

AS SPECIFIED
EACH 100 HOURS
EACH 50 HOURS

FUEL SYSTEM

- | | | |
|--|---|----|
| 1. Fuel strainer, drain valve, and control | • | |
| 2. Fuel strainer screen and bowl | • | |
| 3. Electric fuel pump, throttle switch, and electric connections | • | |
| 4. Fuel tanks, fuel accumulator tank, fuel lines, drains, filler caps, and placards | • | |
| 5. Drain fuel and check tank interior, attachment and outlet screens | | 7 |
| 6. Fuel vents and vent valves | • | |
| 7. Fuel selector and/or shut-off valve and placards | • | |
| 8. Fuel quantity gages and transmitter units | • | |
| 9. Engine primer | • | |
| 10. Vapor return line and check valve | • | |
| 11. Perform a fuel quantity indicating system operational test. Refer to Section 16 for detailed accomplishment instructions. | | 12 |

LANDING GEAR

- | | | |
|--|---|--|
| 1. Brake fluid, lines and hoses, linings, disc and clips, brake assemblies and master cylinders .. | • | |
| 2. Main gear wheels, wheel bearings, step and spring strut, tires and fairings | • | |
| 3. Nose gear strut servicing, and shimmy dampener servicing | • | |
| 4. Nose gear wheel, wheel bearings, strut, steering system, shimmy dampener, tire, fairing, and torque links | • | |
| 5. Parking brake system | • | |

LANDING GEAR RETRACTION SYSTEM

NOTE

When performing inspection of the landing gear retraction system, a hydraulic power source is required. Refer to paragraphs 2-41 through 2-82 for Hydro Test operation.

- | | | |
|---|---|---|
| 1. Operate the landing gear through five fault-free cycles, noting cycle time. (Refer to paragraphs 2-53 and 2-76.) | • | 4 |
|---|---|---|

	AS SPECIFIED	
	EACH 100 HOURS	
	EACH 50 HOURS	
18. Check operation of emergency hand pump		•
19. Check accumulator precharge (Models 210 and 210A). (Refer to paragraph 2-25.)		•

SPECIFIED INSPECTION

- Each 25 hours, if not equipped with an external filter.
- Each 1000 hours, or to coincide with engine overhauls, replace garter-type filters.
- Starters and generators each 200 hours; alternators, each 500 hours.
- First 25 hours; each 100-hour inspection thereafter.
- Check timing each 200 hours; check breaker compartment each 500 hours, unless timing is off.
- Central filter, each 500 hours, and gyro filters at instrument overhaul; gyro filters, each 100 hours, without central filter.
- Each 1000 hours or to coincide with engine overhauls.
- Refer to Section 15 for details.
- Refer to paragraphs 2-27 and 2-28 for details.
- At first 25 hours and first 50 hours of operation; at each 100-hour inspection thereafter.
- At first 50 and first 100 hours, thereafter at each 500 hours or one year, whichever occurs first.
- Fuel quantity indicating system operational test is required every 12 months. Refer to Section 16 for detailed accomplishment instructions.
- At the first 100-hour inspection on new, rebuilt or overhauled engines, remove and clean the fuel injection nozzles. Thereafter the fuel injection nozzles must be cleaned at 300-hour intervals or more frequently if fuel stains are noted.

16-45C. FUEL QUANTITY INDICATING SYSTEM OPERATIONAL TEST

WARNING: REMOVE ALL IGNITION SOURCES FROM THE AIRPLANE AND VAPOR HAZARD AREA. SOME TYPICAL EXAMPLES OF IGNITION SOURCES ARE STATIC ELECTRICITY, ELECTRICALLY POWERED EQUIPMENT (TOOLS OR ELECTRONIC TEST EQUIPMENT - BOTH INSTALLED ON THE AIRPLANE AND GROUND SUPPORT EQUIPMENT), SMOKING AND SPARKS FROM METAL TOOLS.

WARNING: OBSERVE ALL STANDARD FUEL SYSTEM FIRE AND SAFETY PRACTICES.

1. Disconnect all electrical power from the airplane. Attach maintenance warning tags to the battery connector and external power receptacle stating:

DO NOT CONNECT ELECTRICAL POWER, MAINTENANCE IN PROGRESS.

2. Electrically ground the airplane.
3. Level the airplane and drain all fuel from wing fuel tanks.
4. Gain access to each fuel transmitter float arm and actuate the arm through the transmitter's full range of travel.
 - A. Ensure the transmitter float arm moves freely and consistently through this range of travel. Replace any transmitter that does not move freely or consistently.

WARNING: USE EXTREME CAUTION WHILE WORKING WITH ELECTRICAL COMPONENTS OF THE FUEL SYSTEM. THE POSSIBILITY OF ELECTRICAL SPARKS AROUND AN "EMPTY" FUEL CELL CREATES A HAZARDOUS SITUATION.

- B. While the transmitter float arm is being actuated, apply airplane battery electrical power as required to ensure that the fuel quantity indicator follows the movement of the transmitter float arm. If this does not occur, troubleshoot, repair and/or replace components as required until the results are achieved as stated.

NOTE: Stewart Warner fuel quantity indicating systems can be adjusted. Refer to paragraph 16-45A for instructions for adjusting Stewart Warner fuel indicating systems. Rochester fuel quantity indicating system components are not adjustable, only component replacement or standard electrical wiring system maintenance practices are permitted.

5. With the fuel selector valve in the "OFF" position, add unusable fuel to each fuel tank.
6. Apply electrical power as required to verify the fuel quantity indicator indicates "EMPTY".
 - A. If "EMPTY" is not indicated, adjust, troubleshoot, repair and/or replace fuel indicating components as required until the "EMPTY" indication is achieved.

NOTE: Stewart Warner fuel quantity indicating systems can be adjusted. Refer to paragraph 16-45A for instructions for adjusting Stewart Warner fuel indicating systems. Rochester fuel quantity indicating system components are not adjustable, only component replacement or standard electrical wiring system maintenance practices are permitted.

7. Fill tanks to capacity, apply electrical power as required and verify fuel quantity indicator indicates "FULL".

- A. If "FULL" is not indicated, adjust, troubleshoot, repair and/or replace fuel indicating components as required until the "FULL" indication is achieved.

NOTE: Stewart Warner fuel quantity indicating systems can be adjusted. Refer to paragraph 16-45A for instructions for adjusting Stewart Warner fuel indicating systems. Rochester fuel quantity indicating system components are not adjustable, only component replacement or standard electrical wiring system maintenance practices are permitted.

8. Install any items and/or equipment removed to accomplish this procedure, remove maintenance warning tags and connect the airplane battery.