



## AIRCRAFT MAINTENANCE MANUAL

### APU LINE CONTACTOR (ALC) - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedures to remove/install the APU Line Contactor (ALC).
- B. The ALC is installed in the left electrical-power control/distribution box.
- C. 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
24-34-03-000-801-A	APU LINE CONTACTOR (ALC) - REMOV- AL	ALL
24-34-03-400-801-A	APU LINE CONTACTOR (ALC) - INSTAL- LATION	ALL



EMB145 - EMB135

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TASK 24-34-03-000-801-A

EFFECTIVITY: ALL

2. APU LINE CONTACTOR (ALC) - REMOVAL

A. General

- (1) This task gives the procedure to remove the ALC.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION

C. Zones and Accesses

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

I. Preparation

SUBTASK 841-002-A

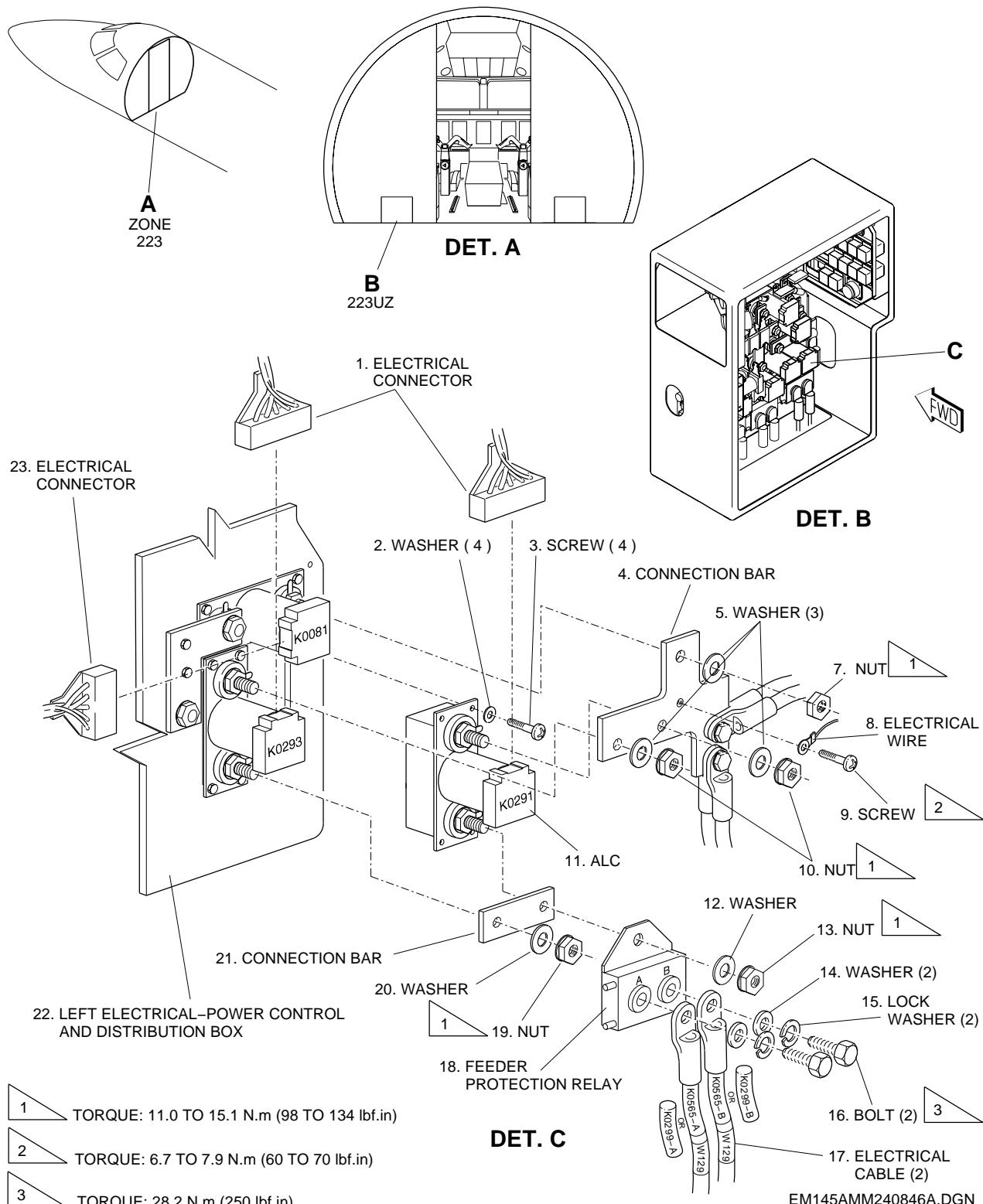
- (1) Make sure that the GPU pushbutton, on the electrical panel, on the overhead panel, is set at OFF (The striped bar is off).
- (2) Attach a DO-NOT-SET-ON tag to the GPU pushbutton.
- (3) Make sure that the BATT 1 and BATT 2 switches, on the electrical panel, on the overhead panel, are set at OFF.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



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

SUBTASK 020-002-A

- (1) Disconnect the three electrical connectors (1) and (23).
- (2) Remove the three nuts (7) and (10), and three washers (5) which attach the connection bar (4) to the left electrical-power control/distribution box (22).
- (3) Remove the screw (9) and release the electrical wire (8).
- (4) Remove the connection bar (4).
- (5) Remove the two bolts (16), two lock washers (15), and two washers (14) which attach the two electrical cables (17) to the APU-feeder protection relay (18).
- (6) Disconnect the two electrical cables (17) from the APU-feeder protection relay (18).  
**NOTE:** If the electrical cables are without an identification code, identify them to make the reinstallation easier.
- (7) Remove the nut (13) and washer (12) which attach the APU-feeder protection relay (18) to the connection bar (21).
- (8) Remove the nut (19) and the washer (20) which attach the connection bar (21) to the left electrical-power control/distribution box (22).
- (9) Remove the connection bar (21).
- (10) Remove the four screws (3) and four washers (2) which attach the ALC (11) to the left electrical-power control/distribution box (22).
- (11) Remove the ALC (11) from the left electrical-power control/distribution box (22).

**EFFECTIVITY: ALL**
**APU Line Contactor (ALC) - Removal/Installation**
**Figure 401**




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TASK 24-34-03-400-801-A

EFFECTIVITY: ALL

3. APU LINE CONTACTOR (ALC) - INSTALLATION

A. General

- (1) This task gives the procedure to install the ALC.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION
AMM TASK 24-34-00-700-803-A/500	APU GENERATION SYSTEM - OPERATIONAL TEST

C. Zones and Accesses

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

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench (For the torque range, refer to Figure 401)	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	LH forward fuselage section II

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Put the ALC (11) in its installation position.
- (2) Tighten the four screws (3) and four washers (2) which attach the ALC (11) to the left electrical-power control/distribution box (22).
- (3) Put the connection bar (21) in its installation position.
- (4) Put the APU-feeder protection relay (18) in its installation position.

- (5) Tighten the nut (13) and washer (12) which attach the APU-feeder protection relay (18) to the connection bar (21).
- (6) Connect the two electrical cables (17) to the APU-feeder protection relay (18).

**CAUTION:** SEE 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 IMPORTANT PROBLEMS TO THE AIRCRAFT.

- (7) Tighten the two bolts (16), two lock washers (15), and two washers (14) which attach the two electrical cables (17) to the APU-feeder protection relay (18).
- (8) Tighten the nut (19) and washer (20) which attach the connection bar (21).
- (9) Put the connection bar (4) in its installation position.
- (10) Connect the electrical wire (8) to the connection bar (4) with the screw (9).
- (11) Tighten the screw (9) to the connection bar (4).
- (12) Tighten the three nuts (7) and (10), and three washers (5) which attach the connection bar (4) to the left electrical-power control/distribution box (22).
- (13) Connect the electrical connectors (1) and (23).

J. Follow-on

**SUBTASK 842-002-A**

- (1) Close access panel 223UZ ([AMM MPP 06-41-03/100](#)).
- (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 operational test of the APU Generation System ([AMM TASK 24-34-00-700-803-A/500](#)).