



AIRCRAFT MAINTENANCE MANUAL

THRUST-REVERSER DOOR ACTUATOR - INSPECTION/CHECK

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do an inspection on the thrust reverser 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
78-32-01-200-801-A	THRUST REVERSER ACTUATOR - INSPECTION	ALL
78-32-01-200-802-A	THRUST-REVERSER ACTUATOR LEAK-AGE - INSPECTION	ALL



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 78-32-01-200-801-A

EFFECTIVITY: ALL

2. THRUST REVERSER ACTUATOR - INSPECTION

A. General

(1) Obey these instructions to do an inspection on the thrust reverser actuator.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM MPP 78-30-00/200	- MAINTENANCE PRACTICES
AMM TASK 78-31-01-940-801-A/200	THRUST REVERSER - OPENING PROCEDURE
AMM TASK 78-31-01-940-802-A/200	THRUST REVERSER - CLOSURE PROCEDURE
AMM TASK 78-32-01-000-801-A/400	THRUST-REVERSER DOOR ACTUATOR - REMOVAL
AMM TASK 78-33-01-980-801-A/200	ISOLATION CONTROL UNIT - INHIBITION PROCEDURES

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
416	416HT	LH Thrust reverser
416	416BB	LH Thrust reverser
426	426HT	RH Thrust reverser
426	426BB	RH Thrust reverser

D. Tools and Equipment

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

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Examine the actuator	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.

CAUTION: MAKE SURE THAT ALL THE HYDRAULIC LINES ARE CONNECTED NOT TO LET THE HYDRAULIC OIL FALL OUT.

- (1) Open the thrust reverser doors ([AMM TASK 78-31-01-940-801-A/200](#)).
- (2) On the circuit breaker panel, open these circuit breakers and attach a DO-NOT-CLOSE tag to them:
 - THRUST REVERSER 1/2.
 - HYD. ELEC. PUMP 1/2.
- (3) Put a DO-NOT-OPERATE-THE-THRUST-REVERSER sign on the instrument panel, in the cockpit.
- (4) Inhibit the ICU ([AMM TASK 78-33-01-980-801-A/200](#)).
- (5) Put the workstand under the thrust reverser.
- (6) Open access panels 416HT, 426HT, 416BB, and 426BB ([AMM MPP 06-43-00/100](#)) to get access to the actuator head.

J. Inspection ([Figure 601](#))

SUBTASK 211-002-A

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

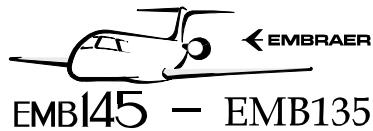
- (1) Visually examine the actuator shaft, rod end, and head end for signs of corrosion, cracks, leaks, or signs of abnormal wear.
- (2) If an incorrect condition is found, replace the actuator ([AMM TASK 78-32-01-000-801-A/400](#)).

K. Follow-on

SUBTASK 842-002-A

CAUTION: EXAMINE ALL THE WORK AREAS TO MAKE SURE YOU DID NOT LET TOOLS OR OTHER EQUIPMENT STAY BEHIND.

- (1) Close access panels 416HT, 426HT, 416BB, and 426BB ([AMM MPP 06-43-00/100](#)).



EMB145 - EMB135

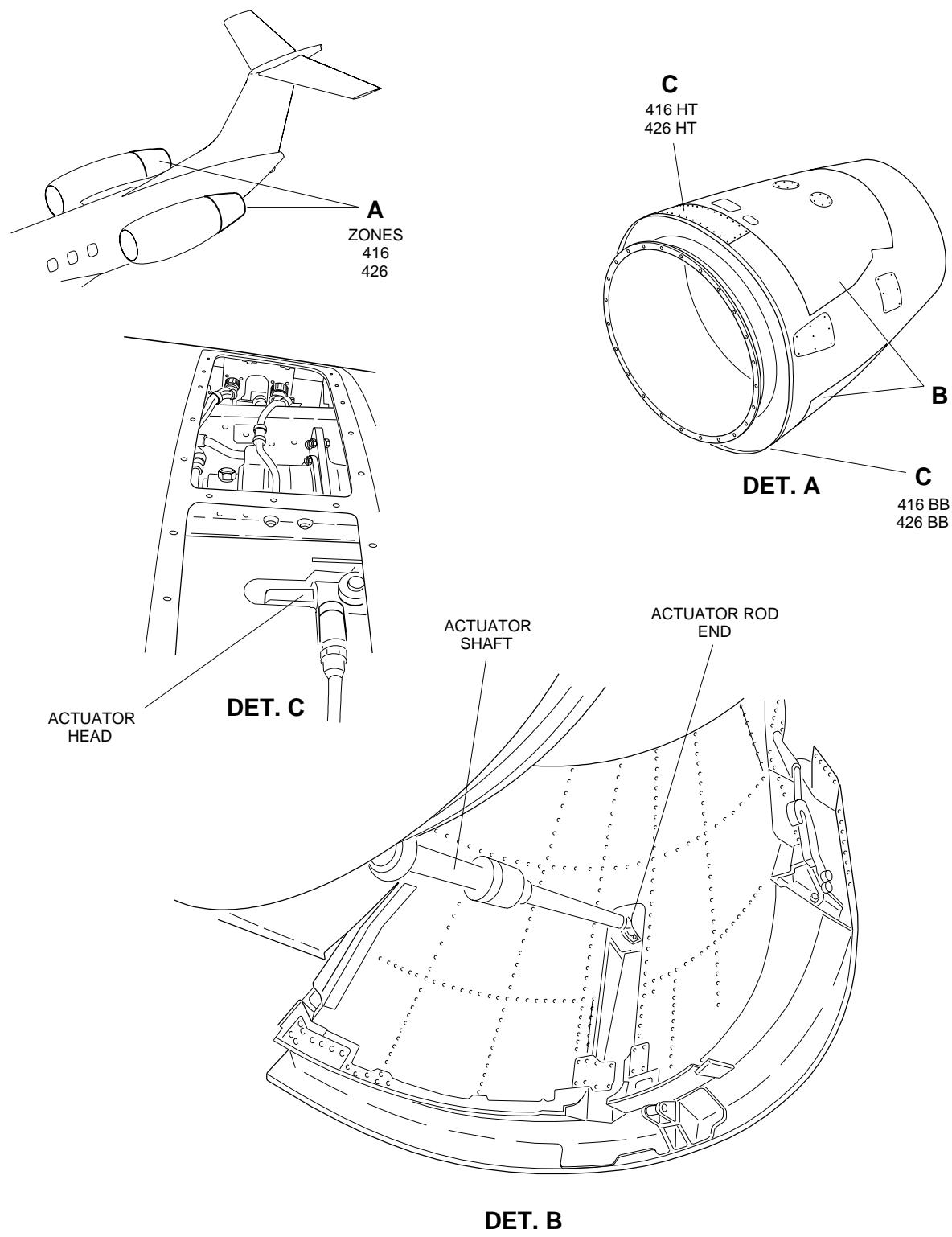
AIRCRAFT
MAINTENANCE MANUAL

- (2) On the circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tag from them:
 - THRUST REVERSER 1/2.
 - HYD. ELEC. PUMP 1/2.
- (3) Remove the DO-NOT-OPERATE-THE-THRUST-REVERSER sign from the instrument panel, in the cockpit.
- (4) Deinhibit the ICU ([AMM TASK 78-33-01-980-801-A/200](#)).
- (5) Remove the workstand from the work area.
- (6) Close the thrust-reverser doors ([AMM TASK 78-31-01-940-802-A/200](#)).

EFFECTIVITY: ALL

Thrust-Reverser Actuator - Inspection

Figure 601



145AMM780060.MCE A



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 78-32-01-200-802-A

EFFECTIVITY: ALL

3. THRUST-REVERSER ACTUATOR LEAKAGE - INSPECTION

A. General

- (1) Obey these instructions to do an inspection on the thrust reverser actuator for hydraulic fluid leakage.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM MPP 78-30-00/200	- MAINTENANCE PRACTICES
AMM TASK 78-32-01-000-801-A/400	THRUST-REVERSER DOOR ACTUATOR - REMOVAL
AMM TASK 78-33-01-980-801-A/200	ISOLATION CONTROL UNIT - INHIBITION PROCEDURES
FIM TASK 78-30-00-810-826-A	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
416	416HT	LH Thrust reverser
416	416BB	LH Thrust reverser
426	426HT	RH Thrust reverser
426	426BB	RH Thrust reverser

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the engine nacelle	
Commercially available	Graduated flask	To measure hydraulic fluid leakage	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Examine the actuator drain	Thrust reverser

I. Preparation ([Figure 602](#))

SUBTASK 841-003-A

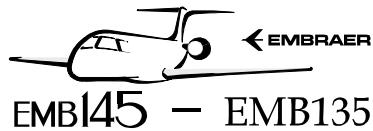
- WARNING:** • REFER TO THE GROUND SAFETY PRECAUTIONS GIVEN IN [AMM MPP 78-30-00/200](#) WHEN YOU DO THE THRUST-REVERSER MAINTENANCE PROCEDURES.
- MAKE SURE THAT THE HYDRAULIC TEST STAND IS NOT CONNECTED.

- (1) On the circuit breaker panel, open these circuit breakers 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-REVERSER sign on the instrument panel, in the cockpit.
- (3) Put the workstand under the engine thrust reverser.
- (4) Inhibit the ICU ([AMM TASK 78-33-01-980-801-A/200](#)).
- (5) Open access panels 416HT, 426HT, 416BB, and 426BB ([AMM MPP 06-43-00/100](#)) to get access to the actuator head.
- (6) Disconnect the upper and lower actuator drain line fittings. Refer to DET. C of [Figure 602](#).
- (7) Put a flask graduated in ml at the disconnected points to measure the volume leaked.
- (8) Deinhibit the ICU ([AMM TASK 78-33-01-980-801-A/200](#)).
- (9) On the circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tag from them:
 - THRUST REVERSER 1/2.
 - HYD. ELEC. PUMP 1/2.

J. Inspection ([Figure 602](#))

SUBTASK 211-003-A

- WARNING:** • BE CAREFUL WHEN YOU OPERATE THE THRUST REVERSERS. MAKE SURE THAT THE THRUST REVERSERS ARE CLEAR. INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT CAN OCCUR.
- BE CAREFUL WHEN YOU USE THE HYDRAULIC FLUID. THE HYDRAULIC FLUID IS DANGEROUS. IT CAN CAUSE DAMAGE TO YOUR EYES AND SKIN. PUT ON SAFETY GOGGLES AND PROTECTION CLOTHING. IF HYDRAULIC FLUID COMES IN YOUR EYES OR ON YOUR SKIN, FLUSH YOUR EYES WITH WATER FOR A MINIMUM OF 15 MINUTES. CLEAN YOUR SKIN WITH SOAP AND WATER. GET MEDICAL HELP.



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

CAUTION: MAKE SURE THAT THE GRADUATED FLASKS ARE ATTACHED FIRMLY AND THE HYDRAULIC FLUID POSSIBLY DRAINED CANNOT FALL OUT.

- (1) Cycle the thrust reverser twice to know in which actuator there is leakage and record the volume leaked.
- (2) On the circuit breaker panel, open these circuit breakers and attach a DO-NOT-CLOSE tag to them:
 - THRUST REVERSER 1/2.
 - HYD. ELEC. PUMP 1/2.
- (3) Inhibit the ICU ([AMM TASK 78-33-01-980-801-A/200](#)).
- (4) Remove the graduated flasks from the drain lines.
- (5) Connect the actuator drain line fitting again to the drain line in which there is no leakage.
- (6) If the volume leaked is greater than or equal to 1.0 ml, replace the actuator ([AMM TASK 78-32-01-000-801-A/400](#)). If the volume leaked is less than 1.0 ml, refer to FIM TASK 78-30-00-810-826-A.

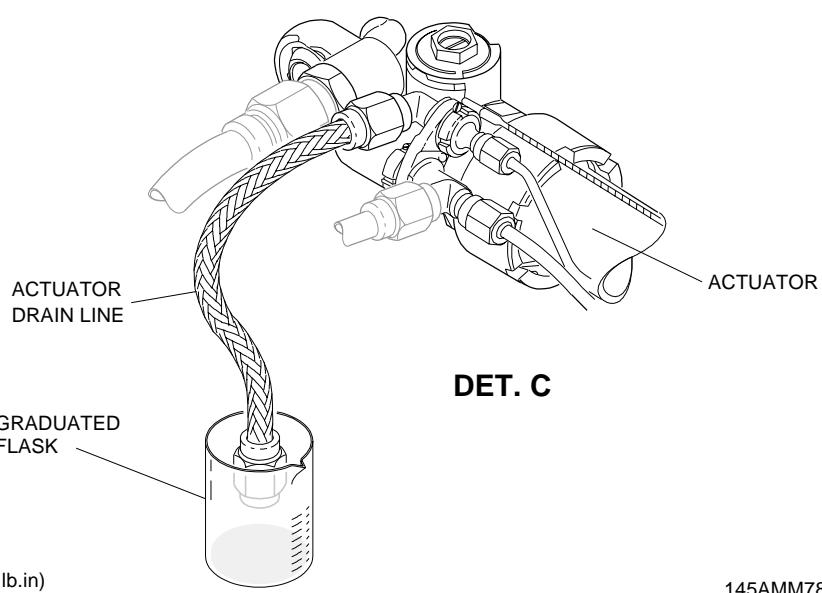
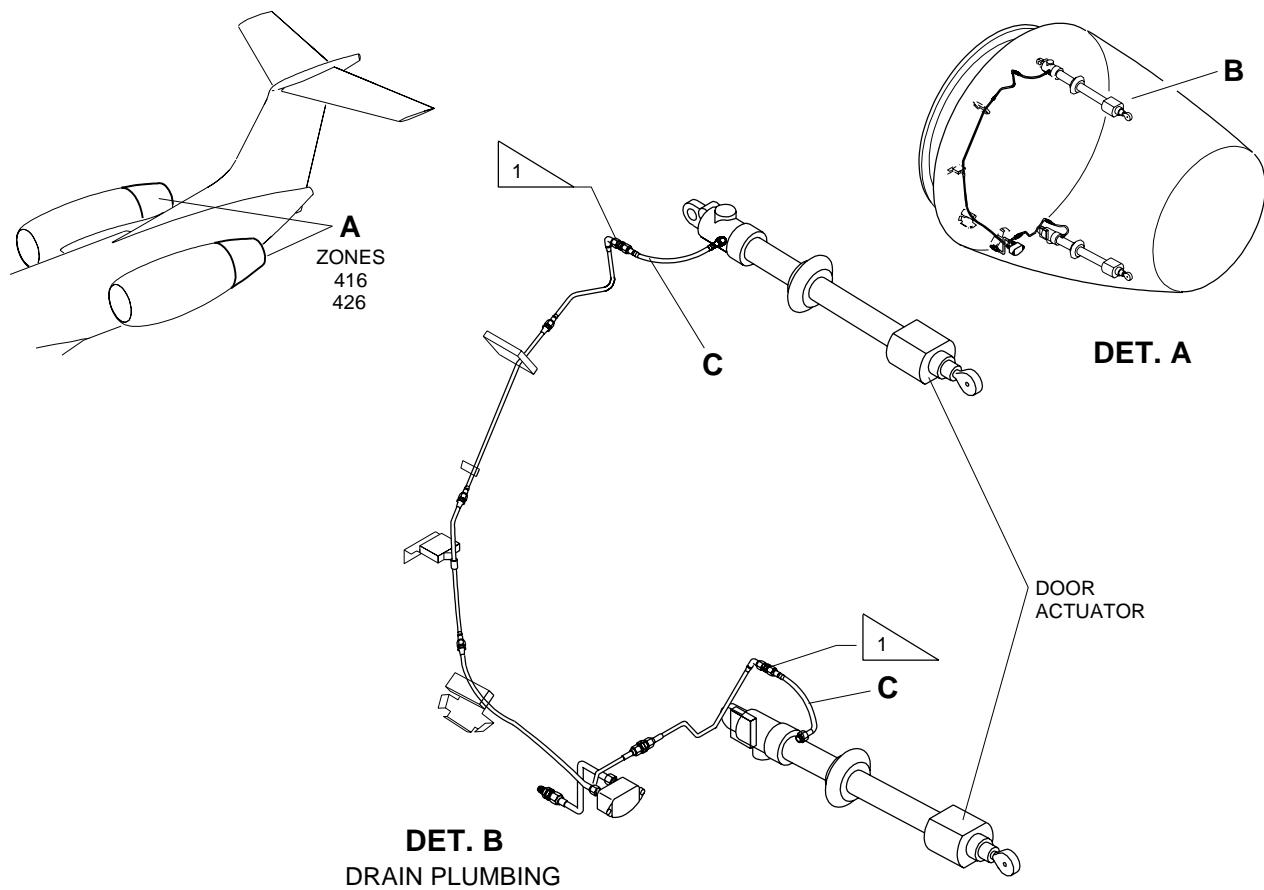
K. Follow-on

SUBTASK 842-003-A

- (1) Close access panels 416HT, 426HT, 416BB, and 426BB ([AMM MPP 06-43-00/100](#)).
- (2) On the circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tag from them:
 - THRUST REVERSER 1/2.
 - HYD. ELEC. PUMP 1/2.
- (3) Remove the DO-NOT-OPERATE-THE-THRUST-REVERSER sign from the instrument panel, in the cockpit.
- (4) Deinhibit the ICU ([AMM TASK 78-33-01-980-801-A/200](#)).
- (5) Remove the workstand from the work area.

EFFECTIVITY: ALL

Thrust-Reverser Actuator Leakage - Inspection
Figure 602



145AMM780167A.MCE

