

## CHAPTER 33

## LIGHTS

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## CHAPTER 33

## LIGHTS

33-00 Description

A red anti-collision light is installed on the tailcone and is controlled by the strobe switch. Position lights are installed on each side of the cabin and in the tail and are controlled by the nav lights switch. A light at the top of the windshield and post lights illuminate the instrument panel. Panel lighting is active when the nav lights switch is on and lighting is dimmed via the knob above the nav lights switch. An overhead map light mounted on a swivel is controlled by an adjacent switch with high and low settings. The map light may be used for emergency lighting of the instrument panel. An additional cabin light with an adjacent switch is located just aft of the map light. The map and cabin lights are not connected to the dimmer circuit.

Two long-life, high intensity discharge (HID) landing lights are installed in the nose. One wide-angle and one narrow-beam light are used to increase lighted area. One landing light switch controls both lights and is located on the cyclic center post.

## NOTE

Continuous operation of landing and position lights in flight is recommended to promote collision avoidance.

An optional flashing light may be mounted on the tailcone in addition to the standard anti-collision light. On earlier aircraft, the optional light is controlled by an additional position on the strobe switch. On later aircraft, the optional light is controlled by a separate switch.

33-10 Exterior Lights33-11 Strobe Light(s)**A. Removal**

1. Turn battery switch off. Pull out STROBE circuit breaker (5 amp, or 7½ amp if forward strobe is installed) at panel.
2. Remove hardware securing A708 strobe light assembly's retainer, lens, and gasket to light assembly.
3. Remove hardware securing light assembly to tailcone mount.
4. Remove hardware securing ground wire, if ground is installed at mount. Disconnect light assembly harness from airframe harness and remove light assembly.

### 33-11 Strobe Light(s) (continued)

#### **B. Installation**

1. Turn battery switch off. Pull out STROBE circuit breaker (5 amp, or 7½ amp if forward strobe is installed) at panel.
2. Install hardware securing A708 strobe light assembly's ground wire to tailcone mount, if ground is installed at mount. Connect light assembly's harness to airframe harness at connectors.
3. Install hardware securing light assembly to tailcone mount (white forward strobe: two missing columns of LEDs facing forward). Verify security.
4. Install hardware securing light assembly's gasket, lens, and retainer to light assembly. Verify security.
5. Push in STROBE circuit breaker (5 amp, or 7½ amp if forward strobe is installed) at panel. Turn battery switch and strobe switch(es) on and verify function. Turn battery switch off.

### 33-12 Navigation Lights

#### **A. Removal**

1. Turn battery switch off. Pull out LTS circuit breaker (5 amp) at panel.
2. a. Position Lights: Remove screw securing retainer, lens, and gasket to light assembly. Remove hardware securing light assembly, gasket, and ground wire to chin. Cut and discard ty-rap securing excess wire to light assembly, pull out light assembly, and disconnect light assembly harness from airframe harness at connector.
- b. Tail Light: Remove screws securing retainer, lens, gasket, and light assembly to C529-1 mount assembly. Pull out light assembly and disconnect light assembly harness from airframe harness at connector.

#### **B. Installation**

1. Turn battery switch off. Pull out LTS circuit breaker (5 amp) at panel.
2. a. Position Lights: Connect light assembly harness to airframe harness at connector. Install hardware securing light assembly, gasket, and ground wire to chin. Verify security. Install ty-rap securing excess wire to light assembly. Cinch ty-rap until snug without over-tightening, and trim tip flush with head. Install screw securing retainer, lens, and gasket to light assembly. Verify security.
- b. Tail Light: Connect light assembly harness to airframe harness at connector. Install screws securing retainer, lens, gasket, and light assembly to C529-1 mount assembly. Verify security.
3. Push in LTS circuit breaker (5 amp) at panel. Turn battery switch and LTS switch on and verify function. Turn battery switch and LTS switch off.

### 33-13 Landing Lights

#### **A. Removal**

1. Turn battery switch off. Pull out LAND LT circuit breaker (7½ amp) at panel.
2. Remove screws securing C526-1 retainer to chin and remove retainer.
3. Disconnect landing light cable from lamp and remove lamp.

#### **B. Installation**

1. Turn battery switch off. Pull out LAND LT circuit breaker (7½ amp) at panel.

#### **NOTE**

B557-1 (spot) landing light is installed in LH location and B557-2 (flood) taxi light is installed in RH location.

2. Connect landing light cable to landing light.
3. Install screws securing C526-1 retainer to chin.
4. Push in LAND LT circuit breaker (7½ amp) at panel. Turn battery switch and landing light switch on (cyclic center post) and verify function. Turn battery switch and landing light switch off.

### 33-20 Interior Lights

#### 33-21 Panel Light

#### **A. LED Assembly Replacement**

1. Turn battery switch off. Pull out LTS circuit breaker (5 amp) at panel.
2. Remove hardware securing G196 light assembly to windshield stiffener. Remove two cap screws securing cover and LED assembly to housing. Disconnect LED assembly wires from airframe harness and remove LED assembly.
3. Connect F090-2289 (white) airframe harness wire to new LED assembly red wire, and F090-2290 airframe harness wire to LED assembly black wire. Install cover (chamfer facing away from housing) and install two cap screws. Install hardware securing G196 light assembly to windshield stiffener. Verify security.
4. Push in LTS circuit breaker (5 amp) at panel. Turn battery switch and LTS switch on and verify function. Verify dimming knob adjusts brightness. Turn battery switch and LTS switch off.

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