

RUDDER I LEADING EDGE ACCESS PANELS - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This procedure gives the instructions to remove and install the access panels that are between rudder I leading edge and vertical stabilizer.

To reach the access panels in this area is necessary to do this task.

- 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
55-38-00-000-801-A	RUDDER I ACCESS PANELS - REMOVAL	ALL
55-38-00-400-801-A	RUDDER I ACCESS PANELS - INSTALLATION	ALL

TASK 55-38-00-000-801-A

EFFECTIVITY: ALL

2. RUDDER I ACCESS PANELS - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the access panels that are between rudder I leading edge and Vertical Stabilizer.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-42-00/100	-
AMM TASK 27-22-02-000-801-A/400	RUDDER ACTUATOR - REMOVAL
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
325	325JR	Vertical Stabilizer - Right Side
326	326AL	Rudder I Leading Edge
326	326BL	Rudder I Leading Edge
326	326DL	Rudder I Leading Edge
326	326EL	Rudder I Leading Edge
326	326GL	Rudder I Leading Edge
326	326HL	Rudder I Leading Edge

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the work area	
Commercially available	Torque wrench	To remove the nut	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Protective Gloves	For protection of technician's hands	1
Commercially available	Safety Goggles	For protection of technician's eyes	1

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
ASTM-D-740	Methyl Ethyl Ketone - MEK	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Rudder
1	Helps the other technician	Rudder

I. Preparation

SUBTASK 841-002-A

WARNING: MAKE SURE THAT THE RUDDER CANNOT BE OPERATED ACCIDENTALLY. AN ACCIDENTAL OPERATION OF THE RUDDER CAN CAUSE INJURY TO PERSONS.

- (1) Release the pressure on hydraulic systems 1 and 2, according to [AMM TASK 29-10-00-860-801-A/200](#).
- (2) On the circuit breaker panel, open the RUDDER 1 and RUDDER 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (3) Install the rig pin to the forward torque tube. Refer to [Figure 401](#).
- (4) Remove access panel 325JR. Refer to AMM MPP 06-42-00/100.
- (5) Remove access panel 326DL. Refer to AMM MPP 06-42-00/100.
- (6) Disconnect the ends of the actuators from Rudder I, according to [AMM TASK 27-22-02-000-801-A/400](#).

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

SUBTASK 020-002-A

- (1) **NOTE:** Do not remove the locking nut (3). Refer to [Figure 402](#); DET. B.
Keep the locking nut (3) in the same position for not to lose the adjustment.

NOTE: The following procedures lead the mechanical to remove some components inside the vertical stabilizer.
Be careful during the removal not to let parts fall into the vertical stabilizer.

Remove the cotter pin (6) from nut (5). Refer to [Figure 402](#); DET. B.
- (2) Remove the nut (5) and washer (4). Refer to [Figure 402](#); DET. B.
- (3) Remove the eccentric pin (1) and washer (12). Refer to [Figure 402](#); DET. B.
- (4) Remove the cotter pin (9) from nut (10). Refer to [Figure 402](#); DET. B.

- (5) Remove the nut (10), washer (11), and bushing (8). Refer to [Figure 402](#); DET. B.
- (6) Remove the bolt (7). Refer to [Figure 402](#); DET. B.
- (7) Deflect the rudder I to the right side to reach all access panels bolts and remove the following access panels according to your needs:
 - 326AL
 - 326BL
 - 326DL
 - 326EL
 - 326GL
 - 326HL

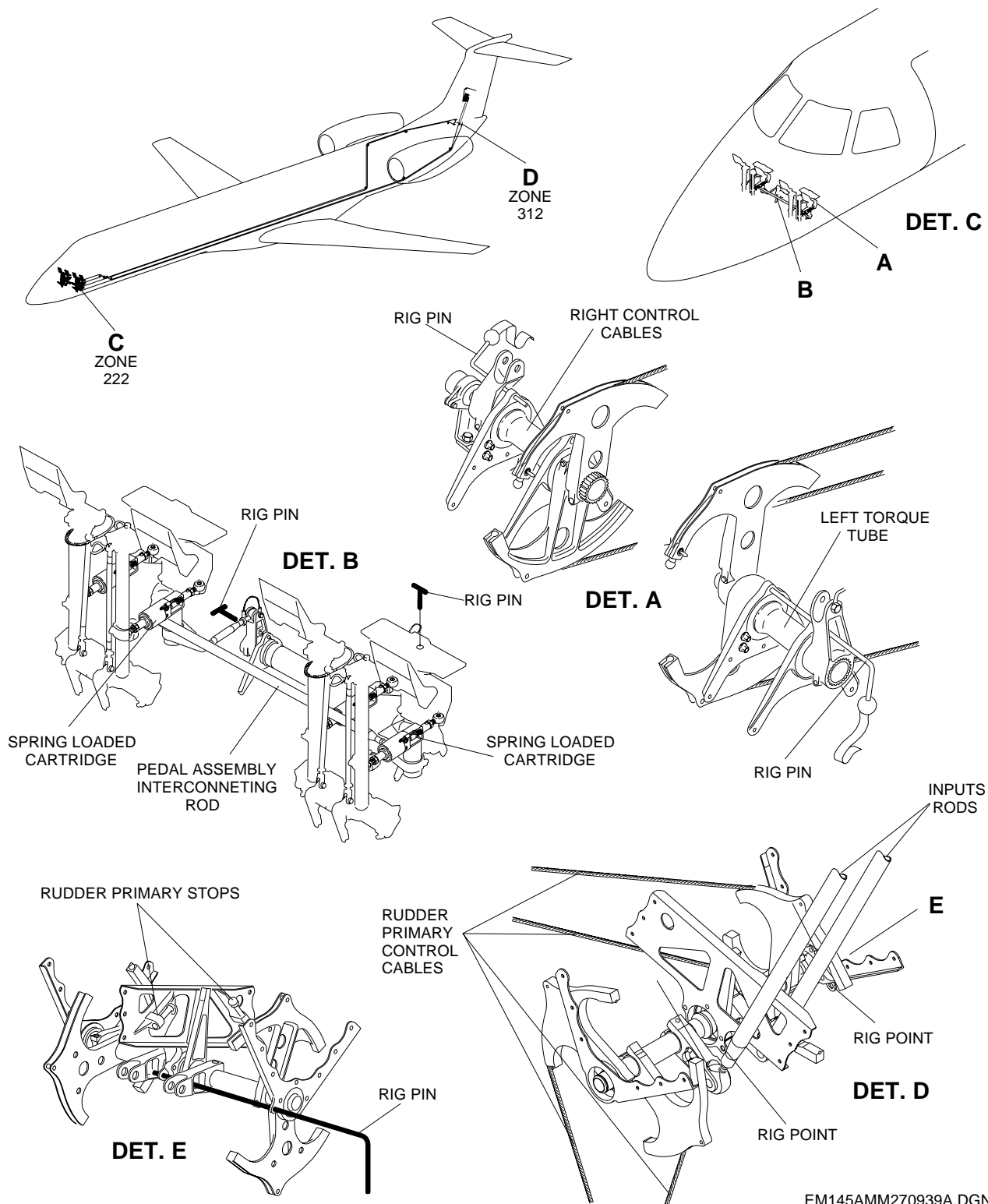
WARNING: BE CAREFUL WHEN YOU USE SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING WHEN YOU HANDLE THEM. DO NOT BREATHE THEIR GASES AND WORK IN A WELL VENTILATED AREA.

- (8) With a cloth soaked in MEK, clean the surface.

EFFECTIVITY: ALL

Rudder I - Rig Pin

Figure 401

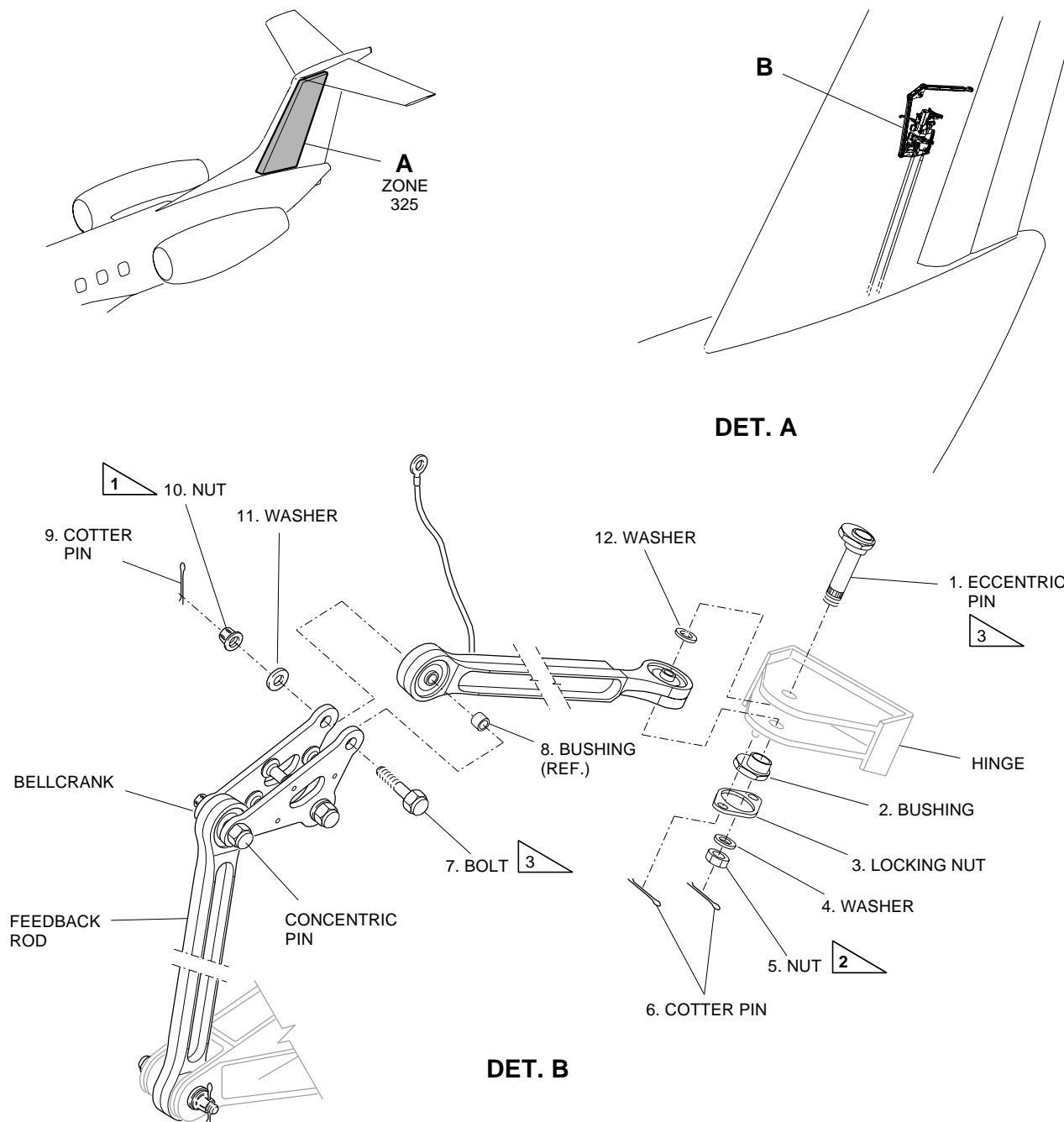


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EFFECTIVITY: ALL

Feedback Rod - Eccentric Pin Removal/Installation

Figure 402



1 TORQUE: 6.8–9.6 N.m (60–85 lb.in)

2 TORQUE: 11.3–15.8 N.m (100–140 lb.in)

3 APPLY COR-BAN 27L.

EM145AMM550080B.DGN

TASK 55-38-00-400-801-A

EFFECTIVITY: ALL

3. RUDDER I ACCESS PANELS - INSTALLATION

A. General

- (1) This procedure gives the instructions to Install the access panels that are between rudder I leading edge and Vertical Stabilizer.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-42-00/100	-
AMM TASK 27-20-00-700-801-A/500	ADJUSTMENT OF THE RUDDER NEUTRAL POSITION AND DEFLECTIONS OF RUDDER I AND RUDDER II
AMM TASK 27-22-02-400-801-A/400	RUDDER ACTUATOR - INSTALLATION
IPC 27-24-00	YAW TRIM ACTUATOR

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
325	325JR	Vertical Stabilizer - Right Side
326	326AL	Rudder I Leading Edge
326	326BL	Rudder I Leading Edge
326	326DL	Rudder I Leading Edge
326	326EL	Rudder I Leading Edge
326	326GL	Rudder I Leading Edge
326	326HL	Rudder I Leading Edge

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the work area	
Commercially available	Torque wrench	To tighten remove the nut	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Protective Gloves	For protection of technician's hands	1
Commercially available	Safety Goggles	For protection of technician's eyes	1

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
MEP 09-075	Corrosion-Inhibiting Compound (COR-BAN 27L)	AR

G. Expendable Parts

<i>ITEM</i>	<i>IPC REFERENCE (VENDOR REFERENCE)</i>	<i>QTY</i>
Cotter Pin	IPC 27-24-00	AR

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Rudder
1	Helps the other technician	Rudder

I. Installation (Figure 401) (Figure 402)

SUBTASK 020-003-A

- (1) Deflect the rudder I totally to the right side and install the access panels back as applicable:

- 326AL
- 326BL
- 326DL
- 326EL
- 326GL
- 326HL

WARNING: COR-BAN 27L IS TOXIC TO SKIN, EYES, AND RESPIRATORY INHALATION. USE PVC GLOVES AND EYE PROTECTION GOGGLES. USE ONLY IN WELL VENTILATED AREAS. OBEY THE MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS.

- (2) Apply COR-BAN 27L in the bolt (7).
- (3) **NOTE:** The following procedures lead the mechanical to install some components inside the vertical stabilizer.
Be careful during the installation not to let parts fall into the vertical stabilizer.
Install the bolt (7) back and the bushing (8). Refer to (Figure 402); DET. B.
- (4) Install the washer (11) and nut (10). Refer to (Figure 402); DET. B.
NOTE: Apply torque: 6.8 - 9.6 N.m (60 - 85 lb.in).
- (5) Install the cotter pin (9) to the nut (10). Refer to (Figure 402); DET. B.

WARNING: COR-BAN 27L IS TOXIC TO SKIN, EYES, AND RESPIRATORY INHALATION. USE PVC GLOVES AND EYE PROTECTION GOGGLES. USE ONLY IN WELL VENTILATED AREAS. OBEY THE MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS.

- (6) Apply COR-BAN 27L in the eccentric pin (1).
- (7) **NOTE:** Make sure that the locking nut (3) and eccentric pin (1) are in the same position. If not perform the, according to [AMM TASK 27-20-00-700-801-A/500](#).

Connect the ends of the actuators to Rudder I, according to [AMM TASK 27-22-02-400-801-A/400](#).

- (8) Install the washers (12) and (4), and nut (5). Refer to (Figure 402); DET. B.

NOTE: Apply torque: 11.3 - 15.8 N.m (100 - 140 lb.in).

- (9) Install the cotter pin (6) to the nut (5). Refer to (Figure 402); DET. B.

J. Follow-on

SUBTASK 841-003-A

WARNING: MAKE SURE THAT THE RUDDER CANNOT BE OPERATED ACCIDENTALLY. AN ACCIDENTAL OPERATION OF THE RUDDER CAN CAUSE INJURY TO PERSONS.

- (1) Install access panel 325 JR back. Refer to AMM MPP 06-42-00/100.
- (2) Install access panel 326 DL back. Refer to AMM MPP 06-42-00/100.
- (3) Remove the rig pin from the forward torque tube. Refer to (Figure 401).
- (4) On the circuit breaker panel, open the RUDDER 1 and RUDDER 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.

