

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 shutoff valve handle "ON."

(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.
- (4) a. Disconnect wing tie-down.
 - b. Check main wheel tire for proper inflation.
 - c. Visually check fuel quantity, then check fuel filler cap secure.
- 5 a. Check oil level. Do not operate with less than four quarts. Fill to six quarts for extended flight.
 - b. Before first flight of 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 wing tank sumps contain water. Thus, the wing tank sump drain plugs and fuel line drain plug should be removed to check for presence of water.

c. Check propeller and spinner for nicks and security.

- d. Check carburetor air filter for restrictions by dust or other foreign matter.
- e. Check landing light for condition and cleanliness.
- f. Check nose wheel strut and tire for proper inflation.
- g. Disconnect nose tie-down.
- h. Inspect flight instrument static source opening on left side of fuselage for stoppage.
- a. Visually check fuel quantity, then check fuel filler cap secure.
 b. Check main wheel tire for proper inflation.
- a. Remove pitot tube cover, if installed, and check pitot tube opening for stoppage.
 - b. Check stall warning vent opening for stoppage.
 - c. Check fuel tank vent opening for stoppage.
 - d. Disconnect wing tie-down.
- 8 a. Check aileron for freedom of movement and security.

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INSTRUMENT PANEL 24 23 22 21 12. Radios (Opt.)

17. Ammeter 18. Over-Voltage Warning Light 19. Map Compartment

Cabin Air/Heat Control Knobs 21. Wing Flap Switch

15. ADF Bearing Indicator (Opt.)

13. Tachometer

14. Fuel and Oil Gages

16. Suction Gage (Opt.)

22. Cigar Lighter (Opt.) Transmitter Selector Switch (Opt.) 10. Omni Course Indicators (Opt.) 11. Rear View Mirror and Control (Opt. 23. Mixture Control Knob 25. Microphone (Opt.) 26. Elevator Trim Control Wheel 27. Throttle 28. Carburetor Heat Control Knob

29. Electrical Switches 30, Fuses

31, Alternator Circuit Breaker 32. Radio Dial Light Rheostat 33. Panel Lights Rheostat

34. Ignition/Starter Switch 35. Master Switch 36. Primer

Figure 2-1.

Section II

DESCRIPTION AND OPERATING DETAILS

The following paragraphs describe the systems and equipment whose function and operation is not obvious when sitting in the airplane. This section also covers in somewhat greater detail some of the items listed in Check List form in Section I that require further explanation.

FUEL SYSTEM.

Fuel is supplied to the engine from two tanks, one in each wing. From these tanks, fuel flows by gravity through a fuel shutoff valve and fuel strainer to the carburetor.

Refer to figure 2-2 for fuel quantity data. For fuel system service information, refer to Lubrication and Servicing Procedures in Section V.

FUEL STRAINER DRAIN KNOB.

Refer to fuel strainer servicing procedure, Section V.

FUEL QUANTITY DATA (U.S. GALLONS)

TANKS	USABLE FUEL ALL FLIGHT CONDITIONS	UNUSABLE FUEL	TOTAL FUEL VOLUME
TWO, STANDARD WING (13 GAL. EACH)	22.5	3.5	26.0
TWO, LONG RANGE WING (19 GAL. EACH)	35.0	3, 0	38.0

Figure 2-2.

1. Turn Coordinator (Opt.)

3. Directional Gyro (Opt.)

6. Aircraft Registration Number

Marker Beacon Indicator

Lights and Switches/Radio

Vertical Speed Indicator (Opt.)

2. Airspeed Indicator

4. Gyro Horizon (Opt.)

5. Clock (Opt.)

8. Altimeter