

## THRUST-REVERSER DOOR PRIMARY-LOCK ACTUATOR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

### 1. General

- A. This section gives the procedures to remove and install the engine thrust-reverser door primary lock actuator.
- B. These procedures are applicable to the LH and RH thrust reversers.
- 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
78-32-02-000-801-A	ENGINE THRUST-REVERSER DOOR PRIMARY LOCK ACTUATOR - REMOVAL	ALL
78-32-02-400-801-A	ENGINE THRUST-REVERSER DOOR PRIMARY LOCK ACTUATOR - INSTALLATION	ALL

TASK 78-32-02-000-801-A

EFFECTIVITY: ALL

## 2. ENGINE THRUST-REVERSER DOOR PRIMARY LOCK ACTUATOR - REMOVAL

### A. General

(1) Obey the instructions below to remove the engine thrust-reverser door primary lock actuator.

### B. References

REFERENCE	DESIGNATION
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM MPP 78-30-00/200	- MAINTENANCE PRACTICES
AMM TASK 78-31-01-980-801-A/200	LOCK/UNLOCK THE TR EXHAUST DOOR - STOWED POSITION

### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
416	416QL/416PR	LH Thrust Reverser
426	426QL/426PR	RH Thrust Reverser

### D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the engine nacelle	
Commercially available	Container	To catch oil	

### E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber gloves, phosphate ester base, fluid-resistant	Protection for the hands	1
Commercially available	Rubber goggles, phosphate ester base, fluid-resistant	Protection for the eyes	1

### F. Consumable Materials

Not Applicable

### G. Expandable Parts

Not Applicable

### H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Thrust reverser

I. Preparation

SUBTASK 841-002-A

**WARNING:** • REFER TO THE GROUND SAFETY PRECAUTIONS GIVEN IN [AMM MPP 78-30-00/200](#) WHEN YOU DO THE THRUST REVERSER MAINTENANCE PROCEDURES.

- MAKE SURE THAT THE THRUST REVERSERS ARE DEENERGIZED. ENERGIZED CIRCUITS CAN CAUSE INJURY TO PERSONS.
- MAKE SURE THAT THE HYDRAULIC TEST STAND IS NOT CONNECTED.
- THE PHOSPHATE-ESTER-BASE OIL IS HIGHLY CORROSIVE AND CAUSES INJURY TO THE EYES AND SKIN. BE CAREFUL NOT TO TOUCH THIS OIL. YOU MUST USE GLOVES AND GOGGLES.

**CAUTION:** • ALWAYS CLEAN THE HYDRAULIC FLUID THAT FALLS FROM THE ENGINE. DAMAGE COULD COME FROM ITS CORROSIVE ACTION.

- USE APPLICABLE CONTAINERS TO COLLECT THE REMAINING FLUIDS FROM THE OPEN LINES, TO KEEP THE WORK AREA CLEAN AND SAFE.
- (1) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them:
    - THRUST REVERSER 1/2.
    - HYD. ELEC. PUMP 1/2.
  - (2) Put a DO-NOT-OPERATE-THE-THRUST-REVERSERS sign on the instrument panel, in the cockpit.
  - (3) Put the workstand under the engine thrust reverser.
  - (4) Lock the thrust-reverser exhaust door (stowed position) ([AMM TASK 78-31-01-980-801-A/200](#)).
  - (5) Remove access panels 416QL, 416PR, 426QL, or 426PR ( [AMM MPP 06-43-00/100](#)), as applicable, to get access to the thrust-reverser door primary lock actuator.

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

SUBTASK 020-002-A

**WARNING:** DO NOT APPLY HYDRAULIC POWER TO THE AIRCRAFT, AND DO NOT OPERATE THE THRUST REVERSER WHILE THE MAINTENANCE PERSONS ARE AT WORK.

- (1) To unload the primary door lock, tighten the inhibition bolts ([AMM TASK 78-31-01-980-801-A/200](#)) until you have the door overstop position.
- (2) Remove the split pin (1), nut (2), washer (3), and the actuator-link special bolt (4).

**CAUTION:** BE VERY CAREFUL WHEN YOU DISCONNECT HYDRAULIC LINES. SKYDROL FLUID IS HIGHLY DANGEROUS.

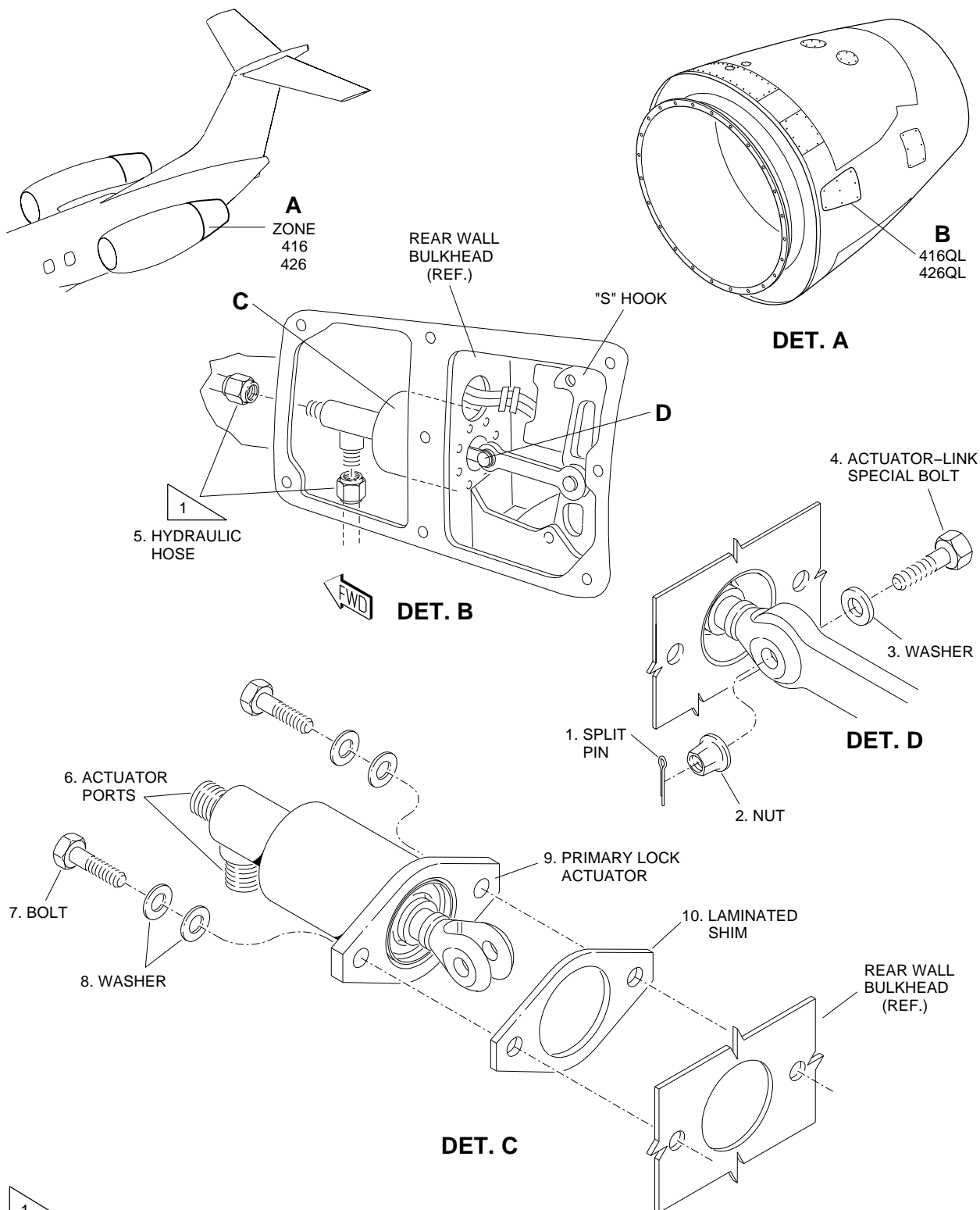


- (3) Remove the two hydraulic hoses (5) from the actuator head. Be careful with the Skydrol fluid.
- (4) Install applicable caps in the hoses (5) and also in the actuator ports (6).
- (5) Remove the bolts (7) and washers (8).
- (6) Remove the thrust-reverser door primary lock actuator (9) and laminated shim (10) and put it in a safe location.

EFFECTIVITY: ALL

Engine Thrust-Reverser Door Primary Lock Actuator - Removal/Installation

Figure 401



EM145AMM780221A.DGN

TASK 78-32-02-400-801-A

EFFECTIVITY: ALL

### 3. ENGINE THRUST-REVERSER DOOR PRIMARY LOCK ACTUATOR - INSTALLATION

#### A. General

(1) Obey the instructions below to install the engine thrust-reverser door primary lock actuator.

#### B. References

REFERENCE	DESIGNATION
-	-
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM MPP 78-30-00/200	- MAINTENANCE PRACTICES
AMM TASK 78-31-01-700-801-A/500	THRUST REVERSER - OPERATIONAL CHECK
AMM TASK 78-31-01-980-801-A/200	LOCK/UNLOCK THE TR EXHAUST DOOR - STOWED POSITION

#### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
416	416QL/416PR	LH Thrust Reverser
426	426QL/426PR	RH Thrust Reverser

#### D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the engine nacelle	
Commercially available	Torque wrench	To tighten the attachment nuts	

#### E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber gloves, phosphate ester base, fluid-resistant	Protection for the hands	1
Commercially available	Rubber goggles, phosphate ester base, fluid-resistant	Protection for the eyes	1

#### F. Consumable Materials

Not Applicable

#### G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Split pin	-	1

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Thrust reverser

I. Installation (Figure 401)

*SUBTASK 420-002-A*

**WARNING:** • REFER TO THE GROUND SAFETY PRECAUTIONS GIVEN IN [AMM MPP 78-30-00/200](#) WHEN YOU DO THE THRUST REVERSER MAINTENANCE PROCEDURES.

- MAKE SURE THAT THE THRUST REVERSERS ARE DEENERGIZED. ENERGIZED CIRCUITS CAN CAUSE INJURY TO PERSONS.
  - MAKE SURE THAT THE HYDRAULIC TEST STAND IS NOT CONNECTED.
- (1) Install the laminated shim (10) and the thrust-reverser door primary lock actuator (9) on the rearwall bulkhead.
  - (2) Install the washers (8) and bolts (7).
  - (3) Install the actuator-link special bolt (4), washer (3), nut (2), and the split pin (1).
  - (4) Remove the caps from the actuator ports (6) and hoses (5 ).
  - (5) Connect the hoses (5) to the actuator ports (6) and torque them.

J. Follow-on

*SUBTASK 842-002-A*

- (1) Close access panels 416QL, 416PR, 426QL, or 426PR ( [AMM MPP 06-43-00/100](#)), as applicable.
- (2) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
  - THRUST REVERSER 1/2.
  - HYD. ELEC. PUMP 1/2.
- (3) Unlock the thrust reverser exhaust doors (stowed position) ([AMM TASK 78-31-01-980-801-A/200](#)).
- (4) Remove the DO-NOT-OPERATE-THE-THRUST-REVERSERS sign from the instrument panel, in the cockpit.
- (5) Remove the workstand from the work area.
- (6) Do the engine thrust-reverser operational check ( [AMM TASK 78-31-01-700-801-A/500](#)) (two cycles minimum).

