

APU STARTER/GENERATOR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove/install the APU starter/generator.
- B. The APU starter/generator is installed on the APU, in the aircraft tail cone.
- C. You can get access to the APU starter/generator through the APU cowling.
- D. 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
24-34-01-000-801-A	APU STARTER/GENERATOR - REMOVAL	ALL
24-34-01-400-801-A	APU STARTER GENERATOR - INSTALLATION	ALL

TASK 24-34-01-000-801-A

EFFECTIVITY: ALL

2. APU STARTER/GENERATOR - REMOVAL

A. General

(1) This task gives the procedure to remove the APU starter/generator.

B. References

REFERENCE	DESIGNATION
AMM TASK 49-11-00-000-801-A/400	APU COWLING - REMOVAL
AMM TASK 49-15-00-000-801-A/400	APU COWLING - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
313		Aircraft Tail Cone

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	Aircraft tail cone

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.
- (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) For Aircraft with APU T-62T-40C11, remove the APU cowling ([AMM TASK 49-11-00-000-801-A/400](#)).

- (6) For Aircraft with APU T-62T-40C14, remove the APU cowling ([AMM TASK 49-15-00-000-801-A/400](#)).

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

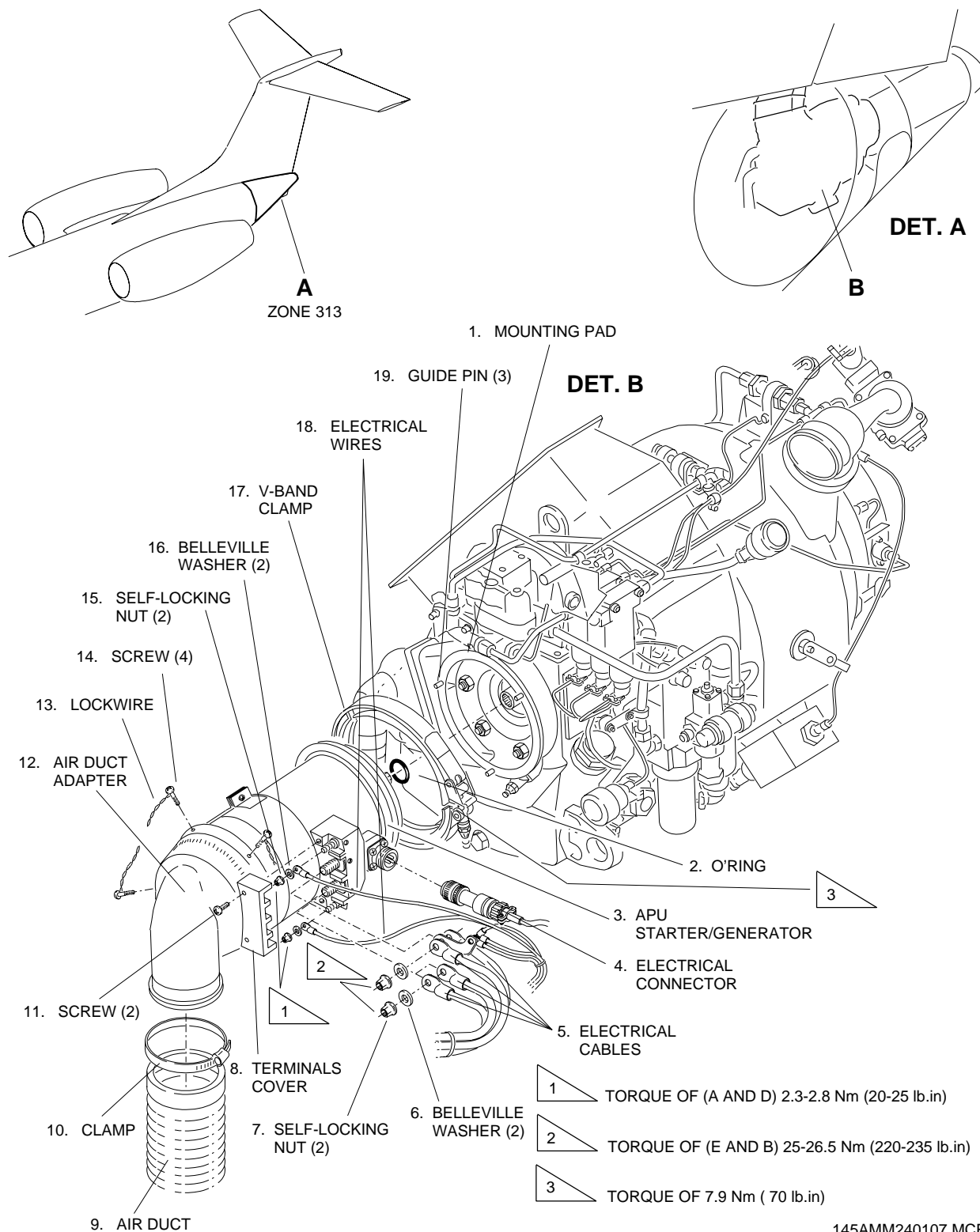
SUBTASK 020-002-A

- (1) Disconnect the electrical connector (4).
- (2) Remove the screws (11) which attach the terminals cover (8).
- (3) Remove the self-locking nuts (7) and Belleville washers (6) which attach the electrical cables (5) to the APU starter/generator (3).
- (4) Disconnect the electrical cables (5) from the APU starter/generator (3).
- (5) Remove the self-locking nuts (15) and Belleville washers (16) which attach the electrical wires (18) to the APU starter/generator (3).
- (6) Disconnect electrical wires (18) from the APU starter/generator (3).
- (7) Loosen the clamp (10) which attaches the air duct (9) to the air duct adapter (12).
- (8) Disconnect the air duct (9) from air duct adapter (12).
- (9) Loosen the V-band clamp (17) which attaches the APU starter/generator (3) to the mounting pad (1).
- (10) Remove the APU starter/generator (3).
- (11) Discard the O-ring (2).
- (12) Cut the lockwire (13) from the screws (14) of the air duct adapter (12).
- (13) Remove the screws (14) which attach the air duct adapter (12) to the APU starter/generator (3).
- (14) Remove the air duct adapter (12) from the APU starter/generator (3).

EFFECTIVITY: ALL

APU Starter Generator - Removal/Installation

Figure 401



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TASK 24-34-01-400-801-A
EFFECTIVITY: ALL

3. APU STARTER GENERATOR - INSTALLATION

A. General

(1) This task gives the procedure to install the APU starter/generator.

B. References

REFERENCE	DESIGNATION
AMM TASK 24-34-00-700-803-A/500	APU GENERATION SYSTEM - OPERATIONAL TEST
AMM TASK 49-11-00-400-801-A/400	APU COWLING - INSTALLATION
AMM TASK 49-15-00-400-801-A/400	APU COWLING - INSTALLATION
IPC 24-34-01	APU STARTER GENERATOR

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
313		Aircraft Tail Cone

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench (For the torque range, refer to Figure 401)	To torque	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MS20995C20	Lockwire	100 (mm)
MS20995C32	Lockwire	1200 (mm)
MIL-G-81322	Mobil grease 28	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	IPC 24-34-01	1

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Aircraft tail cone

I. Installation (Figure 401)

SUBTASK 420-002-A

CAUTION: MAKE SURE THAT THE GPU PUSHBUTTON, BATT 1 AND BATT 2 SWITCHES, ON THE ELECTRICAL PANEL, ON THE OVERHEAD PANEL, ARE SET AT OFF.

- (1) Clean the APU starter/generator (3) shaft.
- (2) On aircraft with APU model C11 (APU 500), do as follows :
CAUTION: MAKE SURE THAT THE O-RING IS NEW. A REUSED O-RING CAN CAUSE DAMAGE TO THE APU STARTER/GENERATOR.
 - (a) Lubricate the new O-ring (2) and the APU starter/generator (3) shaft with Mobil grease 28 and install the O-ring to the shaft.
- (3) On aircraft with APU model C14 (APU 500R), do as follows:
CAUTION: MAKE SURE THAT THE O-RING IS NEW. A REUSED O-RING CAN CAUSE DAMAGE TO THE APU STARTER/GENERATOR.
 - (a) Install the new O-ring (2) to the APU starter/generator (3) shaft.
- (4) Put the air duct adapter (12) on the APU starter/generator (3) air inlet side.
- (5) Tighten the screws (14) and safety (lockwire P/N = MS20995C32) them.
- (6) Put the APU starter/generator (3) and V-band clamp (17) on the mounting pad.
- (7) Tighten the nut of the V-band clamp (17) to approximately 2/3 of the specified torque value.
- (8) Connect the air duct (9) to the air duct adapter (12).
- (9) Lightly hit the V-band clamp (17) at different locations around the outside diameter with a rubber mallet and a stick.
- (10) Tighten the nut of the V-band clamp (17) to the specified value.
NOTE: Do step (7) and then step (9) as many times as necessary to get a condition in which there is no reduction in torque.
- (11) Tighten the clamp (10) which attaches the air duct (9) to the air duct adapter (12).
- (12) Safety (lockwire P/N = MS20995C20) the clamp (10).
- (13) Connect the electrical connector (4) and electrical wires (18) to the APU starter/generator (3).
- (14) Connect the electrical cables (5) to the APU starter/generator (3).

- (15) Tighten the self-locking nuts (15) and Belleville washers (16), which attach the electrical wires (18) to the APU starter/generator (3), to the specified value.
- (16) Tighten the self-locking nuts (7) and Belleville washers (6), which attach the electrical cables (5) to the APU starter/generator (3), to the specified value.
- (17) Put the terminals cover (8) in its installation position.

NOTE: 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 electrical equipment.

- (18) Tighten the screws (11) which attach the terminals cover (8).

J. Follow-on

SUBTASK 842-002-A

- (1) Remove the DO-NOT-SET-ON tag from the GPU pushbutton.
- (2) Remove the DO-NOT-SET-AUTO tag from the BATT 1 and BATT 2 switches.
- (3) Do the APU generation system operational test ([AMM TASK 24-34-00-700-803-A/500](#)).
- (4) For Aircraft with APU T-62T-40C11, install the APU cowling ([AMM TASK 49-11-00-400-801-A/400](#)).
- (5) For Aircraft with APU T-62T-40C14, install the APU cowling ([AMM TASK 49-15-00-400-801-A/400](#)).

