

RIGHT POWER CONTROL/DISTRIBUTION BOX - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the right power control/distribution box.
- B. 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
24-65-01-000-801-A	RIGHT POWER CONTROL/DISTRIBUTION ALL BOX - REMOVAL	
24-65-01-400-801-A	RIGHT POWER CONTROL/DISTRIBUTION ALL BOX - INSTALLATION	

TASK 24-65-01-000-801-A

EFFECTIVITY: ALL

2. RIGHT POWER CONTROL/DISTRIBUTION BOX - REMOVAL

A. General

(1) This procedure gives the instructions to remove the right power control/distribution box.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-41-02/100	-
AMM MPP 06-41-03/100	- COMPONENT LOCATION
AMM SDS 24-40-00/1	
AMM TASK 25-11-01-000-801-A/400	PILOT SEAT - REMOVAL
AMM TASK 25-12-04-000-801-A/400	RH AFT CONSOLE - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113DL	Forward fuselage section I
220	222BF	Cockpit floor panels
220	222FF	Cockpit floor panels
220	221GF	Cockpit floor panels
220	224NZ	Cockpit internal panels 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	Cockpit - RH
1	Helps the other technician	Cockpit - RH

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 ([AMM SDS 24-40-00/1](#)).
- (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) Make sure that the engines are not in operation.
- (6) Make sure that the APU engine is not in operation.
- (7) Remove the copilot seat ([AMM TASK 25-11-01-000-801-A/400](#)).
- (8) Remove the RH aft console ([AMM TASK 25-12-04-000-801-A/400](#)).
- (9) Open main battery compartment door 113DL (AMM MPP 06-41-01/100).
- (10) Open floor panels 222BF, 222FF, and 221GF (AMM MPP 06-41-02/100) to get access to the right power control/distribution box.
- (11) Open the access panel inside the galley to get access to access panel 224NZ.
- (12) Open access panel 224NZ ([AMM MPP 06-41-03/100](#)) to get access to the cables of the right power control/distribution box.

J. Removal ([Figure 401](#)) ([Figure 402](#)) ([Figure 403](#))

SUBTASK 020-002-A

CAUTION: DO NOT ENERGIZE THE AIRCRAFT AND DO NOT START THE ENGINES AND APU IF THE RIGHT POWER CONTROL/DISTRIBUTION BOX IS NOT INSTALLED.

- (1) Refer to [Figure 401](#) and do as follows:
 - (a) Cut the lockwire (2) from the power connectors (1) of the main batteries (3).
 - (b) Disconnect the power connectors (1) from the main batteries (3).
- (2) Refer to [Figure 402](#) and do as follows:
 - (a) Remove the cover (1) of the right power control/distribution box (2).
 - (b) Remove the four screws (3) and four washers (4) which attach the right power control/distribution box (2).
- (3) Refer to [Figure 403](#) and do as follows:
 - (a) Disconnect the seven electrical connectors (21) from the right power control/distribution box (1).

NOTE: If the electrical connectors are without identification code, identify them to make the installation easier.

- (b) Disconnect the electrical connector (2).
- (c) Cut the tiedown strap (34) to loosen the electrical cable (3)
- (d) Remove the nut (5) and washer (4) which attach the electrical cable (3) to the contactor (6).
- (e) Disconnect the electrical cable (3) from the contactor (6).
NOTE: If the electrical cable is without identification code, identify it to make the installation easier.
- (f) Remove the nut (16), spring washer (17), and washer (18) which attach the two electrical cables (19) to the interconnection bar (20).
- (g) Disconnect the two electrical cables (19) from the interconnection bar (20).
NOTE: If the electrical cables are without identification code, identify them to make the installation easier.
- (h) Remove the four bolts (11), four spring washers (12), and four washers (13) which attach the four electrical cables (14) to the two feeder protection relays (15).
- (i) Disconnect the four electrical cables (14) from the two feeder protection relays (15).
NOTE: If the electrical cables are without identification code, identify them to make the installation easier.
- (j) Remove the nut (10) and washer (9) which attach the electrical cable (8) to the contactor (7).
- (k) Disconnect the electrical cable (8) from the contactor (7).
NOTE: If the electrical cable is without identification code, identify it to make the installation easier.
- (l) Remove the bolt (28) and washer (29) which attach the electrical cable (26) to the fuse (27).
- (m) Disconnect the electrical cable (26) from the fuse (27).
NOTE: If the electrical cable is without identification code, identify it to make the installation easier.
- (n) Remove the bolt (30) and washer (31) which attach the electrical cable (32) to the interconnection bar (33).
- (o) Disconnect the electrical cable (32) from the interconnection bar (33).
NOTE: If the electrical cable is without identification code, identify it to make the installation easier.
- (p) Remove the nut (25) and washer (24) which attach the electrical cable (23) to the contactor (22).

- (q) Disconnect the electrical cable (23) from the contactor (22).

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

- (r) Applicable to aircraft with MEDEVAC configuration: Remove the nut (38) and washer (37) which attach the electrical cable (36) to the contactor (35).
- (s) Applicable to aircraft with MEDEVAC configuration: Disconnect the electrical cable (36) from the contactor (35).

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

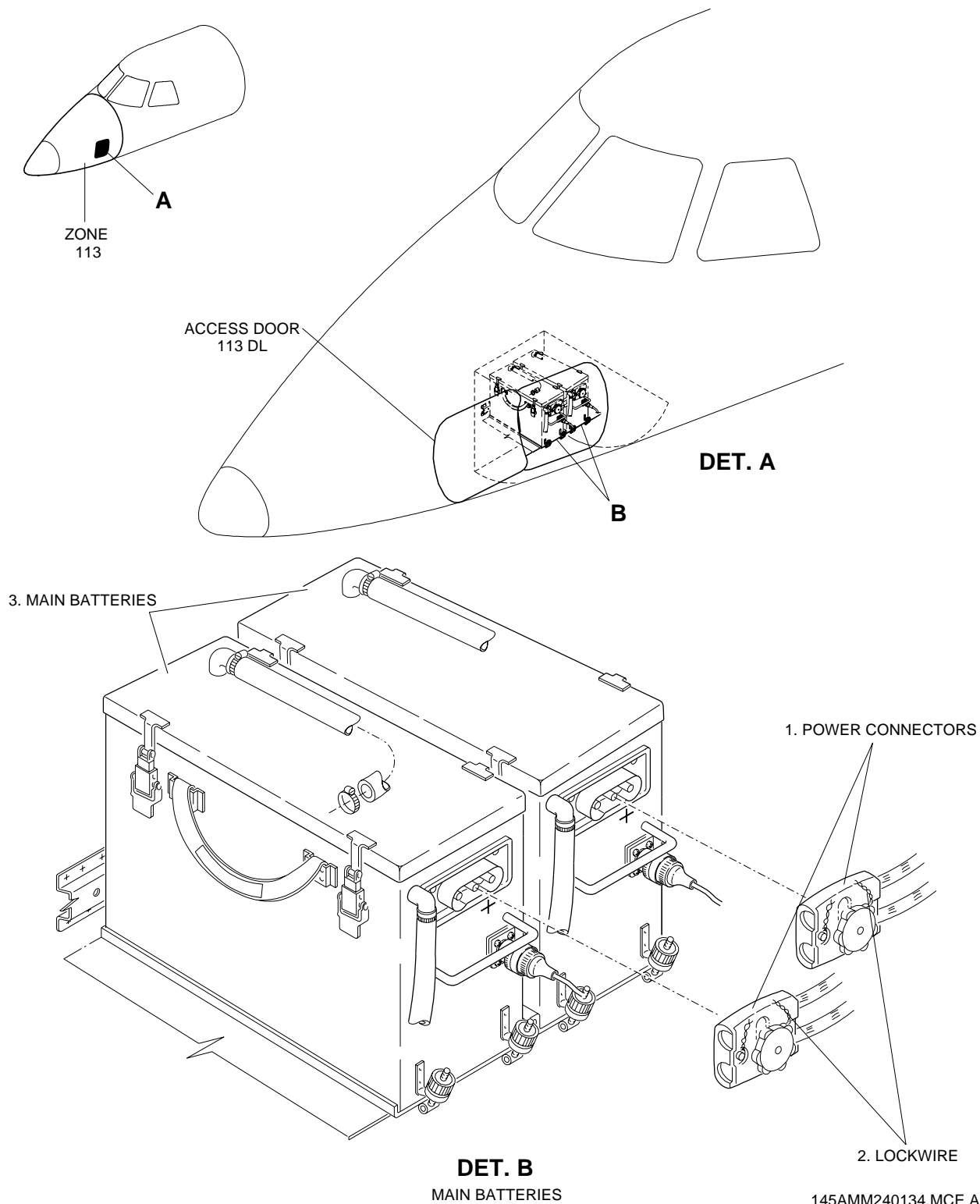
CAUTION: AFTER THE REMOVAL OF THE RIGHT POWER CONTROL/DISTRIBUTION BOX, DO NOT ENERGIZE THE AIRCRAFT AND DO NOT START THE ENGINES AND APU BEFORE THE BOX REINSTALLATION.

- (t) Remove the right power control/distribution box (1).

EFFECTIVITY: ALL

Right Power Control/Distribution Box - Removal/Installation

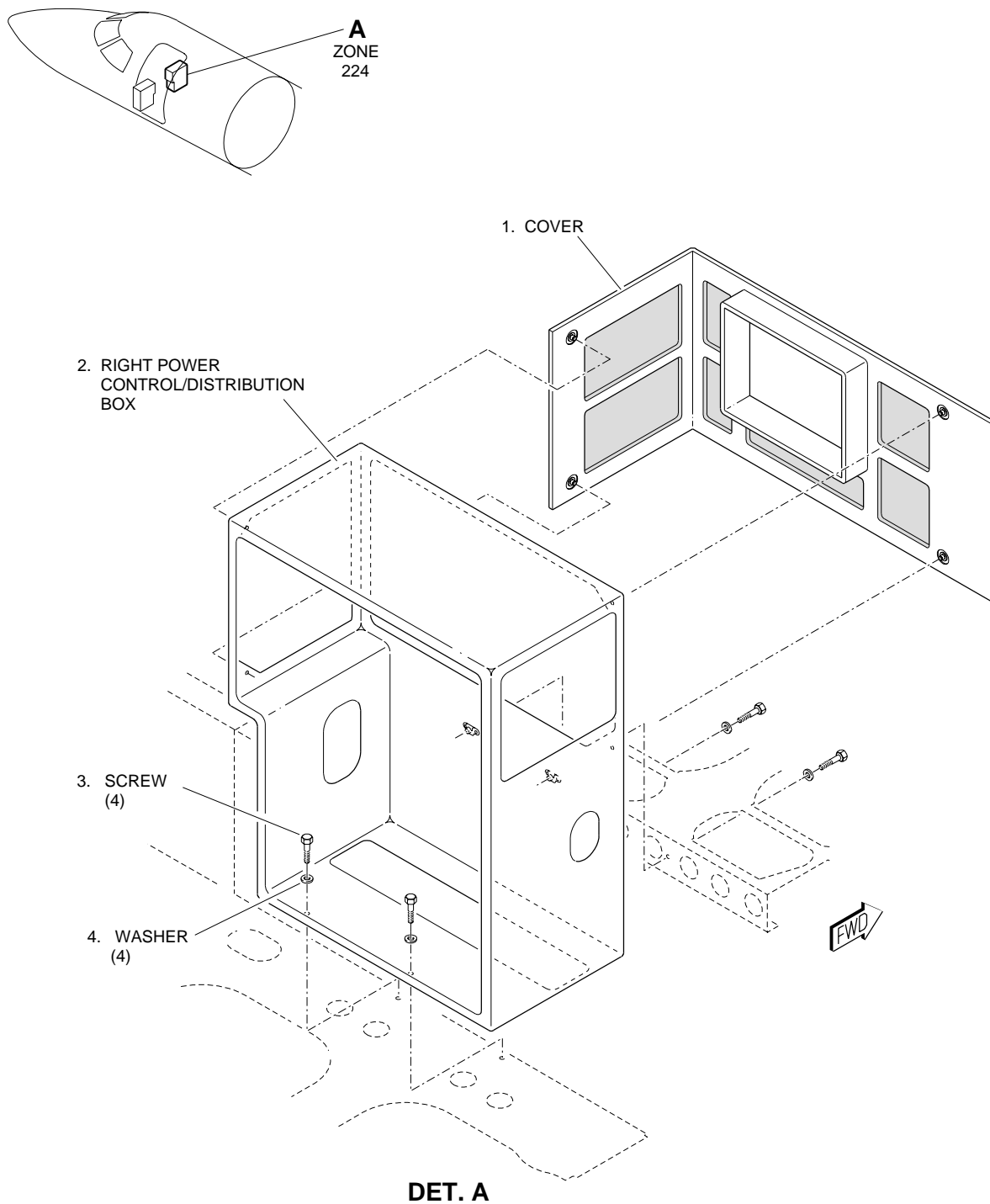
Figure 401



EFFECTIVITY: ALL

Right Power Control/Distribution Box - Removal/Installation

Figure 402

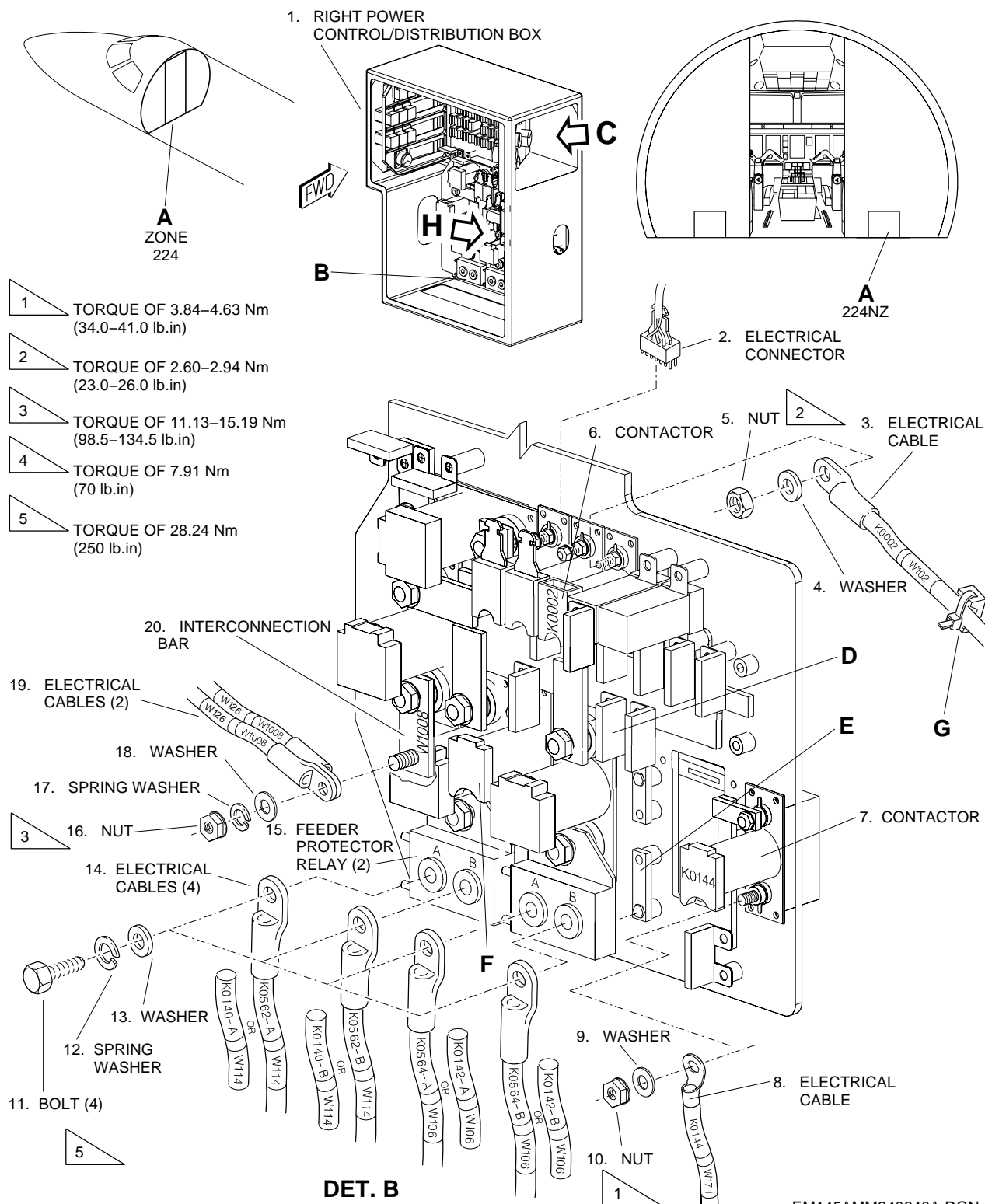


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EFFECTIVITY: ALL

Right Power Control/Distribution Box - Removal/Installation

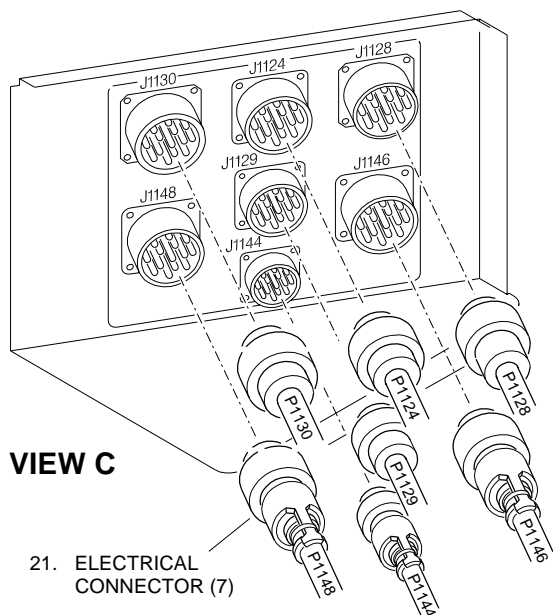
Figure 403 - Sheet 1



EFFECTIVITY: ALL

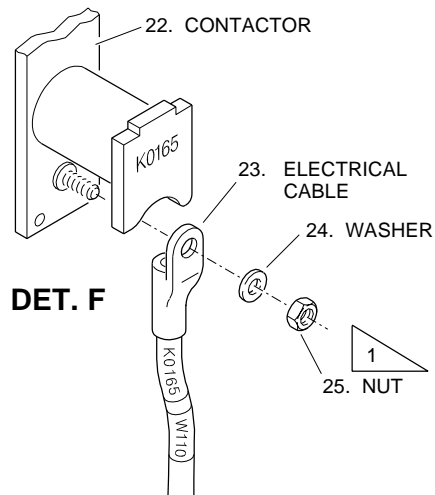
Right Power Control/Distribution Box - Removal/Installation

Figure 403 - Sheet 2

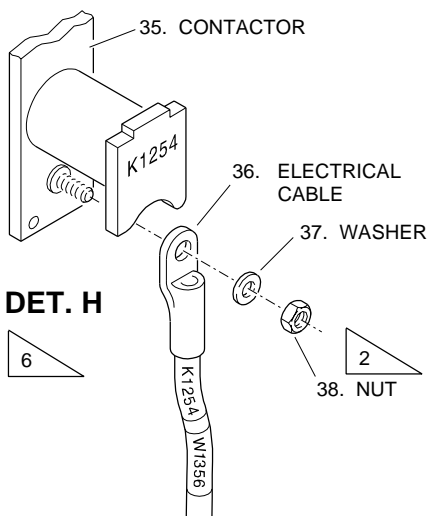


VIEW C

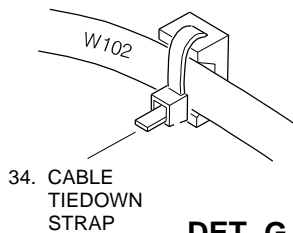
21. ELECTRICAL
CONNECTOR (7)



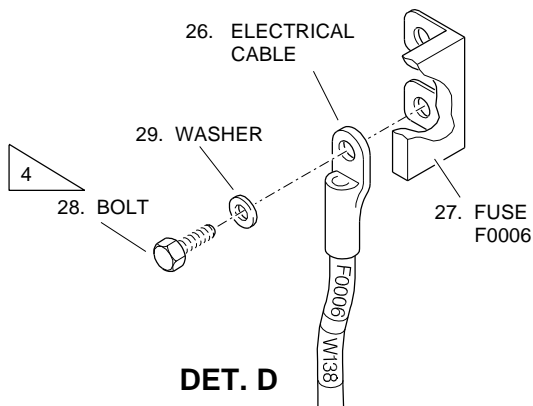
DET. F



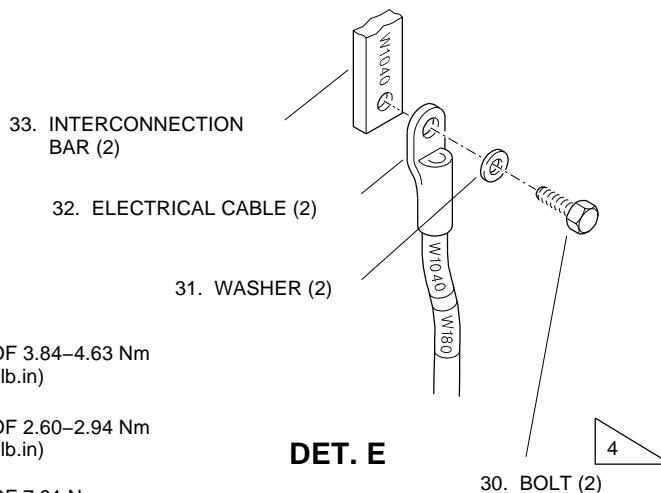
DET. H



DET. G



DET. D



DET. E

- | | |
|---|---|
| 1 | TORQUE OF 3.84–4.63 Nm
(34.0–41.0 lb.in) |
| 2 | TORQUE OF 2.60–2.94 Nm
(23.0–26.0 lb.in) |
| 4 | TORQUE OF 7.91 Nm
(70 lb.in) |
| 6 | FOR MEDEVAC CONFIGURATION. |

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TASK 24-65-01-400-801-A

EFFECTIVITY: ALL

3. RIGHT POWER CONTROL/DISTRIBUTION BOX - INSTALLATION

A. General

(1) This procedure gives the instructions to install the right power control/distribution box.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-41-02/100	-
AMM MPP 06-41-03/100	- COMPONENT LOCATION
AMM TASK 21-20-00-700-801-A/500	CONDITIONED AIR DISTRIBUTION SYSTEM - OPERATIONAL CHECK
AMM TASK 24-31-00-700-803-A/500	MAIN GENERATION SYSTEM - OPERATIONAL TEST
AMM TASK 24-36-00-700-801-A/500	MAIN BATTERY SYSTEM - OPERATIONAL TEST
AMM TASK 24-60-00-700-801-A/500	ELECTRICAL EMERGENCY TRANSFER CIRCUIT - OPERATIONAL CHECK
AMM TASK 24-60-00-700-802-A/500	ELEC EMERG ABNORM ALARM - OPERATIONAL CHECK
AMM TASK 25-11-01-400-801-A/400	PILOT SEAT - INSTALLATION
AMM TASK 25-12-04-400-801-A/400	RH AFT CONSOLE - INSTALLATION
AMM TASK 28-41-00-200-801-A/600	-
AMM TASK 29-10-04-700-801-A/500	ELECTRIC MOTOR DRIVEN PUMP (EMDP) - OPERATIONAL CHECK
AMM TASK 30-42-00-700-801-A/500	WINDSHIELD HEATING - OPERATIONAL CHECK
AMM TASK 33-41-00-700-801-A/500	LANDING LIGHTS - OPERATIONAL TEST
AMM TASK 33-42-00-700-801-A/500	TAXI LIGHTS - OPERATIONAL TEST

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113DL	Forward fuselage section I
220	222BF	Cockpit floor panels
220	222FF	Cockpit floor panels
220	221GF	Cockpit floor panels
220	224NZ	Cockpit internal panels II

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench (For the torque range, refer to Figure 402)	To torque the fasteners correctly	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
MIL-S-23190 (P/N MS3367-1-9)	Tiedown strap	1
ASTM B 134-(OS)	Lockwire - Annealed Brass C26000, .012 in	400 (mm)

G. Expandable Parts

Not Applicable

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
2	Do the task	Cockpit - RH

I. Installation (Figure 401) (Figure 402) (Figure 403)

SUBTASK 420-002-A

WARNING: • **DO NOT ENERGIZE THE AIRCRAFT. MAKE SURE THAT THE GPU PUSHBUTTON, BACKUP PUSHBUTTON, BATT 1 AND BATT 2 SWITCHES, ON THE ELECTRICAL PANEL, ON THE OVERHEAD PANEL, ARE SET AT OFF.**

- **MAKE SURE THAT THE ENGINES AND APU ARE NOT IN OPERATION.**

(1) Refer to (Figure 402) and do as follows:

- Tighten the four screws (3) and four washers (4) which attach the right power control/distribution box (2).
- Install the cover (1) to the right power control/distribution box (2).

(2) Refer to (Figure 403) and do as follows:

- Applicable to aircraft with MEDEVAC configuration: Connect the electrical cable (36) to the contactor (35)

CAUTION: REFER TO ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY AND THAT THE TORQUE VALUE IS APPLIED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- Applicable to aircraft with MEDEVAC configuration: Tighten the nut (38) and the washer (37) which attach the electrical cable (36) to the contactor (35).
- Connect the electrical cable (23) to the contactor (22).

CAUTION: REFER TO ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY AND THAT THE TORQUE VALUE IS APPLIED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (d) Tighten the nut (25) and the washer (24) which attach the electrical cable (23) to the contactor (22).
- (e) Connect the electrical cable (32) to the interconnection bar (33).

CAUTION: REFER TO ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY AND THAT THE TORQUE VALUE IS APPLIED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (f) Tighten the bolt (30) and the washer (31) which attach the electrical cable (32) to the interconnection bar (33).
- (g) Connect the electrical cable (26) to the fuse (27).

CAUTION: REFER TO ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY AND THAT THE TORQUE VALUE IS APPLIED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (h) Tighten the bolt (28) and washer (29) which attach the electrical cable (26) to the fuse (27).
- (i) Connect the electrical cable (8) to the contactor (7).

CAUTION: REFER TO ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY AND THAT THE TORQUE VALUE IS APPLIED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (j) Tighten the nut (10) and washer (9) which attach the electrical cable (8) to the contactor (7).
- (k) Connect the four electrical cables (14) to the two feeder protection relays (15).

CAUTION: REFER TO THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY AND THAT THE TORQUE VALUE IS APPLIED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (l) Tighten the four bolts (11), four spring washers (12), and four washers (13) which attach the four electrical cables (14) to the two feeder protection relays (15).
- (m) Connect the two electrical cables (19) to the interconnection bar (20).

CAUTION: REFER TO THEIR IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLES ARE INSTALLED CORRECTLY AND THAT THE TORQUE VALUE IS APPLIED CORRECTLY. INCORRECT INSTALLATION OF THE CABLES WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (n) Tighten the nut (16), spring washer (17), and washer (18) which attach the two electrical cables (19) to the interconnection bar (20).
- (o) Connect the electrical cable (3) to the contactor (6).

CAUTION: REFER TO ITS IDENTIFICATION TO MAKE SURE THAT THE ELECTRICAL CABLE IS INSTALLED CORRECTLY AND THAT THE TORQUE VALUE IS APPLIED CORRECTLY. INCORRECT INSTALLATION OF THE CABLE WILL CAUSE SERIOUS PROBLEMS TO THE AIRCRAFT.

- (p) Tighten the nut (5) and washer (4) which attach the electrical cable (3) to the contactor (6).
 - (q) Install the tiedown strap (34) to hold the electrical cable (3).
 - (r) Install the electrical connector (2).
 - (s) Connect the seven electrical connector (21) to the right power control/distribution box.
- (3) Refer to (Figure 401) and do as follows:
- (a) Connect the power connectors (1) to the main batteries (3).
 - (b) Use a lockwire (2) to lock the power connectors (1) of the main batteries (3).

J. Follow-on

SUBTASK 842-002-A

- (1) Close main battery compartment door 113DL (AMM MPP 06-41-01/100).
- (2) Close access panel 224NZ ([AMM MPP 06-41-03/100](#)) and the access panel inside the galley that gives access to that panel.
- (3) Do an inspection on the fuel quantity indication harness (AMM TASK 28-41-00-200-801-A/600).

NOTE: The inspection of fuel quantity indication harness is a part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations (Section 6) of the Maintenance Review Board Report (MRB).

- (4) Close floor panels 222BF, 222FF, and 221GF (AMM MPP 06-41-02/100)
- (5) Install the RH aft console ([AMM TASK 25-12-04-400-801-A/400](#)).
- (6) Install the copilot seat ([AMM TASK 25-11-01-400-801-A/400](#)).
- (7) Remove the DO-NOT-SET-AUTO tag to the BATT 1 and BATT 2 switches.

- (8) Remove the DO-NOT-SET-ON tag to the GPU pushbutton.
- (9) Do the operational test of the main battery system ([AMM TASK 24-36-00-700-801-A/500](#)).
- (10) Do the operational check of the electrical emergency transfer circuit ([AMM TASK 24-60-00-700-801-A/500](#)).
- (11) Do the operational check of the ELEC EMERG ABNORM alarm ([AMM TASK 24-60-00-700-802-A/500](#)).
- (12) Do the operational check of the conditioned air distribution system in the cockpit ([AMM TASK 21-20-00-700-801-A/500](#)).
- (13) Do the operational check of the electric motor-driven pump of system 1 ([AMM TASK 29-10-04-700-801-A/500](#)).
- (14) Do the operational test of windshield heating 2 ([AMM TASK 30-42-00-700-801-A/500](#)).
- (15) Do the operational test of landing light 2 ([AMM TASK 33-41-00-700-801-A/500](#)).
- (16) Do the operational test of the bottom taxi light ([AMM TASK 33-42-00-700-801-A/500](#)).
- (17) Do the operational test of the main generation system ([AMM TASK 24-31-00-700-803-A/500](#)).