



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

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MAIN BATTERY 1 RELAY BOX - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the Main Battery 1 Relay 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
24-36-02-000-801-A	MAIN BATTERY 1 RELAY BOX - REMOV- AL	ALL
24-36-02-400-801-A	MAIN BATTERY 1 RELAY BOX - INSTAL- LATION	ALL



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TASK 24-36-02-000-801-A

EFFECTIVITY: ALL

2. MAIN BATTERY 1 RELAY BOX - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the Main Battery 1 Relay Box.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113DL	Battery compartment

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	At the battery compartment

I. Preparation

*SUBTASK 841-002-A*

- (1) Open access panel 113DL (AMM MPP 06-41-01/100).

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

*SUBTASK 020-002-A*

- (1) Refer to figure 401:

- (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).

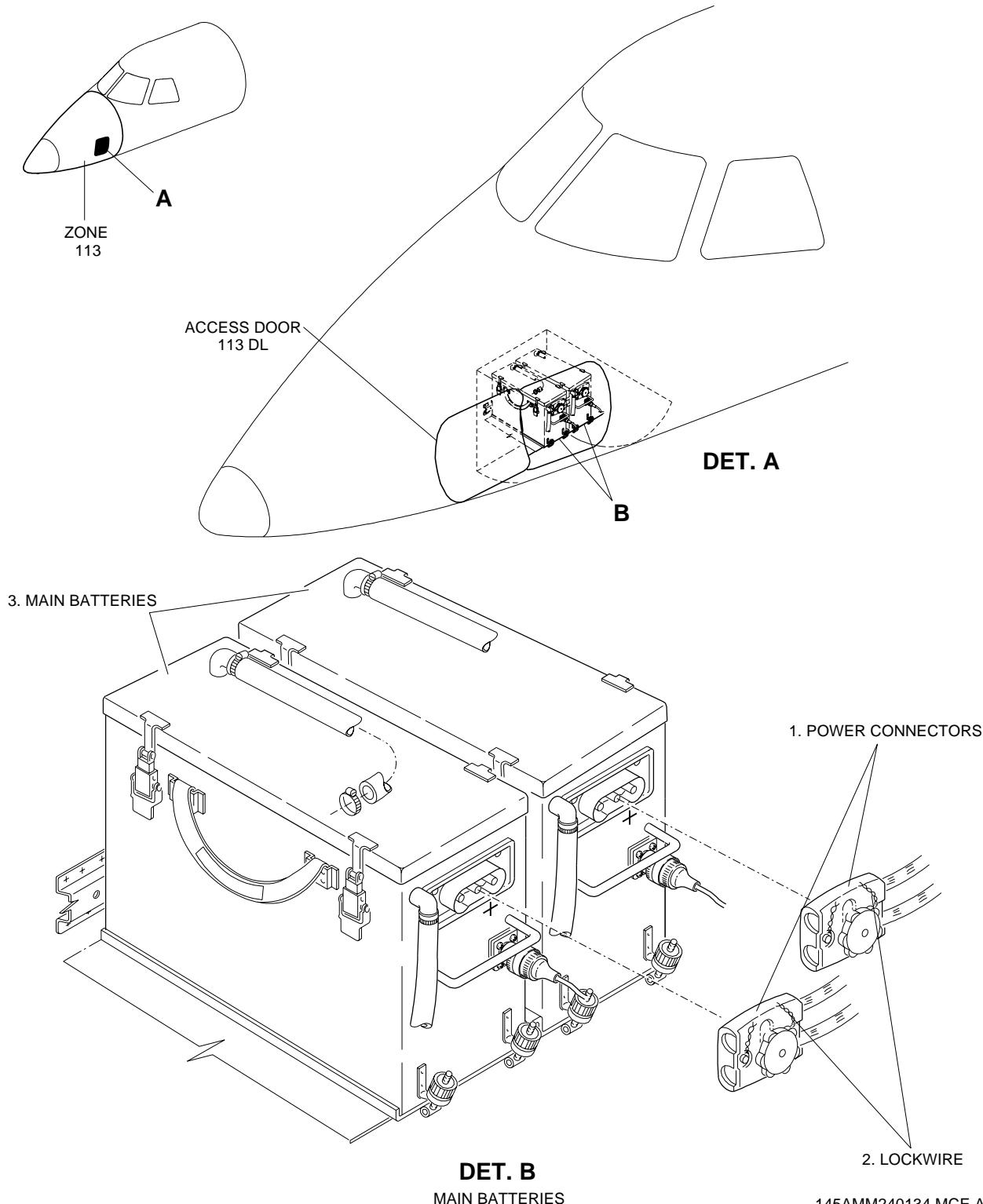
- (2) Refer to figure 402:

- (a) Disconnect the two electrical connectors (12) from the main battery 1 relay box (1).
- (b) Release the four dzus fasteners (8) of the front cover (11) of the main battery 1 relay box (1).
- (c) Remove the front cover (11) of the main battery 1 relay box (1).
- (d) Remove the bolt (3) and washer (2) which attach the electrical cable (16) to the main battery 1 relay box (1).
- (e) Remove the electrical cable (16).  
NOTE: If the electrical cable is without an identification code, identify the cable to make the reinstallation easier.
- (f) Remove the bolt (4) and washer (5) which attach the electrical cable (17) to the main battery 1 relay box (1).
- (g) Remove the electrical cable (17).  
NOTE: If the electrical cable is without an identification code, identify the cable to make the reinstallation easier.
- (h) (Applicable to main battery 1 relay box serial numbers 145013 thru 145024) Remove the bolt (13), lock washer (14), and washer (15) which attach the electrical cable (18) to the main battery 1 relay box (1).
- (i) (Applicable to main battery 1 relay box serial numbers 145004 thru 145012 and 145025 and on) Remove the bolt (13) and washer (15) which attach the electrical cable (18) to the main battery 1 relay box (1).
- (j) Remove the electrical cable (18).  
NOTE: If the electrical cable is without an identification code, identify the cable to make the reinstallation easier.
- (k) Remove the two screws (6) and two washers (7) which attach the main battery 1 relay box (1) to the tray (9).
- (l) Release the three locks (10) of the tray (9).
- (m) Remove the main battery 1 relay box (1).

**EFFECTIVITY: ALL**

Main Battery 1 Relay Box - Removal/Installation

Figure 401

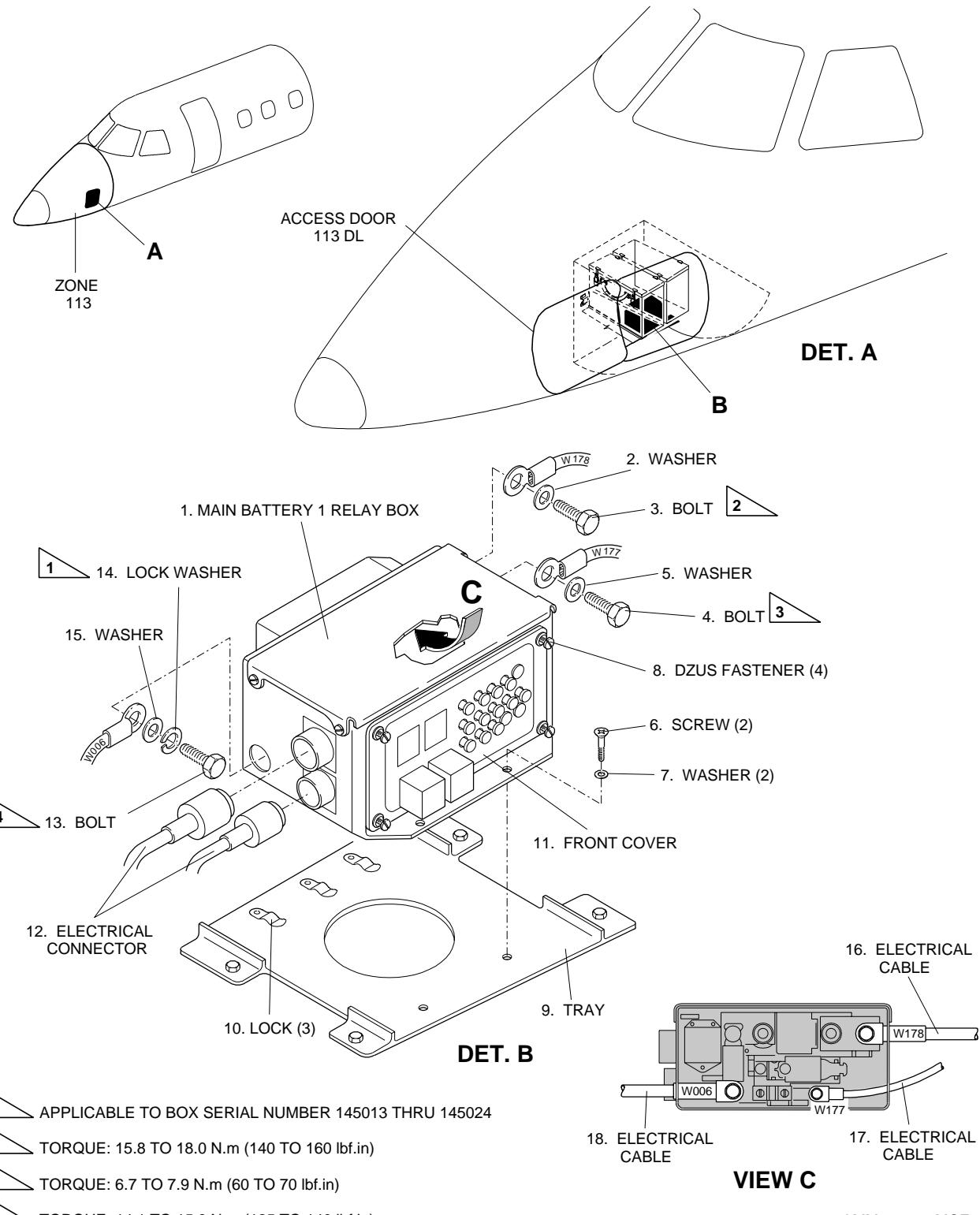


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**EFFECTIVITY: ALL**

Main Battery 1 Relay Box - Removal/Installation

Figure 402





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TASK 24-36-02-400-801-A

EFFECTIVITY: ALL

3. MAIN BATTERY 1 RELAY BOX - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the Main Battery 1 Relay Box.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
<a href="#">AMM TASK 24-36-00-700-801-A/500</a>	MAIN BATTERY SYSTEM - OPERATIONAL TEST

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113DL	Battery compartment

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

SPECIFICATION (BRAND)	DESCRIPTION	QTY
P/N MS20995C20	Lockwire	400 (mm)

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	At the battery compartment

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Refer to figure 402:

- (a) Put the main battery 1 relay box (1) in its installation position.
- (b) Attach the three locks (10) of the tray (9).

- (c) Tighten the two washers (7) and two screws (6) which attach the main battery 1 relay box (1) to the tray (9).
- (d) Release the four dzus fasteners (8) of the front cover (11) of the main battery 1 relay box (1).
- (e) Remove the front cover (11) of the main battery 1 relay box (1).
- (f) Connect the electrical cable (16) to the main battery 1 relay box (1).

**CAUTION:** SEE 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.

- (g) Tighten the bolt (3) and washer (2) which attach the electrical cable (16) to the main battery 1 relay box (1).
- (h) Connect the electrical cable (17) to the main battery 1 relay box (1).

**CAUTION:** SEE 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.

- (i) Tighten the bolt (4) and washer (5) which attach the electrical cable (17) to the main battery 1 relay box (1).
- (j) Connect the electrical cable (18) to the main battery 1 relay box (1).

**CAUTION:** SEE 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.

- (k) (Applicable to main battery 1 relay box serial numbers 145013 thru 145024) Tighten the bolt (13), lock washer (14), and washer (15) which attach the electrical cable (18) to the main battery 1 relay box (1).
  - (l) (Applicable to main battery 1 relay box serial numbers 145004 thru 145012 and 145025 and on) Tighten the bolt (13) and washer (15) which attach the electrical cable (18) to the main battery 1 relay box (1).
  - (m) Connect the two electrical connectors (12) to the main battery 1 relay box (1).
  - (n) Put the front cover (11) of the main battery 1 relay box (1) in its installation position.
  - (o) Tighten the four dzus fasteners (8) which attach the front cover (11) of the main battery 1 relay box (1).
- (2) Refer to figure 401:
- (a) Connect the power connector (1) to the main batteries (3)
  - (b) Use the lockwire (2) to lock the power connector (1) of the main batteries (3).



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J. Follow-on

SUBTASK 842-002-A

- (1) Do the Operational Test of the Main Battery System ( [AMM TASK 24-36-00-700-801-A/500](#)).
- (2) Close access panel 113DL (AMM MPP 06-41-01/100).