

Read the text carefully and complete the following activities:



### Position Lights

Aircraft operating at night must be equipped with position lights that meet the minimum requirements specified by Title 14 of the Code of Federal Regulations. A set of position lights consist of one red, one green, and one white light. On some types of installations, a switch in the cockpit provides for steady or flashing operation of the position lights. On many aircraft, each light unit contains a single lamp mounted on the surface of the aircraft. Other types of position light units contain two lamps and are often streamlined into the surface of the aircraft structure. The green light unit is always mounted at the extreme tip of the right wing. The red unit is mounted in a similar position on the left wing. The white unit is usually located on the vertical stabilizer in a position where it is clearly visible through a wide angle from the rear of the aircraft. *Figure 9-176* illustrates a schematic diagram of a position light circuit. Position lights are also known as navigation lights.

There are, of course, many variations in the position light circuits used on different aircraft. All circuits are protected by fuses or circuit breakers, and many circuits include flashing and dimming equipment. Small aircraft are usually equipped with a simplified control switch and circuitry. In some cases, one control knob or switch is used to turn on several sets of lights; for example, one type utilizes a control knob, the first movement of which turns on the position lights and the instrument panel lights. Further rotation of the control knob increases the intensity of only the panel lights. A flasher unit is seldom included in the position light circuitry of very light aircraft but is used in small twin-engine aircraft. Traditional position lights use incandescent light bulbs. LED lights have been introduced on modern aircraft because of their good visibility, high reliability, and low power consumption.



Locate the position lights in the correct place



Fig. 14-2 Position Lights

WHITE LIGHTS

GREEN LIGHTS

RED LIGHTS



**Tick the sentences that are right**

- ☐ 1- Fuses protect the circuits
- ☐ 2- A flasher unit is always used in very light aircraft
- ☐ 3- The green light is mounted on the vertical stabilizer
- ☐ 4- Navigation lights are position lights
- ☐ 5- Led lights are used on modern aircraft
- ☐ 6- Position lights can be green, red and blue.

