

reading the oil level on the dip stick located adjacent to the oil tank cap.



In replacing the dip stick, make sure that it is firmly back in place. In replacing the oil filler cap, make sure that it is on firmly and turned clockwise as far as it will go to prevent loss of oil thru the filler neck. While the minimum oil supply is four quarts, oil should be added if below six quarts and should be full if an extended flight is planned.

Oil Specification and Grade. Aviation grade oil is recommended for your Cessna 172 and should be changed every 25 hours of operation. When adding or changing oil, use the grades in the following table:

Average Outside Temperature	Recommended Oil Grade
Below 50° F.	SAE 20
Above 50° F.	SAE 40

Oil System Indicators

Oil Temperature Indicator. A capillary type oil temperature gage (10, figure 1) is mounted to the right of the right control wheel shaft. The green arc defines the normal operating range of oil temperatures.

Oil Pressure Gage. An oil pressure gage (9, figure 1) is installed immediately above the oil temperature indicator. The gage is calibrated in pounds per square inch.

FUEL SYSTEM.

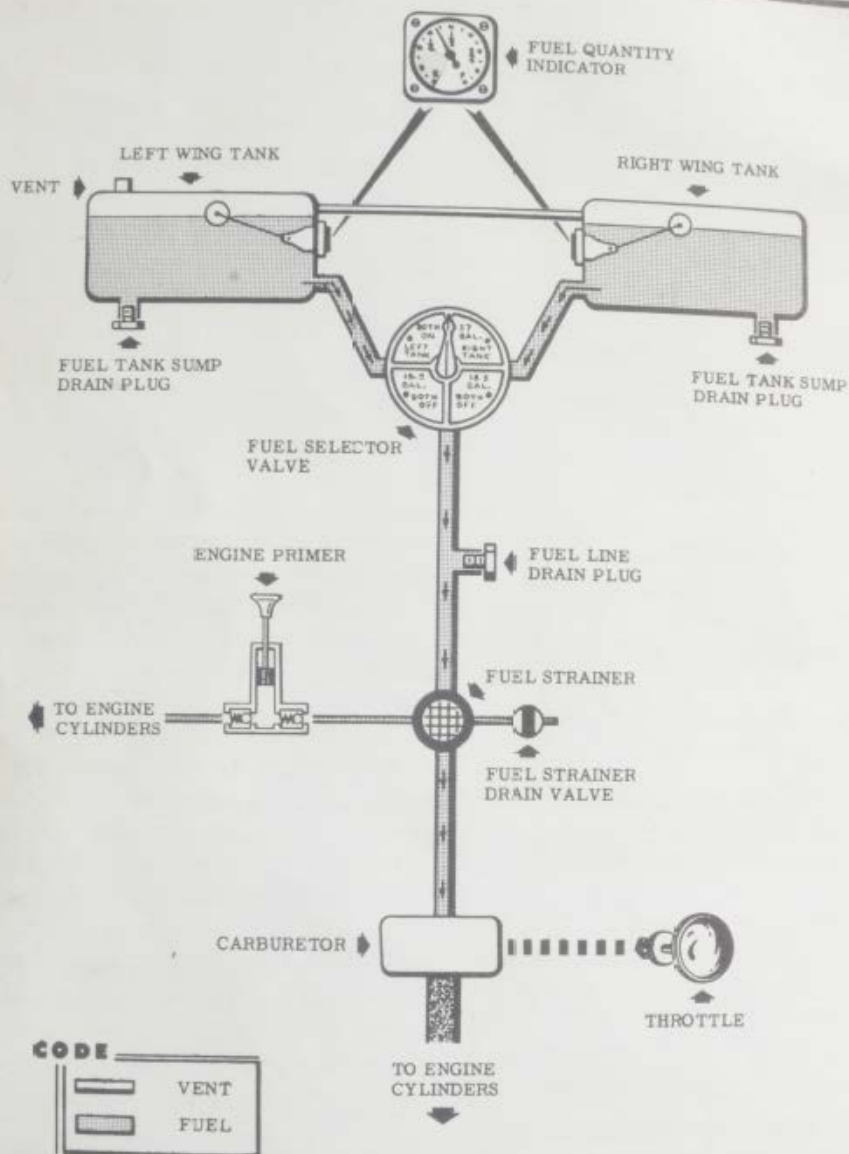
Fuel is supplied to the engine from two 21 gallon aluminum tanks, (of which 18.5 gallons in each tank are useable in all flight conditions) one located in each wing. From these tanks fuel flows by means of gravity through a fuel selector valve and fuel strainer to the engine carburetor.

Fuel Specification and Grade.

Aviation grade fuel should always be used except under emergency conditions. The recommended fuel is 80 octane rating minimum with a lead content of not more than 1/2 cc per gallon. Highly leaded fuels are not recommended. Filling the fuel tanks immediately after flight will reduce the air space and minimize the moisture condensation in the fuel tanks.

Fuel System Controls.

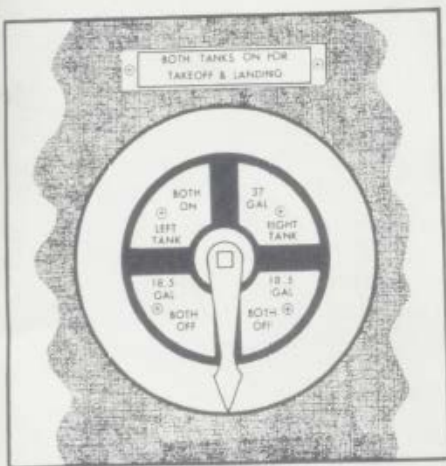
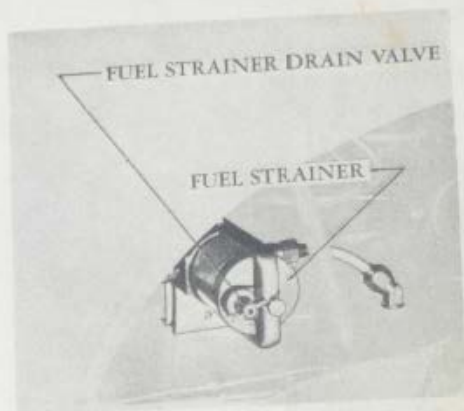
Fuel Selector Valve. A rotary type fuel selector valve is located at the aft end of the cabin floor tunnel between the front seats. The valve has four positions labeled "BOTH OFF", "LEFT



FUEL SYSTEM *Schematic*

TANK", "RIGHT TANK", and "BOTH ON". The "BOTH OFF" position seals both wing tanks off from the rest of the fuel system and allows no fuel to pass beyond the selector valve. The "LEFT TANK" position allows fuel to flow from the left wing tank to the engine. The "RIGHT TANK" position permits fuel to flow from the right wing tank to the engine. The "BOTH ON" position provides fuel flow from both tanks simultaneously to provide max-

might have collected in the fuel strainer. A one ounce quantity of fuel



mum safety. *Important* — The fuel valve *handle* indicates the setting of the valve by its positions above the valve dial.

Fuel Strainer Drain Valve. A fuel strainer drain valve is located on the bottom of the fuel strainer and is accessible by reaching through the bottom rear opening of the engine cowl just forward of the firewall. This valve provides a quick simple method of draining any water or sediment that

should be drained from the fuel strainer before the initial flight of the day or after each refueling operation.

Fuel Tank Sump Drain Plugs. A fuel tank drain plug is located on the underside of each wing in line with the rear edge of the cabin door and out a few inches from the fuselage. These plugs are used to drain any sediment or water that may collect in the fuel tanks. Draining the tank sumps is normally required only at each 100 hour inspection period.

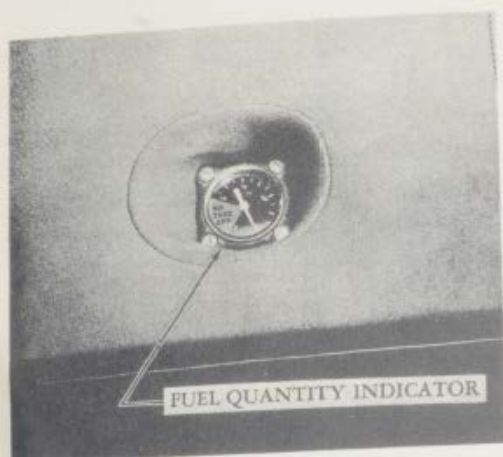
Fuel Line Drain Plug. A fuel line drain plug is located on the under side of the airplane directly below the fuel tank selector valve. At each 100 hour inspection period, this plug should be removed to drain any sediment or water that might have accumulated in the fuel line.

FUEL SYSTEM INDICATOR.

Fuel Quantity Indicators. A direct-reading, dampened, float-type fuel

DESCRIPTION

quantity indicator is mounted in each tank at the wing root inside the cabin. Each gage indicates the amount of fuel remaining in its respective tank. A red arc is painted on the face of each indicator to warn the pilot that the respective fuel tank is almost empty.



Do not take off if the pointer is in the red arc.

ELECTRICAL SYSTEM.

Electrical energy is supplied by a 12-volt, direct-current system powered by an engine-driven generator. A 12-volt storage battery serves as a standby power source, supplying current to the system when the generator is inoperative, or when the generator voltage is insufficient to close the reverse-current relay.

ELECTRICAL SYSTEM CONTROLS.

Master Switch. The master switch (6, figure 2) is the first knob to the left of the cigarette lighter. Switch positions are "ON" (out position) and "OFF" (in position). When the master switch is turned "ON", a solenoid switch is energized and the electrical power of the battery is admitted into the electrical system. In event of a short or malfunctioning of the airplane electrical system, the master switch may be turned off and the engine will con-

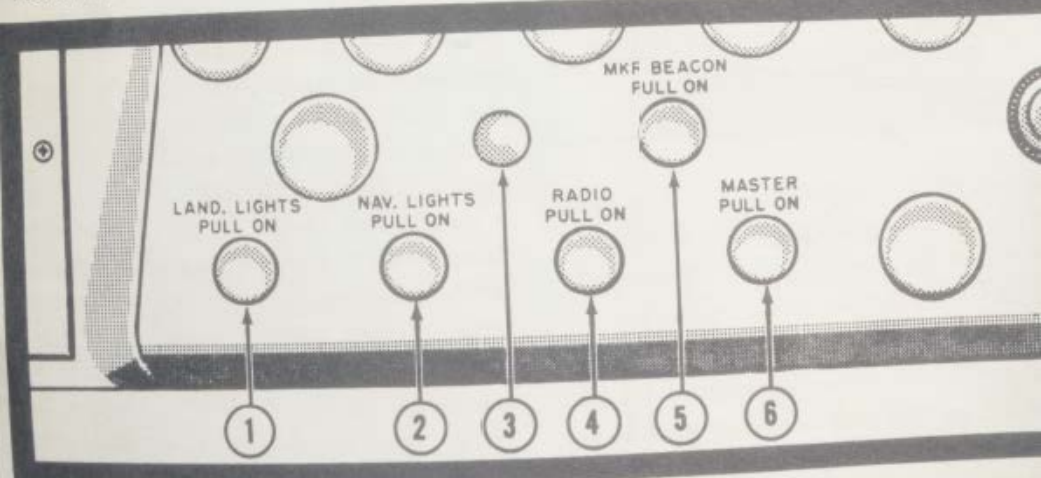


Figure 2. Electrical Switch Panel

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|----------------------------|------------------------------|---------------------------|
| 1. Landing Light Switch | 3. Cabin Heater Switch Space | 5. Marker Beacon Switch S |
| 2. Navigation Light Switch | 4. Radio Switch Space | 6. Master Switch |