



AIRCRAFT MAINTENANCE MANUAL

TORQUE TUBE - REMOVAL/INSTALLATION

EFFECTIVITY: AIRCRAFT WITH MECHANICAL GUST LOCK (PRE-MOD S.B. 145-27-0086)

1. General

- A. This section gives the procedures to remove and install the torque tube of the gust lock system.
- 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
27-70-04-000-801-A	TORQUE TUBE - REMOVAL	AIRCRAFT WITH MECHANICAL GUST LOCK (PRE-MOD S.B. 145-27-0086)
27-70-04-400-801-A	TORQUE TUBE - INSTALLATION	AIRCRAFT WITH MECHANICAL GUST LOCK (PRE-MOD S.B. 145-27-0086)



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 27-70-04-000-801-A

EFFECTIVITY: AIRCRAFT WITH MECHANICAL GUST LOCK (PRE-MOD S.B. 145-27-0086)

2. TORQUE TUBE - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the torque tube of the gust lock system.

B. References

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

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
123	123BL	Below the cockpit floor
124		Below the cockpit floor

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	Below the cockpit floor

I. Preparation

SUBTASK 841-002-A

- (1) Remove cockpit underfloor access hatch 123BL (AMM MPP 06-41-01/100).

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

SUBTASK 020-002-A

- (1) Disconnect the end of the spring (7) from the support at the torque tube (1).
- (2) Disconnect the end of the rod (8) from the bellcrank at the torque tube (1). For this, remove the cotter pin (15), nut (14), washers (13), (12), and (10), bonding strap (9), and bolt (11) (DET. C).
- (3) Disconnect the end of the rod (6) from the arm at the torque tube (1). For this, remove the cotter pin (19), nut (18), washers (17) and (20), and bolt (21) (DET. D).



EMB145 - EMB135

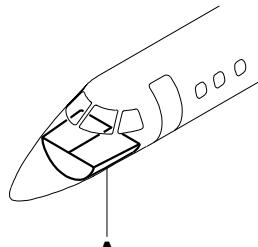
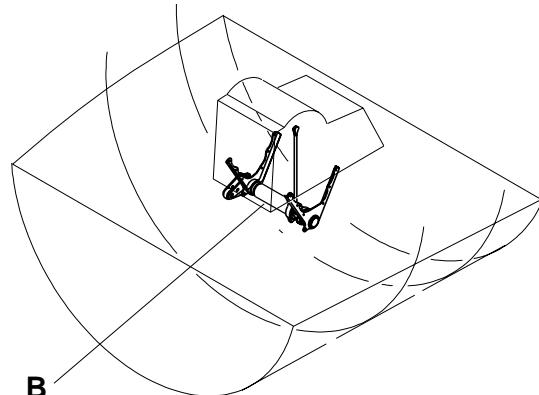
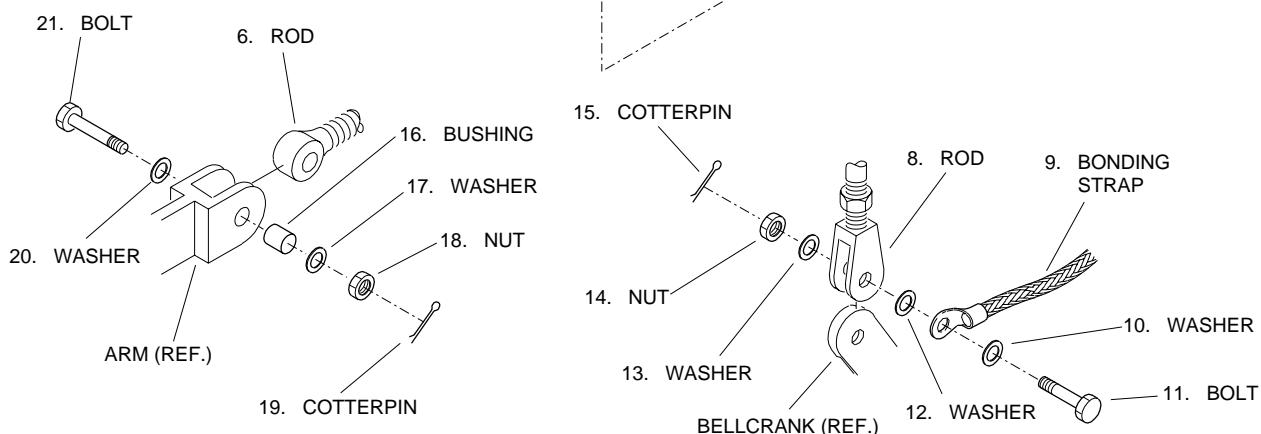
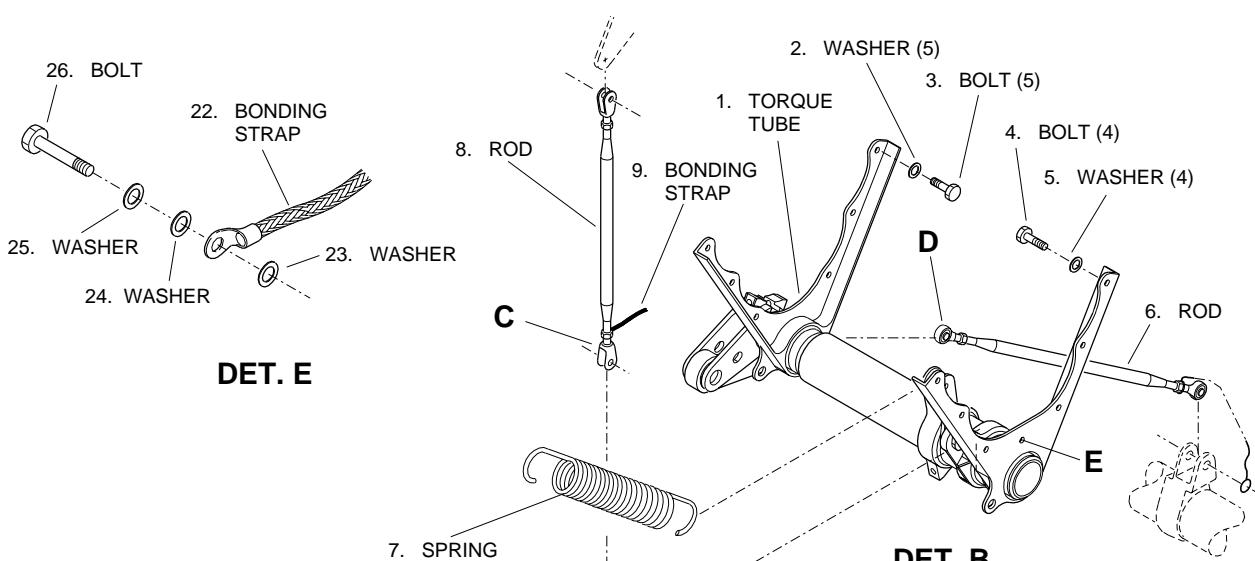
AIRCRAFT
MAINTENANCE MANUAL

- (4) Disconnect the end of the bonding strap (22) from the fuselage structure. For this, remove the bolt (26) and washers (25), (24), and (23) (DET. E).
- (5) Remove the bolts (4) and washers (5) (4 positions).
- (6) Remove the bolts (3) and washers (2) (5 positions).
- (7) Remove the torque tube (1).

EFFECTIVITY: AIRCRAFT WITH MECHANICAL GUST LOCK (PRE-MOD S.B. 145-27-0086)

Torque Tube - Removal/Installation

Figure 401


A
ZONES
123
124

DET. A




EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 27-70-04-400-801-A

EFFECTIVITY: AIRCRAFT WITH MECHANICAL GUST LOCK (PRE-MOD S.B. 145-27-0086)

3. TORQUE TUBE - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the torque tube of the gust lock system.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 20-13-21-910-801-A/200	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 27-70-00-700-801-A/500	GUST LOCK SYSTEM - ADJUSTMENT
IPC 27-71-00	GUST LOCK ELECTROMECHANICAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
123	123BL	Below the cockpit floor
124		Below the cockpit floor

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Cotter pin	IPC 27-71-00	1
Cotter pin	IPC 27-71-00	1

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Below the cockpit floor

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Put the torque tube (1) on the fuselage structure.

- (2) Install the bolts (4) and washers (5) (4 positions).



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- (3) Install the bolts (3) and washers (2) (5 positions).
- (4) Connect the end of the bonding strap (22) to the fuselage structure. For this, install the bolt (26) and washers (23), (24), and (25) (DET. E).

NOTE: Refer to [AMM TASK 20-13-21-910-801-A/200](#).

- (5) Connect the end of the rod (6) to the arm at the torque tube (1), with the bolt (21), washers (20), and (17), bushing (16), nut (18), and cotter pin (19) (DET. D).
- (6) Connect the end of the rod (8) to the bellcrank at the torque tube (1), with the bolt (11), washers (10), (12), and (13), bonding strap (9), nut (14), and cotter pin (15) (DET. C).

NOTE: Refer to [AMM TASK 20-13-21-910-801-A/200](#).

- (7) Connect the end of the spring (7) to the support at the torque tube (1).

J. Follow-on

SUBTASK 842-002-A

- (1) Do a functional check of the gust lock system ([AMM TASK 27-70-00-700-801-A/500](#)).
- (2) Install cockpit underfloor access hatch123BL ([AMM MPP 06-41-01/100](#)).