

## FLAP FLEXIBLE SHAFT SECTION 4 - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

### 1. General

- A. This section gives the procedures to remove and install section 4 of the flap flexible shaft.
- B. Section 4 of the flap flexible shaft (FFS) extends from the actuator installed at the root of the outboard flap to the flap transmission brake.
- 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
27-51-07-000-801-A	FLAP FLEXIBLE SHAFT SECTION 4 - RE-MOVAL	ALL
27-51-07-400-801-A	FLAP FLEXIBLE-SHAFT SECTION 4 - IN-STALLATION	ALL

TASK 27-51-07-000-801-A

EFFECTIVITY: ALL

## 2. FLAP FLEXIBLE SHAFT SECTION 4 - REMOVAL

### A. General

(1) This task gives the procedures to remove section 4 of the flap flexible shaft.

### B. References

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

### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
5712		Wing trailing edge
6712		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 an 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.
- (5) Open the lower shroud of the outboard flap ([AMM TASK 57-56-01-000-801-A/400](#)).

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

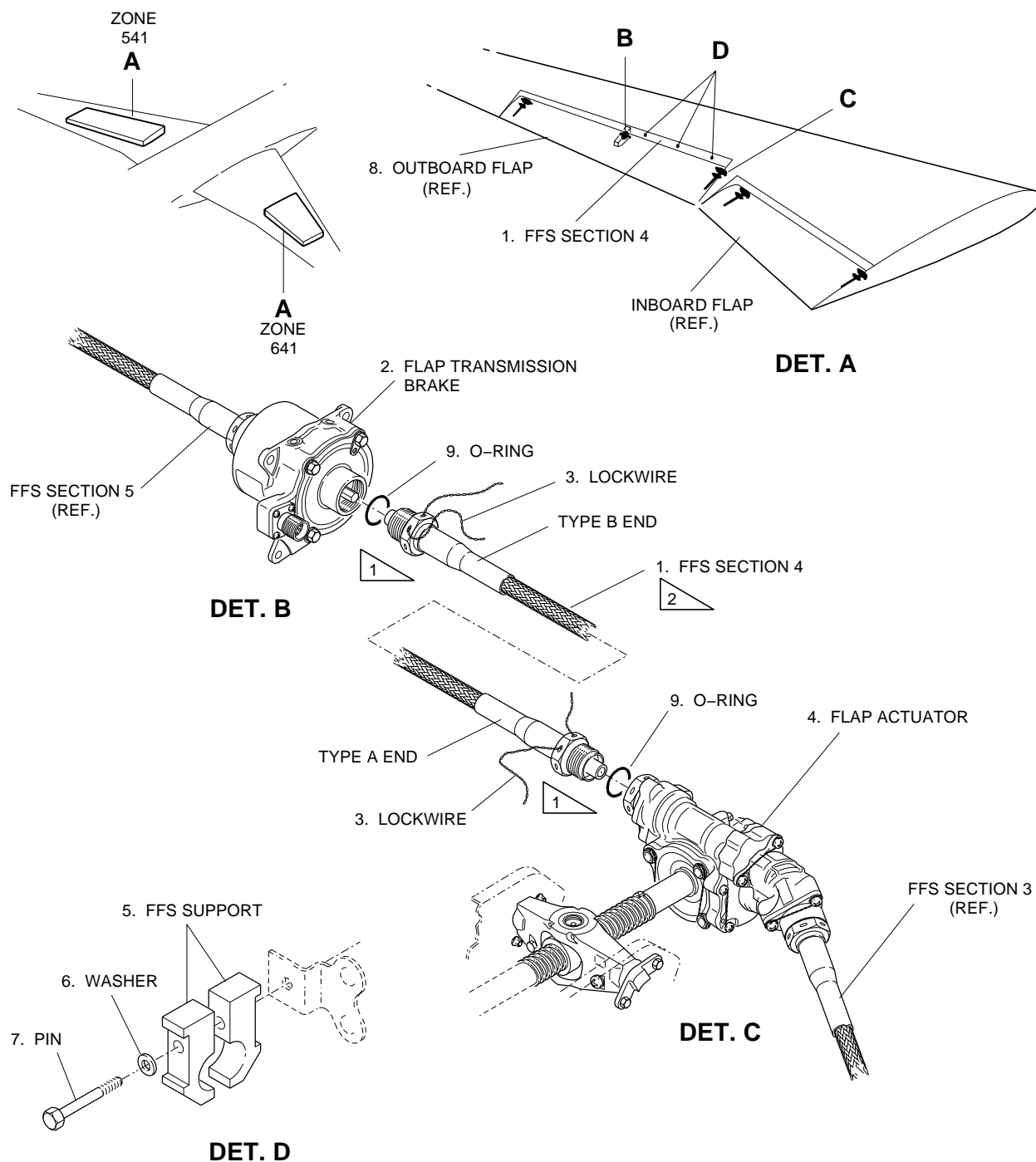
*SUBTASK 020-002-A*

- (1) Cut the lockwire (3) that safeties FFS section 4 (1) in the actuator (4) installed at the root of the outboard flap (8).
- (2) Cut the lockwire (3) that safeties FFS section 4 (1) in the flap transmission brake (2).
- (3) Loosen FFS section 4 (1) from the actuator installed at the root of the outboard flap (8).
- (4) Loosen FFS section 4 (1) from the flap transmission brake (2).
- (5) Loosen the FFS supports (5) to remove FFS section 4 (1) from spar II.
- (6) Remove FFS section 4 (1).

EFFECTIVITY: ALL

Flap Flexible-Shaft Section 4 - Removal/Installation

Figure 401



1 TORQUE: 19,2 – 25 Nm (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 27-51-07-400-801-A  
EFFECTIVITY: ALL

### 3. FLAP FLEXIBLE-SHAFT SECTION 4 - INSTALLATION

#### A. General

(1) This task gives the procedures to install the section 4 of the flap Flexible Shaft.

#### B. References

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

#### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
5712		Wing trailing edge
6712		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 given below, the removal of the FFS inner core for inspection and lubrication will be easier.

- (1) Before you install FFS section 4, replace the O-ring (9). Refer to (Figure 401).
- (2) Coat the new O-ring (9) with a thin film of Parker Super-O-Lube lubricant before the assembly.
- (3) Install the type-A end of FFS section 4 (1) to the actuator (4) installed at the root of the outboard flap (8) and safety it. Refer to (Figure 401).
- (4) Install the type-B end of FFS section 4 (1) to the flap transmission brake (2) and safety it. Refer to (Figure 401).

**NOTE:** Make sure that the shaft is inserted fully, before you lockwire the nut.

- (5) Put FFS section 4 (1) in the supports (5) at spar II.
- (6) Tighten the supports (5). Use the pin (7) and washer (6).

J. Follow-on

*SUBTASK 842-002-A*

- (1) Close the lower shroud of the outboard flap ([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 because of shaft rupture or twist, do the flap zero-degree rigging ( [AMM TASK 27-53-04-700-801-A/500](#)).