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MEL Preamble

The following is applicable for authorized certificate holders operating under Title 14 Code of Federal Regulations (14 CFR) Parts 121, 125, 129, 135: 14 CFR require that all equipment installed on an aircraft in compliance with the Airworthiness Standards and the Operating Rules must be operative. However, the Rules also permit the publication of a Minimum Equipment List (MEL) where compliance with certain equipment requirements is not necessary in the interests of safety under all operating conditions. Experience has shown that with the various levels of redundancy designed into aircraft, operation of every system or installed component may not be necessary when the remaining operative equipment can provide an acceptable level of safety.

A Master Minimum Equipment List (MMEL) is developed by the FAA, with participation by the aviation industry, to improve aircraft utilization and thereby provide more convenient and economic air transportation for the public. The FAA approved MMEL includes those items of equipment related to airworthiness and operating regulations and other items of equipment which the Administrator finds may be inoperative and yet maintain an acceptable level of safety by appropriate conditions and limitations; it does not contain obviously required items such as wings, flaps, and rudders. The MMEL is the basis for development of individual operator MELs which take into consideration the operator's particular aircraft equipment configuration and operational conditions. Operator MELs, for administrative control, may include items not contained in the MMEL; however, relief for administrative control items must be approved by the Administrator. An operator's MEL may differ in format from the MMEL, but cannot be less restrictive than the MMEL. The individual operator's MEL, when approved and authorized, permits operation of the aircraft with inoperative equipment. Equipment not required by the operation being conducted and equipment in excess of 14 CFR requirements are included in the MEL with appropriate conditions and limitations. The MEL must not deviate from the Aircraft Flight Manual Limitations, Emergency Procedures or with Airworthiness Directives. It is important to remember that all equipment related to the airworthiness and the operating regulations of the aircraft not listed on the MMEL must be operative.

Suitable conditions and limitations in the form of placards, maintenance procedures, crew operating procedures and other restrictions as necessary are specified in the MEL to ensure that an acceptable level of safety is maintained.

The MEL is intended to permit operation with inoperative items of equipment for a period of time until repairs can be accomplished. It is important that repairs be accomplished at the earliest opportunity. In order to maintain an acceptable level of safety and reliability, the MMEL establishes limitations on the duration of and conditions for operation with inoperative equipment.

The MEL provides for release of the aircraft for flight with inoperative equipment. When an item of equipment is discovered to be inoperative, it is reported by making an entry in the Aircraft Maintenance Record/Logbook as prescribed by 14 CFR (see TOPP 50-10-05). The item is then either repaired or may be deferred per the MEL or other approved means acceptable to the Administrator prior to further operation. MEL conditions and limitations do not relieve the operator from determining that the aircraft is in condition for safe operation with items of equipment inoperative. When these requirements are met, an Airworthiness Release, Aircraft Maintenance Record/Logbook entry, or other approved documentation is issued as prescribed by 14 CFR. Such documentation is required prior to operation with any item of equipment inoperative.

Operators are responsible for exercising the necessary operational control to ensure that an acceptable level of safety is maintained. When operating with multiple inoperative items, the interrelationships between those items and the effect on aircraft operation and crew workload will be considered. Operators are to establish a controlled and sound repair program including the parts, personnel, facilities, procedures, and schedules to ensure timely repair.

WHEN USING THE MEL, COMPLIANCE WITH THE STATED INTENT OF THE PREAMBLE, DEFINITIONS, AND THE CONDITIONS AND LIMITATIONS SPECIFIED IN THE MEL IS REQUIRED.

Delta's MEL Policy and Scope

The Minimum Equipment List (MEL) and Configuration Deviation List (CDL) for each aircraft type is prepared to comply with each respective FAA Approved Master MEL and FAA Approved Airplane Flight Manual. The authority to operate under the MEL is contained in Delta's Operations Specifications D95 (see TOPP 20-00-05).

The MEL/CDL is applicable to revenue flights and to non-revenue flights when operated with passengers aboard (e.g., publicity, ferry, etc.).

The items listed in each MEL/CDL are applicable to all models of that aircraft unless specifically noted for a specific series aircraft or aircraft number. Where differentiation is required, notations appear in the NAME/DESCRIPTION column or in the REMARKS or EXCEPTIONS column denoting the applicability. Where variations occur within a series, the aircraft ship numbers are used (ref. FAR 121.563, 121.627, 121.701).

A. MEL/CDL Concept and Contents

Federal Aviation Regulations require that certain equipment be operative for a given type of aircraft operation. FAR 121.628 provides for deviations from these requirements under certain conditions.

All components/systems on an aircraft fall into the following three classes in regard to airworthiness requirements:

1. Units which are obviously required for aircraft to be airworthy, such as tires, ailerons, wings, etc.
2. Units which are obviously not required for aircraft to be airworthy, such as cabin trim, curtains, pillows, galley equipment, etc.
3. Units which do not clearly fall into either of the above classes for which some deviations from the normal complement of equipment has been approved.

The MEL contains items in the third classification above for which some deviation from the normal complement of equipment has been approved in the Master MEL. In addition, the MEL also contains certain other Administrative Control items which may not be in the Master MEL. Also listed are the items that may be missing from the aircraft as reflected in the Approved Airplane Flight Manual (AFM) Configuration Deviation List (CDL).

B. MEL Effectivity

The provisions and limitations of the MEL are applicable for "Dispatch" of an aircraft. For the Delta MEL purposes, "Dispatch" is defined as the advancement of throttles for the purpose of taking off (takeoff event). If the takeoff is aborted for any reason, the MEL provisions and limitations become applicable once again. If a component or function becomes inoperative following the takeoff, the MEL does not apply.

C. MEL Notification/Coordination Requirements

When dispatching an aircraft under the authority of the MEL/CDL, it is important that proper coordination and communication be established among the pilots and the affected personnel in Maintenance (Line Maintenance and Maintenance Control Center [MCC]), and in Flight Control (Dispatcher). Refer to TOPP 40-40-05 to ensure that all affected personnel are in the communication loop.

D. Placarding Aircraft and Logbook Entry

A Logbook entry must be made per TOPP 40-40-05 anytime an aircraft is dispatched using MEL/CDL authority, and the appropriate placard must be placed on or adjacent to the instrument, light unit, component, etc. of the aircraft for each MEL/CDL item that is inoperative. Placard location and text information is found in the MEL / CDL placard table, which follows each item in the respective MEL/CDL.

E. Publication and Distribution

The MEL Management group publishes the MEL and CDL. The document will be revised periodically to reflect the latest approved changes to the MEL/CDL.

A revision to the MEL/CDL becomes effective on the date of approval by the Principal Operations Inspector (Delta - Certificate Management Office). During the period that the revision is being processed for publication and distribution, the revised MEL may be used for dispatch provided it is ensured that a copy of the revised MEL page(s) is available to the affected aircraft (to be seen by the current and subsequent pilots) and appropriate personnel, i.e., ACS, Dispatcher, Maintenance Coordinator, and Line/Contract Maintenance.

A temporary revision (TR) process includes paper and electronic documentation of an interim MEL/CDL revision. A Tech Ops bulletin will be issued indicating a TR has been approved. The TR will be distributed for installation in the MDM to all MEL/CDL holders and an electronic version will be available via the TOHP. The TR is required to be filed in the MDM prior to using relief. Users shall follow the instructions on the TR revision highlight sheet. The TR is an FAA approved document and is used temporarily and will be replaced upon the next routine MEL/CDL revision cycle.

The MEL/CDL will have a revision date adjacent to the page number in the upper corner of each page. This revision date will correspond to the date located in the List of Effective Pages (LEP). The revision date on each page will be the same as, or prior to, the date when the FAA approved the last revision. The MEL/CDL revision is effective and considered current as of this date. Master LEPs with the FAA Approved stamp are reproduced in the MEL.

F. Definitions

1. “Administrative Control Item” is listed by the aircraft operator in the MEL for tracking and informational purposes. As an example, Administrative Control Item may be used to track ETOPS accomplishment of required APU cold-soak, or in-flight verification starts. An Administrative Control Item may be added to an aircraft operator**’s** MEL by approval of the POI provided no relief is granted, or provided conditions and limitations are contained in an approved document (e.g., Structural Repair Manual (SRM) or Airworthiness Directive (AD)). If relief other than that granted by an approved document is sought for an Administrative Control Item, a request must be submitted to the Administrator. If the request results in review and approval by the FOEB, the item becomes an MMEL item rather than
2. "Airplane Flight Manual" (AFM) is the document required for type certification and approved by the responsible FAA Aircraft Certification Office. The FAA approved AFM for the specific aircraft is listed on the applicable Type Certificate Data Sheet.
3. “As Required by 14CFR” means the listed instrument or equipment item is subject to certain provisions (restrictive or permissive) expressed in the 14 CFR operating rules. The number of items required by 14 CFR must be operative. When the listed item is not required by 14 CFR, it may be inoperative for the time specified by repair category. The term “14 CFR” has replaced “FAR” as the current reference to Federal Regulations pertaining to aviation. However, many, if not most, MMELs still contain the acronym “FAR”; therefore, this acronym is acceptable and retained in PL-025 and this definition.
4. “CONDITIONAL REPETITIVE CHECK” under REMARKS or EXCEPTIONS means that these items are required to be checked per the comments in the REMARKS or EXCEPTIONS column.
5. “Considered Inoperative", as used in the provisos means that item must be treated for dispatch, taxi and flight purposes as though it were inoperative. The item shall not be used or operated until the original deferred item is repaired. Additional actions include: documenting the item on the dispatch release (if applicable), placarding, and complying with all remarks, exceptions, and related MMEL provisions, including any (M) and (O) procedures and observing the repair category.
6. “Contact MCC” under NAME/DESCRIPTION means that the Maintenance Coordinator must be notified prior to takeoff. If the discrepancy is found prior to pushback, the Maintenance Coordinator must be notified before leaving the gate. This designation is for heightened awareness for certain MEL items requiring MCC review, but not requiring Flight Superintendent (Dispatcher) approval. For example, this statement can be used to alert MCC personnel to items that have short time deferral limits, (Category “A”’ “B”, items), repetitive maintenance checks, or items of high customer impact. .

7. “Day” means the time between the beginning of morning civil twilight and the end of evening civil twilight, or approximately 30 minutes before official local sunrise and 30 minutes after official local sunset.
8. "Day of Discovery" is the calendar day an equipment / instrument malfunction was recorded in the aircraft maintenance log and/or record. This day is excluded from the calendar days or flight days specified in the MMEL for the repair of an inoperative item of equipment. This provision is applicable to all MMEL items, i.e., category's "A, B, C and D" and is based on UTC time (see MEL Instructions).
9. "Deactivated" and "Secured" means that the specified component must be put into an acceptable condition for safe flight. An acceptable method of securing or deactivating will be established by the operator.
10. **"DISP. APPR. REQ'D."** under NAME/DESCRIPTION means that the approval of the controlling Flight Superintendent (Dispatcher) is required prior to takeoff. If the discrepancy is found prior to pushback, the approval must be received before leaving the gate. This approval is necessary to ensure that Flight Planning issues which result from this MEL item have been appropriately considered.

The approval is obtained in accordance with TOPP 40-40-05; any of the following constitute Dispatcher approval:

- The MEL item number and description are indicated on the Flight Plan.
- The Captain has received an amended release adding the MEL item number and description.
- The Dispatcher and the Captain have communicated by telephone or radio and have agreed on the conditions of the dispatch.

11. Electronic Fault Alerting Systems

    New generation aircraft display system fault indications to the flight crew by use of computerized display systems. Airbus aircraft equipped with Electronic Centralized Aircraft Monitoring (ECAM) provide different levels of system condition messages {WARNING (red), CAUTION (amber)}. On A318/319/320/321, A330 and A340, the ECAM STATUS page also provides MAINTENANCE STATUS messages.

    Any message that affects airplane dispatch is displayed at the WARNING or CAUTION level. For A318/319/320/321, MAINTENANCE STATUS messages may also affect airplane dispatch.

    System faults that result only in messages on the Central Maintenance System (CMS) (for A330, A340 and A380) or on the Centralized Fault Display System (CFDS) (for A318/319/320/321) do not affect airplane dispatch and do not require action other than as addressed within the operator’s standard maintenance program.

    The ECAM Messages section of the MEL contains an ECAM Message List which includes Class I (warning, caution) and Class II (maintenance) status messages along with possible corresponding MEL relief.

12. "Extended Overwater Operation or Flight" means operation overwater at a horizontal distance of more than 50 nautical miles from the nearest shoreline.
13. "Federal Aviation Regulations" (FAR) means the applicable portions of the Federal Aviation Act and Federal Aviation Regulations.
14. “Flight Day" means a 24 hour period (from midnight to midnight) using UTC time, during which at least one flight is initiated for the affected aircraft.
15. “Flight Hours” means the time from the moment an aircraft leaves the surface of the earth until it touches it at the next point of landing (i.e., takeoff to landing time). ”Flight hours” is identical to ”time in service” as defined in FAR Part 1.

16. “Icing Conditions” means an atmospheric environment that may cause ice to form on the aircraft (Structural) or in the engine(s) (Induction).

    a) Aircraft (Structural) Icing is present when the aircraft surface temperature is between 0 degrees C and –40 degrees C and visible moisture in any form is present (such as clouds, fog with visibility of one mile or less, rain, snow, sleet and ice crystals).

    b) Engine (Induction) Icing is present when the OAT, TAT or RAT is 10 degrees C or below and visible moisture in any form is present (such as clouds, fog with visibility of one mile or less, rain, snow, sleet and ice crystals).

17. “IMC” – IMC means meteorological conditions such as to require the flight to be conducted under Instrument Flight Rules.

18. "Inoperative" means a system and/or component malfunction to the extent that it does not accomplish its intended purpose and/or is not consistently functioning normally within its approved operating limit(s) or tolerance(s).

19. Inoperative components of an inoperative system: Inoperative items which are components of a system which is inoperative are usually considered components directly associated with and having no other function than to support that system. (Warning/caution systems associated with the inoperative system must be operative unless relief is specifically authorized per the MMEL.

20. “Is not used” in the provisos, remarks or exceptions for an MMEL item may specify that another item relieved in the MMEL “is not used.” In such cases, crewmembers should not activate, actuate, or otherwise utilize that component or system under normal operations. It is not necessary for the operators to accomplish the (M) procedures associated with the item. However, operational requirements must be complied with, and an additional placard must be affixed, to the extent practical, adjacent to the control or indicator for the item that is not used to inform crewmembers that a component or system is not to be used under normal operations.

21. “Known or Forecast Windshear Conditions”:

    - Occurring at or below 1,000 ft,

      AND

    - Resulting in a loss or gain of greater than 15 knots indicated airspeed.

22. “LLM” – The definition of LLM when used in this manual is as follows:

    a) The FAA approves CAT II/III OpSpec’s which allow aircraft to land in reduced weather minimums or Lower Landing Minimums (LLM). The LLM program allows an aircraft to be dispatched to Category II and/or III conditions as outlined in the aircraft Minimum Equipment List. The aircraft Auto Flight System may be utilized for LLM CAT I operations, or in some cases, CAT II and/or CAT III, depending on the item. The CAT II/III restriction will be noted in the MDM Manual. Several examples of where an MEL deferral does not restrict CAT II and/or CAT III operations are:

        1) An A330 aircraft equipped with 3 ADR’s and one on MEL deferral, CAT III is not authorized, but CAT II is authorized, as only two ADR’s are required for CAT II operations.

        2) An A320 with one autopilot on MEL deferral, CAT III is not authorized, but CAT II is authorized, as only one autopilot and two flight directors are required for CAT II operations.

        3) A B747–400 with one or both Flight Director displays on MEL deferral precludes CAT II operation; however, CAT III is authorized.

        4) A B757 aircraft equipped with 3 operational Flight Director Systems and one Flight Director System on MEL deferral, CAT II and CAT III operations are authorized, as only 2 Flight Director Displays are required for CAT II and CAT III operations.

b) The LLM CAT II/III status of an aircraft may be deferred and placarded by using the MEL deferral code. Several examples of where an LLM deferral will be implemented are:

1) Aircraft was returned to service after unsuccessful autoland, but maintenance procedures were accomplished by non-Auto Flight Qualified (AFQ) authorized personnel which downgraded the aircraft from CATIII.

2) An Autoflight system has had similar repetitive discrepancies.

3) The scheduled auto land system check has not been accomplished.

c) The LLM deferral code requires MCC authorization prior to its usage or removal. The aircraft LLM status is upgraded to CAT III (CAT II DC9) by using maintenance procedures which must be accomplished by AFQ authorized personnel allowing removal of the LLM deferral.

23. "(M)" PROCEDURES: The “(M)” symbol indicates a requirement for a specific maintenance procedure which must be accomplished prior to operation with the listed item inoperative. Normally, these procedures are accomplished by maintenance personnel; however, other personnel may be qualified and authorized to perform certain functions. Other personnel may include, but are not limited to Aircraft Maintenance Technicians, Flight Crews and Ramp Personnel. Procedures requiring specialized knowledge or skill or requiring the use of tools or test equipment should be accomplished by maintenance personnel.

    The satisfactory accomplishment of all maintenance procedures [(M) PROCEDURES], regardless of who performs them, is the responsibility of the operator. Appropriate procedures are published in this MEL.

    NOTE: The (M) and (O) symbols are required in the operator's MEL unless otherwise authorized by the Administrator.

24. "Non-Combustible Materials" are materials that will not take fire and burn (e.g., sand).

25. “Non-essential Equipment and Furnishings (NEF)” are those items installed on the aircraft as part of the original type certification, supplemental type certificate, or other form of alteration that have no effect on the safe operation of flight and would not be required by the applicable certification rules or operational rules. They are those items that if inoperative, damaged or missing have no effect on the aircraft’s ability to be operated safely under all operational conditions. NEF items are not **instrument and equipment** items already identified in the MEL or CDL of the applicable aircraft. They do not include **instrument and equipment** items that are functionally required to meet the certification rule or for compliance with any operational rule. These nonessential items may be installed in areas including, but not limited to, lavatories, and galley areas. NEF items are not items already identified in the MEL or CDL of the applicable aircraft. They do not include items that are functionally required to meet the certification rule or for compliance with any operational rule. Operator’s NEF process shall not provide for deferral of items within serviceable limits identified in the manufacturer’s maintenance manual or operator’s approved maintenance program such as wear limits, fuel/hydraulic leak rates, oil consumption, etc. Cosmetic items that are fully serviceable but worn or soiled may be deferred under an operator’s NEF process (see TOPP 40-40-08).

26. "Notes:" in the "REMARKS or EXCEPTIONS" column provide additional information for flight crew, maintenance, or other personnel. Notes are used to identify applicable material which is intended to assist with compliance, but do not relieve the operator of the responsibility for compliance with all applicable requirements. Notes are not a part of the provisos.

27. "(O)" PROCEDURES: The “(O)” symbol indicates a requirement for a specific operations procedure which must be accomplished in planning for and/or operating with the listed item inoperative. Normally, these procedures are accomplished by the flight crew (pilots); however, other personnel may be qualified and authorized to perform certain functions.

    The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the operator. Appropriate procedures are published in this MEL.

    NOTE: The (M) and (O) symbols are required in the operator's MEL unless otherwise authorized by the Administrator.

28. “ONCE EACH FLIGHT DAY” under REMARKS or EXCEPTIONS means that these items are required to be checked at least once each flight day. This check need not be performed prior to the first flight of the day, but at least once each flight day.

29. “PRIOR TO EACH DEPARTURE” under REMARKS or EXCEPTIONS means that these items are required to be checked prior to each departure.

30. “Local calendar day” means a 24-hour period (from midnight to midnight local time).

31. “PRIOR TO THE FIRST FLIGHT OF THE DAY” under REMARKS or EXCEPTIONS means that these items are required to be checked prior to the first flight from a station during the local calendar day.

32. RNP-5 Status (BRNAV) deferral code may be used when it is determined that RNP-5 (BRNAV) airspace operations cannot be used and no specific MEL relief applies. This deferral code requires MCC authorization prior to its usage or removal.

33. RNP-10 Status deferral code may be used when it is determined that RNP-10 airspace operations cannot be used and no specific MEL relief applies. This deferral code requires MCC authorization prior to its usage or removal.

34. RVSM Status deferral code may be used when it is determined that RVSM operations cannot be used, no specific MEL relief applies and the aircraft must remain at or below FL280. This deferral code requires MCC authorization prior to its usage or removal.

35. “Time In Service” means the time from the moment an aircraft leaves the surface of the earth until it touches it at the next point of landing (as defined in FAR Part 1). “Time In Service” is identical to “Flight Hours” as defined in FAR Part 1.

36. A vertical bar (change bar) indicates a change, addition or deletion in the adjacent text for the current revision of that page only. The change bar is dropped at the next revision of that page.

37. "Visible Moisture" means an atmospheric environment containing water in any form that can be seen in natural or artificial light; for example, clouds, fog, rain, sleet, hail or snow.

38. "Visual Flight Rules" (VFR) is as defined in FAR Part 91. This precludes a pilot from filing an Instrument Flight Rules (IFR) flight plan.

39. "Visual Meteorological Conditions" (VMC) means the atmospheric environment is such that would allow a flight to proceed under the visual flight rules applicable to the flight. This does not preclude operating under Instrument Flight Rules.

Repetitive Check Requirements

The REMARKS or EXCEPTIONS column of some MEL items is annotated with “Repetitive Check Required (Yellow Placard)”. A yellow placard will be installed per TOPP 40-40-05, and the Captain must ensure that required repetitive checks are accomplished by the appropriate personnel per the instructions for the MEL (see MEL Definitions).

NOTE: At non-maintenance stations where a pilot is not qualified to accomplish the check, contact the Maintenance Coordinator or ACS personnel per TOPP 40-20-15 and the FOM for help in procuring contract maintenance.

The four Repetitive Checks are:

A. PRIOR TO EACH DEPARTURE

It is the Captain’s responsibility to manage these items by either checking the item himself or by advising Maintenance personnel a check is required. Enter the check into the Aircraft Log Book when “Log Book Entry Required” is listed in the MEL item.

NOTE: If a takeoff is aborted, the captain determines if it is necessary to repeat this type of check.

B. ONCE EACH FLIGHT DAY

The ONCE EACH FLIGHT DAY check is normally accomplished during a layover, but may be accomplished at any station as long as it is accomplished once each flight day. Enter the check into the Aircraft Log Book.

C. PRIOR TO THE FIRST FLIGHT OF THE DAY

The check must be entered into the Aircraft Log Book as being accomplished per MEL requirement.

D. CONDITIONAL REPETITIVE CHECK

The MEL Remarks or Exceptions column may specify conditional repetitive check requirements, i.e., “BEFORE ENGINE START” or “AFTER FLIGHT CONTROL CHECK.” The Remarks or Exceptions column for these MEL items will be annotated with “Repetitive Check Required (Yellow Placard)” and may require a logbook entry.

MEL Instructions

The units on the Minimum Equipment List/Configuration Deviation List (MEL/CDL) are presented in accordance with the ATA chapter numbering system, and are coded by a six digit number. Under each ATA chapter code, the units are listed in a column by numerical sequence.

A. MEL Items and Sub-Items

Within the complete MEL item, each associated sub-item is designated by a letter after each item number (24-00-01A, 24-00-01B, etc.). A sub-item may denote one or more of the following:

- Two or more alternatives available for dispatch ("or" item)
- Sub-system(s) of the Main MEL item
- Aircraft group applicability
- Types of operation for the MEL item (icing, no-icing, etc.)

The following provides an explanation of the scope and use of each of the columns as titled:

		(4) NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH (5)		
		(3) FLIGHT CREW MAY PLACARD			REPAIR CATEGORY (6)	
(1) ITEM NO.	(2) NAME/DESCRIPTION					REMARKS OR EXCEPTIONS (7)
21-00-XX	Air Conditioning Packs **"DISP.APPR.REQ'D."**	Y	2	0	C (8)	**(M)(O)** Both may be inoperative provided flight is conducted in an unpressurized configuration.

1. ITEM NO. - This column lists the MEL Number in ATA Number format.

2. NAME/DESCRIPTION - Below the manufacturer's name of an item, the commonly used terminology for an item may be included in parenthesis. The term "DISP. APPR. REQ'D." in this column is explained in item 9, MEL Definitions. The term “Contact MCC” is explained in item 6, MEL Definitions. When aircraft numbers are specified in this column, it signifies the applicability of the relief to these aircraft only. However, if no aircraft numbers are specified, the relief applies to all the aircraft in that fleet.

3. FLIGHT CREW MAY PLACARD - This column serves as additional reference to the pilots for items that qualify for Flight Crew Placarding. These items will be identified by the letter “Y”. Items NOT available for Flight Crew Placarding will be identified by the letter “N”. In addition, where the letter “Y” is followed by an asterisk (“**Y✱**”), the item may qualify for Flight Crew Placarding at Delta Maintenance stations when the door is open. See TOPP 40-40-05 for placarding procedures.

   A “Y” or “**Y✱**” in the Flight Crew May Placard column indicates all (M) or (O) PROCEDURES for that item may be performed or managed by the pilots (see MEL Definitions).

4. NUMBER INSTALLED - This column serves as a reference to the number of units installed on the aircraft. The number in this column will also be equal to or greater than the requirements in column five (Number Required For Dispatch).

5. NUMBER REQUIRED FOR DISPATCH - This column shows the number of units required for continuous operation as defined in the concept of the fail-safe design and operating requirements.

   NOTE: Reference 4 and 5: When a specific number of units installed / required for dispatch cannot be determined due to the numerous fleet configurations, a dash (-) will be shown in the column and the special limitations will be shown under REMARKS or EXCEPTIONS Column

6. REPAIR CATEGORY - This column denotes the repair category of the item. The timing for each category item is listed below. Items which are without a category identifier are either Administrative or CDL items and may be inoperative without limit as noted in the REMARKS or EXCEPTIONS column.

   Category "A" - Items in this category shall be repaired within the time interval specified in the REMARKS or EXCEPTIONS column of the operator's approved MEL.

   NOTE: Category "A" items are marked with background shading to highlight their significance.

   Category "B" - Items in this category shall be repaired within three (3) consecutive calendar days (72 hours), excluding the day the malfunction was recorded in the Aircraft Maintenance Record / Logbook. For example, if it were recorded at 10 a.m. on January 26th, the three day interval would begin at midnight on the 26th and end at midnight the 29th.

   Category "C" - Items in this category shall be repaired within ten (10) consecutive calendar days (240 hours), excluding the day the malfunction was recorded in the Aircraft Maintenance Record / Logbook. For example, if it were recorded at 10 a.m. on January 26th, the 10 day interval would begin at midnight the 26th and end at midnight February 5th.

   Category "D" - Items in this category shall be repaired within one hundred twenty (120) consecutive calendar days (2880 hours), excluding the day the malfunction was recorded in the Aircraft Maintenance Record / Logbook.

   NOTE 1: Category "A" and "D" items cannot be extended beyond the maximum repair interval as specified in the Minimum Equipment List (MEL).

   NOTE 2: Category "B" and "C" items can be extended by the Shift Manager – MCC (see MEL Management).

7. Category “E” items have no time limit. This may be assigned to an MEL for administrative and tracking purposes. These are CDL, non restrictive or non-MEL items that are within manual limits.

8. REMARKS or EXCEPTIONS - Any limitations to the number of units shown in the Minimum Requirements Column are shown or referenced under REMARKS or EXCEPTIONS. Specific procedures which must be accomplished with the listed item inoperative are indicated by "(M)" and/or "(O)" symbols. The function of the (M) and (O) symbols is to denote that a procedure exists which must be conducted, and not to necessarily identify who accomplishes the procedure. The (M) and (O) PROCEDURE(s) will be listed in their entirety below the MEL item along with the applicable graphics and performance corrections, if any.

9. (M) and (O) PROCEDURES - Manufacturer's MMEL Procedures Manuals are used as a baseline to develop the procedures found in Delta's MELs. The procedures found in manufacturer's Procedures Manuals are recommended by the manufacturer and are intended to be used as guidance for the operator in development of their own procedures. The MEL Program Group has the responsibility for developing all applicable (M) and (O) Procedures found in Delta MELs (see TOPP 30-20-20).

   The (M) and (O) Procedures found in Delta MELs may require accomplishment of various routine maintenance and/or pilot actions. In order to keep the size of MELs manageable, normal procedures and associated warnings related to activating/deactivating aircraft electrical, pneumatic and hydraulic systems, operating flight controls or engines, etc., are not reproduced in Delta MEL (M) or (O) Procedures. These normal procedures and precautions are found in applicable TOPP documents, Aircraft Maintenance Manuals, Operations Manuals, Quick Reference Handbook, FOM, etc., and must be followed when accomplishing (M) and/or (O) Procedures.

10. All MEL and CDL items require that inoperative component(s) be placarded.

11. PLACARD INSTRUCTION TABLE –

    NOTE: The following instructions are also applicable to the CDL placard tables. When the MCO Tab Location column states N/A, no tab is required.

(a) MEL ITEM	(b) MCO TAB LOCATION	(d) MCO PLACARD TEXT
34-00-XX	1. #1 Radio Altimeter Indicator 2. GPWS Switch	1. #1 Radio Altimeter Indicator INOP 2. GPWS INOP

MEL ITEM	MCO TAB LOCATION	MCO PLACARD TEXT
21-00-XX	(c) Associated Pack Switch	(e) ____ Air Conditioning Pack INOP

(a)	MEL ITEM – Lists the specific MEL item number.
(b)	MCO TAB LOCATION – Place the MCO TAB on or adjacent to the listed switch, indicator, lever, etc., that controls the inoperative unit/system. Multiple MCO TAB locations may be listed for one MEL item and will be listed numerically in this column as indicated in the above example. When multiple MCO TABs are required, use tabs from additional Aircraft Placards and discard the large unused portion of the placard. Record the same Log or Control No. on each MCO TAB. Place an MCO TAB at each listed location.
(c)	The term "associated" or "affected" may appear in this column. For example, with a *left* pack inoperative, the "associated" pack switch is the *left* switch; with a *left* boost pump LOW PRESSURE light inoperative, the "affected" LOW PRESSURE light is the *left* light. Place the MCO TAB(s) on or adjacent to the associated or affected item(s) listed in this column.
(d)	MCO PLACARD TEXT – A description of the inoperative unit/system to be recorded on the large portion of the Aircraft Placard that is placed in the Aircraft Log Book. Failures of certain systems may cause other systems to be inoperative or require other systems to be considered inoperative. All affected systems will be listed numerically in this column as indicated in the above example. All listed items are to be recorded on a single MCO Placard. NOTE: Commonly used terms or abbreviations may be substituted for TEXT listed in this column. Additional information that will enhance Flight Crew and Maintenance awareness of the inoperative system / component may be included at the discretion of the individual installing the MCO.
(e)	When there are multiple units or components within a system, a space (____) will be included in this column indicating a descriptive term or position (i.e., left, right, #1, #2, forward, aft, upper, lower, etc.) must be recorded on the placard in addition to the MEL PLACARD TEXT.

12. If an item is to be deferred to Maintenance Carry Over (MCO), the MEL item number must be recorded in the aircraft logbook. Refer to TOPP 40-40-05 for MCO procedures and associated logbook requirements. Refer to TOPP 50-00-25 for General Work Document Procedures and TOPP 50-10-05 for Aircraft Log System information.

13. For MEL items that restrict cargo loading (bin empty or only empty cargo handling equipment, ballast and fly-away kits), only the items listed below are approved for carriage in the affected bin(s).

    - Ballast sand bags (bulk loaded or in ULDs)
    - Empty ULDs (containers and/or metal pallets)
    - CRAF Mission Fly-Away-Kits (contents listed below)

Main Wheel Assy (2 ea)	IDG Service Pot	WXR Trans
Nose Wheel Assy (2 ea)	Starter	MMR
85 Ton Jack (2 ea)	Start Valve	Radio Altimeter
Tire Dolly	ELMs Relay (3ea)	APU Battery
Torque Wrench	Ram Air Door Hinge (2 ea)	Battery Charger
MLG/NLG Socket	Ram Air Door Plate	Contactor
Oil Case (2 ea)	HF Trans	Engine A/I Valve

Remarks on the Weight Data Record (WDR) will provide verification to flight crews that bin(s) is empty or contains only approved materials as listed above.

Performance Instructions

A. Performance Penalty Example

1	**21-25-01A**	**Right Recirculation Fan**
2	EFFECTIVITY	**All**
3	FLIGHT PLANNING REQUIREMENTS	Increase BLOCK FUEL by 0.3%.
4	NOTES	None
5	**AWABS**	Performance corrections have been applied.
6	TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** None **LANDING** None

Shown above is a sample Performance Correction for a MEL item. The contents of the Performance Correction box should be used in conjunction with the other limitations and procedures in the MEL for the applicable dispatch. A quick-reference guide to the Performance Correction is provided below. It is important to note that items appearing above the double line should be considered by all users including the flight crew and dispatcher. Items below the double line are primarily for flight crew or LCC use. Use the appropriate box depending on the type of Weight Data Record (WDR) generated.

NOTE: The Performance Correction shown above is provided for training purposes only and should not be used for MEL 21-25-01A. Additionally, the sample MEL item above may not reflect the most current information.

1. MEL Item Number and Title.
2. Effectivity: Aircraft affected by the subject MEL item. Use the cross-reference table in the front of the MEL as necessary.
3. Flight Planning Requirements: Requirements that must be taken into account prior to the flight.
   - These items will be the responsibility of the dispatcher and must be taken into account prior to the flight.
   - Examples of Flight Planning Requirements can be, but are not limited to, Enroute Climb Limit Weight or Block Fuel adjustments.
4. Notes: Other pertinent information applicable to this MEL item.
5. AWABS: Contains information regarding functionality applied by AWABS. One of the two following statements will be published:
   - "Performance corrections have been applied" indicates that the AWABS document contains all applicable MEL adjustments and that no further Flight Crew action is required.
   - "Performance weight corrections have been applied" indicates that only the weights listed on the AWABS document contain the applicable MEL adjustments. This statement is followed by a specific action (or actions) required by the Flight Crew. Example – "Performance weight corrections have been applied. Reduce V1 by 3 KIAS." These statements advise that the performance weight corrections have been applied by AWABS, but the Flight Crew must reduce the V1 noted on the AWABS document by 3 KIAS.
6. Takeoff Performance Worksheet: LCC (Load Control Center) will complete this Worksheet (including performance corrections shown in this section) and a copy will be provided to the flight crew when dispatched with a Manual WDR. This section contains three subsections: Takeoff, Landing, and Other Corrections. The section titled "Other Corrections" will only appear if other corrections are to be performed.

   NOTE: Performance decrements specified in this section of the performance box are simplified and conservative for the manual computation of takeoff and landing limit weights. AWABS produces more precise weights based on runway length and obstacles. Therefore, comparing AWABS documents with and without an MEL item will frequently produce significantly different results than weights specified in the Takeoff Performance Worksheet section of the performance box.

   TAKEOFF

   - Runway Allowable Takeoff Weight adjustment.
   - Takeoff Climb Limit Weight adjustment.

   LANDING

   - Runway Allowable Landing Weight adjustment.
   - Approach/Landing Climb Limit Weight adjustment.
   - Maximum Quick Turnaround Landing Weight adjustment.

   OTHER CORRECTIONS

   - V-speed adjustments.
   - Landing speed adjustments.
   - EPR or N1 adjustments.

B. Performance Corrections

The enroute performance penalties in this MEL are applied to all flights by the Flight Control Dispatcher when analyzing the flight plan using the FPS flight planning system. The penalty is entered as an Enroute Driftdown Penalty in FPS and applied in FPS by increasing the weight of the aircraft by the penalty amount. The flight planning system will then access the driftdown tables at the penalized, increased weight to determine the driftdown weight limit. One-engine inoperative performance limitations (under FAR 121.191) will be applied where most restrictive. Transoceanic operations are conducted under ETOPS rules and use the same MEL performance penalty method.

MEL Management

A. Review of MEL items

1. MEL items will be reviewed once during each work shift by each Maintenance Coordinator(s) responsible for an area of assignment. The review of the SCEPTRE deferred (tran code MEL) MEL program will allow determination of time limit restrictions.

   The responsible Maintenance Coordinator (specific fleet assigned) will be responsible for tracking MEL/CDL items. Demand Planning will be responsible for availability of parts, labor and scheduling of the aircraft in the planned action to assure the MEL/CDL time limit is met.

Note: Every effort will be applied to accomplish MEL/CDL corrective action at the earliest time possible after a deferral.

2. The AOG Desk will be responsible (after receiving a parts order/request for an MEL/CDL repair item) for:

   - Providing the status to the MCC and Demand Planning on all MEL/CDL parts including a firm delivery date on each item when available from applicable vendor/manufacturer. Reference TOPP 40-40-05.

3. The Maintenance Control Center or Demand Planning will identify where parts are required to Stores and the Stores Shift Manager will ensure the parts that are required are available or will have those required items shipped to the selected stations to effect the repair.

B. Monitoring MCO Expiration

MCO Category	MCO Expiration Time	Extendible?	Who is responsible for MCO currency?
A	Time interval specified in MEL	No	MCC
B	3 Days	Yes	Pilot and MCC
C	10 Days	Yes	Pilot and MCC
D	120 Days	No	Pilot and MCC
N/A[1]	Item specific (Not in MEL)	Item specific (Not in MEL)	MCC
[1]NOTE: A MCO placard may be placed in the logbook which identifies other components / systems not specifically referenced in the MEL. This is done for administrative tracking purposes. These items do not have a MEL Number and the placard MEL/CDL Reference Number block will indicate “N/A” (not applicable). The Captain is not responsible for verification of the expiration period for this type of entry.			

1. The Captain and the Maintenance Coordinator have joint responsibility to ensure that MCO expiration periods are not exceeded for MEL Category B, C and D items. The MEL serves as the primary reference source for category and expiration period guidance.

   - The expiration period of category “A” items is defined the time interval specified in the REMARKS or EXCEPTIONS column of the operator's approved MEL. For time intervals specified in “flight days,” the day the malfunction was recorded in the aircraft logbook is excluded. For all other time intervals (flights, flight legs, cycles, hours, etc.), repair tracking begins at the point when the malfunction is deferred in accordance with the operator’s approved MEL.
   - NOTE: The MCC is solely responsible for monitoring the expiration of Category A items and non-MEL items.
   - The MEL should always be consulted regarding limitations and restrictions for any MCO. The flight plan MCO expiration information should be used as a cross-check, not a substitute, for reviewing the MEL.
   - If any MCO in the log book is not listed in the flight plan, check the MEL for its category and expiration period based on the “Day of Discovery” (see MEL Definitions).
   - The Captain shall contact the MCC in accordance with the FOM with any questions concerning MCO currency.

2. The MEL references and MCO expiration dates/times will be listed in the “FLIGHT CONTROL & MAINTENANCE REMARKS” section of the Delta Flight Plan to help verify MCO information and currency.

   The following examples show how MEL/MCO information will appear on the flight plan:

   Category A items

   M78-34-01 REVERSER UNLOCK INDIC/AMBER U/L/--1INOP

   **CATEGORY A MEL

   Category B, C and D items

   M32-46-01C TIRE PRESSURE INDICATIONS - UP TO 12 INOP

   MEL EXPIRATION DATE - 20MAR95 AT 2400 UTC

C. MEL Status During a Revision

If an MEL revision has been published that changes either the MEL item number, (M) procedures, (O) procedures, deactivation procedures, or expiration limit, the MEL restrictions and procedures that were in place at the time of deferral will remain in effect until the MCO is cleared or extended.

D. Maintenance Responsibilities In MEL Management

Line and Hangar Maintenance personnel are responsible for ordering the necessary parts and/or tooling to repair MEL items, unless the item is within 24 hours of expiring. In this case, the System Maintenance Coordinator - MCC will assist them as necessary (e.g., assuring the necessary parts are obtained or are on order, routing the aircraft to a station where the appropriate repairs can be made). If unable to procure the necessary parts through normal channels, contact the Senior Material Planner - Parts Provisioning, ATL, ext. 5-0202, for assistance.

NOTE: If it is determined that an A item cannot be cleared prior to flight release from layover, the mechanic assigned to the aircraft must call Aircraft Routing, ATL, ext. 5-0222, to determine if there is sufficient flight time remaining to allow the aircraft to reach the next layover, or to reach a station where the repairs can be accomplished.

E. Active MEL Open Item List

At each shift change, the Maintenance Coordinators or designees will review the active MELs to ensure coordination of all open items are repaired prior to expiration.

F. MEL/CDL Expiration

Expiration dates/times are based on UTC. Under normal circumstances the aircraft must arrive at the destination station prior to midnight (UTC time)of the expiration date (UTC). This applies to all category A, B, C, and D items. If the aircraft cannot arrive at the destination station prior to midnight, due to an unexpected delay (maintenance, flight exception, weather, ATC flow control, etc.), the MCC Shift Manager may approve the flight departure provided the aircraft departs (departs for this policy means an "OUT" time has been sent or all doors closed) prior to midnight of the expiration date (UTC). In the event of any additional unexpected delay (ATB, DIV, RTB, etc.), the aircraft must still depart (depart for this policy means an "OUT" time has been sent or all doors closed) prior to midnight of the expiration date. If the delayed departure time is expected to be after midnight, the item must either be repaired, or reviewed by the MCC Shift Manager for possible extension (Category B, C) prior to further revenue flight.

G. Extension Of Expiration Date

Extension of MEL items past the allowable limit will only be authorized under very stringent controlled procedures.

A. When circumstances, beyond the control of Delta Airlines, have created a situation where MEL allowable time limits have been reached and the unavailability of parts/materials or unforeseen operational problems beyond the control of Delta Aril Lines prevent corrective action of the deferred MEL, an extension may be warranted. Procedures outlined in TOPP 40-40-05 (EXTENSION OF MEL ITEMS) must be followed for granting approval of the extension beyond allowable time limits.

Category A and D items cannot be extended beyond the maximum repair interval as specified in the MEL. Only Category B and C items may be extended.

All time extensions will require the approval of the MCC Shift Manager. The name of the approving individual will be entered into the computer system along with the extension deferral information.

After approval of an extension and completion of the SCEPTRE deferral showing all required information outlined in TOPP 40-40-05, copies of the log page deferral will be printed and forwarded within 24 hours to the FAA/NTSB Liaison, Dept. 595 ATG. This copy will be signed by an authorized approval individual. It does not have to be the same person that granted the extension, but must be signed before going to the FAA. The MCC Shift Manager will make an entry in the Outlook MEL Extension Notification folder. Selecting the Send Message button transmits the information by email to the CMU.

The MCC will advise Dispatch that approval to exceed the established time has been secured. The Flight Release will show the subject MEL as approved to exceed the time limitation.

Second time extensions will be rare, but require the same approval procedures as outlined in TOPP 40-40-05. Each extension will be supported by its own merits or circumstances.

RNAV Minimum Requirements

The chart below should be used when making MEL compliance or aircraft equipage decisions prior to the dispatch event. Equipment failures that occur after that event will be referenced in the appropriate AOM. The values referenced below are not intended to reduce the minimum values published on any approach chart or reduce any crew qualification restriction.

To use the chart, locate the MEL number for the system on deferral. Read the columns to the right of the appropriate MEL number to determine the number of systems required for the type of operation under consideration.

MEL Item Deferral	Number Required			
	RNAV ENROUTE	RNAV SID/STAR	RNAV APPROACH	
			RNAV (GPS)	RNAV (RNP)
22-10-01: Autopilot or 22-10-02B: Flight Director Systems	**1 or 1**	**1 or 1**	**1 or 1**	**2 and 2**
22-10-03: AP Disconnect Function	**1**	**1**	**1**	**2**
22-66-01: Flight Augmentation Computers (FAC)	**0**	**0**	**0**	**2**
22-81-03C: Auto Flight Control Panel Mode Engagement Pb APPR	**0**	**0**	**1**	**1**
22-81-04G: EFIS Control Panel ND Mode Selector	**1**	**1**	**2**	**2**
22-82-01: Multi Purpose Control Display Units (MCDU's)	**1**	**1**	**1**	**2**
22-83-01: FMGC	**1**	**1**	**1**	**2**
22-83-02A: FMA Indications On PFD Autopilot/Flight Director Related Indications	**1**	**1**	**1**	**2**
22-83-02D: FMA Indications On PFD Approach and Landing Capabilities	**0**	**0**	**0**	**0**
27-51-01A: SFCS 2 Flap Channel	**1**	**1**	**1**	**2**
27-51-01B: SFCS 2 Slat Channel	**1**	**1**	**1**	**2**
27-51-02: Flap Wing Tip Brake Soleniods	**1**	**1**	**1**	**2**
27-54-02: Flap PCU Valve Blocks SFCS 2	**1**	**1**	**1**	**2**
27-64-01D: Spoiler Surfaces	**1**	**1**	**1**	**2**
27-81-01: Slat Wing Tip Brake Soleniods	**1**	**1**	**1**	**2**
27-84-02: Slat PCU Valve Blocks	**1**	**1**	**1**	**2**
27-93-01: Elevator Aileron Computers (ELAC)	**1**	**1**	**1**	**2**
27-94-01: Spoiler Elevator Computer (SEC)	**1**	**1**	**1**	**2**

Continued Next Page

MEL Item Deferral	Number Required			
	RNAV ENROUTE	RNAV SID/STAR	RNAV APPROACH	
			RNAV (GPS)	RNAV (RNP)
31-63-01A: Primary Flight Display (PFD)	**0**	**0**	**0**	**2**
31-63-01B: Navigation Display (ND) or 31-63-01C: Navigation Display (ND)	**0 or 0**	**0 or 0**	**0 or 0**	**2 or 2**
34-10-01: ADIRS IRS NAV Mode	**2**	**2**	**2**	**3**
34-42-01: Radio Altimeter (RA)	**0**	**0**	**0**	**2**
34-48-01A: Ground Proximity Warning System 34-48-01F: 34-48-01G: 34-48-01H:	**0**	**0**	**0**	**1**
34-51-01: DME	**1❶**	**1❶**	**1❶**	**0**
34-58-01A: Global Positioning System (GPS) 34-58-01B:	**1**	**1**	**2**	**2**
34-61-01: Flight Management System (FMS) Navigation Database	**1❷**	**1❷**	**1❷**	**1❷**

❶ All A319/A320 aircraft are equipped with two, four channel scanning DME units.
❷ Authorized with 1 or 0 if MEL 34-61-01 NAV Database “O” procedure is successfully accomplished.

ECAM MESSAGES

ECAM

SECTION 1 – ECAM Messages

The Electronic Centralized Aircraft Monitoring System (ECAM) is the primary means of displaying airplane system indications and messages to the flight crew. There are two classes of messages displayed on the ECAM that affect the dispatch of the airplane; Class I, and Class II.

Class I messages normally restrict the dispatch capability of the airplane. Class I messages include the following category of crew alerting messages: Warning, Caution Level 2, and Caution Level 1. A brief description of Class I category messages appear below:

WARNING Level 3:	This is the highest priority alert message. It signals a requirement for immediate crew action. An aural warning, a red flashing warning light, and warning message in the ECAM accompany this type of alert.
CAUTION Level 2:	This signals an abnormal situation requiring immediate crew awareness, but does not require immediate crew action. An aural warning, an amber master caution light, and a caution message in the ECAM accompany this type of alert.
CAUTION Level 1:	This signals a configuration that requires monitoring by the crew. A FAULT light or an ECAM message accompanies this type of alert. (This alert does not activate the amber master caution light or an aural warning.) Normal crew procedures require that all Warning and Caution messages be addressed during flight deck preparation to determine the airplane's status. At this time, Caution messages may not require crew action since they reflect systems not yet configured for flight and may disappear as a result of crew action during flight deck preparation. Some Warning and Caution messages are addressed in the MEL. Use this section to deal with all Warning and Caution messages whenever they are displayed before takeoff.

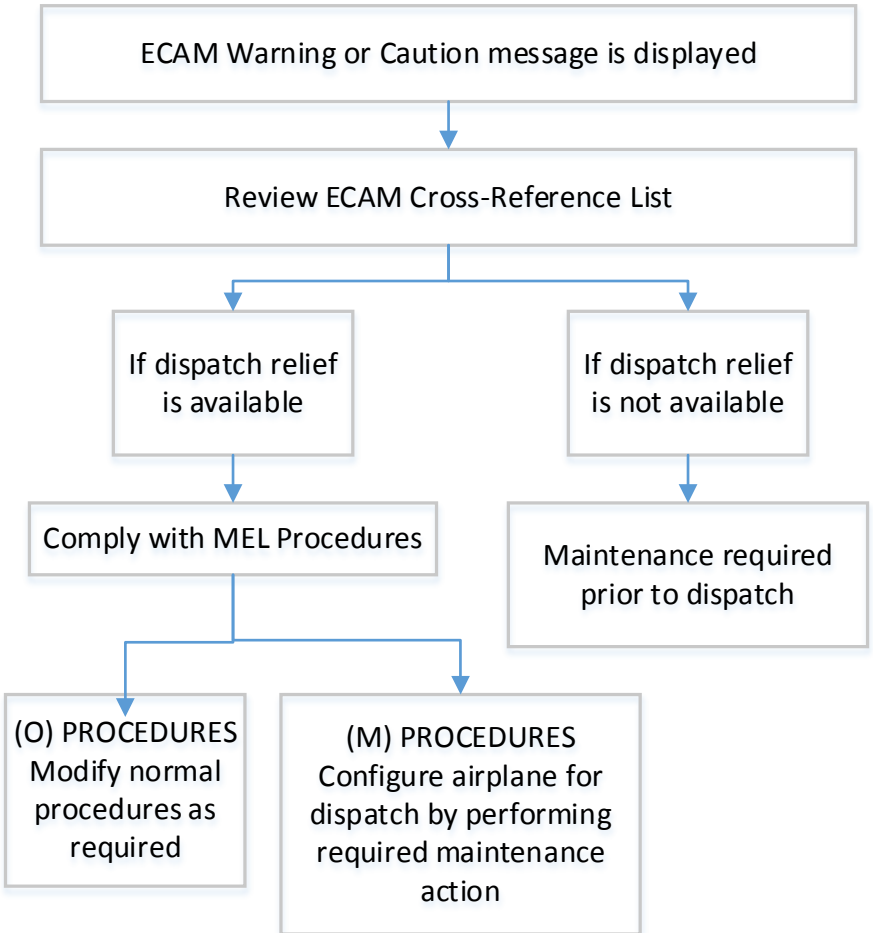
Class II messages are Maintenance Status Messages that indicate minor system faults. Class II messages are addressed in the MEL. In most cases, these faults are compatible with MEL requirements that enable the aircraft to perform a continuation of flight(s).

Crews are informed of Class II faults in the MAINTENANCE section of the lower ECAM STATUS page. After engine shut down, a flashing STS reminder appears on the upper ECAM display if MAINTENANCE messages exist. The actual fault is described in the Central Fault Display System (CFDS).

1. If a Class II message is encountered once Flight Deck Preparation (Electrical Power Established) has been started by the Flight Crew:
   a) If any if the following messages are displayed:
      - AIR BLEED -The associated MEL item must be applied prior to dispatch.
      - DMC 1/3 AND DMC 2/3 (displayed simultaneously) -Dispatch is not authorized.
   b) For all other Class II messages encountered, the flight may continue as originally dispatched. Contact Dispatch and Maintenance Control prior to take-off and advise them that you will have a Class II write-up at your destination. The Flight Crew will then make a logbook entry at the next point of landing and clearly indicate "Class II message." Placarding will be accomplished at the destination by Maintenance or by the Flight Crew as directed by Maintenance Control.
2. If maintenance is not available at your destination, the Flight Crew will contact MCC for deferral instructions.

Class II Message/MEL Cross Reference List:

MESSAGE	MEL ITEM NUMBER
ACMS	31-31-00E
AC GEN	24-00-02
ADR	34-00-00A
AFTCRG HEAT	21-21-00C
AIR BLEED	36-36-01 APPLY MEL ITEM 36-36-01A, -01B, OR -01C AS APPLICABLE BEFORE DEPARTURE
APU	49-00-01
CFDIU	31-31-00C
CIDS	23-00-01
DAR	31-31-00D
DC BUS TIE	24-00-01
DMC 1/3	31-31-00F/G
DMC 2/3	31-31-00H IF DMC 1/3 IS ALSO DISPLAYED - NO DISPATCH
DMU	31-31-00B
ENG (1/2) EIU	71-71-00B
ENG (1/2) FADEC	71-71-00A
EVMU	71-71-00C
F/CTL	27-27-00A
FUEL	28-00-01
FUEL INERT	47-47-00
GPCU	24-00-02
IR	34-00-00B
PACK	21-21-00A
QAR	31-31-00A
SDCU	26-26-00A
SFCS	27-27-00B
ZONE CONT	21-21-00B


ECAM Warning or Caution message is displayed
Review ECAM Cross-Reference List
If dispatch relief is available
If dispatch relief is not available
Comply with MEL Procedures
Maintenance required prior to dispatch
(O) PROCEDURES Modify normal procedures as required
(M) PROCEDURES Configure airplane for dispatch by performing required maintenance action

ECAM MESSAGES

CLASS I ECAM WARNING	REMARKS	See MEL Item for Possible Relief
AIR		
AIR AFT CRG VENT FAULT		21–28–04
AIR PACK 1 (2) FAULT or OVHT or OFF		21–52–01
AIR PACK 1(2) REGUL FAULT	If pack ram air inlet flap is affected. OR If pack ram air outlet flap (if installed) is affected. OR If pack controller, pack anti-ice valve or water extractor temperature sensor are affected. OR If turbine bypass valve is affected.	21–52–02 21-52-03 21-61-01 21-61-02
COND		
COND AFT CRG DUCT OVHT		21–43–02
COND AFT CRG HEAT FAULT		21–43–02
COND AFT CRG ISOL VALVE		21–28–05
COND CKPT (FWD CAB) (AFT CAB) DUCT OVHT		21–63–02
COND HOT AIR FAULT	If TRIM AIR SYS FAULT warning not present. OR If TRIM AIR SYS FAULT warning present.	21–63–03 21–63–02
COND L + R CAB FAN FAULT		NO DISPATCH
COND LAV + GALLEY FAN FAULT		21–23–01
COND TRIM AIR SYS FAULT	NOTE: If trim air valves are closed when this warning is triggered, it can be disregarded. AFT CAB / FWD CAB / CKPT TRIM VALVE message displayed on ECAM. OR TRIM AIR HI PR message displayed on ECAM.	 21–63–02 21–63–03
COND ZONE REGUL FAULT	If the message CAB ZONE AT FIXED TEMPERATURE is displayed. OR If the message PACKS AT FIXED TEMPERATURE is displayed.	21–63–01A 21–63–01C
CAB PR		
CAB PR LDG ELEV FAULT		21–31–05
CAB PR OUTFLOW VALVE NOT OPEN		NO DISPATCH

CAB PR SAFETY VALVE OPEN		21–31–08
CAB PR SYS 1 FAULT		21–31–01
CAB PR SYS 2 FAULT		21–31–01
VENT		
VENT AVNCS SYS FAULT	If SKIN VALVE FAULT message is present. OR If SKIN VALVE FAULT message is not present.	21–26–04, or 21–26–05, OR 21–26–03, or 21–26–06, or 21–26–08, or 21–26–10
VENT BLOWER FAULT	Actual Caution OR False Caution	21–26–01 21–26–11
VENT EXTRACT FAULT	Actual Caution OR False Caution	21–26–02 21–26–12
VENT SKIN VALVE FAULT	Faulty valve determined on ECAM CAB PRESS page. OR None	21–26–04 21–26–05
AUTO FLT		
AUTO FLT A/THR OFF	Actual Caution OR False Caution	22–30–01 22–30–03
AUTO FLT AP OFF	Actual Warning OR False Warning	22–10–01 22–10–05
AUTO FLT FAC 1 FAULT	NOTE: FAC 1 FAULT ECAM Caution may be triggered with associated C/B AUTO FLT/FAC1/28VDC tripping. This may be due to a short circuit within either rudder trim actuator channel 1 or rudder travel actuator channel 1. In this case, FAC 1 may be recovered provided the affected part of the faulty actuator is deactivated. Refer to MEL 27–22–01 if rudder trim system affected or MEL 27–23–01 if rudder travel limiter system affected.	NO DISPATCH
AUTO FLT FAC 2 FAULT		22–66–01A
AUTO FLT FAC 1 + 2 FAULT		NO DISPATCH
AUTO FLT FCU 1(2) (1 + 2) FAULT		NO DISPATCH
AUTO FLT RUD TRIM 1(2) FAULT		27–22–01
AUTO FLT RUD TRIM SYS		NO DISPATCH

AUTO FLT RUD TRV LIM 1(2)		27–23–01
AUTO FLT RUD TRV LIM SYS		NO DISPATCH
AUTO FLT YAW DAMPER 1(2)		22–63–01
AUTO FLT YAW DAMPER SYS		NO DISPATCH
WINDSHEAR		
WINDSHEAR DET FAULT		22–66–03
WINDSHEAR REAC W/S DET FAULT		22–66–03
COM		
COM ACARS (ATSU) FAULT		23–24–01, or 46–21–01
COM CIDS 1 + 2 FAULT		NO DISPATCH
COM HF 1(2) EMITTING	If hand microphone selector is jammed in the transmitting position. OR If side stick radio selector is jammed in the transmitting position. OR If a transmission key on one ACP is jammed in the transmitting position. OR None	23-51-05 23-51-08 23-51-02 23-11-01
COM VHF 1 EMITTING		NO DISPATCH
COM VHF (2)(3) EMITTING	If hand microphone selector is jammed in the transmitting position. OR If side stick radio selector is jammed in the transmitting position. OR If a transmission key on one ACP is jammed in the transmitting position. OR None	23-51-05 23-51-08 23-51-02 23-12-01
COM VHF 3 DATA FAULT		23–12–01
ELEC		
ELEC AC ESS BUS ALTN		NO DISPATCH
ELEC AC BUS 1 FAULT		NO DISPATCH
ELEC AC BUS 2 FAULT		NO DISPATCH
ELEC AC ESS BUS FAULT		NO DISPATCH
ELEC AC ESS BUS SHED		NO DISPATCH
ELEC APU GEN FAULT		24–20–02
ELEC BAT 1(2) FAULT		NO DISPATCH

ELEC BCL 1(2) FAULT		NO DISPATCH
ELEC C/B TRIPPED	Actual Caution OR False Caution	Refer to affected system. 24-50-01
ELEC DC BAT BUS FAULT		NO DISPATCH
ELEC DC BUS 1 + 2 FAULT		NO DISPATCH
ELEC DC BUS 1 FAULT		NO DISPATCH
ELEC DC BUS 2 FAULT		NO DISPATCH
ELEC DC EMER CONFIG		NO DISPATCH
ELEC DC ESS BUS FAULT		NO DISPATCH
ELEC DC ESS BUS SHED		NO DISPATCH
ELEC EMER CONFIG		NO DISPATCH
ELEC ESS BUSSES ON BAT		NO DISPATCH
ELEC GEN 1(2) FAULT		24–20–01
ELEC GEN 1(2) or APU GEN OVER LOAD		24–56–01
ELEC IDG DISCONNECTED		24–20–01
ELEC IDG 1(2) OIL PR / OVHT		24–20–01
ELEC STAT INV FAULT		NO DISPATCH
ELEC TR 1(2) or ESS TR FAULT		24–30–01
SMOKE		
SMOKE AFT (FWD) CARGO SMOKE	Actual Warning OR False Warning	NO DISPATCH 26–16–03, or 26–16–04
SMOKE AFT CRG DET FAULT		26–16–04
SMOKE AVIONICS SMOKE	Actual Warning OR False Warning	NO DISPATCH 26–15–01
SMOKE FWD CRG DET FAULT		26–16–03
SMOKE LAV + CRG DET FAULT		NO DISPATCH
SMOKE LAVATORY DET FAULT		26–17–01
SMOKE LAVATORY SMOKE	Actual Warning OR False Warning	NO DISPATCH 26–17–01
CARGO SMOKE		
CARGO SMOKE FWD (AFT) BTL SQUIB FAULT		26–23–01
ENG 1 (2)		
ENG 1(2) FIRE DET FAULT		NO DISPATCH
ENG 1(2) FIRE LOOP A(B) FAULT		26–12–01

ENG 1(2) FIRE		NO DISPATCH
APU		
APU FIRE DET FAULT		26–13–01C
APU FIRE LOOP A(B) FAULT		26–13–01
APU FIRE	Actual Warning OR False Warning	NO DISPATCH 49–10–01
F/CTL		
F/CTL AIL SERVO FAULT		27–14–01
F/CTL ALTN LAW		NO DISPATCH
F/CTL DIRECT LAW		NO DISPATCH
F/CTL ELAC 1 FAULT		27–93–01
F/CTL ELAC 1 PITCH FAULT		27–93–01
F/CTL ELAC 2 FAULT		NO DISPATCH
F/CTL ELAC 2 PITCH FAULT		NO DISPATCH
F/CTL ELEV SERVO FAULT	If servo control is affected. OR If servo control position transducer is affected.	NO DISPATCH 27–34–02
F/CTL FCDC FAULT		27–95–01
F/CTL FLAP ATTACH SENSOR		NO DISPATCH
F/CTL FLAP SYS 1 FAULT	None OR If maintenance confirms warning to be triggered due to flap motor failure.	NO DISPATCH 27–54–01
F/CTL FLAP SYS 2 FAULT	None OR If maintenance confirms warning to be triggered due to flap motor failure.	27–51–01A 27–54–01
F/CTL FLAP TIP BRK FAULT		27–51–02
F/CTL FLAPS / SLATS FAULT		NO DISPATCH
F/CTL FLAPS / SLATS LOCKED		NO DISPATCH
F/CTL GND SPLR (1 + 2) (3 + 4) FAULT		27–92–02
F/CTL GND SPLR FAULT	If braking system not affected. OR If braking system affected.	27–92–02 NO DISPATCH
F/CTL L + R ELEV FAULT		NO DISPATCH
F/CTL L(R) AIL FAULT		NO DISPATCH
F/CTL L(R) ELEV FAULT		NO DISPATCH
L(R) SIDESTICK FAULT		NO DISPATCH

F/CTL SEC 3 FAULT		27–94–01
F/CTL SEC 1(2) FAULT		NO DISPATCH
F/CTL SIDESTICK PRIORITY		NO DISPATCH
F/CTL SLAT SYS 1 FAULT	None OR If maintenance confirms warning to be triggered due to slat motor failure.	NO DISPATCH 27–84–01
F/CTL SLAT SYS 2 FAULT	None OR If maintenance confirms warning to be triggered due to slat motor failure.	27–51–01B 27–84–01
F/CTL SLAT TIP BRK FAULT		27–81–01
F/CTL SLATS and FLAPS FAULT in Conf 0		NO DISPATCH
F/CTL SPD BRK 2 (3 + 4) FAULT		27–92–01
F/CTL SPD BRK DISAGREE		27–92–01
F/CTL SPD BRK FAULT		27–92–01
F/CTL SPLR FAULT		27–64–01
F/CTL STABILIZER JAM		NO DISPATCH
CONFIG		
CONFIG L(R) SIDESTICK FAULT		NO DISPATCH
CONFIG PITCH TRIM NOT IN T.O. RANGE		NO DISPATCH
CONFIG RUD TRIM NOT IN T.O. RANGE		NO DISPATCH
CONFIG SLATS (FLAPS) NOT IN T.O. CONFIG.		NO DISPATCH
CONFIG SPEED BRK NOT RETRACTED		NO DISPATCH
FUEL		
FUEL APU LP VALVE FAULT		49–30–02
FUEL AUTO FEED FAULT		28–20–01
FUEL CTR TK PUMP 1(2) LO PR		28–21–02
FUEL CTR TK PUMPS LO PR		28–21–02
FUEL ENG 1(2) LP VALVE OPEN		NO DISPATCH
FUEL FQI CH 1(2) FAULT		28–40–02
FUEL L + R WING TK LO LVL		NO DISPATCH
FUEL L(R) INNER (OUTER) – TK HI TEMP	Actual Caution – Dispatch possible only if “delay T.O.” is not displayed on ECAM. OR False Caution	 28–40–09

FUEL L(R) INNER(OUTER) – TK LO TEMP	Actual Caution OR False Caution	NO DISPATCH 28–40–09
FUEL L(R) TK PUMP 1 + 2 LO PR		NO DISPATCH
FUEL L(R) TK PUMP 1(2) LO PR		28–21–01
FUEL L(R) WING TK LO LVL	Actual Caution OR False Caution	NO DISPATCH 28–40–01
FUEL L(R) XFR VALVE CLOSED or OPEN		28–15–01
FUEL XFEED VALVE FAULT		NO DISPATCH
HYD		
HYD B ELEC PUMP LO PR	Actual Caution OR False Caution	NO DISPATCH 29–30–04E
HYD B ELEC PUMP OVHT	Actual Caution OR False Caution	NO DISPATCH 29–30–04D
HYD G(Y) ENG 1(2) PUMP LO PR	Actual Caution OR False Caution	NO DISPATCH 29–30–04F
HYD G(B)(Y) RSVR LO AIR PR	Actual Caution OR False Caution	NO DISPATCH 29–30–04B
HYD G(B)(Y) RSVR LO LVL	Actual Caution OR False Caution	NO DISPATCH 29–30–04G
HYD G(Y)(B) RSVR OVHT	Actual Caution OR False Caution	NO DISPATCH 29–30–04C
HYD G(B)(Y) SYS LO PR	Actual Caution OR False Caution	NO DISPATCH 29–30–04H
HYD (B+Y) (B+G) (Y+G) SYS LO PR	Actual Caution OR False Caution	NO DISPATCH 29–30–04H
HYD PTU FAULT	Actual Caution OR False Caution	NO DISPATCH 29–30–04I

HYD RAT FAULT	Actual Caution OR False Caution	NO DISPATCH 29–30–04J
HYD Y ELEC PUMP LO PR	Actual Caution OR False Caution	29–24–01 29–30–04E
HYD Y ELEC PUMP OVHT	Actual Caution OR False Caution	29–24–01 29–30–04D
ANTI ICE		
ANTI ICE ALL PITOT		NO DISPATCH
ANTI ICE CAPT (F/O) (STBY) AOA		30–31–04
ANTI ICE CAPT (F/O) (STBY) L(R) STAT		30–31–03
ANTI ICE CAPT (F/O) (STBY) PITOT		30–31–02
ANTI ICE CAPT + F/O (CAPT + STBY) (F/O + STBY) PITOT		NO DISPATCH
ANTI ICE CAPT (F/O) (STBY) PROBES		30–31–01
ANTI ICE CAPT (F/O) TAT		30–31–05
ANTI ICE DETECT FAULT		NO DISPATCH
ANTI ICE ENG 1(2) VALVE CLSD or OPEN		30–21–01
ANTI ICE L + R WINDSHIELD		NO DISPATCH
ANTI ICE L(R) WINDOW		30–42–02
ANTI ICE L(R) WINDSHIELD		30–42–03
WING ANTI ICE		
WING ANTI ICE L(R) HI PR		NO DISPATCH
WING ANTI ICE L(R) VALVE OPEN		30–11–01
WING ANTI ICE OPEN ON GND		30–11–01
WING ANTI ICE SYS FAULT		30–11–01
EIS		
EIS DMC 1(2)(3) FAULT		31–63–02
FWS		
FWS FWC 2 FAULT		31–53–01
FWS FWC 1 (1 + 2) FAULT		NO DISPATCH
FWS OEB/FWC DISCREPANCY		NO DISPATCH
FWS SDAC 2 FAULT		31–55–01
FWS SDAC 1 (1 + 2) FAULT		NO DISPATCH
RECORDER		
RECORDER DFDR FAULT		31–30–02
RECORDER FDIU FAULT		31–30–03
RECORDER SYS FAULT		31–30–03

L/G		
RECORDL/G DOORS NOT CLOSED		NO DISPATCH
L/G LGCIU 1 FAULT		NO DISPATCH
L/G LGCIU 2 FAULT		32-31-01
L/G SHOCK ABSORBER FAULT		NO DISPATCH
L/G SYS DISAGREE		NO DISPATCH
WHEEL		
WHEEL HYD SEL FAULT		NO DISPATCH
WHEEL N/W STEER FAULT		32–51–01
CONFIG		
CONFIG PARK BRAKE ON		NO DISPATCH
BRAKES		
BRAKES A/SKID NWS FAULT		NO DISPATCH
BRAKES AUTO BRK FAULT	If normal braking is lost (BRAKE RELEASED message is not displayed on ECAM E/WD) OR If Auto Brake function is affected. (BRAKE RELEASED message is displayed on ECAM E/WD) OR If a tachometer is affected (BRAKE RELEASED message is displayed on ECAM E/WD)	NO DISPATCH 32–42–04 NO DISPATCH
BRAKES BSCU CH 1(2) FAULT		32–42–03
BRAKES HOT	Actual Caution OR False Caution	NO DISPATCH 32–60–03H
BRAKES SYS 1(2) FAULT		32–42–03
NAV		
CAPT (F/O) (STBY) AOA FAULT		NO DISPATCH
NAV ADR DISAGREE		NO DISPATCH
NAV ADR FAULT	ADR 1 ADR 2 ADR 3	NO DISPATCH 34–10–01K 34–10–01L
NAV GPWS FAULT		34–48–01 or, 34–48–02
NAV GPWS TERR DET FAULT		34–48–01E
NAV HDG / ATT / ALTI DISCREPANCY		34–10–01
NAV IAS DISCREPANCY		34–10–01C
NAV ILS 1(2) FAULT		34–36–01
NAV IR DISAGREE		NO DISPATCH
NAV IR FAULT	IR OR IRS NAV MODE	34–10–01

NAV RA DEGRADED		34-42-01
NAV RA 1(2) FAULT		34–42–01
NAV TCAS FAULT		34–43–01
F/CTL		
F/CTL ADR DISAGREE		NO DISPATCH
F/CTL IR DISAGREE		NO DISPATCH
AIR		
AIR APU BLEED FAULT		36–12–02
AIR APU BLEED LEAK	Actual Caution OR False Caution	36–12–01 36–22–17
AIR BLEED 1(2) OFF		36–11–01
AIR ENG 1(2) (1 + 2) BLEED LO TEMP		36–11–04
AIR ENG 1(2) BLEED ABNORM PR		36–11–01
AIR ENG 1(2) BLEED FAULT		36–11–01
AIR ENG 1(2) BLEED LEAK	Actual Caution OR False Caution	NO DISPATCH 36–22–15
AIR ENG 1(2) BLEED NOT CLSD		36–11–02
AIR ENG HP VALVE FAULT		36–11–07
AIR L(R) WING LEAK		NO DISPATCH
AIR L(R) WING LEAK DET FAULT		NO DISPATCH
AIR X BLEED FAULT		36–12–04
BLEED		
BLEED MONITORING FAULT		NO DISPATCH
APU		
APU AUTO (EMER) SHUT DOWN		49–10–01
DOOR		
DOORS CABIN (CARGO) (EMER EXIT)	Actual Caution OR False Caution	NO DISPATCH 52–70–01
DOORS L(R) AFT (FWD) AVIONICS	Actual Caution OR False Caution	NO DISPATCH 52–70–01
ENG 1 (2)		
ENG 1(2) BLEED STATUS FAULT		NO DISPATCH
ENG 1(2) COMPRESSOR VANE		NO DISPATCH
ENG 1(2) CTL VALVE FAULT	.	NO DISPATCH
ENG 1(2) EIU FAULT		NO DISPATCH
ENG 1(2) FADEC A(B) FAULT		NO DISPATCH

ENG 1(2) FADEC ALTERNATOR		NO DISPATCH
ENG 1(2) FADEC FAULT		NO DISPATCH
ENG 1(2) FADEC HI TEMP		NO DISPATCH
ENG 1(2) FUEL CTL FAULT		NO DISPATCH
ENG 1(2) FUEL FILTER CLOG		NO DISPATCH
ENG 1(2) HP FUEL VALVE		NO DISPATCH
ENG 1(2) IGN A (B) (A+B) FAULT	Actual Caution OR False Caution	74–31–01 74–31–03
ENG 1(2) LOW N1		NO DISPATCH
ENG 1(2) N1 / N2 / EGT / FF DISCREPANCY		NO DISPATCH
ENG 1(2) OIL FILTER CLOG	Actual Caution OR False Caution	NO DISPATCH 79–35–02
ENG 1(2) OIL HI TEMP		NO DISPATCH
ENG 1(2) OIL LO PR	Actual Caution OR False Caution	NO DISPATCH 79–33–02
ENG 1(2) ONE TLA FAULT		NO DISPATCH
ENG 1(2) OVSPD PROT FAULT		NO DISPATCH
ENG 1(2) REV ISOL FAULT		NO DISPATCH
ENG 1(2) REV PRESSURIZED		NO DISPATCH
ENG 1(2) REV SWITCH FAULT		78–30–02
ENG 1(2) REVERSE UNLOCKED		NO DISPATCH
ENG 1(2) REVERSER FAULT		78–30–01
ENG 1(2) SENSOR/ PROBES FAULT		NO DISPATCH
ENG 1(2) START FAULT		NO DISPATCH
ENG 1(2) START VALVE FAULT		80–11–01
ENG 1(2) THR LEVER DISAGREE		NO DISPATCH
ENG 1(2) THR LEVER FAULT		NO DISPATCH
ENG		
ENG COMPRESSOR VANE		NO DISPATCH
ENG FLEX TEMP NOT SET		73–20–05
ENG TYPE DISAGREE		NO DISPATCH
ENG VIB SYS FAULT		77–00–02

ATA 11 Contents

11-00-01 Aircraft Placards/Markings Repair Installed 11-2

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
11-00-01	Aircraft Placards/Markings Repair Installed **"Contact MCC"** Administrative Control Item	**N**	-	-	-	Item may be used to track repair provided: a) MCC determines that placard is FAA required, b) Install repair per TOPP 40-40-05, c) Enter in log book repair is applied per TOPP 40-40-05, and d) Enter in log book that repair is deferred per MEL 11-00-01. NOTE: If MCC determines that placard is not FAA required, use TOPP 40-40-08 (NEF).

MEL ITEM	TAB LOCATION	PLACARD TEXT
11-00-01	Log book	_____ REPAIRED PER TOPP 40-40-05

ATA 21 Contents

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		NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH	
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY					
21-21-00A	Fault(s) Indicated by PACK 1 (2) (A319/A320 Aircraft Only)	**Y**	-	-	**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
21-21-00B	Fault(s) Indicated by ZONE CONT (A319/A320 Aircraft Only)	**Y**	-	-	**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
21-21-00C	Fault(s) Indicated by AFT CRG HEAT	**Y**	-	-	**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
21-21-00D	Fault(s) Indicated by TEMP CTL 1(2) (A321 Aircraft Only)	**Y**	-	-	**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-21-00A	Adjacent To ECAM Display	ECAM MAINT STATUS MESSAGE “PACK ___ ” DISPLAYED
21-21-00B	Adjacent To ECAM Display	ECAM MAINT STATUS MESSAGE “ZONE CONT” DISPLAYED
21-21-00C	Adjacent To ECAM Display	ECAM MAINT STATUS MESSAGE “AFT CRG HEAT” DISPLAYED
21-21-00D	Adjacent To ECAM Display	ECAM MAINT STATUS MESSAGE “TEMP CTL ____” DISPLAYED

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-21-01	Cabin Fans	**Y**	2	1	**C**	One may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-21-01	Adjacent To Affected Cabin Fan Lighted Pushbutton Switch	___ FAN IS INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
CAB FAN PB SWITCH 21-21-02 OFF Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-21-02	Adjacent To OFF Light CAB FAN pb Switch	CAB FAN PB SWITCH OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-23-01A	Lavatory and Galley Extraction Fan A/C 3209-3235					NO RELIEF APPROVED.
21-23-01B	Lavatory and Galley Extraction Fan (ALL A319 and A321 A/C and A/C 3236-3278) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Cabin duct temperatures are available on ECAM, and b) Flight duration is acceptable to the Captain and Dispatcher.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-23-01A	N/A	N/A
21-23-01B	Adjacent To ECAM Display	LAV & GALLEY EXTRACTION FAN INOP

(O) PROCEDURES

21-23-01B

1. Two amber crosses replace the cabin zone temperature indications on the COND SD page.
2. The INOP SYS column on the STATUS SD page may display the LAV DET message.
3. The cabin zone temperature regulation is lost:
   a) For the A319 and A320 aircraft the Zone Controller commands fixed FWD and AFT cabin ducts temperature to 59°F (15°C).
   b) For the A321 aircraft the Air Conditioning System Controller commands FWD and AFT cabin ducts temperature using the position of the FWD CABIN selector and the AFT CABIN selector on the AIR COND overhead panel. Slight effect of cabin comfort may occure.
4. Cockpit Temperature Regulation:
   a) For the A319 and A320 aircraft recover cockpit temperature regulation:
      (1) Set the HOT AIR pb switch to OFF on overhead AIR COND panel.
      (2) Use the COCKPIT selector on overhead AIR COND panel to control flight deck temperature.
   b) For the A321 aircraft cockpit temperature regulation is still operative.

(M) PROCEDURES

21-23-01B

1. Deactivate the extraction fan by:
   a) On C/B panel 122VU: pull and secure circuit breaker LAV/GALLEY VENT CTL–EXTRACT FAN–SPLY location U19.
   b) On C/B panel 122VU: pull and secure circuit breaker LAV/GALLEY VENT CTL–EXTRACT FAN–CTL location U21.

NOTE: Panel 122VU is located behind the first officer on the bulkhead.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-01A	Blower Fan (Avionics Ventilation) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Extract Fan operates normally, b) BLOWER pb switch is set to OVRD, c) Both packs are operative, and d) VENT AVNCS SYS FAULT ECAM caution is not present. NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs.
21-26-01B	Blower Fan (Avionics Ventilation) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Extract Fan operates normally, b) BLOWER pb switch is set to OVRD, c) Both packs are operative, and d) Air conditioning inlet valve is verified open PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**
21-26-01C	Blower Fan (Avionics Ventilation) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Extract Fan operates normally, b) BLOWER pb switch is set to OVRD, c) Both packs are operative, d) Air conditioning inlet valve is secured open, and e) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-01A	Adjacent To Blower Lighted Pushbutton Switch	BLOWER FAN INOP PACKS MUST BE OPERATING WHEN POWER ON A/C
21-26-01B	Adjacent To Blower Lighted Pushbutton Switch	BLOWER FAN INOP PACKS MUST BE OPERATING WHEN POWER ON A/C
21-26-01C	Adjacent To Blower Lighted Pushbutton Switch	BLOWER FAN INOP PACKS MUST BE OPERATING WHEN POWER ON A/C

Continued Next Page

(O) PROCEDURES

21-26-01A

On the ground:

1. Apply electrical power to aircraft systems.
2. Check that the air conditioning is operating with both PACKS ON.

   NOTE: If APU is inoperative, a high pressure cart must be used to run the packs.
3. Ensure BLOWER pb switch is in the OVRD position.
4. Check that VENT AVNCS SYS FAULT and VENT EXTRACT FAULT cautions are not displayed on ECAM E/WD.

   NOTE 1: If VENT EXTRACT FAULT caution is displayed on ECAM E/WD, it means that the blower fan may be seized. The aircraft can be dispatched provided the blower and extract fans are interchanged (i.e. blower fan serviceable and extract fan seized). Only a VENT EXTRACT FAULT caution will then be displayed on ECAM E/WD. A/C may then be dispatched per MEL item 21–26–02A, –02B or –02C.

   NOTE 2: For last flight of the day, flight crews should put the aircraft on ground service power before shutting packs off.

21-26-01B

On the ground:

1. Apply electrical power to aircraft systems.
2. Check that the air conditioning is operating with both PACKS ON.

   NOTE: If APU is inoperative, a high pressure cart must be used to run the packs.
3. Ensure BLOWER pb switch is in the OVRD position.
4. Check that VENT EXTRACT FAULT caution is not displayed on ECAM E/WD.

   NOTE: If VENT EXTRACT FAULT caution is displayed on ECAM E/WD, it means that the blower fan may be seized. The aircraft can be dispatched provided blower and extract fans are interchanged (i.e. blower fan serviceable and extract fan seized). Only a VENT EXTRACT FAULT caution will then be displayed on ECAM E/WD. A/C may then be dispatched per MEL item 21–26–02A, –02B or –02C.
5. After maintenance has verified the air conditioning inlet valve is in the open position, clear VENT AVNCS SYS FAULT caution on ECAM by pressing ECAM CLR pb.

   NOTE: For last flight of the day, flight crews should put the aircraft on ground service power before shutting packs off.

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21-26-01C

On the ground:

1. Apply electrical power to aircraft systems.
2. Check that the air conditioning is operating with both PACKS ON.

   NOTE: If APU is inoperative, a high pressure cart must be used to run the packs.
3. Ensure BLOWER pb switch is in the OVRD position.
4. Check that VENT EXTRACT FAULT caution is not displayed on ECAM E/WD.

   NOTE: If VENT EXTRACT FAULT caution is displayed on ECAM E/WD, it means that the blower fan may be seized. The aircraft can be dispatched provided blower and extract fans are interchanged (i.e. blower fan serviceable and extract fan seized). Only a VENT EXTRACT FAULT caution will then be displayed on ECAM E/WD. A/C may then be dispatched per MEL item 21–26–02A, –02B or –02C.
5. Clear VENT AVNCS SYS FAULT caution on ECAM by pressing ECAM CLR pb.

   NOTE 1: VENT AVNCS SYS FAULT will be displayed after landing.

   NOTE 2: For last flight of the day, flight crews should put the aircraft on ground service power before shutting packs off.

(M) PROCEDURES

21-26-01A

1. On 123VU panel, open and secure the AVNCS VENT/BLOWER/FAN circuit breaker located at AD10.

   NOTE: If VENT EXTRACT FAULT caution is displayed on ECAM E/WD, it means that the blower fan may be seized. The aircraft can be dispatched provided blower and extract fans are interchanged (i.e. blower fan serviceable and extract fan seized). Only a VENT EXTRACT FAULT caution will then be displayed on ECAM E/WD. A/C may then be dispatched per MEL item 21–26–02A, –02B or –02C.

21-26-01B

1. On 123VU panel, open and secure the AVNCS VENT/BLOWER/FAN circuit breaker located at AD10.

   NOTE: If EXTRACT FAULT warning appears, it means that blower fan may be seized. The aircraft can be dispatched provided blower and extract fans are interchanged (i. e. blower fan serviceable and extract fan seized). Only an EXTRACT FAULT warning will then be present. A/C may then be dispatched per MEL item 21–26–02A or 02B.

PRIOR TO EACH DEPARTURE:

2. Verify that Air Conditioning Inlet Valve is OPEN by performing AMM Task 21-26-00-040-006.

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21-26-01C

1. On 123VU panel, open and secure the AVNCS VENT/BLOWER/FAN circuit breaker located at AD10.
2. Comply with AMM Task 21-26-00-040-013.

PRIOR TO EACH DEPARTURE

3. Do an operational test of the avionics equipment ventilation from the MCDU per AMM Task 21-26-00-710-001

NOTE: Make sure all fault messages shown are related to:
- The fault of the blower fan, and
- The deactivation of the conditioned-air inlet valve (21HQ)
- If other messages are shown, refer to the related MEL valve item

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-02A	Extract Fan **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Blower fan operates normally, b) EXTRACT p.b. sw. is set at OVRD, c) Both packs are operative, d) VENT AVNCS SYS FAULT ECAM caution is not present, and e) Outside air temperature (OAT) and time on ground with electrical power on are limited as follows: OAT < 38°C – No limit OAT 39–45°C – 3 hours OAT 46–50°C – 2 hours OAT 51–54°C – 35 min. NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs.
21-26-02B	Extract Fan **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Blower Fan operates normally, b) EXTRACT p.b. sw. is set at OVRD, c) Both packs are operative, d) Air conditioning inlet valve is verified open PRIOR TO EACH DEPARTURE (Log Book Entry Required), and e) Outside air temperature (OAT) and time on ground with electrical power on are limited as follows: OAT < 38°C – No limit OAT 39–45°C – 3 hours OAT 46–50°C – 2 hours OAT 51–54°C – 35 min. NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-02C Extract Fan **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Blower Fan operates normally, b) EXTRACT p.b. sw. is set at OVRD, c) Both packs are operative, d) Air conditioning inlet valve is secured open, e) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required), and f) Outside air temperature (OAT) and time on ground with electrical power on are limited as follows: OAT < 38°C – No limit OAT 39–45°C – 3 hours OAT 46–50°C – 2 hours OAT 51–54°C – 35 min. NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-02A	Adjacent To Extract Lighted Pushbutton Switch	EXTRACT FAN INOP PACKS MUST BE OPERATING WHEN POWER ON A/C
21-26-02B	Adjacent To Extract Lighted Pushbutton Switch	EXTRACT FAN INOP PACKS MUST BE OPERATING WHEN POWER ON A/C
21-26-02C	Adjacent To Extract Lighted Pushbutton Switch	EXTRACT FAN INOP PACKS MUST BE OPERATING WHEN POWER ON A/C

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(O) PROCEDURES

21-26-02A

1. On the ground:
   a) Apply electrical power to aircraft systems.
   b) Check that the air conditioning is operating with both PACKS ON.

      NOTE: If APU is inoperative, a high pressure cart must be used to run the packs.

   c) Set EXTRACT pb-sw to OVRD.
   d) Clear VENT EXTRACT FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.
   e) Check that VENT AVNCS SYS FAULT caution is not displayed on ECAM E/WD.
   f) Ensure time on ground with electrical power on does not exceed specified limits.
2. After engine start:
   a) Verify that C/B on panel 121VU EIS/HORN/SPLY location P09 is closed unless horn is deactivated and MEL 23–42–01 is applied.

   NOTE 1: The ground horn may be activated. If so, horn may be silenced by pulling C/B on panel 121VU EIS/HORN/SPLY location P09. C/B must be closed again after engine start. If horn is triggered after landing when engines are shut down, it can be silenced again. In this case, the ADIRS must be switched OFF before leaving the aircraft.

   NOTE 2: For last flight of the day, flight crews should put the aircraft on ground service power before shutting packs off.

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21-26-02B

1. On the ground:
    a) Apply electrical power to aircraft systems.
    b) Check that the air conditioning is operating with both PACKS ON.

        NOTE: If APU is inoperative, a high pressure cart must be used to run the packs.

    c) Set EXTRACT pb-sw to OVRD.
    d) Clear VENT EXTRACT FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.
    e) If VENT AVNCS SYS FAULT is displayed on ECAM E/WD, it means that an avionics equipment ventilation valve or an AEVC fault has been detected. In that case, the failed system has to be identified and repaired or corresponding MEL item has to be applied.
    f) Ensure time on ground with electrical power on does not exceed specified limits.
2. After engine start:
    a) Verify that C/B on panel 121VU EIS/HORN/SPLY location P09 is closed unless horn is deactivated and MEL 23–42–01 is applied.

    NOTE 1: The ground horn may be activated. If so, horn may be silenced by pulling C/B on panel 121VU EIS/HORN/SPLY location P09. C/B must be closed again after engine start. If horn is triggered after landing when engines are shut down, it can be silenced again. In this case, the ADIRS must be switched OFF before leaving the aircraft.

    NOTE 2: For last flight of the day, flight crews should put the aircraft on ground service power before shutting packs off.

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21-26-02C

1. On the ground:
   a) Apply electrical power to aircraft systems..
   b) Check that the air conditioning is operating with both PACKS ON.

      NOTE: If APU is inoperative, a high pressure cart must used to run the packs.

   c) Ensure time on ground with electrical power on does not exceed specified limits
   d) Set EXTRACT pb-sw to OVRD.
   e) Clear VENT EXTRACT FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.
   f) Clear VENT AVNCS SYS FAULT caution on ECAM E/WD by pressing ECAM CLR pb.
   g) Ensure time on ground with electrical power on does not exceed specified limits.
2. After engine start:
   a) Verify that C/B EIS/HORN/SPLY (P09 on 121VU) is closed.

      NOTE 1: The ground horn may be activated. If so, horn may be silenced by pulling C/B on panel 121VU EIS/HORN/SPLY location P09. C/B must be closed again after engine start. If horn is triggered after landing when engines are shut down, it can be silenced again. In this case, the ADIRS must be switched OFF before leaving the aircraft.

      NOTE 2: VENT AVNCS SYS FAULT will be displayed after landing.

      NOTE 3: For last flight of the day, flight crews should put the aircraft on ground service power before shutting packs off.

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(M) PROCEDURES

21-26-02A

1. On C/B panel 123VU: pull and secure circuit breaker AVNCS VENT/EXTC/FAN located at AE2 for the A319/A320 aircraft or located at AC4 for the A321 aircraft.

21-26-02B

1. On C/B panel 123VU: pull and secure circuit breaker AVNCS VENT/EXTC/FAN located at AE2 for the A319/A320 aircraft or located at AC4 for the A321 aircraft.

PRIOR TO EACH DEPARTURE

2. Make sure that the operation of avionics equipment ventilation with electrical ground power, has the time limits that follow:
    - Outside air temperature 38 deg. C or less, no time limit
    - Outside air temperature 45 deg. C, maximum 3 hours
    - Outside air temperature 55 deg. C, maximum of thirty five minutes
3. Check Air Inlet Valve is in the OPEN position by performing AMM Task 21-26-00-040-007.

21-26-02C

1. On C/B panel 123VU: pull and secure circuit breaker AVNCS VENT/EXTC/FAN located at AE2 for the A319/A320 aircraft or located at AC4 for the A321 aircraft.
2. Deactivate Extract Fan per AMM Task 21-26-00-040-015.

PRIOR TO EACH DEPARTURE:

3. Make sure that the operation of avionics equipment ventilation with electrical ground power, has the time limits that follow:
    - Outside air temperature 38 deg. C or less, no time limit
    - Outside air temperature 45 deg. C, maximum 3 hours
    - Outside air temperature 55 deg. C, maximum of thirty five minutes
4. Perform operational test of the Avionics Equipment Ventilation (AEVC) using CFDS AIR COND system test via MCDU: AMM Task 21–26–00–710–001.
    a) Check that no other fault messages other than related to the failure of the extract fan and the deactivation of the air conditioning inlet valve (21HQ), otherwise refer to the associated MEL valve item.

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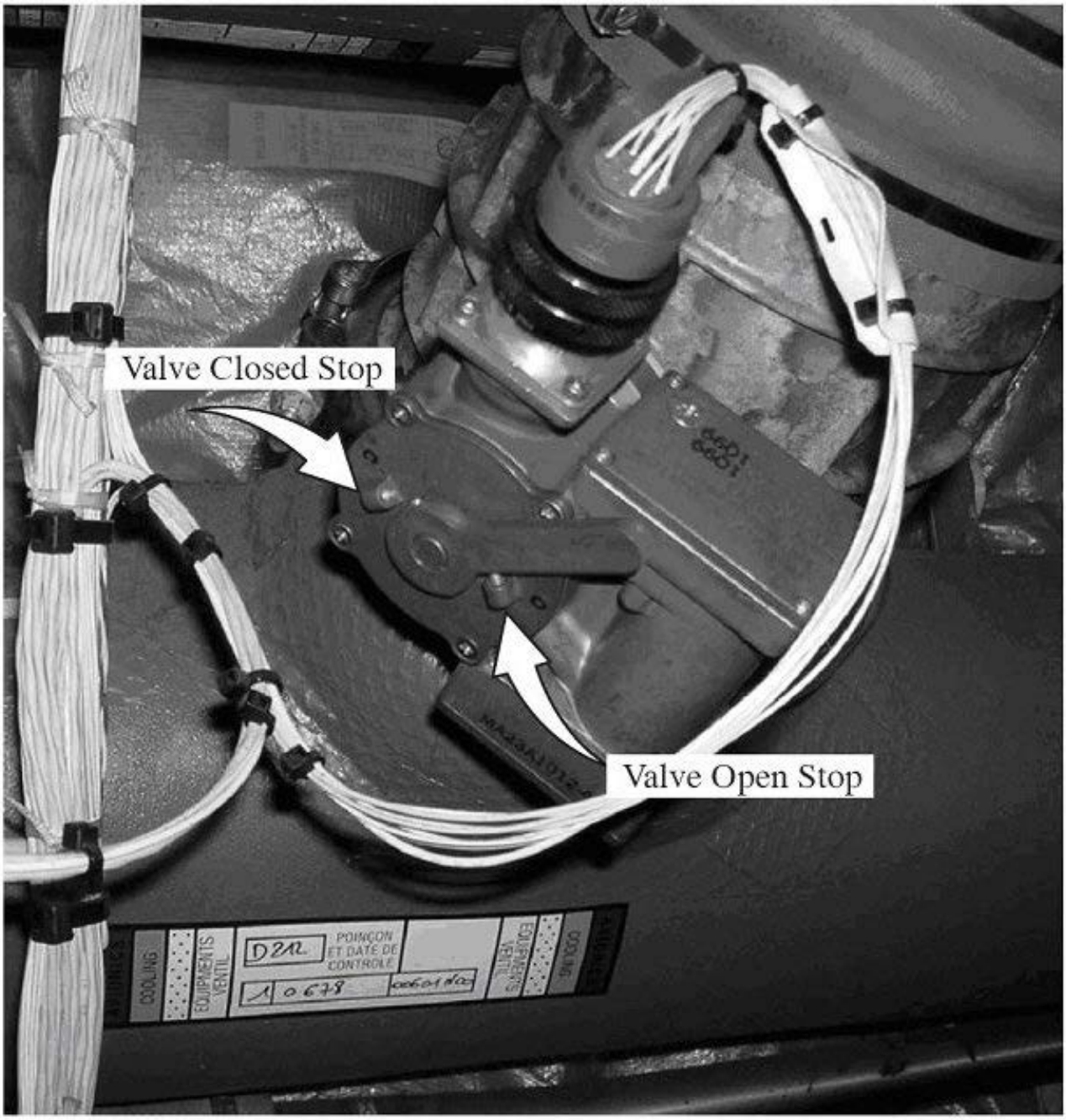

Figure 21-26-02.1

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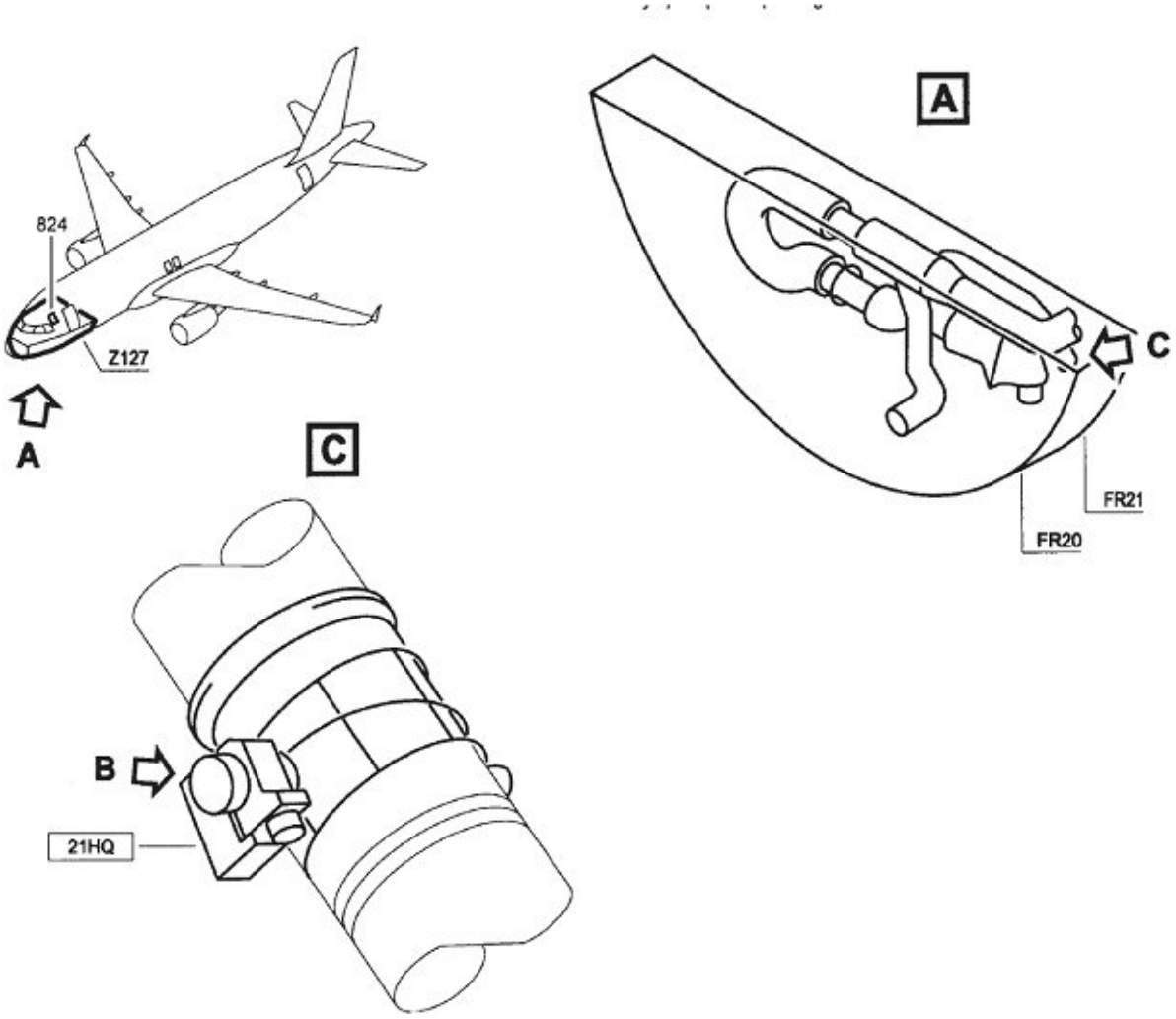

Figure 21-26-02.2

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
21-26-03	Skin Exchanger Inlet Bypass Valve **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Valve is secured closed, and b) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required) **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-03	Adjacent To ECAM Display	SKIN EXCHANGER INLET BYPASS VALVE INOP SECURED CLOSED

(O) PROCEDURES

1. After the valve has been secured closed, clear VENT AVNCS SYS FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.

   NOTE: VENT AVNCS SYS FAULT will be displayed after landing.

(M) PROCEDURES

1. Deactivate the SKIN EXCHANGER INLET BYPASS VALVE by performing AMM Task 21-26-00-040-001.

PRIOR TO EACH DEPARTURE:

2. Perform operational test of the Avionics Equipment Ventilation (AEVC) using CFDS AIR COND system test via MCDU: Task 21–26–00–710–001:

   a) Make sure that all the fault messages shown are related to the fault of the skin exchanger inlet-bypass-valve. If other messages are shown, refer to the related MEL valve item.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-04	Skin Air Outlet Valve **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Internal flap (small door) is manually secured to open position, b) Extract valve (skin air outlet valve) is displayed in partially open position (amber or green) on ECAM CAB PRESS page, c) Both packs are operative, d) Skin exchanger isolation valve is secured open, and e) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE When ground De–icing procedures are required, contact Maintenance to close the Internal Flap of Skin Air Outlet Valve during De–icing. Flap must be opened after De–icing. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-04	Adjacent To ECAM Display	SKIN AIR OUTLET VALVE INOP

(O) PROCEDURES

1. After the internal flap (small door) has been secured open, clear VENT AVNCS SYS FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.
2. If VENT SKIN VALVE FAULT is displayed on ECAM E/WD, follow the ECAM procedure.

   NOTE 1: ECAM CAB PRESS page will indicate the door at 45 degrees open and amber or green.

   NOTE 2: VENT AVNCS SYS FAULT will be displayed after landing.
3. When ground De–icing procedures are required, contact Maintenance to close the Internal Flap of Skin Air Inlet Valve during De–icing. Flap must be opened after De–icing.

   NOTE: Avionics smoke may not be perceptible from the flight deck due to opening of the internal flap of the valve. In case of ECAM warning AVIONICS SMOKE, apply associated ECAM procedure even if smoke is not perceptible.

(M) PROCEDURES

1. To deactivate the Skin Air Outlet Valve perform AMM Task 21-26-00-040-002.
2. PRIOR TO EACH DEPARTURE
   a. Complete an operational test of the AEVC by performing AMM Task 21-26-00-710-001.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-05A	Skin Air Inlet Valve **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Valve is secured closed, b) Air conditioning inlet valve is verified open PRIOR TO EACH DEPARTURE (Log Book Entry Required), c) Both packs are operative. and d) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**
21-26-05B	Skin Air Inlet Valve **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Valve is secured closed, b) Deactivate the air conditioning inlet valve in open position per MEL 21-26-08, c) Both packs are operative, and d) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-05A	Adjacent To ECAM Display And Extract Pushbutton Switch	SKIN AIR INLET VALVE INOP
21-26-05B	Adjacent To ECAM Display And Extract Pushbutton Switch	SKIN AIR INLET VALVE INOP

Continued Next Page

(O) PROCEDURES

21-26-05A

1. On the ground:
   a) Apply electrical power to aircraft systems.
   b) Operate APU BLEED and both air conditioning PACKS ON to provide avionics cooling.
   NOTE: If APU is inoperative, a high pressure cart must used to run the packs.
   c) Set EXTRACT pb switch to OVRD.
   d) Check on ECAM CAB PRESS page that the skin air inlet valve is closed.
   e) Clear VENT AVNCS SYS FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.
2. After takeoff:
   a) Set EXTRACT pb switch to AUTO.
3. After landing:
   a) Set EXTRACT pb switch to OVRD.

21-26-05B

1. On the ground:
   a) Apply electrical power to aircraft systems.
   b) Operate APU BLEED and both air conditioning PACKS ON to provide avionics cooling.
   NOTE: If APU is inoperative, a high pressure cart must used to run the packs.
   c) Set EXTRACT pb switch to OVRD.
   d) Clear VENT AVNCS SYS FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.
2. After takeoff:
   a) Set EXTRACT pb switch to AUTO.
3. After landing:
   a) Set EXTRACT pb switch to OVRD.
   NOTE: VENT AVNCS SYS FAULT will be displayed after landing.

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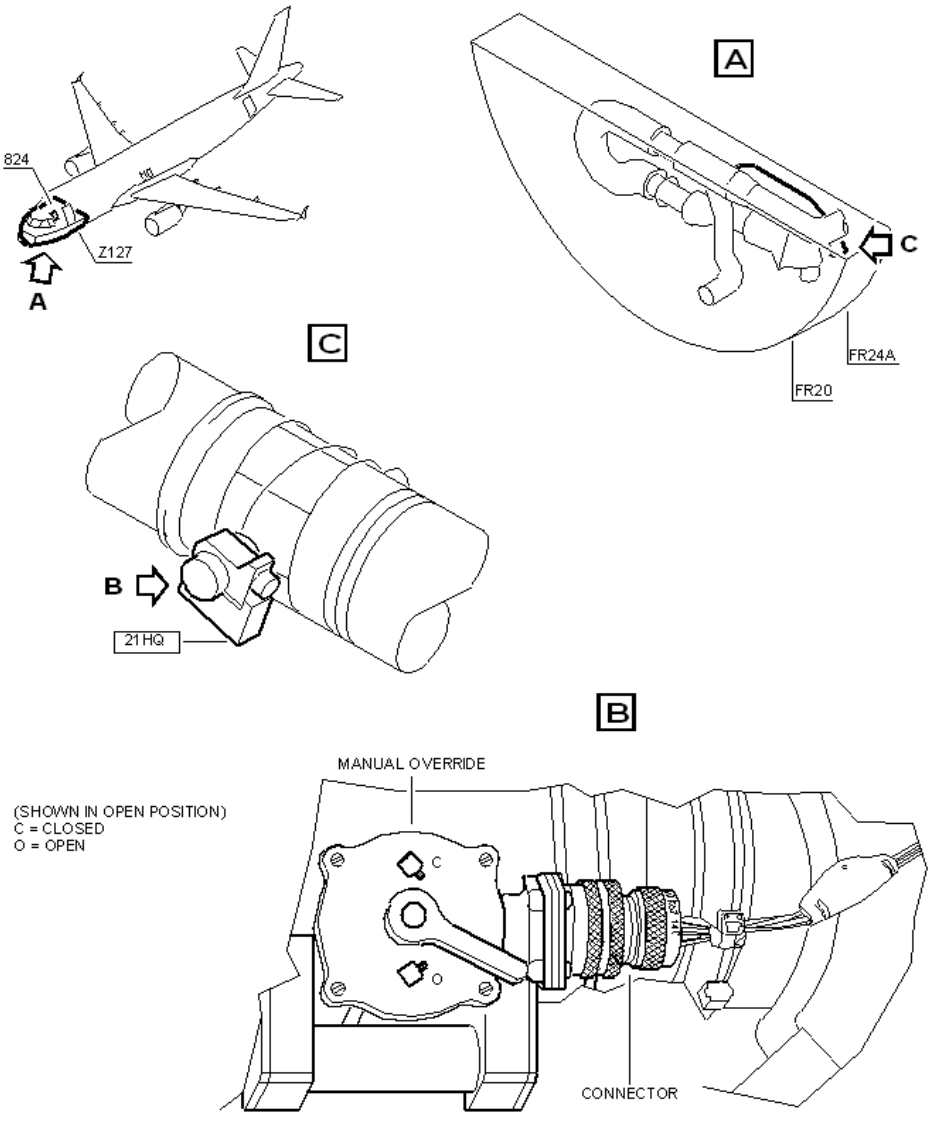
(M) PROCEDURES

21-26-05A

1. Deactivate the Skin Air Inlet Valve per AMM Task 21-26-00-040-004.
2. PRIOR TO EACH DEPARTURE:
   a) Check that the visual position indicator on the Air Conditioning Inlet Valve is in the open position.
   b) Ensure that the EXTRACT P/B switches are in AUTO configuration.
   c) Perform operational test of the Avionics Equipment Ventilation (AEVC) using CFDS AIR COND system test via MCDU: Task 21–26–00–710–001.:
      1) Check that all fault messages shown are related to the fault of the skin air inlet valve. If other messages are shown, refer to the related MEL item.
   d) Set EXTRACT P/B switches to the OVRD position.



Air Conditioning Inlet Valve Figure 21.26.05.01

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21-26-05B

1. Deactivate the Skin Air Inlet Valve per AMM Task 21-26-00-040-004.
2. Deactivate the Air Conditioning Inlet Valve in the open position per MEL 21-26-08.
3. PRIOR TO EACH DEPARTURE:
   a) Ensure that the EXTRACT P/B switches are in AUTO configuration.
   b) Perform operational test of the Avionics Equipment Ventilation (AEVC) using CFDS AIR COND system test via MCDU: Task # 21–26–00–710–001.:
      1) Check that all fault messages shown are related to the fault of the skin air inlet valve. If other messages are shown, refer to the related MEL item.
   c) Set EXTRACT P/B switches to the OVRD position.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-06A	Skin Exchanger Isolation Valve (Valve Inoperative Open) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative in open position provided AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
21-26-06B	Skin Exchanger Isolation Valve (Valve Secured Open) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Valve is secured open, and b) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-06A	Adjacent To ECAM Display	SKIN EXCHANGER ISOLATION VALVE INOP OPEN
21-26-06B	Adjacent To ECAM Display	SKIN EXCHANGER ISOLATION VALVE SECURED OPEN

(O) PROCEDURES

21-26-06A, 21-26-06B

1. Clear VENT AVNCS SYS FAULT caution if displayed on ECAM E/WD by pressing ECAM CLR pb.

(M) PROCEDURE

21-26-06A

1. To verify the skin exchanger isolation valve is in the open position perform AMM Task 21-26-00-040-008.
2. PRIOR TO EACH DEPARTURE:
   a) Perform operational test of the Avionics Equipment Ventilation (AEVC) using CFDS AIR COND system test AMM Task 21–26–00–710–001:
      1) Check that all fault messages shown are related to the fault of the skin air inlet valve. If other messages are shown, refer to the related MEL item.

21-26-06B

1. To deactivate the skin exchanger isolation valve perform AMM Task 21-26-00-040-016.
2. PRIOR TO EACH DEPARTURE:
   a) Perform operational test of the Avionics Equipment Ventilation (AEVC) using CFDS AIR COND system test AMM Task 21–26–00–710–001:
      1) Check that all fault messages shown are related to the fault of the skin air inlet valve. If other messages are shown, refer to the related MEL item.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-07	Skin Exchanger Outlet Bypass Valve	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-07	Adjacent To ECAM Display	SKIN EXCHANGER OUTLET BYPASS VALVE INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
21-26-08	Air Conditioning Inlet Valve (Avionics Ventilation) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Valve is secured open, b) Both packs are operative, and c) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-08	Adjacent To ECAM Display	AIR CONDITIONING INLET VALVE INOP SECURED OPEN

(O) PROCEDURES

1. After the valve has been secured open, clear VENT AVNCS SYS FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.

(M) PROCEDURES

1. To deactivate the air conditioning inlet valve perform AMM Task 21-26-00-040-003.
2. PRIOR TO EACH DEPARTURE:
   a) Perform operational test of the Avionics Equipment Ventilation (AEVC) using CFDS AIR COND system test via AMM Task 21–26–00–710–001:
      1) Check that all fault messages shown are related to the fault of the skin air inlet valve. If other messages are shown, refer to the related MEL item.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-09A	Ventilation Filters **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Blower and extract fans operate normally, b) EXTRACT pb switch is set at OVRD, c) Both packs are operative, and d) VENT AVNCS SYS FAULT ECAM caution is not present. NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs.
21-26-09B	Ventilation Filters **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Blower and extract fans operate normally, b) EXTRACT pb switch is set at OVRD, c) Both packs are operative, and d) Air conditioning inlet valve is verified open PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**
21-26-09C	Ventilation Filters **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Blower and extract fans operate normally, b) EXTRACT pb switch is set at OVRD, c) Both packs are operative, d) Deactivate the Air conditioning inlet valve in the open position per MEL 21-26-08, and e) AEVC test is performed PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-09A	Adjacent To Blower Lighted Pushbutton Switch	VENTILATION FILTER INOP
21-26-09B	Adjacent To Blower Lighted Pushbutton Switch	VENTILATION FILTER INOP
21-26-09C	Adjacent To Blower Lighted Pushbutton Switch	___ VENTILATION FILTER INOP

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(O) PROCEDURES

21-26-09A

On the ground:

1. Apply electrical power to aircraft systems.
2. Operate APU BLEED and both air conditioning PACKS ON to provide avionics cooling.
   NOTE: If APU is inoperative, a high pressure cart must be used to run the packs.
3. Set EXTRACT pb switch to OVRD.
4. Check that VENT AVNCS SYS FAULT caution is not displayed on ECAM E/WD.

21-26-09B

On the ground:

1. Apply electrical power to aircraft systems.
2. Operate APU BLEED and both air conditioning PACKS ON to provide avionics cooling.
   NOTE: If APU is inoperative, a high pressure cart must be used to run the packs.
3. Set EXTRACT pb switch to OVRD.

21-26-09C

On the ground:

1. Apply electrical power to aircraft systems.
2. Operate APU BLEED and both air conditioning PACKS ON to provide avionics cooling.
   NOTE: If APU is inoperative, a high pressure cart must used to run the packs.
3. Set EXTRACT pb switch to OVRD.
4. Clear VENT AVNCS SYS FAULT caution on ECAM by pressing ECAM CLR pb.
   NOTE: VENT AVNCS SYS FAULT will be displayed after landing.

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(M) PROCEDURES

21-26-09B

1. PRIOR TO EACH DEPARTURE:
   a) Check that the Air Conditioning Inlet Valve is in the open position by performing AMM Task 21-26-00-040-009.

21-26-09C

1. On VENTILATION panel 22VU.
   a) Release EXTRACT Pushbutton Switch (OVRD light will come on).
   b) On the upper ECAM display unit, make sure that the AVNCS SYS FAULT warning does not come into view.
2. Perform the deactivation of the Air Conditioning Inlet Valve (21HQ) in the open position per MEL 21-26-08
3. PRIOR TO EACH DEPARTURE:
   a) Perform operational test of the Avionics Equipment Ventilation(AEVC) using CFDS AIR COND system test via AMM Task 21–26–00–710–001:
      1) Check that all fault messages shown are related to the fault of the ventilation filter and the deactivation of the Air Conditioning Inlet Valve. If other messages are shown, refer to the related MEL item.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-10	Avionic Equipment Ventilation Computer (AEVC) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Extract fan is verified to operate normally PRIOR TO EACH DEPARTURE (Log Book Entry Required), b) BLOWER and EXTRACT pb switches are set to OVRD, c) Air conditioning inlet valve and extract valve (skin air outlet valve) are verified in the proper position PRIOR TO EACH DEPARTURE (Log Book Entry Required), d) Both packs are operative, e) Skin air inlet valve is secured closed, and f) Weather Radar is considered inoperative and deferred per MEL 34-41-01A. NOTE: If the APU is inoperative, a high pressure cart (engine start cart) must be available to operate the packs. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-10	Adjacent To ECAM Display	AEVC INOP AND SKIN AIR INLET VALVE SECURED CLOSED AIR CONDITIONING MUST BE OPERATING WHEN POWER ON A/C

(O) PROCEDURES

1. On the ground:
   a) Apply electrical power to aircraft systems.
   b) Operate APU BLEED and both air conditioning PACKS ON to provide avionics cooling.
      NOTE: If APU is inoperative, a high pressure cart must used to run the packs.
   c) Set BLOWER and EXTRACT pb switches to OVRD.
      NOTE: The ground horn may be activated. If so, horn may be silenced by pulling associated C/B on panel 121VU EIS/HORN/SPLY location P09. C/B must be closed again after first engine start. If horn is triggered after landing when engines are shut down, it can be silenced again. In this case, the ADIRS and APU must be switched off before leaving the aircraft.
   d) Clear VENT AVNCS SYS FAULT caution displayed on ECAM E/WD by pressing ECAM CLR pb.

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2. In flight:

   a) In case of pack failure, cabin altitude may reach about 9,700 ft (CAB PR EXCESS CAB ALT caution may be displayed on ECAM E/WD).

(M) PROCEDURES

1. Defer Weather Radar inoperative per MEL Item 34–41–01A.
2. Aircraft with fold out handle – secure closed: (Ref. figure 21–26–10.1) (For T handle Ref. Figure 21–26–10.2)

   a) Depress “push” handle latch.

   b) Pull handle to engage clutch.

   c) Spread out the handle.

   d) Place the integrated deactivation switch in OFF position.

   e) Turn the handle counter clockwise to fully close the flap.

   NOTE: The handle should not be turned further when the end position is reached.

   f) Fold, stow and latch handle after use.

   g) Check on ECAM CAB PRESS page that the skin air inlet valve is indicated closed. (In case of amber crosses, the valve is not fully closed).

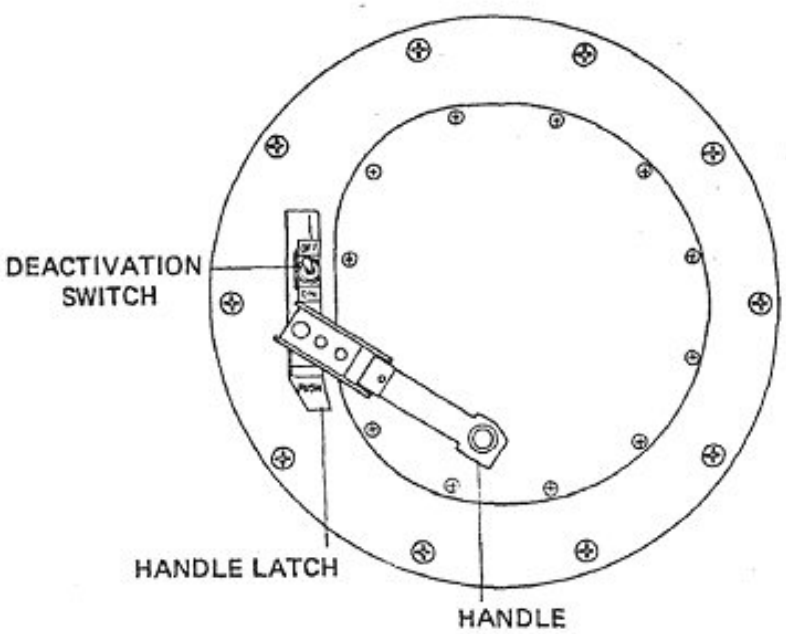

Figure 21–26–10.1 SKIN AIR INLET VALVE

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3. Aircraft with “T” Handle – secure closed:
   a) Push the PUSH latch to release the handle.
   b) Pull the handle to engage the mechanism.
   c) Set the deactivation switch to OFF.
   d) Turn the handle counterclockwise to fully close the flap.
   e) Stow and latch the handle.

      NOTE: The handle should not be turned further when the end position is reached.

   f) Check on ECAM CAB PRESS page that the skin air inlet valve is indicated closed. (In case of amber crosses, the valve is not fully closed).

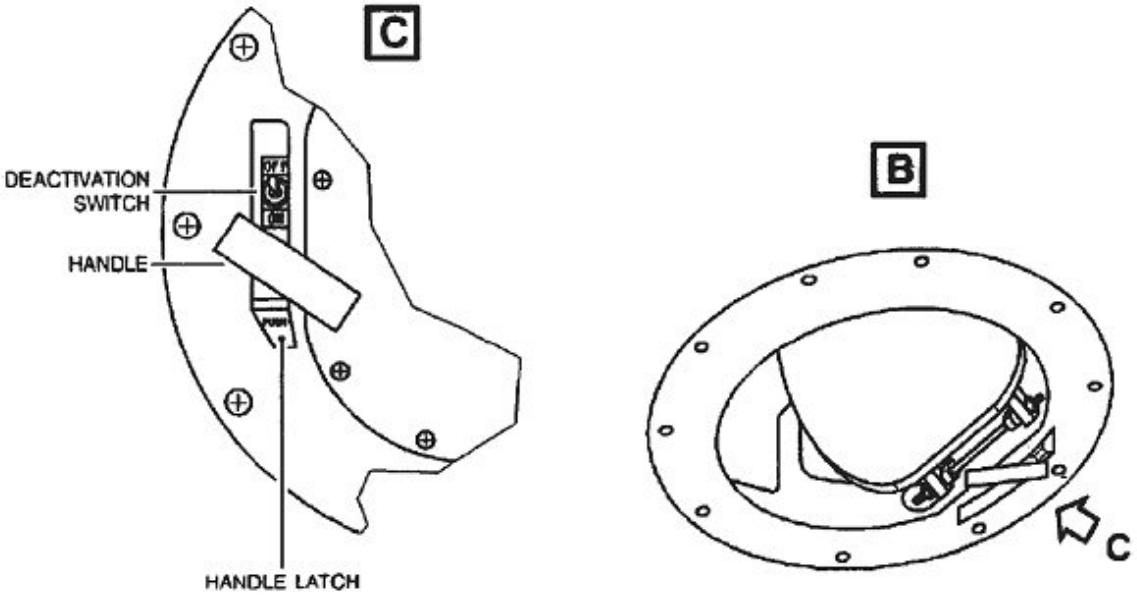

Figure 21–26–10.2 SKIN AIR INLET VALVE

4. PRIOR TO EACH DEPARTURE:
   a) On VENTILATION Panel 22 VU;
      1) Release BLOWER and EXTRACT pushbutton switches (OVRD legends come on).
   b) On CAB PRESS page;
      1) EXTRACT valve (Skin air outlet valve door) indicates partially open (Green). (Ref. Figure 21–26–10.3).
      2) VENT indication is amber.

         NOTE: If valve indicates Full open or Full closed, Dispatch is NOT allowed.

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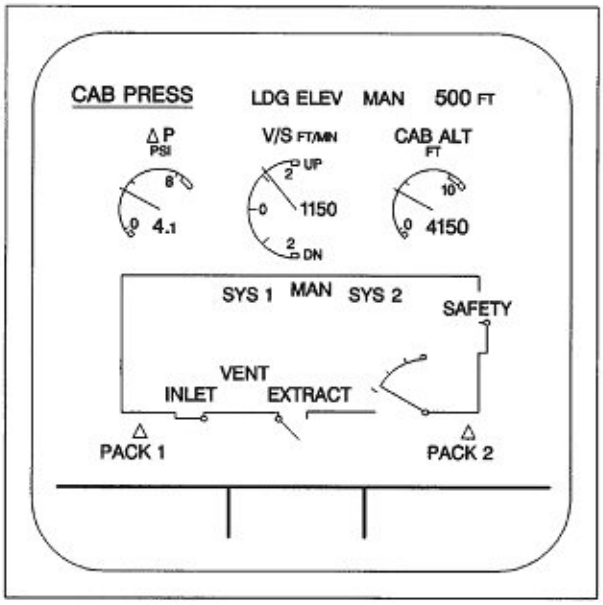

Figure 21–26–10.3
Skin air outlet valve

c) In aft avionics compartment;

1) Verify that air conditioning inlet valve 21 HQ is open. (Ref. Figure 21–26–10.4, 21–26–10.5)

NOTE: Manual control handle position O is valve open and C or F position is valve closed.

d) Check that extract fan is running.

e) Visually check that the main (large) flap is closed and internal (small) flap is open. (Ref. Figure 21–26–10.6)

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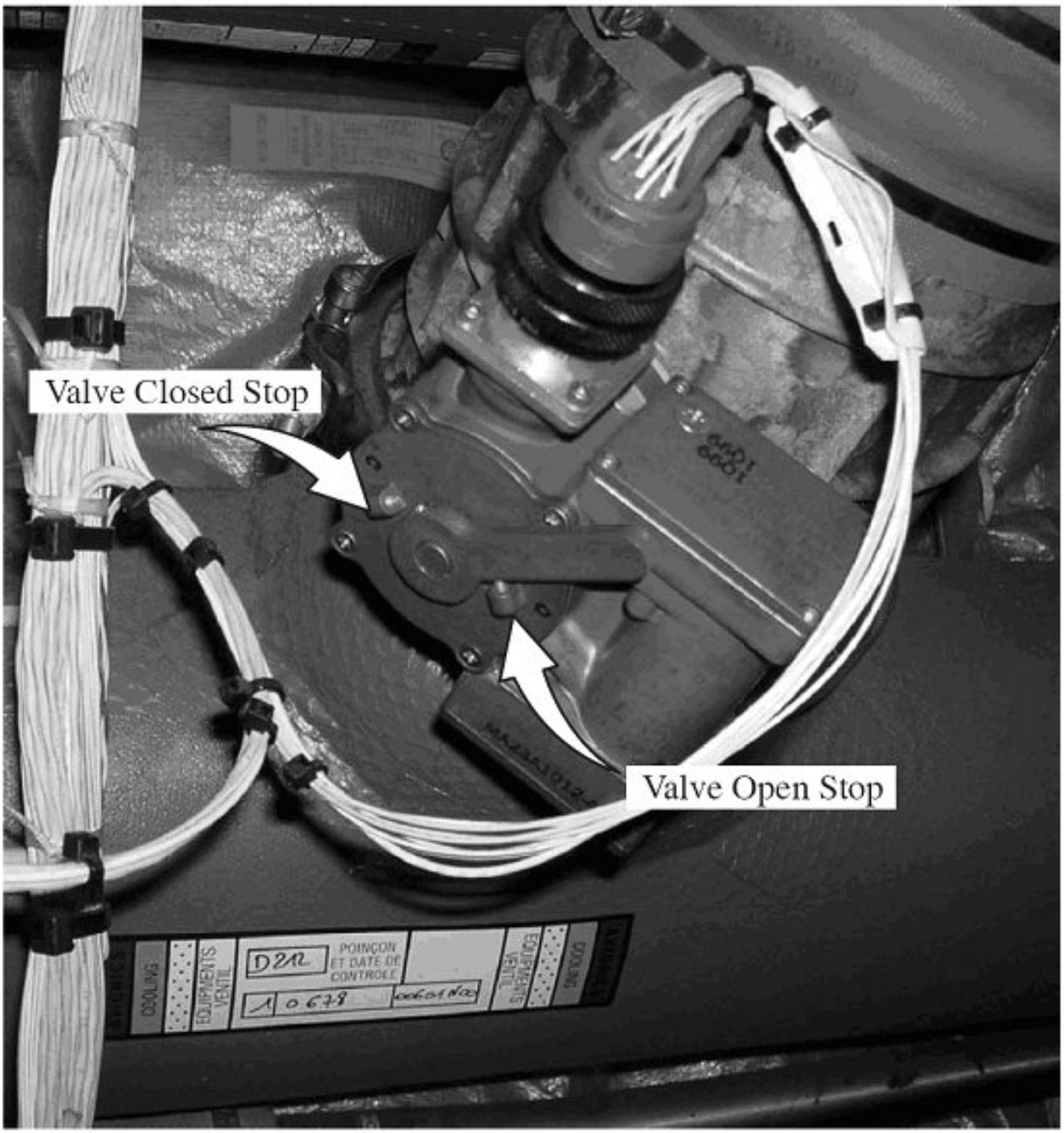

Figure 21–26–10.4
Air Conditioning Inlet Valve 21HQ

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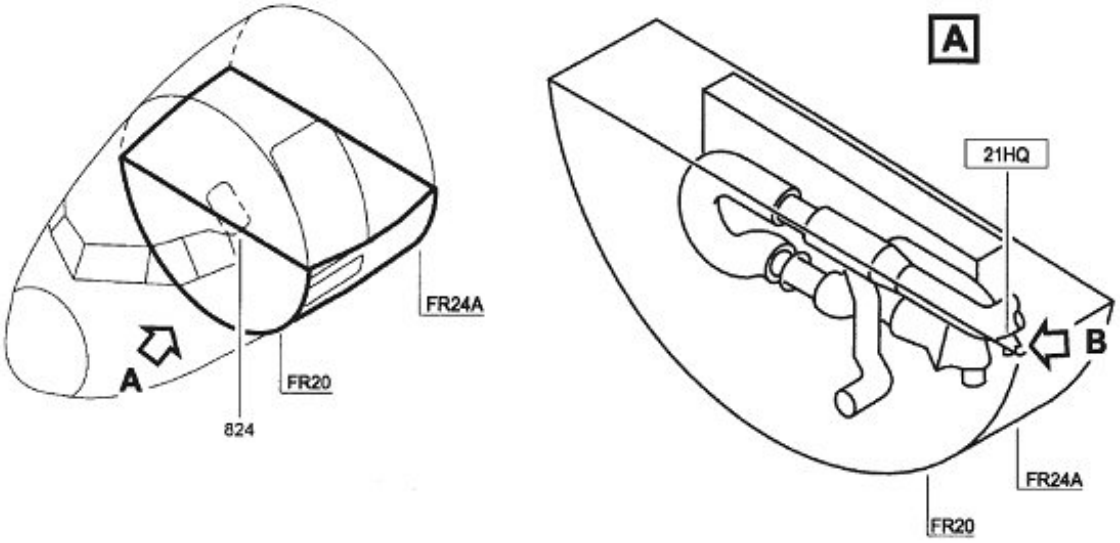

Figure 21–26–10.5
Air Conditioning Inlet Valve 21HQ

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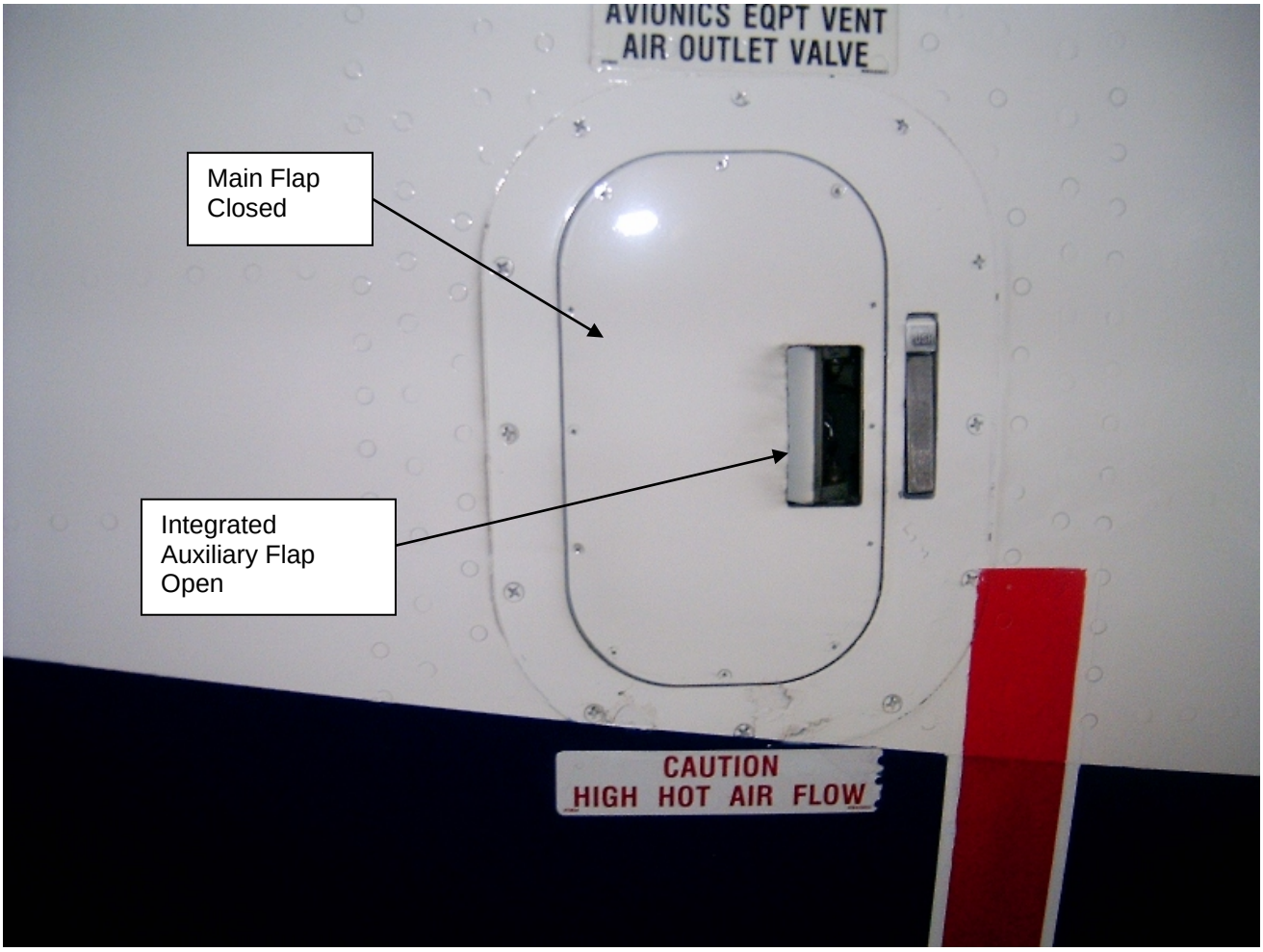

Figure 21-26-10.6

Integrated Auxiliary Flap Open and Main Flap Closed

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-11A	BLOWER FAULT Caution on ECAM **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Blower fan is verified operative PRIOR TO EACH DEPARTURE (Log Book Entry Required), b) VENT AVNCS SYS FAULT caution is available on ECAM, and c) EXTRACT FAULT caution is not present on ECAM. **Repetitive Check Required (Yellow Placard)**
21-26-11B	BLOWER FAULT Caution on ECAM **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided blower fan is considered inoperative and deferred per MEL 21-26-01A, 21-26-01B, or 21-26-01C as applicable.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-11A	Adjacent To ECAM Display	BLOWER FAULT CAUTION INOP
21-26-11B	Adjacent To ECAM Display	BLOWER FAULT CAUTION INOP

(O) PROCEDURES

21-26-11A

1. Disregard VENT BLOWER FAULT caution if displayed on ECAM E/WD.
2. Disregard BLOWER pb-sw FAULT light illuminated on VENTILATION overhead panel.

   NOTE: Ground horn may be activated. If so, horn may be silenced by pulling C/B on panel 121VU EIS/HORN/SPLY location P09. C/B must be closed again after engine start. If horn is triggered after landing when engines are shut down, it can be silenced again. In this case, the ADIRS must be switched OFF before leaving the aircraft.

21-26-11B

1. Disregard VENT BLOWER FAULT caution if displayed on ECAM E/WD.

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(M) PROCEDURES

21-26-11A

PRIOR TO EACH DEPARTURE:

1. To verify the blower fan is operating normally perform AMM Task 21-26-00-040-010.

21-26-11B

1. Defer Blower Fan inoperative per MEL Item 21-26-01A, 21–26–01B or 21-26–01C as applicable.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-12A	EXTRACT FAULT Caution on ECAM **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Extract fan is verified to operate normally PRIOR TO EACH DEPARTURE (Log Book Entry Required), b) VENT AVNCS SYS FAULT caution is available on ECAM, and c) BLOWER FAULT Caution is not present on ECAM. **Repetitive Check Required (Yellow Placard)**
21-26-12B	EXTRACT FAULT Caution on ECAM **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided extract fan is considered inoperative and deferred per MEL 21-26-02A, 21-26-02B, or 21-26-02C as applicable.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-12A	Adjacent To ECAM Display	EXTRACT FAULT CAUTION INOP – EXTRACT FAN IS OPERATIVE
21-26-12B	Adjacent To ECAM Display And Extract Fan Pushbutton Switch	EXTRACT FAULT CAUTION INOP

(O) PROCEDURES

21-26-12A

1. Disregard VENT EXTRACT FAULT caution if displayed on ECAM E/WD.

21-26-12B

1. Disregard VENT EXTRACT FAULT caution if displayed on ECAM E/WD.

(M) PROCEDURES

21-26-12A

1. PRIOR TO EACH DEPARTURE:
   a) To verify the extract fan is operating normally perform AMM Task 21-26-00-040-011.

21-26-12B

1. Defer Extract Fan inoperative per MEL item 21–26–02A, –02B or –02C, as applicable.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
BLOWER PB SWITCH 21-26-13 FAULT Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-13	Adjacent To Blower Switch Fault Light	BLOWER PB SWITCH FAULT LIGHT INOP

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
EXTRACT PB SWITCH 21-26-14 FAULT Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-14	Adjacent To Extract Switch Fault Light	EXTRACT PB SWITCH FAULT LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-26-15	ECAM CAB PRESS Indications	**Y**	2	0	**C**	INLET and EXTRACT indications may be Inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-26-15	Adjacent To ECAM Display	INLET and/or EXTRACT INDICATIONS INOP (as applicable)

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
21-28-04	Aft Cargo Extraction Fan **"DISP.APPR.REQ'D"**	**Y** 1	0	**C**	**(O)** May be inoperative provided no live animals or perishables are carried in the Aft Cargo compartment. .

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-28-04	Adjacent To ECAM Display	AFT CARGO EXTRACTION FAN INOP

(O) PROCEDURES

21-28-04

1. Ensure no live animals or perishables are carried in the Aft Cargo compartment.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-28-05A	Aft Cargo Isolation Valves **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided: a) Both valves are closed, b) AFT ISOL VALVE FAULT Light operates normally, and c) No live animals or perishables are carried in the Aft Cargo compartment. NOTE: If AFT ISOL VALVE FAULT light illuminates, both isolation valves must be secured closed. Apply MEL Item 21–28–05B.
21-28-05B	Aft Cargo Isolation Valves **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative provided: a) Both valves are secured closed, and b) No live animals or perishables are carried in the Aft Cargo compartment.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-28-05A	Adjacent To Aft Cargo Isolation Valve Lighted PB Switch	___ AFT CARGO ISO VLV INOP
21-28-05B	Adjacent To Aft Cargo Isolation Valve Lighted PB Switch	___ AFT CARGO ISO VLV INOP AND BOTH VALVES SECURED CLOSED

(O) PROCEDURES

21-28-05A

1. Set the ANN LT switch to TEST and check that the AFT ISOL VALVE FAULT light illuminates, then set the ANN LT switch to BRT or DIM.
2. Set AFT ISOL VALVE pb switch to OFF and check that associated FAULT light is not illuminated.

   NOTE: If FAULT light illuminates, the isolation valves must be secured closed. Contact MCC.
3. Ensure no live animals or perishables are carried in the Aft Cargo compartment.

21-28-05B

1. Set AFT ISOL VALVE pb switch to OFF.
2. Ensure no live animals or perishables are carried in the Aft Cargo compartment.

(M) PROCEDURES

21-28-05B

1. To secure both Aft Cargo Isolation Valves perform AMM Task 21-28-00-040-002.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-28-06	Aft Cargo AFT ISOL VALVE Fault Light	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-28-06	Adjacent To Aft Cargo AFT ISOL Valve Fault Light	AFT ISOL VALVE FAULT LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	AUTOMATIC CABIN PRESSURE CONTROL SYSTEM (CPC, OUTFLOW VALVE AUTO CHANNELS)					
21-31-01A	Automatic Cabin Pressure Control Systems **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided: a) Flight is conducted in an unpressurized configuration, and b) Extended over water flight is prohibited.
21-31-01B	Automatic Cabin Pressure Control System No.1 **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(M)(O)** No.1 system may be inoperative provided: a) CPC 1 is deactivated, b) Manual Mode is verified to operate normally, c) Cabin pressure indications are available on ECAM CAB PRESS page in manual mode, d) Both FCU channels operate normally, e) System 2 operates normally, and f) Repairs are made within 3 flight days.
21-31-01C	Automatic Cabin Pressure Control System No.2	**Y**	1	0	**C**	**(M)(O)** No. 2 only may be inoperative provided: a) CPC 2 is deactivated, b) Manual mode is verified to operate normally, c) Cabin pressure indications are available on ECAM CAB PRESS page in the manual mode, d) Both FCU channels operate normally, and e) System 1 operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-31-01A	On Cabin Pressure Control Panel 25VU	BOTH AUTO CABIN PRESSURE CONTROL SYSTEMS INOP
21-31-01B	On Cabin Pressure Control Panel 25VU	AUTO CABIN PRESSURE CONTROL No. 1 INOP
21-31-01C	On Cabin Pressure Control Panel 25VU	AUTO CABIN PRESSURE CONTROL No. 2 INOP

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(O) PROCEDURES

21-31-01A

1. Limit altitude to 10,000 feet for passenger flights.
2. Non-passenger flights above 10,000 feet require flight crews to be on oxygen.
3. Check that the ECAM CAB PRESS page shows the outflow valve in the open position.

21-31-01B, 21-31-01C

During flight deck preparation, check for proper outflow valve operation by performing the following:

1. On A321 aircraft – On CB panel 122VU pull circuit breaker RPCU location X23.
2. MODE SEL – MAN.
3. Check on ECAM CAB PRESS page that cabin differential pressure, cabin vertical speed, cabin altitude and outflow valve position are available.
4. Select MAN V/S CTL to DN and check on ECAM for outflow valve movement.
5. MODE SEL – AUTO (Observe outflow valve movement on ECAM goes back to open).
6. On A321 aircraft – On CB panel 122VU close circuit breaker RPCU location X23.
7. Check that no FCU message is displayed on ECAM STATUS PAGE.

(M) PROCEDURES

21-31-01B

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE OUTFLOW VALVES ARE CLEAR. MOVEMENT OF THE OUTFLOW VALVES CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT.

WARNING: KEEP AWAY FROM THE MOVING AND ENERGIZED PARTS OF THE OUTFLOW VALVE WHEN YOU OPERATE OR TEST THE VALVE. THESE CAN CAUSE INJURY TO PERSONS.

Deactivate CPC 1 and verify Manual mode operates normally.

1. On C/B panel 49VU: pull and secure circuit breaker AIR COND/CAB/PRESS/CTL 1 location D09.
2. PACK 1 and PACK 2 pushbutton switches on in the off position (the OFF legends are on).
3. RAM AIR pushbutton switch is in the off position (the ON legend is off).
4. On A321 aircraft – On CB panel 122VU pull circuit breaker RPCU location X23.
5. Select MAN on MODE SEL.
6. Check ECAM CAB PRESS page that differential pressure, cabin vertical speed, cabin altitude and outflow valve position are available.
7. Select MAN V/S CTL to DN and check on ECAM for outflow valve movement in a downward direction.
8. Select MAN V/S CTL to UP and check on ECAM for outflow valve movement in an upward direction.
9. Select AUTO on MODE SEL (Observe outflow valve movement on ECAM goes back to open).
10. On A321 aircraft – On CB panel 122VU close circuit breaker RPCU location X23.
11. Check that no FCU message is displayed on ECAM STATUS PAGE.

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21-31-01C

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE OUTFLOW VALVES ARE CLEAR. MOVEMENT OF THE OUTFLOW VALVES CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT.

WARNING: KEEP AWAY FROM THE MOVING AND ENERGIZED PARTS OF THE OUTFLOW VALVE WHEN YOU OPERATE OR TEST THE VALVE. THESE CAN CAUSE INJURY TO PERSONS.

Deactivate CPC 2 and verify Manual mode operates normally.

1. On C/B panel 122VU: pull and secure circuit breaker AIR COND/CAB/PRESS/CTL 2 location Y22.
2. PACK 1 and PACK 2 pushbutton switches on in the off position (the OFF legends are on).
3. RAM AIR pushbutton switch is in the off position (the ON legend is off).
4. On A321 aircraft – On CB panel 122VU pull circuit breaker RPCU location X23.
5. Select MAN on MODE SEL.
6. Check ECAM CAB PRESS page that differential pressure, cabin vertical speed, cabin altitude and outflow valve position are available.
7. Select MAN V/S CTL to DN and check on ECAM for outflow valve movement in a downward direction.
8. Select MAN V/S CTL to UP and check on ECAM for outflow valve movement in an upward direction.
9. Select AUTO on MODE SEL (Observe outflow valve movement on ECAM goes back to open).
10. On A321 aircraft – On CB panel 122VU close circuit breaker RPCU location X23.
11. Check that no FCU message is displayed on ECAM STATUS PAGE.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-31-02	Manual Cabin Pressure Control System (Outflow Valve MAN Channel, MAN V/S CTL Sel) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)** May be inoperative provided both auto cabin pressure control systems are verified to operate normally PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-31-02	On Cabin Pressure Control Panel	MANUAL CABIN PRESSURE CONTROL SYSTEM INOP

(M) PROCEDURES

21-31-02

1. PRIOR TO EACH DEPARTURE

   a) Verify both cabin pressure control systems are operating normally by performing AMM Task 21-31-00-040-002.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-31-04 Safety Valves	**N**	2	1	**C**	**(M)** One may be inoperative closed provided: a) Both automatic cabin pressure control systems operate normally, and b) The three outflow valve motors operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-31-04	Adjacent To ECAM Display	___ SAFETY VALVE INOP

(M) PROCEDURES

21-31-04

1. Perform verification test per AMM Task 21-31-00-040-001.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
LANDING ELEVATION SELECTION SYSTEM 21-31-05 AUTO Function	**Y**	1	0	**C**	**(O)** May be inoperative provided LDG ELEV is set to destination field elevation altitude.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-31-05	On Cabin Pressure Control Panel 25VU	LANDING ELEVATION SELECTION SYSTEM AUTO FUNCTION INOP

(O) PROCEDURES

Before Takeoff

1. Set LDG ELEV selector on CABIN PRESS panel to destination airport altitude.
2. Check on ECAM CAB PRESS page that LDG ELEV MAN is displayed.

NOTE: The landing field elevation of the destination airport may not be correctly displayed on the ECAM CAB PRESS page. It is automatically corrected after first engine start.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-31-06	MODE SEL FAULT Light	**Y**	1	0	**C**	**(O)** May be inoperative provided SYS 1 and SYS 2 indications on ECAM CAB PRESS page are available.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-31-06	On Cabin Pressure Control Panel 25VU	MODE SEL FAULT LIGHT INOP

(O) PROCEDURES

1. If system 1 active (SYS 1 displayed on ECAM CAB PRESS page):
   a) ON C/B panel 49VU: pull circuit breaker C/B AIR COND/CAB/PRESS/CTL1 location D09.
   b) Check that SYS 2 is displayed on ECAM CAB PRESS page.
   c) ON C/B panel 49VU: close circuit breaker C/B AIR COND/CAB/PRESS/CTL1 location D09.
2. If system 2 active (SYS 2 displayed on ECAM CAB PRESS page):
   a) ON C/B panel 49VU: pull circuit breaker C/B AIR COND/CAB/PRESS/CTL/2 location Y22.
   b) Check that SYS 1 is displayed on ECAM CAB PRESS page.
   c) ON C/B panel 49VU: close circuit breaker C/B AIR COND/CAB/PRESS/CTL/2 location Y22.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-31-07	Safety Valves Position Indication on ECAM CAB PRESS Page	**N**	1	0	**C**	**(M)** May be inoperative provided both safety valves are visually verified closed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-31-07	Adjacent To ECAM Display	SAFETY VALVES POSITION INDICATION INOP

(M) PROCEDURES

21-31-07

1. Verify that both safety valves are closed by performing AMM Task 21-31-00-040-004.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-31-08	SAFETY VALVE OPEN Caution on ECAM	**N**	1	0	**C**	**(M)** May be inoperative provided both safety valves are visually verified closed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-31-08	Adjacent To ECAM Display	SAFETY VALVES POSITION INDICATION INOP

(M) PROCEDURES

21-31-08

1. Verify that the valves are closed by performing AMM Task 21-31-00-040-005.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-43-02A	Aft Cargo Compartment Heating System **"DISP.APPR.REQ'D"**	**Y**	1	0	**D**	**(O)** Associated hot air pressure regulating valve or trim air valve may be inoperative provided: a) The heating system is switched OFF, b) Operative valve is verified closed on ECAM, and c) No live animals or perishables are carried in the Aft Cargo compartment.
21-43-02B	Aft Cargo Compartment Heating System **"DISP.APPR.REQ'D"**	**N**	1	0	**D**	**(M)(O)** Associated hot air pressure regulating valve and trim air valve may be inoperative provided: a) One of these valves is secured closed, and b) No live animals or perishables are carried in the Aft Cargo compartment.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-43-02A	On Cargo Heat Panel	AFT CARGO HEATING SYSTEM INOP
21-43-02B	On Cargo Heat Panel	AFT CARGO HEATING SYSTEM INOP

(O) PROCEDURES

21-43-02A

1. CARGO HEAT HOT AIR – OFF.
2. Check on ECAM COND page that the operative valve (either HOT AIR pressure regulating valve or trim air valve) is indicated closed.
3. Ensure no live animals or perishables are carried in the Aft Cargo compartment.

21-43-02B

1. CARGO HEAT HOT AIR – OFF.
2. Ensure no live animals or perishables are carried in the Aft Cargo compartment.

(M) PROCEDURES

21-43-02B

1. Deactivate AFT Cargo Compartment – Heating Trim – Air Valve per AMM Task 21-43-00-040-002 or AFT Cargo Compartment – Heating Pressure – Regulating Valve per AMM Task 21-43-00-040-003.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-51-01A	Pack Flow Control Valves (A319/A320) **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)** One may be inoperative provided: a) Valve is secured closed, and b) Associated air conditioning pack is considered inoperative and deferred per MEL 21-52-01A, 21-52-01B, or 21-52-01C as applicable. Theater Restrictions May Apply
21-51-01B	Pack Flow Control Valves (A321) **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)** One may be inoperative provided associated air conditioning pack is considered inoperative and deferred per MEL 21-52-01D. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-51-01A	On AIR COND Panel Adjacent Affected PACK Switch	___ PACK FLOW CONTROL VALVE INOP AND SECURED CLOSED
21-51-01B	On AIR COND Panel Adjacent Affected PACK Switch	___ PACK FLOW CONTROL VALVE INOP

(M) PROCEDURES

21-51-01A

1. Secure the associated Pack Flow Control Valve closed by performing AMM Task 21-51-00-040-001.
2. Defer the associated air conditioning pack inoperative per MEL 21-52-01A, 21-52-01B, or 21-52-01C as applicable.

21-51-01B

1. Defer the associated air conditioning pack inoperative per MEL 21-52-01D.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-51-02A	Pack Flow Selections (A319/A320)	**Y**	3	1	**C**	LO and/or NORM may be inoperative.
21-51-02B	Pack Flow Selections (A321)	**Y**	2	1	**C**	ECON FLOW may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-51-02A	On AIR COND Panel	___ PACK FLOW SELECTION INOP
21-51-02B	On AIR COND Panel	___ PACK FLOW SELECTION INOP

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
PACK PB SWITCH					
21-51-03A FAULT Lights	**Y**	2	0	**C**	May be inoperative.
21-51-03B OFF Lights	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-51-03A	Adjacent To Affected Fault Light	___ PACK FAULT LIGHT INOP
21-51-03B	Adjacent To Affected OFF Light	___ PACK PB SWITCH OFF LIGHT INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-51-06	Pack Flow Sensor (A321)	**Y**	2	1	**C**	**(O)** One may be inoperative provided the HOT AIR p.b. switch is selected OFF.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-51-06	Adjacent To Affected Fault Light	___ PACK FLOW SENSOR INOP

(O) PROCEDURES

1. AIR COND HOT AIR pb-sw placed to OFF.

   NOTE 1: The hot air pressure regulating valve automatically closes and the Flow Control Valve on the affected side operates in pneumatic backup mode.

   NOTE 2: Unequal passengers distribution may cause high temperature in the rear cabin when the hot air pressure regulating valve is closed.

   NOTE 3: The temperature in the cockpit may be low when the hot air pressure regulating valve is closed combined with single pack operation.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER INSTALLED	NUMBER REQUIRED FOR DISPATCH	REPAIR CATEGORY	REMARKS OR EXCEPTIONS
21-52-01A	Packs (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	One may be inoperative provided: a) Airplane remains at or below FL310, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) COND ZONE REGUL FAULT caution is not displayed on ECAM, d) Affected pack pb switch is set at OFF, e) Associated pack valve is verified closed on ECAM BLEED page, f) PACK FLOW selector is set to HI, and g) Avionics equipment ventilation system operates normally. NOTE: The above pack valve verification requirement does not apply if pack valve has been secured closed with MEL Item 21–51–01A applied Theater Restrictions May Apply
21-52-01B	Packs (A319) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	One may be inoperative provided: a) Airplane remains at or below FL370, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) COND ZONE REGUL FAULT caution is not displayed on ECAM, d) Affected pack pb switch is set at OFF, e) Associated pack valve is verified closed on ECAM BLEED page, f) PACK FLOW selector is set to HI, g) Avionics equipment ventilation system operates normally, and h) Speedbrakes operate normally. NOTE: The above pack valve verification requirement does not apply if pack valve has been secured closed with MEL Item 21–51–01A applied Theater Restrictions May Apply

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH			
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-52-01C	Packs (A320) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	One may be inoperative provided: a) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, b) COND ZONE REGUL FAULT caution is not displayed on ECAM, c) Affected pack pb switch is set at OFF, d) Associated pack valve is verified closed on ECAM BLEED page, e) PACK FLOW selector is set to HI, f) Avionics equipment ventilation system operates normally, and g) Speedbrakes operate normally. NOTE: The above pack valve verification requirement does not apply if pack valve has been secured closed with MEL Item 21–51–01A applied Theater Restrictions May Apply
21-52-01D	Packs (A321) **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)** One pack may be inoperative provided: a) Airplane remains at or below FL310, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) AIR PACK 1(2), REGUL FAULT, AIR COND CTL 1(2)-A FAULT, and AIR COND CTL 1(2)-B FAULT cautions associated with the operative side are not displayed on ECAM, d) Affected pack p.b. switch is set to OFF, e) ECON FLOW p.b. switch is set to OFF, f) Avionics equipment ventilation system operates normally, and g) Pack flow control valve is secured closed. Theater Restrictions May Apply

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ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER REQUIRED FOR DISPATCH		REPAIR CATEGORY	REMARKS OR EXCEPTIONS
21-52-01E	Packs (A321) **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)** One pack may be inoperative provided: a) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, b) AIR PACK 1(2), REGUL FAULT, AIR COND CTL 1(2)-A FAULT, and AIR COND CTL 1(2)-B FAULT cautions associated with the operative side are not displayed on ECAM, c) Affected pack p.b. switch is set to OFF, d) ECON FLOW p.b. switch is set to OFF, e) Avionics equipment ventilation system operates normally, f) Speedbrakes operate normally, and g) Pack flow control valve is secured closed. Theater Restrictions May Apply
21-52-01F	Air Cycle Machines (ACM) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One pack may be operated on heat exchanger cooling only provided: a) Affected pack's compressor outlet temperature indication is available on ECAM BLEED page, b) TAT indication is available, c) Corresponding pack controller operates normally, d) Affected pack is not used until airborne, e) TAT is at or below 12°C, (54°F), and f) Avionics equipment ventilation system operates normally. NOTE: FL 310 or below must be maintained if normal operating pack fails.
21-52-01G	Air Cycle Machines (ACM) (A321)	**Y**	2	1	**C**	**(O)** One pack may be operated on heat exchanger cooling only provided: a) Affected pack's compressor outlet temperature indication is available on ECAM BLEED page, b) TAT indication is available, c) AIR COND CTL 1(2)-A FAULT and AIR COND CTL 1(2)-B FAULT cautions associated with the operative side are not displayed on ECAM, d) Affected pack is not used until airborne, e) TAT is at or below 12°C, (54°F), and f) Avionics equipment ventilation system operates normally. NOTE: FL 310 or below must be maintained if normal operating pack fails.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
21-52-01A	Adjacent To Affected Pack Fault Light	___ PACK INOP
21-52-01B	Adjacent To Affected Pack Fault Light	___ PACK INOP
21-52-01C	Adjacent To Affected Pack Fault Light	___ PACK INOP
21-52-01D	Adjacent To Affected Pack Fault Light	___ PACK INOP
21-52-01E	Adjacent To Affected Pack Fault Light	___ PACK INOP
21-52-01F	Adjacent To Affected Pack Fault Light	____ ACM INOP
21-52-01G	Adjacent To Affected Pack Fault Light	____ ACM INOP

(O) PROCEDURES

21-52-01F, 21-52-01G

1. On Ground
   a) Affected PACK pb-sw (in heat exchanger cooling only) – OFF
2. In Flight
   a) When TAT is at or below 12°C (54°F), affected PACK pb-sw (in heat exchanger cooling only) – ON
   b) If the non-affected pack fails, descend to FL310 or below
3. During Descent
   a) When TAT is above 12°C (54°F), affected PACK pb-sw (in heat exchanger cooling only) – OFF
4. At the end of descent before landing
   a) Affected PACK pb-sw (in heat exchanger cooling only) – OFF

(M) PROCEDURES

21-52-01D, 21-52-01E

1. Secure the associated pack flow control valve in the closed position by performing AMM Task 21-51-00-040-002.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-52-02A	Air Cond Pack Ram Air Inlet Flaps (OPEN)	**N**	2	0	**C**	**(M)** May be inoperative in the open position. NOTE: Disregard AIR PACK 1(2) REGUL FAULT message if displayed on ECAM.
21-52-02B	Air Cond Pack Ram Inlet Flaps (CLOSED) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative in the closed position provided the associated pack is considered inoperative and deferred per MEL 21–52–01A, 21-52-01B, 21-52-01C, 21-52-01D, or 21-52-01E as applicable. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-52-02A	Adjacent To Affected Pack Switch	___ AIR COND PACK RAM AIR INLET FLAP INOP OPEN
21-52-02B	Adjacent To Affected Pack Switch	___ AIR COND PACK RAM AIR INLET FLAP INOP CLOSED

(O) PROCEDURES

21-52-02B

1. Comply with (O) procedures for MEL 21–52–01A, 21-52-01B, 21-52-01C, 21-52-01D, or 21-52-01E as applicable.

(M) PROCEDURES

21-52-02A

1. Deactivate air inlet flap in the open position per AMM Task 21-61-00-040-002.

21-52-02B

1. Defer associated pack per MEL 21–52–01A, 21-52-01B, 21-52-01C, 21-52-01D, or 21-52-01E as applicable.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-52-03A	Air Cond Pack Ram Air Outlet Flaps (OPEN) A/C 3209-3259	**N**	2	0	**C**	**(M)** May be inoperative in the open position provided backlash is verified within limits. NOTE: Disregard AIR PACK 1(2) REGUL FAULT message if displayed on ECAM.
21-52-03B	Air Cond Pack Ram Air Outlet Flaps (CLOSED) A/C 3209-3259 **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** May be inoperative in the closed position provided the associated pack is considered inoperative and deferred per MEL 21–52–01A, 21-52-01B, 21-52-01C, 21-52-01D, or 21-52-01E as applicable. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-52-03A	Adjacent To Affected Pack Switch	___ AIR COND PACK RAM AIR OUTLET FLAP INOP OPEN
21-52-03B	Adjacent To Affected Pack Switch	___ AIR COND PACK RAM AIR OUTLET FLAP INOP CLOSED

(O) PROCEDURES

21-52-03B

1. Comply with MEL21–52–01A, 21-52-01B, 21-52-01C, 21-52-01D, or 21-52-01E (O) procedure as applicable.

(M) PROCEDURES

21-52-03A

1. Deactivate Air Cond Pack Ram Air Outlet Flap in the OPEN position and verify backlash per AMM Task 21-61-00-040-003.

21-52-03B

1. Deferred associated pack per MEL 21–52–01A, 21-52-01B, 21-52-01C, 21-52-01D, or 21-52-01E as applicable.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-55-02	ECAM Emergency RAM Air Inlet Indication (ECAM BLEED Page)	**N**	1	0	**C**	**(M)** May be inoperative provided Ram Air Inlet system is verified to operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-55-02	Adjacent To ECAM Display	RAM AIR INLET INDICATION INOP

(M) PROCEDURES

1. Verify normal operation of the Emergency Ram Air Inlet System by performing AMM Task 21-55-00-040-001.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-61-01	Pack Temperature Control Primary Channels (A319/A320)	**Y**	2	1	**C**	One may be inoperative. NOTE 1: If the primary channel is failed, pack flow is fixed at the value reached at time of failure. If primary and secondary channels are failed, the pack outlet temperature is controlled by the anti–ice valve to a nominal value of 15°C (59°F). NOTE 2: Disregard AIR PACK 1(2) REGUL FAULT message if displayed on ECAM.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-61-01	Adjacent To ECAM Display	___ PACK TEMPERATURE CONTROL – PACK CONTROL PRIMARY CHANNEL INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-61-02	Turbine Bypass Valves	**Y**	2	1	**C**	One may be inoperative. NOTE: Disregard AIR PACK 1(2) REGUL FAULT message if displayed on ECAM.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-61-02	Adjacent To The Air Cond Control Panel	___ TURBINE BYPASS VALVE INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ZONE CONTROLLER SYSTEM					
21-63-01A Primary Channel (A319/A320)	**Y**	1	0	**C**	May be inoperative provided: a) HOT AIR pb switch on AIR COND overhead panel is selected to OFF, and b) Hot air pressure regulating valve is verified closed on ECAM COND page. NOTE: The message ALT MODE will appear at top of the ECAM COND page.
21-63-01B Secondary Channel (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)** May be inoperative provided the minimum idle on ground function is considered inoperative and deferred per MEL 73–20–03A or 73-20–03B as applicable.
21-63-01C Primary and Secondary Channels (A319/A320) **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative provided: a) Hot Air Pressure Regulating Valve is secured closed, and b) Minimum idle on ground function is considered inoperative and deferred per MEL 73–20–03A or 73-20–03B as applicable. NOTE: The message PACK REG will appear at top of the ECAM COND page.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-63-01A	Adjacent To ECAM Display	ZONE CONTROLLER SYSTEM PRIMARY CHANNEL INOP
21-63-01B	Adjacent To ECAM Display	ZONE CONTROLLER SYSTEM SECONDARY CHANNEL INOP
21-63-01C	Adjacent To ECAM Display	ZONE CONTROLLER SYSTEM PRIMARY and SECONDARY CHANNELS INOP AND HOT AIR PRESSURE REGULATING VALVE IS VERIFIED CLOSED AND DEACTIVATED

(O) PROCEDURES

21-63-01C

1. Select HOT AIR pb on AIR COND overhead panel– OFF.
2. Comply with MEL item 73–20–03A or 73-20–03B (O) procedure, as applicable.

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(M) PROCEDURES

21-63-01B

Defer Minimum Idle on Ground inoperative per MEL item 73–20–03A or 73-20–03B, as applicable.

21-63-01C

1. Secure the Hot Air Pressure Regulating Valve closed by performing AMM Task 21-63-00-040-004.
2. Defer Minimum Idle on Ground inoperative per MEL item 73–20–03A or 73-20–03B, as applicable

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-63-02A	Cockpit/Cabin Trim Air Valves (A319/A320)	**N**	3	0	**C**	**(M)(O)** May be inoperative provided: a) Affected valve(s) is secured closed, and b) Both pack controllers operate normally. NOTE: Unequal passenger distribution may cause high or low temperature in the rear cabin. Adjust the cabin temperature selectors to reach the best compromise temperature between the forward and aft zones.
21-63-02B	Cockpit/Cabin Trim Air Valves (A319/A320)	**Y**	3	0	**C**	**(O)** May be inoperative provided: a) HOT AIR pb switch on AIR COND overhead panel is selected OFF, b) Hot air pressure regulating valve is verified closed on ECAM COND page, and c) Both pack controllers operate normally. NOTE: Unequal passenger distribution may cause high or low temperature in the rear cabin. Adjust the cabin temperature selectors to reach the best compromise temperature between the forward and aft zones.
21-63-02C	Cockpit/Cabin Trim Air Valves (A321)	**Y**	3	0	**C**	**(O)** May be inoperative provided associated valve(s) is confirmed closed on ECAM COND page PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
21-63-02D	Cockpit/Cabin Trim Air Valves (A321)	**Y**	3	0	**C**	**(O)** May be inoperative provided hot air pressure regulating valve is confirmed operative on ECAM COND page PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
21-63-02E	Cockpit/Cabin Trim Air Valve (A321)	**Y**	3	0	**C**	May be inoperative provided the hot air pressure regulating valve is considered inoperative and deferred per MEL 21-63-03D or 21-63-03E as applicable.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
21-63-02A	Adjacent To Affected Zone Control Knob(s)	___ TRIM AIR VALVE INOP
21-63-02B	Adjacent To Affected Zone Control Knob(s)	___ TRIM AIR VALVE INOP
21-63-02C	Adjacent To Affected Zone Control Knob(s)	___ TRIM AIR VALVE INOP
21-63-02D	Adjacent To Affected Zone Control Knob(s)	___ TRIM AIR VALVE INOP
21-63-02E	Adjacent To Affected Zone Control Knob(s)	___ TRIM AIR VALVE INOP

(O) PROCEDURES

21-63-02A

1. If affected zone temperature becomes uncomfortable, select HOT AIR pb on AIR COND overhead panel to OFF.
2. At each power up, the zone controller closes all trim air valves and the hot air pressure regulating valve. To recover normal operation of the operative valves, apply the following procedure:
   a) After pack start, if COND HOT AIR FAULT caution is displayed on ECAM E/WD, reset the following C/B's:

      C/B on panel 122VU AIR COND/ZONE TEMP CTL/115VAC/SYS1 location V17.

      C/B on panel 122VU AIR COND/ZONE TEMP CTL/115VAC/SYS2 location V18.

      C/B on panel 122VU AIR COND/ZONE TEMP CTL/28VDC/SYS1 location V19.

      C/B on panel 122VU AIR COND/ZONE TEMP CTL/28VDC/SYS2 location V20.

   b) Check that COND HOT AIR FAULT caution is not displayed on ECAM E/WD (If COND HOT AIR FAULT caution is still displayed on ECAM E/WD, apply item 21–63–03A, or 21–63–03B).

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21-63-02B

1. Select HOT AIR pb on AIR COND overhead panel – OFF.
2. Check on ECAM COND page that the hot air pressure regulating valve is closed amber.
3. Control zone temperatures using selector switches.

21-63-02C

1. Confirm affected trim air valve(s) is closed on ECAM COND page.
2. If the affected zone temperature becomes uncomfortable:
   a) HOT AIR pb-sw……. OFF

21-63-02D

1. HOT AIR pb-sw…….. OFF then back on
2. On the COND SD page, check that the hot air pressure regulating valve follows the HOT AIR pb-sw command.
3. If the affected zone temperature becomes uncomfortable:
   a) HOT AIR pb-sw……. OFF

(M) PROCEDURES

21-63-02A

1. Secure the affected trim air valve closed by performing AMM Task 21-63-00-040-001.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
21-63-03A	Hot Air Pressure Regulating Valve (A319/A320)	**Y**	1	0	**C**	May be inoperative in the closed position provided: a) HOT AIR pb switch is selected OFF, and b) Hot air pressure regulating valve is verified closed on ECAM COND page. NOTE: Unequal passenger distribution may cause high or low temperature in the rear cabin. Adjust the cabin temperature selectors to reach the best compromise temperature between the forward and aft zones.
21-63-03B	Hot Air Pressure Regulating Valve (A319/A320)	**N**	1	0	**C**	**(M)** May be inoperative provided valve is secured closed. NOTE: Unequal passenger distribution may cause high or low temperature in the rear cabin. Adjust the cabin temperature selectors to reach the best compromise temperature between the forward and aft zones.
21-63-03C	Hot Air Pressure Regulating Valve (A321)	**Y**	1	0	**C**	May be inoperative in the closed position provided: a) HOT AIR p.b. switch is selected OFF, and b) Hot air pressure regulating valve is verified closed on ECAM COND page.
21-63-03D	Hot Air Pressure Regulating Valve (A321)	**Y**	1	0	**C**	May be inoperative in the open position provided: a) HOT AIR p.b. switch is selected OFF, and b) All trim air valves are verified closed on ECAM COND page.
21-63-03E	Hot Air Pressure Regulating Valve (A321)	**N**	1	0	**C**	**(M)** May be inoperative provided valve is secured closed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-63-03A	Adjacent To Zone Control Knobs	HOT AIR PRV INOP
21-63-03B	Adjacent To Zone Control Knobs	HOT AIR PRV INOP
21-63-03C	Adjacent To Zone Control Knobs	HOT AIR PRV INOP
21-63-03D	Adjacent To Zone Control Knobs	HOT AIR PRV INOP
21-63-03E	Adjacent To Zone Control Knobs	HOT AIR PRV INOP

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(M) PROCEDURES

21-63-03B, 21-63-03E

1. Secure hot air pressure regulating valve closed by performing AMM Task 21-63-00-040-002.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
HOT AIR PB SWITCH					
21-63-04A FAULT Light	**Y**	1	0	**C**	May be inoperative provided zone duct temperatures are available on ECAM.
21-63-04B OFF Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-63-04A	Adjacent To Hot Air pb Switch Fault Light	HOT AIR FAULT LIGHT INOP
21-63-04B	Adjacent To Hot Air pb Switch OFF Light	HOT AIR OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM INDICATION					
21-63-05A	On COND Page	**Y**	-	0	**C**	All indications may be inoperative.
21-63-05B	On CRUISE Page	**Y**	-	-	**C**	Cabin and cockpit zone indications may be inoperative.
21-63-05C	On Bleed Page - Pack Outlet Temperature	**Y**	2	0	**C**	May be inoperative.
21-63-05D	On Bleed Page - Pack Turbine Bypass Valve Position	**Y**	2	0	**C**	May be inoperative.
21-63-05E	On Bleed Page - Pack Compressor Outlet Temperature	**Y**	2	0	**C**	May be inoperative.
21-63-05F	On Bleed Page - Pack Flow	**Y**	2	0	**C**	May be inoperative.
21-63-05G	On Bleed Page - Pack Flow Control Valve Position	**Y**	2	0	**C**	May be inoperative.
21-63-05H	On CAB PRESS Page	**Y**	-	-	**C**	Pack 1 and 2 indications may be inoperative.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
21-63-05A	Adjacent To ECAM Display	___ INDICATION IS INOP
21-63-05B	Adjacent To ECAM Display	___ CABIN and/or COCKPIT ZONE INDICATIONS INOP
21-63-05C	Adjacent To ECAM Display	PACK OUTLET TEMPERATURE INDICATION IS INOP
21-63-05D	Adjacent To ECAM Display	PACK TURBINE BYPASS VALVE POSITION INDICATION IS INOP
21-63-05E	Adjacent To ECAM Display	PACK COMPRESSOR OUTLET TEMPERATURE INDICATION IS INOP
21-63-05F	Adjacent To ECAM Display	PACK FLOW INDICATION IS INOP
21-63-05G	Adjacent To ECAM Display	PACK FLOW CONTROL VALVE POSITION INDICATION IS INOP
21-63-05H	Adjacent To ECAM Display	___ INDICATION IS INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
AIR CONDITIONING SYSTEM CONTROLLER (ACSC) 21-63-06 Channels COND CTL 1(2)-A(B) (A321)	**Y**	4	2	**C**	One on each side may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
21-63-06	Adjacent To ECAM Display	ACSC ___ CHANNEL IS INOP

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ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
22-00-00L	LLM Autoland Status (Lower Landing Minimums) **"DISP.APPR.REQ'D"** Administrative Control Item	**N**	-	-		**(M)** Aircraft restricted from autopilot coupled Autoland due to chronic problem, or no Autoland in 30 days. a) This item number is only used for deferring the Autoland status of the aircraft and MCC authorization is required prior to its usage or removal. b) Practice Autolands are permitted if authorized by MCC.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-00-00L	Adjacent To Each PFD	AUTOLAND NOT AUTHORIZED

(M) PROCEDURES

1. Create a new log page in the aircraft logbook using the appropriate MEL Item Number (contact MCC for instructions).
2. The deferral code LLM must also be entered on the log page and the placard when deferring this item.
3. MCC authorization is required prior to its usage or removal.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-10-01A	Autopilot Systems **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One autopilot system may be inoperative provided: a) Components associated with the mode or function of the autopilot to be used are operative, b) When destination weather is less than 4000 RVR, 3/4 mi. one flight director is operative, and c) RNAV operations do not require Autopilot Systems use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT III / RNP Approaches Not Authorized
22-10-01B	Autopilot Systems **"DISP.APPR.REQ'D"**	**Y**	2	0	**B**	**(O)** Both autopilot systems may be inoperative provided: a) One flight director is operative, unless destination weather is less than 4000 RVR, 3/4 mi. both flight directors must be operative, b) Both autothrust systems are operative, c) Aircraft is not dispatched to an airport where the anticipated approach is a non–precision approach unless destination weather is 1000 ft./3 mi. or greater, d) The airplane remains at or below FL280, and e) Number of flight segments and segment duration is acceptable to flight crew. NOTE: Any mode which operates normally may be used. CAT II/III / RVSM / RNP / PRM Approaches Not Authorized Theater Restrictions May Apply

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MEL ITEM	TAB LOCATION	PLACARD TEXT
22-10-01A	Adjacent To Affected Autopilot Engage Switch(s) Located On FCU (Flight Control Unit)	___ AUTOPILOT INOP
22-10-01B	Adjacent To Autopilot Engage Switch(s) Located On FCU (Flight Control Unit)	BOTH AUTOPILOTS INOP

(O) PROCEDURES

22-10-01A

1. When destination weather is less than 4000 RVR, 3/4 mi. one autopilot and one flight director must be operative.
2. Do not engage associated autopilot.

22-10-01B

1. When destination weather is less than 4000 RVR, 3/4 mi. both flight directors must be operative.
2. RVSM operations – Not Authorized. Limit flight altitude to FL 280 or below.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH	REPAIR CATEGORY	REMARKS OR EXCEPTIONS
22-10-02A	Flight Director Systems **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One flight director may be inoperative provided when destination weather is less than 4000 RVR, 3/4 mi. one autopilot must be functional in the approach mode. CAT III Not Authorized
22-10-02B	Flight Director Systems **"DISP.APPR.REQ'D"**	**Y**	2	0	**B**	**(O)** Both flight directors may be inoperative provided: a) One autopilot is operative unless destination weather is less than 4000 RVR, 3/4 mi. both autopilots must be functional in the approach mode, and b) RNAV operations do not require Flight Director Systems use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-10-02A	Adjacent To Affected Flight Director Engage Switch(s) Located On FCU (Flight Control Unit)	___ FLIGHT DIRECTOR INOP
22-10-02B	Adjacent To Affected Flight Director Engage Switch(s) Located On FCU (Flight Control Unit)	BOTH FLIGHT DIRECTORS INOP

(O) PROCEDURES

22-10-02A

1. Pilot with the operative flight director must accomplish the takeoff.
2. When destination weather is less than 4000 RVR, 3/4 mi. one autopilot and one flight director must be operative.

22-10-02B

1. The following will not be available on takeoff or a go–around on either PFD:
   a) No FD bars.
   b) No A/THR arming.
   c) Target speed on PFD as selected on the FCU or defaulted to 100 kt.
   d) No A/THR activation when thrust levers are set to CL detent.

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2. When a takeoff or a go–around is performed without FDs proceed as follows:

   a) Acquire pitch attitude of 17.5 degrees to maintain the speed target (V2+10) with two engines operative.

OR

   b) Acquire pitch to maintain at least V2 (pitch about 12.5 degrees) in case of engine failure.

3. When reaching THR RED ALT and ACCEL ALT:

   a) Select CLB speed on the FCU.

   b) Set thrust levers to CL detent.

4. When reaching level off altitude or FL:

   a) Select CRUISE speed or mach number on FCU.

   b) Use manual thrust or activate A/THR if applicable.

      NOTE: When AP1 or AP2 is engaged, basic mode will engage and other AP modes are available. For go–around with no FD, thrust reduction and acceleration altitude should be the same.

5. Verify that both autopilot systems are functional in the approach mode when weather is less than 4000 RVR, 3/4 mi.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
TAKE OVER PUSH- BUTTON SWITCH					
22-10-03A AP Disconnect Function **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One may be inoperative provided: a) One flight director is operative, unless destination weather is less than 4000 RVR, 3/4 mi. both flight directors must be operative, b) Aircraft is not dispatched to an airport where the anticipated approach is a non–precision approach unless destination weather is 1000 ft./3 mi. or greater. c) Both autothrust systems are operative, d) Autopilots are not utilized at less than initial approach altitude, e) Priority function is verified to operate normally before each departure, and f) RNAV operations do not require AP Disconnect Function use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III / PRM Approaches Not Authorized
22-10-03B AP Disconnect Function **"DISP.APPR.REQ'D"**	**Y**	2	0	**B**	**(M)(O)** May be inoperative provided: a) Autopilots are not engaged, b) Priority function is verified to operate normally before each departure, c) Number of flight segments and segment duration is acceptable to flight crew, d) The airplane remains at or below FL280, e) Defer Autopilot Systems per MEL 22-10-01B, and f) RNAV operations not permitted. CAT II/III / RVSM Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-10-03A	Adjacent To Affected Side Stick Priority Light Located On FCU (Flight Control Unit)	___ TAKE OVER PUSH BUTTON SWITCH AP DISCONNECT FUNCTION INOP
22-10-03B	Adjacent To Side Stick Priority Lights Located On FCU (Flight Control Unit)	BOTH TAKE OVER PUSH BUTTON SWITCHES AP DISCONNECT FUNCTION INOP

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(O) PROCEDURES

22-10-03A

1. Before engine start:
   a) AP1 – ON.
   b) Operative takeover pb – PRESS
   c) Check that the red AP OFF message appears on ECAM.
   d) AP2 – ON.
   e) Operative takeover pb – PRESS
   f) Check that the red AP OFF message appears on ECAM.
2. Verify priority function operates normally before each departure. Reference Vol. 1, Supplementary Procedures – Flight Controls, Sidestick Priority Check.
3. Pilot flying on autopilot must have operative button.
4. Do not use autopilot at less than initial approach altitude.
5. When destination weather is less than 4000 RVR, 3/4 mi. both flight directors must be operative.

22-10-03B

1. Verify priority function operates normally before each departure. Reference Vol. 1, Supplementary Procedures – Flight Controls, Sidestick Priority Check.
2. Do not engage autopilots.
3. Comply with MEL Item 22–10–01B (O) procedure.
4. RNAV operations not permitted.

(M) PROCEDURES

22-10-03B

Defer Autopilots inoperative per MEL Item 22–10–01B.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-10-04A	Autoland Lights	**Y**	2	1	**C**	May be inoperative.
22-10-04B	Autoland Lights **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided approach minimums do not require use of autoland. CAT II/III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-10-04A	Adjacent To Affected Autoland Light Located On Glareshield	___ AUTOLAND LIGHT INOP
22-10-04B	Adjacent To Both Autoland Lights Located On FCU (Flight Control Unit)	BOTH AUTOLAND LIGHTS INOP

(O) PROCEDURES

22-10-04B

1. CAT II – Not Authorized.
2. CAT III – Not Authorized.
3. Autoland – Not Authorized.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
22-10-05	AP Disengagement Warning System **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(M)(O)** May be inoperative provided: a) Both autopilots are not used and deferred per MEL 22-10-01B, and b) The airplane remains at or below FL280. CAT II/III / RVSM Not Authorized Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-10-05	Adjacent To Autopilot Engage Switches Located On FCU (Flight Control Unit)	AP DISENGAGEMENT WARNING SYSTEM INOP

(O) PROCEDURES

1. CAT II – Not Authorized.
2. CAT III – Not Authorized.
3. RVSM – Not Authorized.
4. Do not engage autopilots.
5. Comply with MEL Item 22–10–01B (O) procedure.

(M) PROCEDURES

1. Defer autopilots inoperative per MEL 22-10-01B.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-10-06	Side Sticks and Rudder Locking Solenoids in AP Mode **"DISP.APPR.REQ'D"**	**Y**	3	1	**C**	**(O)** May be inoperative unlocked provided: a) Autopilot Disconnect/Disengagement Warning operates normally, and b) Autoland is not used. NOTE: If one of the locking solenoids is inoperative in the unlocked position, the affected side stick or pedals will move freely and the "hard point" will not be felt any longer by the pilots. This may result in an unintentional AP disconnect. CAT II/III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-10-06	Adjacent To Autopilot Engage Switches Located On FCU (Flight Control Unit)	___ AUTOPILOT MODE LOCKING SOLENOIDS INOP UNLOCKED

(O) PROCEDURES

1. CAT II – Not Authorized.
2. CAT III – Not Authorized.
3. Autoland – Not Authorized.

NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH				
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-30-01	Autothrust Function **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided: a) All thrust lever sensors are verified to operate normally, and b) Both autopilot systems are operative. NOTE: Alpha floor is not available with autothrust function inoperative. <u>CAT II/III</u> Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-30-01	Adjacent to ECAM display	BOTH FMGC'S AUTOTHRUST FUNCTION INOP

(O) PROCEDURES

1. Check that no ONE TLA FAULT warning is present, (if necessary use RCL pb on ECAM control panel).
2. After engines start, push either autothrottle instinctive disconnect pb for at least 15 seconds.
3. Check that A/THR is displayed in INOP SYS on ECAM STATUS page.

   NOTE: The A/THR system is permanently disconnected for the remainder of the flight. All A/THR functions including ALPHA FLOOR are lost.

(M) PROCEDURES

1. Check that pushbuttons ENG FADEC GND POWER 1 and 2 are released (ON legend comes ON).
2. On C/B panel 49VU: pull circuit breaker ENGINE/1/FADEC A/AND EIU 1 location A04.
3. On C/B panel 49VU: pull circuit breaker ENGINE/2/FADEC A/AND EIU 2 location A05.
4. Move the throttle control levers ENG 1 (ENG 2) and check that the small white circle on N1 indication follows the throttle position.
5. On C/B panel 49VU: close circuit breaker ENGINE/1/FADEC A/AND EIU 1 location A04.
6. On C/B panel 49VU: close circuit breaker ENGINE/2/FADEC A/AND EIU 2 location A05.
7. On C/B panel 121VU: pull circuit breaker ENGINE/ENG1/FADEC B/AND EIU 1 location R41.
8. On C/B panel 121VU: pull circuit breaker ENGINE/ENG2/FADEC B/AND EIU 2 location Q40.
9. Move the throttle control levers ENG 1 (ENG 2) and check that the small white circle on N1 indication follows the throttle position.
10. On C/B panel 121VU: close circuit breaker ENGINE/ENG1/FADEC B/AND EIU 1 location R41.
11. On C/B panel 121VU: close circuit breaker ENGINE/ENG2/FADEC B location Q40.
12. Operate pushbuttons ENG FADEC GND POWER 1 and 2 to set to off (ON legend goes off).

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-30-02	Autothrust Instinctive Disconnect Switches	Y	2	1	C	**(O)** One may be inoperative provided ability to disconnect A/THR by means of the remaining Instinctive Disconnect pb and by the FCU A/THR pb, is verified PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-30-02	Adjacent To Autothrust Engage Switch Located On FCU (Flight Control Unit)	___ AUTO– THRUST INSTINCTIVE DISCONNECT SWITCH INOP

(O) PROCEDURES

NOTE: Disregard ECAM warnings. Use the EMER CANCEL pb on ECAM control panel as necessary.

PRIOR TO EACH DEPARTURE, after IRS alignment:

1. -
   a) ENG/FADEC GND PWR 1 and 2 – ON.
   b) THRUST LEVERS – MCT.
   c) FD – OFF.
   d) C/B on panel 121 VU AUTO FLT/ FMGC/2 location M17 – PULL.
   e) A/THR – ON.
   f) Check that green SPEED and white A/THR indications appear on PFD and that A/THR pb is illuminated.
2. -
   a) A/THR instinctive disconnect pb switch (non affected throttle) – PUSH.
   b) Check that the A/THR pb is extinguished, that green SPEED and white A/THR indications are no longer displayed on PFD.
   c) A/THR – ON.
   d) Check that the A/THR pb is illuminated and that green SPEED and white A/THR indications are displayed on PFD.
   e) A/THR (pb on FCU)- OFF.
   f) Check that the A/THR pb is extinguished, that green SPEED and white A/THR indications are no longer displayed on PFD.
   g) A/THR – ON.

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3. -
   a) C/B on panel 121 VU AUTO FLT/ FMGC/2 location M17 – PUSH.
   b) C/B on panel 49 VU AUTO FLT/ FMGC/1 location B02 – PULL.
   c) Wait at least 2 minutes, then repeat the steps listed under No. 2. Of this procedure.
4. -
   a) A/THR – OFF.
   b) C/B on panel 49 VU AUTO FLT/ FMGC/1 location B02 – PUSH.
   c) ENG/FADEC GND PWR 1 and 2 – OFF.
   d) THRUST LEVER – IDLE.
   e) RCL pb on ECAM control panel – PUSH.
   f) Wait at least 2 minutes before using MCDU and FD.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-30-03	Autothrust Disengagement Warning System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided Autothrust is disconnected and is considered inoperative and deferred per MEL 22-30-01. NOTE: Alpha floor is not available. CAT II/III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-30-03	Adjacent To Autothrust Engage Switch Located On FCU (Flight Control Unit)	AUTOTHRUST WARNING SYSTEM INOP

(O) PROCEDURES

1. Check that no ONE TLA FAULT warning is present (if necessary, use RCL pb on ECAM control panel).
2. After engines start, push either autothrottle instinctive disconnect pb for at least 15 seconds.
3. Check that A/THR is displayed in INOP SYS on ECAM STATUS page.

   NOTE: The A/THR system is permanently disconnected for the remainder of the flight. All A/THR functions including ALPHA FLOOR are lost.

(M) PROCEDURES

Defer Autothrust Function inoperative per MEL item 22–30–01.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
YAW DAMPERS					
22-63-01A System 1 **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) System 1 is deactivated, and b) System 2 is operative. CAT III Not Authorized
22-63-01B System 2 **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) System 2 is deactivated in the case of actuator leakage, and b) System 1 is operative. CAT III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-63-01A	Adjacent To ECAM Display	SYSTEM 1 YAW DAMPER INOP
22-63-01B	Adjacent To ECAM Display	SYSTEM 2 YAW DAMPER INOP

(O) PROCEDURES

22-63-01A

CAT III – Not Authorized.

22-63-01B

CAT III – Not Authorized.

(M) PROCEDURES

22-63-01A, 22-63-01B

1. Deactivate Yaw Damper Servo – Actuator by performing AMM Task 27-26-00-040-001.

NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH			
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
FLIGHT AUGMENTATION COMPUTERS (FAC)					
22-66-01 FAC 2 **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** FAC 2 may be inoperative provided: a) Both FCU channels operate normally, b) ELAC, SEC, ADIRS, SFCC, RA, and LGCIU systems operate normally, c) Departure weather is 1000 ft./3 mi. or greater, d) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival, e) If, upon arrival, the actual destination/alternate weather is below 1000 ft./3 mi., landing is authorized provided FAC 1 is operational, and f) RNAV operations do not require Autopilot Systems use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. NOTE: Loss of FAC 1 will result in Direct Law Mode at landing gear down. CAT II/III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-66-01	Adjacent To Affected FAC Disengage Switch On FLT CTL Panel	FLIGHT AUGMENTATION COMPUTER (FAC) NO. 2 INOPERATIVE

(O) PROCEDURES

1. CAT II/III – Not Authorized.
2. Verify that:
   a) Departure weather is 1000 ft./3 mi. or greater.
   b) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival.
3. Set FAC 2 pb switch to OFF.
4. If, upon arrival, the actual destination/alternate weather is below 1000 ft./3 mi., landing is authorized provided FAC 1 is operational.

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5. After engine start:
   a) Display the ECAM F/CTL page,
   b) Turn RUD TRIM selector to NOSE/R position and hold until between R 5 and R 10 is achieved, then release and observe rudder displacement on ECAM F/CTL page,
   c) Push the RUD TRIM/RESET pb and verify rudder trim is centered,
   d) Turn RUD TRIM selector to NOSE/L position and hold until between L 5 and L 10 is achieved, then release and observe rudder displacement on ECAM F/CTL page,
   e) Push the RUD TRIM/RESET pb and VERIFY rudder trim is centered.

NOTE 1: The following will be inoperative:
– Yaw Damper System 2
– Rudder Trim system 2
– Rudder Travel Limiter System 2

NOTE 2: The following ECAM Caution messages may be displayed:
AUTO FLT YAW DAMPER 2
AUTO FLT RUD TRIM 2 FAULT
AUTO FLT RUD TRV LIM 2

(M) PROCEDURES

Deactivation of the FAC 2 Computer.

1. On C/B panel 121VU: pull and secure circuit breaker AUTO FLT/FAC2/28VDC location M19.
2. Set FAC 2 P.B. switch to OFF.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
FAC PB SWITCH					
22-66-02A FAULT Lights	**Y**	2	1	**C**	One may be inoperative.
22-66-02B OFF Lights	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-66-02A	Adjacent To Affected FAC Switch On Overhead Panel	___ FAC FAULT LIGHT INOP
22-66-02B	Adjacent To Affected FAC Switch On Overhead Panel	___ FAC OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-66-03	Windshear Warning and Flight Guidance System **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided takeoffs, approaches and landings are not conducted when windshear of greater than 15 kts (plus or minus) at or below 1000 ft and/or microburst alerts are in effect for the runway of intended use.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-66-03	Adjacent to Capt's and F/O's PFD	WINDSHEAR WARNING AND FLIGHT GUIDANCE SYSTEM INOP

(O) PROCEDURES

22-66-03

1. Reference Flight Crew Training Manual Chapter 7 for the Windshear Guidance and Windshear Escape Maneuver.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					**REMARKS OR EXCEPTIONS**
FLIGHT MANAGEMENT SYSTEM 22-72-01 Lateral Navigation	**N**	2	2		NO RELIEF APPROVED.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-72-01	N/A	N/A

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	FLIGHT MANAGEMENT SYSTEM					
22-73-01	Performance Information and/or Vertical Navigation	**Y**	2	0	**C**	May be inoperative. NOTE: Lateral Nav must operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-73-01	On The Affected MCDU (Multi–Purpose Control Display Unit)	___ FLIGHT MANAGEMENT SYSTEM PERFORMANCE INFORMATION AND/OR VERTICAL NAV INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
FLIGHT MANAGEMENT SYSTEM 22-73-02 Fuel/Time Predictions	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-73-02	On The Affected MCDU (Multi–Purpose Control Display Unit)	___ FLIGHT MANAGEMENT SYSTEM FUEL/TIME PREDICTIONS INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-81-01 FCU Channels	**Y**	2	1	**B**	One may be inoperative provided 2 RMPs, all DUs, both RAs, both LGCIUs, both FACs, both cabin pressure controllers, the three ADIRS, and standby altimeter (or ISIS Baro-altimeter function) operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-81-01	On the FCU	FCU CHANNEL ____ INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	AUTO FLIGHT CONTROL PANEL					
22-81-03A	Mode Engagement Pb LOC	**Y**	1	0	**C**	**(O)** May be inoperative provided APPR pb operates normally.
22-81-03B	Mode Engagement Pb EXPED	**Y**	1	0	**C**	May be inoperative.
22-81-03C	Mode Engagement Pb APPR **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	May be inoperative provided: a) LOC pb operates normally, b) Destination weather must be 4000 RVR, 3/4 mi. or greater, and c) RNAV operations do not require Mode Engagement Pb APPR use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III Not Authorized
22-81-03D	Selection Windows	**Y**	4	1	**C**	SPD MACH, HDG TRK, or V/S FPA windows may be inoperative provided associated indications are operative on both PFD's and both ND's.
22-81-03E	HDG-V/S TRK-FPA Change Over Pb	**Y**	1	0	**C**	May be inoperative provided HDG–V/S selection is operative.
22-81-03F	SPD/MACH Change Over Pb	**Y**	1	0	**C**	**(O)** May be inoperative provided SPD selection is operative.
22-81-03G	Metric ALT Pb	**Y**	1	0	**C**	**(O)** May be inoperative provided alternate procedures are used.
22-81-03H	Engagement Pb Light Bars (LOC, AP1, AP2, A/THR, EXPED, APPR)	**Y**	6	0	**D**	May be inoperative provided associated indication is available on both PFD's.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
22-81-03I	V/S-FPA - Rate/Angle Selection Knob **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided V/S–FPA Push to Level Off function operates normally.
22-81-03J	V/S-FPA Push to Level Off Function	**Y**	1	0	**C**	**(O)** May be inoperative provided V/S–FPA selection knob operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-81-03A	Adjacent To The LOC Pushbutton Switch On The FCU	LOC MODE ENGAGEMENT PB INOP
22-81-03B	Adjacent To The EXPED Pushbutton Switch On The FCU.	EXPED MODE ENGAGEMENT PB INOP
22-81-03C	Adjacent To The APPR Pushbutton Switch On The FCU	APPR MODE ENGAGEMENT PB INOP
22-81-03D	Adjacent To The Affected Selection Window On The FCU	FCU ___ SELECTION WINDOW INOP
22-81-03E	Adjacent To The HDG–V/S / TRK–FPA Change Over Pushbutton Switch On The FCU	HDG–V/S / TRK–FPA CHANGE OVER PB INOP
22-81-03F	Adjacent To The SPD/MACH Change Over Pushbutton Switch On The FCU	SPD/MACH CHANGE OVER PB INOP
22-81-03G	Adjacent To The Meter Selection Pushbutton Switch On The FCU	METER SELECTION PB INOP
22-81-03H	Adjacent To The Associated Engagement Pb Light Bars On The FCU	___ ENGAGEMENT PB LIGHT BARS INOP
22-81-03I	Adjacent To The Pb On Upper Center Instrument Panel	V/S–FPA SELECT KNOB INOP
22-81-03J	Adjacent To The Pb On Upper Center Instrument Panel	V/S–FPA PUSH TO LEVEL OFF FUNCTION INOP

(O) PROCEDURES

22-81-03A

1. If a localizer approach is required:
   a) Track the approach course in LOC mode using the APPR pb.
   b) At the OM/FAF, set the rounded up MDA in the FCU altitude window and V/S down to the MDA.

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22-81-03F

Monitor Vmo above FL 250.

22-81-03G

Use metric conversion chart in ODM.

22-81-03I

1. LOC, LOC BC and ASR Approaches – Not Authorized.
2. Constant Angle Rate of Descent (CARD) procedures – Not Authorized.

NOTE 1: Non–precision APPR NAV procedures are authorized.

NOTE 2: Vertical Speed–FPA rate/angle cannot be adjusted.

22-81-03J

Use vertical speed zero to level off if an engine fails on takeoff after V_1.

NOTE: Push to Level Off Function is not available.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	EFIS CONTROL PANEL					
22-81-04A	Baro Reference Display Windows	**Y**	2	1	**C**	One may be inoperative.
22-81-04B	Baro Reference Sel Outer Ring Hg	**Y**	2	0	**C**	May be inoperative provided: a) Route of flight does not require its use, and b) Both hPa indications are available on EFIS control panel.
22-81-04C	Baro Reference Sel Outer Ring - hPa	**Y**	2	0	**C**	May be inoperative provided: a) Route of flight does not require its use, and b) Both Hg indications are available on EFIS control panel.
22-81-04D	ILS/LS Pushbutton	**Y**	2	1	**C**	**(O)** One may be inoperative provided ILS information is available on associated ND.
22-81-04E	Optional Data Display p.b.	**Y**	10	0	**C**	Captain and FO's CSTR, WPT, VOR.D, NDB, ARPT pushbuttons may be inoperative.
22-81-04F	ND Range	**Y**	2	1	**C**	One may be inoperative provided the ND unit associated with the operative ND range selector is operative.
22-81-04G	ND Mode Selector **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	One may be inoperative provided: a) ND unit associated with the operative ND selector is operative, and b) RNAV operations do not require ND Mode Selector use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III Not Authorized
22-81-04H	ADF/VOR Sel	**Y**	4	-	**C**	**(M)(O)** One or more may be inoperative provided associated ADF or VOR indication on ND is considered inoperative and deferred per MEL 34-53-01 or 34-55-01 as needed.
22-81-04I	Display p.b. Light Bars	**Y**	14	0	**D**	May be inoperative provided associated indication is available on associated PFD or ND.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
22-81-04A	Adjacent To The Baro Reference Display Window On The EFIS Control Panel	EFIS CONTROL PANEL ___ BARO REFERENCE DISPLAY WINDOW INOP
22-81-04B	Adjacent To The Baro Reference Sel Outer Ring On The EFIS Control Panel	EFIS CONTROL PANEL ___ BARO REFERENCE SEL OUTER RING Hg INOP
22-81-04C	Adjacent To The Baro Reference Sel Outer Ring On The EFIS Control Panel	EFIS CONTROL PANEL ___ BARO REFERENCE SEL OUTER RING hPa INOP
22-81-04D	Adjacent To The ILS Pushbutton On The EFIS Control Panel	EFIS CONTROL PANEL ___ ILS PUSHBUTTON INOP
22-81-04E	Adjacent To The Affected Optional Display Pb On The EFIS Control Panel	EFIS CONTROL PANEL ___ OPTIONAL DATA DISPLAY PB INOP
22-81-04F	Adjacent To The Affected ND Range Selector On The EFIS Control Panel	EFIS CONTROL PANEL ___ ND RANGE SELECTOR INOP
22-81-04G	Adjacent To The Affected ND Mode Selector On The EFIS Control Panel	EFIS CONTROL PANEL ___ ND MODE SELECTOR INOP
22-81-04H	Adjacent To The Affected ADF/VOR Selector On The EFIS Control Panel	EFIS CONTROL PANEL ___ ADF/VOR SELECTOR INOP
22-81-04I	Adjacent To The Affected Display Pb Bars On The EFIS Control Panel	___ EFIS CONTROL PANEL DISPLAY PB LIGHT BARS INOP

(O) PROCEDURES

22-81-04D

On affected side, select ILS rose mode for ILS ND information.

22-81-04H

Ensure (O) procedures for MEL 34-53-01 or 34-55-01 are applied as needed.

(M) PROCEDURES

22-81-04H

Defer ADF or VOR as required per MEL 34-53-01 or 34-55-01 as applicable.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
22-81-06	Automatic Landing System (AUTOLAND) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. <u>CAT II/III</u> Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-81-06	Adjacent to Autopilot Engage Switches located on FCU (Flight Control Unit)	AUTOMATIC LANDING SYSTEM INOP

(O) PROCEDURES

1. CAT II – Not Authorized.
2. CAT III – Not Authorized.
3. Autoland – Not Authorized.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	MULTI PURPOSE CONTROL DISPLAY UNITS (MCDU)					
22-82-01A	MCDUs **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	One may be inoperative provided RNAV operations do not require MCDUs use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements.
22-82-01B	MCDU Annunciator Lights **"DISP.APPR.REQ'D"**	**Y**	-	0	**C**	May be inoperative provided RNAV operations do not require MCDUs use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements.

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-82-01A	Adjacent To Affected Multi Purpose Control Display	___ MULTI PURPOSE DISPLAY UNIT INOP
22-82-01B	Adjacent To Affected Multi Purpose Control Display	___ MULTI PURPOSE DISPLAY UNIT LIGHT(S) INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
22-83-01	Flight Management Guidance Computer (FMGC) **"DISP.APPR.REQ'D"**	**Y** 2	1	**A**	**(M)(O)** One may be inoperative provided: a) Alternate procedures are used, b) Departure airport weather is at VFR minimums (1000 ft./3 mi.) and destination airport weather for proposed arrival time is forecast to be and remain within VFR minimums (1000 ft./3 mi.), c) Affected FMGC is deactivated, d) RNAV operations do not require FMGC use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements, and e) Repairs are made within three landings. NOTE: Reference Airway Manual Section 7 "Definitions and Abbreviations" for Class 1 navigation description. CAT II/III Not Authorized Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-83-01	On The Affected MCDU (Multi–Purpose Control Display Unit)	FMGC ___ INOP

(O) PROCEDURES

22-83-01

1. Verify that:
   a) Departure weather is 1000 ft./3 mi. or greater.
   b) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival.
2. Remaining FMGC is operative for landing.
3. If, upon arrival, the actual destination/alternate weather is below 1000 ft./3 mi., landing is authorized provided one FMGC is operational.

NOTE: During IR alignment, IRS IN ALIGN memo cannot be displayed until the operational FD is engaged.

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(M) PROCEDURES

22-83-01

1. To deactivate FMGC
   a) For FMGC 1 accomplish the following:
      1) Pull and secure circuit breaker AUTO FLT/FMGC/1 on panel 49VU location B02 or 121VU location M16.
   b) For FMGC 2 accomplish the following
      1) On C/B panel 121VU: pull and secure circuit breaker AUTO FLT/FMGC/2 location M17.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	FMA INDICATIONS ON PFD					
22-83-02A	Autopilot/Flight Director Related Indications **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** Indications may be inoperative on the PNF FMA provided RNAV operations do not require Autopilot/Flight Director Indications use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III Not Authorized
22-83-02B	Autothrust Related Indications **"DISP.APPR.REQ'D"**	**Y**	2	1	**A**	**(O)** Indications may be inoperative on non–flying pilot's FMA provided repairs are made within three flight days.
22-83-02C	Autothrust Related Indications **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(M)(O)** May be inoperative provided Autothrust is disconnected and deferred per MEL 22-30-01. NOTE: Alpha floor is not available. CAT II/III Not Authorized
22-83-02D	Approach and Landing Capabilities **"DISP.APPR.REQ'D"**	**Y**	-	-	**C**	**(O)** One or more may be inoperative on one FMA provided: a) When destination weather is less than 4000 RVR, 3/4 mi., one autopilot and one flight director must be operative, and b) RNAV operations do not require Autopilot/Flight Director Indications use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
22-83-02A	Adjacent To Affected PFD	___ PFD FMA INDICATIONS INOP ON ___ PILOTS PFD
22-83-02B	Adjacent To Affected PFD	___ PFD FMA INDICATIONS INOP ON ___ PILOTS PFD
22-83-02C	Adjacent To Affected PFD	BOTH PFD FMA INDICATIONS INOP ON BOTH PILOTS PFD
22-83-02D	Adjacent To Affected PFD	___ APPROACH AND LANDING CAPABILITIES ON FMA INDICATION PFD INOP

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(O) PROCEDURES

22-83-02A

Pilot flying must have operative autopilot/flight director system.

22-83-02B

Pilot flying must have operative FMA.

22-83-02C

1. Check that no ONE TLA FAULT warning is present (if necessary, use RCL pb on ECAM control panel).
2. After engines start, push either autothrottle instinctive disconnect pb for at least 15 seconds.

NOTE: The A/THR system is permanently disconnected for the remainder of the flight. All A/THR functions including ALPHA FLOOR are lost.

22-83-02D

1. Pilot with the operative PFD approach and landing capabilities must accomplish the landing.
2. When destination weather is less than 4000 RVR, 3/4 mi., one autopilot and one flight director must be operative.

(M) PROCEDURES

22-83-02C

Defer Autothrust Function inoperative per MEL item 22–30–01.

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY				
23-00-01	Fault(s) Indicated by CIDS 1 (2)	**Y**		**C**	NOTE: Dispatch with this maintenance status messages displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-00-01	Adjacent To ECAM Display	ECAM MAINT STATUS MESSAGE “CIDS ___ ” DISPLAYED

NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH	
FLIGHT CREW MAY PLACARD		REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION			REMARKS OR EXCEPTIONS
23-00-99 Long Range Communication System **"DISP.APPR.REQ'D"** Administrative Control Item	**N**		**(M)** Aircraft restricted due to HF history. WATRS routes not authorized. MCC authorization is required prior to its usage or removal.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-00-99	Log Book	HF Restricted

(M) PROCEDURE

Use this item to restrict aircraft due to HF equipment that has been placed on MEL three (3) or more times in the last thirty (30) days.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-11-01A	High Frequency (HF) Communication System (Single HF Installed) **"DISP.APPR.REQ'D"**	**Y**	1	0	**D**	**(M)** May be inoperative provided route to be flown does not require its use. NOTE: Refer to Delta Airway Manual, page OPS-5CM.1.3, Communication Equipment Requirements Chart.
23-11-01B	High Frequency (HF) Communication System (Dual HF Installed) **"DISP.APPR.REQ'D"**	**Y**	2	0	**D**	**(M)(O)** One or both may be inoperative provided route to be flown does not require its use. NOTE: Refer to Delta Airway Manual, page OPS-5CM.1.3, Communication Equipment Requirements Chart.
23-11-01C	High Frequency (HF) Communication System (Dual HF Installed) North America, Caribbean and Latin America Operations ONLY **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative while conducting operations that require two LRCS provided: a) Aircraft SATVOICE system operates normally, b) SATVOICE services are available as a LRCS over the intended route of flight, c) The ICAO Flight Plan is updated (as required) to notify ATC of the communications equipment status of the aircraft, and d) Alternate procedures are used. NOTE: Refer to Delta Airway Manual, page OPS-5CM.1.3, Communication Equipment Requirements Chart.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-11-01A	Adjacent To HF Comm Selector On The Capt's Radio Management Panel	HF COMM SYSTEM RECEIVER AND/OR TRANSMITTER INOP
23-11-01B	Adjacent To HF Comm Selector On The Capt's Radio Management Panel	___ HF COMM SYSTEM RECEIVER AND/OR TRANSMITTER INOP
23-11-01C	Adjacent To HF Comm Selector On The Capt's Radio Management Panel	___ HF COMM SYSTEM RECEIVER AND/OR TRANSMITTER INOP

(O) PROCEDURES

23-11-01B, 23-11-01C

Confirm route to be flown complies with limitations of the Remarks & Exceptions column.

(M) PROCEDURES

23-11-01A, 23-11-01B, 23-11-01C

Contact MCC to check 30 day history. When an aircraft achieves the third individual MEL occurrence in 30 days, MCC should apply MEL item 23-00-99.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-12-01A	Communications (VHF) (No. 3) **"DISP.APPR.REQ'D"**	**Y**	3	2	**C**	**(M)(O)** No. 3 VHF only may be inoperative. NOTE 1: ACARS/ATSU will be inoperative. NOTE 2: Refer to Delta Airway Manual, Section 11, Theater Guidance for operations with ACARS/ATSU unavailable.
23-12-01B	Communications (VHF) (No. 2) **"DISP.APPR.REQ'D"**	**Y**	3	2	**C**	**(O)** No. 2 VHF only may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-12-01A	Adjacent To VHF3 Comm Selector On The Capt's Radio Management Panel	NO. 3 COMM SYSTEM RECEIVER AND/OR TRANSMITTER INOP
23-12-01B	Adjacent To VHF3 Comm Selector On The Capt's Radio Management Panel	NO. 2 COMM SYSTEM RECEIVER AND/OR TRANSMITTER INOP

(O) PROCEDURES

23-12-01A

Comply with MEL item 23–24–01A or 46–21–01A (O) procedure, as applicable.

23-12-01B

Use VHF 3 in the voice mode as the secondary radio for ATIS, company voice communications, etc. When not needed for voice communications, VHF 3 should be in ACARS data mode to monitor company communications via ACARS/ATSU.

Reference Delta AOM Volume 2, Chapter 23 for VHF No. 3 Voice/Data mode procedures.

NOTE 1: When only two VHF radios are available, monitor company communications instead of 121.5. (ACARS/ATSU data mode is preferred or company frequency on voice mode, if necessary.)

NOTE 2: ACARS/ATSU will not be available when VHF 3 is being used in the voice mode.

NOTE 3: Monitoring company communications is not required when on a PRM approach.

(M) PROCEDURES

23-12-01A

Defer ACARS or Air Traffic Service Unit (ATSU) inoperative per MEL Item 23–24–01A or 46–21–01A, as applicable.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	RADIO MANAGEMENT PANELS (RMP)					
23-13-01A	RMP 1 VHF Comm Select Keys **"DISP.APPR.REQ'D"**	**Y**	3	2	**C**	**(O)** VHF No. 2 or No. 3 may be inoperative.
23-13-01B	RMP 1 HF 1 Comm Select Key (Single HF Installed) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** HF 1 key ONLY may be inoperative on RMP 1 provided HF radio is not required for flight. NOTE 1: One operative HF radio is required for all overwater operations outside of VHF coverage in the Western Atlantic, Caribbean and Gulf of Mexico. Reference Airway Manual Section 3. NOTE 2: Dispatch to remove Equipment Code "H" from the flight plan. NOTE 3: Refer to Delta Airway Manual, Section 11, Theater Guidance for operations with HF unavailable.
23-13-01C	RMP 1 HF Comm Select Key(s) (Dual HF Installed) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided affected HF radio is not required for flight. NOTE 1: Two operative HF radios are required for dispatch on: 1. Asia Interport HF routes, and 2. Transpacific routes (including GUM and SPN). NOTE 2: One operative HF radio is required for all overwater operations outside of VHF coverage in the Western Atlantic, Caribbean and Gulf of Mexico. Reference Airway Manual Section 3. NOTE 3: If both HF radios are inoperative, dispatch to remove Equipment Code "H" from the flight plan. NOTE 4: Refer to Delta Airway Manual, Section 11, Theater Guidance for operations with HF unavailable.
23-13-01D	RMP 2 VHF Comm Select Keys **"DISP.APPR.REQ'D"**	**Y**	3	2	**C**	**(O)** One VHF Comm Select key may be inoperative on RMP 2.

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	RADIO MANAGEMENT PANELS (RMP) (CONTINUED)				
23-13-01E	RMP 2 HF 1 Comm Select Key (Single HF Installed) **"DISP.APPR.REQ'D"**	**Y** 1	0	**C**	**(O)** HF 1 key ONLY may be inoperative on RMP 2 provided HF radio is not required for flight. NOTE 1: One operative HF radio is required for all overwater operations outside of VHF coverage in the Western Atlantic, Caribbean and Gulf of Mexico. Reference Airway Manual Section 3. NOTE 2: Dispatch to remove Equipment Code "H" from the flight plan. NOTE 3: Refer to Delta Airway Manual, Section 11, Theater Guidance for operations with HF unavailable.
23-13-01F	RMP 2 HF Comm Select Key(s) (Dual HF Installed) **"DISP.APPR.REQ'D"**	**Y** 2	0	**C**	**(O)** May be inoperative provided affected HF radio is not required for flight. NOTE 1: Two operative HF radios are required for dispatch on: 1. Asia Interport HF routes, and 2. Transpacific routes (including GUM and SPN). NOTE 2: One operative HF radio is required for all overwater operations outside of VHF coverage in the Western Atlantic, Caribbean and Gulf of Mexico. Reference Airway Manual Section 3. NOTE 3: If both HF radios are inoperative, dispatch to remove Equipment Code "H" from the flight plan. NOTE 4: Refer to Delta Airway Manual, Section 11, Theater Guidance for operations with HF unavailable.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
23-13-01A	On RMP 1	RMP-1 ___ RADIO COMMUNICATIONS SELECTION KEY INOP
23-13-01B	On RMP 1	RMP-1 HF 1 RADIO COMMUNICATIONS SELECTION KEY INOP
23-13-01C	On RMP 1	RMP-1 ___ HF RADIO COMMUNICATIONS SELECTION KEY(S) INOP.
23-13-01D	On RMP 2	RMP-2 ___ RADIO COMMUNICATIONS SELECTION KEY INOP
23-13-01E	On RMP 2	RMP-2 HF 1 RADIO COMMUNICATIONS SELECTION KEY INOP
23-13-01F	On RMP 2	RMP-2 ___ HF RADIO COMMUNICATIONS SELECTION KEY(S) INOP

(O) PROCEDURES

23-13-01A, 23-13-01D

RNP–10 airspace operations – Not Authorized.

23-13-01B, 23-13-01E

Ensure HF radio is not required for flight.

RNP–10 airspace operations – Not Authorized.

23-13-01C, 23-13-01F

Confirm route to be flown complies with limitations of Remarks & Exceptions column.

RNP–10 airspace operations – Not Authorized.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ACARS					
23-24-01A	ACARS A/C 3209-3270 **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided alternate procedures are used. NOTE 1: If an ENCON monitoring page is not available at the time of deferral and MCC determines that there is no requirement for ENCON readings during that flight segment, the ENCON monitoring page may be boarded at the destination. NOTE 2: Refer to Delta Airway Manual, Section 5, Communications for requirements. NOTE 3: For All A319 and A321 Aircraft and Ships 3271-3278, use ATSU MEL item 46-21-01A.
23-24-01B	Chime A/C 3209-3270 **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For All A319 and A321 Aircraft and Ships 3271-3278, use ATSU MEL item 46-21-01B.
23-24-01C	Message Storage A/C 3209-3270 **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For All A319 and A321 Aircraft and Ships 3271-3278, use ATSU MEL item 46-21-01C.
23-24-01D	UTC Time Reset A/C 3209-3270 **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For All A319 and A321 Aircraft and Ships 3271-3278, use ATSU MEL item 46-21-01D.
23-24-01E	Out, Off, On, In Times Function A/C 3209-3270 **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For All A319 and A321 Aircraft and Ships 3271-3278, use ATSU MEL item 46-21-01E.

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ACARS (CONTINUED) 23-24-01F Weight Data Page A/C 3209-3270 **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For All A319 and A321 Aircraft and Ships 3271-3278, use ATSU MEL item 46-21-01F.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-24-01A	On Affected MCDU (Multipurpose Control Display Unit)	ACARS INOP
23-24-01B	On Affected MCDU (Multipurpose Control Display Unit)	ACARS SYSTEM CHIME INOP
23-24-01C	On Affected MCDU (Multipurpose Control Display Unit)	ACARS SYSTEM MESSAGE STORAGE INOP
23-24-01D	On Affected MCDU (Multipurpose Control Display Unit)	ACARS SYSTEM UTC TIME RESET INOP
23-24-01E	On Affected MCDU (Multipurpose Control Display Unit)	ACARS SYSTEM OUT, OFF, ON, IN TIME FUNCTION INOP
23-24-01F	On Affected MCDU (Multipurpose Control Display Unit)	ACARS SYSTEM WEIGHT DATA PAGE INOP

(O) PROCEDURES

23-24-01A

1. Prior to departure, advise departing station that ACARS is inoperative.
2. Operational information is to be communicated by voice radio.
3. Obtain Load Advice via radio or a printed copy.

   NOTE: Make enroute company reports every hour (Reference Airway Manual, ATC & Flt Control Communications).

4. Utilize SELCAL if available, (#2 or #3 VHF must be tuned to the appropriate Delta radio network frequency), if not –continuously monitor appropriate company voice radio frequencies.

   NOTE 1: If SELCAL is required, perform a SELCAL check before departure.

   NOTE 2: Company frequency must be monitored rather than 121.5.

   NOTE 3: Monitoring company frequency is not required when on a PRM approach.

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5. Record engine data on the inflight engine (ENCON) monitoring page or the faxed copy.

   NOTE 1: If an ENCON monitoring page is not available and MCC had determined that ENCON readings are not required for the flight segment, engine readings are not required.

   NOTE 2: If data is entered on an ENCON monitoring page, enter an INFO ONLY write–up stating that ENCON data was recorded and requires entry into SCEPTRE at the next Delta staffed station.

23-24-01B

Monitor message status.

23-24-01C

Record any messages/data that may be required later in flight.

23-24-01D, 23-24-01E

Report Out, Off, On, In, times using free text downlinks to station or by radio communication.

23-24-01F

Obtain final weight data prior to departure or via company radio.

(M) PROCEDURES

23-24-01A

Ensure inflight engine monitoring logbook is installed in aircraft logbook.

NOTE: If an ENCON monitoring page is not available at the time of deferral and MCC determines that there is no requirement for ENCON readings during that flight segment, the ENCON Monitoring page may be boarded at the destination.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
PASSENGER ADDRESS SYSTEM (PA)					
23-31-01A Passenger Address System (PA) **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided: a) Alternate, normal and emergency procedures and/or operating restrictions are established and used, b) Flight Attendant alerting system (audio and visual) operates normally, and c) Attendant Indication Panels (AIP) operates normally. NOTE: Any station function(s) that operates normally may be used.
23-31-01B Lavatory Speakers	**Y**	3	0	**C**	**(O)** May be inoperative provided alternate procedures are used.
23-31-01C Cabin Speakers	**Y**	-	-	**C**	May be inoperative provided inoperative speakers are not adjacent to each other.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-31-01A	Adjacent To The FWD Flight Attendants Handset	___ PA SYSTEM INOP
23-31-01B	Adjacent To The Cockpit Handset And The FWD Flight Attendants Handset	___ PA LAVATORY SPEAKERS INOP
23-31-01C	Adjacent To The Cockpit Handset And The FWD Flight Attendants Handset	___ PA CABIN SPEAKERS INOP

(O) PROCEDURES

23-31-01A

1. Advise the flight attendants to make all passenger briefings, and the Lead Flight Attendant/Purser to advise the captain, prior to departure, when the briefings are complete.
2. To accommodate ditching or evacuation, the captain must instruct the Lead Flight Attendant/ Purser on the interphone to make the necessary calls using the aircraft megaphones or other methods.
3. Reference QRH Chapter 5 for Alternate Procedures for PA or Interphone Inoperative.

23-31-01B

Captain to brief Lead Flight Attendant/Purser to notify occupant(s) of affected lavatory(s) of any emergency or safety of flight announcements.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-36-01A	In-flight Entertainment (IFE) System (System Deactivated) **"DISP.APPR.REQ'D"**	**Y**	1	0	**D**	**(M)(O)** May be inoperative provided system is deactivated. NOTE: Approval for flight must be obtained by the MCC Shift Manager.
23-36-01B	In-flight Entertainment (IFE) System (Partially Operative) **"DISP.APPR.REQ'D"**	**Y**	1	0	**D**	**(O)** May be inoperative provided alternate procedures are used. NOTE 1: This item is for use when the IFE system is partially inoperative (i.e., zone inop, software load corrupt). For individual IFE components see the Nonessential Equipment and Furnishings List (NEF) for deferral. NOTE 2: Any part of the system that is operational may be used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-36-01A	Logbook and IFE Control Panel	IFE INOP – DO NOT USE
23-36-01B	Logbook and IFE Control Panel	IFE _____ FUNCTION INOP

(O) PROCEDURES

23-36-01A, 23-36-01B

Captain to brief Lead Flight Attendant that it will be necessary to do passenger briefings and emergency equipment demonstrations verbally.

(M) PROCEDURES

23-36-01A

1. To deactivate the IFE system:
    a. For the A319/A320 aircraft pull and secure the IFE CONTROL circuit breaker on the 122VU panel located at Z11.
    b. For the A321 aircraft pull and secure the IFE-VCC-DC circuit breaker on the 2000VU panel located at C01.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-42-01	Ground External Horn **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Flight crew or maintenance Personnel are available to monitor APU on the flight deck when operating, and b) Flight crew or maintenance personnel are available to monitor avionics ventilation on the flight deck, for ECAM alerts, when main electrical power is applied to the aircraft (not required when operating on Maint Bus). NOTE 1: When the flight crew leaves the aircraft, maintenance must monitor the APU and/or avionics ventilation. If maintenance is not available, the flight crew must shut down the APU, ADIRS and de–select main electrical power from the aircraft. NOTE 2: The Maint Bus Switch can be selected before leaving the aircraft to provide power to the ground service busses. Coordinate with station to determine if this is required. NOTE 3: The ground horn may be silenced by pulling the C/B on panel 121VU EIS/HORN/SPLY location P09.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-42-01	Adjacent To EXT PWR Switch And APU START Switch On The Overhead Panel	GROUND EXTERNAL HORN INOP

(O) PROCEDURES

1. Flight crew or maintenance personnel to monitor APU on the flight deck during operation.
2. Avionic ventilation must be monitored on the flight deck, by flight crew or maintenance personnel for ECAM alerts, when aircraft main electrical power is supplied (not required when operating on Maint Bus).
3. When the flight crew leaves the aircraft, maintenance must monitor the APU and/or avionics ventilation. If maintenance is not available, the flight crew must:
   ADIRS – OFF.
   APU – OFF.
   EXT PWR – OFF.

   NOTE: The Maint Bus Switch can be selected before leaving the aircraft to provide power to the ground service busses. Coordinate with station to determine if this is required.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ALERTING SYSTEM (LIGHTS / CHIME)					
23-42-02	Flight Attendant Call Lights (EMER/FWD/AFT) **"DISP.APPR.REQ'D"**	**Y**	3	0	**B**	**(O)** May be inoperative provided: a) The PA system is operative, b) Affected light is not used for Lavatory Smoke Detector Alerting, and c) Alternate procedures for contacting flight attendants are used. NOTE 1: The flight attendant chime must always be operative. NOTE 2: Passenger to Attendant Call System is considered an NEF item. See NEF item 33–24–09. NOTE 3: Any visual alerting system function(s) that operate(s) normally may be used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-42-02	Between FWD And AFT Attendants Call Buttons On Flight Deck Overhead Panel And Forward Flight Attendant's Call Panel	___ FLIGHT ATTENDANT CALL LIGHT(S) INOP

(O) PROCEDURES

23-42-02

Captain to brief Lead Flight Attendant/Purser which light(s) is inoperative and that PA, interphone or face–to–face communications is required at all affected locations.

NOTE: Chime is still operative.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	FLIGHT DECK TO GROUND INTERPHONE SYSTEM					
23-43-01A	Flight Deck To Ground Interphone System **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided alternate procedures are used.
23-43-01B	External Power Panel Call Light	**Y**	1	0	**C**	**(O)** May be inoperative provided alternate procedures are used.
23-43-01C	External Power Panel Call Switch	**Y**	1	0	**C**	**(O)** May be inoperative provided alternate procedures are used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-43-01A	Adjacent To INT Switch On The Capt's Audio Control Panel	FLIGHT DECK TO GROUND INTERPHONE SYSTEM INOP
23-43-01B	Adjacent To The External Power Panel Call Light And CALL Panel On Overhead.	EXTERNAL POWER PANEL CALL LIGHT INOP
23-43-01C	Adjacent To The External Power Panel Call Switch	EXTERNAL POWER PANEL CALL SWITCH INOP

(O) PROCEDURES

23-43-01A

Use standard ramp hand signals. Reference FOM Chapter 6 Ramp Signals.

23-43-01B, 23-43-01C

Use standard ramp hand signals to notify ground crew of interphone call. Reference FOM Chapter 6 Ramp Signals.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
CREWMEMBER INTERPHONE SYSTEM					
23-43-02 Cabin to Cabin Function **"DISP.APPR.REQ'D"**	**Y**	2	0	**B**	**(O)** May be inoperative provided alternate communications procedures between the affected flight attendants stations are used. NOTE: Any station function(s) that operate normally may be used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-43-02	On The FWD Attendants Panel	___ CABIN TO CABIN FUNCTION(S) INOP

(O) PROCEDURES

Captain to brief Lead Flight Attendant/Purser that communication between flight attendants is via operative positions, PA or face to face.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	HANDSETS					
23-43-04A	Flight Deck Handset	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Flight deck to cabin communications operates normally, and b) Alternate procedures are used.
23-43-04B	Cabin Attendant Handsets **"DISP.APPR.REQ'D"**	**Y**	3	2	**B**	**(O)** May be inoperative provided: a) One forward and one aft handset operate normally, b) Operative handsets are located at operative flight attendant seats, and c) Alternate communications procedures between the affected Flight Attendant stations are used. NOTE 1: Any operative handset at an inoperative flight attendant seat shall not be counted to satisfy this requirement. NOTE 2: Any handset(s) function(s) that operate normally may be used. NOTE 3: Handsets may be relocated to meet the requirements of the Remarks & Exceptions column.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-43-04A	Adjacent To Flight Deck Handset	FLIGHT DECK HANDSET INOP
23-43-04B	On The FWD Attendants Panel	___ AFT FLIGHT ATTENDANT HANDSET IS INOP

(O) PROCEDURES

23-43-04A

Use the ACP for PA announcements.

23-43-04B

Captain to brief Lead Flight Attendant/Purser to ensure that:

1. All announcements normally made from the inoperative aft handset position are made by a flight attendant with an operative handset.
2. Communication between flight attendants is via operative handsets, PA or face to face.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-44-01	Service Interphone Jack System (Maintenance Outlets)	**Y**	8	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-44-01	Adjacent To Service Interphone Switch On Overhead Panel	___ SERVICE INTERPHONE INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	**NAME / DESCRIPTION**					**REMARKS OR EXCEPTIONS**
23-51-01	SELCAL (AMU) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided, If ACARS/ATSU is also inoperative, then the Flight crew must continuously monitor appropriate radio frequencies.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-51-01	On Captain's Audio Control Panel	SELCAL INOP

(O) PROCEDURES

1. Maintain a listening watch on the appropriate VHF frequencies during the portion of any flight where ACARS/ATSU is unusable.
2. If on an HF route, maintain continuous listening watch on appropriate HF frequency.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	AUDIO CONTROL PANEL (ACP)					
23-51-02A	CAPT and F/O	**Y**	2	1	**C**	**(O)** One may be inoperative provided: a) ACP 3 operates normally, and b) AUDIO SWITCHING selector operates normally.
23-51-02B	ACP 3 **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(M)** ACP 3 may be inoperative provided repairs are made within two flight days. Ensure the provisos in the Remarks & Exceptions column of MEL item 25–11–06B are applied.
23-51-02C	ATT Call Lights (Flight Deck Call Lights/CAPT and F/O ACP) **"DISP.APPR.REQ'D"**	**Y**	2	1	**B**	One may be inoperative provided the flight deck buzzer is operative. NOTE: The flight deck buzzer must always be operative.
23-51-02D	Transmission key(s) **"DISP.APPR.REQ'D"**	**Y**	-	-	**C**	One may be inoperative on each ACP provided: a) VHF 1 transmission key operates normally on either CAPT ACP or F/O ACP, and b) If HF 1 is required: HF 1 transmission key operates normally on either CAPT ACP or F/O ACP.
23-51-02E	Reception Knob(s) **"DISP.APPR.REQ'D"**	**Y**	-	-	**C**	One may be inoperative on each ACP provided: a) VHF 1 reception knob operates normally on either CAPT ACP or F/O ACP, and b) If HF 1 is required: HF 1 reception knob operates normally on either CAPT ACP or F/O ACP.
23-51-02F	Reception Knob Light(s)	**Y**	-	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-51-02A	Adjacent To The Affected Audio Control Panel	___ AUDIO CONTROL PANEL INOP
23-51-02B	Adjacent To The Audio Control Panel(ACP3) On Overhead Panel	AUDIO CONTROL PANEL (ACP 3) INOP
23-51-02C	Adjacent To ATT Light On Capt's Audio Control Panel And Adjacent To Forward Flight Attendant's Handset	___ FLIGHT DECK ATT CALL LIGHT INOP
23-51-02D	On Affected Audio Control Panel	___ ACP TRANSMISSION KEY(S) INOP
23-51-02E	On Affected Audio Control Panel	___ ACP RECEPTION KNOB(S) INOP
23-51-02F	On Affected Audio Control Panel	___ ACP RECEPTION KNOB LIGHT(S) INOP

Continued Next Page

(O) PROCEDURES

23-51-02A

Utilize ACP 3 by placing AUDIO SWITCHING selector to CAPT 3 or F/O 3 as required.

(M) PROCEDURES

23-51-02B

Defer the Primary Observer’s 3rd Occupant Sliding Seat inoperative per MEL item 25–11–06B.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
SWITCHING PANEL 23-51-03 Audio Selector	**Y**	1	0	**C**	Must operate in NORM position.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-51-03	Adjacent To Audio Switching Selector On Overhead Panel	___ AUDIO SWITCHING INOP

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
FLIGHT DECK HEADSETS / HEADPHONES					
23-51-04A Headset Boom Microphone **"DISP.APPR.REQ'D"**	**Y**	3	0	**A**	May be inoperative provided: a) Associated hand microphone is installed and operates normally, b) Flight Data Recorder (FDR) operates normally, and c) Repairs are made within three flight days.
23-51-04B Headset Earphones / Headphones	**Y**	2	1	**C**	Either the Captain's or F/O's earphone/headphone may be inoperative provided associated flight deck speaker operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-51-04A	Adjacent To Affected Boom Set Receptacle On Overhead Panel	___ BOOM MICROPHONE INOP
23-51-04B	Adjacent To Affected Headset Earphones/Headphones	___ HEADSET EARPHONES/ HEADPHONES INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
HANDMIC SYSTEM					
23-51-05A CAPT and F/O	**Y**	1	0	**C**	May be inoperative or missing.
23-51-05B Observer's Seat	**Y**	1	0	**D**	May be inoperative or missing.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-51-05A	Adjacent To Affected Hand Microphone Receptacle	___ HAND MICROPHONE INOP
23-51-05B	Adjacent To The Observers Hand Microphone Receptacle	OBSERVERS HAND MICROPHONE INOP OR MISSING

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-51-06	Cockpit Speakers - F/O Speaker (Speaker 2 Only)	**Y**	2	1	**C**	**(M)** The F/O speaker (speaker number 2) ONLY may be inoperative provided at least one crewmember on flight deck duty wears a headset.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-51-06	Adjacent To Affected Speaker	F/O SPEAKER (SPEAKER 2) INOP

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Deactivate the F/O speaker as follows:

   a) On C/B panel 121VU: pull and secure circuit breaker EIS/F/O/LOUD/SPKR location P08 located behind the F/O on rear bulkhead.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-51-08A	Side Stick Radio Selector (PTT) (Transmit Switch)	**Y**	2	0	**C**	May be inoperative in open/neutral position (non transmitting position) provided INT/RAD switches on CAPT ACP, F/O ACP and ACP3 operate normally.
23-51-08B	Side Stick Radio Selector (PTT) (Transmit Switch)	**N**	2	0	**C**	**(M)** May be inoperative provided: a) INT/RAD switches on CAPT ACP, F/O ACP and ACP3 operate normally, and b) Affected switch is deactivated in open/neutral position (non transmitting position).

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-51-08A	Adjacent To The Affected Sidestick Assembly	___ TRANSMIT SWITCH INOP
23-51-08B	Adjacent To The Affected Sidestick Assembly	___ TRANSMIT SWITCH INOP

(M) PROCEDURES

23-51-08B

Deactivate the side stick radio PTT switch per AMM Task 23-51-00-040-001.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-71-01	Cockpit Voice Recorder System (CVR) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	May be inoperative provided: a) The flight data recorder (FDR) operates normally, and b) Repairs are made within three flight days.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-71-01	Adjacent To Cockpit Voice Recorder (CVR) Test Switch On Overhead Panel	CVR INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	RCDR CONTROL PANEL					
23-71-02A	RCDR/GND CTL p.b. Sw. **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** May be inoperative in AUTO position provided repairs are made within three flight days.
23-71-02B	RCDR/GND CTL p.b. Sw. (Inoperative ON)	**Y**	1	0	**C**	**(O)** May be inoperative in ON position.
23-71-02C	RCDR/GND CTL p.b. Sw. **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	May be inoperative provided: a) CVR is considered inoperative, b) The flight data recorder (FDR) operates normally, and c) Repairs are made within three flight days.
23-71-02D	RCDR/GND CTL p.b. Sw. ON Light	**Y**	1	0	**C**	May be inoperative.
23-71-02E	CVR Erase p.b.	**Y**	1	0	**C**	May be inoperative.
23-71-02F	CVR TEST p.b. **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	May be inoperative provided: a) CVR is considered inoperative, b) The flight data recorder (FDR) operates normally, and c) Repairs are made within three flight days.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-71-02A	Adjacent To RCDR/GND CTL P.B. Switch On Overhead Panel	RCDR/GND CTL SWITCH INOP
23-71-02B	Adjacent To RCDR/GND CTL P.B.	RCDR/GND CTL SWITCH INOP
23-71-02C	Adjacent To RCDR/GND CTL P.B. Switch On Overhead Panel	RCDR/GND CTL SWITCH INOP
23-71-02D	Adjacent To RCDR/GND CTL P.B. Switch On Overhead Panel	RCDR/GND CTL SWITCH ON LIGHT INOP
23-71-02E	Adjacent To CVR Erase P.B. Switch On Overhead Panel	CVR ERASE p.b INOP
23-71-02F	Adjacent To Cockpit Voice Recorder (CVR) Test Switch On Overhead Panel	CVR TEST INOP

(O) PROCEDURES

23-71-02A
On ground: CVR can only be tested through the CVR test pb during the first five minutes after supply of the aircraft electrical network.

23-71-02B
After landing: If needed, CVR recording can only be stopped by pulling C/B on panel 49 VU COM/CVR/SPLY location E14.

NOTE: Normally CVR stops recording five minutes after second engine is shut down.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
FLIGHT DECK DOOR VISUAL SURVEILLANCE SYSTEM					
23-72-01 Viewing Ports	**Y**	1	0	**A**	**(O)** May be inoperative provided: a) Alternate procedures are used, and b) Repairs are made within three flight days.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-72-01	Adjacent To Flight Deck Door Viewing Port	FLT DECK DOOR VIEWING PORT INOP

(O) PROCEDURES

23-72-01

1. Captain to brief Lead Flight Attendant/Purser that flight deck door view port is inoperative/unusable.
2. Crewmember will use interphone to notify flight deck of desired access.
3. Communicate via interphone to coordinate flight deck entry/exit.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-73-01	Cabin Inter-communication Data System (CID) - CIDS Director	**N**	2	1	**C**	**(M)** One may be inoperative. NOTE 1: Failure of a single CIDS director is indicated by a MAINTENANCE message on the STATUS SD page. (Refer to MEL 23-00-01) Fault(s) Indicated by CIDS 1(2). NOTE 2: In the case of disturbance of the CIDS function, the deactivation/removal of the affected CIDS director may recover normal operation of the CIDS function. Refer to AMM TASK 23-73-00-040-001.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-73-01	Adjacent To ECAM Display	___ CIDS DIRECTOR INOP

(M) PROCEDURES

23-73-01

Deactivate the CIDS Director per AMM Task 23-73-00-040-001.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-73-02A	Cabin Inter-communication Data System (CIDS) CIDS DEU A	**N**	-	-	**C**	**(M)** May be inoperative provided: a) No two consecutive or adjacent DEU's are verified to be inoperative, and b) Lavatory speaker is verified to operate normally, or return to seat sign is verified to operate normally for an associated inoperative DEU. NOTE: The following items may be affected: Loudspeakers, No Smoking/Fasten Seat Belt Signs, general illumination, and Passenger Call.
23-73-02B	Cabin Inter-communication Data System (CIDS) CIDS DEU A **"DISP.APPR.REQ'D"**	**N**	-	-	**C**	**(M)(O)** May be inoperative provided: a) No two consecutive or adjacent DEU's are verified to be inoperative, and b) Lavatory door is locked closed and placarded "UNSERVICEABLE–DO NOT USE" for an inoperative DEU affecting a lavatory. NOTE 1: These provisos are not intended to prohibit lavatory use or inspections by crewmembers. Ensure lavatory door is locked closed after crewmember inspection. NOTE 2: The following items may be affected in cabin and lavatory: Loudspeakers, No Smoking/ Fasten Seat Belt Signs, general illumination, and Passenger Call.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-73-02A	Adjacent To The ECAM Display And On The FWD Attendants Panel	___ CIDS DEU INOP
23-73-02B	Adjacent To The ECAM Display And On The FWD Attendants Panel	___ CIDS DEU A INOP Also if applicable, ___ LAVATORY LOCKED AND PLACARDED UNSERVICEABLE – DO NOT USE

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(O) PROCEDURES

23-73-02B

1. Captain to brief Lead Flight Attendant/Purser that the affected lavatory door is to remain locked and not entered except for use or inspection by crewmembers.
2. Captain is to ensure the lavatory door is locked closed if crewmember inspection has been performed or if the lavatory is used by a crewmember.

(M) PROCEDURES

23-73-02A

1. Locate the inoperative DEU-A(s) using the below graphics.
2. Verify that no two consecutive or adjacent DEU's are inoperative.
3. If a Lavatory is affected by the inoperative DEU, ensure the lavatory speaker operates normally, or the return to seat sign operates normally for the associated inoperative DEU.
4. Verify operation of Loudspeakers, No Smoking/Fasten Seat Belt Signs, General Illumination and Passenger Call.

23-73-02B

1. Locate the inoperative DEU-A(s) using the below graphics.
2. Verify that no two consecutive or adjacent DEU's are inoperative.
3. Close the lavatory door and lock by placing a slotted screwdriver blade in the slot in the VACANT/OCCUPIED sign on the door and move to OCCUPIED position. Check that door will not open.
4. Place a strip of Red colored OM2 "UNSERVICEABLE – DO NOT USE" tape or equivalent* ON the lavatory door. DO NOT tape door shut. This allows crew members to access lavatory.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE".
5. Place a strip of 2 inch wide masking tape with the words "CREW USE ONLY" printed legibly in 1 inch black letters ON the lavatory door. DO NOT tape door shut. This allows crew members to access lavatory.

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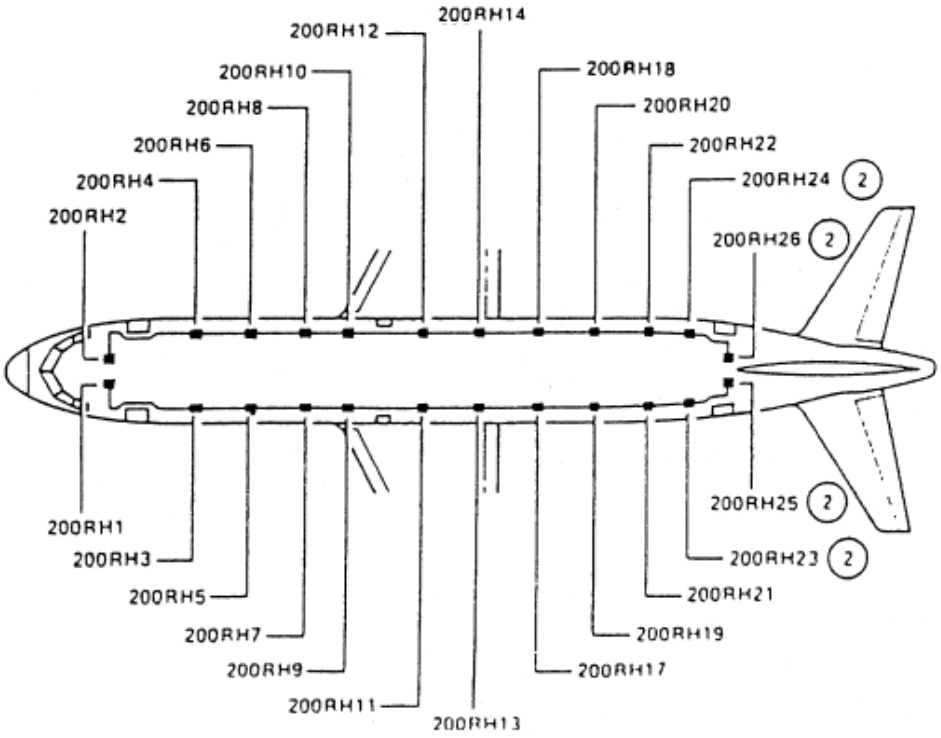

A319 DEU-A LOCATIONS

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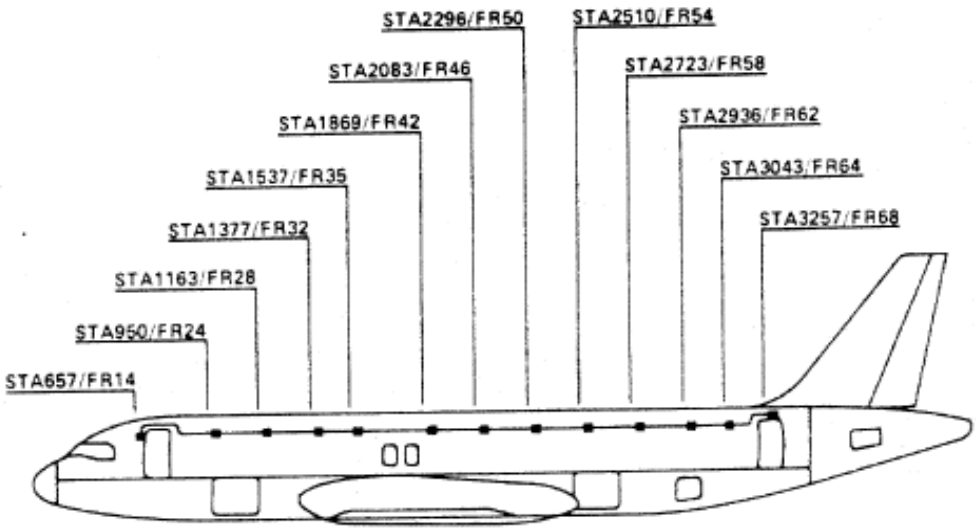

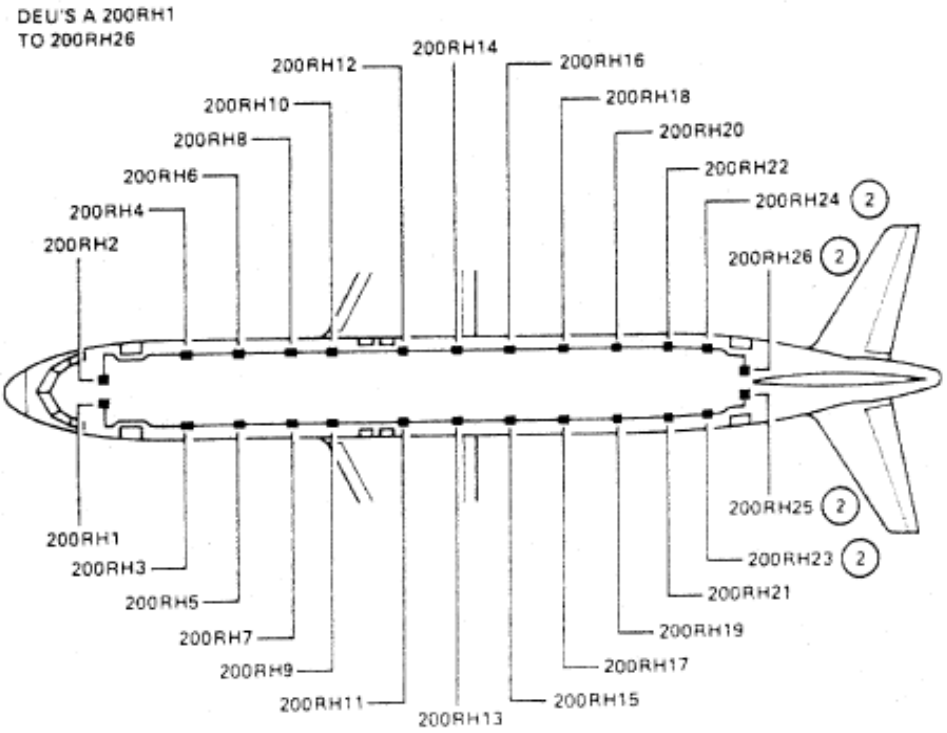

A320 DEU-A LOCATIONS

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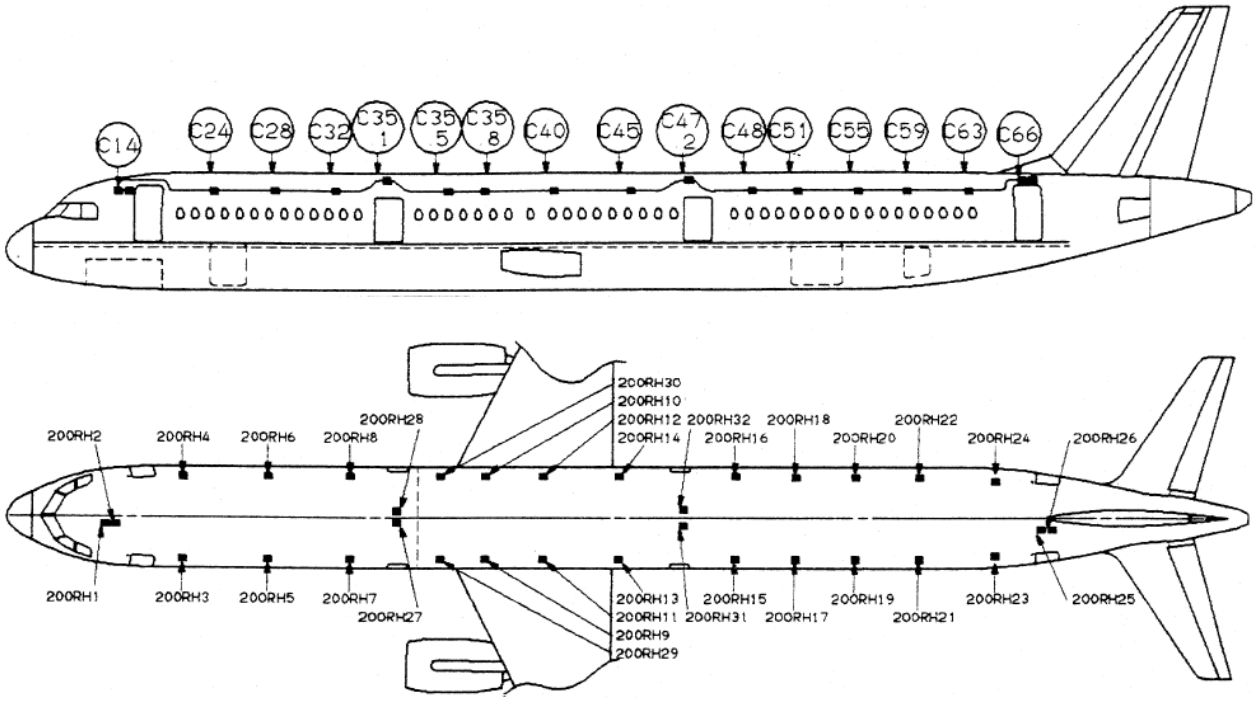

A321 DEU-A LOCATIONS

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
CABIN INTER-COMMUNICATION DATA SYSTEM (CIDS)					
23-73-03A CIDS Decoder/Encoder Unit (DEU) B	**N**	-	-	**C**	**(M)(O)** May be inoperative provided: a) DEU B and the associated handset are operative at each pair of floor level exit doors, and b) Alternate procedures are used. NOTE: The following items may be affected: Cabin attendant station intercommunications, Emergency Overwing Exit slide bottle pressure indications on PTP, waste system control, lavatory control, and lavatory smoke detection system.
23-73-03B Attendant Indication Panels (AIP)	**Y**	3	0	**C**	**(O)** May be inoperative at a cabin attendant station provided: a) Corresponding area call panel(s) operates normally, b) Passenger address and cabin interphone at affected station(s) operates normally, and c) Alternate procedures are used.
23-73-03C Area Call Panel	**Y**	3	0	**C**	**(O)** May be inoperative provided: a) Corresponding Attendant Indication panel(s) (AIP) operates normally, b) Passenger address and cabin interphone at affected station(s) operates normally, and c) Alternate procedures are used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-73-03A	Adjacent To The ECAM Display And On The FWD Attendants Panel	___ CIDS DEU B INOP
23-73-03B	Adjacent To The ECAM Display And On The FWD Attendants Panel	___ ATTENDANT INDICATION PANEL INOP
23-73-03C	Adjacent To The ECAM Display And On The FWD Attendants Panel	___ AREA CALL PANEL INOP

(O) PROCEDURES

23-73-03A

Follow procedures for affected MEL items inoperative.

23-73-03B

Captain to ensure Lead Flight Attendant/ Purser is briefed on which attendant indication panel(s) inoperative, and that area call panel(s) must be observed by flight attendants for notifications for affected area.

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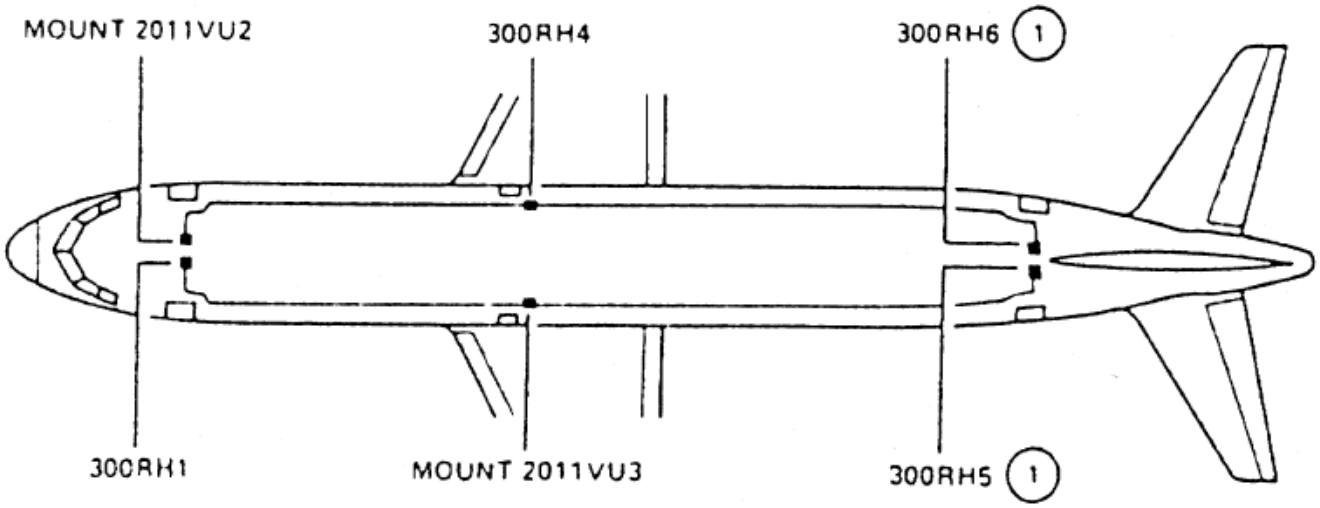
23-73-03C

Captain to ensure Lead Flight Attendant/ Purser is briefed on which area call panel(s) is inoperative, and that Attendant Indication panel(s) (AIP) must be observed by flight attendants for notifications for affected area.

(M) PROCEDURES

23-73-03A

1. Locate inoperative DEU-B(s) using the below graphics.
2. Operative DEU's must be positioned to ensure one DEU B and handset are operative at each pair of exit doors in the cabin.



A319 DEU-B LOCATIONS

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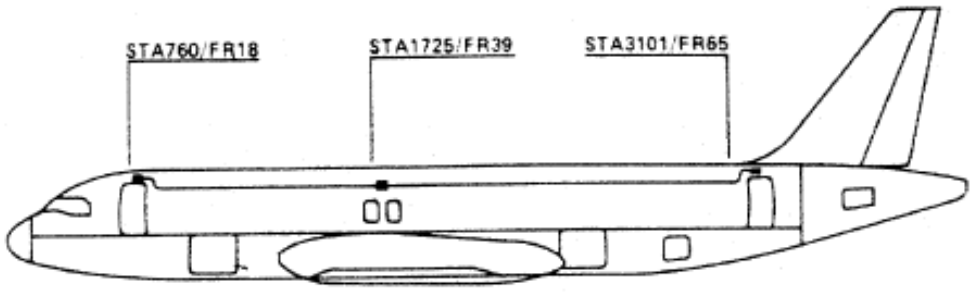
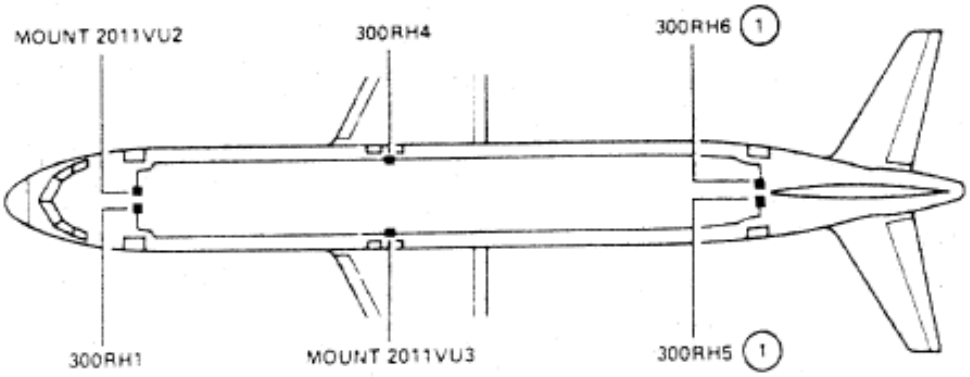


DEU'S B 300RH1
300RH4 TO 300RH6



A320 DEU-B LOCATIONS

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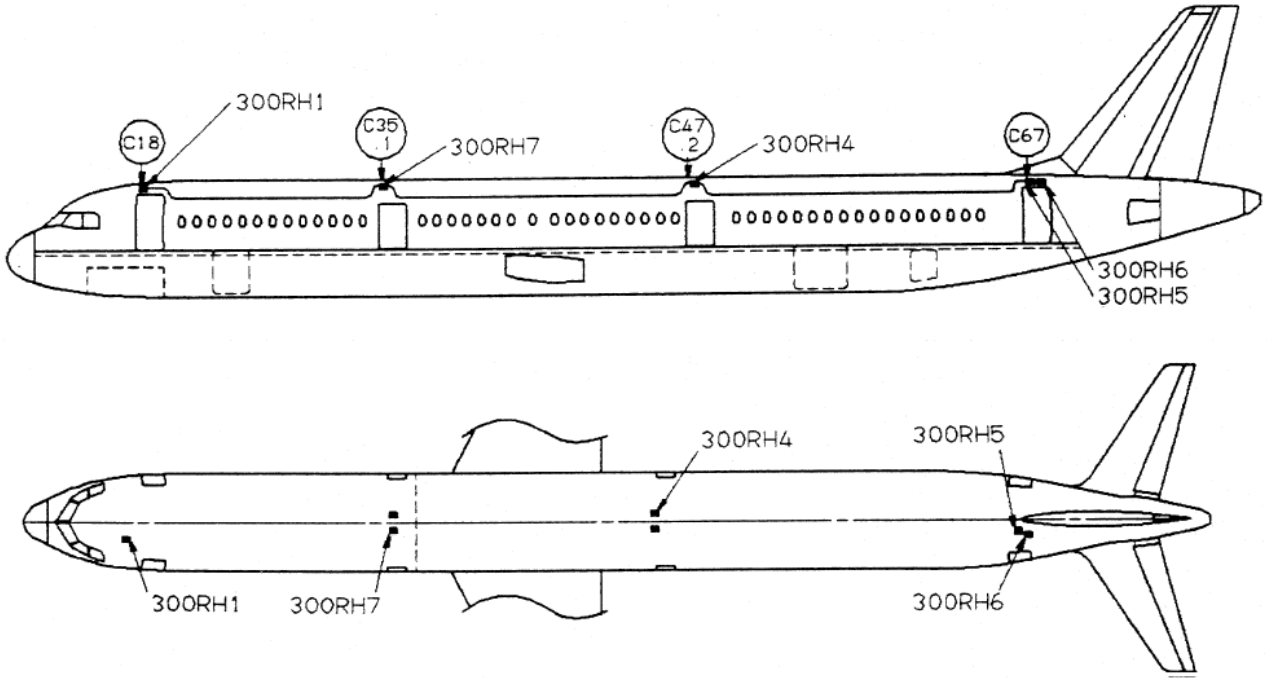

A321 DEU-B LOCATIONS

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	FORWARD ATTENDANT PANEL (FAP)					
23-73-04A	Forward Attendant Panel (FAP) (A319/A320) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Associated FAP functions are considered inoperative, b) Alternate procedures are used, and c) PTP messages are checked PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE: LIGHT EMER pb must always be operative. **Repetitive Check Required (Yellow Placard)**
23-73-04B	Cabin Lighting Control Functions on FAP (A319/A320)	**Y**	-	0	**C**	**(O)** May be inoperative provided lighting is sufficient for cabin attendants to perform their duties. .
23-73-04C	SYSTEM INOP Light on Water Waste Panel on FAP (A319/A320)	**Y**	1	0	**D**	**(M)(O)** May be inoperative provided alternate procedures are used.
23-73-04D	Other Functions on FAP (A319/A320)	**Y**	-	0	**D**	**(O)** May be inoperative provided alternate procedures are used. NOTE: LIGHT EMER pb must always be operative
23-73-04E	CIDS CAUT Light on the Forward Attendant Panel (A319/A320) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)** May be inoperative provided that PTP messages are checked PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

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MEL ITEM	TAB LOCATION	PLACARD TEXT
23-73-04A	Adjacent To Forward Attendant Panel	FAP INOP
23-73-04B	Adjacent To Forward Attendant Panel	___ CABIN LIGHTING CONTROL FUNCTION ON FAP INOP
23-73-04C	Adjacent To Forward Attendant Panel	WATER WASTE PANEL SYSTEM INOP LIGHT ON FAP INOP
23-73-04D	Adjacent To Forward Attendant Panel	___ FUNCTION ON FAP INOP
23-73-04E	Adjacent To Forward Attendant Panel	CIDS CAUT LIGHT ON FAP INOP

(O) PROCEDURES

23-73-04A

1. Captain to brief Lead Flight Attendant/Purser to ensure:
   a) Cabin lighting is sufficient for cabin attendants to perform their duties.
   b) Each lavatory flushes properly PRIOR TO EACH DEPARTURE.

23-73-04B

Captain to brief Lead Flight Attendant/Purser to ensure cabin lighting is sufficient for cabin attendants to perform their duties.

23-73-04C

Captain to brief Lead Flight Attendant/Purser to ensure each lavatory flushes properly before flight.

23-73-04D

Captain to brief Lead Flight Attendant/Purser which FAP functions are inoperative.

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(M) PROCEDURES

23-73-04A

1. Deactivate the FAP by performing AMM Task 23-73-00-040-002.
2. PRIOR TO EACH DEPARTURE:
   a) Check the SYSTEM STATUS of the PTP to verify no failures (Class1 and Class2) are hidden.
   b) Check the LAST/CURRENT LEG report or the MAINTENANCE mode for detailed CIDS failure description part of the SYSTEM STATUS mode.

NOTE: Failures will normally be displayed on the CFDS and the PFR if pertaining to Class1 or Class2 faults.

23-73-04C

1. Ensure all lavatories flush normally.

23-73-04E

1. PRIOR TO EACH DEPARTURE:
   a) Check the SYSTEM STATUS of the PTP to verify no failures (Class1 and Class2) are hidden.
   b) Check the LAST/CURRENT LEG report or the MAINTENANCE mode for detailed CIDS failure description part of the SYSTEM STATUS mode.

NOTE: Failures will normally be displayed on the CFDS and the PFR if pertaining to Class1 or Class2 faults

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-73-06	Programmed Cabin Assignment Module (CAM)	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-73-06	On Cabin Assignment Module	CABIN ASSIGNMENT MODULE INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	PROGRAMMING AND TEST PANEL (PTP)					
23-73-07A	Programming and Test Panel (PTP) (A319/A320)	**N**	1	0	**B**	**(M)(O)** May be inoperative provided: a) Associated PTP functions are considered inoperative, b) Alternate procedures are used, c) PTP system emergency light test is considered inoperative and deferred per MEL 23-73-07B, d) Slide bottle pressure indication on PTP for passenger doors is considered inoperative and deferred per MEL 23-73-07C, and e) Slide bottle pressure indication on PTP for overrwing emergency exits is considered inoperative and deferred per MEL 23-73-07D.
23-73-07B	SYS EMER LIGHT TEST (A319/A320)	**N**	1	0	**B**	**(M)** May be inoperative provided emergency lights are verified to operate normally PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
23-73-07C	Slide Bottle Pressure Indication (on PTP) for Passenger Doors (A319/A320)	**Y**	4	0	**C**	**(O)** May be inoperative provided the slide bottle pressure is verified PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
23-73-07D	Slide Bottle Pressure Indication (on PTP) for Overwing Emergency Exits (A319/A320)	**N**	2	0	**C**	**(M)** May be inoperative provided associated slide bottle pressure is verified before the FIRST FLIGHT OF EACH DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
23-73-07E	Drain Masts (Indication on PTP) (A319/A320)	**Y**	1	0	**C**	May be inoperative.
23-73-07F	Lavatory Smoke Detection System (Indication on PTP) (A319/A320)	**Y**	1	0	**C**	May be inoperative.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
23-73-07A	Adjacent To Programming And Test Panel	PROGRAMMING AND TEST PANEL (PTP) INOP
23-73-07B	Adjacent To PTP Panel	SYS EMER LIGHT TEST ON PTP INOP
23-73-07C	Adjacent To PTP Panel	SLIDE BOTTLE PRESSURE IND INOP ____ PASSENGER DOOR
23-73-07D	Adjacent To PTP Panel	___ OVERWING EMERGENCY EXIT SLIDE BOTTLE PRESSURE ON PTP INOP
23-73-07E	On Program And Test Panel	DRAIN MASTS INDICATION ON PTP INOP
23-73-07F	On Program And Test Panel	LAVATORY SMOKE DETECTION SYSTEM INDICATION ON PTP INOP

(O) PROCEDURES

23-73-07A

1. Comply with MEL item 23-73-07C (O) procedure.

23-73-07C

1. PRIOR TO EACH DEPARTURE, verify the passenger door slide/raft bottle pressure indicator needle is in the green band.

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(M) PROCEDURES

23-73-07A

1. Defer PTP SYS EMER LIGHT TEST per MEL 23-73-07B
2. Defer Slide Bottle Pressure Indication for Passenger Doors per MEL 23-73-07C
3. Defer Slide Bottle Pressure Indication for Overwing Emergency Exits inoperative per MEL 23-73-07D.

23-73-07B

1. PRIOR TO EACH DEPARTURE:
   a) Perform the Operational Test Of Emergency Lights AMM TASK 33–51–00–710–006.

23-73-07D

1. DAILY CHECK (ONCE EACH FLIGHT DAY):
   a) Perform a visual check of the applicable emergency exit door Slide Bottle Pressure as follows:
      1) Open the aft cargo compartment door.
      2) Put the access platform in position at the aft cargo compartment door.
      3) In the aft cargo compartment, remove the sidewall panels, left and right, 151CW or 152CW.
      4) Examine the pressure gauge installed on the offwing slide inflation– reservoir, left or right.
      5) Make sure the gauge pointer is in the green –"GO"– band.
         A. If bottle pressure is low refer to MM Reference 25–62–46, 400 series pgs. for Removal/Installation procedures.
      6) Make sure that the work area is clean and clear of tools and other items.
      7) In the AFT cargo compartment, install the forward sidewall panels, left and right, 151CW and 152CW.
      8) Close the AFT cargo compartment door.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	FLIGHT ATTENDANT PANEL (FAP)					
23-73-08A	Flight Attendant Panel (FAP) (A321)	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Associated FAP functions are considered inoperative, b) Alternate procedures are used, c) Cabin lighting control function is considered inoperative and deferred per MEL 23-73-08B, d) CABIN READY on FAP is considered inoperative and deferred per MEL 23-73-08C, e) EVAC Light / CMD p.b. is considered inoperative and deferred per MEL 23-73-08D f) SYSTEM INOP light on WATER WASTE panel on FAP is considered inoperative per MEL 23-73-08E, g) Slide bottle pressure indication for passenger doors is considered inoperative and deferred per MEL 23-73-08F, and h) Slide bottle pressure indication for cabin emergency exit is considered inoperative and deferred per MEL 23-73-08F, NOTE: EMER p.b. must always be operative.
23-73-08B	Cabin Lighting Control Functions on FAP (A321)	**N**	-	0	**C**	**(O)** May be inoperative provided lighting is sufficient for cabin attendants to perform their duties.
23-73-08C	CABIN READY on FAP (A321)	**Y**	1	0	**D**	**(O)** May be inoperative provided alternate procedures are used.
23-73-08D	EVAC Light / CMD p.b. (On FAP) (A321)	**Y**	1	0	**D**	**(O)** May be inoperative provided alternate procedures are used.
23-73-08E	SYSTEM INOP Light on WATER WASTE Panel on FAP (A321)	**Y**	1	0	**D**	**(M)** May be inoperative provided alternate procedures are used.
23-73-08F	Slide Bottle Pressure Indication (On FAP) for Cabin Emergency Exit (A321)	**Y**	4	0	**C**	**(O)** May be inoperative provided the associated slide bottle pressure is verified PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
23-73-08G	Drain Mast Indication (On FAP) (A321)	**Y**	1	0	**C**	May be inoperative.
23-73-08H	Lavatory Smoke Detection System (Indication on FAP) (A321)	**Y**	1	0	**C**	May be inoperative.
23-73-08I	Other Functions (On FAP) (A321)	**Y**	-	0	**D**	**(O)** May be inoperative provided alternate procedures are used. NOTE: EMER p.b. must always be operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
23-73-08A	Adjacent To FAP	FAP INOP
23-73-08B	Adjacent To FAP	CABIN LIGHTING CONTROL ON FAP INOP
23-73-08C	Adjacent To FAP	CABIN READY ON FAP INOP
23-73-08D	Adjacent To FAP	EVAC LIGHT / CMD PB ON FAP INOP
23-73-08E	Adjacent To FAP	SYSTEM INOP LIGHT ON WATER WASTE PANEL INOP
23-73-08F	Adjacent To FAP	CABIN EMER EXIT SLIDE BOTTLE PRESS ON FAP INOP
23-73-08G	Adjacent To FAP	DRAIN MAST INDICATION ON FAP INOP
23-73-08H	Adjacent To FAP	LAV SMOKE DET SYS INDICATION ON FAP INOP
23-73-08I	Adjacent To FAP	____ FUNCTION ON FAP INOP

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(O) PROCEDURES

23-73-08A

1. Comply with MEL item 23-73-08B (O) procedure.
2. Comply with MEL item 23-73-08C (O) procedure.
3. Comply with MEL item 23-73-08D (O) procedure.
4. Comply with MEL item 23-73-08F (O) procedure.
5. Comply with MEL item 23-73-08F (O) procedure.

23-73-08B

1. Captain to brief Lead Flight Attendant/Purser to ensure cabin lighting is sufficient for cabin attendants to perform their duties.

23-73-08C

1. Captain to brief Lead Flight Attendant/Purser that is will be necessary to verbally notify the flight deck crew that all passengers are seated and the cabin is ready for departure.

23-73-08D

1. Captain to brief Lead Flight Attendant/Purser that the EVAC light / CMD pb is inoperative and verbal communications will need to used.

23-73-08F

1. PRIOR TO EACH DEPARTURE, verify the cabin emergency exit slide bottle pressure indicator needle is in the green band.

23-73-08I

1. Captain to brief Lead Flight Attendant/Purser which FAP functions are inoperative.

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(M) PROCEDURES

23-73-08A

1. Defer cabin lighting control on FAP inoperative per MEL 23-73-08B.
2. Defer CABIN READY on FAP inoperative per MEL 23-73-08C.
3. Defer EVAC Light / CMD p.b. inoperative per MEL 23-73-08D.
4. Defer SYSTEM INOP light on WATER WASTE panel on FAP inoperative per MEL 23-73-08E.
5. Defer slide bottle pressure indication for passenger doors inoperative per MEL 23-73-08F.
6. Defer slide bottle pressure indication for cabin emergency exit inoperative per MEL 23-73-08F.

23-73-08E

1. Ensure all lavatories flush normally.

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY				
24-00-01	Fault(s) Indicated by DC BUS TIE	**Y**		**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-00-01	Adjacent To ECAM Display	ECAM MAINT STATUS MESSAGE “DC BUS TIE” DISPLAYED

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY				
24-00-02	Fault(s) Indicated by GPCU or AC GEN	**Y**		**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-00-02	Adjacent To ECAM Display	ECAM MAINT STATUS MESSAGE “GPCU” OR “AC GEN” DISPLAYED

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-20-01	Engine Driven Generator Channel (IDG, GCU, Line Contactor) **"DISP.APPR.REQ'D"**	**N**	2	1	**B**	**(M)(O)** One may be inoperative provided: a) APU generator operates normally and is used throughout flight, b) The APU oil quantity is checked PRIOR TO EACH DEPARTURE (Log Book Entry Required), c) The operative IDG oil quantity is checked PRIOR TO EACH DEPARTURE (Log Book Entry Required), d) APU and remaining (operative) IDG Log Book history for past 30 days is reviewed and approved by MCC prior to deferral, e) All busses can be powered, f) All indications and warnings associated with the remaining engine and APU driven generator channels operate normally, g) Galley automatic shedding is verified to operate normally, h) Aircraft remains at or below FL330, and i) If the APU is to be used as an alternate power source and has been operating for extended period of time in heavy falling or blowing snow, inspect the inlet plenum to ensure that accumulations of snow or ice do not exist PRIOR TO EACH DEPARTURE. CAT III Not Authorized **Repetitive Check Required (Yellow Placard)** **Theater Restrictions May Apply**

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-20-01	Adjacent To Associated GEN Switch On Overhead ELEC Panel	___ GENERATOR INOP

Continued Next Page

(O) PROCEDURES

Limit aircraft altitude to FL330 or below.

PRIOR TO ENGINE START

a) Check that the DISC message is displayed on the ELEC SD page.

PRIOR TO EACH DEPARTURE:

b) With the electrical network supplied from APU or external power:
   i) GALLEY – Check AUTO.
   ii) C/B on panel 122VU ELEC/GALLEY/GND/FLT/ LOGIC location S24–PULL.
   iii) Check FWD galley oven No. 1 does not operate.
   iv) C/B on panel 122VU ELEC/GALLEY/GND/FLT/LOGIC location S24 –PUSH.

c) After engine start with APU running:
   i) GEN 1 – OFF.
   ii) GEN 2 – OFF.
   iii) Check on ECAM ELEC page that all AC BUS are supplied.
   iv) Operative GEN –ON.
   v) APU GEN – OFF.
   vi) Check on ECAM ELEC page that all AC BUS are supplied.
   vii) APU GEN – ON.

Operate the APU and the APU generator throughout flight.

NOTE: APU fuel consumption is 160 lbs per flight hour.

24-20-01	**ENGINE DRIVEN GENERATOR CHANNEL (IDG, GCU, LINE CONTACTOR)**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	Increase BLOCK FUEL by 160 lbs. per hour for APU usage.
NOTES	None
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** None **LANDING** None

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(M) PROCEDURES

24-20-01

1) Disconnect IDG.

CAUTION: DO NOT PUSH THE IDG DISCONNECT PUSHBUTTON SWITCH IF THE ENGINE SPEED IS LESS THAN IDLE SPEED. IF YOU DO, YOU WILL CAUSE DAMAGE TO THE JAW TEETH, AT ENGINE START.

CAUTION: DO NOT PUSH THE IDG DISCONNECT PUSHBUTTON SWITCH FOR MORE THAN 3 SECONDS. THERE MUST BE AT LEAST 60 SECONDS BETWEEN TWO OPERATIONS OF THE SWITCH. THIS IS TO PREVENT DAMAGE TO THE DISCONNECT SOLENOID WHICH WILL BECOME TOO HOT.

a) With the associated engine at idle speed, lift the safety guard and push the IDG pushbutton switch (not longer than 3 seconds) on the panel 35VU, for the IDG to be disconnected.

i) On the lower ECAM display unit:

(1) The charge, voltage and frequency parameters, of the related generator are at zero.

(2) The amber DISC indication comes into view under the disconnected IDG.

b) The FAULT legend on the pushbutton switch illuminates.

c) Release the associated GEN pushbutton, the OFF legend comes on.

NOTE: The FAULT legends on the pushbutton switches being illuminated or not, depends on failure.

2) Perform AMM Task 24-20-00-040-001.

PRIOR TO EACH DEPARTURE

3) Check the APU oil quantity to ensure it is sufficient for the intended flight.

4) Check the oil level of the operative IDG.

CAUTION: MAKE SURE THAT THE IDG DOES NOT OPERATE FOR MORE THAN 50 HOURS IN THE DISCONNECTED MODE.

IF THE IDG OPERATES FOR 50 HOURS IN THE DISCONNECTED MODE, IT WILL BE NECESSARY TO ACCOMPLISH THE FOLLOWING PRIOR TO RECONNECTING:

1. REPLACE THE IDG

2. SEND THE REMOVED IDG FOR A SHOP INSPECTION. THERE IS A RISK OF DAMAGE TO THE BALL BEARING ASSEMBLY ON THE IMPUT SHAFT.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-20-02A	APU Generator Channel (APU Pneumatic Operative) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) APU GEN pb switch set to OFF, and b) External power is available for engine starts. NOTE: When GPCU/Ground Power Control Function of the GAPCU and APU generator are both inoperative, engines cannot be started. Theater Restrictions May Apply
24-20-02B	APU Generator Channel (APU Not Used) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided APU is not used. NOTE 1: When GPCU/Ground Power Control Function of the GAPCU and APU generator are both inoperative, engines cannot be started. NOTE 2: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply
24-20-02C	APU Generator Channel (APU Generator Deactivated) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** Maybe inoperative provided the APU generator is deactivated. NOTE: When GPCU/Ground Power Control Function of the GAPCU and APU generator are both inoperative, engines cannot be started. Theater Restrictions May Apply

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MEL ITEM	TAB LOCATION	PLACARD TEXT
24-20-02A	Adjacent To APU GEN Switch On Overhead ELEC Panel	APU GENERATOR INOP
24-20-02B	Adjacent To APU GEN Switch On Overhead ELEC Panel And One Tab Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU GENERATOR INOP - DO NOT USE APU
24-20-02C	Adjacent To APU GEN Switch On Overhead ELEC Panel	APU GENERATOR INOP

(O) PROCEDURES

24-20-02A, 24-20-02C

1) Ensure AC power is available for engine starts.

Start ENG 1 first, then start ENG 2

If operational restrictions require ENG 2 to be started first:

a) Before first engine start, select GEN 1, the PTU, and ENG 1 (green) HYD pump to OFF.

b) After both engines are started, select GEN 1, the PTU, and ENG 1 (green) HYD pump to AUTO (lights out).

NOTE: This procedure prevents erroneous Yaw Damper faults.

24-20-02B

1) Do not use APU.
2) APU MASTER switch – OFF
3) External electrical and pneumatic power are required for normal starting.
4) Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures; If an APU takeoff is specified on the WDR reference AOM VOL 1 Packs Off For Takeoff.

(M) PROCEDURES

24-20-02C

Deactivate the APU generator (Quill Shaft Removal) by performing AMM Task 24-23-00-040-002.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	AC ESS FEED CONTROL					
24-20-07A	Manual Transfer to the AC BUS 2 (ALTN Function)	**Y**	1	0	**C**	**(O)** ALTN function may be inoperative provided: a) AC ESS FEED pb switch is set at NORM position, a) It is checked on the ELEC SD page that the AC BUS 1 supplies the AC ESS BUS, and b) TR 2 operates normally.
24-20-07B	Automatic Transfer to AC BUS 2	**Y**	1	0	**C**	**(O)** ALTN function may be inoperative provided: a) AC ESS FEED pb switch is set at NORM position, b) It is checked on the ELEC SD page that the AC BUS 1 supplies the AC ESS BUS, and c) TR 2 operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-20-07A	Adjacent To AC ESS FEED Switch On Overhead ELEC Panel	AC ESS FEED ALTN FUNCTION INOP
24-20-07B	Adjacent To AC ESS FEED Switch On Overhead ELEC Panel	AC ESS FEED ALTN FUNCTION INOP

(O) PROCEDURES

24-20-07A, 24-20-07B

On ECAM ELEC page, check that the AC BUS 1 supplies the AC ESS BUS.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-27-01	IDG FAULT Lights	**Y**	2	1	**C**	One may be inoperative provided frequency and temperature indications are available on ECAM ELEC page, and are monitored.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-27-01	Adjacent To Affected IDG Switch On Overhead ELEC Panel	___ IDG FAULT LIGHT INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
GEN PB SWITCH 24-27-02A FAULT Lights	**Y**	3	1	**C**	One GEN and/or the APU FAULT Light may be inoperative provided the associated indications are available on ECAM ELEC page.
24-27-02B OFF Lights	**Y**	3	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-27-02A	Adjacent To Affected GEN Switch On Overhead ELEC Panel	___ GEN FAULT LIGHT INOP
24-27-02B	Adjacent To Affected GEN Switch On Overhead ELEC Panel	___ GEN OFF LIGHT(S) INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-27-03	AC ESS FEED FAULT/ALTN Light	**Y**	1	0	**C**	May be inoperative provided AC ESS bus indication is available on ECAM ELEC page.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-27-03	Adjacent To AC ESS FEED Switch On Overhead ELEC Panel	AC ESS FEED FAULT/ALTN LIGHT INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
GALLEY PB SWITCH					
24-27-04A FAULT Light	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) AC load indication for each generator channel is available on ECAM ELEC page, and b) Automatic shedding operates normally.
24-27-04B OFF Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-27-04A	Adjacent To Galley Switch On Overhead Elec Panel	GALLEY FAULT LIGHT INOP
24-27-04B	Adjacent To Galley Switch On Overhead Elec Panel	GALLEY SWITCH OFF LIGHT INOP

(O) PROCEDURES

24-27-04A

With the electrical network supplied from APU or external power:

5) GALLEY – Check AUTO.
6) C/B on panel 122VU ELEC/GALLEY/GND/FLT/ LOGIC location S24 –PULL.
7) Check for white GALLEY SHED on lower ECAM display electrical page.
8) Check FWD galley oven No. 1 does not operate.
9) C/B on panel 122VU ELEC/GALLEY/GND/FLT/ LOGIC location S24 –PUSH.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-27-05	RAT and EMER GEN FAULT Light	**Y**	1	0	**C**	**(O)** May be inoperative provided indications are available on associated ECAM ELEC page.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-27-05	Adjacent To RAT/ & EMER GEN Switch On Overhead EMER ELEC PWR Panel	RAT/ & EMER GEN FAULT LIGHT INOP

(O) PROCEDURES

Monitor ECAM indications for associated light when required.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
INDICATIONS ON ECAM PAGE 24-27-06A Indications on ECAM ELEC Page	**Y**	-	-	**C**	**(O)** Indications related to AC generation may be inoperative provided: a) Load, voltage and frequency indications of at least one engine driven generator are operative, b) Associated GEN FAULT caution on ECAM operates normally, and c) Automatic shedding operates normally.
24-27-06B APU GEN Parameters	**Y**	-	0	**C**	May be inoperative provided both Engine Driven Generators are operative

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-27-06A	Adjacent To ECAM Display	___ AC INDICATION ON ECAM ELEC PAGE INOP
24-27-06B	Adjacent To ECAM Display	___ APU GEN PARAMETERS ON ECAM ELEC PAGE INOP

(O) PROCEDURES

24-27-06A

With the electrical network supplied from APU or external power:

1) Check that FAULT light of GEN 1 (2) pb switch is ON (pb at ON position).
2) GALLEY – Check AUTO.
3) C/B on panel 122VU ELEC/GALLEY/GND/FLT/ LOGIC location S24 – PULL.
4) Check FWD galley oven No. 1 does not operate.
5) C/B on panel 122VU ELEC/GALLEY/GND/FLT/ LOGIC location S24 – PUSH.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	COMMERCIAL PB SWITCH				
24-27-09	OFF Light A/C 3142-3171, all A319 aircraft with AA 2426-01003, A/C 3276-3278, all A320 aircraft with AA 2337-01169, and All A321 Aircraft	**Y** 1	0	**C**	May be inoperative. NOTE: A/C 3134–3141 and 3272–3275 have the Commercial pb switch installed but deactivated. AA 2426-01003 and AA 2337-01169 reactivates the Commercial pb switch.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-27-09	Adjacent To COMMERCIAL Pb Switch OFF Light	COMMERCIAL P.B. OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-30-01A	Transformer / Rectifier Units (TR 1) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(M)(O)** TR 1 may be inoperative provided: a) TR 2 and Essential TR operate normally, b) Extract fan operates normally, c) Battery voltage indicator operates normally, d) Both packs operate normally, and e) Repairs are made within two flight days. CAT III Not Authorized
24-30-01B	Transformer / Rectifier Units (TR 2) **(A319/A320)** **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** TR 2 may be inoperative provided: a) TR 1 and Essential TR operate normally, b) Extract fan operates normally, c) Battery voltage indicator operates normally, d) Both packs operate normally, e) Repairs are made within two flight days, f) AC ESS FEED control is checked operative ONCE EACH FLIGHT DAY (Log Book Entry Required), g) Standby Horizon operates normally, and h) Standby Compass operates normally. CAT III Not Authorized **Repetitive Check Required (Yellow Placard)**
24-30-01C	Transformer / Rectifier Units (TR 2) **(A321)** **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** TR 2 may be inoperative provided: a) TR 1 and Essential TR operate normally, b) Extract fan operates normally, c) Battery voltage indicator operates normally, d) Both packs operate normally, e) Repairs are made within two flight days, f) AC ESS FEED control is checked operative ONCE EACH FLIGHT DAY (LOG Book Entry Required), g) ISIS Horizon operates normally, and h) Standby Compass operates normally. CAT III Not Authorized **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-30-01A	Adjacent To ECAM Display	TR 1 INOP
24-30-01B	Adjacent To ECAM Display	TR 2 INOP
24-30-01C	Adjacent To ECAM Display	TR 2 INOP

Continued Next Page

(O) PROCEDURES

24-30-01A

1) Check the integrity of the remaining TR2 and Essential TR by checking on ECAM ELEC page TR voltage above 27V.
2) Select batteries to OFF, then check the battery voltage indicator that BAT 1 and BAT 2 voltages are both above 25.5V.

24-30-01B, 24-30-01C

1) AC ESS FEED – ALTN.
2) Check the integrity of the remaining TR1 and Essential TR by checking on the ECAM ELEC page TR voltage above 27V.
3) Select batteries to OFF, then check the battery voltage indicator that BAT 1 and BAT 2 voltages are both above 25.5V.
4) In-flight:
   a) In the event of failure of AC BUS 2, all DU's will be lost: Select AC ESS FEED to NORM position.
   b) In the event of failure of AC BUS 1: RAT MAN ON – Select.

(M) PROCEDURES

24-30-01A

1) On C/B panel 125VU: Pull and secure circuit breaker TR 1/CNTOR/SPLY location CF01.

Check the integrity of the remaining TR2 and Essential TR by checking on ECAM ELEC page, TR voltage above 27V.

2) Select batteries to OFF, then check the battery voltage indicator that BAT 1 and BAT 2 voltages are both above 25.5V.

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24-30-01B, 24-30-01C

1) On C/B panel 124VU: Pull and secure circuit breaker TR 2/CNTOR/SPLY location BC01.

Check the integrity of the remaining TR1 and Essential TR by checking on ECAM ELEC page, TR voltage above 27V.

2) Select batteries to OFF, then check the battery voltage indicator that BAT 1 and BAT 2 voltages are both above 25.5V.

ONCE EACH FLIGHT DAY check AC ESS FEED control:

a) Do the EIS start procedure (Upper ECAM DU and lower ECAM DU only). (Ref. AMM TASK 31–60–00–860–001)

b) AC FEED pb-sw is pushed (ALTN legend is off)

c) Verify that the following circuit breakers are closed:

i) On Panel 106VU: verify that circuit breaker AC ESS BUS/STBY/CNTOR/CTL location B08 is closed.

ii) On Panel 106VU: verify that circuit breaker AC ESS/BUS NORM/CNTOR/CTL location B03 is closed.

iii) On Panel 123VU: verify that circuit breaker AC ESS/BUS ON/BUS 1 location AC12 is closed.

iv) On Panel 123VU: verify that circuit breaker AC ESS/BUS ON/BUS 2 location AC01 is closed.

d) Operational test of the AC essential –generation switching system.

ACTION	RESULT
1. On the ECAM control panel: • Push the ELEC key.	On the lower ECAM DU. on the ELEC page: • A green bar comes into view between AC1 and AC ESS busbars. This shows that the AC1 busbar energizes the AC ESS busbar.
2. On panel 123VU: pull circuit breaker AC ESS/ BUS ON/BUS 1 location AC12.	On the F/O glareshield panel 130VU: • The MASTER CAUT light illuminates.
	You will hear a single chime.
	The upper ECAM DU becomes black.
	The indications shown on the upper ECAM DU: ELEC AC ESS BUS FAULT then AC ESS FEED... ALTN move to the lower DU.

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ACTION	RESULT
	On the ELEC panel 35VU: • The FAULT legend of the AC ESS FEED pushbutton switch illuminates.
3. On the ELEC panel 35VU: • Release the AC ESS FEED pushbutton switch.	On the ELEC panel 35VU: • The FAULT legend of the AC ESS FEED pushbutton switch goes off. • The ALTN legend of the AC ESS FEED pushbutton switch illuminates.
4. On the ECAM control panel: • Push the ELEC key.	On the lower ECAM DU, on the ELEC page: • A green bar comes into view between the AC2 and AC ESS busbars. This shows that the AC2 busbar energizes the AC ESS busbar. • The green bar between the AC1 and AC ESS busbars goes out of view.
5. On the panel 123VU: close circuit breaker AC ESS/BUS ON/BUS 1 location AC12.	
6. On the ELEC panel 35VU: • Push the AC ESS FEED pushbutton switch.	On the ELEC panel 35VU: • The ALTN legend of the AC ESS FEED pushbutton switch goes off.
	On the ELEC page: • The green bar between the AC2 and AC ESS busbars goes out of view. • The green bar between the AC1 and AC ESS busbars comes into view.

e) Do the EIS stop procedure. (Ref. AMM TASK 31–60–00–860–002)

f) De-energize the aircraft electrical circuits. (Ref. AMM TASK 24–41–00–862–002)

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-30-04	Battery Voltmeters (Indications on overhead panel) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided: a) Battery indications are available on ECAM, and b) Battery voltage is confirmed adequate before APU start. NOTE: External electrical power will be required to check battery voltage(s) on ECAM ELEC Page prior to APU start when aircraft engines, (generators), are not running.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-30-04	Adjacent To Affected Battery Voltage Indicator	___ BAT VOLTAGE INDICATOR INOP

(O) PROCEDURES

1) Ensure external power source is available.
2) Select battery switch(s) ON.
3) Utilize battery voltmeter indications on ECAM ELEC Page as required.

   NOTE: Under this MEL, battery voltage may be checked using this method to satisfy the BATT OFF check.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
BAT PB SWITCH					
24-30-05A FAULT Lights	**Y**	2	0	**C**	May be inoperative.
24-30-05B OFF Lights	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-30-05A	Adjacent To BAT FAULT Light	BAT FAULT LIGHT INOP
24-30-05B	Adjacent To BAT OFF Light	BAT OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	DC BUS TIE SYSTEM					
24-30-06A	DC TIE Contactor 1 (DC BUS 1-DC BAT BUS)	**Y**	1	0	**C**	May be inoperative open provided DC TIE contactor ESS operates normally.
24-30-06B	DC TIE Contactor ESS (DC BAT BUS -DC ESS BUS)	**Y**	1	0	**C**	May be inoperative open provided DC TIE contactor 1 operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-30-06A	Adjacent To ECAM Display	#1 DC TIE CONTACTOR INOP OPEN
24-30-06B	Adjacent To ECAM Display	ESS DC TIE CONTACTOR INOP OPEN

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
BUS TIE PB SWITCH 24-30-07 OFF Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-30-07	Adjacent To ECAM Display	BUS TIE SWITCH OFF LIGHT INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-30-08	ECAM ELEC Page (DC)	**Y**	-	0	**C**	Indications related to DC generation may be Inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-30-08	Adjacent To ECAM Display	___ DC INDICATION ON ECAM ELEC PAGE INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-30-09	External Power Panel ADIRU/AVNCS Vent Caution Light	**N**	1	0	**C**	**(M)** May be inoperative provided avionics ventilation system warning horn is verified to operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-30-09	Adjacent To The ADIRU/AVNCS Vent Caution Light On The EXT POWER Panel	ADIRU/AVNCS VENT CAUTION LIGHT INOP

(M) PROCEDURES

1) To verify that the avionics ventilation system warning horn operates normally accomplish AMM Task 21-26-00-040-012.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
	AC EXTERNAL POWER CONTROL					
24-41-01A	Ground Power Control Unit (GPCU) / Ground Power Control Function of the Ground and Auxiliary Power Control Unit (GAPCU) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)** May be inoperative provided: a) External power is not used, and b) APU generator operates normally. NOTE: When GPCU / Ground Power Control Function of the GAPCU and APU generator are both inoperative, engines cannot be started.
24-41-01B	Receptacle **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)** May be inoperative provided: a) External power is not used, and b) APU generator operates normally. NOTE: When GPCU / Ground Power Control Function of the GAPCU and APU generator are both inoperative, engines cannot be started.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-41-01A	Adjacent To EXT PWR Switch On Overhead ELEC Panel	EXT PWR GPCU INOP
24-41-01B	Adjacent To EXT PWR Switch On Overhead ELEC Panel	EXT PWR RECEPTACLE INOP

(M) PROCEDURES

24-41-01A

1) Open the AC External Power Control Door 121AL (Located just aft of the nose gear).
2) Place a strip of Red colored OM2 "UNSERVICEABLE – DO NOT USE" tape (or equivalent*) over the external power receptacle.

   *An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE–DO NOT USE" printed legibly in 1 inch black letters.
3) Close the AC External Power Control door.

24-41-01B

1) Visually inspect the external power receptacle by perform AMM Task 24-41-00-040-001.
2) Place a strip of Red colored OM2 "UNSERVICEABLE – DO NOT USE" tape (or equivalent*) over the external power receptacle.

   *An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE–DO NOT USE" printed legibly in 1 inch black letters

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
24-41-02	External Power NOT IN USE and AVAIL Panel Lights	**Y**	2	0	**C**	**(O)** May be inoperative provided alternate procedures are used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-41-02	Adjacent To NOT IN USE And/Or AVAIL External Power Panel Lights	EXTERNAL POWER NOT IN USE AND AVAIL PANEL LIGHTS INOP

(O) PROCEDURES

Use standard DELTA ramp hand signals. FOM Chap 6 Ramp Signals.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
EXT PWR PB SWITCH 24-41-03A AVAIL Light	**Y**	1	0	**C**	**(O)** May be inoperative provided alternate procedures are used.
24-41-03B ON Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-41-03A	Adjacent To EXT PWR Switch AVAIL Light On Overhead ELEC Panel	EXT PWR AVAIL LIGHT INOP
24-41-03B	Adjacent To EXT PWR Pb Switch ON Light On Overhead ELEC Panel	EXT PWR PB SWITCH ON LIGHT INOP

(O) PROCEDURES

24-41-03A

Use standard DELTA ramp hand signals. FOM Chap 6 Ramp Signals.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
WARNING AND CAUTION ON ECAM E/WD 24-50-01 C/B TRIPPED	**N**	1	0	**C**	**(M)** May be inoperative provided alternate procedures are used to verify that no circuit breaker is tripped on associated C/B panel.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-50-01	Adjacent To ECAM Display	___ C/B TRIPPED MSG INOP

(M) PROCEDURES

24-50-01

1) Perform C/B TRIPPED Warning procedure per AMM Task 24-50-00-040-001.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
GALLEY / GALY & CAB SUPPLY SYSTEMS					
24-56-01A Automatic Load Shedding System	**Y**	1	0	**C**	May be inoperative provided: a) GALLEY/GALY&CAB pb switch, and b) GALLEY/GALY&CAB FAULT light on the flight deck operate normally.
24-56-01B Automatic and Manual Load Shedding Systems **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(M)** May be inoperative provided all GALLEY/GALY&CAB loads are disconnected. NOTE: Ovens and coffee makers are inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
24-56-01A	Adjacent To Galley Switch On Overhead ELEC Panel	AUTOMATIC GALLEY LOAD SHEDDING SYSTEM INOP
24-56-01B	Adjacent To Galley Switch On Overhead ELEC Panel	AUTOMATIC AND MANUAL GALLEY LOAD SHEDDING SYSTEM INOP

(M) PROCEDURES

24-56-01B

1) To deactivate the Galley Supply System:

   a) On A319 aircraft 3101 – 3141 and A320 aircraft 3209 – 3275 make sure that the pushbutton switch GALLEY 2XA on the overhead panel 35VU is in the OFF position (white indication light shows OFF).

   b) On all A321 aircraft, A319 aircraft 3142 – 3171, and A320 aircraft 3276 – 3278:

      i) Make sure that the pushbutton switch GALLEY 2XA on the overhead panel 35VU is in the OFF position (white indication light shows OFF).

      ii) Make sure that the pushbutton switch ELEC/COMMERCIAL 22XN on the overhead panel 35VU is in the ON position (white indication OFF is off).

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c) Pull and secure the following circuit breakers:

PANEL	DESIGNATION	LOCATION
Effective on: All A319 aircraft, All A321 aircraft, and A320 aircraft 3270 thru 3278		
122VU	ELEC/GALY & CAB/CTL	S26
Effective on: All aircraft		
122VU	ELEC/GALLEY/CNTOR	S28
Effective on: A320 aircraft 3209 thru 3269		
122VU	ELEC/GALLEY/CTL	S26
Effective on: All A321 aircraft		
123VU	FWD GALLEY/FEEDER D	
Effective on: All A321 aircraft		
123VU	AFT GALLEY/FEEDER A	
Effective on: All A321 aircraft		
123VU	AFT GALLEY/FEEDER E	
Effective on: All A320 aircraft		
123VU	AFT GALLEY/FEEDER B	AD09
Effective on: All A320 aircraft		
123VU	FWD GALLEY/FEEDER D	AD04
Effective on: All A320 aircraft		
123VU	FWD GALLEY/FEEDER C	AE10
Effective on: All A319 and A320 aircraft		
123VU	FWD GALLEY/FEEDER F	AC10
Effective on: All A319 and A320 aircraft		
123VU	AFT GALLEY/FEEDER E	AF09
Effective on: All A319 and A320 aircraft		
123VU	AFT GALLEY/FEEDER A	AF04

2) Make sure that the galley electrical panel(s) and galley equipment(s) does (do) not work.

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	PILOT SEAT ADJUSTMENTS					
25-11-01A	Recline **"DISP.APPR.REQ'D"**	**N**	2	0	**A**	**(M)** May be inoperative provided: a) Seat is secured in an upright position acceptable to the affected crewmember, and b) Repairs are made within two flight days.
25-11-01B	Electrical Adjustment A/C 3101-3182 A/C 3251-3280	**N**	2	0	**D**	**(M)** May be inoperative provided: a) Horizontal and vertical mechanical adjustments operate normally, and b) Associated electrical control is deactivated.
25-11-01C	Primary Horizontal Mechanical Adjustment **"DISP.APPR.REQ'D"**	**Y**	2	0	**B**	May be inoperative provided backup horizontal mechanical adjustment is installed and operates normally.
25-11-01D	Backup Horizontal Mechanical Adjustment	**Y**	2	0	**D**	May be inoperative provided primary horizontal mechanical adjustment operates normally.
25-11-01E	Vertical Mechanical Adjustment A/C 3101-3171 A/C 3251-3278	**Y**	2	0	**C**	May be inoperative provided vertical electrical adjustment operates normally.
25-11-01F	Lumbar	**Y**	2	0	**C**	May be inoperative provided seat contour is satisfactory to individual/crewmember requirements.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
25-11-01A	On Applicable Seat	___ RECLINE INOP
25-11-01B	On Applicable Pilot's Glare Shield	___ ELECTRICAL ADJUSTMENT INOP
25-11-01C	On Applicable Pilot's Glare Shield	___ PRIMARY HORIZONTAL MECHANICAL ADJUSTMENT INOP
25-11-01D	On Applicable Pilot's Glare Shield	___ BACKUP HORIZONTAL MECHANICAL ADJUSTMENT INOP
25-11-01E	On Applicable Pilot's Glare Shield	___ VERTICAL MECHANICAL ADJUSTMENT INOP
25-11-01F	On Applicable Pilot's Glare Shield	___ LUMBAR ADJUSTMENT INOP

(M) PROCEDURES

25-11-01A

The (M) Indicates the following Maintenance Procedures are required:

1. Ensure that the affected seat is secured in an upright position by performing a functional test to verify that the seat cannot be moved. If the affected seat can be moved, do the following procedure to secure seatback in an upright position: (**Ref. Figure 25–11–01A**)
2. Remove the affected seat cushion.

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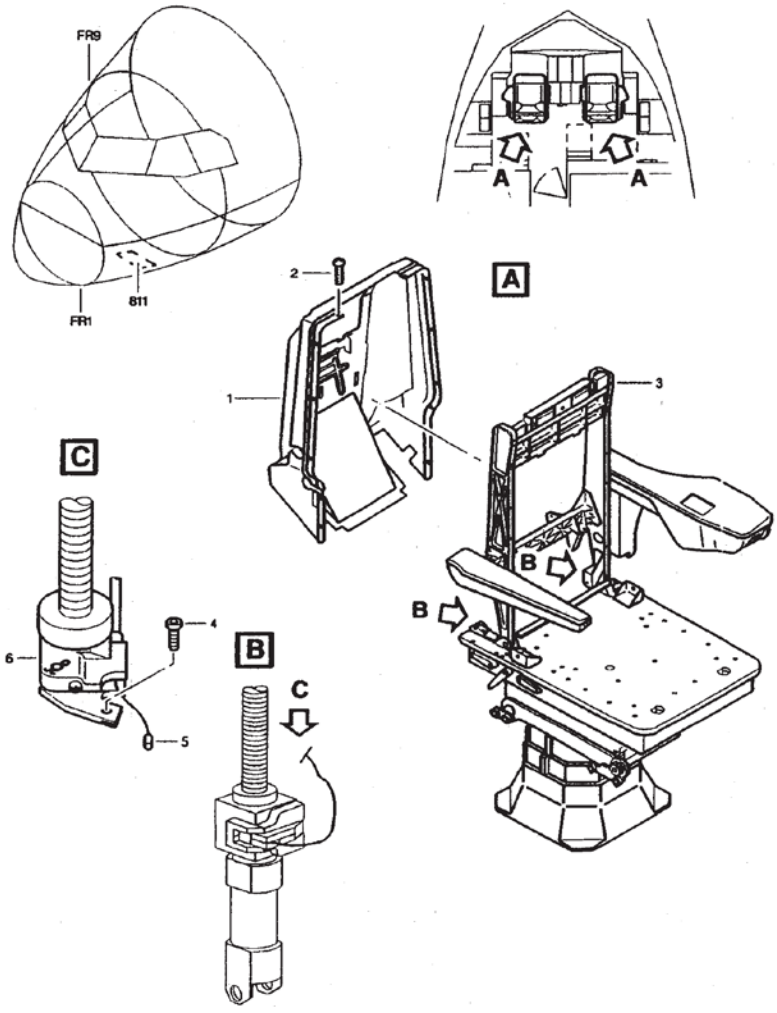
3. If installed, remove the headrest.
4. Remove the fourteen screws. (2).
5. Remove the upper back shroud (1) from the affected seat backrest (3).
6. Loosen the screw (4) on the left and right lock levers (6).
7. Remove the cable (5) from the left and right lock levers (6).
8. Push on the left and right lock levers (6) at the same time and push the affected seat backrest (3).
9. Release the left and right lock levers (6).
10. Make sure that the affected seat backrest (3) is correctly locked in the vertical position.
11. Put the upper back shroud (1) in position on the affected seat backrest (3).
12. Install and tighten the fourteen screws (2).
13. If necessary, install the headrest.
14. Install the affected seat cushion.



PILOT SEAT ADJUSTMENTS (Recline)
Figure 25–11–01A

Continued Next Page

25-11-01B

The (M) Indicates the following Maintenance Procedures are required:

1. To deactivate the Pilot Seat Adjustment electrical control, accomplish the following:
   a) On A/C 3251–3278, 3101–3171
      1) For Captain:
         A. On C/B panel 122VU: pull and secure circuit breaker COCKPIT SEATS/SEAT CTL/CAPT location U11.
   b) On A/C 3251–3278, 3101–3171
      1) For F/O:
         A. On C/B panel 122VU: pull and secure circuit breaker COCKPIT SEATS/SEAT CTL/F/O location U14.
   c) Restore aircraft to original configuration.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-11-02A	Primary Observer's Sliding Seat (3rd Occupant) Crewmember Shoulder Harness **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** May be inoperative provided: a) A passenger seat in the passenger cabin is made available to an FAA inspector for the performance of official duties, or b) Additional Observers seat is available, functional and acceptable, including peripheral equipment, to an FAA inspector for the performance of official duties, and c) Operators are limited to not more than two flight days before repairs are made.
25-11-02B	Additional Observer's Fixed Seat (4th Occupant) Crewmember Shoulder Harness **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided that if the forward observers seat is inoperative, a passenger seat in the passenger cabin is made available and is acceptable to an FAA inspector for the performance of official duties.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-11-02A	In A Conspicuous Place On The Primary Observer's Seat	PRIMARY OBSERVER'S SLIDING SEAT SHOULDER HARNESS INOP – DO NOT USE SEAT
25-11-02B	In A Conspicuous Place On The Additional Observer's Fixed Seat	ADDITIONAL OBSERVER FIXED SEAT SHOULDER HARNESS INOP – DO NOT USE SEAT

(O) PROCEDURES

25-11-02A

Captain to notify Dispatch if an FAA Inspector requires a passenger seat in the cabin.

25-11-02B

Captain to notify Dispatch if an FAA Inspector requires a passenger seat in the cabin.

(M) PROCEDURES

25-11-02A

The (M) Indicates the following Maintenance Procedures are required:

1. Placard the inoperative seat with OM2, "UNSERVICEABLE – DO NOT USE" tape or equivalent*.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in 1 inch black letters.

Continued Next Page

25-11-02B

The (M) Indicates the following Maintenance Procedures are required:

To placard an inoperative seat accomplish the following:

1. Placard the inoperative seat with OM2, “UNSERVICEABLE – DO NOT USE” tape or equivalent*.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

OR

To remove an inoperative seat accomplish the following:

2. Remove seat (Ref. AMM TASK 25–11–42–000–001).

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
CAPT AND F/O OUTBOARD ARMREST CONTROLS					
25-11-03A Height Control	**Y**	2	0	**C**	May be inoperative provided setting is acceptable to crewmember(s).
25-11-03B Pitch Control (Tilt)	**Y**	2	0	**C**	May be inoperative provided setting is acceptable to crewmember(s).
25-11-03C Armrest Memory Position Display	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-11-03A	On Applicable Pilot's Glare Shield	___ OUTBOARD ARMREST HEIGHT CONTROL INOP
25-11-03B	On Applicable Pilot's Glare Shield	___ OUTBOARD ARMREST PITCH CONTROL INOP
25-11-03C	On Applicable Pilot's Glare Shield	___ OUTBOARD ARMREST MEMORY POSITION DISPLAY INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-11-04	Capt and F/O Inboard Armrest Vertical Adjustment Controls	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-11-04	On Applicable Pilot's Glare Shield	___ INBOARD ARMREST VERTICAL ADJ. CONTROL INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-11-06A	Primary Observer's Sliding Seat (3rd Occupant) (Including associated equipment) Seat Unusable **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** May be inoperative provided: a) A passenger seat in the passenger cabin is made available to an FAA inspector for the performance of official duties, and b) Repairs are made within two flight days.
25-11-06B	Primary Observer's Sliding Seat (3rd Occupant) (Including associated equipment) Seat Usable **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	May be inoperative provided: a) Second observer's (4th occupant– fixed seat) seat is available to the FAA inspector for the performance of official duties, and b) Repairs are made within two flight days.
25-11-06C	Primary Observer's Sliding Seat (3rd Occupant) (Including associated equipment) Seat Usable **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** May be inoperative provided: a) Required minimum safety equipment (safety belt and oxygen) is available, b) Seat is acceptable to the FAA inspector for the performance of official duties, and c) Repairs are made within two flight days. NOTE 1: These provisos are intended to provide for occupancy of the above seat by an FAA inspector when the minimum safety equipment (oxygen and safety belt) is functional and the inspector determines the conditions to be acceptable. NOTE 2: The pilot-in-command will determine if the minimum safety equipment is functional for other persons (other than FAA) authorized to occupy seat.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-11-06A	In A Conspicuous Place On The Primary Observer's Sliding Seat	PRIMARY OBSERVER'S SLIDING SEAT INOP
25-11-06B	In A Conspicuous Place On The Primary Observer's Sliding Seat	PRIMARY OBSERVER'S SLIDING SEAT INOP
25-11-06C	In A Conspicuous Place On The Primary Observer's Sliding Seat	PRIMARY OBSERVER'S SLIDING SEAT INOP

Continued Next Page

(O) PROCEDURES

25-11-06A

Captain to notify Dispatch if an FAA Inspector requires a passenger seat in the cabin.

25-11-06C

Captain is to ensure that minimum safety equipment (safety belt and oxygen) is functional if seat is to be occupied, (by other than FAA personnel).

(M) PROCEDURES

25-11-06A

1. Placard the inoperative seat with OM2, “UNSERVICEABLE – DO NOT USE” tape or equivalent*.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-11-07	Additional Observer's Fixed Seat (4^{th} Occupant) (Including associated equipment) Seat Unusable **"DISP.APPR.REQ'D"**	**N**	1	0	**D**	**(M)(O)** May be inoperative or removed

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-11-07	In A Conspicuous Place On The Additional Observer's Fixed Seat	ADDITIONAL OBSERVER FIXED SEAT INOP

(O) PROCEDURES

25-11-07

Captain to notify Dispatch if an FAA Inspector requires a passenger seat in the cabin.

(M) PROCEDURES

25-11-07

To placard an inoperative seat accomplish the following:

1. Placard the inoperative seat with OM2, "UNSERVICEABLE – DO NOT USE" tape or equivalent*.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in 1 inch black letters.

OR

To remove an inoperative seat accomplish the following:

1. Remove seat per AMM TASK 25–11–42–000–001.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
CAPT AND F/O SLIDING TABLES					
25-13-01A Sliding Tables	N	2	0	D	**(M)** May be inoperative in the stowed position or removed.
25-13-01B Table Tilt Function	**Y**	2	0	**D**	May be inoperative provided associated table can be stowed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-13-01A	On Applicable Pilot's Glare Shield	___ SLIDING TABLE(S) INOP
25-13-01B	On Applicable Pilot's Glare Shield	___ SLIDING TABLE TILT(S) INOP

(M) PROCEDURES

25-13-01A

The (M) Indicates the following Maintenance Procedures are required:

1. Ensure table is in stowed position or removed.
2. Remove the defective Captain and/or First Officer sliding table(s).
   a) Pull the table. Do not remove it fully from its housing.
   b) Remove the screw from the bottom.
   c) Remove the sliding table.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-13-02	CAPT and F/O Retractable Footrests	**N**	-	0	**D**	**(M)** May be inoperative secured in the retracted position or removed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-13-02	On Applicable Pilot's Glare Shield	___ RETRACTABLE FOOTREST INOP

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Footrest can be inoperative in stowed position or removed.
   a) Footrest can be stowed per the following:
      1) Inoperative foot rests with failed actuators must be secured in the retracted position with .032 diameter minimum safety wire until MEL is cleared.
   b) Footrest can be removed per the following:
      1) Remove the actuator on the footrest assembly.
      2) Remove the defective Captain and/or First Officer retractable footrest.
         A. Remove and discard the retaining rings.
         B. Hold the retractable footrest.
         C. Remove the hinge pins.
         D. Remove the retractable footrest from the footrest and sliding table assembly.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
PASSENGER SEAT(S)					
25-21-01A Passenger Seat(s) (Seat Unusable) **"DISP.APPR.REQ'D"**	**N**	-	-	**D**	**(M)** May be inoperative provided: a) Seat does not block an Emergency Exit, b) Seat does not restrict any passenger from access to the main aircraft aisle, c) Affected seat(s) is blocked and placarded "UNSERVICEABLE – DO NOT USE", and d) Seat is not required for use by a displaced flight attendant. NOTE 1: A seat with an inoperative seat belt/shoulder harness is considered inoperative. NOTE 2: Inoperative seats do not affect the required number of Flight Attendants. NOTE 3: Affected seat(s) may include the seat(s) behind and/or adjacent outboard seat(s). NOTE 4: MCC must contact Flight Control for coordinating with ROC to remove seat from inventory until repaired.
25-21-01B Recline Mechanism (Seat Useable)	**N**	-	-	**D**	**(M)** May be inoperative and seat occupied provided seat back is secured in the full upright position. NOTE: A seat with an inoperative recline mechanism is considered inoperative if the seat cannot be secured upright. Apply MEL Item 25–21–01A.

Continued Next Page

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH	REPAIR CATEGORY	REMARKS OR EXCEPTIONS
	PASSENGER SEAT(S) (CONTINUED)					
25-21-01C	Recline Mechanism (Seat Useable)	**Y**	-	-	**D**	May be inoperative and seat occupied provided seat back is immovable in the full upright position. NOTE: If a seat back is not immovable in the full upright position, apply MEL Item 25–21–01B.
25-21-01D	Legrest/Footrest/ Headrest Mechanisms (NBA Configuration)	**Y**	-	-	**D**	May be inoperative and seat occupied provided the affected component is secure in the takeoff/landing position. NOTE 1: If the headrest is not secure in the full up position, apply MEL Item 25–21–01A. NOTE 2: If the legrest/footrest is not secure in the retracted position, apply MEL Item 25–21–01A.
25-21-01E	Swivel Function (NBA Configuration)	**N**	6	0	**D**	**(M)** May be inoperative and seat occupied provided the seat is secure in the takeoff/landing position. NOTE: Dispatch with the seat swivel function not secure in the takeoff/landing position (full forward/aft facing position) is not authorized.
25-21-01F	Track Function (FWD/AFT and or Side to Side) (NBA Configuration)	**N**	12	0	**D**	**(M)** May be inoperative and seat occupied provided the seat is secure in the takeoff/landing position. NOTE: Dispatch with the seat track function not secure in the takeoff/landing position is not authorized.
25-21-01G	Passenger Seat(s) Underseat Baggage Restraining Bars	**N**	-	-	**C**	**(M)(O)** May be inoperative provided: a) Baggage is not stowed under seat with inoperative restraining bar, b) Associated seat is placarded “DO NOT STOW BAGGAGE UNDER THIS SEAT,” and c) Procedures are established to alert Cabin Crew of inoperative restraining bar.

Continued Next Page

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	PASSENGER SEAT(S) (CONTINUED)				
25-21-01H	Passenger Seat(s) Armrests Armrest With Recline Mechanism	**Y** -	-	**D**	**(M)** May be inoperative or missing and seat occupied provided: Armrest does not block an Emergency Exit, a) Armrest does not restrict any passenger from access to the main aircraft aisle, and b) If armrest(s) is missing, the affected seat is secured in the full upright position.
25-21-01I	Passenger Seat(s) Armrest Without Recline Mechanism	**Y** -	-	**D**	May be inoperative or missing and seat occupied provided: a) Armrest does not block an Emergency Exit, and b) Armrest does not restrict any passenger from access to the main aircraft aisle.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-21-01A	On Nearest Flight Attendants Panel	___ PASSENGER SEAT INOP ___ SEATS RESTRICTED
25-21-01B	On Nearest Flight Attendants Panel	___ PASSENGER SEATBACK SECURED IN UPRIGHT POSITION INOP
25-21-01C	On Nearest Flight Attendants Panel	___ PASSENGER SEATBACK IMMOVABLE IN UPRIGHT POSITION
25-21-01D	On Nearest Flight Attendants Panel	___ LEGREST/FOOTREST/ HEADREST INOP
25-21-01E	On The Nearest Flight Attendants Panel	___ PASSENGER SEAT SWIVEL FUNCTION INOP
25-21-01F	On The Nearest Flight Attendants Panel	___ PASSENGER SEAT TRACK FUNCTION INOP
25-21-01G	On The Nearest Flight Attendants Panel	___ PASSENGER SEAT UNDERSEAT BAGGAGE RESTRAINING BAR INOPERATIVE or MISSING
25-21-01H	On The Nearest Flight Attendants Panel	___ PASSENGER SEAT(s) ARMREST INOP OR MISSING SEAT MAY BE OCCUPIED. If the affected armrest(s) is missing, placard the seat(s) recline mechanism inoperative per MEL item 25–21–01B.
25-21-01I	On The Nearest Flight Attendants Panel	___ PASSENGER SEAT ARMREST(S) INOP or MISSING

Continued Next Page

(O) PROCEDURES

25-21-01G

Brief Flight attendants to ensure baggage is not stowed under associated seat.

(M) PROCEDURES

25-21-01A

1. Install Seat INOP Block-Out Cover part number 25-5136-001 per ERA 10-485792-14MA.

    a) If the seat is stuck in the recline position block off affected seat(s) and the seat directly behind the inoperative seat by installing a Seat INOP Block-Out Cover part number 25-5136-001 per ERA 10-485792-14MA. Affected seats would be any seat with blocked access to an aisle by the inoperative seat

NOTE: The inoperative seat or affected seat(s) must not block access to an Emergency Exit or aisle.

    b) If the seatback is loose or blocks access to an Emergency Exit secure upright with a Seat INOP Block-Out Cover part number 25-5136-001 per ERA 10-485792-14MA or alternatively for seat backs without AVOD installed remove the seat back and placard the seatback “MUST REMAIN WITH AIRPLANE” and stow in available closet. Block off affected seat directly behind the inoperative seat(s) by installing a Seat INOP Block-Out Cover part number 25-5136-001 per ERA 10-485792-14MA. Install a Seat INOP Block-Out Placard part number 11-0972-001 per ERA 10-485792-14MA or equivalent* on seat with removed seat back.

2. In the event that the Seat INOP Block-Out Cover is not available the seat may be made inoperative per one of the following provisions provided the MCC is contacted to schedule the installation of a Seat INOP Block-Out Cover at the next maintenance station the cover is available:

    a) Secure the inoperative seat in the upright position and block seat per MEL applicable Remarks or Exeptions and placard “DO NOT OCCUPY” by installing a Seat INOP Block-Out Placard part number 110972-001 per ERA 10-485792-14MA or equivalent*.

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b) If the recline mechanism is inoperative, ensure the seat remains in the upright position otherwise secure the seat in the upright or break over position as required maintaining a pleasant and professional appearance and block off affected seat(s) and the seat directly behind the inoperative seat per MEL applicable Remarks or Exceptions and placard “DO NOT OCCUPY” by installing a Seat INOP Block-Out Placard part number 11-0972-001 per ERA 10-485792-14MA or equivalent*. Affected seats would be any seat with blocked access to an aisle by the inoperative seat.

NOTE: The inoperative seat or affected seat(s) must not block access to an Emergency Exit or aisle.

c) If the seatback is loose or blocks access to an Emergency Exit and the seat back does not have AVOD installed remove seatback and block off affected seat directly behind the inoperative seat per MEL applicable Remarks or Exceptions and placard “DO NOT OCCUPY” by installing a Seat INOP Block-Out Placard part number 11-0972-001 per ERA 10-485792-14MA or equivalent*. Placard seatback, “MUST REMAIN WITH AIRPLANE” and stow in available closet. Seat back is to remain in closet until removed by maintenance for repair or re–installation. For seats with AVOD installed see prior step.

For Seats with Leg Rests:

1. If the leg/foot rest is not secure in the retracted position, secure the inoperative leg/foot rest in the retracted position by installing the Seat INOP Block-Out Cover part number 25-5136-001 per ERA 10-485792-14MA such that it cannot move during flight.
2. In the event that the Seat INOP Block-Out Cover is not available the seat may be made inoperative per one of the following provisions provided the MCC is contacted to schedule the installation of a Seat INOP Block-Out Cover at the next maintenance station the cover is available:
   a) Secure the leg/foot rest in the retracted position using tape or straps such that it cannot move during flight and block seat per MEL applicable Remarks or Exceptions and placard “DO NOT OCCUPY” by installing a Seat INOP Block-Out Placard part number 11-0972-001 per ERA 10-485792-14MA or equivalent*.
3. If the leg/foot rest is unable to be secured in the retracted position, placard the inoperative seat and block off all seats that block access to the aisle per MEL applicable Remarks or Exceptions and placard “DO NOT OCCUPY” by installing a Seat INOP Block-Out Placard part number 11-0972-001 per ERA 10-485792-14MA or equivalent*.

Other Problems:

1. Other seat problems (e.g., broken seat belt/shoulder harness, headrest, life vests etc.): Install Seat INOP Block-Out Cover part number 25-5136-001 per ERA 10-485792-14MA.
2. In the event that the Seat INOP Block-Out Cover is not available the seat may be made inoperative provided the MCC is contacted to schedule the installation of a Seat INOP Block-Out Cover at the next maintenance station the cover is available:
   a) Secure the inoperative seat in the upright position and block seat per MEL applicable Remarks or Exceptions and placard “DO NOT OCCUPY” or equivalent*.

*An acceptable alternative to the “DO NOT OCCUPY” placard is to apply a one or two sections of 2 inch wide masking tape as required over the head rest area (seat bottom if seat back is removed with the words “UNSERVICEABLE – DO NOT USE” printed neatly and legibly in 1.5 inch black or red letters and contacting MCC to schedule the installation of the approved Seat INOP Block-Out Cover part number 25-5136-001 and/or Seat INOP Block-Out Placard part number 11-0972-001.

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25-21-01B

1. Secure seat in an upright position by detaching the seat recline control assemblies or adjusting the recline mechanism (hydrolok) as follows:
   a) For Hydrolok P/N HL08700–(XX),
      1) Slide plastic cover to expose STOP.
      2) Reposition STOP to the LOCKOUT position.
      3) Slide plastic cover to the stowed position.
      4) Check that seatback is locked in upright position.

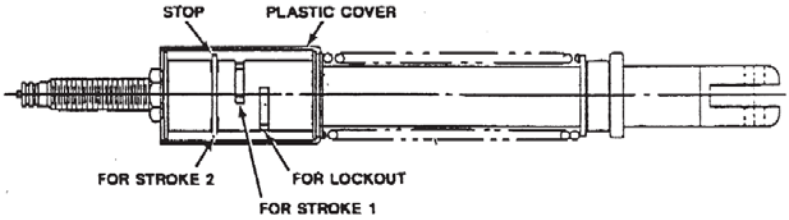

Figure 25–21–01B.1 HYDROLOK P/N HL08700–(XX)

   b) For Hydrolok P/N LL15000–(XX)
      1) Remove/displace CIR–CLIP on lock barrel (if installed).

NOTE: Cir–Clip does not need to be reinstalled.

      2) Push and rotate barrel clockwise to the lockout position.
      3) Check that seatback is locked in upright position.

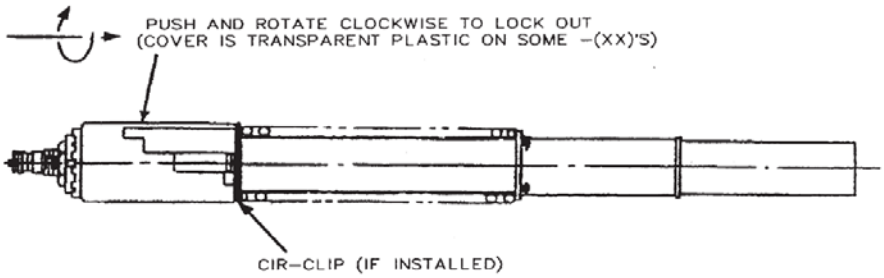

Figure 25–21–01B.2 HYDROLOK P/N LL15000–(XX)

   c) Hydrolok P/N HV08000–(XX) is secured by:
      1) Open snap ring, behind the clear plastic cover, and slide aft.
      2) Ensure seatback is in the full upright position.
      3) Rotate clear plastic cover clockwise until recline stop ring is tight against the recline plunger.

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4) Hold plastic cover in place and return snap ring to its original position.
5) Check that the seatback is locked in the upright position.

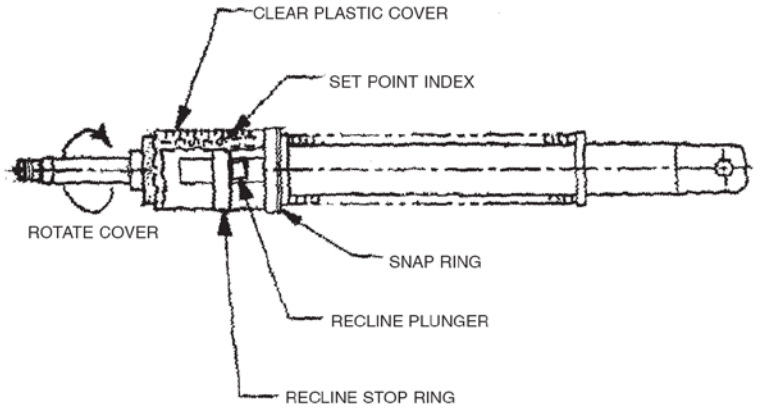

Figure 25–21–01B.3 Hydrolok P/N HV08000–(XX)

d) For Hydrolok P/N AL08700–29 or P/N 08000–01
1) Loosen the set screw to free collar.
2) Rotate collar counter clockwise until it rests on the hydrolok actuator shoulder.
3) Tighten the set screw.
4) Check that seatback is locked in upright position.

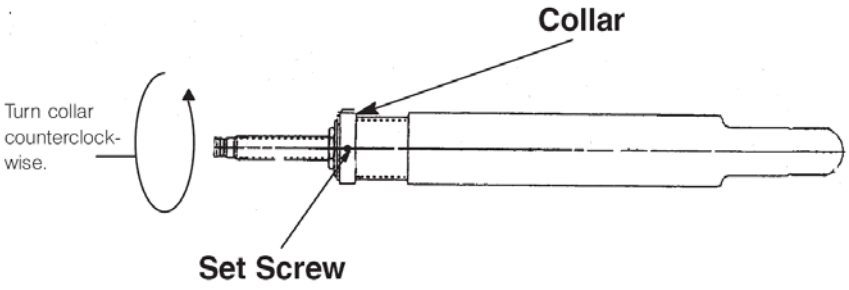

Figure 25–21–01B.4 Hydrolok P/N AL08700–29 or P/N 08000–01

e) To secure recline on the Decrane Swivel (NBA configuration) seats, accomplish the following:
1) Remove seat cover.
2) Remove seat pan to gain access to recline limiter.
3) Verify that the setback is in the full upright position.
4) Loosen set screws on the Recline Limiter.
5) Position Limiter tight against the cylinder as shown. (Ref. Figure 25–21–01B.5)
6) Tighten set screws on the recline limiter.
7) Re–install seat pan.
8) Re–install seat cover.

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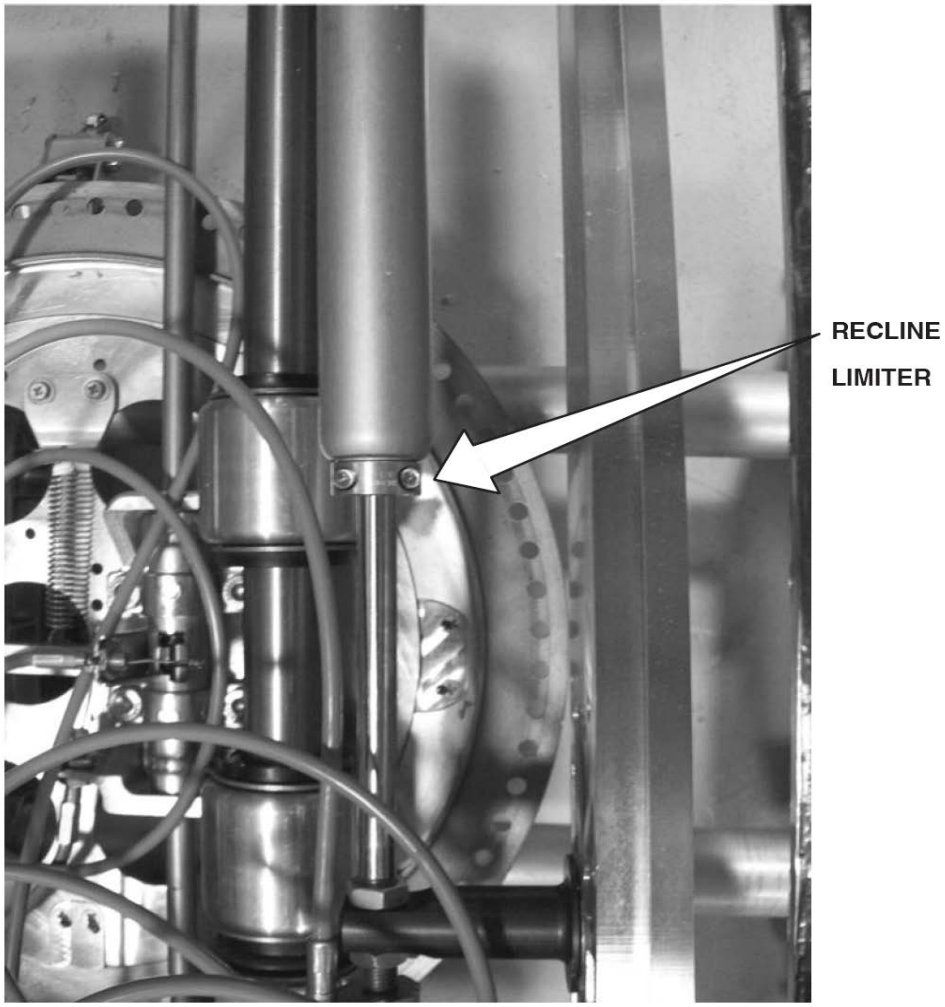

Figure 25–21–01B.5
Recline Limiter for DeCrane Swivel Seats
(NBA CONFIGURATION)

f) To secure recline on the Recaro (NBA configuration) seats, accomplish the following: (Ref. Figure 25–21–01B.5 & 25–21–01B.6
   1) Remove the seat bottom cushion.
   2) Push back the cover.
   3) Move the backrest to the full upright position and hold.
   4) If spacers are available, install spacers onto the shaft between the hydrolok collar and piston in order to fill the gap as much as possible.
   5) Loosen the set screw on the hydrolok collar.
   6) Slide collar toward spacers until there no more space available in the gap.
   7) If spacers are not available, loosen collar set screw and slide collar over until it rests on the hydrolok shoulder.
   8) Re–tighten the set screw.

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9) Pull the cover forward toward the end cap.
10) Re–install the seat bottom cushion.

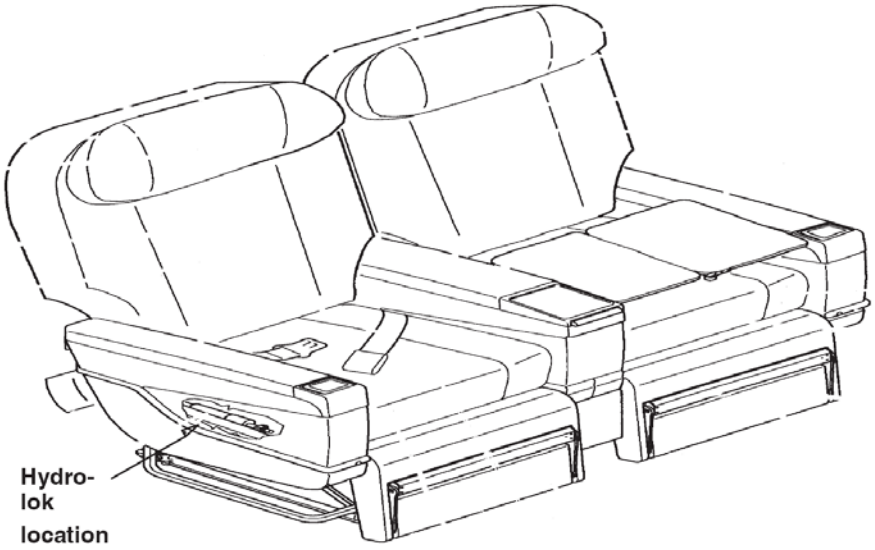


Figure 25–21–01B.6
Recaro Seat (NBA Configuration)
Recline Hydroloc Location

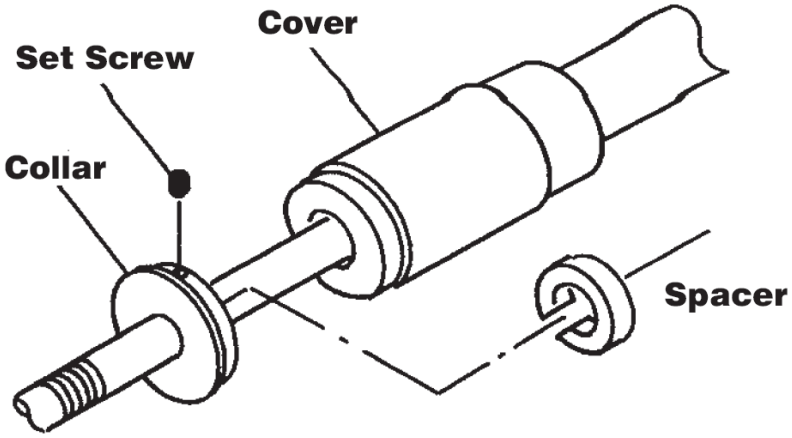
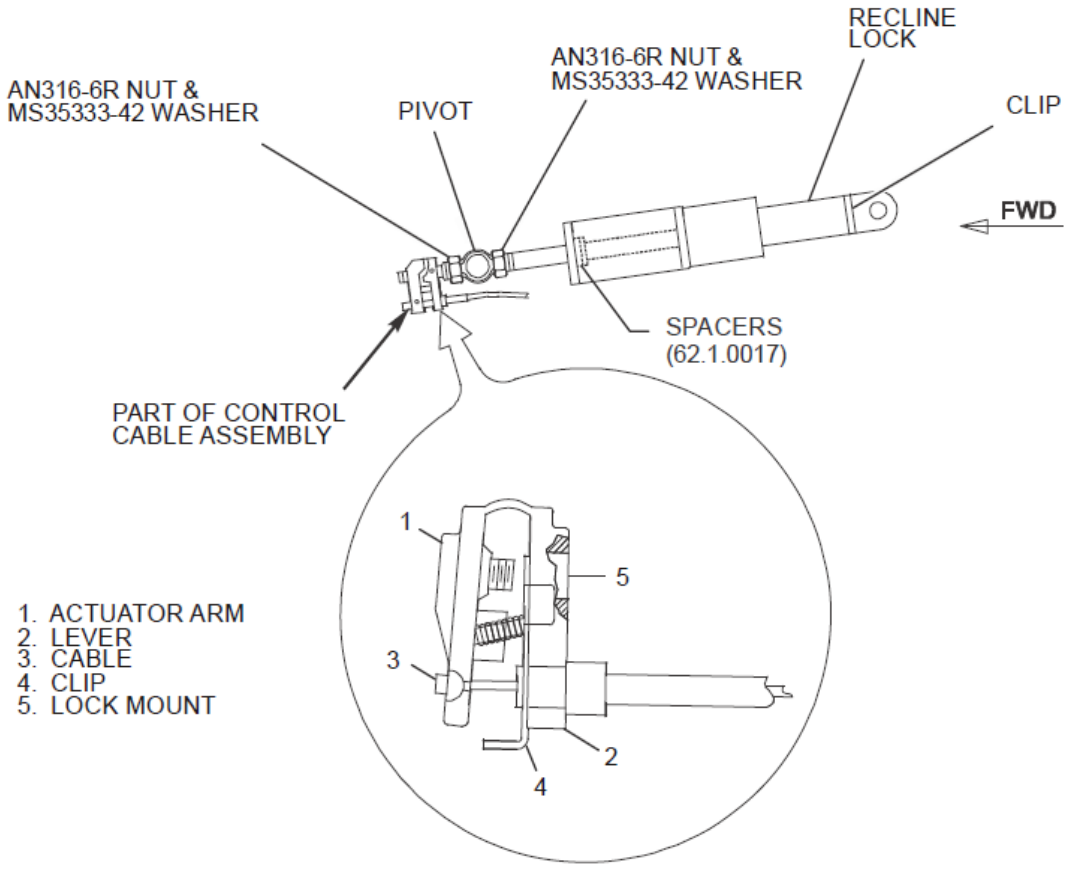


Figure 25–21–01B.6
Recaro Seat (NBA Configuration)
Recline Hydroloc

Continued Next Page

g) To secure the recline on Zodiac seat assemblies installed by AA 2500-01772:
   1) Adjust the recline lock to the fully extended position.
   2) Tighten the jam nut against the adjusting nut on the recline lock.



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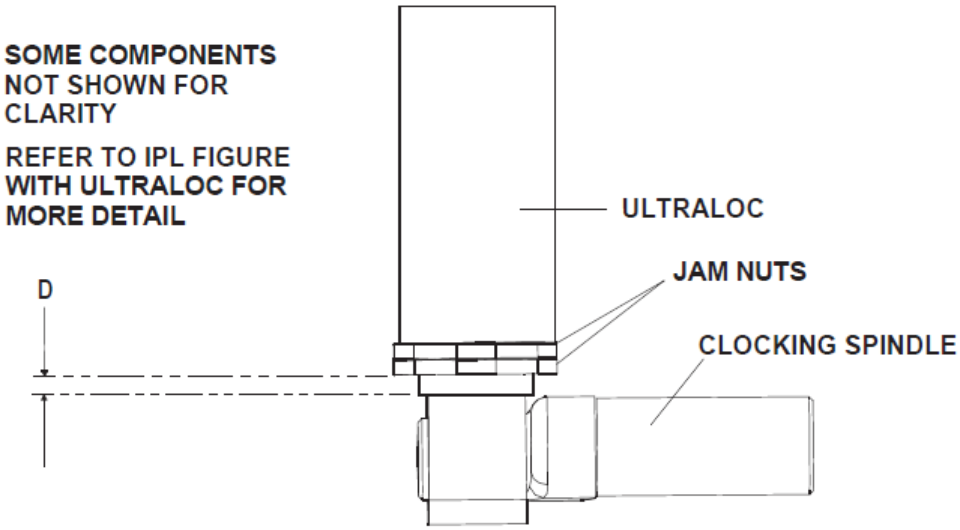
h) To secure the recline on Pinnacle seat assemblies installed by AA 2500-01772:
   1) Adjust the recline lock to the fully extended position.
   2) Adjust the jam nuts to secure ULTRALOC in upright position.



2. If the seatback cannot be secured in the upright position or the leg/footrest is not secure in the retracted position, please refer to MEL Item 25–21–01A.

Continued Next Page

25-21-01E

NOTE: With the seat swivel function not secure in the takeoff/landing position (full forward/full aft facing as appropriate), DISPATCH IS NOT ALLOWED.

1. To lockout the swivel function of the Decrane Swivel Seat (NBA Configuration), accomplish the following: Ref. Figure 25–21–01E.
   a) Position the seat in the takeoff position.
   b) NOTE: The takeoff position is defined as the full forward or full aft facing position as appropriate.
   c) Remove seat cover.
   d) Remove seat pan to gain access to swivel lockout location. (Ref. Figure 25–21–01E)
   e) Verify that seat is in the full forward or full aft facing position as appropriate.
   f) Install 3/8 inch bolt and nut into lockout location.
   g) Tighten until snug.
   h) Verify that the seat will not swivel.
   i) Re–install seat pan.
   j) Re–install seat cover.

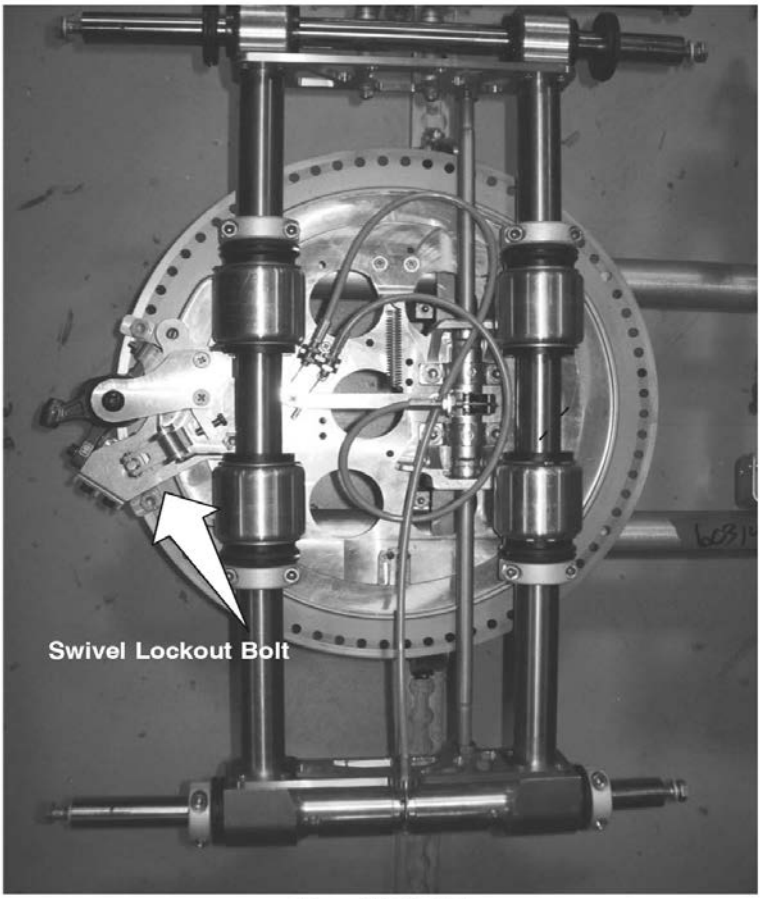


Figure 25–21–01E
Swivel Lockout

Continued Next Page

25-21-01F

NOTE: With the seat track function not secure in the takeoff/landing position (position furthest away from the table and for aisle seats the furthest outboard position), DISPATCH IS NOT ALLOWED.

1. To lockout the track function of the Decrane Swivel Seat (NBA Configuration), accomplish the following: Ref. Figure 25–21–01F.1 & 25–21–01F.2.
   a) Position the seat in the takeoff position.

NOTE: The takeoff position is defined as the position furthest away from the table and for aisle seats the furthest outboard position.

   1) Remove seat cover.
   2) Remove the seat pan to gain access to lockout the fwd/aft and side to side seat function:
   3) To lockout fwd/aft movement of the seat locate travel limiter(s) on each side (A).
      A. Loosen limiter bolts.
      B. Slide limiter until limiter rests against stop as shown below. (Ref. Figure 25–21–01F.1)
      C. Tighten limiter bolts.
      D. Verify that the fwd/aft movement of the seat is locked out.
   4) To lockout the side to side movement of the seat locate travel limiter(s) (B).
      A. Loosen limiter bolts.
      B. Slide limiter until limiter rests against stop as shown below. (Ref. Figure 25–21–01F.2)
      C. Tighten limiter bolts.
      D. Verify that the side to side movement of the seat is locked out.
   5) Re–install seat pan.
   6) Re–install seat cover.

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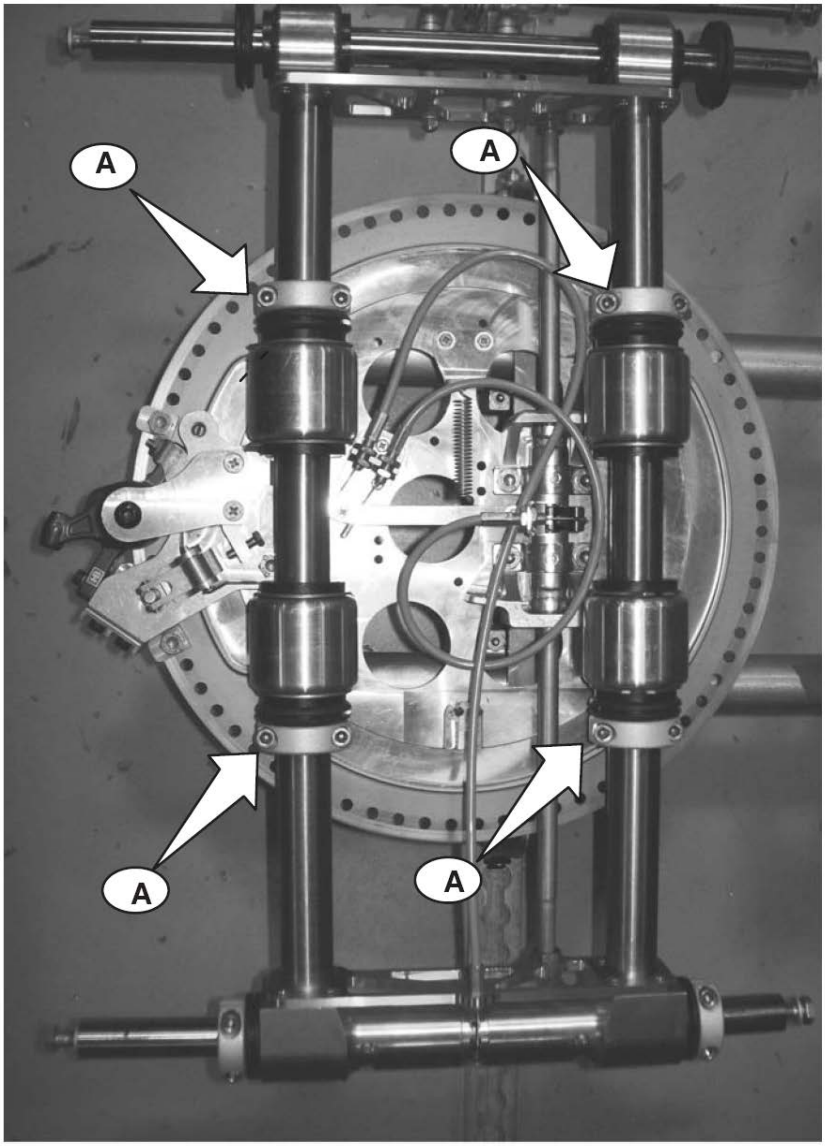

Figure 25–21–01F.1
Decrane Swivel Seat (NBA Configuration)

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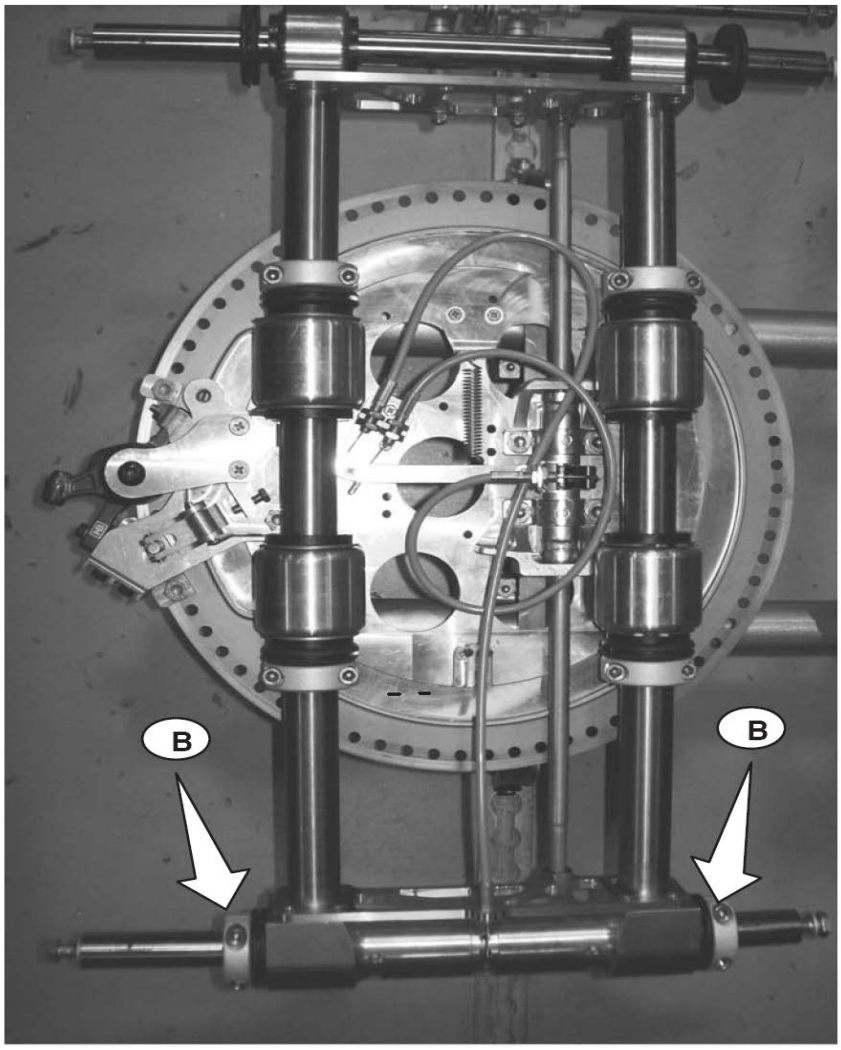

Figure 25–21–01F.2
Decrane Swivel Seat (NBA Configuration)

25-21-01G:

1. If broken, remove underseat restraining bars.
2. On a 2 inch wide section of masking tape, print legibly in 1 inch black letters “DO NOT STOW BAGGAGE UNDER THIS SEAT”.
3. Place the masking tape on the floor in the area aft of the inoperative restraining bar.

25-21-01H

If armrest(s) is missing, the affected seat must be secured in the full upright position. *Maintenance is Required and Flight Crew May NOT Placard*

If applicable, defer affected passenger seat(s) inoperative per MEL Item 25–21–01B.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
FLIGHT ATTENDANT SEAT ASSEMBLY (SINGLE OR DUAL POSITION)					
25-22-01A Required Flight Attendant Seats (For A319 Aircraft without AA 2500-01771) (For A320 Aircraft without AA 2500-01772) **"DISP.APPR.REQ'D"** (Refer to In-flight Service Onboard Manual for required seat locations)	**N**	3	2	**B**	**(M)(O)** One required seat position or assembly (dual position) may be inoperative provided: a) Affected seat position or assembly is not occupied, b) For all positions except AFT RT, Flight Attendant(s) displaced from an inoperative seat(s) occupies an adjacent flight attendant seat or the passenger seat which is most accessible to the inoperative seat(s), c) For the AFT RT position, Flight Attendant must occupy the passenger seat most accessible to the AFT RT position, d) Alternate procedures are used as published in crewmember manuals, e) Folding type seat stows automatically or is secured in the retracted position and is checked ONCE EACH FLIGHT DAY (Log Book Entry Required), and f) If a passenger seat is needed for a required flight attendant, the assigned seat is placarded "FOR FLIGHT ATTENDANT USE ONLY". NOTE 1: An automatic folding seat that will not stow automatically is considered inoperative. NOTE 2: A seat with a missing or inoperative restraint system is considered inoperative. NOTE 3: If one side of a dual seat assembly is inoperative and a flight attendant is displaced to the adjacent seat, the adjacent seat must operate normally. **Repetitive Check Required (Yellow Placard)**

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-22-01B	Required Flight Attendant Seats (For A319 Aircraft with AA 2500-01771) (For A320 Aircraft with AA 2500-01772) (For All A321 Aircraft) **"DISP.APPR.REQ'D"** (For A321 Refer to In-flight Service Onboard Manual Bulletin 2-16 for required seat locations) (For A319 and A320 Refer to In-flight Service Onboard Manual for required seat locations)	**N**	4	3	**B**	**(M)(O)** One required seat position or assembly (dual position) may be inoperative provided: a) Affected seat position or assembly is not occupied, b) Flight Attendant(s) displaced by inoperative seat(s) occupies either an adjacent flight attendant seat or the passenger seat which is most accessible to the inoperative seat(s) so as to most effectively perform assigned duties, c) Alternate procedures are used as published in crewmember manuals, d) Folding type seat stows automatically or is secured in the retracted position and is checked ONCE EACH FLIGHT DAY (Log Book Entry Required), and e) If a passenger seat is needed for a required flight attendant, the assigned seat is placarded "FOR FLIGHT ATTENDANT USE ONLY". NOTE 1: An automatic folding seat that will not stow automatically is considered inoperative. NOTE 2: A seat with a missing or inoperative restraint system is considered inoperative. NOTE 3: If one side of a dual seat assembly is inoperative and a flight attendant is displaced to the adjacent seat, the adjacent seat must operate normally. **Repetitive Check Required (Yellow Placard)**
25-22-01C	Excess (Non-required) Flight Attendant Seats	**N**	-	0	**C**	**(M)(O)** May be inoperative provided: a) Affected seat position or seat assembly is not occupied, and b) Folding type seat stows automatically or is secured in the retracted position and is checked ONCE EACH FLIGHT DAY (Log Book Entry Required). NOTE 1: An automatic folding seat that will not stow automatically is considered inoperative. NOTE 2: A seat with a missing or inoperative restraint system is considered inoperative. **Repetitive Check Required (Yellow Placard)**

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MEL ITEM	TAB LOCATION	PLACARD TEXT
25-22-01A	On Affected Flight Attendant's Seat Position	___ FLIGHT ATTENDANT SEAT POSITION INOP
25-22-01B	On Affected Flight Attendant's Seat Assembly	___ FLIGHT ATTENDANT'S SEAT POSITION INOP
25-22-01C	On Affected Flight Attendant's Seat Assemblies	___ FLIGHT ATTENDANT'S SEAT POSITION(S) INOP

(O) PROCEDURES

25-22-01A, 25-22-01B

Captain to brief Lead Flight Attendant/Purser which seat is inoperative.

1. The flight attendant displaced from an inoperative required seat position occupies the operative non–required seat position of a dual seat assembly at the same location. If the non–required seat of a dual seat assembly is inoperative or not available, the flight attendant assigned to the affected seat occupies a passenger seat, most accessible to his/her assigned seat and is as close to or closer than the nearest seated passenger to the associated exit. The flight attendant must be able to reach the assigned emergency exit in essentially the same time as from the normally assigned seat, i.e., a 2 or 3 second time difference is considered ”essentially the same time.”

25-22-01C

1. Captain to brief Lead Flight Attendant/Purser which seat is inoperative.

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(M) PROCEDURES

25-22-01A, 25-22-01B

1. Ensure the Flight Attendant Seat automatically retracts without assistance to the fully stowed position. If the seat will not automatically retract without assistance to the fully stowed position, secure the inoperative seat in the fully stowed position using the following procedure:

   a) Secure seat in the retracted (fully stowed) position using high visibility tape.

2. Placard the inoperative seat with OM–2 “UNSERVICEABLE – DO NOT USE” tape or equivalent.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

3. If a flight attendant is displaced from a required seat and requires a passenger seat to occupy, perform the following:

   a) The passenger seat assigned to the cabin attendant(s) use must be the seat most accessible to their assigned exit and placarded as follows:

      1) Obtain a placard.

      2) Print on placard DISCREPANCY in bold letters “FOR FLIGHT ATTENDANT USE ONLY”

      3) Trim placard so that only the DISCREPANCY portion remains.

      4) Affix placard in a conspicuous place on the seat.

4. ONCE EACH FLIGHT DAY

   a) Ensure seat has remained in the fully stowed position. If the seat has been secured in the fully stowed position with tape, ensure tape is in good condition.

25-22-01C

1. Ensure the Flight Attendant Seat automatically retracts without assistance to the fully stowed position. If the seat will not automatically retract without assistance to the fully stowed position, secure the inoperative seat in the fully stowed position using the following procedure:

   a) Secure seat in the retracted (fully stowed) position using high visibility tape.

2. Placard the inoperative seat with OM–2 “UNSERVICEABLE – DO NOT USE” tape or equivalent.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

3. ONCE EACH FLIGHT DAY

   a) Ensure seat has remained in the fully stowed position. If the seat has been secured in the fully stowed position with tape, ensure tape is in good condition.

NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH	
FLIGHT CREW MAY PLACARD		REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION		REMARKS OR EXCEPTIONS
25-22-03	Non-Essential Equipment & Furnishings (NEF)		May be inoperative, damaged, or missing provided that item(s) is deferred in accordance with operator's NEF deferral program, NOTE 1: Do not use this MEL number to defer the discrepancy. Defer the discrepancy under the NEF program per TOPP 40-40-08. The NEF List and procedures can be found in the on-line NEF Application. NOTE 2: Exterior lavatory door ash trays are not considered NEF items.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-22-04A	Lavatory Door Ashtrays (On outside of door)	**Y**	-	2	**A**	Up to 50% may be missing or inoperative for 10 days.
25-22-04B	Lavatory Door Ashtrays (On outside of door)	**Y**	-	0	**A**	More than 50% may be missing or inoperative for 3 days.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-22-04A	On Nearest Flight Attendants Panel	___ LAVATORY DOOR ASHTRAY MISSING
25-22-04B	On Nearest Flight Attendants Panel	___ LAVATORY DOOR ASHTRAY MISSING

NOTE: Interior lavatory ashtrays are considered Non-essential Equipment Furnishings items.
See TOPP 40-40-08 for the NEF deferral processes.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-27-01	Heating Function of Heated Floor Panels (Passenger/Crew Doors, Emergency Exits, and Galley Areas)	**N**	4	0	**D**	**(M)** May be inoperative provided the heating elements of the affected floor panel are deactivated.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-27-01	Log Book	FLOOR HEATING ELEMENT AT THE ____ DOOR INOP

(M) PROCEDURES

25-27-01

1. To deactivate the affected heating element pull and secure the following circuit breakers:
    a. For Door 2 – on the 2000VU panel pull and secure DR AREA HTG PANELS – DR2 – CTL located at A06 and DR AREA HTG PANELS – DR2 – HTR located at A08.
    b. For Door 3 – on the 2001VU panel pull and secure DR AREA HTG PNLS – DOOR3 – CTL located at F03 and DOOR AREA HTG PNL – DOOR3 – HTR located at F05.

NOTE: Only the circuit breakers for the affected floor panels are required to be pulled and secured.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
	OVERHEAD STORAGE BIN(S)/ CABIN GALLEY STORAGE COMPARTMENTS / CLOSETS					
25-28-01A	Storage Bin(s)/ Cabin, Galley, and Lavatory Storage Compartments / Closets	**N**	-	-	**C**	**(M)(O)** May be inoperative provided: a) Affected compartment(s) is secured CLOSED, b) Associated bin or compartment is prominently placarded “UNSERVICEABLE – DO NOT USE”, c) Any emergency equipment located in the affected compartment is considered inoperative and associated MEL relief is applied, and d) Affected compartment is not used for storage of any item(s) except for those permanently affixed. NOTE: For overhead storage compartments, if no partitions are installed, the entire overhead storage compartment is considered one compartment.
25-28-01B	Storage Bin(s)/ Cabin, Galley, and Lavatory Storage Compartments / Closets	**N**	-	-	**C**	**(M)(O)** May be inoperative provided: a) Affected door(s) is (are) removed or, for retractable doors, secured in the retracted (fully open) position, b) Associated bin or compartment is not used for storage of any items, except those permanently affixed, c) Associated bin or compartment is not used for storage of a portable oxygen bottle, d) Associated bin or compartment is prominently placarded “UNSERVICEABLE – DO NOT USE”, and e) Passengers are briefed that associated bin or compartment is not used. NOTE 1: For overhead storage compartments, if no partitions are installed, the entire overhead storage compartment is considered one compartment. NOTE 2: Any emergency equipment located in the associated compartment (permanently affixed) is available for use.
25-28-01C	Storage Compartment Key Locks	**N**	-	0	**D**	**(M)** May be inoperative in the unlocked position provided doors can be secured by other means.

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-28-01D	Multi Latch/ Quarter Turn Lug Installations Compartment Locks	**Y**	-	-	**C**	One latch per compartment may be inoperative provided: a) Remaining latch(es)/lug(s) on affected compartment(s) operate normally, and b) If affected compartment is used for a galley cart, the cart remains empty.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-28-01A	On Affected Overhead Storage Bin(S)/Cabin And Galley Storage Compartments/ Closets	___ OVERHEAD STORAGE BIN(S) / CABIN AND GALLEY STORAGE COMPARTMENTS / CLOSETS INOP If applicable, placard affected emergency equipment inoperative with appropriate MEL relief
25-28-01B	On Adjacent To Overhead Storage Bin(S)/Cabin And Galley Storage Compartments/ Closets	___ OVERHEAD STORAGE BIN(S) / CABIN AND GALLEY STORAGE COMPARTMENTS / CLOSETS INOP AND DOOR(S) REMOVED
25-28-01C	On Lead Flight Attendants Panel And Affected Storage Compartment(S)	___ STORAGE COMPARTMENT KEY LOCK(S) INOP
25-28-01D	On Lead Flight Attendants Panel And Affected Storage Compartment(S).	___ STORAGE COMPARTMENT LATCH/LUG/LOCK INOP

(O) PROCEDURES

25-28-01A

Captain to brief Lead Flight Attendant/Purser:

1. Which bins are inoperative and may not be used.
2. Flight Attendant/Purser to brief passengers which bin or compartment cannot be used.
3. Any emergency equipment located in the associated compartment (permanently affixed) is NOT available for use.

25-28-01B

Captain to brief Lead Flight Attendant/Purser:

1. Which bins are inoperative and may not be used.
2. Flight Attendant/Purser to brief passengers which bin or compartment cannot be used.
3. Any emergency equipment located in the associated compartment (permanently affixed) is available for use.

Continued Next Page

(M) PROCEDURES

25-28-01A:

To secure the affected compartment(s) closed, accomplish the following:

1. Affected compartment is not used for storage of any item(s) except for those permanently affixed.
2. Any emergency equipment located in affected compartment is considered inoperative.
   a) Placard affected emergency equipment inoperative per applicable MEL relief.
3. Secure affected compartment(s) CLOSED by placing nylon reinforced strapping tape (packing tape) across the compartment(s).
4. Placard affected compartment(s) by placing a strip of Red colored OM–2 “UNSERVICEABLE – DO NOT USE” tape or equivalent across the compartment(s).

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

25-28-01B

To remove the affected door(s), accomplish the following:

1. Affected compartment is not used for storage of a portable oxygen bottle.
2. Remove the affected door.
3. Place door hardware in parts bag and attach to removed door.
4. Placard door “MUST REMAIN WITH AIRPLANE” and stow in available closet or cargo compartment as applicable. Door is to remain in closet or cargo compartment until removed by maintenance for repair or re–installation.
5. Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) diagonally across the door opening.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

25-28-01C

To secure the affected compartment(s) closed, accomplish the following:

1. Secure affected compartment(s) CLOSED by using the latch on the door.
2. If the latch on the door is inoperative, secure the affected compartment(s) CLOSED by placing nylon reinforced strapping tape (packing tape) across the compartment(s).

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
25-40-01	Lavatory Waste Receptacle Access Doors/Covers/Flapper/ Doors **"DISP.APPR.REQ'D"**	**N** 3	2	**C**	**(M)(O)** May be inoperative provided: a) Associated waste container is empty, b) Affected receptacle access doors/covers/flapper door is secured to prevent waste introduction into the receptacle, c) Lavatory is used only by crewmembers, and d) The lavatory door is locked closed and placarded: "Unserviceable – Do Not Use", NOTE 1: These provisos are not intended to prohibit lavatory use or inspections by crewmembers. Ensure lavatory door is locked closed after crew member inspection. NOTE 2: Applicable doors include all lavatory paper and linen waste receptacle enclosure access doors and disposal doors.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-40-01	On Affected Lavatory Door And On The Nearest Flight Attendants Control Panel	___ LAVATORY WASTE RECEPTACLE ACCESS DOOR/COVER/FLAPPER DOOR INOP

(O) PROCEDURES

1. Captain to brief Lead Flight Attendant/Purser that the affected lavatory door is to remain locked and not entered except for use or inspection by crewmembers.
2. Captain is to ensure the lavatory door is locked closed if crewmember inspection has been performed or if the lavatory is used by a crewmember.

(M) PROCEDURES

1. Close and lock the Lavatory Door as follows:
   a) Lift the LAVATORY sign on the outer face of the lavatory door.
   b) Move the latch under the sign until the indicator shows the door is locked (OCCUPIED).
   c) Check that the door will not open.
2. Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) diagonally across the lavatory door and across the toilet lid to prevent use.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in 1 inch black letters.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
25-45-01	Galley/Cabin Waste Receptacles Access Doors/Covers	**N** -	-	**C**	**(M)(O)** May be inoperative provided: a) The container is empty and the access is secured to prevent waste introduction into the compartment, and b) Procedures are established to ensure that sufficient galley/cabin receptacles are available to accommodate all waste that may be generated on a flight.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-45-01	On Affected Galley/Cabin Waste Receptacles Access Doors And/Or Covers	___ GALLEY/CABIN WASTE RECEPTACLES ACCESS DOOR and/or COVER IS INOP

(O) PROCEDURES

Captain to verify with Lead Flight Attendant/ Purser that sufficient galley/cabin waste receptacles are available to accommodate all waste that may be generated on the flight.

(M) PROCEDURES

1. Check the affected waste container is empty.
2. Place a strip of Red colored OM–2 UNSERVICEABLE – DO NOT USE tape or equivalent* across the affected Galley/Cabin Waste Receptacle Access Door and/or Cover.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-50-02A	Blow In/Out Panels in Cargo Compartment (FWD) **"DISP.APPR.REQ'D"**	**Y**	-	0	**C**	**(O)** May be damaged or missing provided forward cargo compartment remains empty, or verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section).
25-50-02B	Blow In/Out Panels in Cargo Compartment (AFT) **"DISP.APPR.REQ'D"**	**N**	-	0	**C**	**(M)(O)** May be damaged or missing provided aft cargo compartment remains empty, or verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section).

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-50-02A	Adjacent To ECAM Display	___ BLOW IN/OUT PANEL DAMAGED or MISSING IN FWD CARGO COMPARTMENT
25-50-02B	Adjacent To ECAM Display	___ BLOW IN/OUT PANEL DAMAGED or MISSING IN AFT CARGO COMPARTMENT. AOG PARTS CONTAINER TO REMAIN EMPTY

(O) PROCEDURES

25-50-02A

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the forward cargo compartment

25-50-02B

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the aft cargo compartment.

(M) PROCEDURES

25-50-02B

1. If panels are damaged or missing in the aft cargo compartment, verify AOG Parts Stowage Container is empty.
2. Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) across the container.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in 1 inch black letters.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-50-03A	Cargo Compartment Lining Panels (FWD) **"DISP.APPR.REQ'D"**	**Y**	-	0	**C**	**(O)** May be damaged or missing provided forward cargo compartment remains empty, or verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section).
25-50-03B	Cargo Compartment Lining Panels (AFT) **"DISP.APPR.REQ'D"**	**N**	-	0	**C**	**(M)(O)** May be damaged or missing provided aft cargo compartment remains empty, or verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section).

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-50-03A	Adjacent to ECAM display	___ LINING PANEL(S) DAMAGED or MISSING IN FWD CARGO COMPARTMENT
25-50-03B	Adjacent to ECAM display	___ LINING PANEL(S) DAMAGED or MISSING IN AFT CARGO COMPARTMENT AOG PARTS CONTAINER TO REMAIN EMPTY

(O) PROCEDURES

25-50-03A

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the forward cargo compartment.

25-50-03B

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the aft cargo compartment.

(M) PROCEDURES

25-50-03B

1. If panels are damaged or missing in the aft cargo compartment, verify AOG Parts Stowage Container is empty.
2. Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) across the container.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in 1 inch black letters.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-50-04A	Cargo Compartment Nets, Attach Points, Stanchions (Restraint Components) **"DISP.APPR.REQ'D"**	**N**	-	-	**A**	**(M)** May be inoperative, damaged or missing provided: a) Acceptable cargo loading limits from the Weight and Balance Loading Manual are observed, and b) Repairs are made prior to the completion of the next Heavy Maintenance Visit. NOTE: Reference Aircraft Loading Manual (ALM) Weight and Balance section for cargo loading limitations.
25-50-04B	Cargo Compartment Nets, Attach Points, Stanchions (Restraint Components) **"DISP.APPR.REQ'D"**	**Y**	-	0	**C**	**(O)** May be inoperative, damaged or missing provided affected cargo compartment(s) remains empty, or verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section).

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-50-04A	Adjacent To ECAM Display	___ NET(S), ATTACH POINTS, OR STANCHIONS INOPERATIVE, DAMAGED or MISSING IN ___ CARGO BIN (1, 2, 3, or 4)
25-50-04B	Adjacent To ECAM Display	___ NET(S), ATTACH POINTS, OR STANCHIONS INOPERATIVE, DAMAGED or MISSING IN ___ CARGO BIN (1, 2, 3, or 4)

(O) PROCEDURES

25-50-04B

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the affected cargo compartment.

(M) PROCEDURES

25-50-04A

When nets are damaged or missing the net section must remain unoccupied or the bulk load restrained individually. Reference Aircraft Loading Manual (ALM) Weight and Balance section for cargo loading limitations.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
25-50-05	Protection Panel of Decompression Panels at the FWD Partition Wall of FWD Cargo Compartment **"DISP.APPR.REQ'D"**	**N** -	0	**C**	**(M)** One or more may be damaged provided: a) The affected protection panel is removed if the damage prevents correct operation of the decompression panel, and b) Bulk loading is not permitted in the section between the affected protection panel and the closest divider net. NOTE 1: Tied down cargo is not considered as bulk loading. NOTE 2: MEL Instructions Section for empty cargo compartment does not apply to this relief. Cargo compartment section must remain empty unless cargo is tied down.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-50-05	Log Book	____ PROTECTION PANEL DAMAGED

(M) PROCEDURES

25-50-05

Deactivate the damaged protection panel by performing AMM Task 25-54-00-040-801.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
25-60-03	SLIDE ARMED Light Systems (At over wing emergency exits)	**Y**	2	0	**C**	**(M)(O)** May be inoperative provided: a) Associated Emergency Exit (white) SLIDE indications on ECAM DOOR/OXY page operates normally, and b) ECAM advisory message for associated EMER EXIT operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-03	Adjacent To Affected Cabin Door Light And On The Nearest Flight Attendants Control Panel	___ DOOR, SLIDE ARMED LIGHT SYSTEM IS INOP

(O) PROCEDURES

Captain to brief Lead Flight Attendant/Purser which over wing Slide Armed Light(s) is inoperative.

(M) PROCEDURES

1. Ensure the (white) “SLIDE” is adjacent to the associated Emergency Exits on the DOOR/OXY ECAM page.
2. The following procedures must be accomplished for the Fwd and Aft Emergency Exits individually.
   a) Pull down the cover flap from the emergency exit hatch and remove it. Check that the ECAM advisory is triggered “DOOR L(R) FWD(AFT) EMER EXIT”.
   b) Install the cover flap on the hatch and push it against the hatch. Check that the ECAM advisory is extinguished.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER INSTALLED	NUMBER REQUIRED FOR DISPATCH	REPAIR CATEGORY	REMARKS OR EXCEPTIONS
	SLIDE INDICATIONS ON ECAM DOOR/OXY PAGE					
25-60-04A	Passenger Doors Armed Indication (SLIDE is displayed when door slide is Disarmed) Doors Without Girt Bar Placard On Floor **"DISP.APPR.REQ'D"**	**N**	4	0	**B**	**(M)(O)** May be inoperative provided associated slide(s) is verified engaged (armed) PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
25-60-04B	Passenger Doors Not Armed Indication (SLIDE is not displayed when door slide is Armed) Doors Without Girt Bar Placard On Floor **"DISP.APPR.REQ'D"**	**N**	4	0	**C**	**(M)(O)** May be inoperative provided: a) Associated slide(s) is verified engaged (armed) PRIOR TO EACH DEPARTURE (Log Book Entry Required), and b) Aircraft is limited to Day operations only. **Repetitive Check Required (Yellow Placard)**
25-60-04C	Passenger Doors Armed Indication (SLIDE is displayed when door slide is Disarmed) Doors With Girt Bar Placard On Floor	**Y**	4	0	**B**	**(M)(O)** May be inoperative provided alternate procedures are used.
25-60-04D	Passenger Doors Not Armed Indication (SLIDE is not displayed when door slide is Armed) Doors With Girt Bar Placard On Floor **"DISP.APPR.REQ'D"**	**Y**	4	0	**C**	**(M)(O)** May be inoperative provided: a) Alternate procedures are used, and b) Aircraft is limited to Day operations only.

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-60-04E	Overwing Emergency Exits Armed Indication (SLIDE is displayed when slide is Disarmed)	**N**	2	0	**B**	**(M)** May be inoperative provided a visual check is made to verify that slide(s) is armed.
25-60-04F	Overwing Emergency Exits Not Armed Indication (SLIDE is not displayed when slide is Armed) **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative provided: a) Visual check is made to verify that slide(s) is armed, and b) Aircraft is limited to Day operations only.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-04A	Adjacent To ECAM Screen	___ DOOR, ECAM SLIDE INDICATION INOP
25-60-04B	Adjacent To ECAM Screen	___ DOOR, ECAM SLIDE INDICATION INOP
25-60-04C	Adjacent To ECAM Screen	___ DOOR, ECAM SLIDE INDICATION INOP
25-60-04D	Adjacent To ECAM Screen	___ DOOR, ECAM SLIDE INDICATION INOP
25-60-04E	Adjacent To ECAM Screen	___ OVERWING EMERGENCY EXIT, ECAM SLIDE INDICATION INOP
25-60-04F	Adjacent To ECAM Screen	___ OVERWING EMERGENCY EXIT, ECAM SLIDE INDICATION INOP

(O) PROCEDURES

25-60-04A

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

25-60-04B

1. Limit aircraft to Day operations only.
2. PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

25-60-04C

Captain to brief Lead Flight Attendant/ Purser to:

1. Make sure that the girt bar is in the ARMED position by verifying that the visual indicator comes into view and moves to the position shown by the arrow on the placard installed on the floor. Refer to Figure 25–60–04C/D.
2. Notify flight deck crew when associated passenger door(s) have been armed for departure and disarmed after flight.

25-60-04D

Limit aircraft to Day operations only.

1. Captain to brief Lead Flight Attendant/ Purser to:
   a) Make sure that the girt bar is in the ARMED position by verifying that the visual indicator comes into view and moves to the position shown by the arrow on the placard installed on the floor. Refer to Figure 25–60–04C/D.
2. Notify flight deck crew when associated passenger door(s) have been armed for departure and disarmed after flight.

25-60-04F

Limit aircraft to Day operations only.

Continued Next Page

(M) PROCEDURES

25-60-04A, 25-60-04B

1. PRIOR TO EACH DEPARTURE:

NOTE: To accomplish this procedure two individuals will be needed (One individual may be a crewmember). One individual will need to operate the control handle, while maintenance personnel will need to verify the girt bar position. (Ref. Figure 25–60–04A/B.1 & 25–60–04A/B.2)

2. Close the affected passenger/crew door.
3. Remove the SLIDE ARMING SAFETY PIN from the emergency control handle.
4. Put the control handle of the emergency escape slide in the ARMED position.

WARNING: DO NOT OPEN THE PASSENGER/CREW DOOR FULLY WITH THE DOOR EMERGENCY CONTROL HANDLE IN THE ARMED POSITION. IF YOU DO, YOU WILL START THE SEQUENCE OF STEPS THAT PULLS THE INFLATABLE ASSEMBLY OUT OF THE PACK ASSEMBLY.

5. Carefully lift the door with the control handle (2).
6. Hold the door to prevent it from opening fully.
7. Make sure that the girt bar (10) has engaged correctly in the floor fittings (26).
8. Carefully lower and lock the door with the control handle (2).
9. After completing the procedure, maintenance personnel need to exit any door other than the affected door.
10. Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

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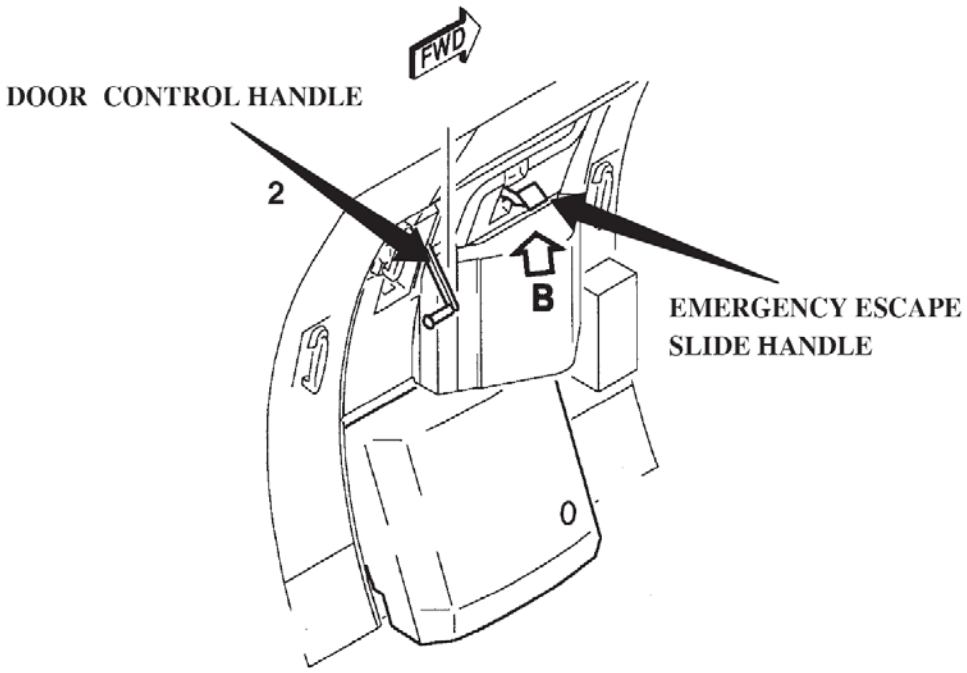

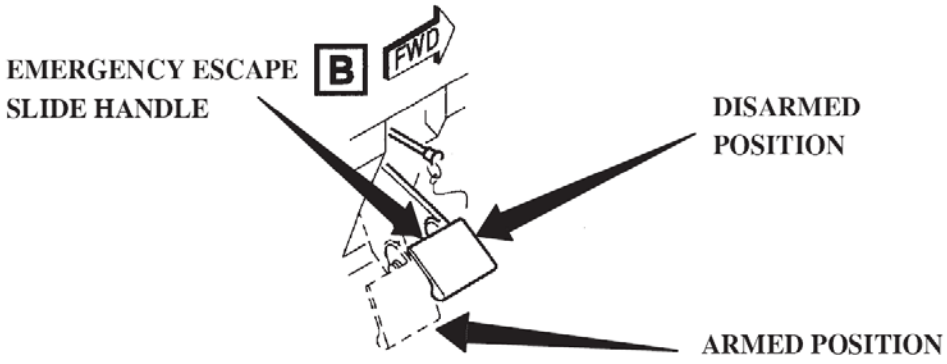

Figure 25–60–04A/B.1
Emergency Escape Slide Handle Location

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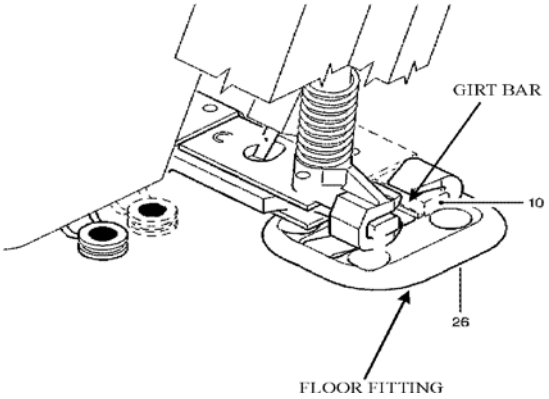
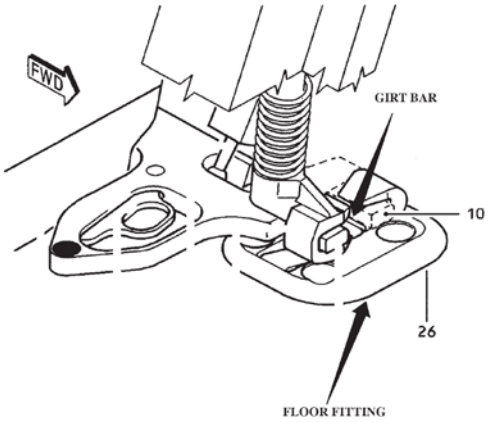


View of Girt Bar on Slide equipped door



View of Girt Bar on Slide Raft equipped door

Figure 25-60-04A/B.2

25-60-04C, 25-60-04D

1. Close the affected passenger/crew door.
2. Remove the SLIDE ARMING SAFETY PIN from the emergency control handle.
3. Put the control handle of the emergency escape slide in the ARMED position.
4. Make sure that the girt bar is in the ARMED position by verifying that the visual indicator comes into view and moves to the position shown by the arrow on the placard installed on the floor. Refer to Figure 25–60–04C/D.
5. Put the control handle of the emergency escape slide in the DISARMED position.
6. Make sure that the girt bar is in the DISARMED position by verifying that the visual indicator goes out of view and moves away from the arrow on the placard installed on the floor. Refer to Figure 25–60–04C/D.
7. Install the SLIDE ARMING SAFETY PIN in the emergency control handle to lock it in the DISARM position.

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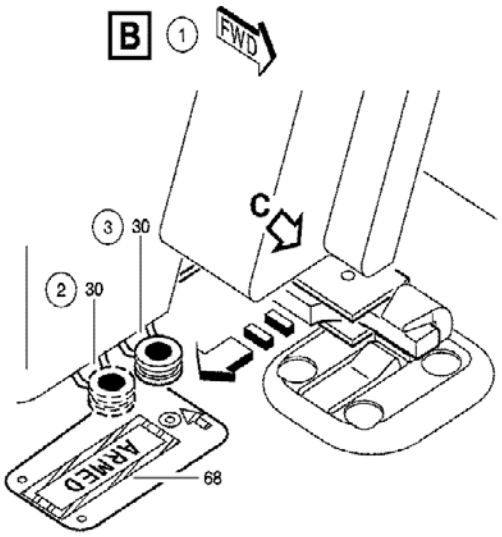
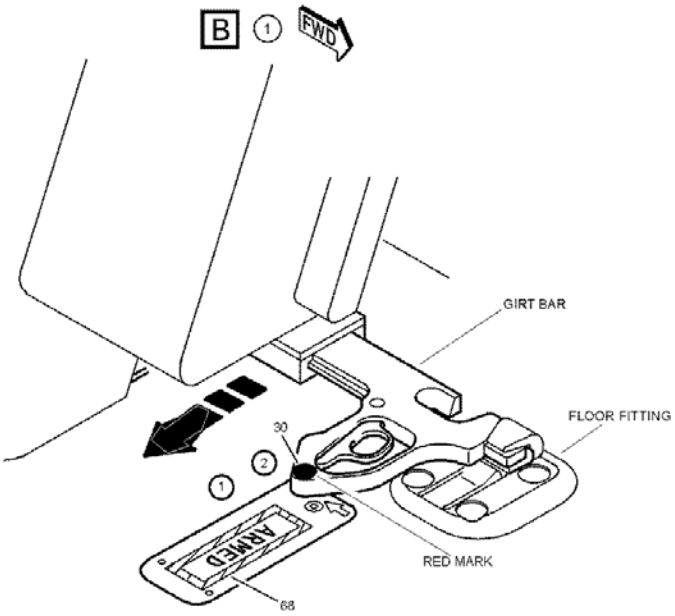


NOTE:

1. TELESCOPIC FORK NOT SHOWN
2. DISARMED/MANUAL POSITION
3. ARMED/AUTOMATIC POSITION

Slide Girt Bar Visual Indicator (above)



NOTE:

1. DISARMED POSITION - GIRT BAR NOT ENGAGED IN FLOOR FITTINGS
2. ARMED POSITION - GIRT BAR ENGAGED IN FLOOR FITTINGS

Slide Raft Girt Bar visual Indicator

Figure 25-60-04C/D

Continued Next Page

25-60-04E, 25-60-04F

1. Verify affected Overwing Emergency Exit Slide is armed.

   a) The following procedures must be accomplished for the Fwd and Aft Emergency Exits individually.

      1) Pull down the cover flap from the emergency exit hatch and remove it. Check that the white indication light “SLIDE ARMED” on the sidewall is on.

      2) If not, push the latch pin against the spring and turn its head with a hexagonal socket wrench a quarter turn clockwise (latch pin is extended) and check that the white indication light “SLIDE ARMED” on the sidewall comes on.

         NOTE: A minimal force may be required if a hexagonal wrench is used.

      3) Install the cover flap on the hatch and push it against the hatch. Check that the white indication light “SLIDE ARMED” on the sidewall goes off.

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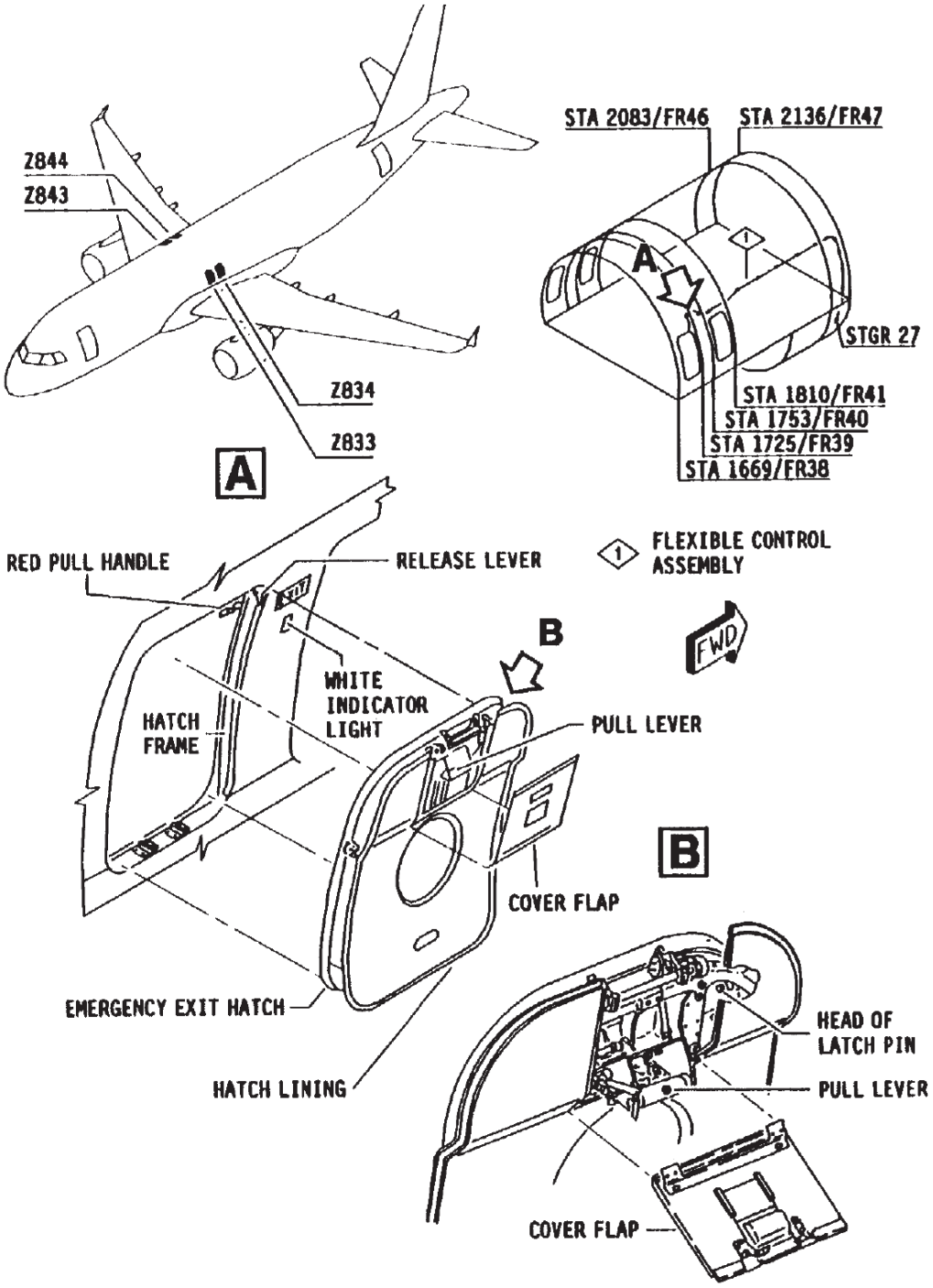

Figure 25–60–04E/F EMERGENCY EXITS SLIDE INDICATION

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-60-07	"Fasten Seat Belts While Seated" Signs or Placards	**Y**	-	-	**C**	**(M)** One or more may be illegible or missing provided: a) A legible sign or placard is visible from each occupied passenger seat, and b) Each seat unable to meet the requirements of proviso a) is placarded inoperative. If applicable, ensure the provisos in the Remarks & Exceptions column of MEL item 25–21–01A are applied.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-07	On FWD Flight Attendants Control Panel	___ FASTEN SEAT BELTS WHILE SEATED SIGN IS MISSING or ILLEGIBLE

(M) PROCEDURES

If a seat is unable to meet the requirements of proviso a), *Maintenance is Required and Flight Crew May NOT Placard*

If applicable, defer affected passenger seat(s) inoperative per MEL Item 25–21–01A.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-60-08	Flashlight and Holders (Flight Deck or Cabin)	**Y**	-	-	**C**	May be inoperative or missing provided crewmember assigned to the associated seat has a flashlight with equivalent characteristics readily available.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-08	On Affected Flight Attendant's Control Panel	___ FLIGHT ATTENDANT'S FLASHLIGHT AND/OR HOLDER ASSEMBLY IS INOP OR MISSING

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-60-11	Slide Raft Lanyards (White and/or Yellow) **"DISP.APPR.REQ'D"**	**N**	8	0	**C**	**(M)(O)** May be missing or damaged beyond serviceable limits provided aircraft is not operated on extended overwater flights.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-11	On The Affected Slide/Raft Container	___ SLIDE RAFT LANYARD(S) INOP – EXTENDED OVERWATER FLIGHTS PROHIBITED

(O) PROCEDURES

1. Do not operate aircraft on extended overwater flights.
2. Brief cabin crew on the overwater equipment that is missing or damaged beyond serviceable limits.

(M) PROCEDURES

1. If the lanyard is chaffed, abraded or severed less than 25% of the actual width or cross section area, it is considered serviceable. No action is required.
2. If the lanyard is chaffed, abraded or severed greater than 25% of the actual width or cross section area, it is considered unserviceable and must be replaced or placarded inoperative.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
	EMERGENCY MEDICAL EQUIPMENT					
25-60-13A	Automated External Defibrillator (AED) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** May be incomplete, missing or inoperative provided: a) AED is resealed in a manner that will identify it as a unit that cannot be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within 1 landing.
25-60-13B	Automated External Defibrillator (AED) (Battery Low and/or Service Indication)	**Y**	1	0	**C**	**(M)(O)** May display fault indication provided AED is checked PRIOR TO EACH DEPARTURE to ensure AED is usable for flight. **Repetitive Check Required (Yellow Placard)**
25-60-13C	Automated External Defibrillator (AED) (Electrode Sets)	**Y**	2	1	**C**	**(M)** One set may be inoperative or missing.
25-60-13D	EEMK (Enhanced Emergency Medical Kit) **"DISP.APPR.REQ'D"**	**Y**	2	0	**A**	**(O)** Both may be incomplete, missing or inoperative provided: a) EEMK is resealed in a manner that will identify it as a unit that can not be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within 1 landing.
25-60-13E	EEMK (Enhanced Emergency Medical Kit)	**Y**	2	1	**D**	May be incomplete, missing or inoperative.

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	EMERGENCY MEDICAL EQUIPMENT (CONTINUED)					
25-60-13F	First Aid Kits **(For aircraft without AA 2500-01772)** **"DISP.APPR.REQ'D"**	**Y**	2	1	**A**	**(O)** May be incomplete or missing provided: a) If a First Aid Kit is available but not fully serviceable, it is resealed in a manner that will identify it as a unit that cannot be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within 1 landing.
25-60-13G	First Aid Kits **(For aircraft with AA 2500-01772)** **"DISP.APPR.REQ'D"**	**Y**	3	2	**A**	**(O)** May be incomplete or missing provided: a) If a First Aid Kit is available but not fully serviceable, it is resealed in a manner that will identify it as a unit that cannot be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within 1 landing.
25-60-13H	First Aid Kits Broken Seals **"DISP.APPR.REQ'D"**	**Y**	2	1	**B**	**(O)** A First Aid Kit(s) with a broken seal may continue in service provided it is inventoried PRIOR TO EACH DEPARTURE for required contents. **Repetitive Check Required (Yellow Placard)**
25-60-13I	Red Pouch (Medical Accessory Pouch)	**Y**	1	0	**D**	May be incomplete, missing, or inoperative. NOTE: This Medical Accessory Pouch is in excess of those required by FAR.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-13A	On Locked AED Container	AUTOMATED EXTERNAL DEFIBRILLATOR (AED) INCOMPLETE, MISSING OR INOP
25-60-13B	On Lead Flight Attendants Control Panel and On Locked AED Container	AUTOMATED EXTERNAL DEFIBRILLATOR BATTERY LOW AND/OR SERVICE INDICATION DISPLAYED
25-60-13C	On Lead Flight Attendants Control Panel and On Locked AED Container	AUTOMATED EXTERNAL DEFIBRILLATOR ELECTRODE SET INOP OR MISSING
25-60-13D	Logbook	BOTH EEMKs INCOMPLETE / MISSING / INOP
25-60-13E	Logbook	EEMK INCOMPLETE / MISSING / INOP
25-60-13F	Across The Cover/Kit Forward Seam Of Affected First Aid Kit If First Aid Kit is missing: Place tab adjacent to affected First Aid Kit placard (Symbol)	FIRST AID KIT INCOMPLETE OR MISSING
25-60-13G	Across The Cover/Kit Forward Seam Of Affected First Aid Kit If First Aid Kit is missing: Place tab adjacent to affected First Aid Kit placard (Symbol)	FIRST AID KIT INCOMPLETE OR MISSING
25-60-13H	On First Aid Kit	FIRST AID KIT HAS BEEN OPENED (SEAL BROKEN)
25-60-13I	Logbook	RED POUCH (MEDICAL ACCESSORY POUCH) INOP / MISSING

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(O) PROCEDURES

25-60-13A

The AED is identified as not being fully serviceable by writing AUTOMATED EXTERNAL DEFIBRILLATOR (AED) INCOMPLETE on an Aircraft Placard and placing it on the AED Metal Enclosure making sure not to cover the viewing ports.

25-60-13B

Captain to brief Lead Flight Attendant/Purser that AED Low Battery and/or Service Indication is displayed and that PRIOR TO EACH DEPARTURE to remove the AED, open the cover and accomplish a power up test and/or observation on the Device Key Panel. This will verify serviceability of the AED.

Reference In-Flight Services On-Board Manual Chapter 7 Emergency/Cabin Checklist for AED displays allowed for dispatch.

25-60-13D

1. Captain to brief Lead Flight Attendant/Purser that both EEMK's are incomplete, inoperative, or missing.
2. If seal is broken, reseal with green seal.

25-60-13E

1. Captain to brief Lead Flight Attendant/Purser that one EEMK is incomplete, inoperative, or missing.
2. After use, reseal with green seal.

25-60-13F, 25-60-13G

The First Aid Kit is identified as not being fully serviceable by installing a green seal (if available) or by writing FIRST AID KIT INCOMPLETE on an Aircraft Placard and place it across the Cover/Kit Forward Seam of the affected First Aid Kit.
Captain to brief Lead Flight Attendant/Purser that one First Aid Kit is not fully serviceable or is missing.

NOTE: If the Kit is available but not fully serviceable, it may be used in an emergency.

25-60-13H

Captain to brief Lead Flight Attendant/Purser that one or more First Aid Kits have broken seals and must be inventoried PRIOR TO EACH DEPARTURE.

Continued Next Page

(M) PROCEDURES

25-60-13B

1. Unlock AED kit container using cabin access key and remove AED.
2. Verify the following AED indicator displays:
   a) Low Battery Indicator illuminates on the readiness display. (Handle)
      1) Open the AED carrying case lid to view the device key panel.
      2) If battery indicator illuminates on the device key panel.
         a. LOW BATTERY displays on the LCD.
         b. Battery is low but AED is still serviceable and can be used per MEL 25–60–13B.
      3) If battery indicator is flashing on the device key panel.
         a. REPLACE BATTERY displays on the LCD.
         b. AED is unserviceable until battery is replaced. Apply MEL 25–60–13A.
   b) Service Indicator (Wrench) illuminates on the readiness display. (Handle)
      1) Open the AED carrying case lid to view the device key panel.
      2) Turn the AED unit on by pushing the ON/OFF button on the device key panel. An internal self test is initiated.
      3) If service Indicator (Wrench) illuminates on the device key panel.
         a. The AED is still serviceable and can be used per MEL 25–60–13B.
      4) If indicator (Wrench) is flashing on the device key panel.
         a. AED is unserviceable and cannot be used. Apply MEL 25–60–13A
         b. CALL SERVICE displays on the LCD.
   c) Turn off the AED unit by pushing the ON/OFF button on the device key panel.
3. Return AED to kit container and lock.

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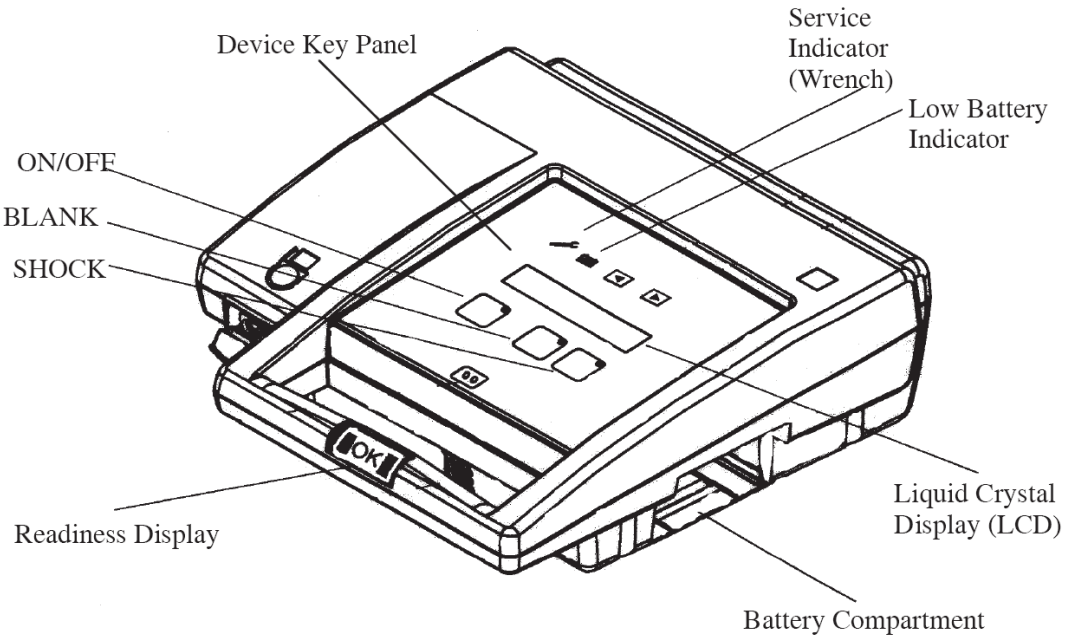

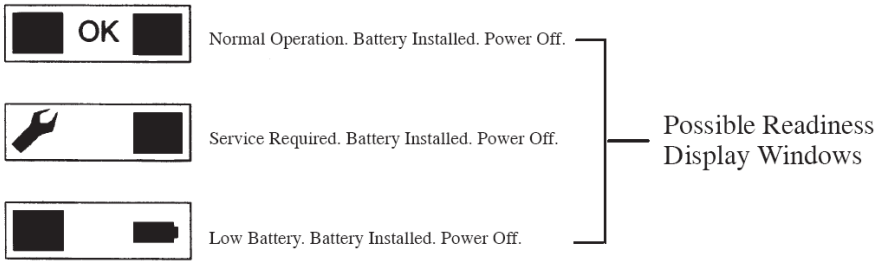

Automated External Defibrillator (AED)

Figure 25-60-13B

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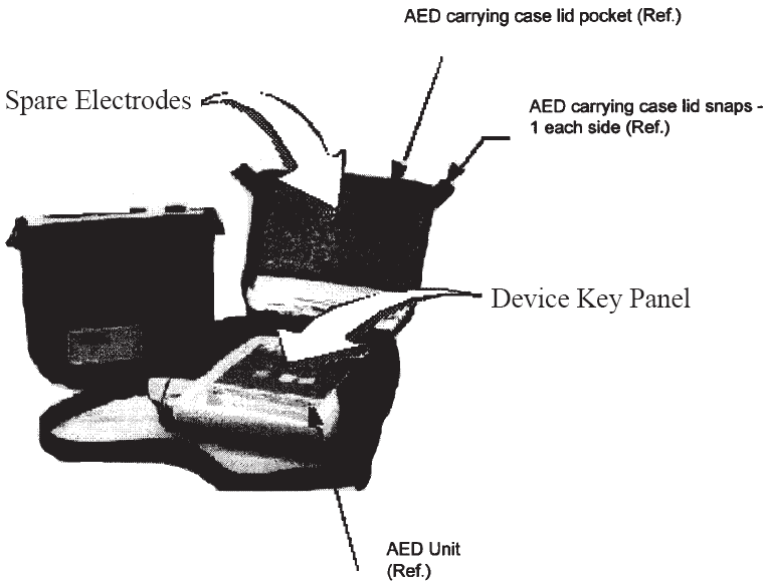
25-60-13C

1. Replace inoperative or missing electrodes with the spare set located in the pocket attached to the inside lid of the AED carrying case.
2. Discard any previously used or inoperative electrodes.
3. The AED is identified as not being fully serviceable by writing AUTOMATED EXTERNAL DEFIBRILLATOR ELECTRODE SET INOP OR MISSING on an Aircraft Placard and placing it on the AED Metal Enclosure making sure not to cover the viewing ports.



	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ESCAPE LIFE LINES					
25-60-14A Overwing A/C 3101-3171 A/C 3209-3278 **"DISP.APPR.REQ'D"**	**Y** **Y**	2 4	0 0	**D** **D**	**(O)** May be damaged or missing provided aircraft is not operated on extended overwater flights.
25-60-14B Escape Life Lines Flight Deck Escape Life Line Cover Plates	**Y**	2	0	**C**	May be damaged or missing.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-14A	On Fwd Flight Attendants Control Panel	___ OVERWING ESCAPE LIFE LINE DAMAGED OR MISSING
25-60-14B	On Applicable Pilot's Glare Shield	___ FLIGHT DECK ESCAPE LIFE LINE COVER PLATES DAMAGED OR MISSING

(O) PROCEDURES

25-60-14A

1. Do not operate aircraft on extended overwater flights.
2. Brief cabin crew on the overwater equipment that is missing.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
	FLOTATION EQUIPMENT					
25-60-16A	Passenger/Crew Life Vest (If equipped) **"DISP.APPR.REQ'D"**	**N**	-	-	**C**	**(M)** One life vest required for each passenger and crewmember. If a Passenger Life Vest is not available, seat(s) must be placarded "UNSERVICEABLE – DO NOT USE" and deferred per MEL 25-21-01A.
25-60-16B	Passenger Life Vests (If equipped) **"DISP.APPR.REQ'D"**	**Y**	-	-	**C**	May be inoperative or missing provided aircraft is not operated on extended overwater flights. NOTE: On aircraft without life vest installed, seat cushions are used as a flotation device for overwater operations.
25-60-16C	Spare Life Vests (If equipped)	**Y**	-	-	**D**	May be inoperative or missing.
25-60-16D	Infant Life Vest (If equipped)	**Y**	-	-	**D**	**(O)** May be inoperative or missing.
25-60-16E	Life Vests Tamper Proof Seal (If equipped) **"DISP.APPR.REQ'D"**	**N**	-	-	**B**	**(M)** The seal on life vest pouch(es) may be broken provided pouch contents are checked PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
25-60-16F	Life Rafts (If equipped) **"DISP.APPR.REQ'D"**	**Y**	3	-	**D**	**(O)** May be inoperative or missing provided aircraft is not operated on extended overwater flights. NOTE: Performance corrections must be applied if Life Raft(s) is removed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-16A	On Lead Flight Attendants Control Panel	___ LIFE VEST MISSING And if applicable, SEAT MAY NOT BE OCCUPIED
25-60-16B	On Lead Flight Attendants Control Panel	___ LIFE VEST MISSING. SEAT MAY NOT BE OCCUPIED FOR EXTENDED OVERWATER FLIGHTS
25-60-16C	On Lead Flight Attendants Control Panel	SPARE LIFE VEST INOP / MISSING
25-60-16D	On Lead Flight Attendants Control Panel	INFANT LIFE VEST INOP / MISSING
25-60-16E	Adjacent To Lead Flight Attendants Control Panel	___ LIFE VEST SEAL BROKEN
25-60-16F	Logbook	___ Life Raft INOP / Missing

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(O) PROCEDURES

25-60-16D
One life vest or other approved floatation means is required for each occupant, including infants. On aircraft equipped with single cell adult life vests, an infant life vest is normally available for each occupant under 35 pounds for extended overwater operations. In the event that there are not enough infant life vests onboard for the extended overwater operation and all attempts have been made to locate and board additional infant life vests, notify an Airport Customer Service (ACS) Agent so that they can initialize their passenger handling procedures.

NOTE: Infant life vests are not installed on over-water configured A319 aircraft. Universal passenger life vest may be used on passengers of less than 35 lbs.

25-60-16F
If raft is missing, apply the following performance corrections:

25-60-16F	**LIFE RAFTS REMOVED OR MISSING**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	Extended Overwater Operations Prohibited
NOTES	None
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** None **LANDING** None **OTHER CORRECTIONS (Manual Weight & Balance Worksheet only)** Use applicable OEW correction for “Life Raft Removed” in ALM – Weight and Balance Section.

(M) PROCEDURES

25-60-16A
The passenger seat(s) with an inoperative or missing life vest must be restricted from use by placarding with OM–2, UNSERVICEABLE – DO NOT USE tape or equivalent* and deferring seat per MEL 25-21-01A.

* An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

25-60-16E
PRIOR TO EACH DEPARTURE:
1. For a missing seal, check pouch contents to ensure a life vest exists and no foreign objects or matter have been inserted into the pouch; make sure the overhaul date on the outside of the pouch and the vest are the same. Refer to AMM 25-66-52-200-801 for seal configuration.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-60-17A	Overwater Survival Kits Broken Seal **"DISP.APPR.REQ'D"**	**Y**	4	4	**D**	**(O)** May continue in service after being opened (seal broken) provided it is inventoried prior to each overwater departure for minimum contents.
25-60-17B	Overwater Survival Kits **"DISP.APPR.REQ'D"**	**Y**	4	0	**C**	**(O)** May be inoperative or missing provided: a) Aircraft is not operated on extended overwater flights, b) Operations solely within the state of Alaska over uninhabited areas are Not Authorized, and c) Dispatch is prohibited for flights to and from Alaska.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-60-17A	On Overwater Survival Kit	___ OVERWATER SURVIVAL KIT HAS BEEN OPENED (SEAL BROKEN)
25-60-17B	On Overwater Survival Kit Storage Bin	___ OVERWATER SURVIVAL KIT INOPERATIVE OR MISSING

(O) PROCEDURES

25-60-17A

Inventory overwater survival kit prior to each overwater departure to ensure it contains the minimum required items as follows:

1. One hand inflation pump.
2. One canopy and pole assembly.
3. One small plastic sealed module.
4. One large plastic sealed module.

NOTE: If the plastic sealed module's plastic cover is intact, the contents are considered secure and no further inventory is necessary.

25-60-17B

1. Brief cabin crew on the overwater equipment that is missing.
2. Do not operate aircraft on extended overwater flights.
3. Operations solely within the state of Alaska over uninhabited areas are Not Authorized, and
4. Dispatch is prohibited for flights to and from Alaska.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
25-61-01A	Emergency Locator Transmitter (ELT) (ADT 406 S) After completion of EO 2560-01357 **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One may be inoperative or missing provided: a) Departures to a country other than the United States or Canada are Not Authorized, and b) Aircraft is not operated on extended overwater flights.
25-61-01B	Emergency Locator Transmitter (ELT) (ADT 406 S) After completion of EO 2560-01357 **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** Both may be inoperative or missing provided: a) Departures to a country other than the United States or Canada are Not Authorized, and b) Aircraft is not operated on extended overwater flights. c) Operations solely within the state of Alaska over uninhabited areas are Not Authorized, and d) Dispatch is prohibited for flights to and from Alaska.
25-61-01C	Emergency Locator Transmitter (ELT) (ADT 406 S **Plastic Cover**) After completion of EO 2560-01357	**Y**	2	0	**C**	**(O)** One or both may be damaged or missing.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-61-01A	On Emergency Locator Transmitter Storage Compartment Door	___ EMERGENCY LOCATOR TRANSMITTER INOPERATIVE or MISSING
25-61-01B	On Emergency Locator Transmitter Storage Compartment Door	BOTH EMERGENCY LOCATOR TRANSMITTERS INOPERATIVE or MISSING
25-61-01C	On Emergency Locator Transmitter Storage Compartment Door	___ EMERGENCY LOCATOR TRANSMITTER(S) PLASTIC COVER DAMAGED or MISSING

(O) PROCEDURES

25-61-01A

1. Captain to brief Lead Flight Attendant/Purser on the overwater equipment that is inoperative or missing.
2. Do not operate aircraft on extended overwater flights.

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25-61-01B

1. Captain to brief Lead Flight Attendant/Purser on the equipment that is inoperative or missing.
2. Do not operate aircraft on extended overwater flights.
3. Operations solely within the state of Alaska over uninhabited areas are Not Authorized, and
4. Dispatch is prohibited for flights to and from Alaska.

25-61-01C

Captain to brief Lead Flight Attendant/Purser to inspect the affected ELT to ensure the ON/OFF/ARMED switch is in the ARMED position.

	NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH	
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
25-90-01	Printed Supplemental Safety Information	**Y**	-	**C**	**(M)(O)** May be missing or damaged provided: a) Safety Information Card is located in convenient locations for use of each passenger, b) Cards cannot be missing from each exit seat, and c) Any seat(s) or row(s) of seats must be blocked and deferred per MEL 25-21-01A where a Safety Information Card is not located in convenient locations for use of each passenger.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-90-01	Log book	SAFETY INFORMATION CARD(S) MISSING AT _____

(O) PROCEDURES

1. Captain to brief Lead Flight Attendant/Purser on the location of missing or damaged Safety Information Card(s).

(M) PROCEDURES

1. Safety Information Cards must be available at each exit seat.
2. Safety Information Cards must be placed in a convenient location for use by each passenger.
3. Defer any passenger seat per 25-21-01A if a Safety Information Card cannot be placed in a convenient location for use by passenger occupying the seat.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
PERSONAL ELECTRONIC DEVICE (PED) MOUNTS					
25-99-01A PED Mount Administrative Control Item	**Y**	-	-		Reconfigure cockpit for two (2) operative PED mounts. See TOPP 40-40-05 for instructions.
25-99-01B PED Mount **"DISP.APPR.REQ'D"** Administrative Control Item	**Y**	-	-		Reconfigure cockpit for one (1) operative PED mount. See TOPP 40-40-05 for instructions.
25-99-01C PED Mount **"DISP.APPR.REQ'D"** Administrative Control Item	**Y**	-	-		Reconfigure cockpit for zero (0) operative PED mounts. See TOPP 40-40-05 for instructions.

MEL ITEM	TAB LOCATION	PLACARD TEXT
25-99-01A	Log book	Reconfigured PED mounts per TOPP 40-40-05
25-99-01B	Log book	Reconfigured PED mounts per TOPP 40-40-05
25-99-01C	Log book	Reconfigured PED mounts per TOPP 40-40-05

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NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY					
26-26-00A	Fault(s) indicated by SDCU (For A319/A320 Aircraft)	**Y**	-	-	**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
26-26-00B	Fault(s) indicated by SMOKE (For A321 Aircraft)	**Y**	-	-	**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-26-00A	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “SDCU” DISPLAYED
26-26-00B	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “SMOKE” DISPLAYED

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
26-12-01	Engine Fire Detection Systems Loops	**Y**	4	2	**C**	**(O)** One loop on each engine may be inoperative provided engine fire test is performed PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-12-01	Adjacent To ENG Fire Test Switch On Overhead ENG FIRE Panel	___ ENG FIRE DETECTION LOOP ___ INOP

(O) PROCEDURES

Engine Fire Warning Test must be accomplished on associated engine PRIOR TO EACH DEPARTURE.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-12-02	FIRE Lights On ENG Control Panel	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-12-02	Adjacent To Affected Engine FIRE Light On Engine Control Panel	___ ENG FIRE LIGHT INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ENG FIRE PB LIGHTS 26-12-03 Bulbs/LEDs	**Y**	16	8	**C**	Four bulbs/LEDs in each pushbutton switch may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-12-03	Adjacent To Affected ENG FIRE Pb/Light On Overhead ENG FIRE Panel	___ BULB/LED IN ___ ENG FIRE PB/LIGHT INOP

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
26-13-01A	APU Fire Detection System	**Y**	2	1	**C**	Detection loop (B) may be inoperative provided APU fire test is performed before each APU start. **Repetitive Check Required (Yellow Placard)**
26-13-01B	APU Fire Detection System **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	Detection loop (A) may be inoperative provided: a) APU fire test is performed before each APU start, and b) During ground operations, APU condition is monitored in the cockpit. NOTE: APU Auto Fire Extinguishing feature not available. When the flight crew leaves the aircraft, maintenance must monitor the APU. If maintenance is not available, the flight crew must shut down the APU. **Repetitive Check Required (Yellow Placard)**
26-13-01C	APU Fire Detection System **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** Both loops (A and B) may be inoperative provided APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-13-01A	Adjacent To APU Fire Detection Test Switch And The APU MASTER Switch On The Pilot's Overhead Panel	APU FIRE DETECTION LOOP B INOP
26-13-01B	Adjacent To APU Fire Detection Test Switch And The APU MASTER Switch On The Pilot's Overhead Panel	APU FIRE DETECTION LOOP A INOP
26-13-01C	One Tab Adjacent To APU Fire Detection Test Switch On Overhead APU FIRE Panel And One Tab Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU FIRE DETECTION SYSTEM INOP

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(O) PROCEDURES

26-13-01C

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures; If an APU takeoff is specified on the WDR reference AOM VOL 1 Packs Off For Takeoff.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	APU FIRE PB LIGHT					
26-13-02A	Bulbs/LEDs	**Y**	8	4	**C**	Up to four bulbs/LEDs in push button may be inoperative.
26-13-02B	Bulbs/LEDs **"DISP.APPR.REQ'D"**	**Y**	8	0	**C**	**(O)** More than four bulbs/LEDs may be inoperative provided APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-13-02A	Adjacent To APU Fire Detection Test Switch On Overhead APU FIRE Panel	___ BULB/LED IN APU FIRE PB/LIGHT INOP
26-13-02B	Adjacent To APU Fire Detection Test Switch On Overhead APU FIRE Panel And One Tab Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU FIRE PB LIGHT INOP DO NOT USE APU

(O) PROCEDURES

26-13-02B

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Procedures section for External Air/CrossBleed Start procedures.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
26-15-01	Avionic Smoke Detection System **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** May be inoperative for three landings only.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-15-01	Adjacent To SMOKE Light On Overhead EMER ELEC PWR Panel	AVIONICS SMOKE DETECTION SYSTEM INOP

(O) PROCEDURES

In case of electrical smoke in flight, apply AVIONICS SMOKE procedure in QRH Chapter 8.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-16-03	Smoke Detectors in FWD Cargo Compartment **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided procedures are used to ensure the FWD cargo compartment remains empty, or is verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section). NOTE: Failure of a single detector in each cavity is indicated by a MAINTENANCE STATUS message. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-16-03	Adjacent To FWD Cargo Compartment SMOKE Light On Overhead Cargo Compartment Smoke Panel	FWD CARGO COMPARTMENT SMOKE DETECTORS INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the FWD cargo compartment.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
26-16-04	Smoke Detectors in AFT Cargo Compartment **"DISP.APPR.REQ'D"**	**N**	4	0	**C**	**(M)(O)** May be inoperative provided procedures are used to ensure the AFT cargo compartment remains empty, or is verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section). NOTE: Failure of a single detector in each cavity is indicated by a MAINTENANCE STATUS message. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-16-04	Adjacent To Aft Cargo Compartment SMOKE Light On Overhead Cargo Compartment Smoke Panel	___ AFT CARGO COMPARTMENT SMOKE DETECTOR(S) INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the AFT cargo compartment.

(M) PROCEDURES

1. Verify AOG Parts Stowage Container in aft cargo compartment is empty.
2. Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) across the container.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in 1 inch black letters.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-17-01	Lavatory Smoke Detection System **"DISP.APPR.REQ'D"**	**N**	3	2	**C**	**(M)(O)** For one lavatory the smoke detector system may be inoperative provided: a) Lavatory waste receptacle is empty, b) Lavatory door is locked and placarded, UNSERVICEABLE – DO NOT USE, and c) Lavatory is used only by crewmembers. NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers. Ensure lavatory door is locked closed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-17-01	On FWD FLT Attendants Panel	___ LAVATORY SMOKE DETECTOR INOP LAVATORY LOCKED AND PLACARDED UNSERVICEABLE – DO NOT USE

(O) PROCEDURES

1. Captain to brief Lead Flight Attendant/Purser that the affected lavatory door is to remain locked and not entered except for use or inspection by crewmembers.
2. Captain is to ensure the lavatory door is locked closed if crewmember inspection has been performed or if the lavatory is used by a crewmember.

(M) PROCEDURES

1. Check that the lavatory waste container is empty.
2. Close and lock the Lavatory door as follows:
   a) Lift the LAVATORY sign on the outer face of the lavatory door.
   b) Move the latch under the sign until the indicator shows the door is locked (OCCUPIED).
   c) Check that the door will not open.
3. Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) ON the lavatory door. DO NOT tape shut door shut. This allows crew members to access lavatory.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in 1 inch black letters.
4. Place a strip of 2 inch wide masking tape with the words "CREW USE ONLY" printed legibly in 1 inch black letters ON the lavatory door. DO NOT tape door shut. This allows crew members to access lavatory.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
26-21-01	Engine AGENT 1 & 2 DISCH Light Systems **"DISP.APPR.REQ'D"**	**N**	4	2	**C**	**(M)(O)** One may be inoperative for each engine provided associated bottle(s) is verified properly charged before the FIRST FLIGHT OF EACH DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-21-01	Adjacent To ENG AGENT DISCH Light On Overhead ENG FIRE Panel	___ ENG, AGENT ___ DISCH LIGHT INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required before the FIRST FLIGHT OF EACH DAY.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. DAILY CHECK (BEFORE FIRST FLIGHT OF EACH DAY):
   a) Accomplish bottle pressure check from MM 26–21–00, page 401 on affected system.
   b) If the bottle pressure check is NOT OK, you must do the weight check of the affected bottle by performing the following:
   c) To deactivate Engine Agent 1 & 2 Discharge Light systems, accomplish the following:
      1) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL1/SQUIB/A location Q43.
      2) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL2/SQUIB/A location Q41.
      3) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL1/ SQUIB/B location Q44.
      4) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL2/ SQUIB/B location Q42.
   d) Remove fire extinguisher bottle to be verified.
   e) Disconnect electrical connector from cartridge and put a blanking cap on cartridge and on the electrical connector.
   f) Verify bottle weight: weight must be equivalent to weight indicated on appropriate label minus 50 grams max.

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NOTE: Weight indicated on the label doesn't include discharge head weight (discharge head weight is 130 grams).

NOTE: Grams to ounces conversion = number of grams times 0.03527.

g) Install fire extinguisher bottle.

h) Remove blanking cap from cartridge and electrical connector and install electrical connector on cartridge.

i) To activate Engine Agent 1 & 2 Discharge Light systems, accomplish the following:

1) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL1/SQUIB/A location Q43.

2) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL2/SQUIB/A location Q41.

3) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL1/ SQUIB/B location Q44.

4) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL2/ SQUIB/B location Q42.

j) Perform engine fire test and check it is successful.

k) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

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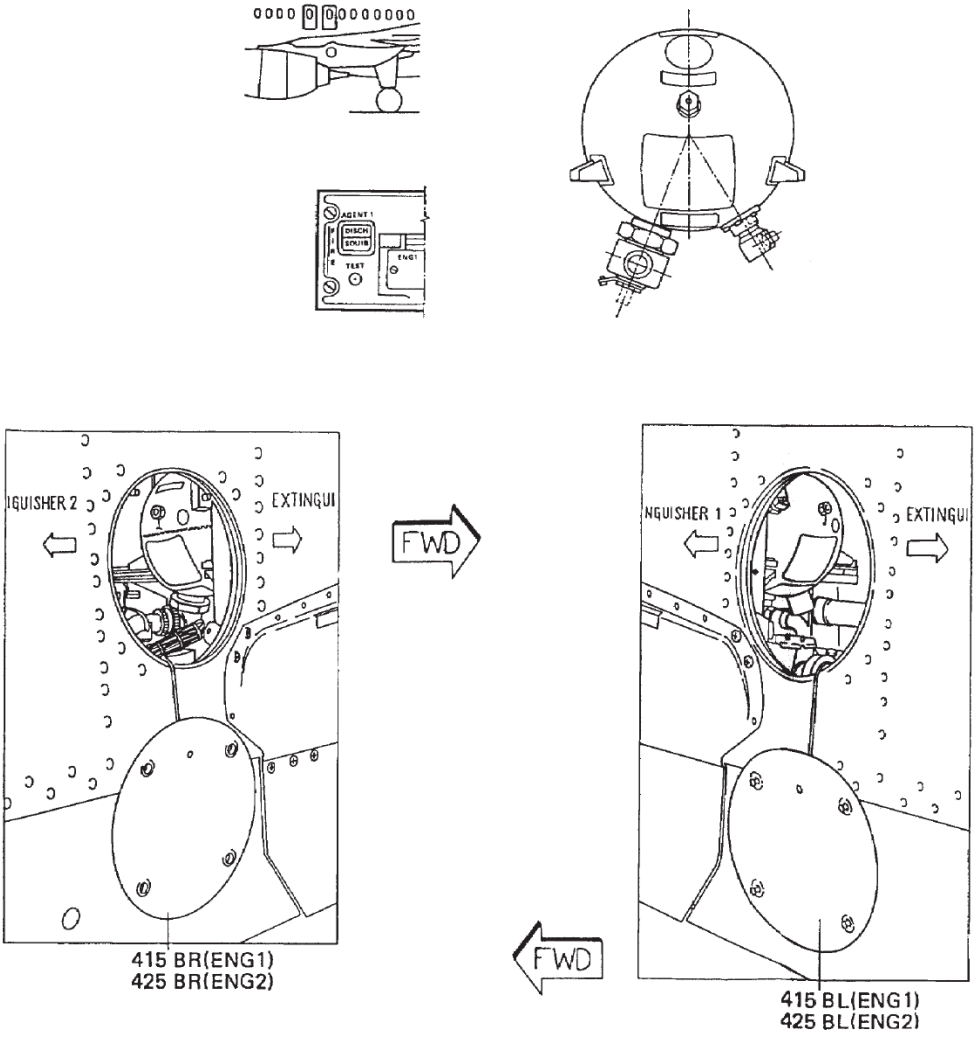

Figure 26–21–01 ENGINE FIRE BOTTLE LOCATION

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-21-02	Engine AGENT 1 & 2 SQUIB Light Systems	**N**	4	0	**C**	**(M)** May be inoperative provided it is verified that the failure is in the test circuit only.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-21-02	Adjacent To ENG AGENT SQUIB Light On Overhead ENG FIRE Panel	___ ENG, AGENT ___ SQUIB LIGHT INOP

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Engine Agent 1 & 2 Squib Light Systems deactivation procedure.
   a) To deactivate Engine Agent 1&2 Squib Light Systems, accomplish the following:
      1) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL1/ SQUIB/A location Q43.
      2) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL2/ SQUIB/A location Q41.
      3) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL1/ SQUIB/B location Q44.
      4) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL2/ SQUIB/B location Q42.
   b) In the pylon, disconnect plug of circuit to be verified:

      ENG 1: BTL1 plug 5WE1–A
      BLT2 plug 7WE1–A

      ENG 2: BTL1 plug 5WE2–A
      BTL2 plug 7WE2–A

   c) Put shunt plug on the cartridges.
   d) On disconnected plug, ground pins 1 and 2.
      1) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL1/ SQUIB/A location Q43.
      2) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL2/ SQUIB/A location Q41.
      3) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL1/ SQUIB/B location Q44.
      4) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 & 2 FIRE EXTIG/BTL2/ SQUIB/B location Q42.

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e) Perform the following test:

NOTE: Ignore other indications than the following ones.

1) On the ENG FIRE PNL press ENG 1(2) TEST pushbutton switch and check that affected SQUIB light(s) does not illuminate. The non affected light illuminates.

2) Release TEST pushbutton switch and check that SQUIB light(s) goes off.

3) IF TEST NOT OK:(Affected SQUIB light(s) illuminate)

A. Replace relevant cartridge.

B. Disconnect pins 1 and 2 from ground.

C. Connect plug of SQUIB.

D. Perform Fire Test.

4) IF TEST OK: (Affected SQUIB light(s) remains OFF)
Fire test system is faulty. Perform following check to ensure the integrity of firing system.

A. Connect voltmeter between pin 1 and ground, then pin 2 and ground of associated connector. The voltmeter must show zero volts.

CAUTION: PUSHING FIRE PUSHBUTTON SWITCH WILL CLOSE LP FUEL, HYDRAULIC, BLEED AIR, ANTI–ICE AND PACK VALVES AND SWITCH OFF GENERATOR EXCITATION.

B. On ENG FIRE PNL, press ENG 1(2) FIRE pushbutton switch.

NOTE: Disregard SQUIB legends and all other subsequent consequences.

C. On ENG FIRE PNL, press and hold AGENT pushbutton switch. At the pylon, check for 28 VDC between pin 1 and ground and between pin 2 and ground of associated connector plug.

D. Release AGENT pushbutton. At the pylon, check for 0 VDC between pin 1 and ground and between pin 2 and ground of associated connector.

E. IF TEST OK, Firing System is OK:(Fire test system is faulty)

i. A/C can be released.

ii. Connect plug to SQUIB.

CAUTION: MAKE CERTAIN THAT THE CONNECTOR IS CORRECTLY INSTALLED AND SAFETIED.

iii. Restored aircraft to normal operating conditions.

F. IF TEST NOT OK, trouble shoot and restore system before dispatch.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-21-03	ENG FIRE Test Systems **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One test function may be inoperative provided: a) The fault is in the test system only, b) System is tested ONCE EACH FLIGHT DAY (Log Book Entry Required), and c) All other functions of fire detection systems operate normally. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-21-03	Adjacent To ENG FIRE Test Switch On Overhead ENG FIRE Panel	___ ENG FIRE TEST SYSTEM INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required once each flight day.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. DAILY CHECK (Once Each Flight Day):
   a) Engine Fire Extinguisher System
      1) Perform procedure in DDG Item 26–21–02.
   b) Engine Fire and Overheat Detection System.
      1) On the MCDU 1 (2):
         A. Select CFDS
         B. Select SYSTEM REPORT/TEST
         C. Select FIRE PROT
      2) On the MCDU 1(2), push the line key adjacent to the ENG FDU 1 (2) indication and check that ENG FDU 1 (2) page comes into view.
      3) Push the line key adjacent to the TEST indication and check that on the ENG FDU 1 (2) page, the TEST WAIT message comes on for a few seconds, then goes off and the message TEST OK, END OF TEST appears.
      4) Push the line key adjacent to the RETURN indication until you get the MCDU MENU.
      5) Stop the MCDU.
   c) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-22-00	APU Fire Extinguisher System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided the APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-22-00	Adjacent To AGENT Switch On Overhead APU FIRE Panel And One Tab Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU FIRE EXTINGUISHING SYSTEM INOP DO NOT USE APU

(O) PROCEDURES

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-22-01A	APU Agent DISCH Light **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided bottle is verified properly charged before the FIRST FLIGHT OF EACH DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
26-22-01B	APU Agent DISCH Light **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-22-01A	Adjacent To AGENT Switch On Overhead APU FIRE Panel	APU FIRE EXTINGUISHING AGENT DISCH LIGHT INOP
26-22-01B	Adjacent To AGENT Switch On Overhead APU FIRE Panel And One Tab Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU FIRE EXTINGUISHING AGENT DISCH LIGHT INOP DO NOT USE APU

(O) PROCEDURES

26-22-01A

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required before the FLIGHT OF EACH DAY.

26-22-01B

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures.

(M) PROCEDURES

26-22-01A

1. DAILY CHECK (BEFORE FLIGHT OF EACH DAY):
   a) Accomplish bottle pressure check from MM 26–22–00, page 403 on affected system.
   b) If the bottle pressure check in NOT OK, you must do the weight check of the affected bottle by performing the following:

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To deactivate APU Fire Extinguisher Squib A, accomplish the following:

c) ON C/B panel 121VU: pull and tag circuit breaker APU/FIRE/EXTIG/SQUIB/A location L38.

d) Remove fire extinguisher bottle.

CAUTION: CARTRIDGE MUST BE REMOVED PRIOR TO BOTTLE REMOVAL.

e) Verify bottle weight – weight must be equivalent to weight indicated on the identification plate minus 50 grams max.

NOTE: For weighing purposes, the fire extinguisher will include discharge outlet, cartridge and fill fitting assembly. All protective caps and shunt plug will be removed for weighing.

NOTE: Grams to ounces conversion = number of grams times 0.03527.

f) Install fire extinguisher bottle.

g) On C/B panel 121VU: remove tag and close circuit breaker APU/FIRE/EXTIG/SQUIB/A location L38.

h) Perform APU fire test and check it is successful.

i) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

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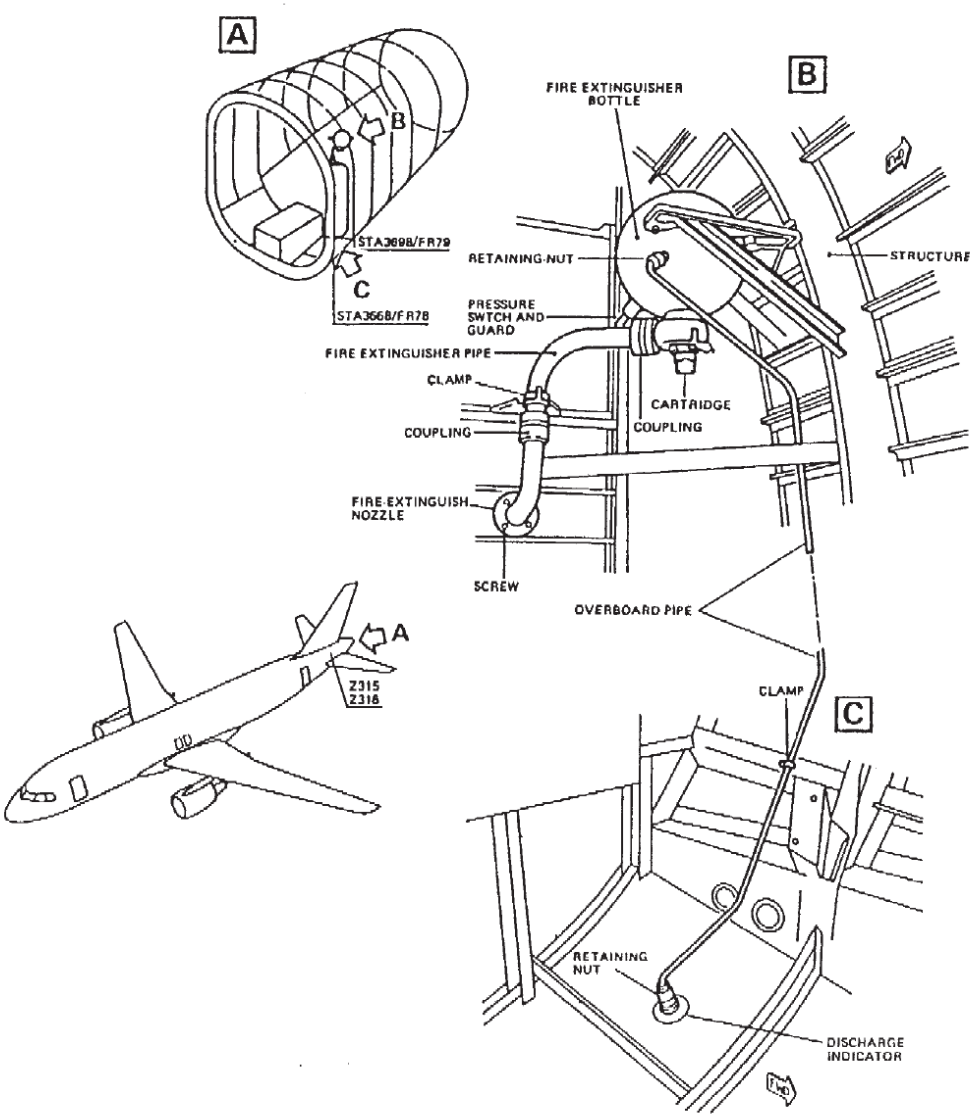

Figure 26–22–01A APU FIRE BOTTLE LOCATION

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
26-22-02	APU SQUIB Light **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided APU extinguishing system firing circuit is verified operative before the FIRST FLIGHT OF EACH DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-22-02	Adjacent To Agent SQUIB Light On Overhead APU FIRE Panel	APU AGENT SQUIB LIGHT INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required before the FIRST FLIGHT OF EACH DAY.

(M) PROCEDURES

The (M) indicates the following Maintenance Procedures are required:

1. DAILY CHECK (BEFORE FIRST FLIGHT OF EACH DAY):

WARNING: BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

   a) Energize the aircraft from the external power.

2. To deactivate the APU Squib Lights, accomplish the following:
   a) On C/B panel 121VU, pull and tag circuit breaker APU/FIRE/EXTIG/SQUIB/A location L38.
   b) On C/B panel 121VU, pull and tag circuit breaker APU/FIRE/EXTIG/SQUIB/B location L39.
   c) Put the access platform in position.
   d) Open access door 314 AR.
   e) Remove and discard the safety wire from the electrical connector of the cartridge 12WF.
   f) Disconnect the electrical connector from the cartridge 12WF.
   g) Put shunt plug on the cartridge 12WF.
   h) Connect to ground, connectors A/A and A/B of the electrical connector.
   i) On C/B panel 121VU: remove tag and close circuit breaker APU/FIRE/EXTIG/SQUIB/A location L38.
   j) On C/B panel 121VU: remove tag and close circuit breaker APU/FIRE/EXTIG/SQUIB/B location L39.

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k) Perform the following test:

1) On APU FIRE PNL (1WD) press APU Loop/Squib TEST pushbutton switch.

A. Check that SQUIB legend for APU comes on.

2) Release depressed Loop/Squib TEST pushbutton switch.

3) Check that SQUIB legend goes off.

4) If test is OK, squib is faulty and must be replaced.

5) If test is not OK (One SQUIB legend remains off), Loop/Squib system is faulty. It is recommended to perform following test to ensure integrity of firing system.

A. Connect a 28VDC voltmeter between connector A/A and ground and between connector A/B and ground.

B. On APU FIRE PNL (1WD) press APU FIRE p.b. switch.

i. Disregard SQUIB legends and all other subsequent consequences.

C. Press associated AGENT pushbutton switch (and keep it pressed).

i. At the electrical connector 12WF check 28VDC between the connector A/A and ground and between connector A/B and ground.

D. Release AGENT pushbutton switch.

i. Check 0 VDC between the connector A/A and ground and connector A/B and ground.

ii. If test is OK, firing system is OK, loop/squib test system is faulty, aircraft can be released.

OR

iii. If test is not OK (no voltage), firing system must be cleared.

l) Remove the shunt device.

m) Connect the electrical connector to cartridge 12 WF.

CAUTION: MAKE CERTAIN THAT THE CONNECTOR IS CORRECTLY INSERTED AND SAFETIED.

n) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
26-22-03	APU Ground Automatic Fire Extinguisher System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided APU is continuously monitored in the flight deck during all APU ground operations. NOTE: When the flight crew leaves the aircraft, maintenance must monitor the APU. If maintenance is not available, the flight crew must shut down the APU.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-22-03	Adjacent To APU Master Switch On Overhead Panel	APU AUTOMATIC FIRE EXTINGUISHING INOP APU OPERATION MUST BE MONITORED FROM FLIGHT DECK

(O) PROCEDURES

1. Flight crew or maintenance personnel to monitor APU on the flight deck during ground operations.
2. When the flight crew leaves the aircraft, maintenance must monitor the APU. If maintenance is not available, the flight crew must shut down the APU.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-22-04A APU Fire Test System **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided firing circuit and bottle low pressure detection systems are verified operative before the FIRST FLIGHT OF EACH DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
26-22-04B APU Fire Test System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-22-04A	Adjacent To APU Fire TEST Switch On Overhead APU FIRE Panel	APU FIRE TEST INOP
26-22-04B	Adjacent To APU Fire TEST Switch On Overhead Panel And Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU FIRE TEST INOP DO NOT USE APU

(O) PROCEDURES

26-22-04A

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required before the FIRST FLIGHT OF EACH DAY.

26-22-04B

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures.

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(M) PROCEDURES

26-22-04A

1. DAILY CHECK (BEFORE FIRST FLIGHT OF EACH DAY):

CAUTION: MAKE SURE THAT ALL THE CIRCUITS IN MAINTENANCE ARE ISOLATED BEFORE YOU SUPPLY ELECTRICAL POWER TO THE AIRCRAFT.

DO NOT REMOVE/INSTALL THE DISCHARGE CARTRIDGES UNLESS YOU HAVE INSTALLED SHUNT PLUGS. THIS PREVENTS EXPLOSION OF CARTRIDGE.

To deactivate APU Fire Test System, accomplish the following:

2. APU Fire Test System Deactivation procedure:
   a) On C/B panel 121VU: pull and tag circuit breaker APU/FIRE/EXTIG/SQUIB/A location L38.
   b) On C/B panel 121VU: pull and tag circuit breaker APU/FIRE/EXTIG/SQUIB/B location L39.
   c) Put the access platform in position below the APU compartment.
   d) Open maintenance door 314AR.
   e) Remove and discard the safety wire from the electrical connector 12WF–A.
   f) Disconnect electrical connector 12WF–A from APU fire bottle cartridge.
   g) Install shunt plug SHUNT DEVICE–FIRE EXTINGUISHER CARTRIDGE, HTL (30840007) to the cartridge electrical connector 12WF–A.
   h) Remove safety wire (snapwire) from APU FIRE pushbutton switch on overhead FIRE panel 20VU.
   i) Energize the electrical circuits.
   j) On C/B panel 121VU: remove tag and close circuit breaker APU/FIRE/EXTIG/SQUIB/A location L38.
   k) On C/B panel 121VU: remove tag and close circuit breaker APU/FIRE/EXTIG/SQUIB/B location L39
   l) On the CAPT jack panel, connect the 600 ohms headset to the electrical connector.
   m) Energize the audio integrating system.
   n) Energize the Annunciator Light Test and Dimming system.

   NOTE: For this procedure, it is recommended that a minimum of two persons are in constant touch with each other with the help of the audio integrating system. One person at the cockpit APU Fire panel and the other person at zone 313.

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o) Do this test:

ACTION	RESULT
On the connector 12WF–A: • Connect a 28VDC voltmeter between terminal A and ground, and then between terminal B and ground.	On the connector 12WF–A: • Make sure that there is no voltage shown between terminals A and B and ground.
On the APU FIRE panel 20VU: • Push the APU FIRE pushbutton switch.	On the connector 12WF–A: • Make sure, that there is no voltage shown between terminal A and B and ground. On the APU FIRE panel 20VU: • On the AGENT pushbutton switch, the SQUIB light comes on.
On the APU FIRE panel 20VU: • Press and hold the squib switch pushbutton.	On connector 12WF–A: • Make sure that there is 28VDC shown between terminal A and B and ground.
On the APU FIRE panel 20VU: • Release the SQUIB pushbutton switch.	On connector 12WF–A: • Make sure that there is no voltage shown.
On the APU FIRE panel 20VU: • Push to release the APU FIRE pushbutton switch.	On the APU FIRE panel 20VU: • On the AGENT pushbutton switch, the SQUIB light goes off.

p) If this test is correct the APU fire extinguishing system is correct, the test circuit is faulty.

q) De–energize the audio integrating system.

r) De–energize the Annunciator Light Test and Dimming system.

s) On C/B panel 121VU: pull and tag circuit breaker APU/FIRE/EXTIG/SQUIB/A location L38.

t) On C/B panel 121VU: pull and tag circuit breaker APU/FIRE/EXTIG/SQUIB/B location L39

u) On the APU FIRE panel install safety wire (snapwire) on APU FIRE pushbutton switch.

v) Remove the shunt plug SHUNT DEVICE–FIRE EXTINGUISHER CARTRIDGE, HTL from the cartridge electrical connector 12WF–A.

w) Connect the electrical connector 12WF–A to the cartridge.

x) Safety wire the electrical connector with safety wire MS 20995–C25 or equivalent.

y) De–energize the aircraft electrical circuits.

z) On C/B panel 121VU: remove tag and close circuit breaker APU/FIRE/EXTIG/SQUIB/A location L38.

aa) On C/B panel 121VU: remove tag and close circuit breaker APU/FIRE/EXTIG/SQUIB/B location L39

bb) Make sure that the work area is clean and clear of tools and other items.

cc) Close maintenance door 314AR.

dd) Remove the access platform(s).

ee) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-22-05A	APU Fire Extinguisher Overpressure Indication (Red Disc) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be missing provided: a) Squib test is used to verify squib integrity, and b) Bottle pressure switch is verified operative before the FIRST FLIGHT OF EACH DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
26-22-05B	APU Fire Extinguisher Overpressure Indication (Red Disc) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be missing provided APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-22-05A	Adjacent To APU Fire TEST Switch On Overhead Panel	APU FIRE EXTINGUISHER OVERPRESSURE INDICATION (RED DISK) MISSING
26-22-05B	One Tab Adjacent To APU Fire TEST Switch On Overhead Panel And One Tab Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU FIRE EXTINGUISHER OVERPRESSURE INDICATION (RED DISK) MISSING DO NOT USE APU

(O) PROCEDURES

26-22-05A

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required before the FIRST FLIGHT OF EACH DAY.

26-22-05A

1. Do not use APU.
2. APU MASTER switch –OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures.

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(M) PROCEDURES

26-22-05A

Refer to MEL Item 26–22–01A for squib test.

The (M) Indicates the following Maintenance Procedures are required:

1. DAILY CHECK (BEFORE FIRST FLIGHT OF EACH DAY):
   a) Operational check of affected fire bottle and pressure switch accomplish the following:

      NOTE: This procedure requires a minimum of two persons that are in contact with each other with the audio integrating system. One person must monitor the flight deck APU panel 20VU and the other person does the test in zone 313.

2. To deactivate APU Fire Extinguisher Overpressure Indication.
   a) APU Fire Extinguisher Overpressure Indication deactivation procedure:
      1) On C/B panel 121VU: pull and tag circuit breaker APU/ECB/SPLY location L41.
      2) On C/B panel 121VU: pull and tag circuit breaker APU/APU/CTL location L42.
      3) Gain access to affected fire bottle by opening maintenance door 314AR.
      4) Energize the aircraft electrical circuits.
      5) Energize the audio integrating system.
      6) On the CAPT jack panel, connect headset.
      7) Accomplish the following tests:

         On the affected APU fire extinguisher bottle:

         A. Put the 3/32 inch allen key into the pressure switch hexagon test–socket. Slowly turn the allen key clockwise or counterclockwise approx. 10 degrees.
         B. On the APU FIRE panel 20VU the DISCH light in the AGENT pushbutton switch comes on.
         C. Release the allen key.
         D. The DISC light in the AGENT pushbutton switch goes off.
         E. The pressure effect must sent the allen key back to the initial position.
         F. On the APU fire extinguisher bottle remove the allen key.

      8) Close the affected access panels.
      9) De–energize the audio integrating system and the aircraft electrical circuits.
   b) APU Fire Extinguisher Overpressure Indication activation procedure:
      1) On C/B panel 121VU: remove tag and close circuit breaker APU/ECB/SPLY location L41.
      2) On C/B panel 121VU: remove tag and close circuit breaker APU/APU/CTL location L42.
      3) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-22-11A	APU FIRE Light (On External Fire Panel) APU Automatic Fire Extinguishing System Verified Operative	**N**	1	0	**C**	**(M)** May be inoperative provided the APU Automatic Fire Extinguishing System is verified operative.
26-22-11B	APU FIRE Light (On External Fire Panel) APU Automatic Fire Extinguishing System NOT Verified Operative **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided APU is continuously monitored in the flight deck during all APU ground operations. NOTE: When the flight crew leaves the aircraft, maintenance must monitor the APU. If maintenance is not available, the flight crew must shut down the APU.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-22-11A	On Overhead Fire Control Panel	APU FIRE LIGHT ON EXTERNAL FIRE PANEL INOP
26-22-11B	On Overhead Fire Control Panel	APU FIRE LIGHT ON EXTERNAL FIRE PANEL INOP

(O) PROCEDURES

26-22-11B

1. Flight crew or maintenance personnel to monitor APU on the flight deck during ground operations.
2. When the flight crew leaves the aircraft, maintenance must monitor the APU. If maintenance is not available, the flight crew must shut down the APU.

(M) PROCEDURES

26-22-11A

The (M) Indicates the following Maintenance Procedures are required:

1. Place a warning notice in the flight deck in position on overhead panel 25VU to tell person(s) not to operate the APU.

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2. Accomplish the following Operational Test of the Test Circuit.

ACTION	RESULT
1. On the APU/AUTO EXTING section of panel 50 VU: • Push the TEST ON pushbutton during the test.	On the APU/AUTO EXTING section of panel 50 VU: • The OK legend in the TEST pushbutton switch illuminates. NOTE: When the OK legend in the TEST pushbutton switch illuminates, all components operate correctly.
2. On the APU/AUTO EXTING section of panel 50 VU: • Push the RESET pushbutton switch.	On the APU/AUTO EXTING section of panel 50VU: • The test circuit is reset.

3. Put aircraft back to original configuration.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
26-23-01	FWD/AFT Cargo Compartment Fire Extinguishing System (Bottle and/or Squib) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided procedures are used to ensure all compartments remain empty, or is verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-23-01	Adjacent to AFT Cargo DISCH light	CARGO COMPARTMENTS FIRE EXTINGUISHING SYSTEM INOP AOG PARTS CONTAINER TO REMAIN EMPTY

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the cargo compartments.

(M) PROCEDURES

1. Verify AOG Parts Stowage Container in aft cargo compartment is empty.
2. Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) across the container.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in 1 inch black letters.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-23-02A	FWD Cargo Compartment DISCH Light **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)** May be inoperative provided an acceptable test procedure is used ONCE EACH FLIGHT DAY (Log Book Entry Required) to verify that bottle is properly charged. **Repetitive Check Required (Yellow Placard)**
26-23-02B	FWD Cargo Compartment DISCH Light **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided FWD cargo compartment remains empty, or is verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section).
26-23-02C	AFT Cargo Compartment DISCH Light **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)** May be inoperative provided an acceptable test procedure is used ONCE EACH FLIGHT DAY (Log Book Entry Required) to verify that bottle is properly charged. **Repetitive Check Required (Yellow Placard)**
26-23-02D	AFT Cargo Compartment DISCH Light **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided the AFT cargo compartment remains empty, or is verified to contain only empty cargo handling equipment, ballast, and/or fly-away kits (see MEL Instructions Section).

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-23-02A	Adjacent To FWD Cargo Compartment DISCH Light	FWD CARGO COMPARTMENT DISCH LIGHT INOP
26-23-02B	Adjacent To FWD Cargo Compartment DISCH Light	FWD CARGO COMPARTMENT DISCH LIGHT INOP
26-23-02C	Adjacent To AFT Cargo Compartment DISCH Light	AFT CARGO COMPARTMENT DISCH LIGHT INOP
26-23-02D	Adjacent To AFT Cargo Compartment DISCH Light	AFT CARGO COMPARTMENT DISCH LIGHT INOP AOG PARTS CONTAINER TO REMAIN EMPTY.

(O) PROCEDURES

26-23-02B

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the FWD cargo compartment

26-23-02D

PRIOR TO EACH DEPARTURE, Captain is to ensure that no cargo is loaded in the AFT cargo compartment.

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(M) PROCEDURES

26-23-02A, 26-23-02C

1. DAILY CHECK (Once Each Flight Day):

   a) Verify the bottle is properly charged by performing AMM Task 26-23-00-040-001.

26-23-02D

1. Verify AOG Parts Stowage Container in aft cargo compartment is empty.
2. Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) across the container.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-25-01A Lavatory Waste Bin Fire Extinguisher System	**N**	3	0	**C**	**(M)** For each lavatory, the fire extinguisher system may be inoperative provided lavatory smoke detection system operates normally.
26-25-01B Lavatory Waste Bin Fire Extinguisher System **"DISP.APPR.REQ'D"**	**N**	3	2	**C**	**(M)(O)** For one lavatory, the fire extinguisher system may be inoperative provided: a) Lavatory waste receptacle is empty, b) Lavatory door is locked and placarded, UNSERVICEABLE – DO NOT USE, and c) Lavatory is used only by crewmembers. NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers. Ensure lavatory door is locked closed after crewmember inspection.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-25-01A	On FWD Attendants Panel	___ LAVATORY FIRE EXTINGUISHER INOP LAVATORY SMOKE DETECTOR OPERATES NORMALLY
26-25-01B	On FWD Attendants Panel	___ LAVATORY FIRE EXTINGUISHER INOP LAVATORY LOCKED AND PLACARDED UNSERVICEABLE – DO NOT USE

(O) PROCEDURES

26-25-01B

1. Captain to brief Lead Flight Attendant/Purser that the affected lavatory door is to remain locked and not entered except for use or inspection by crewmembers.
2. Captain is to ensure the lavatory door is locked closed if crewmember inspection has been performed or if the lavatory is used by a crewmember.

(M) PROCEDURES

26-25-01A

1. If the Lavatory Smoke Detector is operational as verified by performing the following, placard as required per the MEL.
2. Energize the aircraft electrical circuits.

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3. Make sure that circuit breakers AIR COND / SDCU / CHAN 1 at panel location C6 on 49VU (On A/C 3101–3182 & 3212–3280) or T17 on 122VU (On A/C 3201–3211) and AIR COND / SDCU / CHAN 2 at panel location T18 on 122VU are closed.
4. On one MCDU get the system REPORT/TEST menu page.
5. Do this test:

ACTION	RESULT
(a) On the MCDU: • Push the line key adjacent to the TEST indication.	On the MCDU: • The SDCU TEST page comes on.
• Push the line key adjacent to the • SMOKE DET LAV A (1WQ).	• The SDCU TEST REPORT page comes on • SMOKE DET LAV A (1WQ) TEST OK. CK. ECAM AND CABIN WARN. or SMOKE DET LAV A (1WQ) TEST FAILED comes on. On the glareshield panel 130 VU and 131VU: • The MASTER WARN lights flash and a continuous repetitive chime is heard. On the ECAM upper display unit: • SMOKE LAVATORY SMOKE comes on.
(b) On the glareshield panel 130VU or 131VU: • Push the MASTER WARN pushbutton switch.	On the glareshield panel 130VU or 131VU: • The MASTER WARN lights stop flashing and the continuous repetitive chimes stop.
(c) On the MCDU: • Push the line key adjacent to the RETURN indication.	On the ECAM upper unit: • SMOKE LAVATORY SMOKE goes off.

NOTE: For the remaining lavatories, push the NEXT PAGE key on the SDCU TEST REPORT page.

6. De–energize the aircraft electrical circuits.

26-25-01B:

1. Close and lock the Lavatory door as follows:
   a) Close the lavatory door and lock by placing a slotted screwdriver blade in the slot in the VACANT/OCCUPIED sign on the door and move to OCCUPIED position. Check that door will not open.
   b) Place a strip of Red Colored OM2 UNSERVICEABLE – DO NOT USE tape (or equivalent*) ON the lavatory door. DO NOT tape door shut. This allows crew members to access lavatory.

      * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

   c) Place a strip of 2 inch wide masking tape with the words “CREW USE ONLY” printed legibly in 1 inch black letters ON the lavatory door. DO NOT tape door shut. This allows crew members to access lavatory.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
26-26-24	Portable Fire Extinguishers **"DISP.APPR.REQ'D"**	**Y**	5	4	**C**	**(M)** One forward passenger compartment fire extinguisher may be inoperative or missing provided the inoperative fire extinguisher is removed from the aircraft.

MEL ITEM	TAB LOCATION	PLACARD TEXT
26-26-24	Adjacent To Missing Extinguisher And On An Empty Space On The Forward Center Instrument Panel	___ PORTABLE FIRE EXTINGUISHER MISSING

(M) PROCEDURES

Remove the unserviceable extinguisher from the aircraft.

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		NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH	
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY					
27-27-00A	Fault(s) Indicated by F/CTL	**Y**	-	-	**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
27-27-00B	Fault(s) Indicated by SFCS	**Y**	-	-	**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-27-00A	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “F/CTL” DISPLAYED
27-27-00B	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “SFCS” DISPLAYED

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-14-01A	Aileron Servo Controls (Associated with ELAC 2) **"DISP.APPR.REQ'D"**	**N**	4	2	**A**	**(M)** Two associated with ELAC 2 (left green and right blue) may be inoperative provided: a) Servos remain mechanically connected and hydraulically supplied (damping function is not affected), b) All roll spoilers operate normally, c) Aileron Servo Controls associated with ELAC 1 operate normally, and d) Repairs are made within three flight days.
27-14-01B	Aileron Servo Controls (Associated with ELAC 1) **"DISP.APPR.REQ'D"**	**N**	4	2	**A**	**(M)(O)** Two associated with ELAC 1 (left blue and right green) may be inoperative provided: a) Servos remain mechanically connected and hydraulically supplied (damping function is not affected), b) All roll spoilers operate normally, c) Aileron Servo Controls associated with ELAC 2 operate normally, d) TR1 and TR2 operate normally, e) DC TIE contactor 1 is verified closed before takeoff, and f) Repairs are made within three flight days. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-14-01A	Adjacent To ECAM Display	___ AILERON SERVO ACTUATOR HYDRAULIC SYSTEM INOP AND DEACTIVATED
27-14-01B	Adjacent To ECAM Display	___ AILERON SERVO ACTUATOR HYDRAULIC SYSTEM INOP AND DEACTIVATED

(O) PROCEDURES

27-14-01B

PRIOR TO EACH DEPARTURE, verify DC TIE contactor closed:

Apply APU generator or external power.

Check on ECAM ELEC page for a link between DC BUS 1 and DC BAT BUS.

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(M) PROCEDURES

27-14-01A, 27-14-01B

The (M) Indicates that the following Maintenance Procedure is required:

1. Failure Confirmation Procedure:
   a) Energize the aircraft electrical circuits.
   b) On the center pedestal or LH or RH MCDU
      a) Push MCDU MENU key.
      b) CFDS MENU page appears.
   c) Push CFDS key. CFDS page appears.
   d) Push SYSTEM REPORT/TEST KEY. SYSTEM REPORT/TEST page appears.
   e) Push F/CTL key. F/CTL page appears.
   f) Push EFCS1 key. EFCS1 page appears.
   g) Push GROUND SCAN key. GROUND SCAN page appears.
   h) Push START GROUND SCAN key.
   i) After two minutes push the GROUND SCAN STOP key.
   j) Push GROUND REPORT key.
      a) If there is a message concerning RUDDER PEDAL XDCR unit, it is not necessary to deactivate the aileron servo control. The aircraft can be dispatched as is.
      b) If there is no message concerning RUDDER PEDAL XDCR unit, the aileron servo control must be deactivated. Apply the following deactivation procedures.
2. Deactivation:
   a) On the flight deck:
      a) On overhead panels 23 VU and 24 VU, release ELAC 1 and ELAC 2 pushbutton switches; corresponding OFF legends come on.
      b) Make certain that green, blue and yellow hydraulic systems are not pressurized.
      c) Display warning notices to avoid hydraulic systems pressurization.
      d) On C/B panel 49VU: pull and tag circuit breaker FLIGHT CONTROLS/ELAC1/NORM/SPLY location B11.
      e) On C/B panel 105VU: pull and tag circuit breaker FLIGHT CONTROLS/ELAC2/STBY SPLY location A02.
      f) On C/B panel 105VU: pull and tag circuit breaker FLT CTL/ELAC1/STBY SPLY location A01.
      g) On C/B panel 121VU: pull and tag circuit breaker FLIGHT CONTROLS/ELAC2/NORM/SPLY location R20
   b) On the wing:
      a) Install access platform.
      b) Open access doors 575 KB or 675 KB to gain access to LH or RH aileron servo control.
      c) Make sure that faulty servo control is not leaky.
      d) Disconnect the electrical connector on servocontrol to be deactivated and install protective cap on the plug.
      e) Stow electrical connector and secure with tie–wraps.

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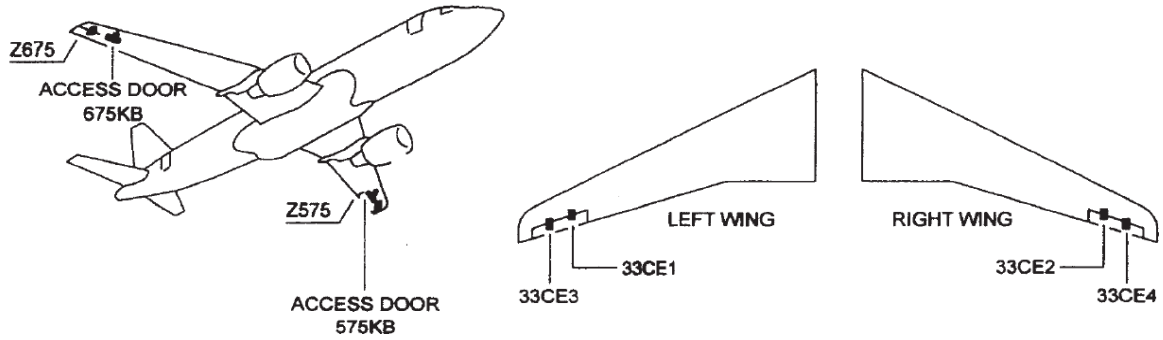
c) In the flight deck:
   a) On C/B panel 49VU: remove tag and close circuit breaker FLIGHT CONTROLS/ELAC1/NORM/SPLY location B11.
   b) On C/B panel 105VU: remove tag and close circuit breaker FLIGHT CONTROLS/ELAC2/STBY SPLY location A02.
   c) On C/B panel 105VU: remove tag and close circuit breaker FLT CTL/ELAC1/STBY SPLY location A01.
   d) On C/B panel 121VU: remove tag and close circuit breaker FLIGHT CONTROLS/ELAC2/NORM/SPLY location R20.
   e) On overhead panels 23 VU and 24 VU, push ELAC 1 and ELAC 2 pushbutton switches, corresponding OFF legends go OFF and FAULT legends come on then go OFF after approximately 8 seconds.

3. Test:
   a) Pressurize green and blue hydraulic systems.
   b) On ECAM control panel select F/CTL page.
   c) Move one sidestick controller to the left then to the right and check that aileron symbols move on ECAM.
   d) Check that corresponding servocontrol symbol is amber.
4. Close–up:
   a) Depressurize green and blue hydraulic systems.
   b) Close access doors 575 KB or 675 KB on left or right wings.
   c) Restore aircraft to required configuration.



AILERON SERVOCONTROL	ASSOCIATED COMPUTER
33CE1 (GREEN)	ELAC 2
33CE2 (GREEN)	ELAC 1
33CE3 (BLUE)	ELAC 1
33CE4 (BLUE)	ELAC 2

Figure 27–14–01A/B
Aileron servo Control Location

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
AILERON INDICATIONS ON ECAM FLIGHT CONTROL PAGE					
27-14-02A ECAM Aileron Position Indications	**Y**	2	0	**C**	**(O)** May be inoperative provided capability to move affected aileron through each servo control is verified visually PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
27-14-02B ECAM Aileron Actuator Indications	**Y**	4	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-14-02A	Adjacent To ECAM Display	___ AILERON POSITION INDICATION INOP
27-14-02B	Adjacent To ECAM Display	___ AILERON ACTUATOR INDICATION INOP

(O) PROCEDURES

27-14-02A

PRIOR TO EACH DEPARTURE, and before engine start, visually verify that each servo control is capable of moving the affected aileron by:

1. Verify ailerons are clear.
2. YELLOW ELEC PUMP– ON.
3. PTU – Check AUTO.
4. BLUE ELEC PUMP –Check AUTO.
5. BLUE PUMP OVRD –ON.
6. ELAC 1 and 2 – ON,
   a) Move the stick from left stop to right stop and check visually the full travel of ailerons. If the expected aileron movement does not occur, maintenance action is required.
7. ELAC 1 – OFF,
   a) Move the stick from left stop to right stop and check visually the full travel of ailerons. If the expected aileron movement does not occur, maintenance action is required.
8. ELAC 1 – ON.
9. YELLOW ELEC PUMP– OFF.
10. BLUE ELEC PUMP OFF then AUTO (Resets Blue Pump OVRD).

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-20-01	ECAM Rudder Position Indication **"DISP.APPR.REQ'D"**	**N**	1	0	**B**	**(M)(O)** May be inoperative provided: a) A visual verification of rudder movement is made PRIOR TO EACH DEPARTURE (Log Book Entry Required), and b) RUD TRIM indication on pedestal is operative and is verified at zero PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-20-01	Adjacent To ECAM Display	RUDDER POSITION INDICATION INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

(M) PROCEDURES

The (M) Indicates that the following Maintenance Procedure is required:

1. PRIOR TO EACH DEPARTURE:

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROLS ARE CLEAR. MOVEMENT OF FLIGHT CONTROLS CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE.

a) Energize the aircraft electrical circuits.

b) Establish communications – flight deck to ground.

c) Set YELLOW ELEC PUMP to ON.

d) Perform a visual check of rudder surface movement as follows:

FLIGHT DECK (Flight Crew if available)	GROUND OBSERVATION
• Apply full left rudder.	Rudder moves to full left.
• Apply full right rudder.	Rudder moves to full right.
• Release rudder pedals.	Rudder goes to the neutral position.

e) Set YELLOW ELEC PUMP to OFF.

2. Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-20-02	Rudder Hydraulic System Pressure Indication Symbol on ECAM F/CTL Page	**Y**	3	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-20-02	Adjacent To ECAM Display	___ RUDDER HYDRAULIC SYSTEM PRESSURE INDICATION SYMBOL(S) INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-21-01	Rudder Pedal Adjustment System	**Y**	2	0	**C**	**(O)** CAPT and/or F/O may be inoperative provided: a) Associated rudder pedals can be adjusted to a position which is acceptable to the affected crewmember, and b) Full and unrestricted movement of rudder pedals and brake pedal deflection is possible at both pilot stations.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-21-01	Adjacent to ECAM display	___ RUDDER PEDAL ADJUSTMENT SYSTEM(S) INOP

(O) PROCEDURES

During flight deck preparation:

1. At affected crewmember(s) position simultaneously press both rudder pedals to ensure they are secure in the desired position.

   NOTE: The pedal force used to satisfactorily accomplish the above test should approximate the force normally used for individual rudder pedal movement.

2. At both crewmember positions accomplish full rudder pedal and brake pedal movement to ensure full and unrestricted movement/deflection.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
27-22-01	Rudder Trim Systems **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One may be inoperative provided the operative system is verified to operate normally PRIOR TO EACH DEPARTURE. CAT III Not Authorized **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-22-01	On Rudder Trim Panel	___ RUDDER TRIM SYSTEM INOP

(O) PROCEDURES

After engine start:

1. Display the ECAM F/CTL page,
2. Turn RUD TRIM selector to NOSE/R position and hold until between R 5 and R 10 is achieved, then release and observe rudder displacement on ECAM F/CTL page,
3. Push the RUD TRIM/RESET pb and verify rudder trim is centered,
4. Turn RUD TRIM selector to NOSE/L position and hold until between L 5 and L 10 is achieved, then release and observe rudder displacement on ECAM F/CTL page,
5. Push the RUD TRIM/RESET pb and VERIFY rudder trim is centered.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-22-02	Rudder Manual Trim Reset Function	**Y**	1	0	**C**	May be inoperative provided one rudder position indication is available.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-22-02	Adjacent To Rudder Reset Switch	RUDDER RESET FUNCTION INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-22-03A	Rudder Trim Position Indications	**Y**	2	1	**C**	**(O)** One indicator on ECAM or pedestal may be inoperative.
27-22-03B	Rudder Trim Position Indications **"DISP.APPR.REQ'D"**	**N**	2	0	**B**	**(M)(O)** May be inoperative provided: a) Rudder trim is verified to operate normally, b) Rudder position is verified at zero PRIOR TO EACH DEPARTURE (Log Book Entry Required), and c) Rudder pedals are verified in a neutral position. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-22-03A	Adjacent To Rudder Trim Indicator On Pedestal	RUDDER TRIM POSITION INDICATION INOP ON ECAM or PEDESTAL
27-22-03B	Adjacent To ECAM Display And Rudder Trim Indicator On Pedestal	RUDDER TRIM POSITION INDICATION INOP ON ECAM and PEDESTAL

(O) PROCEDURES

27-22-03A

Use operative indication to check rudder trim position.

27-22-03B

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

(M) PROCEDURES

27-22-03B

The (M) Indicates that the following Maintenance Procedure is required:

1. PRIOR TO EACH DEPARTURE:

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROLS ARE CLEAR. MOVEMENT OF FLIGHT CONTROLS CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE.

a) Energize the aircraft electrical circuits.

b) Establish communications – flight deck to ground.

c) Set YELLOW ELEC PUMP to ON.

d) Verify rudder pedals are in neutral position.

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e) Verify rudder trim operates as follows:

FLIGHT DECK (Flight Crew if available)	GROUND OBSERVATION
• Turn RUD TRIM selector switch to the NOSE/L position.	Rudder moves to the left.
• Turn RUD TRIM selector switch to the NOSE/R position.	Rudder moves to the right.
• Push the RUD TRIM/RESET pushbutton.	Rudder goes to the neutral position.

f) Set YELLOW ELEC PUMP to OFF.

2. Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-23-01	Rudder Travel Limiter Systems	**Y**	2	1	**C**	One may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-23-01	Adjacent To ECAM Display	___ RUDDER TRAVEL LIMITER SYSTEM (1 or 2) INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-23-02	ECAM Rudder Travel Limiter Position Indication	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-23-02	Adjacent To ECAM Display	ECAM RUDDER TRAVEL LIMITER POSITION INDICATION INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ELEVATOR INDICATION ON ECAM FLIGHT CONTROL PAGE					
27-30-01A	ECAM Elevator Position Indications **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative provided a visual verification of affected elevator movement is made PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
27-30-01B	ECAM Elevator Actuator Indications (HYD POWER)	**Y**	4	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-30-01A	Adjacent To ECAM Display	___ ELEVATOR POSITION INDICATION(S) INOP
27-30-01B	Adjacent To ECAM Display	ELEVATOR ACTUATOR INDICATION ___ INOP

(O) PROCEDURES

27-30-01A

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

(M) PROCEDURES

The (M) Indicates that the following Maintenance Procedure is required:

1. PRIOR TO EACH DEPARTURE:

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROLS ARE CLEAR. MOVEMENT OF FLIGHT CONTROLS CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE.

a) Energize the aircraft electrical circuits.

b) Establish communications – flight deck to ground.

c) Set YELLOW ELEC PUMP to ON.

d) Check that BLUE ELEC PUMP and PTU are set to AUTO.

e) Set BLUE PUMP OVRD to ON.

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f) Verify elevator position indicator(s) operates normal as follows:

FLIGHT DECK (Flight Crew if available)	GROUND OBSERVATION
• Apply maximum side stick nose down position.	Elevators move down.
• Apply maximum side stick nose up position.	Elevators move up.
• Release side stick.	Elevators go to the neutral position.

g) Set YELLOW ELEC PUMP to OFF.

h) Set BLUE ELEC PUMP to OFF, then AUTO.

2. Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-34-02	Elevator Servo Control Position Transducers	**N**	8	4	**C**	**(M)** One per servo control must operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-34-02	Adjacent To ECAM Display	ELEVATOR SERVO CONTROL POSITION TRANSDUCER(S) ___ INOP

(M) PROCEDURES

The (M) Indicates that the following Maintenance Procedure is required:

NOTE: MEL relief for an ELEV SERVO FAULT warning message is only possible if the associated failure message contains ELEV POS XDCR: USE STBY XDCR. After swapping the servo control position transducer, the servo control must operate normally on the spare transducer (no ECAM warning and no amber box around the servo control on the ECAM F/CTL page).

1. Energize aircraft electrical circuits.
2. On overhead panel 23VU, release the FLT CTL/ ELAC 1, FLT CTL/SEC 1 pushbutton switches (on these pushbuttons switches, the OFF legends come on).
3. On overhead panel 24VU, release the FLT CTL/ ELAC 2, FLT CTL/SEC 2 and FLT CTL/SEC 3 pushbutton switches (on these pushbuttons switches, the OFF legends come on).
4. Depressurize the aircraft hydraulic systems:
   a) For left elevator depressurize the Green and Blue systems
   b) For the right elevator depressurize the Yellow and Blue systems.
5. Put the access platform in position:
   a) In the zone 334 for the left elevator.
   b) In the zone 344 for the right elevator.

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6. Open the access door:
   a) 334 DB for left elevator.
   b) 344 DB for right elevator.
7. Swap the connection of the plugs on the position transmitters.
8. On overhead panel 23VU, push the FLT CTL/ ELAC 1, FLT CTL/SEC 1 pushbutton switches (on these pushbuttons switches, the OFF legends go off).
9. On overhead panel 24VU, push the FLT CTL/ ELAC 2, FLT CTL/SEC 2 and FLT CTL/SEC 3 pushbutton switches (on these pushbuttons switches, the OFF legends go off).
10. Do the operational test of the elevator per M/M ref 27–34–00 500 series pages.
11. Make sure that the work area is clean and clear of tools and other items.
12. Close access doors 334DB or 344 DB.
13. Remove access platform.
14. Restore aircraft to required configuration.

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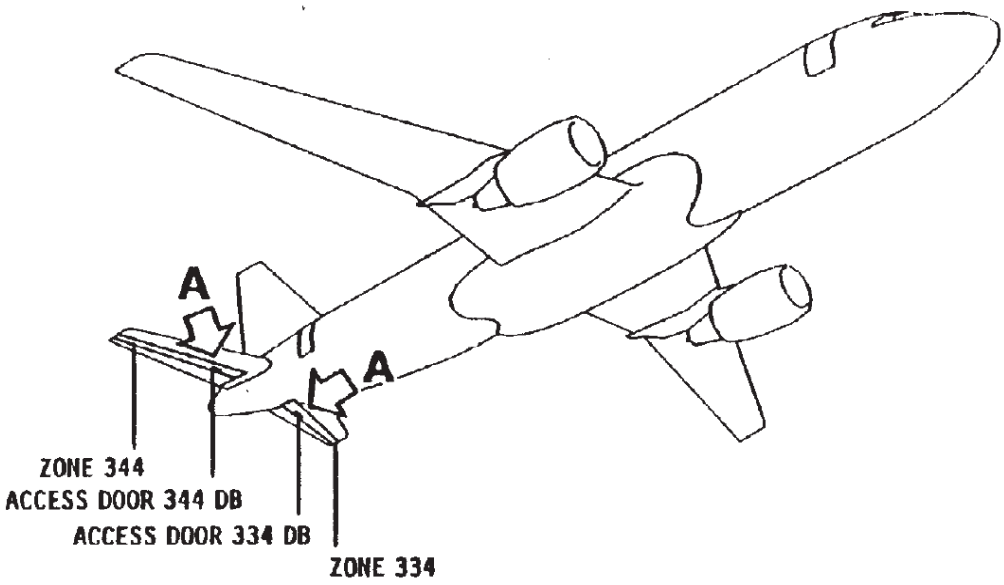

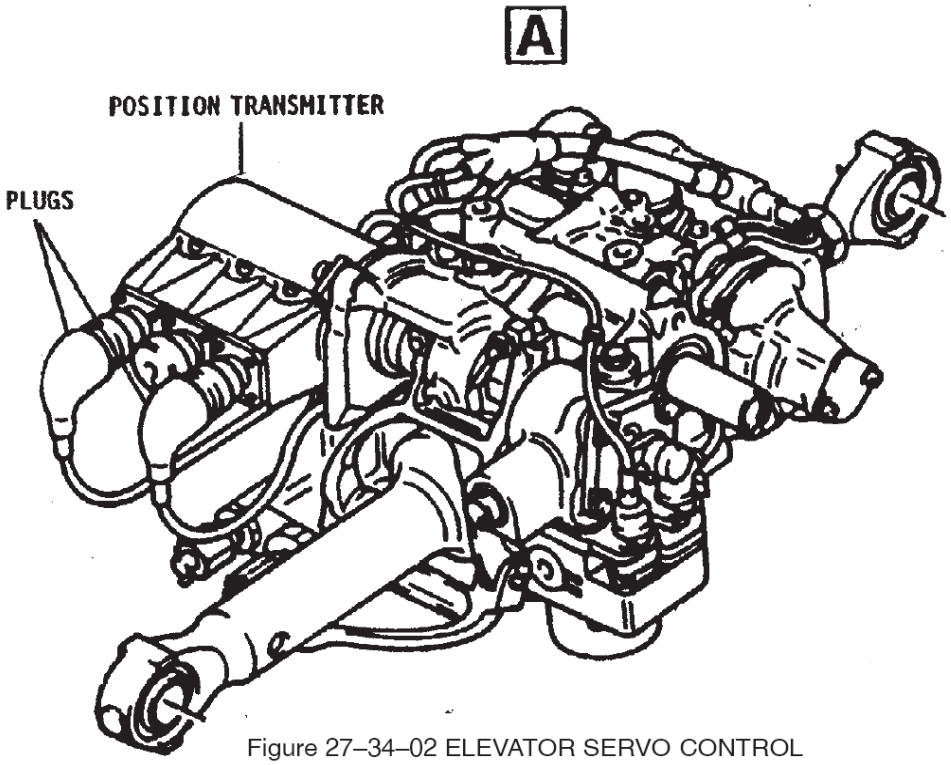

Figure 27–34–02 ELEVATOR SERVO CONTROL

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-40-01	ECAM Pitch Trim Position Indication **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided a check of pitch trim handwheel and stabilizer verifies synchronous movement PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-40-01	Adjacent To ECAM Display	ECAM PITCH TRIM POSITION INDICATION INOP

(O) PROCEDURES

1. PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.
2. Pitch trim – Set as required.

   NOTE: If requested to assist in the maintenance stab trim check, refer to DDG item below.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

3. PRIOR TO EACH DEPARTURE:
4. Place an observer in position to view stabilizer position marks on the left side of the fuselage just forward of the leading edge of the stabilizer.
5. Establish communications between flight deck and observer.
6. Pressurize the Green and Yellow hydraulic systems.
7. On the panel 23VU, release the FLT CTL/SEC1 and FLT CTL/ELAC1 pushbutton switches (on these pushbuttons switches, the OFF legends come on).
8. On the panel 23VU, release the FLT CTL/SEC2 and FLT CTL/ELAC2 pushbutton switches (on these pushbuttons switches, the OFF legends come on).
9. Slowly move the pitch–trim control wheels to the DN stop position.
10. Make sure that the DN indication on each graduated wheel is opposite the triangle on the center pedestal index.
11. Make sure that the position mark on the stabilizer is opposite the 4th mark up from the zero trim mark on the fuselage
12. Slowly move the pitch–trim control wheels to the UP stop position (Stabilizer position 13.5 degrees, See Figure 27–40–01 on next page).
13. Make sure that the UP mark (Stabilizer position 13.5 degrees, See Figure 27–40–01 on next page) on each graduated wheel is opposite the triangle on the center pedestal index.

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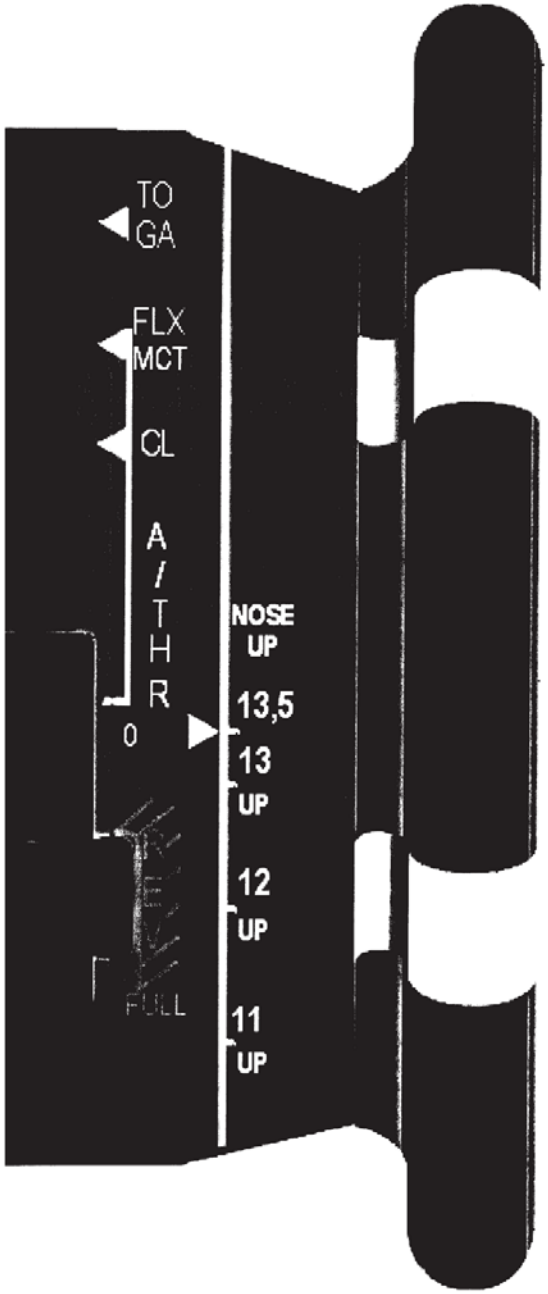
14. Make sure that stabilizer position mark is between the 13th and 14th marks down from the zero trim mark on the fuselage.
15. On the panel 23VU, push the FLT CTL/SEC1, FLT CTL/ELAC1, FLT CTL/SEC2 and FLT CTL/ELAC2 pushbutton switches (on these pushbuttons switches), the OFF legends go off.
16. Make sure that the pitch–trim control wheels move to the zero mark on the pitch–trim control–wheels, opposite the triangle on the center pedestal.
17. Return aircraft to normal configuration.
18. Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.



Pitch Trim Control Wheel – 13.5 Degree UP STOP POSITION
Figure 27–40–01

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-44-01A	Stabilizer Actuator Electrical Motors (Motor 3)	**Y**	3	2	**C**	Motor 3 only may be inoperative.
27-44-01B	Stabilizer Actuator Electrical Motors (Motor 2) **"DISP.APPR.REQ'D"**	**N**	3	2	**B**	**(M)(O)** Motor 2 only may be inoperative provided ELAC 1 is considered inoperative. Ensure the provisos in the Remarks & Exceptions column of MEL item 27–93–01 are applied. CAT III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-44-01A	Adjacent To ECAM Display	NO. 3 STABILIZER ACTUATOR ELECTRIC MOTOR INOP
27-44-01B	Adjacent To ECAM Display	NO. 2 STABILIZER ACTUATOR ELECTRIC MOTOR INOP

(O) PROCEDURES

27-44-01B

Comply with MEL item 27–93–01 (O) procedure.

(M) PROCEDURES

27-44-01B

Defer ELAC 1 inoperative per MEL item 27–93–01.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-44-02	Pitch Trim Hydraulic System Pressure Indication Symbol on ECAM F/CTL Page	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-44-02	Adjacent To ECAM Display	___ PITCH TRIM HYDRAULIC SYSTEM PRESSURE INDICATION SYMBOL(S) INOP

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
	SLAT/FLAP CONTROL SYSTEM (SFCS)					
27-51-01A	Flap Channels **"DISP.APPR.REQ'D"**	**N**	2	1	**B**	**(M)(O)** SFCS 2 flap channel may be inoperative provided: a) Slats and Flaps operate normally on SFCC 1, b) Operation of SFCC 1 WTBs are confirmed by tests PRIOR TO EACH DEPARTURE (Log Book Entry Required), c) Electrical supply to SFCC 2 flap channel is inhibited, d) ELAC, SEC, ADIRS, LGCIU, FAC, and RA systems operate normally, e) Spoiler surfaces 2 and 4 operate normally, f) RNAV operations do not require SFCS use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. and g) Minimum idle on ground is considered inoperative and deferred per MEL 73-20-03A or 73-20-03B as applicable. **Repetitive Check Required (Yellow Placard)**
27-51-01B	Slat Channel **"DISP.APPR.REQ'D"**	**N**	2	1	**B**	**(M)(O)** SFCS 2 slat channel may be inoperative provided: a) Slats and Flaps operate normally on SFCC 1, b) Operation of SFCC 1 WTBs are confirmed by tests PRIOR TO EACH DEPARTURE (Log Book Entry Required), c) Electrical supply to SFCC 2 slat channel is inhibited, d) ELAC, SEC, ADIRS, LGCIU, FAC, and RA systems operate normally, e) Takeoff using FLAP 1 configuration is prohibited, f) Departure weather is 1000 ft./3 mi. or greater, g) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival, h) If, upon arrival, the actual destination/alternate weather is below 1000 ft./3 mi. landing is authorized provided SFCC 1 is operational, and i) RNAV operations do not require SFCS use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. **Repetitive Check Required (Yellow Placard)**

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MEL ITEM	TAB LOCATION	PLACARD TEXT
27-51-01A	Adjacent To ECAM Display	SFCS 2 FLAP CHANNEL INOP
27-51-01B	Adjacent To ECAM Display	SFCS 2 SLAT CHANNEL INOP

(O) PROCEDURES

27-51-01A

1. Disregard and clear the F/CTL FLAP SYS 2 FAULT caution displayed on ECAM E/WD.
2. Comply with MEL item 73–20–03A or –03B (O) procedure, as applicable.

   NOTE: Status messages ENG 2 APPR IDLE ONLY and FLAPS SLOW are displayed.

27-51-01B

1. Verify that:
   a) Departure weather is 1000 ft./3 mi. or greater.
   b) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival.
2. If, upon arrival, the actual destination/alternate weather is below 1000 ft./3 mi., landing is authorized provided SFCC 1 is operational.
3. Disregard and clear the F/CTL SLAT SYS 2 FAULT caution displayed on ECAM E/WD.
4. Takeoff using FLAP 1 configuration is prohibited.

   NOTE: Status message SLATS SLOW is displayed.

(M) PROCEDURES

27-51-01A

1. Deactivate the SFCC No.2 Flap Channel by performing AMM Task 27-51-00-040-001
2. Defer Minimum Idle on Ground inoperative per MEL item 73–20–03A or –03B, as applicable
3. PRIOR TO EACH DEPARTURE:
   a) Confirm operation of SFCC 1 WTB/POB by performing AMM Task 27-51-00-710-001.

27-51-01B

1. Deactivate the SFCC No.2 Slat Channel by performing AMM Task 27-51-00-040-005
2. PRIOR TO EACH DEPARTURE:
   a) Confirm operation of SFCC 1 WTB/POB by performing AMM Task 27-81-00-710-001.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
27-51-02	Flap Wing Tip Brake Solenoids **“DISP.APPR.REQ’D”**	**N**	4	2	**C**	**(M)** Solenoids associated with SFCC 2 may be inoperative provided: a) Operation of SFCC 1 WTBs are confirmed by tests PRIOR TO EACH DEPARTURE (Log Book Entry Required), and b) RNAV operations do not require Flap Wing Tip Brake Soleniod use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-51-02	Adjacent To ECAM Display	___ WTB SOLENOID ASSOCIATED WITH SFCC 2 INOP

(M) PROCEDURES

27-51-02

1. PRIOR TO EACH DEPARTURE:
   a) Confirm the operation of the SFCC 1 WTBs by performing AMM Task 27-51-00-040-004.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-54-01A	Flap Hydraulic Motors (Green Motor)	**Y**	2	1	**C**	Green motor may be inoperative provided blue slat motor operates normally.
27-54-01B	Flap Hydraulic Motors (Yellow Motor)	**Y**	2	1	**C**	Yellow motor may be inoperative provided blue slat motor operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-54-01A	Adjacent To Flap Selector Handle	GREEN SYSTEM FLAP HYDRAULIC MOTOR INOP
27-54-01B	Adjacent To Flap Selector Handle	YELLOW SYSTEM FLAP HYDRAULIC MOTOR INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
27-54-02	Flap PCU Valve Blocks **"DISP.APPR.REQ'D"**	**N** 2	1	**B**	**(M)(O)** SFCS 2 Flap PCU Valve Block may be inoperative provided: a) Slats and Flaps operate normally on SFCC 1, b) Operation of SFCC 1 WTBs are confirmed by tests PRIOR TO EACH DEPARTURE (Log Book Entry Required), c) Electrical supply to SFCC 2 flap channel is inhibited, d) ELAC, SEC, ADIRS, LGCIU, FAC, and RA systems operate normally, e) Spoiler surfaces 2 and 4 operate normally, f) Minimum idle on ground is considered inoperative and deferred per MEL 73-20-03A or 73-20-03B as applicable, and g) RNAV operations do not require Flap BCU Valve Blocks use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-54-02	Adjacent To ECAM Display	SFCS 2 FLAP PCU VALUE BLOCK INOP

(O) PROCEDURES

27-54-02

1. Disregard and clear the F/CTL FLAP SYS 2 FAULT caution displayed on ECAM E/WD.
2. Comply with MEL item 73–20–03A or –03B (O) procedure, as applicable.

   NOTE: Status messages ENG 2 APPR IDLE ONLY and FLAPS SLOW are displayed.

(M) PROCEDURES

27-54-02

1. Deactivate the SFCC No.2 Flap Channel by performing AMM Task 27-51-00-040-001
2. Defer Minimum Idle on Ground inoperative per MEL item 73–20–03A or –03B, as applicable
3. PRIOR TO EACH DEPARTURE:

   a) Confirm operation of SFCC 1 WTB/POB by performing AMM Task 27-51-00-710-001.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-64-01A	Spoiler Surfaces (No. 1 or 3) **"DISP.APPR.REQ'D"**	**N**	10	8	**C**	**(M)(O)** One pair of symmetrical surfaces 1 or 3 may be inoperative in the retracted position provided: a) SECs associated with operative spoilers operate normally, and b) Applicable performance corrections for 2 Pair Spoilers Inoperative are applied for takeoff and landing.
27-64-01B	Spoiler Surfaces (No. 5)	**N**	10	8	**C**	**(M)(O)** One pair of symmetrical surfaces 5 may be inoperative in the retracted position provided SECs associated with operative spoilers operate normally.
27-64-01C	Spoiler Surfaces (No. 2 or 4) **"DISP.APPR.REQ'D"**	**N**	10	8	**C**	**(M)(O)** One pair of symmetrical surfaces 2 or 4 may be inoperative in the retracted position provided: a) SECs associated with operative spoilers operate normally, b) SFCS 2 flap channel operates normally, and c) Applicable performance corrections for 2 Pair Spoilers Inoperative are applied for takeoff and landing.
27-64-01D	Spoiler Surfaces (No. 1 and 2) **"DISP.APPR.REQ'D"**	**N**	10	6	**C**	**(M)(O)** Two pair of symmetrical surfaces 1 and 2 may be inoperative in the retracted position provided: a) SECs associated with operative spoilers operate normally, b) SFCS 2 flap channel operates normally, c) Spoiler surfaces 3 and 4 operate normally, d) Applicable performance corrections for 2 Pair Spoilers Inoperative are applied for takeoff and landing, and e) RNAV operations do not require Spoiler Surfaces use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III/Autoland Not Authorized

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
27-64-01E	Spoiler Surfaces (No. 3 and 4) **"DISP.APPR.REQ'D"**	**N** 10	6	**C**	**(M)(O)** Two pair of symmetrical surfaces 3 and 4 may be inoperative in the retracted position provided: a) SECs associated with operative spoilers operate normally, b) TR 1 and TR 2 operate normally, c) DC TIE contactor 1 is verified closed PRIOR TO EACH DEPARTURE, d) SFCS 2 flap channel operates normally, e) Do not use speedbrakes, and f) Applicable performance corrections for 2 Pair Spoilers Inoperative are applied for takeoff and landing. CAT II/III/Autoland Not Authorized **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-64-01A	Adjacent To ECAM Display	SPOILER PAIR ___ INOP AND DEACTIVATED
27-64-01B	Adjacent To ECAM Display	SPOILER PAIR NO. 5 INOP AND DEACTIVATED
27-64-01C	Adjacent To ECAM Display	SPOILER PAIR ___ INOP AND DEACTIVATED
27-64-01D	Adjacent To ECAM Display	SPOILER PAIRS 1 AND 2 INOP AND DEACTIVATED
27-64-01E	Adjacent To ECAM Display	SPOILER PAIRS 3 AND 4 INOP AND DEACTIVATED

(O) PROCEDURES

27-64-01A

1. After engines start, check on ECAM HYD page for the absence of amber data.

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27-64-01A	SPOILER SURFACES (NO. 1 OR 3)
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-64-01A.**

27-64-01B

After engines start, check on ECAM HYD page for the absence of amber data.

27-64-01C

After engines start, check on ECAM HYD page for the absence of amber data.

27-64-01C	SPOILER SURFACES (NO. 2 OR 4)
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-64-01C.**

27-64-01D

1. SEC 3 – OFF.
2. In flight, in case of further SEC 1 and SEC 2 failures, disengage autopilot by 500 ft RA before landing in Direct Law.

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27-64-01D	**SPOILER SURFACES (NO. 1 AND 2)**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-64-01D.**

27-64-01E

1. PRIOR TO EACH DEPARTURE, verify DC TIE contactor closed:
   a) Apply APU generator or external power.
   b) Check on ECAM ELEC page for a link between DC BUS 1 and DC BAT BUS.
2. Do not use Speedbrakes.

27-64-01E	**SPOILER SURFACES (NO. 3 AND 4)**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-64-01E.**

(M) PROCEDURES

27-64-01A, 27-64-01B, 27-64-01C, 27-64-01E

1. Deactivate the associated spoiler servo control per AMM Task 27-64-00-040-001.

27-64-01D

1. Deactivate the associated spoiler servo control per AMM Task 27-64-00-040-001.
2. On 121VU panel, pull and secure FLIGHT CONTROLS/SEC3/SPLY circuit breaker located at Q19.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-64-04	Spoilers Hydraulic System Pressure Indication Symbol on F/CTL Page	**Y**	3	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-64-04	Adjacent To ECAM Display	___ SPOILERS HYDRAULIC SYSTEM PRESSURE INDICATION SYMBOL(S) INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
27-81-01	Slat Wing Tip Brake Solenoids **"DISP.APPR.REQ'D"**	**N** 4	2	**C**	**(M)** Solenoids associated with SFCC 2 may be inoperative provided: a) SFCC 1 WTBs is checked operative normally PRIOR TO EACH DEPARTURE (Log Book Entry Required)y, and b) RNAV operations do not require Slat Wing Tip Brake Soleniod use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-81-01	Adjacent To ECAM Display	___ WTB SOLENOID ASSOCIATED WITH SFCC 2 INOP

(M) PROCEDURES

1. PRIOR TO EACH DEPARTURE:
   a) Perform AMM Task 27-81-00-040-001

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-84-01	Slats Hydraulic Motors	**Y**	2	1	**C**	If blue slat hydraulic motor is inoperative, the green flap hydraulic motor must be operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-84-01	Adjacent To ECAM Display	___ SLATS HYDRAULIC MOTOR INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
27-84-02	Slat PCU Valve Blocks **"DISP.APPR.REQ'D"**	**N** 2	1	**B**	**(M)(O)** SFCS 2 Slat PCU Valve Block may be inoperative provided: a) Slats, Flaps and associated monitoring and protection systems operate normally on SFCC 1, b) Operation of SFCC 1 WTBs are confirmed by tests PRIOR TO EACH DEPARTURE (Log Book Entry Required), c) Electrical supply to SFCC 2 slat channel is inhibited, d) ELAC, SEC, ADIRS, LGCIU, FAC, and RA systems operate normally, e) Takeoff using FLAP 1 configuration is prohibited, f) Departure weather is 1000 ft./3 mi. or greater, g) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival, h) If, upon arrival, the actual destination/alternate weather is below 1000 ft./3mi., landing is authorized provided SFCC 1 is operational, and i) RNAV operations do not require Slat PCU Valve Blocks use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-84-02	Adjacent To ECAM Display	SFCS 2 SLAT PCU VALVE BLOCK INOP

(O) PROCEDURES

27-84-02

1. Verify that:
   a) Departure weather is 1000 ft./3 mi. or greater.
   b) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival.
2. If, upon arrival, the actual destination/alternate weather is below 1000 ft./3 mi., landing is authorized provided SFCC 1 is operational.
3. Disregard and clear the F/CTL SLAT SYS 2 FAULT caution displayed on ECAM E/WD.
4. Takeoff using FLAP 1 configuration is prohibited.

   NOTE: Status message SLATS SLOW is displayed.

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27-84-02	**SLAT PCU VALVE BLOCKS**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	None
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-84-02.**

(M) PROCEDURES

27-84-02

1. Deactivate the SFCC No.2 Slat Channel by performing AMM Task 27-51-00-040-005.
2. PRIOR TO EACH DEPARTURE:
   a) Confirm operation of SFCC 1 WTB/POB by performing AMM Task 27-81-00-710-001.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
	SPEED BRAKE CONTROL SYSTEM					
27-92-01A	All Speed Brakes **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided applicable performance corrections for All Spoilers Inoperative are applied for takeoff and landing.
27-92-01B	Speed Brake No. 2 **"DISP.APPR.REQ'D"**	**N**	10	8	**C**	**(M)(O)** May be inoperative provided: a) Speed brake No. 2 is considered inoperative in the retracted position, b) Spoiler surfaces No.2 are considered inoperative and deferred per MEL 27-64-01C, and c) Speed brakes No. 3 and 4 are operative.
27-92-01C	Speed Brake No. 3 and 4 **"DISP.APPR.REQ'D"**	**N**	10	6	**C**	**(M)(O)** May be inoperative provided: a) Speed brake Nos. 3 and 4 are considered inoperative in the retracted position, b) Spoiler surfaces No.3 and 4 are considered inoperative and deferred per MEL 27-64-01E, and c) Speed brake No. 2 is operative. CAT II/III/Autoland Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-92-01A	Adjacent To ECAM Display	ALL SPEED BRAKES INOP
27-92-01B	Adjacent To ECAM Display	SPEED BRAKE NO. 2 INOP AND DEACTIVATED
27-92-01C	Adjacent To ECAM Display	SPEED BRAKES NO. 3 AND 4 INOP AND DEACTIVATED

(O) PROCEDURES

27-92-01A

1. AUTO/BRK function is not available. Do not select or use the AUTO/BRK function.

   NOTE 1: When T.O MEMO is displayed on ECAM E/WD, disregard the line: AUTO BRK.....MAX (blue)

   NOTE 2: One or both thrust reversers may not deploy at landing.

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27-92-01A	**SPEED BRAKE CONTROL SYSTEM (ALL SPEED BRAKES)**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-92-01A.**

27-92-01B

1. Comply with MEL item 27–64–01C (O) procedure.

27-92-01C

1. Comply with MEL item 27–64–01E (O) procedure.

(M) PROCEDURES

27-92-01B

1. Defer spoiler surface No. 2 inoperative per MEL item 27–64–01C.

27-92-01C

1. Defer spoiler surface No. 3 and 4 inoperative per MEL item 27–64–01E.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
GROUND SPOILER CONTROL SYSTEM					
27-92-02A All Spoilers **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** May be inoperative provided: a) A check of the thrust reverser system is performed to ensure that both thrust reversers operate normally PRIOR TO EACH DEPARTURE (Log Book Entry Required), b) Autobrake function is not used, c) Applicable performance corrections for All Spoilers Inoperative are applied for takeoff and landing, and d) Repairs are made within three landings. CAT III Not Authorized **Repetitive Check Required (Yellow Placard)**
27-92-02B Spoiler 5	**Y**	2	0	**C**	May be inoperative.
27-92-02C Spoilers 1 and 2 **"DISP.APPR.REQ'D"**	**Y**	4	0	**C**	**(O)** Spoilers 1 and 2 may be inoperative provided: a) Spoilers 3 and 4 are operative, and b) Applicable performance corrections for 2 Pair Spoilers Inoperative are applied for takeoff and landing.
27-92-02D Spoilers 3 and 4 **"DISP.APPR.REQ'D"**	**Y**	4	0	**C**	**(O)** Spoilers 3 and 4 may be inoperative provided: a) Spoilers 1 and 2 are operative, and b) Applicable performance corrections for 2 Pair Spoilers Inoperative are applied for takeoff and landing.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
27-92-02A	Adjacent To ECAM Display	GROUND SPOILER CONTROL SYSTEM INOP
27-92-02B	Adjacent To ECAM Display	GROUND SPOILER 5 CONTROL SYSTEM INOP
27-92-02C	Adjacent To ECAM Display	GROUND SPOILER 1 AND 2 CONTROL SYSTEM INOP
27-92-02D	Adjacent To ECAM Display	GROUND SPOILER 3 AND 4 CONTROL SYSTEM INOP

(O) PROCEDURES

27-92-02A

1. AUTO/BRK function is not available. Do not select or use the AUTO/BRK function.

   NOTE 1: When T.O MEMO is displayed on ECAM E/WD, disregard the line: AUTO BRK.....MAX (blue)

   NOTE 2: One or both thrust reversers may not deploy at landing.

27-92-02A	**GROUND SPOILER CONTROL SYSTEM (ALL SPOILERS)**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-92-02A.**

27-92-02C

1. Verify that the AWABS contains MEL item 27–92–02C.

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27-92-02C	GROUND SPOILER CONTROL SYSTEM (SPOILERS 1 AND 2)
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-92-02C.**

27-92-02D

1. Verify that the AWABS contains MEL item 27–92–02D.

27-92-02D	GROUND SPOILER CONTROL SYSTEM (SPOILERS 3 AND 4)
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 27-92-02D.**

(M) PROCEDURES

27-92-02A

PRIOR TO EACH DEPARTURE:

1. Perform AMM Task 27-92-00-040-003.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
27-92-05A	Spoiler/Speedbrake Indications on ECAM F/CTL and WHEEL Page (Spoilers Nos. 1 or 3; 2 or 4; 5 Inoperative) **"DISP.APPR.REQ'D"**	**N**	10	6	**C**	**(M)(O)** May be inoperative for an associated inoperative spoiler. Ensure the provisos in the Remarks & Exceptions column of MEL Item 27–64–01A, –01B, or –01C, as appropriate, are applied.
27-92-05B	Spoiler/Speedbrake Indications on ECAM F/CTL and WHEEL Page (Spoilers Nos.1 and 2 Inoperative) **"DISP.APPR.REQ'D"**	**N**	10	6	**B**	**(M)(O)** May be inoperative for associated inoperative spoilers. Ensure the provisos in the Remarks & Exceptions column of MEL Item 27–64–01D are applied. CAT II/III/Autoland Not Authorized
27-92-05C	Spoiler/Speedbrake Indications on ECAM F/CTL and WHEEL Page (Spoilers Nos.3 and 4 Inoperative) **"DISP.APPR.REQ'D"**	**N**	10	6	**B**	**(M)(O)** May be inoperative for associated inoperative spoilers. Ensure the provisos in the Remarks & Exceptions column of MEL Item 27–64–01E are applied. CAT II/III Not Authorized
27-92-05D	Spoiler/Speedbrake Indications on ECAM F/CTL and WHEEL Page (Spoilers operative) **"DISP.APPR.REQ'D"**	**N**	10	0	**C**	**(M)(O)** May be inoperative provided a visual check of affected surface movement is made PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-92-05A	Adjacent To ECAM Display	___ SPOILER /SPEEDBRAKE INDICATION INOP
27-92-05B	Adjacent To ECAM Display	NO. 1 AND 2 SPOILER /SPEEDBRAKE INDICATION INOP
27-92-05C	Adjacent To ECAM Display	SPOILER/SPEEDBRAKE INDICATIONS INOP. SPOILERS NO. 3 AND 4 INOP AND DEACTIVATED
27-92-05D	Adjacent To ECAM Display	___ SPOILER /SPEEDBRAKE INDICATION INOP

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(O) PROCEDURES

27-92-05A

Comply with MEL Item 27–64–01A, –01B, or –01C (O) procedure, as appropriate.

27-92-05B

Comply with MEL Item 27–64–01D (O) procedure.

27-92-05C

Comply with MEL Item 27–64–01E (O) procedure.

27-92-05D

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

(M) PROCEDURES

27-92-05A

Defer the associated inoperative spoiler per MEL Item 27–64–01A, –01B, or –01C, as applicable.

27-92-05B

Defer the associated inoperative spoiler per MEL Item 27–64–01D.

27-92-05C

Defer spoiler surface No. 3 and 4 inoperative per MEL item 27–64–01E.

27-92-05D

The (M) Indicates that the following Maintenance Procedure is required:

1. PRIOR TO EACH DEPARTURE:

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROLS ARE CLEAR. MOVEMENT OF FLIGHT CONTROLS CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE.

a) Energize the aircraft electrical circuits.

b) Establish communications – flight deck to ground.

c) If surface 1 is affected, accomplish the following:

   a) Set YELLOW ELEC PUMP to ON.

   b) Check that PTU is set to AUTO.

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FLIGHT DECK (Flight Crew if available)	GROUND OBSERVATION
• Set SPD BRK to FULL	Surface 1 slightly extends (approximately 6 degrees)

c) Set YELLOW ELEC PUMP to OFF.

d) If surface 3 is affected, accomplish the following:

a) Check that BLUE ELEC PUMP is set to AUTO.

b) Set BLUE PUMP OVRD switch to ON.

FLIGHT DECK (Flight Crew if available)	GROUND OBSERVATION
• Move side stick from left stop to right stop.	Check the correct movement of surface.

c) Set BLUE ELEC PUMP to OFF.

e) If surface 2, 4 or 5 are affected, accomplish the following:

a) Set YELLOW ELEC PUMP to ON.

b) Check that PTU is set to AUTO.

FLIGHT DECK (Flight Crew if available)	GROUND OBSERVATION
• Move side stick from left stop to right stop.	Check the correct movement of surfaces 2, 4 and 5.

c) Set YELLOW ELEC PUMP to OFF.

2. Accomplish required FOLLOW UP ACTION (on Yellow Placard) for logbook entry.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
27-93-01	Elevator Aileron Computers (ELAC) ELAC 1 **"DISP.APPR.REQ'D"**	**N**	2	1	**B**	**(M)(O)** ELAC 1 or any ELAC 1 function may be inoperative provided: a) Both accelerometers associated with ELAC 2 operate normally, b) All sidestick transducers associated with ELAC 2 and the three SECs operate normally, c) ELAC 2, SECs, ADIRs, SFCCs, LGCIUs, FACs, and RAs operate normally, d) TR 1 and TR 2 operate normally, e) DC TIE contactor 1 is verified closed PRIOR TO EACH DEPARTURE, f) All roll spoilers operate normally, g) Elevators and roll spoilers control through the SECs is verified operative PRIOR TO EACH DEPARTURE (Log Book Entry Required), h) Above FL200, the use of speed brakes lever is limited to its half position, and i) RNAV operations do not require ELAC use refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. NOTE: When the ELAC 1 FAULT alert is displayed (ELAC 1 is not electrically supplied), F/O Take-Over pb cannot disengage AP1. CAT III Not Authorized **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-93-01	Adjacent To ECAM Display	ELAC 1 OR ___ ELAC 1 FUNCTION INOP

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(O) PROCEDURES

27-93-01

DURING COCKPIT PREPARATION

NOTE: If the Yellow Electric Pump is not available:
- Pressurize the Yellow Hydraulic System with:
  - A ground cart, or with
  - The Yellow Engine 2 Pump with Engine 2 running
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

- If the F/CTL ELAC 1 FAULT alert is displayed on the EWD:

NOTE 1: After application of the maintenance procedure, the following ECAM alerts remain displayed on the EWD :
- C/B TRIPPED R ELEC BAY alert , and
- C/B TRIPPED ON OVHD PNL alert, and
- F/CTL ELAC 1 FAULT alert.

NOTE 2: After first engine start, the F/CTL ALTN LAW alert may be spuriously displayed. It normally disappears after second engine start.

Check of the elevator and the roll spoilers control through SECs:

Put the aircraft in the test configuration:

- YELLOW ELEC PUMP pb-sw – ON
- PTU pb-sw – AUTO
- BLUE ELEC PUMP pb-sw – AUTO
- BLUE ELEC OVRD pb – ON
- ELAC 2 pb-sw – ON
- SEC 1 pb-sw – ON
- SEC 2 pb-sw – ON
- SEC 3 pb-sw – ON
- Wait 5 seconds

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Check elevator control through SEC 1 and spoiler control through SEC 1 and SEC 3

- BLUE PUMP OVRD pb-sw – OFF
- Wait for hydraulic circuit depressurization.
- On the F/CTL SD page, check that blue elevator actuator symbol becomes amber.
- Wait 5 seconds
- BLUE PUMP OVRD pb-sw – ON
- Both ELAC 1 pb-sw and ELAC 2 pb-sw – OFF
- SEC 2 pb-sw - OFF
- Move the CAPT stick from right stop to left stop, then from forward stop to aft stop.
- On the F/CTL SD page, check the correct movement of the pairs of spoilers 2, 3, and 4 and the full travel of both elevators.
- Move the F/O stick from right stop to left stop, then from forward stop to aft stop.
- On the F/CTL SD page, check the correct movement of the pairs of spoilers 2, 3, and 4 and the full travel of both elevators

CAUTION	If an expected spoiler or elevator movement does not occur, do not attempt any reset. Contact MCC/Maintenance.

Check of elevator control through SEC 2 and spoiler control through SEC 2 and SEC 3:

- ELAC 2 pb-sw – ON
- SEC 2 pb-sw – ON
- Wait 5 seconds
- YELLOW ELEC PUMP pb-sw – OFF
- Wait for hydraulic circuits depressurization.
- On the F/CTL SD page, check that the yellow and the green elevator actuators symbols become amber.
- Wait 5 seconds
- YELLOW ELEC PUMP pb-sw – ON
- ELAC 2 pb-sw – OFF
- SEC 1 pb-sw – OFF
- Move the CAPT stick from right stop to left stop, then from forward stop to aft stop.
- On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators.
- Move the F/O stick from right stop to left stop, then from forward stop to aft stop.
- On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators.

CAUTION	If an expected spoiler or elevator movement does not occur, do not attempt any reset. Contact MCC/Maintenance.

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Return to normal configuration:

- YELLOW ELEC PUMP pb-sw – OFF
- BLUE PUMP OVRD pb-sw – OFF
- ELAC 1 pb-sw – OFF
- ELAC 2 pb-sw – ON
- SEC 1 pb-sw – ON

Check that the DC TIE contactor 1 is closed:

- Supply the electrical network from the APU or the external power.
- On the ELEC SD page, check the link between the DC BUS 1 and the DC BAT BUS.

- If the F/CTL ELAC 1 PITCH FAULT alert is displayed on the EWD:

NOTE: After first engine start, the F/CTL ALTN LAW alert may be spuriously displayed on the EWD. It normally disappears after second engine start.

Check of the elevator and the roll spoilers control through the SECs:

Put the aircraft in the test configuration:

- YELLOW ELEC PUMP pb-sw – ON
- PTU pb-sw – AUTO
- BLUE ELEC PUMP pb-sw – AUTO
- BLUE ELEC OVRD pb – ON
- ELAC 1 pb-sw – ON
- ELAC 2 pb-sw – ON
- SEC 1 pb-sw – ON
- SEC 2 pb-sw – ON
- SEC 3 pb-sw – ON
- Wait 5 seconds

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Check of the elevator control through the SEC 1 and of the spoilers control through the SEC 1 and the SEC 3:

- - BLUE PUMP OVRD pb-sw – OFF
- - Wait for hydraulic circuit depressurization.
- - On the F/CTL SD page, check that blue elevator actuator symbol becomes amber.
- - Wait 5 s
- - BLUE PUMP OVRD pb-sw – ON
- - ELAC 1 pb-sw – OFF
- - ELAC 2 pb-sw – OFF
- - SEC 2 pb-sw – OFF
- - Move the CAPT stick from right stop to left stop, then from forward stop to aft stop.
- - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2, 3, and 4 and the full travel of both elevators.
- - Move the F/O stick from right stop to left stop, then from forward stop to aft stop.
- - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2, 3, and 4 and the full travel of both elevators.

CAUTION	If an expected spoiler or elevator movement does not occur, do not attempt any reset. Contact MCC/Maintenance.

Check of the elevator control through the SEC 2 and of the spoilers control through the SEC 2 and the SEC 3:

- - ELAC 1 pb-sw – ON
- - ELAC 2 pb-sw – ON
- - SEC 2 pb-sw – ON
- - Wait 5 s
- - YELLOW ELEC PUMP pb-sw – OFF
- - Wait for hydraulic circuits depressurization.
- - On the F/CTL SD page, check that the yellow and the green elevator actuators symbols become amber.
- - Wait 5 s
- - YELLOW ELEC PUMP pb-sw – ON
- - ELAC 1 pb-sw – OFF
- - ELAC 2 pb-sw – OFF
- - SEC 1 pb-sw – OFF
- - Move the CAPT stick from right stop to left stop, then from forward stop to aft stop.
- - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators.
- - Move the F/O stick from right stop to left stop, then from forward stop to aft stop.
- - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators.

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CAUTION	If an expected spoiler or elevator movement does not occur, do not attempt any reset. Contact MCC/Maintenance.

Return to normal configuration:

- YELLOW ELEC PUMP pb-sw – OFF
- BLUE PUMP OVRD pb-sw – OFF
- ELAC 1 pb-sw – ON
- ELAC 2 pb-sw – ON
- SEC 1 pb-sw – ON

Check that the DC TIE contactor 1 is closed:

- Supply the electrical network from the APU or the external power.
- On the ELEC SD page, check the link between the DC BUS 1 and the DC BAT BUS.

IN FLIGHT

Above FL200, limit the use of the speedbrakes lever to its half position.

APPROACH

- If the AP 1 is used for the approach:

  The captain must be the PF.

NOTE: Due to the fact that the ELAC 1 is not electrically supplied, the F/O take-over pb cannot disengage the AP 1

(M) PROCEDURES

27-93-01

PRIOR TO EACH DEPARTURE:

1. Perform AMM Task 27-93-00-040-001.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ELAC PB SWITCH 27-93-02A FAULT Lights	**Y**	2	1	**C**	One may be inoperative provided: a) Both Flight Warning Computers (FWCs) operate normally, and b) ELAC indications operate normally.
27-93-02B OFF Lights	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-93-02A	Adjacent To Affected Fault Light(S)	___ ELAC P.B. SWITCH FAULT LIGHT INOP
27-93-02B	Adjacent To Affected Off Light(S)	___ ELAC P.B. SWITCH OFF LIGHTS INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-93-03	ECAM ELAC Indications	**Y**	2	0	**C**	May be inoperative provided: a) Both Flight Warning Computers operate normally, and b) ELAC fault light operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-93-03	Adjacent To ECAM Display	___ ECAM ELAC INDICATION INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
27-94-01	Spoiler Elevator Computers (SEC) SEC 3 **"DISP.APPR.REQ'D"**	**N** 1	0	**C**	**(M)(O)** May be inoperative provided: a) SEC 3 is deactivated, b) SEC 1 and SEC 2 are operative, c) SFCS No. 2 flap channel is operative, d) All aileron servo channels and roll spoilers associated with the operative SECs are operative, e) Spoiler Surfaces (No.1 and 2) are considered inoperative and deferred per MEL 27-64-01D, and f) RNAV operations do not require Spoiler Elevator Computers use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III/Autoland Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-94-01	Adjacent To ECAM Display	SEC 3 INOP

(O) PROCEDURES

27-94-01

1. SEC 3 – OFF.
2. Comply with MEL Item 27–64–01D (O) procedure.

(M) PROCEDURES

27-94-01

1. Defer Spoilers 1 and 2 inoperative per MEL Item 27–64–01D.
2. Deactivate the SEC 3 by:
   a) Pull and secure FLIGHT CONTROLS/SEC 3/SPLY circuit breaker located on the 121VU panel at Q19.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
SEC PB SWITCH					
27-94-02A FAULT Lights	**Y**	3	2	**C**	One may be inoperative provided associated SEC caution operates normally.
27-94-02B FAULT Lights	**Y**	3	0	**C**	May be inoperative provided: a) Flight warning computers (FWC's) operate normally, and b) ECAM SEC indications operate normally.
27-94-02C OFF Lights	**Y**	3	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-94-02A	Adjacent To Affected SEC Fault Light	___ SEC FAULT LIGHT INOP
27-94-02B	Adjacent To Affected SEC Fault Light(s)	___ SEC FAULT LIGHT INOP
27-94-02C	Adjacent To Affected SEC OFF Light(s)	SEC ___ OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-94-03	SEC Indication on ECAM F/CTL Page	**Y**	3	0	**C**	May be inoperative provided SEC p.b switch fault light system operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-94-03	Adjacent To ECAM Display	SEC ___ ECAM INDICATION INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
27-95-01	Flight Control Data Concentrators (FCDC)	**Y**	2	1	**C**	**(M)(O)** FCDC 2 ONLY may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
27-95-01	Adjacent To ECAM Display	FCDC 2 INOP

(O) PROCEDURES

Verify that C/B on panel 121VU FLIGHT CONTROLS/FCDC2/SPLY location Q20 is pulled and secured.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

On C/B panel 121VU: pull and secure circuit breaker FLIGHT CONTROLS/FCDC2/SPLY location Q20.

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY				
28-00-01	Fault(s) Indicated by FUEL	**Y**		**C**	NOTE: Dispatch with this MAINT STS message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-00-01	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “FUEL” DISPLAYED

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	OVERPRESSURE PROTECTORS					
28-12-01A	Between Inner and Outer Tanks (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** One or both may be damaged or missing provided the inner tank fuel temperature is monitored.
28-12-01B	Between Inner and Outer Tank (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(M)(O)** One or both may be damaged or missing provided: a) Associated transfer valves are latched in open position, and b) PRIOR TO EACH DEPARTURE, associated transfer valve is verified in the open position. NOTE: After transfer valves have been electrically latched open; any refueling, repowering or opening of refuel door will cause the transfer valve to unlatch and close requiring transfer valve to be electrically latched open again. **Repetitive Check Required (Yellow Placard)**
28-12-01C	In Vent Surge Tank (A319/A320/A321)	**N**	2	0	**C**	**(M)(O)** May be damaged or missing.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-12-01A	Adjacent To Lower ECAM Display	___ OVERPRESSURE PROTECTORS DAMAGED/MISSING
28-12-01B	Adjacent To Lower ECAM Display	LH WING OVERPRESSURE PROTECTOR DAMAGED/MISSING
28-12-01C	Adjacent To Lower ECAM Display	___ OVERPRESSURE PROTECTORS DAMAGED/MISSING

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(O) PROCEDURES

28-12-01A

1. This dispatch condition results in an unusual distribution of fuel quantity: Outer tank of affected wing will be partially empty with the transfer valves normally closed.
2. Fuel management should be performed with care.
3. After a long taxi or if outside air temperature is high, FUEL OUTER TK HI TEMP caution may be displayed on ECAM E/WD. If this occurs, disregard FUEL OUTER TK HI TEMP caution and apply the following procedure:
   a) The Inner Tank Fuel temperature during taxi and in flight is to be monitored to ensure that it decreases and remains within temperature limitations.
   b) In the event of the Inner Tank Fuel temperature exceeding temperature limitations,
      1) Before takeoff, delay takeoff and shutdown engine of affected side.
      2) In flight, increase engine fuel flow of affected side and if necessary use APU GEN and switch off IDG of affected side if opposite GEN is available.

28-12-01B

1. This condition results in an unusual distribution of fuel quantity: outer tank of affected wing will not be full unless the inner tank is full.
2. Perform the following:
   a) Ensure the refuel panel is closed.
   b) For left wing open CB on panel 49 VU FUEL/XFR VALVE1/WING/L location A10, or for right wing open CB on panel 49 VU FUEL/XFR VALVE1/WING/R location A11, wait ten seconds,
   c) For left wing open CB on panel 121 VU FUEL/XFR VALVE2/WING/L location M22, or for right wing open CB on panel 121 VU FUEL/XFR VALVE2/WING/R location M23, wait ten seconds and observe the left wing fuel LO LEVEL warning displayed on ECAM.
   d) Close the above mentioned circuit breakers and the associated transfer valve indication should indicate open on the fuel page.

   NOTE 1: Fuel should transfer out of the outer tank into the inner tank if the inner tank is not full (this can be seen by observing the fuel quantity).

   NOTE 2: Do not reselect refuel power or open the refuel door as this will cause the transfer valve latch circuit to delatch and the valves will close again.

28-12-01C

1. Taxi slowly in turns to reduce the possibility of fuel spill during taxi.
2. When established in cruise, check that sufficient FOB is available for reaching destination with adequate reserve.

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(M) PROCEDURES

28-12-01B

1. Refuel aircraft to the required fuel quantity for departure.
2. Close up the refuel panel.
3. On the ECAM control panel, push the FUEL pushbutton to show the FUEL page on the ECAM lower display unit.
4. To latch the associate transfer valve in the open position perform the following:

   a) For the Left Wing:

ACTION	RESULT
1. On the panel 49VU:	
• Open the circuit breaker FUEL/XFR VALVE1/WING/L located at A10	• The green left-wing transfer-valve indicator moves from the closed position to the open position • The green right-wing transfer-valve indicator moves from the closed position to the intermediate (amber) position • The left-wing outer-cell fuel content decreases and the left-wing inner-cell fuel content increases.
• Wait ten seconds.	
2. On the panel 121VU	
• Open the circuit breaker FUEL/XFR VALVE2/WING/L located at M22	• The green left-wing transfer-valve indicator, open position stays in view • The amber right-wing transfer-valve indicator, intermediate (amber) position stays in view • The left-wing outer-cell fuel content decreases and the left-wing inner-cell fuel content increases.
• Wait ten seconds	

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ACTION	RESULT
3. On the panel 49VU	
• Close the circuit breaker FUEL/XFR VALVE1/WING/L located at A10	• The amber right-wing transfer-valve indicator moves from the intermediate position to the green open position • Both wing outer-cell fuel contents decrease and the inner-cell fuel contents increase.
4. On the panel 121VU • Close the circuit breaker FUEL/XFR VALVE2/WING/L located at M22	

i. Monitor the wing fuel quantity indications on the ECAM display unit. Make sure the quantity of fuel in the wing tank inner cell increases as fuel moves from the outer cell. The left wing transfer valves are now set to the open position and the aircraft is ready for flight.

NOTE: The wing transfer valves will close again if the refuel/defuel panel door is open.

b) For the Right Wing:

ACTION	RESULT
1. On the panel 49VU:	
• Open the circuit breaker FUEL/XFR VALVE1/WING/R located at A11	• The green right-wing transfer-valve indicator moves from the closed position to the open position • The green left-wing transfer-valve indicator moves from the closed position to the intermediate (amber) position • The right-wing outer-cell fuel content decreases and the right-wing inner-cell fuel content increases.
• Wait ten seconds.	

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ACTION	RESULT
2. On the panel 121VU	
• Open the circuit breaker FUEL/XFR VALVE2/WING/R located at M23	• The green right-wing transfer-valve indicator, open position stays in view • The amber left-wing transfer-valve indicator, intermediate (amber) position stays in view • The right-wing outer-cell fuel content decreases and the right-wing inner-cell fuel content increases.
• Wait ten seconds	
3. On the panel 49VU	
• Close the circuit breaker FUEL/XFR VALVE1/WING/R located at A11	• The amber right-wing transfer-valve indicator moves from the intermediate position to the green open position • Both wing outer-cell fuel contents decrease and the inner-cell fuel contents increase.
4. On the panel 121VU • Close the circuit breaker FUEL/XFR VALVE2/WING/R located at M23	

i. Monitor the wing fuel quantity indications on the ECAM display unit. Make sure the quantity of fuel in the wing tank inner cell increases as fuel moves from the outer cell. The right wing transfer valves are now set to the open position and the aircraft is ready for flight.

NOTE: The wing transfer valves will close again if the refuel/defuel panel door is open.

28-12-01C

Visually inspect NACA Vent Inlet for blockage.

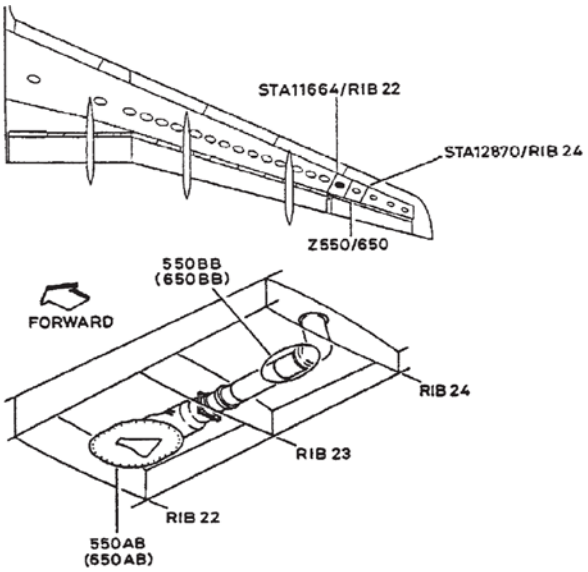

Figure 28–12–01D NACA VENT LOCATION

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
OUTER TO INNER TANK TRANSFER VALVES					
28-15-01A LH Wing (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative open.
28-15-01B LH Wing (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** One or both may be inoperative closed provided LH outer tank fuel (1500 lbs.) is considered unusable.
28-15-01C LH Wing Forward Spar Valve (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative closed provided: a) LH wing rear spar valve is latched open, and b) PRIOR TO EACH DEPARTURE, LH wing rear spar valve is verified to be in open position. NOTE 1: This item may not be used in combination with MEL 28-15-01D. NOTE 2: After transfer valves have been electrically latched open; any refueling, repowering or opening of the refuel door will cause the transfer valve to unlatch and close requiring transfer valve to be electrically latched open again. **Repetitive Check Required (Yellow Placard)**
28-15-01D LH Wing Rear Spar Valve (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative closed provided: a) LH wing forward spar valve is latched open, and b) PRIOR TO EACH DEPARTURE, LH wing forward spar valve is verified to be in open position. NOTE 1: This item may not be used in combination with MEL 28-15-01C. NOTE 2: After transfer valves have been electrically latched open; any refueling, repowering or opening of the refuel door will cause the transfer valve to unlatch and close requiring transfer valve to be electrically latched open again. **Repetitive Check Required (Yellow Placard)**

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	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
OUTER TO INNER TANK TRANSFER VALVES					
28-15-01E RH Wing (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative open.
28-15-01F RH Wing (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** One or both may be inoperative closed provided RH outer tank fuel (1500 lbs.) is considered unusable.
28-15-01G RH Wing Forward Spar Valve (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative closed provided: a) RH wing rear spar valve is latched open, and b) PRIOR TO EACH DEPARTURE, RH wing rear spar valve is verified to be in open position. NOTE 1: This item may not be used in combination with MEL 28-15-01H. NOTE 2: After transfer valves have been electrically latched open; any refueling, repowering or opening of the refuel door will cause the transfer valve to unlatch and close requiring transfer valve to be electrically latched open again. **Repetitive Check Required (Yellow Placard)**
28-15-01H RH Wing Rear Spar Valve (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative closed provided: a) RH wing forward spar valve is latched open, and b) PRIOR TO EACH DEPARTURE, RH wing forward spar valve is verified to be in open position. NOTE 1: This item may not be used in combination with MEL 28-15-01G. NOTE 2: After transfer valves have been electrically latched open; any refueling, repowering or opening of the refuel door will cause the transfer valve to unlatch and close requiring transfer valve to be electrically latched open again. **Repetitive Check Required (Yellow Placard)**

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MEL ITEM	TAB LOCATION	PLACARD TEXT
28-15-01A	Adjacent To Lower ECAM Display	___ LH INTERCELL TRANSFER VALVE INOP OPEN
28-15-01B	Adjacent To Lower ECAM Display	___ LH INTERCELL TRANSFER VALVE(S) INOP CLOSED
28-15-01C	Adjacent To Lower ECAM Display	LH WING FWD SPAR INTERCELL TRANSFER VALVE INOP
28-15-01D	Adjacent To Lower ECAM Display	LH WING REAR SPAR INTERCELL TRANSFER VALVE INOP
28-15-01E	Adjacent To Lower ECAM Display	___ RH INTERCELL TRANSFER VALVE INOP OPEN
28-15-01F	Adjacent To Lower ECAM Display	___ RH INTERCELL TRANSFER VALVE(S) INOP CLOSED
28-15-01G	Adjacent To Lower ECAM Display	RH WING FWD SPAR INTERCELL TRANSFER VALVE INOP
28-15-01H	Adjacent To Lower ECAM Display	RH WING REAR SPAR INTERCELL TRANSFER VALVE INOP

(O) PROCEDURES

28-15-01A, 28-15-01E

1. Check that the associated wing transfer valve is indicated open on FUEL SD page.
2. This condition results in an unusual distribution of fuel quantity: outer tank of affected wing will not be full unless the inner tank is full.

28-15-01B, 28-15-01F

1. Fuel in the associated outer tank (1500 lbs.) is considered as not usable for flight planning purposes.

28-15-01C, 28-15-01D, 28-15-01G, 28-15-01H

1. This condition results in an unusual distribution of fuel quantity: outer tank of affected wing will not be full unless the inner tank is full.
2. Ensure the refuel panel is closed.
3. Check the operative transfer valve indicates open on the FUEL SD page.

   NOTE 1: Fuel should transfer out of the outer tank into the inner tank if the inner tank is not full (this can be seen by observing the fuel quantity).

   NOTE 2: Do not reselect refuel power or open the refuel door as this will cause the transfer valve latch circuit to delatch and the valves will close again.

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(M) PROCEDURES

28-15-01C

NOTE: One Intercell Transfer Valve may be inoperative in each tank. The purpose of this maintenance procedure is to latch open the on-side operative Intercell Transfer Valve.

1. Refuel aircraft to the required fuel quantity for departure.

   a) Close up the refuel panel.

   b) In the LH Wing:

      1) If the Intercell Transfer Valve 27QM (L FWD SPAR) is failed closed, open the Intercell Transfer Valve 28QM (L REAR SPAR)

ACTION	RESULT
On C/B panel 49VU: pull circuit breaker FUEL/XFR VALVE1/WING/R location A11 and wait ten seconds.	
On C/B panel 49VU: close circuit breaker FUEL/XFR VALVE1/WING/R location A11.	• Left Wing Transfer Valve is shown fully open on ECAM.

NOTE: The open transfer valve will close again if the refuel panel is opened.

   c) Monitor the fuel quantity indication of the related wing on the ECAM. The fuel quantity in the wing tank inner cell increases and decreases in outer cell.

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28-15-01D

NOTE: One Intercell Transfer Valve may be inoperative in each tank. The purpose of this maintenance procedure is to latch open the on-side operative Intercell Transfer Valve.

1. Refuel aircraft to the required fuel quantity for departure.

   a) Close up the refuel panel.

   b) In the LH Wing:

      1) If the Intercell Transfer Valve 28QM (L REAR SPAR) is failed closed, open the Intercell Transfer Valve 27QM (L FWD SPAR)

ACTION	RESULT
On C/B panel 121VU: pull circuit breaker FUEL/XFR VALVE2/WING/R location M23 and wait ten seconds.	
On C/B panel 121VU: close circuit breaker FUEL/XFR VALVE2/WING/R location M23.	• Left Wing Transfer Valve is shown fully open on ECAM.

NOTE: The open transfer valve will close again if the refuel panel is opened.

   c) Monitor the fuel quantity indication of the related wing on the ECAM. The fuel quantity in the wing tank inner cell increases and decreases in outer cell.

28-15-01G

NOTE: One Intercell Transfer Valve may be inoperative in each tank. The purpose of this maintenance procedure is to latch open the on-side operative Intercell Transfer Valve.

1. Refuel aircraft to the required fuel quantity for departure.

   a) Close up the refuel panel.

   b) In the RH Wing:

      1) If the Intercell Transfer Valve 29QM (R FWD SPAR) is failed closed, open the Intercell Transfer Valve 30QM (R REAR SPAR)

ACTION	RESULT
On C/B panel 49VU: pull circuit breaker FUEL/XFR VALVE1/WING/L location A10 and wait ten seconds.	
On C/B panel 49VU: close circuit breaker FUEL/XFR VALVE1/WING/R location A10.	• Right Wing Transfer Valve is shown fully open on ECAM.

NOTE: The open transfer valve will close again if the refuel panel is opened.

   c) Monitor the fuel quantity indication of the related wing on the ECAM. The fuel quantity in the wing tank inner cell increases and decreases in outer cell.

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28-15-01H

NOTE: One Intercell Transfer Valve may be inoperative in each tank. The purpose of this maintenance procedure is to latch open the on-side operative Intercell Transfer Valve.

1. Refuel aircraft to the required fuel quantity for departure.

   a) Close up the refuel panel.

   b) In the RH Wing:

      1) If the Intercell Transfer Valve 30QM (R REAR SPAR) is failed closed, open the Intercell Transfer Valve 29QM (R FWD SPAR)

ACTION	RESULT
On C/B panel 121VU: pull circuit breaker FUEL/XFR VALVE2/WING/L location M22 and wait ten seconds.	
On C/B panel 121VU: close circuit breaker FUEL/XFR VALVE2/WING/L location M22.	• Right Wing Transfer Valve is shown fully open on ECAM.

NOTE: The open transfer valve will close again if the refuel panel is opened.

   c) Monitor the fuel quantity indication of the related wing on the ECAM. The fuel quantity in the wing tank inner cell increases and decreases in outer cell.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-20-01A	Automatic Fuel Feed System (A319/A320 Aircraft with AA 2820-01115)	**Y**	1	0	**C**	**(O)** May be inoperative provided alternate procedures are used.
28-20-01B	Automatic Fuel Feed System (A319/A320 Aircraft without AA 2820-01115) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided the total FOB after refueling is less than or equal to 26,500 lbs.
28-20-01C	Automatic Fuel Feed System (A319/A320 Aircraft without AA 2820-01115) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) The total FOB after refueling is more than 26,500 lbs, and b) The fuel quantity in the center tank is between 4,400 lbs and 6,600 lbs.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-20-01A	On Pilot's Overhead Fuel Control Panel 40VU	AUTO FUEL FEED SYSTEM INOP
28-20-01B	On Pilot's Overhead Fuel Control Panel 40VU	AUTO FUEL FEED SYSTEM INOP
28-20-01C	On Pilot's Overhead Fuel Control Panel 40VU	AUTO FUEL FEED SYSTEM INOP

(O) PROCEDURES

28-20-01A, 28-20-01B, 28-20-01C

ON GROUND

1. If center tank is empty for flight:
   a) FUEL MODE SEL pb-sw – MAN
   b) CTR TK PUMP 1 and 2 pb-sw – OFF
2. If center tank is not empty for the flight:
   a) Before Engine Start
      1) FUEL MODE – MAN before engines start.
   b) 3 minutes after engines start:
      1) OPERATIVE CTR TK PUMPS (1 and/or 2) –OFF.

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IN FLIGHT

3. If the center tank is not empty for the flight:
   a) After slats retraction and when the fuel in one wing is less than 11,000 lbs::
      1) OPERATIVE CTR TK PUMPS (1 and/or 2) – ON.
   b) If the FUEL CTR TK PUMPS LO PR alert is displayed on the EWD, if the center tank is not empty at slat extension:
      1) OPERATIVE CTR TK PUMPS (1 and/or 2) –OFF.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-21-01A	Wing Tank Pumps **"DISP.APPR.REQ'D"**	**Y**	4	3	**C**	**(M)(O)** One pump may be inoperative provided JP–4/Jet B is not used. NOTE: If JP–4/Jet B is used, refer to MEL item 28–21–01B.
28-21-01B	Wing Tank Pumps (JP-4/Jet B fuel only) **"DISP.APPR.REQ'D"**	**N**	4	3	**C**	**(M)(O)** One pump 2 may be inoperative when JP4/Jet B is used provided: a) Fuel return valve is verified to operate normally PRIOR TO EACH DEPARTURE (Log Book Entry Required), and b) Takeoff ECAM fuel temperature is less than +30°C. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-21-01A	On Pilot's Overhead Fuel Control Panel 40VU	___ TANK PUMP INOP – DO NOT USE JP–4/JET B FUEL
28-21-01B	Adjacent To Pilot's Overhead Fuel Control Panel 40VU	NO. 2 WING TANK PUMP INOP

(O) PROCEDURES

28-21-01A

Ensure inoperative fuel pump is OFF.

28-21-01B

1. Ensure inoperative fuel pump is OFF.
2. PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

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(M) PROCEDURES

28-21-01A

CAUTION: IF THE FOLLOWING CIRCUIT BREAKERS ARE TRIPPED, THE ASSOCIATED WING FUEL PUMP WIRING MUST BE CHECKED PRIOR TO THE RESET OF THAT CIRCUIT BREAKER (PER AD 2000–24–08, EM 2821–01068).

1. Pull and secure the circuit breaker for the affected pump as follows:
   a) Left Wing Tanks (21QA):
      1) On C/B panel 121VU: pull and secure circuit breaker FUEL/L WING TK/PUMP1 SPLY location N23.
      2) On C/B panel 121VU: pull and secure circuit breaker FUEL/L WING TK/PUMP2 SPLY location N26.
   b) Right Wing Tanks (22QA):
      1) On C/B panel 121VU: pull and secure circuit breaker FUEL/R WING TK/PUMP1 SPLY location Q23.
      2) On C/B panel 121VU: pull and secure circuit breaker FUEL/R WING TK/PUMP2 SPLY location Q26.

28-21-01B

CAUTION: IF THE FOLLOWING CIRCUIT BREAKERS ARE TRIPPED, THE ASSOCIATED WING FUEL PUMP WIRING MUST BE CHECKED PRIOR TO THE RESET OF THAT CIRCUIT BREAKER (PER AD 2000–24–08, EM 2821–01068).

1. Pull and secure the circuit breaker for the affected pump as follows:
   a) Left Wing Tanks (21QA)
      1) On C/B panel 121VU: pull and secure circuit breaker FUEL/L WING TK/PUMP2 SPLY location N26.
   b) Right Wing Tanks (22QA):
      1) On C/B panel 121VU: pull and secure circuit breaker FUEL/R WING TK/PUMP2 SPLY location Q26.
2. PRIOR TO EACH DEPARTURE:
   a) Perform AMM Task 28-21-00-040-001-A.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-21-02A	Center Tank Systems Pump (A319/A320) **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One may be inoperative provided (when center tank fuel is required) a suitable alternate airport exists within range of wing tanks fuel loading.
28-21-02B	Center Tank Systems Pump (A319/A320) **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative provided: a) Center tank pumps remain OFF, and b) Center tank remains empty.
28-21-02C	Center Tank Systems Pump (A319/A320) **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative provided fuel in center tank is considered unusable, and is included in ZFW and C.G. calculations.
28-21-02D	Center Tank Systems Transfer Valves (A321) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One may be inoperative in closed position provided (when center tank fuel is required) a suitable alternate airport exists within range of wing tanks fuel loading.
28-21-02E	Center Tank Systems Transfer Valves (A321) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative in closed position provided center tank remains empty.
28-21-02F	Center Tank Systems Transfer Valves (A321) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative in closed position provided fuel in center tank is considered unusable and is included in ZFW and C.G. calculations.
28-21-02G	Center Tank Systems Transfer Valves (A321) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative in the open position provided center tank remains empty.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
28-21-02A	On Pilot's Overhead Fuel Control Panel 40VU	___ CENTER TANK PUMP INOP
28-21-02B	On Pilot's Overhead Fuel Control Panel 40VU	___ CENTER TANK PUMP INOP
28-21-02C	On Pilot's Overhead Fuel Control Panel 40VU	___ CENTER TANK PUMP INOP
28-21-02D	On Pilot's Overhead Fuel Control Panel 40VU	____ CENTER TANK TRANSFER VALVE INOP
28-21-02E	On Pilot's Overhead Fuel Control Panel 40VU	____ CENTER TANK TRANSFER VALVE INOP
28-21-02F	On Pilot's Overhead Fuel Control Panel 40VU	____ CENTER TANK TRANSFER VALVE INOP
28-21-02G	On Pilot's Overhead Fuel Control Panel 40VU	____ CENTER TANK TRANSFER VALVE INOP

(O) PROCEDURES

28-21-02A

1. When center tank has available fuel:
2. On Ground:
   a) X-FEED pb-sw – Check OFF
   b) Affected CTR TK PUMP pb-sw – OFF
   c) Operative CTR TK PUMP pb-sw – OFF
3. In Flight:
   a) If the fuel quantity in the center tank is less than 440 lbs:
      1) Operative CTR TK PUMP pb-sw – Maintain OFF
   b) If the fuel quantity in the center tank is greater than 440 lbs:
      1) When the fuel quantity in one wing inner tank is less than 10,000 lbs:
         A. Operative CTR TK PUMP pb-sw – ON
         B. X-FEED pb-sw – ON
      2) When the fuel quantity in one wing inner tank increases above 12,000 lbs:
         A. X-FEED pb-sw – OFF
         B. Operative CTR TK PUMP pb-sw – OFF

      NOTE: Repeat the previous two steps as many times as necessary until the center tank is empty.

      3) When the fuel quantity in the center tank is less than 550 lbs:
         A. X-FEED pb-sw - OFF

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28-21-02B, 28-21-02C, 28-21-02E, 28-21-02F, 28-21-02G

1. Ensure that either no fuel is in the center tank, or that fuel remaining in the center tank is considered unusable.
2. Leave center tank pumps OFF.

28-21-02D

1. In Flight
   a) Disregard the FUEL CTR L(R) XFR FAULT alert on the EWD.
   b) MODE SEL pb-sw – AUTO
   c) Operative CTR TK L(R) XFR pb-sw – ON
   d) Affected CTR TK L(R) XFR pb-sw – OFF
   e) When differences between fuel quantities in two wings is above 3,300 lbs:
      1) Monitor the fuel imbalance.
      2) Until the fuel is balanced:
         A. X_FEED pb-sw - ON
         B. L(R) TK PUMPS (on the lighter side) pb-sw - OFF

(M) PROCEDURES

28-21-02A, 28-21-02B, 28-21-02C

CAUTION: IF THE FOLLOWING CIRCUIT BREAKERS ARE TRIPPED, THE ASSOCIATED WING FUEL PUMP WIRING MUST BE CHECKED PRIOR TO THE RESET OF THAT CIRCUIT BREAKER (PER AD 2000–24–08, EM 2821–01068).

1. Record the status of the associated circuit breaker (closed/tripped) prior to performing step 2 in the aircraft log book.
2. Pull and secure the circuit breaker for the affected pump(s) as follows:
   a) Center Wing Tanks:
      1) On C/B panel 121VU: pull and secure circuit breaker FUEL/CTR TK/PUMP1 SPLY location P23.
      2) On C/B panel 121VU: pull and secure circuit breaker FUEL/CTR TK/PUMP2 SPLY location P26.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-21-03	Wing Tank Pump Sequence Valves (A319/A320 Aircraft)	**Y**	4	3	**C**	**(O)** One may be inoperative provided the associated pump is switched off when center tank is feeding.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-21-03	On Pilot's Overhead Fuel Control Panel 40VU	___ SEQUENCE VALVE INOP

(O) PROCEDURES

Turn corresponding pump off when center tank is feeding.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
CROSSFEED PB SWITCH					
28-23-02A ON Light	**Y**	1	0	**C**	May be inoperative provided X FEED indication on ECAM FUEL page operates normally.
28-23-02B OPEN Light	**Y**	1	0	**C**	May be inoperative provided X FEED indication on ECAM FUEL page operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-23-02A	Adjacent To Crossfeed PB	CROSSFEED PB SWITCH ON LIGHT INOP
28-23-02B	Adjacent To Crossfeed PB	CROSSFEED PB SWITCH OPEN LIGHT INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
28-24-01	Engine LP Fuel Valve Electrical Motor	**N**	4	2	**C**	**(M)** One motor on each engine LP Fuel Valve may be inoperative provided: a) Affected valve motor is deactivated, and b) Remaining valve motor is checked operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-24-01	Adjacent To Upper ECAM Display	___ ENGINE LP FUEL VALVE MOTOR INOP

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

WARNING: PUT THE SAFETY DEVICES AND DISPLAY WARNING NOTICES BEFORE YOU START A TASK ON OR NEAR:
– THE FLIGHT CONTROLS
– THE FLIGHT CONTROL SURFACES
– THE LANDING GEAR AND RELATED DOORS
– COMPONENTS THAT MOVE

WARNING: MAKE SURE THAT THE GROUND SAFETY–LOCKS ARE IN POSITION ON THE LANDING GEAR

1. Safety Precautions:
   a) Display Warning Notices in the flight deck to tell person(s) not to operate the flaps, slats, APU, bleed air, or engines.
2. Access:
   NOTE: It is necessary to listen to the LP valve actuator during the test follows. If the actuator motor can be heard with the access panel in position, it is not necessary to remove it.
   a) Remove the applicable access panel. (Ref. AMM TASK 57–41–37–000–003).
   – for the LH HP valve, remove panel 522AT
   – for the panel RH LP valve remove panel 622AT.
3. Verify that the following circuit breakers are closed:
   a) On C/B panel 49VU: verify that circuit breaker FUEL/LP VALVE/MOT1/ENG2 location A09 is closed.
   b) On C/B panel 49VU: verify that circuit breaker FUEL/LP VALVE/MOT1/ENG2 location A08 is closed.
   c) On C/B panel 121VU: verify that circuit breaker FUEL/LP VALVE/MOT2/ENG2 location M26 is closed.
   d) On C/B panel 121VU: verify that circuit breaker FUEL/LP VALVE/MOT2/ENG1 location M25 is closed.
4. Pull and tag the following circuit breakers:
   a) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL1/SQUIB/B location Q44.
   b) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL1/SQUIB/A location Q43.

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c) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL2/SQUIB/B location Q42.

d) On C/B panel 121VU: pull and tag circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL2/SQUIB/A location Q41.

5. To deactivate the inoperative motor on the defective LP valve actuator accomplish the following:

a) If the LH actuator 9QG motor 1 is inoperative:

1) On C/B panel 49VU: pull and secure circuit breaker FUEL/LP VALVE/MOT1/ENG1 location A08.

b) If the LH actuator 9QG motor 2 is inoperative:

1) On C/B panel 121VU: pull and secure circuit breaker FUEL/LP VALVE/MOT2/ENG1 location M25.

c) If the RH actuator 10QG motor 1 is inoperative:

1) On C/B panel 49VU: pull and secure circuit breaker FUEL/LP VALVE/MOT1/ENG2 location A09.

d) If the RH actuator 10QG motor 2 is inoperative:

1) On C/B panel 121VU: pull and secure circuit breaker FUEL/LP VALVE/MOT2/ENG2 location M26.

6. Energize the electrical circuits. (Ref. AMM TASK 24–41–00–861–002)

7. DO THE EIS start procedure (ECAM only). (Ref. AMM TASK 31–60–00–860–001)

8. To do an operational test of the LH Engine LP Valve Actuator 9QG, accomplish the following:

NOTE: It is necessary to have two individuals to accomplish this procedure. One individual must be in the flight deck (to operate the LP valve), and the other individual needs to be near the LP valve (to listen to the actuator motor).

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ACTION	RESULT
1. On the ECAM CP:	On the ECAM lower DU:
• Push (in) the FUEL P/BSW	• The FUEL system page shows • The LEFT LP valve indication shows the valve closed (amber cross–line).
2. On the panel 115VU:	On the ECAM lower DU:
• Push the ENG/MASTER 1 pushbutton switch to the ON position to open the LP valve.	• The LEFT LP valve indication changes to show the valve open (green in–line).
3. On the LP valve actuator 9QG also:	
• Listen to the actuator motor and measure the time that it operates for as the LP valve opens.	• The actuator motor must not operate for more than 5 seconds.
4. On the ENG/APU FIRE panel 1WD:	On the ECAM lower DU:
• Push (in) the ENG FIRE 1 pushbutton switch to close the LP valve.	• The LEFT LP valve indication changes to show the valve closed (amber cross–line).
5. On the LP valve actuator 9QG also:	
• Listen to the actuator motor and measure the time that it operates for as the LP valve closes.	• The actuator motor must not operate for more than 5 seconds.
6. On the ENG/APU FIRE panel 1WD:	On the ECAM lower DU:
• Release the ENG FIRE 1 pushbutton switch to open the LP valve.	• The left LP valve indication changes to show the valve open (green in–line).
7. On the LP valve actuator 9QG also:	
• Listen to the actuator motor and measure the time that it operates for as the LP valve opens.	• The actuator motor must not operate for more than 5 seconds.
8. On the panel 115VU:	On the ECAM lower DU:
• Put the ENG/MASTER 1 pushbutton switch to the OFF position to close the LP valve.	The LEFT LP valve indication changes to show the valve closed (amber cross–line).
9. On the LP valve actuator 9QG also:	
• Listen to the actuator motor and measure the time that it operates for as the LP valve closes.	• The actuator motor must not operate for more than 5 seconds.

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9. To do an operational test of the RH Engine LP Valve Actuator 10QG, accomplish the following:

   NOTE: It is necessary to have two individuals to accomplish this procedure. One individual must be in the flight deck (to operate the LP valve), and the other individual needs to be near the LP valve (to listen to the actuator motor).

ACTION	RESULT
1. On the ECAM CP:	On the ECAM lower DU:
Push (in) the FUEL P/BSW	• The FUEL system page shows • The RIGHT LP valve indication shows the valve closed (amber cross–line).
2. On the panel 115VU:	On the ECAM lower DU:
• Push the ENG/MASTER 2 pushbutton switch to the On position to open the LP valve.	• The RIGHT LP valve indication changes to show the valve open (green in–line).
3. On the LP valve actuator 10QG also:	
• Listen to the actuator motor and measure the time that it operates for as the LP valve opens.	• The actuator motor must not operate for more than 5 seconds.
4. On the ENG/APU FIRE panel 1WD:	On the ECAM lower DU:
• Push (in) the ENG FIRE 2 pushbutton switch to close the LP valve.	• The RIGHT LP valve indication changes to show the valve closed (amber cross–line).
5. On the LP valve actuator 10QG also:	
• Listen to the actuator motor and measure the time that it operates for as the LP valve closes.	• The actuator motor must not operate for more than 5 seconds.
6. On the ENG/APU FIRE panel 1WD:	On the ECAM lower DU:
• Release the ENG FIRE 2 pushbutton switch to open the LP valve.	• The RIGHT LP valve indication changes to show the valve open (green in–line).
7. On the LP valve actuator 10QG also:	
• Listen to the actuator motor and measure the time that it operates for as the LP valve opens.	• The actuator motor must not operate for more than 5 seconds.
8. On the panel 115VU:	On the ECAM lower DU:
• Put the ENG/MASTER 2 pushbutton switch to the OFF position to close the LP valve.	• The RIGHT LP valve indication changes to show the valve closed (amber cross–line).
On the LP valve actuator 10QG also:	
• Listen to the actuator motor and measure the time that it operates for as the LP valve closes.	• The actuator motor must not operate for more than 5 seconds.

10. Do the EIS stop procedure. (Ref. AMM TASK 31–60–00–860–002)
11. De-energize the aircraft electrical circuits. (Ref. AMM TASK 24–41–00–862–002)
12. Remove tags and close the following circuit breakers:
    a) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL1/SQUIB/B location Q44.

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b) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL1/SQUIB/A location Q43.

c) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL2/SQUIB/B location Q42.

d) On C/B panel 121VU: remove tag and close circuit breaker ENGINE/ENG1 AND 2 FIRE EXTIG/BTL2/SQUIB/A location Q41.

13. Close–Up

a) Reinstall the applicable access panel (if removed). (Ref. AMM TASK 57–41–37–400–003)
–for the LH HP valve, install panel 522AT
–for the RH LP valve install panel 622AT.

b) Remove warning notices and ground safety locks if installed.

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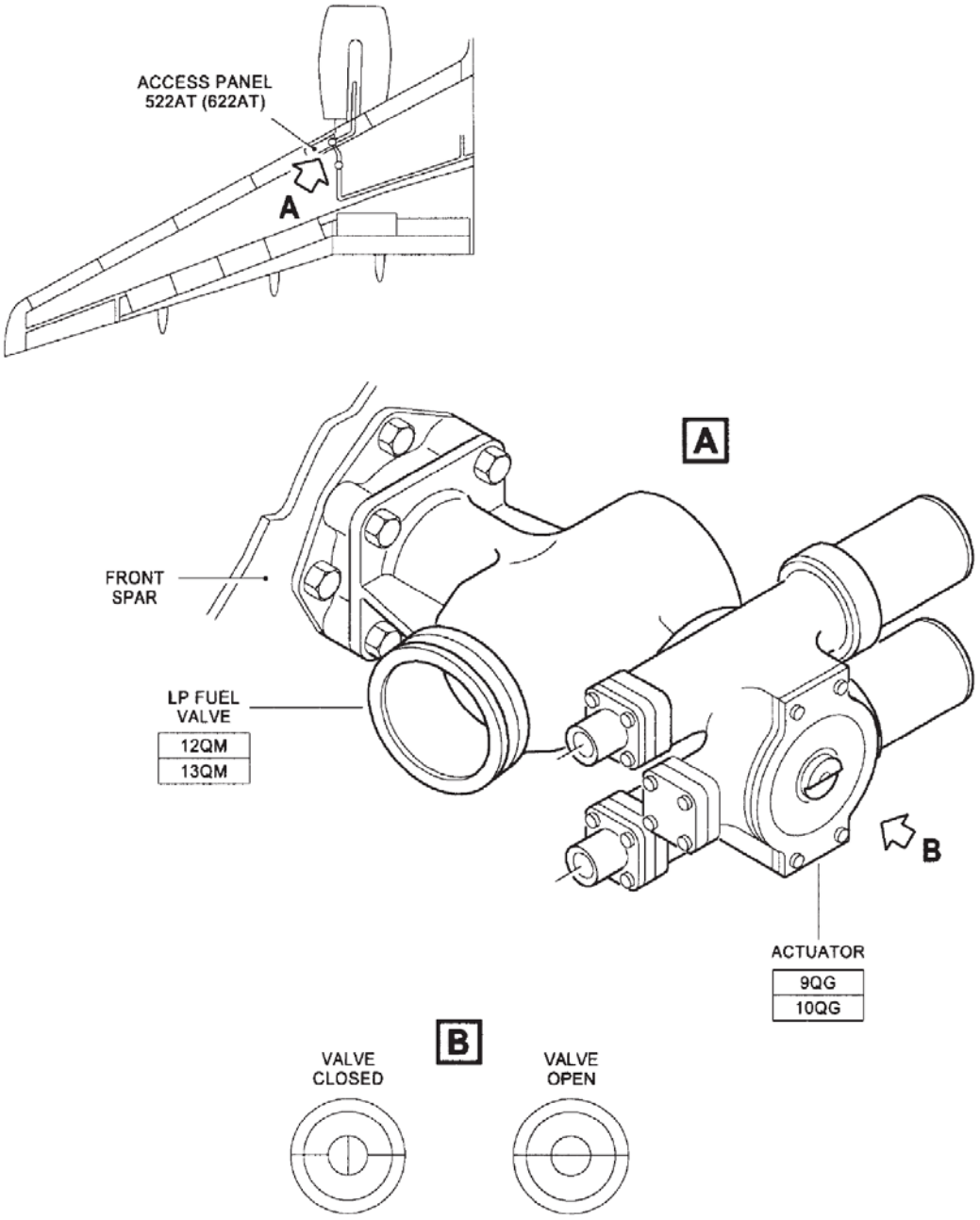

Figure 28–24–01
LP Fuel Shutoff Valve Location

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-25-01	Fuel Quantity Preselector System	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-25-01	On Refuel/Defuel Control Panel	FUEL QTY PRESELECTOR SYS INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-25-02	Fuel Quantity Indicator (Refueling Panel) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** One or more indications may be inoperative provided: a) Alternate means of refueling are used, and b) Fuel quantity is verified AFTER EACH USE (Log Book Entry Required). NOTE: "Alternate means" as used above simply means to use the flight deck ECAM FUEL QTY indications (if operative) for reference during refueling. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-25-02	On Refuel/Defuel Control Panel	___ FUEL QUANTITY PANEL INDICATION(S) INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required after each fueling.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. AFTER USE CHECK (After each Refueling)
2. Service tank to required level per Fueling Procedures Manual reference, except monitor fuel quantities from the cockpit ECAM FUEL page.
3. Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-25-03	High Level Fuel Detection System	**N**	1	0	**C**	**(M)** May be inoperative provided an acceptable means of monitoring fuel loading is used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-25-03	On Refuel/Defuel Control Panel	HI LVL FUEL DETECTION SYS INOP USE ALTERNATE MEANS OF MONITORING FUELING

(M) PROCEDURES

1. Service tank to required level per Fueling Procedures Manual, except monitor fuel quantities continuously from either the refueling panel or the cockpit ECAM FUEL page.
2. Place a placard adjacent to the affected tank indicator at the refueling panel as follows:
   a) Obtain a Placard.
   b) Print on placard DISCREPANCY in bold letters “HIGH LEVEL FUEL DETECTION SYSTEM INOP – CONTINUOUSLY MONITOR FUEL QUANTITIES.”
   c) Trim placard so only the DISCREPANCY portion remains.
   d) Affix trimmed placard adjacent to the tank indicators at the refueling panel.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
28-25-04	Refuel Valves **"DISP.APPR.REQ'D"**	**N** 3	0	**C**	**(M)(O)** May be inoperative provided affected valve(s) is operated manually DURING EACH REFUELING (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-25-04	On Refuel/Defuel Control Panel	___ REFUEL VALVE(S) INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required after each fueling.

(M) PROCEDURES

The (M) indicates that the following Maintenance Procedures are required:

1. AFTER USE CHECK (After each Refueling)
   a) Service tank with inoperative refueling valve to required level per Fueling Procedures Manual.
   b) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

   NOTE: The associated refueling valve must be opened by pushing and holding the manual plunger and is closed by releasing the manual plunger.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-25-05 Transfer Defuel Valve	**N**	1	0	**C**	**(M)** May be inoperative provided valve is secured in the closed position.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-25-05	On Refuel/Defuel Control Panel	XFER DEFUEL VALVE INOP – SECURED CLOSED

(M) PROCEDURES

The (M) Indicates that the following Maintenance Procedures are required:

1. TRANSFER DEFUEL VALVE – DEACTIVATE CLOSED

   a) On C/B panel 121 VU: pull and secure circuit breaker FUEL/RFL/DFL/XFR/DEFUEL/VALVE location L23.

   b) Open right MLG door.

   c) Open Fueling Control access panel 622KB on the right hand wing leading edge.

   d) Close the Transfer Defuel Valve:

      1) On Fueling Control panel (800VU) make sure that MODE SELECT SWITCH is in the OFF and guarded position.

      2) If the actuator (11QU) shows the transfer defuel valve (11QM) OPEN (See feel indicator is in line with the step).

         A. Remove the actuator from the drive shaft of the transfer defuel valve.

         B. Manually turn the drive shaft to the valve–closed position (indicator groove vertical).

         C. Make sure that the actuator shaft is in the correct position to align with the valve drive shaft.

         D. If necessary, on panel 121VU: remove secure and close circuit breaker FUEL/RFL/DFL/XFR/DEFUEL/VALVE location L23, and operate the actuator to get the correct position. Pull and re-secure circuit breaker.

         E. Disconnect the electrical connector from the actuator.

         F. Cap and stow.

         G. Install the actuator, but leave electrically disconnected.

            OR

      3) If the position indicator on the actuator shows closed (see–feel indicator is crossline 90 degrees to the step)

         A. Disconnect the electrical connector from the actuator.

         B. Cap and stow.

            OR

Continued Next Page

4) If the actuator 11U unserviceable:

A. Disconnect the electrical connector from the actuator.

B. Cap and stow electrical connectors.

C. Remove the actuator.

D. Make sure that the transfer defuel valve is in the closed position (indicator vertical

E. Install the VALVE LOCKING TOOL (T720456) onto the face plate of the drive shaft to lock the drive shaft so that it will not turn.

e) Close the right MLG door.

f) Close access panel opened in step 1. A. (3).

NOTE: In the event of actuator malfunction, immobilize the transfer valve shaft mechanically and safety in the CLOSED position. Do not install the actuator. Retain with clamp (82QM) and keep in safe location.

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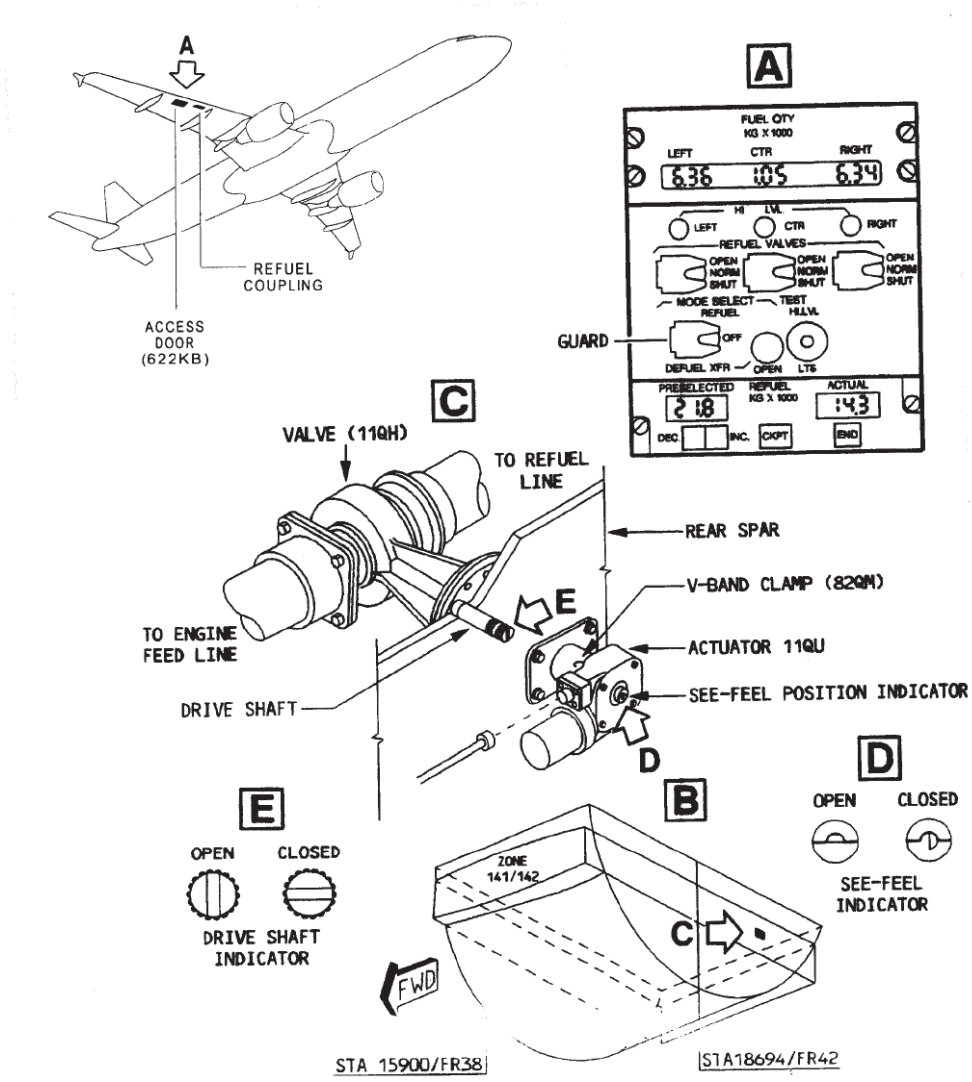

Figure 28–25–05 TRANSFER DEFUEL VALVE

Figure 28–25–05 TRANSFER DEFUEL VALVE

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
REFUEL/DEFUEL CONTROL PANEL					
28-25-06 Exterior Control Panel **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)** May be inoperative provided: a) Alternate procedures are used, and b) Fuel quantity is verified AFTER EACH USE NOTE: "Alternate procedures" as used above simply means to use the flight deck ECAM FUEL QTY indications (if operative) for reference during refueling. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-25-06	On Refuel/Defuel Control Panel	REFUEL/DEFUEL CONTROL PANEL INOP

(M) PROCEDURES

NOTE: Alternate refueling procedures are not required when the refueling panel indicator is inoperative and the flight deck indicator is operative on ECAM fuel page. Normal fueling procedures (Reference Fueling Procedures Manual) will be performed using the flight deck indications on ECAM fuel page.

1. AFTER USE CHECK (After each Refueling)
   a) Service tank to required level per Fueling Procedures Manual.
2. Place a placard on refuel/defuel panel as follows:
   a) Obtain a Placard.
   b) Print on placard DISCREPANCY in bold letters "REFUEL/DEFUEL CONTROL PANEL INOP USE ALTERNATE PROCEDURES."
   c) Trim placard so only the DISCREPANCY portion remains.
   d) Affix trimmed placard adjacent to the tank indicators at the refueling panel.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-40-01	Low Level Warning System	**Y**	2	1	**C**	One may be inoperative provided all flight deck fuel quantity indicators are operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-01	Adjacent To Lower ECAM Display Unit	ONE LOW LEVEL WARNING SYSTEM INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
FUEL QUANTITY INDICATING COMPUTER SYSTEM					
28-40-02A Channels (For A319/A320 aircraft without AA 2820-01115) **"DISP.APPR.REQ'D"**	**Y**	2	1	**A**	**(O)** One channel may be inoperative provided: a) Low level warning system operates normally, and b) Repairs are made within two flight days.
28-40-02B Channels (For all A321 aircraft) (For A319/A320 aircraft with AA 2820-01115) **"DISP.APPR.REQ'D"**	**Y**	2	1	**A**	**(M)(O)** One may be inoperative provided: a) Low level warning system operates normally, b) Repairs are made within two flight days, and c) Alternate procedures are used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-02A	Adjacent To Lower ECAM Display Unit	ONE CHANNEL OF FUEL QTY INDICATING COMPUTER SYS INOP
28-40-02B	Adjacent To Lower ECAM Display Unit	ONE CHANNEL OF FUEL QTY INDICATING COMPUTER SYS INOP

(O) PROCEDURES

28-40-02A, 28-40-02B

Before takeoff, ensure both MCDU FUEL PRED pages contain FOB and weight information.

NOTE 1: After engine start, ensure the FUEL PRED pages on both MCDUs contain FOB and weight information. The FOB may need to be manually entered into the MCDU associated with the fuel quantity channel that is inoperative.

NOTE 2: Manual entry of the fuel quantity cannot be accomplished until both engines are running.

(M) PROCEDURES

28-40-02B

1. Service tank to required level per Fueling Procedures Manual, except monitor fuel quantities continuously from either the refueling panel or the cockpit ECAM FUEL page.
2. Place a placard adjacent to the affected tank indicator at the refueling panel as follows:
   a) Obtain a Placard.
   b) Print on placard DISCREPANCY in bold letters "ONE FQIC SYSTEM CHANNEL INOP – CONTINUOUSLY MONITOR FUEL QUANTITIES."
   c) Trim placard so only the DISCREPANCY portion remains.
   d) Affix trimmed placard adjacent to the tank indicators at the refueling panel.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-40-03A	TK PUMP FAULT Lights	**Y**	6	0	**C**	**(O)** May be inoperative provided associated pump is switched OFF when tank is empty.
28-40-03B	CTR TK XFR FAULT Lights (A321 Aircraft)	**Y**	2	0	**C**	**(O)** May be inoperative provided associated transfer valve is switched off when tank is empty.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-03A	On Pilot's Overhead Fuel Control Panel 40VU	___ TANK PUMP FAULT LIGHT(S) INOP
28-40-03B	Adjacent To Affected CTR TK XFR FAULT Light	____ CTR TK XFR FAULT LIGHT INOP

(O) PROCEDURES

28-40-03A

1. Turn corresponding pump OFF when tank is empty.

28-40-03B

1. Turn corresponding transfer valve switch to OFF when tank is empty.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-40-04A	TK PUMP OFF Lights	**Y**	6	0	**C**	May be inoperative provided corresponding pump indication is available on ECAM.
28-40-04B	CTR TK XFR OFF Lights (A321 Aircraft)	**Y**	2	0	**C**	May be inoperative provided corresponding transfer valve indication is available on ECAM.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-04A	Adjacent To Affected TK PUMP OFF Light	___ TK PUMP OFF LIGHT INOP
28-40-04B	Adjacent To Affected CTR TK XFR OFF Light	____ CTR TK XFR OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	FUEL TRANSFER CONTROL					
28-40-05A	MODE SEL FAULT Light (A319/A320 Aircraft)	**Y**	1	0	**C**	**(O)** May be inoperative provided all tank pump indications on ECAM FUEL page are operative.
28-40-05B	MODE SEL FAULT Light (A321 Aircraft)	**Y**	1	0	**C**	May be inoperative provided wing tank pumps and center tank transfer valves indications on ECAM FUEL page are operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-05A	On Pilot's Overhead Fuel Control Panel 40VU	MODE SEL FAULT LIGHT INOP
28-40-05B	On Pilot's Overhead Fuel Control Panel 40VU	MODE SEL FAULT LIGHT INOP

(O) PROCEDURES

28-40-05A

1. After engine start, with slats retracted, check center tank pumps in line (if any fuel in center tank).
2. After slats extension, check center tank pumps cross line.
3. After takeoff, after slats retraction, check center tank pumps in line (if any fuel in center tank).

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
	ECAM FUEL PAGE INDICATIONS					
28-40-06A	Tank Pumps (A319/A320)	**Y**	6	0	**C**	May be inoperative.
28-40-06B	APU LP Valve (A319/A320/A321) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Valve is secured closed, and b) APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply
28-40-06C	Cross Feed (A319/A320/A321) **"Contact MCC"**	**N**	1	0	**C**	**(M)** May be inoperative provided operation of the cross feed valve is verified before the FIRST FLIGHT OF EACH DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
28-40-06D	Transfer Valves (A319/A320) **"Contact MCC"**	**N**	2	0	**C**	**(M)(O)** May be inoperative provided: a) Associated inner and outer tank fuel quantity indicators are operative, and b) Transfer valve operation is verified PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
28-40-06E	Fuel Temperature (A319/A320)	**Y**	4	2	**C**	One in each wing or both in one wing may be inoperative.
28-40-06F	Fuel On Board (A319/A320/A321)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Associated indication is available on the MCDU, and b) Fuel used indications operate normally.
28-40-06G	Fuel Quantity Outer Tank (Associated Inner Tank Indication Operative) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) PRIOR TO EACH DEPARTURE fuel quantity in associated tank is verified by manual magnetic indicators or by corresponding fuel quantity indicator on refuel/defuel panel, b) Associated fuel used indicator operates normally, and c) Associated inner tank indication is operative. **Repetitive Check Required (Yellow Placard)**

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM FUEL PAGE INDICATIONS (CONTINUED)					
28-40-06H	Fuel Quantity Outer Tank (Associated Inner Tank Indication Inoperative) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	1	**B**	**(M)(O)** One may be inoperative provided: a) PRIOR TO EACH DEPARTURE fuel quantity in associated tank is verified by manual magnetic indicators or by corresponding fuel quantity indicator on refuel/defuel panel, and b) Associated fuel used indicator operates normally. **Repetitive Check Required (Yellow Placard)**
28-40-06I	Fuel Quantity Inner Tank (Associated Outer Tank Indication Operative) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) PRIOR TO EACH DEPARTURE fuel quantity in associated tank is verified by manual magnetic indicator or by corresponding fuel quantity indicator on refuel/defuel panel, b) Associated fuel used indicator operates normally, and c) Associated outer tank indication is operative. **Repetitive Check Required (Yellow Placard)**
28-40-06J	Fuel Quantity Inner Tank (Associated Outer Tank Indication Inoperative) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	1	**B**	**(M)(O)** One may be inoperative provided: a) PRIOR TO EACH DEPARTURE fuel quantity in associated tank is verified by manual magnetic indicator or by corresponding fuel quantity indicator on refuel/defuel panel, and b) Associated fuel used indicator operates normally. **Repetitive Check Required (Yellow Placard)**
28-40-06K	Fuel Quantity Center Tank (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Fuel quantity in associated tank is checked PRIOR TO EACH DEPARTURE by an acceptable means per Fueling Procedures Manual, b) All wing tank quantity indicators operate normally, and c) Both fuel used indicators operate normally. **Repetitive Check Required (Yellow Placard)**
28-40-06L	Fuel Quantity Center Tank (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided the tank remains empty. **Repetitive Check Required (Yellow Placard)**

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ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER REQUIRED FOR DISPATCH		REPAIR CATEGORY	REMARKS OR EXCEPTIONS
	ECAM FUEL PAGE INDICATIONS (CONTINUED)					
28-40-06M	Fuel Quantity Center Tank (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided fuel is considered unusable, and is included in computing ZFW and C.G. calculations. **Repetitive Check Required (Yellow Placard)**
28-40-06N	Fuel Quantity Indications (All Tanks – Degraded Mode) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	-	-	**D**	**(O)** Last two digits may be displayed dashed (degraded mode) provided the loss of accuracy is accounted for in fuel planning. NOTE 1: Fuel quantity is considered operative. NOTE 2: Fuel On Board display will also be in degraded (dashed) mode.
28-40-06O	Engine LP Valve Indication (A319/A320/A321) **"Contact MCC"**	**N**	2	0	**C**	**(M)** May be inoperative provided associated LP valve(s) is checked operative PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
28-40-06P	Wing Tank Pumps and Center Tank Transfer Valves (A321)	**Y**	6	0	**C**	May be inoperative.
28-40-06Q	Fuel Temperature (A321)	**Y**	2	1	**C**	One may be inoperative.
28-40-06R	Fuel Quantity Wing Tank (A321) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)** One may be inoperative provided: a) Fuel quantity in associated tank is verified PRIOR TO EACH DEPARTURE by an acceptable means per Fueling Procedures Manual, and b) Associated fuel used indicator operates normally. **Repetitive Check Required (Yellow Placard)**
28-40-06S	Fuel Quantity Indications (All Tanks – Degraded Mode) (A321) **"DISP.APPR.REQ'D"**	**Y**	-	-	**D**	**(O)** The last two digits may be displayed dashed (degraded mode) provided the loss of accuracy is accounted for in fuel planning. NOTE 1: Fuel quantity is considered operative. NOTE 2: Fuel On Board display will also be in degraded (dashed) mode.

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM FUEL PAGE INDICATIONS (CONTINUED)					
28-40-06T	Fuel Quantity Center Tank (A321) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)** May be inoperative provided: a) Fuel quantity in associated tank is verified PRIOR TO EACH DEPARTURE by an acceptable means per Fueling Procedures Manual, b) All wing tank quantity indicators operate normally, and c) Both fuel used indicators operate normally. **Repetitive Check Required (Yellow Placard)**
28-40-06U	Fuel Quantity Center Tank (A321) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)** May be inoperative provided the tank remains empty. **Repetitive Check Required (Yellow Placard)**
28-40-06V	Fuel Quantity Center Tank (A321) **"DISP.APPR.REQ'D"**					**(M)** May be inoperative provided fuel is considered unusable, and is included in computing ZFW and C.G. calculations. **Repetitive Check Required (Yellow Placard)**
28-40-06W	FUEL FLOW 1+2 (For A321)	**Y**	1	0	**C**	May be inoperative.
28-40-06X	FUEL USED	**N**	2	0	**C**	**(M)** May be inoperative provided the associated fuel used indication on the ENG SD page is considered inoperative and deferred per MEL 73-30-02A or 73-30-02B as applicable.
28-40-06Y	FUEL USED 1+2 (For A321)	**Y**	1	0	**C**	May be inoperative.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-06A	Adjacent To Lower ECAM Display	___ TANK PUMP INDICATION(S) INOP
28-40-06B	Adjacent To Lower ECAM Display	APU LP VALVE INDICATION INOP
28-40-06C	Adjacent To Lower ECAM Display	CROSS FEED VALVE INDICATION INOP
28-40-06D	Adjacent To Lower ECAM Display	___ TRANSFER VALVE INDICATION INOP
28-40-06E	Adjacent To Lower ECAM Display	FUEL TEMP INDICATION INOP
28-40-06F	Adjacent To Lower ECAM Display	FUEL ON BOARD INDICATION INOP
28-40-06G	Adjacent To Lower ECAM Display	___ FUEL QTY OUTER TANK INOP
28-40-06H	Adjacent To Lower ECAM Display	___ FUEL QTY OUTER TANK INOP
28-40-06I	Adjacent To Lower ECAM Display	___ FUEL QTY INNER TANK INOP
28-40-06J	Adjacent To Lower ECAM Display	___ FUEL QTY INNER TANK INOP
28-40-06K	Adjacent To ECAM Lower Display	FUEL QTY CENTER TANK INOP
28-40-06L	Adjacent To ECAM Lower Display	FUEL QTY CENTER TANK INOP
28-40-06M	Adjacent To ECAM Lower Display	FUEL QTY CENTER TANK INOP
28-40-06N	Adjacent To Lower ECAM Display	____ TANK FUEL QUANTITY INDICATION LAST TWO DIGITS DEGRADED (DASHED)
28-40-06O	Adjacent To Lower ECAM Display	____ENG LP VALVE INDICATION INOP
28-40-06P	Adjacent To Lower ECAM Display	____ WING TANK PUMP INOP or ____ CENTER TANK XFER VALVE INOP
28-40-06Q	Adjacent To Lower ECAM Display	____ FUEL TEMPERATURE IND INOP
28-40-06R	Adjacent To Lower ECAM Display	FUEL QTY ____ WING TANK INOP
28-40-06S	Adjacent To Lower ECAM Display	____ TANK FUEL QUANTITY INDICATION LAST TWO DIGITS DEGRADED (DASHED)
28-40-06T	Adjacent To ECAM Lower Display	FUEL QTY CENTER TANK INOP
28-40-06U	Adjacent To ECAM Lower Display	FUEL QTY CENTER TANK INOP
28-40-06V	Adjacent To ECAM Lower Display	FUEL QTY CENTER TANK INOP
28-40-06W	Adjacent To ECAM Lower Display	FUEL FLOW 1+2 INOP
28-40-06X	Adjacent To ECAM Lower Display	FUEL USED INOP
28-40-06Y	Adjacent To ECAM Lower Display	FUEL USED 1+2 INOP

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(O) PROCEDURES

28-40-06B

1. Do not use APU.
2. APU MASTER switch –OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures; If an APU takeoff is specified on the WDR reference AOM VOL 1 Packs Off For Takeoff.

28-40-06D

1. When any inner tank fuel quantity reaches 1,650 lbs – check on ECAM fuel page that associated outer tank fuel transfers.

28-40-06F

After engine start:

1. Select the FUEL PRED page.
2. Ensure that /FF is displayed. If /FF is displayed, no further action is required.
3. If /FF + FQ is displayed, enter FOB.

28-40-06G, 28-40-06H, 28-40-06K

1. PRIOR TO EACH DEPARTURE, ensure receipt of a completed FSR.

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28-40-06I, 28-40-06J

1. Ensure receipt of a completed FSR.
2. After engine start:
   a) Select the FUEL PRED page.
   b) Ensure that /FF is displayed. If /FF is displayed, no further action is required.
   c) If /FF + FQ is displayed, enter FOB.

28-40-06L, 28-40-06M

1. Ensure receipt of a completed FSR.
2. Leave center tank pumps OFF.

28-40-06N

1. Loss of fuel quantity accuracy is accounted for by planning the following amounts as unusable fuel for each affected tank:

TANK	FUEL IN POUNDS
Outer Tanks	500*
Inner Tanks	500*
Center Tank	600
All Tanks	2,600

* Per Affected Tank

28-40-06S

1. Loss of fuel quantity accuracy is accounted for by planning the following amounts as unusable fuel for each affected tank:

TANK	FUEL IN POUNDS
Wing Tanks	1000*
Center Tank	600
All Tanks	2,600

* Per Affected Tank

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(M) PROCEDURES

28-40-06B

1. Deactivate APU LP valve by performing AMM Task 28-40-00-040-001.

28-40-06C

BEFORE THE FIRST FLIGHT OF THE DAY:

1. Perform AMM Task 28-40-00-040-002.

28-40-06D

PRIOR TO EACH DEPARTURE:

1. Perform AMM Task 28-40-00-040-004.

28-40-06G, 28-40-06H, 28-40-06I, 28-40-06J, 28-40-06K, 28-40-06L, 28-40-06M, 28-40-06R, 28-40-06T, 28-40-06U, 28-40-06V

1. Place a placard adjacent to the affected tank indicator at the refueling panel as follows:
   a) Obtain a Placard.
   b) Print on placard DISCREPANCY in bold letters “FLIGHT DECK (specify which) FUEL QUANTITY INDICATOR INOP. USE ALTERNATE FUELING PROCEDURES.”
   c) Trim placard so only the DISCREPANCY portion remains.
   d) Affix trimmed placard adjacent to the affected tank indicator at the refueling panel.
2. PRIOR TO EACH DEPARTURE:
   a) Use the alternate procedures from the Fueling Procedures Manual to fuel the aircraft and verify the fuel load.

28-40-06O

PRIOR TO EACH DEPARTURE

1. Perform AMM Task 28-40-00-040-009.

28-40-06X

1. Defer the Fuel Used Indication per MEL 73-30-02A or 73-30-02B as applicable.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-40-07	Manual Magnetic Indicators	**Y**	11	0	**C**	One or more may be inoperative provided fuel quantity is determined by acceptable means. NOTE: With an associated Fuel Quantity Indicator inoperative, the remaining operative manual magnetic indicators must be able to verify fuel quantity.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-07	Adjacent To Lower ECAM Display And On The Refuel Control Panel	___ MANUAL MAGNETIC FUELING INDICATORS ARE INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
28-40-08	Fuel Quantity Attitude Monitor	**Y**	1	0	**D**	May be inoperative provided fueling and defueling procedures do not require its use.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-08	Adjacent To Lower ECAM Display	FUEL QUANTITY ATTITUDE MONITOR INOP

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
	CAUTIONS ON ECAM					
28-40-09A	TK HI TEMP (Left, Right, Inner, Outer Wing Tank) (For A319/A320 Aircraft)	**Y**	4	2	**C**	**(O)** One in each wing or both in one wing may be inoperative provided fuel temperature indications on the ECAM FUEL system page are available for the non affected tank(s) and fuel temperature is monitored prior to takeoff and during flight.
28-40-09B	TK HI TEMP (Left, Right, Inner, Outer Wing Tank) (For A319/A320 Aircraft)	**Y**	4	0	**C**	**(O)** May be inoperative provided fuel temperature indications on the ECAM FUEL system page are available and fuel temperature is monitored prior to takeoff and during flight.
28-40-09C	TK HI TEMP (Left, Right Wing Tank) (For A321 Aircraft)	**Y**	2	1	**C**	**(O)** One may be inoperative provided fuel temperature indications on the ECAM FUEL system page are available for the non affected tank and fuel temperature is monitored prior to takeoff and during flight.
28-40-09D	TK HI TEMP (Left, Right Wing Tank) (For A321 Aircraft)	**Y**	2	0	**C**	**(O)** May be inoperative provided fuel temperature indications on the ECAM FUEL system page are available and fuel temperature is monitored prior to takeoff and during flight.
28-40-09E	TK LO TEMP (Left, Right, Inner, Outer Wing Tank) (For A319/A320 Aircraft)	**Y**	4	2	**C**	**(O)** One in each wing or both in one wing may be inoperative provided fuel temperature indications on the ECAM FUEL system page are available for the non affected tank(s) and fuel temperature is monitored prior to takeoff and during flight.
28-40-09F	TK LO TEMP (Left, Right, Inner, Outer Wing Tank) (For A319/A320 Aircraft)	**Y**	4	0	**C**	**(O)** May be inoperative provided fuel temperature indications on the ECAM FUEL system page are available and fuel temperature is monitored prior to takeoff and during flight.
28-40-09G	TK LO TEMP (Left, Right, Wing Tank) (For A321 Aircraft)	**Y**	2	1	**C**	**(O)** One may be inoperative provided fuel temperature indications on the ECAM FUEL system page are available for the non affected tank and fuel temperature is monitored prior to takeoff and during the flight.
28-40-09H	TK LO TEMP (Left, Right, Wing Tank) (For A321 Aircraft)	**Y**	2	0	**C**	**(O)** May be inoperative provided fuel temperature indications on the ECAM FUEL system page are available and fuel temperature is monitored prior to takeoff and during the flight.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-09A	Adjacent To Lower ECAM Display	___ TK HI TEMP CAUTION ON ECAM INOP
28-40-09B	Adjacent To Lower ECAM Display	___ TK HI TEMP CAUTION ON ECAM INOP
28-40-09C	Adjacent To Lower ECAM Display	___ TK HI TEMP CAUTION ON ECAM INOP
28-40-09D	Adjacent To Lower ECAM Display	___ TK HI TEMP CAUTION ON ECAM INOP
28-40-09E	Adjacent To Lower ECAM Display	___ TK LO TEMP CAUTION ON ECAM INOP
28-40-09F	Adjacent To Lower ECAM Display	___ TK LO TEMP CAUTION ON ECAM INOP
28-40-09G	Adjacent To Lower ECAM Display	___ TK LO TEMP CAUTION ON ECAM INOP
28-40-09H	Adjacent To Lower ECAM Display	___ TK LO TEMP CAUTION ON ECAM INOP

(O) PROCEDURES

28-40-09A, 28-40-09B

1. Monitor fuel temperature on ECAM FUEL system page prior to takeoff and periodically during the flight.
2. If fuel temperature reaches limits:
   a) Before takeoff, delay takeoff and shutdown engine of affected side.
   b) In flight, increase engine fuel flow of affected side and if necessary use APU GEN and switch OFF IDG of affected side if opposite GEN is available.

   NOTE: For fuel temperature limitations, refer to AOM VOL 1 Limitations.

28-40-09E, 28-40-09F, 28-40-09G, 28-40-09H

1. Monitor fuel temperature on ECAM FUEL system page prior to takeoff and periodically during the flight.
2. If fuel temperature reaches limits:
   a) Before takeoff, delay takeoff.
   b) In flight, consider descending to a lower altitude and/or increasing mach to increase TAT.

   NOTE: For fuel temperature limitations, refer to AOM VOL 1 Limitations.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
INDICATION ON ECAM E/WD 28-40-10 Fuel on Board (FOB)	**Y**	1	0	**C**	May be inoperative provided: a) Associated indication is available on the MCDU, and b) Fuel Used indications operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
28-40-10	Adjacent To Lower ECAM Display	FUEL ON BOARD INDICATION ON ECAM INOP

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NUMBER INSTALLED	NUMBER REQUIRED FOR DISPATCH
FLIGHT CREW MAY PLACARD	REPAIR CATEGORY

ITEM NO.	NAME / DESCRIPTION	REMARKS OR EXCEPTIONS
29-00-01	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY Faults(s) Indicated by BLUE RSVR	NO RELIEF APPROVED.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-00-01	N/A	N/A

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
29-10-01	Engine Driven Pump Systems Depressurization Function	**Y**	2	1	**C**	May be inoperative on one pump.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-10-01	Adjacent To ECAM Display	___ SYSTEM ENGINE DRIVEN PUMP DEPRESSURIZATION FUNCTION INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
29-10-02	Blue System Electric Pump (Automatic Control)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Pump can be manually operated, and b) Indications of blue hydraulic system are verified normal.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-10-02	Adjacent To The Blue Electric Pump pushbutton Switch	BLUE HYD SYSTEM ELECTRIC PUMP AUTO CONTROL INOP

(O) PROCEDURES

1. On the ground, if blue electric pump runs continuously:
   a) At electrical power supply application: BLUE ELEC PUMP – OFF.
   b) After engines start: BLUE ELEC PUMP –AUTO.
   c) After engines shutdown: BLUE ELEC PUMP – OFF.

OR

2. On the ground, if blue electric pump does not start automatically:
   a) After engines start:
      1) BLUE ELEC PUMP – AUTO.
      2) BLUE PUMP OVRD – ON.
      3) Check blue hydraulic pressure available on ECAM HYD page.
      4) After engines shutdown: BLUE ELEC PUMP – OFF

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
29-10-03	Hydraulic System Accumulators	**N**	3	0	**C**	**(M)** May be inoperative provided the affected accumulator is deactivated.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-10-03	Adjacent To ECAM Display	___ SYSTEM ACCUMULATOR INOP

(M) PROCEDURES

29-10-03

1. To deactivate accumulator(s):
   a) To deactivate the green power accumulator perform AMM Task 29-10-00-040-004.
   b) To deactivate the blue power accumulator perform AMM Task 29-10-00-040-005.
   c) To deactivate the yellow power accumulator perform AMM Task 29-10-00-040-006.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
FILTERS					
29-10-07A System Filters	**Y**	8	7	**C**	One LP or one reservoir filling filter may be inoperative.
29-10-07B Case Drain Filters	**N**	3	2	**C**	**(M)** One may be inoperative provided it is removed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-10-07A	Adjacent To ECAM Display	___ FILTER INOP
29-10-07B	Adjacent To ECAM Display	___ SYSTEM CASE DRAIN FILTER INOP AND REMOVED

(M) PROCEDURES

29-10-07B

The (M) Indicates the following Maintenance Procedures are required:

1. Green Hydraulic System. (Ref. Figure 29–10–07B.1)
   a) Depressurize green hydraulic system.
   b) Remove PTU isolation (quick disconnect) coupling.
   c) Depressurize green hydraulic reservoir.
   d) Install warning tags in cockpit and on the green hydraulic system ground service panel to advise personnel that green hydraulic system must remain unpressurized.
   e) Open left fan cowl door 437 AL.
   f) Cut and remove lockwire from filter bowl (3).
   g) Unscrew and remove filter bowl together with filter element (2) from filter head.
   h) Remove filter element together with its o–ring from filter bowl.
   i) Clean filter bowl.
   j) Coat filter bowl threads with hydraulic fluid.
   k) Position filter bowl under filter head and hand tighten filter bowl.
   l) Safety filter bowl to filter head with lockwire.
   m) Press clogging indicator button if protruding.
   n) Remove warning tags and make sure that work area is clean and clear of tools and other items.
   o) Pressurize green hydraulic reservoir.
   p) Perform dry–motoring of ENG 1 and check:
      1) Case drain filter for leakage.
      2) That clogging indicator button is still retracted.
   q) Check fluid level in green system reservoir. Service as required.
   r) Make sure that work area is clean and clear of tools and other items.

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s) Close left fan cowl door 437AL.
t) Connect PTU isolation coupling.

2. Blue Hydraulic System. (Ref. Figure 29–10–07B.2)

a) Depressurize blue hydraulic system.
b) Depressurize blue hydraulic reservoir.

3. On A/C 3209–3211

a) On C/B panel 49VU: pull and tag circuit breaker HYD/HYD PWR/B WARN/AND CTL location D14.

4. On A/C 3212–3278, 3101–3171

a) On C/B panel 49VU: pull and tag circuit breaker HYD/HYD PWR/B WARN/& CTL location C12.

5. On All A/C

a) On C/B panel 123VU: pull and tag circuit breaker B HYD/ELEC PUMP location AB09.
b) Install warning tags in cockpit and on the blue hydraulic system ground service panel to advise personnel that blue hydraulic system must remain unpressurized.
c) Open access panel 195BB.
d) Cut and remove lockwire from filter bowl (3).
e) Unscrew and remove filter bowl (3) together with filter element (2) from filter head.
f) Remove filter element together with its o–ring from filter bowl (3).
g) Clean filter bowl.
h) Coat filter bowl threads with hydraulic fluid.
i) Position filter bowl under filter head and hand tighten filter bowl.
j) Safety filter bowl to filter head with lockwire.
k) Press in clogging indicator button if protruding.
l) Remove warning tags and make sure that work area is clean and clear of tools and other items.
m) Pressurize blue hydraulic reservoir.

6. On A/C 3209–3211

a) On C/B panel 49VU: remove tag and close circuit breaker HYD/HYD PWR/B WARN/AND CTL location D14.

7. On A/C 3212–3278, 3101–3171

a) On C/B panel 49VU: remove tag and close circuit breaker HYD/HYD PWR/B WARN/& CTL location C12.

8. On All A/C

a) On C/B panel 123VU: remove tag and close circuit breaker B HYD/ELEC PUMP location AB09.
b) Pressurize blue hydraulic system by means of blue electric pump and check:
   1) Case drain filter for leakage.
   2) That clogging filter button is still retracted.
c) Stop blue electric pump operation
d) Check fluid level in blue reservoir. Service as required.
e) Make sure that work area is clean and clear of tools and other items.
f) Close access panel 195BB.

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9. Yellow Hydraulic System. (Ref. Figure 29–10–07B.1)
   a) Depressurize yellow hydraulic system.
10. On A/C 3209–3238
   a) On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC PUMP/NORM location AB03.
11. On A/C 3239–3278, 3101–3171
   a) On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/HYD POWER/Y location N30.
   b) On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC/ELEC PUMP/NORM location AB03
12. On All A/C
   a) On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC/PUMP location AB06.
   b) Remove PTU isolation (quick disconnect) coupling.
   c) Depressurize yellow reservoir.
   d) Install warning tags in cockpit and on the yellow hydraulic system ground service panel to advise personnel that yellow hydraulic system must remain unpressurized.
   e) Open left fan cowl door 447 AL.
   f) Cut and remove lockwire from filter bowl (3).
   g) Unscrew and remove filter bowl together with filter element (2) from filter head.
   h) Remove filter element together with its o–ring from filter bowl.
   i) Clean filter bowl.
   j) Coat filter bowl threads with hydraulic fluid.
   k) Position filter bowl under filter head and hand tighten filter bowl.
   l) Safety filter bowl to filter head with lockwire.
   m) Press in clogging indicator button if protruding.
   n) Remove warning tags and make sure that work area is clean and clear of tools and other items.
   o) Pressurize yellow system reservoir.
   p) Perform dry motoring of ENG 2 and check:
      1) Case drain filter for leakage.
      2) That clogging indicator button is still retracted.
   q) Check fluid level in yellow reservoir. Service as required.
   r) Make sure that work area is clean and clear of tools and other items.
   s) Close left fan cowl door.
   t) Connect PTU isolation coupling.
13. On A/C 3209–3238
   a) On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC PUMP/NORM location AB03.
14. On A/C 3239–3278, 3101–3171
   a) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/HYD POWER/Y location N30.

Continued Next Page

b) On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC/ELEC PUMP/NORM location AB03

15. On All A/C

a) On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC/PUMP location AB06.

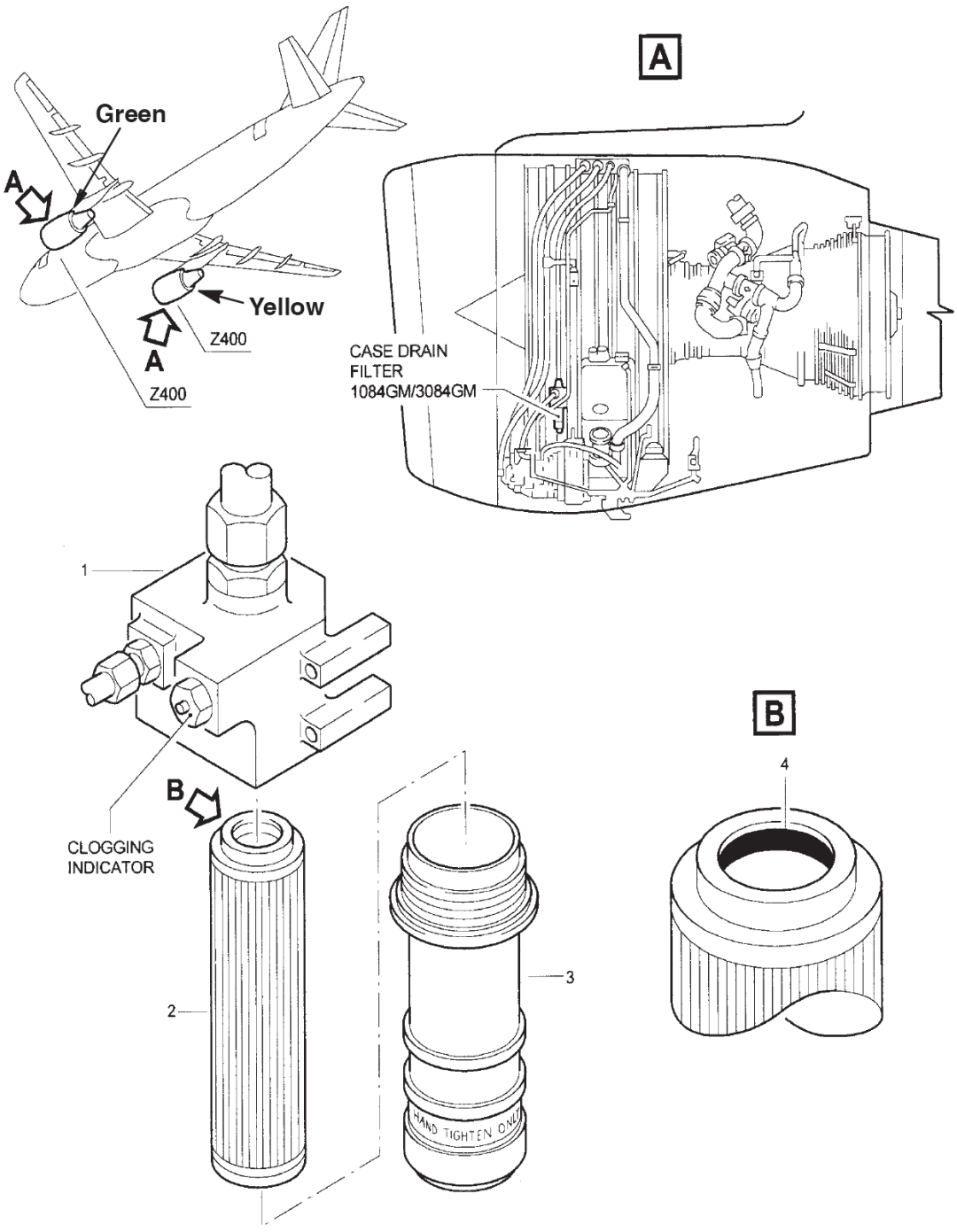

Figure 29–10–07B.1
Green And Yellow Engine Pump Case Drain Filters
ON All A/C

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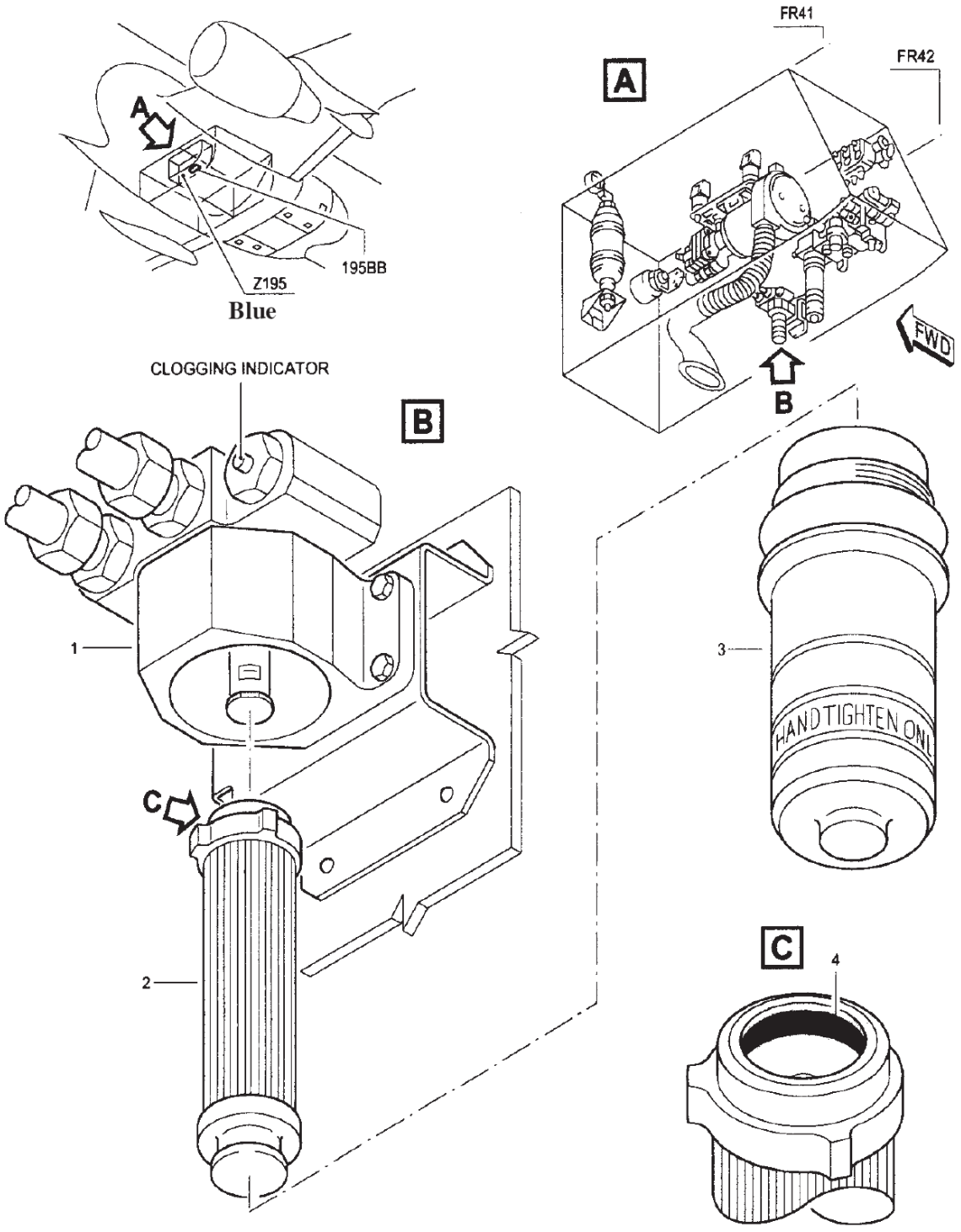

Figure 29–10–07B.2
Blue Electric Pump Case Drain Filters
ON All A/C

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
29-20-01	Hydraulic Reservoir Quantity Indicator (Green Servicing Panel)	**N**	1	0	**C**	**(M)** May be inoperative provided hydraulic fluid quantity is monitored during servicing of the hydraulic reservoir using the visual quantity gauge.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-20-01	ON The Green Servicing Panel	HYDRAULIC RESERVOIR INDICATOR INOP ON THE GREEN SERVICING PANEL

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. When servicing the hydraulic reservoir with an inoperative quantity indicator at the Green Servicing Panel, accomplish the following:
   a) Energize the aircraft electrical circuits: (Ref. AMM TASK 24–41–00–861–002).
   b) Open access door 197BB.
   c) On C/B panel 121VU: verify that circuit breaker HYDRAULIC/HYD/QTY/IND location P35 is closed.
   d) On the service panel of the Green hydraulic system:
      1) Turn on the reservoir–filling manual selector–valve (1134CQ) to the applicable position for each hydraulic system.
   e) If the quantity indicator gives an incorrect indication and it is necessary to fill one or more of the reservoirs, fill the applicable reservoir(s) as follows:
      1) Gain access to the applicable hydraulic reservoir:
         A. For the Green hydraulic reservoir:
            - Open the RH main landing gear door (Ref. AMM TASK 32–12–00–010–001).
         B. For the Blue hydraulic reservoir:
            - Open access door 197FB
         C. For the Yellow hydraulic reservoir:
            - Open access door 196BB
      2) Have a person in position at the reservoir to be filled. This person will monitor the contents indicator of the reservoir during the filling procedure. Make sure this person lets the filler know when the reservoir is full.
      3) Fill the reservoir (Ref. AMM TASK 12–12–29–611–001) or (Ref. AMM TASK 12–12–29–611–001).
      4) Stop the supply of hydraulic fluid when the reservoir is full.
   f) De–energize the ground service network.
   g) Close–up

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1) For the Green hydraulic reservoir:

   A. Close the main door of the landing gear (Ref. AMM TASK 32–12–00–410–001).

2) For the Blue hydraulic reservoir:

   A. Close the access door 197FB.

3) For the Yellow hydraulic reservoir:

   A. Close the access door 196BB.

h) Restore aircraft to required configuration

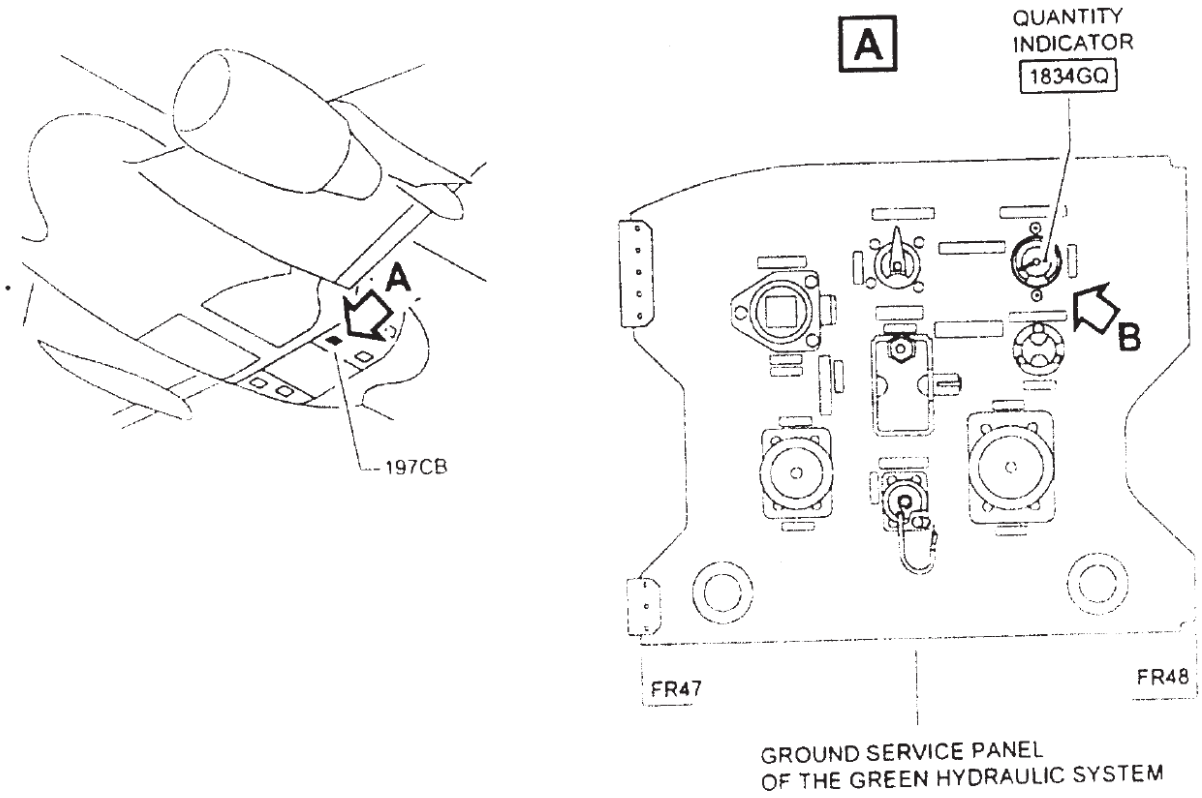

Figure 29–20–01 Green Servicing Panel Location

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
29-20-02	Hydraulic Reservoir Four Way Selector Valve on Ground Service Panel	**N**	1	0	**C**	**(M)** May be inoperative provided associated system is serviced using the HP ground connection.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-20-02	Adjacent To The Hydraulic Reservoir Four Way Selector Valve	HYDRAULIC RESERVOIR FOUR WAY SELECTOR INOP ON THE GROUND SERVICE PANEL

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

Service the affected hydraulic reservoir as follows:

NOTE: Each hydraulic reservoir system must be serviced separately.

1. Connect the ground cart to the HP ground connector of the affected system to be filled.
2. Slowly increase the pressure until a level increase can be observed directly at the reservoir gauge.
3. Keep this pressure until the correct reservoir level is reached.
4. Disconnect the ground cart.
5. Return aircraft to required service.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
POWER TRANSFER UNIT					
29-23-01 Automatic Activation Function **"DISP.APPR.REQ'D"**	**N**	1	0	**B**	**(M)(O)** May be inoperative (PTU runs continuously) provided: a) System pressure indication on ECAM operates normally, b) Power transfer can be stopped when PTU p.b. switch is placed OFF, and c) Operation of the PTU in both directions is verified before FIRST FLIGHT OF EACH DAY (Log Book Entry Required). NOTE: PTU must be operated during takeoff and landing to provide gear and flap retraction in the event of an engine failure during takeoff/go–around. It is advisable to make a PA announcement to the passengers indicating PTU noise is normal during these phases of flight. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-23-01	Adjacent To The PTU Pushbutton Switch	PTU RUNS CONTINUOUSLY IN AUTO

(O) PROCEDURES

1. PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

   NOTE: The above logbook entry is only required before the first flight of each day.

2. Before Takeoff select PTU – AUTO (Lights out).
3. After gear and flaps are retracted, select PTU –OFF.
4. Before landing, select PTU – AUTO (Lights out).

   NOTE: For passenger comfort, PTU may be switched OFF during the taxi after landing provided both hydraulic engine pumps are operative and running. PTU must be selected to AUTO before leaving the aircraft.

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(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. DAILY CHECK (Before first flight of Each Day):

NOTE: The PTU pressurizes the system to a nominal value of 3000 PSI+/– 200 PSI, but if no systems are operated the pressure is not constant. The PTU operates in a cycle which keeps the pressure in the hydraulic system between 2100 and 3200 PSI.

a) Verify PTU pb switch is in the AUTO (Lights out) position.

b) Verify Power Transfer Unit operates in both directions.

c) After both engines start:

1) GREEN ENG 1 PUMP – OFF

A. Check that green system pressure is correct (3000 PSI _ 200 PSI) and check the PTU arrow indication.

2) GREEN ENG 1 PUMP – ON

3) PTU – OFF

4) YELLOW ENG 2 PUMP – OFF

5) YELLOW ELEC PUMP – Check, to be in OFF position

6) Let the pressure in the yellow hydraulic system decrease to 200 psi or less.

7) PTU – ON.

8) Check that yellow system pressure is correct (3000 PSI _ 200 PSI) and check the PTU arrow indication.

9) YELLOW ENG 2 PUMP – ON

d) Restore aircraft to required configuration.

2. Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
29-25-01	Yellow System Electric Pump **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided associated pb sw is selected OFF. NOTE: Two agents required to operate cargo doors.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-25-01	Adjacent To ECAM Display	YELLOW SYSTEM ELECTRIC PUMP INOP

(O) PROCEDURES

1. Yellow system electric pump pb sw – OFF.
2. Start ENG 2 first, then start ENG 1.

   NOTE: This start sequence ensures that the yellow system accumulator is pressurized for parking brake operation.
3. Single engine taxi Not Authorized.

   NOTE: Without engines running, if yellow system accumulator pressure is bled off, parking brakes will not be available.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Deactivate the yellow system electric pump as follows:
   a) Place the Yellow system electric pump p.b. sw – OFF.
   b) On C/B panel 122VU: pull and secure circuit breaker DOORS/CARGO location T12.
   c) If pump continues to run, Pull and secure the following circuit breakers:
   d) On A/C 3209–3238
      1) On C/B panel 123VU: pull and secure circuit breaker Y HYD/ELEC PUMP/NORM location AB03.
   e) On A/C 3239–3278, 3101–3171
      1) On C/B panel 123VU: pull and secure circuit breaker Y HYD/ELEC/ELEC PUMP/NORM location AB03.
   f) On All A/C
      1) On C/B panel 123VU: pull and secure circuit breaker Y HYD/ELEC/PUMP location AB06.

         NOTE: If the pump runs continuously on the ground, there is a potential of an overheat situation.

         NOTE: The resetting of the circuit breakers should be limited to the time required to open or close the cargo doors.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
HYDRAULIC PUMP PB SWITCH					
29-30-01A FAULT Lights	**Y**	4	0	**C**	May be inoperative provided the associated reservoir quantity indication operates normally. NOTE: Illumination of two lights (one from the Blue ELEC PUMP pb and one from ENG 1(2) PUMP pb) with engines off, may be due to a failed engine oil low pressure switch. In this case, the ENG OIL LO PRESS warning is inoperative.
29-30-01B OFF Lights	**Y**	3	0	**C**	May be inoperative.
29-30-01C ON Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-30-01A	Adjacent To Pump FAULT Light	___ PUMP FAULT LIGHT INOP
29-30-01B	Adjacent To Pump OFF Light	___ PUMP OFF LIGHT INOP
29-30-01C	Adjacent To Pump ON Light	PUMP ON LIGHT INOP

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
PTU PB SWITCH					
29-30-02A FAULT Light	**Y**	1	0	**C**	May be inoperative provided yellow and green reservoir quantity indicators operate normally.
29-30-02B OFF Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-30-02A	Adjacent To PTU FAULT Light	PTU FAULT LIGHT INOP
29-30-02B	Adjacent To PTU OFF Light	PTU OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM HYD PAGE INDICATIONS					
29-30-03A	Reservoir Quantity **"DISP.APPR.REQ'D"**	**N**	3	2	**C**	**(M)(O)** One may be inoperative provided: a) The associated reservoir quantity is verified adequate PRIOR TO EACH DEPARTURE (Log Book Entry Required), and b) Associated RSVR LO LVL caution on ECAM operates normally. **Repetitive Check Required (Yellow Placard)**
29-30-03B	Fire Valve	**Y**	2	0	**C**	May be inoperative.
29-30-03C	Yellow Elec Pump	**Y**	1	0	**C**	May be inoperative.
29-30-03D	Power Transfer Unit (PTU)	**Y**	1	0	**C**	May be inoperative.
29-30-03E	System Label	**Y**	3	0	**C**	**(O)** May be inoperative provided: a) Associated system pressure is verified PRIOR TO EACH DEPARTURE, and b) Associated spoilers availability is verified PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
29-30-03F	System Pressure	**Y**	3	2	**C**	**(O)** One may be inoperative provided associated System Label indication operates normally.
29-30-03G	Pumps	**Y**	3	0	**C**	May be inoperative.
29-30-03H	RAT	**Y**	1	0	**C**	**(O)** May be inoperative provided RAT is verified stowed PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-30-03A	Adjacent To ECAM Display	___ ECAM HYD PAGE RESERVOIR QUANTITY INDICATION INOP
29-30-03B	Adjacent To ECAM Display	___ FIRE VALVE INDICATION INOP
29-30-03C	Adjacent To ECAM Display	ECAM YELLOW PUMP INDICATION INOP
29-30-03D	Adjacent To ECAM Display	ECAM PTU INDICATION INOP
29-30-03E	Adjacent To ECAM Display	ECAM HYDRAULIC PAGE ___ SYSTEM LABEL INDICATION(S) INOP
29-30-03F	Adjacent To ECAM Display	ECAM HYDRAULIC PAGE ___ SYSTEM PRESSURE INDICATION INOP
29-30-03G	Adjacent To ECAM Display	ECAM HYDRAULIC PAGE ___ PUMP INDICATION(S) INOP
29-3003H	Adjacent To ECAM Display	ECAM HYDRAULIC PAGE ___ RAT INDICATION(S) INOP

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(O) PROCEDURES

29-30-03A

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

29-30-03E

During flight deck preparation:

1. Verify ailerons and spoilers are clear.
2. YELLOW ELEC PUMP – ON
3. BLUE ELEC PUMP –CHECK AUTO
4. BLUE PUMP OVRD –ON
5. PTU – CHECK AUTO
6. Move the stick left or right and check spoilers movement on ECAM FLT CTL Page.
7. YELLOW ELEC PUMP – OFF
8. BLUE ELEC PUMP OFF then AUTO (Resets Blue Pump OVRD.)
9. Verify associated system pressure is normal before each departure.

29-30-03F

During flight deck preparation:

1. If blue system affected:
   a) Check on ECAM HYD page that BLUE system label is amber.
   b) BLUE ELEC PUMP –CHECK AUTO
   c) BLUE PUMP OVRD –ON
   d) Check that BLUE system label is white and arrow is green.
   e) BLUE ELEC PUMP OFF then AUTO (Resets Blue Pump OVRD.)
2. If yellow system affected:

   NOTE: ECAM PTU FAULT warning will annunciate after engine start. If the PTU function operates normally during test, clear the ECAM PTU fault message and continue.

   a) YELLOW ELEC PUMP – OFF
   b) Check on ECAM HYD page that YELLOW system label is amber.
   c) YELLOW ELEC PUMP – ON
   d) Check that YELLOW system label is white and arrow is green.
   e) YELLOW ELEC PUMP – OFF
3. If green system affected:

   NOTE: PTU FAULT warning is on.

   a) Check on ECAM HYD page that green system label is amber.
   b) YELLOW ELEC PUMP – ON
   c) PTU – CHECK AUTO

Continued Next Page

d) Check that GREEN system label is white and arrow is green.

e) YELLOW ELEC PUMP – OFF

29-30-03H

Verify RAT is stowed before each departure.

(M) PROCEDURES

29-30-03A

The (M) Indicates the following Maintenance Procedures are required:

1. Determine type of failure, electrical or mechanical.
   a) Compare quantity indication between ECAM, HYD servicing panel, and the mechanical indicator on the reservoir of the affected system.
   b) If mechanical indicator is indicating a normal quantity proceed with deactivation for an electrical failure.
2. Deactivate the Blue/Green/Yellow reservoir.
   a) Open applicable access door as follows:
      1) Green reservoir – open RH main gear door.
      2) Blue reservoir – open access door 197FB.
      3) Yellow reservoir – open access door 196BB and the RH main gear door.
   b) On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/HYD/QTY/IND location P35.
   c) Disconnect the applicable electrical connector 1000GQ–A (Green), 2000GQ–A (Blue), 3000GQ–A (Yellow) from the quantity transmitter of the related reservoir.
   d) Install protective caps on the connector and receptacle.
   e) Secure the cable:
      1) For Blue/Green, use a tiewrap to secure the cable to a part of the structure.
      2) For Yellow, put the connector through the hole in the top of the rear wall (FR42) of the yellow hydraulic compartment and use a tiewrap to attach the connector and the cable to the structure in the main gear compartment.

         NOTE: Attach the cable to the structure so that the disconnected end of the connector points down. Oil or other liquids can not then enter.
   f) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/HYD/QTY/IND location P35.
3. Check contents of deactivated reservoir as follows:
   a) For electrical failure:
      1) Check for adequate fluid level using the mechanical indicator on the reservoir.
      2) Check the RSVR LO LVL ECAM warning:

         NOTE: This check for an electrical failure is only made one time for the aircraft to be dispatched under this MEL item.

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A. Make sure the aircraft configuration is:

i. For deactivation of the Green reservoir indication as follows:

- The landing gear extended with landing gear doors closed (one main landing gear door maybe open for access to reservoir
- The thrust reverser for the left engine is stowed.
- The speedbrakes and spoilers retracted.
- Green power accumulator is empty of fluid and filled with nitrogen to the correct pressure.

ii. For deactivation of the Blue reservoir indication:

- The speedbrakes and spoilers retracted.
- Blue power accumulator is empty of fluid and filled with nitrogen to the correct pressure.

iii. For deactivation of the Yellow reservoir indication:

- The thrust reverser for the right engine is stowed.
- The speedbrakes and spoilers retracted.
- Yellow power accumulator is empty of fluid and filled with nitrogen to the correct pressure.
- FWD and AFT cargo doors are closed.

B. All of the other hydraulic services can be in any position.

C. Energize the aircraft electrical buses.

D. Set the ECAM system on.

E. Drain the applicable reservoir until the LO LVL ECAM warning comes on.

NOTE: Keep the air pressure in the reservoir at more that 22 PSI while draining the reservoir.

F. Service reservoir to its normal level using the mechanical indicator on the reservoir.

NOTE: Monitor Mechanical quantity indicator during servicing for proper operation.

b) For a mechanical failure of the quantity transmitter:

1) Check the RSVR LO LVL ECAM warning:

A. Make sure the aircraft configuration is:

i. For deactivation of the Green reservoir indication:

- The landing gear extended with landing gear doors closed (one main landing gear door maybe open for access to reservoir).
- The thrust reverser for the left engine is stowed.
- The speedbrakes and spoilers retracted.
- Green power accumulator is empty of fluid and filled with nitrogen to the correct pressure.

ii. For deactivation of the Blue reservoir indication:

- The speedbrakes and spoilers retracted.
- Blue power accumulator is empty of fluid and filled with nitrogen to the correct pressure.

Continued Next Page

iii. For deactivation of the Yellow reservoir indication:

- The thrust reverser for the right engine is stowed.
- The speedbrakes and spoilers retracted.
- Yellow power accumulator is empty of fluid and filled with nitrogen to the correct pressure.
- FWD and AFT cargo doors are closed.

B. All of the other hydraulic services can be in any position.

C. Energize the aircraft electrical buses.

D. Set the ECAM system on.

E. Drain the applicable reservoir until the LO LVL ECAM warning comes on.

NOTE: Keep the air pressure in the reservoir at more that 22 PSI while draining the reservoir.

c) Service reservoir to its normal level using a known quantity:

1) Green reservoir

- 2.9 US gallons.

2) Blue reservoir

- 1.05 US gallons

3) Yellow reservoir

- With the brake accumulator empty of fluid but filled with nitrogen to the correct pressure, add 3.2 US gallons.
- With the brake accumulator full of fluid at the system pressure of 3000 PSI, add 2.4 US gallons.

NOTE: The above quantities are for fluid temperatures between 50 and 68 degrees F (10 and 20 degrees C). If the temperature is out of these limits, the quantity of fluid necessary changes by:

o .13 US gallons for each 18 degrees F (10 degrees C) for the green/yellow reservoirs.

o .065 US gallons for each 18 degrees F (10 degrees C) for the blue reservoir.

d) De–energize aircraft electrical circuits if no longer required.

e) Ensure that the manual selector valve 1134GQ is in the neutral position.

f) Make sure that work area is clean and clear of tools and other items

g) Close access doors.

h) Check that circuit breaker HYDRAULIC/HYD/QTY/IND at panel location P35 (1831Q) is closed and tag removed.

4. PRIOR TO EACH DEPARTURE:

a) For electrical failure:

1) Check for adequate fluid level using the mechanical indicator on the reservoir.

b) For a mechanical failure of the quantity transmitter:

1) Check the RSVR LO LVL ECAM warning as follows:

A. Make sure the aircraft configuration is:

Continued Next Page

i. For deactivation of the Green reservoir indication as follows:

- The landing gear extended with landing gear doors closed (one main landing gear door maybe open for access to reservoir).
- The thrust reverser for the left engine is stowed.
- The speedbrakes and spoilers retracted.
- Green power accumulator is empty of fluid and filled with nitrogen to the correct pressure.

ii. For deactivation of the Blue reservoir indication:

- The speedbrakes and spoilers retracted.
- Blue power accumulator is empty of fluid and filled with nitrogen to the correct pressure.

iii. For deactivation of the Yellow reservoir indication:

- The thrust reverser for the right engine is stowed.
- The speedbrakes and spoilers retracted.
- Yellow power accumulator is empty of fluid and filled with nitrogen to the correct pressure.
- FWD and AFT cargo doors are closed.

B. All of the other hydraulic services can be in any position.

C. Energize the aircraft electrical buses.

D. Set the ECAM system on.

E. Drain the applicable reservoir until the LO LVL ECAM warning comes on.

NOTE: Keep the air pressure in the reservoir at more that 22 PSI while draining the reservoir.

F. Service reservoir to its normal level using a known quantity:

i. Green reservoir

- 2.9 US gallons.

ii. Blue reservoir

- 1.05 US gallons

iii. Yellow reservoir

- With the brake accumulator empty of fluid but filled with nitrogen to the correct pressure, add 3.2 US gallons.
- With the brake accumulator full of fluid at the system pressure of 3000 PSI, add 2.4 US gallons

NOTE: The above quantities are for fluid temperatures between 50 and 68 degrees F (10 and 20 degrees C). If the temperature is out of these limits, the quantity of fluid necessary changes by:

- o .13 US gallons for each 18 degrees F (10 degrees C) for the green/yellow reservoirs.
- o .065 US gallons for each 18 degrees F (10 degrees C) for the blue reservoir.

c) De–energize aircraft electrical circuits if no longer required.

d) Ensure that the manual selector valve 1134GQ is in the neutral position.

e) Make sure that work area is clean and clear of tools and other items

f) Close access doors.

g) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM WARNINGS AND CAUTIONS					
29-30-04A	RSVR LO AIR PR ALL A319 A/C A320 A/C 3271-3278 ALL A321 A/C **"Contact MCC"**	**N**	3	2	**C**	**(M)** One may be inoperative provided air pressure is verified on the reservoir PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
29-30-04B	RSVR LO AIR PR A320 A/C 3209-3270 **"Contact MCC"**	**N**	3	2	**C**	**(M)** One may be inoperative for the green or yellow system provided air pressure is verified on the reservoir PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
29-30-04C	RSVR OVHT	**Y**	3	2	**C**	Either green or yellow RSVR OVHT may be inoperative.
29-30-04D	ELEC PUMP OVHT	**Y**	2	0	**C**	May be inoperative.
29-30-04E	ELEC PUMP LO PR	**Y**	2	0	**C**	**(O)** May be inoperative provided: c) Associated system, (blue/yellow), pressure indication operates normally, and d) Operation of electric pumps is checked PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
29-30-04F	ENG Pump LO PR	**Y**	2	0	**C**	**(O)** May be inoperative provided: e) Associated system, (yellow/green), pressure indication operates normally, and f) Operation of engine pumps is checked PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
29-30-04G	RSVR LO LVL **"Contact MCC"**	**N**	3	2	**C**	**(M)(O)** One may be inoperative provided: g) Associated reservoir quantity indication operates normally, and h) Reservoir quantity is verified adequate PRIOR TO EACH DEPARTURE (Log Book Entry Required). NOTE 1: If HYD B RSVR LO LVL is displayed, EMER GEN may appear on ECAM STATUS INOP SYS until an engine is started. NOTE 2: If HYD G or Y RSVR LO LVL is displayed, MEL item 29–30–01A and 29–30–02A may apply if the associated fault lights are illuminated. **Repetitive Check Required (Yellow Placard)**

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM WARNINGS AND CAUTIONS (CONTINUED)					
29-30-04H	SYS LO PR	**Y**	3	0	**C**	**(O)** May be inoperative provided: a) Associated system pressure is verified PRIOR TO EACH DEPARTURE, and b) Associated spoiler availability is verified PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
29-30-04I	Power Transfer Unit (PTU) Fault	**Y**	1	0	**C**	**(O)** May be inoperative provided the PTU is verified to operate normally PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**
29-30-04J	Ram Air Turbine (RAT) Fault **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) RAT integrity is not affected, and b) If any part of the RAT FAULT warning system is deactivated, the deactivated component must be reactivated and the (M) procedure accomplished PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-30-04A	Adjacent To ECAM Display	ECAM ___ RSVR LO AIR PR WARNING/ CAUTION INOP
29-30-04B	Adjacent To ECAM Display	ECAM ___ RSVR LO AIR PR WARNING/ CAUTION INOP
29-30-04C	Adjacent To ECAM Display	ECAM ___ RSVR OVHT WARNING/ CAUTION INOP
29-30-04D	Adjacent To ECAM Display	ECAM ___ ELECTRICAL PUMP OVHT WARNING/ CAUTION INOP
29-30-04E	Adjacent To ECAM Display	ECAM ___ ELEC PUMP LO PR WARNING/ CAUTION INOP
29-30-04F	Adjacent To ECAM Display	ECAM ___ ENG PUMP LO PR WARNING/ CAUTION INOP
29-30-04G	Adjacent To ECAM Display	___ HYD SYSTEM ECAM RSVR LO LVL WARNING/CAUTION INOP
29-30-04H	Adjacent To ECAM Display	ECAM ___ SYS LO PR WARNING/ CAUTION INOP

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MEL ITEM	TAB LOCATION	PLACARD TEXT
29-30-04I	Adjacent To ECAM Display	ECAM PTU FAULT WARNING/CAUTION INOP
29-30-04J	Adjacent To ECAM Display	RAT FAULT INDICATION INOP, And If Applicable, ___ PORTION ON RAT FAULT WARNING SYSTEM DEACTIVATED

(O) PROCEDURES

29-30-04E

After both engines are started:

1. PTU – OFF.
2. Yellow Elec Pump – ON.
3. Check that the blue and yellow hydraulic systems pressure is correct (3000 PSI +/– 200 PSI) on the ECAM HYD page.
4. PTU – AUTO.
5. Yellow Elec Pump – OFF.

NOTE: PTU will indicate running on the ECAM HYD page.

29-30-04F

After both engines are started:

1. PTU – OFF.
2. Check that green and yellow hydraulic systems pressure is correct (3000 PSI +/– 200 PSI) on the ECAM HYD page.
3. PTU – AUTO.

NOTE: PTU will indicate running on the ECAM HYD page.

29-30-04G

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

29-30-04H

During flight deck preparation (prior to engine start):

1. YELLOW ELEC PUMP– ON
2. BLUE ELEC PUMP –CHECK AUTO
3. BLUE PUMP OVRD –ON
4. PTU – CHECK AUTO
5. Move the stick left or right and check spoilers movement on ECAM FLT CTL Page.
6. YELLOW ELEC PUMP– OFF

Continued Next Page

7. BLUE ELEC PUMPOFF then AUTO (Resets Blue Pump OVRD.)
8. Verify associated system pressure is normal before each departure.

NOTE: Due to a false system low pressure alert displayed on EWD, the “T.O. CONFIG NORMAL” line may not replace the “T.O. CONFIG….TEST” line in the T.O. MEMO. Consider normal configuration for takeoff provided that no alert was displayed during the T.O. CONFIG TEST except the system low pressure alert. The T.O. CONFIG TEST pb must be maintained pressed to check that there is no alert except a false system low pressure alert.

29-30-04I

During flight deck preparation:

1. YELLOW ELEC PUMP– ON
2. PTU – CHECK AUTO
3. Check on ECAM HYD page that green hydraulic pressure (if indication available) is normal. If hydraulic pressure indication is not available, check on ECAM HYD page that GREEN system label is white and arrow is green.
4. YELLOW ELEC PUMP – OFF

29-30-04J

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

(M) PROCEDURES

29–30–04A, 29–30–04B

Deactivation procedure:

1. For the Green and Yellow hydraulic system perform AMM Task 29-34-00-040-001.
2. For the Blue hydraulic system perform AMM Task 29-34-00-040-002.
3. PRIOR TO EACH DEPARTURE:
   a) Look at the air pressure gages on the applicable reservoir and make sure that the air pressure is not less than 37 PSI.
   b) If necessary, pressurize the reservoir.

29–30–04G

1. Deactivate the affected low level switch per AMM 29–30–00, 400 series pages.
2. PRIOR TO EACH DEPARTURE:
   a) Open applicable access door as follows:
      1) Green reservoir – open one main gear door.

         NOTE: Green reservoir is accessible from either gear well, but access is better from the RH side.

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2) Blue reservoir – open access door 197FB.

3) Yellow reservoir – Open access door 196BB and the RH main door of the main gear.

b) Check for adequate fluid level using the mechanical indicator on the reservoir.

29–30–04J

NOTE: If the fault indication is because of a defect in the indication system it is permissible to dispatch the aircraft. It is also permissible to dispatch the aircraft if the defect is in the RAT ground test system (if the system is known to be in the ”flight” condition). It is not permitted to dispatch the aircraft if the fault indication is because of a defect which could prevent the operation of the RAT.

If any part of the system is deactivated, the aircraft can be dispatched for one flight only. After that flight, the deactivated component must be reactivated and this procedure repeated. This is used to find faults which were not shown because of the deactivation.

PRIOR TO EACH DEPARTURE:

1. ON A/C 3209–3278

a) Energize aircraft electrical circuits.

b) Set the ECAM to ON.

c) On the ECAM control panel on the center pedestal, press HYD push–button. Make sure that the ECAM lower Display Unit shows the HYD page.

d) Make sure that RAT FAULT caution on ECAM upper display is shown.

e) Do a visual check of the left belly fairing to find if the RAT is extended. If RAT is extended, there is a fault (unwanted extension of the RAT) which you must repair before you can dispatch aircraft.

NOTE: If the RAT is found extended, the rest of this procedure is unnecessary

f) Open access panels 195BB and 197EB.

g) On ground service panel of the Blue hydraulic system, look through the window on the RAT control panel 2815GE. See if red warning light is on.

h) If red warning light is on:

1) Disconnect electrical connector 2455GE–A from jack control module (JCM).

2) Look at ECAM and see if the RAT FAULT caution on the ECAM upper display is present.

3) If RAT FAULT caution on the ECAM upper display is present, there is a defect in the wiring.

4) If RAT FAULT caution on the ECAM upper display is not present:

A. Depressurize Blue hydraulic system (Ref TASK 29–10–00–864–003).

B. Wait a short time to make sure that the hydraulic pressure is gone.

C. Connect electrical connector 2455GE–A.

D. Look at the ECAM upper DU to see if the RAT FAULT caution is there.

E. If RAT FAULT caution on the ECAM upper display is present, the pressure switch in the JCM is defective. If necessary, deactivate warning from the pressure switch as described below:

i. Disconnect electrical connector 2455GE–A.

ii. Put a blanking cap on disconnected electrical connector.

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iii. Use a tiewrap and attach the cable and the electrical connector to an adjacent part of the structure.

F. If RAT FAULT caution on the ECAM upper display is not present, defect is unwanted hydraulic pressure in retract side of jack. This fault must be repaired before dispatch of the aircraft.

i) If red warning light is not on:

1) Open the cover of the RAT control panel 2815GE.

2) Press TEST push–button and make sure that the red warning light comes on. Release the P/B.

3) If red warning light does not come on, repair it and do this procedure from step 1. h) 4) C. above.

4) Disconnect electrical connector 2454GE–C from the ejection jack.

CAUTION: MAKE SURE THAT YOU DISCONNECT THE CORRECT CONNECTORS. THERE ARE THREE CONNECTORS IN THE SAME AREA. IF YOU DISCONNECT THE WRONG ONE YOU WILL LEAVE RAT INOPERATIVE.

5) Look at the ECAM upper display to see if the RAT FAULT caution is there.

6) If RAT FAULT caution on the ECAM upper display is not present, the stow limit switch in the ejection jack is defective. If necessary deactivate as described below:

A. Put a blanking cap on the disconnected electrical connector.

B. Use a tiewrap and attach the cable and the electrical connector to an adjacent part of the structure.

j) If RAT FAULT caution remains on the ECAM upper display after disconnection of 2454GE–C, do this procedure.

1) Disconnect electrical connector 2027GE–A from the ground check module (GCM).

WARNING: MAKE SURE THAT THE RAT TRAVEL RANGE IS CLEAR BEFORE YOU EXTEND THE RAT.

2) On overhead panel 40VU, lift the guard and operate the RAT MAN ON P/B SW to extend RAT.

3) If it is available, install PROTECTIVE EQPT–RAT (98D29307514000) on the RAT.

CAUTION: DO NOT OPERATE ELECTRIC PUMP OR PTU IF SUPPLY OF HYDRAULIC FLUID IS NOT SUFFICIENT. MAKE SURE THAT THE RESERVOIRS HAVE SUFFICIENT AIR PRESSURE BEFORE YOU OPERATE THE PUMP/PTU

WARNING: KEEP ALL PERSONS AWAY FROM THE AREA WHEN YOU PRESSURIZE THE BLUE HYDRAULIC SYSTEM. WHEN YOU PRESSURIZE THE BLUE HYDRAULIC SYSTEM, THE RAT CAN TURN AT MORE THAN 5000 RPM.

4) On overhead panel 40VU, make sure that the BLUE ELEC PUMP P/B SW is set to AUTO (OFF light not on).

5) On maintenance panel 50VU, lift the guard and press BLUE PUMP OVRD P/B SW. Make sure that the ON light comes on.

6) Refer to the ECAM lower display and make sure that the Blue hydraulic system is pressurized.

7) Look at the RAT are see if it turns.

8) On the overhead panel 40VU, push and release BLUE ELEC PUMP P/B SW. Make sure that the OFF light comes on.

9) If RAT has turned, there is a fault in the GCM which you must repair before dispatch of aircraft.

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10) If RAT did not turn, there is a defect in the wiring associated with connectors 2454GE–C or 2027GE–A. If necessary deactivate the fault warning from them as described below:

A. Put blanking cap on the disconnected electrical connectors.

B. Use tiewrap and attach the two connectors and the cables to adjacent parts of the structure.

11) If it is installed, remove the PROTECTIVE EQPT–RAT (98D29307514000)

12) Retract the RAT (Ref. TASK 29–22–00–869–002).

k) Make sure that the work area is clean and clear of tools and other items.

l) Close the cover of the RAT control panel 2815GE.

m) Close the access panels 195BB and 197EB.

n) Restore aircraft to required configuration.

o) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

2. ON A/C 3101–3171

a) Energize aircraft electrical circuits.

b) Set the ECAM to ON.

c) On the ECAM control panel on the center pedestal, press HYD push–button. Make sure that the ECAM lower Display Unit shows the HYD page.

d) Make sure that RAT FAULT caution on ECAM upper display is shown.

e) Do a visual check of the left belly fairing to find if the RAT is extended. If RAT is extended, there is a fault (unwanted extension of the RAT) which you must repair before you can dispatch aircraft.

NOTE: If the RAT is found extended, the rest of this procedure is unnecessary

f) Open access panels 195BB and 197EB.

g) On the RAT STOW panel of the BLUE HYD ground service panel, do the test of the lights:

1) Set the 28 VDC sw to ON.

2) Set and hold the LAMP TEST sw and make sure that the red warning light ACTUATOR PRESSURE and the green indicator light RAT STOWED come on.

NOTE: If the red or green light does not illuminate, replace the bulb.

3) Release the LAMP TEST sw.

4) Set the 28 VDC sw to off.

h) Pressurize the blue hydraulic system.

i) If the red warning light ACTUATOR PRESSURE is on:

1) Disconnect the electrical connector 1GE–E from the jack control RAT actuator.

2) If the RAT FAULT caution on ECAM upper display is present, there is a defect in the wiring.

A. Connect the electrical connector 1GE–E.

B. Continue with the step j).

3) If the RAT FAULT caution on ECAM upper display is not present.

A. Depressurize the Blue Hydraulic system.

B. Wait a short time to make sure that the hydraulic pressure is gone.

C. Connect the electrical 1GE–E.

Continued Next Page

D. If the RAT FAULT caution on ECAM upper display is present, the pressure switch in the RAT actuator is defective. Deactivate the warning from the pressure switch:

i. Disconnect the electrical connector 1GE–E.

ii. Put a blanking cap on the disconnected electrical connector.

iii. Use tiewrap and attach the cable and the electrical connector on adjacent part of the structure.

iv. Continue with the step k).

4) If the RAT FAULT caution on ECAM upper display is not present, the defect is unwanted hydraulic pressure in the retract side of the RAT actuator. The fault must be repaired before dispatch of the aircraft.

j) If the red warning light ACTUATOR PRESSURE is not on:

1) Set the 28 VDC switch on the RAT control panel to ON:

A. If the green indicator light RAT STOWED is ON:

WARNING: MAKE SURE THAT THE RAT TRAVEL RANGE IS CLEAR BEFORE YOU EXTEND THE RAT.

i. Extend the RAT.

ii. Make sure that the green indicator light RAT STOWED is off.

iii. Retract the RAT.

iv. Make sure that the green indicator light RAT STOWED is ON. If successful, the aircraft can be dispatched.

v. If the green indicator light RAT STOWED is off, the fault must repaired before dispatch.

k) Depressurize the Blue Hydraulic system.

l) Set the 28 VDC switch on the RAT control panel to OFF.

m) Make sure that the work area is clean and clear of tools and other items.

n) Close the access panels 195BB and 197EB.

o) Restore aircraft to required configuration.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
LEAK MEASUREMENT VALVE PB SWITCH 29-30-05 OFF Lights	**Y**	3	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
29-30-05	Adjacent To Leak Measurement Valve pb Switch OFF Lights	___ LEAK MEASUREMENT VALVE P.B. SWITCH OFF LIGHTS INOP

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-11-01A Wing Anti-Ice Control Valves - RH Valve OPEN **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** RH valve may be inoperative in the OPEN position provided: a) Performance corrections are applied, b) Engine No. 1 is started first, c) X BLEED selector is shut when starting the No. 1 engine, and d) "CROSS BLEED START" procedure is used when starting the No. 2 engine.
30-11-01B Wing Anti-Ice Control Valves **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative secured closed provided the aircraft is not operated in known or forecast structural icing conditions. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-11-01A	Adjacent To Wing Anti–Ice Switch On Overhead ANTI–ICE Panel	RH WING ANTI–ICE CONTROL VALVE INOP AND SECURED OPEN
30-11-01B	Adjacent To Wing Anti–Ice Switch On Overhead ANTI–ICE Panel	___ WING ANTI–ICE CONTROL VALVE(S) INOP AND SECURED CLOSED

(O) PROCEDURES

30-11-01A

1. Check that the anti–ice arrow is displayed on the ECAM BLEED page (may be displayed amber or green).
2. Before engines start: Maintain X BLEED selector at SHUT before engines start when APU bleed is used.
3. Engines start:
   a) Engine 1 must be started first.
   b) Maintain X BLEED selector at SHUT during ENG 1 start.
   c) Use "CROSS BLEED ENG START" procedure to start ENG 2.
4. After engines start:
   a) WING ANTI ICE pb switch – OFF
   b) ENG 2 BLEED pb switch – OFF
   c) X BLEED selector –SHUT

   NOTE 1: PACK 2 is displayed in the INOP SYS column.

   NOTE 2: RH engine will be in Hi–Idle Mode.

   NOTE 3: Deicing must be accomplished with Engines Not Running.

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5. After takeoff when above 1,500 ft:
   a) ENG 2 BLEED pb switch – ON
   b) WING ANTI ICE pb switch – As required.

      NOTE : WING ANTI ICE R HI PR caution is triggered on ECAM E/WD above 1500 ft when ENG 2 BLEED is selected ON.

6. After landing:
   a) WING ANTI ICE pb switch – OFF
   b) ENG 2 BLEED pb switch – OFF
   c) X BLEED selector – SHUT

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30-11-01A WING ANTI-ICE CONTROL VALVES – RH VALVE OPEN

EFFECTIVITY

A319

FLIGHT PLANNING REQUIREMENTS

1. Reduce ENROUTE LIMIT WT by 14,200 lbs.
2. Increase BLOCK FUEL by:

Flight Length	Max Cruise Flight Level	
	At or above FL300	Below FL300
Up to 1 hr	5.0%	5.0%
1 to 2 hrs	4.5%	5.0%
2 to 3.5 hrs	3.5%	5.0%
3.5+ hrs	3.0%	5.0%

NOTES

1. Make a notation on the Flight Plan when Enroute Climb is limiting.
2. Landing temperature is based on flight's approximate arrival time at the scheduled destination airport.

AWABS

Performance corrections have been applied.

TAKEOFF PERFORMANCE WORKSHEET

TAKEOFF

None

LANDING

Reduce LANDING CLIMB LIMIT WT according to the following table:

	AIRPORT ELEVATION	OAT	WEIGHT PENALTY
PENALTIES FOR TEMPERATURES AT OR BELOW ISA +10°C	MSL	25°C (77°F) or below	1,400 lbs.
	2,000 ft	21°C (70°F) or below	
	4,000 ft	17°C (63°F) or below	
	6,000 ft	13°C (56°F) or below	
	8,000 ft	9°C (49°F) or below	
PENALTIES FOR TEMPERATURES ABOVE ISA +10°C	MSL	Above 25°C (77°F)	6,900 lbs.
	2,000 ft	Above 21°C (70°F)	
	4,000 ft	Above 17°C (63°F)	
	6,000 ft	Above 13°C (56°F)	
	8,000 ft	Above 9°C (49°F)	

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30-11-01A WING ANTI-ICE CONTROL VALVES – RH VALVE OPEN

EFFECTIVITY

A320

FLIGHT PLANNING REQUIREMENTS

1. Reduce ENROUTE LIMIT WT by 10,600 lbs.
2. Increase BLOCK FUEL by:

Flight Length	Max Cruise Flight Level	
	At or above FL300	Below FL300
Up to 1 hr	5.0%	5.0%
1 to 2 hrs	4.5%	5.0%
2 to 3.5 hrs	3.5%	5.0%
3.5+ hrs	3.0%	5.0%

NOTES

1. Make a notation on the Flight Plan when Enroute Climb is limiting.
2. Landing temperature is based on flight's approximate arrival time at the scheduled destination airport.

AWABS

Performance corrections have been applied.

TAKEOFF PERFORMANCE WORKSHEET

TAKEOFF

None

LANDING

Reduce LANDING CLIMB LIMIT WT according to the following table:

	AIRPORT ELEVATION	OAT	WEIGHT PENALTY
PENALTIES FOR TEMPERATURES AT OR BELOW ISA +5°C	MSL	20°C (68°F) or below	1,600 lbs.
	2,000 ft	16°C (61°F) or below	
	4,000 ft	12°C (54°F) or below	
	6,000 ft	8°C (47°F) or below	
	8,000 ft	4°C (40°F) or below	
PENALTIES FOR TEMPERATURES ABOVE ISA +5°C	MSL	Above 20°C (68°F)	7,500 lbs.
	2,000 ft	Above 16°C (61°F)	
	4,000 ft	Above 12°C (54°F)	
	6,000 ft	Above 8°C (47°F)	
	8,000 ft	Above 4°C (40°F)	

Continued Next Page

30-11-01A WING ANTI-ICE CONTROL VALVES – RH VALVE OPEN

EFFECTIVITY

A321

FLIGHT PLANNING REQUIREMENTS

1. Reduce ENROUTE LIMIT WT by 10,200 lbs.
2. Increase BLOCK FUEL by:

Flight Length	Max Cruise Flight Level	
	At or above FL300	Below FL300
Up to 1 hr	4.5%	4.5%
1 to 2 hrs	4.5%	4.5%
2 to 3.5 hrs	3.5%	4.5%
3.5+ hrs	3.0%	4.5%

NOTES

1. Make a notation on the Flight Plan when Enroute Climb is limiting.
2. Landing temperature is based on flight's approximate arrival time at the scheduled destination airport.

AWABS

Performance corrections have been applied.

TAKEOFF PERFORMANCE WORKSHEET

TAKEOFF

None

LANDING

Reduce LANDING CLIMB LIMIT WT according to the following table:

	AIRPORT ELEVATION	OAT	WEIGHT PENALTY
PENALTIES FOR TEMPERATURES AT OR BELOW ISA +5°C	MSL	20°C (68°F) or below	2,500 lbs.
	2,000 ft	16°C (61°F) or below	
	4,000 ft	12°C (54°F) or below	
	6,000 ft	8°C (47°F) or below	
	8,000 ft	4°C (40°F) or below	
PENALTIES FOR TEMPERATURES ABOVE ISA +5°C	MSL	Above 20°C (68°F)	9,500 lbs.
	2,000 ft	Above 16°C (61°F)	
	4,000 ft	Above 12°C (54°F)	
	6,000 ft	Above 8°C (47°F)	
	8,000 ft	Above 4°C (40°F)	

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30-11-01B

1. Do not operate aircraft in known or forecast structural icing conditions.
2. Check ECAM warning WING A. ICE L(R) VALVE OPEN is **not present on ECAM**. If this warning is present, it must be canceled using the EMER CANC pb switch.

(M) PROCEDURES

30-11-01A

1. To deactivate the RH wing anti-ice control valve to the OPEN position perform AMM Task 30-11-00-040-004.

30-11-01B

1. Deactivate the associated wing anti-ice control valve in the CLOSED position by performing AMM TASK 30-11-00-040-001.

ITEM NO. NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
WING ANTI-ICE					
30-11-02A FAULT Light	**Y**	1	0	**C**	**(O)** May be inoperative provided the anti–ice “arrow” on ECAM BLEED page operates normally.
30-11-02B FAULT Light **“DISP.APPR.REQ’D”**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Wing anti–ice control valves are deactivated closed and considered inoperative, and b) Airplane is not operated in known or forecast structural icing conditions. Theater Restrictions May Apply
30-11-02C ON Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-11-02A	Adjacent To Wing Anti–Ice Switch On Overhead ANTI–ICE Panel	WING ANTI–ICE FAULT LIGHT INOP
30-11-02B	Adjacent To Wing Anti–Ice Switch On Overhead ANTI–ICE Panel	WING ANTI–ICE FAULT LIGHT INOP
30-11-02C	Adjacent To Wing Anti–Ice Switch On Overhead ANTI–ICE Panel	WING ANTI–ICE ON LIGHT INOP

(O) PROCEDURES

30-11-02A

1. Make sure that air bleed system is available.
2. ANTI ICE WING pb switch – ON.
3. Check that the anti–ice “arrow” appears amber on ECAM BLEED page and disappears after 30 seconds.
4. ANTI ICE WING pb switch – OFF.

30-11-02B

Do not operate airplane in known or forecast structural icing conditions.

(M) PROCEDURES

30-11-02B

Defer Wing Anti-Ice Control Valves inoperative per MEL Item 30–11–01B.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ECAM BLEED PAGE INDICATIONS					
30-11-03A ANTI-ICE	**Y**	2	0	**C**	May be inoperative.
30-11-03B ARROW	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-11-03A	Adjacent To ECAM Display	ECAM BLEED PAGE ___ ANTI–ICE INDICATION INOP
30-11-03B	Adjacent To ECAM Display	ECAM BLEED PAGE ___ WING ANTI–ICE ARROW(S) INDICATION INOP

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
30-21-01A	Engine Anti-Ice Valves **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One may be inoperative secured closed provided the airplane is not operated in known or forecast induction icing conditions. Theater Restrictions May Apply
30-21-01B	Engine Anti-Ice Valves A320 Ships 3209-3233, and 3277-3278 **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative open provided Performance corrections are applied. NOTE 1: For single engine cruise: Terrain clearance must be calculated with engine anti–ice on. NOTE 2: Performance corrections apply whenever one or both valves are inoperative.
30-21-01C	Engine Anti-Ice Valves A320 Ships 3234-3276, **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative open provided Performance corrections are applied. NOTE 1: For single engine cruise: Terrain clearance must be calculated with engine anti–ice on. NOTE 2: Performance corrections apply whenever one or both valves are inoperative.
30-21-01D	Engine Anti-Ice Valves A319 Aircraft **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative open provided Performance corrections are applied. NOTE 1: For single engine cruise: Terrain clearance must be calculated with engine anti–ice on. NOTE 2: Performance corrections apply whenever one or both valves are inoperative
30-21-01E	Engine Anti-Ice Valves A321 Aircraft **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative open provided Performance corrections are applied. NOTE 1: For single engine cruise: Terrain clearance must be calculated with engine anti–ice on. NOTE 2: Performance corrections apply whenever one or both valves are inoperative

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MEL ITEM	TAB LOCATION	PLACARD TEXT
30-21-01A	Adjacent to affected ENG Anti–Ice switch on overhead	___ ENGINE ANTI–ICE VALVE INOP AND SECURED CLOSED
30-21-01B	Adjacent to affected ENG Anti–Ice switch on overhead	___ ENGINE ANTI–ICE VALVE INOP AND SECURED OPEN
30-21-01C	Adjacent to affected ENG Anti–Ice switch on overhead	___ ENGINE ANTI–ICE VALVE INOP AND SECURED OPEN
30-21-01D	Adjacent to affected ENG Anti–Ice switch on overhead	___ ENGINE ANTI–ICE VALVE INOP AND SECURED OPEN
30-21-01E	Adjacent to affected ENG Anti–Ice switch on overhead	___ ENGINE ANTI–ICE VALVE INOP AND SECURED OPEN

(O) PROCEDURES

30-21-01A

Do not operate airplane in known or forecast induction icing conditions.

30-21-01B

1. ANTI–ICE ENG 1(2) pb switch (inoperative valve(s)) – ON.

   NOTE 1: Deicing must be accomplished with Engines Not Running.

   NOTE 2: When an engine anti–ice valve is open, N1 limit is automatically reduced and, if necessary, the idle N1 is automatically increased for both engines to provide the required pressure.

30-21-01B	**ENGINE ANTI-ICE VALVES**
EFFECTIVITY	**A320 (Ships 3209 – 3233 and 3277 – 3278)**
FLIGHT PLANNING REQUIREMENTS	1. Reduce ENROUTE LIMIT WT by 10,200 lbs. 2. Increase BLOCK FUEL by:

Flight Length	Max Cruise Flight Level	
	At or above FL300	Below FL300
Up to 1 hr	6.0%	6.0%
1 to 2 hrs	5.0%	5.5%
2 to 3.5 hrs	3.5%	4.8%
3.5+ hrs	3.0%	4.5%

NOTES	1. Make a notation on the Flight Plan when Enroute Climb is limiting. 2. Landing temperature is based on flight's approximate arrival time at the scheduled destination airport.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**MANUAL WDR NOT PERMITTED WITH MEL 30-21-01B.**

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30-21-01C

1. ANTI–ICE ENG 1(2) pb switch (inoperative valve(s)) – ON.

   NOTE 1: Deicing must be accomplished with Engines Not Running.

   NOTE 2: When an engine anti–ice valve is open, N1 limit is automatically reduced and, if necessary, the idle N1 is automatically increased for both engines to provide the required pressure.

30-21-01C **ENGINE ANTI-ICE VALVES**

EFFECTIVITY

A320 (Ships 3234 - 3276)

FLIGHT PLANNING REQUIREMENTS

1. Reduce ENROUTE LIMIT WT by 10,200 lbs.
2. Increase BLOCK FUEL by:

Flight Length	Max Cruise Flight Level	
	At or above FL300	Below FL300
Up to 1 hr	6.0%	6.0%
1 to 2 hrs	5.0%	5.5%
2 to 3.5 hrs	3.5%	4.8%
3.5+ hrs	3.0%	4.5%

NOTES

1. Make a notation on the Flight Plan when Enroute Climb is limiting.
2. Landing temperature is based on flight's approximate arrival time at the scheduled destination airport.

AWABS

Performance corrections have been applied.

TAKEOFF PERFORMANCE WORKSHEET

Manual WDR not permitted with MEL 30-21-01C.

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30-21-01D

1. ANTI–ICE ENG 1(2) pb switch (inoperative valve(s)) – ON.

   NOTE 1: Deicing must be accomplished with Engines Not Running.

   NOTE 2: When an engine anti–ice valve is open, N1 limit is automatically reduced and, if necessary, the idle N1 is automatically increased for both engines to provide the required pressure.

30-21-01D **ENGINE ANTI-ICE VALVES**

EFFECTIVITY **A319**

FLIGHT PLANNING REQUIREMENTS

1. Reduce ENROUTE LIMIT WT by 10,200 lbs.
2. Increase BLOCK FUEL by:

Flight Length	Max Cruise Flight Level	
	At or above FL300	Below FL300
Up to 1 hr	6.0%	6.0%
1 to 2 hrs	5.0%	5.5%
2 to 3.5 hrs	3.5%	4.8%
3.5+ hrs	3.0%	4.5%

NOTES

1. Make a notation on the Flight Plan when Enroute Climb is limiting.
2. Landing temperature is based on flight's approximate arrival time at the scheduled destination airport.

AWABS Performance corrections have been applied.

TAKEOFF PERFORMANCE WORKSHEET **Manual WDR not permitted with MEL 30-21-01D.**

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30-21-01E

1. ANTI–ICE ENG 1(2) pb switch (inoperative valve(s)) – ON.

   NOTE 1: Deicing must be accomplished with Engines Not Running.

   NOTE 2: When an engine anti–ice valve is open, N1 limit is automatically reduced and, if necessary, the idle N1 is automatically increased for both engines to provide the required pressure.

30-21-01E	**ENGINE ANTI-ICE VALVES**
EFFECTIVITY	**A321**
FLIGHT PLANNING REQUIREMENTS	1. Reduce ENROUTE LIMIT WT by 10,600 lbs. 2. Increase BLOCK FUEL by:

Flight Length	Max Cruise Flight Level	
	At or above FL300	Below FL300
Up to 1 hr	5.5%	5.5%
1 to 2 hrs	5.0%	5.5%
2 to 3.5 hrs	3.5%	4.8%
3.5+ hrs	3.0%	4.5%

1.

2.

NOTES	1. Make a notation on the Flight Plan when Enroute Climb is limiting. 2. Landing temperature is based on flight's approximate arrival time at the scheduled destination airport.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 30-21-01E.**

(M) PROCEDURES

30-21-01A

1. Deactivate the associated engine anti-ice valve in the CLOSED position by performing AMM Task 30-21-00-040-001.

30-21-01B, 30-21-01C, 30-21-01D, 30-21-01E

1. Deactivate the associated engine anti-ice valve in the OPEN position by performing AMM TASK 30-21-00-040-002.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ENGINE ANTI-ICE					
30-21-02A FAULT Lights	**Y**	2	0	**C**	One or both may be inoperative.
30-21-02B ON Lights	**Y**	2	0	**C**	**(O)** One or both may be inoperative provided alternate procedures are used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-21-02A	Adjacent To Affected ENG Anti-Ice Switch On Overhead ANTI-ICE Panel	___ ENGINE ANTI–ICE FAULT LIGHT INOP
30-21-02B	Adjacent To Affected ENG Anti-Ice Switch On Overhead ANTI-ICE Panel	____ ENGINE ANTI–ICE ON LIGHTS INOP

(O) PROCEDURES

30-21-02B

Check ECAM E/WD for ENG A.ICE memo when using engine anti–ice.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-31-01A	Probe Heat Computers	**N**	3	2	**C**	**(M)** One may be inoperative provided associated heater is verified to operate normally PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
30-31-01B	Probe Heat Computers - F/O's Only **"DISP.APPR.REQ'D"**	**N**	3	2	**C**	**(M)(O)** F/O's ONLY may be inoperative provided: a) ADRs, heaters and failure warnings associated with the operative units are verified to operate normally, b) Takeoff using FLAP 1 configuration is prohibited (in structural icing conditions) with ADR 2 - Off, and c) The airplane remains at or below FL280. RVSM Not Authorized
30-31-01C	Probe Heat Computers - STBY Only **"DISP.APPR.REQ'D"**	**N**	3	2	**C**	**(M)(O)** STBY ONLY may be inoperative provided: a) ADRs, heaters and failure warnings associated with operative units are verified to operate normally, b) The airplane is not operated in visible moisture, or in known or forecast structural icing conditions, and c) Ambient temperature at the departure airport is above +41°F (5°C) when taxiway or runways are covered with standing water or slush. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-31-01A	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	___ PROBE HEAT COMPUTER INOP
30-31-01B	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel And Adjacent To RVSM QUALIFIED Placard (If Installed) On Forward Instrument Panel	F/O's PROBE HEAT COMPUTER INOP
30-31-01C	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	STBY PROBE HEAT COMPUTER INOP

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(O) PROCEDURES

30-31-01B

1. Place AIR DATA selector to the F/O 3 position.
2. The following apply if known or forecast structural icing conditions are encountered:
   - ADR 2 pb-sw is set to OFF for the remainder of the flight.
   - Takeoff using FLAP 1 configuration is prohibited with ADR 2 – OFF.
   - CAT II – Not Authorized.
   - CAT III – Not Authorized.
   - RVSM operations – Not Authorized. Limit flight altitude to FL280 or below.fs

30-31-01C

1. Do not operate in visible moisture.
2. Do not operate airplane in known or forecast structural icing conditions.
3. When taxiway or runways are covered with standing water or slush, departure airport temperature must be above +41° F (5°C).

(M) PROCEDURES

30-31-01A

PRIOR TO EACH DEPARTURE:

1. PROBE HEAT CHECK:
   a) Check that TAT, AOA, STATIC and PITOT probes associated with the failed Probe Heat Computer (PHC) are heated (Ref Figure 30–31–1A).

CAUTION: DO NOT CONTINUE THE TEST FOR MORE THAN ONE MINUTE TO PREVENT DAMAGE TO THE PROBES. DO NOT TOUCH THE PROBES IMMEDIATELY AFTER THE TEST.

1) On panel 25VU, Check that the PROBE/WINDOW HEAT P/B switch is released.
2) Simulate a flight configuration via the CFDS. (Get access to the L/G page on MCDU).
3) On panel 25VU push the PROBE/WINDOW HEAT P/B switch (ON legend comes on).
4) Make sure the heating of the probes related to the inoperative PHC, is in operation.

For PHC 1

7DA1 PROBE – L STATIC, 1
8DA1 PROBE – R STATIC, 1
9DA1 PROBE – PITOT, 1
3FP1 SENSOR – ANGLE OF ATTACK, 1
11FP1 SENSOR – TAT, 1

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For PHC 2

7DA2 PROBE – L STATIC, 2
8DA2 PROBE – R STATIC, 2
9DA2 PROBE – PITOT, 2
3FP2 SENSOR – ANGLE OF ATTACK, 2
11FP2 SENSOR – TAT, 2

For PHC 3

7DA3 PROBE – L STATIC, 3
8DA3 PROBE – R STATIC, 3
9DA3 PROBE – PITOT, 3
3FP3 SENSOR – ANGLE OF ATTACK, 3

5) On the upper ECAM DU, Make sure there is no warning related to the probes.

6) Check that the related probes are heating, you can use a thermometer able to read up to 400 deg. C (752 deg. F) to do this check.

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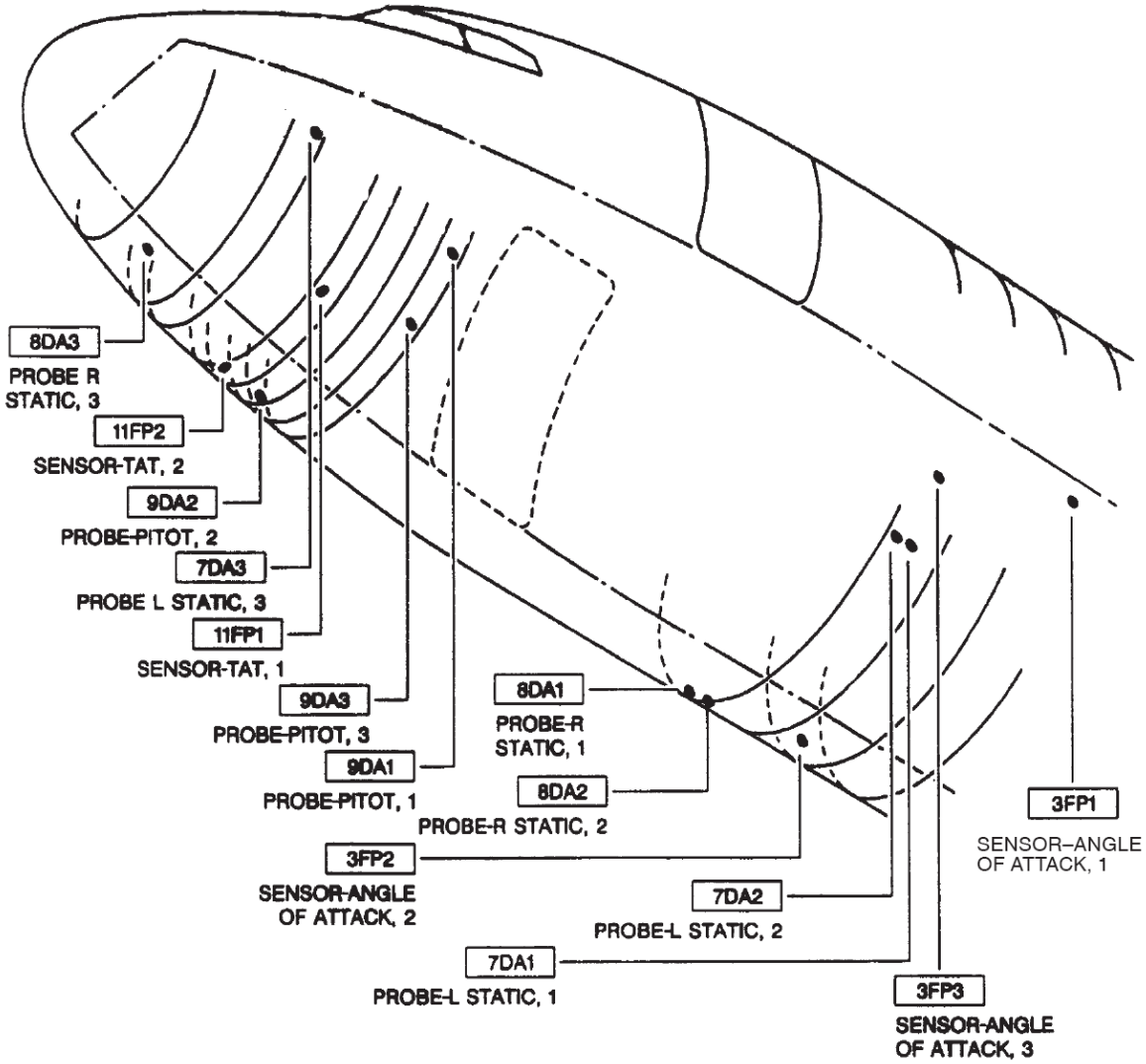

Figure 30–31–1A PROBE ICE PROTECTION – COMPONENT LOCATION

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30-31-01B, 30-31-01C

1. On ANTI ICE panel 25VU make certain that PROBE/WINDOW/ HEAT/AUTO/ON pb sw is released (ON legend is off).
2. On MCDU 2 or 3 A/C 3201–3250, 1 or 2 A/C 3101–3178 & 3251–3284:
   a) Select CFDS MENU, SYSTEM REPORT TEST, ICE AND RAIN
   b) Select PROBES HEAT CMPTR 1. PROB HEAT 1 MENU is displayed.
   c) Perform TEST (test must be OK).
   d) Select PROBES HEAT CMPTR 3. PROB HEAT 3 MENU is displayed.
   e) Perform TEST (test must be OK).
   f) Select CFDS MENU, SYSTEM REPORT TEST, NAV.
   g) Perform test of ADR related to operative sides.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-31-02A	Pitot Heaters - F/O's Only **"DISP.APPR.REQ'D"**	**N**	3	2	**B**	**(M)(O)** F/O's heater ONLY may be inoperative provided: a) ADR, heaters and failure warnings associated with CAPT and STBY probes (pitot, static, AOA, TAT) are verified to operate normally, b) Takeoff using FLAP 1 configuration is prohibited, and c) The airplane remains at or below FL280. RVSM Not Authorized
30-31-02B	Pitot Heaters - CAPT's Only **"DISP.APPR.REQ'D"**	**N**	3	2	**B**	**(M)(O)** CAPT heater ONLY may be inoperative provided: a) ADR, heaters and failure warnings associated with F/O and STBY probes (pitot, static, AOA, TAT) are verified to operate normally, and b) The airplane is not operated in visible moisture, or in known or forecast structural icing conditions. Theater Restrictions May Apply
30-31-02C	Pitot Heaters - STBY Only **"DISP.APPR.REQ'D"**	**N**	3	2	**B**	**(M)(O)** STBY heater ONLY may be inoperative provided: a) ADR, heaters and failure warnings associated with CAPT and F/O probes (pitot, static, AOA, TAT) are verified to operate normally, and b) The airplane is not operated in visible moisture, or in known or forecast structural icing conditions. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-31-02A	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel And Adjacent To RVSM QUALIFIED Placard (If Installed) On Forward Instrument Panel	F/O's PITOT HEATER INOP
30-31-02B	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	CAPT PITOT HEATER INOP
30-31-02C	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	STBY PITOT HEATER INOP

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(O) PROCEDURES

30-31-02A

1. Place AIR DATA selector to the F/O 3 position.
2. The following apply if known or forecast structural icing conditions are encountered:
   - ADR 2 pb-sw is set to OFF for the remainder of the flight.
   - Takeoff using FLAP 1 configuration is prohibited with ADR 2 – OFF.
   - CAT II – Not Authorized.
   - CAT III – Not Authorized.
   - RVSM operations – Not Authorized. Limit flight altitude to FL280 or below.

30-31-02B, 30-31-02C

1. Do not operate in visible moisture.
2. Do not operate airplane in known or forecast structural icing conditions.

(M) PROCEDURES

30-31-02A, 30-31-02B, 30-31-02C

1. On ANTI ICE panel 25VU make certain that PROBE/WINDOW/ HEAT/AUTO/ON pb sw is released (ON legend is off).
2. On MCDU 2 or 3 A/C 3201–3250, 1 or 2 A/C 3101–3178 & 3251–3284:
   a) Select CFDS MENU, SYSTEM REPORT TEST, ICE AND RAIN.
   b) Select PROBES HEAT CMPTR 1. PROB HEAT 1 MENU is displayed.
   c) Perform TEST (test must be OK).
   d) Select PROBES HEAT CMPTR 3. PROB HEAT 3 MENU is displayed.
   e) Perform TEST (test must be OK).
   f) Select CFDS MENU, SYSTEM REPORT TEST, NAV.
   g) Perform test of ADR related to operative sides.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-31-03A	Static Port Heaters - STBY Only	**Y**	6	5	**C**	One STBY ONLY may be inoperative.
30-31-03B	Static Port Heaters CAPT's Only **"DISP.APPR.REQ'D"**	**N**	6	4	**C**	**(M)(O)** CAPT heaters ONLY may be inoperative provided: a) ADRs, heaters and failure warnings associated with operative units are verified to operate normally, and b) Ambient temperature at the departure airport is above +41° F (5°C) when runway is contaminated with water or slush.
30-31-03C	Static Port Heaters - F/O's Only **"DISP.APPR.REQ'D"**	**N**	6	4	**C**	**(M)(O)** F/O heaters ONLY may be inoperative provided: a) ADRs, heaters and failure warnings associated with the operative units are verified to operate normally, b) Takeoff using FLAP 1 configuration is prohibited, and c) The airplane remains at or below FL280. <u>RVSM</u> Not Authorized
30-31-03D	Static Port Heaters - STBY Only **"DISP.APPR.REQ'D"**	**N**	6	4	**C**	**(M)(O)** STBY heaters ONLY may be inoperative provided: a) ADRs, heaters and failure warnings associated with operative units are verified to operate normally, and b) Ambient temperature at the departure airport is above +41°F (5°C) when runway is contaminated with water or slush.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
30-31-03A	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel	___ STBY STATIC PORT HEATER INOP
30-31-03B	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel	CAPT STATIC PORT HEATERS INOP
30-31-03C	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel And Adjacent To RVSM QUALIFIED Placard (If Installed) On Forward Instrument Panel	F/O'S STATIC PORT HEATER(S) INOP
30-31-03D	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel	STBY STATIC PORT HEATERS INOP

(O) PROCEDURES

30-31-03B

The following approach restrictions ONLY apply in known or forecast structural icing conditions:

- CAT II – Not Authorized.
- CAT III – Not Authorized.

30-31-03C

1. Place AIR DATA selector to the F/O 3 position.
2. The following apply if known or forecast structural icing conditions are encountered:
   - ADR 2 pb-sw is set to OFF for the remainder of the flight.
   - Takeoff using FLAP 1 configuration is prohibited with ADR 2 – OFF.
   - CAT II – Not Authorized.
   - CAT III – Not Authorized.
   - RVSM operations – Not Authorized. Limit flight altitude to FL280 or below.

30-31-03D

When taxiway or runways are covered with standing water or slush, departure airport temperature must be above +41°F (5°C).

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(M) PROCEDURES

30-31-03B, 30-31-03C, 30-31-03D

1. On ANTI ICE panel 25VU make certain that PROBE/WINDOW/ HEAT/AUTO/CN pb sw is released (ON legend is off).
2. On MCDU 2 or 3 A/C 3201–3250, 1 or 2 A/C 3101–3150 & 3278–3284:
   a) Select CFDS MENU, SYSTEM REPORT TEST, ICE AND RAIN.
   b) Select PROBES HEAT CMPTR 2. PROB HEAT 2 MENU is displayed.
   c) Perform TEST (test must be OK).
   d) Select PROBES HEAT CMPTR 3. PROB HEAT 3 MENU is displayed.
   e) Perform TEST (test must be OK).
   f) Select CFDS MENU, SYSTEM REPORT TEST, NAV.
   g) Perform test of ADR related to operative sides.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
30-31-04A	Angle of Attack Probe Heaters - F/O's Only	**N**	3	2	**C**	**(M)(O)** F/O's heater ONLY may be inoperative provided ADR heaters and failure warnings associated with CAPT and STBY probes (pitot, static, AOA, TAT) are verified to operate normally.
30-31-04B	Angle of Attack Probe Heaters - STBY Only	**N**	3	2	**C**	**(M)** STBY heater ONLY may be inoperative provided ADR heaters and failure warnings associated with CAPT and F/O probes (pitot, static, AOA, TAT) are verified to operate normally.
30-31-04C	Angle of Attack Probe Heaters - CAPT's Only **"DISP.APPR.REQ'D"**	**N**	3	2	**C**	**(M)(O)** CAPT's heater ONLY may be inoperative provided: a) ADRs, heater and failure warnings associated with F/O and STBY probes (pitot, static, AOA, TAT) are verified to operate normally, and b) Airplane is not operated in visible moisture, or in known or forecast structural icing conditions. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-31-04A	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	F/O'S ANGLE OF ATTACK PROBE HEATER INOP
30-31-04B	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	STBY ANGLE OF ATTACK PROBE HEATER INOP
30-31-04C	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	CAPT's ANGLE OF ATTACK PROBE HEATER INOP

(O) PROCEDURES

30-31-04A

Place AIR DATA switch in the F/O 3 position.

30-31-04C

1. Do not operate in visible moisture, and
2. Do not operate airplane in known or forecast structural icing conditions.

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(M) PROCEDURES

30-31-04A

1. The (M) Indicates the following Maintenance Procedures are required:
2. On ANTI ICE panel 25VU make certain that PROBE/WINDOW/ HEAT/AUTO/CN pb sw is released (ON legend is off).
3. On MCDU 2 or 3 A/C 3201–3250, 1 or 2 A/C 3101–3178 & 3251–3284:
   a) Select CFDS MENU, SYSTEM REPORT TEST, ICE AND RAIN
   b) Select PROBES HEAT CMPTR 1. PROB HEAT 1 MENU is displayed.
   c) Perform TEST (test must be OK).
   d) Select PROBES HEAT CMPTR 3. PROB HEAT 3 MENU is displayed.
   e) Perform TEST (test must be OK).
   f) Select CFDS MENU, SYSTEM REPORT TEST, NAV.
   g) Perform test of ADR related to operative sides.

30-31-04B

1. The (M) Indicates the following Maintenance Procedures are required:
2. On ANTI ICE panel 25VU make certain that PROBE/WINDOW/ HEAT/AUTO/ON pb sw is released (ON legend is off).
3. On MCDU 2 or 3 A/C 3201–3250, 1 or 2 A/C 3101–3178 & 3251–3284:
   a) Select CFDS MENU, SYSTEM REPORT TEST, ICE AND RAIN
   b) Select PROBES HEAT CMPTR 1. PROB HEAT 1 MENU is displayed.
   c) Perform TEST (test must be OK).
   d) Select PROBES HEAT CMPTR 2. PROB HEAT 2 MENU is displayed.
   e) Perform TEST (test must be OK).
   f) Select CFDS MENU, SYSTEM REPORT TEST, NAV.
   g) Perform test of ADR related to operative sides.

30-31-04C

1. The (M) Indicates the following Maintenance Procedures are required:
2. On ANTI ICE panel 25VU make certain that PROBE/WINDOW/ HEAT/AUTO/ON pb sw is released (ON legend is off).
3. On MCDU 2 or 3 A/C 3201–3250, 1 or 2 A/C 3101–3178 & 3251–3284:
   a) Select CFDS MENU, SYSTEM REPORT TEST, ICE AND RAIN
   b) Select PROBES HEAT CMPTR 2. PROB HEAT 2 MENU is displayed.
   c) Perform TEST (test must be OK).
   d) Select PROBES HEAT CMPTR 3. PROB HEAT 3 MENU is displayed.
   e) Perform TEST (test must be OK).
   f) Select CFDS MENU, SYSTEM REPORT TEST, NAV.
   g) Perform test of ADR related to operative sides.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-31-05A	TAT Probe Heaters	**Y**	2	1	**C**	May be inoperative.
30-31-05B	TAT Probe Heaters **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided airplane is not operated in visible moisture, or in known or forecast structural icing conditions. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-31-05A	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	___ TAT PROBE HEATER INOP
30-31-05B	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI–ICE Panel	BOTH TAT PROBE HEATERS INOP

(O) PROCEDURES

30-31-05B

1. Do not operate in visible moisture, and
2. Do not operate airplane in known or forecast structural icing conditions.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
30-42-01	Window Heat Computers **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) All heaters and failure warnings on the front, and sliding windows associated with operative systems are verified to operate normally, and b) Airplane is not operated in known or forecast structural icing conditions. CAT II/III Not Authorized Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-42-01	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel	___ WINDOW HEAT COMPUTER INOP

(O) PROCEDURES

Do not operate airplane in known or forecast structural icing conditions.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. On ANTI ICE panel 25VU make certain that PROBE/WINDOW/ HEAT/AUTO/ON pushbutton switch is released (ON legend is off).
2. On MCDU 2 or 3 A/C 3201–3250, 1 or 2 A/C 3101–3178 & 3251–3284:
   a) Select CFDS MENU, SYSTEM REPORT TEST, ICE and RAIN.
   b) Select WINDOW HEAT CMPTR 1 or 2 (as applicable). WHC 1 or 2 (as applicable) MENU is displayed.
   c) Perform TEST (test must be OK).

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-42-02	Fixed Lateral Window and Sliding Window Heating Systems	**Y**	4	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-42-02	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel	___ WINDOW HEAT INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
30-42-03	Windshield Heating System **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One may be inoperative provided airplane is not operated in known or forecast structural icing conditions. CAT II/III Not Authorized Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-42-03	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel	___ WINDSHIELD HEAT INOP

(O) PROCEDURES

Do not operate airplane in known or forecast structural icing conditions.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	PROBES/WINDOW HEAT pb-sw					
30-42-04A	Probes / Window Heat pb-sw AUTO Control	**Y**	1	0	**C**	May be inoperative provided PROBES/WINDOW HEAT system is manually selected.
30-42-04B	Probes / Window Heat pb-sw ON Light	**Y**	1	0	**C**	May be inoperative provided the PROBES/WINDOW HEAT automatic system is operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-42-04A	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel	AUTOMATIC CONTROL OF PROBES/WINDOW HEAT INOP
30-42-04B	Adjacent To PROBE/WINDOW HEAT Switch On Overhead ANTI-ICE Panel	PROBE/WINDOW HEAT ON LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	WINDSHIELD WIPER SYSTEMS					
30-45-01A	Windshield Wiper Systems **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided airplane is not operated in precipitation within 5 SM of the airport of takeoff or intended landing. CAT II/III Not Authorized
30-45-01B	Fast Speed	**Y**	2	0	**C**	Fast speed may be inoperative provided slow speed operates normally.
30-45-01C	Slow Speed	**Y**	2	0	**C**	Slow speed may be inoperative provided fast speed operates normally.
30-45-01D	PARK Function	**Y**	2	0	**C**	Park function may be inoperative provided affected wiper can be located in a position that will not obstruct forward vision.
30-45-01E	PARK Function (Affected Wiper(s) Removed) **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(O)** Park function may be inoperative provided: a) Affected wiper(s) is removed, b) Affected wiper(s) is considered inoperative, and c) Airplane is not operated in precipitation within 5 SM of the airport of takeoff or intended landing. CAT II/III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-45-01A	Adjacent To Affected Windshield Wiper Control Switch(s) On Overhead Panel	___ WINDSHIELD WIPER(S) INOP
30-45-01B	Adjacent To Affected Windshield Wiper Control Switch(s) On Overhead Panel	___ WINDSHIELD WIPER(S) FAST SPEED INOP
30-45-01C	Adjacent To Affected Windshield Wiper Control Switch(s) On Overhead Panel	___ WINDSHIELD WIPER(S) SLOW SPEED INOP
30-45-01D	Adjacent To Affected WIPER Control Switch(s) On Overhead Panel	___ WINDSHIELD WIPER PARK FUNCTION(S) INOP
30-45-01E	Adjacent To Affected WIPER Control Switch(s) On Overhead Panel	___ WINDSHIELD WIPER PARK FUNCTION(S) INOP

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(O) PROCEDURES

30-45-01A, 30-45-01E

Do not operate in precipitation within 5 SM of airport of takeoff or intended landing.

(M) PROCEDURES

30-45-01E

The (M) Indicates the following Maintenance Procedures are required:

WARNING: MAKE SURE THAT THE CIRCUIT BREAKERS RELATED TO THE WEATHER RADAR ARE OPENED AND TAGGED.

1. To remove Wiper Arm (306DM) (CAPTAIN's WIPER) or (307DM) (F/O's WIPER), accomplish the following:
   a) Verify that the following circuit breakers are closed:
      1) For Captain's Wiper:
         A. ON C/B panel 122VU: verify that circuit breaker ANTI ICE/WIPER/CAPT location X12 is closed.
      2) For F/O Wiper:
         A. ON C/B panel 122VU: verify that circuit breaker ANTI ICE/F/O/WIPER location W12 is closed.
   b) Energize the aircraft electrical circuits. (REF. AMM TASK 24–41–00–861–002)
   c) Aircraft Maintenance Configuration:
      1) For 307DM (CAPTAIN's WIPER)
         A. On the overhead control and indicating panel 21VU, set the CAPT WIPER control switch 5DB1 to SLOW then to OFF.
      2) For 306DM (F/O's WIPER)
         A. On the overhead control and indicating panel 22VU, set the F/O WIPER control switch 5DB2 to SLOW then to OFF.
   d) To deactivate Captain's Wiper:
      1) On C/B panel 121VU: pull and tag circuit breaker COM NAV/RADAR/1 location K13.
      2) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WIPER/CAPT location X12.
   e) To deactivate F/O's Wiper:
      1) On C/B panel 121VU: pull and tag circuit breaker COM NAV/RADAR/1 location K13.
      2) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/F/O/WIPER location W12.
   f) Put access platform in position.
      1) Removal of the Wiper Arm: (Ref. Figure 30–45–01E)
         A. Fully loosen the bolt (7).

            NOTE: Do not remove the bolt (7).

         B. Remove the screw (6).
         C. Remove the wiper arm (8) from the splined shaft (5).

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g) Close Up

1) On C/B panel 121VU: remove tag and close circuit breaker COM NAV/RADAR/1 location K13.

2) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/WIPER/CAPT location X12.

3) ON C/B panel 122VU: verify that circuit breaker ANTI ICE/F/O/WIPER location W12 is closed.

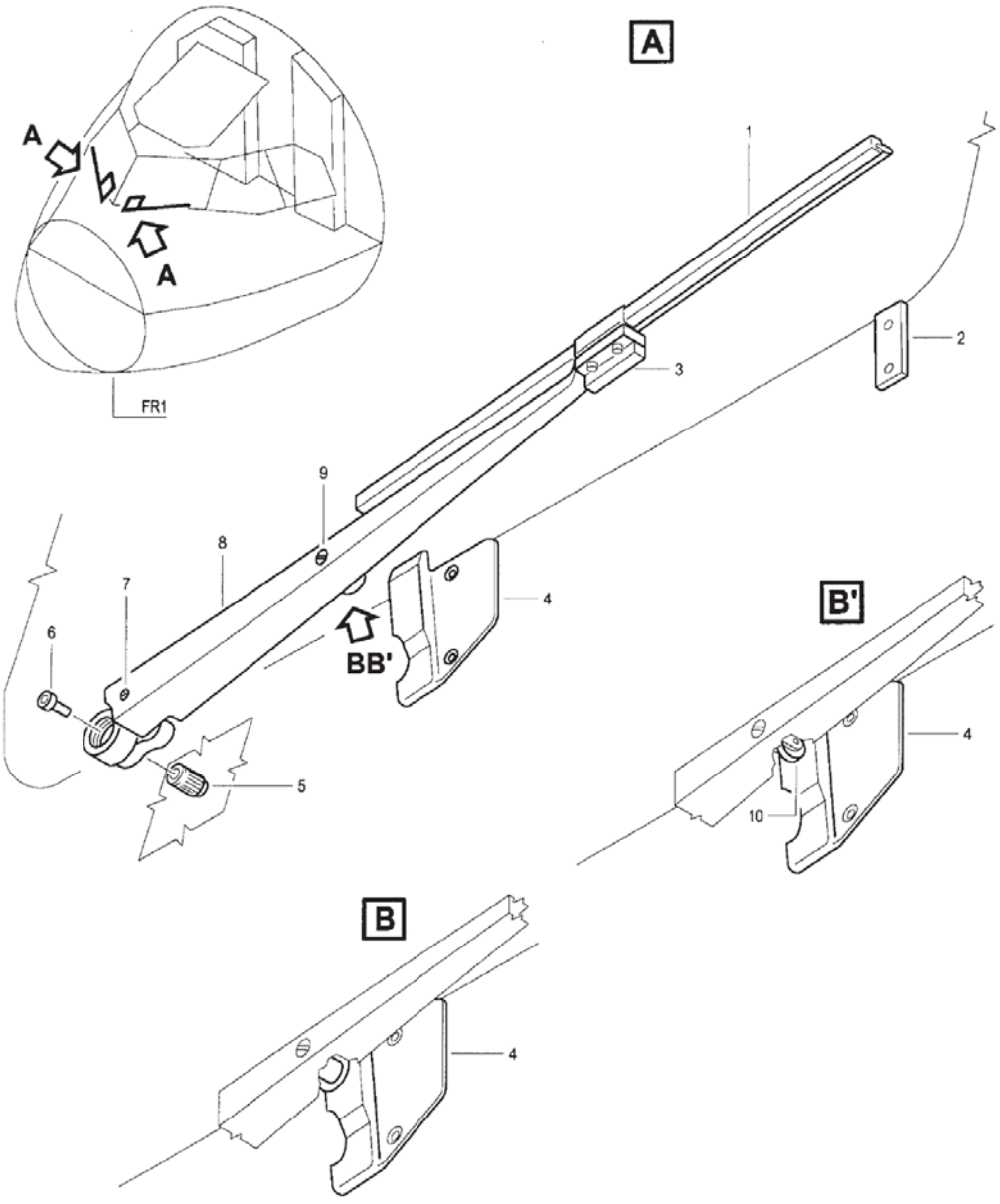

Figure 30–45–01E
Wiper Arm

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
30-71-01	Waste Water Drain Mast Heating System - FWD and/or AFT **"DISP.APPR.REQ'D"**	**N** -	0	**C**	**(M)(O)** One or both may be inoperative provided: a) Associated lavatory and galley water supplies are secured off, b) Associated galley sink and lavatory washbasin drains are blocked to prevent their use, and c) Associated galley sinks and washbasins are periodically monitored to ensure they remain blocked. NOTE: Provide a source of potable water and moist towelettes (or equivalent) for passenger needs.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-71-01	On FWD Flight Attendants Panel	___ DRAIN MAST HEATER(S) INOP ___ GALLEY WATER SHUTOFF AND ___ LAVATORY SINK POTABLE WATER DEACTIVATED INOP

(O) PROCEDURES

30-71-01

1. Captain to brief Lead Flight Attendant/Purser to periodically monitor associated galley sinks and associated washbasins to ensure they remain blocked.

NOTE: Rinse water is still available in the associated lavatory for toilet flushing only.

(M) PROCEDURES

30-71-01

1. To deactivate the waste water drain mast heating perform AMM Task 38-10-00-040-001NWA-O00.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-71-02	Waste Water Drain Line Protection System	**Y**	-	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-71-02	On The Logbook	___ WASTE WATER LINE PROTECTION SYSTEM INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-71-03	Cargo Compartment Drain Line & Drain Mast Ice Protection System	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-71-03	On The Logbook	___ CARGO COMPARTMENT DRAIN LINE AND DRAIN MAST ICE PROTECTION SYSTEM INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
30-81-03	External Visual Ice Indicator Lighting	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
30-81-03	Adjacent To ICE IND & STBY COMPASS Switch	EXTERNAL VISUAL ICE INDICATOR LIGHTING INOP

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ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY					
31-31-00A	Fault(s) Indicated by QAR	Y			D	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
31-31-00B	Fault(s) Indicated by DMU	Y			D	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
31-31-00C	Fault(s) Indicated by CFDIU	Y			C	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
31-31-00D	Fault(s) Indicated by DAR	Y			D	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
31-31-00E	Fault(s) Indicated by ACMS	Y			D	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
31-31-00F	Fault(s) Indicated by DMC 1/3 **(A319/A320 Only)**	Y			C	May be displayed provided DMC 2/3 MAINTENANCE message is not displayed simultaneously on ECAM STATUS page. NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
31-31-00G	Fault(s) Indicated by DMC 1/3 **(A321 ONLY)**					May be displayed on ECAM STATUS page. NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
31-31-00H	Fault(s) Indicated by DMC 2/3	Y			C	May be displayed provided DMC 1/3 MAINTENANCE message is not displayed simultaneously on ECAM STATUS page. NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
31-31-00A	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “QAR” DISPLAYED
31-31-00B	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “DMU” DISPLAYED
31-31-00C	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “CFDIU” DISPLAYED
31-31-00D	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “DAR” DISPLAYED
31-31-00E	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “ACMS” DISPLAYED
31-31-00F	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “DMC 1/3” DISPLAYED
31-31-00G	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “DMC 1/3” DISPLAYED
31-31-00H	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “DMC 2/3” DISPLAYED

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-21-01	Clock System (Indicator On Center Instrument Panel)	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Time base from CFDIU is available on ECAM, and b) Chrono indication is available on one Navigation Display (ND).

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-21-01	Adjacent To Clock On Right Center Instrument Panel	CLOCK INDICATOR ON CENTER INSTRUMENT PANEL INOP

(O) PROCEDURES

After any electrical power interruption (loss of UTC on ECAM lower display), initialize UTC and date through the MCDU as follows:

1. Select CFDS on F/O's MCDU.
2. Select next page.
3. Enter GMT and Date.

NOTE: If clock cannot be reset, contact MCC.

(M) PROCEDURES:

NOTE: GMT/DATE init only appears on the MCDU when there is a clock fault and a power cutoff longer than 200 minutes. In this case, pulling of circuit breaker(s) is not sufficient due to the clock having a built in battery.

1. To remove the clock:
   a) On C/B panel 49VU: pull and tag circuit breaker CLOCK/NORM/SPLY location F11.
   b) On C/B panel 121VU: pull and tag circuit breaker CLOCK/STBY/SPLY location N02.
   c) Remove the thermoformed cover from the center instrument panel.
   d) Loosen the two screws. Do not remove them.
   e) Disengage the clock from the housing.
   f) Disconnect the electrical connector.
   g) Remove the clock.

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2. Reset the CFDIU as follows:
   a) On C/B panel 121VU: pull circuit breaker CFDS/CFDIU/SPLY location J18 and keep open for 1 minute.
   b) On C/B panel 121VU: pull circuit breaker CFDS/CFDIU/BACK/UP location J17 and keep open for 1 minute.
   c) After 1 minute: On C/B panel 121VU: close circuit breaker CFDS/CFDIU/SPLY location J18.
   d) After 1 minute: On C/B panel 121VU: close circuit breaker CFDS/CFDIU/BACK/UP location J17.
   e) After you close the above circuit breakers you will have the GMT/DATE init available on the MCDU.
3. Re–install the clock as follows:
   a) Clean the component interface and/or the adjacent area.
   b) Make sure that the electrical connectors and are clean and are the correct condition.
   c) Connect the electrical connector to the clock.
   d) Install the clock in it's housing.
   e) Tighten the screws.
   f) Install the thermoformed cover on the center instrument panel.
   g) On C/B panel 49VU: remove tag and close circuit breaker CLOCK/NORM/SPLY location F11.
   h) On C/B panel 121VU: remove tag and close circuit breaker CLOCK/STBY/SPLY location N02.
4. Verify the time is displayed on the lower ECAM display unit.
5. Return aircraft to original configuration.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-30-01	Centralized Fault Display system (CFDS)	**Y**	1	0	**C**	May be inoperative provided: a) A CFDS system is available when required for specified maintenance tasks, and b) Panel Clock must operate normally. NOTE: CFDS time base may not be available on lower screen.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-30-01	Adjacent To Captain And FO's Multi Function Control Display Unit (MCDU)	CFDS SYSTEM INOP

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
31-30-02A	Flight Data Recorder (FDR) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	May be inoperative provided: a) Cockpit Voice Recorder (CVR) operates normally, b) Airplane is not dispatched from ATL, MSP or DTW unless: 1. The FDR failure occurs after pushback but prior to takeoff, OR 2. The FDR repair was attempted but was not successful, c) In those cases where repair is attempted but not successful, the aircraft may be dispatched on a flight or series of flights until the next arrival at ATL, MSP or DTW where repair must be accomplished, and d) Repairs are made within three flight days.
31-30-02B	Flight Data Recorder (FDR) DFDR Recording Parameters Required by 14 CFR	**N**	-	0	**A**	Up to three (3) parameters may be inoperative provided: a) Cockpit Voice Recorder (CVR) operates normally, and b) Repairs are made within 20 calendar days. NOTE: Refer to TOPP 40-20-40 for handling FDR.
31-30-02C	Flight Data Recorder (FDR) DFDR Recording Parameters Not Required by 14 CFR	**N**	-	0	**A**	May be inoperative provided repairs are made prior to completion of the next scheduled (C/H/M) maintenance check. NOTE: Refer to TOPP 40-20-40 for handling FDR.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-30-02A	On The Overhead RCDR Panel	FLIGHT DATA RECORDER INOP
31-30-02B	On The Overhead RCDR Panel	FLIGHT DATA RECORDER REQUIRED PARAMETER(S) ___ NOT BEING RECORDED
31-30-02C	On The Overhead RCDR Panel	FLIGHT DATA RECORDER NOT REQUIRED PARAMETER(S) ___ NOT BEING RECORDED

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-30-03	Flight Data Interface Unit (FDIU) or Flight Data Interface Function of the Flight Data Interface and Management Unit (FDIMU) **"DISP.APPR.REQ'D"**	**Y**	-	0	**A**	**(O)** May be inoperative provided: a) Cockpit Voice Recorder (CVR) operates normally, b) Airplane is not dispatched from ATL, MSP or DTW unless: 1. The FDR failure occurs after pushback but prior to takeoff, OR 2. The FDR repair was attempted but was not successful, c) In those cases where repair is attempted but not successful, the aircraft may be dispatched on a flight or series of flights until the next arrival at ATL, MSP or DTW where repair must be accomplished prior to dispatch, and d) Repairs are made within three flight days.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-30-03	On The Overhead RCDR Panel	FLIGHT DATA INTERFACE UNIT INOP

(O) PROCEDURES

If FDIU failure occurs after pushback but prior to takeoff (including at ATL, MSP or DTW), contact MCC for deferral instructions.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-30-05	Quick Access Recorder	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-30-05	Adjacent To ECAM Display	QUICK ACCESS RECORDER INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-30-07	Data Management Recorder (DMU) or Data Management Function of the FDIMU	**Y**	1	0	**D**	**(O)** May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-30-07	Adjacent To ECAM Display	DATA MANAGEMENT UNIT INOP

(O) PROCEDURES

Record engine data via ACARS.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-30-08	Printer	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-30-08	On The Printer	PRINTER INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-53-01	Flight Warning Computer (FWC) - FWC 2 Only **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(M)(O)** FWC 2 ONLY may be inoperative. CAT III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-53-01	Adjacent To ECAM Display	#2 FLIGHT WARNING COMPUTER (FWC) INOP

(O) PROCEDURES

31-53-01

CAT III – Not Authorized.

(M) PROCEDURES

1. Verify that the following circuit breakers are closed:
   a) On C/B panel 122VU: verify that circuit breaker LIGHTING/ANN LT SPLY/XFMR/BUS 2 location X05 is closed.
   b) On C/B panel 122VU: verify that circuit breaker LIGHTING/ANN LT SPLY/XFMR/STAT INV location X03 is closed.
   c) On C/B panel 122VU: verify that circuit breaker LIGHTING/TST/BOARD/SPLY location X06 is closed.
   d) On C/B panel 49VU: verify that circuit breaker LIGHTING/XFMR/115V.5V/ESS BUS location H03 is closed.
2. Pull and tag the following circuit breakers:
   a) On A/C 3209–3211
      i. On C/B panel 49VU: pull circuit breaker FWS/FWC1/SPLY location E02.
   b) On A/C 3212–3278, 3101–3171, and A321 aircraft
      i. On C/B panel 49VU: pull circuit breaker FWS/FWC1/SPLY location F1.
   c) On All A/C
      i. On C/B panel 121VU: pull circuit breaker EIS/FWC2/SPLY location Q07.

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3. Make certain that aircraft is in the following configuration:
   a) LANDING GEAR down locked, confirmed on panel 402VU by the fact that the lower light (triangle) of the 3 LANDING GEAR POSITION INDICATING LIGHT UNITS IS ON (Green color).
   b) ELAC 1 (2), SEC 1 (2) (3) engaged, confirmed on panel 23VU for ELAC 1 and SEC 1, and on panel 24VU for ELAC 2, SEC 2 and SEC 3 by the fact that FAULT and OFF legends of associated FLT CTL pushbutton switch are extinguished.
4. On panel 25VU, place the ANN LT switch in the TEST position:
   a) On panel 402VU, make sure that the upper light (UNLK legend) of the 3 LANDING GEAR POSITION INDICATING LIGHT UNITS comes on (Red color) and that the lower light (triangle) remains on (Green color).
   b) On panel 23VU and panel 24VU, make sure that for ELAC 1 (2), SEC 1 (2) (3), that FAULT and OFF legends of the associated FLT CTL pushbutton switch come on.
5. On panel 25VU, place the ANN LT switch in the BRT position:
   a) On panel 402VU, make sure that the upper light (UNLK legend) of the 3 LANDING GEAR POSITION INDICATING LIGHT UNITS goes OFF and that the lower light (triangle) remains on (Green color).
   b) On panel 23VU and panel 24VU, make sure that, for ELAC 1 (2), SEC 1 (2) (3), the FAULT and OFF legends of the associated FLT CTL pushbutton switch go off.
6. On A/C 3209–3211
   a) On C/B panel 49VU: close circuit breaker FWS/FWC1/SPLY location E02.
7. On A/C 3212–3278, 3101–3171, and A321 aircraft
   a) On C/B panel 49VU: close circuit breaker FWS/FWC1/SPLY location F1.
8. On All A/C
   a) On C/B panel 121VU: close circuit breaker EIS/FWC2/SPLY location Q07.
9. After few seconds, some warnings will appear on upper ECAM display unit. Press CLEAR until MEMO page appears.
10. Restore aircraft to required configuration.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-55-01	System Data Acquisition Concentrator Units (SDAC)	**Y**	2	1	**C**	SDAC 2 ONLY may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-55-01	Adjacent To ECAM Display	#2 SDAC INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM CONTROL PANEL					
31-56-01A	System Page MANUAL CALL pb	**Y**	11	0	**C**	May be inoperative.
31-56-01B	CLR pb	**Y**	2	1	**C**	May be inoperative.
31-56-01C	T/O CONFIG pb	**N**	1	1		NO RELIEF APPROVED.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-56-01A	On ECAM Control Panel	ECAM ___ SYSTEM PAGE MANUAL CALL PUSHBUTTON INOP
31-56-01B	On ECAM Control Panel	ECAM ___ CLR PUSHBUTTON(S) INOP
31-56-01C	N/A	N/A

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
MASTER WARN SYSTEM					
31-58-01A Lights	**Y**	2	1	**C**	May be inoperative.
31-58-01B CANCEL Functions	**Y**	2	1	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-58-01A	Adjacent To Affected Master Warning Light	___ MASTER WARNING LIGHT INOP
31-58-01B	Adjacent To Affected Master Warning Light	___ MASTER WARNING LIGHT/SWITCH CANCEL FUNCTION INOP

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
MASTER CAUTION SYSTEM					
31-58-02A Lights	**Y**	2	1	**C**	May be inoperative.
31-58-02B CANCEL Functions	**Y**	2	1	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-58-02A	Adjacent To Affected Master Caution Light	___ MASTER CAUTION LIGHT INOP
31-58-02B	Adjacent To Affected Master Caution Light	___ MASTER CAUTION LIGHT/SWITCH CANCEL FUNCTION INOP

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
EIS SWITCHING SYSTEMS					
31-61-01A ATT HDG	**Y**	1	0	**C**	**(M)** May be inoperative provided: a) NORM mode operates normally, and b) Switch remains in the normal position.
31-61-01B AIR DATA	**Y**	1	0	**C**	**(M)** May be inoperative provided: a) NORM mode operates normally, and b) Switch remains in the normal position.
31-61-01C EIS DMC	**Y**	1	0	**C**	**(M)** May be inoperative provided: a) NORM mode operates normally, and b) Switch remains in the normal position.
31-61-01D ECAM / ND XFR	**Y**	1	0	**C**	May be inoperative provided: a) It operates normally in the Normal position, and b) Both ECAM DUs operate normally.
31-61-01E PFD / ND XFR	**Y**	2	0	**C**	**(O)** May be inoperative provided: a) PFD and ND units are operative, and b) PFD to ND automatic switching is checked operative on the flying pilot's side PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-61-01A	Adjacent to ATT HDG switch on Pedestal Switching Panel	ATT HDG SWITCHING INOP
31-61-01B	Adjacent to Air Data switch on Pedestal Switching Panel	AIR DATA SWITCHING INOP
31-61-01C	Adjacent to EIS DMC switch on Pedestal Switching Panel	EIS DMC SWITCHING INOP
31-61-01D	Adjacent to ECAM/ND XFR switch on SWITCHING panel	ECAM/ND XFR SWITCHING FUNCTION INOP
31-61-01E	Adjacent to affected PFD/ND XFR switch on CAPT and/or F/O's instrument panel	___ PFD/ND XFR SWITCHING INOP

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(O) PROCEDURES

31-61-01E

1. During flight deck preparation:
   a) On the inoperative PFD/ND XFR pb:
      i. PFD Brightness control knob – OFF.
      ii. Check that the PFD image is automatically transferred on ND.
      iii. PFD Brightness control knob – ON.

CAUTION: If the PFD image is not automatically transferred on the associated ND unit, the affected side cannot be used by the Pilot Flying.

   b) If applicable, on the side where PFD to ND automatic switching is inoperative:
      i. PFD Brightness control knob – OFF.
      ii. EIS DMC SWITCHING selector (Affected Side) –CAPT 3 (F/O 3)
      iii. Check that the PFD image is transferred on the associated ND unit.
      iv. PDF Brightness control knob - ON
      v. EIS DMC SWITCHING knob (Affected Side) – NORM
2. In Flight, if a PFD unit fails with no automatic transfer to associated ND unit:
   a) PFD Brightness control knob – OFF.
   b) EIS DMC SWITCHING selector (Affected Side) –CAPT 3 (F/O 3)
   c) Check that the PFD image is displayed on the associated ND unit.

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(M) PROCEDURES

31-61-01A, 31-61-01B, 31-61-01C

1. On the center pedestal, on the SWITCHING panel 8VU, make sure that the affected EIS DMC selector switch(s) is in the NORM position.
2. For the A319 and A320 aircraft perform the following:

ACTION	RESULT
1. On circuit breaker panel 49VU:	
Open the circuit breaker EIS/DMC1/SPLY located at E11	A diagonal line comes into view on the CAPT PFD and ND and on the upper ECAM DU. On the lower ECAM DU, the EIS DMC1 FAULT message is displayed.
Close the circuit breaker EIS/DMC1/SPLY located at E11	The related images of each DU comes into view.
2. On circuit breaker panel 121VU:	
Open the circuit breaker EIS/DMC2/SPLY located at Q08	A diagonal line comes into view on the F/O PFD and ND and on the lower ECAM DU. On the upper ECAM DU, the EIS DMC2 FAULT message is displayed.
Close the circuit breaker EIS/DMC2/SPLY located at Q08	The related images of each DU comes into view.

3. For the A321 aircraft perform the following:

ACTION	RESULT
1. On circuit breaker panel 49VU:	
Open the circuit breaker EIS/DMC1/SPLY located at E11	An INVALID DATA message comes into view on the CAPT PFD and ND. On the lower ECAM DU, the EIS DMC1 FAULT message is displayed.
Close the circuit breaker EIS/DMC1/SPLY located at E11	After 35 seconds, the related images of each DU comes into view.
2. On circuit breaker panel 121VU:	
Open the circuit breaker EIS/DMC2/SPLY located at Q08	An INVALID DATA message comes into view on the F/O PFD and ND. On the upper ECAM DU, the EIS DMC2 FAULT message is displayed.
Close the circuit breaker EIS/DMC2/SPLY located at Q08	After 35 seconds, the related images of each DU comes into view.

ITEM NO. NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD	NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY	REMARKS OR EXCEPTIONS
DISPLAY UNITS (DU)			
31-63-01A PFDU 2 Only **"DISP.APPR.REQ'D"**	**Y** 1	0 **C**	**(O)** May be inoperative provided: a) PFDU1, NDU1, E/WDU, SDU and NDU2 are operative, and b) RNAV operations do not require PFDU use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements, CAT II/III Not Authorized
31-63-01B NDU 1 Only **"DISP.APPR.REQ'D"**	**Y** 1	0 **C**	**(O)** May be inoperative provided: a) PFDU1, NDU2, E/WDU, SDU and PFDU2 are operative, and b) RNAV operations do not require NDU use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III Not Authorized
31-63-01C NDU 2 Only **"DISP.APPR.REQ'D"**	**Y** 1	0 **C**	**(O)** May be inoperative provided: a) PFDU1, NDU1, E/WDU, SDU and PFDU2 are operative, and b) RNAV operations do not require NDU use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements, CAT II/III Not Authorized
31-63-01D SDU Only **"DISP.APPR.REQ'D"**	**N** 1	0 **A**	**(M)(O)** May be inoperative provided: a) PFDU1, NDU1, E/WDU, PFDU2 and NDU2 are operative, b) The AC ESS FEED Control and AC ESS FEED FAULT light is verified operative ONCE EACH FLIGHT DAY (Log Book Entry Required), and c) Repairs are made within three flight days. CAT II/III Not Authorized **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-63-01A	Adjacent To Affected Display Unit	PFDU 2 IS INOP
31-63-01B	Adjacent To Affected Display Unit	NDU 1 IS INOP
31-63-01C	Adjacent To Affected Display Unit	NDU 2 IS INOP
31-63-01D	Adjacent To Affected Display Unit	SD DISPLAY UNIT IS INOP

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(O) PROCEDURES

31-63-01A, 31-63-01B, 31-63-01C

1. Set corresponding brightness knob to OFF.

NOTE: If the PFD 2 brightness knob is switched OFF, ensure the PFD 2 display automatically transfers to the ND 2 display unit. If this transfer does not occur, contact the MCC or local maintenance.

31-63-01D

1. Set corresponding brightness knob to OFF
2. In case of warning on ECAM E/WDU, use ECAM/ND switching selector to get the system page on the selected ND.
3. In the event of failure of AC BUS 1, and all DUs are lost: Reference QRH Section 6 – AC ESS BUS FAULT to recover AC ESS BUS.

   NOTE: The AC ESS BUS is recovered when the AC ESS FEED pb-sw is set to ALTN.

(M) PROCEDURES

31-63-01D

DAILY CHECK (Once Each Flight Day)

4. Perform AMM Task 31-68-00-040-006.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-63-02A	Display Management Computers - (DMC 1) (All A319 Aircraft) (A320 Ships 3212-3278)	**Y**	1	0	**C**	**(O)**DMC 1 may be inoperative provided DMC 2 and DMC 3 are operative.
31-63-02B	Display Management Computers – (DMC 1) (All A321 Aircraft)	**Y**	1	0	**C**	**(O)** DMC 1 may be inoperative provided DMC 2 and DMC 3 are operative.
31-63-02C	Display Management Computers - (DMC2) (All A319 and A320 Aircraft)	**N**	1	0	**C**	**(M)(O)** DMC 2 may be inoperative provided: a) AC ESS Feed Control is verified operative ONCE EACH FLIGHT DAY (log book entry required), b) AC ESS Feed Fault Light is verified operative ONCE EACH FLIGHT DAY (log book entry required), and c) DMC 1 and DMC 3 are operative. **Repetitive Check Required (Yellow Placard)**
31-63-02D	Display Management Computers – (DMC 2) (All A321 Aircraft)	**N**	1	0	**C**	**(M)(O)** DMC 2 may be inoperative provided: a) AC ESS Feed Control is verified operative ONCE EACH FLIGHT DAY (log book entry required), b) AC ESS Feed Fault Light is verified operative ONCE EACH FLIGHT DAY (log book entry required), and c) DMC 1 and DMC 3 are operative. **Repetitive Check Required (Yellow Placard)**
31-63-02E	Display Management Computers - (DMC 3) (All A319 and A320 Aircraft)	**Y**	1	0	**C**	**(O)** DMC 3 may be inoperative provided DMC 1 and DMC 2 are operative.
31-63-02F	Display Management Computers - (DMC 3) (All A321 Aircraft)	**Y**	1	0	**C**	**(O)** DMC 3 may be inoperative provided DMC 1 and DMC 2 are operative.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
31-63-02A	Adjacent To EIS DMC Switch On Switching Panel 8VU	DMC 1 INOP
31-63-02B	Adjacent To EIS DMC Switch On Switching Panel 8VU	DMC 1 INOP
31-63-02C	Adjacent To EIS DMC Switch On Switching Panel 8VU	DMC 2 INOP
31-63-02D	Adjacent To EIS DMC Switch On Switching Panel 8VU	DMC 2 INOP
31-63-02E	Adjacent To EIS DMC Switch On Switching Panel 8VU	DMC 3 INOP
31-63-02F	Adjacent To EIS DMC Switch On Switching Panel 8VU	DMC 3 INOP

(O) PROCEDURES

31-63-02A

1. Place EIS DMC SWITCHING selector to CAPT 3

31-63-02B

1. Place EIS DMC SWITCHING selector to CAPT 3
2. On Ground or In Flight
   a. In the case of multiple undue ECAM alerts concerning ENG 1(2) N1(N2) (EGT)(FF) OVER LIMIT or ENG 1(2) N1(N2)(EGT)(EPR)(FF) DISCREPANCY or NAV ATT(ALT1)(HDG) DISCREPANCY or NAV FM/GPS POS DISAGREE or FUEL F.USED/FOB DISAGREE or MINIMUM or HUNDRED ABOVE callouts, possibly associated with EFIS red flags, apply the below procedure:
      i. Crosscheck the affected parameters on the EWD, PFD, ND, or on the related SD page to confirm that the alerts are undue.
      ii. EIS DMC SWITCHING selector..... NORM

      NOTE: CAPT PFD and ND are lost when EIS DMC SWITCHING selector is set to NORM
   b. If the undue ECAM alerts stop:
      i. Pull EIS/DMC3/SPLY (121 VU Q09) C/B and EIS/DMC3/STBY/SPLY (49 VU E10) C/B for more than 5 s and push them back.
      ii. EIS DMC SWITCHING selector .....CAPT 3
   c. If the undue ECAM alerts continue:
      i. EIS DMC SWITCHING selector ……..CAPT 3
      ii. Wait for CAPT PFD and ND recovery.
      iii. Pull EIS/DMC2/SPLY (121 VU Q08) C/B for more than 5 s and push it back.

Continued Next Page

31-63-02C

1. Place EIS DMC SWITCHING selector to F/O 3

31-63-02D

1. Place EIS DMC SWITCHING selector to F/O 3
2. On Ground or In Flight
   a. In the case of multiple undue ECAM alerts concerning ENG 1(2) N1(N2) (EGT)(FF) OVER LIMIT or ENG 1(2) N1(N2)(EGT)(EPR)(FF) DISCREPANCY or NAV ATT(ALT1)(HDG) DISCREPANCY or NAV FM/GPS POS DISAGREE or FUEL F.USED/FOB DISAGREE or MINIMUM or HUNDRED ABOVE callouts, possibly associated with EFIS red flags, apply the below procedure:
      i. Crosscheck the affected parameters on the EWD, PFD, ND, or on the related SD page to confirm that the alerts are undue.
      ii. EIS DMC SWITCHING selector..... NORM

      NOTE: F/O PFD and ND are lost when EIS DMC SWITCHING selector is set to NORM
   b. If the undue ECAM alerts stop:
      i. Pull EIS/DMC3/SPLY (121 VU Q09) C/B and EIS/DMC3/STBY/SPLY (49 VU E10) C/B for more than 5 s and push them back.
      ii. EIS DMC SWITCHING selector .....F/O 3
   c. If the undue ECAM alerts continue:
      i. EIS DMC SWITCHING selector ……F/O 3
      ii. Wait for F/O PFD and ND recovery.
      iii. Pull EIS/DMC1/SPLY (49 VU E11) C/B for more than 5 s and push it back.

31-63-02E

1. Ensure the EIS DMC SWITCHING selector is set to NORM

Continued Next Page

31-63-02F

1. Place EIS DMC SWITCHING selector to NORM
2. On Ground or In Flight
   a. In the case of multiple undue ECAM alerts concerning ENG 1(2) N1(N2) (EGT)(FF) OVER LIMIT or ENG 1(2) N1(N2)(EGT)(EPR)(FF) DISCREPANCY or NAV ATT(ALT1)(HDG) DISCREPANCY or NAV FM/GPS POS DISAGREE or FUEL F.USED/FOB DISAGREE or MINIMUM or HUNDRED ABOVE callouts, possibly associated with EFIS red flags, apply the below procedure:
      i. Crosscheck the affected parameters on the EWD, PFD, ND, or on the related SD page to confirm that the alerts are undue.
      ii. EIS DMC SWITCHING selector..... CAPT 3

      NOTE: CAPT PFD and ND are lost when EIS DMC SWITCHING selector is set to CAPT 3
   b. If the undue ECAM alerts stop:
      i. Pull EIS/DMC1/SPLY (49 VU E11) C/B for more than 5 s and push them back.
      ii. EIS DMC SWITCHING selector .....NORM
   c. If the undue ECAM alerts continue:
      i. EIS DMC SWITCHING selector ……..NORM
      ii. Wait for CAPT PFD and ND recovery.
      iii. Pull EIS/DMC2/SPLY (121 VU Q08) C/B for more than 5 s and push it back.

(M) PROCEDURES

31-63-02C, 31-63-02D

DAILY CHECK: (Once Each Flight Day)

1. Perform AMM Task 31-68-00-040-005.

.

	NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-63-03	ECAM Memo Display	**Y**	-	0	**C**	Indications may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-63-03	Adjacent To ECAM Display	ECAM ___ MEMO DISPLAY INDICATOR(S) INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
31-63-04	ECAM Permanent Data Display	**Y**	-	0	**C**	Indications may be inoperative if TAT or SAT temperature is available.

MEL ITEM	TAB LOCATION	PLACARD TEXT
31-63-04	Adjacent To ECAM Display	___ PERMANENT DATA DISPLAY INFORMATION INDICATION(S) IS INOP

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ATA 32 Contents

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
32-11-01	Torque Link Dampers **"DISP.APPR.REQ'D"**	**Y**	2	0	**A**	May be inoperative provided repairs are made within seven landings.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-11-01	Adjacent To ECAM Display	___ TORQUE LINK DAMPER INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-12-01	Main Gear Doors Ground Opening Cables	**N**	2	0	**C**	**(M)** May be broken or missing.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-12-01	Adjacent To Landing Gear Handle Display	___ MAIN GEAR DOOR(S) GROUND OPENING CABLES INOP

(M) PROCEDURES:

Deactivation of the MLG Ground Door Opening Cable:

WARNING: OBEY THE HYDRAULIC SAFETY PROCEDURES

– ON THE PANEL 400VU:

– ENSURE THE LANDING GEAR CONTROL LEVER 6GA IS IN THE DOWN POSITION

– INSTALL WARNING NOTICE ON FLT DECK TO NOT OPERATE THE LANDING GEAR

– INSTALL WARNING NOTICE ON FLT DECK TO NOT OPERATE THE GREEN AND YELLOW HYDRAULIC SYSTEMS

– ON PANEL 110VU, ENSURE THE GRAVITY GEAR EXTN HANDLE IS FOLDED INTO THE CENTER CONSOLE

– ENSURE THE GROUND SAFETY LOCKS ARE INSTALLED ON THE LANDING GEAR

– ENSURE THAT THE TRAVEL RANGES OF THE LANDING GEAR DOORS ARE CLEAR

NOTE: The defective opening cable can be removed, or left in position with the cable ends disconnected from the control handle and by–pass valve per as following procedure.

1. Pull and tag the following circuit breakers:
   a) On C/B panel 49VU: pull and tag circuit breaker L/G/LGCIU/SYS1/NORM location C09.
   b) On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/LGCIU/SYS2 location Q35.
   c) On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/LGCIU/SYS1/GRND SPLY location Q34.
   d) On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/G HYD/PUMP ENG1/CTL location R35.
   e) On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/G HYD/PUMP ENG1/MONG location R34.
2. Open the applicable access panel(s):
   a) For control cable 2804GM open 195BB.
   b) For control cable 2805GM open 196BB.
3. If necessary, open MLG door by the free fall system.
4. Install a GROUND LOCK SLEEVE on each MLG door actuating cylinder.

Continued Next Page

5. Disconnect the cable end from the control handle:
   a) Remove and discard the cotter pin(5).
   b) Remove the nut (4), the washer (3) and the bolt (1).
   c) Remove the cable end (2) from the control handle.
6. Disconnect the end from the by–pass valve:
   a) Remove the cotter pin (8).
   b) Remove the nut (7), the washer (9), the bushing (11) and the bolt (12).
   c) Remove the cable end (6) from the by–pass valve operating lever (10).
7. Stow the cable ends and secure them in position with a cable tie.
8. Disconnect the applicable MLG door actuating cylinder from the MLG door.
9. Pressurize the Green Hydraulic system.
10. Reset the free fall system if the MLG doors opened by the free fall system (step 3).
11. Make sure that the by–pass valve operating lever is in the NORMAL position as follows:
    a) Put the rigging pin through the operating lever and the by–pass valve rigging pin holes.
       1) If the operating lever and the by–pass valve rigging pin holes are not aligned, manually move the operating lever until the rigging pin holes are aligned.
    b) Remove the rigging pin and secure the operating lever in the rigged position with 0.032 stainless steel lockwire (double wrapped) through the rigging pin holes.
12. Depressurize the Green Hydraulic system.
13. Turn the GRAVITY GEAR EXTN handle clockwise two full turns.
14. Connect the applicable MLG door actuating cylinder.
15. Remove the GROUND LOCK SLEEVES.
16. Pressurize the Green Hydraulic system.
17. Close MLG doors as follows:
    a) On the panel 110VU, turn the GRAVITY GEAR EXTN handle counterclockwise two full turns at a rate of one full turn every 5 seconds.
    b) Fold the GRAVITY GEAR EXTN handle into the center console.
18. Put the MLG door ground control handle in the CLOSED position.
19. Make sure that the MLG doors are closed and locked correctly.

WARNING: IF THE MLG DOOR CONTROLS DO NOT AGREE WITH THE POSITION OF THE MLG DOORS, YOU MUST KEEP CLEAR OF THE LANDING GEAR BAY UNTIL:

– YOU DEPRESSURIZE THE GREEN HYDRAULIC SYSTEM;

– YOU INSTALL GROUND LOCK SLEEVE ON THE ACTUATING CYLINDER OF THE APPLICABLE OPEN DOOR(S). IF THE DOOR IS OPEN AND NOT SAFETIED, THERE IS A RISK THAT IT CAN CLOSE AND CAUSE INJURY.

20. Depressurize the Green Hydraulic system.
21. Close the applicable access panel(s).
22. Remove all tags from deactivated systems.

Continued Next Page

23. Remove tags and close the following circuit breakers:

    a) On C/B panel 49VU: remove tag and close circuit breaker L/G/LGCIU/SYS1/NORM location C09.

    b) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/LGCIU/SYS2 location Q35.

    c) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/LGCIU/SYS1/GRND SPLY location Q34.

    d) On C/B panel 121VU: remove tag and close circuit break HYDRAULIC/G HYD/PUMP ENG1/CTL location R35.

    e) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/G HYD/PUMP ENG1/MONG location R34.

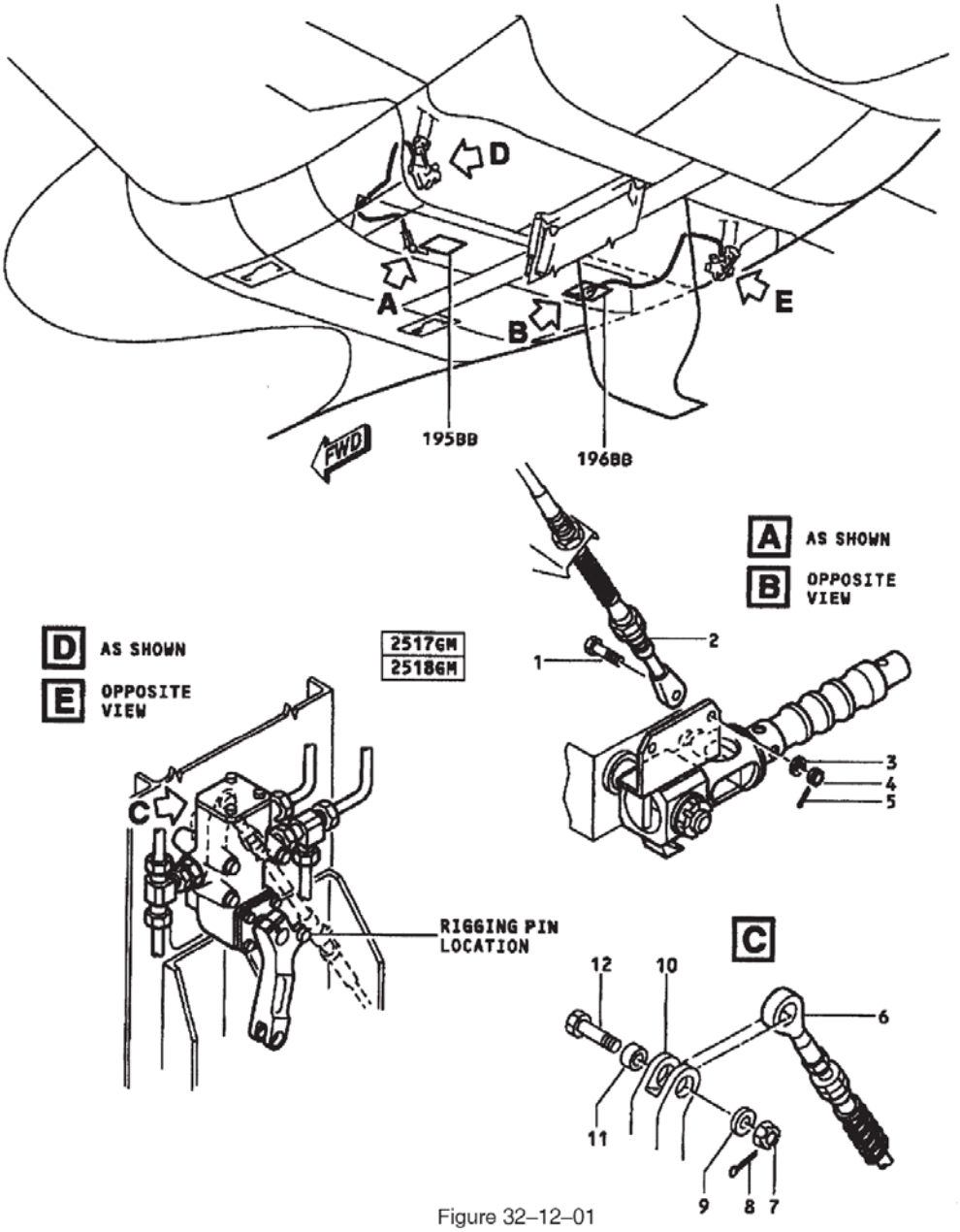

Figure 32–12–01

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
32-31-01	Landing Gear Control and Interface Units No.2 (LGCIU 2) **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** LGCIU No.2 may be inoperative provided: a) Both radio altimeter systems operate normally, b) Both FCU channels operate normally, c) All ELAC's, SEC's, ADIR's, SFCC's, and FAC's operate normally, d) Flex takeoff is not used, e) Reverser No.2 is considered inoperative and deferred per MEL 78-30-01, f) LGCIU No.2 is deactivated, g) Runway turn-off light system is considered inoperative and deferred per MEL 33-40-03, h) Taxi and takeoff light system is considered inoperative and deferred per MEL 33-40-04, i) No.2 engine minimum idle on ground is inoperative and deferred per MEL 73-20-03A or 73-20-03B as applicable, j) Ground external horn is considered inoperative and deferred per MEL 23-42-01, k) No.2 engine AUTOSTART controls are considered inoperative and deferred per MEL 80-11-05, l) Cargo door opening electrical control system is considered inoperative and deferred per MEL 52-30-04B, m) Cockpit voice recorder system is considered inoperative and deferred per MEL 23-71-01, and n) Repairs are made within one flight day. NOTE: As a result of a deactivated LGCIU 2 multiple systems are affected.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-31-01	Adjacent to the Landing Gear Control Handle	NO.2 LGCIU INOP

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(**O) PROCEDURE**

32-31-01

1. Flex Takeoff is not used.
2. Comply with the following MEL procedures:
   23-42-01
   23-71-01
   33-40-03
   33-40-04
   52-30-04B
   73-20-03A or 73-20-03B as applicable
   78-30-01
   80-11-05

With the HYDRAULIC/LGCIU/SYS2 circuit breaker pulled and secured at Q35 the following table outlines the affected systems:

SYSTEMS	AFFECTS
AVNCS VENT (on ground)	- The system remains in closed circuit configuration. - The ground cooling system is inoperative. Time limitations must be observed. Time limitations on ground for ELEC PWR supply with air conditioning system operating: OAT ≤43°C = No Limitation OAT >43°C ≤ 52°C = 3 hours OAT >52°C = 30 minutes
HYD (on ground)	- The PTU runs after the first engine is started until the second engine is started. - The BLUE ELEC PUMP FAULT light and YELLOW ENG 2 PUMP FAULT light illuminate when engines are off.
ATC 2 (on ground)	- ATC 2 is not inhibited on the ground. On the ground set the ATC selector to SYS 1.
LIGHTS	- The strobe lights are not inhibited. On ground set the STROBE sw to OFF. - On ground with the flaps retracted logo lights do not come on.
ELEC	- When the APU generator or GPU supplies the aircraft, the main galleys are not powered.
ENG 2	- The FADEC is continuously powered. NOTE: AUTOSTART Control is also inoperative requiring an external air or crossbleed start. See MEL 80-11-05
SLATS (on ground)	- The slats are slow during retraction.

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SYSTEMS	AFFECTS
AIR COND (on ground)	- Both air conditioning packs ram air inlets do not close on the ground.
WING A ICE (on ground)	- On ground if set to ON, the WING A ICE valve does not close at the end of the test sequence. The WING A ICE OPEN ON GND alert will be displayed on the EWD.
RECORDERS	- The CVR and DFDR do not stop after engine shut down.
ECAM	- On the WHEEL SD page the landing gear position indications associated with LGCIU 2 are displayed with XX. - The L/G LGCIU FAULT caution is displayed on the EWD.

(M) PROCEDURES

32-31-01

1. On C/B panel 121VU, pull and secure the HYDRAULIC/LGCIU/SYS2 circuit breaker located at Q35.
2. Deactivate the No.2 Thrust Reverser and defer per MEL 78-30-01.
3. Defer the runway turn-off light system per MEL 33-40-03.
4. Defer the taxi and takeoff light system per MEL 33-40-04.
5. Defer the No.2 engine minimum idle on ground per MEL 73-20-03A or 73-20-03B as applicable.
6. Defer the ground external horn per MEL 23-42-01.
7. Defer the No.2 engine AUTOSTART controls per MEL 80-11-05.
8. Defer the cargo door opening electrical control system per MEL 52-30-04B.
9. Defer the cockpit voice recorder system per MEL 23-71-01,

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-41-01	Wheel Tie Bolts **"DISP.APPR.REQ'D"**	**N**	-	-	**A**	**(M)** One bolt may be broken or missing provided: a) Affected wheel is removed, checked for broken parts or damage, and replaced if broken parts or damage is found, b) For the main wheel, associated brake is checked for broken parts or damage, and is replaced or deactivated if broken parts or damage is found, c) PRIOR TO EACH DEPARTURE, wheel is inspected for additional broken or missing tie bolts (Log Book Entry Required), and d) Repairs are made within five landings. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-41-01	Adjacent To Landing Gear Handle Display	___ WHEEL TIE BOLT BROKEN OR MISSING

(M) PROCEDURES

32-41-01

1. Affected wheel is removed and inspected for broken parts or damage.
   a) For nose wheel assembly perform AMM Task 32-41-00-040-002.
   b) For main wheel assembly perform AMM Task 32-41-00-040-003. Associated brake must also be inspected for broken parts or damage..
2. PRIOR TO EACH DEPARTURE:
   a) Wheel Tie Bolt inspection:
      1) After each landing, wheel is inspected for additional broken or missing tie bolts.
      2) One tie bolt may be missing on one Nose Landing gear or one Main gear wheel.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
32-42-01	Main Wheel Braking Systems **"DISP.APPR.REQ'D"**	**N**	4	3	**C**	**(M)(O)** One brake may be inoperative provided: a) Minimum runway width is 148 ft (45 meters), b) Anti–skid system operates normally, c) Nose wheel steering operates normally, d) Affected brake is removed or deactivated, e) Both reversers operate normally, f) Green and yellow systems on operative brakes operate normally, g) Wheel tachometers are operative, h) Applicable performance corrections for One Brake Inoperative are applied for takeoff and landing, and i) The AUTO/BRK Function is considered inoperative and deferred per MEL 32-42-04A. CAT III Not Authorized KJAC (Jackson Hole Airport) operations Authorized on dry runways only.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-42-01	Adjacent To ECAM Display	___ BRAKE INOP AND (REMOVED/ DEACTIVATED) DO NOT USE AUTOBRAKES

(O) PROCEDURES

32-42-01

1. Comply with MEL 32-42-04A (O) procedure.
2. If both engines are operative, keep landing gear down for one minute and observe max gear retract speed (220 kts). The fuel burn increase is negligible.

   NOTE 1: Vibrations may be present during 1 or 2 minutes after landing gear retraction.

   NOTE 2: In case of engine failure at takeoff, retract landing gear when in positive climb.
3. Verify takeoff and landing runways are at least 148 ft wide.

   NOTE: Takeoff memo will not be all green.

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32-42-01	MAIN WHEEL BRAKING SYSTEMS
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 32-42-01.**

(M) PROCEDURES

1. Do a BITE of the BSCU per AMM Task 32-46-00-740-001 to make sure that any fault message is not related to a tachometer.
2. Defer AUTO/BRK Function inoperative per MEL 32-42-04A.
3. DEACTIVATION WITH BRAKE REMOVAL

WARNING: MAKE CERTAIN THAT LANDING GEAR SAFETY LOCKS AND THE WHEEL CHOCKS ARE IN POSITION.

a) Remove the main landing gear wheel concerned.

b) Place PARKING BRAKE CONTROL switch in OFF (released) position.

c) Remove brake unit.

d) Place a blanking cap on the temperature sensor electrical connector.

e) Remove protective cone (J47779 or Q47323-1) from wheel axle. (Protective cone was installed during brake removal procedure).

f) Clean the axle.

g) Lightly lubricate the axle and axle protective sleeve.

h) Install axle protective sleeve and retaining ring (these items were removed during brake unit removal).

i) Install the main landing gear wheel.

j) Wipe sleeves and brake temperature electrical connector clean and apply 2 or 3 turns of 3/4 to 1 inch wide self-adhesive fabric tape around sleeves and connector.

k) Tightly wind 3 or 4 turns of lockwire around mid–area of taped–lagged sleeves and connector.

l) Make sure hoses and wires are not kinked.

m) Twist lockwire and run it through the nearest hole of the landing gear axle flange or attach it to the clamp block which secures hydraulic hoses and conduit.

n) Tension lockwire and twist.

NOTE: This attachment point avoids any risk of hoses/wire/lockwire chafing during landing gear operation.

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o) Tests:

1) Pressurize for ALTERNATE BRAKING (Yellow hydraulic system) then for NORMAL BRAKING (Green hydraulic system), the hydraulic pressure line associated to removed brake and check for leakage.

4. DEACTIVATION WITHOUT BRAKE REMOVAL

WARNING: MAKE CERTAIN THAT LANDING GEAR SAFETY LOCKS AND THE WHEEL CHOCKS ARE IN POSITION. MAKE CERTAIN THAT PARKING BRAKE CONTROL SWITCH IS IN OFF (RELEASED) POSITION BEFORE DEACTIVATION

a) Loosen knurled sleeves of the 2 hydraulic self–sealing couplings and turn to disconnect.

b) Wipe the hydraulic half–couplings (hose side), clean and apply 2 or 3 turns of 3/4 to 1 inch wide self-adhesive fabric tape around the knurled sleeves.

c) Tightly wind 3 or 4 turns of lockwire around mid–area of taped–lagged sleeves.

d) Twist the lockwire and put it through the nearest locking hole in the hexagonal head of the fixed half couplings. Tighten the lockwire and twist it.

e) Remove the two bleed screw plugs from the bleed screw.

f) Connect a vinyl hose to a bleed screw and put the other end in a container.

g) Slowly loosen the bleed screw to release hydraulic residual pressure from the brake.

h) Tighten the bleed screw.

i) Disconnect the vinyl hose.

j) Install the bleed screw plug on the bleed screw.

k) Do the same to the other bleed screw.

l) Tests:

1) Pressurize for ALTERNATE BRAKING (Yellow hydraulic system) then for NORMAL BRAKING (Green hydraulic system), the hydraulic pressure line associated to deactivated brake and check for leakage with the related pedals fully pushed.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-42-02	Green Braking System **"DISP.APPR.REQ'D"**	**N**	1	1	**C**	**(M)(O)** Braking on one wheel may be inoperative provided: a) Minimum runway width is 148 ft (45 meters), b) Green hydraulic supply to affected brake is deactivated, c) Anti–skid system operates normally, d) Nose wheel steering operates normally, e) Both reversers operate normally, f) Wheel tachometers are operative, and g) Applicable performance corrections for One Brake Inoperative are applied for takeoff and landing. CAT III Not Authorized KJAC (Jackson Hole Airport) operations Authorized on dry runways only.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-42-02	Adjacent To ECAM Display	GREEN HYDRAULIC BRAKE SYSTEM INOP ON ___ BRAKE

(O) PROCEDURES

32-42-02

1. Do not use autobrakes.

   NOTE : In case of engine failure at takeoff, retract landing gear when in positive climb.

2. If both engines are operative, keep landing gear down for one minute and observe max gear retract speed 220 kts). The fuel burn increase is negligible.

   NOTE : Vibrations may be present during 1 or 2 minutes after landing gear retraction.

3. Verify takeoff and landing runways are at least 148 ft wide.

   NOTE : Takeoff memo will not be all green.

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32-42-02	GREEN BRAKING SYSTEMS
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 32-42-02.**

(M) PROCEDURES

32-42-02

1. Deactivate green hydraulic supply to the associated brake by performing AMM Task 32-42-00-040-002.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-42-03A	Braking/Steering Control Unit (BSCU) Channel 1/System 1 **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Alternate brake system is verified to operate normally PRIOR TO EACH DEPARTURE, b) Brake pressure indicators operate normally, c) The affected channel/system is deactivated, d) PRIOR TO EACH DEPARTURE, the CFDS does not indicate a L/G SYS DISAGREE caution (Log Book Entry Required), e) Channel 2/System 2 is operative, f) The AUTO/BRK (LO, MED, MAX) pb DECEL light is considered inoperative and deferred per MEL 32-42-04E, and g) The AUTO/BRK Panel Mode Lights (LO, MED, MAX) ON light is considered inoperative and deferred per MEL 32-42-04B. CAT II/III Not Authorized **Repetitive Check Required (Yellow Placard)**
32-42-03B	Braking/Steering Control Unit (BSCU) Channel 2/System2 **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Alternate brake system is verified to operate normally PRIOR TO EACH DEPARTURE, b) Brake pressure indicators operate normally, c) The affected channel/system is deactivated, d) PRIOR TO EACH DEPARTURE, the CFDS does not indicate a L/G SYS DISAGREE caution (Log Book Entry Required), and e) Channel 1/System 1 is operative. CAT II/III Not Authorized **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-42-03A	Adjacent To ECAM Display	BRAKE STEERING CONTROL UNIT CHANNEL 1/SYSTEM 1 INOP
32-42-03B	Adjacent To ECAM Display	BRAKE STEERING CONTROL UNIT CHANNEL 2/SYSTEM 2 INOP

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(O) PROCEDURES

32-42-03A

1. A satisfactory check of the alternate brake system during the Captain's Preflight satisfies the requirement of paragraph a) in Remarks & Exceptions.
2. Comply with MEL 32-42-04B and MEL 32-42-04E (O) procedures, as applicable.

32-42-03B

1. A satisfactory check of the alternate brake system during the Captain's Preflight satisfies the requirement of paragraph a) in Remarks & Exceptions.

(M) PROCEDURES

32-42-03A, 32-42-03B

1. Deactivate the affected BSCU Channel / System by performing AMM Task 32-42-00-040-007.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER INSTALLED	NUMBER REQUIRED FOR DISPATCH	REPAIR CATEGORY	REMARKS OR EXCEPTIONS
	AUTO/BRK FUNCTION					
32-42-04A	Auto/BRK Function **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided normal braking is not affected. CAT III Not Authorized KJAC (Jackson Hole Airport) operations Authorized on dry runways only.
32-42-04B	AUTO/BRK Panel Mode Lights (LO, MED, MAX) ON	**Y**	3	0	**C**	**(O)** May be inoperative provided Auto Brake indications on ECAM WHEEL page operate normally.
32-42-04C	AUTO/BRK Panel Mode Lights (MAX only) ON	**Y**	1	0	**C**	**(O)** MAX Mode ON light may be inoperative provided MAX autobrake mode is not used. NOTE: If the ECAM WHEEL page operates normally, use MEL item 32–42–04B.
32-42-04D	AUTO/BRK Panel Mode Lights (LO, MED) ON **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided LO and/or MED autobrake mode(s) is not used. NOTE: If the ECAM WHEEL page operates normally, use MEL item 32–42–04B. CAT III Not Authorized KJAC (Jackson Hole Airport) operations Authorized on dry runways only.
32-42-04E	AUTO/BRK Panel Mode Lights (LO, MED, MAX) DECEL	**Y**	3	0	**C**	**(O)** May be inoperative provided Auto Brake indications on ECAM WHEEL page operate normally.
32-42-04F	AUTO/BRK Panel Mode Lights (MAX only) DECEL	**Y**	1	0	**C**	**(O)** MAX Mode DECEL light may be inoperative provided MAX autobrake mode is considered inoperative and not used. NOTE: If the ECAM WHEEL page operates normally, use MEL item 32–42–04E.
32-42-04G	AUTO/BRK Panel Mode Lights (LO, MED) DECEL **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided associated autobrake mode(s) is not used. NOTE: If the ECAM WHEEL page operates normally, use MEL item 32–42–04E. CAT III Not Authorized KJAC (Jackson Hole Airport) operations Authorized on dry runways only.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
32-42-04A	On Auto/Brk Select Panel 402VU	AUTO/BRK FUNCTION INOP
32-42-04B	On Auto/Brk Select Panel 402VU	___ MODE ON LIGHT INOP
32-42-04C	On Auto/Brk Select Panel 402VU	MAX MODE ON LIGHT INOP
32-42-04D	On Auto/Brk Select Panel 402VU	___ LO/MED MODE ON LIGHT(S) INOP
32-42-04E	On Auto/Brk Select Panel 402VU	___ DECEL MODE LIGHT INOP
32-42-04F	On Auto/Brk Select Panel 402VU	MAX (DECEL) MODE LIGHT INOP
32-42-04G	On Auto/Brk Select Panel 402VU	___ LO/MED (DECEL) MODE LIGHT INOP

(O) PROCEDURES

32-42-04A

Do not select or use the AUTO/BRK function.

NOTE: When T.O MEMO is displayed on ECAM E/WD, disregard the line: AUTO BRK.....MAX (blue)

32-42-04B, 32-42-04E

Utilize Auto Brake Indications on ECAM WHEEL page.

32-42-04C, 32-42-04F

1. Do not arm autobrakes for takeoff.
2. Use manual braking during Rejected Takeoff.

   NOTE: When T.O MEMO is displayed on ECAM E/WD, disregard the line: AUTO BRK.....MAX (blue)

32-42-04D, 32-42-04G

Do not use associated autobrake mode(s) for landing.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-44-01 Yellow Brake System	**N**	1	1	**C**	**(M)** Braking on one wheel may be inoperative provided: a) Yellow hydraulic supply of affected brake is deactivated, and b) Both reversers operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-44-01	Adjacent to ECAM display	YELLOW HYDRAULIC BRAKE SYSTEM INOP AND DEACTIVATED ON ___ BRAKE INOP

(M) PROCEDURES

CAUTION: THE YELLOW HYDRAULIC BRAKE CONNECTION IS ALWAYS BEHIND THE LDG GEAR. MAKE CERTAIN THAT THE LANDING GEAR SAFETY LOCKS AND THE WHEEL CHOCKS ARE IN POSITION.
MAKE CERTAIN THAT PARKING BRAKE CONTROL SWITCH IS IN OFF (RELEASED) POSITION BEFORE DEACTIVATION.

1. Depressurize yellow hydraulic systems and install warning tag.
2. Loosen knurled sleeve on hydraulic self–sealing coupling (located behind the ldg gear) and turn to disconnect.
3. Wipe hydraulic half–coupling (hose side) clean and apply 2 or 3 turns of 3/4 to 1 inch wide self adhesive fabric tape around sleeve.
4. Tightly wind 3 or 4 turns of lockwire around mid–area of tape–lagged sleeves
5. Twist the lockwire and put it through the nearest locking hole in the hexagonal head of the half coupling. Tighten the lockwire and twist it.
6. Remove the bleed screw plug (2) from the bleed screw (1) (reference Figure 32–44–01).
7. Connect a vinyl hose to the bleed screw and put other end in a container.
8. Slowly loosen the bleed screw to release hydraulic residual pressure from the brake.
9. Tighten the bleed screw, disconnect the vinyl hose and install the bleed screw plug on the bleed screw.
10. Remove warning tag.
11. Pressurize the yellow hydraulic system and then the hydraulic line associated to deactivated alternate brake and check for leakage with related pedals fully pushed.

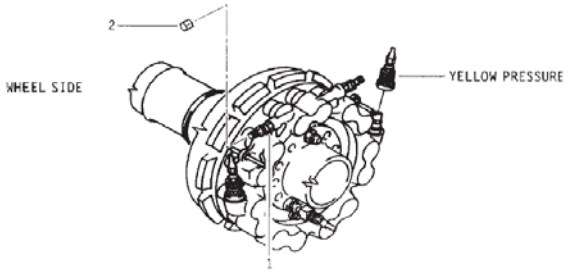

Figure 32–44–01 Yellow Brake System Disconnect

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
32-44-02A	ACCU PRESS Indicator (Accumulator) (For A319/A320 Aircraft)	**Y**	1	0	**C**	**(M)** May be inoperative provided: a) Both brake pressure indicators operate normally, and b) Pressure on both brake pressure indicators is verified with parking brake on.
32-44-02B	ACC PRESS Indicator (Accumulator) (A321)	**Y**	1	0	**C**	**(M)** May be inoperative provided: a) Both brake pressure indicators operate normally, and b) Pressure on both brake pressure indicators is verified with parking brake on.
32-44-02C	ACCU PRESS Indicator (Accumulator) (A321)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) ACCU PRESS/ACCU ONLY indication is available on ECAM WHEEL page, and b) Hydraulic pressure of the brake accumulator is checked on ECAM PRIOR TO EACH DEPARTURE. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-44-02A	Adjacent To ACCU–PRESS/BRAKES gauge	ACCUMULATOR PRESS INDICATOR INOP
32-44-02B	Adjacent To ACCU–PRESS/BRAKES gauge	ACCUMULATOR PRESS INDICATOR INOP
32-44-02C	Adjacent To ACCU–PRESS/BRAKES gauge	ACCUMULATOR PRESS INDICATOR INOP

(O) PROCEDURES

32-44-02C

1. Place the YELLOW ENG 2 PUMP pb-sw to the OFF position.
2. Place the YELLOW ELEC PUMP pb-sw to the OFF position.
3. Move a side stick in the pitch and roll until the yellow system pressure indication on the HYD SD page indicates 0.
4. Place the PARK BRK handle to the ON position.
5. On both BRAKES pressure indicators, check that the BRAKES indication is in the upper part of the white zone (around 2,500 PSI). If required use the electric pump on the hydraulic system to recharge the brake accumulators.

WARNING Yellow and green systems are pressurized from the yellow electric pump. Get ground crew clearance before using the electric pump.

6. Restore aircraft to normal configuration.

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(M) PROCEDURES

32-44-02A, 32-44-02B

1. Place the YELLOW ENG 2 PUMP pb-sw to the OFF position.
2. Place the YELLOW ELEC PUMP pb-sw to the OFF position.
3. Move a side stick in the pitch and roll until the yellow system pressure indication on the HYD SD page indicates 0.
4. Place the PARK BRK handle to the ON position.
5. On both BRAKES pressure indicators, check that the BRAKES indication is in the upper part of the white zone (around 2,500 PSI). If required use the electric pump on the hydraulic system to recharge the brake accumulators.

WARNING	Yellow and green systems are pressurized from the yellow electric pump. Get ground crew clearance before using the electric pump.

6. Restore aircraft to normal configuration.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-44-03	BRAKES Pressure Indicators	**N**	2	1	**C**	**(M)(O)** One may be inoperative provided both BSCU channels/systems operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-44-03	Adjacent To ACCU–PRESS/BRAKES Gauge	___ BRAKE PRESS INDICATOR INOP

(O) PROCEDURES

Check ECAM status page to verify that neither BRAKES SYS 1 (2) appear under INOP SYS.

(M) PROCEDURES

1. Assure that all hydraulic systems are depressurized.
2. Assure that the brake accumulator is pressurized.

   NOTE: If the alternate brake accumulator is depleted, it will be necessary to pressurize the yellow hydraulic system momentarily prior to this check.
3. Establish contact with ground observer.
4. Place PARKING BRK to OFF.
5. Step on both brake pedals.
6. Have the ground observer check that the wear indicators on associated brake(s) retract.
7. Release Pressure on brake pedals.
8. Have ground observer check that the wear indicators on associated brake(s) extend.
9. Place Parking Brake to ON.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-45-02	Parking Brake External Light	**Y**	1	0	**C**	**(O)** May be inoperative provided parking brake status is verified before moving aircraft.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-45-02	Adjacent To Parking Brake Handle	PARKING BRAKE EXTERNAL LIGHT INOP

(O) PROCEDURES

Ensure parking brake is off before pushback or taxi.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-47-01	Brake Temperature Monitoring Unit **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(M)(O)** May be inoperative provided brake ground cooling time is applied.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-47-01	Adjacent To ECAM Display	___ BRAKE TEMPERATURE MONITORING UNIT INOP

(O) PROCEDURES

Determine the minimum quick turn around time from the table found in MEL item 32-60-03H (O) procedure.

(M) PROCEDURES

On C/B panel 121VU: pull and secure circuit breaker HYDRAULIC/BRK/TEMP/DET/UNIT location M37.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-48-01	Brake Fan System (A321)	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-48-01	Adjacent To ECAM Display	BRAKE FAN SYSTEM INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-48-02	BRAKE FAN HOT Light (A321)	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-48-02	Adjacent To Brake Fan Hot Light	BRAKE FAN HOT LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-48-03	BRK FAN ON Light (A321)	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-48-03	Adjacent To Brake Fan On Light	BRAKE FAN ON LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-51-02	PEDALS DISC pb	**Y**	2	0	**C**	**(O)** May be inoperative in the released position (No disconnection possible and NWS still available by rudder pedals).

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-51-02	On Affected Pedal Steering Disconnect Pushbutton	___ PEDAL DISCONNECT PUSHBUTTON INOP

(O) PROCEDURES

Accomplish the rudder check portion of the before takeoff flight control check with the aircraft stopped.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-51-03A	Nose Wheel Steering Control system Deactivation Device (Failed In No-Towing Mode)	**Y**	1	0	**C**	**(O)** May be inoperative (no towing mode when lever in TOWING position).
32-51-03B	Nose Wheel Steering Control system Deactivation Device (Failed In Towing Mode)	**N**	1	0	**C**	**(M)(O)** May be inoperative provided the NWS electrical deactivation box is deactivated.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-51-03A	Adjacent To ECAM Display	NOSE WHEEL STEERING CONTROL SYSTEM DEACTIVATION DEVICE INOP
32-51-03B	Adjacent To ECAM Display	NOSE WHEEL STEERING CONTROL SYSTEM DEACTIVATION DEVICE INOP

(O) PROCEDURES

32-51-03A

1. Before pushback: A/SKID and NOSE WHEEL – OFF.
2. After pushback: A/SKID and NOSE WHEEL – ON.

32-51-03B

1. Before pushback: A/SKID and NOSE WHEEL – OFF.
2. After pushback: A/SKID and NOSE WHEEL – ON.
3. Nose gear parking brake light will be inoperative.

(M) PROCEDURES

32-51-03B

WARNING: MAKE SURE THAT THE GROUND SAFETY–LOCKS ARE IN POSITION ON THE LANDING GEAR.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE CONTROLS AGREE WITH THE POSITION OF THE ITEMS THEY OPERATE BEFORE YOU PRESSURIZE A HYDRAULIC SYSTEM.

WARNING: PRESSURIZE ONLY THE HYDRAULIC SYSTEM(S) THAT IS (ARE) NECESSARY FOR THE TASK. ISOLATE THE OTHER HYDRAULIC SYSTEM(S) BEFORE YOU SUPPLY HYDRAULIC POWER TO THE AIRCRAFT.

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1. On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS2/SPLY location M36.
2. On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS2/CTL location M35.
3. On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS1/CTL location M34.
4. On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS1/IND AND/SPLY location M33.
5. Display warning notice on panel 400VU to tell person(s) to not operate the nose landing gear.
6. On the center pedestal in the flight deck make sure that the free–fall control handle of the landing gear is in the normal position.
7. To deactivate the Nose Wheel Steering Deactivation Electrical Box (5GC), accomplish the following:
   a) On the nose wheel steering deactivation box (1), set the lever to the non–towing (engaged) position.
   b) Disconnect the electrical connector (2) from the nose wheel steering deactivation electrical box (1).
   c) Put a blanking cap on the disconnected electrical connector (2).
   d) Secure the connector with blanking cap installed to the nearest structure with tie wraps or safety wire.
8. Remove tags and close the following circuit breakers:
   a) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS2/SPLY location M36.
   b) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS2/CTL location M35.
   c) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS1/CTL location M34.
   d) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS1/IND AND/SPLY location M33.
9. System Consequences and Effects
   a) There is no electrical supply at the nose wheel steering deactivation electrical box therefore:
      1) The parking brake light does not operate
      2) Person(s) will have to communicate to confirm parking break operation during towing operations
10. Remove warning notice from flight deck.

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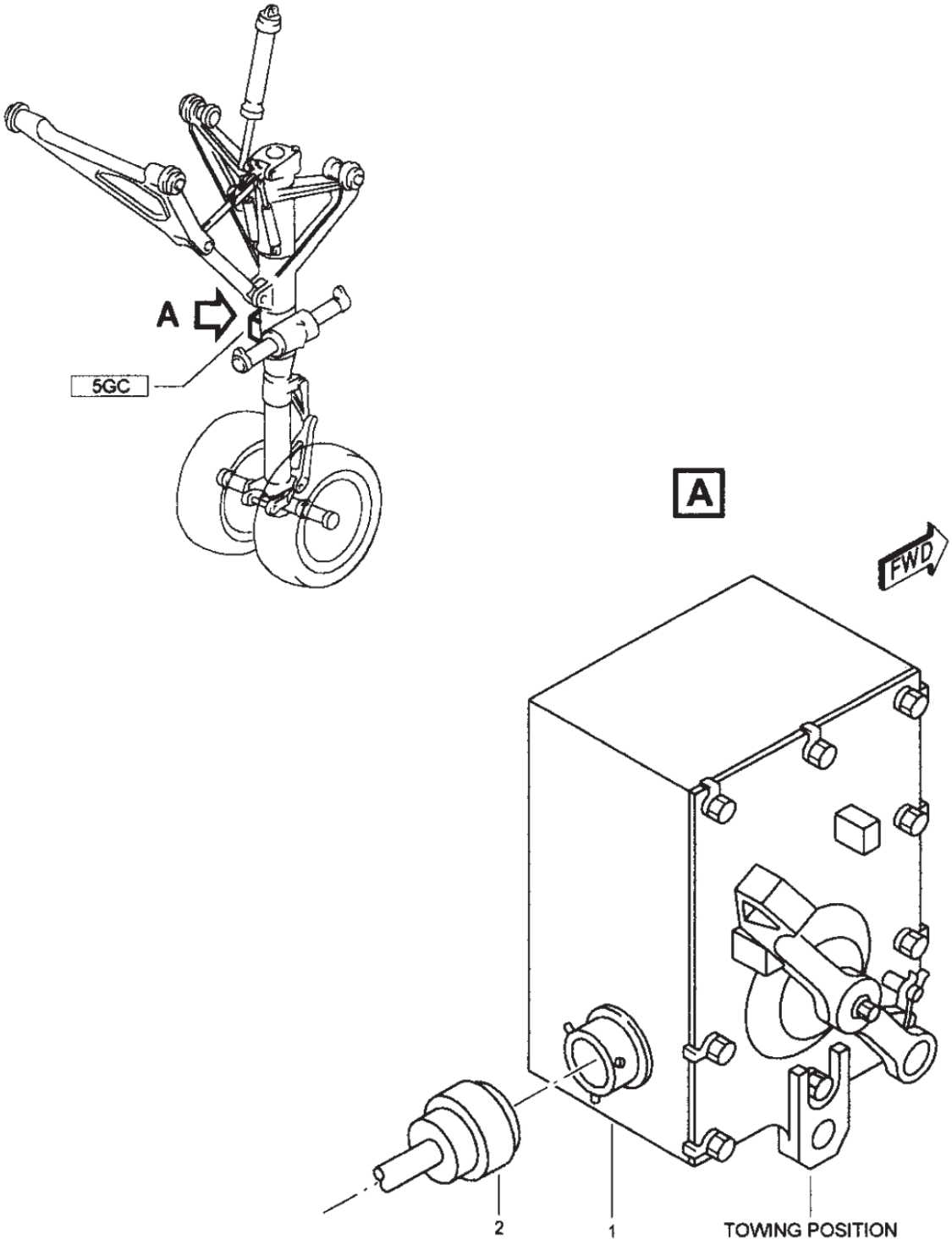

Figure 32–51–03B

Nose Wheel Steering Deactivation Electrical Box

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-60-01	LDG Gear Indicator Panel (UNLK and/or Down & Locked Triangle Indications) **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided: a) Both landing gear position indications (on ECAM wheel page) for all three landing gear operate normally, and b) Upper and lower ECAM display units operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-60-01	On 402VU LDG GEAR Panel	LDG GEAR INDICATION PANEL INOP

(O) PROCEDURES

During aircraft operation – Use ECAM Wheel Page to determine landing gear position.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
GEAR NOT DOWN INDICATION					
32-60-02 Red DOWN Arrow Light **"DISP.APPR.REQ'D"**	**N**	1	0	**B**	**(M)** May be inoperative provided GEAR NOT DOWN caution on ECAM operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-60-02	On 402VU LDG GEAR Panel	___ GEAR DOWN ARROW LIGHT INOP

(M) PROCEDURES

WARNING: MAKE SURE THAT THE GROUND SAFETY LOCKS ARE ON THE LANDING GEAR.

1. Check of the ECAM Landing Gear not down warning.
   a) Energize the aircraft electrical circuits.
   b) Select the YELLOW ELEC PUMP to the ON position.
      NOTE: PTU may be selected OFF to avoid pressurization of the green hydraulic system.
   c) Select FLAP 3 or FULL.
   d) On C/B panel 49VU: pull and tag circuit breaker ANTI ICE/PROBES/PITOT/1 location D02.
   e) On C/B panel 49VU: pull and tag circuit breaker ANTI ICE/PROBES/AOA/1 location D04.
   f) On C/B panel 122VU: pull and tag circuit breaker HYDRAULIC/LGCIU/SYS2 location Q35.
   g) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/1/TAT location Z12.
   h) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/2/TAT location Y15.
   i) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/2/PITOT location Y14.
   j) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/3/PITOT location Z16.
   k) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/2/AOA location Y13.
   l) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/3/AOA location Z15.
   m) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/1/STATIC location Z13.
   n) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/2/STATIC location Y11.
   o) On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/PROBES/3/STATIC location Z14.
   p) Make sure the ENG MASTER 1 and MASTER 2 levers are in the OFF position.
   q) On the panel 50 VU, select ON the FADEC 1 or 2 GND PW.
   r) On the center pedestal, put the throttle levers in the idle position.
   s) On the MCDU, get access to the L/G page.
   t) Do the following test:

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ACTION	RESULT
On the MCDU: • Push (in) the LGCIU 1 P/B SW	On the MCDU: • The LGCIU1 menu shows
• Push (in) the NEXT PAGE P/B SW.	• The LGCIU1 Page 2 menu shows.
• Push (in) the LANDING GEAR SIMULATION P/B SW.	• The LANDING GEAR SIMULATION page shows.
• Push (in) the NOSE+LH+RH P/B SW.	• The NOSE+LH+RH page menu shows.
• Push (in) the UPLOCKED P/B SW	• The UPLOCKED “<” goes off. On the ECAM lower DU: • The WHEELS page shows the wheels UP position and L/G CTL in amber. NOTE: The amber crosses will stay on screen because the #2 LGCIU circuit breaker is open. On 402 VU: • The UNLK (red) indicator lights show. On the ECAM upper DU: • The L/G GEAR NOT DOWN display comes into view and after 30 seconds, L/G GEAR NOT DOWNLOCKED shows. On the panels 130 VU and 131 VU • The MASTER WARN lights flash. • You can hear the warning chime.
On the ECAM CP: • Push (in) the EMER CANC P/B SW	• The warning chime stops. On the panels 130 VU and 131 VU • The MASTER WARN lights go off On the 402 VU: • The UNLK (red) indicator stay on.
On the MCDU: • Push (in) the Downlocked P/B SW.	On the ECAM upper DU: • The L/G GEAR NOT DOWN and L/G GEAR NOT DOWNLOCKED display goes out of view. • The UNLK (red) indicator lights go out and the LKD (green) indicator lights come on. • On the ECAM lower DU: • The WHEELS page shows the wheels DOWN position. NOTE: The amber crosses will stay on screen because the #2 LGCIU circuit breaker is open.
On the MCDU: • Push (in) the RETURN P/B SW until the CFDS menu page shows. • Push in the MCDU MENU P/B SW	• The warning chime stops.

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u) On C/B panel 49VU: remove tag and close circuit breaker ANTI ICE/PROBES/PITOT/1 location D02.

v) On C/B panel 49VU: remove tag and close circuit breaker ANTI ICE/PROBES/AOA/1 location D04.

w) On C/B panel 122VU: remove tag and close circuit breaker HYDRAULIC/LGCIU/SYS2 location Q35.

x) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/1/TAT location Z12.

y) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/2/TAT location Y15.

z) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/2/PITOT location Y14.

aa) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/3/PITOT location Z16.

bb) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/2/AOA location Y13.

cc) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/3/AOA location Z15.

dd) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/1/STATIC location Z13.

ee) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/2/STATIC location Y11.

ff) On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/PROBES/3/STATIC location Z14.

gg) Restore aircraft to required configuration

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER INSTALLED	NUMBER REQUIRED FOR DISPATCH	REPAIR CATEGORY	REMARKS OR EXCEPTIONS
	ECAM WHEEL PAGE INDICATIONS					
32-60-03A	UP LOCK	Y	3	0	C	May be inoperative.
32-60-03B	L/G Doors **"DISP.APPR.REQ'D"**	Y	3	0	C	**(O)** May be inoperative provided MAX SPEED is limited to 250 KIAS/M .60.
32-60-03C	L/G CTL	Y	1	0	C	May be inoperative.
32-60-03D	REL	Y	4	0	C	May be inoperative.
32-60-03E	ANTI SKID / ANTI SKID [1,2]	N	-	0	C	**(M)** May be inoperative provided anti–skid system operates normally.
32-60-03F	AUTO BRK	Y	1	0	C	**(O)** May be inoperative provided Auto Brake Mode Lights operate normally.
32-60-03G	AUTO BRK **"DISP.APPR.REQ'D"**	Y	1	0	C	**(O)** May be inoperative provided AUTO/BRK Function is not used. CAT III Not Authorized KJAC (Jackson Hole Airport) operations Authorized on dry runways only.
32-60-03H	Brakes Temperatures **"DISP.APPR.REQ'D"**	N	4	0	C	**(M)(O)** May be inoperative provided ground brake cooling time is applied.
32-60-03I	L/G Position	Y	6	3	C	May be inoperative provided gear position indications are available on landing gear indicator panel.
32-60-03J	[Y] N/W STEERING (For A321 Aircraft)	Y	2	0	C	May be inoperative.
32-60-03K	[G] NORM BRK (For A321 Aircraft)	Y	2	0	C	May be inoperative.
32-60-03L	[Y] ALTN BRK (For A321 Aircraft)	Y	2	0	C	May be inoperative.
32-60-03M	ACCU PRESS/ACCU ONLY (For A321 Aircraft)	Y	1	0	C	May be inoperative.

Continued Next Page

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-60-03A	Adjacent To ECAM Display	ECAM ___ WHEEL PAGE UPLOCK INDICATION(S) INOP
32-60-03B	Adjacent To ECAM Display	ECAM WHEEL PAGE ___ L/G DOOR INDICATION(S) INOP
32-60-03C	Adjacent To ECAM Display	ECAM WHEEL PAGE L/G CTL INDICATION INOP
32-60-03D	Adjacent To ECAM Display	ECAM WHEEL PAGE ___ RELEASE INDICATION INOP
32-60-03E	Adjacent To ECAM Display	ECAM WHEEL PAGE ANTI SKID INDICATION INOP
32-60-03F	Adjacent To ECAM Display	ECAM WHEEL PAGE AUTO BRK INDICATION INOP
32-60-03G	Adjacent To ECAM Display	ECAM WHEEL PAGE AUTO BRK INDICATION INOP
32-60-03H	Adjacent To ECAM Display	ECAM WHEEL PAGE BRK TEMP INDICATION INOP AND DEACTIVATED
32-60-03I	Adjacent To ECAM Display	ECAM WHEEL PAGE ___ L/G POSITION INDICATION INOP
32-60-03J	Adjacent To ECAM Display	ECAM WHEEL PAGE ____ [Y] N/W/STEERING INDICATION INOP
32-60-03K	Adjacent To ECAM Display	ECAM WHEEL PAGE ____ NORM BRK INDICATION INOP
32-60-03L	Adjacent To ECAM Display	ECAM WHEEL PAGE ____ ALTN BRK INDICATION INOP
32-60-03M	Adjacent To ECAM Display	ECAM WHEEL PAGE ACCU PRESS/ACCU ONLY INDICATION INOP

(O) PROCEDURES

32-60-03B

MAX SPEED – 250 KIAS/ M .60.

32-60-03F

1. Place ANN LT switch to the TEST positon.
2. Check that all lights on the Auto Brake Mode panel illuminate.

32-60-03G

Do not select or use the AUTO/BRK function.

NOTE: When T.O MEMO is displayed on ECAM E/WD, disregard the line: AUTO BRK.....MAX (blue).

Continued Next Page

32-60-03H

1. In case of false BRAKE HOT caution: After engine start clear the brakes hot caution by depressing the EMER CANC pb.

   NOTE: In case of erroneous triggering of the ECAM caution BRAKES HOT due to a faulty BTMU or a faulty BSCU, after having performed the TO CONFIG TEST, the T.O. MEMO display line will not be replaced by the line “TO CONFIG NORMAL” and will remain displayed. Consider normal configuration for TO provided no warning presented during TO CONFIG TEST.

CAUTION: The TO CONFIG TEST pb must be pressed while checking no warning presented.

2. Determine the minimum quick turn around time from the table on the following page.

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NORMAL QUICK TURNAROUND CHART

GROSS WEIGHT (1000 LBS)	AIRPORT ALTITUDE (FT)	REQUIRED COOLING TIME (minutes) OAT (Degree C)					
		0	10	20	30	40	50
142	MSL	14	19	23	27	60	62
	2000'	14	19	23	57	60	62
	4000'	14	51	54	57	60	62
	6000'	48	51	54	57	60	62
	8000'	48	51	54	57	60	62
135	MSL	14	19	23	27	31	35
	2000'	14	19	23	27	31	35
	4000'	14	19	23	57	60	62
	6000'	14	19	54	57	60	62
	8000'	48	51	54	57	60	62
130	MSL	14	19	23	27	31	35
	2000'	14	19	23	27	31	35
	4000'	14	19	23	27	31	35
	6000'	14	19	54	57	60	62
	8000'	14	51	54	57	60	62
125	MSL	14	19	23	27	31	35
	2000'	14	19	23	27	31	35
	4000'	14	19	23	27	31	35
	6000'	14	19	23	27	31	62
	8000'	14	19	23	27	31	62
120	MSL	14	19	23	27	31	35
	2000'	14	19	23	27	31	35
	4000'	14	19	23	27	31	35
	6000'	14	19	23	27	31	35
	8000'	14	19	23	27	31	62
115	MSL	14	19	23	27	31	35
	2000'	14	19	23	27	31	35
	4000'	14	19	23	27	31	35
	6000'	14	19	23	27	31	35
	8000'	14	19	23	27	31	35
110	MSL	14	19	23	27	31	35
	2000'	14	19	23	27	31	35
	4000'	14	19	23	27	31	35
	6000'	14	19	23	27	31	35
	8000'	14	19	23	27	31	35
105	MSL	0	0	23	27	31	35
	2000'	0	19	23	27	31	35
	4000'	14	19	23	27	31	35
	6000'	14	19	23	27	31	35
	8000'	14	19	23	27	31	35

Use this chart to determine the brake cooling time required following a normal landing when MEL 32–60–3H ECAM Brake Temp Indication is inoperative.

Enter chart with landing weight and destination airport elevation and OAT. Read the required cooling time in minutes prior to subsequent takeoff.

NOTE: In case of dispatch with one brake inoperative (MEL 32–42–01 or 32–42–02), the brake energy accumulated is increased by 34%.

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(M) PROCEDURES

32-60-03E

1. On panel 400VU, make sure that landing gear normal control lever 6GA is set to down. Put a warning notice on this lever to tell persons not to move it.
2. Verify that the following circuit breakers are closed:
   a) On C/B panel 121VU: verify that circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS2/SPLY location M36 is closed.
   b) On C/B panel 121VU: verify that circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS2/CTL location M35 is closed.
   c) On C/B panel 121VU: verify that circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS1/CTL location M34 is closed.
   d) On C/B panel 121VU: verify that circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS1/IND AND/SPLY location M33 is closed.
3. Energize the aircraft electrical circuits.
4. On the panel 402VU, make sure that the A/SKID & NOSE WHEEL switch is set to ON.
5. Do this test:
   a) On the center pedestal, on the MCDU, push the MCDU MENU mode key.
   b) Select the line keys adjacent to the following in sequence:
   c) CFDS (CFDS page will appear).
   d) System report test (system report test page will appear).
   e) L/G (landing gear page will appear).
   f) BSCU 1 (BSCU #1 page will appear).
   g) TEST (self test is initiated).

      NOTE: The test sequence is automatic, it continues for 45 seconds. During the test, the MCDU shows ”WAIT FOR SYSTEM RESPONSE” on the bottom of the screen. Test must be OK.

   h) RETURN (landing gear page will appear).
   i) BSCU 2 (BSCU #2 page will appear).
   j) TEST (self test is initiated).

      NOTE: The test sequence is automatic, it continues for 45 seconds. During the test, the MCDU shows “WAIT FOR SYSTEM RESPONSE” on the bottom of the screen. Test must be OK.

Continued Next Page

32-60-03H

1. Pull, collar and tag the following circuit breakers:
   a) On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/BRK/TEMP/DET/UNIT location M37.
   b) On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS2/SPLY location M36.
2. On the affected brake, disconnect the connector from the temperature sensor.
3. Put a blanking cap on both connectors.
4. Clean the electrical connector of the brake temperature sensor. Apply two or three turns of 3/4 to 1 inch wide self adhesive tape around the electrical connector.
5. Tightly wind two or three turns of lockwire around the tape on the electrical connector.
6. Twist the lockwire. Put it through the nearest locking hole.

   NOTE: Make sure that the lockwire cannot rub when the landing gear operates.
7. Remove tag and collar and close circuit breakers:
   a) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/BRK/TEMP/DET/UNIT location M37.
   b) On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/BRAKING AND STEERING/SYS2/SPLY location M36.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
32-60-04A	Faults Indicated by BRAKES N/WS MINOR FAULT Caution on ECAM E/WD (A321)	**Y**	-	-	**B**	May be displayed provided BSCU system 1 and system 2 operate normally.
32-60-04B	Faults Indicated by BRAKES N/WS MINOR FAULT Caution on ECAM E/WD (A321)	**N**	-	-	**B**	**(M)(O)** May be displayed provided: a) BRAKES pressure indicators operate normally, b) Alternate braking system is checked operative PRIOR TO THE FIRST FLIGHT OF THE DAY (log book entry required), c) It is checked PRIOR TO EACH DEPARTURE that the following CFDS failure message related to BRAKES N/WS MINOR FAULT is not displayed: • A fault on an Alternate Pressure Transducer, or • A fault on a Normal Pressure Transducer. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
32-60-04A	Adjacent To ECAM Display	BRAKES N/WS MINOR FAULT DISPLAYED ON ECAM
32-60-04B	Adjacent To ECAM Display	BRAKES N/WS MINOR FAULT DISPLAYED ON ECAM

Continued Next Page

(O) PROCEDURES

32-60-04B

1. The ACCU PRESS indication must be in the green band.
    a. If ACCU PRESS indication is not in the green band:
        i. Y ELEC PUMP pb-sw ON until pressure is in the green band then OFF
2. CHOCKS – Check in place.
3. PARKING BRAKE handle – OFF
4. PARKING PEDALS – PRESS
    a. Apply maximum pressure on both pedals
5. BRAKE PRESSURE (on BRAKES pressure indicators) – CHECK
    a. Pressure must increase without delay symmetrically on left and right sides for the same application simultaneously applied on left and right pedals. With full pedal deflection, the pressure must be between 900 PSI and 1 100 PSI.
6. BRAKES PEDALS – RELEASE
    a. Check that no residual pressure in the brakes remains.
7. PARKING BRAKE handle – ON

(M) PROCEDURES

32-60-04B

PRIOR TO THE FIRST FLIGHT OF THE DAY

1. Perform AMM Task 32-46-00-040-001.

PRIOR TO EACH DEPARTURE

2. Check the BSCU LAST LEG REPORT:
    a. On The BSCU CHAN 1(2) page select the line select key adjacent to the LAST LEG REPORT.
    b. Make sure the following CFDS faults are not displayed:
        i. BRK ALTN PRESS TRANSDUCER
        ii. ABCU/BRK NORM SEL VALVE XDCR

INTENTIONALLY LEFT BLANK

ATA 33 Contents

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ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
33-10-01A	Cockpit and Instrument Panel Lighting System (A319/A320 Aircraft)	Y	-	-	C	Individual lights may be inoperative provided: a) Remaining lights are sufficient to clearly illuminate all required instruments, controls, and other devices for which they are provided, b) Remaining lights are positioned so that direct rays are shielded from flight crewmembers eyes, c) Lighting configuration and intensity is acceptable to the flight crew, d) RH dome light is operative, and e) The left section of the center main panel flood light operates normally. NOTE 1: RH Dome light is considered operative with a minimum of three bulbs illuminated in each assembly. The bulbs can be checked by selecting the DOME toggle switch from DIM to BRT and ensure both functions operate. NOTE 2: Individual buttons/switch lights and/or annunciations and indications are excluded from this relief.
33-10-01B	Cockpit and Instrument Panel Lighting System (A321 Aircraft)	Y	-	-	C	Individual lights may be inoperative provided: a) Remaining lights are sufficient to clearly illuminate all required instruments, controls, and other devices for which they are provided, b) Remaining lights are positioned so that direct rays are shielded from flight crewmembers eyes, c) Lighting configuration and intensity is acceptable to the flight crew, and d) RH dome light is operative. NOTE 1: RH Dome light is considered operative with a minimum of three bulbs illuminated in each assembly. The bulbs can be checked by selecting the DOME toggle switch from DIM to BRT and ensure both functions operate. NOTE 2: Individual buttons/switch lights and/or annunciations and indications are excluded from this relief.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-10-01A	Adjacent To Affected Cockpit Lighting Panel(s)	___ COCKPIT LIGHT(S) IS INOP
33-10-01B	Adjacent To Affected Cockpit Lighting Panel(s)	___ COCKPIT LIGHT(S) IS INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ANNUNCIATOR LIGHTS					
33-10-02A	Test Function **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	May be inoperative.
33-10-02B	Dim Function **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative for day operations only.
33-10-02C	Bright Function **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative: a) For night operations, and b) Day operations are not conducted. NOTE: Aircraft is Not Authorized to operate during daylight hours.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-10-02A	Adjacent To ANN LT Switch On Overhead INT LT Panel	ANN LT TEST FUNCTION INOP
33-10-02B	Adjacent To ANN LT Switch On Overhead INT LT Panel	ANN LT DIM FUNCTION INOP
33-10-02C	Adjacent To ANN LT Switch On Overhead INT LT Panel	ANN LT BRIGHT FUNCTION INOP

(O) PROCEDURES

33-10-02B

Limit aircraft to day operations only.

33-10-02C

Day operations–Not Authorized.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-20-01A	Cabin Light System	**Y**	-	-	**C**	**(O)** Individual lights may be inoperative provided remaining lighting is sufficient for cabin attendants to perform their duties. NOTE: POD Lighting is not considered part of the cabin illumination lighting system. Use NEF 33-24-09 for POD Lighting deferrals.
33-20-01B	Flight Deck Door Security Lighting System	**Y**	1	0	**B**	**(O)** May be inoperative provided alternate procedures are used to visually observe personnel requesting flight deck entry.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-20-01A	Adjacent To Affected Light Switch On FWD FLT Attendants panel	___ CABIN LIGHT(S) IS INOP
33-20-01B	Adjacent To Flight Deck Door Security Lighting System Light Switch	FLIGHT DECK DOOR SECURITY LIGHTING SYSTEM INOP

(O) PROCEDURES

33-20-01A

Ensure remaining lights are sufficient for cabin attendants to perform their duties.

33-20-01B

Captain to brief Lead Flight Attendant/Purser to utilize a flashlight to illuminate the area outside the flight deck door to allow visual verification.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
33-20-02A	Passenger Lighted Information Signs (Inoperative PA) **"DISP.APPR.REQ'D"**	**N**	-	-	**C**	**(M)(O)** May be inoperative provided: a) Associated passenger seat or lavatory is not occupied from which a passenger lighted information sign is not readily legible, b) The passenger seat or lavatory is blocked and placarded UNSERVICEABLE – DO NOT USE, c) If placarded, lavatory is used only by crewmembers, and d) A minimum of two lavatories must operate normally. NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers. Ensure lavatory door is locked closed after crewmember inspection.
33-20-02B	Passenger Lighted Information Signs (Operative PA)	**Y**	-	-	**C**	**(O)** May be inoperative and associated passenger seat or lavatory may be occupied provided: a) PA system operates normally, and b) PA system is used to notify passengers and cabin crew when associated sign(s) are placed on or off.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-20-02A	Adjacent To No Smoking And Fasten Seat Belt Sign Switches On Overhead SIGN Panel	___ PASSENGER LIGHTED INFORMATION SIGN(S) IS INOP ___ PASSENGER SEATS AND/OR LAVATORY ARE BLOCKED
33-20-02B	Adjacent To No Smoking And Fasten Seat Belt Sign Switches On Overhead SIGN Panel	___ PASSENGER LIGHTED INFORMATION SIGN(S) IS INOP

Continued Next Page

(O) PROCEDURES

33-20-02A

1. Captain to brief Lead Flight Attendant/Purser on the following applicable items:
   a) Which passenger seat(s) is blocked.
   b) If a lavatory is blocked, that the affected lavatory door is to remain locked and not entered except for use or inspection by crewmembers.
2. Captain is to ensure the lavatory door is locked closed if crewmember inspection has been performed or if the lavatory is used by a crewmember.

33-20-02B

1. Ensure that PA system operates normally and can be heard through out cabin during flight.
2. Captain is to brief the Lead Flight Attendant/ Purser to use PA system to alert the passengers.

(M) PROCEDURES

33-20-02A

1. A strip of Red Colored OM2, UNSERVICEABLE – DO NOT USE tape (or equivalent*) must be used to block access to unusable seats or lavatories prior to boarding passengers.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE–DO NOT USE” printed legibly in one inch black letters.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-20-04	Passenger Lighted Information Signs AUTO Function	**Y**	1	0	**C**	**(O)** May be inoperative provided Manual function operates normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-20-04	Adjacent To No Smoking And Fasten Seat Belt Sign Switches On Overhead SIGN Panel	PASSENGER LIGHTED INFORMATION SIGNS AUTO FUNCTION IS INOP

(O) PROCEDURES

Utilize manual function during the appropriate phases of flight.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-30-01	Cargo and Service Compartment Lighting System	**Y**	1	0	**D**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-30-01	Adjacent To Affected Cargo Or Service Compartment Light Switch(s)	___ CARGO OR SERVICE COMPARTMENT LIGHT(S) ARE INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	NAVIGATION LIGHTS SYSTEM					
33-40-01A	Aircraft Equipped with One Navigation Light System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative for day operations only. NOTE 1: Applies to FWD Nav Light regardless of which type of assembly (Goodrich or Honeywell) is installed. NOTE 2: Applies to aircraft with a single navigation light system with a Tail Light assembly that has no bulbs illuminated.
33-40-01B	Aircraft Equipped with Two Navigation Light Systems	**Y**	2	1	**C**	NAV 1 or NAV 2 system may be inoperative. NOTE: Applies to FWD Nav Light regardless of which type of assembly (Goodrich or Honeywell) is installed.
33-40-01C	Aircraft Equipped with Two Navigation Light Systems **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative for day operations. NOTE 1: Applies to FWD Nav Light regardless of which type of assembly (Goodrich or Honeywell) is installed. NOTE 2: Applies to aircraft with dual system with a Tail Light assembly that has both bulbs inoperative.
33-40-01D	Forward Navigational Light System LEDs	**Y**	-	-	**C**	One LED in each Nav light assembly may be inoperative. NOTE: Applies to FWD Nav Light regardless of which type of assembly (Goodrich or Honeywell) is installed.
33-40-01E	Tail Navigation Light Bulbs	**Y**	2	1	**C**	One bulb may be inoperative.

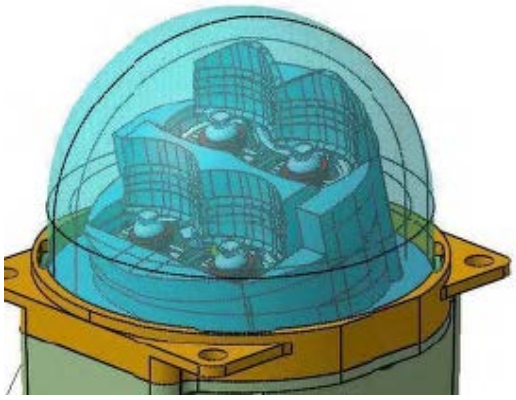
MEL ITEM	TAB LOCATION	PLACARD TEXT
33-40-01A	Adjacent To NAV Light Switch On Overhead EXT LT Panel	_____ NAV LIGHT SYSTEM INOP
33-40-01B	Adjacent To NAV Light Switch On Overhead EXT LT Panel	_____ NAV LIGHT SYSTEM INOP
33-40-01C	Adjacent To NAV Light Switch On Overhead EXT LT Panel	_____ NAV LIGHT SYSTEM INOP
33-40-01D	Adjacent To NAV Light Switch On Overhead EXT LT Panel	___ FWD NAV LIGHT LED(S) INOP
33-40-01E	Adjacent To NAV Light Switch On Overhead EXT LT Panel	TAIL NAV LIGHT HAS ONE BULB INOP

Continued Next Page

(O) PROCEDURES

33-40-01A, 33-40-01C

Limit aircraft to day operations only.



Goodrich light assembly

Figure 33-40-01-01

Honeywell light assembly

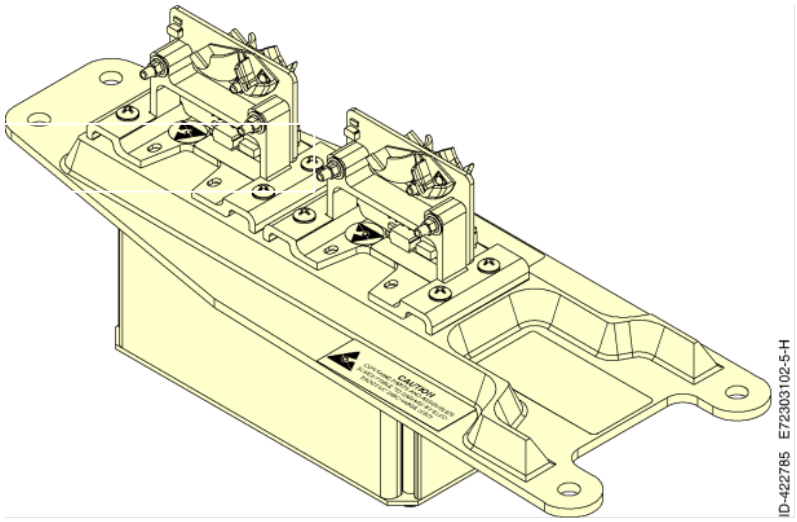


Figure 33-40-01-02

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	LANDING LIGHTS					
33-40-02A	Landing Lights	**Y**	2	1	**C**	One may be inoperative provided taxi and takeoff lights operate normally.
33-40-02B	Landing Lights **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative for day operations only.
33-40-02C	Extension / Retraction Systems - One Light Extended **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One may be inoperative in the extended position provided performance corrections are applied.
33-40-02D	Extension / Retraction Systems - Both Lights Extended **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** Both may be inoperative in the extended position provided performance corrections are applied.
33-40-02E	Extension / Retraction Systems - One Light Retracted	**Y**	2	1	**C**	One may be inoperative in the retracted position provided taxi and takeoff lights operate normally.
33-40-02F	Extension / Retraction Systems - Both Lights Retracted **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** Both may be inoperative in the retracted position for day operations.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-40-02A	Adjacent To Affected Landing Light Switch(s) On Overhead EXT LT Panel	___ LANDING LIGHT(S) INOP
33-40-02B	Adjacent To Affected Landing Light Switch(s) On Overhead EXT LT Panel	___ LANDING LIGHT(S) IS INOP
33-40-02C	Adjacent To Affected Landing Light Switch(s) On Overhead EXT LT Panel	___ LANDING LIGHT RETRACT SYSTEM INOP EXTENDED
33-40-02D	Adjacent To Affected Landing Light Switch(s) On Overhead EXT LT Panel	BOTH LANDING LIGHT RETRACT SYSTEM INOP EXTENDED
33-40-02E	Adjacent To Affected Landing Light Switch(s) On Overhead EXT LT Panel	___ LANDING LIGHT RETRACT SYSTEM INOP RETRACTED
33-40-02F	Adjacent To Affected Landing Light Switch(s) On Overhead EXT LT Panel	BOTH LANDING LIGHT RETRACT SYSTEMS INOP RETRACTED

Continued Next Page

(O) PROCEDURES

33-40-02B, 33-40-02F

Limit aircraft to day operations only.

33-40-02C

1. Verify that the AWABS contains MEL item 33–40–02C.

33-40-02C	**LANDING LIGHTS – EXTENSION / RETRACTION SYSTEMS – ONE LIGHT EXTENDED**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	Increase BLOCK FUEL by 1.0%.
NOTES	None
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** None **LANDING** None

33-40-02D

1. Verify that the AWABS contains MEL item 33–40–02D.

33-40-02D	**LANDING LIGHTS – EXTENSION / RETRACTION SYSTEMS – BOTH LIGHTS EXTENDED**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	Increase BLOCK FUEL by 2.0%.
NOTES	None
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** None **LANDING** None

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
33-40-03	Runway Turn- Off Light System	**Y**	2	0	**C**	May be inoperative. NOTE: Assemblies with LED's are considered inoperative if more than 2 LEDs are inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-40-03	Adjacent To RWY TURN OFF Light Switch On Overhead EXT LT Panel	___ RUNWAY TURN–OFF LIGHT SYSTEM(S) IS INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-40-04	Taxi and Takeoff Light System	**Y**	2	0	**C**	May be inoperative. NOTE: Assemblies with LED's are considered inoperative if more than 4 LEDs are inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-40-04	Adjacent To NOSE Light Switch On Overhead EXT LT Panel	___ TAXI AND/OR TAKEOFF LIGHT SYSTEM(S) IS INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-40-05	Logo Lights A/C 3101-3171 A/C 3212-3278 All A321 Aircraft	**Y**	2	0	**D**	May be inoperative. NOTE: Assemblies with LED's are considered inoperative if more than 5 LEDs are inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-40-05	Adjacent To NAV & LOGO Light Switch On The Overhead Panel	___ LOGO LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-40-06A	Anti-Collision Lights **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative for day operations only.
33-40-06B	Anti-Collision Lights	**Y**	2	0	**C**	May be inoperative for night operations provided wing/tail strobe lights operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-40-06A	Adjacent To BEACON Light Switch On Overhead EXT LT Panel	_____ANTI COLLISION LIGHTS IS INOP
33-40-06B	Adjacent To BEACON Light Switch On Overhead EXT LT Panel	_____ANTI COLLISION LIGHTS IS INOP

(O) PROCEDURES

33-40-06A

Limit aircraft to day operations only.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-40-07	Wing Scan Lights **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided when a pre–takeoff contamination check is necessary: a) Adequate lighting exists, OR b) A return to gate or de–icing site is accomplished. NOTE: Assemblies with LED's are considered inoperative if more than 2 LEDs are inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-40-07	Adjacent To WING Light Switch On Overhead EXT LT Panel	___ WING SCAN LIGHT(S) INOP

(O) PROCEDURES

1. When a pre–takeoff contamination check is necessary and lighting conditions are not adequate:
   - Return to gate or de–icing site.
2. Reference Operations Manual Volume I, Supplementary Procedures, Adverse Weather for Cold Weather Operation section for Exterior Inspection requirements.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-40-08	Wing/Tail Strobe Light System	**Y**	1	0	**C**	**(M)** May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-40-08	Adjacent To STROBE Switch On Overhead EXT LT Panel	STROBE LIGHT SYSTEM IS INOP

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

Pull and secure LIGHTING/WING/STROBE circuit breaker on panel 122VU, location V5 (FIN 10LV).

		NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH	
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	EXIT SIGNS					
33-50-01A	Wall Mounted Exit (Markings) Signs (Bulbs/LEDs)	**Y**	-	-	**C**	Up to three non-adjacent Bulbs or LEDs may be inoperative in individual signs.
33-50-01B	Main Aisle Overhead Exit (Location) Signs (LEDs ONLY)	**Y**	-	-	**C**	Up to three non-adjacent LEDs may be inoperative in individual signs. NOTE: For main aisle overhead Exit (Location) Signs with bulbs, all bulbs must be operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-50-01A	Adjacent To Affected Exit Marking Sign(s)	___ EXIT MARKING SIGN(S) INOP
33-50-01B	Adjacent To Affected Exit Location Sign(s)	___ EXIT LOCATION SIGN(S) INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-50-02A	Overhead Emergency Lights (A319 Aircraft Only)	**Y**	11	9	**C**	A maximum of two non–adjacent overhead emergency lights may be inoperative.
33-50-02B	Overhead Emergency Lights (A/C 3209-3250)	**Y**	14	11	**C**	A maximum of three non–adjacent overhead emergency lights may be inoperative.
33-50-02C	Overhead Emergency Lights (A/C 3251-3278)	**Y**	12	9	**C**	A maximum of three non–adjacent overhead emergency lights may be inoperative.
33-50-02D	Overhead Emergency Lights (A321)	**Y**	19	15	**C**	A maximum of four non-adjacent overhead emergency lights may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-50-02A	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel	___ OVERHEAD EMERGENCY LIGHT(S) IS INOP
33-50-02B	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel	___ OVERHEAD EMERGENCY LIGHT(S) INOP
33-50-02C	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel	___ OVERHEAD EMERGENCY LIGHT(S) INOP
33-50-02D	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel	___ OVERHEAD EMERGENCY LIGHT(S) INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-50-03A	Floor Proximity Emergency Escape Path Marking System A319 Aircraft (Except NBA Charter Configuration) with AA 2500-01771, and A320 with AA 2500-01772, and All A321 Aircraft	**Y**	1	1	**C**	Individual lights may be inoperative as indicated. a) Up to 50% of the bulbs in the cabin may be inoperative provided no two consecutive bulbs are inoperative, b) One of the two red bulbs at each overwing exit group may be inoperative, and c) One of the two white bulbs at each first class seat may be inoperative. NOTE 1: All interior Emergency Exit sign light covers must be installed. NOTE 2: LED EXIT Identifiers must operate normally.
33-50-03B	Floor Proximity Emergency Escape Path Marking System A319 Aircraft (Except NBA Charter Configuration) without AA 2500-01771, and A320 Ships A/C 3209-3250 without AA 2500-01772	**Y**	1	1	**C**	Individual lights may be inoperative as indicated. a) Up to 50% of the white bulbs on the Tourist seats may be inoperative provided no two consecutive bulbs are inoperative, b) One of the two white bulbs at each first class seat may be inoperative, c) One of the two red bulbs at each overwing exit group may be inoperative, and d) Floor proximity light covers must be installed on all operative lights. NOTE 1: All interior Emergency Exit sign light covers must be installed. NOTE 2: LED EXIT Identifiers must operate normally.
33-50-03C	Floor Proximity Emergency Escape Path Marking System A320 Ships 3251-3278 without AA 2500-01772	**Y**	1	1	**C**	Individual lights may be inoperative as indicated. a) Up to 50% of the white bulbs on the Tourist seats may be inoperative provided no two consecutive bulbs are inoperative, b) One of the two white bulbs at each first class seat may be inoperative, and c) Floor proximity light covers must be installed on all operative lights. NOTE 1: All interior Emergency Exit sign light covers must be installed. NOTE 2: LED EXIT Identifiers must operate normally.

Continued Next Page

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
33-50-03D	Floor Proximity Emergency Escape Path Marking System (NBA Charter Configuration)	**Y** 1	1	**C**	Individual lights may be inoperative as indicated. a) The forward–most and aft–most mounted lights and all partition mounted lights must be operative, NOTE 1: A seat/partition/wall mounted light with one inoperative LED/bulb is considered inoperative. b) The number of inoperative seat/partition/wall mounted lights does not exceed 10% of the installed total, c) There are no adjacent inoperative seat/partition/wall mounted lights, and d) Individual incandescent bulbs within incandescent exit identifiers may be inoperative provided a minimum of three lamps remain operative in each incandescent exit identifier. NOTE 2: All interior Emergency Exit sign light covers must be installed.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-50-03A	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel	___ FLOOR PROXIMITY LIGHTS ARE INOP
33-50-03B	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel	___ FLOOR PROXIMITY LIGHTS ARE INOP
33-50-03C	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel	___ FLOOR PROXIMITY LIGHTS ARE INOP
33-50-03D	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel	___ FLOOR PROXIMITY LIGHTS ARE INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	OVERWING ESCAPE ROUTE LIGHTING					
33-50-04A	Overwing Emergency Light **"DISP.APPR.REQ'D"**	**Y**	-	-	**C**	**(O)** May be inoperative for day operations only.
33-50-04B	Overwing Exit Handle Light **"DISP.APPR.REQ'D"**	**Y**	-	0	**B**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-50-04A	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel And Forward Flight Attendants Panel	___ OVERWING EMERGENCY LIGHT(S) IS INOP
33-50-04B	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel And Forward Flight Attendants Panel	___ OVERWING EXIT HANDLE LIGHT(S) IS INOP

(O) PROCEDURES

33-50-04A

Limit aircraft to day operations only.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-50-05	Escape Slide Lighting **"DISP.APPR.REQ'D"**	**Y**	-	0	**B**	**(O)** May be inoperative for day operations only.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-50-05	Adjacent To EMER EXIT LT Switch On Overhead SIGN Panel And Forward Flight Attendants Panel	___ ESCAPE SLIDE LIGHT(S) IS INOP

(O) PROCEDURES

Limit aircraft to day operations only.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-50-06	Lavatory Auxiliary Lights	**Y**	3	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-50-06	On Nearest Flight Attendants Panel	___ LAVATORY AUXILIARY LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-50-08	EMER EXIT LT OFF Light on SIGNS Overhead Panel **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-50-08	Adjacent To EMER EXIT LT OFF Light On Signs Overhead Panel	EMER EXIT LT OFF LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-51-12	BAT TEST pb on the PTP	**Y**	1	0	**C**	**(M)** May be inoperative provided that the batteries are verified correctly charged. NOTE: Battery tests required by the maintenance program cannot be exceeded.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-51-12	Adjacent To the BAT TEST pb on the PTP	BAT TEST PUSH BUTTON ON PTP INOP

(M) PROCEDURES

1. On the overhead panel 25VU make sure the EMER EXIT LT switch 4WL is in the OFF position.
2. On the overhead panel 25VU make sure the NO SMOKING switch 190RH is in the OFF position.
3. On the Forward Attendant Panel (FAP) 120RH, make sure the LIGHT EMER pushbutton switch and its integral light are off.
4. For the A319 and A320 aircraft perform the following:
    a) On the PTP 110RH, press the TEST EMER LIGHT/SYS membrane switch for not less than 3 seconds.
    b) On the PTP display 110RH:
        - The EMER SYSTEM ATA 33-51-36 TEST OK status comes on.
        - The SYS OK light goes off after approximately 60 seconds.

NOTE: If the SYS OK LED comes on, there are no limitations in the operation of the emergency light system (REF AMM 33-51-00-710-001).

5. For the A321 aircraft perform the following:
    a) In the cockpit on the MCDU :
        - Push the line select key CIDS 1 displaying the menu page.
        - Push the line select key SYSTEM TESTS displaying the tests on the menu page.
        - Push the line select key EPSU SYS TEST.
        - TEST IN PROGRESS shows for 60 seconds then TEST OK shows.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
33-70-01	ATTND ADVISORY Light System (Green Light)	**Y**	1	0	**C**	**(O)** May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
33-70-01	Adjacent To ATTND ADVISORY Light Switch	FLIGHT ATTND ADVISORY LIGHT INOP

(O) PROCEDURES

Captain to brief flight attendants on sterile flight deck procedures that must be observed in flight.

1. During climb–out, after passing 10,000 ft, notify Flight Attendants that sterile flight deck conditions are no longer in effect.
2. During descent, before passing 10,000 ft, notify Flight Attendants that sterile flight deck conditions are in effect.
3. Approximately one aircraft length from the gate: F/O should call “Flight Attendants, prepare for arrival.”

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NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY					
34-34-00A	Fault(s) Indicated by ADR	**Y**	-	-	**C**	NOTE: Dispatch with this MAINT STS message displayed on ECAM is permitted without CFDS interrogation.
34-34-00B	Fault(s) Indicated by IR	**Y**	-	-	**C**	NOTE: Dispatch with this MAINT STS message displayed on ECAM is permitted without CFDS interrogation.
34-34-00C	Fault(s) Indicated by RA 1 (2)	**Y**	-	-	**C**	NOTE: Dispatch with this MAINT STS message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-34-00A	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “ADR” DISPLAYED
34-34-00B	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “IR” DISPLAYED
34-34-00C	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “RA 1 (2)” DISPLAYED

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-00-00L LLM Category II/III Status **"DISP.APPR.REQ'D"** Administrative Control Item	**N**	-	-		**(M)** Aircraft restricted to CAT I due to AMT is non-AFQ authorized. Aircraft restricted from autopilot coupled Autoland. a) This Item Number is only used for deferring the Autoland status of the aircraft and MCC authorization is required prior to its usage or removal. <u>CAT II/III</u> Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-00-00L	Adjacent To Each PFD	AUTOLAND NOT AUTHORIZED

(M) PROCEDURES

1. Create a new log page in the aircraft logbook using the appropriate MEL Item Number (contact MCC for instructions).
2. The deferral code LLM must also be entered on the log page and the placard when deferring this item.
3. MCC authorization is required prior to its usage or removal.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-00-01	Autotune Systems	**Y**	2	1	**C**	One may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-00-01	Adjacent To ECAM Display	AUTOTUNE SYSTEM INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ADIRS					
34-10-01A	IR 1 (IR 1 NAV Mode) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** NAV Mode of IR 1 may be inoperative provided: a) NAV Mode of IR 2 and IR 3 are operative, and b) RNAV operations do not require IR 1 NAV Mode use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. NOTE: EGPWS TERR is inoperative. CAT II/III Not Authorized Theater Restrictions May Apply
34-10-01B	IR 1 (IR 1 NAV Mode) (A321) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** NAV Mode of IR 1 may be inoperative provided: a) NAV Mode of IR2 and NAV Mode of IR 3 are operative, b) RNAV operations do not require IR 1 NAV Mode use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements, c) The FMGC 1 is considered inoperative, and d) Repairs are made within three flight legs. NOTE: EGPWS TERR is inoperative. CAT II/III Not Authorized Theater Restrictions May Apply
34-10-01C	IR 2 (IR 2 NAV Mode) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** NAV Mode of IR 2 may be inoperative provided: a) NAV Mode IR 1 and IR 3 are operative, and b) RNAV operations do not require IR 2 NAV Mode use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III Not Authorized

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-10-01D	IR 2 (A319/A320) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) IR 1 and IR 3 are operative, b) Both FCU channels operate normally, c) All ELAC's, SEC's, SFCC's, FAC's, LGCIU's, and RA's operate normally, d) All flight control accelerometers are verified operative, e) Takeoff using FLAP 1 configuration is prohibited, and f) RNAV operations do not require IR 2 use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT II/III Not Authorized
34-10-01E	IR 2 (IR 2 NAV Mode) (A321) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** NAV Mode of IR 2 may be inoperative provided: a) NAV Mode of IR 1 and NAV Mode of IR3 are operative, b) RNAV operations do not require IR 2 NAV Mode use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements, c) The FMGC 2 is considered inoperative, and d) Repairs are made within three flight legs. CAT II/III Not Authorized
34-10-01F	IR 2 (A321) **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** May be inoperative provided: a) IR 1 and 3 are operative, b) Both FCU channels operate normally, c) All ELACs, SECs, SFCCs, FACs, LGCIUs, and RAs operate normally, d) All flight control accelerometers are verified operative, e) Takeoff using FLAP 1 configuration is prohibited, and f) RNAV operations do not require IR 2 NAV Mode use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements, g) FMGC 2 is considered inoperative, and h) Repairs are made within three flight legs. CAT II/III Not Authorized

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ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER INSTALLED	NUMBER REQUIRED FOR DISPATCH	REPAIR CATEGORY	REMARKS OR EXCEPTIONS
34-10-01G	IR 3 (IR 3 NAV Mode) (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** NAV Mode of IR 3 may be inoperative provided: a) NAV Mode of IR 1 and NAV Mode of IR 2 are operative, and b) RNAV operations do not require IR 3 NAV Mode use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT III Not Authorized
34-10-01H	IR 3 (A319/A320) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) IR 1 and IR 2 are operative, b) Both FCU channels operate normally, c) All ELAC's, SEC's, SFCC's, FAC's, LGCIU's, and RA's operate normally, d) All flight control accelerometers are verified operative, and e) RNAV operations do not require IR 3 use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT III Not Authorized
34-10-01I	IR 3 (IR 3 NAV Mode) (A321) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** NAV Mode of IR 3 may be inoperative provided: a) NAV Mode of IR 1 and NAV Mode of IR 2 are operative, and b) RNAV operations do not require IR 3 NAV Mode use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT III Not Authorized

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-10-01J	IR 3 (A321) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) IR 1 and IR 2 are operative, b) Both FCU channels operate normally, c) All ELAC's, SEC's, SFCC's, FAC's, LGCIU's, and RA's operate normally, d) All flight control accelerometers are verified operative, and e) RNAV operations do not require IR 3 use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. CAT III Not Authorized
34-10-01K	ADR 2 **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Both ADR 1 and ADR 3 are operative, b) Both FCU channels operate normally, c) All ELACs, SECs, SFCCs, FACs, LGCIUs, and RAs operate normally, d) All flight control accelerometers are verified operative, and e) Takeoff using FLAP 1 configuration is prohibited. CAT III / RVSM Not Authorized
34-10-01L	ADR 3 **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** One may be inoperative provided: a) Both ADR 1 and ADR 2 are operative, b) Both FCU channels operate normally, c) All ELACs, SECs, SFCCs, FACs, LGCIUs, and RAs operate normally, and d) All flight control accelerometers are verified operative. CAT III Not Authorized

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MEL ITEM	TAB LOCATION	PLACARD TEXT
34-10-01A	Adjacent To ECAM Display	IRS 1 NAV MODE INOP
34-10-01B	Adjacent To ECAM Display	IRS 1 NAV MODE INOP
34-10-01C	Adjacent To ECAM display	IRS 2 NAV MODE INOP
34-10-01D	Adjacent To ECAM display	IRS 2 INOP
34-10-01E	Adjacent To ECAM display	IRS 2 NAV MODE INOP
34-10-01F	Adjacent To ECAM display	IRS 2 INOP
34-10-01G	Adjacent To ECAM Display	IRS 3 NAV MODE INOP
34-10-01H	Adjacent To ECAM Display	IRS 3 INOP
34-10-01I	Adjacent To ECAM Display	IRS 3 NAV MODE INOP
34-10-01J	Adjacent To ECAM Display	IRS 3 INOP
34-10-01K	On Overhead ADIRS CDU	ADR 2 INOP
34-10-01L	On Overhead ADIRS CDU	ADR 3 INOP

(O) PROCEDURES

34-10-01A

1. ATT HDG selector – CAPT 3.
2. IR 1 mode selector – ATT.
3. The heading must be entered through the CDU keyboard for the IR 1 and has to be reset frequently.
   NOTE: Refer to VOL. 1 S.P. 11 for “IR Alignment in ATT Mode.”

34-10-01B

1. ATT HDG selector – CAPT 3.
2. IR 1 mode selector – ATT.
3. The heading must be entered through the MCDU keyboard for the IR 1 and has to be frequently reset.
   NOTE: Refer to VOL. 1 S.P. 11 for “IR Alignment in ATT Mode.”

34-10-01C

1. ATT HDG selector –F/O 3.
2. IR 2 mode selector –ATT.
3. The heading must be entered through the CDU keyboard for the IR 2 and has to be reset frequently.
   NOTE: Refer to VOL. 1 S.P. 11 for “IR Alignment in ATT Mode.”

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34-10-01D

1. IR 2 mode selector –OFF.

   NOTE: F/CTL MAINTENANCE message may be displayed on the STATUS SD page.

2. ATT HDG SWITCHING selector –F/O 3.
3. AIR DATA SWITCHING selector –F/O 3.
4. Takeoff using FLAP 1 configuration is prohibited.

34-10-01E

1. ATT HDG selector – F/O 3.
2. IR 2 mode selector – ATT.
3. The heading must be entered through the MCDU keyboard for the IR 2 and has to be frequently reset.

   NOTE: Refer to VOL. 1 S.P. 11 for “IR Alignment in ATT Mode.”

34-10-01F

1. IR 2 pb-sw – OFF.

   NOTE: F/CTL MAINTENANCE message may be displayed on the STATUS SD page.

2. ATT HDG selector – F/O 3.
3. ATT HDG SWITCHING selector –F/O 3.
4. AIR DATA SWITCHING selector –F/O 3.

   NOTE: When the ADR 2 is inoperative and if the IR 2 pb-sw OFF light does not come on:
   - Set the IR 2 mode selector to OFF.

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34-10-01G

1. IR 3 mode selector –ATT.
2. The heading must be entered through the CDU keyboard for the affected IR and has to be reset frequently.

   NOTE: Refer to VOL. 1 S.P. 11 for “IR Alignment in ATT Mode.”

34-10-01H

1. Set IR 3 mode selector to OFF.

   NOTE: F/CTL MAINTENANCE message may be displayed on the STATUS SD page.

34-10-01I

1. IR 3 mode selector – ATT.
2. The heading must be entered through the MCDU keyboard for the IR 3 and has to be frequently reset.

   NOTE: Refer to VOL. 1 S.P. 11 for “IR Alignment in ATT Mode.”

34-10-01J

1. Set IR 3 pb-sw to OFF.

   NOTE: F/CTL MAINTENANCE message may be displayed on the STATUS SD page.

   NOTE: When the ADR 3 is inoperative and if the IR 3 pb-sw OFF light does not come on:
   - Set the IR 3 mode selector to OFF.

34-10-01K, 34-10-01L

1. For ADR 2 inop – Aircraft is not authorized for RVSM operations.
2. Set affected ADR pb switch to OFF.

   NOTE: F/CTL MAINTENANCE message may be displayed on the STATUS SD page.
3. AIR DATA SWITCHING selector:
   a) For ADR 2 inop – F/O 3.
   b) For ADR 3 inop –NORM.
4. After engine start:
   a) Use RCL pb switch on ECAM CTL panel, in order to recall ADR FAULT warning.
   b) Check that ECAM does not display:
      1) For ADR 2 inop - “ADR 2 .... OFF” in blue below the ADR FAULT message.
      2) For ADR 3 inop - “ADR 3 .... OFF” in blue below the ADR FAULT message.
   c) Use the CLR p. b. to clear the ADR FAULT message from ECAM.
5. If ADR 2 is inoperative takeoff using FLAP 1 configuration is prohibited.

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(M) PROCEDURES

34-10-01D, 34-10-01F, 34-10-01H, 34-10-01J

1. Verify that all flight control accelerometers operate normally:
   - Enter CFDS SYSTEM REPORT TEST.
   - Select F/CTL line key.
   - Select EFCS 1(2).
   - Select GROUND SCAN.
   - Select START GROUND SCAN.
   - After two minutes, select GROUND SCAN STOP.
   - Select GROUND REPORT.
   - Check that none of the following messages is displayed:

     - ELAC1 COM OR WIRING FROM ACCLRM1 12CE1.
     - ELAC1 MON OR WIRING FROM ACCLRM1 12CE1.
     - SEC1 OR WIRING FROM ACCLRM1 12CE1.
     - ELAC COM OR WIRING FROM ACCLRM2 12CE2.
     - ELAC MON OR WIRING FROM ACCLRM2 12CE2.
     - ACCLRM2 12CE2.
     - SEC1 OR WIRING FROM ACCLRM 2 12CE2.
     - ELAC2 COM OR WIRING FROM ACCOR 12CE3.
     - ELAC2 MON OR WIRING FROM ACCLRM3 12CE3.
     - ACCLRM3 12CE3.
     - SEC2 OR WIRING FROM ACCLRM3 12CE3.
     - ELAC2 COM OR WIRING FROM ACCLRM4 12CE4.
     - ELAC2 MON OR WIRING FROM ACLRM4 12CE4.
     - ACCLRM4 12CE4.
     - SEC2 OR WIRING FROM ACCLRM4 12CE4.

   - Push RETURN until the CFDS menu page comes into view.

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34-10-01K, 34-10-01L

1. Verify that all flight control accelerometers operate normally:
   - Enter CFDS SYSTEM REPORT TEST.
   - Select F/CTL line key.
   - Select EFCS 1(2).
   - Select GROUND SCAN.
   - Select START GROUND SCAN.
   - After two minutes, select GROUND SCAN STOP.
   - Select GROUND REPORT.
   - Check that none of the following messages is displayed:

     - ELAC1 COM OR WIRING FROM ACCLRM1 12CE1.
     - ELAC1 MON OR WIRING FROM ACCLRM1 12CE1.
     - SEC1 OR WIRING FROM ACCLRM1 12CE1.
     - ELAC COM OR WIRING FROM ACCLRM2 12CE2.
     - ELAC MON OR WIRING FROM ACCLRM2 12CE2.
     - ACCLRM2 12CE2.
     - SEC1 OR WIRING FROM ACCLRM 2 12CE2.
     - ELAC2 COM OR WIRING FROM ACCOR 12CE3.
     - ELAC2 MON OR WIRING FROM ACCLRM3 12CE3.
     - ACCLRM3 12CE3.
     - SEC2 OR WIRING FROM ACCLRM3 12CE3.
     - ELAC2 COM OR WIRING FROM ACCLRM4 12CE4.
     - ELAC2 MON OR WIRING FROM ACLRM4 12CE4.
     - ACCLRM4 12CE4.
       SEC2 OR WIRING FROM ACCLRM4 12CE4.

   - Push RETURN until the CFDS menu page comes into view.

2. Pull and secure the following circuit breakers:
   - For ADR 2 pull and secure ADIRS/ADIRU/2/26VAC AND AOA (Location 121VU N08).
   - For ADR 3 pull and secure ADIRS/ADIRU/3/26VAC AND AOA (Location 121VU N07).

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ADIRS CDU					
34-10-02A	Data Selector (For A319/A320 Aircraft)	**Y**	1	0	**C**	May be inoperative provided MCDU 1 and MCDU 2 operate normally.
34-10-02B	System Selector (For A319/A320 Aircraft)	**Y**	1	0	**C**	May be inoperative provided: a) MCDU 1 and MCDU 2 operate normally, and b) IRS initialization is available through FMGS.
34-10-02C	Display (For A319/A320 Aircraft)	**Y**	1	0	**C**	May be inoperative provided MCDU 1 and MCDU 2 operate normally.
34-10-02D	ADR FAULT Lights (For A319/A320 Aircraft)	**Y**	3	0	**C**	May be inoperative provided ECAM display operates normally.
34-10-02E	ADR OFF Lights (For A319/A320 Aircraft)	**Y**	3	0	**C**	May be inoperative provided ECAM display operates normally.
34-10-02F	IR FAULT Lights (For A319/A320 Aircraft)	**Y**	3	0	**C**	May be inoperative provided ECAM display operates normally.
34-10-02G	IR ALIGN Lights (For A319/A320 Aircraft)	**Y**	3	0	**C**	May be inoperative provided ECAM display operates normally.
34-10-02H	ON BAT Light (For A319/A320 Aircraft)	**Y**	1	0	**C**	May be inoperative.
34-10-02I	Keyboard (For A319/A320 Aircraft)	**Y**	1	0	**C**	May be inoperative provided MCDU 1 and MCDU 2 operate normally.
34-10-02J	ADIRS CDU (ADR 2 p.b. Switch) (For A319/A320 Aircraft)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Mode Rotary Selector 2 is operative, and b) ADR 1, ADR 3, IR1 and IR3 are operative.
34-10-02K	ADIRS CDU (ADR 3 p.b. Switch) (For A319/A320 Aircraft)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Mode Rotary Selector 3 is operative, and b) ADR 1, ADR 2, IR1 and IR2 are operative.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
34-10-02A	On Overhead ADIRS CDU	ADIRS CDU DATA SELECTOR INOP
34-10-02B	On Overhead ADIRS CDU	ADIRS CDU SYSTEM SELECTOR INOP
34-10-02C	On Overhead ADIRS CDU	ADIRS CDU DISPLAY INOP
34-10-02D	Adjacent To Affected ADR FAULT Light(s) On Overhead ADIRS CDU	___ ADR FAULT LIGHT(S) INOP
34-10-02E	Adjacent To Affected ADR OFF Light(s) On Overhead ADIRS CDU	___ ADR OFF LIGHT(S) INOP
34-10-02F	Adjacent To Affected IR FAULT Light(s) On Overhead ADIRS CDU	___ IR FAULT LIGHT(S) INOP
34-10-02G	Adjacent To Affected IR ALIGN Light On ADIRU Control Panel	___ IR ALIGN LIGHT INOP
34-10-02H	Adjacent To ADIRS CDU ON BATT Light	ADIRS CDU ON BATT LIGHT INOP
34-10-02I	Adjacent To ADIRS CDU Keyboard	ADIRS CDU KEYBOARD INOP
34-10-02J	Adjacent To ADR 2 p.b. Switch	ADR 2 p.b. SWITCH INOP
34-10-02K	Adjacent To ADR 3 p.b. Switch	ADR 3 p.b. SWITCH INOP

(O) PROCEDURES

34-10-02J

ADR 2 can be set to OFF through the associated mode rotory selector.

NOTE: In this case IR 2 is also set to OFF.

34-10-02K

ADR 3 can be set to OFF through the associated mode rotory selector.

NOTE: In this case IR 3 is also set to OFF.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ADIRS MSU					
34-10-03A	IR 2 p.b. Switch (For A321 Aircraft)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Mode Rotary Selector 2 is operative, and b) ADR 1, ADR 3, IR1, and IR3 are operative.
34-10-03B	IR 3 p.b. Switch (For A321 Aircraft)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Mode Rotary Selector 3 is operative, and b) ADR 1, ADR 2, IR1, and IR2 are operative.
34-10-03C	IR FAULT Lights (For A321 Aircraft)	**Y**	3	0	**C**	May be inoperative provided ECAM display operates normally.
34-10-03D	IR OFF Lights (For A321 Aircraft)	**Y**	3	0	**C**	May be inoperative provided ECAM display operates normally.
34-10-03E	ADR 2 p.b. Switch (For A321 Aircraft)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Mode Rotary Selector 2 is operative, and b) ADR 1, ADR 3, IR1, and IR3 are operative.
34-10-03F	ADR 3 p.b. Switch (For A321 Aircraft)	**Y**	1	0	**C**	**(O)** May be inoperative provided: a) Mode Rotary Selector 3 is operative, and b) ADR 1, ADR 2, IR1, and IR2 are operative.
34-10-03G	ADR FAULT Lights (For A321 Aircraft)	**Y**	3	0	**C**	May be inoperative provided ECAM display operates normally.
34-10-03H	ADR OFF Lights (For A321 Aircraft)	**Y**	3	0	**C**	May be inoperative provided ECAM display operates normally.
34-10-03I	ON BAT Light (For A321 Aircraft)	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-10-03A	On Overhead ADIRS MSU	IR 2 PB SWITCH INOP
34-10-03B	On Overhead ADIRS MSU	IR 3 PB SWITCH INOP
34-10-03C	On Overhead ADIRS MSU	IR FAULT LIGHT INOP
34-10-03D	On Overhead ADIRS MSU	IR OFF LIGHT INOP
34-10-03E	On Overhead ADIRS MSU	ADR 2 PB SWITCH INOP
34-10-03F	On Overhead ADIRS MSU	ADR 3 PB SWITCH INOP
34-10-03G	On Overhead ADIRS MSU	ADR FAULT LIGHT INOP
34-10-03H	On Overhead ADIRS MSU	ADR OFF LIGHTS INOP
34-10-03I	On Overhead ADIRS MSU	ON BAT LIGHT INOP

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(O) PROCEDURES

34-10-03A, 34-10-03B

1. If needed, the associated IR can be set to OFF through the associated mode selector.
2. If the IR is set to OFF:
    a) The associated ADR is also set to OFF.
    b) The F/CTL MAINTENANCE message is displayed on the STATUS SD page.

34-10-03E, 34-10-03F

1. If needed, the associated ADR can be set to OFF through the associated mode selector.
2. If the ADR is set to OFF:
    a) The associated IR is also set to OFF.
    b) The F/CTL MAINTENANCE message is displayed on the STATUS SD page.

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
AIR DATA INDICATIONS ON PRIMARY FLIGHT DISPLAYS (PFD)					
34-13-02A Mach numbers	**Y**	2	1	**C**	One may be inoperative.
34-13-02B Mach numbers **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided: a) MMO black and red strips operate normally on both PFDs, and b) Airplane remains at or below FL250.
34-13-02C Mach numbers (For A321 Aircraft)	**Y**	2	0	**C**	May be inoperative provided ISIS Mach Number function is operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-13-02A	Adjacent To Affected PFD	___ PFD MACH INDICATION INOP
34-13-02B	Adjacent To Affected PFD	BOTH PFD MACH INDICATIONS INOP
34-13-02C	Adjacent To Affected PFD	BOTH PFD MACH INDICATIONS INOP

(O) PROCEDURES

34-13-02B

Operate aircraft at FL250 or below.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-13-05	Vertical Speed Indications on PFD - Inertial Mode	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-13-05	Adjacent To Affected PFD(s)	___ PFD INERTIAL VERTICAL SPEED IS INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-13-07	Ground Speed Indications on ND	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-13-07	Adjacent To Affected ND(s)	___ ND(S) GROUND SPEED INDICATION(S) INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-13-08	True Airspeed Indications on ND	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-13-08	Adjacent To Affected ND(s)	___ ND(S) TRUE AIRSPEED INDICATION(S) INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-13-09	Wind Indications on ND	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-13-09	Adjacent To Affected ND(s)	___ ND(S) WIND INDICATION(S) INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ATTITUDE, HEADING AND POSITION ON DISPLAY UNITS 34-14-02 EIS Heading	**Y**	4	3	**C**	One may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-14-02	Adjacent To Affected DU	HEADING INFORMATION ON ___ DU IS INOP

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ATTITUDE, HEADING AND POSITION ON DISPLAY UNITS					
34-14-04 Navigation Station Information on display Units	**Y**	-	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-14-04	Adjacent To Affected EFIS Control Panel(s)	___ NAVIGATION STATION INFORMATION(S) IS INOP ON CAPT'S OR F/O'S DU(S)

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-14-05	Chrono (Clock)	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-14-05	Adjacent To Affected CHRONO Switch On Glare Shield Panel	___ CHRONO FUNCTION INOP

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-22-01	Standby Horizon (Attitude) **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided: a) Operations are conducted in Day VMC only, and b) Operations are not conducted into known or forecast over–the–top conditions. NOTE: "Over–the–top" means above the layer of clouds or other obscuring phenomena forming the ceiling.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-21-02	Adjacent To The Standby Horizon	STANDBY HORIZON INDICATOR INOP

(O) PROCEDURES

Limit operation to Day VMC only.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-22-02A	Non-Stabilized Magnetic Compass (Standby) **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided: a) Three IRs operate normally, and b) ATT/HDG, EIS DMC and PFD/ND switching capabilities operate normally.
34-22-02B	Non-Stabilized Magnetic Compass (Standby) **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided: a) Three IRs operate normally, and b) DDRMI operates normally.
34-22-02C	Non-Stabilized Magnetic Compass (Standby) **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided: a) Any combination of two IRs are operative, and b) Airplane is operated with dual independent navigation capability and under positive radar control by ATC on enroute portion of flight.
34-22-02D	Non-Stabilized Magnetic Compass (Standby) Lighting	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-22-02A	Adjacent To Magnetic Stand–By Compass	MAGNETIC STAND-BY COMPASS INOP
34-22-02B	Adjacent To Magnetic Stand–By Compass	MAGNETIC STAND-BY COMPASS INOP
34-22-02C	Adjacent To Magnetic Stand–By Compass	MAGNETIC STAND-BY COMPASS INOP
34-22-02D	Adjacent To Magnetic Stand–By Compass	MAGNETIC STAND-BY COMPASS LIGHTING INOP

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(O) PROCEDURES

34-22-02A

During flight deck preparation:

1. ATT HDG sel – CAPT 3 Check normal display on CAPT PFD, ND and RMI VOR.
2. ATT HDG sel – F/O 3. Check normal display on F/O PFD, ND.
3. ATT HDG sel – NORM.
4. EIS DMC – CAPT 3. Check normal display on CAPT PFD, ND.
5. EIS DMC – F/O 3. Check normal display on F/O PFD, ND.
6. EIS DMC – NORM.
7. CAPT PFD/ND – XFR. Check that CAPT PFD and ND images are interchanged.
8. CAPT PFD/ND – XFR.
9. F/O PFD/ND – XFR. Check that F/O PFD and ND images are interchanged.
10. F/O PFD/ND – XFR.

34-22-02B

Utilize DDRMI for compass information.

34-22-02C

Maintain positive radar control by ATC during enroute portion of flight.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
34-36-01A	ILS Navigation (Localizer) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** One may be inoperative provided destination weather is not less than 4000 RVR, ¾ mi. CAT II/III / PRM Approaches Not Authorized
34-36-01B	ILS Navigation (Localizer) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided final approach is flown VMC. CAT II/III / PRM Approaches Not Authorized
34-36-01C	ILS Navigation (Glide Slope) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(M)(O)** May be inoperative provided no approaches are conducted which require the ILS Glide Slope. NOTE: If one Glide Slope is operative, it may be utilized but approach minimums must be predicated on non–precision approaches. CAT II/III / PRM Approaches Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-36-01A	Adjacent To Affected Radio Management Panel (RMP)	___ ILS LOCALIZER INOP
34-36-01B	Adjacent to affected Radio Management Panel (RMP)	___ ILS LOCALIZER INOP
34-36-01C	Adjacent to affected Radio Management Panel (RMP)	___ GLIDE SLOPE INOP

(O) PROCEDURES

34-36-01A, 34-36-01B, 34-36-01C

1. CAT II/III – Not Authorized.
2. Precision Runway Monitor (PRM) approaches – Not Authorized.

NOTE: If one Glide Slope is operative, an ILS approach may be conducted but Localizer or Converging ILS minimums must be inserted in the PERF APPR page

(M) PROCEDURES

34-36-01C

If No. 1 Glide Slope inoperative, defer the Glideslope mode of the GPWS inoperative per MEL item 34–48–01E.

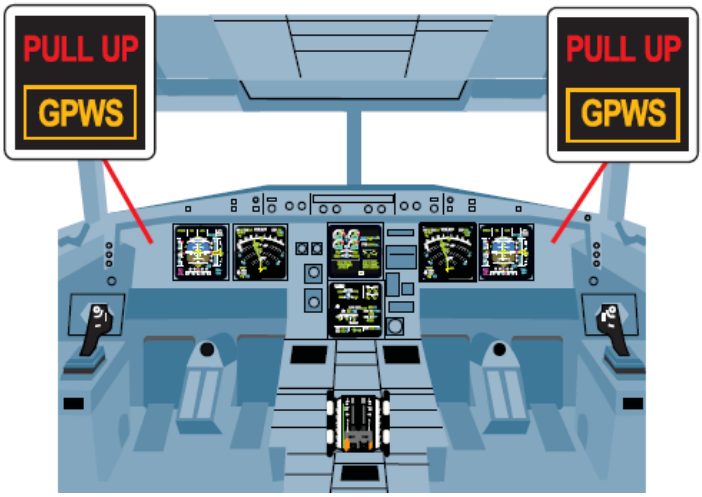
		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-40-07A	GPWS – G/S pb	**Y**	2	1	**C**	**(O)** One may be inoperative provided GPWS and EGPWS aural and visual warnings are checked to be operative.
34-40-07B	GPWS – G/S pb **"DISP.APPR.REQ'D"**	**Y**	2	0	**A**	Both may be inoperative provided: a) GPWS is considered inoperative and deferred per MEL 34-48-01A, b) EGPWS is considered inoperative and deferred per MEL 34-48-01F, and c) Repairs are made within two flight days.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-40-07A	Adjacent to the GPWS G/S pb	_____G/S PUSH BUTTON INOP
34-40-07B	Adjacent to the GPWS G/S pb	BOTH G/S PUSH BUTTONS INOP

(O) PROCEDURES

34-40-07A

With the aircraft on the ground, press and hold the operational GPWS pb until all warnings are checked.



		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-41-01A	Weather Radar System **"DISP.APPR.REQ'D"**	**Y**	1	0	**D**	May be inoperative provided aircraft is not dispatched in IFR or night VFR conditions when current weather reports indicate thunderstorms or other potentially hazardous weather conditions, which can be detected by airborne weather radar, can reasonably be expected to be encountered along the route to be flown. Theater Restrictions May Apply
34-41-01B	Weather Radar System (Map Mode)	**Y**	1	0	**C**	May be inoperative.
34-41-01C	Weather Radar System (Automatic Gain Control (CAL))	**Y**	1	0	**C**	May be inoperative provided radar gain can be manually tuned to receive satisfactory radar returns.
34-41-01D	Weather Radar System (Turbulence Detection Mode)	**Y**	1	0	**C**	May be inoperative.
34-41-01E	Weather Radar System (Ground Clutter Suppression)	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-41-01A	On Weather Radar Control Panel	WEATHER RADAR SYSTEM INOP
34-41-01B	On Weather Radar Control Panel	WEATHER RADAR SYSTEM MAP MODE INOP
34-41-01C	On Weather Radar Control Panel	WEATHER RADAR SYSTEM AUTOMATIC GAIN CONTROL INOP
34-41-01D	On Weather Radar Control Panel	WEATHER RADAR SYSTEM TURBULENCE DETECTION MODE INOP
34-41-01E	On Weather Radar Control Panel	WEATHER RADAR SYSTEM GROUND CLUTTER SUPPRESSION INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-42-01A	Radio Altimeter (RA) Systems - (RA 1) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(M)(O)** RA 1 may be inoperative provided: a) RA 2 operates normally, b) Both FCU channels operate normally, c) All ELACs, SECs, ADIRS, SFCC, LGCIU, and FACs operate normally, d) Departure weather is 1000 ft./3 mi. or greater, e) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival, f) Defer GPWS per MEL 34-48-01A, g) Defer EGPWS per MEL 34-48-01F, h) RNAV operations do not require RA 1 use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements, and i) Repairs are made within two flight days. NOTE: If, upon arrival, the actual destination/alternate weather is below 1000 ft./3mi., landing is authorized. CAT II/III Not Authorized Theater Restrictions May Apply
34-42-01B	Radio Altimeter (RA) Systems - (RA 2) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(M)(O)** RA 2 may be inoperative provided: a) RA 1 operates normally, b) Both FCU channels operate normally, c) All ELACs, SECs, ADIRS,SFCC, LGCIU, and FACs operate normally, d) Departure weather is 1000 ft./3 mi. or greater, e) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival, f) RNAV operations do not require RA 2 use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements, and g) Repairs are made within three flight days. NOTE: If, upon arrival, the actual destination/alternate weather is below 1000 ft./3mi., landing is authorized. CAT II/III Not Authorized

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MEL ITEM	TAB LOCATION	PLACARD TEXT
34-42-01A	Adjacent To Captain's PFD	RADIO ALTIMETER 1 SYSTEM INOP
34-42-01B	Adjacent To Captain's PFD	RADIO ALTIMETER 2 SYSTEM INOP

(O) PROCEDURES

34-42-01A, 34-42-01B

1. Verify that:
   a) Departure weather is 1000 ft./3 mi. or greater.
   b) Destination (and alternate if required) station weather is forecast to be 1000 ft./3 mi. or greater at the time of arrival.
2. If, upon arrival, the actual destination/alternate weather is below 1000 ft./3mi., landing is authorized.
3. If RA 1 is inoperative comply with MEL Item 34–48–01A and 34-48-01F (O) procedures.
4. F/CTL MAINTENANCE message maybe displayed on the STATUS SD page.
5. During approach During an ILS (or MLS, or GLS) approach with AP engaged, the flight crew must closely monitor all primary flight parameters and FMA indications. An early/untimely FLARE and THR IDLE mode engagement may occur in the case of an erroneous RA height indication from the remaining RA.

   In the event of an early/untimely FLARE and THR IDLE mode engagement:
   - Immediately perform an automatic go-around (thrust levers set to TOGA),
   OR
   - Immediately disconnect AP and set both FDs to OFF. If external visual references are sufficient, the approach may be continued manually.

   NOTE: If the flight crew does not immediately react, the angle-of-attack will increase and may reach the stall value,

   In CONF FULL, the auto-trim function is inhibited. In manual flight, a significant longitudinal sidestick input may be required.

(M) PROCEDURES

34-42-01A, 34-42-01B

1. To deactivate the RA 1 system:
   a) Pull and secure the following circuit breaker:

CIRCUIT BREAKER	PANEL	LOCATION (FIN)
COM NAV/RAD ALTM/1	121VU	K11

2. To deactivate the RA 2 system:
   a) Pull and secure the following circuit breaker:

CIRCUIT BREAKER	PANEL	LOCATION (FIN)
COM NAV/RAD ALTM/2	121VU	K12

3. If RA 1 is inoperative, defer GPWS system inoperative per MEL item 34–48–01A and EGPWS system inoperative per MEL 34-48-01F.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
34-42-02	Automatic Call Out System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. CAT II/III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-42-02	On Capt's EFIS Control Panel	AUTOMATIC CALL OUT SYSTEM INOP

(O) PROCEDURES

1. CAT II – Not Authorized.
2. CAT III – Not Authorized.
3. Autoland – Not Authorized.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-42-04A	Altitude Alerting System **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** May be inoperative provided: a) Autopilot with altitude hold and altitude capture is operative, b) Enroute operations do not require it use, c) Aircraft cannot depart from ATL, DTW, or MSP, d) Repairs are made within three flight days, and e) The airplane remains at or below FL280. NOTE: Dispatch to remove flight plan equipment code "W". <u>RVSM</u> Not Authorized
34-42-04B	Altitude Alerting System Aural Alert	**Y**	1	0	**C**	May be inoperative provided: a) Visual alert operates normally, and b) Autopilot with altitude hold and altitude capture is operative.
34-42-04C	Altitude Alerting System Visual Alert	**Y**	1	0	**C**	May be inoperative provided: a) Aural alert operates normally, and b) Autopilot with altitude hold and altitude capture is operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-42-04A	Adjacent To Captains PFD And Adjacent To RVSM QUALIFIED Placard (If Installed) On Forward Instrument Panel	ALTITUDE ALERTING SYSTEM INOP
34-42-04B	Adjacent To Captains PFD	ALTITUDE ALERTING SYSTEM AURAL ALERT INOP
34-42-04C	Adjacent To Captains PFD	ALTITUDE ALERTING SYSTEM VISUAL ALERT INOP

(O) PROCEDURES

34-42-04A

1. RVSM operations – Not Authorized. Limit flight altitude to FL280 or below.
2. Utilize altitude hold function of A/P.
3. Use standard altitude awareness during climbs and descents.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-43-01A	Traffic Alert and Collision Avoidance System (TCAS System) **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)(M)** May be inoperative provided: a) Routing restrictions for TCAS are observed, and b) System is deactivated and secured. Theater Restrictions May Apply
34-43-01B	Traffic Alert and Collision Avoidance System (Resolution Advisory (RA) Display Systems)	**Y**	2	1	**C**	One may be inoperative on the non–flying pilot side.
34-43-01C	Traffic Alert and Collision Avoidance System (Resolution Advisory (RA) Display Systems) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided: a) Traffic Alert (TA) visual display and audio functions are operative, b) TA only mode is selected by crew, and c) Enroute or approach procedures do not require its use.
34-43-01D	Traffic Alert and Collision Avoidance System (Traffic Alert (TA) Display Systems) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided: a) RA visual display and audio functions are operative, and b) Enroute or approach procedures do not require its use.
34-43-01E	Traffic Alert and Collision Avoidance System (Audio Functions) **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	May be inoperative provided enroute or approach procedures do not require use of TCAS.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-43-01A	Adjacent To TCAS Selector On TCAS Control Panel	TCAS INOP AND DEACTIVATED
34-43-01B	Adjacent To Affected Display	___ RESOLUTION ADVISORY (RA) DISPLAY SYSTEM INOP
34-43-01C	Adjacent To Affected Display	___ RESOLUTION ADVISORY (RA) DISPLAY SYSTEM INOP
34-43-01D	Adjacent To Affected Display	TRAFFIC ALERT (TA) DISPLAY SYSTEM(S) INOP
34-43-01E	Adjacent To TCAS Selector On TCAS Control Panel	TCAS AUDIO FUNCTIONS INOP

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O) PROCEDURES

34-43-01A

TCAS must be operative on routes outbound from the Continental United States to destinations outside the Continental United States, except Canada.

34-43-01C, 34-43-01D

Monitor the operative indications and advisories and respond as appropriate.

(M) PROCEDURES

34-43-01A

Pull and secure the TCAS circuit breaker at location K10.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-48-01A	Ground Proximity Warning System (GPWS) **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** May be inoperative provided: a) Alternate procedures are used, b) RNAV operations do not require Enhanced Ground Proximity Warning System use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. and c) Repairs are made within two flight days.
34-48-01B	Ground Proximity Warning System (GPWS) Modes 1 thru 4 **"DISP.APPR.REQ'D"**	**Y**	4	0	**A**	**(O)** May be inoperative provided: a) Alternate procedures are used, and b) Repairs are made within two flight days.
34-48-01C	Ground Proximity Warning System (GPWS) Test Mode **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** May be inoperative provided: a) GPWS is considered inoperative and deferred per MEL 34-48-01A, and b) Repairs are made within two flight days.
34-48-01D	Ground Proximity Warning System (GPWS) Glideslope Deviation (Mode 5) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	One may be inoperative.
34-48-01E	Ground Proximity Warning System (GPWS) Glideslope Deviation (Mode 5) **"DISP.APPR.REQ'D"**	**Y**	2	0	**B**	**(O)** May be inoperative.
34-48-01F	Enhanced Ground Proximity Warning System (EGPWS) Terrain (TERR) System-Forward Looking Terrain Avoidance (FLTA) and Premature Descent Alert (PDA) Functions **"DISP.APPR.REQ'D"**	**Y**	1	0	**B**	**(O)** May be inoperative provided: a) Alternate procedures are used, and b) RNAV operations do not require Enhanced Ground Proximity Warning System use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. Theater Restrictions May Apply

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NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-48-01G	Enhanced Ground Proximity Warning System (EGPWS) Terrain (TERR) System-Forward Looking Terrain Avoidance (FLTA) and Premature Descent Alert (PDA) Functions Terrain Display Functions (TERR ON ND) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	One may be inoperative off provided RNAV operations do not require Enhanced Ground Proximity Warning System use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements.
34-48-01H	Enhanced Ground Proximity Warning System (EGPWS) Terrain (TERR) System-Forward Looking Terrain Avoidance (FLTA) and Premature Descent Alert (PDA) Functions Terrain Display Functions (TERR ON ND) **"DISP.APPR.REQ'D"**	**Y**	2	0	**B**	May be inoperative off provided RNAV operations do not require Enhanced Ground Proximity Warning System use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-48-01A	On GPWS Control Panel	GPWS INOP
34-48-01B	On GPWS Control Panel	GPWS TERRAIN AVOIDANCE WARNING (MODES 1 THRU 4) INOP
34-48-01C	On GPWS Control Panel	GPWS TEST MODE INOP – GPWS INOP
34-48-01D	On GPWS Control Panel	GPWS GLIDESLOPE DEVIATION (MODE 5) INOP
34-48-01E	On GPWS Control Panel	GPWS GLIDESLOPE DEVIATION (MODE 5) INOP
34-48-01F	On GPWS Control Panel	EGPWS TERR, FLTA AND PDA FUNCTIONS INOP
34-48-01G	On GPWS Control Panel	EGPWS TERRAIN DISPLAY FUNCTIONS INOP
34-48-01H	On GPWS Control Panel	EGPWS TERRAIN DISPLAY FUNCTIONS INOP

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(O) PROCEDURES

34-48-01A

1. Place GPWS SYS pb switch OFF.
2. The pilot not flying will monitor the aircraft flight path and alert the pilot flying to any of the following conditions:
   a) Excessive descent rate.
   b) Excessive terrain closure rate.
   c) Altitude loss after takeoff or go–around.
   d) Unsafe terrain clearance while not in the landing configuration.
   e) Below glide slope deviation.

34-48-01B

1. The pilot not flying will monitor the aircraft flight path and alert the pilot flying to any of the following conditions:
   a) Excessive descent rate.
   b) Excessive terrain closure rate.
   c) Altitude loss after takeoff or go–around.
   d) Unsafe terrain clearance while not in the landing configuration.

34-48-01C

Comply with MEL Item 34–48–01A (O) procedure.

34-48-01E

The pilot not flying will monitor the aircraft flight path and alert the pilot flying if deviating below glideslope.

34-48-01F

1. Place TERR pb switch on overhead panel to OFF.
2. The pilot not flying will monitor the aircraft flight path and alert the pilot flying to any unsafe terrain clearance while not in the landing configuration.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-48-02A	GPWS FAULT Light	**Y**	1	0	**C**	**(O)** May be inoperative provided GPWS is verified to operate normally before each flight.
34-48-02B	GPWS FAULT Light **"DISP.APPR.REQ'D"**	**Y**	1	0	**A**	**(O)** May be inoperative provided: a) GPWS is considered inoperative, and b) Repairs are made within two flight days. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-48-02A	On Overhead GPWS Control Panel	GPWS FAULT LIGHT INOP
34-48-02B	Adjacent To GPWS FAULT Light	GPWS FAULT LIGHT INOP – GPWS SYSTEM INOP

(O) PROCEDURES

34-48-02A

1. PRIOR TO EACH DEPARTURE momentarily press either GPWS G/S warning light located outboard of each PFD and verify the following:
   a) GPWS FAULT light remains extinguished.
   b) TERR FAULT light illuminates.
   c) Instrument panel G/S lights illuminate. "GLIDE SLOPE" aural warning is generated.
   d) Instrument panel GPWS lights illuminate. "PULL UP" and "TERRAIN PULL UP" aural warnings are generated.
   e) Both instrument panel TERR ON ND pbs illuminate "ON" and a terrain test pattern is displayed on both NDs.
   f) All indications and displays revert to their previous configuration after the test.

34-48-02B

Comply with MEL Item 34–48–01A (O) procedure.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-51-01	DME	**Y**	2	1	**C**	**(O)** One may be inoperative provided RNAV operations do not require DME use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-51-01	Adjacent To DDRMI On Center Instrument Panel	___ DME INOP

(O) PROCEDURES

If remaining DME fails enroute, notify ATC.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-52-01A	ATC Transponders and Automatic Altitude Reporting Systems (All Functions) **"DISP.APPR.REQ'D"**	**Y**	2	0	**B**	**(M)(O)** Both ATC Transponders (Including Automatic Altitude Reporting functions) may be inoperative provided: a) Operations do not require its use, b) PRIOR TO EACH DEPARTURE, dispatch has obtained approval from ATC facilities having jurisdiction over the planned route of flight. c) TCAS is considered inoperative and deferred per MEL 34–43–01A. RVSM Not Authorized **Repetitive Check Required (Yellow Placard)**
34-52-01B	ATC Transponders and Automatic Altitude Reporting Systems (All Functions)	**Y**	2	1	**D**	One may be inoperative.
34-52-01C	ATC Transponders Elementary and Enhanced Downlink Aircraft Reportable Parameters **"DISP.APPR.REQ'D"**	**Y**	4	0	**A**	May be inoperative provided: a) Enroute operations do not require its use, and b) Repairs are made prior to completion of next heavy maintenance visit.
34-52-01D	ATC Transponder ADS-B Squitter Transmissions **"DISP.APPR.REQ'D"**	**Y**	-	0	**D**	May be inoperative provided operations do not require its use.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-52-01A	On ATC Control Panel On Center Pedestal	BOTH ATC TRANSPONDERS INOP
34-52-01B	On ATC Control Panel And Adjacent To RVSM QUALIFIED Placard (If Installed) On Forward Instrument Panel	___ ATC TRANSPONDER INOP
34-52-01C	On ATC Control Panel On Center Pedestal	___ ATC TRANSPONDER REPORTABLE PARAMETER(S) INOP
34-52-01D	On ATC Control Panel On Center Pedestal	___ ATC TRANSPONDER SQUITTER TRANSMISSION(S) INOP

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(O) PROCEDURES

34-52-01A

1. Prior to flight, ensure dispatch has obtained ATC approval for flight.
2. Comply with MEL item 34–43–01A (O) procedure.
3. RVSM operations are not authorized.

(M) PROCEDURES

34-52-01A

1. Defer TCAS system inoperative per MEL item 34–43–01A.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-53-01	ADF System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	May be inoperative provided operations requiring ADF are not conducted. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-53-01	On Capt's Radio Management Panel (RMP)	ADF SYSTEM INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
34-55-01	VOR Navigation **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	The No.2 VOR Navigation System may be inoperative provided approach minimums do not require its use. CAT II/III - Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-55-01	On F/O's Radio Management Panel (RMP)	NO.2 VOR NAVAGATION INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
34-55-02	Marker Beacon **"DISP.APPR.REQ'D"**	**Y** 1	0	**D**	May be inoperative for IMC flight conditions provided approach to be flown does not require outer marker beacon for navigation or an approved outer marker substitute is available. Example: compass locator, precision radar, surveillance radar, or fix from NDB, VOR or DME. OR May be inoperative for VMC flight conditions. NOTE: May be required as noted on approach plate. CAT II RA/NA Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-55-02	On Affected PFD(s)	MARKER BEACON SYSTEM INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-57-01A	DDRMI Compass Card	**Y**	1	0	**C**	May be inoperative.
34-57-01B	DDRMI VOR Pointers	**Y**	2	0	**C**	May be inoperative.
34-57-01C	DDRMI DME Counters	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-57-01A	Adjacent To DDRMI On Center Instrument Panel	DDRMI COMPASS CARD INOP
34-57-01B	Adjacent To DDRMI On Center Instrument Panel	DDRMI ___ VOR POINTER(S) INOP
34-57-01C	Adjacent To DDRMI On Center Instrument Panel	DDRMI ___ DME COUNTER(S) INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-58-01A	Global Positioning System (GPS) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(O)** May be inoperative provided: a) destination and alternate airports do not require a RNAV (GPS) approach, and b) RNAV operations do not require GPS use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. Theater Restrictions May Apply
34-58-01B	Global Positioning System (GPS) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided: a) Destination and alternate airports do not require a RNAV (GPS) approach, b) RNAV operations do not require GPS use, refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-58-01A	Adjacent To ECAM Display	___ GPS INOP
34-58-01B	Adjacent To ECAM Display	BOTH GPS INOP

(O) PROCEDURES

34-58-01A

Ensure destination and alternate airports do not require a RNAV (GPS) approach.

34-58-01B

1. RNAV procedures that require the use of GPS – Not Authorized.
2. Ensure destination and alternate airports do not require a RNAV (GPS) approach.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
34-61-01	Flight Management System (FMS) Navigation Databases **"DISP.APPR.REQ'D"**	**Y**	2	2	**C**	**(O)** May be out of currency provided: a) Current aeronautical charts or current Nav Database is used to verify navigation fixes PRIOR TO EACH DEPARTURE, b) Pilot or Flight Control use charts or RVAL tool to verify status and suitability of navigation facilities used to define route of flight, c) Approach navigation radios are manually tuned and identified, and d) Dispatch will not file a flight plan requiring RNAV data that is identified as changed within the current database. Refer to Navigation Equipment Tab (this manual) for RNAV Minimum Requirements. Theater Restrictions May Apply **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
34-61-01	On The Affected MCDU (Multi–Purpose Control Display Unit)	___ NAV DATA BASE OUT OF CURRENCY

(O) PROCEDURES

Select the route to be flown from the (non-current) data base. Check the intended route against current Jeppesen pages for agreement of all navigation data, using applicable departure, enroute and arrival charts or request Flight Control to validate the database using the RVAL tool. If all information agrees, the FMS may be used normally on the route which was checked. Each new route must be checked in the same manner. Any time the FMS data does not agree with current Jeppesen information, manual tuning and course selection must be accomplished.

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
35-10-04	Exterior Oxygen Indicator Disc (Green Disc)	**Y**	1	0	**C**	**(O)** May be damaged or missing.

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-10-04	Adjacent To ECAM Screen	EXTERIOR OXYGEN INDICATOR DISC DAMAGED OR MISSING

(O) PROCEDURES

During preflight before each flight, verify that oxygen pressure is not decreasing by checking the OXY pressure indication on ECAM DOOR/OXY page twice with a 15 minute interval between each check.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	INDICATIONS ON DOOR/OXY ECAM PAGE					
35-13-01A	OXY High Pressure Indication **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) The oxygen pressure is verified by direct reading PRIOR TO EACH DEPARTURE (Log Book Entry Required), b) The oxygen pressure is sufficient for the intended flight, and c) The REGUL LO PR indication is operative. **Repetitive Check Required (Yellow Placard)**
35-13-01B	REGUL LO PR Indication **"Contact MCC"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided the oxygen pressure is verified PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-13-01A	Adjacent To ECAM Screen	CREW OXYGEN HI PRESSURE INDICATION INOP
35-13-01B	Adjacent To ECAM Screen	CREW REG LO PR INDICATION SYSTEM INOP

(O) PROCEDURES

35-13-01A

1. PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.
2. Ensure that the oxygen pressure is sufficient for the intended flight.

35-13-01B

1. PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.
2. Disregard the REGUL LO PR indication and associated OXY indication on ECAM DOOR/OXY page.

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(M) PROCEDURES

35-13-01A

PRIOR TO EACH DEPARTURE:

1. Check the OXYGEN pressure on direct reading pressure gauge, access through door 812.
2. Review Log/Sceptre history to ensure NO history of leakage.
3. Record cylinder pressure in logbook.
4. Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

35-13-01B

PRIOR TO EACH DEPARTURE:

1. Open access door 812.
   a) In the avionics department, open the cover of the oxygen compartment.
   b) Close the valve of the oxygen storage cylinder (5750HM).
2. Verify that the following circuit breakers are closed:
   a) On A/C 3209–3211
      1) On C/B panel 49VU: verify that circuit breaker OXYGEN/CREW/OXY/SPLY location C01 is closed.
   b) On A/C 3212–3278, 3101–3171
      1) On C/B panel 49VU: verify that circuit breaker OXYGEN/CREW/OXY/SPLY location HA01 is closed.
      2) Energize the aircraft electrical circuits (Ref. AMM TASK 24–41–00–861–002).
      3) Bleed the oxygen system as follows:
         A. In the flight deck, on the OXYGEN section of the overhead panel 21VU:
            - Release the OXYGEN/CREW SUPPLY pushbutton switch (the OFF legend illuminates).
         B. On one of the oxygen masks:
            - Push the PRESS TO TEST AND RESET control slide a sufficient number of times.
      4) To check the pressure of Crew Oxygen Cylinder accomplish the following: (Ref. Figure 35-13-01B)
         A. Remove the blanking caps of the test port (5755HM).
         B. Install a pressure gauge (10M-8678) that can read the pressure from 0 psi to 150 psi on the test port (5755HM).
         C. Fully open the valve of the oxygen cylinder.
         D. Make sure that the pressure read on the pressure gauge is above 50 psi.
      5) Disconnect the test installation.
         A. Put the blanking cap on the test port 5755HM.
      6) De–energize the electrical circuits (Ref. AMM TASK 24–41–00–862–002).

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7) Fully open the valve of the oxygen storage cylinder.

8) Close the cover of the oxygen compartment.

9) Close access door 812.

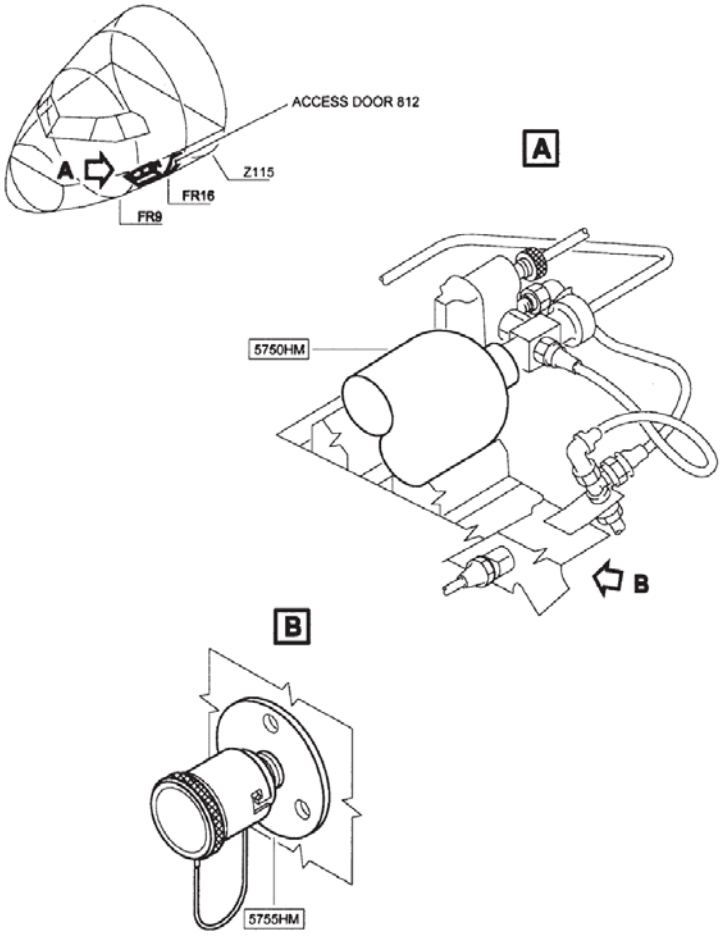

Figure 35–13–01B

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
CREW SUPPLY PB SWITCH 35-13-02 OFF Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-13-02	Adjacent To The Crew Supply p.b. Switch	CREW SUPPLY PB SWITCH OFF LIGHT INOP

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		REMARKS OR EXCEPTIONS
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
	PASSENGER OXYGEN STORAGE					
35-21-01A	Passenger Oxygen Modules **"DISP.APPR.REQ'D"**	**N**	-	-	**B**	**(M)** Modules may be inoperative provided associated seats are placarded UNSERVICEABLE – DO NOT USE.
35-21-01B	Passenger Oxygen Modules **"DISP.APPR.REQ'D"**	**Y**	-	-	**B**	**(O)** Modules may be inoperative provided airplane remains at or below FL250.
35-21-01C	Galley Modules **"DISP.APPR.REQ'D"**	**Y**	-	-	**B**	**(O)** May be inoperative and associated galley occupied provided airplane remains at or below FL250.
35-21-01D	Galley Modules	**Y**	-	-	**B**	**(O)** May be inoperative and associated galley occupied provided a portable oxygen bottle and mask are available for the associated galley occupant.
35-21-01E	Flight Attendant Oxygen Module **"DISP.APPR.REQ'D"**	**N**	-	-	**B**	May be inoperative provided the associated flight attendant seat is considered inoperative and deferred per MEL 25-22-01A or 25-22-01B as applicable.
35-21-01F	Flight Attendant Oxygen Module **"DISP.APPR.REQ'D"**	**Y**	-	-	**B**	**(O)** May be inoperative provided the airplane remains at or below FL 250.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
35-21-01A	On Affected Cabin Emergency Oxygen Container Door And Nearest Flight Attendant's Control Panel	___ EMERGENCY OXYGEN CONTAINER DOOR(S) IS INOP ___ PASSENGER SEATS ARE BLOCKED
35-21-01B	On Affected Cabin Emergency Oxygen Container Door And Nearest Flight Attendant's Control Panel	___ EMERGENCY OXYGEN CONTAINER DOOR(S) IS INOP
35-21-01C	On Affected Cabin Emergency Oxygen Container Door And Nearest Flight Attendant's Control Panel	___ EMERGENCY OXYGEN GALLEY MODULE(S) IS INOP
35-21-01D	On Affected Cabin Emergency Oxygen Container Door And Nearest Flight Attendant's Control Panel	___ EMERGENCY OXYGEN GALLEY MODULE(S) IS INOP.
35-21-01E	On Affected Flight Attendant Oxygen Module Door And Nearest Flight Attendant's Control Panel	FLIGHT ATTENDANT O2 MODULE INOP. DO NOT USE FLIGHT ATTENDANT SEAT.
35-21-01f	On Affected Flight Attendant Oxygen Module Door And Nearest Flight Attendant's Control Panel	FLIGHT ATTENDANT O2 MODULE INOP.

(O) PROCEDURES

35-21-01B, 35-21-01C, 35-21-01F

Operate aircraft at or below FL250.

35-21-01D

Captain to brief Lead Flight Attendant/Purser:

1. Which unit(s) is inoperative.
2. To use an available oxygen bottle and mask or an adjacent oxygen unit if required.
3. To verify the number of oxygen bottle and mask stored in vicinity of the affected galley meets or exceeds the number of Flight Attendants working in the galley.

(M) PROCEDURES

35-21-01A

1. Affected Oxygen Module door must be secured in the closed position by the use of tape.
2. Block affected seat(s) using OM2 "UNSERVICEABLE – DO NOT USE" tape (or equivalent*).

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in one inch black letters.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
35-21-02	Lavatory Oxygen Module **"DISP.APPR.REQ'D"**	**Y**	-	-	**B**	**(M)** May be inoperative provided lavatory is placarded "UNSERVICABLE – DO NOT USE".

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-21-02	On Affected Lavatory Door	____LAVATORY OXY INOP

(M) PROCEDURE

35-21-02

1. Close and lock the Lavatory Door as follows:
   a. Lift the LAVATORY sign on the outer face of the lavatory door.
   b. Move the latch under the sign until the indicator shows the door is locked (OCCUPIED).
   c. Check that the door will not open.
2. Place a strip of Red colored OM2 "UNSERVICEABLE – DO NOT USE" tape (or equivalent*) across the lavatory door and across the toilet lid to prevent use.

* An acceptable alternate to the OM2 tape is a section of two inch wide masking tape with the words "UNSERVICEABLE – DO NOT USE" printed legibly in one inch black letters.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
35-23-01	Passenger Oxygen Manual Control System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided airplane remains at or below FL250.

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-23-01	On Pilot's Overhead 21VU Panel	PASSENGER OXYGEN MANUAL CONTROL SYSTEM IS INOP

(O) PROCEDURES

Operate aircraft at or below FL250.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
35-23-02A	Passenger Oxygen AUTO Control System **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Airplane remains at or below FL300, and b) Passenger oxygen manual control system is verified to operate normally.
35-23-02B	Passenger Oxygen AUTO Control System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided airplane remains at or below FL250.

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-23-02A	On Pilot's Overhead 21VU Panel	PASSENGER OXYGEN AUTO CONTROL SYSTEM IS INOP
35-23-02B	On Pilot's Overhead 21VU Panel	PASSENGER OXYGEN AUTO CONTROL SYSTEM IS INOP

(O) PROCEDURES

35-23-02A

1. Operate aircraft at or below FL300.

35-23-02B

1. Operate aircraft at or below FL250.

(M) PROCEDURES

35-23-02A

1. Verify the passenger oxygen manual control system is operational by performing AMM Task 35-23-00-040-802.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
35-23-03	PASSENGER SYS ON Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-23-03	On Pilots Overhead 21VU Panel.	PASSENGER OXYGEN SYSTEM ON LIGHT IS INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
35-31-01	Portable Oxygen Units (Bottle and Mask) **"DISP.APPR.REQ'D"**	**Y** 5	-	**B**	**(M)(O)** Any in excess of those required may be unserviceable or missing provided: a) Required distribution of serviceable bottles is maintained throughout the aircraft, and b) Bottles not properly serviced are replaced, serviced, or removed at the next available maintenance facility, and c) Affected bottles are identified as unusable units.

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-31-01	On The Affected Oxygen Bottle Pressure Indicator If Oxygen Bottle Is Missing: Place Tab Adjacent To Affected Oxygen Bottle Placard (Symbol)	___ PORTABLE OXYGEN DISPENSING UNIT UNUSABLE or REMOVED

(O) PROCEDURES

1. A reference table containing the number of oxygen bottles required for flight is contained in the (M) Procedure below.
2. Captain to brief Lead Flight Attendant/Purser on location of unusable or missing units.

(M) PROCEDURES

1. Placard unserviceable oxygen bottle(s) or remove unserviceable oxygen bottle(s) from aircraft.
2. Serviceable oxygen bottles are distributed throughout the aircraft as follows:
   a) 4 serviceable oxygen bottles– 2 FWD and 2 AFT
   b) 3 serviceable oxygen bottles– 1 FWD and 2 AFT

   NOTE: Any excess oxygen bottles that cannot be secured in the cabin in a standard oxygen bottle location must be removed from the aircraft.

Portable Oxygen Requirements – Minimum for Dispatch

A319/A320/A321

NUMBER OF PASSENGERS AND FLIGHT ATTENDANTS	MIN NUMBER OF FULL 11 CU. FT. OXY BOTTLES REQUIRED	
1 – 50	3	
51 – 100	3	
101 – 150	3	
151 – 200	4	

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
35-32-01	Protective Breathing Equipment (PBE) Units	**Y**	5	4	**C**	**(M)** One forward passenger compartment PBE unit may be inoperative provided: a) Inoperative PBE is removed from the aircraft before departure, and b) Location placarding is removed or obscured.

MEL ITEM	TAB LOCATION	PLACARD TEXT
35-32-01	Adjacent To Missing PBE And On An Empty Space On The Forward Center Instrument Panel	___ PBE IS INOP AND REMOVED FROM THE AIRCRAFT

(M) PROCEDURES

1. Remove PBE from aircraft.
2. Cover up the PBE location placard or remove it.

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NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	CLASS II MAINTANENCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY					
36-36-00A	Fault(s) Indicated by AIR BLEED (For A321 Aircraft)	**N**	-	-	**C**	**(M)** May be displayed provided it is verified that the CFDS does not report a fault on APU Leak detection loop.
36-36-00B	Fault(s) Indicated by AIR BLEED (A321 Aircraft)	**N**	-	-	**C**	**(M)** May be displayed provided APU Leak detection loop is considered inoperative and deferred per MEL 36-22-17A or 36-22-17C as applicable. NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
36-36-00C	Fault(s) Indicated by AIR BLEED (For A319/A320 Aircraft)	**N**	-	-	**C**	**(M)** May be displayed provided it is verified that the CFDS does not report a fault on APU Leak detection loop.
36-36-00D	Fault(s) Indicated by AIR BLEED (For A319/A320 Aircraft)	**N**	-	-	**C**	**(M)** May be displayed provided: a) Verify CFDS does not report faults on BMC 1, LH pylon leak detection loop or the APU Leak detection loop, b) If CFDS reports a fault on BMC 2, BMC 2 is considered inoperative and deferred per MEL 36-11-08A, 36-11-08B, or 36-11-08C as applicable, and c) If CFDS reports a fault on the RH pylon leak detection loop, RH pylon leak detection loop is considered inoperative and deferred per MEL 36-22-15A, 36-22-15B, or 36-22-15C as applicable.
36-36-00E	Fault(s) Indicated by AIR BLEED (For A319/A320 Aircraft)	**N**	-	-	**C**	**(M)** May be displayed provided: a) Verify CFDS does not report faults on BMC 2, RH pylon leak detection loop, b) If CFDS reports a fault on BMC 1, BMC 1 is considered inoperative and deferred per MEL 36-11-08A, 36-11-08B, or 36-11-08C as applicable, c) If CFDS reports a fault on the LH pylon leak detection loop, LH pylon leak detection loop is considered inoperative and deferred per MEL 36-22-15A, 36-22-15B, or 36-22-15C as applicable, and d) If CFDS reports a fault on APU leak detection loop, APU leak detection loop is considered inoperative.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
36-36-00A	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “AIR BLEED” DISPLAYED
36-36-00B	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “AIR BLEED” DISPLAYED
36-36-00C	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “AIR BLEED” DISPLAYED
36-36-00D	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “AIR BLEED” DISPLAYED
36-36-00E	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “AIR BLEED” DISPLAYED

(M) PROCEDURES

36-36-00A, 36-36-00C

Perform AMM Task 36-11-00-040-004.

36-36-00B

Defer APU Leak detection loop per MEL 36-22-17A or 36-22-17C as applicable

36-36-00D

1. Defer BMC 2 per MEL 36-11-08A, 36-11-08B, or 36-11-08C as applicable.
2. Defer RH pylon leak detection loop per MEL 36-22-15A, 36-22-15B, or 36-22-15C as applicable.
3. Perform AMM Task 36-11-00-040-807.

36-36-00E

1. Defer BMC 1 per MEL 36-11-08A, 36-11-08B, or 36-11-08C as applicable.
2. Defer LH pylon leak detection loop per MEL 36-22-15A, 36-22-15B, or 36-22-15C as applicable.
3. Perform AMM Task 36-11-00-040-808.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-11-01A	Bleed Air Supply Systems **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated ENG BLEED p.b. sw is selected OFF, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization, c) Airplane is not operated in known or forecast structural icing conditions, d) Airplane remains at or below FL310, e) The X-BLEED valve selector switch is selected OPEN, and f) No live animals or perishables are carried in the AFT cargo compartment. Theater Restrictions May Apply
36-11-01B	Bleed Air Supply Systems (For A320/A321 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated ENG BLEED p.b. sw is selected OFF, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization, c) Airplane is not operated in known or forecast structural icing conditions, d) The speed brakes are operative, e) The X-BLEED valve selector switch is selected OPEN, and f) No live animals or perishables are carried in the AFT cargo compartment. Theater Restrictions May Apply

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-11-01C	Bleed Air Supply Systems (For A319 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated ENG BLEED p.b. sw is selected OFF, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization, c) Airplane is not operated in known or forecast structural icing conditions, d) Airplane remains at or below FL 370, e) The speed brakes are operative, f) The X-BLEED valve selector switch is selected OPEN, and g) No live animals or perishables are carried in the AFT cargo compartment. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-11-01A	Adjacent To Affected Bleed Switch	___ BLEED AIR SUPPLY SYSTEM INOP
36-11-01B	Adjacent To Affected Bleed Switch	___ BLEED AIR SUPPLY SYSTEM INOP
36-11-01C	Adjacent To Affected Bleed Switch	___ BLEED AIR SUPPLY SYSTEM INOP

(O) PROCEDURES

36-11-01A

1. WING ANTI ICE pb – OFF.
2. Do not operate airplane in known or forecast structural icing conditions.
3. Operate aircraft at or below FL310.
4. For the A319/A320 aircraft: PACK FLOW – LO.
5. For the A321 aircraft: ECON FLOW – ON.
6. AFT CARGO HOT AIR – OFF.
7. Affected ENG BLEED – OFF.
8. Select Cross Bleed valve to OPEN.
9. For the A319/A320 Aircraft: BLEED Page – SELECT and MONITOR (throughout the flight)

   If the pre cooler outlet temperature of the remaining bleed exceeds 240 degrees C within 2 minutes after X BLEED valve opening:

   PACK (on the first affected bleed side) – OFF.

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10. For takeoff – switch off the packs.
11. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

36-11-01B

1. WING ANTI ICE pb – OFF.
2. Do not operate airplane in known or forecast structural icing conditions.
3. For the A320 aircraft: PACK FLOW – LO.
4. For the A321 aircraft: ECON FLOW – ON.
5. AFT CARGO HOT AIR – OFF.
6. Affected ENG BLEED – OFF.
7. Select Cross Bleed valve to OPEN.
8. For the A320 Aircraft: BLEED Page – SELECT and MONITOR (throughout the flight)

   If the pre cooler outlet temperature of the remaining bleed exceeds 240 degrees C within 2 minutes after X BLEED valve opening:

   PACK (on the first affected bleed side) – OFF.
9. For takeoff – switch off the packs.
10. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

36-11-01C

1. WING ANTI ICE pb – OFF.

1. Do not operate airplane in known or forecast structural icing conditions.
2. Operate aircraft at or below FL370.
3. PACK FLOW – LO.
4. AFT CARGO HOT AIR – OFF.
5. Affected ENG BLEED – OFF.
6. Select Cross Bleed valve to OPEN.
7. BLEED Page – SELECT and MONITOR (throughout the flight)

   If the pre cooler outlet temperature of the remaining bleed exceeds 240 degrees C within 2 minutes after X BLEED valve opening:

   PACK (on the first affected bleed side) – OFF.
8. For takeoff – switch off the packs.
9. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

(M) PROCEDURES

36-11-01A, 36-11-01B, 36-11-01C

Before applying this MEL, contact MCC. MCC will review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
36-11-02	Bleed Valves Pressure Regulating Valves (PRV) **"DISP.APPR.REQ'D"**	**N** 2	1	**C**	**(M)(O)** One may be inoperative secured closed provided: a) Associated bleed air supply system is considered inoperative, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization, c) The associated ENG BLEED p.b. sw is selected OFF, d) The X–BLEED valve selector switch is selected OPEN, e) Airplane is not operated in known or forecast structural icing conditions, f) Airplane remains at or below FL 310, and g) No live animals or perishables are carried in the AFT cargo compartment. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-11-02	Adjacent To Affected Bleed Switch	___ PRV INOP AND SECURED CLOSED ___ BLEED AIR SUPPLY SYSTEM INOP

(O) PROCEDURES

1. WING ANTI ICE pb – OFF.
2. Do not operate airplane in known or forecast structural icing conditions.
3. Operate aircraft at or below FL310.
4. PACK FLOW – LO
5. AFT CARGO HOT AIR – OFF
6. Affected ENG BLEED – OFF.
7. Select Cross Bleed valve to OPEN.
8. BLEED Page – SELECT and MONITOR (throughout the flight)

   If the pre cooler outlet temperature of the remaining bleed exceeds 240 degrees C within 2 minutes after X BLEED valve opening:

   – PACK (on the first affected bleed side) – OFF

   NOTE: Flaps 01/FIX and FLEX Thrust may be used if permitted by the AWABS.
9. For takeoff – switch off the packs.
10. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

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(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

WARNING: MAKE SURE THAT THE PNEUMATIC SYSTEM IS DEPRESSURIZED BEFORE YOU START WORK ON THE PNEUMATIC SYSTEM. BE CAREFUL WHEN YOU WORK ON ENGINE COMPONENTS IMMEDIATELY AFTER THE ENGINE IS SHUTDOWN. THE ENGINE COMPONENTS CAN STAY HOT FOR UP TO ONE HOUR.

Bleed Valve (PRV) Closure Procedure

1. Before applying this MEL, contact MCC. MCC will review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization.
2. Energize the aircraft electrical circuits.
3. Make sure that engine 1(2) shutdown has been longer than 5 minutes.
4. On panel 50VU:
   a) Make sure that the ON legend of the ENG/FADEC GND PWR 1(2) p/b switch is off.
   b) Put a warning notice to tell persons not to energize the FADEC 1(2).
5. On panel 30VU:
   a) Make sure that the ENG 1(2) BLEED P/B switch is released (the OFF legend is on).
   b) Make sure that the APU BLEED P/B switch is released (the ON legend is off).
6. Pull and tag the following circuit breakers:
   a) On C/B panel 49VU: pull and tag circuit breaker AIR BLEED/ENG 1/CTL location D12.
   b) On C/B panel 49VU: pull and tag circuit breaker AIR BLEED/ENG 1/MONG location D11.
   c) On C/B panel 122VU: pull and tag circuit breaker AIR BLEED/ENG 2/CTL location Z23.
   d) On C/B panel 122VU: pull and tag circuit breaker AIR BLEED/ENG 2/MONG location Z22.
7. Open the fan cowl door:
   a) For 1000EM1 (437AL, 438AR)
   b) For 1000EM2 (447AL, 448AR)
8. Make the thrust reverser unserviceable.
9. Open left thrust reverser cowl door:
   - For 1000EM1 (451AL)
   - For 1000EM2 (461AL)
10. Deactivate the Bleed Pressure Regulator Valve as follows:
    a) On the Bleed Pressure Regulator Valve (4001HA)
    b) Use a hexagonal wrench to set the manual override control to the CLOSED position.
    c) Use the locking pin (1) to lock the override control.
11. Close the left thrust reverser cowl door.
12. Make the thrust reverser serviceable.
13. Close the fan cowl door.

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14. Remove tags and close the following circuit breakers:
    a) On C/B panel 49VU: remove tag and close circuit breaker AIR BLEED/ENG 1/CTL location D12.
    b) On C/B panel 49VU: remove tag and close circuit breaker AIR BLEED/ENG 1/MONG location D11.
    c) On C/B panel 122VU: remove tag and close circuit breaker AIR BLEED/ENG 2/CTL location Z23.
    d) On C/B panel 122VU: remove tag and close circuit breaker AIR BLEED/ENG 2/MONG location Z22.
15. Restore aircraft to the required configuration.

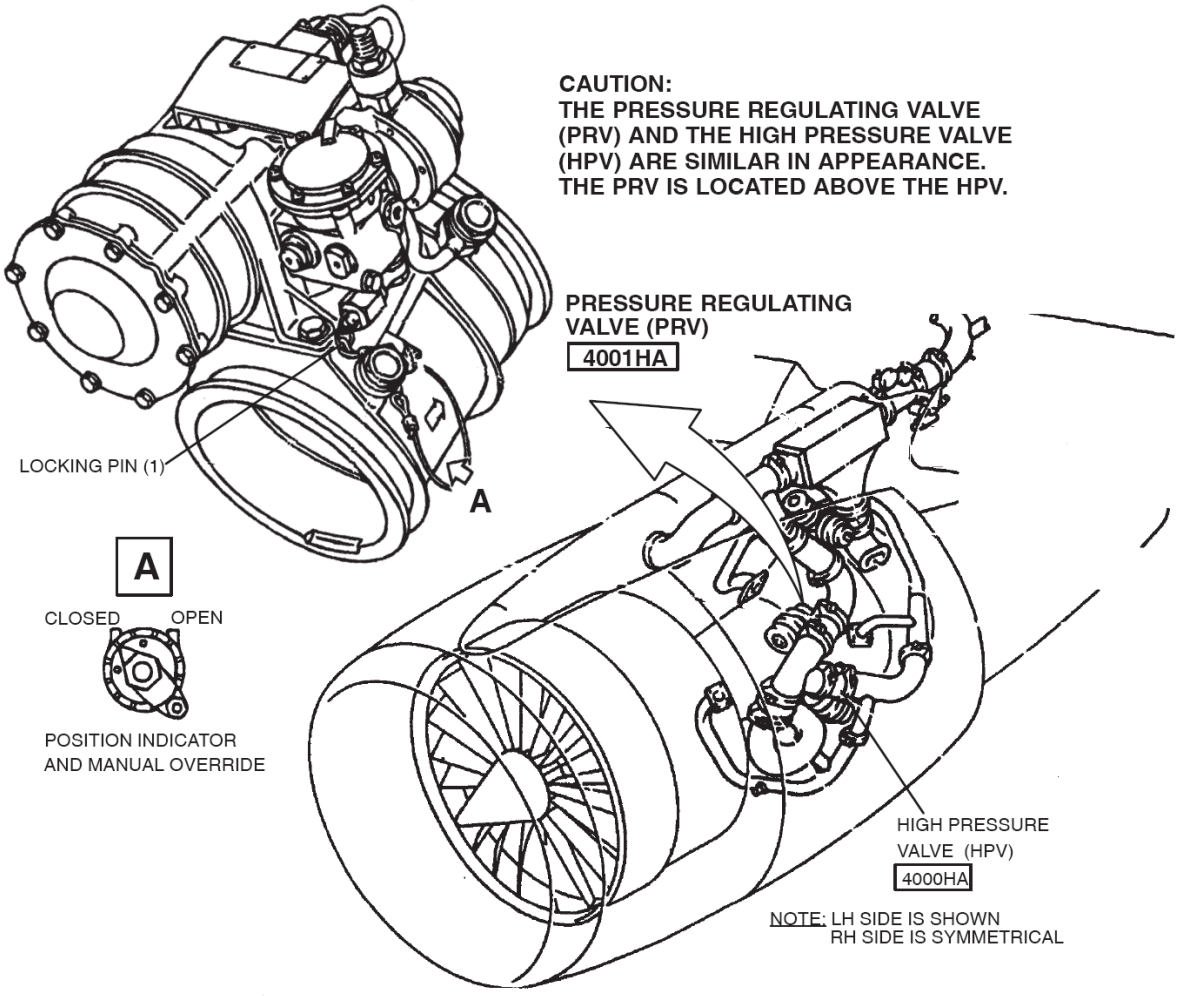

Figure 36–11–02 BLEED PRESSURE REGULATING VALVE

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-11-03A	Over Pressure Valves (Inoperative Closed) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative closed provided associated bleed air supply system is considered inoperative and deferred per MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable. Theater Restrictions May Apply
36-11-03B	Over Pressure Valves (Inoperative Open)	**Y**	2	0	**C**	May be inoperative open provided ENG BLEED FAULT or ENG BLEED ABNORM PR CAUTIONS were not triggered during previous flight.

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-11-03A	Adjacent To Affected Bleed Switch	___ OPV INOP CLOSED ___ BLEED AIR SUPPLY SYSTEM OFF
36-11-03B	Adjacent To ECAM Display	___ OVER PRESSURE VALVE INOP OPEN

(O) PROCEDURES

36-11-03A

1. Comply with (O) procedure for MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable.

(M) PROCEDURES

36-11-03A

1. Defer the associated bleed air supply system inoperative per MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-11-04	Fan Air Valves (FAV) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) Associated bleed air supply system is not used, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization, c) The associated ENG BLEED p.b. sw is selected OFF, d) The X-BLEED valve selector switch is selected OPEN, e) Airplane is not operated in known or forecast structural icing conditions, f) Airplane remains at or below FL310, and g) No live animals or perishables are carried in the AFT cargo compartment. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-11-04	Adjacent To Affected Bleed Switch	___ FAV INOP ___ BLEED AIR SUPPLY SYSTEM OFF

(O) PROCEDURES

1. WING ANTI ICE pb – OFF.
2. Do not operate airplane in known or forecast structural icing conditions.
3. Operate aircraft at or below FL310.
4. PACK FLOW – LO
5. AFT CARGO HOT AIR – OFF
6. Affected ENG BLEED – OFF.
7. Select Cross Bleed valve to OPEN.
8. BLEED Page – SELECT and MONITOR (throughout the flight)

   If the pre cooler outlet temperature of the remaining bleed exceeds 240 degrees C within 2 minutes after X BLEED valve opening:

   – PACK (on the first affected bleed side) – OFF

   NOTE: Flaps 01/FIX and FLEX Thrust may be used if permitted by the AWABS.
9. For takeoff – switch off the packs.
10. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

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(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Before applying this MEL, contact MCC. MCC will review the 7 day history, including Post flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
36-11-05	Bleed Air Precooler Exchangers **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) Associated bleed air supply system is not used, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization, c) The associated ENG BLEED p.b. sw is selected OFF, d) The X-BLEED valve selector switch is selected OPEN, e) Airplane is not operated in known or forecast structural icing conditions, f) Airplane remains at or below FL310, and g) No live animals or perishables are carried in the AFT cargo compartment. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-11-05	Adjacent To Affected Bleed Switch	___ BLEED AIR PRECOOLER INOP ___ BLEED AIR SUPPLY SYSTEM OFF

(O) PROCEDURES

1. WING ANTI ICE pb – OFF.
2. Do not operate airplane in known or forecast structural icing conditions.
3. Operate aircraft at or below FL310.
4. PACK FLOW – LO
5. AFT CARGO HOT AIR – OFF
6. Affected ENG BLEED – OFF.
7. Select Cross Bleed valve to OPEN.
8. BLEED Page – SELECT and MONITOR (throughout the flight)

   If the pre cooler outlet temperature of the remaining bleed exceeds 240 degrees C within 2 minutes after X BLEED valve opening:

   – PACK (on the first affected bleed side) – OFF

   NOTE: Flaps 01/FIX and FLEX Thrust may be used if permitted by the AWABS.
9. For takeoff – switch off the packs.
10. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

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(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Before applying this MEL, contact MCC. MCC will review the 7 day history, including Post Flight Reports, of the operative pneumatic bleed system to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
36-11-06A	Intermediate Pressure Check Valves (IP) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided associated bleed air supply system is considered inoperative and deferred per MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable. Theater Restrictions May Apply
36-11-06B	Intermediate Pressure Check Valves (IP) Inoperative Open	**N**	2	1	**C**	**(M)(O)** One may be inoperative open provided: a) Affected HP valve is secured closed and deferred per MEL 36-11-07B, and b) Opposite bleed air supply system is operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-11-06A	Adjacent To Affected Bleed Switch	___ INTERMEDIATE PRESSURE CHECK VALVE INOP ___ BLEED AIR SUPPLY SYSTEM OFF
36-11-06B	Adjacent To Affected Bleed Switch	___ INTERMEDIATE PRESSURE CHECK VALVE INOP OPEN

(O) PROCEDURES

36-11-06A

1. Comply with (O) procedures for MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable.

36-11-06B

1. Comply with (O) procedures for MEL item 36–11–07B.

(M) PROCEDURES

36-11-06A

1. Defer the associated bleed air supply system per MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable.

36-11-06B

1. Defer High Pressure Valves (HPV) inoperative per MEL item 36–11–07B.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-11-07A	High Pressure Valves (HPV) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative in the closed position provided associated bleed air supply system is considered inoperative and deferred per MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable. Theater Restrictions May Apply
36-11-07B	High Pressure Valves (HPV) **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) Affected HP valve is secured closed, and b) Opposite bleed air supply system is operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-11-07A	Adjacent To Affected Bleed Switch	___ HIGH PRESSURE VALVE INOP
36-11-07B	Adjacent To Affected Bleed Switch	___ HIGH PRESSURE VALVE INOP SECURED CLOSED

(O) PROCEDURES

36-11-07A

1. Comply with (O) procedure for MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable.

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36-11-07B

1. During flight deck preparation:
   a) Affected ENG 1(2) BLEED pb – OFF.
   b) X BLEED – AUTO.
2. After engine start, but prior to taxi:
   a) Affected ENG 1(2) BLEED pb – ON.
   b) Select the ECAM BLEED system display page and verify that the ENG BLEED valve is open and the HP BLEED valve (if available) is closed.
   c) Affected ENG 1(2) BLEED pb – OFF.
3. During taxi :
   a) Affected ENG 1(2) BLEED pb – OFF.
   b) X BLEED – OPEN.
4. Before takeoff and until descent:
   a) Affected ENG 1(2) BLEED pb – ON.
   b) X BLEED – AUTO.
5. If wing anti ice is required :
   a) ONE PACK – OFF.
6. Before descent and until parked at the gate:
   a) Affected ENG 1(2) BLEED pb – OFF.
   b) X BLEED – OPEN.
7. At the gate:
   a) X BLEED – AUTO.

(M) PROCEDURES

36-11-07A

1. Defer the associated bleed air supply system per MEL 36-11-01A, 36-11-01B, or 36-11-01C as applicable.

36-11-07B

1. Deactivate the associated HP valve per AMM Task 36-11-00-040-003.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-11-08A	Bleed Monitoring Computers (BMC) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated BLEED p.b.-sw is set to OFF, b) The associated PACK p.b.-sw is set to OFF, c) The X-BLEED selector is set to SHUT, d) If BMC 1 is inoperative, APU bleed leak detection loop is considered inoperative and deferred per MEL 36-22-17, e) The aircraft is not operated in known or forecast structural icing conditions, and f) Airplane remains at or below FL310. Theater Restrictions May Apply
36-11-08B	Bleed Monitoring Computers (BMC) (For A320 and A321 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated BLEED p.b.-sw is set to OFF, b) The associated PACK p.b.-sw is set to OFF, c) The X-BLEED selector is set to SHUT, d) If BMC 1 is inoperative, APU bleed leak detection loop is considered inoperative and deferred per MEL 36-22-17, e) The aircraft is not operated in known or forecast structural icing conditions, and f) The speed brakes are operative. Theater Restrictions May Apply
36-11-08C	Bleed Monitoring Computers (BMC) (For A319 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated BLEED p.b.-sw is set to OFF, b) The associated PACK p.b.-sw is set to OFF, c) The X-BLEED selector is set to SHUT, d) If BMC 1 is inoperative, APU bleed leak detection loop is considered inoperative and deferred per MEL 36-22-17, e) The aircraft is not operated in known or forecast icing conditions, f) Airplane remains at or below FL 370, and g) The speed brakes are operative. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-11-08A	Adjacent To BLEED Switch	____ BMC INOP
36-11-08B	Adjacent To BLEED Switch	____ BMC INOP
36-11-01C	Adjacent To BLEED Switch	____ BMC INOP

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(O) PROCEDURES

36-11-08A

1. Do not operate airplane in known or forecast structural icing conditions.
2. If speed brakes are inoperative operate aircraft at or below FL310.
3. Affected ENG BLEED – OFF.
4. Associated PACK – OFF.
5. Set X-BLEED to SHUT.
6. If BMC 1 is inoperative: APU BLEED – OFF
7. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

36-11-08B

1. Do not operate in known or forecast icing conditions.
2. Associated BLEED – OFF
3. Associated PACK – OFF
4. Set X-BLEED to SHUT
5. If BMC 1 is inoperative: APU BLEED – OFF
6. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

36-11-08C

1. Do not operate airplane in known or forecast structural icing conditions.
2. If speed brakes are inoperative operate aircraft at or below FL370.
3. Affected ENG BLEED – OFF.
4. Associated PACK – OFF.
5. Set X-BLEED to SHUT.
6. If BMC 1 is inoperative: APU BLEED – OFF
7. In flight, in the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

(M) PROCEDURES

36-11-08A, 36-11-08B, 36-11-08C

1. Defer APU leak detection loop per MEL 36-22-17.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-12-01	APU Bleed Air Supply System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided: g) APU BLEED switch remains OFF, and h) An alternate air source is available for engine starts. NOTE 1: APU can be used for electrical power. NOTE 2: Two air carts required for engine start, unless a single cart is high volume output.

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-12-01	Adjacent To APU BLEED Switch	APU BLEED AIR SYSTEM INOP

(O) PROCEDURES

1. Set APU BLEED pb switch to OFF.
2. Reference AOM Volume I Supplementary Procedures section for External Air / Cross Bleed Start procedures.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-12-02A	APU Bleed Valve Inoperative Closed **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative deactivated in the closed position provided: a) APU bleed switch is selected OFF, and b) An alternate air source is available for engine starts. NOTE 1: APU can be used for electrical power. NOTE 2: Two air carts required for engine start, unless a single cart is high volume output.
36-12-02B	APU Bleed Valve Inoperative Open **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative open provided APU is not used in flight. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-12-02A	Adjacent To APU BLEED Switch	APU BLEED VALVE INOP AND SECURED CLOSED – APU PNEUMATIC SYSTEM INOP
36-12-02B	One Tab Adjacent To APU BLEED Switch And One Tab Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU BLEED VALVE INOP OPEN DO NOT USE APU

(O) PROCEDURES

36-12-02A

1. Set APU BLEED pb switch to OFF.
2. Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures; If an APU takeoff is specified on the WDR reference AOM VOL 1 Packs Off For Takeoff.

36-12-02B

1. Do not use APU in flight.
2. When APU is running:
   a) APU BLEED pb-sw – ON
3. When APU is shutdown:
   a) APU BLEED pb-sw – OFF
4. Reference AOM VOL I Supplementary Procedures section for External Air/Cross Bleed Start procedures; If an APU takeoff is specified on the WDR reference AOM VOL 1 Packs Off For Takeoff.

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(M) PROCEDURES

36-12-02A

1. Deactivate the APU Bleed Valve close by:
   a) For aircraft with the GTCP 36-300 APU perform AMM Task 49-51-00-040-001.
   b) For aircraft with the 131-9 APU perform AMM Task 49-51-00-040-004.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-12-03A	APU Bleed Check Valve Inoperative Closed **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative closed provided: a) APU bleed switch is selected OFF, and b) An alternate air source is available for engine starts. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply
36-12-03B	APU Bleed Check Valve Inoperative Open **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative open and APU used provided: a) Airplane remains at or below FL200, and X BLEED selector is selected SHUT and ENG 1 bleed is selected OFF, and b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight Report, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization. NOTE 1: In this configuration, the number 2 engine bleed air will supply the right pneumatic manifold. NOTE 2: APU fuel burn will be 175 lbs per hr.
36-12-03C	APU Bleed Check Valve Inoperative Open **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative open provided APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-12-03A	Adjacent To APU BLEED Switch	APU BLEED CHECK VALVE INOP CLOSED APU BLEED AIR SYSTEM INOP
36-12-03B	Adjacent To ECAM Display	APU BLEED CHECK VALVE INOP OPEN
36-12-03C	One Tab Adjacent To ECAM Display And One Tab Adjacent To APU MASTER Switch On Pilot's Overhead Panel 25VU	APU BLEED CHECK VALVE INOP OPEN DO NOT USE APU

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(O) PROCEDURES

36-12-03A

1. Set APU BLEED pb switch to OFF.
2. Reference AOM Volume I Supplementary Procedures section for External Air / Cross Bleed Start procedures.

36-12-03B

1. Verify that the AWABS contains MEL item 36-12-03B.
2. Operate the APU during flight as a pneumatic source for the left pneumatic manifold.
3. After engine start, configure the bleed valves as follows:
   a) ENG 1 BLEED pb –OFF.
   b) X BLEED – SHUT.
   c) ENG 2 BLEED pb –ON.
4. Airplane must remain at or below FL200.

36-12-03B	**APU BLEED CHECK VALVE – INOPERATIVE OPEN**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	Increase BLOCK FUEL by 175 lbs. per hour for APU usage.
NOTES	None
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** None **LANDING** None

36-12-03C

1. Do not use APU.
2. External electrical and pneumatic power are required for normal starting.
3. Reference AOM Volume I Supplementary Procedures section for External Air / Cross Bleed Start procedures.

(M) PROCEDURES

36-12-03B

The (M) Indicates the following Maintenance Procedures are required:

1. Before applying this MEL, contact MCC. MCC will review the 7 day history, including Post Flight Report, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could prevent an adequate supply of bleed air for cabin pressurization.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-12-04A	Cross Bleed Valve - Automatic Control	**Y**	1	0	**C**	**(O)** May be inoperative provided manual control operates normally.
36-12-04B	Cross Bleed Valve - Manual Control **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Automatic control is verified to operate normally PRIOR TO EACH DEPARTURE, b) APU bleed is operative for engine start, c) Aircraft is not operated in known or forecast icing conditions, d) Both bleed air supply systems operate normally, and e) Both air conditioning packs operate normally. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-12-04A	Adjacent To X BLEED Knob	X BLEED INOP IN AUTO MODE
36-12-04B	Adjacent To X BLEED Knob	X BLEED INOP IN MANUAL MODE

(O) PROCEDURES

36-12-04A

During flight deck preparation:

1. X BLEED selector –OPEN. (Check on ECAM BLEED page that the crossbleed valve position indication shows open).
2. X BLEED selector –SHUT. (Check on ECAM BLEED page that the crossbleed valve position indication shows closed).
3. X BLEED selector –AUTO.
4. Prior to starting No. 2 engine, X BLEED – OPEN.
5. After No. 2 engine start, X BLEED – AS REQUIRED.

36-12-04B

During flight deck preparation:

1. X-BLEED selector – AUTO

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(M) PROCEDURES

36-12-04B

PRIOR TO EACH DEPARTURE

Check the

1. Check that the APU is started.
2. APU BLEED p.b.-sw – OFF
    a. On the BLEED SD page, check that the cross bleed valve is indicated close.
3. APU BLEED p.b.-sw – ON
    a. On the BLEED SD page, check that the cross bleed valve is indicated open

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ENG BLEED PB SWITCH 36-20-01A FAULT Lights	**N**	2	0	**C**	**(M)(O)** May be inoperative provided the ECAM message for the associated light operates normally.
36-20-01B OFF Lights	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-20-01A	Adjacent To Fault Light	___ ENG BLEED FAULT LIGHT INOP
36-20-01B	Adjacent To OFF Lights	___ ENG BLEED OFF LIGHTS INOP

(O) PROCEDURES

36-20-01A

Utilize ENG 1(2) bleed fault(s) class 1 ECAM Warning(s) to detect associated engine bleed fault(s).

(M) PROCEDURES

36-20-01A

The (M) Indicates the following Maintenance Procedures are required:

On MCDU 1or 2:

1. Select CFDS MENU, SYS REPORT TEST, PNEU.
2. Select BMC 1 (2), BMC menu is displayed.
3. Perform TEST (test must be OK for at least one BMC).

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
APU BLEED PB SWITCH					
36-20-02A Fault Light	**Y**	1	0	**C**	May be inoperative.
36-20-02B ON Light	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-20-02A	Adjacent To APU BLEED FAULT Light	APU BLEED FAULT LIGHT INOP
36-20-02B	Adjacent To APU BLEED ON light	APU BLEED ON LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM BLEED PAGE INDICATIONS					
36-20-03A	ENG BLEED Pressure	**Y**	2	0	**C**	May be inoperative.
36-20-03B	ENG BLEED Temperature	**Y**	2	0	**C**	May be inoperative.
36-20-03C	ENG BLEED Valve	**Y**	2	0	**C**	May be inoperative.
36-20-03D	ENG HP Valve	**Y**	2	0	**C**	May be inoperative.
36-20-03E	APU BLEED Valve	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided the Cross Bleed Valve automatic control is considered inoperative and deferred per MEL 36-12-04A.
36-20-03F	X BLEED Valve	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-20-03A	Adjacent To ECAM Display	___ ECAM ENG BLEED PRESSURE INDICATION(S) INOP
36-20-03B	Adjacent To ECAM Display	___ ECAM ENG BLEED TEMP INDICATION(S) INOP
36-20-03C	Adjacent To ECAM Display	___ ECAM ENG BLEED VALVE INDICATION(S) INOP
36-20-03D	Adjacent To ECAM Display	___ ECAM ENG HP VALVE INDICATION(S) INOP
36-20-03E	Adjacent To ECAM Display	ECAM APU BLEED VALVE INDICATION INOP
36-20-03F	Adjacent To ECAM Display	ECAM X BLEED VALVE INDICATION INOP

(O) PROCEDURES

36-20-03E

1. When the APU BLEED is selected ON, select the X BLEED valve OPEN.
2. When the APU BLEED is selected OFF, select the X BLEED valve to AUTO.

(M) PROCEDURES

36-20-03E

1. Defer Cross Bleed Valve automatic control per MEL 36-12-04A.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
36-22-15A	Pylon Leak Detection Loops (A319/A320/A321 Aircraft) **"DISP.APPR.REQ'D"**	**N** 2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated pylon leak detection loop is deactivated, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) The associated BLEED p.b–sw is set to OFF, d) The associated PACK p.b–sw is set to OFF, e) The X–BLEED selector is set to SHUT, f) The APU BLEED p.b–sw is set to OFF if LH side is affected, g) The aircraft is not operated in known or forecast structural icing conditions, and h) Airplane remains at or below FL 310. Theater Restrictions May Apply
36-22-15B	Pylon Leak Detection Loops (A320/A321 Aircraft) **"DISP.APPR.REQ'D"**	**N** 2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated pylon leak detection loop is deactivated, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) The associated BLEED p.b–sw is set to OFF, d) The associated PACK p.b–sw is set to OFF, e) The X–BLEED selector is set to SHUT, f) The APU BLEED p.b–sw is set to OFF if LH side is affected, g) The aircraft is not operated in known or forecast structural icing conditions, and h) The speedbrakes are operative. Theater Restrictions May Apply

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
36-22-15C	Pylon Leak Detection Loops (A319 Aircraft) **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) The associated pylon leak detection loop is deactivated, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) The associated BLEED p.b–sw is set to OFF, d) The associated PACK p.b–sw is set to OFF, e) The X–BLEED selector is set to SHUT, f) The APU BLEED p.b–sw is set to OFF if LH side is affected, g) The aircraft is not operated in known or forecast structural icing conditions, h) The speedbrakes are operative, and i) Airplane remains at or below FL 370. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-22-15A	Adjacent To ECAM Display	___ PYLON LEAK DETECTION LOOP INOP
36-22-15B	Adjacent To ECAM Display	___ PYLON LEAK DETECTION LOOP INOP
36-22-15C	Adjacent To ECAM Display	___ PYLON LEAK DETECTION LOOP INOP

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(O) PROCEDURES

36-22-15A, 36-22-15B, 36-22-15C

1. WING ANTI ICE pb – OFF.
2. Do not operate airplane in known or forecast structural icing conditions.
3. For A319/A320 aircraft when the speedbrakes are inoperative: Operate aircraft at or below FL310.
4. For the A319 aircraft with the speedbrakes operational: Operate the aircraft at or below FL 370.
5. A321 aircraft when the speedbrakes are inoperative: Operate aircraft at or below FL310.

NOTE: There is no FL restriction for the A320 and A321 aircraft when the speedbrakes are operational.

6. During flight deck preparation:
   a) Affected ENG BLEED pb – OFF.
   b) Associated PACK pb – OFF.
   c) X BLEED – SHUT.
   d) If LH side is affected, APU BLEED pb – OFF,
7. Just prior to and during engines start:
   a) Affected ENG BLEED pb – As required.
   b) X BLEED–As required.
   c) APU BLEED pb–As required.
8. After engines start:
   a) Affected ENG BLEED pb – OFF.
   b) X BLEED – SHUT.
   c) If LH side is affected, APU BLEED pb – OFF,

   NOTE 1: Flaps 01/FIX and FLEX Thrust may be used if permitted by the AWABS.
9. For takeoff – switch off both packs.

   NOTE 2: In flight:

   a) If the BLOWER and EXTRACT pb–sw are selected to OVRD, cabin altitude may reach about 9,700 ft. (CAB PR EXCESS ALT caution may be displayed on ECAM E/WD).
   b) In the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

(M) PROCEDURES

36-22-15A, 36-22-15B, 36-22-15C

1. Before applying this MEL, contact MCC. MCC will review the 7 day history, including Post Flight reports, of the operative of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system.
2. Deactivate the pylon overheat sensing element by performing AMM Task 36-22-00-040-001.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
36-22-17A	APU Leak Detection Loop (For A320/A321 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided: a) AIR APU BLEAD LEAK was not displayed during the previous flight, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) ENG 1 BLEED p.b.-sw is set to OFF, d) PACK 1 p.b.-sw is set to OFF, e) X-BLEED selector is set to SHUT, f) APU BLEED p.b.-sw is set to OFF, g) Aircraft is not operated in known or forecast structural icing conditions, and h) Speedbrakes are operative. Theater Restrictions May Apply
36-22-17B	APU Leak Detection Loop (For A319 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided: a) AIR APU BLEAD LEAK was not displayed during the previous flight, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) ENG 1 BLEED p.b.-sw is set to OFF, d) PACK 1 p.b.-sw is set to OFF, e) X-BLEED selector is set to SHUT, f) APU BLEED p.b.-sw is set to OFF, g) Aircraft is not operated in known or forecast structural icing conditions, h) Speedbrakes are operative, and i) Airplane remains at or below FL 370. Theater Restrictions May Apply

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
36-22-17C	APU Leak Detection Loop (For A319/A320/A321 Aircraft) **"DISP.APPR.REQ'D"**	**Y** 1	0	**C**	**(M)(O)** May be inoperative provided: a) AIR APU BLEAD LEAK was not displayed during the previous flight, b) Upon initial MEL application, MCC shall review the 7 day history, including Post Flight reports, of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system, c) ENG 1 BLEED p.b.-sw is set to OFF, d) PACK 1 p.b.-sw is set to OFF, e) X-BLEED selector is set to SHUT, f) APU BLEED p.b.-sw is set to OFF, g) Aircraft is not operated in known or forecast structural icing conditions, and h) Airplane remains at or below FL 310. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
36-22-17A	Adjacent To ECAM Display	APU LEAK DETECTION LOOP INOP
36-22-17B	Adjacent To ECAM Display	APU LEAK DETECTION LOOP INOP
36-22-17C	Adjacent To ECAM Display	APU LEAK DETECTION LOOP INOP

(M) PROCEDURES

36-22-17A, 36-22-17B, 36-22-17C

During cockpit preparation:

1. ENG BLEED p.b.-sw (affected side) – OFF
2. PACK p.b.-sw (affected side) – OFF
3. X-BLEED p.b.-sw – SHUT
4. APU BLEED p.b.-sw – OFF

   NOTE : The use of the APU bleed air supply system for main engine start is permitted.

In-Flight

1. In case of failure of the remaining engine bleed air supply system, or in the case of failure of the associated engine:
   1) Apply the associated ECAM procedure
   2) In the event of remaining bleed air supply system failure or associated engine failure: Apply associated ECAM procedure(s) and refer to the AIR DUAL BLEED FAULT procedure in the QRH.

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(M) PROCEDURES

36-22-17A, 36-22-17B, 36-22-17C

Before applying this MEL, contact MCC. MCC will review the 7 day history, including Post Flight reports, of the operative of the operative pack and pneumatic bleed system associated with the operative pack to ensure no known conditions exist that could affect proper operation of the pressurization system.

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ATA 38 Contents

38-10-01A Potable Water System Compressor 38-2
38-10-01B Potable Water System Quantity Indication 38-2
38-10-01D Potable Water System Individual Components (Lavatory Sink Drain or Faucet) 38-2
38-10-01E Potable Water System Fill Valve and/or Overflow Valve 38-2
38-10-01F Potable Water System Galley Drains 38-3
38-10-01G Potable Water System 38-3
38-30-01A Lavatory Waste Systems (Including Wheelchair Accessible Lavatories) 38-11
38-30-01B Lavatory Waste Systems Waste Quantity Indication System 38-11
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38-30-01D Lavatory Waste Systems Vacuum Generator (Toilet) 38-12

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
38-10-01A	Potable Water System Compressor (ALL Except A/C 3201-3206)	**N**	1	0	**C**	**(M)** May be inoperative provided the compressor is deactivated. NOTE: Water system pressure may be supplied on the ground by operating the APU or running an engine.
38-10-01B	Potable Water System Quantity Indication **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)** May be inoperative provided: a) Affected quantity indication is deactivated or isolated, b) System is verified not to have leaks, and c) Potable water tank is serviced prior to each departure.
38-10-01C	Potable Water System Individual Components (ALL EXCEPT Lavatory Sink Drain or Faucet Fill Valve and/or Overflow Valve and Galley Drains)	**N**	-	-	**C**	**(M)** Individual components may be inoperative provided: a) Associated components are deactivated or isolated, and b) Associated system components are verified not to have leaks. NOTE 1: Any portion of system which operates normally may be used. NOTE 2: Leaking lines or tank renders system inoperative.
38-10-01D	Potable Water System Individual Components (Lavatory Sink Drain or Faucet) **"DISP.APPR.REQ'D"**	**N**	-	-	**C**	**(M)** Lavatory Sink Drain(s) or Faucet(s) may be inoperative provided: a) Associated components are deactivated or isolated, and b) Associated system components are verified not to have leaks. NOTE: Provide moist towelettes (or equivalent) for passenger needs.
38-10-01E	Potable Water System Fill Valve and/or Overflow Valve **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)(O)** May be inoperative provided: a) Associated system components are verified not to have leaks, and b) The overflow valve is verified closed AFTER EACH WATER SERVICING (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
38-10-01F	Potable Water System Galley Drains	**N**	4	0	**C**	**(M)(O)** May be inoperative provided associated galley drain is blocked.
38-10-01G	Potable Water System **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** May be inoperative provided: a) Performance corrections are applied, b) System is drained, c) System is not serviced, and d) Repairs are made within one flight day. NOTE: Provide a source of potable water and moist towelettes (or equivalent) for passenger needs.
38-10-01H	Potable Water System Contaminated **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) Each galley potable water shut–off valve is turned to OFF b) Each lavatory sink potable water is deactivated. NOTE: Provide a source of potable water and moist towelettes (or equivalent) for passenger needs.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
38-10-01A	On The FWD Flight Attendants Control Panel	POTABLE WATER SYSTEM COMPRESSOR INOP
38-10-01B	On The FWD Flight Attendants Control Panel	___ POTABLE WATER SYSTEM QUANTITY INDICATOR INOP
38-10-01C	On The FWD Flight Attendants Control Panel	___ INDIVIDUAL COMPONENTS INOP
38-10-01D	On The FWD Flight Attendants Control Panel	___ LAVATORY SINK/DRAIN(S) INOP
38-10-01E	On The FWD Flight Attendants Control Panel	___ VALVE(S) INOP
38-10-01F	On The FWD Flight Attendants Control Panel	___ GALLEY DRAIN(S) INOP
38-10-01G	On The FWD Flight Attendants Control Panel	POTABLE WATER SYSTEM INOP
38-10-01H	Discards Tabs	POTABLE WATER SYSTEM CONTAMINATED

(O) PROCEDURES

38-10-01E

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required after each water servicing.

38-10-01F

Captain to brief Lead Flight Attendant/Purser which galley drains are blocked.

38-10-01G

Captain to brief Lead Flight Attendant/Purser:

1. To pour a small bottle/cup of water down each lavatory toilet hourly to prevent clogging.
2. Galley water and coffee makers cannot be used.

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38-10-01G	**POTABLE WATER SYSTEM**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	None
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** None **LANDING** None **OTHER CORRECTIONS (Manual Weight & Balance Worksheet only)** Use OEW correction for "Potable Water System Drained" in ALM – Weight and Balance Section.

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38-10-01H

Captain to brief Lead Flight Attendant/Purser that the Galley water and coffee makers cannot be used.

NOTE: Rinse water is still available for toilet flushing only.

(M) PROCEDURES

38-10-01A

The (M) or (O) Indicates the following Maintenance Procedures are required:

Deactivate Potable Water System compressor:

1. On A/C 3209–3250
   a) On C/B panel 2001VU: pull and secure circuit breaker WATER SYS–AIR–COMPRESSOR location D03.
   b) On A/C 3251–3278, 3101–3171
2. On C/B panel 2001VU: pull and secure circuit breaker WATER SYS–AIR–COMPRESSOR location F01.

   NOTE: The 2001VU panel is located in the ceiling of the Aft Galley area.

38-10-01B

The (M) Indicates the following Maintenance Procedures are required:

To deactivate and isolate water quantity indication accomplish the following:

1. On A/C 3209–3250
   a) On C/B panel 2000VU: pull and secure circuit breaker WATER SYS–QANT IND location D03.

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2. On A/C 3251–3278
   a) On C/B panel 2000VU: pull and secure circuit breaker WATER SYS–QANT–IND location B01.
3. On A/C 3101–3171
   a) On C/B panel 2001VU: pull and secure circuit breaker WATER SYS–QUANT–IND location B06.

      NOTE: The 2001VU panel is located in the ceiling of the Aft Galley area.
   b) System is verified not to have leaks.
   c) Potable water tank is serviced.

38-10-01C, 38-10-01D

The (M) Indicates the following Maintenance Procedures are required:

1. Associated components are deactivated or isolated.
2. Associated system components are verified not to have leaks.

   NOTE: Any portion of the system which operates normally may be used.
3. If lav is affected, pull and secure associated Lavatory Water Heater circuit breakers.

   AMM Quick Reference to most common procedures:

   - Lav sink deactivation 38–10–02 p201
   - Water storage 38–11–00
   - Water Tank 38–11–41
   - Water Shut–off valve 38–12–14
   - Water Heater 38–12–16
   - Water faucet 38–12–41

38-10-01E

The (M) Indicates the following Maintenance Procedures are required:

1. AFTER USE CHECK (After Each Water Servicing)
   a) If unable to service the potable water system, accomplish the following: (Ref. AMM TASK 12–15–38–613–002

      FOR A/C 3209–3278

      - On service panel 2023VU, turn the FILL/OVERFLOW/DRAIN control handle from NORMAL to FILL position and pull the control handle out to the mechanical stop.
      - On service panel 192NB, turn the tank overflow valve control handle to the open position.

–OR–

      FOR A/C 3101–3171

      - On service panel 2023VU, turn the FILL/OVERFLOW/DRAIN control handle from NORMAL to FILL position and pull the control handle out to the mechanical stop.

   b) After servicing the potable water system, accomplish the following:
      1) Verify that the TANK OVERFLOW valve on service panel 192NB is closed and no air is escaping from the valve port. If there is air present, cycle valve handle until valve closes and there is longer air escaping from port.

Continued Next Page

2) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

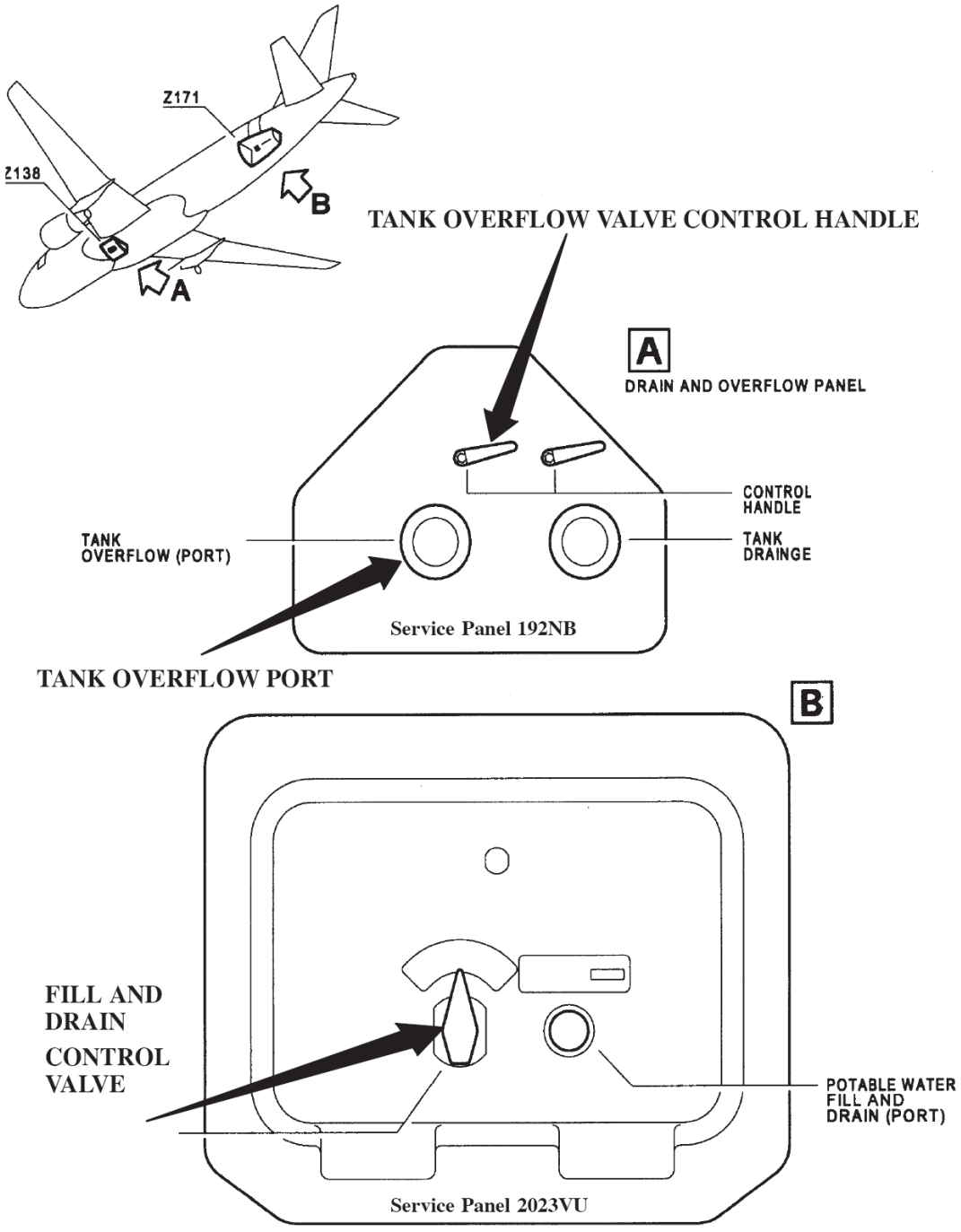

Figure 38–10–01B.1
FOR A/C 3209–3278
Potable Water Service Panel 192NB & 2023VU

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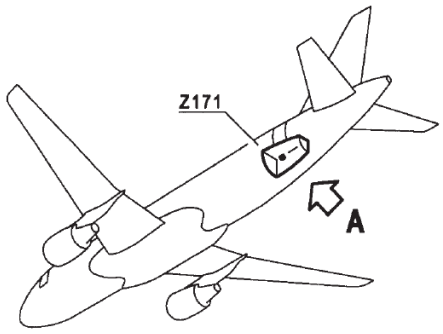

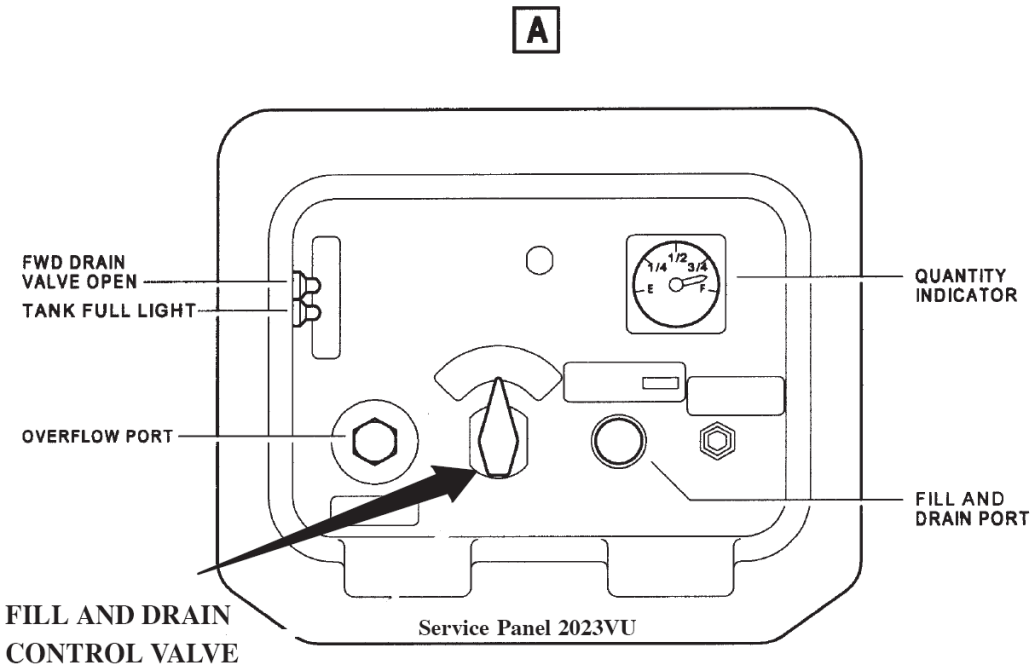

Figure 38–10–01B.2
FOR A/C 3101–3171
Potable Water Service Panel 2023VU

38-10-01F

The (M) Indicates the following Maintenance Procedures are required:

1. To deactivate galley basin drain(s), accomplish the following:

   a) Place a strip of Red colored OM–2 “UNSERVICEABLE–DO NOT USE” tape or equivalent* across the applicable galley basin drain.

   * An acceptable alternate to the OM2 tape is a section of 2 inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in 1 inch black letters.

Continued Next Page

38-10-01G

The (M) Indicates the following Maintenance Procedures are required:

1. Tank must be drained.
2. The outside water servicing cap is safety wired closed and placarded with a manila tag approximately 2 inches by 4 inches or equivalent with a wire attached stating POTABLE WATER SYSTEM INOP, DO NOT SERVICE.
3. Pull and secure all Lavatory Water Heater circuit breakers:
4. On A/C 3209–3250
   a) On C/B panel 2001VU: pull and secure circuit breaker LAV AFT–HOT WATER– location C04.
   b) On C/B panel 2001VU: pull and secure circuit breaker LAV AFT–HOT WATER location C02.
5. On A/C 3251–3278
   a) On C/B panel 2001VU: pull and secure circuit breaker LAV AFT&MID HOT WATER E location B03.
   b) On C/B panel 2001VU: pull and secure circuit breaker LAV AFT–HOT WATER location B02.
6. On A/C 3101–3171
   a) On C/B panel 2000VU: pull and secure circuit breaker LAV FWD & MID–HOT WATER–A location F02.
   b) On C/B panel 2001VU: pull and secure circuit breaker LAV AFT–HOT WATER–E location B03.
   c) On C/B panel 2001VU: pull and secure circuit breaker LAV AFT–HOT WATER–D location B02.

38-10-01H

The (M) Indicates the following Maintenance Procedures are required:

1. Turn the potable water EMERGENCY WATER SHUT–OFF valve to OFF at each galley.
2. Refer to AMM Task 38–10–00–040–001–000–NWA to deactivate sink potable water supply at each lavatory.
3. Flush each toilet to verify that water is visible in the bowl and operates normally.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
38-30-01A	Lavatory Waste Systems (Including Wheelchair Accessible Lavatories) **"DISP.APPR.REQ'D"**	**N**	-	-	**C**	**(M)(O)** Associated lavatory system(s) may be inoperative provided: a) Associated components are deactivated or isolated to prevent leaks, b) The Captain will determine if flight duration is acceptable with a forward lavatory unusable, and c) The lavatory door is locked closed and placarded "UNSERVICEABLE–DO NOT USE." NOTE 1: It is acceptable for other lavatories (in lieu of the forward) to be used during flight. NOTE 2: These provisos are not intended to prohibit lavatory inspections by crewmembers. Ensure lavatory door is locked closed after crewmember inspection. NOTE: 3: Affected lavatory is usable by crewmembers provided the vacuum waste system is operative. Ensure lavatory door is locked closed after crewmember use.
38-30-01B	Lavatory Waste Systems (Including Wheelchair Accessible Lavatories) Waste Quantity Indication System **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)** May be inoperative provided: a) Indication system is deactivated or isolated, b) Indication system components are verified not to have leaks, and c) Lavatory waste tank is serviced prior to each departure.
38-30-01C	Lavatory Waste Systems (Including Wheelchair Accessible Lavatories) Individual Components	**N**	-	-	**C**	**(M)** Individual components may be inoperative provided: a) Associated components are deactivated or isolated, b) Associated system components are verified not to have leaks. NOTE: Any portion of system which operates normally may be used.

Continued Next Page

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
38-30-01D	Lavatory Waste Systems (Including Wheelchair Accessible Lavatories) Vacuum Generator (Toilet)	**N** 1	0	**C**	**(M)(O)** May be inoperative provided: a) Vacuum generator is deactivated, and b) Procedures are used to only allow use of lavatories at or above 16,000 ft MSL. NOTE: Toilets will not flush on ground or altitudes below 16,000 ft MSL. Toilets will flush normally above 16,000 ft MSL (by differential pressure).

MEL ITEM	TAB LOCATION	PLACARD TEXT
38-30-01A	On Affected Lavatory Door	___ LAVATORY INOP
38-30-01B	On The FWD Flight Attendants Control Panel	LAVATORY SYSTEMS WASTE QUANTITY INDICATION INOP
38-30-01C	On The FWD Flight Attendants Control Panel	___ INDIVIDUAL COMPONENTS INOP
38-30-01D	On The FWD Flight Attendants Control Panel	TOILET VACUUM GENERATOR INOP TOILETS WILL FLUSH ONLY ABOVE 16,000 FEET

(O) PROCEDURES

38-30-01A

Captain is to ensure the lavatory door is locked closed if crewmember inspection has been performed or if the lavatory is used by a crewmember.

38-30-01D

Captain to brief Lead Flight Attendant/Purser to lock lavatories below 16,000 ft and unlock lavatories above 16,000 ft.

(M) PROCEDURES

38-30-01A

1. Close and lock the Lavatory Door as follows:
   a) Lift the LAVATORY sign on the outer face of the lavatory door.
   b) Move the latch under the sign until the indicator shows the door is locked (OCCUPIED).
   c) Check that the door will not open.
2. Place a strip of Red colored OM2 “UNSERVICEABLE – DO NOT USE” tape (or equivalent*) across the lavatory door and across the toilet lid to prevent use.

   * An acceptable alternate to the OM2 tape is a section of two inch wide masking tape with the words “UNSERVICEABLE – DO NOT USE” printed legibly in one inch black letters.

Continued Next Page

38-30-01B

Indication system is deactivated or isolated.

1. Remove power for the liquid level transmitter (40MG) by pulling the associated circuit breaker:
2. Pull and tag the following circuit breakers:
   a) On A/C 3209–3250:

      On C/B panel 2001 VU: pull and tag circuit breaker VACU TOIL SYS–VACU–SYS location B06.

   b) On A/C 3251–3278 and A321 aircraft:

      On C/B panel 2001 VU: pull and tag circuit breaker VACU TOIL SYS–VACU–SYS location A06.

   c) On A/C 3101–3171:

      On C/B panel 2001 VU: pull and tag circuit breaker VACU TOIL SYS–VACUUM–SYS location A06.
3. Disconnect the cannon plug for the liquid level transmitter on the tank and put a blanking cap, tape or equivalent to cover the plug.
4. Secure the cannon plug with tie straps, nylon string etc.
5. Remove tag and close the following circuit breakers:
   a) On A/C 3209–3250:

      On C/B panel 2001 VU: remove tag and close circuit breaker VACU TOIL SYS–VACU–SYS location B06.

   b) On A/C 3251–3278 and A321 aircraft:

      On C/B panel 2001 VU: remove tag and close circuit breaker VACU TOIL SYS–VACU–SYS location A06.

   c) On A/C 3101–3171:

      On C/B panel 2001 VU: remove tag and close circuit breaker VACU TOIL SYS–VACUUM–SYS location A06.
6. Indication system components are verified not to have leaks.
7. Verify toilet vacuum flush system is operative by flushing an operative toilet.
8. Lavatory waste tank is serviced prior to each departure.

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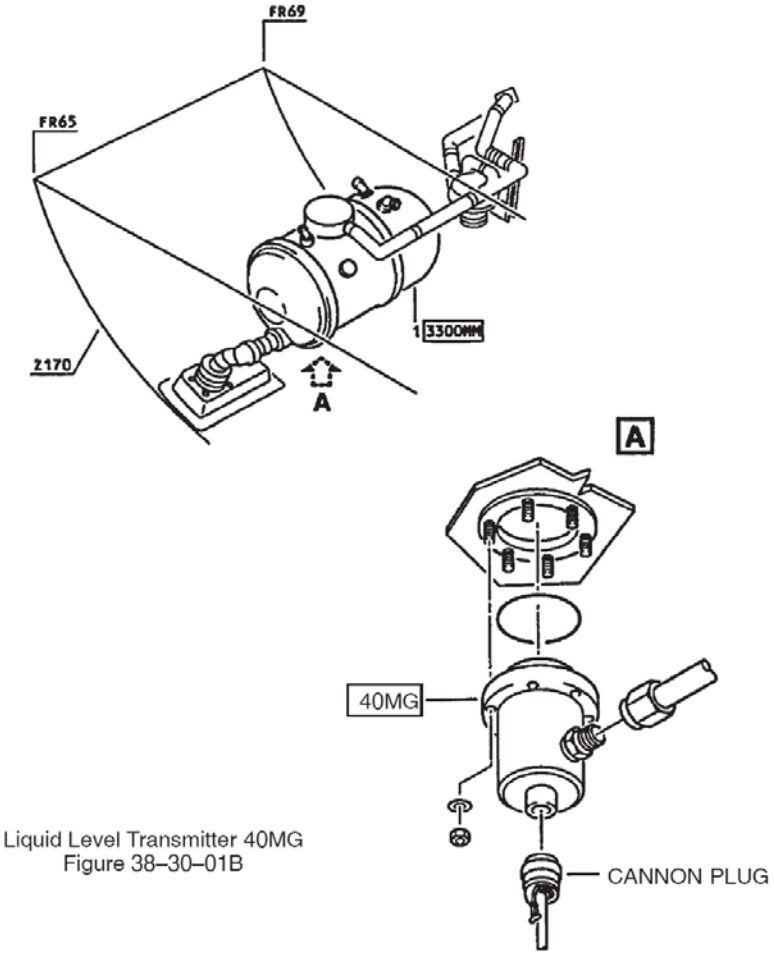

Liquid Level Transmitter 40MG
Figure 38–30–01B

38-30-01C

1. Individual components may be inoperative provided:
   a) Associated components are deactivated or isolated.
   b) Associated system components are verified not to have leaks.

NOTE: Any portion of the system which operates normally may be used.

38-30-01D

1. To deactivate the vacuum generator accomplish the following:
2. For A/C 3209–3250
   a) On C/B panel 2001VU: pull and secure circuit breaker VACU TOIL SYS–VACU–GEN location B08.
3. For A/C 3251–3278
   a) On C/B panel 2001VU: pull and secure circuit breaker VACU TOIL SYS–VACUUM–GEN location A08.
4. For A319 and A321 aircraft
   a) On C/B panel 2001VU: For the A319 aircraft pull and secure circuit breaker VACU TOIL SYS–VACUUM–SYS location A06 or for A321 aircraft pull and secure circuit breaker VACU TOIL SYS-VACU-SYS location A06.

ATA 46 Contents

46-21-01A Air Traffic Service Unit (ATSU)....46-2
46-21-01B ATSU Chime....46-2
46-21-01C ATSU Message Storage....46-2
46-21-01D ATSU UTC Time Reset....46-2
46-21-01E ATSU Out, Off, On, In, Times Function....46-2
46-21-01F ATSU Weight Data Page....46-3

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER REQUIRED FOR DISPATCH		REPAIR CATEGORY	REMARKS OR EXCEPTIONS
46-21-01A	Air Traffic Service Unit (ATSU) (All A319 and A321 A/C) (A320 A/C 3271-3278) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(M)(O)** May be inoperative provided alternate procedures are used. NOTE 1: If an ENCON monitoring page is not available at the time of deferral and Maintenance Control determines that there is no requirement for ENCON readings during that flight segment, the ENCON monitoring page may be boarded at the destination. NOTE 2: Refer to Delta Airway Manual, Page OPS-5CM 1.3, Communication Equipment Requirements for operations with ACARS unavailable. NOTE 3: For 3209-3270, refer to MEL item 23-24-01A
46-21-01B	ATSU Chime (All A319 and A321 A/C) (A320 A/C 3271-3278) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For 3209-3270, refer to MEL item 23-24-01B
46-21-01C	ATSU Message Storage (All A319 and A321 A/C) (A320 A/C 3271-3278) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For 3209-3270, refer to MEL item 23-24-01C
46-21-01D	ATSU UTC Time Reset (All A319 and A321 A/C) (A320 A/C 3271-3278) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For 3209-3270, refer to MEL item 23-24-01D
46-21-01E	ATSU Out, Off, On, In, Times Function (All A319 and A321 A/C) (A320 A/C 3271-3278) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For 3209-3270, refer to MEL item 23-24-01E

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
46-21-01F	ATSU Weight Data Page (All A319 and A321 A/C) (A320 A/C 3271-3278) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative. NOTE: For 3209-3270, refer to MEL item 23-24-01A

MEL ITEM	TAB LOCATION	PLACARD TEXT
46-21-01A	On Affected MCDU (Multipurpose Control Display Unit)	ATSU INOP
46-21-01B	On Affected MCDU (Multipurpose Control Display Unit)	ATSU SYSTEM CHIME INOP
46-21-01C	On Affected MCDU (Multipurpose Control Display Unit)	ATSU SYSTEM MESSAGE STORAGE INOP
46-21-01D	On Affected MCDU (Multipurpose Control Display Unit)	ATSU SYSTEM UTC TIME RESET INOP
46-21-01E	On Affected MCDU (Multipurpose Control Display Unit)	ATSU SYSTEM – OUT, OFF, ON, IN TIME FUNCTION INOP
46-21-01F	On Affected MCDU (Multipurpose Control Display Unit)	ATSU SYSTEM WEIGHT DATA PAGE INOP

(O) PROCEDURES

46-21-01A

1. PRIOR TO DEPARTURE, advise departing station that ATSU is inoperative.
2. Operational information is to be communicated by voice radio.
3. Obtain Load Advice via radio or a printed copy.

   NOTE 1: Make enroute company reports every hour (reference Airway Manual Communications Section 6).
4. Utilize SELCAL if available, (#2 or #3 VHF must be tuned to the appropriate NWA radio network frequency), if not –continuously monitor appropriate company voice radio frequencies.

   NOTE 2: If SELCAL is required, perform a SELCAL check before departure.

   NOTE 3: Company frequency must be monitored rather than 121.5.

   NOTE 4: Monitoring company frequency is not required when on a PRM approach.
5. Record engine data in the inflight engine (ENCON) monitoring page or the faxed copy.

   NOTE 5: If an ENCON monitoring page is not available and Maintenance Control had determined that ENCON readings are not required for the flight segment, engine readings are not required.

   NOTE 6: If data is entered on an ENCON monitoring page, enter an INFO ONLY write–up stating that ENCON data was recorded and requires entry into SCEPTRE at the next Delta staffed station.

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46-21-01B

Monitor message status.

46-21-01C

Record any messages/data that may be required later in flight.

46-21-01D

Report all OUT, OFF, ON, IN times using free text downlinks to station or by radio communication.

46-21-01E

Report all times using free text downlinks to station or by radio communication.

46-21-01F

Obtain final weight data prior to departure or via company radio.

(M) PROCEDURES

46-21-01A

Ensure in-flight engine monitoring logbook is installed in aircraft logbook.

NOTE: If an ENCON monitoring page is not available at the time of deferral and MCC determines that there is no requirement for ENCON readings during that flight segment, the ENCON Monitoring page may be boarded at the destination.

ATA 47 Contents

47-47-00 Fault(s) Indicated by FUEL INERT 47-2
47-10-01 Fuel Tank Inerting System 47-3

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	CLASS II MAINTAINENCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY				
47-47-00	Fault(s) Indicated by FUEL INERT	**Y** -	-	**A**	May be displayed provided repairs are made within twenty flight days. NOTE: Dispatch with associated MAINT STS message displayed on ECAM is permitted without CFDS this interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
47-47-00	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “FUEL INERT” DISPLAYED

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
47-10-01	Fuel Tank Inerting System	**Y**	1	0	**A**	May be inoperative provided repairs are made within twenty flight days.

MEL ITEM	TAB LOCATION	PLACARD TEXT
47-10-01	Adjacent To ECAM Display	FUEL TANK INERTING SYSTEM INOP

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ATA 49 Contents

	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY	49-2
49-00-01	Fault(s) Indicated by APU	49-2
49-10-01A	APU System (Other than Auto Shutdown occurrence)	49-3
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49-10-01C	APU System Pneumatic	49-3
49-10-02A	APU Air Intake Flap (Secured Open)	49-5
49-10-02B	APU Air Intake Flap (Closed or partially closed)	49-5
49-30-01	APU Fuel Pump	49-7
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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY				
49-00-01	Fault(s) Indicated by APU	**Y**		**C**	NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-00-01	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “APU” DISPLAYED

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
49-10-01A	APU System (Other than Auto Shutdown occurrence) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided the APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply
49-10-01B	APU System (Auto Shutdown occurrence) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative after Auto Shutdown provided it is verified that there is no damage to the APU mount system as a result of a turbine wheel burst. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply
49-10-01C	APU System Pneumatic **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided an alternate air source is available for engine starts. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-10-01A	On Pilot's Overhead Panel 25VU Adjacent To APU MASTER Switch	APU INOP DO NOT USE APU
49-10-01B	On Pilot's Overhead Panel 25VU Adjacent To APU MASTER Switch	APU INOP DO NOT USE APU
49-10-01C	On Pilots Overhead Panel Adjacent To APU MASTER Switch And APU BLEED Switch	APU PNEUMATIC SYSTEM INOP

(O) PROCEDURES

49-10-01A, 49-10-01B

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Section for External Air/Cross Bleed Start procedures.

49-10-01C

1. Set APU BLEED pb switch to OFF.
2. Reference AOM VOL I Supplementary Section for External Air/Cross Bleed Start procedures.

Continued Next Page

(M) PROCEDURES

49-10-01B

The (M) Indicates the following Maintenance Procedures are required:

1. This procedure is applied in the case of APU on speed auto-shutdown and the APU does not accelerate up to 50% during the first restart attempt:
   a) Enter CFDS APU SHUTDOWN PAGE
   b) Check none of the following messages is present:
      1) EMERGENCY
      2) LOSS OF SPEED
      3) OVERTEMPERATURE
      4) NO ACCELERATION
      5) SENSOR FAILURE
      6) BOTH EGT TC RAKES (LAST LEG REPORT: BOTH EGT TC RAKES)
   c) If any of these messages are present or if the CFDS has not been interrogated, perform the following tailpipe check:
      1) Make sure that the APU MASTER switch 14KD on panel 25VU is in OFF position.
      2) Check the APU tailpipe for damage or debris to determine if APU turbine has failed.
      3) If turbine failure is observed, accomplish the following procedure:
         A. Open the APU access doors 316 AR and 315 AL.
         B. Check APU externally, through the plenum chamber intake into the compressor area. Ensure absence of any traces of overheat/fire and check the inlet screen for discoloration/damage.
         C. Check for absence of any smoke from the exhaust gas system.
         D. Check the diffuser/elbow of the air intake. Ensure the absence of any traces of overheat/fire and check the inlet screen for discoloration/damage.
         E. Perform a detailed visual check of the aft APU mount flange attachment. Ensure all 5 bolts are properly installed and not sheared.
         F. Check the APU mount attachment vibration isolator and the 2 connected tie–rods for proper installation. Ensure tie–rods are not distorted or broken and vibration isolator is not separated.
         G. Check proper installation/condition of all fwd mount (LH and RH suspension tie–rods).
         H. If the inspection is successfully performed, close APU access doors 316AR and 316AL.

            NOTE: If distortion/separation of mount flange attachment bolts, mount flange, vibration isolator or suspension tie–rods is discovered, REPAIR BEFORE THE NEXT REVENUE FLIGHT IS REQUIRED AND CONTACT MAINTENANCE CONTROL.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
49-10-02A	APU Air Intake Flap (Secured Open)	**N** 1	0	**A**	**(M)** May be inoperative secured open and APU used provided repairs are made within 10 flight days.
49-10-02B	APU Air Intake Flap (Closed or partially closed) **"DISP.APPR.REQ'D"**	**Y** 1	0	**C**	**(O)** May be inoperative closed or partially closed provided APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-10-02A	Adjacent To ECAM Lower Display Unit	APU AIR INTAKE FLAP INOP – DEACTIVATED OPEN
49-10-02B	Adjacent To ECAM Lower Display Unit And APU MASTER Switch	APU AIR INTAKE FLAP INOPERATIVE CLOSED (OR PARTIALLY CLOSED). DO NOT USE APU

(O) PROCEDURES

49-10-02B

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Section for External Air/Cross Bleed Start procedures.

(M) PROCEDURES

49-10-02A

The (M) indicates that the following Maintenance Procedures are required:

1. AIR INTAKE FLAP – DEACTIVATE OPEN

WARNING: – DO NOT TOUCH THE APU UNTIL IT IS SUFFICIENTLY COOL TO PREVENT BURNS WHEN YOU DO THE MAINTENANCE TASKS.

– LOCK THE MECHANISM OF THE ACCESS DOOR 316AR WITH THE PIP PIN WHEN YOU OPEN THE ACCESS DOOR. THIS WILL PREVENT INJURY.

– MAKE SURE THAT THE AIR INTAKE FLAP IS FULLY EXTENDED BEFORE YOU INSTALL THE TEMPORARY CONNECTOR. IF NOT, YOU WILL CAUSE DAMAGE TO THE APU.

a) On C/B panel 121VU: pull and tag circuit breaker APU/ECB/SPLY location L41.

b) On C/B panel 121VU: pull and tag circuit breaker APU/APU/CTL location L42.

c) Put the access platform below the maintenance door 314AR.

d) Open APU maintenance door 314AR and secure with pip pin.

Continued Next Page

e) Disconnect the electrical connector from the fixed connector 7527 VC located at the maintenance frame of the air intake flap actuator at FR 78.

f) Install a blanking cap to the free electrical connector and attach the connector to the maintenance frame with a tie–wrap.

g) Release the fasteners in the access plate of the maintenance frame and remove the access plate from the maintenance frame.

h) Put a torque wrench in position on the manual–drive device of the air intake–flap actuator.

i) Turn the manual drive shaft on the air intake flap actuator until the air intake flap is in the fully open position.

NOTE: Be careful when you come to the mechanical stop at the travel ends. If you turn the manual drive shaft with a torque which is more than the limit, damage to the flap actuator will occur.

1) For Actuator P/N 43–1–1100:

A. Make sure that the torque necessary to turn the manual drive shaft is not more than up to 26.55 inch lbs.

B. Approximately 47 turns for the actuator are necessary on the manual drive shaft for one full travel of the air intake flap actuator.

2) For Actuator P/N 106–1–1100–02

A. Make sure that the torque necessary to turn the manual drive shaft is not more than up to 35.40 inch lbs.

B. Approximately 87 turns for the actuator are necessary on the manual drive shaft for one full travel of the air intake flap actuator.

j) Use a dummy connector to close the electrical control circuit between the ECB 59 KD and the air intake flap actuator. Do the following step to make the dummy connector:

1) Install the Jumper AWG lead 24 between the sockets C and D of the connector–E005R14B12PNF.

2) Hold the jumper lead in position on the connector with the backshell E0080–01–14C.

3) Paint the dummy connector red to make sure the dummy connector is easily identified.

k) Install the dummy connector on the external part of the connector 7527 VC.

l) Put the access plate in position on the maintenance frame and lock the fasteners.

m) Make sure that the work area is clean and clear of tools and other items.

n) Close the maintenance access door 314AR.

o) Remove the access platform.

p) On C/B panel 121VU: remove tag and close circuit breaker APU/ECB/SPLY location L41.

q) On C/B panel 121VU: remove tag and close circuit breaker APU/APU/CTL location L42.

NOTE: After the reactivation of the air intake flap, a detailed visual inspection of the air intake components must be made, augmented by tap testing of all readily accessible bonding surfaces (acoustically treated or not) exposed to the airstream.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
49-30-01	APU Fuel Pump **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided both engine driven generators are operative. NOTE 1: APU may be started using any AC boost pump feeding the left fuel manifold. NOTE 2: AC power must be available on the airplane to operate the boost pump(s).

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-30-01	On Pilot's Overhead Panel 25VU Adjacent To APU MASTER Switch	APU FUEL PUMP INOP

(O) PROCEDURES

Pressurize Left Fuel Manifold with at least one fuel tank pump prior to APU start.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
49-30-02A	APU LP Valve **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative secured closed provided APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply
49-30-02B	APU LP Valve **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative in closed position provided: a) Valve is indicated closed on ECAM, and b) APU is not used. NOTE: Two air carts required for engine start, unless a single cart is high volume output. Theater Restrictions May Apply

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-30-02A	On Pilot's Overhead Panel 25VU Adjacent To APU MASTER Switch	APU LP VALVE INOP – SECURED CLOSED
49-30-02B	On Pilot's Overhead Panel 25VU Adjacent To APU MASTER Switch	APU LP VALVE INOP CLOSED. DO NOT USE APU

(O) PROCEDURES

49-30-02A

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Reference AOM VOL I Supplementary Section for External Air/Cross Bleed Start procedures.

49-30-02B

1. Do not use APU.
2. APU MASTER switch – OFF.
3. External electrical and pneumatic power are required for normal starting.
4. Check on ECAM FUEL page that the APU LP valve is indicated closed.
5. Reference AOM VOL I Supplementary Section for External Air/Cross Bleed Start procedures.

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(M) PROCEDURES

49-30-02A

The (M) indicates that the following Maintenance Procedures are required:

APU LP VALVE – DEACTIVATE CLOSED:

WARNING: – MAKE SURE THAT LANDING GEAR SAFETY LOCKS ARE IN POSITION.

– MAKE SURE THAT YOU HAVE THE CORRECT FIRE FIGHTING EQUIPMENT AVAILABLE BEFORE YOU START ANY TASK ON THE FUEL SYSTEM.

– OBEY THE FUEL SAFETY PROCEDURES.

1. Energize the aircraft electrical circuits from external power.
2. Make sure that the APU MASTER SW 14KD is in the OFF position.
3. On C/B panel 121VU: pull and secure circuit breaker APU/FUEL/LP VALVE/SPLY location M39.
4. On C/B panel 121VU: pull and secure circuit breaker APU/FUEL/LP VALVE/CTL M40.
5. Open the main landing gear doors Z734 and Z744.
6. Install the GROUND LOCK SLEEVE on the main landing–gear door–actuators.
7. Put an access platform below the APU LP fuel shutoff valve 14QM in zone 147.
8. Check the position of the valve at the visual indicator of the APU–fuel LP–valve actuator (upper LH bulkhead of frame 42):
   a) If the LP–fuel shutoff valve actuator, is in the green CLOSED position:
      1) Disconnect the electrical connections from actuator assembly.
      2) Put blanking caps on the disconnected electrical connectors.
      3) Fold the electrical connectors/cables back over the cable clamps and secure them with tie–wraps.
   b) If the LP–fuel shutoff valve actuator, is in the red OPEN position:
      1) Disconnect the electrical connections from actuator assembly.
      2) Put blanking caps on the disconnected electrical connectors.
      3) Fold the electrical connectors/cables back over the cable clamps and attach them with tie–wraps to a stowage position.
      4) Hold the APU fuel LP valve actuator in position and remove the nuts, washers and the bonding strap.
      5) Carefully disconnect the actuator drive shaft from the valve drive shaft and remove actuator.
      6) Turn the valve drive shaft to the horizontal (closed) position.
      7) Lock the APU fuel LP valve in the closed position:
         A. Turn the actuator drive shaft in a counter clockwise direction to the green CLOSED position.

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NOTE: DISPATCH IS NOT ALLOWED if drive shaft cannot be turned in a limit of 10.6 in/lbs or if the actuator shaft is free, damaged or does not engage correctly in the valve drive shaft.

B. Put the actuator in position and engage the actuator drive shaft in the valve drive shaft (in the closed position).

C. Re–install the bonding strap, washers and the nuts on the actuator mount studs.

8) De–energize the aircraft electrical circuits.

9) Make sure that the work area is clean and clear of tools and other items.

10) Remove the GROUND LOCK SLEEVE on the main landing–gear door–actuators.

11) Remove platform.

12) Close the main landing gear doors Z734 and Z744.

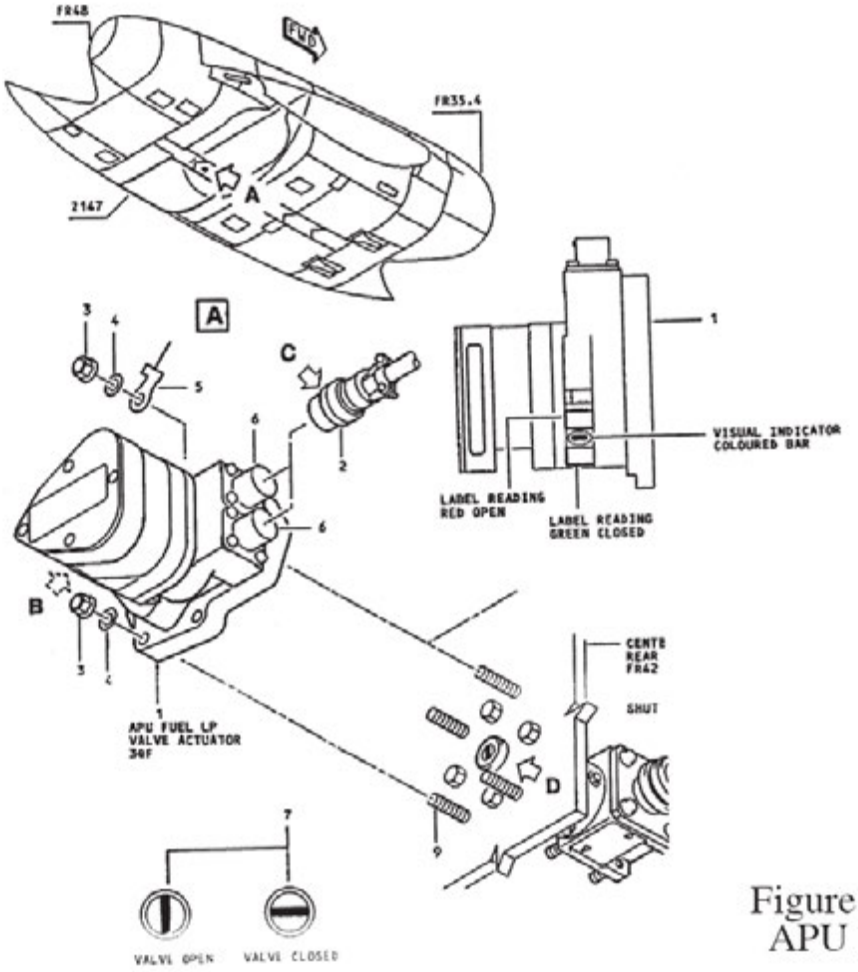

Figure 49–30–02A
APU LP VALVE

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
49-70-01	MASTER Switch ON Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-70-01	On Pilot's Overhead Panel 25VU Adjacent To APU MASTER Switch	MASTER SW ON LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
49-70-02	MASTER Switch FAULT Light	**Y**	1	0	**C**	May be inoperative provided N and EGT indications are available on ECAM APU Page

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-70-02	On Pilot's Overhead Panel 25VU Adjacent To APU MASTER Switch	MASTER SWITCH FAULT LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
49-70-03	START ON Light	**Y**	1	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-70-03	On Pilot's Overhead Panel 25VU Adjacent To START Switch	START ON LIGHT INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
49-70-04	START/AVAIL Light	**Y**	1	0	**C**	May be inoperative provided N indications are available on ECAM APU Page.

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-70-04	On Pilot's Overhead Panel 25VU Adjacent To START Switch	START AVAIL LIGHT INOP

	NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
	FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ECAM APU PAGE INDICATIONS					
49-70-05A APU Indications	**Y**	-	0	**C**	May be inoperative provided START/AVAIL Light and MASTER Switch FAULT Light are operative.
49-70-05B APU GEN Parameters	**Y**	-	0	**C**	May be inoperative provided both Engine Driven Generators are operative.
49-70-05C LOW OIL LEVEL **"DISP.APPR.REQ'D"**	**N**	1	0	**B**	**(M)(O)** May be inoperative provided: a) Oil level is verified BEFORE EACH REFUELING (Log Book Entry Required), and b) There is no evidence of abnormal consumption or leakage. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
49-70-05A	Adjacent To ECAM Lower Display Unit	___ ECAM APU PAGE INDICATIONS INOP
49-70-05B	Adjacent To ECAM Lower Display Unit	___ APU GEN PARAMETER INDICATIONS INOP
49-70-05C	Adjacent To ECAM Lower Display Unit	ECAM APU PAGE LOW OIL LEVEL MESSAGE INOP

(O) PROCEDURES

49-70-05C

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required before each refueling.

(M) PROCEDURES

49-70-05C

The (M) Indicates the following Maintenance Procedures are required:

1. PRIOR TO EACH DEPARTURE: (Before Each Refueling)
   a) Oil level is verified before each refueling per the following:
      1) Config 1 – (APU 36–300)
         A. Task # 49–90–00–600–001
      2) Config 2 – (APU 131–9(A)
         A. Task # 49–90–00–600–007
   b) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

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NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
52-10-04	Emergency Operation Cylinder Damper Functions (Damper Functions Only)	**Y**	4	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
52-10-04	On Affected Door Inside Operating Handle And Nearest Flight Attendant's Control Panel	___ DOOR EMERGENCY OPERATION CYLINDER DAMPER FUNCTION INOP

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
52-30-01A Cargo Door Actuators **"DISP.APPR.REQ'D"**	**N**	4	2	**A**	**(M)** One per door may be inoperative provided: a) Integrity of Yellow hydraulic system is not affected, b) Wind velocity does not exceed 30 knots, and c) Operation of the door with a single actuator is limited to 75 landings.
52-30-01B Cargo Door Actuators **"DISP.APPR.REQ'D"**	**N**	4	0	**C**	**(M)** May be inoperative provided: a) Integrity of Yellow hydraulic system is not affected, and b) Door(s) is manually closed and locked.

MEL ITEM	TAB LOCATION	PLACARD TEXT
52-30-01A	On Applicable Cargo Door Control Panel And Adjacent To Lower ECAM Display	___ CARGO DOOR ACTUATOR INOP AND DEACTIVATED
52-30-01C	On Applicable Cargo Door Control Panel And Adjacent To Lower ECAM Display	___ CARGO DOOR ACTUATOR INOP AND DEACTIVATED INOP

(M) PROCEDURES

52-30-01A, 52-30-01B

The (M) Indicates the following Maintenance Procedures are required:

1. Make sure that the FWD or AFT cargo compartment door is fully opened and safetied with the support struts.
2. Open the access panel 134AR or 154 AR to gain access to the service panel of the applicable cargo door.
3. Put access platform in position of the applicable door actuator.
4. Pull and tag the following circuit breakers:
5. On A/C 3209–3238
   - On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC PUMP/NORM location AB03.
6. On A/C 3239–3278, 3101–3171
   - On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC/ELEC PUMP/NORM location AB03.
7. On ALL A/C
   - On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC/PUMP location AB06.
   - On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/HYD POWER/Y location N30.
   - On C/B panel 122VU: pull and tag circuit breaker DOORS/CARGO location T12.
8. Depressurize the yellow hydraulic system.
9. Place a Warning Tag on the cockpit overhead panel 40VU to prevent operation of the yellow hydraulic system.

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10. Place a Warning Tag on the Ground Service Panel to prevent the operation of the yellow hydraulic system.
11. Put a container below the hydraulic connections of the door actuator(s) to collect the hydraulic fluid.
12. Remove the flexible hoses from the ports of the defective door actuator(s).
13. Install the blanking plugs on the open ends of the door actuator ports.
14. Install the pressure plugs on the open ends of the flexible hoses.
15. Disconnect the electrical connector from the door actuator , put blanking plugs on the disconnected electrical connectors, remove actuator.
16. Make sure that the aircraft electrical circuits are energized.
17. Remove tags and close the following circuit breakers:
18. On A/C 3209–3238
    - On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC PUMP/NORM location AB03.
19. On A/C 3239–3278, 3101–3171
    - On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC/ELEC PUMP/NORM location AB03.
20. On ALL A/C
    - On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC/PUMP location AB06.
    - On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/HYD POWER/Y location N30.
    - On C/B panel 122VU: remove tag and close circuit breaker DOORS/CARGO location T12.
21. Check that ECAM is on.
22. Remove the support struts and close the cargo door correctly.
23. Pressurize the yellow hydraulic system.
24. Do a pressure check of the hydraulic system over five minutes to find a possible pressure drop.

    NOTE: Look on the lower DU of the ECAM system or on the yellow power accumulator to see the actual pressure.
25. For only ONE door actuator deactivated. Examine the hydraulic system of the cargo door for leaks.
    a) Operate the locking handle to unlock the applicable cargo door.
    b) Turn the selector on the service panel to the CLOSE position and hold it for three seconds.
    c) Make sure that there are no leaks at the door actuators, the pipes, and hoses and the related valves (visual inspection).

       NOTE: If necessary, disconnect the hydraulic pipes from the defective components and attach applicable pressure plugs to the open ends.
    d) Examine the yellow reservoir level on the HYD page of the lower DU of the ECAM system. If necessary, fill up the yellow reservoir to its normal fill level.
    e) Operate the locking handle to lock the cargo door correctly.
26. Make sure that the work area is clean and clear of tools and other items.
27. Make sure that all opened access panels are correctly close.
28. Return aircraft to required configuration.
29. Remove warning notices in cockpit and service panel.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
52-30-03	Hand Pump	**N**	1	0	**C**	**(M)** May be inoperative provided the integrity of Yellow hydraulic System is not affected.

MEL ITEM	TAB LOCATION	PLACARD TEXT
52-30-03	On Cargo Door Hand Pump	CARGO DOOR HAND PUMP INOP

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Open the access panel 198CB to get access to the ground service panel of the Yellow hydraulic system.
2. Remove the access panel 197AB to get access to the hydraulic connections of the hand pump.
3. Pull and tag the following circuit breakers:
4. On A/C 3209–3238
   - On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC PUMP/NORM location AB03.
5. On A/C 3239–3278, 3101–3171
   - On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC/ELEC PUMP/NORM location AB03.
6. On ALL A/C
   - On C/B panel 123VU: pull and tag circuit breaker Y HYD/ELEC/PUMP location AB06.
   - On C/B panel 121VU: pull and tag circuit breaker HYDRAULIC/HYD POWER/Y location N30.
   - On C/B panel 122VU: pull and tag circuit breaker DOORS/CARGO location T12.
7. Depressurize the Yellow hydraulic system.
8. Depressurize the reservoir of the Yellow hydraulic system.
9. Place a Warning Tag on the cockpit overhead panel 40VU to prevent operation of the Yellow hydraulic system.
10. Place a Warning Tag on the Ground Service Panel to prevent the operation of the yellow hydraulic system.
11. Set the PTU P/B SW on the overhead panel 40VU to prevent unwanted operation of the power transfer unit.
12. Put a spillage container below the hydraulic connections of the hand pump to collect the hydraulic fluid
13. Disconnect the pressure pipe from the port A of the hand pump and install a pressure plug on the open end of the pipe.
14. Disconnect the suction pipe from the port C of the hand pump and install a pressure plug on the open end of the pipe.
15. Install blanking plugs on the ports A and C of the hand pump.
16. Energize the aircraft electrical circuits.

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17. Remove tags and close the following circuit breakers:
18. On A/C 3209–3238
    - On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC PUMP/NORM location AB03.
19. On A/C 3239–3278, 3101–3171
    - On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC/ELEC PUMP/NORM location AB03.
20. On ALL A/C
    - On C/B panel 123VU: remove tag and close circuit breaker Y HYD/ELEC/PUMP location AB06.
    - On C/B panel 121VU: remove tag and close circuit breaker HYDRAULIC/HYD POWER/Y location N30.
    - On C/B panel 122VU: remove tag and close circuit breaker DOORS/CARGO location T12.
21. Remove warning tags from the overhead panel and the ground service panel.
22. Pressurize the reservoir of the Yellow hydraulic system.
23. Pressurize the Yellow hydraulic system.
24. Set the ECAM system to ON and push the HYD p.b. sw. on the ECAM control panel so that the ECAM lower display unit shows the HYD page.
25. Check the hydraulic system of the FWD or AFT cargo door for leaks:
    a) Open and close the FWD or AFT cargo door three times to bleed the hydraulic system.
    b) Make sure that there are no leaks at the suction and pressure pipe ends (visual inspection).
    c) Examine the Yellow reservoir level on the HYD page of the ECAM lower display unit. If necessary, fill the Yellow reservoir to its normal level.
26. Push the PTU pb. sw on the overhead panel 40VU to activate the power transfer unit.
27. Remove the spillage container.
28. Make sure that the work area is clean and clear of tools and other items.
29. Install the access panel 197AB.
30. Close the access door 198CB of the ground service panel.
31. Close and lock the FWD or AFT cargo door correctly
32. Return aircraft to required configuration.

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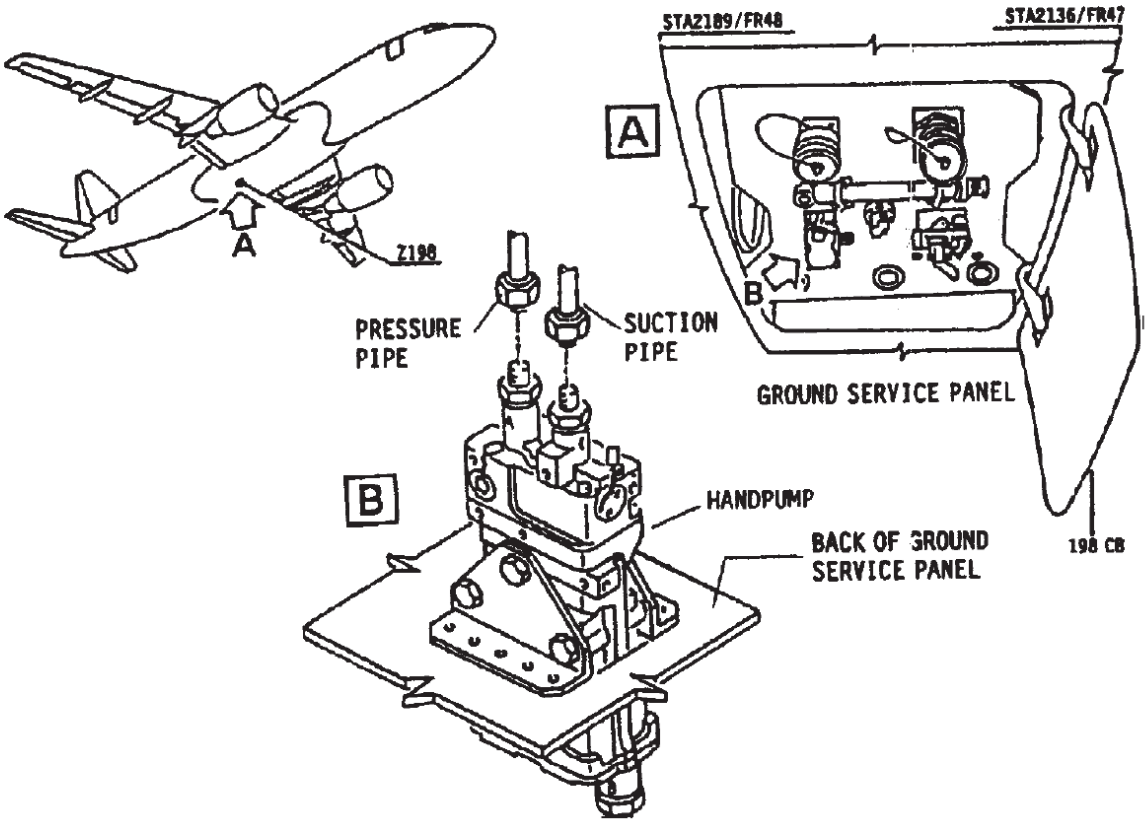

Figure 52–30–03 GROUND SERVICE PANEL LOCATION

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
52-30-04A	Cargo Door Opening Electrical Control System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	**(O)** May be inoperative provided the affected cargo door(s) is verified closed on ECAM door page PRIOR TO DEPARTURE. NOTE: Any cargo door control function that operates normally may be used. **Repetitive Check Required (Yellow Placard)**
52-30-04B	Cargo Door Opening Electrical Control System **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	May be inoperative provided: a) Hand pump operates normally, and b) Cargo doors are fully open during loading and unloading. NOTE 1: Two people will be required to operate cargo doors. NOTE 2: Any cargo door control function that operates normally may be used.
52-30-04C	Cargo Door Opening Electrical Control System Open and Locked (Green) Lights	**Y**	2	0	**D**	**(O)** May be inoperative and associated cargo compartment used provided cargo door is fully open during loading and unloading.

MEL ITEM	TAB LOCATION	PLACARD TEXT
52-30-04A	On Both Cargo Door Control Handles	CARGO DOOR OPENING ELECTRICAL CONTROL SYSTEM INOP
52-30-04B	On Both Cargo Door Control Handles	CARGO DOOR OPENING ELECTRICAL CONTROL SYSTEM INOP
52-30-04C	Adjacent To Cargo Door Electrical Control	CARGO DOOR OPENING ELECTRICAL CONTROL SYSTEM INOP

(O) PROCEDURES

52-30-04A

1. PRIOR TO EACH DEPARTURE, Captain is to ensure that affected cargo door(s) is verified closed on the ECAM door page.

52-30-04C

When a cargo door Open and Locked (Green) Light is inoperative, it is necessary to inform ground personnel:

1. To visually check that the affected cargo door is in the fully open position, with no downward movement after releasing the lever of the manual selector valve.
2. To visually check that the lever of the manual selector valve stays in the neutral position.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED: FLIGHT CREW MAY PLACARD	NUMBER REQUIRED FOR DISPATCH		REPAIR CATEGORY	REMARKS OR EXCEPTIONS
	FLIGHT DECK DOOR LOCKING SYSTEM					
52-50-02A	Cockpit Door Locking System **"Contact MCC"**	**Y**	1	0	**A**	**(M)(O)** May be inoperative provided: a) Automatic locking system is deactivated, b) Door dead bolt operates normally and is used to lock the door, c) Alternate procedures are used for locking and unlocking the door using the dead bolt, and d) Repair are made within two flight days.
52-50-02B	Cockpit Door Toggle Switch (UNLOCK Function)	**Y**	1	0	**C**	**(O)** May be inoperative provided alternate procedures are used.
52-50-02C	Cockpit Door Toggle Switch (LOCK Function)	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) The cockpit door locking system keypad is deactivated, and b) Alternate procedures are used.
52-50-02D	OPEN Light	**Y**	1	0	**C**	May be inoperative.
52-50-02E	FAULT Light	**Y**	1	0	**C**	**(O)** May be inoperative provided all LEDs on CKPT DOOR CONT Panel are operative.
52-50-02F	Buzzer	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) The cockpit door locking system keypad is deactivated, and b) Alternate procedures are used.
52-50-02G	Keypad	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) The cockpit door locking system keypad is deactivated, and b) Alternate procedures are used.
52-50-02H	Keypad Green and Red LED's	**Y**	2	0	**C**	**(O)** One or both may be inoperative provided alternate procedures are used.
52-50-02I	Pressure Rate Sensors	**Y**	2	1	**C**	One may be inoperative.
52-50-02J	Pressure Rate Sensors **"Contact MCC"**	**Y**	2	0	**A**	Both may be inoperative provided repairs are made within two flight days.
52-50-02K	Door Release Strike (Catch Spring, Solenoid, Bolt)	**Y**	3	2	**C**	One may be inoperative provided the associated door release strike is failed in the open/unlock position.
52-50-02L	Door Release Strike (Catch Spring, Solenoid, Bolt)	**N**	3	2	**C**	**(M)** One may be inoperative provided associated door release strike is deactivated or removed. NOTE: If center strike is affected, the OPEN Light will be Inoperative.
52-50-02M	Control Unit LED's	**N**	5	0	**C**	**(M)(O)** May be inoperative provided associated FAULT light is verified to operate normally.

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MEL ITEM	TAB LOCATION	PLACARD TEXT
52-50-02A	Adjacent To Cockpit Door Toggle Switch On Center Pedestal	COCKPIT DOOR LOCKING SYSTEM INOP
52-50-02B	Adjacent To Cockpit Door Toggle Switch On Center Pedestal	COCKPIT DOOR TOGGLE SWITCH UNLOCK FUNCTION INOP
52-50-02C	Adjacent To Cockpit Door Toggle Switch On Center Pedestal	COCKPIT DOOR TOGGLE SWITCH LOCK FUNCTION
52-50-02D	On Cockpit Door Control Panel On Center Pedestal	COCKPIT DOOR LOCKING SYSTEM OPEN LIGHT INOP
52-50-02E	On Cockpit Door Control Panel On Center Pedestal	COCKPIT DOOR LOCKING SYSTEM FAULT LIGHT INOP
52-50-02F	On Cockpit Door Control Panel (24MQ) On Overhead	COCKPIT DOOR LOCKING SYSTEM BUZZER INOP
52-50-02G	On Cockpit Door Control Panel (24MQ) On Overhead	COCKPIT DOOR LOCKING SYSTEM KEYPAD INOP
52-50-02H	On Cockpit Door Control Panel (24MQ) On Overhead	KEYPAD GREEN AND RED LED'S INOP
52-50-02I	On Cockpit Door Control Panel (24MQ) On Overhead	___ PRESSURE RATE SENSOR INOP
52-50-02J	On Cockpit Door Control Panel (24MQ) On Overhead	BOTH PRESSURE RATE SENSORS INOP
52-50-02K	On Cockpit Door Control Panel (24MQ) On Overhead	___ DOOR RELEASE STRIKE INOP
52-50-02L	On Cockpit Door Control Panel (24MQ) On Overhead	___ DOOR RELEASE STRIKE INOP
52-50-02M	On Cockpit Door Control Panel (24MQ) On Overhead	CONTROL UNIT LED'S INOP

(O) PROCEDURES

52-50-02A

1. Captain to brief Lead Flight Attendant/Purser that the keypad is inoperative.
2. Dead bolt must be used to secure the cockpit door closed.
3. Crewmember will use the interphone to notify flight deck of desired entry.
4. When a flight deck crewmember exits the flight deck, a flight attendant will enter the flight deck until the crewmember returns, unless an XCM remains on the flight deck.

52-50-02B

1. Captain to brief Lead Flight Attendant/Purser that the flight deck door UNLOCK Function is inoperative.
2. The Mechanical override function on the flight deck side must be used to open door.
3. When a flight deck crewmember exits the flight deck, a flight attendant will enter the flight deck until the crewmember returns, unless an XCM remains on the flight deck.

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52-50-02C, 52-50-02F, 52-50-02G

1. Captain to brief Lead Flight Attendant/Purser that the keypad is inoperative.
2. Crewmember will use the interphone to notify flight deck of desired entry.
3. When a flight deck crewmember exits the flight deck, a flight attendant will enter the flight deck until the crewmember returns, unless an XCM remains on the flight deck.

52-50-02E

1. Captain to brief Lead Flight Attendant/Purser that when door is closed, ensure it is locked by trying to force door to the open position.
2. Use Control Unit LED's for detection for inoperative FAULT Light.

52-50-02H

1. Captain to brief Lead flight Attendant/Purser which keypad LEDs (green and/or red) is inoperative.
2. Green light will not illuminate when door is unlocked or will not flash when emergency access code is entered in the keypad.
   a) Communicate via interphone to coordinate flight deck entry.
   b) If emergency access code is entered, wait 45 seconds then open the flight deck door.
3. Red light will not illuminate when the flight crew has denied access.

52-50-02M

Use FAULT light for detection for inoperative STRIKE or CHAN LED(s).

(M) PROCEDURES

52-50-02A

1. Deactivate the Door Locking System by:
   a. On all A321 aircraft and Ships 3277-3278 and Ships 3146 – 3171:
      i. On the 122VU panel pull and secure circuit breaker DOORS CKPT LOCK located at T13.
   b. On A319 aircraft 3101 – 3145 without SB A320-11-1047 and A320 aircraft 3209 – 3276 without SB A320-11-1047:
      i. On the 122VU panel pull and secure circuit breaker DOORS/PAX/MONG located at T13.
   c. On A319 aircraft 3101 – 3145 with SB A320-11-1047 and A320 aircraft 3209 – 3276 with SB A320-11-1047:
      i. On the 122VU panel pull and secure circuit breaker COCKPIT DOOR LOCK SYSTEM located at T13.

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52-50-02C, 52-50-02F, 52-50-02G

1. Position one person on flight deck side of door and one on passenger side of door to accomplish maintenance procedure.
2. Deactivation of the Key Pad on the Control Unit (24MQ).

CAUTION: MAKE SURE THAT THE FLIGHT DECK DOOR DOES NOT CLOSE DURING OR AFTER THE DEACTIVATION PROCEDURE, WHEN NO PERSON IS IN THE FLIGHT DECK.

NOTE: If the flight deck door closed during the deactivation procedure and no person is in the flight deck, de–energize the aircraft electrical circuits to open the flight deck door from the cabin.

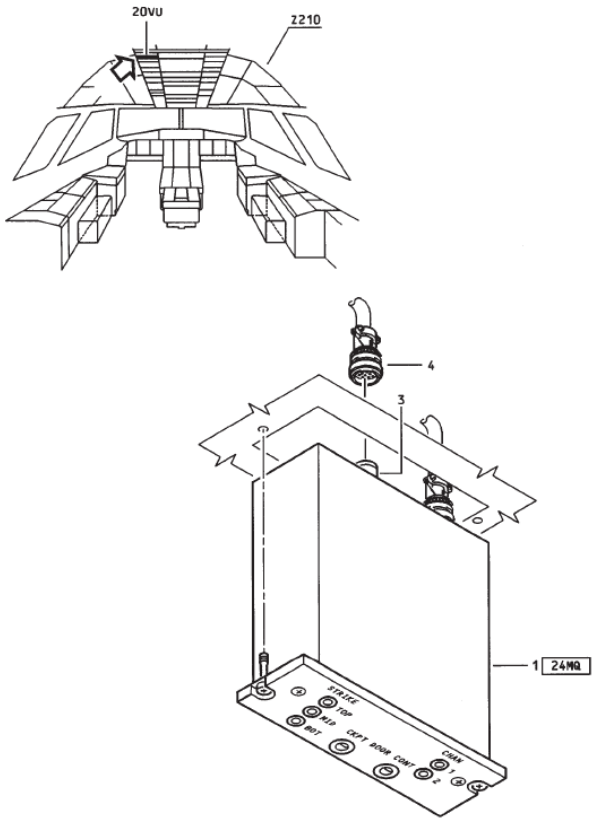
a) Hold the front face of the control unit (24MQ) and loosen the captive screws.

b) Carefully remove the control unit until you can get access to the electrical connector.

c) Disconnect the electrical connector 24MQ–B (4) from the receptacle (3) and put blanking caps on the disconnected electrical connector and on the receptacle.

d) Secure the electrical connector to the adjacent cable bundle (i.e. tie wraps, nylon string etc.).

e) Carefully install the control unit (24MQ) and tighten the captive screws.



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52-50-02L

1. Deactivation of the door release strike per the following:
   a) Make sure that the aircraft electrical circuits are energized.
   b) Make sure that access to the flight compartment is available.
   c) Open the following circuit breaker:
      1) On all A321 aircraft and Ships 3277-3278 and Ships 3146 – 3171:
         A. On the 122VU panel pull circuit breaker DOORS CKPT LOCK located at T13.
      2) On A319 aircraft 3101 – 3145 without SB A320-11-1047 and A320 aircraft 3209 – 3276 without SB A320-11-1047:
         A. On the 122VU panel pull circuit breaker DOORS/PAX/MONG located at T13.
      3) On A319 aircraft 3101 – 3145 with SB A320-11-1047 and A320 aircraft 3209 – 3276 with SB A320-11-1047:
         A. On the 122VU panel pull circuit breaker COCKPIT DOOR LOCK SYSTEM located at T13.
   d) Turn the D–Ring of the latch mechanism and open the flight deck door.
   e) Manually move the catch of the defective electrical release strike to check that it moves freely.
      1) If the plunger causes a blockage of the catch, remove the defective release strike per AMM Task 52–51–12–000–001.
         NOTE: Do not disconnect the jiffi junction connectors at the aircraft wire harness for isolation reasons to prevent a short circuit.

      –OR–

      2) If catch moves freely, disconnect the aircraft wire harness from the applicable electrical release cables ESPM 204825 and AWM 52–51–02.
         NOTE: Do not disconnect the jiffi junction connectors at the aircraft wire harness for isolation reasons to prevent a short circuit.
   f) Make sure that the remaining electrical release strikes operate satisfactorily (Ref. AMM TASK 52–51–00–710–001).
   g) Put a warning notice on the door post to tell persons that the applicable electrical release strike is deactivated or removed.
   h) On C/B panel 122VU: Close circuit breaker opened in step 1.c).
   i) Return aircraft to serviceable condition

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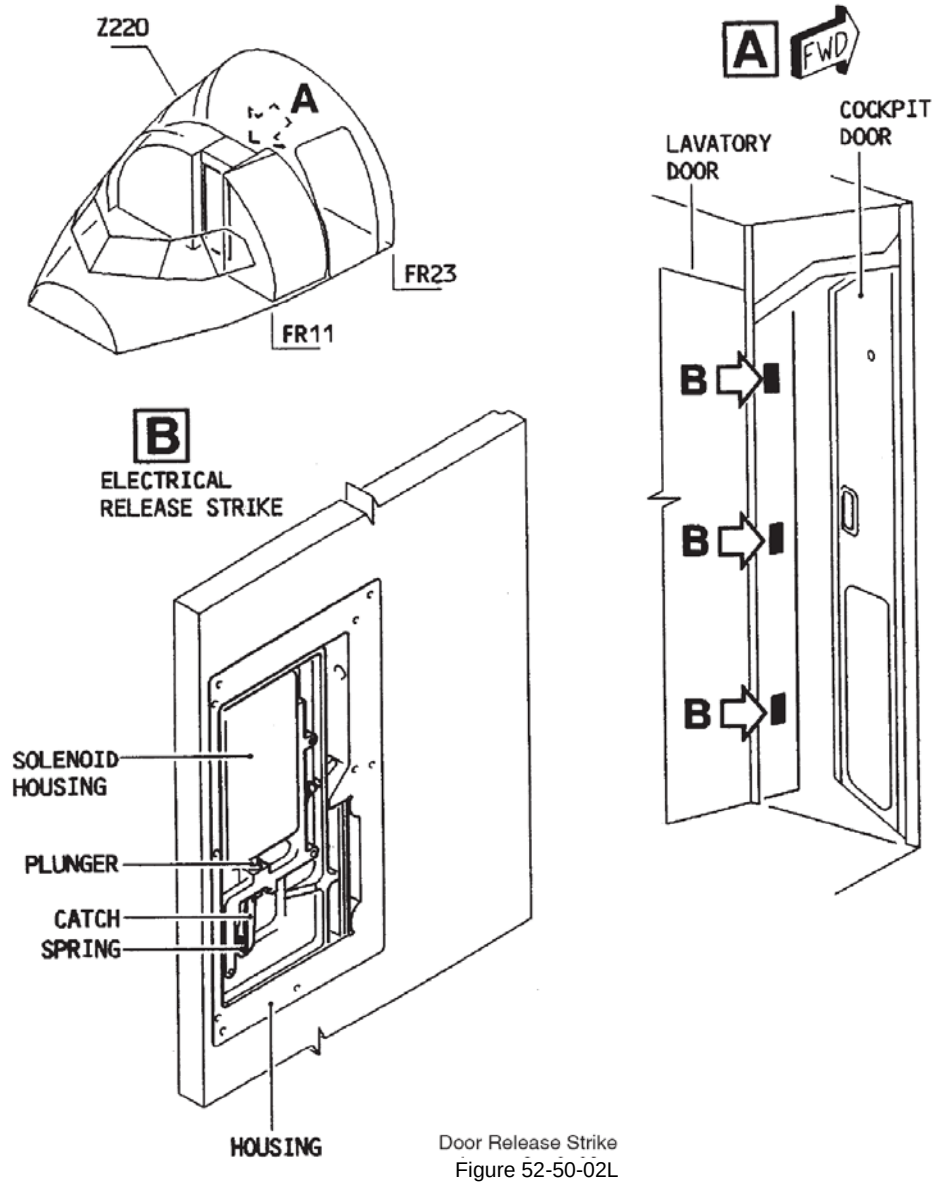

Door Release Strike
Figure 52-50-02L

52-50-02M

1. Control unit/Control Panel LEDs:
   a) On the overhead panel (INT LT) move the lamp test toggle switch (ANN LT) to test.
      1) On the COCKPIT DOOR control panel 119VU (on pedestal), the open and fault lamp are illuminated.
      2) On the control unit 24MQ (on overhead), the remaining LEDs are illuminated.

NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH				
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
52-50-03	Cockpit Door Secondary Locking System (Deadbolt) (For A321 Aircraft) **"DISP.APPR.REQ'D"**	**Y**	1	0	**C**	May be inoperative provided automatic lock controls operate normally.

MEL ITEM	TAB LOCATION	PLACARD TEXT
52-50-03	Adjacent To Cockpit Door Toggle Switch On Center Pedestal	COCKPIT DOOR SECONDARY LOCKING DEADBOLT INOP

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH	REPAIR CATEGORY	REMARKS OR EXCEPTIONS
	ECAM DOOR PAGE INDICATIONS					
52-70-01A	Passenger Doors - Open Indication **"DISP.APPR.REQ'D"**	**Y**	4	0	**C**	**(O)** May be inoperative provided: a) PRIOR TO EACH DEPARTURE a visual check is made to ensure that the affected door(s) is closed and locked, and b) White SLIDE ARMED light on the affected door does not illuminate when the door is closed and locked and slide armed. **Repetitive Check Required (Yellow Placard)**
52-70-01B	Passenger Doors - Open Indication **"DISP.APPR.REQ'D"**	**Y**	4	0	**B**	**(O)** May be inoperative provided: a) PRIOR TO EACH DEPARTURE a visual check is made to ensure that the affected door(s) is closed and locked, and b) White SLIDE ARMED light on the affected door remains illuminated when the door is closed and locked and slide armed. **Repetitive Check Required (Yellow Placard)**
52-70-01C	Passenger Doors - Open Indication **"DISP.APPR.REQ'D"**	**Y**	4	0	**C**	**(O)** May be inoperative provided: a) Aircraft is limited to Day operations only, and b) PRIOR TO EACH DEPARTURE a visual check is made ensure that the affected door(s) is closed and locked. **Repetitive Check Required (Yellow Placard)**
52-70-01D	Passenger Doors - Closed Indication **"DISP.APPR.REQ'D"**	**Y**	4	0	**C**	**(O)** May be inoperative provided: a) Aircraft is limited to Day operations only, and b) PRIOR TO EACH DEPARTURE a visual check is made ensure that the affected door(s) is closed and locked. **Repetitive Check Required (Yellow Placard)**
52-70-01E	Overwing Emergency Exits - Open Indication (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**N**	-	0	**B**	**(M)(O)** May be inoperative provided: a) PRIOR TO EACH DEPARTURE a visual check is made to ensure that the affected overwing emergency exit is closed and locked (Log Book Entry Required), and b) SLIDE Indication on ECAM DOOR page illuminates white when the overwing emergency exits are closed and locked. **Repetitive Check Required (Yellow Placard)**
52-70-01F	Overwing Emergency Exits - Open Indication (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**N**	-	0	**C**	**(M)(O)** May be inoperative provided: a) Aircraft is limited to Day operations only, and b) A visual check is made PRIOR TO EACH DEPARTURE to ensure that the affected overwing emergency exit is closed and locked (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM DOOR PAGE INDICATIONS (CONTINUED)					
52-70-01G	Overwing Emergency Exits - Closed Indication (For A319/A320 Aircraft) **"DISP.APPR.REQ'D"**	**N**	-	0	**C**	**(M)(O)** May be inoperative provided: a) Aircraft is limited to Day operations only, and b) A visual check is made PRIOR TO EACH DEPARTURE to ensure that the affected overwing emergency exit is closed and locked (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
52-70-01H	FWD Cargo Door without an LGCIU fault and associated Thrust Reverser message **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided a visual check is made PRIOR TO EACH DEPARTURE to confirm that affected door is closed and locked (Log Book Entry Required). NOTE: Out, off, and in times must be reported using free text downlinks or by radio communication. **Repetitive Check Required (Yellow Placard)**
52-70-01I	FWD Cargo Door Accompanied by LGCIU 1 Fault and associated Thrust Reverser message **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** May be inoperative provided: a) A visual check is made PRIOR TO EACH DEPARTURE to confirm that affected door is closed and locked (Log Book Entry Required), b) GPWS is considered inoperative and deferred per MEL 34-48-01A, c) Associated Thrust Reverser is considered inoperative and deferred per MEL 78-30-01, d) KJAC (Jackson Hole Airport) operations – Authorized on dry runways only, and e) Repairs are made within two flight days. **Repetitive Check Required (Yellow Placard)**
52-70-01J	FWD Cargo Door accompanied by LGCIU 2 Fault and associated Thrust Reverser message **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) A visual check is made PRIOR TO EACH DEPARTURE to confirm that affected door is closed and locked (Log Book Entry Required), b) KJAC (Jackson Hole Airport) operations – Authorized on dry runways only, and c) Associated Thrust Reverser is considered inoperative and deferred per MEL 78-30-01. **Repetitive Check Required (Yellow Placard)**

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NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM DOOR PAGE INDICATIONS (CONTINUED)					
52-70-01K	AFT Cargo Door without an LGCIU fault and associated Thrust Reverser message **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) A visual check is made PRIOR TO EACH DEPARTURE to confirm that affected door is closed and locked (Log Book Entry Required), b) Aft cargo compartment heating system is considered inoperative and deferred per MEL 21-43-02A or 21-43-02B as applicable, and c) No live animals or perishables are carried in the AFT Cargo Compartment. **Repetitive Check Required (Yellow Placard)**
52-70-01L	AFT Cargo Door accompanied by LGCIU Fault and associated Thrust Reverser message **"DISP.APPR.REQ'D"**	**N**	1	0	**A**	**(M)(O)** May be inoperative provided: a) A visual check is made PRIOR TO EACH DEPARTURE to confirm that affected door is closed and locked (Log Book Entry Required), b) Aft cargo compartment heating system is considered inoperative and deferred per MEL 21-43-02A or 21-43-02B as applicable, c) No live animals or perishables are carried in the AFT Cargo Compartment, d) GPWS is considered inoperative and deferred per MEL 34-48-01A, e) KJAC (Jackson Hole Airport) operations – Authorized on dry runways only, f) Associated Thrust Reverser is considered inoperative and deferred per MEL 78-30-01, and g) Repairs are made within two flight days. **Repetitive Check Required (Yellow Placard)**

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NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
	ECAM DOOR PAGE INDICATIONS (CONTINUED)				
52-70-01M	AFT Cargo Door accompanied by LGCIU 2 Fault and associated Thrust Reverser message **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) A visual check is made PRIOR TO EACH DEPARTURE to confirm that affected door is closed and locked (Log Book Entry Required), b) Aft cargo compartment heating system is considered inoperative and deferred per MEL 21-43-02A or 21-43-02B, c) No live animals or perishables are carried in the AFT Cargo Compartment, d) KJAC (Jackson Hole Airport) operations – Authorized on dry runways only, and e) Associated Thrust Reverser is considered inoperative and deferred per MEL 78-30-01. **Repetitive Check Required (Yellow Placard)**
52-70-01N	Avionics Compartment Access Door	**N**	4	0	**C**	**(M)(O)** Indications may be inoperative provided a visual check is made PRIOR TO EACH DEPARTURE to confirm that doors are closed and locked (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
52-70-01O	Bulk Cargo Compartment Access Door (A321) **"DISP.APPR.REQ'D"**	**N**	1	0	**C**	**(M)(O)** May be inoperative provided: a) A visual check is made PRIOR TO EACH DEPARTURE to confirm that affected door is closed and locked (Log Book Entry Required), b) Aft cargo compartment heating system is considered inoperative and deferred per MEL 21-43-02A or 21-43-02B as applicable, and c) No live animals or perishables are carried in the AFT Cargo Compartment. **Repetitive Check Required (Yellow Placard)**

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MEL ITEM	TAB LOCATION	PLACARD TEXT
52-70-01A	Adjacent To ECAM Display	___ PASSENGER DOOR(S) OPEN INDICATION INOP
52-70-01B	Adjacent To ECAM Display	___ PASSENGER DOOR(S) OPEN INDICATION INOP
52-70-01C	Adjacent To ECAM Display	___ PASSENGER DOOR(S) OPEN INDICATION INOP
52-70-01D	Adjacent To ECAM Display	___ PASSENGER DOOR(S) CLOSE INDICATION INOP
52-70-01E	Adjacent To ECAM Display	___ EMERGENCY EXIT DOOR OPEN INDICATIONS INOP
52-70-01F	Adjacent To ECAM Display	___ EMERGENCY EXIT DOOR OPEN INDICATIONS INOP
52-70-01G	Adjacent To ECAM Display	___ EMERGENCY EXIT DOOR CLOSED INDICATIONS INOP
52-70-01H	Adjacent To ECAM Screen	FWD CARGO DOOR INDICATIONS INOP
52-70-01I	Adjacent To ECAM Screen	FWD CARGO DOOR INDICATIONS INOP
52-70-01J	Adjacent To ECAM Screen	FWD CARGO DOOR INDICATIONS INOP
52-70-01K	Adjacent To ECAM Screen	AFT CARGO DOOR INDICATIONS AND AFT CARGO HEAT IS INOP
52-70-01L	Adjacent To ECAM Screen	AFT CARGO DOOR INDICATIONS AND AFT CARGO HEAT IS INOP
52-70-01M	Adjacent To ECAM Screen	FWD CARGO DOOR INDICATIONS INOP
52-70-01N	Adjacent To ECAM Display	___ AVIONICS DOOR(S) INDICATION INOP
52-70-01O	Adjacent To ECAM Screen	BULK CARGO DOOR INDICATIONS INOP

(O) PROCEDURES

52-70-01A

1. PRIOR TO ENGINE START, ensure that the associated door is closed and locked using the following procedure:
   a) Make sure that door LOCKED indicator is displayed on the affected door.
   b) Make sure the SLIDE ARMED light on the affected door does not illuminate when the door is closed and locked and slide armed.
2. After engine start, clear the door by depressing the EMER CANC pb.
3. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE 1: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
4. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.

NOTE 2: Indications on Programming and Test Panel and on Forward Attendant Panel may be affected.

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52-70-01B

1. PRIOR TO ENGINE START, ensure that the associated door is closed and locked using the following procedure:
   a) Make sure that door LOCKED indicator is displayed on the affected door.
   b) Make sure the SLIDE ARMED light on the affected door remains illuminated when the door is closed and locked and slide armed.
2. After engine start, clear the door by depressing the EMER CANC pb.
3. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE 1: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
4. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.

   NOTE 2: Indications on Programming and Test Panel and on Forward Attendant Panel may be affected.

52-70-01C

Limit aircraft to Day operations only.

1. PRIOR TO ENGINE START, ensure that the associated door is closed and locked using the following procedure:
   a) Make sure that door LOCKED indicator is displayed on the affected door.
   b) Make sure the SLIDE ARMED light on the affected door remains illuminated when the door is closed and locked and slide armed.
2. After engine start, clear the door by depressing the EMER CANC pb.
3. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE 1: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
4. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.

   NOTE 2: Indications on Programming and Test Panel and on Forward Attendant Panel may be affected.

52-70-01D

Limit aircraft to Day operations only.

1. PRIOR TO ENGINE START, ensure that the associated door is closed and locked checking that the door LOCKED indicator is displayed on affected door.
2. After engine start, clear the door by depressing the EMER CANC pb.
3. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE 1: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
4. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.

   NOTE 2: Indications on Programming and Test Panel and on Forward Attendant Panel may be affected.

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52-70-01E

1. After engine start, clear the door warning by depressing the EMER CANC pb.
2. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE1: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.

   NOTE 2: Indications on Programming and Test Panel and on Forward Attendant Panel may be affected.

52-70-01F

Limit aircraft to Day operations only.

1. After engine start, clear the door warning by depressing the EMER CANC pb.
2. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE 1: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.

   NOTE 2: Indications on Programming and Test Panel and on Forward Attendant Panel may be affected.

52-70-01G

Limit aircraft to Day operations only.

1. After engine start, clear the door warning by depressing the EMER CANC pb.
2. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE 1: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.

   NOTE 2: Indications on Programming and Test Panel and on Forward Attendant Panel may be affected.

52-70-01H

1. In case of a false door warning – After engine start, clear the door warning by depressing the EMER CANC pb.
2. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O.CONFIG pb for at least three seconds.

   NOTE: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
3. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.

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52-70-01I

KJAC (Jackson Hole Airport) operations – Authorized on dry runways only.

1. In case of a false door warning – After engine start, clear the door warning by depressing the EMER CANC pb.
2. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
3. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.
4. Comply with MEL Items 34–48–01A and 78–30–01(O) procedures.

52-70-01J

KJAC (Jackson Hole Airport) operations – Authorized on dry runways only.

1. In case of a false door warning – After engine start, clear the door warning by depressing the EMER CANC pb.
2. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
3. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.
4. Comply with MEL Item 78–30–01 (O) procedure.

52-70-01K, 52-70-01O

1. Ensure that no live animals or perishables are carried in the AFT or BULK Cargo Compartment, since the cargo heat will be inoperative.
2. In case of a false door warning – After engine start, clear the door warning by depressing the EMER CANC pb.
3. When checking the T. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
4. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.
5. Comply with MEL Item 21–43–02A or 21–43–02B (O) procedure, as appropriate.

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52-70-01L

KJAC (Jackson Hole Airport) operations – Authorized on dry runways only.

1. Ensure that no live animals or perishables are carried in the AFT Cargo Compartment, since the cargo heat will be inoperative.
2. In case of a false door warning – After engine start, clear the door warning by depressing the EMER CANC pb.
3. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
4. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.
5. Comply with MEL Items 34–48–01A and 78–30–01(O) procedures.
6. Comply with MEL Item 21–43–02A or 21–43–02B (O) procedure, as appropriate.

52-70-01M

KJAC (Jackson Hole Airport) operations – Authorized on dry runways only.

1. Ensure that no live animals or perishables are carried in the AFT Cargo Compartment, since the cargo heat will be inoperative.
2. In case of a false door warning – After engine start, clear the door warning by depressing the EMER CANC pb.
3. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O. CONFIG pb for at least three seconds.

   NOTE: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.
4. Report Out, Off, On, In, times using free text downlinks to station or by radio communication.
5. Comply with MEL Item 78–30–01 (O) procedure.
6. Comply with MEL Item 21–43–02A or 21–43–02B (O) procedure, as appropriate.

52-70-01N

1. After engine start, clear the door by depressing the EMER CANC pb.
2. When checking the T.O. Memo during the final items of the Takeoff Checklist, press the T.O CONFIG pb for at least three seconds.

   NOTE: The memo will remain blue, however the test is passed if there is no aural or ECAM warning.

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(M) PROCEDURES

52-70-01E, 52-70-01F, 52-70-01G

1. PRIOR TO EACH DEPARTURE:

   a) Pull down the cover flap from the emergency exit hatch and remove it.

   b) Ensure the locking hooks are engaged with the upper roller fittings.

   c) Install the cover flap on the hatch and push it against the hatch.

   d) If the ECAM indication EMER EXIT remains on, examine the skin offset of the emergency exit hatch from the outer side.

      NOTE: The contour of the emergency exit hatch must align with the fuselage.

CAUTION: DURING THE REMOVAL/INSTALLATION, THE EMERGENCY EXIT HATCH MUST BE IN THE DISARM MODE.

   e) If the skin offset is not correct, remove and install the emergency hatch.

52-70-01H, 52-70-01K

1. Defer Aft Cargo Compartment Heating System per MEL item 21–43–02A or 21-43-02B, as appropriate.
2. PRIOR TO EACH DEPARTURE:

   a) Forward/Aft cargo door.

      1) Unlock door by pulling latch/lock handle outwards (30 degrees). Do not unlatch.

      2) Lock door by pushing latch/lock handle fully inwards. If light stays on or is inoperative, confirm from outside the airplane that the fwd/aft cargo door is closed, latched and locked as follows:

         A. Door faired with fuselage.

         B. Vent door fully closed.

         C. Latch lock handle faired with door.

         D. Locked position of latch cams (color green, 6 places) can be viewed through 6 viewing windows along the lower edge of the door.

Continued Next Page

52-70-01I, 52-70-01L

1. Defer associated Thrust Reverser inoperative per MEL item 78–30–01.
2. Defer GPWS per MEL Item 34–48–01A.
3. Defer Aft Cargo Compartment Heating System per MEL item 21–43–02A or 21-43-02B, as appropriate.
4. PRIOR TO EACH DEPARTURE:
   a) Clear ECAM warning messages.
      1) On Post Flight Report, make sure LGCIU FAULT ECAM warning is associated with cargo door sensor CFDS message.

         NOTE: The LGCIU fault due to the Cargo door sensor fault is generated in flight, the fault will remain after landing. In addition to the LGCIU FAULT, the associated thrust reverser will be displayed in the INOP STS column on the lower ECAM system page.

      2) On C/B panel 49VU: pull and reset circuit breaker L/G/LGCIU/SYS1/NORM location C09. This will clear the ECAM warnings.

         NOTE: The associated thrust reverser and the GPWS is considered inoperative.

   b) Verify Forward/Aft cargo door is closed.
      1) Unlock door by pulling latch/lock handle outwards (30 degrees). Do not unlatch.
      2) Lock door by pushing latch/lock handle fully inwards. If light stays on or is inoperative, confirm from outside the airplane that the fwd/aft cargo door is closed, latched and locked as follows:
         A. Door faired with fuselage.
         B. Vent door fully closed.
         C. Latch lock handle faired with door.
         D. Locked position of latch cams (color green, 6 places) can be viewed through 6 viewing windows along the lower edge of the door.

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52-70-01J, 52-70-01M

1. Defer associated Thrust Reverser inoperative per MEL item 78–30–01.
2. Defer Aft Cargo Compartment Heating System per MEL item 21–43–02A or 21-43-02B, as appropriate.
3. PRIOR TO EACH DEPARTURE:
   a) Clear ECAM warning messages.
      1) On Post Flight Report, make sure LGCIU FAULT ECAM warning is associated with cargo door sensor CFDS message.

         NOTE: The LGCIU fault due to the Cargo door sensor fault is generated in flight, the fault will remain after landing. In addition to the LGCIU FAULT, the associated thrust reverser will be displayed in the INOP STS column on the lower ECAM system page.

      2) On C/B panel 49VU: pull and reset circuit breaker L/G/LGCIU/SYS1/NORM location C09. This will clear the ECAM warnings.

         NOTE: The associated thrust reverser is considered inoperative.

   b) Verify Forward/Aft cargo door is closed.
      1) Unlock door by pulling latch/lock handle outwards (30 degrees). Do not unlatch.
      2) Lock door by pushing latch/lock handle fully inwards. If light stays on or is inoperative, confirm from outside the airplane that the fwd/aft cargo door is closed, latched and locked as follows:
         A. Door faired with fuselage.
         B. Vent door fully closed.
         C. Latch lock handle faired with door.
         D. Locked position of latch cams (color green, 6 places) can be viewed through 6 viewing windows along the lower edge of the door.

52-70-01N

1. PRIOR TO EACH DEPARTURE:
   a) Check that Avionics Doors are closed and locked:
      1) Manually open affected access door.
      2) With door open, move the handle so as to operate the locking system.
      3) Make sure that the locks get out of their housing and operate correctly.
      4) Put the handle in the open position.
      5) Close and lock the access door.
      6) Verify that the door locking handle is retracted in its housing.

Continued Next Page

52-70-01O

1. Defer the AFT cargo compartment heating system per MEL 21–43–02A or 21–43–02B as applicable.
2. PRIOR TO EACH DEPARTURE
   a) Visually check to make sure bulk cargo door is correctly closed:
      1) Push the button of the external door handle to release it from the recess.
      2) Move the external door handle to the OPEN position and push the bulk cargo compartment door in.
      3) Move the internal or external door handle to the LOCKED position and examine the lateral barrel locks.

         NOTE: The barrel locks turn until their slots cannot engage with the latch spigots at the door frame.

      4) Move the applicable door handle back to the OPEN position.
      5) Pull the door down into the door opening and move the external door handle to the LOCKED position.

         NOTE: The bulk cargo-compartment door is aligned with the fuselage.

      6) Push the external door handle into its recess.

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		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
52-70-02	CABIN PRESSURE Light (On Doors)	**Y**	4	0	**C**	**(O)** May be inoperative provided alternate procedures are used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
52-70-02	Adjacent To ECAM Display And The Cabin Pressure Light On The Affected Door(s)	___ PASSENGER DOOR(S) CABIN PRESSURE LIGHT INOP

(O) PROCEDURES

1. Insure the agent does not open the door prior to receipt of the Flight Attendant signal.
2. Captain to brief Lead Flight Attendant/Purser to:
   a) Check with flight deck crew to ensure cabin is unpressurized before a passenger door is opened.

      OR

   b) Flight Attendant may check another door to ensure cabin is depressurized prior to opening the affected door(s).

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ATA 53 Contents

53-00-00V RVSM Status 53-2

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
53-00-00V RVSM Status **"DISP.APPR.REQ'D"** Administrative Control Item	**Y**	-	-		**(M)** Authorized by MCC when: a) RVSM operations cannot be used, b) No specific MEL item applies, and c) The aircraft must remain at or below FL280. NOTE: This SYS/SEQ number is to be used for deferring the RVSM Status of the aircraft. This number also requires Maintenance Control's authorization prior to its usage or removal. <u>RVSM</u> Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
53-00-00V	Adjacent To Each PFD	RVSM OPERATIONS NOT AUTHORIZED

(M) PROCEDURES

1. Create a new log page in the aircraft logbook using the appropriate MEL Item Number (contact MCC for instructions).
2. The deferral code VSM must also be entered on the log page and the placard when deferring this item.
3. MCC authorization is required prior to its usage or removal.
4. RVSM operations – Not Authorized. Limit flight altitude to FL 280 or below.

ATA 56 Contents

56-11-01A Front Windshields (PPG Windshields and PAL Windshields).....56-2
56-11-01B Front Windshields (SPS Windshields).....56-2
56-11-02A Fixed Lateral Windows (Aircraft with Glass Windows).....56-6
56-11-02B Fixed Lateral Windows (Aircraft with Acrylic windows).....56-6
56-12-01A Sliding Windows (Aircraft with Glass Windows).....56-11
56-12-01B Sliding Windows (Aircraft with Acrylic windows).....56-11

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
56-11-01A	Front Windshields (PPG Windshields and PAL Windshields) (only P/N PAL 06282 & 06283) and SPS Windshields except P/N STA320–1–3–1 and STA320–2–3–1) **"DISP.APPR.REQ'D"**	**N**	2	2	**A**	**(M)(O)** One front windshield outer ply may be cracked provided: a) Visibility through affected windshield is acceptable to the crewmember, b) The aircraft is not operated in known or forecast structural icing conditions, c) The other front windshield is not damaged, d) Repairs are made within ten landings, and e) The affected windshield heating is deactivated and considered inoperative. NOTE: Acceptable structural damages are provided in the AMM. CAT II/III Not Authorized
56-11-01B	Front Windshields (SPS Windshields) (P/N STA320–1–3–1 and STA320–2–3–1) **"DISP.APPR.REQ'D"**	**N**	2	2	**A**	**(M)(O)** One front windshield outer ply may be cracked provided: a) Visibility through affected windshield is acceptable to the crewmember, b) The aircraft is not operated in known or forecast structural icing conditions c) The other front windshield is not damaged, d) Repairs are made within one landing, and e) The affected windshield heating is deactivated and considered inoperative. NOTE: Acceptable structural damages are provided in the AMM. CAT II/III Not Authorized

MEL ITEM	TAB LOCATION	PLACARD TEXT
56-11-01A	Adjacent To PROBE/WINDOW Heat Switch On Overhead ANTI–ICE Panel	___ FRONT WINDSHIELD ___ (STATE CONDITION)
56-11-01B	Adjacent To PROBE/WINDOW Heat Switch On Overhead ANTI–ICE Panel	___ FRONT WINDSHIELD ___ (STATE CONDITION)

(O) PROCEDURES

56-11-01A, 56-11-01B

Do not operate airplane in known or forecast structural icing conditions.

NOTE: Delamination and/or shattering of the outer layer ply does not affect structural integrity of the window.

Continued Next Page

(M) PROCEDURES

56-11-01A, 56-11-01B

The (M) Indicates the following Maintenance Procedures are required:

1. Pull and tag the following circuit breakers:

- On C/B panel 121VU: pull and tag circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/2 location W13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: pull and tag circuit breaker ANTIICE/L/WHSLD location AF10.
- On C/B panel 123VU: pull and tag circuit breaker ANTI ICEIRIWHSLD location AF03.

WARNING: MAKE SURE THAT THE CIRCUIT BREAKERS RELATED TO THE WEATHER RADAR ARE OPENED AND TAGGED.

2. To deactivate the windshield accomplish the following: (Ref. AMM TASK 56-10-00-040-001)

   a) Carry out a visual inspection/check of the front windshields. (Ref. AMM TASK 56-11-11-200-001) (Ref. Figure 56-11-01.1 to 56-11-01.2, 56-11-01.3)

	OUTER PLY	INNER MAIN PLY
SCRATCHES PILKINGTON/GKN and SPS + PPG SUPPLIER	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	PERMITTED IF THE MEASUREMENT VALUE OF THE SCRATCHES DEPTH ARE LESS THAN 50 MICRONS. IF THE DEPTH MEASUREMENT IS NOT PERFORMED, SCRATCHES ARE PERMITTED IF THE OPERATOR CANNOT FEEL THE SCRATCHES BY TOUCHING THE WINDSHIELD WITH A FINGER NAIL.
SCRATCHES PILKINGTON/GKN and SPS SUPPLIER (SOFT LINER) STA-1-5-1 STA-2-5-1	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	PERMITTED IF THE SCRATCHES DO NOT REACH THE CHEMICALLY STRENGTENED GLASS AND IF THE VISIBILITY IS NOT DECREASED
CHIPPING	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	NOT ACCEPTABLE
CRACKS	PERMITTED. REFER TO MMEL CHAP 1 56.10.01 – THE AFFECTED WINDSHIELD HEATING IS SWITCHED OFF : OPEN, SAFETY AND TAG C/B 1DG1 (1DG2)	MIDDLE OR INNER OR BOTH CRACKED PLIES : NOT ACCEPTABLE
BUBBLES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
DELAMINATION	AREA A : NOT PERMITTED AREA B : PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
DISCOLORATION OR BURNING	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	

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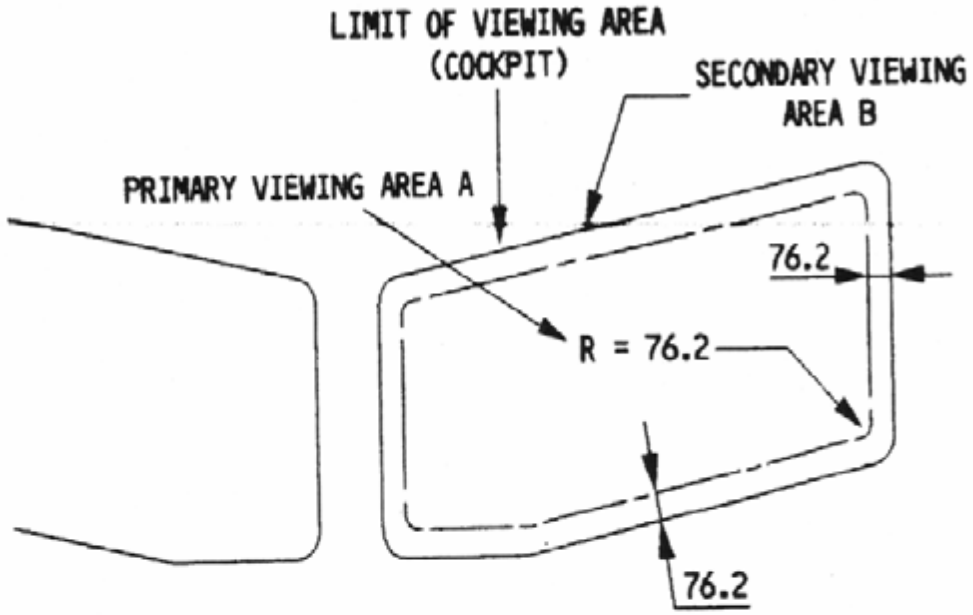
Figure 56–11–1.1
Windshield Limits



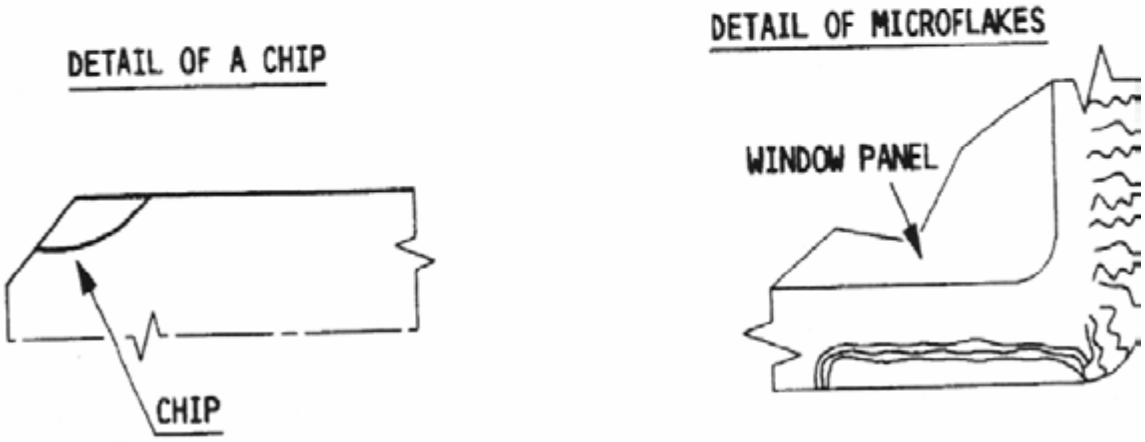


Figure 56–11–1.2
Windshield Limits

	OUTER PLY	INNER MAIN PLY
INTERLAYER MICROFLAKES	AREA A : NOT PERMITTED AREA B : PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
BURN SPOTS	ACCEPTABLE IF THE LENGTH OF ALL THE BURN SPOTS ADDED TOGETHER ON ONE BUS BAR IS LESS THAN 200 mm (7.874 in). IF THE TOTAL LENGTH IS MORE THAN 200 mm (7.874 in) DEACTIVATE THE RELATED WINDSHIELD ANTI ICE SYSTEM.	

Figure 56–11–1.3 Windshield Limits

Continued Next Page

b) Remove tags and close the following circuit breakers:

- On C/B panel 121VU: remove tag and close circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WHC/2 location W13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/L/WHSLD location AF10.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/R/WHSLD location AF03.

3. If the Windshield outer ply has cracks or if the Windshield has burn spots that are equal to or more than the acceptable limit, deactivate the Anti-Ice of the defective windshield. To deactivate the Anti-Ice of the defective windshield open and collar the following circuit breakers:

<u>For the Left Side</u>

- On C/B panel 123VU: pull and secure circuit breaker ANTI ICE/LlWHSLD location AF10.

<u>For the Right Side</u>

- On C/B panel 123VU: pull and secure circuit breaker ANTIICE/RIWHSLD location AF03.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
56-11-02A	Fixed Lateral Windows (Aircraft with Glass Windows) SPS Supplier P/N SPS... and PPG Supplier P/N NP...) **"DISP.APPR.REQ'D"**	**N**	2	2	**A**	**(M)** One fixed lateral window outer ply may be cracked provided: a) Vision through the affected fixed lateral window is acceptable to the crewmember, b) The other fixed lateral window is not damaged, c) Repairs are made within one landing, and d) The affected window heating is deactivated and considered inoperative. NOTE: Acceptable structural damages are provided in the AMM.
56-11-02B	Fixed Lateral Windows (Aircraft with Acrylic windows) LUCAS/ACT Supplier P/N NH...)	**N**	2	2		**(M)** May be damaged. NOTE: Acceptable structural damages are provided in the AMM.

MEL ITEM	TAB LOCATION	PLACARD TEXT
56-11-02A	Adjacent To PROBE/WINDOW Heat Switch On Overhead ANTI–ICE Panel	___ FIXED LATERAL WINDOW ___ (STATE CONDITION)
56-11-02B	Adjacent To PROBE/WINDOW Heat Switch On Overhead ANTI–ICE Panel	___ FIXED LATERAL WINDOW ___ (STATE CONDITION)

(M) PROCEDURES

56-11-02A

The (M) Indicates the following Maintenance Procedures are required:

1. Pull and tag the following circuit breakers:

- On C/B panel 121VU: pull and tag circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/2 location W13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: pull and tag circuit breaker ANTIICE/L/WHSLD location AF10.
- On C/B panel 123VU: pull and tag circuit breaker ANTI ICEIRIWHSLD location AF03.

WARNING: MAKE SURE THAT THE CIRCUIT BREAKERS RELATED TO THE WEATHER RADAR ARE OPENED AND TAGGED.

2. To deactivate the fixed lateral window, accomplish the following: (REF. AMM TASK 56-10-00-040-002)

   a) Carry out a visual inspection/check of the lateral windows according to the following values: (Ref. AMM TASK 56-11-12-200-001)(Ref. Figure 56-11-02A.1-56-11-02A.2)

Continued Next Page

	OUTER PLY	INNER MAIN PLY
SCRATCHES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED	PERMITTED IF THE MEASUREMENT VALUE OF THE SCRATCHES DEPTH ARE LESS THAN 50 MICRONS. IF THE DEPTH MEASUREMENT IS NOT PERFORMED, SCRATCHES ARE PERMITTED IF THE OPERATOR CANNOT FEEL THE SCRATCHES BY TOUCHING THE WINDOW WITH A FINGER NAIL.
CHIPPING	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED	NOT ACCEPTABLE
CRACKS	PERMITTED. REFER TO MMEL CHAP 1, 56 10.02 DO NOT APPLY ELECTRICAL HEATING IF THERE IS ARCING	MIDDLE OR INNER OR BOTH CRACKED PLIES : NOT ACCEPTABLE
BUBBLES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED	
DELAMINATION	AREA A : NOT PERMITTED AREA B : PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED	
DISCOLORATION	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
INTERLAYER MICROFLAKES	AREA A : NOT PERMITTED AREA B : PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED	
BURN SPOTS	- ACCEPTABLE ON THE BUS BAR AREA IF THE DIAMETER OF THE MARKS IS LESS THAN 10 MM (0.39 IN). IF THE DIAMETER OF THE MARKS IS MORE THAN 10 MM (0.39 IN), DEACTIVATE THE ANTI ICE SYSTEM OF THE DEFECTIVE FIXED WINDOW - ACCEPTABLE IF THE VISIBILITY IS NOT IMPAIRED.	

Figure 56–11–02A.1
Fixed Lateral Window Limits

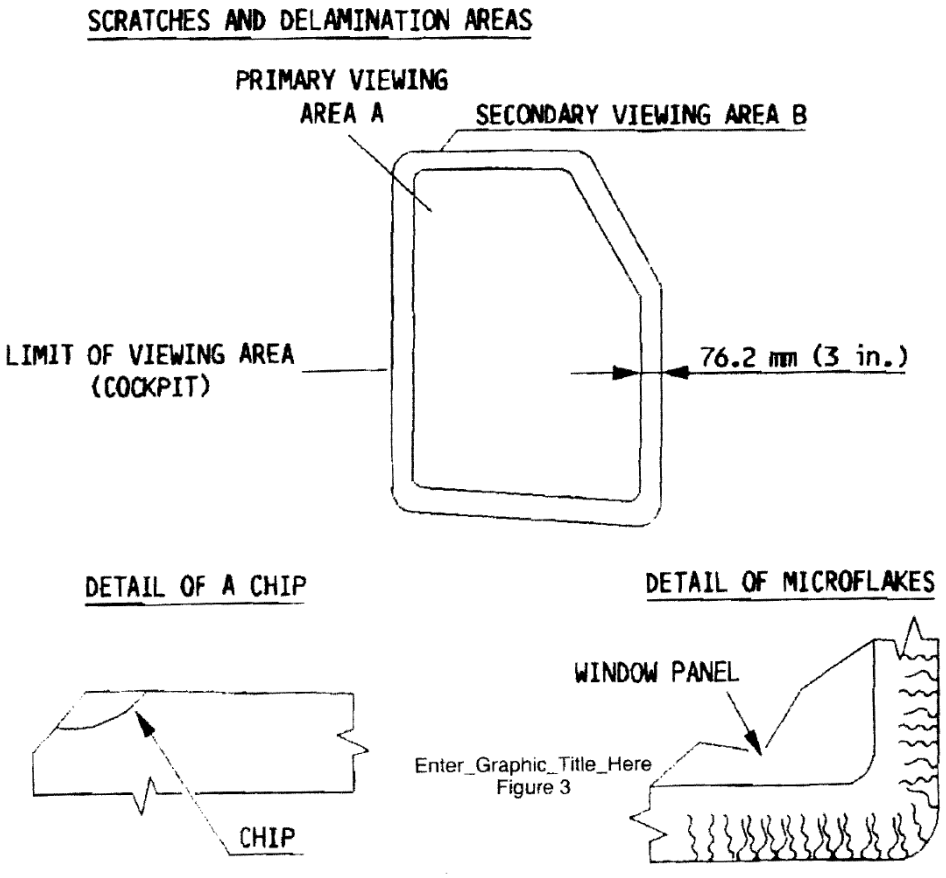


Figure 56–11–02A.2
Fixed Lateral Window Limits

Continued Next Page

b) Remove tags and close the following circuit breakers:

- On C/B panel 121VU: remove tag and close circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WHC/2 location W13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/L/WHSLD location AF10.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/R/WHSLD location AF03.

3. If the Fixed Window has burn spots that are equal to or more than the acceptable limit, deactivate the Anti-Ice of the defective window. To deactivate the Anti-Ice of the defective window pull and secure the following circuit breaker:

<u>For the Left Side</u>

- On C/B panel 123VU: pull and secure circuit breaker ANTIICEIWINDOWS/L location X14.

<u>For the Right Side</u>

- On C/B panel 123VU: pull and secure circuit breaker ANTIICEIWINDOWS/R location W14.

56-11-02B

The (M) Indicates the following Maintenance Procedures are required:

1. Pull and tag the following circuit breakers:

- On C/B panel 121VU: pull and tag circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/2 location W13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: pull and tag circuit breaker ANTIICE/L/WHSLD location AF10.
- On C/B panel 123VU: pull and tag circuit breaker ANTI ICEIRIWHSLD location AF03.

WARNING: MAKE SURE THAT THE CIRCUIT BREAKERS RELATED TO THE WEATHER RADAR ARE OPENED AND TAGGED.

2. To deactivate the fixed lateral window, accomplish the following: (REF. AMM TASK 56-10-00-040-002)

a) Carry out a visual inspection/check of the lateral windows according to the following values: (Ref. AMM TASK 56-11-12-200-001)(Ref. Figure 56-11-02B.1-56-11-02B.2)

Continued Next Page

	OUTER PLY	INNER MAIN PLY
SCRATCHES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED. MAX. DEPTH 1 mm (.039 in)	
CHIPPING	MAXIMUM DEPTH : 1 mm (.039 in)	
CRACKS	NOT ACCEPTABLE	
BUBBLES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
DELAMINATION	AREA A : NOT PERMITTED AREA B : PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
DISCOLORATION OR BURNING	PERMITTED IF THE VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
BURN SPOTS	- ACCEPTABLE ON THE BUS BAR AREA IF THE DIAMETER OF THE MARKS IS LESS THAN 10 MM (0.39 IN). IF THE DIAMETER OF THE MARKS IS MORE THAN 10 MM (0.39 IN), DEACTIVATE THE ANTI ICE SYSTEM OF THE DEFECTIVE FIXED WINDOW. - ACCEPTABLE ON THE CONDUCTIVE ELEMENT IF THE VISIBILITY IS NOT IMPAIRED.	

Figure 56–11–02B.1
Fixed Lateral Windows Limits

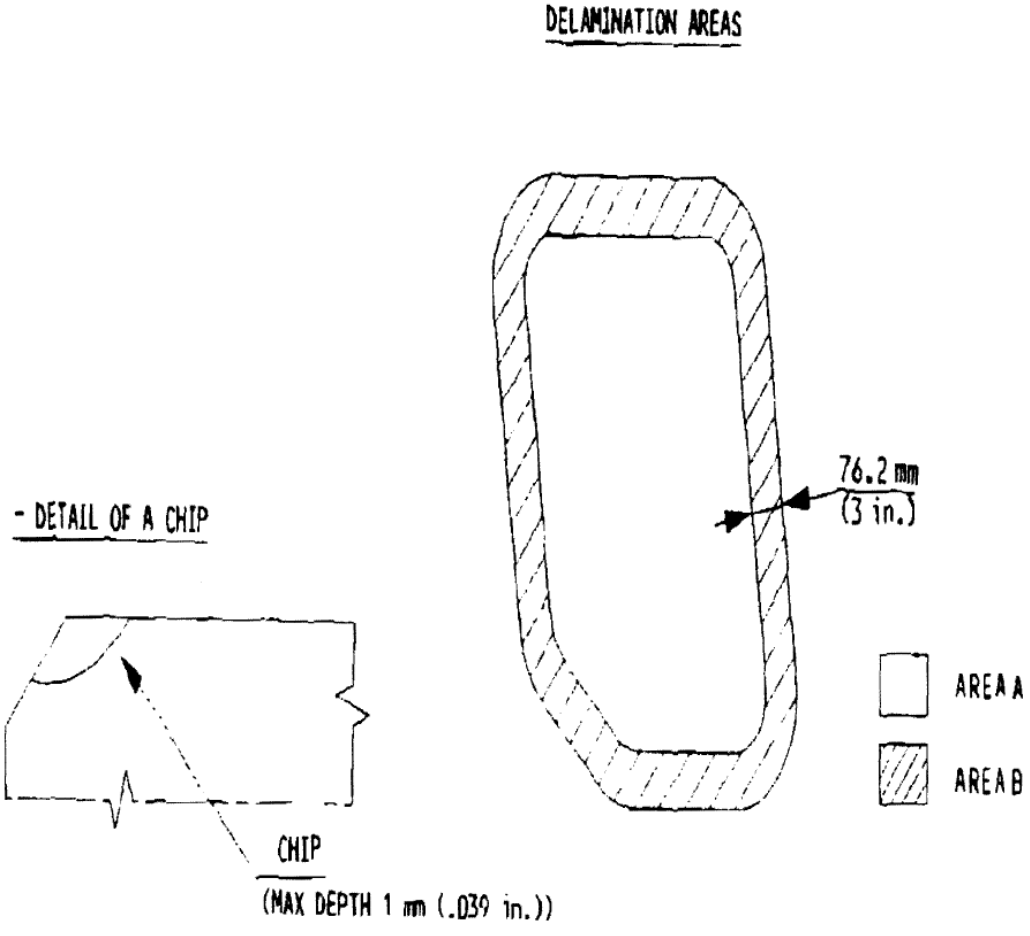


Figure 56–11–02B.2
Fixed Lateral Windows Limits

Continued Next Page

b) Remove tags and close the following circuit breakers:

- On C/B panel 121VU: remove tag and close circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WHC/2 location W13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/L/WHSLD location AF10.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/R/WHSLD location AF03.

3. If the Fixed Window has burn spots that are equal to or more than the acceptable limit, deactivate the Anti-Ice of the defective window. To deactivate the Anti-Ice of the defective window pull and secure the following circuit breaker:

<u>For the Left Side</u>

- On C/B panel 123VU: pull and secure circuit breaker ANTIICEIWINDOWS/L location X14.

<u>For the Right Side</u>

- On C/B panel 123VU: pull and secure circuit breaker ANTIICEIWINDOWS/R location W14.

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
56-12-01A	Sliding Windows (Aircraft with Glass Windows) SPS Supplier P/N SPS... and PPG Supplier P/N NP...) **"DISP.APPR.REQ'D"**	**N**	2	2	**A**	**(M)** One sliding window outer ply may be cracked provided: a) Vision through the affected sliding window is acceptable to the crewmember, b) The other sliding window is not damaged, c) Repairs are made within one landing, and d) The affected window heating is deactivated and considered inoperative. NOTE: Acceptable structural damages are provided in the AMM.
56-12-01B	Sliding Windows (Aircraft with Acrylic windows) (LUCAS/ACT Supplier P/N NH...)	**N**	2	2		**(M)** May be damaged. NOTE: Acceptable structural damages are provided in the AMM.

MEL ITEM	TAB LOCATION	PLACARD TEXT
56-12-01A	Adjacent To PROBE/WINDOW Heat Switch On Overhead ANTI–ICE Panel	___ SLIDING WINDOW _____ (STATE CONDITION)
56-12-01B	Adjacent To PROBE/WINDOW Heat Switch On Overhead ANTI–ICE Panel	___ SLIDING WINDOW _____ (STATE CONDITION)

(M) PROCEDURES

56-12-01A

The (M) Indicates the following Maintenance Procedures are required:

1. Pull and tag the following circuit breakers:

- On C/B panel 121VU: pull and tag circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/2 location W13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: pull and tag circuit breaker ANTIICE/L/WHSLD location AF10.
- On C/B panel 123VU: pull and tag circuit breaker ANTI ICEIRIWHSLD location AF03.

WARNING: MAKE SURE THAT THE CIRCUIT BREAKERS RELATED TO THE WEATHER RADAR ARE OPENED AND TAGGED.

2. To deactivate the sliding window, accomplish the following: (REF. AMM TASK 56-10-00-040-002)

   a) Carry out a visual inspection/check of the sliding windows according to the following values: (Ref. AMM TASK 56-11-12-200-001)(Ref. Figure 56-12-01A.1-56-12-01A.2)

Continued Next Page

	OUTER PLY	INNER MAIN PLY
SCRATCHES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	PERMITTED IF THE MEASUREMENT VALUE OF THE SCRATCHES DEPTH ARE LESS THAN 50 MICRONS. IF THE DEPTH MEASUREMENT IS NOT PERFORMED, SCRATCHES ARE PERMITTED IF THE OPERATOR CANNOT FEEL THE SCRATCHES BY TOUCHING THE SLIDING WINDOW WITH A FINGER NAIL.
CHIPPING	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	MIDDLE OR INNER OR BOTH PLIES : NOT ACCEPTABLE
CRACKS	PERMITTED. REFER TO MMEL CHAP 1, 56.10.02 DO NOT APPLY ELECTRICAL HEATING IF THERE IS ARCING	MIDDLE OR INNER OR BOTH CRACKED PLIES : NOT ACCEPTABLE
BUBBLES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
DELAMINATION	AREA A : NOT PERMITTED AREA B : PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
DISCOLORATION	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
INTERLAYER MICROFLAKES	AREA A : NOT PERMITTED AREA B : PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
BURN SPOTS	– ACCEPTABLE ON THE BUS BAR AREA IF THE DIAMETER OF THE MARKS IS LESS THAN 10 MM (0.39 IN). IF THE DIAMETER OF THE MARKS IS MORE THAN 10 MM (0.39 IN), DEACTIVATE THE ANTI ICE SYSTEM OF THE DEFECTIVE SLIDING WINDOW. – ACCEPTABLE IF THE VISIBILITY IS NOT IMPAIRED.	

Figure 56–12–01A.1
Sliding Windows Limits

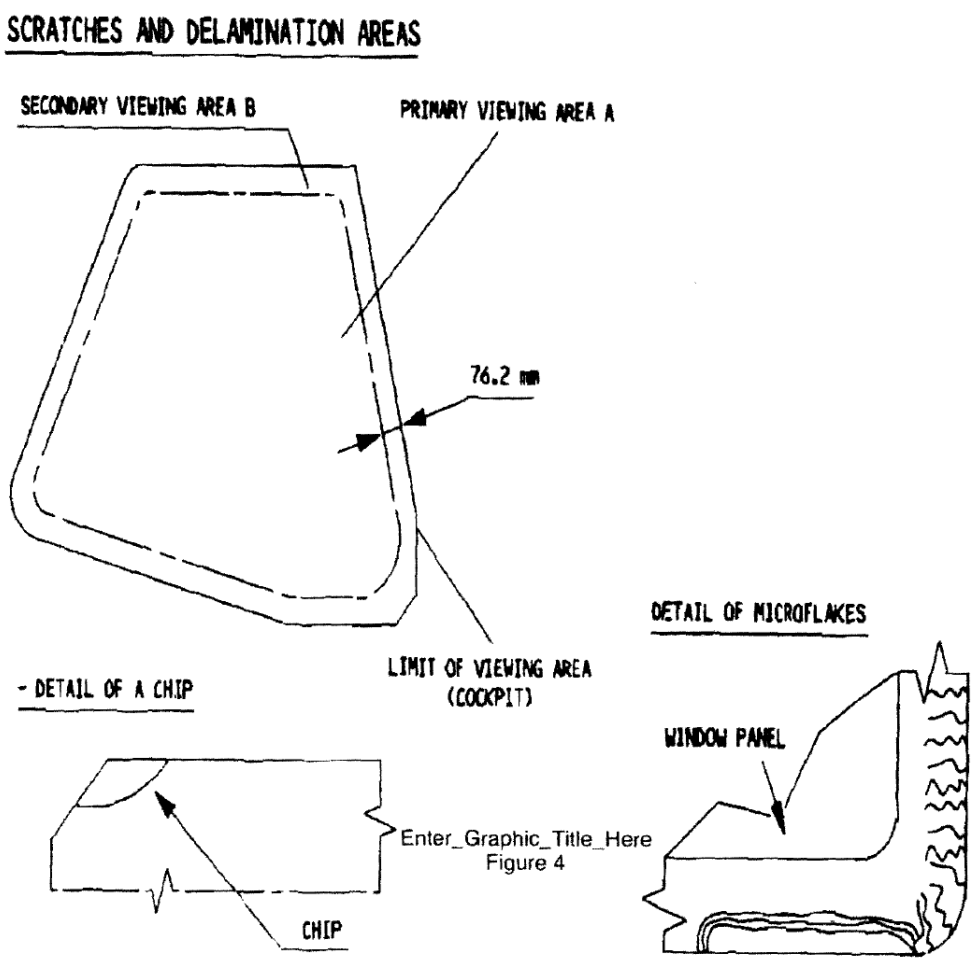


Figure 56–12–01A.2
Sliding Windows Limits

Continued Next Page

b) Remove tags and close the following circuit breakers:

- On C/B panel 121VU: remove tag and close circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WHC/2 location W13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/L/WHSLD location AF10.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/R/WHSLD location AF03.

3. If the Lateral Sliding Window Outer ply has cracks or if the Lateral Sliding Window has burn spots that are equal to or more than the acceptable limit, deactivate the Anti-Ice of the defective window. To deactivate the Anti-Ice of the defective window open and collar the following circuit breakers:

<u>For the Left Side</u>

- On C/B panel 123VU: pull and secure circuit breaker ANTIICEIWINDOWS/L location X14.

<u>For the Right Side</u>

- On C/B panel 123VU: pull and secure circuit breaker ANTIICEIWINDOWS/R location W14.

56-12-01B

The (M) Indicates the following Maintenance Procedures are required:

1. Pull and tag the following circuit breakers:

- On C/B panel 121VU: pull and tag circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/2 location W13.
- On C/B panel 122VU: pull and tag circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: pull and tag circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: pull and tag circuit breaker ANTIICE/L/WHSLD location AF10.
- On C/B panel 123VU: pull and tag circuit breaker ANTI ICEIRIWHSLD location AF03.

WARNING: MAKE SURE THAT THE CIRCUIT BREAKERS RELATED TO THE WEATHER RADAR ARE OPENED AND TAGGED.

2. To deactivate the sliding window, accomplish the following: (REF. AMM TASK 56-10-00-040-002)

a) Carry out a visual inspection/check of the sliding windows according to the following values: (Ref. AMM TASK 56-11-12-200-001)(Ref. Figure 56-12-01B.1-56-12-01B.2)

Continued Next Page

	OUTER PLY	INNER MAIN PLY
SCRATCHES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED. MAX. DEPTH 1 mm (.039 in)	
CHIPPING	MAXIMUM DEPTH : 1 mm (.039 in)	
CRACKS	NOT ACCEPTABLE	
BUBBLES	PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
DELAMINATION	AREA A : NOT PERMITTED AREA B : PERMITTED PROVIDED VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
DISCOLORATION OR BURNING	PERMITTED IF THE VISIBILITY IS NOT UNACCEPTABLY IMPAIRED.	
BURN SPOTS	- ACCEPTABLE ON THE BUS BAR AREA IF THE DIAMETER OF THE MARKS IS LESS THAN 10 MM (0.39 IN). IF THE DIAMETER OF THE MARKS IS MORE THAN 10 MM (0.39 IN), DEACTIVATE THE ANTI ICE SYSTEM OF THE DEFECTIVE SLIDING WINDOW. - ACCEPTABLE IF THE VISIBILITY IS NOT IMPAIRED.	

Figure 56–12–01B.1
Sliding Windows Limits

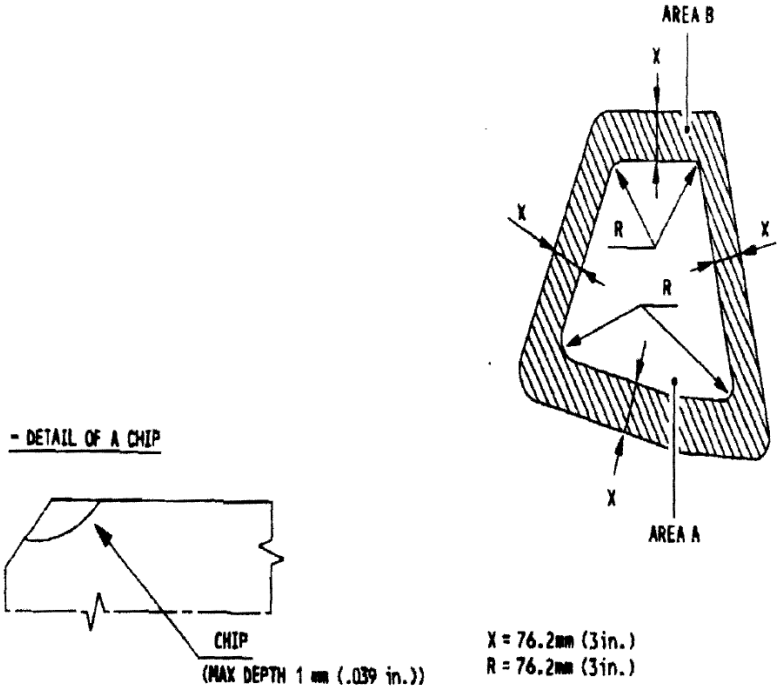


Figure 56–12–01B.2
Sliding Windows Limits

Continued Next Page

b) Remove tags and close the following circuit breakers:

- On C/B panel 121VU: remove tag and close circuit breaker COM NAV/RADAR/1 location K13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/R location W14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WHC/2 location W13.
- On C/B panel 122VU: remove tag and close circuit breaker ANTIICE/WINDOWS/L location X14.
- On C/B panel 122VU: remove tag and close circuit breaker ANTI ICE/WHC/1 location X13.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/L/WHSLD location AF10.
- On C/B panel 123VU: remove tag and close circuit breaker ANTI ICE/R/WHSLD location AF03.

3. If the Lateral Sliding Window Outer ply has bum spots that are equal to or more than the acceptable limit, deactivate the Anti-Ice of the defective window. To deactivate the Anti-Ice of the defective window open and collar the following circuit breakers:

   For the Left Side

   - On C/B panel 123VU: pull and secure circuit breaker ANTIICEIWINDOWS/L location X14.

   For the Right Side

   - On C/B panel 123VU: pull and secure circuit breaker ANTIICEIWINDOWS/R location W14.

If the Lateral Sliding Window Outer ply has bum spots that are equal to or more than the acceptable limit, deactivate the Anti-Ice of the defective window. To deactivate the Anti-Ice of the defective window open and collar the following circuit breakers:

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ATA 71 Contents

CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY....71-2
71-71-00A Faults(s) Indicated by ENG (1 and/or 2) FADEC....71-2
71-71-00B Faults(s) Indicated by ENG (1 and/or 2) EIU....71-2
71-71-00C Faults(s) Indicated by EVMU....71-2

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	CLASS II MAINTENANCE MESSAGES DISPLAYED ON ECAM STATUS PAGE OF ECAM SYSTEM DISPLAY					
71-71-00A	Faults(s) Indicated by ENG (1 and/or 2) FADEC	**Y**	2	-	**A**	May be inoperative provided repairs are made within 10 days. NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
71-71-00B	Faults(s) Indicated by ENG (1 and/or 2) EIU	**Y**	2	-	**C**	May be inoperative. NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.
71-71-00C	Faults(s) Indicated by EVMU	**Y**	2	-	**C**	May be inoperative. NOTE: Dispatch with this maintenance status message displayed on ECAM is permitted without CFDS interrogation.

MEL ITEM	TAB LOCATION	PLACARD TEXT
71-71-00A	Adjacent To ECAM Display	___ “ENG 1 (2) FADEC” ECAM MAINTENANCE STATUS MESSAGE(S) DISPLAYED
71-71-00B	Adjacent To ECAM Display	___ “ENG 1 (2) EIU” ECAM MAINTENANCE STATUS MESSAGE(S) DISPLAYED
71-71-00C	Adjacent To ECAM Display	ECAM MAINTENANCE STATUS MESSAGE “EVMU” DISPLAYED

ATA 73 Contents

73-11-01A Fuel Recirculation System Valves (Closed) 73-2
73-11-01B Fuel Recirculation System Valves (Open) 73-2
73-20-03A Minimum Idle on Ground For A319 Aircraft 73-3
73-20-03B Minimum Idle on Ground For A320 Aircraft 73-3
73-20-03C Minimum Idle on Ground For A321 Aircraft 73-3
73-20-05 Flex Temp Function 73-5
73-30-02A Fuel Used Indications (For A319/A320) 73-6
73-30-02B Fuel Used Indications (For A321) 73-6
73-30-03 Fuel Filter Clog Warnings (For A321) 73-7
73-30-04 Fuel Filter Clog Indication on ECAM System Display (On ECAM Engine System Page) 73-8

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
73-11-01A	Fuel Recirculation System Valves (Closed) (A321) **"DISP.APPR.REQ'D"**	**Y**	2	1	**C**	One may be inoperative in the closed position on one engine provided the APU generator is operative. NOTE: For A319 and A320 aircraft with the CFM 56-5A engine use MEL 71-71-00A.
73-11-01B	Fuel Recirculation System Valves (Open) (A321) **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	One or both valves may be inoperative in the open position provided that the four wing tank pumps are operative. NOTE: For A319 and A320 aircraft with the CFM 56-5A engine use MEL 71-71-00A.

MEL ITEM	TAB LOCATION	PLACARD TEXT
73-11-01A	Adjacent To Lower ECAM Display Unit	___ FUEL RECIRCULATION SYSTEM VALVE INOP – CLOSED
73-11-01B	Adjacent To Lower ECAM Display Unit	___ FUEL RECIRCULATION SYSTEM VALVE INOP – OPEN

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
73-20-03A	Minimum Idle on Ground For A319 Aircraft **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided performance corrections are applied.
73-20-03B	Minimum Idle on Ground For A320 Aircraft **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided performance corrections are applied.
73-20-03C	Minimum Idle on Ground For A321 Aircraft	**Y**	2	0	**C**	**(O)** May be inoperative provided performance corrections are applied.

MEL ITEM	TAB LOCATION	PLACARD TEXT
73-20-03A	Adjacent To Upper ECAM Display	___ MINIMUM IDLE ON GROUND INOP
73-20-03B	Adjacent To Upper ECAM Display	___ MINIMUM IDLE ON GROUND INOP
73-20-03C	Adjacent To Upper ECAM Display	___ MINIMUM IDLE ON GROUND INOP

(O) PROCEDURES

73-20-03A

73-20-03A	**MINIMUM IDLE ON GROUND**
EFFECTIVITY	**A319**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	None
AWABS	Performance weight corrections have been applied. Reduce the AWABS V_1, V_r and V_2 by 1 KIAS. If the resulting V_1 is less than minimum V_{mcg}, takeoff is permitted with V_1 set equal to V_{mcg}. See ODM – Abnormal Section for Minimum Control Speed – Ground (V_{mcg}).
TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** Reduce RATOW by 500 lbs. Reduce T/O CLIMB LIMIT by 500 lbs. **LANDING** None **OTHER CORRECTIONS** Reduce the ODM V_1, V_r and V_2 by 1 KIAS. If the resulting V_1 is less than minimum V_{mcg}, takeoff is permitted with V_1 set equal to V_{mcg}. See ODM – Abnormal Section for Minimum Control Speed – Ground (V_{mcg}).

Continued Next Page

73-20-03B

73-20-03B	**MINIMUM IDLE ON GROUND**
EFFECTIVITY	**A320**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	None
AWABS	Performance weight corrections have been applied. Reduce the AWABS V_1, V_r and V_2 by 1 KIAS. If the resulting V_1 is less than minimum V_{mcg}, takeoff is permitted with V_1 set equal to V_{mcg}. See ODM – Abnormal Section for Minimum Control Speed – Ground (V_{mcg}).
TAKEOFF PERFORMANCE WORKSHEET	**TAKEOFF** Reduce RATOW by 700 lbs. Reduce T/O CLIMB LIMIT by 700 lbs. **LANDING** None **OTHER CORRECTIONS** Reduce the ODM V_1, V_r and V_2 by 1 KIAS. If the resulting V_1 is less than minimum V_{mcg}, takeoff is permitted with V_1 set equal to V_{mcg}. See ODM – Abnormal Section for Minimum Control Speed – Ground (V_{mcg}).

73-20-03C

73-20-03C	**MINIMUM IDLE ON GROUND**
EFFECTIVITY	**A321**
FLIGHT PLANNING REQUIREMENTS	1. None
NOTES	None
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 73-20-03C.**

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
73-20-05	Flex Temp Function **"DISP.APPR.REQ'D"**	**Y**	2	0	**C**	**(O)** May be inoperative provided maximum thrust is used at takeoff.

MEL ITEM	TAB LOCATION	PLACARD TEXT
73-20-05	Adjacent To Upper ECAM Display	FLEX TEMP FUNCTION INOP

(O) PROCEDURES

Use maximum thrust for takeoff.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
73-30-02A	Fuel Used Indications (For A319/A320)	**N**	2	0	**C**	**(M)** May be inoperative provided: a) Associated tank fuel quantity indication system operates normally, and b) Fuel–On–Board indication operates normally.
73-30-02B	Fuel Used Indications (For A321)	**N**	2	0	**C**	**(M)** May be inoperative provided: a) Associated tank fuel quantity indication system operates normally, b) Fuel–On–Board indication operates normally, and c) F.USED 1+2 indication is considered inoperative and deferred per MEL 28-40-06Y.

MEL ITEM	TAB LOCATION	PLACARD TEXT
73-30-02A	Adjacent To ECAM Display Unit	___ FUEL USED INDICATION INOP
73-20-02B	Adjacent To ECAM Display Unit	___ FUEL USED INDICATION INOP

(M) PROCEDURES

73-30-02A, 73-30-02B

1. Gain access to the SYSTEM REPORT/TEST MENU on the Multipurpose Control Display Unit (MCDU).
2. Push the Line Select Keys adjacent to the following menu items on the MCDU screen:
   a) FUEL
   b) SYSTEM STATUS
   c) CH 1 FQIS STATUS
3. 'NO FAULTS' must appear for each of the above selections on the MCDU.
4. For A321 aircraft defer FUEL USED 1+2 per MEL 28-40-06Y.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
73-30-03	Fuel Filter Clog Warnings (For A321)	**N**	2	1	**C**	**(M)** One may be inoperative provided associated filter is changed before the next flight and then ONCE EACH FLIGHT DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
73-30-03	Adjacent To ECAM Display Unit	___ FUEL FILTER CLOG WARNING INOP

(M) PROCEDURES

73-30-03

1. Replace the associated fuel filter per AMM Task 73-30-00-040-043.
2. ONCE EACH FLIGHT DAY:
   a. Replace the associated fuel filter per AMM Task 73-30-00-040-043.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
73-30-04	Fuel Filter Clog Indication on ECAM System Display (On ECAM Engine System Page)	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
73-30-04	Adjacent To Lower ECAM Display Unit	___ FUEL FILTER CLOG INDICATION ON ECAM SYSTEM DISPLAY INOP

ATA 74 Contents

	IGNITION SYSTEMS	74-2
74-31-01A	System A	74-2
74-31-01B	System B	74-2
	ECAM INDICATIONS (LOWER DISPLAY)	74-3
74-31-02A	Engine 1 Selected Igniter	74-3
74-31-02B	Engine 2 Selected Igniter	74-3
74-31-03A	IGN FAULT Caution on ECAM	74-4

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
IGNITION SYSTEMS					
74-31-01A System A	**N**	2	2		NO RELIEF APPROVED. NOTE: A and B output (or input) leads from the exciter boxes may be swapped in order to restore System A operative. Reference MEL item 74–31–01B for possible relief.
74-31-01B System B	**Y**	2	0	**C**	**(M)(O)** May be inoperative provided System A is operative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
74-31-01A	N/A	N/A
74-31-01B	Adjacent To ECAM Display	IGNITION SYSTEM B INOP ON ___ ENGINE(S)

(O) PROCEDURES

74-31-01B

1. Ensure the following has been accomplished for the associated engine:
   - For Engine 1: on C/B panel 121VU: pull and secure circuit breaker ENGINE/IGN/ENG1/SYS B location P41.
   - For Engine 2: on C/B panel 121VU: pull and secure circuit breaker ENGINE/IGN/ENG2/SYS B location P42.

(M) PROCEDURES

74-31-01B

1. When an Ignition System B is inoperative, pull and secure the associated circuit breaker:
   - On C/B panel 121VU: pull and secure circuit breaker ENGINE/IGN/ENG2/SYS B location P42.
   - On C/B panel 121VU: pull and secure circuit breaker ENGINE/IGN/ENG1/SYS B location P41.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM INDICATIONS (LOWER DISPLAY)					
74-31-02A	Engine 1 Selected Igniter	**Y**	2	0	**C**	**(M)** May be inoperative provided IGN FAULT warning is verified to operate normally on ECAM.
74-31-02B	Engine 2 Selected Igniter	**Y**	2	0	**C**	**(M)** May be inoperative provided IGN FAULT warning is verified to operate normally on ECAM.

MEL ITEM	TAB LOCATION	PLACARD TEXT
74-31-02A	Adjacent To ECAM Display	ECAM SELECTED IGNITER INDICATION ON LOWER DU INOP
74-31-02B	Adjacent To ECAM Display	ECAM SELECTED IGNITER INDICATION ON LOWER DU INOP

(M) PROCEDURES

74-31-02A, 74-31-02B

To verify IGN FAULT warning is operating normally:

1. Start the affected engine(s):
   a) If engine 1 is affected, pull the following circuit breakers:
      1) On C/B panel 49VU: pull circuit breaker ENGINE/1 AND 2/IGN/SYS A location A03.
      2) On C/B panel 121VU: pull circuit breaker ENGINE/IGN/ENG1/SYS A BAT location P39.
      3) On C/B panel 121VU: pull circuit breaker ENGINE/IGN/ENG1/SYS B location P41.
      4) Check on ECAM upper display that IGN FAULT warning is triggered.
      5) On C/B panel 49VU: close circuit breaker ENGINE/1 AND 2/IGN/SYS A location A03.
      6) On C/B panel 121VU: close circuit breaker ENGINE/IGN/ENG1/SYS A BAT location P39.
      7) On C/B panel 121VU: close circuit breaker ENGINE/IGN/ENG1/SYS B location P41.
   b) If engine 2 is affected, pull the following circuit breakers:
      1) On C/B panel 49VU: pull circuit breaker ENGINE/1 AND 2/IGN/SYS A location A03.
      2) On C/B panel 121VU: pull circuit breaker ENGINE/IGN/ENG2/SYS A BAT location P40.
      3) On C/B panel 121VU: pull circuit breaker ENGINE/IGN/ENG2/SYS B location P42.
      4) Check on ECAM upper display that IGN FAULT warning is triggered.
      5) On C/B panel 49VU: close circuit breaker ENGINE/1 AND 2/IGN/SYS A location A03.
      6) On C/B panel 121VU: close circuit breaker ENGINE/IGN/ENG2/SYS A BAT location P40.
      7) On C/B panel 121VU: close circuit breaker ENGINE/IGN/ENG2/SYS B location P42.

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
74-31-03A	IGN FAULT Caution on ECAM	**N**	4	3	**C**	**(M)** One may be inoperative provided associated ignition system is verified to operate normally ONCE EACH FLIGHT DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**
74-31-03B	IGN FAULT Caution on ECAM	**N**	4	2	**C**	**(M)** Two may be inoperative provided associated ignition system is verified to operate normally PRIOR TO EACH DEPARTURE (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
74-31-03A	Adjacent To ECAM Display	___ IGN FAULT CAUTIONS INOP
74-31-03B	Adjacent To ECAM Display	___ IGN FAULT CAUTIONS INOP

(M) PROCEDURES

74-31-03A

ONCE EACH FLIGHT DAY:

1. Verify the associated ignition system operates normally by performing AMM Task 74-31-00-040-043 on the A319/A320 aircraft or AMM Task 74-31-00-040-001 for the A321 aircraft.

74-31-03B

PRIOR TO EACH DEPARTURE

1. Verify the associated ignition system operates normally by performing AMM Task 74-31-00-040-043 on the A319/A320 aircraft or 74-31-00-040-001 for the A321 aircraft.

ATA 76 Contents

76-11-01 Thrust Lever Position Sensor 76-2

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
76-11-01	Thrust Lever Position Sensor **"DISP.APPR.REQ'D"**	**Y**	4	3	**A**	One may be inoperative on one engine provided: a) The A/THR is operative, b) Both LGCIU's are operative, and c) Repairs are made within 3 flight days.

MEL ITEM	TAB LOCATION	PLACARD TEXT
76-11-01	Adjacent to the associated Thrust Lever	____ THRUST LEVER POSITION SENSOR IS INOP

ATA 77 Contents

	ECAM Indications (Upper Display)	77-2
77-00-01A	Fuel Flow (A319/A320)	77-2
77-00-01B	Fuel Flow (A321)	77-2
77-00-01C	Total Fuel Flow Indication (A321)	77-2
	ECAM Indications (Lower Display)	77-3
77-00-02A	Nacelle Temperatures	77-3
77-00-02B	N1 Vibration	77-3
77-00-02C	N2 Vibration	77-3

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
ECAM INDICATIONS (UPPER DISPLAY)					
77-00-01A Fuel Flow (A319/A320) **"DISP.APPR.REQ'D"**	**Y**	2	1	**B**	One may be inoperative.
77-00-01B Fuel Flow (A321) **"DISP.APPR.REQ'D"**	**Y**	2	1	**B**	May be inoperative provided the total fuel flow indication is considered inoperative.
77-00-01C Total Fuel Flow Indication (A321)	**Y**	1	0	**B**	May be inoperative or replaced by XX.

MEL ITEM	TAB LOCATION	PLACARD TEXT
77-00-01A	Adjacent To ECAM Display	___ FUEL FLOW INDICATION INOP
77-00-01B	Adjacent To ECAM Display	___ FUEL FLOW INDICATION INOP
77-00-01C	Adjacent To ECAM Display	TOTAL FUEL FLOW INDICATION INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD		REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
	ECAM INDICATIONS (LOWER DISPLAY)					
77-00-02A	Nacelle Temperatures	**Y**	2	0	**C**	May be inoperative.
77-00-02B	N1 Vibration	**Y**	2	1	**C**	One may be inoperative.
77-00-02C	N2 Vibration	**Y**	2	1	**C**	One may be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
77-00-02A	Adjacent To ECAM Display	LOWER ECAM DISPLAY ___ NACELLE TEMPERATURE INDICATION INOP
77-00-02B	Adjacent To ECAM Display	LOWER ECAM DISPLAY ___ N1 VIBRATION INDICATION INOP
77-00-02C	Adjacent To ECAM Display	LOWER ECAM DISPLAY ___ N2 VIBRATION INDICATION INOP

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ATA 78 Contents

78-30-01 Thrust Reverser Systems 78-2
78-30-02 Thrust Reversers Inhibition Relay Contacts 78-4
78-30-07 T/R Indications 78-5

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
78-30-01	Thrust Reverser Systems **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) Inoperative reverser is deactivated and secured in the stowed (forward thrust) position, and no operations or procedures require its use, b) All stow and deploy switches on the inoperative reverser operate normally, c) ENG 1 (2) REV PRESSURIZED caution is not present on ECAM after deactivation, d) Wheel brake tachometers operate normally, e) Main wheel braking system operates normally, and f) For wet runway operation, applicable performance corrections for Thrust Reverser Inoperative (TRI) are applied for takeoff. KJAC (Jackson Hole Airport) operations Authorized on dry runways only.

MEL ITEM	TAB LOCATION	PLACARD TEXT
78-30-01	Adjacent To ECAM Display	ENG NO ___ THRUST REVERSER INOP – DEACTIVATED AND SECURED IN THE STOWED POSITION

(O) PROCEDURES

1. CAT III – Both thrust reversers are required when the RVR is less than 600 or the braking action is less than GOOD.
2. At Takeoff: In case of rejected takeoff, THRUST levers 1 AND 2 to IDLE, then select REV 1 AND 2 to MAX.
3. At Landing:
   a) Before touchdown (for the flare), THRUST levers 1 AND 2 to IDLE.
   b) At touchdown, select REV 1 AND 2 to MAX.

NOTE 1: ENG (affected side) REVERSER FAULT caution is displayed on ECAM E/WD when thrust reverse is selected during landing and rejected takeoff.

NOTE 2: Upon selection of the thrust reversers, a temporary increased thrust idle is commanded by the FADEC on the affected side.

NOTE 3: During landings with strong crosswinds and one reverser inoperative, asymmetric reverse thrust above idle may cause directional control problems. Performance permitting, limiting reverse thrust to idle with the operative reverser may aid in maintaining directional control.

NOTE 4: For automatic roll-out on A321 aircraft with one thrust reverser inoperative refer to Vol. 1, Limitations – Operating Limitations, Autoflight, Automatic Landing, Autoland Landing Rollout.

Continued Next Page

4. For a landing conducted with one deactivated thrust reverser, ensure that both engine thrust levers are retarded to the IDLE detent for the flare and the touchdown. Select both thrust levers to reverse when applying reverse thrust.

78-30-01	**THRUST REVERSER SYSTEMS**
EFFECTIVITY	**All**
FLIGHT PLANNING REQUIREMENTS	None
NOTES	AWABS Takeoff data is provided for DRY or WET runway conditions only. Takeoffs using ICY, QCTR or HCTR data are not authorized.
AWABS	Performance corrections have been applied.
TAKEOFF PERFORMANCE WORKSHEET	**Manual WDR not permitted with MEL 78-30-01.**

(M) PROCEDURES

1. Deactivate thrust reverser by:
   a) For A319 and A320 aircraft perform AMM Task 78-30-00-040-A.
   b) For A321 aircraft perform AMM Task 78-30-00-040-B.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
78-30-02	Thrust Reversers Inhibition Relay Contacts **"DISP.APPR.REQ'D"**	**N**	4	2	**C**	**(M)(O)** Two contacts may be inoperative provided: a) They are on the same engine, and b) The associated reverser is deactivated and deferred per MEL 78-30-01.

MEL ITEM	TAB LOCATION	PLACARD TEXT
78-30-02	Adjacent To ECAM Display	___ T/R INHIBITION RELAY CONTACTS INOP

(O) PROCEDURES

1. Comply with MEL Item 78–30–01 (O) procedure.

(M) PROCEDURES

1. Defer associated Thrust Reverser inoperative per MEL item 78–30–01.

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
78-30-07	T/R Indications **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One may be inoperative provided the associated T/R is considered inoperative and deferred per MEL 78-30-01.

MEL ITEM	TAB LOCATION	PLACARD TEXT
78-30-07	Adjacent To ECAM Display	___ T/R INDICATION INOP

(O) PROCEDURES

1. Comply with MEL Item 78–30–01 (O) procedure.

(M) PROCEDURES

1. Defer associated Thrust Reverser inoperative per MEL item 78–30–01.

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ATA 79 Contents

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79-35-01 OIL FILTER CLOG Indications on ECAM Engine System Page....79-4
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NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
79-31-01	Oil Quantity Indications **"DISP.APPR.REQ'D"**	**N**	2	1	**B**	**(M)(O)** One may be inoperative provided: a) Associated oil quantity is verified PRIOR TO EACH DEPARTURE (Log Book Entry Required), b) There is no evidence of abnormal consumption or leakage, and c) Associated ENG OIL PRESS, OIL TEMP indications operate normally. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
79-31-01	Adjacent To ECAM Display	___ OIL QUANTITY INDICATION INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Inspect engine exterior for evidence of oil leakage.
2. Check the aircraft log for evidence of normal oil pressure, oil temperature and oil pressure warning system operation for the affected engine.
3. Contact Maintenance Control to verify that engine oil consumption is not excessive.
4. PRIOR TO EACH DEPARTURE:
   a) Verify that affected engine oil tank is filled to maximum capacity with approved lubricating oil. See AMM Ref. 12–13–79, 300 series pgs or A/C Servicing Manual Ref. 11–01–06.
   b) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

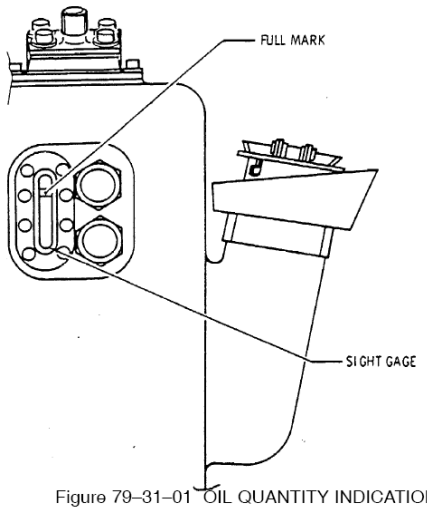

Figure 79–31–01 OIL QUANTITY INDICATION

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
79-33-02A	OIL LO PR Warning on ECAM	**Y**	2	1	**C**	**(O)** One may be inoperative.
79-33-02B	OIL LO PR Warning on ECAM	**Y**	2	0	**C**	**(O)** Both may be inoperative provided RCDR GND CTL is verified ON after engines are started.

MEL ITEM	TAB LOCATION	PLACARD TEXT
79-33-02A	Adjacent To ECAM Display	___ OIL LO PRESS WARNING INOP
79-33-02B	Adjacent To ECAM Display	BOTH ENGINE OIL LO PRESS WARNING INOP

(O) PROCEDURES

79-33-02A

Periodically monitor oil pressure indication on ECAM ENG page.

79-33-02B

1. Periodically monitor oil pressure indication(s) on ECAM ENG page.
2. When both engines are affected:
   a) After engines start:
      1) RCDR GND CTL – CHECK ON.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
79-35-01	OIL FILTER CLOG Indications on ECAM Engine System Page **"DISP.APPR.REQ'D"**	**N** 2	1	**C**	**(M)(O)** One may be inoperative provided a check for filter clogging is made ONCE EACH FLIGHT DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
79-35-01	Adjacent To ECAM Display	___ OIL FILTER CLOG INDICATION INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required ONCE EACH FLIGHT DAY.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. ONCE EACH FLIGHT DAY:
   a) CHECK OF OIL SCAVENGE FILTER CLOGGING INDICATOR.
      1) On panel 115VU, install a warning notice to tell persons not to start the engine 1 (2).
      2) Make sure that the engine 1 (2) has been shut down for at least 5 minutes.
      3) On panel 50VU, make sure that the ON legend of the ENG/FADEC GND PWR 1 (2) pushbutton switch is OFF, and install a warning notice.
      4) Open left fan cowl door.
      5) Check that pops out is not visible on the oil scavenge filter.
      6) Close left fan cowl door.
      7) Remove warning notices from the panel 115VU and 50VU.
   b) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

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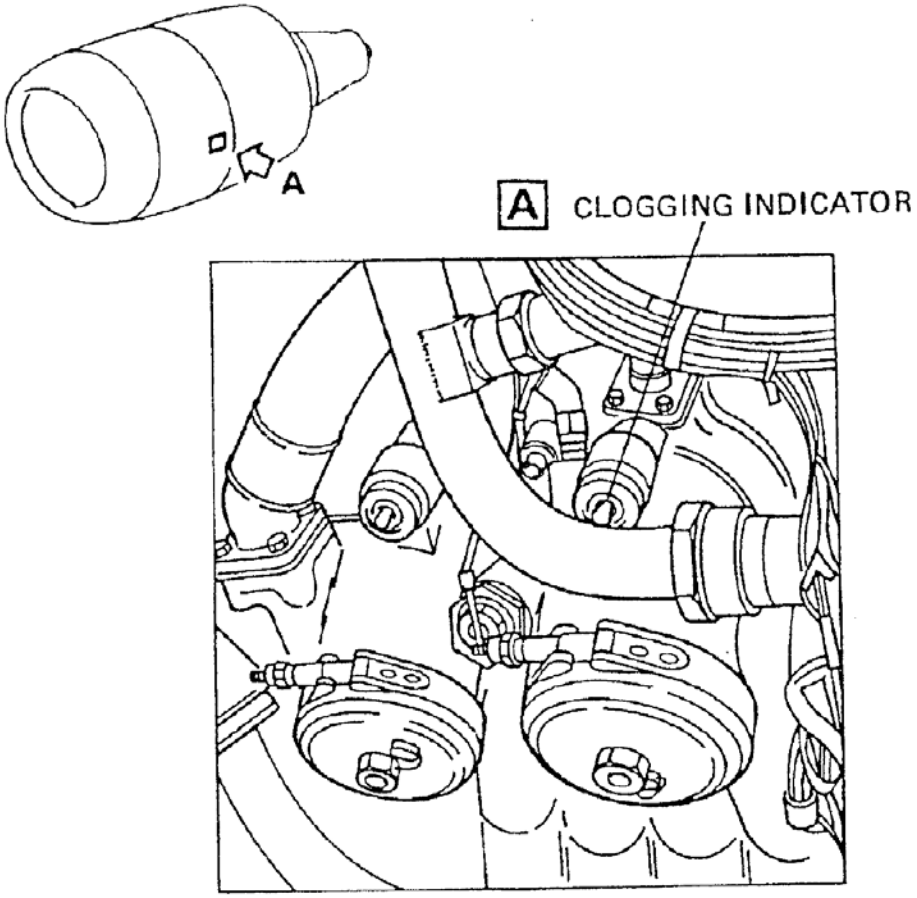

Figure 79–35–01 SCAVENGE OIL FILTER CLOGGING INDICATOR

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
79-35-02A	OIL FILTER CLOG Caution on ECAM E/WD (For A319/A320 Aircraft)	**N**	2	1	**C**	**(M)** One may be inoperative provided: a) Associated filter is replaced ONCE EACH FLIGHT DAY (Log Book Entry Required), and b) Chip detectors are inspected when the filter is replaced and do not reveal the presence of metal chips or other contaminants. **Repetitive Check Required (Yellow Placard)**
79-35-02B	OIL FILTER CLOG Caution on ECAM E/WD (For A321 Aircraft)	**N**	2	1	**C**	**(M)** One may be inoperative provided: a) Associated filter is replaced ONCE EACH FLIGHT DAY (Log Book Entry Required), and b) Visual indicator (pop-out) on the electrical master chip detector is inspected when the filter is replaced and does not reveal the presence of metal chips or other contaminates. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
79-35-02A	Adjacent To E/WD Display	___ OIL FILTER CLOG CAUTION ON E/WD INOP
79-35-02B	Adjacent To E/WD Display	___ OIL FILTER CLOG CAUTION ON E/WD INOP

(M) PROCEDURES

79-35-02A

1. ONCE EACH FLIGHT DAY:

   a) Change the associated filter and do a check of the Magnetic Chip Detectors ONCE EACH FLIGHT DAY (reference AMM 79–35–00, TASK 79–35–00–040–043).

79-35-02B

1. ONCE EACH FLIGHT DAY:

   a) Replace the main oil supply filter and inspect the visual indicator on the electrical master chip detector by performing AMM Task 79-35-00-040-042

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79-35-02B OIL FILTER CLOG Caution on ECAM E/WD (For A321 Aircraft)....79-6

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
79-31-01	Oil Quantity Indications **"DISP.APPR.REQ'D"**	**N**	2	1	**B**	**(M)(O)** One may be inoperative provided: a) Associated oil quantity is verified PRIOR TO EACH DEPARTURE (Log Book Entry Required), b) There is no evidence of abnormal consumption or leakage, and c) Associated ENG OIL PRESS, OIL TEMP indications operate normally. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
79-31-01	Adjacent To ECAM Display	___ OIL QUANTITY INDICATION INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE, verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Inspect engine exterior for evidence of oil leakage.
2. Check the aircraft log for evidence of normal oil pressure, oil temperature and oil pressure warning system operation for the affected engine.
3. Contact Maintenance Control to verify that engine oil consumption is not excessive.
4. PRIOR TO EACH DEPARTURE:
   a) Verify that affected engine oil tank is filled to maximum capacity with approved lubricating oil. See AMM Ref. 12–13–79, 300 series pgs or A/C Servicing Manual Ref. 11–01–06.
   b) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

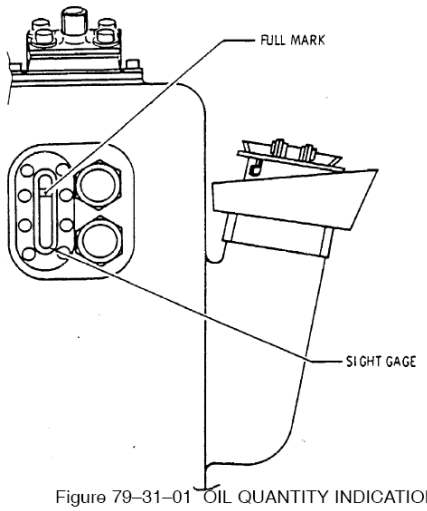

Figure 79–31–01 OIL QUANTITY INDICATION

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
79-33-02A	OIL LO PR Warning on ECAM	**Y**	2	1	**C**	**(O)** One may be inoperative.
79-33-02B	OIL LO PR Warning on ECAM	**Y**	2	0	**C**	**(O)** Both may be inoperative provided RCDR GND CTL is verified ON after engines are started.

MEL ITEM	TAB LOCATION	PLACARD TEXT
79-33-02A	Adjacent To ECAM Display	___ OIL LO PRESS WARNING INOP
79-33-02B	Adjacent To ECAM Display	BOTH ENGINE OIL LO PRESS WARNING INOP

(O) PROCEDURES

79-33-02A

Periodically monitor oil pressure indication on ECAM ENG page.

79-33-02B

1. Periodically monitor oil pressure indication(s) on ECAM ENG page.
2. When both engines are affected:
   a) After engines start:
      1) RCDR GND CTL – CHECK ON.

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION				REMARKS OR EXCEPTIONS
79-35-01	OIL FILTER CLOG Indications on ECAM Engine System Page **"DISP.APPR.REQ'D"**	**N** 2	1	**C**	**(M)(O)** One may be inoperative provided a check for filter clogging is made ONCE EACH FLIGHT DAY (Log Book Entry Required). **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
79-35-01	Adjacent To ECAM Display	___ OIL FILTER CLOG INDICATION INOP

(O) PROCEDURES

PRIOR TO EACH DEPARTURE verify logbook entry has been made by maintenance for MEL/CDL REQUIRED FOLLOW UP ACTION as stated on the (yellow) MEL Placard placed in the logbook.

NOTE: The above logbook entry is only required ONCE EACH FLIGHT DAY.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. ONCE EACH FLIGHT DAY:
   a) CHECK OF OIL SCAVENGE FILTER CLOGGING INDICATOR.
      1) On panel 115VU, install a warning notice to tell persons not to start the engine 1 (2).
      2) Make sure that the engine 1 (2) has been shut down for at least 5 minutes.
      3) On panel 50VU, make sure that the ON legend of the ENG/FADEC GND PWR 1 (2) pushbutton switch is OFF, and install a warning notice.
      4) Open left fan cowl door.
      5) Check that pops out is not visible on the oil scavenge filter.
      6) Close left fan cowl door.
      7) Remove warning notices from the panel 115VU and 50VU.
   b) Accomplish required FOLLOW UP ACTION (Yellow Placard) for logbook entry.

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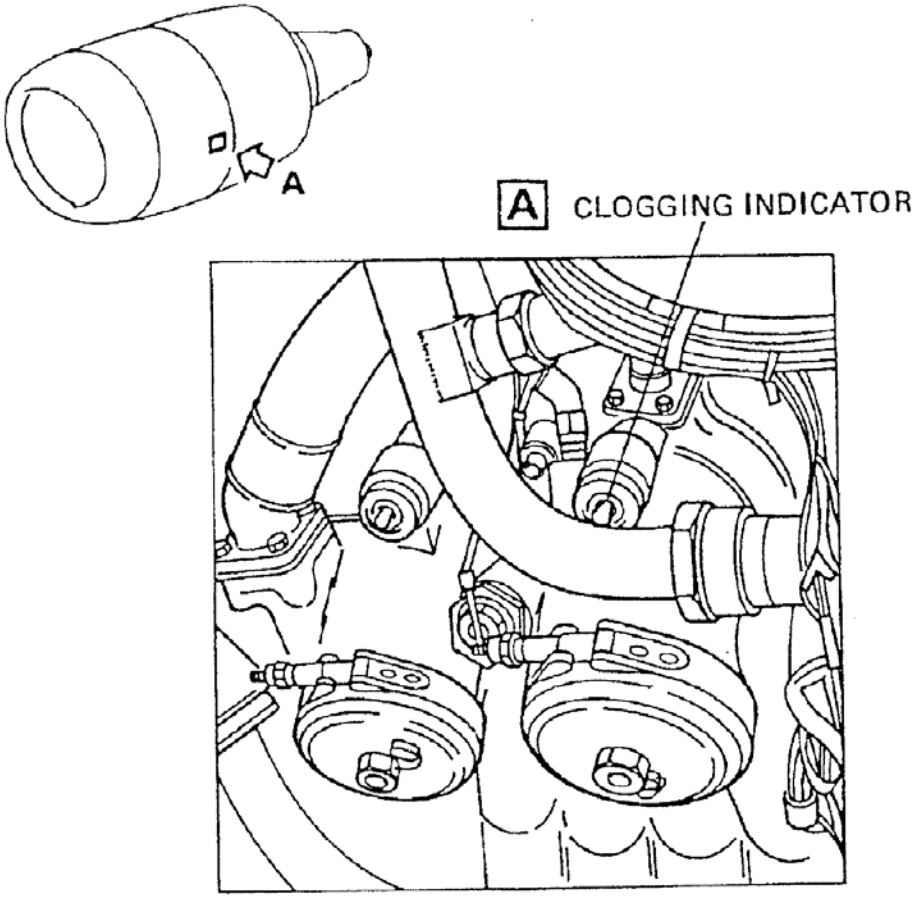

Figure 79–35–01 SCAVENGE OIL FILTER CLOGGING INDICATOR

ITEM NO.	NAME / DESCRIPTION	NUMBER INSTALLED FLIGHT CREW MAY PLACARD		NUMBER REQUIRED FOR DISPATCH REPAIR CATEGORY		REMARKS OR EXCEPTIONS
79-35-02A	OIL FILTER CLOG Caution on ECAM E/WD (For A319/A320 Aircraft)	**N**	2	1	**C**	**(M)** One may be inoperative provided: a) Associated filter is replaced ONCE EACH FLIGHT DAY (Log Book Entry Required), and b) Chip detectors are inspected when the filter is replaced and do not reveal the presence of metal chips or other contaminants. **Repetitive Check Required (Yellow Placard)**
79-35-02B	OIL FILTER CLOG Caution on ECAM E/WD (For A321 Aircraft)	**N**	2	1	**C**	**(M)** One may be inoperative provided: a) Associated filter is replaced ONCE EACH FLIGHT DAY (Log Book Entry Required), and b) Visual indicator (pop-out) on the electrical master chip detector is inspected when the filter is replaced and does not reveal the presence of metal chips or other contaminates. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
79-35-02A	Adjacent To E/WD Display	___ OIL FILTER CLOG CAUTION ON E/WD INOP
79-35-02B	Adjacent To E/WD Display	___ OIL FILTER CLOG CAUTION ON E/WD INOP

(M) PROCEDURES

79-35-02A

1. ONCE EACH FLIGHT DAY:

   a) Change the associated filter and do a check of the Magnetic Chip Detectors ONCE EACH FLIGHT DAY (reference AMM 79–35–00, TASK 79–35–00–040–043).

79-35-02B

1. ONCE EACH FLIGHT DAY:

   a) Replace the main oil supply filter and inspect the visual indicator on the electrical master chip detector by performing AMM Task 79-35-00-040-042

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80-11-02 MAN START Controls 80-4
80-11-03 ENG FAULT Lights On Pedestal 80-5
80-11-04 ECAM Start Valve Position Indicators (Lower Display) 80-6
80-11-05 AUTOSTART Controls 80-7

NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
START VALVE SYSTEM					
80-11-01 Valves **"DISP.APPR.REQ'D"**	**N**	2	1	**C**	**(M)(O)** One may be inoperative provided: a) Valve is manually closed after engine start, and b) Associated igniter system operates normally. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
80-11-01	Adjacent To ECAM Display	___ START VALVE INOP

(O) PROCEDURES

1. Accomplish external operation of the engine start valve procedure as follows:
   a) Advise ground crew to operate the start valve manually.
   b) AUDIO CONTROL PANEL – CAB.
   c) When ground crew member is ready:
      1) ENG MODE SEL –IGN/START.
      2) MASTER sw – ON.
      3) Announce to ground crew: OPEN START VALVE AND KEEP OPEN.
      4) When N2 is at 50%, announce to ground crew: CLOSE START VALVE.
   d) Continue with normal procedures.

      NOTE: Starter assisted engine relight should be avoided.

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

STARTER VALVE MANUAL OPERATION

1. Open the SAV access door on right fan cowl.
2. Perform engine start by operating the starter valve manually (coordinate with Flight Crew).
3. After engine start, position the starter valve manually to CLOSED position.
4. Close access door.

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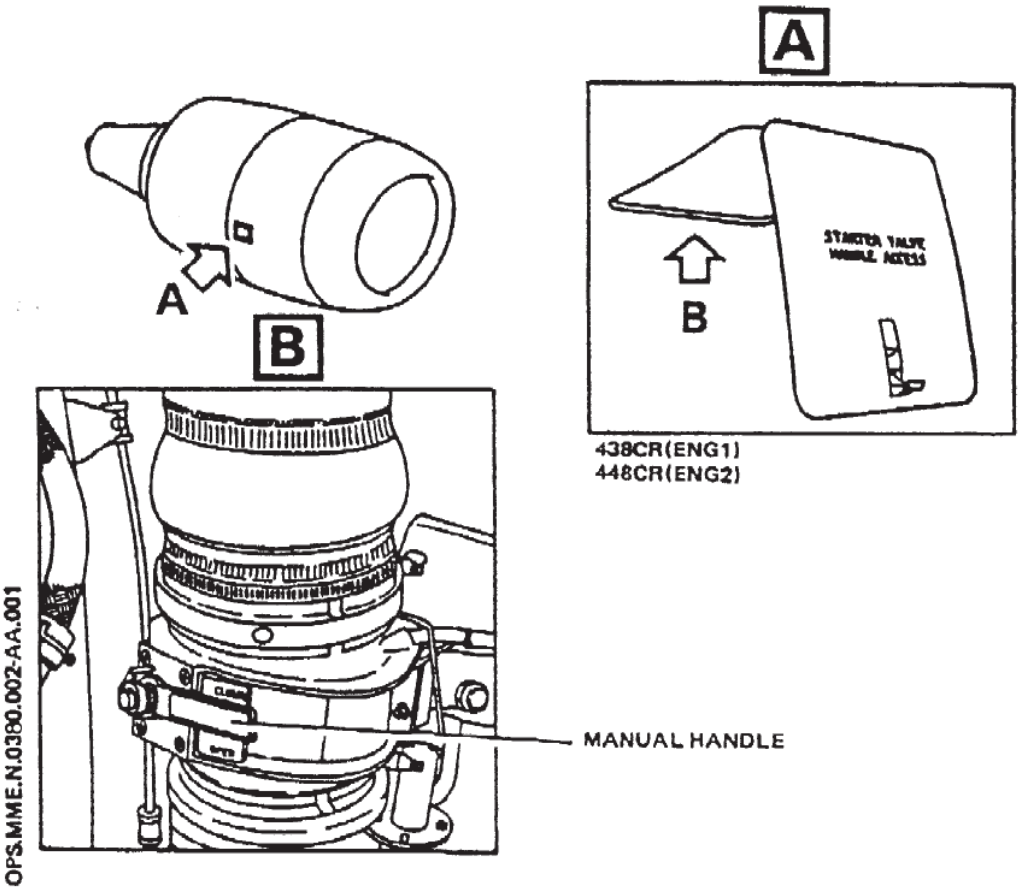


STARTER VALVE MANUAL OPERATION

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
80-11-02	ENG MAN START Controls	**Y**	2	0	**C**	May be inoperative. NOTE: Autostarts must be conducted for all engine starts including first flights.

MEL ITEM	TAB LOCATION	PLACARD TEXT
80-11-02	Adjacent To ECAM Display	___ MAN START CONTROL INOP

		NUMBER INSTALLED		NUMBER REQUIRED FOR DISPATCH		
		FLIGHT CREW MAY PLACARD			REPAIR CATEGORY	
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
80-11-03	ENG FAULT Lights On Pedestal	**Y**	2	0	**C**	May be inoperative.

MEL ITEM	TAB LOCATION	PLACARD TEXT
80-11-03	Adjacent To ECAM Display	___ ENGINE FAULT LIGHT (ON PEDESTAL) INOP

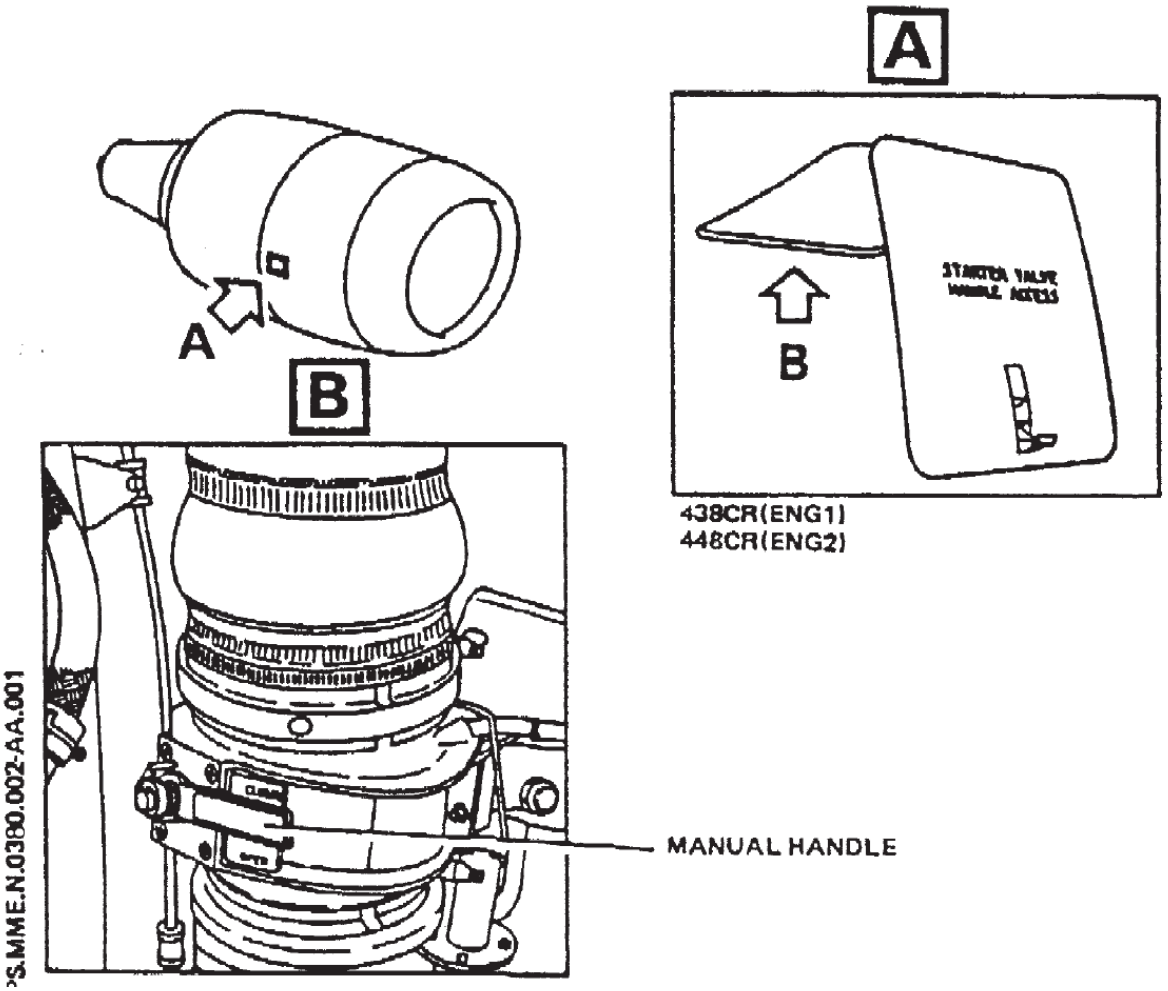
NUMBER INSTALLED			NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD			REPAIR CATEGORY		
ITEM NO. NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
80-11-04 ECAM Start Valve Position Indicators (Lower Display) **"DISP.APPR.REQ'D"**	**N**	2	0	**C**	**(M)** May be inoperative provided start valve is verified closed after engine start. **Repetitive Check Required (Yellow Placard)**

MEL ITEM	TAB LOCATION	PLACARD TEXT
80-11-04	Adjacent To ECAM Display	ECAM ____ START VALVE POSITION INDICATOR (LOWER DISPLAY) INOP

(M) PROCEDURES

The (M) Indicates the following Maintenance Procedures are required:

1. Open access door on right fan cowl.
2. After engine start sequence, ensure that manual handle is in CLOSED position.
3. Close access door.



STARTER VALVE MANUAL OPERATION

NUMBER INSTALLED				NUMBER REQUIRED FOR DISPATCH		
FLIGHT CREW MAY PLACARD				REPAIR CATEGORY		
ITEM NO.	NAME / DESCRIPTION					REMARKS OR EXCEPTIONS
80-11-05	AUTOSTART Controls	**Y**	2	0	**C**	**(O)** May be inoperative provided manual start procedures are used.

MEL ITEM	TAB LOCATION	PLACARD TEXT
80-11-05	Adjacent To ECAM Display	___ AUTOSTART CONTROL INOP

(O) PROCEDURES

Reference AOM Volume I Supplementary Procedures section 7 Engine Start – External Air / Crossbleed Start Procedures

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A

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