### LED FLIGHT COMPARTMENT LIGHTING - TROUBLESHOOTING

## 1. General

- A. This section gives the troubleshooting procedures for the flight compartment LED lighting. For a general description of the interior LED panels and lights, refer to LED Flight Compartment Lighting Description and Operation.
- B. Use the Model 208 Wiring Diagram Manual with the procedures in this section.

# 2. Tools and Equipment

A. No special tools or equipment are necessary to do the procedures in this section.

# 3. Flight Compartment Lighting Troubleshooting

- A. If an instrument panel, throttle quadrant, left circuit breaker, fuel tank selector, or standby flap motor LED panel does not come on when you operate the LED PANELS/ANUNN dimmer control. Do the steps that follow:
  - (1) Remove the applicable LED panel to get access to LED panel wiring bundles and electrical connectors. Refer to the applicable section as follows:
    - Overhead Console LED Panels/Chart Light LED LIGHT Removal/Installation
    - Instrument Panels LED Panels Removal/Installation
    - Left Circuit Breaker Assembly LED Panels Removal/Installation
    - Throttle Quadrant LED Panel Removal/Installation.

CAUTION: Make sure that the applicable circuit breakers are disengaged before you examine the LED panel wiring bundle or do a continuity check.

- (2) Visually inspect the connector and pins for signs of damage.
  - (a) Repair any damage.
- (3) If wiring repair was done do a check of the LED panel light operation again. Refer to LED Flight Compartment Lighting Adjustment/Test, LED Panel Operational Check.
- (4) If the connector is serviceable, examine the wiring bundle for continuity between the LED panel and other lighting system components. Refer to the Model 208 Wiring Diagram Manual.
  - (a) Repair any wiring faults.
- (5) If wiring repair was done do a check of the LED panel light operation again. Refer to LED Flight Compartment Lighting Adjustment/Test, LED Panel Operational Check.
- (6) Replace the applicable LED panel. Refer to the applicable section as follows:
  - Overhead Console LED Panels/Chart Light LED LIGHT Removal/Installation
    - Instrument Panels LED Panels Removal/Installation
    - Left Circuit Breaker Assembly LED Panels Removal/Installation
    - Throttle Quadrant LED Panel Removal/Installation.
- (7) Do a check of the LED panel light operation. Refer to LED Flight Compartment Lighting Adjustment/Test, LED Panel Operational Check.
- B. If no instrument panel, throttle quadrant, left circuit breaker panel or overhead console LED panel comes on when you operate the LED PANELS/ANUNN dimmer control.
  - (1) Make sure that the AVN/LED/STBY LIGHTS circuit breaker, found on the left circuit breaker panel is engaged.
    - (a) If the circuit breaker is not engaged, engage it and operate the dimmer control again.

CAUTION: Make sure that the applicable circuit breakers are disengaged before you examine the LED panel wiring bundle or do a continuity check.

- (2) If the LED panels do not come on do a continuity check of the wiring between the dimmer control rheostat and the left circuit breaker panel and the LED panels.
  - (a) If necessary, remove the rheostats from the environmental panel to get access to the rheostat's wiring and terminals. Refer to Flight Compartment Lighting Maintenance Practices
  - (b) Repair any wiring faults.
  - (c) If necessary, install the rheostats in the environmental panel. Refer to Flight Compartment Lighting -Maintenance Practices.
- (3) If wiring repair was done do a check of the LED panel light operation. Refer to LED Flight Compartment Lighting -

#### Adjustment/Test, LED Panel Operational Check.

(4) If the wiring is serviceable, replace the AVN/LED/STBY LIGHTS circuit breaker, found on the left circuit breaker panel. Refer to Chapter 24, Flight Compartment Lighting - Maintenance Practices.

### 4. Overhead Console Chart Lights Troubleshooting

- A. If an overhead console chart light does not come on when you operate the applicable dimmer control. Do the steps that follow:
  - NOTE: There are three chart lights installed in the overhead console. The lights that are installed in the overhead console are the left chart light (FC16), center chart light (FC017), and right chart light (FF003).
  - (1) If the chart light does not come on, replace the applicable chart light LED lamp. Refer to Overhead Console LED Panel/Chart Light LED Lamp.
    - (a) Do a check of the chart light operation again. Refer to LED Flight Compartment Lighting Adjustment/Test, LED Chart Light Operational Test.
  - CAUTION: Make sure that the applicable circuit breakers are disengaged before you examine the LED panel wiring bundle or do a continuity check.
  - (2) If the chart light does not come on do a continuity check of the wiring between the rheostat, the left circuit breaker panel and the chart light.
    - (a) If necessary, remove the applicable rheostat from the environmental panel to get access to the rheostat wiring and terminals. Refer to Flight Compartment Lighting Maintenance Practices.
      - NOTE: There are three chart light dimming control rheostats installed in the environmental panel. The rheostats that are installed in the environmental panel are the LEFT FLOOD, CENTER FLOOD, and RIGHT FLOOD rheostats.
    - (b) If necessary, remove the applicable chart light sockets from the overhead console to get access to the chart light wiring terminals. Refer to Overhead Console LED Panels/Chart light LED Lamp - Removal/Installation, Chart Light LED Lamp Removal/Installation.
  - (3) When the continuity checks are complete and/or wiring repairs done install the chart light sockets in the overhead console. Overhead Console LED Panels/Chart light LED Lamp Removal/Installation, Chart Light LED Lamp Removal/Installation
  - (4) If wiring repairs were done do a check of the chart light operation again. Refer to LED Flight Compartment Lighting Adjustment/Test, LED Chart Light Operational Test.
  - (5) If the wiring is serviceable, replace the rheostat. Refer to Flight Compartment Lighting Maintenance Practices.
    - (a) If necessary, install the rheostat in the environmental panel. Refer to Flight Compartment Lighting Maintenance Practices, Chart Light LED Lamp Removal/Installation.
- B. If none of the overhead console chart lights come on when you operate the applicable dimmer control rheostat.
  - (1) Make sure that the COCKPIT FLOOD LIGHTS circuit breaker, found on the left circuit breaker panel, is engaged.
    - (a) If the circuit breaker is not engaged, engage it and operate the chart light dimmer controls again.
  - CAUTION: Make sure that the applicable circuit breakers are disengaged before you examine the LED panel wiring bundle or do a continuity check.
  - (2) If the chart lights do not come on do a continuity check of the wiring between the rheostat, the left circuit breaker panel and the overhead console light electrical connector (PC006).
    - (a) If necessary, remove the rheostats from the environmental panel to get access to the rheostat's wiring and terminals. Refer to Flight Compartment Lighting Maintenance Practices.
    - (b) If necessary, remove the flight compartment headliner to get access overhead console light electrical connector (PC006). Refer to Chapter 25, Cabin Upholstery Maintenance Practices.
  - (3) If wiring repairs are done do a check of the chart light operation again. Refer to LED Flight Compartment Lighting Adjustment/Test, LED Chart Light Operational Test.
    - (a) If necessary, install the flight compartment headliner. Refer to Chapter 25 Cabin Upholstery Maintenance Practices.
    - (b) If necessary, install the rheostats in the environmental panel. Refer to Electrical Distribution System -

#### Maintenance Practices.

(4) If the wiring is serviceable, replace the COCKPIT FLOOD LIGHTS circuit breaker. Refer to Chapter 24, Flight Compartment Lighting - Maintenance Practices.