

CHAPTER

33

LIGHTS



777-200/300 FAULT ISOLATION MANUAL

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A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

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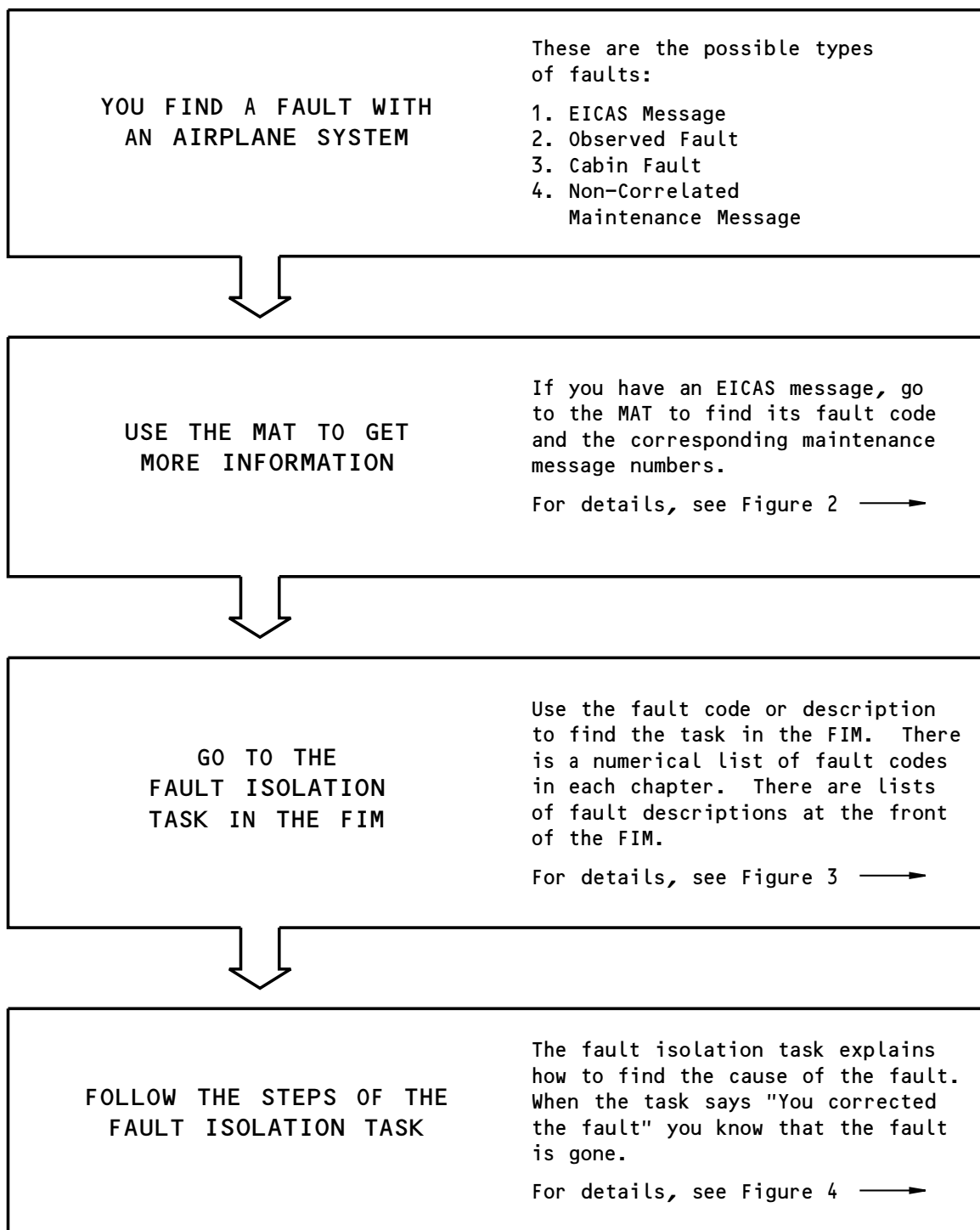
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E84424 S0000132469_V1

Basic Fault Isolation Process
Figure 1

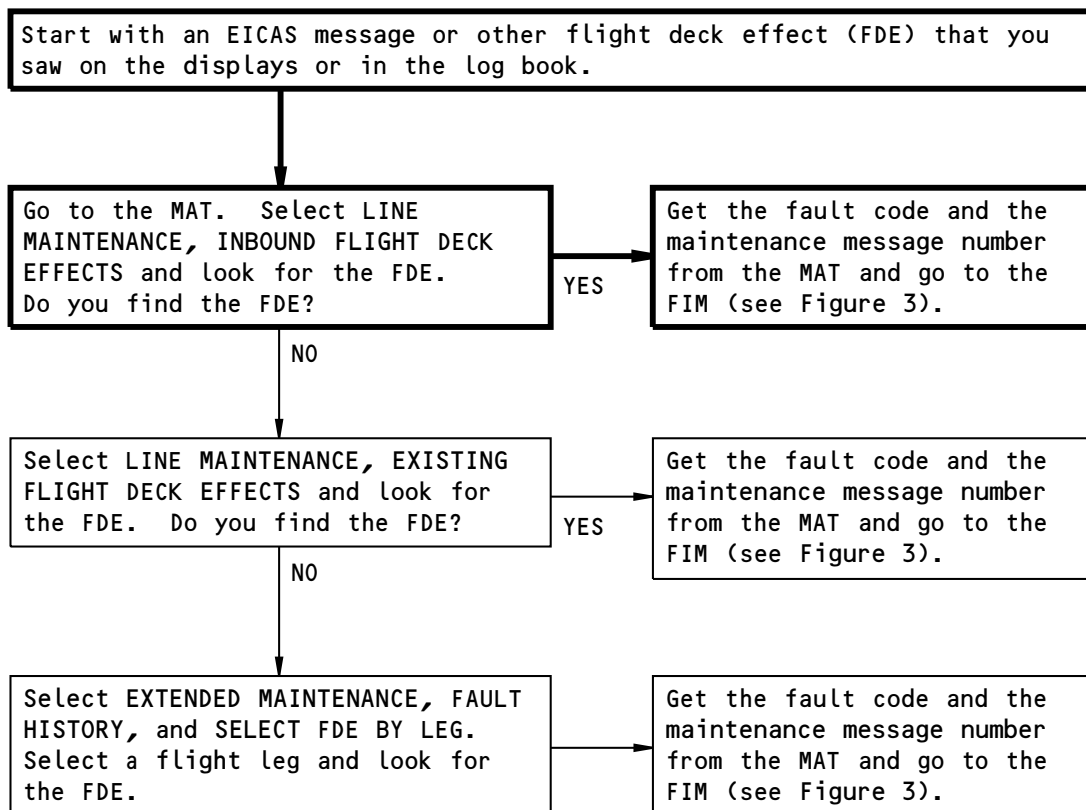
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NOTE: The bold lines show the most common path.

E84425 S0000132475_V1

Getting Fault Information from the MAT
Figure 2

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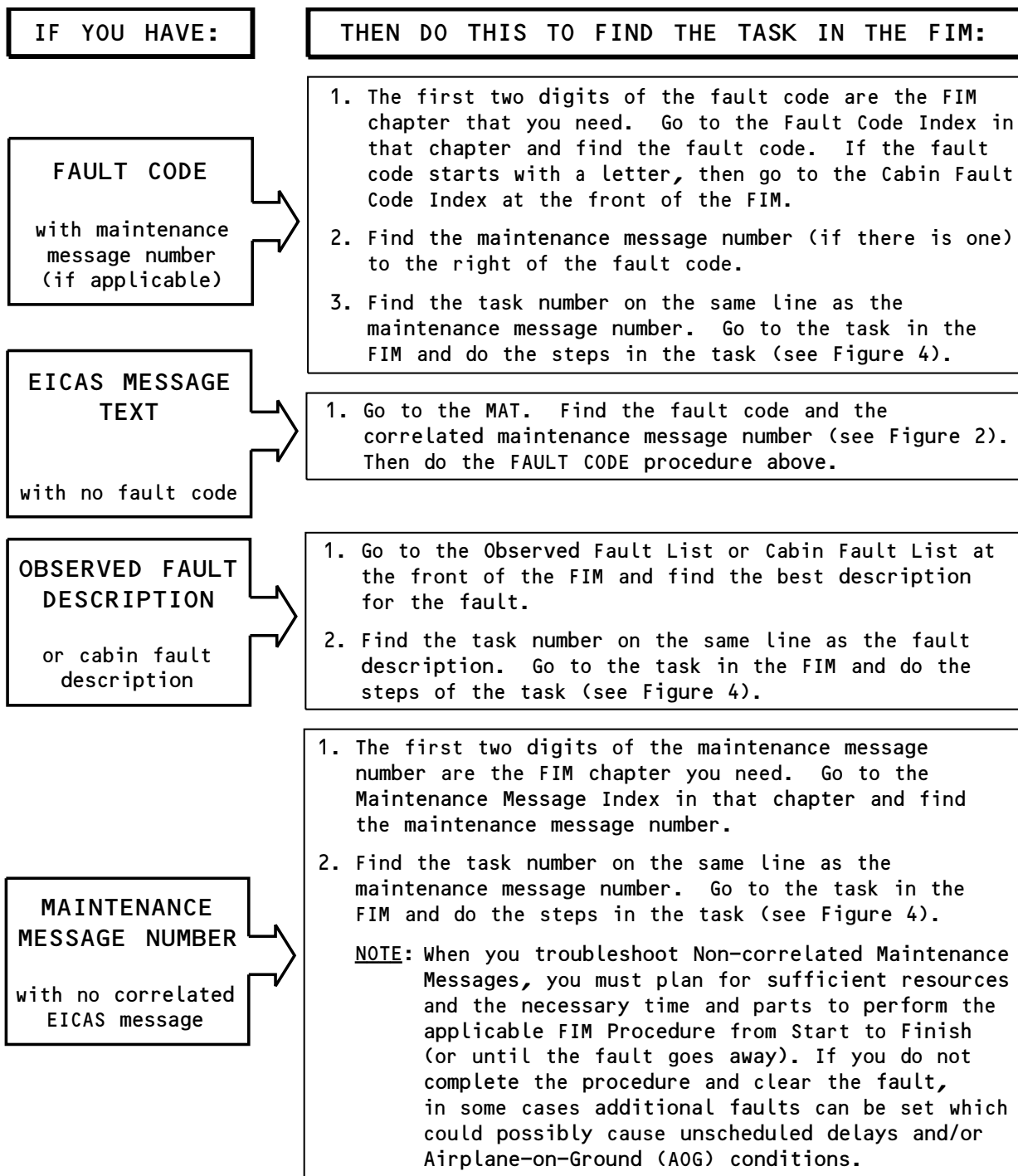
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E84427 S0000132476_V2

Finding the Fault Isolation Task in the FIM
Figure 3

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ASSUMED CONDITIONS AT START OF TASK

- External electrical power is ON
- Hydraulic power and pneumatic power are OFF
- Engines are shut down
- No equipment in the system is deactivated

INITIAL EVALUATION PARAGRAPH

- The Initial Evaluation paragraph at the start of the task helps you determine whether you can detect the fault right now.
- If you cannot detect the fault right now, then the task cannot isolate the fault and the Initial Evaluation paragraph will say that there was an intermittent fault.
- If you have an intermittent fault, you must use your judgement (and follow your airline's policy) to decide which components to replace. Then monitor the airplane to see if the fault happens again on subsequent flights.

FAULT ISOLATION STEPS

- The FIM task steps are presented in a specified order. "The If... then" statements will guide you along a logical path. But if you do not plan to follow the FIM task exactly, make sure that you read it before you start to isolate the fault. Some FIM procedures start with important steps that have an effect on the other steps in the procedure.
- When you are at the endpoint of the path, the step says "You corrected the fault." Complete the step and exit the procedure.
- The Recommended Maintenance Action that shows on the MAT for the maintenance message gives a list of possible causes in order by probability of failure. In the FIM procedure, the possible causes can be in a different order from the MAT.

WIRING CHECKS

When a step says "Do a wiring check", do these three types of electrical checks for the specified contacts (pins):

- continuity from contact to contact
- shorts between the contacts
- shorts from each contact to ground

E84428 S0000132477_V3

Doing the Fault Isolation Task
Figure 4

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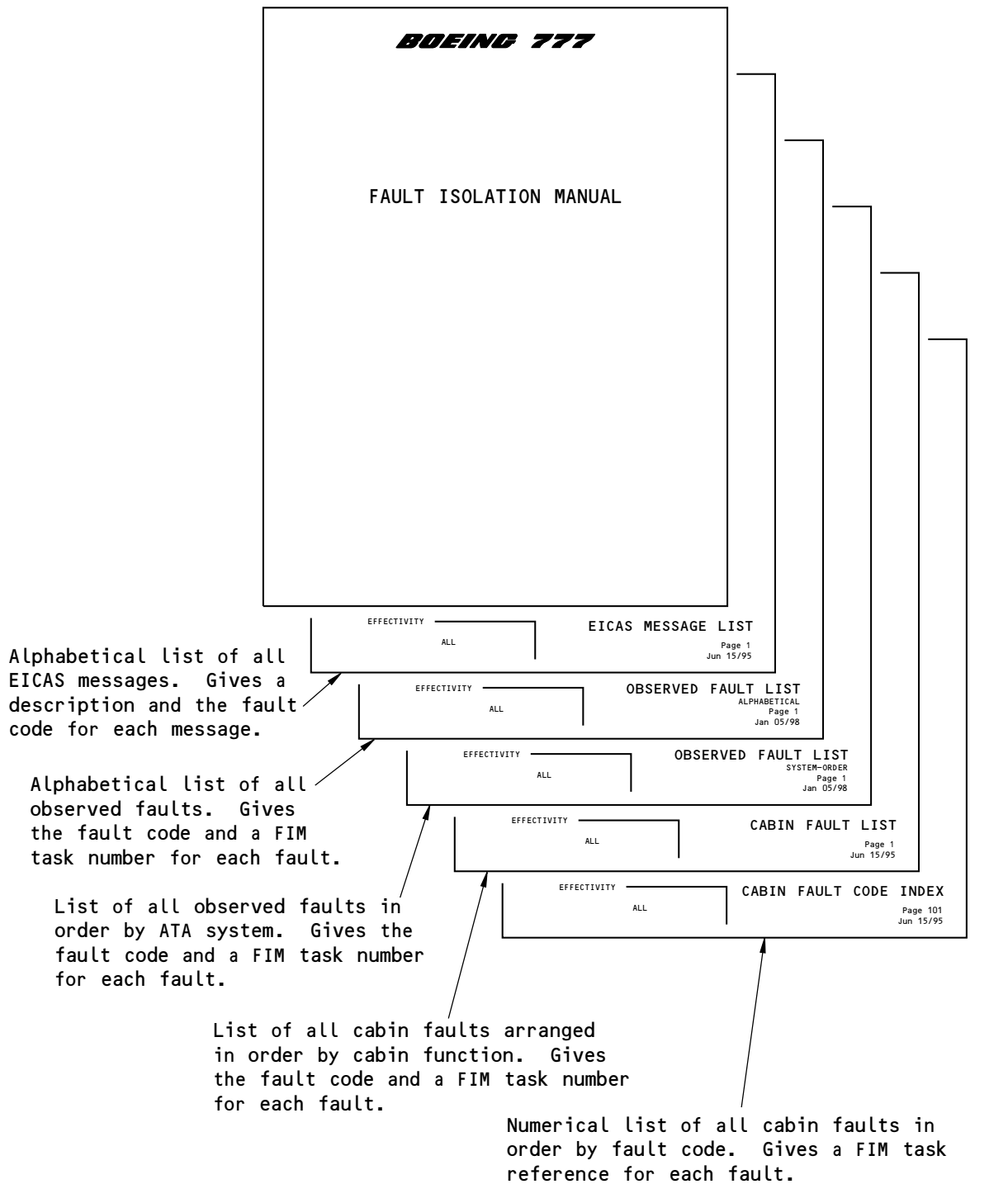
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F39750 S0000132478_V1

Subjects at Front of FIM
Figure 5

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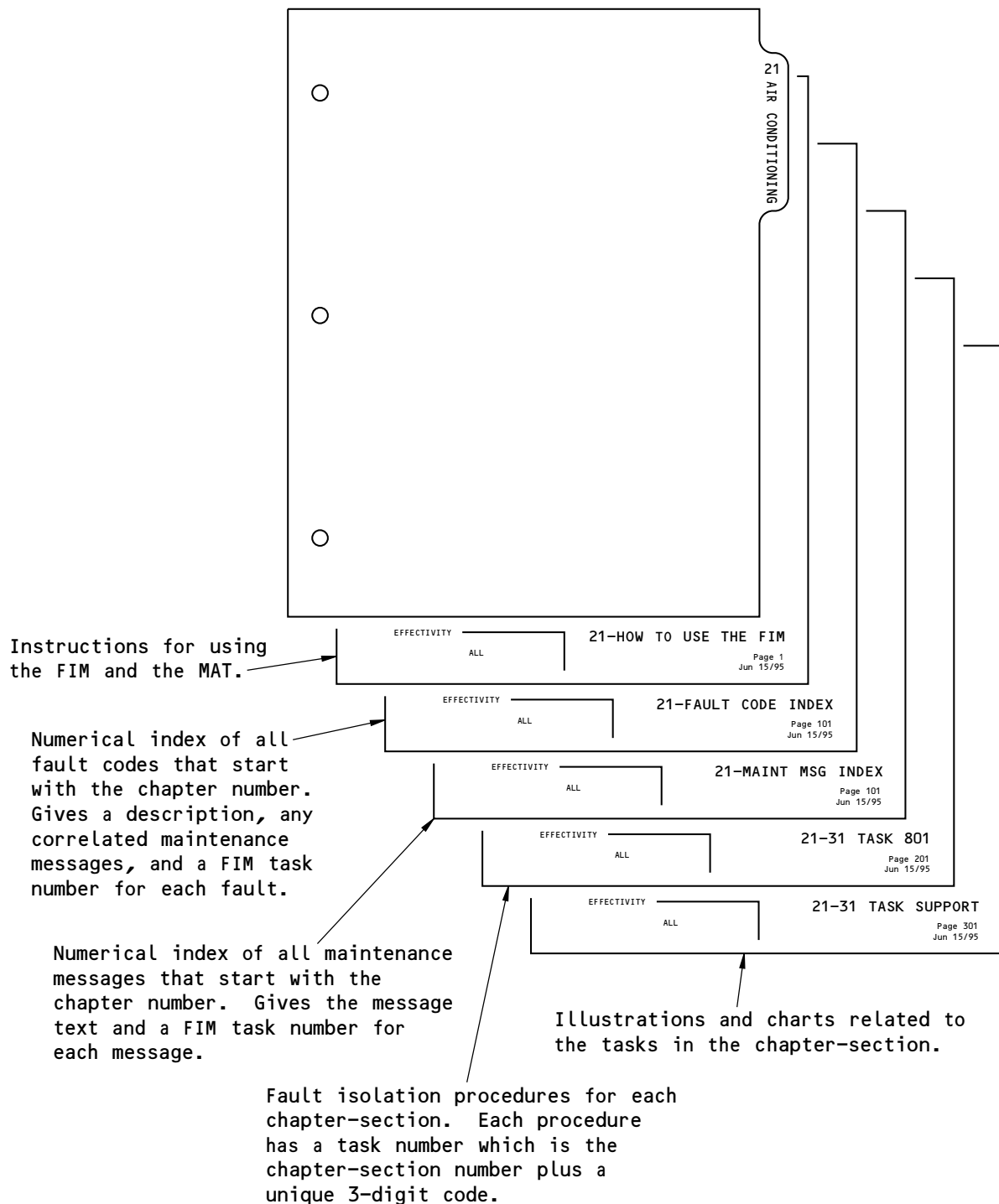
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F39837 S0000132479_V1

Subjects in Each FIM Chapter
Figure 6

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
331 611 00	Overhead circuit breaker light(s): do not come on.		33-13 TASK 801
331 612 31	Map light: does not come on - captain's.		33-14 TASK 801
331 612 32	Map light: does not come on - first officer's.		33-14 TASK 801
331 612 33	Map light: does not come on - first observer's.		33-14 TASK 801
331 612 34	Map light: does not come on - second observer's.		33-14 TASK 801
331 613 00	Dome light: does not come on.		33-11 TASK 802
331 614 00	Storm light(s): do not come on.		33-11 TASK 803
331 621 00	Glareshield/forward panel flood light(s): do not come on.		33-11 TASK 804
331 622 00	Glareshield instrument/panel light(s): do not come on.		33-13 TASK 802
331 622 41	Runway turnoff light: does not come on - left.		33-42 TASK 816
331 622 42	Runway turnoff light: does not come on - right.		33-42 TASK 816
331 623 00	Aisle stand flood light(s): do not come on.		33-11 TASK 805
331 624 00	Aisle stand instrument/panel light(s): do not come on.		33-13 TASK 803
331 631 00	Navigation light(s): do not come on.		33-43 TASK 804
331 632 46	Beacon light: does not come on - upper.		33-44 TASK 804
331 632 47	Beacon light: does not come on - lower.		33-44 TASK 804
331 633 41	Logo light: does not come on - left.		33-45 TASK 803
331 633 42	Logo light: does not come on - right.		33-45 TASK 803
331 634 41	Strobe light: does not come on - left wing.		33-44 TASK 806
331 634 42	Strobe light: does not come on - right wing.		33-44 TASK 806
331 635 00	Strobe light: does not come on - tailcone.		33-44 TASK 806
331 651 00	Spare bulb kit (flight deck): needs replenishing.		33-14 TASK 802
332 101 00	Passenger Compartment Illumination: Indirect Ceiling LED Lights do not have Uniform Brightness.		33-21 TASK 838
332 102 00	Passenger Compartment Illumination: Indirect Ceiling LED Lights do not have Uniform Color.		33-21 TASK 838
332 103 00	Passenger Compartment Illumination: LED Light Fixture fails Tokening.		33-21 TASK 835
332 104 00	Passenger Compartment Illumination: Sidewall LED Lights do not have Uniform Brightness.		33-21 TASK 838

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
332 105 00	Passenger Compartment Illumination: Sidewall LED Lights do not have Uniform Color.		33-21 TASK 838
332 497 00	NO SMOKING ON (EICAS MEMO)		33-24 TASK 811
332 498 00	PASS SIGNS ON (EICAS MEMO)		33-24 TASK 812
332 499 00	SEATBELTS ON (EICAS MEMO)		33-24 TASK 813
334 611 41	Wing illumination light: does not come on - left.		33-41 TASK 802
334 611 42	Wing illumination light: does not come on - right.		33-41 TASK 802
334 616 41	Light, landing: does not come on - left.		33-42 TASK 817
334 616 42	Light, landing: does not come on - right.		33-42 TASK 817
334 617 00	Light, landing: does not come on - nose.		33-42 TASK 818
334 621 00	Taxi light: does not come on.		33-42 TASK 819
335 001 00	EMER LIGHTS (EICAS ADVISORY)		33-51 TASK 804
335 801 00	Floor proximity lights: seat-mounted lights do not operate correctly.		33-51 TASK 805

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-04401	ALC does not respond. Detected by: ALC.	33-21 TASK 834
23-04411	ALC hardware has incorrect configuration. Detected by: ALC.	33-21 TASK 807
23-04412	ALC Operational Program Software is missing or failed. Detected by: ALC.	33-21 TASK 820
23-04413	ALC Configuration Database is missing or failed. Detected by: ALC.	33-21 TASK 830
23-04414	ALC Lighting Database is missing or failed. Detected by: ALC.	33-21 TASK 823
23-04416	ALC Operational Program Software is not compatible with hardware. Detected by: ALC.	33-21 TASK 820
23-04417	ALC Configuration Database is not compatible with OPS. Detected by: ALC.	33-21 TASK 819
23-04418	ALC Lighting Database is not compatible with OPS. Detected by: ALC.	33-21 TASK 821
23-04419	ALC did not load selected software into some LRUs. Detected by: ALC.	33-21 TASK 829
23-04422	ALC has an internal fault (RAM failed). Detected by: ALC.	33-21 TASK 807
23-04424	ALC has an internal fault (timer failed). Detected by: ALC.	33-21 TASK 807
23-04425	ALC has an internal fault (interrupts failed). Detected by: ALC.	33-21 TASK 807
23-04426	ALC temperature is too hot. Detected by: ALC.	33-21 TASK 822
23-04428	ALC has an internal fault (temperature sensor failed). Detected by: ALC.	33-21 TASK 807
23-04429	ALC power supply temperature is too hot. Detected by: ALC.	33-21 TASK 822
23-04431	ALC has an ethernet bus fault. Detected by: ALC.	33-21 TASK 817
23-04432	ALC has a LF column data bus fault. Detected by: ALC.	33-21 TASK 818
23-04433	ALC has a LF column data bus fault. Detected by: ALC.	33-21 TASK 807
23-04434	ALC has an internal fault (SPI bus failed). Detected by: ALC.	33-21 TASK 807
23-04435	Interface RS485 Data Size Mismatch	33-21 TASK 818
23-04436	RAM (1) is corrupted	33-21 TASK 820
23-04437	RAM (2) is corrupted	33-21 TASK 807
23-04438	RAM (3) is corrupted	33-21 TASK 807
23-04441	ALC has an internal fault (discrete input failed). Detected by: ALC.	33-21 TASK 807
23-04442	ALC discrete output circuit is open. Detected by: ALC.	33-21 TASK 814
23-04443	ALC discrete output circuit is shorted. Detected by: ALC.	33-21 TASK 815
23-04444	ALC discrete output circuit is over voltage or over temperature. Detected by: ALC.	33-21 TASK 815
23-04445	ALC output is used, but is not defined in Configuration Database by: ALC.	33-21 TASK 816

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23-04601	LF does not respond. Detected by: ALC.	33-21 TASK 831
23-04602	LF is installed, but is not defined in Configuration Database by: ALC.	33-21 TASK 824
23-04613	LF Operational Program Software is missing or failed. Detected by: LF.	33-21 TASK 826
23-04616	LF Operational Program Software is not compatible with hardware. Detected by: LF.	33-21 TASK 826
23-04621	LF has an internal fault (ADC failed). Detected by: LF.	33-21 TASK 825
23-04622	LF has an internal fault (RAM failed). Detected by: LF.	33-21 TASK 825
23-04623	LF hardware has incorrect configuration. Detected by: LF.	33-21 TASK 825
23-04624	LF has an internal fault (timer failed). Detected by: LF.	33-21 TASK 825
23-04628	LF has an internal fault (temperature sensor failed). Detected by: LF.	33-21 TASK 825
23-04629	LF temperature is too hot. Detected by: LF.	33-21 TASK 828
23-04636	LF Operational Program Software is not compatible with ALC OPS. Detected by: LF.	33-21 TASK 833
23-04641	LF lamp is missing or failed. Detected by: LF.	33-21 TASK 832
23-04642	LF lamp is not properly installed. Detected by: LF.	33-21 TASK 832
23-04645	LF lamp is missing or failed. Detected by: LF.	33-21 TASK 832
23-04647	LF LEDs are open. Detected by: LF.	33-21 TASK 827
23-04648	LF has been dimmed due to high temperature. Detected by: LF.	33-21 TASK 828
23-04649	LF LEDs are shorted. Detected by: LF.	33-21 TASK 827
33-41112	Relay (WING ILLUM LTS CNTL) in P320 is not in commanded position.	33-41 TASK 804
33-42117	Relay (NOSE GEAR R LDG CNTL) in P210 is not in commanded position.	33-42 TASK 820
33-42118	Relay (R WING LNDG LIGHTS CNTL) in P210 is not in commanded position.	33-42 TASK 822
33-42119	Relay (R LNDF LT DIMMING) in P210 is not in commanded position.	33-42 TASK 824
33-42124	Relay (R RUNWAY TURNOFF LT CNTL) in P210 is not in commanded position.	33-42 TASK 826
33-43113	Relay (RIGHT POS LT CNTR) in P210 is not in commanded position.	33-43 TASK 805
33-44113	Relay (RED ANTI-COLL LTS CNTL) in P210 is not in commanded position.	33-44 TASK 807
33-45112	Relay (LOGO LTG CONTROL) in P210 is not in commanded position.	33-45 TASK 804

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
33-46111	Relay (CAMERA LIGHTS CNTL) in P110 is not in commanded position.	33-47 TASK 802
33-46112	Relay (NOSE GEAR L LDG CNTL) in P110 is not in commanded position.	33-42 TASK 821
33-46113	Relay (TAXI LT CNTL) in P110 is not in commanded position.	33-42 TASK 828
33-46114	Relay (LEFT POS LT CNTL) in P110 is not in commanded position.	33-43 TASK 806
33-46115	Relay (L WING LNDG LIGHTS CNTL) in P110 is not in commanded position.	33-42 TASK 823
33-46116	Relay (WHITE ANTI-COLL LTS CNTL) in P110 is not in commanded position.	33-44 TASK 808
33-46117	Relay (L RUNWAY TURNOFF LT CNTL) in P110 is not in commanded position.	33-42 TASK 827
33-46118	Relay (L LNDG LT DIMMING) in P110 is not in commanded position.	33-42 TASK 825
33-46119	Relay (CAMERA LIGHTS CNTL) in P110 is not in commanded position.	33-47 TASK 803

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801. Storm Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43950.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
- (a) At the overhead panel, P5, set the switch for the storm lights first to the on mode, and then to the off mode.
- (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the storm lights, M33412S3 (WDM 33-16-12).
- (a) Monitor the maintenance message on the MAT while you do these steps:
- 1) Set the switch first to the on mode, and then to the off mode.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the storm lights to the right overhead panel card file:
- (a) Remove the passenger signs module, M33412 (WDM 33-16-12).
- (b) Disconnect connector DM33412A.
- (c) Disconnect connector DM23217H from the right overhead card file, M23217.
- (d) Do a wiring check between these pins of connector DM33412A at the pilots overhead panel, P5, and connector DM23217H, at the maintenance panel, P61 (WDM 33-16-12):

DM33412A	DM23217H
pin 13	pin B1
pin 25	pin B2
pin 12	pin B3

- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-connect connector DM33412A.
- 3) Re-connect connector DM23217H.
- 4) Re-install the passenger signs module, M33412.
- 5) Monitor the maintenance message on the MAT while you do these steps:
- a) Set the switch first to the on mode, and then to the off mode.

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- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector DM33412A.
- (h) Re-install the passenger signs module, M33412.
- (3) Replace the right overhead panel card file chassis, M23217 at the maintenance panel, P61.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the storm lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

END OF TASK

802. Dome Light Problems - Fault Isolation

A. Initial Evaluation

- (1) At the overhead panel, P5, set the switch for the dome lights to the bright mode.
 - (a) If the dome light does not come on, then do the Fault Isolation Procedure below.
 - (b) If the dome light comes on, there was an intermittent fault. Set the switch to its usual position.

B. Fault Isolation Procedure

- (1) Replace the lamp in the applicable dome light.

These are the tasks:

Dome Light - Lamp Removal, AMM TASK 33-11-01-000-801,

Dome Light - Lamp Installation, AMM TASK 33-11-01-400-801.

DOME LIGHT	
Captain	L33013
First Officer	L33014

- (a) If the dome light comes on, you corrected the fault. Set the switch to its usual position.
- (b) If the dome light does not come on but the other dome light does, then do these steps:
 - 1) Remove the overhead lining. To remove it, do this task: Overhead Lining - Removal, AMM TASK 25-15-06-000-801.
 - 2) Replace the dome light assembly (WDM 33-11-11).
 - 3) Install the overhead lining. To install it, do this task: Overhead Lining - Installation, AMM TASK 25-15-06-400-801.
 - 4) If the dome light comes on, you corrected the fault. Set the switch to its usual position.
 - 5) If the dome light does not come on, then do these steps:

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- a) Repair the wiring between the connector at the dome light and connector QB3 on terminal block TB3496 at the overhead dimmer panel, P96 (WDM 33-11-11).
- b) If the dome light comes on, you corrected the fault. Set the switch to its usual position.
- (c) If none of the dome lights come on, then continue.
- (2) Replace the DOME switch, M33412R2 (WDM 33-11-11).
 - (a) If the dome lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If the dome lights do not come on, then continue.
- (3) Replace the dome light dimmer relay, K33202 (WDM 33-11-11).
 - (a) If the dome lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If the dome lights do not come on, then continue.
- (4) Replace the standby dome light relay, K33012 (WDM 33-11-11).
 - (a) If the dome lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If the dome lights do not come on, then continue.
- (5) Replace the dome light storm relay, K33013 (WDM 33-11-11).
 - (a) If the dome lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If the dome lights do not come on, then continue.
- (6) Replace the circuit breaker:
(WDM 33-11-11)

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	2	C33403	DOMELIGHTS

- (a) If the dome lights come on, open these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	22	C33402	DOMELTSBACKUP

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	3	C33612	STBYDOMELTS

- 1) If the dome lights stay on, you corrected the fault. Set the switch to its usual position and close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	22	C33402	DOMELTSBACKUP

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	3	C33612	STBYDOMELTS

- 2) If the dome lights go off, then continue.

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- (b) If the dome lights do not come on, then continue.
- (7) Replace and close this circuit breaker:
(WDM 33-11-11)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	22	C33402	DOMELTS BACKUP

- (a) If the dome lights come on, open this circuit breaker:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	2	C33403	DOMELIGHTS

- 1) If the dome lights stay on, you corrected the fault. Set the switch to its usual position and close these circuit breakers:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	2	C33403	DOMELIGHTS

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	3	C33612	STBY DOMELTS

- 2) If the dome lights go off, then continue.
- (b) If the dome lights do not come on, then continue.
- (8) Do a check of the wiring for the dome light circuits (WDM 33-11-11).
- (a) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - a) If it is necessary, replace resistor R33007 (WDM 33-11-11).
 - 2) If the dome lights come on, you corrected the fault. Set the switch to its usual position.

————— END OF TASK —————

803. Storm Light Problems - Fault Isolation

A. Initial Evaluation

- (1) At the overhead panel, P5, set the switch for the storm lights to the on position.
- (a) If the lights connected to the switch (WDM 33-11-11) do not come on brightly, then do the Fault Isolation Procedure below.
- NOTE:** These lights include the dome lights, floodlights, and fault indicators.
- (b) If the lights come on brightly, there was an intermittent fault. Set the switch to the off position.

B. Fault Isolation Procedure

- (1) If all the lights connected to the switch do not come on brightly, replace the switch, M33412S3 (WDM 33-11-11).
- (a) If all the lights come on brightly, you corrected the fault. Set the switch to the off position.

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- (b) If all the lights do not come on brightly, then continue.
- (2) If the dome lights do not come on brightly, replace the dome lights storm relay, K33013 (WDM 33-11-11).
 - (a) If the dome lights come on brightly, you corrected the fault. Set the switch to the off position.
 - (b) If the dome lights do not come on brightly, then do these steps:
 - 1) Remove relay K33013.
 - 2) Do a check for 28 VDC from pin X1 of connector DK33013 to structure ground .
 - 3) If there is not 28 VDC at pin X1 of DK33013, replace this circuit breaker:
(WDM 33-11-11)

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	3	C33612	STBY DOME LTS

- a) Re-install relay K33013.
 - b) If the dome lights come on brightly, you corrected the fault. Set the switch to the off position.
 - c) If the dome lights do not come on brightly, then repair the wiring between circuit breaker C33612 and pin X1 of connector DK33012.
 - 4) If there is 28 VDC at pin X1 of DK33013, repair the wiring between pin 7 of connector DM33412A at the STORM switch and pin X2 of connector DK33013 at the relay (WDM 33-11-11).
 - a) Re-install relay K33013.
 - b) If the dome lights come on brightly, you corrected the fault. Set the switch to the off position.
- (3) If the floodlights do not come on brightly, replace the floodlight storm relay, K33010 (WDM 33-11-12).
 - (a) If the floodlights come on brightly, you corrected the fault. Set the switch to the off position.
 - (b) If the floodlights do not come on brightly, then do these steps:
 - 1) Remove relay K33010.
 - 2) Do a check for 115 VAC from pin X1 of connector DK33010 to structure ground (WDM 33-11-12).
 - 3) If there is not 115 VAC at pin X1 of DK33010, replace this circuit breaker
(WDM 33-11-12)

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	2	C33407	STBY INST LTS

- a) Re-install relay K33010.
 - b) If the floodlights come on brightly, you corrected the fault. Set the switch to the off position.
 - c) If the floodlights do not come on brightly, then repair the wiring between circuit breaker C33407 and pin X1 of connector DK33010.

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- 4) If there is 115 VAC at pin X1 of DK33010, repair the wiring between pin 23 of connector DM33412A at the STORM switch and pin X2 of connector DK33010 at the relay (WDM 33-11-12).
 - a) Re-install relay K33010.
 - b) If the floodlights come on brightly, you corrected the fault. Set the switch to the off position.
- (4) If the fault indicators do not come on brightly, repair the wiring between pin 8 on connector DM33412A at the STORM switch and pin 2 on connector DP29C at the master dim and test cardfile, P29 (WDM 33-16-11).
 - (a) If all fault indicators come on brightly, you corrected the fault. Set the switch to the off position.
 - (b) If some fault indicators do not come on brightly, then continue.
- (5) Do these checks for 28 VDC at the master dim and test cardfile, P29 to structure ground (WDM 33-16-11).
 - (a) Do a check for 28 VDC from pin 1 of connector DP29A to structure ground.
 - 1) If there is not 28 VDC at pin 1 on connector DP29A, then replace this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	25	C33605	MD & T CHANNEL 1

- a) If there is not 28 VDC at pin 1 on connector DP29A, repair the wiring between circuit breaker C33605 and pin 1 of connector DP29A.
- 2) If there is 28 VDC at pin 1 on connector DP29A, then continue.
- (b) Do a check for 28 VDC from pin 7 of connector DP29A to structure ground.
 - 1) If there is not 28 VDC at pin 7 on connector DP29A, then replace this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	24	C33607	MD & T CHANNEL 2

- a) If there is not 28 VDC at pin 7 on connector DP29A, repair the wiring between circuit breaker C33607 and pin 7 of connector DP29A.
- 2) If there is 28 VDC at pin 7 on connector DP29A, then continue.
- (c) Do a check for 28 VDC from pin 1 of connector DP29B to structure ground.
 - 1) If there is not 28 VDC at pin 1 on connector DP29B, then replace this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C33610	MD & T CHANNEL 3

- a) If there is not 28 VDC at pin 1 on connector DP29B, repair the wiring between circuit breaker C33610 and pin 1 of connector DP29B.
- 2) If there is 28 VDC at pin 1 on connector DP29B, then continue.
- (d) Do a check for 28 VDC from pin 7 of connector DP29B to structure ground.

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- 1) If there is not 28 VDC at pin 7 on connector DP29B, then replace this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	4	C33611	MD & T CHANNEL 4

- a) If there is not 28 VDC at pin 7 on connector DP29B, repair the wiring between circuit breaker C33611 and pin 7 of connector DP29B.
- 2) If there is 28 VDC at pin 7 on connector DP29B, then continue.
- (e) Do a check for 28 VDC from pin 1 of connector DP29C to structure ground.
 - 1) If there is not 28 VDC at pin 1 on connector DP29C, then replace this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	3	C33604	MD & T CHANNEL 5

- a) If there is not 28 VDC at pin 1 on connector DP29C, repair the wiring between circuit breaker C33604 and pin 1 of connector DP29C.
- 2) If there is 28 VDC at pin 1 on connector DP29C, then continue.
- 3) If there is not 28 VDC at pin 7 on connector DP29C, then replace this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	4	C33606	MD & T CHANNEL 6

- a) If there is not 28 VDC at pin 7 on connector DP29C, repair the wiring between circuit breaker C33606 and pin 7 of connector DP29C.
- 4) If there is 28 VDC at pin 7 on connector DP29C, then continue.
- (f) If all fault indicators come on brightly, you corrected the fault. Set the switch to the off position.

————— END OF TASK —————

804. Glareshield and Forward Panel Floodlight Problems - Fault Isolation

A. Initial Evaluation

- (1) At the adjacent panel, P5, P13, or P14, set the applicable switch for the floodlight to the bright mode.

NOTE: Use the inner knob.

- (a) If the floodlight does not come on, then do the Fault Isolation Procedure below.
- (b) If the floodlight comes on, there was an intermittent fault. Set the switch to its usual position.

B. Fault Isolation Procedure

- (1) Set the switches for all floodlights to the bright mode.

NOTE: Use the inner knobs.

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GROUP	FLOODLIGHT	SWITCH	RELAY	DIMMER
Captain	L33016 L33017 L33774	M33414R3	K33017	T33025
First Officer	L33018 L33772 L33773	M33415R3	K33018	T33026
Glareshield	L33166 L33266	M33412R4	K33039	T33017

- (2) If the none of the floodlights come on, replace this circuit breaker:
(WDM 33-11-12)

Standby Power Management Panel, P310

Row	Col	Number	Name
A	2	C33407	STBY INST LTS

- (a) If all the floodlights come on, you corrected the fault. Set the switches to their usual positions.
- (b) If none of the floodlights come on, replace this circuit breaker:
(WDM 33-13-15)

Left Power Management Panel, P110

Row	Col	Number	Name
F	4	C33410	OVHD INST & PNL LTS/FWD PNL FLOOD LTS

- 1) If all the floodlights come on, you corrected the fault. Set the switches to their usual positions.
- 2) If none of the floodlights come on, then do these steps:
- Repair the wiring between circuit breaker C33407 and connector UA1 on terminal block TB3497 at the overhead dimmer panel, P96 (WDM 33-11-12).
 - Repair the wiring between circuit breaker C33410 and connector UB1 on terminal block TB3497 at the overhead dimmer panel, P96 (WDM 33-13-15).
 - If all the floodlights come on, you corrected the fault. Set the switches to their usual positions.
 - If some floodlights come on, then continue.
- (c) If some floodlights come on, then continue.
- (3) Replace the applicable light assembly. To replace it, do this task: Floodlight, Panel or Glareshield - Light Assembly Replacement, AMM TASK 33-11-03-960-801.
- (a) If the floodlight comes on, you corrected the fault. Set the switch to its usual position.
- (b) If the floodlight does not come on but other floodlights in the group do, then do these steps:
- Repair the wiring between the floodlight and the connector on the applicable dimmer at the overhead dimmer panel, P96.
 - If the floodlight comes on, you corrected the fault. Set the switches to their usual positions.
- (c) If none of the floodlights in the group come on, then continue.
- (4) Replace the applicable switch (WDM 33-11-12).

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- (a) If the floodlights in the group come on, you corrected the fault. Set the switches to their usual positions.
- (b) If none of the floodlights in the group come on, then continue.
- (5) Replace the applicable relay (WDM 33-11-12).
 - (a) If the floodlights in the group come on, you corrected the fault. Set the switches to their usual positions.
 - (b) If none of the floodlights in the group come on, then continue.
- (6) Replace the applicable dimmer (WDM 33-11-12).
 - (a) If the floodlights come on, you corrected the fault. Set the switches to their usual positions.
 - (b) If none of the floodlights in the group come on, then continue.
- (7) Do a check of the wiring for the applicable floodlight circuit (WDM 33-11-12).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - a) If it is necessary, replace the resistors.
 - 2) If the floodlights come on, you corrected the fault. Set the switches to their usual positions.

————— **END OF TASK** —————

805. Aisle Stand Floodlight Problems - Fault Isolation

A. Initial Evaluation

- (1) At the aisle stand panel, P8, set the switch for the aisle stand to the bright mode.
NOTE: Use the inner knob.
 - (a) If the aisle stand floodlight does not come on brightly, then do the Fault Isolation Procedure below.
 - (b) If the aisle stand floodlight comes on brightly, there was an intermittent fault. Set the switch to its usual position.

B. Fault Isolation Procedure

- (1) Replace the lamp in the aisle stand floodlight. To replace it, do this task: Floodlight, Aisle Stand - Lamp Replacement, AMM TASK 33-11-03-960-802.
 - (a) If the aisle stand floodlight comes on, you corrected the fault. Set the switch to its usual position.
 - (b) If the aisle stand floodlight does not come on, then continue.
- (2) Replace the switch, M33418R1 (WDM 33-11-12).
 - (a) If the aisle stand floodlight comes on, you corrected the fault. Set the switch to its usual position.
 - (b) If the aisle stand floodlight does not come on, then continue.
- (3) Replace the light assembly (WDM 33-11-12).
 - (a) If the aisle stand floodlight comes on, you corrected the fault. Set the switch to its usual position.
 - (b) If the aisle stand floodlight does not come on, then continue.

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- (4) Replace this circuit breaker:

(WDM 33-11-12)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	2	C33600	AISLE STANDBY FLOOD LT

- (a) If the aisle stand floodlight comes on, you corrected the fault. Set the switch to its usual position.
- (b) If the aisle stand floodlight does not come on, then do these steps:
- 1) Repair the wiring between circuit breaker C33600 and the aisle stand floodlight.
 - a) Replace the resistor, R33008, if it appears defective.
 - 2) If the aisle stand floodlight comes on, you corrected the fault. Set the switch to its usual position.

———— **END OF TASK** ————

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801. Overhead Circuit Breaker Panel (P11) Light Problems - Fault Isolation

A. Initial Evaluation

- (1) At the overhead panel, P5, set the switch for the overhead circuit breaker panel to the bright mode.

NOTE: Use the inner knob.

- (a) If the lightplates on the overhead circuit breaker panel, P11, do not come on, then do the Fault Isolation Procedure below.
- (b) If the lightplates on the P11 panel come on, there was an intermittent fault. Set the switch to its usual position.

B. Fault Isolation Procedure

- (1) If none of the lightplates come on, then replace the dimmer (WDM 33-13-14).
 - (a) If all lightplates come on, then you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lightplates come on, then continue.
- (2) If none of the lightplates come on, then replace the switch, M33412R1 (WDM 33-13-14).
 - (a) If all lightplates come on, then you corrected the fault. Set the switch to its usual position.
 - (b) If none of the lightplates come on, then continue.
- (3) If none of the lightplates come on, then replace this circuit breaker:
(WDM 33-13-14)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	26	C33412	OVHD CB PNL LTS

- (a) If all lightplates come on, then you corrected the fault. Set the switch to its usual position.
- (b) If none of the lightplates come on, then repair the wiring between circuit breaker C33412 and dimmer T33016 at the overhead dimmer panel, P96.
 - 1) If all lightplates come on, then you corrected the fault. Set the switch to its usual position.
 - 2) If some lightplates come on, then continue.
- (4) If some lightplates come on, then replace the lightplate that did not come on. To replace it, do this task: Integral Panel Light - Lightplate Replacement, AMM TASK 33-13-00-960-801.
 - (a) If the lightplate comes on, then you corrected the fault. Set the switch to its usual position.
 - (b) If the lightplate does not come on, then continue.
- (5) Do a check of the wiring for the lighting circuit (WDM 33-13-14).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the lightplates come on, then you corrected the fault. Set the switch to its usual position.

————— END OF TASK —————

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802. Glareshield (P7 and P55) Instrument and Panel Light Problems - Fault Isolation

A. Initial Evaluation

- (1) At the overhead panel, set the switch for the glareshield instrument and panel lights to the bright mode.

NOTE: Use the outer knob.

- (a) If the lightplates and pushbutton switches on the glareshield panels, P7 and P55, do not come on, then do the Fault Isolation Procedure below.
- (b) If the lights come on, there was an intermittent fault. Set the switch to its usual position.

B. Fault Isolation Procedure

- (1) Identify the lights that do not come on (WDM 33-13-12).

NOTE: Use the table in SSM 33-13-12. Find the light. The data in the POWER-REF PT column refers to the lighting circuitry on sheet 1. Sheet 1 shows the applicable components for each light.

- (2) If the none of the lights come on, replace the switch, M33412R4 (WDM 33-13-12).
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (3) If the none of the lights come on, replace this circuit breaker:
(WDM 33-13-12)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	25	C33411	GSHLD INST & PNL LTS

- (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (4) If none of the lights connected to dimmer T33009 and relay K33008 come on, replace this circuit breaker:
(WDM 33-11-12)

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	2	C33407	STBY INST LTS

- (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (5) If none of the lights connected to dimmer T33044 come on, replace the dimmer. To replace it, do this task: Relay/Dimmer Control Unit (DCU) - Replacement of a Component in the Aisle Stand, AMM TASK 33-13-02-960-802.
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (6) If none of the lights connected to dimmer T33009 come on, replace the dimmer. To replace it, do this task: Relay/Dimmer Control Unit (DCU) - Replacement of a Component in the Aisle Stand, AMM TASK 33-13-02-960-802.
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.

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- (7) If none of the lights connected to relay K33008 come on, replace the relay. To replace it, do this task: Relay/Dimmer Control Unit (DCU) - Replacement of a Component in the Aisle Stand, AMM TASK 33-13-02-960-802.
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (8) Replace the applicable light (WDM 33-13-12).
 - (a) If the light comes on, you corrected the fault. Set the switch to its usual position.
 - (b) If the light does not come on, then continue.
- (9) Do a check of the wiring for the lighting circuit (WDM 33-13-12).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the lights come on, you corrected the fault. Set the switch to its usual position.

————— END OF TASK —————

803. Aisle Stand (P8, P9, and P10) Instrument and Panel Light Problems - Fault Isolation

A. Initial Evaluation

- (1) At the aisle stand panel, P8, set the switch for the aisle stand instrument and panel lights to the bright mode.

NOTE: Use the outer knob.

- (a) If the lightplates and indicators on the aisle stand, P8, P9, and P10, do not come on, then do the Fault Isolation Procedure below.
- (b) If the lights come on, there was an intermittent fault. Set the switch to its usual position.

B. Fault Isolation Procedure

- (1) Identify the lights that do not come on (WDM 33-13-18).

NOTE: Use the table in SSM 33-13-18. Find the light. The data in the POWER-REF PT column refers to the lighting circuitry on sheets 1 and 2. Sheets 1 and 2 show the applicable components for each light.

- (2) If none of the lights come on, replace the switch, M33418R1 (WDM 33-13-18).
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (3) If none of the lights connected to dimmers T33011, T33012, T33013, T33014 come on, replace this circuit breaker:

(WDM 33-13-18)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	4	C33492	AISLE STAND INST & PNL LTS

- (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (4) If none of the lights connected to dimmer T33008 come on, replace this circuit breaker:
(WDM 33-11-12)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	2	C33407	STBY INST LTS

- (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
- (b) If none or some lights come on, then continue.
- (5) If none of the lights connected to dimmer T33011 come on, replace the dimmer. To replace it, do this task: Relay/Dimmer Control Unit (DCU) - Replacement of a Component in the Aisle Stand, AMM TASK 33-13-02-960-802.
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (6) If none of the lights connected to dimmer T33012 come on, replace the dimmer. To replace it, do this task: Relay/Dimmer Control Unit (DCU) - Replacement of a Component in the Aisle Stand, AMM TASK 33-13-02-960-802.
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (7) If none of the lights connected to dimmer T33013 come on, replace the dimmer. To replace it, do this task: Relay/Dimmer Control Unit (DCU) - Replacement of a Component in the Aisle Stand, AMM TASK 33-13-02-960-802.
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (8) If none of the lights connected to dimmer T33014 come on, replace the dimmer. To replace it, do this task: Relay/Dimmer Control Unit (DCU) - Replacement of a Component in the Aisle Stand, AMM TASK 33-13-02-960-802.
 - (a) If all the lights come on, you corrected the fault. Set the switch to its usual position.
 - (b) If none or some lights come on, then continue.
- (9) Replace the applicable light (WDM 33-13-18).
 - (a) If the light comes on, you corrected the fault. Set the switch to its usual position.
 - (b) If the light does not come on, then continue
- (10) Do a check of the wiring for the lighting circuit (WDM 33-13-18).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the lights come on, you corrected the fault. Set the switch to its usual position.

————— **END OF TASK** —————

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801. Map Light Problems - Fault Isolation

A. Initial Evaluation

- (1) At the adjacent control panel, P7, P17, or P18, set the applicable MAP switch to the bright mode.

NOTE: To set the switch to the bright mode, pull the knob out and turn it fully clockwise.

- (a) If the map light does not come on brightly, then do the Fault Isolation Procedure below.
- (b) If the map light comes on brightly, there was an intermittent fault. Set the switch to its usual position.

B. Fault Isolation Procedure

- (1) Set all MAP switches in the flight compartment to the bright mode.

MAP LIGHT	SWITCH
Captain L33024	T33028 (P7)
First Officer L33025	T33029 (P7)
First Observer L33023	M23459R1 (P17)
Second Observer L33027	M33417R2 (P18)

- (a) If none of the map lights come on, then do these steps:

- 1) Replace this circuit breaker:

(WDM 33-14-11)

Right Power Management Panel, P210

Row	Col	Number	Name
G	22	C33501	UTIL & MAP LTS

- 2) If the map lights come on, you corrected the fault.

- 3) If the map lights do not come on, then do these steps:

- a) Repair the wiring between circuit breaker C33501 and splice SM1-0 at the right integration bracket, AE0232 (WDM 33-14-11).

- b) If the map lights come on, you corrected the fault.

- (b) If one or more of the map lights comes on, then continue.

- (2) Replace the lamp in the applicable map light. To replace it, do this task: Map Light - Lamp Replacement, AMM TASK 33-14-02-960-801.

- (a) If the map light comes on, you corrected the fault. Set the switch to its usual position.

- (b) If the map light does not come on, then continue.

- (3) Replace the switch for the map light (WDM 33-14-11).

- (a) If the map light comes on, you corrected the fault. Set the switch to its usual position.

- (b) If the map light does not come on, then continue.

- (4) Do these steps to replace the map light assembly:

- (a) Remove the overhead lining. To remove it, do this task: Overhead Lining - Removal, AMM TASK 25-15-06-000-801.

- (b) Replace the map light assembly (WDM 33-14-11).

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- (c) Install the overhead lining. To install it, do this task: Overhead Lining - Installation, AMM TASK 25-15-06-400-801.
- (d) If the map light comes on, you corrected the fault. Set the switch to its usual position.
- (e) If the map light does not come on, then continue.
- (5) Do a check of the wiring for the applicable map light circuit (WDM 33-14-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the map light comes on, you corrected the fault. Set the switch to its usual position.

————— **END OF TASK** —————

802. Spare Lamp (Bulb) Stowage - Fault Isolation

A. Initial Evaluation

- (1) Open the access door to the spare lamp stowage.
 - (a) If one or more lamp containers are empty, do the Fault Isolation Procedure below.
 - (b) If one or more lamp containers are not empty, there was an intermittent fault. Close the access door.

B. Fault Isolation Procedure

- (1) Fill the lamp containers.
 - (a) Make a list of the lamp number below each empty lamp container.
 - (b) Secure the lamps.
 - (c) Put the applicable lamp in the empty lamp containers.
 - 1) If all lamp containers are full, you corrected the fault. Close the access door.

————— **END OF TASK** —————

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807. Area Lighting Controller Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04411, 23-04422, 23-04424, 23-04425, 23-04428, 23-04433, 23-04434, 23-04437, 23-04438, 23-04441.

B. General

- (1) This task is for the maintenance messages that follow:
- (a) 23-04411, ALC hardware has incorrect configuration.
 - (b) 23-04422, ALC has an internal fault (RAM failed).
 - (c) 23-04424, ALC has an internal fault (timer failed).
 - (d) 23-04425, ALC has an internal fault (interrupts failed).
 - (e) 23-04428, ALC has an internal fault (temperature sensor failed).
 - (f) 23-04433, ALC has a LF column data bus fault.
 - (g) 23-04434, ALC has an internal fault (SPI bus failed).
 - (h) 23-04437, RAM (2) is corrupted.
 - (i) 23-04438, RAM (3) is corrupted.
 - (j) 23-04441, ALC has an internal fault (discrete input failed).

C. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR) you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

D. Fault Isolation Procedure

- (1) Do this check of the circuit breakers:
- (a) Open and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	8	C23660	AREA LIGHTING CONT 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	16	C23661	AREA LIGHTING CONT 2

- (b) Install the configuration database and lighting database. To install them, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (e) If the maintenance message shows in the QFTR, then continue.
- (2) Replace the applicable ALC.
- (a) To replace the ALC 1, M23439, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.

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- (b) To replace the ALC 2, M23440, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
- (c) Do the QUICK TEST on the CSCP.
- (d) If the maintenance message does not show in the QTFR, you corrected the problem.

————— **END OF TASK** —————

814. ALC Discrete Output Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04442.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFS), you corrected the fault.
 - (b) If the maintenance message shows in the QTFS, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure for Area Lighting Controller 1, M23439

- (1) Check the SSM 23-33-06 to make sure that the discrete outputs are connected to the area light controllers.
 - (a) If there are no discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, verify the Cabin Services System Database (CDB) for proper settings in the Mood Lighting System (MLS) section or correct CDB part number installed on airplane.
 - (b) If there are discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, then continue.
- (2) Replace the lighting controller 1, M33015.
 - (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (3) Replace the lighting controller 2, M33016.
 - (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (4) Do a wiring check between the ALC 1, M23439 and lighting controllers:
 - (a) Disconnect electrical connector DM23439D from the ALC 1, M23439.
 - (b) Disconnect electrical connector DM33015B from the lighting controller 1, M33015.
 - (c) Disconnect electrical connector DM33016B from the lighting controller 2, M33016.
 - (d) Do a wiring check between these pins of connector DM23439D at the ALC 1 and connectors DM33015B and DM33016B at the lighting controllers (WDM 33-21-51):

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DM23439D

pin 1		pin 10
pin 2		pin 11
pin 3		pin 22
pin 4		pin 23

DM33016B

DM23439D

pin 5		pin 10
pin 6	.....	pin 11
pin 7	.....	pin 22
pin 8	.....	pin 23

DM33015B

- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM33015B to the lighting controller 1, M33015.
 - 3) Re-connect connector DM33016B to the lighting controller 2, M33016.
 - 4) Re-connect connector DM23439D to the ALC 1, M23439.
 - 5) Do the QUICK TEST on the CSCP.
 - 6) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 7) If the maintenance message shows in the QTFS, then continue.
- (5) Do a wiring check between the accent lights TRU (M33183) and lighting controllers:
- (a) Check the wires connected between the circuit breaker C33303 (P110) and accent lights TRU (M33183) connector DM33183B pins 2, 9 and 11.
 - (b) Check the wires connected between the accent lights TRU (M33183) connector DM33183A pin 1 to the Power Panel Ground Service Handling (P320) connector D32012 pin L3.
 - (c) Check the 28V DC output wires to light controllers.
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 4) If the maintenance message shows in the QTFS, then continue.
- (6) Replace the ALC 1, M23439:
- (a) To replace the ALC 1, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFS, you corrected the problem.

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D. Fault Isolation Procedure for Area Lighting Controller 2, M23440

- (1) Check the SSM 23-33-06 to make sure that the discrete outputs are connected to the area light controllers.
 - (a) If there are no discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, verify the Cabin Services System Database (CDB) for proper settings in the Mood Lighting System (MLS) section or correct CDB part number installed on airplane.
 - (b) If there are discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, then continue.
- (2) Replace the lighting controller 3, M33017.
 - (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (3) Replace the lighting controller 4, M33018.
 - (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (4) Do a wiring check between the ALC 2, M23440 and lighting controllers:
 - (a) Disconnect electrical connector DM23440D from the ALC 2, M23440.
 - (b) Disconnect electrical connector DM33017B from the lighting controller 3, M33017.
 - (c) Disconnect electrical connector DM33018B from the lighting controller 4, M33018.
 - (d) Do a wiring check between these pins of connector DM23440D at the ALC 2 and connectors DM33017B and DM33018B at the lighting controllers (WDM 33-21-51):

DM23440D

pin 1	.....	pin 10
pin 2	.....	pin 11
pin 3	.....	pin 22
pin 4	.....	pin 23

DM33017B

DM23440D

pin 5	.....	pin 10
pin 6	.....	pin 11
pin 7	.....	pin 22
pin 8	.....	pin 23

DM33018B

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33017B to the lighting controller 3, M33017.
 - 3) Re-connect connector DM33018B to the lighting controller 4, M33018.
 - 4) Re-connect connector DM23440D to the ALC 2, M23440.
 - 5) Do the QUICK TEST on the CSCP.
 - 6) If the maintenance message does not show in the QTFS, you corrected the problem.

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- 7) If the maintenance message shows in the QTFS, then continue.
- (5) Do a wiring check between the accent lights TRU (M33183) and lighting controllers:
 - (a) Check the wires connected between the circuit breaker C33303 (P110) and accent lights TRU (M33183) connector DM33183B pins 2, 9 and 11.
 - (b) Check the wires connected between the accent lights TRU (M33183) connector DM33183A pin 1 to the Power Panel Ground Service Handling (P320) connector D32012 pin L3.
 - (c) Check the 28V DC output wires to light controllers.
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 4) If the maintenance message shows in the QTFS, then continue.
- (6) Replace the ALC 2, M23440:
 - (a) To replace the ALC 2, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFS, you corrected the problem.

E. Fault Isolation Procedure for Area Lighting Controller 3, M23438

- (1) Check the SSM 23-33-06 to make sure that the discrete outputs are connected to the area light controllers.
 - (a) If there are no discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, verify the Cabin Services System Database (CDB) for proper settings in the Mood Lighting System (MLS) section or correct CDB part number installed on airplane.
 - (b) If there are discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, then continue.
- (2) Replace the lighting controller 5, M33019.
 - (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (3) Do a wiring check between the ALC 3, M23438 and lighting controller 5, M33019:
 - (a) Disconnect electrical connector DM23438D from the ALC 3, M23438.
 - (b) Disconnect electrical connector DM33019B from the lighting controller 5, M33019.
 - (c) Do a wiring check between these pins of connector DM23438D at the ALC 3 and connectors DM33019B at the lighting controller (WDM 33-21-51):

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DM23438D

pin 1 pin 10
pin 2 pin 11
pin 3 pin 22
pin 4 pin 23

DM33019B

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33019B to the lighting controller 5, M33019.
 - 3) Re-connect connector DM23438D to the ALC 3, M23438.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 6) If the maintenance message shows in the QTFS, then continue.
- (4) Do a wiring check between the accent lights TRU (M33183) and lighting controller:
 - (a) Check the wires connected between the circuit breaker C33303 (P110) and accent lights TRU (M33183) connector DM33183B pins 2, 9 and 11.
 - (b) Check the wires connected between the accent lights TRU (M33183) connector DM33183A pin 1 to the Power Panel Ground Service Handling (P320) connector D32012 pin L3.
 - (c) Check the 28V DC output wires to light controllers.
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 4) If the maintenance message shows in the QTFS, then continue.
- (5) Replace the ALC 3, M23438:
 - (a) To replace the ALC 3, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFS, you corrected the problem.

————— **END OF TASK** —————

815. Shorted or Over Voltage Discrete Output Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04443, 23-04444.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFS), you corrected the fault.

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- (b) If the maintenance message shows in the QTFS, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure for Area Lighting Controller 1, M23439

- (1) Check the SSM 23-33-06 to make sure that the discrete outputs are connected to the area light controllers.
- (a) If there are no discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, verify the Cabin Services System Database (CDB) for proper settings in the Mood Lighting System (MLS) section or correct CDB part number installed on airplane.
- (b) If there are discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, then continue.
- (2) Do a wiring check between the ALC 1, M23439 and lighting controllers:
- (a) Disconnect electrical connector DM23439D from the ALC 1, M23439.
- (b) Disconnect electrical connector DM33015B from the lighting controller 1, M33015.
- (c) Disconnect electrical connector DM33016B from the lighting controller 2, M33016.
- (d) Do a wiring check between these pins of connector DM23439D at the ALC 1 and connectors DM33015B and DM33016B at the lighting controllers (WDM 33-21-51):

DM23439D

pin 1	.....	pin 10
pin 2	.....	pin 11
pin 3	.....	pin 22
pin 4	.....	pin 23

DM33016B

DM23439D

pin 5	.....	pin 10
pin 6	.....	pin 11
pin 7	.....	pin 22
pin 8	.....	pin 23

DM33015B

- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM33015B to the lighting controller 1, M33015.
 - 3) Re-connect connector DM33016B to the lighting controller 2, M33016.
 - 4) Re-connect connector DM23439D to the ALC 1, M23439.
 - 5) Do the QUICK TEST on the CSCP.
 - 6) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 7) If the maintenance message shows in the QTFS, then continue.
- (3) Replace the lighting controller 1, M33015.
- (a) Do the QUICK TEST on the CSCP.
- (b) If the maintenance message does not show in the QTFS, you corrected the problem.
- (c) If the maintenance message shows in the QTFS, then continue.
- (4) Replace the lighting controller 2, M33016.
- (a) Do the QUICK TEST on the CSCP.

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- (b) If the maintenance message does not show in the QTFS, you corrected the problem.
- (c) If the maintenance message shows in the QTFS, then continue.
- (5) Do a wiring check between the accent lights TRU (M33183) and lighting controllers:
 - (a) Check the wires connected between the circuit breaker C33303 (P110) and accent lights TRU (M33183) connector DM33183B pins 2, 9 and 11.
 - (b) Check the wires connected between the accent lights TRU (M33183) connector DM33183A pin 1 to the Power Panel Ground Service Handling (P320) connector D32012 pin L3.
 - (c) Check the 28V DC output wires to light controllers.
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 4) If the maintenance message shows in the QTFS, then continue.
- (6) Replace the ALC 1, M23439:
 - (a) To replace the ALC 1, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFS, you corrected the problem.

D. Fault Isolation Procedure for Area Lighting Controller 2, M23440

- (1) Check the SSM 23-33-06 to make sure that the discrete outputs are connected to the area light controllers.
 - (a) If there are no discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, verify the Cabin Services System Database (CDB) for proper settings in the Mood Lighting System (MLS) section or correct CDB part number installed on airplane.
 - (b) If there are discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, then continue.
- (2) Do a wiring check between the ALC 2, M23440 and lighting controllers:
 - (a) Disconnect electrical connector DM23440D from the ALC 2, M23440.
 - (b) Disconnect electrical connector DM33017B from the lighting controller 3, M33017.
 - (c) Disconnect electrical connector DM33018B from the lighting controller 4, M33018.
 - (d) Do a wiring check between these pins of connector DM23440D at the ALC 2 and connectors DM33017B and DM33018B at the lighting controllers (WDM 33-21-51):



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DM23440D

pin 1		pin 10
pin 2		pin 11
pin 3		pin 22
pin 4		pin 23

DM33017B

DM23440D

pin 5		pin 10
pin 6	.....	pin 11
pin 7	.....	pin 22
pin 8	.....	pin 23

DM33018B

- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM33017B to the lighting controller 3, M33017.
 - 3) Re-connect connector DM33018B to the lighting controller 4, M33018.
 - 4) Re-connect connector DM23440D to the ALC 2, M23440.
 - 5) Do the QUICK TEST on the CSCP.
 - 6) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 7) If the maintenance message shows in the QTFS, then continue.
- (3) Replace the lighting controller 3, M33017.
- (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (4) Replace the lighting controller 4, M33018.
- (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (5) Do a wiring check between the accent lights TRU (M33183) and lighting controllers:
- (a) Check the wires connected between the circuit breaker C33303 (P110) and accent lights TRU (M33183) connector DM33183B pins 2, 9 and 11.
 - (b) Check the wires connected between the accent lights TRU (M33183) connector DM33183A pin 1 to the Power Panel Ground Service Handling (P320) connector D32012 pin L3.
 - (c) Check the 28V DC output wires to light controllers.
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 4) If the maintenance message shows in the QTFS, then continue.

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- (6) Replace the ALC 2, M23440:
 - (a) To replace the ALC 2, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFS, you corrected the problem.

E. Fault Isolation Procedure for Area Lighting Controller 3, M23438

- (1) Check the SSM 23-33-06 to make sure that the discrete outputs are connected to the area light controllers.
 - (a) If there are no discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, verify the Cabin Services System Database (CDB) for proper settings in the Mood Lighting System (MLS) section or correct CDB part number installed on airplane.
 - (b) If there are discrete outputs connected to the area light controllers as shown in the SSM 23-33-06, then continue.
- (2) Do a wiring check between the ALC 3, M23438 and lighting controller 5, M33019:
 - (a) Disconnect electrical connector DM23438D from the ALC 3, M23438.
 - (b) Disconnect electrical connector DM33019B from the lighting controller 5, M33019.
 - (c) Do a wiring check between these pins of connector DM23438D at the ALC 3 and connectors DM33019B at the lighting controller (WDM 33-21-51):

DM23438D	DM33019B
pin 1	pin 10
pin 2	pin 11
pin 3	pin 22
pin 4	pin 23

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33019B to the lighting controller 5, M33019.
 - 3) Re-connect connector DM23438D to the ALC 3, M23438.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 6) If the maintenance message shows in the QTFS, then continue.
- (3) Replace the lighting controller 5, M33019.
 - (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (4) Do a wiring check between the accent lights TRU (M33183) and lighting controller:
 - (a) Check the wires connected between the circuit breaker C33303 (P110) and accent lights TRU (M33183) connector DM33183B pins 2, 9 and 11.

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- (b) Check the wires connected between the accent lights TRU (M33183) connector DM33183A pin 1 to the Power Panel Ground Service Handling (P320) connector D32012 pin L3.
- (c) Check the 28V DC output wires to light controllers.
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 4) If the maintenance message shows in the QTFS, then continue.
- (5) Replace the ALC 3, M23438:
 - (a) To replace the ALC 3, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) If the maintenance message does not show in the QTFS, you corrected the problem.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFS, you corrected the problem.

————— END OF TASK —————

816. Configuration Database Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04445.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR) you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Do a configuration Database installation:
 - (a) To install the configuration Database, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811
- (2) Do a QUICK TEST on the QTFR.
 - (a) If the maintenance message does not show in the QTFR, you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then continue.
- (3) Replace the lighting controller 1, M33051.
 - (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (c) If the maintenance message shows in the QTFR, then continue.
- (4) Replace the lighting controller 2, M33052.
 - (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (c) If the maintenance message shows in the QTFR, then continue.

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- (5) Do a wiring check between the ALC 1, M23439 and lighting controllers:
- (a) Disconnect electrical connector DM23439D from the ALC 1, M23439.
 - (b) Disconnect electrical connector DM33051B from the lighting controller 1, M33051.
 - (c) Disconnect electrical connector DM33052B from the lighting controller 1, M33052.
 - (d) Do a wiring check between these pins of connector DM23439D at the ALC 1 and connectors DM33051B and DM33052B at the lighting controllers (WDM 33-21-51):

DM23439D

pin 1	.....	pin 10
pin 2	.....	pin 11
pin 3	.....	pin 22
pin 4	.....	pin 23

DM33051B

DM23439D

pin 5	.....	pin 10
pin 6	.....	pin 11
pin 7	.....	pin 22
pin 8	.....	pin 23

DM33052B

- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM33051B to the lighting controller 1, M33051.
 - 3) Re-connect connector DM33052B to the lighting controller 2, M33052.
 - 4) Re-connect connector DM23439D to the ALC 1, M23439.
 - 5) Do the QUICK TEST on the CSCP.
 - 6) If the maintenance message does not show in the QTFR, you corrected the problem.

————— **END OF TASK** —————

817. ALC Ethernet Bus Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04431.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFS, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Replace the applicable area lighting controller (ALC).
- (a) To replace the ALC 1, M23439, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) To replace the ALC 2, M23440, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (c) If the maintenance message does not show in the QTFS, you corrected the fault.

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- (d) If the maintenance message shows in the QTFS, then continue.
- (2) For ALC 1, do this wiring check between the ALC 1, M23439 and zone management unit (ZMU) 1, M23071:
- (a) Disconnect electrical connector DM23439B from the ALC 1, M23439.
 - (b) Disconnect electrical connector DM23071D from the ZMU 1, M23071.
 - (c) Do a wiring check between these pins of connector DM23439B at the ALC 1 and connectors DM23071D at the ZMU 1(WDM 23-33-16):

M23439	M23071
Pin 13	Pin 11
Pin 24	Pin 12
Pin 25	Pin 26
Pin 12	Pin 27

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM23071B to the ZMU 1, M23071.
 - 3) Re-connect connector DM23439D to the ALC 1, M23439.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the QTFS, you corrected the problem.
 - 6) If the maintenance message shows in the QTFS, then continue.
- (3) For ALC 2, do this wiring check between the ALC 2, M23440 and zone management unit (ZMU) 2, M23072:
- (a) Disconnect electrical connector DM23440B from the ALC 2, M23440.
 - (b) Disconnect electrical connector DM23072D from the ZMU 2, M23072.
 - (c) Do a wiring check between these pins of connector DM23440B at the ALC 2 and connectors DM23072D at the ZMU 2(WDM 23-33-16):

M23440	M23072
Pin 13	Pin 21
Pin 24	Pin 37
Pin 25	Pin 38
Pin 12	Pin 39

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM23072D to the ZMU 2, M23071.
 - 3) Re-connect connector DM23440B to the ALC 2, M23440.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the QTFS, you corrected the problem.

————— **END OF TASK** —————

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818. ALC Light Fixture and/or Interface RS485 Data Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04432, 23-04435.

B. Description

- (1) This task is for these maintenance messages:
- (a) 23-04432: ALC has a LF Column Data Bus Fault
 - (b) 23-04435: Interface RS485 Data Size Mismatch

C. Possible Causes

- (1) Area Lighting Controller (ALC) 1 (2) M23439 (M23440)
- (2) Wiring
- (3) Light Fixture (LF)

D. Related Data

- (1) WDM 33-21-51

E. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), there was an intermittent fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure below.

F. Fault Isolation Procedure

- (1) Replace the applicable ALC:
- ALC 1, M23439: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802
 - ALC 2, M23440: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802
- (a) Do the Repair Confirmation at the end of this task.
- (2) Do a wiring check between the ALCs (WDM 33-21-51):
- (a) Disconnect electrical connector DM23439D from the ALC 1, M23439.
 - (b) Disconnect electrical connector DM33051B from the lighting controller 1, M33051.
 - (c) Disconnect electrical connector DM33052B from the lighting controller 1, M33052.
 - (d) Do a wiring check between these pins of connector DM23439D at the ALC 1 and connectors DM33051B and DM33052B at the lighting controllers (WDM 33-21-51):

DM23439D

pin 1	.....	pin 10
pin 2	.....	pin 11
pin 3	.....	pin 22
pin 4	.....	pin 23

DM33051B

DM23439D

pin 5		pin 10
pin 6		pin 11
pin 7		pin 22
pin 8		pin 23

DM33052B

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- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33051B to the lighting controller 1, M33051.
 - 3) Re-connect connector DM33052B to the lighting controller 2, M33052.
 - 4) Re-connect connector DM23439D to the ALC 1, M23439.
 - 5) Do the Repair Confirmation at the end of this task.
- (f) If the wiring is OK, reconnect the connectors and continue.
- (3) Do a Light Fixture (LF) check:

NOTE: There are a total of 24 LFs in a column. The objective is to divide the column of LFs in half and find which group of LFs has the problem. Each time that you find which group has the problem, you divide that group in half until you find the LF that caused the problem.

 - (a) Go to the LF that is in the middle between the first and last LFs in the column.
 - (b) Disconnect the LF.
 - (c) Do the QUICK TEST on the CSCP.
 - 1) If the maintenance message does not show in the CSCP, then a LF between the disconnected and the last LF's caused the problem.

NOTE: If the maintenance message shows in the Quick Test Fault Results, then a LF between the first LF in the column and the disconnected LF caused the problem.

 - (d) Re-connect the LF.
 - (e) Continue to divide the problem group in half until you find the LF that caused the problem (use the steps above to disconnect the LF, do the QUICK TEST, and re-connect the LF).
 - (f) Replace the LF that caused the problem.
 - (g) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message still shows in the QTFR, then continue the Fault Isolation Procedure at the subsequent step.

————— **END OF TASK** —————

819. Configuration Database Not Compatible with Operational Program Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04417.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

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C. Fault Isolation Procedure

- (1) Do a configuration database installation.
 - (a) To install the configuration Database, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (d) If the maintenance message shows in the QTFR, then continue.
- (2) Do an Operational Program Software (OPS) installation:
 - (a) To install the OPS, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.

————— END OF TASK —————

820. OPS Software Not Compatible with Hardware, or Missing or Failed Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04412, 23-04416, 23-04436.

B. Description

- (1) This task is for these maintenance messages:
 - (a) 23-04412: ALC Operational Program Software is missing or failed.
 - (b) 23-04416: ALC Operational Program Software is not compatible with hardware.
 - (c) 23-04436: RAM (1) is corrupted.

C. Possible Causes

- (1) Software
- (2) Area Lighting Controller (ALC) 1, M23439
- (3) Area Lighting Controller (ALC) 2, M23440.

D. Related Data

- (1) WDM 33-21-11.

E. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

F. Fault Isolation Procedure

- (1) Do an Operational Program Software (OPS) installation:
 - (a) To install the OPS, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
 - (b) Do the Repair Confirmation at the end of this task.
- (2) Replace the applicable ALC:
 - ALC 1, M23439: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.

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- ALC 2, M23440: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.

(a) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message still shows in the QTFR, then continue the Fault Isolation Procedure at the subsequent step.

————— END OF TASK —————

821. Lighting Database Not Compatible With Operational Program Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04418.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Do a Lighting database (LDB) installation:
 - (a) To install the LDB, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (d) If the maintenance message shows in the QTFR, then continue.
- (2) Do an Operational Program Software (OPS) installation:
 - (a) To install the OPS, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.

————— END OF TASK —————

822. ALC Temperature Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04426, 23-04429.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Let the airplane ambient temperature to cool down.

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- (2) Do the QUICK TEST on the CSCP.
 - (a) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (b) If the maintenance message shows in the Fault Result, then continue.
- (3) Replace the applicable area lighting controller (ALC):
 - (a) To replace the ALC 1, M23439, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) To replace the ALC 2, M23440, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.

————— END OF TASK —————

823. ALC Lighting Database Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04414.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Do a Lighting database (LDB) installation:
 - (a) To install the LDB, do this task:(Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (d) If the maintenance message shows in the QTFR, then continue.
- (2) Replace the applicable area lighting controller (ALC).
 - (a) To replace the ALC 1, M23439, do this task: (Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.)
 - (b) To replace the ALC 2, M23440, do this task:(Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.)
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFR, you corrected the problem.

————— END OF TASK —————

824. Light Fixture Installed but Not Defined in Configuration Database Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04602.

B. Initial Evaluation

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- (1) If message 23-04602 shows after completing the operational software installation or database installation then there is a problem with the tokening process.
 - (a) Do this Fault Isolation Procedure: (Light Fixture Fails Tokening - Fault Isolation, 33-21 TASK 835)

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- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Do a configuration database installation.
 - (a) To install the configuration Database, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (d) If the maintenance message shows in the QTFR, then continue.
- (2) Do a check of the applicable Light Fixture (LF).

NOTE: There are a total of 31 LFs in a column. The objective is to divide the column of LFs in half and find which group of LFs has the problem. Each time that you find which group has the problem, you divide that group in half until you find the LF that caused the problem.

- (a) Go to the LF that is in the middle between the first and last LFs in the column.
- (b) Disconnect the LF.
- (c) Do the QUICK TEST on the CSCP.
- (d) If the maintenance message does not show in the QTFR, then a LF between the disconnected connector and the last LF caused the problem.

NOTE: If the maintenance message shows in the Quick Test Fault Results, then a LF between the first LF in the column and the disconnected LF caused the problem.

- (e) Re-connect the LF.
- (f) Continue to divide the problem group in half until you find the LF that caused the problem (use the steps above to disconnect the LF, do the QUICK TEST, and re-connect the LF).
- (g) Replace the LF that caused the problem.

————— **END OF TASK** —————

825. Light Fixture Internal Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04621, 23-04622, 23-04623, 23-04624, 23-04628.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

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C. Fault Isolation Procedure

- (1) Do a check of the applicable Light Fixture (LF).

NOTE: There are a total of 31 LFs in a column. The objective is to divide the column of LFs in half and find which group of LFs has the problem. Each time that you find which group has the problem, you divide that group in half until you find the LF that caused the problem.

- (a) Go to the LF that is in the middle between the first and last LFs in the column.
- (b) Disconnect the LF.
- (c) Do the QUICK TEST on the CSCP.
- (d) If the maintenance message does not show in the Quick Test Fault Results, then a LF between the disconnected and the last LF's caused the problem.

NOTE: If the maintenance message shows in the Quick Test Fault Results, then a LF between the first LF in the column and the disconnected LF caused the problem.

- (e) Re-connect the LF.
- (f) Continue to divide the problem group in half until you find the LF that caused the problem (use the steps above to disconnect the LF, do the QUICK TEST, and re-connect the LF).
- (g) Replace the LF that caused the problem.

————— **END OF TASK** —————

826. Failed or Missing Light Fixture OPS Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04613, 23-04616.

B. Initial Evaluation

ARO 007-999

- (1) If message 23-04613 and/or 23-04616 shows after completing the operational software installation or database installation then there is a problem with the tokening process.
 - (a) Do this Fault Isolation Procedure: (Light Fixture Fails Tokening - Fault Isolation, 33-21 TASK 835)

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- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Do an Operational Program Software (OPS) installation:
 - (a) To install the OPS, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.

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- (2) Do a check of the applicable Light Fixture (LF).

NOTE: There are a total of 31 LFs in a column. The objective is to divide the column of LFs in half and find which group of LFs has the problem. Each time that you find which group has the problem, you divide that group in half until you find the LF that caused the problem.

- (a) Go to the LF that is in the middle between the first and last LFs in the column.
- (b) Disconnect the LF.
- (c) Do the QUICK TEST on the CSCP.
- (d) If the maintenance message does not show in the Quick Test Fault Results, then a LF between the disconnected connector and the last LF caused the problem.

NOTE: If the maintenance message shows in the Quick Test Fault Results, then a LF between the first LF in the column and the disconnected LF caused the problem.

- (e) Re-connect the LF.
- (f) Continue to divide the problem group in half until you find the LF that caused the problem (use the steps above to disconnect the LF, do the QUICK TEST, and re-connect the LF).
- (g) Replace the LF that caused the problem.

————— END OF TASK —————

827. Light Emitting Diode (LED) Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04647, 23-04649.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Replace the applicable light emitting diode (LED) at detected light fixture.
 - (a) Do the QUICK TEST on the CSCP
 - (b) If the maintenance message does not show in the QTFR, you corrected the fault.
 - (c) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.
- (2) Do a check of the applicable Light Fixture (LF).

NOTE: There are a total of 31 LFs in a column. The objective is to divide the column of LFs in half and find which group of LFs has the problem. Each time that you find which group has the problem, you divide that group in half until you find the LF that caused the problem.

- (a) Go to the LF that is in the middle between the first and last LFs in the column.
- (b) Disconnect the LF.
- (c) Do the QUICK TEST on the CSCP.
- (d) If the maintenance message does not show in the Quick Test Fault Results, then a LF between the disconnected and the last LF's caused the problem.

NOTE: If the maintenance message shows in the Quick Test Fault Results, then a LF between the first LF in the column and the disconnected LF caused the problem.

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- (e) Re-connect the LF.
- (f) Continue to divide the problem group in half until you find the LF that caused the problem (use the steps above to disconnect the LF, do the QUICK TEST, and re-connect the LF).
- (g) Replace the LF that caused the problem.

————— **END OF TASK** —————

828. Light Fixture LEDs Temperature Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04629, 23-04648.

B. Description

- (1) The Mood Lighting System (MLS) light fixtures can automatically dim their brightness level when the cabin temperature is above normal. The dimming of the light output occurs to protect the longevity of the light fixtures.
 - (a) If this problem occurs when cabin temperatures are above normal, the operator should use the airplane Environmental Control System to set the cabin temperature to normal levels.
 - (b) If a light fixture continues to report this problem after cabin temperature has reached a normal level, the light fixture should be replaced.

C. Initial Evaluation

- (1) Let the airplane Ambient Temperature cool down.
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

- (1) Do a check of the applicable Light Fixture (LF):

NOTE: There are a total of 31 LFs in a column. The objective is to divide the column of LFs in half and find which group of LFs has the problem. Each time that you find which group has the problem, you divide that group in half until you find the LF that caused the problem.

 - (a) Go to the LF that is in the middle between the first and last LFs in the column.
 - (b) Disconnect the LF.
 - (c) Do the QUICK TEST on the CSCP.
 - 1) If the maintenance message does not show in the Quick Test Fault Results, then a LF between the disconnected connector and the last LF caused the problem.
 - 2) If the maintenance message shows in the Quick Test Fault Results, then a LF between the first LF in the column and the disconnected LF caused the problem.
 - (d) Re-connect the LF.
 - (e) Continue to divide the problem group in half until you find the LF that caused the problem (use the steps above to disconnect the LF, do the QUICK TEST, and re-connect the LF).
 - (f) Replace the LF that caused the problem.

————— **END OF TASK** —————

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829. ALC OPS Not Loading Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04419.

B. Fault Isolation Procedure

- (1) Install the configuration database, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (a) If the maintenance message does not show in the Installation Fault Results, you corrected the problem.
 - (b) If the maintenance message shows in the Installation Fault Results, then continue.
- (2) Replace the applicable area lighting controller (ALC):
 - (a) To replace the ALC 1, M23439, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) To replace the ALC 2, M23440, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (c) If the maintenance message does not show in the Installation Fault Results, you corrected the problem.

————— END OF TASK —————

830. Failed or Missing Configuration Database Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04413.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Do a configuration database installation:
 - (a) To install the configuration Database, do this task: (Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (d) If the maintenance message shows in the QTFR, then continue.
- (2) Replace the applicable area lighting controller (ALC).
 - (a) To replace the ALC 1, M23439, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) To replace the ALC 2, M23440, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the QTFR, you corrected the problem.

————— END OF TASK —————

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831. Light Fixture Not Responding Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04601.

B. Initial Evaluation

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- (1) If message 23-04601 shows after completing the operational software installation or database installation then there is a problem with the tokening process.
 - (a) Do this Fault Isolation Procedure: (Light Fixture Fails Tokening - Fault Isolation, 33-21 TASK 835)

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- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the All Test Fault Results (ATFR), there was an intermittent fault.

NOTE: If the error message shows after configuration database (CDB) installation, but does not show in All Test or Quick Test results, this message is considered nuisance and can be ignored.
 - (b) If the maintenance message shows in the ATFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Replace the light fixture (LF):
 - (a) Use the ATFR to locate the LF.

NOTE: The ATFR Recommended Maintenance Action area shows LF approximate cabin location.
 - (b) Replace the LF.
 - (c) Do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
 - (d) Do this task: Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-802.
 - (e) Do the ALL TEST on the CSCP.
 - (f) If the maintenance message does not show in the ATFR, then you corrected the fault.
 - (g) If the maintenance message shows in the ATFR, then continue.
- (2) Do a wiring check at the non-responsive light fixture (LF):
 - (a) Use the ATFR to locate the LF.

NOTE: The ATFR Recommended Maintenance Action area shows LF approximate cabin location.
 - (b) Do a wiring check between the non-responsive LF and the line-replaceable unit (LRU) before it (SSM 33-21-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the electrical connector to the LF.
 - 3) Re-connect the electrical connector to the LRU.
 - 4) Do the ALL TEST on the CSCP.

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- 5) If the maintenance message does not show in the ATFR, you corrected the fault.
- 6) If the maintenance message shows in the ATFR, then continue.
- (d) If you do not find a problem with the wiring, then continue.
 - 1) Re-connect the electrical connectors to the LF and LRU.
- (3) Replace the applicable area lighting controller (ALC):
 - (a) To replace the ALC, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) Do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
 - (c) Do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (d) Do this task: Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-802.
 - (e) Do the ALL TEST on the CSCP.
 - (f) If the maintenance message does not show in the ATFR, you corrected the fault.

END OF TASK

832. Light Fixture Lamp Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04641, 23-04642, 23-04645.

B. Possible Causes

- (1) Defective Lamp
- (2) Light Fixture

C. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFS), you corrected the fault.
 - (b) If the maintenance message shows in the QTFS, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

- (1) Do a lamp check:
 - (a) If the applicable lamp is correctly installed, and the light does not come ON, replace the applicable Lamp or Light Fixture as applicable.
 - Indirect Ceiling Light - Light Assembly Replacement, AMM TASK 33-21-01-960-802
 - (b) Do the QUICK TEST on the CSCP
 - 1) If the maintenance message does not show in the QTFR, you corrected the fault.
 - 2) If the maintenance message still shows in the QTFR, then continue.
- (2) Do a check of the applicable Light Fixture (LF).

NOTE: There are a total of 31 LFs in a column. The objective is to divide the column of LFs in half and find which group of LF has the problem. Each time that you find which group has the problem, you divide that group in half until you find the LF that caused the problem.

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- (a) Go to the LF that is in the middle between the first and last LFs in the column.
- (b) Disconnect the LF.
- (c) Do the QUICK TEST on the CSCP.
 - 1) If the maintenance message does not show in the Quick Test Fault Results, then a LF between the disconnected and the last LFs caused the problem.
 - 2) If the maintenance message shows in the Quick Test Fault Results, then a LF between the first LF in the column and the disconnected LF caused the problem.
- (d) Re-connect the LF.
- (e) Continue to divide the problem group in half until you find the LF that caused the problem (use the steps above to disconnect the LF, do the QUICK TEST, and re-connect the LF.
- (f) Replace the LF that caused the problem.

————— END OF TASK —————

833. Light Fixture OPS Not Compatible with ALC OPS - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04636.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Do an Operational Program Software (OPS) installation:
 - (a) To install the OPS, do this task: (Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.
 - (d) If the maintenance message shows in the QTFR, then continue
- (2) Do a software test:
 - (a) Do this tas:(Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-802 or Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-804).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the QTFR, you corrected the problem.

————— END OF TASK —————

834. ALC Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04401.

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B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR), you corrected the fault.
 - (b) If the maintenance message shows in the QTFS, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Replace the applicable area lighting controller (ALC).
 - (a) To replace the ALC 1, M23439, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (b) To replace the ALC 2, M23440, do this task: Area Lighting Controller Replacement, AMM TASK 33-21-07-960-802.
 - (c) If the maintenance message does not show in the QTFS, you corrected the fault.
 - (d) If the maintenance message shows in the QTFS, then continue.
- (2) Replace the applicable zone management unit (ZMU).

These are the tasks:

Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,

Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.

- (a) Do the ALL TEST on the CSCP.
 - (b) If the maintenance message does not show in the QTFS, you corrected the fault.
 - (c) If the maintenance message shows in the QTFS, then continue.
- (3) For ALC 1, do this wiring check between the ALC 1, M23439 and zone management unit (ZMU) 1, M23071:
 - (a) Disconnect electrical connector DM23439B from the ALC 1, M23439.
 - (b) Disconnect electrical connector DM23071D from the ZMU 1, M23071.
 - (c) Do a wiring check between these pins of connector DM23439B at the ALC 1 and connectors DM23071D at the ZMU 1(WDM 23-33-16):

M23439	M23071
Pin 13	Pin 11
Pin 24	Pin 12
Pin 25	Pin 26
Pin 12	Pin 27

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM23071B to the ZMU 1, M23071.
 - 3) Re-connect connector DM23439D to the ALC 1, M23439.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the QTFS, you corrected the problem.
- (4) For ALC 2, do this wiring check between the ALC 2, M23440 and zone management unit (ZMU) 2, M23072:
 - (a) Disconnect electrical connector DM23440B from the ALC 2, M23440.

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- (b) Disconnect electrical connector DM23072D from the ZMU 2, M23072.
- (c) Do a wiring check between these pins of connector DM23440B at the ALC 2 and connectors DM23072D at the ZMU 2(WDM 23-33-16):

M23440	M23072
Pin 13	Pin 21
Pin 24	Pin 37
Pin 25	Pin 38
Pin 12	Pin 39

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM23072D to the ZMU 2, M23071.
 - 3) Re-connect connector DM23440B to the ALC 2, M23440.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the QTFS, you corrected the problem.

————— **END OF TASK** —————

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835. Light Fixture Fails Tokening - Fault Isolation

A. Description

- (1) This task is for light fixture tokening problems that may occur from untokened or incorrectly tokened light fixtures.
- (2) Untokened light fixtures cannot transmit fault messages on the data bus.
- (3) Light fixtures will temporarily show a brightness/color state immediately after tokening.
 - (a) 0% or OFF - Major Hardware Fault.
 - 1) This lighting condition is caused by no power, electrical problems, or a defective light fixture.
 - (b) 80% Red - Token Input Stuck.
 - 1) This lighting state is caused by faulty wiring between light fixtures, a defective light fixture, or a defective previous light fixture.
 - (c) 80% Blue - Duplicate Bus ID's.
 - 1) This lighting state is caused by incorrect tokening, defective wiring between light fixtures, or a defective light fixture.
 - (d) 55% White - Un-Addressable Light Fixture.
 - 1) This lighting state is caused because it is behind a defective light fixture.
 - (e) 100% White - No Fault.
- (4) This fault indication will last for twelve minutes after the tokening.

B. Possible Causes

- (1) Wiring
- (2) LED Light Fixture

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C. Circuit Breakers

- (1) These are the primary circuit breakers related to the fault:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C33416	CABIN LTS FWD R
G	3	C33422	CABIN LTS AFT R
H	4	C33418	CABIN LTS MID FWD R
H	9	C33420	CABIN LTS MED AFT R
L	2	C33417	CABIN LTS FWD L
L	6	C33419	CABIN LTS MID FWD L
L	7	C33423	CABIN LTS AFT L
L	10	C33421	CABIN LTS MID AFT L

D. Initial Evaluation

- (1) Examine the light fixtures one by one starting from the first light fixture to the last light fixture.
- (a) If all light fixtures are 100% White, then there was an intermittent problem.
 - (b) If there are light fixtures not at 100% White, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Do these steps for all light fixtures that are OFF:
- (a) If there is a light fixture that is OFF, then check the wiring between the light fixture and the previous light fixture.
 - 1) Do the Repair Confirmation at the end of the task.
 - (b) If the light fixture is still OFF, then replace the light fixture. This is the task: Indirect Ceiling Light - Light Assembly Replacement, AMM TASK 33-21-01-960-802.
 - 1) Do the Repair Confirmation at the end of the task.
- (2) Do these steps for all light fixtures that are 80% Red:
- (a) If there is a light fixture at 80% Red, then check the wiring between the light fixture and the previous light fixture.
 - 1) Do the Repair Confirmation at the end of the task.
 - (b) If the light is still 80% Red, then replace the light fixture. This is the task: Indirect Ceiling Light - Light Assembly Replacement, AMM TASK 33-21-01-960-802.
 - 1) Do the Repair Confirmation at the end of the task.
 - (c) If the light is still 80% Red, then replace the previous light fixture. This is the task: Indirect Ceiling Light - Light Assembly Replacement, AMM TASK 33-21-01-960-802.
 - 1) Do the Repair Confirmation at the end of the task.
- (3) Do these steps for all light fixtures that are 80% Blue:
- (a) If there is a light fixture at 80% Blue, then re-token the lighting fixtures. This is the task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - 1) If the light fixture is still at 80% Blue, then continue.
 - (b) If there is a light fixture at 80% Blue, then check the wiring between the light fixture and the previous light fixture.

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- 1) Do the Repair Confirmation at the end of the task.
- (c) If the light is still 80% Blue, then replace the light fixture. This is the task: Indirect Ceiling Light - Light Assembly Replacement, AMM TASK 33-21-01-960-802.
 - 1) Do the Repair Confirmation at the end of the task.
 - a) If all the lights are not at 100% White, repeat the Fault Isolation Procedure for the colors that show.

F. Repair Confirmation

- (1) Do the Database Installation sequence to re token the light fixtures. This is the task:
 - Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (a) If all the lighting fixtures are 100% white and no faults show on the CSCP, then you have corrected the problem.
- (b) If there are lighting fixtures not at 100% white and there is a maintenance message on the CSCP, then continue the Fault Isolation Procedure at the subsequent step.

————— **END OF TASK** —————

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837. Passenger Lights Do Not Respond to Commands - Fault Isolation

A. Description

- (1) Passenger compartment lights do not respond to commands at CSCP/CACP and remain at current lighting setting.

B. Initial Evaluation

- (1) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the Quick Test Fault Results (QTFR) it was an intermittent fault.
 - (b) If the maintenance message shows in the QTFR, then do the Fault Isolation Procedure.

C. Fault Isolation Procedure

- (1) Test the ALC and CSCP/CACP light switches at the Attendant Switch Panel (ASP) of door 1 Right, do the following steps:
 - (a) Make sure that these circuit breakers are closed:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	16	C23400	CAB SYS MGMT UNIT
F	1	C23415	ZONE MGMT UNIT 1
H	4	C23419	ZONE MGMT UNIT 3
L	8	C23660	AREA LIGHTING CONT 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	25	C23417	ZONE MGMT UNIT 2
G	23	C23463	ZONE MGMT UNIT 4

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- (b) Make sure that these circuit breakers are closed:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23632	PAX ADRS CTRL PRI
F	7	C23633	PAX ADRS CTRL SEC

- (c) Make sure that these circuit breakers are closed:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C33416	CABIN LTS FWD R
G	3	C33422	CABIN LTS AFT R
H	4	C33418	CABIN LTS MID FWD R
H	9	C33420	CABIN LTS MED AFT R
L	6	C33419	CABIN LTS MID FWD L
L	7	C33423	CABIN LTS AFT L
L	10	C33421	CABIN LTS MID AFT L

- (d) Make sure the CSCP and all CACP's have power.

NOTE: The touch screens will be illuminated and operational.

- (e) Press the CSCP/CACP power switch on the Attendant Switch Panel (ASP) at Door 1 Right.

NOTE: The cabin lights will dim after the switch is pressed.

- (f) Make sure that the OFF light comes on.
- (g) Make sure that the CSCP and all the CACP screens are blank.
- (h) Touch the CSCP and CACP screens.
- 1) Make sure that the screens do not come on.
- (i) Press the CSCP/CACP power switch on the ASP at Door 1 Right.
- (j) Make sure the OFF light does not come on.
- (k) Make sure that the CSCP/CACP panels go back to their usual menus after initialization.
- (l) Use the CSCP to do the Scene Selection:
- 1) Touch these selections on the CSCP:
- a) CABIN CONTROLS
- b) CABIN LIGHTING
- c) ALL AREAS
- d) STANDARD SCENE HIGH (OR EQUIVALENT)
- e) START SCENE
- (m) Press the ALC power switch on the ASP at Door 1 Right.
- (n) Make sure that the OFF light comes on.
- (o) Make sure that the main cabin indirect lights go to the default dim state after approximately 15 minutes.
- (p) Press the ALC power switch on the ASP at Door 1 Right.
- (q) Make sure that the OFF light does not come on.



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- (r) Make sure that the main cabin indirect lights return to the HIGH or FULL bright state after the system is initialized again.
- (s) Do the QUICK TEST on the CSCP.
- (t) If the maintenance message does not show in the QTFR, you corrected the problem.

————— **END OF TASK** —————

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838. The Sidewall and Indirect Ceiling LED Lights Do Not Have Uniform Brightness/Color - Fault Isolation

A. Description

- (1) This task is for this Observed Fault:
 - (a) The Sidewall/Indirect Ceiling LED Lights do not have uniform brightness and/or color.
- (2) Light fixtures are equipped with an anti-aging compensation feature that is activated by an operational test or the Passenger Compartment Lights.

B. Possible Causes

- (1) Wiring
- (2) LED Light Fixture

C. Circuit Breakers

- (1) These are the primary circuit breakers related to the fault:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C33416	CABIN LTS FWD R
G	3	C33422	CABIN LTS AFT R
H	4	C33418	CABIN LTS MID FWD R
H	9	C33420	CABIN LTS MED AFT R
L	2	C33417	CABIN LTS FWD L
L	6	C33419	CABIN LTS MID FWD L
L	7	C33423	CABIN LTS AFT L
L	10	C33421	CABIN LTS MID AFT L

D. Initial Evaluation

- (1) Examine the light fixtures one by one starting from the first light fixture to the last light fixture.
 - (a) If all light fixtures are the same brightness and/or color, then there was an intermittent problem.
 - (b) If there are light fixtures not at the same brightness and/or color, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Do an operational test of the sidewall lights and the indirect ceiling lights. This is the task: Passenger Compartment Illumination - Operational Test, AMM TASK 33-21-00-710-801.
 - (a) Do the Repair Confirmation at the end of the task.
- (2) If there are light fixtures that are significantly dimmer than the other lights, replace the light fixtures. This is the task: Indirect Ceiling Light - Light Assembly Replacement, AMM TASK 33-21-01-960-802.

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- (a) Do the Repair Confirmation at the end of the task.

F. Repair Confirmation

- (1) Examine the light fixtures one by one starting from the first light fixture to the last light fixture.
 - (a) If all light fixtures are the same brightness, then you corrected the problem.
 - (b) If the light fixtures still do not have uniform brightness and/or color, then continue the Fault Isolation Procedure at the subsequent step.

———— **END OF TASK** ————

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801. Direct Ceiling Light Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the direct ceiling lights to the off mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection for the fluorescent or incandescent direct ceiling lights.

- (a) If a direct ceiling light does not go off, then do the Fault Isolation Procedure below.

NOTE: Since the lighting circuits are different for the fluorescent and incandescent lamps, isolate the fault for one type of lamp at a time.

- (b) If all direct ceiling lights go off, then there was an intermittent fault. Set the lights to their usual mode.

B. Fault Isolation Procedure

- (1) If one or more (but not all) direct ceiling lights do not go off, then do these steps:

- (a) Do this task: Direct Ceiling Light - Ballast Replacement, AMM TASK 33-22-02-960-802.

- 1) If the light goes off, you corrected the fault. Set the lights to their usual mode.
 - 2) If the light does not go off, then continue.

- (b) Do a QUICK TEST on the CSCP.

- 1) If a maintenance message related to the overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:

- a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the direct ceiling lights to the bright mode, and then to the off mode.
 - d) If the direct ceiling light goes off, you corrected the fault. Set the lights to their usual mode.

- (2) If all direct ceiling lights do not go off, then do these steps:

- (a) Do a QUICK TEST on the CSCP.

- 1) If a maintenance message related to the overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:

- a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the direct ceiling lights to the bright mode, and then to the off mode.
 - d) If the direct ceiling lights go off, you corrected the fault. Set the lights to their usual mode.

————— END OF TASK —————

802. Direct Ceiling Light Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) Make sure the flight compartment door is closed and the engines are off.

NOTE: When the engines are on and the flight compartment door is open, the direct ceiling light aft of the flight compartment door will not come on.

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- (2) At the cabin system control panel (CSCP), set the direct ceiling lights to the bright mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection for the fluorescent or incandescent direct ceiling lights.

- (a) If a direct ceiling light does not come on brightly, then do the Fault Isolation Procedure below.

NOTE: Since the lighting circuits are different for the fluorescent and incandescent lamps, isolate the fault for one type of lamp at a time.

- (b) If all direct ceiling lights come on brightly, then there was an intermittent fault. Set the lights to their usual mode.

B. Fault Isolation Procedure

- (1) If one or more (but not all) direct ceiling lights do not come on, then do these steps:

- (a) Do this task: Direct Ceiling Light - Lamp Replacement, AMM TASK 33-22-02-960-801.

- 1) If the light comes on, you corrected the fault. Set the lights to their usual mode.
- 2) If the light does not come on, then continue.

- (b) For the fluorescent direct ceiling lights, do this task: Direct Ceiling Light - Ballast Replacement, AMM TASK 33-22-02-960-802.

- 1) If the light comes on, you corrected the fault. Set the lights to their usual mode.
- 2) If the light does not come on, then continue.

- (c) Replace the direct ceiling light assembly (WDM 33-22-41) (WDM 33-22-42) (WDM 33-22-43) (WDM 33-22-44).

- 1) If the light comes on, you corrected the fault. Set the lights to their usual mode.
- 2) If the light does not come on, then continue.

- (d) Do a QUICK TEST on the CSCP.

- 1) If a maintenance message related to the overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:

- a) Find the maintenance message in the applicable FIM Maintenance Message Index.
- b) Do the specified fault isolation task.
- c) Set the direct ceiling lights to the bright mode.
- d) If the direct ceiling light comes on, you corrected the fault. Set the lights to their usual mode.

- (2) If all direct ceiling lights do not come on, then do these steps:

- (a) For fluorescent direct ceiling lights, replace the circuit breaker:
(WDM 33-22-11)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	10	C33433	ENTRY/DIR CLG LTS

- 1) If the lights come on, you corrected the fault. Set the lights to their usual mode.
- 2) If the lights do not come on, then continue.

- (b) Do a QUICK TEST on the CSCP.

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- 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the direct ceiling lights to the bright mode.
 - d) If the direct ceiling lights come on, you corrected the fault. Set the lights to their usual mode.
 - 2) If a maintenance message related to the ZMU or OEU does not show in the Quick Test Fault Results, then continue.
- (c) Do a check of the wiring between the applicable circuit breaker and the applicable direct ceiling light (WDM 33-22-41) (WDM 33-22-42) (WDM 33-22-43) (WDM 33-22-44).
- 1) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) If the light comes on, you corrected the fault. Set the lights to their usual mode.
- (d) If the direct ceiling lights can not be controlled, do this task: Loss of Control of the Cabin Service System - Fault Isolation, 23-39 TASK A20

————— **END OF TASK** —————

803. Closet Light Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) Set the closet light to the off mode.
 - (a) If the closet light does not go off, then do the Fault Isolation Procedure below.
 - (b) If the closet light goes off, then there was an intermittent fault. Set the closet light to its usual mode.

B. Fault Isolation Procedure

- (1) Replace the closet light switch (WDM 33-22-25).
 - (a) Set the closet light to the on mode and then to the off mode.
 - (b) If the light goes off, you corrected the fault. Set the closet light to its usual mode.

————— **END OF TASK** —————

804. Closet Light Does Not Turn On - Fault Isolation

A. Initial Evaluation



WARNING

MAKE SURE THERE ARE NO INDIRECT CEILING LIGHT AND SIDEWALL LIGHT PROBLEMS BEFORE YOU DO THIS PROCEDURE. WHEN ELECTRICAL POWER IS SUPPLIED TO THE CLOSET LIGHT, ELECTRICAL SHOCK FROM 115 VAC CAN OCCUR IF THERE IS A WIRING PROBLEM.

- (1) Set the closet light to the on mode.
 - (a) If the closet light does not come on, then do the Fault Isolation Procedure below.
 - (b) If the closet light comes on, then there was an intermittent fault. Set the closet light to its usual mode.

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B. Fault Isolation Procedure

- (1) Do this task: Closet Light - Lamp Replacement, AMM TASK 33-22-05-960-801.
 - (a) If the light comes on, you corrected the fault. Set the closet light to its usual mode.
 - (b) If the light does not come on, then continue.
- (2) Do this task: Closet Light - Fuse Replacement, AMM TASK 33-22-05-960-802.
 - (a) If the light comes on, you corrected the fault. Set the closet light to its usual mode.
 - (b) If the light does not come on, then continue.
- (3) Do this task: Closet Light - Light Assembly Replacement, AMM TASK 33-22-05-960-803.
 - (a) If the light comes on, you corrected the fault. Set the closet light to its usual mode.
 - (b) If the light does not come on, then continue.
- (4) Replace the closet light switch (WDM 33-22-25).
 - (a) If the light comes on, you corrected the fault. Set the closet light to its usual mode.
 - (b) If the light does not come on, then continue.
- (5) Do this task: Closet Light - Transformer Replacement, AMM TASK 33-22-05-960-804.
 - (a) If the light comes on, you corrected the fault. Set the closet light to its usual mode.
 - (b) If the light does not come on, then continue.
- (6) Do a check of the wiring for the applicable closet light circuits:
(WDM 33-22-21WDM 33-22-22WDM 33-22-23)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C33416	CABIN LTS FWD R
G	3	C33422	CABIN LTS AFT R
H	4	C33418	CABIN LTS MID FWD R
H	9	C33420	CABIN LTS MED AFT R
L	2	C33417	CABIN LTS FWD L
L	6	C33419	CABIN LTS MID FWD L
L	7	C33423	CABIN LTS AFT L
L	10	C33421	CABIN LTS MID AFT L

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the closet light to its usual mode.

————— END OF TASK —————

805. Entry Light Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the entry lights to the off mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

- (a) If an entry light does not go off, then do the Fault Isolation Procedure below.

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- (b) If all entry lights go off, then there was an intermittent fault. Set the lights to their usual mode.

B. Fault Isolation Procedure

- (1) If one entry light does not go off, then do these steps:
 - (a) Do this task: Entry Light - Ballast Replacement, AMM TASK 33-22-03-960-802.
 - 1) If the light goes off, you corrected the fault. Set the lights to their usual mode.
 - 2) If the light does not go off, then continue.
 - (b) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the entry lights to the bright mode, and then to the off mode.
 - d) If the entry light goes off, you corrected the fault. Set the lights to their usual mode.
- (2) If all entry lights do not go off, then do these steps:
 - (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the entry lights to the bright mode, and then to the off mode.
 - d) If the entry lights go off, you corrected the fault. Set the lights to their usual mode.

————— END OF TASK —————

806. Entry Light Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the entry lights to the bright mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

 - (a) If an entry light does not come on brightly, then do the Fault Isolation Procedure below.
 - (b) If all entry lights come on brightly, then there was an intermittent fault. Set the lights to their usual mode.

B. Fault Isolation Procedure

- (1) If one entry light does not come on, then do these steps:
 - (a) Do this task: Entry Light - Lamp Replacement, AMM TASK 33-22-03-960-801.
 - 1) If the light comes on, you corrected the fault. Set the lights to their usual mode.
 - 2) If the light does not come on, then continue.

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- (b) Do this task: Entry Light - Ballast Replacement, AMM TASK 33-22-03-960-802.
 - 1) If the light comes on, you corrected the fault. Set the lights to their usual mode.
 - 2) If the light does not come on, then continue.
- (c) Replace the entry light assembly (WDM 33-22-21).
 - 1) If the light comes on, you corrected the fault. Set the lights to their usual mode.
 - 2) If the light does not come on, then continue.
- (d) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the entry lights to the bright mode.
 - d) If the entry light comes on, you corrected the fault. Set the lights to their usual mode.
- (2) If all entry lights do not come on, then do these steps:
 - (a) At the CSCP, set the fluorescent direct ceiling lights to the bright mode.
 - (b) If the fluorescent direct ceiling lights do not come on, then replace this circuit breaker:
(WDM 33-22-11)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	10	C33433	ENTRY/DIR CLG LTS

- 1) If the entry and fluorescent direct ceiling lights come on, you corrected the fault. Set the lights to their usual mode.
- 2) If the entry and fluorescent direct ceiling lights do not come on, then do these steps:
 - a) Repair the wiring between circuit breaker C33433 and connector UA5 on terminal block TB1021 at the Door 2 Distribution Integration Panel, P102.
 - b) If the entry and fluorescent direct ceiling lights come on, you corrected the fault. Set the lights to their usual mode.
- (c) If the fluorescent direct ceiling lights come on, then continue.
- (d) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the entry lights to the bright mode.
 - d) If the entry lights come on, you corrected the fault. Set the lights to their usual mode.
 - 2) If a maintenance message related to the ZMU or OEU does not show in the Quick Test Fault Results, then continue.

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- (e) Do a check of the wiring between circuit breaker C33433 and the applicable entry light (WDM 33-22-21).
 - 1) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) If the light comes on, you corrected the fault. Set the lights to their usual mode.

————— **END OF TASK** —————

807. Attendant Work Light Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) At all attendant switch panels (ASPs), set all attendant work light switches to the off mode.

NOTE: The light in each switch comes on when power is supplied to the airplane. The light goes off when the attendant work light switch is set to the on mode.

- (a) If an attendant work light does not go off, then do the Fault Isolation Procedure below.
- (b) If all attendant work lights go off, then there was an intermittent fault. Set the switches to their usual mode.

B. Fault Isolation Procedure

- (1) If one or more (but not all) lights in a group of attendant work lights does not go off, then do these steps:

NOTE: The switches for each group of attendant work lights are at the same ASP. Use the table in SSM 33-22-31 to identify the lights in a specific group.

- (a) Do this task: Attendant Switch Panel (ASP) - Switch Replacement, AMM TASK 33-22-06-960-805.

- 1) If the light goes off, you corrected the fault. Set the switches to their usual mode.
 - 2) If the light does not go off, then continue.

- (b) Do a QUICK TEST on the CSCP.

- 1) If a maintenance message related to the zone management unit (AMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the attendant work light switch to the on mode, and then to the off mode.
 - d) If the attendant work light goes off, you corrected the fault. Set the switches to their usual mode.

- (2) If all lights in a group of attendant work lights do not go off, then do these steps:

NOTE: The switches for each group of attendant work lights are at the same ASP. Use the table in SSM 33-22-31 to identify the lights in a specific group.

- (a) Do a QUICK TEST on the CSCP.

- 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.

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- c) Set the attendant work light switches to the on mode, and then to the off mode.
- d) If the attendant work lights go off, you corrected the fault. Set the switches to their usual mode.

————— END OF TASK —————

808. Attendant Work Light Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) At all attendant switch panels (ASPs), set all attendant work light switches to the on mode.

NOTE: The light in each switch comes on when power is supplied to the airplane. The light goes off when the attendant work light switch is set to the on mode.

- (a) If all attendant work lights do not come on, then do the Fault Isolation Procedure below.
- (b) If all attendant work lights come on, then there was an intermittent fault. Set the switches to their usual mode.

B. Fault Isolation Procedure

- (1) If one or more (but not all) lights in a group of attendant work lights does not come on, then do these steps:

NOTE: The switches for each group of attendant work lights are at the same ASP. Use the table in SSM 33-22-31 to identify the lights in a specific group.

- (a) Do this task: Attendant Work Light - Lamp Replacement, AMM TASK 33-22-01-960-801.
 - 1) If the light comes on, you corrected the fault. Set the switches to their usual mode.
 - 2) If the light does not come on, then continue.
- (b) Replace the attendant work light assembly (WDM 33-22-31) (WDM 33-22-32) (WDM 33-22-33) (WDM 33-22-34) (WDM 33-22-35) (WDM 33-22-36) (WDM 33-22-37) (WDM 33-22-38).
 - 1) If the light comes on, you corrected the fault. Set the switches to their usual mode.
 - 2) If the light does not come on, then continue.
- (c) Do this task: Attendant Switch Panel (ASP) - Switch Replacement, AMM TASK 33-22-06-960-805.
 - 1) If the light comes on, you corrected the fault. Set the switches to their usual mode.
 - 2) If the light does not come on, then continue.
- (d) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the attendant work light switch to the off mode and then to the on mode.
 - d) If the attendant work light comes on, you corrected the fault. Set the switches to their usual mode.

- (2) If all lights in a group of attendant work lights do not come on, then do these steps:

NOTE: The switches for each group of attendant work lights are at the same ASP. Use the table in SSM 33-22-31 to identify the lights in a specific group.

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- (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the attendant work light switches to the off mode and then to the on mode.
 - d) If the attendant work lights come on, you corrected the fault. Set the switches to their usual mode.

————— END OF TASK —————

809. For Intermittent Operation Of The Flight Deck Door Switch - Fault Isolation

A. Initial Evaluation

- (1) Examine the Flight Deck Door Switch S33360 for the correct installation.
 - (a) Make sure that the black (sensing) surface of the switch is visible in the doorpost.

NOTE: The flight deck door sensor switch S33360 is installed below the flight deck door latch on the doorpost.

NOTE: The flight deck door switch has a red (sensing) surface and a black (sensing) surface.
 - (b) If the correct surface of the switch is visible continue.
- (2) Make sure that the Flight Deck Door Switch, S33360, has the correct clearance.

NOTE: The door proximity switch on the edge of the door and the sensor on the doorpost has a set distance. If distance is not correct, the sensor will not operate correctly.

 - (a) Measure the distance from the door to the doorpost.
 - (b) Make sure that the distance from the door to the doorpost is 0.345 in. (0.876 cm) to 0.430 in. (1.092 cm).
 - (c) If the distance is more than the tolerance, then put a shim behind the sensor S33360 to correct the distance.
 - (d) If the clearance is correct, do the Fault Isolation Procedure.

B. Fault Isolation Procedure

- (1) To access the INPUT/OUTPUT MONITOR - OVERHEAD ELECTRONICS UNIT (OEU) menu, make these selections from the main CABIN MAINTENANCE menu:
 - (a) CABIN TESTS
 - (b) ENGINEERING TESTS
 - (c) INPUT/OUTPUT MONITOR
 - (d) OVERHEAD ELECTRONICS UNIT (OEU)
- (2) OPEN the Flight Deck Door.
 - (a) SELECT these options on the CSCP INPUT/OUTPUT MONITOR - OVERHEAD ELECTRONICS UNIT (OEU) SELECTION menu:
 - 1) Column: 1
 - 2) Overhead Electronics Unit:

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- a) The Overhead EU can be 2 or higher. Refer to WDM 33-22-41 Direct Ceiling Lights Schematic, M23401 OEU, Door 1 Left
- 3) CONTINUE
- (3) OPERATE the Flight Deck Door Switch S33360 by closing the door.
NOTE: Make sure that one person is in the flight deck, the door will be locked if it is closed and the system is energized.
 - (a) VERIFY on the CSCP INPUT/OUTPUT MONITOR - OVERHEAD ELECTRONIC UNIT (OEU) screen that the DISCRETE INPUT 3 reads "GROUND".
- (4) OPEN the flight deck door.
 - (a) VERIFY on the CSCP INPUT/OUTPUT MONITOR - OVERHEAD ELECTRONIC UNIT (OEU) screen that DISCRETE INPUT 3 reads "OPEN".
 - (b) Do the Fault Isolation Procedure 3 or 4 times and make sure that the results are the same each time.

————— **END OF TASK** —————

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801. Reading Light Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) Set the power control switch in the purser station to the on mode.
- (2) At the cabin system control panel (CSCP), set the reading lights to the on mode, and then to the off mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

- (a) If all or a group of reading lights do not go off, then do the Fault Isolation Procedure below (SSM 33-23-11), (WDM 33-23-11).
- (b) If the reading light goes off, then do these steps:
 - 1) At the passenger seat, set the reading light to the on mode, then to the off mode.
 - 2) If the reading light does not go off, then do the Fault Isolation Procedure below.
 - 3) If the reading light goes off, then there was an intermittent fault.
 - a) Set the power control switch in the purser station to the usual mode.

B. Fault Isolation Procedure

- (1) Do a QUICK TEST on the CSCP.
 - (a) If a maintenance message related to the zone management unit (ZMU), overhead electronic unit (OEU), seat electronic unit (SEU), or passenger control unit (PCU) shows in the Quick Test Fault Results, then do these steps:
 - 1) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - 3) At the passenger seat, set the reading light to the on mode, and then to the off mode.
 - 4) If the reading light goes off, you corrected the fault.
 - a) Set the power control switch in the purser station to the usual mode.
 - 5) If the reading light does not go off, then continue.
 - (b) If a maintenance message related to the zone management unit (ZMU), overhead electronic unit (OEU), seat electronic unit (SEU), or passenger control unit (PCU) does not show in the Quick Test Fault Results, then continue.
- (2) Refer to the troubleshooting section of the vendor manual for the in-flight entertainment system.
 - (a) Repair the in-flight entertainment system, as given in the vendor manual.
 - (b) At the passenger seat, set the reading light to the on mode, and then to the off mode.
 - (c) If the reading light goes off, you corrected the fault.
 - 1) Set the power control switch in the purser station to the usual mode.

————— **END OF TASK** —————

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802. Reading Light Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) Set the power control switch in the purser station to the on mode.
- (2) At the cabin system control panel (CSCP), set the reading lights to the on mode.
NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.
 - (a) If all or a group of reading lights do not come on, then do the Fault Isolation Procedure below (SSM 33-23-11), (WDM 33-23-11).
 - (b) If the reading light comes on, set the lights to the off mode, then do this test:
 - 1) At the passenger seat, set the reading light to the on mode.
 - 2) If the reading light does not come on, then do the Fault Isolation Procedure below.
 - 3) If the reading light comes on, then there was an intermittent fault. Set the light to the usual mode.
 - a) Set the power control switch in the purser station to the usual mode.

B. Fault Isolation Procedure

- (1) If the reading light (but not a group of reading lights) does not come on, then do these steps:
 - (a) Do this task: Reading Light - Lamp Replacement, AMM TASK 33-23-00-960-801.
 - 1) If the light comes on, you corrected the fault. Set the light to the usual mode.
 - 2) If the light does not come on, then continue.
 - (b) Do this task: Reading Light - Light Assembly Replacement, AMM TASK 33-23-00-960-802.
 - 1) If the light comes on, you corrected the fault. Set the light to the usual mode.
 - 2) If the light does not come on, then continue.
 - (c) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU), overhead electronic unit (OEU), seat electronic unit (SEU), or passenger control unit (PCU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) At the passenger seat, set the reading light to the on mode.
 - d) If the reading light comes on, you corrected the fault. Set the light to the usual mode.
- (2) If all or a group of reading lights do not come on, then do these steps:
 - (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU), overhead electronics unit (OEU), seat electronic unit (SEU), or passenger control unit (PCU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.

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- c) At the passenger seat, set the reading light to the on mode.
 - d) If the reading light comes on, you corrected the fault. Set the light to the usual mode.
 - e) Set the power control switch in the purser station to the usual mode if you corrected the fault.
- 2) If the reading light does not come on, then continue.
- (b) Refer to the troubleshooting section of the vendor manual for the in-flight entertainment system.
- 1) Repair the in-flight entertainment system, as given in the vendor manual.
 - 2) At the passenger seat, set the reading light to the on mode.
 - 3) If the reading light comes on, you corrected the fault. Set the light to the usual mode.
 - a) Set the power control switch in the purser station to the usual mode.

————— **END OF TASK** —————

807. Reading Light Needs Adjustment - Fault Isolation

A. Fault Isolation Procedure

- (1) Do this task: Reading Light - Light Beam Adjustment, AMM TASK 33-23-00-820-801.

————— **END OF TASK** —————

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801. No-Smoking Sign Switch Problems - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the no-smoking signs first to the on mode, then to the automatic mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on, automatic, or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on, automatic, and off modes, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the switch for the no-smoking signs, M33412S1 (WDM 33-24-11).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the no-smoking signs first to the on mode, then to the automatic mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on, automatic, and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on, automatic, or off mode, then continue.
- (2) Do this check of the wiring from the switch for the no-smoking signs to the left overhead panel card file:
 - (a) Remove the passenger signs module, M33412 (WDM 33-24-11).
 - (b) Disconnect connector M33412DS1 from the switch, M33412S1.
 - (c) Disconnect connector DM23117H from the left overhead card file, M23117.
 - (d) Do a wiring check between these pins of connector M33412DS1 at the pilots overhead panel, P5, and connector DM23117H, at the maintenance panel, P61 (WDM 33-24-11).

M33412DS1

pin J
pin H
pin G
pin K

DM23117H

pin B7
pin B8
pin B9
pin B10

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector M33412DS1.
 - 3) Re-connect connector DM23117H.
 - 4) Re-install the passenger sign module, M33412.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the no-smoking signs to the on mode, then to the automatic mode, and then to the off mode.

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- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on, automatic, and off modes, you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector M33412DS1 to the switch, M33412S1.
- (h) Re-install the passenger signs module, M33412.
- (3) Replace the left overhead panel card file chassis, M23117 at the maintenance panel, P61.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the no-smoking signs first to the on mode, then to the automatic mode, and then to the off mode.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on, automatic, and off modes, you corrected the fault.

———— END OF TASK ————

802. Seat-Belt Sign Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43940.

B. Possible Causes

- (1) Fasten Seat Belts Sign Switch, M33412S2
- (2) Wiring
- (3) Overhead Panel Card File (OPCF), M23117
- (4) Overhead Panel Bus Controller (OPBC), M23112

C. Related Data

- (1) WDM 33-24-11

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) Set the switch for the fasten-seat-belt signs first to the ON mode, then to the AUTO mode, and then to the OFF mode.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the ON, AUTO, and OFF modes, then there was an intermittent problem.
 - 2) If the MAT shows ACTIVE for the maintenance message while the switch is in the ON, AUTO, or OFF mode, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Replace the Fasten-Seat Belts Sign Switch, M33412S2 (WDM 33-24-11).
 - (a) Do the Repair Confirmation at the end of this task.

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- (2) Do this check of the wiring from the Fasten-Seat Belts Sign Switch to the Left Overhead Panel Card File (WDM 33-24-11):

- (a) Disconnect connector DM33412B from the Passenger Signs Module, M33412.
- (b) Disconnect connector DM23117H from the Left Overhead Card File, M23117.
- (c) Do a wiring check between the Passenger Signs Module connector at the Overhead Panel, P5, and the Left Card File connector, at the Maintenance Panel, P61 as follows:

Pass Signs

Module

DM33412B

pin 39 pin B15
pin 40 pin B16
pin 22 pin B17
pin 21 pin B18

L Card File

DM23117H

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33412B.
 - 3) Re-connect connector DM23117H.
 - 4) Do the Repair Confirmation at the end of this task.
 - (e) If you do not find a problem with the wiring, then re-connect connector DM33412B to the Passenger Signs Module, M33412 and continue.
- (3) Replace the Left Overhead Panel Card File Chassis, M23117 at the Maintenance Panel, P61. These are the tasks:
- Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802
 - Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802
- (a) Do the Repair Confirmation at the end of this task.
- (4) Replace the Left Overhead Panel Bus Controller, M23112 at the Maintenance Panel, P11. These are the tasks:
- Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801
 - Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801
- (a) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Monitor the maintenance message on the MAT while you do these steps:
- (a) Set the switch for the Fasten-Seat-Belt Signs first to the ON mode, then to the AUTO mode, and then to the OFF mode.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the ON, AUTO, and OFF modes, then you corrected the problem.
 - 2) If the MAT shows ACTIVE for the maintenance message while the switch is in the ON, AUTO, or OFF mode, then continue the Fault Isolation Procedure at the subsequent step.

————— END OF TASK —————

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803. No-Smoking Sign Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the no-smoking signs to the off mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

If a no-smoking sign was changed to remain on at all times, use the SPECIAL FUNCTION selection on the lamp test menu to operate the sign.

- (2) If all no-smoking signs in the airplane do not go off, then do these steps:

- (a) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (b) At the overhead panel, P5, set the switch for the no-smoking signs to the off mode.

NOTE: The switch will not control a no-smoking sign that was changed to remain on at all times.

- 1) If a maintenance message related to the no-smoking signs shows on the MAT while the switch is in the off mode, then do these steps.
 - a) Find the maintenance message in the FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
- 2) If a maintenance message related to the no-smoking sign does not show on the MAT while the switch is in the off mode, then do these steps:
 - a) Set the switch to the automatic mode.
 - b) Do the Fault Isolation Procedure below.
- (3) If all no-smoking signs go off, then there was an intermittent fault. Set the signs to the usual mode at the CSCP and the P5 panel.

B. Fault Isolation Procedure

- (1) If the no-smoking sign does not go off, then do these steps:

- (a) Do a QUICK TEST on the CSCP.

- 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the no-smoking signs to the on mode, and then to the off mode.
 - d) If the no-smoking sign goes off, you corrected the fault. Set the signs to the usual mode at the CSCP and the P5 panel.

————— END OF TASK —————

804. No-Smoking Sign Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the no-smoking signs to the on mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

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- (2) If all no-smoking signs in the airplane do not come on, then do these steps:
 - (a) Monitor the Extended Maintenance, Existing Faults display on the MAT.
 - (b) At the P5 panel, set the switch for the no-smoking signs to the on mode.
 - 1) If a maintenance message related to the no-smoking signs shows on the MAT while the switch is in the on mode, then do these steps.
 - a) Find the maintenance message in the FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - 2) If a maintenance message related to the no-smoking sign does not show on the MAT while the switch is in the on mode, then do these steps:
 - a) Set the switch to the automatic mode.
 - b) Do the Fault Isolation Procedure below.
- (3) If all no-smoking signs come on, then there was an intermittent fault. Set the signs to their usual mode.

B. Fault Isolation Procedure

- (1) If one or more (but not all) no-smoking signs in the airplane zone do not come on, then do these steps:
 - (a) At the CSCP, set the fasten-seat-belt signs to the on mode.
 - (b) If the fasten-seat-belt sign in the same housing as the no-smoking sign comes on, then do these steps:
 - 1) For the applicable lamps in the no-smoking sign, do this task: Information Sign - Lamp Replacement, AMM TASK 33-24-00-960-801.
NOTE: The no smoking and fasten seat belt signs, without the lav occupied signs, use LEDs. The sign legend itself must be removed if a sign fails.
 - 2) If the no-smoking sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.
 - (c) If the fasten-seat-belt sign in the same housing as the no-smoking sign does not come on, then do these steps:
 - 1) Do this task: Information Sign - Light Assembly Replacement, AMM TASK 33-24-00-960-802 or Information Sign - Lamp Replacement, AMM TASK 33-24-00-960-801.
 - a) If the no-smoking sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and at the P5 panel.
 - b) If the sign does not come on, then continue.
 - (d) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU), overhead electronics unit (OEU), or passenger control unit (PCU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the no-smoking signs to the on mode.
 - d) If the no-smoking sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.

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- (2) If all no-smoking signs in the airplane zone do not come on, then do these steps:
 - (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the no-smoking signs to the on mode.
 - d) If the no-smoking signs come on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.

————— **END OF TASK** —————

805. Return-to-Seat Sign In Cabin Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the return-to-seat signs to the off mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.
- (2) If the return-to-seat sign does not go off, then do these steps:
 - (a) Monitor the Extended Maintenance, Existing Faults display on the MAT.
 - (b) At the overhead panel, P5, set the switch for the fasten-seat-belt signs to the off mode.
 - 1) If a maintenance message related to the fasten-seat-belt signs shows on the MAT while the switch is in the off mode, then do these steps.
 - a) Find the maintenance message in the FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - 2) If a maintenance message related to the fasten-seat-belt signs does not show on the MAT while the switch is in the off mode, then do these steps:
 - a) Set the switch to the automatic mode.
 - b) Do the Fault Isolation Procedure below.
- (3) If the return-to-seat sign goes off, then there was an intermittent fault. Set the signs to their usual mode at the CSCP and the P5 panel.

B. Fault Isolation Procedure

- (1) If the return-to-seat sign does not go off, then do these steps:
 - (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the return-to-seat signs to the on mode, and then to the off mode.

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- d) If the return-to-seat sign goes off, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.

— END OF TASK —

806. Return-to-Seat Sign In Cabin Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the return-to-seat signs to the on mode.
NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.
- (2) If the return-to-seat sign does not come on, then do these steps:
 - (a) Monitor the Extended Maintenance, Existing Faults display on the MAT.
 - (b) At the P5 panel, set the switch for the fasten-seat-belt signs to the on mode.
 - 1) If a maintenance message related to the fasten-seat-belt signs shows on the MAT while the switch is in the on mode, then do these steps.
 - a) Find the maintenance message in the FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - 2) If a maintenance message related to the fasten-seat-belt signs does not show on the MAT while the switch is in the on mode, then do these steps:
 - a) Set the switch to the automatic mode.
 - b) Do the Fault Isolation Procedure below.
 - (3) If the return-to-seat sign comes on, then there was an intermittent fault. Set the signs to their usual mode at the CSCP and the P5 panel.

B. Fault Isolation Procedure

- (1) At the CSCP, set the no-smoking signs to the on mode.
- (2) If the no-smoking sign in the same housing as the return-to-seat sign comes on, then do these steps:
 - (a) For the applicable lamps in the return-to-seat sign, do this task: Reading Light - Lamp Replacement, AMM TASK 33-23-00-960-801.
 - 1) If the return-to-seat sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.
- (3) If the no-smoking sign in the same housing as the return-to-seat sign does not come on, then do these steps:
 - (a) Do this task: Information Sign - Light Assembly Replacement, AMM TASK 33-24-00-960-802 or Information Sign - Lamp Replacement, AMM TASK 33-24-00-960-801.
 - 1) If the return-to-seat sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and at the P5 panel.
 - 2) If the sign does not come on, then continue.
 - (b) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:

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- a) Find the maintenance message in the applicable FIM Maintenance Message Index.
- b) Do the specified fault isolation task.
- c) Set the return-to-seat signs to the on mode.
- d) If the return-to-seat sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.

————— END OF TASK —————

807. Fasten-Seat-Belt Sign Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the fasten-seat-belt signs to the off mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

- (2) If all fasten-seat-belt signs in the airplane do not go off, then do these steps:
 - (a) Monitor the Extended Maintenance, Existing Faults display on the MAT.
 - (b) At the overhead panel, P5, set the switch for the fasten-seat-belt signs to the off mode.
 - 1) If a maintenance message related to the fasten-seat-belt signs shows on the MAT while the switch is in the off mode, then do these steps.
 - a) Find the maintenance message in the FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - 2) If a maintenance message related to the fasten-seat-belt sign does not shows on the MAT while the switch is in the off mode, then do these steps:
 - a) Set the switch to the automatic mode.
 - b) Do the Fault Isolation Procedure below.
 - (3) If all fasten-seat-belt signs go off, then there was an intermittent fault. Set the signs to their usual mode at the CSCP and the P5 panel.

B. Fault Isolation Procedure

- (1) If the fasten-seat-belt sign does not go off, then do these steps:
 - (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the fasten-seat-belt signs to the on mode, and then to the off mode.
 - d) If the fasten-seat-belt sign goes off, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.
- (2) If the fasten-seat-belt sign can not be controlled, do this task: Loss of Control of the Cabin Service System - Fault Isolation, 23-39 TASK A20.

————— END OF TASK —————

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808. Fasten-Seat-Belt Sign Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the fasten-seat-belt signs to the on mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

- (2) If all fasten-seat-belt signs in the airplane do not come on, then do these steps:
 - (a) Monitor the Extended Maintenance, Existing Faults display on the MAT.
 - (b) At the P5 panel, set the switch for the fasten-seat-belt signs to the on mode.
 - 1) If a maintenance message related to the fasten-seat-belt signs shows on the MAT while the switch is in the on mode, then do these steps.
 - a) Find the maintenance message in the FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - 2) If a maintenance message related to the fasten-seat-belt sign does not show on the MAT while the switch is in the on mode, then do these steps:
 - a) Set the switch to the automatic mode.
 - b) Do the Fault Isolation Procedure below.
 - (3) If all fasten-seat-belt signs come on, then there was an intermittent fault. Set the signs to their usual mode.

B. Fault Isolation Procedure

- (1) If one or more (but not all) fasten-seat-belt signs in the airplane zone do not come on, then do these steps:
 - (a) At the CSCP, set the no-smoking signs to the on mode.
 - (b) If the no-smoking sign in the same housing as the fasten-seat-belt sign comes on, then do these steps:
 - 1) For the applicable lamps in the fasten-seat-belt sign, do this task: Information Sign - Lamp Replacement, AMM TASK 33-24-00-960-801.

NOTE: The no smoking and fasten seat belt signs, without the lav occupied signs, use LEDs. The sign legend itself must be removed if a sign fails.
 - 2) If the fasten-seat-belt sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.
 - (c) If the no-smoking sign in the same housing as the fasten-seat-belt sign does not come on, then do these steps:
 - 1) Do this task: Information Sign - Light Assembly Replacement, AMM TASK 33-24-00-960-802 or Information Sign - Lamp Replacement, AMM TASK 33-24-00-960-801.
 - a) If the fasten-seat-belt sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and at the P5 panel.
 - b) If the sign does not come on, then continue.
 - (d) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU), overhead electronics unit (OEU), or passenger control unit (PCU) shows in the Quick Test Fault Results, then do these steps:

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- a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the fasten-seat-belt signs to the on mode.
 - d) If the fasten-seat-belt sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.
- (2) If all no-smoking signs in the airplane zone do not come on, then do these steps:
- (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the fasten-seat-belt signs to the on mode.
 - d) If the fasten-seat-belt signs come on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.

END OF TASK

809. Return-to-Seat Sign In Lavatory Does Not Turn Off Or Change To Dim - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the fasten-seat-belt signs to the off mode.
NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.
- (2) If the return-to-seat sign does not go off or change to dim, then do these steps:
NOTE: A return-to-seat sign that flashes will not go off; it will become dim.
 - (a) Monitor the Extended Maintenance, Existing Faults display on the MAT.
 - (b) At the overhead panel, P5, set the switch for the fasten-seat-belt signs to the off mode.
 - 1) If a maintenance message related to the fasten-seat-belt signs shows on the MAT while the switch is in the off mode, then do these steps.
 - a) Find the maintenance message in the FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - 2) If a maintenance message related to the fasten-seat-belt signs does not show on the MAT while the switch is in the off mode, then do these steps:
 - a) Set the switch to the automatic mode.
 - b) Do the Fault Isolation Procedure below.
- (3) If the return-to-seat sign goes off or changes to dim, then there was an intermittent fault. Set the signs to their usual mode at the CSCP and the P5 panel.

B. Fault Isolation Procedure

- (1) If the return-to-seat sign does not go off or change to dim, then do these steps:
 - (a) Do a QUICK TEST on the CSCP.

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- 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the fasten-seat-belt signs to the on mode, and then to the off mode.
 - d) If the return-to-seat sign goes off or changes to dim, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.

————— END OF TASK —————

810. Return-to-Seat Sign In Lavatory Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the return-to-seat signs to the on mode.
NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.
- (2) If all return-to-seat signs do not come on, then do these steps:
NOTE: On some airplanes, the return-to-seat signs will flash.
 - (a) Monitor the Extended Maintenance, Existing Faults display on the MAT.
 - (b) At the P5 panel, set the switch for the fasten-seat-belt signs to the on mode.
 - 1) If a maintenance message related to the fasten-seat-belt signs shows on the MAT while the switch is in the on mode, then do these steps.
 - a) Find the maintenance message in the FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - 2) If a maintenance message related to the fasten-seat-belt signs does not show on the MAT while the switch is in the on mode, then do these steps:
 - a) Set the switch to the automatic mode.
 - b) Do the Fault Isolation Procedure below.
- (3) If all return-to-seat signs come on, then there was an intermittent fault. Set the signs to their usual mode at the CSCP and the P5 panel.

B. Fault Isolation Procedure

- (1) If one or more (but not all) return-to-seat signs do not on, then do these steps:
 - (a) Do this task: Information Sign - Light Assembly Replacement, AMM TASK 33-24-00-960-802 or Information Sign - Lamp Replacement, AMM TASK 33-24-00-960-801.
 - 1) If the return-to-seat sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and at the P5 panel.
 - 2) If the sign does not come on, then continue.
 - (b) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.

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- b) Do the specified fault isolation task.
 - c) Set the return-to-seat signs to the on mode.
 - d) If the return-to-seat sign comes on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.
- (2) If all return-to-seat signs do not come on, then do these steps:
- (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) Set the return-to-seat signs to the on mode.
 - d) If all return-to-seat signs come on, you corrected the fault. Set the signs to their usual mode at the CSCP and the P5 panel.

————— **END OF TASK** —————

811. EICAS Message NO SMOKING ON - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the switch for the no-smoking signs on the overhead panel, P5, is set to the on mode.

- (1) To set the switch for the no-smoking signs to the usual mode, set it to the off or automatic (auto) mode.

————— **END OF TASK** —————

812. EICAS Message PASS SIGNS ON - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the switches for no-smoking and fasten-seat-belt signs on the overhead panel, P5, are set to the on mode.

- (1) To set the switches for the no-smoking and fasten-seat-belt signs to the usual mode, set them to the off or automatic (auto) mode.

————— **END OF TASK** —————

813. EICAS Message SEATBELTS ON - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the switch for the fasten-seat-belt signs on the overhead panel, P5, is set to the on mode.

- (1) To set the switch for the fasten-seat-belt signs to the usual mode, set it to the off or automatic (auto) mode.

————— **END OF TASK** —————

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801. Call Light On Master Call Light Module Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the master call lights to the on mode, and then to the off mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selections. Include the passenger, cabin interphone (crew), and lavatory master call lights.

- (a) If all or a group of call lights on the master call light modules do not go off, then do the Fault Isolation Procedure below.
- (b) If the call light on the master call light module goes off, then do this test:
 - 1) At the applicable passenger seat, lavatory, or crew station, set the call light to the on mode, then to the off mode.

NOTE: At the lavatory, the switch in the lavatory activates the call light. To deactivate it, push the call light above the lavatory door.

- a) If the call light does not go off, then do the Fault Isolation Procedure below.
- b) If the call light goes off, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Do a QUICK TEST on the CSCP.
 - (a) If a maintenance message related to the applicable zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - 1) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - 3) At the applicable passenger seat, lavatory, or crew station, set the call light to the on mode, then to the off mode.

NOTE: At the lavatory, the switch in the lavatory activates the call light. To deactivate it, push the call light above the lavatory door.

- a) If the call light does not go off, then do the Fault Isolation Procedure below.
- b) If the call light goes off, you corrected the fault. Set the call light to the usual mode.

————— END OF TASK —————

802. Call Light On Master Call Light Module Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) At the cabin system control panel (CSCP), set the master call lights to the on mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selections. Include the passenger, cabin interphone (crew), and lavatory master call lights.

- (a) If all or a group of call lights on the master call light modules do not come on, then do the Fault Isolation Procedure below.
- (b) If the call light on the master call light module comes on, set the light to the off mode, then do this test:

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- 1) At the applicable passenger seat, lavatory, or crew station, set the call light to the on mode.

NOTE: At the lavatory, the switch in the lavatory activates the call light. To deactivate it, push the call light above the lavatory door.

- a) If the call light does not come on, then do the Fault Isolation Procedure below.
- b) If the call light comes on, then there was an intermittent fault. Set the call light to the usual mode.

B. Fault Isolation Procedure

- (1) If all call lights or a group of call lights on the master call light modules do not come on, then do these steps:

- (a) Do a QUICK TEST on the CSCP.

- 1) If a maintenance message related to the applicable zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:

- a) Find the maintenance message in the applicable FIM Maintenance Message Index.
- b) Do the specified fault isolation task.
- c) At the applicable passenger seat, lavatory, or crew station, set the call light to the on mode.

NOTE: At the lavatory, the switch in the lavatory activates the call light. To deactivate it, push the call light above the lavatory door.

- d) If the call light comes on, you corrected the fault. Set the call light to the usual mode.
- e) If the call light does not come on, then continue.

- 2) If a maintenance message related to the ZMU or OEU does not show in the Quick Test Results, then continue.

- (b) Do a check of the wiring between circuit breaker C33628 and the applicable zone management unit (SSM 33-25-11) (WDM 33-28-21)

- 1) If you find a problem with the wiring, then do these steps:

- a) Repair the wiring.
- b) At the applicable passenger seat, lavatory, or crew station, set the call light to the on mode.

NOTE: At the lavatory, the switch in the lavatory activates the call light. To deactivate it, push the call light above the lavatory door.

- c) If the call light comes on, you corrected the fault. Set the call light to the usual mode.

- (2) If all call lights on one master call light module do not come on (but other master call light modules operate correctly), then do these steps:

- (a) To replace the master call light module, do this task: Master Call Light Module - Light Assembly Replacement, AMM TASK 33-25-02-960-802.

- 1) If the call light comes on, you corrected the fault. Set the light to the usual mode.
- 2) If the call light does not come on, then continue.

- (b) Do a QUICK TEST on the CSCP.

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- 1) If a maintenance message related to the applicable zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) At the applicable passenger seat, lavatory, or crew station, set the call light to the on mode.

NOTE: At the lavatory, the switch in the lavatory activates the call light. To deactivate it, push the call light above the lavatory door.
 - d) If the call light comes on, you corrected the fault. Set the call light to the usual mode.
- (3) If the call light on a master call light module does not come on (but other call lights on the module come on), then do these steps:
 - (a) To replace the applicable lamp, do this task: Master Call Light Module - Lamp Replacement, AMM TASK 33-25-02-960-801.
 - 1) If the call light comes on, you corrected the fault. Set the light to the usual mode.
 - 2) If the call light does not come on, then continue.
 - (b) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the applicable zone management unit (ZMU) or overhead electronics unit (OEU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) At the applicable passenger seat, lavatory, or crew station, set the call light to the on mode.

NOTE: At the lavatory, the switch in the lavatory activates the call light. To deactivate it, push the call light above the lavatory door.
 - d) If the call light comes on, you corrected the fault. Set the call light to the usual mode.

————— **END OF TASK** —————

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803. Call Light Switch In Lavatory Does Not Turn Off - Fault Isolation

- A. Initial Evaluation**
- B. Fault Isolation Procedure**

————— **END OF TASK** —————

804. Call Light Switch In Lavatory Does Not Turn On - Fault Isolation

- A. Initial Evaluation**
- B. Fault Isolation Procedure**

————— **END OF TASK** —————

805. Call Light Outside Lavatory Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) In the lavatory, set the call light switch to the on mode, and then push the call light above the lavatory door to the off mode.
 - (a) If the call light does not go off, then do the Fault Isolation Procedure below.
 - (b) If the call light goes off, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) If the call light does not go off, then do these steps:
 - (a) Replace the call light that does not go off (WDM 33-26-11.
 - (b) If the call light goes off, you corrected the fault. Push the call light above the lavatory door to the off mode.

————— **END OF TASK** —————

806. Call Light Outside Lavatory Does Not Turn On - Fault Isolation

- A. Initial Evaluation**
- B. Fault Isolation Procedure**

————— **END OF TASK** —————

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801. Lavatory Light Does Not Turn Off - Fault Isolation

- A. Initial Evaluation**
- B. Fault Isolation Procedure**

————— **END OF TASK** —————

802. Lavatory Light Does Not Turn On - Fault Isolation

- A. Initial Evaluation**
- B. Fault Isolation Procedure**

————— **END OF TASK** —————

803. Lavatory Lock-Door Sign Does Not Turn Off - Fault Isolation

- A. Initial Evaluation**
- B. Fault Isolation Procedure**

————— **END OF TASK** —————

804. Lavatory Lock-Door Sign Does Not Turn On - Fault Isolation

- A. Initial Evaluation**
- B. Fault Isolation Procedure**

————— **END OF TASK** —————

805. Lavatory-Occupied Sign Does Not Turn Off - Fault Isolation

- A. Initial Evaluation**
 - (1) Set the lavatory door switch to the locked position, and then to the unlocked position.
 - (a) If LAVATORY or OCCUPIED continue to show on the signs, then do the Fault Isolation Procedure below.
 - (b) If LAVATORY or OCCUPIED do not show on the signs, then there was an intermittent fault. Set the signs to their usual mode.
- B. Fault Isolation Procedure**
 - (1) If the lavatory-occupied sign does not turn off, then do this step:
 - (a) Replace the lavatory door switch (WDM 33-26-11).
 - (b) Set the lavatory door switch to the locked position, and then to the unlocked position.
 - (c) If LAVATORY or OCCUPIED sign in the lavatory goes off, you corrected the fault.

————— **END OF TASK** —————

806. Lavatory-Occupied Sign Does Not Turn On - Fault Isolation

- A. Initial Evaluation**
- B. Fault Isolation Procedure**

————— **END OF TASK** —————

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801. Galley (Ceiling) Light Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) At each galley, set the switches for the galley lights installed in the ceiling to the on or bright mode, and then to the off mode.

NOTE: Use the switch with the bright mode to operate the fluorescent galley lights. Use the switch with the on mode to operate the incandescent galley lights.

- (a) If a galley light does not go off, then do the Fault Isolation Procedure below.
(b) If all galley lights go off, then there was an intermittent fault. Set the switches to their usual mode.

B. Fault Isolation Procedure

———— **END OF TASK** ————

802. Galley (Ceiling) Light Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) At each galley, set the switches for the galley lights in the ceiling to the bright or on mode.

NOTE: Use the switch with the bright mode to operate the fluorescent galley lights. Use the switch with the on mode to operate the incandescent galley lights.

- (a) If a galley light does not come on, then do the Fault Isolation Procedure below.
(b) If all galley lights come on, then there was an intermittent fault. Set the switches for the galley lights to their usual mode.

B. Fault Isolation Procedure

———— **END OF TASK** ————

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801. Call Light Above Passenger Seats Does Not Turn Off - Fault Isolation

A. Initial Evaluation

- (1) Set the power control switch in the purser station to the on mode.
- (2) At the cabin system control panel (CSCP), set the call lights above the passenger seats to the on mode, and then to the off mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

- (a) If all or a group of call lights do not go off, then do the Fault Isolation Procedure below.
- (b) If the call light goes off, then do this test:
 - 1) At the passenger seat, set the call light to the on mode, then to the off mode.
 - 2) If the call light does not go off, then do the Fault Isolation Procedure below.
 - 3) If the call light goes off, then there was an intermittent fault.
 - a) Set the power control switch in the purser station to the usual mode.

B. Fault Isolation Procedure

- (1) Do a QUICK TEST on the CSCP.
 - (a) If a maintenance message related to the zone management unit (ZMU), overhead electronic unit (OEU), seat electronic unit (SEU), or passenger control unit (PCU) shows in the Quick Test Fault Results, then do these steps:
 - 1) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - 3) At the passenger seat, set the call light to the on mode, and then to the off mode.
 - 4) If the call light goes off, you corrected the fault.
 - a) Set the power control switch in the purser station to the usual mode.
 - 5) If the call light does not go off, then continue.
 - (b) If a maintenance message related to the zone management unit (ZMU), overhead electronic unit (OEU), seat electronic unit (SEU), or passenger control unit (PCU) does not show in the Quick Test Fault Results, then continue.
- (2) Refer to the troubleshooting section of the vendor manual for the in-flight entertainment system.
 - (a) Repair the in-flight entertainment system, as given in the vendor manual.
 - (b) At the passenger seat, set the call light to the on mode, and then to the off mode.
 - (c) If the call light goes off, you corrected the fault.
 - 1) Set the power control switch in the purser station to the usual mode.

————— END OF TASK —————

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802. Call Light Above Passenger Seat Does Not Turn On - Fault Isolation

A. Initial Evaluation

- (1) Set the power control switch in the purser station to the on mode.
- (2) At the cabin system control panel (CSCP), set the call lights to the on mode.

NOTE: Use the cabin maintenance menus. On the main menu, touch CABIN TESTS. When the screen changes, touch LAMP TESTS. On the lamp test menu, make the applicable selection.

- (a) If all call lights do not come on, then do the Fault Isolation Procedure below.
- (b) If the call light comes on, set the lights to the off mode, then do this test.
 - 1) At the passenger seat, set the call light to the on mode.
 - 2) If the call light does not come on, then do the Fault Isolation Procedure below.
 - 3) If the call light comes on, then there was an intermittent fault. Set the call light to the usual mode.
 - a) Set the power control switch in the purser station to the usual mode.

B. Fault Isolation Procedure

- (1) If one or more (but not all) call lights in the airplane zone do not come on, then do these steps:

NOTE: Use the table in SSM 33-28-11 to identify the call lights installed in each zone.

- (a) Do this task: Passenger Call Light - Lamp Replacement, AMM TASK 33-28-00-960-801.
 - 1) If the call light comes on, you corrected the fault. Set the call lights to the usual mode.
 - 2) If the call light does not come on, then continue.
- (b) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU), overhead electronics unit (OEU), seat electronics unit (SEU), or passenger control unit (PCU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) At the passenger seat, set the call light to the on mode.
 - d) If the call light comes on, you corrected the fault. Set the call light to the usual mode.
- (2) If all call lights do not come on, then do these steps:
 - (a) Do a QUICK TEST on the CSCP.
 - 1) If a maintenance message related to the zone management unit (ZMU), overhead electronics unit (OEU), seat electronics unit (SEU), or passenger control unit (PCU) shows in the Quick Test Fault Results, then do these steps:
 - a) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - b) Do the specified fault isolation task.
 - c) At the passenger seat, set the call light to the on mode.
 - d) If the call light comes on, you corrected the fault. Set the call light to the usual mode.

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- e) Set the power control switch in the purser station to the usual mode if you corrected the fault.
- f) If the call light does not come on, then continue.
- 2) If a maintenance message related to the zone management unit (ZMU), overhead electronics unit (OEU), seat electronics unit (SEU), or passenger control unit (PCU) does not show in the Quick Test Fault Results, then continue.
- (b) Refer to the troubleshooting section of the vendor manual for the in-flight entertainment system.
 - 1) Repair the in-flight entertainment system, as given in the vendor manual.
 - 2) At the passenger seat, set the call light to the on mode.
 - 3) If the call light comes on, you corrected the fault. Set the light to the usual mode.
 - a) Set the power control switch in the purser station to the usual mode.

————— **END OF TASK** —————

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802. Wing Illumination Light Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the switch for the wing illumination lights to the on mode.
 - (a) Look for maintenance messages related to the wing illumination lights. They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the wing illumination lights shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the wing illumination lights does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the wing illumination lights.
 - 2) If the lights do not come on, then do the Fault Isolation Procedure below.
 - 3) If the lights come on, then there was an intermittent fault. Set the switch to the off mode.

B. Fault Isolation Procedure

- (1) Replace the lamp in the applicable wing illumination light. To replace it, do this task: Wing Illumination Light - Lamp Replacement, AMM TASK 33-41-00-960-801.

LIGHT
Left L33111
Right L33211

- (a) If the light comes on, you corrected the fault. Set the switch to the off mode.
 - (b) If the light does not come on, then continue.
- (2) Replace the transformer on the applicable wing illumination light. To replace the it, do this task: Wing Illumination Light - Transformer Replacement, AMM TASK 33-41-00-960-802.
 - (a) If the light comes on, you corrected the fault. Set the switch to the off mode.
 - (b) If the light does not come on, then continue.
- (3) If none of the lights come on, do a check of the wiring between the switch and the right overhead panel cardfile (WDM 33-41-11).
 - (a) Do a wiring check between these pins of connector M33413DS7 at the switch on the anti-ice module assembly and connector DM23217K at the right overhead panel cardfile on the P61 panel.

D33413DS7

pin 4
pin 5
pin 6

DM23217K

pin B1
pin B2
pin B3

- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the lights come on, you corrected the fault. Set the switch to the off mode.

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- (c) If you do not find a problem with the wiring, then continue.
- (4) Do a check of the wiring between splice SM4121 at the Ground Service Panel, P320, and the applicable wing illumination light (WDM 33-41-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the switch to the off mode.

— END OF TASK —

803. Wing Illumination Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43105.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the wing illumination lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the wing illumination lights, M33413S7 (WDM 33-41-11).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the wing illumination lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the wing illumination lights to the right overhead panel card file:
 - (a) Remove the anti-ice module, M33413 (WDM 33-41-11).
 - (b) Disconnect connector DM33413A from the switch, M33413S7.
 - (c) Disconnect connector DM23217K from the right overhead card file, M23217.
 - (d) Do a wiring check between these pins of connector DM33413A at the pilots overhead panel, P5, and connector DM23217K, at the maintenance panel, P61 (WDM 33-41-11):

DM33413A

pin 26
pin 28
pin 27

DM23217K

pin B1
pin B2
pin B3

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- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33413A.
 - 3) Re-connect connector DM23217K.
 - 4) Re-install the anti-ice module, M33413.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the wing illumination lights to the on mode, and then to the off mode.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector DM33413A to the switch, M33413S7.
- (h) Re-install the anti-ice module, M33413.
- (3) Replace the right overhead panel card file chassis, M23217 at the maintenance panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the wing illumination lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

————— **END OF TASK** —————

804. Relay (WING ILLUM LTS CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-41112.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the wing illumination lights to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the wing illumination lights control relay, K33036 (WDM 33-41-11).
 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the wing illumination lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.

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- (2) Do this check for power to relay, K33036 (WDM 33-41-11):
- (a) Remove relay K33036.
 - (b) Do a check for 28V DC from pin X1 of connector DK33036 on the Ground Service Panel, P320, to structure ground.
 - 1) If 28V DC is not present at pin X1, then do these steps:
 - a) Repair the wiring or replace the circuit breaker (WDM 33-41-11).
 - b) Re-install relay K33036.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the wing illumination lights to the off mode.
 - 2) If 28V DC is present, then continue.
 - (c) Do a check for 115V AC from pin A2 of connector DK33036 on the ground service panel to structure ground.
 - 1) If 115V AC is not present at pin A2, then do these steps:
 - a) Repair the wiring or replace the circuit breaker (WDM 33-41-11).
 - b) Re-install relay K33036.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the wing illumination lights to the off mode.
 - (d) If 115V AC is present, then continue.
- (3) Do a check of the SIU 2 module, M24513 on the P310 Power Management Panel.
- This is the task:
- Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
- (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the wing illumination lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (4) Do this check of the wiring between the relay K33036 and the SIU 2 Module M24513, on the Standby Power Management Panel, P310:
- (a) Remove relay K33036 (WDM 33-41-11).
 - (b) Remove connector DM24513B from SIU 2, M24513.
 - (c) Do a wiring check between these pins of connector DK33036 at the Ground Service Panel, P320, and connector DM24513B at the Standby Power Management Panel, P310:
- | | |
|------------------|-----------------|
| DK33036 | DM24513B |
| pin X2 | pin 15 |
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33036 (WDM 33-41-11).
 - 3) Re-install connector DM24513B to SIU 2, M24513
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the wing illumination lights to the off mode.
 - (e) If you do not find a problem with the wiring, then continue.
- (5) Do this check of the wiring between the relay K33036 and the SIU 2 Module M24513, on the Standby Power Management Panel, P310:

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- (a) Remove relay K33036 (WDM 33-41-11).
- (b) Remove connector DM24513C from SIU 2, M24513.
- (c) Using an ohmmeter, measure 47K ohms between these pins of connectors DK33036 at the Ground Service Panel, P320, and connector DM24513C on the Standby Power Management Panel, P310 (WDM 33-41-11):

DK33036	DM24513C
pin A1	pin 39

- (d) If you measured an open circuit, replace the 47K ohm resistor on the Ground Service panel, P320 or repair the wiring between it and either of the pins indicated in the table.
 - 1) Re-install relay K33036 (WDM 33-41-11).
 - 2) Re-install connector DM24513C to SIU 2, M24513.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the wing illumination lights to the off mode.

———— **END OF TASK** ————

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805. Left Landing Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43480.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the left landing light first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the left landing light, M33412S4 (WDM 33-42-11).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the left landing light first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the left landing light to the left overhead panel card file:
 - (a) Remove the passenger signs module, M33412 (WDM 33-42-11).
 - (b) Disconnect connector DM33412B from the switches, M33412S4 and M33412S5.
 - (c) Disconnect connector DM23117H from the left overhead card file, M23117.
 - (d) Do a wiring check between these pins of connector DM33412B at pilots overhead panel, P5, and connector DM23117H, at the maintenance panel, P61 (WDM 33-42-11):

DM33412B

pin 8	.....	pin B1
pin 9	.....	pin B2
pin 2	.....	pin B3

DM23117H

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33412B.
 - 3) Re-connect connector DM23117H.
 - 4) Re-install the passenger signs module, M33412.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the left landing light first to the on mode, and then to the off mode.

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- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (f) If you do not find a problem with the wiring, then continue.
 - (g) Re-connect connector DM33412B to the switches, M33412S4 and M33412S5.
 - (h) Re-install the passenger signs module, M33412.
- (3) Replace the left overhead panel card file chassis, M23117 at the maintenance panel, P61.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the left landing light first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

— END OF TASK —

806. Left Runway Turnoff Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43580.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the left runway turnoff light first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the left runway turnoff light, M33413S9 (WDM 33-42-13).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the left runway turnoff light first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the left runway turnoff light to the left overhead panel card file:
 - (a) Remove the anti-ice module, M33413 (WDM 33-42-13).
 - (b) Disconnect connector DM33413B from the switches, M33413S9 and M33413S11.

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- (c) Disconnect connector DM23117J from the left overhead card file, M23117.
- (d) Do a wiring check between these pins of connector DM33413B at pilots overhead panel, P5, and connector DM23117J, at the maintenance panel, P61 (WDM 33-42-13):

DM33413B	DM23117J
pin 6	pin B5
pin 17	pin B6
pin 18	pin B7

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33413B.
 - 3) Re-connect connector DM23117J.
 - 4) Re-install the anti-ice module, M33413.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the left runway turnoff light first to the on mode, and then to the off mode.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (f) If you do not find a problem with the wiring, then continue.
 - (g) Re-connect connector DM33413B to the switches, M33413S9 and M33413S11.
 - (h) Re-install the anti-ice module, M33413.
- (3) Replace the left overhead panel card file chassis, M23117 at the maintenance panel, P61.
- These are the tasks:
- Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the left runway turnoff light first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

————— **END OF TASK** —————

807. Nose Landing Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43680.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the nose landing lights first to the on mode, and then to the off mode.

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- (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the nose landing lights, M33412S5 (WDM 33-42-11).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the nose landing lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the nose landing lights to the left overhead panel card file:
 - (a) Remove the passenger signs module, M33412 (WDM 33-42-11).
 - (b) Disconnect connector DM33412B from the switches, M33412S5 and M33412S4.
 - (c) Disconnect connector DM23117H from the left overhead card file, M23117.
 - (d) Do a wiring check between these pins of connector DM33412B at pilots overhead panel, P5, and connector DM23117H, at the maintenance panel, P61 (WDM 33-42-11):

DM33412B	DM23117H
pin 41	pin B4
pin 42	pin B5
pin 23	pin B6

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33412B.
 - 3) Re-connect connector DM23117H.
 - 4) Re-install the passenger signs module, M33412.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the nose landing lights first to the on mode, and then to the off mode.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (f) If you do not find a problem with the wiring, then continue.
 - (g) Re-connect connector DM33412B to the switches, M33412S5 and M33412S4.
 - (h) Re-install the passenger signs module, M33412.
 - (3) Replace the left overhead panel card file chassis, M23117 at the maintenance panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

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- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the nose landing lights first to the on mode, and then to the off mode.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

———— **END OF TASK** ————

808. Right Landing Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43840.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the right landing light first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the right landing light, M33412S6 (WDM 33-42-11).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the right landing light first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the right landing light to the right overhead panel card file:
 - (a) Remove the passenger signs module, M33412 (WDM 33-42-11).
 - (b) Disconnect connector DM33412A from the switch, M33412S6.
 - (c) Disconnect connector DM23217H from the right overhead card file, M23217.
 - (d) Do a wiring check between these pins of connector DM33412A at pilots overhead panel, P5, and connector DM23217H, at the maintenance panel, P61 (WDM 33-42-11):

DM33412A

pin 26
pin 27
pin 14

DM23217H

pin B4
pin B5
pin B6

- (e) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
- 2) Re-connect connector DM33412A.
- 3) Re-connect connector DM23217H.
- 4) Re-install the passenger signs module, M33412.
- 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the right landing light first to the on mode, and then to the off mode.
- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the ON and OFF positions, you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector DM33412A to the switch, M33412S6.
- (h) Re-install the passenger signs module, M33412.
- (3) Replace the right overhead panel card file chassis, M23217 at the maintenance panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the right landing light first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

END OF TASK

809. Right Runway Turnoff Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43930.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the right runway turnoff light first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the right runway turnoff light, M33413S10 (WDM 33-42-13).
 - (a) Monitor the maintenance message on the MAT while you do these steps:

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- 1) Set the switch for the right runway turnoff light first to the on mode, and then to the off mode.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the right runway turnoff light to the right overhead panel card file:
 - (a) Remove the anti-ice module, M33413 (WDM 33-42-13).
 - (b) Disconnect connector DM33413A from the switch, M33413S10.
 - (c) Disconnect connector DM23217K from the right overhead card file, M23217.
 - (d) Do a wiring check between these pins of connector DM33413A at pilots overhead panel, P5, and connector DM23217K, at the maintenance panel, P61 (WDM 33-42-12):

DM33413A

pin 15
pin 16
pin 5

DM23217K

pin B4
pin B5
pin B6

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33413A.
 - 3) Re-connect connector DM23217K.
 - 4) Re-install the anti-ice module, M33413.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the right runway turnoff light first to the on mode, and then to the off mode.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector DM33413A to the switch, M33413S10.
- (h) Re-install the anti-ice module, M33413.

- (3) Replace the right overhead panel card file chassis, M23217 at the maintenance panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the right runway turnoff light first to the on mode, and then to the off mode.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

————— **END OF TASK** —————

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810. Taxi Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43970.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the taxi lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the taxi lights, M33413S11 (WDM 33-42-12).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the taxi lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the taxi lights to the left overhead panel card file:
 - (a) Remove the anti-ice module, M33413 (WDM 33-42-12).
 - (b) Disconnect connector DM33413B from the switches, M33413S11 and M33413S9.
 - (c) Disconnect connector DM23117J from the left overhead card file, M23117.
 - (d) Do a wiring check between these pins of connector DM33413B at pilots overhead panel, P5, and connector DM23117J, at the maintenance panel, P61 (WDM 33-42-13):

DM33413B	DM23117J
pin 5	pin A1
pin 15	pin A2
pin 16	pin A4

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33413B.
 - 3) Re-connect connector DM23117J.
 - 4) Re-install the anti-ice module, M33413.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the taxi lights first to the on mode, and then to the off mode.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

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- (f) If you do not find a problem with the wiring, then continue.
 - (g) Re-connect connector DM33413B to the switches, M33413S11 and M33413S9.
 - (h) Re-install the anti-ice module, M33413.
- (3) Replace the left overhead panel card file chassis, M23117 at the maintenance panel, P61.
- These are the tasks:
- Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the taxi lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

————— **END OF TASK** —————

816. Runway Turnoff Light Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the applicable switch for the runway turnoff light to the on mode.
 - (a) Look for maintenance messages related to the runway turnoff lights. They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the runway turnoff lights shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the runway turnoff lights does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the runway turnoff lights.
 - 2) If the lights do not come on, then do the Fault Isolation Procedure below.
 - 3) If the lights come on, then there was an intermittent fault. Set the applicable switch to the off mode.

B. Fault Isolation Procedure

- (1) Replace the lamp in the applicable runway turnoff light. To replace it, do this task: Runway Turnoff Light - Lamp Replacement, AMM TASK 33-42-04-960-801.

LIGHT	TRANSFORMER
Left L33117	T33104
Right L33217	T33204

- (a) If the light comes on, you corrected the fault. Set the applicable switch to the off mode.
 - (b) If the light does not come on, then continue.
- (2) Replace the applicable transformer. To replace it, do this task: Runway Turnoff Light - Transformer Replacement, AMM TASK 33-42-04-960-802.
- (a) If the light comes on, you corrected the fault. Set the applicable switch to the off mode.

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- (b) If the light does not come on, then continue.
- (3) If the left runway turnoff light does not come on, do a check of the wiring between connector 47K on terminal block TB412 at the Left Power Management Panel, P110, and the left runway turnoff light (WDM 33-42-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the applicable switch to the off mode.
- (4) If the right runway turnoff light does not come on, do a check of the wiring between connector 47K on terminal block TB406 at the Right Power Management Panel, P210, and the right runway turnoff light (WDM 33-42-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the applicable switch to the off mode.

————— **END OF TASK** —————

817. Wing Landing Light Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the applicable switch for the landing lights to the on mode.
 - (a) Look for maintenance messages related to the wing landing lights. They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the wing landing lights shows on the MAT while the switch is in the on mode then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the wing landing lights does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the wing landing lights.
 - 2) If the lights do not come on, then do the applicable Fault Isolation Procedure below.
 - 3) If the lights do not go off, then do the applicable Fault Isolation Procedure below.

B. Fault Isolation Procedure - Landing Light Does Not Come On

- (1) Replace the lamp in the applicable wing landing light. To replace it, do this task: Wing Landing Light - Lamp Replacement, AMM TASK 33-42-02-960-801.

LIGHT	TRANSFORMER
Left L33115	T33102
Right L33215	T33202

- (a) If the light comes on, you corrected the fault. Set the applicable switch to the off mode.
- (b) If the light does not come on, then continue.

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- (2) Replace the applicable transformer. To replace it, do this task: Wing Landing Light - Transformer Replacement, AMM TASK 33-42-960-802.
 - (a) If the light comes on, you corrected the fault. Set the applicable switch to the off mode.
 - (b) If the light does not come on, then continue.
- (3) If the left wing landing light does not come on, do a check of the wiring between relay K33101 at the Left Power Management Panel, P110, and the light (WDM 33-42-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the applicable switch to the off mode.
- (4) If the right wing landing light does not come on, do a check of the wiring between relay K33201 at the Right Power Management Panel, P210, and the light (WDM 33-42-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the applicable switch to the off mode.

C. Fault Isolation Procedure - Landing Light Does Not Go Off

- (1) Make sure the airplane air/ground system is in the ground mode.
 - (a) If the light stays off, you corrected the fault.
- (2) Open the applicable circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	26	C33601	L WG LDG LT CTRL

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	8	C33630	R WG LDG LT CTRL

Make sure that these circuit breakers are closed:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	15	C33473	L WG LDG LT

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	9	C33474	R WG LDG LT

- (3) Set the applicable landing light switch to the OFF position.
 - (a) If the landing light stays on, then replace the applicable landing light control relay.

LIGHT	Relay
Left L33115	K33034
Right L33215	K33035

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- (b) If the light goes off, then continue.
- (4) Remove the applicable safety tags and close these circuit breakers:
- Left Power Management Panel, P110**
- | <u>Row</u> | <u>Col</u> | <u>Number</u> | <u>Name</u> |
|------------|------------|---------------|------------------|
| N | 26 | C33601 | L WG LDG LT CTRL |
- Right Power Management Panel, P210**
- | <u>Row</u> | <u>Col</u> | <u>Number</u> | <u>Name</u> |
|------------|------------|---------------|------------------|
| M | 8 | C33630 | R WG LDG LT CTRL |
- (5) Make sure the applicable landing light switch is in the OFF position.
- (6) If the left landing light stays on, then remove connector, DM23117H, from the Left Overhead Cardfile, M23117 (WDM 33-42-11).
- (a) Examine the pins on connector, DM23117H, for damage or contamination.
 - (b) Check for continuity across pins B2 and B3.
 - (c) If there is continuity, then replace the left landing light switch, S4.
 - (d) If there is no continuity, then remove and re-install CCU, M24502, and SIU 1, M24504, located on the P110 Power Management Panel.
 - (e) If the light stays off, you corrected the fault.
 - (f) If the landing light stays on, then continue.
- (7) If the right landing light stays on, then remove connector, DM23217H, from the Right Overhead Cardfile, M23217 (WDM 33-42-11).
- (a) Examine the pins on connector, DM23217H, for damage or contamination.
 - (b) Check for continuity across pins B5 and B6.
 - (c) If there is continuity, then replace the right landing light switch, S6.
 - (d) If there is no continuity, then remove and re-install CCU, M24506, and SIU 1, M24508, on the P210 Power Management Panel.
 - (e) If the light stays off, you corrected the fault.
 - (f) If the landing light stays on, then continue.
- (8) Replace the applicable Overhead Panel Card File, in the Maintenance Panel, P61.
- (a) Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802
 - (b) Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802
 - (c) If the light stays off, you corrected the fault.
 - (d) If the landing light stays on, then continue.



MAKE SURE YOU REMOVE ELECTRICAL POWER FROM THE ELMS PANELS BEFORE YOU REMOVE COMPONENTS OF THE PANELS. IF YOU DO NOT REMOVE ELECTRICAL POWER, DAMAGE TO EQUIPMENT CAN OCCUR.

- (9) If the landing light stays on, then do a check of the applicable SIU.
- This is the task:
- Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

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LIGHT	SIU
Left L33115	M24504
Right L33215	M24508

- (a) If the light stays off, you corrected the fault.
- (b) If the landing light stays on, then continue.



MAKE SURE YOU REMOVE ELECTRICAL POWER FROM THE ELMS PANELS BEFORE YOU REMOVE COMPONENTS OF THE PANELS. IF YOU DO NOT REMOVE ELECTRICAL POWER, DAMAGE TO EQUIPMENT CAN OCCUR.

- (10) If the landing light stays on, then do a check of the applicable CCU.

This is the task:

Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.

LIGHT	CCU
Left L33115	M24502
Right L33215	M24506

- (a) If the light stays off, you corrected the fault.

————— **END OF TASK** —————

818. Nose Gear Landing Light Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the switch for the nose landing lights to the on mode.
 - (a) Look for maintenance messages related to the nose gear landing lights. They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the nose gear landing lights shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the nose gear landing lights does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the nose gear landing lights.
 - 2) If the lights do not come on, then do the Fault Isolation Procedure below.
 - 3) If the lights come on, then there was an intermittent fault. Set the switch for the nose landing lights to the off mode.

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B. Fault Isolation Procedure

- (1) Replace the lamp in the applicable nose gear landing light. To replace it, do this task: Nose Gear Landing Light - Lamp Replacement, AMM TASK 33-42-01-960-801.

LIGHT	TRANSFORMER
Left L33114	T33103
Right L33214	T33201

- (a) If the light comes on, you corrected the fault. Set the switch for the nose landing lights to the off mode.
 - (b) If the light does not come on, then continue.
- (2) Replace the applicable transformer. To replace it, do this task: Nose Gear Landing Light - Transformer Replacement, AMM TASK 33-42-01-960-802.
 - (a) If the light comes on, you corrected the fault. Set the switch for the nose landing lights to the off mode.
 - (b) If the light does not come on, then continue.
- (3) If the left nose gear landing light does not come on, do a check of the wiring between connector 47K on terminal block TB412 at the Left Power Management Panel, P110, and the light (WDM 33-42-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the switch for the nose landing lights to the off mode.
- (4) If the right nose gear landing light does not come on, do a check of the wiring between connector 47K on terminal block TB406 at the Right Power Management Panel, P210, and the light (WDM 33-42-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the switch for the nose landing lights to the off mode.

————— END OF TASK —————

819. Taxi Light Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the switch for the taxi lights to the on mode.
 - (a) Look for maintenance messages related to the taxi lights. They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the taxi lights shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the taxi lights does not show on the MAT while the switch is in the on mode, then do these steps:

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- 1) Look at the taxi lights.
- 2) If the lights do not come on, then do the Fault Isolation Procedure below.
- 3) If the lights come on, then there was an intermittent fault. Set the switch for the taxi lights to the off mode.

B. Fault Isolation Procedure

- (1) Replace the lamp in the applicable taxi light. To replace it, do this task: Taxi Light - Lamp Replacement, AMM TASK 33-42-03-960-801.

LIGHT	TRANSFORMER
Left L33116	T33105
Right L33216	T33210

- (a) If the light comes on, you corrected the fault. Set the switch for the taxi lights to the off mode.
- (b) If the light does not come on, then continue.
- (2) Replace the applicable transformer. To replace it, do this task: Taxi Light - Transformer Replacement, AMM TASK 33-42-03-960-802.
 - (a) If the light comes on, you corrected the fault. Set the switch for the taxi lights to the off mode.
 - (b) If the light does not come on, then continue.
- (3) If the left taxi light does not come on, do a check of the wiring between relay K33003 at the Left Power Management Panel, P110, and the taxi light (WDM 33-42-12).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the switch for the taxi lights to the off mode.
- (4) If the right taxi light does not come on, do a check of the wiring between connector 47K on the terminal block TB410 at the Left Power Management Panel, P110, and the taxi light (WDM 33-42-12).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the switch for the taxi lights to the off mode.

————— END OF TASK —————

820. Relay (NOSE GEAR R LDG CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-42117.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the Nose Landing lights to the on mode.

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- (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the NLG R LDG LT CTRL relay, K33033 (WDM 33-42-11).
 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (2) Do this check for power to relay, K33033 (WDM 33-42-11):
 - (a) Remove relay K33033.
 - (b) Do a check for 28V DC from pin X1 of connector DK33033 on the Power Management Panel - Right, P210, to structure ground.
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33033.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - 2) If 28V DC is present, then continue.
 - (c) Do a check for 115V AC from pin A1 of connector DK33033 on the P210 panel, to structure ground.
 - 1) If 115V AC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33033.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - 2) If 115V AC is present, re-install relay K33033, then continue.
- (3) Do a check of the SIU 1 module, M24508 on the P210 Power Management Panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (4) Do this check of the wiring between the relay and the SIU 1 module:
 - (a) Remove relay K33033 (WDM 33-41-11).
 - (b) Remove connector DM24508B from SIU 1 module M24508.
 - (c) Do a wiring check between these pins of connector DK33033 on the Power Management Panel, P210, and connector DM24508B on the same panel:

DK33033

pin X2

DM24508B

pin 11

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- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33033 (WDM 33-41-11).
 - 3) Re-connect connector DM24508B to signal SIU 1, M24508.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
- (e) If you do not find a problem with the wiring, then continue.
- (5) Do this check of the wiring between the relay and the SIU 1 Module M24508, on the Standby Power Management Panel, P210:
 - (a) Remove connector DM24508C from SIU 1 module M24508.
 - (b) Using an ohmmeter, measure 18K ohms between these pins of connectors DK33033 on the Power Management panel, P210, and connector DM24508C on the same panel (WDM 33-41-11):

DK33033	DM24508C
pin A2	pin 83

- (c) If you measured an open circuit, replace the 18K ohm resistor on the P210 panel or repair the wiring between it and either of the pins indicated in the table.
 - 1) Re-install relay K33033 (WDM 33-41-11).
 - 2) Re-connect DM24508B and DM24508C to SIU 1 module, M24508.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.

— END OF TASK —

821. Relay (NOSE GEAR L LDG CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46112.

B. This task is for maintenance message 33-46112

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the Nose Landing lights to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the NLG L LDG LT CTRL relay, K33002 (WDM 33-42-11).
 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.

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- (2) Do this check for power to relay, K33002 (WDM 33-42-11):
- (a) Remove relay K33002.
 - (b) Do a check for 28V DC from pin X1 of connector DK33002 on the Power Management Panel - Left, P110, to structure ground.
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33002.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - 2) If 28V DC is present, then continue.
 - (c) Do a check for 115V AC from pin A2 of connector DK33002 on the P110 panel, to structure ground.
 - 1) If 115V AC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33002.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - 2) If 115V AC is present, re-install relay K33002, then continue.
- (3) Do a check of the SIU 1 module, M24504 on the P110 Power Management Panel.
- This is the task:
- Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
- (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (4) Do this check of the wiring between the relay and the SIU 1 module:
- (a) Remove relay K33002 (WDM 33-41-11).
 - (b) Remove connector DM24504B from SIU 1 module M24504.
 - (c) Do a wiring check between these pins of connector DK33002 on the Power Management Panel, P110, and connector DM24504B on the same panel:
- | | |
|------------------|-----------------|
| DK33002 | DM24504B |
| pin X2 | pin 11 |
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33002 (WDM 33-41-11).
 - 3) Re-connect connector DM24504B to signal SIU 1, M24504.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.
 - (e) If you do not find a problem with the wiring, then continue.
- (5) Do this check of the wiring between the relay and the SIU 1 Module M24504, on the Standby Power Management Panel, P110:

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- (a) Remove connector DM24504C from SIU 1 module M24504.
- (b) Using an ohmmeter, measure 18K ohms between these pins of connectors DK33002 on the Power Management panel, P110, and connector DM24504C on the same panel (WDM 33-41-11):

DK33002	DM24504C
pin A2	pin 90

- (c) If you measured an open circuit, replace the 18K ohm resistor on the P210 panel or repair the wiring between it and either of the pins indicated in the table.
 - 1) Re-install relay K33002 (WDM 33-41-11).
 - 2) Re-connect DM24504B and DM24504C to SIU 1 module, M24504.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Nose Landing lights to the off mode.

———— END OF TASK ————

822. Relay (R WING LNDG LIGHTS CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-42118.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the Right Landing lights to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the R WG LDG LT CTRL relay, K33035 (WDM 33-42-11).
 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (2) Do this check for power to relay, K33035 (WDM 33-42-11):
 - (a) Remove relay K33035.
 - (b) Do a check for 28V DC from pin X1 of connector DK33035 on the Power Management Panel - Right, P210, to structure ground.
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33035.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.

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- 2) If 28V DC is present, then continue.
- (c) Do a check for 115V AC from pin B1 of connector DK33035 on the P210 panel, to structure ground.
 - 1) If 115V AC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33035.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - 2) If 115V AC is present, re-install relay K33035 and continue.
- (3) Do a check of the SIU 1 module, M24508 on the P210 Power Management Panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (4) Replace the monitor card, M24519 on the P210 Power Management Panel.

These are the tasks:

Monitor Card - Removal, AMM TASK 24-09-00-000-826,

Monitor Card - Installation, AMM TASK 24-09-00-400-824.

 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (5) Do this check of the wiring between the relay and the SIU 1 module:
 - (a) Remove relay K33035 (WDM 33-41-11).
 - (b) Remove connector DM24508B from SIU 1 module M24508.
 - (c) Do a wiring check between these pins of connector DK33035 on the Power Management Panel, P210, and connector DM24508B on the same panel:

DK33035	DM24508B
pin X2	pin 12

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DK33035	DM24508B
pin X2	pin 43

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- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) If ground is broken or wire continuity is open, do these steps:
 - a) Remove the wiring from the Diode's pin C and install in the spare Diode's pin D.
 - b) Remove the wiring from the Diode's pin A and install in the spare Diode's pin B.

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- 3) Re-install relay K33035 (WDM 33-41-11).
 - 4) Re-connect DM24508B to signal SIU 1, M24508.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
- (e) If you do not find a problem with the wiring, then continue.
- (6) Do this check of the wiring between the relay and the SIU 1 Module M24508, on the Power Management Panel, P210:
- (a) Remove connector DM24508C from SIU 1 module M24508.
 - (b) Using an ohmmeter, measure 18K ohms between these pins of connectors DK33035 on the Power Management panel, P210, and connector DM24508C on the same panel (WDM 33-41-11):
- | DK33035 | DM24508C |
|------------------|----------|
| pin B2 | pin 84 |
- (c) If you measured an open circuit, replace the 18K ohm resistor on the P210 panel or repair the wiring between it and either of the pins indicated in the table.
- 1) Re-install relay K33035 (WDM 33-41-11).
 - 2) Re-connect DM24508B and DM24508C to SIU 1 module, M24508.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.

————— **END OF TASK** —————

823. Relay (L WING LNDG LIGHTS CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46115.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the Left Landing lights to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

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C. Fault Isolation Procedure

- (1) Replace the L WG LDG LT CTRL relay, K33034 (WDM 33-42-11).
 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (2) Do this check for power to relay, K33034 (WDM 33-42-11):
 - (a) Remove relay K33034.
 - (b) Do a check for 28V DC from pin X1 of connector DK33034 on the Power Management Panel - Left, P110, to structure ground.
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33034.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Left Landing lights to the off mode.
 - 2) If 28V DC is present, then continue.
 - (c) Do a check for 115V AC from pin B1 of connector DK33034 on the P110 panel, to structure ground.
 - 1) If 115V AC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33034.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - 2) If 115V AC is present, re-install relay K33034 and continue.
- (3) Do a check of the SIU 1 module, M24504 on the P110 Power Management Panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (4) Replace the monintor card, M24518 on the P110 Power Management. Panel. These are the tasks:

Monitor Card - Removal, AMM TASK 24-09-00-000-826,

Monitor Card - Installation, AMM TASK 24-09-00-400-824.

 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (5) Do this check of the wiring between the relay and the SIU 1 module:
 - (a) Remove relay K33034 (WDM 33-41-11).
 - (b) Remove connector DM24504B from SIU 1 module M24504.
 - (c) Do a wiring check between these pins of connector DK33034 on the Power Management Panel, P110, and connector DM24504B on the same panel:

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DK33034

pin X2 pin 20

DM24504B

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33034 (WDM 33-41-11).
 - 3) Re-connect DM24504B to signal SIU 1, M24504.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
- (e) If you do not find a problem with the wiring, then continue.
- (6) Do this check of the wiring between the relay and the SIU 1 Module M24504, on the Power Management Panel - Left, P110:
 - (a) Remove connector DM24504C from SIU 1 module M24504.
 - (b) Using an ohmmeter, measure 18K ohms between these pins of connectors DK33034 on the Power Management panel, P110, and connector DM24504C on the same panel (WDM 33-41-11):

DK33034

pin B2 pin 91

DM24504C

- (c) If you measured an open circuit, replace the 18K ohm resistor on the P110 panel or repair the wiring between it and either of the pins indicated in the table.
 - 1) Re-install relay K33034 (WDM 33-41-11).
 - 2) Re-connect DM24504B and DM24504C to signal SIU 1, M24504.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.

END OF TASK

824. Relay (R LNDG LT DIMMING) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-42119.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the Right Landing lights to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

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C. Fault Isolation Procedure

- (1) Replace the R LNDG LT DIMMING relay, K33201 (WDM 33-42-11).
 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (2) Do this check for power to relay, K33201 (WDM 33-42-11):
 - (a) Remove relay K33201.
 - (b) Do a check for 28V DC from pin X1 of connector DK33201 on the Power Management Panel - Right, P210, to structure ground.
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33201.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - 2) If 28V DC is present, then continue.
 - (c) Do a check for 28V DC from pin B2 of connector DK33201 on the P210 panel, to structure ground.
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33201.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - 2) If 28V DC is present, re-install relay K33201 and continue.
- (3) Do a check of the SIU 1 module, M24508 on the P210 Power Management Panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (4) Do this check of the wiring between the relay and the SIU 1 module:
 - (a) Remove relay K33201 (WDM 33-41-11).
 - (b) Remove connectors DM24508A and DM24508B from SIU 1 module M24508.
 - (c) Do a wiring check between these pins of connector DK33201 on the Power Management Panel, P210, and connectors DM24508A and DM24508B on the same panel:

DK33201	DM24508B
pin X2	pin 13
DK33201	DM24508A
pin B1	pin 16
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Re-install relay K33201 (WDM 33-41-11).
- 3) Re-connect connectors DM24508A and DM24508B to SIU 1 module, M24508.
- 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.

———— **END OF TASK** ————

825. Relay (L LNDG LT DIMMING) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46118.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the Left Landing lights to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the L LNDG LT DIMMING relay, K33101 (WDM 33-42-11).
 - (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (2) Do this check for power to relay, K33101 (WDM 33-42-11):
 - (a) Remove relay K33101.
 - (b) Do a check for 28V DC from pin X1 of connector DK33101 on the Power Management Panel - Right, P110, to structure ground.
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33101.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - 2) If 28V DC is present, then continue.
 - (c) Do a check for 28V DC from pin B2 of connector DK33101 on the P110 panel, to structure ground.
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33101.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
 - 2) If 28V DC is present, re-install relay K33101 and continue.

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- (3) Do a check of the SIU 1 module, M24504 on the P110 Power Management Panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- (a) If the MAT shows NOT ACTIVE, you corrected the fault. Set the switch for the Right Landing lights to the off mode.
- (b) If the MAT shows ACTIVE or LATCHED, then continue.
- (4) Do this check of the wiring between the relay and the SIU 1 module:
 - (a) Remove relay K33101 (WDM 33-41-11).
 - (b) Remove connectors DM24504A and DM24504B from SIU 1 module M24504.
 - (c) Do a wiring check between these pins of connector DK33101 on the Power Management Panel, P210, and connectors DM24504A and DM24504B on the same panel:

DK33101	DM24504B
pin X2	pin 19

DK33101	DM24504A
pin B1	pin 13

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33101 (WDM 33-41-11).
 - 3) Re-connect connectors DM24504A and DM24504B to SIU 1 module, M24504.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Right Landing lights to the off mode.

———— END OF TASK ————

826. Relay (R RUNWAY TURNOFF LT CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-42124.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the right runway turnoff light to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the right runway turnoff light control relay, K33041 (WDM 33-42-13).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.

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- (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for power to relay, K33041 (WDM 33-42-13) :
 - (a) Remove relay K33041.
 - (b) Do a check for 28 VDC from pin X1 of connector DK33041 on the Right Power Management Panel, P210, to structure ground (WDM 33-42-13).
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33041.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.
 - 2) If 28V DC is present, then continue.
 - (c) Do a check for 115V AC from pin A2 of DK33041 on the Right Power Management Panel, P210, to structure ground (WDM 33-42-13)
 - 1) If 115V AC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33041.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.
 - 2) If 115V AC is present, re-install relay K33041 and then continue.
- (3) Do a check of the SIU 2 module, M24509 in the Right Power Management Panel, P210.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring between the relay and the SIU 2 module, M24509:
 - (a) Remove relay K33041 (WDM 33-42-13).
 - (b) Remove connectors DM24509B and DM24509C from SIU 2 module M24509.
 - (c) Do a wiring check between these pins of connector DK33041 and connectors DM24509B and DM24509C at the Right Power Management Panel, P210:

DK33041	DM24509B
pin X2	pin 11

DK33041	DM24509C
pin A1	pin 89

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33041 (WDM 33-42-13).
 - 3) Re-connect connectors DM24509B and DM24509C to SIU 2 module, M24509.

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- 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.

————— **END OF TASK** —————

827. Relay (L RUNWAY TURNOFF LT CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46117.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the Left runway turnoff light to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the right runway turnoff light control relay, K33042 (WDM 33-42-13).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for power to relay, K33042 (WDM 33-42-13) :
 - (a) Remove relay K33042.
 - (b) Do a check for 28 VDC from pin X1 of connector DK33042 on the Left Power Management Panel, P110, to structure ground (WDM 33-42-13).
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33042.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.
 - 2) If 28V DC is present, then continue.
 - (c) Do a check for 115V AC from pin A2 of DK33042 on the Left Power Management Panel, P110, to structure ground (WDM 33-42-13).
 - 1) If 115V AC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33042.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.
 - 2) If 115V AC is present, re-install relay K33042 and then continue.
- (3) Do a check of the SIU 2 module, M24505 in the Left Power Management Panel, P110.
This is the task:

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- (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.
- (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring between the relay and the SIU 2 module, M24505:
 - (a) Remove relay K33042 (WDM 33-42-13).
 - (b) Remove connectors DM24505B and DM24505C from SIU 2 module M24505.
 - (c) Do a wiring check between these pins of connector DK33042 and connectors DM24505B and DM24505C at the Left Power Management Panel, P110:

DK33042	DM24505B
pin X2	pin 13

DK33042	DM24505C
pin A1	pin 95

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33042 (WDM 33-42-13).
 - 3) Re-connect connectors DM24505B and DM24505C to SIU 2 module, M24505.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the right runway turnoff light to the off mode.

————— **END OF TASK** —————

828. Relay (TAXI LT CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46113.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the taxi lights to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch for the taxi lights to the off mode.

C. Fault Isolation Procedure

- (1) Replace the taxi light control relay, K33003 (WDM 33-42-12).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the taxi lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.

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- (2) Do this check for power to relay K33003 (WDM 33-42-12):
- (a) Remove relay K33003.
 - (b) Do a check for 28 VDC from pin X1 of connector DK33003 on the Left Power Management Panel, P110, to structure ground (WDM 33-42-12).
 - 1) If 28V DC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33003.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the taxi lights to the off mode.
 - 2) If 28V DC was present, then continue.
 - (c) Do a check for 115 VAC from pin B2 of connector DK33003 on the Left Power Management Panel, P110, to structure ground (WDM 33-42-12).
 - 1) If 115V AC is not present, then do these steps:
 - a) Repair wiring or replace the circuit breaker.
 - b) Re-install relay K33003.
 - c) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Taxi lights to the off mode.
 - 2) If 115V AC is present, re-install relay K33003 and then continue.
- (3) Do a check of the SIU 2 module, M24505.
- This is the task:
- Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
- (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the taxi lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring between the relay and the SIU 2 module, M24505:
- (a) Remove relay K33003 (WDM 33-42-12).
 - (b) Remove connectors DM24505B and DM24505C from SIU 2 module, M24505.
 - (c) Do a wiring check between these pins of connectors DK33003 and DM24505B and DM24505C at the Left Power Management Panel, P110:

DK33003	DM24505B
pin X2	pin 12

DK33003	DM24505C
pin B1	pin 94

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33003 (WDM 33-42-12).
 - 3) Re-connect connectors DM24505B and DM24505C to SIU 2 module, M24505.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the taxi lights to the off mode.

————— **END OF TASK** —————

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802. Position (Navigation) Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43660.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the position (navigation) lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the position (navigation) lights, M33413S5 (WDM 33-43-12).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the position (navigation) lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the position (navigation) lights to the right overhead panel card file:
 - (a) Remove the anti-ice module, M33413 (WDM 33-43-12).
 - (b) Disconnect connector M33413DS5 from the switch, M33413S5.
 - (c) Disconnect connector DM23217K from the right overhead card file, M23217.
 - (d) Do a wiring check between these pins of connector M33413DS5 at the pilots overhead panel, P5, and connector DM23217K, at the maintenance panel, P61 (WDM 33-43-12):

M33413DS5	DM23217K
pin 4	pin A12
pin 5	pin A13
pin 6	pin A14

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector M33413DS5.
 - 3) Re-connect connector DM23217K.
 - 4) Re-install the anti-ice module, M33413.
 - 5) Monitor the maintenance message on the MAT while you do these steps:

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- a) Set the switch for the position (navigation) lights to the on mode, and then to the off mode.
- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector M33413DS5 to the switch, M33413S5.
- (h) Re-install the anti-ice module, M33413.
- (3) Replace the right overhead panel card file chassis, M23217 at the maintenance panel, P61.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the position (navigation) lights first to the on mode, and then to the off mode.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

————— END OF TASK —————

804. Position (Navigation) Light Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the switch for the position (navigation) lights to the on mode.
 - (a) Look for maintenance messages related to the position (navigation) lights. They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the position (navigation) lights shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the position (navigation) lights does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the position (navigation) lights.
 - 2) If the lights do not come on, then do the Fault Isolation Procedure below.
 - 3) If the lights come on, then there was an intermittent fault. Set the switch to the off mode.

B. Fault Isolation Procedure

- (1) If all of the lights connected to the same transformer do not come on, replace the transformer. To replace it, do this task: Position Light Transformer, Wing - Replacement, AMM TASK 33-43-03-960-801.

LIGHT	TRANSFORMER
Left FWD L33118 Left AFT L33119	Left T33106

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LIGHT	TRANSFORMER
Right FWD L33218 Right AFT L33219	Right T33206

- (a) If all of the lights come on, you corrected the fault. Set the switch to the off mode.
- (b) If none or some of the lights come on, then continue.
- (2) Replace the lamp in the applicable light.
These are the tasks:
Forward Position Light - Lamp Replacement, AMM TASK 33-43-01-960-801,
Rear Position Light - Lamp Replacement, AMM TASK 33-43-02-960-801.
- (a) If the light comes on, you corrected the fault. Set the switch to the off mode.
- (b) If the light does not come on, then continue.
- (3) If the left position (navigation) lights do not come on, do a check of the wiring between connector 47K on terminal block TB412 at the Left Power Management Panel, P110, and the applicable light (WDM 33-43-11).
- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the switch to the off mode.
- (4) If the right position (navigation) lights do not come on, do a check of the wiring between connector 47K on terminal block TB406 at the Right Power Management Panel, P210, and the applicable light (WDM 33-43-12).
- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the switch to the off mode.

END OF TASK

805. Relay (RIGHT POS LT CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-43113.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the position lights (NAV - navigation) to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

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C. Fault Isolation Procedure

- (1) Replace the right position lights control relay, K33032 (WDM 33-43-11).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for power to relay K33032 (WDM 33-43-11):
 - (a) Remove relay K33032.
 - (b) Do a check for 28 VDC from pin X1 of connector DK33032 on the right Power Management Panel, P210, to structure ground.
 - 1) If there is not 28 VDC at pin X1 of DK33032, check the wiring between pin X1 and the 28V DC circuit breaker on the P210 panel.
 - a) If a fault was found, repair the wiring or replace the circuit breaker as required and re-install relay K33032.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.
 - 2) If 28V DC was present, then continue.
 - (c) Do a check for 115 VAC from pin A2 of connector DK33032 on the right Power Management Panel, P210, to structure ground (WDM 33-43-11).
 - 1) If there is not 115 VAC at pin A2, check the wiring between pin A2 and the 115V AC circuit breaker on the P210 panel.
 - a) If a fault was found, repair wiring or replace the circuit breaker as required and re-install relay K33032.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.
 - (d) If no wiring or circuit breaker problems were found, re-install relay K33032 and then continue.
- (3) Do a check of the SIU 2 module, M24509 in the Right Power Management Panel, P210.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring between the K33032 relay and the SIU 2 module, M24509 (WDM 33-43-11):
 - (a) Remove relay K33032.
 - (b) Remove connectors DM24509B and DM24509C from SIU 2 module M24509.
 - (c) Do a wiring check between these pins of connector DK33032 and connectors DM24509B and DM24509C at the Right Power Management Panel, P210:

DK33032

DM24509B

pin X2 pin 10

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DK33032

DM24509C

pin A1 pin 88

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33032.
 - 3) Re-connector connectors DM24509B and DM24509C to SIU 2 module, M24509.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.

———— END OF TASK ————

806. Relay (LEFT POS LT CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46114.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the position lights (NAV - navigation) to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the left position lights control relay, K33031 (WDM 33-43-11).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for power to relay K33031 (WDM 33-43-11):
 - (a) Remove relay K33031.
 - (b) Do a check for 28 VDC from pin X1 of connector DK33031 on the left Power Management Panel, P110, to structure ground.
 - 1) If there is not 28 VDC at pin X1 of DK33031, check the wiring between pin X1 and the 28V DC circuitr breaker on the P110 panel.
 - a) If a fault was found, repair the wiring or replace the circuit breaker as required and re-install relay K33031.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.
 - 2) If 28V DC was present, then continue.

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- (c) Do a check for 115 VAC from pin A2 of connector DK33031 on the left Power Management Panel, P110, to structure ground (WDM 33-43-11).
 - 1) If there is not 115 VAC at pin A2, check the wiring between pin A2 and the 115V AC circuit breaker on the P110 panel.
 - a) If a fault was found, repair wiring or replace the circuit breaker as required and re-install relay K33031.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.
 - (d) If no wiring or circuit breaker problems were found, re-install relay K33031 and then continue.
- (3) Do a check of the SIU 2 module, M24505 in the left Power Management Panel, P110.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring between the K33031 relay and the SIU 2 module, M24505 (WDM 33-43-11):
 - (a) Remove relay K33031.
 - (b) Remove connectors DM24505B and DM24505C from SIU 2 module M24505.
 - (c) Do a wiring check between these pins of connector DK33031 and connectors DM24505B and DM24505C at the left Power Management Panel, P110:

DK33031	DM24505B
pin X2	pin 10

DK33031	DM24505C
pin A1	pin 93

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33031.
 - 3) Re-connect connectors DM24505B and DM24505C to SIU 2 module, M24505.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the NAV switch to the off mode.

———— **END OF TASK** ————

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802. Wing and Tailcone Anti-Collision (Strobe) Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43960.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the wing and tailcone anti-collision (strobe) lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the wing and tailcone anti-collision (strobe) lights, M33413S12 (WDM 33-44-12).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the wing and tailcone anti-collision (strobe) lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the wing and tailcone anti-collision (strobe) lights to the left overhead panel card file:
 - (a) Remove the anti-ice module, M33413 (WDM 33-44-12).
 - (b) Disconnect connector DM33413B from the switch, M33413S12.
 - (c) Disconnect connector DM23117J from the left overhead card file, M23117.
 - (d) Do a wiring check between these pins of connector DM33413B at the pilots overhead panel, P5, and connector DM23117J, at the maintenance panel, P61 (WDM 33-44-12):

DM33413B	DM23117J
pin 26	pin A5
pin 27	pin A6
pin 14	pin A8

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33413B.
 - 3) Re-connect connector DM23117J.
 - 4) Re-install the anti-ice module, M33413.
 - 5) Monitor the maintenance message on the MAT while you do these steps:

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- a) Set the switch for the wing and tailcone anti-collision (strobe) lights to the on mode, and then to the off mode.
- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector DM33413B to the switch, M33413S12.
- (h) Re-install the anti-ice module, M33413.
- (3) Replace the left overhead panel card file chassis, M23117 at the maintenance panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the wing and tailcone anti-collision (strobe) lights first to the on mode, and then to the off mode.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

————— **END OF TASK** —————

804. Upper and Lower Anti-Collision Light (Beacon) Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the anti-collision light (beacon) switch to the on mode.
 - (a) Look for maintenance messages related to the anti-collision lights (beacons). They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the upper or lower anti-collision lights (beacons) shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the anti-collision lights (beacons) does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the upper and lower anti-collision lights (beacons).
 - 2) If the lights do not flash, then do the Fault Isolation Procedure below.
 - 3) If the lights flash, then there was an intermittent fault. Set the switch to the off mode.

B. Fault Isolation Procedure

- (1) Replace the lamp assembly in the applicable anti-collision light (beacon).

These are the tasks:

Upper Body Anti-Collision Light - Lamp Assembly Replacement, AMM TASK 33-44-01-960-801,

Lower Body Anti-Collision Light - Lamp Assembly Replacement, AMM TASK 33-44-02-960-801.

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LIGHT	POWER SUPPLY
Upper L33706 Lower L33707	M33426 M33427

- (a) If the light flashes, you corrected the fault. Set the switch to the off mode.
- (b) If the light does not flash, then continue.
- (2) Replace the applicable anti-collision light (beacon).
- These are the tasks:
- Upper Body Anti-Collision Light - Light Assembly Replacement, AMM TASK 33-44-01-960-802,
Lower Body Anti-Collision Light - Light Assembly Replacement, AMM TASK 33-44-02-960-802.
- (a) If the light flashes, you corrected the fault. Set the switch to the off mode.
- (b) If the light does not flash, then continue.
- (3) Replace the applicable power supply.
- These are the tasks:
- Upper Body Anti-Collision Light - Power Supply Replacement, AMM TASK 33-44-01-960-804,
Lower Body Anti-Collision Light - Power Supply Replacement, AMM TASK 33-44-02-960-804.
- (a) If the light flashes, you corrected the fault. Set the switch to the off position.
- (b) If the light does not flash, then continue.
- (4) If none of the lights flash, do a check of the wiring between the switch and the right overhead panel cardfile (WDM 33-44-12).
- (a) Do a wiring check between these pins of connector M33413DS4 on the switch at the anti-ice module assembly and connector DM23217K at the right overhead panel cardfile on the P61 panel.
- | | |
|------------------|-----------------|
| D33413DS4 | DM23217K |
| pin 4 | pin A9 |
| pin 5 | pin A10 |
| pin 6 | pin A11 |
- (b) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) If the lights flash, you corrected the fault. Set the switch to the off mode.
- (c) If you do not find a problem with the wiring, then continue.
- (5) Do a check of the wiring between connector 47K on terminal block TB401 at the Right Power Management Panel, P210, and the applicable anti-collision (beacon) light (WDM 33-44-13).
- (a) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) If the light flashes, you corrected the fault. Set the switch to the off mode.

———— **END OF TASK** ————

805. Upper and Lower Anti-Collision (Beacon) Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43095.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the upper and lower anti-collision (beacon) lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the upper and lower anti-collision (beacon) lights, M33413S4 (WDM 33-44-12).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the upper and lower anti-collision (beacon) lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the upper and lower anti-collision (beacon) lights to the right overhead panel card file:
 - (a) Remove the anti-ice module, M33413 (WDM 33-44-12).
 - (b) Disconnect connector DM33413A from the switch, M33413S4.
 - (c) Disconnect connector DM23217K from the right overhead card file, M23217.
 - (d) Do a wiring check between these pins of connector DM33413A at the pilots overhead panel, P5, and connector DM23217K, at the maintenance panel, P61 (WDM 33-44-12):

DM33413A

pin 38
pin 20
pin 39

DM23217K

pin A9
pin A10
pin A11

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM33413A.
 - 3) Re-connect connector DM23217K.
 - 4) Re-install the anti-ice module, M33413.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the upper and lower anti-collision (beacon) lights to the on mode, and then to the off mode.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

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- (f) If you do not find a problem with the wiring, then continue.
 - (g) Re-connect connector DM33413A to the switch, M33413S4.
 - (h) Re-install the anti-ice module, M33413.
- (3) Replace the right overhead panel card file chassis, M23217 at the maintenance panel, P61.
- These are the tasks:
- Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the wing and tailcone anti-collision (strobe) lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

— END OF TASK —

806. Wing and Tailcone Anticollision Light (Strobe) Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the anti-collision light (strobe) switch to the on mode.
 - (a) Look for maintenance messages related to the anti-collision lights (strobes). They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the wing or tailcone anti-collision lights (strobes) shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the anti-collision lights (strobes) does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the wing and tailcone anti-collision lights (strobes).
 - 2) If the lights do not flash, then do the Fault Isolation Procedure below.
 - 3) If the lights flash, then there was an intermittent fault. Set the switch to the off mode.

B. Fault Isolation Procedure

- (1) Replace the lamp assembly in the applicable anti-collision light (strobe).

These are the tasks:

Wing Anti-Collision Light - Lamp Assembly Replacement, AMM TASK 33-44-03-960-801,

Tailcone Anti-Collision Light - Lamp Assembly Replacement, AMM TASK 33-44-04-960-801.

LIGHT	POWER SUPPLY
L Wing L33709	M33429
R Wing L33708	M33428
Tailcone L33857	M33425

- (a) If the light flashes, you corrected the fault. Set the switch to the off mode.
- (b) If the light does not flash, then continue.

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- (2) Replace the anti-collision light (strobe). To replace it, do this task: Tailcone Anti-Collision Light - Light Assembly Replacement, AMM TASK 33-44-04-960-803.
 - (a) If the light flashes, you corrected the fault. Set the switch to the off mode.
 - (b) If the light does not flash, then continue.
- (3) Replace the applicable power supply.

These are the tasks:

Wing Anti-Collision Light - Power Supply Replacement, AMM TASK 33-44-03-960-802,
Tailcone Anti-Collision Light - Power Supply Replacement, AMM TASK 33-44-04-960-802.

 - (a) If the light flashes, you corrected the fault. Set the switch to the off position.
 - (b) If the light does not flash, then continue.
- (4) If none of the lights flash, do a check of the wiring between the switch and the left overhead panel cardfile (WDM 33-44-12).
 - (a) Do a wiring check between these pins of connector M33413DS12 on the switch at the anti-ice module assembly and connector DM23117J at the left overhead panel cardfile on the P61 panel.

D33413DS4	DM23217K
pin 3	pin A5
pin 1	pin A6
pin 2	pin A8
 - (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the lights flash, you corrected the fault. Set the switch to the off mode.
 - (c) If you do not find a problem with the wiring, then continue.
- (5) Do a check of the wiring between connector 47K on terminal block TB410 at the Left Power Management Panel, P110, and the applicable anti-collision (strobe) light (WDM 33-44-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light flashes, you corrected the fault. Set the switch to the off mode.

————— **END OF TASK** —————

807. Relay (RED ANTI-COLL LTS CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-44113.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the red anti-collision lights (BEACON) to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.

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- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the red anti-collision lights control relay, K33038 (WDM 33-44-13).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the BEACON switch to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for 28 VDC at the relay:
 - (a) Remove relay K33038 (WDM 33-44-13).
 - (b) Do a check for 28 VDC from pin X1 of connector DK33038 on the Right Power Management Panel, P210, to structure ground (WDM 33-44-13).
 - 1) If there is not 28 VDC at pin X1 of DK33038, check the wiring between pin X1 and the 28V DC circuit breaker on the P210 panel.
 - a) If a fault was found, repair wiring or replace the circuit breaker as required and re-install relay K33038.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the BEACON switch to the off mode.
 - 2) If 28V DC is present, then continue.
- (c) Do a check for 115V AC from pin A2 of connector DK33038 on the Right Power Management panel, P210, to structure ground.
 - 1) If there is not 115V AC at pin A2, check the wiring between pin A2 and the 115V AC circuit breaker on the P210 panel.
 - a) If a fault was found, repair wiring or replace the circuit breaker as required and re-install relay K33038.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the BEACON switch to the off mode.
- (d) If no wiring or circuit breaker problems were found, re-install relay K33038 and then continue.
- (3) Do a check of the SIU 1 module, M24508, in the Right Power Management Panel, P210.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the BEACON switch to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring between the relay and the SIU 1 module, M24508:
 - (a) Remove relay K33038 (WDM 33-44-13).
 - (b) Remove connectors DM24508B and DM24508C from SIU 1 module, M24508.
 - (c) Do a wiring check between these pins of connectors DK33038 and DM24508B and DM24508C at the Right Power Management Panel, P210:

DK33038

DM24508B

pin X2 pin 14

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DK33038

pin A1

DM24508C

pin 85

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install relay K33038 (WDM 33-44-13).
 - 3) Re-connect connectors DM24508B and DM24508C to SIU 1 module, M24508.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the BEACON switch to the off mode.

END OF TASK

808. Relay (WHITE ANTI-COLL LTS CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46116.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
- (a) At the overhead panel, P5, set the switch for the white anti-collision lights (strobes) to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the white anti-collision light control relay, K33037 (WDM 33-44-11) (WDM 33-44-12).
- (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the white anti-collision lights (strobes) to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for power to relay K33037 (WDM 33-44-11) (WDM 33-44-12):
- (a) Remove relay K33037.
 - (b) Do a check for 28 VDC from pin X1 of connector DK33037 on the Left Power Management Panel, P110, to structure ground .
 - 1) If there is not 28 VDC at pin X1 of DK33037, check the wiring between pin X1 and the 28V DC circuit breaker on the left Power Management Panel, P110, to structure ground.
 - a) If a fault was found, repair wiring or replace the circuit breaker as required and re-install relay K33037.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the white anti-collision lights (strobes) to the off mode.
 - 2) If there is 28 VDC at pin X1 of the connector K33037, then continue.

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- (c) Do a check for 115V AC from pin A2 of DK33037 on the Left Power Management panel, P110, to structure ground (WDM 33-44-11) (WDM 33-44-12).
- 1) If there is not 115V AC at pin A2, check the wiring between pin A2 and the 115V AC circuit breaker on the P110 panel.
 - a) If a fault was found, repair wiring or replace the circuit breaker as necessary and re-install relay K33037.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the white anti-collision lights (strobes) to the off mode.
 - (d) If no wiring or circuit breaker problems were found, re-install relay K33037 and then continue.
- (3) Do a check of the SIU 2 module, M24505, in the Left Power Management panel, P110.
- This is the task:
- Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of the wiring between the relay and the SIU 2 module, M24505:
- (a) Remove relay K33037.
 - (b) Remove connector DM24505B from SIU 2 module M24505.
 - (c) Do a wiring check between these pins of connectors DK33037 and DM24505B at the Left Power Management Panel, P110.
- | DK33037 | DM24505B |
|------------------|-----------------|
| pin X2 | pin 14 |
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33037 (WDM 33-44-11) (WDM 33-44-12).
 - 3) Re-connect connector DM24505B to SIU 2 module, M24505.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the white anti-collision lights (strobes) to the off mode.
 - (e) If you do not find a problem with the wiring, then continue.
- (5) Do this check of the wiring between relay K33037 and the SIU 2 module, M24505 on the Left Power Management panel, P110:
- (a) Remove connector DM24505C from SIU 2 module M24505.
 - (b) Using an ohmmeter, measure 18K ohms between these pins of connector DK33037 and connector DM24505C on the Left Power Management Panel, P110:
- | DK33037 | DM24505C |
|------------------|-----------------|
| pin A1 | pin 96 |
- (c) If you measured an open circuit, replace the 18K ohm resistor on the Left Power Management panel, P110 or repair the wiring between it and either of the pins indicated in the table.

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- 1) Re-install relay K33037 (WDM 33-44-11) (WDM 33-44-12).
- 2) Re-connect connector DM24505C to SIU 2 module, M24505.
- 3) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the white anti-collision lights (strokes) to the off mode.

———— **END OF TASK** ————

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801. Logo Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43510.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, set the switch for the logo lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the switch for the logo lights, M33413S6 (WDM 33-45-11).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the logo lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the logo lights to the right overhead panel card file:
 - (a) Remove the anti-ice module, M33413 (WDM 33-45-11).
 - (b) Disconnect connector M33413DS6 from the switch, M33413S6.
 - (c) Disconnect connector DM23217K from the right overhead card file, M23217.
 - (d) Do a wiring check between these pins of connector M33413DS6 at the pilots overhead panel, P5, and connector DM23217K, at the maintenance panel, P61 (WDM 33-45-11):

M33413DS6

pin 4	.....	pin A15
pin 5	.....	pin A16
pin 6	.....	pin A17

DM23217K

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector M33413DS6.
 - 3) Re-connect connector DM23217K.
 - 4) Re-install the anti-ice module, M33413.
 - 5) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the logo lights to the on mode, and then to the off mode.

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- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.
 - (f) If you do not find a problem with the wiring, then continue.
 - (g) Re-connect connector M33413DS6 to the switch, M33413S6.
 - (h) Re-install the anti-ice module, M33413.
- (3) Replace the right overhead panel card file chassis, M23217 at the maintenance panel, P61.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the logo lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, you corrected the fault.

END OF TASK

803. Logo Light Problems - Fault Isolation

A. Initial Evaluation

- (1) Monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the switch for the logo lights to the on mode.
 - (a) Look for maintenance messages related to the logo lights. They will have numbers like 33-4XXX or 23-43XXX, where X is any number.
 - (b) If a maintenance message related to the logo lights shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (c) If a maintenance message related to the logo lights does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the logo lights.
 - 2) If the lights do not come on, then do the Fault Isolation Procedure below.
 - 3) If the lights come on, then there was an intermittent fault. Set the switch to the off mode.

B. Fault Isolation Procedure

- (1) Replace the lamp in the applicable logo light. To replace it, do this task: Logo Light - Lamp Replacement, AMM TASK 33-45-00-960-801.

LIGHT
Left FWD L33112
Left AFT L33113
Right FWD L33212
Right AFT L33213

- (a) If the light comes on, you corrected the fault. Set the switch to the off mode.

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- (b) If the light does not come on, then continue.
- (2) Replace the applicable logo light assembly. To replace it, do this task: Logo Light - Light Assembly Replacement, AMM TASK 33-45-00-960-802.
 - (a) If the light comes on, you corrected the fault. Set the switch to the off mode.
 - (b) If the light does not come on, then continue.
- (3) Do a check of the wiring between connector 47K on terminal block TB401 at the Right Power Management Panel, P210, and the applicable logo light (WDM 33-45-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) If the light comes on, you corrected the fault. Set the switch to the off mode.

END OF TASK

804. Relay (LOGO LTG CONTROL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-45112.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set the switch for the Logo lights to the on mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the switch to the off mode.

C. Fault Isolation Procedure

- (1) Replace the Logo lights control relay, K33030 (WDM 33-45-11).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Logo lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for power to relay K33030 (WDM 33-45-11):
 - (a) Remove relay K33030.
 - (b) Do a check for 28 VDC from pin X1 of connector DK33030 on the right Power Management Panel, P210, to structure ground.
 - 1) If there is not 28 VDC at pin X1 of DK33030, check the wiring between pin X1 and the 28V DC circuit breaker on the P210 panel.
 - a) If a fault was found, repair the wiring or replace the circuit breaker as required and re-install relay K33030.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Logo lights to the off mode.
 - 2) If 28V DC was present, then continue.

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- (c) Do a check for 115 VAC from pin A1 of connector DK33030 on the right Power Management Panel, P210, to structure ground (WDM 33-45-11).
- 1) If there is not 115 VAC at pin A1, check the wiring between pin A1 and the 115V AC circuit breaker on the P210 panel.
 - a) If a fault was found, repair wiring or replace the circuit breaker as required and re-install relay K33030.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Logo Lights to the off mode.
 - (d) If no wiring or circuit breaker problems were found, re-install relay K33030 and then continue.
- (3) Do a check of the SIU 2 module, M24509 in the Right Power Management Panel, P210.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
- (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Logo lights to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring between the K33032 relay and the SIU 2 module, M24509 (WDM 33-45-11):
- (a) Remove relay K33032.
 - (b) Remove connector DM24509B from SIU 2 module M24509.
 - (c) Do a wiring check between these pins of connector DK33030 and connector DM24509B at the Right Power Management Panel, P210:
- | DK33032 | DM24509B |
|------------------|-----------------|
| pin X2 | pin 9 |
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install relay K33030.
 - 3) Re-connect connector DM24509B to SIU 2 module, M24509.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Logo lights to the off mode.
 - (e) If you did not find a problem with the wiring, then continue.
- (5) Do this check of the wiring between the relay and the SIU 2 Module M24509, on the Right Power Management Panel, P210:
- (a) Remove connector DM24509C from SIU 2 module M24509.
 - (b) Using an ohmmeter, measure 18K ohms between these pins of connectors DK33030 on the Power Management panel, P210, and connector DM24509C on the same panel (WDM 33-45-11):
- | DK33030 | DM24509C |
|------------------|-----------------|
| pin A2 | pin 87 |
- (c) If you measured an open circuit, replace the 18K ohm resistor on the P210 panel or repair the wiring between it and either of the pins indicated in the table.

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- 1) Re-install relay K33030.
- 2) Re-connect connector DM24509C to SIU 2 module, M24509.
- 3) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the switch for the Logo lights to the off mode.

———— **END OF TASK** ————

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801. Camera Light Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43145.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) At the overhead panel, P5, set the switch for the red anti-collision lights (beacons) to the on mode.
 - (b) At the P5 panel, set the switch for the camera lights first to the on mode, and then to the off mode.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch for the camera lights is in the on or off mode, then do the Fault Isolation Procedure below.
 - (d) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on and off modes, then there was an intermittent fault.
 - 1) At the P5 panel, set the switch for the red anti-collision lights (beacons) to the off mode.

C. Fault Isolation Procedure

- (1) Replace the switch for the camera lights, M30421S2 (WDM 33-47-11).
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the camera lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, then you corrected the fault.
 - 1) Set the switch for the red anti-collision lights (beacons) to the off mode.
 - (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on or off mode, then continue.
- (2) Do this check of the wiring from the switch for the camera lights to the left overhead panel card file:
 - (a) Remove the left wiper module, M30421 (WDM 33-43-12).
 - (b) Disconnect connector M30421DS2 from the switch, M30421S2.
 - (c) Disconnect connector DM23117K from the left overhead card file, M23117.
 - (d) Do a wiring check between these pins of connector M30421DS2 at the pilots overhead panel, P5, and connector DM23117K, at the maintenance panel, P61 (WDM 33-43-12):

M30421DS2

pin 1	.....	pin B11
pin 2	.....	pin B13
pin 3	.....	pin B12

DM23117K

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector M30421DS2.

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- 3) Re-connect connector DM23117K.
- 4) Monitor the maintenance message on the MAT while you do these steps:
 - a) Set the switch for the camera lights to the on mode, and then to the off mode.
- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, then you corrected the fault.
 - a) Set the switch for the red anti-collision lights (beacons) to the off mode.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector M30421DS2 to the switch, M30421S2.
- (h) Re-install the left wiper module, M30421.
- (3) Replace the left overhead panel card file chassis, M23117 at the maintenance panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the camera lights first to the on mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on and off modes, then you corrected the fault.
 - 1) Set the switch for the red anti-collision lights (beacons) to the off mode.

————— **END OF TASK** —————

802. Relay (CAMERA LIGHTS CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46111.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set these switches to the on mode:
 - 1) Red anti-collision lights (beacons) switch
 - 2) Camera lights switch
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set these switches to the off mode:
 - a) Camera lights switch
 - b) Red anti-collision lights (beacons) switch

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C. Fault Isolation Procedure

- (1) Replace the camera lights control relay, K33639 (WDM 33-47-11).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set these switches to the off mode:
 - 1) Camera lights switch
 - 2) Red anti-collision lights (beacons) switch
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for 28 VDC at the relay:

- (a) Remove relay K33639 (WDM 33-47-11).
- (b) Do a check for 28 VDC from pin X1 of connector DK33639 on the Left Power Management Panel, P110, to structure ground (WDM 33-47-11).
- (c) If there is not 28 VDC at pin X1 of DK33639, then do these steps:

- 1) Replace this circuit breaker, C33639 (WDM 33-47-11):
Replace this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	15	C33639	CAMERA LTS CTRL

- a) Re-install relay K33639.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set these switches to the off mode:
 - <1> Camera lights switch
 - <2> Red anti-collision lights (beacons) switch
 - c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- 2) Repair the wiring between circuit breaker C33639 and pin X1 of connector DK33639.
 - a) Re-install relay K33639.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set these switches to the off mode:
 - <1> Camera lights switch
 - <2> Red anti-collision lights (beacons) switch
 - (d) If there is 28 VDC at pin X1 of connector K33639, then continue.
- (3) Do this check for 115 VAC at the relay:
 - (a) Do a check for 115 VAC from pin A2 of connector DK33639 on the Left Power Management Panel, P110, to structure ground (WDM 33-47-11).
 - (b) If there is not 115 VAC at pin A2 of connector DK33639, then do these steps:
 - 1) Replace this circuit breaker, C33498 (WDM 33-47-11):



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Replace this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	21	C33498	CAMERA LTS

- a) Re-install relay K33639.
 - <1> Camera lights switch
 - <2> Red anti-collision lights (beacons) switch
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set these switches to the off mode:
 - <1> Camera lights switch
 - <2> Red anti-collision lights (beacons) switch
 - c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- 2) Repair the wiring between circuit breaker C33498 and pin A2 of connector DK33639 (WDM 33-47-11).
 - a) Re-install relay K33639.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set these switches to the off mode:
 - <1> Camera lights switch
 - <2> Red anti-collision lights (beacons) switch

————— END OF TASK —————

803. Relay (CAMERA LIGHTS CNTL) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 33-46119.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) At the overhead panel, P5, set these switches to the on mode:
 - 1) Camera lights switch
 - 2) Red anti-collision lights (beacons) switch
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - 1) If you do not do the Fault Isolation Procedure, set the Camera Lights and beacon switches to the off mode.

C. Fault Isolation Procedure

- (1) Replace the camera lights control relay, K33639 (WDM 33-47-11).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the Camera Lights and beacon switches to the off mode.

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- (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check for power to relay K33639 (WDM 33-47-11):
 - (a) Remove camera lights control relay K33639.
 - (b) Do a check for 28 VDC from pin X1 of connector DK33639 on the Left Power Management Panel, P110, to structure ground (WDM 33-47-11).
 - 1) If there is not 28 VDC at pin X1 of DK33639, check the wiring between pin X1 and the 28V DC circuit breaker on the P110 panel.
 - a) If a fault was found, repair wiring or replace the circuit breaker as required and re-install relay K33639.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the Camera Lights and beacon switches to the off mode.
 - 2) If 28V DC is present, then re-install relay K33639 and continue.
- (3) Replace the camera system control relay, K31004 on the P110 panel (WDM 31-61-53).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the Camera Lights and beacon switches to the off mode.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check for the control to relay K33639 (WDM 33-47-11):
 - (a) Remove relay K33639.
 - (b) Using an ohmmeter, check for continuity from pin X2 of connector DK33639 to structure ground (WDM 33-47-11).
 - 1) If continuity is not indicated, check the wiring to relay K31004 on the P110 panel (WDM 31-61-53).
 - a) If a fault is found, repair the wiring and re-install relay K33639.
 - 2) If no wiring faults were found, re-install relay K33639 and continue.
- (5) Do a check for power to relay K31004 (WDM 31-61-53):
 - (a) Remove relay K31004 on the P110 panel.
 - (b) Do a check for 28V DC at pin X1 of connector DK31004.
 - 1) If 28V DC is not present, do a check of the wiring to the 28V DC circuit breaker on the P110 panel (WDM 31-61-53).
 - a) If a problem is found, repair the wiring or replace the circuit breaker as required and re-install relays K31004 and K33639.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set the Camera Lights and beacon switches to the off mode.
 - 2) If 28V DC was present, continue.
- (6) Do a check of the control wiring to relay K31004 (WDM 31-61-53):
 - (a) Using an ohmmeter, check for continuity from pin X2 of connector DK31004 to structure ground (WDM 31-61-53).
 - 1) If continuity is not present, check the wiring to the Camera System Kill switch, S31106, (STA1506, WL94, RBL). and repair wiring or replace the switch as required.
 - a) If a fault was found, repair the wiring or relace the switch as required.
 - b) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault. Set these switches to the off mode:

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- c) Re-install relays K33639 and K31004.
- d) Set the Camera lights switch to the off mode.
- e) Set the red anti-collision lights (beacons) switch to the off mode.

———— **END OF TASK** ————

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801. Pilots Emergency Light Switch Problems - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, monitor the maintenance message on the MAT while you do these steps:
 - (a) Set the switch for the emergency lights to the on mode, then to the armed mode, and then to the off mode.
 - (b) If the MAT shows ACTIVE for the maintenance message while the switch is in the on, armed, or off mode, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message while the switch is in the on, armed, and off modes, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the window heat/emergency lights module, M30001, at the pilots overhead panel, P5.
These are the tasks:

Window Heat/Emer Lights Module Removal, AMM TASK 30-41-02-020-801,

Window Heat/Emer Lights Module Installation, AMM TASK 30-41-02-400-801.

- (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the emergency lights to the on mode, then to the armed mode, and then to the off mode.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on, armed, and off modes, you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message while the switch is in the on, armed, or off mode, then continue.
- (2) Do this check of the wiring from the switch for the emergency lights to the right overhead panel card file:
 - (a) Remove the window heat/emergency lights module, M30001 (WDM 33-51-12).
 - (b) Disconnect connector DM30001B from the module, M30001.
 - (c) Disconnect connector DM23217H from the right overhead card file, M23217.
 - (d) Do a wiring check between these pins of connector DM30001B at the pilots overhead panel, P5, and connector DM23217H, at the maintenance panel, P61 (WDM 33-51-12):

DM30001B

pin 21
pin 40
pin 20

DM23217H

pin B7
pin B8
pin B10

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM30001B.
 - 3) Re-connect connector DM23217H
 - 4) Re-install the window heat/emergency lights module, M30001.
 - 5) Monitor the maintenance message on the MAT while you do these steps:

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- a) Set the switch for the emergency lights to the on mode, then to the armed mode, and then to the off mode.
- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on, armed, and off modes, you corrected the fault.
 - a) To make sure the service interphone switch is connected to connector DM30001B and operates correctly, do this task: Service Interphone System - Operational Test, AMM TASK 23-41-00-700-801.
NOTE: Use only the applicable steps of the Operational Test.
 - b) To make sure the window heat switches are connected to connector DM30001B and operate correctly, do this task: Window Heat Control System - Operational Test, AMM TASK 30-41-00-710-801.
NOTE: Use only the applicable steps of the Operational Test.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector DM30001B to the module, M30001.
 - 1) To make sure the service interphone switch is connected to connector DM30001B and operates correctly, do this task: Service Interphone System - Operational Test, AMM TASK 23-41-00-700-801.
NOTE: Use only the applicable steps of the Operational Test.
 - 2) To make sure the window heat switches are connected to connector DM30001B and operate correctly, do this task: Window Heat Control System - Operational Test, AMM TASK 30-41-00-710-801.
NOTE: Use only the applicable steps of the Operational Test.
- (h) Re-install the window heat/emergency lights module, M30001.
- (3) Replace the right overhead panel card file chassis, M23217 at the maintenance panel, P61.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
 - (a) Monitor the maintenance message on the MAT while you do these steps:
 - 1) Set the switch for the emergency lights to the on mode, then to the armed mode, and then to the off mode.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) while the switch is in the on, armed, and off modes, you corrected the fault.

END OF TASK

802. Emergency Exit Sign Does Not Go Off - Fault Isolation

A. Initial Evaluation

- (1) In the flight compartment, monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the pilots emergency light switch to the off mode.
 - (a) If a maintenance message related to the emergency lights shows on the MAT while the switch is in the off mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.

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- 2) Do the specified fault isolation task.
- (b) If a maintenance message related to the emergency lights does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) Look at the emergency exit signs.
 - 2) If all emergency exit signs do not go off, set the switch to the usual mode then do the Fault Isolation Procedure below.
 - 3) If all emergency exit signs go off, then there was an intermittent fault. Set the switch to the usual mode

B. Fault Isolation Procedure

- (1) At the applicable attendant switch panel (ASP), set the emergency light test switch to the on mode.

NOTE: Operate the emergency lights only when it is necessary. Use the test switch on the applicable attendant switch panel (ASP) or on the applicable power supply. These test switches go off automatically after one minute.

- (2) If all emergency exit signs do not go off after one minute, then do these steps:
 - (a) Replace the emergency light test switch (AMM TASK 33-22-06-960-805).
 - 1) Set the emergency light test switch to the on mode.
 - 2) If the emergency exit signs go off after one minute, you corrected the fault.
 - 3) If the emergency exit signs does not go off, do a check of the wiring between the emergency light test switch and the applicable distribution integration panels (WDM 33-51-12).
 - a) Repair the wiring.
 - b) Set the emergency light test switch to the on mode.
 - c) If the emergency exit signs go off after one minute, you corrected the fault.

————— **END OF TASK** —————

803. Emergency Exit Sign Does Not Come On - Fault Isolation

A. Initial Evaluation

- (1) In the flight compartment, monitor the Extended Maintenance, Existing Faults display on the MAT.
- (2) At the overhead panel, P5, set the pilots emergency light switch to the on mode.
 - (a) If a maintenance message related to the emergency lights shows on the MAT while the switch is in the on mode, then do these steps:
 - 1) Find the maintenance message in the FIM Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (b) If a maintenance message related to the emergency lights does not show on the MAT while the switch is in the on mode, then do these steps:
 - 1) If all applicable emergency exit signs and seat-mounted proximity lights do not come on, then do this task: Emergency Exit Signs and Seat-Mounted Proximity Lights Do Not Come On - Fault Isolation, 33-51 TASK 806.
 - 2) Look at the emergency exit signs.
 - 3) If all emergency exit signs do not come on, set the switch to the usual mode then do the Fault Isolation Procedure below.

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- 4) If all emergency exit signs come on, then there was an intermittent fault. Set the switch to the usual mode

B. Fault Isolation Procedure

- (1) At the applicable attendant switch panel (ASP), set the emergency light test switch to the on mode.

NOTE: Operate the emergency lights only when it is necessary. Use the test switch on the applicable attendant switch panel (ASP) or on the applicable power supply. These test switches go off automatically after one minute.

- (2) If all emergency exit signs do not come on, then do these steps:

- (a) Do this task: Attendant Switch Panel (ASP) - Switch Replacement, AMM TASK 33-22-06-960-805.

- 1) If the emergency exit signs come on, you corrected the fault.
- 2) If the emergency exit signs do not come on, do a check of the wiring between the emergency light test switch and the applicable distribution integration panels (WDM 33-51-12).
- 3) Repair the wiring.
- 4) If the emergency exit signs come on, you corrected the fault.

- (3) If all emergency exit signs in a group of emergency lights do not come on, then do these steps:

NOTE: Each group of emergency lights has one power supply. Use the table in SSM 33-51-11 to identify the emergency exit signs in a specific group.

- (a) Repair the wiring between the applicable emergency light power supply and the applicable emergency exit sign (WDM 33-51-21, 33-51-22, 33-51-23, 33-51-24, 33-51-31, 33-51-32, 33-51-33, 33-51-34).

- 1) If the emergency exit sign comes on, you corrected the fault.

- (4) If one or more emergency exit signs (but not all) in a group of emergency lights do not come on, then do these steps:

NOTE: Each group of emergency lights has one power supply. Use the table in SSM 33-51-11 to identify the emergency exit signs in a specific group.

- (a) Do this task: Exit Sign - Lamp Replacement, AMM TASK 33-51-01-960-801.

- 1) If the emergency exit sign comes on, you corrected the fault.
- 2) If the emergency exit sign does not come on, then continue.

- (b) Do this task: Power Supply - Fuse Replacement, AMM TASK 33-51-06-960-801.

- 1) If the emergency exit sign comes on, you corrected the fault.
- 2) If the emergency exit sign does not come on, then continue.

- (c) Repair the wiring between the applicable emergency light power supply and the applicable emergency exit sign (WDM 33-51-21, 33-51-22, 33-51-23, 33-51-24, 33-51-31, 33-51-32, 33-51-33, 33-51-34).

- 1) If the emergency exit sign comes on, you corrected the fault.

————— END OF TASK —————

804. EICAS message EMER LIGHTS - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the emergency lights are in the on mode.

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- (1) To put the emergency lighting system back to the normal mode, do these steps:
 - (a) At the overhead panel, P5, set the emergency light switch to the armed mode.
 - (b) If the message continues to show, go to the applicable attendant switch panel (ASP) and set the emergency light switch to the off mode.

————— **END OF TASK** —————

805. Seat-Mounted Proximity Lights - Fault Isolation

A. Initial Evaluation

- (1) If all applicable emergency exits signs and seat-mounted proximity lights do not come on, then do this task: Emergency Exit Signs and Seat-Mounted Proximity Lights Do Not Come On - Fault Isolation, 33-51 TASK 806.
- (2) If all applicable seat-mounted proximity lights do not come on, then do the Fault Isolation Procedure below.

B. Fault Isolation Procedure

- (1) Do a visual check of the seat-mounted proximity lights:
 - (a) If there is damage or signs of disturbance, replace the proximity light.
 - (b) If you do not find damage or signs of disturbance, then continue.
 - (c) Check for wire damage inside the applicable seat.
 - 1) If there is damage or signs of disturbance, replace the wiring.
 - 2) If the seat-mounted proximity light is dimly lit and there is no damage to the wiring, then replace the applicable seat-mounted proximity light cable inside the seat.
 - 3) If you do not find damage or signs of disturbance, then measure the resistance level between pin 1 and pin 2 of the seat-to-seat cable.
 - a) Replace the applicable proximity light with a small jumper wire.
 - b) Measure the resistance between pin 1 and pin 2 on the applicable connector.
 - c) Make sure the resistance is less than 0.15 ohm.
 - d) If the resistance is greater than 0.15 ohm, then repair the wiring.
 - (d) If you do not find damage or signs of disturbance, then continue.
- (2) Do a wiring check of the power supply fuse outputs (WDM 33-51-58 - WDM 33-51-59):

NOTE: There are four fuses in each power supply. Each fuse has two output signals and are connected to a group of emergency lights and/or proximity lights.

 - (a) Do these steps to find the output that causes the problem:
 - 1) Disconnect the electrical connector from the applicable power supply.

NOTE: See WDM 33-51-58 thru 33-51-59 to find the applicable power supply and fuse in the zone that has the proximity light problem.
 - 2) Remove the battery pack from the applicable power supply.
 - 3) For fuse no. 1, look for short circuit at pin 9 and pin 10.
 - 4) For fuse no. 2, look for short circuit at pin 11 and pin 12.
 - 5) For fuse no. 3, look for short circuit at pin 13 and pin 14.
 - 6) For fuse no. 4, look for short circuit at pin 15 and pin 16.
 - (b) If you find one of the pins is shorted to ground, then do these steps:

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- 1) If the output of that pin is connected to the exit emergency light, then repair the wiring between the emergency light and the power supply.
 - a) Replace the applicable fuse. Do this task: Power Supply - Fuse Replacement, AMM TASK 33-51-06-960-801.
 - b) Re-install the applicable power supply battery pack.
 - c) Re-connect the electrical connector to the power supply.
- (3) Do a check of the wiring between the applicable power supply and the emergency light(s) (WDM 33-51-58)(WDM 33-51-59):

NOTE: There are approximately 20-30 proximity lights connect in parallel to a fuse in a zone.

 - (a) Repair the wiring.
 - (b) Set the applicable switch to the ON mode.
 - (c) If the light(s) come on, then you corrected the fault.
 - 1) Set the applicable switch to the OFF mode.

————— **END OF TASK** —————

806. Emergency Exit Signs and Seat-Mounted Proximity Lights Do Not Come On - Fault Isolation

A. Initial Evaluation

- (1) Disconnect the electrical connector from the applicable power supply (WDM 33-51-58 - WDM 33-51-59).
- (2) Check the electrical connector and wiring for damage.
 - (a) If there is wire damage, then replace the applicable wiring.
 - (b) If there is damage to the electrical connector, then replace the electrical connector.
 - (c) If you do not find damage to the electrical connector or wiring, then continue.
- (3) Re-connect the electrical connector to the applicable power supply.
- (4) Do the Repair Confirmation Procedure below.
 - (a) If all applicable emergency exit signs and seat-mounted proximity lights do not come on, then do the Fault Isolation Procedure Below.

B. Fault Isolation Procedure

- (1) Do a visual check of the power supply
 - (a) If there is damage or signs of disturbance on the power supply, then replace the power supply.
 - 1) Do the Repair Confirmation Procedure below.
 - (b) If you do not find damage or signs of disturbance, then continue.
- (2) Replace the battery pack. Do this task: Power Supply - Battery Pack Replacement, AMM TASK 33-51-06-960-802.
 - (a) Do the Repair Confirmation Procedure below.
 - (b) If all applicable emergency exit signs and seat-mounted proximity lights do not come on, then continue.
- (3) Replace the power supply. Do this task: Power Supply - Power Supply Replacement, AMM TASK 33-51-06-960-803.
 - (a) Do the Repair Confirmation Procedure below.

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C. Repair Confirmation

- (1) Replace the applicable fuse. Do this task: Power Supply - Fuse Replacement, AMM TASK 33-51-06-960-801.
- (2) Push the emergency light test switch on the applicable power supply.
 - (a) If all applicable emergency exit signs and seat-mounted proximity lights come on, then you corrected the fault.
 - (b) If all applicable emergency exit signs do not come on, then do this task: Emergency Exit Sign Does Not Come On - Fault Isolation, 33-51 TASK 803.
 - (c) If all applicable seat-mounted proximity lights do not come on, then do this task: Seat-Mounted Proximity Lights - Fault Isolation, 33-51 TASK 805.

———— **END OF TASK** ————

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