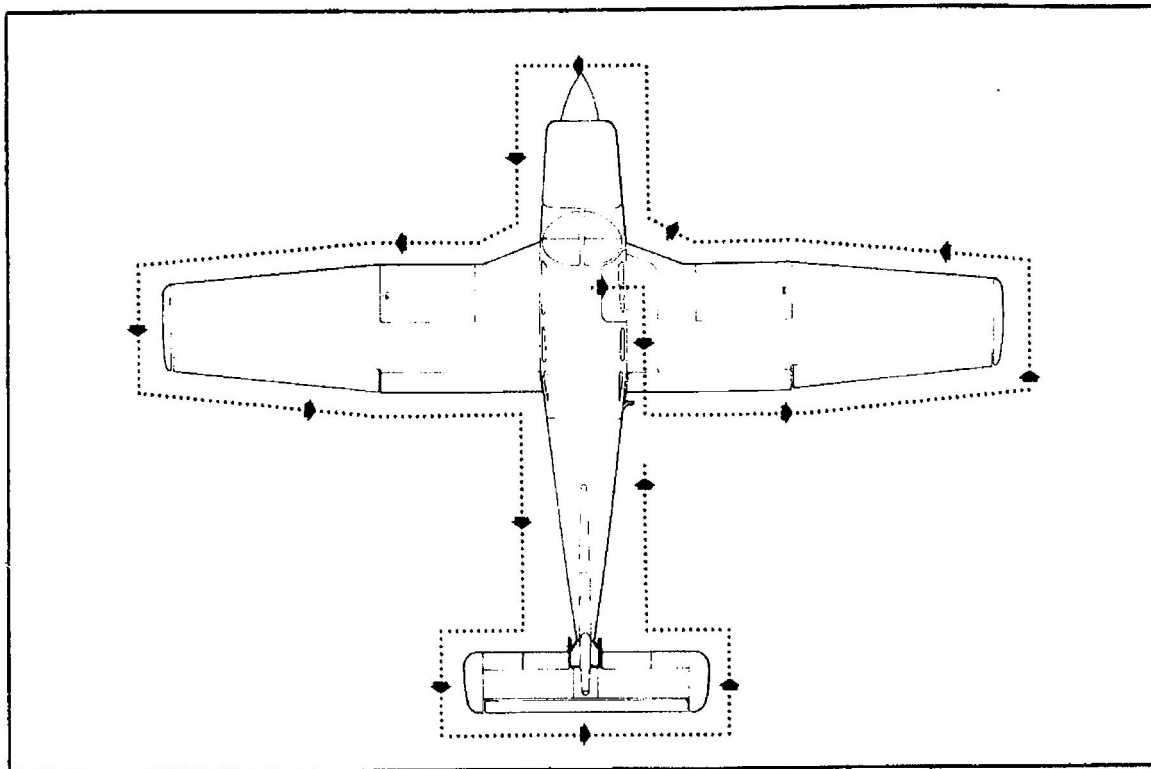


NORMAL PROCEDURES

PREFLIGHT CHECK

COCKPIT

Control wheel release restraints
Parking brake set
All switches OFF
Mixture idle cut-off
Master switch ON
Fuel gauges check quantity
Annunciator panel check
Master switch OFF
Primary flight controls proper operation
Flaps proper operation
Trim neutral
Pitot and static systems drain
Windows check clean



WALK-AROUND

Required papers check on board
Tow bar and baggage..... stow properly - secure
Baggage door..... close and secure

RIGHT WING

Surface condition	clear of ice, frost, snow
Flap and hinges	check
Aileron and hinges	check
Wing tip and lights	check
Fuel tank	check supply visually - secure cap
Fuel tank vent	clear
Fuel tank sump	drain and check for water, sediment and proper fuel
Tie down and chock	remove
Main gear strut	proper inflation (2.5 ± .25 in.)
Tire	check
Brake block and disc	check
Fresh air inlet	clear

NOSE SECTION

General condition	check
Cowling	secure
Windshield	clean
Propeller and spinner	check
Air inlets	clear
Alternator belt	check tension
Chock	remove
Nose gear strut	proper inflation (2.75 ± .25 in.)
Nose wheel tire	check
Engine baffle seals	check
Oil	check quantity
Dipstick	properly seated
Oil filler cap	secure
Fuel strainer	drain

LEFT WING

Surface condition clear of ice, frost, snow
Fresh air inlet clear

Chock	remove
Main gear strut	proper inflation (2.5 ± .25 in.)
Tire	check
Brake block and disc	check
Fuel tank	check supply visually - secure cap
Fuel tank vent	clear
Fuel tank sump	drain and check for water, sediment and proper fuel
Tie down	remove
Pitot/static head	remove cover - holes clear
Wing tip and lights	check
Aileron and hinges	check
Flap and hinges	check

FUSELAGE

Antennas	check
Empennage	clear of ice, frost, snow
Fresh air inlet	clear
Stabilator and trim tab	check
Tie down	remove
Master switch	ON
Cockpit lighting	check
Nav and strobe lights	check
Stall warning	check
Pitot heat	check
All switches	OFF
Passengers	board
Cabin door	close and secure
Seat belts and harness	fasten/adjust check inertia reel

BEFORE STARTING ENGINE

Avionics switch	OFF
Parking brake	set
Propeller	full INCREASE rpm
Fuel selector	desired tank
Alternate air	OFF

STARTING ENGINE (AIRPLANE EQUIPPED WITH STANDARD ENGINE PRIMER SYSTEM)

Fuel selector ON
 Mixture RICH
 Throttle half travel
 Propeller..... FORWARD
 Master switch ON
 Propeller..... clear
 Starter..... engage
 Primer button ON as required
 Throttle retard when engine starts
 Oil pressure check
 Alternator check
 Gyro vacuum check

STARTING ENGINE (AIRPLANE EQUIPPED WITH OPTIONAL ENGINE PRIMER SYSTEM)

Fuel selector ON
 Mixture full RICH
 Throttle full FORWARD
 Prop control full FORWARD
 Master switch ON
 Auxiliary fuel pump OFF
 Primer..... ON
 See Figure 4-3 for
 Priming Time
 Throttle CLOSE
 Starter..... engage immediately
 At temperatures below +20° F continue priming while cranking until engine starts.

When engine starts firing - open throttle very slowly to raise engine speed to 1000 RPM. As engine speed accelerates through 500 RPM, release starter.
 Primer..... release
 Auxiliary fuel pump low only as necessary to obtain smooth engine operation (1-3 minutes will be required when temp. is below 20° F)

Oil pressure check
Alternator check
Gyro vacuum check

STARTING ENGINE WHEN FLOODED

Mixture	idle cut-off
Throttle	full FORWARD
Propeller.....	FORWARD
Master switch	ON
Auxiliary fuel pump	OFF
Propeller.....	clear
Starter.....	engage

When engine fires:

Throttle retard
Mixture advance slowly

STARTING ENGINE IN COLD WEATHER (AIRPLANE EQUIPPED WITH STANDARD ENGINE PRIMER SYSTEM)

Fuel selector	ON
Mixture	IDLE CUT-OFF
Throttle	full FORWARD
Prop control	full FORWARD
Master switch	ON
Auxiliary fuel pump	ON HIGH BOOST
Starter	engage
Mixture	full FORWARD for 3 sec.
Throttle	full FORWARD to full AFT
Mixture	full FORWARD for 3 sec.
	full AFT for 3 sec.
	full FORWARD for 3 sec.

When engine fires:

Starter.....	leave engaged
Auxiliary fuel pump.....	ON LOW BOOST
Primer button.....	tap until rhythmic firing
Starter.....	release
Throttle.....	half travel
Oil pressure.....	check

If engine begins to falter:

Primer button tap
Throttle 1000 RPM
Auxiliary fuel pump OFF after start complete

STARTING WITH EXTERNAL POWER SOURCE

Master switch OFF
All electrical equipment OFF
Terminals connect
External power plug insert in fuselage

Proceed with normal start

Throttle lowest possible RPM
External power plug disconnect from fuselage
Master switch ON - check ammeter
Oil pressure check

WARM-UP

Throttle 900 to 1200 RPM

TAXIING

Chocks removed
Taxi area clear
| Parking brake release
Throttle apply slowly
Prop high RPM
Brakes check
Steering check

GROUND CHECK

| Parking brake set
Propeller full INCREASE
Throttle 1800 to 2000 RPM
Magnetos max. drop 150 RPM -
max. diff. 50 RPM
Vacuum 4.8" Hg. to 5.1" Hg.
|

Oil temperature check
 Oil pressure check
 Air conditioner check
 Annunciator panel press-to-test
 Propeller exercise - then full INCREASE
 Alternate air check
 Engine is warm for takeoff when oil temperature is at least 100 °F.
 Auxiliary fuel pump OFF
 Fuel pressure check
 Throttle retard
 Manifold pressure line drain

BEFORE TAKEOFF

Master switch ON
 Flight instruments check
 Fuel selector proper tank
 Auxiliary fuel pump OFF
 Engine gauges check
 Alternate air CLOSED
 Seat backs erect
 Mixture set
 Prop set
 Belts/ harness fastened/adjusted
 Empty seats seat belts snugly fastened
 Flaps set
 Trim tab set
 Controls free
 Doors latched
 Air conditioner OFF
 Parking brake release

TAKEOFF

NORMAL

Flaps set
 Tab set
 Accelerate to 70 to 77 KIAS.
 Control wheel back pressure to
 rotate to climb attitude

SHORT FIELD, OBSTACLE CLEARANCE

Flaps 25° (second notch)
Accelerate to 53 to 64 KIAS depending on aircraft weight.
Control wheel back pressure to
rotate to climb attitude
After breaking ground, accelerate to 59 to 68 KIAS depending on aircraft weight.
Gear (OVERRIDE ENGAGED on aircraft equipped
with backup gear extender) UP
Accelerate to best flaps up angle of climb speed - 79 KIAS, slowly retract the
flaps and climb past the obstacle.
Accelerate to best flaps up rate of climb speed - 97 KIAS.

SOFT FIELD

Flaps 25° (second notch)
Accelerate to 53 to 64 KIAS depending on aircraft weight.
Control wheel back pressure to
rotate to climb attitude
After breaking ground, accelerate to 59 to 68 KIAS depending on aircraft weight.
Gear (OVERRIDE ENGAGED on aircraft equipped
with backup gear extender) UP
Accelerate to best flaps up rate of climb speed 97 KIAS.
Flaps retract slowly

TAKEOFF CLIMB

Mixture full RICH
Prop speed 2575 RPM
Manifold pressure DO NOT EXCEED 41 in. Hg.
Climb speed
Best angle 79 KIAS
Best rate 97 KIAS
Auxiliary fuel pump LO - if required

CRUISE CLIMB

Mixture full RICH
Prop speed 2450 RPM
Manifold pressure 33 in. Hg.
Climb speed 104 KIAS
Auxiliary fuel pump LO - if required

CRUISING

Reference performance charts, Teledyne Continental Operator's Manual and power setting table.

Normal max power 75%
Power set per power table
Mixture adjust
Auxiliary fuel pump LO - if required

APPROACH AND LANDING

Fuel selector proper tank
Seat backs erect
Belts/ harness fasten/adjust
Mixture set
Propeller set
Gear down - 129 KIAS max
Flaps set - 103 KIAS max
Air conditioner OFF
Trim to 75 KIAS.

STOPPING ENGINE

Flaps retract
Air conditioner OFF
Radios OFF
Propeller full INCREASE
Throttle full aft
Mixture idle cut-off
Magnetos OFF
Master switch OFF

PARKING

Parking brake set
Control wheel secured with belts
Flaps full up
Wheel chocks in place
Tie downs secure

