CHAPTER 33

LIGHTS

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33-00-00		
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33-11-00		
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Master Warning And Caution System Annunciator - Lamp Replacement TASK 33-11-00-960-806			212	SIA ALL
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Master Warning And Caution Light Switch - Switch Replacement TASK 33-11-00-960-808			222	SIA ALL
Master Warning And Caution Light Switch - Lamp Replacement TASK 33-11-00-960-809			225	SIA ALL
Control Stand Lighting Control Panel Replacement TASK 33-11-00-960-810			228	SIA ALL

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Miscellaneous Lights - Deactivation TASK 33-14-00-040-801			201	SIA ALL
Miscellaneous Lights - Activation TASK 33-14-00-440-801			209	SIA ALL
Panel/Glareshield Floodlight - Light Assembly Replacement TASK 33-14-00-960-801			209	SIA ALL
Control Stand Floodlight - Lamp Replacement TASK 33-14-00-960-802			214	SIA ALL
Control Stand Floodlight - Light Assembly Replacement TASK 33-14-00-960-803			217	SIA ALL
Oxygen Mask Floodlight - Light Assembly Replacement TASK 33-14-00-960-804			220	SIA ALL
Dome Light - Lamp Replacement TASK 33-14-00-960-805			223	SIA ALL
Dome Light - Removal TASK 33-14-00-000-801			227	SIA ALL
Dome Light - Installation TASK 33-14-00-400-801			230	SIA ALL
Circuit Breaker Panel Light - Lamp Replacement TASK 33-14-00-960-806			231	SIA ALL
Dimmer Control Unit - Replacement TASK 33-14-00-960-807			234	SIA ALL
Panel Floodlights - Operational Test of the Standby Relay TASK 33-14-00-710-801			239	SIA ALL
FLIGHT CREW LIGHTS - MAINTENANCE PRACTICES	33-17-00		201	SIA ALL
Flight Crew Lights - Deactivation TASK 33-17-00-040-801			201	SIA ALL
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Flight Kit/Reading Light - Lamp Replacement TASK 33-17-00-960-802			209	SIA ALL
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MASTER DIM AND TEST (MD&T) LIGHTS - MAINTENANCE PRACTICES	33-18-00		201	SIA ALL
Master Dim and Test Lights - Deactivation TASK 33-18-00-040-801			201	SIA ALL
Master Dim and Test Lights - Activation TASK 33-18-00-440-801			204	SIA ALL
Indicator Light - Lamp Replacement TASK 33-18-00-960-801			205	SIA ALL
Indicator Light - Light Assembly Replacement TASK 33-18-00-960-802			208	SIA ALL
Lighted Pushbutton Switch - Lamp Replacement TASK 33-18-00-960-803			209	SIA ALL
Lightplate - Replacement TASK 33-18-00-960-804			215	SIA ALL
Annunciator And Dimming Module - Module Replacement TASK 33-18-00-960-805			217	SIA ALL
Master Dim and Test System - Module Replacement TASK 33-18-00-960-806			222	SIA ALL
Master Dim and Test - Operational Test TASK 33-18-00-710-801			225	SIA ALL
PASSENGER COMPARTMENT LIGHTS - ADJUSTMENT/TEST	33-20-00		501	SIA ALL
Passenger Compartment Lights - Operational Test TASK 33-20-00-710-801			501	SIA ALL

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Passenger Compartment Lights - BSI Generation 3 OPS Loadable Software Airplane Part (LSAP) Loading TASK 33-20-00-470-801			508	SIA ALL
WINDOW LIGHTS - MAINTENANCE PRACTICES	33-21-00		201	SIA ALL
BSI Window LED Lighting - Deactivation TASK 33-21-00-040-801			201	SIA ALL
BSI Window LED Lighting - Activation TASK 33-21-00-440-801			204	SIA ALL
Window Light - LED Light Assembly Replacement TASK 33-21-00-960-801			205	SIA ALL
Window Light - Overwing Exit Light Assembly Replacement TASK 33-21-00-960-802			210	SIA ALL
CEILING LIGHTS - MAINTENANCE PRACTICES	33-22-00		201	SIA ALL
BSI Ceiling LED Lighting - Deactivation TASK 33-22-00-040-801			201	SIA ALL
BSI Ceiling LED Lighting - Activation TASK 33-22-00-440-801			205	SIA ALL
BSI Entry and Cove LED Lighting - Deactivation TASK 33-22-00-040-802			206	SIA ALL
BSI Entry and Cove LED Lighting - Activation TASK 33-22-00-440-802			210	SIA ALL
Ceiling Light, Bin/Wash - LED Light Assembly Replacement TASK 33-22-00-960-801			211	SIA ALL
Ceiling Light, Direct - LED Light Assembly Replacement TASK 33-22-00-960-802			218	SIA ALL
Ceiling Light, Cove - LED Light Assembly Replacement TASK 33-22-00-960-803			224	SIA ALL
Ceiling Light, Center Overhead Stowage - LED Light Assembly Replacement TASK 33-22-00-960-804			230	SIA ALL

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CEILING LIGHTS - INSPECTION/CHECK	33-22-00		601	SIA ALL
BSI LED Light - Inspection/Check TASK 33-22-00-200-801			601	SIA ALL
READING LIGHTS - MAINTENANCE PRACTICES	33-23-00		201	SIA ALL
Reading Lights - Deactivation TASK 33-23-00-040-801			201	SIA ALL
Reading Lights - Activation TASK 33-23-00-440-801			204	SIA ALL
Reading Light - Light Assembly Replacement TASK 33-23-00-960-801			205	SIA ALL
Reading Light - Adjustment and Test TASK 33-23-00-820-801			211	SIA ALL
INFORMATION SIGNS - MAINTENANCE PRACTICES	33-25-00		201	SIA ALL
Information Signs - Deactivation TASK 33-25-00-040-801			201	SIA ALL
Information Signs - Activation TASK 33-25-00-440-801			204	SIA ALL
Information Sign - Light Assembly Replacement for a Passenger Service Unit (PSU) Sign TASK 33-25-00-960-801			204	SIA ALL
Information Sign - Lamp Replacement for a No-Smoking/Fasten-Seat-Belt Sign TASK 33-25-00-960-803			209	SIA ALL
Information Sign - Light Assembly Replacement for a Return-to-Seat Sign TASK 33-25-00-960-802			212	SIA ALL
ATTENDANT WORK LIGHTS - MAINTENANCE PRACTICES	33-26-01		201	SIA ALL
Attendant Work Light - Lamp Replacement TASK 33-26-01-960-801			201	SIA ALL
Attendant Work Light - Light Assembly Replacement TASK 33-26-01-960-802			205	SIA ALL

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GALLEY LIGHTS - MAINTENANCE PRACTICES	33-26-02		201	SIA ALL
Galley Light - Lamp Replacement TASK 33-26-02-960-801			201	SIA ALL
Galley Light - Ballast Replacement TASK 33-26-02-960-802			204	SIA ALL
LAVATORY LIGHTS AND SIGNS - MAINTENANCE PRACTICES	33-26-03		201	SIA ALL
Lavatory Lights - Deactivation TASK 33-26-03-040-801			201	SIA ALL
Lavatory Lights - Activation TASK 33-26-03-440-801			203	SIA ALL
Lavatory Light - LED Light Replacement TASK 33-26-03-960-803			203	SIA ALL
Lavatory-Occupied Sign - Light Assembly Replacement TASK 33-26-03-960-804			206	SIA ALL
Lavatory Door Switch - Replacement TASK 33-26-03-960-805			210	SIA ALL
PASSENGER AND LAVATORY CALL LIGHTS - MAINTENANCE PRACTICES	33-27-00		201	SIA ALL
Passenger and Lavatory Call Lights - Deactivation TASK 33-27-00-040-801			201	SIA ALL
Passenger and Lavatory Call Lights - Activation TASK 33-27-00-440-801			204	SIA ALL
Passenger Call Light - PSU LED Call Light Replacement TASK 33-27-00-960-801			204	SIA ALL
Lavatory Call Light - Light/Switch Replacement TASK 33-27-00-960-802			208	SIA ALL
ENTRY LIGHTS - MAINTENANCE PRACTICES	33-29-00		201	SIA ALL
Dim Entry Light Assembly Replacement TASK 33-29-00-960-801			201	SIA ALL

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WHEEL WELL LIGHTS - MAINTENANCE PRACTICES	33-32-00		201	SIA ALL
Wheel Well Lights - Deactivation TASK 33-32-00-040-801			201	SIA ALL
Wheel Well Lights - Activation TASK 33-32-00-440-801			207	SIA ALL
Wheel Well Light - Light Assembly Replacement TASK 33-32-00-960-801			208	SIA ALL
Wheel Well Lights - Operational Test TASK 33-32-00-710-801			215	SIA ALL
AIR CONDITIONING COMPARTMENT LIGHTS - MAINTENANCE PRACTICES	33-33-00		201	SIA ALL
Air Conditioning Compartment Lights Deactivation TASK 33-33-00-040-801			201	SIA ALL
Air Conditioning Compartment Lights Activation TASK 33-33-00-440-801			206	SIA ALL
Air Conditioning Compartment LED Light Assembly Replacement TASK 33-33-00-960-801			208	SIA ALL
ELECTRONIC EQUIPMENT COMPARTMENT LIGHTS - MAINTENANCE PRACTICES	33-34-00		201	SIA ALL
Electronic Equipment Compartment Lights Deactivation TASK 33-34-00-040-801			201	SIA ALL
Electronic Equipment Compartment Lights Activation TASK 33-34-00-440-801			205	SIA ALL
Electronic Equipment Compartment LED Light Assembly Replacement TASK 33-34-00-960-801			206	SIA ALL
ACCESSORY COMPARTMENT LIGHTS - MAINTENANCE PRACTICES	33-35-00		201	SIA ALL
Accessory Compartment Lights - Deactivation TASK 33-35-00-040-801			201	SIA ALL
Accessory Compartment Lights - Activation TASK 33-35-00-440-801			207	SIA ALL

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Accessory Compartment Light - Lamp Replacement TASK 33-35-00-960-801			208	SIA ALL
CARGO COMPARTMENT LIGHTS - MAINTENANCE PRACTICES	33-36-00		201	SIA ALL
Cargo Compartment Lights Deactivation TASK 33-36-00-040-801			201	SIA ALL
Cargo Compartment Lights Activation TASK 33-36-00-440-801			202	SIA ALL
Cargo Compartment Ceiling Light Assembly Replacement TASK 33-36-00-960-801			204	SIA ALL
Cargo Compartment Door Sill Light Assembly Replacement TASK 33-36-00-960-802			208	SIA ALL
WING ILLUMINATION LIGHTS - MAINTENANCE PRACTICES	33-41-00		201	SIA ALL
Wing Illumination Light - Deactivation TASK 33-41-00-040-801			201	SIA ALL
Wing Illumination Light - Activation TASK 33-41-00-440-801			202	SIA ALL
Wing Illumination Light - Lamp Replacement TASK 33-41-00-960-801			202	SIA ALL; AIRPLANES WITH LAMP LIGHTS
Wing Illumination Light - LED Module Assembly Replacement TASK 33-41-00-960-804			207	SIA ALL; AIRPLANES WITH LED MODULE ASSEMBLY LIGHTS
Wing Illumination Light - Transformer Replacement TASK 33-41-00-960-802			210	SIA ALL; AIRPLANES WITH LAMP LIGHTS
Wing Illumination Light - Light Assembly Replacement TASK 33-41-00-960-803			214	SIA ALL
Wing Illumination Light - Operational Test TASK 33-41-00-710-801			218	SIA ALL

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LED LANDING, TAXI, AND RUNWAY TURNOFF LIGHTS (LTRTL) - MAINTENANCE PRACTICES	33-42-21		201	SIA ALL
Fixed Landing Light - Deactivation TASK 33-42-21-040-801			201	SIA ALL
Fixed Landing Light - Activation TASK 33-42-21-440-801			203	SIA ALL
Fixed Landing Light - Main Array Assembly Replacement TASK 33-42-21-960-801			203	SIA ALL
Fixed Landing Light - Power Supply Replacement TASK 33-42-21-960-802			211	SIA ALL
Fixed Landing Light - Lens Temporary Repair TASK 33-42-21-350-801			219	SIA ALL
Runway Turnoff Lights - Deactivation TASK 33-42-21-040-802			224	SIA ALL
Runway Turnoff Lights - Activation TASK 33-42-21-440-802			226	SIA ALL
Runway Turnoff Light - Light Assembly Replacement TASK 33-42-21-960-803			226	SIA ALL
Taxi Light Relay - Replacement TASK 33-42-21-960-804			233	SIA ALL
LED LANDING, TAXI, AND RUNWAY TURNOFF LIGHTS (LTRTL) - ADJUSTMENT/TEST	33-42-21		501	SIA ALL
LTRTL Main Array - Operational Test TASK 33-42-21-710-801			501	SIA ALL
Taxi Light Relay - Operational Test TASK 33-42-21-710-802			502	SIA ALL
POSITION LIGHTS - MAINTENANCE PRACTICES	33-43-10		201	SIA ALL
Position Lights Deactivation TASK 33-43-10-040-801			201	SIA ALL
Position Lights Activation TASK 33-43-10-440-801			202	SIA ALL
Position Lights Transformer Replacement TASK 33-43-10-960-801			203	SIA ALL

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Forward Position Lights Power Supply Unit Replacement TASK 33-43-10-960-803			208	SIA ALL
Position Lights Operational Test TASK 33-43-10-710-801			211	SIA ALL
Winglet (AFT) Marker and Winglet Anti-Collision Lights - Disconnect the Electrical Connectors TASK 33-43-10-020-801			211	SIA ALL
Winglet (AFT) Marker and Winglet Anti-Collision Lights - Connect the Electrical Connectors TASK 33-43-10-420-801			215	SIA ALL
FORWARD POSITION LIGHTS - MAINTENANCE PRACTICE	33-43-11		201	SIA ALL
Forward Position Lights LED Module Replacement TASK 33-43-11-960-801			201	SIA ALL
FORWARD POSITION LIGHT - REMOVAL/INSTALLATION	33-43-11		401	SIA ALL
Forward Position Light Removal TASK 33-43-11-000-801			401	SIA ALL
Forward Position Light Installation TASK 33-43-11-400-801			404	SIA ALL
WINGLET AFT MARKER LIGHTS - MAINTENANCE PRACTICES	33-43-12		201	SIA ALL
Aft Marker Light LED Optic Assembly Replacement TASK 33-43-12-960-801			201	SIA ALL
WINGLET AFT MARKER LIGHTS - REMOVAL/INSTALLATION	33-43-12		401	SIA ALL
Aft Marker Light Removal TASK 33-43-12-000-801			401	SIA ALL
Aft Marker Light Installation TASK 33-43-12-400-801			405	SIA ALL

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TAILCONE POSITION LIGHTS - MAINTENANCE PRACTICES	33-43-13		201	SIA ALL
Tailcone Position Lights Deactivation TASK 33-43-13-040-801			201	SIA ALL
Tailcone Position Lights Activation TASK 33-43-13-440-801			202	SIA ALL
Tailcone Position Lights Replacement TASK 33-43-13-960-801			202	SIA ALL
Tailcone Position Lights Transformer Replacement TASK 33-43-13-960-802			208	SIA ALL
Tailcone Position Lights LED Module Replacement TASK 33-43-13-960-803			212	SIA ALL
Tailcone Position Lights Housing Assembly Replacement TASK 33-43-13-960-804			216	SIA ALL
ANTI-COLLISION LIGHTS - TEST	33-44-00		501	SIA ALL
Anti-Collision Lights - Operational Test TASK 33-44-00-710-801			501	SIA ALL
UPPER ANTI-COLLISION LIGHT - MAINTENANCE PRACTICES	33-44-01		201	SIA ALL
Upper Anti-Collision Light Deactivation TASK 33-44-01-040-801			201	SIA ALL
Upper Anti-Collision Light Activation TASK 33-44-01-440-801			202	SIA ALL
Upper Anti-Collision Light Lamp Assembly Replacement TASK 33-44-01-960-806			202	SIA 001-014
Upper Anti-Collision Light - Light Assembly Replacement TASK 33-44-01-960-801			208	SIA 001-014
Upper Anti-Collision Light - LED Light Assembly Replacement TASK 33-44-01-960-807			213	SIA 015-999

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Upper Anti-Collision Light - Power Supply Replacement TASK 33-44-01-960-802			222	SIA 001-014
Upper Anti-Collision Light - Adapter Plate Replacement TASK 33-44-01-960-803			227	SIA 001-014
LOWER ANTI-COLLISION LIGHT - MAINTENANCE PRACTICES	33-44-02		201	SIA ALL
Lower Anti-Collision Light Deactivation TASK 33-44-02-040-801			201	SIA ALL
Lower Anti-Collision Light Activation TASK 33-44-02-440-801			202	SIA ALL
Lower Anti-Collision Light - Light Assembly Replacement TASK 33-44-02-960-802			202	SIA 001-014
Lower Anti-Collision Light Lamp Assembly Replacement TASK 33-44-02-960-805			209	SIA 001-014
Lower Anti-Collision Light - LED Light Assembly Replacement TASK 33-44-02-960-807			213	SIA 015-999
Lower Anti-Collision Light Lens Replacement TASK 33-44-02-960-806			218	SIA 001-014
Lower Anti-Collision Light - Power Supply Replacement TASK 33-44-02-960-804			221	SIA 001-014
TAILCONE ANTI-COLLISION LIGHT - MAINTENANCE PRACTICES	33-44-04		201	SIA ALL
Tailcone Anti-Collision Light Deactivation TASK 33-44-04-040-801			201	SIA ALL
Tailcone Anti-Collision Light Activation TASK 33-44-04-440-801			202	SIA ALL
Tailcone Anti-Collision Light Replacement TASK 33-44-04-960-801			202	SIA ALL

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Tailcone Anti-Collision Light Transformer Replacement TASK 33-44-04-960-802			203	SIA ALL
Tailcone Anti-Collision Light LED Module Replacement TASK 33-44-04-960-803			207	SIA ALL
Tailcone Anti-Collision Light Housing Assembly Replacement TASK 33-44-04-960-804			211	SIA ALL
WINGLET ANTI-COLLISION LIGHTS - MAINTENANCE PRACTICES	33-44-13		201	SIA ALL
Winglet Anti-Collision Light Deactivation TASK 33-44-13-040-801			201	SIA ALL
Winglet Anti-Collision Light Activation TASK 33-44-13-440-801			202	SIA ALL
Winglet Anti-Collision Light Removal TASK 33-44-13-000-801			202	SIA ALL
Winglet Anti-Collision Light Installation TASK 33-44-13-400-801			206	SIA ALL
Winglet Anti-Collision Light Transformer Replacement TASK 33-44-13-960-801			208	SIA ALL
Winglet Anti-Collision Light LED Module and Power Supply Unit Replacement TASK 33-44-13-960-802			212	SIA ALL
LOGO LIGHTS - MAINTENANCE PRACTICES	33-49-00		201	SIA ALL
Logo Light - Deactivation TASK 33-49-00-040-801			201	SIA ALL
Logo Light - Activation TASK 33-49-00-440-801			202	SIA ALL
Logo Light - Lamp Replacement TASK 33-49-00-960-801			202	SIA ALL; AIRPLANES WITH LAMP LIGHTS
Logo Light - LED Module Assembly Replacement TASK 33-49-00-960-803			208	SIA ALL; AIRPLANES WITH LED MODULE ASSEMBLY LIGHTS

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Logo Light - Light Assembly Replacement TASK 33-49-00-960-802			212	SIA ALL
EMERGENCY LIGHTS - ADJUSTMENT/TEST	33-51-00		501	SIA ALL
Emergency Lights Operational Check TASK 33-51-00-710-801			501	SIA ALL
Emergency Lights Operational Test TASK 33-51-00-720-801			512	SIA ALL
EXIT SIGNS - MAINTENANCE PRACTICES	33-51-01		201	SIA ALL
Exit Sign - Lamp Replacement TASK 33-51-01-960-801			201	SIA ALL
Exit Sign - Light Assembly Replacement TASK 33-51-01-960-802			209	SIA ALL
AREA LIGHTS - MAINTENANCE PRACTICES	33-51-03		201	SIA ALL
Emergency Aisle Light (EAL) - Lens Replacement TASK 33-51-03-960-801			201	SIA ALL
Emergency Aisle Light (EAL) – Assembly Replacement TASK 33-51-03-960-802			205	SIA ALL
SLIDE/OVERWING LIGHTS - MAINTENANCE PRACTICES	33-51-04		201	SIA ALL
Slide/Overwing Light - Lamp Replacement TASK 33-51-04-960-801			201	SIA ALL
Slide/Overwing Light - Light Assembly Replacement TASK 33-51-04-960-802			205	SIA ALL
POWER SUPPLIES - MAINTENANCE PRACTICES	33-51-06		201	SIA ALL
Power Supply - Charge the Battery Packs TASK 33-51-06-610-801			201	SIA ALL
Power Supply - Fuse Replacement TASK 33-51-06-960-801			202	SIA ALL
Power Supply - Battery Pack Replacement TASK 33-51-06-960-802			207	SIA ALL
Power Supply - Power Supply Replacement TASK 33-51-06-960-803			209	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Power Supply - Battery Pack Capacity Check TASK 33-51-06-200-801			211	SIA ALL
Power Supply - Battery Pack Deep-Cycle Procedure TASK 33-51-06-600-801			212	SIA ALL
FLOOR PROXIMITY LIGHTS ON GALLEYS, LAVATORIES, CLOSETS, AND WINDSCREENS - MAINTENANCE PRACTICES	33-51-14		201	SIA ALL
Floor Proximity Light - Lamp Replacement TASK 33-51-14-960-801			201	SIA ALL
Floor Proximity Light - Light Assembly Replacement TASK 33-51-14-960-802			204	SIA ALL
FLOOR PROXIMITY LIGHTS, PHOTOLUMINESCENT - MAINTENANCE PRACTICES	33-51-15		201	SIA ALL
Floor Proximity Light - Charge the Photoluminescent Strips TASK 33-51-15-860-801			201	SIA ALL
Floor Proximity Light - Photoluminescent Strip Replacement TASK 33-51-15-960-801			207	SIA ALL
Floor Proximity Light - Photoluminescent Strip Cleaning TASK 33-51-15-100-801			211	SIA ALL
Floor Proximity Light - Photoluminescent Strip Inspection TASK 33-51-15-210-801			211	SIA ALL
FLOOR PROXIMITY LIGHTS, CABIN LIGHT INTENSITY - ADJUSTMENT/TEST	33-51-15		501	SIA ALL
Cabin Lighting - Measure the Available Light Intensity TASK 33-51-15-860-802			501	SIA ALL

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LIGHTS - DDG MAINTENANCE PROCEDURES

1. General

A. This procedure has the maintenance tasks for the Master Minimum Equipment List (MMEL) maintenance requirements as shown in the Dispatch Deviations Guide (DDG). These tasks prepare the airplane for flight with systems/components that are inoperative.

B. This procedure also has the tasks that put the airplane back to its usual condition.

C. These are the tasks for the components in the lights system:

(1) DDG 33-24-01 Passenger Lighted Information Signs and Notice System Inoperative - Preparation

(2) DDG 33-24-01 Passenger Lighted Information Signs and Notice System Inoperative - Restoration

TASK 33-00-00-040-802

2. DDG 33-24-01 Passenger Lighted Information Signs and Notice System Inoperative - Preparation

A. General

(1) This task gives the maintenance steps which prepare the applicable passenger seat or lavatory for flight with the passenger lighted information signs and notice system inoperative.

NOTE: A passenger seat or lavatory is inoperative if the passenger lighted information sign is not easy to see.

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Passenger Lighted Information Signs and Notice System Inoperative Preparation

SUBTASK 33-00-00-040-001

(1) Do these steps to block and placard each inoperative passenger seat or lavatory:

(a) If necessary, attach tapes or ropes across the seat or lavatory door to show that the area is not available.

1) Make sure that the tape or rope is a color that is easy to see against the color of the seat or lavatory door.

(b) Put DO NOT OCCUPY placards at applicable locations to show that the seat or lavatory is not available.

1) Make sure that the placards are easy to see.

(c) For a lavatory that is not available, close and lock the lavatory door.

——— END OF TASK ———

TASK 33-00-00-440-802

3. DDG 33-24-01 Passenger Lighted Information Signs and Notice System Inoperative - Restoration

A. General

(1) This task restores the airplane back to its usual condition after operation with the passenger lighted information signs and notice system inoperative.

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B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Passenger Lighted Information Signs and Notice System Restoration

SUBTASK 33-00-00-000-002

(1) Remove the DO NOT OCCUPY placards, ropes, and tapes from the applicable passenger seat or lavatory.

(a) If necessary, unlock the lavatory door.

——— END OF TASK ———

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INSTRUMENT AND PANEL LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Instrument and Panel Lights Deactivation.

(2) Instrument and Panel Lights Activation.

(3) Captain's Lighting Module - Module Replacement.

(4) First Officer's Lighting Module - Module Replacement.

(5) Stabilizer Trim Warning Light - Lamp Replacement.

(6) Stabilizer Trim Warning Light - Cap Assembly Replacement.

(7) Master Warning And Caution System Annunciator - Lamp Replacement.

NOTE: A spare lamp box is on the right sidewall that is forward of the first officers seat.

(8) Master Warning And Caution System Annunciator - Light Assembly Replacement.

(9) Master Warning And Caution Light Switch - Switch Replacement.

(10) Master Warning And Caution Light Switch - Lamp Replacement.

(11) Control Stand Lighting Control Panel Replacement.

TASK 33-11-00-040-801

2. Instrument and Panel Lights - Deactivation

A. General

(1) This procedure removes electrical power to the Instrument and Panel Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-11-00-860-001

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	6	C00148	ANTI-ICE & RAIN ENG 1 & WING CONT

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT
B	9	C00440	FLIGHT CONTROL AUTO SPEED BRAKE

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	5	C00540	FUEL SPAR VALVE IND
B	7	C00361	FUEL CROSS FEED VALVE CONT
B	9	C00331	PANEL & INSTR 28V PRI CAPT & CTR
B	10	C00335	PANEL & INSTR 28V PRI F/O

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT
C	10	C00284	PANEL & INSTR ELEX PANEL
C	13	C01277	MASTER CAUTION ANNUNCIATOR CONT 3
D	8	C00701	EMER PANEL LTG
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT
D	12	C00310	INDICATOR MASTER DIM BAT
D	13	C00311	INDICATOR MASTER DIM BUS 1
D	14	C00312	INDICATOR MASTER DIM BUS 2
E	4	C01396	ENGINE FUEL ENGINE 2 HPSOV IND
E	6	C01395	ENGINE FUEL ENGINE 1 HPSOV IND
E	11	C00313	INDICATOR MASTER DIM SECT 1
E	12	C00314	INDICATOR MASTER DIM SECT 2
E	13	C00315	INDICATOR MASTER DIM SECT 3
E	14	C00316	INDICATOR MASTER DIM SECT 4
F	11	C00317	INDICATOR MASTER DIM SECT 5
F	12	C00318	INDICATOR MASTER DIM SECT 6
F	13	C01179	INDICATOR MASTER DIM SECT 7
F	14	C01180	INDICATOR MASTER DIM SECT 8

D. Instrument and Panel Lights - Tryout

NOTE: This tryout is to make sure the Instrument and Panel Lights are in a zero energy state.

SUBTASK 33-11-00-700-001

(1) On the captain's instrument panel, P1:

(a) Turn the PANEL control clockwise to the full BRIGHT position.

(b) Set the switch for the master dim and test lights to TEST.

(2) Make sure that these panel, column, and instrument lights do not come on:

(a) Captain's Instrument Panel, P1

(b) Center Instrument Panel, P2

(c) AFT and FWD Overhead Panel, P5

(d) Glareshield Panel, P7

(e) AFT and FWD Electronics Panels, P8 and P9

(f) Captain's Auxiliary Panel, P21

(g) Captain's Control Column

(3) Turn the PANEL control counter clockwise to the OFF position.

SUBTASK 33-11-00-700-002

(4) On the first officer's instrument panel P3, turn the PANEL control clockwise to the full BRIGHT position.

(5) Make sure that these panel, column, and instrument lights do not come on:

(a) First Officer's Instrument Panel, P3

(b) First Officer's Auxiliary Panel, P23

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) First Officer's Control Column

(6) Turn the PANEL control counter clockwise to the OFF position.

(7) On the captain's instrument panel P1, set the switch for the master dim and test lights to DIM.

——— END OF TASK ———

TASK 33-11-00-960-801

3. Captain Lighting Module - Module Replacement

(Figure 201)

A. General

(1) The captain's lighting module is located near the rudder pedal adjustment crank below the captain's instrument panel (P1).

B. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

C. Location Zones

Zone	Area
211	Flight Compartment - Left

D. Procedure

SUBTASK 33-11-00-860-003

(1) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	9	C00331	PANEL & INSTR 28V PRI CAPT & CTR

(2) Open the Captain's Lighting Module, P41

(a) 41C1 5.7V SEC MCP PANEL LIGHTING

(b) 41C2 28V PRIM CAPT PANEL LIGHTING

(c) 41C3 5V SEC CAPT PANEL LIGHTING

(d) 41C4 5V SEC CAPT PANEL LIGHTING

(e) 41C5 28V PRIM CENTER PANEL LIGHTING

(f) 41C6 5V SEC CENTER PANEL LIGHTING

(g) 41C7 5V SEC CENTER PANEL LIGHTING

SUBTASK 33-11-00-960-001

(3) Do these steps to replace lighting module [2]:

(a) Loosen the fasteners [3].

(b) Pull the lighting module [2] away from the rudder pedals enough to disconnect the electrical connectors [1].

(c) Disconnect the electrical connectors [1].

(d) Tag the electrical connectors [1] for the installation.

(e) Remove the lighting module [2].

(f) Connect the electrical connectors [1] to the replacement lighting module [2].

(g) Install the replacement lighting module [2].

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1) Align the pins on the back of the lighting module [2] with the holes in the bracket below the rudder pedal adjustment crank.

(h) Tighten the fasteners [3].

SUBTASK 33-11-00-860-005

(4) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	9	C00331	PANEL & INSTR 28V PRI CAPT & CTR

(5) Close the Captain's Lighting Module, P41

(a) 41C1 5.7V SEC MCP PANEL LIGHTING

(b) 41C2 28V PRIM CAPT PANEL LIGHTING

(c) 41C3 5V SEC CAPT PANEL LIGHTING

(d) 41C4 5V SEC CAPT PANEL LIGHTING

(e) 41C5 28V PRIM CENTER PANEL LIGHTING

(f) 41C6 5V SEC CENTER PANEL LIGHTING

(g) 41C7 5V SEC CENTER PANEL LIGHTING

SUBTASK 33-11-00-940-001

(6) If it is necessary, put a windshield cover, STD-1176 on the windshield.

NOTE: During the day, the changes in light intensity are not easy to see.

SUBTASK 33-11-00-710-001

(7) Do these steps to test the replacement lighting module [2]:

(a) On the captain's instrument panel P1, turn the PANEL control clockwise to the full BRIGHT position.

(b) Make sure that these panels and column come on and are of the same intensity:

1) Captain's Instrument Panel, P1

2) Center Instrument Panel, P2

3) AFDS Mode Control Panel, P7

4) Captain's EFIS Panel, P7

5) Captain's Auxiliary Panel, P21

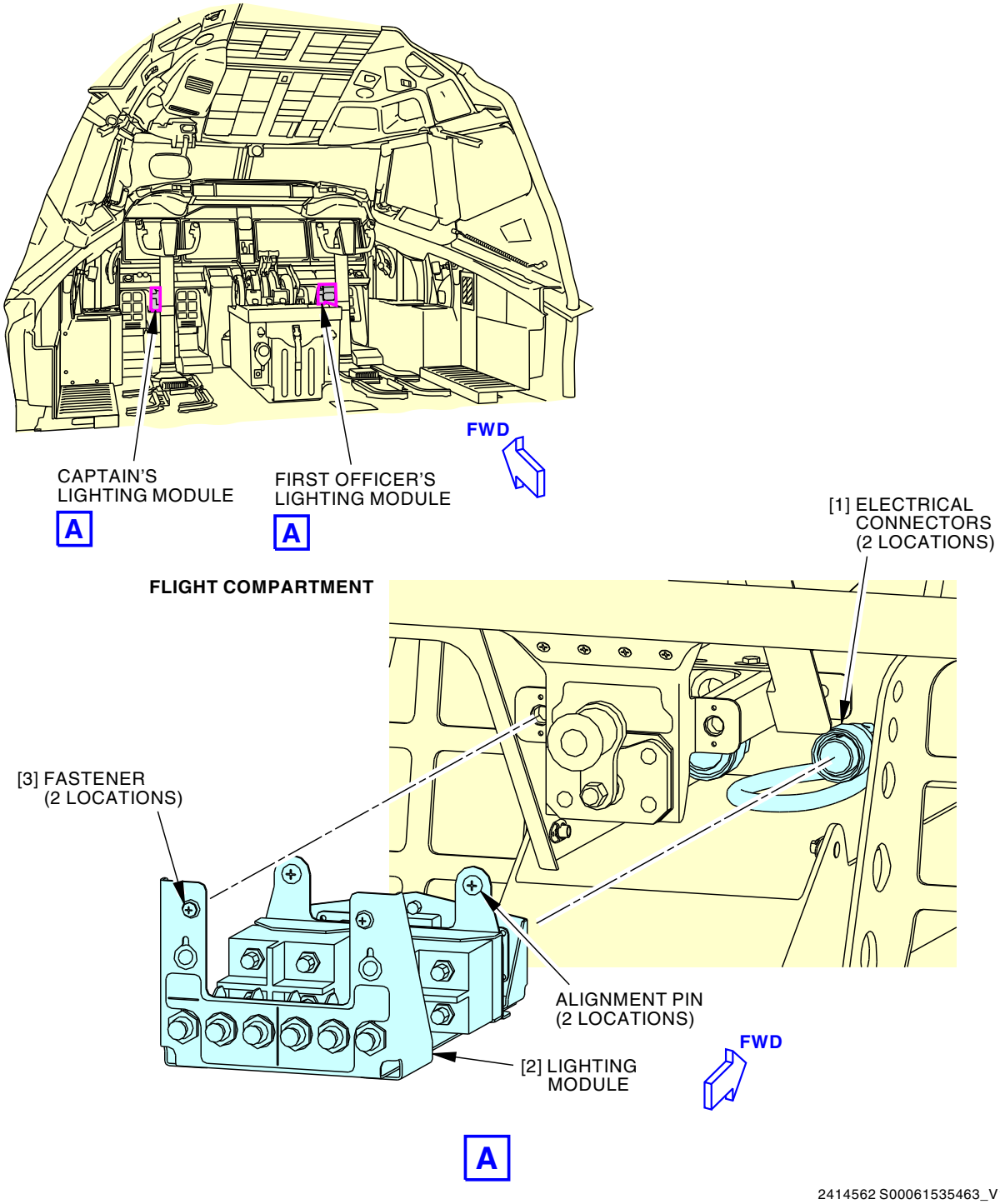
6) Captain's Control Column

SUBTASK 33-11-00-940-002

(8) If a windshield cover, STD-1176 was used on the windshield, remove it.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lighting Modules
Figure 201/33-11-00-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-11-00-960-802

4. First Officer Lighting Module - Module Replacement

(Figure 201)

A. General

(1) The first officer's lighting module is located near the rudder pedal adjustment crank below the first officer's instrument panel (P3).

B. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

C. Location Zones

Zone	Area
212	Flight Compartment - Right

D. Procedure

SUBTASK 33-11-00-860-007

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	10	C00335	PANEL & INSTR 28V PRI F/O
D	8	C00701	EMER PANEL LTG

(2) Open the First Officer's Lighting Module, P42

(a) 42C1 28V PRIM F/O PANEL LIGHTING

(b) 42C2 5V SEC F/O PANEL LIGHTING

(c) 42C3 5V SEC F/O PANEL LIGHTING

(d) 42C4 5V EMER & F/O PANEL LIGHTING

(e) 42C5 4V SEC F/O PANEL LIGHTING

(f) 42C6 4V EMER & F/O PANEL LIGHTING

SUBTASK 33-11-00-960-002

(3) Do these steps to replace the lighting module [2]:

(a) Loosen the fasteners [3].

(b) Pull the lighting module [2] away from the rudder pedals enough to disconnect the electrical connectors [1].

(c) Disconnect the electrical connectors [1].

(d) Tag the electrical connectors [1] for the installation.

(e) Remove the lighting module [2].

(f) Connect the electrical connectors [1] to the replacement lighting module [2].

(g) Install the replacement lighting module [2].

1) Align the pins on the back of the lighting module [2] with the holes in the bracket below the rudder pedal adjustment crank.

(h) Tighten the fasteners [3].

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SUBTASK 33-11-00-860-009

(4) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	10	C00335	PANEL & INSTR 28V PRI F/O
D	8	C00701	EMER PANEL LTG

(5) Close the First Officer's Lighting Module, P42

(a) 42C1 28V PRIM F/O PANEL LIGHTING

(b) 42C2 5V SEC F/O PANEL LIGHTING

(c) 42C3 5V SEC F/O PANEL LIGHTING

(d) 42C4 5V EMER & F/O PANEL LIGHTING

(e) 42C5 4V SEC F/O PANEL LIGHTING

(f) 42C6 4V EMER & F/O PANEL LIGHTING

SUBTASK 33-11-00-940-003

(6) If it is necessary, put a windshield cover, STD-1176 on the windshield.

NOTE: During the day, the changes in light intensity are not easy to see.

SUBTASK 33-11-00-710-002

(7) Do these steps to test the replacement lighting module [2]:

(a) On the first officer's instrument panel P3, turn the PANEL control clockwise to the full BRIGHT position.

(b) Make sure that these panels and column come on and are of the same intensity:

1) First Officer's Instrument Panel, P3

2) First Officer's Auxiliary Panel, P23

3) First Officer's Control Column

SUBTASK 33-11-00-940-004

(8) If a windshield cover, STD-1176 was used on the windshield, remove it.

——— END OF TASK ———

TASK 33-11-00-960-803

5. Stabilizer Trim Warning Light Lamp Replacement

(Figure 202)

A. Location Zones

Zone	Area
211	Flight Compartment - Left

B. Procedure

SUBTASK 33-11-00-860-012

(1) At the captain's main instrument panel, P1, set the switch for the master dim and test lights to TEST.

SUBTASK 33-11-00-210-001

(2) Identify the defective lamp.

SUBTASK 33-11-00-860-013

(3) Set the switch to the off position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-11-00-860-014

(4) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
E	12	C00314	INDICATOR MASTER DIM SECT 2

SUBTASK 33-11-00-960-003

(5) Do these steps to replace the lamp:

(a) Hold the cap assembly and pull directly out to retract the cap assembly locking pins.

(b) Continue to pull the cap assembly until it is free from the base assembly.

NOTE: The cap assembly will stay attached to the base assembly by two retaining elements.

(c) Remove the defective lamp.

(d) Put the new lamp into the lamp holder.

(e) Check that the cap assembly is in the extended position (Figure 202).

(f) If the cap assembly is in a collapsed position, then do these steps:

1) Hold the cap shell and the lamp holder.

2) Pull apart the cap shell from the lamp holder until the locking pins are retracted.

NOTE: In the collapsed position, locking pins are extended and cannot lock the cap assembly into the base assembly. Thus, the shaft will not operate the switches and the lamps will not touch the energized pins in the mounting base.

(g) Put the cap assembly into the mounting base.

(h) Push the cap assembly tightly back into the base assembly until the cap assembly touches the bottom of the base assembly.

NOTE: The cap assembly must collapse and the locking pins must engage the base assembly. Failure to put the cap assembly into the base assembly can cause the cap to release prematurely. This will cause the unit to not work correctly.

SUBTASK 33-11-00-860-015

(6) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
E	12	C00314	INDICATOR MASTER DIM SECT 2

SUBTASK 33-11-00-710-003

(7) Do a test of the new lamp:

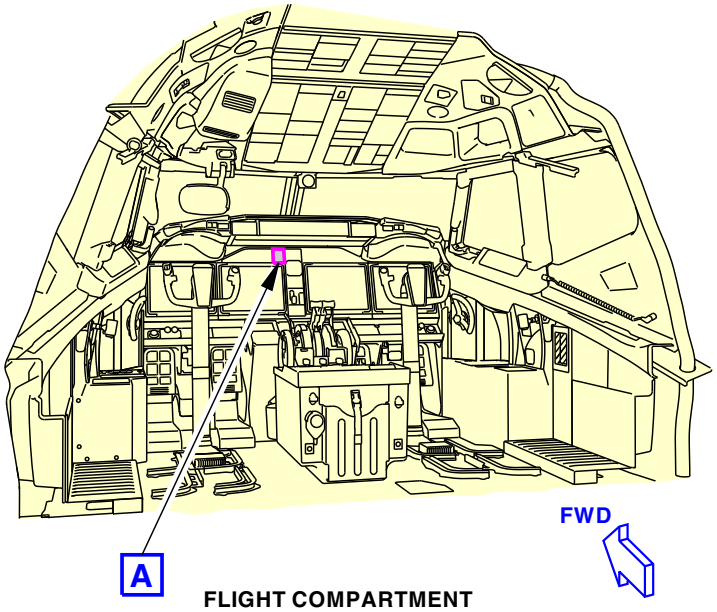
(a) At the captain's main instrument panel, P1, set the switch for the master dim and test lights to TEST.

(b) Make sure that the replaced lamp is on.

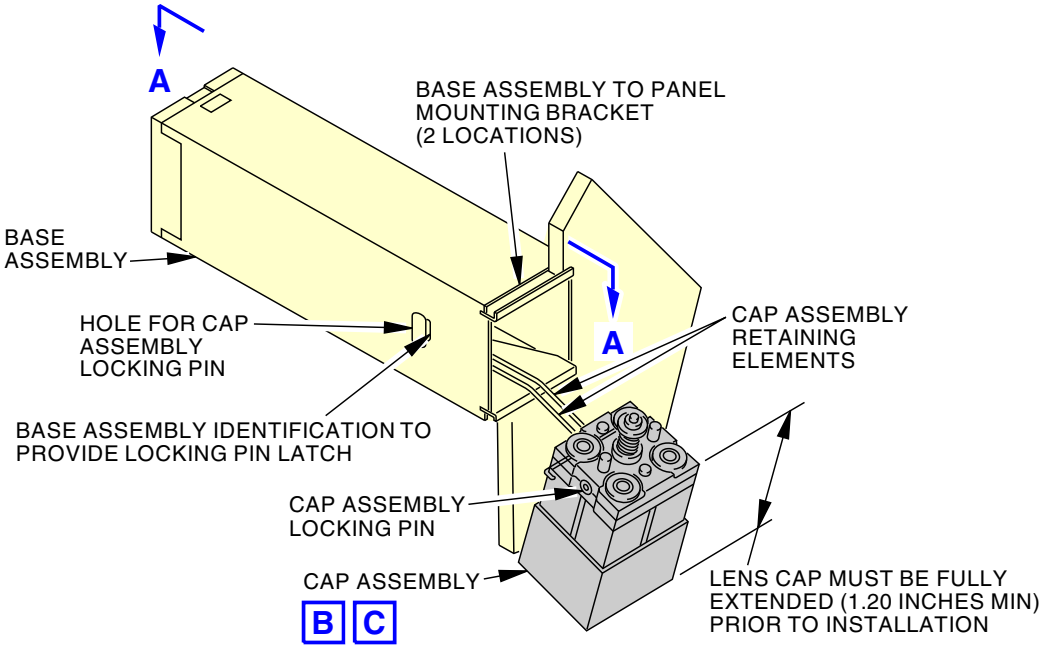
(c) Set the switch to the off position.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT



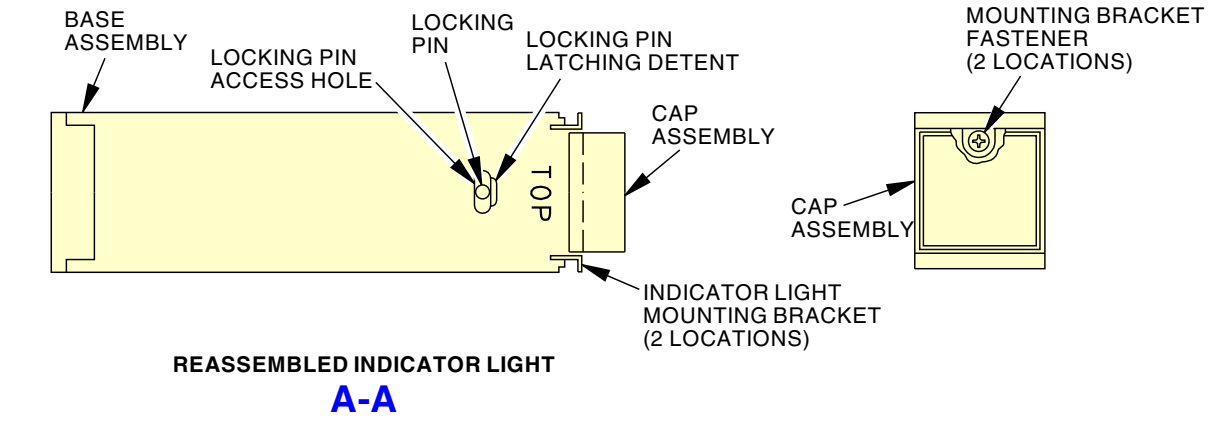
INDICATOR LIGHT IN RELAMPING POSITION

A

2537706 S0000602505_V1

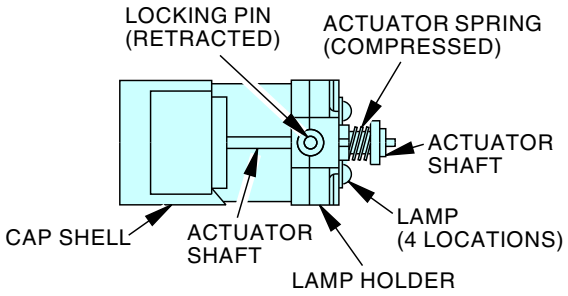
Stabilizer Trim Warning Light - Lamp Replacement
Figure 202/33-11-00-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



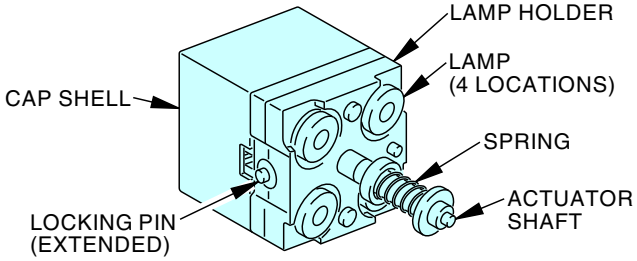
REASSEMBLED INDICATOR LIGHT

A-A



CAP ASSEMBLY IN EXTENDED POSITION

B



CAP ASSEMBLY IN COLLAPSED POSITION

C

2414563 S00061535466_V1

Stabilizer Trim Warning Light - Lamp Replacement
Figure 202/33-11-00-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-11-00-960-804

6. Stabilizer Trim Warning Light - Cap Assembly Replacement

(Figure 202)

A. General

(1) This task includes the steps to replace the stabilizer trim warning light cap assembly.

B. References

Reference	Title
22-11-00-740-801	Digital Flight Control System (DFCS) - Operational Test (P/B 501)

C. Location Zones

Zone	Area
211	Flight Compartment - Left

D. Prepare for the Cap Assembly Replacement

SUBTASK 33-11-00-860-017

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
D	3	C01048	AFCS SYS A ENGAGE INTLK

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
B	4	C00716	AFCS SYS B ENGAGE INTLK

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
E	12	C00314	INDICATOR MASTER DIM SECT 2

E. Cap Assembly Replacement

SUBTASK 33-11-00-960-004

(1) Do these steps to replace the cap assembly:

(a) Hold the cap assembly and pull directly out to retract the cap assembly locking pins.

(b) Continue to pull the cap assembly until it is free from the base assembly.

NOTE: The cap assembly will stay attached to the base assembly by two retaining elements.

(c) Make sure that the cap assembly is in the extended position (Figure 202).

(d) If the cap assembly is in a collapsed position, do these steps:

1) Hold the cap shell and the lamp holder.

2) Pull apart the cap shell from the lamp holder until the locking pins are retracted.

NOTE: In the collapsed position, locking pins are extended and cannot lock the cap assembly into the base assembly. Thus, the shaft will not operate the switches and the lamps will not touch the energized pins in the mounting base.

(e) Remove the cap assembly retaining elements from the two small holes in the lampholder of the cap assembly.

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1) Make sure not to bend the cap assembly retaining elements.

(f) Install the cap assembly retaining elements into the two small holes in the lampholder of the new cap assembly.

1) Make sure not to bend the cap assembly retaining elements.

(g) Put the cap assembly into the mounting base.

(h) Push the cap assembly tightly back into the base assembly until the cap assembly touches the bottom of the base assembly.

NOTE: The cap assembly must collapse and the locking pins must engage the base assembly. Failure to put the cap assembly into the base assembly can cause the cap to release prematurely. This will cause the unit to not work correctly.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 33-11-00-860-018

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
D	3	C01048	AFCS SYS A ENGAGE INTLK

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
B	4	C00716	AFCS SYS B ENGAGE INTLK

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
E	12	C00314	INDICATOR MASTER DIM SECT 2

G. Cap Assembly Replacement Test

SUBTASK 33-11-00-700-003

(1) Do a test of the lamps.

(a) On the P1 captain's main instrument panel, set the switch for the master dim and test lights to TEST.

(b) Make sure that the lamps come on.

(c) Set the switch to the off position.

SUBTASK 33-11-00-710-004

(2) Do this task: Digital Flight Control System (DFCS) - Operational Test, TASK 22-11-00-740-801.

NOTE: Library Test 32 in the SPEED TRIM TEST will check the Stabilizer Trim Warning Light wiring.

——— END OF TASK ———

TASK 33-11-00-960-806

7. Master Warning And Caution System Annunciator - Lamp Replacement

(Figure 203)

A. References

Reference	Title
24-22-00-860-803	Supply External Power (P/B 201)

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B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
23	Lamp housing	Not Specified	

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Master Warning And Caution System Annunciator Lamp Replacement

SUBTASK 33-11-00-860-023

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT

SUBTASK 33-11-00-960-006

(2) Do these steps to replace the lamp [21]:

CAUTION REMOVE THE LAMP HOUSING WITH YOUR FINGERS ONLY. IF YOU USE A TOOL TO HOLD THE LAMP HOUSING, THE TOOL CAN CAUSE DAMAGE TO THE HOUSING.

(a) Pull the lamp housing [23] from the annunciator assembly [22].

(b) Remove the defective lamp [21].

(c) Put the new lamp [21] into the lamp housing [23].

(d) Put the lamp housing [23] into the annunciator assembly [22].

(e) Make sure that the lamp housing [23] engages correctly in the annunciator assembly [22].

SUBTASK 33-11-00-860-025

(3) Remove the safety tag and close the applicable circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT

SUBTASK 33-11-00-860-044

(4) Do this task: Supply External Power, TASK 24-22-00-860-803.

SUBTASK 33-11-00-710-006

(5) Do a test of the new lamp [21]:

(a) Set the switch for the master dim and test lights, on the P1 captain's main instrument panel, to the TEST position.

(b) Make sure that the replaced lamp [21] is on.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Set the switch to the OFF position.

SUBTASK 33-11-00-710-013

(6) If the lamp [21] is replaced, do a test of the six Captain's system annunciator lights, do these steps:

(a) Do a test of the FLT CONT annunciator:

1) Open this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
C	16	C01356	LANDING GEAR AIR/GND SYS 1

2) Wait for a minimum of 10 seconds until the FEEL DIFF PRESS light, on the P5 overhead panel, comes on.

3) Close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
C	16	C01356	LANDING GEAR AIR/GND SYS 1

4) Make sure that the FEEL DIFF PRESS light extinguishes.

5) Make sure that the FLT CONT annunciator illuminates along with the master caution light.

6) Push the Master Caution switch to reset the lights.

(b) Do a test of the IRS annunciator:

1) Set the IRS MSU left and right mode select switches to the ATT position.

2) Open this circuit breaker:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
E	7	C01007	ADIRU LEFT AC

3) Make sure that the IRS annunciator illuminates along with the master caution light.

4) Close this circuit breaker:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
E	7	C01007	ADIRU LEFT AC

5) Push the Master Caution switch to reset the lights.

(c) Do a test of the FUEL annunciator:

1) Turn on a single fuel pump and subsequently off again after a few seconds.

2) Make sure that the FUEL annunciator illuminates along with the master caution systems annunciator, on the P7 glare shield panel.

3) Push the Master Caution switch to reset the lights.

(d) Do a test of the ELEC annunciator:

1) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

2) Open this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	1	C00809	BAT CHGR

3) Wait for a minimum of 60 seconds.

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

4) Close this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	1	C00809	BAT CHGR

5) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

6) Make sure that the ELEC annunciator illuminates along with the master caution light.

7) Push the Master Caution switch to reset the lights.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(e) Do a test of the APU annunciator:

1) Open this circuit breaker:

F/O Electrical System Panel, P6-5

Row	Col	Number	Name
A	12	C04011	APU INLET DOOR

2) Make sure that the APU annunciator illuminates along with the master caution light.

3) Close this circuit breaker:

F/O Electrical System Panel, P6-5

Row	Col	Number	Name
A	12	C04011	APU INLET DOOR

4) Push the Master Caution switch to reset the lights.

(f) Do a test of the OVHT/DET annunciator:

1) Move and hold the TEST switch, on the P8-1 panel, to the OVHT/FIRE position.

2) Make sure that the OVHT/DET annunciator illuminates along with the master caution light.

3) Push the Master Caution switch to reset the lights.

SUBTASK 33-11-00-710-014

(7) If the lamp [21] is replaced, do a test of the six First Officer's system annunciator lights, do these steps:

(a) Do a test of the AIR COND annunciator:

1) Push the OVHT TEST button, on the P5 air conditioning panel.

2) Make sure that the AIR COND annunciator illuminates along with the master caution light.

3) Push the Master Caution switch to reset the lights.

(b) Do a test of the ANTI ICE annunciator:

WARNING DO NOT TOUCH THE HOT METAL OF THE HEATER PROBE WHEN THE PROBES ARE HOT. LET THEM BECOME COOL, OR ONLY TOUCH THE OTHER PARTS OF THE PROBE. THE PROBES CAN BURN YOU.

CAUTION MAKE SURE THAT YOU REMOVE ANY TYPE OF PROTECTIVE COVER OR MATERIAL BEFORE OPERATING ANY PROBE HEATER OR ANTI-ICE TYPE HEATED SURFACE. DAMAGE CAN OCCUR TO THE EQUIPMENT WHEN THE PROBES BECOME HOT.

CAUTION PROBE HEAT APPLICATION TIME SHOULD BE KEPT TO A MINIMUM. PROBES MAY OVERHEAT IF PROBE HEAT IS APPLIED TOO LONG.

1) Turn on the Pitot Probe Heat and subsequently off again after a few seconds.

2) Make sure that the ANTI-ICE annunciator illuminates along with the master caution light.

3) Push the Master Caution switch to reset the lights.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Do a test of the DOORS annunciator:

1) Close the cabin, passenger, or service door and open again.

NOTE: It is acceptable to fully push the door sensor for a few seconds before releasing instead.

2) Make sure that the DOORS annunciator illuminates along with the master caution light.

3) Push the Master Caution switch to reset the lights.

(d) Do a test of the ENG annunciator:

1) Set the GND TESTS switch, on the P61-4 panel, to the ENABLE position.

2) Select the SYS, on the multifunction display (MFD) panel.

3) Select the MAINT - MAINT CTRL PGS - MISC SYSTEM CTRLS (MSC) - EEC MAINT POWER - ENG 1 - TEST.

4) Push the Engine 1 EEC ALTN button, on the P5 aft overhead panel.

5) Make sure that the ENG annunciator illuminates along with the master caution light.

6) To stop the ALTN mode, push the Engine 1 EEC ALTN button, on the P5 overhead panel, again.

7) Set Eng 1 back to NORM on the MFD MSC page.

8) Push the Master Caution switch to reset the lights.

(e) Do a test of the HYD annunciator:

1) Start the operation of the electric hydraulic pump until the associated low pressure light extinguishes.

NOTE: Do not let electric hydraulic pump operate longer than 2 minutes.

2) Stop the operation of the electric hydraulic pump.

3) Make sure that the HYD annunciator illuminates along with the master caution light.

4) Push the Master Caution switch to reset the lights.

(f) Do a test of the OVERHEAD annunciator:

1) Start the operation of the equipment cooling exhaust.

2) Open this circuit breaker:

F/O Electrical System Panel, P6-4

Row	Col	Number	Name
C	14	C01435	EQPT COOLING EXHAUST FAN CONT NORMAL

3) Make sure that the OVERHEAD annunciator illuminates along with the master caution light within 30 seconds.

4) Close this circuit breaker:

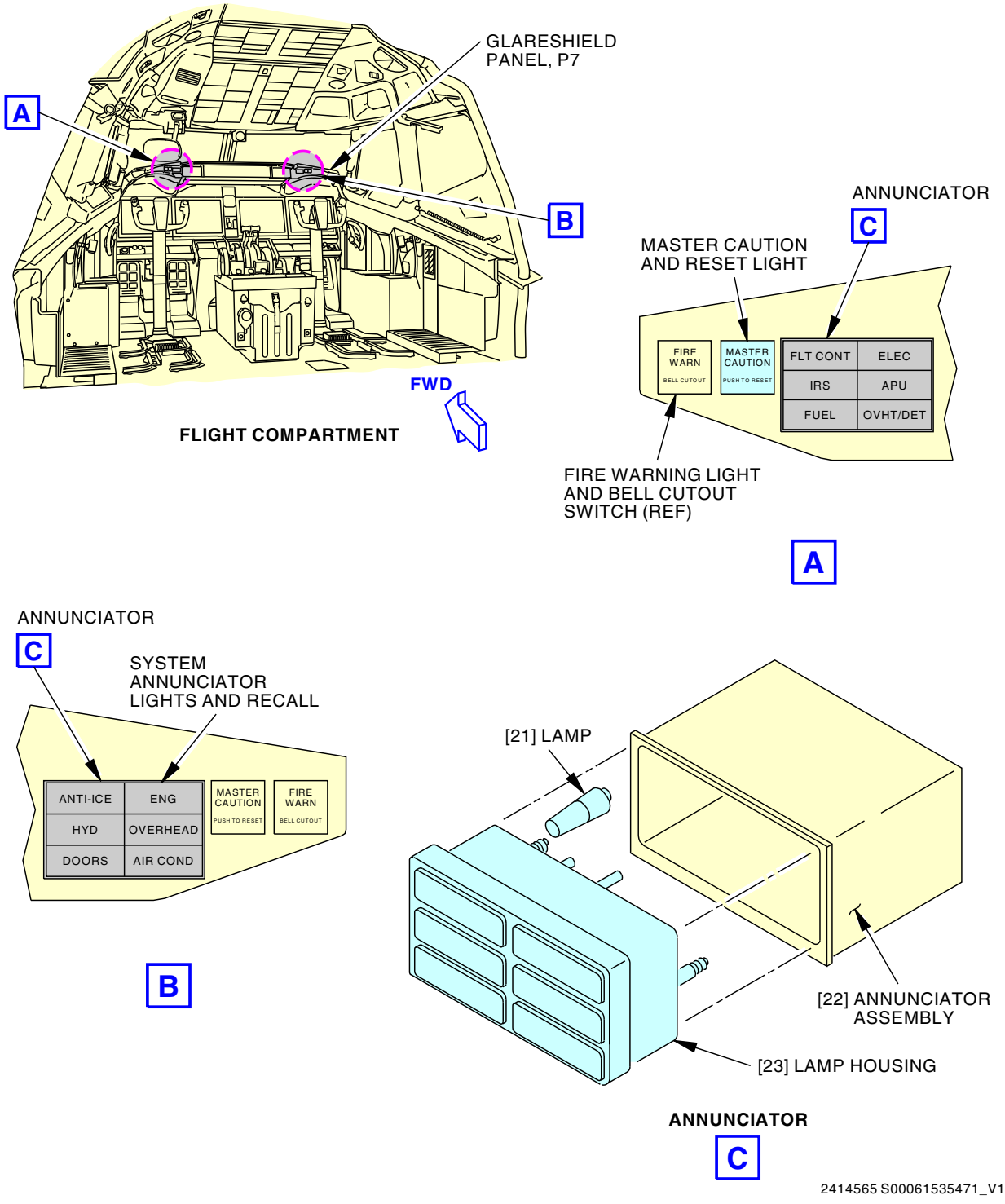
F/O Electrical System Panel, P6-4

Row	Col	Number	Name
C	14	C01435	EQPT COOLING EXHAUST FAN CONT NORMAL

5) Push the Master Caution switch to reset the lights.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Master Warning And Caution System Annunciator - Lamp Replacement
Figure 203/33-11-00-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-11-00-960-807

8. Master Warning And Caution System Annunciator - Light Assembly Replacement

(Figure 204)

A. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
23	Lamp housing	Not Specified	

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-11-00-860-027

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT

SUBTASK 33-11-00-960-007

(2) Do these steps to replace the light assembly [24]:

CAUTION REMOVE THE LAMP HOUSING WITH YOUR FINGERS ONLY. IF YOU USE A TOOL TO HOLD THE LAMP HOUSING, THE TOOL CAN CAUSE DAMAGE TO THE HOUSING.

(a) Pull the lamp housing [23] from the annunciator assembly.

(b) Loosen the screws [26]. Then pull the light assembly [24].

(c) Loosen the screws [25] at the rear of the light assembly [24] to disconnect the electrical wires.

(d) Replace the light assembly [24].

(e) Connect the electrical wires to the new light assembly [24].

(f) Tighten the screws [25] at the rear of the new light assembly [24].

(g) Install the light assembly [24] to the annunciator assembly.

(h) Tighten the screws [26].

1) Make sure that you tighten the screws [26] equally.

(i) Put the lamp housing [23] into the annunciator assembly.

1) Make sure that the lamp housing [23] engages correctly in the annunciator assembly.

SUBTASK 33-11-00-860-028

(3) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT

SUBTASK 33-11-00-710-007

(4) Do a test of the new light assembly [24]:

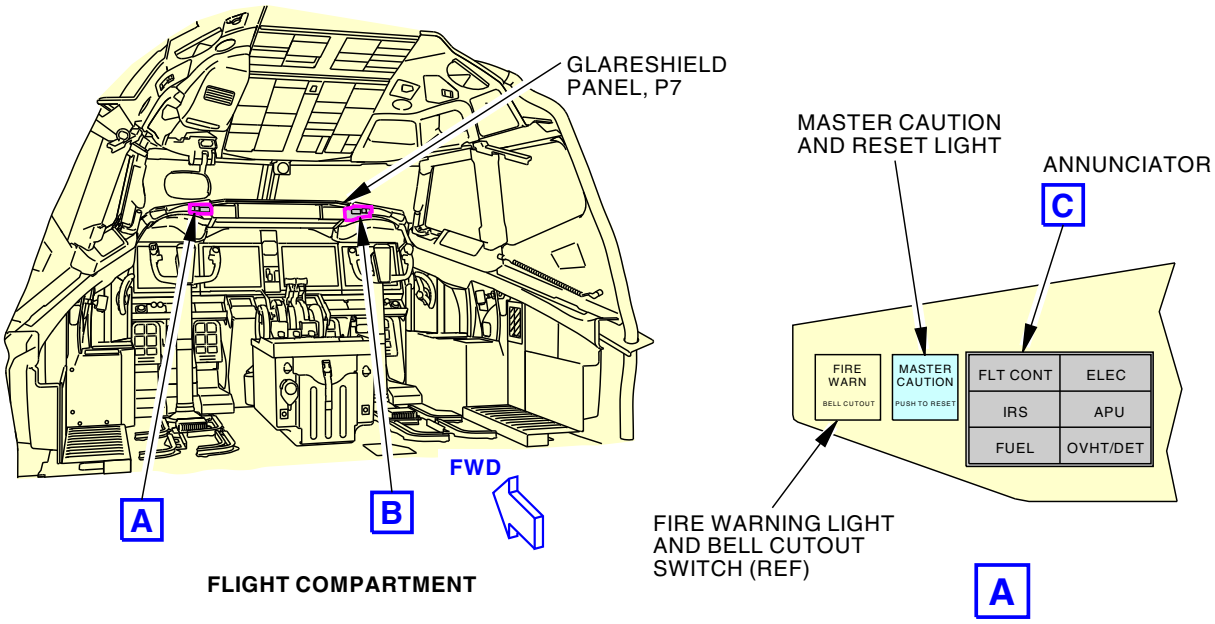
(a) At the captain's main instrument panel, P1, set the switch for the master dim and test lights to TEST.

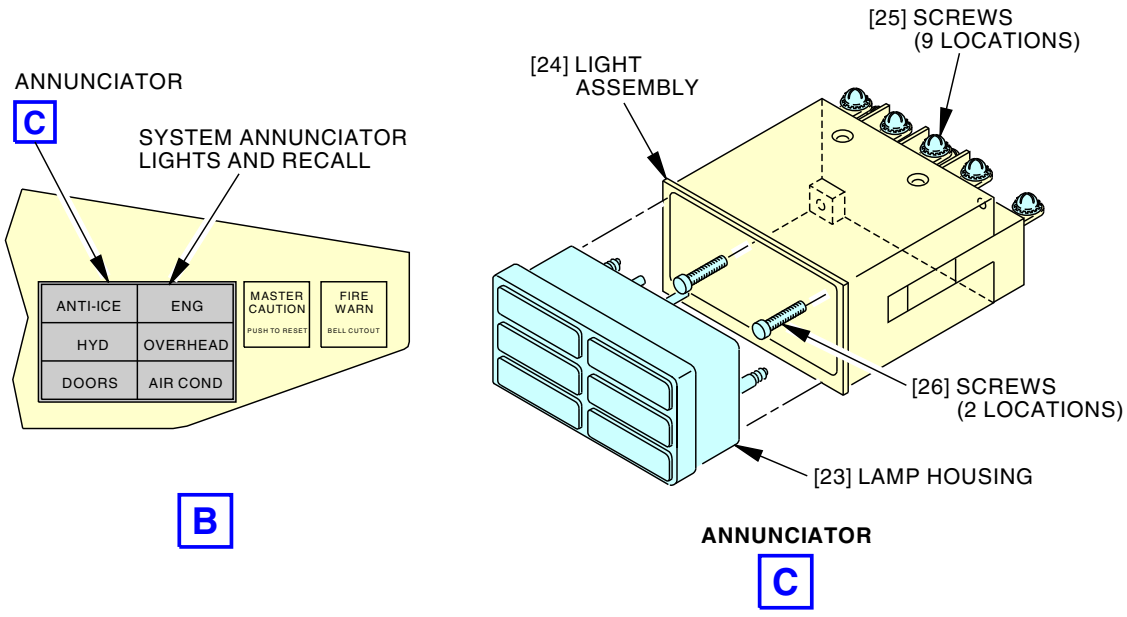
(b) Make sure that the light is on.

(c) Set the switch to the off position.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





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Master Warning And Caution System Annunciator - Light Assembly Replacement
Figure 204/33-11-00-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-11-00-960-808

9. Master Warning And Caution Light Switch - Switch Replacement

(Figure 205)

A. References

Reference	Title
26-16-00-710-801	Cargo Bay Smoke Detection - Operational Test (P/B 501)
WDM 26-11-21	D000534480
WDM 31-52-11	D000534481

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Prepare for the Replacement

SUBTASK 33-11-00-860-031

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT

D. Switch Replacement

SUBTASK 33-11-00-020-001

(1) Do these steps to remove the switch [27] (WDM 26-11-21, WDM 31-52-11):

(a) Remove the screws to the panel below the switch.

(b) Remove the panel.

(c) Remove the switch cap [28].

(d) Remove the nut [29] and lock washer [30].

(e) Disconnect the wires at the quick disconnect connector.

(f) Remove the switch [27].

SUBTASK 33-11-00-420-001

(2) Do these steps to install the new switch [27] (WDM 26-11-21, WDM 31-52-11):

(a) Remove the nut [29] and lock washer [30] from the switch [27].

NOTE: Do not remove the key washer.

(b) Connect the wires to the quick disconnect connector.

(c) Place the switch [27] in its position.

(d) Install the lock washer [30] and nut [29].

(e) Tighten the nut [29].

(f) Install the switch cap [28].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Switch Installation Test

SUBTASK 33-11-00-860-045

(1) Remove the safety tag and close the applicable circuit breaker:

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT

SUBTASK 33-11-00-710-008

(2) Do a test of the Master Caution and Reset Light switch.

(a) Set the switch for the Master Dim and Test Lights, on the P1 captain's main instrument panel, to the TEST position.

(b) Make sure that the lamp in the Master Caution and Reset switch is on.

(c) Release the TEST switch, on the P1 captain's main instrument panel.

SUBTASK 33-11-00-710-010

(3) Do a test of the Fire Warning Light switch.

(a) Set the TEST switch, on the P8 engine and Auxiliary Power Unit (APU) fire control panel, to the OVHT/FIRE position.

(b) Make sure that the lamp in the Fire Warning Light switch is on.

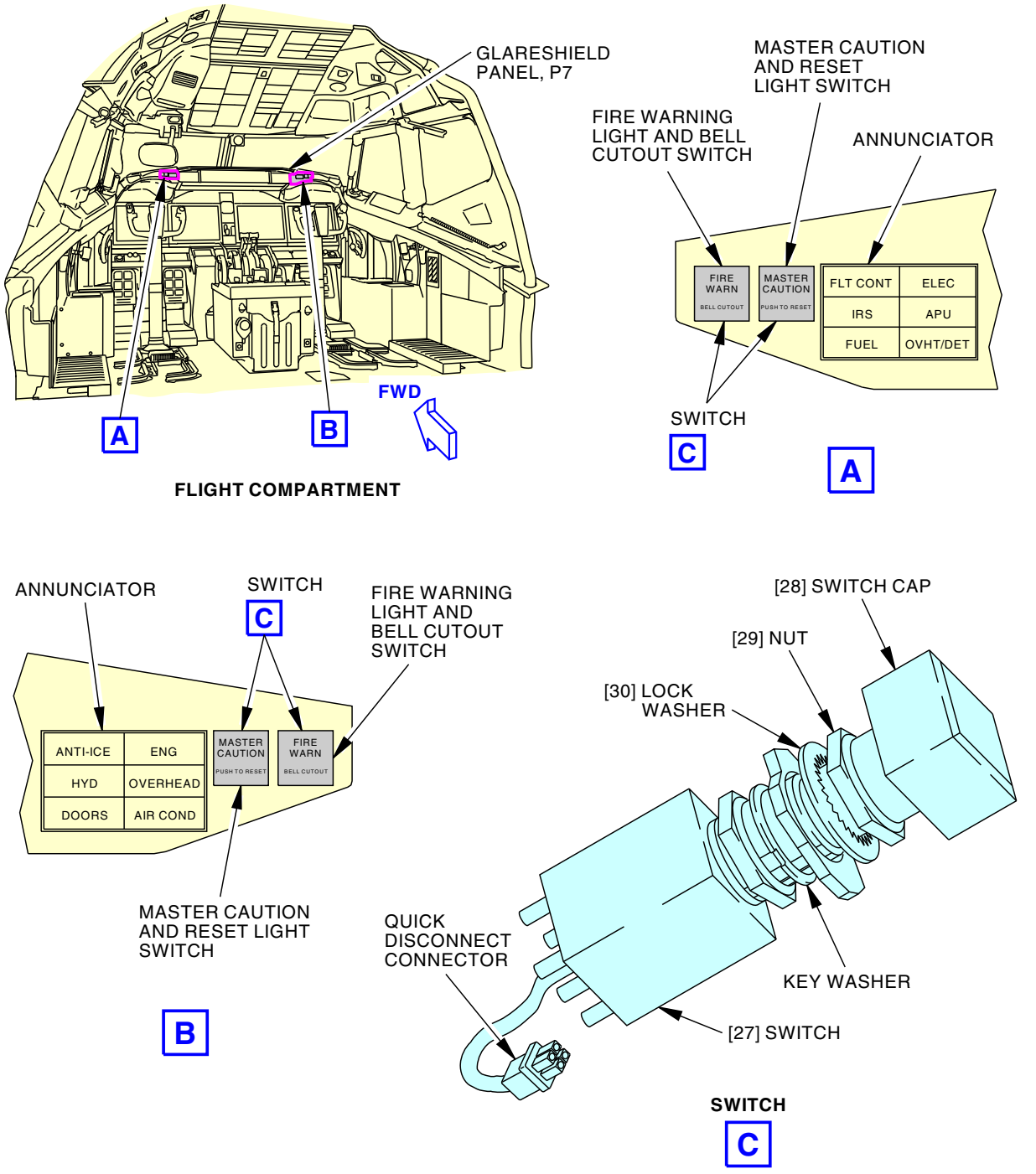
(c) Release the TEST switch, on the P8 engine and APU fire control panel.

SUBTASK 33-11-00-710-015

(4) Do a test of the bell cutoff function of the switches (TASK 26-16-00-710-801).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2414567 S00061535475_V2

Master Warning And Caution Light Switch - Switch Replacement
Figure 205/33-11-00-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-11-00-960-809

10. Master Warning And Caution Light Switch - Lamp Replacement

(Figure 206)

A. References

Reference	Title
WDM 26-11-21	D000534480
WDM 31-52-11	D000534481

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Prepare for the switch replacement

SUBTASK 33-11-00-860-035

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT

D. Procedure

SUBTASK 33-11-00-960-008

(1) Do these steps to replace the lamp [31] (WDM 26-11-21, WDM 31-52-11):

(a) Remove the switch cap [28].

(b) Remove the lamp [31].

(c) Install the new lamp [31].

(d) Install the switch cap [28].

SUBTASK 33-11-00-860-037

(2) Remove the safety tag and close the applicable circuit breaker:

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT

SUBTASK 33-11-00-710-009

(3) Do a test of the Master Caution and Reset Light lamp.

(a) At the Captain's Main Instrument Panel, P1, set the switch for the Master Dim and Test Lights to the TEST position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Make sure that the lamp in the Master Caution and Reset switch is on.

(c) Release the TEST switch on the Captain's Main Instrument Panel.

SUBTASK 33-11-00-710-011

(4) Do a test of the Fire Warning Light lamp.

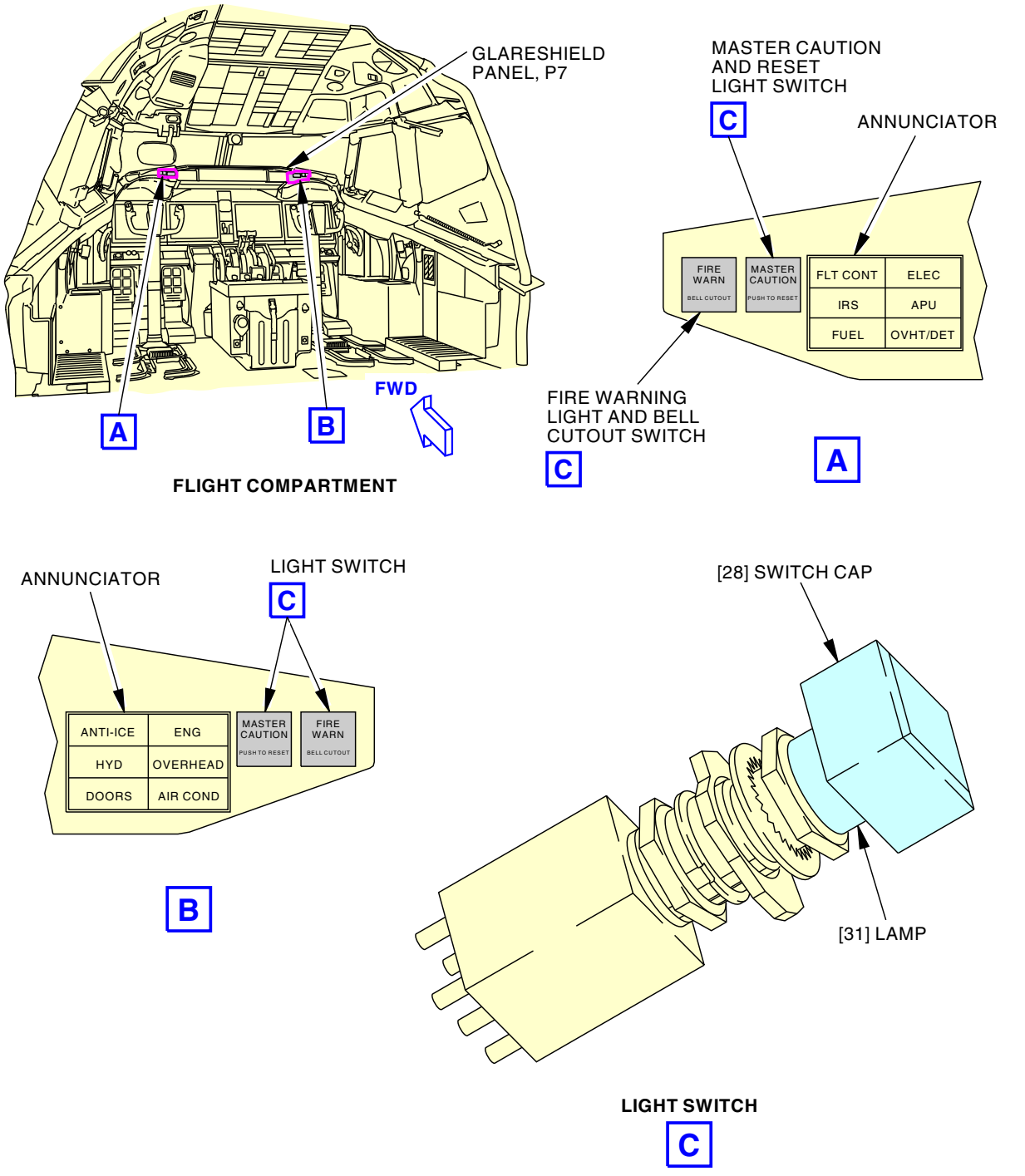
(a) At the Engine and Auxiliary Power Unit (APU) Fire Control Panel, P8, set the TEST switch to the OVHT/FIRE position.

(b) Make sure that the lamp in the Fire Warning Light switch is on.

(c) Release the TEST switch on the Engine and APU Fire Control Panel.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Master Warning And Caution Light Switch - Lamp Replacement
Figure 206/33-11-00-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-11-00-960-810

11. Control Stand Lighting Control Panel Replacement

(Figure 207)

A. General

(1) This task gives the instructions to replace the control stand lighting control panel.

B. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)

C. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

D. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

E. Control Stand Lighting Control Panel Replacement

SUBTASK 33-11-00-860-039

(1) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
C	10	C00284	PANEL & INSTR ELEX PANEL

Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	8	C00283	CONTROL CABIN LIGHTING CONT STAND

SUBTASK 33-11-00-860-040

(2) Rotate the PANEL BRIGHT control, on the P8 electronic panel, to the OFF position.

SUBTASK 33-11-00-860-041

(3) Rotate the FLOOD BRIGHT control, on the P8 electronic panel, to the OFF position.

SUBTASK 33-11-00-910-001

(4) Before you touch the control stand lighting control panel, do this task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.

SUBTASK 33-11-00-960-009

(5) Do these steps to replace the control stand lighting control panel [87]:

(a) Loosen the quarter-turn fastener [88].

(b) Carefully lift the control stand lighting control panel from the P8 electronic panel, to get access to the electrical connector [89].

(c) Disconnect the electrical connector [89].

(d) Remove the control stand lighting control panel [87].

(e) Examine the electrical connector [89] for bent or broken pins, dirt, and damage.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(f) Connect the electrical connector [89] to the replacement control stand lighting control panel.

(g) Put the replacement control stand lighting control panel [87] in its position.

(h) Tighten the quarter-turn fastener [88].

SUBTASK 33-11-00-860-042

(6) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
C	10	C00284	PANEL & INSTR ELEX PANEL

Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	8	C00283	CONTROL CABIN LIGHTING CONT STAND

F. Installation Test

SUBTASK 33-11-00-940-005

(1) If it is necessary, put a windshield cover, STD-1176, on the windshield.

NOTE: During the day, the changes in light intensity are not easy to see.

SUBTASK 33-11-00-710-012

(2) Do these steps to test the new control stand lighting control panel:

(a) Test the FLOOD BRIGHT control on the P8-50 panel:

1) Turn the FLOOD BRIGHT control clockwise to the full BRIGHT position.

a) Make sure that the control stand floodlight comes on brightly.

2) Turn the FLOOD BRIGHT control counter-clockwise to the DIM position.

a) Make sure that the light becomes dim.

3) Turn the FLOOD BRIGHT control counter-clockwise to the OFF position.

a) Make sure that the light goes off.

4) Turn the FLOOD BRIGHT control to the usual position.

(b) Test the PANEL BRIGHT control on the P8-50 panel:

1) Turn the PANEL BRIGHT control clockwise to the full BRIGHT position.

a) Make sure that the panel lights come on brightly.

2) Turn the PANEL BRIGHT control counter-clockwise to the DIM position.

a) Make sure that the lights become dim.

3) Turn the PANEL BRIGHT control counter-clockwise to the OFF position.

a) Make sure that the lights go off.

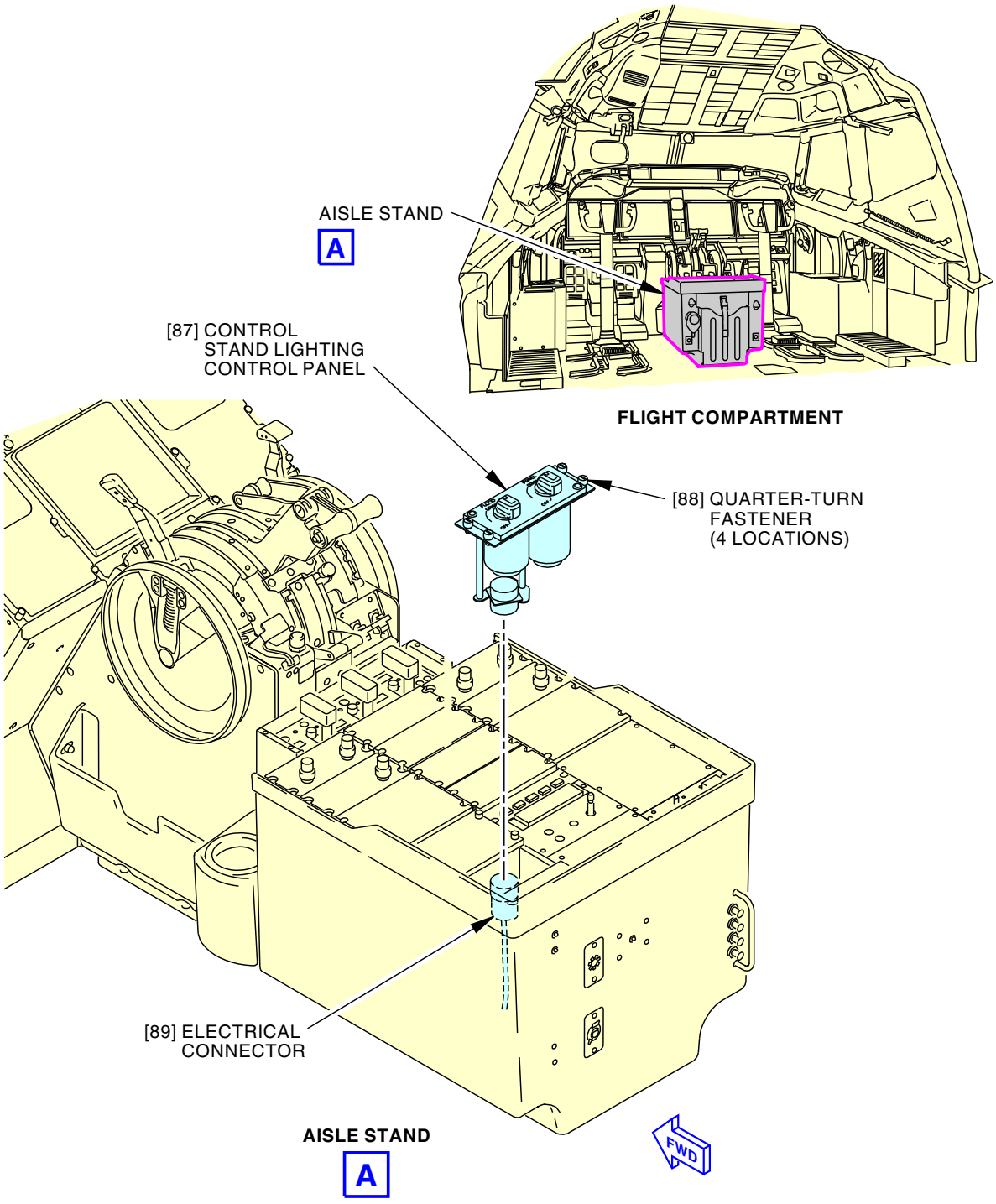
4) Turn the PANEL BRIGHT control to the usual position.

SUBTASK 33-11-00-940-006

(3) If it is necessary, remove the windshield cover, STD-1176.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Control Stand Lighting Control Panel Replacement
Figure 207/33-11-00-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MISCELLANEOUS LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Miscellaneous Lights Deactivation.

(2) Miscellaneous Lights Activation.

(3) Panel/Glareshield Floodlight - Light Assembly Replacement.

(4) Control Stand Floodlight - Lamp Replacement.

(5) Control Stand Floodlight - Light Assembly Replacement.

(6) Oxygen Mask Floodlight - Light Assembly Replacement.

(7) Dome Light - Lamp Replacement.

(8) Dome Lights - Removal.

(9) Dome Lights - Installation.

(10) Circuit Breaker Panel Light - Lamp Replacement.

(11) Dimmer Control Unit - Replacement.

(12) Panel Floodlights - Operational Test of the Standby Relay.

TASK 33-14-00-040-801

2. Miscellaneous Lights - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power to the Miscellaneous Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-14-00-860-001

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	8	C00283	CONTROL CABIN LIGHTING CONT STAND
A	11	C00751	CONT CABIN LIGHTING PANEL FLOOD CONT
A	12	C01425	CONT CABIN LIGHTING PANEL FLOOD STBY
A	14	C00161	CONTROL CABIN LIGHTING STBY COMPASS
A	15	C00282	CONTROL CABIN LIGHTING DOME WHITE
C	9	C00219	PANEL & INSTR CB PANEL
D	8	C00701	EMER PANEL LTG

D. Miscellaneous Lights - Tryout

NOTE: This tryout is to make sure the Miscellaneous Lights are in a zero energy state.

SUBTASK 33-14-00-700-001

(1) For the floodlights do these steps:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) At the captain's instrument panel, P1-5, turn the AFDS FLOOD control switch clockwise to the full BRIGHT position.

(b) At the AFT electronics panel, P8, turn the FLOOD control switch clockwise to the full BRIGHT position.

NOTE: The floodlights for the P1, P2, P3, P7, P21 and P23 panels are above the panels. The floodlight for the P8, P9 and P10 panels are above the aisle stand on the P5 panel.

1) Make sure none of the following floodlights come on:

a) P1 captain instrument panel.

b) P2 center instrument panel.

c) P3 first officer instrument panel.

d) P7 glareshield panel.

e) P8 aft electronics panel.

f) P9 forward electronics panel.

g) P10 control stand.

h) P21 captain’s oxygen mask stowage panel.

i) P23 first officer’s oxygen mask stowage panel

(c) Turn the control switches on the P1-5 and P8 panels counter clockwise to the OFF position.

SUBTASK 33-14-00-700-002

(2) For the dome lights, do these steps:

(a) On the AFT overhead panel, P5, set the switch for the dome lights to the BRIGHT position.

1) Make sure none of the dome lights come on.

(b) Set the switch to the DIM position.

1) Make sure none of the dome lights come on.

(c) Set the switch to the OFF position.

SUBTASK 33-14-00-700-003

(3) For the circuit breaker lights, do these steps:

(a) On the FWD overhead panel, P5, turn the CIRCUIT BREAKER control switch clockwise to the full BRIGHT position.

1) Make sure none of the circuit breaker lights come on.

(b) Turn the CIRCUIT BREAKER control switch counter clockwise to the OFF position.

SUBTASK 33-14-00-700-004

(4) For the standby compass light, do these steps:

(a) Just forward of FWD overhead panel, P5, set the standby compass light switch to the BRIGHT position.

1) Make sure the standby compass light does not come on.

(b) Set the standby compass light switch to the DIM position.

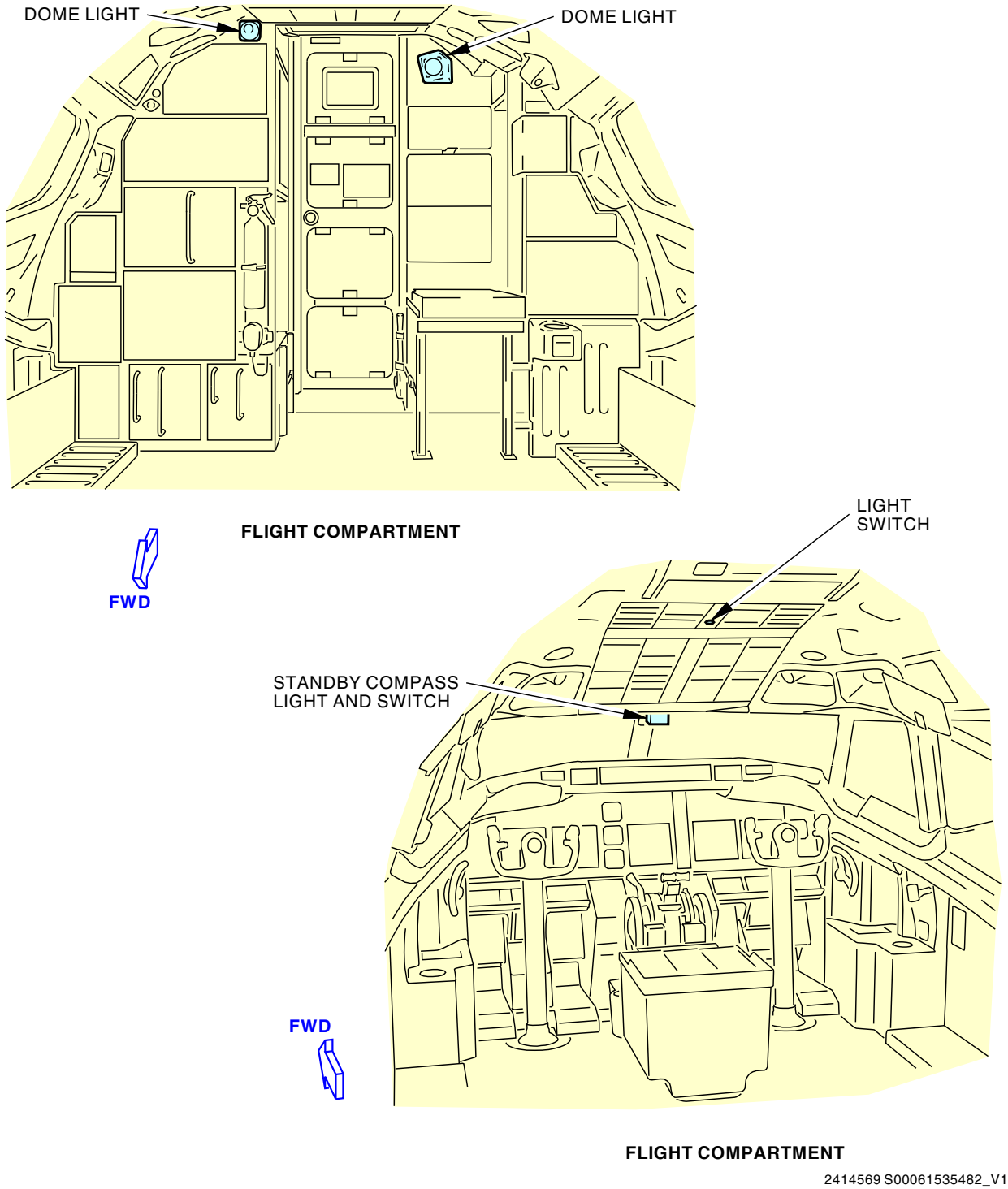
1) Make sure the standby compass light does not come on.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Set the standby compass light switch to the OFF position.

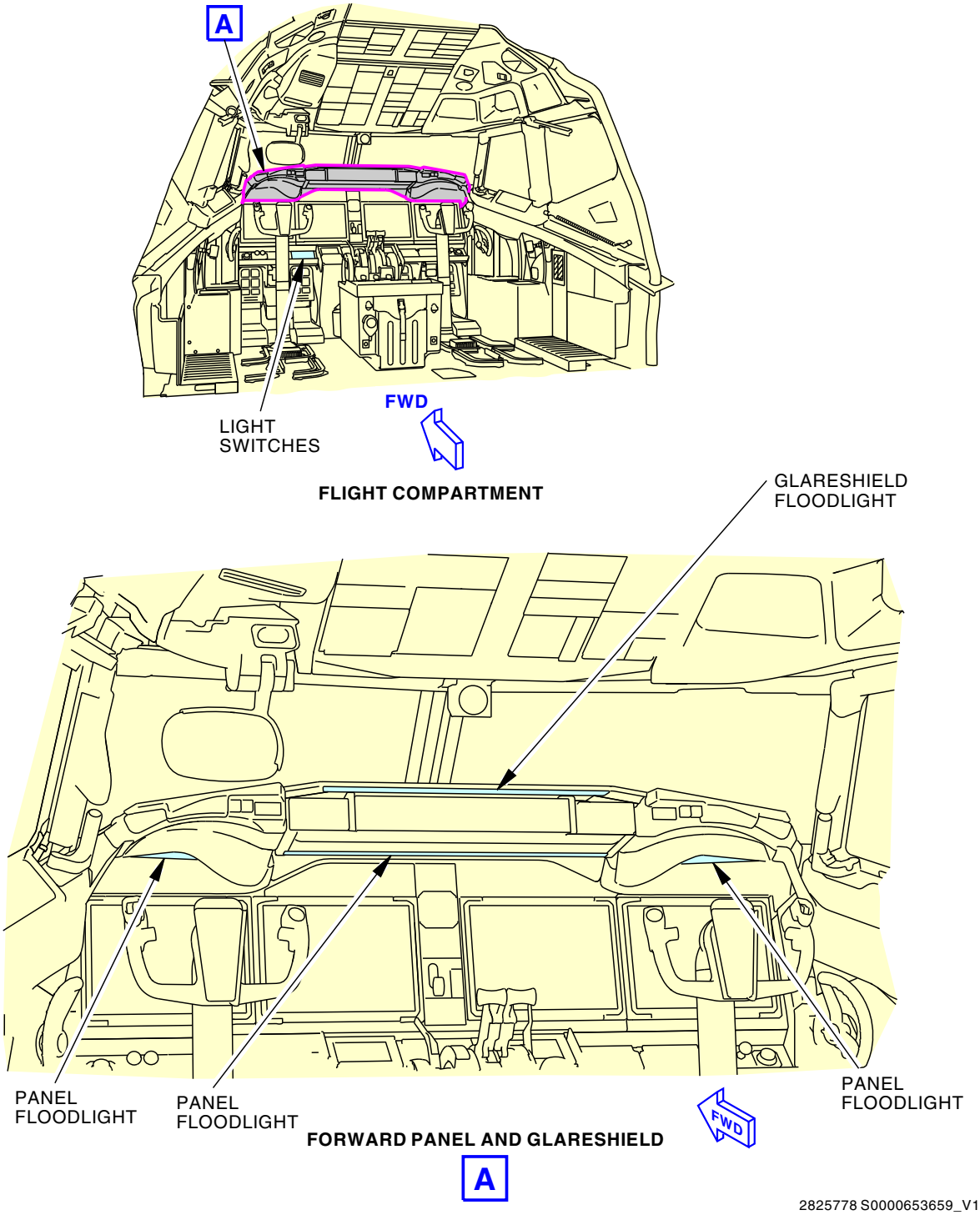
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



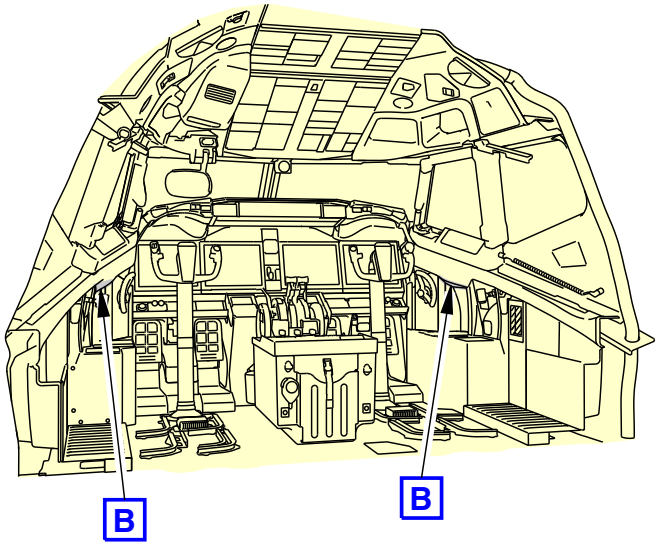
Miscellaneous Lights
Figure 201/33-14-00-990-801 (Sheet 1 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

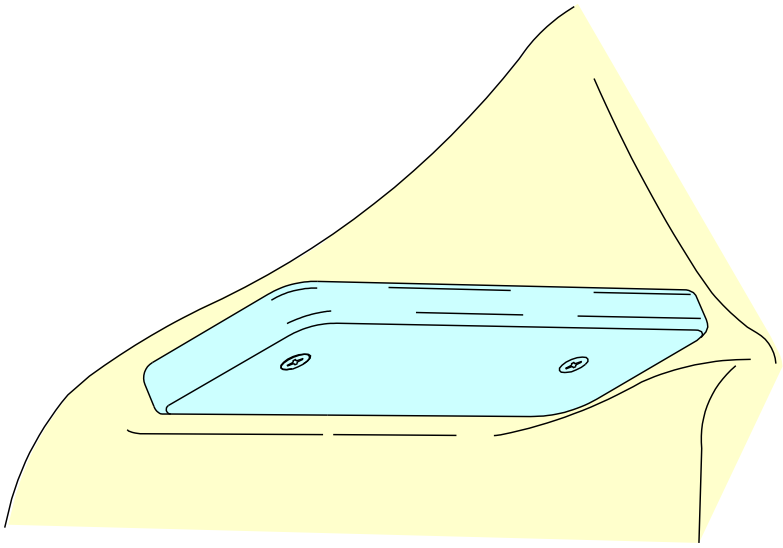


Miscellaneous Lights
Figure 201/33-14-00-990-801 (Sheet 2 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT



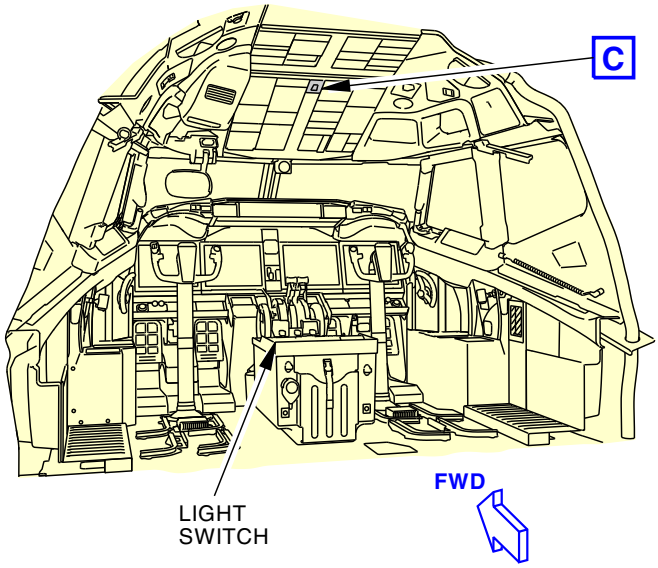
OXYGEN MASK FLOODLIGHT
(EXAMPLE)

B

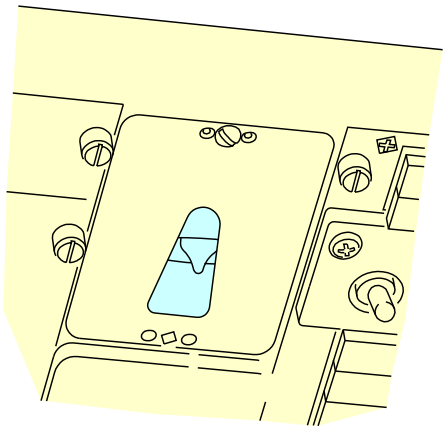
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Miscellaneous Lights
Figure 201/33-14-00-990-801 (Sheet 3 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT



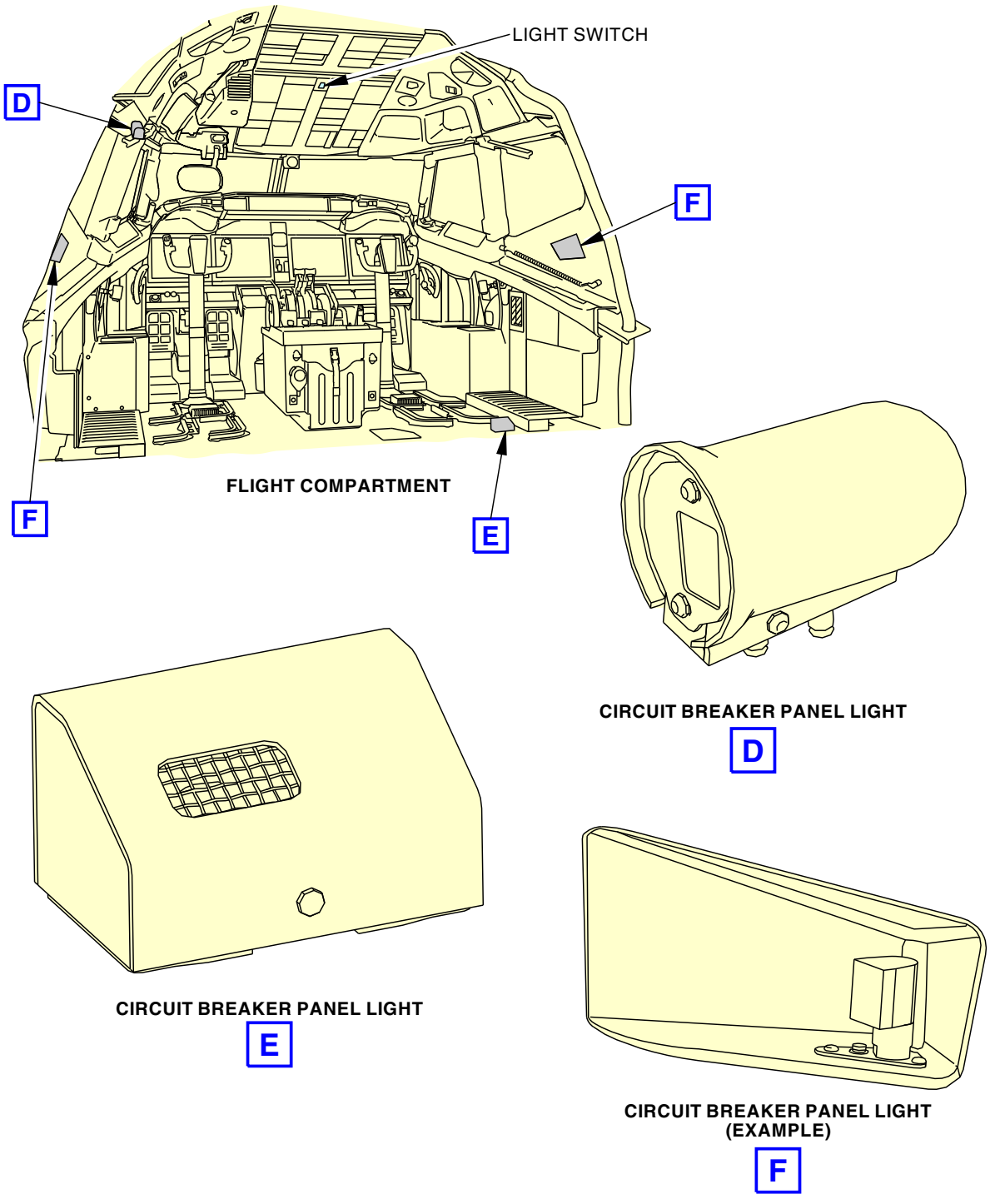
CONTROL STAND FLOODLIGHT

C

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Miscellaneous Lights
Figure 201/33-14-00-990-801 (Sheet 4 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Miscellaneous Lights
Figure 201/33-14-00-990-801 (Sheet 5 of 5)

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TASK 33-14-00-440-801

3. Miscellaneous Lights - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the Miscellaneous Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-14-00-860-002

(1) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	8	C00283	CONTROL CABIN LIGHTING CONT STAND
A	11	C00751	CONT CABIN LIGHTING PANEL FLOOD CONT
A	12	C01425	CONT CABIN LIGHTING PANEL FLOOD STBY
A	14	C00161	CONTROL CABIN LIGHTING STBY COMPASS
A	15	C00282	CONTROL CABIN LIGHTING DOME WHITE
C	9	C00219	PANEL & INSTR CB PANEL
D	8	C00701	EMER PANEL LTG

——— END OF TASK ———

TASK 33-14-00-960-801

4. Panel/Glareshield Floodlight - Light Assembly Replacement

(Figure 202)

A. General

(1) When you replace the light assembly, do not discard it. It is possible to replace its lamps in a shop.

B. Consumable Materials

Reference	Description	Specification
A50006	Compound - Sealing, Thread-Locking, Anaerobic, Single-Component (100-200 In-Lbs)	MIL-S-46163 Type II Grade M

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Light assembly	33-14-51-15-040	SIA ALL
5	Light assembly	33-14-51-15-020	SIA ALL
		33-14-51-15-030	SIA ALL
		33-14-51-15-050	SIA ALL

D. Location Zones

Zone	Area
211	Flight Compartment - Left

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Zone	Area
212	Flight Compartment - Right

E. Procedure

SUBTASK 33-14-00-860-003

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	11	C00751	CONT CABIN LIGHTING PANEL FLOOD CONT
A	12	C01425	CONT CABIN LIGHTING PANEL FLOOD STBY

SUBTASK 33-14-00-960-001

(2) Do these steps to replace the glareshield floodlight:

(a) Loosen the fasteners [2].

(b) Disconnect the electrical wire [3].

(c) Replace the light assembly [1].

(d) Connect the electrical wire [3].

(e) Apply compound, A50006 to the thread of fasteners [2].

1) Tighten the fasteners [2] to 8.00 in-lb (0.90 N·m).

SUBTASK 33-14-00-960-009

(3) Do these steps to replace the forward panel floodlights:

(a) Loosen the fasteners [4].

(b) Disconnect the electrical wire [3].

(c) Replace the light assembly [5].

(d) Connect the electrical wire [3].

(e) Apply compound, A50006 to the thread of fasteners [4].

1) Tighten the fasteners [4] to 8.00 in-lb (0.90 N·m).

SUBTASK 33-14-00-860-004

(4) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	11	C00751	CONT CABIN LIGHTING PANEL FLOOD CONT
A	12	C01425	CONT CABIN LIGHTING PANEL FLOOD STBY

SUBTASK 33-14-00-710-001

(5) Do a test of the new light assembly:

(a) At the forward panel on the floodlight control module, P1-5, set the applicable switch for the floodlight to the bright mode.

1) Make sure that the light comes on brightly.

(b) Set the switch to the dim mode.

1) Make sure that the light becomes dim.

(c) Set the switch to the off mode.

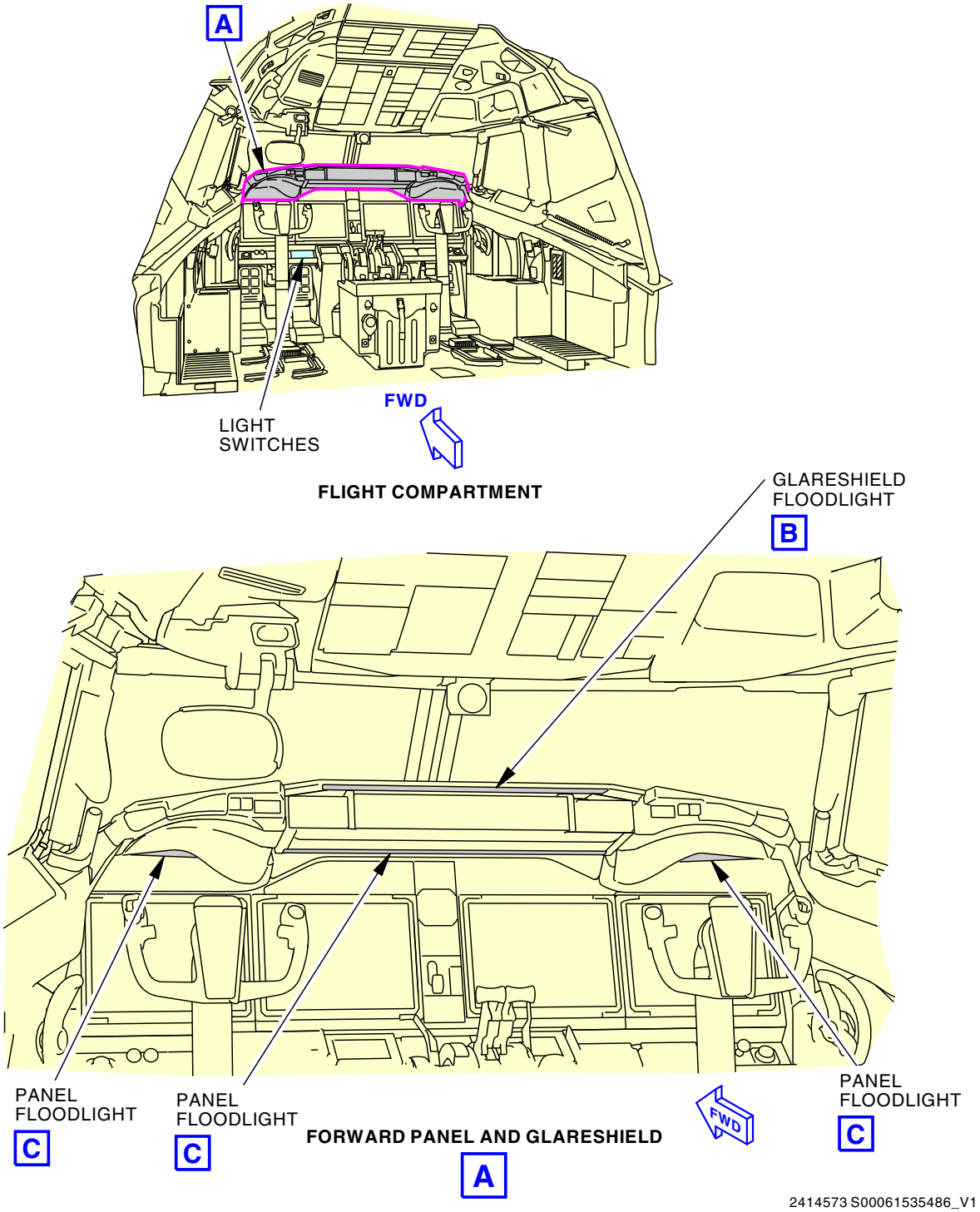
1) Make sure that the light goes off.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(d) Set the switch to the usual mode.

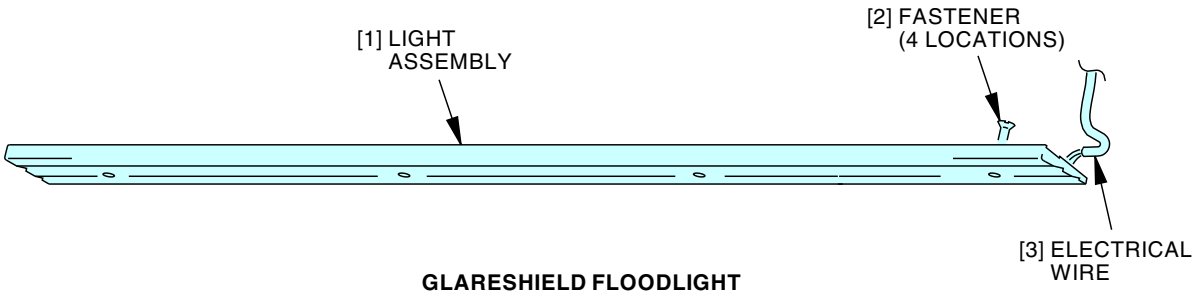
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



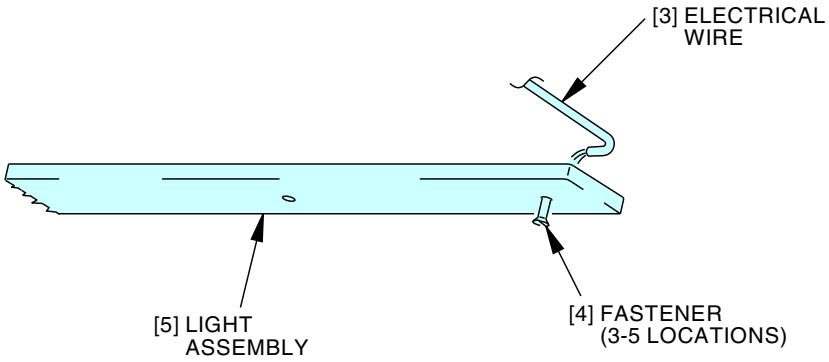
Panel/Glareshield Floodlight - Light Assembly Replacement
Figure 202/33-14-00-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



GLARESHIELD FLOODLIGHT

B



PANEL FLOODLIGHT (EXAMPLE)

C

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Panel/Glareshield Floodlight - Light Assembly Replacement
Figure 202/33-14-00-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-14-00-960-802

5. Control Stand Floodlight - Lamp Replacement

(Figure 203)

A. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
23	Lamp	33-14-51-19-050	SIA ALL

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

SUBTASK 33-14-00-860-007

(1) At the control stand on the lighting control module, P8-50, make sure the switch for the control stand floodlight is set to the OFF mode.

SUBTASK 33-14-00-960-002

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(2) Do these steps to replace the lamp:

(a) Loosen the fasteners [21].

(b) Remove the cover [22].

(c) Replace the lamp [23].

(d) Install the cover [22].

(e) Tighten the fasteners [21].

SUBTASK 33-14-00-940-001

(3) When the test is done during the day, put a windshield cover, STD-1176 on the windshield.

SUBTASK 33-14-00-710-002

(4) Do a test of the new lamp:

(a) At the P8-50 panel, set the switch for the control stand floodlight to the BRIGHT mode.

1) Make sure that the lamp comes on brightly.

(b) Set the switch to the DIM mode.

1) Make sure that the light becomes dim.

(c) Set the switch to the OFF mode.

1) Make sure that the light goes off.

(d) Set the switch to the usual mode.

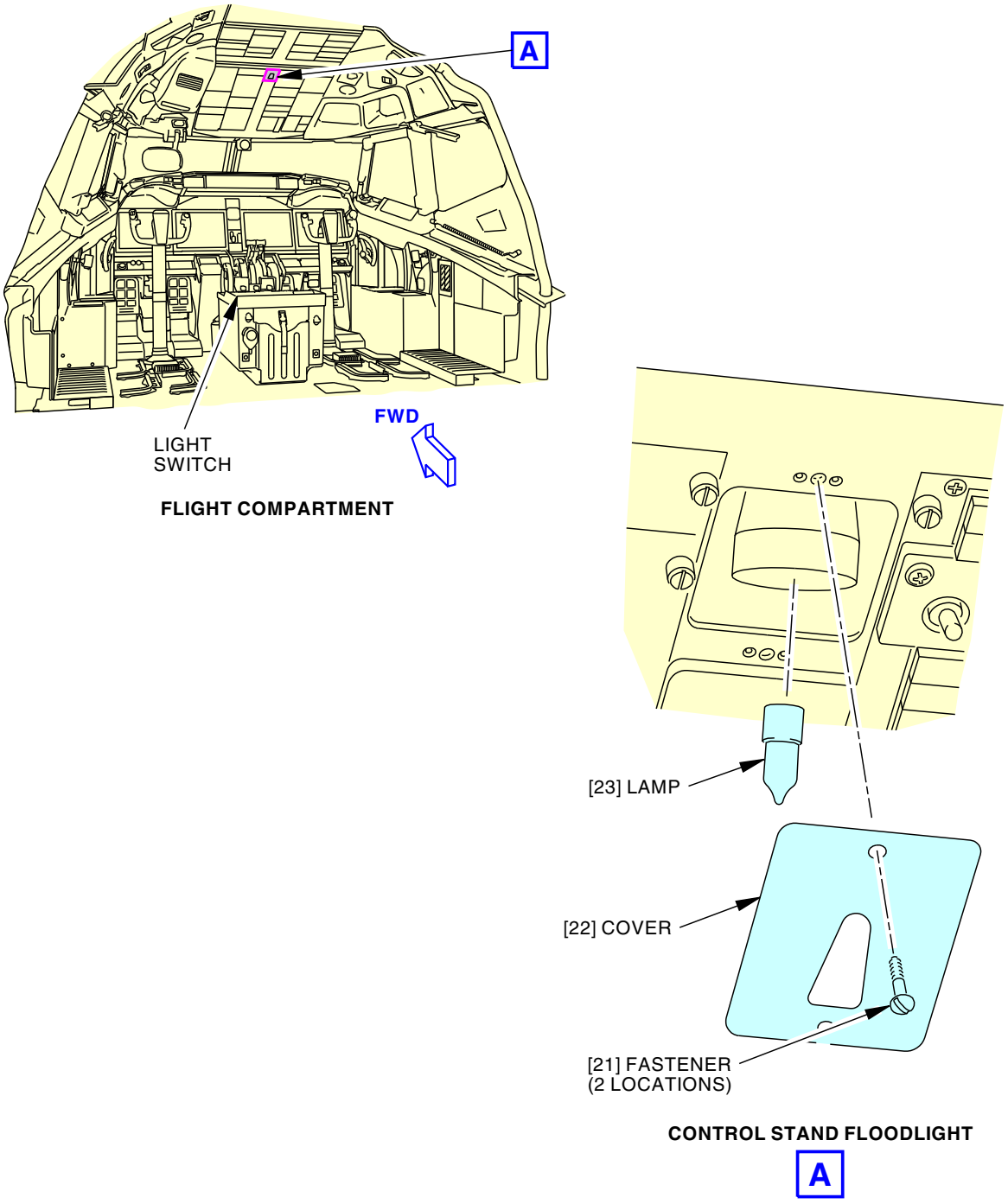
ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-14-00-940-002

(5) If a windshield cover, STD-1176 was used on the windshield, remove it.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Control Stand Floodlight - Lamp Replacement
Figure 203/33-14-00-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-14-00-960-803

6. Control Stand Floodlight - Light Assembly Replacement

(Figure 204)

A. General

(1) This task removes and installs the control stand floodlight light assembly, located on the P5 overhead panel.

(2) When you replace the light assembly, do not discard it. Refer to vendor instructions for possible repairs.

B. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
28	Light assembly	33-14-51-19-055	SIA ALL

D. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

E. Prepare for the Replacement

SUBTASK 33-14-00-860-010

(1) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	8	C00283	CONTROL CABIN LIGHTING CONT STAND

SUBTASK 33-14-00-010-001

(2) Unlatch the P5 overhead panel and let the panel hinge down to the open position.

F. Procedure

SUBTASK 33-14-00-020-001

(1) Disconnect the electrical wire [29].

SUBTASK 33-14-00-020-002

(2) Loosen the screw [24], washer [25], washer [26] and nut [27] from the back of the light assembly [28].

SUBTASK 33-14-00-960-003

(3) Replace the light assembly [28].

SUBTASK 33-14-00-420-001

(4) Tighten the screw [24], washer [25], washer [26] and nut [27] onto the back of the light assembly [28].

SUBTASK 33-14-00-420-002

(5) Connect the electrical wire [29].

G. Put the Airplane Back to Its Usual Condition

SUBTASK 33-14-00-410-001

(1) Push the P5 overhead panel up to the closed position and latch it.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-14-00-860-011

(2) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	8	C00283	CONTROL CABIN LIGHTING CONT STAND

H. Control Stand Floodlight Replacement Test

SUBTASK 33-14-00-420-003

(1) If the test is done during the day, put a windshield cover, STD-1176 on the windshield.

SUBTASK 33-14-00-710-003

(2) Do these steps to test the new light assembly:

(a) At the P8-50 panel, set the switch for the control stand floodlight to the BRIGHT mode.

1) Make sure that the lamp comes on brightly.

(b) Set the switch to the DIM mode.

1) Make sure that the light becomes dim.

(c) Set the switch to the OFF mode.

1) Make sure that the light goes off.

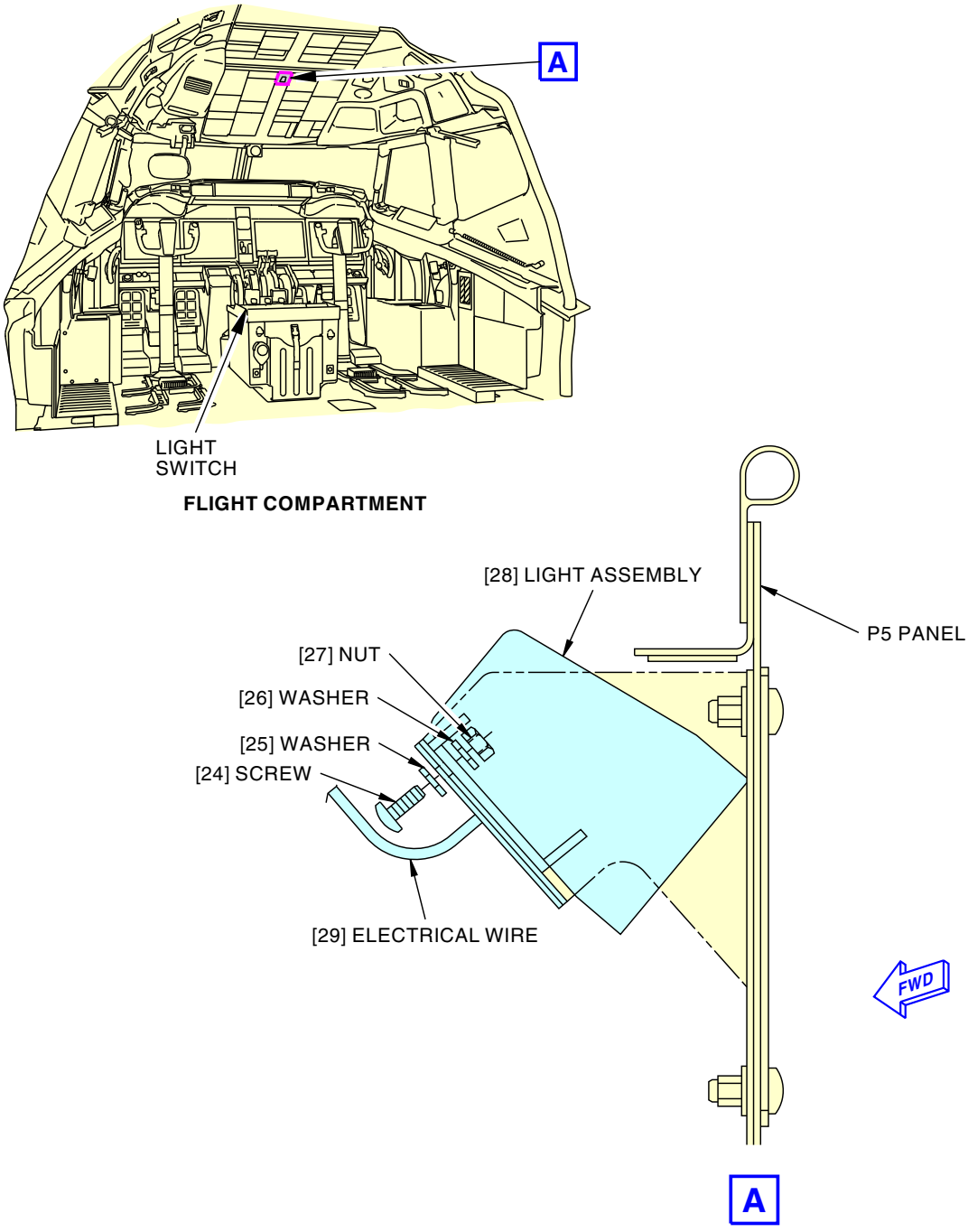
(d) Set the switch to the usual mode.

SUBTASK 33-14-00-020-003

(3) If necessary, remove the windshield cover, STD-1176.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Control Stand Floodlight - Light Assembly Replacement
Figure 204/33-14-00-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-14-00-960-804

7. Oxygen Mask Floodlight - Light Assembly Replacement

(Figure 205)

A. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
42	Light assembly	33-14-51-08-010	SIA ALL

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

SUBTASK 33-14-00-860-012

(1) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	8	C00701	EMER PANEL LTG

SUBTASK 33-14-00-960-004

(2) Do these steps to replace the light assembly:

(a) Loosen the fasteners [41].

(b) Disconnect the electrical wire [43].

(c) Replace the light assembly [42].

(d) Connect the electrical wire [43].

(e) Tighten the fasteners [41].

SUBTASK 33-14-00-940-003

(3) When the test is done during the day, put a windshield cover, STD-1176 on the windshield.

SUBTASK 33-14-00-710-004

(4) Do a test of the new light assembly:

(a) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	8	C00701	EMER PANEL LTG

1) Make sure that the light comes on.

NOTE: The light will be very dim.

(b) Open this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	8	C00701	EMER PANEL LTG

1) Make sure that the light goes off.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Close this circuit breaker:

F/O Electrical System Panel, P6-3

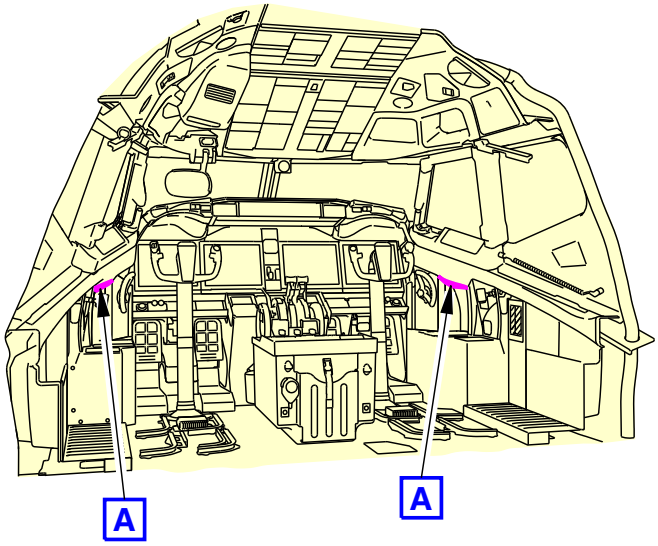
Row	Col	Number	Name
D	8	C00701	EMER PANEL LTG

SUBTASK 33-14-00-940-004

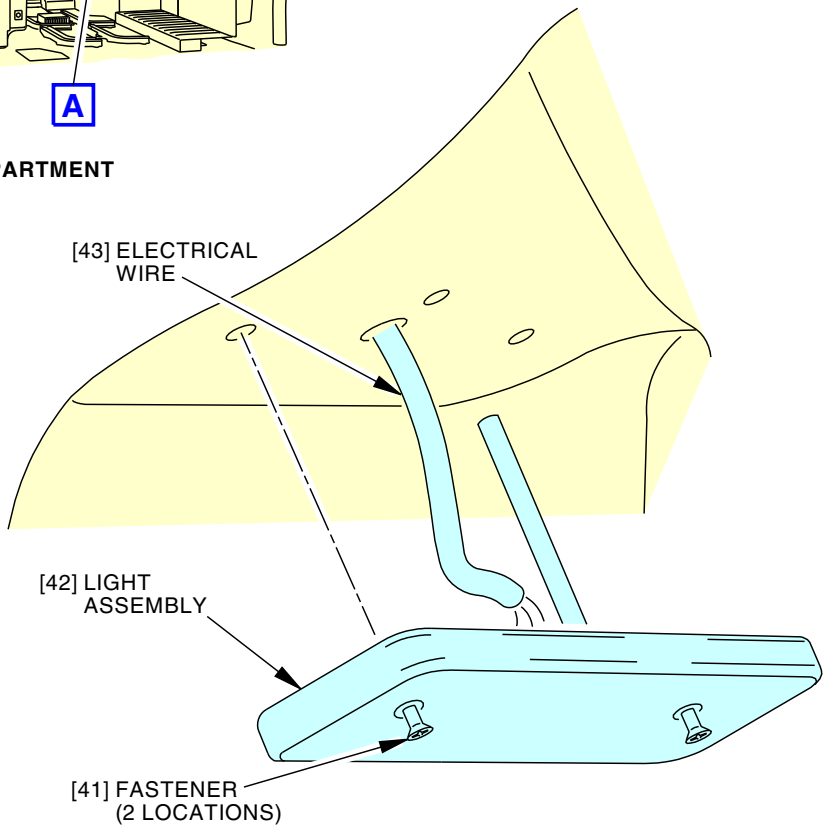
(5) If a windshield cover, STD-1176 was used on the windshield, remove it.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT



OXYGEN MASK FLOODLIGHT (EXAMPLE)

A

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Oxygen Mask Floodlight - Light Assembly Replacement
Figure 205/33-14-00-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-14-00-960-805

8. Dome Light - Lamp Replacement

(Figure 206)

A. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
62	Lamp	33-14-51-01-030	SIA ALL
63	Secondary lamp	33-14-51-05-030	SIA ALL
64	Lamp	33-14-51-05-025	SIA ALL

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-14-00-860-015

(1) On the overhead panel, P5, make sure that the DOME WHITE switch for the dome lights sets to the OFF mode.

SUBTASK 33-14-00-960-005

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(2) Do these steps to replace the lamp in the right dome light assembly [66]:

(a) Remove the lens [61].

(b) Remove the defective dome light lamp [62].

(c) Install the new dome light lamp [62].

(d) Install the lens [61].

SUBTASK 33-14-00-960-010

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(3) Do these steps to replace the lamp in the left dome light assembly [67]:

(a) Remove the lens [65].

(b) Remove the defective dome light lamp [64].

NOTE: The secondary lamp [63] installed in some light assemblies is connected to the emergency lighting system.

(c) Install the new dome light lamp [64].

(d) Install the lens [65].

SUBTASK 33-14-00-710-005

(4) Do a test of the new lamps:

(a) On the P5 panel, set the DOME WHITE switch for the dome lights to the BRIGHT mode.

1) Make sure that the lights come on bright.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Set the switch to the DIM mode.

1) Make sure that the lights become dim.

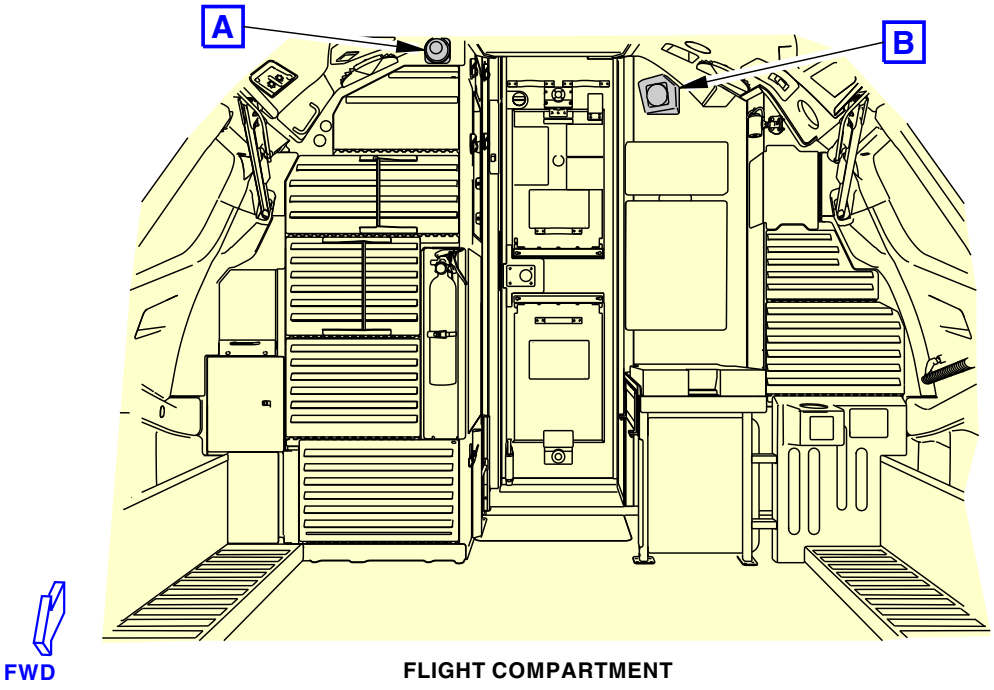
(c) Set the switch to the OFF mode.

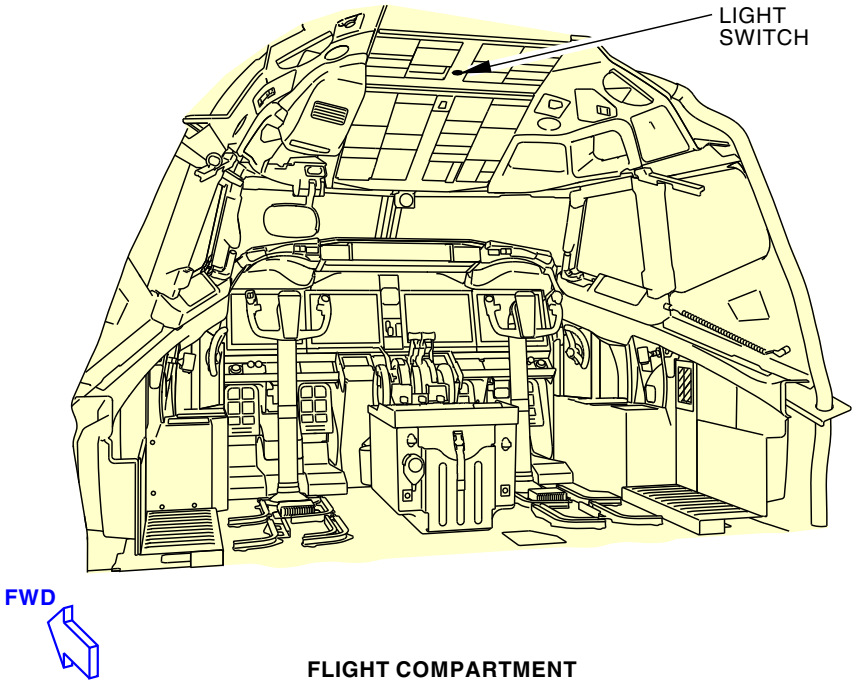
1) Make sure that the lights go off.

(d) Set the switch to the usual mode.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

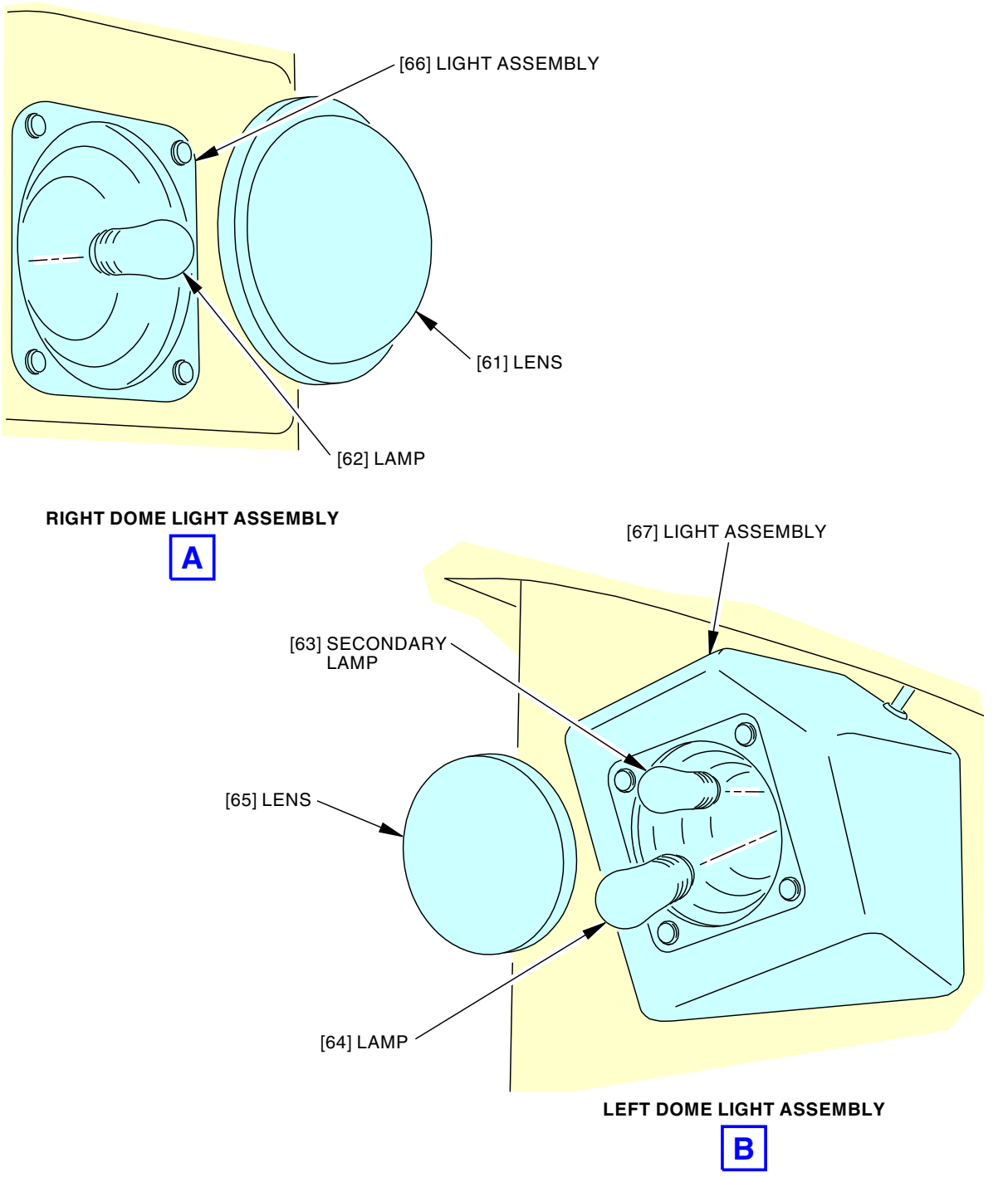




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Dome Light - Lamp Replacement
Figure 206/33-14-00-990-806 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dome Light - Lamp Replacement
Figure 206/33-14-00-990-806 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-14-00-000-801

9. Dome Light - Removal

(Figure 207)

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

B. Procedure

NOTE: The left dome light assembly includes two lamps. The 28 VDC battery bus supplies electrical power to the left and right dome lights.

SUBTASK 33-14-00-860-018

(1) On the overhead panel, P5, make sure that the DOME WHITE switch for the dome lights sets to the OFF mode.

SUBTASK 33-14-00-860-019

(2) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	15	C00282	CONTROL CABIN LIGHTING DOME WHITE

SUBTASK 33-14-00-020-004

(3) Do these steps to remove the left light assembly [67]:

(a) Remove the screws [68] that hold the light assembly [67] to the shroud [70].

(b) Carefully pull out the light assembly [67].

(c) Disconnect the electrical connector [69] from the back of the light assembly [67].

1) Make a note of the wiring for aid during installation of the dome light.

(d) Carefully pull the electrical connector [69] from the shroud [70].

SUBTASK 33-14-00-020-005

(4) Do these steps to remove the right light assembly [66]:

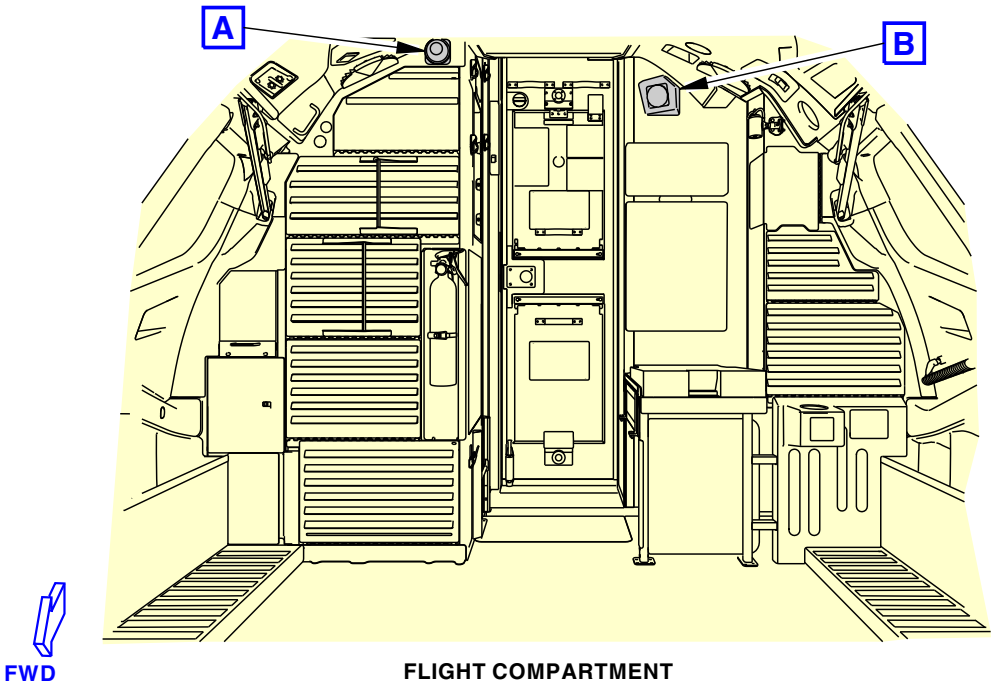
(a) Remove the screws [73].

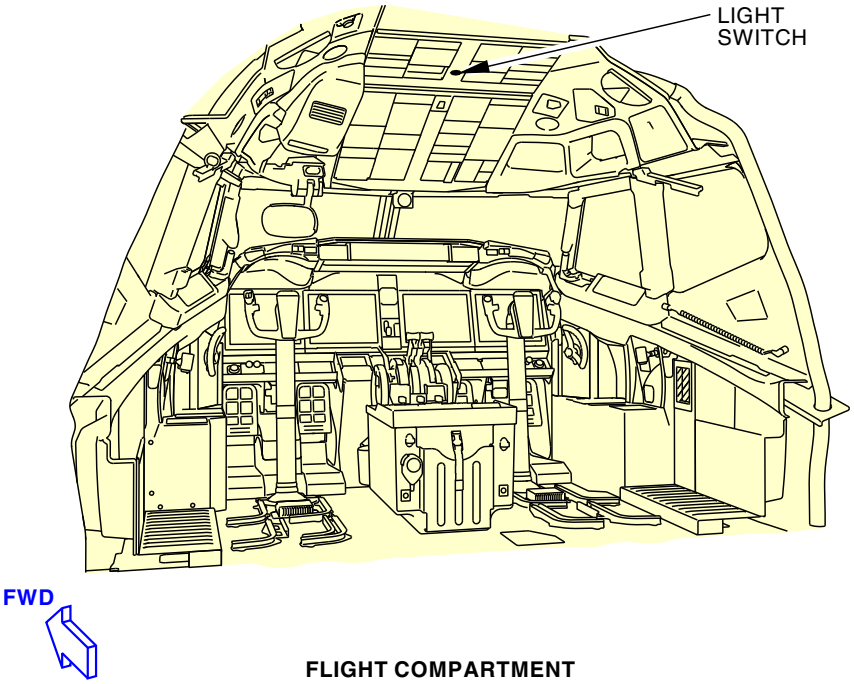
(b) Carefully pull out the light assembly [66].

(c) Disconnect the electrical connector [74] from the light assembly [66].

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

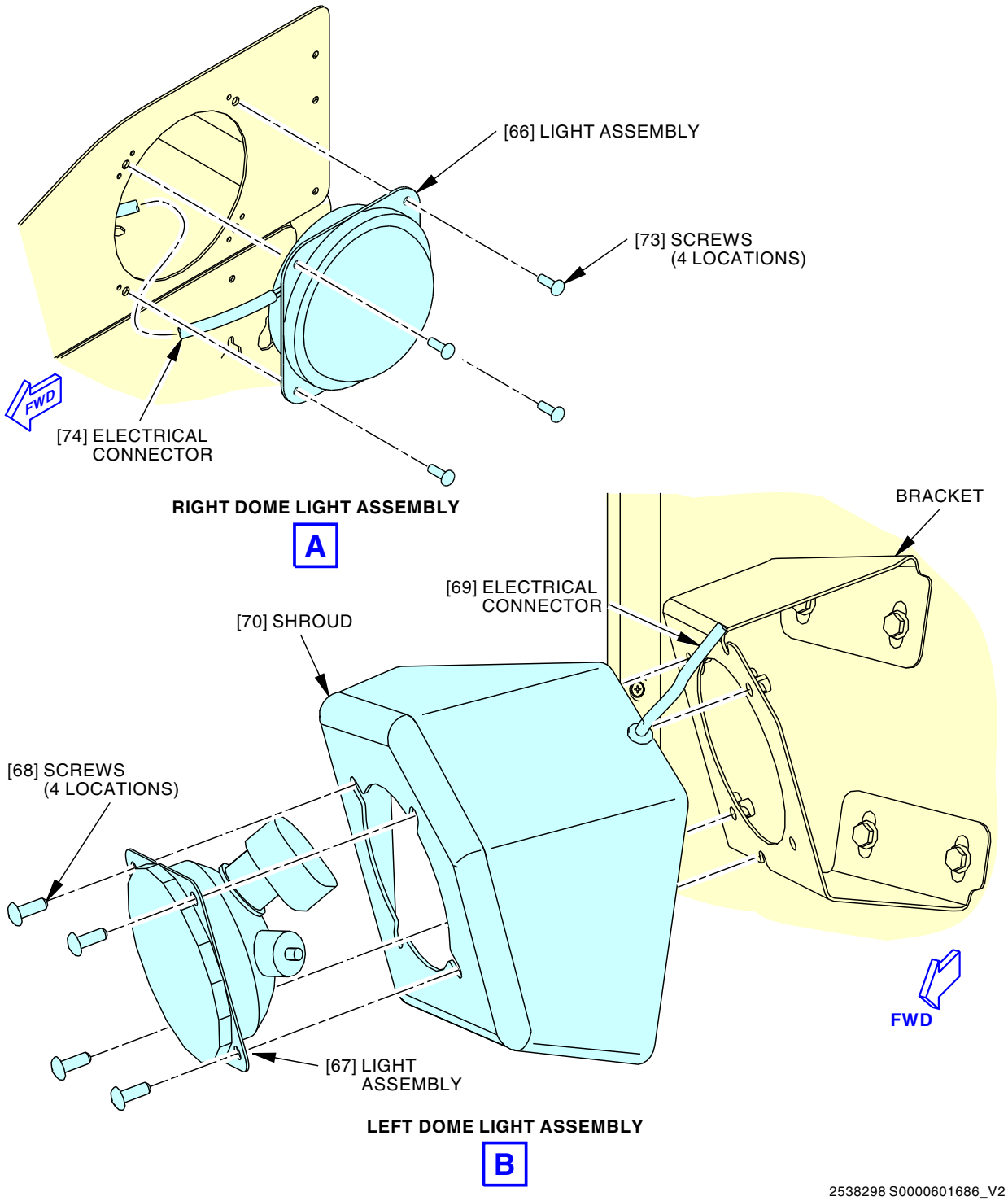




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Dome Light - Installation
Figure 207/33-14-00-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dome Light - Installation
Figure 207/33-14-00-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-14-00-400-801

10. Dome Light - Installation

(Figure 207)

A. References

Reference	Title
WDM 33-14-12	D000534482

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
66	Light assembly	33-14-51-01-005	SIA ALL
67	Light assembly	33-14-51-05-015	SIA ALL

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

SUBTASK 33-14-00-420-004

(1) Do these steps to install the left light assembly [67]:

(a) Put the electrical connector [69] through the hole in the shroud [70].

(b) Connect the electrical connector [69] to the back of the light assembly [67].

1) Make sure the electrical connector [69] wires are connected correctly (WDM 33-14-12).

(c) Put the light assembly [67] in the shroud [70] opening.

(d) Install the screws [68] that hold the light assembly [67] in its position.

SUBTASK 33-14-00-420-005

(2) Do these steps to install the right light assembly [66]:

(a) Connect the electrical connector [74] to the back of the light assembly [66].

1) Make sure the electrical connector [74] wires are connected correctly (WDM 33-14-12).

(b) Install the screws [73] that hold the light assembly [66] in its position.

SUBTASK 33-14-00-860-020

(3) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	15	C00282	CONTROL CABIN LIGHTING DOME WHITE

SUBTASK 33-14-00-710-006

(4) Do a test of the left light assembly [67]:

(a) On the P5 panel, set the DOME WHITE switch for the dome lights to the BRIGHT mode.

NOTE: The dome lights are energized by the 28VDC battery. Use the lights for a minimum time to do this test.

1) Make sure that the dome lights come on brightly.

(b) Set the DOME WHITE switch to the DIM mode.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Make sure that the intensity of the dome lights becomes dim.

(c) Set the DOME WHITE switch to the OFF mode.

1) Make sure that the dome lights go off.

SUBTASK 33-14-00-710-007

(5) Do a test of the right light assembly [67]:

(a) On the P5 panel, set the DOME WHITE switch for the dome light to the BRIGHT mode.

NOTE: The dome light is energized by the 28VDC battery. Use the light for a minimum time to do this test.

1) Make sure that the secondary dome light comes on brightly.

(b) Set the DOME WHITE switch to the DIM mode.

1) Make sure that the secondary dome light becomes dim.

(c) Set the DOME WHITE switch to the OFF mode.

1) Make sure that the secondary dome light goes off.

——— END OF TASK ———

TASK 33-14-00-960-806

11. Circuit Breaker Panel Light - Lamp Replacement

(Figure 208)

A. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
83	Lamp	33-14-51-10-100	SIA ALL
86	Lamp	33-14-00-04-065	SIA ALL
		33-14-00-04-070	SIA ALL
89	Lamp	33-14-00-05-195	SIA ALL

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-14-00-860-023

(1) On the overhead panel, P5, adjacent to the control stand floodlight, make sure the switch for the circuit breaker panel lights is set to the OFF mode.

SUBTASK 33-14-00-960-007

(2) Do these steps to replace a lamp:

(a) If the light has a cover, loosen the screw [81] or screw [88] and lift away the cover [82] or cover [87].

(b) If a shield is installed, shield [85], remove it.

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(c) Replace the applicable lamp [83], lamp [86] or lamp [89].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-14-00-710-008

(3) Do a test of the new lamp:

(a) At the P5 panel, set the switch for the circuit breaker panel lights to the BRIGHT mode.

1) Make sure that the light comes on brightly.

(b) Set the switch to the DIM mode.

1) Make sure that the light becomes dim.

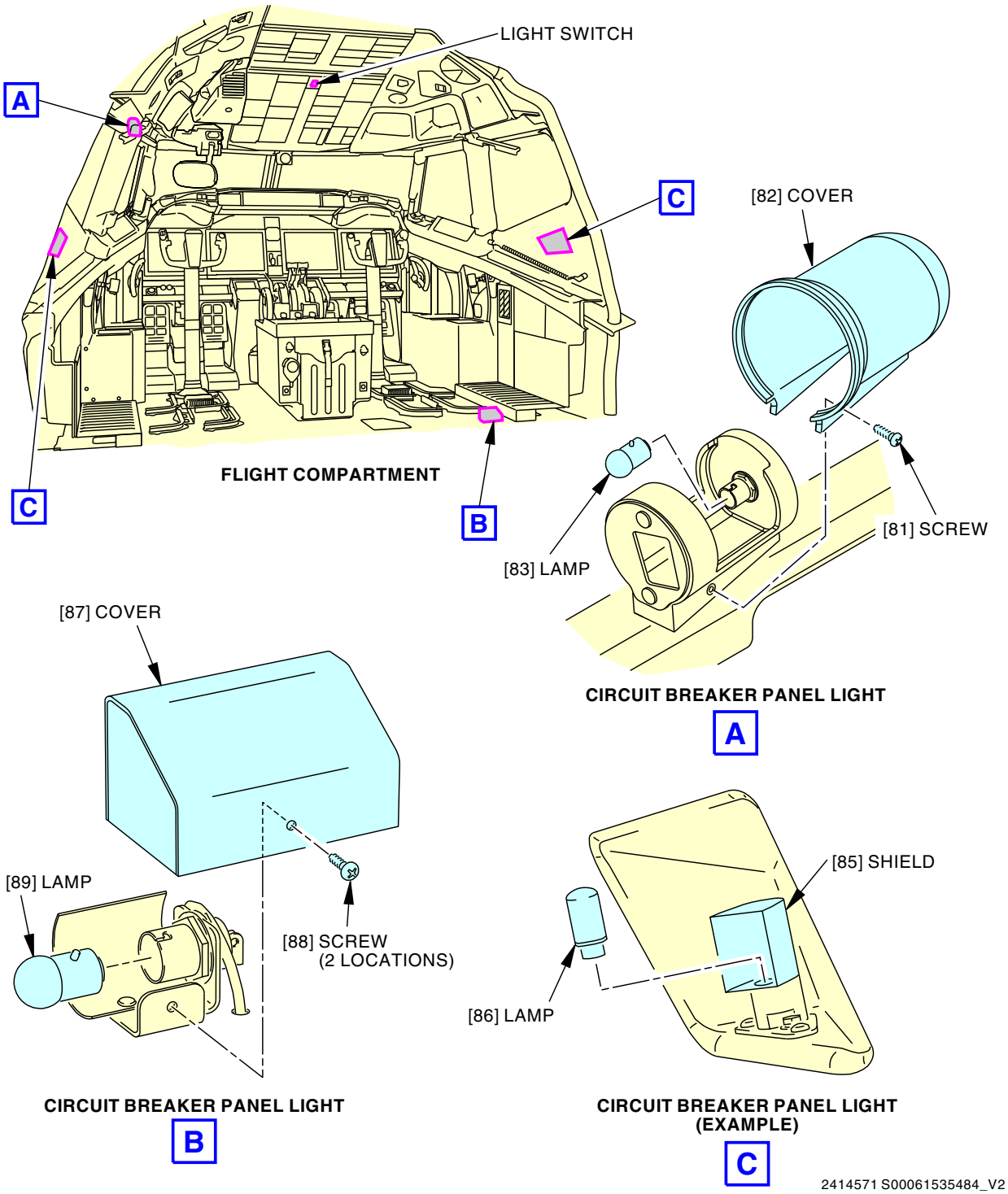
(c) Set the switch to the OFF mode.

1) Make sure that the light goes off.

(d) Set the switch to the usual mode.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Circuit Breaker Panel Light - Lamp Replacement
Figure 208/33-14-00-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-14-00-960-807

12. Dimmer Control Unit - Replacement

(Figure 209)

A. References

Reference	Title
25-11-01-000-801	Captain and First Officer Seat Removal (P/B 401)
25-11-01-400-801	Captain and First Officer Seat Installation (P/B 401)
27-21-00-800-802	Pressure from the Rudder Hydraulic Systems A, B, and Standby - Deactivation (P/B 201)
27-21-00-840-802	Pressure to the Rudder Systems A, B, and Standby - Activation (P/B 201)
34-61-01-000-802	FMCS Control Display Unit (CDU) Removal (P/B 401)
34-61-01-400-802	FMCS Control Display Unit (CDU) Installation (P/B 401)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
103	Dimmer control unit	33-11-00-37-005	SIA ALL

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Prepare for the Procedure

SUBTASK 33-14-00-010-002

(1) Do this task: FMCS Control Display Unit (CDU) Removal, TASK 34-61-01-000-802.

SUBTASK 33-14-00-010-003

(2) Do this task: Captain and First Officer Seat Removal, TASK 25-11-01-000-801.

SUBTASK 33-14-00-840-002

(3) Do this task: Pressure from the Rudder Hydraulic Systems A, B, and Standby - Deactivation, TASK 27-21-00-800-802.

SUBTASK 33-14-00-010-004

WARNING MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF THE RUDDER. THE RUDDER CAN MOVE QUICKLY. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Push the rudder pedal fully forward to get access to the lower side panel [106].

SUBTASK 33-14-00-010-005

(5) Remove the lower side panel [106] from the forward electronic panel.

(a) Remove the screws [107].

(b) Remove the lower side panel [106].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-14-00-860-026

(6) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	11	C00751	CONT CABIN LIGHTING PANEL FLOOD CONT
A	12	C01425	CONT CABIN LIGHTING PANEL FLOOD STBY

E. Procedure

SUBTASK 33-14-00-960-008

(1) Do these steps to replace the dimmer control unit [103]:

(a) Disconnect the electrical connector [102].

(b) Remove four screws [104] that holds the dimmer control unit [103] to the mounting plate [105].

(c) Replace the dimmer control unit [103].

(d) Install the four screws [104].

(e) Connect the electrical connector [102].

SUBTASK 33-14-00-860-027

(2) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	11	C00751	CONT CABIN LIGHTING PANEL FLOOD CONT
A	12	C01425	CONT CABIN LIGHTING PANEL FLOOD STBY

SUBTASK 33-14-00-710-009

(3) Do a test of the new dimmer control unit:

(a) At the forward panel on the floodlight control module, P1-5, set the switch for the applicable floodlights to the bright mode.

1) Make sure that the light comes on brightly.

(b) Set the switch to the dim mode.

1) Make sure that the light becomes dim.

(c) Set the switch to the off mode.

1) Make sure that the light goes off.

(d) Set the switch to the usual mode.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 33-14-00-410-003

(1) Install the lower side panel [106].

(a) Put the lower side panel [106] in place on the forward electronic panel.

(b) Install the screws [107] on the lower side panel [106].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-14-00-860-028

WARNING MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF THE RUDDER. THE RUDDER CAN MOVE QUICKLY. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Put the rudder pedal back to the center position.

SUBTASK 33-14-00-840-001

WARNING KEEP PERSONS AND EQUIPMENT CLEAR OF THE FLIGHT CONTROL SURFACES, THE THRUST REVERSERS, AND THE LANDING GEAR. THESE COMPONENTS CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Do this task: Pressure to the Rudder Systems A, B, and Standby - Activation, TASK 27-21-00-840-802.

SUBTASK 33-14-00-410-004

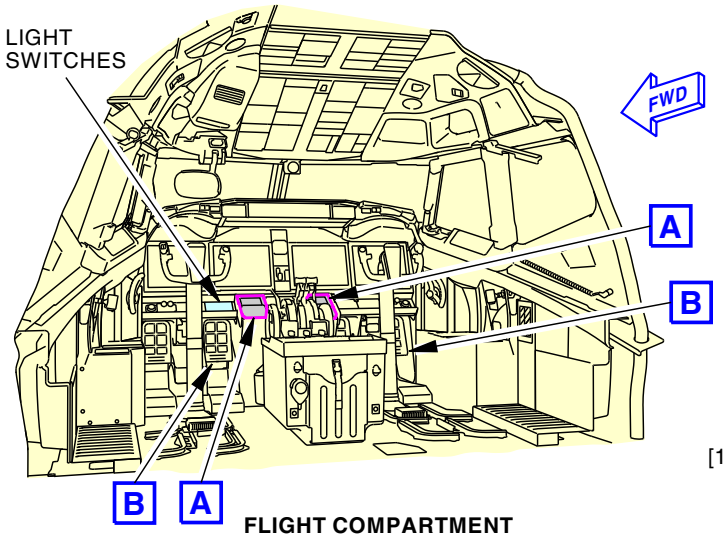
(4) Do this task: Captain and First Officer Seat Installation, TASK 25-11-01-400-801.

SUBTASK 33-14-00-410-002

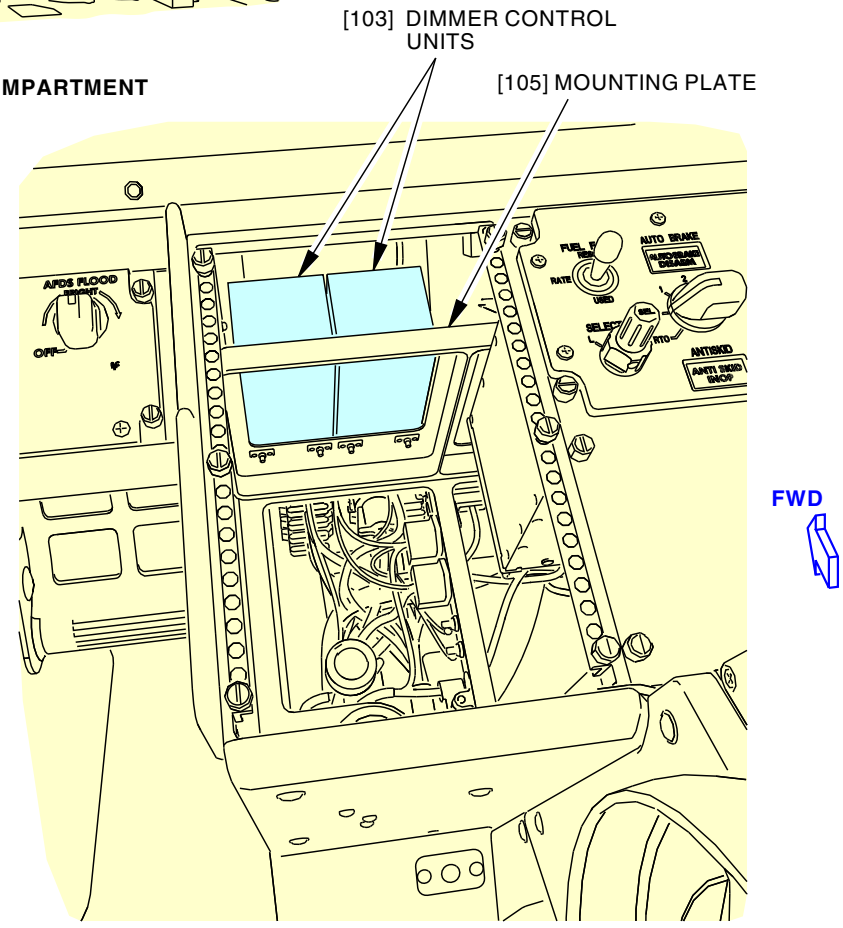
(5) Do this task: FMCS Control Display Unit (CDU) Installation, TASK 34-61-01-400-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT



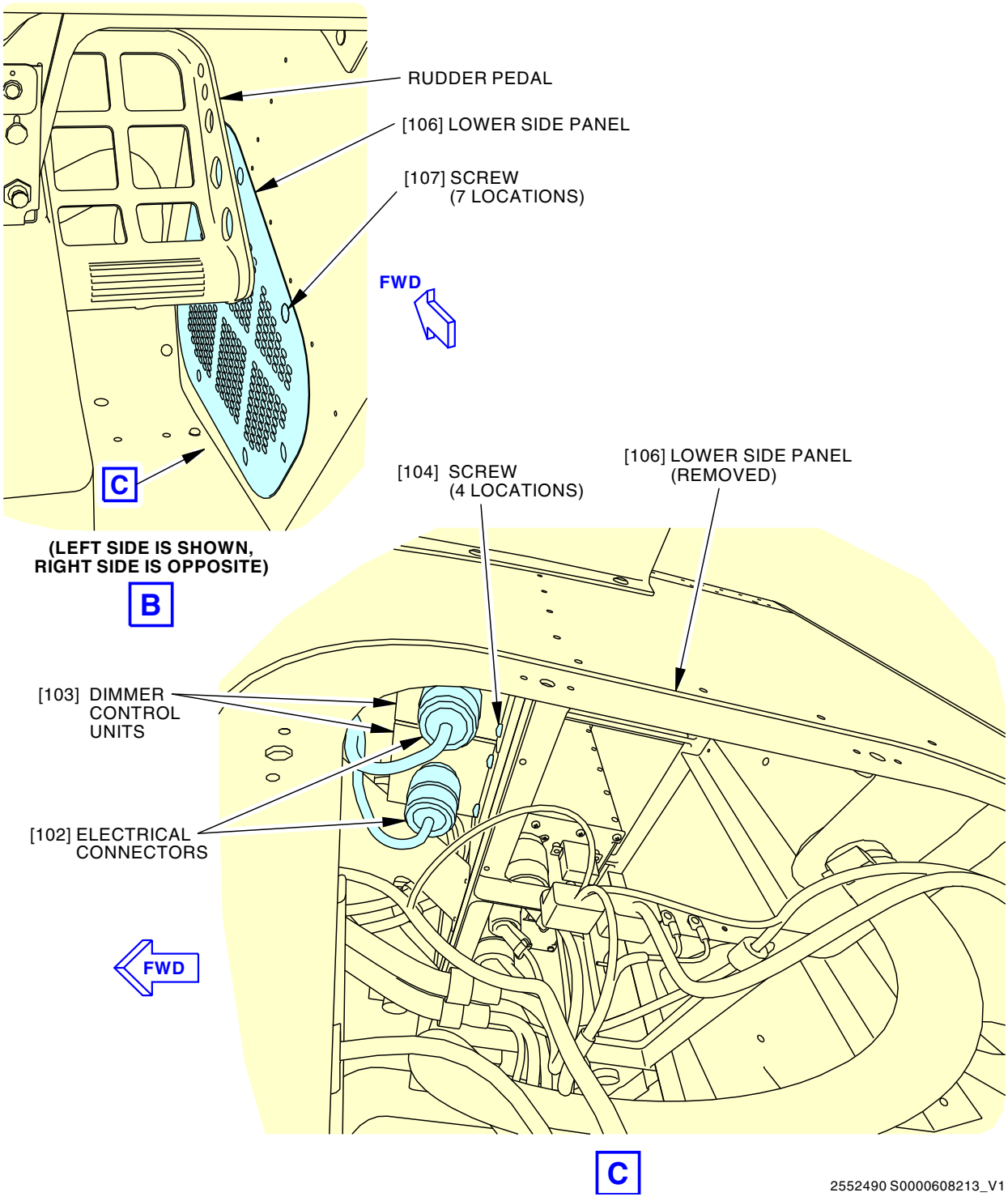
FORWARD ELECTRONICS PANEL
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

A

2414578 S00061535501_V2

Dimmer Control Unit - Replacement
Figure 209/33-14-00-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dimmer Control Unit - Replacement
Figure 209/33-14-00-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-14-00-710-801

13. Panel Floodlights - Operational Test of the Standby Relay

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

B. Procedure

SUBTASK 33-14-00-710-010

(1) Do this test of the standby relay for the panel floodlights:

NOTE: When you open the circuit breaker, you simulate the standby mode.

(a) At the forward panel on the floodlight control module, P1-5, set the switch for the main panel floodlights to the bright mode.

1) Make sure that the panel floodlights come on brightly.

(b) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	11	C00751	CONT CABIN LIGHTING PANEL FLOOD CONT

1) Make sure that the panel floodlights become dim.

(c) Set the switch to the OFF or DIM mode.

1) Make sure the switch has no effect on the panel floodlights.

(d) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	11	C00751	CONT CABIN LIGHTING PANEL FLOOD CONT

(e) Set the switch to the usual mode.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT CREW LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Flight Crew Lights Deactivation.

(2) Flight Crew Lights Activation.

(3) Map light - Lamp Replacement.

(4) Flight Kit/Reading Light - Lamp Replacement.

(5) Chart Light - Lamp Replacement.

TASK 33-17-00-040-801

2. Flight Crew Lights - Deactivation

(Figure 201 or Figure 202 or Figure 203)

A. General

(1) This procedure removes electrical power from the Flight Crew Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-17-00-860-001

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	9	C00308	CONTROL CABIN LIGHTING MAP & KIT
A	10	C00309	CONTROL CABIN LIGHTING OBS READING

D. Flight Crew Lights - Tryout

NOTE: This tryout is to make sure the Flight Crew Lights are in a zero energy state.

SUBTASK 33-17-00-700-001

(1) For the map, chart, and flight kit lights do these steps:

(a) At the P21 panel, turn the MAP and CHART light control switches clockwise to the full BRIGHT position.

1) Make sure that neither the map light, nor chart light comes on.

(b) Turn the control switches on the P21 panel counter clockwise to the OFF position.

(c) At the flight kit light, turn the light control knob to the full BRIGHT position and set the light switch to the ON mode.

1) Make sure the flight kit light does not come on.

(d) Set the light switch to the OFF mode.

(e) At the P23 panel, turn the MAP and CHART light control switches clockwise to the full BRIGHT position.

1) Make sure that neither the map light, nor chart light comes on.

(f) Turn the control switches on the P23 panel counter clockwise to the OFF position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(g) At the flight kit light, turn the light control knob to the full BRIGHT position and set the light switch to the ON mode.

1) Make sure the flight kit light does not come on.

(h) Set the light switch to the OFF mode.

(2) For the observer reading lights do these steps:

(a) Turn the light control knob to the full BRIGHT position and set the light switch to the ON mode.

1) Make sure the observer reading light does not come on.

(b) Set the light control switch to the OFF mode.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

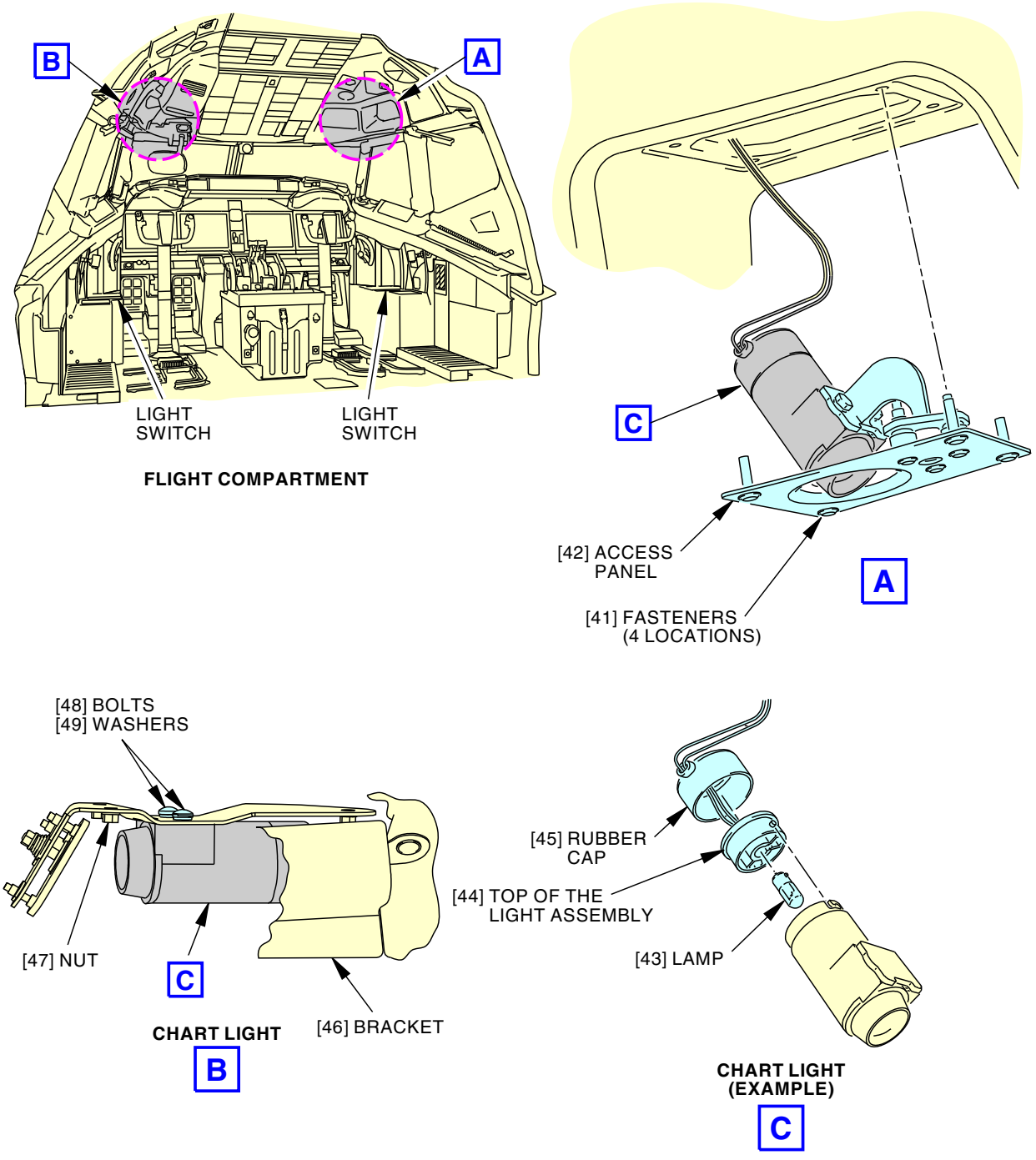
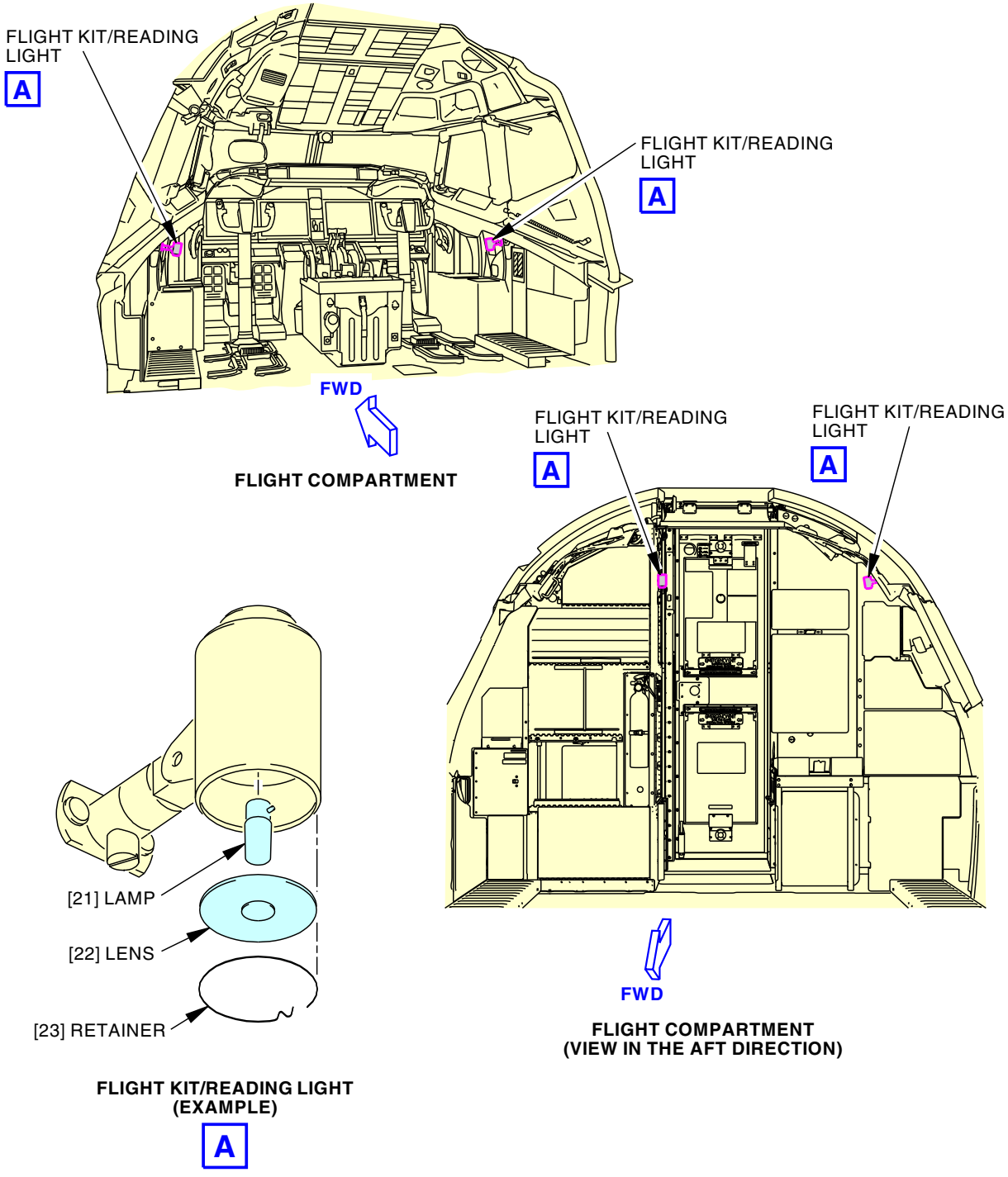


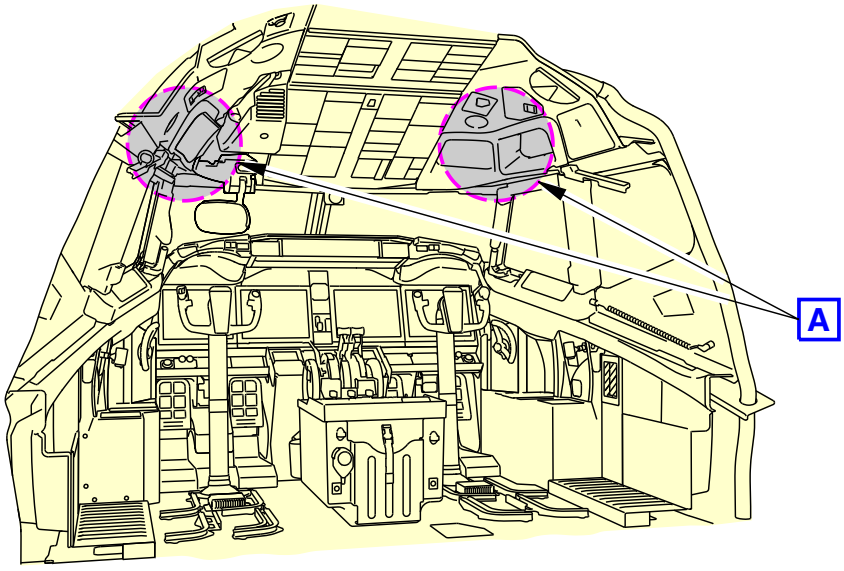
Chart Light - Lamp Replacement
Figure 201/33-17-00-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

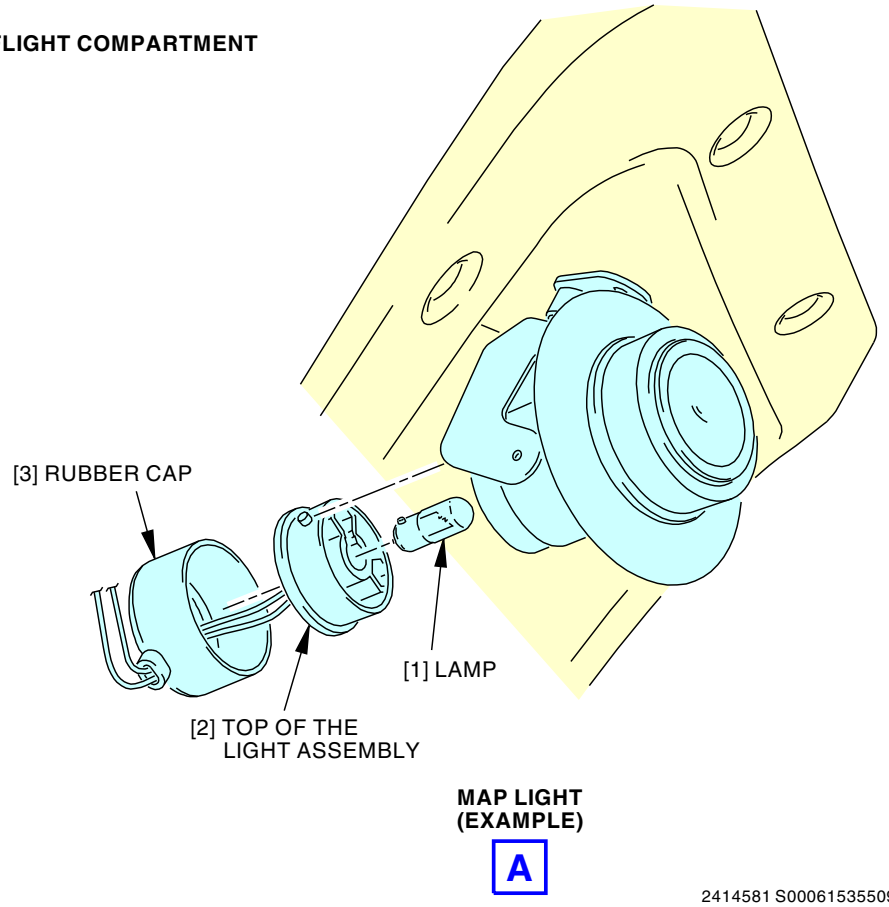


Flight Kit/Reading Light - Lamp Replacement
Figure 202/33-17-00-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT



MAP LIGHT
(EXAMPLE)

A

2414581 S00061535509_V1

Map Light - Lamp Replacement
Figure 203/33-17-00-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-17-00-440-801

3. Flight Crew Lights - Activation

(Figure 201 or Figure 202 or Figure 203)

A. General

(1) This procedure adds electrical power to the Flight Crew Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-17-00-860-002

(1) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
A	9	C00308	CONTROL CABIN LIGHTING MAP & KIT
A	10	C00309	CONTROL CABIN LIGHTING OBS READING

——— END OF TASK ———

TASK 33-17-00-960-801

4. Map Light - Lamp Replacement

(Figure 204)

A. References

Reference	Title
24-22-00-860-801	Supply Electrical Power (P/B 201)
24-22-00-860-802	Remove Electrical Power (P/B 201)
WDM 33-17-11	D000534484

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Lamp	33-17-00-21-100	SIA ALL

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

SUBTASK 33-17-00-860-003

(1) At the auxiliary panel, P21 or P23, set the switch for the applicable map light to the off mode.

SUBTASK 33-17-00-960-001

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LIGHT, ELECTRICAL SHOCK CAN OCCUR.

(2) Do these steps to replace the lamp (WDM 33-17-11):

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Turn the light assembly for access to the back of it.

(b) Lift off the rubber cap [3].

(c) Remove the top of the light assembly [2].

(d) Replace the lamp [1].

(e) Install the top of the light assembly [2].

(f) Put on the rubber cap [3].

(g) Turn the light assembly back to its usual position.

SUBTASK 33-17-00-860-004

(3) Do this task: Supply Electrical Power, TASK 24-22-00-860-801.

SUBTASK 33-17-00-710-001

(4) Do a test of the new lamp:

(a) At the P21 or P23 panel, set the applicable switch for the map light to the dim mode and then to the bright mode.

1) Make sure the intensity of the light changes from dim to bright.

(b) Set the switch to the off mode.

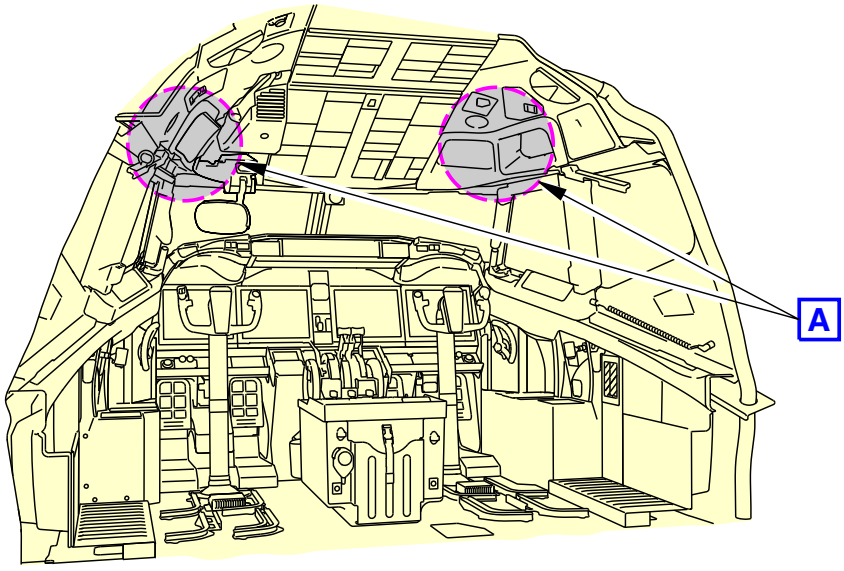
1) Make sure the light goes off.

SUBTASK 33-17-00-860-005

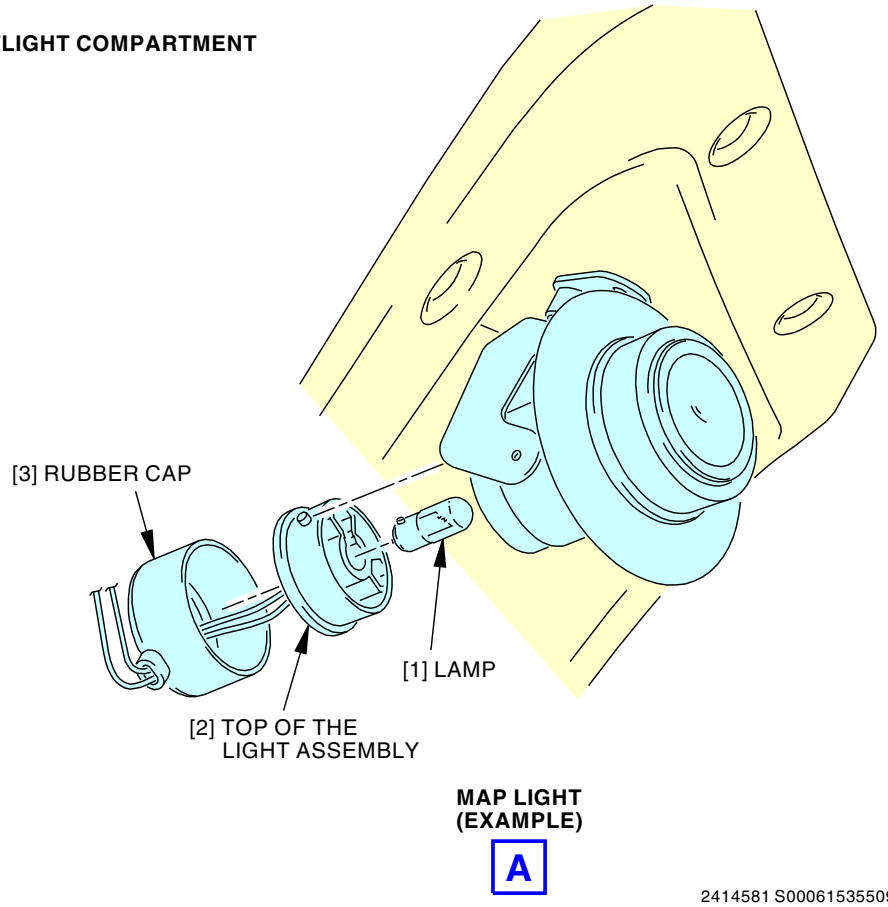
(5) Do this task: Remove Electrical Power, TASK 24-22-00-860-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT



MAP LIGHT
(EXAMPLE)

A

2414581 S00061535509_V1

Map Light - Lamp Replacement
Figure 204/33-17-00-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-17-00-960-802

5. Flight Kit/Reading Light - Lamp Replacement

(Figure 205)

A. References

Reference	Title
24-22-00-860-801	Supply Electrical Power (P/B 201)
24-22-00-860-802	Remove Electrical Power (P/B 201)
WDM 33-17-11	D000534484

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
21	Lamp	33-17-00-07-035	SIA ALL
		33-17-00-15-040	SIA ALL

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

SUBTASK 33-17-00-860-006

(1) At the back of the light, set the switch to the off mode.

NOTE: Use the knob, not the push-button switch.

SUBTASK 33-17-00-960-002

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LIGHT, ELECTRICAL SHOCK CAN OCCUR.

(2) Do these steps to replace the lamp (WDM 33-17-11):

(a) Remove the retainer [23].

(b) Remove the lens [22].

(c) Replace the lamp [21].

(d) Install the lens [22].

(e) Install the retainer [23].

SUBTASK 33-17-00-860-007

(3) Do this task: Supply Electrical Power, TASK 24-22-00-860-801.

SUBTASK 33-17-00-710-002

(4) Do a test of the new lamp:

(a) Set the switch for the light to the on mode.

1) Make sure the light comes on.

(b) Set the switch to the off mode.

1) Make sure the light goes off.

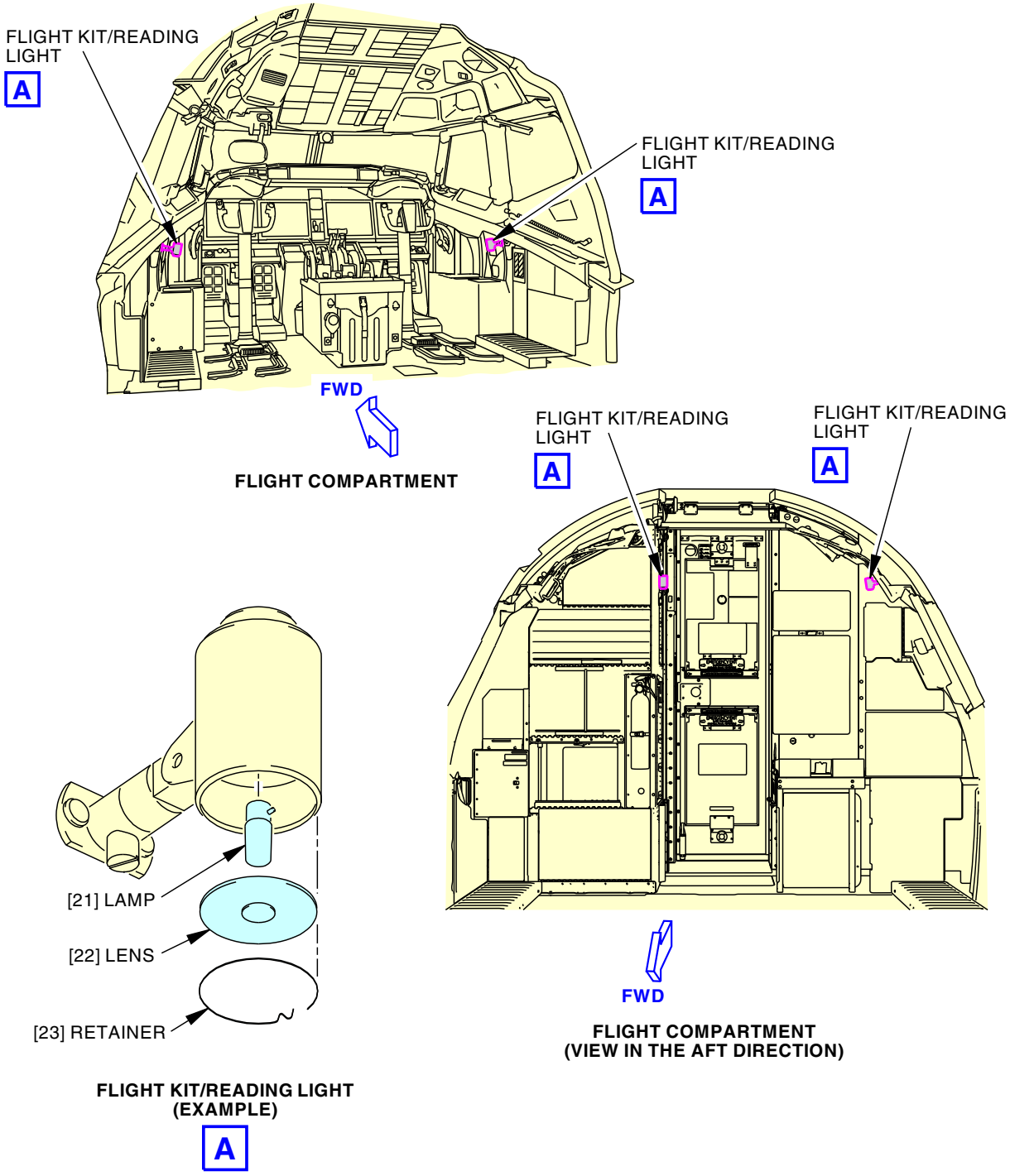
ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-17-00-860-008

(5) Do this task: Remove Electrical Power, TASK 24-22-00-860-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flight Kit/Reading Light - Lamp Replacement
Figure 205/33-17-00-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-17-00-960-803

6. Chart Light - Lamp Replacement

(Figure 206)

A. References

Reference	Title
24-22-00-860-801	Supply Electrical Power (P/B 201)
24-22-00-860-802	Remove Electrical Power (P/B 201)
WDM 33-17-11	D000534484

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
43	Lamp	33-17-00-01-125	SIA ALL
		33-17-00-01-635	SIA ALL

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

SUBTASK 33-17-00-860-009

(1) At the auxiliary panel, P21 or P23, set the applicable switch for the chart light to the off mode.

SUBTASK 33-17-00-960-003

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LIGHT, ELECTRICAL SHOCK CAN OCCUR.

(2) Do these steps to replace the lamp (WDM 33-17-11):

(a) For the captain's chart light, do these steps to get access to the light assembly:

1) Remove the bolts [48] and washers [49] that attach the bracket [46] to the chart light.

2) Remove the nuts [47] that attach the bracket [46] to the structure.

3) Remove the bracket [46].

(b) For the first officer's chart light, do this step to get access to the light assembly:

1) Loosen the fasteners [41] and lower the access panel [42].

(c) Lift off the rubber cap [45].

(d) Remove the top of the light assembly [44].

(e) Replace the lamp [43].

(f) Install the top of the light assembly [44].

(g) Put on the rubber cap [45].

(h) For the first officer's chart light, install the access panel [42] and tighten the fasteners [41].

(i) For the captain's chart light, do these steps:

1) Tighten the bolts [48] and washers [49] that attach the bracket [46] to the chart light.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) Put the bracket [46] in its position.

3) Install the nuts [47] that attach the bracket [46] to the structure.

NOTE: Do not tighten the nuts [47].

4) With power on, use driver to direct light assembly to chart holder area.

5) Hold aim with driver and rotate aperture on light assembly to align light pattern lengthwise and parallel to the number 2 window pane.

6) Hold aim of light and tighten the nuts [47] that attach the bracket [46] to the structure.

SUBTASK 33-17-00-860-010

(3) Do this task: Supply Electrical Power, TASK 24-22-00-860-801.

SUBTASK 33-17-00-710-003

(4) Do a test of the new lamp:

(a) At the P21 or P23 panel, set the applicable switch for the chart light to the dim mode and then to the bright mode.

1) Make sure the intensity of the light changes from dim to bright.

(b) Set the switch to the off mode.

1) Make sure the light goes off.

SUBTASK 33-17-00-860-011

(5) Do this task: Remove Electrical Power, TASK 24-22-00-860-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

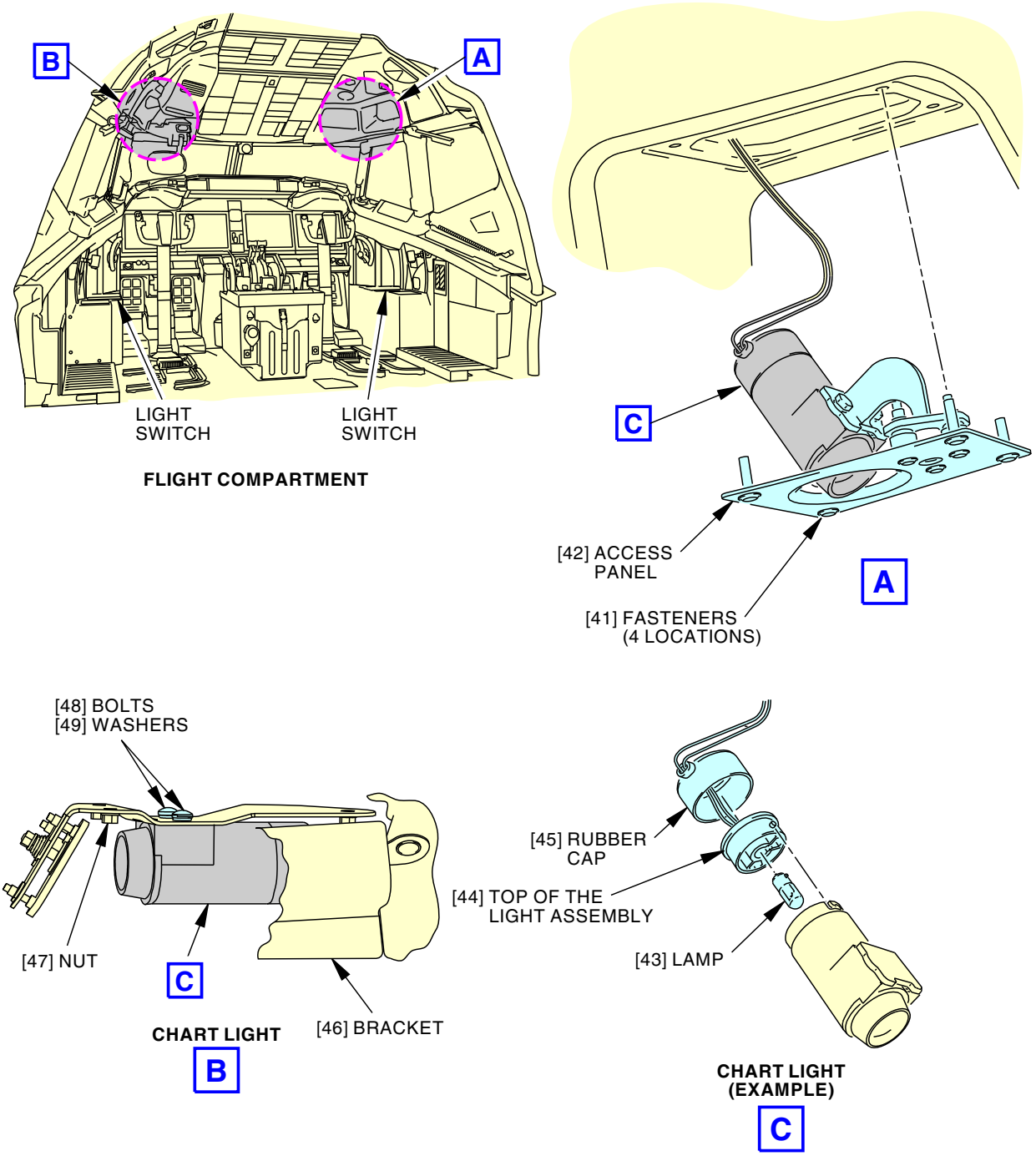


Chart Light - Lamp Replacement
Figure 206/33-17-00-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MASTER DIM AND TEST (MD&T) LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Master Dim and Test Lights Deactivation.

(2) Master Dim and Test Lights Activation.

(3) Indicator Light - Lamp Replacement.

(4) Indicator Light - Light Assembly Replacement.

(5) Lighted Pushbutton Switch - Lamp Replacement.

(6) Lightplate - Replacement.

(7) Annunciator And Dimming Module - Module Replacement.

(8) Master Dim and Test System - Module Replacement.

(9) Master Dim and Test - Operational Test.

TASK 33-18-00-040-801

2. Master Dim and Test Lights - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power to the Master Dim and Test Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Master Dim and Test Lights Deactivation

SUBTASK 33-18-00-860-001

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	6	C00148	ANTI-ICE & RAIN ENG 1 & WING CONT

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT
B	9	C00440	FLIGHT CONTROL AUTO SPEED BRAKE

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	5	C00540	FUEL SPAR VALVE IND
B	7	C00361	FUEL CROSS FEED VALVE CONT
C	13	C01277	MASTER CAUTION ANNUNCIATOR CONT 3
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT
D	12	C00310	INDICATOR MASTER DIM BAT
D	13	C00311	INDICATOR MASTER DIM BUS 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	14	C00312	INDICATOR MASTER DIM BUS 2
E	4	C01396	ENGINE FUEL ENGINE 2 HPSOV IND
E	6	C01395	ENGINE FUEL ENGINE 1 HPSOV IND
E	11	C00313	INDICATOR MASTER DIM SECT 1
E	12	C00314	INDICATOR MASTER DIM SECT 2
E	13	C00315	INDICATOR MASTER DIM SECT 3
E	14	C00316	INDICATOR MASTER DIM SECT 4
F	11	C00317	INDICATOR MASTER DIM SECT 5
F	12	C00318	INDICATOR MASTER DIM SECT 6
F	13	C01179	INDICATOR MASTER DIM SECT 7
F	14	C01180	INDICATOR MASTER DIM SECT 8

D. Master Dim and Test Lights Tryout

NOTE: This tryout is to make sure the Master Dim and Test Lights are in a zero energy state.

SUBTASK 33-18-00-700-001

(1) On the Captain's instrument panel, P1, set the switch for the master dim and test lights to TEST.

(2) Make sure that the indicator lights on these panels do not come on:

(a) Captain's instrument panel, P1

(b) Center instrument panel, P2

(c) First Officer's instrument panel, P3

(d) AFT and FWD overhead panel, P5

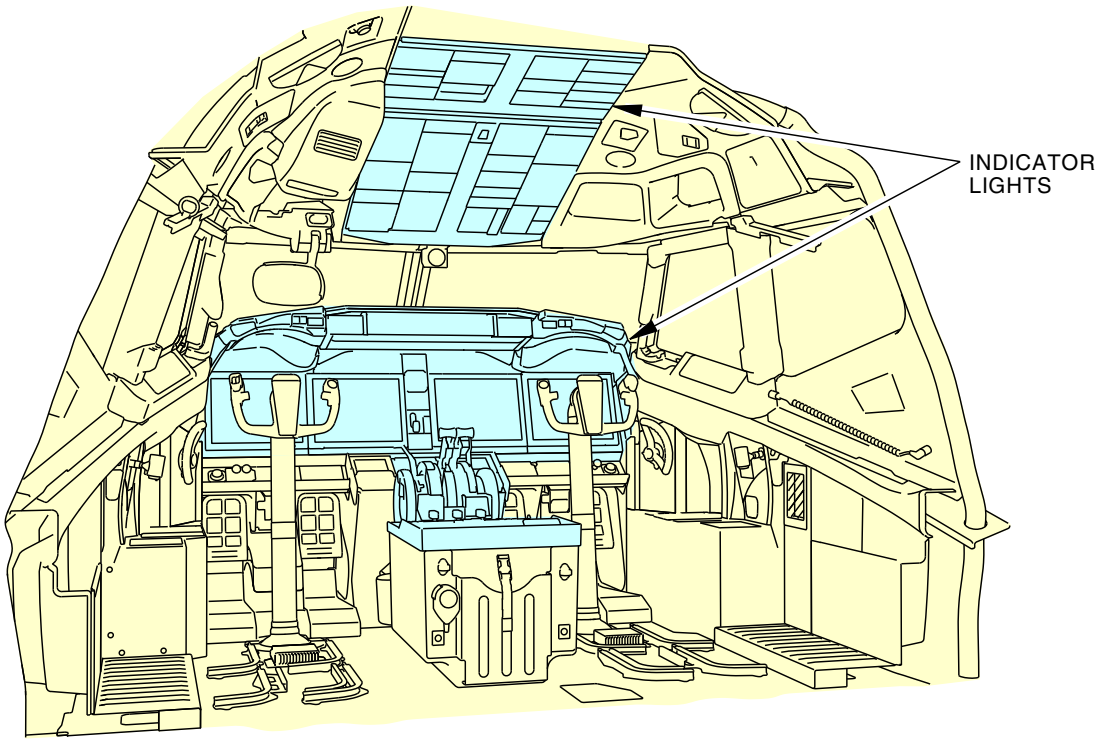
(e) Glareshield panel, P7

(f) AFT and FWD electronics panels, P8 and P9.

(3) Set the switch for the master dim and test lights to DIM.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT

2414582 S00061535518_V1

Master Dim and Test Lights
Figure 201/33-18-00-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-18-00-440-801

3. Master Dim and Test Lights - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the Master Dim and Test Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Master Dim and Test Lights Activation

SUBTASK 33-18-00-860-002

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	6	C00148	ANTI-ICE & RAIN ENG 1 & WING CONT

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT
B	9	C00440	FLIGHT CONTROL AUTO SPEED BRAKE

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	5	C00540	FUEL SPAR VALVE IND
B	7	C00361	FUEL CROSS FEED VALVE CONT
C	13	C01277	MASTER CAUTION ANNUNCIATOR CONT 3
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT
D	12	C00310	INDICATOR MASTER DIM BAT
D	13	C00311	INDICATOR MASTER DIM BUS 1
D	14	C00312	INDICATOR MASTER DIM BUS 2
E	4	C01396	ENGINE FUEL ENGINE 2 HPSOV IND
E	6	C01395	ENGINE FUEL ENGINE 1 HPSOV IND
E	11	C00313	INDICATOR MASTER DIM SECT 1
E	12	C00314	INDICATOR MASTER DIM SECT 2
E	13	C00315	INDICATOR MASTER DIM SECT 3
E	14	C00316	INDICATOR MASTER DIM SECT 4
F	11	C00317	INDICATOR MASTER DIM SECT 5
F	12	C00318	INDICATOR MASTER DIM SECT 6
F	13	C01179	INDICATOR MASTER DIM SECT 7
F	14	C01180	INDICATOR MASTER DIM SECT 8

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-18-00-960-801

4. Indicator Light - Lamp Replacement

(Figure 202)

A. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Indicator Light Lamp Replacement

SUBTASK 33-18-00-010-001

(1) Pull the cap assembly [4] away from the panel [6].

SUBTASK 33-18-00-960-001

(2) Replace the unserviceable lamps [5].

SUBTASK 33-18-00-940-001

(3) If it is necessary, put a windshield cover, STD-1176, on the windshield.

NOTE: During the day, the changes in light intensity are not easy to see.

SUBTASK 33-18-00-710-001

(4) Do these steps to test the lamps [5]:

(a) If the indicator light has a press-to-test actuator [3], then on the Captain's instrument panel, P1, set the DIM/BRT/TEST switch to the BRT position.

1) Push the front of the indicator light.

2) Make sure that the indicator light comes on.

(b) If the indicator light does not have a press-to-test actuator [3], then on the Captain's instrument panel, P1, set the DIM/BRT/TEST switch to the TEST position.

1) Make sure that the indicator light comes on.

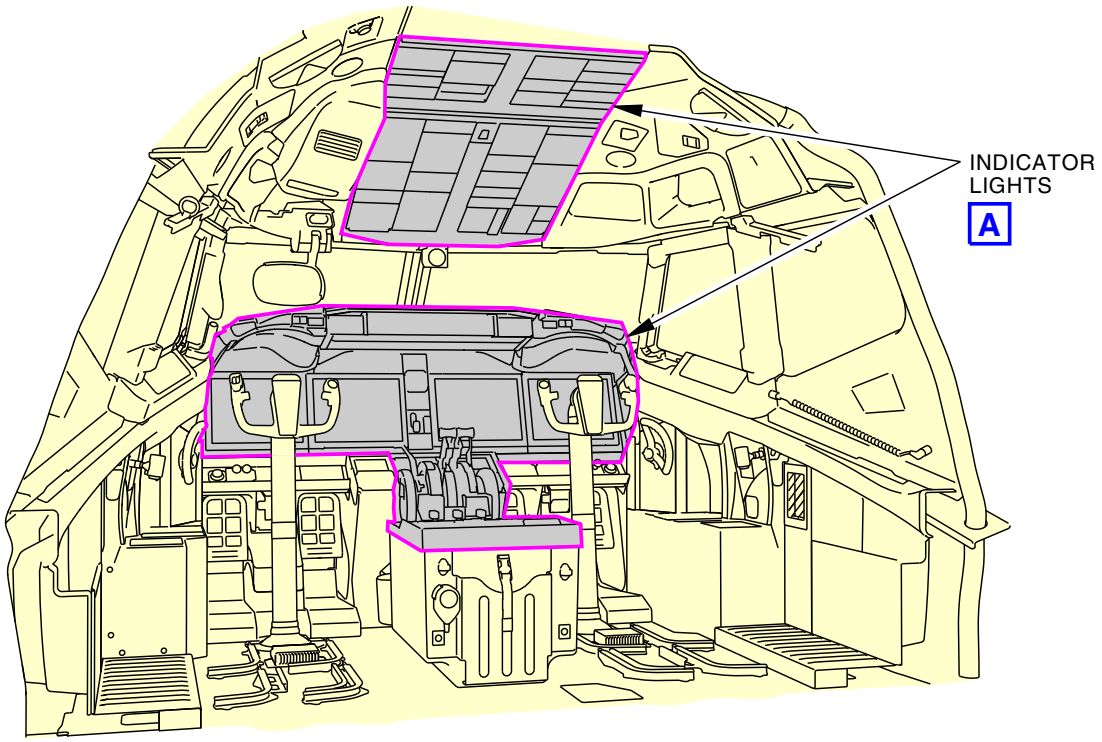
2) Set the DIM/BRT/TEST switch to the DIM or BRT position.

SUBTASK 33-18-00-940-002

(5) If a windshield cover, STD-1176, was used on the windshield, remove it.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

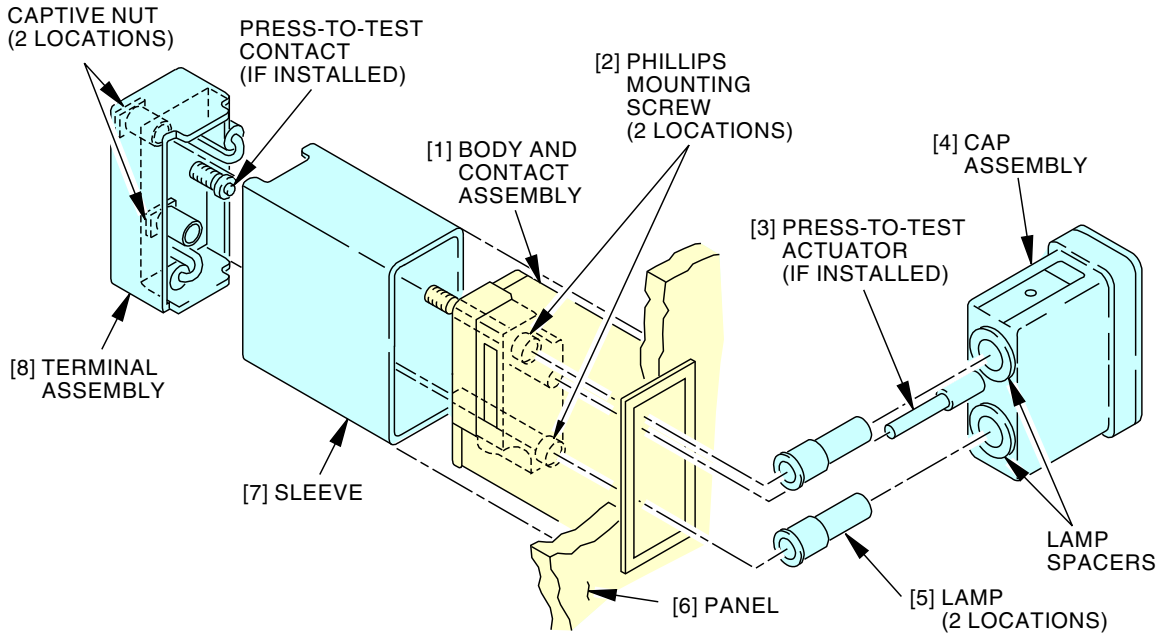


FLIGHT COMPARTMENT

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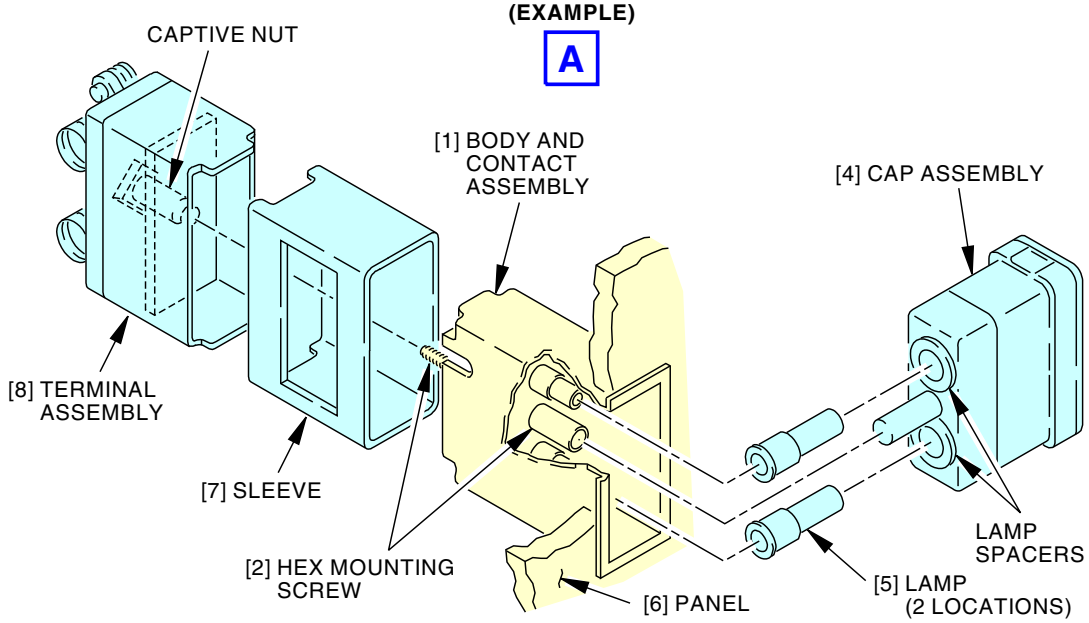
Indicator Light - Lamp/Light Assembly Replacement
Figure 202/33-18-00-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



INDICATOR LIGHT WITH PHILLIPS MOUNTING SCREWS (EXAMPLE)

A



INDICATOR LIGHT WITH A HEX MOUNTING SCREW (EXAMPLE)

A

2414584 S00061535522_V1

Indicator Light - Lamp/Light Assembly Replacement
Figure 202/33-18-00-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-18-00-960-802

5. Indicator Light - Light Assembly Replacement

(Figure 202)

A. References

Reference	Title
WDM 33-18-11 thru 33-18-99	D000534485

B. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Indicator Light Light Assembly Replacement

SUBTASK 33-18-00-860-005

(1) Open the circuit breakers that supply the indicator light with power and attach DO-NOT-CLOSE tags.

NOTE: Many systems in the airplane have indicator lights installed in the flight compartment. Use the Wiring Diagram Manual to find the correct circuit breakers for the indicator light (WDM 33-18-11 thru 33-18-99).

SUBTASK 33-18-00-960-002

(2) Do these steps to replace the indicator light assembly:

(a) Get access to the rear of the indicator light.

(b) Disconnect and tag the electrical wires attached to the indicator light terminals.

(c) Pull the cap assembly [4] away from the panel [6].

(d) Loosen the screws [2]that hold the indicator light to the panel [6].

(e) From behind the panel [6], remove the terminal assembly [8] and sleeve [7] of the indicator light.

(f) From the front of the panel [6], remove the body and contact assembly [1].

(g) Put the replacement body and contact assembly [1] through the front of the panel [6].

(h) From the rear of the panel [6], put the sleeve [7] on the body and contact assembly [1].

1) Make sure that the sleeve [7] is installed in the correct orientation for use with the desired panel thickness.

a) For 1/16 in. (0.16 cm) to ⅛ in. (0.32 cm) thickness panel, rotate the sleeve [7] by 180°arc (3.14 rad).

(i) Hold the terminal assembly [8] in the correct position.

(j) Tighten the screws [2] to attach the indicator light to the panel [6].

(k) From the front of the panel [6], push the cap assembly [4] into position.

(l) Connect the electrical wires to the indicator light terminals.

SUBTASK 33-18-00-850-001

(3) Remove the DO-NOT-CLOSE tags and close the circuit breakers that were opened to replace the indicator light assembly.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-18-00-940-003

(4) If it is necessary, put a windshield cover, STD-1176, on the windshield.

NOTE: During the day, the changes in light intensity are not easy to see.

SUBTASK 33-18-00-710-002

(5) Do these steps to test the indicator light assembly:

(a) If the indicator light has a press-to-test actuator [3], then on the Captain's instrument panel, P1, set the DIM/BRT/TEST switch to the BRT position.

1) Push the front of the indicator light.

2) Make sure that the indicator light comes on.

(b) If the indicator light does not have a press-to-test actuator [3], then on the Captain's instrument panel, P1, set the DIM/BRT/TEST switch to the TEST position.

1) Make sure that the indicator light comes on.

2) Set the DIM/BRT/TEST switch to the DIM or BRT position.

SUBTASK 33-18-00-940-004

(6) If a windshield cover, STD-1176, was used on the windshield, remove it.

——— END OF TASK ———

TASK 33-18-00-960-803

6. Lighted Pushbutton Switch - Lamp Replacement

(Figure 203)

A. General

(1) The lighted pushbutton switches are installed on the instrument panels in the flight compartment.

(2) Each switch has two light circuits that are electrically isolated.

(a) One circuit controls the caution indicator lights. The caution indicator lights show the condition of the airplane.

1) The Master Dim and Test module supplies 28 volts dc to each caution indicator light.

(b) The other circuit controls the position indicator lights. The position indicator lights show if the lighted pushbutton switch is on or off.

1) 5 volts ac from the dimmer controls, installed in the instrument panels, controls each position indicator light.

(3) Replacement procedures for lighted pushbutton switches are contained in the Standard Wiring Practices Manual, SWPM 20-84-13.

B. References

Reference	Title
SWPM 20-84-13	Standard Wiring Practices Manual

C. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

E. Lighted Pushbutton Switch Lamp Replacement

SUBTASK 33-18-00-960-003

(1) Do these steps to replace the unserviceable lamps [23]:

CAUTION REMOVE THE POWER FROM THE LAMPS BEFORE YOU DO MAINTENANCE. FAILURE TO OPEN THE CIRCUIT BREAKERS CAN CAUSE DAMAGE TO THE ELECTRICAL CIRCUIT CARDS WHEN YOU INSTALL THE LENS CAP.

(a) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	12	C00310	INDICATOR MASTER DIM BAT
D	13	C00311	INDICATOR MASTER DIM BUS 1
D	14	C00312	INDICATOR MASTER DIM BUS 2

WARNING OPEN THE APPLICABLE SYSTEM CIRCUIT BREAKERS FOR THE SYSTEM CONTROLLED BY THE SWITCH. THE INSTALLATION OF THE LENS CAP INTO THE HOUSING CAN OPERATE THE SWITCH AND CAUSE ITS SYSTEM TO OPERATE. THE ACCIDENTAL OPERATION OF A SYSTEM CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT

(b) Open the applicable system circuit breakers and attach DO-NOT-CLOSE tags.

(c) Make sure that the switch is in the OFF position (not pushed in).

CAUTION DO NOT HOLD THE LENS CAP WITH A TOOL. REMOVE THE LENS CAP WITH YOUR FINGERS ONLY. DO NOT USE TOO MUCH FORCE ON THE BAIL WIRES, DAMAGE TO THE BAIL WIRE CLIPS WILL OCCUR.

(d) Hold the lens cap [24] with your fingers and pull it away from the housing [22].

(e) Replace the unserviceable lamps [23].

NOTE: After you extend the lens cap [24], you can easily turn it to get to the lamps [23].

(f) Push the lens cap [24] back into the housing [22] in a continuous movement until the lens cap [24] engages.

(g) Make sure that the switch is in the OFF position (not pushed in), after you install the lens cap [24].

(h) Close these circuit breakers:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	12	C00310	INDICATOR MASTER DIM BAT
D	13	C00311	INDICATOR MASTER DIM BUS 1
D	14	C00312	INDICATOR MASTER DIM BUS 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(i) Remove the DO-NOT-CLOSE tags and close the applicable circuit breakers for the system controlled by each switch.

SUBTASK 33-18-00-710-003

(2) Do these steps to test the lamps [23]:

(a) Do a test of the caution indicator lights.

1) On the Captain's instrument panel, P1, set the DIM/BRT/TEST switch to the TEST position.

2) Make sure that the lamps [23] that were replaced come on.

3) Set the DIM/BRT/TEST switch to the DIM or BRT position.

4) Make sure that the caution indicator lights go off.

(b) Do a test of the position indicator lights.

WARNING THE OPERATION OF A SWITCH WILL CAUSE ITS SYSTEM TO OPERATE. THE ACCIDENTAL OPERATION OF A SYSTEM CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

1) Push the switch to the ON position.

2) Make sure that the lamps [23] that were replaced come on.

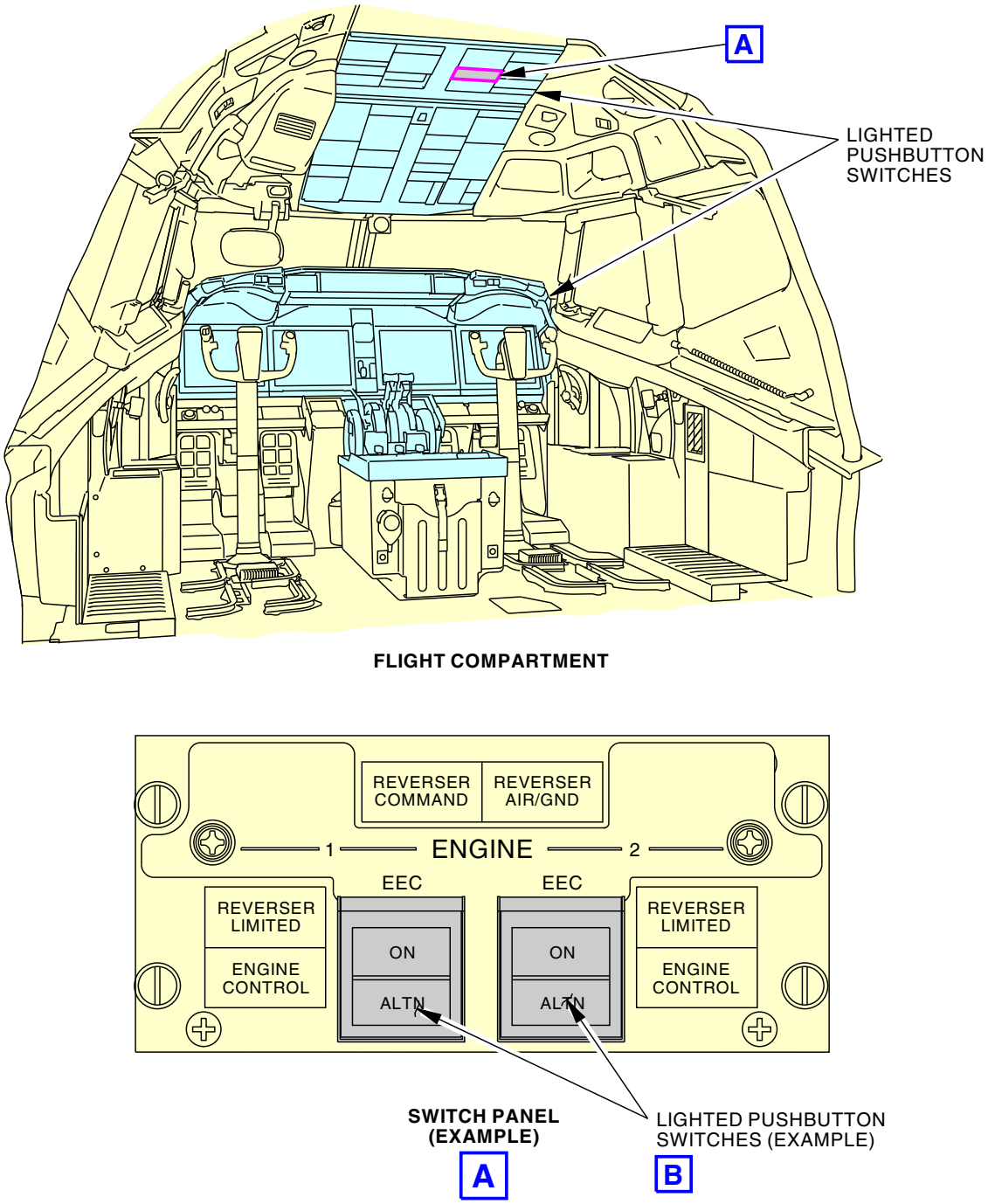
3) Push the switch to the OFF position.

4) Make sure that the position indicator lights go off.

(c) If a windshield cover, STD-1176, was used on the windshield, remove it.

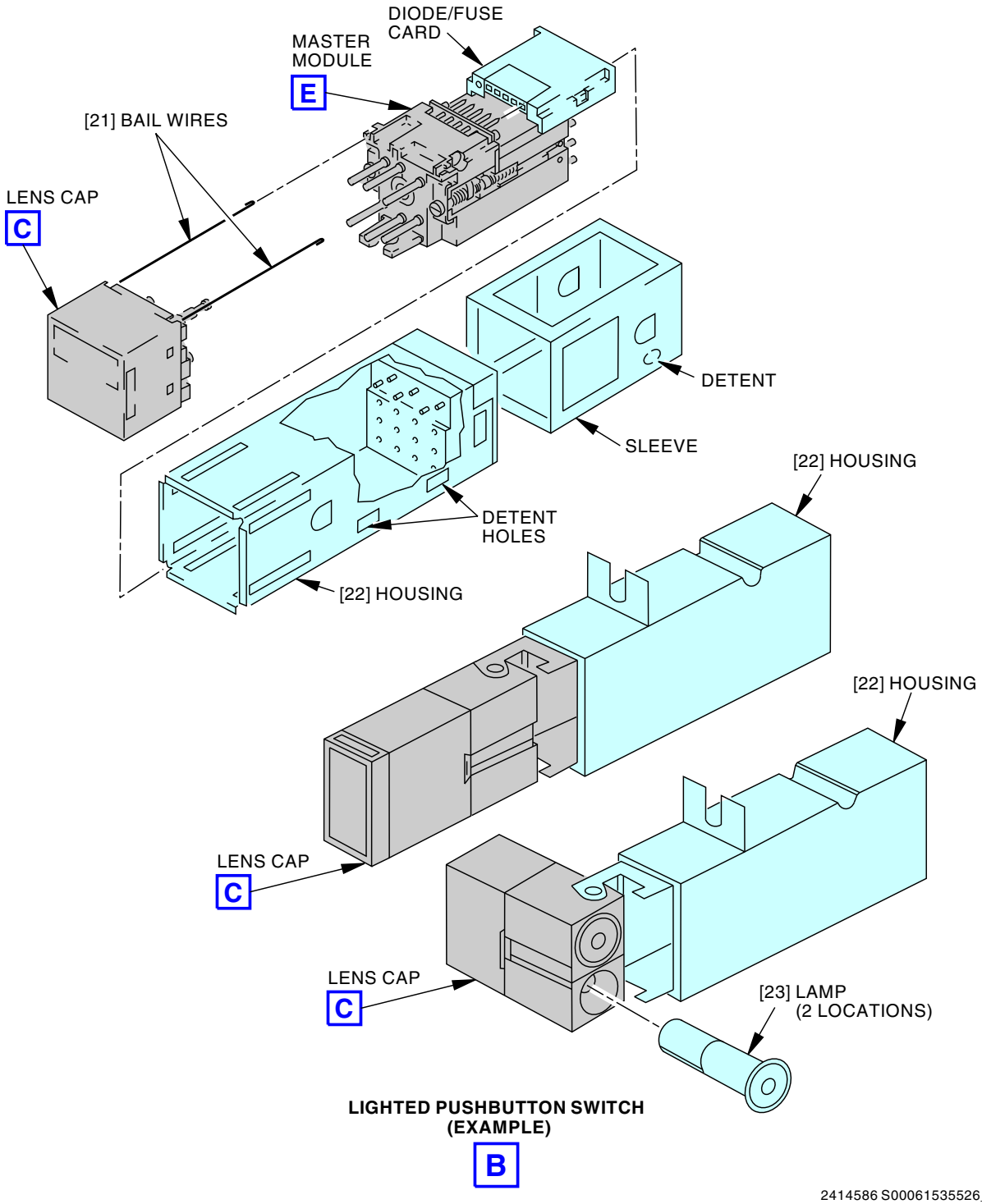
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lighted Pushbutton Switch
Figure 203/33-18-00-990-803 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



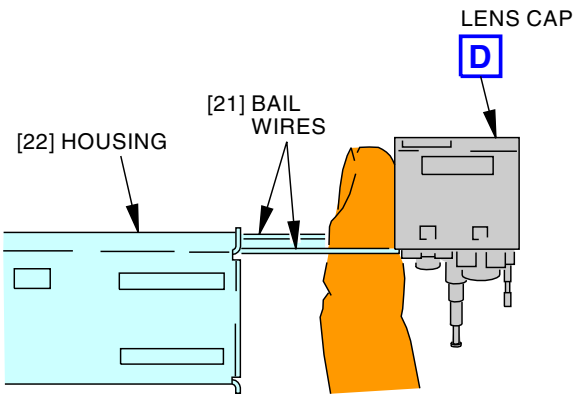
LIGHTED PUSHBUTTON SWITCH (EXAMPLE)

B

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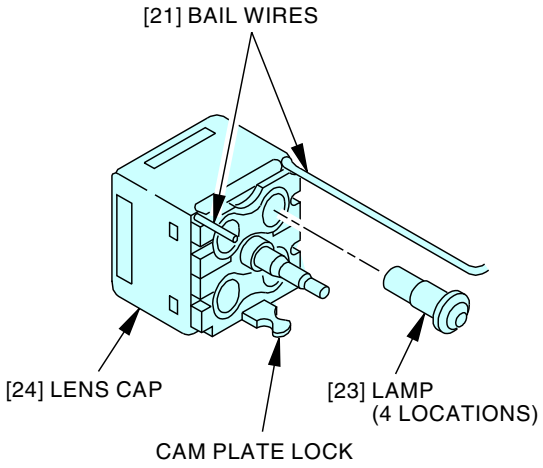
Lighted Pushbutton Switch
Figure 203/33-18-00-990-803 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



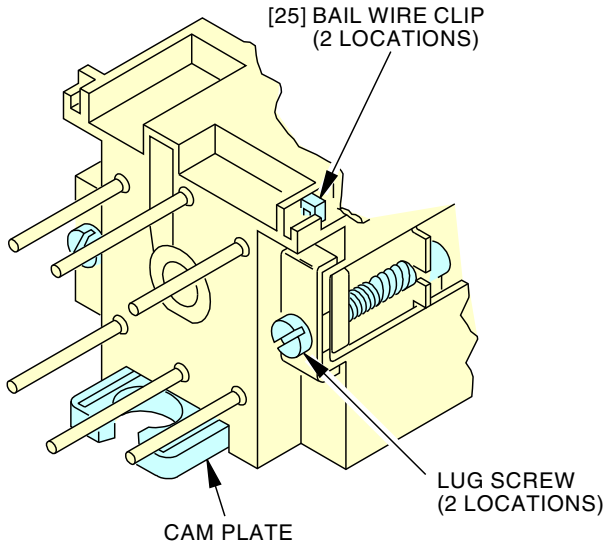
LENS CAP (EXAMPLE)

C



LENS CAP (EXAMPLE)

D



MASTER MODULE (EXAMPLE)

E

2414587 S00061535527_V1

Lighted Pushbutton Switch
Figure 203/33-18-00-990-803 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-18-00-960-804

7. Lightplate - Replacement

(Figure 204)

A. General

(1) Lightplates give lighting to the components and words on the pilots panels.

(2) If a lightplate becomes too dim, you need to replace the lightplate.

(3) Onboard repair of lightplates is not recommended. Replacement of the complete lightplate assembly is the preferred maintenance practice. Instructions for lamp replacement can be found in the lightplate vendor's manual.

B. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Lightplate Replacement

SUBTASK 33-18-00-960-004

(1) Do these steps to replace the unserviceable lightplate [41]:

(a) If it is necessary, remove the knobs [44] that are in front of the lightplate [41].

(b) Loosen the fasteners [43] that hold the lightplate [41] in its position.

(c) Carefully pull the lightplate [41] from the module [42].

NOTE: Do not discard the lightplate [41]. Refer to the vendor manual for possible repairs in a shop.

(d) Attach the replacement lightplate [41] to the module [42].

(e) Tighten the fasteners [43] to hold the lightplate [41] in its position.

(f) If it is necessary, attach the knobs [44] in front of the lightplate [41].

SUBTASK 33-18-00-710-004

(2) Do these steps to test the replacement lightplate [41]:

(a) If it is necessary, put a cover on the windshield.

NOTE: During the day, the changes in light intensity are not easy to see.

(b) Turn the applicable PANEL control clockwise to the full BRIGHT position.

(c) Make sure that the lightplate [41] comes on brightly.

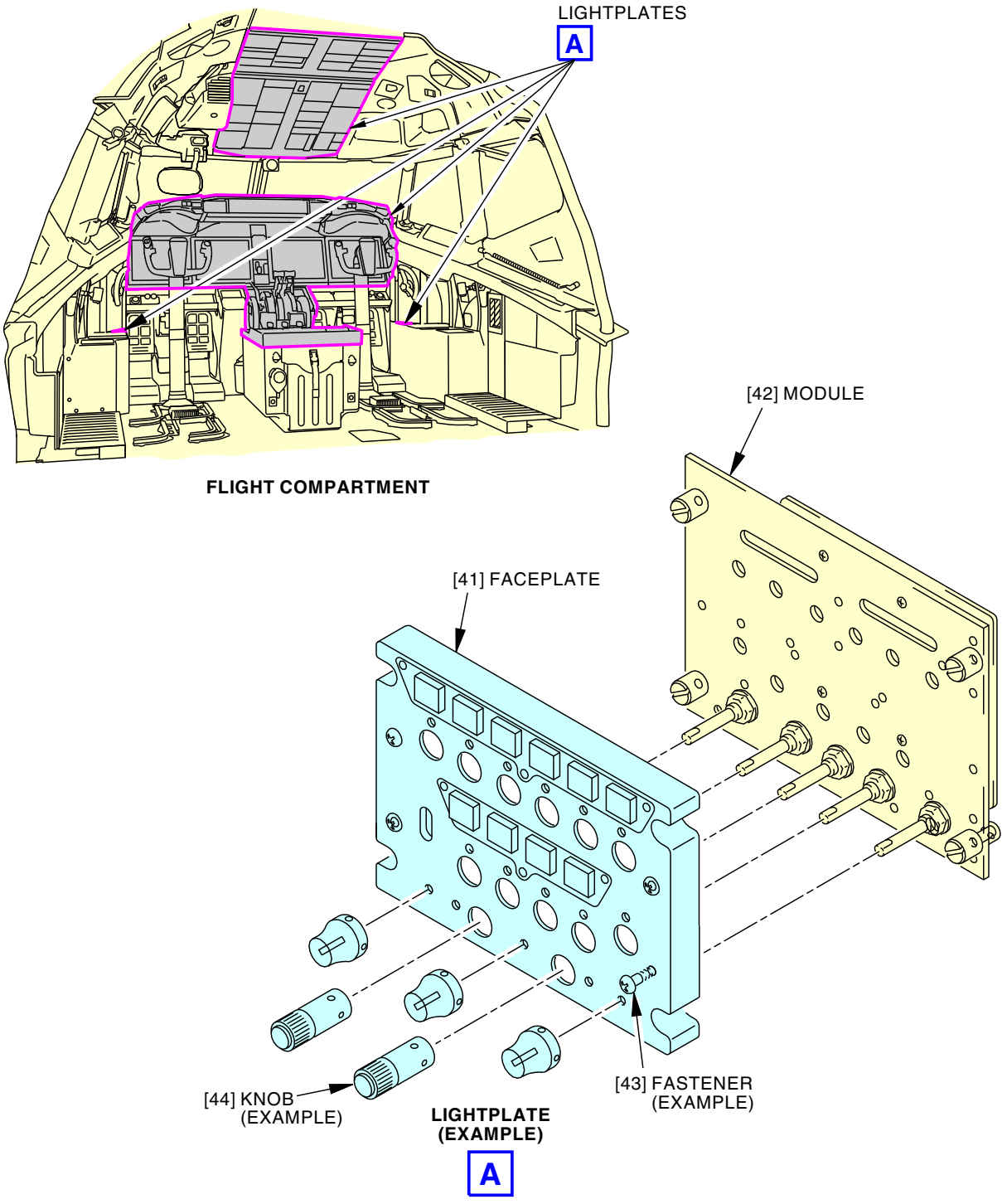
(d) Turn the applicable PANEL control counterclockwise to the OFF position.

SUBTASK 33-18-00-940-005

(3) If a windshield cover, STD-1176, was used on the windshield, remove it.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lightplate Replacement
Figure 204/33-18-00-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-18-00-960-805

8. Annunciator And Dimming Module - Module Replacement

(Figure 205)

A. General

(1) The annunciator and dimming module is located above access panels in the top of the nose landing gear wheel well and is mounted to the J19 panel which is fastened to the bottom of the flight compartment floor.

(2) This task provides instructions to replace the annunciator and dimming module.

B. References

Reference	Title
53-14-01-020-801	Nose Wheel Well Access Panels Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels Installation (P/B 401)

C. Location Zones

Zone	Area
110	Subzone - Body Station 130 to Station 396

D. Access Panels

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
114AC	Fwd Nose Wheel Well Upper Access Panel

E. Annunciator And Dimming Module Replacement

SUBTASK 33-18-00-010-002

(1) Remove these access panels to get to the annunciator and dimming module [61] (TASK 53-14-01-020-801).

(a) Open these access panels:

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
114AC	Fwd Nose Wheel Well Upper Access Panel

SUBTASK 33-18-00-860-010

(2) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
D	3	C01048	AFCS SYS A ENGAGE INTLK

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT
B	4	C00716	AFCS SYS B ENGAGE INTLK

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F/O Electrical System Panel, P6-4

Row	Col	Number	Name
E	15	C00134	DC BUS INDICATION HOT BAT

SUBTASK 33-18-00-960-005

(3) Do these steps to remove the annunciator and dimming module [61], M469:

(a) Disconnect the connectors [63] from the annunciator and dimming module [61] and move them to one side.

(b) When you hold the annunciator and dimming module [61] in place, remove the mounting bolts [62] that attach the annunciator and dimming module [61] to the P19 external power panel.

(c) Remove the annunciator and dimming module [61].

SUBTASK 33-18-00-960-006

(4) Do these steps to install the annunciator and dimming module [61], M469:

(a) Position the new annunciator and dimming module [61], on the P19 external power panel.

(b) Install the mounting bolts [62] that attach the new annunciator and dimming module [61] to the P19 external power panel.

(c) Reconnect the connectors [63] to the annunciator and dimming module [61].

SUBTASK 33-18-00-410-002

(5) Install these access panels (TASK 53-14-01-420-801).

(a) Install these access panels:

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
114AC	Fwd Nose Wheel Well Upper Access Panel

SUBTASK 33-18-00-860-012

(6) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
D	3	C01048	AFCS SYS A ENGAGE INTLK

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	21	C00396	FIRE PROT DETECTION MA WRN & CONT
B	4	C00716	AFCS SYS B ENGAGE INTLK

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
B	12	C00132	MASTER CAUTION ANNUNCIATOR BUS 1
B	13	C00131	MASTER CAUTION ANNUNCIATOR BAT
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT

F/O Electrical System Panel, P6-4

Row	Col	Number	Name
E	15	C00134	DC BUS INDICATION HOT BAT

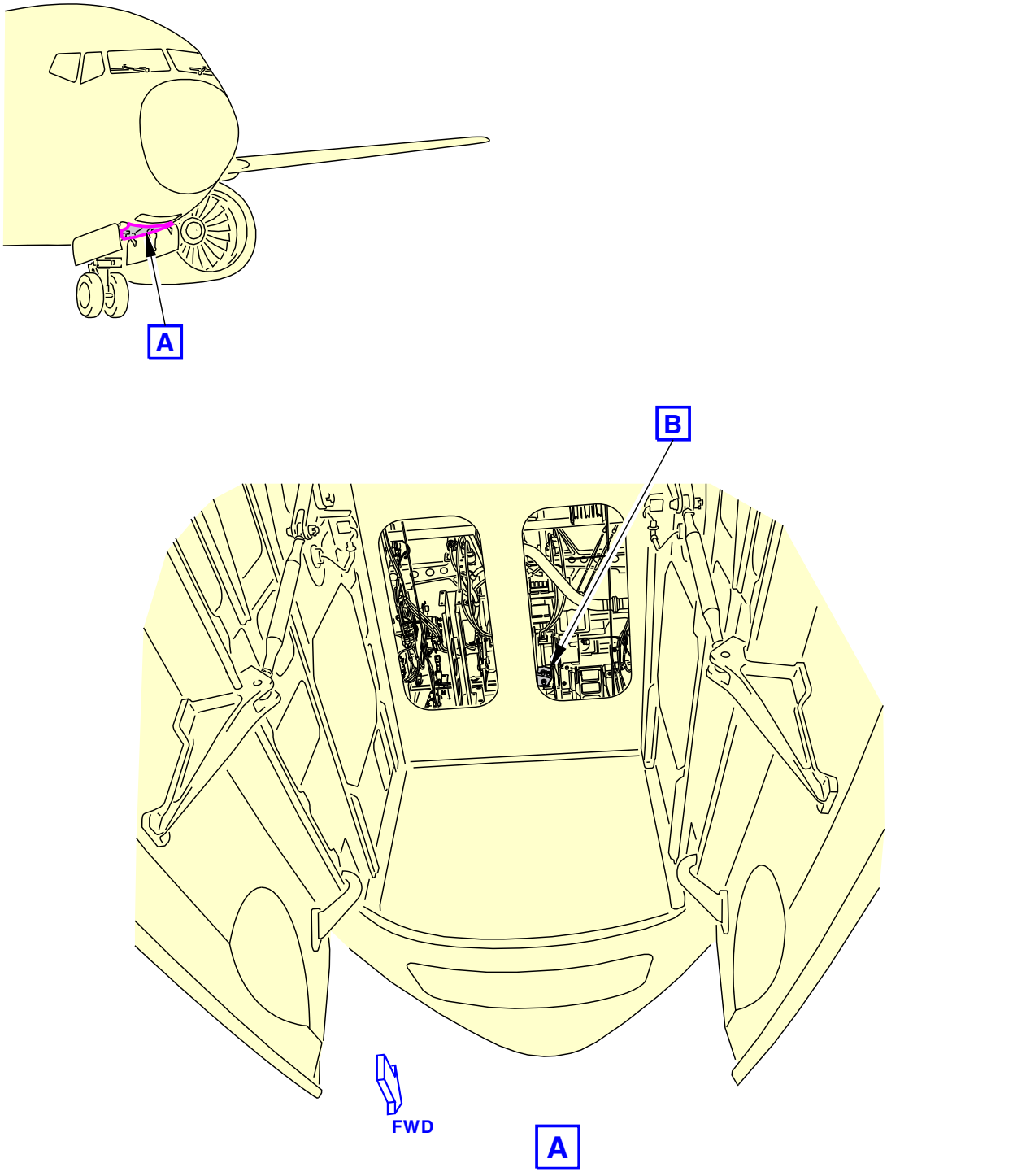
ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-18-00-710-005

(7) Test the new annunciator and dimming module [61], do this task: Master Dim and Test - Operational Test, TASK 33-18-00-710-801.

——— END OF TASK ———

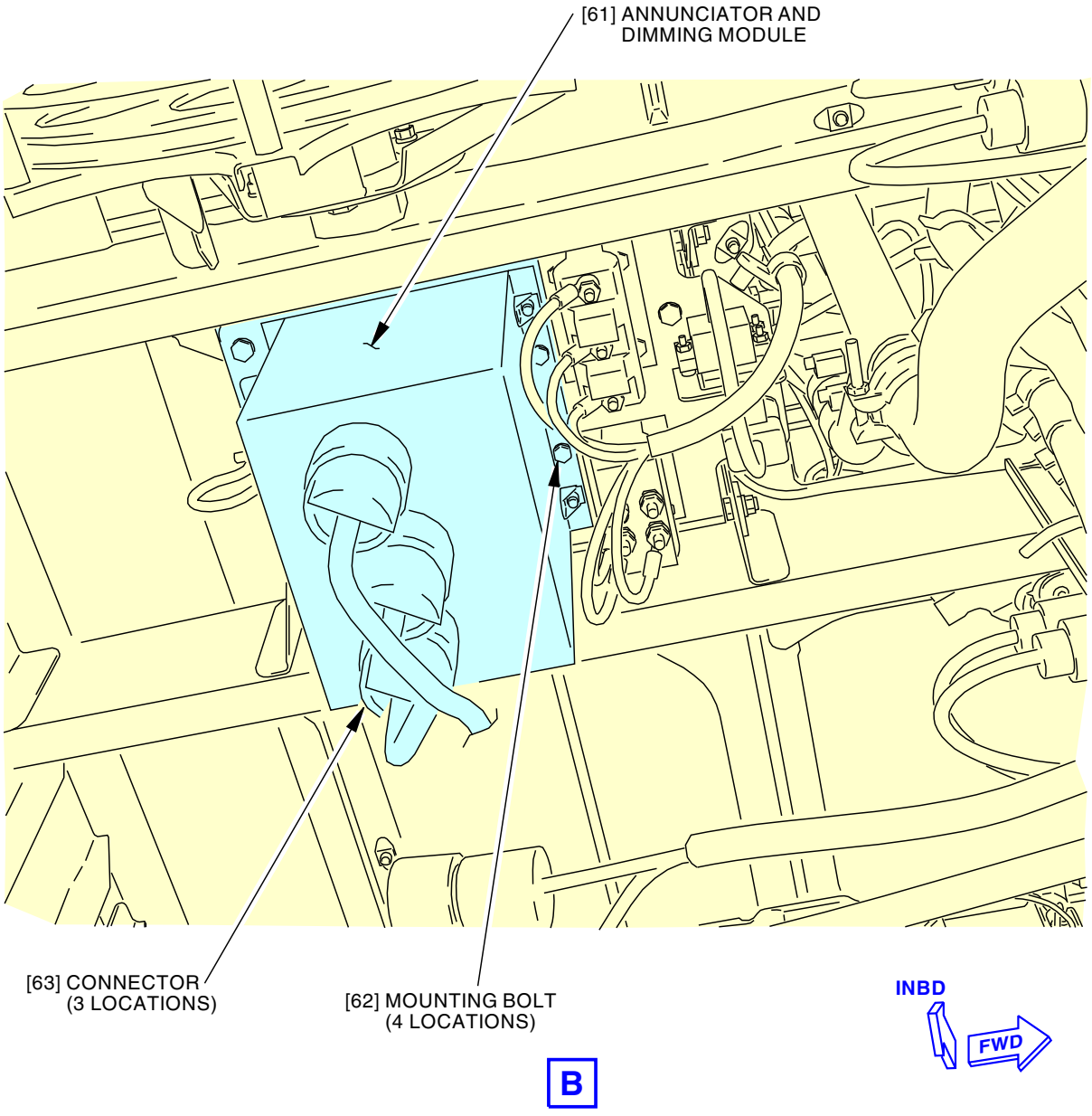
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2414589 S00061535531_V1

Annunciation and Dimming Module, M469 - Removal and Installation
Figure 205/33-18-00-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Annunciation and Dimming Module, M469 - Removal and Installation
Figure 205/33-18-00-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-18-00-960-806

9. Master Dim and Test System - Module Replacement

A. General

(1) The Master Dim and Test System has two dim/test modules. The modules are M564 master dim/test module and M1456 aux dim/test module. The M564 master dim/test module is a circuit card assembly.

(2) The modules are installed in the circuit breaker panel, P6.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Prepare for the Replacement

SUBTASK 33-18-00-860-013

(1) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT
D	12	C00310	INDICATOR MASTER DIM BAT
D	13	C00311	INDICATOR MASTER DIM BUS 1
D	14	C00312	INDICATOR MASTER DIM BUS 2

D. Master Dim and Test System Module Replacement

SUBTASK 33-18-00-960-007

(1) Do these steps to replace the M564 master dim/test module [81]:

NOTE: The M564 master dim/test module is a circuit card assembly.

(a) Open the circuit breaker panel, P6-3.

(b) Turn the screws [83] to unlock the module retainer [82] from the circuit breaker panel, P6.

(c) Open the module retainer [82].

(d) Remove the master dim/test module [81] from circuit card slot in the circuit breaker panel, P6.

(e) Install the new master dim/test module [81] into the circuit card slot.

(f) Close the module retainer [82].

(g) Turn the screws [83] to lock the module retainer [82] to the circuit breaker panel, P6.

(h) Close the circuit breaker panel, P6-3.

SUBTASK 33-18-00-960-008

(2) Do these steps to replace the M1456 aux dim/test module [84]:

(a) Open the circuit breaker panel, P6-4.

(b) Remove the screws [85] that attach the aux dim/test module [84] to the circuit breaker panel, P6.

(c) Disconnect the connector [86] from the aux dim/test module [84].

(d) Remove the aux dim/test module [84].

(e) Connect the connector [86] to the new aux dim/test module [84].

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(f) Put the new aux dim/test module [84] in its position in the circuit breaker panel, P6.

(g) Install the screws [85] that attach the new aux dim/test module [84] to the circuit breaker panel, P6.

(h) Close the circuit breaker panel, P6-4.

SUBTASK 33-18-00-860-014

(3) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-3

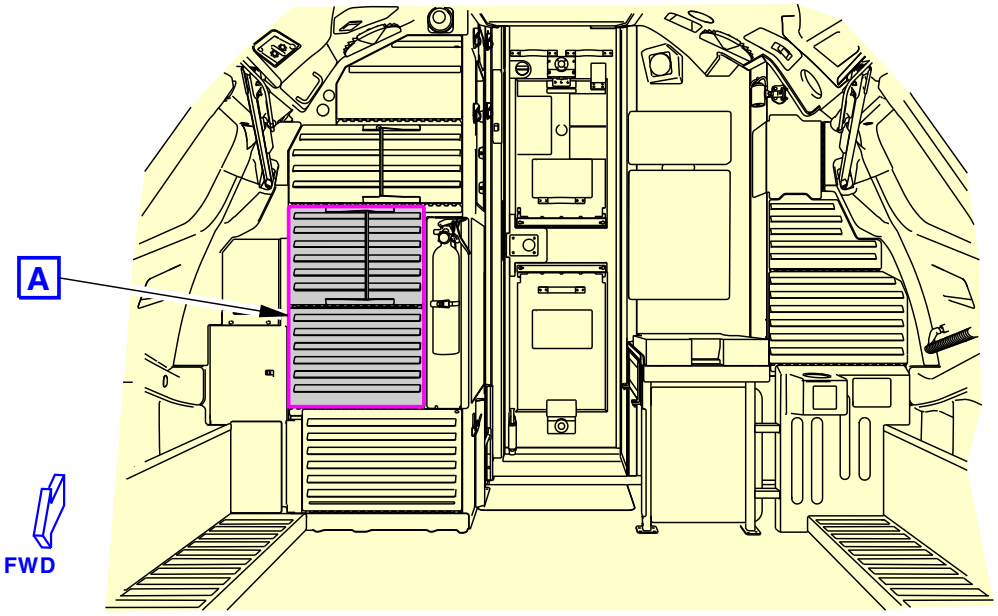
Row	Col	Number	Name
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT
D	12	C00310	INDICATOR MASTER DIM BAT
D	13	C00311	INDICATOR MASTER DIM BUS 1
D	14	C00312	INDICATOR MASTER DIM BUS 2

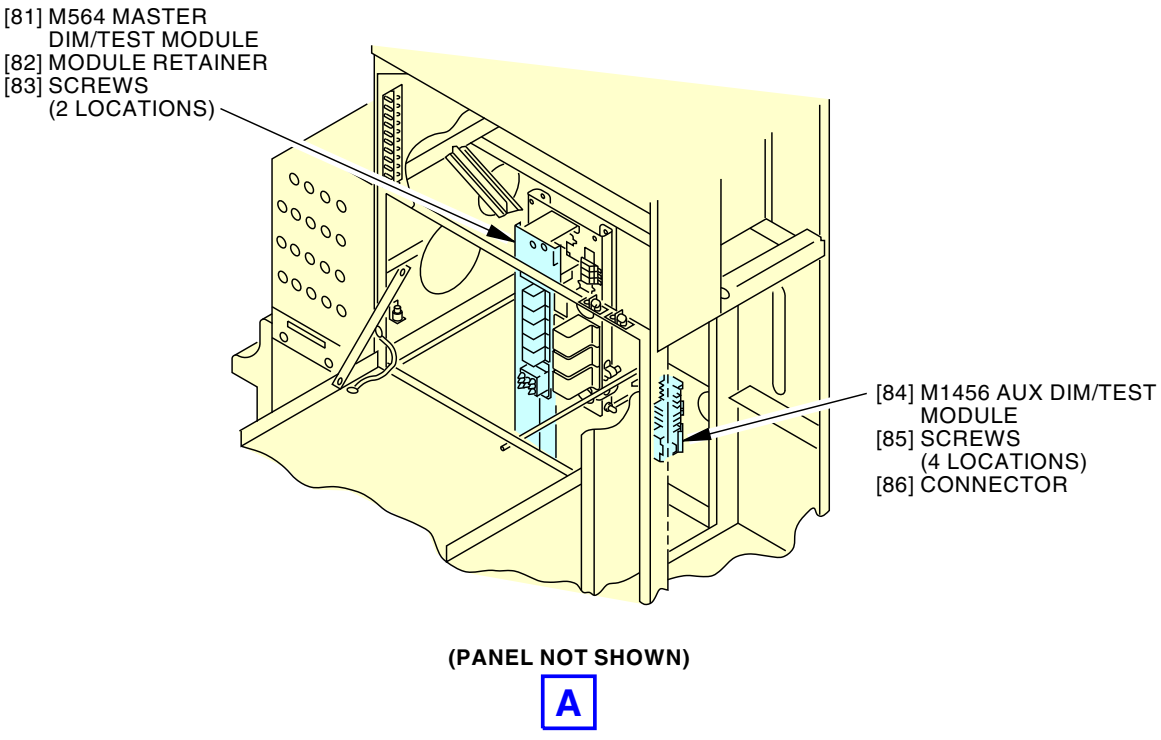
SUBTASK 33-18-00-710-006

(4) Do this task: Master Dim and Test - Operational Test, TASK 33-18-00-710-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2414591 S00061535534_V1

Master Dim and Test System - Module Replacement
Figure 206/33-18-00-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-18-00-710-801

10. Master Dim and Test - Operational Test

(Figure 207)

A. General

(1) This test makes sure the master dim and test system operates.

B. References

Reference	Title
WDM 33-18-11 thru 33-18-99	D000534485

C. Tools/Equipment

Reference	Description
STD-1176	Cover - Windshield Blackout Screen

D. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

E. Master Dim and Test Operational Test

SUBTASK 33-18-00-940-006

(1) On a bright day, put a windshield cover, STD-1176, on the windshield to make it easier to do this test.

SUBTASK 33-18-00-860-017

(2) Prepare to do the test:

(a) At the overhead panel, P5, do these steps:

1) Set the emergency light switch to ARMED.
2) Set the air conditioning switches to AUTO.
3) Set the left and right mode select switches to ALIGN.
4) Set the yaw damper switch to ON.

(b) At the control stand, P10, release the parking brake.

(c) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
E	1	C00137	DOOR LOCK

SUBTASK 33-18-00-710-007

(3) Do a test of the annunciators, pushbutton switches, and liquid crystal display (LCD) segments connected to the master dim and test system (WDM 33-18-11 thru 33-18-99):

(a) At the Captain's main instrument panel, P1, set the switch for the master dim and test lights to TEST.

NOTE: The CMD and CWS pushbuttons on Collins MCP (part number 822-1567-103/-104) will illuminate.

(b) On these panels, make sure the lamps in the annunciators come on brightly:

1) Captain's main instrument panel, P1
2) Center main instrument panel, P2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) F/O's main instrument panel, P3

4) Overhead panel, P5.

5) Glareshield panel, P7

6) Aft electronics panel, P8

NOTE: The Fire Warning Lights are not checked during this test.

a) To complete the test of the wheel well warning light, set the test switch to the OVHT/FIRE position, then back to its usual position.

7) Forward electronics panel, P9

NOTE: You will find five annunciators on each CDU; DSPY (or CALL), FAIL, MSG, OFST, and EXEC.

8) Control stand, P10.

NOTE: The parking brake light is installed on the vertical surface on the aft side of the control stand, P10.

a) To complete the test of the parking brake light, push the annunciator, then release it.

(c) On the aft overhead panel, P5, make sure that the lamps in the pushbutton switches (engine module, P5-68) come on brightly.

(d) Make sure that the LCD segments on these panels come on for 2 seconds then go off for 1 second:

1) Overhead panel, P5

2) Glareshield panel, P7

3) Aft electronics panel, P8.

(e) At the Captain's instrument panel, P1, set the switch for the master dim and test lights to the usual mode.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 33-18-00-860-020

(1) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
E	1	C00137	DOOR LOCK

(2) At the control stand, P10, set the parking brake.

(3) At the overhead panel, P5, do these steps:

(a) Set the emergency light switch to the usual mode.

(b) Set the air conditioning switches to the usual mode.

(c) Set the yaw damper switch to usual mode.

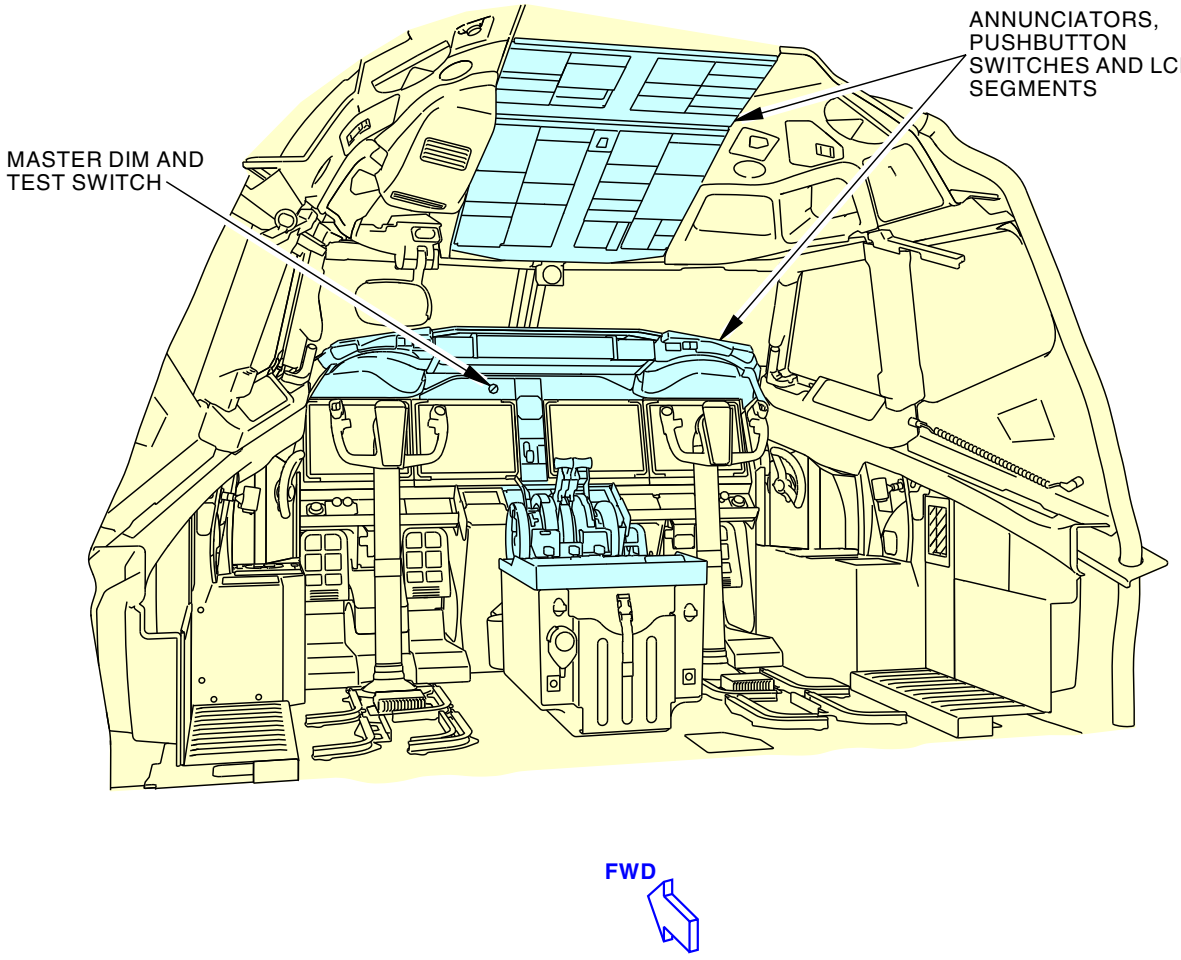
(d) Set the left and right mode select switches to the usual mode.

SUBTASK 33-18-00-940-008

(4) If a windshield cover, STD-1176, was used on the windshield, remove it.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT

2414592 S00061535536_V2

Master Dim and Test System Test
Figure 207/33-18-00-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

PASSENGER COMPARTMENT LIGHTS - ADJUSTMENT/TEST

1. General

A. This procedure has these tasks:

(1) Passenger Compartment Lights - Operational Tests

(2) Passenger Compartment Lights - BSI Generation 3 OPS LSAP Loading

TASK 33-20-00-710-801

2. Passenger Compartment Lights - Operational Test

A. General

(1) Do the applicable operational test for the light section that you replaced.

(2) This procedure includes operational tests of these components:

(a) passenger seating area:

1) Window and overwing exit lights

2) Bin/wash ceiling lights

3) Center overhead stowage lights

4) Direct lights

5) Cove lights

(b) Forward/Aft entry area:

1) Direct entry lights

2) Attendant work lights

(c) Information signs

(d) Lavatory mirror lights

(e) Lavatory-occupied signs

(f) Passenger call lights

(g) Lavatory call lights

B. References

Reference	Title
29-11-00-860-801	Hydraulic System A or B Pressurization (P/B 201)
29-11-00-860-805	Hydraulic System A or B Power Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
32-09-00-860-801	Put the Airplane in the Air Mode (P/B 201)
32-09-00-860-802	Return the Airplane to the Ground Mode (P/B 201)

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Prepare for the Operational Test

SUBTASK 33-20-00-860-002

(1) Make sure that the CAB/UTIL switch at the panel, P5-13, is set to the ON position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Operational Test

SUBTASK 33-20-00-710-011

(1) Do a LAMP TEST from the ACP (Attendant Control Panel).

(a) If it is necessary, touch the opposite corners of the display sequentially within two seconds to activate the display.

(b) If it is necessary, input the password to get access to the attendant control panel.

(c) At the ACP, set lights to the ON mode.

NOTE: Use the ACP maintenance display. On the ACP display, touch the MAINTENANCE tab. When the ACP changes to the maintenance display, touch LAMP TESTS.

SUBTASK 33-20-00-710-001

(2) Do a manual test of lights in the passenger seating area.

NOTE: The passenger seating area lights include the cove lights, direct lights, window lights, and ceiling lights.

(a) Do a test of the lights in the passenger seating area from each applicable attendant control panel as follows:

NOTE: The lights can take at least 5 seconds to change.

1) If it is necessary, touch the opposite corners of the display sequentially within two seconds to activate the display.

2) On the attendant control panel display, touch the Lighting tab.

3) Below the passenger seating area, touch the Both Zones button.

4) Below the passenger seating area, touch the white BRIGHT button.

a) Make sure that the lights come on brightly.

5) Below the passenger seating area, touch the white MEDIUM button.

a) Make sure that the lights operate at medium brightness.

6) Below the passenger seating area, touch the night/sleep button.

a) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The lights can take at least 15 seconds to change.

7) Below the passenger seating area, touch the boarding/deplane button.

a) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The lights can take at least 15 seconds to change.

8) Below the passenger seating area, touch the take-off/landing button.

a) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The lights can take at least 15 seconds to change.

9) Below the passenger seating area, touch the cruise button.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The lights can take at least 15 seconds to change.

10) Below the passenger seating area, touch the meal/beverage button.

a) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The lights can take at least 15 seconds to change.

11) Below the passenger seating area, touch the Forward Zone button.

12) Below the passenger seating area, touch the boarding/deplane button.

a) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The lights can take at least 15 seconds to change.

13) Below the passenger seating area, touch the aft zone button.

14) Below the passenger seating area, touch the sunrise/sunset button.

a) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The lights can take at least 15 seconds to change.

15) Below the passenger seating area, touch the OFF button.

a) Make sure that the lights go off.

SUBTASK 33-20-00-710-002

(3) Do a test of the lights in the forward and aft entry areas.

(a) Do a test of the lights in the forward entry area from each applicable attendant control panel:

1) On the attendant control panel display, touch the Lighting tab.

2) Below the forward entry area, entry section, touch the white BRIGHT button.

a) Make sure that the direct entry light comes on brightly.

3) Below the forward entry area, entry section, touch the white MEDIUM button.

a) Make sure that the direct entry light becomes medium.

4) Below the forward entry area, entry section, touch the OFF button.

a) Make sure that the direct entry light goes off.

5) Below the forward entry area, work section, touch the button to set it to ON.

a) Make sure that the attendant work light comes on.

NOTE: In the forward entry area, the incandescent work light is aft of the dim entry LED light. The dim entry LED light is on when the airplane is supplied with external electrical power.

6) Below the forward entry area, work section, touch the button to set it to OFF.

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a) Make sure that the attendant work light goes off.

NOTE: In the forward entry area, the incandescent work light is aft of the dim entry LED light. The dim entry LED light is on when the airplane is supplied with external electrical power.

(b) Do a test of the lights in the aft entry area at each attendant control panel:

1) On the attendant control panel display, touch the Lighting tab.
2) Below the aft entry area, entry section, touch the white BRIGHT button.
   a) Make sure that the direct entry lights come on bright.
3) Below the aft entry area, entry section, touch the white MEDIUM button.
   a) Make sure that the direct entry lights are at medium brightness.
4) Below the aft entry area, entry section, touch the OFF button.
   a) Make sure that the direct entry lights go off.
5) Below the aft entry area, work section, touch the button to set it ON.
   a) Make sure that the attendant work lights come on.
6) Below the aft entry area, work section, touch the button to set it OFF.
   a) Make sure that the attendant work lights go off.

SUBTASK 33-20-00-710-003

(4) Do a test of the ceiling lights during rapid decompression.

(a) At the applicable attendant control panel, do these steps:

1) On the attendant control panel display, touch the Lighting tab.
2) Below the passenger seating area, touch the cruise button.
   a) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

   NOTE: The lights can take at least 15 seconds to change.
3) Touch the white MEDIUM button below the forward entry area, entry section and do these steps:
   a) Make sure that the direct entry light are at medium brightness.
   b) Make sure that the attendant work light stays off.

   NOTE: In the forward entry area, the incandescent work light is aft of the dim entry LED light. The dim entry LED light is on when the airplane is supplied with external electrical power.
4) Touch the white medium button below the aft entry area, entry section and do these steps:
   a) Make sure that the direct entry lights are at medium brightness.
   b) Make sure that the attendant work lights stay off.

(b) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(c) Put the airplane in the air mode (TASK 32-09-00-860-801).

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(d) Remove the safety wire from the oxygen switch at the pilot overhead panel, P5.

(e) At the pilots aft overhead panel, P5, set the PASS OXYGEN switch to ON momentarily, and then release the switch back to the NORMAL position.

NOTE: Information signs will come on and chimes will sound.

1) Make sure that the PASS OXY ON light on the panel comes on.

2) Make sure that all the window, ceiling (cross bin, wash, and COS), cove, direct, work, direct entry lights illuminate to white BRIGHT mode.

(f) Below the passenger seating area, touch the meal/beverage button and do this step:

1) Make sure that the lights in the passenger compartment are equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The lights can take at least 15 seconds to change.

(g) Touch these buttons:

1) White MEDIUM button below the forward entry area, entry section.

2) The button below the forward entry area, work section.

a) Make sure that the direct entry light are at medium brightness.

b) Make sure that the attendant work light goes off.

NOTE: In the forward entry area, the incandescent work light is aft of the dim entry LED light. The dim entry LED light is on when the airplane is supplied with external electrical power.

(h) Touch these buttons:

1) White MEDIUM button below the aft entry area, entry section.

2) The button below the aft entry area, work section.

a) Make sure that the direct entry light are at medium brightness.

b) Make sure that the attendant work light goes off.

(i) Put the airplane in the ground mode (TASK 32-09-00-860-802).

(j) Open and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND

(k) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(l) Make sure that the PASS OXY ON light on the panel goes off.

(m) Install the safety wire on to the PASS OXYGEN switch.

SUBTASK 33-20-00-710-004

(5) Do a test of the reading lights.

(a) At each passenger seat, set the switch for the reading light to the on mode.

1) Make sure that the reading light comes on.

(b) Set the switch to the off mode.

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1) Make sure that the reading light goes off.

(c) Set the switch to the usual mode.

SUBTASK 33-20-00-710-005

(6) Do a test of the information signs:

SIA ALL; AIRPLANES WITH PERMANENTLY ILLUMINATED NO SMOKING SIGNS

NOTE: The NO-SMOKING sign is lighted at all times. The no-smoking switch on the P5 panel will not operate these signs. The switch will have a INOP placard.

(a) Make sure the no-smoking sign comes on when electrical power is supplied.

NOTE: The switch for no-smoking does not operate.

SIA ALL

(b) Set the FASTEN BELTS switch on the forward overhead panel to ON.

1) Make sure that these information signs are on:

a) FASTEN SEAT BELT

b) RETURN TO SEAT

(c) Set the FASTEN BELTS switch to OFF.

1) Make sure that the information signs are off.

WARNING MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT. THIS CAN CAUSE INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT.

(d) Make sure that the ground locks are installed on the nose and main landing gear.

1) If it is necessary, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

WARNING KEEP PERSONNEL AND EQUIPMENT AWAY FROM THE FLIGHT CONTROL SURFACES, THE THRUST REVERSERS, AND THE LANDING GEAR. THESE COMPONENTS CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(e) Supply hydraulic power to hydraulic systems A and B (TASK 29-11-00-860-801).

(f) Move the flap control lever to the UP position.

(g) Move the landing gear lever to the up position.

(h) Set the FASTEN BELTS switch to AUTO.

1) Make sure that all information signs are off.

(i) Move the flap control lever to position 2.

1) Make sure that these information signs are on:

a) FASTEN SEAT BELT

b) RETURN TO SEAT

(j) Move the flap control lever to position 0.

1) Make sure that all information signs are off.

(k) Move the landing gear lever to the down position.

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1) Make sure that all information signs are on.

(l) Move the landing gear lever to the up position.

1) Make sure that all information signs are off.

(m) Set the FASTEN BELTS switch to OFF.

1) Make sure that all information signs stay off.

(n) Move the landing gear lever to the down position.

(o) Set the FASTEN BELTS switch to AUTO.

(p) Remove hydraulic power from hydraulic systems A and B (TASK 29-11-00-860-805).

SUBTASK 33-20-00-710-006

(7) Do a test of the galley light in the forward galley as follows:

NOTE: The galley light is located in the forward galley.

(a) Set the switch for the galley light to the bright mode.

1) Make sure that the lights comes on bright.

(b) Set the switch to the dim mode.

1) Make sure that the light becomes dim.

(c) Set the switch to the off mode.

1) Make sure that the light goes off.

SUBTASK 33-20-00-710-007

(8) Do a test of the lavatory mirror lights as follows:

(a) At each lavatory, open the lavatory door.

1) Make sure that the auxiliary lights are on.

NOTE: The auxiliary lights come on when electrical power is supplied to the airplane.

2) Make sure that the lights are Off.

(b) Go in the lavatory and lock the door.

1) Make sure that the lights come on bright.

(c) Unlock the door.

1) Make sure that the lights go to Off.

2) Make sure that the auxiliary lights stay on.

SUBTASK 33-20-00-710-008

(9) Do a test of each lavatory-occupied sign as follows:

NOTE: You will need two people to do this part of the test.

(a) Make sure that the lights behind the occupied symbol are off.

(b) Go in the lavatory and lock the door.

NOTE: For airplane with multiple lavatories in the aft cabin, the lavatory-occupied sign comes on when all lavatories in the aft cabin are locked.

1) Make sure that the lights behind the occupied symbol come on.

(c) Leave the lavatory and close the lavatory door.

1) Make sure that the lights behind the occupied symbol go off.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-20-00-710-009

(10) Do a test of the passenger call lights.

(a) At each PSU (Passenger Service Unit), set the call switch to the on mode.

1) Make sure that the call light on the PSU comes on.

2) Make sure that the blue call light in the exit sign near the door comes on.

NOTE: A call-select switch on the PSU lets you send the call signal to the forward or the aft exit sign.

(b) Set the call switch to the off mode.

1) Make sure that the call light on the PSU goes off.

2) Make sure that the blue call light in the exit sign near the door goes off.

SUBTASK 33-20-00-710-010

(11) Do a test of the lavatory call light system.

(a) Set the call switch in the lavatory to the on mode.

1) Make sure that the light in the call switch comes on.

2) Make sure that the call light/reset switch outside the lavatory comes on.

3) Make sure that the amber call light in the exit sign near the lavatory comes on.

(b) Push the call light/reset switch outside the lavatory to the off mode.

1) Make sure that the call light/reset switch goes off.

2) Make sure that the light in the call switch in the lavatory goes off.

3) Make sure that the amber call light on the exit sign near the lavatory goes off.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 33-20-00-860-004

(1) Set the CAB/UTIL switch at the panel, P5-13, to the OFF position.

——— END OF TASK ———

TASK 33-20-00-470-801

3. Passenger Compartment Lights - BSI Generation 3 OPS Loadable Software Airplane Part (LSAP) Loading

(Figure 501)

A. General

(1) Do the LSAP verification for light section.

(2) This procedure includes the steps to install the OPS LSAP into BSI generation 3 light columns:

(a) Direct

(b) Cove

(c) Wash

(d) Crossbin

(e) COS

(3) LED light indication:

(a) Normal function - LED's are displaying correct scene data from ACP.

(b) Bootloader Mode:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) White (WWW) segments - Partial cool white segments with remaining segment cool and warm light.

2) RGBW (color) segments - Partial blue segment with remaining segment white light.

(c) Loss of Communication:

1) White (WWW) segments - White light at 30% intensity (amber and white lights).

2) RGBW (color) segments - White light at 30% intensity.

B. References

Reference	Title
23-42-03-470-801	Attendant Control Panel (ACP) - Software Loading (P/B 201)
23-42-03-700-801	Attendant Control Panel (ACP) - Configuration Check (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-15086	Cable - USB to RS-485 Harness Part #: TH-737-CABLE-02 Supplier: 59579
STD-13611	Laptop - Generic (Minimum requirements: Windows 7 SP1, 500MHz processor, 256MB RAM, 10/100 BaseT Ethernet port, CD-ROM/DVD media drive, 60GB hard drive, English language)

D. Location Zones

Zone	Area
200	Upper Half of Fuselage

E. Prepare for the LSAP Loading

SUBTASK 33-20-00-860-006

(1) Make sure that the CAB/UTIL switch at the panel, P5-13, is set to the ON position.

SUBTASK 33-20-00-720-001

(2) Select the maintenance tab button on the forward attendant control panel.

SUBTASK 33-20-00-720-002

(3) Enter password if required.

NOTE: Default password is “1234” unless changed by the operator.

SUBTASK 33-20-00-720-003

(4) Select the CONFIG CHECK button.

SUBTASK 33-20-00-720-004

(5) Make sure OPS LSAP part number is displayed in the firmware field for these lighting types:

- Direct
- Cove
- Wash
- Crossbin

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- COS

NOTE: It is not necessary to examine the Sidewall and Overwing Exit (OWE) lights because they do not have loadable OPS at this time. Sidewall and Exit lights are on lighting columns 1 and 4.

(a) On column 1 start with the first light and examine the OPS part number for all light types until the first sidewall light is shown.

(b) On column 2 and 3, examine the OPS part number for all lights.

(c) On column 4 start with the last light address and verify the OPS part number for all light types backward until the first sidewall light is displayed.

NOTE: During software verification if one part number is incorrect in the lighting column the rest of the lights in that column do not need to be examined.

SUBTASK 33-20-00-720-005

(6) Record the necessary columns.

F. LSAP Loading

SUBTASK 33-20-00-470-001

(1) Copy the 33 CLS OPS media set part onto the laptop, STD-13611.

NOTE: B/E Aerospace will provide this load tool application.

SUBTASK 33-20-00-420-001

(2) Connect the USB to RS-485 harness cable, COM-15086, to the laptop.

SUBTASK 33-20-00-860-010

(3) Select the lighting menu on the ACP.

SUBTASK 33-20-00-860-009

(4) Select a lighting scene on the ACP where the crossbin is OFF or DIM.

SUBTASK 33-20-00-860-011

(5) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
D	12	C01936	ATTENDANT PANELS

SUBTASK 33-20-00-010-001

(6) To get access to the wire bundle for a column, use one of these:

(a) For column 1, open access panel to get to the wire bundle (Figure 501).

(b) For column 2, open access panel to get to the wire bundle (Figure 502).

NOTE: Use bin light that is not blocked by a center overhead storage.

(c) For column 3, open access panel to get to the wire bundle (Figure 503).

NOTE: Use bin light that is not blocked by a center overhead storage.

(d) For column 4, open access panel to get to the wire bundle (Figure 504).

SUBTASK 33-20-00-020-001

(7) Disconnect J2 from P2.

SUBTASK 33-20-00-420-002

(8) Connect the USB to RS-485 harness cable, COM-15086, between J2 and P2 on the column to load.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-20-00-470-003

(9) Install the LSAP as follows:

(a) Open the load tool application.

(b) Go to File >Select LSAP.

(c) Select the LSAP HDR file contained in the media set, P/N DISK001, folder.

NOTE: An example of the file name for the LSAP part number: 3375–BEA-003–00 will be in the form of BEA00300.HDR.

(d) Use the drop down menu to select a COM port:

1) Select the first COM port on the list.

2) Select File>Debug> and press COM test.

3) If the lights blink, or go into lamp test (all LEDs illuminated) the correct COM port is selected.

4) If the lights do not blink or go into lamp test select the next COM port and repeat steps 2 and 3.

(e) Select Start Data Load.

NOTE: When data load is finished, the lights should go into the loss of communication mode.

(f) Make sure that the lights that were loaded are not in bootloader mode.

(g) All other lights in the column will continue to display the same as before the load or go into loss of communication mode.

SUBTASK 33-20-00-020-002

(10) Disconnect the USB to RS-485 harness cable, COM-15086, from J2 and P2.

SUBTASK 33-20-00-420-003

(11) Connect J2 to P2.

SUBTASK 33-20-00-410-001

(12) To close access to the wire bundle for a column, use one of these:

(a) For column 1, close access panel for the wire bundle (Figure 501).

(b) For column 2, close access panel for the wire bundle (Figure 502).

NOTE: Use bin light that is not blocked by a center overhead storage.

(c) For column 3, close access panel for the wire bundle (Figure 503).

NOTE: Use bin light that is not blocked by a center overhead storage.

(d) For column 4, close access panel for the wire bundle (Figure 504).

SUBTASK 33-20-00-470-002

(13) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
D	12	C01936	ATTENDANT PANELS

SUBTASK 33-20-00-470-004

(14) Do this: Attendant Control Panel (ACP) - Software Loading, TASK 23-42-03-470-801.

NOTE: Phase 2 data load is recommended.

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SUBTASK 33-20-00-700-002

(15) Do this task: Attendant Control Panel (ACP) - Configuration Check, TASK 23-42-03-700-801.

(a) Make sure that the correct LSAP part number is displayed in the firmware field for these light types:

- Direct
- Cove
- Wash
- Crossbin
- COS

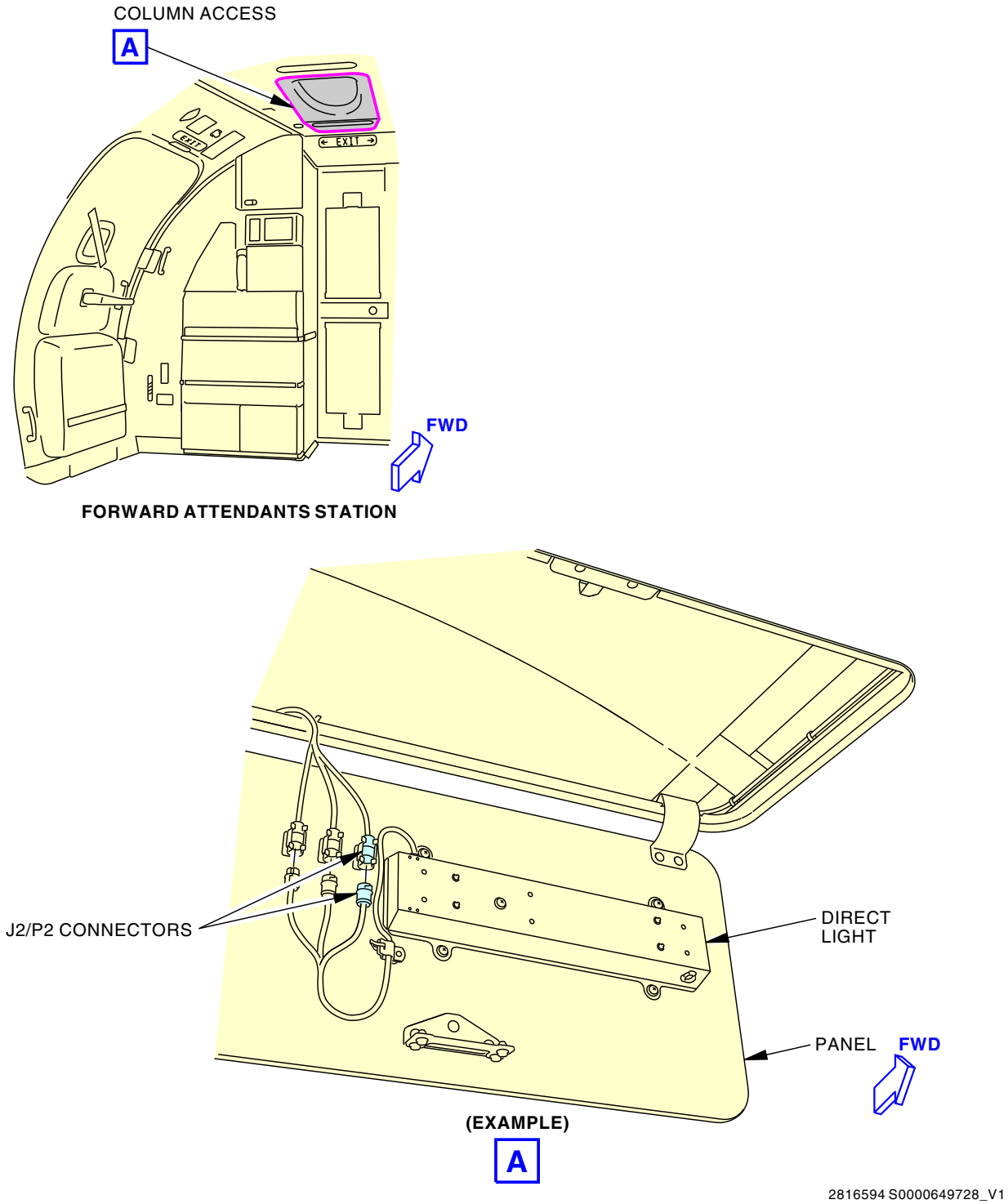
G. Put the Airplane Back to ITS Usual Condition

SUBTASK 33-20-00-860-007

(1) Set the CAB/UTIL switch at the panel, P5-13, to the OFF position.

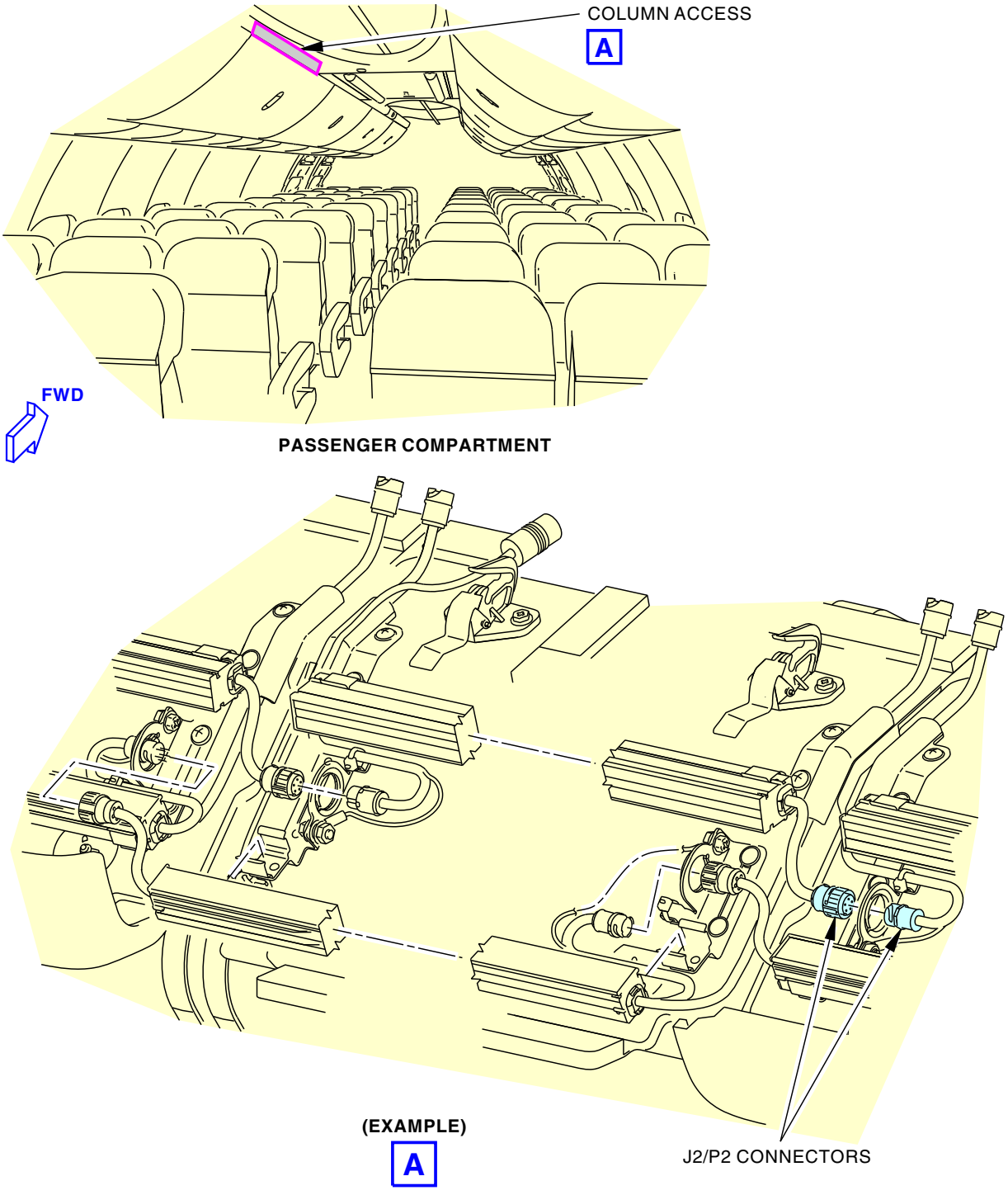
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



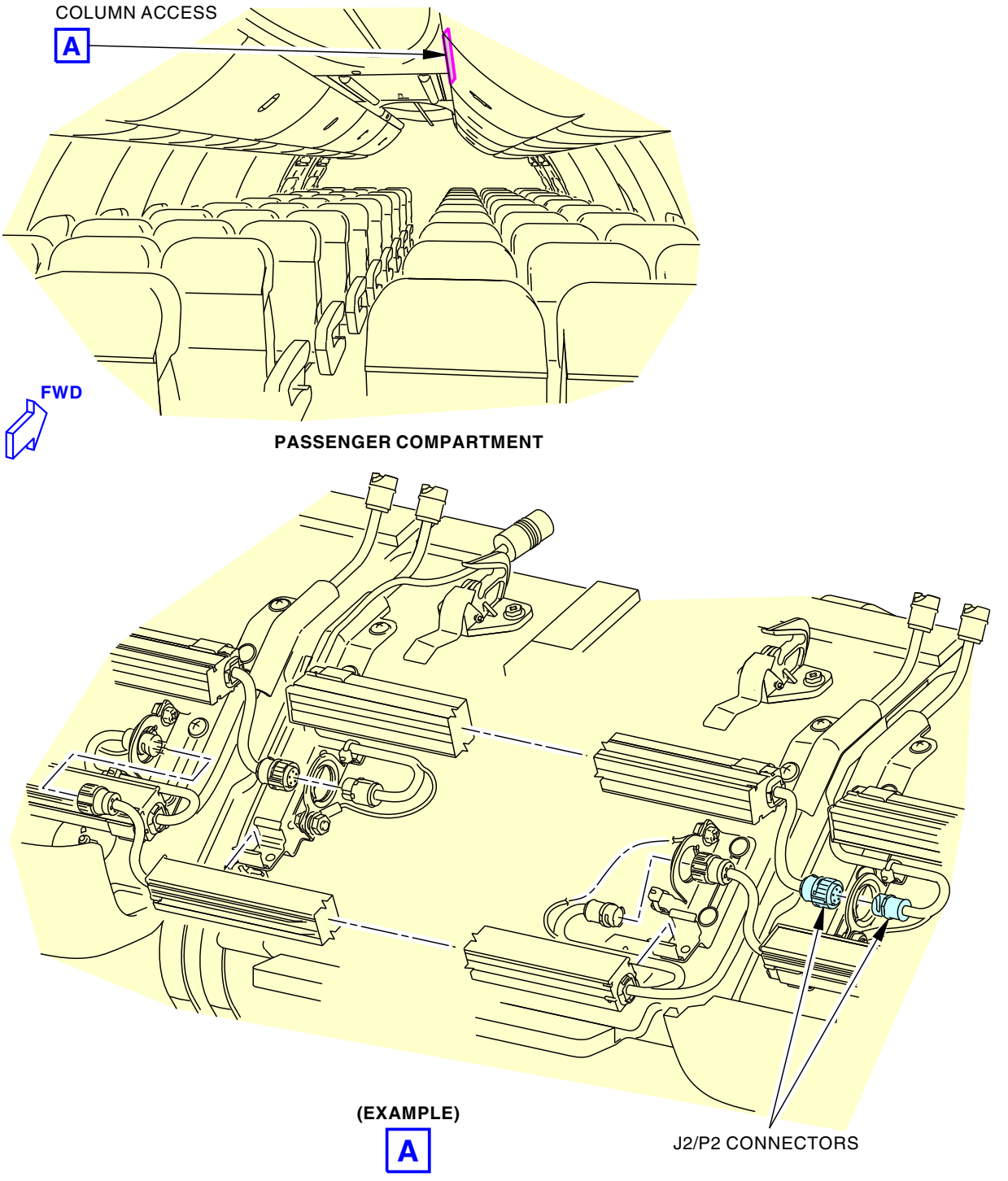
BSI Lighting Column 1 Access
Figure 501/33-20-00-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details



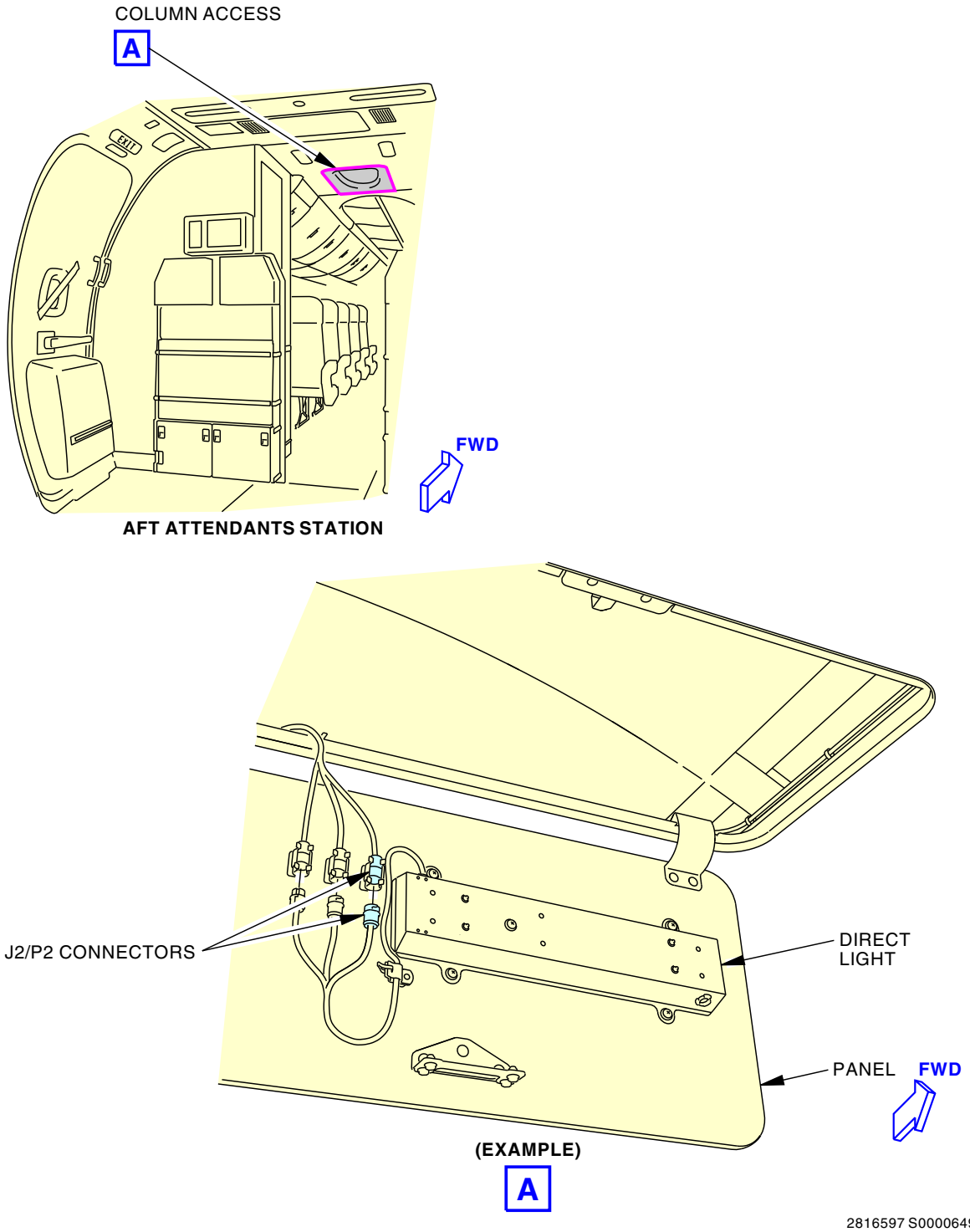
BSI Lighting Column 2 Access
Figure 502/33-20-00-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details



BSI Lighting Column 3 Access
Figure 503/33-20-00-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details



BSI Lighting Column 4 Access
Figure 504/33-20-00-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WINDOW LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) BSI Window LED Lighting Deactivation

(2) BSI Window LED Lighting Activation

(3) Window Light - LED Light Assembly Replacement

(4) Window Light - Overwing Exit Light Assembly Replacement

TASK 33-21-00-040-801

2. BSI Window LED Lighting - Deactivation

(Figure 201)

A. General

(1) This procedure removes the electrical power to the window lights.

B. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage
211	Flight Compartment - Left

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. BSI Window LED Lighting Deactivation

SUBTASK 33-21-00-860-001

(1) Make sure that the Utility switch(es) (ELEC METERS, BATTERY AND GALLEY PWR MODULE), on the P5 -13 panel, are in the ON position.

SUBTASK 33-21-00-010-001

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-21-00-860-003

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Open these circuit breakers and install safety tags:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	11	C00594	WINDOW LIGHT RIGHT
E	12	C00776	WINDOW LIGHT LEFT

SUBTASK 33-21-00-410-004

(4) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

E. BSI Window LED Lighting - Tryout

NOTE: This tryout is to make sure that the BSI Window LED Lighting is in a zero energy state.

SUBTASK 33-21-00-211-001

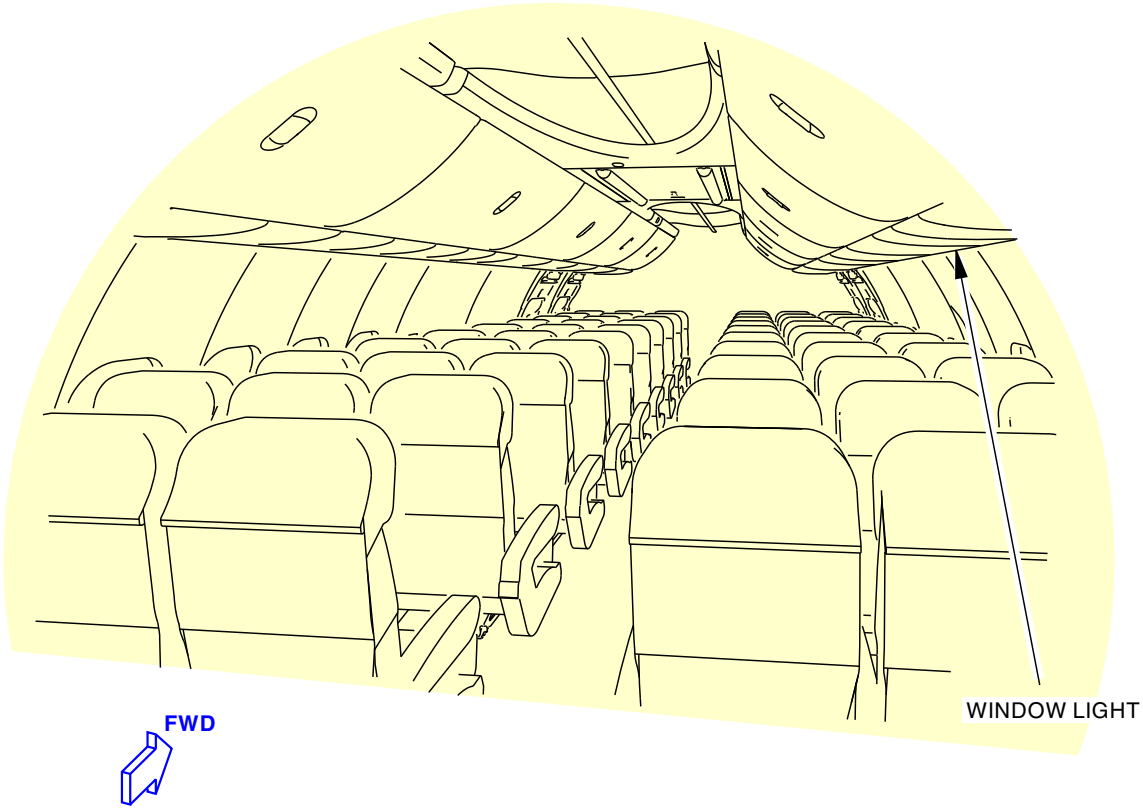
(1) Set the applicable switch for the window light to ON.

NOTE: Window lights are controlled by the Attendant Control Panel (ACP).

(a) Make sure that the window lights do not come on.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



PASSENGER COMPARTMENT

2414593 S00061535545_V1

Window Lights
Figure 201/33-21-00-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-21-00-440-801

3. BSI Window LED Lighting - Activation

(Figure 201)

A. General

(1) This procedure adds electrical the power to the window lights.

B. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. BSI Window LED Lighting Activation

SUBTASK 33-21-00-010-004

(1) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-21-00-860-006

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Remove the safety tags and close these circuit breakers:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	11	C00594	WINDOW LIGHT RIGHT
E	12	C00776	WINDOW LIGHT LEFT

SUBTASK 33-21-00-410-001

(3) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-21-00-960-801

4. Window Light - LED Light Assembly Replacement

(Figure 202)

A. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
23-42-03-470-801	Attendant Control Panel (ACP) - Software Loading (P/B 201)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
41	Light assembly	33-21-51-74-205	SIA ALL
		33-21-51-74-210	SIA ALL
		33-21-51-74-215	SIA ALL
		33-21-51-74-220	SIA ALL
		33-21-51-74-225	SIA ALL

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage
211	Flight Compartment - Left

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Windows LED Light Assembly Replacement

SUBTASK 33-21-00-860-008

(1) Do these steps at the applicable attendant control panel:

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) On the attendant control panel display, touch the Lighting tab.

(e) Below the passenger seating area, touch the OFF button.

SUBTASK 33-21-00-010-002

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-21-00-860-009



WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Open these circuit breakers and install safety tags:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	11	C00594	WINDOW LIGHT RIGHT
E	12	C00776	WINDOW LIGHT LEFT

SUBTASK 33-21-00-040-001

CAUTION DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(4) Before you touch the light assembly [41], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-000-802).

SUBTASK 33-21-00-020-001

(5) Do these steps to remove the light assembly [41]:

(a) Do these steps to remove the lens [45].

1) Remove the screw [44] and retainer [43] from each end of the lens [45].

2) Remove the lens [45].

(b) Disconnect the elector connector [42] from each end of the light assembly [41].

(c) Remove the light assembly [41].

1) If there is a center mounting bracket, use a flat tool to carefully remove the light assembly [41] from the center mounting bracket.

SUBTASK 33-21-00-040-002

CAUTION DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(6) Before you touch the light assembly [41], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-400-802).

SUBTASK 33-21-00-420-001

(7) Do these steps to install the light assembly [41]:

(a) Put the light assembly [41] in position.

1) If there is a center mounting bracket, carefully push the light assembly [41] until it latches onto the mounting bracket.

(b) Connect a elector connector [42] to each end of the light assembly [41].

(c) Do these steps to install the lens [45].

1) Put the lens [45] in position.

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2) Install a retainer [43] and screw [44] to each end of the lens [45].

3) Tighten the screws [44] to 12.5 ±2.5 in-lb (1.4 ±0.3 N·m).

SUBTASK 33-21-00-860-010

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(8) Remove the safety tags and close these circuit breakers:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	11	C00594	WINDOW LIGHT RIGHT
E	12	C00776	WINDOW LIGHT LEFT

SUBTASK 33-21-00-410-002

(9) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-21-00-860-020

(10) Load the software to the new light assembly, do this task: Attendant Control Panel (ACP) - Software Loading, TASK 23-42-03-470-801.

SUBTASK 33-21-00-710-001

(11) Do a test of the new light assembly.

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) Make sure that the CAB/UTIL switch at the P5-13 panel is set to the ON position.

(e) On the attendant control panel display, touch the Lighting tab.

(f) Below the passenger seating area, touch the White BRIGHT button.

1) Make sure that the light comes on brightly.

(g) Touch the White MEDIUM button.

1) Make sure that the light becomes medium.

(h) Touch the Boarding/Deplane button.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Make sure that the light color in the passenger compartment is equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The light can take at least 15 seconds to change.

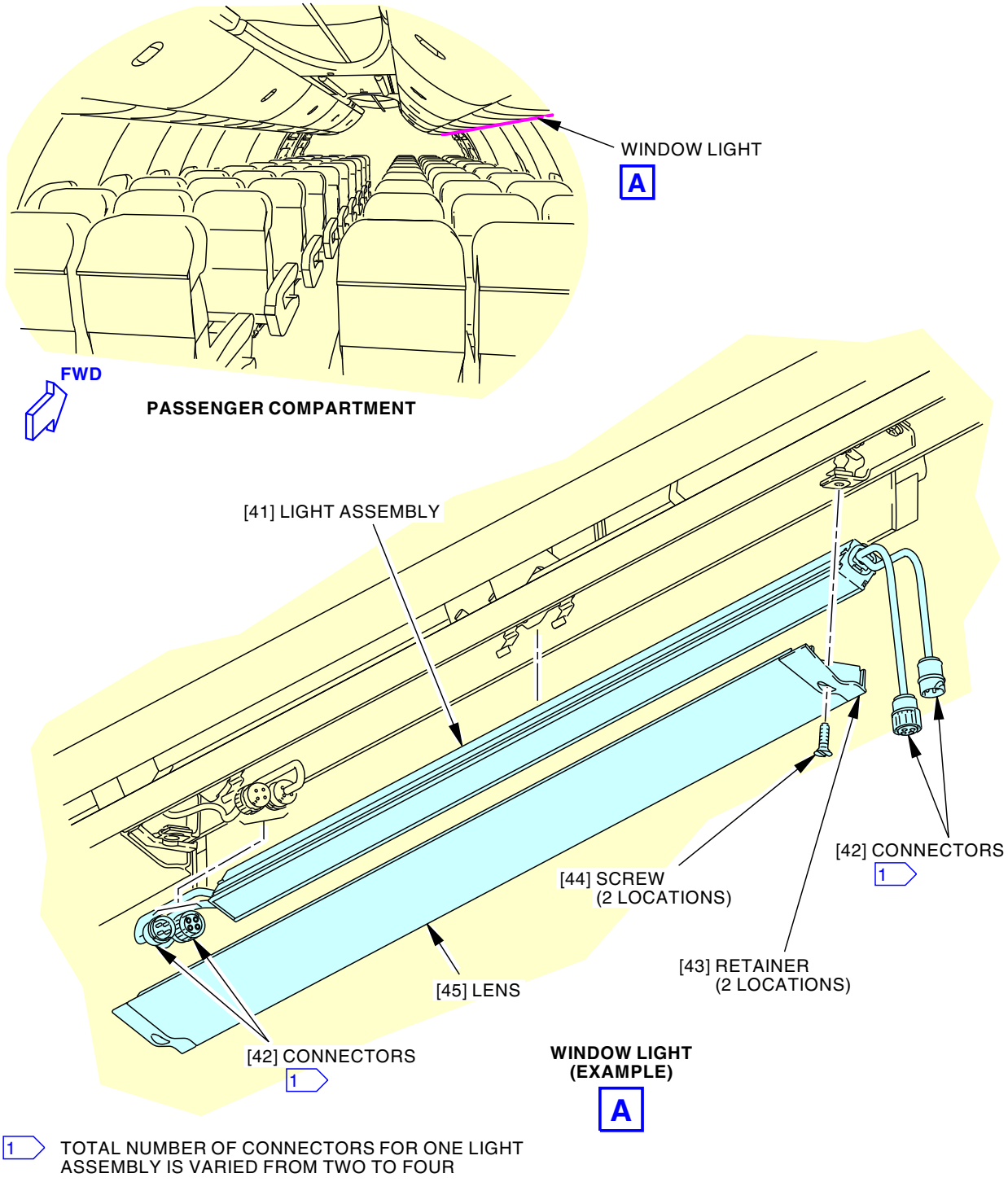
(i) Touch the OFF button.

1) Make sure that the light goes off.

(j) If it is not necessary, set the CAB/UTIL switch at the P5-13 panel to the OFF position.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Window Light - LED Light Assembly Replacement
Figure 202/33-21-00-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-21-00-960-802

5. Window Light - Overwing Exit Light Assembly Replacement

(Figure 203)

A. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
23-42-03-470-801	Attendant Control Panel (ACP) - Software Loading (P/B 201)
25-21-20-000-801	Emergency Exit Doorway Lining Removal (P/B 401)
25-21-20-400-801	Emergency Exit Doorway Lining Installation (P/B 401)
33-51-00-710-801	Emergency Lights Operational Check (P/B 501)
33-51-00-720-801	Emergency Lights Operational Test (P/B 501)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
61	Light assembly	33-21-51-74-380	SIA ALL
		33-21-51-74-385	SIA ALL

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage
211	Flight Compartment - Left

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Windows Overwing Exit Light Assembly Replacement

SUBTASK 33-21-00-860-014

(1) Do these steps at the applicable attendant control panel:

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) On the attendant control panel display, touch the Lighting tab.

(e) Below the passenger seating area, touch the OFF button.

SUBTASK 33-21-00-010-003

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-21-00-860-015

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Open these circuit breakers and install safety tags:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	11	C00594	WINDOW LIGHT RIGHT
E	12	C00776	WINDOW LIGHT LEFT

SUBTASK 33-21-00-860-021

(4) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

SUBTASK 33-21-00-040-003

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(5) Before you touch the light assembly [61], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-000-802).

SUBTASK 33-21-00-020-002

(6) Do these steps to remove the light assembly [61]:

(a) Remove the fasteners [63].

(b) Remove the lens [64].

(c) Remove the fasteners [65].

(d) Get access to the light assembly [61] installed on the back of the upper lining assembly, do this task: Emergency Exit Doorway Lining Removal, TASK 25-21-20-000-801.

NOTE: Do only the steps necessary for access to the light assembly installed on the back of the upper lining assembly.

(e) Remove the fasteners [62].

(f) Disconnect the electrical connecctors [66].

(g) Remove the light assembly [61].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-21-00-040-004

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(7) Before you touch the light assembly [61], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-400-802).

SUBTASK 33-21-00-420-002

(8) Do these steps to install the light assembly [61]:

(a) Put the light light assembly [61] in position.

(b) Install the fasteners [62].

1) Tighten the fasteners [62].

(c) Connect the electrical connecctors [66].

(d) Do this task: Emergency Exit Doorway Lining Installation, TASK 25-21-20-400-801.

(e) Install the fasteners [65].

1) Tighten the fasteners [65].

(f) Put the lens [64] in position.

(g) Install the fasteners [63].

1) Tighten the fasteners [63].

SUBTASK 33-21-00-860-016

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(9) Remove the safety tags and close these circuit breakers:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	11	C00594	WINDOW LIGHT RIGHT
E	12	C00776	WINDOW LIGHT LEFT

SUBTASK 33-21-00-860-022

(10) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

SUBTASK 33-21-00-410-003

(11) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-21-00-860-017

(12) Load the software to the new light assembly, do this task: Attendant Control Panel (ACP) - Software Loading, TASK 23-42-03-470-801.

SUBTASK 33-21-00-710-002

(13) Do a test of the new light assembly.

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) Make sure that the CAB/UTIL switch at the P5-13 panel is set to the ON position.

(e) On the attendant control panel display, touch the Lighting tab.

(f) Below the passenger seating area, touch the White BRIGHT button.

1) Make sure that the light comes on brightly.

(g) Touch the White MEDIUM button.

1) Make sure that the light becomes medium.

(h) Touch the Boarding/Deplane button.

1) Make sure that the light color in the passenger compartment is equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The light can take at least 15 seconds to change.

(i) Touch the OFF button.

1) Make sure that the light goes off.

(j) If it is not necessary, set the CAB/UTIL switch at the P5-13 panel to the OFF position.

SUBTASK 33-21-00-710-003

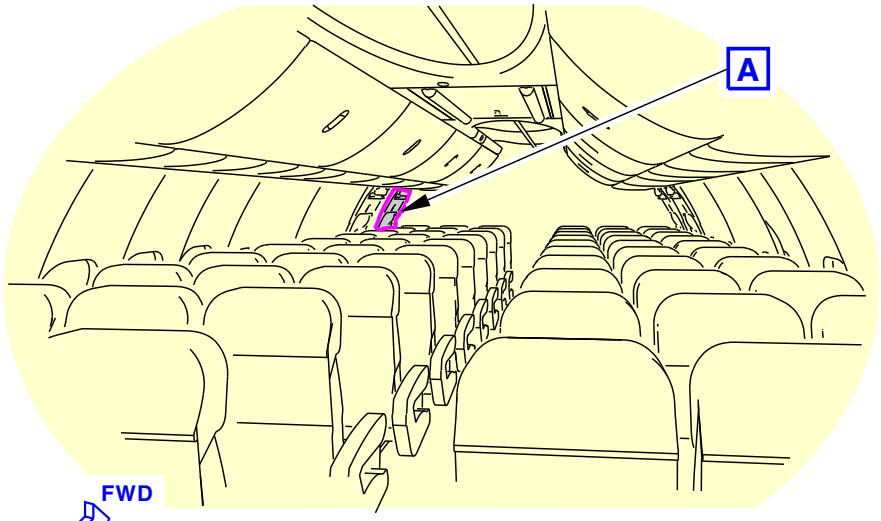
(14) Do this task: Emergency Lights Operational Check, TASK 33-51-00-710-801.

SUBTASK 33-21-00-710-004

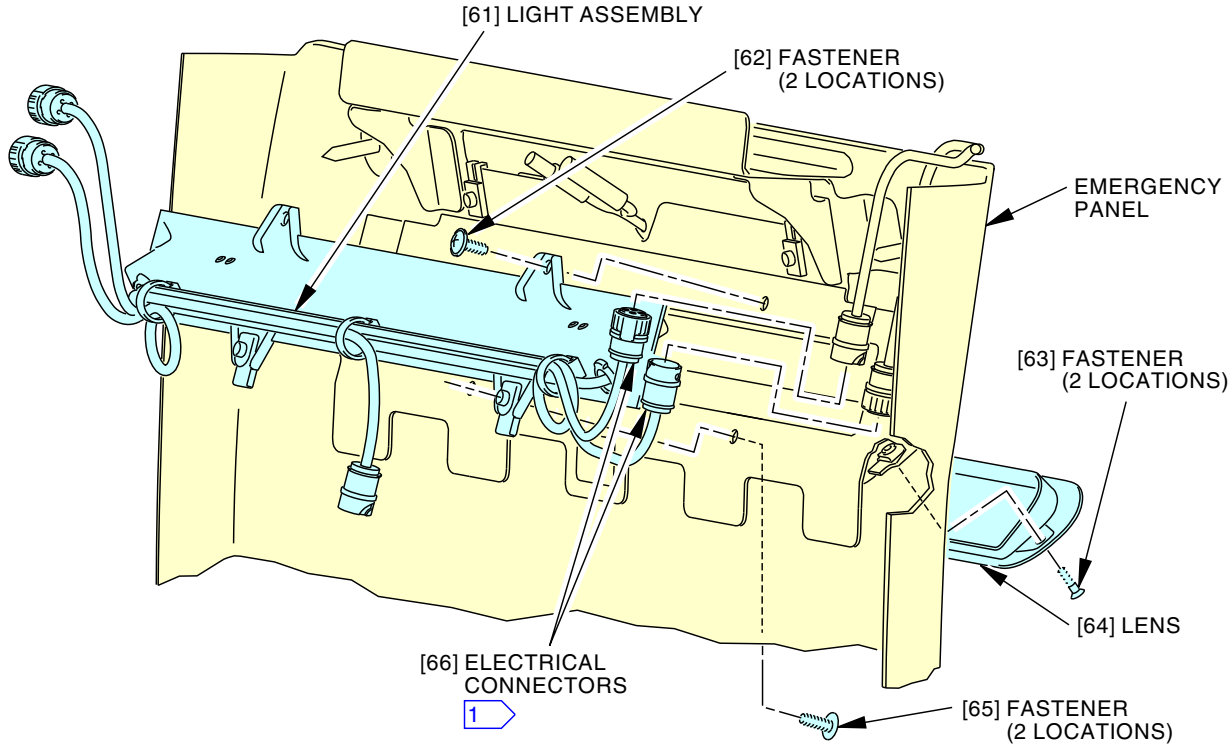
(15) Do this task: Emergency Lights Operational Test, TASK 33-51-00-720-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



PASSENGER COMPARTMENT



1 TOTAL NUMBER OF CONNECTORS FOR ONE LIGHT ASSEMBLY IS VARIED FROM FOUR TO FIVE

A

2414595 S00061535550_V1

Window Light - Overwing Exit Light Assembly Replacement
Figure 203/33-21-00-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CEILING LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) BSI Ceiling LED Lighting Deactivation

(2) BSI Ceiling LED Lighting Activation

(3) BSI Entry and Cove LED Lighting Deactivation

(4) BSI Entry and Cove LED Lighting Activation

(5) Ceiling Light, Bin/Wash - LED Light Assembly Replacement

(6) Ceiling Light, Direct - LED Light Assembly Replacement

(7) Ceiling Light, Cove - LED Light Assembly Replacement

(8) Ceiling Light, Center Overhead Stowage - LED Light Assembly Replacement

TASK 33-22-00-040-801

2. BSI Ceiling LED Lighting - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power to the ceiling lights.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
200	Upper Half of Fuselage
211	Flight Compartment - Left

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. BSI Ceiling LED Lighting Deactivation

SUBTASK 33-22-00-860-001

(1) Make sure that the Utility switch (ELEC METERS, BATTERY AND GALLEY PWR MODULE), on the P5 -13 panel, is in the ON position.

SUBTASK 33-22-00-010-001

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-002

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Make sure that this circuit breaker is closed:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	4	C00184	GND SERV CLG NIGHT CONT

SUBTASK 33-22-00-860-003

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(4) Open these circuit breakers and install safety tags:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
E	7	C01937	CEILING LIGHT AFT-L
E	8	C01938	CEILING LIGHT AFT-R
E	9	C00590	CEILING LT-R
E	10	C00591	CEILING LT-L

E. BSI Ceiling LED Lighting - Tryout

NOTE: This tryout is to make sure that the BSI Ceiling LED Lighting is in a zero energy state.

SUBTASK 33-22-00-860-004

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(1) Make sure that this circuit breaker is closed:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	4	C00184	GND SERV CLG NIGHT CONT

SUBTASK 33-22-00-410-011

(2) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

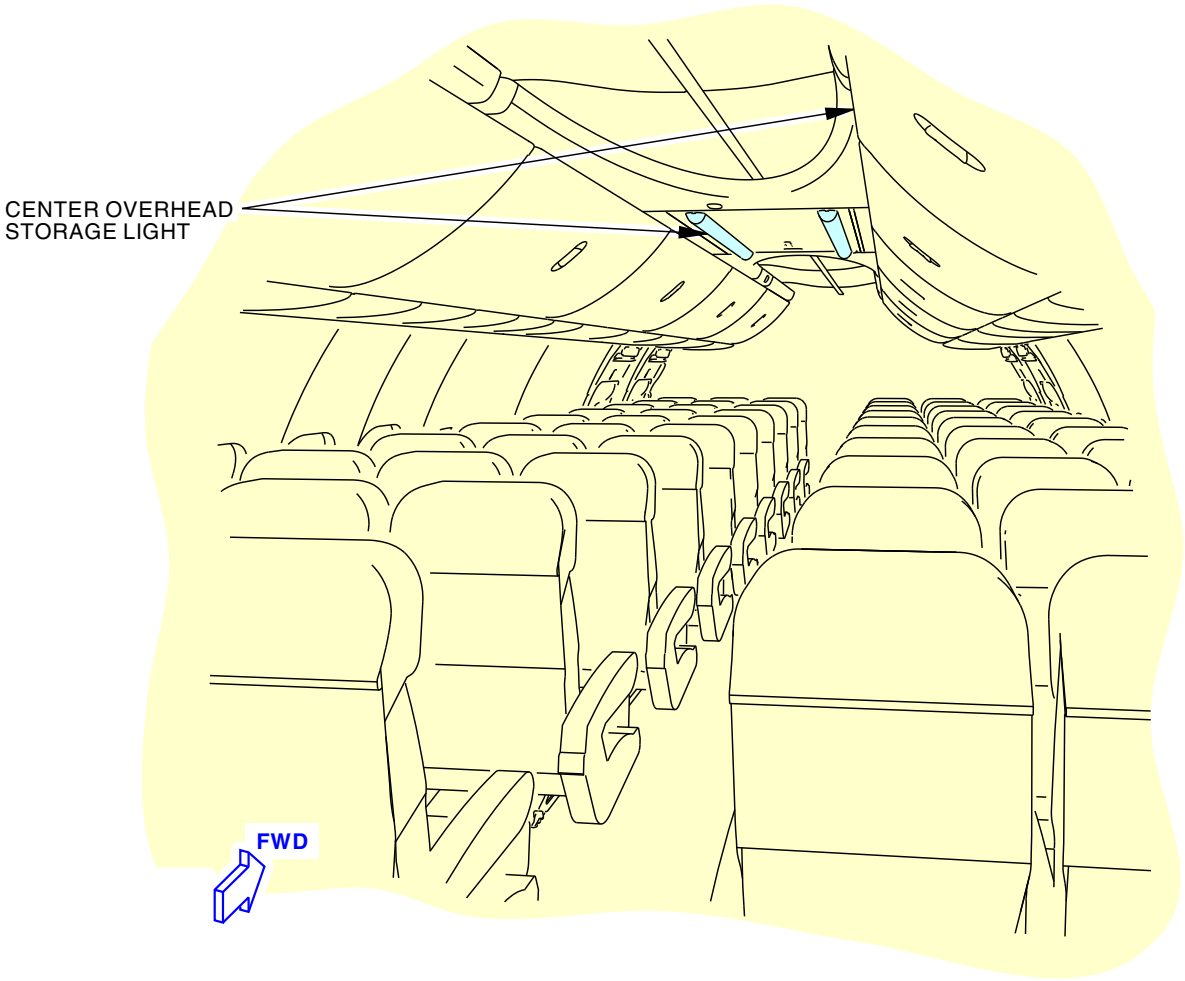
SUBTASK 33-22-00-211-001

(3) Make sure that the ceilings light on both sides are off.

NOTE: The ceiling lights are controlled by the Attendant Control Panel (ACP).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Ceiling Lights
Figure 201/33-22-00-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-22-00-440-801

3. BSI Ceiling LED Lighting - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the ceiling lights.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
200	Upper Half of Fuselage

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. BSI Ceiling LED Lighting Activation

SUBTASK 33-22-00-010-011

(1) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-005

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Make sure that this circuit breaker is closed:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	4	C00184	GND SERV CLG NIGHT CONT

SUBTASK 33-22-00-860-006

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Remove the safety tags and close these circuit breakers:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
E	7	C01937	CEILING LIGHT AFT-L
E	8	C01938	CEILING LIGHT AFT-R
E	9	C00590	CEILING LT-R
E	10	C00591	CEILING LT-L

SUBTASK 33-22-00-410-001

(4) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

END OF TASK

TASK 33-22-00-040-802

4. BSI Entry and Cove LED Lighting - Deactivation

(Figure 202)

A. General

(1) This procedure removes electrical power to the entry and cove LED lights.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
211	Flight Compartment - Left
231	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. BSI Entry and Cove LED Lighting Deactivation

SUBTASK 33-22-00-860-007

(1) Make sure that the Utility switch (ELEC METERS, BATTERY AND GALLEY PWR MODULE), on the P5 -13 panel, is in the ON position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-010-002

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-008

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Make sure that this circuit breaker is closed:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	4	C00184	GND SERV CLG NIGHT CONT

SUBTASK 33-22-00-860-009

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(4) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	5	C01939	COVE LIGHT

E. BSI Entry and Cove LED Lighting - Tryout

NOTE: This tryout is to make sure that the BSI Entry and Cove LED Lighting is in a zero energy state.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-860-010

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(1) Make sure that this circuit breaker is closed:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	4	C00184	GND SERV CLG NIGHT CONT

SUBTASK 33-22-00-410-012

(2) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

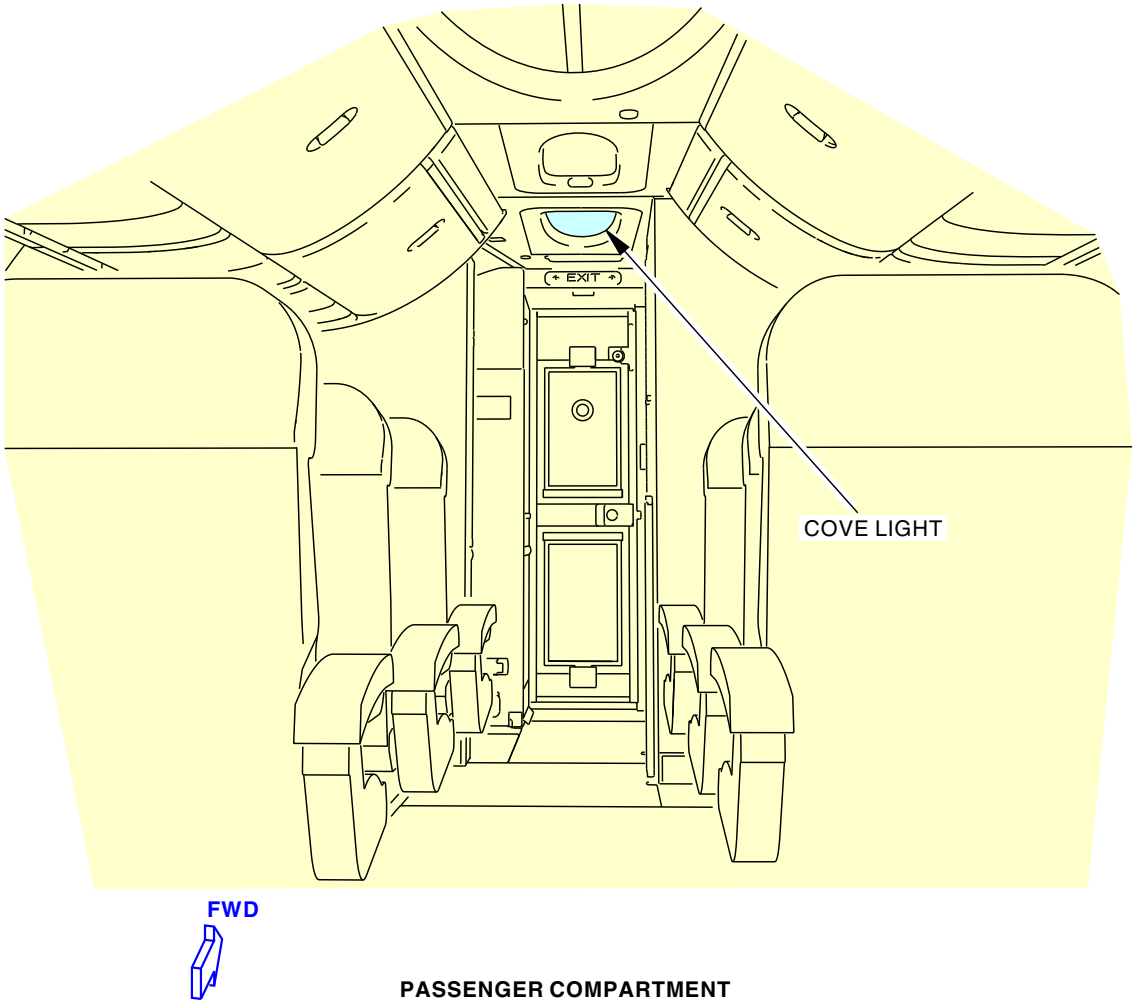
SUBTASK 33-22-00-211-002

(3) Make sure that the FWD and AFT Entry and Cove LED Lights are off.

NOTE: The entry and cove lights are controlled by the Attendant Control Panel (ACP).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Entry and Cove Lights
Figure 202/33-22-00-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-22-00-440-802

5. BSI Entry and Cove LED Lighting - Activation

(Figure 202)

A. General

(1) This procedure adds electrical power to the entry and cove LED Lights.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
231	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. BSI Entry and Cove LED Lighting Activation

SUBTASK 33-22-00-010-012

(1) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-011

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Make sure that this circuit breaker is closed:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	4	C00184	GND SERV CLG NIGHT CONT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-860-012

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	5	C01939	COVE LIGHT

SUBTASK 33-22-00-410-002

(4) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

END OF TASK

TASK 33-22-00-960-801

6. Ceiling Light, Bin/Wash - LED Light Assembly Replacement

(Figure 203)

A. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
23-42-03-470-801	Attendant Control Panel (ACP) - Software Loading (P/B 201)
25-21-45 P/B 401	CEILING PANEL - REMOVAL/INSTALLATION

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
101	Light assembly	33-22-51-18-060	SIA ALL
		33-22-51-18-065	SIA ALL
		33-22-51-18-070	SIA ALL
		33-22-51-18-075	SIA ALL
		33-22-51-18-080	SIA ALL
		33-22-51-18-085	SIA ALL
		33-22-51-18-090	SIA ALL
		33-22-52-04-100	SIA ALL
		33-22-52-04-105	SIA ALL

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

AMM Item	Description	AIPC Reference	AIPC Effectivity
101 (cont.)		33-22-52-04-110	SIA ALL

C. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
200	Upper Half of Fuselage
211	Flight Compartment - Left

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Ceiling LED Light Assembly Replacement

SUBTASK 33-22-00-860-014

(1) Do these steps at the applicable attendant control panel:

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) On the attendant control panel display, touch the Lighting tab.

(e) Below the passenger seating area, touch the OFF button.

SUBTASK 33-22-00-010-008

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-015

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Open these circuit breakers and install safety tags:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
E	7	C01937	CEILING LIGHT AFT-L
E	8	C01938	CEILING LIGHT AFT-R
E	9	C00590	CEILING LT-R

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
E	10	C00591	CEILING LT-L

SUBTASK 33-22-00-010-003

(4) Do these steps to get access to the ceiling bin/wash light assembly [101]:

(a) If it is necessary to remove the valance [107], do these steps:

1) Open the applicable stowage bin doors for access to the screws [108] below the light assembly [101].

2) Remove the screws [108].

3) Remove the valance [107].

NOTE: Some valances have the valance aisle light installed.

(b) If it is necessary, remove the applicable ceiling panel (PAGEBLOCK 25-21-45/401).

SUBTASK 33-22-00-040-001

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(5) Before you touch the light assembly [101], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-000-802).

SUBTASK 33-22-00-020-001

(6) Do these steps to remove the light assembly [101]:

(a) Remove the screws [102] to the cable covers [103].

(b) Disconnect the electrical connectors [104].

(c) Disconnect the bin-light data connectors [105].

(d) Disconnect the wash-light data connectors [109].

(e) Remove the screws [106].

(f) Remove the light assembly [101].

SUBTASK 33-22-00-040-002

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(7) Before you touch the light assembly [101], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-400-802).

SUBTASK 33-22-00-420-001

(8) Do these steps to install the light assembly [101]:

(a) Place the light assembly [101] in position.

(b) Connect the electrical connectors [104].

(c) Install and tighten the screws [106].

(d) Install the cable covers [103] with the screws [102].

1) Tighten the screws [102].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(e) Connect the bin-light data connectors [105].

(f) Connect the wash-light data connectors [109].

SUBTASK 33-22-00-410-003

(9) If it is necessary, do these steps to install the valance [107]:

(a) Place the valance [107].

(b) Install and tighten the screws [108].

SUBTASK 33-22-00-410-004

(10) If it is necessary, install the applicable ceiling panel (PAGEBLOCK 25-21-45/401).

SUBTASK 33-22-00-860-016

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(11) Remove the safety tags and close these circuit breakers:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
E	7	C01937	CEILING LIGHT AFT-L
E	8	C01938	CEILING LIGHT AFT-R
E	9	C00590	CEILING LT-R
E	10	C00591	CEILING LT-L

SUBTASK 33-22-00-410-008

(12) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-039

(13) Load the software to the new light assembly, do this task: Attendant Control Panel (ACP) - Software Loading, TASK 23-42-03-470-801.

SUBTASK 33-22-00-710-001

(14) Do a test of the new light assembly.

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) Make sure that the CAB/UTIL switch at the P5-13 panel is set to the ON position.

(e) On the attendant control panel display, touch the Lighting tab.

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(f) Below the passenger seating area, touch the White BRIGHT button.

1) Make sure that the light comes on brightly.

(g) Touch the White MEDIUM button.

1) Make sure that the light becomes medium.

(h) Touch the Boarding/Deplane button.

1) Make sure that the light color in the passenger compartment is equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The light can take at least 15 seconds to change.

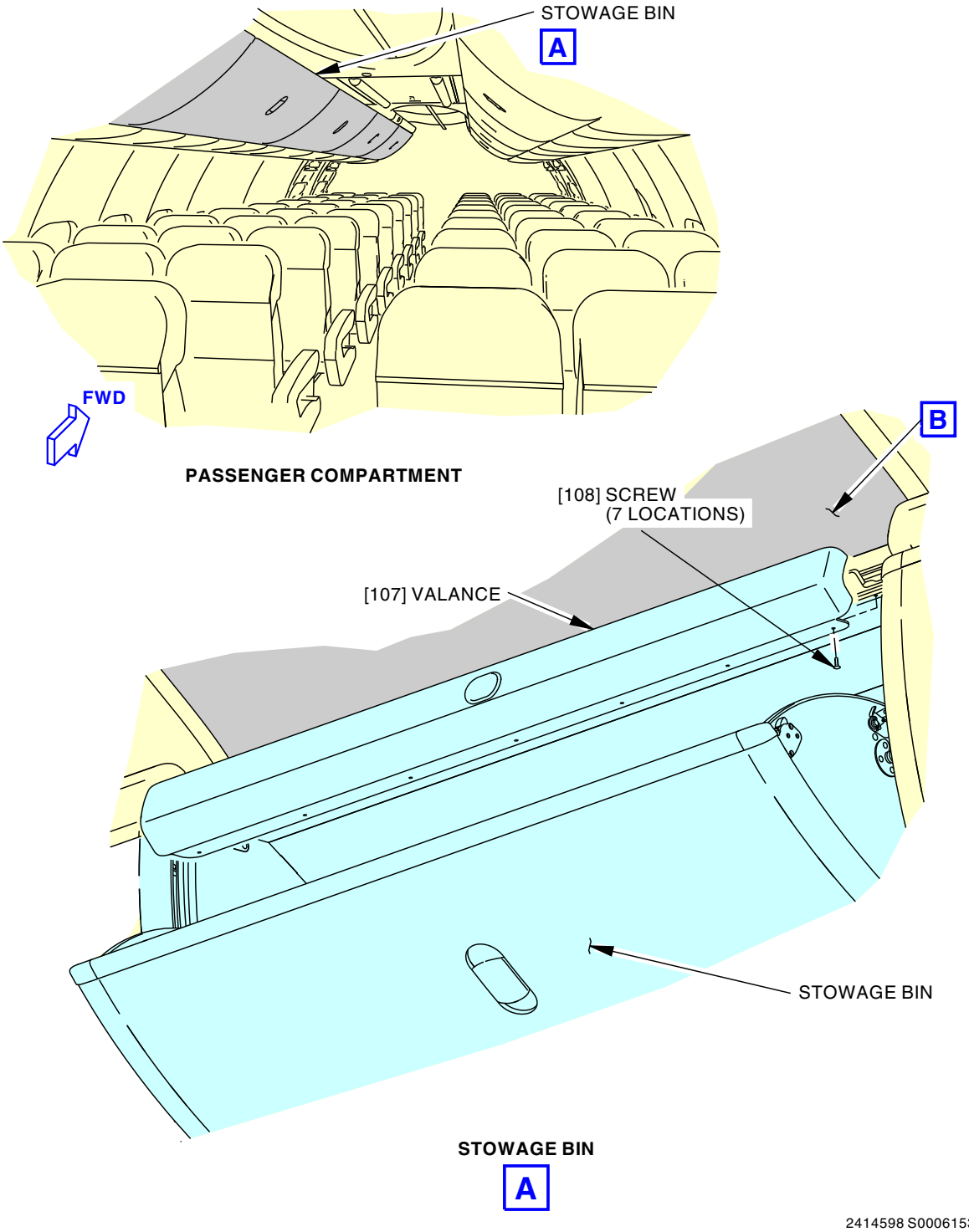
(i) Touch the OFF button.

1) Make sure that the light goes off.

(j) If it is not necessary, set the CAB/UTIL switch at the P5-13 panel to the OFF position.

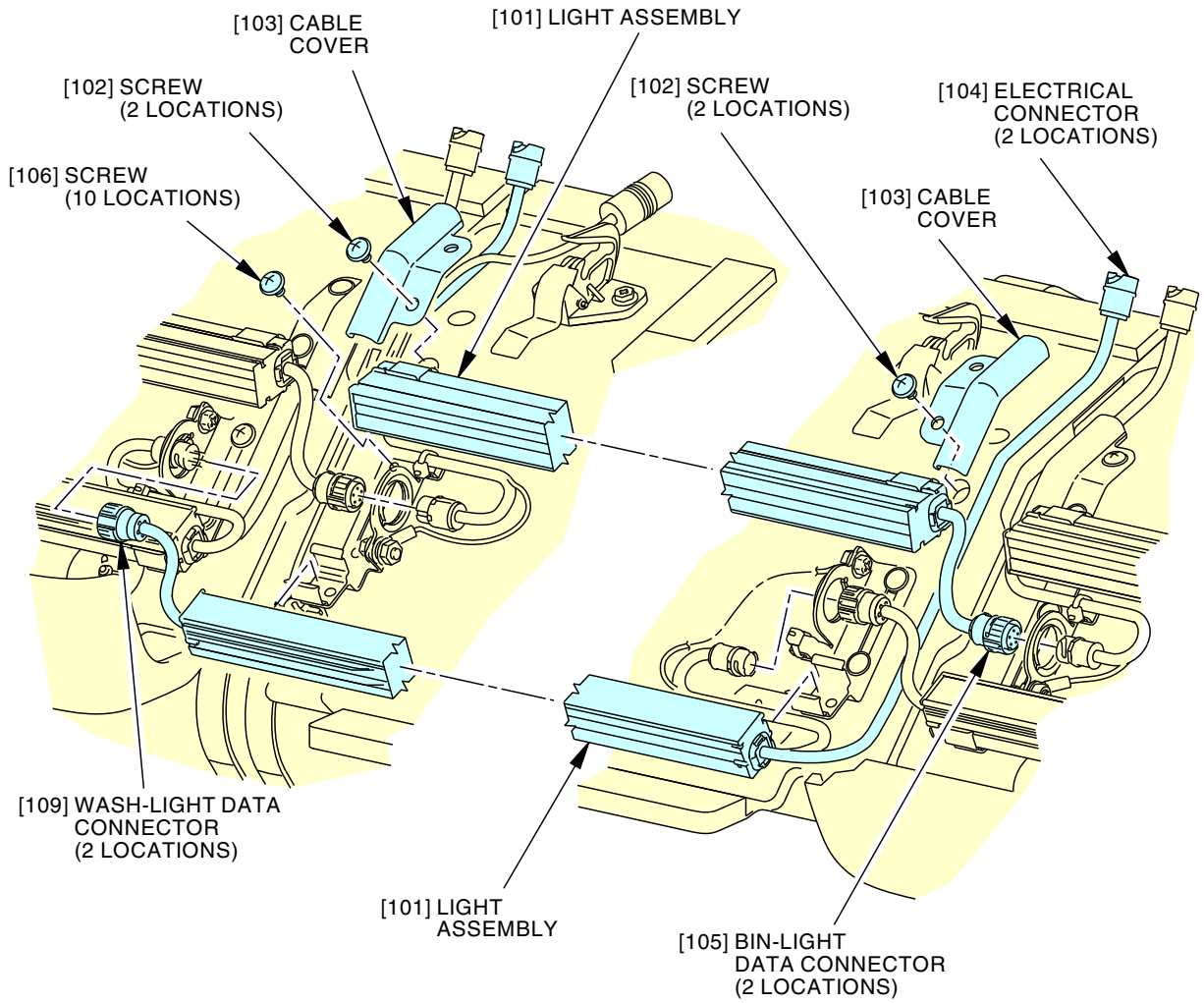
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Ceiling Light, Bin/Wash - LED Light Assembly Replacement
Figure 203/33-22-00-990-803 (Sheet 1 of 2)

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(EXAMPLE)

B

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Ceiling Light, Bin/Wash - LED Light Assembly Replacement
Figure 203/33-22-00-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-22-00-960-802

7. Ceiling Light, Direct - LED Light Assembly Replacement

(Figure 204)

A. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
23-42-03-470-801	Attendant Control Panel (ACP) - Software Loading (P/B 201)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
121	Light assembly	33-22-00-01-015	SIA ALL
		33-22-00-01-050	SIA ALL
		33-22-00-04J-200	SIA 001-005
		33-22-00-15-200	SIA ALL
		33-22-00-15-235	SIA ALL
		33-22-51-10-150	SIA ALL

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage
211	Flight Compartment - Left

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Ceiling LED Light Assembly Replacement

SUBTASK 33-22-00-860-021

(1) Do these steps at the applicable attendant control panel:

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) On the attendant control panel display, touch the Lighting tab.

(e) Below the passenger seating area, touch the OFF button.

SUBTASK 33-22-00-010-007

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-860-022

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	5	C01939	COVE LIGHT

SUBTASK 33-22-00-010-004

(4) Open the applicable access panel to get to the direct ceiling light assembly [121].

SUBTASK 33-22-00-040-003

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(5) Before you touch the light assembly [121], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-000-802).

SUBTASK 33-22-00-020-002

(6) Do these steps to remove the direct ceiling light assembly [121]:

(a) Remove the lens [123].

(b) Disconnect the electrical connectors [124].

(c) Remove the screws [122].

(d) Remove the direct ceiling light assembly [121].

SUBTASK 33-22-00-040-004

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(7) Before you touch the light assembly [121], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-400-802).

SUBTASK 33-22-00-420-002

(8) Do these steps to install the direct ceiling light assembly [121]:

(a) Detach the lens [123] from the direct ceiling light assembly [121].

(b) Put the direct ceiling light assembly [121] in position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Install the direct ceiling light assembly [121] with the screws [122].

1) Tighten the screw [122].

(d) Connect the electrical connectors [124].

(e) Attach the lens [123] to the direct ceiling light assembly [121].

SUBTASK 33-22-00-410-005

(9) Close the applicable access panel.

SUBTASK 33-22-00-860-023

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(10) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	5	C01939	COVE LIGHT

SUBTASK 33-22-00-410-007

(11) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-024

(12) Load the software to the new light assembly, do this task: Attendant Control Panel (ACP) - Software Loading, TASK 23-42-03-470-801.

SUBTASK 33-22-00-860-040

(13) Do a test of the new light assembly.

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) Make sure that the CAB/UTIL switch at the P5-13 panel is set to the ON position.

(e) On the attendant control panel display, touch the Lighting tab.

(f) Below the passenger seating area, touch the White BRIGHT button.

1) Make sure that the light comes on brightly.

(g) Touch the White MEDIUM button.

1) Make sure that the light becomes medium.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(h) Touch the Boarding/Deplane button.

1) Make sure that the light color in the passenger compartment is equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The light can take at least 15 seconds to change.

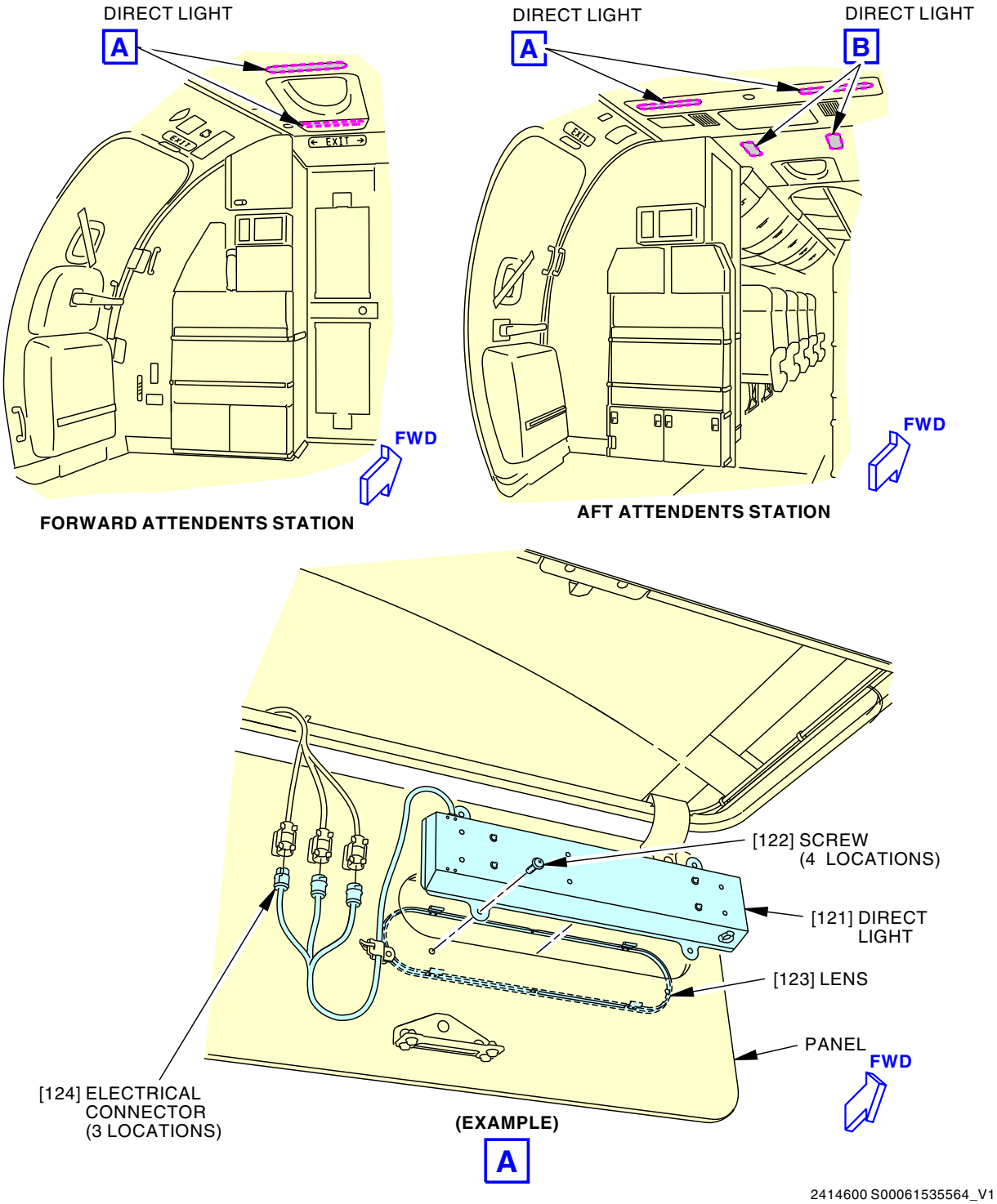
(i) Touch the OFF button.

1) Make sure that the light goes off.

(j) If it is not necessary, set the CAB/UTIL switch at the P5-13 panel to the OFF position.

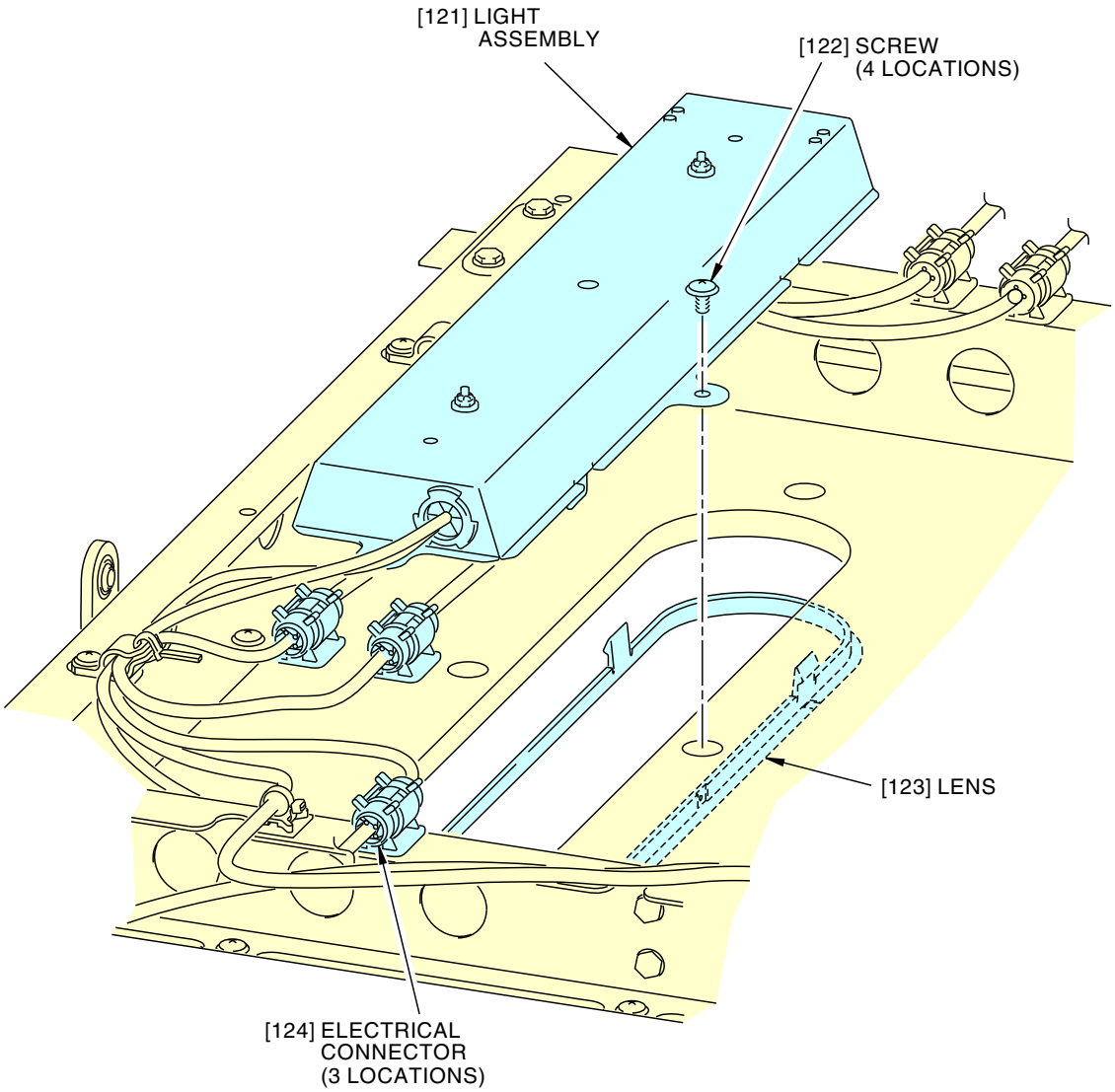
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Ceiling Light, Direct - LED Light Assembly Replacement
Figure 204/33-22-00-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



DIRECT LIGHT ASSEMBLY (EXAMPLE)

B

2414601 S00061535565_V1

Ceiling Light, Direct - LED Light Assembly Replacement
Figure 204/33-22-00-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-22-00-960-803

8. Ceiling Light, Cove - LED Light Assembly Replacement

(Figure 205)

A. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
23-42-03-470-801	Attendant Control Panel (ACP) - Software Loading (P/B 201)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
143	Light assembly	33-22-00-03M-057	SIA ALL
		33-22-00-03M-060	SIA ALL
		33-22-00-03M-122	SIA ALL
		33-22-00-03M-125	SIA ALL
		33-22-00-04J-025	SIA 001-005
		33-22-00-04J-090	SIA 001-005
		33-22-00-15-025	SIA ALL
		33-22-00-15-027	SIA ALL
		33-22-00-15-090	SIA ALL
		33-22-00-15-092	SIA ALL
		33-22-51-10-030	SIA ALL
		33-22-51-10-090	SIA ALL

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage
211	Flight Compartment - Left

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Ceiling LED Light Assembly Replacement

SUBTASK 33-22-00-860-027

(1) Do these steps at the applicable attendant control panel:

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) On the attendant control panel display, touch the Lighting tab.

(e) Below the passenger seating area, touch the OFF button.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-010-009

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-028

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	5	C01939	COVE LIGHT

SUBTASK 33-22-00-010-005

(4) Do these steps to get access to the ceiling cove light assembly [143]:

(a) Open the applicable access panel to get to the cove light cover [141].

(b) Remove the screws [142].

(c) Remove the cove light cover [141].

SUBTASK 33-22-00-040-005

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(5) Before you touch the light assembly [143], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-000-802).

SUBTASK 33-22-00-020-003

(6) Do these steps to remove the ceiling cove light assembly [143]:

NOTE: There are two ceiling cove light assemblies under the cove light cover. Each ceiling cove light assembly contains two LED light strips. Both LED light strips need to be removed at the same time.

(a) Disconnect the electrical connecctors [144].

(b) Remove the screws [145].

(c) Remove the ceiling cove light assembly [143].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-040-006

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(7) Before you touch the light assembly [143], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-400-802).

SUBTASK 33-22-00-420-003

(8) Do these steps to install the ceiling cove light assembly [143]:

(a) Place the ceiling cove light assembly [143] in its location on the panel.

(b) Install the screws [145].

(c) Tighten the screws [145].

(d) Connect the electrical connecctors [144].

(e) Install the cove light cover [141] with the screws [142].

1) Tighten the screws [142].

(f) Close the access panel.

SUBTASK 33-22-00-860-029

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(9) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	5	C01939	COVE LIGHT

SUBTASK 33-22-00-410-009

(10) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-030

(11) Load the software to the new light assembly, do this task: Attendant Control Panel (ACP) - Software Loading, TASK 23-42-03-470-801.

SUBTASK 33-22-00-710-003

(12) Do a test of the new light assembly.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) Make sure that the CAB/UTIL switch at the P5-13 panel is set to the ON position.

(e) On the attendant control panel display, touch the Lighting tab.

(f) Below the passenger seating area, touch the White BRIGHT button.

1) Make sure that the light comes on brightly.

(g) Touch the White MEDIUM button.

1) Make sure that the light becomes medium.

(h) Touch the Boarding/Deplane button.

1) Make sure that the light color in the passenger compartment is equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The light can take at least 15 seconds to change.

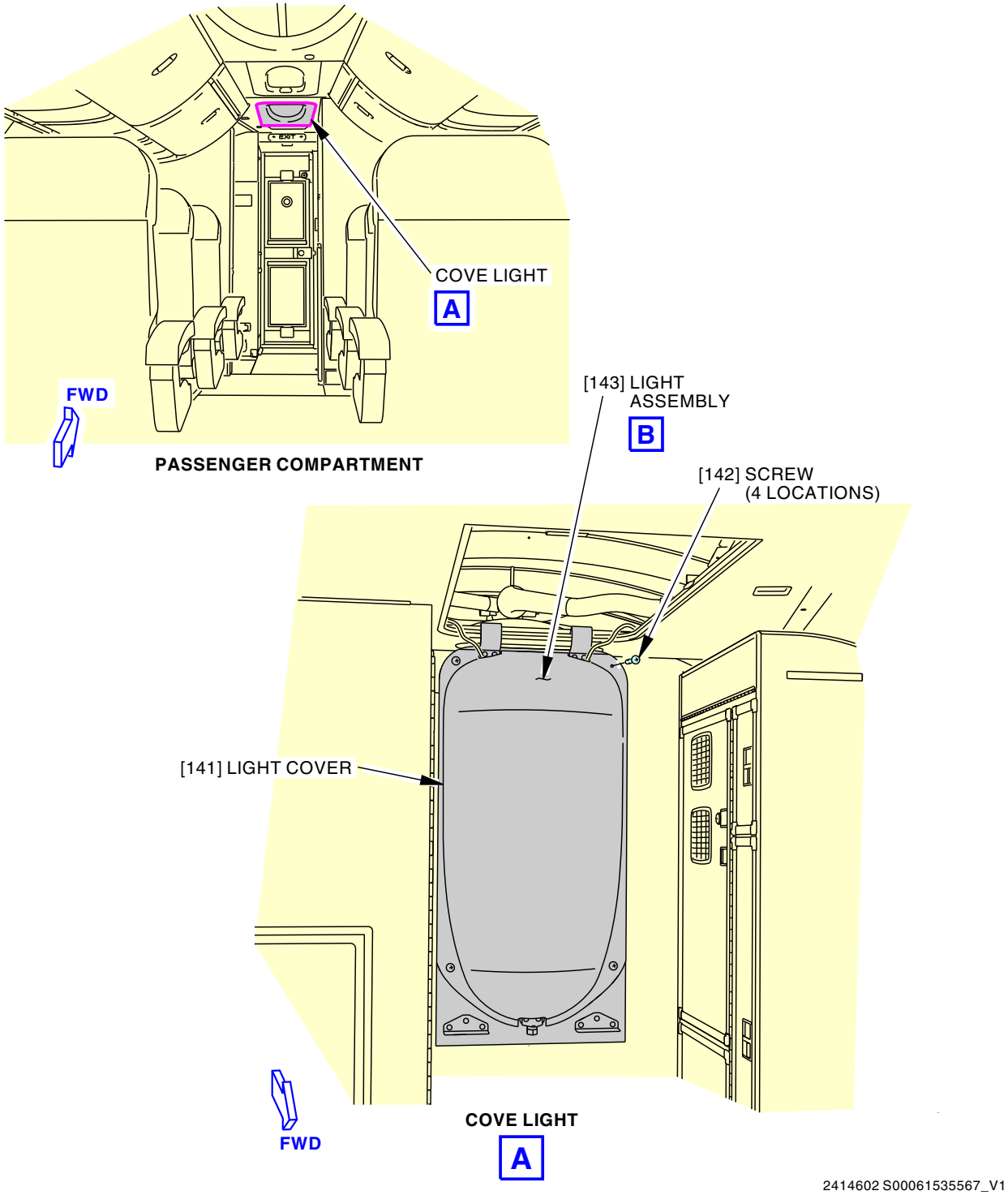
(i) Touch the OFF button.

1) Make sure that the light goes off.

(j) If it is not necessary, set the CAB/UTIL switch at the P5-13 panel to the OFF position.

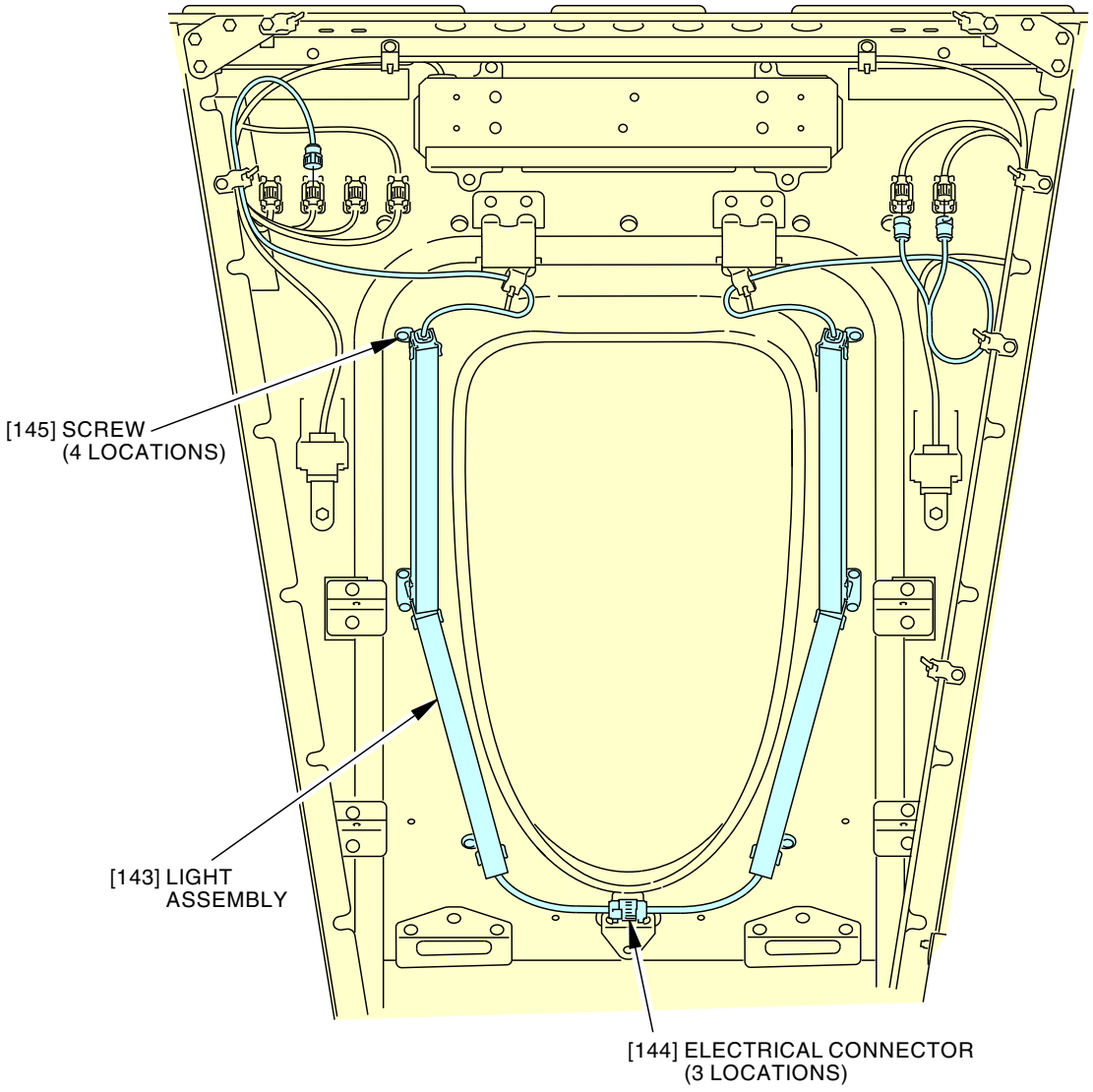
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Ceiling Light, Cove - LED Light Assembly Replacement
Figure 205/33-22-00-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LIGHT ASSEMBLY
(VIEW IN THE AFT DIRECTION)

B

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Ceiling Light, Cove - LED Light Assembly Replacement
Figure 205/33-22-00-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-22-00-960-804

9. Ceiling Light, Center Overhead Stowage - LED Light Assembly Replacement

(Figure 206)

A. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
23-42-03-470-801	Attendant Control Panel (ACP) - Software Loading (P/B 201)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
161	Light assembly	33-22-51-01-050	SIA ALL
		33-22-51-01-080	SIA ALL
		33-22-51-02-050	SIA ALL
		33-22-51-02-080	SIA ALL
		33-22-51-03-050	SIA ALL
		33-22-51-04-050	SIA ALL
		33-22-51-04-080	SIA ALL

C. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
200	Upper Half of Fuselage
211	Flight Compartment - Left

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Ceiling LED Light Assembly Replacement

SUBTASK 33-22-00-860-033

(1) Do these steps at the applicable attendant control panel:

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) On the attendant control panel display, touch the Lighting tab.

(e) Below the passenger seating area, touch the OFF button.

SUBTASK 33-22-00-010-010

(2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-860-034

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Open these circuit breakers and install safety tags:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
E	7	C01937	CEILING LIGHT AFT-L
E	8	C01938	CEILING LIGHT AFT-R
E	9	C00590	CEILING LT-R
E	10	C00591	CEILING LT-L

SUBTASK 33-22-00-010-006

(4) Do these steps to get access to the ceiling center overhead stowage light assembly [161]:

(a) Open the Center Overhead Stowage (COS) box door.

(b) Remove the screw [169] and fasteners [170] front, aft, mid, and 2 uppers of the COS box side panel.

NOTE: Side panel will drop on outboard stow bin and lanyard.

(c) Close the COS box door.

(d) Remove the lanyards [171] and side panel.

SUBTASK 33-22-00-040-007

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(5) Before you touch the light assembly [161], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-000-802).

SUBTASK 33-22-00-020-004

(6) Do these steps to remove the ceiling center overhead stowage light assembly [161]:

(a) Disconnect the electrical connectors [162].

(b) Remove the screw [168] for the ground wire.

(c) Hold the light assembly [161] and loosen the screw [172] from the light box.

(d) Remove the light assembly [161].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-040-008

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(7) Before you touch the light assembly [161], do the procedure for devices that are sensitive to electrostatic discharge (TASK 20-40-12-400-802).

SUBTASK 33-22-00-420-004

(8) Do these steps to install the ceiling center overhead stowage light assembly [161]:

(a) Attach the light assembly [161] to the light box.

(b) Tighten the screw [172] to the light box.

(c) Install the ground wire of the ceiling center overhead stowage light assembly [161] on the light box with the screw [168].

(d) Connect the electrical connector [162] from each end of the light assembly [161].

SUBTASK 33-22-00-410-006

(9) Do these steps to install the COS box side panel:

(a) Install the lanyards [171] and side panel to the light box.

(b) Open the COS box door.

(c) Slide the side panel into the stow bin.

(d) Install the screw [169] and fasteners [170] at front, aft, mid, and 2 uppers of the COS box side panel.

(e) Close the COS box door.

SUBTASK 33-22-00-860-035

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(10) Remove the safety tags and close these circuit breakers:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
E	7	C01937	CEILING LIGHT AFT-L
E	8	C01938	CEILING LIGHT AFT-R
E	9	C00590	CEILING LT-R
E	10	C00591	CEILING LT-L

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-22-00-410-010

(11) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-22-00-860-036

(12) Load the software to the new light assembly, do this task: Attendant Control Panel (ACP) - Software Loading, TASK 23-42-03-470-801.

SUBTASK 33-22-00-710-004

(13) Do a test of the new light assembly.

(a) Make sure that the attendant control panel display is activated.

(b) To activate it, touch the opposite corners of the display sequentially within two seconds.

(c) If it is necessary, input the password to get access to the attendant control panel.

(d) Make sure that the CAB/UTIL switch at the P5-13 panel is set to the ON position.

(e) On the attendant control panel display, touch the Lighting tab.

(f) Below the passenger seating area, touch the White BRIGHT button.

1) Make sure that the light comes on brightly.

(g) Touch the White MEDIUM button.

1) Make sure that the light becomes medium.

(h) Touch the Boarding/Deplane button.

1) Make sure that the light color in the passenger compartment is equivalent to the light type shown below the general lighting layout on the attendant control panel display.

NOTE: The light can take at least 15 seconds to change.

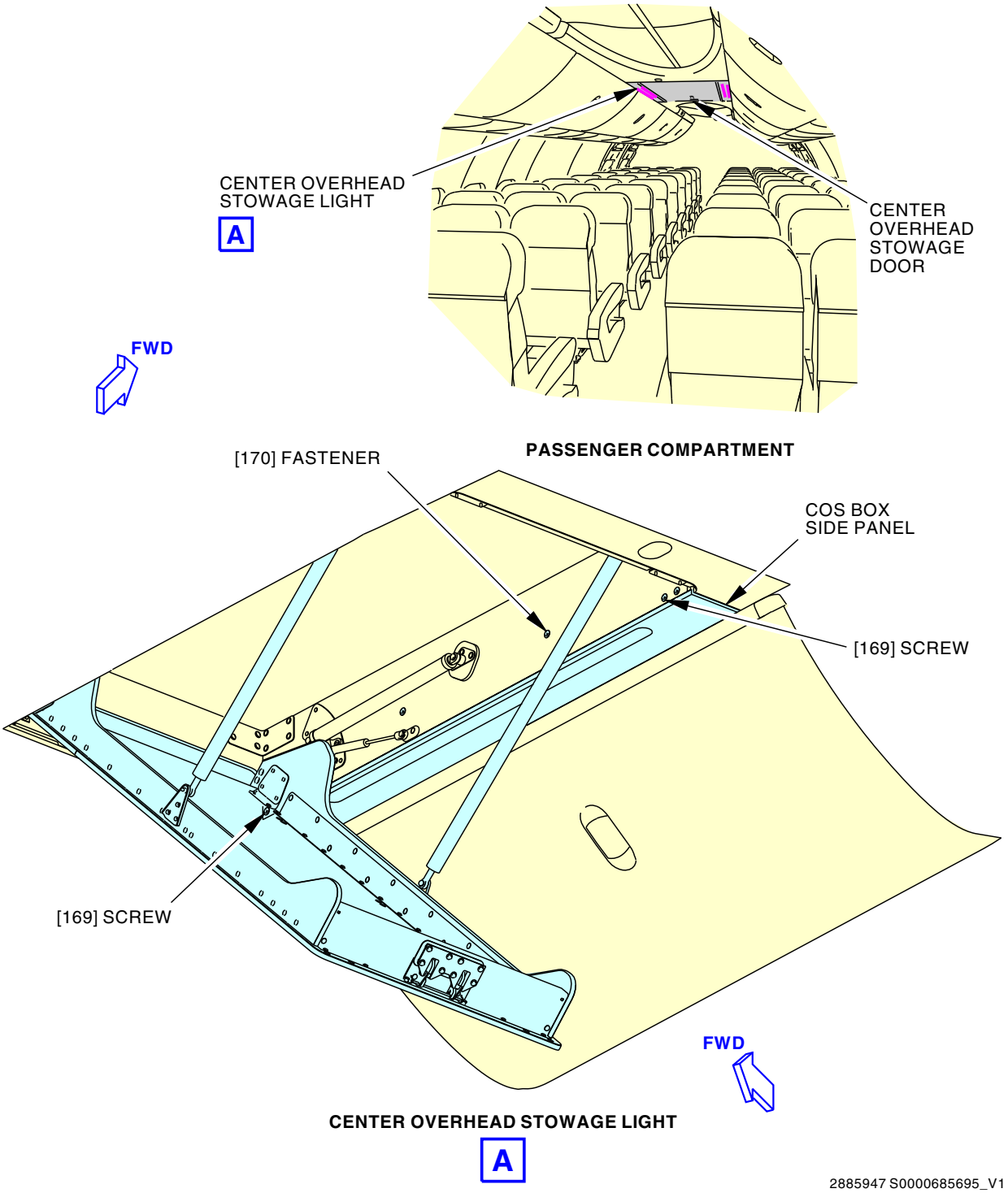
(i) Touch the OFF button.

1) Make sure that the light goes off.

(j) If it is not necessary, set the CAB/UTIL switch at the P5-13 panel to the OFF position.

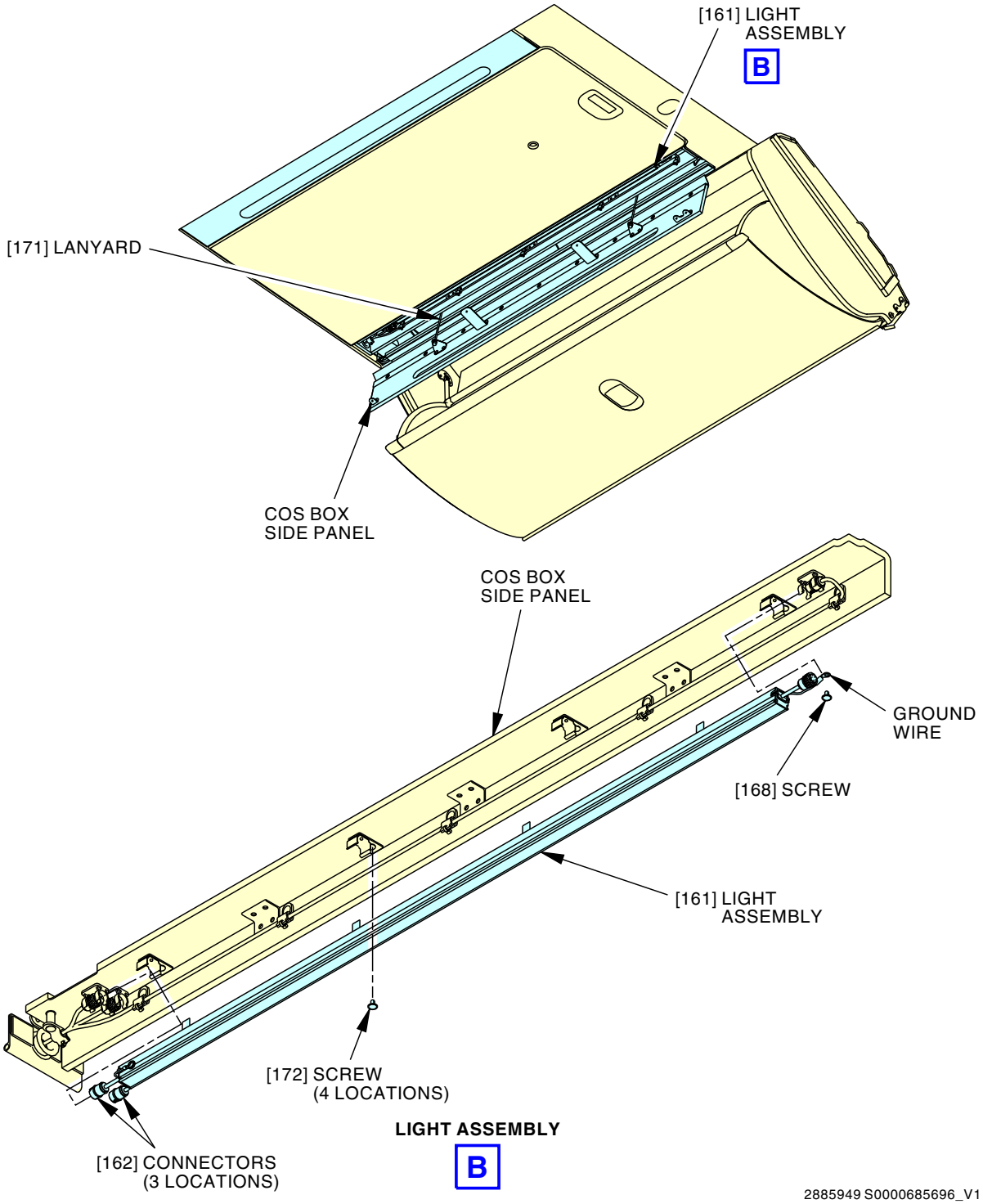
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Ceiling Light, Center Overhead Stowage - LED Light Assembly Replacement
Figure 206/33-22-00-990-807 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Ceiling Light, Center Overhead Stowage - LED Light Assembly Replacement
Figure 206/33-22-00-990-807 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CEILING LIGHTS - INSPECTION/CHECK

1. General

A. This procedure has this task:

(1) BSI LED Light - Inspection/Check

TASK 33-22-00-200-801

2. BSI LED Light - Inspection/Check

(Figure 601)

A. General

(1) This procedure does a visual inspection of the ceiling Light Emitting Diode (LED) lights.

(2) A maximum of 20% of the ceiling LED lights can be not serviceable if the lights opposite and adjacent to them are serviceable.

(3) The LED direct lights and cove lights at the ends of the passenger cabin are not counted as ceiling lights. These lights are not critical for the charge of the photoluminescent strips.

B. References

Reference	Title
33-22-00-960-801	Ceiling Light, Bin/Wash - LED Light Assembly Replacement (P/B 201)
33-22-00-960-804	Ceiling Light, Center Overhead Stowage - LED Light Assembly Replacement (P/B 201)

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Prepare for the Inspection

SUBTASK 33-22-00-440-001

(1) Make sure that the CAB/UTIL switch at the P5–13 panel is set to the ON position.

E. BSI LED Lights - Inspection/Check

SUBTASK 33-22-00-200-001

(1) Do a visual examination of the ceiling lights.

(a) Make sure that the attendant control panel display is activated.

1) To activate it, touch the opposite corners of the display sequentially within two seconds.

(b) On the attendant control panel display, touch the Lighting tab.

(c) Below the Passenger Seating Area, touch the White Bright button.

(d) Make sure that the ceiling lights, bullnose ceiling lights, wash only ceiling lights, and the Center Overhead Stowage (COS) lights (if installed) are on.

NOTE: The LED direct lights and cove lights at the ends of the passenger cabin are not part of this inspection.

1) The long light assemblies in Table 601 are considered serviceable if:

a) Less than 16 inches of the assembly is not serviceable.

b) A cross-bin element assembly with one section set to off can have one more section not serviceable of less than 16 inches.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 601/33-22-00-993-801 Ceiling Light Assemblies And Minimum Assembly Lengths

Light Assembly	Element Assembly	Minimum Assembly Length
COS Light Assembly	COS Element Assembly	40 in. (1016 mm)
Wash-only Ceiling Light Assembly	Wash Element Assembly	40 in. (1016 mm)
Ceiling Light Assembly	Wash Element Assembly	40 in. (1016 mm)
	Cross-bin Element Assembly	40 in. (1016 mm)
Bullnose Ceiling Light Assembly	Wash Element Assembly	40 in. (1016 mm)
	Cross-bin Element Assembly	55 in. (1397 mm)

2) If necessary, replace the unserviceable light assembly. Do this task: Ceiling Light, Bin/Wash - LED Light Assembly Replacement, TASK 33-22-00-960-801 or Ceiling Light, Center Overhead Stowage - LED Light Assembly Replacement, TASK 33-22-00-960-804.

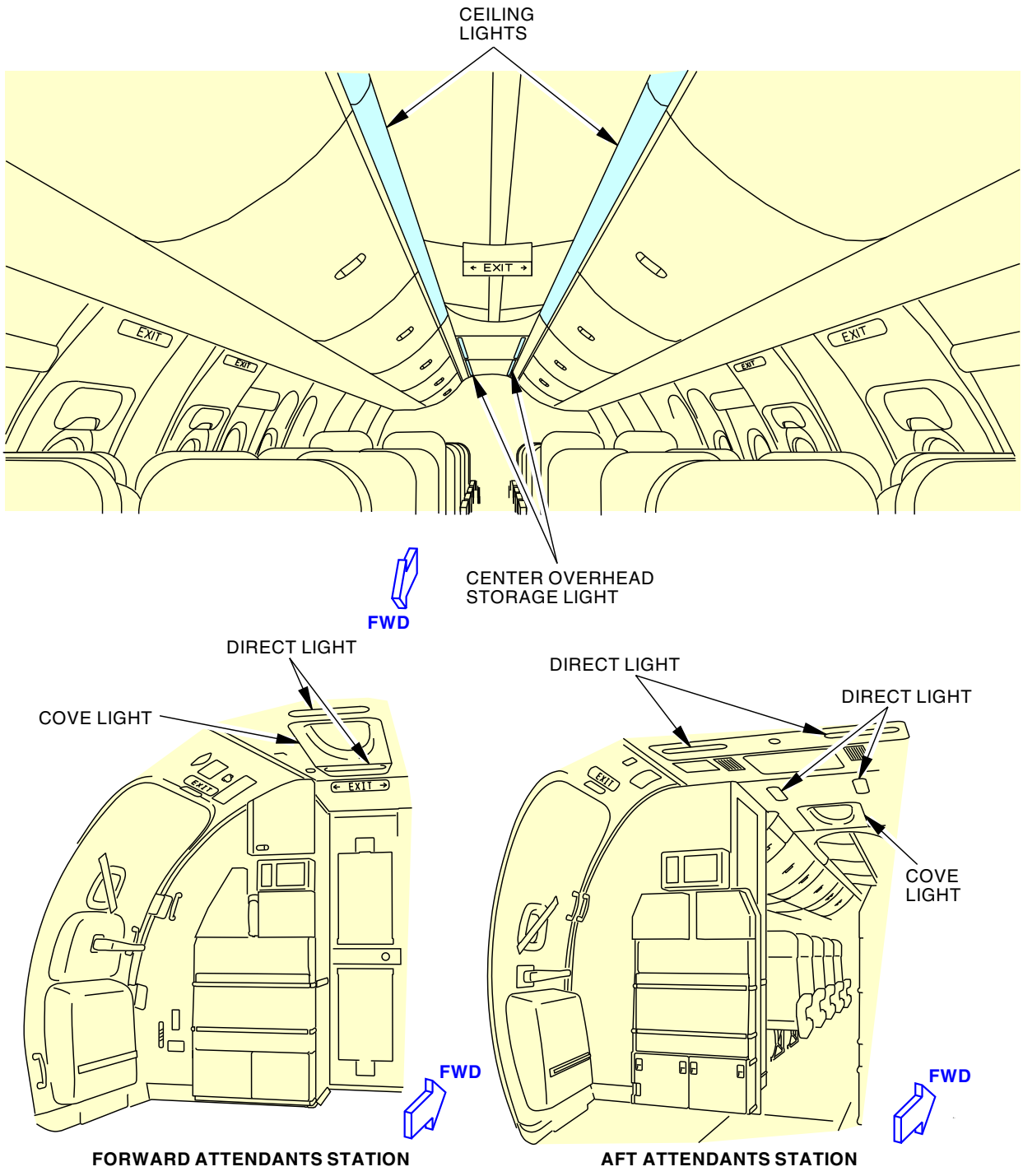
F. Put the Airplane Back to its Usual Condition

SUBTASK 33-22-00-040-009

(1) If the ceiling lighting is not necessary, set the CAB/UTIL switch at the P5–13 panel to the OFF position.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



BSI LED Lights - Ceiling Lights
Figure 601/33-22-00-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

READING LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Reading Lights Deactivation.

(2) Reading Lights Activation.

(3) Reading Light - Light Assembly Replacement.

(4) Reading Light - Adjustment.

TASK 33-23-00-040-801

2. Reading Lights - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power to the reading lights.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. Reading Lights Deactivation

SUBTASK 33-23-00-010-001

(1) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-23-00-860-001

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open these circuit breakers and install safety tags:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
B	1	C00087	PASS READING LIGHTS LEFT
B	2	C00088	PASS READING LIGHTS-LEFT
B	3	C00089	PASS READING LIGHTS-LEFT
B	4	C00090	PASS READING LIGHTS-LEFT
B	5	C00091	PASS READING LIGHTS-LEFT
B	6	C00092	PASS READING LIGHTS-LEFT
B	7	C00773	PASS READING LIGHTS-LEFT
B	8	C01152	PASS READING LIGHTS-LEFT
B	9	C01153	PASS READING LIGHTS-LEFT

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
B	1	C00094	PASS READING LIGHTS-RIGHT STA 340-464
B	2	C00095	PASS READING LIGHTS-RIGHT
B	3	C00096	PASS READING LIGHTS-RIGHT
B	4	C00097	PASS READING LIGHTS-RIGHT
B	5	C00098	PASS READING LIGHTS-RIGHT
B	6	C00099	PASS READING LIGHTS-RIGHT
B	7	C00774	PASS READING LIGHTS-RIGHT
B	8	C01437	PASS READING LIGHTS-RIGHT
B	9	C01438	PASS READING LIGHTS-RIGHT

SUBTASK 33-23-00-410-003

(3) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

E. Reading Lights - Tryout

NOTE: This tryout is to make sure that the Reading Lights are in a zero energy state.

SUBTASK 33-23-00-700-001

(1) Do these steps at a Passenger Service Unit (PSU):

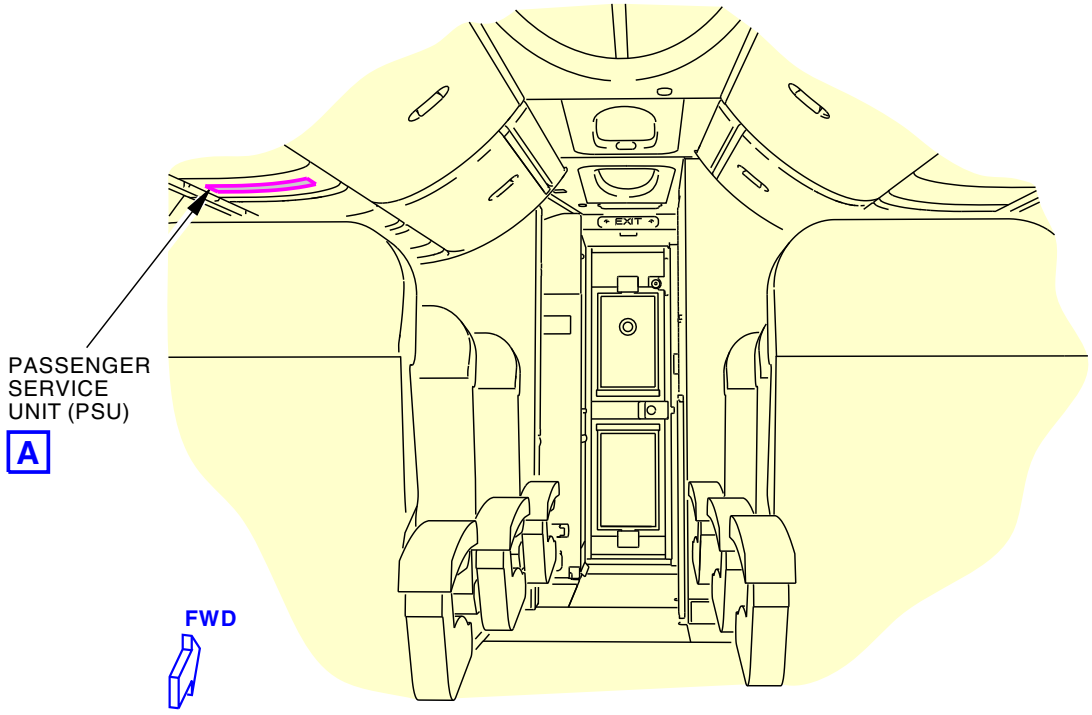
(a) Set the switch for the reading light to the on mode.

1) Make sure that the reading light does not come on.

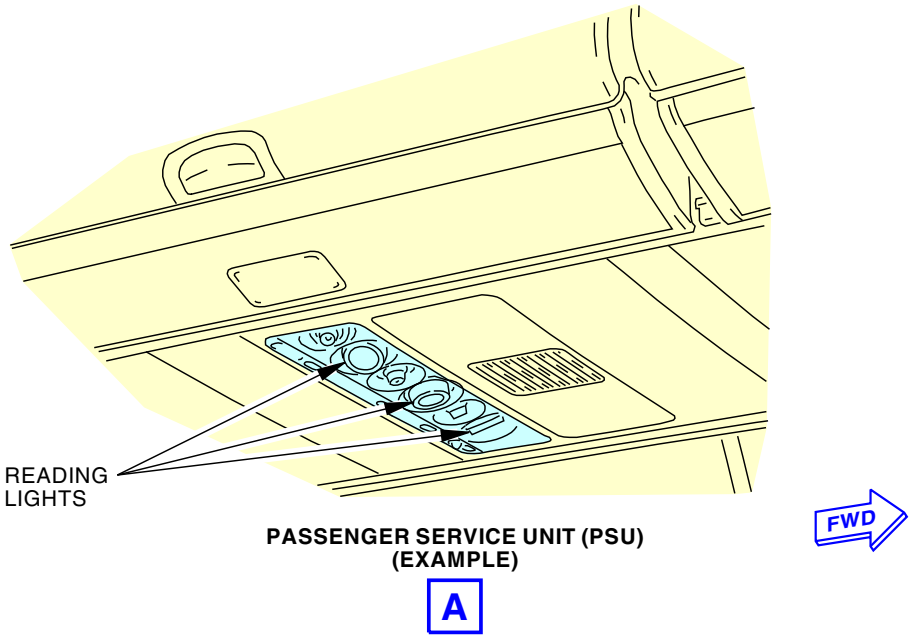
(b) Set the switch to the off mode.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



PASSENGER COMPARTMENT



PASSENGER SERVICE UNIT (PSU)
(EXAMPLE)

A

2414605 S00061535575_V2

Reading Lights
Figure 201/33-23-00-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-23-00-440-801

3. Reading Lights - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the reading lights.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. Reading Lights Activation

SUBTASK 33-23-00-010-003

(1) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-23-00-860-002

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Remove the safety tags and close these circuit breakers:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
B	1	C00087	PASS READING LIGHTS LEFT
B	2	C00088	PASS READING LIGHTS-LEFT
B	3	C00089	PASS READING LIGHTS-LEFT
B	4	C00090	PASS READING LIGHTS-LEFT
B	5	C00091	PASS READING LIGHTS-LEFT
B	6	C00092	PASS READING LIGHTS-LEFT
B	7	C00773	PASS READING LIGHTS-LEFT
B	8	C01152	PASS READING LIGHTS-LEFT
B	9	C01153	PASS READING LIGHTS-LEFT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
B	1	C00094	PASS READING LIGHTS-RIGHT STA 340-464
B	2	C00095	PASS READING LIGHTS-RIGHT
B	3	C00096	PASS READING LIGHTS-RIGHT
B	4	C00097	PASS READING LIGHTS-RIGHT
B	5	C00098	PASS READING LIGHTS-RIGHT
B	6	C00099	PASS READING LIGHTS-RIGHT
B	7	C00774	PASS READING LIGHTS-RIGHT
B	8	C01437	PASS READING LIGHTS-RIGHT
B	9	C01438	PASS READING LIGHTS-RIGHT

SUBTASK 33-23-00-410-001

(3) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

——— END OF TASK ———

TASK 33-23-00-960-801

4. Reading Light - Light Assembly Replacement

(Figure 202)

A. References

Reference	Title
25-23-61-000-801	Passenger Service Unit - Removal (P/B 401)
25-23-61-400-801	Passenger Service Unit - Installation (P/B 401)

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. Reading Light Assembly Replacement

SUBTASK 33-23-00-010-004

(1) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-23-00-860-003

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open the applicable circuit breakers and install the safety tags:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
B	1	C00087	PASS READING LIGHTS LEFT
B	2	C00088	PASS READING LIGHTS-LEFT
B	3	C00089	PASS READING LIGHTS-LEFT
B	4	C00090	PASS READING LIGHTS-LEFT
B	5	C00091	PASS READING LIGHTS-LEFT
B	6	C00092	PASS READING LIGHTS-LEFT
B	7	C00773	PASS READING LIGHTS-LEFT
B	8	C01152	PASS READING LIGHTS-LEFT
B	9	C01153	PASS READING LIGHTS-LEFT

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
B	1	C00094	PASS READING LIGHTS-RIGHT STA 340-464
B	2	C00095	PASS READING LIGHTS-RIGHT
B	3	C00096	PASS READING LIGHTS-RIGHT
B	4	C00097	PASS READING LIGHTS-RIGHT
B	5	C00098	PASS READING LIGHTS-RIGHT
B	6	C00099	PASS READING LIGHTS-RIGHT
B	7	C00774	PASS READING LIGHTS-RIGHT
B	8	C01437	PASS READING LIGHTS-RIGHT
B	9	C01438	PASS READING LIGHTS-RIGHT

SUBTASK 33-23-00-010-002

(3) For access to the top of the light assembly [23], lower the Passenger Service Unit (PSU) (TASK 25-23-61-000-801).

SUBTASK 33-23-00-960-001

(4) Do these steps to replace the light assembly [23].

(a) Disconnect the electrical connectors [21].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Remove the retaining ring [22].

NOTE: Push apart the ends of the retaining ring [22] to loosen it from the light assembly [23]. Prepare to catch the light assembly [23] when it falls from the panel.

(c) Replace the light assembly [23].

1) Put the light assembly [23] back in the panel.

2) Make sure that the notch on the light assembly [23] aligns with the notch on the panel.

NOTE: The notches can be seen from the top side of the panel.

(d) Install the retaining ring [22] around the light assembly [23].

NOTE: Use pliers to pull together the ends of the retaining ring [22]. The retaining ring [22] must be tight to hold the light assembly [23] in its position.

(e) Connect the electrical connectors [21].

SUBTASK 33-23-00-410-002

(5) Close the PSU (TASK 25-23-61-400-801).

SUBTASK 33-23-00-860-005

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(6) Remove the safety tags and close the applicable circuit breakers:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
B	1	C00087	PASS READING LIGHTS LEFT
B	2	C00088	PASS READING LIGHTS-LEFT
B	3	C00089	PASS READING LIGHTS-LEFT
B	4	C00090	PASS READING LIGHTS-LEFT
B	5	C00091	PASS READING LIGHTS-LEFT
B	6	C00092	PASS READING LIGHTS-LEFT
B	7	C00773	PASS READING LIGHTS-LEFT
B	8	C01152	PASS READING LIGHTS-LEFT
B	9	C01153	PASS READING LIGHTS-LEFT

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
B	1	C00094	PASS READING LIGHTS-RIGHT STA 340-464

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
B	2	C00095	PASS READING LIGHTS-RIGHT
B	3	C00096	PASS READING LIGHTS-RIGHT
B	4	C00097	PASS READING LIGHTS-RIGHT
B	5	C00098	PASS READING LIGHTS-RIGHT
B	6	C00099	PASS READING LIGHTS-RIGHT
B	7	C00774	PASS READING LIGHTS-RIGHT
B	8	C01437	PASS READING LIGHTS-RIGHT
B	9	C01438	PASS READING LIGHTS-RIGHT

SUBTASK 33-23-00-410-004

(7) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-23-00-710-001

(8) Do a test of the new light assembly [23].

(a) Set the switch for the reading light to the on mode.

1) Make sure that the light comes on.

2) Make sure that the reading light is adjusted to give the best lighting for a passenger to read a book.

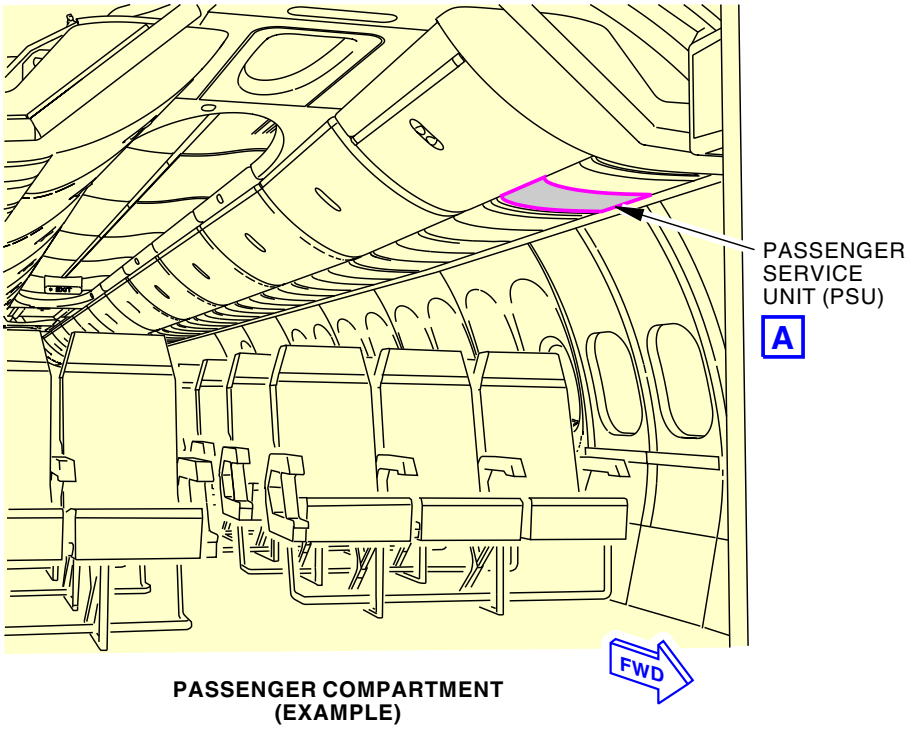
NOTE: The best lighting for a passenger to read a book is at approximately the center of the forward edge of the seat.

(b) Set the switch to the off mode.

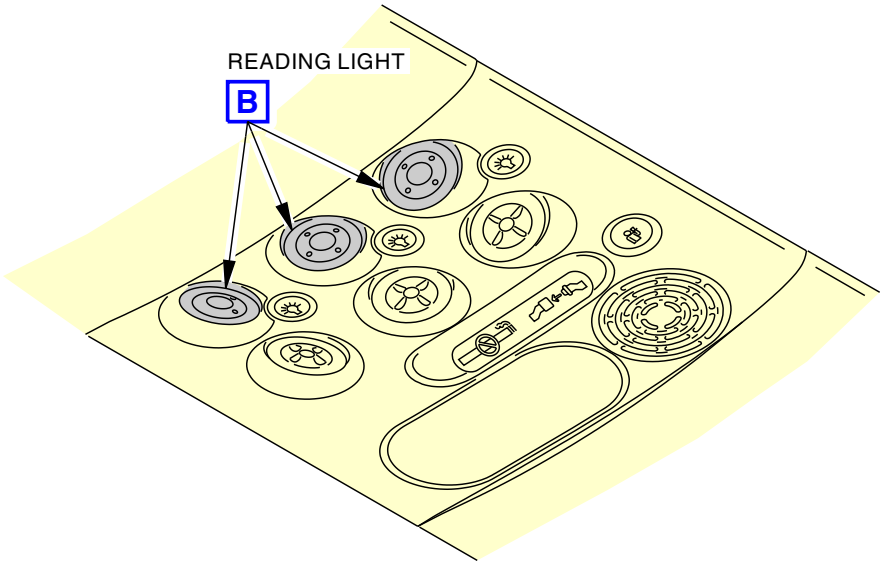
1) Make sure that the light goes off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**PASSENGER COMPARTMENT
(EXAMPLE)**



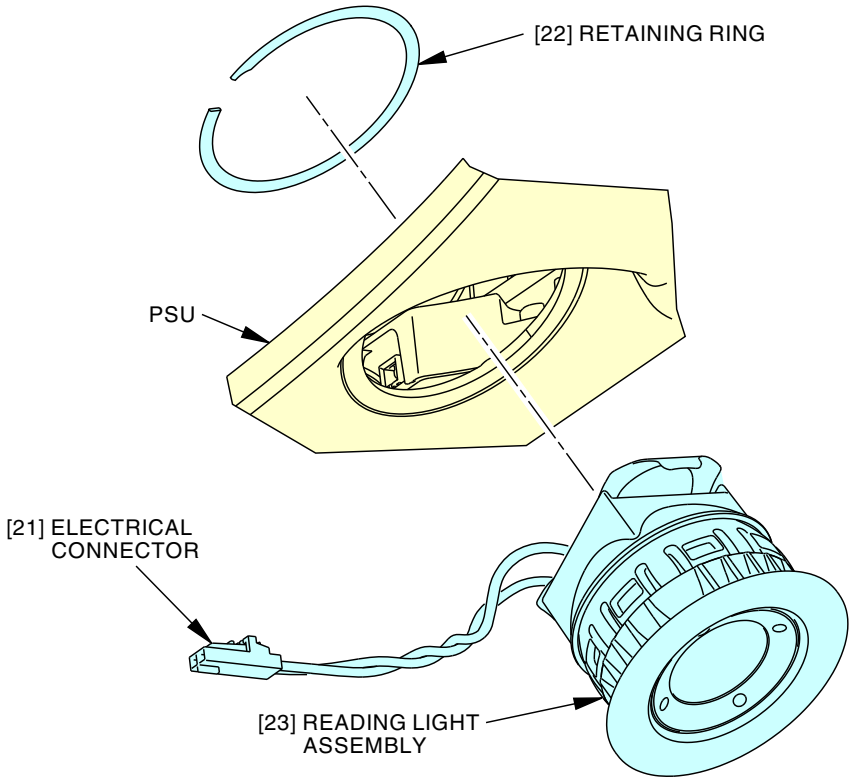
**PASSENGER SERVICE UNIT (PSU)
(EXAMPLE)**

A

2414606 S00061535578_V1

**Reading Light - Light Assembly Replacement
Figure 202/33-23-00-990-802 (Sheet 1 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



READING LIGHT (EXAMPLE)

B

2414607 S00061535579_V1

Reading Light - Light Assembly Replacement
Figure 202/33-23-00-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-23-00-820-801

5. Reading Light - Adjustment and Test

(Figure 203)

A. General

(1) You can permit the passengers and attendants to adjust the direction of the light beam. You can also adjust and lock the reading light in its position. Passengers and attendants cannot change direction of the light beam while the reading light is locked.

B. References

Reference	Title
25-23-61-000-801	Passenger Service Unit - Removal (P/B 401)
25-23-61-400-801	Passenger Service Unit - Installation (P/B 401)

C. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Reading Light Adjustment and Test

SUBTASK 33-23-00-010-005

(1) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-23-00-820-001

(2) Adjusting the reading light.

(a) If the reading light is off, set its switch to the on position.

(b) Examine where the light beam is pointed.

NOTE: The correct adjustment of a reading light is in the direction that gives the best lighting for a person to read a book. This is at approximately the center of the forward edge of the seat.

(c) Remove electrical power from the light.

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

1) Open the applicable circuit breakers and install safety tags:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
B	1	C00087	PASS READING LIGHTS LEFT
B	2	C00088	PASS READING LIGHTS-LEFT
B	3	C00089	PASS READING LIGHTS-LEFT
B	4	C00090	PASS READING LIGHTS-LEFT
B	5	C00091	PASS READING LIGHTS-LEFT
B	6	C00092	PASS READING LIGHTS-LEFT
B	7	C00773	PASS READING LIGHTS-LEFT
B	8	C01152	PASS READING LIGHTS-LEFT
B	9	C01153	PASS READING LIGHTS-LEFT

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
B	1	C00094	PASS READING LIGHTS-RIGHT STA 340-464
B	2	C00095	PASS READING LIGHTS-RIGHT
B	3	C00096	PASS READING LIGHTS-RIGHT
B	4	C00097	PASS READING LIGHTS-RIGHT
B	5	C00098	PASS READING LIGHTS-RIGHT
B	6	C00099	PASS READING LIGHTS-RIGHT
B	7	C00774	PASS READING LIGHTS-RIGHT
B	8	C01437	PASS READING LIGHTS-RIGHT
B	9	C01438	PASS READING LIGHTS-RIGHT

(d) Open the Passenger Service Unit (PSU) to get access to the rear of the reading light (TASK 25-23-61-000-801).

(e) Adjust the direction of the light beam:

1) Use the lever to release the reading light assembly.

2) Move the lens assembly until the reading light is in its correct position.

3) Use the lever to lock the reading light in its position.

(f) Close the PSU (TASK 25-23-61-400-801).

SUBTASK 33-23-00-710-002

(3) Do a test of the light beam adjustment.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(a) Remove the safety tags and close the applicable circuit breakers:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
B	1	C00087	PASS READING LIGHTS LEFT
B	2	C00088	PASS READING LIGHTS-LEFT
B	3	C00089	PASS READING LIGHTS-LEFT
B	4	C00090	PASS READING LIGHTS-LEFT
B	5	C00091	PASS READING LIGHTS-LEFT
B	6	C00092	PASS READING LIGHTS-LEFT
B	7	C00773	PASS READING LIGHTS-LEFT
B	8	C01152	PASS READING LIGHTS-LEFT
B	9	C01153	PASS READING LIGHTS-LEFT

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
B	1	C00094	PASS READING LIGHTS-RIGHT STA 340-464
B	2	C00095	PASS READING LIGHTS-RIGHT
B	3	C00096	PASS READING LIGHTS-RIGHT
B	4	C00097	PASS READING LIGHTS-RIGHT
B	5	C00098	PASS READING LIGHTS-RIGHT
B	6	C00099	PASS READING LIGHTS-RIGHT
B	7	C00774	PASS READING LIGHTS-RIGHT
B	8	C01437	PASS READING LIGHTS-RIGHT
B	9	C01438	PASS READING LIGHTS-RIGHT

(b) Make sure that the reading light is adjusted to give the best lighting for a passenger to read a book.

NOTE: The best lighting for a passenger to read a book is at approximately the center of the forward edge of the seat.

(c) Set the switch to the usual position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

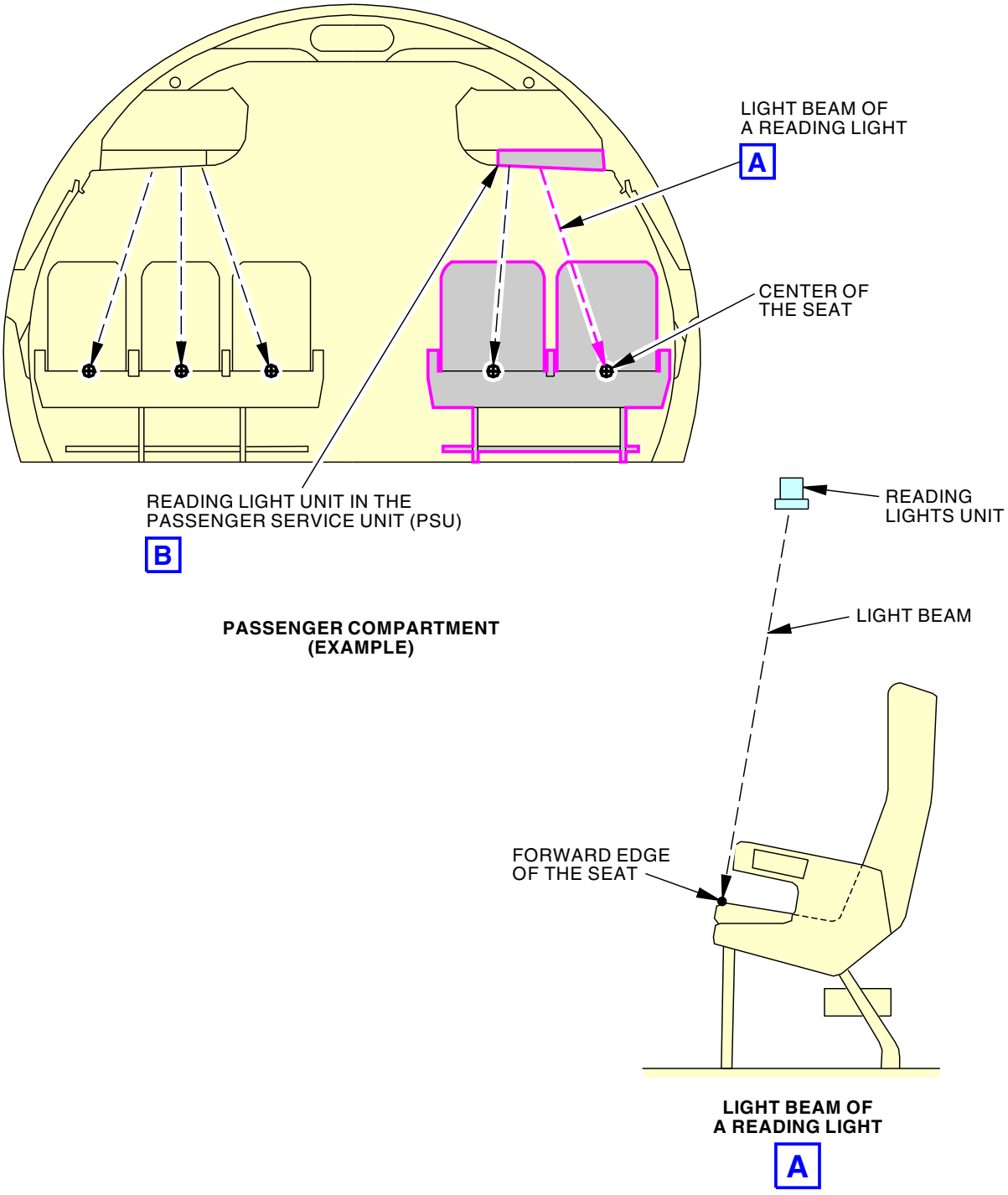
SUBTASK 33-23-00-410-005

(4) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

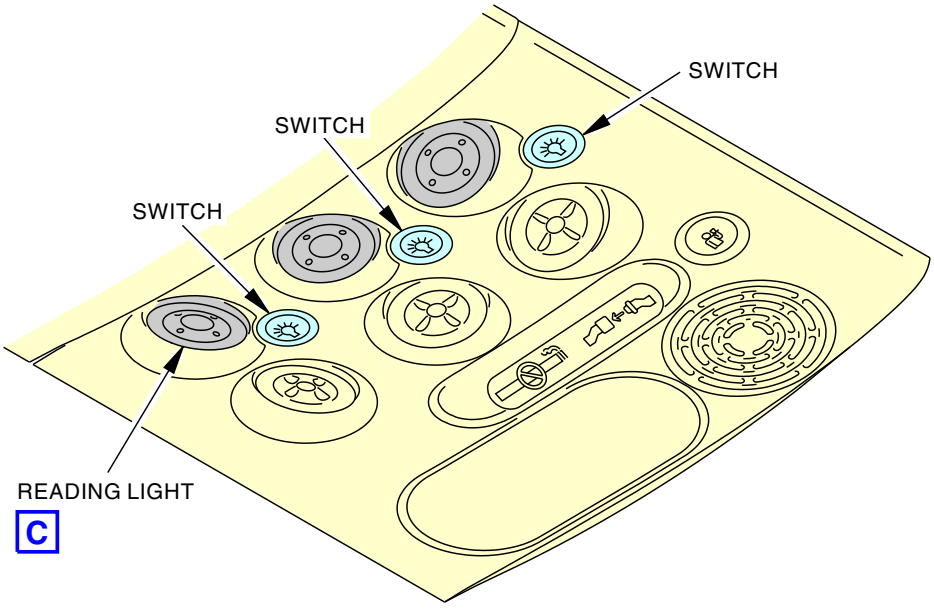
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



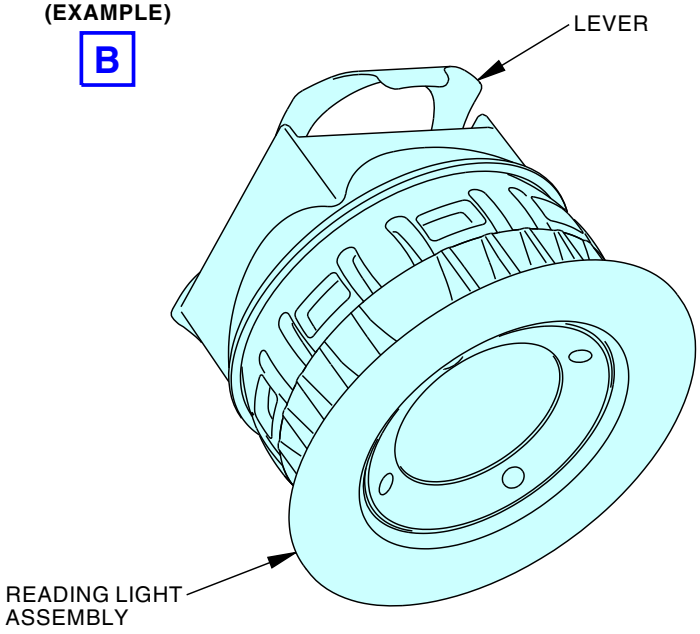
Reading Lights - Light Beam Adjustment
Figure 203/33-23-00-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



READING LIGHTS UNIT (EXAMPLE)

B



READING LIGHT (EXAMPLE)

C

2414609 S00061535582_V1

Reading Lights - Light Beam Adjustment
Figure 203/33-23-00-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

INFORMATION SIGNS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Information Signs - Deactivation

(2) Information Signs - Activation

(3) Information Sign - Light Assembly Replacement for a Passenger Service Unit (PSU) Sign

(4) Information Sign - Lamp Replacement for a No-Smoking/Fasten-Seat-Belt Sing

(5) Information Sign - Light Assembly Replacement for a Return-to-Seat Sign.

B. This procedure includes the no-smoking, fasten-seat-belt, and return-to-seat signs.

NOTE: It does not include the lavatory-occupied signs (TASK 33-26-03-960-804).

TASK 33-25-00-040-801

2. Information Signs - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power from the Information Signs.

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Procedure

SUBTASK 33-25-00-860-001

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	8	C04072	PASS CABIN SIGNS FASTEN SEAT BELT R
C	9	C04071	PASS CABIN SIGNS FASTEN SEAT BELT L
C	10	C01408	PASS CABIN SIGNS NO SMOKING RIGHT
C	11	C01407	PASS CABIN SIGNS NO SMOKING LEFT
D	11	C00442	PASSENGER CABIN SIGNS PASS SIGN CONT

D. Information Signs - Tryout

NOTE: This tryout is to make sure the Information Signs are in a zero energy state.

SUBTASK 33-25-00-210-001

(1) Do these steps to tryout the information signs:

SIA ALL; AIRPLANES WITH PERMANENTLY ILLUMINATED NO SMOKING SIGNS

(a) Make sure that the no-smoking symbol is off.

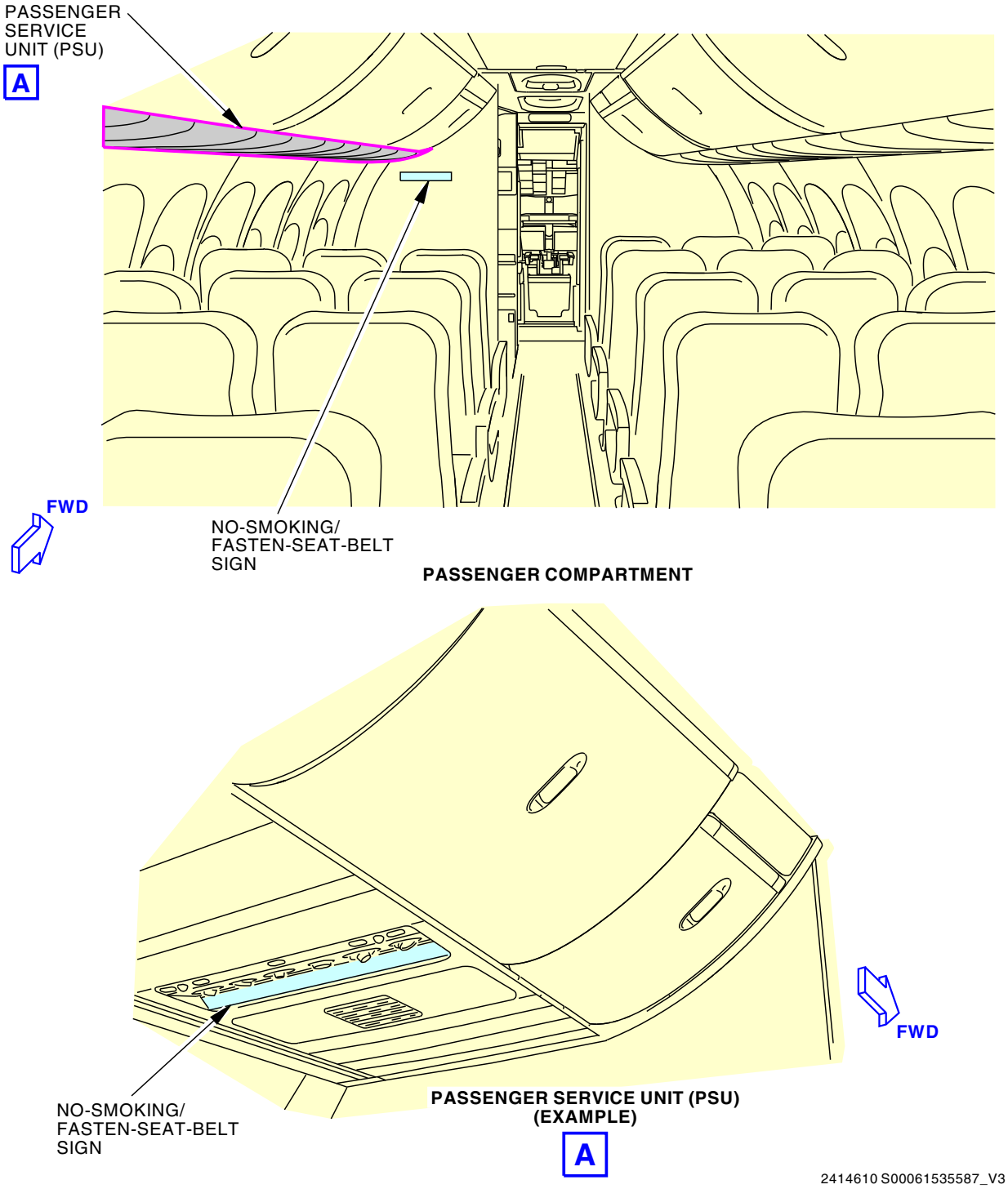
SIA ALL

(b) At the pilots overhead panel, P5, set the switch for the seat belts to the on mode.

1) Make sure that the fasten-seat-belt symbol is off.

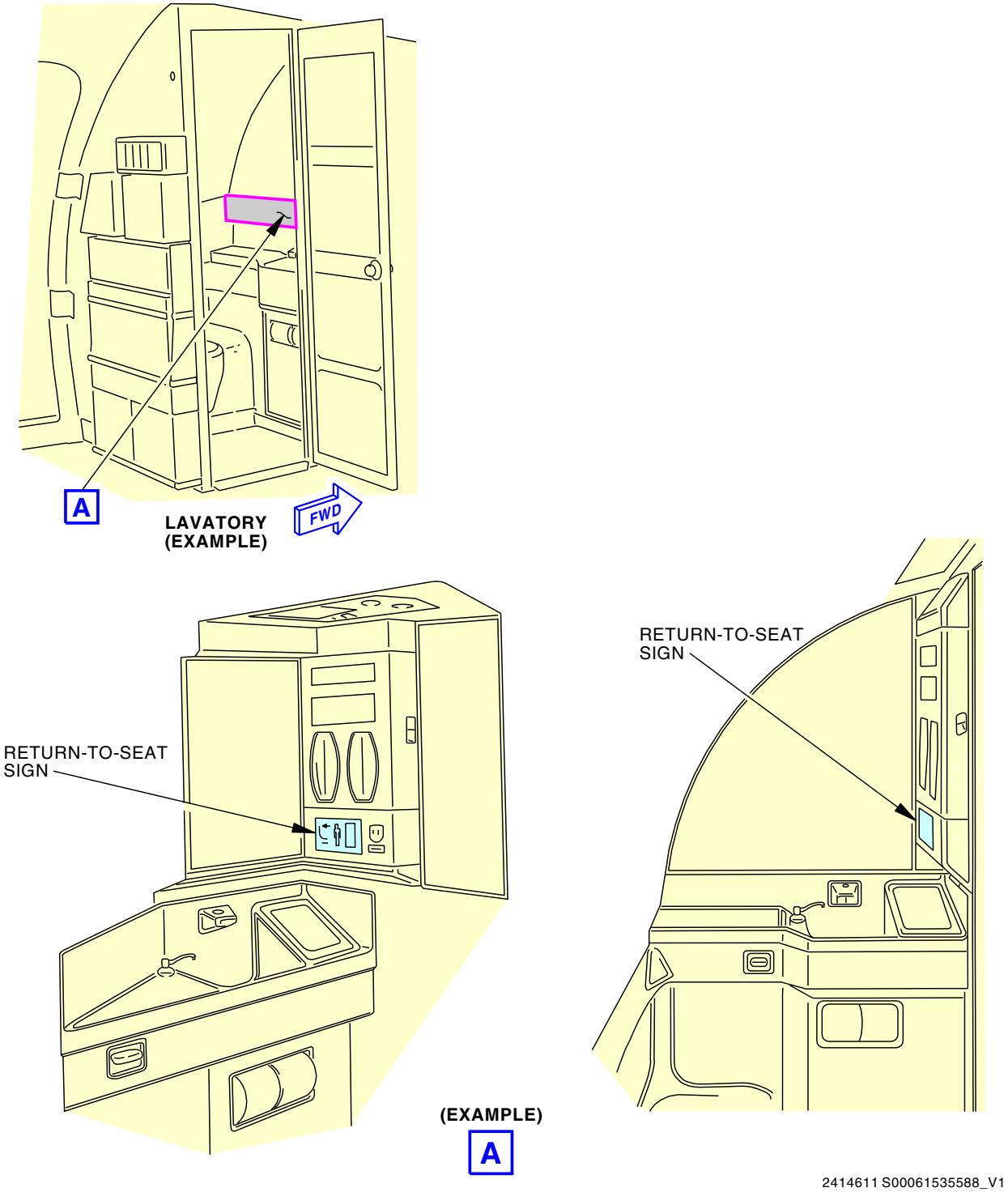
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Information Sign - Lamp Replacement
Figure 201/33-25-00-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Information Sign - Lamp Replacement
Figure 201/33-25-00-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-25-00-440-801

3. Information Signs - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the Information Signs.

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Procedure

SUBTASK 33-25-00-860-002

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	8	C04072	PASS CABIN SIGNS FASTEN SEAT BELT R
C	9	C04071	PASS CABIN SIGNS FASTEN SEAT BELT L
C	10	C01408	PASS CABIN SIGNS NO SMOKING RIGHT
C	11	C01407	PASS CABIN SIGNS NO SMOKING LEFT
D	11	C00442	PASSENGER CABIN SIGNS PASS SIGN CONT

——— END OF TASK ———

TASK 33-25-00-960-801

4. Information Sign - Light Assembly Replacement for a Passenger Service Unit (PSU) Sign

(Figure 202)

A. General

(1) This procedure has steps to do a light assembly replacement for a Passenger Service Unit (PSU) sign.

B. References

Reference	Title
25-23-61-000-801	Passenger Service Unit - Removal (P/B 401)
25-23-61-400-801	Passenger Service Unit - Installation (P/B 401)

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Prepare for the Replacement

SUBTASK 33-25-00-860-003

(1) Open the applicable circuit breakers and install the safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	8	C04072	PASS CABIN SIGNS FASTEN SEAT BELT R
C	9	C04071	PASS CABIN SIGNS FASTEN SEAT BELT L
C	10	C01408	PASS CABIN SIGNS NO SMOKING RIGHT
C	11	C01407	PASS CABIN SIGNS NO SMOKING LEFT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
D	11	C00442	PASSENGER CABIN SIGNS PASS SIGN CONT

E. Procedure

SUBTASK 33-25-00-960-001

(1) Do these steps to replace the light assembly:

(a) Lower the Passenger Service Unit (PSU) (TASK 25-23-61-000-801).

(b) Disconnect the electrical connectors [42].

(c) Pull the light assembly [41] from the clips that attach it to the PSU.

(d) Put the new light assembly [41] in its position.

(e) Push the light assembly [41] until the clips latch it to the PSU.

(f) Connect the electrical connectors [42].

(g) Close the PSU (TASK 25-23-61-400-801).

SUBTASK 33-25-00-960-002

(2) Do these steps to replace the light assembly:

(a) Pull the sign away from the wall.

(b) Disconnect the electrical wires behind the light assembly.

(c) Replace the light assembly.

(d) Connect the electrical wires to the new light assembly.

(e) Push the sign back into the wall.

SUBTASK 33-25-00-860-004

(3) Remove the safety tags and close the applicable circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	8	C04072	PASS CABIN SIGNS FASTEN SEAT BELT R
C	9	C04071	PASS CABIN SIGNS FASTEN SEAT BELT L
C	10	C01408	PASS CABIN SIGNS NO SMOKING RIGHT
C	11	C01407	PASS CABIN SIGNS NO SMOKING LEFT
D	11	C00442	PASSENGER CABIN SIGNS PASS SIGN CONT

F. Replacement Test

SUBTASK 33-25-00-710-001

(1) Do this test of the new light assembly:

SIA ALL; AIRPLANES WITH PERMANENTLY ILLUMINATED NO SMOKING SIGNS

(a) Make sure that the no-smoking symbol comes on when electrical power is supplied.

SIA ALL

(b) At the pilots overhead panel, P5, set the switch for the seat belts to the on mode.

SIA ALL; AIRPLANES WITH PERMANENTLY ILLUMINATED NO SMOKING SIGNS

NOTE: The switch for the no-smoking signs does not operate.

SIA ALL

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Make sure that the fasten-seat-belt symbol comes on.

(c) Set the fasten-seat-belt switch to the off mode.

1) Make sure that the fasten-seat-belt symbol goes off.

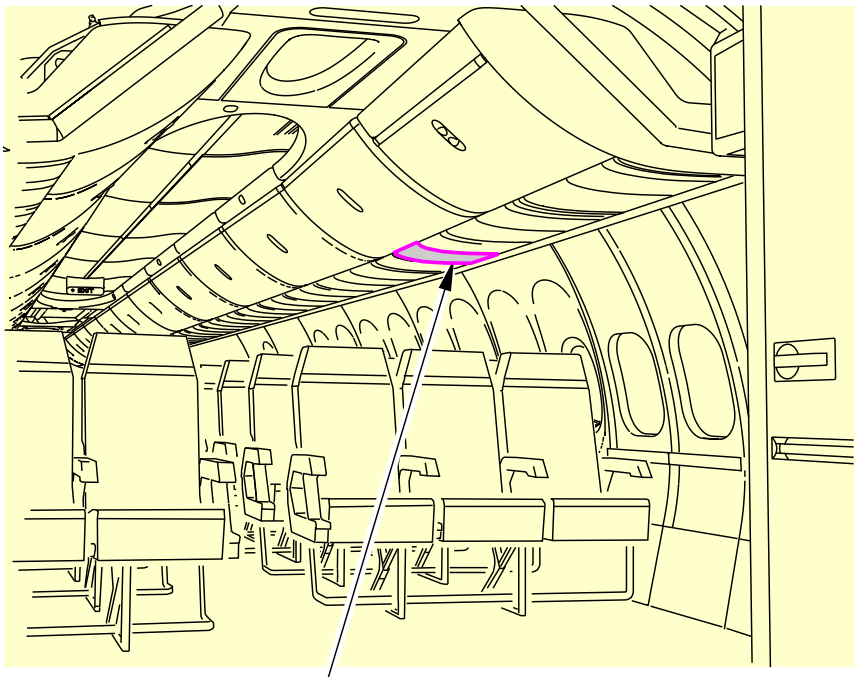
SIA ALL; AIRPLANES WITH PERMANENTLY ILLUMINATED NO SMOKING SIGNS

(d) Make sure that the no-smoking symbol stays on.

SIA ALL

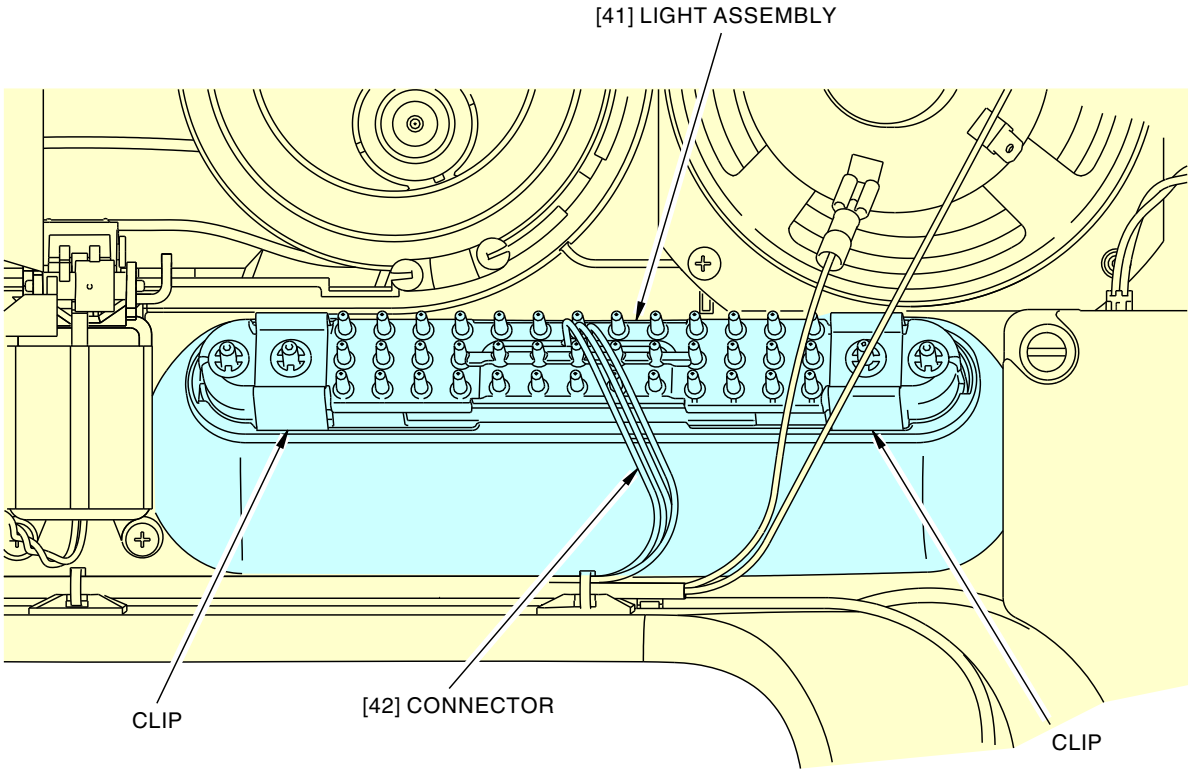
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Information Sign - Passenger Service Unit (PSU) Sign - Light Assembly Replacement
Figure 202/33-25-00-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**LIGHT ASSEMBLY SIGN
(EXAMPLE)**

B

2414613 S00061535592_V3

**Information Sign - Passenger Service Unit (PSU) Sign - Light Assembly Replacement
Figure 202/33-25-00-990-802 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-25-00-960-803

5. Information Sign - Lamp Replacement for a No-Smoking/Fasten-Seat-Belt Sign

(Figure 203)

A. General

(1) This task provides instructions to remove the lamps on the No-Smoking/Fasten-Seat-Belt signs in the Boeing Sky Interior.

(a) To replace the No-Smoking/Fasten-Seat-Belt sign lights installed in the Passenger Service Unit (PSU), the light assembly must be replaced (Information Sign - Light Assembly Replacement for a Passenger Service Unit (PSU) Sign, TASK 33-25-00-960-801).

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Prepare for the Replacement

SUBTASK 33-25-00-860-011

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	8	C04072	PASS CABIN SIGNS FASTEN SEAT BELT R
C	9	C04071	PASS CABIN SIGNS FASTEN SEAT BELT L
C	10	C01408	PASS CABIN SIGNS NO SMOKING RIGHT
C	11	C01407	PASS CABIN SIGNS NO SMOKING LEFT

D. Procedure

SUBTASK 33-25-00-960-004

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(1) Do these steps to replace the lamp:

(a) Pull the sign away from the wall.

(b) Disconnect the electrical wires behind the light assembly.

(c) Remove the two screws that attach the light assembly to the wall.

(d) Pull out the light assembly.

(e) Replace the lamps.

NOTE: The bulbs slide to the side when removed.

(f) Put the light assembly back into the wall.

(g) Tighten the two screws.

(h) Connect the electrical wires from the light assembly.

(i) Push the sign back into the wall.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-25-00-860-012

(2) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	8	C04072	PASS CABIN SIGNS FASTEN SEAT BELT R
C	9	C04071	PASS CABIN SIGNS FASTEN SEAT BELT L
C	10	C01408	PASS CABIN SIGNS NO SMOKING RIGHT
C	11	C01407	PASS CABIN SIGNS NO SMOKING LEFT

E. Replacement Test

SUBTASK 33-25-00-860-013

(1) Do this test of the new light assembly:

SIA ALL; AIRPLANES WITH PERMANENTLY ILLUMINATED NO SMOKING SIGNS

(a) Make sure that the no-smoking symbol comes on when electrical power is supplied.

SIA ALL

(b) At the pilots overhead panel, P5, set the switch for the seat belts to the on mode.

SIA ALL; AIRPLANES WITH PERMANENTLY ILLUMINATED NO SMOKING SIGNS

NOTE: The switch for the no-smoking signs does not operate.

SIA ALL

1) Make sure that the fasten-seat-belt symbol comes on.

(c) Set the fasten-seat-belt switch to the off mode.

1) Make sure that the fasten-seat-belt symbol goes off.

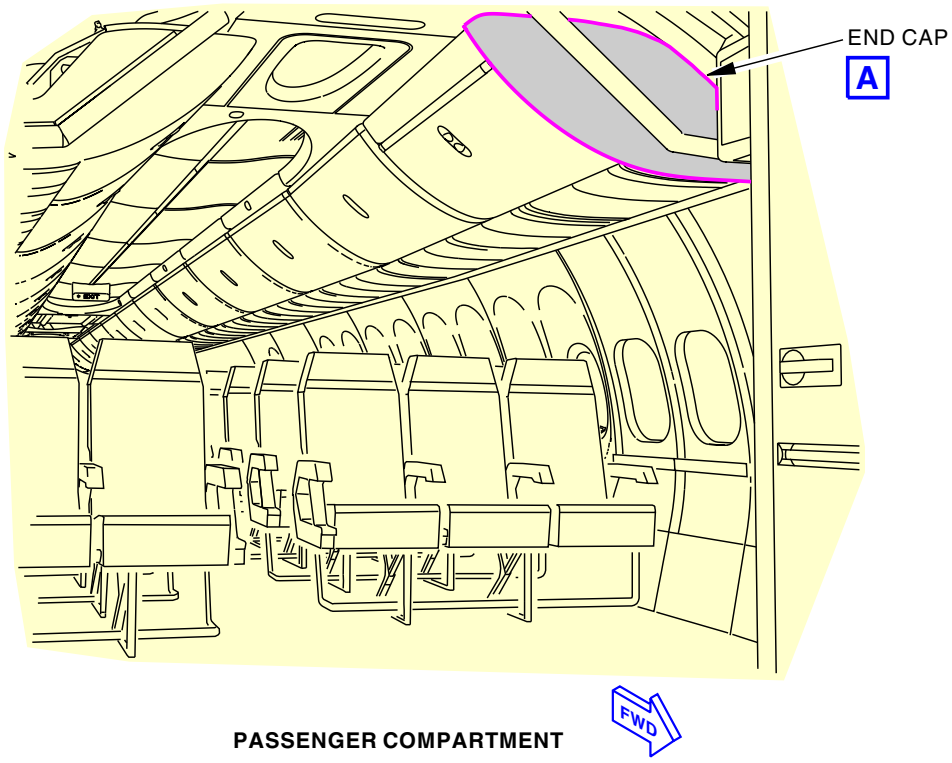
SIA ALL; AIRPLANES WITH PERMANENTLY ILLUMINATED NO SMOKING SIGNS

(d) Make sure that the no-smoking symbol stays on.

SIA ALL

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Information Sign, No-Smoking/Fasten-Seat-Belt Sign - Light Assembly Replacement
Figure 203/33-25-00-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-25-00-960-802

6. Information Sign - Light Assembly Replacement for a Return-to-Seat Sign

(Figure 204)

A. General

(1) This procedure has steps to do a light assembly replacement for a Return-to-Seat sign.

B. References

Reference	Title
WDM 33-25-11	D000534491

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Procedure

SUBTASK 33-25-00-860-007

(1) Open the applicable circuit breaker and install the safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	8	C04072	PASS CABIN SIGNS FASTEN SEAT BELT R
C	9	C04071	PASS CABIN SIGNS FASTEN SEAT BELT L

SUBTASK 33-25-00-960-003

(2) Do these steps to replace the sign: (WDM 33-25-11)

(a) In the lavatory, open the utility door for access to the return-to-seat sign.

(b) Pull the sign away from the wall.

(c) Disconnect the electrical wires.

(d) Replace the light assembly.

(e) Connect the electrical wires from the light assembly.

(f) Push the sign back into the wall.

(g) Close the utility door.

SUBTASK 33-25-00-860-008

(3) Remove the safety tag and close the applicable circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	8	C04072	PASS CABIN SIGNS FASTEN SEAT BELT R
C	9	C04071	PASS CABIN SIGNS FASTEN SEAT BELT L

SUBTASK 33-25-00-710-002

(4) Do a test of the new light assembly.

(a) At the pilots overhead panel, P5, set the switch for the seat belts to the on mode.

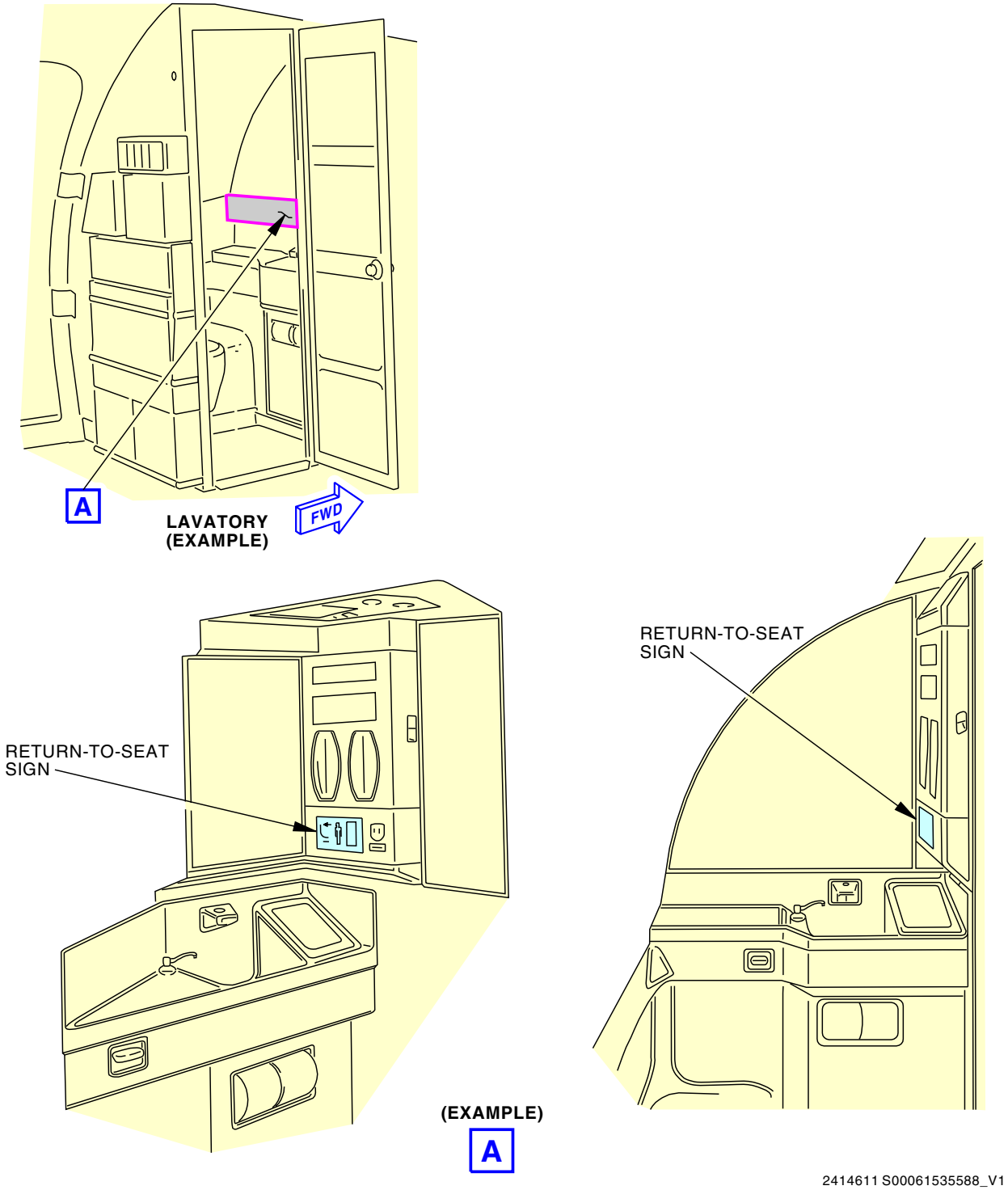
1) Make sure that the return-to-seat sign comes on.

(b) Set the switch to the off mode.

1) Make sure that the sign goes off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Information Sign, Return-To-Seat Sign - Light Assembly Replacement
Figure 204/33-25-00-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ATTENDANT WORK LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Attendant Work Lights - Deactivation

(2) Attendant Work Lights - Activation

(3) Attendant Work Light - Lamp Replacement

(4) Attendant Work Light - Light Assembly Replacement.

TASK 33-26-01-960-801

2. Attendant Work Light - Lamp Replacement

(Figure 201)

A. Location Zones

Zone	Area
200	Upper Half of Fuselage

B. Attendant Work Light Lamp Replacement

SUBTASK 33-26-01-860-004

(1) Do these steps at the adjacent attendant control panel:

(a) Make sure that the attendant control panel display is operational.

1) Touch the opposite corners of the display sequentially in two seconds to operate it.

(b) On the attendant control panel display, touch the Lighting tab.

(c) For the attendant work light in the forward entry area, make sure that the OFF button below the Forward Entry Area, Work section is a black color.

NOTE: The OFF button is a black color when the light is off and a blue color when the light is on.

1) If the OFF button is a blue color, touch the OFF button to remove electrical power to the attendant work light.

(d) For attendant work light in the aft entry area, make sure that the OFF button below the Aft Entry Area, Work section is a black color.

NOTE: The OFF button is a black color when the light is off and a blue color when the light is on.

1) If the OFF button is a blue color, touch the OFF button to remove electrical power to the attendant work light.

SUBTASK 33-26-01-960-001

WARNING DO NOT TOUCH THE SOCKETS OR THE METAL ENDS OF THE LAMP. SHOCK CAN OCCUR WHEN YOU SUPPLY ELECTRICAL POWER TO THE LIGHT.

(2) Do these steps to replace the lamp [1]:

(a) Remove the lens [2].

NOTE: Use a slim, flat tool to lift away the lens.

(b) Replace the lamp [1].

(c) Push the lens [2] back into its position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-26-01-710-001

(3) Do a test of the new lamp [1]:

(a) Make sure that the adjacent attendant control panel display is operational.

1) Touch the opposite corners of the display sequentially in two seconds to operate it.

(b) On the attendant control panel display, touch the Lighting tab.

(c) For attendant work light in the forward entry area, do these steps:

NOTE: The OFF button is a black color when the light is off and a blue color when the light is on.

1) Below the Forward Entry Area, Work section, touch the OFF button.

a) Make sure that the attendant work light comes on.

2) Below the Forward Entry Area, Work section, touch the OFF button.

a) Make sure that the attendant work light goes off.

(d) For attendant work light in the aft entry area, do these steps:

NOTE: The OFF button is a black color when the light is off and a blue color when the light is on.

1) Below the Aft Entry Area, Work section, touch the OFF button.

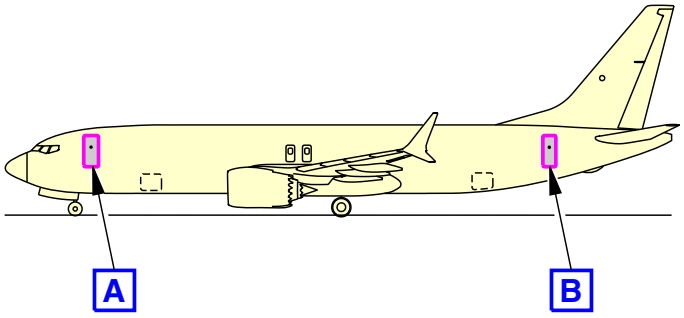
a) Make sure that the attendant work lights come on.

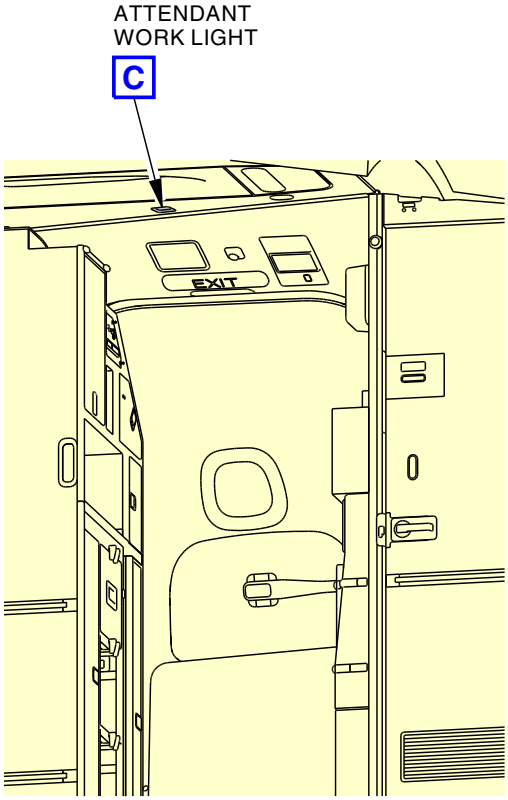
2) Below the Aft Entry Area, Work section, touch the OFF button.

a) Make sure that the attendant work lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

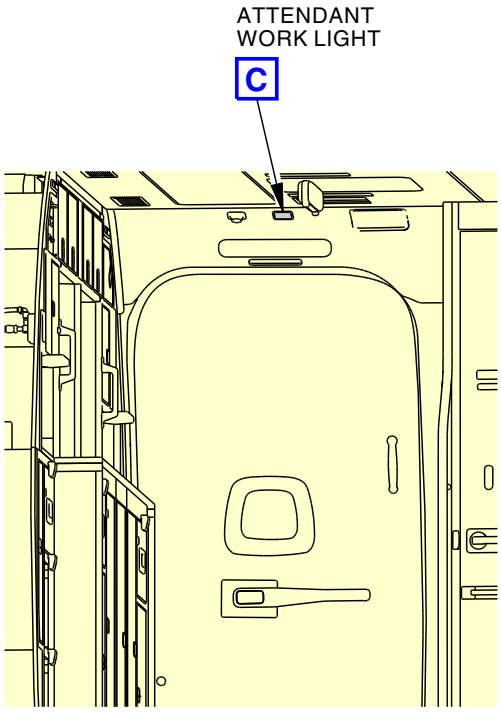




(VIEW THROUGH THE FORWARD PASSENGER DOOR)
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

FWD

A



(VIEW THROUGH THE AFT DOOR)
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

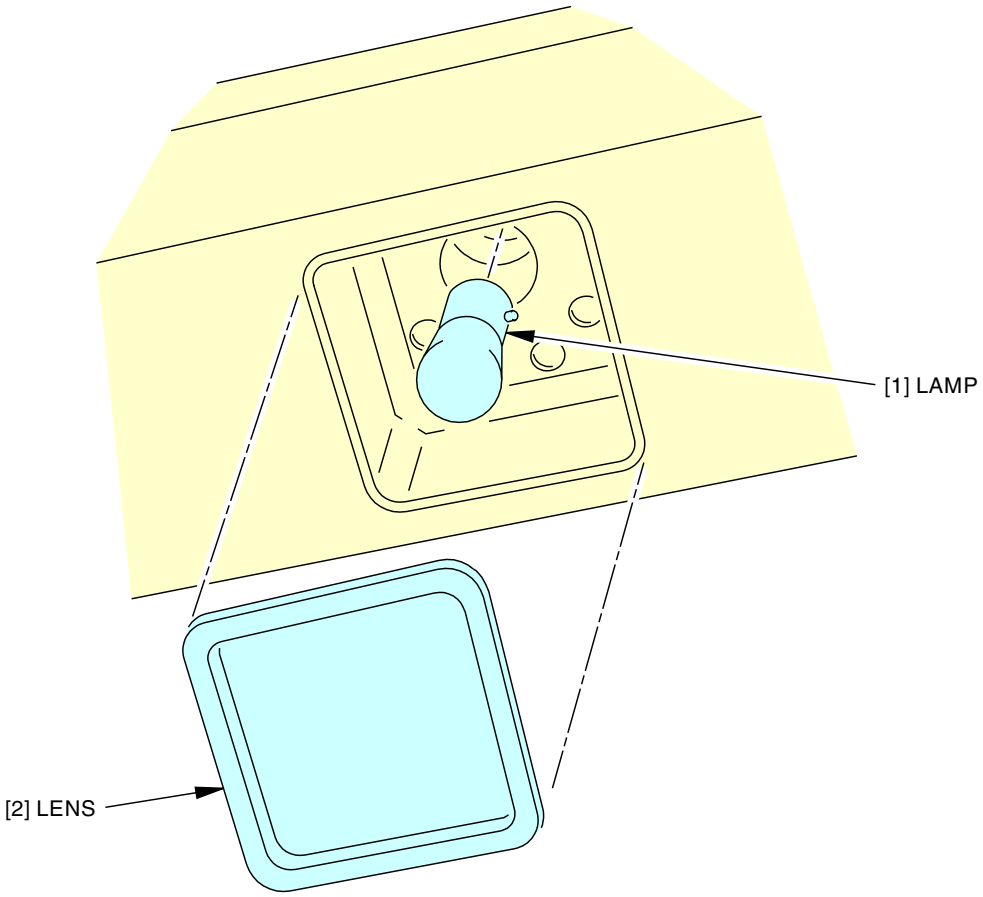
B

FWD

2414615 S00061535601_V2

Attendant Work Light - Lamp Replacement
Figure 201/33-26-01-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**ATTENDANT WORK LIGHT
(EXAMPLE)**

C

2414616 S00061535602_V1

**Attendant Work Light - Lamp Replacement
Figure 201/33-26-01-990-802 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-26-01-960-802

3. Attendant Work Light - Light Assembly Replacement

(Figure 202)

A. References

Reference	Title
WDM 33-26-11	D000534492

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
200	Upper Half of Fuselage

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
831	Forward Entry Door
834	Aft Entry Door

D. Light Assembly Replacement

SUBTASK 33-26-01-010-002

(1) To get access to the P91 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-26-01-860-007

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	3	C00140	WORK AND THSHD LTS

SUBTASK 33-26-01-860-008

(3) Get access to the back of the light assembly [22] (WDM 33-26-11).

(a) Open this access panel:

Number	Name/Location
831	Forward Entry Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Open this access panel:

Number	Name/Location
834	Aft Entry Door

SUBTASK 33-26-01-960-002

(4) Do these steps to replace the light assembly [22]:

(a) Lift away the cap [23].

(b) Disconnect the electrical wires [24].

(c) Loosen the fasteners [21] on the light assembly [22].

(d) Replace the light assembly [22].

(e) Tighten the fasteners [21].

(f) Connect the electrical wires [24] to the new light assembly [22].

(g) Cover the electrical wires [24] with the cap [23].

SUBTASK 33-26-01-410-004

(5) Close this access panel:

Number	Name/Location
831	Forward Entry Door

SUBTASK 33-26-01-410-005

(6) Close this access panel:

Number	Name/Location
834	Aft Entry Door

SUBTASK 33-26-01-860-009

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(7) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	3	C00140	WORK AND THSHD LTS

SUBTASK 33-26-01-410-003

(8) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-26-01-710-002

(9) Do a test of the new light assembly [22]:

(a) Make sure that the adjacent attendant control panel display is operational.

1) To operate it, touch the opposite corners of the display sequentially in two seconds.

(b) On the attendant control panel display, touch the Lighting tab.

(c) For attendant work light in the forward entry area, do these steps:

NOTE: The OFF button is a black color when the light is off and a blue color when the light is on.

1) Below the Forward Entry Area, Work section, touch the OFF button.

a) Make sure that the attendant work light comes on.

2) Below the Forward Entry Area, Work section, touch the OFF button.

a) Make sure that the attendant work light goes off.

(d) For attendant work light in the aft entry area, do these steps:

NOTE: The OFF button is a black color when the light is off and a blue color when the light is on.

1) Below the Aft Entry Area, Work section, touch the OFF button.

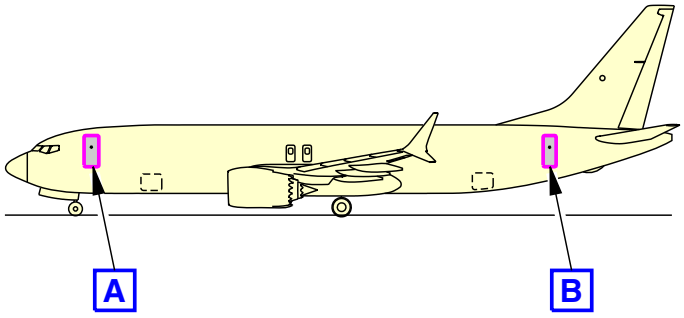
a) Make sure that the attendant work lights come on.

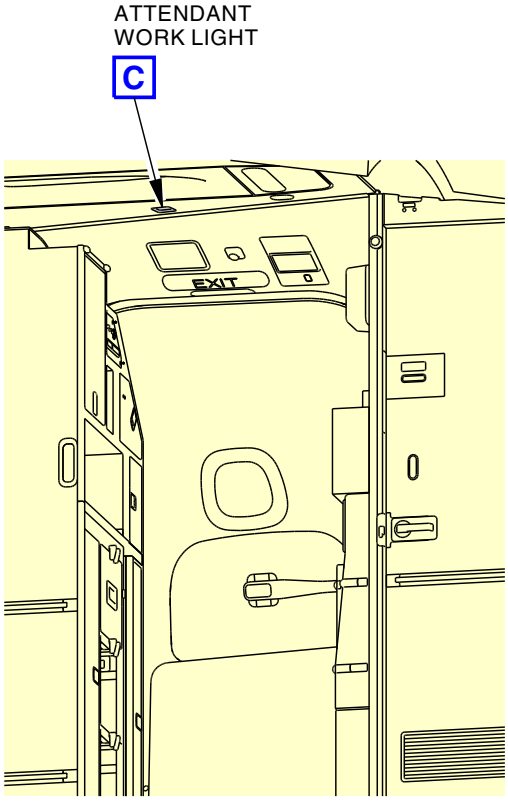
2) Below the Aft Entry Area, Work section, touch the OFF button.

a) Make sure that the attendant work lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

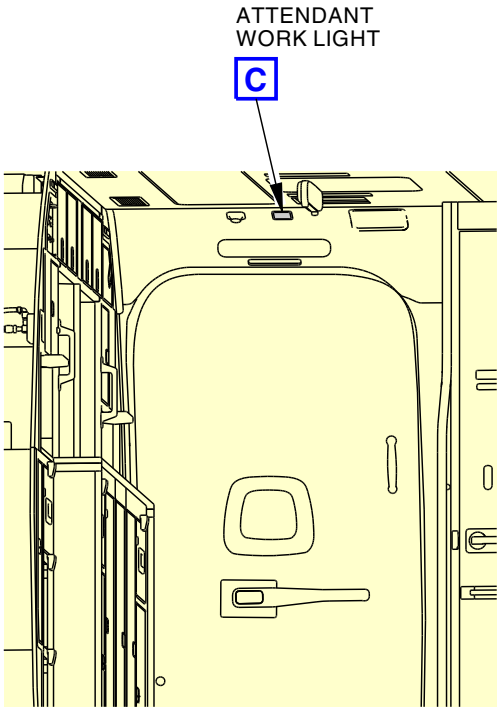




(VIEW THROUGH THE FORWARD PASSENGER DOOR)
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

FWD

A



(VIEW THROUGH THE AFT DOOR)
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

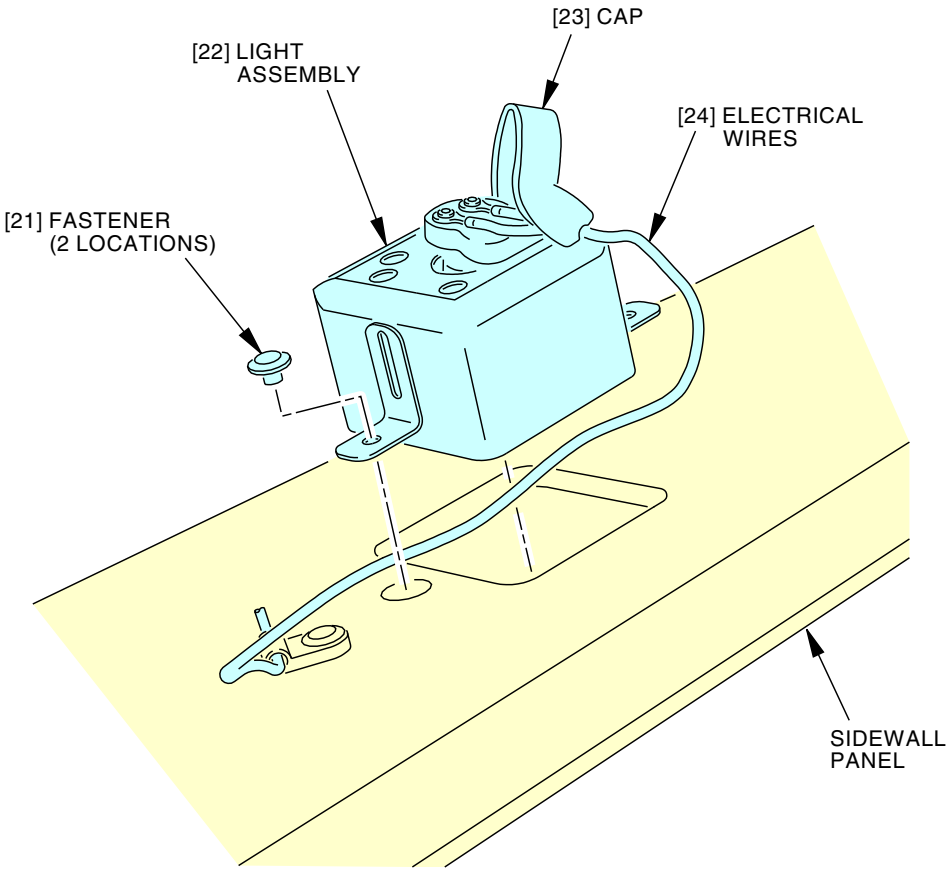
B

FWD

2414615 S00061535601_V2

Attendant Work Light - Light Assembly Replacement
Figure 202/33-26-01-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



ATTENDANT WORK LIGHT (EXAMPLE)

C

2414618 S00061535605_V1

Attendant Work Light - Light Assembly Replacement
Figure 202/33-26-01-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

GALLEY LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) FWD Galley Area Lights - Deactivation

(2) FWD Galley Area Lights - Activation

(3) Galley Light - Lamp Replacement

(4) Galley Light - Ballast Replacement.

TASK 33-26-02-960-801

2. Galley Light - Lamp Replacement

(Figure 201)

A. References

Reference	Title
WDM 33-26-21	D000534493

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Procedure

SUBTASK 33-26-02-860-003

(1) In the galley, set the switch for the galley light to the off mode (WDM 33-26-21).

SUBTASK 33-26-02-960-001

WARNING DO NOT TOUCH THE SOCKETS OR THE METAL ENDS OF THE LAMP. SHOCK CAN OCCUR WHEN YOU SUPPLY ELECTRICAL POWER TO THE LIGHT.

(2) Do these steps to replace the lamp [3]:

(a) Loosen the fasteners [1]. Then remove the lens assembly [2].

(b) Replace the lamp [3].

NOTE: Use the levers to eject the lamp.

(c) Install the lens assembly [2]. Then tighten fasteners [1].

SUBTASK 33-26-02-710-001

(3) Do a test of the new lamp [3]:

(a) Set the switch for the galley light to the bright mode.

1) Make sure that the light comes on brightly.

(b) Set the switch to the dim mode.

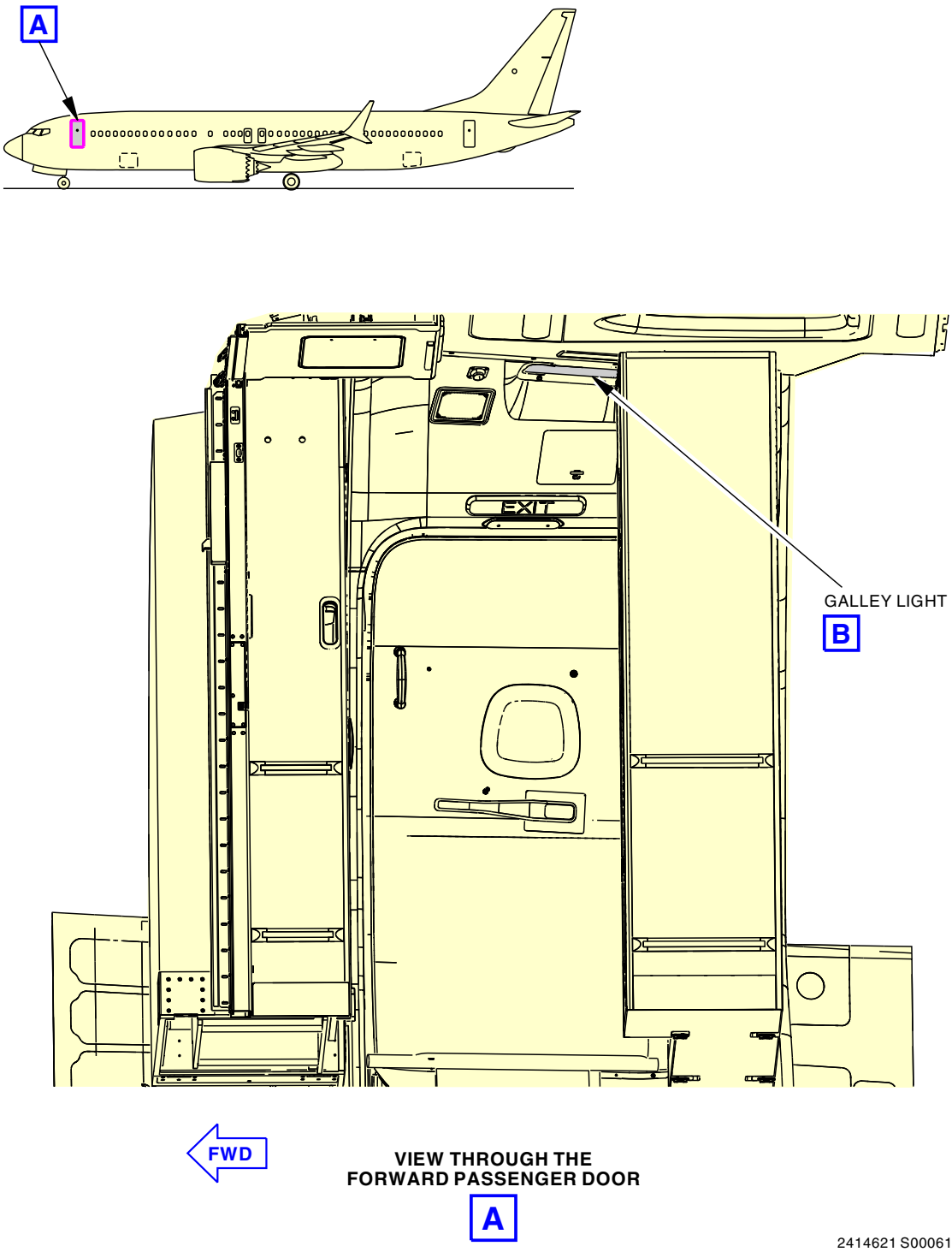
1) Make sure that the light becomes dim.

(c) Set the switch to the off mode.

1) Make sure that the light goes off.

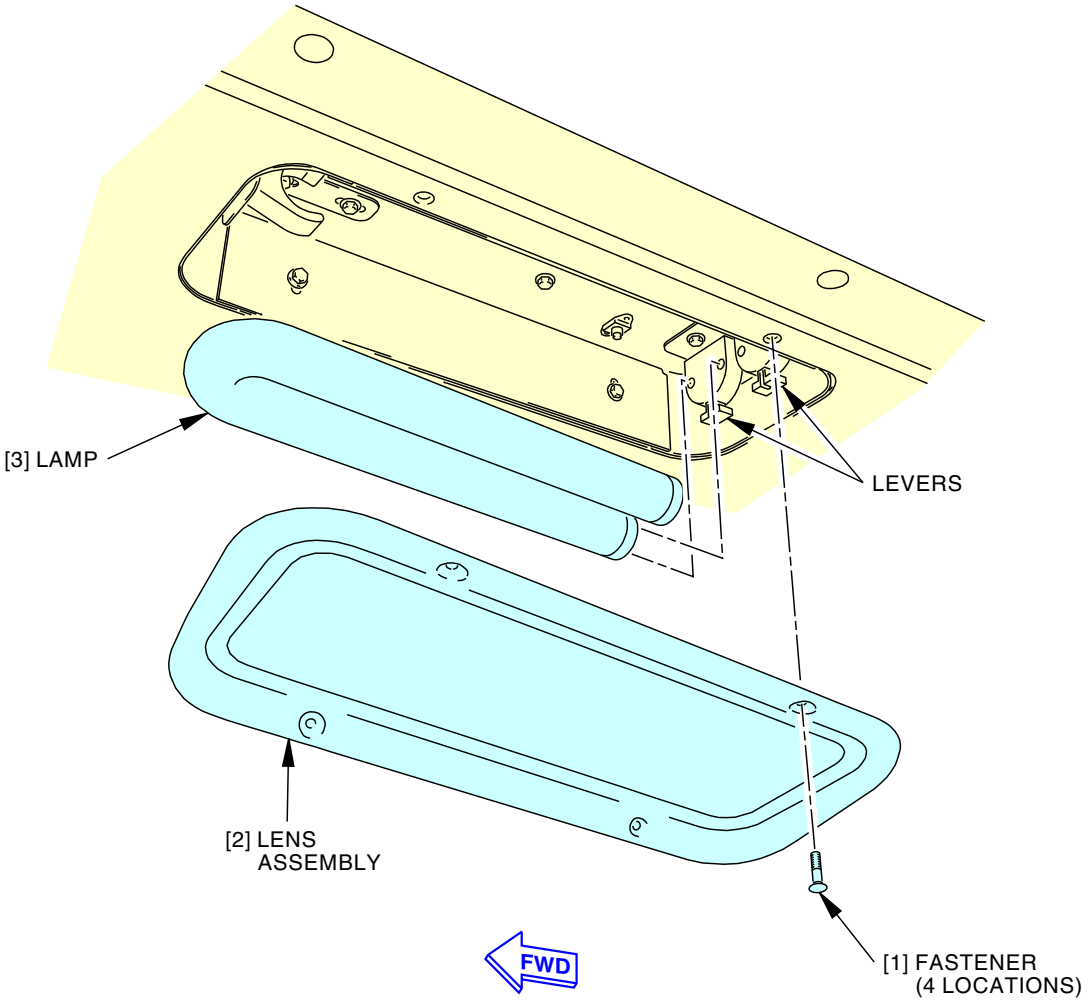
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Galley Light - Lamp Replacement
Figure 201/33-26-02-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



GALLEY LIGHT

B

2414620 S00061535612_V1

Galley Light - Lamp Replacement
Figure 201/33-26-02-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-26-02-960-802

3. Galley Light - Ballast Replacement

(Figure 202)

A. References

Reference	Title
WDM 33-26-21	D000534493

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
24	Ballast	33-26-02-95-120	SIA ALL

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Galley Light Ballast Replacement

SUBTASK 33-26-02-010-003

(1) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-26-02-860-006

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	10	C00242	GALLEY LTS

SUBTASK 33-26-02-010-002

(3) Remove the galley light for access to the ballast [24] (WDM 33-26-21):

(a) Loosen the fasteners [1].

(b) Remove the lens assembly [2].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Remove the lamp [3].

NOTE: Use the levers to eject the lamp.

(d) Remove the screws [23] and washers [22] in the housing [21].

(e) Lower the housing [21].

SUBTASK 33-26-02-960-002

(4) Do these steps to replace the ballast [24]:

(a) Disconnect the electrical connector [25] from the ballast [24].

(b) Remove the screws [27] and washers [26] from the ballast [24].

(c) Replace the ballast [24].

(d) Install the screws [27] and washers [26].

(e) Connect the electrical connector [25] to the new ballast [24].

SUBTASK 33-26-02-410-002

(5) Install the galley light:

(a) Put the housing [21] back in its position.

(b) Install the screws [23] and washers [22] in the housing.

(c) Install the lamp [3].

(d) Install the lens assembly [2].

(e) Then tighten the fasteners [1].

SUBTASK 33-26-02-860-007

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(6) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	10	C00242	GALLEY LTS

SUBTASK 33-26-02-410-003

(7) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-26-02-710-002

(8) Do a test of the new ballast [24]:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) In the galley, set the switch for the galley light to the bright mode.

1) Make sure that the light comes on brightly.

(b) Set the switch to the dim mode.

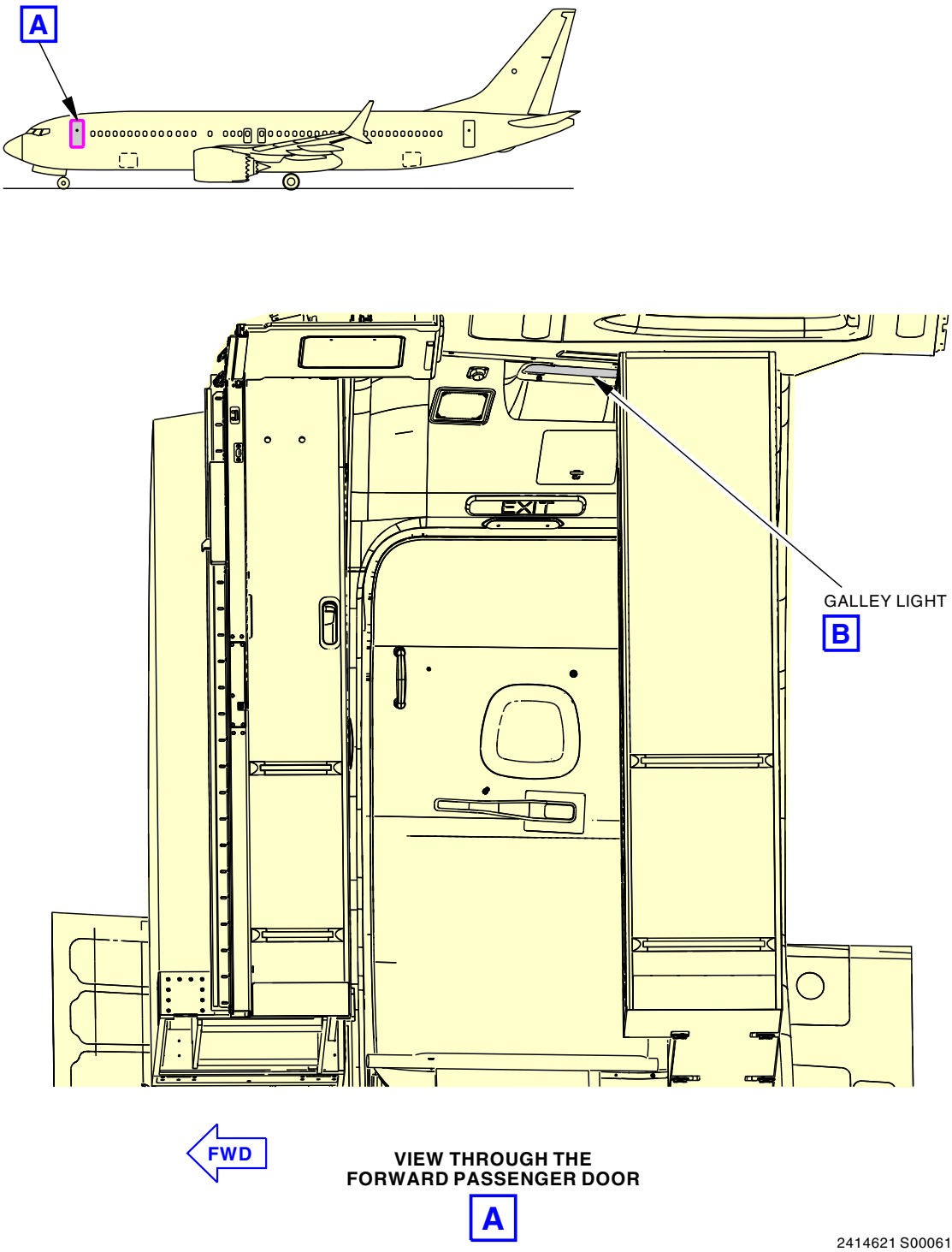
1) Make sure that the light becomes dim.

(c) Set the switch to the off mode.

1) Make sure that the light goes off.

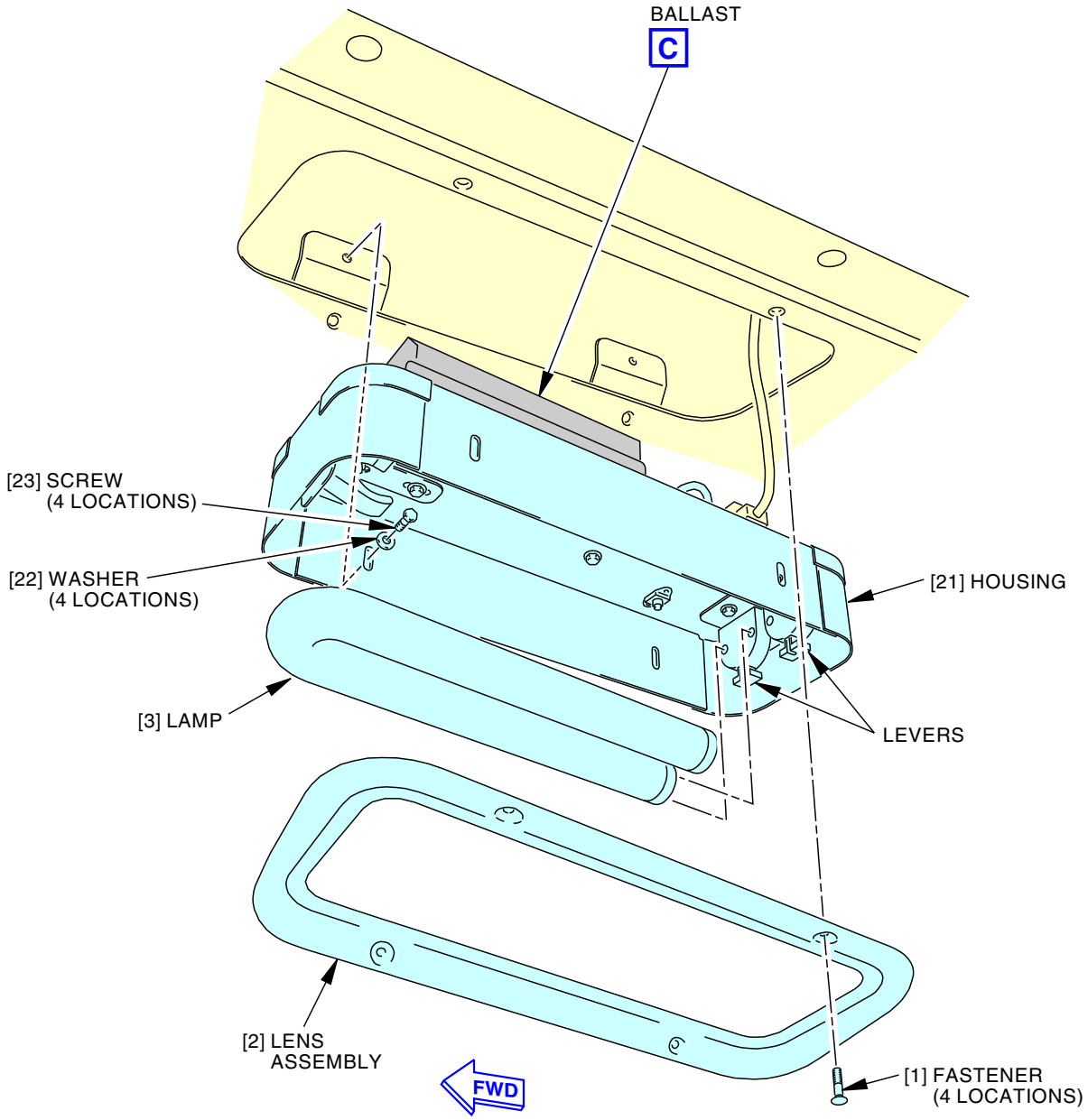
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Galley Light - Ballast Replacement
Figure 202/33-26-02-990-802 (Sheet 1 of 3)

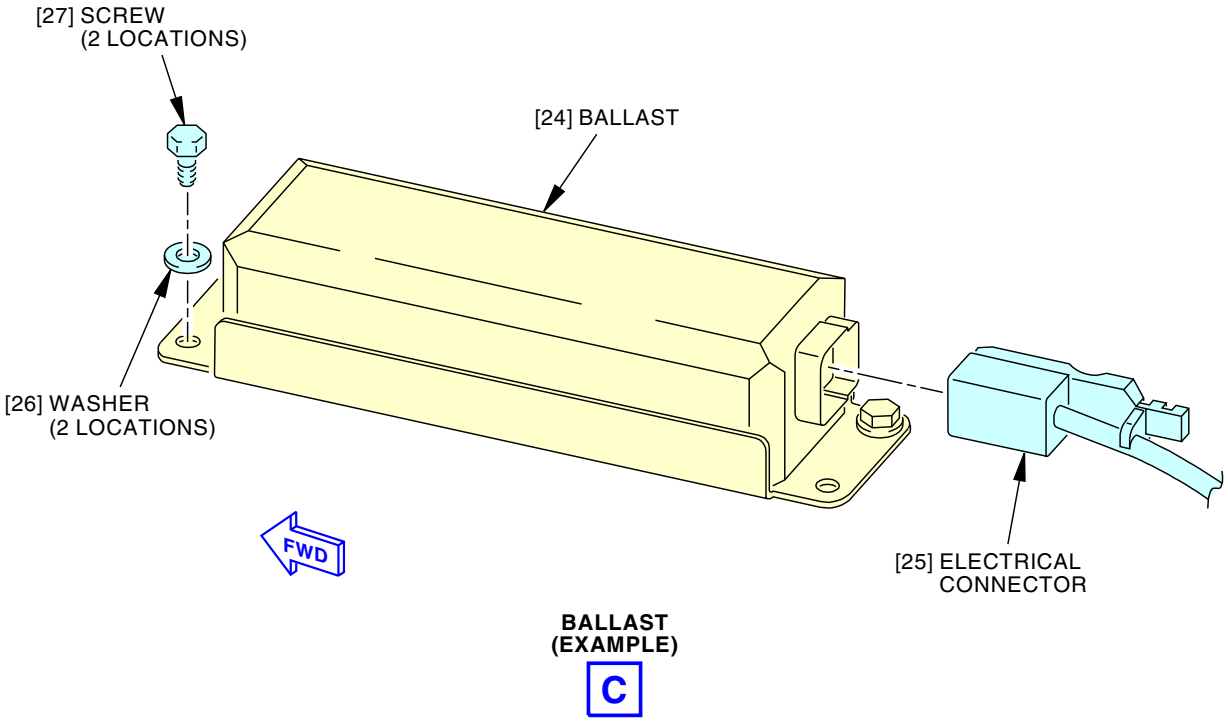
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2414622 S00061535615_V1

Galley Light - Ballast Replacement
Figure 202/33-26-02-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2414623 S00061535616_V1

Galley Light - Ballast Replacement
Figure 202/33-26-02-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LAVATORY LIGHTS AND SIGNS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Lavatory Lights Deactivation

(2) Lavatory Lights Activation

(3) Lavatory Light - LED Light Repacement

(4) Lavatory-Occupied Sign - Light Assembly Replacement

(5) Lavatory Door Switch - Adjustment/Replacement

TASK 33-26-03-040-801

2. Lavatory Lights - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power from the lavatory lights.

B. Location Zones

Zone	Area
200	Upper Half of Fuselage
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-26-03-860-001

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
E	14	C01648	LAVATORY MIRROR LIGHT

D. Lavatory Lights - Tryout

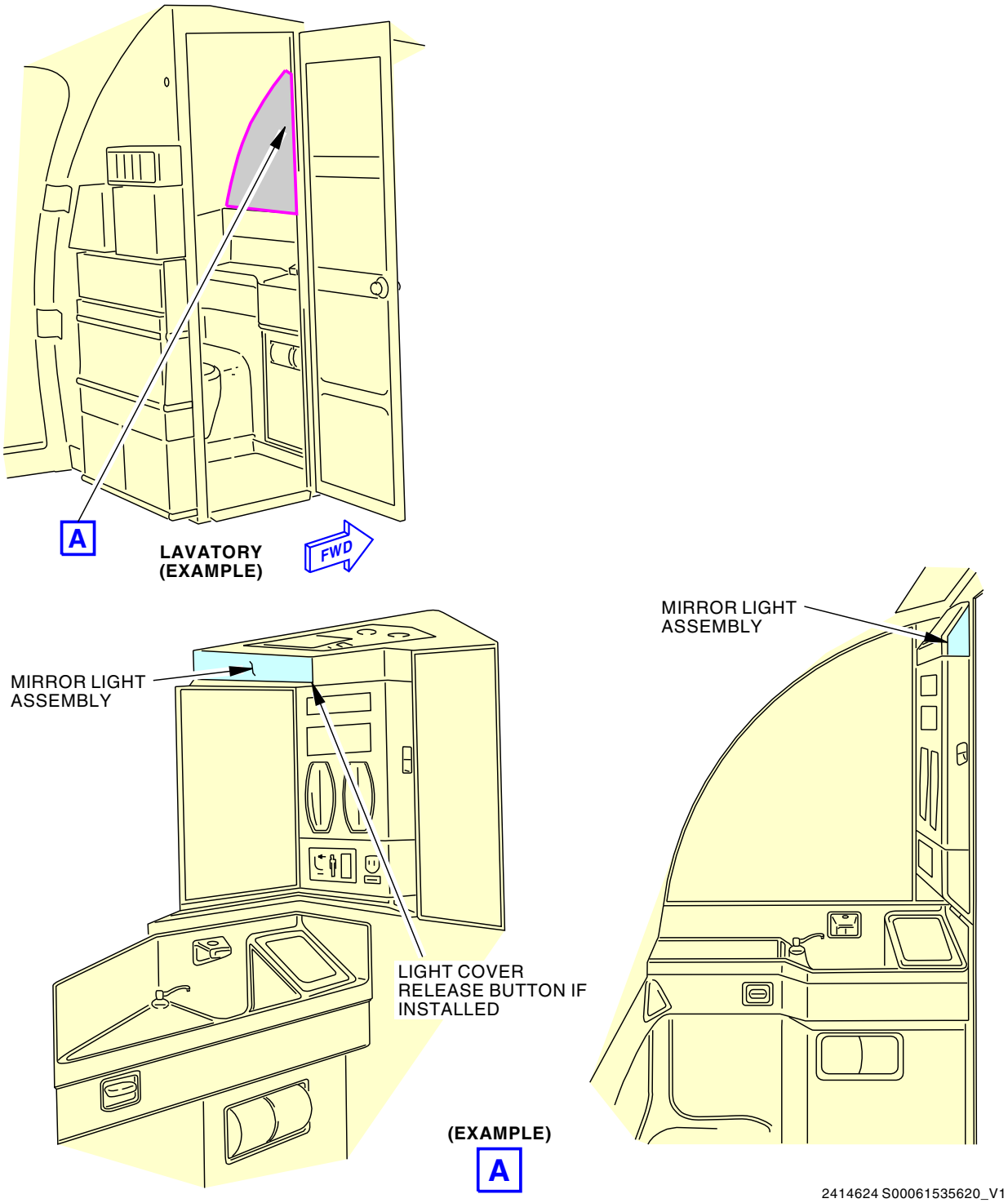
SUBTASK 33-26-03-200-001

NOTE: This tryout is to make sure the Lavatory lights is in a zero energy state.

(1) At each lavatory, close the door and make sure that the lights are off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lavatory Lights
Figure 201/33-26-03-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-26-03-440-801

3. Lavatory Lights - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the lavatory lights.

B. Location Zones

Zone	Area
200	Upper Half of Fuselage
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-26-03-860-002

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
E	14	C01648	LAVATORY MIRROR LIGHT

——— END OF TASK ———

TASK 33-26-03-960-803

4. Lavatory Light - LED Light Replacement

(Figure 202)

A. Location Zones

Zone	Area
200	Upper Half of Fuselage

B. Procedure

SUBTASK 33-26-03-860-011

WARNING REMOVE ELECTRICAL POWER FROM THE COMPONENT. IF YOU DO NOT REMOVE ELECTRICAL POWER, YOU CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
D	10	C01217	PASS CAB SIGNS LAV OCC SIGN

SUBTASK 33-26-03-960-004

(2) Do these steps to replace the LED lights:

(a) Remove the applicable light cover or mirror door.

(b) Disconnect the connector of applicable LED light.

(c) Replace the LED light.

(d) Connect the connector of the new LED light.

(e) Install the applicable light cover or mirror door.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-26-03-860-012

(3) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
D	10	C01217	PASS CAB SIGNS LAV OCC SIGN
E	14	C01648	LAVATORY MIRROR LIGHT

SUBTASK 33-26-03-710-003

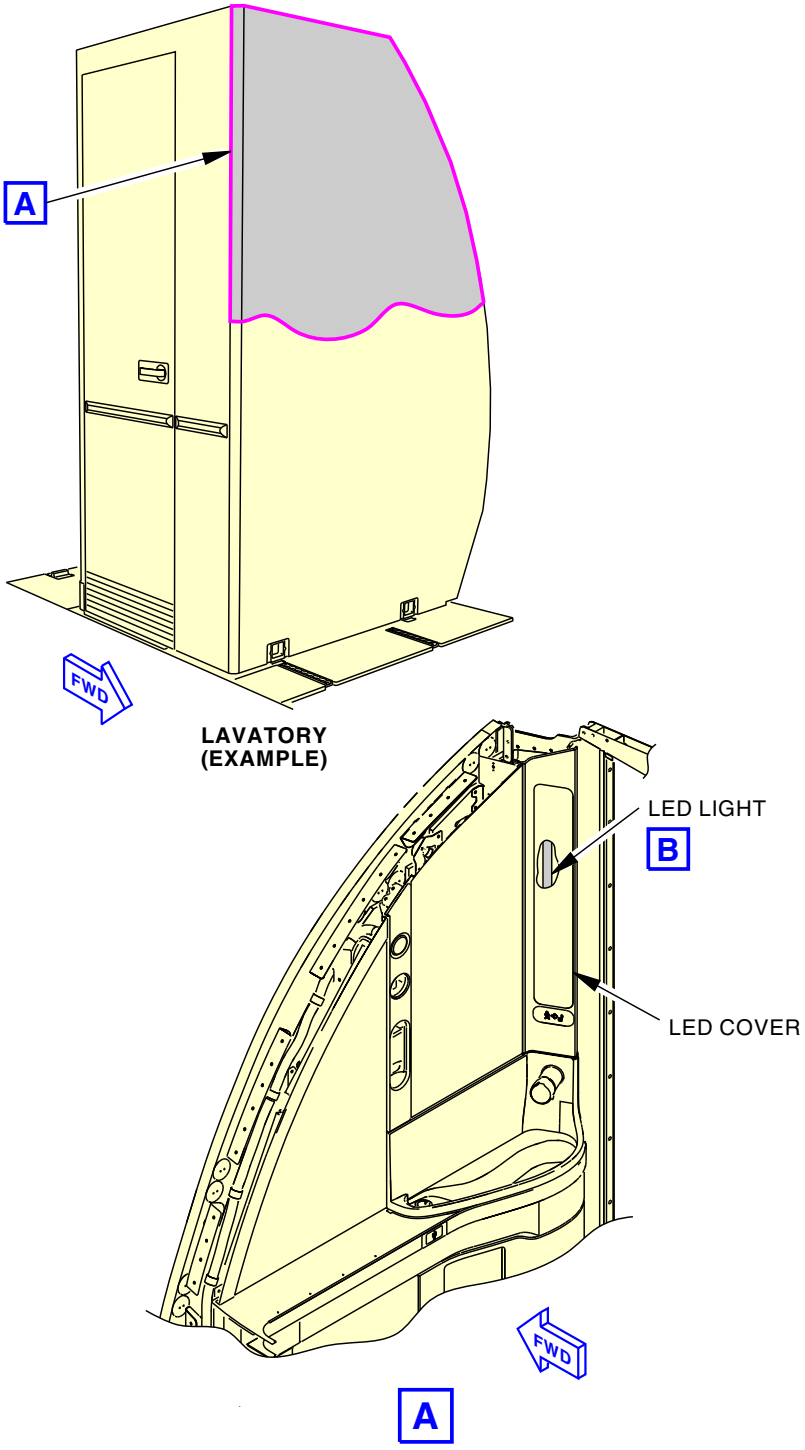
(4) Do the test of the new LED light:

NOTE: The lavatory LED lights are energized when electrical power is supplied to the airplane and the Lav door is closed.

(a) Make sure that the LED light comes on.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lavatory Light - LED Light Replacement
Figure 202/33-26-03-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-26-03-960-804

5. Lavatory-Occupied Sign - Light Assembly Replacement

(Figure 203)

A. Tools/Equipment

Reference	Description
STD-13571	Screwdriver - Flat Tip

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Lavatory Occupied Sigh Light Assembly Replacement

SUBTASK 33-26-03-860-015

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
D	10	C01217	PASS CAB SIGNS LAV OCC SIGN
E	14	C01648	LAVATORY MIRROR LIGHT

SUBTASK 33-26-03-960-005

(2) Do these steps to replace the lavatory occupied sign [41]:

(a) Do these steps to remove the lavatory occupied sign [41]:

1) Use a thin Flat Tip Screwdriver, STD-13571, or an equivalent tool at the small opening to release the lavatory occupied sign [41] from the retainer at the rear.

NOTE: The retainer holds the lavatory occupied sign to the panel.

2) Disconnect the electrical connector [42].

3) Remove the lavatory occupied sign [41].

(b) Do these steps to install the new lavatory occupied sign [41]:

1) Connect the electrical connector [42] to the lavatory occupied sign [41].

2) Push the electrical connector [42] into the mounting hole.

3) Push the lavatory occupied sign [41] into the mounting hole.

a) Make sure that the retainer holds the lavatory occupied sign [41] in the panel correctly.

SUBTASK 33-26-03-860-016

(3) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
D	10	C01217	PASS CAB SIGNS LAV OCC SIGN
E	14	C01648	LAVATORY MIRROR LIGHT

SUBTASK 33-26-03-710-004

(4) Do a test of the new lavatory occupied sign [41]:

(a) Close and lock the lavatory door.

1) Make sure that the lavatory occupied sign [41] comes on.

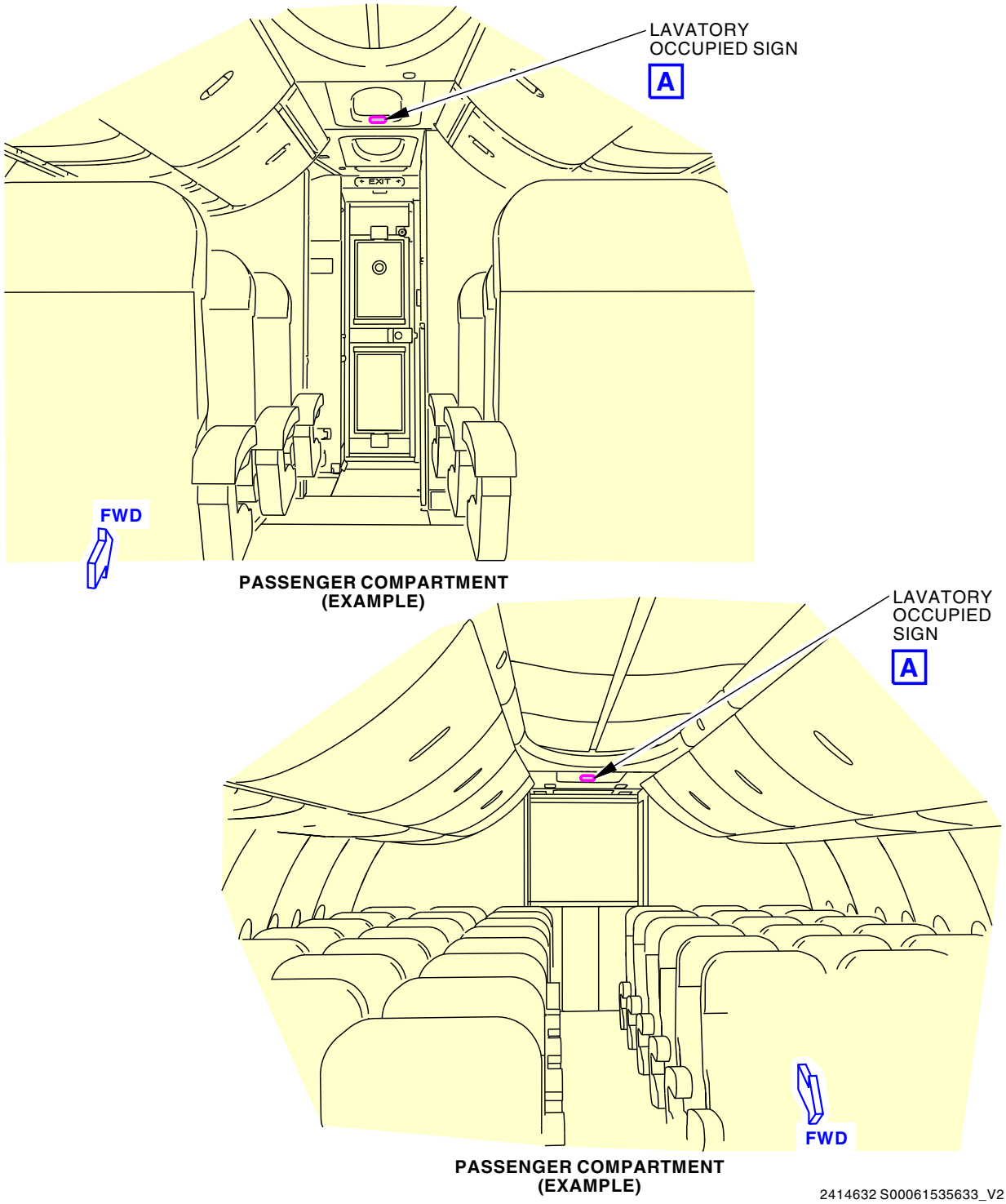
(b) Unlock and open the lavatory door.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Make sure that the lavatory occupied sign [41] goes off.

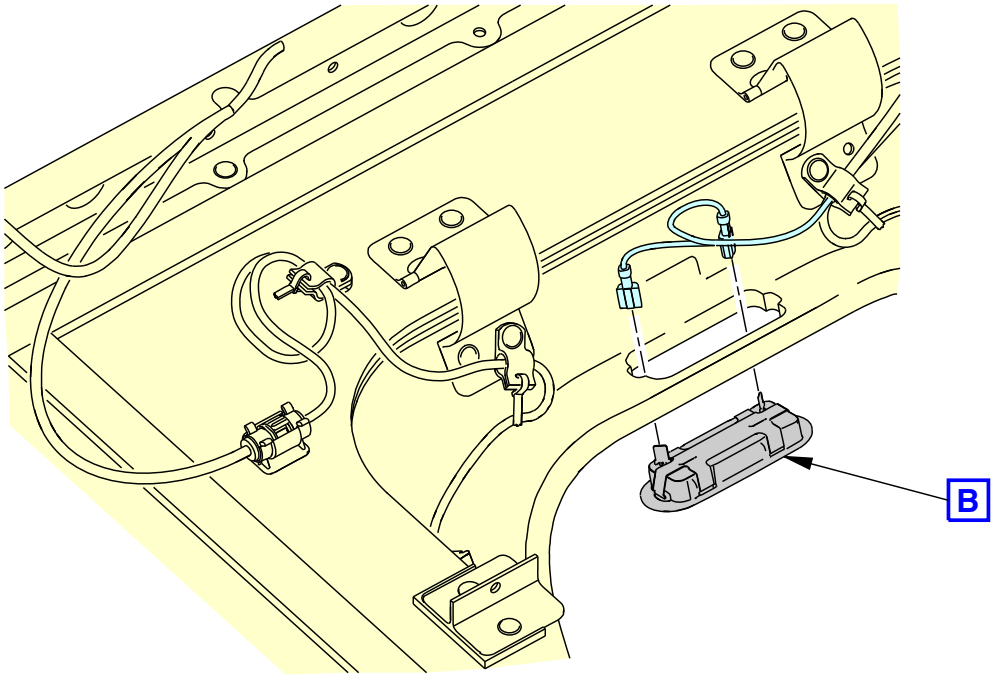
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

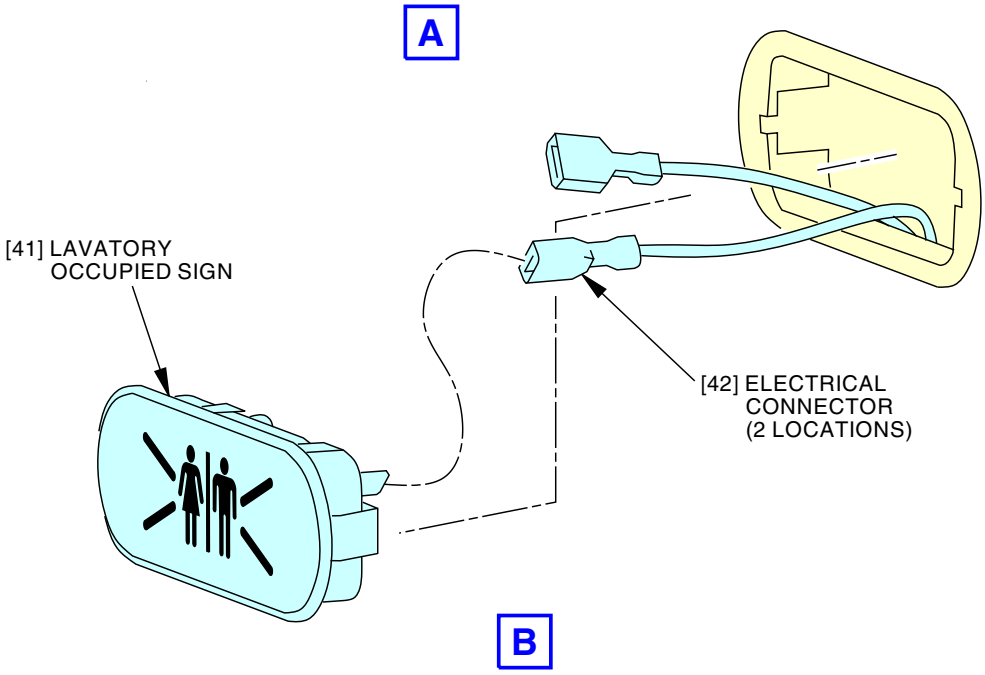


Lavatory Occupied Sign - Light Assembly Replacement
Figure 203/33-26-03-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LAVATORY OCCUPIED SIGN



2414633 S00061535634_V1

Lavatory Occupied Sign - Light Assembly Replacement
Figure 203/33-26-03-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-26-03-960-805

6. Lavatory Door Switch - Replacement

(Figure 204)

A. General

(1) There are 3 lavatory options:

- Lavatory without bi-fold doors.
- Lavatory with bi-fold doors and 1 switch assembly.
- Lavatory with dual bi-fold doors and 2 switch assemblies.

B. References

Reference	Title
33-20-00-710-801	Passenger Compartment Lights - Operational Test (P/B 501)
WDM 33-26-31	D000534494

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Prepare for the Replacement

SUBTASK 33-26-03-860-019

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT

SUBTASK 33-26-03-010-002

(2) For lavatories without the bi-fold door, open the lavatory door.

SUBTASK 33-26-03-010-003

(3) For lavatories with the bi-fold door(s), remove the lavatory door(s).

E. Lavatory Door Switch Replacement

SUBTASK 33-26-03-960-006

(1) For lavatory without bi-fold doors, replace the switch assembly [1] as follows:

(a) Remove the screws [2] that attach the switch assembly [1] to the door jamb.

(b) Carefully pull the switch assembly [1] out from the door jamb.

(c) Disconnect the lavatory wiring.

(d) Replace the switch assembly [1].

(e) Connect the lavatory wiring (WDM 33-26-31).

(f) Put the switch assembly [1] into the door jamb.

(g) Make sure that the wires are not pinched between the switch assembly [1] and door jamb.

(h) Attach the switch assembly [1] with the screws [2].

SUBTASK 33-26-03-960-007

(2) For lavatory bi-fold doors and 1 switch assembly, replace the switch assembly [3] as follows:

(a) Remove the screws [7] that attach the slide rail [5], rail edge trim [6], spacer [4] (if installed), and switch assembly [3] to the header assembly.

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(b) Disconnect the lavatory wiring.

1) If it is necessary, release the lavatory wiring from the switch assembly [3].

(c) Replace the switch assembly [3].

(d) Connect the lavatory wiring (WDM 33-26-31).

1) If released, attach the lavatory wiring to the switch assembly [3].

(e) Attach the slide rail [5], rail edge trim [6], spacer [4] (if removed), and switch assembly [3] to the header assembly with the screws [7].

1) Put the rail edge trim [6] above the slide rail [5].

2) Put the screws [7] up and through the slide rail [5] and rail edge trim [6].

NOTE: It can be easiest to tape the heads of the screws until they can be tightened.

3) If applicable, make sure that the carriage is in the slide rail [5] slot.

4) Put the slide rail [5] and rail edge trim [6] so the screws [7] align with the holes inside the header assembly.

5) Put the spacer [4] (if removed) above the slide rail [5] and rail edge trim [6].

6) Put the switch assembly [3] into the hole in the header assembly.

7) Make sure that the wires are not pinched between the switch assembly [3] and header assembly.

8) Make sure that the actuator on the switch assembly [3] lines up with the hole in the rail edge trim [6] and slide rail [5].

9) Tighten the screws [7].

SUBTASK 33-26-03-960-008

(3) For lavatory bi-fold doors and 2 switch assemblies, replace the switch assembly [8] as follows:

(a) Remove the screws [10] that attach the slide rail [12] and rail edge trim [9] to the header assembly.

(b) Disconnect the lavatory wiring.

(c) Remove the applicable screws [11] that attach the switch assembly [8] to the slide rail [12].

(d) Replace the applicable switch assembly [8].

(e) Connect the lavatory wiring (WDM 33-26-31).

(f) Put the rail edge trim [9] above the slide rail [12].

(g) Install the screws [11] to attach the switch assembly [8] to the slide rail [12].

(h) Align the slide rail [12] and rail edge trim [9] holes with holes inside the header assembly.

(i) Make sure that the wires are not pinched between the switch assembly [8] and header assembly.

(j) Install the screws [10].

F. Lavatory Door Switch Installation Test

SUBTASK 33-26-03-410-003

(1) For lavatories with the bi-fold door(s), re-install the lavatory door(s).

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SUBTASK 33-26-03-860-021

(2) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

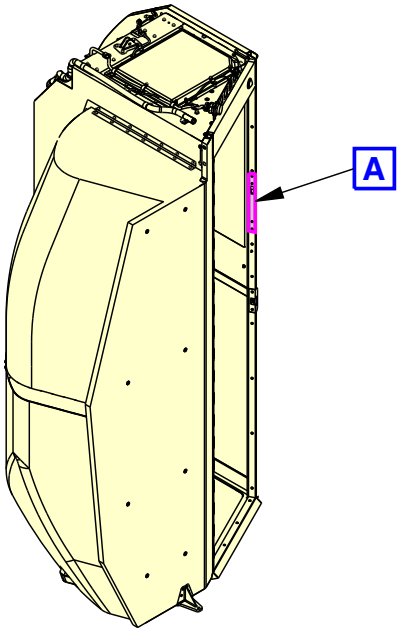
Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT

SUBTASK 33-26-03-710-006

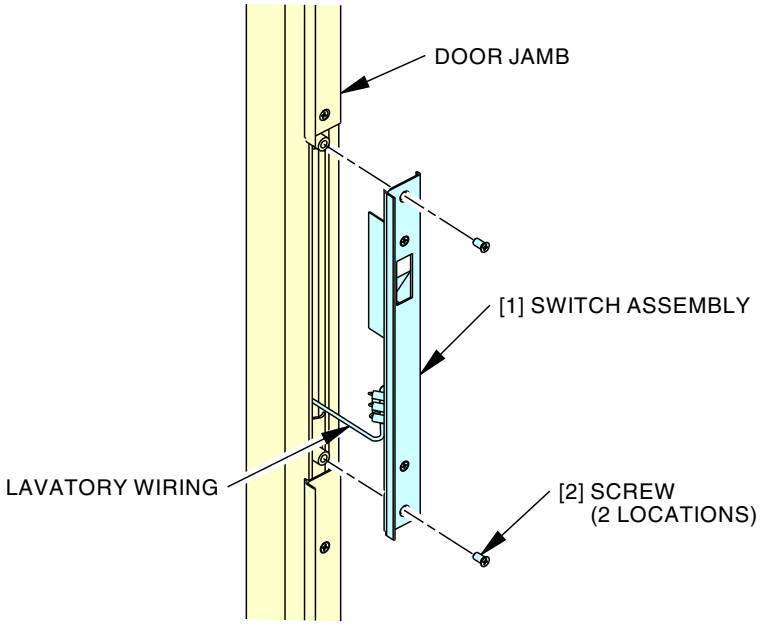
(3) Do the test of the lavatory mirror lights (TASK 33-20-00-710-801).

——— END OF TASK ———

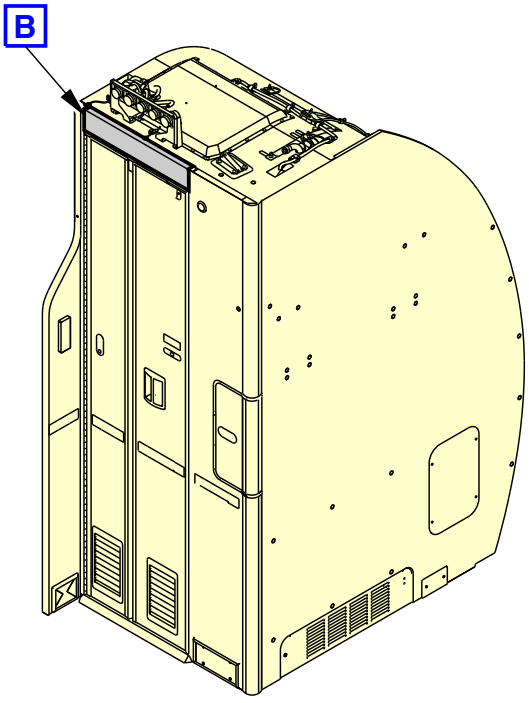
ECCN 9E991 BOEING PROPRIETARY - See title page for details



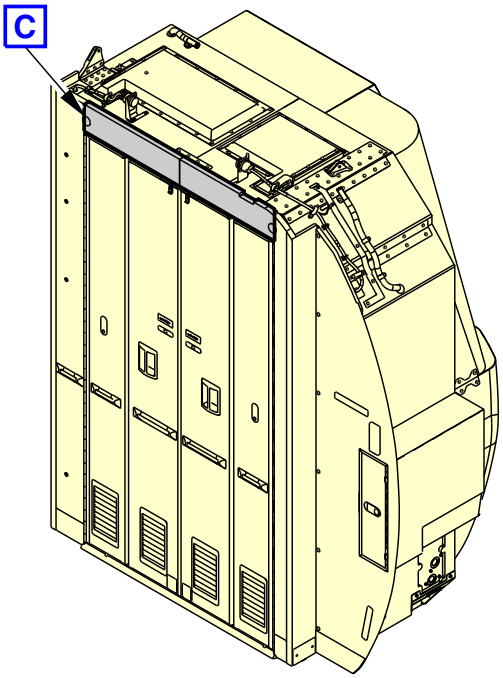
LAVATORY WITHOUT BI-FOLD DOOR
(DOOR IS NOT SHOWN)
(EXAMPLE)



A



LAVATORY WITH BI-FOLD DOOR
(EXAMPLE)

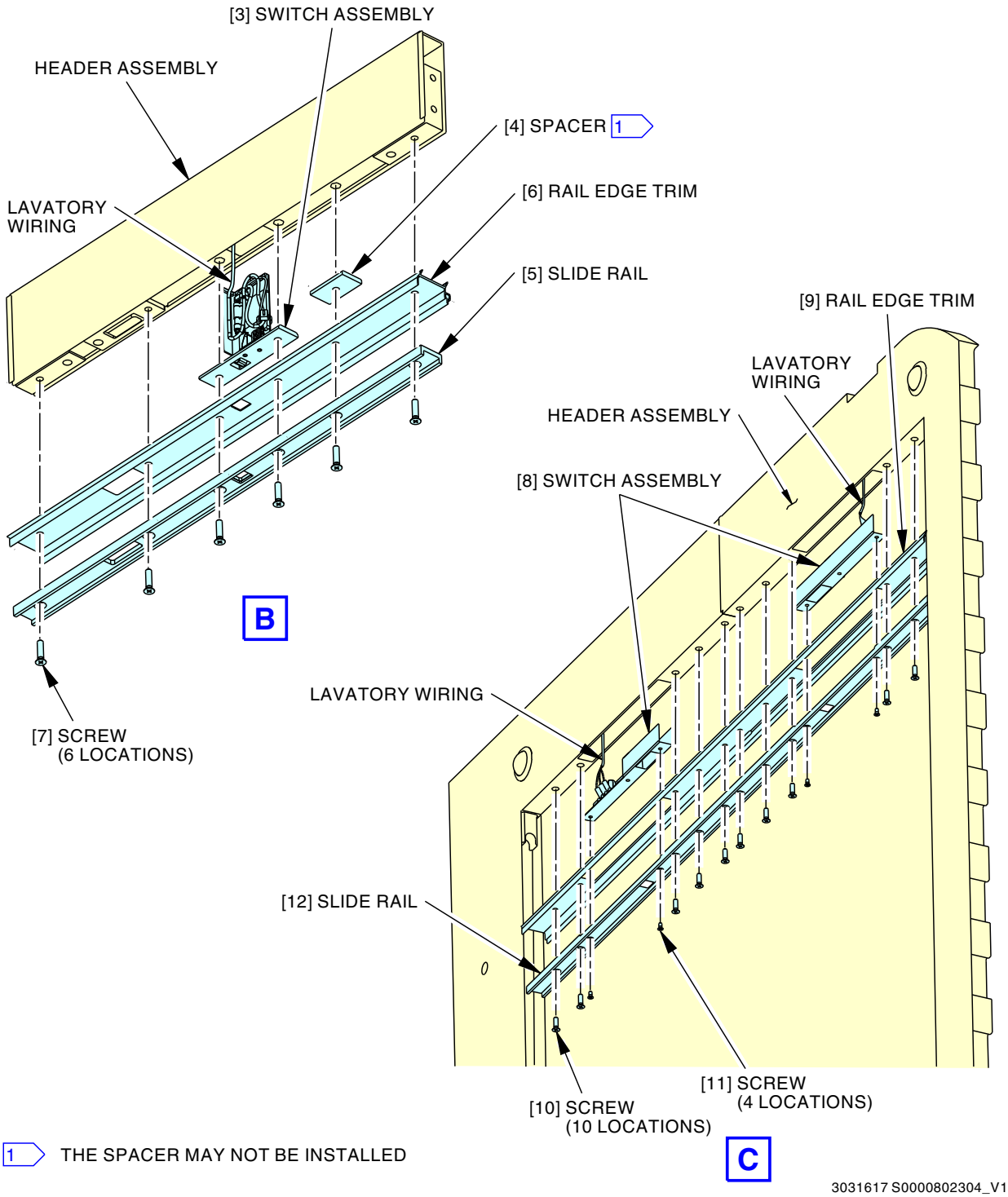


DUAL LAVATORY WITH BI-FOLD DOORS
(EXAMPLE)

2414634 S00061535636_V3

Lavatory Door Switch - Replacement
Figure 204/33-26-03-990-806 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lavatory Door Switch - Replacement
Figure 204/33-26-03-990-806 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

PASSENGER AND LAVATORY CALL LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Passenger and Lavatory Call Lights Deactivation

(2) Passenger and Lavatory Call Lights Activation

(3) Passenger Call Light - PSU LED Call Light Replacement

(4) Lavatory Call Light - Light/Switch Replacement

TASK 33-27-00-040-801

2. Passenger and Lavatory Call Lights - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power to the Passenger and Lavatory Call Lights.

B. Location Zones

Zone	Area
200	Upper Half of Fuselage
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Passenger and Lavatory Call Lights Deactivation

SUBTASK 33-27-00-860-001

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT
B	8	C01404	PASSENGER CABIN PASS CALL RIGHT

D. Passenger and Lavatory Call Lights - Tryout

NOTE: This tryout is to make sure the Passenger and Lavatory Call Lights are in a zero energy state.

SUBTASK 33-27-00-700-001

(1) At the Passenger Service Unit (PSU), press the passenger call switch.

(a) Make sure the passenger call light does not come on.

SUBTASK 33-27-00-700-002

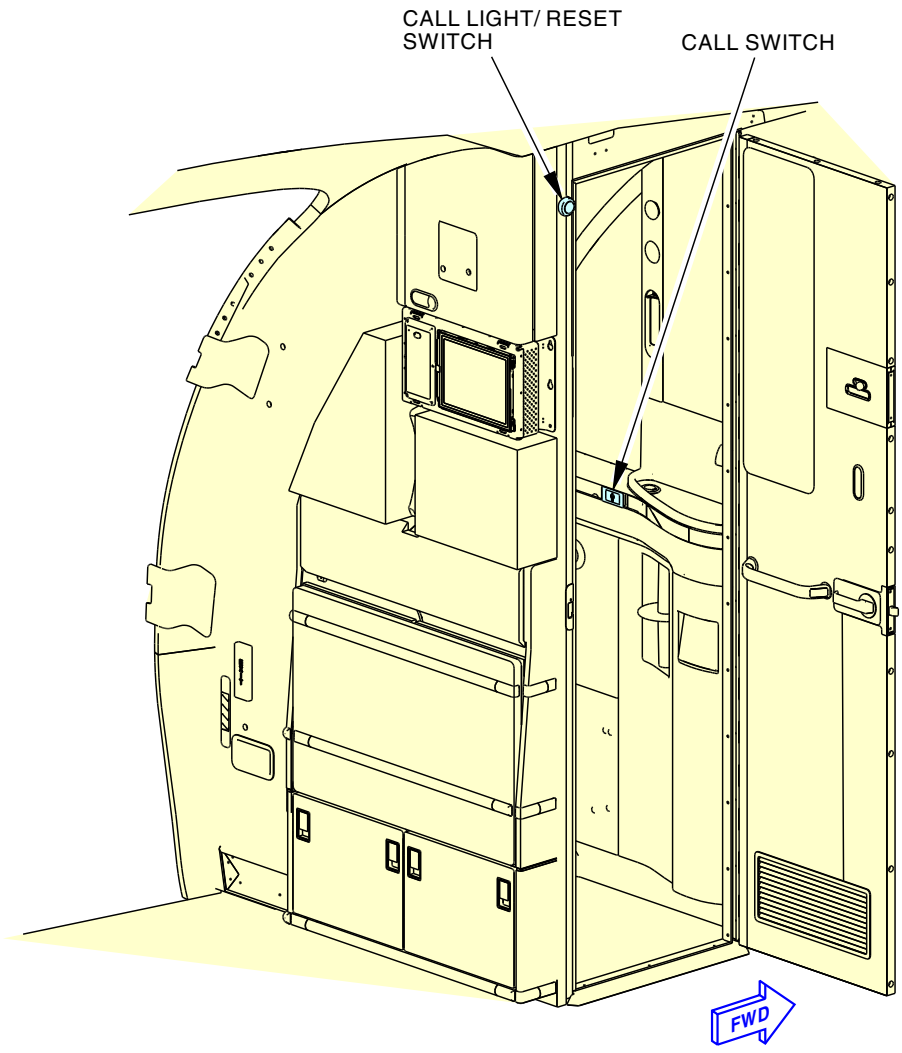
(2) At the lavatory, press the lavatory call switch.

(a) Make sure the inside lavatory call light does not come on.

(b) Make sure the outside lavatory call light does not come on.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

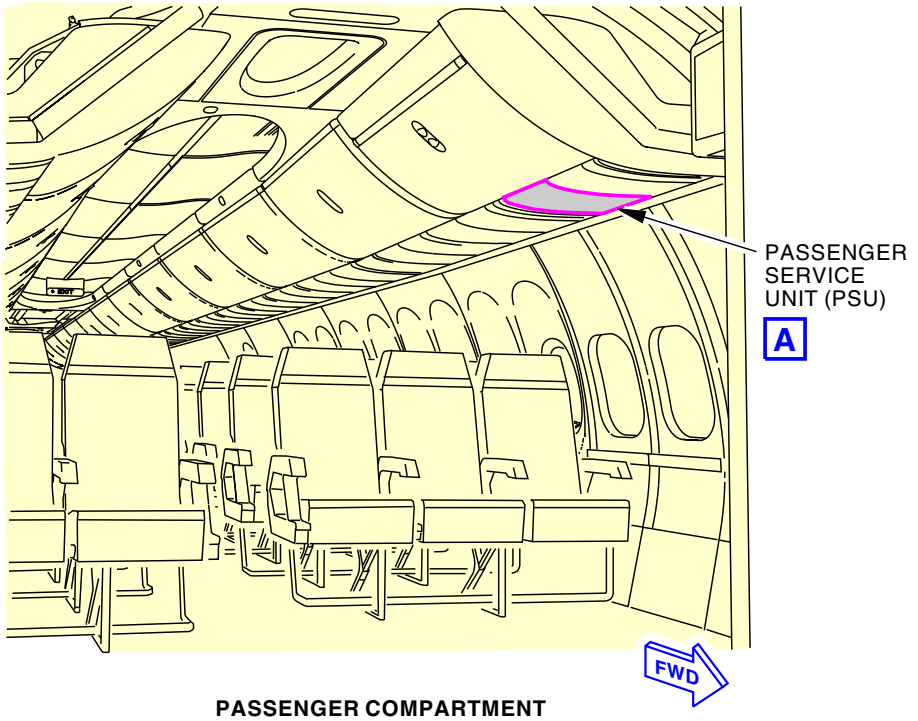


LAVATORY (EXAMPLE)

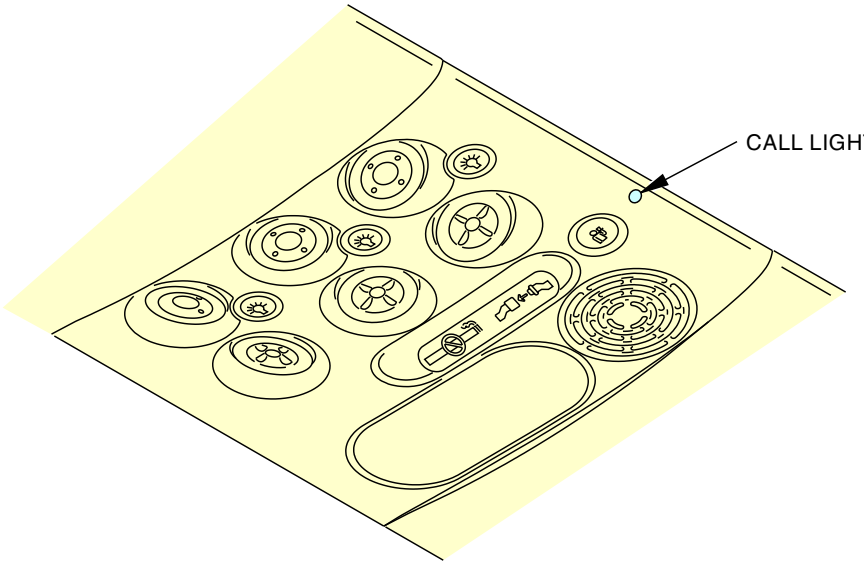
2414635 S00061535641_V1

Passenger and Lavatory Call Lights
Figure 201/33-27-00-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**PASSENGER COMPARTMENT
(EXAMPLE)**



**PASSENGER SERVICE UNIT (PSU)
(EXAMPLE)**

A

2414636 S00061535642_V1

**Passenger and Lavatory Call Lights
Figure 201/33-27-00-990-801 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-27-00-440-801

3. Passenger and Lavatory Call Lights - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the passenger and lavatory call lights

B. Location Zones

Zone	Area
200	Upper Half of Fuselage
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Procedure

SUBTASK 33-27-00-860-002

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT
B	8	C01404	PASSENGER CABIN PASS CALL RIGHT

——— END OF TASK ———

TASK 33-27-00-960-801

4. Passenger Call Light - PSU LED Call Light Replacement

A. References

Reference	Title
24-22-00-860-802	Remove Electrical Power (P/B 201)
25-23-61-000-801	Passenger Service Unit - Removal (P/B 401)
25-23-61-400-801	Passenger Service Unit - Installation (P/B 401)

B. Tools/Equipment

Reference	Description
STD-8416	Cutter - Wire, Diagonal or Side, 6 in. (150 mm)

C. Consumable Materials

Reference	Description	Specification
A00028	Adhesive - Modified Epoxy For Rigid PVC, Foam Cored Sandwiches	BAC5010 Type 70 (BMS5-92 Type 1)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Call light	33-27-52-64A-070	SIA 001-007
		33-27-52-64M-065	SIA 008-999

E. Location Zones

Zone	Area
200	Upper Half of Fuselage

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Prepare for the Procedure

SUBTASK 33-27-00-860-003

(1) Open the applicable circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT
B	8	C01404	PASSENGER CABIN PASS CALL RIGHT

SUBTASK 33-27-00-010-001

(2) For access to the top of the light assembly, lower the passenger service unit (PSU) (TASK 25-23-61-000-801).

G. Procedure

SUBTASK 33-27-00-020-001

(1) Remove the call light [1].

(a) Use a diagonal or side wire cutter, STD-8416 if necessary to remove the adhesive that secures the call light [1] to the PSU.

(b) Disconnect the connector [2] from the PSU.

(c) Remove the call light [1].

(d) Remove the lens [3].

SUBTASK 33-27-00-420-001

(2) Install the new call light [1].

(a) Insert the lens [3] into the PSU from the cabin side.

(b) Insert the washer of the call light [1] onto the lens [3] from the component side of the PSU.

(c) Align the key on the lens holder of the call light [1] with the slot on the lens [3] and install the parts together.

(d) Apply two drops of adhesive, A00028 to secure the lens holder to the washer of the call light [1].

(e) If necessary, use a clean cloth to remove the adhesive from the PSU.

(f) Connect the connector [2] to the PSU.

SUBTASK 33-27-00-410-001

(3) Close the PSU (TASK 25-23-61-400-801).

H. Test

SUBTASK 33-27-00-860-004

(1) Remove the safety tags and close the applicable circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT
B	8	C01404	PASSENGER CABIN PASS CALL RIGHT

(2) Do a test of the new call light [1].

(a) At PSU, set the call switch to the on mode.

1) Make sure that the new call light [1] comes on.

(b) Set the call switch to the off mode.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Make sure that the new call light [1] goes off.

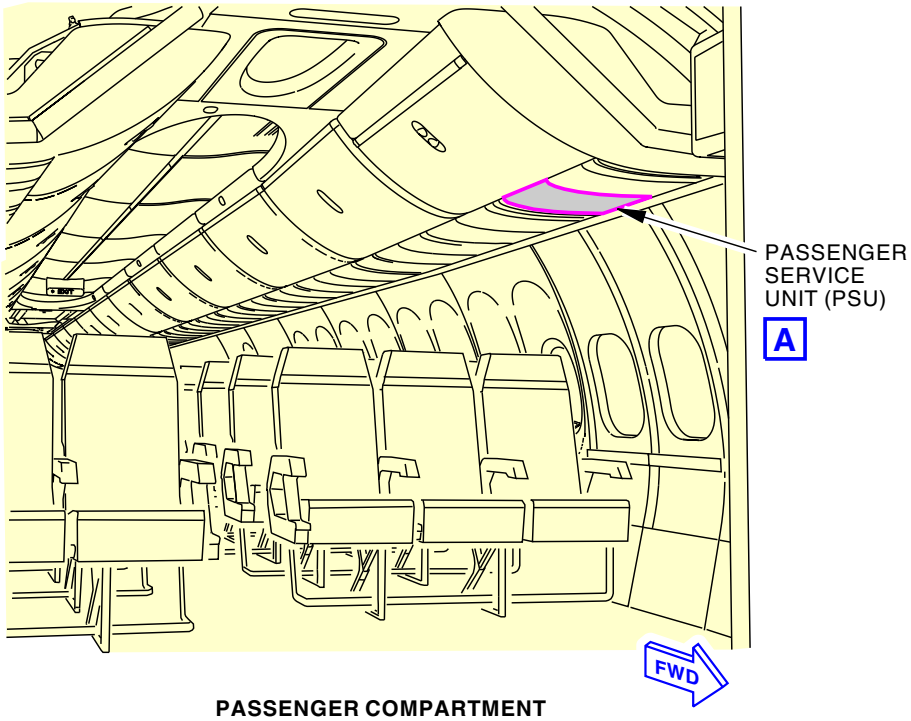
I. Put the Airplane Back to Its Usual Condition

SUBTASK 33-27-00-860-005

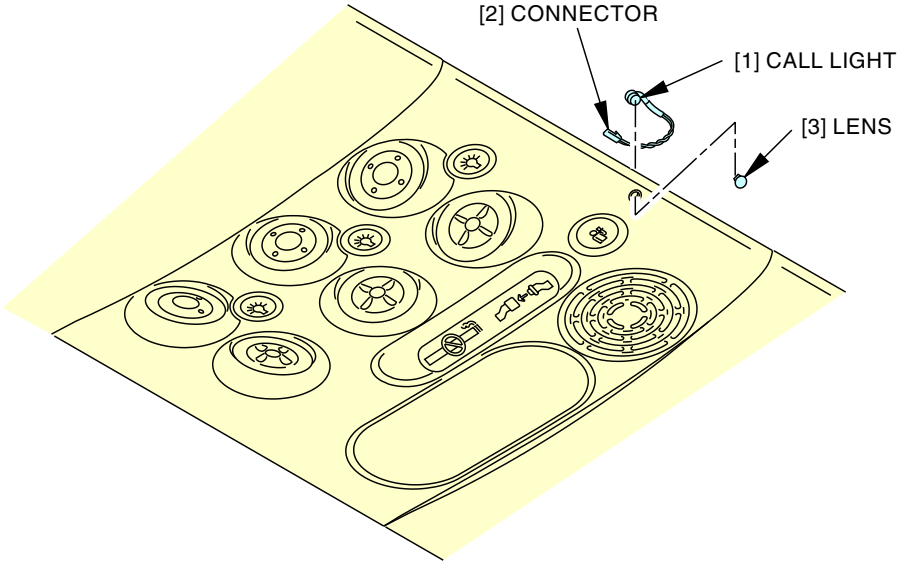
(1) If it is not necessary, remove electrical power. To remove it, do this task: Remove Electrical Power, TASK 24-22-00-860-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**PASSENGER COMPARTMENT
(EXAMPLE)**



**PASSENGER SERVICE UNIT (PSU)
(EXAMPLE)**

A

2414637 S00061535645_V1

**Passenger Call Light - PSU LED Call Light Replacement
Figure 202/33-27-00-990-802**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-27-00-960-802

5. Lavatory Call Light - Light/Switch Replacement

(Figure 203)

A. General

(1) The lavatory call lights include these components: (WDM 33-27-11)

(a) A call light/reset switch installed outside each lavatory near the top of the door.

(b) A call switch installed in each lavatory.

B. References

Reference	Title
24-22-00-860-802	Remove Electrical Power (P/B 201)
WDM 33-27-11	D000534495

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
4	Call light/reset switch assembly	33-27-51-01G-055	SIA 001-014
		33-27-51-05K-055	SIA 015-999
		33-27-51-05L-050	SIA 015-999
		33-27-51-10H-055	SIA 001-014
		33-27-51-11D-010	SIA 015-999
		33-27-51-31E-050	SIA 001-014
6	Call switch assembly	33-27-51-01G-050	SIA 001-014
		33-27-51-05K-050	SIA 015-999
		33-27-51-05L-060	SIA 015-999
		33-27-51-10H-050	SIA 001-014
		33-27-51-11D-005	SIA 015-999
		33-27-51-31E-055	SIA 001-014

D. Location Zones

Zone	Area
200	Upper Half of Fuselage

E. Prepare for the Procedure

SUBTASK 33-27-00-860-008

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT
B	8	C01404	PASSENGER CABIN PASS CALL RIGHT

F. Procedure

SUBTASK 33-27-00-860-006

(1) Do these steps to replace the call light/reset switch assembly [4] outside the lavatory:

(a) Remove the call light/reset switch assembly [4] and pull away from the lavatory wall.

(b) Disconnect the connector [5] from the in-line connection.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Connect the connector [5] of the new call light/reset switch assembly [4] to the in-line connection.

(d) Install the new call light/reset switch assembly [4] into the lavatory wall.

SUBTASK 33-27-00-860-007

(2) Do these steps to replace the call switch assembly [6] in the lavatory:

(a) Remove the call switch assembly [6] and pull away from the lavatory wall.

(b) Disconnect the connector [7] from the in-line connection.

(c) Connect the connector [7] of the new call switch assembly [6] to the in-line connection.

(d) Install the new call switch assembly [6] into the lavatory wall.

G. Test

SUBTASK 33-27-00-860-009

(1) Remove the safety tags and close the applicable circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT
B	8	C01404	PASSENGER CABIN PASS CALL RIGHT

(2) Do a test of the call switch assembly [6] and call light/reset switch assembly [4]:

(a) Set the call switch assembly [6] in the lavatory to the on mode.

1) Make sure the light in the call switch assembly [6] comes on.

2) Make sure the call light/reset switch assembly [4] outside the lavatory comes on.

(b) Push the call light/reset switch assembly [4] outside the lavatory to the off mode.

1) Make sure the call light/reset switch assembly [4]goes off.

2) Make sure the light in the call switch assembly [6] in the lavatory goes off.

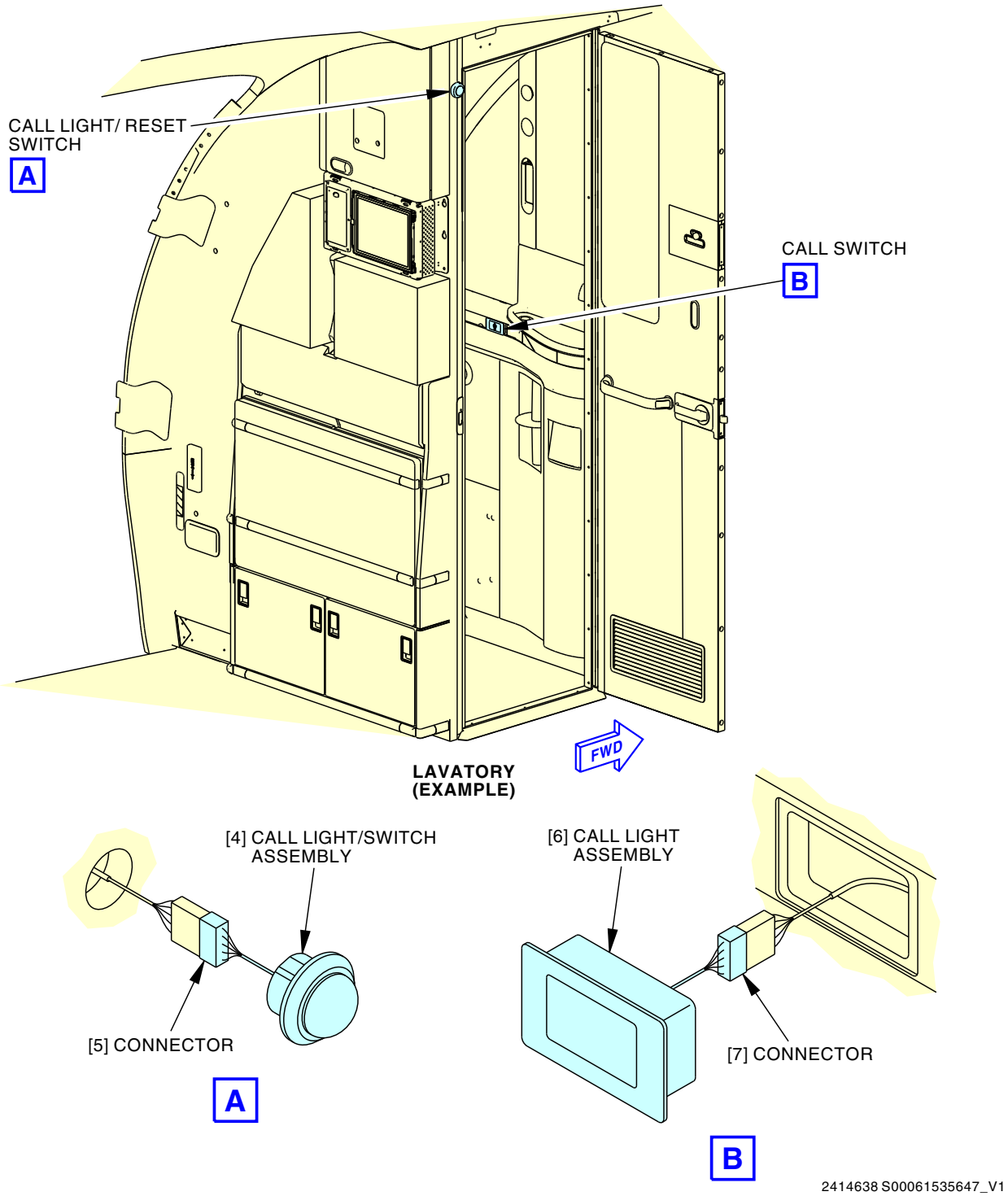
H. Put the Airplane Back to its Usual Condition

SUBTASK 33-27-00-860-010

(1) If it is not necessary, remove electrical power. To remove it, do this task: Remove Electrical Power, TASK 24-22-00-860-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lavatory Call Light - Light/Switch Replacement
Figure 203/33-27-00-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ENTRY LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has this task:

(1) Dim entry LED light assembly replacement.

TASK 33-29-00-960-801

2. Dim Entry Light Assembly Replacement

(Figure 201)

A. General

(1) This task is for the replacement of the dim entry light assembly.

(2) The LED and its circuits are in the light assembly.

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Dim entry light assembly	33-29-00-15-010	SIA ALL

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Prepare for the Replacement

SUBTASK 33-29-00-860-001

(1) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-4

Row	Col	Number	Name
E	9	C00155	ENTRY LIGHTS DIM

E. Dim Entry Light Assembly Replacement

SUBTASK 33-29-00-020-001

(1) Remove the dim entry light assembly [1] as follows:

(a) Lower the applicable panel to get access to the dim entry light assembly [1].

(b) Disconnect the electrical connector [4] from the dim entry light assembly [1].

(c) Hold the lens when you push the clips along the sides of the dim entry light assembly [1] to release the housing [5] from the retainer [3].

(d) Remove the housing [5] from the ceiling panel.

(e) Remove the retainer [3] and gasket [2].

SUBTASK 33-29-00-420-001

(2) Install the dim entry light assembly [1] as follows:

(a) Push the clips to remove the retainer [3] and gasket [2] from the housing [5].

(b) Move the housing [5] through the ceiling panel mounting hole.

(c) Put the gasket [2] and retainer [3] on the housing [5].

(d) Carefully push the lens and retainer [3] together until the clips latch the housing [5] to the retainer [3].

(e) Connect the electrical connector [4] to the dim entry light assembly [1].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Dim Entry Light Assembly Replacement Test

SUBTASK 33-29-00-710-001

(1) Do a test of the dim entry light assembly [1] as follows:

(a) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-4

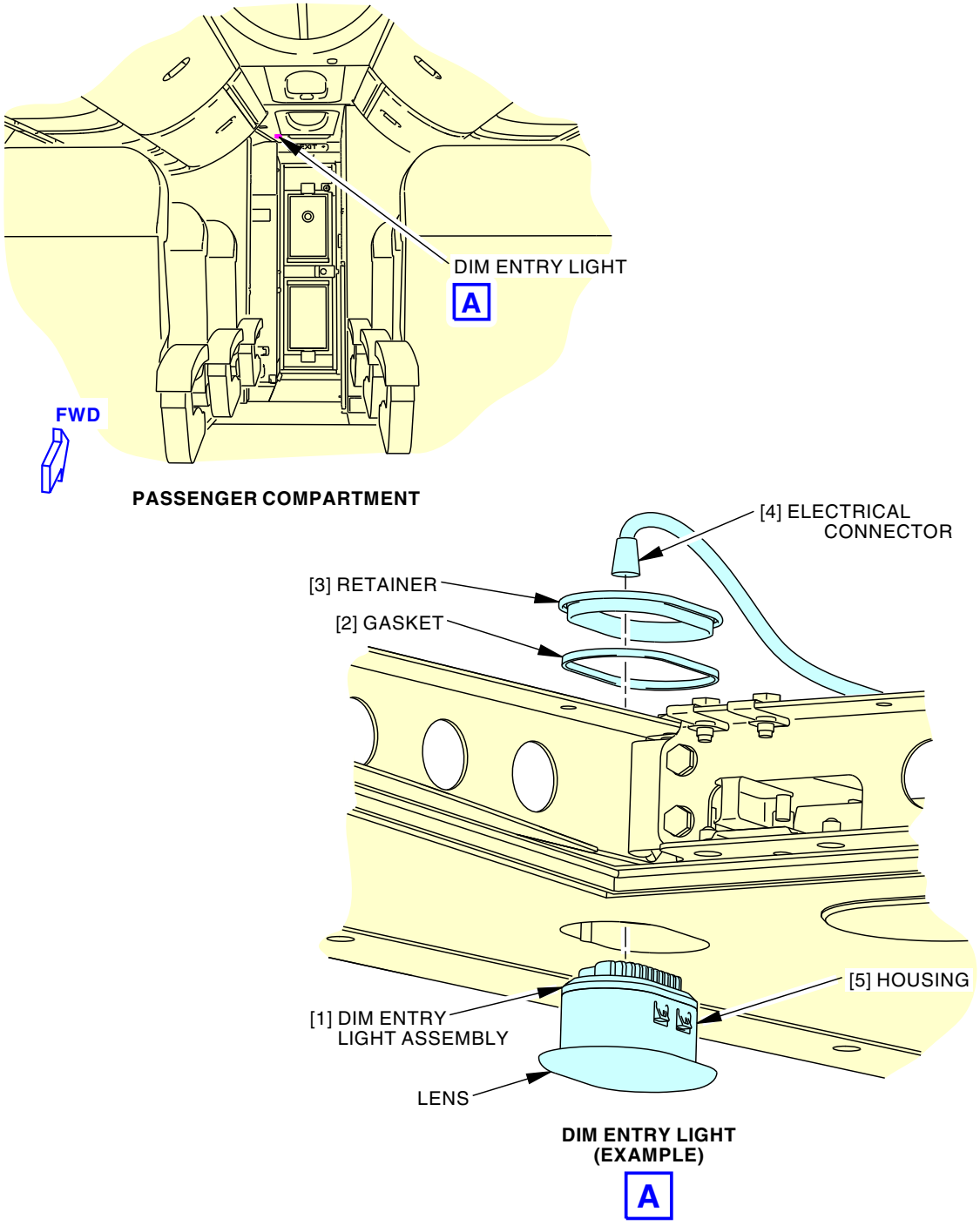
Row	Col	Number	Name
E	9	C00155	ENTRY LIGHTS DIM

(b) Make sure that the light comes on.

NOTE: The light is energized by the 28 volt dc hot battery bus.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dim Entry Light Assembly Installation
Figure 201/33-29-00-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WHEEL WELL LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Wheel Well Lights - Deactivation

(2) Wheel Well Lights - Activation

(3) Wheel Well Lights - Light Assembly Replacement

(4) Wheel Well Lights - Operational Test.

TASK 33-32-00-040-801

2. Wheel Well Lights - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power to the wheel well lights.

B. Location Zones

Zone	Area
115	Nose Landing Gear Wheel Well - Left
116	Nose Landing Gear Wheel Well - Right
118	Electrical and Electronics Compartment - Right
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. Wheel Well Lights Deactivation

SUBTASK 33-32-00-010-001

(1) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-32-00-860-001

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	2	C00125	WHEEL WELL LT

E. Wheel Well Lights Tryout

NOTE: This tryout is to make sure that the Wheel Well Lights are in a zero energy stage.

SUBTASK 33-32-00-860-002

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(1) Make sure that this circuit breaker is open and has safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	2	C00125	WHEEL WELL LT

SUBTASK 33-32-00-410-003

(2) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-32-00-700-001

(3) Do the following steps for the Wheel Well Lights:

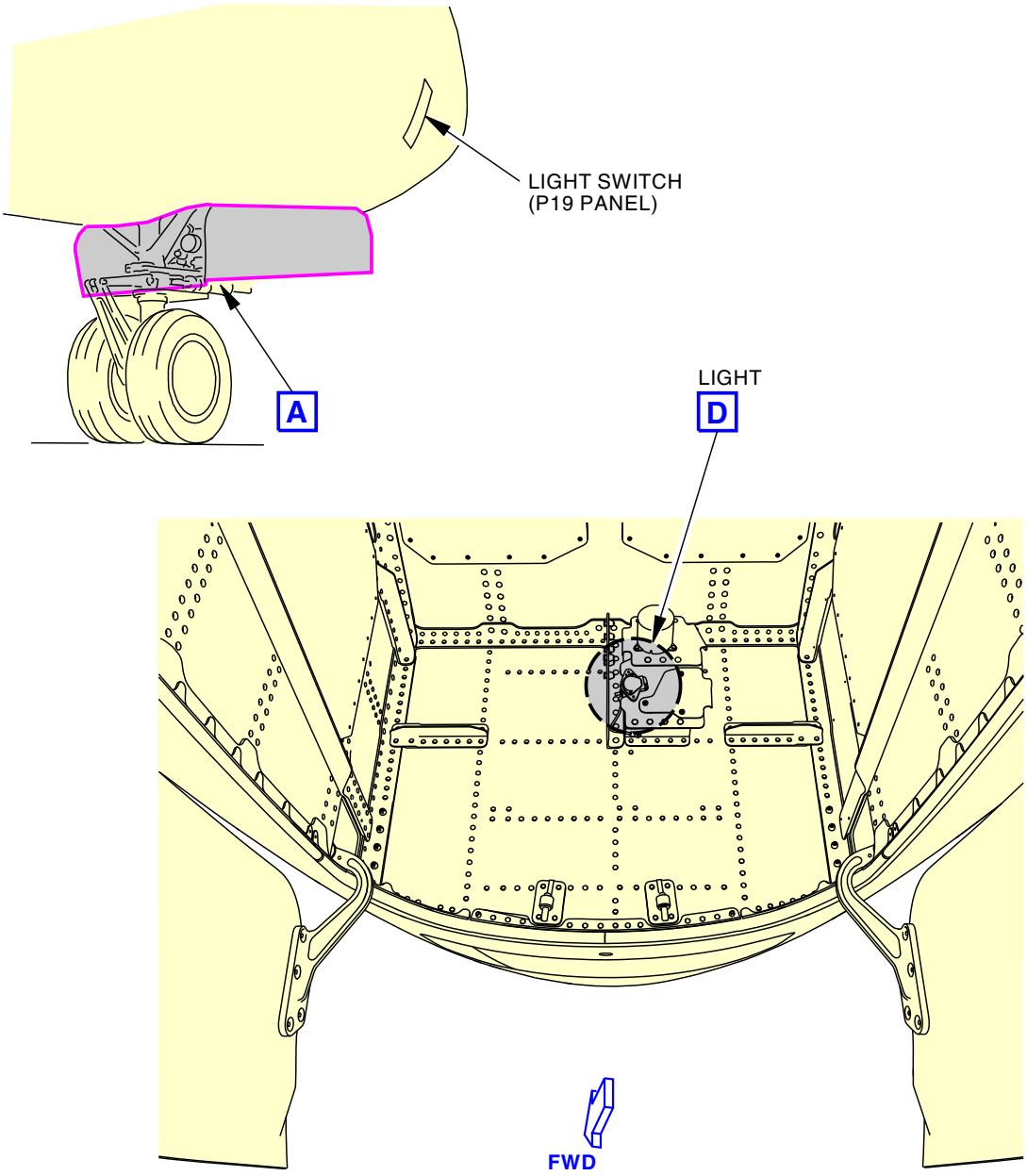
(a) At the overhead panel, P5, set the wheel well lights switch to the ON mode.

1) Make sure that the NLG wheel well light does not come on.

2) Make sure that none of the MLG wheel well lights come on.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



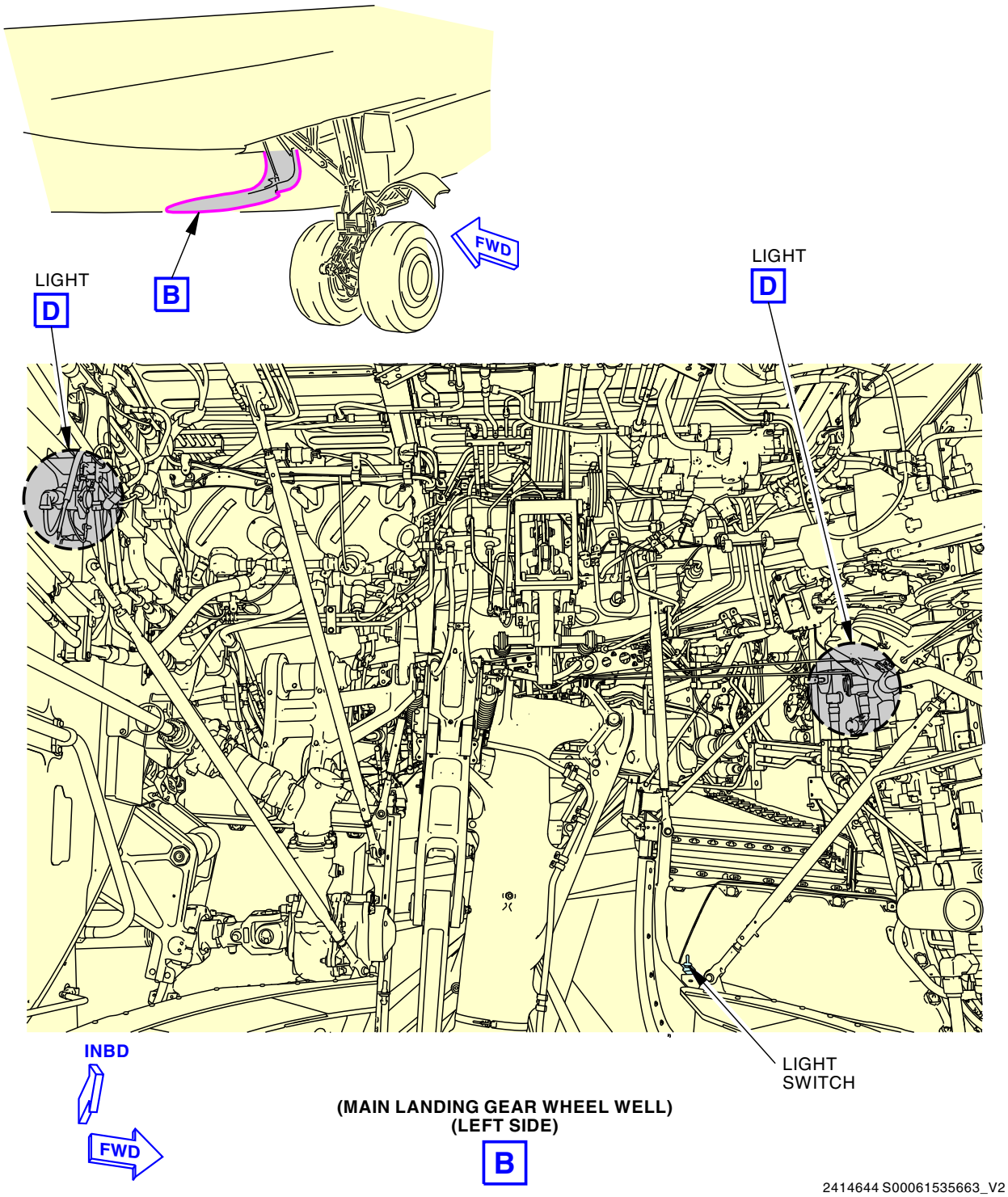
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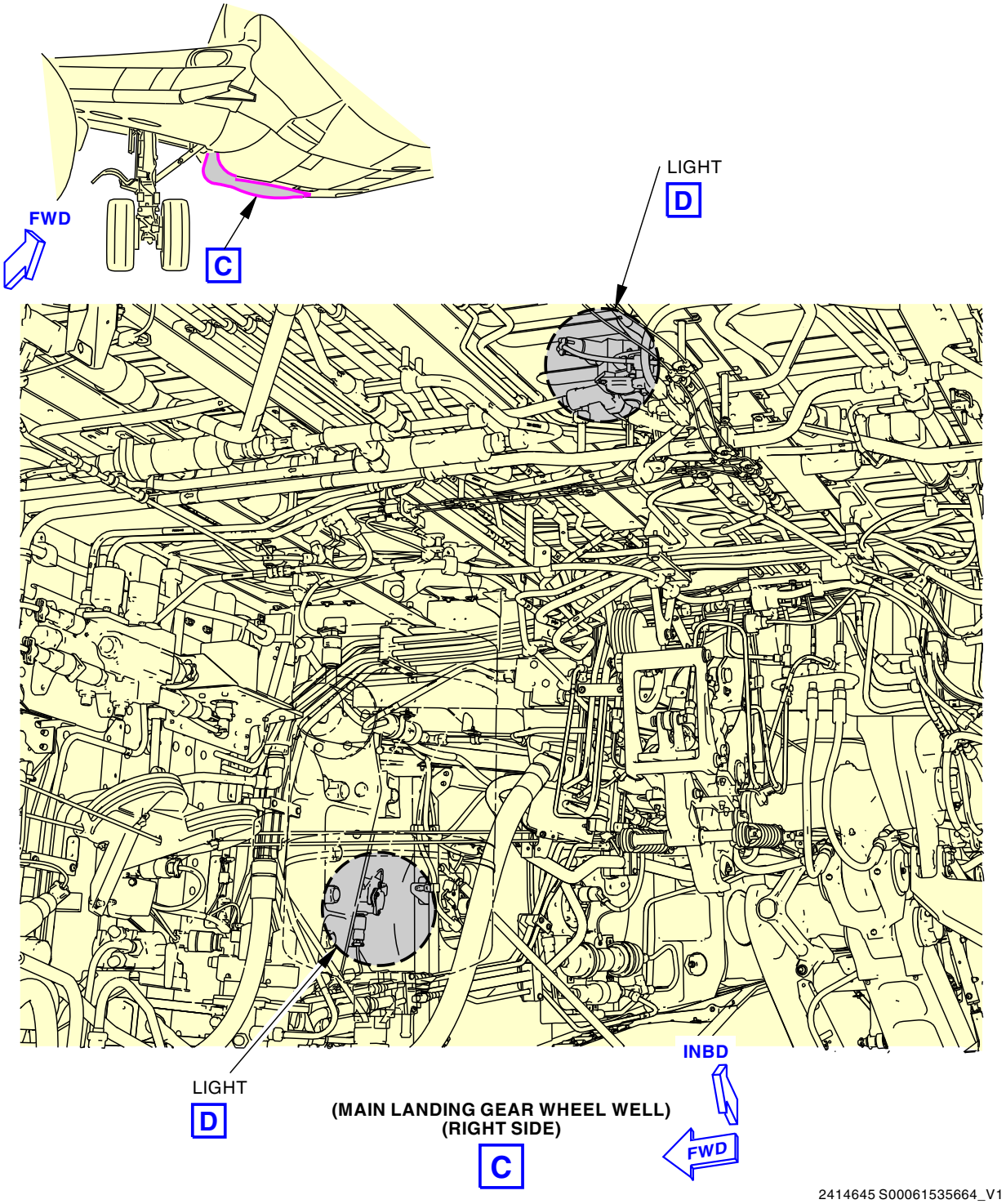
Wheel Well Lights
Figure 201/33-32-00-990-801 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



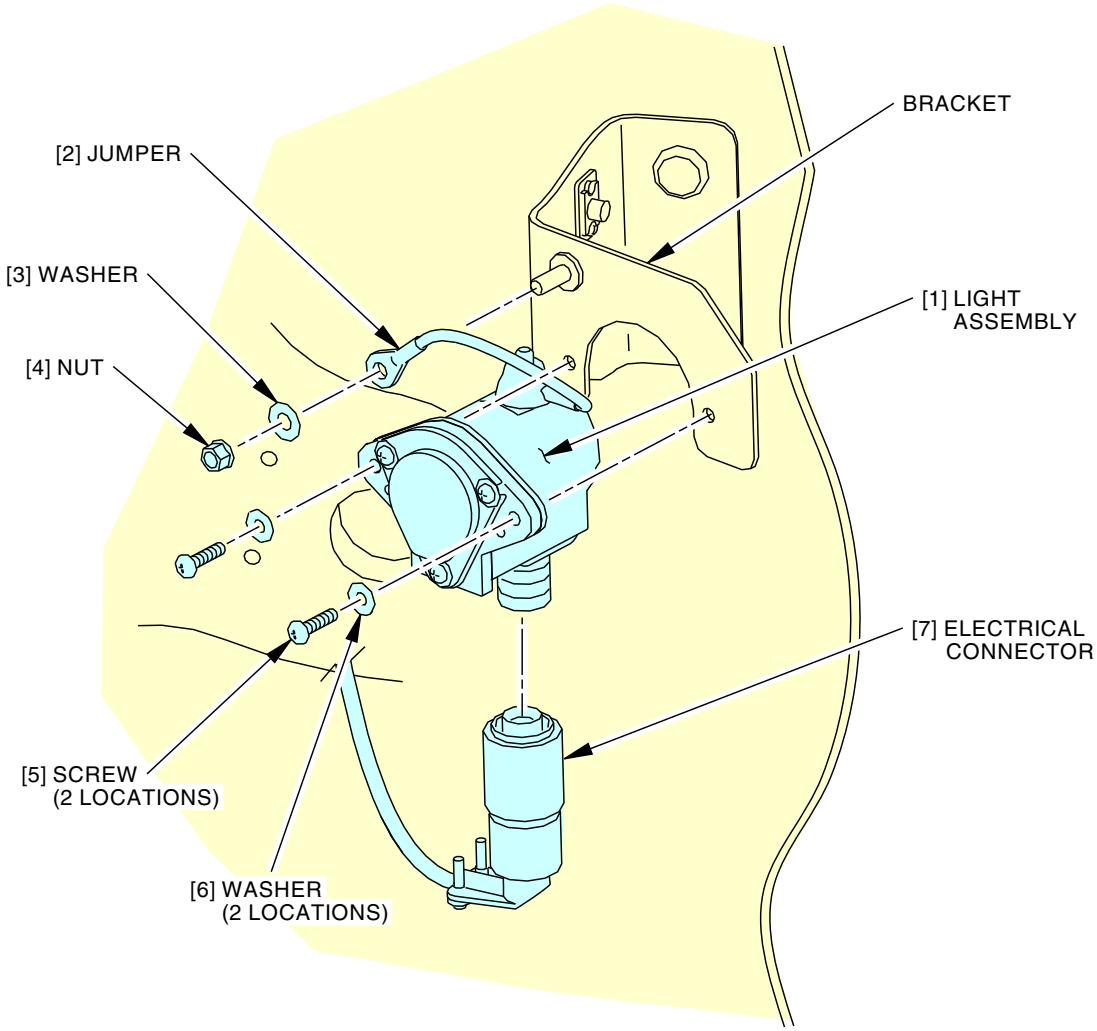
Wheel Well Lights
Figure 201/33-32-00-990-801 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Wheel Well Lights
Figure 201/33-32-00-990-801 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LIGHT (EXAMPLE)

D

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Wheel Well Lights
Figure 201/33-32-00-990-801 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-32-00-440-801

3. Wheel Well Lights - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the wheel well lights.

B. Location Zones

Zone	Area
115	Nose Landing Gear Wheel Well - Left
116	Nose Landing Gear Wheel Well - Right
118	Electrical and Electronics Compartment - Right
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. Wheel Well Lights Activation

SUBTASK 33-32-00-010-002

(1) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-32-00-860-003

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	2	C00125	WHEEL WELL LT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-32-00-410-001

(3) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

——— END OF TASK ———

TASK 33-32-00-960-801

4. Wheel Well Light - Light Assembly Replacement

(Figure 202)

A. References

Reference	Title
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-20-00, Paragraph 2	CLEANING OF FAY SURFACES
WDM 33-32-11	D000534497

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-614	Bonding Meters - Non-Intrinsically Safe (For use in outside Class I, Divisions I & II non-hazardous locations. For hazardous locations, use COM-1550). Part #: 247000 Supplier: 00426 Part #: 620LK Supplier: 1CRL2 Part #: BLR-0003-XX Supplier: KC432 Part #: BT51 Supplier: 00426 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659 Opt Part #: 247001 Supplier: 00426

C. Consumable Materials

Reference	Description	Specification
A50110	Sealant - Fuel Tank	BMS5-45 Class B-2
A50155	Sealant - Fuel Tank	BMS5-45 Class C
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
A50296	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class C
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Light assembly	33-32-00-01-025	SIA ALL

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

AMM Item	Description	AIPC Reference	AIPC Effectivity
1 (cont.)		33-32-00-02B-040	SIA ALL

E. Location Zones

Zone	Area
115	Nose Landing Gear Wheel Well - Left
116	Nose Landing Gear Wheel Well - Right
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

F. Access Panels

Number	Name/Location
114AR	External Power Receptacle Door

G. Wheel Well Light Assembly Replacement

SUBTASK 33-32-00-860-004

(1) Set the switch for the light to the OFF mode (WDM 33-32-11):

(a) Use the switch on the left wall of the main wheel well.

(b) Use the switch on the P19 external power receptacle panel.

1) For access to the switch, do this step:

a) Open this access panel:

Number	Name/Location
114AR	External Power Receptacle Door

SUBTASK 33-32-00-020-001

(2) Do these steps to remove the light assembly [1]:

(a) Disconnect the electrical connector [7] from the light assembly [1].

(b) Remove the nut [4], washer [3], and jumper [2].

(c) Remove the screws [5] and washers [6].

(d) Remove the light assembly [1] from the bracket.

SUBTASK 33-32-00-100-001

(3) Clean the ground stud on the aluminum bracket (SWPM 20-20-00, Paragraph 2).

SUBTASK 33-32-00-420-001

(4) Do these steps to install the new light assembly [1] to the bracket:

(a) Install the screws [5] and washers [6].

(b) Install the nut [4], washer [3] to connect the jumper [2] to the bracket.

1) Use cotton wiper, G00034, moist in solvent, B00184, to clean the mating surfaces of the nut [4], washer [3], and jumper [2].

2) Apply sealant, A50155, sealant, A50110, sealant, A50296, or sealant, A50231, to the mating surfaces of the ground stud, nut [4], washer [3], and jumper [2].

3) Install the nut [4], washer [3], and jumper [2].

4) Tighten the nut [4] to 28 in-lb (3 N·m) - 35 in-lb (4 N·m).

a) Make sure that there is squeeze out around all the interfaces of each component.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

5) Measure the electrical resistance between jumper [2] and airplane structure (SWPM 20-20-00).
   a) Use a non-intrinsically safe bonding meter, COM-614.
   b) Make sure that the electrical bonding resistance is 0.001 ohm (1.0 milliohm) or less.

(c) Connect the electrical connector [7] to the light assembly [1].

SUBTASK 33-32-00-710-001

(5) Do a test of the light assembly [1]:
   (a) Set the switch for the light to the ON mode.
      1) Make sure that the light assembly [1] comes on.
   (b) Set the switch to the OFF mode.
      1) Make sure that the light assembly [1] goes off.

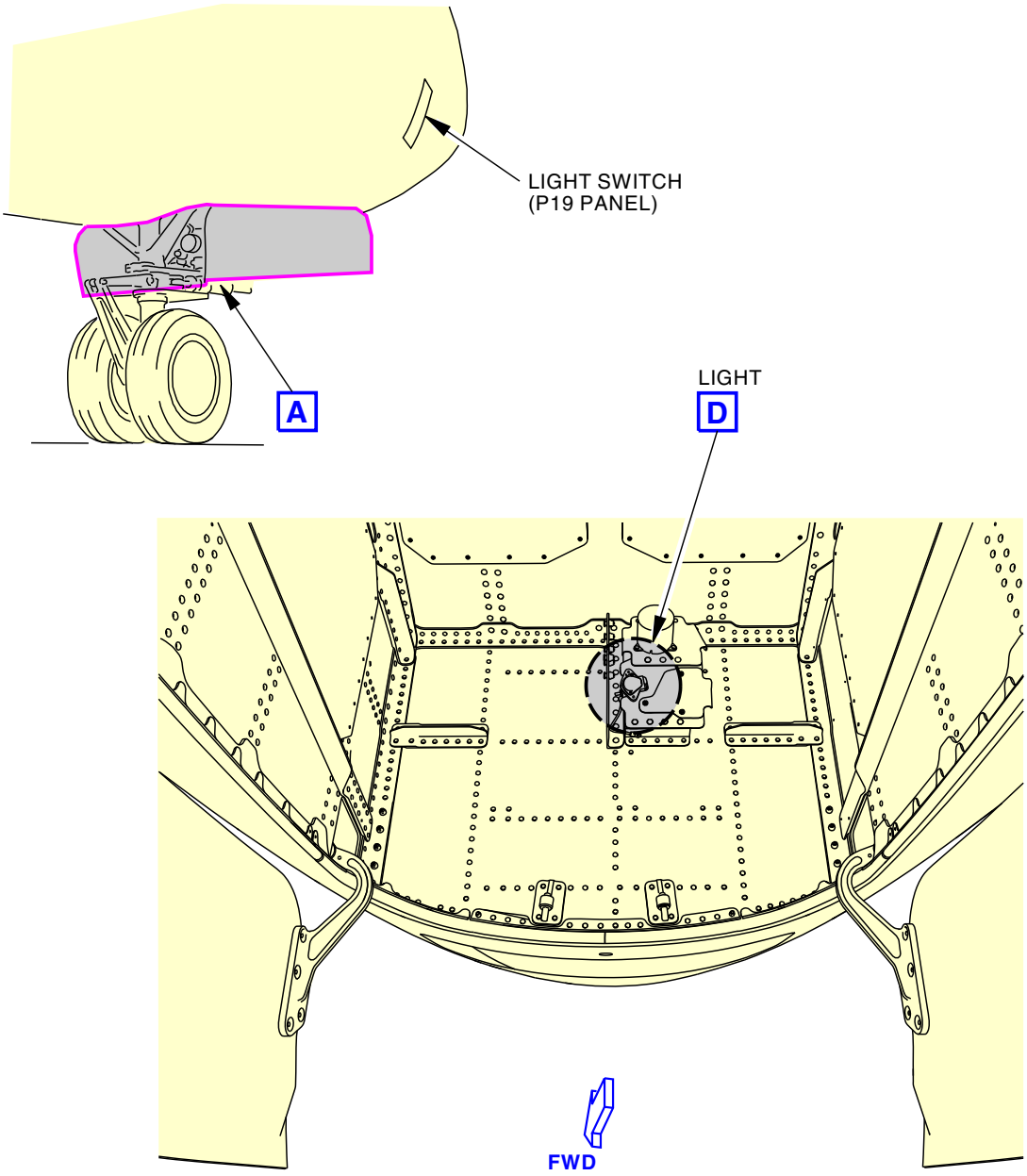
SUBTASK 33-32-00-410-002

(6) Close this access panel:

Number	Name/Location
114AR	External Power Receptacle Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



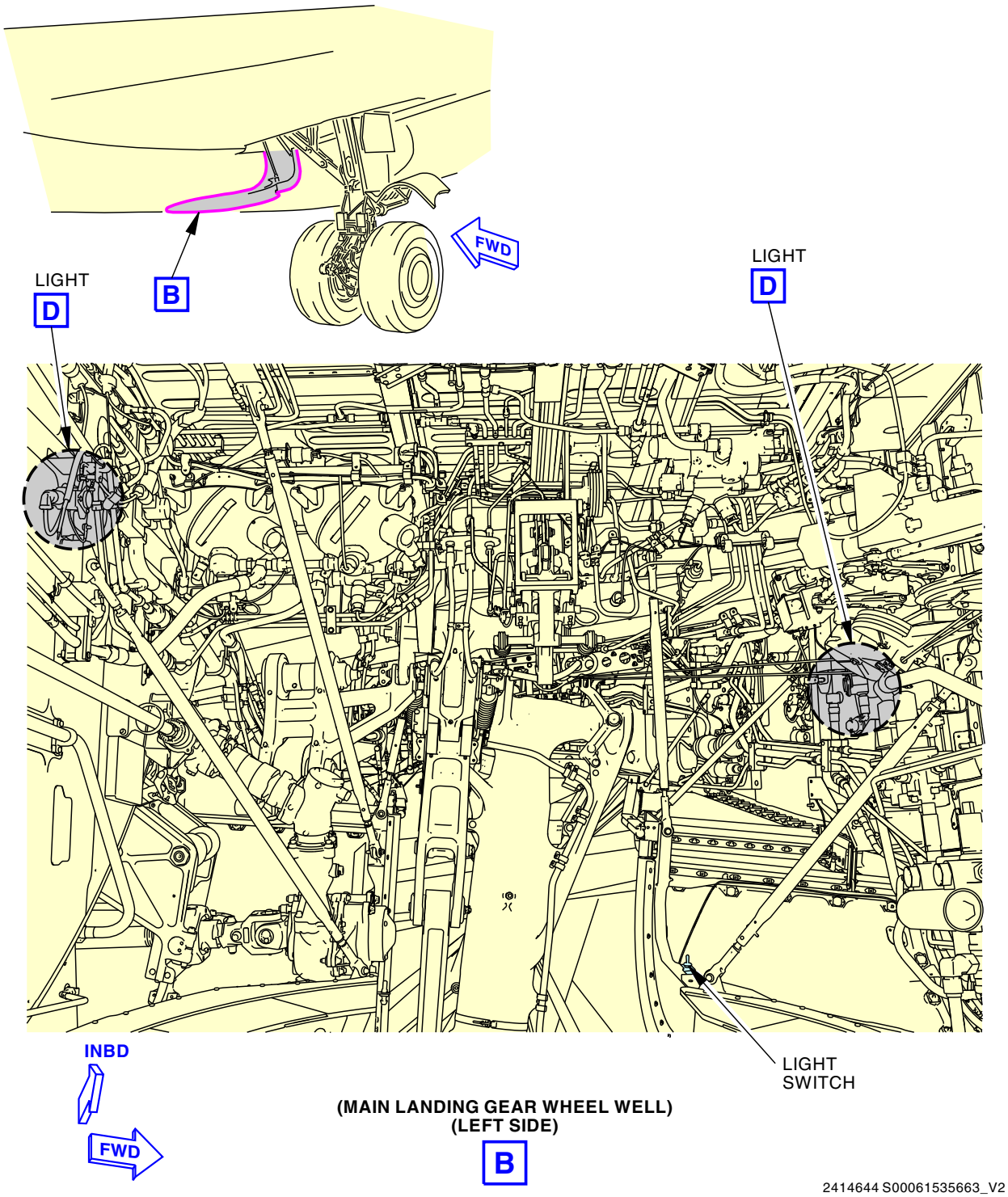
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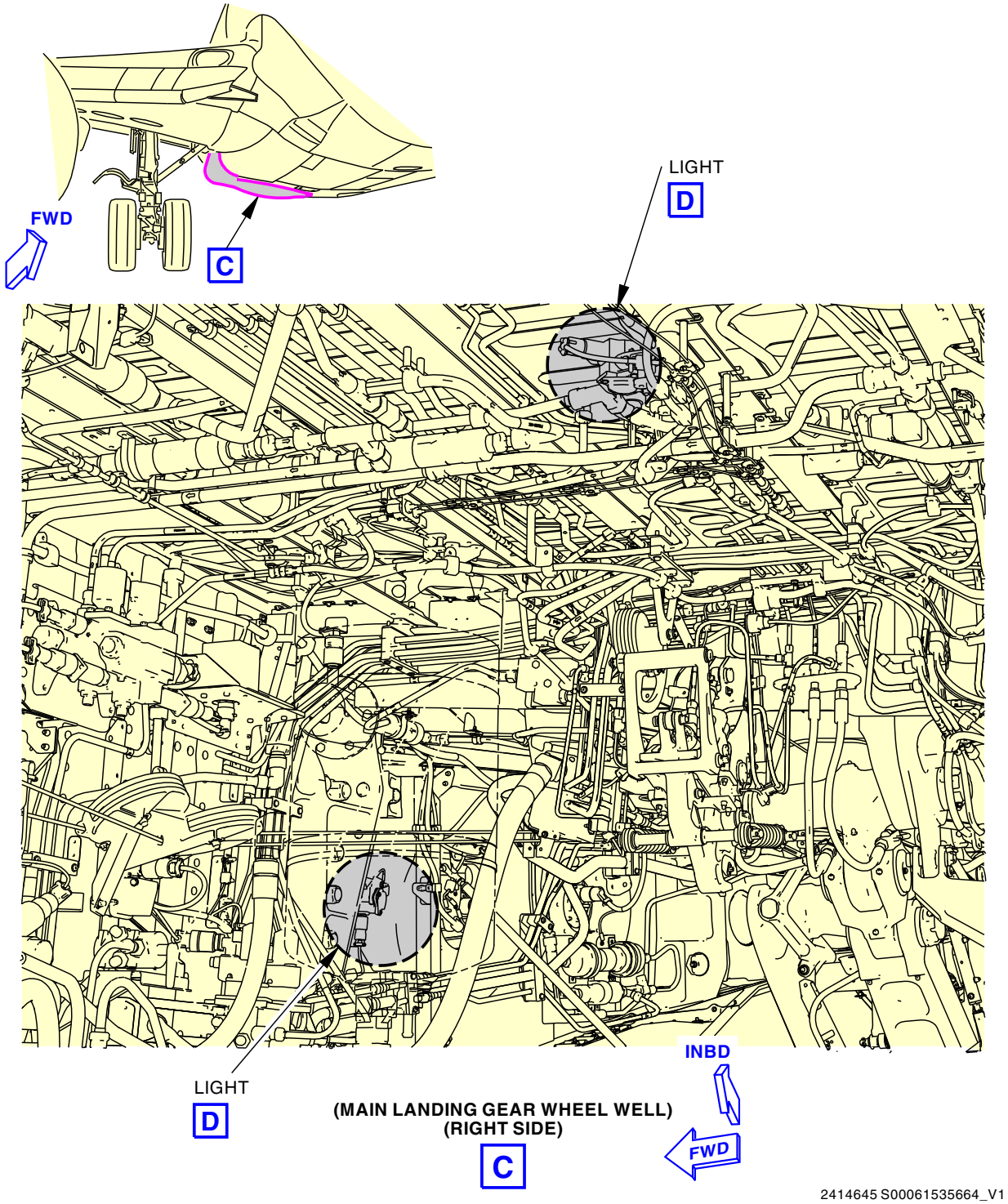
Wheel Well Light - Light Assembly Replacement
Figure 202/33-32-00-990-802 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



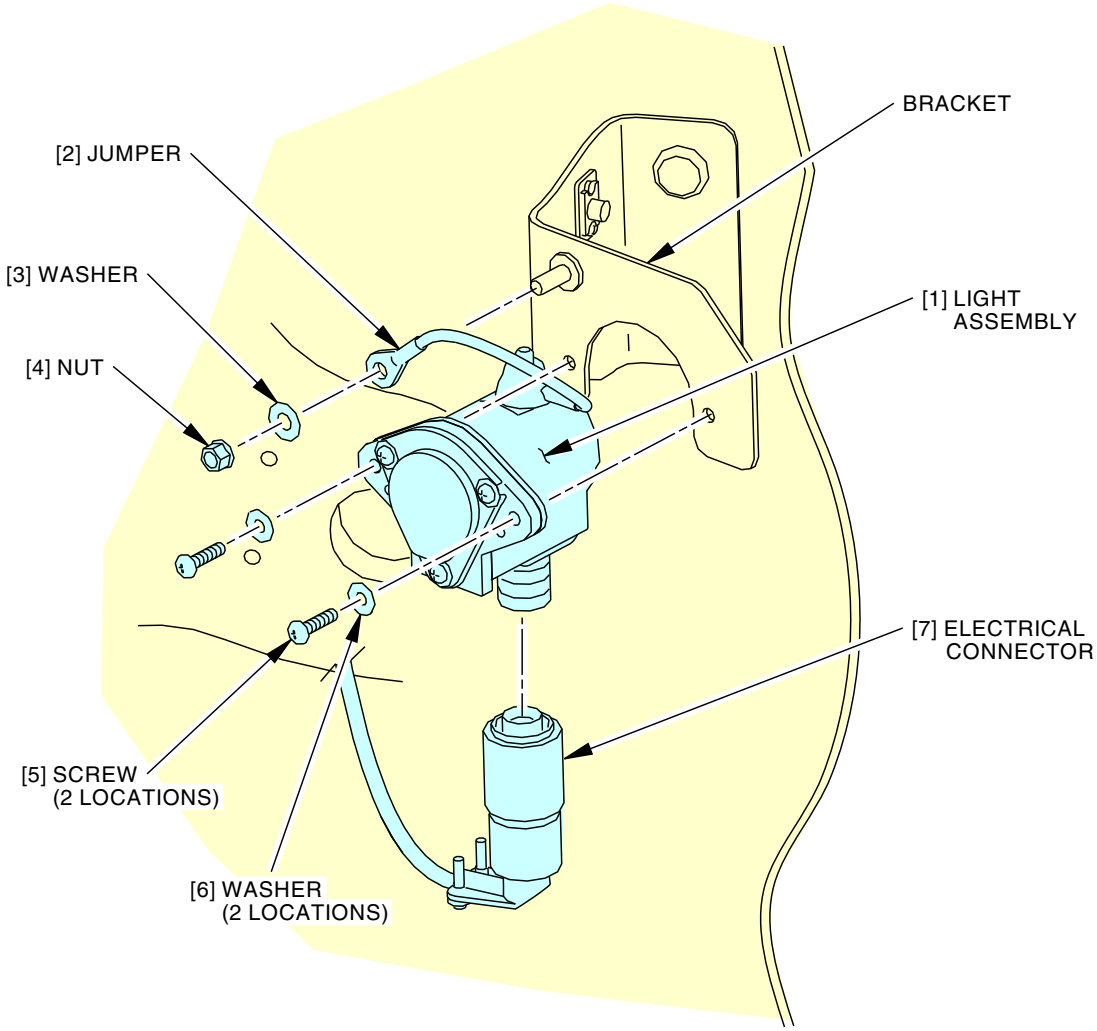
Wheel Well Light - Light Assembly Replacement
Figure 202/33-32-00-990-802 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Wheel Well Light - Light Assembly Replacement
Figure 202/33-32-00-990-802 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LIGHT (EXAMPLE)

D

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Wheel Well Light - Light Assembly Replacement
Figure 202/33-32-00-990-802 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-32-00-710-801

5. Wheel Well Lights - Operational Test

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

B. Wheel Well Lights Operational Test

SUBTASK 33-32-00-710-002

(1) Do a test of the NLG and MLG wheel well lights:

(a) At the overhead panel, P5, set the WHEEL WELL switch to ON.

1) Make sure that the light in the NLG wheel well comes on.

2) Make sure that the lights in the MLG wheel well comes on.

(b) Set the switch to OFF.

1) Make sure that the light in the NLG wheel well goes off.

2) Make sure that the lights in the MLG wheel well goes off.

(c) At the main wheel well, set the MAIN WHEEL WELL LIGHT SWITCH to ON.

1) Make sure that the lights in the left and right MLG come on.

(d) Set the MAIN WHEEL WELL LIGHT SWITCH to OFF.

1) Make sure that the lights in the left and right MLG goes off.

(e) At the external power receptacle panel, set the NWW LIGHT switch to ON.

1) Make sure that the light in the NLG wheel well come on.

(f) Set the NWW LIGHT switch to NORMAL.

1) Make sure that the light in the NLG wheel well goes off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AIR CONDITIONING COMPARTMENT LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Air conditioning compartment lights deactivation

(2) Air conditioning compartment lights activation

(3) Air conditioning compartment LED light assembly replacement.

TASK 33-33-00-040-801

2. Air Conditioning Compartment Lights Deactivation

(Figure 201)

A. General

(1) This task gives the instructions on how to deactivate the lights for the air conditioning compartment.

NOTE: The air conditioning compartment is also referred to as the environmental control systems (ECS) bay.

(2) This task makes sure that the air conditioning compartment lights are in a zero energy stage when deactivated.

B. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
132	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
192CL	ECS Access Door
192CR	ECS Access Door
192JL	Air Conditioning Panel - Aft
192JR	Air Conditioning Panel - Aft

D. Prepare for the Deactivation

SUBTASK 33-33-00-010-008

(1) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-33-00-860-001

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	3	C00126	AIR COND COMPT LT

SUBTASK 33-33-00-410-006

(3) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-33-00-010-001

(4) Open these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

SUBTASK 33-33-00-010-002

(5) Open these access panels:

Number	Name/Location
192JL	Air Conditioning Panel - Aft
192JR	Air Conditioning Panel - Aft

E. Air Conditioning Compartment Lights Deactivation

SUBTASK 33-33-00-700-001

(1) Make sure that the air conditioning compartment lights are deactivated as follow:

(a) At the forward end of the left ECS bay, set the light switch to the ON position.

(b) Make sure that the left conditioning compartment lights do not come on.

(c) Set the light switch to the OFF position.

(d) At the forward end of the right ECS bay, set the light switch to the ON position.

(e) Make sure that the right conditioning compartment lights do not come on.

(f) Set the light switch to the OFF position.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 33-33-00-410-001

(1) Close these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

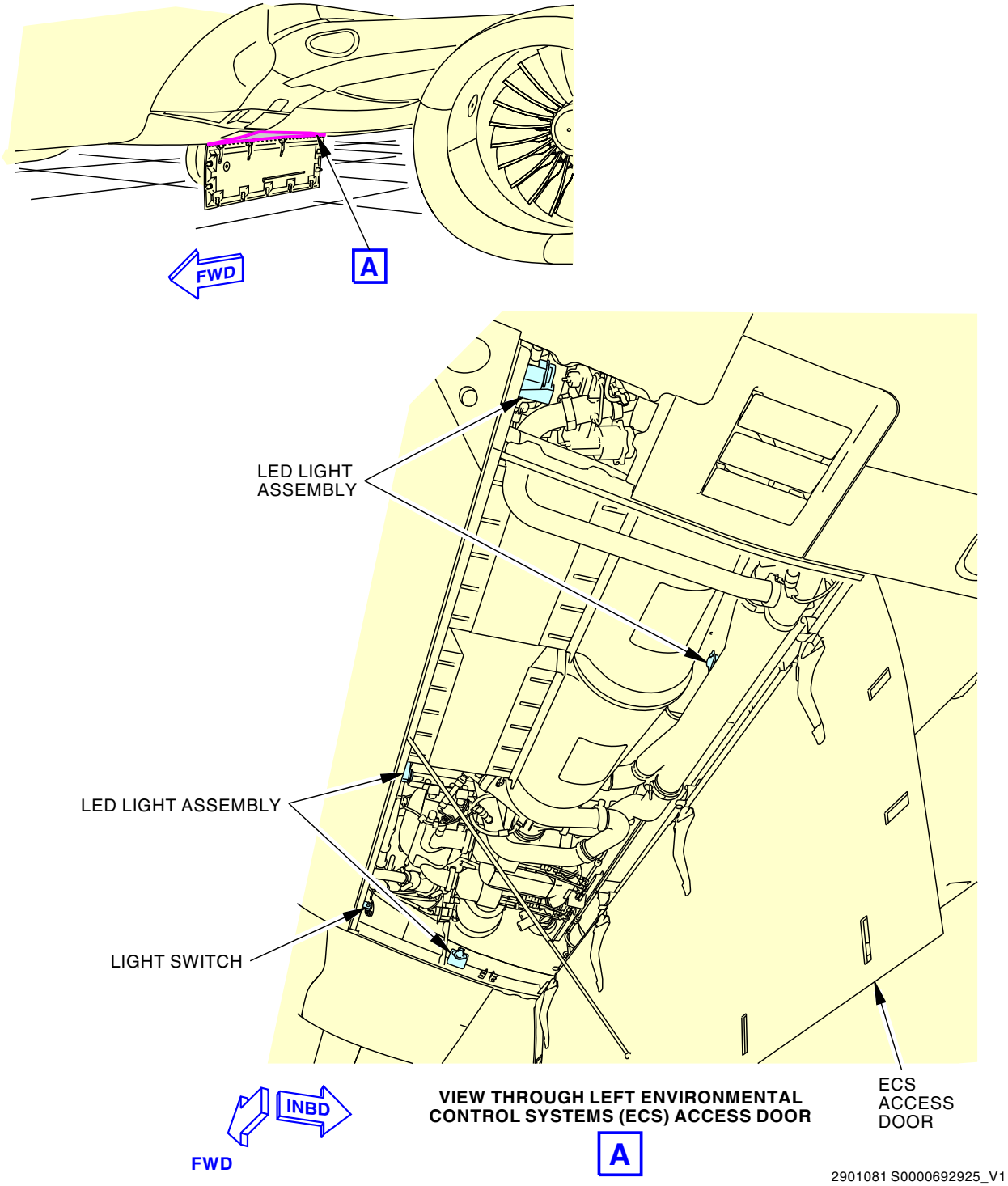
SUBTASK 33-33-00-410-002

(2) Close these access panels:

Number	Name/Location
192JL	Air Conditioning Panel - Aft
192JR	Air Conditioning Panel - Aft

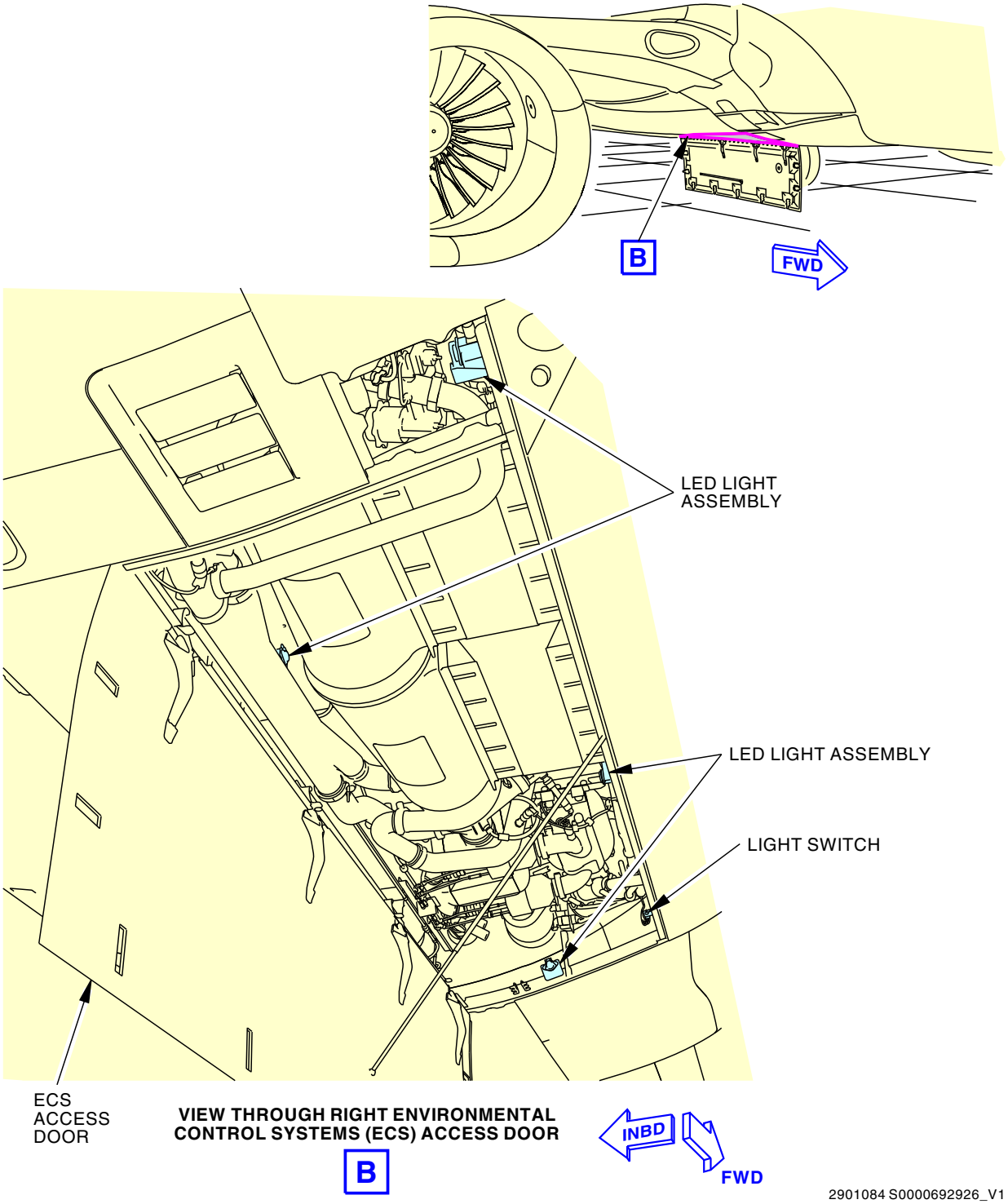
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Air Conditioning Compartment Lights
Figure 201/33-33-00-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Air Conditioning Compartment Lights
Figure 201/33-33-00-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-33-00-440-801

3. Air Conditioning Compartment Lights Activation

(Figure 201)

A. General

(1) This task gives the instructions on how to activate the lights for the air conditioning compartment.

(2) This task makes sure that electrical power is restored to the air conditioning compartment lights.

B. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
132	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
192CL	ECS Access Door
192CR	ECS Access Door
192JL	Air Conditioning Panel - Aft
192JR	Air Conditioning Panel - Aft

D. Prepare for the Activation

SUBTASK 33-33-00-010-003

(1) Open these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

SUBTASK 33-33-00-010-004

(2) Open these access panels:

Number	Name/Location
192JL	Air Conditioning Panel - Aft
192JR	Air Conditioning Panel - Aft

SUBTASK 33-33-00-010-009

(3) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-33-00-860-002

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(4) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	3	C00126	AIR COND COMPT LT

SUBTASK 33-33-00-410-007

(5) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

E. Air Conditioning Compartment Lights Activation

SUBTASK 33-33-00-720-001

(1) Make sure that the air conditioning compartment lights work as follows:

(a) At the forward end of the left ECS bay, set the light switch to the ON position.

(b) Make sure that the left air conditioning compartment lights come on.

(c) Set the light switch to the OFF position.

(d) Make sure that the left air conditioning compartment lights go off.

(e) At the forward end of the right ECS bay, set the light switch to the ON position.

(f) Make sure that the right air conditioning compartment lights come on.

(g) Set the light switch to the OFF position.

(h) Make sure that the right air conditioning compartment lights go off.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 33-33-00-410-003

(1) Close these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

SUBTASK 33-33-00-410-004

(2) Close these access panels:

Number	Name/Location
192JL	Air Conditioning Panel - Aft
192JR	Air Conditioning Panel - Aft

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-33-00-960-801

4. Air Conditioning Compartment LED Light Assembly Replacement

(Figure 202)

A. General

(1) This task gives the instructions on how to replace the LED light assembly for the air conditioning compartment.

(2) The air conditioning compartment is also referred to as the Environmental Control System (ECS) bay.

B. Tools/Equipment

Reference	Description
STD-6972	Milliohmmeter - 0.0 to 0.1 Ohm Range

C. Consumable Materials

Reference	Description	Specification
A50110	Sealant - Fuel Tank	BMS5-45 Class B-2
A50155	Sealant - Fuel Tank	BMS5-45 Class C
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
A50296	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class C

D. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
132	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Right

E. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
192CL	ECS Access Door
192CR	ECS Access Door
192JL	Air Conditioning Panel - Aft
192JR	Air Conditioning Panel - Aft

F. Prepare for the Replacement

SUBTASK 33-33-00-010-005

(1) Open the applicable access door to the Environmental Control Systems (ECS) Bay:

For the left side,

Number	Name/Location
192CL	ECS Access Door

For the right side,

Number	Name/Location
192CR	ECS Access Door

SUBTASK 33-33-00-010-006

(2) If the light assembly is installed aft of the ECS access doors, also open the applicable access panel:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

For the left side,

Number	Name/Location
192JL	Air Conditioning Panel - Aft

For the right side,

Number	Name/Location
192JR	Air Conditioning Panel - Aft

SUBTASK 33-33-00-010-010

(3) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-33-00-860-006

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(4) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	3	C00126	AIR COND COMPT LT

G. Air Conditioning Compartment LED Light Assembly Replacement

SUBTASK 33-33-00-980-001

(1) Set the light switch at the forward end of the ECS bay to the OFF position.

SUBTASK 33-33-00-960-001

(2) Do these steps to replace the LED light assembly:

(a) Remove the nut [4], washer [5] and the jumper cable [7] from the stud on the mounting bracket.

(b) Remove the screws [2] and washers [3] from the LED light assembly [1].

(c) Remove the LED light assembly [1] from the mounting bracket.

(d) Disconnect the electrical connector [6] from the LED light assembly [1].

(e) Connect the electrical connector [6] to the new LED light assembly [1].

(f) Install the LED light assembly [1] to the mounting bracket with the washers [3] and screws [2].

(g) Install the jumper cable [7] to the mounting bracket as follows:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Apply a bead of sealant, A50110 to the contact surfaces of the stud, terminal of jumper cable [7], washer [5] and nut [4].

NOTE: The sealant, A50155, sealant, A50231 and sealant, A50296 are equivalent alternatives for the sealant, A50110.

2) Install the jumper cable [7], washer [5] and nut [4] to the stud.

a) Tighten the nut [4].

3) Make sure that there is a continuous squeeze-out of sealant around the stud, terminal of jumper cable [7], washer [5] and nut [4].

a) If necessary, add more sealant around the contact surfaces.

(h) Measure the resistance between the terminal of jumper cable [7] and mounting bracket with a milliohmmeter, STD-6972.

1) Make sure that the resistance is not more than 1.0 milliohms.

SUBTASK 33-33-00-860-007

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	3	C00126	AIR COND COMPT LT

SUBTASK 33-33-00-410-008

(4) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-33-00-710-001

(5) Test the new LED light assembly as follows:

(a) On the forward end of the ECS bay, set the switch for the light to the ON position.

1) Make sure that the light comes on.

(b) Set the switch to the OFF position.

1) Make sure that the light goes off.

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H. Put the Airplane Back to Its Usual Condition

SUBTASK 33-33-00-410-005

(1) Close the access door that was opened:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

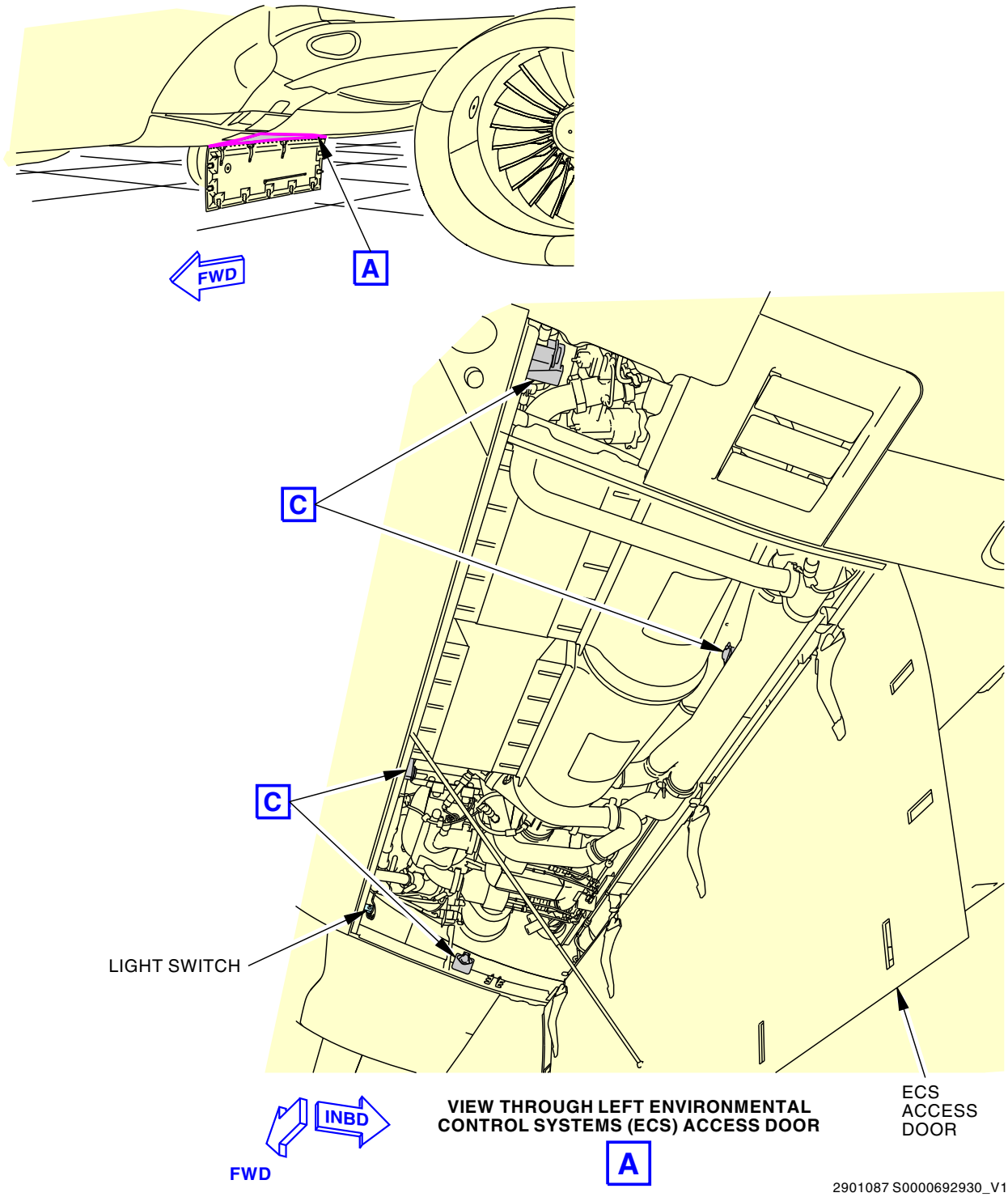
SUBTASK 33-33-00-010-007

(2) Close the access panel, if opened:

Number	Name/Location
192JL	Air Conditioning Panel - Aft
192JR	Air Conditioning Panel - Aft

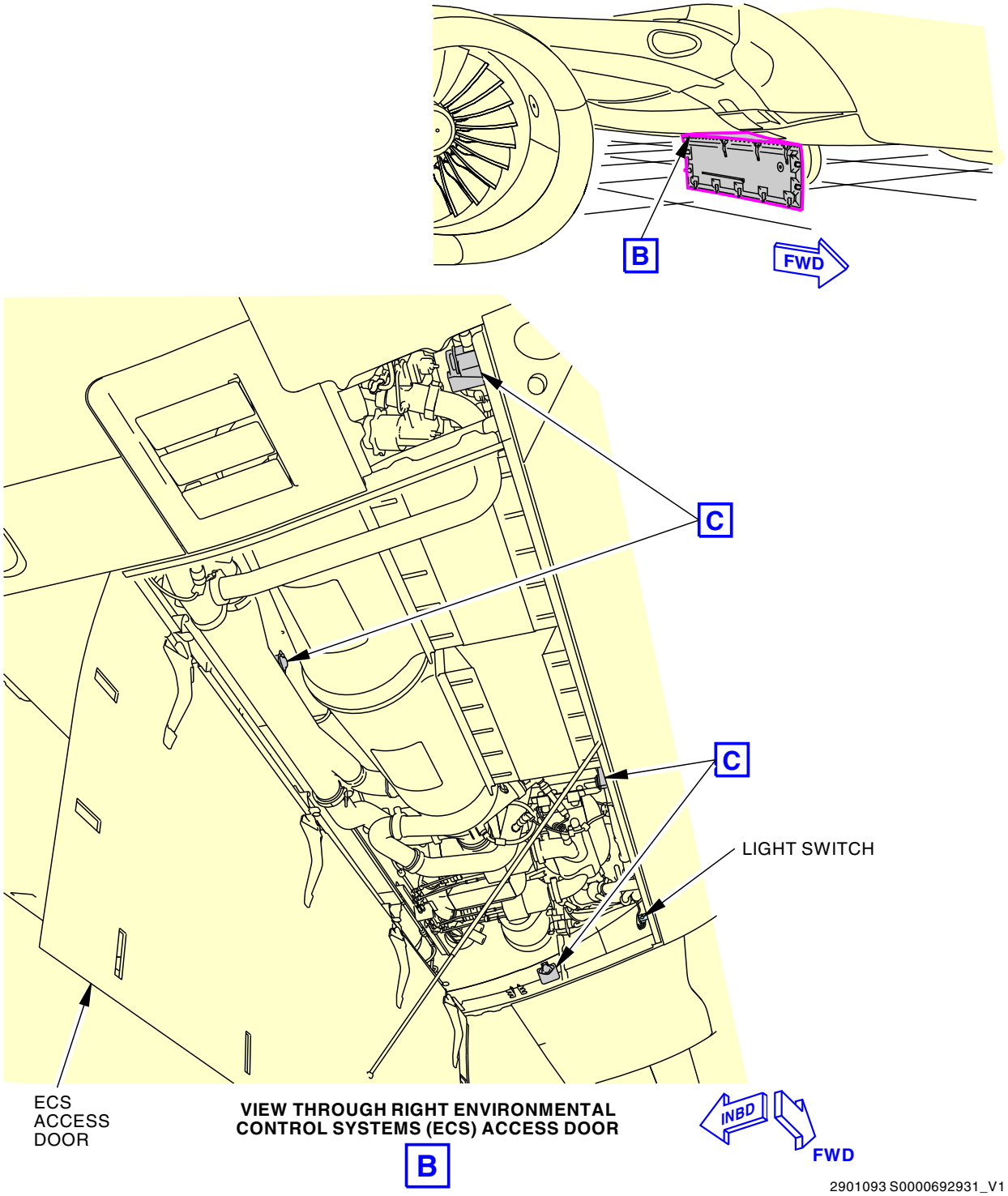
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



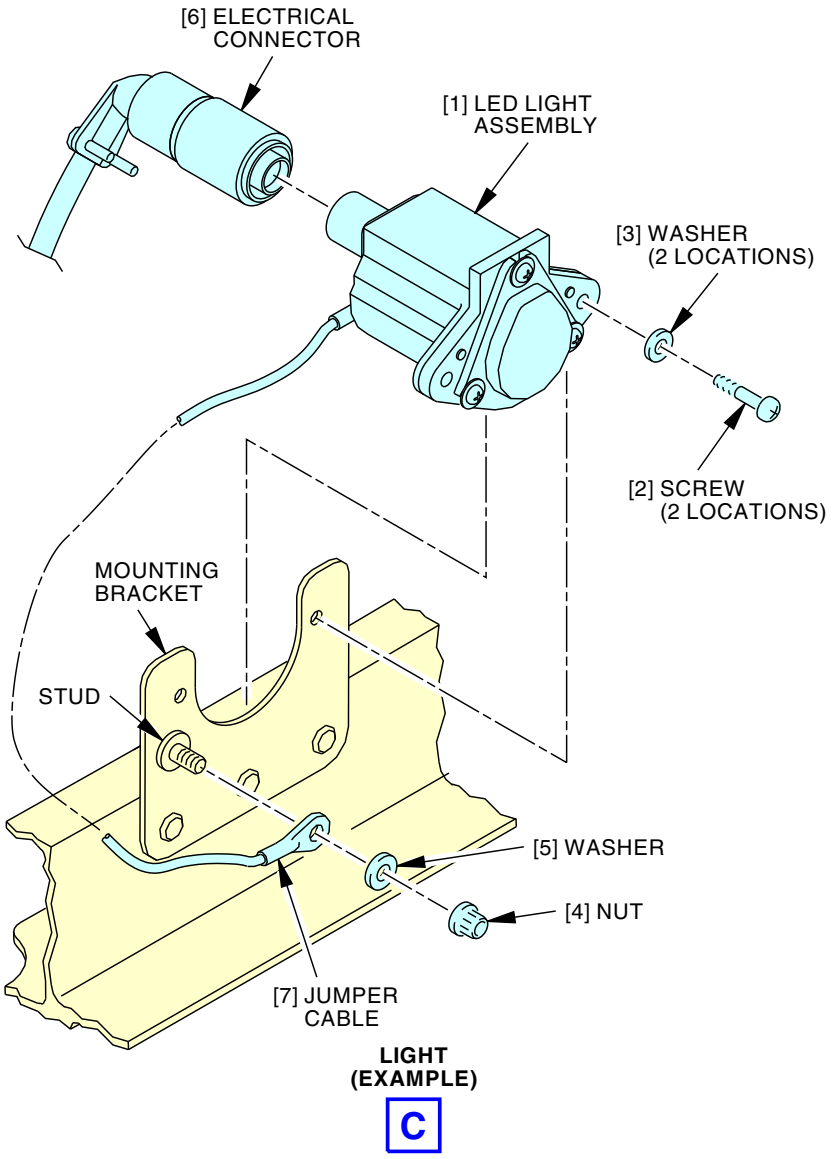
Air Conditioning Compartment Light Lamp Replacement
Figure 202/33-33-00-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Air Conditioning Compartment Light Lamp Replacement
Figure 202/33-33-00-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Air Conditioning Compartment Light Lamp Replacement
Figure 202/33-33-00-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRONIC EQUIPMENT COMPARTMENT LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) A Deactivation of the Electronic Equipment Compartment Lights

(2) An Activation of the Electronic Equipment Compartment Lights

(3) A Replacement of the Electronic Equipment Compartment Light Lamp.

TASK 33-34-00-040-801

2. Electronic Equipment Compartment Lights Deactivation

(Figure 201)

A. General

(1) This task gives the instructions on how to deactivate the lights for the electronic equipment compartment.

(2) This task makes sure that the electronic equipment compartment lights are in a zero energy stage when deactivated.

B. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well
117	Electrical and Electronics Compartment - Left

C. Access Panels

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door

D. Prepare for the Deactivation

SUBTASK 33-34-00-010-004

(1) To get access to the P91 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-34-00-860-001

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	2	C00139	ELEC RACK LT-FWD

SUBTASK 33-34-00-010-002

(3) Open this access panel:

Number	Name/Location
112A	Forward Access Door

E. Electronic Equipment Compartment Lights Deactivation

SUBTASK 33-34-00-700-001

(1) Make sure that the electronic equipment compartment lights are deactivated as follows:

(a) At the forward access door, set the light switch to the ON position.

(b) Make sure that the forward equipment compartment lights do not come on.

(c) Set the light switch to the OFF position

(d) At the electronic equipment compartment service panel, set the light switch to the ON position.

(e) Make sure that the electronic equipment compartment lights do not come on.

(f) Set the light switch to the OFF position.

F. Put the Airplane Back to Its Usual Condition

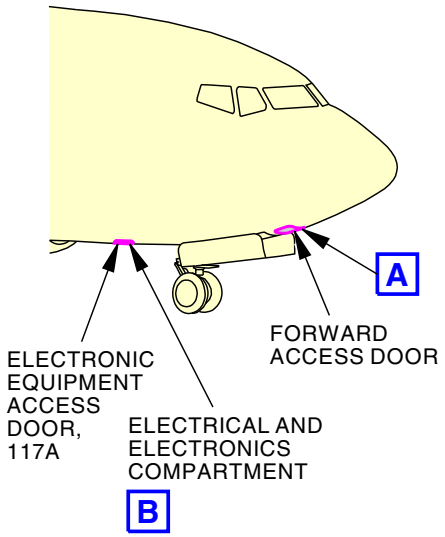
SUBTASK 33-34-00-410-001

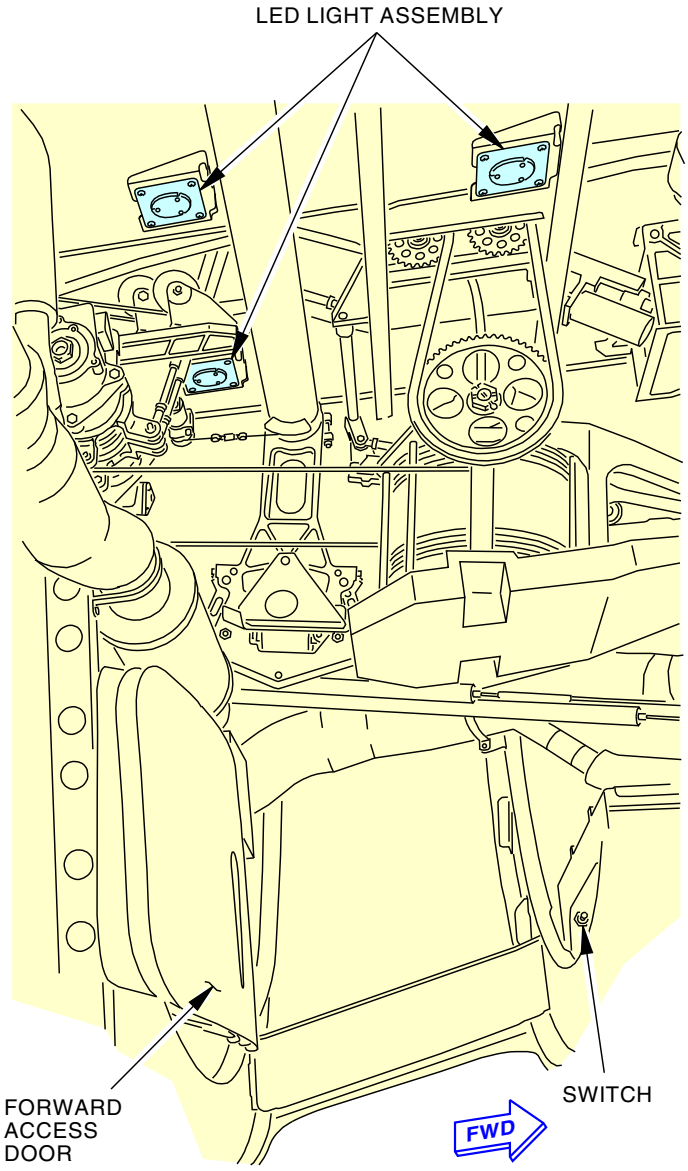
(1) Close these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details





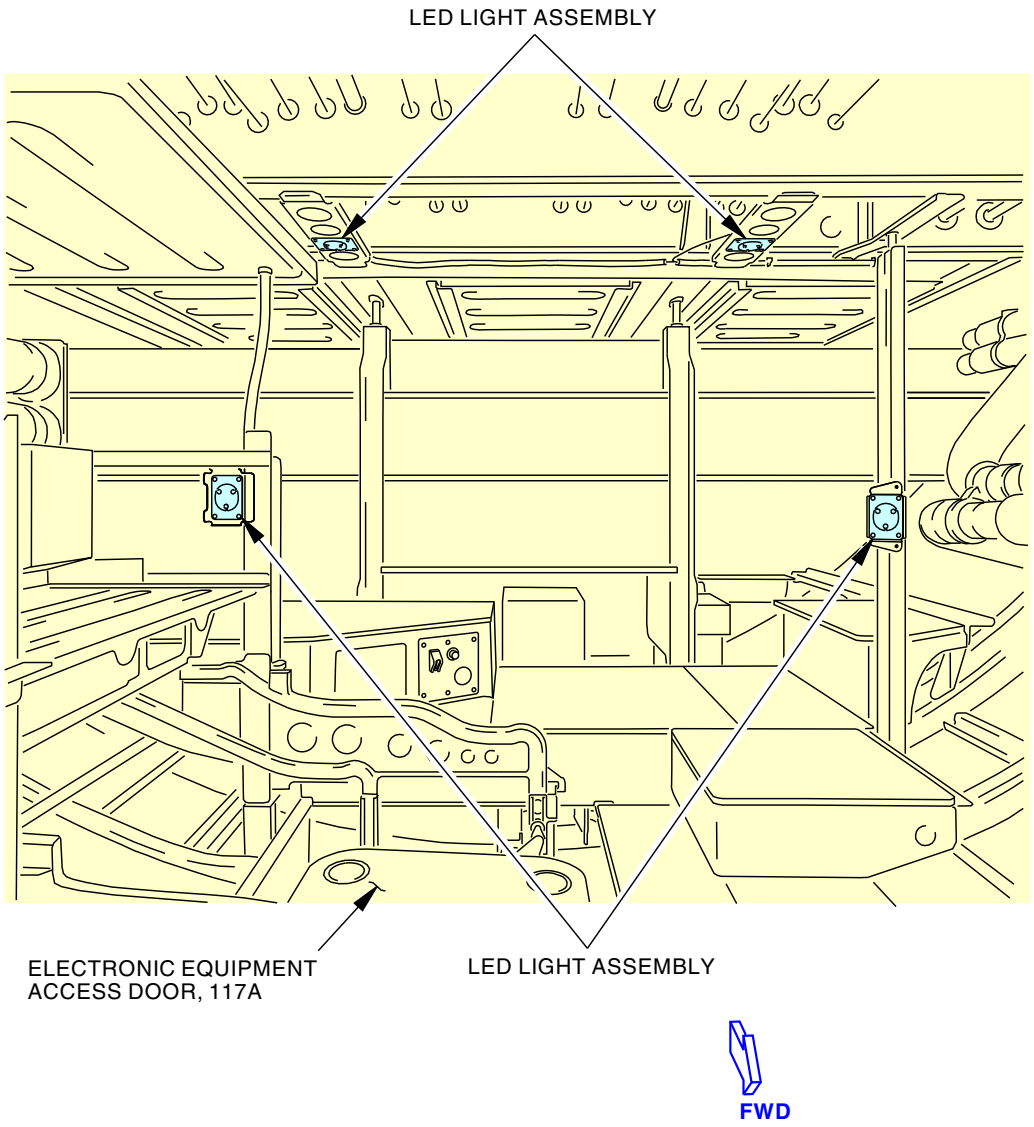
VIEW IN THE UP AND OUTBOARD DIRECTION THROUGH FORWARD ACCESS DOOR

A

2414652 S00061535682_V1

Electronic Equipment Compartment Lights
Figure 201/33-34-00-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



ELECTRICAL AND ELECTRONICS COMPARTMENT

B

2414653 S00061535683_V1

Electronic Equipment Compartment Lights
Figure 201/33-34-00-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-34-00-440-801

3. Electronic Equipment Compartment Lights Activation

(Figure 201)

A. General

(1) This task gives the instructions on how to activate the lights for the electronic equipment compartment.

(2) This task makes sure that electrical power is restored for the electronic equipment compartment lights.

B. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well
117	Electrical and Electronics Compartment - Left

C. Access Panels

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door

D. Prepare for the Activation

SUBTASK 33-34-00-010-003

(1) To get access to the P91 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

E. Electronic Equipment Compartment Lights Activation

SUBTASK 33-34-00-860-002

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(1) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	2	C00139	ELEC RACK LT-FWD

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-34-00-010-005

(2) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 33-34-00-440-001

(3) Make sure that the electronic compartment lights work as follow:

(a) At the forward access door, set the light switch to the ON position.

(b) Make sure that the forward equipment compartment lights come on.

(c) Set the light switch to the OFF position

(d) Make sure that the forward equipment compartment lights go off.

(e) At the electronic equipment compartment service panel, set the light switch to the ON position.

(f) Make sure that the electronic equipment compartment lights come on.

(g) Set the light switch to the OFF position.

(h) Make sure that the electronic equipment compartment lights go off.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 33-34-00-410-002

(1) Close these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door

——— END OF TASK ———

TASK 33-34-00-960-801

4. Electronic Equipment Compartment LED Light Assembly Replacement

(Figure 202)

A. General

(1) This task gives the instructions on how to replace the LED light assembly for the electronic equipment compartment light.

B. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well
117	Electrical and Electronics Compartment - Left

C. Access Panels

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door

D. Prepare for the Replacement

SUBTASK 33-34-00-960-001

(1) If you will replace a LED light assembly in the area forward of the nose landing gear wheel well, do this step:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 33-34-00-960-002

(2) If you will replace a LED light assembly in the electrical and electronics compartment, do this step:

(a) To get access to the P91 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-34-00-040-001

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(3) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	2	C00139	ELEC RACK LT-FWD

E. Electronic Equipment Compartment LED Light Assembly Replacement

SUBTASK 33-34-00-860-003

(1) If you will replace a LED light assembly in the area forward of the nose landing gear wheel well, do this step:

(a) Set the light switch at the forward access door to the OFF position.

SUBTASK 33-34-00-860-004

(2) If you will replace a LED light assembly in the electrical and electronics compartment, do this step:

(a) Set the light switch at the service panel to the OFF position.

SUBTASK 33-34-00-960-003

(3) Do these steps to replace LED light assembly:

(a) For post mounted LED light assembly, remove nut [5], washer [6], and ground terminal [7].

(b) Remove screws [3] and washers [4].

(c) Remove LED light assembly [1].

(d) Disconnect electrical connector [2] from the LED light assembly [1].

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(e) Connect electrical connector [2] to the new LED light assembly [1].

(f) Install the new LED light assembly [1].

(g) Install the washers [4] and screws [3].

(h) Install the ground terminal [7], washer [6], and nut [5].

SUBTASK 33-34-00-440-002

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(4) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	2	C00139	ELEC RACK LT-FWD

SUBTASK 33-34-00-710-001

(5) Do this test if you replaced an LED light assembly in the area forward of the nose landing gear wheel well:

(a) Set the light switch at the forward access door to the ON position.

1) Make sure that the lamp comes on.

(b) Set the switch to the OFF position.

1) Make sure that the lamp goes off.

(6) Do this test if you replaced an LED light assembly in the electrical and electronics compartment:

(a) Set the light switch at the service panel to the ON position.

1) Make sure that the lamp comes on.

(b) Set the switch to the OFF position.

1) Make sure that the lamp goes off.

F. Put the Airplane Back to Its Usual Condition

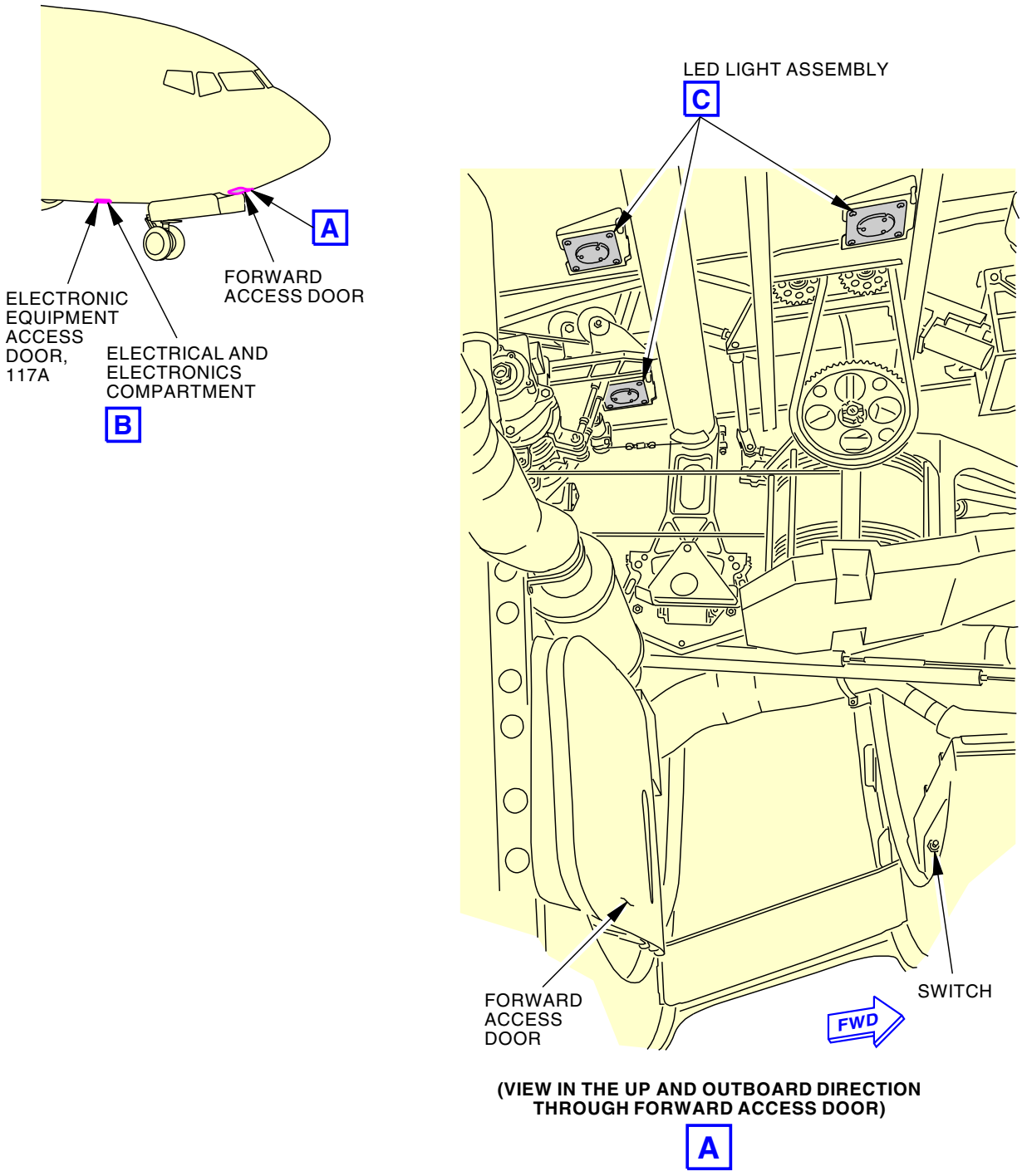
SUBTASK 33-34-00-410-003

(1) Close these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door

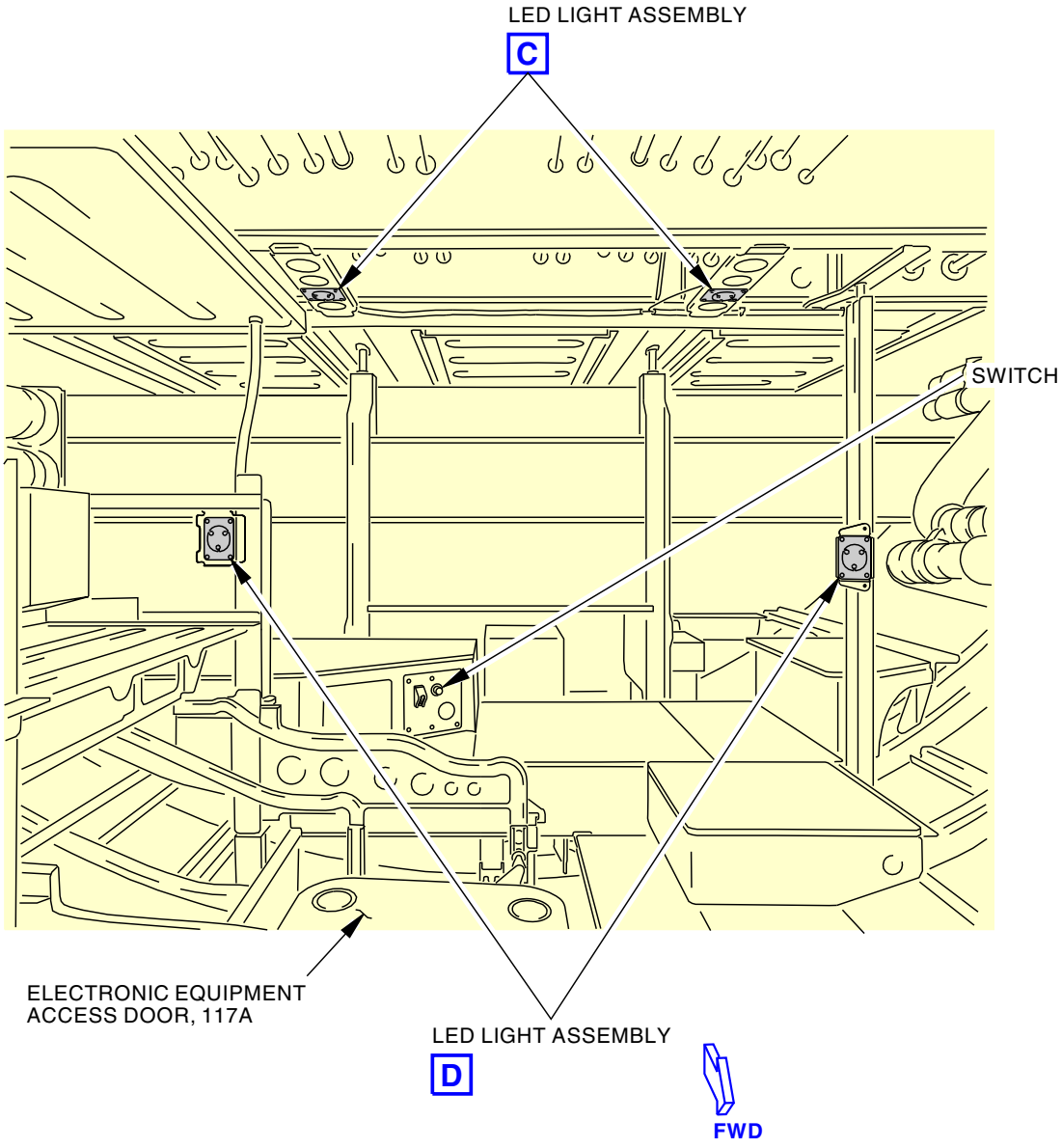
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Electronic Equipment Compartment LED Light Assembly Replacement
Figure 202/33-34-00-990-802 (Sheet 1 of 3)

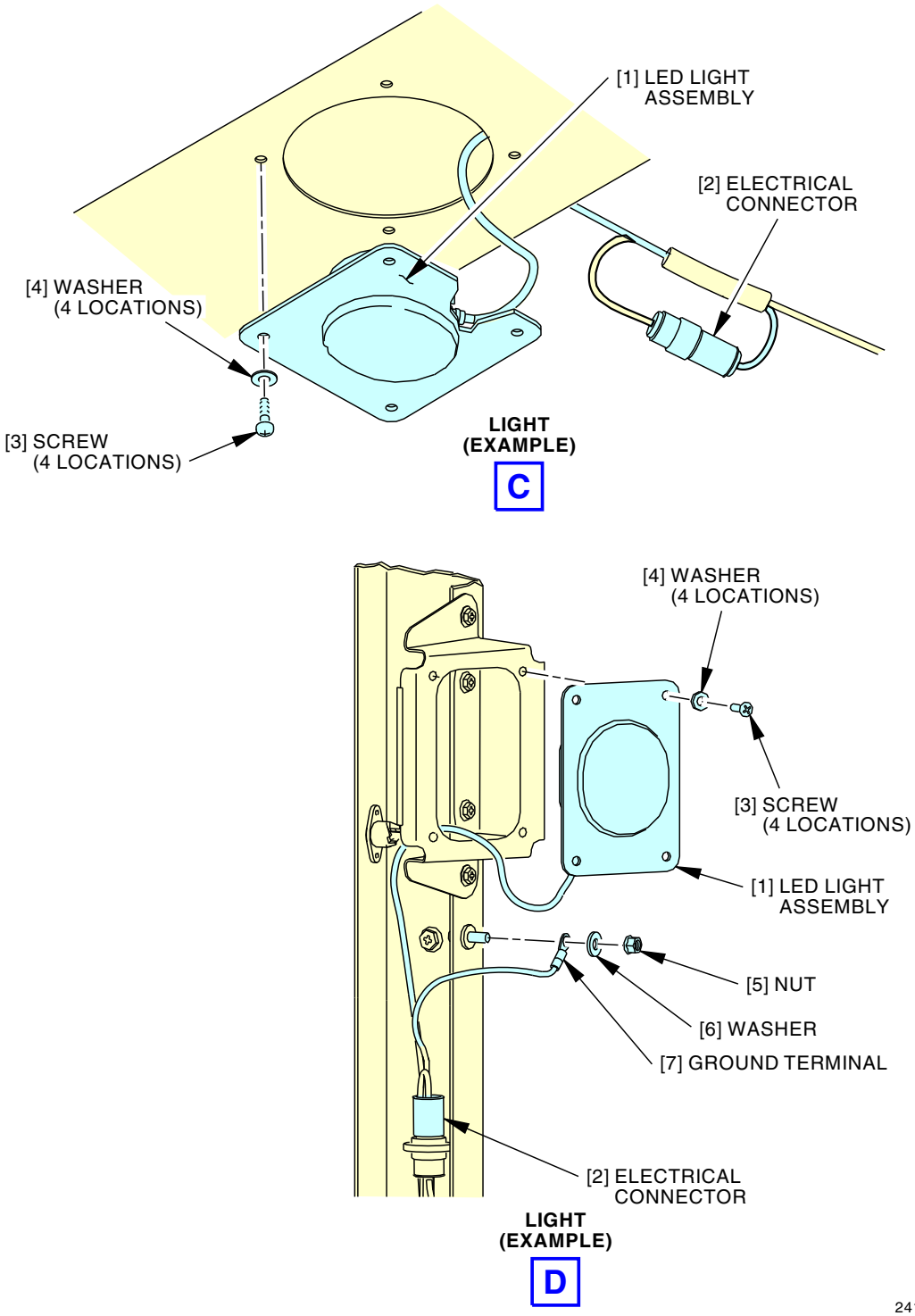
ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Electronic Equipment Compartment LED Light Assembly Replacement
Figure 202/33-34-00-990-802 (Sheet 2 of 3)

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Electronic Equipment Compartment LED Light Assembly Replacement
Figure 202/33-34-00-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ACCESSORY COMPARTMENT LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) A Deactivation of the Accessory Compartment Lights

(2) An Activation of the Accessory Compartment Lights

(3) A Replacement of the Accessory Compartment Light Lamp.

TASK 33-35-00-040-801

2. Accessory Compartment Lights - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power to the Accessory Compartment Lights.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
311	Area Aft of Pressure Bulkhead - Left
315	APU Compartment - Left
318	Tail Cone Compartment - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
311BL	Stabilizer Trim Access Door
315A	APU Cowl Door
318BR	Tailcone Access Door

D. Accessory Compartment Lights Deactivation

SUBTASK 33-35-00-010-001

(1) To get access to the P91 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-35-00-860-001

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	5	C00389	ACCESS COMPT LT

E. Accessory Compartment Lights - Tryout

NOTE: This tryout is to make sure that the Accessory Compartment Lights are in a zero energy state.

SUBTASK 33-35-00-010-002

(1) Open these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
315A	APU Cowl Door
318BR	Tailcone Access Door

SUBTASK 33-35-00-860-002

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Make sure that this circuit breaker is open and has safety tag:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	5	C00389	ACCESS COMPT LT

SUBTASK 33-35-00-410-003

(3) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-35-00-700-001

(4) At the tail cone access door, toggle the light switch to the ON mode.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Make sure that the tail cone compartment light does not come on.

(5) At the FWD end of the APU cowl door, toggle the light switch to the ON mode.

(a) Make sure that none of the APU compartment lights come on.

(6) At the AFT end of the accessory compartment door, press the light switch button to the ON mode.

(a) Make sure that none of the accessory compartment lights come on.

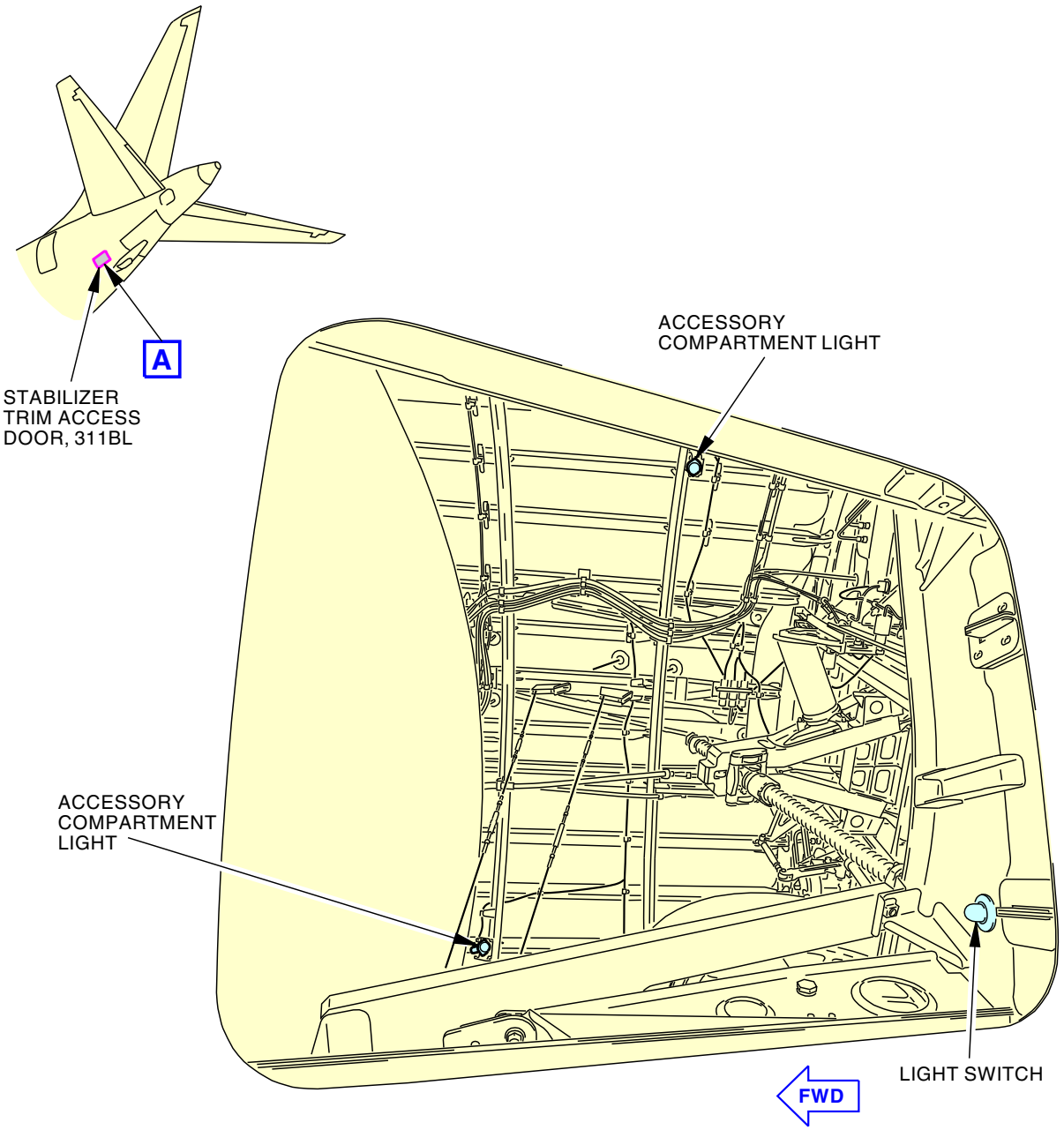
SUBTASK 33-35-00-410-004

(7) Close these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
315A	APU Cowl Door
318BR	Tailcone Access Door

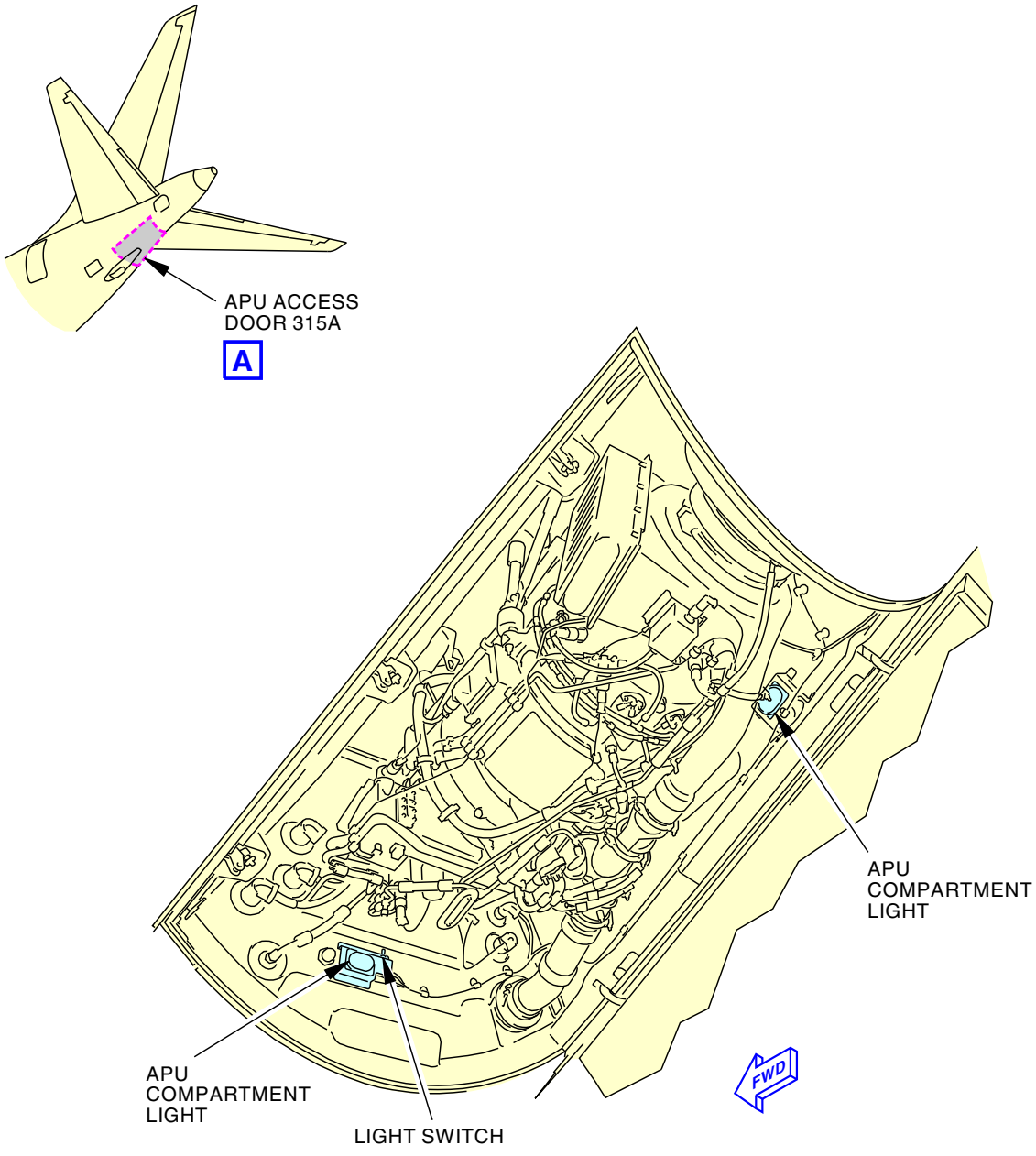
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Accessory Compartment Lights
Figure 201/33-35-00-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

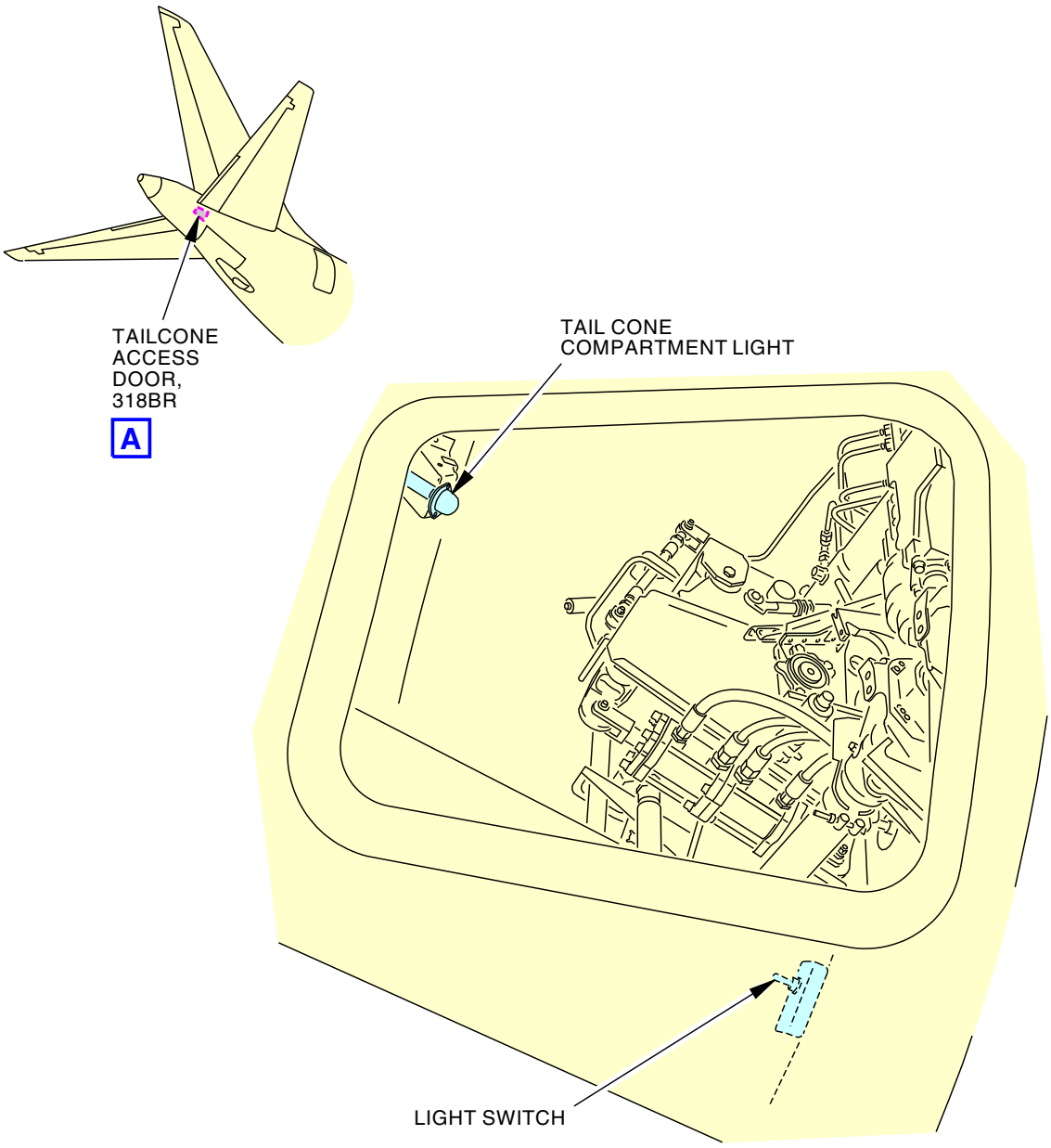


APU ACCESS DOOR 315A
(VIEW LOOKING INBOARD)
A

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Accessory Compartment Lights
Figure 201/33-35-00-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



TAIL CONE ACCESS DOOR, 318BR
(VIEW LOOKING INBOARD)

A

2414659 S00061535695_V2

Accessory Compartment Lights
Figure 201/33-35-00-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-35-00-440-801

3. Accessory Compartment Lights - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the Accessory Compartment Lights.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

D. Accessory Compartment Lights Activation

SUBTASK 33-35-00-010-008

(1) To get access to the P91 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-35-00-860-003

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	5	C00389	ACCESS COMPT LT

SUBTASK 33-35-00-410-001

(3) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-35-00-960-801

4. Accessory Compartment Light - Lamp Replacement

(Figure 202)

A. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
310	Fuselage - Body Station 1016.00 to Body Station 1260.00

B. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
311BL	Stabilizer Trim Access Door
315A	APU Cowl Door
318BR	Tailcone Access Door

C. Accessory Compartment Light Lamp Replacement

SUBTASK 33-35-00-010-003

(1) For access to the area aft of the bulkhead, do this step:

(a) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

SUBTASK 33-35-00-010-004

(2) For access to the Auxiliary Power Unit (APU) compartment, do this step:

(a) Open this access panel:

Number	Name/Location
315A	APU Cowl Door

SUBTASK 33-35-00-010-005

(3) For access to the tailcone, do this step:

(a) Open this access panel:

Number	Name/Location
318BR	Tailcone Access Door

SUBTASK 33-35-00-010-009

(4) To get access to the P91 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-35-00-010-006

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(5) Open this circuit breaker and install safety tag:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	5	C00389	ACCESS COMPT LT

SUBTASK 33-35-00-860-004

(6) Set the light switch at the access door to the OFF mode.

SUBTASK 33-35-00-960-001

(7) Do these steps to replace service LED light assembly:

(a) Disconnect electrical connector [6] from light assembly [2].

(b) Remove nut [3], washer [1] and ground terminal [7].

(c) Remove fasteners [5], washers [4] and light assembly [2].

(d) Install the new light assembly [2], washers [4], and fasteners [5].

(e) Install ground terminal [7], washer [1], and nut [3]

(f) Connect electrical connector [6] to the new light assembly [2].

SUBTASK 33-35-00-960-002

(8) Do these steps to replace the lamp:

(a) Loosen the applicable fasteners [8].

(b) Remove the applicable lens assembly [9].

(c) Replace the applicable lamp [10].

(d) Install the applicable lens assembly [9].

1) Check the gasket, if one is installed.

2) If the gasket is damaged, replace it.

(e) Tighten the applicable fasteners [8].

SUBTASK 33-35-00-010-007

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(9) Remove the safety tag and close this circuit breaker:

Power Distribution Panel Number 1, P91

Row	Col	Number	Name
C	5	C00389	ACCESS COMPT LT

SUBTASK 33-35-00-410-005

(10) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-35-00-710-001

(11) Do this test of the new lamp:

(a) At the access door, set the switch for the light to the ON mode.

1) Make sure that the lamp comes on.

(b) Set the switch to the OFF mode.

1) Make sure that the lamp goes off.

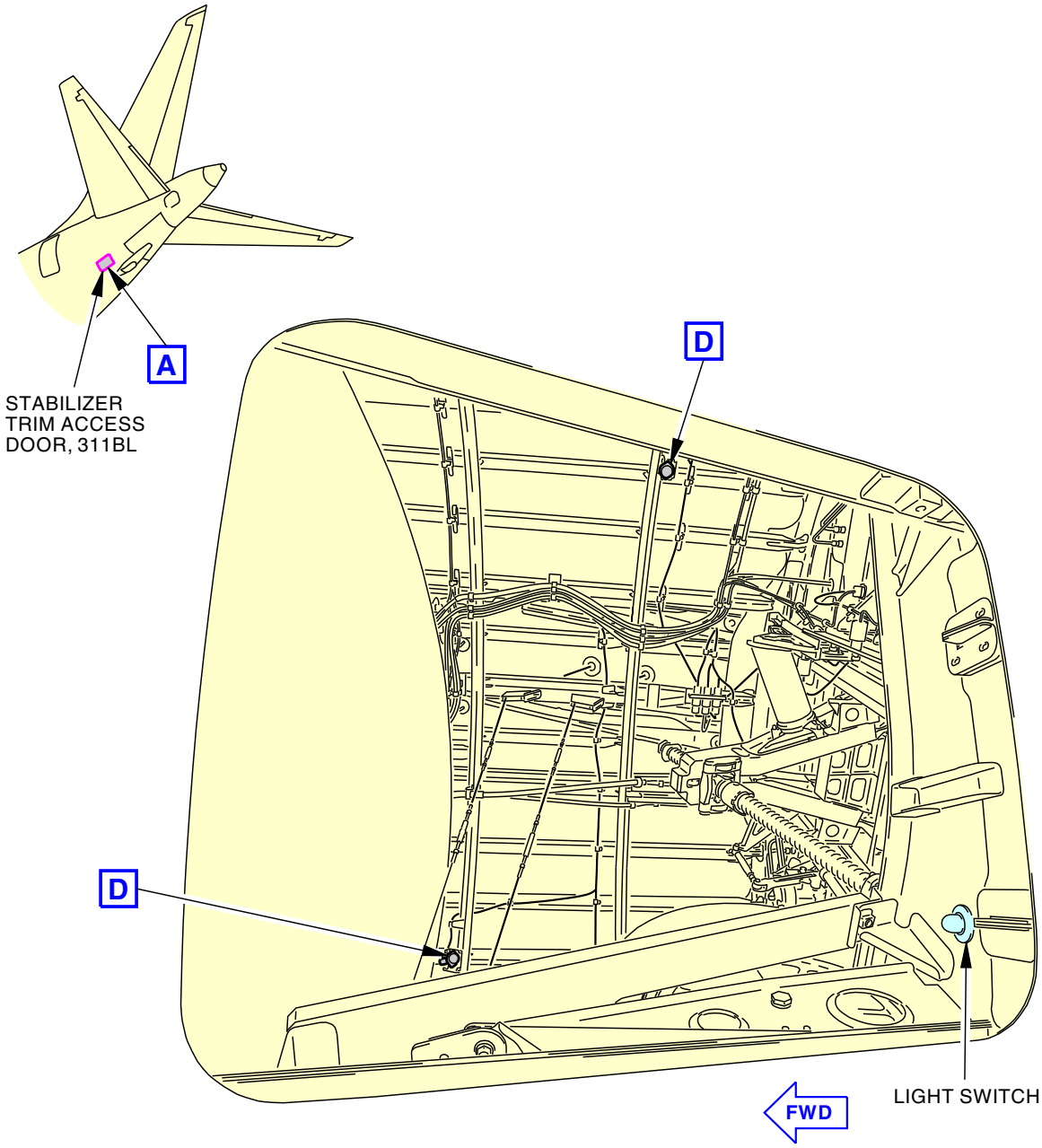
SUBTASK 33-35-00-410-002

(12) Close these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
315A	APU Cowl Door
318BR	Tailcone Access Door

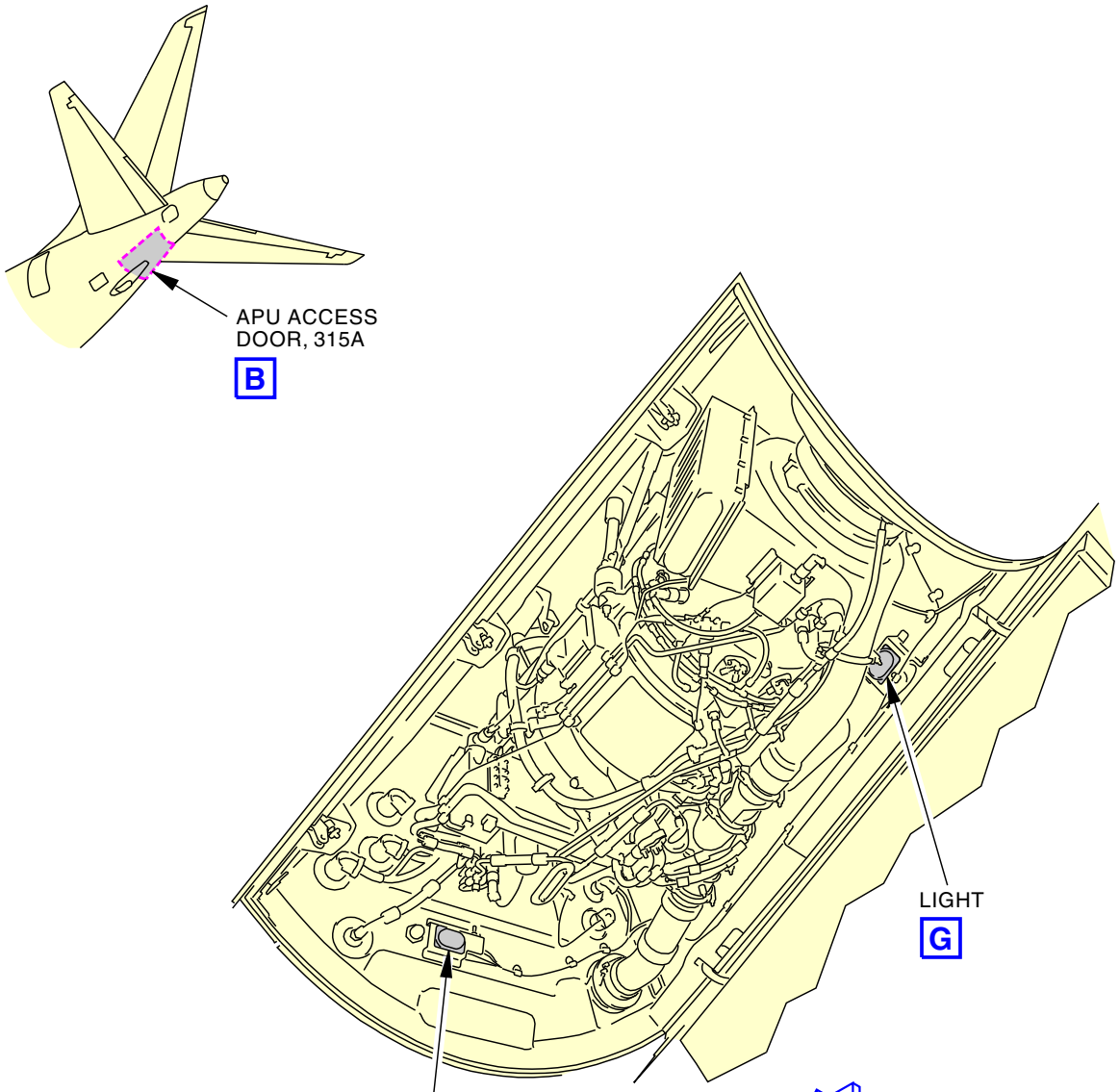
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Accessory Compartment Light - Lamp Replacement
Figure 202/33-35-00-990-802 (Sheet 1 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

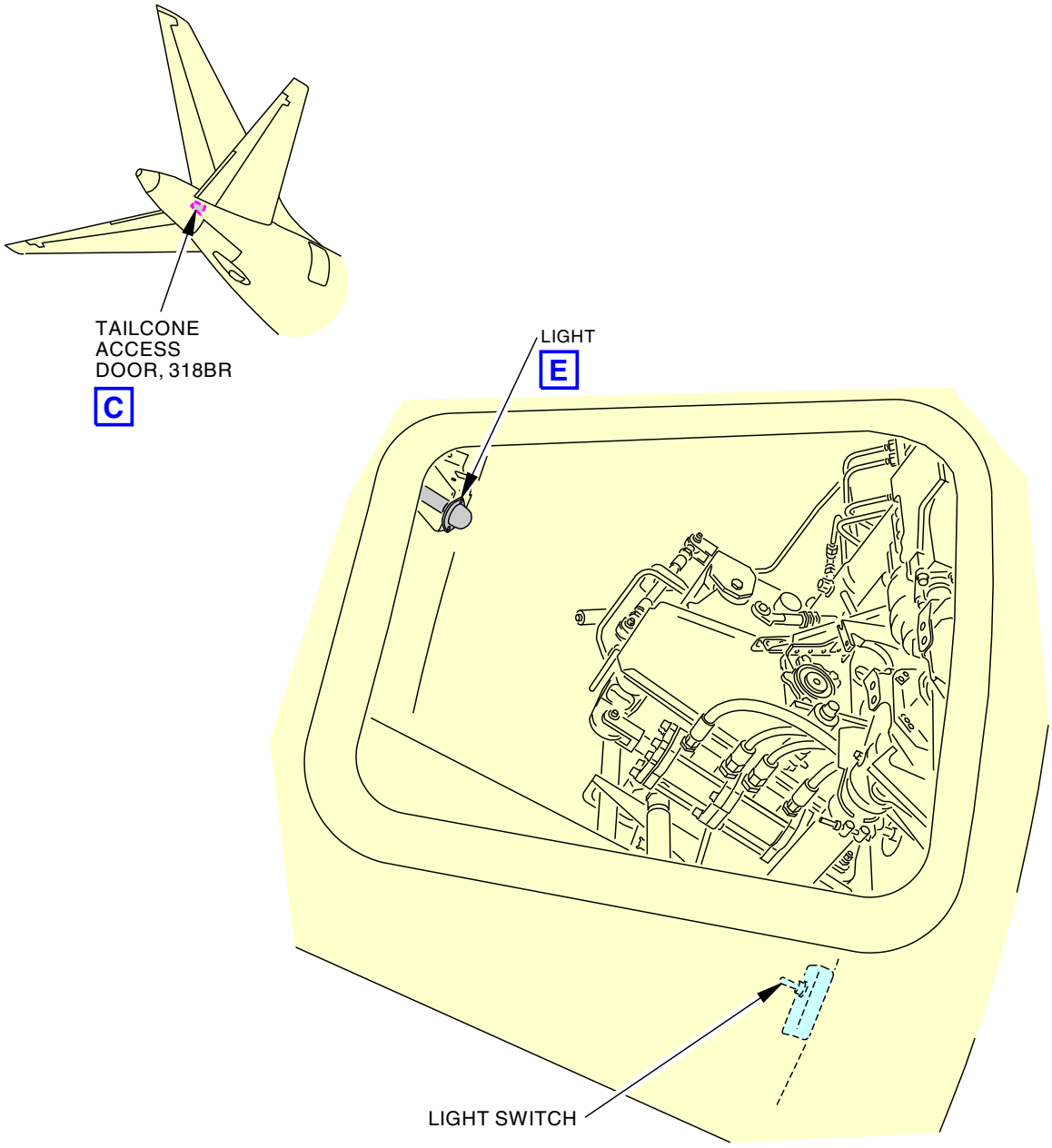


APU ACCESS DOOR, 315A
(VIEW LOOKING INBOARD)
B

2414661 S00061535699_V2

Accessory Compartment Light - Lamp Replacement
Figure 202/33-35-00-990-802 (Sheet 2 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

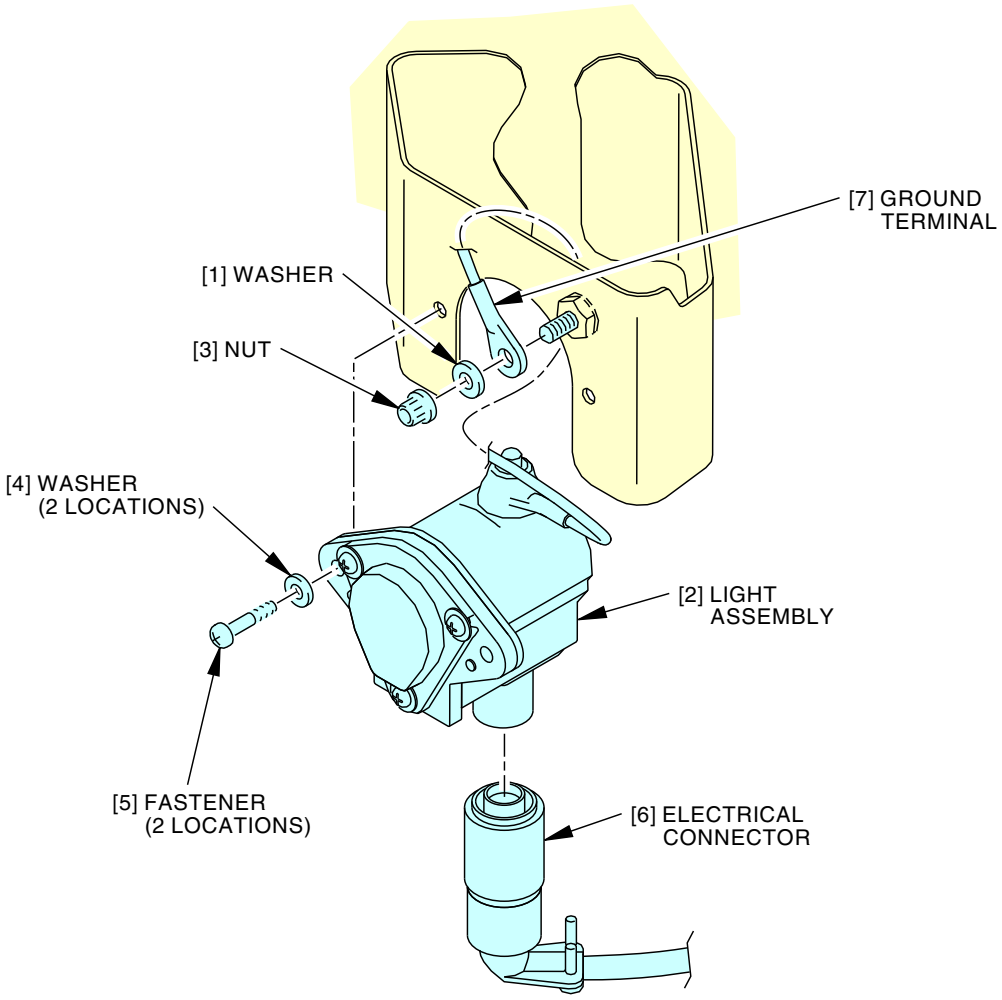


TAIL CONE ACCESS DOOR, 318BR
(VIEW LOOKING INBOARD)
C

2414662 S00061535700_V2

Accessory Compartment Light - Lamp Replacement
Figure 202/33-35-00-990-802 (Sheet 3 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



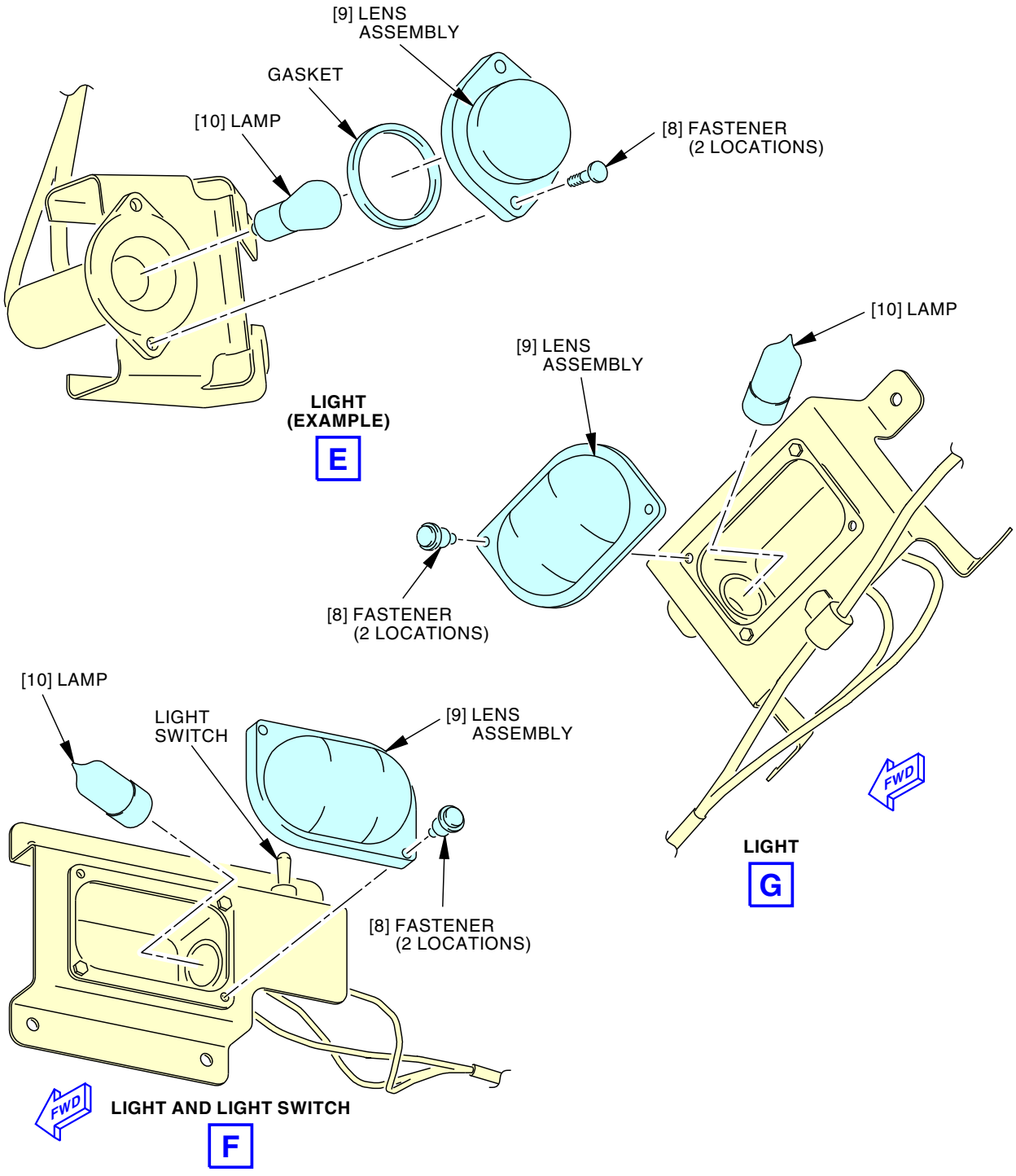
LIGHT (EXAMPLE)

D

2475695 S0000580259_V2

Accessory Compartment Light - Lamp Replacement
Figure 202/33-35-00-990-802 (Sheet 4 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2480573 S0000582630_V1

Accessory Compartment Light - Lamp Replacement
Figure 202/33-35-00-990-802 (Sheet 5 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CARGO COMPARTMENT LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Cargo compartment lights deactivation

(2) Cargo compartment lights activation

(3) Cargo compartment ceiling light assembly replacement

(4) Cargo compartment door sill light assembly replacement.

TASK 33-36-00-040-801

2. Cargo Compartment Lights Deactivation

A. General

(1) This task provides the instructions on how to deactivate the cargo compartment lights.

(2) This make sure that the cargo compartment lights are in a zero energy state when it is necessary.

B. References

Reference	Title
52-31-00-580-801	Open the Cargo Door (P/B 201)

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Prepare for the Deactivation

SUBTASK 33-36-00-010-001

(1) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-36-00-010-002

(2) Open the forward and aft cargo doors (TASK 52-31-00-580-801).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Cargo Compartment Lights Deactivation

SUBTASK 33-36-00-860-001

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(1) Open these circuit breakers and install safety tags:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	4	C00127	CARGO COMPT LT-FWD
C	5	C00128	CARGO COMPT LT-AFT
C	10	C01419	CARGO LT CONT

G. Put the Airplane Back to Its Usual Condition

SUBTASK 33-36-00-410-001

(1) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

END OF TASK

TASK 33-36-00-440-801

3. Cargo Compartment Lights Activation

A. General

(1) This task provides the instructions on how to activate the cargo compartment lights.

(2) This restores the cargo compartment lights to the operational condition.

B. References

Reference	Title
52-31-00-580-801	Open the Cargo Door (P/B 201)

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Prepare for the Activation

SUBTASK 33-36-00-010-003

(1) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-36-00-010-004

(2) Open the forward and aft cargo doors (TASK 52-31-00-580-801).

F. Cargo Compartment Lights Activation

SUBTASK 33-36-00-860-002

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(1) Remove the safety tags and close these circuit breakers:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	4	C00127	CARGO COMPT LT-FWD
C	5	C00128	CARGO COMPT LT-AFT
C	10	C01419	CARGO LT CONT

SUBTASK 33-36-00-210-001

(2) Make sure that the forward cargo compartment lights are activated:

(a) Move the forward cargo compartment lights switch (S67) to ON.

NOTE: The location of the forward cargo compartment lights switch is near the bottom on the forward side of the cargo door frame.

1) Make sure that the forward cargo compartment lights come on.

2) If the forward cargo compartment lights are not necessary, set the forward cargo compartment lights switch (S67) to OFF.

(3) Make sure that the aft cargo compartment lights are activated:

(a) Move the aft cargo compartment lights switch (S68) to ON.

NOTE: The location of the aft cargo compartment lights switch is near the bottom on the forward side of the cargo door frame.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Make sure that the aft cargo compartment lights come on.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 33-36-00-410-002

(1) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

——— END OF TASK ———

TASK 33-36-00-960-801

4. Cargo Compartment Ceiling Light Assembly Replacement

(Figure 201)

A. General

(1) This task gives the instructions on how to replace a light assembly [1] on the cargo compartment ceiling.

B. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
821	Forward Cargo Door
822	Aft Cargo Door

D. Prepare for the Replacement

SUBTASK 33-36-00-010-005

(1) To get access to the P92 panel, open this access door:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-36-00-860-003

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open the applicable circuit breaker and install the safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	4	C00127	CARGO COMPT LT-FWD
C	5	C00128	CARGO COMPT LT-AFT

SUBTASK 33-36-00-010-006

(3) Open the applicable cargo door:

Number	Name/Location
821	Forward Cargo Door
822	Aft Cargo Door

SUBTASK 33-36-00-860-004

(4) Set the forward or aft control switch for the cargo compartment lights to OFF.

NOTE: The forward or aft control switch is located near the bottom of the cargo door frame.

E. Cargo Compartment Ceiling Light Assembly Replacement

SUBTASK 33-36-00-010-007

(1) Remove the closeout ring assembly [4].

(a) Remove the screws [2] that attach the closeout ring assembly [4] and the cargo liner [7] to the bracket assembly [5].

(b) Remove the closeout ring assembly [4].

SUBTASK 33-36-00-960-001

(2) Replace the light assembly [1].

(a) Remove the screws [3] that attach the light assembly [1] to the bracket assembly [5].

(b) Disconnect the electrical connector [6] from the light assembly [1].

(c) Remove the light assembly [1] from the bracket assembly [5].

(d) Connect the electrical connector [6] to the new light assembly [1].

(e) Attach the new light assembly [1] to the bracket assembly [5] with the screws [3].

SUBTASK 33-36-00-410-003

CAUTION

DO NOT COVER THE CLOSEOUT-RING OR LENS WITH TAPE, PAPER, PLASTIC, AND OTHER ITEMS. IF YOU DO, IT CAN CAUSE THE LIGHT TO BECOME TOO HOT.

(3) Attach the closeout ring assembly [4] and the cargo liner [7] to the bracket assembly [5] with the screws [2].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Cargo Compartment Ceiling Light Assembly Installation Test

SUBTASK 33-36-00-860-005

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(1) Remove the safety tag and close the applicable circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	4	C00127	CARGO COMPT LT-FWD
C	5	C00128	CARGO COMPT LT-AFT

SUBTASK 33-36-00-860-007

(2) Do a test of the new light assembly [1]:

(a) Set the forward or aft control switch for the cargo compartment lights to ON.

NOTE: The forward or aft control switch is located near the bottom of the cargo door frame.

(b) Make sure that the light comes on.

(c) Set the forward or aft control switch to OFF.

(d) Make sure that the light goes off.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 33-36-00-410-004

(1) Close this access door:

Number	Name/Location
117A	Electronic Equipment Access Door

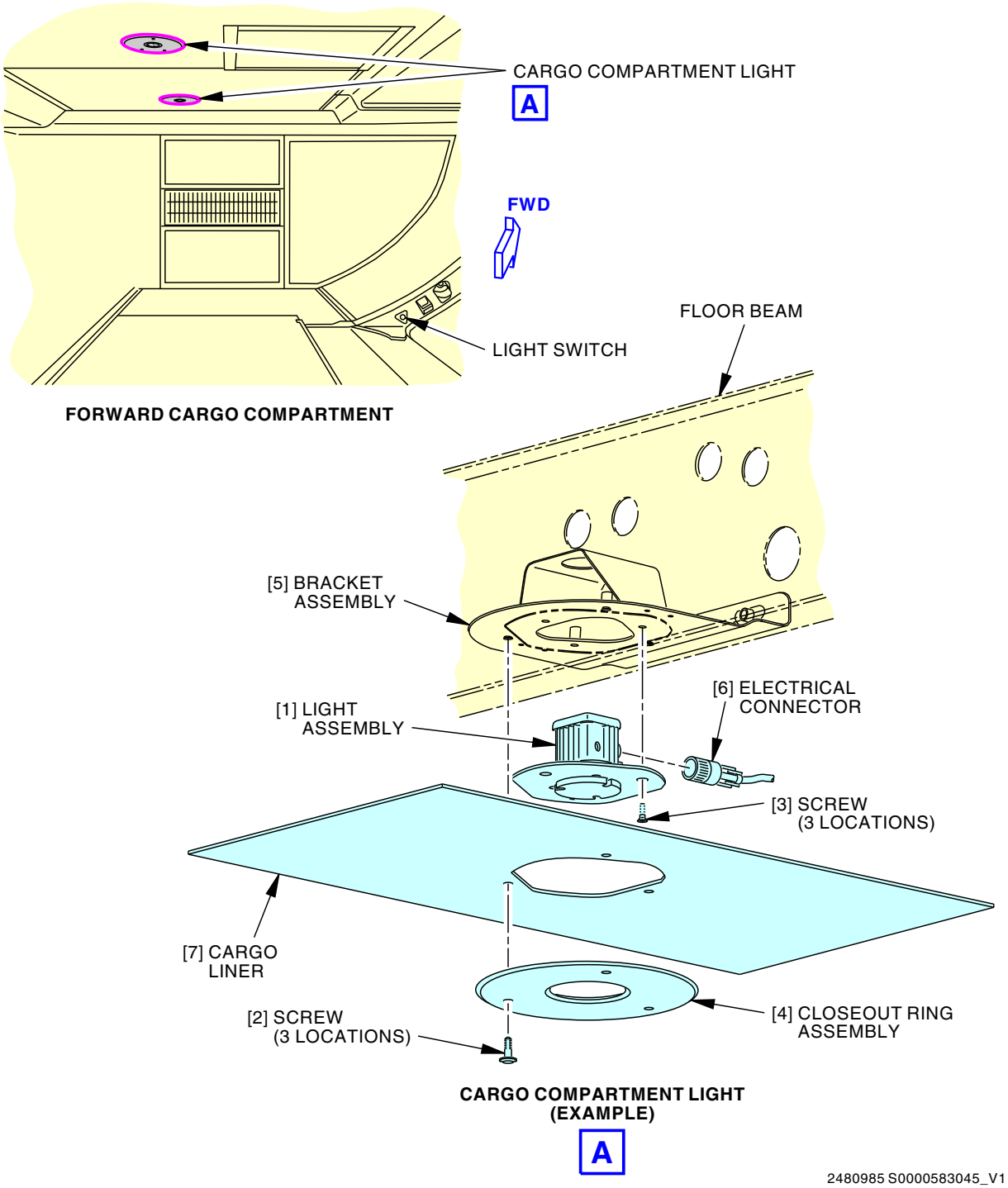
SUBTASK 33-36-00-410-005

(2) Close the applicable cargo door:

Number	Name/Location
821	Forward Cargo Door
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Cargo Compartment Ceiling Light Assembly Installation
Figure 201/33-36-00-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-36-00-960-802

5. Cargo Compartment Door Sill Light Assembly Replacement

(Figure 202)

A. General

(1) This task gives the instructions on how to replace the light assembly on the cargo compartment forward and aft door sills.

B. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
122	Forward Cargo Compartment - Right
142	Aft Cargo Compartment - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
821	Forward Cargo Door
822	Aft Cargo Door

D. Prepare for the Replacement

SUBTASK 33-36-00-010-008

(1) To get access to the P92 panel, open this access door:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-36-00-860-009

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(2) Open the applicable circuit breakers and install the safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	4	C00127	CARGO COMPT LT-FWD
C	5	C00128	CARGO COMPT LT-AFT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-36-00-010-009

(3) Open the applicable cargo door:

Number	Name/Location
821	Forward Cargo Door
822	Aft Cargo Door

E. Cargo Compartment Door Sill Light Assembly Replacement

SUBTASK 33-36-00-960-002

(1) Replace the forward cargo compartment door sill light assembly [8].

(a) Remove the screws [10] and washers [11].

(b) Remove the light assembly [8], gasket [13] and spacers [12] from the forward cargo door upper main sill.

(c) Put identification tags on each electrical connector for the correct connections during installation.

(d) Disconnect the electrical connectors [14] from the light assembly [8].

(e) Remove the gasket [13] and spacers [12] from the light assembly [8].

(f) Put the gasket [13] on the new light assembly [8].

(g) Insert the spacers [12] into the gasket mount holes.

(h) Connect the electrical connectors [14] to the new light assembly [8].

(i) Remove identification tags from the electrical connectors.

(j) Align the four holes on the new light assembly [8] with the holes on the gasket [13].

(k) Install the new light assembly [8] on the forward cargo door upper main sill with the screws [10] and washers [11].

SUBTASK 33-36-00-960-003

(2) Replace the aft cargo compartment door sill light assembly [9].

(a) Remove the screws [17] and washers [16].

(b) Remove the light assembly [9] from the aft cargo door upper main sill.

(c) Put identification tags on each electrical connector for the correct connections during installation.

(d) Disconnect the electrical connectors [15] from the light assembly [9].

(e) Connect the electrical connectors [15] to the new light assembly [9].

(f) Remove identification tags from the electrical connectors.

(g) Install the new light assembly [9] on the aft cargo door upper main sill with the screws [17] and washers [16].

F. Cargo Compartment Door Sill Light Assembly Replacement Test

SUBTASK 33-36-00-860-010

WARNING

WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(1) Remove the safety tag and close the applicable circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
C	4	C00127	CARGO COMPT LT-FWD
C	5	C00128	CARGO COMPT LT-AFT

SUBTASK 33-36-00-710-001

(2) Do a test of the new light assembly as follows:

(a) Set the control switch for the light to ON.

NOTE: The forward and aft cargo light switches are located near the bottom of the cargo door frames.

(b) Make sure that the light comes on.

(c) Set the switch to OFF.

(d) Make sure that the light goes off.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 33-36-00-410-006

(1) Close this access door:

Number	Name/Location
117A	Electronic Equipment Access Door

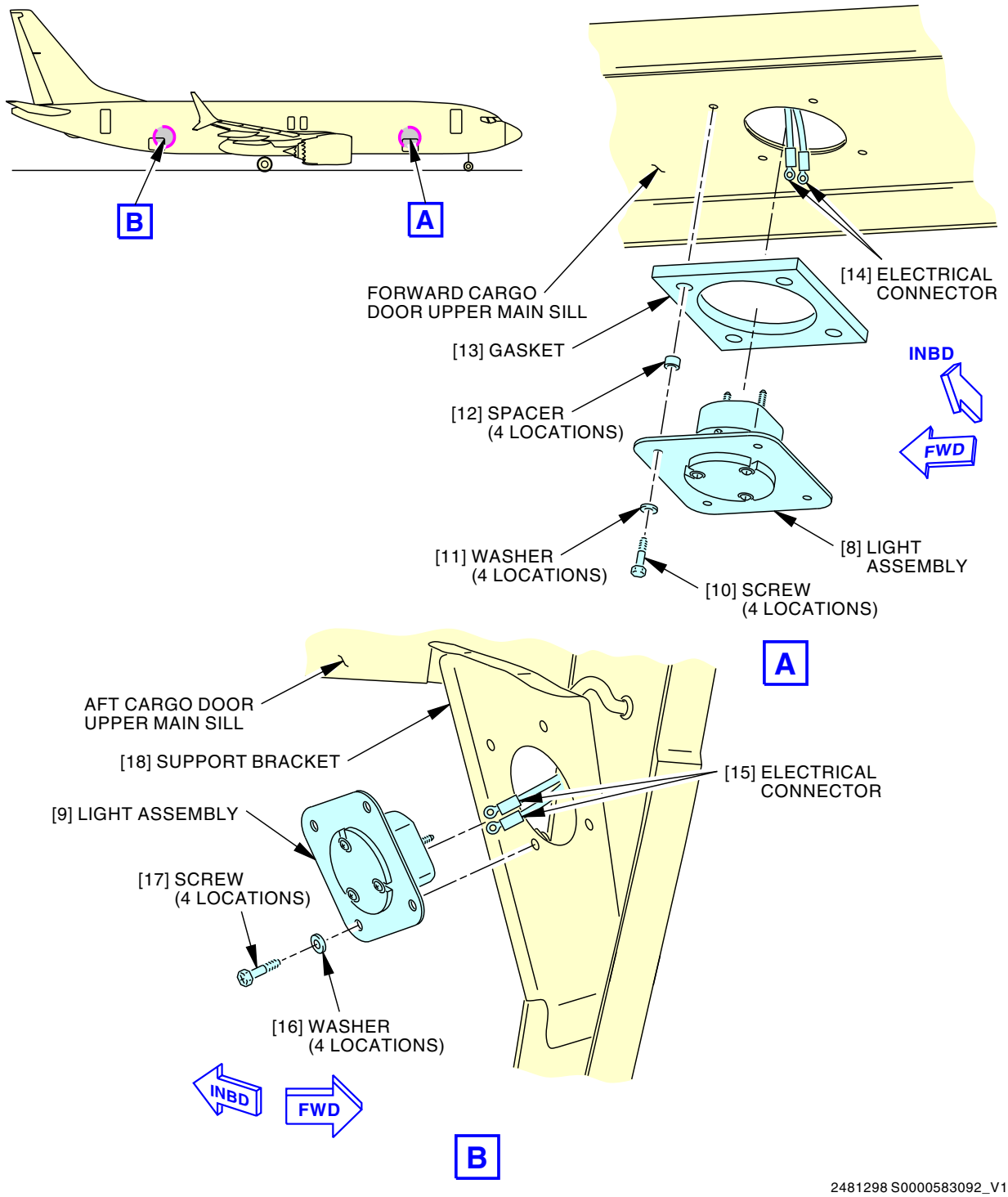
SUBTASK 33-36-00-410-007

(2) Close the applicable cargo door:

Number	Name/Location
821	Forward Cargo Door
822	Aft Cargo Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2481298 S0000583092_V1

Cargo Compartment Door Sill Light Assembly Installation
Figure 202/33-36-00-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WING ILLUMINATION LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Wing Illumination Light - Deactivation

(2) Wing Illumination Light - Activation

SIA ALL; AIRPLANES WITH LAMP LIGHTS

(3) Wing Illumination Light - Lamp Replacement

SIA ALL; AIRPLANES WITH LED MODULE ASSEMBLY LIGHTS

(4) Wing Illumination Light - LED Module Assembly Replacement

SIA ALL; AIRPLANES WITH LAMP LIGHTS

(5) Wing Illumination Light - Transformer Replacement

SIA ALL

(6) Wing Illumination Light - Light Assembly Replacement

(7) Wing Illumination Lights - Operational Test.

TASK 33-41-00-040-801

2. Wing Illumination Light - Deactivation

A. General

(1) This procedure removes electrical power from the wing illumination lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

C. Procedure

SUBTASK 33-41-00-860-001

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

D. Wing Illumination Light Deactivation Test

NOTE: This test is to make sure that the wing illumination lights are in a zero energy condition.

SUBTASK 33-41-00-200-001

(1) Do the following steps to make sure that the power is off:

(a) At the overhead panel, P5, set the wing light switch to ON position.

1) Make sure that the wing illumination lights (left/right) stay off.

(b) At the overhead panel, P5, set the wing light switch to OFF position.

1) Make sure that the wing illumination lights (left/right) stay off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-41-00-440-801

3. Wing Illumination Light - Activation

A. General

(1) This procedure supplies electrical power to the wing illumination lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

C. Procedure

SUBTASK 33-41-00-860-002

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

D. Wing Illumination Light - Tryout

NOTE: This tryout is to make sure that the wing illumination lights operate.

SUBTASK 33-41-00-710-006

(1) Do the following steps to make sure that the power is on:

(a) At the overhead panel, P5, set the wing light switch to ON position

1) Make sure that the wing illumination lights (left/right) come on.

(b) At the overhead panel, P5, set the wing light switch to OFF position

1) Make sure that the wing illumination lights (left/right) go off.

——— END OF TASK ———

SIA ALL; AIRPLANES WITH LAMP LIGHTS

TASK 33-41-00-960-801

4. Wing Illumination Light - Lamp Replacement

(Figure 201)

A. References

Reference	Title
WDM 33-41-11	D000534503

B. Consumable Materials

Reference	Description	Specification
G01306	Gloves - Lint-free	
G02309	Material - Moldable Plastic Shim	BMS8-338

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Lamp	33-41-00-02-045	SIA ALL

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL; AIRPLANES WITH LAMP LIGHTS (Continued)

D. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

E. Wing Illumination Light Lamp Replacement

SUBTASK 33-41-00-860-003

(1) Open this circuit breaker and install safety tag:
(WDM 33-41-11)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

SUBTASK 33-41-00-960-001

(2) Do these steps to replace the lamp [1]:
  (a) Do not touch the new lamp with your hands.
    1) Use a lint-free gloves, G01306.
  (b) Remove the lens assembly [2].
    1) Loosen the screws [6].
    2) Do not remove the lanyard.
  (c) Loosen the retainer [7] to release the socket.
  (d) Disconnect the electrical connector from the lamp [1].
  (e) Remove the lamp [1].
  (f) If the shims on the lens gasket are damaged, replace them.
    1) Remove the unwanted shim material.
    2) Apply new shim material, G02309, in the applicable areas of the rubber gasket.
      NOTE: Use only the quantity necessary. Adjacent compartments in the rubber gasket will help contain the shim material. Keep shim material away from the lens fasteners.
    3) Install the lens assembly [2].
      a) Tighten the screws [9] until the lens assembly [2] is aligned with the fuselage.
    4) Let the shim material dry for six hours.
    5) Remove the lens assembly [2].
      a) Loosen the screws [6].
    6) Clean and examine the shims.
      a) Make sure that the shim thickness is no more than 0.125 in. (3.18 mm).
  (g) Install the new lamp [1].
  (h) Connect the electrical connector to the lamp [1].
  (i) Put retainer [7] back to hold the socket.
  (j) Install the lens assembly [2].
    1) Tighten the screws [6] to 18 in-lb (2 N·m) - 21 in-lb (2 N·m).
    2) Make sure that the UP label is at the top of the lens assembly [2].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL; AIRPLANES WITH LAMP LIGHTS (Continued)

SUBTASK 33-41-00-860-004

(3) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

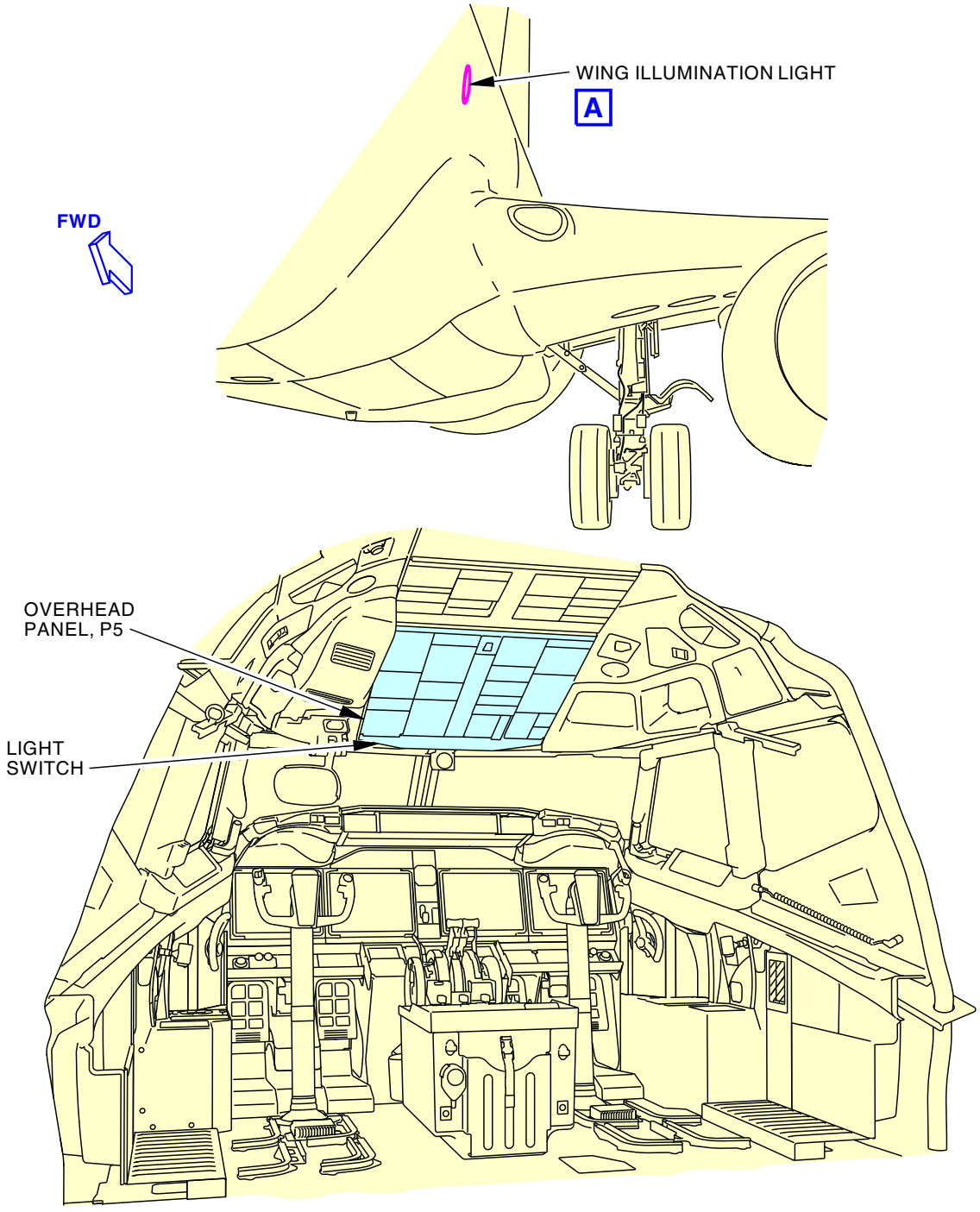
Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

SUBTASK 33-41-00-710-001

(4) Do this task: Wing Illumination Light - Operational Test, TASK 33-41-00-710-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

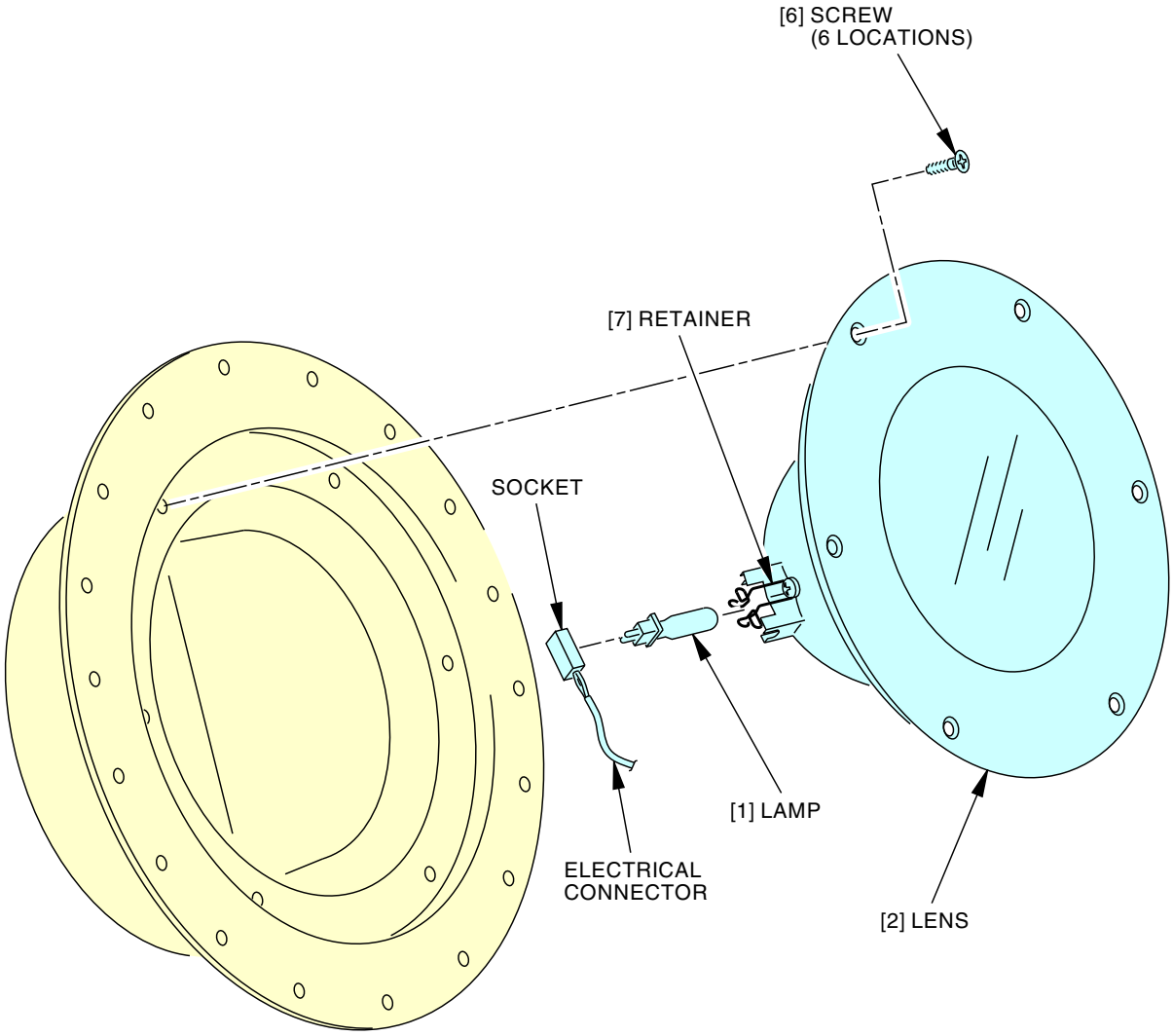


FLIGHT COMPARTMENT

2414668 S00061535722_V1

Wing Illumination Light - Lamp Replacement
Figure 201/33-41-00-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



WING ILLUMINATION LIGHT
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

A

2414669 S00061535723_V2

Wing Illumination Light - Lamp Replacement
Figure 201/33-41-00-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL; AIRPLANES WITH LED MODULE ASSEMBLY LIGHTS

TASK 33-41-00-960-804

5. Wing Illumination Light - LED Module Assembly Replacement

(Figure 202)

A. General

(1) This procedure gives the steps necessary for the wing illumination light LED module assembly replacement.

B. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

C. Procedure

SUBTASK 33-41-00-860-015

(1)

Make sure that this circuit breaker is open and has safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

SUBTASK 33-41-00-960-004

(2) Do these steps to replace the LED module assembly [30]:

(a) Remove the captive screws [31].

(b) Remove the lens assembly [32].

(c) Remove the captive screws [33].

(d) Disconnect the connector [34].

(e) Pull up the LED module assembly [30].

(f) Install a new LED module assembly [30].

(g) Secure the LED module assembly [30] with the captive screws [33].

(h) Connect the connector [34].

(i) Align the lens assembly [32] over the LED module assembly [30] and secure using the captive screws [31].

1) Tighten the captive screws [31] to 18 in-lb (2 N·m) - 21 in-lb (2 N·m).

2) Make sure the UP label is at the top of the lens assembly [32].

SUBTASK 33-41-00-860-016

(3) Make sure that this circuit breaker is closed:

CAPT Electrical System Panel, P18-3

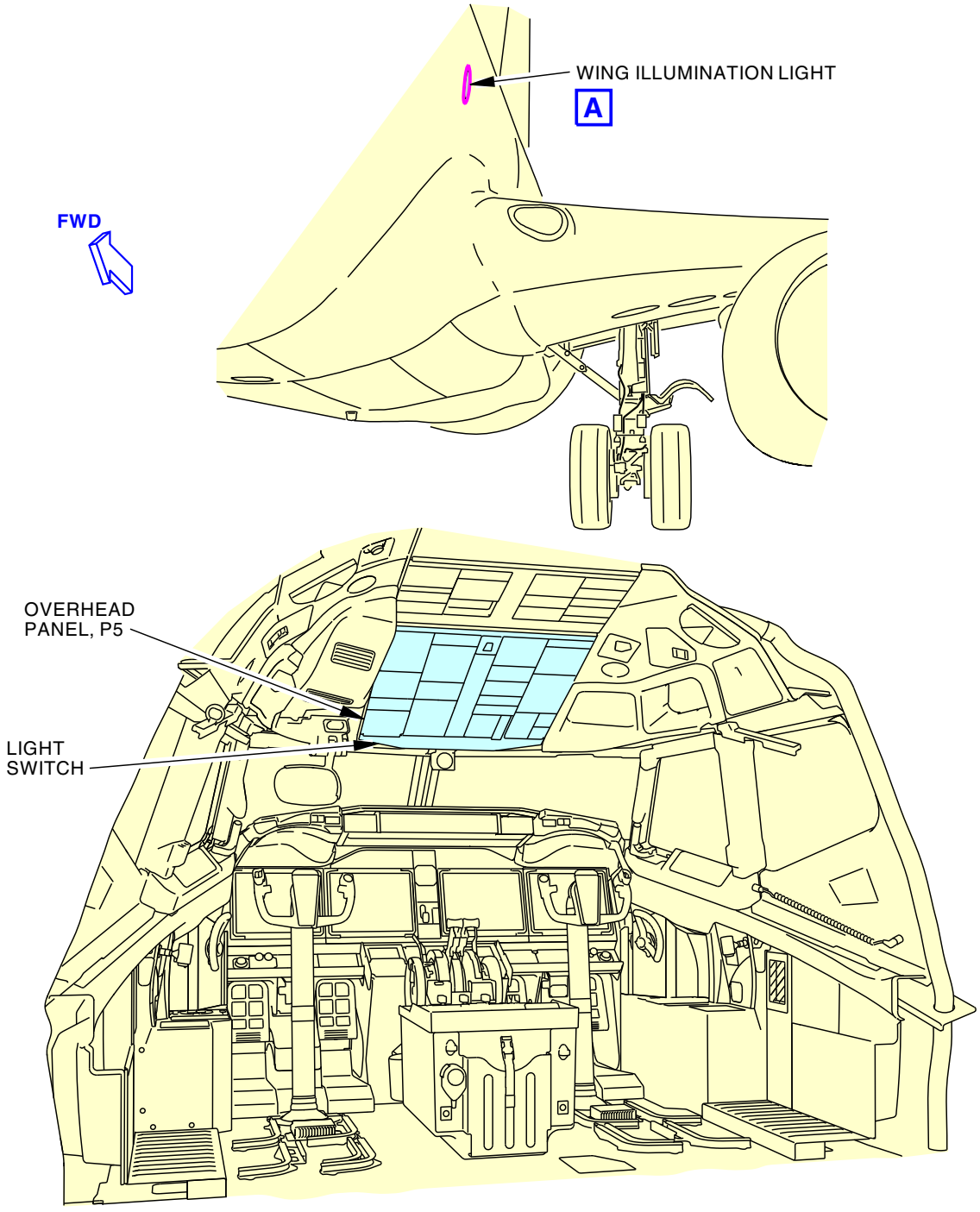
Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

SUBTASK 33-41-00-710-007

(4) Do this task: Wing Illumination Light - Operational Test, TASK 33-41-00-710-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

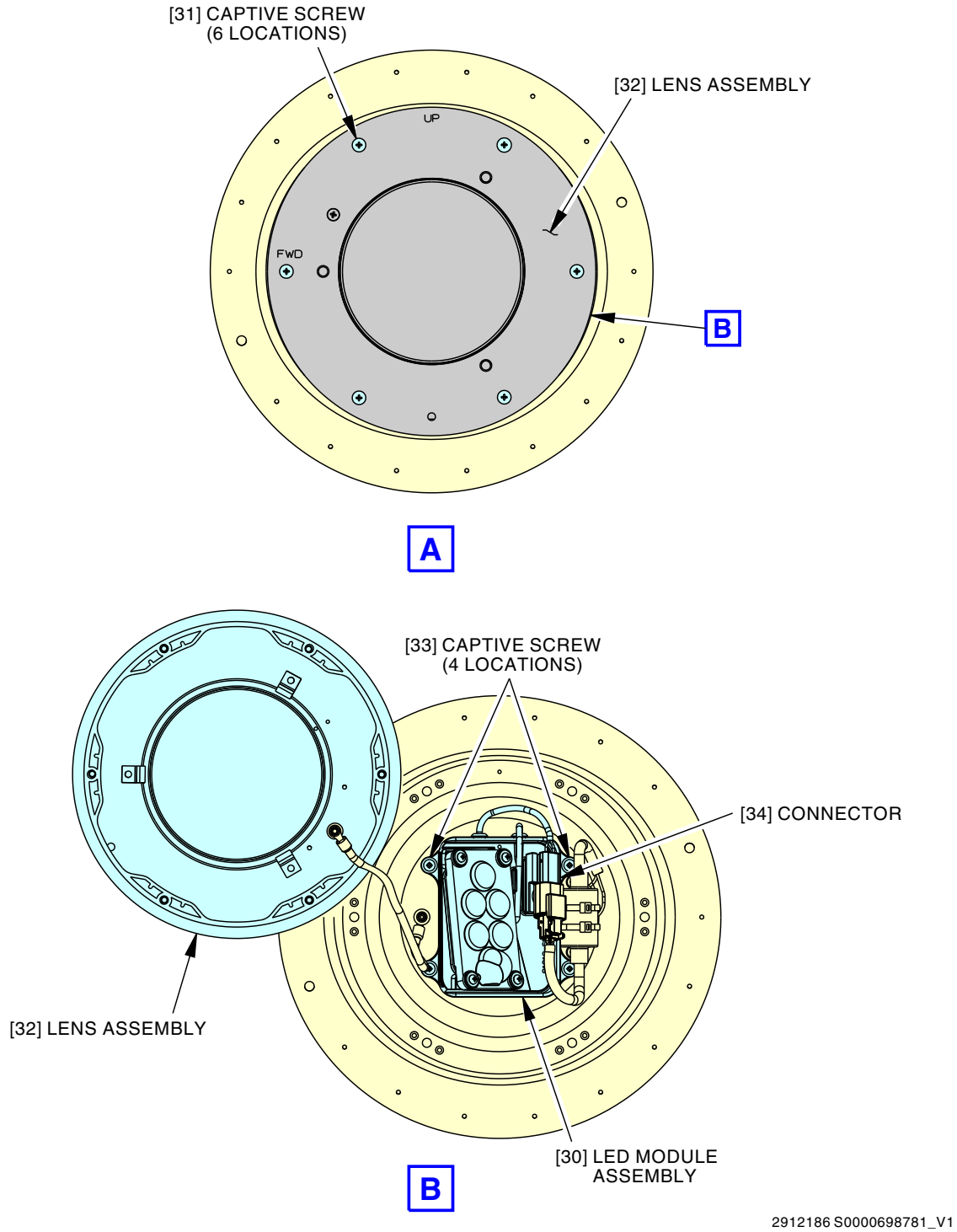


FLIGHT COMPARTMENT

2414668 S00061535722_V1

Wing Illumination Light - LED Module Assembly Replacement
Figure 202/33-41-00-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Wing Illumination Light - LED Module Assembly Replacement
Figure 202/33-41-00-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL; AIRPLANES WITH LAMP LIGHTS

TASK 33-41-00-960-802

6. Wing Illumination Light - Transformer Replacement

(Figure 201, Figure 203)

A. References

Reference	Title
25-21-46-000-801	Sidewall Panel - Removal (P/B 401)
25-21-46-400-801	Sidewall Panel - Installation (P/B 401)

B. Tools/Equipment

Reference	Description
STD-810	Spatula - Fillet Smoothing, Hardwood or Plastic

C. Consumable Materials

Reference	Description	Specification
A00281	Adhesive - Dow Corning 3145 RTV	MIL-A-46146 (BAC5010 Type 79)
B00062	Solvent - Acetone (99.5% Grade)	ASTM D 329 (Supersedes O-A-51)
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
21	Transformer	33-41-00-02-105	SIA ALL

E. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

F. Wing Illumination Light Transformer Replacement

SUBTASK 33-41-00-860-017

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

SUBTASK 33-41-00-020-005

(2) Do these steps out of the airplane at the wing illumination light:

(a) Remove the lens assembly [2].

1) Loosen the screws [6].

(b) Disconnect the electrical connector from the lamp [1].

(c) Remove the screws [23], washers [24], washers [25], and lanyard from the transformer [21].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL

SUBTASK 33-41-00-010-007

(3) Remove the sidewall panel inboard of the wing illumination light transformer (TASK 25-21-46-000-801).

SIA ALL; AIRPLANES WITH LAMP LIGHTS

SUBTASK 33-41-00-010-008

(4) Pull away the liner for access to the back of the wing illumination light.

SUBTASK 33-41-00-960-005

(5) Do these steps to replace the transformer [21]:

(a) Disconnect the electrical wires [22].

(b) Use a hardwood or plastic fillet smoothing spatula, STD-810, to break the seal around the base of the transformer [21].

(c) Remove the transformer [21].

(d) Clean the mating surfaces with solvent, B00062, or solvent, B00184.

(e) Put the transformer [21] in its position on the back of the light assembly.

SUBTASK 33-41-00-420-004

(6) Do these steps out of the airplane at the wing illumination light:

(a) Install the screws [23], washers [24], washers [25], and lanyard on the transformer [21].

(b) Connect the electrical connector to the lamp [1].

(c) Install the lens assembly [2].

1) Tighten the screws [6] from 18 in-lb (2 N·m) to 21 in-lb (2 N·m).

2) Make sure that the UP label is at the top of the lens assembly [2].

SUBTASK 33-41-00-860-018

(7) Do these steps in the airplane:

(a) Apply Dow Corning 3145 RTV adhesive, A00281, (or equivalent) around the base of the transformer [21].

(b) Connect the electrical wires [22].

SUBTASK 33-41-00-860-019

(8) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

SUBTASK 33-41-00-710-008

(9) Do this task: Wing Illumination Light - Operational Test, TASK 33-41-00-710-801.

SIA ALL

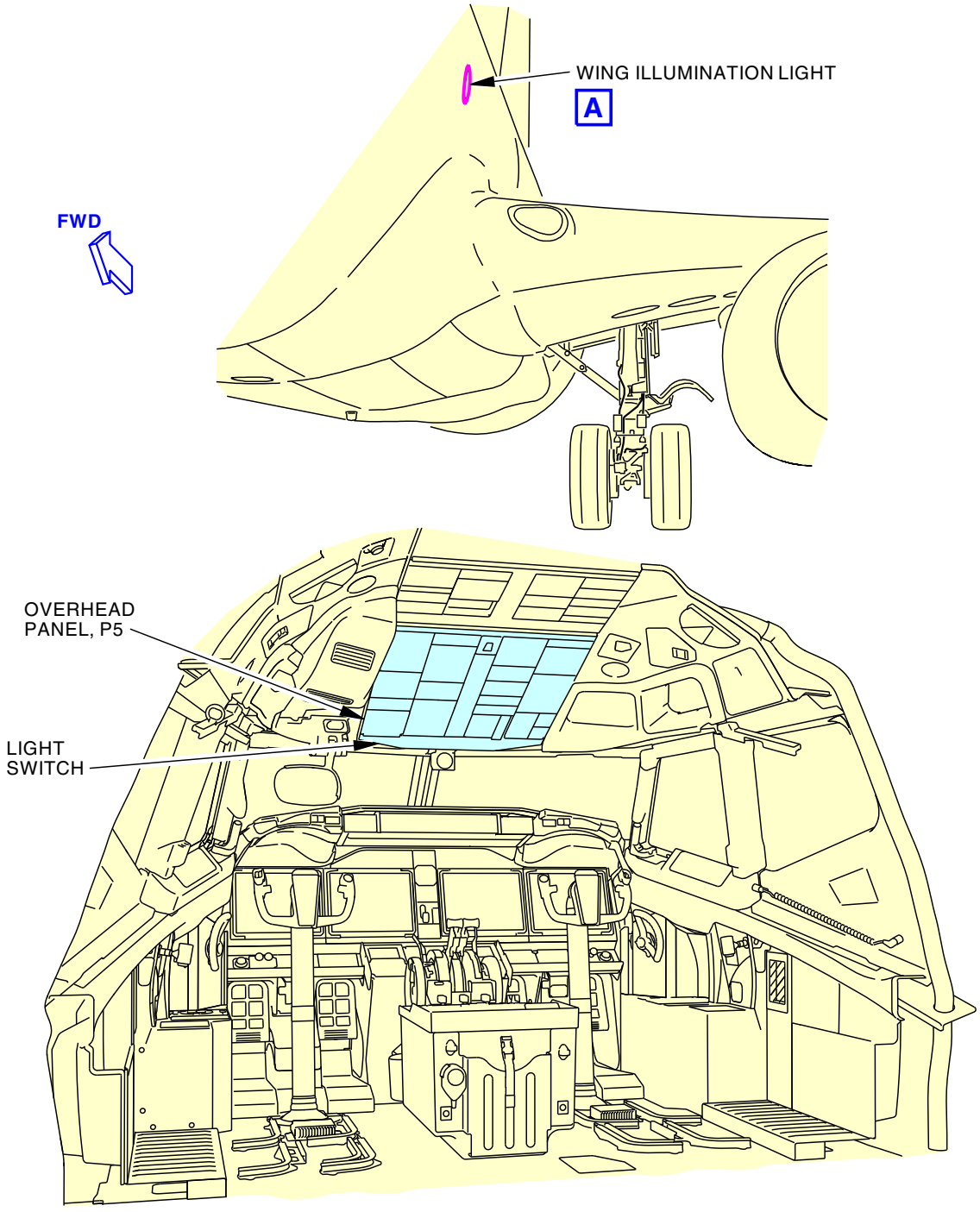
SUBTASK 33-41-00-410-005

(10) To install the sidewall panel, do this task: TASK 25-21-46-400-801.

SIA ALL; AIRPLANES WITH LAMP LIGHTS

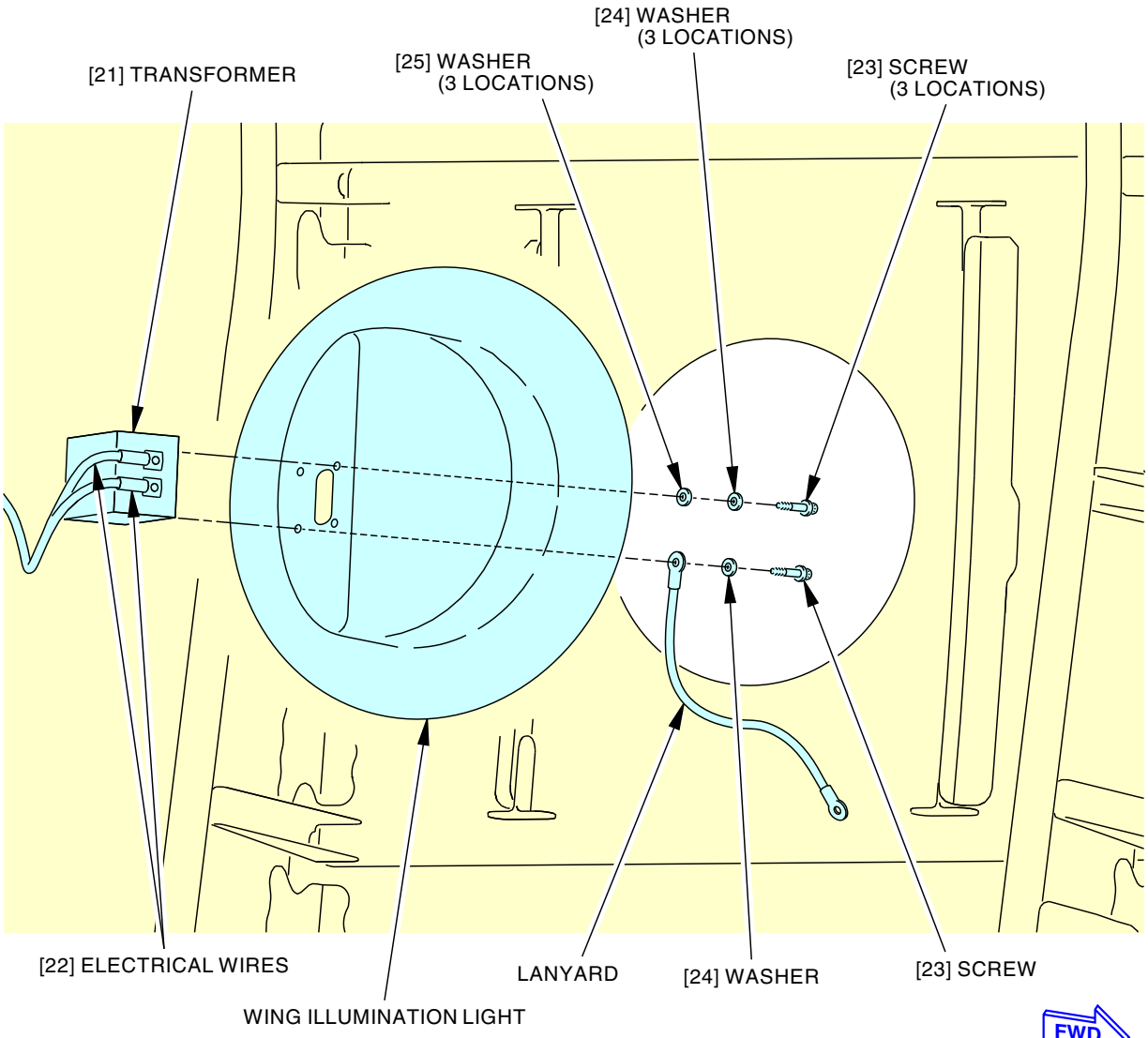
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Wing Illumination Light - Transformer Replacement
Figure 203/33-41-00-990-807 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



WING ILLUMINATION LIGHT TRANSFORMER
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

A

2414671 S00061535726_V1

Wing Illumination Light - Transformer Replacement
Figure 203/33-41-00-990-807 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL

TASK 33-41-00-960-803

7. Wing Illumination Light - Light Assembly Replacement

(Figure 203, Figure 204)

A. References

Reference	Title
25-21-46-000-801	Sidewall Panel - Removal (P/B 401)
25-21-46-400-801	Sidewall Panel - Installation (P/B 401)
51-22-00-160-801	Prepare For Sealing (P/B 201)

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Light assembly	33-41-00-02-010	SIA ALL
		33-41-00-02-150	SIA ALL

D. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

E. Wing Illumination Light Light Assembly Replacement

SUBTASK 33-41-00-860-011

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

SUBTASK 33-41-00-010-003

(2) Remove the sidewall panel inboard of the wing illumination light (TASK 25-21-46-000-801).

SUBTASK 33-41-00-010-004

(3) Pull away the liner for access to the back of the wing illumination light.

SUBTASK 33-41-00-020-002

(4) Remove the electrical wires [22] from the light assembly [1].

SIA ALL; AIRPLANES WITH LAMP LIGHTS

NOTE: The electrical wires are installed on the transformer of the light assembly.

SIA ALL

SUBTASK 33-41-00-020-003

(5) Remove the bolts [2] from the light assembly [1].

SUBTASK 33-41-00-020-004

(6) Remove the light assembly [1] from the airplane skin.

SUBTASK 33-41-00-160-001

(7) Clean the sealant from the airplane skin (TASK 51-22-00-160-801).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-41-00-390-001

(8) Apply sealant, A00247, between the light assembly [1] and airplane skin for a faying surface seal.

SUBTASK 33-41-00-390-002

(9) Apply a layer of sealant, A00247, under the heads of the bolts [2].

SUBTASK 33-41-00-420-002

(10) Install the new light assembly [1] with the bolts [2].

(a) If the bolt holes in the light assembly [1] are too small, drill the bolt holes.

SUBTASK 33-41-00-420-003

(11) Install the electrical wires [22] to the light assembly [1].

F. Wing Illumination Light Installation Test

SUBTASK 33-41-00-860-012

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	14	C00110	EXTERIOR LIGHTING WING SCAN

SUBTASK 33-41-00-710-003

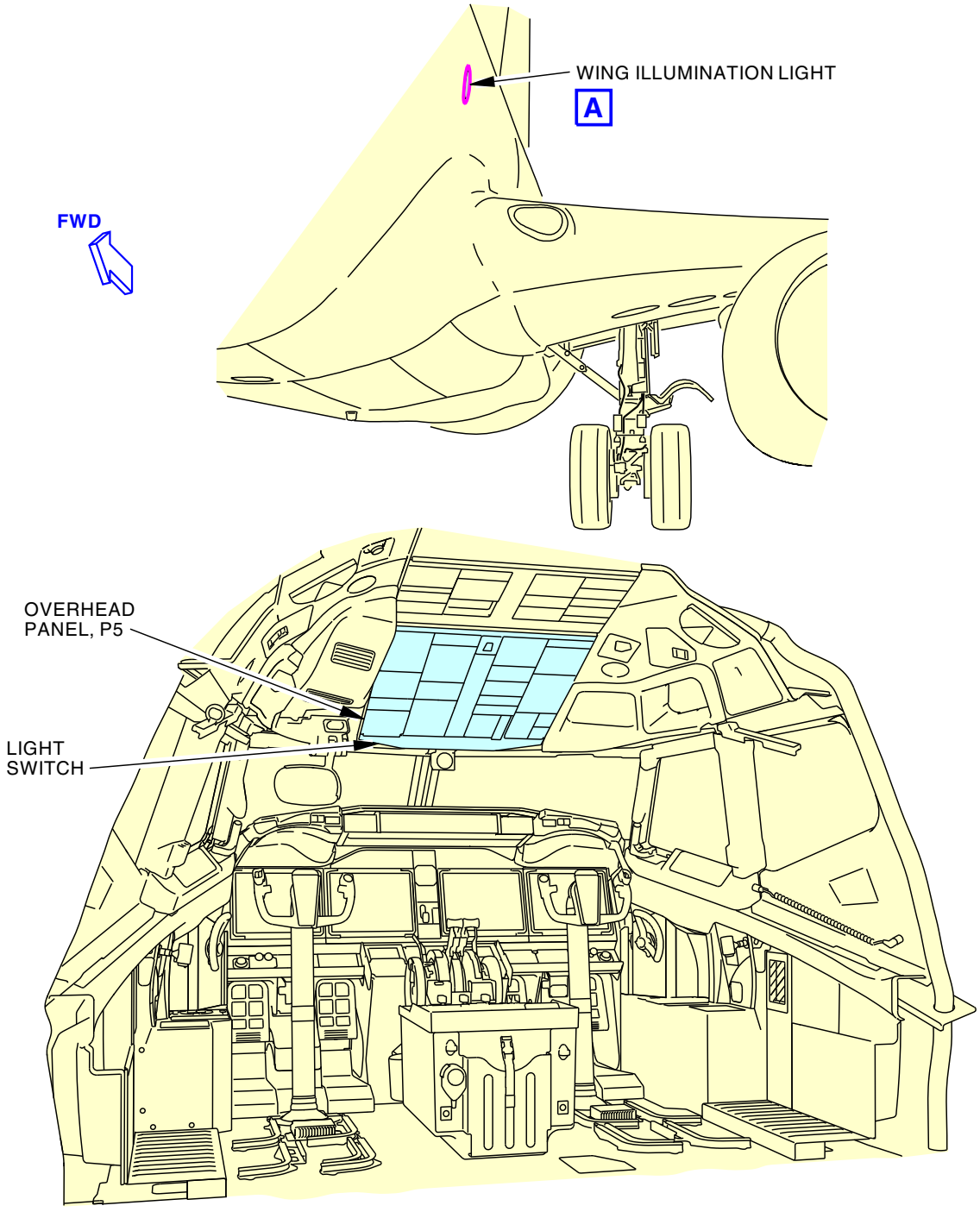
(2) Do this task: Wing Illumination Light - Operational Test, TASK 33-41-00-710-801.

SUBTASK 33-41-00-410-002

(3) To install the sidewall panel, do this task: TASK 25-21-46-400-801.

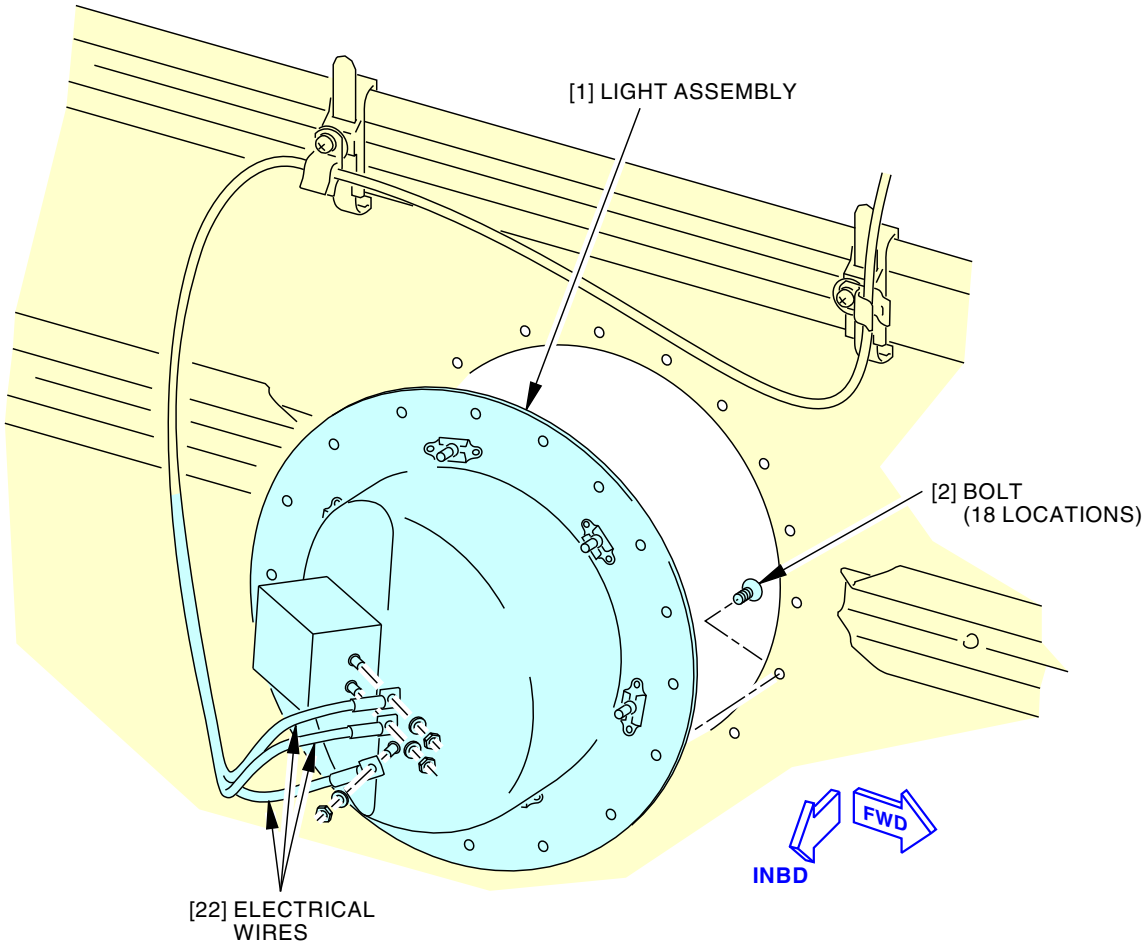
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Wing Illumination Light - Light Assembly Replacement
Figure 204/33-41-00-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**WING ILLUMINATION LIGHT ASSEMBLY
(EXAMPLE)**

A

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**Wing Illumination Light - Light Assembly Replacement
Figure 204/33-41-00-990-803 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-41-00-710-801

8. Wing Illumination Light - Operational Test

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

B. Procedure

SUBTASK 33-41-00-710-005

(1) Do a test of the wing illumination lights:

(a) At the overhead panel, P5, set the switch for the wing illumination lights to the on mode.

1) Make sure that the lights come on.

(b) Set the switch to the off mode.

1) Make sure that the lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LED LANDING, TAXI, AND RUNWAY TURNOFF LIGHTS (LTRTL) - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) A deactivation of the fixed landing light

(2) An activation of the fixed landing light

(3) A replacement of the fixed landing light main array assembly

(4) A replacement of the fixed landing light power supply

(5) A temporary repair of the fixed landing light lens

(6) A deactivation of the runway turnoff lights

(7) An activation of the runway turnoff lights

(8) A replacement of the runway turnoff light assembly

(9) A replacement of the taxi light relay.

B. The main array assemblies are used for both landing and taxi light functions.

TASK 33-42-21-040-801

2. Fixed Landing Light - Deactivation

(Figure 201)

A. General

(1) This procedure removes the electrical power to the Fixed Landing Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

C. Procedure

SUBTASK 33-42-21-860-029

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

D. Fixed Landing Light - Tryout

SUBTASK 33-42-21-700-002

NOTE: This tryout is to make sure that the Fixed Landing Light is in a zero energy state.

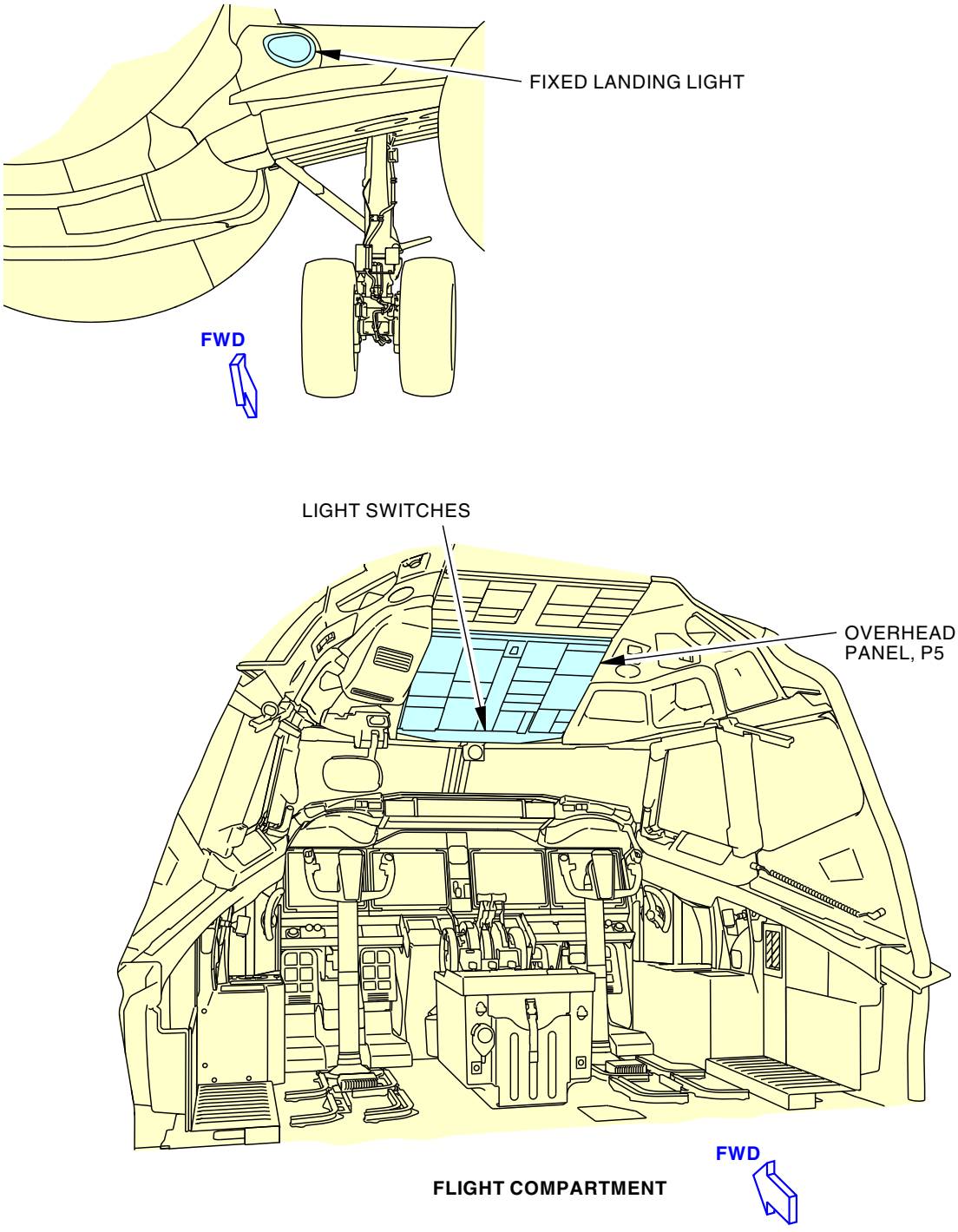
(1) Do the following steps to make sure that the power has been removed:

(a) At the overhead panel, P5, set the fixed landing lights switch to the ON Position.

(b) Make sure that the fixed landing lights in both wings are off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fixed Landing Lights
Figure 201/33-42-21-990-810

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-42-21-440-801

3. Fixed Landing Light - Activation

(Figure 201)

A. General

(1) This procedure adds the electrical power to the Fixed Landing Lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

C. Procedure

SUBTASK 33-42-21-860-002

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

END OF TASK

TASK 33-42-21-960-801

4. Fixed Landing Light - Main Array Assembly Replacement

(Figure 202)

A. General

(1) This task gives the instructions to replace the main array assembly.

(2) The main array also does the taxi light function.

(3) The inboard and outboard array assemblies are the parts of the main array.

B. References

Reference	Title
20-40-12-000-801	ESDS Handling for Printed Circuit Board Removal (P/B 201)
24-22-00-860-801	Supply Electrical Power (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20-20-00, Paragraph 2.E.	Standard Wiring Practices Manual
SWPM 20-20-00, Section 21-A	Resistance of Faying Surface Bonds

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C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
B00083	Solvent - VM&P Naphthas	TT-N-95 Type II, ASTM D-3735 Type III
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G50066	Tape - Thick Ribbed Tape with Adhesive (Skyflex GSC-21-95241-011)	

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
50	Packing	33-42-21-01-060	SIA ALL
51	Packing	33-42-21-01-060	SIA ALL
52	Packing	33-42-21-01-055	SIA ALL
53	Packing	33-42-21-01-055	SIA ALL

F. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

G. Prepare for the Replacement

SUBTASK 33-42-21-860-030

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do one of these steps to deactivate the leading edge flaps and slats in the retracted (UP) position:

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(a) If activation is not necessary to the trailing edge flaps, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

NOTE: This task deactivates both the leading edge flaps/slats and the trailing edge flaps.

(b) If activation is necessary to the trailing edge flaps, do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

NOTE: This task only deactivates the leading edge flaps and slats. The trailing edge flaps can still operate.

SUBTASK 33-42-21-860-031

(2) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

SUBTASK 33-42-21-910-007

(3) For devices that are sensitive to electrostatic discharge, do this task: ESDS Handling for Printed Circuit Board Removal, TASK 20-40-12-000-801.

H. Fixed Landing Light Main Array Assembly Replacement

SUBTASK 33-42-21-010-004

(1) Loosen the studs [4] and remove the lens assembly [3].

(a) Make sure that the lanyard [5] stays connected.

(b) Keep the lens assembly [3] and lanyard [5] away from the wing leading edge.

SUBTASK 33-42-21-020-006

(2) Do these steps to replace the main array:

(a) Remove the nut [7], washer [6], jumper [8], nut [43], washer [44], and jumper [45].

(b) Remove the screws [9], washers [10], screws [37], and washers [38] from the inboard array assembly [1].

1) If it is necessary, remove and discard the packings [50] and packings [51].

(c) Remove the screws [12] and washers [11] to disconnect the inboard array assembly [1] and outboard array assembly [2].

(d) Remove the inboard array assembly [1] from the brackets.

(e) Disconnect the electrical connector [13] from the inboard array assembly [1].

(f) Disconnect the clamp [54] from the inboard array assembly [1].

(g) Remove the screws [39], washers [40], screws [41], and washers [42] from the outboard array assembly [2].

1) If it is necessary, remove and discard the packings [52] and packings [53].

(h) Remove the outboard array assembly [2] from the brackets.

(i) Disconnect the electrical connector [46] from the outboard array assembly [2].

(j) Disconnect the clamp [54] from the outboard array assembly [2].

(k) Connect the electrical connector [46] to the new outboard array assembly [2].

(l) Connect the clamp [54] to the new outboard array assembly [2] to secure the wire.

(m) Install the new outboard array assembly [2] to the brackets.

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(n) If it is removed, install new packings [52] and new packings [53].

(o) Install the screws [39], washers [40], screws [41], and washers [42] to the outboard array assembly [2].

1) Install the fasteners loose.

(p) Connect the electrical connector [13] to the new inboard array assembly [1].

(q) Connect the clamp [54] to the new inboard array assembly [1] to secure the wire.

(r) Install the new inboard array assembly [1] into the brackets.

(s) If it is removed, install new packings [50] and new packings [51].

(t) Install the screws [9], washers [10], screws [37], and washers [38] to the inboard array assembly [1].

1) Install the fasteners loose.

(u) Install the screws [12] and washers [11] to connect the inboard array assembly [1] and outboard array assembly [2].

1) Tighten the screws [12], screws [9], screws [37], screws [39], and screws [41] to 35 in-lb (3.95 N·m) - 36 in-lb (4.07 N·m).

SUBTASK 33-42-21-120-003

(3) Do these steps to prepare the ground stud on the aluminum bracket, fasteners, jumper [8], and jumper [45] for the electrical bond installation:

(a) Clean the washer [6], nut [7], jumper [8], washer [44], nut [43], jumper [45], ground stud, and fay surfaces of the aluminum bracket.

1) Clean the washer [6], nut [7], jumper [8], washer [44], nut [43], and jumper [45] (SWPM 20-20-00, Paragraph 2.E.).

WARNING DO NOT GET SOLVENTS IN YOUR MOUTH, YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE DANGEROUS MATERIALS. SOLVENTS CAN BE FLAMMABLE OR CAUSE DAMAGE TO THE ENVIRONMENT. REFER TO THE MATERIAL SAFETY DATA SHEETS (MSDS) AND THE LOCAL SAFETY PRECAUTIONS.

a) Use a new cotton wiper, G00034, made moist with solvent, B00184, or solvent, B00083.

b) Use a new cotton wiper, G00034, to dry the surfaces.

c) Make sure that you remove the remaining corrosion inhibiting compound on the bracket.

2) Clean the ground stud threads and head of the ground stud assembly (SWPM 20-20-00, Paragraph 2.E.).

WARNING DO NOT GET SOLVENTS IN YOUR MOUTH, YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE DANGEROUS MATERIALS. SOLVENTS CAN BE FLAMMABLE OR CAUSE DAMAGE TO THE ENVIRONMENT. REFER TO THE MATERIAL SAFETY DATA SHEETS (MSDS) AND THE LOCAL SAFETY PRECAUTIONS.

a) Use a new cotton wiper, G00034, made moist with solvent, B00184, or solvent, B00083.

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b) Use a new cotton wiper, G00034, to dry the surfaces.

c) Continue to clean and dry the surface until the cotton wiper shows clean.

SUBTASK 33-42-21-420-007

(4) Do these steps to install the washer [6], nut [7], and jumper [8] on the bracket:

(a) Apply sealant, A50231, to the threads of the ground stud, washer [6], and jumper [8].

(b) Install the jumper [8], nut [7], and washer [6] on the ground stud.

1) Tighten the nut [7] to 28 in-lb (3.16 N·m) - 35 in-lb (3.95 N·m).

SUBTASK 33-42-21-420-008

(5) Do these steps to install the washer [44], nut [43], and jumper [45] on the bracket:

(a) Apply sealant, A50231, to the threads of the ground stud, washer [44], and jumper [45].

(b) Install the jumper [45], nut [43], and washer [44] on the ground stud.

1) Tighten the nut [43] to 28 in-lb (3.16 N·m) - 35 in-lb (3.95 N·m).

SUBTASK 33-42-21-760-003

(6) Measure the electrical bonding resistance between the jumper [8] and fuselage (SWPM 20-20-00, Section 21-A).

(a) Use an intrinsically safe approved bonding meter, COM-1550.

(b) Make sure that the resistance is 0.0010 ohm (1.0 milliohm) or less.

SUBTASK 33-42-21-760-004

(7) Measure the electrical bonding resistance between the jumper [45] and fuselage (SWPM 20-20-00, Section 21-A).

(a) Use an intrinsically safe approved bonding meter, COM-1550.

(b) Make sure that the resistance is 0.0010 ohm (1.0 milliohm) or less.

SUBTASK 33-42-21-860-032

(8) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

SUBTASK 33-42-21-860-033

(9) Make sure that electrical power is supplied to the airplane.

(a) If it is necessary, do this task: Supply Electrical Power, TASK 24-22-00-860-801.

SUBTASK 33-42-21-710-007

WARNING

DO NOT LOOK DIRECTLY AT LIGHTS. HIGH INTENSITY OF LIGHTS CAN CAUSE EYE DAMAGE.

(10) Do a test of the main arrays.

(a) Set left LANDING switch, at the P5 overhead panel, to the ON position.

1) Make sure that the left main array comes on.

(b) Set left LANDING switch, at the P5 overhead panel, to the OFF position.

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1) Make sure that the left main array goes off.

(c) Set right LANDING switch, at the P5 overhead panel, to the ON position.

1) Make sure that the right main array comes on.

(d) Set right LANDING switch, at the P5 overhead panel, to the OFF position.

1) Make sure that the right main array goes off.

(e) Set the TAXI switch, at the P5 overhead panel, to the ON or AUTO position.

1) Make sure that the left and right main arrays come on but at a lower power level than when the LANDING switches are in the ON position.

(f) Set the TAXI switch, at the P5 overhead panel, to the OFF position.

1) Make sure that the left and right main arrays go off.

SUBTASK 33-42-21-410-004

(11) Do these steps to install the lens assembly [3]:

(a) If the tape around the perimeter of the lens opening is damaged, do these steps:

1) Remove and discard the damaged tape.

a) Apply Skyflex tape, G50066, around the perimeter of the lens opening.

NOTE: If the tape is too long, fold it to fit the opening, but not more than four times.

<1> Do not stretch the tape.

2) Use a sharp tool to make a 0.25 in. (6.35 mm) cut in the tape at the 15 holes.

a) Make sure that no other cuts to the tape.

(b) Install the lens assembly [3] with the stud [4].

1) Tighten each stud [4] to 20 in-lb (2.3 N·m) - 25 in-lb (2.8 N·m).

I. Put the Airplane Back to Its Usual Condition

SUBTASK 33-42-21-860-034

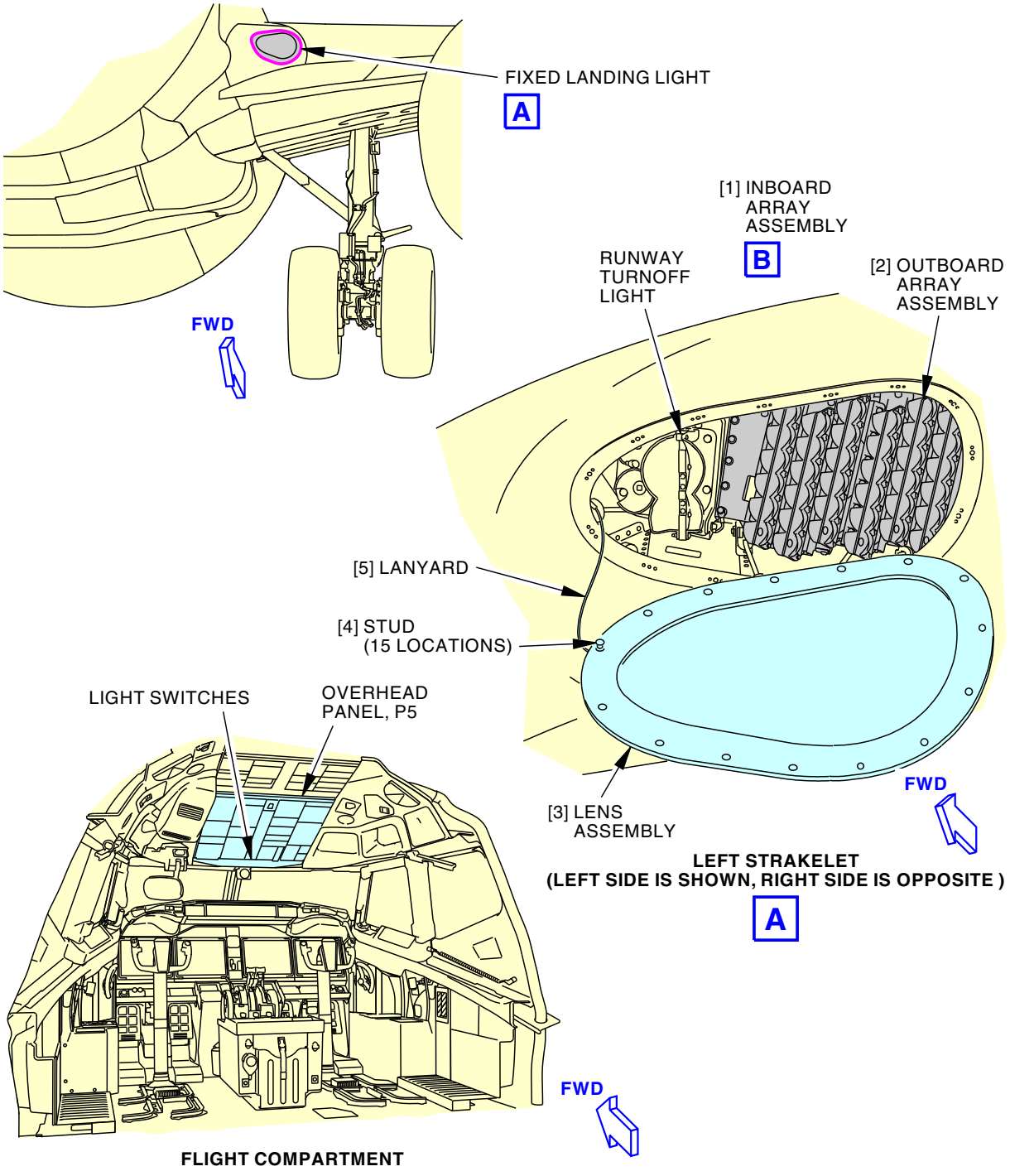
(1) Do these steps to reactivate the leading edge flaps and slats:

(a) If both the leading edge flaps/slats and the trailing edge flaps were deactivated, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

(b) If only leading edge flaps and slats were deactivated, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

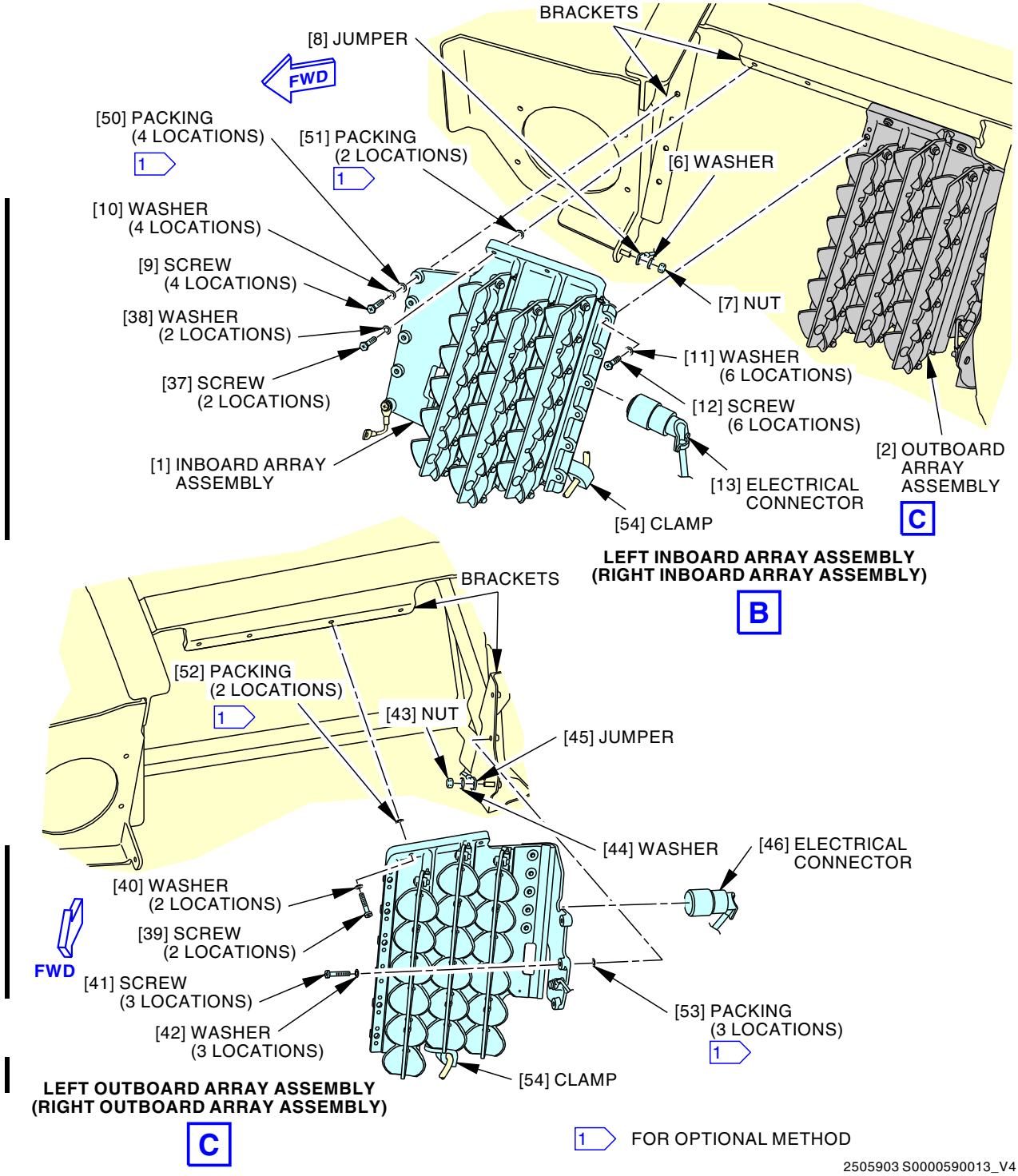
ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Fixed Landing Light - Main Array Assembly Replacement
Figure 202/33-42-21-990-811 (Sheet 1 of 2)

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Fixed Landing Light - Main Array Assembly Replacement
Figure 202/33-42-21-990-811 (Sheet 2 of 2)

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TASK 33-42-21-960-802

5. Fixed Landing Light - Power Supply Replacement

(Figure 203)

A. General

(1) This task has the steps to replace the power supply.

(2) The power supply provides power and control to the main array and runway turnoff light assemblies.

(3) The power supply is located behind the main array.

B. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
24-22-00-860-801	Supply Electrical Power (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
51-21-41-370-802	Apply Bonderite M-CR 600, Bonderite M-CR 1200, Bonderite M-CR 600RTU, or Bonderite M-CR 1200S Solution (P/B 701)
51-21-72-370-804	BMS10-11 Primer - Application (P/B 701)
51-22-00-390-806	Fillet Seal Application (P/B 201)
SWPM 20-20-00, Paragraph 2.A.	Cleaning Procedure 1
SWPM 20-20-00, Paragraph 2.E.	Standard Wiring Practices Manual
SWPM 20-20-00, Section 21-A	Resistance of Faying Surface Bonds

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
B00148	Solvent - Methyl Ethyl Ketone (MEK)	ASTM D740
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7

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(Continued)

Reference	Description	Specification
C00064	Coating - Aluminum Chemical Conversion	BAC5719 Type II Class A (MIL-DTL-5541 Class 1A)
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G50066	Tape - Thick Ribbed Tape with Adhesive (Skyflex GSC-21-95241-011)	
G50398	Pad - Adbrasive, Scotch-Brite Type S, Abrasive Pad	
G50492	Pad - 3M Scotch Brite 7448 Ultra Fine Pad	MIL-A-9962A Type III Grade AAA
G50961	Coating - Corrosion Inhibiting Epoxy Primer - (BAC 377 Yellow Color)	BMS10-11 Type I

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
14	Power supply	33-42-21-10-035	SIA ALL

F. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

G. Prepare for the Replacement

SUBTASK 33-42-21-860-008

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do one of these steps to deactivate the leading edge flaps and slats in the retracted (UP) position:

(a) If activation is not necessary to the trailing edge flaps, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

NOTE: This task deactivates both the leading edge flaps/slats and the trailing edge flaps.

(b) If activation is necessary to the trailing edge flaps, do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

NOTE: This task only deactivates the leading edge flaps and slats. The trailing edge flaps can still operate.

SUBTASK 33-42-21-860-009

(2) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT

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(Continued)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

SUBTASK 33-42-21-010-002

(3) Remove the main array assembly (Fixed Landing Light - Main Array Assembly Replacement, TASK 33-42-21-960-801).

SUBTASK 33-42-21-910-002

CAUTION

DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(4) Before the power supply [14] is touched, do this task for devices that are sensitive to electrostatic discharge (ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802).

H. Power Supply Replacement

SUBTASK 33-42-21-020-002

(1) Do these steps to replace the power supply [14]:

(a) Remove the nut [17], washer [18], and jumper [19].

(b) Remove the bolts [15] and washers [16].

(c) Remove the power supply [14] from the bracket.

(d) Disconnect the electrical connector [20] from the power supply [14].

(e) Connect the electrical connector [20] to the new power supply [14].

(f) Install the power supply [14] to the bracket.

(g) Install the bolts [15] and washers [16].

1) Tighten the bolts [15] to 35 in-lb (3.95 N·m) - 36 in-lb (4.07 N·m).

SUBTASK 33-42-21-120-002

(2) Do these steps to prepare the ground stud on the aluminum bracket, fasteners, and jumper [19] for the electrical bond installation:

(a) Clean the nut [17], washer [18], jumper [19], ground stud, and fay surfaces of the aluminum bracket:

1) Use Cleaning Procedure 1 to abrasively clean the fay surfaces of the aluminum bracket (SWPM 20-20-00, Paragraph 2.A.).

a) Use a very fine Scotch-Brite Type S pad, G50398, or an ultra-fine Scotch-Brite 7448 pad, G50492.

b) Move the pad in a circular movement while you press with your thumb.

2) Use Cleaning Procedure 5 to clean the fay surface of the aluminum bracket, nut [17], washer [18], and jumper [19] (SWPM 20-20-00, Paragraph 2.E.).

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WARNING DO NOT GET SOLVENTS IN YOUR MOUTH, YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE DANGEROUS MATERIALS. SOLVENTS CAN BE FLAMMABLE OR CAUSE DAMAGE TO THE ENVIRONMENT. REFER TO THE MATERIAL SAFETY DATA SHEETS (MSDS) AND THE LOCAL SAFETY PRECAUTIONS.

a) Use a new cotton wiper, G00034, made moist with solvent, B00184, or solvent, B00148.

b) Use a new cotton wiper, G00034, to dry the surfaces.

c) Continue to clean and dry the surface until the cotton wiper shows clean.

SUBTASK 33-42-21-420-002

(3) Install the nut [17], washer [18], and jumper [19].

(a) Tighten the nut [17] to 65 in-lb (7 N·m) - 70 in-lb (8 N·m).

SUBTASK 33-42-21-760-002

(4) Measure the electrical bonding resistance between the power supply and fuselage (SWPM 20-20-00, Section 21-A).

(a) Use an intrinsically safe approved bonding meter, COM-1550.

(b) Make sure that the bonding resistance is 0.0010 ohms (1 milliohm) or less.

SUBTASK 33-42-21-390-001

(5) Apply sealant, A50231, to the nut [17], washer [18], and jumper [19] (TASK 51-22-00-390-806).

SUBTASK 33-42-21-910-003

(6) Apply protective coating, C00064, to the bare metal areas of the aluminum bracket (TASK 51-21-41-370-802).

(a) Apply protective coating to the area where the finish was removed from the electrical bonding probe touching the surface.

SUBTASK 33-42-21-910-004

(7) Apply primer coating, G50961, to the bare metal areas of the aluminum bracket (TASK 51-21-72-370-804).

(a) Apply primer to the area where the finish was removed from the electrical bonding probe touching the surface.

SUBTASK 33-42-21-420-003

(8) Install the main array (TASK 33-42-21-960-801).

SUBTASK 33-42-21-860-010

(9) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

SUBTASK 33-42-21-860-011

(10) Do this task: Supply Electrical Power, TASK 24-22-00-860-801.

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SUBTASK 33-42-21-710-002

WARNING DO NOT LOOK DIRECTLY AT LIGHTS. HIGH INTENSITY OF LIGHTS CAN CAUSE EYE DAMAGE.

(11) Do a test of the main array and the runway turnoff light assemblies.

(a) At the P5 overhead panel, set left LANDING switch to the ON position.

1) Make sure that the left main array comes on.

(b) At the P5 overhead panel, set left LANDING switch to the OFF position.

1) Make sure that the left main array goes off.

(c) At the P5 overhead panel, set right LANDING switch to the ON position.

1) Make sure that the right main array comes on.

(d) At the P5 overhead panel, set right LANDING switch to the OFF position.

1) Make sure that the right main array goes off.

(e) At the P5 overhead panel, set the TAXI switch to the ON or AUTO position.

1) Make sure that the left and right main arrays come on but at a lower power level than when the LANDING switches are in the ON position.

(f) At the P5 overhead panel, set the TAXI switch to the OFF position.

1) Make sure that the left and right main arrays go off.

(g) At the P5 overhead panel, set the left RUNWAY TURNOFF switch to the ON position.

1) Make sure that the left runway turnoff light comes on.

(h) At the P5 overhead panel, set the left RUNWAY TURNOFF switch to the OFF position.

1) Make sure that the left runway turnoff light goes off.

(i) At the P5 overhead panel, set the right RUNWAY TURNOFF switch to the ON position.

1) Make sure that the right runway turnoff light comes on.

(j) At the P5 overhead panel, set the right RUNWAY TURNOFF switch to the OFF position.

1) Make sure that the right runway turnoff light goes off.

SUBTASK 33-42-21-410-002

(12) Do these steps to install the lens assembly:

(a) If the tape around the perimeter of the lens opening is damaged, do these steps:

1) Remove and discard the damaged tape.

a) Apply Skyflex tape, G50066, around the perimeter of the lens opening.

b) If the tape is too long, fold it to fit the opening, but not more than four times.

<1> Do not stretch the tape.

2) Use a sharp tool to make a 0.25 in. (6.35 mm) cut in the tape at the 15 holes.

a) Make no other cuts to the tape.

(b) Install the lens assembly [3] with the studs [4].

1) Tighten each studs [4] to 20 in-lb (2.3 N·m) - 25 in-lb (2.8 N·m).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

I. Put the Airplane Back to Its Usual Condition

SUBTASK 33-42-21-860-012

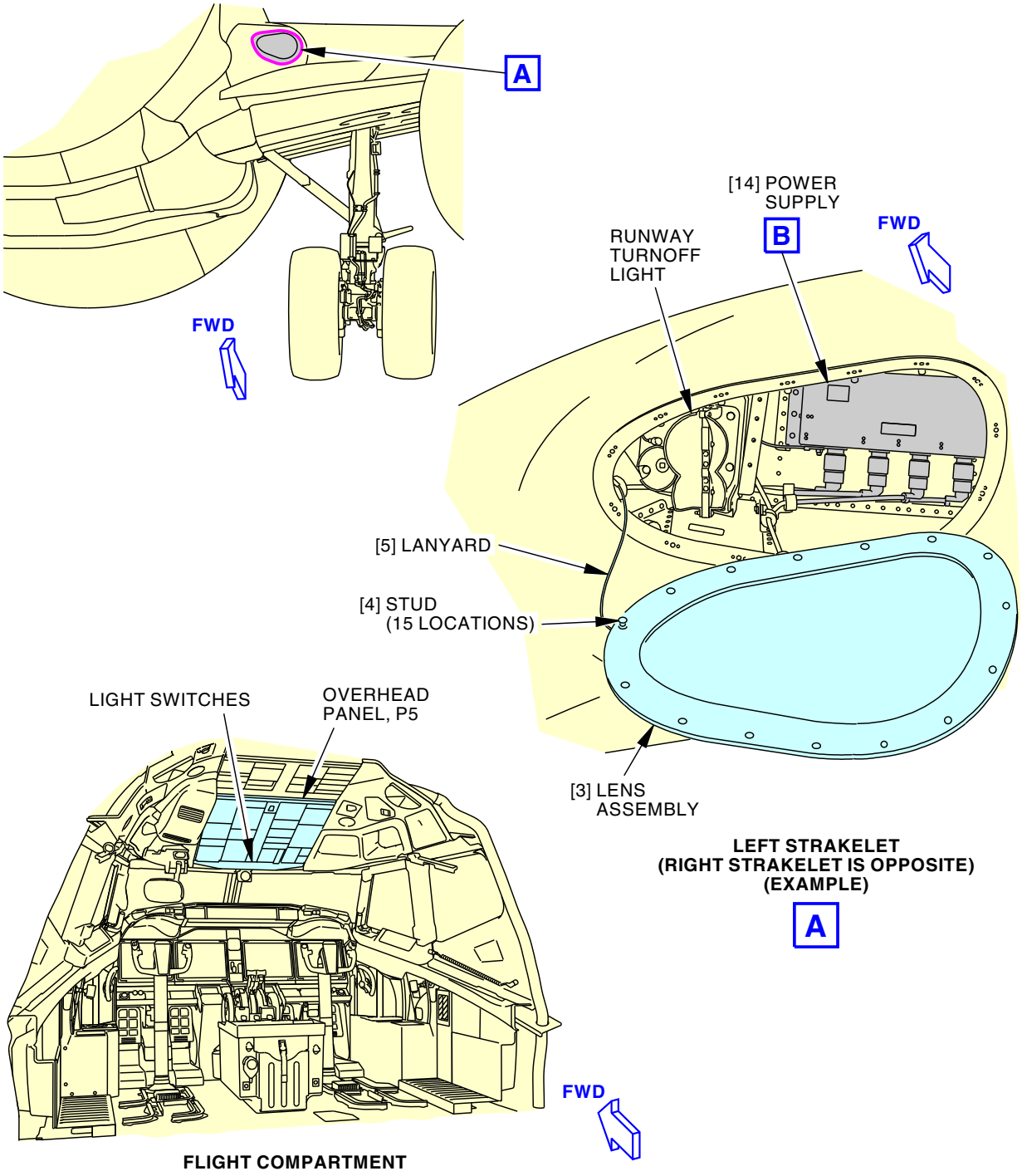
(1) Do these steps to reactivate the leading edge flaps and slats:

(a) If both the leading edge flaps/slats and the trailing edge flaps were deactivated, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

(b) If only leading edge flaps and slats were deactivated, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

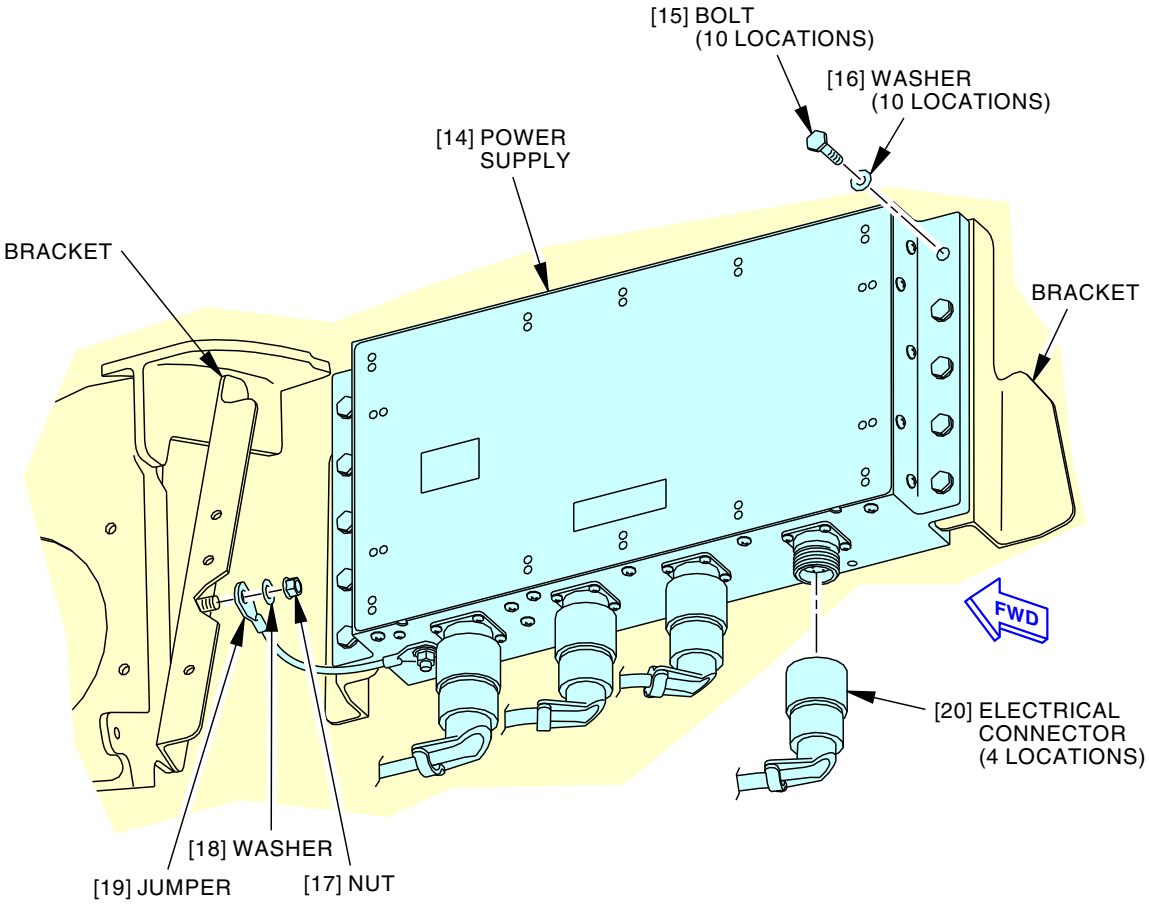
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fixed Landing Light - Power Supply Assembly Replacement
Figure 203/33-42-21-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT POWER SUPPLY
(RIGHT POWER SUPPLY IS OPPOSITE)

B

2508642 S0000591212_V1

Fixed Landing Light - Power Supply Assembly Replacement
Figure 203/33-42-21-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-42-21-350-801

6. Fixed Landing Light - Lens Temporary Repair

(Figure 204)

A. General

(1) Use this task to make a temporary cover for the fixed landing light when the lens assembly is broken and no spare is available.

B. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)

C. Consumable Materials

Reference	Description	Specification
G00111	Sheet - Mylar	
G00270	Tape - Scotch Flatback Masking 250	ASTM D6123 (Supersedes A-A-883)
G02042	Material - Aluminum Alloy 2024 Sheet	MS14361
G02329	Tape - Aluminum Foil, Pressure Sensitive - Vibration Damping Tape 434	

D. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

E. Prepare for the Fixed Landing Light Lens Temporary Repair

SUBTASK 33-42-21-860-013

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do one of these steps to deactivate the leading edge flaps and slats in the retracted (UP) position:

(a) If activation is not necessary to the trailing edge flaps, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

NOTE: This task deactivates both the leading edge flaps/slats and the trailing edge flaps.

(b) If activation is necessary to the trailing edge flaps, do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

NOTE: This task only deactivates the leading edge flaps and slats. The trailing edge flaps can still operate.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-42-21-860-014

(2) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT

F. Fixed Landing Light Lens Temporary Repair

SUBTASK 33-42-21-020-003

(1) Do these steps to remove the broken lens assembly [3]:

(a) Loosen the studs [4].

(b) Disconnect the lanyard [5].

SUBTASK 33-42-21-020-004

(2) Remove the broken lens assembly from the airplane:

(a) Disassemble the studs [4] and rings [21] from the lens assembly [3].

1) Keep the studs [4] for the installation of the temporary cover [22].

SUBTASK 33-42-21-350-001

(3) Do these steps to make a temporary cover [22]:

(a) Make a four-piece mylar template.

1) Cut the mylar sheet, G00111, into four strips.

2) Make each mylar strip align with the contour of the broken lens assembly [3] then attach the strips with the Scotch Flatback Masking Tape 250, G00270.

NOTE: The edges between adjacent mylar strips align on the flange, midway between the fastener holes and perpendicular to the rim.

3) Cut the mylar strips the same as the rim around the lens assembly [3].

4) Carefully make a mark for each fastener holes.

5) Remove the mylar strips from the lens assembly [3].

(b) Make the four-piece lanyard [5] the same as the mylar template.

1) Make the temporary cover from aluminum sheet material, G02042 0.094 ±0.031 in. (2.388 ±0.788 mm) thick.

2) Drill 0.274 ±0.006 in. (6.960 ±0.153 mm) diameter holes and countersink to 0.4015 ±0.0025 in. (10.1981 ±0.0635 mm) diameter x 100 degree head.

3) If the thickness of the aluminum material is less than 0.09 in. (2.29 mm), make a shim out of similar material in the shape of the rim.

SUBTASK 33-42-21-350-002

(4) Do these steps to install the temporary cover [22]:

(a) Make each aluminum strip align with the contour of the broken lens assembly.

(b) Attach the shim (if one is necessary) and each aluminum strip with the studs [4].

1) Do not use the rings [21].

2) Bring the aluminum strips up to contour, 0.126 ±0.040 in. (3.200 ±1.016 mm).

(c) Cover all spaces with speed Vibration Damping Tape 434 tape, G02329.

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1) The spaces between the aluminum strips must be 0.10 ±0.10 in. (2.54 ±2.54 mm) wide. The spaces between the aluminum strips and the opening should be 0.060 ±0.060 in. (1.524 ±1.524 mm) wide.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 33-42-21-860-015

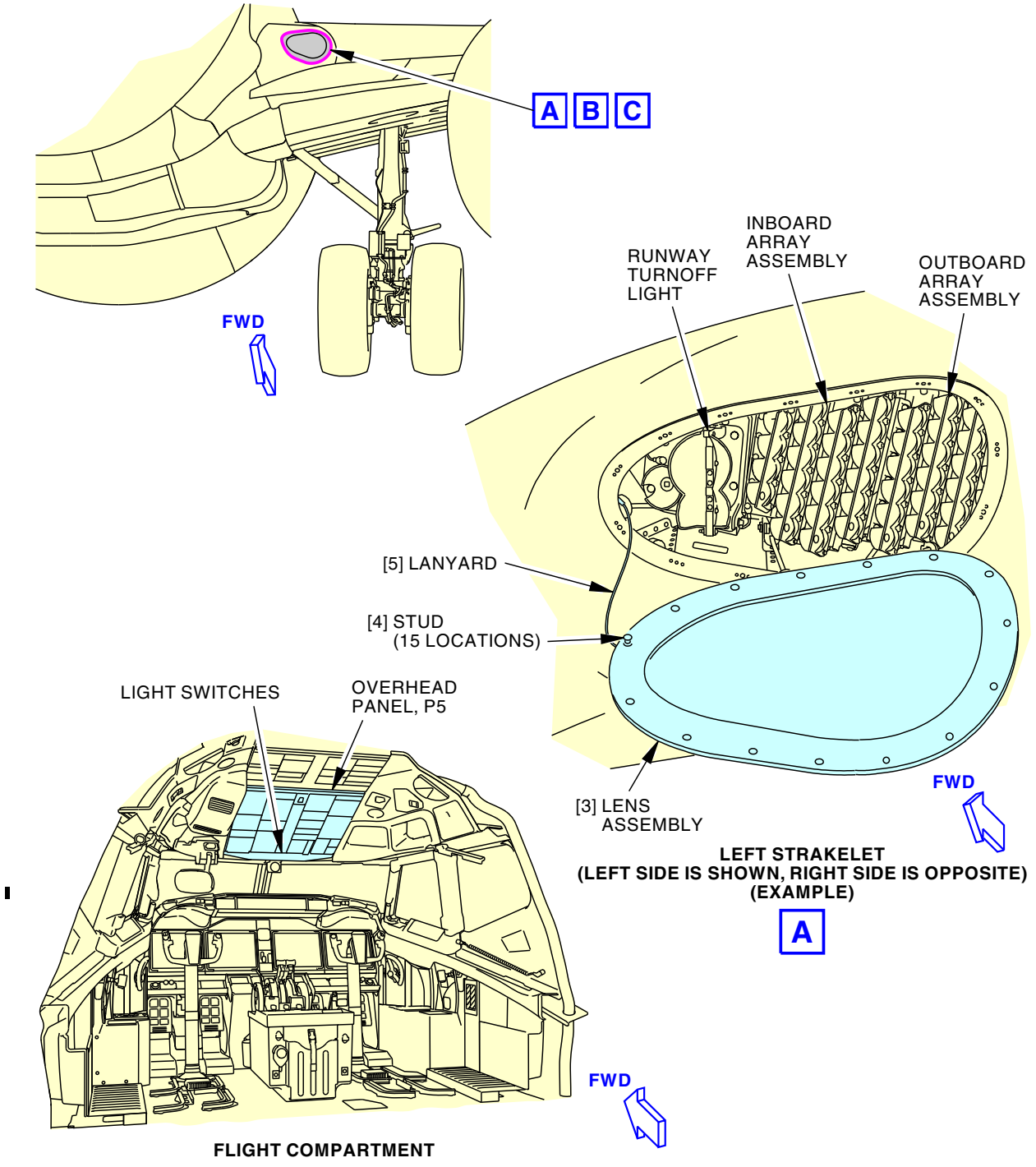
(1) Do these steps to reactivate the leading edge flaps and slats:

(a) If both the leading edge flaps/slats and the trailing edge flaps were deactivated, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

(b) If only leading edge flaps and slats were deactivated, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

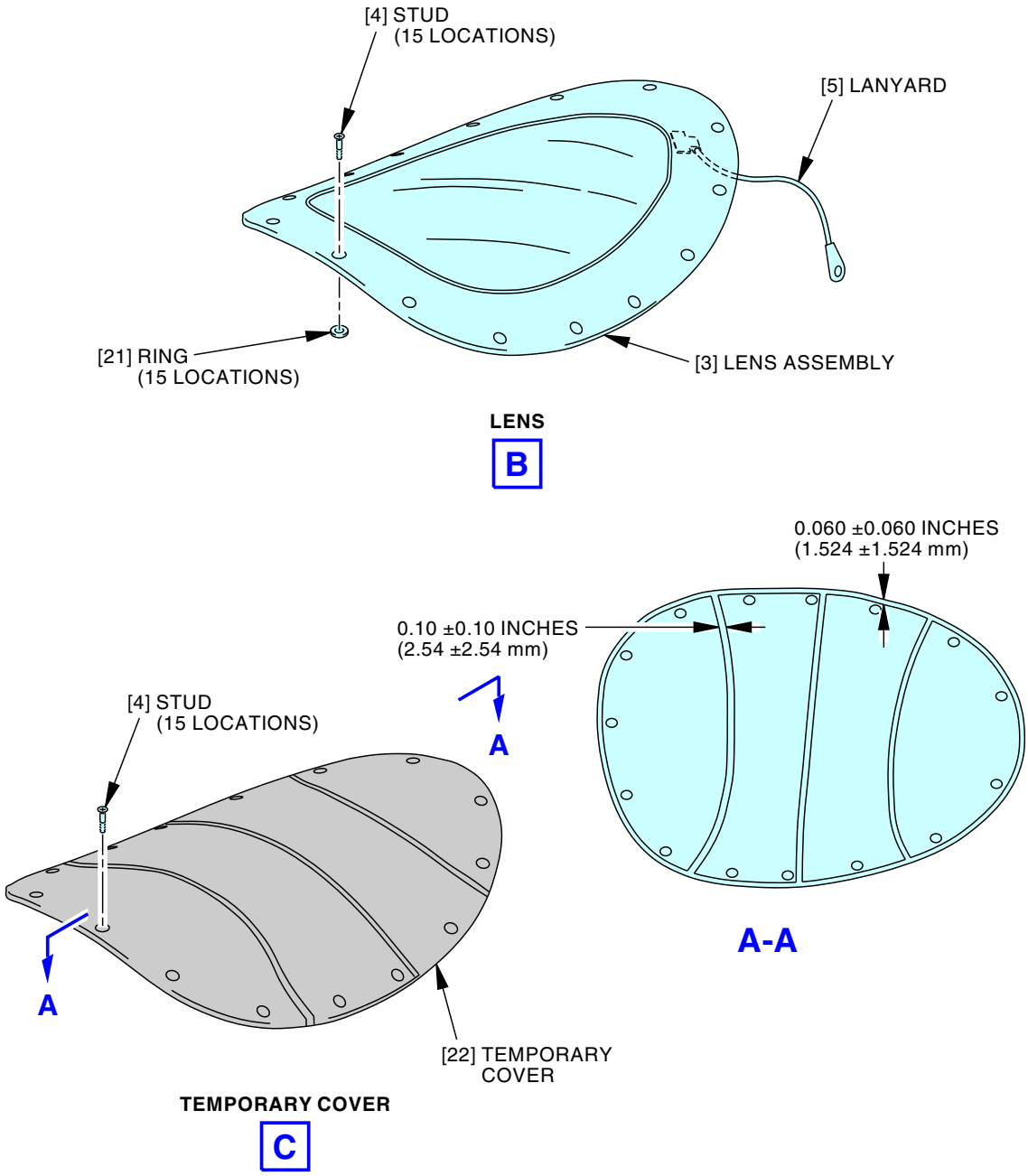
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2517429 S0000591328_V2

Fixed Landing Light - Lens Temporary Repair
Figure 204/33-42-21-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2517453 S0000591329_V1

Fixed Landing Light - Lens Temporary Repair
Figure 204/33-42-21-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-42-21-040-802

7. Runway Turnoff Lights - Deactivation

(Figure 205)

A. General

(1) This procedure removes electrical power to the runway turnoff lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

C. Procedure

SUBTASK 33-42-21-860-016

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

D. Runway Turnoff Lights - Tryout

NOTE: This tryout is to make sure that the Runway Turnoff Lights are in a zero energy state.

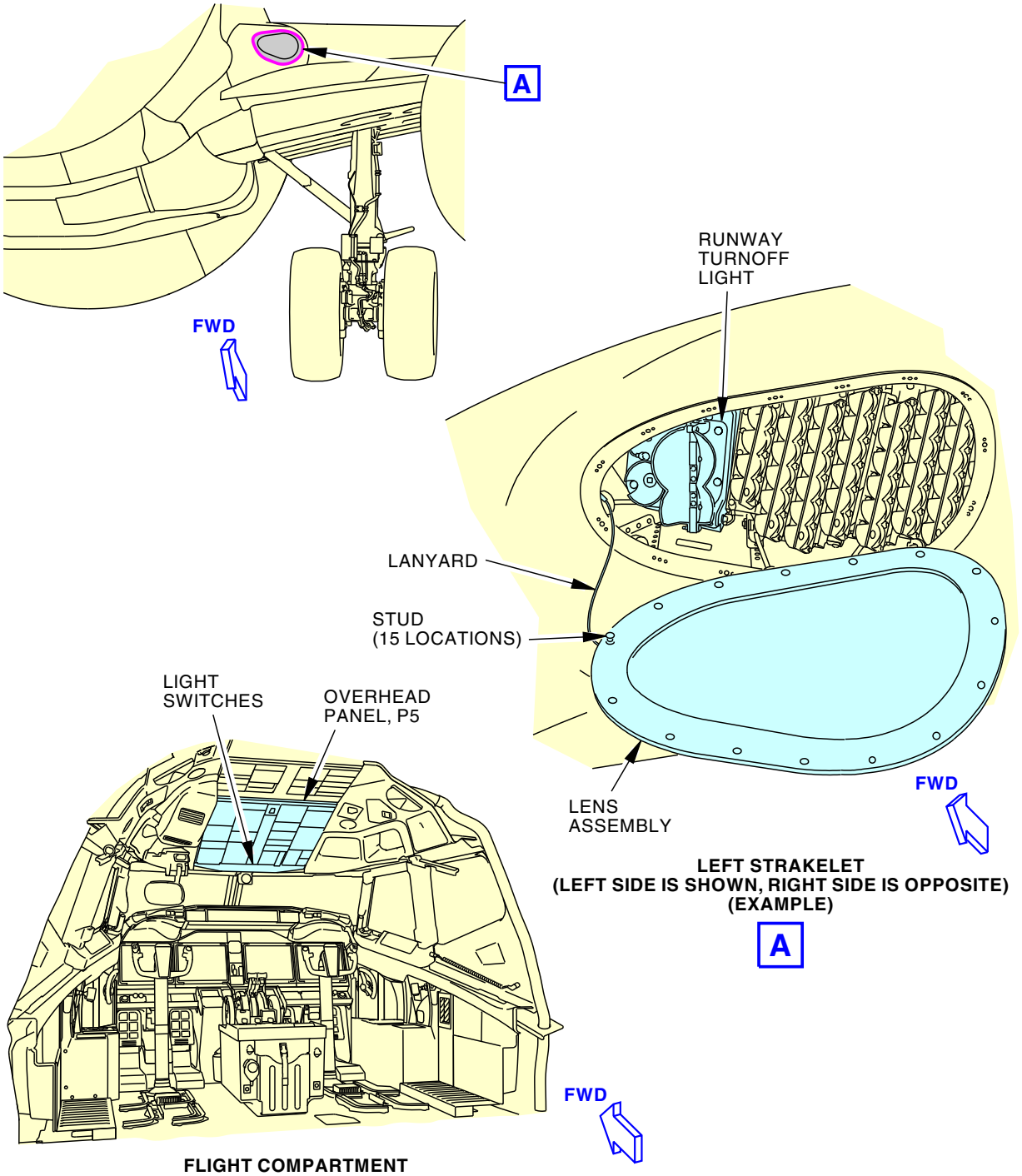
SUBTASK 33-42-21-700-001

(1) At the overhead panel, P5, set the runway turnoff light switches to the ON mode.

(a) Make sure that none of the runway turnoff lights come on.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Runway Turnoff Lights
Figure 205/33-42-21-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-42-21-440-802

8. Runway Turnoff Lights - Activation

(Figure 205)

A. General

(1) This procedure adds electrical power to the runway turnoff lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

C. Procedure

SUBTASK 33-42-21-860-017

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

——— END OF TASK ———

TASK 33-42-21-960-803

9. Runway Turnoff Light - Light Assembly Replacement

(Figure 206)

A. General

(1) This procedure contains the steps to replace the runway turnoff light assembly.

B. References

Reference	Title
20-40-12-000-801	ESDS Handling for Printed Circuit Board Removal (P/B 201)
24-22-00-860-801	Supply Electrical Power (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20-20-00, Paragraph 2.E.	Standard Wiring Practices Manual
SWPM 20-20-00, Section 21-A	Resistance of Faying Surface Bonds

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
B00148	Solvent - Methyl Ethyl Ketone (MEK)	ASTM D740
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G50066	Tape - Thick Ribbed Tape with Adhesive (Skyflex GSC-21-95241-011)	

E. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar
611	Right Wing - Leading Edge to Front Spar

F. Prepare for the Replacement

SUBTASK 33-42-21-860-018

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do one of these steps to deactivate the leading edge flaps and slats in the retracted (UP) position:

(a) If activation is not necessary to the trailing edge flaps, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

NOTE: This task deactivates both the leading edge flaps/slats and the trailing edge flaps.

(b) If activation is necessary to the trailing edge flaps, do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

NOTE: This task only deactivates the leading edge flaps and slats. The trailing edge flaps can still operate.

SUBTASK 33-42-21-860-019

(2) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

SUBTASK 33-42-21-910-005

(3) Before you touch the light assembly, do the procedure for devices that are sensitive to electrostatic discharge (ESDS Handling for Printed Circuit Board Removal, TASK 20-40-12-000-801).

G. Procedure

SUBTASK 33-42-21-020-005

(1) Loosen the studs [4] and remove the lens assembly [3].

(a) The lanyard [5] stays connected.

(b) Keep the lens assembly [3] and lanyard [5] away from the wing leading edge.

SUBTASK 33-42-21-960-001

(2) Do these steps to replace the runway turnoff light:

(a) Remove the nut [27], washer [28], jumper [29].

(b) Remove the screws [26] and washers [24].

(c) Remove the runway turnoff light [23] from the bracket.

(d) Disconnect the electrical connector [25] from the runway turnoff light [23].

(e) Connect the electrical connector [25] to the new runway turnoff light [23].

(f) Install the new runway turnoff light [23] to the bracket.

(g) Install the screws [26] and washers [24].

1) Tighten the screws [26] to 30 in-lb (3.4 N·m) - 31 in-lb (3.5 N·m).

SUBTASK 33-42-21-110-001

(3) Do these steps to prepare the ground stud on the aluminum bracket, fasteners, and jumper [29] for the electrical bond installation:

(a) Clean the nut [27], washer [28], jumper [29], ground stud and the fay surfaces of the aluminum bracket.

1) Use Cleaning Procedure 5 to clean the nut [27], washer [28], jumper [29] (SWPM 20-20-00, Paragraph 2.E.).

WARNING DO NOT GET SOLVENTS IN YOUR MOUTH, YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE DANGEROUS MATERIALS. SOLVENTS CAN BE FLAMMABLE OR CAUSE DAMAGE TO THE ENVIRONMENT. REFER TO THE MATERIAL SAFETY DATA SHEETS (MSDS) AND THE LOCAL SAFETY PRECAUTIONS.

a) Use a new cotton wiper, G00034 made moist with solvent, B00184 or solvent, B00148.

b) Use a new cotton wiper, G00034 to dry the surfaces.

c) Make sure that you remove the remaining corrosion inhibiting compound on the bracket.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) Use Cleaning Procedure 5 to clean the ground stud threads and head of the ground stud assembly (SWPM 20-20-00, Paragraph 2.E.).

WARNING DO NOT GET SOLVENTS IN YOUR MOUTH, YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE DANGEROUS MATERIALS. SOLVENTS CAN BE FLAMMABLE OR CAUSE DAMAGE TO THE ENVIRONMENT. REFER TO THE MATERIAL SAFETY DATA SHEETS (MSDS) AND THE LOCAL SAFETY PRECAUTIONS.

a) Use a new cotton wiper, G00034 made moist with solvent, B00184 or solvent, B00148.

b) Use a new cotton wiper, G00034 to dry the surfaces.

c) Continue to clean and dry the surface until the cotton wiper shows clean.

SUBTASK 33-42-21-420-004

(4) Do these steps to install the nut [27], washer [28], and jumper [29] on the bracket:

(a) Apply sealant, A50231 to the contacts of the jumper [29], washer [28], and nut [27].

(b) Install the jumper [29], washer [28], and nut [27].

1) Tighten the nut [27] to 28 in-lb (3 N·m) - 35 in-lb (4 N·m).

SUBTASK 33-42-21-910-006

(5) Measure the electrical bonding resistance using an intrinsically safe approved bonding meter, COM-1550 between the jumper [29] and the fuselage (SWPM 20-20-00, Section 21-A).

(a) Make sure that the bonding resistance is less than 0.0010 ohms.

SUBTASK 33-42-21-860-020

(6) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	14	C01968	EXTERIOR LIGHTING LTRTL - RIGHT
B	15	C01969	EXTERIOR LIGHTING LTRTL - LEFT
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

SUBTASK 33-42-21-860-021

(7) Make sure that electrical power is supplied to the airplane. To supply it, do this task: Supply Electrical Power, TASK 24-22-00-860-801.

SUBTASK 33-42-21-710-004

(8) Do a test of the runway turnoff light:

(a) At the overhead panel, P5, set the left RUNWAY TURNOFF switch to the ON position.

1) Make sure that the left runway turnoff light comes on.

(b) At the overhead panel, P5, set the left RUNWAY TURNOFF switch to the OFF position.

1) Make sure that the left runway turnoff light goes off.

(c) At the overhead panel, P5, set the right RUNWAY TURNOFF switch to the ON position.

1) Make sure that the right runway turnoff light comes on.

(d) At the overhead panel, P5, set the right RUNWAY TURNOFF switch to the OFF position.

1) Make sure that the right runway turnoff light goes off.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-42-21-420-005

(9) Do these steps to install the lens assembly:

(a) If the tape around the perimeter of the lens opening is damaged, do these steps:

1) Remove and discard the damaged tape.

2) Apply Skyflex tape, G50066, around the perimeter of the lens opening.

a) If the tape is too long, fold it to fit the opening, but not more than four times.

<1> Do not stretch the tape.

3) Use a sharp tool to make a 0.25 in. (6.35 mm) cut in the tape at the 15 holes.

a) Make no other cuts to the tape.

(b) Install the lens assembly [3] with the studs [4].

1) Tighten each studs [4] to 20 in-lb (2 N·m) - 25 in-lb (3 N·m).

H. Put the Airplane Back to Its Usual Condition

SUBTASK 33-42-21-860-022

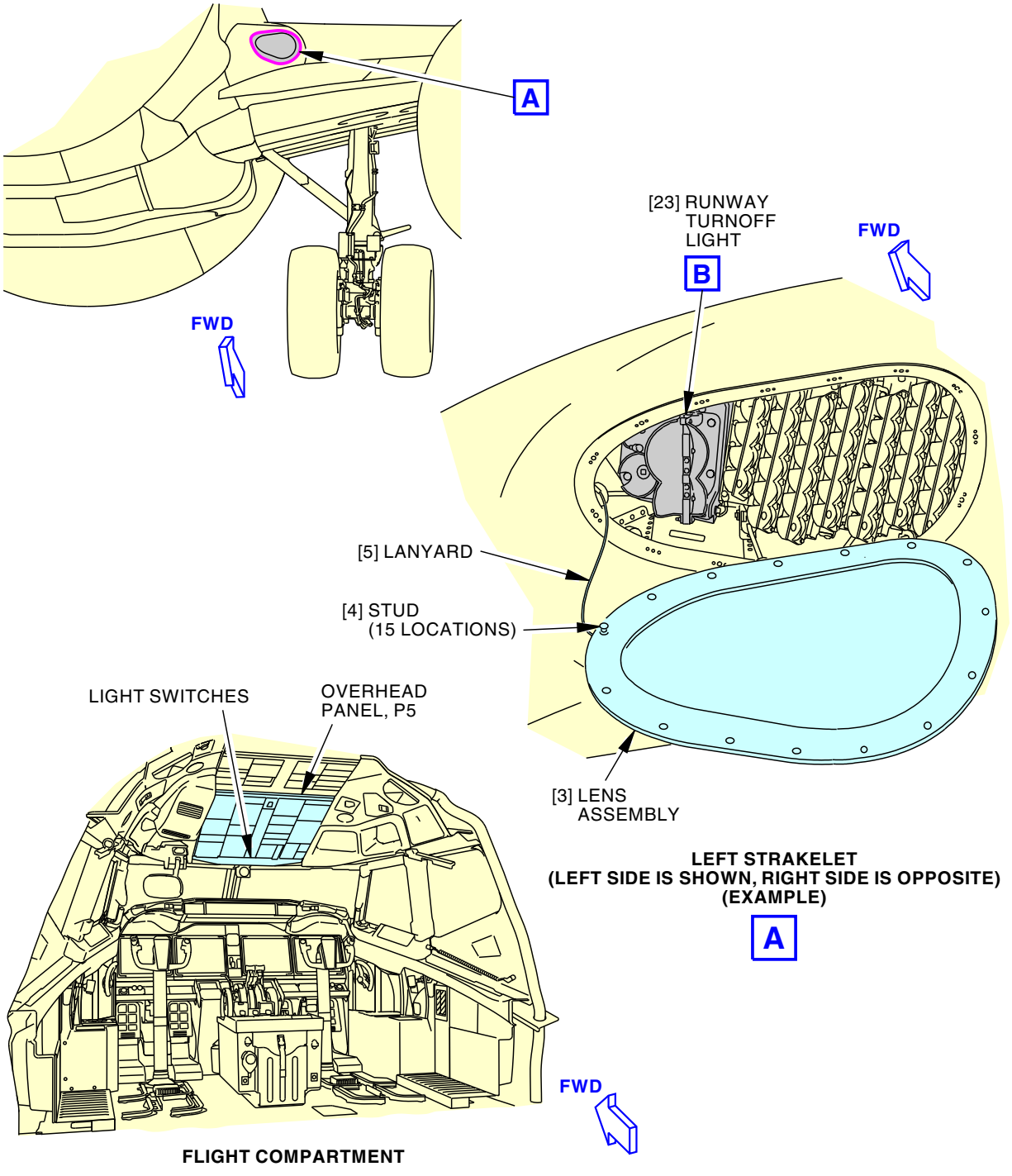
(1) Do these steps to reactivate the leading edge flaps and slats:

(a) If both the leading edge flaps/slats and the trailing edge flaps were deactivated, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

(b) If only leading edge flaps and slats were deactivated, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

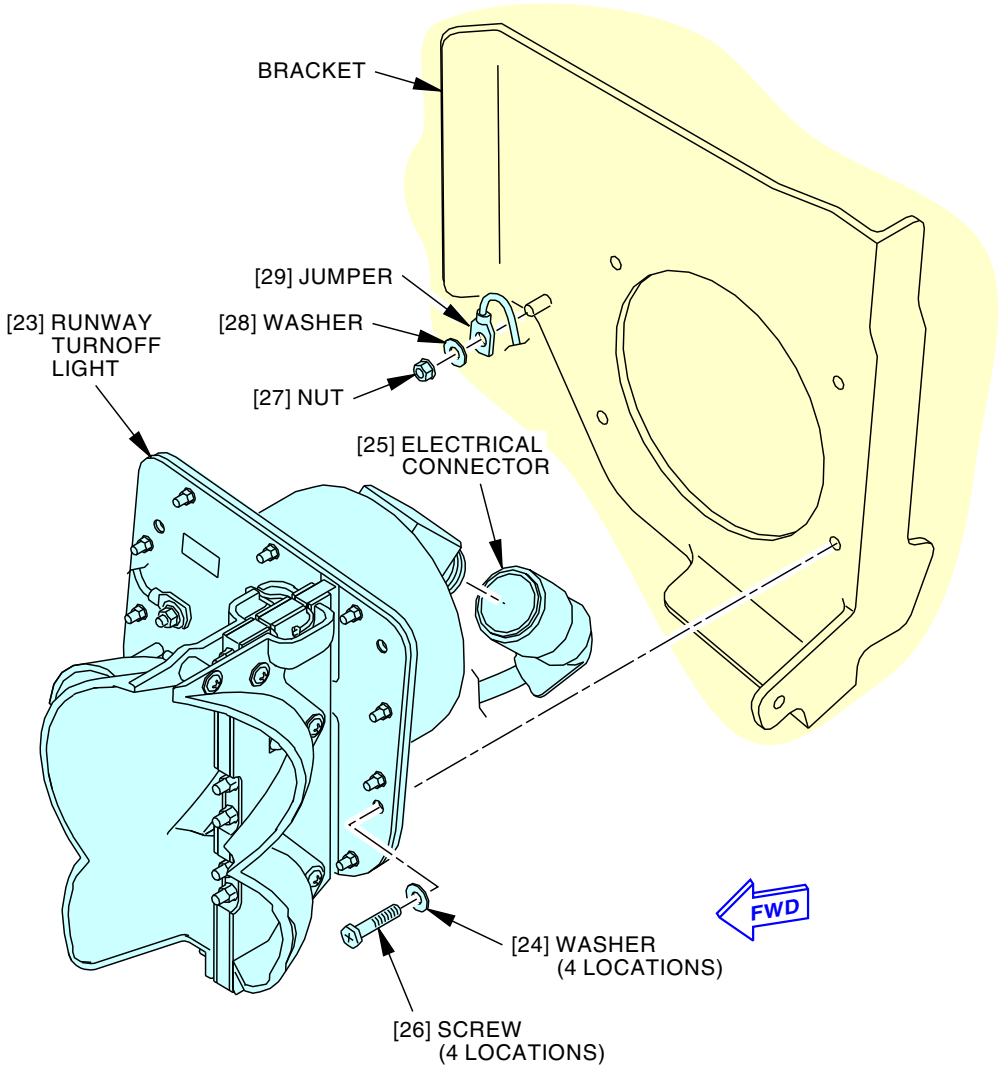
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2518335 S0000591904_V2

Runway Turnoff Light - Light Assembly Replacement
Figure 206/33-42-21-990-806 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT RUNWAY TURNOFF LIGHT
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)
(EXAMPLE)

B

2518338 S0000591905_V2

Runway Turnoff Light - Light Assembly Replacement
Figure 206/33-42-21-990-806 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-42-21-960-804

10. Taxi Light Relay - Replacement

(Figure 207)

A. References

Reference	Title
33-42-21-710-802	Taxi Light Relay - Operational Test (P/B 501)
53-14-01-020-801	Nose Wheel Well Access Panels Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels Installation (P/B 401)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
32	Relay	33-42-51-01-005	SIA ALL

C. Location Zones

Zone	Area
115	Nose Landing Gear Wheel Well - Left
116	Nose Landing Gear Wheel Well - Right
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Access Panels

Number	Name/Location
114BW	Forward Nose Wheel Well Panel

E. Taxi Light Relay Replacement

SUBTASK 33-42-21-860-025

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

SUBTASK 33-42-21-010-003

(2) Open this access panel:

(TASK 53-14-01-020-801)

Number	Name/Location
114BW	Forward Nose Wheel Well Panel

SUBTASK 33-42-21-960-002

(3) Do these steps to replace the relay [32]:

(a) Loosen the fasteners [30] and remove the cover [31] from the J4 junction box.

(b) Remove the screws [33] on the relay [32].

(c) Replace the relay [32].

(d) Install the screws [33] on the relay [32].

(e) Put the cover [31] on the J4 junction box and tighten the fasteners [30].

SUBTASK 33-42-21-410-003

(4) Close this access panel:

(TASK 53-14-01-420-801)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Number	Name/Location
114BW	Forward Nose Wheel Well Panel

SUBTASK 33-42-21-860-026

(5) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

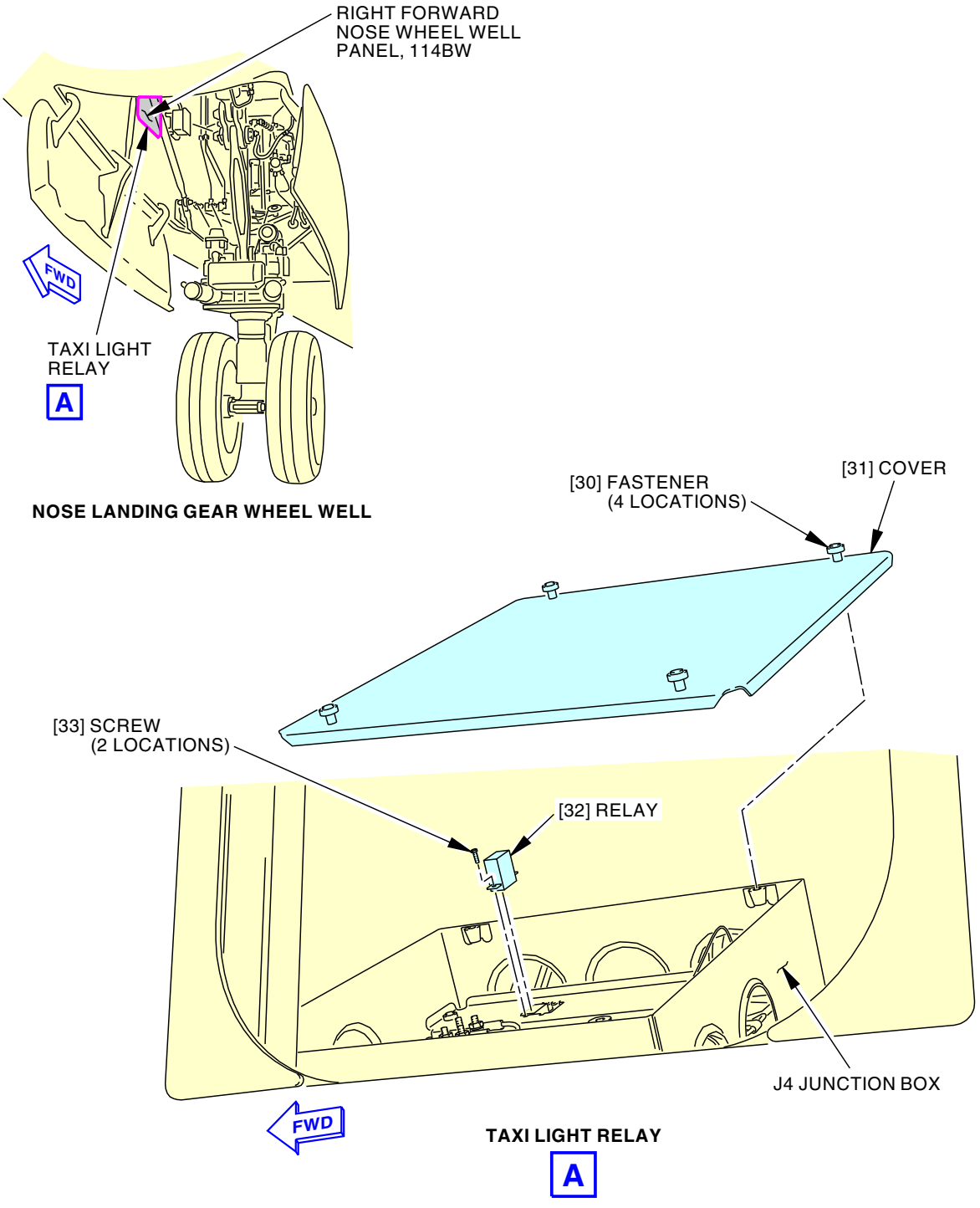
Row	Col	Number	Name
D	12	C01518	EXTERIOR LIGHTING GENERAL LIGHT CONT

SUBTASK 33-42-21-710-006

(6) Do this task: Taxi Light Relay - Operational Test, TASK 33-42-21-710-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Taxi Light Relay - Replacement
Figure 207/33-42-21-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LED LANDING, TAXI, AND RUNWAY TURNOFF LIGHTS (LTRTL) - ADJUSTMENT/TEST

1. General

A. This procedure has these tasks:

(1) LTRTL Main Array - Operational Test

(2) Taxi Light Relay - Operational Test.

TASK 33-42-21-710-801

2. LTRTL Main Array - Operational Test

A. General

(1) This task contains the steps for the operational test for the main array.

(2) The main array has the inboard and outboard arrays.

(3) The operational test is automated by the power supply.

(4) The inboard or outboard array will come on when 50% or more of the nominal array voltage is maintained. The power supply measures this automatically. The power supply stops the array when the array does not meet this condition.

(5) The inboard or outboard array is serviceable when:

(a) The array goes on and off correctly.

NOTE: It is possible that the inboard or outboard array could have multiple Light Emitting Diode (LED) failures and the array will continue to operate normally. The array is considered serviceable in this condition.

NOTE: It is recommended to replace LED array if more than 18 LEDs are non-operational.

(6) The inboard or outboard array is unserviceable when the array does not turn on.

B. References

Reference	Title
33-42-21-440-801	Fixed Landing Light - Activation (P/B 201)

C. Prepare for the Operational Test

SUBTASK 33-42-21-440-001

(1) Operate the main arrays, do this task: Fixed Landing Light - Activation, TASK 33-42-21-440-801.

D. LTRTL Main Array Operational Test

SUBTASK 33-42-21-710-003



WARNING DO NOT LOOK DIRECTLY AT LIGHTS. HIGH INTENSITY OF LIGHTS CAN CAUSE EYE DAMAGE.

(1) Do the following steps to test the main arrays:

(a) On the P5 overhead panel, set the left LANDING switch to the ON position.

1) Make sure that the left main array comes on.

(b) Set the left LANDING switch to the OFF position.

1) Make sure that the left main array goes off.

(c) On the P5 overhead panel, set the right LANDING switch to the ON position.

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1) Make sure that the right main array comes on.

(d) Set the right LANDING switch to the OFF position.

1) Make sure that the right main array goes off.

(e) On the P5 overhead panel, set the TAXI switch to the AUTO or ON position.

1) Make sure that both right and left main arrays come on.

NOTE: When the TAXI switch is in the AUTO or ON position, the intensity of the main array is less than when the LANDING switches are in the ON position.

(f) Set the TAXI switch to the OFF position.

1) Make sure that both right and left main arrays go off.

(g) On the P5 overhead panel, set the RUNWAY TURNOFF L switch to the ON position.

1) Make sure that the left runway turnoff light comes on.

(h) Set the RUNWAY TURNOFF L switch to the OFF position.

1) Make sure that the left runway turnoff light goes off.

(i) On the P5 overhead panel, set the RUNWAY TURNOFF R switch to the ON position.

1) Make sure that the right runway turnoff light comes on.

(j) Set the RUNWAY TURNOFF R switch to the OFF position.

1) Make sure that the right runway turnoff light goes off.

——— END OF TASK ———

TASK 33-42-21-710-802

3. Taxi Light Relay - Operational Test

(Figure 501)

A. General

(1) This task includes the steps to make sure that the taxi light relay operates correctly.

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1690	Actuators/Deactuators Set - Proximity Sensor Part #: 8-758-01 Supplier: 08748 Part #: A27092-139 Supplier: 81205 Opt Part #: A27092-106 Supplier: 81205

C. Location Zones

Zone	Area
115	Nose Landing Gear Wheel Well - Left
116	Nose Landing Gear Wheel Well - Right
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Taxi Light Relay Operational Test

SUBTASK 33-42-21-710-005

(1) Do a test of the taxi light relay as follows:

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(a) On the P5 overhead panel, set the TAXI switch to the AUTO or ON position.

(b) Make sure that the taxi light comes on.

(c) Attach the deactuators to the face of these proximity sensors on the nose landing gear:

NOTE: The deactuators are part of the proximity sensor test set, SPL-1690.

1) S845 #1 NOSE GEAR DOWN

2) S846 #1 NOSE GEAR LOCKED.

(d) Make sure that the taxi light goes off.

(e) Remove the deactuators.

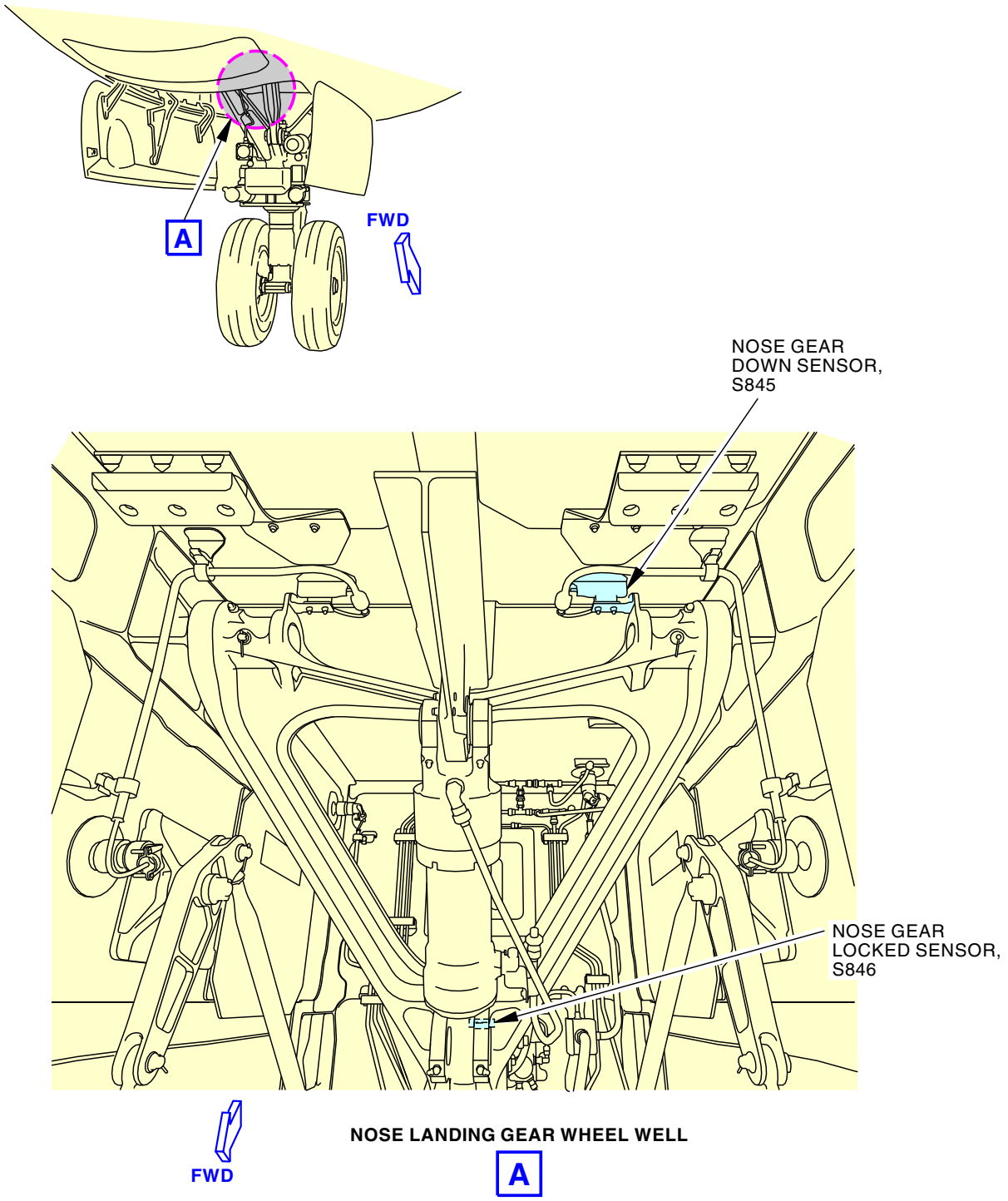
(f) Make sure that the taxi light comes on.

(g) On the P5 overhead panel, set the TAXI switch to the OFF position.

(h) Make sure that the taxi light goes off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Taxi Light Relay - Operational Test
Figure 501/33-42-21-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

POSITION LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Position Lights Deactivation

(2) Position Lights Activation

(3) Position Lights Transformer Replacement

(4) Position Lights Power Supply Unit Replacement

(5) Position Lights Operational Test

(6) Winglet (AFT) Marker and Winglet Anti-Collision Lights - Disconnect the Electrical Connectors

(7) Winglet (AFT) Marker and Winglet Anti-Collision Lights - Connect the Electrical Connectors.

TASK 33-43-10-040-801

2. Position Lights Deactivation

A. General

(1) This procedure removes electrical power from the position lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
527	Left Winglet
627	Right Winglet

C. Procedure

SUBTASK 33-43-10-860-001

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

D. Position Lights Deactivation Test

NOTE: This test is to make sure that the Position lights are in a zero energy condition.

SUBTASK 33-43-10-200-001

(1) Do these steps to make sure that the power is off:

(a) Set the switch for the position lights to STEADY on the P5 overhead panel.

1) Make sure that the forward position, winglet marker (aft), and tailcone position lights (left/right) stay off.

(b) Set the switch for the position lights to STROBE & STEADY on the P5 overhead panel.

1) Make sure that the forward position, winglet marker (aft), and tailcone position lights (left/right) stay off.

(c) Set the switch for the position lights to OFF.

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1) Make sure that the forward position, winglet marker (aft), and tailcone position lights (left/right) stay off.

——— END OF TASK ———

TASK 33-43-10-440-801

3. Position Lights Activation

A. General

(1) This procedure supplies electrical power to the position lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
527	Left Winglet
627	Right Winglet

C. Procedure

SUBTASK 33-43-10-860-002

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

D. Position Lights Activation Test

NOTE: This test is to make sure that the Position lights operate.

SUBTASK 33-43-10-710-001

(1) Do these steps to make sure that the power is on:

(a) Set the switch for the position lights to STEADY on the P5 overhead panel.

1) Make sure that the forward position, winglet marker (aft), and tailcone position lights (left/right) come on.

(b) Set the switch for the position lights to STROBE & STEADY on the P5 overhead panel.

1) Make sure that the forward position, winglet marker (aft), and tailcone position lights (left/right) come on.

(c) Set the switch for the position lights to OFF.

1) Make sure that the forward position, winglet marker (aft), and tailcone position lights (left/right) go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-10-960-801

4. Position Lights Transformer Replacement

(Figure 201)

A. References

Reference	Title
33-43-13-960-802	Tailcone Position Lights Transformer Replacement (P/B 201)
WDM 33-43-11	D000534505

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Consumable Materials

Reference	Description	Specification
B00083	Solvent - VM&P Naphthas	TT-N-95 Type II, ASTM D-3735 Type III
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Forward position light transformer	33-43-10-01-020	SIA ALL

E. Location Zones

Zone	Area
527	Left Winglet
627	Right Winglet

F. Access Panels

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
621ZB	Lower Leading Edge Access Panel - Slat Station 479

G. Procedure

SUBTASK 33-43-10-860-003

(1) Open the applicable circuit breaker and install the safety tag:

(WDM 33-43-11)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-10-960-001

(2) Do these steps to replace the forward position light transformer [1]:

(a) Open the applicable access panel:

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
621ZB	Lower Leading Edge Access Panel - Slat Station 479

(b) Disconnect the electrical connector [4].

(c) Remove the bolts [3] and washers [2].

(d) Remove the forward position light transformers [1].

(e) Clean the fay surface bonding area with solvent, B00083, and a clean cotton wiper, G00034.

(f) Install the new forward position light transformers [1].

(g) Use the intrinsically safe approved bonding meter, COM-1550 to make sure that the resistance between the transformer and the fuselage measures no more than 0.0025 ohms.

(h) Install the washers [2] and bolts [3].

(i) Connect the electrical connector [4].

SUBTASK 33-43-10-960-005

(3) For the tailcone position light transformer replacement:

(a) Do this task: Tailcone Position Lights Transformer Replacement, TASK 33-43-13-960-802.

SUBTASK 33-43-10-860-004

(4) Remove the safety tag and close the applicable circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-10-710-002

(5) Do a test of the new transformer:

(a) Set the switch for the position lights to STEADY on the P5 overhead panel.

(b) Make sure that the forward position, winglet marker (aft) and tailcone position lights come on.

(c) Set the switch for the position lights to POSITION STROBE & STEADY on the P5 overhead panel.

(d) Make sure that the forward position, winglet marker (aft) and tailcone position lights come on.

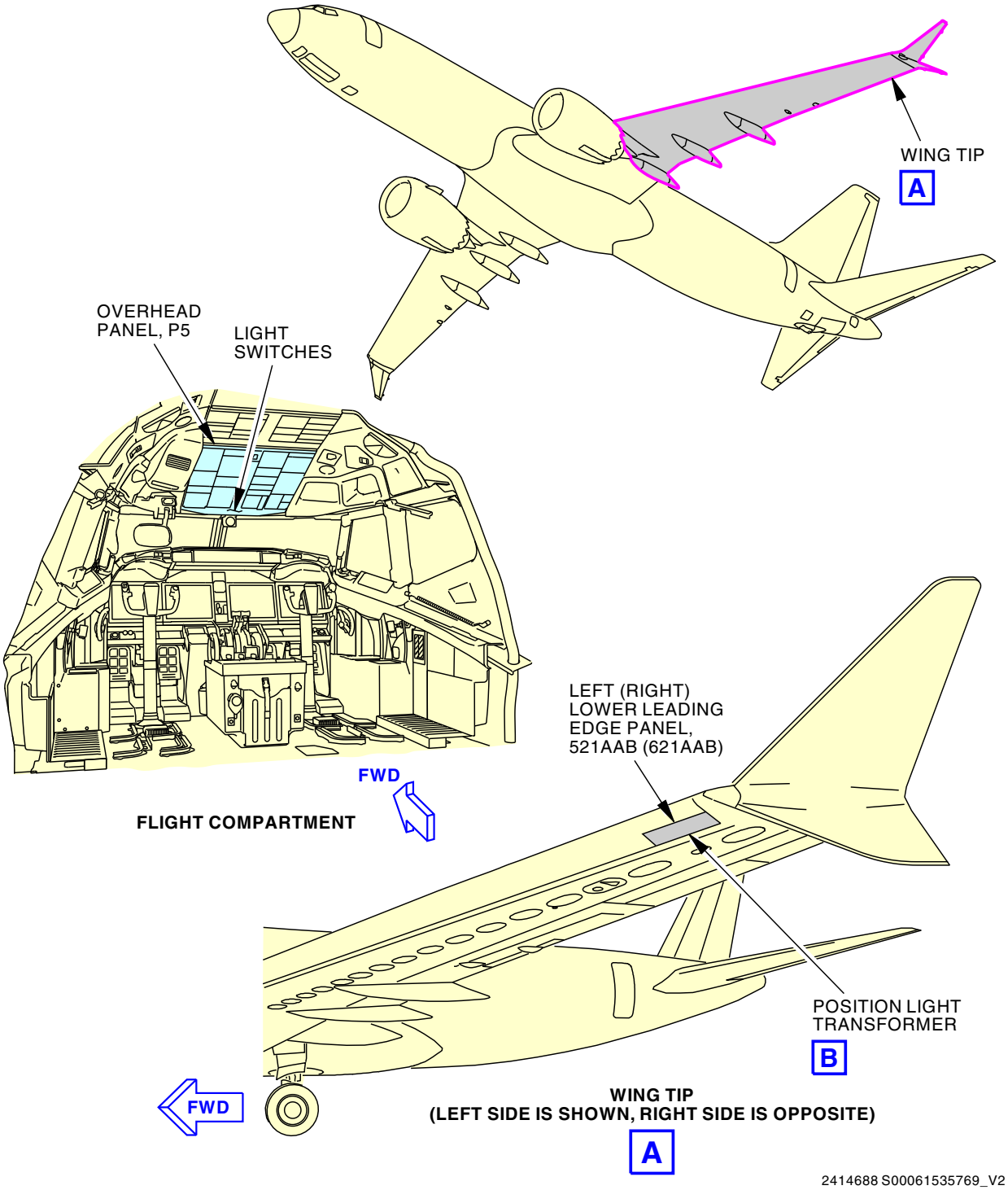
(e) Set the switch for the position lights to OFF.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(f) Make sure that the forward position, winglet marker (aft) and tailcone position lights go off.

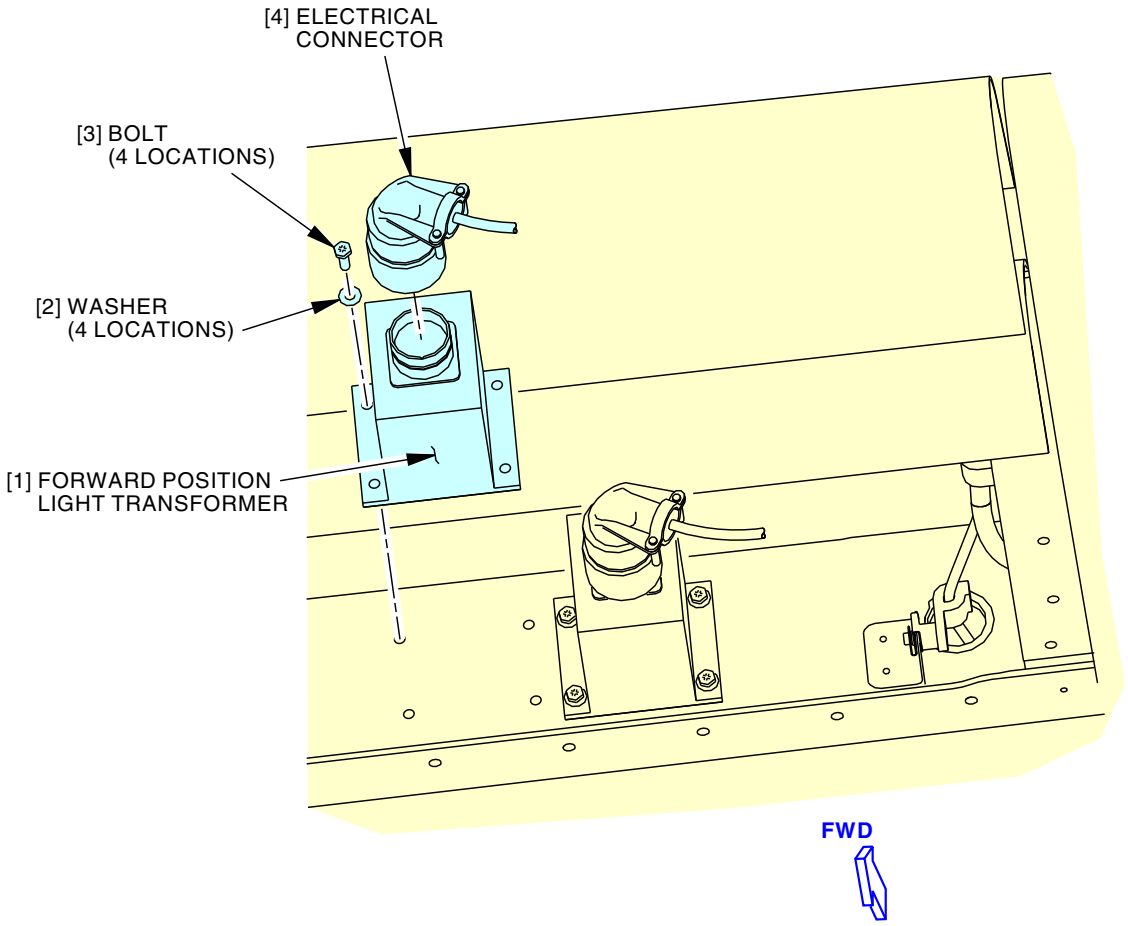
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Position Light Transformer Replacement
Figure 201/33-43-10-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



POSITION LIGHT TRANSFORMER

B

2414689 S00061535770_V3

Position Light Transformer Replacement
Figure 201/33-43-10-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-10-960-803

5. Forward Position Lights Power Supply Unit Replacement

(Figure 202)

A. General

(1) This task contains instructions for the replacement of the power supply unit installed on the winglet forward position light.

B. References

Reference	Title
33-43-11-960-801	Forward Position Lights LED Module Replacement (P/B 201)

C. Tools/Equipment

Reference	Description
STD-420	Gloves - White Cotton

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
50	Power supply assembly	33-43-11-02-180	SIA ALL
		33-43-11-02-185	SIA ALL

E. Location Zones

Zone	Area
527	Left Winglet
627	Right Winglet

F. Access Panels

Number	Name/Location
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
621AB	Outboard Leading Edge Blowout Door - Slat Station 20

G. Forward Position Lights Power Supply Unit Replacement

SUBTASK 33-43-10-860-011

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-10-860-012

(2) Open these access panels:

Number	Name/Location
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
621AB	Outboard Leading Edge Blowout Door - Slat Station 20

SUBTASK 33-43-10-020-004

(3) Remove the LED module assembly, do this task: Forward Position Lights LED Module Replacement, TASK 33-43-11-960-801.

SUBTASK 33-43-10-960-004

(4) Do these steps to replace the power supply assembly [50]:

(a) Use white cotton gloves, STD-420, to handle lens assembly and LED modules.

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(b) Remove the screws [51] and washers [52] that attach the power supply assembly [50] to the forward position housing.

(c) Pull the power supply assembly [50] forward and disconnect the electrical connector [53].

(d) Replace the power supply assembly [50].

(e) Connect the electrical connector [53].

(f) Install the washers [52] and screws [51] to the forward position housing.

(g) Tighten the screws [51] until fully seated.

SUBTASK 33-43-10-420-004

(5) Install the LED module assembly, do this task: Forward Position Lights LED Module Replacement, TASK 33-43-11-960-801.

SUBTASK 33-43-10-860-014

(6) Close these access panels:

Number	Name/Location
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
621AB	Outboard Leading Edge Blowout Door - Slat Station 20

SUBTASK 33-43-10-860-013

(7) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-10-710-006

(8) Do a test of the new power supply assembly [50]:

(a) Set the switch for the position lights to STEADY, on the P5 overhead panel.

1) Make sure that the forward position, winglet marker (aft) and tailcone position lights come on.

(b) Set the switch for the position lights to STROBE & STEADY, on the P5 overhead panel.

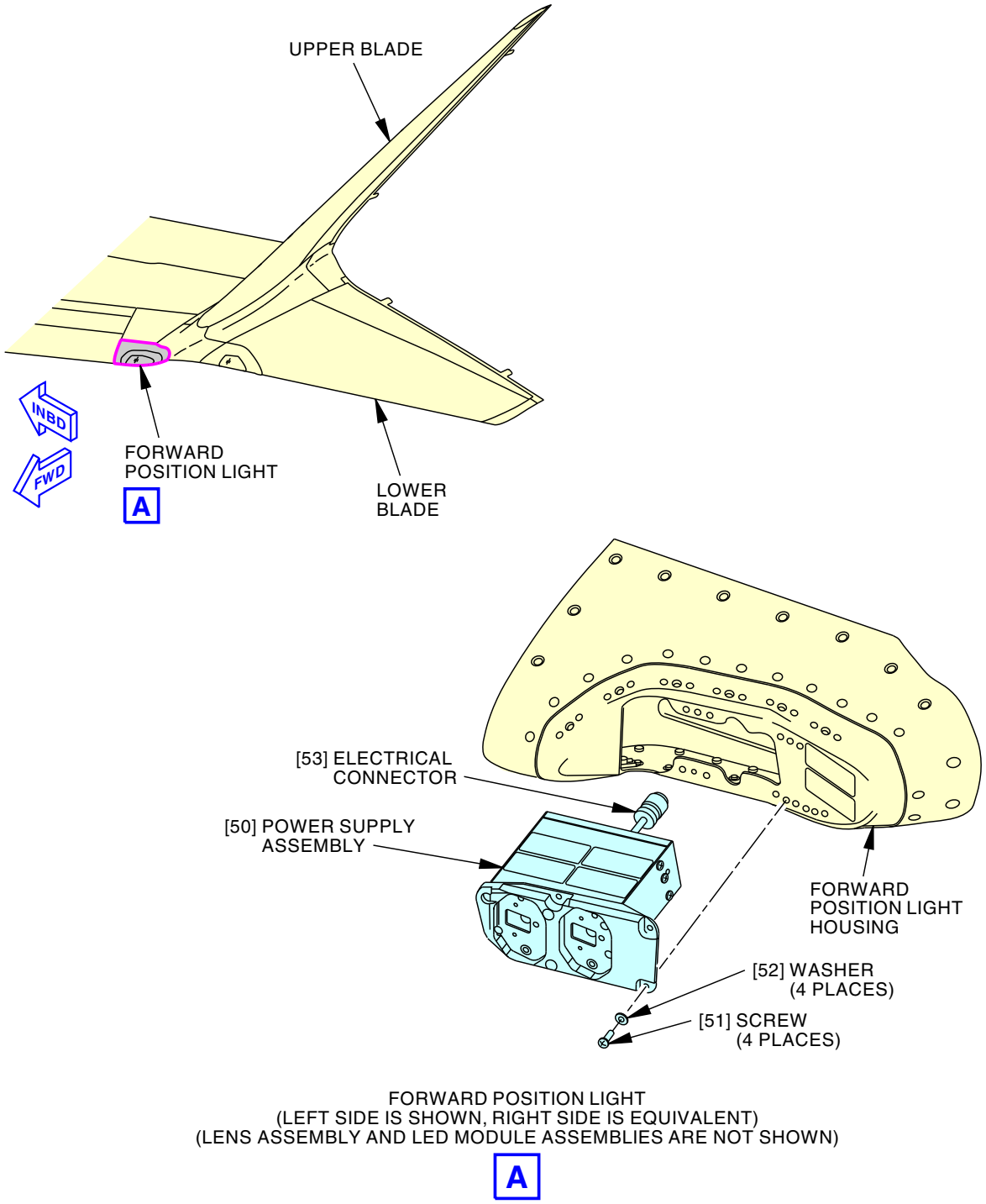
1) Make sure that the forward position, winglet marker (aft) and tailcone position lights come on.

(c) Set the switch for the position lights to OFF, on the P5 overhead panel.

1) Make sure that the forward position, winglet marker (aft) and tailcone position lights go off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FORWARD POSITION LIGHT
(LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT)
(LENS ASSEMBLY AND LED MODULE ASSEMBLIES ARE NOT SHOWN)

A

2965275 S0000744049_V1

Forward Position Lights Power Supply Unit Replacement
Figure 202/33-43-10-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-10-710-801

6. Position Lights Operational Test

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

B. Procedure

SUBTASK 33-43-10-710-003

(1) Test the forward position, winglet (aft) marker and tailcone position lights (left/right):

(a) Set the switch for the position lights to STEADY on the P5 overhead panel.

(b) Make sure that the forward position, winglet marker (aft), and tailcone position lights (left/right) come on.

NOTE: There are two LED module assemblies in each winglet. All position lights in the modules must be operational per certification requirement. A single LED intensity is not sufficient to meet the requirement.

NOTE: Winglet strobes come on when the position light switch is set to STROBE &STEADY.

(c) Set the switch for the position lights to STROBE & STEADY on the P5 overhead panel.

(d) Make sure that the forward position, winglet marker (aft), and tailcone position lights (left/right) come on.

(e) Set the switch for the position lights to OFF.

(f) Make sure that the forward position, winglet (aft) marker and tailcone position lights (left/right) go off.

——— END OF TASK ———

TASK 33-43-10-020-801

7. Winglet (AFT) Marker and Winglet Anti-Collision Lights - Disconnect the Electrical Connectors

(Figure 203)

A. General

(1) Use this procedure when it is necessary to remove the winglet.

B. References

Reference	Title
57-31-25-010-801	Transition Fairing Removal (P/B 401)
WDM 33-43-11	D000534505

C. Access Panels

Number	Name/Location
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

D. Winglet (AFT) Marker and Winglet Anti-Collision Lights - Disconnect the Electrical Connectors

SUBTASK 33-43-10-860-005

(1) Open the applicable circuit breaker and install the safety tag:

(WDM 33-43-11)

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CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE
C	13	C04054	ANTI COLLISION LIGHTS-WINGLET-WHITE

SUBTASK 33-43-10-010-003

(2) Do this task: Transition Fairing Removal, TASK 57-31-25-010-801.

SUBTASK 33-43-10-010-001

(3) Open the applicable access panel:

Number	Name/Location
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

SUBTASK 33-43-10-020-001

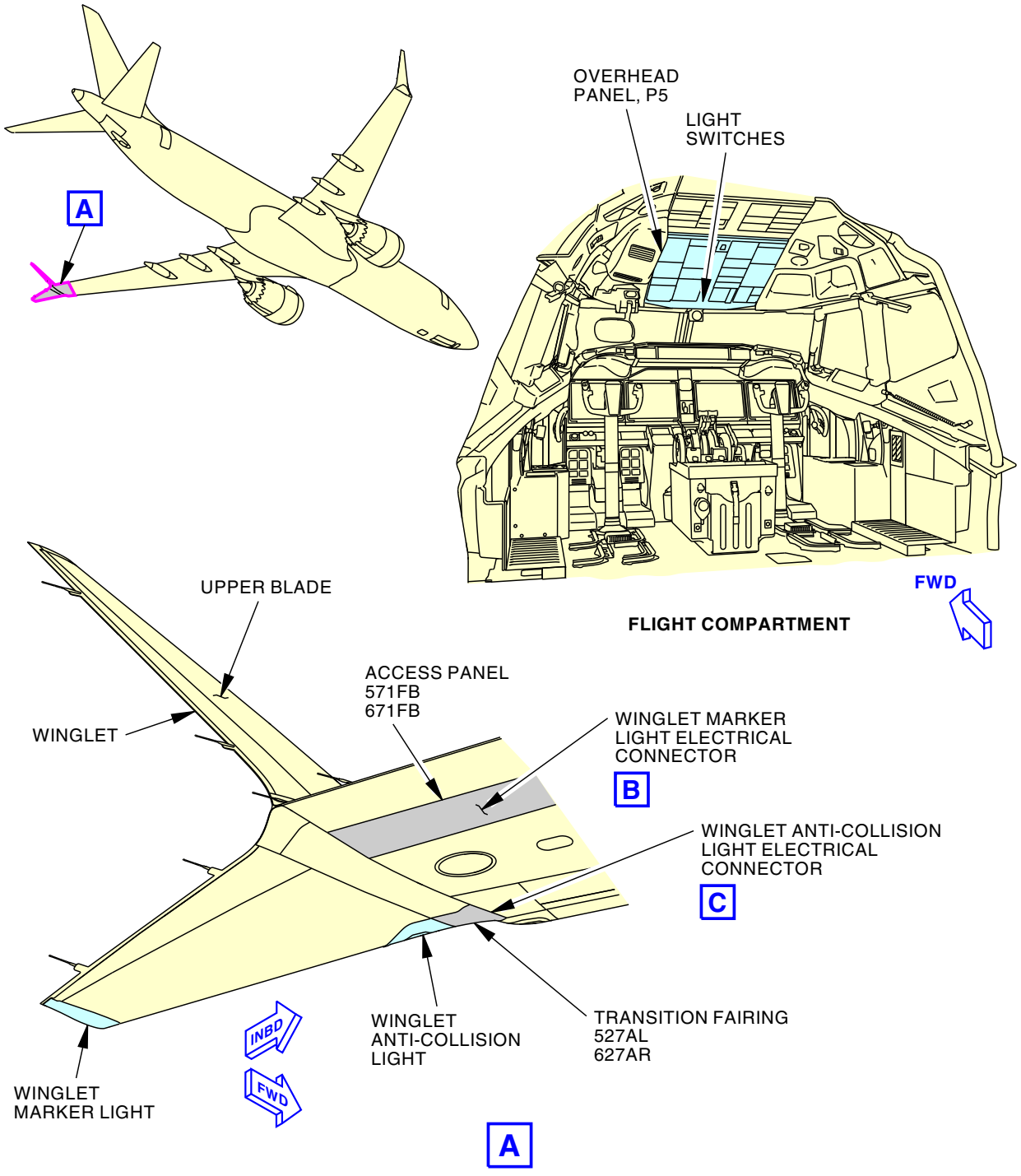
(4) Disconnect the electrical connector [21].

SUBTASK 33-43-10-020-002

(5) Disconnect the electrical connector [22].

——— END OF TASK ———

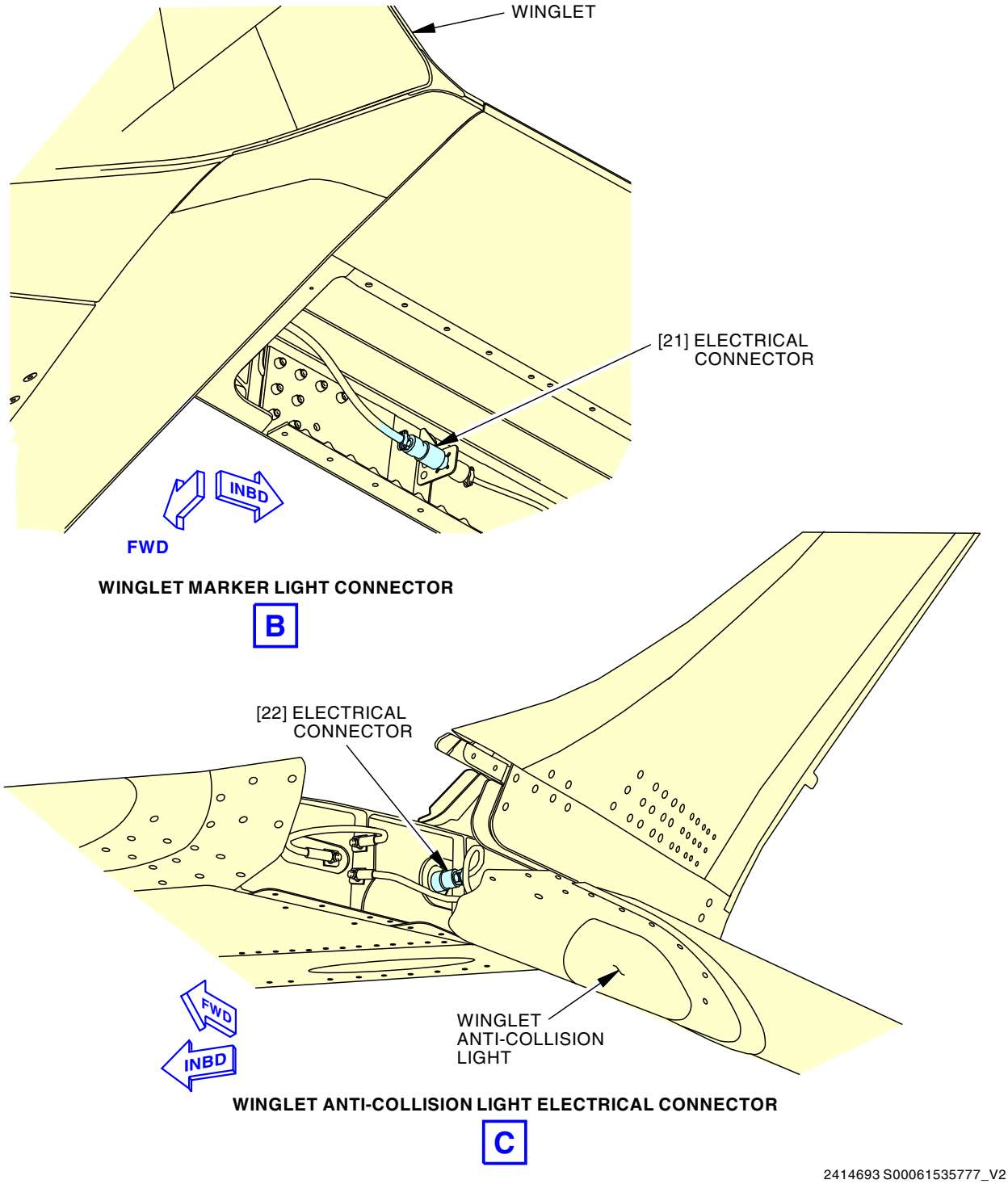
ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Winglet (AFT) Marker and Winglet Anti-Collision Lights - Disconnect/Connect the Electrical Connectors
Figure 203/33-43-10-990-803 (Sheet 1 of 2)

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Winglet (AFT) Marker and Winglet Anti-Collision Lights - Disconnect/Connect the Electrical Connectors
Figure 203/33-43-10-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-10-420-801

8. Winglet (AFT) Marker and Winglet Anti-Collision Lights - Connect the Electrical Connectors

(Figure 203)

A. General

(1) Use this procedure when it is necessary to install the winglet.

B. References

Reference	Title
57-31-25-410-801	Transition Fairing Installation (P/B 401)

C. Location Zones

Zone	Area
527	Left Winglet
627	Right Winglet

D. Access Panels

Number	Name/Location
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

E. Winglet (AFT) Marker and Winglet Anti-Collision Lights - Connect the Electrical Connector

SUBTASK 33-43-10-420-001

(1) Connect the electrical connector [21].

SUBTASK 33-43-10-420-002

(2) Connect the electrical connector [22].

F. Winglet (AFT) Marker and Winglet Anti-Collision Lights - Connect the Electrical Connector Test

SUBTASK 33-43-10-010-002

(1) Close the applicable access panel:

Number	Name/Location
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

SUBTASK 33-43-10-410-001

(2) Do this task: Transition Fairing Installation, TASK 57-31-25-410-801.

SUBTASK 33-43-10-860-006

(3) Remove the safety tag and close the applicable circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE
C	13	C04054	ANTI COLLISION LIGHTS-WINGLET-WHITE

SUBTASK 33-43-10-710-004

(4) Do a test of the electrical connection:

(a) Set the switch for the position lights to STEADY on the P5 overhead panel.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Make sure that the forward position, winglet marker (aft), winglet anti-collision and tailcone position lights (left/right) come on.

(c) Set the switch for the position lights to STROBE & STEADY on the P5 overhead panel.

(d) Make sure that the forward position, winglet marker (aft), winglet anti-collision and tailcone position lights (left/right) come on.

(e) Set the switch for the position lights to OFF.

(f) Make sure that these lights go off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD POSITION LIGHTS - MAINTENANCE PRACTICE

1. General

A. This procedure has this task:

(1) Forward Position Lights LED Module Replacement.

TASK 33-43-11-960-801

2. Forward Position Lights LED Module Replacement

(Figure 201)

A. General

(1) This task contains instructions for the replacement of the LED modules installed on the winglet forward position light.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)

C. Tools/Equipment

Reference	Description
STD-420	Gloves - White Cotton

D. Consumable Materials

Reference	Description	Specification
G50136	Compound - Corrosion Inhibiting, Non-drying Paste	BMS3-38

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Lens assembly	33-43-11-02-135	SIA ALL
		33-43-11-02-140	SIA ALL
5	LED module assembly	33-43-11-02-170	SIA ALL
		33-43-11-02-175	SIA ALL
6	Power supply assembly	33-43-11-02-180	SIA ALL
		33-43-11-02-185	SIA ALL

F. Location Zones

Zone	Area
212	Flight Compartment - Right
527	Left Winglet
627	Right Winglet

G. Forward Position Lights LED Module Replacement

SUBTASK 33-43-11-860-009

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-43-11-860-011

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 33-43-11-020-003

(3) Remove the lens assembly [1].

(a) Use white cotton gloves, STD-420, to handle lens assembly [1] and LED module assemblies [5].

(b) Remove the bolts [2].

(c) Remove the lens assembly [1] from the forward position housing.

SUBTASK 33-43-11-960-002

(4) Do these steps to replace the LED module assembly [5]:

(a) Use white cotton gloves, STD-420, to handle lens assembly [1] and LED module assemblies [5].

(b) Remove the screws [3] and washers [4] that attach the LED module assembly [5] to the power supply assembly [6].

(c) Pull the LED module assembly [5] to disconnect it from the power supply assembly [6].

(d) Replace with the new LED module assembly [5].

(e) Install the washers [4] and screws [3] that hold the LED module assembly [5] to the power supply assembly [6].

(f) Tighten the screws [3] until fully seated.

SUBTASK 33-43-11-420-003

(5) Install the lens assembly [1].

(a) Use white cotton gloves, STD-420, to handle lens assembly [1] and LED module assemblies [5].

(b) Put the lens assembly [1] back to its position.

(c) Apply a layer of corrosion inhibiting material, G50136, to the bolts [2].

(d) Install the bolts [2] that hold the lens assembly [1] to the forward position housing.

SUBTASK 33-43-11-860-010

(6) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-11-710-002

(7) Do a test of the new LED module assembly [5].

(a) Set the switch for the position lights to the STEADY position, on the P5 overhead panel.

1) Make sure that the forward position, winglet marker (aft) and tailcone position lights come on.

(b) Set the switch for the position lights to the STROBE & STEADY position, on the P5 overhead panel.

1) Make sure that the forward position, winglet marker (aft) and tailcone position lights come on.

(c) Set the switch for the position lights to the OFF position, on the P5 overhead panel.

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1) Make sure that the forward position, winglet marker (aft) and tailcone position lights go off.

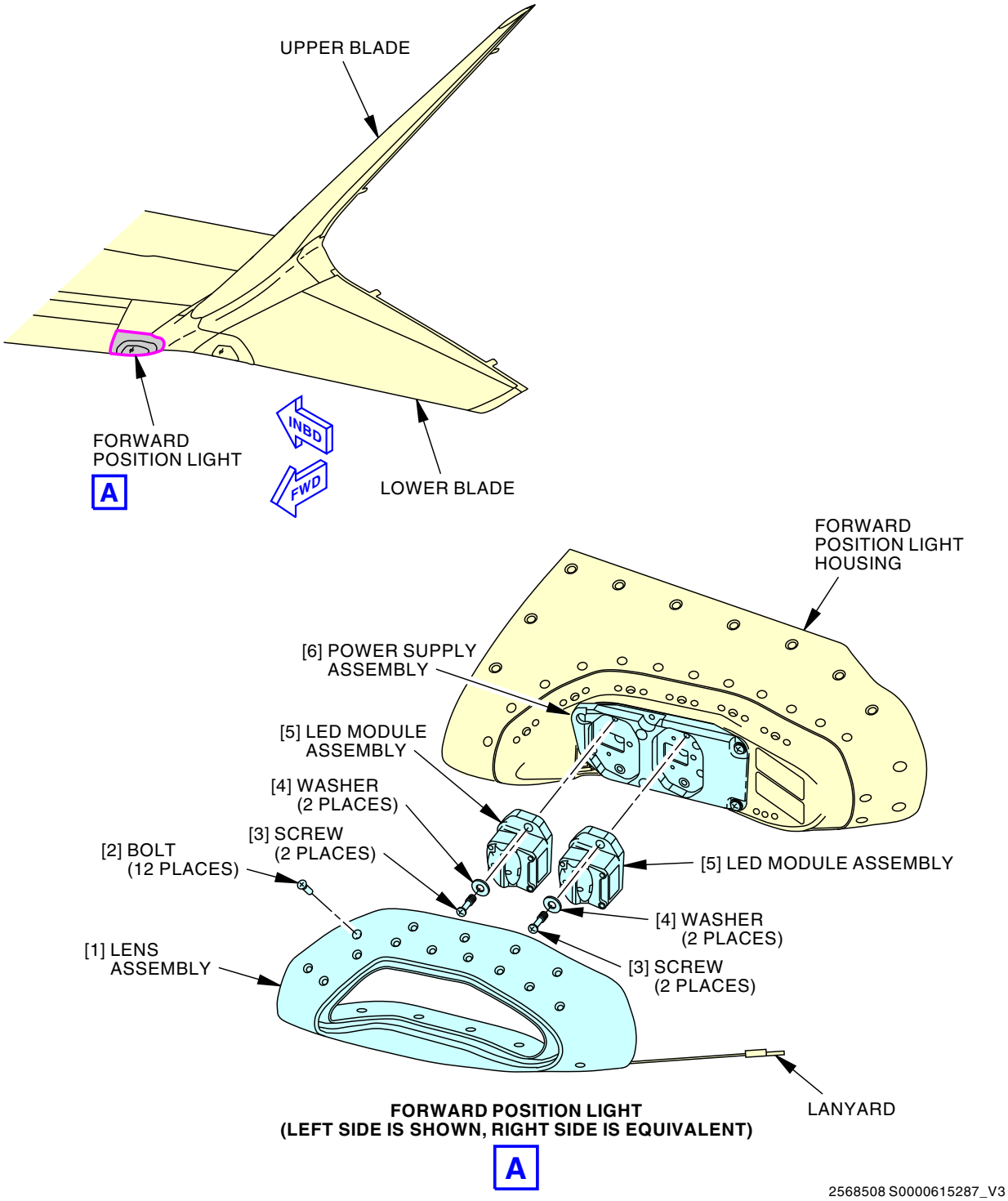
H. Put the Airplane Back to Its Usual Condition

SUBTASK 33-43-11-860-012

(1) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

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Forward Position Light LED Module Replacement
Figure 201/33-43-11-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD POSITION LIGHT - REMOVAL/INSTALLATION

1. General

A. This procedure has the these tasks:

(1) Forward Position Light Removal

(2) Forward Position Light Installation.

TASK 33-43-11-000-801

2. Forward Position Light Removal

(Figure 401)

A. General

(1) This task contains instructions for the removal of the forward position light from the forward edge of the winglet.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height Part #: 1135-8000 Supplier: 00994 Opt Part #: 8662-010 Supplier: 00994
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08
SPL-768	Sealant Removal Tool, Non-Metallic Part #: ST982L-9 Supplier: 81205 Part #: ST982LF-9 Supplier: 81205 Part #: ST982LH-A-1 Supplier: 81205

D. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Prepare for the Removal

SUBTASK 33-43-11-860-004

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-11-860-006

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 33-43-11-010-001

(3) Get a ladder, work platform, COM-2480, or maintenance platform, COM-659.

SUBTASK 33-43-11-010-002

(4) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50 ft (15 m) radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

F. Forward Position Light Removal

SUBTASK 33-43-11-000-001

(1) Remove the forward position light [1].

(a) Remove the screws [2] from the forward position light [1].

(b) Remove the forward position light [1] from the wing.

SUBTASK 33-43-11-020-001

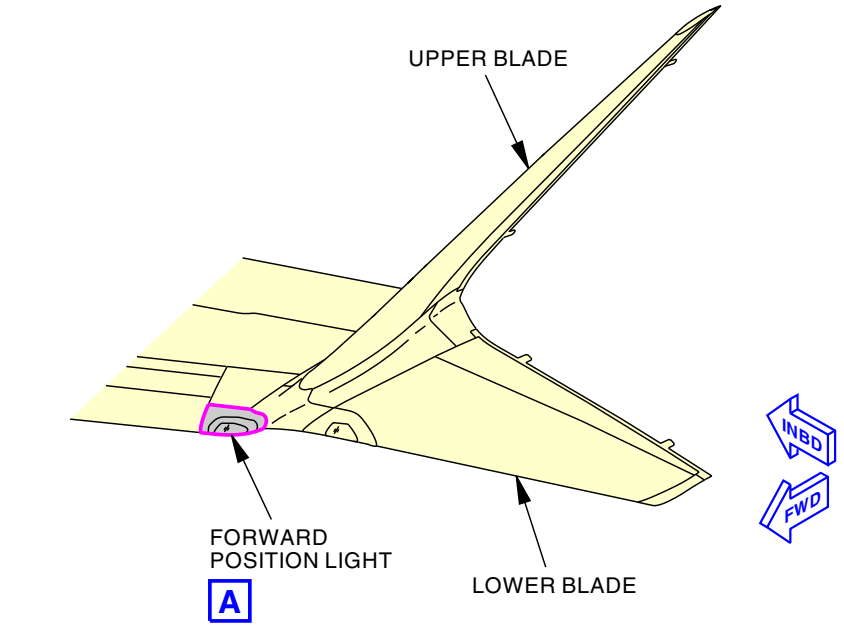
(2) Disconnect the electrical connector [3] from the forward position light [1].

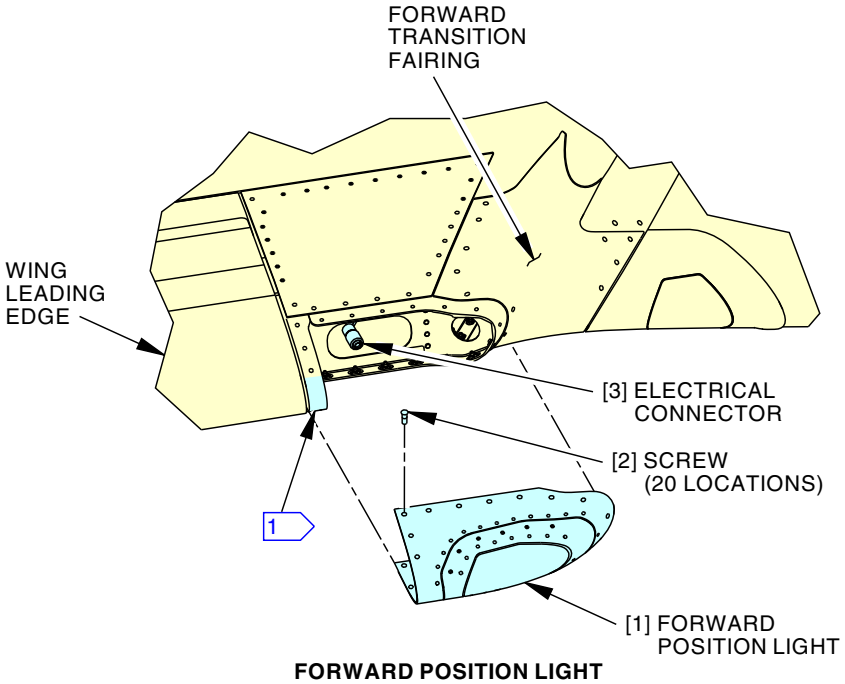
SUBTASK 33-43-11-100-002

(3) Remove all sealant from leading edge panel and the forward position light [1] with a sealant removal tool, SPL-768.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





FORWARD POSITION LIGHT

1 ELECTRICAL BONDING PATH

A

2416634 S00061541186_V3

Forward Position Light Installation
Figure 401/33-43-11-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-11-400-801

3. Forward Position Light Installation

(Figure 401)

A. General

(1) This task contains instructions for the installation of the forward position light on the forward edge of the winglet.

B. References

Reference	Title
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
33-43-10-710-801	Position Lights Operational Test (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height Part #: 1135-8000 Supplier: 00994 Opt Part #: 8662-010 Supplier: 00994
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08

D. Consumable Materials

Reference	Description	Specification
A50110	Sealant - Fuel Tank	BMS5-45 Class B-2
G50136	Compound - Corrosion Inhibiting, Non-drying Paste	BMS3-38

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Forward position light	33-43-11-02-125	SIA ALL
		33-43-11-02-130	SIA ALL

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F. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

G. Forward Position Light Installation

SUBTASK 33-43-11-100-001

(1) Clean the designated bond area of the forward position light [1] and the leading edge to make an electrical bond.

SUBTASK 33-43-11-390-001

(2) Apply a layer of sealant, A50110, to the mounting surface to make a fay surface seal between the mounting surface and the forward position light.

SUBTASK 33-43-11-420-001

(3) Connect the electrical connector [3] to the forward position light [1].

SUBTASK 33-43-11-400-001

(4) Install the forward position light [1]:

(a) Put the forward position light [1] on the mounting surface of the wing leading edge.

(b) Apply a layer of corrosion inhibiting material, G50136, to the screws [2].

(c) Install the screws [2].

(d) Tighten the screws [2] to 30 ±1 in-lb (3 ±1 N·m).

SUBTASK 33-43-11-760-001

(5) Measure the electrical resistance between the forward position light [1] and the leading edge seal rib (SWPM 20-20-00).

(a) Use an intrinsically safe approved bonding meter, COM-1550.

(b) Make sure that the electrical resistance is 0.0005 ohm (0.5 milliohm) or less.

SUBTASK 33-43-11-860-001

(6) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-11-700-001

(7) Do this task: Position Lights Operational Test, TASK 33-43-10-710-801.

H. Put the Airplane Back to Its Usual Condition

SUBTASK 33-43-11-410-001

(1) Remove the ladders, work platform, COM-2480, or maintenance platform, COM-659.

SUBTASK 33-43-11-860-003

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WINGLET AFT MARKER LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has this task:

(1) An aft marker light LED optic assembly replacement.

TASK 33-43-12-960-801

2. Aft Marker Light LED Optic Assembly Replacement

(Figure 201)

A. General

(1) This task contains instructions for the replacement of the LED optic assembly installed on the aft marker light.

(2) Before LED optic assembly replacement, carefully look at the unit to see its position. If it is necessary, make records. This will help you do the LED optic assembly replacement easier.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
33-43-10-710-801	Position Lights Operational Test (P/B 201)
33-43-12-000-801	Aft Marker Light Removal (P/B 401)
33-43-12-400-801	Aft Marker Light Installation (P/B 401)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height Part #: 1135-8000 Supplier: 00994 Opt Part #: 8662-010 Supplier: 00994
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08
STD-420	Gloves - White Cotton

D. Consumable Materials

Reference	Description	Specification
A50119	Adhesive - Silicone Rubber - RTV 103 (Black)	MIL-A-46106
A50250	Sealant - P/S 870 Class B-1/2 Corrosion Inhibitive Sealant	BMS5-95 Class B-1/2
A50416	Sealant - RTV 732, Type 1, Clear Adhesive-Sealant	MIL-A-46106
A50479	Sealant - P/S 870 Class B-2 Corrosion Inhibitive Sealant	BMS5-95 Class B-2

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E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
6	LED optic assembly	33-43-12-10-020	SIA ALL
		33-43-12-10-025	SIA ALL

F. Prepare for the Replacement

SUBTASK 33-43-12-860-007

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-12-860-008

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 33-43-12-940-003

(3) Get a ladder, work platform, COM-2480, or maintenance platform, COM-659.

SUBTASK 33-43-12-940-004

(4) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50 ft (15 m) radius of an open fuel tank.

(a) All support equipment must be in position before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

SUBTASK 33-43-12-020-004

(5) Remove the aft marker light assembly, do this task: Aft Marker Light Removal, TASK 33-43-12-000-801.

G. LED Optic Assembly Replacement

SUBTASK 33-43-12-960-001

(1) Do these steps to replace the LED optic assembly [6]:

(a) Use white cotton gloves, STD-420, to handle LED module.

(b) Remove the LED optic assembly [6] from the mounting bracket [7] and tipcap assembly.

1) Remove the screws [4], washer [3], and screws [5].

2) Disconnect the terminal end [2].

(c) If it is necessary, remove the mounting bracket [7] from tipcap assembly.

1) Remove the screws [8].

(d) Pull the LED optic assembly [6] from the aft marker light assembly.

(e) Replace with a new LED optic assembly [6].

1) Clean all the parts before installation.

a) Remove all contamination, oils signs, and other unwanted material from the light assembly.

b) Clean tools from all oils and contamination.

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(f) Put the mounting bracket [7] into tipcap assembly.

WARNING USE PROTECTIVE GLOVES AROUND CORROSION-INHIBITING COMPOUND. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

1) Apply a thin layer of P/S 870 Class B-1/2 sealant, A50250, or P/S 870 Class B-2 sealant, A50479, to shank and underside of heads the screws [8].
2) If removed, install the screws [8] to secure the mounting bracket [7] to tipcap assembly.
   a) Fully tighten the screws [8].

WARNING USE PROTECTIVE GLOVES AROUND CORROSION-INHIBITING COMPOUND. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

3) Apply a thin layer of P/S 870 Class B-1/2 sealant, A50250, or P/S 870 Class B-2 sealant, A50479, to heads of screws [8].

(g) Install the LED optic assembly [6] in position on tipcap assembly and mounting bracket [7].

1) Put the LED optic assembly [6] in its position.

WARNING USE PROTECTIVE GLOVES AROUND CORROSION-INHIBITING COMPOUND. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

2) Apply a thin layer of P/S 870 Class B-1/2 sealant, A50250, or P/S 870 Class B-2 sealant, A50479, to underside of heads of screws [5].
3) Install screws [5] to the mounting holes.
   a) Fully tighten the screws [5].

WARNING USE PROTECTIVE GLOVES AROUND CORROSION-INHIBITING COMPOUND. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

4) Apply a thin layer of P/S 870 Class B-1/2 sealant, A50250, or P/S 870 Class B-2 sealant, A50479, to heads of screws [5].

(h) Install terminal end [2] with washer [3] and screw [4] on the forward mounting hole of the chassis assembly [1].

WARNING USE PROTECTIVE GLOVES AROUND CORROSION-INHIBITING COMPOUND. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

1) Apply a thin layer of P/S 870 Class B-1/2 sealant, A50250, or P/S 870 Class B-2 sealant, A50479, to underside of head of screw [4].
2) Fully tighten the screw [4].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WARNING USE PROTECTIVE GLOVES AROUND CORROSION-INHIBITING COMPOUND. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

3) Apply a thin layer of P/S 870 Class B-1/2 sealant, A50250, or P/S 870 Class B-2 sealant, A50479, to head of the screw [4].

(i) Install remaining screws [4] to the mounting holes at the wide end of the chassis assembly [1] and inner mounting hole at the forward end of the chassis assembly [1].

WARNING USE PROTECTIVE GLOVES AROUND CORROSION-INHIBITING COMPOUND. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

1) Apply a thin layer of P/S 870 Class B-1/2 sealant, A50250, or P/S 870 Class B-2 sealant, A50479, to underside of heads of screws [4].

2) Fully tighten the screws [4].

WARNING USE PROTECTIVE GLOVES AROUND CORROSION-INHIBITING COMPOUND. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

3) Apply a thin layer of P/S 870 Class B-1/2 sealant, A50250, or P/S 870 Class B-2 sealant, A50479, to heads of the screws [4].

WARNING USE PROTECTIVE GLOVES AROUND RTV ADHESIVE SEALANT. IF YOU DO NOT OBEY, SKIN IRRITATION CAN OCCUR.

(j) Apply RTV 103 adhesive, A50119, or RTV 732 adhesive, A50416, to the gap between the LED optic assembly [6] and tipcap.

(k) Install the aft marker light assembly, do this task: Aft Marker Light Installation, TASK 33-43-12-400-801.

H. LED Optic Assembly Installation Test

SUBTASK 33-43-12-860-009

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-12-710-002

(2) Do a test of the LED optic assembly [6], do this task: Position Lights Operational Test, TASK 33-43-10-710-801.

I. Put the Airplane Back to Its Usual Condition

SUBTASK 33-43-12-840-002

(1) Remove the ladder, work platform, COM-2480, or maintenance platform, COM-659.

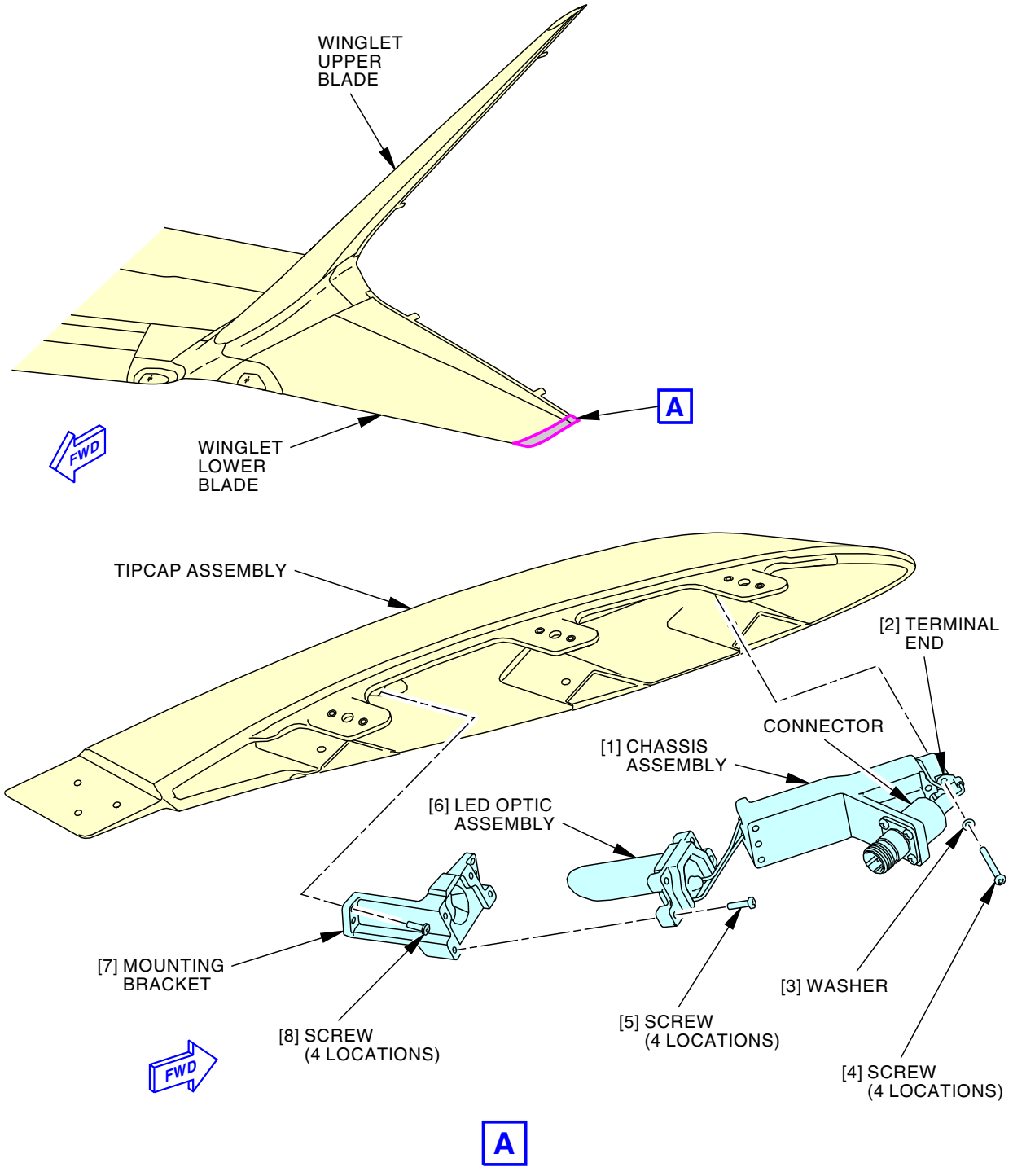
ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-43-12-860-010

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Marker Light LED Optic Assembly Replacement
Figure 201/33-43-12-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WINGLET AFT MARKER LIGHTS - REMOVAL/INSTALLATION

1. General

A. This procedure has these tasks:

(1) Winglet Aft Marker Light Removal

(2) Winglet Aft Marker Light Installation.

TASK 33-43-12-000-801

2. Aft Marker Light Removal

(Figure 401)

A. General

(1) This procedure gives the task to remove the Aft Marker Light from the lower blade of the winglet.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height Part #: 1135-8000 Supplier: 00994 Opt Part #: 8662-010 Supplier: 00994
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08
SPL-768	Sealant Removal Tool, Non-Metallic Part #: ST982L-9 Supplier: 81205 Part #: ST982LF-9 Supplier: 81205 Part #: ST982LH-A-1 Supplier: 81205

D. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Prepare for the Removal

SUBTASK 33-43-12-860-001

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-12-860-003

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 33-43-12-940-001

(3) Get a ladder, work platform, COM-2480, or maintenance platform, COM-659.

SUBTASK 33-43-12-940-002

(4) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50 ft (15 m) radius of an open fuel tank.

(a) All support equipment must be in position before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

F. Aft Marker Light Removal

SUBTASK 33-43-12-980-001

(1) Remove and discard the rivets [43] that attach the aft end of the aft marker light [44] to the arrowhead [41].

SUBTASK 33-43-12-020-001

(2) Remove the aft marker light [44].

(a) Remove the upper bolts [42] and the lower bolts [46] that attach the aft marker light [44] to the lower blade of the winglet.

(b) Remove the aft marker light [44] from the lower blade.

SUBTASK 33-43-12-020-002

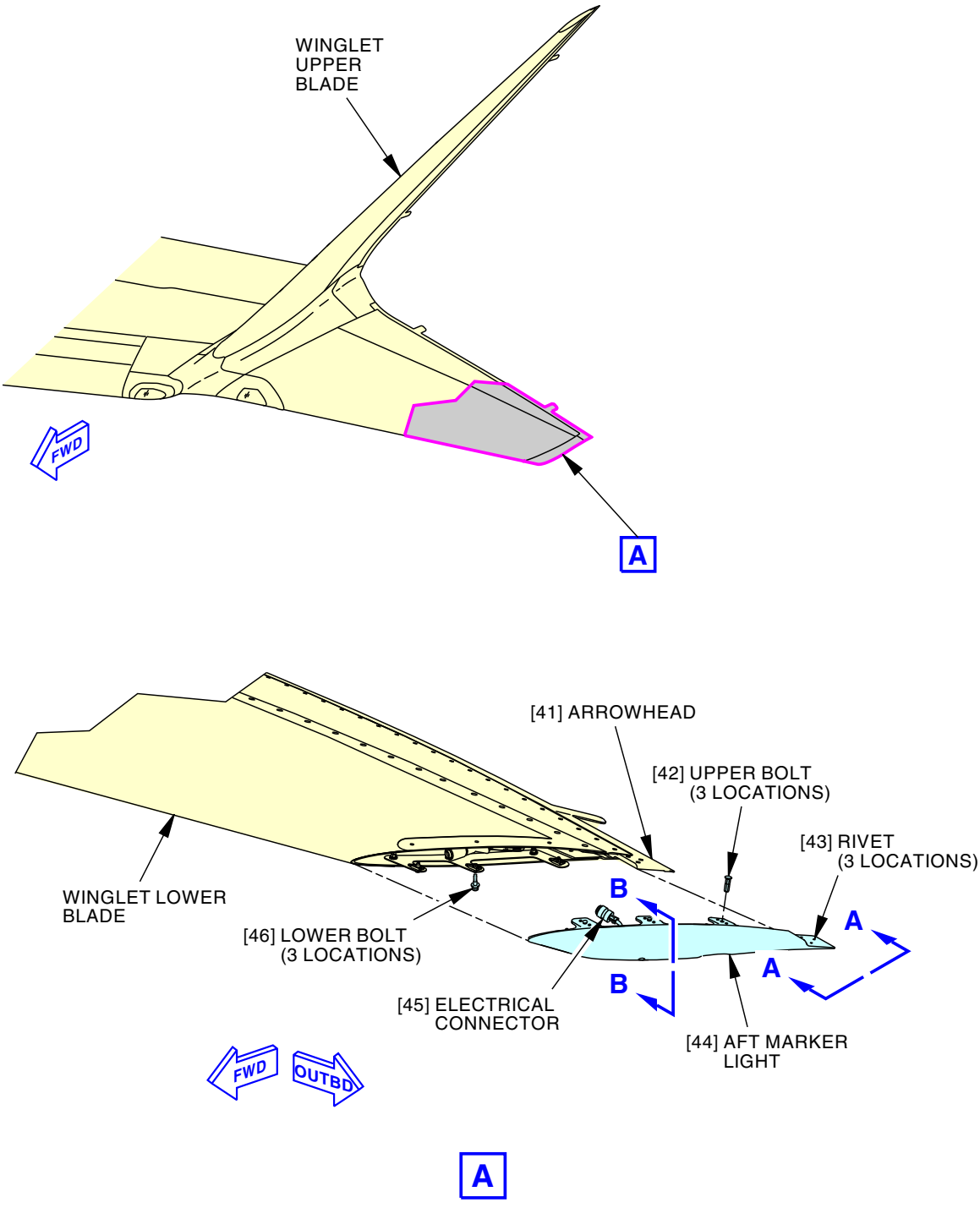
(3) Disconnect the electrical connector [45] from the aft marker light [44] .

SUBTASK 33-43-12-020-003

(4) Remove all sealant from lower blade of the winglet and the aft marker light [44] with a sealant removal tool, SPL-768.

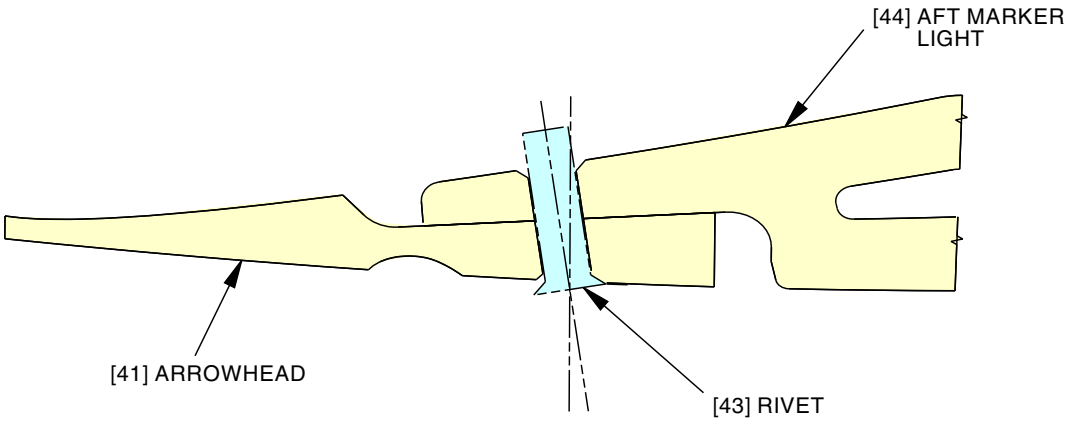
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

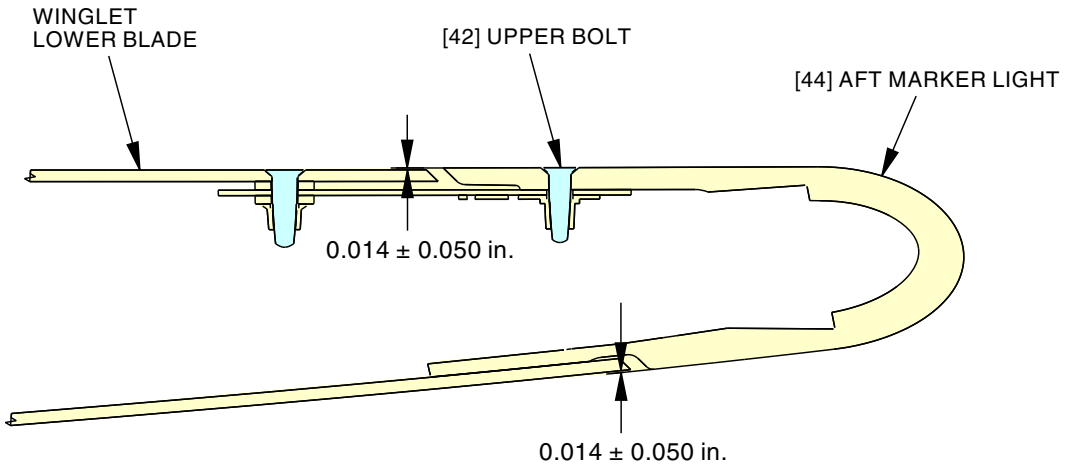


Aft Marker Light Installation
Figure 401/33-43-12-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



A-A



B-B

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Aft Marker Light Installation
Figure 401/33-43-12-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-12-400-801

3. Aft Marker Light Installation

(Figure 401)

A. General

(1) This procedure gives the task to install the Aft Marker Light on the lower blade of the winglet.

B. References

Reference	Title
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
33-43-10-710-801	Position Lights Operational Test (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height Part #: 1135-8000 Supplier: 00994 Opt Part #: 8662-010 Supplier: 00994
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08

D. Consumable Materials

Reference	Description	Specification
C00259	Coating - Chemical And Solvent Resistant Finish, Corrosion Inhibiting Primer	BMS10-11 Type I
G50136	Compound - Corrosion Inhibiting, Non-drying Paste	BMS3-38

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
43	Rivet	33-43-12-01-050	SIA ALL
		33-43-12-05-050	SIA ALL
44	Aft marker light	33-43-12-01-030	SIA ALL
		33-43-12-01-035	SIA ALL

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

G. Aft Marker Light Installation

SUBTASK 33-43-12-370-001

(1) Do a check of the fastener holes on the upper surface of the lower blade:

(a) If it is necessary, apply primer, C00259, to the fastener holes.

SUBTASK 33-43-12-400-001

(2) Install the aft marker light [44]:

(a) Apply a layer of corrosion inhibiting material, G50136, to the mating surfaces of the aft marker light [44], lower blade of the winglet and arrowhead [41].

(b) Apply a layer of corrosion inhibiting material, G50136, to the shank and threads of the upper bolts [42] and the holes for the lower bolts [46].

(c) Connect the electrical connector [45] to the aft marker light [44].

(d) Put the aft marker light [44] in its position on the lower blade.

(e) Install the upper bolts [42] and the lower bolts [46] to attach the aft marker light [44].

(f) Tighten the upper bolts [42] to 30 in-lb (3 N·m).

(g) Tighten the lower bolts [46] to 15 in-lb (2 N·m).

(h) Install the new rivets [43] to attach the aft marker light [44] to the arrowhead [41].

SUBTASK 33-43-12-980-002

(3) Make sure that the aft marker light [44] and the lower blade align in the limit of 0.0140 ±0.0500 in. (0.3556 ±1.2700 mm).

SUBTASK 33-43-12-760-001

(4) Do a check of the electrical resistance between the aft marker light [44] and the arrowhead [41] with an intrinsically safe approved bonding meter, COM-1550.

(a) Make sure that the electrical resistance is 0.0005 ohm (0.5 milliohm) or less.

SUBTASK 33-43-12-980-003

(5) Shave the heads of the rivets [43] so they align with the arrowhead [41] +0.0020 in. (0.0508 mm)/ -0.0000 in. (0.0000 mm).

H. Aft Marker Light Installation Test

SUBTASK 33-43-12-860-004

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C04052	EXTERIOR LIGHTING POSITION RIGHT
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 33-43-12-710-001

(2) Do this task: Position Lights Operational Test, TASK 33-43-10-710-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

I. Put the Airplane Back to Its Usual Condition

SUBTASK 33-43-12-840-001

(1) Remove the ladder, work platform, COM-2480, or maintenance platform, COM-659.

SUBTASK 33-43-12-860-006

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TAILCONE POSITION LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Tailcone Position Lights Deactivation

(2) Tailcone Position Lights Activation

(3) Tailcone Position Lights Replacement

(4) Tailcone Position Lights Transformer Replacement

(5) Tailcone Position Lights LED Module Replacement

(6) Tailcone Position Lights Housing Assembly Replacement.

B. The tailcone position light and tailcone anti-collision light are in the same light assembly.

TASK 33-43-13-040-801

2. Tailcone Position Lights Deactivation

A. General

(1) This procedure removes electrical power from the tailcone position lights.

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

C. Procedure

SUBTASK 33-43-13-860-009

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

D. Tailcone Position Lights Deactivation Test

NOTE: This test is to make sure that the tailcone position lights are in a zero energy condition.

SUBTASK 33-43-13-200-001

(1) Do these steps to make sure that the power is off:

(a) Set the POSITION switch for the tailcone position/anti-collision lights to STEADY on the P5 overhead panel.

1) Make sure that the tailcone position/anti-collision, winglet position and winglet (AFT) marker lights stay off.

(b) Set the POSITION switch for the tailcone position/anti-collision lights to STROBE & STEADY on the P5 overhead panel.

1) Make sure that the tailcone position/anti-collision, winglet position and winglet (AFT) marker lights stay off.

(c) Set the POSITION switch for the tailcone position/anti-collision lights to OFF on the P5 overhead panel.

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1) Make sure that the tailcone position/anti-collision, winglet position and winglet (AFT) marker lights stay off.

——— END OF TASK ———

TASK 33-43-13-440-801

3. Tailcone Position Lights Activation

A. General

(1) This procedure supplies electrical power to the tailcone position lights.

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

C. Procedure

SUBTASK 33-43-13-860-010

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

D. Tailcone Position Lights Activation Test

NOTE: This test is to make sure that the tailcone position lights operate.

SUBTASK 33-43-13-710-005

(1) Do these steps to make sure that the power is on:

(a) Set the POSITION switch for the tailcone position/anti-collision lights to STEADY on the P5 overhead panel.

1) Make sure that the tailcone position/anti-collision, winglet position and winglet (AFT) marker lights come on.

(b) Set the POSITION switch for the tailcone position/anti-collision lights to STROBE & STEADY on the P5 overhead panel.

1) Make sure that the tailcone position/anti-collision, winglet position and winglet (AFT) marker lights come on.

(c) Set the POSITION switch for the tailcone position/anti-collision lights to OFF.

1) Make sure that the tailcone position/anti-collision, winglet position and winglet (AFT) marker lights go off.

——— END OF TASK ———

TASK 33-43-13-960-801

4. Tailcone Position Lights Replacement

(Figure 201)

A. References

Reference	Title
51-22-00-160-801	Prepare For Sealing (P/B 201)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Reference	Title
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-60-01	CLEANING OF ELECTRICAL CONNECTORS
SWPM 20-60-06	INSTALLATION OF ELECTRICAL CIRCULAR CONNECTORS
WDM 33-43-11	D000534505

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659
STD-810	Spatula - Fillet Smoothing, Hardwood or Plastic

C. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
6	Light assembly	33-44-04-02-045	SIA ALL

E. Location Zones

Zone	Area
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

F. Tailcone Position Lights Replacement

SUBTASK 33-43-13-860-002

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-43-13-000-001

(2) Do these steps to replace the light assembly (WDM 33-43-11):

NOTE: Do not discard the light assembly. Refer to the vendor manual for possible repairs. Do the repairs in a shop.

(a) Remove the screws [7].

(b) Disconnect the electrical connector [10].

(c) Replace the light assembly [6].

(d) Connect the electrical connector [10]:

1) Clean the electrical connector [10] (SWPM 20-60-01).

2) Connect the electrical connector [10] (SWPM 20-60-06).

3) Use an intrinsically safe approved bonding meter, COM-1550, to measure the resistance between the electrical connector braid and the housing (SWPM 20-20-00).

a) Make sure that the resistance is 0.003 ohm (3 milliohms) or less.

(e) Abrasive clean the sealant from the light assembly [6] and fuselage surface (TASK 51-22-00-160-801).

(f) Apply sealant, A00247, between the light assembly [6] and the fuselage for an electrical faying surface seal.

(g) Install the light assembly [6] to the fuselage with the screws [7].

(h) Use an intrinsically safe approved bonding meter, COM-1550, to measure the resistance between the metal components of the light assembly [6] and the fuselage surface (SWPM 20-20-00).

1) Make sure that the resistance is 0.0005 ohm (0.5 milliohms) or less.

(i) Apply an aerodynamic fillet seal around the baseplate [9] with sealant, A00247 (TASK 51-22-00-390-809).

(j) Use the hardwood or plastic fillet smoothing spatula, STD-810, to make a smooth 45-degree fillet.

CAUTION DO NOT SEAL LOWER DRAIN HOLE OF THE TAILCONE ANTI-COLLISION LIGHT. LOWER DRAIN HOLE TO BE CLEAR OF ALL SEALANT.

(k) Apply sealant, A00247 to the heads of the screws [7] and the upper drain hole (TASK 51-22-00-390-809).

(l) If the lens is dirty, clean it with a clean, soft, dry cotton wiper, G00034.

G. Tailcone Position Lights Replacement Test

SUBTASK 33-43-13-860-001

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-43-13-710-001

(2) Do a test of the new light assembly [6].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) At the P5 overhead panel, set the POSITION switch for the tailcone position/anti-collision light to the STROBE & STEADY mode.

1) Make sure that the tailcone position/anti-collision light (left/right) flashes continuously.

(b) At the P5 overhead panel, set the POSITION switch for the tailcone position/anti-collision light to the STEADY mode.

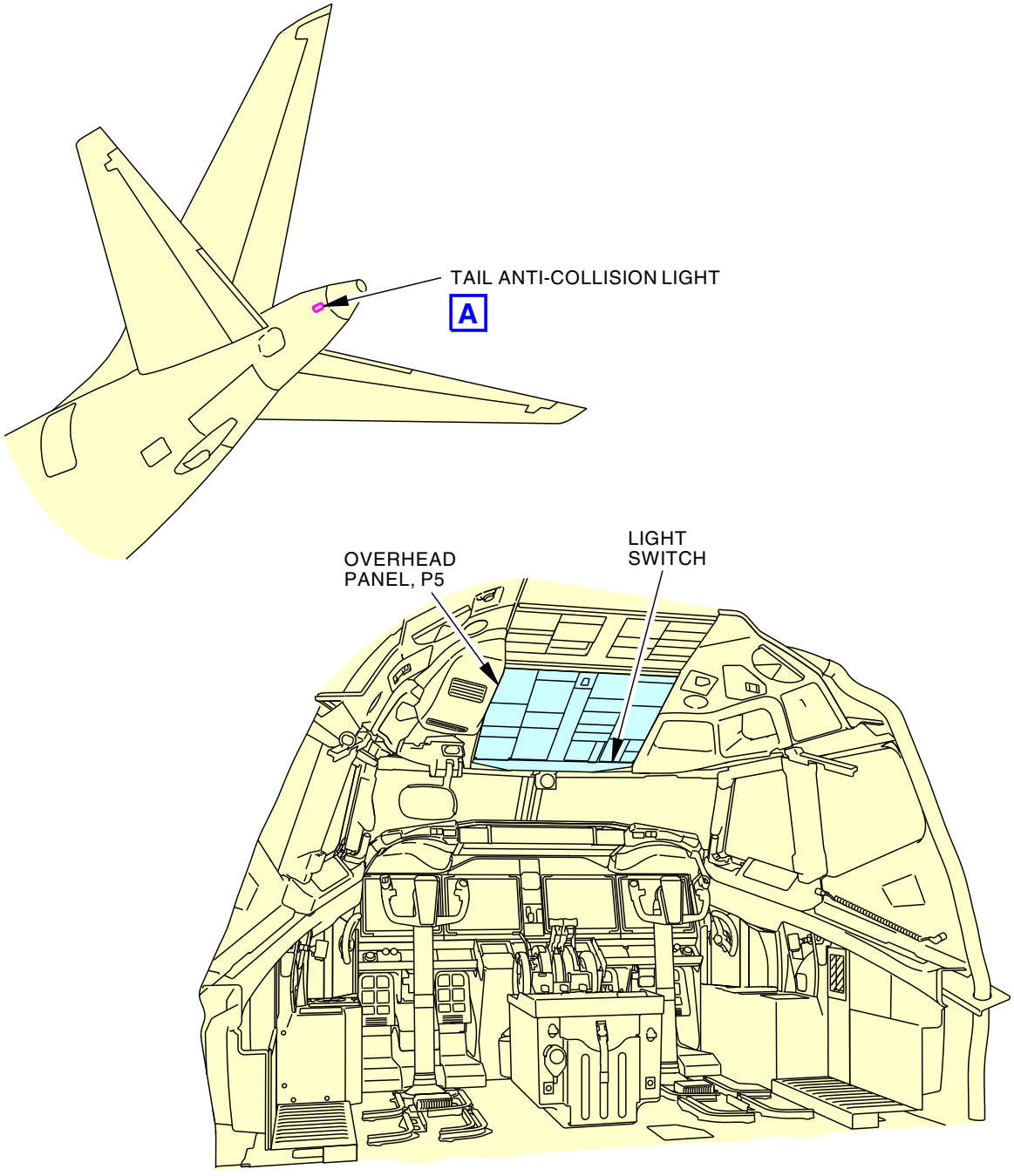
1) Make sure that the tailcone position/anti-collision light (left/right) comes on and stays on.

(c) Set the POSITION switch to the OFF mode.

1) Make sure that the tailcone position/anti-collision lights (left/right) goes off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

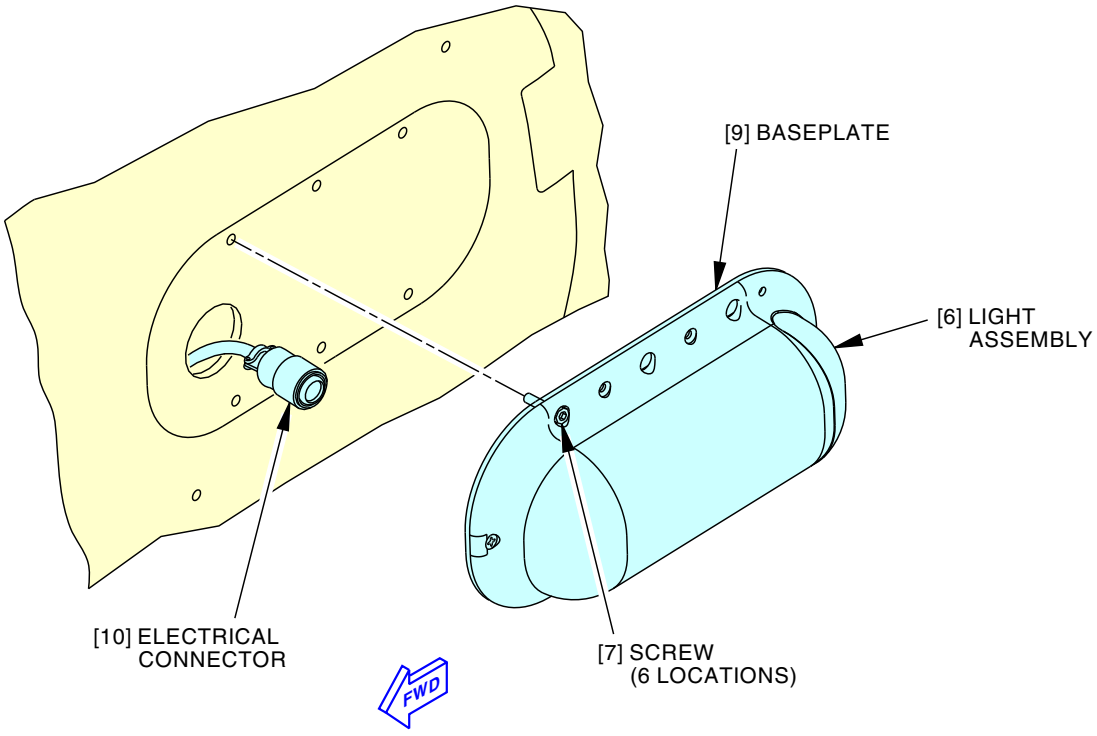


FLIGHT COMPARTMENT

2414735 S00061535859_V1

Tailcone Position - Lights Assembly Replacement
Figure 201/33-43-13-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



TAIL ANTI-COLLISION LIGHT
(LEFT SIDE SHOWN, RIGHT SIDE OPPOSITE)

A

2414736 S00061535860_V1

Tailcone Position - Lights Assembly Replacement
Figure 201/33-43-13-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-13-960-802

5. Tailcone Position Lights Transformer Replacement

(Figure 202)

A. References

Reference	Title
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-60-01	CLEANING OF ELECTRICAL CONNECTORS
SWPM 20-60-06	INSTALLATION OF ELECTRICAL CIRCULAR CONNECTORS
WDM 33-43-11	D000534505

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Consumable Materials

Reference	Description	Specification
A50473	Sealant - Brush (See BAC5000 8.5.3b(1) for instructions to prepare BMS5-95 Type I Class A-2)	BAC5000 Section 8.5.3
B00083	Solvent - VM&P Naphthas	TT-N-95 Type II, ASTM D-3735 Type III
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Transformer	33-43-13-01-010	SIA ALL

E. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

F. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Prepare for the Replacement

SUBTASK 33-43-13-860-003

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-43-13-010-001

(2) Open this access door:

Number	Name/Location
311BL	Stabilizer Trim Access Door

H. Tailcone Position Lights Transformer Replacement

SUBTASK 33-43-13-960-001

(1) Do these steps to remove the transformer [1] (WDM 33-43-11):

(a) Disconnect the electrical connector [2].

(b) Remove the sealant between the transformer [1] and the mounting bracket.

(c) Remove the bolts [3] and washers [4].

(d) Remove the transformer [1].

(2) Do these steps to install a new transformer [1]:

(a) Clean the fay surface bonding area with solvent, B00083, and a clean cotton wiper, G00034.

(b) Put the new transformer [1] on the mounting bracket.

(c) Install the washers [4] and bolts [3].

(d) With the intrinsically safe approved bonding meter, COM-1550, make sure that the resistance between the transformer [1] and the fuselage measures 0.0025 ohm (2.5 milliohms) or less.

(e) Apply a polysulfide sealant, A50473, fillet seal between transformer [1] and the mounting bracket.

(f) Connect the electrical connector [2].

1) Clean the electrical connector [2] (SWPM 20-60-01).

2) Connect the electrical connector [2] (SWPM 20-60-06).

3) Use an intrinsically safe approved bonding meter, COM-1550, to measure the resistance between the electrical connector [2] braid and the housing (SWPM 20-20-00).

a) Make sure that the resistance is 0.003 ohm (3 milliohms) or less.

I. Tailcone Position Lights Transformer Replacement Test

SUBTASK 33-43-13-860-004

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-43-13-710-002

(2) Do a test of the new transformer [1]:

(a) At the P5 overhead panel, set the POSITION switch for the tailcone position/anti-collision light to the STEADY mode.

1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights come on.

(b) At the P5 overhead panel, set the POSITION switch for the tailcone position/anti-collision light to the STROBE & STEADY mode.

1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights come on.

(c) Set the POSITION switch to the OFF mode.

1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights go off.

J. Put the Airplane Back to Its Usual Condition

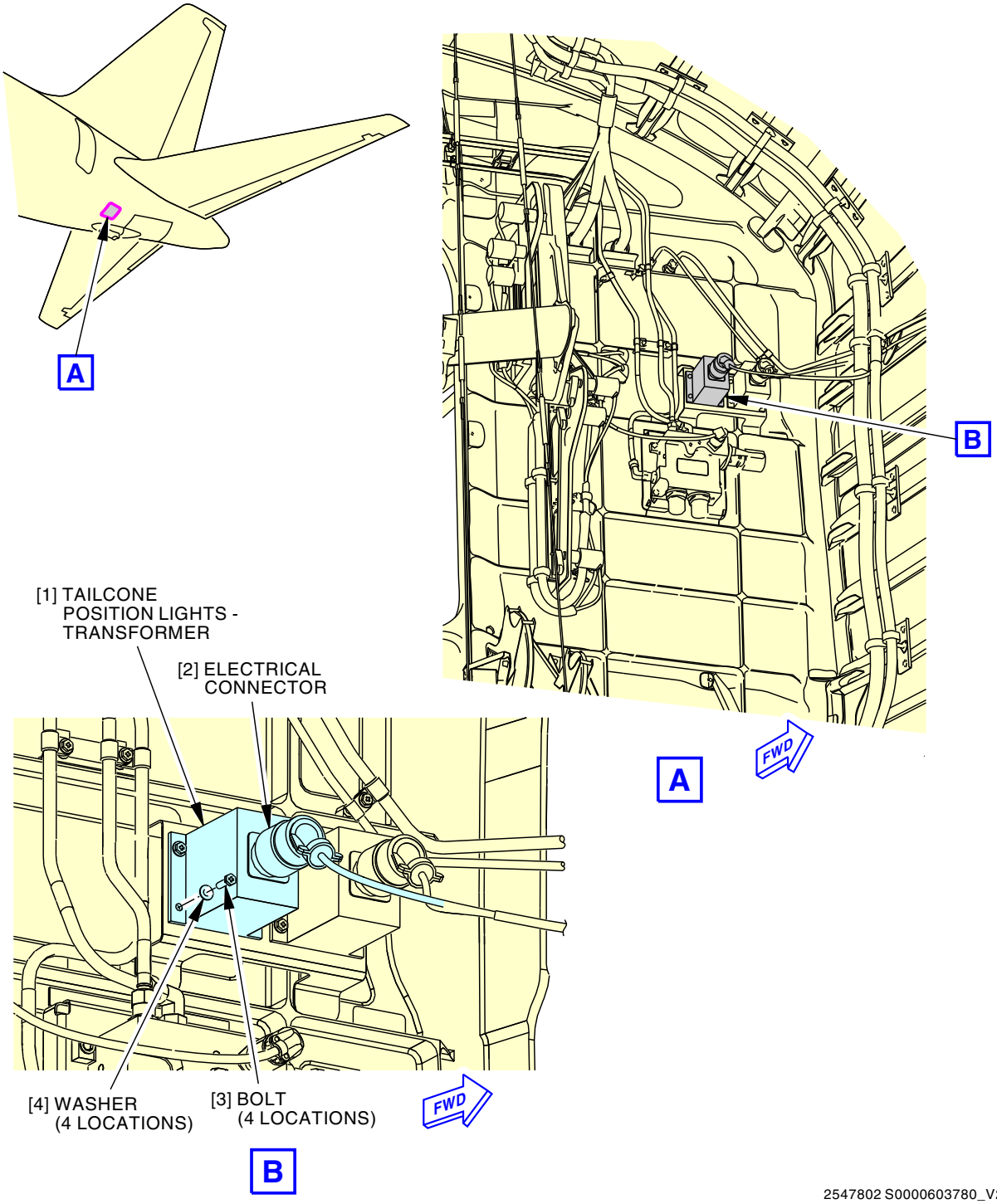
SUBTASK 33-43-13-410-001

(1) Close this access door:

Number	Name/Location
311BL	Stabilizer Trim Access Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2547802 S0000603780_V2

Tailcone Position Light Transformer Replacement
Figure 202/33-43-13-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-13-960-803

6. Tailcone Position Lights LED Module Replacement

(Figure 203)

A. General

(1) This procedure contains instructions for the replacement of the LED modules installed on the tailcone position light.

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
20	LED module assembly	33-44-04-02-050	SIA ALL
30	Housing assembly	33-44-04-02-055	SIA ALL

C. Location Zones

Zone	Area
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

D. Procedure

SUBTASK 33-43-13-860-005

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-43-13-020-001

(2) Do these steps to remove the housing assembly [30]:

(a) Use white cotton gloves to handle housing assembly and LED modules.

(b) Do this task: Tailcone Position Lights Housing Assembly Replacement, TASK 33-43-13-960-804.

SUBTASK 33-43-13-960-002

(3) Do these steps to replace the LED module assembly [20]:

(a) Use white cotton gloves to handle housing assembly and LED modules.

(b) Remove the screws [21] that attach the LED module assembly [20] to the housing assembly [30].

(c) Pull the LED module assembly [20] to disconnect it from the housing assembly [30].

(d) Replace the LED module assembly [20].

(e) Install the screws [21] that hold the LED module assembly [20] to the housing assembly [30].

(f) Tighten the screws [21] untill fully seated.

SUBTASK 33-43-13-420-001

(4) Do these steps to install the housing assembly [30]:

(a) Use white cotton gloves to handle the housing assembly and LED modules.

(b) Do this task: Tailcone Position Lights Housing Assembly Replacement, TASK 33-43-13-960-804.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-43-13-860-006

(5) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-43-13-710-003

(6) Do a test of the new LED module assembly [20]:

(a) At the P5 overhead panel, set the POSITION switch for the tailcone position/anti-collision light to the STEADY mode.

1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights come on.

(b) At the P5 overhead panel, set the POSITION switch for the tailcone position/anti-collision light to the STROBE & STEADY mode.

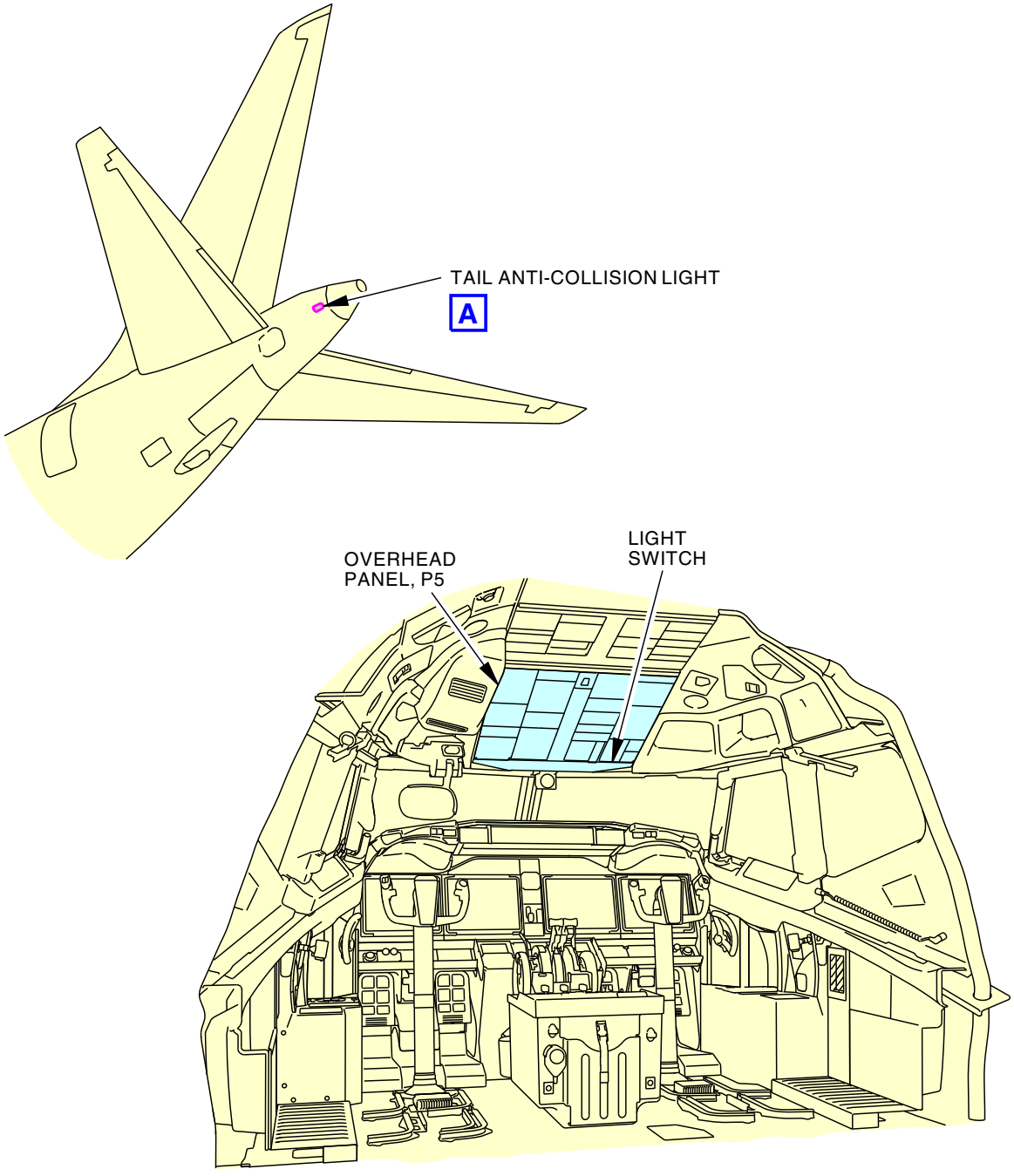
1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights come on.

(c) Set the POSITION switch to the OFF mode.

1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

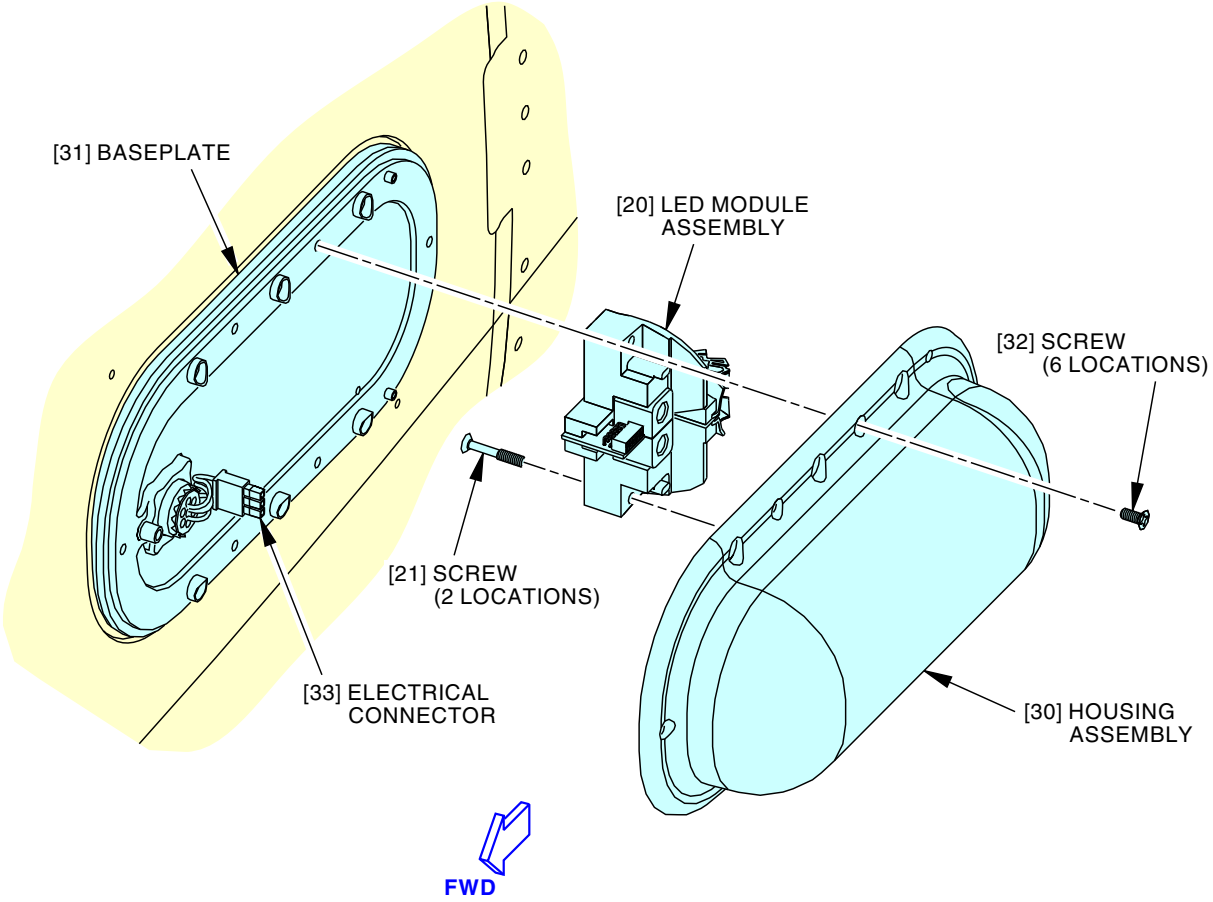


FLIGHT COMPARTMENT

2414735 S00061535859_V1

Tailcone Position Light LED Module Replacement
Figure 203/33-43-13-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



TAIL ANTI-COLLISION LIGHT
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

A

2570017 S0000615941_V1

Tailcone Position Light LED Module Replacement
Figure 203/33-43-13-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-43-13-960-804

7. Tailcone Position Lights Housing Assembly Replacement

(Figure 203)

A. General

(1) This procedure contains instructions for the replacement of the housing assembly installed on the tailcone position light.

B. References

Reference	Title
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)

C. Tools/Equipment

Reference	Description
STD-810	Spatula - Fillet Smoothing, Hardwood or Plastic

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
30	Housing assembly	33-44-04-02-055	SIA ALL

F. Location Zones

Zone	Area
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

G. Procedure

SUBTASK 33-43-13-860-007

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-43-13-960-003

(2) Do these steps to replace the housing assembly [30]:

(a) Use white cotton gloves to handle the housing assembly and LED modules.

(b) Remove the screws [32] that attach the housing assembly [30] to the baseplate [31].

(c) Disconnect the electrical connector [33].

(d) Pull the housing assembly [30] to disconnect it from the baseplate [31].

(e) Replace the new housing assembly [30].

(f) Connect the electrical connector [33].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(g) Install the screws [32] that hold the housing assembly [30] to the baseplate [31].

(h) Clean the housing assembly [30] with a clean, soft, dry cotton wiper, G00034.

(i) Apply an aerodynamic fillet seal around the baseplate [31] with sealant, A00247 (TASK 51-22-00-390-809).

(j) Use the hardwood or plastic fillet smoothing spatula, STD-810, to make a smooth 45-degree fillet.

CAUTION

DO NOT SEAL LOWER DRAIN HOLE OF THE TAILCONE ANTI-COLLISION LIGHT. LOWER DRAIN HOLE TO BE CLEAR OF ALL SEALANT.

(k) Apply sealant, A00247 to the heads of the screws [32] and the upper drain hole(TASK 51-22-00-390-809).

(l) If the lens is dirty, clean it with a clean, soft, dry cotton wiper, G00034.

SUBTASK 33-43-13-860-008

(3) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-43-13-710-004

(4) Do a test of the new housing assembly [30]:

(a) At the P5 overhead panel, set the POSITION switch for the tailcone position/anti-collision light to the STEADY mode.

1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights come on.

(b) At the P5 overhead panel, set the POSITION switch for the tailcone position/anti-collision light to the STROBE & STEADY mode.

1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights come on.

(c) Set the POSITION switch to the OFF mode.

1) Make sure that the forward position, winglet marker (aft), and tailcone position/anti-collision lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ANTI-COLLISION LIGHTS - TEST

1. General

A. This procedure has one task:

(1) Anti-Collision Lights - Operational Test.

TASK 33-44-00-710-801

2. Anti-Collision Lights - Operational Test

(Figure 501)

A. General

(1) This test makes sure that the anti-collision lights operate.

B. References

Reference	Title
WDM 33-44-11	D000534507
WDM 33-44-12	D000534508

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

SUBTASK 33-44-00-710-001

WARNING DO NOT LET THE LIGHTS FLASH DIRECTLY IN YOUR EYES. THE INTENSITY OF THE LIGHT CAN TEMPORARILY CAUSE INJURIES TO YOUR EYES.

(1) Do a test of the upper and lower anti-collision lights (WDM 33-44-11):

(a) At the overhead panel, P5, set the ANTI COLLISION switch for the upper and lower anti-collision lights to the ON position.

NOTE: FOR THE UPPER, LOWER, OR WING ANTI-COLLISION LIGHT:

Let the light flash for 20 seconds to stabilize the system. If no misfire occurs, and the light flashed 40 to 45 times a minute, the system operates correctly. If a misfire occurs before the system becomes stable, let the light flash for 60 more seconds. There must be no other misfires after the system becomes stable for the system to operate correctly.

1) Make sure that the red anti-collision lights on the top and bottom of the fuselage flash 40 to 45 times a minute.

(b) Set the ANTI COLLISION switch to the OFF position.

1) Make sure that lights go off.

SUBTASK 33-44-00-710-002

WARNING DO NOT LET THE LIGHTS FLASH DIRECTLY IN YOUR EYES. THE INTENSITY OF THE LIGHT CAN TEMPORARILY CAUSE INJURIES TO YOUR EYES.

(2) Do a test of the wing and tail anti-collision lights (WDM 33-44-12):

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) At the overhead panel, P5, set the POSITION switch for wing and tail anti-collision lights to the STROBE & STEADY position.

NOTE: FOR THE UPPER, LOWER, OR WING ANTI-COLLISION LIGHT:

Let the light flash for 20 seconds to stabilize the system. If no misfire occurs, and the light flashed 40 to 45 times a minute, the system operates correctly. If a misfire occurs before the system becomes stable, let the light flash for 60 more seconds. There must be no other misfires after the system becomes stable for the system to operate correctly.

1) Make sure that the white anti-collision lights on each wing flash 40 to 45 times a minute.

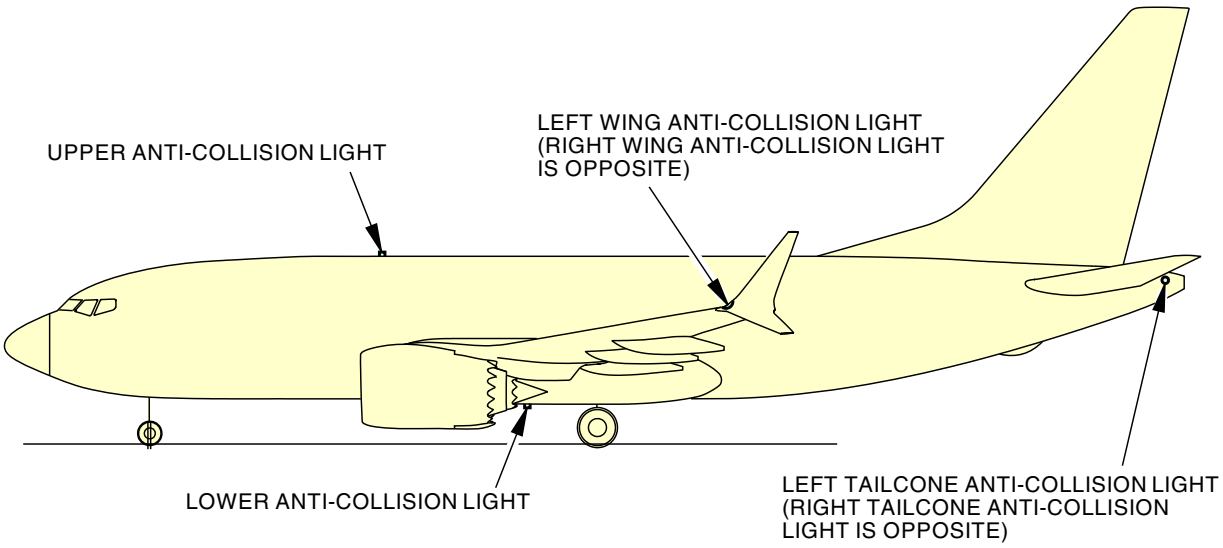
2) Make sure that the white anti-collision lights on each side of the tail flash 40 to 45 times a minute.

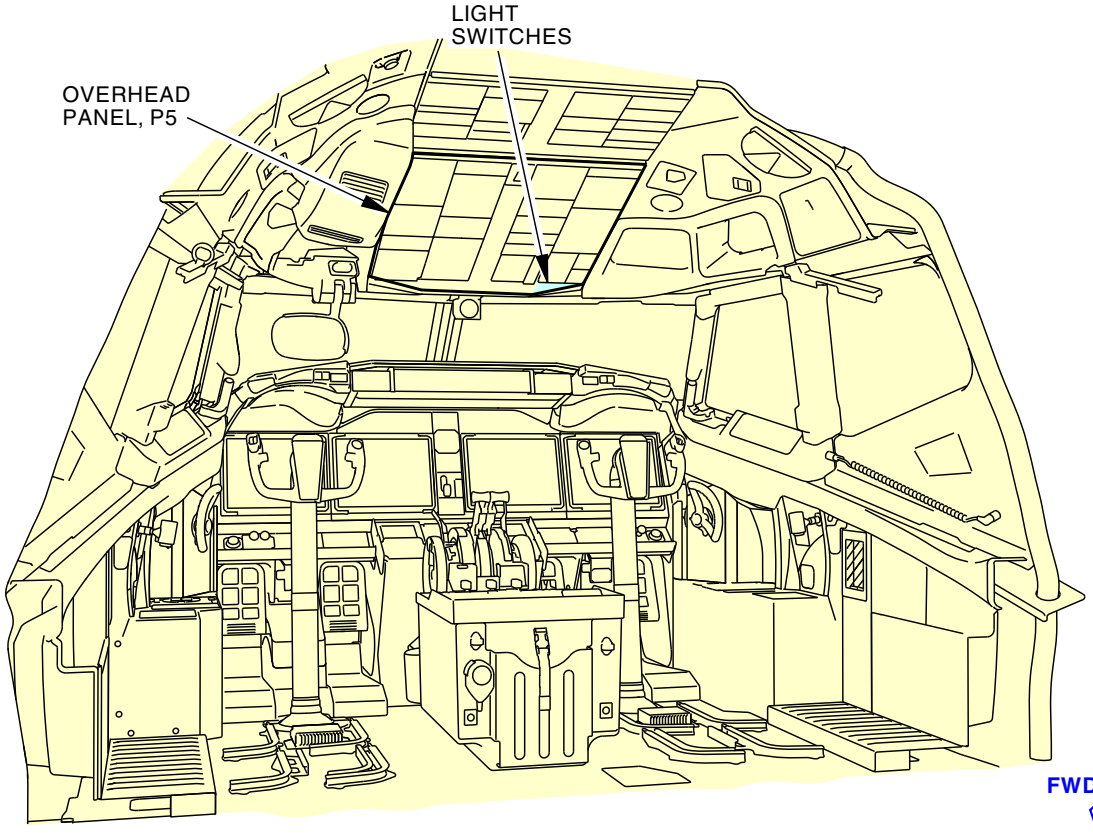
(b) Set the POSITION switch to the OFF position.

1) Make sure that the lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





FLIGHT COMPARTMENT

2414708 S00061535811_V2

Anti-Collision Lights - Test
Figure 501/33-44-00-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

UPPER ANTI-COLLISION LIGHT - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) A deactivation of the upper anti-collision light

(2) An activation of the upper anti-collision light

SIA 001-014

(3) A replacement of the upper anti-collision light lamp assembly

(4) A replacement of the upper anti-collision light light assembly

SIA 015-999

(5) A replacement of the upper anti-collision light LED light assembly

SIA 001-014

(6) A replacement of the upper anti-collision light lens

(7) A replacement of the upper anti-collision light power supply

(8) A replacement of the upper anti-collision light adapter plate.

SIA ALL

TASK 33-44-01-040-801

2. Upper Anti-Collision Light Deactivation

A. General

(1) This procedure removes electrical power from the upper anti-collision light.

B. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

C. Procedure

SUBTASK 33-44-01-860-015

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

D. Upper Anti-Collision Light Deactivation Test

NOTE: This test is to make sure that the upper anti-collision light is in a zero energy condition.

SUBTASK 33-44-01-200-001

(1) Do these steps to make sure that the power is off:

(a) On the P5 overhead panel, set the ANTI COLLISION switch for the upper anti-collision light to ON position.

1) Make sure that the upper anti-collision light stays off.

(b) Set the ANTI COLLISION switch for the upper anti-collision light to OFF position.

1) Make sure that the upper anti-collision light stays off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-01-440-801

3. Upper Anti-Collision Light Activation

A. General

(1) This procedure supplies electrical power to the upper anti-collision light.

B. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

C. Procedure

SUBTASK 33-44-01-860-016

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

D. Upper Anti-Collision Light Activation Test

NOTE: This test is to make sure that the upper anti-collision light operates.

SUBTASK 33-44-01-710-005

(1) Do these steps to make sure that the power is on:

(a) On the P5 overhead panel, set the ANTI COLLISION switch for the upper anti-collision light to ON position.

1) Make sure that the upper anti-collision light comes on.

(b) Set the ANTI COLLISION switch for the upper anti-collision light to OFF position.

1) Make sure that the upper anti-collision light goes off.

——— END OF TASK ———

SIA 001-014

TASK 33-44-01-960-806

4. Upper Anti-Collision Light Lamp Assembly Replacement

(Figure 201)

A. General

(1) The lamp assembly in this procedure is also referred to as a reflector assembly by the vendor.

(2) The lamp assembly can be replaced from inside the airplane or from outside the airplane.

B. References

Reference	Title
21-23-01-000-801	Overhead Distribution Duct Removal (P/B 201)
21-23-01-400-801	Overhead Distribution Duct Installation (P/B 201)
25-21-45-000-801	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-801	Main Ceiling Panel - Installation (P/B 401)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
WDM 33-44-11	D000534507

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

E. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

F. Procedure

SUBTASK 33-44-01-860-013

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-01-000-001

(2) To replace the lamp assembly [22] from inside the airplane, do the following steps:

(a) Do one of the steps below to get access to the upper anti-collision light:

NOTE: The overhead distribution duct is installed below and near the upper anti-collision light, which makes light removal difficult.

1) To remove the ceiling panel only, do this task: Main Ceiling Panel - Removal, TASK 25-21-45-000-801.

2) To remove the ceiling panel and the section of the duct below the light, do this task: Overhead Distribution Duct Removal, TASK 21-23-01-000-801.

(b) Do these steps to replace the lamp assembly [22] (WDM 33-44-11):

NOTE: Do not discard the lamp assembly. Refer to the vendor manual for possible repairs. Do the repairs in a shop.

1) Remove the bolts [25] on the bottom of the light assembly [3].

2) Turn the light assembly [3] clockwise and pull it down from the adapter plate [20].

3) Carefully loosen the fastener [21] on top of the lamp assembly [22].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

4) Examine the gasket [23].
   a) If the gasket [23] is worn, replace it.
5) Replace the lamp assembly [22].
6) Tighten the fastener [21].
7) If the lens [7] is dirty, clean it with a clean, soft, dry cotton wiper, G00034.
8) Put the light assembly [3] in the adapter plate [20] and turn it counterclockwise.
9) Install the bolts [25].
10) With the electrical bonding intrinsically safe approved bonding meter, COM-1550, make sure that the resistance between the light assembly [3] and the adapter plate [20] measures no more than 0.0015 ohm (1.5 milliohms).

(c) Install the items that were removed for access to the light:
1) If the ceiling panel only was removed, do this task: Main Ceiling Panel - Installation, TASK 25-21-45-400-801.
2) If the ceiling panel and the section of the duct below the light were removed, do this task: Overhead Distribution Duct Installation, TASK 21-23-01-400-801.

SUBTASK 33-44-01-000-002

(3) To replace the lamp assembly [22] from outside the airplane do the following steps:
(a) For access to the lens [7], go out of the airplane, on top of the fuselage.
(b) Do these steps to remove the lens [7]:
1) Loosen the screws [26] and lift off the lens [7].
(c) Do these steps to replace the lamp assembly [22] (WDM 33-44-11):

NOTE: Do not discard the lamp assembly. Refer to the vendor manual for possible repairs. Do the repairs in a shop.

1) Loosen the fastener [21] on top of the lamp assembly [22].
2) Replace the lamp assembly [22].
3) Tighten the fastener [21].
4) If the lens [7] is dirty, clean it with a clean, soft, dry cotton wiper, G00034.
5) Put on the lens [7] and tighten the screws [26].

SUBTASK 33-44-01-860-014

(4) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-01-710-004

(5) Do a test of the new lamp assembly [22].
(a) At the overhead panel, P5, set the ANTI COLLISION switch for the upper anti-collision light to ON position.
1) Make sure that the upper anti-collision light flashes (TASK 33-44-00-710-801).
(b) Set the ANTI COLLISION switch to OFF position.

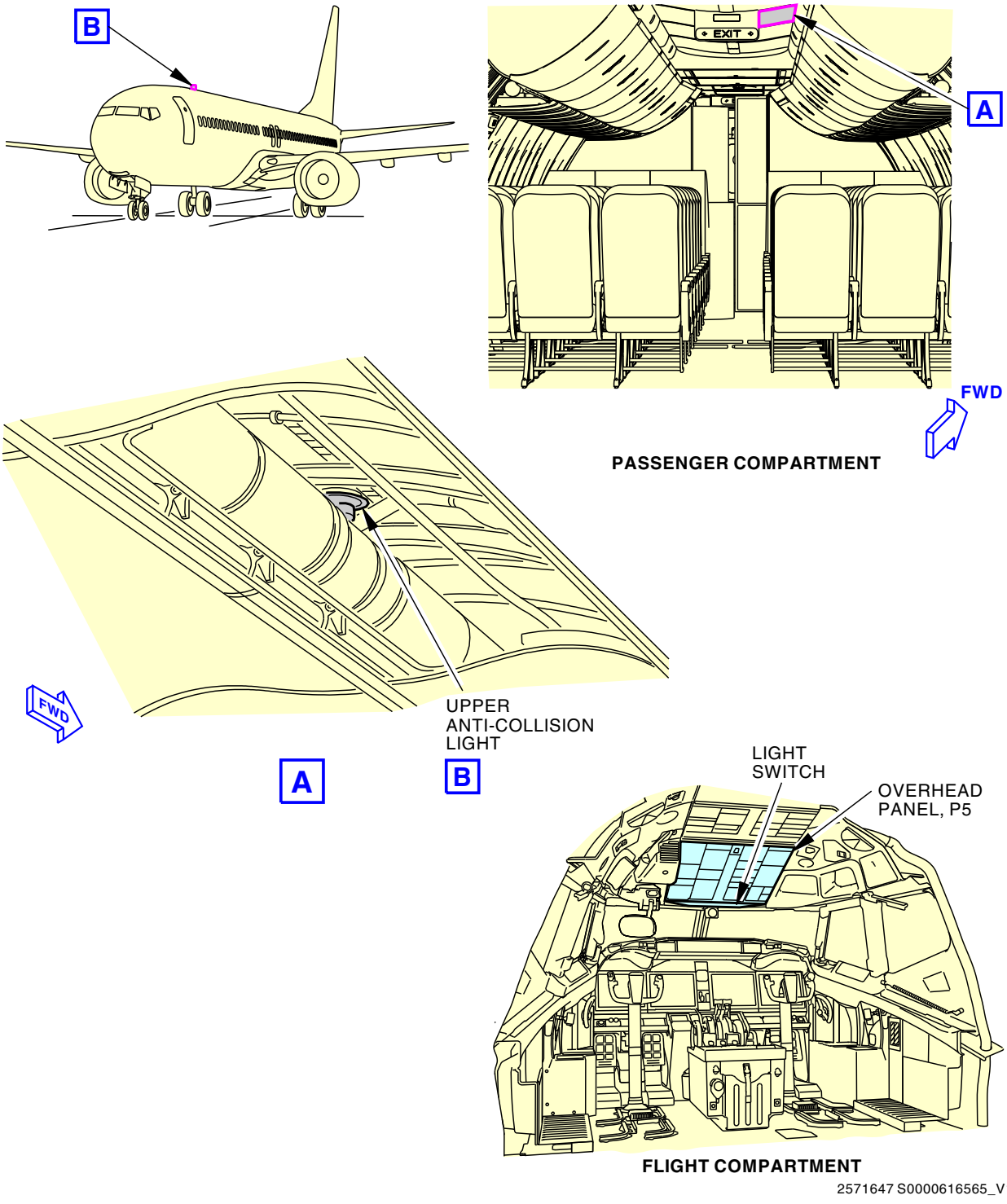
ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

1) Make sure that the upper anti-collision light goes off.

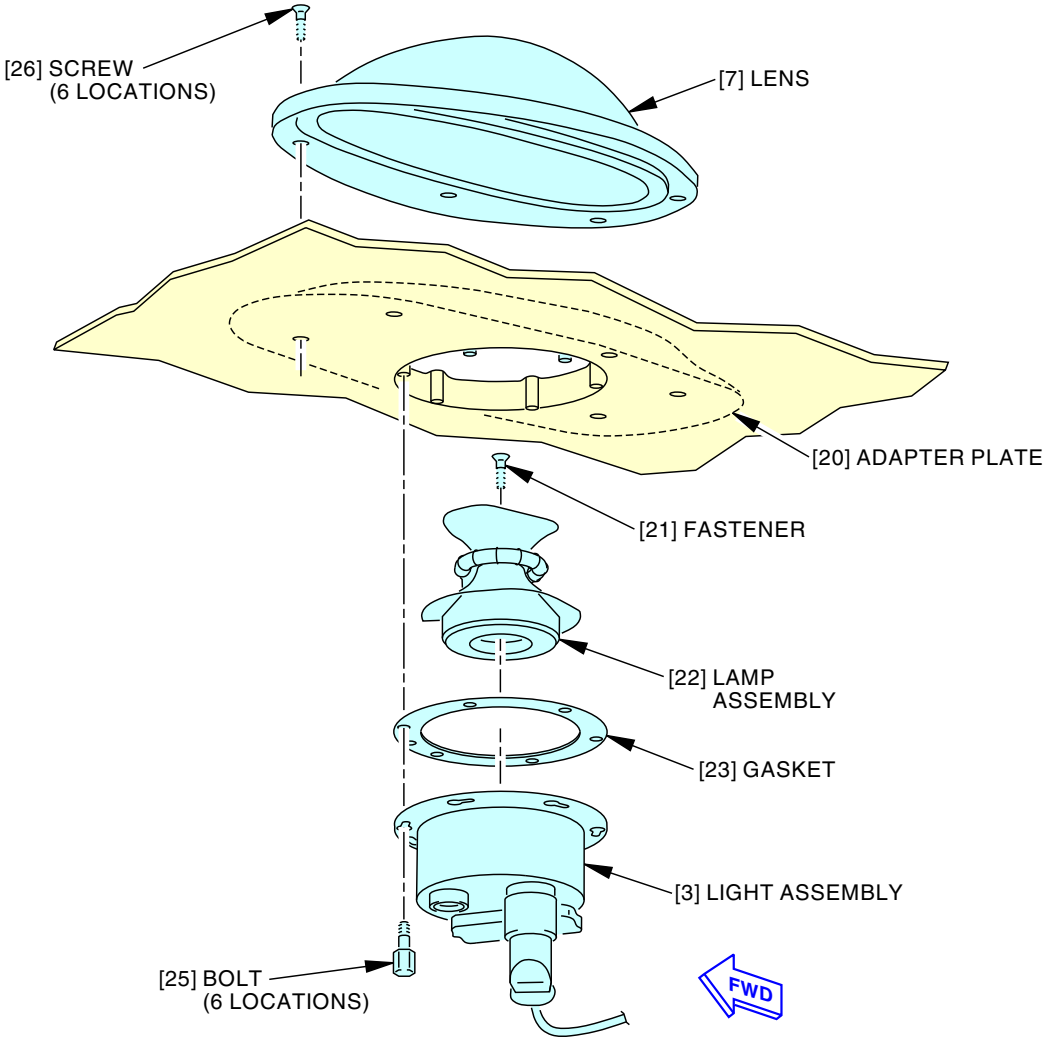
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Upper Anti-Collision Light Lamp Assembly Replacement
Figure 201/33-44-01-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



UPPER ANTI-COLLISION LIGHT

B

2571650 S0000616564_V1

Upper Anti-Collision Light Lamp Assembly Replacement
Figure 201/33-44-01-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

TASK 33-44-01-960-801

5. Upper Anti-Collision Light - Light Assembly Replacement

(Figure 202, Figure 201, Figure 204)

A. References

Reference	Title
21-23-01-000-801	Overhead Distribution Duct Removal (P/B 201)
21-23-01-400-801	Overhead Distribution Duct Installation (P/B 201)
25-21-45-000-801	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-801	Main Ceiling Panel - Installation (P/B 401)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
WDM 33-44-11	D000534507

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Consumable Materials

Reference	Description	Specification
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
3	Light assembly	33-44-01-01A-080	SIA 001-014

E. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

F. Procedure

SUBTASK 33-44-01-860-001

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

SUBTASK 33-44-01-010-001

(2) Do one of these steps to get access to the upper anti-collision light:

NOTE: The overhead distribution duct is installed below and near the upper anti-collision light, which makes light not easily removed.

(a) To remove the ceiling panel only, do this task: Main Ceiling Panel - Removal, TASK 25-21-45-000-801.

(b) To remove the ceiling panel and the section of the duct below the light, do this task: Overhead Distribution Duct Removal, TASK 21-23-01-000-801.

SUBTASK 33-44-01-960-001

(3) Do these steps to replace the light assembly [3] (WDM 33-44-11):

NOTE: Do not discard the light assembly. Refer to the vendor manual for possible repairs. Do the repairs in a shop.

(a) Disconnect the electrical connector [8].

(b) Remove the bolts [2] on the bottom of the light assembly [3].

(c) Turn the light assembly [3] clockwise and pull it down from the adapter plate [4].

(d) Replace the new light assembly [3].

(e) If the lens [7] is dirty, clean it with a clean, soft, dry cotton wiper, G00034.

(f) Put the light assembly [3] in the adapter plate [4] and turn it counterclockwise.

(g) Install the bolts [2].

(h) Connect the electrical connector [8].

(i) With the electrical bonding intrinsically safe approved bonding meter, COM-1550, make sure that the resistance between the light assembly [3] and the adapter plate [4] is 0.0025 ohm (2.5 milliohms) or less.

SUBTASK 33-44-01-410-001

(4) Install the items that were removed for access to the light:

(a) If the ceiling panel only was removed, do this task: Main Ceiling Panel - Installation, TASK 25-21-45-400-801.

(b) If the ceiling panel and the section of the duct below the light were removed, do this task: Overhead Distribution Duct Installation, TASK 21-23-01-400-801.

SUBTASK 33-44-01-860-002

(5) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-01-710-001

(6) Do a test of the new light assembly [3]:

(a) At the overhead panel, P5, set the ANTI COLLISION switch for the upper anti-collision light to ON position.

1) Make sure that the upper anti-collision light flashes (TASK 33-44-00-710-801).

(b) Set the ANTI COLLISION switch to OFF position.

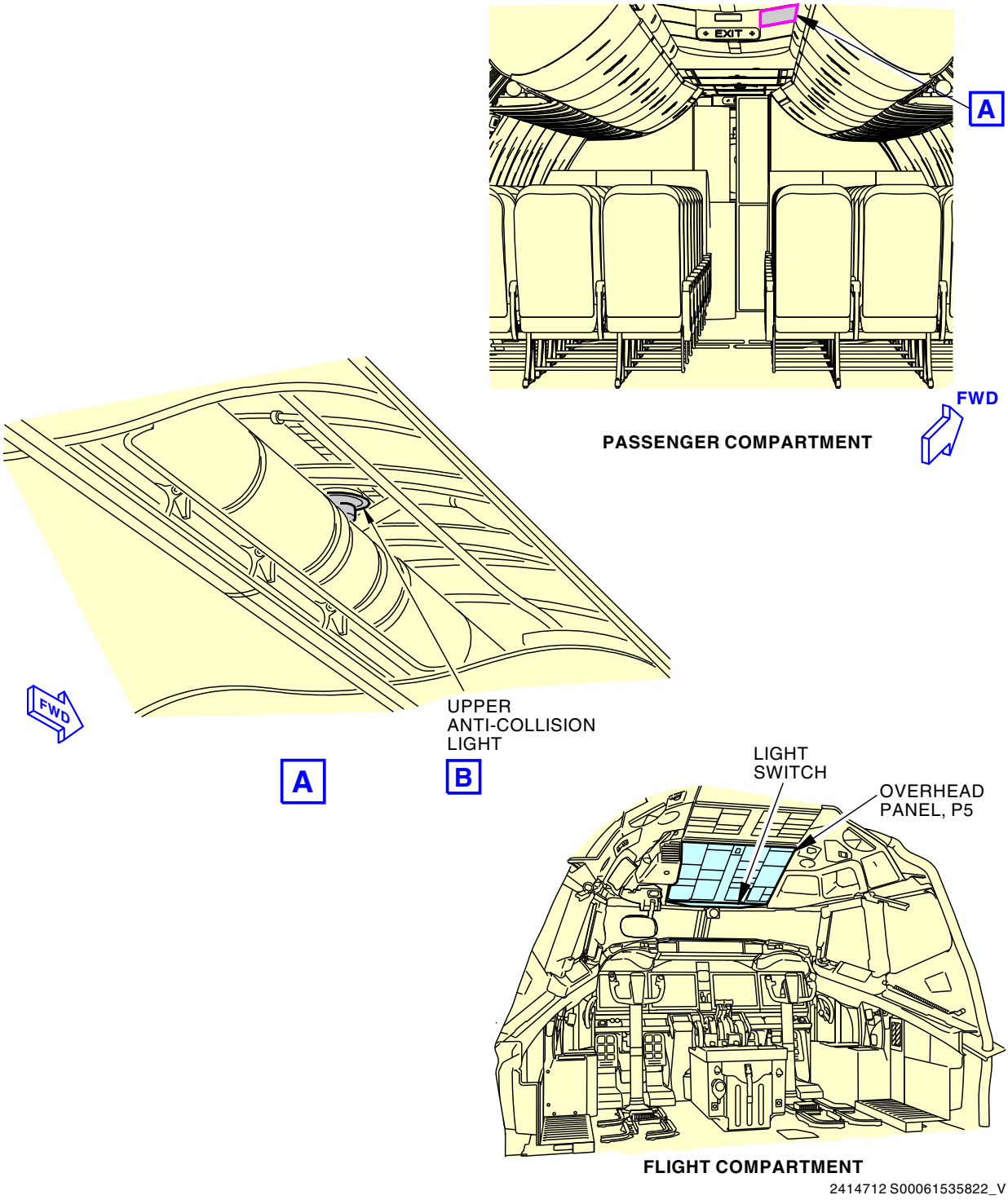
ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

1) Make sure that the upper anti-collision light goes off.

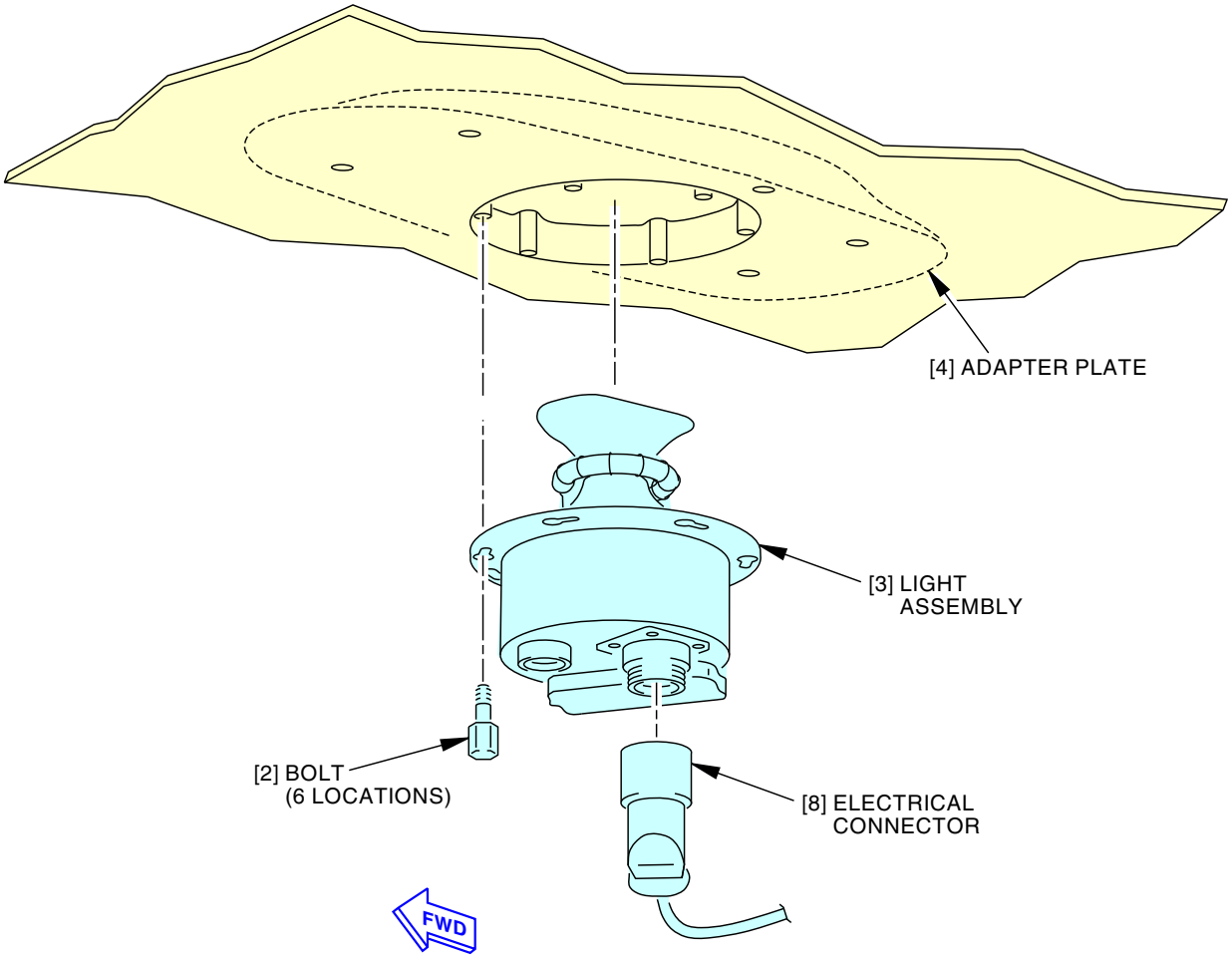
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Upper Anti-Collision Light - Light Assembly Replacement
Figure 202/33-44-01-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



UPPER ANTI-COLLISION LIGHT

B

2414714 S00061535824_V1

Upper Anti-Collision Light - Light Assembly Replacement
Figure 202/33-44-01-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-01-960-807

6. Upper Anti-Collision Light - LED Light Assembly Replacement

(Figure 203)

A. General

(1) This task includes the replacement of the Light Emitting Diode (LED) Upper Anti-Collision Light Assembly as well as its subassemblies (led module [32], driver module [30], and lens retainer [27]).

(2) There are two methods for the replacement of the LED Anti-Collision Light:

(a) Method 1 has the procedures to replace the lens retainer, the LED module, the driver module, and the base plate from outside the airplane.

NOTE: If necessary, use only method 2 to install the pressure cover.

(b) Method 2 has the procedures to replace only the driver module from inside the airplane.

NOTE: The LED module, the driver module can be replaced without replacing the entire Anti-Collision-Light (ACL) assembly.

B. References

Reference	Title
21-23-01-000-801	Overhead Distribution Duct Removal (P/B 201)
21-23-01-400-801	Overhead Distribution Duct Installation (P/B 201)
25-21-45-000-801	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-801	Main Ceiling Panel - Installation (P/B 401)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
A50343	Sealant - PPG Aerospace PR-1772 Class B Low Weight Fuselage Sealant	BMS5-142 Type II Class B
B00130	Alcohol - Isopropyl	TT-I-735

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 015-999 (Continued)

(Continued)

Reference	Description	Specification
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7
C00862	Coating - Chemical Conversion - Bonderite M-CR 600 Aero (Formerly Alodine 600)	BAC5719 Class A, C or D, MIL-DTL-81706 Type I Class 1A or 3
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G50237	Compound - Corrosion Inhibiting, Non-drying - Cor-Ban 27L	BMS3-38
G50316	Cloth - Clean, Dry, Lint-free, White, Cotton	

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
32	Led module	33-44-01-01B-030	SIA 015-999

F. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

G. Prepare for the LED Light Assembly Replacement

CAUTION AVOID ELECTROSTATIC DISCHARGE TO ELECTRICAL INSTRUMENTS OR ADJACENT STRUCTURES. ELECTROSTATIC DISCHARGE WILL CAUSE DAMAGE TO ELECTROSTATIC SENSITIVE DEVICES.

SUBTASK 33-44-01-860-020

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

H. Outside Removal (Method 1)

SUBTASK 33-44-01-020-013

(1) Remove the lens retainer [27] as follows:

(a) Loosen the captive screws [28].

(b) Remove the lens retainer [27].

SUBTASK 33-44-01-020-014

(2) Remove the led module [32] as follows:

(a) If necessary, install the protective cover [29] over the led module [32].

NOTE: The protective cover comes with spare ACL assembly or LED module from the supplier, but any protective container will be acceptable during removal. The cover protects the LED module during removal and installation procedures and should be removed after installation.

(b) Remove the captive screws [34] from the led module [32].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 015-999 (Continued)

(c) Remove led module [32] from the base plate [33].

SUBTASK 33-44-01-020-015

(3) Remove the driver module [30] as follows:

(a) Remove the nuts [37] from the driver module [30].

(b) Remove the driver module [30] from the pressure cover [38].

NOTE: This will also disconnect the driver module from the electrical connector.

SUBTASK 33-44-01-020-016

WARNING

DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THESE MATERIALS. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE THESE MATERIALS. KEEP THESE MATERIALS AWAY FROM SPARKS, FLAME, AND HEAT. THESE MATERIALS ARE POISONOUS AND FLAMMABLE AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Remove the base plate [33] as follows:

I

NOTE: Only do this step if the entire ACL Assembly need to be replaced.

(a) Remove the cover plate [31] from the base plate [33].

(b) Remove the bolts [36] from the base plate [33].

(c) Remove the base plate [33].

(d) Clean the faying surfaces on the aircraft skin and base plate [33] with solvent, B00184, or alcohol, B00130.

(e) Manually apply Bonderite M-CR 600 Aero coating, C00862 to the abraded aircraft skin surface.

I. Outside Installation (Method 1)

SUBTASK 33-44-01-420-009

WARNING

DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THESE MATERIALS. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE THESE MATERIALS. KEEP THESE MATERIALS AWAY FROM SPARKS, FLAME, AND HEAT. THESE MATERIALS ARE POISONOUS AND FLAMMABLE AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(1) Install the base plate [33] as follows:

(a) Do these step to prepare the base plate [33] and the aircraft skin for a sealed electrical faying surface bond (SWPM 20-20-00):

1) Final clean the contact surface of the base plate [33] with a cotton cloth, G50316 or cotton wiper, G00034, soaked in solvent, B00184 or alcohol, B00130.

2) Rub dry with a clean, dry cotton wiper, G00034.

3) Continue to clean and dry the base plate [33] until the dry cotton wiper, G00034, stays clean.

4) Apply sealant, A50231, or PR-1772 Class B Sealant, A50343, to the contact surface of the base plate [33].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 015-999 (Continued)

a) If there is a drain hole on the side of the base plate [33], make sure there is no sealant in it.

(b) Apply sealant, A00247, to the shank and threads of the bolts [36].

(c) Install the base plate [33] on the aircraft skin with the bolts [36].

1) Make sure that the sealant, A00247, is continuously squeezed out along the edges of the base plate [33].

2) If there are gaps, bubbles, or voids in the sealant, A00247, squeezed out, disassemble and apply more sealant, A00247.

3) Shape the squeezed out sealant, A00247, into a fillet seal.

4) If necessary, remove the extra squeezed out sealant, A00247.

5) Make sure that the sealant, A00247, that remains is flush with the mating part edges.

(d) Use an intrinsically safe approved bonding meter, COM-1550, to measure the electrical bonding resistance between the base plate [33] and the aircraft skin (SWPM 20-20-00).

1) Make sure that the bonding resistance is 0.0025 ohm (2.5 milliohm) or less.

SUBTASK 33-44-01-420-010

(2) Install the driver module [30] as follows:

(a) Connect the driver module [30] onto the electrical connector [35].

(b) Secure the driver module [30] onto the pressure cover [38] with three nuts [37].

(c) Tighten the nuts [37] to 6.2 ±0.5 in-lb (0.7 ±0.1 N·m).

SUBTASK 33-44-01-420-011

CAUTION

DO NOT TOUCH THE LED DIRECTLY. IF YOU DO NOT OBEY, DAMAGE TO THE LED CAN OCCUR.

(3) Install the led module [32] as follows:

(a) Install the led module [32] onto the base plate [33] with the captive screws [34].

(b) Tighten the captive screws [34] to 8.0 ±0.5 in-lb (0.90 ±0.06 N·m).

(c) Use an intrinsically safe approved bonding meter, COM-1550, to measure the electrical bonding between the led module [32] and the base plate [33].

1) Make sure that the resistance is 0.0025 ohm (2.5 milliohm) or less.

SUBTASK 33-44-01-420-012

(4) Install the lens retainer [27] as follows:

(a) If installed, remove the protective cover [29].

(b) Install the lens retainer [27] on the base plate [33] using the captive screws [28].

(c) Tighten the captive screws [28] to 8.0 ±0.5 in-lb (0.90 ±0.06 N·m).

J. Inside Removal (Method 2)

NOTE: This method should be used if only the driver module needs to be replaced.

SUBTASK 33-44-01-010-007

(1) Remove the driver module [30] as follows:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 015-999 (Continued)

(a) Do these steps to get access to the ACL assembly from inside the plane:

1) Remove the ceiling panel (TASK 25-21-45-000-801).

2) Remove the overhead distribution duct (TASK 21-23-01-000-801).

(b) Remove the screws [39].

(c) Disconnect the driver module [30] and the pressure cover [38] from the base plate [33].

(d) Remove the nuts [37].

(e) Disconnect the driver module [30] from the pressure cover [38] and the electrical connector [35].

K. Inside Installation (Method 2)

SUBTASK 33-44-01-420-013

(1) Install the driver module [30] as follows:

(a) Install the driver module [30] onto the pressure cover [38] with the three nuts [37].

(b) Tighten the nuts [37] to 6.2 ±0.5 in-lb (0.70 ±0.06 N·m).

(c) Install the pressure cover [38] on the base plate [33] with the screws [39].

1) Apply Cor-Ban 27L Compound, G50237, to the mating surface of the pressure cover [38] and the base plate [33].

(d) Tighten the screws [39] to 6.2 ±0.5 in-lb (0.70 ±0.06 N·m).

L. Put the Airplane Back to its Usual Condition

SUBTASK 33-44-01-420-016

(1) Do this task: Upper Anti-Collision Light Activation, TASK 33-44-01-440-801.

SUBTASK 33-44-01-410-004

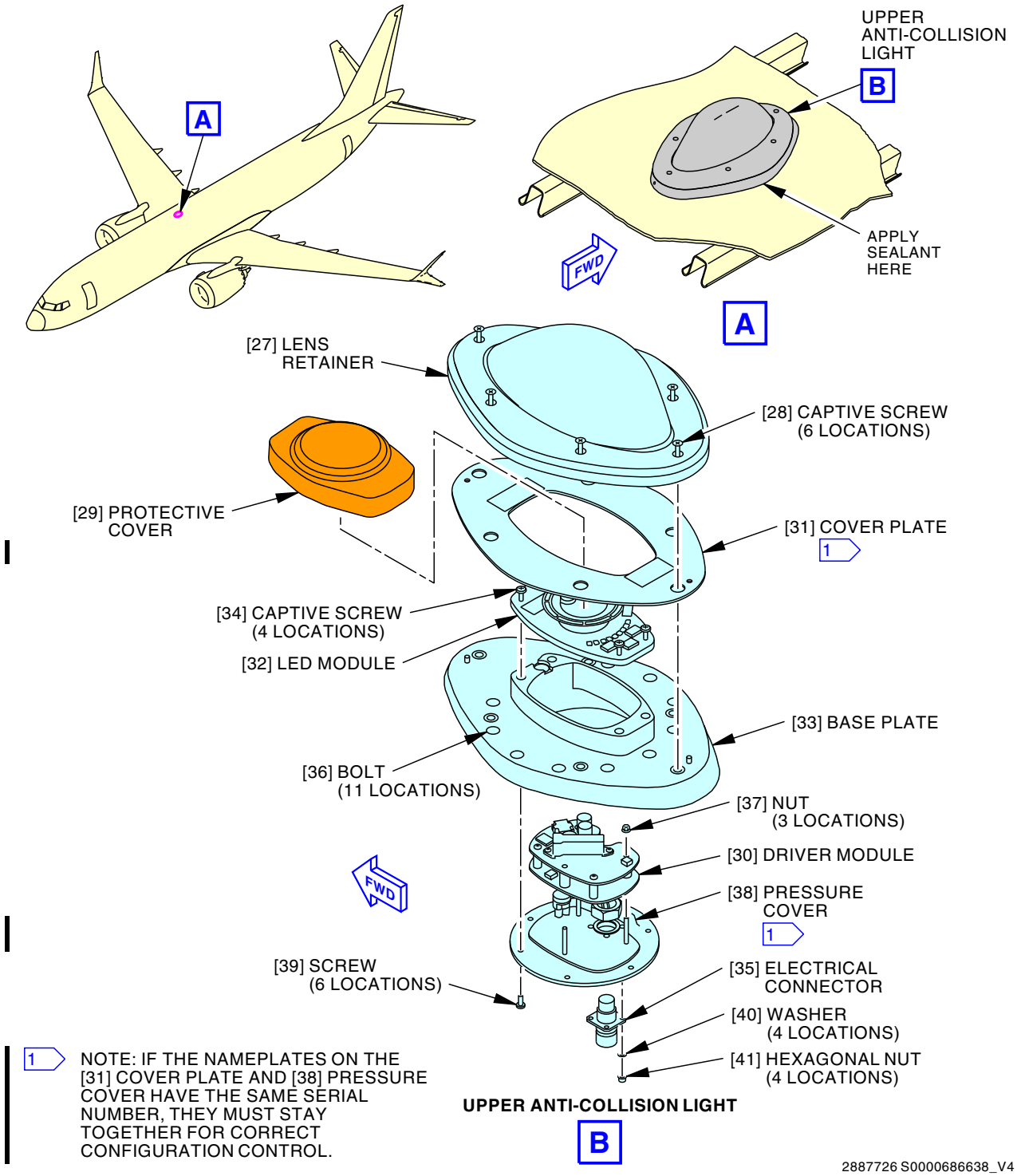
(2) If necessary, reinstall the ceiling panel (TASK 25-21-45-400-801).

SUBTASK 33-44-01-410-005

(3) If necessary, reinstall the overhead distribution duct (TASK 21-23-01-400-801).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Upper Anti-Collision Light - LED Light Assembly Replacement
Figure 203/33-44-01-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014

TASK 33-44-01-960-805

7. Upper Anti-Collision Light Lens Replacement

(Figure 204)

A. References

Reference	Title
51-21-21-100-801	Clean the Surface to be Painted (P/B 701)
51-21-41-370-801	Apply Bonderite M-CR 1001 Aero Solution (P/B 701)
51-21-41-370-804	BMS10-128 Coating Application (P/B 701)
51-22-00-390-804	Injection Seal Application (P/B 201)

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
C00064	Coating - Aluminum Chemical Conversion	BAC5719 Type II Class A (MIL-DTL-5541 Class 1A)
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G50365	Agent - Peelable Parting (AC Products - AC962-73C) Production discontinued, use stock until depleted.	BAC5000
G50367	Agent - Peelable Parting (Aztec Chemical AZ 634-2)	MIL-PRF-6799, BAC5000
G50368	Agent - Peelable Parting (Rexco Chemical Company - Partall Coverall Film)	BAC5000

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
7	Lens	33-44-01-01A-095	SIA 001-014

D. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

E. Procedure

SUBTASK 33-44-01-010-004

(1) For access to the lens [7], go out of the airplane, on top of the fuselage.

SUBTASK 33-44-01-960-003

(2) Do these steps to replace the lens [7]:

(a) Loosen the screws [9] and lift off the lens [7].

(b) Clean the surface that is left exposed by the light assembly (TASK 51-21-21-100-801).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

(c) If you change the aerodynamic light assembly to the non-aerodynamic light assembly, then do these steps:

NOTE: Make sure that to replace all components, including lens, adapter plate, lamp assembly, and power supply.

1) Apply coating, C00064, to the exposed surface (TASK 51-21-41-370-804).

2) Apply paint to the exposed surface (TASK 51-21-41-370-801).

(d) If you change the non-aerodynamic light assembly to the aerodynamic light assembly, do the following steps:

NOTE: Make sure that to replace all components, including lens, adapter plate, lamp assembly, and power supply.

1) Apply AC962-73C peelable parting agent, G50365, AZ 634-2 peelable parting agent, G50367, or Rexco Partall Coverall Film peelable parting agent, G50368 to the panel.

2) Apply an injection seal of sealant, A00247, to the gap between the panels above the light assembly (TASK 51-22-00-390-804).

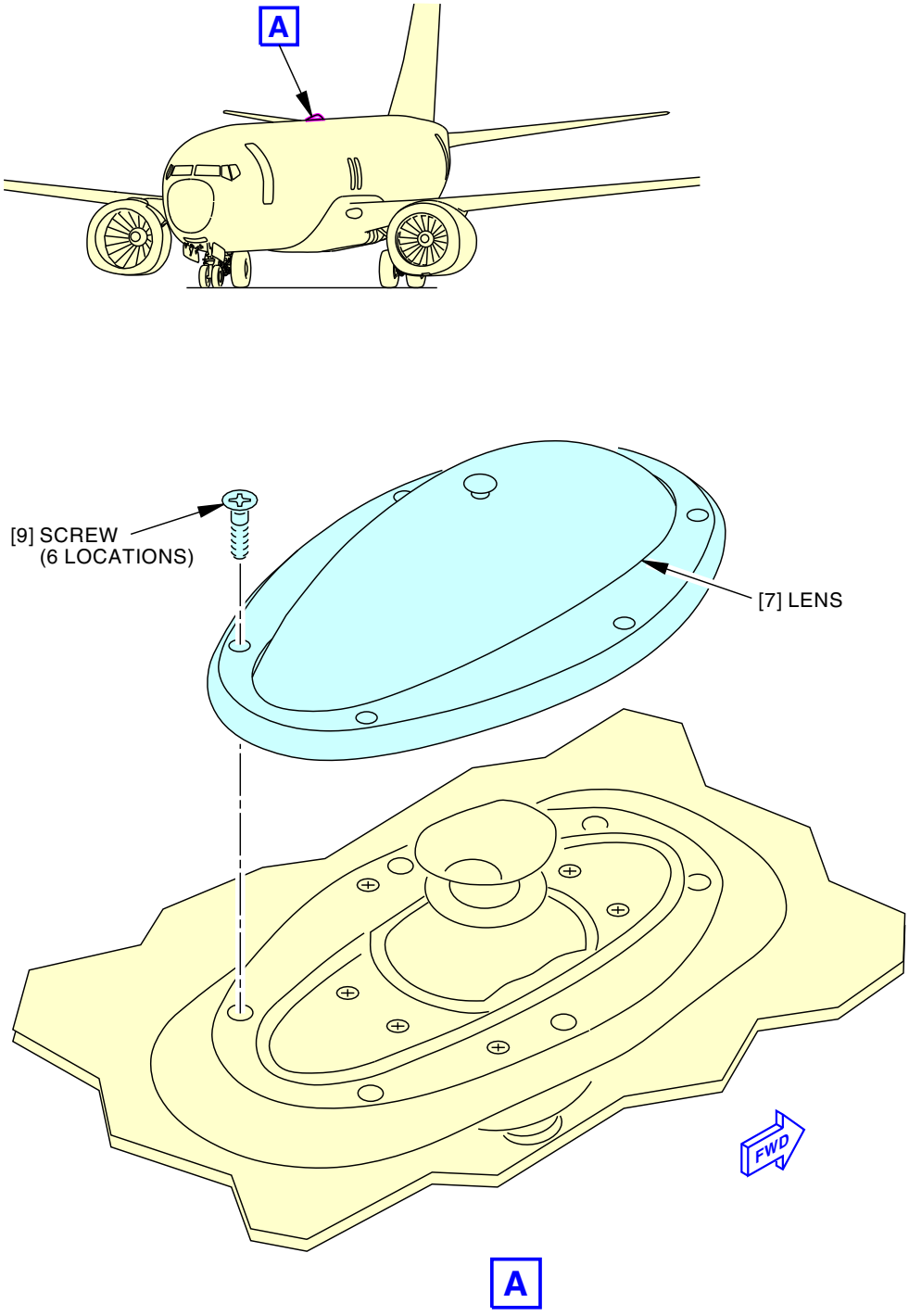
NOTE: Only apply sealant, A00247, to the part of the gap that the light assembly mounting base covers.

(e) If the new lens [7] is dirty, clean it with a clean, soft, dry cotton wiper, G00034.

(f) Put on the new lens [7] and tighten the screws [9].

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2414716 S00061535827_V2

Upper Anti-Collision Light Lens Replacement
Figure 204/33-44-01-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

TASK 33-44-01-960-802

8. Upper Anti-Collision Light - Power Supply Replacement

(Figure 205)

A. References

Reference	Title
25-21-45-000-801	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-801	Main Ceiling Panel - Installation (P/B 401)
25-24-31-000-801	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-000-802	Overhead Stowage Bin Module - Removal (P/B 401)
25-24-31-400-801	Overhead Stowage Bin - Installation (P/B 401)
25-24-31-400-802	Overhead Stowage Bin Module - Installation (P/B 401)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
WDM 33-44-11	D000534507

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Consumable Materials

Reference	Description	Specification
A50110	Sealant - Fuel Tank	BMS5-45 Class B-2
A50155	Sealant - Fuel Tank	BMS5-45 Class C
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
A50296	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class C
C00064	Coating - Aluminum Chemical Conversion	BAC5719 Type II Class A (MIL-DTL-5541 Class 1A)
C00259	Coating - Chemical And Solvent Resistant Finish, Corrosion Inhibiting Primer	BMS10-11 Type I
G50961	Coating - Corrosion Inhibiting Epoxy Primer - (BAC 377 Yellow Color)	BMS10-11 Type I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
12	Power supply	33-44-01-01A-105	SIA 001-014

E. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

F. Procedure

SUBTASK 33-44-01-860-005

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-01-010-002

(2) Do this task: Main Ceiling Panel - Removal, TASK 25-21-45-000-801.

NOTE: The power supply is installed to the right side of the anti-collision light and above overhead stowage bin.

SUBTASK 33-44-01-010-005

(3) Do this task: Overhead Stowage Bin Module - Removal, TASK 25-24-31-000-802 or Overhead Stowage Bin - Removal, TASK 25-24-31-000-801.

SUBTASK 33-44-01-960-002



WARNING DO NOT TOUCH THE POWER SUPPLY FOR THREE MINUTES AFTER YOU REMOVE ELECTRICAL POWER. AN ELECTRICAL SHOCK CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT

(4) Do these steps to replace the power supply [12] (WDM 33-44-11):

NOTE: Do not discard the power supply. Usually, you can repair it with a new capacitor assembly. Do the repairs in a shop.

(a) Disconnect the electrical connectors [10].

(b) Loosen the fasteners [11] on the power supply.

(c) Remove the power supply [12].

(d) Clean the fay surfaces of the support bracket and power supply with abrasive (SWPM 20-20-00).

(e) Apply a thin layer of sealant, A50155, sealant, A50110, sealant, A50231, or sealant, A50296 to the fay surfaces on the bracket and the new power supply.

(f) Install the new power supply [12].

(g) Tighten the fasteners [11].

(h) Connect the electrical connectors [10].

(i) Measure the electrical bonding resistance, using an intrinsically safe approved bonding meter, COM-1550, between the power supply [12] and the fuselage (SWPM 20-20-00).

1) Make sure that the bonding resistance is 0.0025 ohm (2.5 milliohms) or less.

(j) Refinish the metal surfaces:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

1) Apply a layer of coating, C00064 to the abraded surfaces of the support bracket and power supply.
2) Apply a layer of primer, C00259 or coating, G50961 to the abraded surfaces of the support bracket and power supply.

SUBTASK 33-44-01-410-003

(5) Do this task: Overhead Stowage Bin - Installation, TASK 25-24-31-400-801 or Overhead Stowage Bin Module - Installation, TASK 25-24-31-400-802.

SUBTASK 33-44-01-410-002

(6) Do this task: Main Ceiling Panel - Installation, TASK 25-21-45-400-801.

SUBTASK 33-44-01-860-006

(7) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

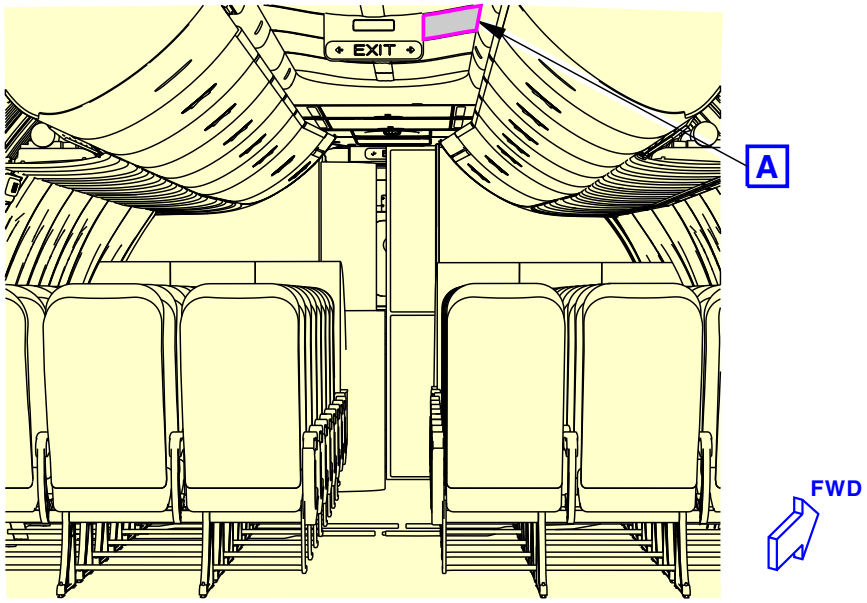
Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-01-710-002

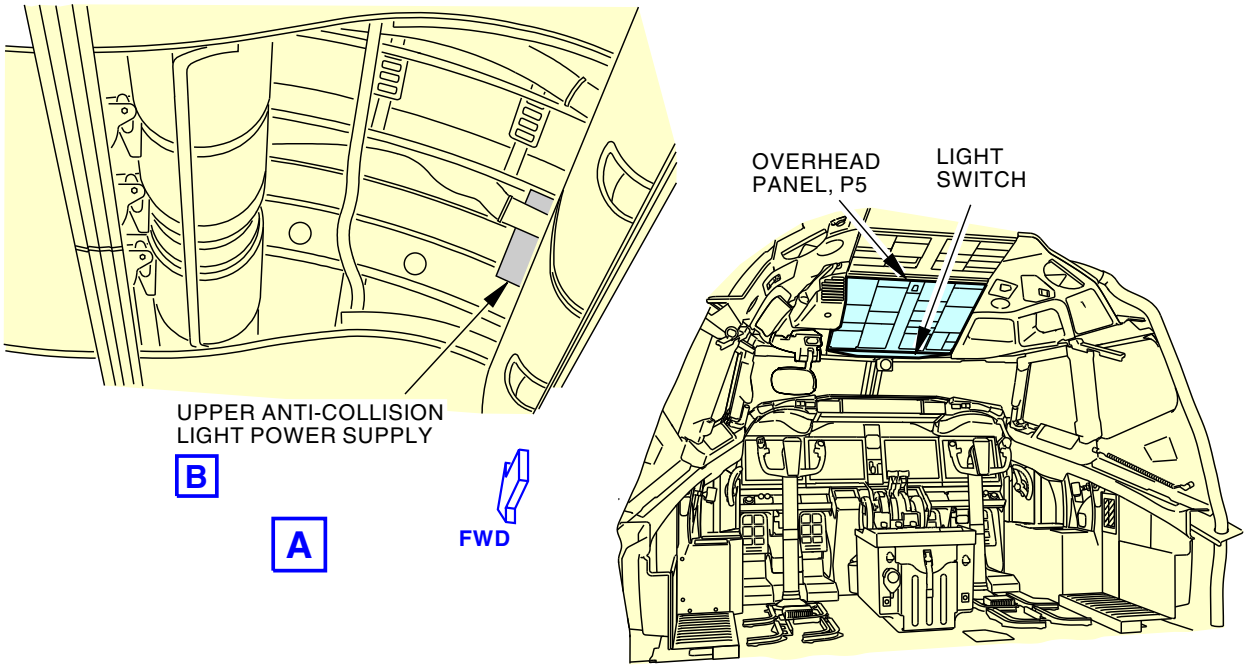
(8) Do a test of the new power supply [12].
   (a) At the overhead panel, P5, set the ANTI COLLISION switch for the upper anti-collision light to ON position.
      1) Make sure that the upper anti-collision light flashes (TASK 33-44-00-710-801).
   (b) Set the ANTI COLLISION switch to OFF position.
      1) Make sure that the upper anti-collision light goes off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



PASSENGER COMPARTMENT

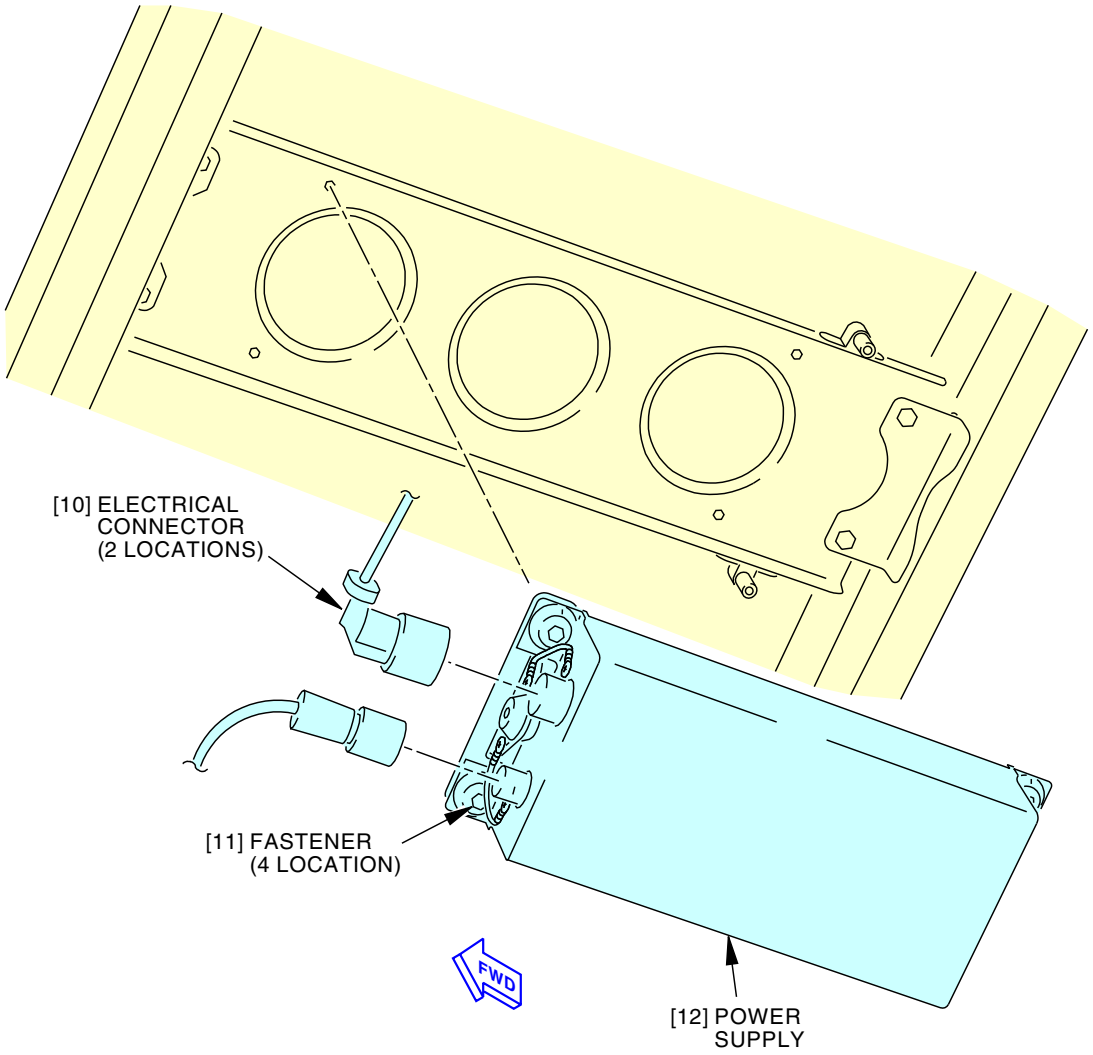


FLIGHT COMPARTMENT

2414717 S00061535829_V1

Upper Anti-Collision Light - Power Supply Replacement
Figure 205/33-44-01-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



UPPER ANTI-COLLISION LIGHT POWER SUPPLY

B

2414718 S00061535830_V1

Upper Anti-Collision Light - Power Supply Replacement
Figure 205/33-44-01-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

TASK 33-44-01-960-803

9. Upper Anti-Collision Light - Adapter Plate Replacement

(Figure 202, Figure 204, Figure 206)

A. General

(1) This task removes and installs the adapter plate for the upper anti-collision light.

(2) The upper anti-collision adapter plate will be referred to as the adapter plate.

B. References

Reference	Title
21-23-01-000-801	Overhead Distribution Duct Removal (P/B 201)
24-22-00-860-801	Supply Electrical Power (P/B 201)
25-21-45-000-801	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-801	Main Ceiling Panel - Installation (P/B 401)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659
STD-297	Drill - Hand
STD-1328	Machine - Drilling, Electrical or Pneumatic

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
A50337	Sealant - Fuel Tank	BMS5-45 Class B
A50343	Sealant - PPG Aerospace PR-1772 Class B Low Weight Fuselage Sealant	BMS5-142 Type II Class B
B00130	Alcohol - Isopropyl	TT-I-735
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7
C00862	Coating - Chemical Conversion - Bonderite M-CR 600 Aero (Formerly Alodine 600)	BAC5719 Class A, C or D, MIL-DTL-81706 Type I Class 1A or 3

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

(Continued)

Reference	Description	Specification
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

E. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

F. Prepare for the Removal

SUBTASK 33-44-01-860-009

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-01-010-003

(2) Do one of the steps below to get access to the adapter plate [4] (Figure 202):

NOTE: The overhead distribution duct is installed below and near the upper anti-collision light, which makes the adapter plate removal difficult.

(a) To remove the ceiling panel only, do this task: Main Ceiling Panel - Removal, TASK 25-21-45-000-801.

(b) To remove the ceiling panel and the section of the duct below the light, do this task: Overhead Distribution Duct Removal, TASK 21-23-01-000-801.

G. Procedure

SUBTASK 33-44-01-020-001

(1) Do these steps to remove the upper anti-collision light assembly [3] (Figure 202):

(a) Disconnect the electrical connector [8].

(b) Remove the bolts [2] on the bottom of the light assembly [3].

(c) Turn the light assembly [3] clockwise and pull it down from the adapter plate [4].

SUBTASK 33-44-01-020-002

(2) Do these steps to remove the upper anti-collision light lens [7] (Figure 204):

(a) For access to the lens [7], go out of the airplane, on top of the fuselage.

(b) Loosen the screws [9] and lift off the lens [7].

SUBTASK 33-44-01-020-003

(3) Remove the screws [13] from the gasket [14], on top of the fuselage (Figure 206).

SUBTASK 33-44-01-020-004

(4) Remove the bolts [15] from the adapter plate [4], on top of the fuselage (Figure 206).

(a) Remove the adapter plate [4].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

SUBTASK 33-44-01-120-001

WARNING

DO NOT GET SOLVENTS IN YOUR MOUTH, YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE DANGEROUS MATERIALS. SOLVENTS CAN BE FLAMMABLE. OBEY THE MATERIAL SAFETY DATA SHEETS (MSDS) FOR SOLVENTS. OBEY LOCAL REGULATIONS FOR THE CORRECT PROCEDURES TO USE OR DISCARD SOLVENTS. SOLVENTS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(5) Clean the following faying surfaces with solvent, B00184 or alcohol, B00130:

(a) aircraft skin

(b) adapter plate [4]

(c) gasket [14].

SUBTASK 33-44-01-910-001

(6) Manually apply Bonderite M-CR 600 Aero coating, C00862, to the abraded aircraft skin surface.

SUBTASK 33-44-01-320-001

(7) If you replace the adapter plate [4], then do these steps to back drill the new adapter plate [4] off-aircraft:

NOTE: You must drill the adapter plate off-aircraft.

(a) Use a hand drill, STD-297, or electrical or pneumatic drilling machine, STD-1328, and drill bit to back drill 12 holes to a diameter of 0.187 in. (0.475 cm) to 0.19 in. (0.48 cm).

NOTE: Use the 12 pilot holes in the adapter plate as a template.

(b) Increase the diameter of the pilot holes by hand countersinking the 12 holes to a diameter of 0.2966 in. (0.7534 cm) to 0.3116 in. (0.7915 cm) x 100 degrees.

SUBTASK 33-44-01-390-001

(8) Do these steps to prepare the adapter plate [4] and the aircraft skin for a sealed electrical faying surface bond (SWPM 20-20-00):

WARNING

DO NOT GET SOLVENTS IN YOUR MOUTH, YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE DANGEROUS MATERIALS. SOLVENTS CAN BE FLAMMABLE. OBEY THE MATERIAL SAFETY DATA SHEETS (MSDS) FOR SOLVENTS. OBEY LOCAL REGULATIONS FOR THE CORRECT PROCEDURES TO USE OR DISCARD SOLVENTS. SOLVENTS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(a) Final clean the contact surface of the adapter plate [4] with a cotton wiper, G00034, soaked with solvent, B00184 or alcohol, B00130.

(b) Rub dry with a clean, dry cotton wiper, G00034.

(c) Continue to clean and dry the adapter plate [4] surface until the dry cotton wiper, G00034, stays clean.

(d) Apply sealant to the contact surface of the adapter plate [4].

1) Use sealant, A50337, sealant, A50231, or PR-1772 Class B Sealant, A50343, for the faying surface seal.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

SUBTASK 33-44-01-390-002

(9) Apply sealant, A00247, to the shank and threads of the twelve bolts [15].

SUBTASK 33-44-01-420-001

(10) Install the adapter plate [4] on the aircraft skin using the twelve bolts [15].

(a) Make sure that the sealant is continuously squeezed out along the edges of the adapter plate [4].

(b) If there are gaps, bubbles, or voids in the sealant squeeze out, then disassemble and apply more sealant.

(c) Shape the squeezed out sealant into a fillet seal.

(d) As an option, remove the extra squeezed out sealant.

NOTE: Make sure that the sealant that remains is flush with the mating part edges.

SUBTASK 33-44-01-760-001

(11) Measure the electrical bonding resistance, using an intrinsically safe approved bonding meter, COM-1550, between the adapter plate [4] and the aircraft skin (SWPM 20-20-00).

(a) Make sure that the bonding resistance is 0.0005 ohm (0.5 milliohm) or less.

SUBTASK 33-44-01-420-002

(12) Install the gasket [14] on the adapter plate [4] and tighten the screws [13] to a torque of 10 ±1 in-lb (1 ±0 N·m).

SUBTASK 33-44-01-420-003

(13) Install the lens [7] on the adapter plate [4] and tighten the screws [9].

(a) If the lens [7] is dirty, clean it with a clean, dry cotton wiper, G00034.

SUBTASK 33-44-01-420-004

(14) Do these steps to install the upper anti-collision light assembly [3]:

(a) Put the light assembly [3] in the adapter plate [4] and turn it counterclockwise.

(b) Install the bolts [2] and tighten to a torque of 10 ±1 in-lb (1 ±0 N·m).

(c) Connect the electrical connector [8].

(d) Measure the electrical bonding resistance, using an intrinsically safe approved bonding meter, COM-1550, between the light assembly [3] and the adapter plate [4] (SWPM 20-20-00).

1) Make sure that the bonding resistance is 0.0015 ohm (1.5 milliohms) or less.

SUBTASK 33-44-01-860-010

(15) If necessary, supply electrical power (TASK 24-22-00-860-801).

SUBTASK 33-44-01-710-003

(16) Do a test of the light assembly [3]:

(a) At the P5 overhead panel, set the ANTI COLLISION switch for the upper anti-collision light to ON position.

1) Make sure that the upper anti-collision light flashes (TASK 33-44-00-710-801).

(b) Set the ANTI COLLISION switch to OFF position.

1) Make sure that the upper anti-collision light goes off.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

H. Put the Airplane Back to Its Usual Condition

SUBTASK 33-44-01-420-005

(1) Do these steps to install the items that were removed for access to the adapter plate [4]:

(a) To install the ceiling panel only, do this task: Main Ceiling Panel - Installation, TASK 25-21-45-400-801.

(b) To install the ceiling panel and the section of the duct below the light, do this task: Overhead Distribution Duct Removal, TASK 21-23-01-000-801.

SUBTASK 33-44-01-860-011

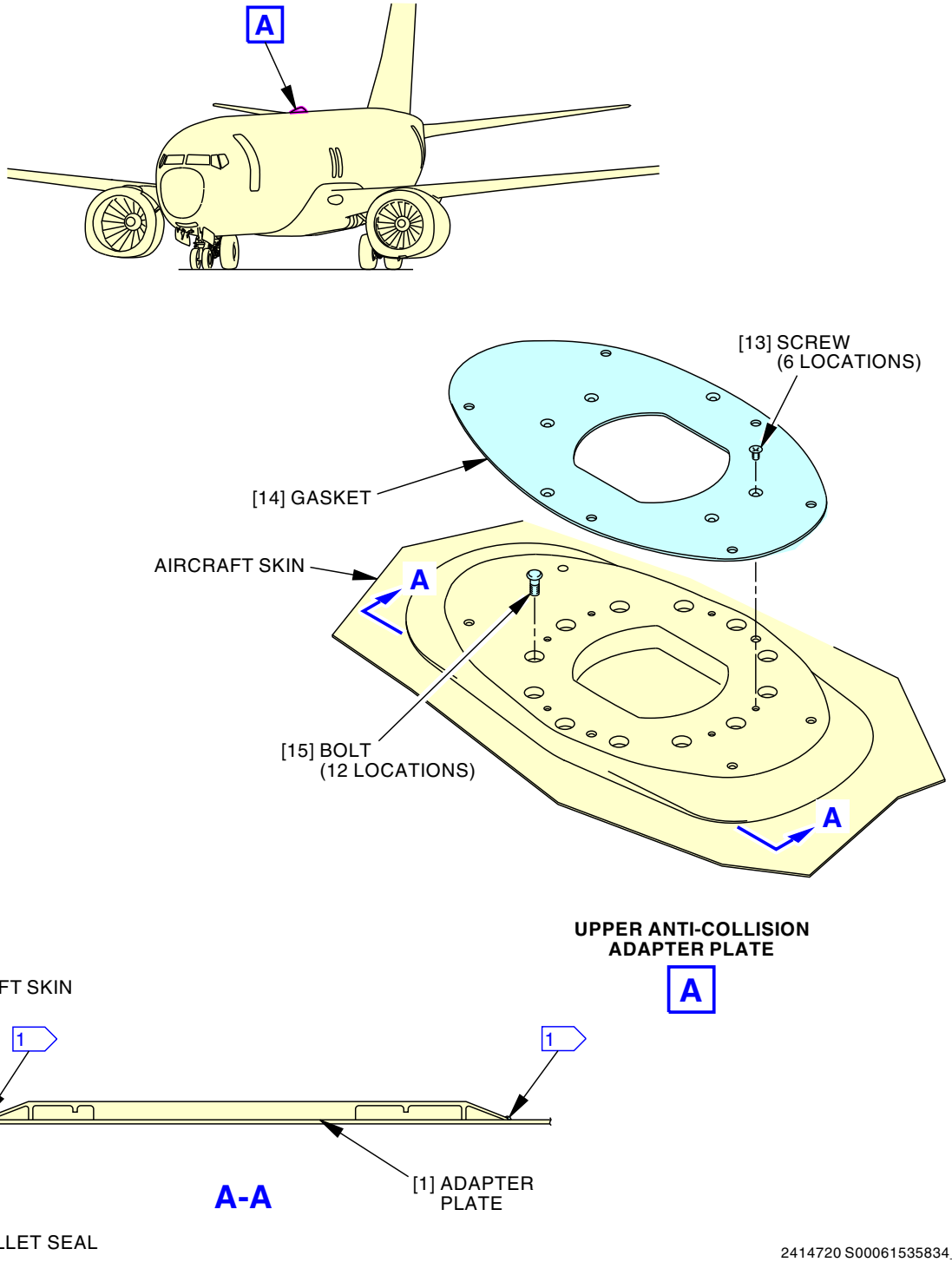
(2) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Upper Anti-Collision Light - Adapter Plate Replacement
Figure 206/33-44-01-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOWER ANTI-COLLISION LIGHT - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) A deactivation of the lower anti-collision light

(2) An activation of the lower anti-collision light

SIA 001-014

(3) A replacement of the lower anti-collision light - light assembly

(4) A replacement of the lower anti-collision light lamp assembly

SIA 015-999

(5) A replacement of the lower anti-collision light - LED light assembly

SIA 001-014

(6) A replacement of the lower anti-collision light lens

(7) A replacement of the lower anti-collision light power supply.

SIA ALL

TASK 33-44-02-040-801

2. Lower Anti-Collision Light Deactivation

A. General

(1) This procedure removes electrical power from the lower anti-collision light.

B. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

C. Procedure

SUBTASK 33-44-02-860-013

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

D. Lower Anti-Collision Light Deactivation Test

NOTE: This test is to make sure that the lower anti-collision light is in a zero energy condition.

SUBTASK 33-44-02-200-001

(1) Do these steps to make sure that the power is off:

(a) On the P5 overhead panel, set the ANTI COLLISION switch for the lower anti-collision light to ON.

1) Make sure that the lower anti-collision light stays off.

(b) Set the ANTI COLLISION switch for the lower anti-collision light to OFF.

1) Make sure that the lower anti-collision light stays off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-02-440-801

3. Lower Anti-Collision Light Activation

A. General

(1) This procedure supplies electrical power to the lower anti-collision light.

B. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

C. Procedure

SUBTASK 33-44-02-860-014

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

D. Lower Anti-Collision Light Activation Test

NOTE: This test is to make sure that the lower anti-collision light operates.

SUBTASK 33-44-02-710-004

(1) Do these steps to make sure that the power is on:

(a) On the P5 overhead panel, set the ANTI COLLISION switch for the lower anti-collision light to ON.

1) Make sure that the lower anti-collision light comes on.

(b) Set the ANTI COLLISION switch for the lower anti-collision light to OFF.

1) Make sure that the lower anti-collision light goes off.

——— END OF TASK ———

SIA 001-014

TASK 33-44-02-960-802

4. Lower Anti-Collision Light - Light Assembly Replacement

(Figure 201)

A. References

Reference	Title
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
51-21-21-100-801	Clean the Surface to be Painted (P/B 701)
51-21-41-370-802	Apply Bonderite M-CR 600, Bonderite M-CR 1200, Bonderite M-CR 600RTU, or Bonderite M-CR 1200S Solution (P/B 701)
51-21-99-300-801	Decorative Exterior Paint System Application (P/B 701)
51-22-00-390-804	Injection Seal Application (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
WDM 33-44-11	D000534507

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
B00130	Alcohol - Isopropyl	TT-I-735
C00064	Coating - Aluminum Chemical Conversion	BAC5719 Type II Class A (MIL-DTL-5541 Class 1A)
C00528	Compound - Corrosion Preventive, Petroleum Hot Application (Soft Film)	MIL-C-11796 Class III
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G50365	Agent - Peelable Parting (AC Products - AC962-73C) Production discontinued, use stock until depleted.	BAC5000
G50367	Agent - Peelable Parting (Aztec Chemical AZ 634-2)	MIL-PRF-6799, BAC5000
G50368	Agent - Peelable Parting (Rexco Chemical Company - Partall Coverall Film)	BAC5000

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
6	Light assembly	33-44-02-01A-090	SIA 001-014

E. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

F. Prepare for the Replacement

SUBTASK 33-44-02-860-024

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

G. Lower Anti-Collision Light Assembly Replacement

SUBTASK 33-44-02-960-001

(1) Do these steps to replace the light assembly [6] (WDM 33-44-11):

NOTE: Do not discard the light assembly. Refer to the vendor manual for possible repairs. Do the repairs in a shop.

(a) Remove the captive screws [1] and spacers [15] to remove the lens [2].

(b) Remove the bolts [5].

(c) Pull down the light assembly [6].

(d) Disconnect the electrical connector [7].

(e) Remove the nut [8] and washer [9].

(f) Lift off the grounding wire [10].

(g) Clean the surface that is left exposed by the light assembly [6] (TASK 51-21-21-100-801).

(h) If the aerodynamic light assembly [6] is changed to the non-aerodynamic light assembly [6], do these steps:

1) Apply coating, C00064, to the exposed surface (TASK 51-21-41-370-802).

2) Apply paint to the exposed surface (TASK 51-21-99-300-801).

(i) If the non-aerodynamic light assembly [6] is changed to the aerodynamic light assembly [6], do these steps:

1) Apply AC962-73C peelable parting agent, G50365, AZ 634-2 peelable parting agent, G50367, or Rexco Partall Coverall Film peelable parting agent, G50368, to the panel.

2) Apply an injection seal of sealant, A00247, to the gap between the panels above the light assembly [6] (TASK 51-22-00-390-804).

NOTE: Only apply sealant, A00247, to the part of the gap that the light assembly mounting base covers.

(j) If it is necessary, remove the lens [2] from the new light assembly [6].

1) Loosen the captive screws [1].

2) Remove the spacers [15].

3) Remove the lens [2].

NOTE: Do not touch the light assembly lamp or reflector.

4) Keep the captive screws [1] for the installation.

(k) Connect the grounding wire [10] to the new light assembly [6]:

1) Install the washer [9] and nut [8] to connect the grounding wire [10].

(l) Connect the electrical connector [7] to the new light assembly [6].

(m) Measure the electrical resistance between the light assembly [6] and airplane structure (SWPM 20-20-00).

1) Use an intrinsically safe approved bonding meter, COM-1550.

2) Make sure that the resistance is 0.0015 ohm (1.5 milliohms) or less.

(n) Apply AC962-73C peelable parting agent, G50365, AZ 634-2 peelable parting agent, G50367, or Rexco Partall Coverall Film peelable parting agent, G50368, to the panel.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

(o) Apply sealant, A00247, to the fay surface area on the aft side of the light assembly [6] mounting base.

NOTE: The sealant, A00247, must not extend 0.75 in. (1.90 cm) forward of and parallel to the gap between the panels.

1) Apply enough sealant, A00247, to fill the entire gap between the light assembly [6] mounting base and panels.

a) Make sure that the drain hole, adjacent to the light assembly [6], is clear of all sealant.

(p) Put the light assembly [6] in the opening.

NOTE: A light assembly with an arrow must be installed with the arrow pointed in the correct direction.

(q) Install the bolts [5] with corrosion-preventative compound, C00528.

(r) Apply the aerosmoother sealant, A00247, around the base of the light assembly [6].

(s) Apply a filet seal of sealant, A00247, around the base of the light assembly [6].

1) Make sure that the drain hole, adjacent to the light assembly [6], is clear of all sealant.

(t) Do the following steps to install the lens [2]:

1) Use a clean cotton wiper, G00034, soaked with alcohol, B00130, to clean the mating surfaces of the light assembly [6] base.

2) Install the captive screws [1] and spacers [15].

3) Tighten the captive screws [1] to 20 ±1 in-lb (2 ±0 N·m) to install the lens [2].

NOTE: It is acceptable to tighten the captive screws to 10 ±1 in-lb (1 ±0 N·m) if they fully engage at this value.

(u) If the plug [41] is installed on the bottom of the lens [2], remove and discard the plug [41].

(v) Make sure that the grommet [42] is not removed.

NOTE: The opening of the grommet becomes a drain hole.

(w) If the lens [2] is dirty, clean it with a clean, soft, dry cotton wiper, G00034.

H. Lower Anti-Collision Light - Light Assembly Test

SUBTASK 33-44-02-860-025

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-02-710-001

(2) Do a test of the new light assembly [6]:

(a) On the P5 overhead panel, set the ANTI COLLISION switch for the lower anti-collision light to the ON position.

1) Make sure that the lower anti-collision light flashes (TASK 33-44-00-710-801).

(b) Set the ANTI COLLISION switch to the OFF position.

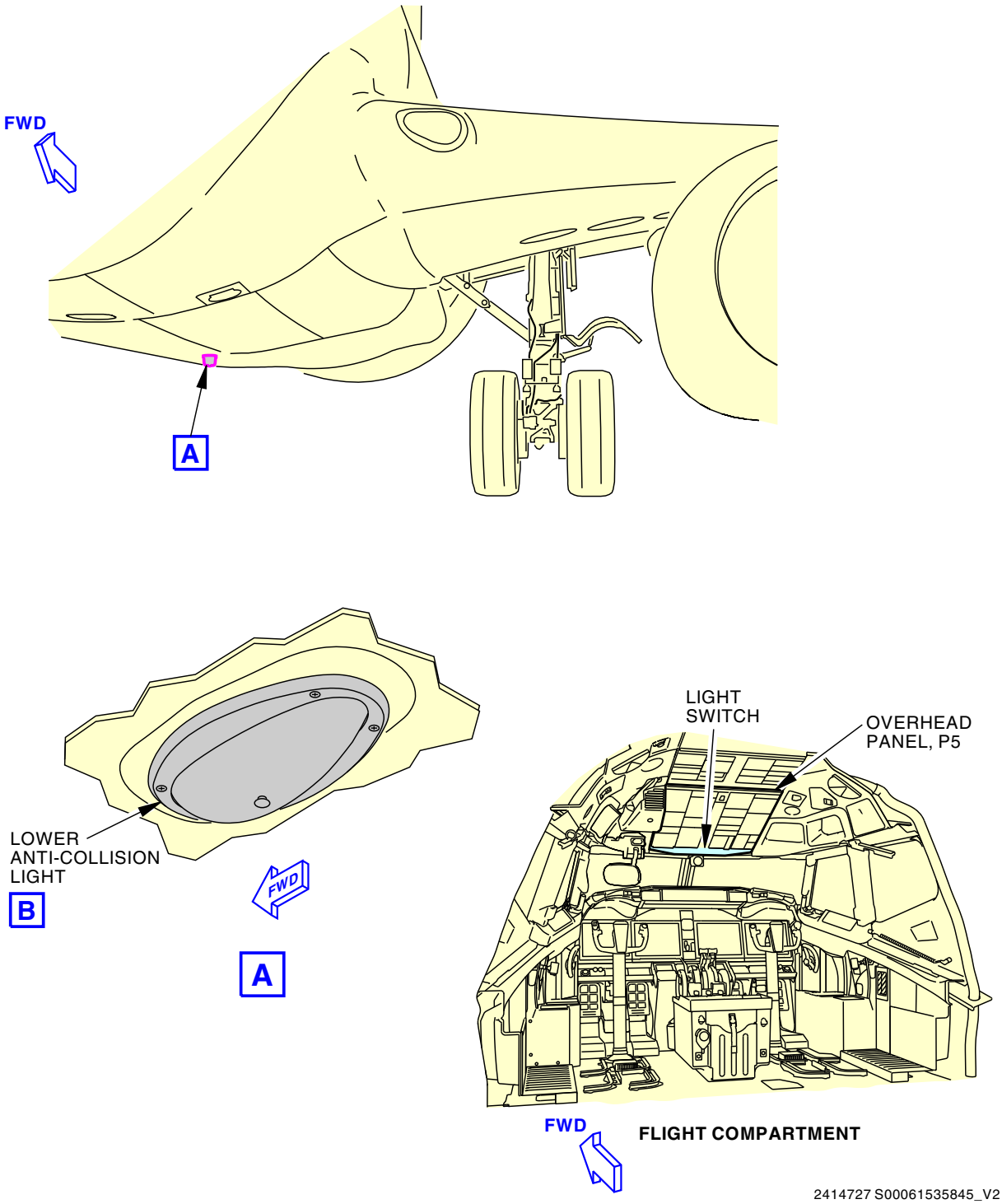
ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

1) Make sure that the lower anti-collision light goes off.

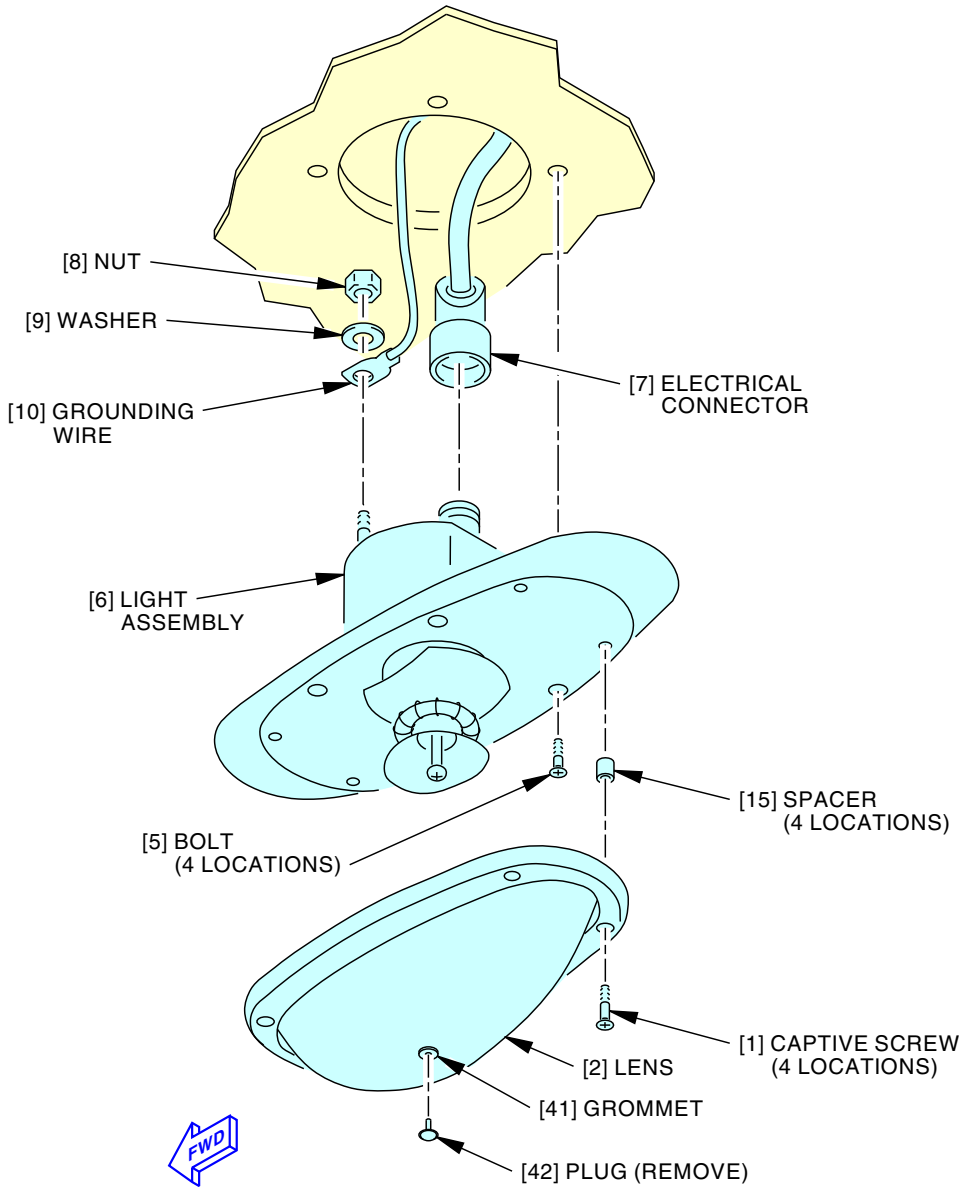
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lower Anti-Collision Light - Light Assembly Replacement
Figure 201/33-44-02-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LOWER ANTI-COLLISION LIGHT

B

2414728 S00061535846_V5

Lower Anti-Collision Light - Light Assembly Replacement
Figure 201/33-44-02-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

TASK 33-44-02-960-805

5. Lower Anti-Collision Light Lamp Assembly Replacement

(Figure 202)

A. General

(1) The lamp assembly in this task is also referred to as a reflector assembly by the vendor.

B. References

Reference	Title
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
WDM 33-44-11	D000534507

C. Consumable Materials

Reference	Description	Specification
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
4	Lamp assembly	33-44-02-01A-090	SIA 001-014

E. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

F. Prepare for the Replacement

SUBTASK 33-44-02-860-026

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

G. Lower Anti-Collision Light Lamp Assembly Replacement

SUBTASK 33-44-02-960-005

(1) Do these steps to replace the lamp assembly [4] (WDM 33-44-11):

NOTE: Do not discard the lamp assembly. Refer to the vendor manual for possible repairs. Do the repairs in a shop.

(a) Remove the captive screws [1] and spacers [15].

1) Lift away the lens [2].

(b) Remove the fastener [3] in the center of the lamp assembly [4].

(c) Replace the new lamp assembly [4].

(d) Tighten the fastener [3].

(e) Put on the lens [2].

1) Install the captive screws [1] and spacers [15].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

2) Tighten the captive screws [1] to 20 ±1 in-lb (2 ±0 N·m).

NOTE: It is acceptable to tighten the captive screws to 10 ±1 in-lb (1 ±0 N·m) if they fully engage at this value.

3) If the lens [2] is dirty, clean it with a clean, soft, dry cotton wiper, G00034.

H. Lower Anti-Collision Light Lamp Assembly Test

SUBTASK 33-44-02-860-027

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-02-710-005

(2) Do a test of the new lamp assembly [4]:

(a) On the P5 overhead panel, set the ANTI COLLISION switch for the lower anti-collision light to the ON position.

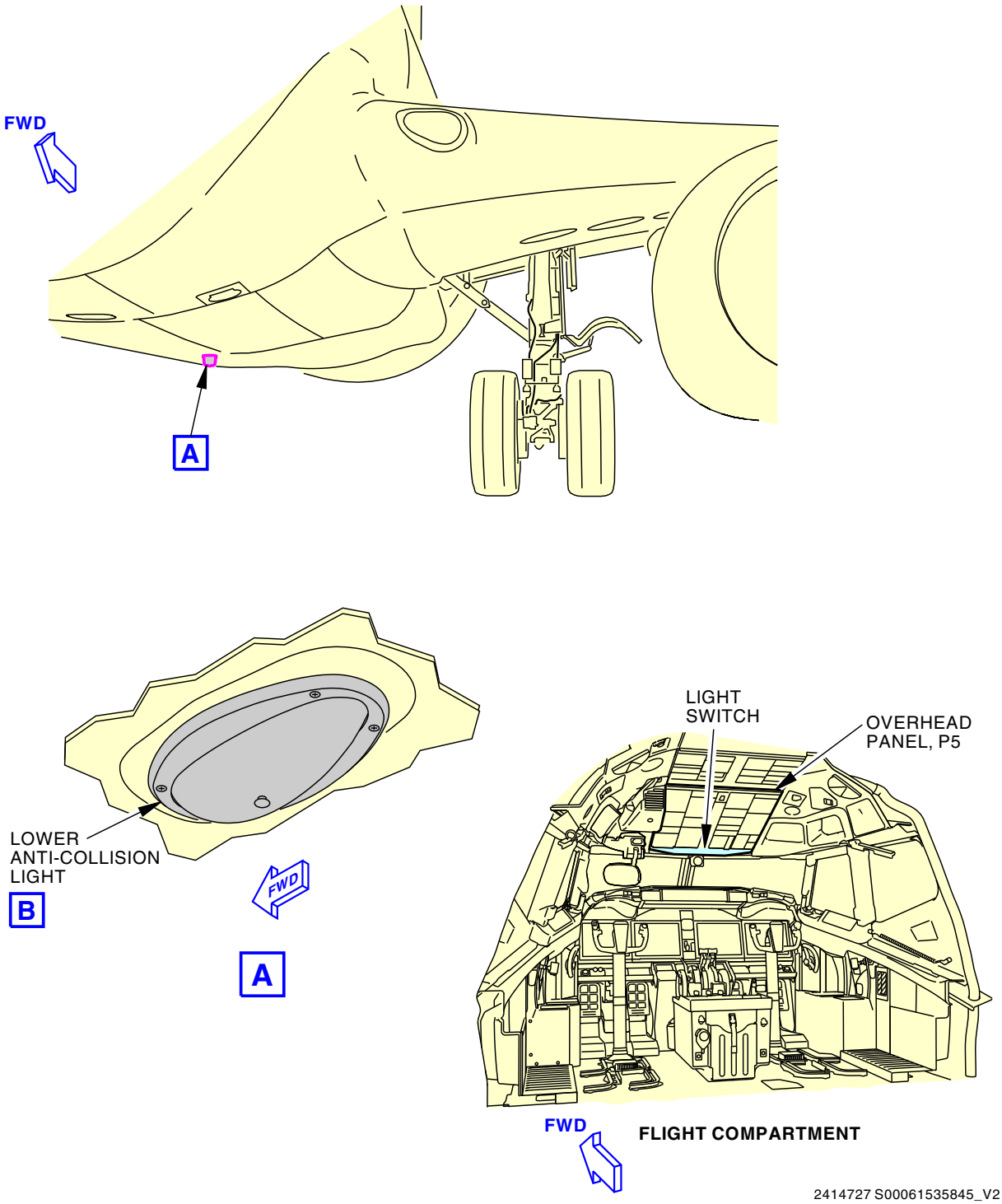
1) Make sure that the lower anti-collision light flashes (TASK 33-44-00-710-801).

(b) Set the ANTI COLLISION switch to the OFF position.

1) Make sure that the lower anti-collision light goes off.

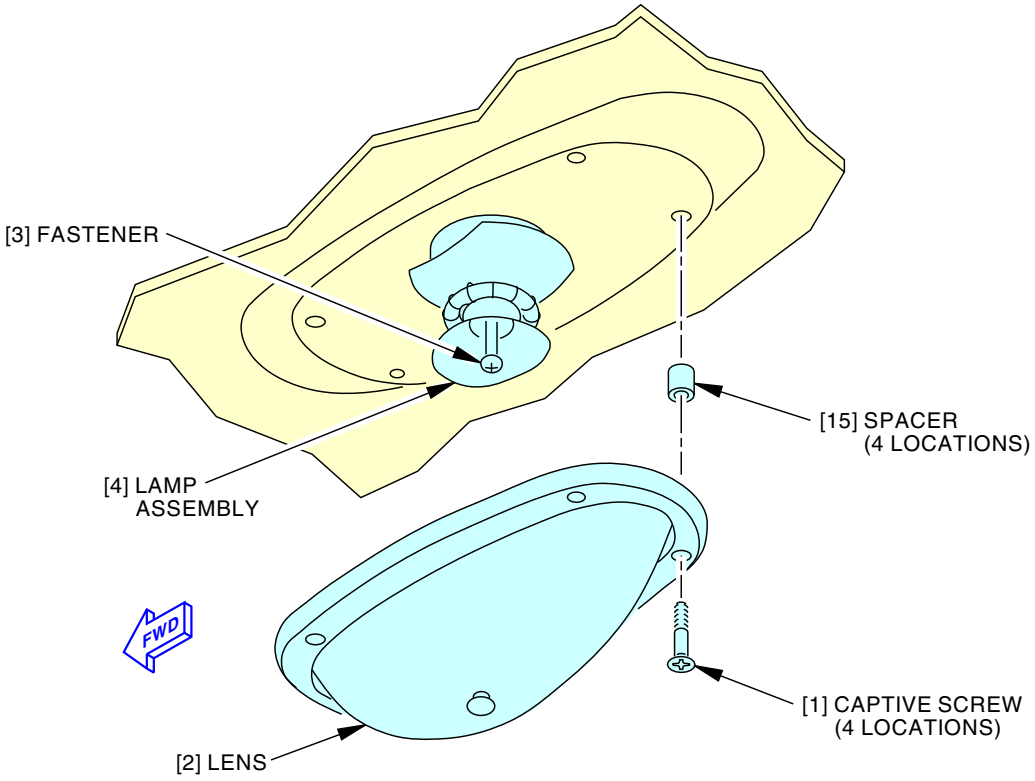
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lower Anti-Collision Light Lamp Assembly Replacement
Figure 202/33-44-02-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LOWER ANTI-COLLISION LIGHT

B

2571698 S0000617051_V3

Lower Anti-Collision Light Lamp Assembly Replacement
Figure 202/33-44-02-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 015-999

TASK 33-44-02-960-807

6. Lower Anti-Collision Light - LED Light Assembly Replacement

(Figure 203)

A. General

(1) This task includes the removal and installation of the lower anti-collision LED assembly and its subassemblies. Subassemblies can be replaced without replacing the entire LED assembly.

(2) The assembly can only be replaced from outside the plane.

B. References

Reference	Title
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
A50343	Sealant - PPG Aerospace PR-1772 Class B Low Weight Fuselage Sealant	BMS5-142 Type II Class B
B00130	Alcohol - Isopropyl	TT-I-735
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7
C00862	Coating - Chemical Conversion - Bonderite M-CR 600 Aero (Formerly Alodine 600)	BAC5719 Class A, C or D, MIL-DTL-81706 Type I Class 1A or 3
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G50316	Cloth - Clean, Dry, Lint-free, White, Cotton	

E. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 015-999 (Continued)

F. Prepare for the LED Light Assembly Replacement

SUBTASK 33-44-02-860-019

CAUTION

THE UNIT CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE (ESDS) COMPONENTS. THESE COMPONENTS ARE IDENTIFIED BY THE LETTERS (ESDS) IN THE ITEM DESCRIPTION CONTAINED IN THE ILLUSTRATED PARTS LIST (IPL). OBEY ESDS PRECAUTIONS WHEN YOU TOUCH THE UNIT OR DAMAGE CAN OCCUR.

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-02-020-008

(2) Do this task only when the entire assembly is to be replaced:

(a) Disconnect the electrical connector [48] from the back of the anti-collision light assembly.

1) Remove the nuts [58] and washers [57].

(b) Disconnect the grounding cable [50].

1) Remove the nut [49] and washer [51].

G. LED Light Assembly Removal

SUBTASK 33-44-02-020-009

(1) Remove the lens retainer [46]:

(a) Remove the captive screws [47] from the lens retainer [46].

(b) Remove the lens retainer [46].

SUBTASK 33-44-02-020-010

CAUTION

DO NOT TOUCH THE LED DIRECTLY. IF YOU DO NOT OBEY, DAMAGE TO THE LED CAN OCCUR.

(2) Remove the led module [45]:

(a) Remove the captive screws [55].

(b) Carefully remove the led module [45] from the driver module [52].

(c) If necessary, install the protective cover [54] over the led module [45].

NOTE: Protect Cover [54] comes with spare Anti-Collision Light assembly or LED module from the supplier, but any protective container is acceptable during removal. The cover protects the LED module during removal and installation procedures and should be remove after installation.

SUBTASK 33-44-02-020-011

(3) Remove the driver module [52]:

(a) Remove the nuts [56] from the driver module [52].

(b) Gently pull the driver module [52] off the base plate [43] and electrical connector [48].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 015-999 (Continued)

SUBTASK 33-44-02-020-012

(4) Remove the base plate [43]:

NOTE: Only do this step if the entire Anti-Collision Light Assembly need to be replaced.

(a) Make sure that the electrical connector [48] and the grounding cable [50] have been disconnected.

(b) Remove the bolts [44] from the base plate [43].

(c) Remove the base plate [43]

(d) Clean the faying surfaces on the aircraft skin and the base plate [43] with solvent, B00184, or alcohol, B00130.

(e) Manually apply Bonderite M-CR 600 Aero coating, C00862 to the abraded aircraft skin surface.

H. LED Light Assembly Installation

SUBTASK 33-44-02-420-003

WARNING

DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THESE MATERIALS. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE THESE MATERIALS. KEEP THESE MATERIALS AWAY FROM SPARKS, FLAME, AND HEAT. THESE MATERIALS ARE POISONOUS AND FLAMMABLE AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(1) Install the base plate [43]:

NOTE: Only do this step if the entire Anti-Collision Light assembly was replace.

(a) Prepare the base plate [43] and the aircraft skin for a sealed electrical faying surface bond (SWPM 20-20-00).

1) Final clean the contact surface of the base plate [43] with a cotton cloth, G50316, or cotton wiper, G00034, soaked in solvent, B00184 or alcohol, B00130.

2) Rub dry with a clean, dry cotton wiper, G00034.

3) Continue to clean and dry the base plate [43] until the dry cotton wiper, G00034, stays clean.

4) Apply sealant, A50231, or PR-1772 Class B Sealant, A50343, to the contact surface of the base plate [43].

5) If present, make sure the drain hole in the base plate [43] is clear of sealant.

(b) Apply sealant, A00247, to the shank and threads of the bolts [44].

(c) Install the base plate [43] on the aircraft sin with the bolt [44].

1) Make sure that the sealant is continuously squeezed out along the edges of the base plate [43].

2) If there are gaps, bubbles, or voids in the sealant that was squeezed out, disassemble and apply more sealant.

3) Shape the squeezed out sealant into a fillet seal.

4) If necessary, remove the extra squeezed out sealant.

5) Make sure that the sealant remains flushed with the mating part edges.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 015-999 (Continued)

(d) Use an intrinsically safe approved bonding meter, COM-1550, to measure the electrical bonding resistance of the base plate [43] and the skin of the aircraft (SWPM 20-20-00).

1) Make sure the bonding resistance is 0.0025 ohm (2.5 milliohm) or less.

(e) Install the grounding cable [50] with the washer [51] and nut [49].

1) Tighten the nut [49] to 19.00 ±1.00 in-lb (2.15 ±0.11 N·m).

2) Apply a fay seal using sealant, A00247, to the grounding terminal, grounding cable [50], washer [51], and nut [49].

(f) Install the electrical connector [48] to the base plate [43] using the washers [57] and nuts [58].

1) Tighten the nuts [58] to 6.2 ±0.5 in-lb (0.70 ±0.06 N·m).

SUBTASK 33-44-02-420-002

(2) Install the driver module [52]:

(a) Connect the driver module [52] onto the electrical connector [48] and secure it onto the base plate [43] using the nuts [56].

(b) Torque the nuts [56] to 6.2 ±0.5 in-lb (0.70 ±0.06 N·m).

(c) Use an intrinsically safe approved bonding meter, COM-1550, to measure the resistance between the driver module [52] and the airplane structure.

1) Make sure the resistance is less than 2.5 milliohms.

SUBTASK 33-44-02-420-004

(3) Install the led module [45]:

(a) Connect the led module [45] to the driver module [52].

(b) Install the led module [45] onto the base plate [43] with the captive screws [55].

(c) Torque the captive screws [55] to 8.50 ±0.50 in-lb (0.96 ±0.06 N·m).

SUBTASK 33-44-02-420-005

(4) Install the lens retainer [46]:

(a) Install the lens retainer [46] onto the base plate [43] with the captive screws [47].

(b) Torque the captive screws [47] to 8.0 ±0.5 in-lb (0.90 ±0.06 N·m).

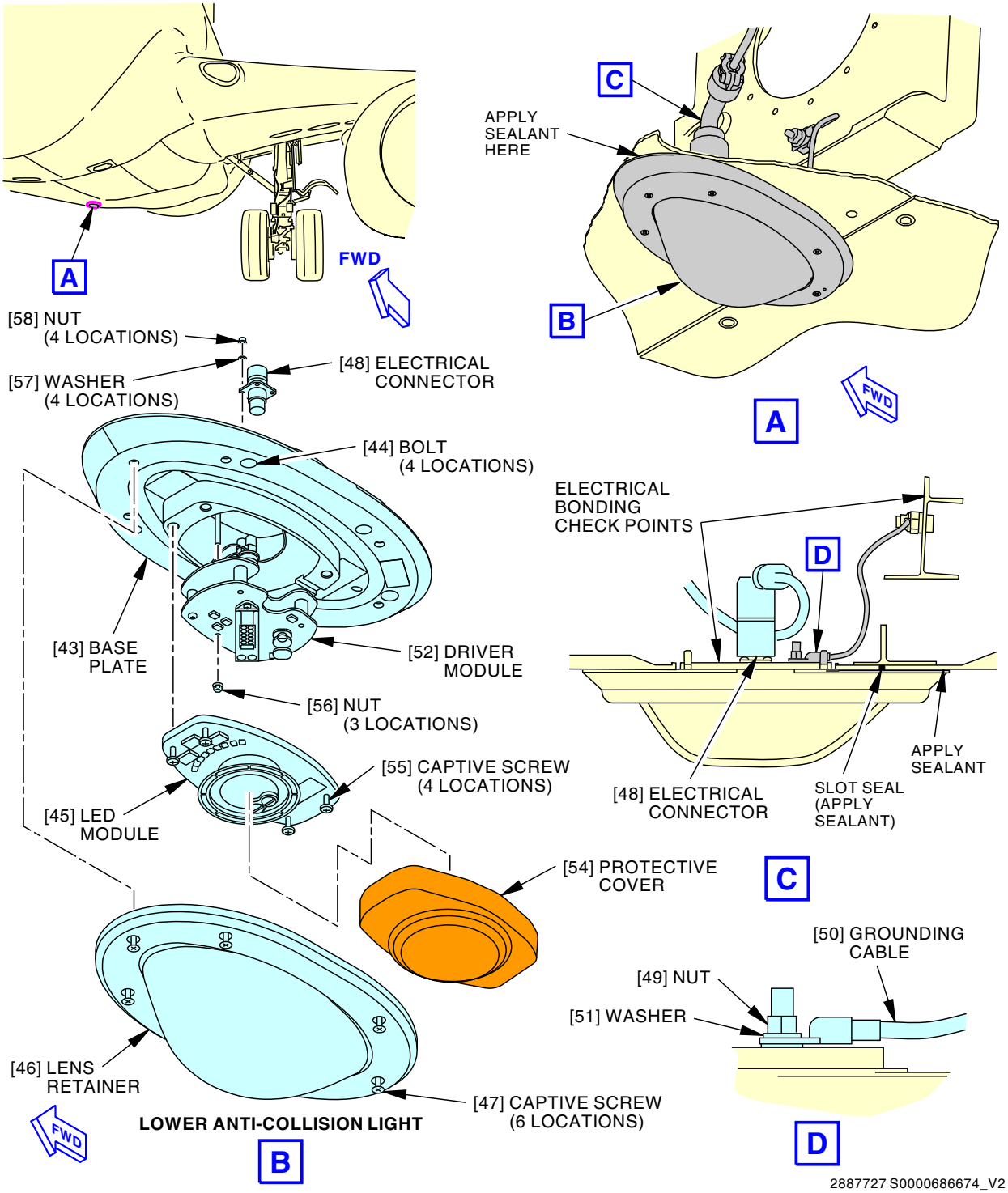
I. Put the Airplane Back To Its Usual Condition

SUBTASK 33-44-02-860-021

(1) Do this task: Lower Anti-Collision Light Activation, TASK 33-44-02-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lower Anti-Collision Light LED Light Assembly Replacement
Figure 203/33-44-02-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014

TASK 33-44-02-960-806

7. Lower Anti-Collision Light Lens Replacement

(Figure 204)

A. Consumable Materials

Reference	Description	Specification
A00562	Adhesive - High Strength Silicone Rubber, One-Part - RTV157	
C00954	Primer - Adhesive Bonding - SS4004P RTV	BAC5010 Type 74
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
2	Lens	33-44-02-01A-105	SIA 001-014
42	Grommet	33-44-02-01A-107	SIA 001-014

C. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

D. Prepare for the Replacement

SUBTASK 33-44-02-860-028

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

E. Lower Anti-Collision Light Lens Replacement

SUBTASK 33-44-02-960-006

(1) Do these steps to replace the lens [2]:

(a) Loosen the captive screws [1].

(b) Remove the spacers [15].

(c) Lift off the lens [2].

(d) Put on the new lens [2].

1) Install the captive screws [1] and spacers [15].

2) Tighten the captive screws [1] to 20 ±1 in-lb (2 ±0 N·m).

NOTE: It is acceptable to tighten the captive screws to 10 ±1 in-lb (1 ±0 N·m) if they fully engage at this value.

3) If a plug [41] is installed on the bottom of the lens [2], remove and discard the plug [41].

4) Make sure that the grommet [42] is not removed.

NOTE: The opening of the grommet becomes a drain hole.

5) If it is necessary, replace the grommet [42], do these steps:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

a) Remove the grommet [42].

WARNING DO NOT GET PRIMER IN YOUR MOUTH, EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM PRIMER. PUT ON GOGGLES, AND GLOVES WHEN YOU USE PRIMER. PRIMER IS POISONOUS AND CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

WARNING KEEP PRIMER AWAY FROM THE FLAME AND HEAT. PRIMER IS FLAMMABLE AND CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

b) Apply SS4004P RTV primer, C00954, to the grommet [42] hole.

WARNING DO NOT GET ADHESIVE IN YOUR MOUTH, EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM ADHESIVE. PUT ON GOGGLES, AND GLOVES WHEN YOU USE ADHESIVE. ADHESIVE IS POISONOUS AND CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

WARNING KEEP ADHESIVE AWAY FROM THE FLAME AND HEAT. ADHESIVE IS FLAMMABLE AND CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

c) Apply RTV157 adhesive, A00562, to the new grommet [42].

d) Install the grommet [42] in lens [2].

6) If the lens [2] is dirty, clean it with a clean, soft, dry cotton wiper, G00034.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 33-44-02-860-029

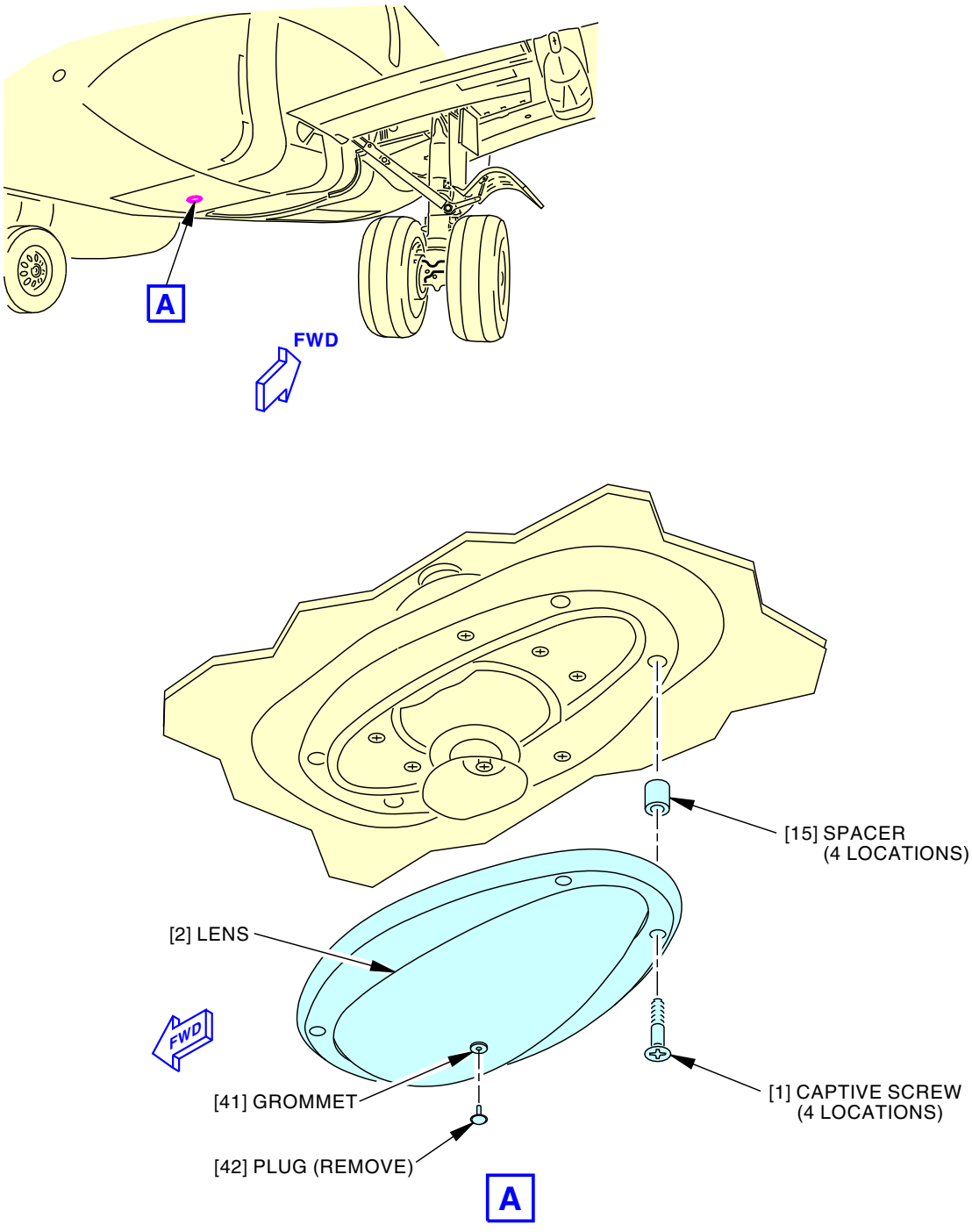
(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Lower Anti-Collision Light Lens Replacement
Figure 204/33-44-02-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

TASK 33-44-02-960-804

8. Lower Anti-Collision Light - Power Supply Replacement

(Figure 205)

A. General

(1) This task provides instruction to replace power supply for the lower anti-collision light assembly.

B. References

Reference	Title
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
51-22-00-160-801	Prepare For Sealing (P/B 201)
51-22-00-390-806	Fillet Seal Application (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
WDM 33-44-11	D000534507

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
A50110	Sealant - Fuel Tank	BMS5-45 Class B-2
A50155	Sealant - Fuel Tank	BMS5-45 Class C
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
A50296	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class C
C00064	Coating - Aluminum Chemical Conversion	BAC5719 Type II Class A (MIL-DTL-5541 Class 1A)
C00259	Coating - Chemical And Solvent Resistant Finish, Corrosion Inhibiting Primer	BMS10-11 Type I
G50961	Coating - Corrosion Inhibiting Epoxy Primer - (BAC 377 Yellow Color)	BMS10-11 Type I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
13	Power supply	33-44-02-02C-005	SIA 001-014

F. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

G. Access Panels

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward

H. Lower Anti-Collision Light Power Supply Replacement

SUBTASK 33-44-02-860-005

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-02-010-001

(2) Open this access panel:

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward

SUBTASK 33-44-02-960-002

WARNING DO NOT TOUCH THE POWER SUPPLY FOR THREE MINUTES AFTER YOU REMOVE ELECTRICAL POWER. AN ELECTRICAL SHOCK CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(3) Do these steps to replace the power supply [13] (WDM 33-44-11):

NOTE: Do not discard the power supply. Usually, you can repair it with a new capacitor assembly. Do the repairs in a shop.

(a) Disconnect the electrical connectors [11].

(b) Loosen the fasteners [12] on the power supply [13].

(c) Remove the sealant between the power supply [13] and structure (TASK 51-22-00-160-801).

(d) Remove the power supply [13].

(e) Clean the fay surface contact areas on the support bracket and power supply [13] with abrasive (SWPM 20-20-00).

(f) Refinish the metal surfaces.

1) Apply a layer of coating, C00064, to the surface contact areas on the support bracket and power supply [13].

2) Apply a layer of primer, C00259, or coating, G50961, to the surface contact areas on the support bracket and power supply [13].

(g) Apply a thin layer of sealant, A50155, sealant, A50110, sealant, A50231, or sealant, A50296, to the fay surface ground areas on the bracket and new power supply [13].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-014 (Continued)

(h) Install the new power supply [13].

(i) Tighten the fasteners [12] to 20 ±2 in-lb (2.26 ±0.23 N·m).

(j) Connect the electrical connectors [11] to the new power supply [13].

(k) Measure the electrical bonding resistance between the power supply [13] and fuselage (SWPM 20-20-00).

1) Use an intrinsically safe approved bonding meter, COM-1550.

2) Make sure that the electrical bonding resistance is 0.0005 ohm (0.5 milliohms) or less

(l) Apply a fillet seal around the power supply [13] (TASK 51-22-00-390-806).

SUBTASK 33-44-02-410-001

(4) Close this access panel:

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward

SUBTASK 33-44-02-860-006

(5) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
B	12	C00111	EXTERIOR LIGHTING ANTI COLLISION RED

SUBTASK 33-44-02-710-002

(6) Do a test of the new power supply [13]:

(a) At the overhead panel, P5, set the ANTI COLLISION switch for the lower anti-collision light to the ON position.

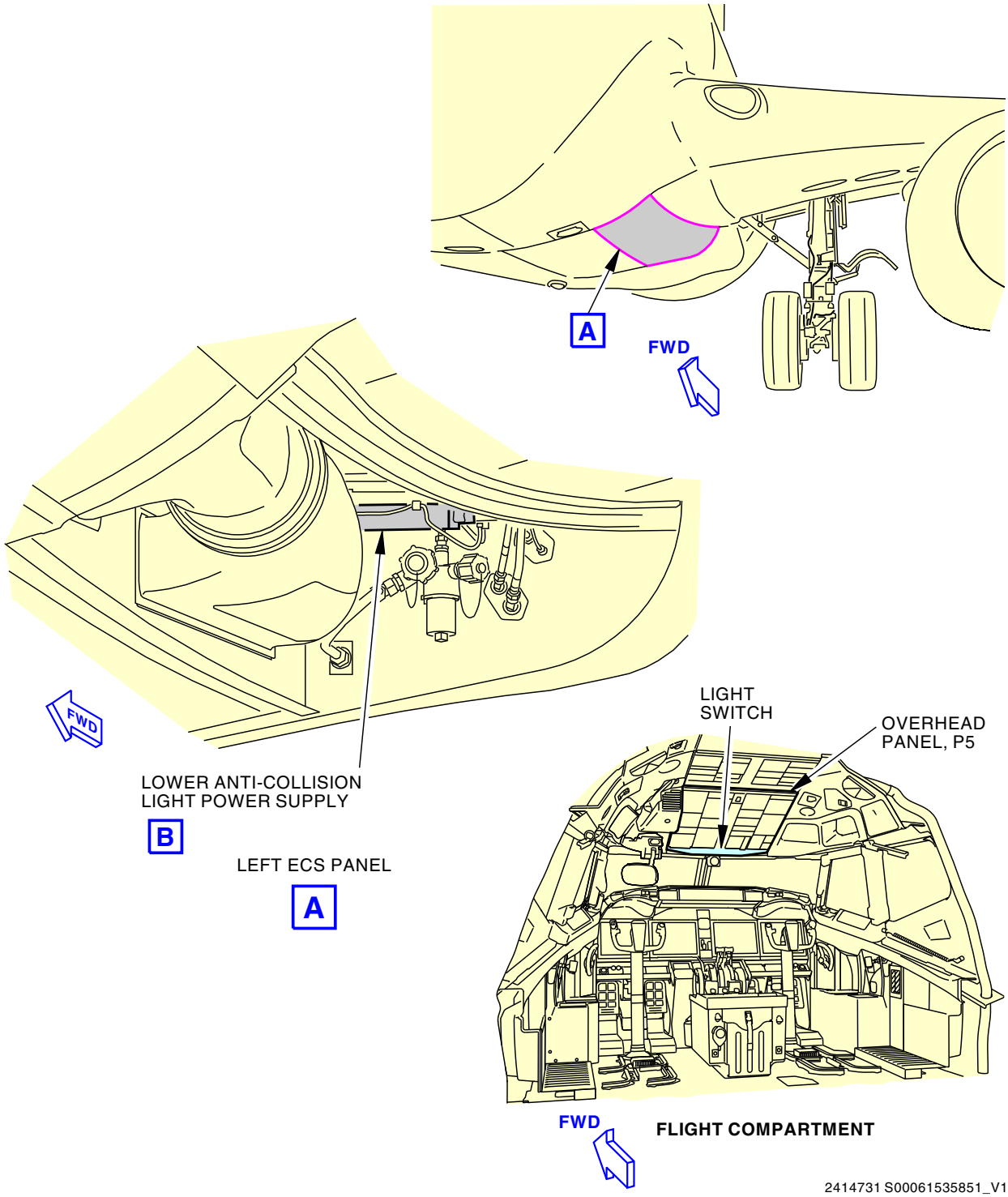
1) Make sure that the lower anti-collision light flashes (TASK 33-44-00-710-801).

(b) Set the ANTI COLLISION switch to the OFF position.

1) Make sure that the lower anti-collision light goes off.

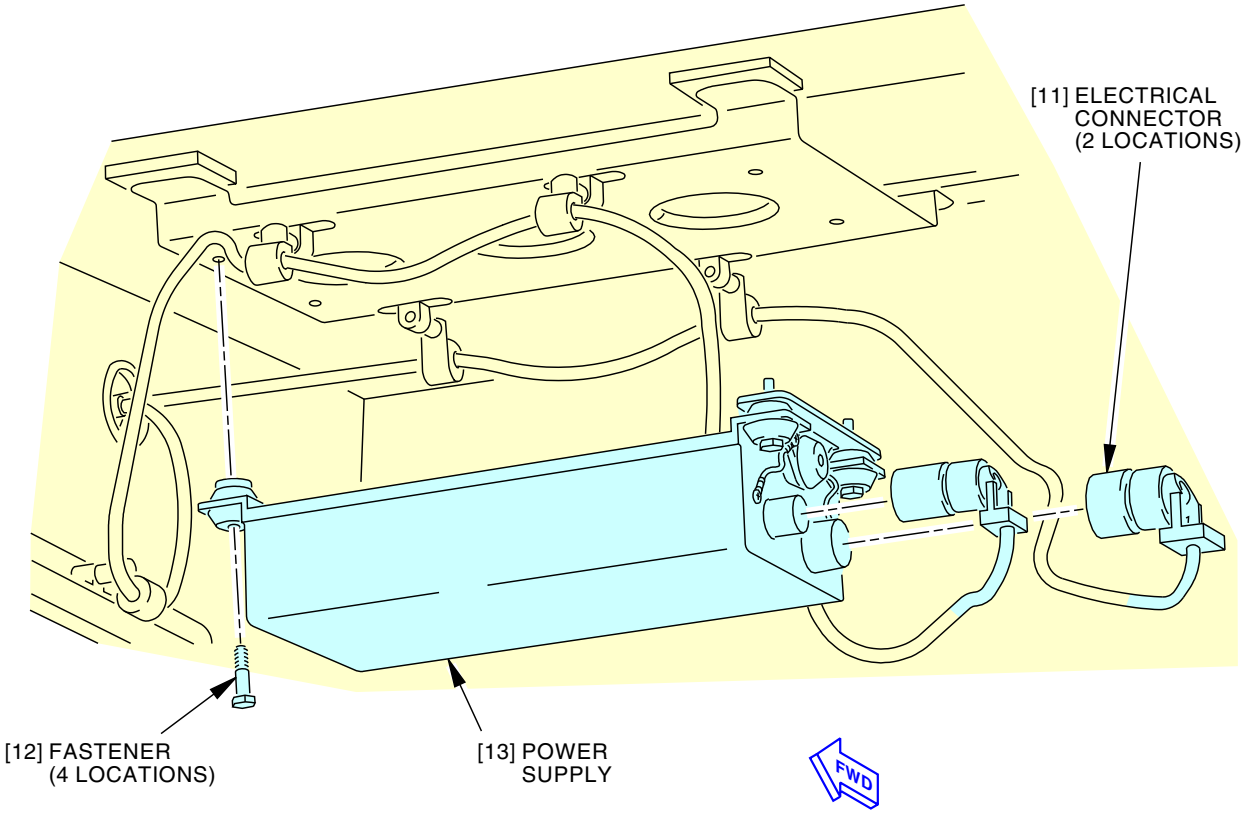
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Lower Anti-Collision Light - Power Supply Replacement
Figure 205/33-44-02-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LOWER ANTI-COLLISION LIGHT POWER SUPPLY

B

2414732 S00061535852_V1

Lower Anti-Collision Light - Power Supply Replacement
Figure 205/33-44-02-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TAILCONE ANTI-COLLISION LIGHT - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Tailcone Anti-Collision Light Deactivation

(2) Tailcone Anti-Collision Light Activation

(3) Tailcone Anti-Collision Light Replacement

(4) Tailcone Anti-Collision Light Transformer Replacement

(5) Tailcone Anti-Collision Light LED Module Replacement

(6) Tailcone Anti-Collision Light Housing Assembly Replacement.

B. The tailcone position light and tailcone anti-collision light are in the same light assembly.

TASK 33-44-04-040-801

2. Tailcone Anti-Collision Light Deactivation

A. General

(1) This procedure removes electrical power from the tailcone anti-collision lights.

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

C. Procedure

SUBTASK 33-44-04-860-013

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

D. Tailcone Anti-Collision Lights - Deactivation Test

NOTE: This test is to make sure that the tailcone anti-collision lights are in a zero energy condition.

SUBTASK 33-44-04-200-001

(1) Do these steps to make sure that the power is off:

(a) Set the POSITION switch for the tailcone anti-collision lights to STEADY on the P5 overhead panel.

1) Make sure that the tailcone anti-collision lights (left/right) stay off.

(b) Set the POSITION switch for the tailcone anti-collision lights to STROBE & STEADY on the P5 overhead panel.

1) Make sure that the tailcone anti-collision lights (left/right) stay off.

(c) Set the POSITION switch for the tailcone anti-collision lights to OFF.

1) Make sure that the tailcone anti-collision lights (left/right) stay off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-04-440-801

3. Tailcone Anti-Collision Light Activation

A. General

(1) This procedure supplies electrical power to the tailcone anti-collision lights.

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

C. Procedure

SUBTASK 33-44-04-860-014

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

D. Tailcone Anti-Collision Lights - Activation Test

NOTE: This test is to make sure that the tailcone anti-collision lights operate.

SUBTASK 33-44-04-710-006

(1) Do these steps to make sure that the power is on:

(a) Set the POSITION switch for the tailcone anti-collision lights to STROBE & STEADY on the P5 overhead panel.

1) Make sure that the tailcone anti-collision lights (left/right) flash continuously.

(b) Set the POSITION switch for the tailcone anti-collision lights to STEADY on the P5 overhead panel.

1) Make sure that the tailcone anti-collision lights (left/right) come on and stay on.

(c) Set the POSITION switch for the tailcone anti-collision lights to OFF.

1) Make sure that the tailcone anti-collision lights (left/right) go off.

——— END OF TASK ———

TASK 33-44-04-960-801

4. Tailcone Anti-Collision Light Replacement

A. References

Reference	Title
33-43-13-960-801	Tailcone Position Lights Replacement (P/B 201)

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

ECCN 9E991 BOEING PROPRIETARY - See title page for details

C. Tailcone Anti-Collision Light Replacement

SUBTASK 33-44-04-860-001

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-44-04-960-001

(2) Do this to replace the light assembly: Tailcone Position Lights Replacement, TASK 33-43-13-960-801.

——— END OF TASK ———

TASK 33-44-04-960-802

5. Tailcone Anti-Collision Light Transformer Replacement

(Figure 201)

A. References

Reference	Title
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-60-01	CLEANING OF ELECTRICAL CONNECTORS
SWPM 20-60-06	INSTALLATION OF ELECTRICAL CIRCULAR CONNECTORS
WDM 33-44-12	D000534508

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Consumable Materials

Reference	Description	Specification
A50473	Sealant - Brush (See BAC5000 8.5.3b(1) for instructions to prepare BMS5-95 Type I Class A-2)	BAC5000 Section 8.5.3
B00083	Solvent - VM&P Naphthas	TT-N-95 Type II, ASTM D-3735 Type III
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Tailcone anti-collision lights transfomer	33-44-04-01-010	SIA ALL

E. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

F. Tailcone Anti-Collision Light Transformer Replacement

SUBTASK 33-44-04-860-007

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-44-04-960-003

(2) Do these steps to remove the tailcone anti-collision lights transfomer [1] (WDM 33-44-12):

(a) Disconnect the electrical connector [2].

(b) Remove the sealant between the tailcone anti-collision lights transfomer [1] and the mounting bracket.

(c) Remove the bolts [3] and washers [4].

(d) Remove the tailcone anti-collision lights transfomer [1].

(3) Do these steps to install a new tailcone anti-collision lights transfomer [1]:

(a) Clean the fay surface bonding area with solvent, B00083, and a clean cotton wiper, G00034.

(b) Put the new tailcone anti-collision lights transfomer [1] on the mounting bracket.

(c) Install the washers [4] and bolts [3].

(d) With the electrical bonding intrinsically safe approved bonding meter, COM-1550, make sure that the resistance between the tailcone anti-collision lights transfomer [1] and the fuselage measures no more than 0.0025 ohms (2.5 milliohms).

(e) Apply a polysulfide sealant, A50473 fillet seal between tailcone anti-collision lights transfomer [1] and the mounting bracket.

(f) Connect the electrical connector [2].

1) Clean the electrical connector [2] (SWPM 20-60-01).

2) Connect the electrical connector [2] (SWPM 20-60-06).

3) Use an intrinsically safe approved bonding meter, COM-1550, to measure the resistance between the electrical connector [2] braid and the housing (SWPM 20-20-00).

a) Make sure that the resistance is 0.003 ohm (3 milliohms) or less.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-44-04-860-008

(4) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-44-04-710-003

(5) Do a test of the new tailcone anti-collision lights transfomer [1].

(a) At the P5 overhead panel, set the POSITION switch for the tailcone anti-collision light to the STROBE & STEADY mode.

1) Make sure that tailcone anti-collision lights (left/right) flash continuously.

(b) At the P5 overhead panel, set the POSITION switch for the tailcone anti-collision light to the STEADY mode.

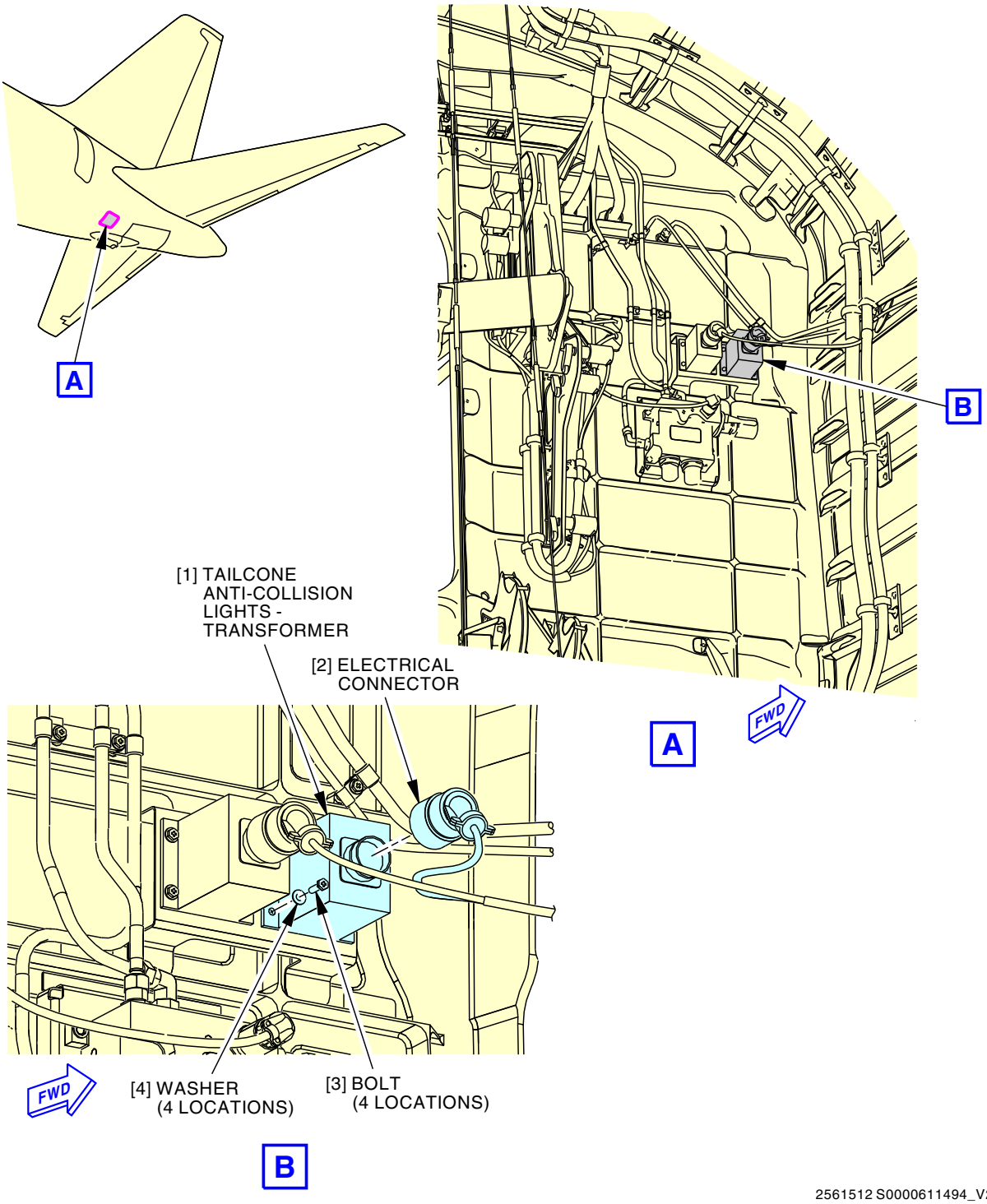
1) Make sure that the tailcone anti-collision lights (left/right) come on and stay on.

(c) Set the POSITION switch to the OFF mode.

1) Make sure that the tailcone anti-collision lights (left/right) go off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2561512 S0000611494_V2

Tailcone Anti-Collision Light Transformer Replacement
Figure 201/33-44-04-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-04-960-803

6. Tailcone Anti-Collision Light LED Module Replacement

(Figure 202)

A. General

(1) This procedure contains instructions for the replacement of the LED modules installed on the tailcone anti-collision light.

B. References

Reference	Title
33-43-13-960-804	Tailcone Position Lights Housing Assembly Replacement (P/B 201)

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
20	LED module assembly	33-44-04-02-050	SIA ALL
30	Housing assembly	33-44-04-02-055	SIA ALL

D. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

E. Procedure

SUBTASK 33-44-04-860-009

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-44-04-020-001

(2) Do these steps to remove the housing assembly [30]:

(a) Use white cotton gloves to handle housing assembly and LED modules.

(b) Do this task: Tailcone Position Lights Housing Assembly Replacement, TASK 33-43-13-960-804.

SUBTASK 33-44-04-960-004

(3) Do these steps to replace the LED module assembly [20]:

(a) Use white cotton gloves to handle housing assembly and LED modules.

(b) Remove the screws [21] that attach the LED module assembly [20] to the housing assembly [30].

(c) Pull the LED module assembly [20] to disconnect it from the housing assembly [30].

(d) Replace the new LED module assembly [20].

(e) Install the screws [21] that hold the LED module assembly [20] to the housing assembly [30].

(f) Tighten the screws [21] until fully seated.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-44-04-420-001

(4) Do these steps to install the housing assembly [30]:

(a) Use white cotton gloves to handle housing assembly and LED modules.

(b) Do this task: Tailcone Position Lights Housing Assembly Replacement, TASK 33-43-13-960-804.

SUBTASK 33-44-04-860-010

(5) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-44-04-710-004

(6) Do a test of the new LED module assembly [20]:

(a) At the P5 overhead panel, set the POSITION switch for the tailcone anti-collision light to the STROBE & STEADY mode.

1) Make sure that the tailcone anti-collision lights (left/right)come on and flash continuously.

(b) At the P5 overhead panel, set the POSITION switch for the tailcone anti-collision light to the STEADY mode.

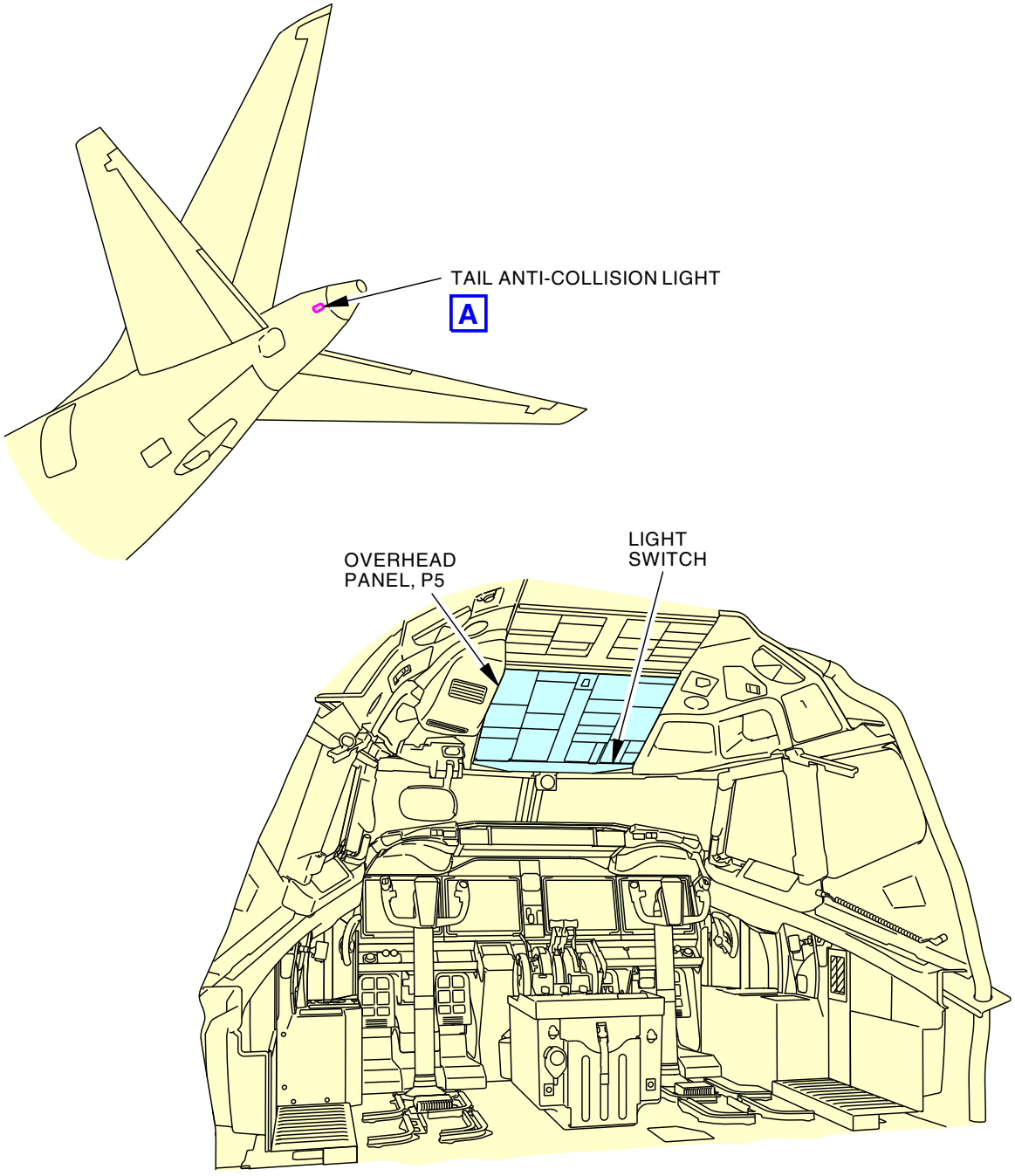
1) Make sure that the tailcone anti-collision lights (left/right) stop flashing and remain steady.

(c) Set the POSITION switch to the OFF mode.

1) Make sure that the tailcone anti-collision lights (left/right) go off.

——— END OF TASK ———

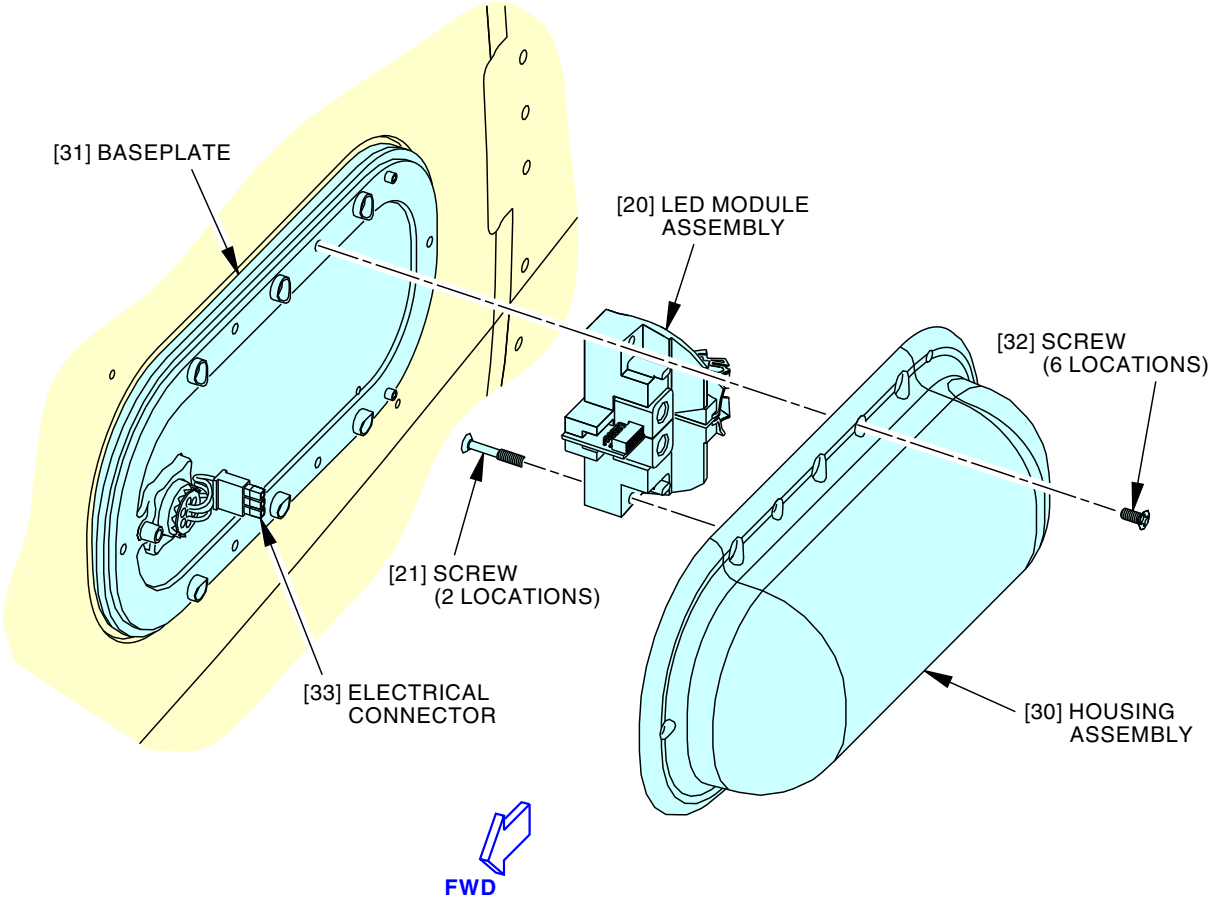
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Tailcone Anti-Collision Light LED Module Replacement
Figure 202/33-44-04-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



TAIL ANTI-COLLISION LIGHT
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

A

2570017 S0000615941_V1

Tailcone Anti-Collision Light LED Module Replacement
Figure 202/33-44-04-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-04-960-804

7. Tailcone Anti-Collision Light Housing Assembly Replacement

(Figure 202)

A. General

(1) This procedure contains instructions for the replacement of the housing assembly installed on the tailcone anti-collision light.

B. References

Reference	Title
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)

C. Tools/Equipment

Reference	Description
STD-810	Spatula - Fillet Smoothing, Hardwood or Plastic

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
30	Housing assembly	33-44-04-02-055	SIA ALL

F. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

G. Procedure

SUBTASK 33-44-04-860-011

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-44-04-960-005

(2) Do these steps to replace the housing assembly [30]:

(a) Use white cotton gloves to handle housing assembly and LED modules.

(b) Remove the screws [32] that attach the housing assembly [30] to the baseplate [31].

(c) Disconnect the electrical connector [33].

(d) Pull the housing assembly [30] forward to disconnect it from the baseplate [31].

(e) Replace the new housing assembly [30].

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(f) Connect the electrical connector [33].

(g) Install the screws [32] that hold the housing assembly [30] to the baseplate [31].

(h) Apply an aerodynamic fillet seal around the baseplate [31] with sealant, A00247 (TASK 51-22-00-390-809).

(i) Use the hardwood or plastic fillet smoothing spatula, STD-810, to make a smooth 45-degree fillet.

CAUTION

DO NOT SEAL LOWER DRAIN HOLE OF THE TAILCONE ANTI-COLLISION LIGHT. LOWER DRAIN HOLE TO BE CLEAR OF ALL SEALANT.

(j) Apply sealant, A00247 to the heads of the screws [32] and the upper drain hole(TASK 51-22-00-390-809).

(k) If the lens is dirty, clean it with a clean, soft, dry cotton wiper, G00034.

SUBTASK 33-44-04-860-012

(3) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	13	C04051	EXTERIOR LIGHTING POSITION LEFT
C	12	C04053	ANTI COLLISION LIGHT-TAIL CONE- WHITE

SUBTASK 33-44-04-710-005

(4) Do a test of the new housing assembly [30]:

(a) At the P5 overhead panel, set the POSITION switch for the tailcone anti-collision light to the STROBE & STEADY mode.

1) Make sure that tailcone anti-collision lights (left/right) flash continuously.

(b) At the P5 overhead panel, set the POSITION switch for the tailcone anti-collision light to the STEADY mode.

1) Make sure that the tailcone anti-collision lights (left/right) come on and stay on.

(c) Set the POSITION switch to the OFF mode.

1) Make sure that the tailcone anti-collision lights (left/right) go off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WINGLET ANTI-COLLISION LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Winglet Anti-Collision Light Deactivation

(2) Winglet Anti-Collision Light Activation

(3) Winglet Anti-Collision Light Removal

(4) Winglet Anti-Collision Light Installation

(5) Winglet Anti-Collision Light Transformer Replacement

(6) Winglet Anti-Collision Light LED Module and Power Supply Replacement.

TASK 33-44-13-040-801

2. Winglet Anti-Collision Light Deactivation

A. General

(1) This procedure removes electrical power from the winglet anti-collision lights.

B. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

C. Procedure

SUBTASK 33-44-13-860-010

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	13	C04054	ANTI COLLISION LIGHTS-WINGLET-WHITE

D. Winglet Anti-Collision Lights Deactivation Test

NOTE: This test is to make sure that the winglet anti-collision lights are in a zero energy condition.

SUBTASK 33-44-13-200-001

(1) Do these steps to make sure that the power is off:

(a) Set the POSITION switch for the winglet anti-collision lights to STEADY on the P5 overhead panel.

1) Make sure that the winglet anti-collision lights (left/right) stay off.

(b) Set the POSITION switch for the winglet anti-collision lights to STROBE & STEADY on the P5 overhead panel.

1) Make sure that the winglet anti-collision lights (left/right) stay off.

(c) Set the POSITION switch for the winglet anti-collision lights to OFF.

1) Make sure that the winglet anti-collision lights (left/right) stay off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-13-440-801

3. Winglet Anti-Collision Light Activation

A. General

(1) This procedure supplies electrical power to the winglet anti-collision lights.

B. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

C. Procedure

SUBTASK 33-44-13-860-011

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	13	C04054	ANTI COLLISION LIGHTS-WINGLET-WHITE

D. Winglet Anti-Collision Lights Activation Test

NOTE: This test is to make sure that the winglet anti-collision lights operate.

SUBTASK 33-44-13-710-003

(1) Do these steps to make sure that the power is on:

(a) Set the POSITION switch for the winglet anti-collision lights to STROBE & STEADY on the P5 overhead panel.

1) Make sure that the winglet anti-collision lights (left/right) come on and flash continuously.

(b) Set the POSITION switch for the winglet anti-collision lights to STEADY on the P5 overhead panel.

1) Make sure that the winglet anti-collision lights (left/right) go off.

(c) Set the POSITION switch for the winglet anti-collision lights to OFF on the P5 overhead panel.

1) Make sure that the winglet anti-collision lights (left/right) go off.

——— END OF TASK ———

TASK 33-44-13-000-801

4. Winglet Anti-Collision Light Removal

(Figure 201)

A. General

(1) This task contains instructions for the removal of the anti-collision light from the lower blade of the winglet.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height Part #: 1135-8000 Supplier: 00994 Opt Part #: 8662-010 Supplier: 00994
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08
SPL-768	Sealant Removal Tool, Non-Metallic Part #: ST982L-9 Supplier: 81205 Part #: ST982LF-9 Supplier: 81205 Part #: ST982LH-A-1 Supplier: 81205

D. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

E. Prepare for the Removal

SUBTASK 33-44-13-860-001

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	13	C04054	ANTI COLLISION LIGHTS-WINGLET-WHITE

SUBTASK 33-44-13-860-003

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 33-44-13-800-001

(3) Get a ladder, work platform, COM-2480, or maintenance platform, COM-659.

SUBTASK 33-44-13-800-002

(4) Do these steps to prepare metal support equipment (work platforms, work/maintenance stands, ladders):

NOTE: These steps apply to all metal support equipment in a 50.0 ft (15.2 m) radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same ground as the airplane.

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F. Winglet Anti-Collision Light Removal

SUBTASK 33-44-13-000-001

(1) Remove the anti-collision light [21]:

(a) Remove screws [22] from the anti-collision light [21].

(b) Remove the sealant from around the anti-collision light [21].

(c) Remove the anti-collision light [21] from the leading edge of the lower blade of the winglet.

SUBTASK 33-44-13-020-001

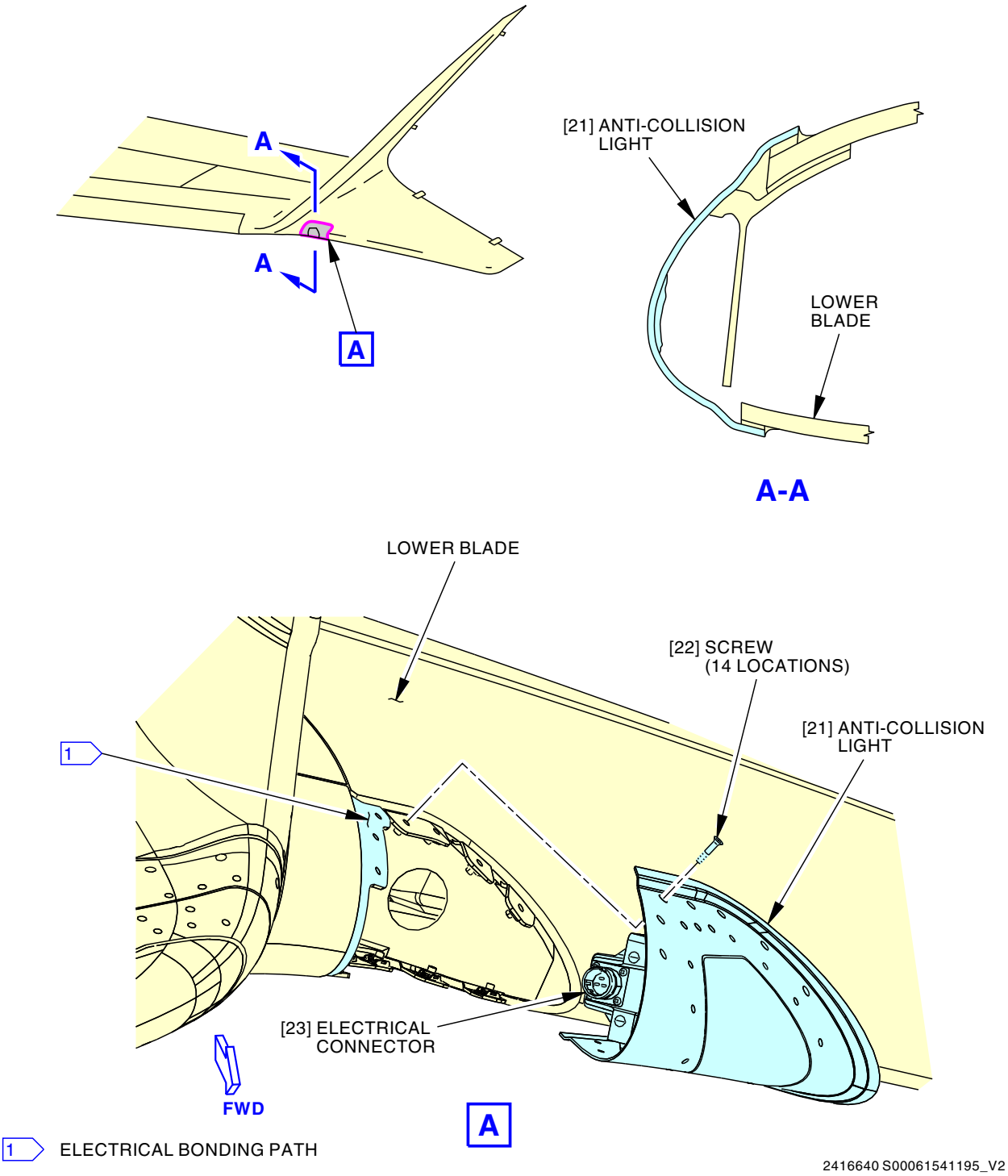
(2) Disconnect the electrical connector [23] from the anti-collision light [21].

SUBTASK 33-44-13-020-002

(3) Remove all sealant from leading edge of the winglet and the anti-collision light [21] with a sealant removal tool, SPL-768.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Anti-Collision Light Installation
Figure 201/33-44-13-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-13-400-801

5. Winglet Anti-Collision Light Installation

(Figure 201)

A. General

(1) This task contains instructions for the installation of the anti-collision light on the lower blade of the winglet.

B. References

Reference	Title
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height Part #: 1135-8000 Supplier: 00994 Opt Part #: 8662-010 Supplier: 00994
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08

D. Consumable Materials

Reference	Description	Specification
A50343	Sealant - PPG Aerospace PR-1772 Class B Low Weight Fuselage Sealant	BMS5-142 Type II Class B
A50345	Sealant - PPG Aerospace PR-1776M Class B Low Weight Fuel Tank Sealant	BMS5-45 Class B

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
21	Anti-collision light	33-44-13-01-020	SIA ALL
		33-44-13-01-025	SIA ALL

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F. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

G. Winglet Anti-Collision Light Installation

SUBTASK 33-44-13-100-001

(1) Clean the designated bond area of the anti-collision light [21] and the lower blade of the winglet to make an electrical bond.

SUBTASK 33-44-13-390-001

(2) Apply a layer of PR-1776M Class B Sealant, A50345, to the mounting surface between the anti-collision light [21] and the lower blade of the winglet to make a fay surface seal.

SUBTASK 33-44-13-420-001

(3) Connect the electrical connector [23] for the anti-collision light [21].

SUBTASK 33-44-13-400-001

(4) Install the anti-collision light [21]:

(a) Put the anti-collision light [21] in its position on the lower blade of the winglet.

(b) Apply a layer of PR-1776M Class B Sealant, A50345, to the screws [22].

(c) Install the screws [22] to attach the anti-collision light [21].

(d) Apply an aerodynamic fillet seal to the external gap around the anti-collision light [21] with PR-1772 Class B Sealant, A50343.

SUBTASK 33-44-13-760-001

(5) Measure the electrical resistance between the anti-collision light [21] and the lower blade of the winglet (SWPM 20-20-00).

(a) Use an intrinsically safe approved bonding meter, COM-1550.

(b) Make sure that the electrical resistance is 0.0005 ohm (0.5 milliohm) or less.

SUBTASK 33-44-13-860-004

(6) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	13	C04054	ANTI COLLISION LIGHTS-WINGLET-WHITE

SUBTASK 33-44-13-710-001

(7) Do this task: Anti-Collision Lights - Operational Test, TASK 33-44-00-710-801.

H. Put the Airplane Back to Its Usual Condition

SUBTASK 33-44-13-080-001

(1) Remove the ladder, work platform, COM-2480, or maintenance platform, COM-659.

SUBTASK 33-44-13-860-006

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-44-13-960-801

6. Winglet Anti-Collision Light Transformer Replacement

(Figure 202)

A. References

Reference	Title
WDM 33-44-12	D000534508

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Consumable Materials

Reference	Description	Specification
A50473	Sealant - Brush (See BAC5000 8.5.3b(1) for instructions to prepare BMS5-95 Type I Class A-2)	BAC5000 Section 8.5.3
B00083	Solvent - VM&P Naphthas	TT-N-95 Type II, ASTM D-3735 Type III
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Anti-collision light transformer	33-44-13-10-020	SIA ALL

E. Location Zones

Zone	Area
527	Left Winglet
627	Right Winglet

F. Access Panels

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
621ABB	Lower Leading Edge Access Panel-Slat Station 519

G. Procedure

SUBTASK 33-44-13-860-007

(1) Open the applicable circuit breaker and install the safety tag:
(WDM 33-44-12)

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CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	13	C04054	ANTI COLLISION LIGHTS-WINGLET-WHITE

SUBTASK 33-44-13-960-001

(2) Do these steps to replace the winglet anti-collision light transformer [1]:

(a) Open the applicable access panel:

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
621ABB	Lower Leading Edge Access Panel-Slat Station 519

(b) Disconnect the electrical connector [4].

(c) Remove the bolts [3] and washers [2].

(d) Remove the winglet anti-collision light transformer [1].

(e) Clean the fay surface bonding area with solvent, B00083, and a clean cotton wiper, G00034.

(f) Install the new winglet anti-collision light transformer [1].

(g) Install the washers [2] and bolts [3].

(h) With the electrical bonding intrinsically safe approved bonding meter, COM-1550, make sure that the resistance between the winglet anti-collision light transformer [1] and the fuselage measures no more than 0.0025 ohms (2.5 milliohms).

(i) Apply a polysulfide sealant, A50473 fillet seal between the winglet anti-collision light transformer [1] and the mounting bracket.

(j) Connect the electrical connector [4].

SUBTASK 33-44-13-860-008

(3) Remove the safety tag and close the applicable circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
C	13	C04054	ANTI COLLISION LIGHTS-WINGLET-WHITE

SUBTASK 33-44-13-710-002

(4) Do a test of the winglet anti-collision light transformer [1].

(a) Set the POSITION switch for the winglet anti-collision lights to STROBE and STEADY on the P5 overhead panel.

1) Make sure that the winglet anti-collision lights (left/right) come on and strobe.

(b) Set the POSITION switch for the winglet anti-collision lights to STEADY.

1) Make sure that the winglet anti-collision lights (left/right) go off.

(c) Set the POSITION switch for the winglet anti-collision lights to OFF.

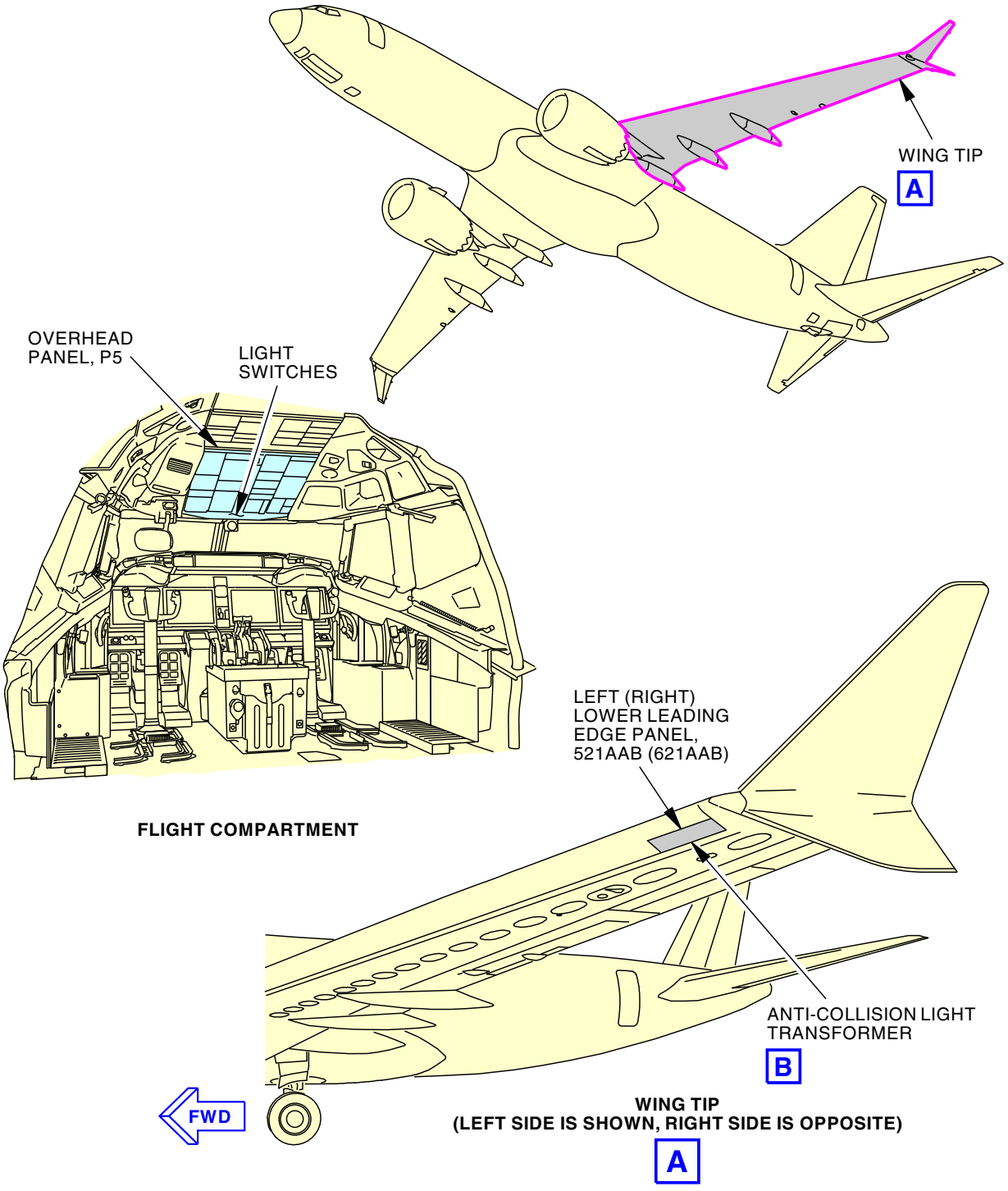
1) Make sure that the winglet anti-collision lights (left/right) go off.

(d) Close these access panels:

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
621ABB	Lower Leading Edge Access Panel-Slat Station 519

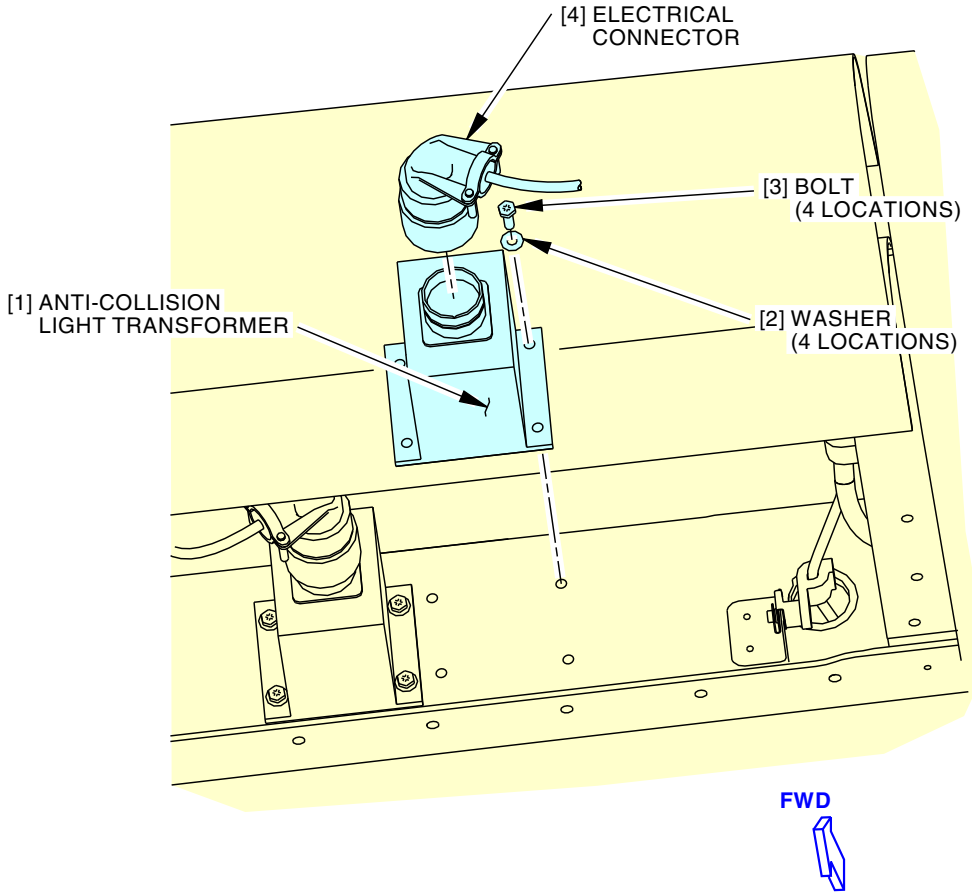
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Winglet Anti-Collision Light - Transformer Replacement
Figure 202/33-44-13-990-812 (Sheet 1 of 2)

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ANTI-COLLISION LIGHT TRANSFORMER

B

2488865 S0000586428_V1

Winglet Anti-Collision Light - Transformer Replacement
Figure 202/33-44-13-990-812 (Sheet 2 of 2)

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TASK 33-44-13-960-802

7. Winglet Anti-Collision Light LED Module and Power Supply Unit Replacement

Figure 201, Figure 203

A. General

(1) This procedure contains instructions for the replacement of the following winglet anti-collision light parts:

(a) Winglet anti-collision light power supply unit

(b) Winglet anti-collision light LED module.

B. Consumable Materials

Reference	Description	Specification
G50136	Compound - Corrosion Inhibiting, Non-drying Paste	BMS3-38

C. Location Zones

Zone	Area
527	Left Winglet
627	Right Winglet

D. Procedure

SUBTASK 33-44-13-000-002

(1) Do this task: Winglet Anti-Collision Light Removal, TASK 33-44-13-000-801.

SUBTASK 33-44-13-020-003

(2) Remove the power supply unit [24] from winglet light assembly:

(a) Use white cotton gloves to handle the winglet light assembly.

(b) Remove the eight screws [27] that attaches the power supply unit [24] to the winglet light assembly.

(c) Remove the power supply unit [24] from the winglet light assembly.

(3) Remove LED module [25] from the power supply unit [24]:

(a) Use white cotton gloves to handle the LED module [25].

(b) Remove four screws [26] that attaches the LED module [25] to the power supply unit [24].

(c) Carefully pull the LED module [25] from the power supply unit.

(4) If power supply unit is defective, install LED module [25] to new power supply unit [24].

(a) Install the four screws [26] to secure the LED module [25] to the new power supply unit [24].

(5) If LED module [25] is defective, install new LED module [25] to the power supply unit [24].

(a) Install the four screws [26] to secure the LED module [25] to the new power supply unit [24].

SUBTASK 33-44-13-420-002

(6) Install thepower supply unit [24] to the winglet light assembly:

(a) Position the power supply unit [24] on to the winglet light assembly.

(b) Apply corrosion inhibiting material, G50136 to the eight screws [27] and install.

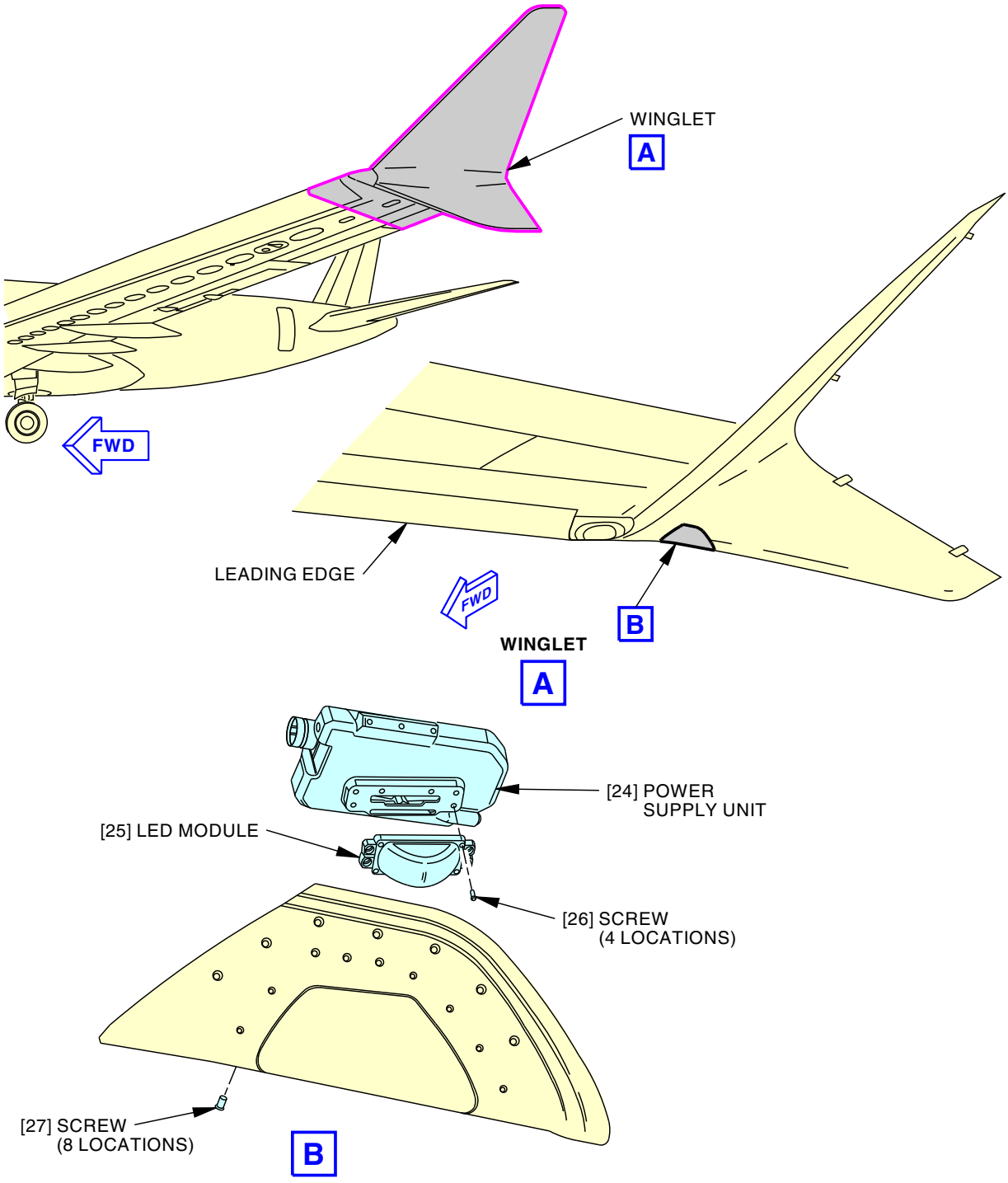
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SUBTASK 33-44-13-410-001

(7) Do this task: Winglet Anti-Collision Light Installation, TASK 33-44-13-400-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Winglet Anti-Collision LED Module and Power Supply Unit
Figure 203/33-44-13-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOGO LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Logo Light Deactivation

(2) Logo Light Activation

SIA ALL; AIRPLANES WITH LAMP LIGHTS

(3) Logo Light - Lamp Replacement

SIA ALL; AIRPLANES WITH LED MODULE ASSEMBLY LIGHTS

(4) Logo Light - LED Module Assembly Replacement

SIA ALL

(5) Logo Light - Light Assembly Replacement

TASK 33-49-00-040-801

2. Logo Light - Deactivation

(Figure 201)

A. General

(1) This procedure removes electrical power to the logo lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

C. Procedure

SUBTASK 33-49-00-860-001

(1) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	15	C00644	EXTERIOR LIGHTING LOGO ILLUM

D. Logo Light - Tryout

NOTE: This tryout is to make sure the Logo light is in a zero energy state.

SUBTASK 33-49-00-200-001

(1) Do the following steps to make sure the power has been removed:

(a) At the overhead panel, P5, set the logo light switch to the ON Position

(b) Set the GALLEY switch on the P5-13 panel to the ON position.

NOTE: On some airplanes the switch name is CAB/UTIL.

(c) Make sure that the logo lights are off.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-49-00-440-801

3. Logo Light - Activation

(Figure 201)

A. General

(1) This procedure adds electrical power to the logo lights.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

C. Procedure

SUBTASK 33-49-00-860-002

(1) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	15	C00644	EXTERIOR LIGHTING LOGO ILLUM

——— END OF TASK ———

SIA ALL; AIRPLANES WITH LAMP LIGHTS

TASK 33-49-00-960-801

4. Logo Light - Lamp Replacement

(Figure 201)

A. References

Reference	Title
27-31-00-000-801	Elevator and Tab Control System - Deactivation (P/B 201)
27-31-00-400-801	Elevator and Tab Control System - Activation (P/B 201)
27-41-00-800-801	Horizontal Stabilizer Trim Control System - Deactivation (P/B 201)
27-41-00-800-802	Horizontal Stabilizer Trim Control System - Activation (P/B 201)

B. Consumable Materials

Reference	Description	Specification
G01306	Gloves - Lint-free	

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Lamp	33-49-00-02-100	SIA ALL

D. Location Zones

Zone	Area
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL; AIRPLANES WITH LAMP LIGHTS (Continued)

E. Procedure

SUBTASK 33-49-00-040-003

(1) Do this task: Horizontal Stabilizer Trim Control System - Deactivation, TASK 27-41-00-800-801.

SUBTASK 33-49-00-040-004

(2) Do this task: Elevator and Tab Control System - Deactivation, TASK 27-31-00-000-801.

SUBTASK 33-49-00-860-003

(3) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	15	C00644	EXTERIOR LIGHTING LOGO ILLUM

SUBTASK 33-49-00-010-001

(4) Open the hinged panel assembly to gain access to the logo light assembly.

NOTE: The hinged panel assembly is located between access panels 333EB (343EB) and 333FB (343FB).

SUBTASK 33-49-00-960-001

CAUTION

DO NOT TOUCH THE HALOGEN LAMP WITH YOUR BARE SKIN. USE A CLOTH TO HOLD THE HALOGEN LAMP. IF YOUR SKIN TOUCHES THE HALOGEN LAMP, YOU WILL DECREASE ITS LIFE.

(5) Do these steps to replace the lamp with lint-free gloves, G01306:

(a) Loosen the two fasteners [4] and remove the socket cover [3] on the bottom of the logo light housing.

NOTE: The lanyard [8] stays connected.

(b) Release the top spring [5] from the left hook [9] to remove the socket [2] (View C).

(c) Remove the socket [2].

(d) Release the lower spring [6] from the right hook [7] (View D).

(e) Remove the lamp [1] from the rear of the reflector assembly [11] (View E).

(f) Install the new lamp [1] to the reflector assembly [11].

1) Make sure the lamp [1] is flush into the reflector assembly [11].

(g) Latch the lower spring [6] to the right hook [7] to hold the lamp [1] in its position (View D).

NOTE: The “V” bend on the lower spring [6] is larger than the top spring [5].

1) Make sure the “V” bend of the lower spring [6] is against the edge of the lamp [1].

CAUTION

DO NOT USE TOO MUCH FORCE. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE LAMP PINS.

(h) Carefully install the socket [2] to the lamp pins.

NOTE: You put the socket [2] to the lamp pins. You hold the socket [2] in its position by the top spring [5].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL; AIRPLANES WITH LAMP LIGHTS (Continued)

1) Make sure the lower spring [6] is positioned under the socket [2] (View C).

CAUTION MAKE SURE THAT THE TOP SPRING IS CORRECTLY ALIGNED. IF YOU DO NOT ALIGN IT CORRECTLY, DAMAGE TO THE EQUIPMENT CAN OCCUR.

(i) Latch the top spring [5] to the left hook [9] to hold the socket [2] in its position (View C).

1) Make sure the socket [2] is seated firmly under the top spring [5].

(j) Install the socket cover [3] and tighten the fasteners [4].

SUBTASK 33-49-00-940-001

(6) Close the hinged panel assembly.

SUBTASK 33-49-00-860-004

(7) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	15	C00644	EXTERIOR LIGHTING LOGO ILLUM

SUBTASK 33-49-00-440-001

(8) If necessary, do this task: Horizontal Stabilizer Trim Control System - Activation, TASK 27-41-00-800-802.

SUBTASK 33-49-00-440-002

(9) If necessary, do this task: Elevator and Tab Control System - Activation, TASK 27-31-00-400-801.

SUBTASK 33-49-00-710-001

(10) Do a test of the new lamp:

(a) Set the GALLEY switch on the P5-13 panel to the ON position.

NOTE: On some airplanes the switch name is CAB/UTIL.

(b) At the overhead panel, P5, set the switch for the logo lights to the on mode.

1) Make sure that the lamp comes on.

2) It can be necessary to adjust the direction of the light beam. Turn the adjustment screws below the housing until the light beam is on the logo.

(c) Set the GALLEY switch on the P5-13 panel to the OFF position.

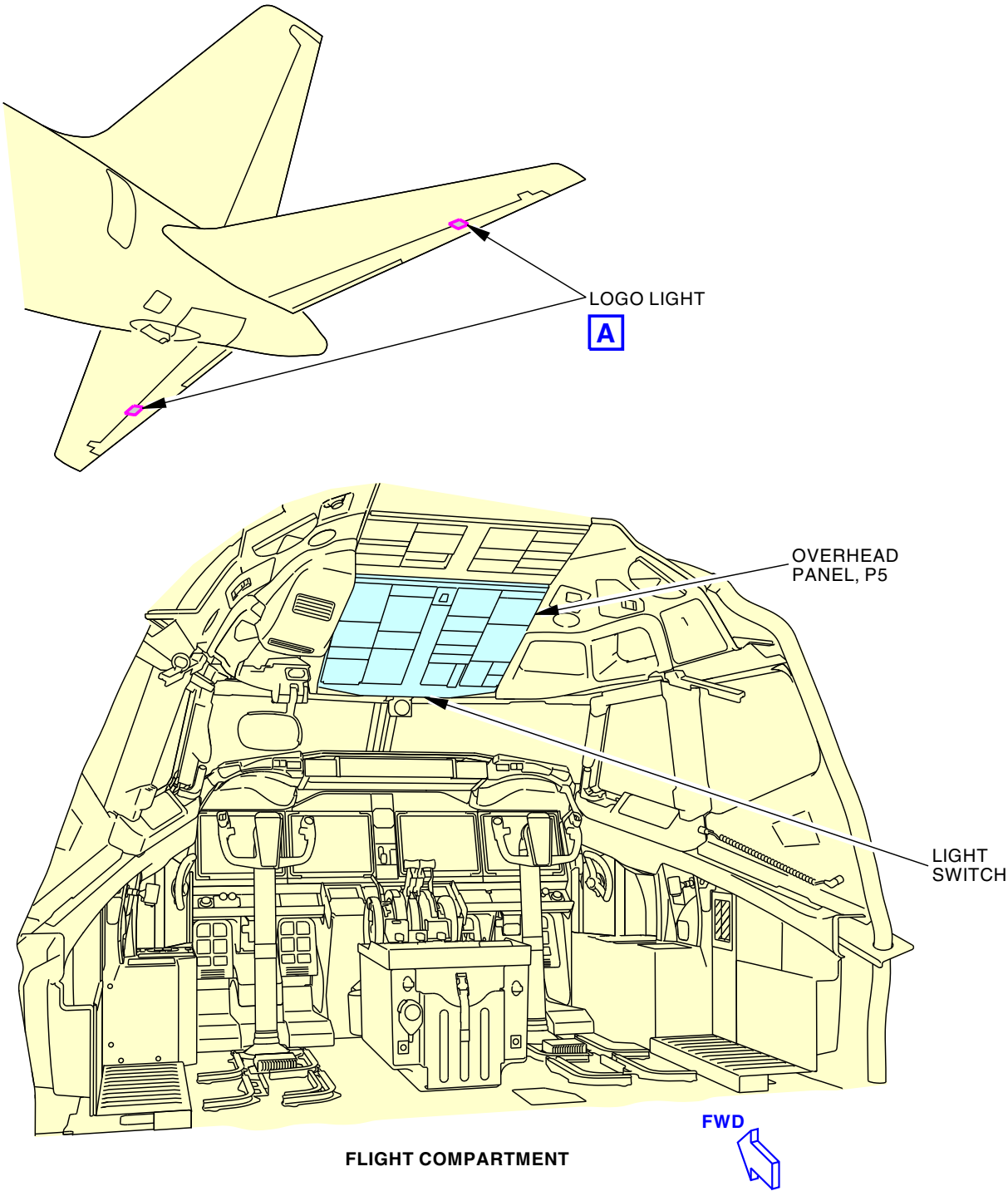
NOTE: On some airplanes the switch name is CAB/UTIL.

(d) Set the switch for the logo lights to the off mode.

1) Make sure that the lamp goes off.

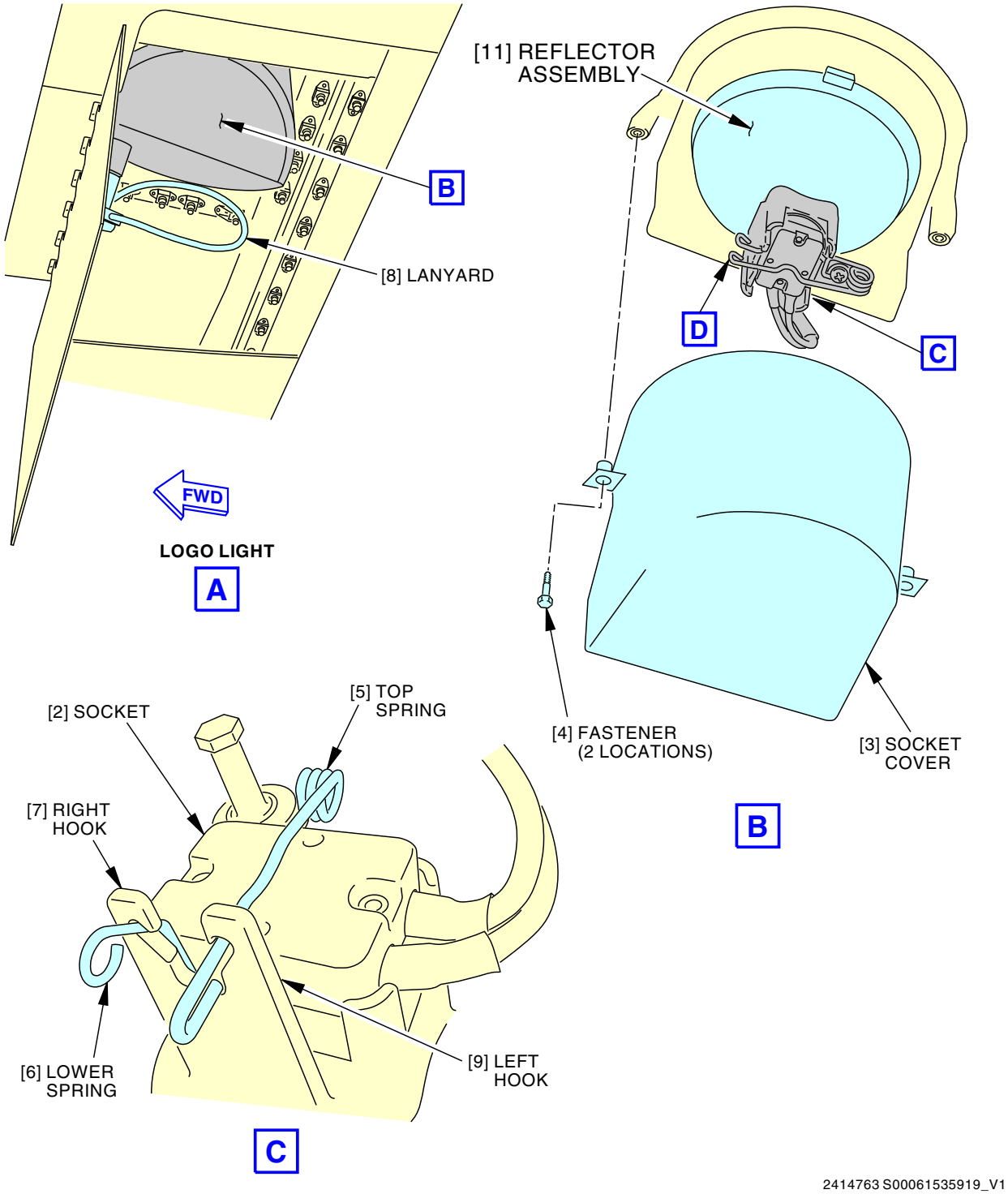
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



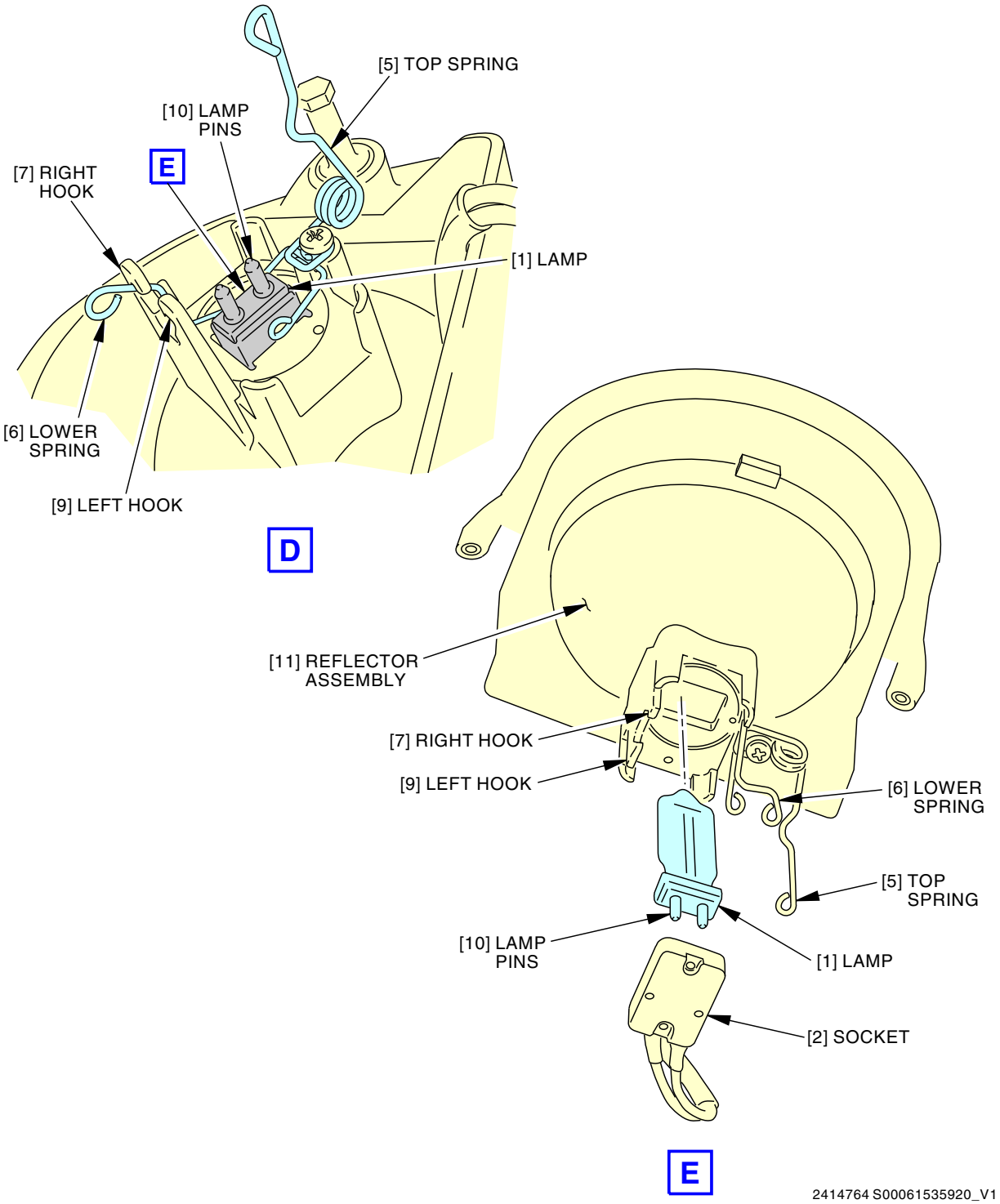
Logo Light - Lamp Replacement
Figure 201/33-49-00-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Logo Light - Lamp Replacement
Figure 201/33-49-00-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Logo Light - Lamp Replacement
Figure 201/33-49-00-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL; AIRPLANES WITH LED MODULE ASSEMBLY LIGHTS

TASK 33-49-00-960-803

5. Logo Light - LED Module Assembly Replacement

(Figure 202)

A. General

(1) This procedure gives the steps necessary for the logo light LED module assembly replacement.

B. References

Reference	Title
27-31-00-000-801	Elevator and Tab Control System - Deactivation (P/B 201)
27-31-00-400-801	Elevator and Tab Control System - Activation (P/B 201)
27-41-00-800-801	Horizontal Stabilizer Trim Control System - Deactivation (P/B 201)
27-41-00-800-802	Horizontal Stabilizer Trim Control System - Activation (P/B 201)

C. Location Zones

Zone	Area
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

D. Procedure

SUBTASK 33-49-00-040-005

(1) Do this task: Horizontal Stabilizer Trim Control System - Deactivation, TASK 27-41-00-800-801.

SUBTASK 33-49-00-040-006

(2) Do this task: Elevator and Tab Control System - Deactivation, TASK 27-31-00-000-801.

SUBTASK 33-49-00-860-009

(3) Make sure that this circuit breaker is open and has safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	15	C00644	EXTERIOR LIGHTING LOGO ILLUM

SUBTASK 33-49-00-010-002

(4) Open the hinged panel assembly to gain access to the logo light assembly.

NOTE: The hinged panel assembly is located between access panels 333EB and 333FB (343EB and 343FB on the right wing).

SUBTASK 33-49-00-960-003

(5) Do these steps to replace the LED module assembly [30]:

(a) Remove the captive screw [33] from the LED module assembly [30].

(b) Remove the captive screws [31].

(c) Pull down the LED module assembly [30].

(d) Disconnect the connector [32] at J2 from the LED module assembly [30].

(e) Connect the connector [32] at J2 to a new LED module assembly [30].

(f) Put the new LED module assembly [30] in position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL; AIRPLANES WITH LED MODULE ASSEMBLY LIGHTS (Continued)

(g) Install the captive screws [31].

(h) Install the captive screw [33] to the LED module assembly [30].

SUBTASK 33-49-00-940-002

(6) Close the hinged panel assembly.

SUBTASK 33-49-00-860-010

(7) Close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	15	C00644	EXTERIOR LIGHTING LOGO ILLUM

SUBTASK 33-49-00-440-003

(8) Do this task: Horizontal Stabilizer Trim Control System - Activation, TASK 27-41-00-800-802.

SUBTASK 33-49-00-440-004

(9) Do this task: Elevator and Tab Control System - Activation, TASK 27-31-00-400-801.

SUBTASK 33-49-00-710-003

(10) Do a test of the new LED module assembly:

(a) Set the GALLEY switch on the P5-13 panel to the ON position.

NOTE: On some airplanes the switch name is CAB/UTIL.

(b) At the overhead panel, P5, set the switch for the logo lights to the ON mode.

1) Make sure that the LED module assembly comes on.

2) It can be necessary to adjust the direction of the light beam. Turn the adjustment screws below the housing until the light beam is on the logo.

(c) Set the GALLEY switch on the P5-13 panel to the OFF position.

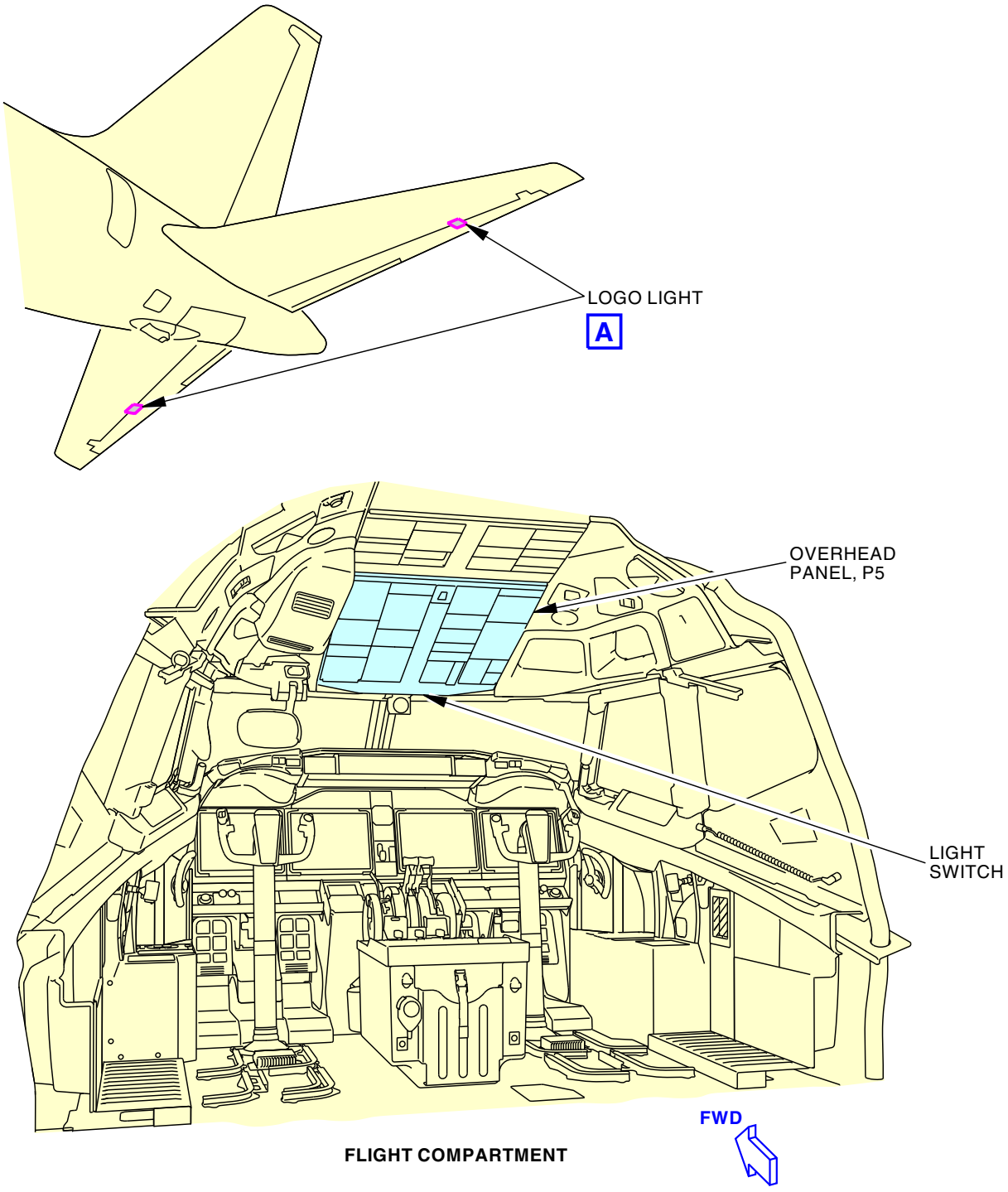
NOTE: On some airplanes the switch name is CAB/UTIL.

(d) Set the switch for the logo lights to the OFF mode.

1) Make sure the LED module assembly goes off.

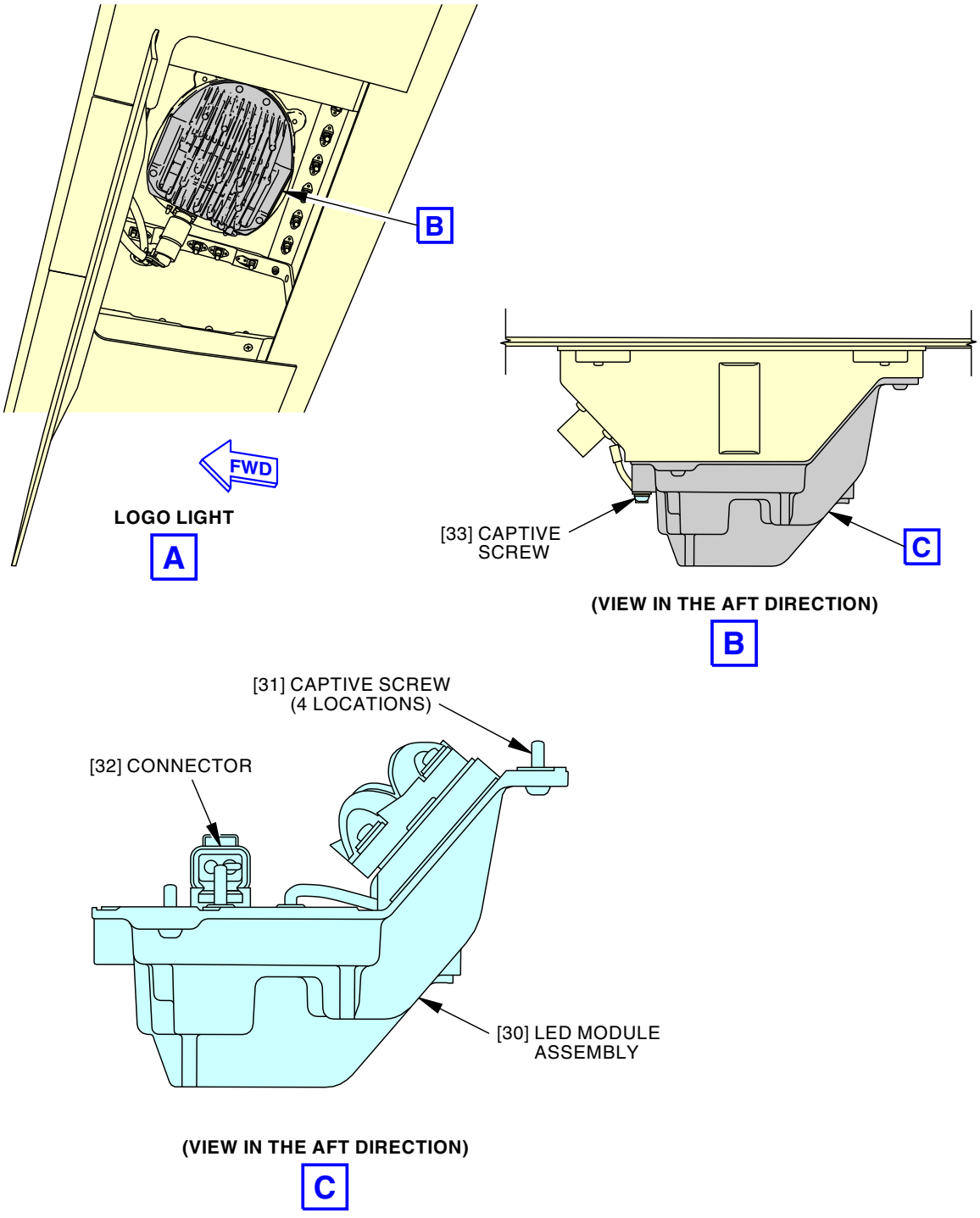
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Logo Light - LED Module Assembly Replacement
Figure 202/33-49-00-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Logo Light - LED Module Assembly Replacement
Figure 202/33-49-00-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL

TASK 33-49-00-960-802

6. Logo Light - Light Assembly Replacement

(Figure 203)

A. General

SIA ALL; AIRPLANES WITH LAMP LIGHTS

(1) When you replace the light assembly, do not discard it. Usually, you can repair the assembly with a new transformer. Do the repairs in a shop.

SIA ALL

B. References

Reference	Title
27-31-00-000-801	Elevator and Tab Control System - Deactivation (P/B 201)
27-31-00-400-801	Elevator and Tab Control System - Activation (P/B 201)
27-41-00-800-801	Horizontal Stabilizer Trim Control System - Deactivation (P/B 201)
27-41-00-800-802	Horizontal Stabilizer Trim Control System - Activation (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II
B00065	Alcohol - Denatured, Ethyl (Ethanol)	AMS 3002 (Supersedes O-A-396)
C00528	Compound - Corrosion Preventive, Petroleum Hot Application (Soft Film)	MIL-C-11796 Class III
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G01306	Gloves - Lint-free	
G50952	Abrasive - Silicon Carbide, 180 Grit	
G51464	Abrasive - Aluminum Oxide paper, 60 grit or finer	

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Reference	Description	Specification
G51465	Abrasive - Garnet sandpaper, 240 (7/0) grit	

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
22	Light assembly	33-49-00-01-010	SIA ALL
		33-49-00-01-015	SIA ALL

F. Location Zones

Zone	Area
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

G. Access Panels

Number	Name/Location
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

H. Logo Light - Light Assembly Replacement

SUBTASK 33-49-00-040-001

(1) Do this task: Horizontal Stabilizer Trim Control System - Deactivation, TASK 27-41-00-800-801.

SUBTASK 33-49-00-040-002

(2) Do this task: Elevator and Tab Control System - Deactivation, TASK 27-31-00-000-801.

SUBTASK 33-49-00-860-007

(3) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	15	C00644	EXTERIOR LIGHTING LOGO ILLUM

SUBTASK 33-49-00-960-002

(4) Do these steps to replace the light assembly [22]:

(a) Remove the bolts [21] on the top of the light assembly [22].

(b) Lift up the light assembly [22].

(c) Disconnect the electrical connector [23].

(d) Replace the light assembly [22].

1) Make sure a lamp is installed in the new light assembly [22].

a) Do not touch the new lamp with your hands. Use lint-free gloves, G01306

(e) Connect the electrical connector [23].

(f) Put the light assembly [22] in its position.

(g) Open these access panels to access to the back of the light assembly:

Number	Name/Location
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WARNING DO NOT BREATHE THE PARTICLES, OR GET THEM IN YOUR MOUTH, EYES, OR ON YOUR SKIN. PUT ON A RESPIRATOR, GOGGLES, AND GLOVES AND OTHER EQUIPMENT FOR PROTECTION. THESE PARTICLES CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(h) Prepare the surface around the edges of the joint between the lower surface of the light assembly [22] and airplane structure.

1) Use 60 grit wet/dry aluminum oxide sandpaper, G51464, 180 grit silicon carbide abrasive, G50952, garnet 240 grit (7/0) or finer sandpaper, G51465, to clean the surface.

a) Sand until a bright aluminum bonding surface is visible.

WARNING DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. PUT ON A RESPIRATOR, PROTECTIVE SPLASH GOGGLES, AND GLOVES WHEN YOU USE SOLVENTS. KEEP THE SOLVENTS AWAY FROM SPARKS, FLAME, AND HEAT. SOLVENTS ARE POISONOUS AND FLAMMABLE. SOLVENTS CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

2) Clean the surface with cotton wiper, G00034, moist with alcohol, B00065.

(i) Apply a fillet seal with sealant, A02315, around the edges of the joint between the lower surface of the light assembly [22] and airplane structure.

(j) Close these access panels:

Number	Name/Location
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

(k) Install the bolts [21] with the corrosion-preventative compound, C00528.

(l) With the intrinsically safe approved bonding meter, COM-1550, make sure the resistance between the light assembly [22] and the fuselage measures no more than 0.0025 ohms.

SUBTASK 33-49-00-860-008

(5) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	15	C00644	EXTERIOR LIGHTING LOGO ILLUM

SUBTASK 33-49-00-440-005

(6) Do this task: Horizontal Stabilizer Trim Control System - Activation, TASK 27-41-00-800-802.

SUBTASK 33-49-00-440-006

(7) Do this task: Elevator and Tab Control System - Activation, TASK 27-31-00-400-801.

SUBTASK 33-49-00-710-002

(8) Do a test of the light assembly:

(a) Set the GALLEY switch on the P5-13 panel to the ON position.

NOTE: On some airplanes the switch name is CAB/UTIL.

(b) At the overhead panel, P5, set the switch for the logo lights to the on mode.

1) Make sure that the light comes on.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) If it is necessary to adjust the direction of the light beam, do these steps:
   a) Open the access panel below the logo light.
   b) Turn the adjustment screws below the housing until the light beam is on the logo.
   c) Close the access panel.

(c) Set the GALLEY switch on the P5-13 panel to the OFF position.

NOTE: On some airplanes the switch name is CAB/UTIL.

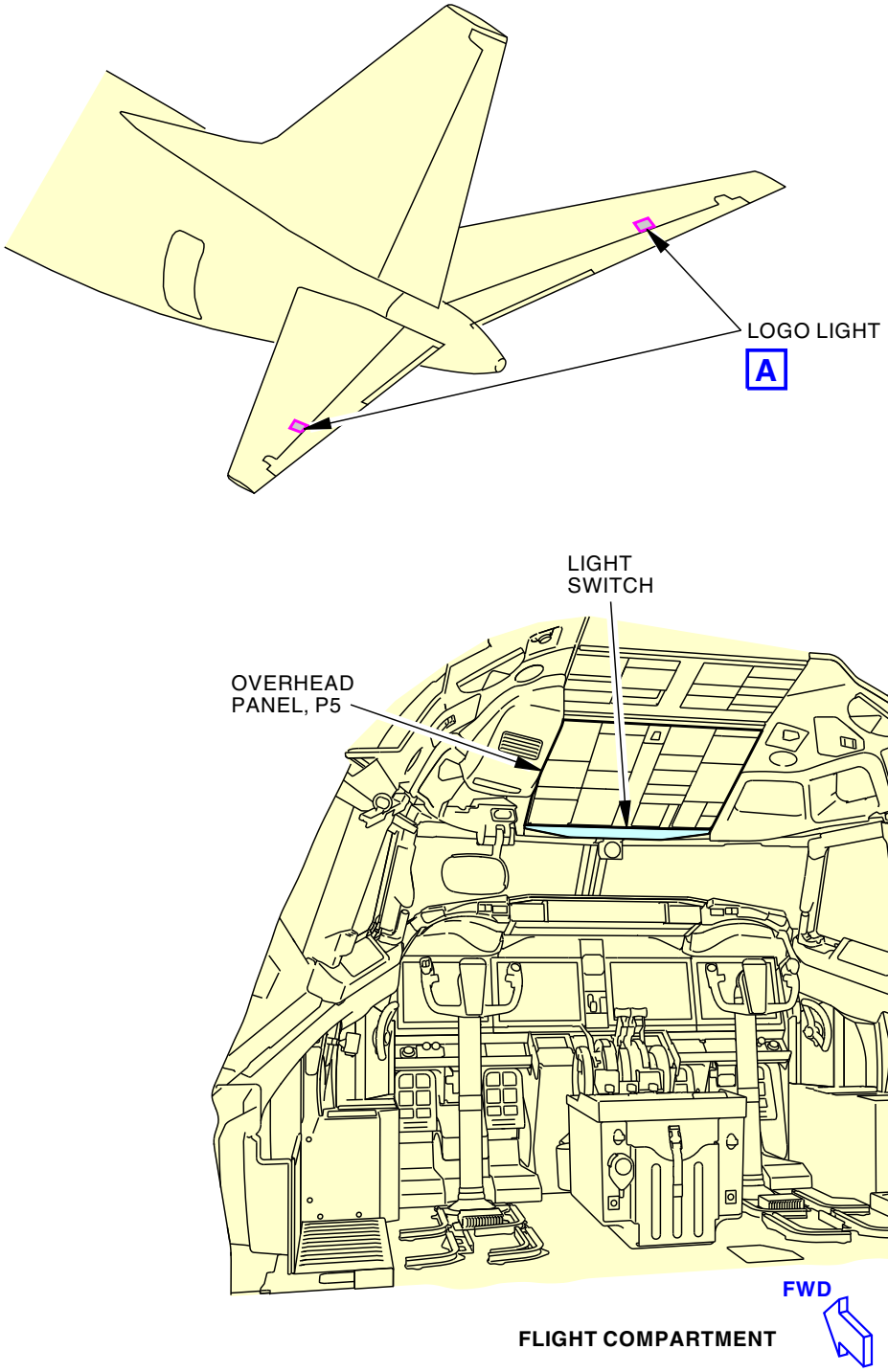
(d) Set the logo lights switch to the off mode.
   1) Make sure that the light goes off.

SUBTASK 33-49-00-390-001

(9) With sealant, A02315, apply an aerodynamic seal around the perimeter of the light assembly.

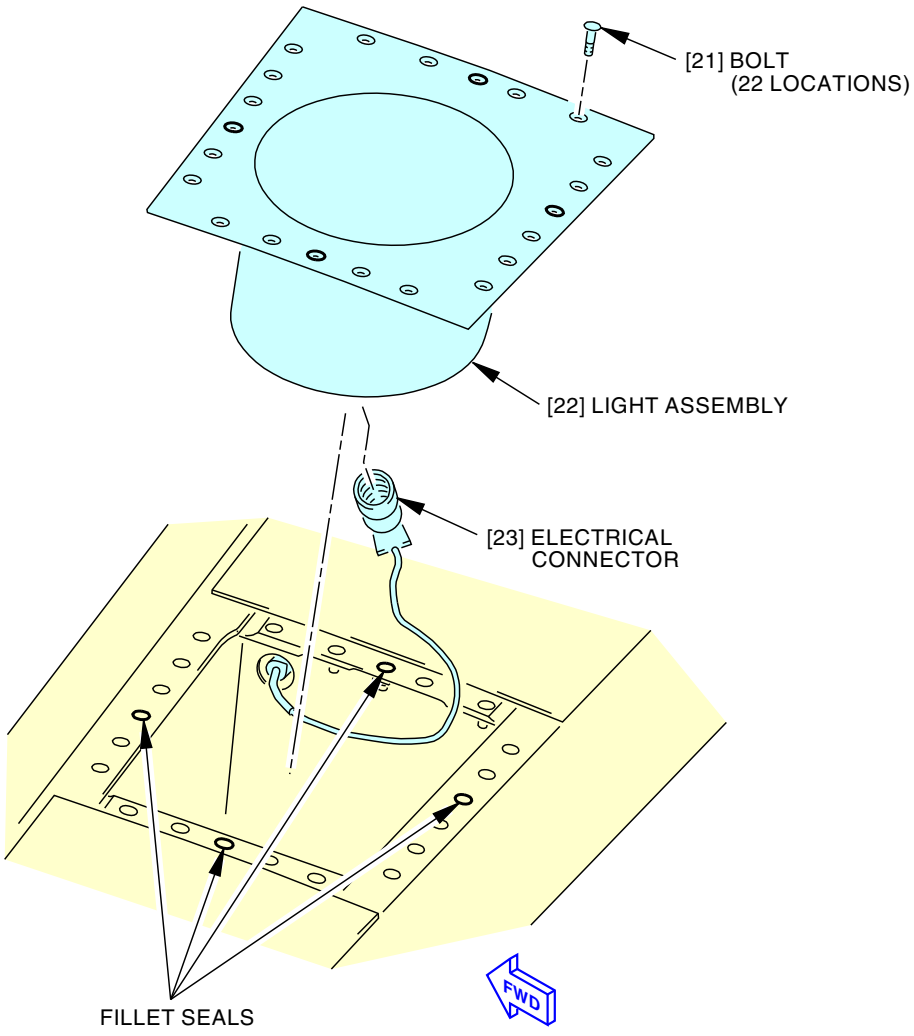
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Logo Light - Light Assembly Replacement
Figure 203/33-49-00-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LOGO LIGHT
(EXAMPLE)

A

2414766 S00061535923_V3

Logo Light - Light Assembly Replacement
Figure 203/33-49-00-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EMERGENCY LIGHTS - ADJUSTMENT/TEST

1. General

A. This procedure has these tasks:

(1) Emergency Lights - Operational Check

(2) Emergency Lights - Operational Test

TASK 33-51-00-710-801

2. Emergency Lights Operational Check

(Figure 501, Figure 502, Figure 503, Figure 504 and Figure 505)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This check makes sure that the emergency lights come on.

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Emergency Lights Operational Check

SUBTASK 33-51-00-860-004

(1) At the aft attendant panel, make sure that the BSI LED lighting system is turned off.

SUBTASK 33-51-00-710-009

(2) Do a check of the emergency lights as follows:

(a) At the forward overhead panel, P5, set the EMER EXIT LIGHTS switch to the ON position, or on the aft attendant panel press the EMERGENCY EXIT LIGHTS switch.

NOTE: The power supply operates the emergency lights. Use the lights for a minimum time to do the test.

1) Make sure that the emergency dome light comes on (Figure 501).

NOTE: The location of the emergency dome light is in the flight deck.

2) Make sure that these emergency lights in the passenger compartment come on (Figure 502, Figure 503, and Figure 504):

a) Aisle light

b) Overdoor exit sign

c) Overwing exit sign

d) Escape hatch handle lights

NOTE: This light illuminates the overwing escape hatch handle.

e) Exit locator sign

f) Exit indicator sign

NOTE: There is an exit indicator light for each exit door.

g) Floor proximity light

h) If applicable, flood light.

3) Make sure that the exterior lights come on (Figure 505).

NOTE: This check includes all slide and overwing lights.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Set the EMER EXIT LIGHTS switch on the forward overhead panel, P5, to the OFF and then to the ARMED position or press the EMERGENCY EXIT LIGHTS switch on the cabin attendant control panel again.

1) Make sure that the emergency dome light goes off (Figure 501).

2) Make sure that these emergency lights in the passenger compartment go off (Figure 502, Figure 503, and Figure 504):

a) Aisle light

b) Overdoor exit sign

c) Overwing exit sign

d) Escape hatch handle lights

NOTE: This light illuminates the overwing escape hatch handle.

e) Exit locator sign

f) Exit indicator sign

NOTE: There is an exit indicator light for each exit door.

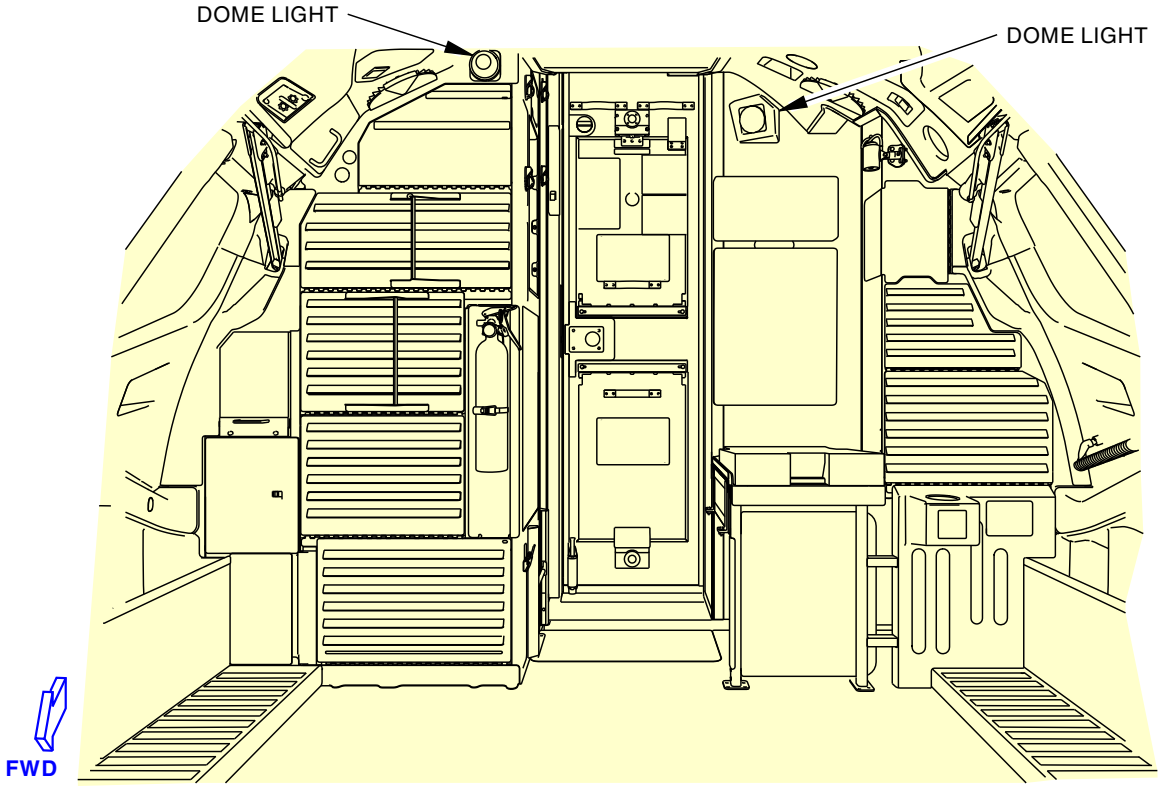
g) Floor proximity light

h) If applicable, flood light.

3) Make sure that the exterior lights go off (Figure 505).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

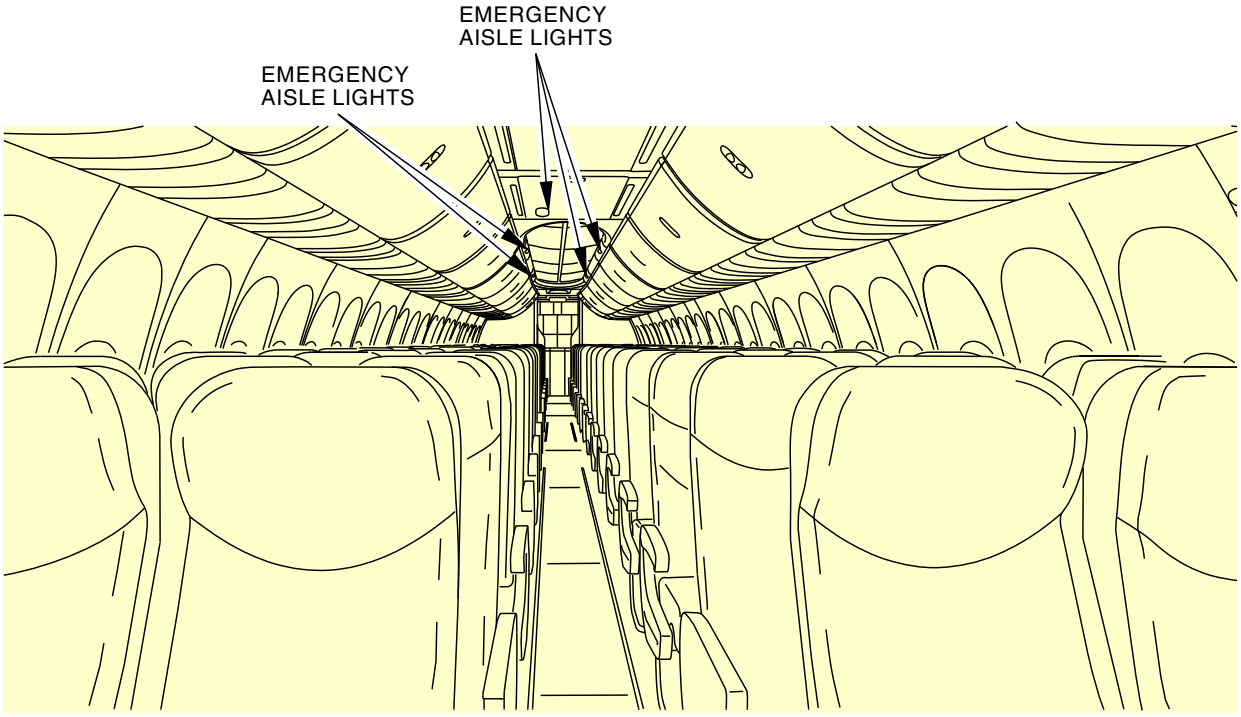


**FLIGHT COMPARTMENT
(EXAMPLE)**

3043043 S0000809935_V1

**Emergency Lights - Dome Lights
Figure 501/33-51-00-990-813**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

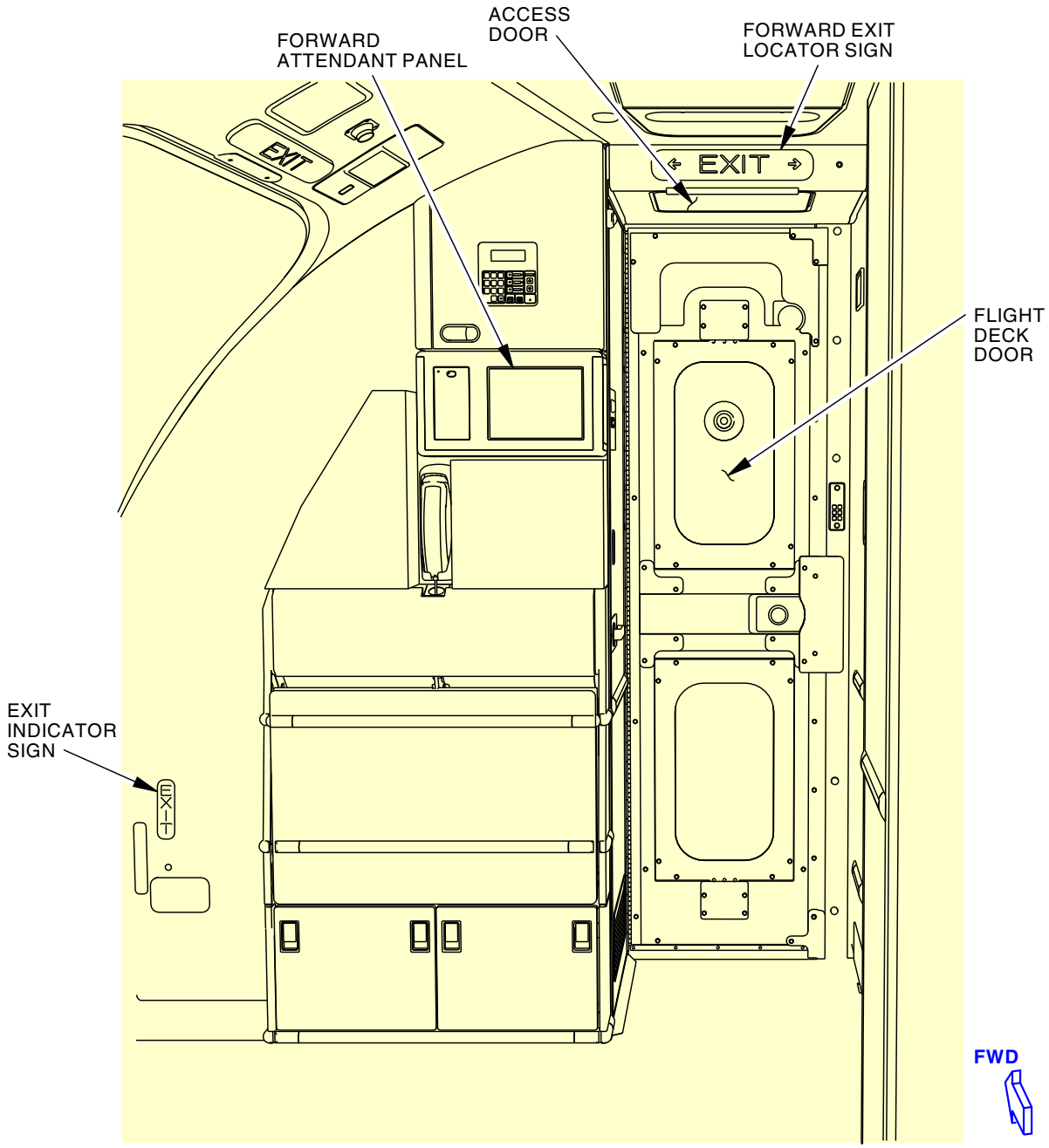


**PASSENGER COMPARTMENT
(EXAMPLE)**

3043063 S0000809963_V1

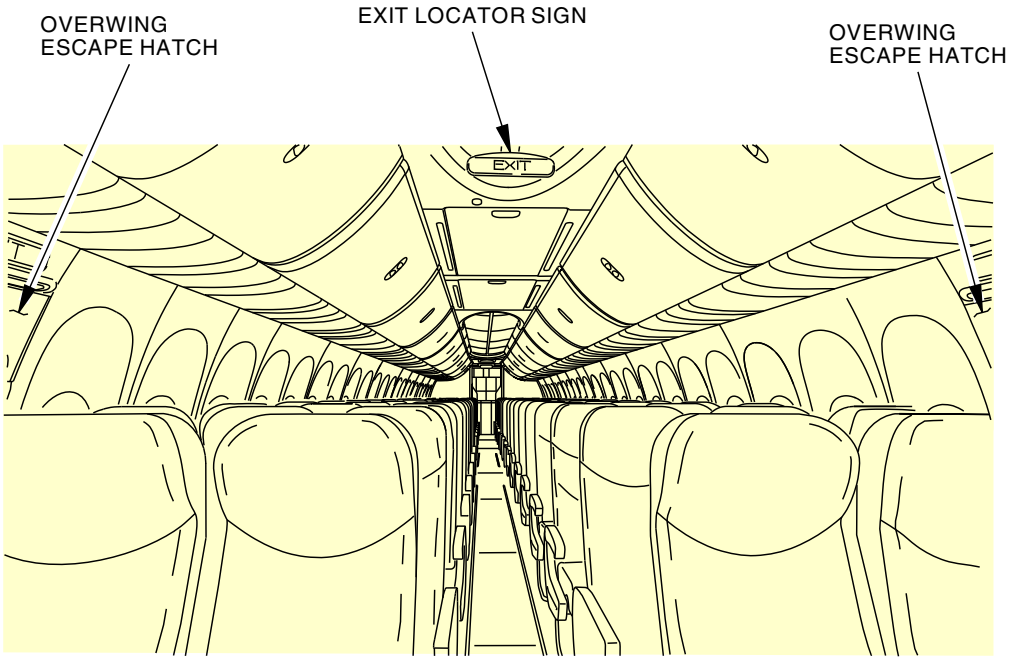
**Emergency Lights - Emergency Aisle Lights (EAL)
Figure 502/33-51-00-990-814**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Emergency Lights - Exit Signs
Figure 503/33-51-00-990-815 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

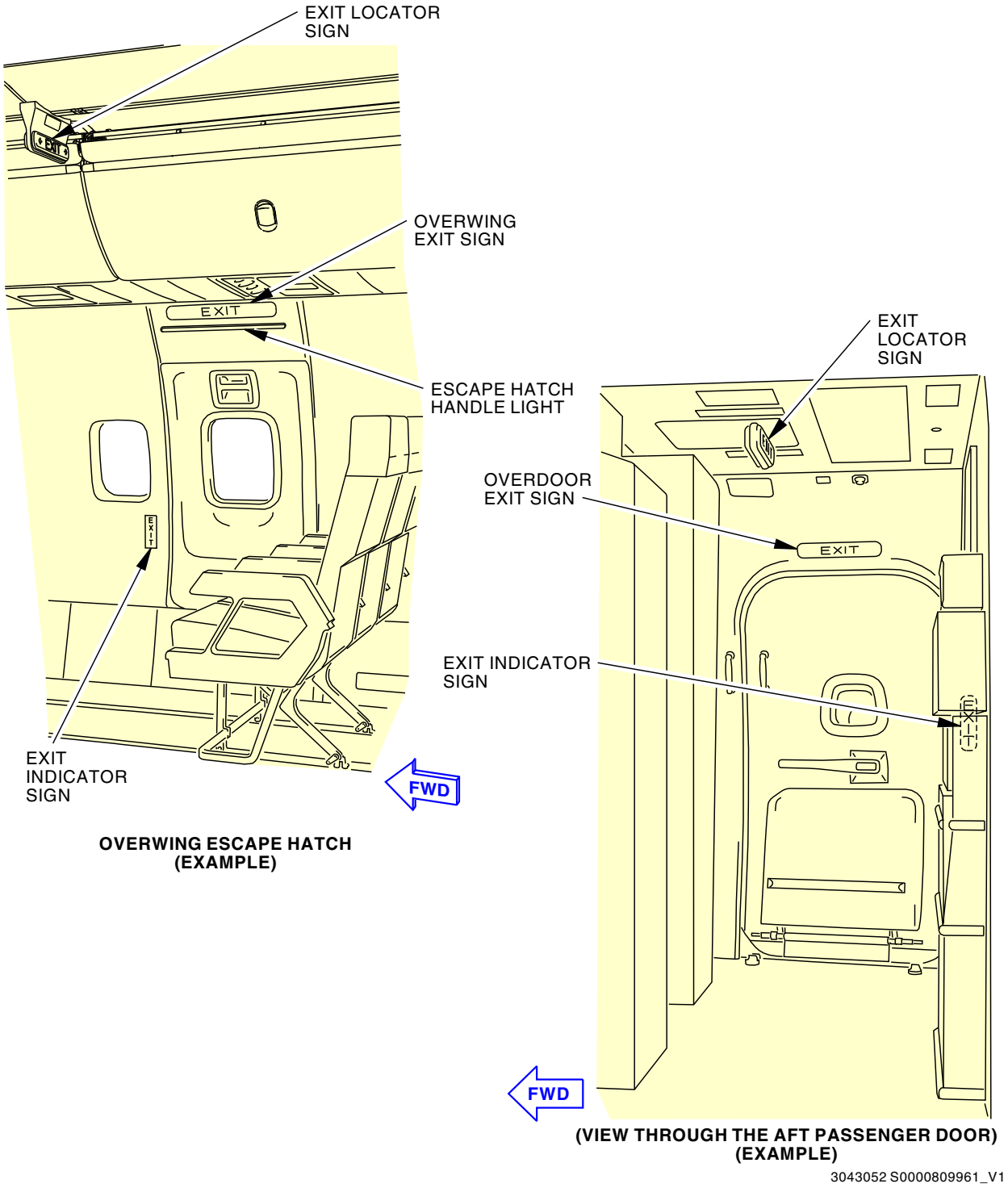


**PASSENGER COMPARTMENT
(EXAMPLE)**

3043045 S0000809956_V1

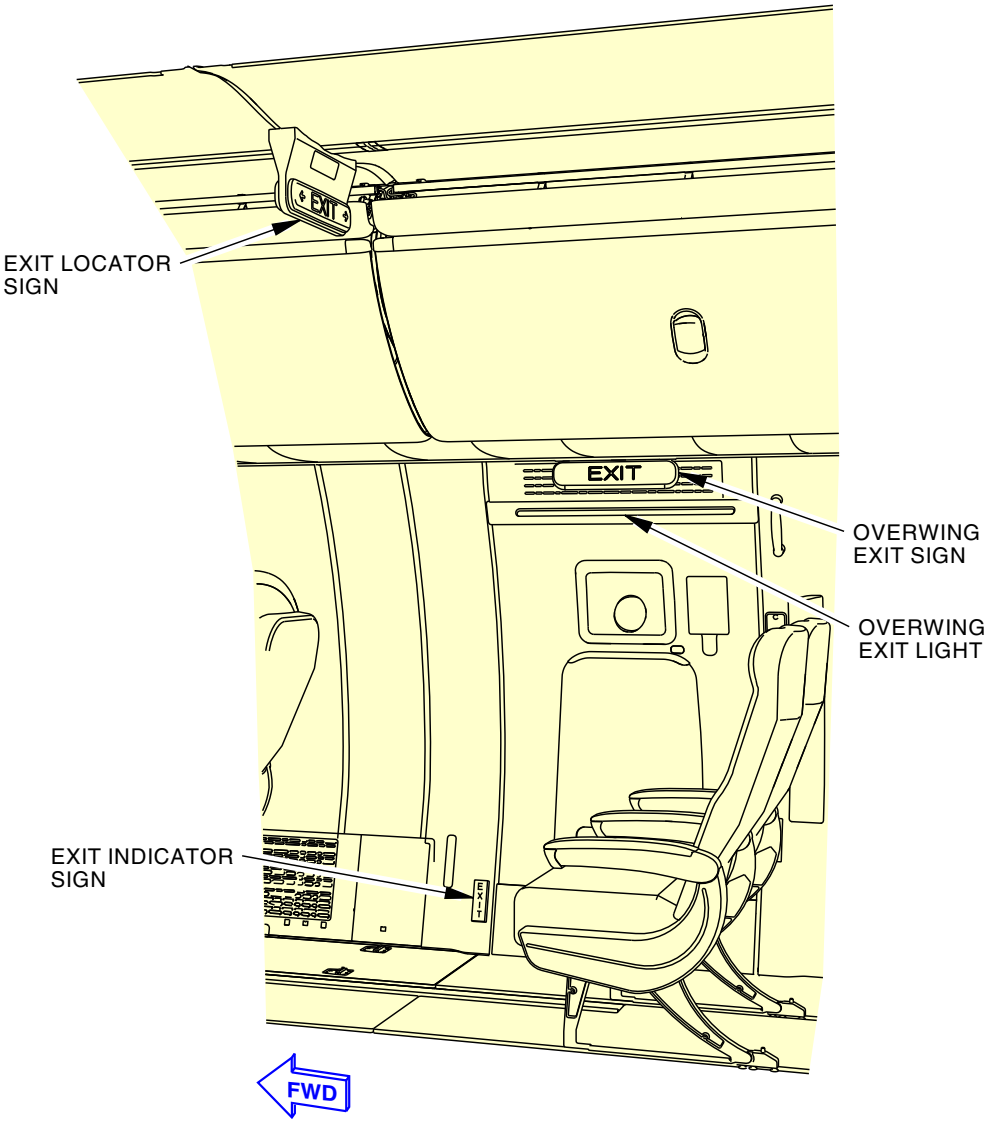
**Emergency Lights - Exit Signs
Figure 503/33-51-00-990-815 (Sheet 2 of 4)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Emergency Lights - Exit Signs
Figure 503/33-51-00-990-815 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

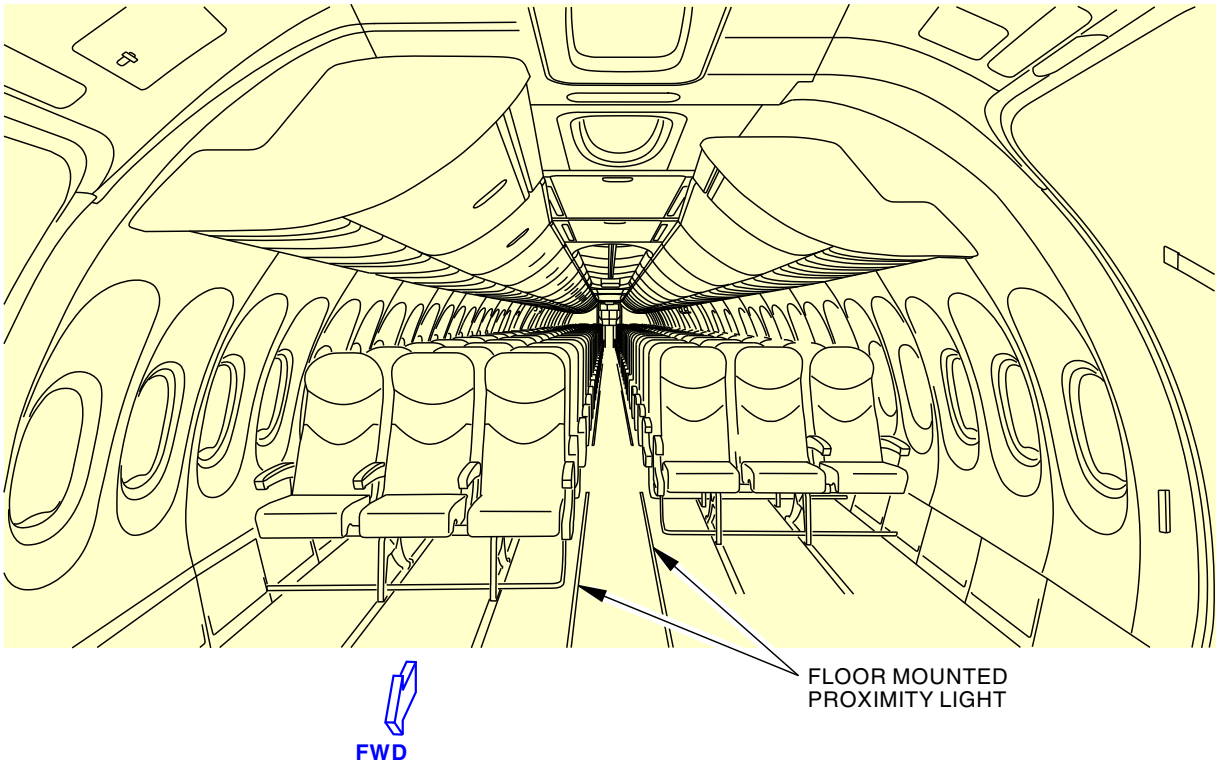


MID EXIT DOOR (EXAMPLE)

3043060 S0000809962_V1

Emergency Lights - Exit Signs
Figure 503/33-51-00-990-815 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

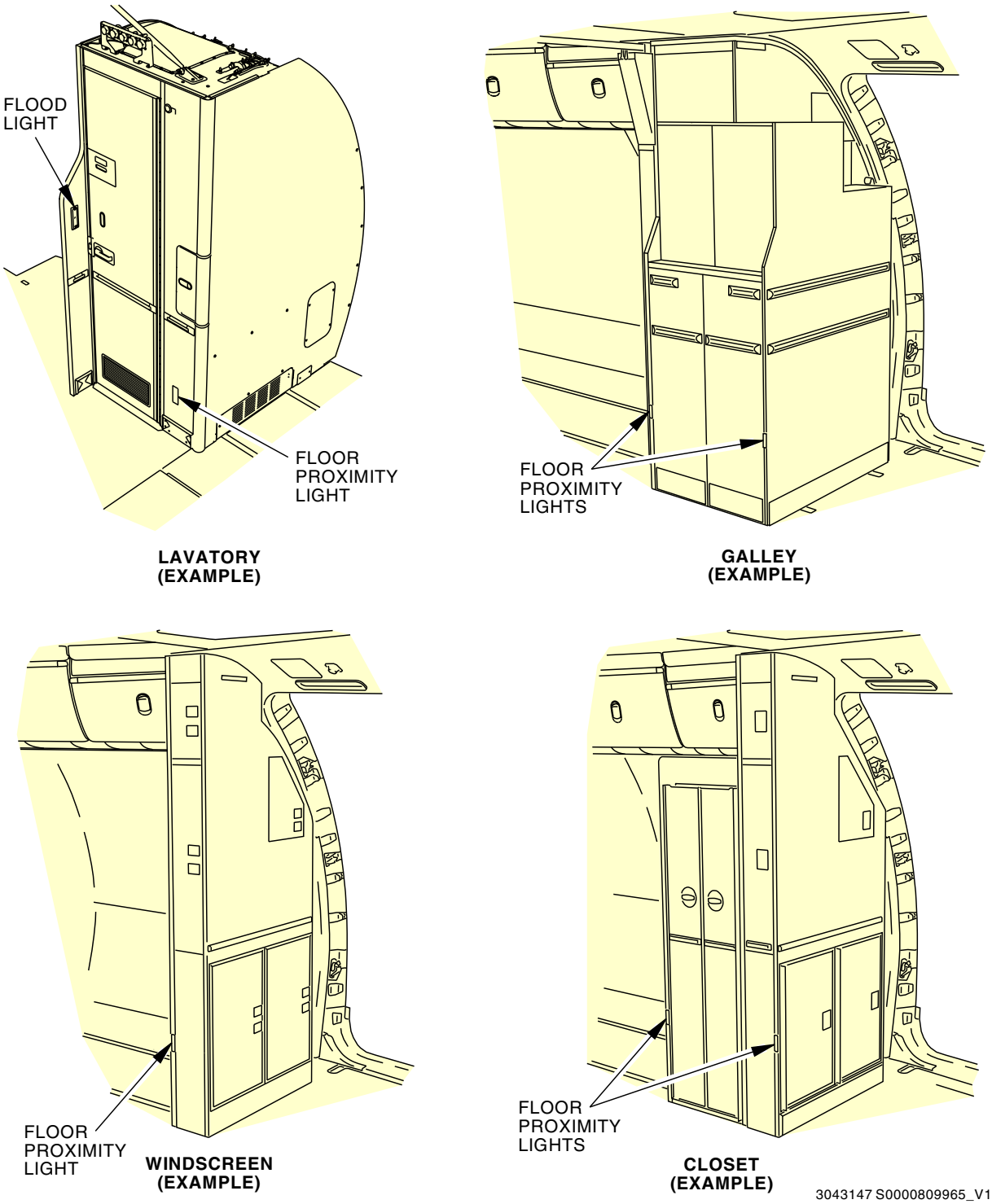


**PASSENGER COMPARTMENT
(EXAMPLE)**

3043066 S0000809964_V1

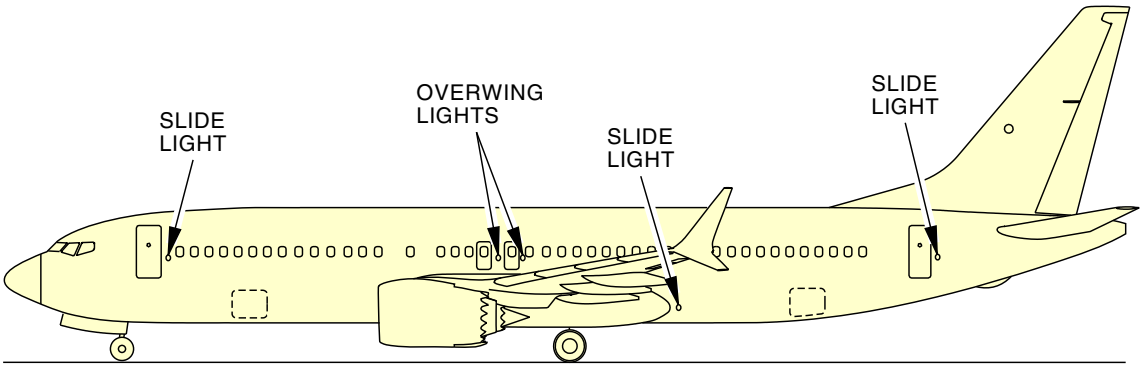
**Emergency Lights - Floor Proximity Lights
Figure 504/33-51-00-990-816 (Sheet 1 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Emergency Lights - Floor Proximity Lights
Figure 504/33-51-00-990-816 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



(EXAMPLE)

3043145 S0000809967_V1

Emergency Lights - Overwing/ Slide Lights
Figure 505/33-51-00-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-51-00-720-801

3. Emergency Lights Operational Test

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This test makes sure that all components in the emergency lighting system operate.

B. References

Reference	Title
33-51-06-610-801	Power Supply - Charge the Battery Packs (P/B 201)

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Emergency Lights Operational Test

SUBTASK 33-51-00-610-001

(1) Make sure that the battery packs are fully charged (TASK 33-51-06-610-801).

SUBTASK 33-51-00-710-002

(2) At the aft attendant panel, make sure that the BSI LED lighting system is turned off.

(3) Do a check of the emergency lighting system with the EMER EXIT LIGHTS switch on the forward overhead panel, P5, as follows:

(a) At the forward overhead panel, P5, set the pilots EMER EXIT LIGHTS switch to the ON position.

1) Make sure that the emergency dome light come on.

NOTE: The location of the emergency dome light is in the flight deck.

2) Make sure that the exterior lights come on.

NOTE: This check includes all slide and overwing lights.

3) Make sure that the lights in the passenger compartment come on.

NOTE: This check includes all types of emergency area lights, exit signs, escape hatch handles, aisle lights, and floor proximity lights in the passenger compartment.

4) Make sure that the overwing exit white LED lights come on.

NOTE: Overwing exit white LED lights provide illumination of the overwing exit door hatch handle during emergency situation.

(b) Set the EMER EXIT LIGHTS switch to the OFF position.

1) Make sure that the emergency dome light goes off.

NOTE: The location of the emergency dome light is in the flight deck.

2) Make sure that the NOT ARMED indication shows on the forward overhead panel, P5.

3) Make sure that the lights in the passenger compartment go off.

4) Make sure that the overwing exit white LED lights go off.

5) Make sure that the exterior lights go off.

(c) Set the switch to the ARMED mode.

1) Make sure that the lights stay off.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) Make sure that the NOT ARMED indication on the forward overhead panel, P5, goes off.

(d) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

1) Make sure that the emergency dome light come on.

NOTE: The location of the emergency dome light is in the flight deck.

2) Make sure that the exterior lights come on.

NOTE: This check includes all slide and overwing lights.

3) Make sure that the lights in the passenger compartment come on.

NOTE: This check includes all types of emergency area lights, exit signs, escape hatch handles, aisle lights, and floor proximity lights in the passenger compartment.

4) Make sure that the overwing exit white LED lights come on.

NOTE: Overwing exit white LED lights provide illumination of the overwing exit door hatch handle during emergency situation.

(e) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

1) Make sure that the emergency dome light goes off.

NOTE: The location of the emergency dome light is in the flight deck.

2) Make sure that the exterior lights goes off.

NOTE: This check includes all slide and overwing lights.

3) Make sure that the lights in the passenger compartment goes off.

NOTE: This check includes all types of emergency area lights, exit signs, escape hatch handles, aisle lights and floor proximity lights in the passenger compartment.

4) Make sure that the overwing exit white LED lights go off.

(f) Set the switch to the OFF position.

SUBTASK 33-51-00-710-003

(4) Do a check of the emergency lighting system with the aft attendant EMERGENCY EXIT LIGHT switch.

(a) At the aft attendant panel, make sure that the BSI LED lighting system is turned off.

(b) At the aft attendant panel, press the EMERGENCY EXIT LIGHTS switch.

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1) Make sure that the lights in the passenger compartment come on.

NOTE: This check includes all types of emergency area lights, exit signs, escape hatch handles, aisle lights, and floor proximity lights in the passenger compartment.

2) Make sure that the overwing exit white LED lights come on.

NOTE: Overwing exit white LED lights provide illumination of the overwing exit door hatch handle during emergency situation.

3) Make sure that the exterior lights come on.

NOTE: This check includes all slide and overwing lights.

4) Make sure that the emergency dome light come on.

NOTE: The location of the emergency dome light is in the flight deck.

(c) Press the EMERGENCY EXIT LIGHTS switch again to turn the lights off.

1) Make sure that the lights in the passenger compartment go off.
2) Make sure that the overwing exit white LED lights go off.
3) Make sure that the exterior lights go off.
4) Make sure that the emergency dome light goes off.

NOTE: The location of the emergency dome light is in the flight deck.

SUBTASK 33-51-00-610-002

(5) Do this task: Power Supply - Charge the Battery Packs, TASK 33-51-06-610-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EXIT SIGNS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Exit Sign - Lamp Replacement

(2) Exit Sign - Light Assembly Replacement

TASK 33-51-01-960-801

2. Exit Sign - Lamp Replacement

(Figure 201)

A. Tools/Equipment

Reference	Description
STD-1330	Wrench - Hexdrive, Allen Wrench
STD-13571	Screwdriver - Flat Tip

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Procedure

SUBTASK 33-51-01-960-001

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(1) Do these steps to replace the applicable lamp:

(a) EXIT signs installed in the FWD, MID and AFT ceilings of the cabin:

NOTE: If an exit sign has a lens on two sides, remove only one lens.

1) Use a small Flat Tip Screwdriver, STD-13571 to remove the lens [1]

2) Replace the lamp [2]

(b) EXIT signs above the emergency exit doors:

1) Replace lamp [6].

a) Remove lens [8] by inserting a rod in the release hole of lens [8].

b) Replace the lamp [6].

2) Replace lamp [5]

a) Remove the lens [8].

b) Remove the screws [3] and washer [4], then remove the cover [7].

c) Replace the lamp [5].

(c) EXIT signs installed adjacent to a emergency exit door or near the floor:

1) Use a hexdrive allen wrench, STD-1330 to loosen the screw [11] and pull off the lens [10]

2) Replace the lamp [9].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-51-01-710-001

(2) Do a test of the new lamp.

NOTE: The power supply operates the emergency lights. Use the lights for a minimum time to do the test.

(a) At the applicable attendant panel, set the emergency light switch to the ON mode.

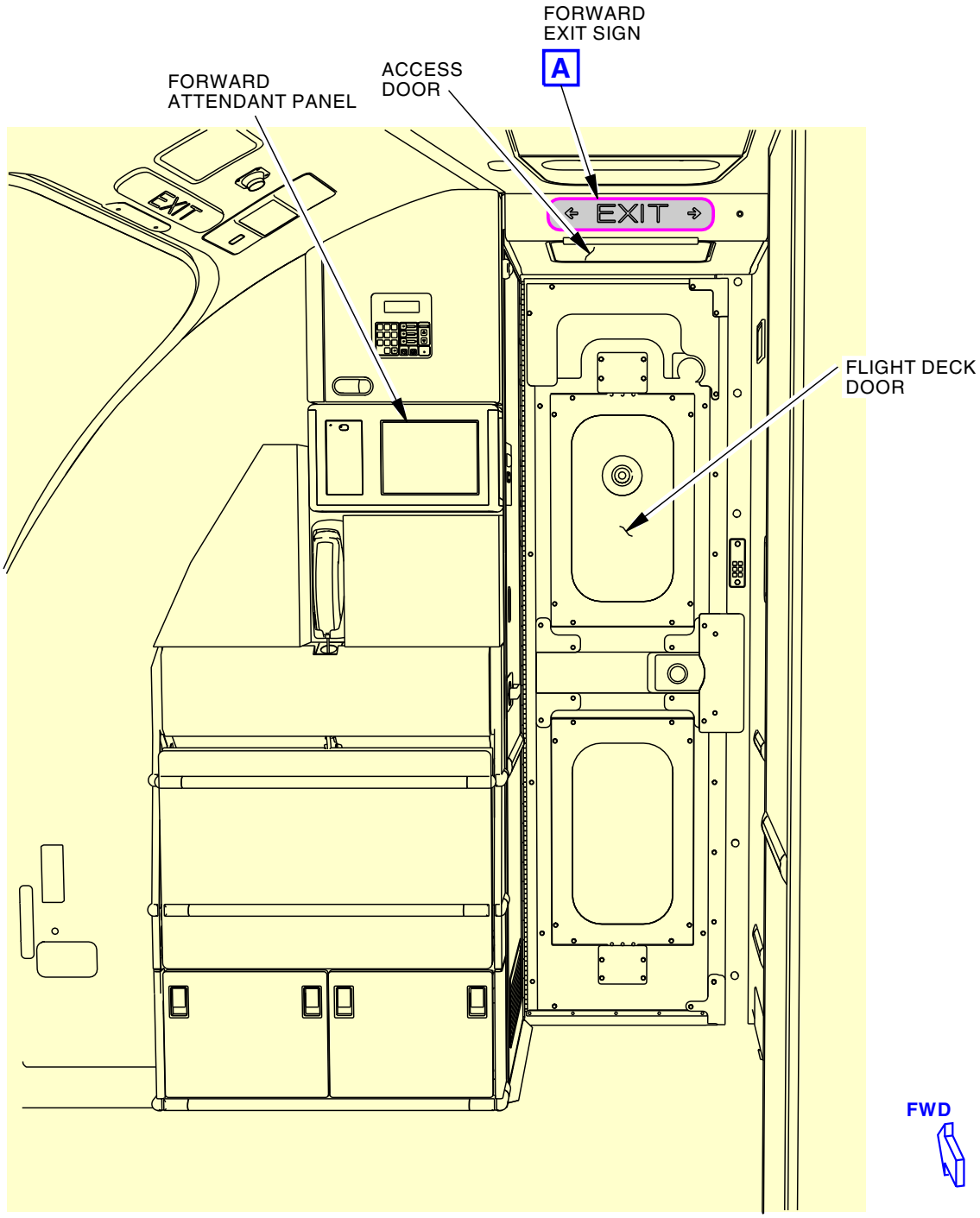
1) Make sure that the new lamp comes on.

(b) Set the switch to the NORMAL mode.

1) Make sure that all emergency lights go off.

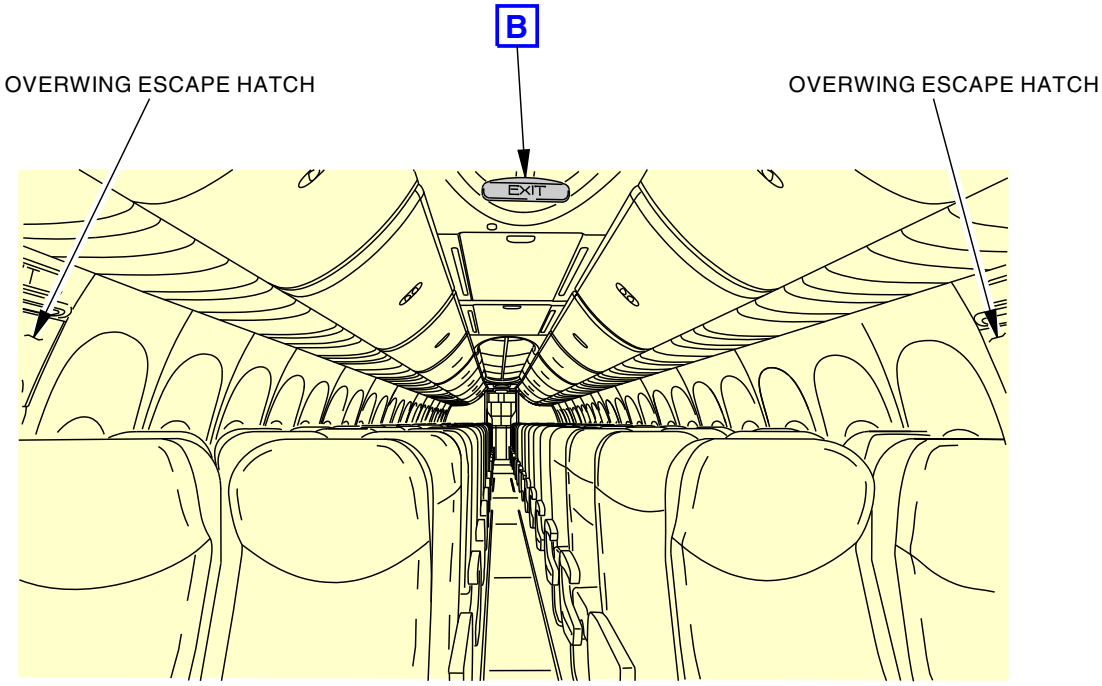
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Exit Sign - Lamp Replacement
Figure 201/33-51-01-990-801 (Sheet 1 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

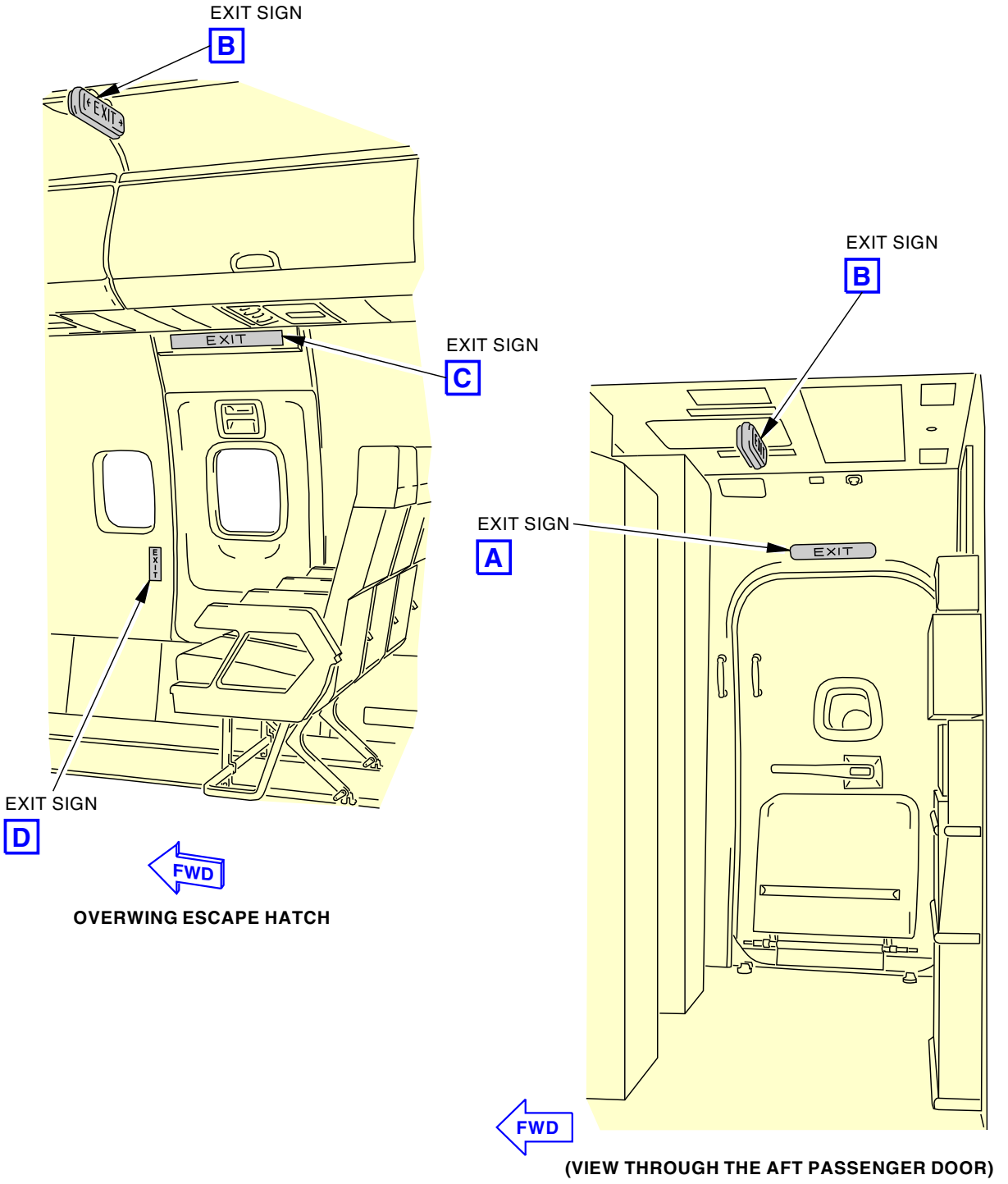


**PASSENGER COMPARTMENT
(EXAMPLE)**

2414768 S00061535933_V2

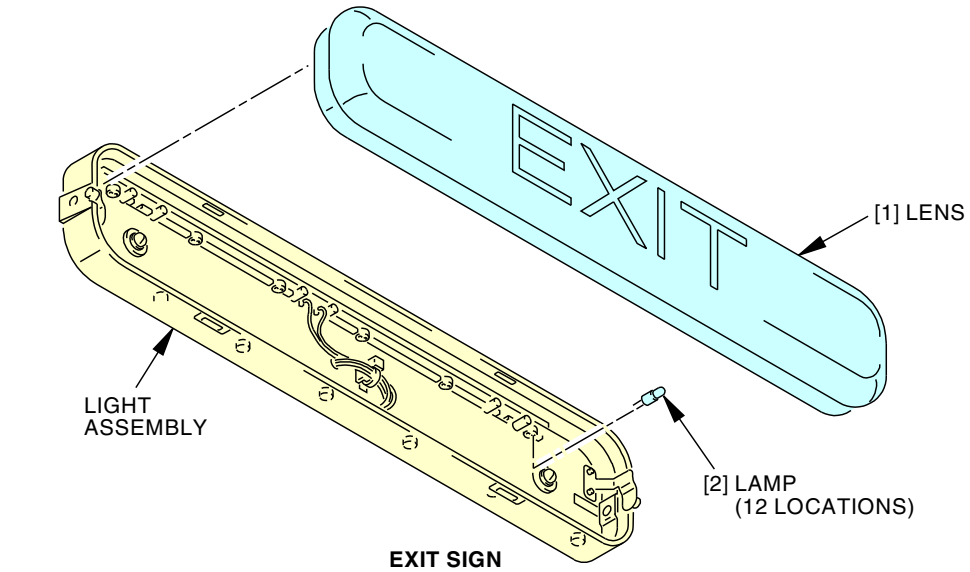
**Exit Sign - Lamp Replacement
Figure 201/33-51-01-990-801 (Sheet 2 of 6)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



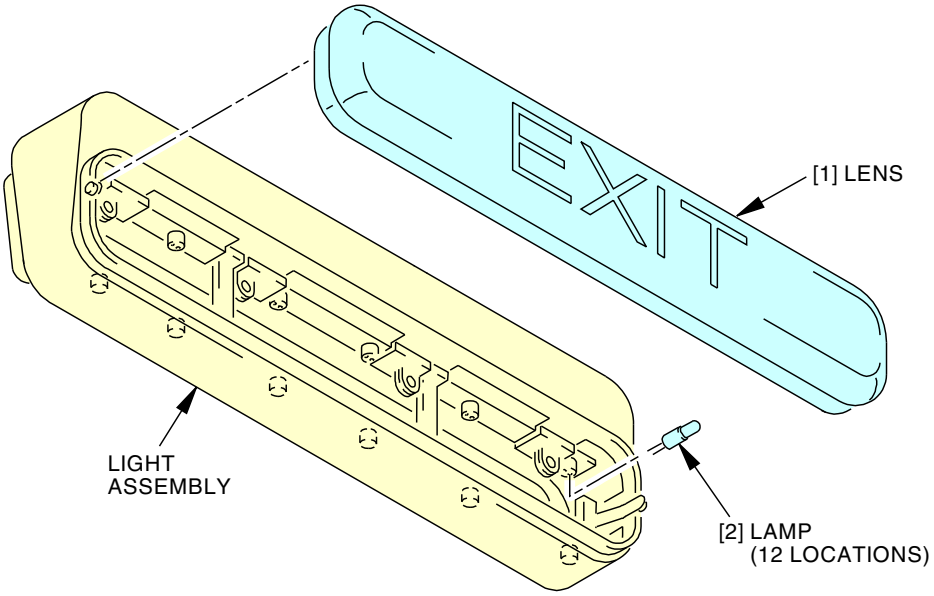
Exit Sign - Lamp Replacement
Figure 201/33-51-01-990-801 (Sheet 3 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**EXIT SIGN
(EXAMPLE)**

A



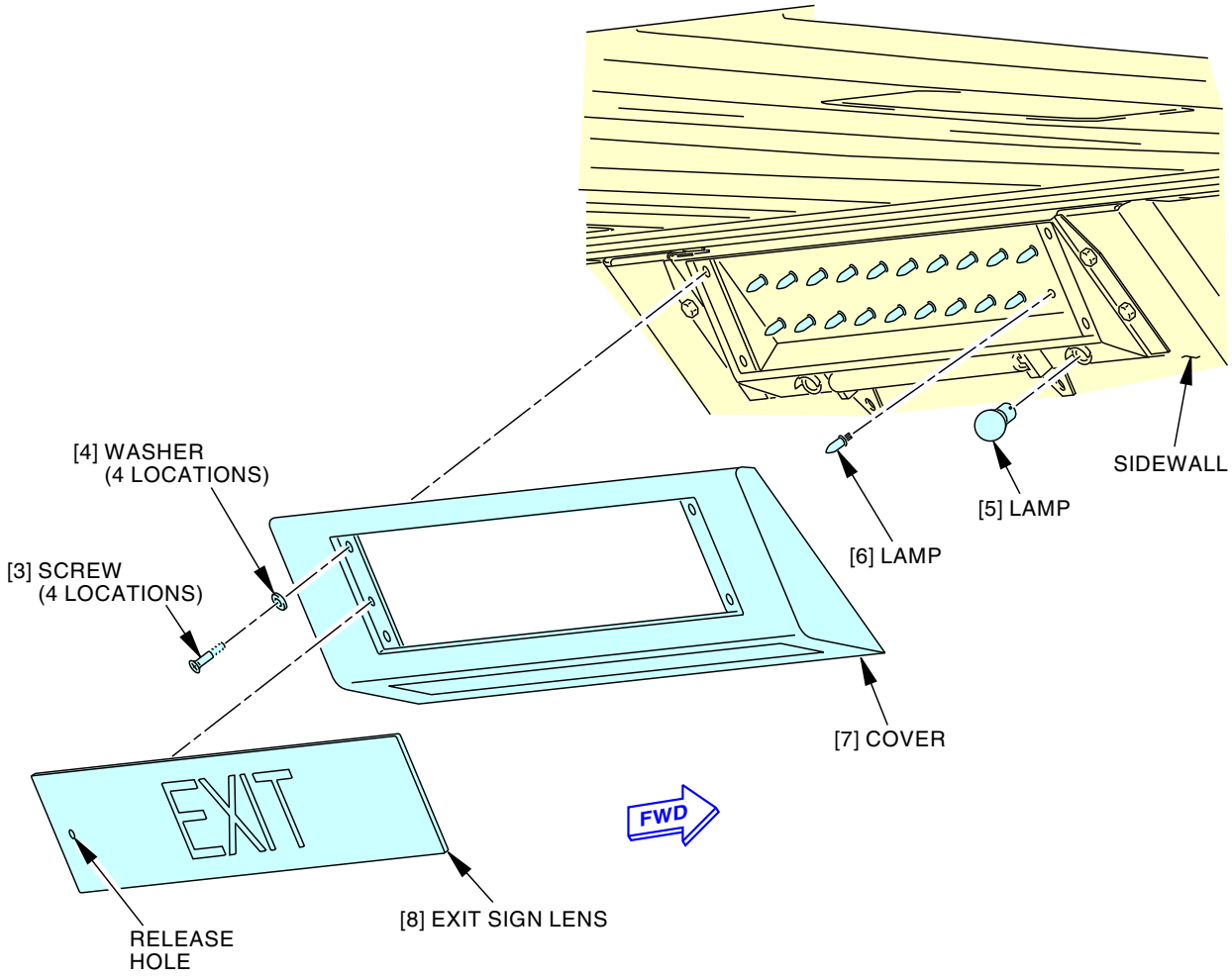
**EXIT SIGN
(EXAMPLE)**

B

2414770 S00061535935_V1

**Exit Sign - Lamp Replacement
Figure 201/33-51-01-990-801 (Sheet 4 of 6)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



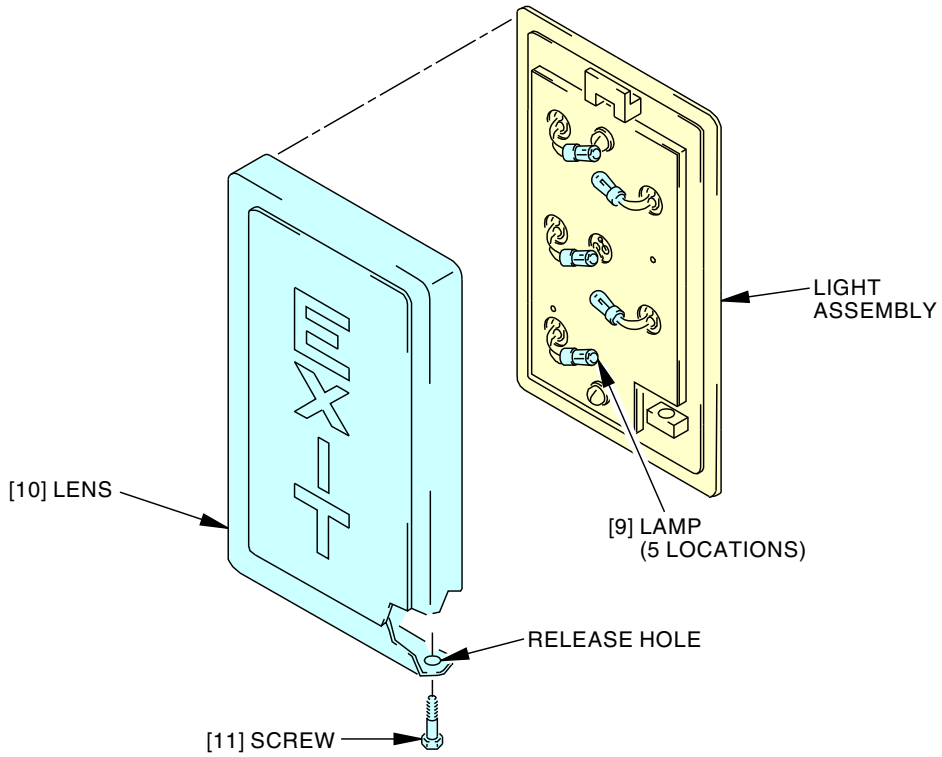
EXIT SIGN
(EXAMPLE)

C

2414771 S00061535936_V1

Exit Sign - Lamp Replacement
Figure 201/33-51-01-990-801 (Sheet 5 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



EXIT SIGN
(EXAMPLE)

D

2414772 S00061535937_V1

Exit Sign - Lamp Replacement
Figure 201/33-51-01-990-801 (Sheet 6 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-51-01-960-802

3. Exit Sign - Light Assembly Replacement

(Figure 202)

A. References

Reference	Title
25-21-45-000-801	Main Ceiling Panel - Removal (P/B 401)
33-51-00-710-801	Emergency Lights Operational Check (P/B 501)
33-51-00-720-801	Emergency Lights Operational Test (P/B 501)

B. Tools/Equipment

Reference	Description
STD-1330	Wrench - Hexdrive, Allen Wrench
STD-13571	Screwdriver - Flat Tip

C. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

E. Exit Sign Light Assembly Replacement

SUBTASK 33-51-01-410-003

(1) Open the applicable circuit breaker and install the safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT
A	9	C00073	PASSENGER CABIN CREW CALL
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	8	C01404	PASSENGER CABIN PASS CALL RIGHT
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

SUBTASK 33-51-01-040-001

(2) Make sure that, at the P5 overhead panel, pilots emergency light switch is in the OFF mode.

SUBTASK 33-51-01-040-002

(3) Make sure that at the applicable attendant panel, the emergency light switch is in the NORMAL mode.

SUBTASK 33-51-01-010-002

(4) To get access to the P92 panel, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-51-01-410-004

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

WARNING DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(5) Open the applicable circuit breaker and install the safety tag:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	11	C00594	WINDOW LIGHT RIGHT
E	12	C00776	WINDOW LIGHT LEFT

SUBTASK 33-51-01-010-001

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(6) Do these steps to remove the EXIT sign in the FWD attendant area above the cockpit door:

(a) Use a small Flat Tip Screwdriver, STD-13571, to remove the lens [1].

(b) Remove the screws [21] and washers [22].

(c) Disconnect the electrical connectors [23].

(d) Replace the light assembly [24].

1) Make sure that lamps are installed in the new light assembly [24].

SUBTASK 33-51-01-020-001

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(7) Do these steps to remove the MID and AFT EXIT signs:

(a) Use a small Flat Tip Screwdriver, STD-13571, to remove the lens [1].

(b) Remove the adjacent ceiling panel, do this task: Main Ceiling Panel - Removal, TASK 25-21-45-000-801.

(c) Remove the screws [31] andwashers [26].

(d) Disconnect the electrical connector [23].

(e) Replace the light assembly [25].

1) Make sure that lamps are installed in the new light assembly [25].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-51-01-020-002

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(8) Do these steps to remove the overwing EXIT signs:

(a) Use a rod to push in at the release hole, then pull off the lens [8].

(b) Remove the screws [3] and washers [4], then remove the cover [7].

(c) Remove the screws [30] and screws [31].

(d) Disconnect the electrical connectors [28].

(e) Replace the light assembly [29].

1) Make sure lamps are installed in the new light assembly [29].

SUBTASK 33-51-01-020-003

WARNING DO NOT TOUCH THE SOCKET OR THE METAL END OF THE LAMP. WHEN ELECTRICAL POWER IS SUPPLIED TO THE LAMP, ELECTRICAL SHOCK CAN OCCUR. THIS CAN CAUSE INJURIES TO PERSONNEL.

(9) Do these steps to remove the EXIT signs that are adjacent to a emergency door or near the floor:

(a) Use a hexdrive allen wrench, STD-1330, to loosen the screws [36] and pull off the lens [10].

(b) Remove the screws [35] and washers [34].

(c) Disconnect the electrical connector [32].

(d) Replace the light assembly [33].

1) Make sure lamps are installed in the new light assembly [33].

SUBTASK 33-51-01-710-002

(10) Do a test of the new light assembly:

NOTE: The power supply operates the emergency lights. Use the lights for a minimum time to do the test.

(a) At the applicable attendant panel, set the emergency light switch to the ON mode.

1) Make sure that the new exit sign comes on.

(b) Set the switch to the NORMAL mode.

1) Make sure that all emergency lights go off.

SUBTASK 33-51-01-410-008

WARNING WHEN YOU OPEN THE P91 AND P92 PANELS, MAKE SURE THAT THE OUTER DOOR STAYS AS OPEN AS POSSIBLE. IF THE OUTER DOOR TURNS IN, THE ATTACHED DOOR COMPONENTS COULD TOUCH THE INNER DOOR COMPONENTS. THIS CAN CAUSE AN ARC CONDITION WHEN YOU SUPPLY POWER. IF YOU DO NOT OBEY, DAMAGE TO EQUIPMENT AND INJURY TO PERSONNEL CAN OCCUR.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

WARNING

DO NOT TOUCH THE CONDUCTORS IN THE P91 AND P92 PANELS. BE CAREFUL WHEN YOU GET ACCESS TO THE CIRCUIT BREAKERS ON THE INNER SIDE OF THE P91 AND P92 PANELS (ROW F). IF IT IS POSSIBLE, REMOVE AIRPLANE ELECTRICAL POWER FIRST. THE P91 AND P92 PANELS HAVE HIGH VOLTAGES AND CURRENTS. ELECTRICAL VOLTAGE AND CURRENT CAN KILL YOU OR CAUSE INJURIES.

(11) Remove the safety tag and close the applicable circuit breaker:

Power Distribution Panel Number 2, P92

Row	Col	Number	Name
E	11	C00594	WINDOW LIGHT RIGHT
E	12	C00776	WINDOW LIGHT LEFT

SUBTASK 33-51-01-410-010

(12) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 33-51-01-410-009

(13) Remove the safety tag and close the applicable circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	8	C01403	PASSENGER CABIN PASS CALL LEFT
A	9	C00073	PASSENGER CABIN CREW CALL
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	8	C01404	PASSENGER CABIN PASS CALL RIGHT
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

SUBTASK 33-51-01-710-003

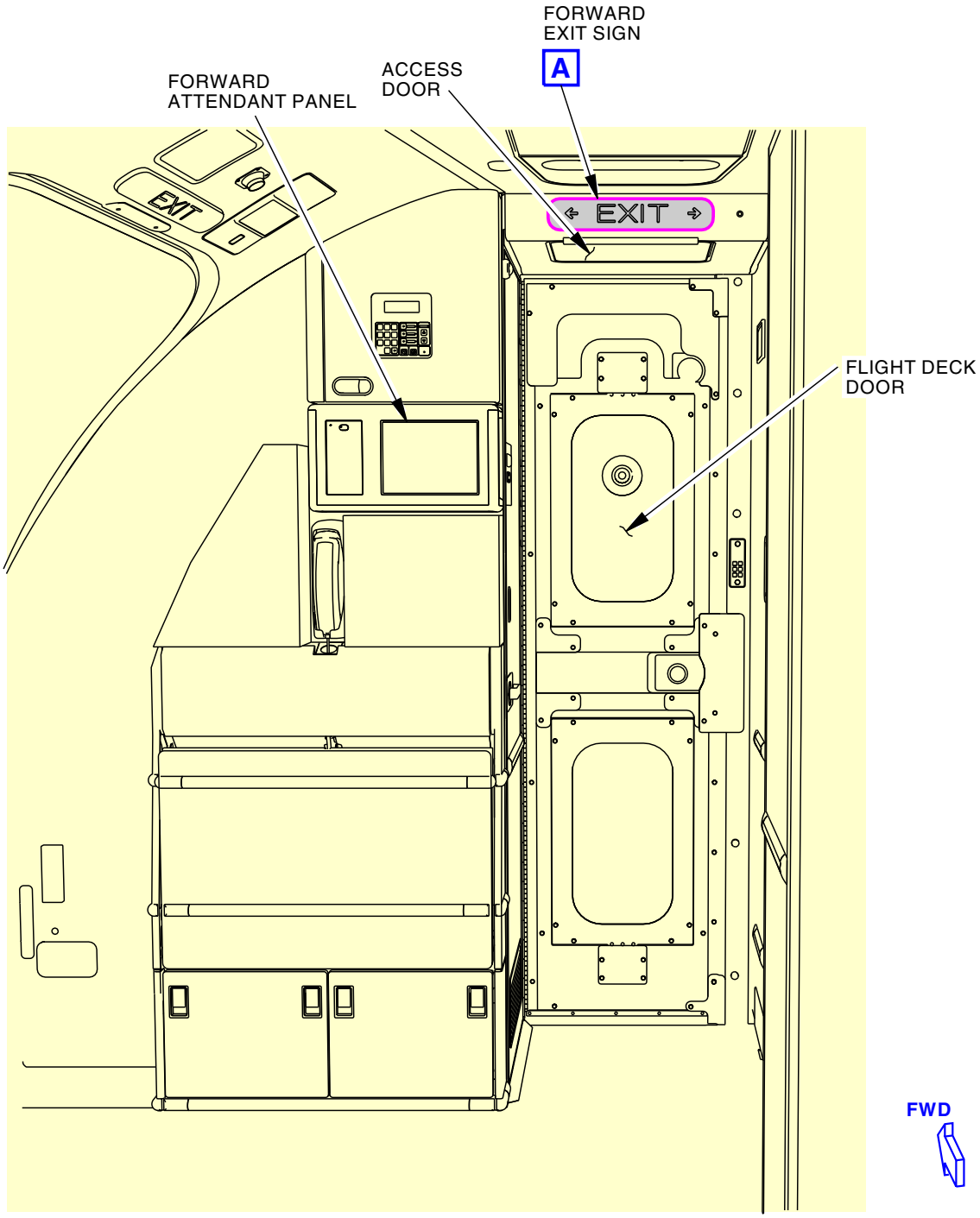
(14) Do this task: Emergency Lights Operational Check, TASK 33-51-00-710-801.

SUBTASK 33-51-01-710-004

(15) Do this task: Emergency Lights Operational Test, TASK 33-51-00-720-801.

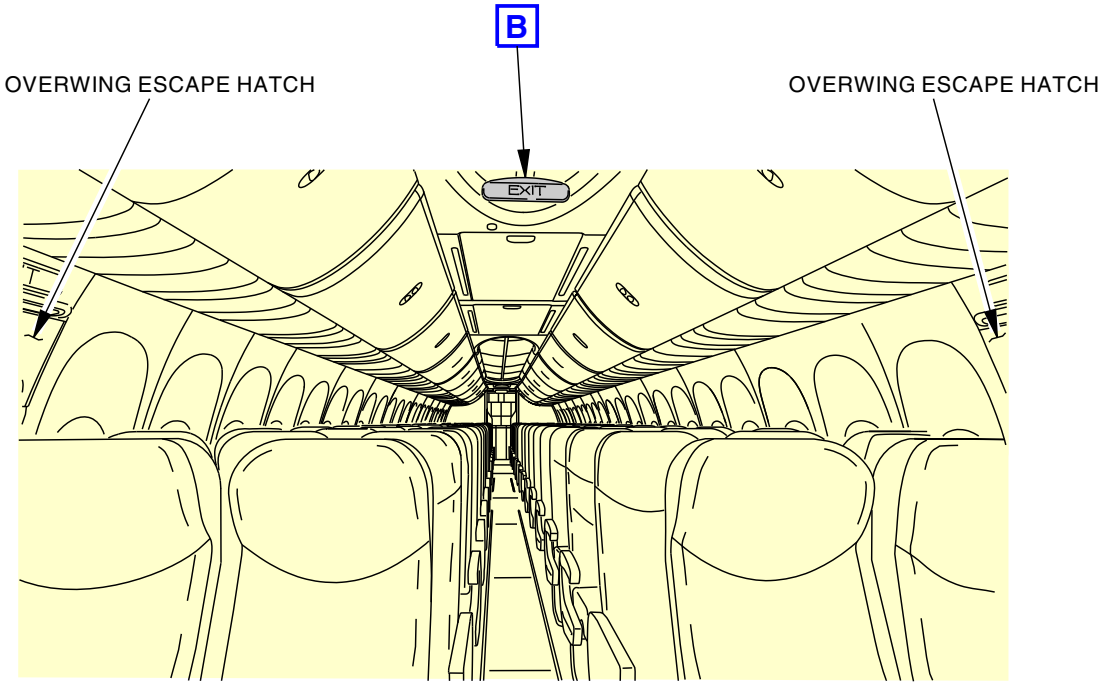
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Exit Sign - Light Assembly Replacement
Figure 202/33-51-01-990-802 (Sheet 1 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

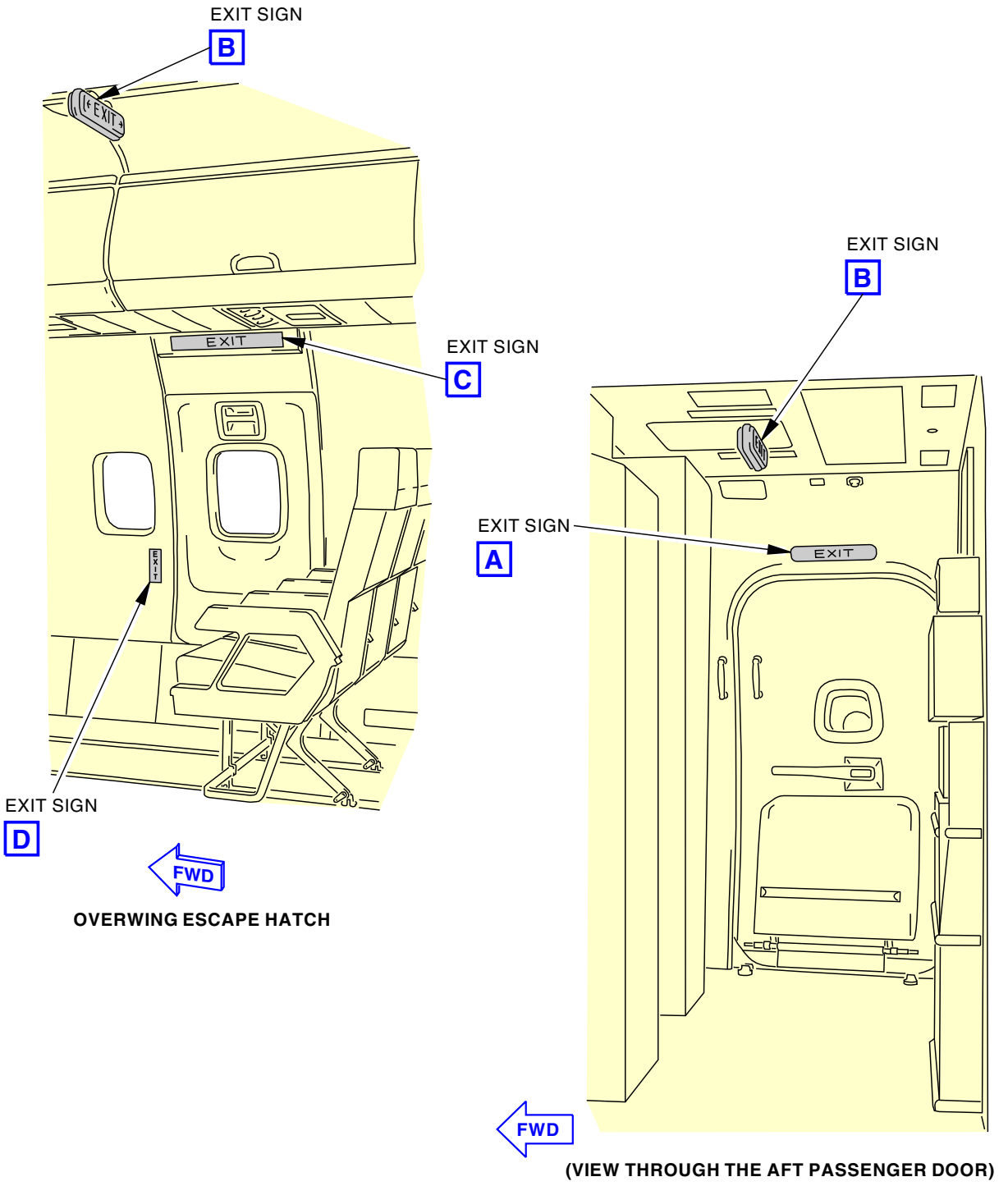


**PASSENGER COMPARTMENT
(EXAMPLE)**

2414768 S00061535933_V2

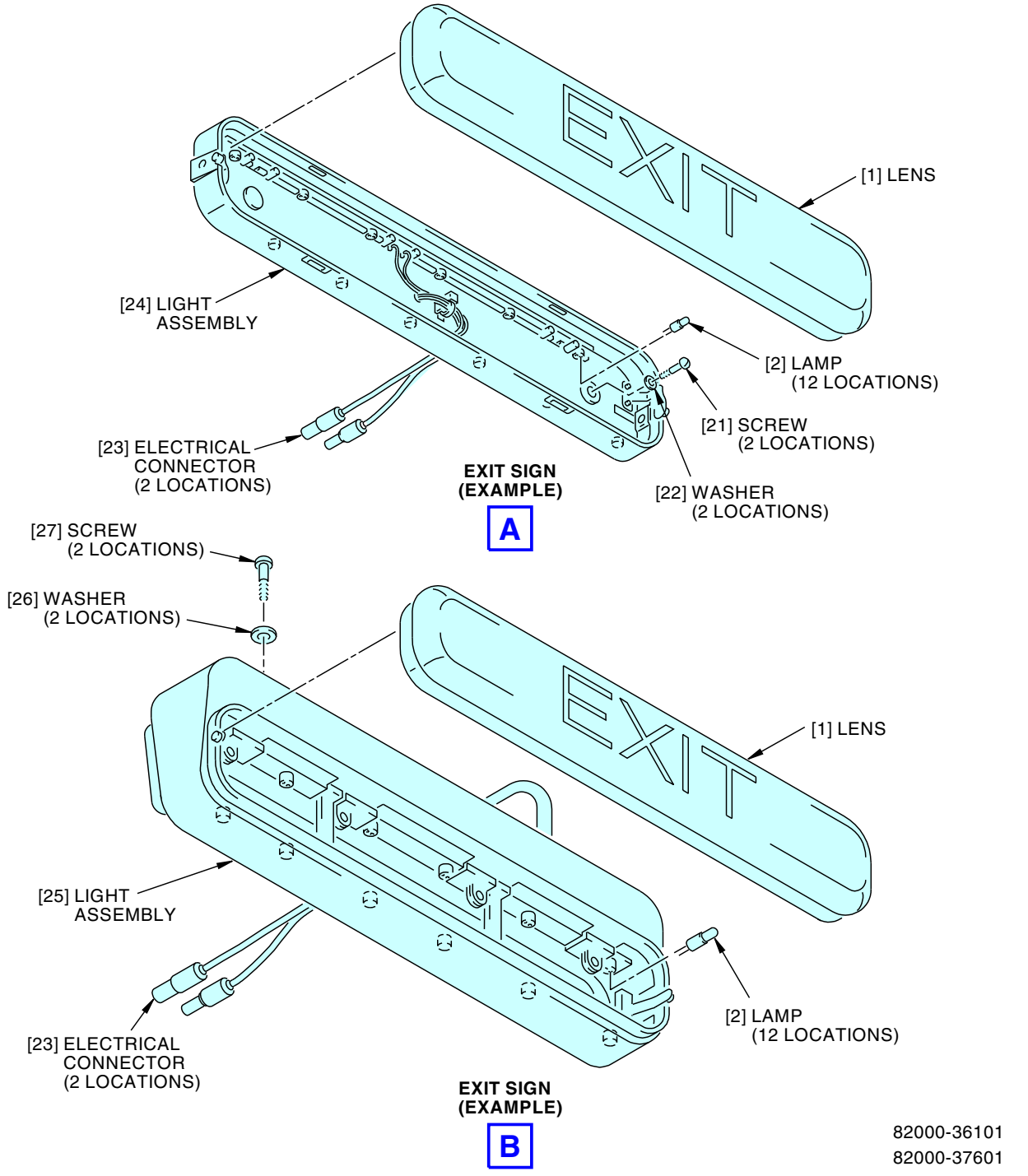
**Exit Sign - Light Assembly Replacement
Figure 202/33-51-01-990-802 (Sheet 2 of 6)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Exit Sign - Light Assembly Replacement
Figure 202/33-51-01-990-802 (Sheet 3 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

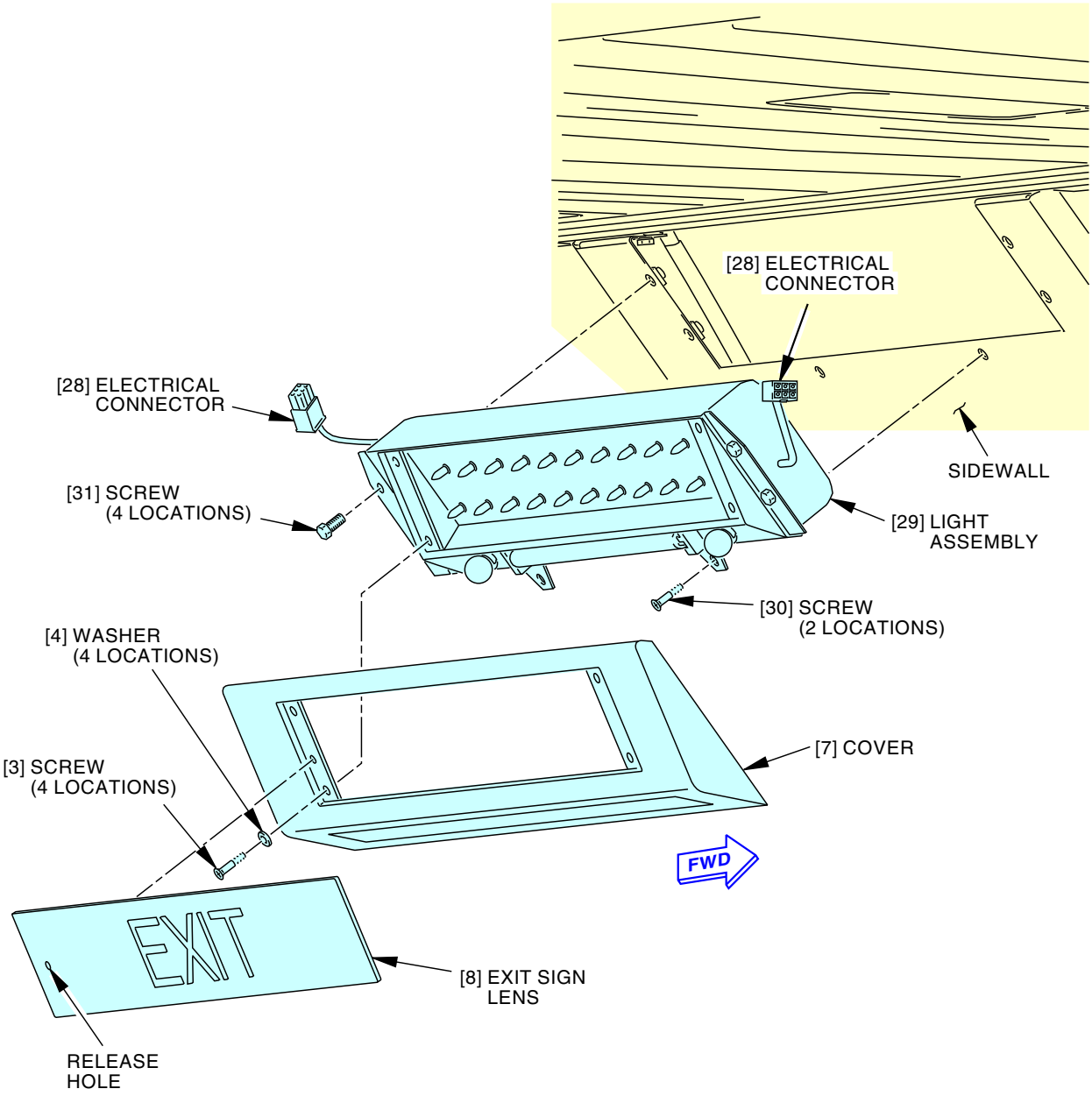


82000-36101
82000-37601

2414774 S00061535940_V1

Exit Sign - Light Assembly Replacement
Figure 202/33-51-01-990-802 (Sheet 4 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



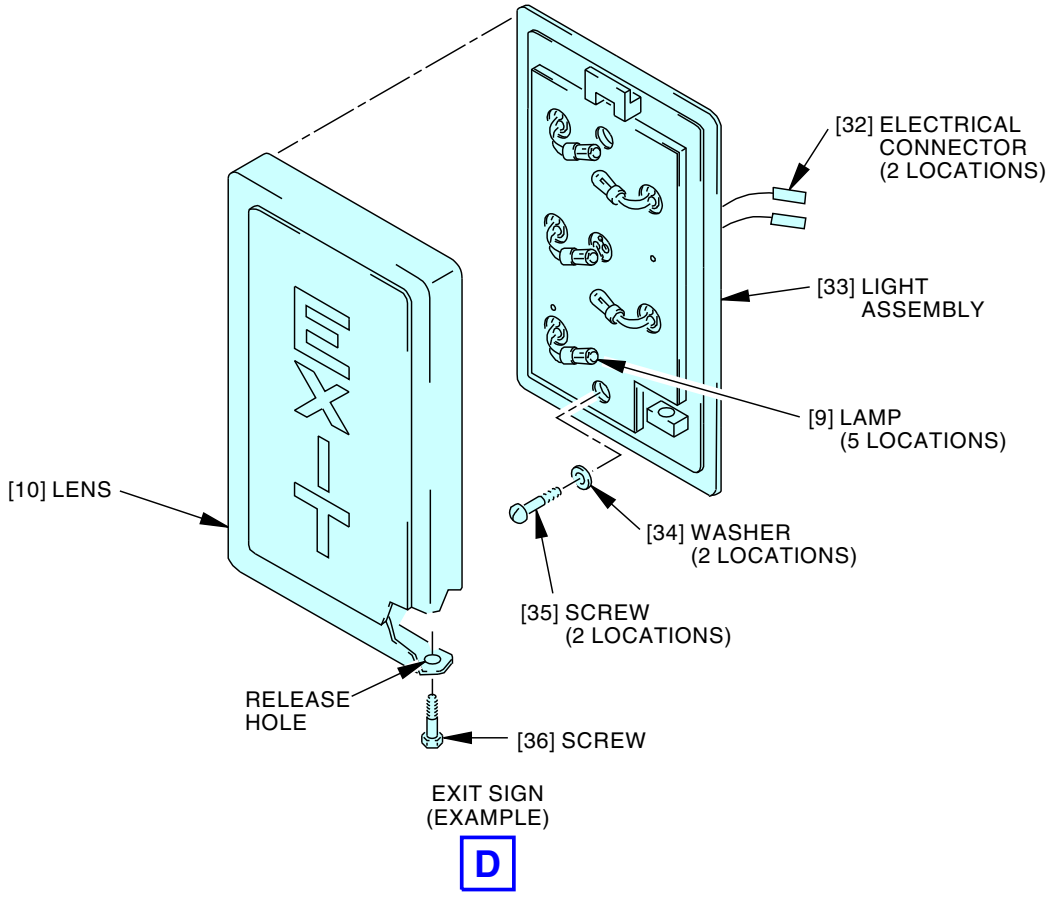
EXIT SIGN (EXAMPLE)

C

2414775 S00061535941_V1

Exit Sign - Light Assembly Replacement
Figure 202/33-51-01-990-802 (Sheet 5 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2414776 S00061535942_V1

Exit Sign - Light Assembly Replacement
Figure 202/33-51-01-990-802 (Sheet 6 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AREA LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Emergency Aisle Light (EAL) - Lens Replacement

(2) Emergency Aisle Light (EAL) - Assembly Replacement.

TASK 33-51-03-960-801

2. Emergency Aisle Light (EAL) - Lens Replacement

(Figure 201)

A. General

(1) This task includes the steps to replace the Emergency Aisle Light (EAL) lens.

B. Tools/Equipment

Reference	Description
STD-549	Knife - Putty, Broad Blade

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
4	Lens	33-51-03-01-065	SIA ALL
		33-51-03-02-065	SIA ALL
		33-51-03-03-065	SIA ALL
		33-51-03-04-065	SIA ALL
		33-51-03-10-025	SIA ALL
		33-51-03-90A-100	SIA ALL
		33-51-03-90A-395	SIA ALL
		33-51-03-90B-050	SIA ALL
		33-51-03-90D-055	SIA ALL
		33-51-03-90E-055	SIA ALL
		33-51-03-92-070	SIA ALL

D. Location Zones

Zone	Area
200	Upper Half of Fuselage

E. Procedure

SUBTASK 33-51-03-010-001

(1) Do these steps to remove the lens [4]:

(a) Use a laminated card for this procedure.

NOTE: The laminated card must be thin and sturdy, to slide between the valance and the lens. This will prevent damage to the valance.

(b) Insert and slide the edge of the card between the rim of the lens [4] and the valance.

(c) Move the card around and stop at the top of the lens [4].

1) Make sure that the card is in a horizontal position between the lens [4] and the valance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(d) Insert the broad blade putty knife, STD-549 (or equivalent), between the card and the lens [4].

(e) Pull the handle of the broad blade putty knife, STD-549 (or equivalent) in your direction, away from the valance.

NOTE: You can twist the handle of the putty knife slightly, if necessary.

1) Remove the lens [4].

SUBTASK 33-51-03-410-001

(2) Do these steps to install the lens [4]:

(a) Align the lens against the EAL housing assembly [5].

1) Make sure that the two prongs of the lens [4] align with the top of the EAL housing assembly [5].

NOTE: The top part of the lens has two prongs. The lower part has one prong.

(b) Engage the single prong of the lens [4] behind the lower rim of the EAL housing assembly [5].

(c) Push the top of the lens [4] against the EAL housing assembly [5].

1) Make sure that the two prongs of the lens [4] snap into their positions.

SUBTASK 33-51-03-710-001

(3) Do a test of the light.

NOTE: The power supply operates the emergency lights. Use the lights for a minimum time to do the test.

(a) At the pilots overhead panel, P5, or the attendant panel, set the emergency light switch to the ON mode.

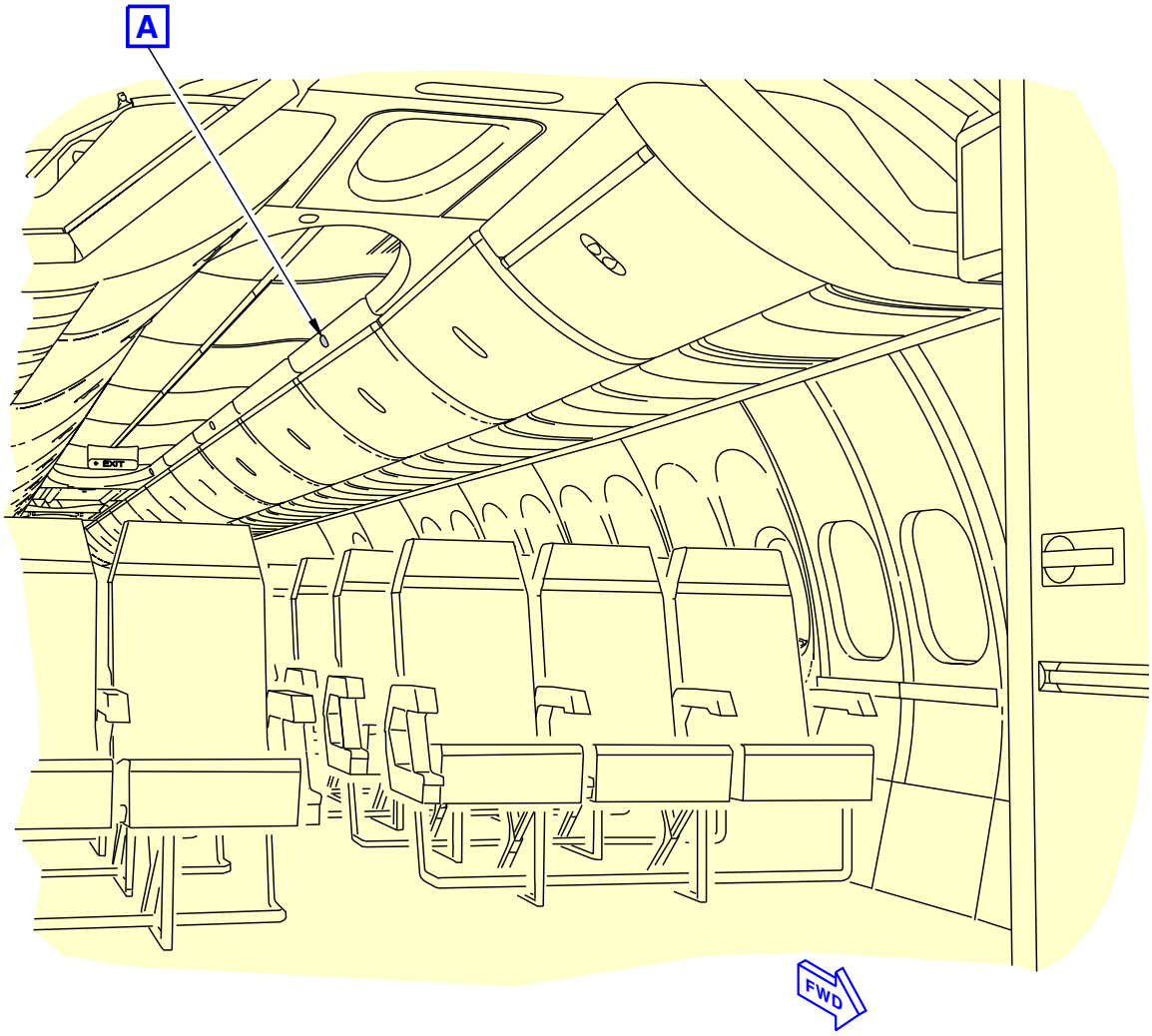
1) Make sure that the light comes on.

(b) Set the emergency light switch on the overhead panel, P5, to the OFF mode or the emergency light switch on the attendant panel to the NORMAL mode.

1) Make sure that all emergency lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

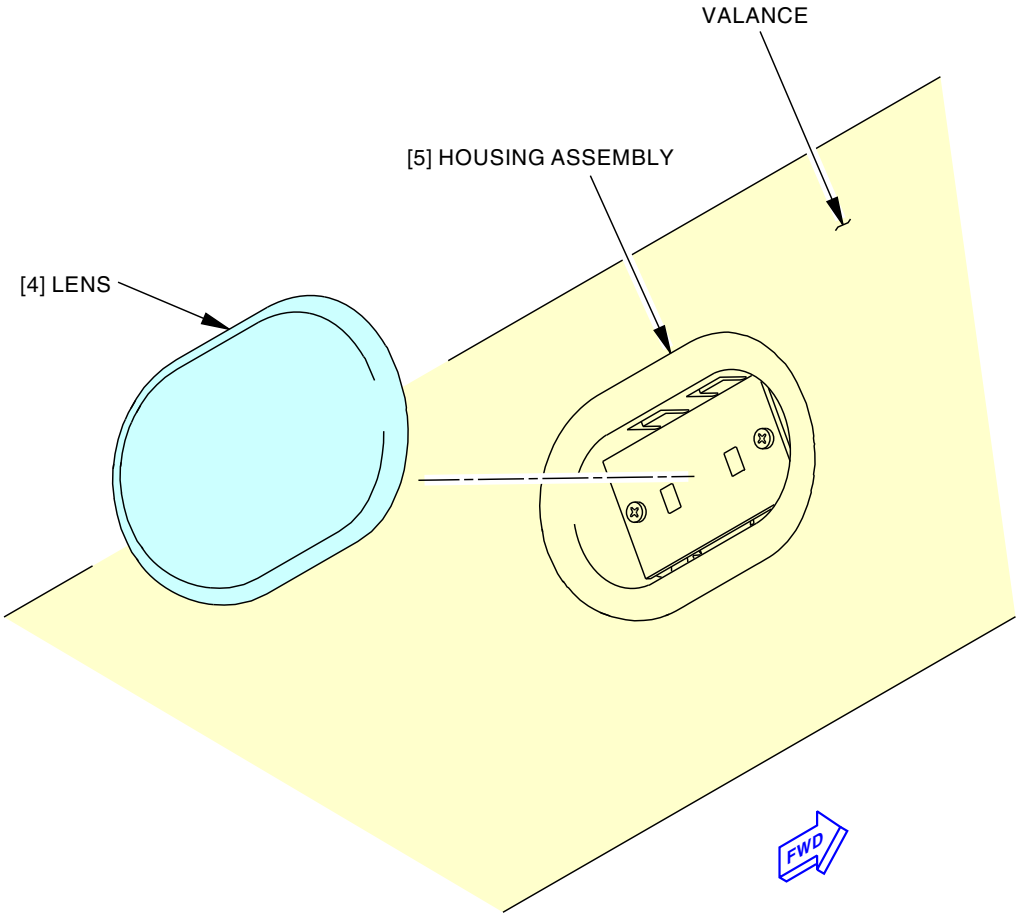


PASSENGER COMPARTMENT

2414778 S00061535952_V1

Emergency Aisle Light (EAL) - Lens Replacement
Figure 201/33-51-03-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



EMERGENCY AISLE LIGHT (EAL)
(EXAMPLE)

A

2414779 S00061535953_V1

Emergency Aisle Light (EAL) - Lens Replacement
Figure 201/33-51-03-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-51-03-960-802

3. Emergency Aisle Light (EAL) – Assembly Replacement

(Figure 202)

A. General

(1) This task includes the steps to replace the emergency aisle light (EAL) assembly [8].

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
8	Emergency aisle light (EAL) assembly	33-51-03-01-050	SIA ALL
		33-51-03-02-050	SIA ALL
		33-51-03-03-050	SIA ALL
		33-51-03-04-050	SIA ALL
		33-51-03-10-010	SIA ALL
		33-51-03-90A-085	SIA ALL
		33-51-03-90A-380	SIA ALL
		33-51-03-90B-035	SIA ALL
		33-51-03-90D-040	SIA ALL
		33-51-03-90E-040	SIA ALL
		33-51-03-92-055	SIA ALL
		33-51-03-92-160	SIA ALL
11	Gasket	33-51-03-01-085	SIA ALL
		33-51-03-02-085	SIA ALL
		33-51-03-03-085	SIA ALL
		33-51-03-04-085	SIA ALL
		33-51-03-10-045	SIA ALL
		33-51-03-90A-110	SIA ALL
		33-51-03-90A-405	SIA ALL
		33-51-03-90B-060	SIA ALL
		33-51-03-90D-065	SIA ALL
		33-51-03-90E-065	SIA ALL
		33-51-03-92-185	SIA ALL

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Emergency Aisle Light (EAL) Assembly Replacement

SUBTASK 33-51-03-860-001

(1) Make sure that the pilot emergency light switch, on the P5 overhead panel, is set to the OFF position.

SUBTASK 33-51-03-860-002

(2) Make sure that the attendant emergency light switch in the passenger compartment is set to the NORMAL position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-51-03-010-002

(3) Do these steps to remove the emergency aisle light (EAL) assembly [8]:

(a) Remove the lens (TASK 33-51-03-960-801).

NOTE: You can remove the EAL assembly with the lens installed.

(b) Get access behind the valance assembly.

(c) Disconnect the electrical connector [9].

(d) Remove the retaining ring [10].

(e) Remove the gasket [11].

1) Replace the gasket [11] if damaged.

(f) Remove the emergency aisle light (EAL) assembly [8].

SUBTASK 33-51-03-410-002

(4) Do these steps to install the emergency aisle light (EAL) assembly [8]:

(a) Install the emergency aisle light (EAL) assembly [8] from the outer side (decorative side) of the valance assembly.

1) Put the electrical connector [9] through the hole of the valance assembly.

(b) Align the top of the emergency aisle light (EAL) assembly [8] with the top of the hole of the valance assembly.

NOTE: You can identify the top of the EAL housing assembly by its two prong slots.

(c) Get access behind the valance assembly.

(d) Install the new gasket [11].

(e) Install the retaining ring [10] that attaches the emergency aisle light (EAL) assembly [8] to the valance assembly.

1) Make sure that the emergency aisle light (EAL) assembly [8] attaches into the correct position.

(f) Connect the electrical connector [9].

(g) Install the lens (TASK 33-51-03-960-801).

NOTE: You can install the EAL assembly with the lens installed.

SUBTASK 33-51-03-710-002

(5) Do a test of the new light.

NOTE: The power supply operates the emergency lights. Use the lights for a minimum time to do the test.

(a) On the P5 overhead panel, or the attendant panel, set the emergency light switch to the ON position.

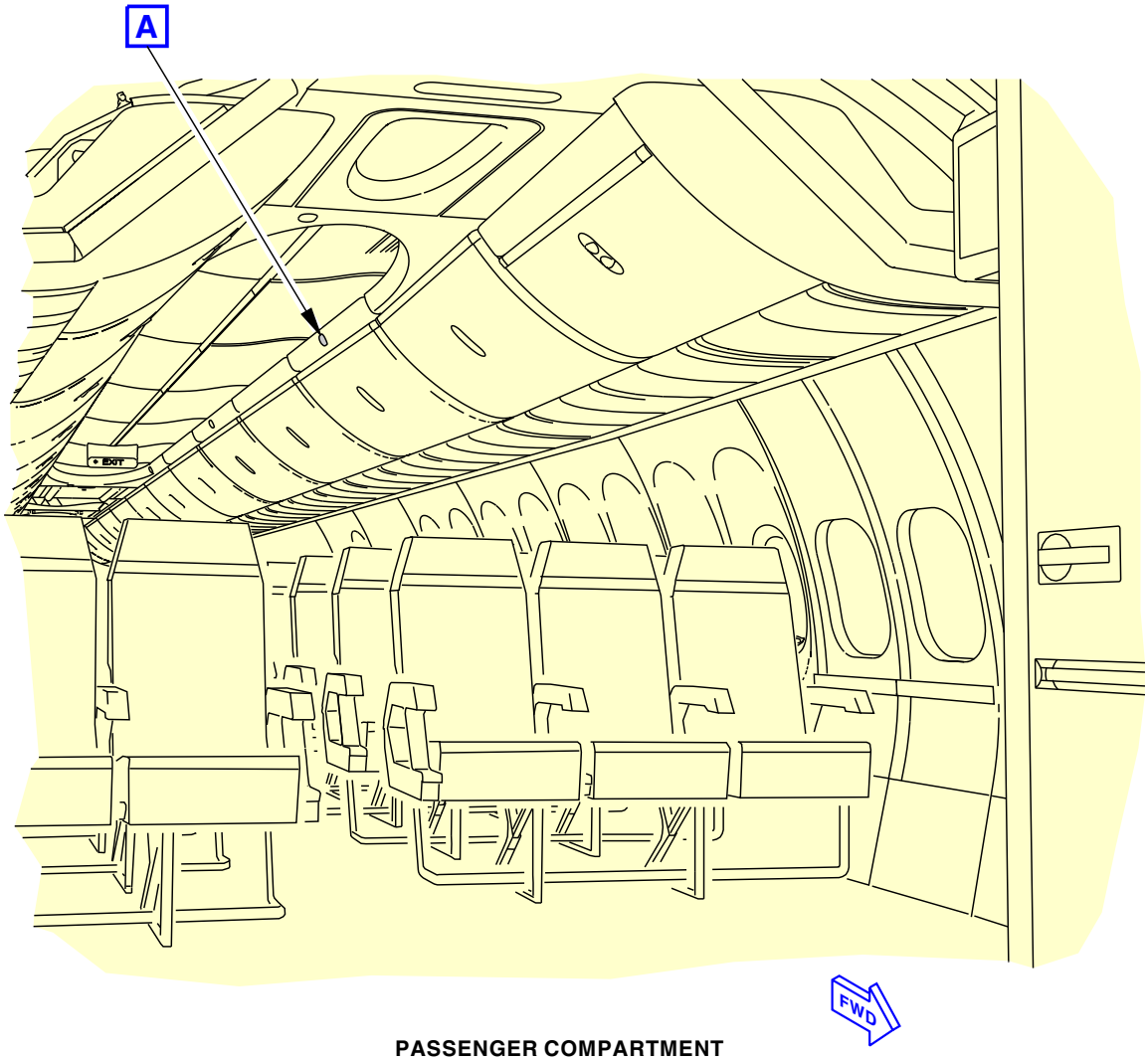
1) Make sure that the light comes on.

(b) Set the emergency light switch, on the P5 overhead panel, to the OFF position or the emergency light switch on the attendant panel to the NORMAL position.

1) Make sure that all emergency lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

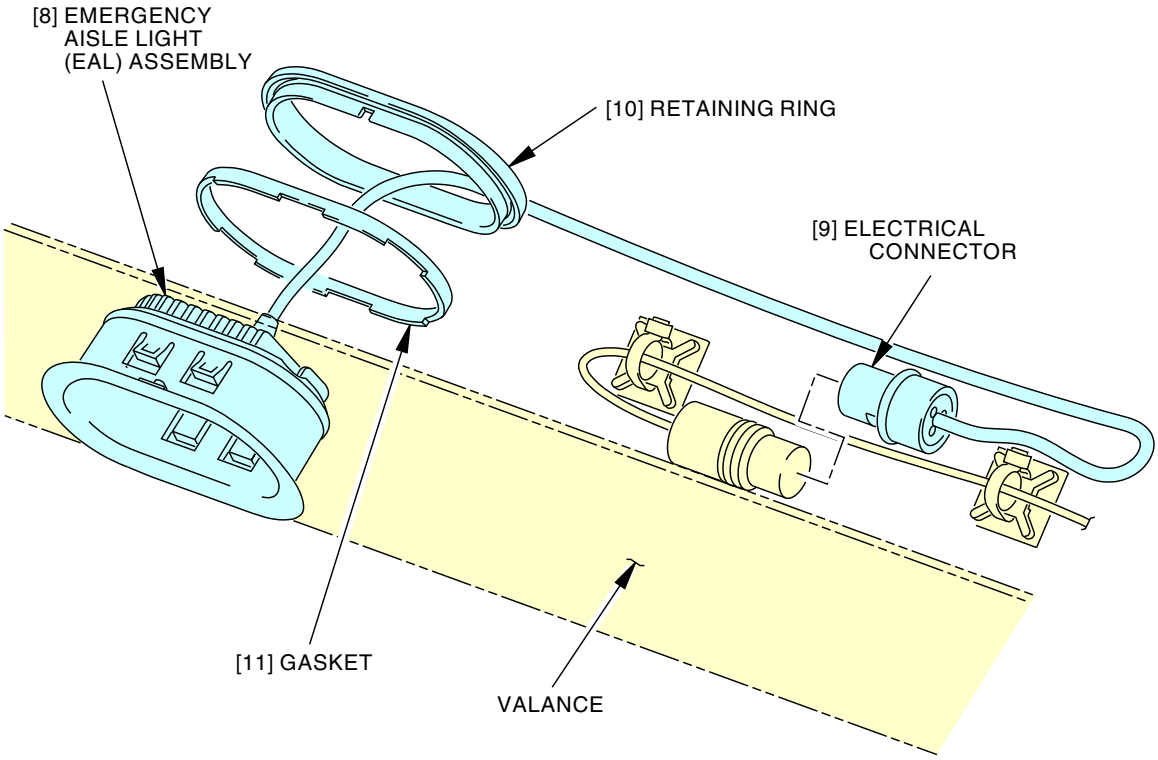


PASSENGER COMPARTMENT

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Emergency Aisle Light (EAL) - Assembly Replacement
Figure 202/33-51-03-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**EMERGENCY AISLE LIGHT (EAL)
(EXAMPLE)**

A

2414781 S00061535956_V1

**Emergency Aisle Light (EAL) - Assembly Replacement
Figure 202/33-51-03-990-802 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SLIDE/OVERWING LIGHTS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Slide/Overwing Light - Lamp Replacement

(2) Slide/Overwing Light - Light Assembly Replacement.

TASK 33-51-04-960-801

2. Slide/Overwing Light - Lamp Replacement

(Figure 201)

A. General

(1) This task includes all exterior emergency lights. The lights are installed on the fuselage adjacent to the doors and over the wings.

B. References

Reference	Title
WDM 33-51-12	D000534483
WDM 33-51-14	D000534516

C. Consumable Materials

Reference	Description	Specification
G02309	Material - Moldable Plastic Shim	BMS8-338

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
4	Lamp	33-51-04-06A-075	SIA ALL
8	Lamp	33-51-04-08A-085	SIA ALL

E. Location Zones

Zone	Area
200	Upper Half of Fuselage

F. Slide/Overwing Light Lamp Replacement

SUBTASK 33-51-04-860-001

(1) Make sure that the pilots emergency light switch, on the P5 overhead panel, is set to the OFF mode.

SUBTASK 33-51-04-860-002

(2) Make sure that the attendants emergency light switch in the passenger compartment is set to the NORMAL mode.

SUBTASK 33-51-04-960-001

WARNING DO NOT TOUCH THE SOCKETS OR THE METAL ENDS OF THE LAMP. SHOCK CAN OCCUR WHEN YOU SUPPLY ELECTRICAL POWER TO THE LIGHT.

(3) Do these steps to replace the applicable lamp (WDM 33-51-12 through WDM 33-51-14):

(a) Loosen the fasteners [2] or fasteners [6] and remove the lens assembly [3] or lens assembly [7].

NOTE: The lanyard stays connected.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Remove the lamp [4] or lamp [8] from the socket.

1) Remove the screw [15] and washer [16] that attach the lamp [4] or lamp [8] to the socket with the retainer [17].

(c) Replace the lamp [4] or lamp [8].

(d) Install the lamp [4] or lamp [8] in the socket.

1) Install the screw [15] and washer [16] that attach the lamp [4] or lamp [8] to the socket with the retainer [17].

(e) If the shims on the lens assembly [3] or lens assembly [7] gasket are damaged, replace them.

1) Remove the unwanted shim material.

2) Apply new shim material, G02309, in the applicable areas of the rubber gasket.

NOTE: Use only the necessary quantity. Adjacent compartments in the rubber gasket will help contain the shim material. Keep shim material away from the lens fasteners.

3) Install the lens assembly [3] or lens assembly [7].

a) Tighten the fasteners [2] or fasteners [6] until the lens assembly [3] or lens assembly [7] is aligned with the fuselage.

4) Let the shim material dry for six hours.

5) Remove the lens assembly [3] or lens assembly [7].

6) Clean and examine the shims.

a) Make sure that the shim thickness is no more than 0.125 in. (0.318 cm).

(f) Install the lens assembly [3] or lens assembly [7].

1) Tighten the fasteners [2] or fasteners [6].

SUBTASK 33-51-04-710-001

(4) Do a test of the new lamp [4] or lamp [8]:

NOTE: The battery packs supply electrical power to the emergency lights. Use the lights for a minimum time to do the test.

(a) On the P5 pilots overhead panel, or the attendant panel, set the emergency light switch to the ON mode.

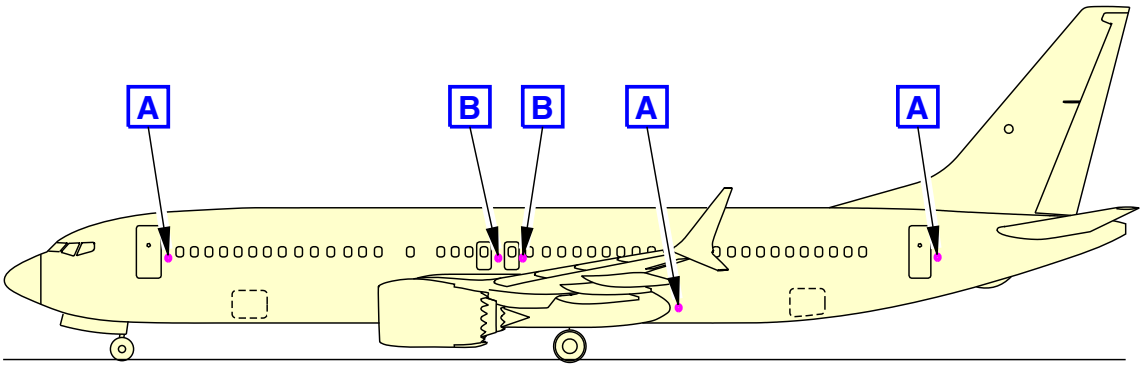
1) Make sure that the new lamp [4] or lamp [8] comes on.

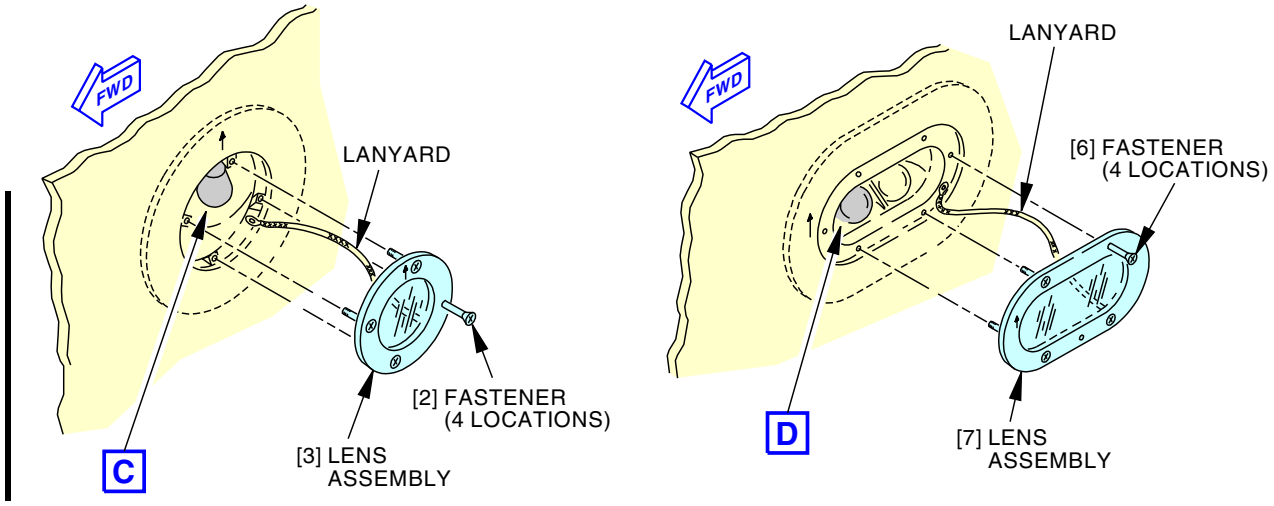
(b) Set the emergency light switch, on the P5 overhead panel, to the OFF mode or emergency light switch on the attendant panel to the NORMAL mode.

1) Make sure that all emergency lights go off.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





SLIDE LIGHT (EXAMPLE)

A

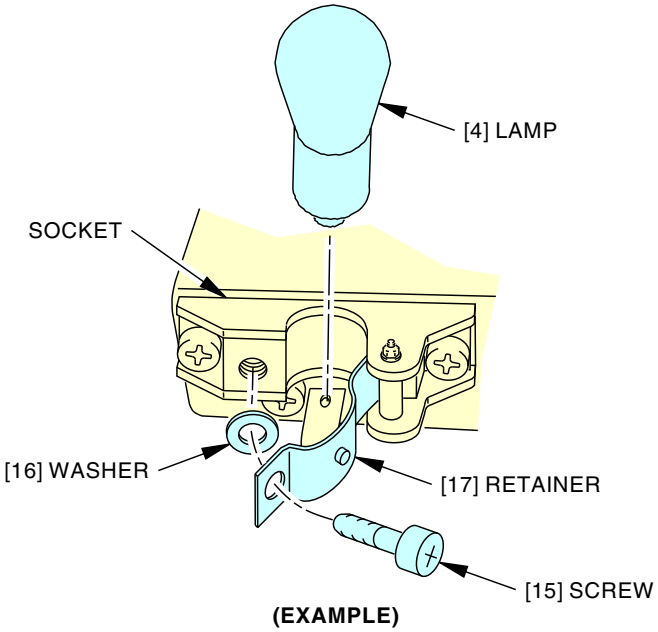
OVERWING LIGHT (EXAMPLE)

B

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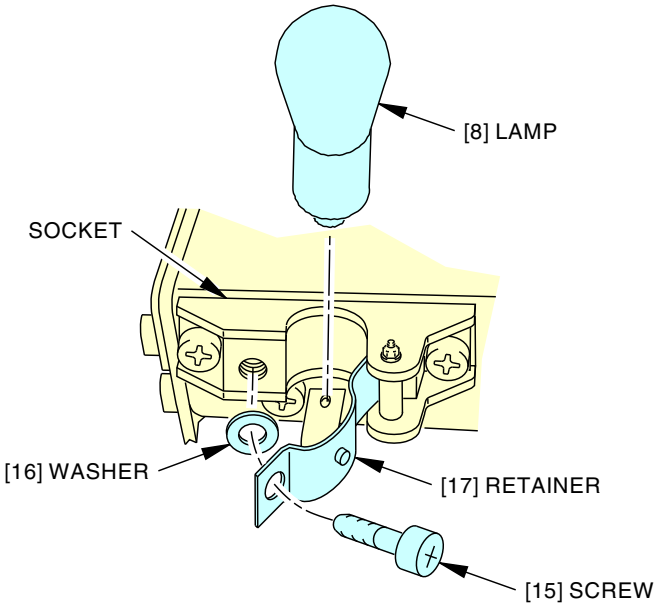
Slide Light - Lamp Replacement
Figure 201/33-51-04-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



(EXAMPLE)

C



(ONE LAMP IS SHOWN, ANOTHER LAMP IS EQUIVALENT)
(EXAMPLE)

D

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Slide Light - Lamp Replacement
Figure 201/33-51-04-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-51-04-960-802

3. Slide/Overwing Light - Light Assembly Replacement

(Figure 202)

A. General

(1) This task includes all exterior emergency lights. The lights are installed on the fuselage adjacent to the doors and over the wings.

B. References

Reference	Title
25-21-46-000-801	Sidewall Panel - Removal (P/B 401)

C. Consumable Materials

Reference	Description	Specification
A50231	Sealant - Pressure And Environmental - Chromate Type	BMS5-95 Class B
B00148	Solvent - Methyl Ethyl Ketone (MEK)	ASTM D740
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
11	Light assembly	33-51-04-01A-005	SIA ALL
		33-51-04-02A-010	SIA ALL
		33-51-04-03A-005	SIA ALL

E. Location Zones

Zone	Area
200	Upper Half of Fuselage

F. Slide/Overwing Light Assembly Replacement

SUBTASK 33-51-04-010-001

(1) Remove the applicable sidewall panel to get access to the light assembly [11] from the inside of the cabin (TASK 25-21-46-000-801).

SUBTASK 33-51-04-020-001

(2) From the inside of the cabin, disconnect the electrical connector [14] from the light assembly [11].

SUBTASK 33-51-04-020-002

(3) Loosen the bolts [12] and collars [13] to remove the light assembly [11].

SUBTASK 33-51-04-110-001

(4) Clean the fay surface bonding area of the contact surface with solvent, B00148, and a clean cotton wiper, G00034.

SUBTASK 33-51-04-160-001

(5) Rub dry with a clean, dry cotton wiper, G00034.

SUBTASK 33-51-04-160-002

(6) Continue to clean and dry the fay surface bonding area until the dry cotton wiper, G00034, stays clean.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-51-04-390-001

(7) Apply sealant, A50231, to the contact surface of the light assembly [11] housing.

SUBTASK 33-51-04-390-002

(8) Apply sealant, A50231, to the shank and threads of the bolts [12].

SUBTASK 33-51-04-420-001

(9) Install the light assembly [11] on the aircraft skin with the bolts [12] and collars [13].

(a) Make sure that sealant, A50231, is continuously squeezed out along the edges of the light assembly [11] housing.

(b) If there are clearances, bubbles, or voids in sealant, A50231, do these steps:

1) Squeeze out sealant, A50231.

2) Remove the light assembly [11] from the aircraft skin.

3) Apply more sealant, A50231.

(c) Shape squeezed out sealant, A50231, into a fillet seal.

(d) As an option, remove the extra squeezed out sealant, A50231.

1) Make sure that sealant, A50231, that remains is flush with the mating part edges.

SUBTASK 33-51-04-420-002

(10) From the inside of the cabin, connect the electrical connector [14] to the light assembly [11].

SUBTASK 33-51-04-710-002

(11) Do a test of the light assembly [11]:

NOTE: The battery packs supply electrical power to the emergency lights. Use the lights for a minimum amount of time to do the test.

(a) On the P5 overhead panel, or the attendant control panel, set the emergency light switch to the ON mode.

1) Make sure that the applicable emergency light comes on.

(b) Set the emergency light switch, on the P5 overhead panel, to the OFF mode or the emergency light switch on the attendant panel to the NORMAL mode.

1) Make sure that the applicable emergency lights go off.

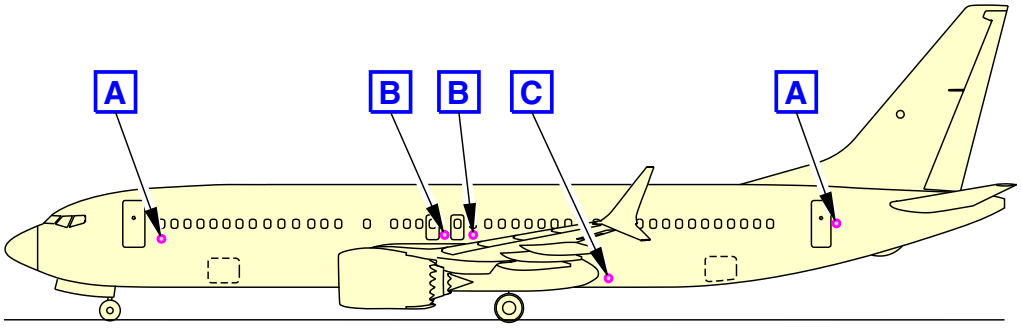
G. Put the Airplane Back to Its Usual Condition

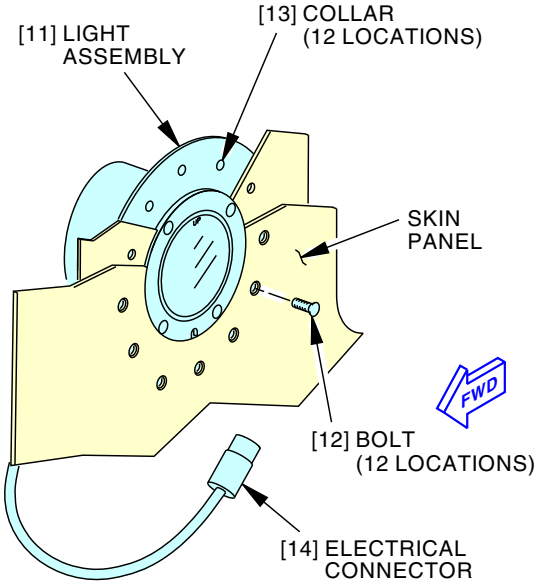
SUBTASK 33-51-04-410-001

(1) Install the applicable sidewall panel (TASK 25-21-46-000-801).

——— END OF TASK ———

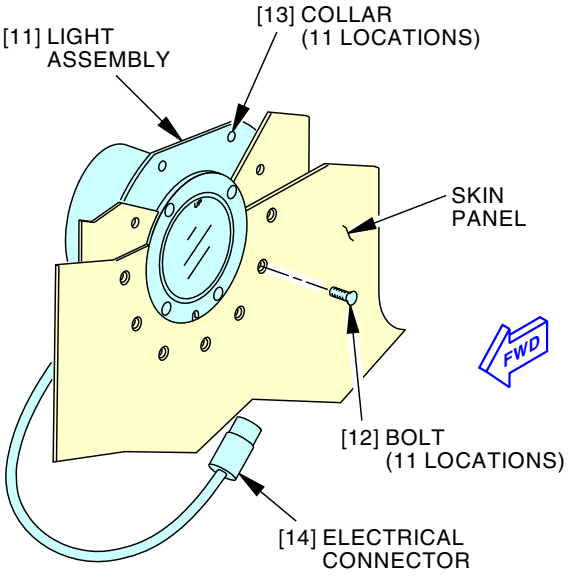
ECCN 9E991 BOEING PROPRIETARY - See title page for details





SLIDE LIGHT ASSEMBLY
(FOWARD RIGHT, AFT LEFT, AFT RIGHT)

A



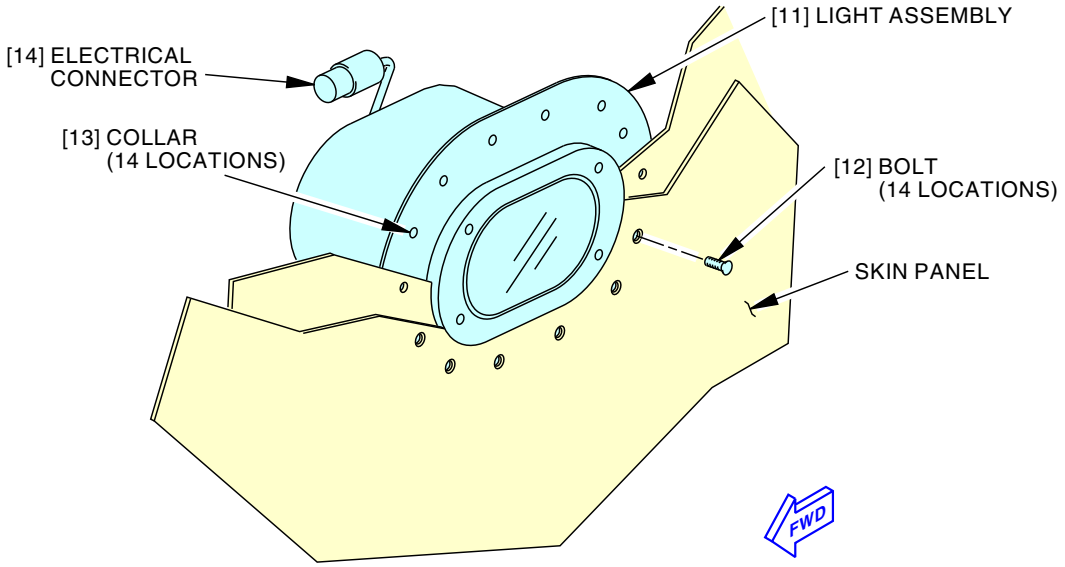
SLIDE LIGHT ASSEMBLY
(FOWARD LEFT ONLY)

A

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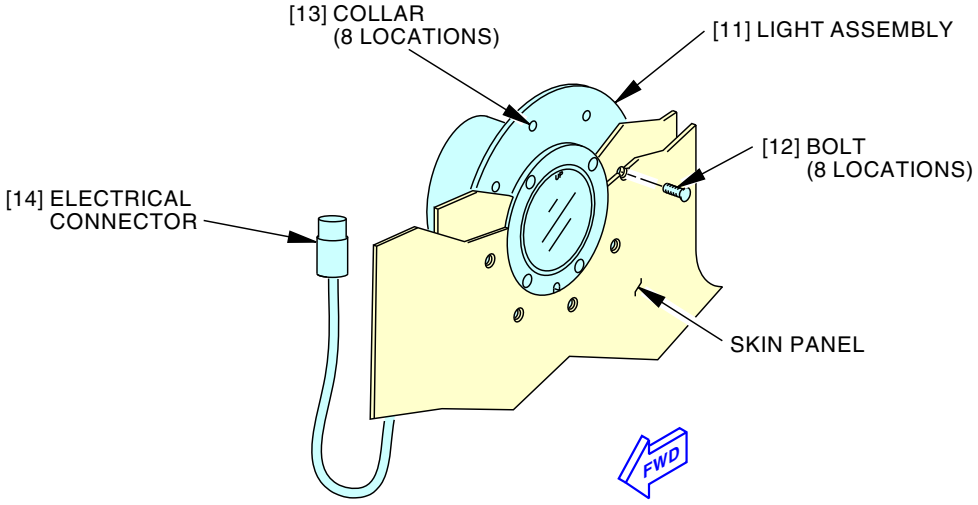
Slide Light - Light Assembly Replacement
Figure 202/33-51-04-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



OVERWING LIGHT ASSEMBLY

B



SLIDE LIGHT ASSEMBLY

C

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Slide Light - Light Assembly Replacement
Figure 202/33-51-04-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

POWER SUPPLIES - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

NOTE: See (WDM 33-51-11) for Power Supplies/Battery Packs quantity and locations.

(1) Power Supply - Charge the Battery Packs

(2) Power Supply - Fuse Replacement

(3) Power Supply - Battery Pack Replacement

(4) Power Supply - Power Supply Replacement

(5) Power Supply - Battery Pack Capacity Check

(6) Power Supply - Battery Pack Deep-Cycle Procedure

TASK 33-51-06-610-801

2. Power Supply - Charge the Battery Packs

A. General

(1) This procedure has steps to charge battery packs for the emergency lights.

B. References

Reference	Title
24-22-00-860-801	Supply Electrical Power (P/B 201)

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Power Supply Battery Packs Charging

SUBTASK 33-51-06-860-001

(1) Make sure the pilots emergency light switch on the overhead panel, P5, is set to the OFF mode.

SUBTASK 33-51-06-860-002

(2) Make sure the attendants emergency light switch in the passenger compartment is set to the NORMAL mode.

SUBTASK 33-51-06-860-003

(3) To charge the battery packs, do this task: Supply Electrical Power, TASK 24-22-00-860-801.

NOTE: The battery packs in the emergency light power supplies are continuously charged when electrical power is supplied to the airplane, unless the emergency light switches are set to the on mode. If the battery packs are fully drained, maximum time necessary to charge them is 180 minutes.

(a) If the airplane power was removed for 6 days or more, do not activate the emergency light system for a minimum of 180 minutes after electrical power is applied. Do not do a functional test until the batteries are charged for a minimum of 180 minutes. The system must be fully charged to operate correctly.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-51-06-960-801

3. Power Supply - Fuse Replacement

(Figure 201)

A. General

(1) This procedure has steps to replace the fuse for the power supply for the emergency exit lights.

B. References

Reference	Title
WDM 33-51-11	D000534517
WDM 33-51-11 thru 33-51-21	D000534510
WDM 33-51-12 thru 33-51-21	D000534515

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
4	Battery pack	33-51-06-12-046	SIA ALL
8	Fuse	33-51-06-12-053	SIA ALL

D. Location Zones

Zone	Area
200	Upper Half of Fuselage

E. Power Supply Fuse Replacement

SUBTASK 33-51-06-860-016

(1) Make sure that the pilots' emergency light switch, on the P5 overhead panel, is set to the OFF mode.

SUBTASK 33-51-06-860-005

(2) Open the applicable circuit breaker and install the safety tag:

(WDM 33-51-11)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

SUBTASK 33-51-06-010-001

(3) Get access to the power supply:

NOTE: Use the WDM to identify the power supply locations (WDM 33-51-11 thru 33-51-21).

(a) For the power supplies near the forward entry door, do the following steps:

1) Open the applicable access panel.
2) Support the battery access door.
3) Remove the screws [9] and washers [10].
4) Open the battery access door.

(b) Open the access panel in the lowered ceiling panel.

(c) Remove the sidewall carpet riser.

SUBTASK 33-51-06-960-001

(4) Do these steps to replace the fuse:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Loosen the fasteners [3] on the battery pack.

CAUTION MAKE SURE TO KEEP THE BATTERY PACK PARALLEL TO THE BATTERY CHARGER SURFACE. DAMAGE TO THE BATTERY PACK CAN OCCUR.

(b) Lift the battery pack [4] to disconnect its pins from the bottom of the power supply.

(c) Replace each damaged fuse [8].

(d) Connect the pins on the battery pack [4] with the bottom of the power supply.

(e) Tighten the fasteners [3].

SUBTASK 33-51-06-710-001

(5) Do a test of the new fuse:

(a) Remove the safety tag and close the applicable circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

(b) Set the test switch [7] to the ON mode.

(c) Make sure that the lights and signs connected to the power supply come on.

NOTE: Use the WDM to identify each of the lights and signs (WDM 33-51-12 thru 33-51-21).

(d) After approximately one minute, make sure that all the emergency lights and signs go off automatically.

F. Put the Airplane Back to its Usual Condition

SUBTASK 33-51-06-410-004

(1) For the power supplies near the forward entry door, do the following steps:

(a) Close the battery access door as follows:

1) Close and hold the battery access door.

2) Install the screws [9] and washers [10] through the clip and to the battery access door.

3) Tighten the screws [9].

(b) Close the access panel.

SUBTASK 33-51-06-410-001

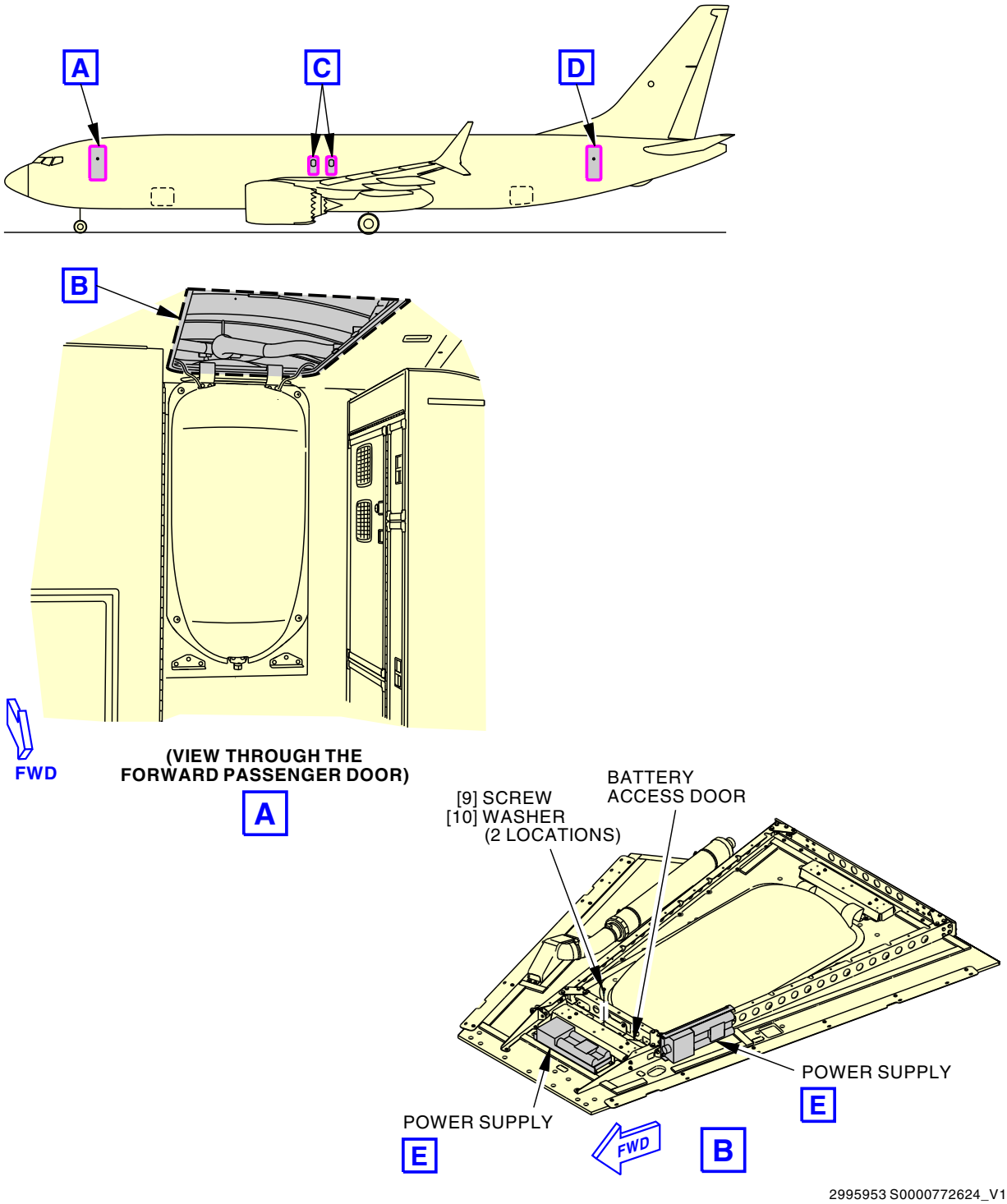
(2) Close the access panel in the lowered ceiling panel.

SUBTASK 33-51-06-420-002

(3) Install the sidewall carpet riser.

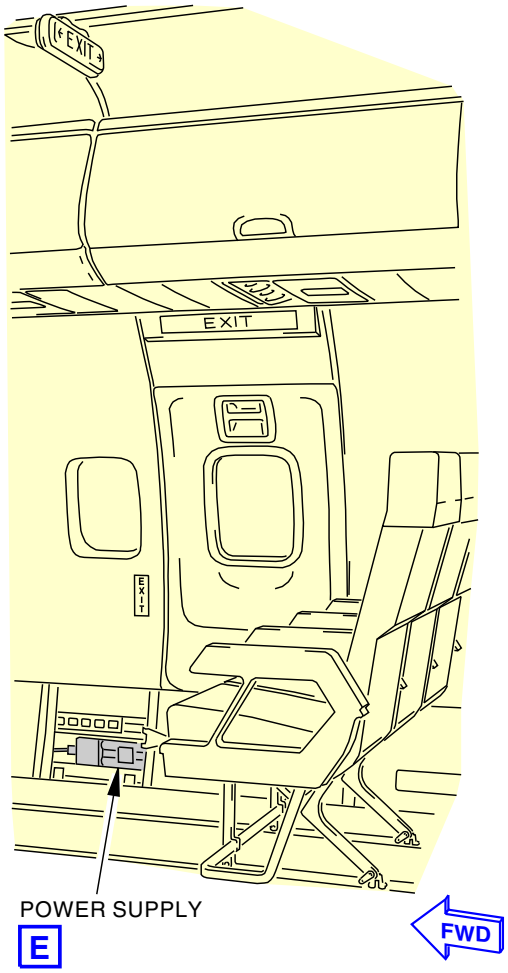
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



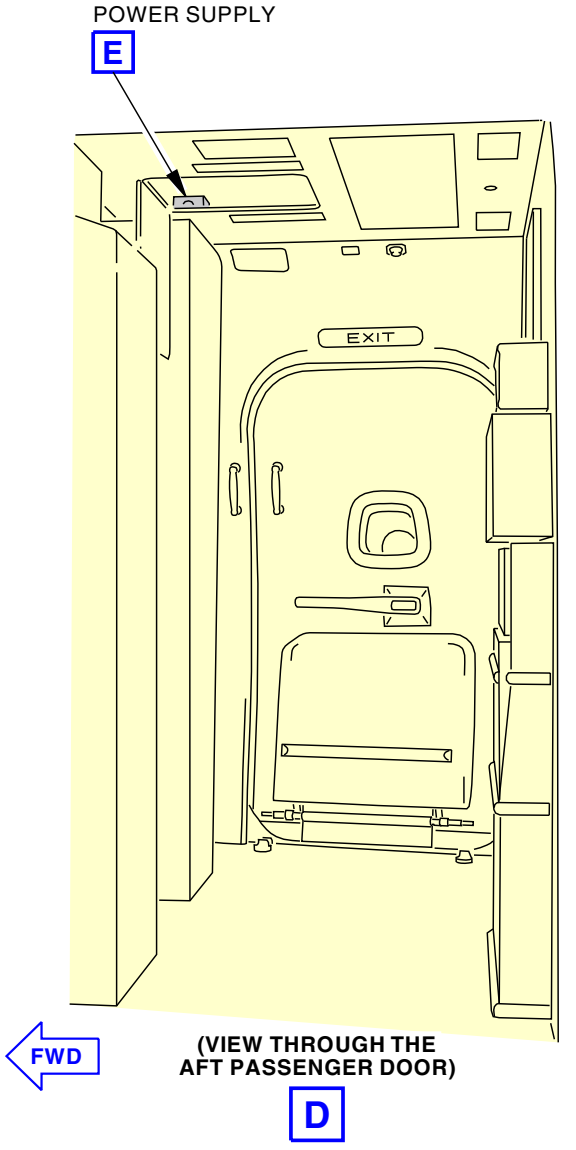
Power Supply - Power Supply/Battery Pack/Fuse Replacement
Figure 201/33-51-06-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



OVERWING ESCAPE HATCH
(EXAMPLE)

C



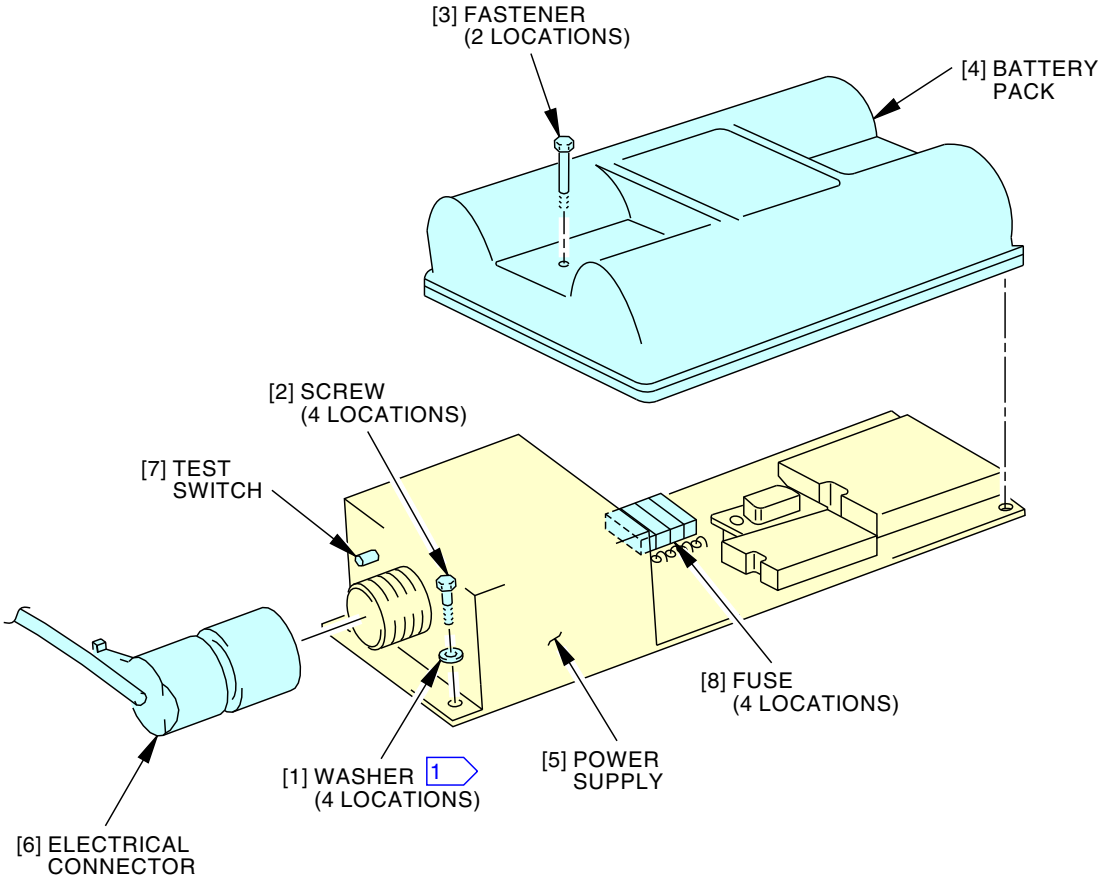
(VIEW THROUGH THE
AFT PASSENGER DOOR)

D

2414786 S00061535969_V2

Power Supply - Power Supply/Battery Pack/Fuse Replacement
Figure 201/33-51-06-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



POWER SUPPLY
(EXAMPLE)

E

1 IF APPLICABLE

2414787 S00061535970_V4

Power Supply - Power Supply/Battery Pack/Fuse Replacement
Figure 201/33-51-06-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-51-06-960-802

4. Power Supply - Battery Pack Replacement

(Figure 201)

A. General

(1) This procedure has steps to replace the battery pack for emergency lights.

(2) When you replace the battery pack, do not discard it. Refer to the vendor instructions for possible repairs.

NOTE: Ignore the expiration dates (if installed) on these battery packs.

B. References

Reference	Title
WDM 33-51-11	D000534517
WDM 33-51-12 thru 33-51-21	D000534515

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Power Supply Battery Pack Replacement

SUBTASK 33-51-06-860-017

(1) Make sure that the pilots emergency light switch, on the P5 overhead panel, is set to the OFF mode.

SUBTASK 33-51-06-860-006

(2) Open the applicable circuit breaker and install the safety tag:

(WDM 33-51-11)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

SUBTASK 33-51-06-010-002

(3) Get access to the power supply that contains the battery pack:

NOTE: Use the WDM to identify power supply locations (WDM 33-51-12 thru 33-51-21).

(a) For the power supplies near the forward entry door, do the following steps:

1) Open the applicable access panel.

2) Support the battery access door.

3) Remove the screws [9] and washers [10].

4) Open the battery access door.

(b) Open the access panel in the lowered ceiling panel.

(c) Remove the sidewall carpet riser.

SUBTASK 33-51-06-960-002

(4) Do these steps to remove the battery pack:

(a) Loosen the fasteners [3].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CAUTION MAKE SURE TO KEEP THE BATTERY PACK PARALLEL TO THE BATTERY CHARGER SURFACE. DAMAGE TO THE BATTERY PACK CAN OCCUR.

(b) Lift away the battery pack [4] to disconnect its pins from the base of the power supply.

SUBTASK 33-51-06-960-003

(5) Do these steps to install the battery pack:

(a) Align the connector pins with the base of the power supply, then install the battery pack [4].

(b) Tighten the fasteners [3].

SUBTASK 33-51-06-710-002

(6) Do a test of the new battery pack:

(a) Remove the safety tag and close the applicable circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

(b) Set the test switch [7] to the on mode.

1) Make sure the lights and signs connected to the battery pack come on.

NOTE: Use the WDM to identify the individual lights and signs (WDM 33-51-12 thru 33-51-21).

2) If the lights and sign do not come on, supply electrical power to the airplane to charge the battery packs, then do the test again (TASK 33-51-06-610-801).

NOTE: The battery packs in the emergency light power supplies are continuously charged when electrical power is supplied to the airplane, unless the emergency light switches are set to the on mode. If the battery packs are fully drained, maximum time necessary to charge them is 180 minutes.

(c) After approximately one minute, make sure all emergency lights and signs go off automatically.

E. Put the Airplane Back to its Usual Condition

SUBTASK 33-51-06-410-005

(1) For the power supplies near the forward entry door, do the following steps:

(a) Close the battery access door as follows:

1) Close and hold the battery access door.

2) Install the screws [9] and washers [10] through the clip and to the battery access door.

3) Tighten the screws [9].

(b) Close the access panel.

SUBTASK 33-51-06-410-002

(2) Close the access panel in the lowered ceiling panel.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-51-06-420-004

(3) Install the sidewall carpet riser.

END OF TASK

TASK 33-51-06-960-803

5. Power Supply - Power Supply Replacement

(Figure 201)

A. General

(1) This procedure has steps to replace a power supply for the emergency lights.

(2) When you replace the power supply, do not discard it. Refer to the vendor instructions for possible repairs.

B. References

Reference	Title
WDM 33-51-11	D000534517
WDM 33-51-12 thru 33-51-21	D000534515

C. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
5	Power supply	33-51-06-12-045	SIA ALL

D. Location Zones

Zone	Area
200	Upper Half of Fuselage

E. Power Supply Replacement

SUBTASK 33-51-06-860-018

(1) Make sure that the pilots emergency light switch, on the P5 overhead panel, is set to the OFF mode.

SUBTASK 33-51-06-860-007

(2) Open the applicable circuit breaker and install the safety tag:

(WDM 33-51-11)

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

SUBTASK 33-51-06-010-003

(3) Get access to the power supply:

NOTE: Use the WDM to identify power supply locations (WDM 33-51-12 thru 33-51-21).

(a) For the power supplies near the forward entry door, do the following steps:

1) Open the applicable access panel.

2) Support the battery access door.

3) Remove the screws [9] and washers [10].

4) Open the battery access door.

(b) Open the access panel in the lowered ceiling panel.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Remove the sidewall carpet riser.

SUBTASK 33-51-06-960-004

(4) Do these steps to replace the power supply:

(a) Disconnect the electrical connector [6].

(b) Remove the screws [2] and washers [1] (if applicable).

(c) Remove the power supply [5].

(d) Install the new power supply [5].

(e) Install the washers [1] (if applicable) and screws [2] .

(f) Connect the electrical connector [6].

SUBTASK 33-51-06-710-003

(5) Do a test of the new power supply:

(a) Remove the safety tag and close the applicable circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	10	C01357	PASS CABIN LIGHTING EMER CHGR L AFT
A	11	C00250	PASS CABIN LIGHTING EMER CHGR FWD
B	10	C01358	PASS CABIN LIGHTING EMER CHGR R AFT

(b) Set the test switch [7] to the on mode.

1) Make sure that the lights and signs connected to the power supply come on.

NOTE: Use the WDM to identify the individual lights and signs (WDM 33-51-12 thru 33-51-21).

2) If the lights and signs do not come on, supply electrical power to the airplane to charge the battery packs, then do the test again (TASK 33-51-06-610-801).

NOTE: If the battery packs are fully drained, maximum time necessary to charge them is 90 minutes. However, this test can be completed after charging the battery packs for only 10 minutes.

(c) After approximately one minute, make sure that all emergency lights and signs go off automatically.

F. Put the Airplane Back to its Usual Condition

SUBTASK 33-51-06-410-006

(1) For the power supplies near the forward entry door, do the following steps:

(a) Close the battery access door as follows:

1) Close and hold the battery access door.

2) Install the screws [9] and washers [10] through the clip and to the battery access door.

3) Tighten the screws [9].

(b) Close the access panel.

SUBTASK 33-51-06-410-003

(2) Close the access panel in the lowered ceiling panel.

SUBTASK 33-51-06-420-006

(3) Install the sidewall carpet riser.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-51-06-200-801

6. Power Supply - Battery Pack Capacity Check

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure has steps to check the capacity of the battery pack for the emergency lights.

(2) The capacity check makes sure each battery pack can operate its emergency lights and signs for a minimum of 15 minutes.

B. References

Reference	Title
24-22-00-860-801	Supply Electrical Power (P/B 201)
WDM 33-51-12 thru 33-51-21	D000534515

C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Power Supply Battery Pack Capacity Check

SUBTASK 33-51-06-860-008

(1) Make sure that electrical power is applied (Supply Electrical Power, TASK 24-22-00-860-801).

SUBTASK 33-51-06-860-009

(2) Make sure the battery packs are fully charged.

NOTE: The battery packs in the emergency light power supplies are continuously charged when electrical power is supplied to the airplane, unless the emergency light switches are set to the on mode. If power has been on for 180 minutes and no emergency lights have been tested, the battery packs can be considered fully charged. If the battery packs are fully drained, maximum time necessary to charge them is 180 minutes.

SUBTASK 33-51-06-210-001

(3) Do the battery pack capacity check:

(a) At the overhead panel, P5, set the pilots emergency light switch to the on mode.

NOTE: You will note the amount of time the emergency lights stay on for each battery pack.

(b) Leave the switch in the on mode until all emergency lights go off.

(c) Make sure the emergency lights and signs stay on for a minimum of 15 minutes.

1) Identify each battery pack that does not operate its emergency lights and signs for a minimum of 15 minutes.

NOTE: Use the WDM (WDM 33-51-12 thru 33-51-21). It is not necessary to identify individual lights and signs. It is only necessary to identify emergency light power supplies where unsatisfactory battery packs may be installed.

(d) At the P5 panel, set the pilots emergency light switch to the off mode.

(e) Charge the battery packs.

NOTE: The battery packs in the emergency light power supplies are continuously charged when electrical power is supplied to the airplane, unless the emergency light switches are set to the on mode. If the battery packs are fully drained, maximum time necessary to charge them is 180 minutes.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 33-51-06-860-010

(4) If there are battery packs that do not operate correctly during the capacity check, then do these steps:

NOTE: The battery packs have been re-charged following the capacity check.

(a) To deep cycle the battery packs, do this task: Power Supply - Battery Pack Deep-Cycle Procedure, TASK 33-51-06-600-801

SUBTASK 33-51-06-810-001

(5) Retest any battery packs that did not stay on for 15 minutes above.

(a) At the overhead panel, P5, set the pilots emergency light switch to the on mode.

NOTE: You will note the amount of time the emergency lights stay on that had previously failed.

(b) Leave the switch in the on mode for a minimum of 15 minutes.

(c) Make sure the emergency lights stayed on for a minimum of 15 minutes.

SUBTASK 33-51-06-860-011

(6) If the battery pack operated correctly during the retest, then put the airplane back to its usual condition:

(a) At the P5 panel, set the pilots emergency light switch to the off mode.

(b) Charge the battery pack.

NOTE: The battery pack in the emergency lights power supply is continuously charged when electrical power is supplied to the airplane, unless the emergency light switches are set to the on mode. If the battery pack is fully drained, maximum time necessary to charge it is 180 minutes.

SUBTASK 33-51-06-860-012

(7) If the battery pack did not operate correctly during the retest, then replace it:

(a) Do this task: Power Supply - Battery Pack Replacement, TASK 33-51-06-960-802.

(b) At the P5 panel, set the pilots emergency light switch to the off mode.

(c) Charge the battery pack.

NOTE: The battery pack in the emergency lights power supply is continuously charged when electrical power is supplied to the airplane, unless the emergency light switches are set to the on mode. If the battery pack is fully drained, maximum time necessary to charge it is 180 minutes.

——— END OF TASK ———

TASK 33-51-06-600-801

7. Power Supply - Battery Pack Deep-Cycle Procedure

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure has steps to check the deep cycle of the battery pack for the emergency lights.

(2) The deep-cycle procedure removes the electrical power in the battery packs down to the power supply lower level cutoff and then charges them to their capacity.

B. References

Reference	Title
24-22-00-860-801	Supply Electrical Power (P/B 201)

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C. Location Zones

Zone	Area
200	Upper Half of Fuselage

D. Power Supply Battery Pack Deep-Cycle Procedure

SUBTASK 33-51-06-860-014

(1) Make sure that electrical power is applied (Supply Electrical Power, TASK 24-22-00-860-801).

SUBTASK 33-51-06-610-001

(2) Do the battery pack deep-cycle procedure:

(a) At the overhead panel, P5, set the pilots emergency light switch to the on mode.

(b) Keep the switch on until all emergency lights and signs go off.

NOTE: The removal of electrical power from the battery packs can take up to 90 minutes.

(c) After all emergency lights and signs go off, set the switch to the off mode.

(d) Charge the battery packs (Power Supply - Charge the Battery Packs, TASK 33-51-06-610-801).

NOTE: The battery packs in the emergency light power supplies are continuously charged when electrical power is supplied to the airplane, unless the emergency light switches are set to the on mode. If the battery packs are fully drained, maximum time necessary to charge them is 180 minutes.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLOOR PROXIMITY LIGHTS ON GALLEYS, LAVATORIES, CLOSETS, AND WINDSCREENS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Floor Proximity Light - Lamp Replacement

(2) Floor Proximity Light - Light Assembly Replacement.

TASK 33-51-14-960-801

2. Floor Proximity Light - Lamp Replacement

(Figure 201)

A. References

Reference	Title
WDM 33-51-21	D000534518

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Procedure

SUBTASK 33-51-14-960-001

WARNING DO NOT TOUCH THE SOCKETS OR THE METAL ENDS OF THE LAMP. SHOCK CAN OCCUR WHEN YOU SUPPLY ELECTRICAL POWER TO THE LIGHT.

(1) Do these steps to replace the applicable lamp (WDM 33-51-21):

(a) Remove the lens [3] or lens [6] from the light assembly [1] or light assembly [4].

(b) Replace the lamp [2] or lamp [5].

(c) Install the lens [3] or lens [6] to the light assembly [1] or light assembly [4].

SUBTASK 33-51-14-710-001

(2) Do a test of the new lamp [2] or lamp [5]:

NOTE: The emergency lights are energized by the power supplies. Use the lights for a minimum time to do the test.

(a) At the attendant panel in the passenger compartment, set the emergency light switch to the ON mode.

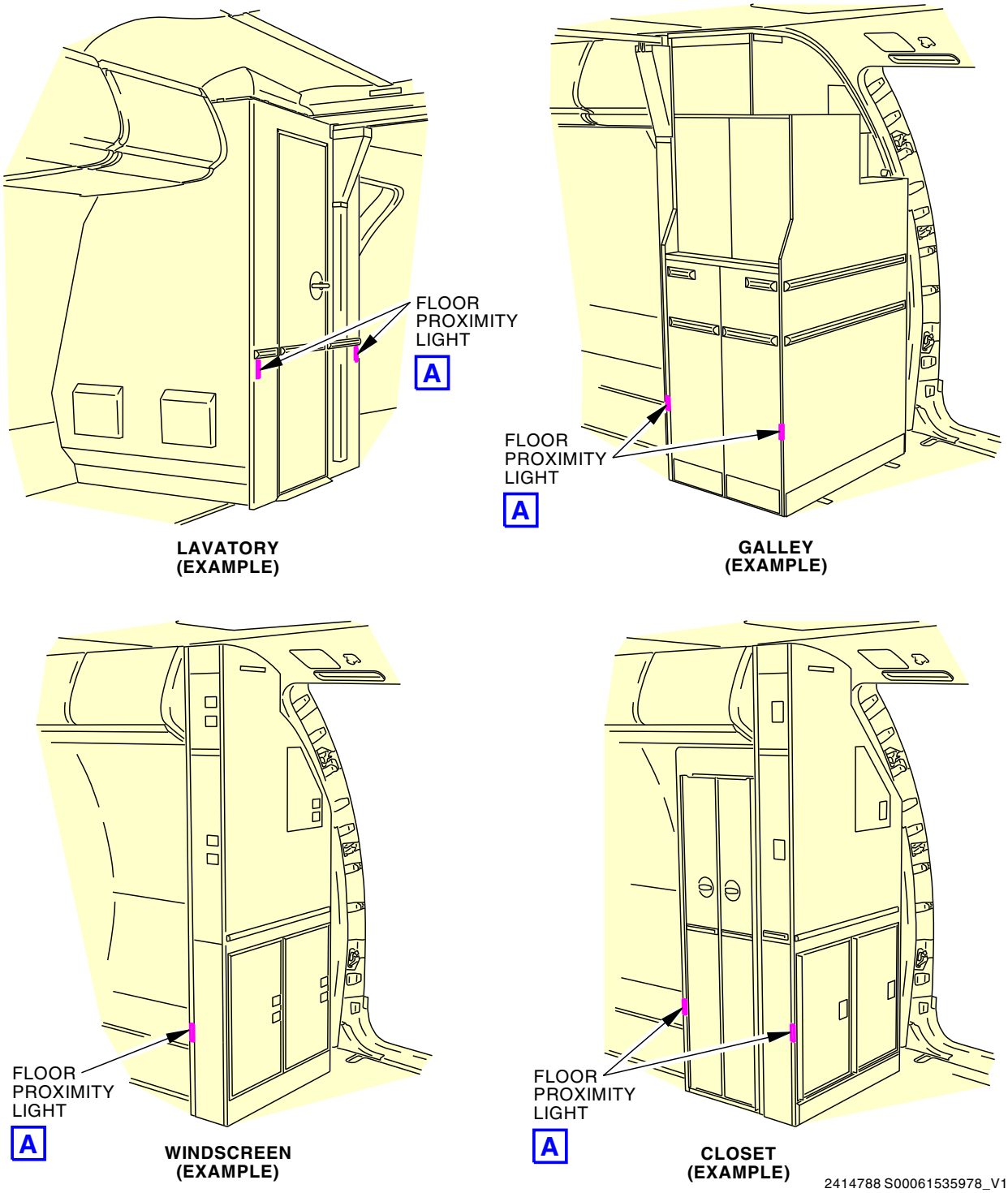
1) Make sure that the lamp comes on.

(b) Set the switch to the NORMAL mode.

1) Make sure that all emergency lights and signs go off.

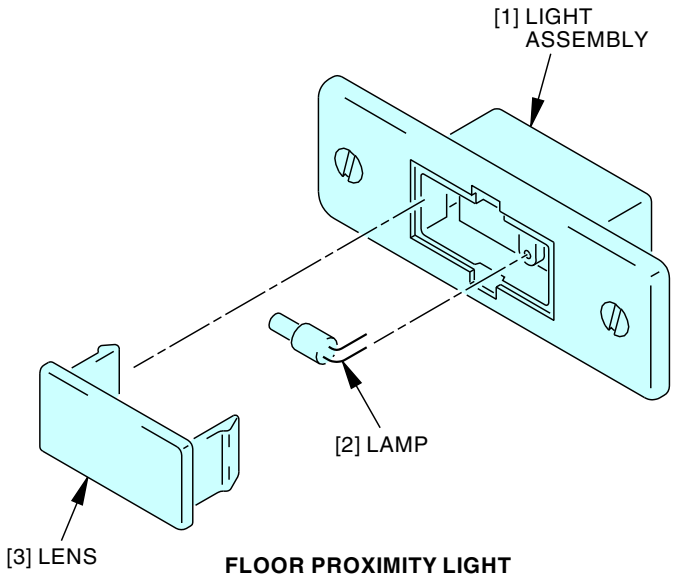
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



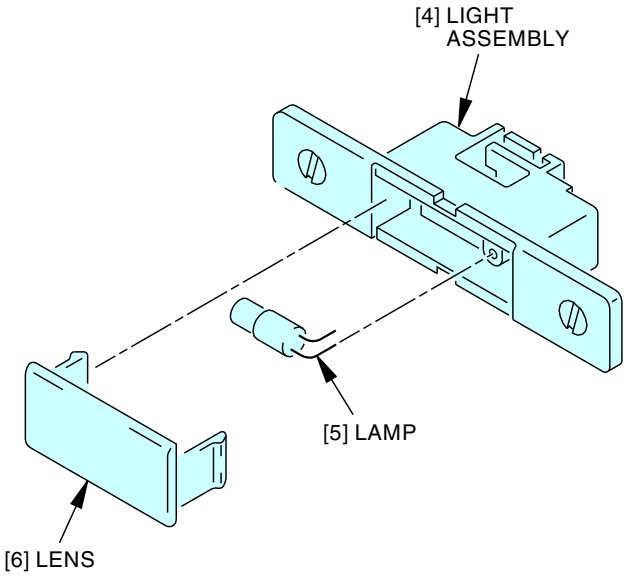
Floor Proximity Light - Lamp Replacement
Figure 201/33-51-14-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLOOR PROXIMITY LIGHT (EXAMPLE)

A



FLOOR PROXIMITY LIGHT (EXAMPLE)

A

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Floor Proximity Light - Lamp Replacement
Figure 201/33-51-14-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 33-51-14-960-802

3. Floor Proximity Light - Light Assembly Replacement

(Figure 202)

A. References

Reference	Title
WDM 33-51-21	D000534518

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Procedure

SUBTASK 33-51-14-960-002

(1) Do these steps to replace the applicable light assembly (WDM 33-51-21):

(a) Remove the fasteners [7] or fasteners [9].

(b) Pull out the light assembly [1] or light assembly [4].

(c) Disconnect the electrical wires [8] or electrical wires [10].

(d) Connect the electrical wires [8] or electrical wires [10] to the new light assembly [1] or light assembly [4].

1) Make sure that the new light assembly [1] or light assembly [4] includes a lamp (TASK 33-51-14-960-801).

(e) Put in the new light assembly [1] or light assembly [4].

1) Make sure that the electrical wires [8] or electrical wires [10] are installed correctly in their usual position.

(f) Install the fasteners [7] or fasteners [9].

SUBTASK 33-51-14-710-002

(2) Do a test of the new light assembly [1] or light assembly [4]:

NOTE: The emergency lights are energized by the power supplies. Use the lights for a minimum time to do the test.

(a) At the attendant panel in the passenger compartment, set the emergency light switch to the ON mode.

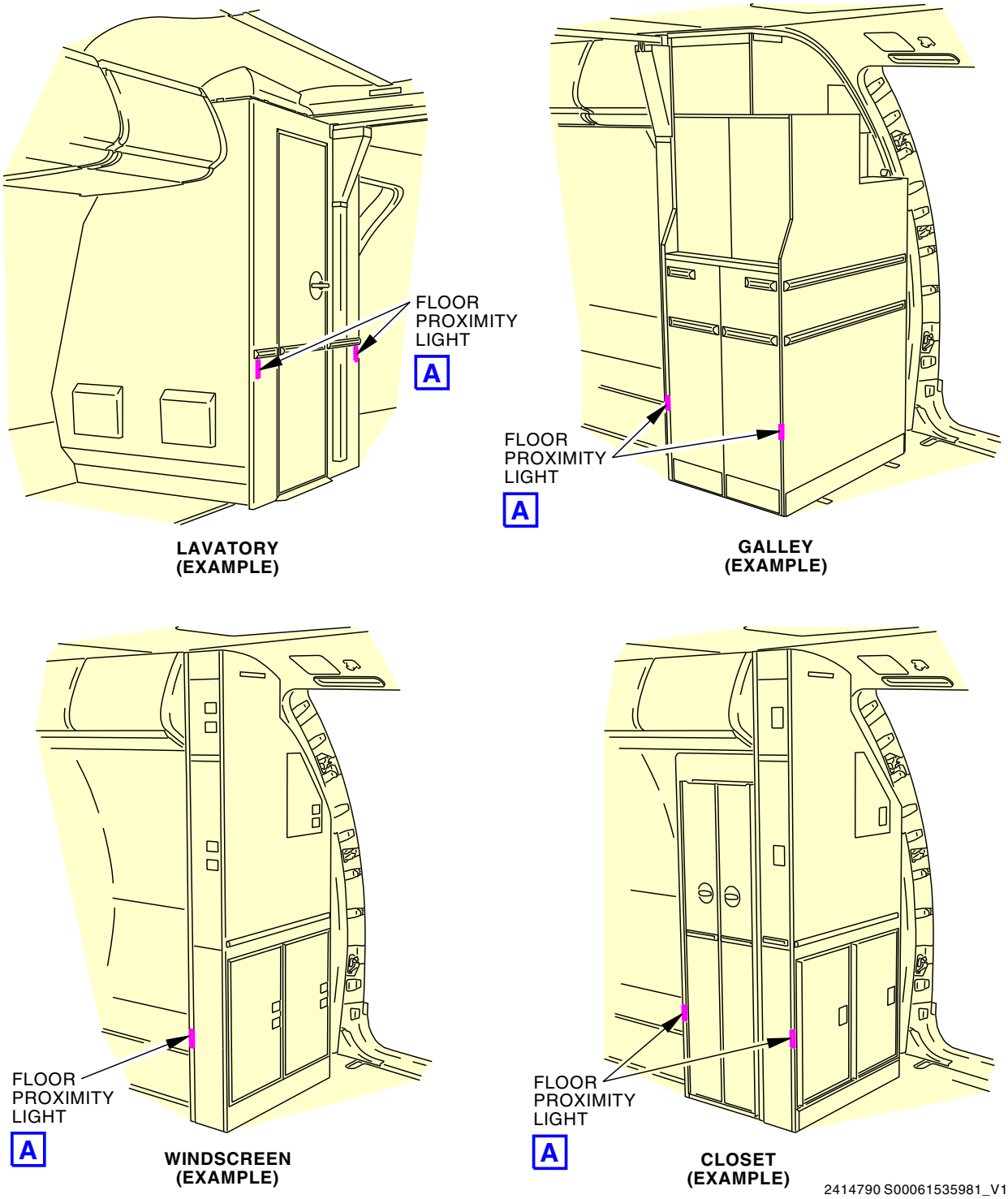
1) Make sure that the light comes on.

(b) Set the switch to the NORMAL mode.

1) Make sure that all emergency lights and signs go off.

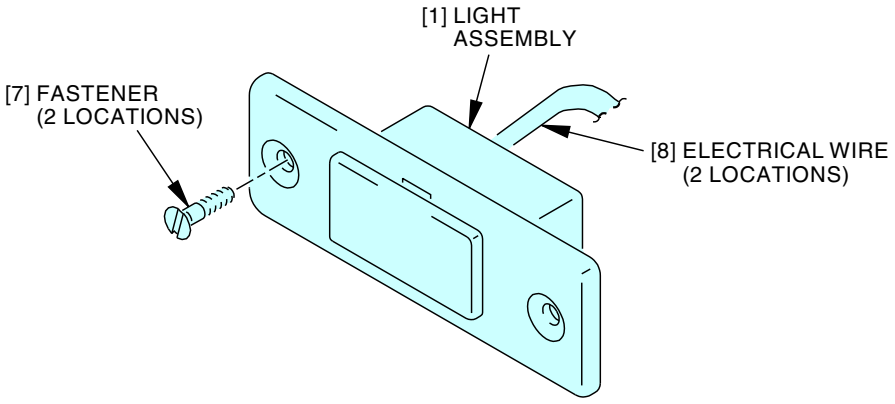
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



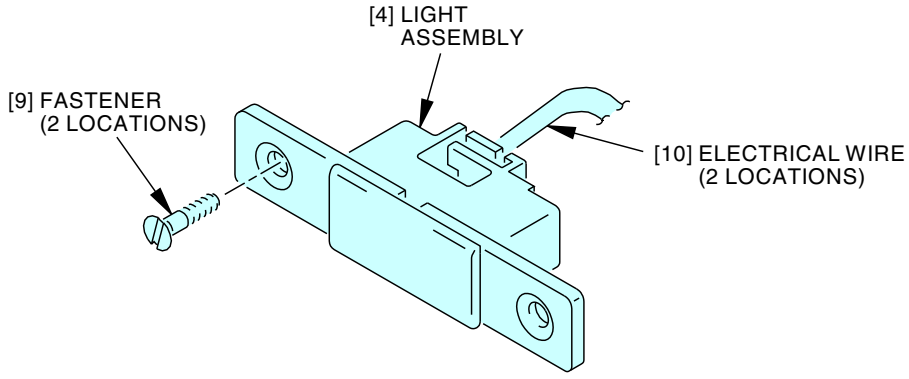
Floor Proximity Light - Light Assembly Replacement
Figure 202/33-51-14-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLOOR PROXIMITY LIGHT (EXAMPLE)

A



FLOOR PROXIMITY LIGHT (EXAMPLE)

A

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Floor Proximity Light - Light Assembly Replacement
Figure 202/33-51-14-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLOOR PROXIMITY LIGHTS, PHOTOLUMINESCENT - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Floor Proximity Light - Charge the Photoluminescent Strips

(2) Floor Proximity Light - Photoluminescent Strip Replacement

(3) Floor Proximity Light - Photoluminescent Strip Cleaning

(4) Floor Proximity Light - Photoluminescent Strip Inspection

B. Do not use this procedure for the exit signs that identify the doors and escape hatches.

TASK 33-51-15-860-801

2. Floor Proximity Light - Charge the Photoluminescent Strips

A. General

(1) The photoluminescent strips are energized when light is present. This procedure uses the passenger cabin lights to supply a continuous charge to all sections of the photoluminescent strips.

(2) The procedure uses three types of Boeing Sky Interior (BSI) light scenes to charge photoluminescent strips.

(a) Standard BSI light scene.

(b) Airline custom BSI light scene.

1) The photoluminescent strips charging criteria is to use the White - White - Amber (WWA) light types, such as the Center Overhead Stowage Lights, Crossbin Lights and Direct Lights. This charging criterion is limited to WWA light types because of their ability to charge photoluminescent strips as compared to the full color LED lights.

2) The photoluminescent charge criteria that are limited to the W1 (cool white light source) and W2 (warm white light source) colors with High or Medium intensities. This is because these colors and intensities have the ability to charge the photoluminescent strips.

(c) Attendant Control Panel (ACP) Inoperative (30% Brightness).

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Charge the Photoluminescent Strips with Standard BSI Light Scene

SUBTASK 33-51-15-860-001

(1) Do these steps to charge the photoluminescent strips with standard BSI light scene:

(a) At the applicable attendant panel, set the Passenger Seating Area scene to White BRIGHT.

NOTE: Passenger compartment lighting is very important to the performance of the photoluminescent floor proximity system. Use the applicable maintenance procedures to correctly maintain these lights.

(b) To do the initial charging of the photoluminescent strips, select the scenarios from the applicable table (Table 201 or Table 202).

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Table 201/33-51-15-993-801 BSI First Flight Charging Requirement for Photoluminescent Strips (Blue Color Strips)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
First flight of the day Bins closed (White BRIGHT)		Close overhead bins during charging. Cabin activity is limited to minor aisle traffic of crew and personnel.
* 5 minute charge	* 3.5	
* 10 minute charge	* 5.0	
* 15 minute charge	* 7.5	
First flight of the day Bins open No Passengers (White BRIGHT)		Bin doors can be open during charging. Cabin activity is limited to minor aisle traffic or crew and personnel.
* 10 minute charge	* 5.0	
* 15 minute charge	* 7.5	

Table 202/33-51-15-993-802 BSI First Flight Charging Requirement for Photoluminescent Strips (Not Blue Color Strips)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
First flight of the day Bins closed (White BRIGHT)		Close overhead bins during charging. Cabin activity is limited to minor aisle traffic of crew and personnel.
* 5 minute charge	* 8.0	
* 10 minute charge	* 9.5	
* 15 minute charge	* 12.5	
First flight of the day Bins open No Passengers (White BRIGHT)		Bin doors can be open during charging. Cabin activity is limited to minor aisle traffic or crew and personnel.
* 10 minute charge	* 9.5	
* 15 minute charge	* 12.5	

(c) Photoluminescent duration can be extended more than the initial charge, by using the extended charge scenarios from the applicable table (Table 203 or Table 204).

NOTE: The Photoluminescent Duration times listed in Table 203 and Table 204 differ from those listed in Table 201 and Table 202 because of differences in the charge time starting conditions.

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Table 203/33-51-15-993-803 BSI Quick Turnaround and In-Flight Charging Requirement (Blue Color Strips)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
Continuous Flight	No limit with ceiling lights and sidewall lights stay on.	If the Attendant Control Panel loses communication with the ceiling lights and sidewall lights, these lights will go to default medium white. Flight duration can be extended continuously
In-Flight Charging (Taxi/Take-off) * 10 minute charge (Meal/Beverage) * 15 minute charge (Cruise) * 15 minute charge	 * 2.5 * 3.5 * 3.5	 Charging must begin prior to previous discharge duration ends. Strips are assumed to be shadowed during meal service by galley cart and flight attendants which are stationary for 5 minutes.
Quick turn with bin doors open and passengers in seats (White BRIGHT) * 10 minute charge * 15 minute charge	 * 5.0 * 7.5	Charging must begin prior to previous discharge duration ends. Bin doors can be open during charging. Passenger loading and unloading periods cannot be included in the charge time. Passengers can be on the airplane.

Table 204/33-51-15-993-804 BSI Quick Turnaround and In-Flight Charging Requirement (Not Blue Color Strips)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
Continuous Flight	No limit with ceiling lights and sidewall lights stay on.	If the Attendant Control Panel loses communication with the ceiling lights and sidewall lights, these lights will go to default medium white. Flight duration can be extended continuously
In-Flight Charging (Taxi/Take-off) * 10 minute charge (Meal/Beverage) * 15 minute charge (Cruise) * 15 minute charge	 * 3.5 * 5.0 * 5.0	 Charging must begin prior to previous discharge duration ends. Strips are assumed to be shadowed during meal service by galley cart and flight attendants which are stationary for 5 minutes.

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Table 204/33-51-15-993-804 BSI Quick Turnaround and In-Flight Charging Requirement (Not Blue Color Strips) (Continued)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
In-Flight Charging* - Double Charge at 3 Hours and 6.5 Hours (Meal/Beverage) * 15 minute charge (Cruise) * 30 minute charge	 * 7.5 * 7.5	Charging must begin prior to previous discharge duration ends. Strips are assumed to be shadowed during meal service by galley cart and flight attendants which are stationary for 5 minutes. To get double charging credit, strips must be charged within 3 hours after prior charge. The second charge must take place before 6.5 hours elapsed from initial charge.
Quick turn with bin doors open and passengers in seats (White BRIGHT) * 10 minute charge * 15 minute charge	 * 9.5 * 12.5	Charging must begin prior to previous discharge duration ends. Bin doors can be open during charging. Passenger loading and unloading periods cannot be included in the charge time. Passengers can be on the airplane.

D. Charge the Photoluminescent Strips with Airline Custom BSI Light Scene

SUBTASK 33-51-15-860-002

(1) Do these steps to charge the photoluminescent strips with the Airline custom BSI light scene:

(a) At the applicable attendant panel, set the Passenger Seating Area scene to White BRIGHT.

NOTE: Passenger compartment lighting is very important to the performance of the photoluminescent floor proximity system. Use the applicable maintenance procedures to correctly maintain these lights.

(b) To do the initial charging of the photoluminescent strips, select the scenario from the applicable table (Table 205 or Table 206).

NOTE: These tables give guidance on photoluminescent strip charging. The airline must coordinate approval of these charging guidance and placard visibility when using custom scenes with their regulatory agency.

NOTE: W1 and W2 are two different colors:

W1 - cool white light source with Medium/High intensity.

W2 - warm white light source with Medium/High intensity.

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Table 205/33-51-15-993-805 BSI First Flight Charging Requirement for Photoluminescent Strips (Blue Color Strips)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
First flight of the day Bins closed No passenger (Crossbin/COS/Direct W1/W2 High) * 15 minute charge	* 3.5	Close overhead bins during charging. Cabin activity is limited to minor aisle traffic of crew and personnel. Passengers will shadow the system and are not allowed on board during charging.

Table 206/33-51-15-993-806 BSI First Flight Charging Requirement for Photoluminescent Strips (Not Blue Color Strips)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
First flight of the day Bins closed No passenger (Crossbin/COS/Direct W1/W2 High) * 15 minute charge	* 7.0	Close overhead bins during charging. Cabin activity is limited to minor aisle traffic of crew and personnel. Passengers will shadow the system and are not allowed on board during charging.

(c) Photoluminescent duration can be extended more than the initial charge, by using the extended charge scenarios from the applicable table (Table 207 or Table 208).

NOTE: The Photoluminescent Duration times listed in Table 207 and Table 208 differ from those listed in Table 205 and Table 206 because of differences in the charge time starting conditions.

NOTE: These tables give guidance on photoluminescent strip charging. The airline must coordinate approval of these charging guidance and placard visibility when using custom scenes with their regulatory agency.

NOTE: W1 and W2 are two different colors:

W1 - cool white light source with Medium/High intensity.

W2 - warm white light source with Medium/High intensity.

Table 207/33-51-15-993-807 BSI Quick Turnaround and In-Flight Charging Requirement (Blue Color Strips)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
In-Flight Charging (Crossbin/COS/Direct W1/W2 Medium) * 15 minute charge	* 2.5	Charging must begin prior to previous discharge duration ends. Strips are assumed to be shadowed during meal service by galley cart and flight attendants which are stationary for 5 minutes.
(Crossbin/COS/Direct W1/W2 High) * 15 minute charge	* 3.5	

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Table 207/33-51-15-993-807 BSI Quick Turnaround and In-Flight Charging Requirement (Blue Color Strips) (Continued)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
Quick turnaround Bin closed No passengers. (Crossbin/COS/Direct W1/W2 High) * 15 minute charge	* 3.5	Close overhead bins during charging. Cabin activity is limited to minor aisle traffic of crew and personnel. Passengers will shadow the system and are not allowed on board during charging.

Table 208/33-51-15-993-808 BSI Quick Turnaround and In-Flight Charging Requirement (Not Blue Color Strips)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
In-Flight Charging (Crossbin/COS/Direct W1/W2 Medium) * 15 minute charge	* 3.5	Charging must begin prior to previous discharge duration ends. Strips are assumed to be shadowed during meal service by galley cart and flight attendants which are stationary for 5 minutes.
(Crossbin/COS/Direct W1/W2 High) * 15 minute charge	* 5.0	
In-Flight Charging* - Double Charge at 3 Hours and 6.5 Hours		Charging must begin prior to previous discharge duration ends. Strips are assumed to be shadowed during meal service by galley cart and flight attendants which are stationary for 5 minutes.
(Crossbin/COS/Direct W1/W2 Medium) * 15 minute charge	* 6.0	To get double charging credit, strips must be charged within 3 hours ± 15 minutes after prior charge.
(Crossbin/COS/Direct W1/W2 High) * 15minute charge	* 7.5	The second charge must take place before 6.5 hours elapsed from initial charge.
Quick turnaround Bin closed No passengers. (Crossbin/COS/Direct W1/W2 High) * 15 minute charge	* 7.0	Close overhead bins during charging. Cabin activity is limited to minor aisle traffic of crew and personnel. Passengers will shadow the system and are not allowed on board during charging.

E. Charge the Photoluminescent Strips with Attendant Control Panel Inoperative

SUBTASK 33-51-15-860-003

(1) Do these steps to charge the photolumiscent strips with an attendant control panel inoperative (30% Brightness - Medium White Setting):

NOTE: Passenger compartment lighting is very important to the performance of the photoluminescent floor proximity system. Use the applicable maintenance procedures to correctly maintain these lights.

(a) To do the charging of the photoluminescent strips, use the table below:

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Table 209/33-51-15-993-809 BSI Charging Requirement for Attendant Control Panel Inoperative (30% Brightness)

Charge Scenario (Light Scene)	Photoluminescent Duration (Hours)	Remarks
Continuous Flight	No limit with ceiling lights and sidewall lights on	If the Attendant Control Panel loses communication with the ceiling lights and sidewall lights, these lights will go to default medium white. Flight duration can be extended continuously.
First flight of the day Bins closed No passengers (White Medium) * 15 minute charge	* 7.0	Close overhead bins during charging. Cabin activity is limited to minor aisle traffic of crew and personnel. Passengers will shadow the system and are not allowed on board during charging.

END OF TASK

TASK 33-51-15-960-801

3. Floor Proximity Light - Photoluminescent Strip Replacement

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This task has the steps to replace sections or complete lengths of the photoluminescent strips.

(a) Replacement strip sections must be a minimum of 18 in. (457.2 mm) long.

(b) Overwing exit aisle strips must be replaced as one piece.

B. References

Reference	Title
51-22-00-160-801	Prepare For Sealing (P/B 201)

C. Consumable Materials

Reference	Description	Specification
A00635	Adhesive - RTV 108 Translucent Silicone Rubber RTV Paste, One-part	BAC5010 Type 60 Class A Grade 2 / MIL-A-46106 Type 1
A50038	Adhesive - Fast-setting, 2 Part Epoxy, Medium Viscosity	BMS5-123 Type I Class 2 Clear
A50464	Tape - Vinyl, Adhesive Coated	BMS5-179
A50555	Adhesive - 2 Part Epoxy, Permabond ET500	
A50556	Adhesive - 2 Part Epoxy, Araldite Fusion	
B00083	Solvent - VM&P Naphthas	TT-N-95 Type II, ASTM D-3735 Type III
B00148	Solvent - Methyl Ethyl Ketone (MEK)	ASTM D740
B00184	Solvent - Presealing, Cleaning Solvent	BMS11-7
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G02129	Tape - 223S (use until stock depleted)	

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(Continued)

Reference	Description	Specification
G50156	Tape - Carpet, Double-sided, 16 oz/sq. yd., Black. Storage Life 18 Months.	BMS5-133 Type II Class 2

D. Location Zones

Zone	Area
200	Upper Half of Fuselage

E. Photoluminescent Strip Replacement

SUBTASK 33-51-15-960-001

(1) Do these steps to replace the photoluminescent strip:

(a) Use a smooth tool to separate the tape holding the light strip onto the floor panels.

(b) Remove the old tape that held the strip onto the floor panels.

(c) Clean the floor panels:

1) Apply solvent, B00184, or solvent, B00148, or solvent, B00083, with a clean oil-free cotton wiper, G00034.

2) Rub the surface to remove the tape.

3) Use a clean cotton wiper, G00034, to remove the solvent before it evaporates.

(d) Do these steps to prepare the new photoluminescent strips that do not have endcaps:

1) If it is necessary, trim the new strip to fit.

NOTE: If this is a strip or a portion of strip to be mounted between existing strips, you will want to leave room to seal the exposed ends of the new strip and still maintain the appropriate gap between each end of the existing strips.

2) Do this task: Prepare For Sealing, TASK 51-22-00-160-801.

CAUTION

SEALANT MUST NOT EXTEND OVER PERIPHERY OF PHOTOLUMINESCENT STRIP.

3) Carefully seal the exposed end of all strips with small beads of adhesive, A50038.

(e) Do these steps to prepare the new photoluminescent strips that have end caps [3] (Figure 201):

NOTE: If this is a strip or a portion of strip to be mounted between existing strips, you will want to leave room to seal the exposed ends of the new strip and still maintain the appropriate gap between each end of the existing strips.

1) If the end caps [3] are installed, remove the end caps [3] from each end of the cover sleeve [2].

2) If it is necessary, do these steps to trim the new photoluminescent strip to fit.

a) Remove the color filter [4] and photoluminescent insert [1] in the cover sleeve [2].

b) Cut the cover sleeve [2] to the applicable length.

c) Cut the color filter [4] and photoluminescent insert [1] to 0.039 in. (1.0 mm) - 0.079 in. (2.0 mm) shorter than the length of the cover sleeve [2].

d) Clean the cover sleeve [2], color filter [4], and photoluminescent insert [1] from dust and unwanted material.

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e) Put the color filter [4] and photoluminescent insert [1] into the cover sleeve [2].

3) Do this task: Prepare For Sealing, TASK 51-22-00-160-801.

4) Apply small beads of Permabond ET500 epoxy adhesive, A50555, Araldite Fusion epoxy adhesive, A50556, or RTV 108 adhesive, A00635, to each end of the cover sleeve [2].

5) If the end caps [3] were removed, install the end caps [3] to each end of the cover sleeve [2].

6) Remove the excess adhesive, from the photoluminescent strip.

(f) If it is necessary, clean the floor panels:

1) Apply solvent, B00184, or solvent, B00148, or solvent, B00083, with a clean oil-free cotton wiper, G00034.

2) Use a clean cotton wiper, G00034, to remove the solvent before it evaporates.

CAUTION

MAKE SURE THAT YOU APPLY THE SOLVENT TO THE LIGHT STRIP. IF THE SOLVENT GETS ON THE TRACK OR THE ENDS OF THE TRACK, DAMAGE TO THE AIRPLANE CAN OCCUR.

(g) Use a cotton wiper, G00034, dampened with solvent, B00083, to clean the new light strip.

(h) Apply new tape, G50156, to the floor panel.

(i) Using the new piece(s) of photoluminescent strip as a guide, mark tape, G50156, where the ends of the strip will be located.

(j) Place small lateral strips of ¾ in. (19 mm) wide Nitto 223S Tape, G02129, or tape, A50464, on top of tape, G50156, so that none of that tape or any floor panel is visible between the strips.

(k) Place the strip in its location, maintaining the gap indicated below between the new strip and existing strips:

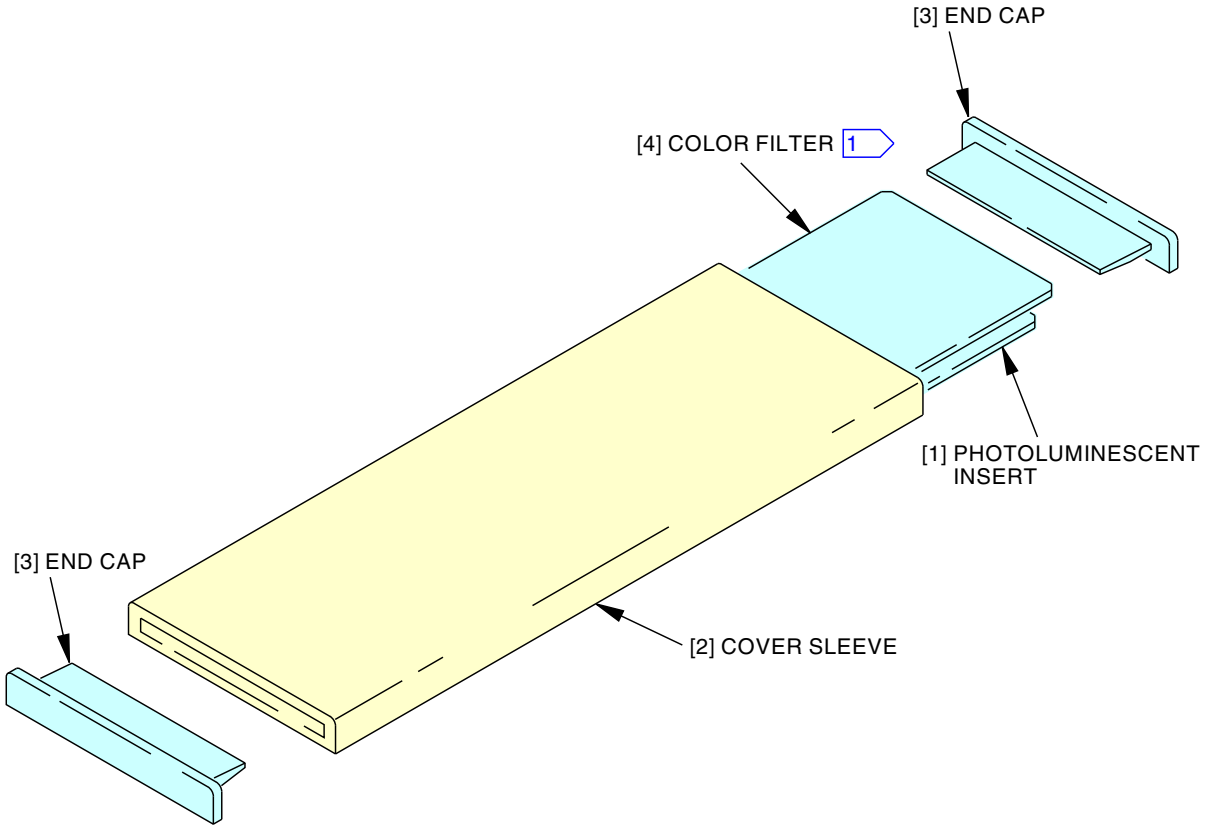
1) At the expansion joint, STA 520, maintain a 0.30 in. (7.62 mm) gap between the new strip and adjoining strip.

2) At all other locations, maintain a 0.10 in. (2.54 mm) gap between the new strip and existing strips.

(l) Press the strip down firmly along it's length to attach it in place.

END OF TASK

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COLOR PHOTOLUMINESCENT STRIP (TYPICAL)

1 IF APPLICABLE

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Floor Proximity Light - Photoluminescent Strip Replacement
Figure 201/33-51-15-990-801

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TASK 33-51-15-100-801

4. Floor Proximity Light - Photoluminescent Strip Cleaning

A. Consumable Materials

Reference	Description	Specification
B00083	Solvent - VM&P Naphthas	TT-N-95 Type II, ASTM D-3735 Type III
B00541	Cleaner - General Purpose Household Detergent	

B. Location Zones

Zone	Area
200	Upper Half of Fuselage

C. Photoluminescent Strip Cleaning

SUBTASK 33-51-15-100-001

(1) Do this task to clean installed photoluminescent strips.

(a) Use a cloth dampened with general purpose household detergent cleaner, B00541, and water and clean the strips.

(b) If a stronger cleaner is necessary, use a cloth dampened with solvent, B00083. Then clean the strips.

SUBTASK 33-51-15-410-001

(2) If it is necessary to remove photoluminescent strips to clean unwanted material, do these tasks:

(a) Do an inspection of the removed strips (TASK 33-51-15-210-801).

(b) Install the strips (TASK 33-51-15-960-801).

END OF TASK

TASK 33-51-15-210-801

5. Floor Proximity Light - Photoluminescent Strip Inspection

A. Location Zones

Zone	Area
200	Upper Half of Fuselage

B. Photoluminescent Strip Inspection

SUBTASK 33-51-15-210-001

(1) Do this procedure to examine the light strips.

(a) FOR STANDARD PHOTOLUMINESCENT STRIP;

There can be no more than 5.0 in. (12.7 cm) of length of photoluminescent strip between 15.0 in. (38.1 cm) and 72.0 in. (182.9 cm) that will not give out light.

(b) FOR COLORED PHOTOLUMINESCENT STRIP;

There can be no more than 5.0 in. (12.7 cm) of length of colored photoluminescent strip between 15.0 in. (38.1 cm) and 79.0 in. (200.7 cm) that will not give out light.

(c) If the strips are dirty, do this task: TASK 33-51-15-100-801.

(d) For sections of light strip that cannot be cleaned to give out light, do this task: TASK 33-51-15-960-801.

END OF TASK

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FLOOR PROXIMITY LIGHTS, CABIN LIGHT INTENSITY - ADJUSTMENT/TEST

1. General

A. This procedure contains this task:

(1) The measuring of the available light intensity of the cabin lighting.

TASK 33-51-15-860-802

2. Cabin Lighting - Measure the Available Light Intensity

(Figure 501)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure measures the amount of light available to provide the charge for the photoluminescent floor proximity strips.

(2) The photoluminescent floor proximity strips are energized when light is present.

(3) Depending on the type of light-meter selected, these conversion factors will allow readings in Foot-Candles (Fc) or Lux to be used:

(a) Fc x 10.764 = Lux

(b) Lux x 0.0929 = Fc.

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-11030	Sensor - Illuminance (Photometric) Part #: U23-01-101 Supplier: 23673
COM-11031	Meter - Light (Photometer) Part #: U68188 Supplier: 23673
COM-23586	Meter - Light (with Light Sensor) Part #: EA33 Supplier: 093V7 Part #: XRP-3000 Supplier: 8W1E4

C. Consumable Materials

Reference	Description	Specification
G00270	Tape - Scotch Flatback Masking 250	ASTM D6123 (Supersedes A-A-883)

D. Location Zones

Zone	Area
200	Upper Half of Fuselage

E. Prepare for the Test

SUBTASK 33-51-15-980-001

(1) Move the airplane out of direct sunlight or daylight conditions.

NOTE: You can move the airplane inside a hanger or take the readings at night.

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SUBTASK 33-51-15-860-006

(2) Make sure that the airplane interior is in fully operational passenger provisions configuration.

NOTE: Provisions to include all seats, bins, galleys, lavs, etc. installed for normal use.

SUBTASK 33-51-15-280-001

(3) Do these steps to mark light intensity measurement points on the aisleway carpet (Figure 501):

(a) Place a piece of Scotch Flatback Masking Tape 250, G00270, centered between the photoluminescent strips, on the aisleway carpet at the centerline of the forward cabin door.

(b) Use a ruler or measuring tape to measure 40 in. (1016 mm) aft of that piece and put another piece of tape on the carpet.

(c) In like fashion, place pieces of tape every 40 in. (1016 mm) throughout the rest of the length of the cabin, all the way back to, and including, the centerline of the most aft passenger door.

SUBTASK 33-51-15-970-002

(4) Make several copies of (Table 501) to use for recording data at each measurement point.

SUBTASK 33-51-15-860-007

(5) Do these steps to set the lights for the cabin light level test:

(a) At the applicable attendant control panel, set the Passenger Seating Area to the White Bright scene.

(b) Set all reading lights to the off mode.

(c) Close all window shades, lavatory doors, cabin egress doors, and all overhead bin doors.

(d) Maintain the above conditions for a minimum of 30 minutes to stabilize the light source.

F. Available Light Intensity Measuring

SUBTASK 33-51-15-860-005

(1) Do these steps to measure the light intensity throughout the passenger cabin (Figure 501):

NOTE: One person should perform the tests while another person records the data.

(a) If light meter, COM-11031, and illuminance photometric sensor, COM-11030, are used, do these steps:

1) Connect the cable from the light meter, COM-11031, to the illuminance photometric sensor, COM-11030.

2) Turn the light meter, COM-11031, on.

3) Zero or initialize the light meter, COM-11031, if it is necessary, then make sure to turn on the following settings:

a) 0 to 200 Lux Range (or approximately 0-25 Fc)

b) Daylight Mode (if applicable)

c) Zero or initialize (if it is necessary).

(b) Do these steps to measure the light intensity:

1) Place the light meter, COM-23586, or illuminance photometric sensor, COM-11030, on the light strip on one side of the aisle at the point to be measured.

a) Make sure that the sensor points up towards the cabin ceiling.

2) Make sure that no object is in the path of the light to the light meter, COM-23586, or illuminance photometric sensor, COM-11030.

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3) Record the measurement point number and the light level value in the Table 501.

Table 501/33-51-15-993-810 Cabin Light Intensity Test Light Meter Readings

Measurement Point	Measured Light (LUX)	
	Left Side	Right Side
Subtotal This Page:		
Subtotal Previous Page:		
Overall Total:		
Average (Last Page Only):		

4) Move the light meter, COM-23586, or illuminance photometric sensor, COM-11030, onto the strip on the other side of the aisle and measure and record the light level value on the data sheet for that side of the aisle.

5) Repeat these steps for other points along the cabin floor.

SUBTASK 33-51-15-970-001

(2) Do these steps to calculate the average light level in the passenger cabin:

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(a) Add all the recorded readings from all data sheets for values measured on each side of the aisle and record those totals on the last sheet.

NOTE: You will have two totals, one for the right side and one for the left side.

(b) Divide each total by the number of readings taken for that side.

(c) Make sure that the average value for each side is 30 Lux (2.787 Fc) minimum.

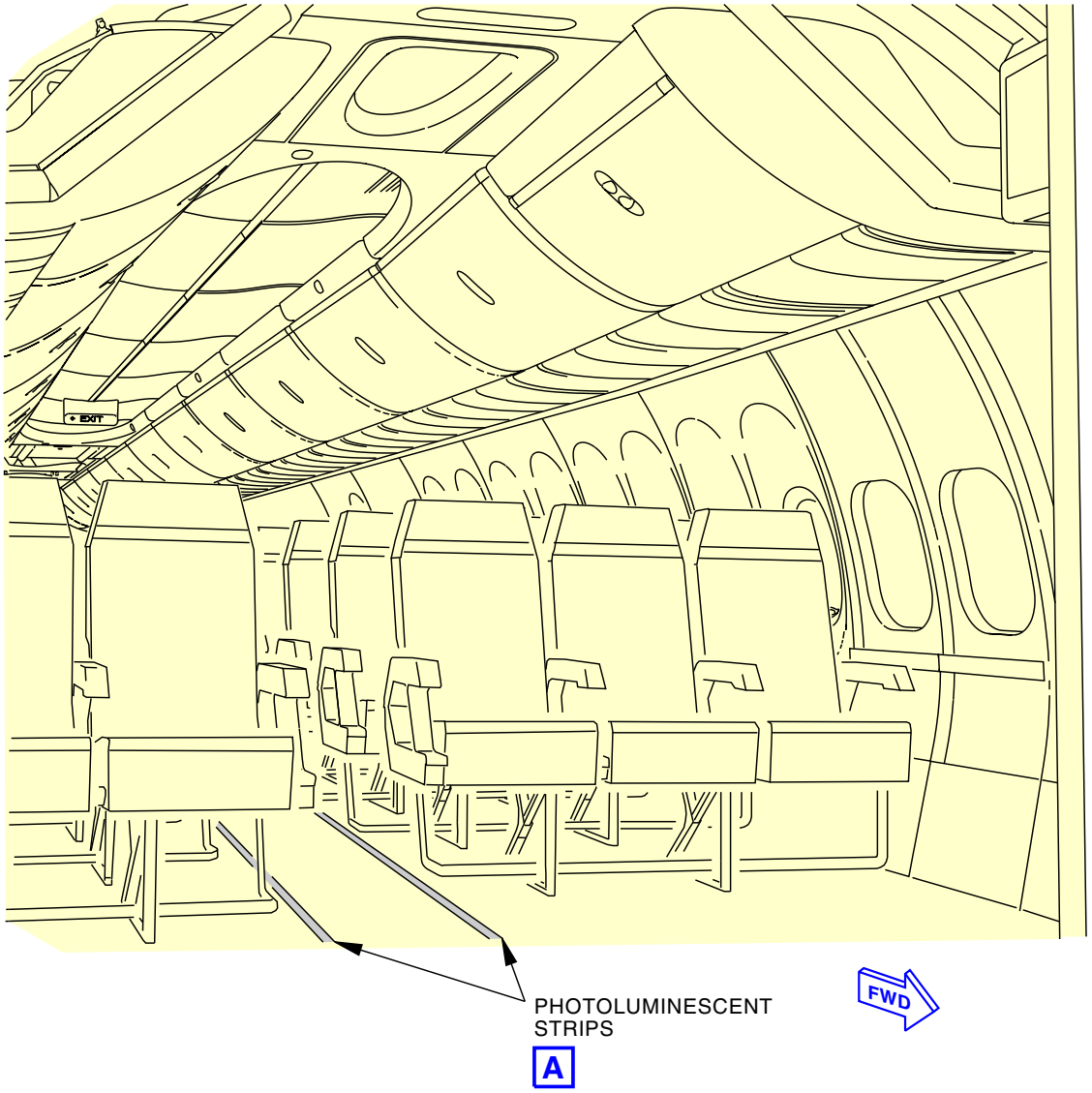
1) If you do not get 30 Lux (2.787 Fc) minimum, clean the light lens or replace the applicable light assembly.

SUBTASK 33-51-15-940-001

(3) Return the airplane to it's usual condition.

——— END OF TASK ———

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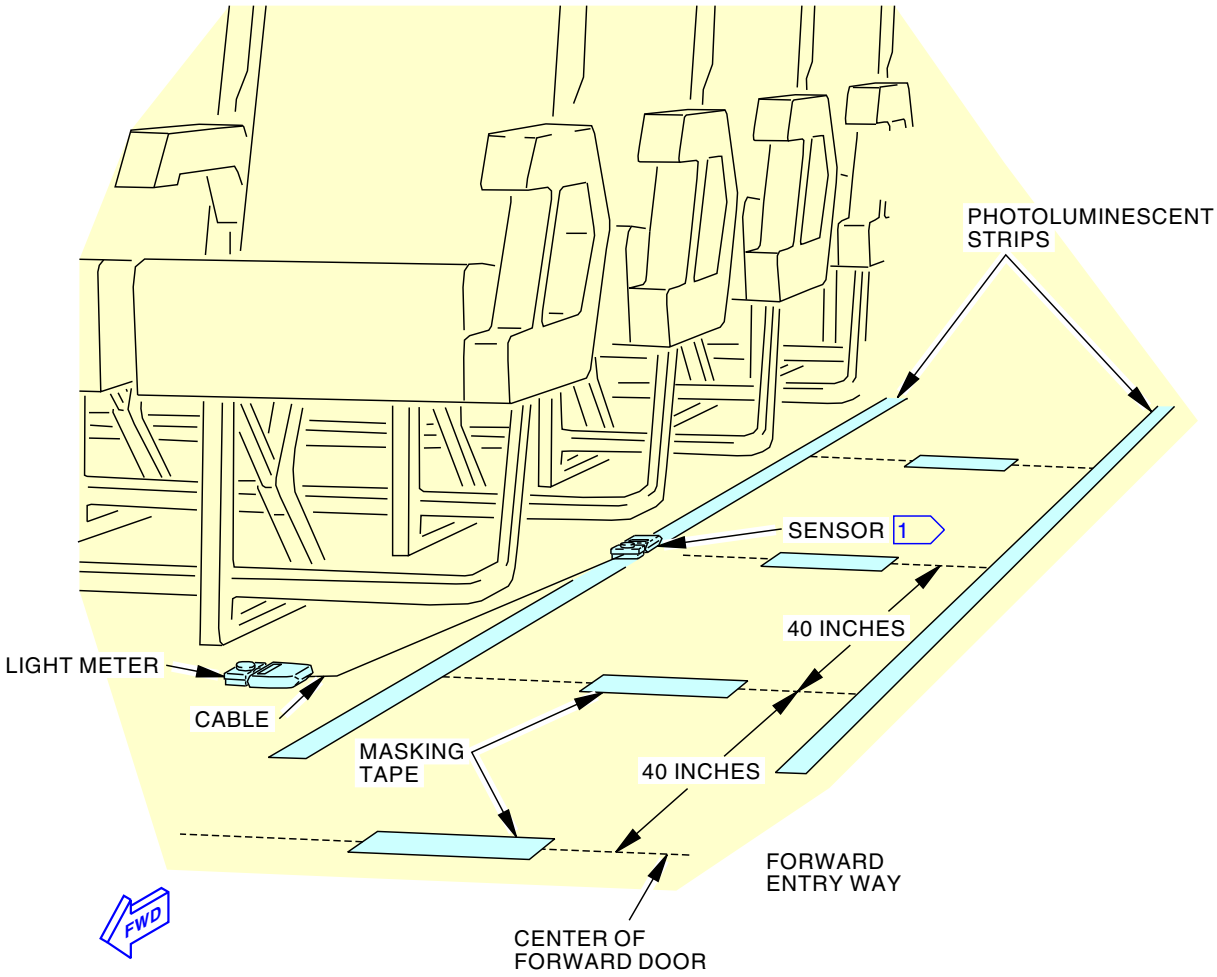


**PASSENGER COMPARTMENT
(EXAMPLE)**

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**Floor Proximity Lights - Cabin Light Intensity Test
Figure 501/33-51-15-990-802 (Sheet 1 of 2)**

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1 SENSOR POINTS UP TO CABIN CEILING.

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Floor Proximity Lights - Cabin Light Intensity Test
Figure 501/33-51-15-990-802 (Sheet 2 of 2)

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