



AIRCRAFT MAINTENANCE MANUAL

FEEDER PROTECTION RLY - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove/install the Feeder Protection Relays.
- B. Feeder Protection RLY 1 and Feeder Protection RLY 3 are installed in the left electrical-power control/distribution box.
- C. Feeder Protection RLY 2 and Feeder Protection RLY 4 are installed in the right electrical-power control/distribution box.
- D. You can get access to Feeder Protection RLY 1 and Feeder Protection RLY 3 through the 223UZ panel on the left side of the cockpit in forward fuselage section II.
- E. You can get access to Feeder Protection RLY 2 and Feeder Protection RLY 4 through the 224NZ panel on the right side of the cockpit in forward fuselage section II.
- F. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
24-31-05-000-801-A	FEEDER PROTECTION RLY - REMOVAL	ALL
24-31-05-400-801-A	FEEDER PROTECTION RLY - INSTALLA- TION	ALL



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TASK 24-31-05-000-801-A

EFFECTIVITY: ALL

2. FEEDER PROTECTION RLY - REMOVAL

A. General

- (1) This task gives the procedure to remove the Feeder Protection RLYs.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION
WM 20-30-00	-
WM 24-31-50	-
WM 24-31-51	-
WM 24-31-52	-
WM 24-31-53	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223	223UZ	LH forward fuselage section II
224	224NZ	RH forward fuselage section II

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Forward fuselage section II

I. Preparation

SUBTASK 841-002-A

- (1) Make sure that the GPU pushbutton, on the electrical panel, on the overhead panel, is set at OFF (The striped bar is off).
- (2) Attach a DO-NOT-SET-ON tag to the GPU pushbutton.

- (3) Make sure that the BATT 1 and BATT 2 switches, on the electrical panel, on the overhead panel, are set at OFF.
- (4) Attach a DO-NOT-SET-AUTO tag to the BATT 1 and BATT 2 switches.
- (5) Open access panel 223UZ ([AMM MPP 06-41-03/100](#)) to remove GLC 1 or/and GLC 3.
- (6) Open access panel 224NZ ([AMM MPP 06-41-03/100](#)) to remove GLC 2 or/and GLC 4.

J. Removal

SUBTASK 020-002-A

- (1) Remove Feeder Protection RLY 1 as follows ([Figure 401](#)):
 - (a) Remove the two bolts (9), two lock washers (8), and two washers (7) which attach the two electrical cables (6) to the Feeder Protection RLY 1 (2).
NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier.
 - (b) Remove the two electrical cables (6) from the Feeder Protection RLY 1 (2).
NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier.
 - (c) For feeders without soldered connections do as follows:
 - 1 Remove the two screws (10), and two lock washers (11) which attach the two electrical wires (12), and (13) to the Feeder Protection RLY 1 (2).
 - 2 Remove the two electrical wires (12), and (13) from the Feeder Protection RLY 1 (2).
NOTE: If the electrical wires are without an identification code, identify them to make the reinstallation easier.
 - (d) For feeders with soldered connections do as follows:
 - 1 Remove the electrical cables soldered (17) to the Feeder Protection RLY 1 (2). Refer to Soldering Procedures (WM 20-30-00).
NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier. Refer to Wiring Manual as applicable (WM 24-31-50).
 - (e) For feeders without soldered connections do as follows:
 - 1 Remove the screw (5), and washer (4) which attach the electrical wire (3) to the Feeder Protection RLY 1 (2).
 - 2 Remove the electrical wire (3) from the Feeder Protection RLY 1 (2).
NOTE: If the electrical wire is without an identification code, identify it to make the reinstallation easier.
 - (f) For feeders with soldered connections do as follows:
 - 1 Remove the nut (14) and washer (15) which attach the electrical cable (16) to the Feeder Protection RLY 1 (2), and to the left electrical-power control/distribution box (1).

- 2 Remove the electrical cable (16) to the Feeder Protection RLY 1 (2).

NOTE: If the electrical cable is without an identification code, identify it to make the reinstallation easier.

- (g) For feeders without soldered connections do as follows:

- 1 Remove the nut (14) and washer (15) which attach the Feeder Protection RLY 1 (2) to the left electrical-power control/distribution box (1).

- (h) Remove the Feeder Protection RLY 1 (2) to the left electrical-power control/distribution box (1).

- (2) Remove Feeder Protection RLY 2 as follows ([Figure 402](#)):

- (a) Remove the two bolts (9), two lock washers (8), and two washers (7) which attach the two electrical cables (6) to the Feeder Protection RLY 2 (2).

- (b) Remove the two electrical cables (6) from the Feeder Protection RLY 2 (2).

NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier.

- (c) For feeders without soldered connections do as follows:

- 1 Remove the two screws (10), and two lock washers (11) which attach the two electrical wires (12), and (13) to the Feeder Protection RLY 2 (2).

- 2 Remove the two electrical wires (12), and (13) from the Feeder Protection RLY 2 (2).

NOTE: If the electrical wires are without an identification code, identify them to make the reinstallation easier.

- (d) For feeders with soldered connections do as follows:

- 1 Remove the electrical cables soldered (17) to the Feeder Protection RLY 2 (2). Refer to Soldering Procedures (WM 20-30-00).

NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier. Refer to Wiring Manual as applicable (WM 24-31-51).

- (e) For feeders without soldered connections do as follows:

- 1 Remove the screw (5), and washer (4) which attach the electrical wire (3) to the Feeder Protection RLY 2 (2).

- 2 Remove the electrical wire (3) from the Feeder Protection RLY 2 (2).

NOTE: If the electrical wire is without an identification code, identify it to make the reinstallation easier.

- (f) For feeders with soldered connections do as follows:

- 1 Remove the nut (14) and washer (15) which attach the electrical cable (16) to the Feeder Protection RLY 2 (2), and to the right electrical-power control/distribution box (1).

- 2 Remove the electrical cable (16) to the Feeder Protection RLY 2 (2).

NOTE: If the electrical cable is without an identification code, identify it to make the reinstallation easier.

- (g) For feeders without soldered connections do as follows:

- 1 Remove the nut (14) and washer (15) which attach the Feeder Protection RLY 2 (2) to the right electrical-power control/distribution box (1).

- (h) Remove the Feeder Protection RLY 2 (2) to the right electrical-power control/distribution box (1).

- (3) Remove Feeder Protection RLY 3 as follows (Figure 403):

- (a) Remove the two bolts (7), two lock washers (8), and two washers (9) which attach the two electrical cables (10) to the Feeder Protection RLY 3 (14).

- (b) Remove the two electrical cables (10) from the Feeder Protection RLY 3 (14).

NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier.

- (c) For feeders without soldered connections do as follows:

- 1 Remove the two screws (6), and two lock washers (5) which attach the two electrical wires (3), and (4) to the Feeder Protection RLY 3 (14).

- 2 Remove the two electrical wires (3), and (4) from the Feeder Protection RLY 3 (14).

NOTE: If the electrical wires are without an identification code, identify them to make the reinstallation easier.

- (d) For feeders with soldered connections do as follows:

- 1 Remove the electrical cables soldered (17) to the Feeder Protection RLY 3 (14). Refer to Soldering Procedures (WM 20-30-00).

NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier. Refer to Wiring Manual as applicable (WM 24-31-52).

- (e) For feeders without soldered connections do as follows:

- 1 Remove the screw (11), and washer (12) which attach the electrical wire (13) to the Feeder Protection RLY 3 (14).

- 2 Remove the electrical wire (13) from the Feeder Protection RLY 3 (14).

NOTE: If the electrical wire is without an identification code, identify it to make the reinstallation easier.



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- (f) For feeders with soldered connections do as follows:
- 1 Remove the nut (2) and washer (1) which attach the electrical cable (16) to the Feeder Protection RLY 3 (14), and to the left electrical-power control/distribution box (15).
 - 2 Remove the electrical cable (16) to the Feeder Protection RLY 3 (14).
NOTE: If the electrical cable is without an identification code, identify it to make the reinstallation easier.
- (g) For feeders without soldered connections do as follows:
- 1 Remove the nut (2) and washer (1) which attach the Feeder Protection RLY 3 (14) to the left electrical-power control/distribution box (15).
- (h) Remove the Feeder Protection RLY 3 (14) to the left electrical-power control/distribution box (15).
- (4) Remove Feeder Protection RLY 4 as follows ([Figure 404](#)):
- (a) Remove the two bolts (8), two lock washers (7), and two washers (6) which attach the two electrical cables (5) to the Feeder Protection RLY 4 (15).
- (b) Remove the two electrical cables (5) from the Feeder Protection RLY 4 (15).
NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier.
- (c) For feeders without soldered connections do as follows:
- 1 Remove the two screws (9), and two lock washers (10) which attach the two electrical wires (11), and (12) to the Feeder Protection RLY 4 (15).
 - 2 Remove the two electrical wires (11), and (12) from the Feeder Protection RLY 4 (15).
NOTE: If the electrical wires are without an identification code, identify them to make the reinstallation easier.
- (d) For feeders with soldered connections do as follows:
- 1 Remove the electrical cables soldered (17) to the Feeder Protection RLY 4 (15). Refer to Soldering Procedures (WM 20-30-00).
NOTE: If the electrical cables are without an identification code, identify them to make the reinstallation easier. Refer to Wiring Manual as applicable (WM 24-31-53).
- (e) For feeders without soldered connections do as follows:
- 1 Remove the screw (4), and washer (3) which attach the electrical wire (2) to the Feeder Protection RLY 4 (15).
 - 2 Remove the electrical wire (2) from the Feeder Protection RLY 4 (15).



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NOTE: If the electrical wire is without an identification code, identify it to make the reinstallation easier.

- (f) For feeders with soldered connections do as follows:

1 Remove the nut (13) and washer (14) which attach the electrical cable (16) to the Feeder Protection RLY 4 (15), and to the right electrical-power control/distribution box (1).

2 Remove the electrical cable (16) to the Feeder Protection RLY 4 (15).

NOTE: If the electrical cable is without an identification code, identify it to make the reinstallation easier.

- (g) For feeders without soldered connections do as follows:

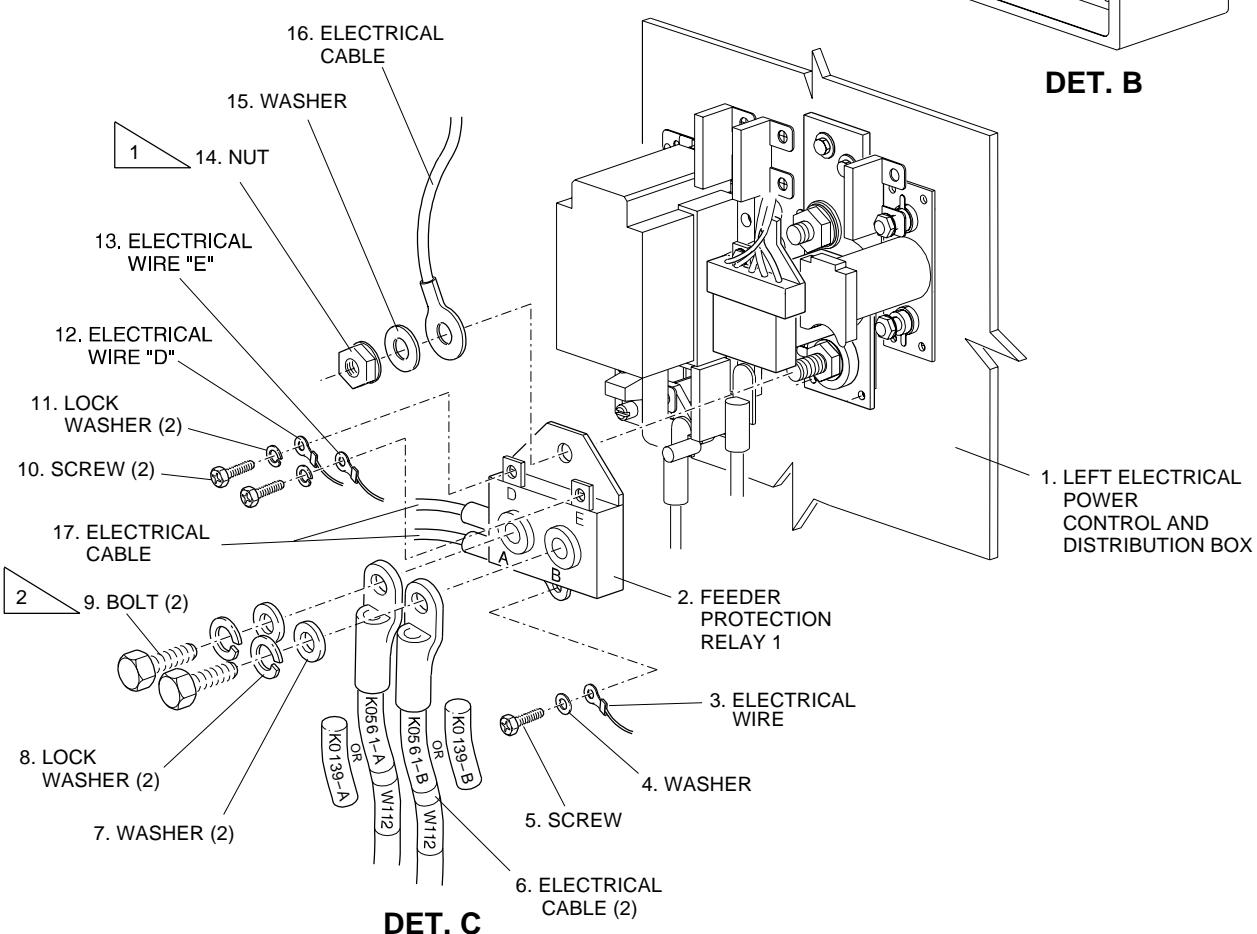
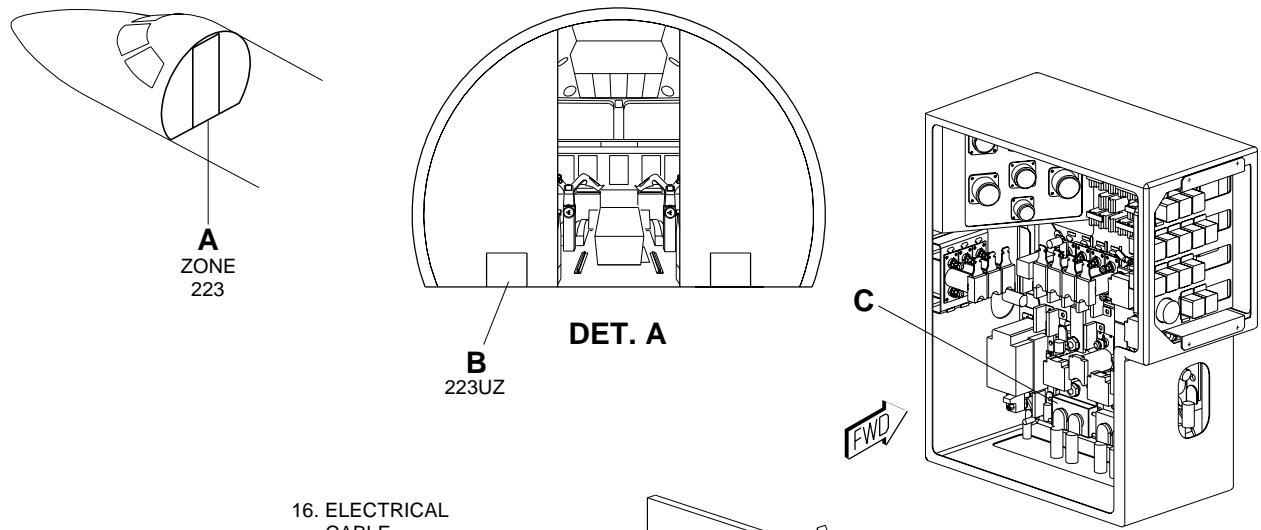
1 Remove the nut (13) and washer (14) which attach the Feeder Protection RLY 4 (15) to the right electrical-power control/distribution box (1).

- (h) Remove the Feeder Protection RLY 4 (15) to the right electrical-power control/distribution box (1).

EFFECTIVITY: ALL

Feeder Protection RLY 1 - Removal/Installation

Figure 401



1 TORQUE: 11.1 TO 15.1 N.m (98.5 TO 134.5 lbf.in)

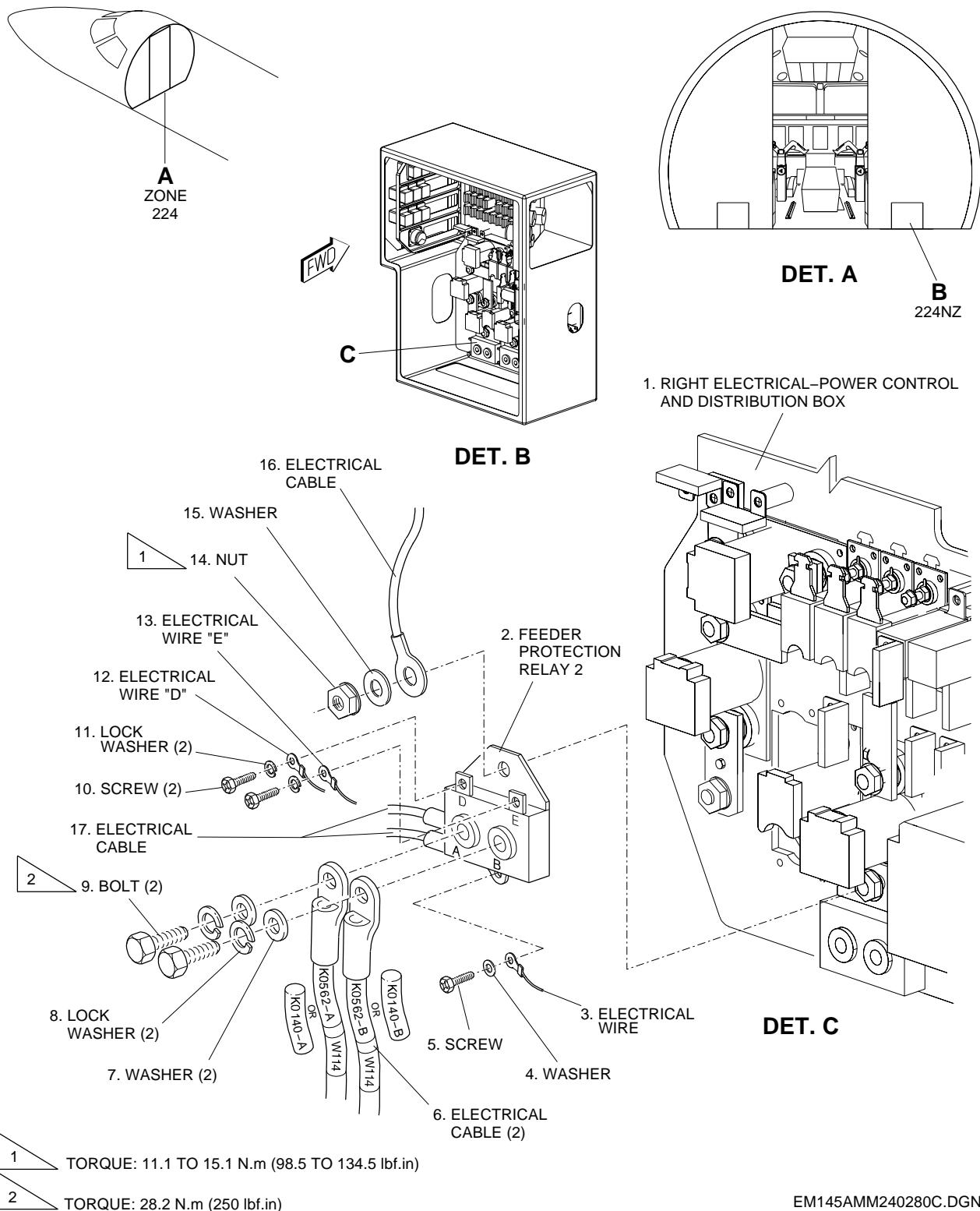
2 TORQUE: 28.2 N.m (250 lbf.in)

EM145AMM240279C.DGN

EFFECTIVITY: ALL

Feeder Protection RLY 2 - Removal/Installation

Figure 402

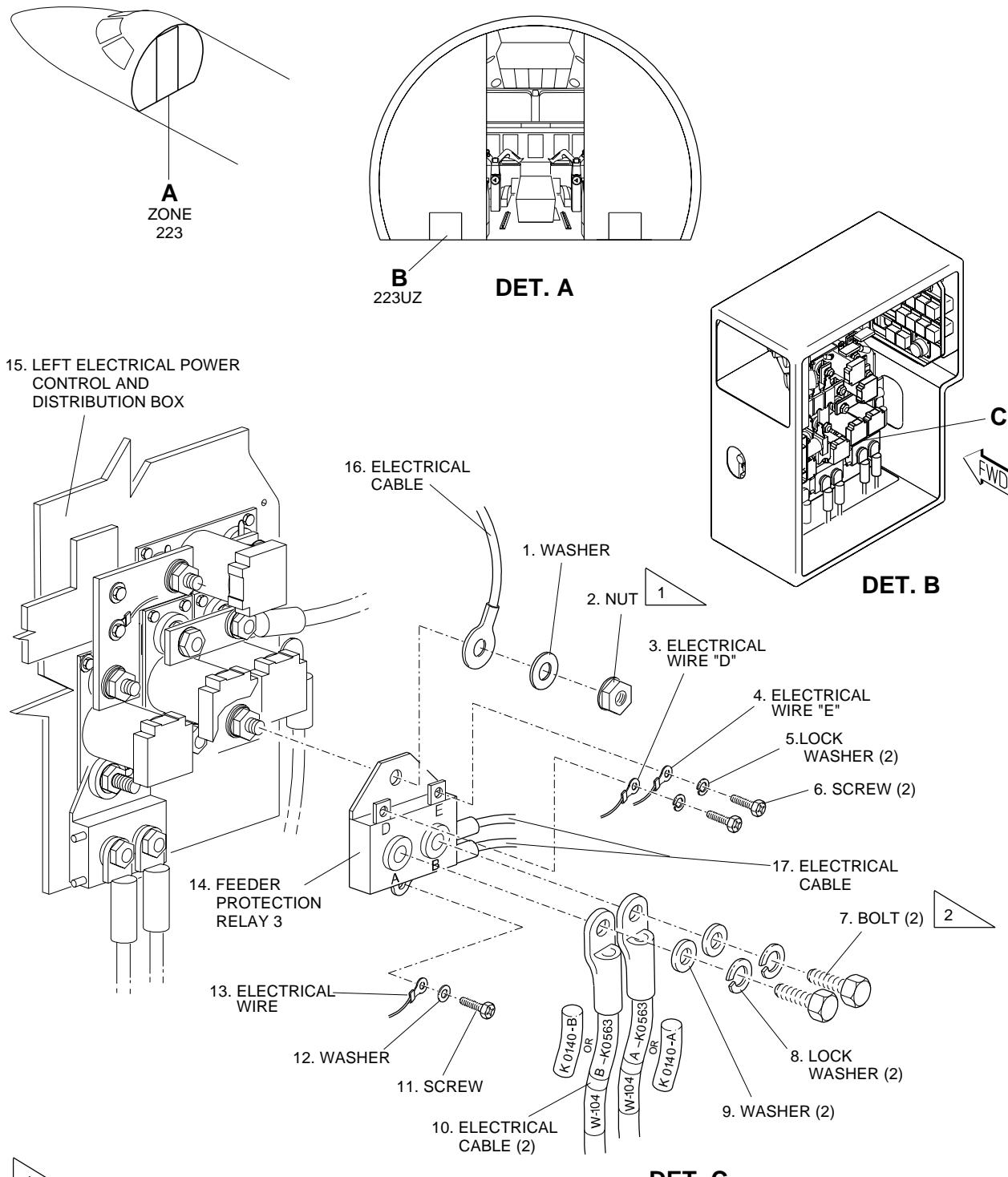


EM145AMM240280C.DGN

EFFECTIVITY: ALL

Feeder Protection RLY 3 - Removal/Installation

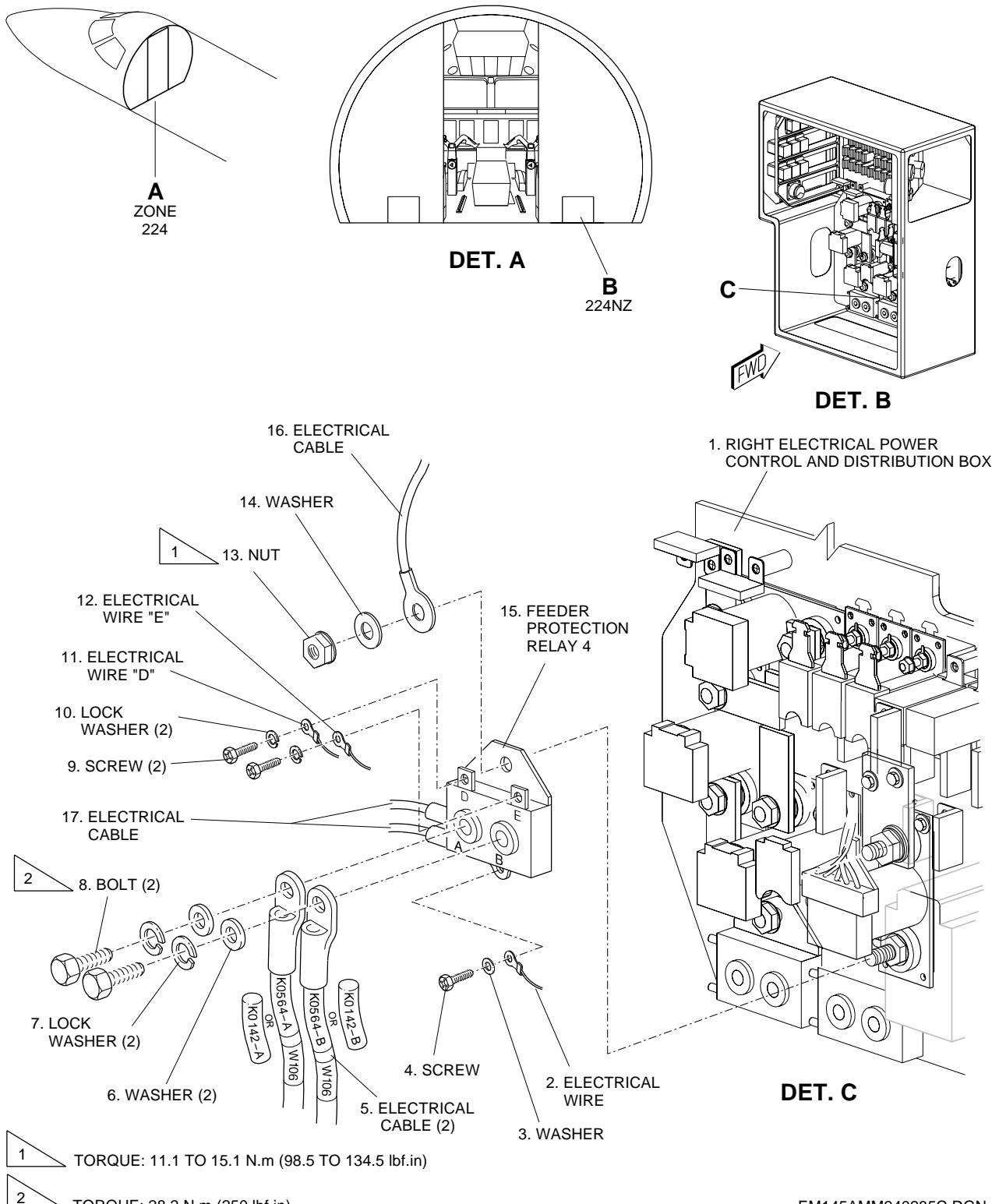
Figure 403



EM145AMM240281C.DGN

EFFECTIVITY: ALL

Feeder Protection RLY 4 - Removal/Installation
Figure 404



EM145AMM240285C.DGN



EMB145 - EMB135

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TASK 24-31-05-400-801-A

EFFECTIVITY: ALL

3. FEEDER PROTECTION RLY - INSTALLATION

A. General

(1) This task gives the procedure to install the Feeder Protection Relays.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION
AMM TASK 24-31-00-700-803-A/500	MAIN GENERATION SYSTEM - OPERATIONAL TEST
WM 20-30-00	-
WM 24-31-50	-
WM 24-31-51	-
WM 24-31-52	-
WM 24-31-53	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223	223UZ	LH forward fuselage section II
224	224NZ	RH forward fuselage section II

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench (For the torque range, refer to the figures)	To torque the fasteners correctly	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Forward fuselage section II

I. Installation

SUBTASK 420-002-A

(1) Install Feeder Protection RLY 1 as follows (Figure 401):

- (a) Put Feeder Protection RLY 1 (2) in its installation position.
- (b) For feeders without soldered connections do as follows:
 - 1 Tighten the nut (14) and washer (15) which attach the Feeder Protection RLY 1 (2) to the left electrical-power control/distribution box (1).
 - 2 Use the torque wrench to torque the nut (14) to 11.1 to 15.1 N.m (98.5 to 134.5 lbf.in).
 - 3 Apply drop of torque seal F-925 to the nut (14) as a check mark.
 - 4 Connect the electrical wire (3) to the Feeder Protection RLY 1 (2).

CAUTION: SEE ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL WIRE IS INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE WIRE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.
- 5 Install the screw (5), and washer (4) which attach the electrical wire (3) to the Feeder Protection RLY 1 (2).
- (c) For feeders with soldered connections do as follows:

CAUTION: SEE IT IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT. REFER TO WIRING MANUAL AS APPLICABLE (WM 24-31-50).

 - 1 Connect the electrical cable (16) to the Feeder Protection RLY1 (2).
 - 2 Tighten the nut (14) and washer (15) which attach the cable (16) to the Feeder Protection RLY 1 (2), and to the left electrical-power control/distribution box (1).
 - 3 Use the torque wrench to torque the nut (14) to 11.1 to 15.1 N.m (98.5 to 134.5 lbf.in).
 - 4 Apply drop of torque seal F-925 to the nut (14) as a check mark.
- (d) For feeders without soldered connections do as follows:
 - 1 Connect the two electrical wires (12), and (13) to the Feeder Protection RLY 1 (2).

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL WIRES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE WIRES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

 - 2 Tighten the two screws (10), and two lock washers (11) which attach the two electrical wires (12), and (13) to the Feeder Protection RLY 1 (2).
- (e) For feeders with soldered connections do as follows:

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT. REFER TO WIRING MANUAL AS APPLICABLE (WM 24-31-50).

- 1 Install the electrical cables soldering (17) to the Feeder Protection RLY 1 (2). Refer to Soldering Procedures (WM 20-30-00).
 - 2 Use the thermoshrinkable sleeve to protect the connection.
- (f) Connect the two electrical cables (6) to the Feeder Protection RLY 1 (2).

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (g) Tighten the two bolts (9), two lock washer (8), and two washers (7) which attach the two electrical cables (6) to the Feeder Protection RLY 1 (2).
- (h) Use the torque wrench to torque the bolts (9) to 28.2 N.m (250 lbf.in).
- (i) Apply drop of torque seal F-925 to the each bolt (9) as a check mark.
- (2) Install Feeder Protection RLY 2 as follows (Figure 402):
- (a) Put Feeder Protection RLY 2 (2) in its installation position.
 - (b) For feeders without soldered connections do as follows:
 - 1 Tighten the nut (14) and washer (15) which attach the Feeder Protection RLY 2 (2) to the right electrical-power control/distribution box (1).
 - 2 Use the torque wrench to torque the nut (14) to 11.1 to 15.1 N.m (98.5 to 134.5 lbf.in).
 - 3 Apply drop of torque seal F-925 to the nut (14) as a check mark.
 - 4 Connect the electrical wire (3) to the Feeder Protection RLY 2 (2).

CAUTION: SEE ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL WIRE IS INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE WIRE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- 5 Install the screw (5), and washer (4) which attach the electrical wire (3) to the Feeder Protection RLY 2 (2).
- (c) For feeders with soldered connections do as follows:

CAUTION: SEE IT IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT. REFER TO WIRING MANUAL AS APPLICABLE (WM 24-31-51).

- 1 Connect the electrical cable (16) to the Feeder Protection RLY 2 (2).
- 2 Tighten the nut (14) and washer (15) which attach the cable to the Feeder Protection RLY 2 (2), and to the right electrical-power control/distribution box (1).
- 3 Use the torque wrench to torque the nut (14) to 11.1 to 15.1 N.m (98.5 to 134.5 lbf.in).
- 4 Apply drop of torque seal F-925 to the nut (14) as a check mark.

(d) For feeders without soldered connections do as follows:

- 1 Connect the two electrical wires (12), and (13) to the Feeder Protection RLY 2 (2).

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL WIRES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE WIRES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- 2 Tighten the two screws (10), and two lock washers (11) which attach the two electrical wires (12), and (13) to the Feeder Protection RLY 2 (2).

(e) For feeders with soldered connections do as follows:

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT. REFER TO WIRING MANUAL AS APPLICABLE (WM 24-31-51).

- 1 Install the electrical cables soldering (17) to the Feeder Protection RLY 2 (2). Refer to Soldering Procedures (WM 20-30-00).

- 2 Use the thermoshrinkable sleeve to protect the connection.

(f) Connect the two electrical cables (6) to the Feeder Protection RLY 2 (2).

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (g) Tighten the two bolts (9), two lock washer (8), and two washers (7) which attach the two electrical cables (6) to the Feeder Protection RLY 2 (2).

- (h) Use the torque wrench to torque the bolts (9) to 28.2 N.m (250 lbf.in).

- (i) Apply drop of torque seal F-925 to the each bolt (9) as a check mark.

(3) Install Feeder Protection RLY 3 as follows (Figure 403):

- (a) Put Feeder Protection RLY 3 (14) in its installation position.

- (b) For feeders without soldered connections do as follows:

- 1 Tighten the nut (2) and washer (1) which attach the Feeder Protection RLY 3 (14) to the left electrical-power control/distribution box (15).
- 2 Use the torque wrench to torque the nut (2) to 11.1 to 15.1 N.m (98.5 to 134.5 lbf.in).
- 3 Apply drop of torque seal F-925 to the nut (2) as a check mark.
- 4 Connect the electrical wire (13) to the Feeder Protection RLY 3 (14).

CAUTION: SEE ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL WIRE IS INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE WIRE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- 5 Install the screw (11), and washer (12) which attach the electrical wire (13) to the Feeder Protection RLY 3 (14).

- (c) For feeders with soldered connections do as follows:

CAUTION: SEE IT IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT. REFER TO WIRING MANUAL AS APPLICABLE (WM 24-31-52).

- 1 Connect the electrical cable (16) to the Feeder Protection RLY3 (14).
- 2 Tighten the nut (2) and washer (1) which attach the cable to the Feeder Protection RLY 3 (14), and to the left electrical-power control/distribution box (15).
- 3 Use the torque wrench to torque the nut (2) to 11.1 to 15.1 N.m (98.5 to 134.5 lbf.in).
- 4 Apply drop of torque seal F-925 to the nut (2) as a check mark.

- (d) For feeders without soldered connections do as follows:

- 1 Connect the two electrical wires (3), and (4) to the Feeder Protection RLY 3 (14).

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL WIRES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE WIRES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- 2 Tighten the two screws (6), and two lock washers (5) which attach the two electrical wires (3), and (4) to the Feeder Protection RLY 3 (14).

- (e) For feeders with soldered connections do as follows:

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT. REFER TO WIRING MANUAL AS APPLICABLE (WM 24-31-52).

- 1 Install the electrical cables soldering (17) to the Feeder Protection RLY 3 (14). Refer to Soldering Procedures (WM 20-30-00).
- 2 Use the thermoshrinkable sleeve to protect the connection.
- (f) Connect the two electrical cables (10) to the Feeder Protection RLY 3 (14).

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (g) Tighten the two bolts (7), two lock washer (8), and two washers (9) which attach the two electrical cables (10) to the Feeder Protection RLY 3 (14).
 - (h) Use the torque wrench to torque the bolts (7) to 28.2 N.m (250 lbf.in).
 - (i) Apply drop of torque seal F-925 to the each bolt (7) as a check mark.
- (4) Install Feeder Protection RLY 4 as follows (Figure 404):
- (a) Put Feeder Protection RLY 4 (15) in its installation position.
 - (b) For feeders without soldered connections do as follows:
 - 1 Tighten the nut (13) and washer (14) which attach the Feeder Protection RLY 4 (15) to the right electrical-power control/distribution box (1).
 - 2 Use the torque wrench to torque the nut (13) to 11.1 to 15.1 N.m (98.5 to 134.5 lbf.in).
 - 3 Apply drop of torque seal F-925 to the nut (13) as a check mark.
 - 4 Connect the electrical wire (2) to the Feeder Protection RLY 4 (15).

CAUTION: SEE ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL WIRE IS INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE WIRE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- 5 Install the screw (4), and washer (3) which attach the electrical wire (2) to the Feeder Protection RLY 4 (15).
- (c) For feeders with soldered connections do as follows:

CAUTION: SEE IT IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT. REFER TO WIRING MANUAL AS APPLICABLE (WM 24-31-53).

- 1 Connect the electrical cable (16) to the Feeder Protection RLY 4 (15).
- 2 Tighten the nut (13) and washer (14) which attach the cable (16) to the Feeder Protection RLY 4 (15), and to the right electrical-power control/distribution box (1).
- 3 Use the torque wrench to torque the nut (13) to 11.1 to 15.1 N.m (98.5 to 134.5 lbf.in).
- 4 Apply drop of torque seal F-925 to the nut (13) as a check mark.

(d) For feeders without soldered connections do as follows:

- 1 Connect the two electrical wires (11), and (12) to the Feeder Protection RLY 4 (15).

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL WIRES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE WIRES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- 2 Tighten the two screws (9), and two lock washers (10) which attach the two electrical wires (11), and (12) to the Feeder Protection RLY 4 (15).

(e) For feeders with soldered connections do as follows:

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT. REFER TO WIRING MANUAL AS APPLICABLE (WM 24-31-53).

- 1 Install the electrical cables soldering (17) to the Feeder Protection RLY 4 (15). Refer to Soldering Procedures (WM 20-30-00).

- 2 Use the thermoshrinkable sleeve to protect the connection.

(f) Connect the two electrical cables (5) to the Feeder Protection RLY 4 (15).

CAUTION: SEE THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (g) Tighten the two bolts (8), two lock washer (7), and two washers (6) which attach the two electrical cables (5) to the Feeder Protection RLY 4 (15).

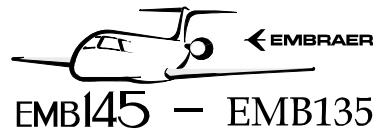
- (h) Use the torque wrench to torque the bolts (8) to 28.2 N.m (250 lbf.in).

- (i) Apply drop of torque seal F-925 to the each bolt (8) as a check mark.

J. Follow-on

SUBTASK 842-002-A

- (1) Close access panel 223UZ or/and 224NZ ([AMM MPP 06-41-03/100](#)) as applicable.



AIRCRAFT
MAINTENANCE MANUAL

- (2) Remove the DO-NOT-SET-ON tag from the GPU pushbutton.
- (3) Remove the DO-NOT-SET-AUTO tag from the BATT 1 and BATT 2 switches.
- (4) Do the Main-Generation System Operational Test ([AMM TASK 24-31-00-700-803-A/500](#)).

