



AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

**ON A/C ALL

33–10–00–001

FLIGHT COMPARTMENT LIGHTS

Introduction

The flight compartment lights supply lighting requirements for the flight compartment area. They supply the lighting required by the pilot and copilot for the operation of the aircraft.

General Description

Light control panels in the cockpit control the flight compartment lights.

[Refer to Figure 1.](#)

The flight compartment lights include the following:

- Dome Lights
- Circuit Breaker Panel Lights
- Map Lights
- Panel and Instrument Lights
- Thunderstorm Lights
- Reading Lights
- Observer Reading Light
- Ice Detection Lights

Detailed Description

The flight compartment lights are protected by the circuit breakers that follow:

Left DC Circuit Breaker Panel:

- A3– PANEL LIGHTS O/H CONS
- B3– PANEL LIGHTS GLARESHIELD
- C3– PANEL LIGHTS PLT FLT
- D3– PLT MAP LIGHTS
- L1– STORM/PLT CB PNL LIGHTS
- N2– FLT COMP DOME LIGHTS

Right DC Circuit Breaker Panel:

- P3– COPLT MAP LIGHTS
- Q3– PANEL LIGHTS COPLT FLT
- R3– PANEL LIGHTS AFT CTR CONS
- S3– PANEL LIGHTS FWD CTR CONS
- L4– COPLT CB PNL LIGHTS
- J1– FLT COMP DOME LIGHTS

Reading Lights

[2](#), [7](#) and [8](#) There are two reading lights, one for the pilot and one for the copilot. They are mounted in the overhead ceiling, one above each pilot. They are directionally adjustable on fixed mountings. Each light is controlled from an adjacent dimmer switch, which incorporates an on–off switch at the extreme dim



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position. The dimmer controls are installed on the aft side of the avionics rack. The reading lights are powered from the 28 volts dc main bus through the PLT MAP LIGHTS (D3) circuit breaker on the left dc circuit breaker panel and the main bus through the COPLT MAP LIGHTS (P3) circuit breaker on the right dc circuit breaker panel.

Dome Lights

3 and **7** There are two dome lights. The dome lights are in the ceiling on the left and right side forward of the entrance door to the flight compartment. The STORM – OFF – STORM/DOME switch and the OFF – DOME switch on the PANEL LIGHTING panel in the overhead console control the dome lights. The dome lights are powered from the 28 volts dc secondary bus through the FLT COMP DOME LIGHTS (N2) circuit breaker on the left dc circuit breaker panel and the battery bus through the FLT COMP DOME LIGHTS (J1) circuit breaker on the right dc circuit breaker panel. The dome lights are used for flight compartment lighting for short times before external dc power is switched on or before engine and dc generator start-up.

Floodlights

Refer to Figure 4.

The floodlights have these parts: a mounting bracket, a retaining clip, a hood and a lamp holder. The floodlights are used for the circuit

breaker panel lights, map lights, panel and instrument lights and ice detection lights.

– Circuit Breaker Panel Lights

7 and **10** There are four circuit breaker lights, two on each side of the flight compartment, above the left and right dc circuit breaker panel. The CIR BKR LIGHT switch on the pilot's side panel and the CIRCUIT BREAKER PNL LIGHTS switch on the copilot's side control the lights. The circuit breaker lights are powered from the 28 volts dc battery bus through the STORM/PLT CB PNL LIGHTS (L1) circuit breaker on the left dc circuit breaker panel and essential bus through the COPLT CB PNL LIGHTS (L4) circuit breaker on the right dc circuit breaker panel.

– Map Lights

4, **7** and **8** There are two map lights, one for the pilot and one for the copilot. They are located below the side windows. The two map lights are directionally adjustable on fixed mountings. Each light is controlled from an adjacent dimmer switch, which incorporates an on-off switch at the extreme dim position. The dimmer controls are installed on the aft side of the avionics rack. The map lights are powered from the 28 volts dc main bus through the PLT MAP LIGHTS (D3) circuit breaker on the left dc circuit breaker panel and the main bus through the COPLT MAP LIGHTS (P3) circuit breaker on the right dc circuit breaker panel.



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– Panel and Instrument Lights

4 and **7** There are four floodlights used for panel lighting. They are located at each end of the glareshield panel and above the left and right side windows.

The pilot side is controlled by the dimmer potentiometer labelled PILOTS FLT PNL, located on the pilot's side panel. It is powered from the 28 volts dc main bus through the PANEL LIGHTS PLT FLT (C3) circuit breaker on the left dc circuit breaker panel.

The copilot side is controlled by the dimmer potentiometer labelled COPILOTS FLT PNL, located on the copilot's side panel. It is powered from the 28 volts dc main bus through the PANEL LIGHTS COPLT FLT (Q3) circuit breaker on the right dc circuit breaker panel.

– Ice Detection Lights

4 and **10** There are two ice detection lights installed on the glareshield panel in the flight compartment. The windshield wiper ice detection switch on the pilot's side panel and the co-pilot's side panel controls the lights. The ice detection lights is powered from the 28 volts dc battery bus through the STORM/PLT CB PNL LIGHTS (L1) ice detection on the left side dc ice detection panel and essential bus through the COPLT CB PNL LIGHTS (L4) ice detection on the right dc ice detection panel.

Panel and Instrument Lighting

[Refer to Figure 4.](#)

Variable intensity 5 volts dc lighting circuits for integrally lit panels and instruments supply the panels and instruments lighting in the flight compartment. 5 volts dc miniature lamp assemblies embedded in Plexiglas facing panels give light to panel marking. The disc-shaped lamp assemblies are attached in the back of the panel by screws and covered with black insulation tape.

[Refer to Figure 11.](#)

There are six variable 5 volts dc power supplies. The power supply units are installed on the electrical panel No. 1, on the left sidewall behind the avionics rack. Each power supply has a 5 volts dc unit (PS1 through PS6) that operates from 28 volts dc and is controlled from a dimmer potentiometer to supply power to the lighting circuits. The operational position of the dimmer potentiometers, OFF – BRT is identified on the panel adjacent to each dimmer potentiometer.

- PS1 – energizes the overhead console dimmer and observer console, panels and instrument lights. Controlled by the dimmer potentiometer labelled OVERHEAD CONS, located on the PANEL LIGHTING panel. Powered from the 28 volts dc main bus through the PANEL LIGHTS O/H CONSOLE (A3) circuit breaker on the left dc circuit breaker panel.
- PS2 – energizes the glareshield panel lights. Controlled by the dimmer potentiometer labelled GLARESHIELD, located on the PANEL LIGHTING panel. Powered from the 28 volts dc main bus through the PANEL LIGHTS GLARESHIELD (B3) circuit breaker on the left dc circuit breaker panel.



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- PS3 – energizes the pilot's flight instrument and panel lights, pilot's pitot static source selector panel and pilot's side panel lights. Controlled by the dimmer potentiometer labelled PILOTS FLT PNL, located on the pilot's side panel. Powered from the 28 volts dc main bus through the PANEL LIGHTS PLT FLT (C3) circuit breaker on the left dc circuit breaker panel.
- PS4 – energizes the copilot's flight instrument panel lights and indicator lights. Controlled by the dimmer potentiometer labelled COPILOTS FLT PNL, located on the copilot's side panel. Powered from the 28 volts dc main bus through the PANEL LIGHTS COPLT FLT (Q3) circuit breaker on the right dc circuit breaker panel.
- PS5 – energizes the center console flight instruments panel lights and indicator lights. Controlled by the dimmer potentiometer labelled AFT CTR CONS PANEL, located on the PANEL LIGHTING panel. Powered from the 28 volts dc main bus through the PANEL LIGHTS AFT CTR CONS (R3) circuit breaker on the right dc circuit breaker panel.
- PS6 – energizes the centre (radio) console instruments and panel lights. Controlled by the dimmer potentiometer labelled FWD CTR CONSOLE, located on the PANEL LIGHTING panel. Powered from the 28 volts dc main bus through the PANEL LIGHTS FWD CTR CONS (S3) circuit breaker on the right dc circuit breaker panel.

glare shield panel and one at each end of the glare shield panel. The STORM – OFF – STORM/DOME switch on the PANEL LIGHTING panel in the overhead console controls the thunderstorm lights. The thunderstorm lights are powered from the 28 volts dc battery bus through the STORM/PLT CB PNL LIGHTS (L1) circuit breaker on the left dc circuit breaker panel.

Observer Reading Lights

[Refer to Figure 6.](#)

There is one observer reading light mounted in the threshold–ceiling panel, approximately at Sta. X–39.00. The light is directionally adjustable on a fixed mounting. The light is controlled from an adjacent dimmer switch, which incorporates an on–off switch at the extreme dim position. The observer reading light is powered from the 28 volts dc secondary bus through the FLT COMP DOME LIGHTS (N2) circuit breaker on the left dc circuit breaker panel.

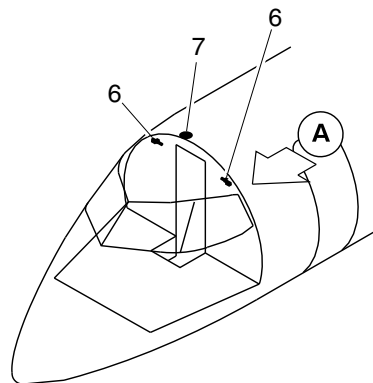
Thunderstorm Lights

5 and 7 There are eight thunderstorm lights. Six of the thunderstorm lights are installed along the lower edge of the



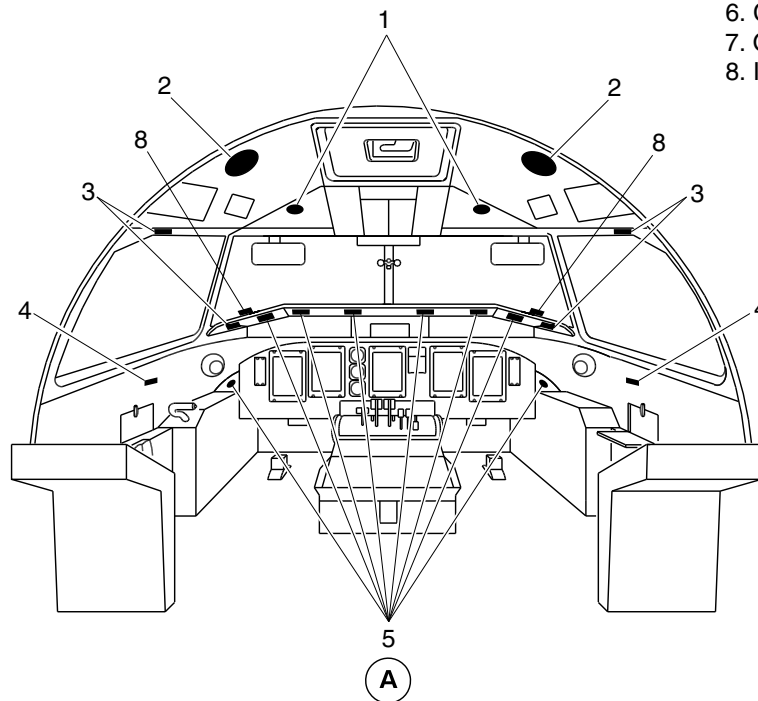
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LEGEND

1. Reading light
2. Dome light.
3. Panel and instrument light.
4. Map light.
5. Thunderstorm light.
6. Circuit breaker light.
7. Observer reading light.
8. Ice detection light.



ap223a01.dg, kb, apr19/2019

FLIGHT COMPARTMENT LIGHT LOCATOR
Figure 1

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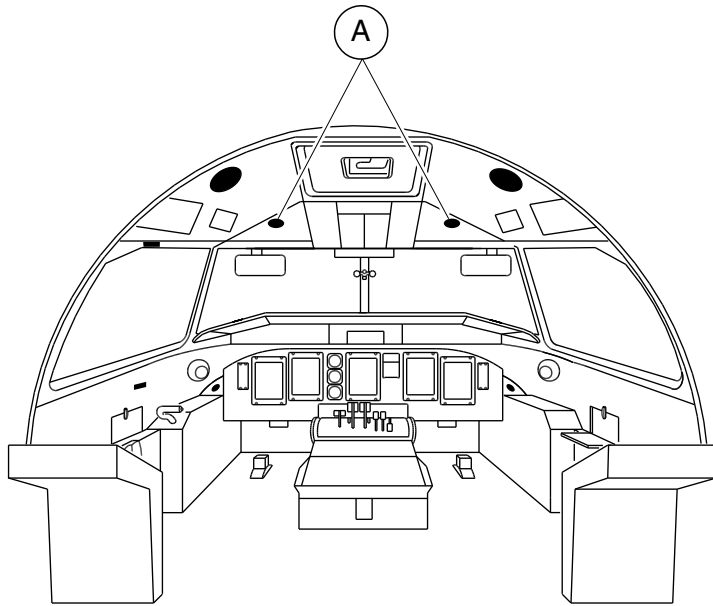
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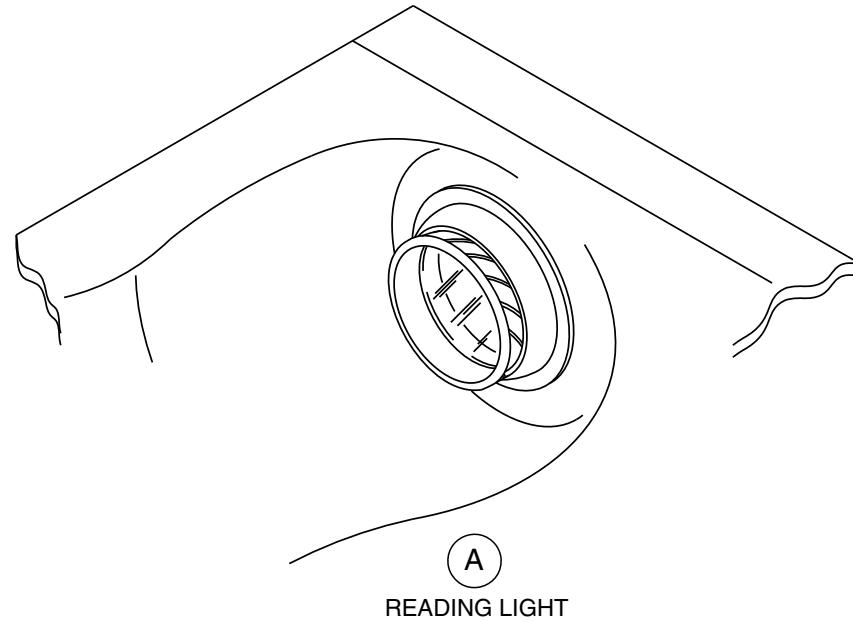


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READING LIGHTS
Figure 2

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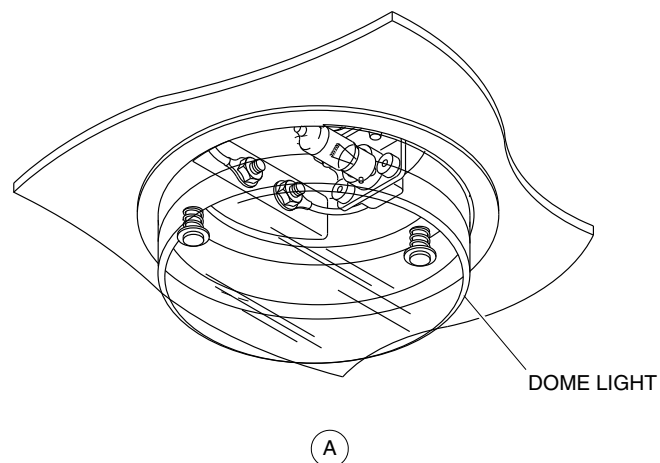
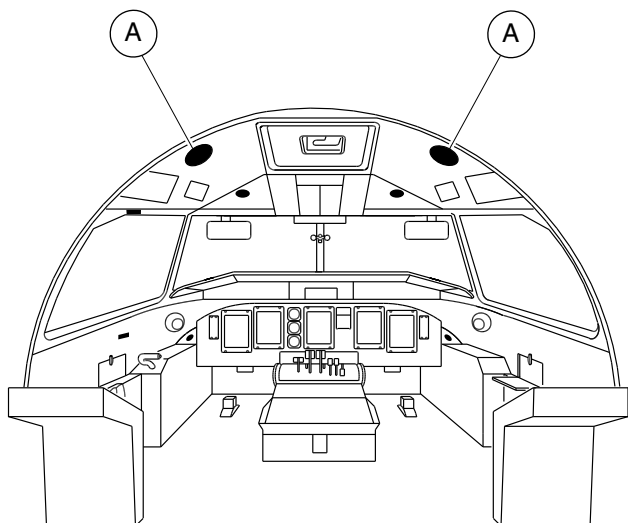
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DOMES LIGHTS
Figure 3

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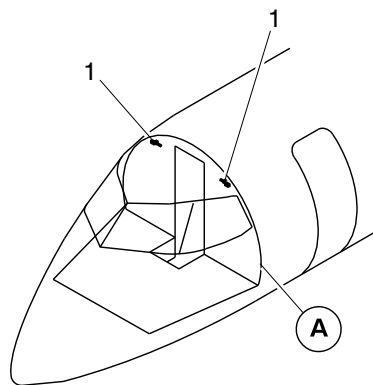
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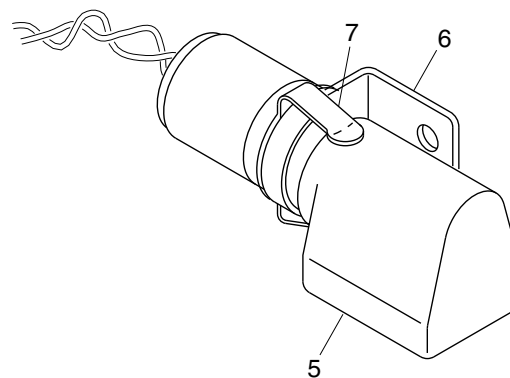
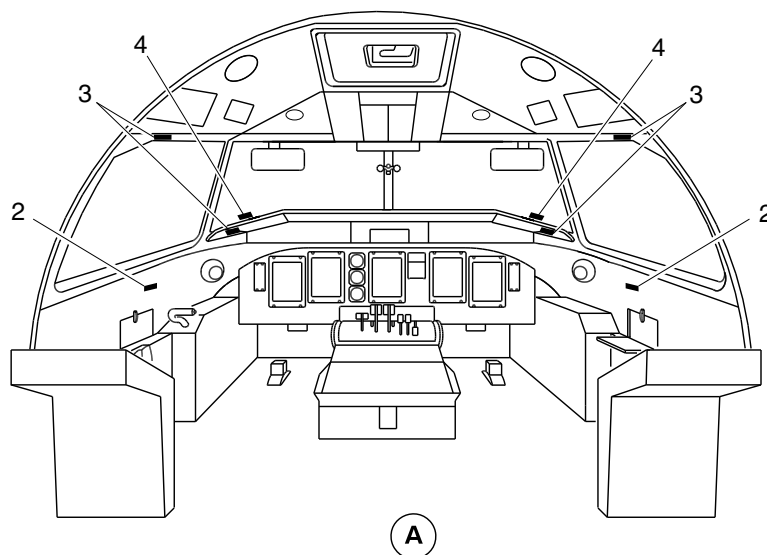
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LEGEND

- 1. Circuit breaker light.
- 2. Map light.
- 3. Panel and instrument light.
- 4. Ice detection light.
- 5. Hood.
- 6. Mounting bracket.
- 7. Retainer clip.



FLOODLIGHT DETAIL

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PANEL AND INSTRUMENT LIGHTS
Figure 4

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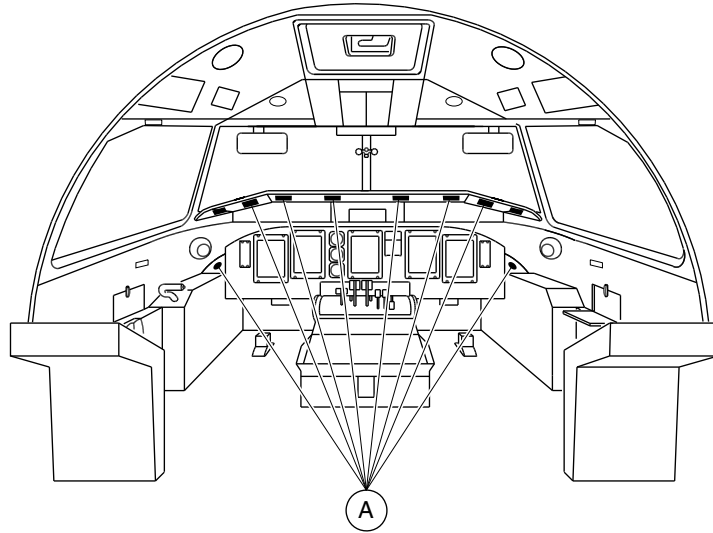
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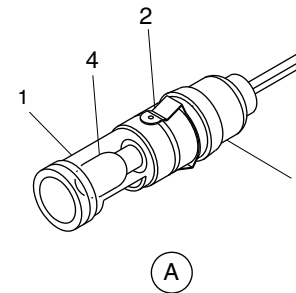
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LEGEND

- 1. Housing.
- 2. Clip.
- 3. Boot.
- 4. Lamp.



THUNDERSTORM LIGHT DETAIL

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THUNDERSTORM LIGHTS
Figure 5

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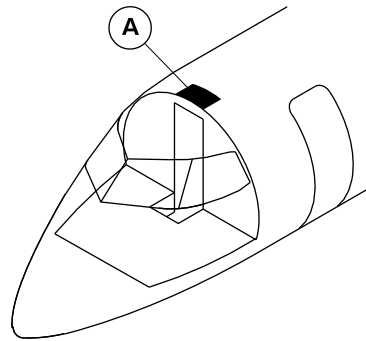
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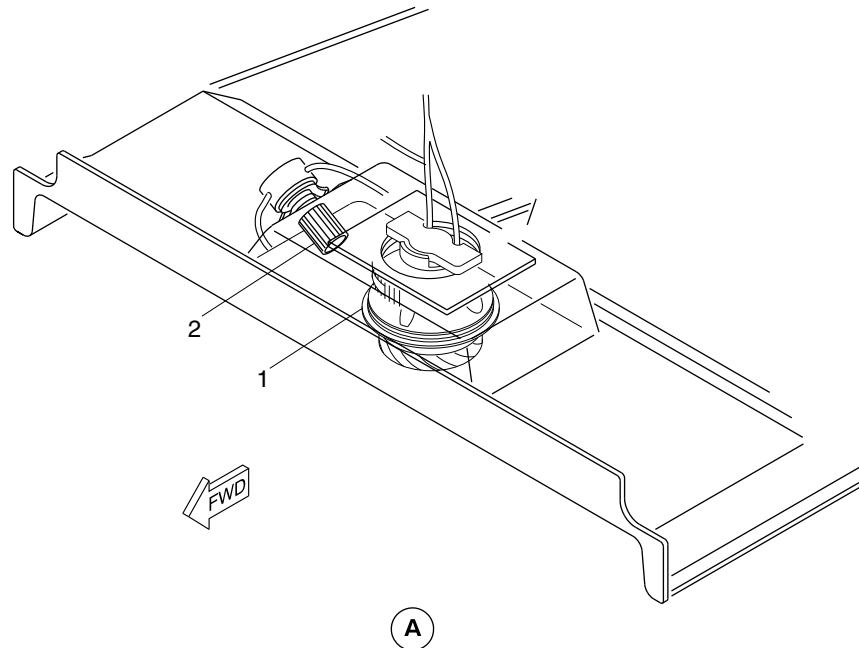
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LEGEND

- 1. Observer Reading Light.
- 2. Light Dimmer.



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OBSERVER READING LIGHT
Figure 6

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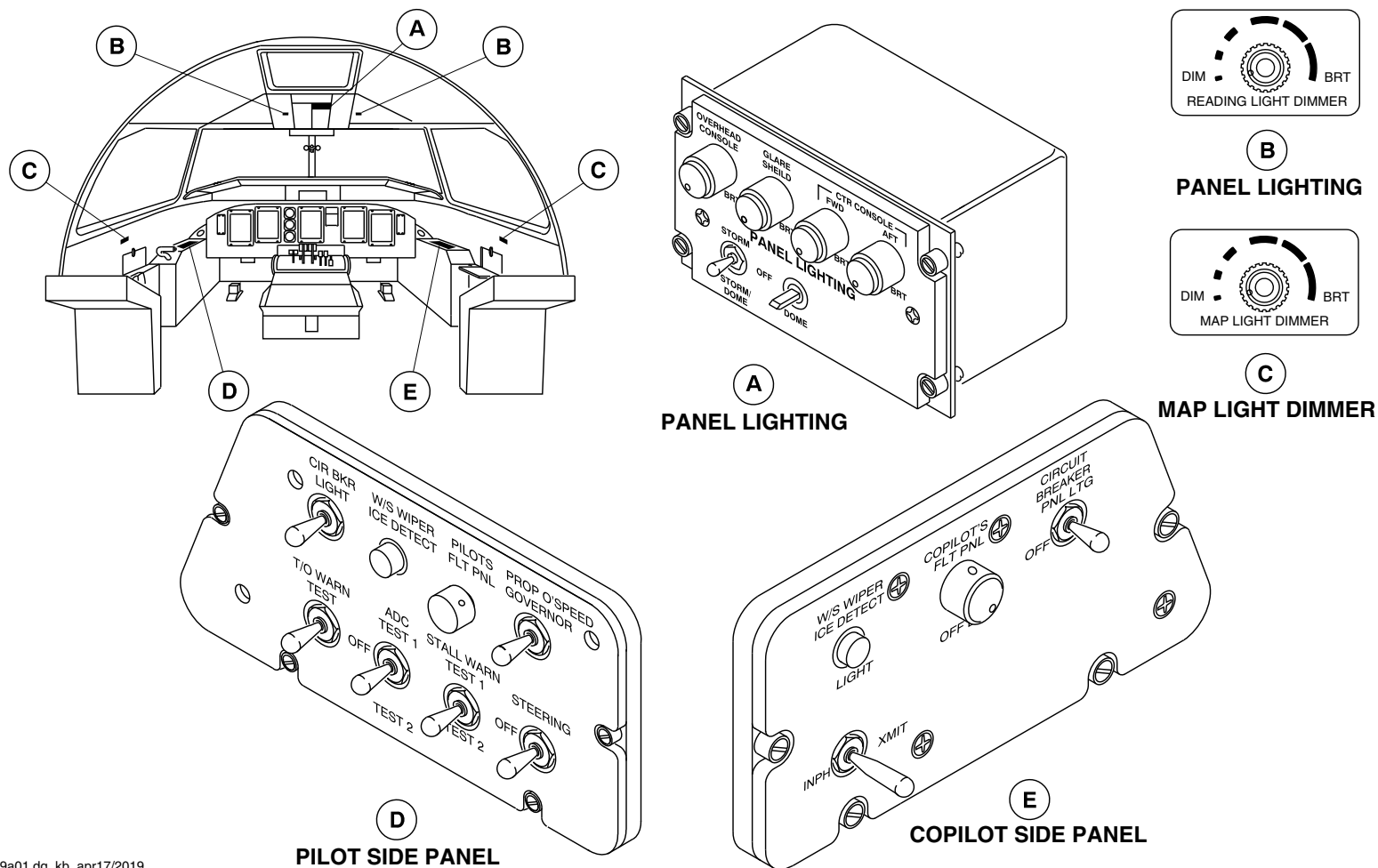
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FLIGHT COMPARTMENT LIGHTS CONTROL PANELS
Figure 7

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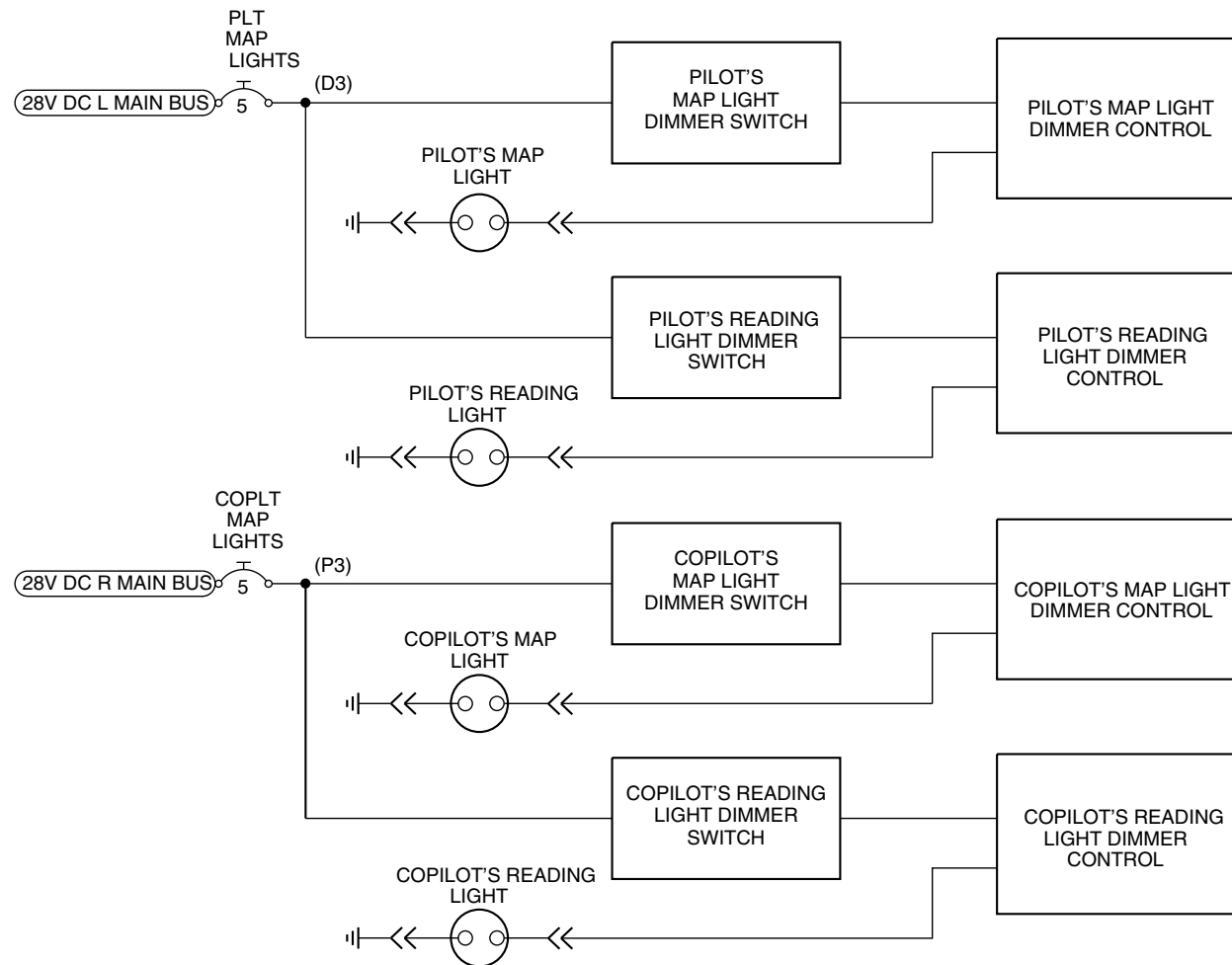
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MAP AND UTILITY LIGHTING – BLOCK DIAGRAM
Figure 8

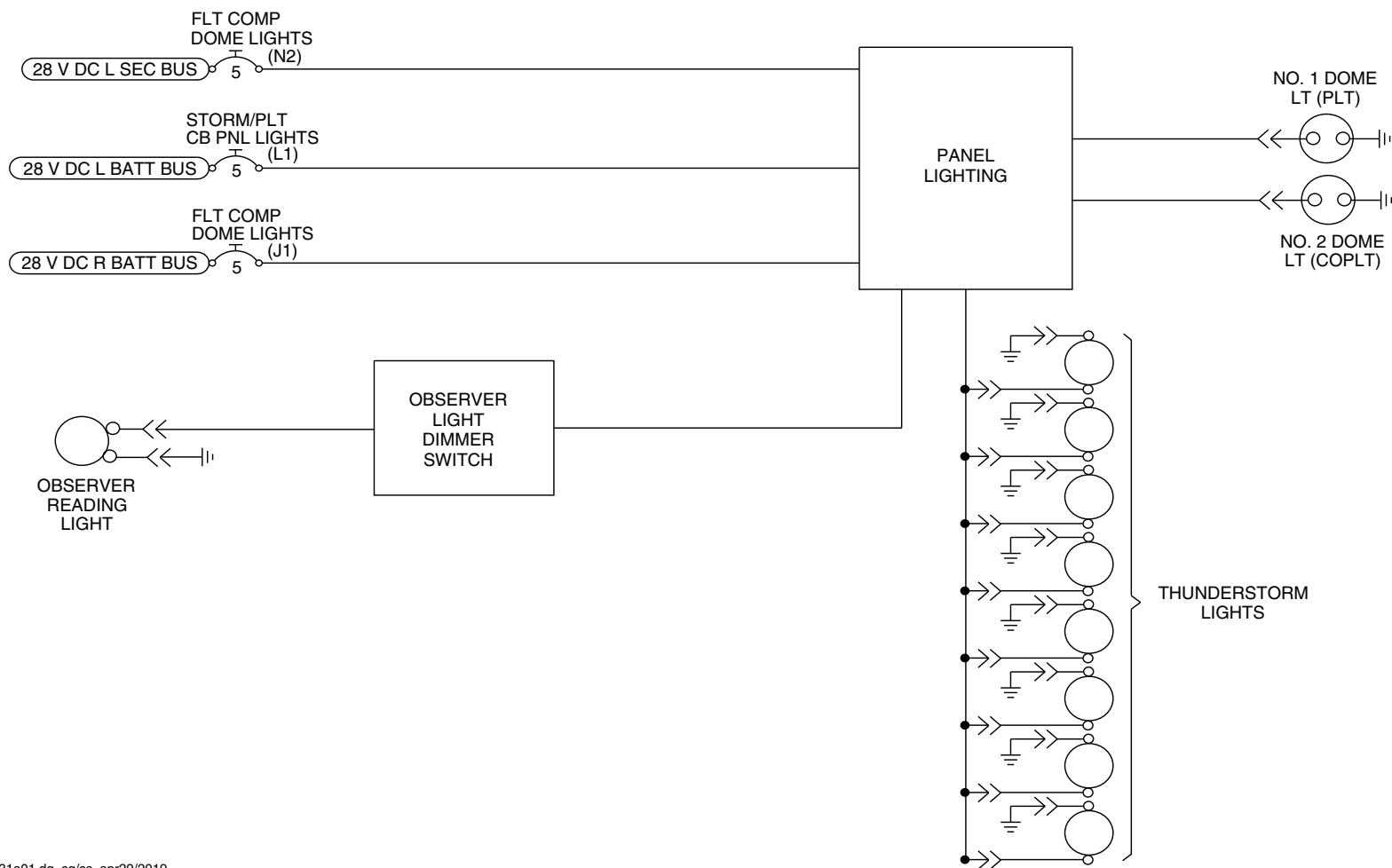
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Observer, Dome and Thunderstorm Lights – Block Diagram
Figure 9

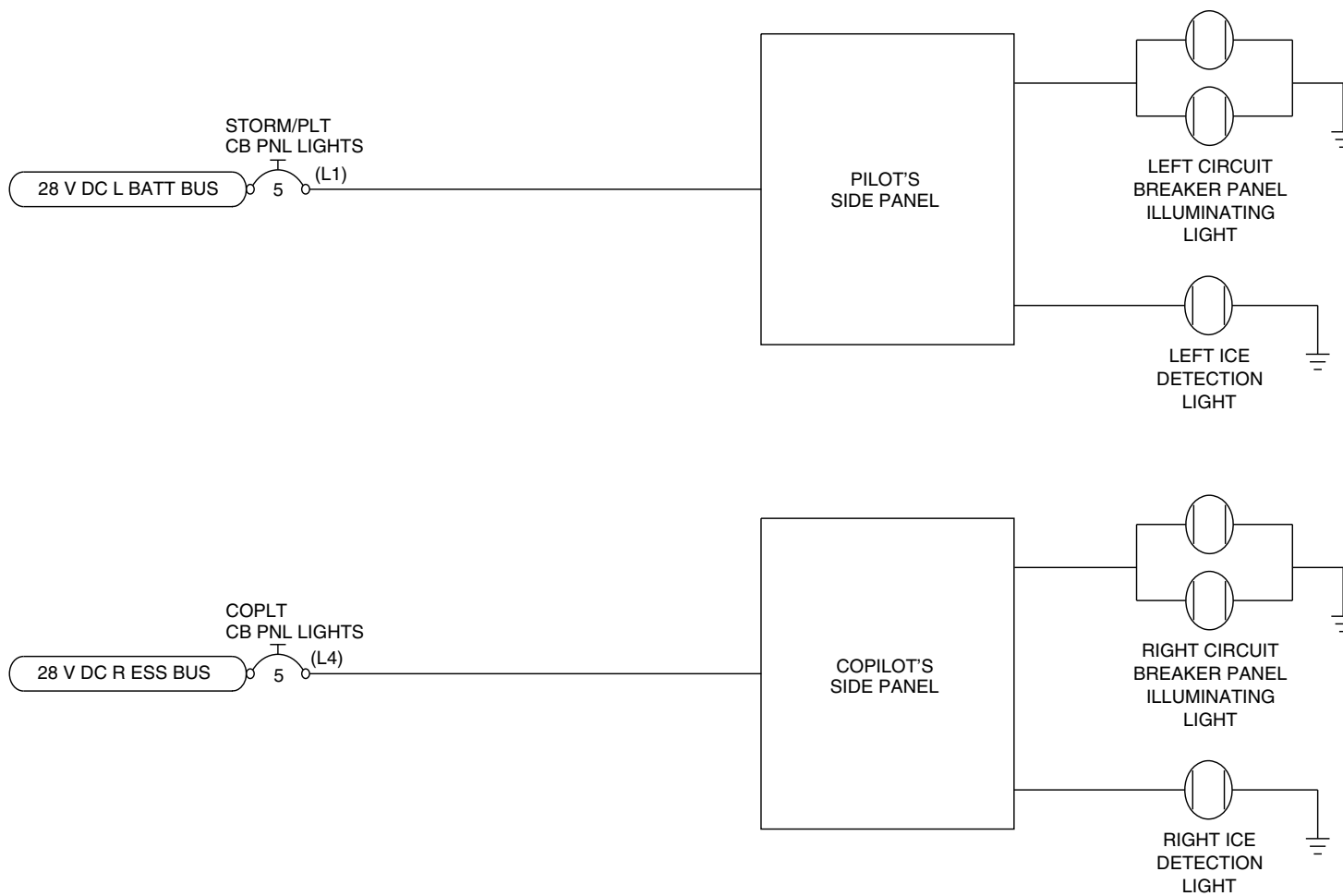
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Left DC and Right DC Circuit Breaker Panel Lights – Block Diagram
Figure 10

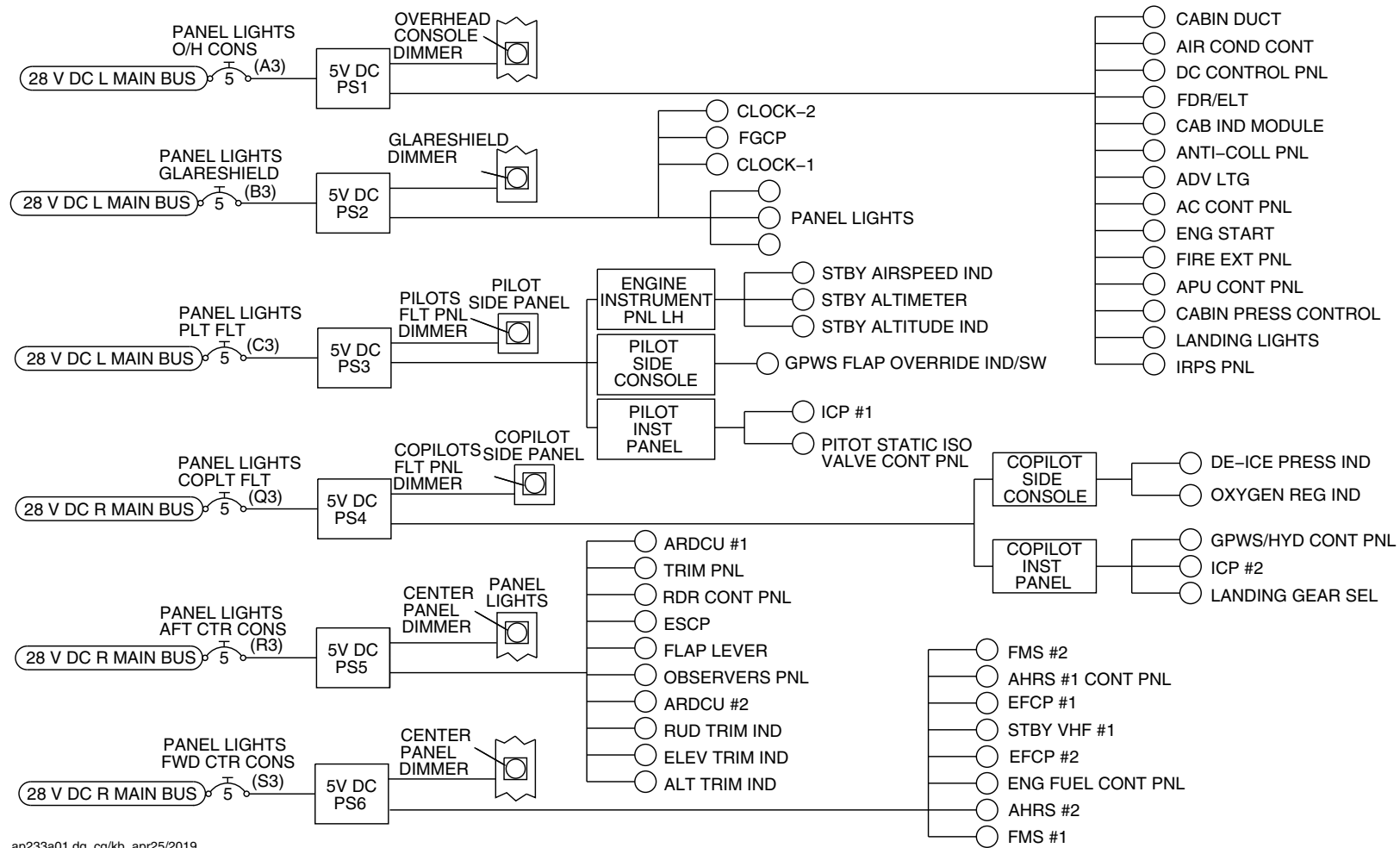
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Panel and Instrument Lights – Block Diagram
Figure 11

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PASSENGER COMPARTMENT LIGHTS

Introduction

The passenger compartment lights supply the general lighting requirements of the passengers and crew in the passenger compartment area. They supply adequate lighting to help the passengers and the crew in boarding and deplaning the aircraft. They also illuminate the aircraft interior and supply reading lights, and information signs, for the passengers.

General Description

Passenger compartment lighting include the systems that follow:

- Boarding Lights (33–21–00)
- Aft Entry Airstair Boarding Light (33–21–01)
- Overhead Lights (33–22–00)
- Accent Lights (33–22–00)
- Sidewall Lights (33–23–00)
- Reading Lights and Information Signs (33–24–00)
- Lavatory Lights (33–25–00)
- Galley Lights (33–26–00).

Detailed Description

[Refer to Figure 1.](#)

Pushbutton switches (referred herein as “pushbuttons”), located on the forward–flight–attendant control panel, control the passenger compartment lights. The pushbuttons are identified as follows:

- CABIN OVERHD
- DIM OVERHD (Modsum 4–422000 or NextGen interior)
- CABIN SIDEWALL
- DIM SIDEWALL (Modsum 4–422000 or NextGen interior)
- BOARDING
- PSU TEST
- PSU ON/OFF
- AIRSTAIR DOOR
- LAVATORY.

When a pushbutton is pressed and released, a red indicator light comes on the pushbutton itself to verify system operation.

There are two types of flight attendant panels:

- Flight attendant panels without sleep mode (Wessex Advanced Switching Products)
- Flight attendant panels with sleep mode (EMTEQ)

The flight attendant panel with the sleep mode has a power–saving feature to conserve the battery power when the aircraft is not in use. When only aircraft battery power is available, the flight attendant panel will monitor the status of the boarding lights only. The boarding



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lights are the only system controlled from the flight attendant panel that gets electrical power directly from the aircraft batteries. If the boarding lights are in the off position, the panel will go into the sleep mode. In the sleep mode the panel minimizes power consumption and appears de-energized.

When the boarding lights pushbutton is pushed, the boarding lights will come on and the panel comes out of the sleep mode. The panel will also come out of the sleep mode when the electrical busses that supply the other systems controlled from the flight attendant panel are energized. The cabin temperature, the NVS, and the lights other than the boarding lights, get their electrical power from the 28 VDC main, essential or secondary busses. When power is applied, these functions will remember their last condition (on or off).

Passenger compartment lighting protection is supplied by the circuit breakers that follow:

- READING LTS R (R1) on the R MAIN dc bus (20A).
- READING LTS R (Q1) on the LMAIN dc bus (20A).
- ATT RDG LTS (Q1) on the L SECONDARY dc bus (5A).
- PASS WARN SIGNS (H3) on the L ESSENTIAL dc bus (7.5A)
- CABIN LTS / PWR 1 (S2) and CABIN LTS PWR 2 (S1) on the R MAIN dc bus (20 A)
- CABIN LTS / CONT (R2) on the R MAIN dc bus (5A)
- CABIN SIDEWALL LTS / PWR 1 (P2) on the L SECONDARY dc bus (20A) and CABIN SIDEWALL LTS PWR 2 (A1) on the R SECONDARY dc bus (20 A)

- CABIN SIDEWALL LTS / CONT (Q2) on the L SECONDARY dc bus (5A).
- BOARD'G LTS (H1) on the BATTERY PWR bus (5A)
- EXT LIGHTS / AIRSTAIR (E2) on the L MAIN dc bus (7.5A)
- LAVATORY (R2) on the L SECONDARY dc bus (7.5A).

Boarding Lights (33–21–00)

The boarding lights supply adequate lighting to help the passengers and crew in boarding and deplaning. They consist of the threshold, ceiling panel and airstair boarding lights.

[Refer to Figure 2.](#)

The threshold boarding light illuminates the entrance floor and, when the passenger door is lowered, it illuminates the top step of the door. The light is located in the wing bulkhead assembly, just above floor level, on the forward side of the passenger airstair–door entrance. The ceiling–panel boarding light illuminates the general area between the flight compartment and the passenger door. It is located in the ceiling, aft of the flight compartment door, on the aircraft center line.

[Refer to Figure 3.](#)

The four airstair boarding lights illuminate the threads of the airstairs. They are each installed in the top center part of the airstair risers.

On pre ModSums 4–457787 AND 4–126450 [Refer to Figures 1 and 6.](#)

On Post ModSums 4–457787 OR 4–126450 [Refer to Figures 1 and 7.](#)



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A pushbutton labelled BOARDING controls the threshold and the ceiling-panel boarding lights. The threshold and ceiling-panel boarding lights are powered through the BOARD'G LTS circuit breaker (5A) at location H1 on the BATTERY PWR bus, on the right dc circuit breaker panel.

On aircraft with ModSums 4-457787 OR 4-126450 incorporated, the ceiling panel and the threshold boarding lights are replaced from the fluorescent lamps to the LED lights.

[Refer to Figures 1 and 8.](#)

A pushbutton labelled AIRSTAIR DOOR controls the airstair lights. The airstair lights are powered through the EXT LIGHTS / AIRSTAIR circuit breaker (7.5A) at location E2 on the L MAIN dc bus, on the left dc circuit breaker panel.

Aft Entry Airstair Boarding Light (33-21-01)

[Refer to Figures 4 and 5.](#)

On aircraft with ModSum 4-302200 incorporated, an aft passenger entry airstair boarding light is located below the aft entry airstair door. The light is controlled by the AIRSTAIR LIGHT annunciator pushbutton. This pushbutton is located on the aft airstair storage close-up panel and is operated by the flight attendant. When pushed, the pushbutton illuminates to indicate that the light is selected ON and the light illuminates the aft entry airstairs. The aft passenger entry airstair boarding light is powered through the AIRSTAIR LTS circuit breaker (7.5A) at location E2 on the left main dc bus, on the left dc circuit breaker panel.

Overhead Ceiling Lights (33-22-00)

[Refer to Figure 9.](#)

The overhead ceiling lights supply general overhead lighting to the passengers and crew. They consist of 10 lighting units located on the right side of the passenger compartment ceiling and 11 lighting units located on the left side. Each lighting unit has a ballast inverter and a lamp fixture with one fluorescent light tube.

On pre ModSums 4-457787 AND 4-126450 [Refer to Figures 1 and 11.](#)

On Post ModSums 4-457787 OR 4-126450 [Refer to Figure 12](#)

A pushbutton labelled CABIN OVERHD, on the forward-flight-attendant control panel, controls the overhead lights. When this pushbutton is pressed and released, relay K1 is energized and supplies 28 Vdc to the two groups of ballast inverters.

On pre ModSums 4-457787 AND 4-126450, the left-side overhead lights are powered through the CABIN LTS / PWR 1 circuit breaker (20A) at location S2 on the R MAIN dc bus, on the right dc circuit breaker panel. The right-side overhead lights are powered through the CABIN LTS PWR 2 circuit breaker (20A) at location S1 on the R MAIN dc bus, on the right dc circuit breaker panel. The control of the ceiling lights (necessary to energize relay K1) is supplied through the CABIN LTS / CONT circuit breaker (5A) at location R2 on the R MAIN dc bus, on the right dc circuit breaker panel.

On Post ModSums 4-457787 OR 4-126450, the left-side overhead lights are powered through the CABIN LTS / PWR 1 circuit breaker (15A) at location S2 on the R MAIN dc bus, on the right dc circuit breaker panel. The right-side overhead lights are powered through the CABIN LTS PWR 2 circuit breaker (15A) at location S1 on the R

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MAIN dc bus, on the right dc circuit breaker panel. The control of the ceiling lights (necessary to energize relay K1) is supplied through the CABIN LTS / CONT circuit breaker (5A) at location R2 on the R MAIN dc bus, on the right dc circuit breaker panel. The overhead ceiling lights are replaced from the fluorescent type lamps to the LED type lights.

Aircraft with Modsum 4–422000 or the NextGen interior have a pushbutton labelled DIM OVERHD on the forward–flight–attendant control panel. The DIM OVERHD pushbutton lets the flight attendant dim all the cabin overhead lights.

Accent Lights (33–22–00)

On Post ModSums 4–457787 OR 4–126450 [Refer to Figure 10.](#)

Accent lighting is provided by the accent light assemblies and the underwing ceiling panel accent lights. Accent light assemblies are located along the center aisle of the passenger cabin except for under the wing box where they are replaced by the underwing accent lights.

There are 11 accent lighting assemblies and four individual underwing accent lights. The accent light assemblies are installed above the overhead bins in a such way that one light assembly points towards a right overhead bin. Each accent light illuminates the handle of its respective storage bin when closed, and the interior of the bin when opened. In the wing box area, the underwing accent lights replace this function.

Accent lights are controlled by the accent light pushbutton switch on the flight attendant panel. This provides 28V DC power from the CABIN ACCENT LTS CONT circuit breaker (5A) to the relay K2. The

relay when energized, supplies power from CABIN ACCENT LTS PWR1 (5A) to the accent lights.

Sidewall Lights (33–23–00)

[Refer to Figure 9.](#)

The passenger–compartment sidewall lights supply wash lighting to the sidewall/window reveal area. They consist of lighting units located in the lower part of the Passenger Service Units (PSUs), adjacent to the cabin sidewall.

On pre ModSums 4–457787 AND 4–126450 [Refer to Figures 1 and 13.](#)

On Post ModSums 4–457787 OR 4–126450 [Refer to Figures 1 and 14.](#)

A pushbutton labelled CABIN SIDEWALL, on the forward–flight–attendant control panel, controls the sidewall lights. When this pushbutton is pressed and released, relay K1 is energized and supplies 28 Vdc to the lights.

On pre ModSums 4–457787 AND 4–126450, the left–side sidewall lights are powered through the CABIN SIDEWALL LTS / PWR 1 circuit breaker (20A) at location P2 on the L SECONDARY dc bus, on the left dc circuit breaker panel. The right–side sidewall lights are powered through the CABIN SIDEWALL LTS PWR 2 circuit breaker (20A) at location A1 on the R SECONDARY dc bus, on the right dc circuit breaker panel. The control of the cabin sidewall lights (necessary to energize relay K1) is supplied through the CABIN SIDEWALL LTS / CONT circuit breaker (5A) at location Q2 on the L SECONDARY dc bus, on the left dc circuit breaker panel.

On Post ModSums 4–457787 OR 4–126450, the left–side sidewall lights are powered through the CABIN SIDEWALL LTS / PWR 1



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circuit breaker (15A) at location P2 on the L SECONDARY dc bus, on the left dc circuit breaker panel. The right-side sidewall lights are powered through the CABIN SIDEWALL LTS PWR 2 circuit breaker (15A) at location A1 on the R SECONDARY dc bus, on the right dc circuit breaker panel. The control of the cabin sidewall lights (necessary to energize relay K1) is supplied through the CABIN SIDEWALL LTS / CONT circuit breaker (5A) at location Q2 on the L SECONDARY dc bus, on the left dc circuit breaker panel. The sidewall lights are replaced from the fluorescent type lamps to the LED type lights.

Aircraft with Modsum 4–422000 or the NextGen interior have a pushbutton labelled DIM SIDEWALL on the forward-flight-attendant control panel. The DIM SIDEWALL pushbutton lets the flight attendant dim all the cabin sidewall lights.

Reading Lights and Information Signs (33–24–00)

[Refer to Figure 15.](#)

Reading lights supply overhead lights for each passenger seat, forward and aft flight attendant. The passenger reading lights are installed in the Passenger Service Unit (PSU), at each seat location. The forward and aft flight-attendant reading lights are installed on the ceiling panels, above each flight-attendant seat location.

The PSUs are located at the bottom of the overhead storage bins. Two switchlights, each located next to its reading light, control the lights. The outboard reading light is provided for the window seat passenger and the inboard reading light for the aisle seat passenger. A flight-attendant call button is also installed in the PSU to service call.

The PSU ON/OFF pushbutton, on the forward-flight-attendant control panel, controls the passenger reading lights. When the pushbutton is pushed to the ON position, a red indicator light, on the pushbutton itself, comes on to indicate that the reading lights are operative. Each reading light can then be controlled by its individual switchlight on the PSU, at each seat location. When the pusbutton is pushed to the OFF position, the red indicator light goes off to indicate that the reading light system is inoperative.

The PSU TEST pusbutton, on the forward-flight-attendant control panel, is used to test all of the passenger reading lights and the flight-attendant call system. When the pushbutton is pushed, a red indicator light, on the pushbutton itself, comes on to indicate that the system is operative. All of the passenger reading lights come on momentarily and any unserviceable reading light can be identified. The red indicator light, on the PSU ON/OFF pushbutton, also comes on to indicate that the reading lights are operative and that they can be controlled by their individual switchlights on the PSU, at each seat location. When the PSU TEST pusbutton is pushed again, the red indicator light, on the pushbutton itself, goes off. The red indicator light on the PSU ON/OFF pushbutton stays on to indicate that the system is still operative.

On Pre ModSums 4–457787 AND 4–126450 [Refer to Figure 16.](#)

The passenger left-side reading lights are powered through the READING LTS L circuit breaker (20A) at location Q1 on the R MAIN dc bus, on the right dc circuit breaker panel. The passenger right-side reading lights are powered through the READING LTS R circuit breaker (20A) at location R1 on the R MAIN dc bus, on the right dc circuit breaker panel.

On Post ModSums 4–457787 OR 4–126450 [Refer to Figure 17.](#)

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The ceiling panel and the threshold boarding lights are replaced from the fluorescent lamps to the LED lights.

The passenger left-side reading lights are powered through the READING LTS L circuit breaker (7.5A) at location Q1 on the R MAIN dc bus, on the right dc circuit breaker panel. The passenger right-side reading lights are powered through the READING LTS R circuit breaker (7.5A) at location R1 on the R MAIN dc bus, on the right dc circuit breaker panel.

On Pre ModSums 4-457787 AND 4-126450 [Refer to Figure 18.](#)

On Post ModSums 4-457787 OR 4-126450 [Refer to Figure 19.](#)

The forward and aft flight-attendant reading lights are powered through the ATT RDG LTS circuit breaker (5A) at location Q1 on the L SECONDARY dc bus, on the left dc circuit breaker panel.

[Refer to Figures 22 and 23.](#)

There are several passenger information signs located throughout the aircraft. Four individual information signs are installed in the combination sign unit located on the forward ceiling panel, above the flight compartment door as follows:

- Exit sign
- No smoking sign
- Fasten seat belt sign
- Lavatory occupied sign

Three individual information signs installed in the two advisory light panels located on the center ceiling panels, along the center aisle as follows:

- No smoking sign

- Fasten seat belt sign
- Occupied lavatory sign.

One individual information sign installed in the advisory light panel located on the aft ceiling panel, at the rear of the cabin as follows:

- Exit sign

Two individual information signs installed in a combination sign unit located on the forward-flight-attendant control panel, on the end cap assembly, aft of the passenger door as follows:

- No smoking sign
- Fasten seat belt sign

A single return-to-seat sign installed in the PSU located in the lavatory.

[Refer to Figure 24.](#)

The passenger information signs are controlled from the passenger-warning control panel, on the overhead console, in the flight compartment. Power to the fasten seat belt and no smoking signs is supplied through the PASS WARN SIGNS circuit breaker (7.5A) at location H3 on the L ESSENTIAL dc bus

The PSU ON/OFF pushbutton also controls the operation of the lavatory sign. When the LAVATORY pushbutton is pressed to the ON position, 28 vdc power is supplied to the lavatory PSU. The circuit for the PSU sign is powered through the PASS WARN SIGNS circuit breaker (7.5A) at location H3 on the L ESSENTIAL dc bus.



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When the LAVATORY pushbutton is pushed to the OFF position, the lavatory sign off. the

[Refer to Figure 20.](#)

On aircraft without Modsum 4–428400, when the NO SMOKING – OFF toggle switch SW–S1 is set to the NO SMOKING position or when the LANDING GEAR selector lever, in the flight compartment, is in the DN position (landing configuration), all of the no smoking signs come on and a low tone chime is heard. When the NO SMOKING – OFF toggle switch SW–S1 is set to the OFF position or when the LANDING GEAR selector lever is in the UP position, the no smoking signs go off and the low tone chime is heard again.

[Refer to Figure 20.](#)

On aircraft with Modsum 4–428400 and without Modsum 4–457027, the no smoking signs are on at all time and the low tone chime system is deactivated.

[Refer to Figure 20.](#)

On aircraft with Modsum 4–428400 and Modsum 4–457027, the no smoking signs are on at all time and a low tone chime is heard when the NO SMOKING – OFF toggle switch SW–S1 is set to the NO SMOKING or OFF position.

On aircraft with ModSums 4–457787 OR 4–126450, [Refer to Figures 1 and 21.](#)

On aircraft with ModSums 4–457787 OR 4–126450 incorporated, the passenger warning lights are replaced from the fluorescent lamps to the LED lights.

Lavatory Lights (33–25–00)

On Pre ModSums 4–457787 AND 4–126450 [Refer to Figure 25.](#)

On Post ModSums 4–457787 OR 4–126450 [Refer to Figure 26.](#)

On aircraft without ModSums 4–457787 AND 4–126450 incorporated, fluorescent lights supply either full or dim illumination to the forward lavatory.

On aircraft with ModSums 4–457787 OR 4–126450 incorporated, LED lights supply either full or dim illumination to the forward lavatory.

The lavatory lights are either on or dim when the aircraft is powered. The lavatory door latch micro-switch control the operation of the lights. When the lavatory door latch is in the unlocked position, power is supplied to the lavatory lights for continuous dim illumination. When the lavatory door latch is in the locked position, the micro-switch is activated and the lights provide full illumination (bright).

On the forward-flight-attendant control panel when the LAVATORY push-button is pushed, a red indicator light and the LAVATORY sign comes on.

A flight-attendant call button is supplied in the PSU for service call (Refer to AMM 25–41–02).

The lavatory lights are powered through the LAVATORY LTS circuit breaker (7.5A) at location R2 on the L SECONDARY dc bus.

On aircraft with MS 4–309208 incorporated, the aft lavatory has a LED lights unit to supply full or dim illumination to the aft lavatory. A push switch is located on the high-up on the aft face of the lavatory and when the switch is pushed the inter lighting and the lavatory available indication light illuminates. The lavatory door latch

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micro-switch control the operation of the lights. When the lavatory door latch is in the unlocked position, power is supplied to the lavatory lights for continuous dim illumination. When the door latch micro switch is locked position, the lavatory LED lights goes to bright illumination and at the same time the red diagonal bar (lavatory occupied) in the oval sign illuminates on the forward face of the lavatory.

The two LED lights are installed at the forward and aft lavatory. One additional LED ceiling light is installed adjacent to the aft lavatory. This additional LED light provides sufficient intensity to charge the floor mounted photoluminescent emergency escape path lighting feature installed along the center aisle.

Galley Lights (33-26-00)

On pre NextGen aircraft, [Refer to Figure 27.](#)

Two lights supply overhead illumination to the galley. The lights are installed in the aft-flight attendant area, on the left and right ceiling panel. Each lighting unit has a lamp fixture with two fluorescent lamps and a dual ballast inverter.

On NextGen aircraft, [Refer to Figure 28.](#)

Two lights supply overhead illumination to the galley. The lights are installed in the aft-flight attendant area, on the left and right ceiling panel. Each lighting unit have LED lights.

Push-buttons, located on the galley control panel, near the top of the galley, control the operation of these lights. The galley has also a worklight to supply illumination to its countertop area. Power is supplied through the GALLEY PWR circuit breaker (20A) at location B1 on the R SECONDARY dc bus.

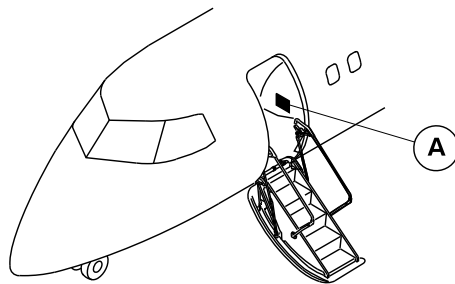
Training Information Points

To avoid loss of battery power, the boarding lights must not be left on unless external DC power is available.



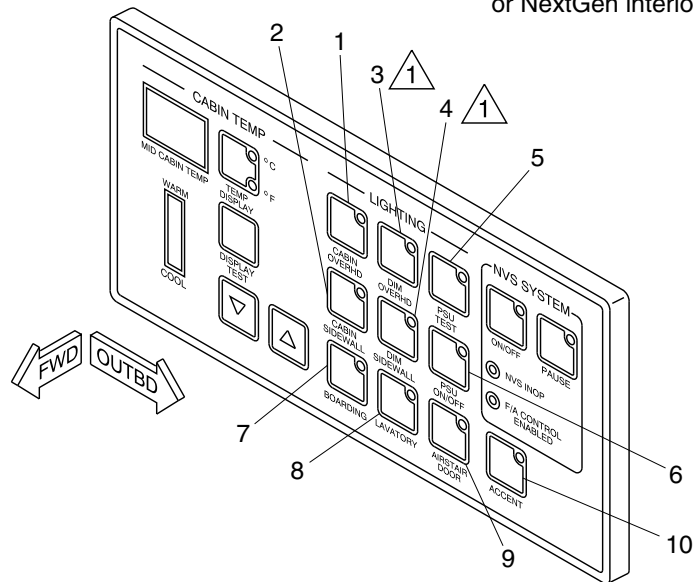
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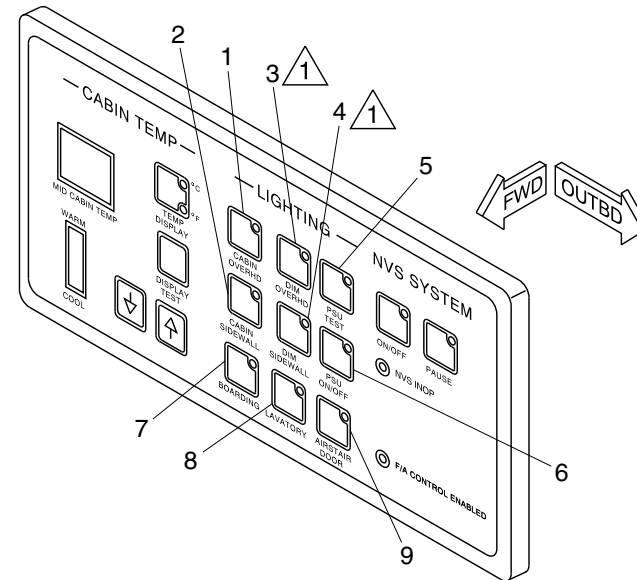
NOTE

- 1 On aircraft with modsum 4-422000 or NextGen interior.



A FLIGHT ATTENDANT PANEL WITH SLEEP MODE

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A FLIGHT ATTENDANT PANEL WITHOUT SLEEP MODE

LEGEND

1. Cabin overhead lighting pushbutton switch.
2. Cabin sidewall lighting pushbutton switch.
3. Cabin overhead lighting dim pushbutton switch.
4. Cabin sidewall lighting dim pushbutton switch.
5. PSU test pushbutton switch.
6. PSU power pushbutton switch.
7. Boarding light pushbutton switch.
8. Lavatory light pushbutton switch.
9. Airstair steps light pushbutton switch.
10. Accent lights pushbutton switch (NextGen interior only).

FLIGHT ATTENDANT CONTROL PANEL
Figure 1

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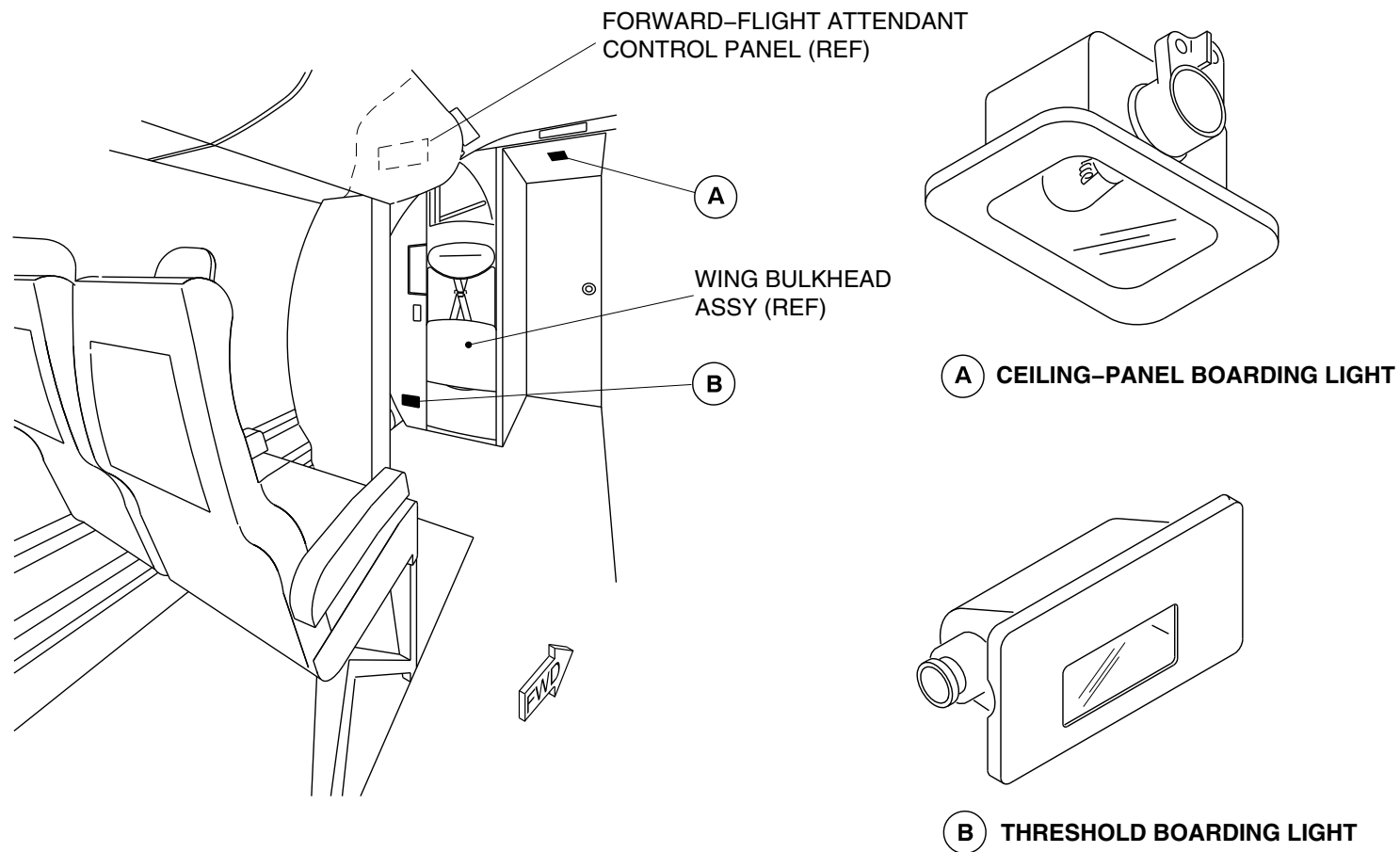
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Threshold and Ceiling-Panel Boarding-Lights
Figure 2

PSM 1-84-2A
EFFECTIVITY:
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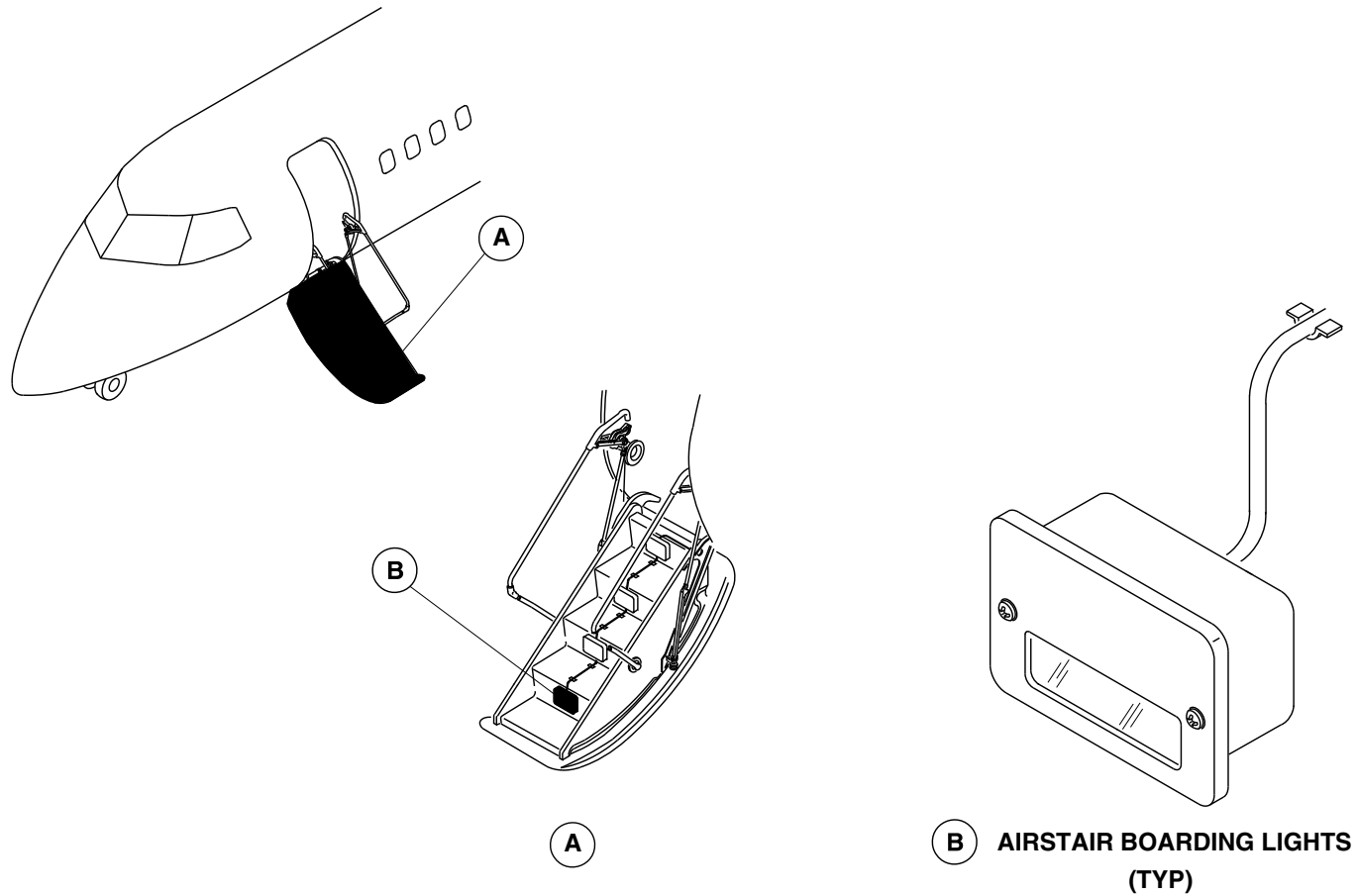
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Airstair Boarding-Lights
Figure 3

PSM 1-84-2A
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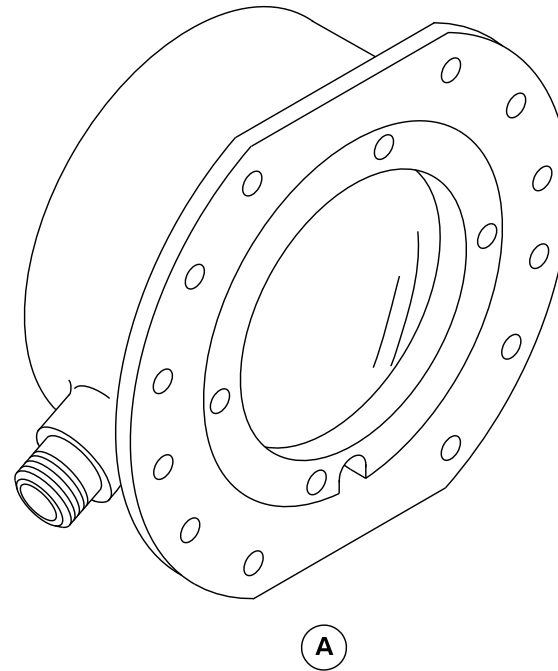
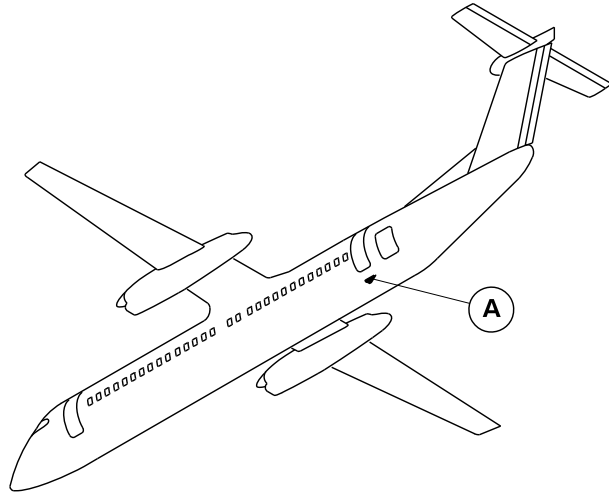
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Aft Entry Airstair Boarding Light
Figure 4

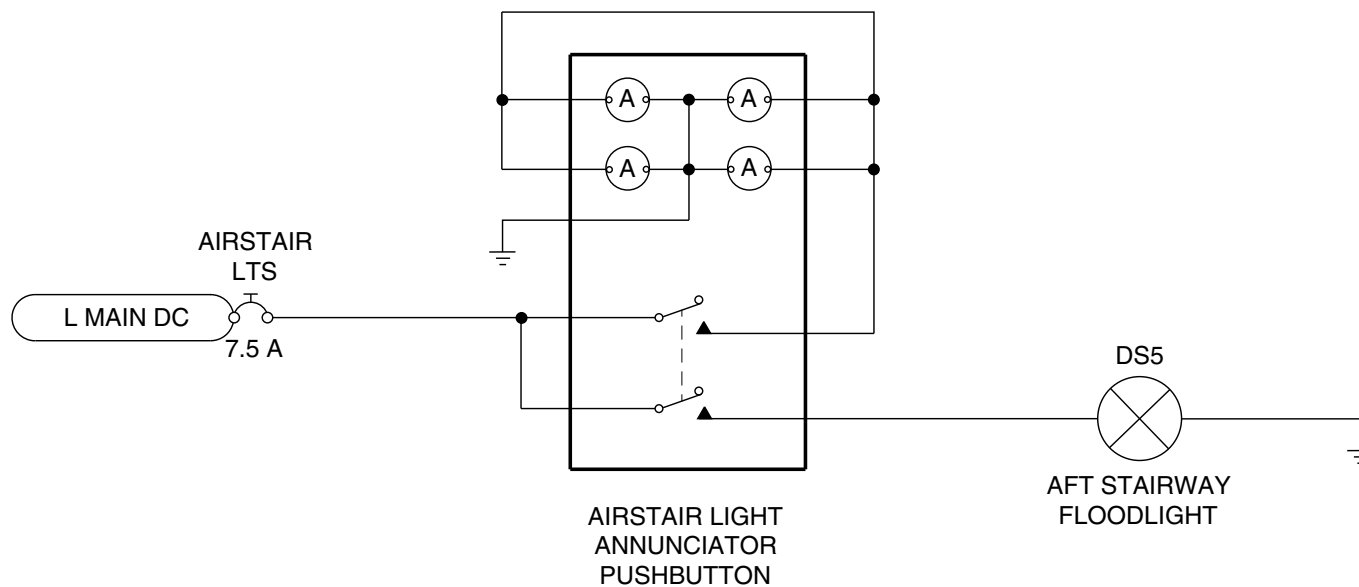
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Aft Entry Airstair Boarding Light – Wiring Schematic
Figure 5

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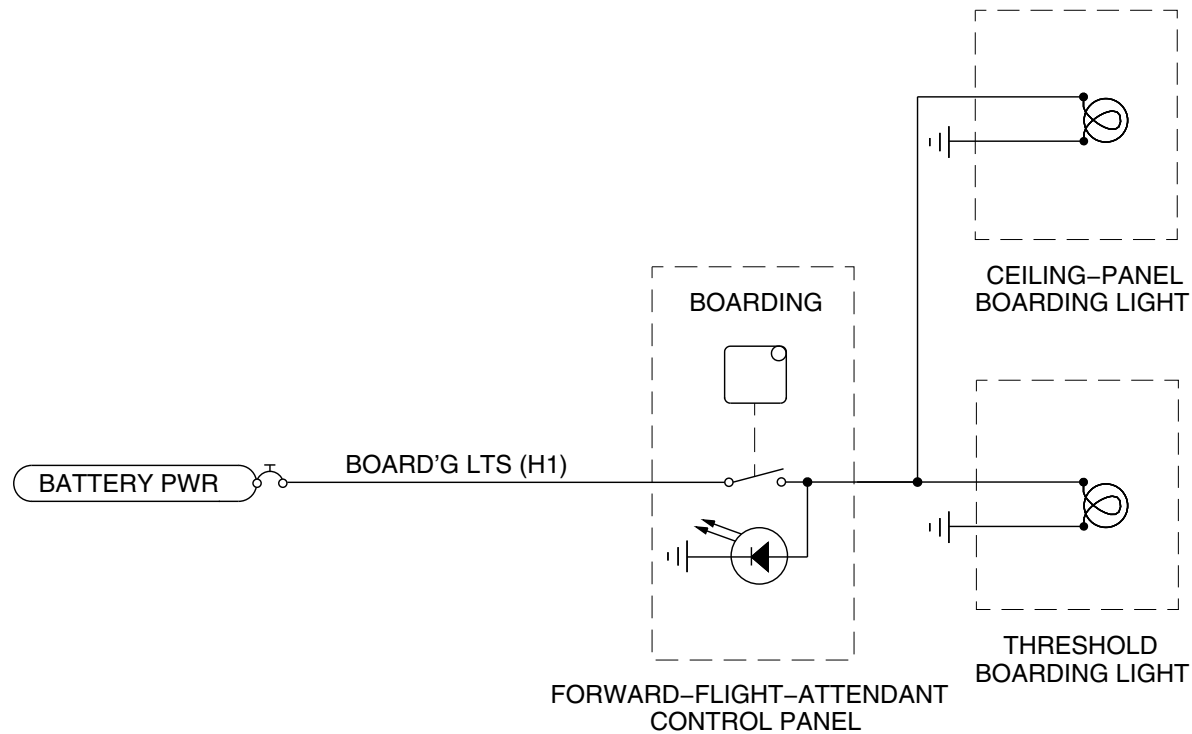
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Threshold and Ceiling-Panel Boarding-Lights Wiring-Schematic
Figure 6

PSM 1-84-2A
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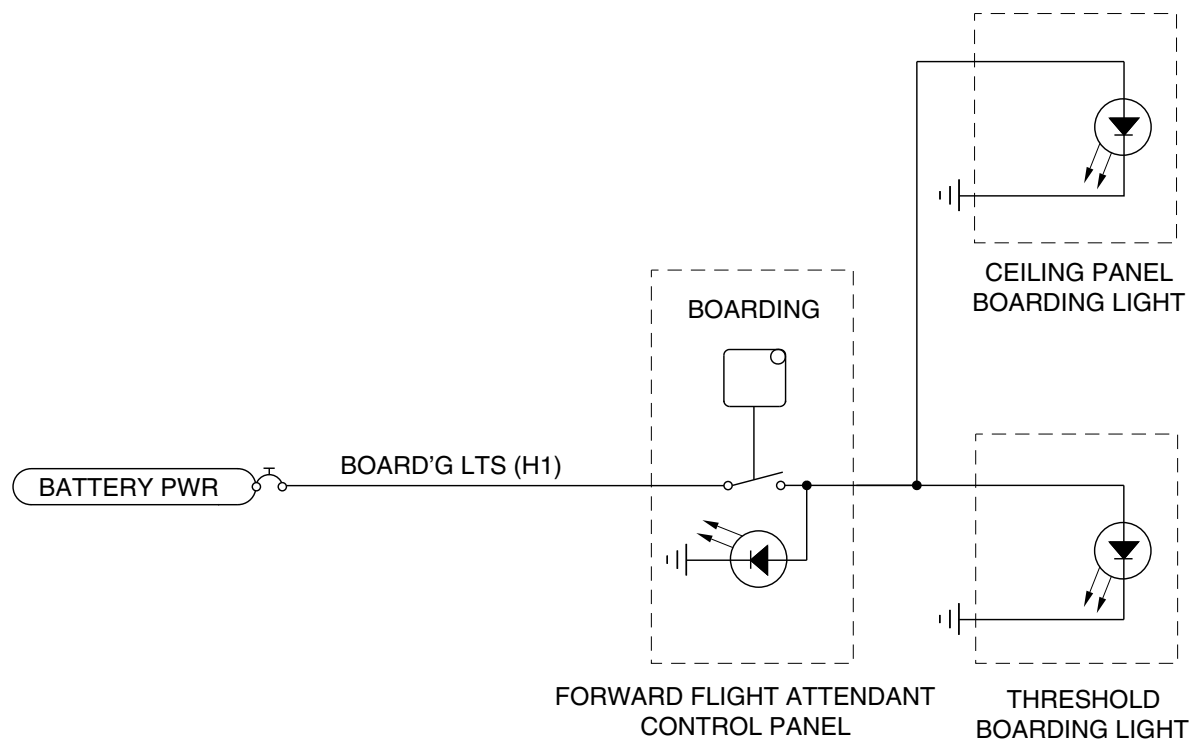
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cg1085a01.dg, bm, aug26/2010

Threshold and Ceiling Panel Boarding Lights – Wiring Schematic
Figure 7

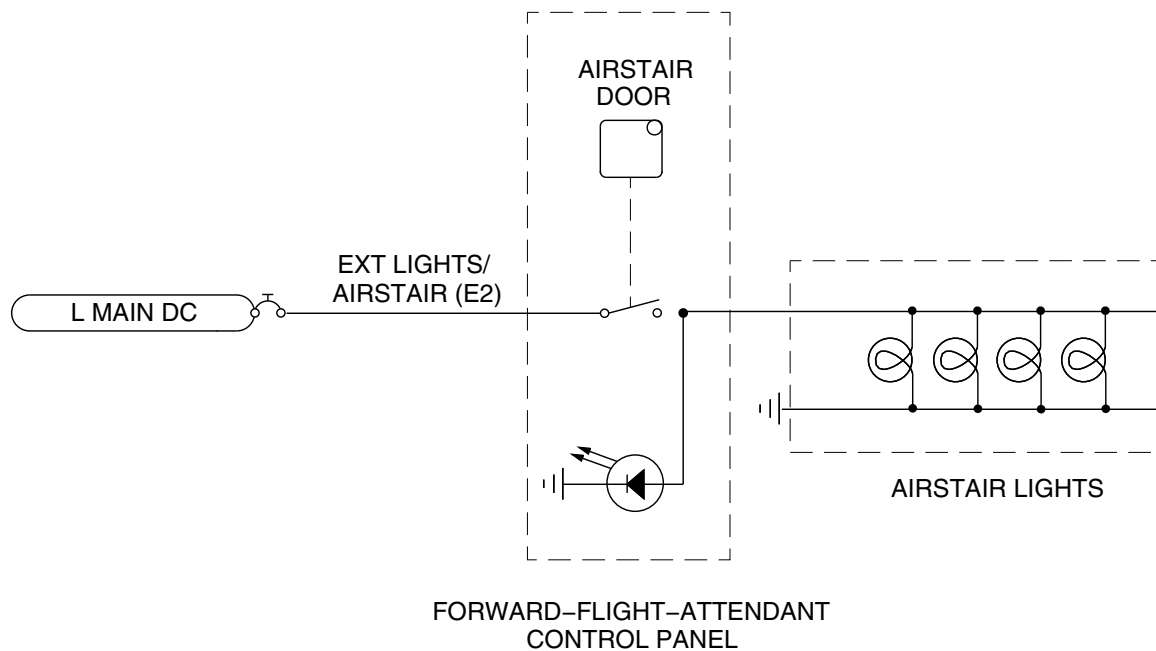
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Airstair-Boarding-Lights Wiring Schematic
Figure 8

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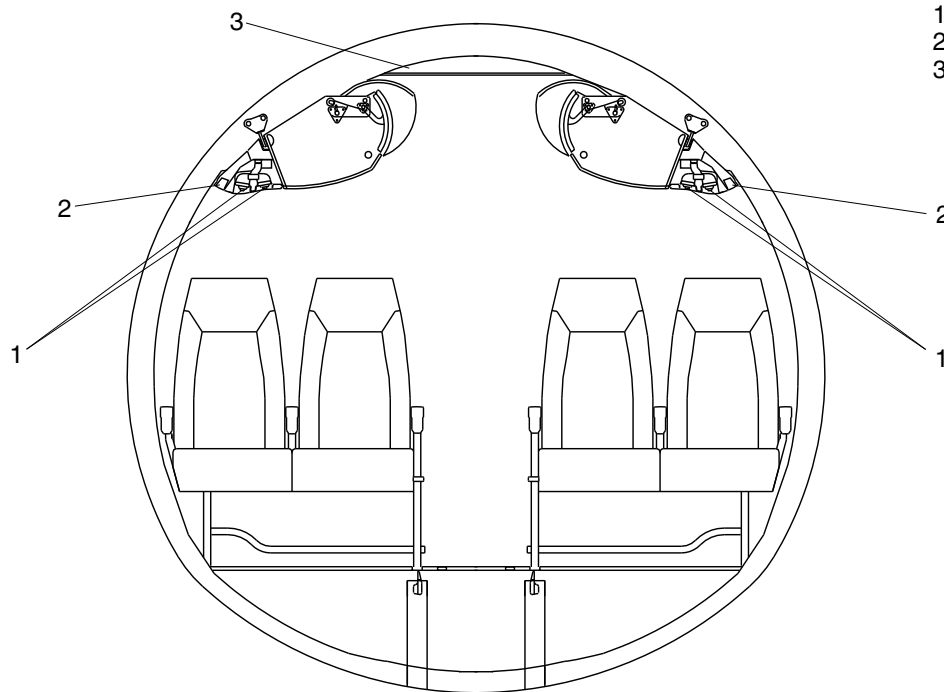


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LEGEND

- 1. Reading lights.
- 2. Sidewall lights.
- 3. Overhead ceiling lights.



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Overhead Lights
Figure 9

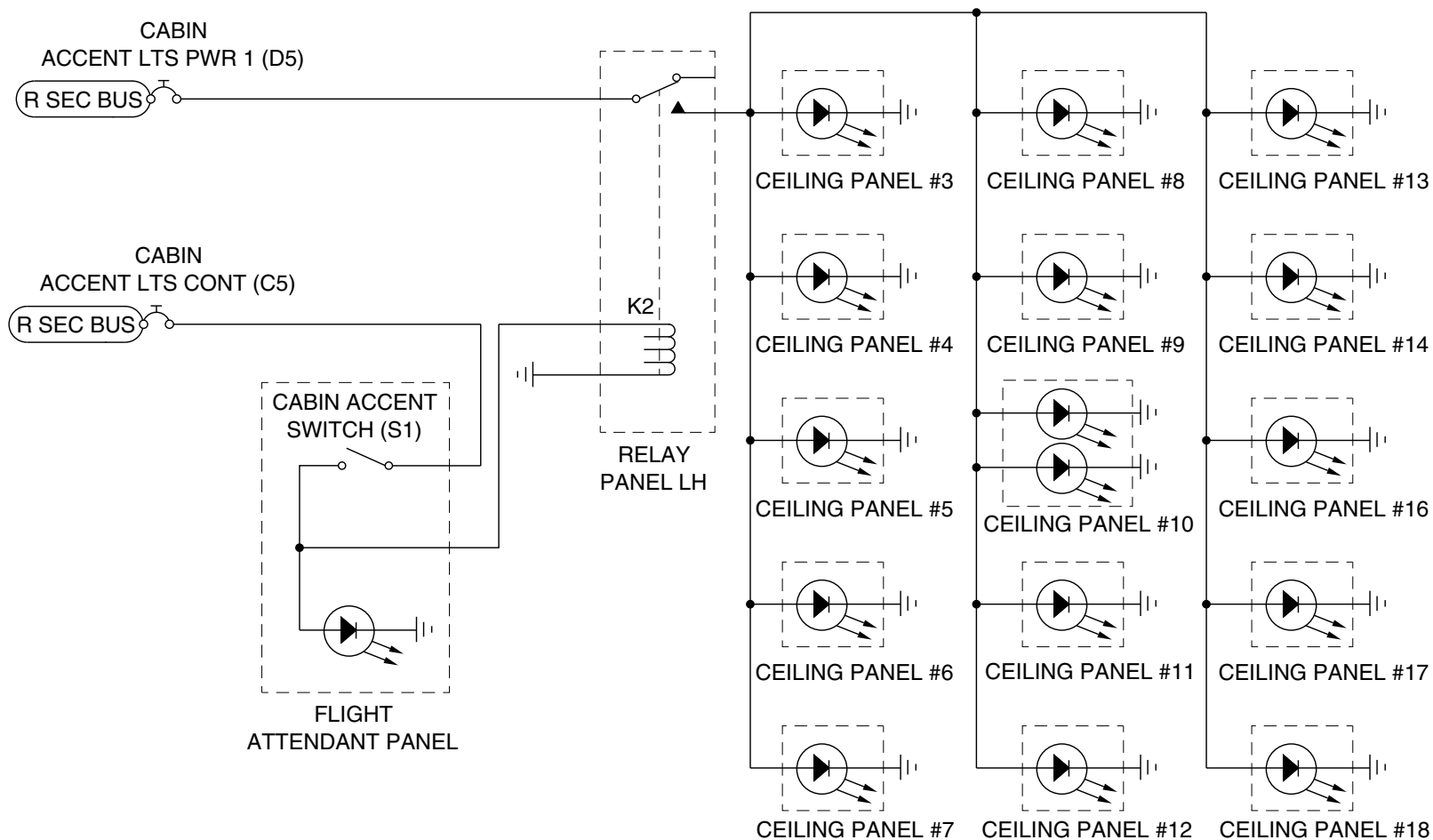
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Accent Light – Wiring Schematic
Figure 10

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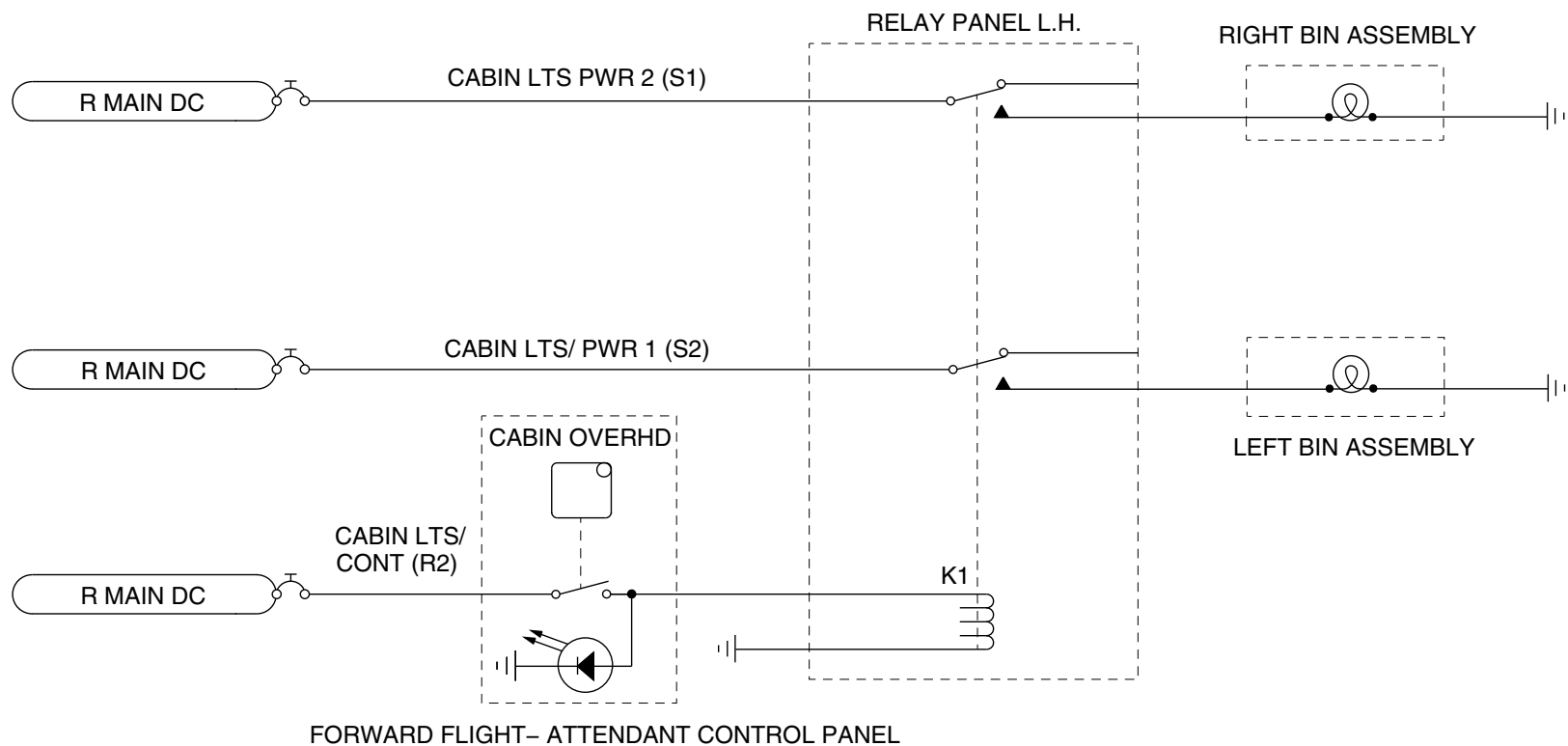
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Overhead-Ceiling-Lights Wiring Schematic
Figure 11

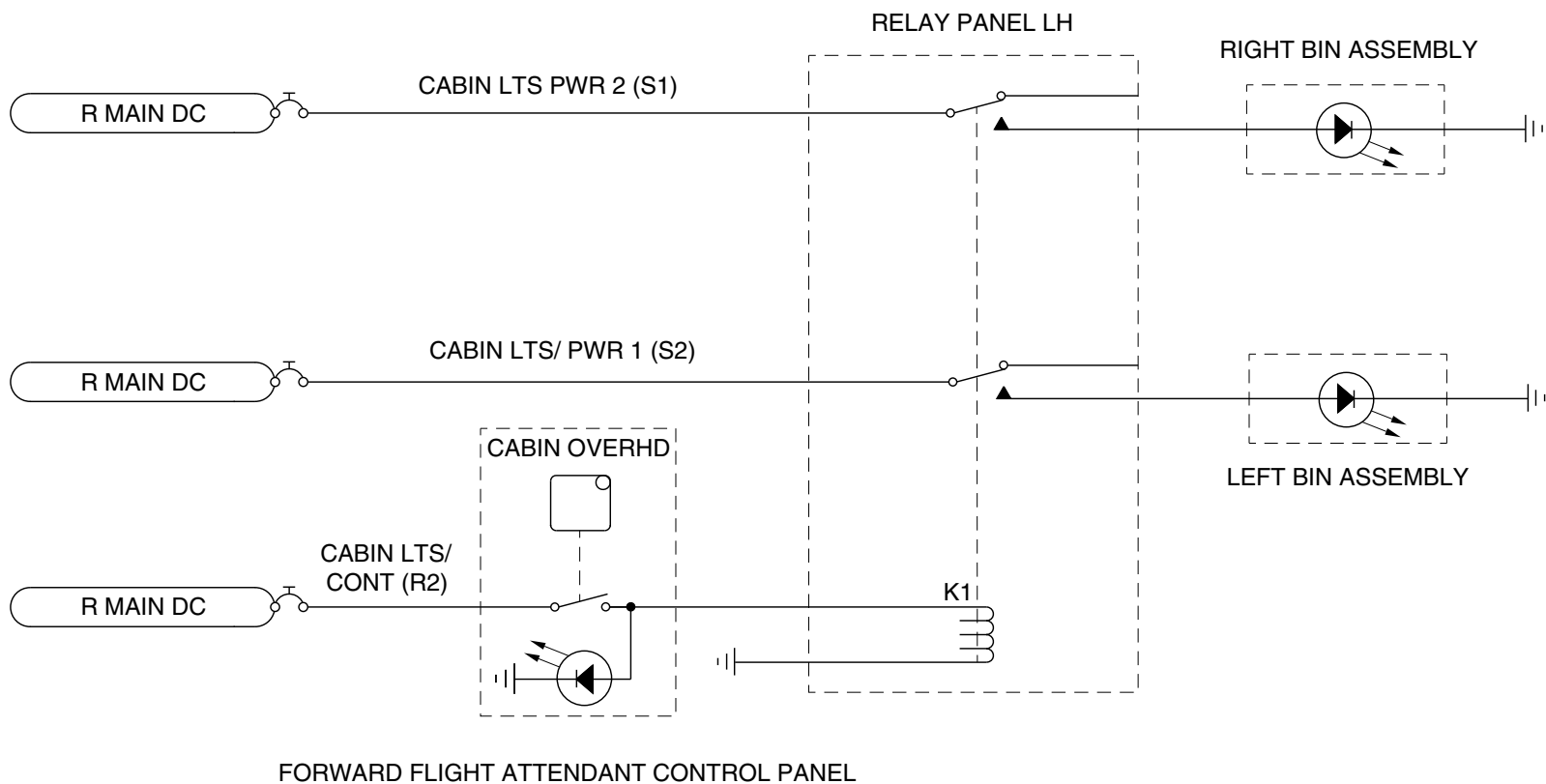
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Overhead Ceiling Lights – Wiring Schematic
Figure 12

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The diagram illustrates the electrical wiring for the Forward-Flight Attendant Control Panel. It features three main power inputs on the left, each represented by a rounded rectangle with a terminal block symbol:

- R SEC DC**: Connected to **CABIN SIDEWALL LTS PWR 2 (A1)**.
- L SEC DC**: Connected to **CABIN SIDEWALL LTS / PWR 1 (P2)**.
- L SEC DC**: Connected to **CABIN SIDEWALL LTS / CONT (Q2)**.

The wiring is organized into three main functional areas, each enclosed in a dashed box:

- RELAY PANEL L.H.**: Contains two relays. The top relay is controlled by the R SEC DC line and the bottom relay by the L SEC DC line (PWR 1). Both relays have a common terminal connected to the **RIGHT BIN ASSEMBLY** and a normally closed terminal connected to the **LEFT BIN ASSEMBLY**.
- CABIN SIDEWALL**: Contains a switch controlled by the **CABIN SIDEWALL LTS / CONT (Q2)** line. The switch is connected to a motor symbol, which is in turn connected to a battery symbol.
- RIGHT BIN ASSEMBLY** and **LEFT BIN ASSEMBLY**: Each contains three parallel light bulb symbols connected to the relay outputs.

At the bottom, a battery symbol is connected to the common terminal of the relay K1, which is also connected to the **LEFT BIN ASSEMBLY**.

Sidewall-Lights Wiring Schematic
Figure 13

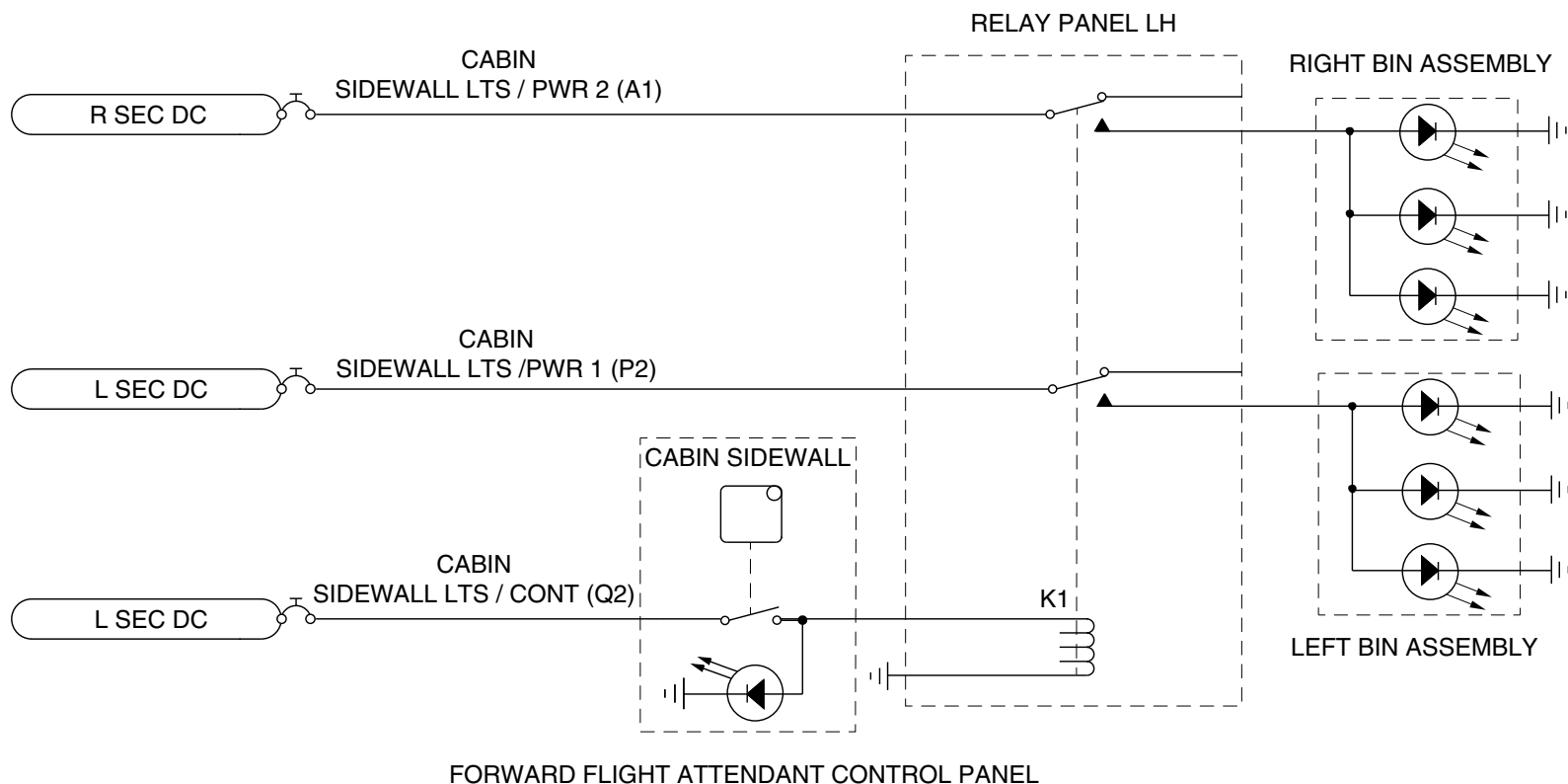
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Sidewall Lights – Wiring Schematic
Figure 14

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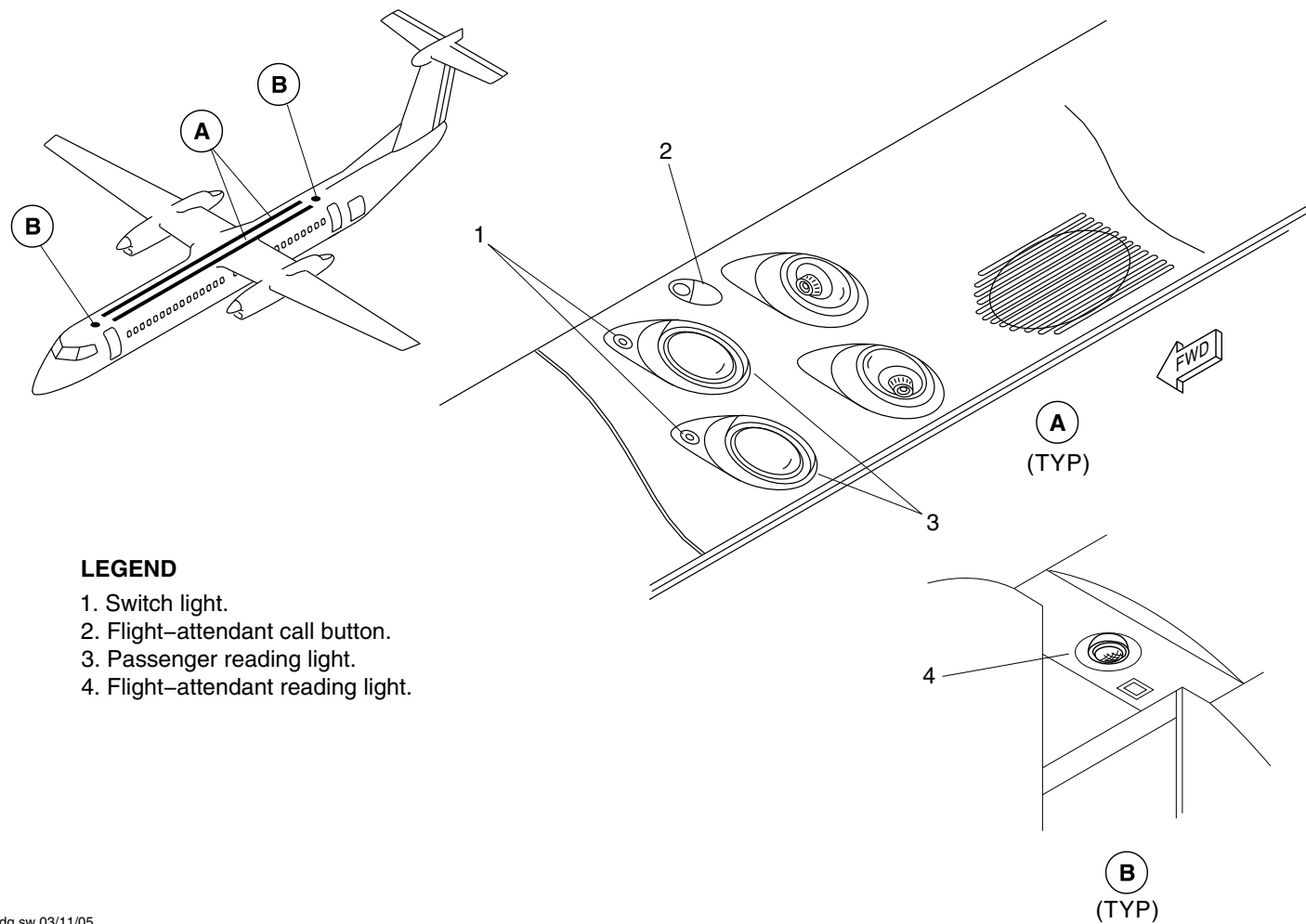
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PCU
Figure 15

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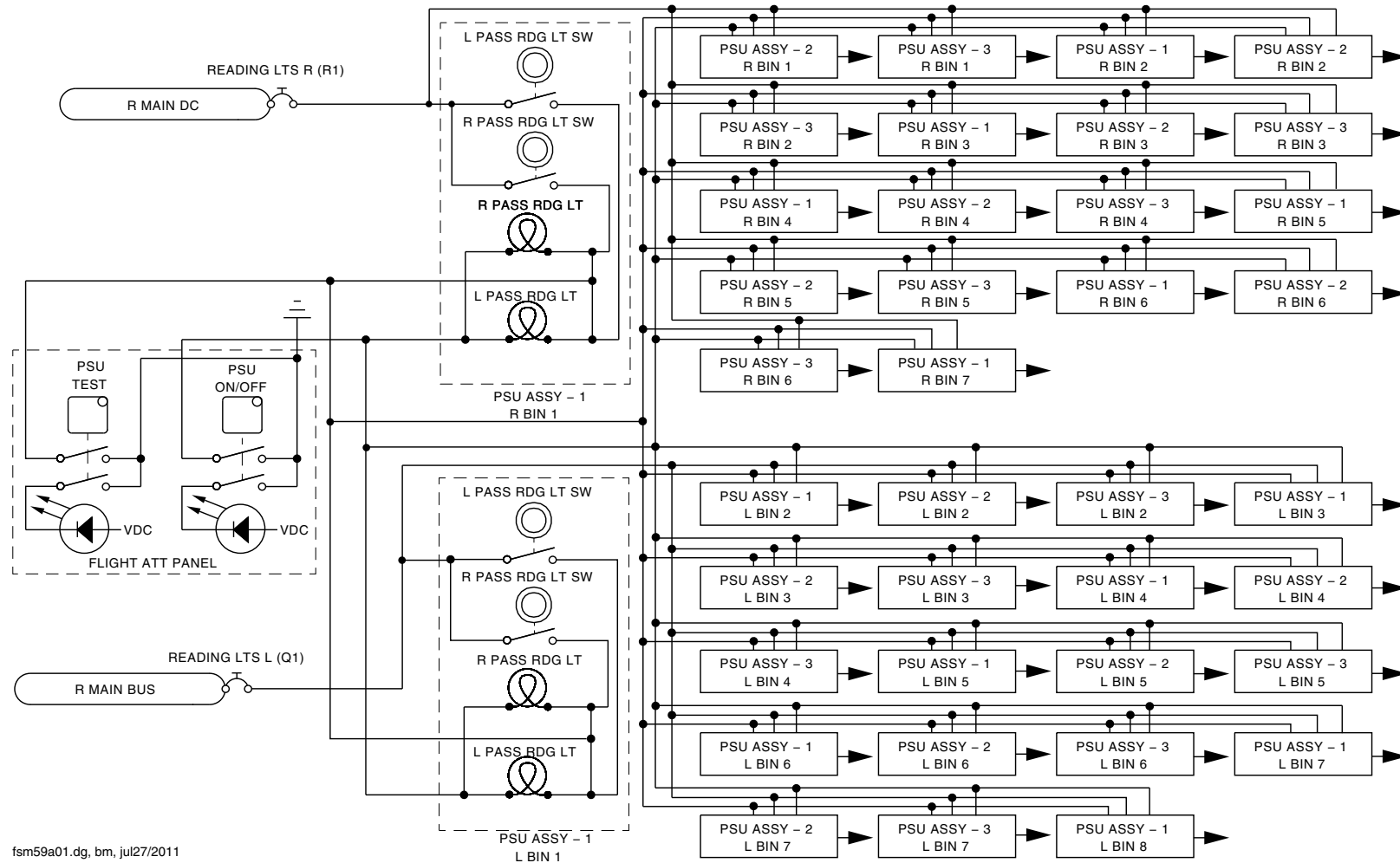
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Passenger-Reading-Lights Wiring Schematic
Figure 16

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The diagram illustrates the power distribution system, showing the connection between the main DC and bus systems, the flight attendant panel, and the various PSU assemblies and lighting systems.

Power Sources and Distribution:

- R MAIN DC:** The primary power source for the right-hand side of the aircraft.
- R MAIN BUS:** The main bus for the right-hand side, connected to the R MAIN DC.
- READING LTS R (R1):** Reading lights for the right-hand side, connected to the R MAIN DC.
- READING LTS L (Q1):** Reading lights for the left-hand side, connected to the R MAIN BUS.

Flight Attendant Panel (FLIGHT ATT PANEL):

- PSU TEST:** A switch for testing the PSU.
- PSU ON/OFF:** A switch for turning the PSU on or off.
- VDC:** Two VDC (Variable Direct Current) indicators, one for the right-hand side and one for the left-hand side.

Passenger Service Units (PSU) and Lighting:

- PSU ASSY - 1, 2, 3:** Passenger Service Units for different rows of seats.
- R BIN 1, 2, 3, 4, 5, 6, 7:** Right-hand side bins (seats) with associated PSU assemblies.
- L BIN 1, 2, 3, 4, 5, 6, 7, 8:** Left-hand side bins (seats) with associated PSU assemblies.
- L PASS RDG LT SW, R PASS RDG LT SW:** Switches for the left and right passenger reading lights.
- L PASS RDG LT, R PASS RDG LT:** Left and right passenger reading lights.

Wiring and Connections:

- The R MAIN DC is connected to the R MAIN BUS and the READING LTS R (R1).
- The R MAIN BUS is connected to the READING LTS L (Q1) and the various PSU assemblies and lighting systems on the right-hand side.
- The FLIGHT ATT PANEL is connected to the R MAIN DC and the R MAIN BUS.
- The PSU assemblies are connected to the R MAIN BUS and the various bins (seats).
- The passenger reading lights are connected to the R MAIN DC and the R MAIN BUS.

Legend:

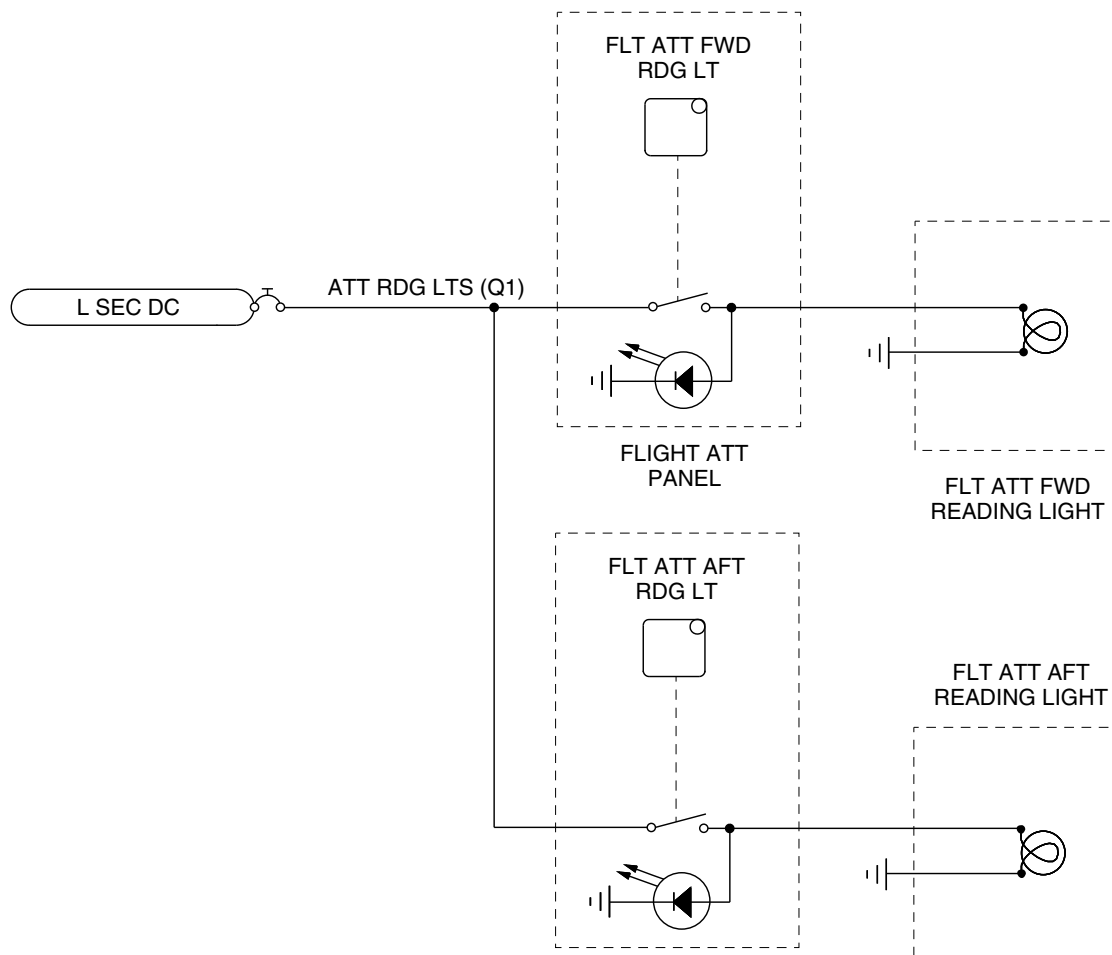
- PSU ASSY - 1, 2, 3:** Passenger Service Unit Assembly
- R BIN 1, 2, 3, 4, 5, 6, 7:** Right-hand side Bin (Seat)
- L BIN 1, 2, 3, 4, 5, 6, 7, 8:** Left-hand side Bin (Seat)
- L PASS RDG LT SW, R PASS RDG LT SW:** Passenger Reading Light Switch
- L PASS RDG LT, R PASS RDG LT:** Passenger Reading Light
- VDC:** Variable Direct Current Indicator
- FLIGHT ATT PANEL:** Flight Attendant Panel
- READING LTS R (R1), READING LTS L (Q1):** Reading Light System
- R MAIN DC, R MAIN BUS:** Right-hand side Main DC and Main Bus

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Flight-Attendant Reading-Lights Wiring-Schematic
Figure 18

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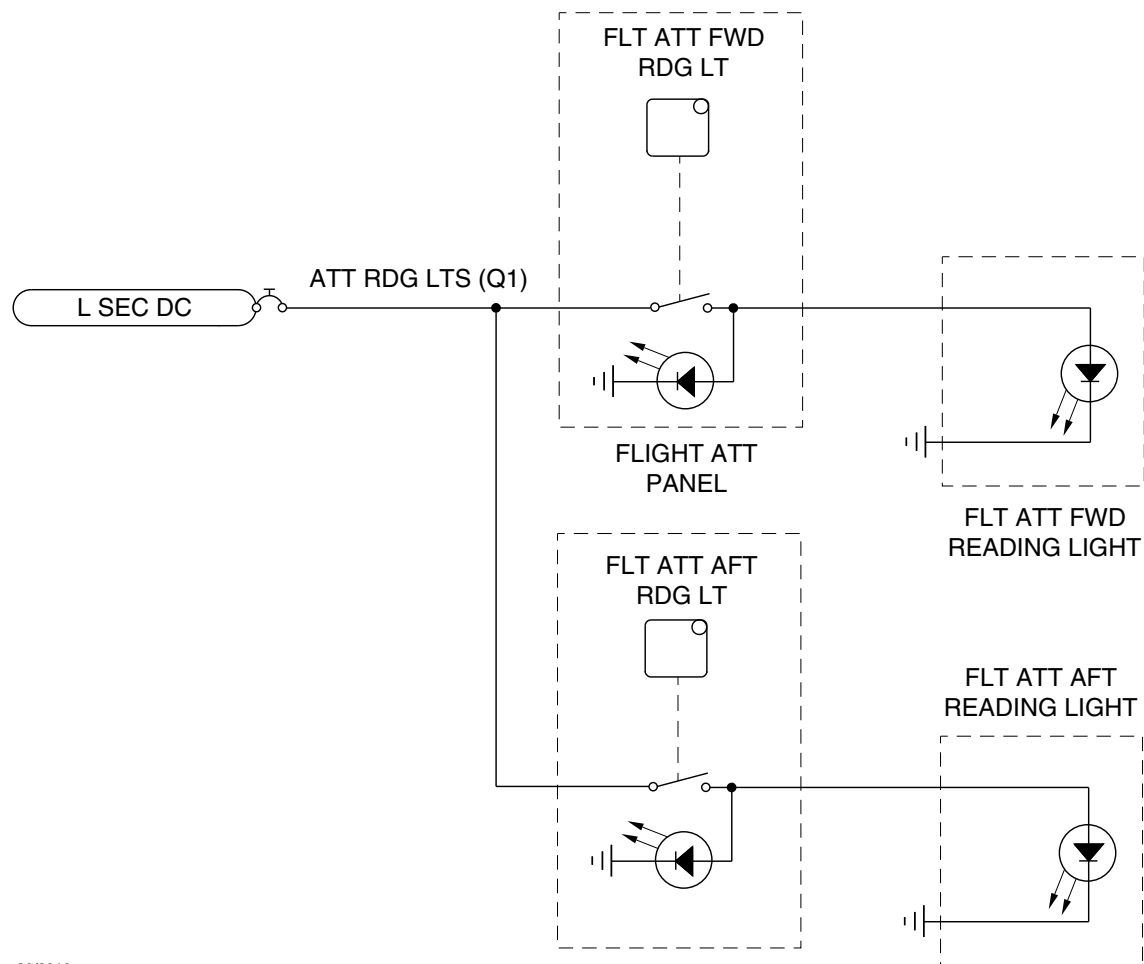
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cg1094a01.dg, bm, aug30/2010

Flight Attendant Reading Lights – Wiring Schematic
Figure 19

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-20-00
Config 001

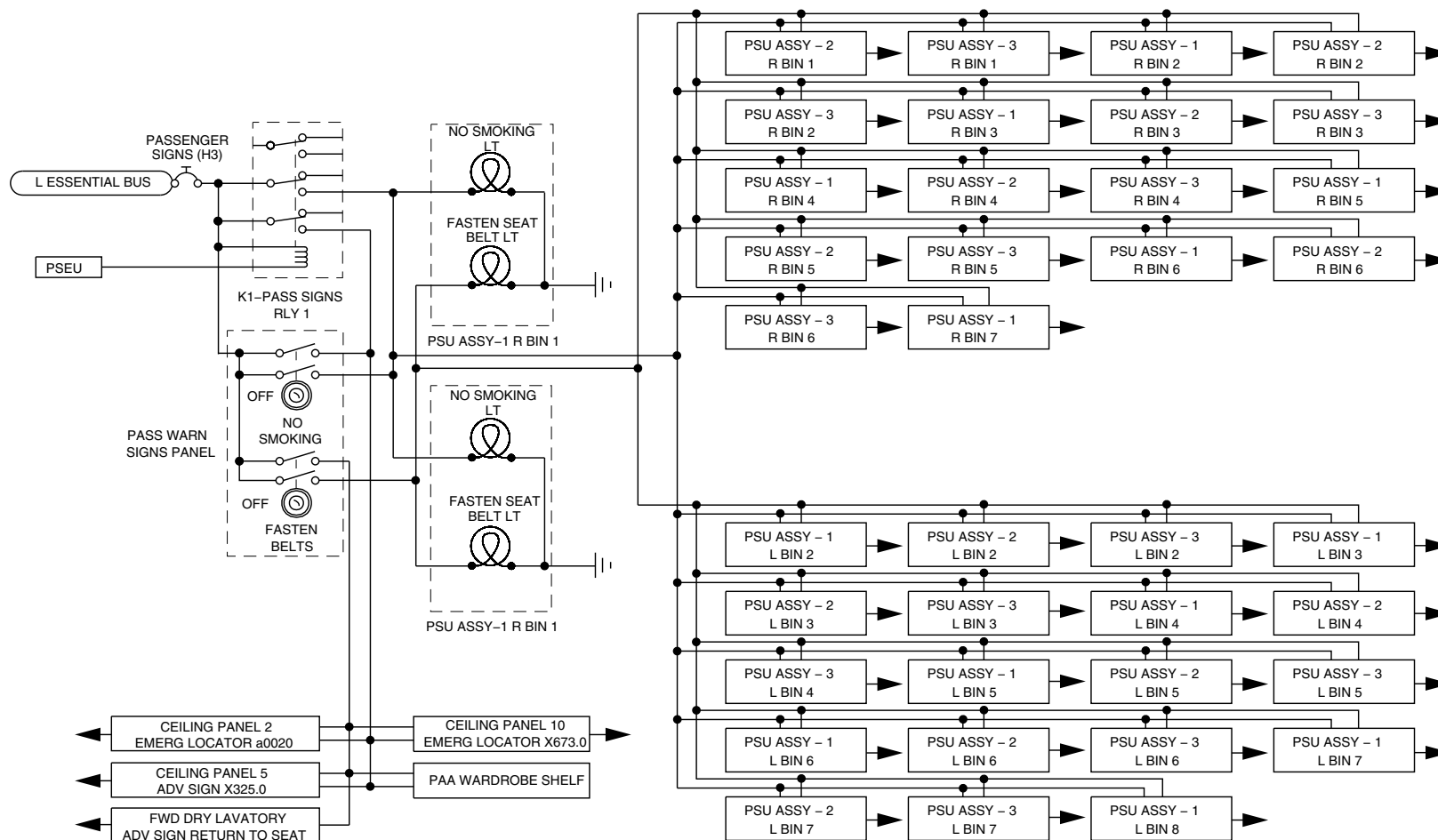
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fsm58a01.dg, bm, jul27/2011

Passenger Warning Lights Wiring Schematic
Figure 20

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-20-00
Config 001

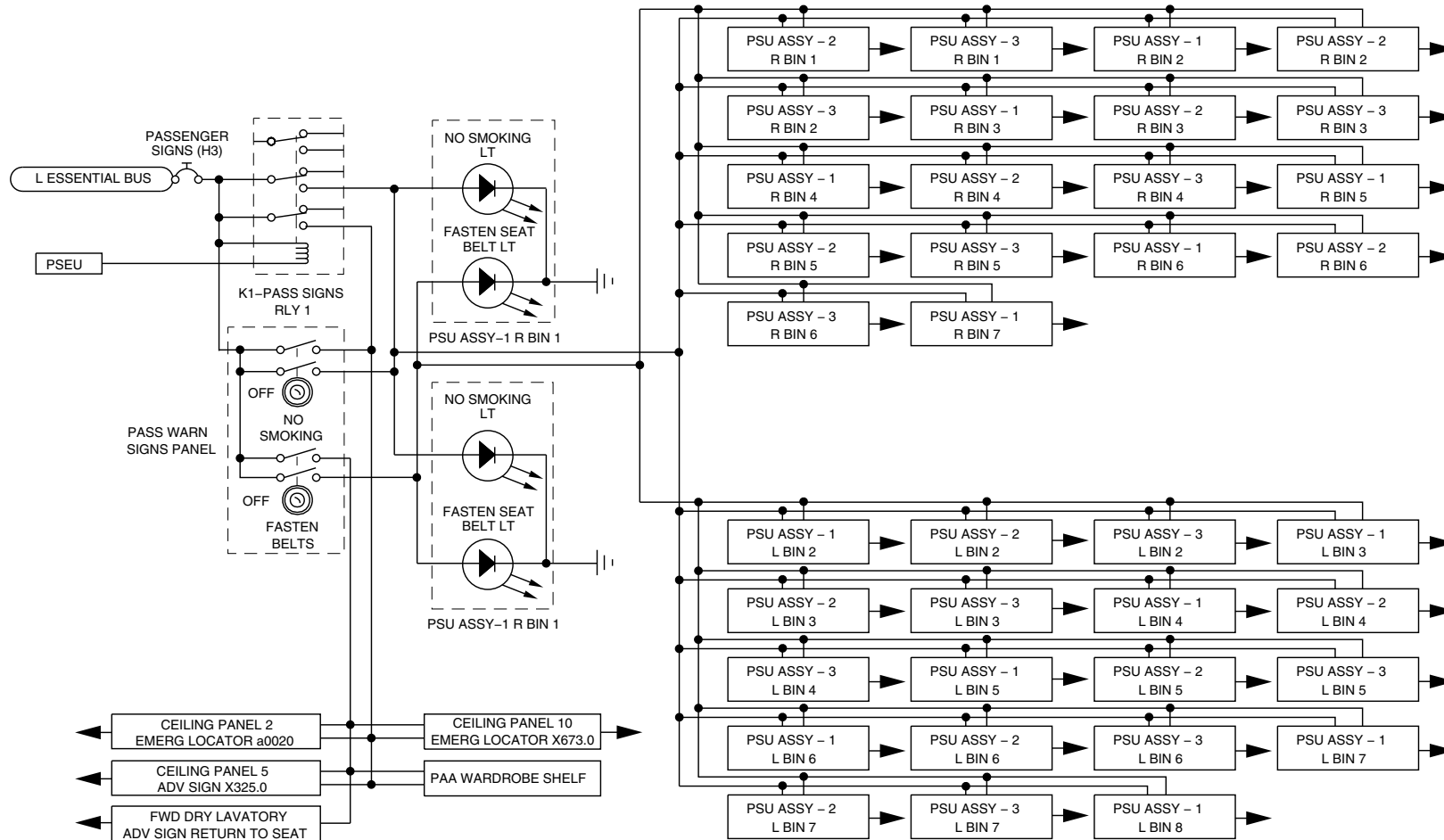
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cg1095a01.dg, bm, jul27/2011

Passenger Warning Lights – Wiring Schematic
Figure 21

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-20-00
Config 001

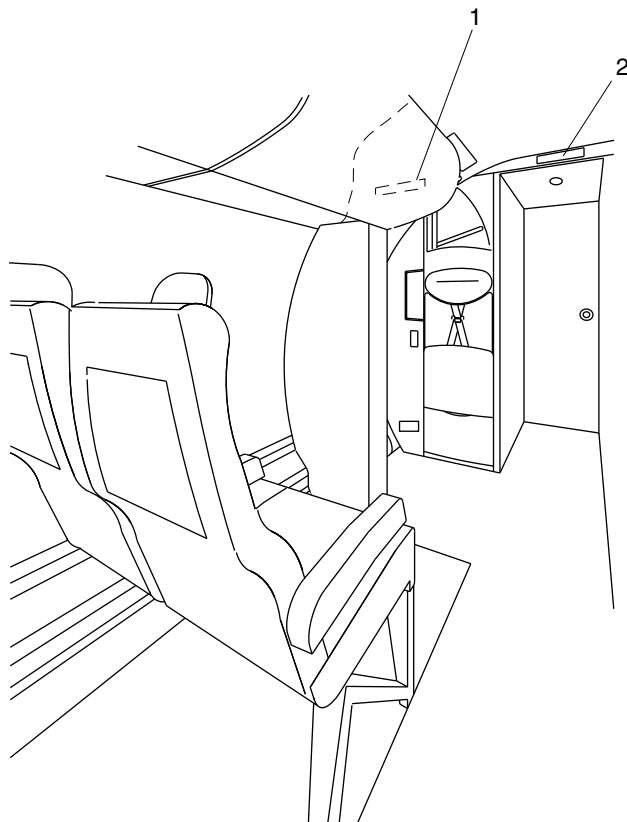
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LEGEND

1. NO SMOKING/FASTEN SEAT BELT Sign
On Bin End Cap.
2. Combination Sign:
EXIT
NO SMOKING
FASTEN SEAT BELT
LAVATORY OCCUPIED

NOTE

View looking forward from
passenger compartment.

fs592a01.cgm

PASSENGER INFORMATION SIGNS I.
Figure 22

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-20-00
Config 001

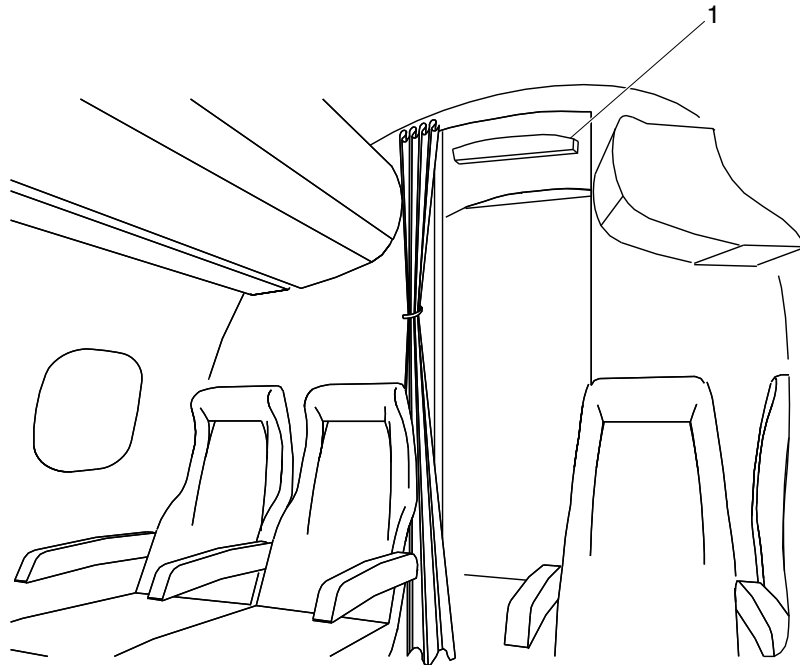
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LEGEND

1. EXIT lighted sign (mounted on aft ceiling panel).

NOTE

View looking aft in
passenger compartment.

cg5544a01.dg, sk/gv, feb28/2019

Passenger Information Signs II
Figure 23

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-20-00
Config 001

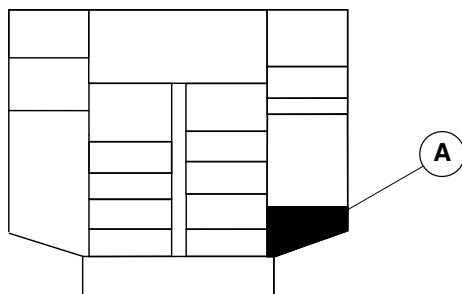
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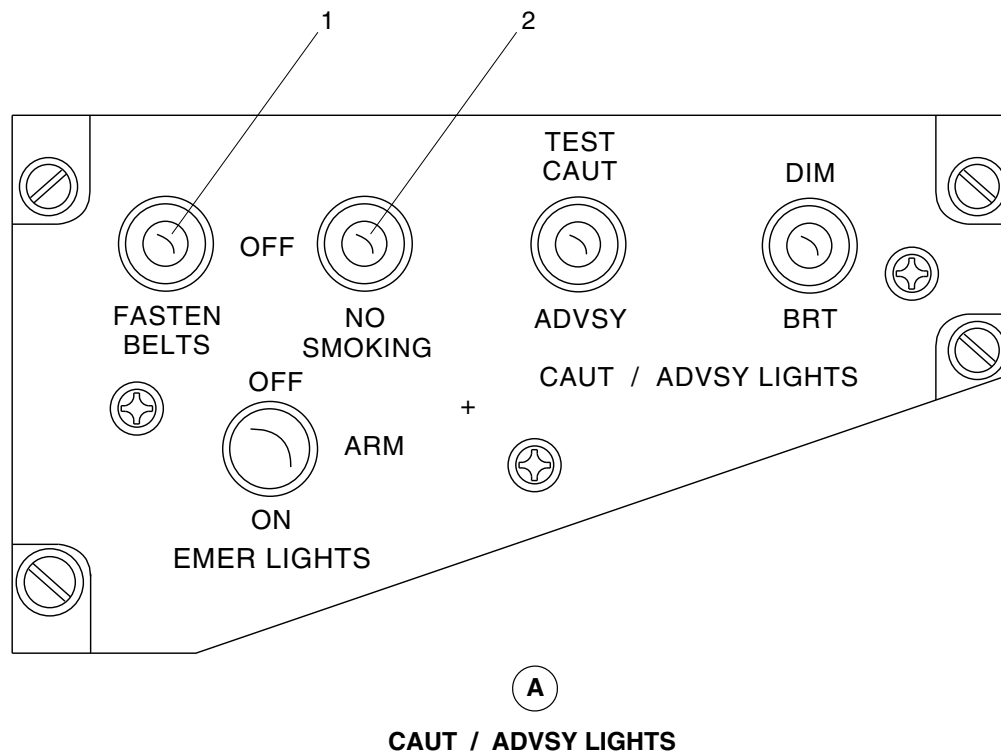
AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



OVERHEAD CONSOLE

LEGEND

1. Fasten seat belt sign toggle switch.
2. No smoking sign toggle switch.



fsb41a01.dg, sw, 07/11/05

Passenger-Warning Control Panel
Figure 24

PSM 1-84-2A
EFFECTIVITY:
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Config 001

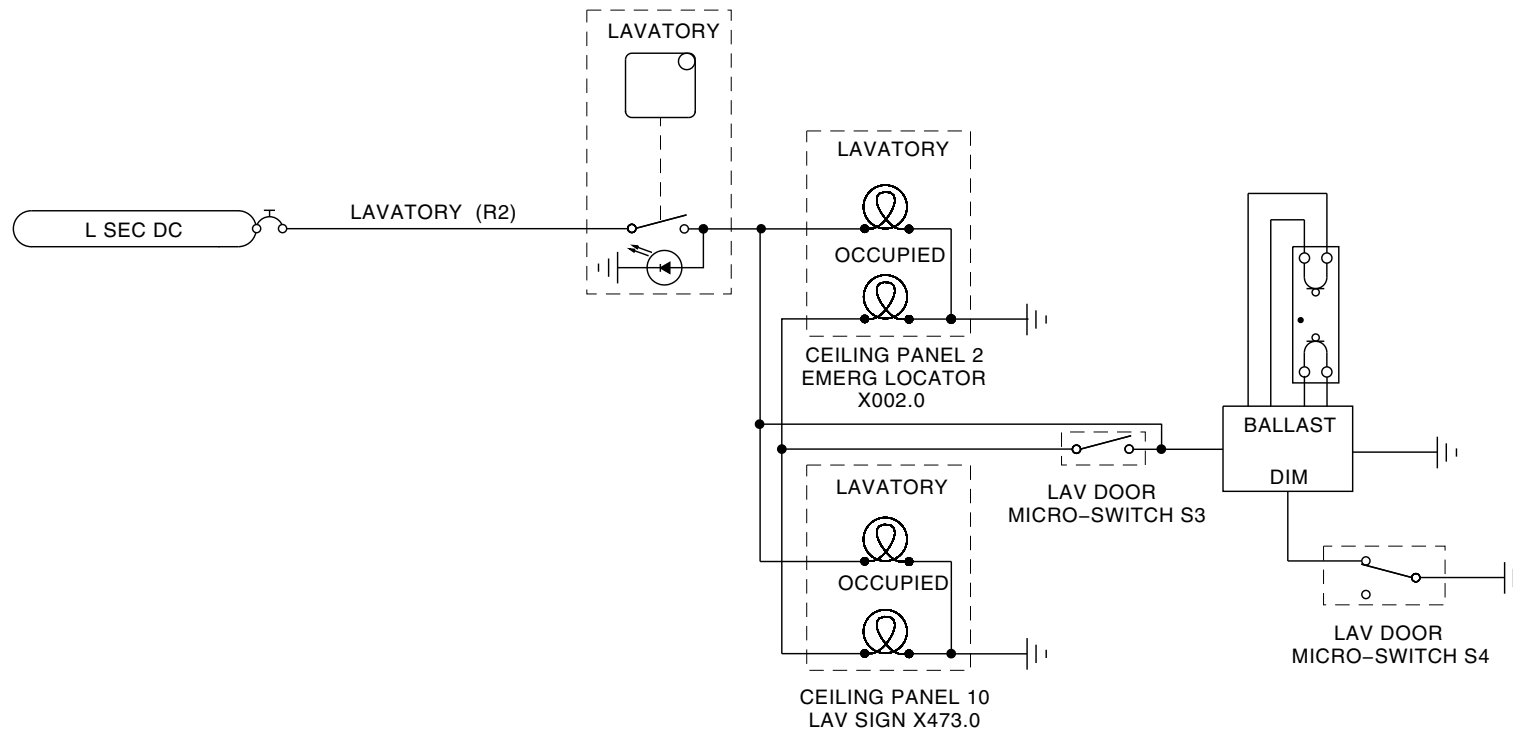
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fsm62a01.cgm, sw, 09/11/05

Lavatory – Lights Wiring Schematic
Figure 25

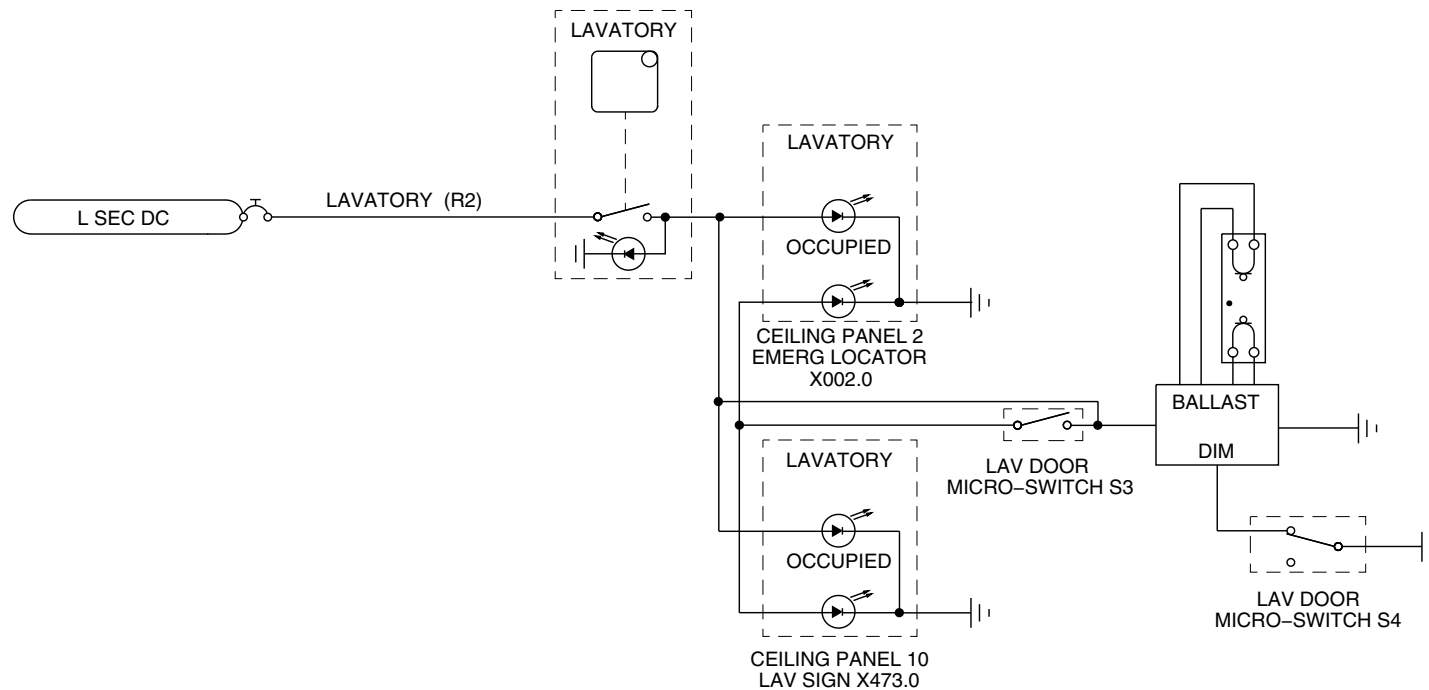
PSM 1-84-2A
EFFECTIVITY:
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cg1017a01.dg, av, aug21/2010

Lavatory Lights – Wiring Schematic
Figure 26

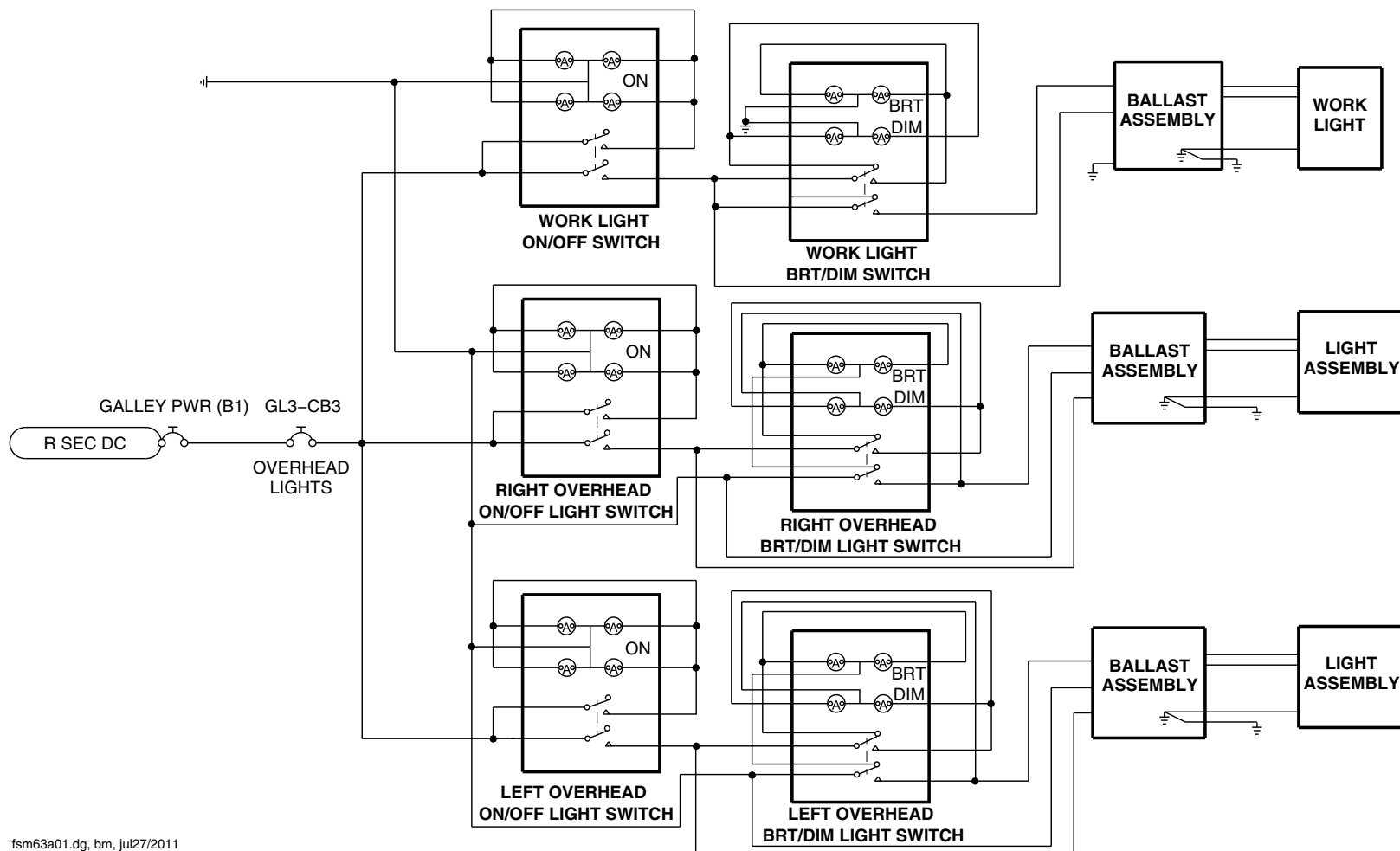
PSM 1-84-2A
EFFECTIVITY:
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fsm63a01.dg, bm, jul27/2011

Galley – Lights Wiring Schematic
Figure 27

PSM 1-84-2A
EFFECTIVITY:
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Config 001

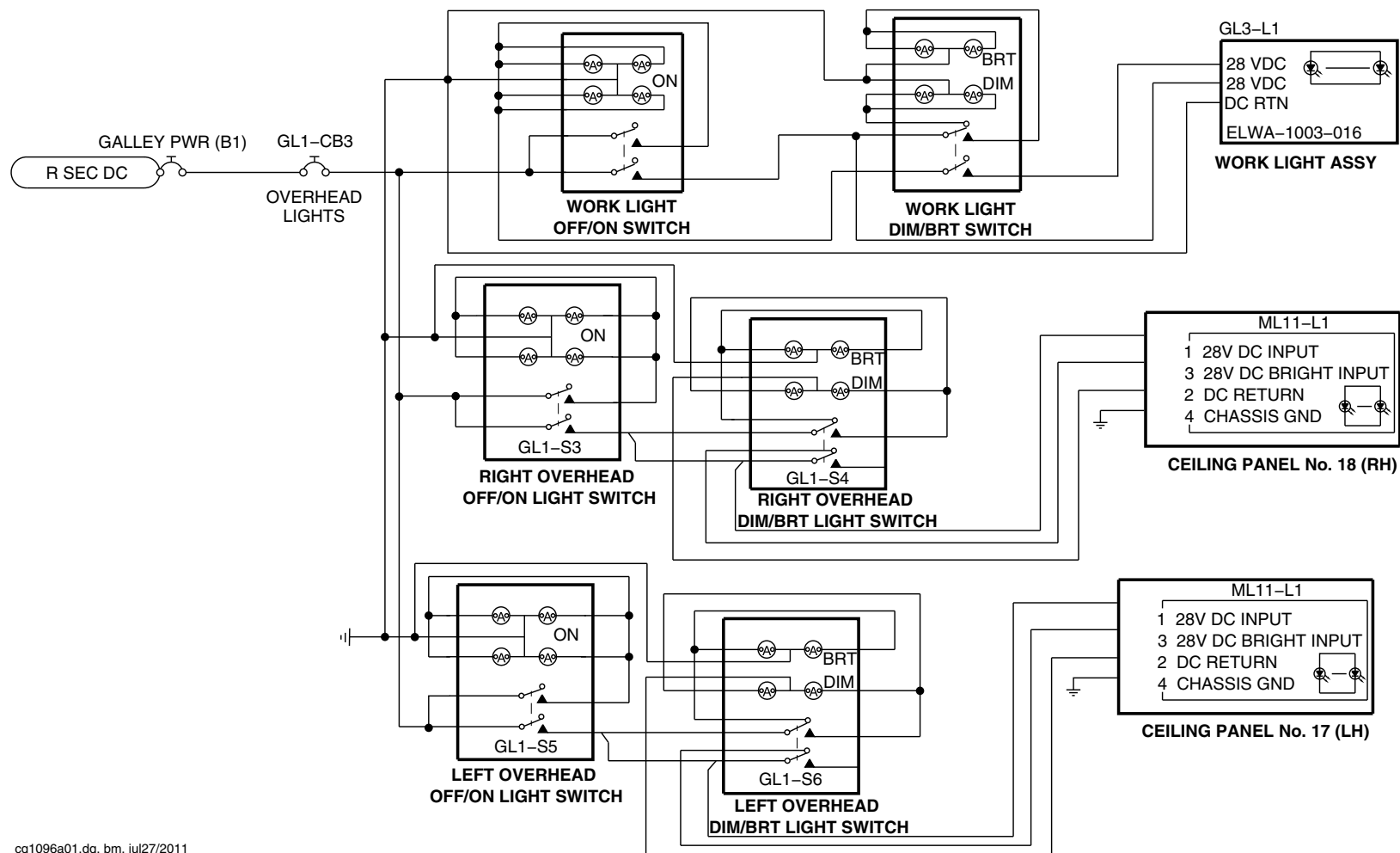
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cg1096a01.dg, bm, jul27/2011

Galley Lights – Wiring Schematic
Figure 28

PSM 1-84-2A
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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

**ON A/C ALL

33-30-00-001

CARGO AND SERVICE COMPARTMENT LIGHTS

Introduction

Baggage and service compartment lights supply general lighting for the baggage and service compartment areas.

General Description

The baggage compartment lights are controlled automatically by the baggage doors.

The baggage and service compartment lights system has the sub-systems that follow:

- Baggage Compartment Lights (33-31-00)
- Refuel Panel Service Lights (33-32-00).

Detailed Description

The baggage compartment lights supply light for loading and unloading baggage and to aid in maintenance related work. Lights in both compartments are controlled automatically by the related door mechanism.

The refuel/defuel panel light supplies light for easier operation of the refuel/defuel panel and comes on automatically when the access door is unlocked.

The baggage and service compartment lights are protected by the circuit breaker that follows:

- WRB & BAGGAGE (K2) on the L Essential DC Bus (5A)

Baggage Compartment Lights

[Refer to Figures 1 and 2.](#)

The aircraft has three lights for the baggage areas. One dome light is located in the forward baggage compartment and two lights are located in the aft baggage compartment. These three lights are controlled by the operation of the related door. When a baggage door is unlocked, the light of the associated compartment will come on. The forward and aft baggage compartment lights are powered from the Left Essential DC Bus through a 5 A circuit breaker labeled WRB & BAGGAGE.

Refuel Panel Service Light

[Refer to Figure 3.](#)

The aircraft has a fixed refuel panel service light, installed on the right nacelle, refuel/defuel access panel to illuminate this area.

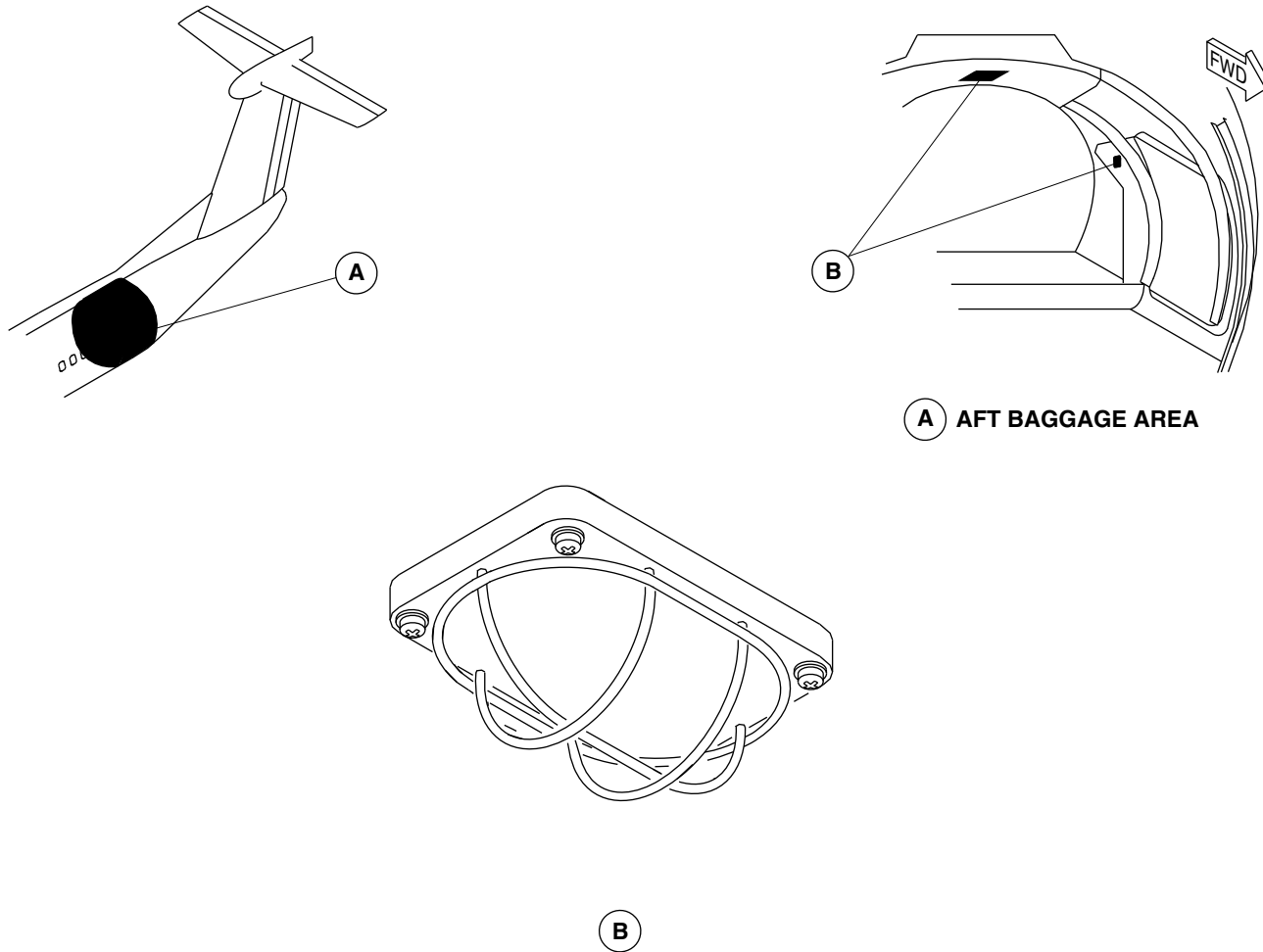
The light comes on automatically whenever the access door is opened.

The service light has a rectangular lens, with simple housing and a reflector light, operated from a 28 Vdc power source.



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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



fs637a01.cgm

AFT BAGGAGE COMPARTMENT LIGHTS LOCATION
Figure 1

PSM 1-84-2A
EFFECTIVITY:
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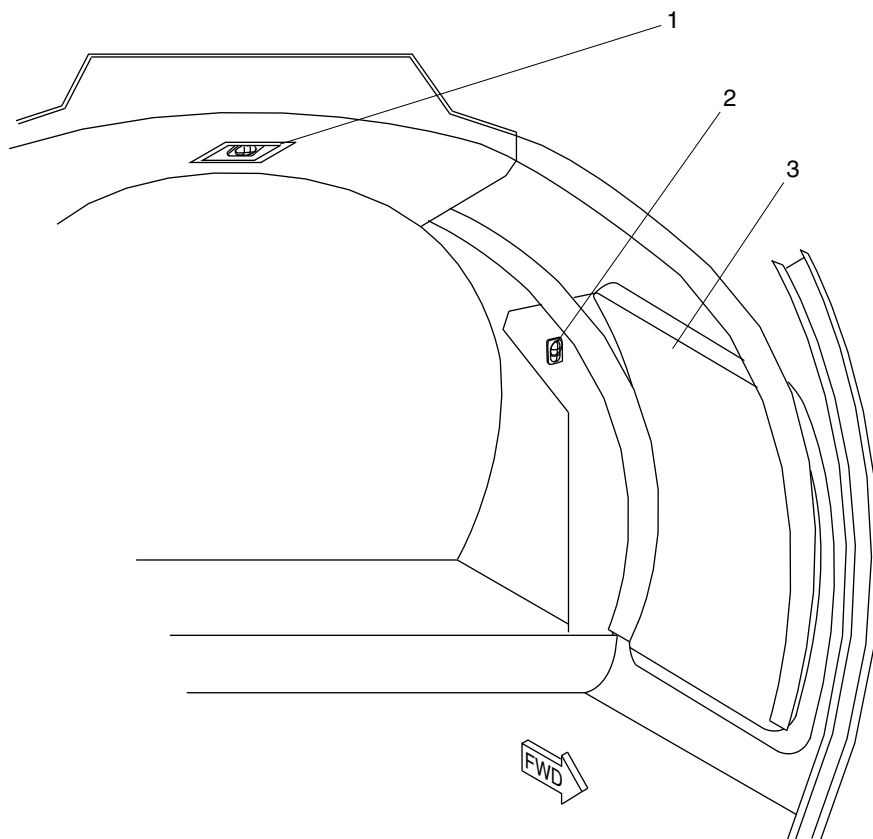
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LEGEND

- 1. Overhead Service Light.
- 2. Doorway Service Light.
- 3. Aft Baggage Door.

NOTE

View looks aft into the baggage compartment.

fs638a01.cgm

BAGGAGE COMPARTMENT LIGHTS
Figure 2

PSM 1-84-2A
EFFECTIVITY:
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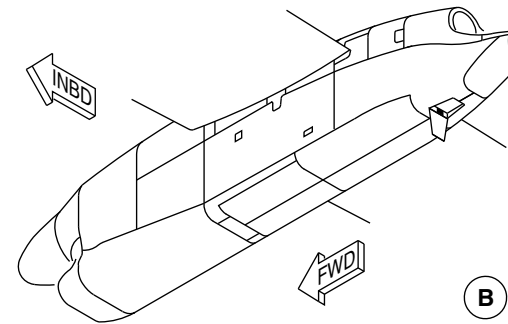
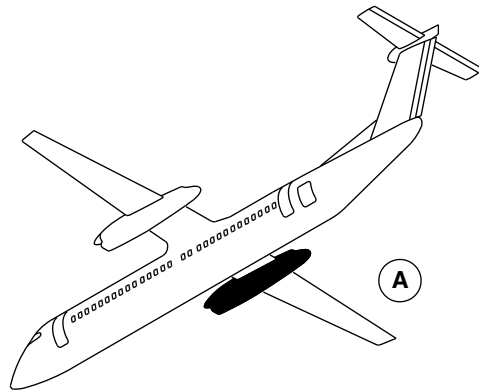
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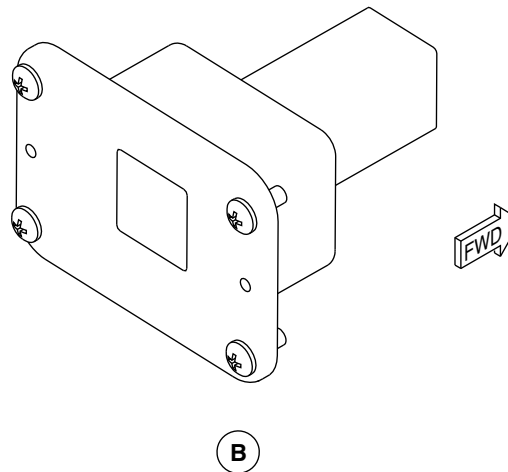


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A RIGHT NACELLE



fs644a01.cgm

REFUEL PANEL SERVICE LIGHT
Figure 3

PSM 1-84-2A
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**ON A/C ALL

33-40-00-001

EXTERIOR LIGHTS

Introduction

The aircraft is equipped with a series of external lights installed at various locations on the fuselage, wings, empennage, engine cowlings, and landing gear. The lights provide adequate illumination during normal operation for the crew, passengers, ground personnel, and aircraft identification.

General Description

The exterior lights are controlled by switches in the flight compartment.

The exterior lights system has the components that follow:

- Landing and Taxi Lights (33-41-00)
- Navigation Lights (33-42-00)
- Inspection Lights (33-43-00)
- Anti-Collision Lights (33-44-00)
- Logo Lights (33-45-00).

Detailed Description

Refer to Figures 1 , 2 and 3.

The exterior lights are controlled by toggle switches on two EXTERIOR LIGHTS panels in the flight compartment. They are labeled as follows:

- LANDING-APPROACH/OFF
- LANDING-FLARE/OFF
- TAXI/OFF
- WING INSP/OFF
- RED/OFF/WHITE A/COL
- POSN/OFF
- TAIL LOGO/OFF.

The exterior lights system is protected by the circuit breakers that follow:

- EXT LIGHTS TAXI PWR (A2) on the L Main DC Bus (10 A)
- EXT LTS APPR L PWR (N1) on the L Secondary DC Bus (30 A)
- EXT LIGHTS L FLARE (D2) on the L Main DC Bus (30 A)
- EXT LTS L WING INSP (P1) on the L Secondary DC Bus (5 A)
- LOGO LIGHTS LEFT (B7) & LOGO LIGHTS RIGHT (C7) on the R Secondary DC Bus (7.5 A)



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- EXT LTS APPR R PWR (N2) on the R Secondary DC Bus (30 A)
- EXT LTS R FLARE (C1) on the R Secondary DC Bus (30 A)
- EXT LTS R WING INSP (D1) on the R Secondary DC Bus (5 A)
- EXT LTS ANTI COLL (Q2) on the R Main DC Bus (7.5 A).

Landing and Taxi Lights

[Refer to Figures 4 and 5.](#)

Two approach and two flare quartz–halogen lights are installed on the wing leading edges. One approach light and one flare light are located outboard of each nacelle. The landing lights are controlled by independent switches labeled APPROACH and FLARE located on the overhead EXTERIOR LIGHTS control panel.

One fixed, forward–facing, Taxi Light is installed on the rotating section of the nose landing gear. The light is controlled by a switch, labeled OFF–TAXI, located on the overhead EXTERIOR LIGHTS control panel.

Navigation Lights

[Refer to Figures 6 and 7.](#)

The navigation lights are standard dual red and green wing position lights, with a single white tail position light. Optional dual white tail position lights are available. The navigation lights are controlled by a switch labeled POSN–OFF on the overhead EXTERIOR LIGHTS control panel.

Inspection Lights

[Refer to Figures 8 and 9.](#)

One incandescent engine inspection light is located on each side of the fuselage. The engine inspection lights are used for lighting the propeller spinners, engine intakes, and the wing leading edges between the nacelle and fuselage. One halogen wing inspection light is located on the outboard side of each nacelle, for lighting the outboard wing leading edges. All inspection lights are controlled by a switch labeled WING INSP–OFF located on the overhead EXTERIOR LIGHTS control panel.

Anti–Collision Lights

[Refer to Figures 10 , 11 , 12 and 13.](#)

Two white anti–collision light assemblies and a flashing red recognition light assembly are installed on the aircraft.

The upper anti–collision light assembly is located on the top of the vertical stabilizer. The lower anti–collision light is located on the lower centre line of the fuselage. A red recognition light is located on the upper forward fuselage.

The anti–collision and red recognition lights are controlled by the overhead A/COL–RED/OFF/WHITE switch located on the EXTERIOR LIGHTS control panel.

Logo Lights

[Refer to Figure 14.](#)

Two optional tail logo lights supply lighting for the airline logo on the vertical tail surface. If installed, one light is located on either side of the horizontal stabilizer.



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Logo lights are controlled using a two-position switch labeled TAIL
LOGO/OFF located on the overhead EXTERIOR LIGHTS control
panel, in the flight compartment.

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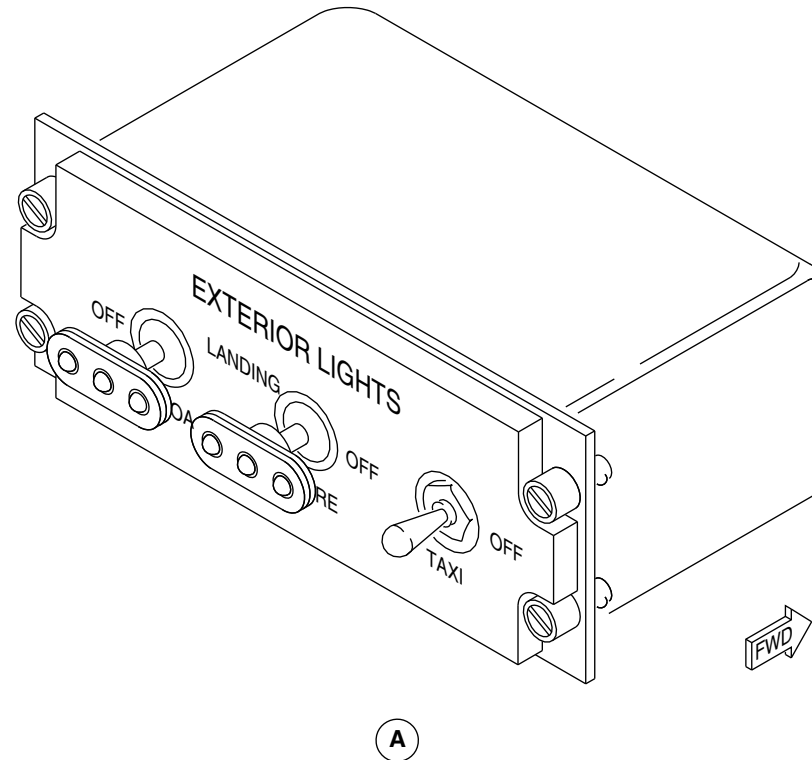
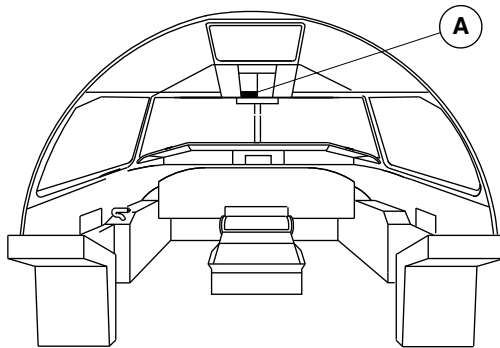
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fs019a01.cgm

EXTERIOR LIGHTS PANEL LOCATION PAGE 1
Figure 1

PSM 1-84-2A
EFFECTIVITY:
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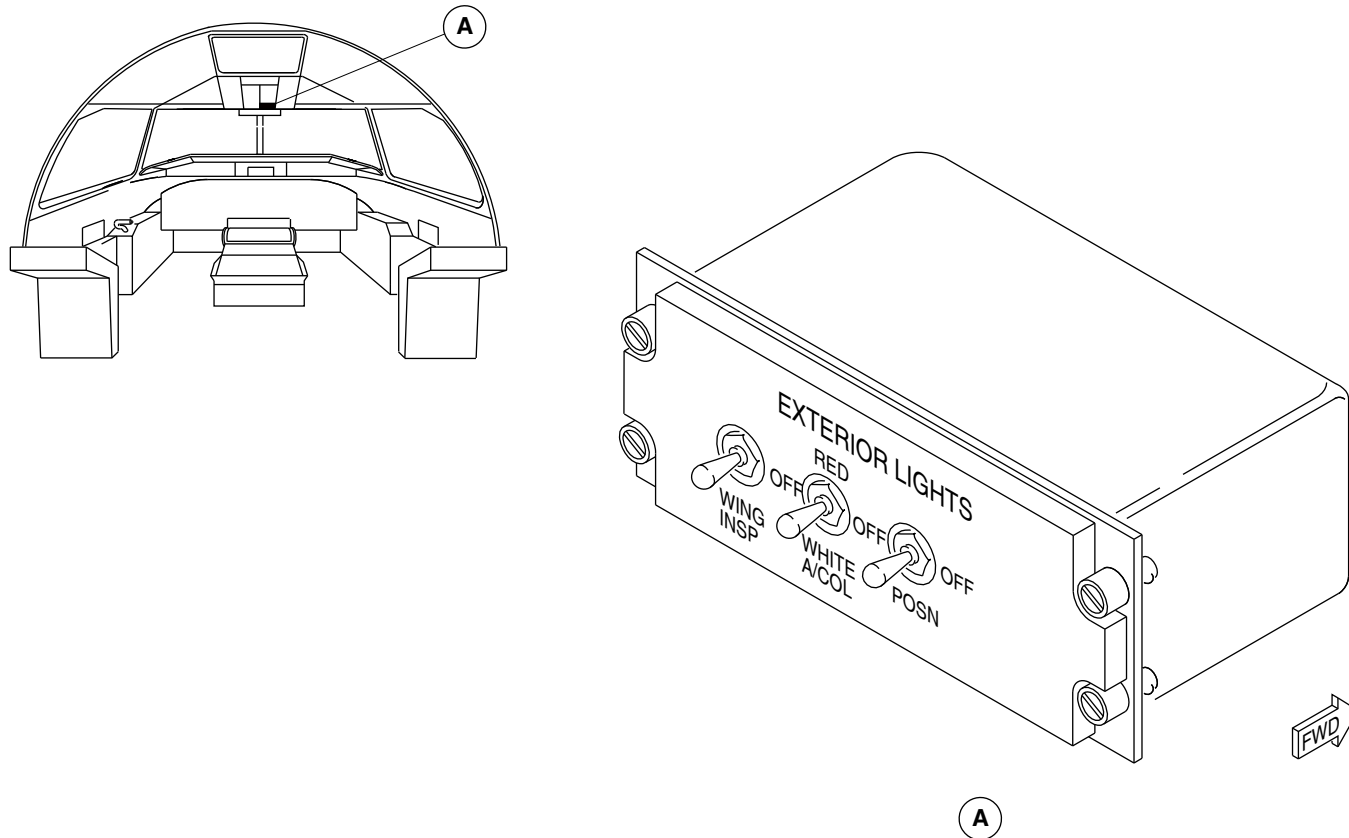
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EXTERIOR LIGHTS PANEL LOCATION PAGE 2
Figure 2

PSM 1-84-2A
EFFECTIVITY:
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Config 001

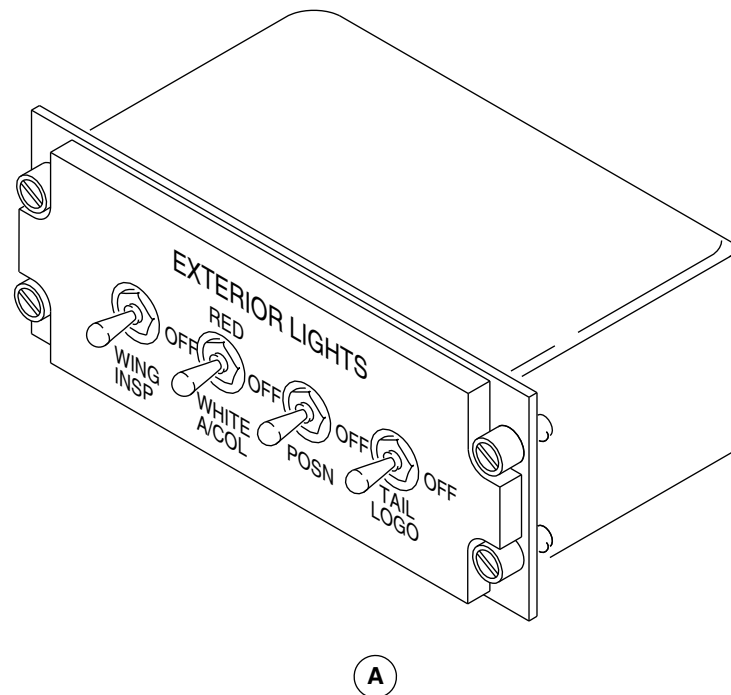
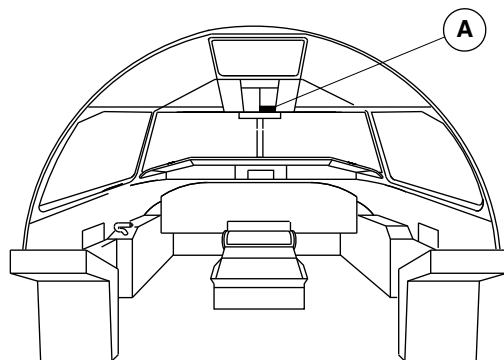
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LOGO LIGHTS, EXTERIOR LIGHTS PANEL LOCATION
Figure 3

PSM 1-84-2A
EFFECTIVITY:
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Config 001

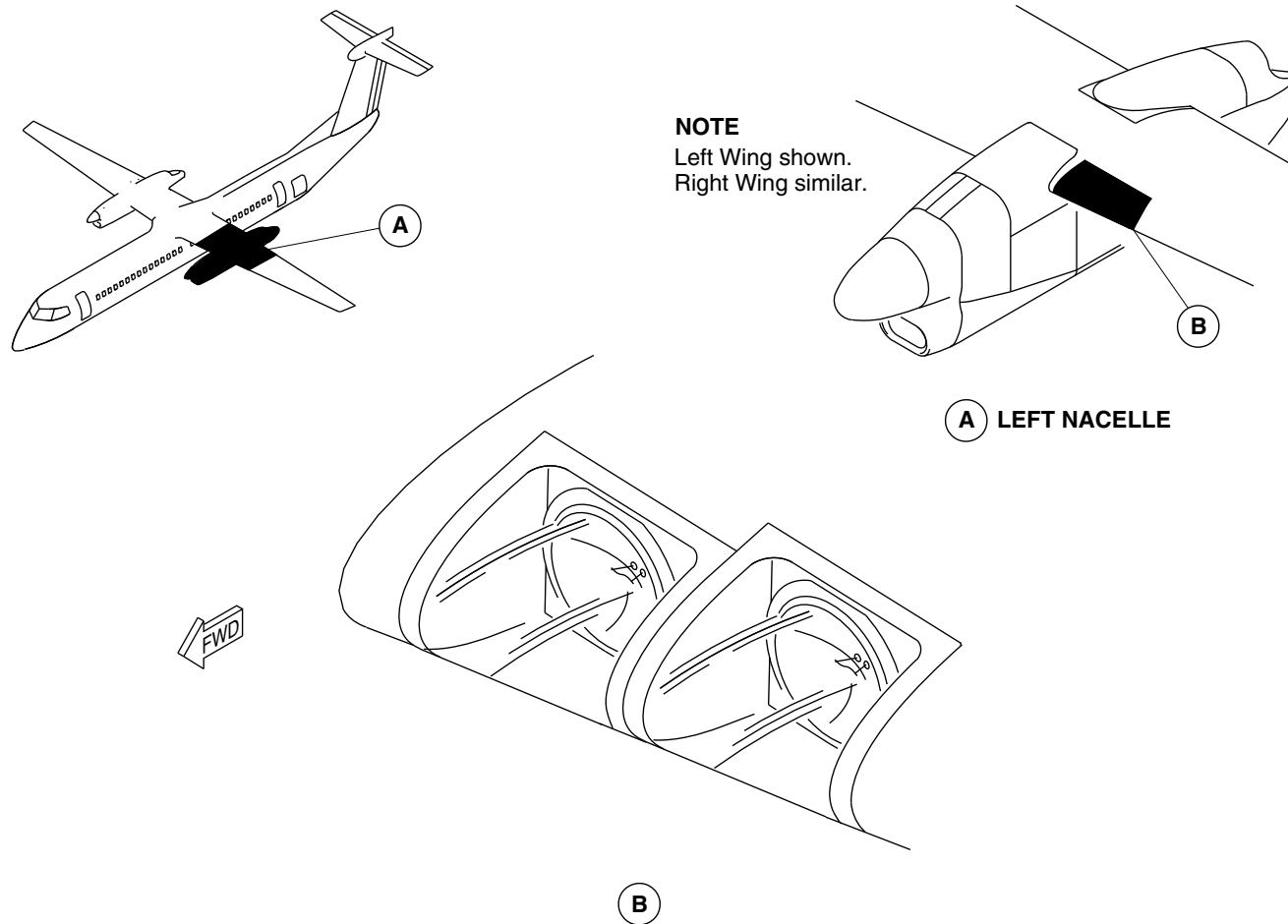
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LANDING LIGHTS LOCATION
Figure 4

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-40-00
Config 001

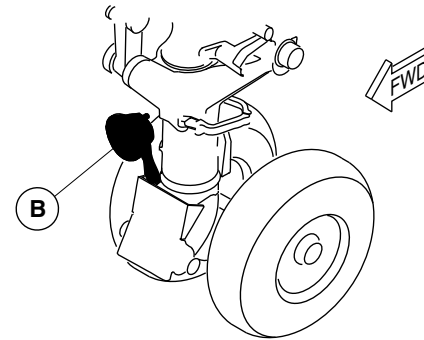
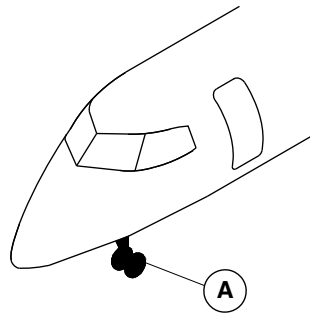
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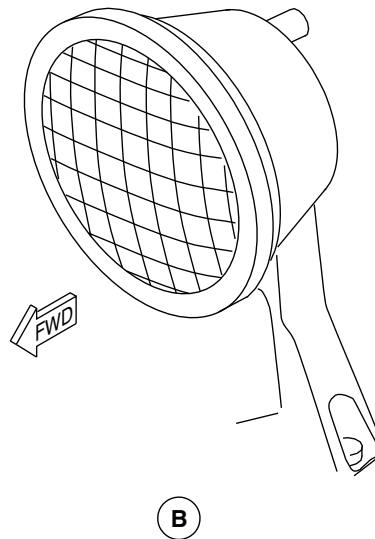


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A NOSE LANDING GEAR ASSEMBLY



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TAXI LIGHT LOCATION
Figure 5

PSM 1-84-2A
EFFECTIVITY:
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Config 001

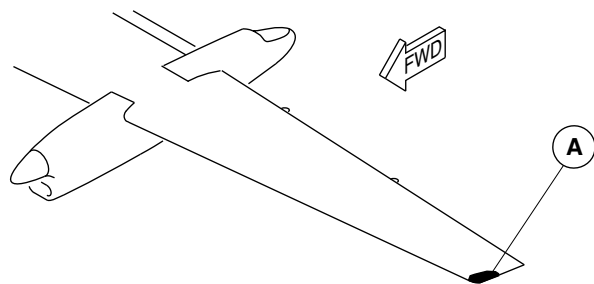
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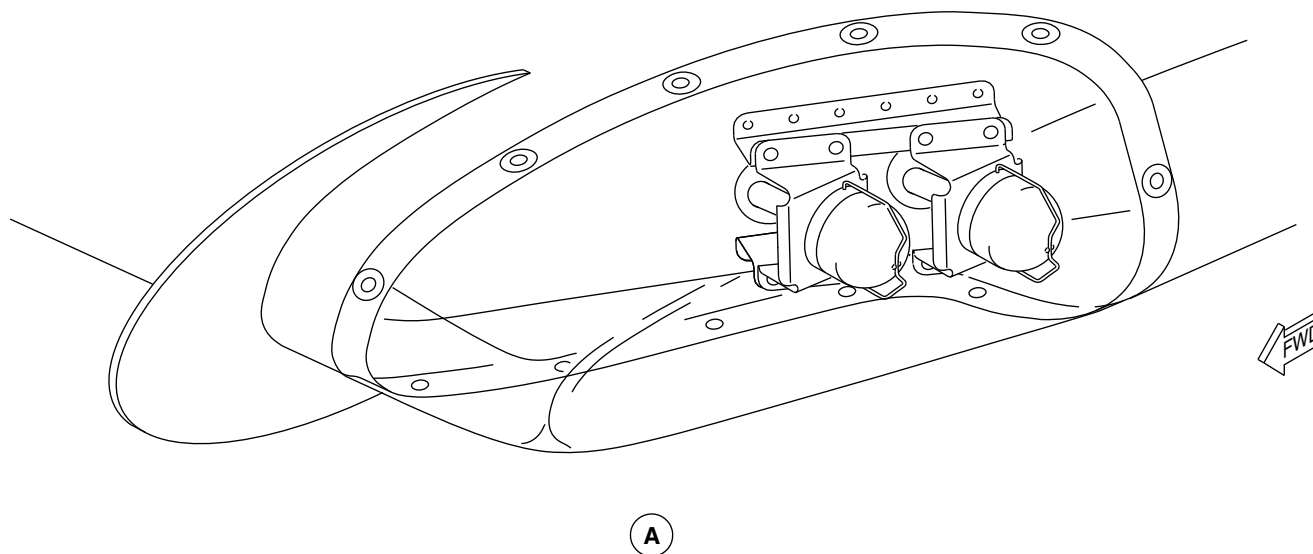
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NOTE

Left Component Shown.
Right Component Similar.



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WING POSITION LIGHTS LOCATION
Figure 6

PSM 1-84-2A
EFFECTIVITY:
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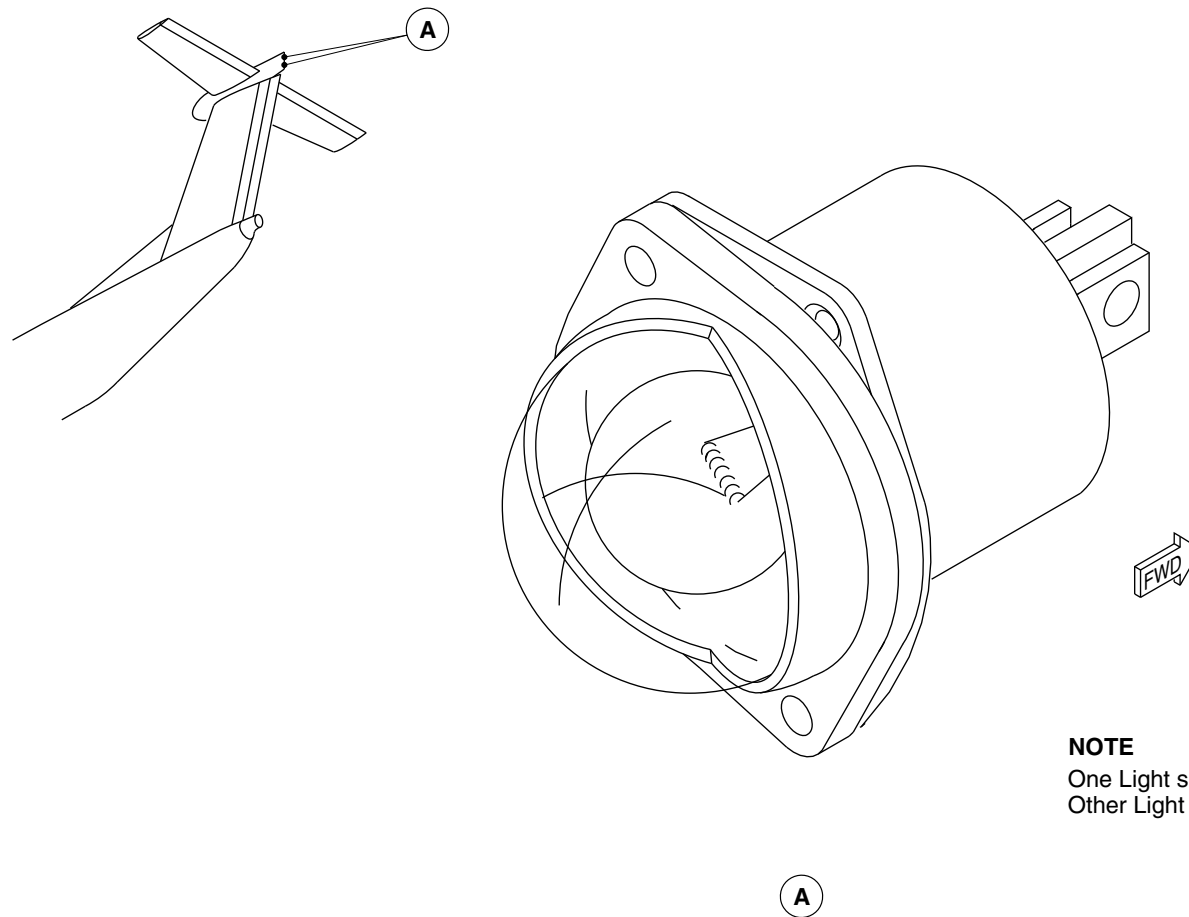
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NOTE

One Light shown.
Other Light similar.

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TAIL POSITION LIGHT LOCATION
Figure 7

PSM 1-84-2A
EFFECTIVITY:
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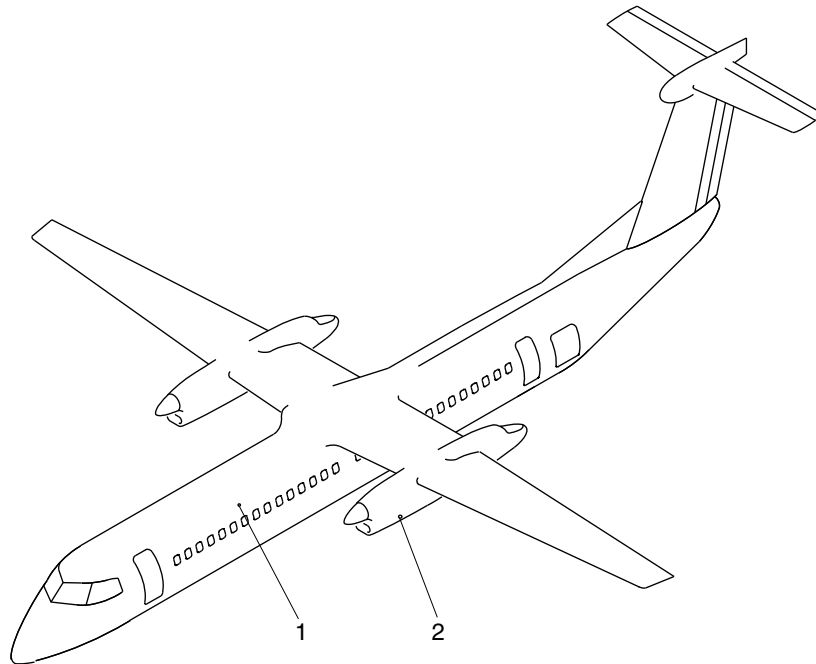
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LEGEND

- 1. Engine Inspection Light.
- 2. Wing Inspection Light.

NOTE

Left equipment shown.
Right side similar.

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ENGINE AND WING INSPECTION LIGHTS LOCATION
Figure 8

PSM 1-84-2A
EFFECTIVITY:
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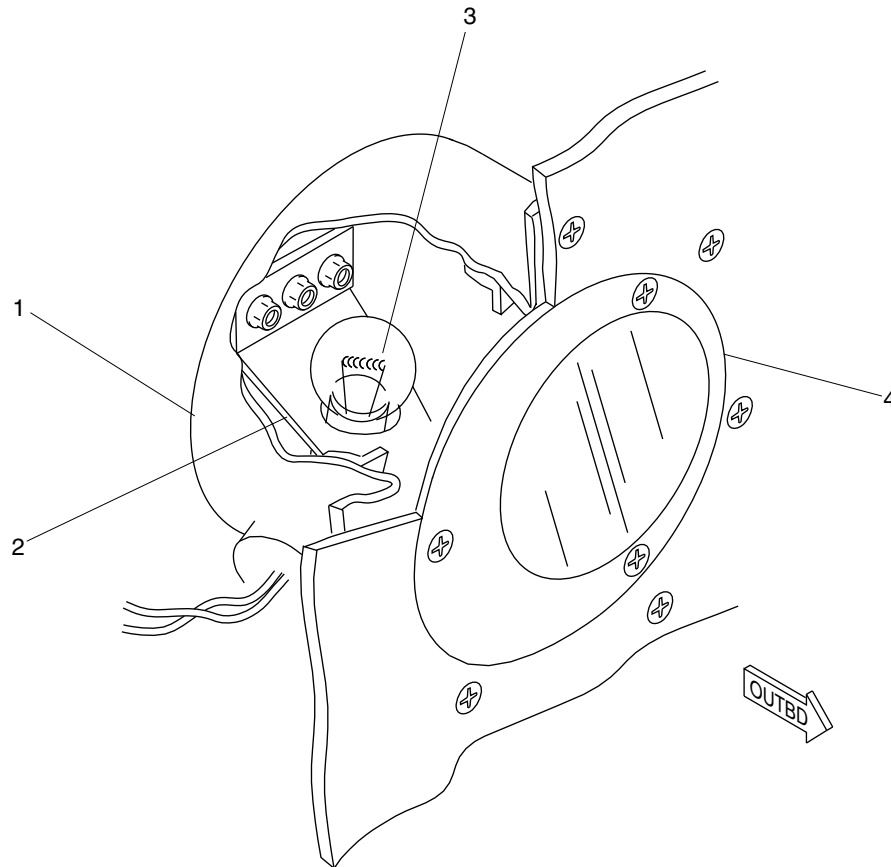
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LEGEND

- 1. Lamp Housing.
- 2. Lamp Assembly.
- 3. Lamp.
- 4. Lens Assembly.

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INSPECTION LIGHT
Figure 9

PSM 1-84-2A
EFFECTIVITY:
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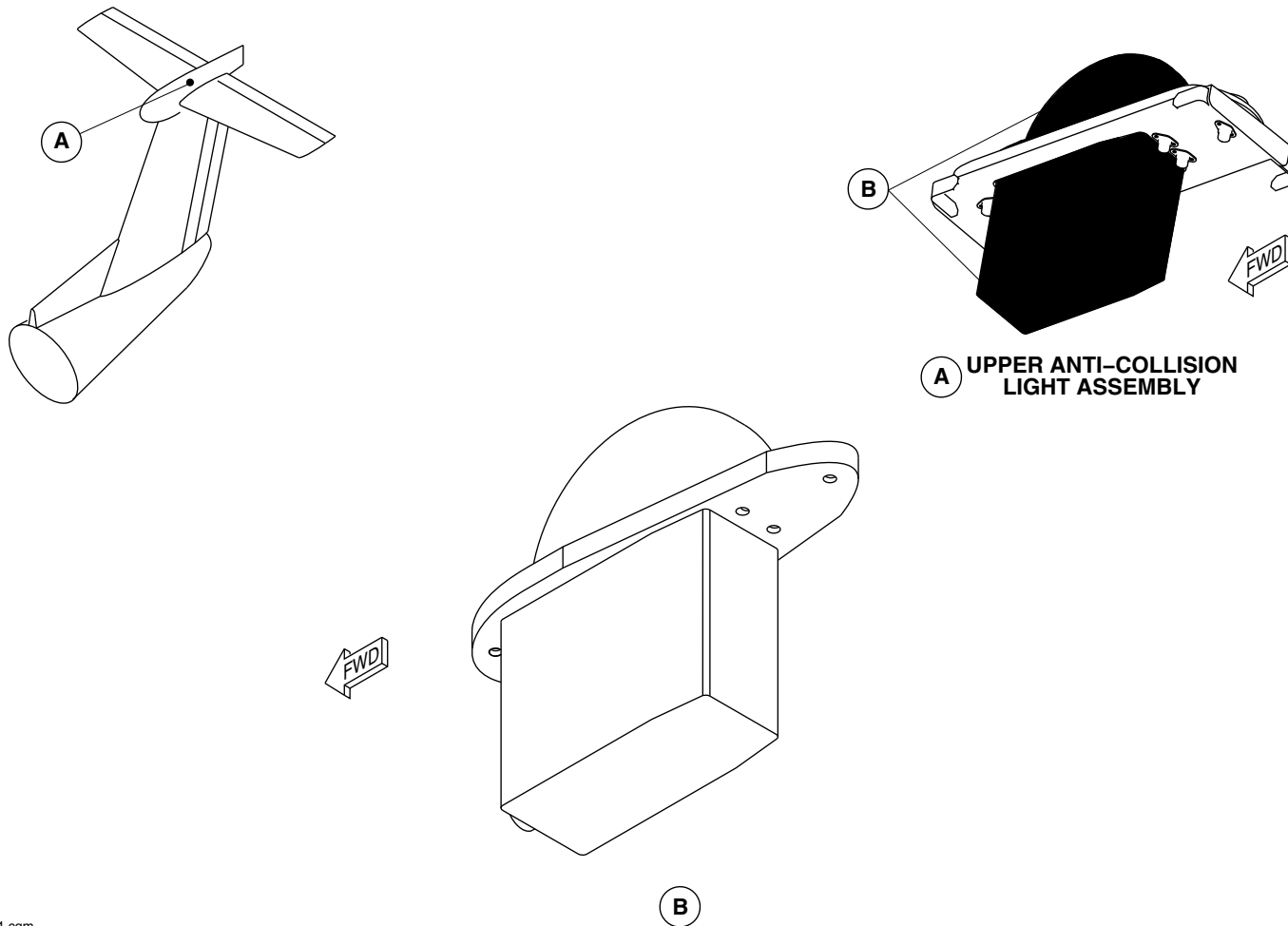
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UPPER ANTI-COLLISION LIGHT LOCATION
Figure 10

PSM 1-84-2A
EFFECTIVITY:
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Config 001

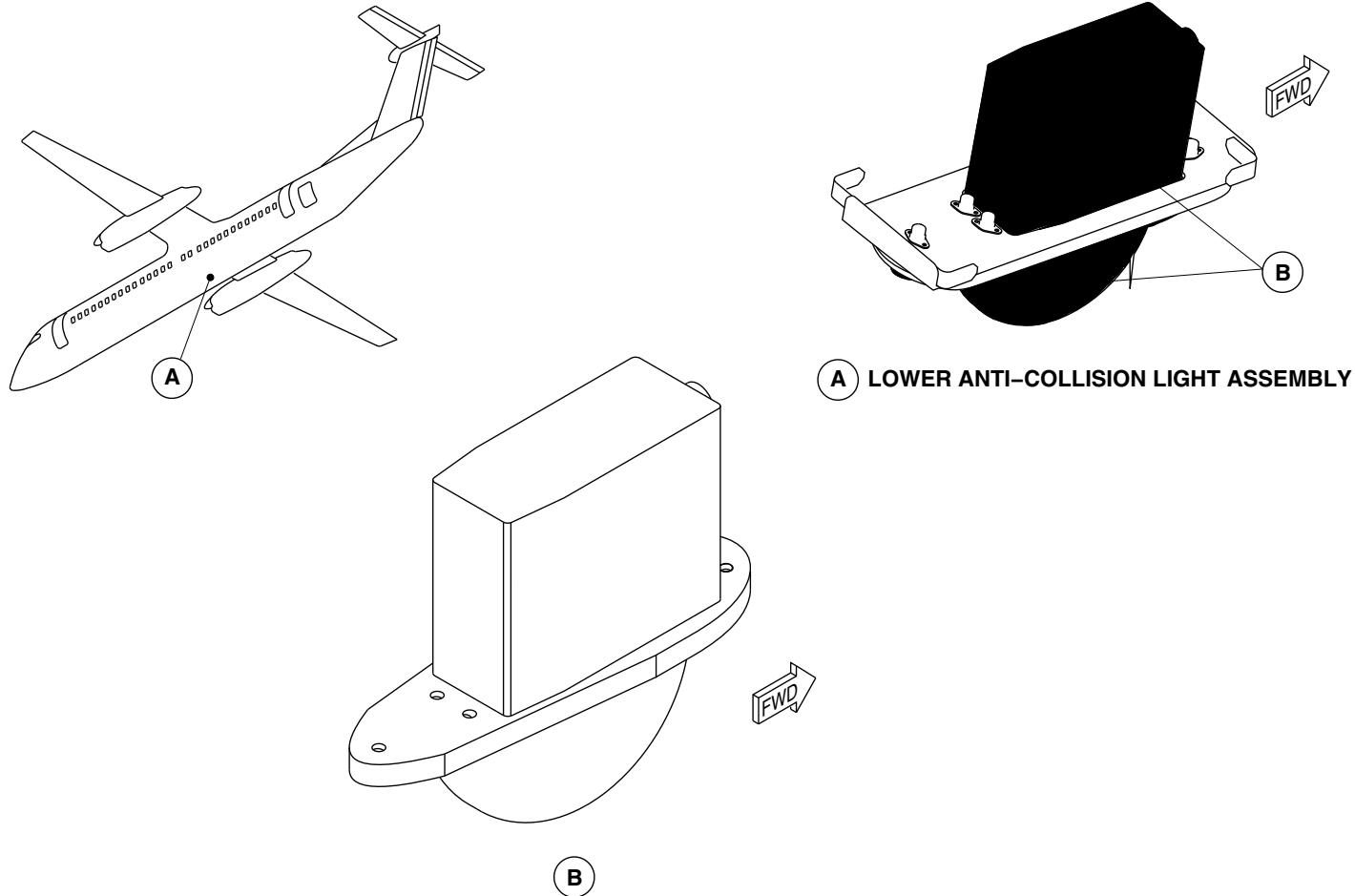
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LOWER ANTI-COLLISION LIGHT LOCATION
Figure 11

PSM 1-84-2A
EFFECTIVITY:
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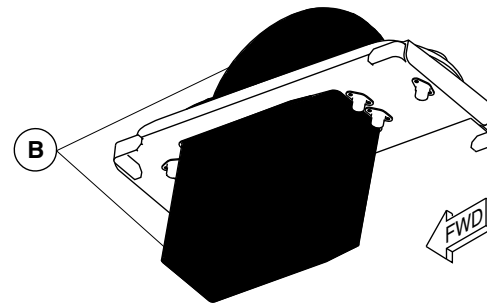
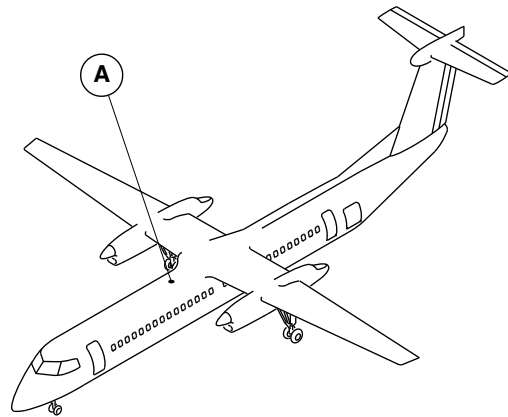
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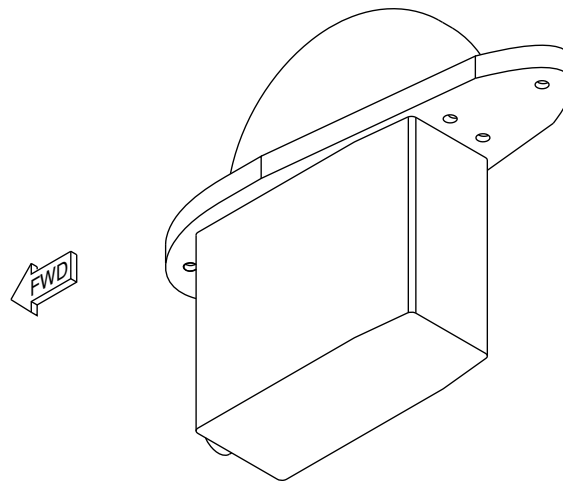


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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



A RED RECOGNITION LIGHT ASSEMBLY



NOTE

Light is red in colour.

B

fs957a01.cgm

RECOGNITION LIGHT LOCATION
Figure 12

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-40-00
Config 001

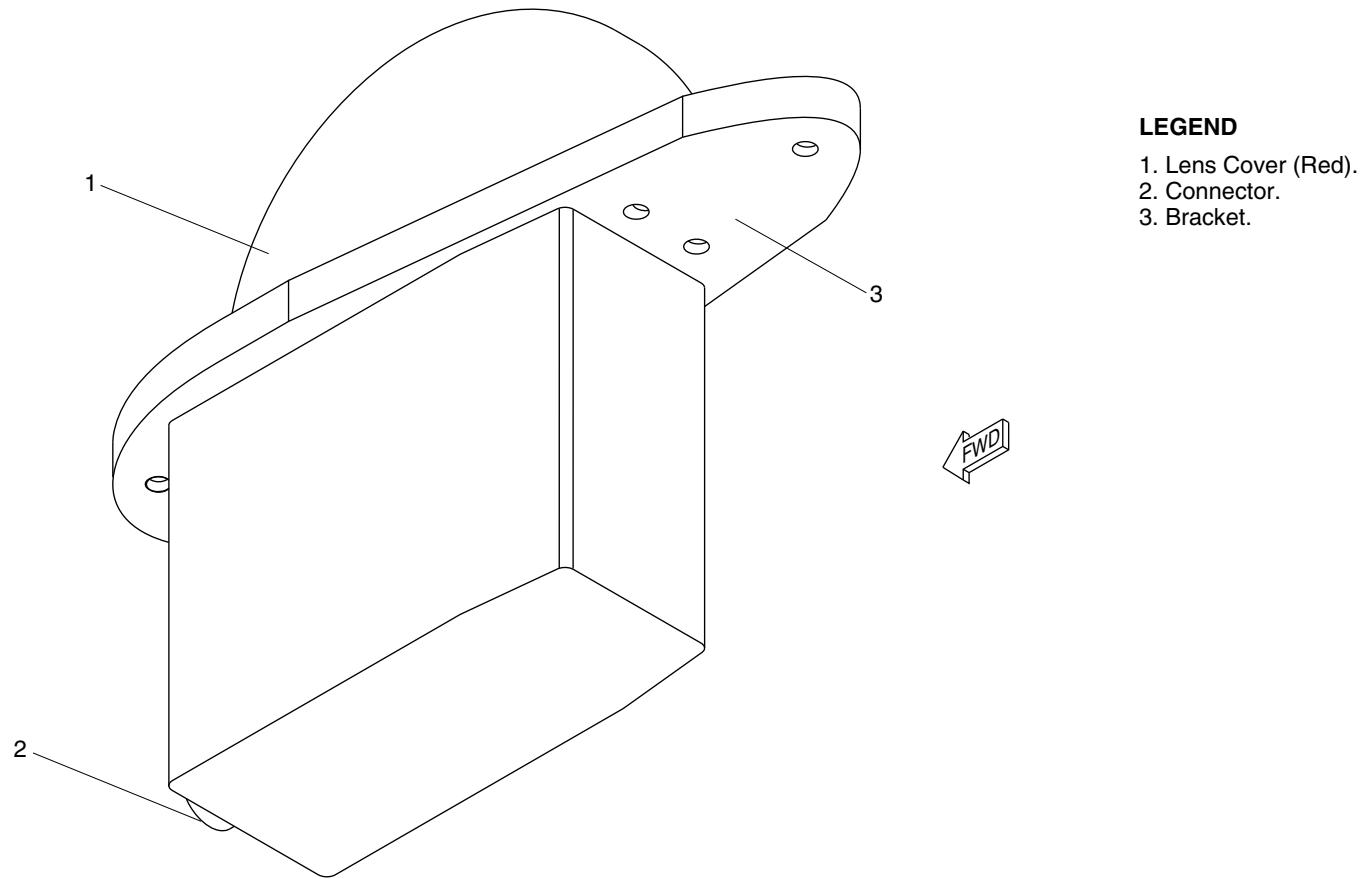
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fs958a01.cgm

RECOGNITION LIGHT DETAIL
Figure 13

PSM 1-84-2A
EFFECTIVITY:
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Config 001

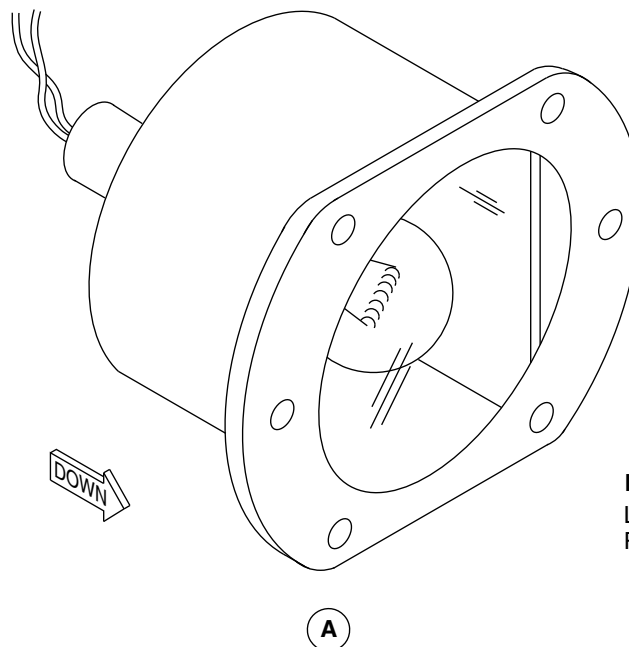
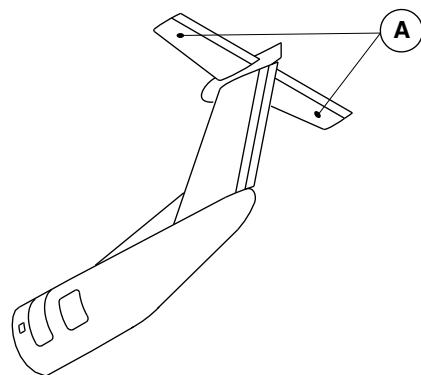
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NOTE

Left Component Shown.
Right Component Similar.

fs683a01.cgm

LOGO LIGHTS LOCATION
Figure 14

PSM 1-84-2A
EFFECTIVITY:
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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

**ON A/C ALL

33-41-00-001

LANDING AND TAXI LIGHTS

Introduction

One approach and one flare landing light are installed on the leading edge of each wing, outboard of the nacelles, to supply landing surface illumination during landing approach.

A single fixed taxi light is installed on the nose landing gear for runway and taxi-way lighting during ground maneuvers.

General Description

The landing and taxi lights are controlled by switches in the flight compartment.

The landing and taxi lights system have the components that follow:

- Lights, Landing (33-41-01)
- Lights, Taxi (33-41-06)
- Landing and Taxi Light Switch Control Panel (33-41-11).

Detailed Description

The aircraft is equipped with four fixed landing lights. Each landing light assembly has a flare light and an approach light.

The outboard, or approach landing lights, are aimed forward in the horizontal plane with a toe-in of 1.3 degrees relative to the aircraft centerline. They supply runway illumination during approach.

The inboard, or flare landing lights, aim directly forward parallel to the aircraft centerline. They are aimed downward from the horizontal at an angle of 4 degrees so that, during the aircraft pitch up flare maneuver, the illumination stays on the runway.

The Taxi Light is installed on the nose landing gear. It comes on when the nose landing gear is down and locked, and the Taxi Light switch is set to TAXI.

The landing and taxi lights are controlled by switches on the EXTERIOR LIGHTS panel in the flight compartment.

The landing and taxi light systems are protected by the circuit breakers that follow:

- EXT LIGHTS TAXI CONT (B2) on the L Main DC Bus (5 A)
- EXT LIGHTS TAXI PWR (A2) on the L Main DC Bus (10 A)
- EXT LIGHTS L FLARE (D2) on the L Main DC Bus (30 A)
- EXT LTS APPR L PWR (N1) on the Left Secondary DC Bus (30 A)
- EXT LTS R FLARE (C1) on the R Secondary DC Bus (30 A)
- EXT LTS APPR R PWR (N2) on the R Main DC Bus (30 A)

Lights, Landing

[Refer to Figure 1.](#)

Four landing lights are installed on the aircraft. [Refer to Figure 2.](#) Two 600 W quartz-halogen sealed beam lights are installed on the leading edge of each wing adjacent to and outboard of the



AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

engine nacelles. The outboard set of lights supply lighting during the approach. The inboard set of lights supply lighting during the flare.

The approach and flare lights are controlled by overhead switches located in the flight compartment. The flare lights are powered from the left main DC bus through a 30 A circuit breaker labeled EXT LIGHTS L FLARE. The approach lights are powered from the left secondary DC bus through a 30 A circuit breaker labeled EXT LTS APPR L PWR.

Lights, Taxi

[Refer to Figure 3.](#)

The aircraft has a single 250 W taxi light installed on the lower nose gear strut. The taxi light is controlled by an overhead TAXI switch located in the flight compartment. Electrical power to the taxi light is supplied by the left main DC bus through a 10 A circuit breaker labeled EXT LIGHTS TAXI PWR. Electrical power for the functional control of the light is through a 5 A circuit breaker labeled EXT LIGHTS TAXI CONT on the left main DC bus circuit breaker panel. The nose landing gear must be down and locked for the taxi light to come on. A signal is supplied from the Proximity Sensor Electronic Unit (PSEU) to complete the control circuit.

Switches, Landing and Taxi

[Refer to Figure 4.](#)

The landing lights and taxi light are controlled by switches on the overhead EXTERIOR LIGHTS control panel. [Refer to Figure 5.](#) Approach lights are controlled by a switch labeled APPROACH–OFF located in the flight compartment on the overhead EXTERIOR LIGHTS control panel. When selected to APPROACH,

the switch closes the dedicated dual contactor that carries the heavy current to the approach lights. Flare lights are controlled by a switch labeled FLARE–OFF on the same panel. When selected to FLARE, the switch closes the dedicated dual contractor that carries the heavy current to the flare lights.

The taxi light is manually controlled by a single switch labeled TAXI–OFF located in the flight compartment on the overhead EXTERIOR LIGHTS control panel. When set to TAXI, the control relay is powered. This relay is further controlled with a signal from the Proximity Sensor Electronic Unit (PSEU), to make sure that the taxi light will not stay on during flight.

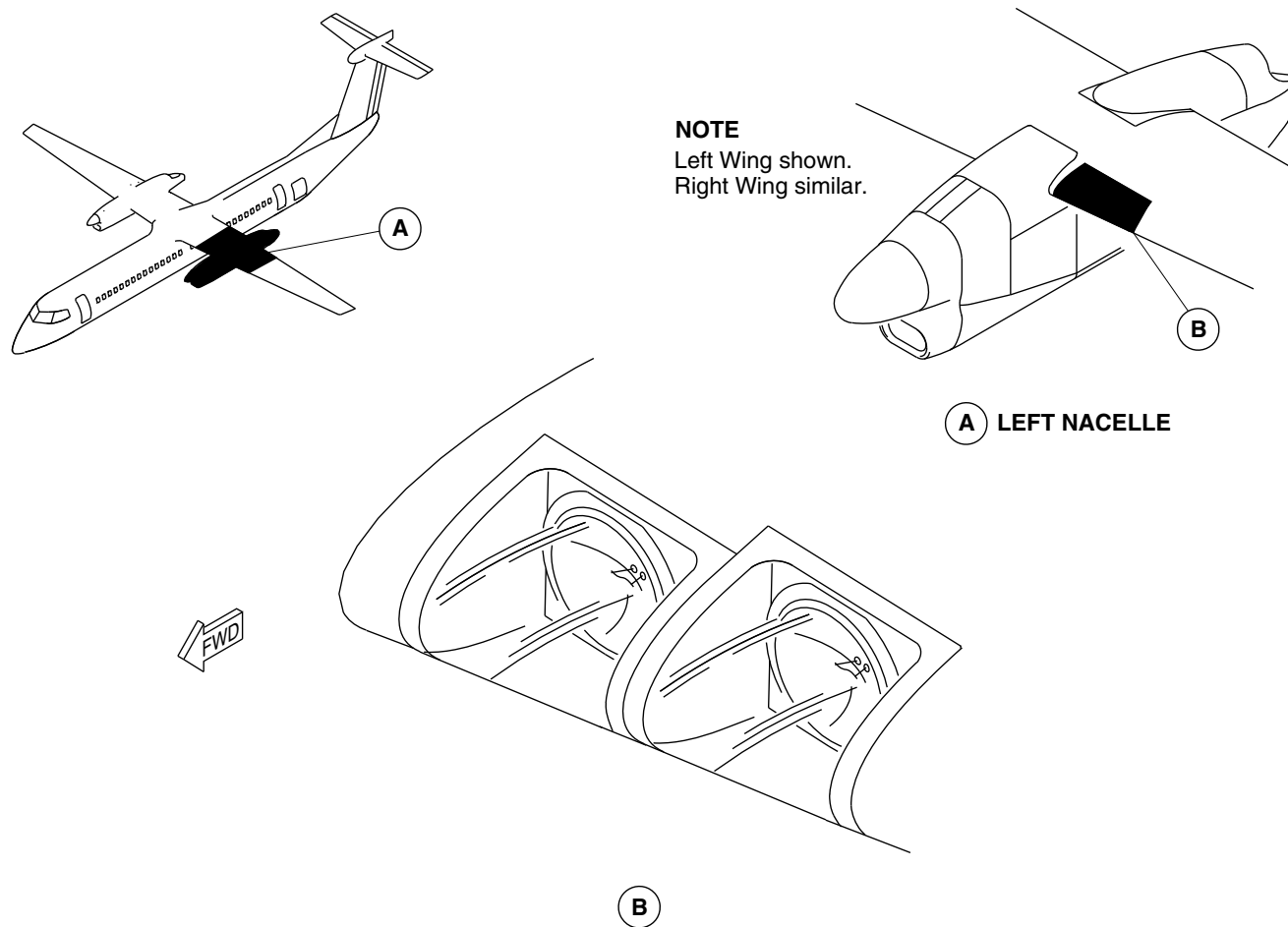
Training Information Points

Refer to caution number C33–1C–0: DO NOT KEEP THE LANDING LIGHTS ON FOR MORE THAN ONE MINUTE WHILE THE AIRCRAFT IS ON THE GROUND. IF YOU DO, THEY CAN GET TOO HOT AND CAUSE DAMAGE.



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LANDING LIGHTS LOCATION
Figure 1

PSM 1-84-2A
EFFECTIVITY:
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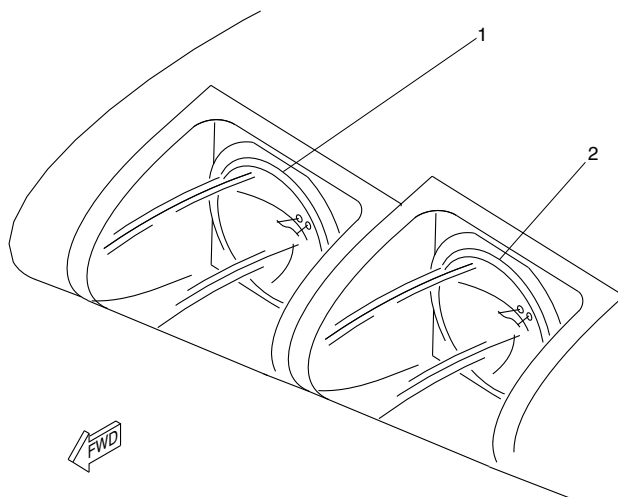
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LEGEND

- 1. Flare Light.
- 2. Approach Light.

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APPROACH AND FLARE LIGHT
Figure 2

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-41-00
Config 001

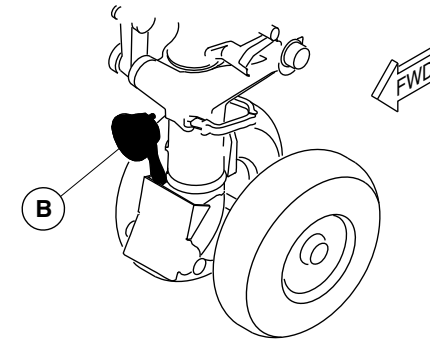
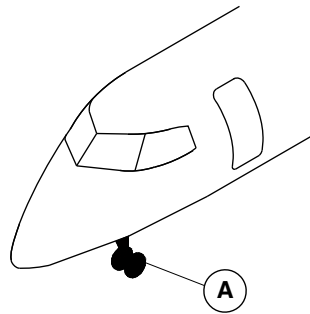
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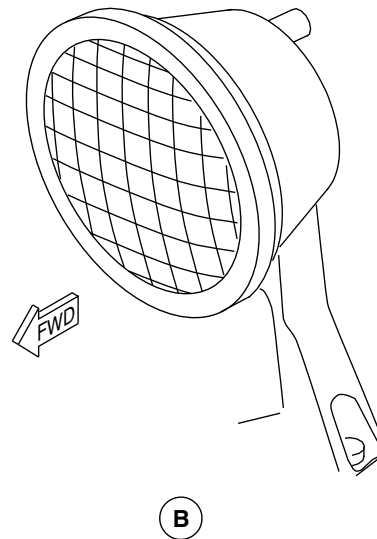


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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



A NOSE LANDING GEAR ASSEMBLY



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TAXI LIGHT LOCATION
Figure 3

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-41-00
Config 001

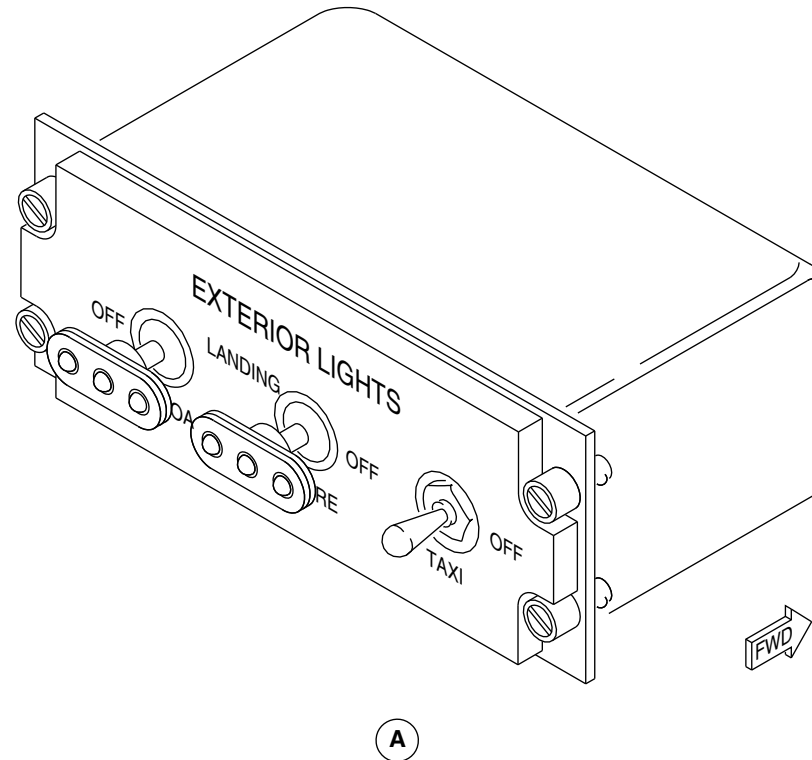
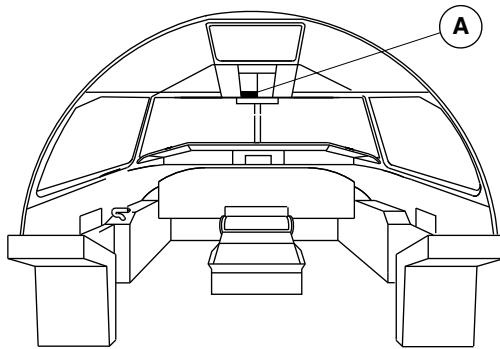
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LANDING AND TAXI LIGHT SWITCH CONTROL PANEL LOCATION
Figure 4

PSM 1-84-2A
EFFECTIVITY:
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Config 001

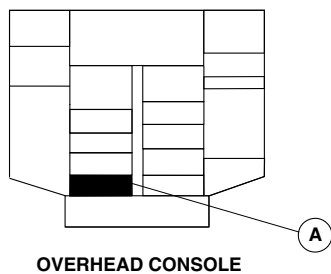
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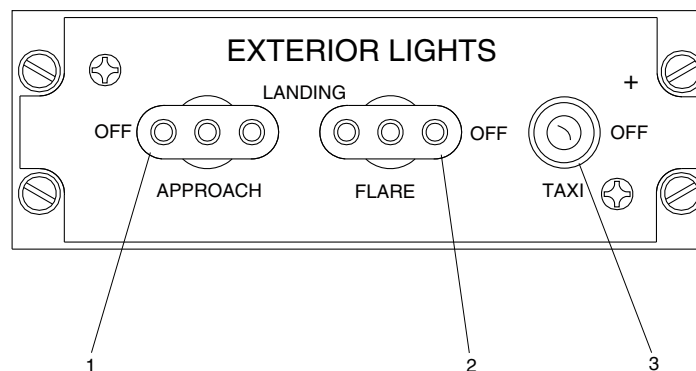
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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



LEGEND

1. Approach Lights Toggle Switch.
2. Flare Lights Toggle Switch.
3. Taxi Light Toggle Switch.



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LANDING AND TAXI LIGHT SWITCHES
Figure 5

PSM 1-84-2A
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**ON A/C ALL

33-42-00-001

NAVIGATION LIGHTS

Introduction

The navigation lights show the orientation of the aircraft in the direction of flight.

General Description

The navigation lights are standard dual red and green wing position lights, and a single white tail position light.

The two wingtip position lights have primary and secondary bulbs that automatically switch in the event of a failure. Two discrete electronic current sensing switches, installed to the outboard forward wing spars, supplies current sensing to the lights and switch the ground path to the secondary light when a failure is sensed.

The navigation lights system has the components that follow:

- Lights, Forward Position (33-42-01)
- Light, Tail Position (33-42-06)
- Module, Switch (33-42-11)
- Switch, Position Light (33-42-16).

Detailed Description

Standard dual wing position lights and a single tail position light indicate aircraft orientation in respect to direction of travel.

Dual wing position light sets on each wing are designated primary and secondary. An electronic switch module senses reduced current flow when the primary bulb fails, and automatically switches the secondary bulb on.

The wing and tail position lights are controlled by the same switch, labeled OFF-POSN on the overhead EXTERIOR LIGHTS control panel. When the switch is selected to POSN, all position lights come on. After a time delay, the secondary light on each wing tip will go out if the primary light stays on. If the primary light on the wing tip fails, the secondary light will come on automatically.

All three position lights are powered from the Right Essential DC Bus through a common circuit breaker. Protection of the navigation lights system is supplied by the EXT LTS POSN (M2) on the R Essential DC Bus (7.5 A) circuit breaker.

Lights, Forward Position

[Refer to Figure 1.](#)

Each wing position light installation has dual lights and an electronic switch module. The forward light is referred to as primary and the aft light is referred to as secondary. When the primary bulb fails, the electronic switch module automatically turns the secondary bulb on. Lights installed on the left wing are red and lights installed on the right wing are green.

Light, Tail Position

[Refer to Figure 2.](#)

One rear upper tail position white light is installed on the trailing edge of the bullet fairing at aircraft station X=1114.557. An option is available for a dual bulb tail position light installation. In a dual bulb



AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

configuration, the secondary light automatically comes on in the event of a primary bulb failure. The second bulb, in a dual tail position light installation, is installed below the first bulb on the trailing edge fairing.

Module, Switch

The forward position lights have primary and secondary elements with an electronic switch. When the overhead switch is set to POSN, all of the position lights come on. After 0.7 seconds, the secondary elements, controlled through an electronic switch unit, go out and remain armed, ready to come on in the event of primary element failure.

The switch module senses the reduced current when there is a failure with the primary bulb. When a failure is sensed, the secondary bulb is automatically switched on by the switch module.

There are two switch modules internally installed on each wing tip. The switch modules work together with the forward position lights and are controlled by the same POSN – OFF switch.

The switch modules are operated by a 28 VDC power source.

Switch, Position Light

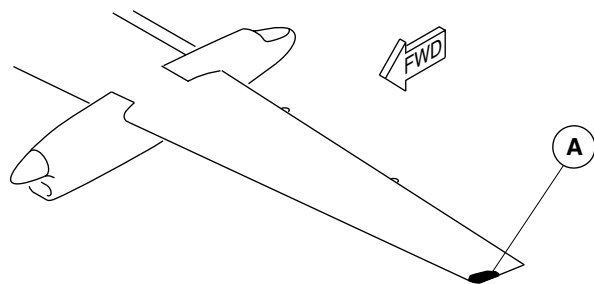
[Refer to Figures 3 and 4.](#)

The position lights are controlled by a single switch, labeled POSN – OFF on the overhead EXTERIOR LIGHTS control panel. When selected to POSN, both primary and secondary position lights come on. After 0.7 seconds, the secondary light goes out if the primary light stays on. The secondary light will stay armed ready to come on if the primary light fails.



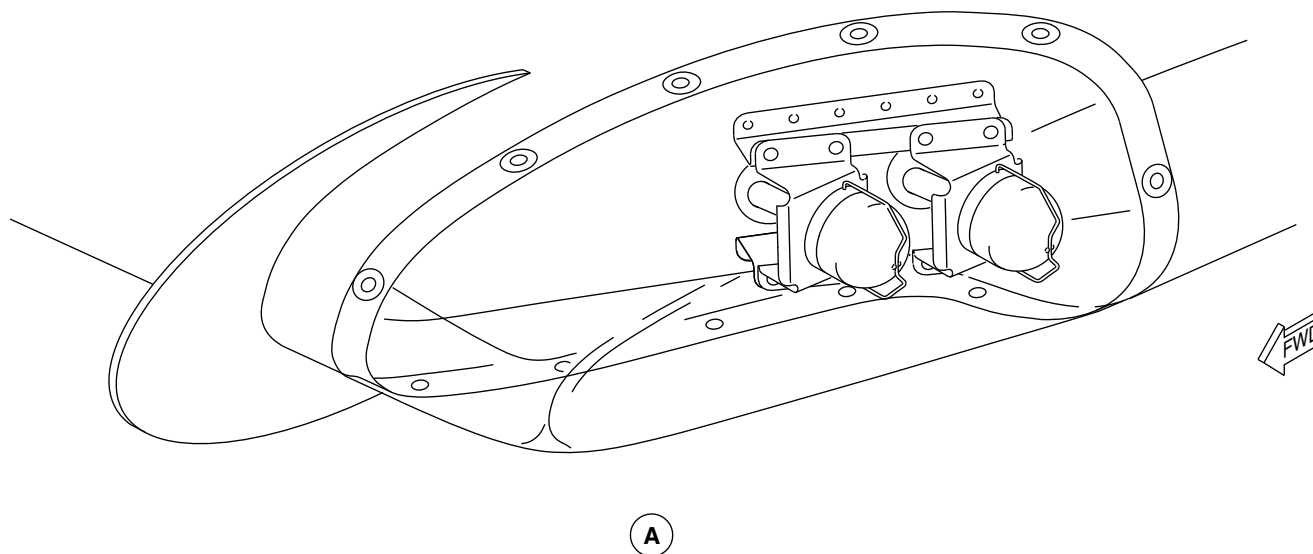
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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



NOTE

Left Component Shown.
Right Component Similar.



fs575a01.cgm

FORWARD POSITION LIGHTS LOCATION
Figure 1

PSM 1-84-2A
EFFECTIVITY:
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Config 001

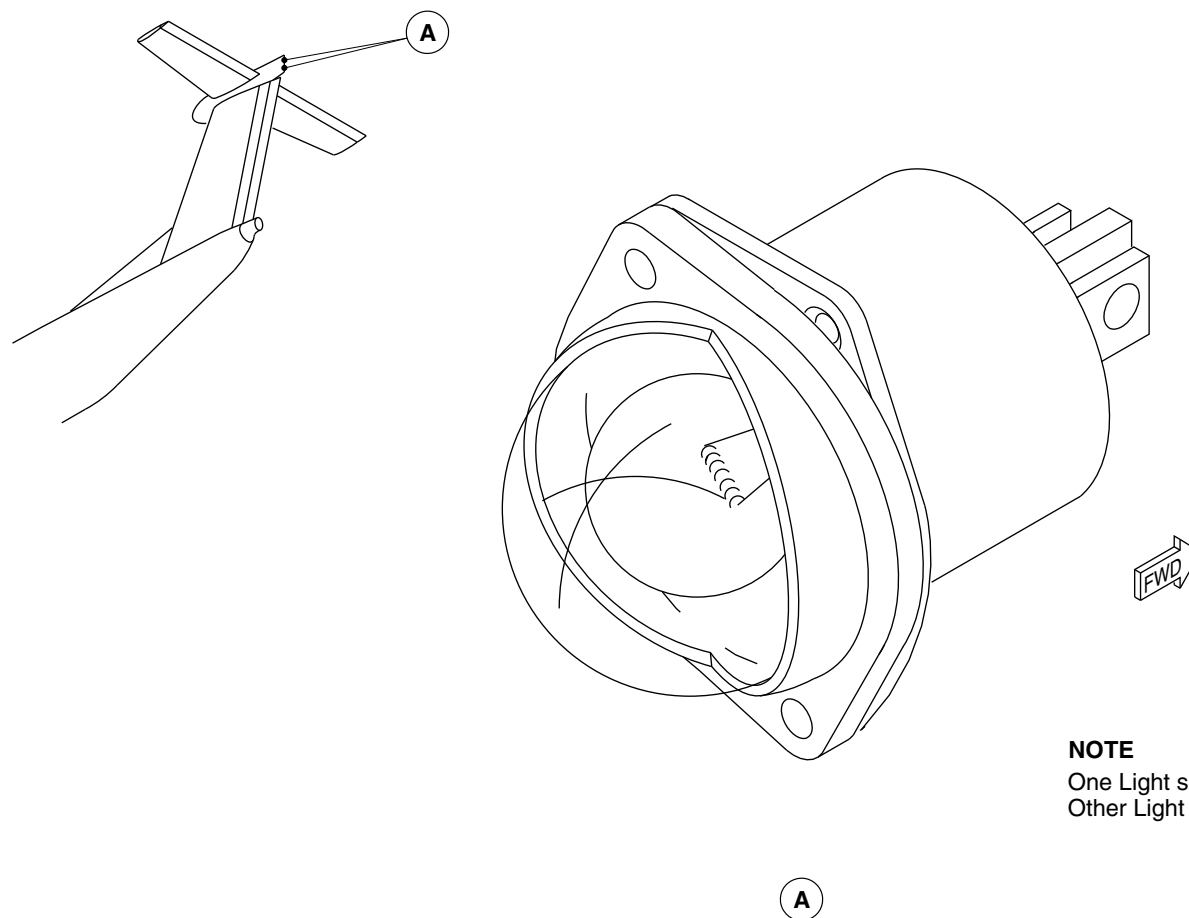
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NOTE

One Light shown.
Other Light similar.

fs595a01.cgm

TAIL POSITION LIGHT LOCATION
Figure 2

PSM 1-84-2A
EFFECTIVITY:
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Config 001

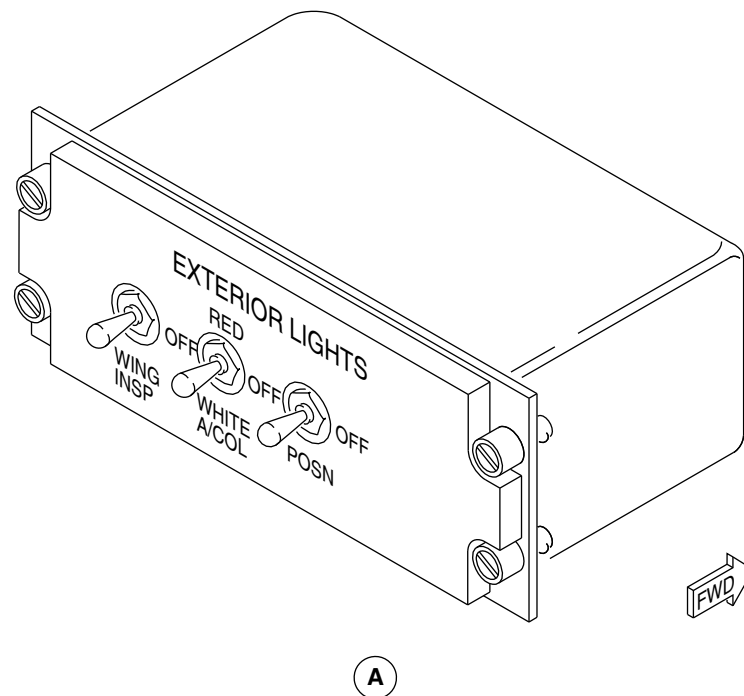
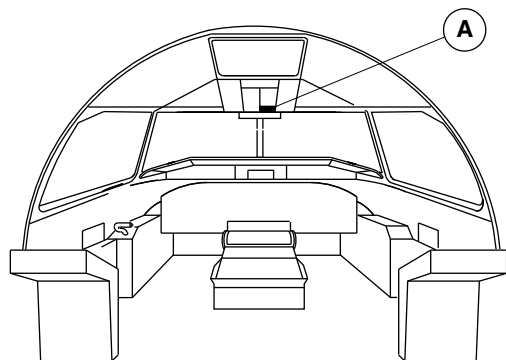
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EXTERIOR LIGHTS PANEL LOCATION
Figure 3

PSM 1-84-2A
EFFECTIVITY:
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Config 001

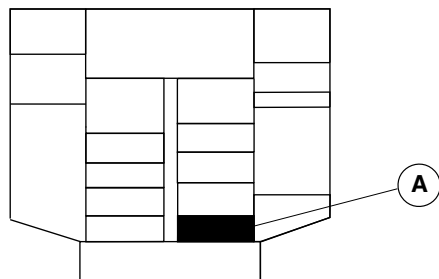
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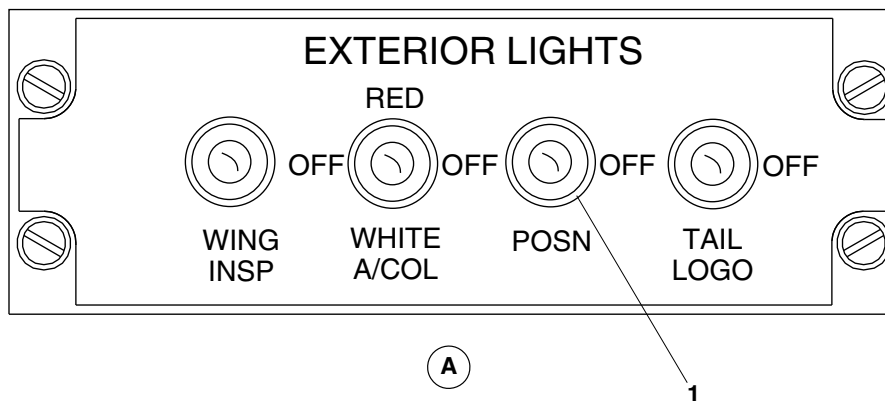
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OVERHEAD CONSOLE

LEGEND

1. Position Toggle Lights Switch.



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POSITION LIGHT SWITCH
Figure 4

PSM 1-84-2A
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**ON A/C ALL

33-43-00-001

INSPECTION LIGHTS

Introduction

The inspection lights allows for visual inspection of the wing leading edges and engine intakes for ice formation.

General Description

Refer to Figure 1.

Two incandescent engine inspection lights are installed on the fuselage to illuminate the left and right propeller spinners, engine intakes, and the wing leading edges between the nacelle and fuselage. Two halogen wing inspection lights are installed, one on each outboard side of the left and right nacelle, to shine on the wing leading edges.

The inspection lights are controlled by a switch in the flight compartment.

The inspection light system has the components that follow:

- Lights, Engine Inspection (33-43-01)
- Lights, Wing Inspection (33-43-06)
- Switch, Wing and Engine Inspection Lights (33-43-11).

Detailed Description

The wing and engine inspection lights supply illumination to the wing and engine intake areas to let the pilots or ground personnel visually detect ice formation.

The inspection lights are controlled by a switch on the EXTERIOR LIGHTS control panel in the flight compartment. The switch is identified as WING INSP/OFF.

The engine and wing inspection lights are protected by the circuit breakers that follow:

- EXT LTS L WING INSP (P1) on the L Secondary DC Bus (5 A)
- EXT LTS R WING INSP (D1) on the R Secondary DC Bus (5 A).

Lights, Engine Inspection

Refer to Figures 1 and 2.

The aircraft has two engine inspection lights located on the left and right sides of the centre fuselage. These lights, when selected on, illuminate the critical surfaces. This will let pilots or ground personnel to visually inspect the surfaces for ice formation.

Refer to Figure 4.

The engine inspection lights are a single bulb assembly located at stations X192.100/Z160.458, on the centre fuselage.

The engine and wing inspection lights are controlled by a single overhead switch located in the flight compartment labeled WING INSP/OFF.



AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

Lights, Wing Inspection

Refer to Figures 1 and 3.

Two wing inspection lights are located on the outer side of each nacelle cowl (left and right). These lights, when selected on, will shine on the critical surfaces. This allows for visual inspection of the surfaces for ice formation. The wing and engine inspection lights are controlled by a single overhead switch located in the flight compartment labeled WING INSP/OFF.

Refer to Figure 4.

The wing inspection lights are a single bulb assembly located at stations X608D53.000/Z608D-35.800, on the outer side of the engine nacelles.

Switch, Wing and Engine Inspection Lights

Refer to Figures 5 and 6.

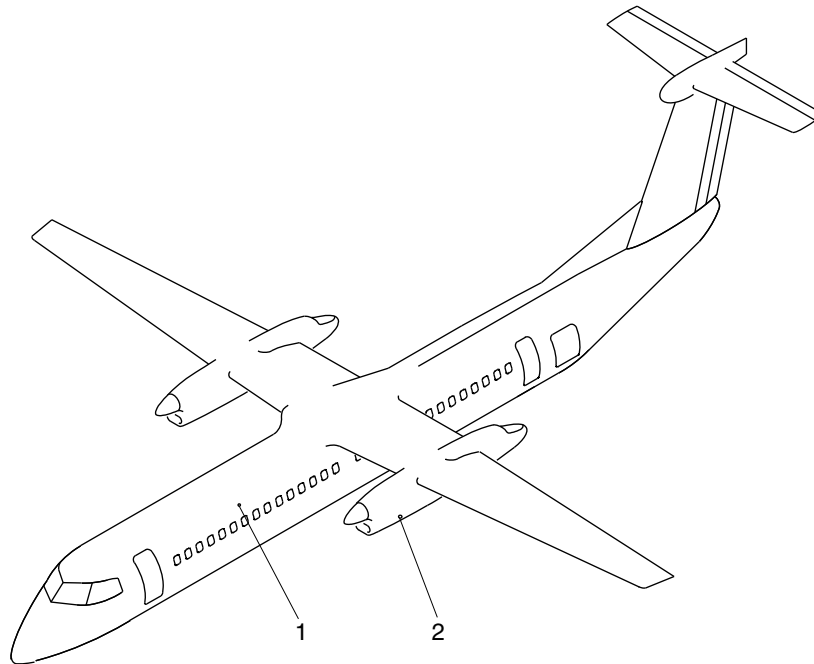
The wing and engine inspection lights are controlled by a single, two-position, switch labeled WING INSP/OFF located on the overhead EXTERIOR LIGHTS control panel.

When selected to the WING INSP position, both the engine and wing inspection lights come on to illuminate the critical surfaces for ice formation.



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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



LEGEND

- 1. Engine Inspection Light.
- 2. Wing Inspection Light.

NOTE

Left equipment shown.
Right side similar.

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INSPECTION LIGHTS LOCATION
Figure 1

PSM 1-84-2A
EFFECTIVITY:
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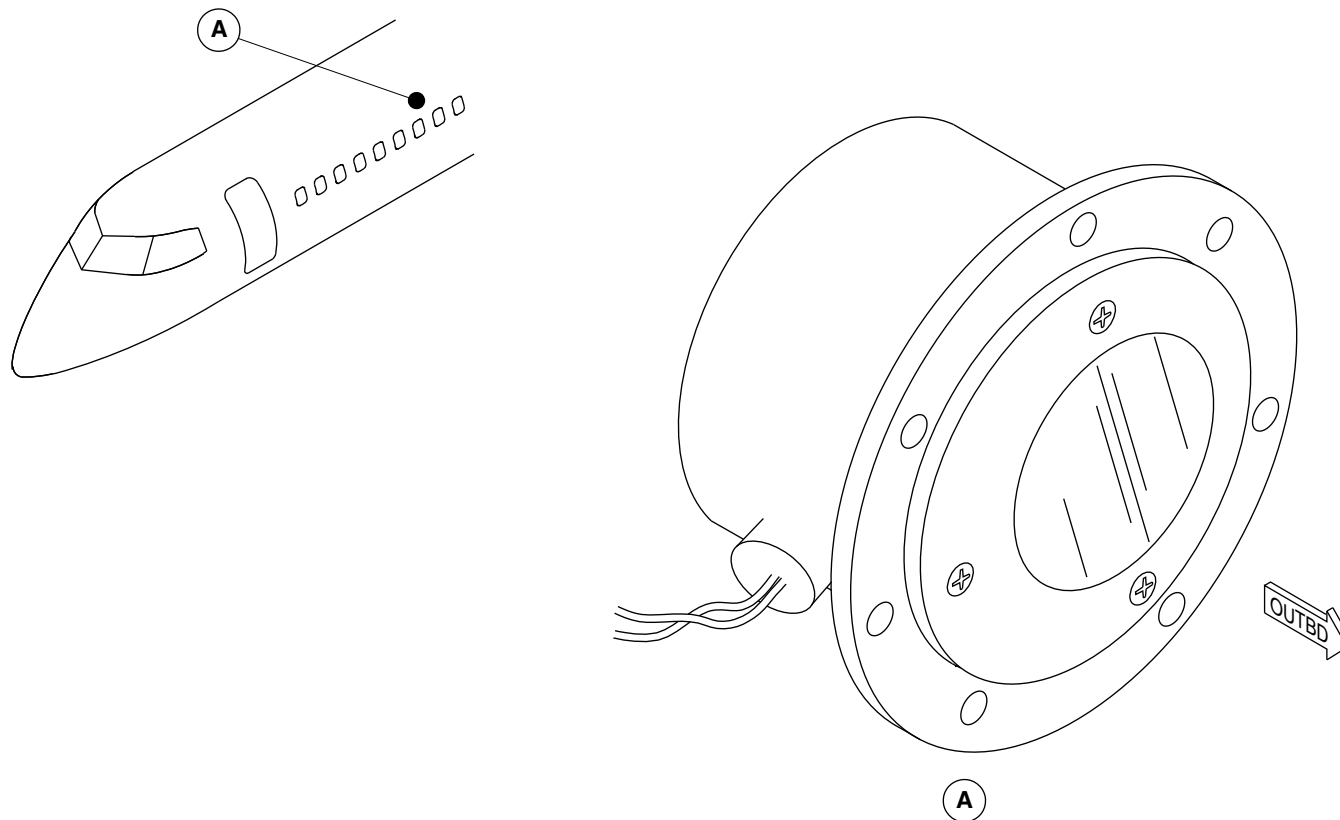
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ENGINE INSPECTION LIGHTS LOCATION
Figure 2

PSM 1-84-2A
EFFECTIVITY:
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Config 001

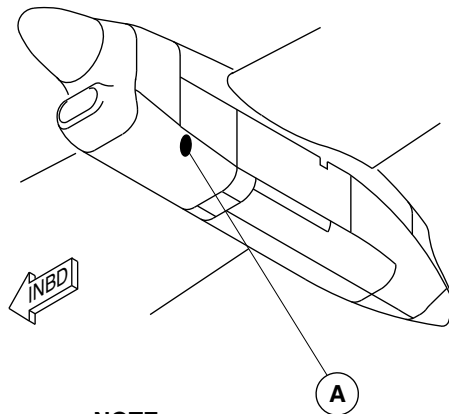
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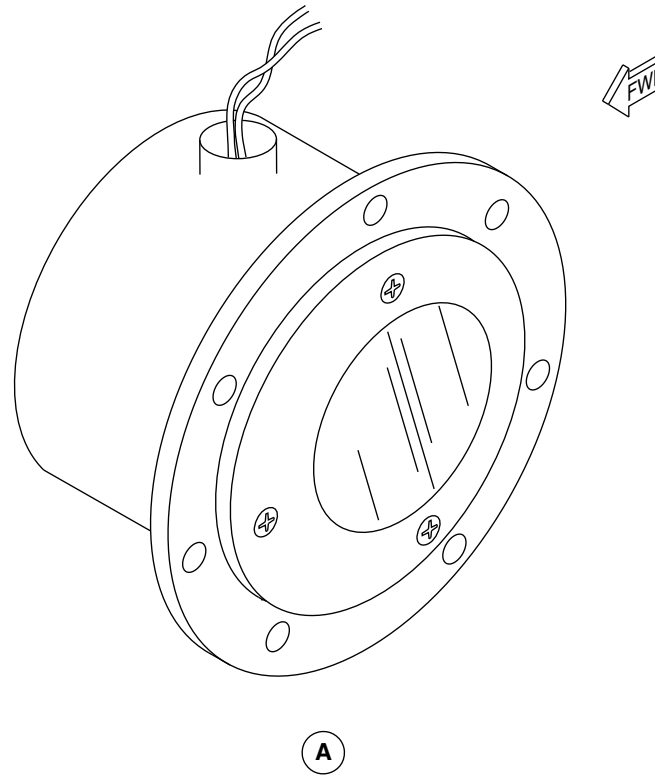
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NOTE

Left nacelle shown.
Right nacelle similar.



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WING INSPECTION LIGHTS LOCATION
Figure 3

PSM 1-84-2A
EFFECTIVITY:
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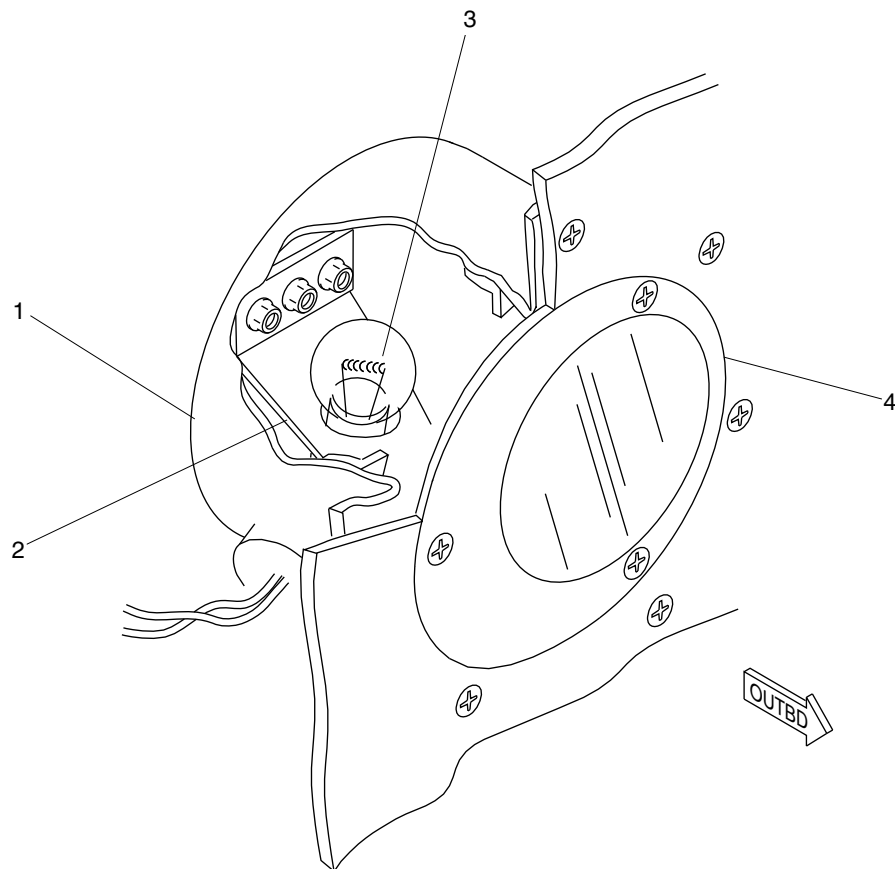
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LEGEND

- 1. Lamp Housing.
- 2. Lamp Assembly.
- 3. Lamp.
- 4. Lens Assembly.

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INSPECTION LIGHT
Figure 4

PSM 1-84-2A
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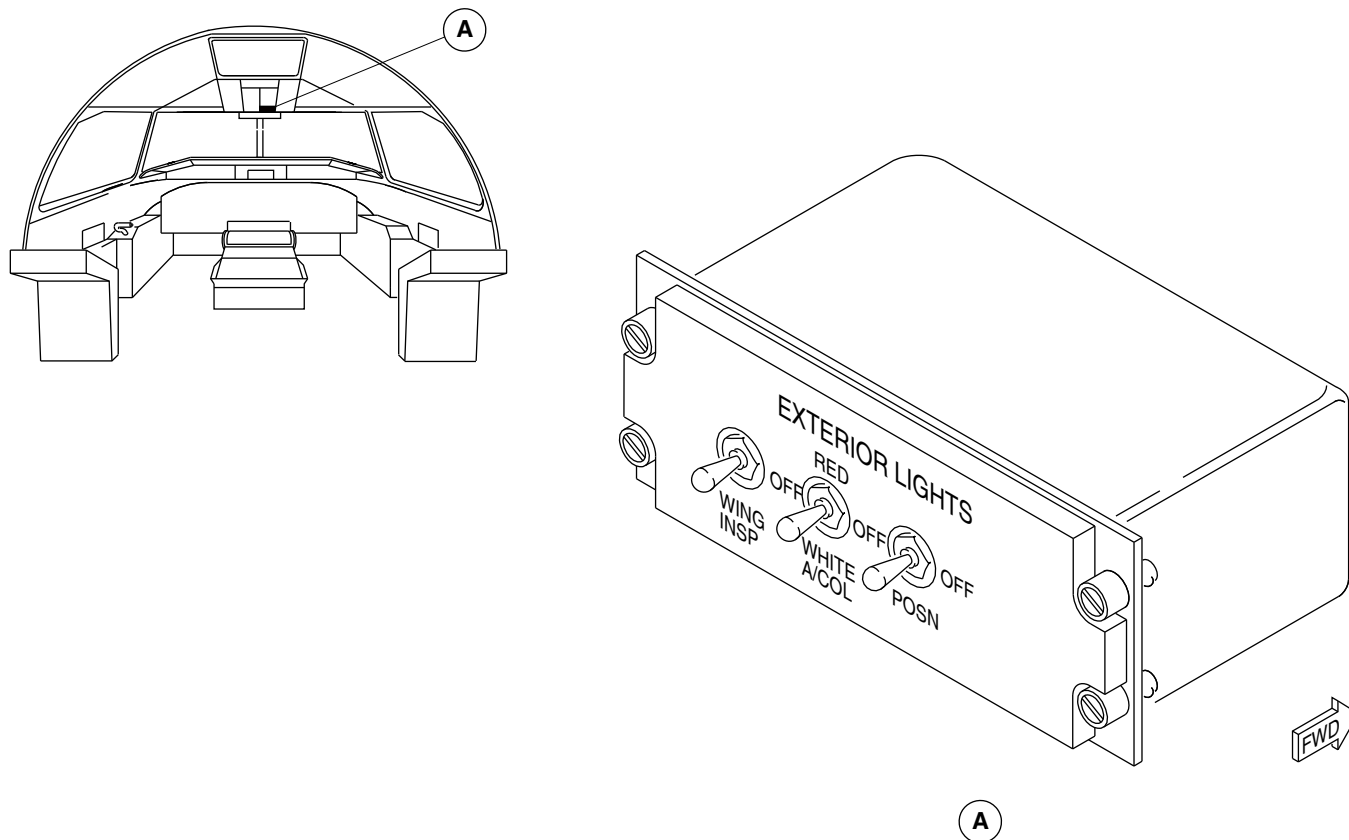
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OVERHEAD EXTERIOR LIGHTS CONTROL PANEL LOCATION
Figure 5

PSM 1-84-2A
EFFECTIVITY:
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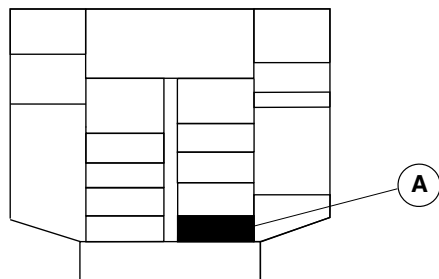
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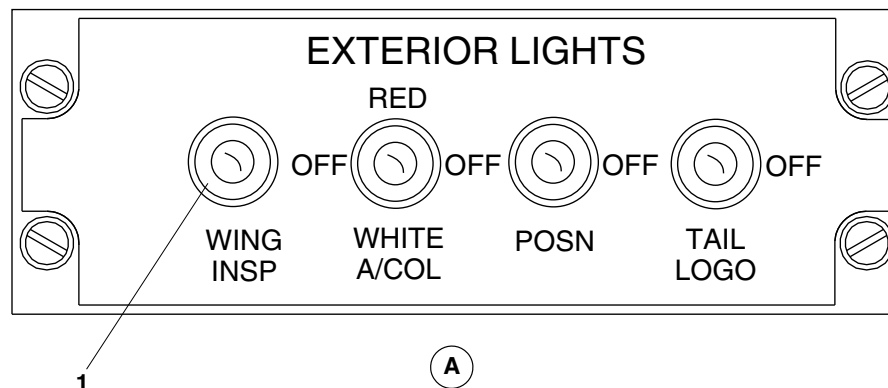
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OVERHEAD CONSOLE

LEGEND

1. Wing Inspection Toggle Lights Switch.



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INSPECTION LIGHTS SWITCH
Figure 6

PSM 1-84-2A
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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

**ON A/C ALL

33-44-00-001

ANTI-COLLISION LIGHTS

Introduction

Two white anti-collision lights, that are located on the fuselage, flash to make the aircraft more visible on the ground and in flight. When the aircraft is on the ground, a red recognition light is turned on to show that the engines are about to start and are operating.

General Description

White anti-collision lights are used for visibility while airborne. One anti-collision light is located on the vertical stabilizer bullet fairing and the other is located on the bottom of the fuselage.

A red recognition light is used for ground operation only. It is installed on top of the fuselage.

The anti-collision lights system has the components that follow:

- Lights, Anti-Collision (33-44-01)
- Switch, Anti-Collision Lights (33-44-06).

Detailed Description

The white anti-collision lights have two elements. A secondary element selection is made using a toggle switch located in the aft fuselage equipment bay in the event of a malfunction of the other element. It allows selection of the secondary element for the upper anti-collision light, lower anti-collision light, both anti-collision lights,

or OFF (for normal use). Control stays the same when the secondary element is selected.

The white anti-collision lights and the recognition light operate at 45 flashes per minute.

The white anti-collision lights and the recognition light are controlled by one switch located in the flight compartment on the EXTERIOR LIGHTS panel. The anti-collision light switch is set to the WHITE A/COL position to operate the white anti-collision lights. It is set to the RED position to operate the red recognition light. When the anti-collision light switch is set to OFF, the white anti-collision lights and the red recognition light go off.

The Right Main Bus supplies the white anti-collision lights and the recognition light with 28 VDC through a 7.5 A circuit breaker. The circuit breaker is found on the right side 28 VDC circuit breaker panel at position Q2 and is labelled EXT LTS ANTI COLL.

Lights, Anti-Collision

[Refer to Figure 3.](#)

Each white anti-collision light assembly has dual anti-collision strobe-type light elements. The lower element of the white anti-collision light assembly is identified as the primary and the upper element is identified as the secondary.

[Refer to Figure 5.](#)

The red recognition light assembly is made up of a single element.

[Refer to Figure 1.](#)

One white anti-collision light assembly is installed on top of the vertical stabilizer fairing at station X1030.000. [Refer to Figure](#)

PSM 1-84-2A

EFFECTIVITY:

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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

2. The other is installed on the lower centre line of the fuselage between stations X341.000 and X361.000.

Refer to Figure 4.

The red recognition light is located on the upper fuselage between stations X216.000 and X236.000.

Switch, Anti-Collision Lights

Refer to Figure 6.

The overhead anti-collision light switch, located on the EXTERIOR LIGHTS control panel, operates the white anti-collision lights or the red recognition light.

Refer to Figure 7.

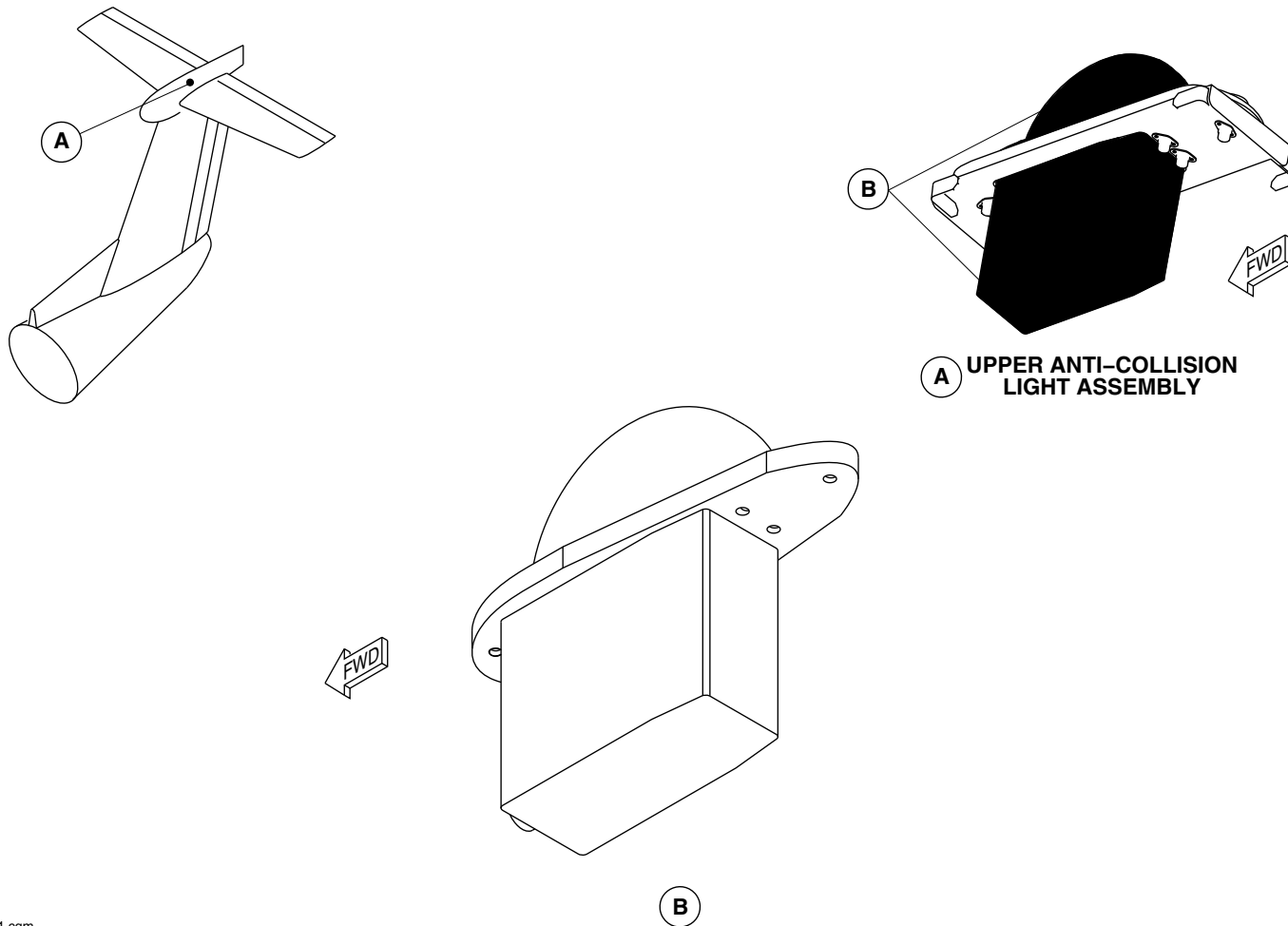
The anti-collision light switch is a three position toggle switch with the positions that follow:

- WHITE A/COL
- OFF
- RED.



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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



fs033a01.cgm

UPPER ANTI-COLLISION LIGHTS LOCATION
Figure 1

PSM 1-84-2A
EFFECTIVITY:
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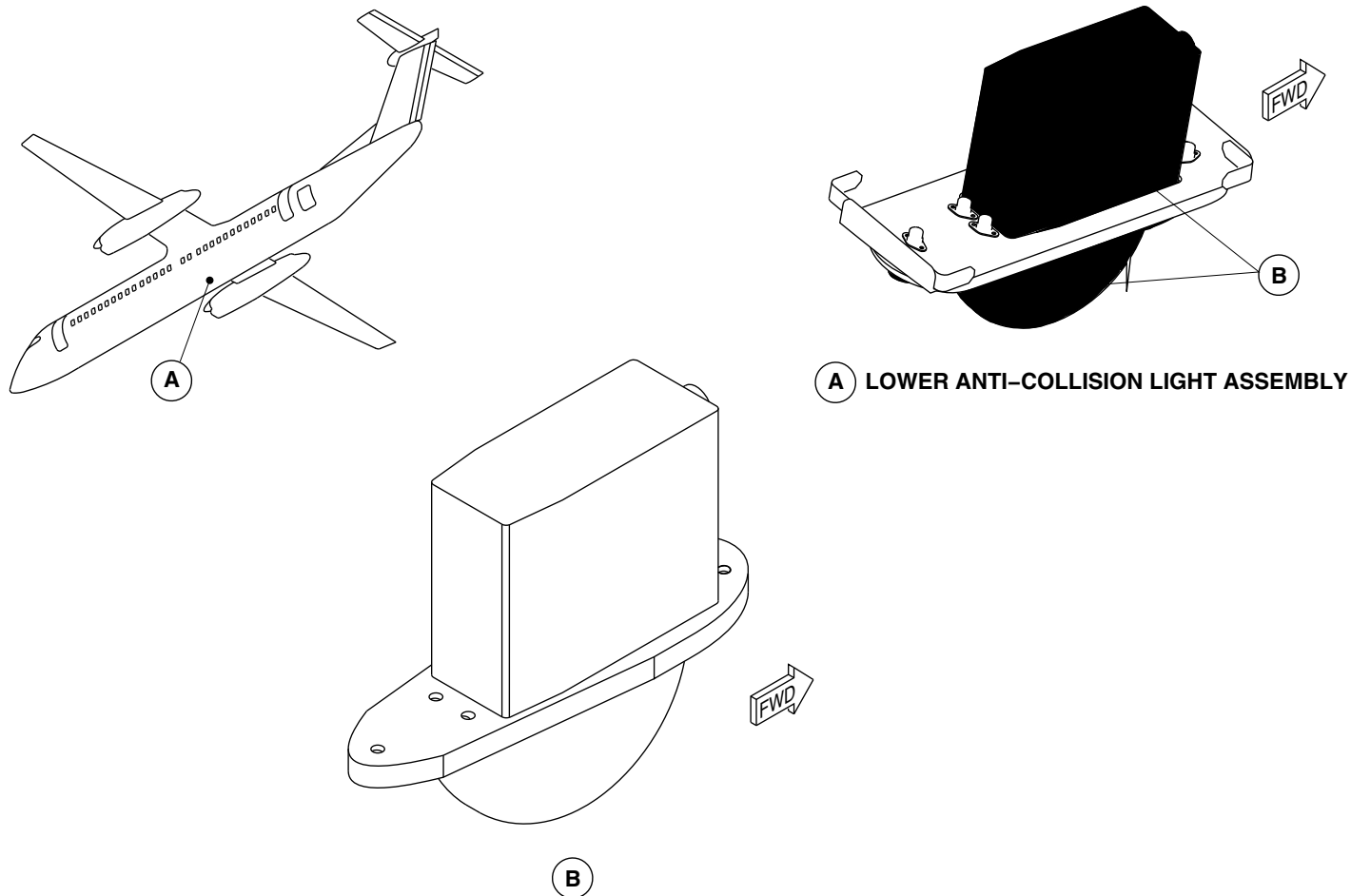
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fs035a01.cgm

LOWER ANTI-COLLISION LIGHTS LOCATION
Figure 2

PSM 1-84-2A
EFFECTIVITY:
See first effectivity on page 2 of 33-44-00
Config 001

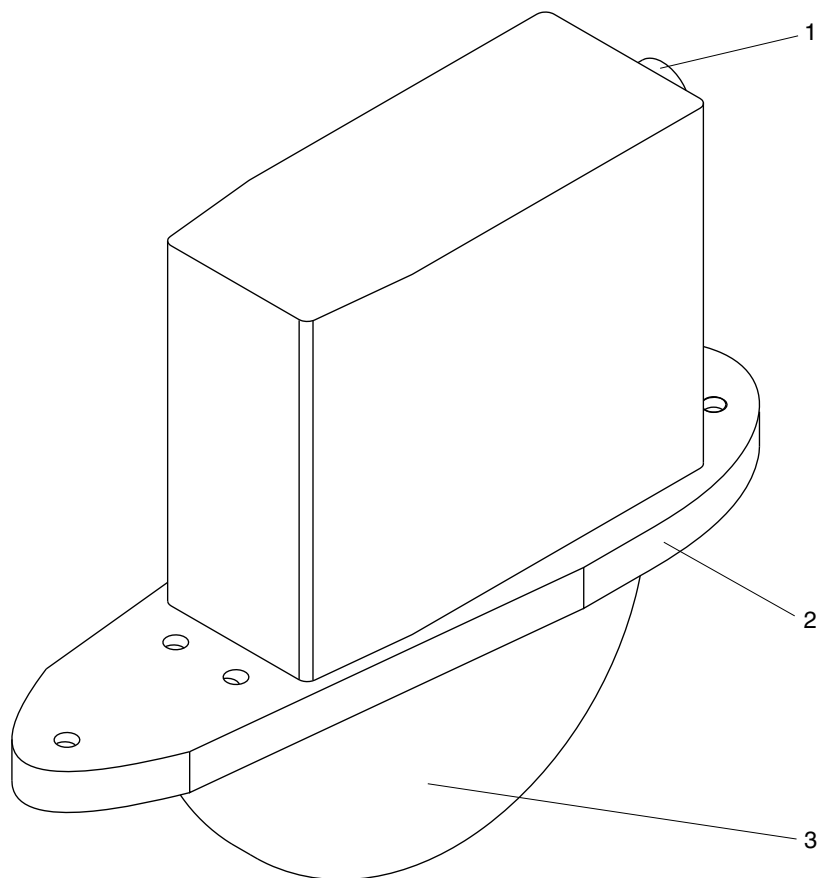
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LEGEND

- 1. Connector.
- 2. Bracket.
- 3. Lens Cover.

fs036a01.cgm

ANTI-COLLISION LIGHT
Figure 3

PSM 1-84-2A
EFFECTIVITY:
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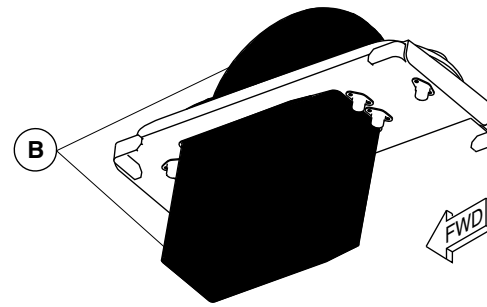
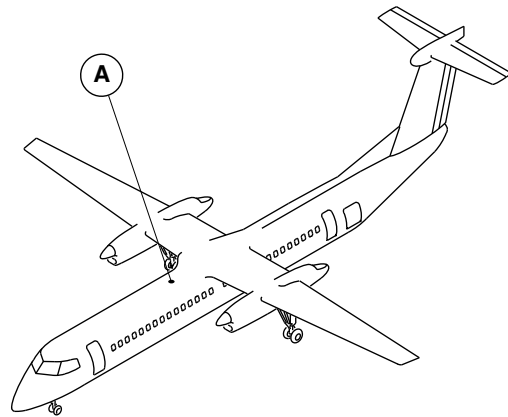
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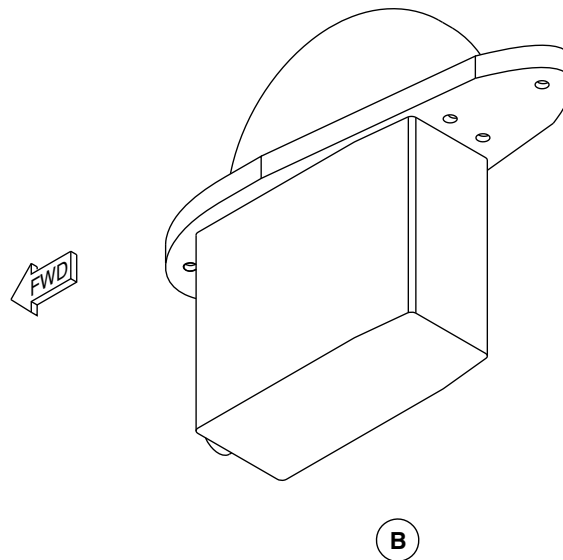


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A RED RECOGNITION LIGHT ASSEMBLY



NOTE

Light is red in colour.

fs957a01.cgm

RED RECOGNITION LIGHT LOCATION
Figure 4

PSM 1-84-2A
EFFECTIVITY:
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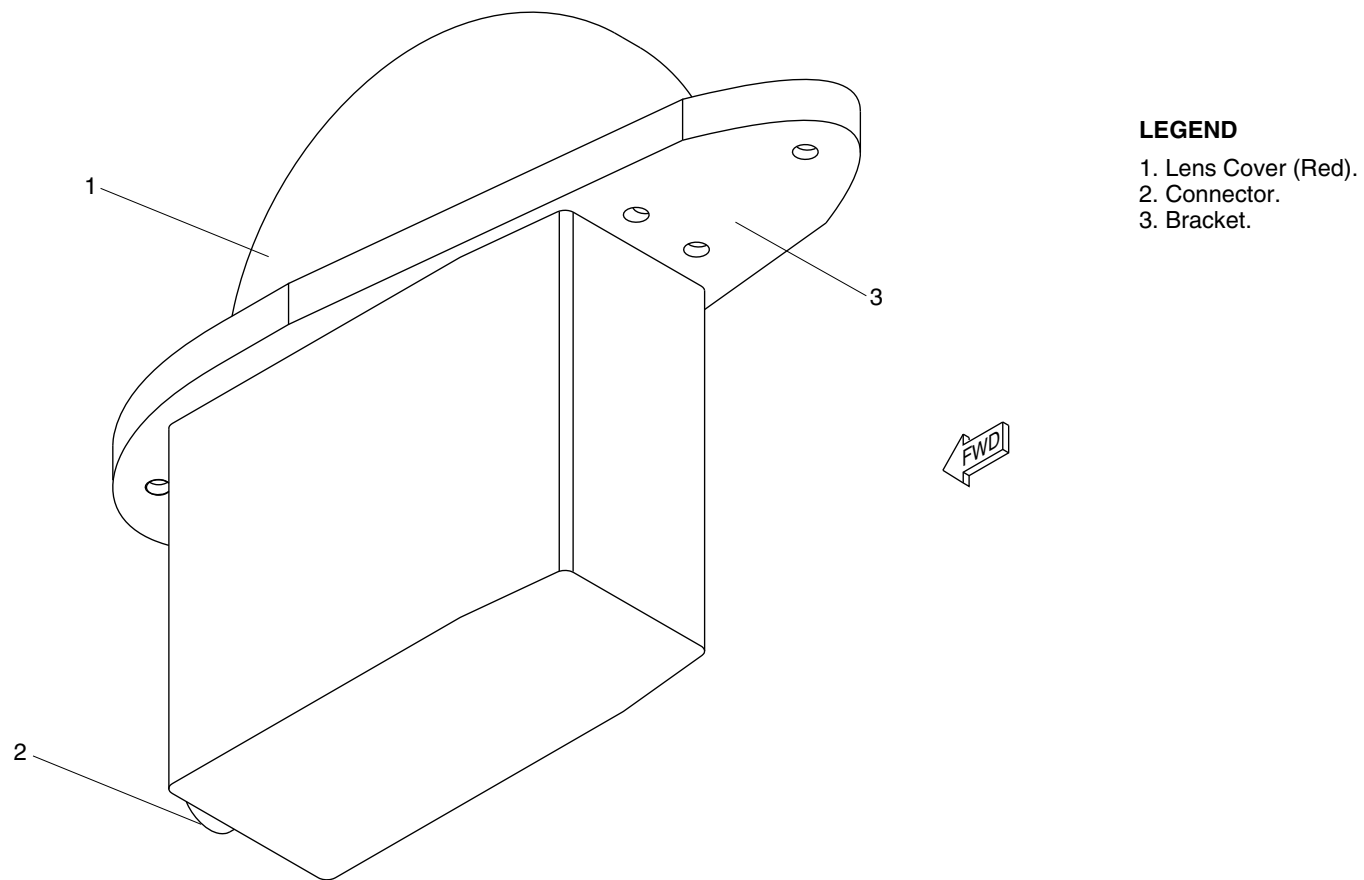
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LEGEND

- 1. Lens Cover (Red).
- 2. Connector.
- 3. Bracket.

fs958a01.cgm

RED RECOGNITION LIGHT
Figure 5

PSM 1-84-2A
EFFECTIVITY:
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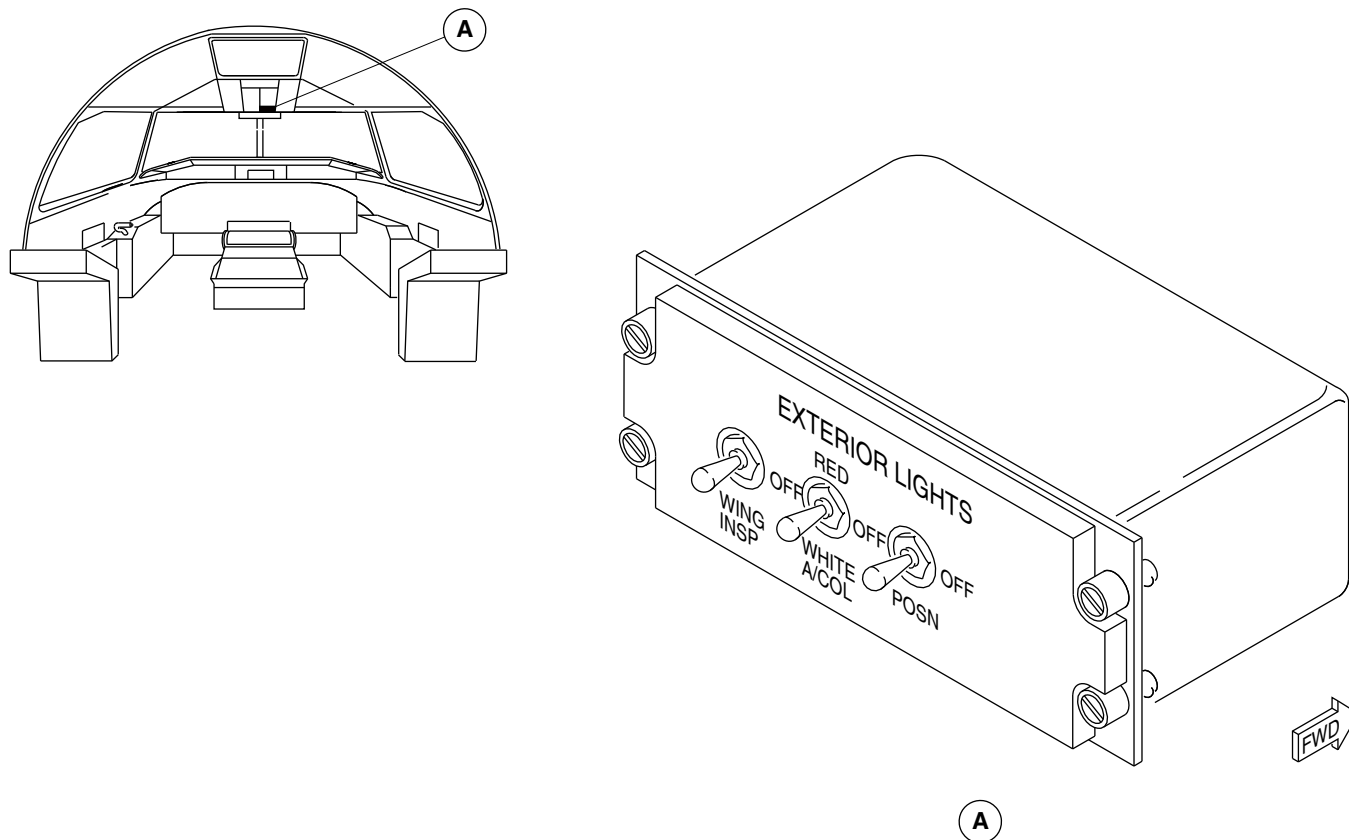
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fs056a01.cgm

OVERHEAD EXTERIOR LIGHTS CONTROL PANEL LOCATION
Figure 6

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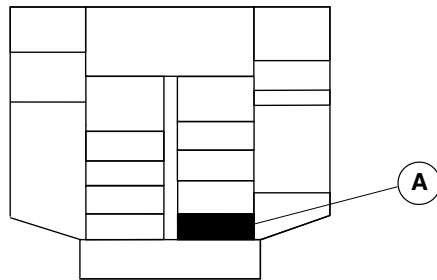
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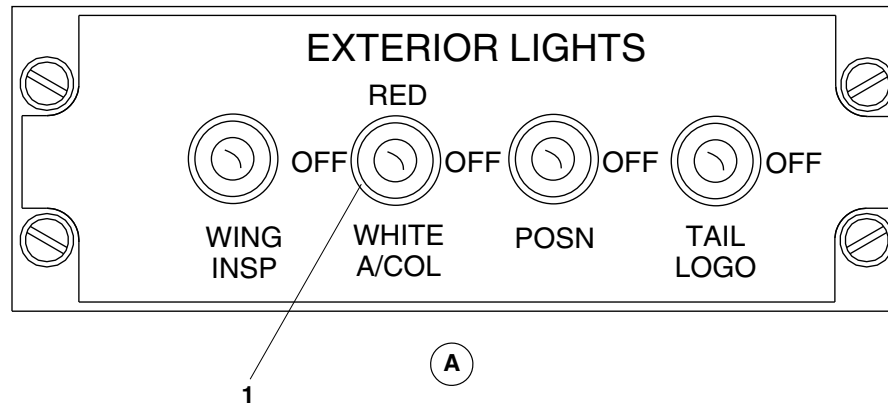
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OVERHEAD CONSOLE

LEGEND

1. Anti-Collision Toggle Lights Switch.



fs084a01.cgm

ANTI-COLLISION LIGHTS SWITCH
Figure 7

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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

**ON A/C ALL

33-45-00-001

LOGO LIGHTS

Introduction

The logo lights supply prominent aircraft tail and company logo visibility during the night.

General Description

Refer to Figure 1.

The optional logo lights are installed on the lower left and right hand horizontal stabilizers to illuminate the airline logo on the vertical tail surface.

Detailed Description

The optional logo lights are installed flush with the underside of the horizontal stabilizer. There is one logo light on the lower left side of the horizontal stabilizer, and one logo light on the lower right side.

Refer to Figures 2 and 3.

The logo lights are controlled by an overhead switch labeled TAIL LOGO-OFF on the EXTERIOR LIGHTS panel. When the switch is selected to LOGO, the switch closes the dedicated dual pole relay that carries the heavy currents to the 75 W logo lights.

The logo lights are powered by 28 VDC through the R Secondary Bus through 7.5 A circuit breakers labeled LOGO LIGHTS LEFT (B7) and LOGO LIGHTS RIGHT (C7).

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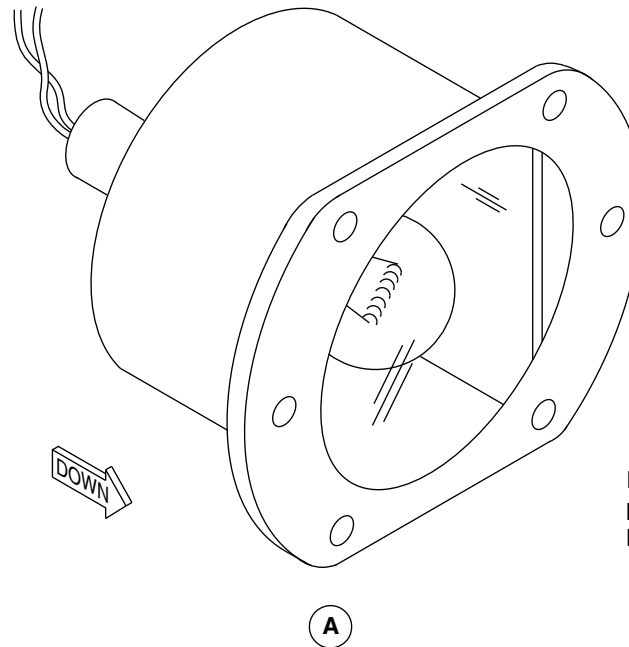
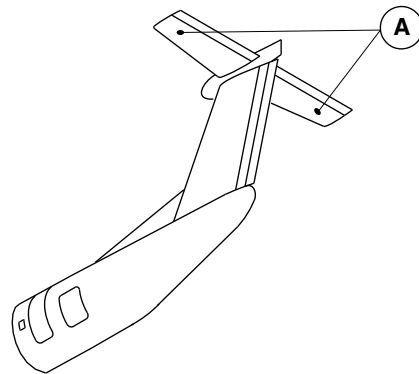
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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



NOTE
Left Component Shown.
Right Component Similar.

fs683a01.cgm

LOGO LIGHTS LOCATION
Figure 1

PSM 1-84-2A
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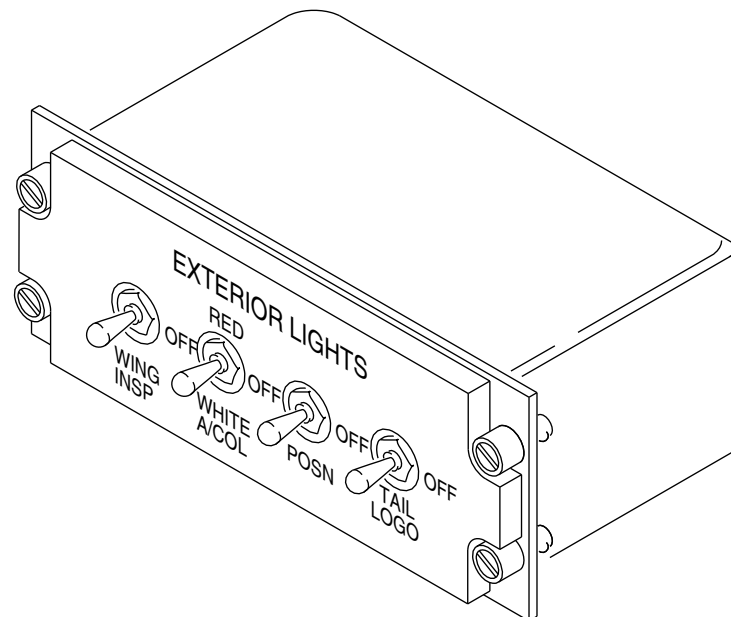
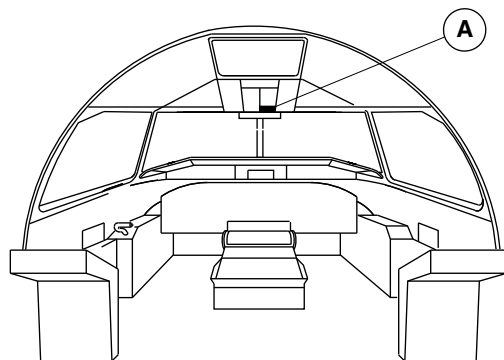
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LOGO LIGHTS, EXTERIOR LIGHTS PANEL LOCATION
Figure 2

PSM 1-84-2A
EFFECTIVITY:
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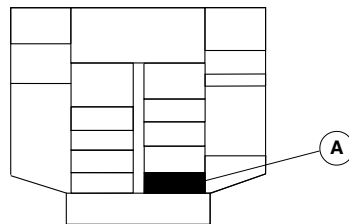
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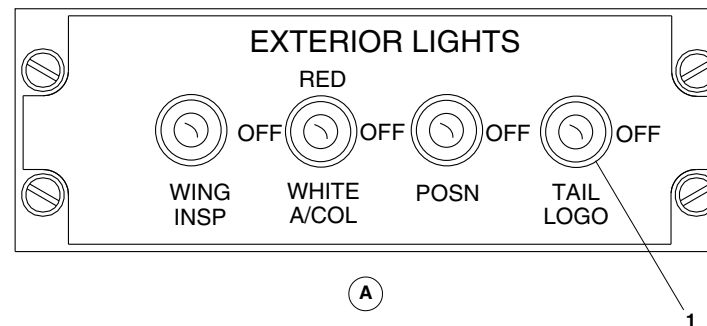
AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



OVERHEAD CONSOLE

LEGEND

1. Tail Logo Toggle Lights Switch.



fs734a01.cgm1

LOGO LIGHTS SWITCH
Figure 3

PSM 1-84-2A
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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

**ON A/C ALL

33-51-00-001

EMERGENCY LIGHTS SYSTEM

Introduction

The emergency lights system supplies interior and exterior lighting for emergency evacuation of the aircraft, or if there is a failure of the essential DC power.

General Description

Fixed exterior emergency egress lights are located at the left and right aft emergency exits, the front right emergency exit and the forward passenger door. Emergency lights in the passenger compartment ceiling supply emergency lighting inside the aircraft. The emergency lights are powered by four 6.4 V Ni-Cad battery packs.

The system is operated by an overhead-panel toggle switch located in the flight compartment or by a push button light switch located on the main passenger entrance bulkhead.

The emergency lights system has the components that follow:

- Unit, Power Supply–Emergency Light (33-51-01)
- Lights, Emergency–Cabin (33-51-06)
- Lights, Emergency–Egress (33-51-11)
- Lights, Emergency–Floor Path (33-51-16).

Detailed Description

Four egress lights, one located adjacent to each emergency exit, supply external emergency lighting. The forward passenger door egress light is powered by a battery pack which also powers the related EXIT signs. The front right emergency exit egress light and EXIT signs are powered by a separate battery pack. The egress lights and EXIT signs for the two aft exits are powered by the same battery pack. The battery pack for the aft exits is located in the ceiling between the two exits.

Emergency ceiling lights in the passenger compartment supply internal emergency lighting. The ceiling lights are powered by three of the four battery packs.

[Refer to Figure 1.](#)

All of the emergency lights are controlled by one of two switches:

- EMER LIGHTS–OFF/ARM/ON switch in the flight compartment
- EMERGENCY LIGHTING–NORMAL/ON switch on the main passenger entrance bulkhead.

When the EMER LIGHTS switch, in the flight compartment, is set to the ON position, the emergency lights come on. When the EMER LIGHTS switch is set to the OFF position, the emergency lights go off. When the EMER LIGHTS switch is set to the ARM position, the emergency lights automatically come on if there is a 28 VDC left main bus power failure. The emergency power supply units receive charging power from the 28 VDC left essential bus with:

- the EMER LIGHTS switch in either the ARM or OFF position
- the EMERGENCY LIGHTING switch is set to NORMAL

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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION

- power is available to the 28 VDC left main bus.

When the EMERGENCY LIGHTING switch, on the main passenger entrance bulkhead, is set to ON, the emergency lights come on. When the EMERGENCY LIGHTING switch is set to NORMAL, the emergency lights go off, but will come on if there is a 28 VDC left main bus power failure. For this to occur, the EMER LIGHTS switch, in the flight compartment, must be in the ARM position.

The emergency lighting system is protected by the circuit breakers that follow:

- EMER LTS (G3) on the L ESSENTIAL DC Bus (5A)
- EMERGENCY LIGHTS RELAY (E3) on the L MAIN DC Bus (5A).

An EMER LTS DISARMED caution light on the caution and warning panel comes on when the EMER LIGHTS–OFF/ARM/ON switch is not in the armed position.

If the emergency lights come on by the automatic function, they are turned off by the EMER LIGHTS–OFF/ARM/ON switch first set to the ON and then the OFF position.

Units, Power Supply–Emergency Light

[Refer to Figure 2.](#)

The emergency lights are powered by four self contained 6.4 V Ni–Cad battery packs found above the passenger compartment ceiling, near each emergency exit at stations X10.250, X83.000, X654.500 and X690.525.

Lights, Emergency–Cabin

[Refer to Figures 3 , 4 , 5 and 6.](#)

Emergency lights installed on the ceiling centerline supply emergency lighting for the passenger aisle. Emergency EXIT signs are located near each of the four emergency exits. The emergency lights and EXIT signs are controlled by the EMER LIGHTS–OFF/ARM/ON switch located in the flight compartment or the EMERGENCY LIGHTING–NORMAL/ON switch on the main passenger entrance bulkhead.

Lights, Emergency–Egress

[Refer to Figure 7.](#)

[Refer to Figure 8.](#)

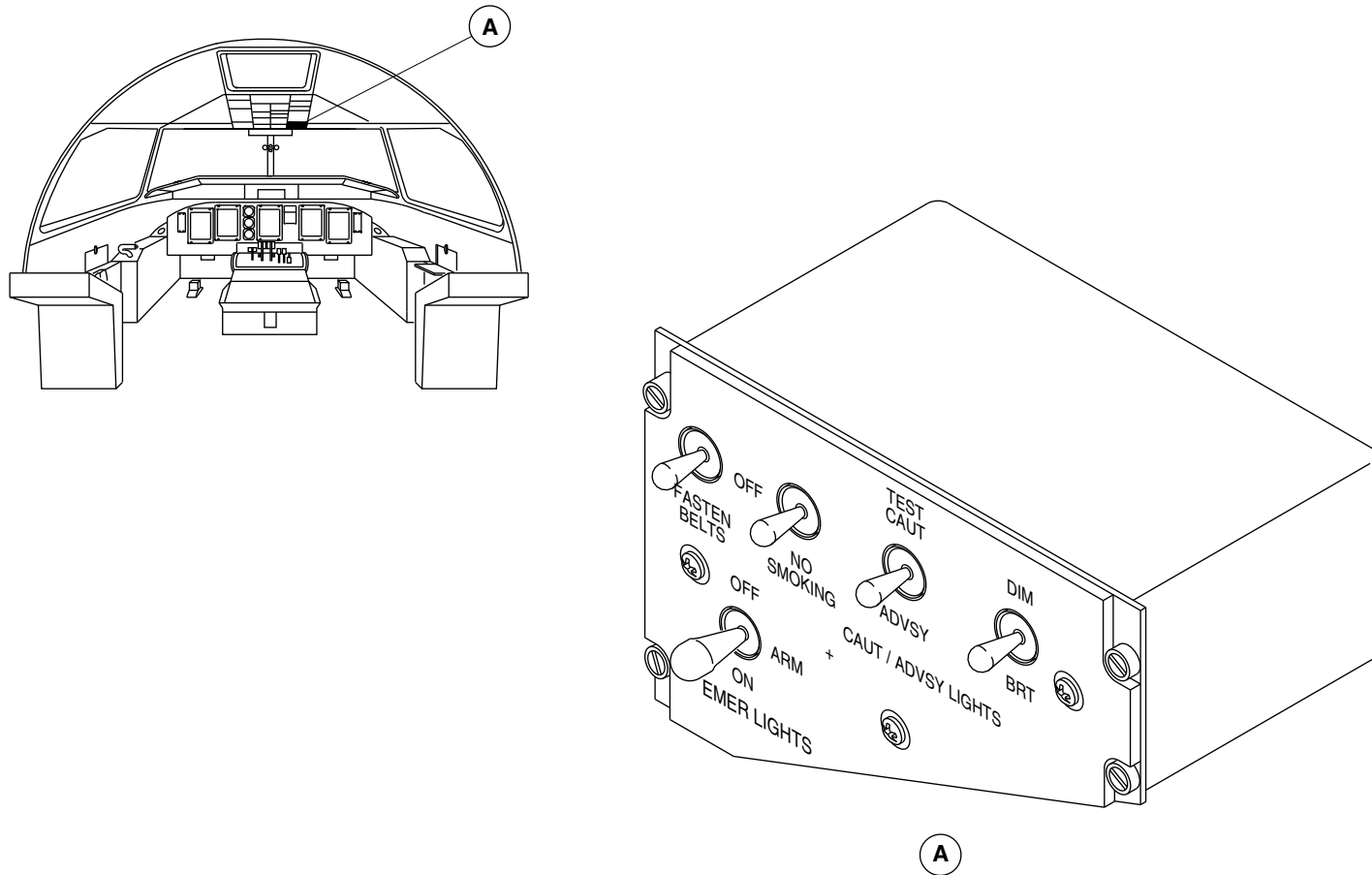
On aircraft without ModSum 4–458983 incorporated, the fixed exterior emergency egress lights are located at the left and right aft emergency exits, the front right emergency exit (Type II/III) and the forward passenger door. They are controlled by the EMER LIGHTS–OFF/ARM/ON switch located in the flight compartment or the EMERGENCY LIGHTING–NORMAL/ON switch on the main passenger entrance bulkhead.

On aircraft with ModSum 4–458983 incorporated, the fixed exterior emergency egress lights are located at the left and right aft emergency exits, the front right emergency exit (Type 1) and the forward passenger door. They are controlled by the EMER LIGHTS–OFF/ARM/ON switch located in the flight compartment or the EMERGENCY LIGHTING–NORMAL/ON switch on the main passenger entrance bulkhead.



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AIRCRAFT MAINTENANCE MANUAL – SYSTEM DESCRIPTION SECTION



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EMERGENCY LIGHTS CONTROL PANEL LOCATION
Figure 1

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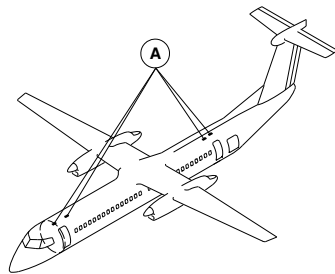
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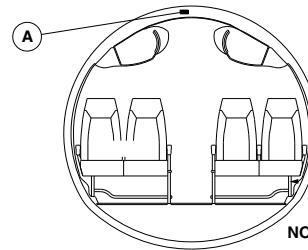
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NOTE

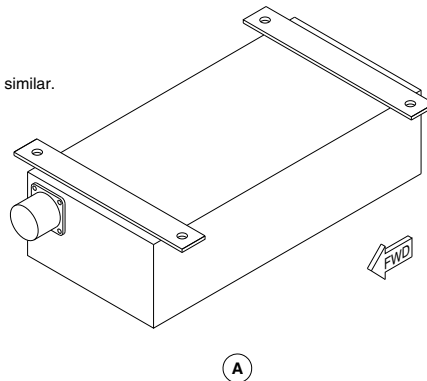
One component shown.
Other three components similar.



CROSS SECTION

NOTE

Component
placement typical.



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EMERGENCY LIGHTS POWER SUPPLY LOCATIONS
Figure 2

PSM 1-84-2A
EFFECTIVITY:
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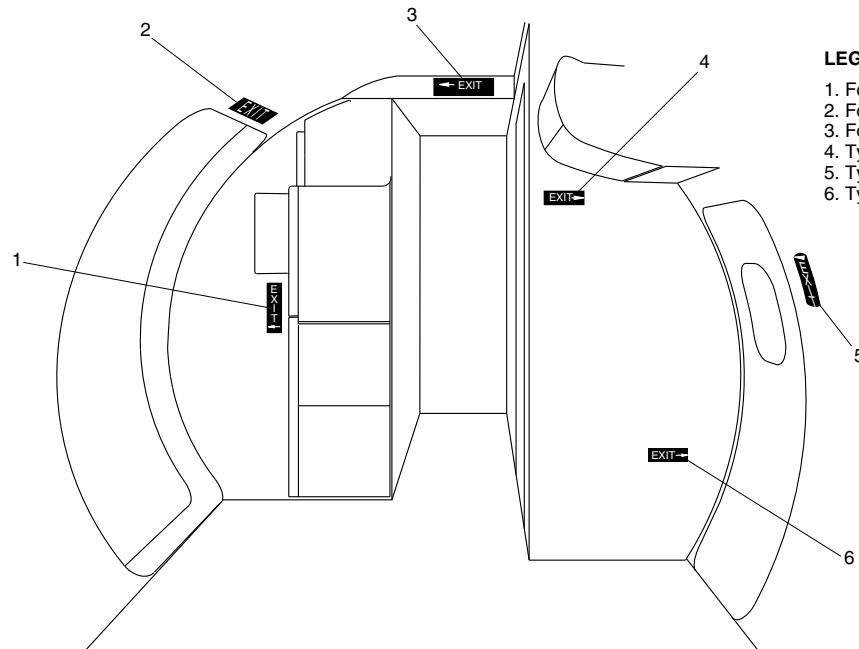
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LEGEND

1. Forward Passenger Door Identifier.
2. Forward Passenger Door Emergency Marker.
3. Forward Passenger Door Locator.
4. Type II/III Door Locator.
5. Type II/III Door Emergency Marker.
6. Type II/III Door Identifier.

NOTE

View looking forward from
FWD Passenger Compartment
area (Selected Details Omitted).

fs591a01.cgm

FORWARD PASSENGER COMPARTMENT EXIT SIGN LOCATIONS
Figure 3

PSM 1-84-2A
EFFECTIVITY:
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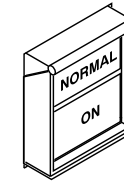
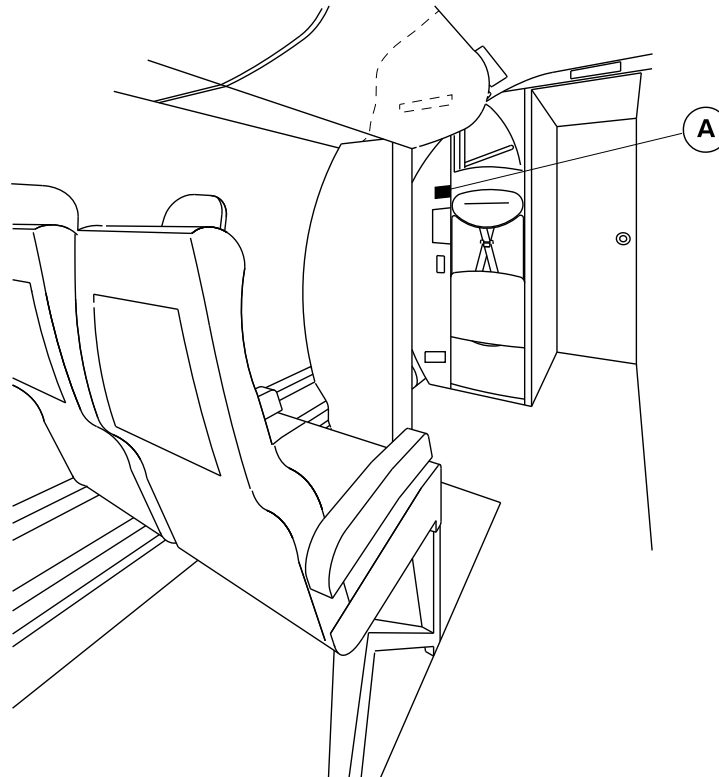
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EMERGENCY LIGHTING

A

NOTE

View looking forward from
FWD Passenger Compartment.

braw45a01.dg, sw, 14/06/04

FORWARD PASSENGER INFORMATION SIGN LOCATION
Figure 4

PSM 1-84-2A
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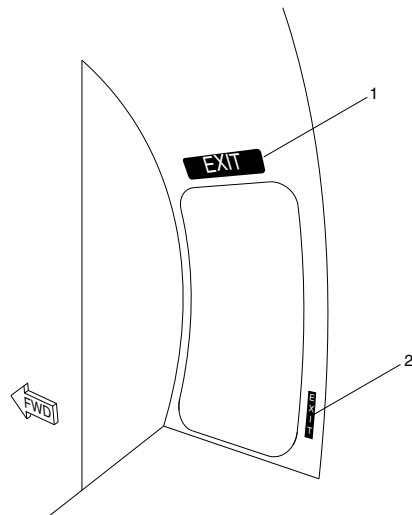
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LEGEND

1. Aft Service Door Lighted Sign.
2. Aft Service Door Lower Lighted Sign.

NOTE

Aft Service Door lighted signs shown
Aft Passenger Door signs similar.

ts593a01.cgm

AFT SERVICE DOOR EXIT SIGN LOCATION
Figure 5

PSM 1-84-2A
EFFECTIVITY:
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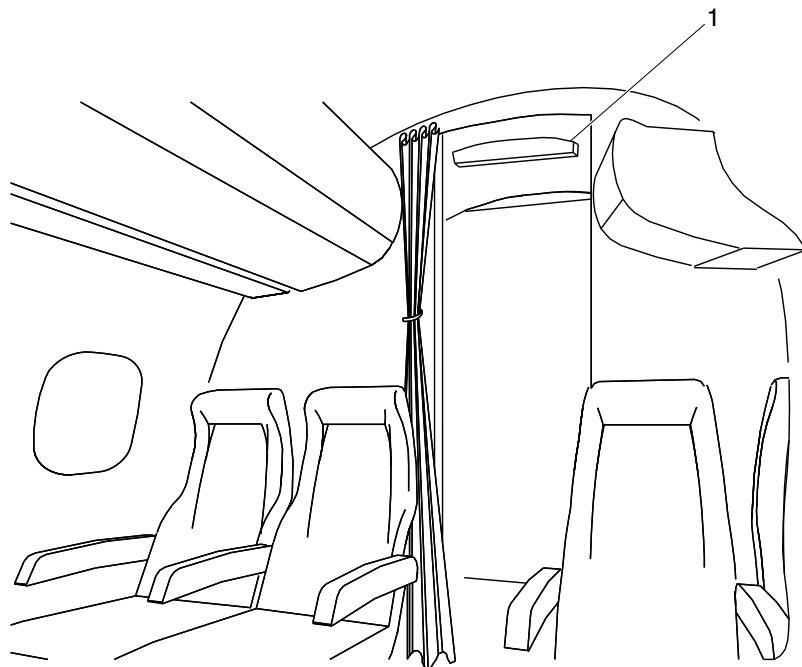
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LEGEND

1. EXIT lighted sign (mounted on aft ceiling panel).

NOTE

View looking aft in
passenger compartment.

cg5544a01.dg, sk/gv, feb28/2019

Passenger Information Signs II
Figure 6

PSM 1-84-2A
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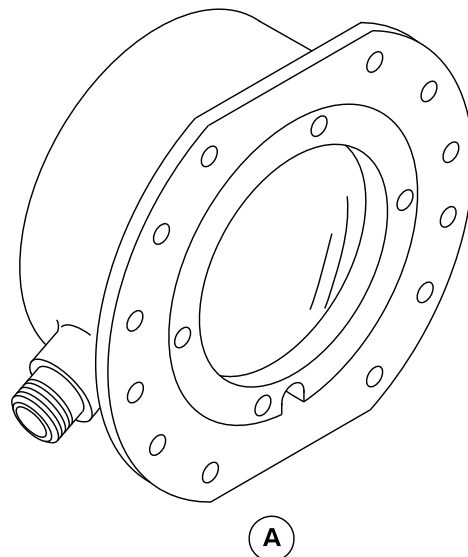
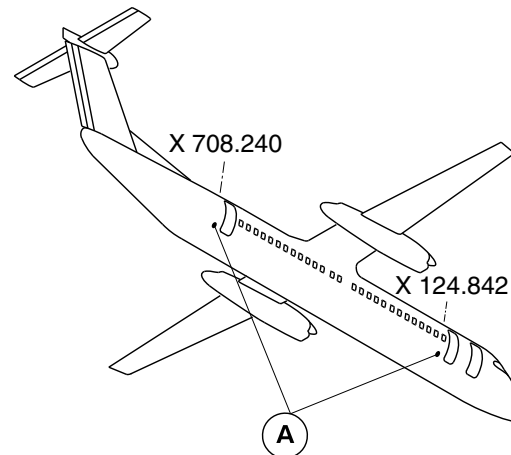
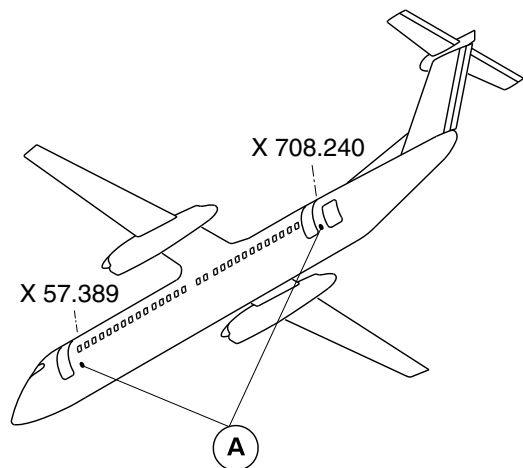
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PRE MODSUM 4-458983

fs780a01.dg, nn, may16/2014

Emergency Egress Lights
Figure 7

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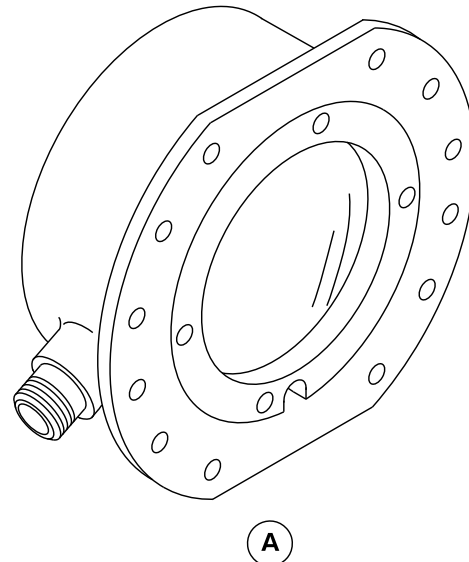
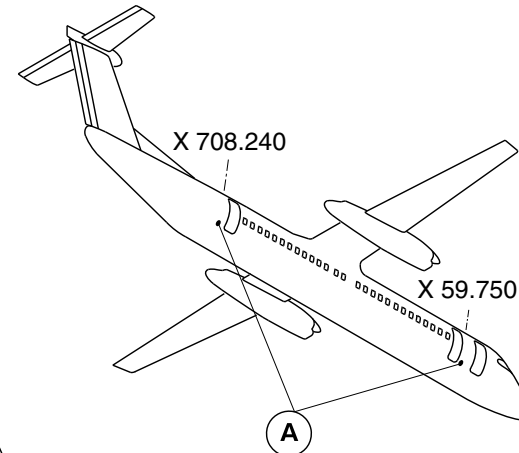
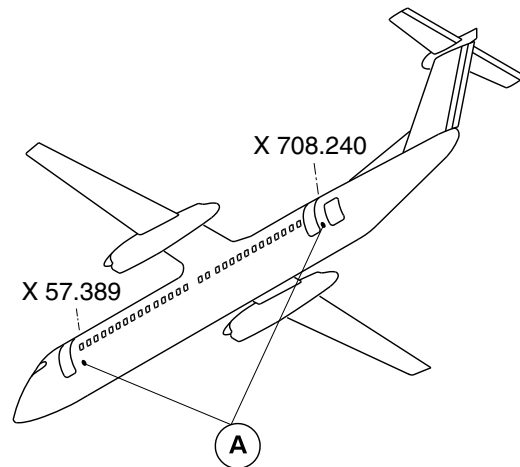
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POST MODSUM 4-458983

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Emergency Egress Lights
Figure 8

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