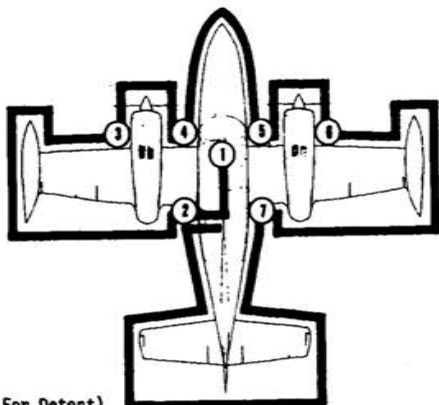


## PREFLIGHT INSPECTION

### NOTE

- Visually check inspection plates and general airplane condition during walk-around inspection. If night flight is planned, check operation of all lights and make sure a flashlight is available.
- Refer to Section 8 for quantities, materials, and specifications of frequently used service items.



- ① a. Control Lock(s) - REMOVE and stow.  
b. Parking Brake - SET.  
c. Alternate Static Source - CLOSED.  
d. All Switches - OFF.  
e. All Circuit Breakers - IN.  
f. Landing Gear Switch - DOWN.  
g. Left Fuel Selector - LEFT MAIN (Feel For Detent).  
h. Right Fuel Selector - RIGHT MAIN (Feel For Detent).  
i. Trim Tab Controls (3) - NEUTRAL.  
j. Oxygen - ON; Quantity, Masks and Hoses - CHECK; Oxygen - OFF.  
k. Battery Switch - ON.  
l. Navigation and Anti-Collision Lights - ON.  
m. Fuel Gages - CHECK quantity and operation.  
n. Wing Flaps - DOWN 45°.  
o. Pitot, Stall and Vent Heat Switches - ON 20 seconds then OFF. Insure pitot tube cover(s) are removed before actuating pitot heat switch(es).  
p. Windshields and Windows - CHECK for cracks and general condition.  
q. \*Electric Windshield - CHECK operation by observing discharge on voltmeter if inflight use is anticipated. Insure system is turned off after operational check.
- ② a. Wing Locker Baggage Door - SECURE.  
b. Battery Compartment Cover - SECURE.  
c. Wing Flap - CHECK security and attachment.  
d. Bottom Outboard Wing - CHECK for fuel leaks or stains.  
e. Control Surface Lock - REMOVE, if installed.  
f. Aileron and Tab - CHECK condition, freedom of movement and tab position.  
g. Tip Tank Transfer Pump - LISTEN for operation.  
h. Main Tank Fuel Vent - CLEAR.  
i. Navigation and Anti-Collision Lights - CHECK operation.  
j. Landing Light Filament - CHECK condition.  
k. Main Tank Fuel Sump - DRAIN.  
l. Fuel Vent and Sniffle Valve - CLEAR.  
m. Main Tank Fuel Quantity - CHECK; Cap - SECURE.  
n. \*Deice Boot - CHECK condition and security.  
o. Stall Warning Vane - CHECK freedom of movement and audible warning.  
p. Wing Tie Down - REMOVE.  
q. \*Auxiliary Tank Fuel Quantity - CHECK; Cap - SECURE.  
r. \*Auxiliary Tank and Wing Locker Transfer Line Fuel Sump - DRAIN.  
s. Fuel Strainer - DRAIN.  
t. \*Wing Locker Tank Fuel Vent - CLEAR and WARM.
- ③ a. \*Wing Locker Tank Fuel Quantity - CHECK; Cap - SECURE.  
b. Cowl Flap - SECURE.  
c. Engine Compartment General Condition - CHECK for fuel, oil and exhaust leaks or stains.  
d. Oil Level - CHECK minimum 9 quarts.  
e. Propeller and Spinner - EXAMINE for nicks, security and oil leaks.  
f. Cowl Flap - SECURE.  
g. \*Deice Boot - CHECK condition and security.  
h. Main Gear, Strut, Doors, Tire and Wheel Well - CHECK.  
i. \*Wing Locker Tank Fuel Sump - DRAIN.  
j. Crossfeed Line - DRAIN.

Figure 4-1 (Sheet 1 of 2)

## PREFLIGHT INSPECTION

- ④ a. Nose Baggage Door - SECURE.  
b. Avionics Bay Door - SECURE.  
c. Nose Gear, Strut, Doors, Tire and Wheel Well - CHECK.  
d. Pitot Cover(s) - REMOVE; Pitot Tube(s) - CLEAR and WARM.  
e. Lower Fuselage, Nose and Center Section - CHECK for fuel and oil leaks or stains and antenna security.  
f. Tie Down - REMOVE.  
g. Heater Inlet - CLEAR.  
h. Nose Baggage Door - SECURE.
- ⑤ a. Crossfeed Line - DRAIN.  
b. Leading Edge Air Intake - CLEAR.  
c. \*Wing Locker Tank Fuel Sump - DRAIN.  
d. Main Gear, Strut, Doors, Tire and Wheel Well - CHECK.  
e. Cowl Flap - SECURE.  
f. \*Deice Boot - CHECK condition and security.  
g. \*Air Conditioning Outlet Air Opening - CLEAR.  
h. \*Wing Locker Tank Fuel Quantity - CHECK; Cap - SECURE.  
i. Oil Level - CHECK minimum 9 quarts.  
j. Engine Compartment General Condition - CHECK for fuel, oil and exhaust leaks or stains.  
k. Propeller and Spinner - EXAMINE for nicks, security and oil leaks.  
l. Cowl Flap - SECURE.
- ⑥ a. \*Air Conditioning Inlet Air Openings - CLEAR.  
b. \*Wing Locker Tank Fuel Vent - CLEAR and WARM.  
c. \*Auxiliary Tank and Wing Locker Transfer Line Fuel Sump - DRAIN.  
d. Fuel Strainer - DRAIN.  
e. \*Deice Boot - CHECK, condition and security.  
f. \*Auxiliary Tank Fuel Quantity - CHECK; Cap - SECURE.  
g. Wing Tie Down - REMOVE.  
h. Main Tank Fuel Quantity - CHECK; Cap - SECURE.  
i. Navigation and Anti-Collision Lights - CHECK operation.  
j. Fuel Vent and Sniffle Valve - CLEAR.  
k. Main Tank Fuel Sump - DRAIN.  
l. \*Landing Light Filament - CHECK condition.  
m. Main Tank Fuel Vent - CLEAR.  
n. Tip Tank Transfer Pump - LISTEN for operation.  
o. Control Surface Lock - REMOVE, if installed.  
p. Aileron - CHECK condition and freedom of movement.  
q. Bottom Outboard Wing - CHECK for fuel leaks or stains.  
r. Wing Flap - CHECK security and attachment.  
s. Wing Locker Baggage Door - SECURE.  
t. \*Alcohol Windshield Deice Tank - CHECK quantity.
- ⑦ a. Static Port(s) - CLEAR.  
b. \*Deice Boots - CHECK condition and security.  
c. Control Surface Lock(s) - REMOVE, if installed.  
d. Elevator and Tab - CHECK condition, freedom of movement, and tab position.  
e. Rudder and Tab - CHECK condition, freedom of movement and tab position.  
f. Navigation and Anti-Collision Lights - CHECK operation.  
g. Tie Down - REMOVE.  
h. \*Deice Boot - CHECK condition and security.  
i. Static Port(s) - CLEAR.  
j. Cabin Door - CHECK security and condition.  
k. Battery Switch - OFF.  
l. Navigation and Anti-Collision Lights - OFF.

\*Denotes items to be checked if the applicable optional equipment is installed on your airplane.

Figure 4-1 (Sheet 2 of 2)

## FUEL SYSTEM

The fuel system, see Figure 7-15, consists of two main tanks, two optional auxiliary tanks, two optional wing locker tanks, fuel selectors for selection of main, auxiliary or crossfeed fuel and other necessary components to complete the system.

### MAIN TANKS

The main tanks are integrally sealed (wet) aluminum tanks mounted on each wing tip. Each tank contains an auxiliary fuel pump and transfer pump. The auxiliary fuel pump, mounted in the bottom of the tank, provides fuel pressure for priming during engine starting and supplies fuel to the engine in an emergency. The auxiliary pump operation is controlled by an auxiliary fuel pump switch on the side console. The transfer pump, mounted on the aft side of the main tank rear bulkhead, transfers fuel from the nose section of the main tank to the center sump area, where it is picked up and routed to the engine by the engine-driven or auxiliary fuel pump. The transfer pump permits steep descents with low main tank fuel quantity. The transfer pump operates continuously whenever the battery switch is positioned to ON. The main tank is vented to atmospheric pressure by a flush vent located on the lower aft portion of the main tank. These tanks are serviced through a flush filler located on the top forward portion of each tank.

### AUXILIARY TANKS

The optional auxiliary tanks are available in two sizes. These tanks are bladder-type cells located between the spars in the outboard wing. These tanks provide an engine fuel supply during cruise operations. No internal fuel pumps are required. The auxiliary tanks are vented to the main tanks. The auxiliary tanks are serviced through a flush filler located on the upper wing surface outboard of the nacelles.

### WING LOCKER TANKS

An optional wing locker fuel tank is available for installation in the forward portion of each wing locker baggage area. These tanks are bladder-type cells which supplement the main tank fuel quantity. This fuel cannot be fed directly to the engines; instead it is transferred to the main tanks by wing locker fuel transfer pumps. The transfer pumps are manually controlled and should not be energized until adequate volume is available in the main tanks to hold the wing locker fuel. After the fuel is transferred, a pressure switch in each transfer line will sense a drop in pressure and illuminate the annunciator light, indicating fuel transfer is complete and the applicable wing locker transfer pump should be turned off. These pumps use fuel for lubrication; therefore, operation after fuel transfer will shorten the pump life. The wing locker fuel tanks are individually vented through the lower surface of each wing. The fuel vent lines are deiced by heaters which are controlled by the stall and vent heat switch. These tanks are serviced through a flush filler located on the top of the engine nacelle.

### FUEL SELECTORS

Two fuel selectors, one for each engine, are provided on the floor between the pilot and copilot seats. The selectors allow selection of main fuel, auxiliary fuel, crossfeed and no fuel.