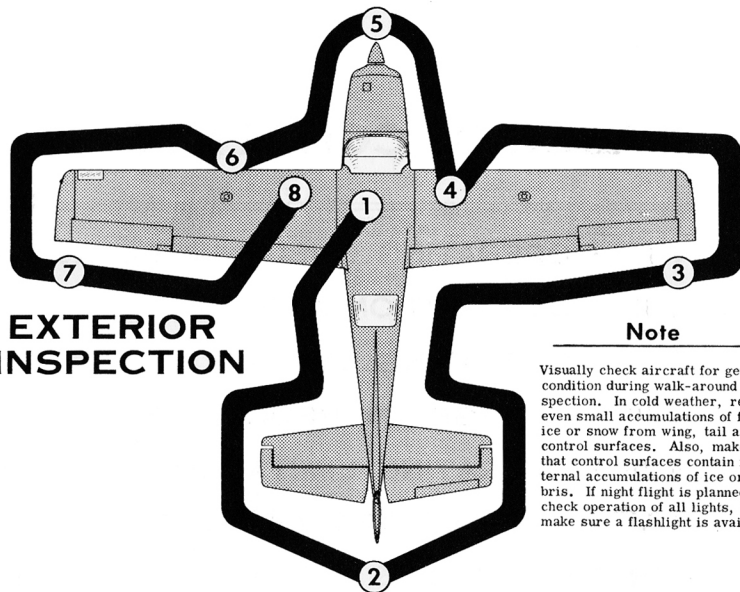


## EXTERIOR INSPECTION



### Note

Visually check aircraft for general condition during walk-around inspection. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris. If night flight is planned, check operation of all lights, and make sure a flashlight is available.

- 1 a. Remove control wheel lock.  
b. Check ignition switch "OFF".  
c. Turn on master switch and check fuel quantity indicators, then turn master switch "OFF".  
d. Check fuel selector valve handle is on fullest bay.  
e. Inspect flight instrument static source opening on side of fuselage for stoppage (both sides).  
f. Check baggage door for security.
- 2 a. Remove rudder gust lock, if installed.  
b. Disconnect tail tie-down.  
c. Check control surfaces for freedom of movement and security.
- 3 a. Check aileron for freedom of movement and security.  
b. Check fuel bay vent opening (at wing tip trailing edge) for stoppage.
- 4 a. Disconnect wing tie down.  
b. Visually check fuel quantity, then check fuel filler cap secure.  
c. Check main wheel tire for proper inflation.
- 5 a. Check propeller and spinner for nicks and security, and propeller for oil leaks.  
b. Check nose wheel strut and tire for proper inflation.  
c. Disconnect nose tie-down.  
d. Check oil level. Do not operate with less than seven quarts. Fill to 10 quarts for extended flight.  
e. Before first flight of the day and after each refueling, pull out strainer drain knob for about four seconds to clear fuel strainer of possible water and sediment. Check strainer drain closed. If water is observed, there is a possibility that the fuel bay sumps contain water. Thus, the fuel bay sump drain plugs and fuel reservoir drain plugs should be removed to check for the presence of water.
- 6 a. Remove pitot tube cover, if installed, and check pitot tube opening for stoppage.
- 7 Same as 3
- 8 Same as 4

### BEFORE ENTERING THE AIRPLANE.

- (1) Make an exterior inspection in accordance with figure 1-1.

### BEFORE STARTING THE ENGINE.

- (1) Pilot's Check List -- Review check list on left front door post.
- (2) Seats and Seat Belts -- Adjust and lock.
- (3) Brakes -- Test and set.
- (4) Cowl Flaps -- "OPEN." (Move lever out of locking hole to reposition.)
- (5) Fuel Selector -- Fullest bay.
- (6) Radios and Electrical Equipment -- "OFF."
- (7) Master Switch -- "ON."
- (8) Landing Gear -- Handle neutral and green "DN" light on.
- (9) Landing Gear Lights and Horn -- Press to test.

### STARTING ENGINE.

- (1) Mixture -- Full Rich.
- (2) Propeller -- High RPM.
- (3) Throttle -- Closed.
- (4) Auxiliary Fuel Pump Switch -- On "LO."

#### NOTE

The auxiliary fuel pump will not operate until the ignition switch is turned to the "START" position.

- (5) Ignition Key -- "START."
- (6) Slowly advance throttle.
- (7) Release ignition key when engine starts.

#### NOTE

If engine fails to continue running, start again from step (3) or use "HI" position of auxiliary fuel pump momentarily to clear vapor from lines.

- (8) Reset throttle to desired idle speed.
- (9) Auxiliary Fuel Pump Switch -- Off.

### BEFORE TAKE-OFF.

- (1) Parking Brake -- Set.
- (2) Cowl Flaps -- Check full "OPEN."
- (3) Flight Controls -- Check for free and correct movement.
- (4) Elevator and Rudder Trim -- "TAKE-OFF" settings.
- (5) Throttle Setting -- 1700 RPM.
- (6) Engine Instruments -- Check.
- (7) Ammeter -- Check.
- (8) Suction Gage -- Check (4, 6 to 5, 4 inches of mercury).
- (9) Magnetos -- Check (50 RPM maximum differential between magnetos).
- (10) Propeller -- Cycle from high to low RPM; return to high RPM (full in).
- (11) Flight Instruments and Radios -- Set.
- (12) Autopilot -- Off.
- (13) Cabin Doors and Window -- Closed and locked.

### TAKE-OFF.

#### NORMAL TAKE-OFF.

- (1) Wing Flaps -- 0° to 10°.
- (2) Power -- Full throttle and 2850 RPM.
- (3) Mixture -- Lean for field elevation per fuel flow indicator placard.
- (4) Elevator Control -- Lift nose wheel at 60 to 70 MPH.
- (5) Climb Speed -- 100 to 110 MPH until all obstacles are cleared; then set up climb speed as shown in "NORMAL CLIMB" check list.
- (6) Brakes -- Apply momentarily (when airborne).
- (7) Landing Gear -- Retract (in climb out).
- (8) Wing Flaps -- Retract (if extended) after obstacles are cleared.

#### MAXIMUM PERFORMANCE TAKE-OFF.

- (1) Wing Flaps -- 10°.
- (2) Brakes -- Apply.
- (3) Power -- Full throttle and 2850 RPM.
- (4) Mixture -- Lean for field elevation per fuel flow indicator placard.
- (5) Brakes -- Release.
- (6) Elevator Control -- Maintain slightly tail-low attitude.
- (7) Climb Speed -- 82 MPH until all obstacles are cleared, then set up climb speed as shown in "MAXIMUM PERFORMANCE CLIMB" check list.
- (8) Landing Gear and Wing Flaps -- Retract (after obstacles are cleared and 90 MPH is reached).

#### NOTE

Do not reduce power until wing flaps and landing gear have been retracted.

### CLIMB.

#### NORMAL CLIMB.

- (1) Airspeed -- 120 to 140 MPH.
- (2) Power -- 25 inches and 2550 RPM.
- (3) Mixture -- Lean to 18 gal/hr. fuel flow.
- (4) Cowl Flaps -- Open as required.

#### MAXIMUM PERFORMANCE CLIMB.

- (1) Airspeed -- 109 MPH (sea level) to 102 MPH (10,000 feet).
- (2) Power -- Full throttle and 2700 RPM.
- (3) Mixture -- Lean for altitude per fuel flow indicator placard.
- (4) Cowl Flaps -- Full "OPEN."

### CRUISING.

- (1) Power -- 15-25 inches of manifold pressure and 2200-2550 RPM. Select combination to give no more than 75% power.
- (2) Cowl Flaps -- Open as required.
- (3) Elevator and Rudder Trim -- Adjust.
- (4) Mixture -- Lean for cruise fuel flow as determined from your Cessna Power Computer or the OPERATIONAL DATA in Section VI.

### LET-DOWN.

- (1) Power -- As desired.
- (2) Mixture -- Lean for smoothness in power descents. Use full rich mixture for idle power.
- (3) Cowl Flaps -- "CLOSED."

### BEFORE LANDING.

- (1) Fuel Selector -- Fullest bay.
- (2) Landing Gear Lever -- "DOWN" (below 160 MPH).
- (3) Landing Gear Light -- Green.
- (4) Mixture -- Rich.
- (5) Propeller -- High RPM.
- (6) Wing Flaps -- Down 0°-10° (below 160 MPH), 10°-30° (below 110 MPH).
- (7) Airspeed -- 95-105 MPH (flaps retracted), 85-95 MPH (flaps extended).
- (8) Elevator Trim -- Adjust.

### BALKED LANDING (GO-AROUND).

- (1) Power -- Full throttle and 2850 RPM.
- (2) Wing Flaps -- Retract to 20°.
- (3) Upon reaching an airspeed of approximately 90 MPH, retract flaps slowly.

### NORMAL LANDING.

- (1) Touch Down -- Main wheels first.
- (2) Landing Roll -- Lower nose wheel gently.
- (3) Braking -- Minimum required.

### AFTER LANDING.

- (1) Cowl Flaps -- "OPEN."
- (2) Wing Flaps -- Retract.

### SECURING AIRCRAFT.

- (1) Parking Brake -- set.
- (2) Radios and Electrical Equipment -- "OFF."
- (3) Mixture -- Idle cut-off (pulled full out).
- (4) Ignition and Master Switch -- "OFF."
- (5) Control Lock -- Installed.