FLAP FLEXIBLE SHAFT SECTION 2 - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures to remove and install the section 2 of the Flap Flexible Shaft.

   B. The section 2 of the Flap Flexible Shaft (FFS) extends from the actuator installed at the root to the actuator installed at the tip of the inboard flap.

   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*
27-51-05-000-801-A	FLAP FLEXIBLE SHAFT SECTION 2 - REMOVAL	ALL
27-51-05-400-801-A	FLAP FLEXIBLE SHAFT SECTION 2 - INSTALLATION	ALL

TASK 27-51-05-000-801-A
EFFECTIVITY: ALL

2. FLAP FLEXIBLE SHAFT SECTION 2 - REMOVAL

A. General

(1) This task gives the procedures to remove the section 2 of the Flap Flexible Shaft.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 57-56-01-000-801-A/400	INBOARD AND OUTBOARD FLAP LOWER SHROUDS - REMOVAL

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
5711		Wing trailing edge
6711		Wing trailing edge

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	Wing trailing edge

I. Preparation

SUBTASK 841-002-A

WARNING: MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN THE FLAP TRAVEL AREA.

(1) Make sure that the aircraft is safe for maintenance.

(2) Energize the aircraft with the External DC Power Supply (AMM TASK 20-40-01-860-801-A/200).

(3) Set the flaps to the 45-degree position.

(4) On the Circuit Breaker Panel, open the FLAP 1 and FLAP 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.

CAUTION: WHEN YOU OPEN THE INBOARD-FLAP LOWER SHROUD, IF IT IS NECESSARY TO MOVE THE FLAPS, DO AS FOLLOWS (IT WILL PREVENT DAMAGE TO THE INBOARD-FLAP LOWER SHROUD AND INBOARD-FLAP LEADING EDGE):

- RELEASE THE SPRINGS FROM THE ROOT AND TIP SUPPORTS OF THE INBOARD-FLAP LOWER SHROUD.
- REMOVE THE TIP AND ROOT SUPPORTS ONLY FROM THE INBOARD-FLAP LOWER SHROUD (AMM TASK 57-56-01-000-801-A/400).

(5) Open the lower shroud of the inboard flap (AMM TASK 57-56-01-000-801-A/400).

J. Removal (Figure 401)

SUBTASK 020-002-A

(1) Cut the lockwire (2) that safeties FFS section 2 (1) in the actuator (6) installed at the root of the inboard flap (8).

(2) Cut the lockwire (2) that safeties FFS section 2 (1) in the actuator (7) installed at the tip of the inboard flap (8).

(3) Loosen FFS section 2 (1) from the actuator (6) installed at the root of the inboard flap.

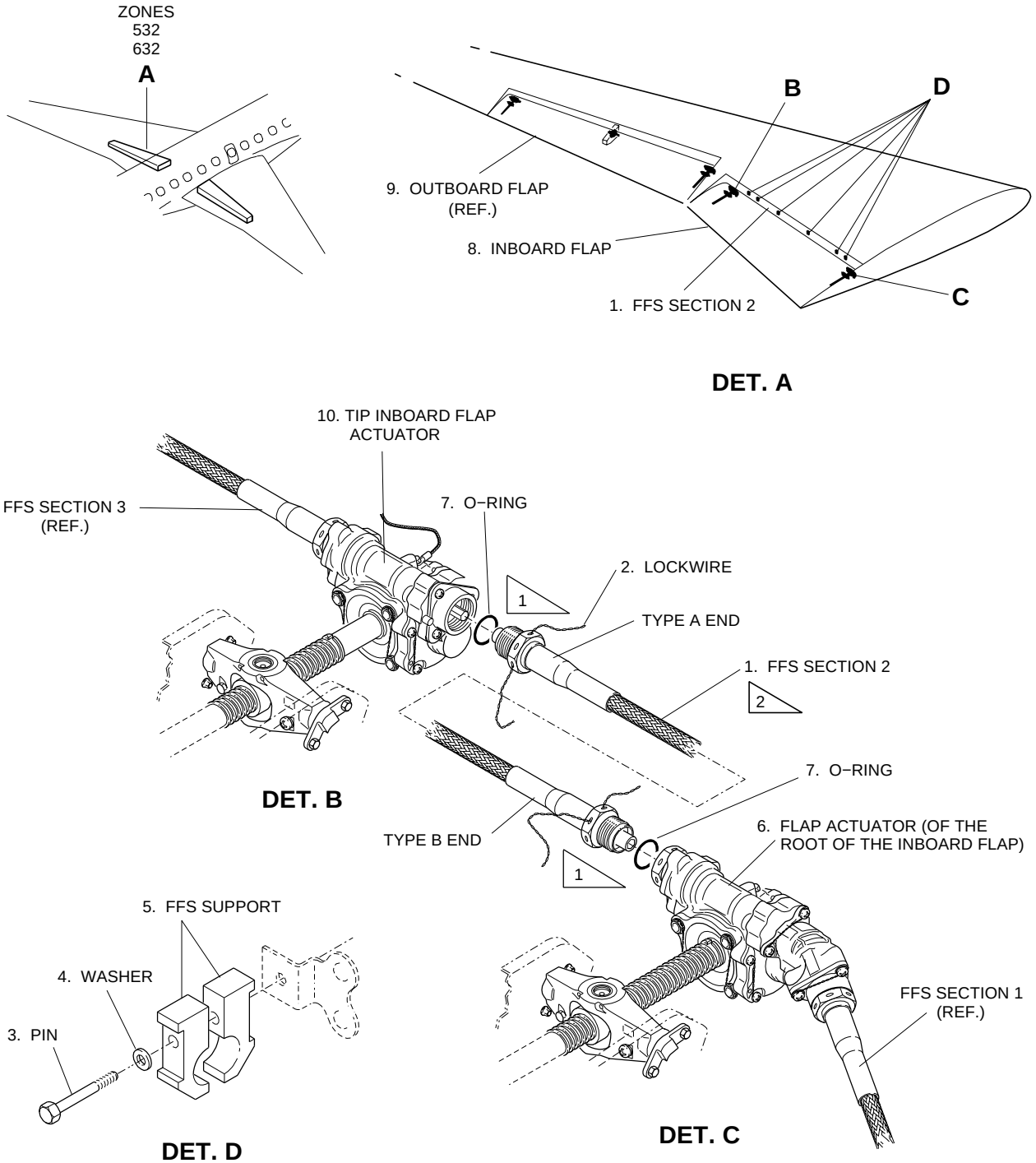
(4) Loosen FFS section 2 (1) from the actuator (10) installed at the tip of the inboard flap.

(5) Loosen the FFS supports (5) to remove FFS section 2 (1) from spar III.

(6) Remove FFS section 2 (1).

EFFECTIVITY: ALL

Flap Flexible Shaft Section 2 - Removal/Installation
Figure 401



1 TORQUE: 19.2 − 25 N.m (170 − 220 lb.in)

2 THE FFS ENDS CAN BE INSTALLED IN TWO DIRECTIONS.
IF YOU OBEY THE DIRECTIONS RECOMMENDED, THE REMOVAL
OF THE FFS INNER CORE FOR INSPECTION AND LUBRICATION WILL BE EASIER.

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TASK 27-51-05-400-801-A
EFFECTIVITY: ALL

3. FLAP FLEXIBLE SHAFT SECTION 2 - INSTALLATION

A. General

(1) This task gives the procedures to install the section 2 of the Flap Flexible Shaft.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 27-51-00-700-801-A/500	FLAP CONTROL SYSTEM - OPERATIONAL CHECK
AMM TASK 27-53-04-700-801-A/500	FLAP ZERO-DEGREE RIGGING
AMM TASK 57-56-01-400-801-A/400	INBOARD AND OUTBOARD FLAP LOWER SHROUDS - INSTALLATION
IPC 27-51-00-10-37	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
5711		Wing trailing edge
6711		Wing trailing edge

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
MS20995C32	Lockwire	As necessary
Commercially available	Parker Super-O-Lube Lubricant	AR

G. Expendable Parts

ITEM	*IPC REFERENCE (VENDOR REFERENCE)*	*QTY*
O-ring	IPC 27-51-00-10-37	2

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Wing trailing edge

I. Installation (Figure 401)

SUBTASK 420-002-A

NOTE: • The FFS ends can be installed in the two directions.

• If you obey the directions recommended below, the removal of the FFS inner core for inspection and lubrication will be easier.

(1) Before you install FFS section 2, replace the O-ring (7). Refer to (Figure 401).

(2) Coat the new O-ring (7) with a thin film of Parker Super-O-Lube before the assembly.

(3) Install the type-B end of FFS section 2 (1) to the actuator (6) installed at the root of the inboard flap (8) and safety it. Refer to (Figure 401).

(4) Install the type-A end of FFS section 2 (1) to the actuator (10) installed at the tip of the inboard flap (8) and safety it. Refer to (Figure 401).

(5) Put FFS section 2 (1) in the FFS supports (5) at spar III.

(6) Tighten the FFS supports (5). Use the pin (3) and washer (4).

J. Follow-on

SUBTASK 842-002-A

(1) Close the lower shroud of the inboard flap (AMM TASK 57-56-01-400-801-A/400).

NOTE: If you removed the tip and root supports from the inboard-flap lower shroud, install them now (AMM TASK 57-56-01-400-801-A/400).

(2) On the Circuit Breaker Panel, close the FLAP 1 and FLAP 2 circuit breakers and remove the DO-NOT-CLOSE tag from them.

(3) Do the operational check of the Flap Control System (AMM TASK 27-51-00-700-801-A/500).

(4) If the FFS replacement is due to shaft rupture or twist, do Flap Zero Degree Rigging (AMM TASK 27-53-04-700-801-A/500).