

CHAPTER 24

LIGHTS

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CHAPTER 24

LIGHTS

24-00 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. Post and internal lights (earlier aircraft) or a light at the top of the windshield (later aircraft) illuminate the instruments. Instrument 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. The map light may be used for emergency lighting of the instrument panel.

Two landing lights are installed in the nose at different vertical angles to increase lighted area. One landing light switch controls both lights and is located on the cyclic center post or near OAT gage.

NOTE

Landing lights operate only when clutch actuator switch is in the engage position.

24-10 Exterior Lights24-11 Strobe Light**A. Removal**

1. Turn battery switch off. Pull out STROBE circuit breaker (5 amp) at panel.
2. Remove hardware securing A708 strobe light assembly's retainer (or clamp), lens, and gasket to strobe (or flash tube assembly).
3. Remove screws securing A708-14 strobe to tailcone mount.
4. Disconnect strobe (or flash tube assembly) wire harness from airframe harness at connectors and remove strobe (or flash tube assembly).

24-11 Strobe Light (continued)**B. Installation**

1. Turn battery switch off. Pull out STROBE circuit breaker (5 amp) at panel.
2. Connect A708 strobe light assembly's wire harness to airframe harness at connectors. Verify security.
3. Loop wires and connectors inside mount and install screws securing A708-14 strobe to tailcone mount.
4. Assemble gasket, lens (red forward if red/white), and retainer (or clamp) on tailcone mount and install hardware. Verify security.
5. Push in STROBE circuit breaker (5 amp) at panel. Turn battery switch and strobe switch(es) on and verify function. Turn battery switch off.

24-12 Navigation Lights**A. Removal**

1. Turn battery switch off. Pull out LTS circuit breaker (5 amp) at panel.
2. a. Position Lights: Remove screw, retainer, lens, (lamp), 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 connectors.

b. Tail Light: Remove screws securing retainer, lens, gasket, (lamp), and light assembly to stabilizer mount. Pull out light assembly and disconnect light assembly harness from airframe harness at connectors.

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 connectors. 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 lamp (earlier R22s). Install screw securing retainer, lens, and gasket to light assembly. Verify security.

b. Tail Light: Connect light assembly harness to airframe harness at connectors. Position light assembly in stabilizer mount and install screws securing retainer, lens, gasket, and light to mount. Verify security.
3. Push in LTS circuit breaker (5 amp) at panel. Turn battery switch and NAV LTS switch on and verify function. Turn battery switch and NAV LTS switch off.

24-13 Landing Lights**NOTE**

Landing lights operate only when clutch actuator switch is in the engage position.

A. Removal

1. Turn battery switch off. Pull out LAND LT circuit breaker (15 amp for HIDs, 20 amp for B196-26 lamps) at panel.
2. Remove screws securing A526-1 retainer to chin and remove retainer.
3. Unplug landing light cable from (or remove hardware securing landing light wires to) lamp and remove lamp.

B. Installation

1. Turn battery switch off. Pull out LAND LT circuit breaker (15 amp for HIDs, 20 amp for B196-26 lamps) at panel.
2. a. HIDs: Connect landing light cable to B557-1 (spot; LH) landing light or B557-2 (flood) taxi light, as required. Verify security.
b. B196 lamps: Install hardware securing landing light wires to lamp. Verify security.
3. Install screws securing A526-1 retainer to chin.
4. Push in LAND LT circuit breaker (15 amp for HIDs, 20 amp for B196-26 lamps) at panel. Turn battery switch and landing light switch on (cyclic center post) and verify function. Turn battery switch and landing light switch off.

24-20 Interior Lights24-21 Instrument Lighting**A. LED Assembly Replacement**

1. Turn battery switch off. Pull out LTS circuit breaker (5 amp) at panel.
2. Remove hardware securing G196-6 light assembly to windshield stiffener. Remove two cap screws securing cover and LED-lamp assembly to housing. Disconnect lamp wires from airframe harness and remove lamp.
3. Connect A238-2289 (white) airframe harness wire to LED-lamp assembly red wire, and A238-2290 airframe harness wire to lamp black wire. Install cover (chamfer facing away from housing) and install two cap screws. Install hardware securing G196-6 light assembly to windshield stiffener. Verify security.
4. Push in LTS circuit breaker (5 amp) at panel. Turn battery switch and NAV LTS switch on and verify function. Verify dimming knob adjusts brightness. Turn battery switch and NAV LTS switch off.