

THRUST REVERSER HARNESS - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to remove and install the thrust reverser harness.
- 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
78-35-01-000-801-A	THRUST REVERSER HARNESS - REMOVAL	ALL
78-35-01-400-801-A	THRUST REVERSER HARNESS - INSTALLATION	ALL

TASK 78-35-01-000-801-A

EFFECTIVITY: ALL

2. THRUST REVERSER HARNESS - REMOVAL

A. General

- (1) The procedures given in this task are related to the harness assembly installed on the thrust reverser structure.
- (2) This task is applicable to the LH and RH thrust reversers.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM MPP 78-30-00/200	- MAINTENANCE PRACTICES
AMM TASK 54-52-01-000-801-A/400	PYLON FAIRINGS - REMOVAL
AMM TASK 71-11-01-000-801-A/400	ENGINE UPPER COWLING - REMOVAL
AMM TASK 71-12-01-000-801-A/400	ENGINE LOWER COWLING - OPENING
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	416JT	LH Thrust reverser
416	416QL	LH Thrust reverser
416	416SL	LH Thrust reverser
416	416CB	LH Thrust reverser
416	416PR	LH Thrust reverser
416	416BB	LH Thrust reverser
416	416AB	LH Thrust reverser
426	426HT	RH Thrust reverser
426	426JT	RH Thrust reverser
426	426QL	RH Thrust reverser
426	426SL	RH Thrust reverser
426	426CB	RH Thrust reverser
426	426PR	RH Thrust reverser
426	426BB	RH Thrust reverser
426	426AB	RH Thrust reverser

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the thrust reverser	

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	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 THRUST REVERSERS ARE DEENERGIZED. ENERGIZED CIRCUITS CAN CAUSE INJURY TO PERSONS.

- (1) On the circuit breaker panel, open these circuit breakers and attach a DO-NOT-CLOSE tag to them:
 - (a) THRUST REVERSER 1/2;
 - (b) HYD. ELEC. PUMP 1/2.
- (2) Put a DO-NOT-OPERATE-THE-THRUST-REVERSERS sign on the instrument panel, in the cockpit.
- (3) Inhibit the ICU ([AMM TASK 78-33-01-980-801-A/200](#)).
- (4) Put the workstand under the engine thrust reverser.
- (5) Open the engine lower cowling ([AMM TASK 71-12-01-000-801-A/400](#)).
- (6) Remove the engine upper cowling ([AMM TASK 71-11-01-000-801-A/400](#)), if necessary.
- (7) Remove the pylon lower fairing ([AMM TASK 54-52-01-000-801-A/400](#)).

- (8) Remove access panels 416HT, 416JT, 416QL, 416SL, 416CB, 416PR, 416BB, and 416AB (engine 1) or 426HT, 426JT, 426QL, 426SL, 426CB, 426PR, 426AB, and 426BB (engine 2), as applicable ([AMM MPP 06-43-00/100](#)).

J. Removal ([Figure 401](#)) ([Figure 402](#)) ([Figure 403](#))

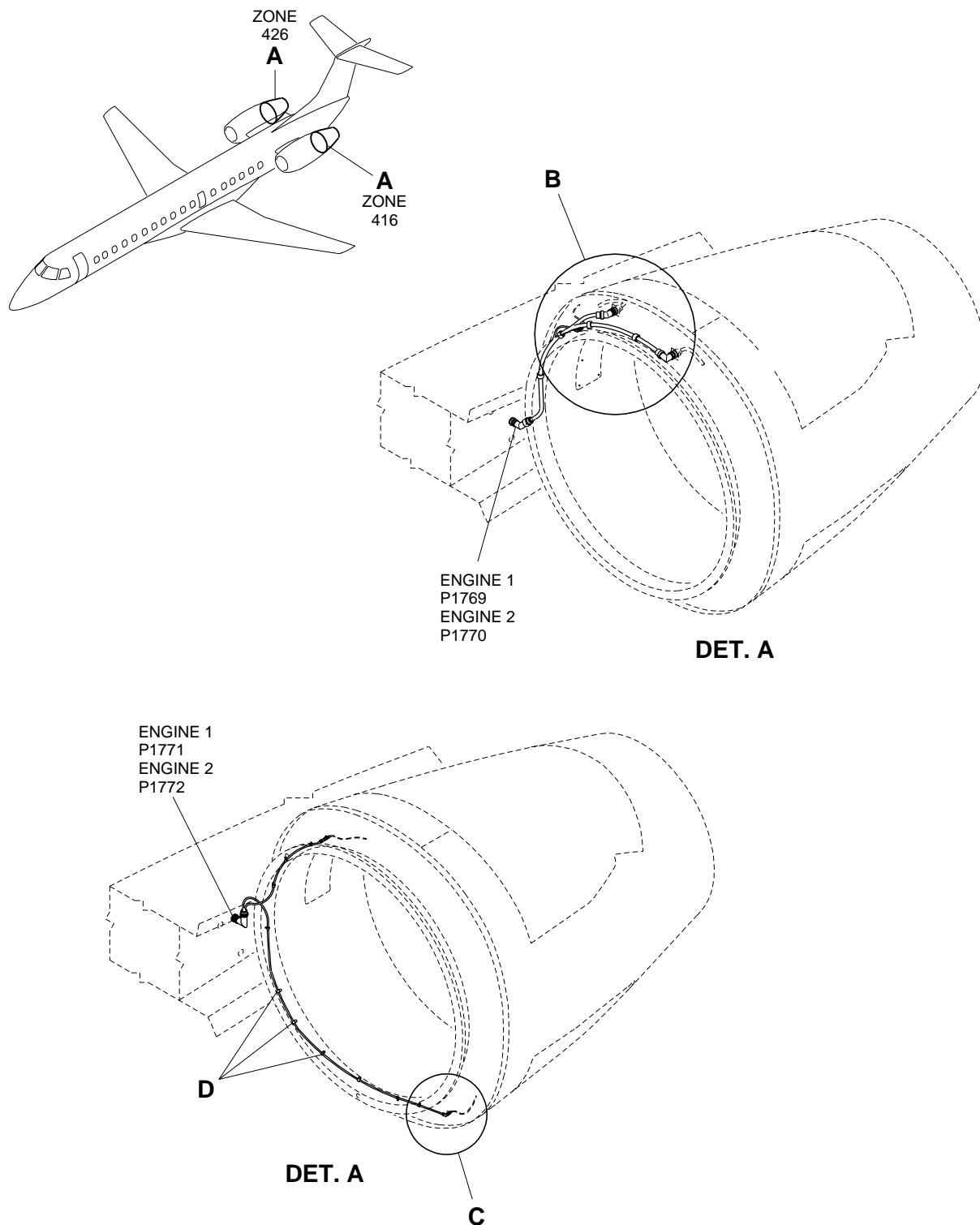
SUBTASK 020-002-A

- (1) Disconnect all the electrical connectors of the harnesses to be removed from the thrust reverser.
- (2) Remove the bolts, washers, and nuts of the clamps.
- (3) Remove the thrust reverser harness. Refer to [Figure 401](#), [Figure 402](#), and [Figure 403](#).
- (4) Install protection caps to the disconnected points.

EFFECTIVITY: ALL

Thrust Reverser Harness - Torsion Box/Pylon Connection (LH TYPICAL)

Figure 401 - Sheet 1

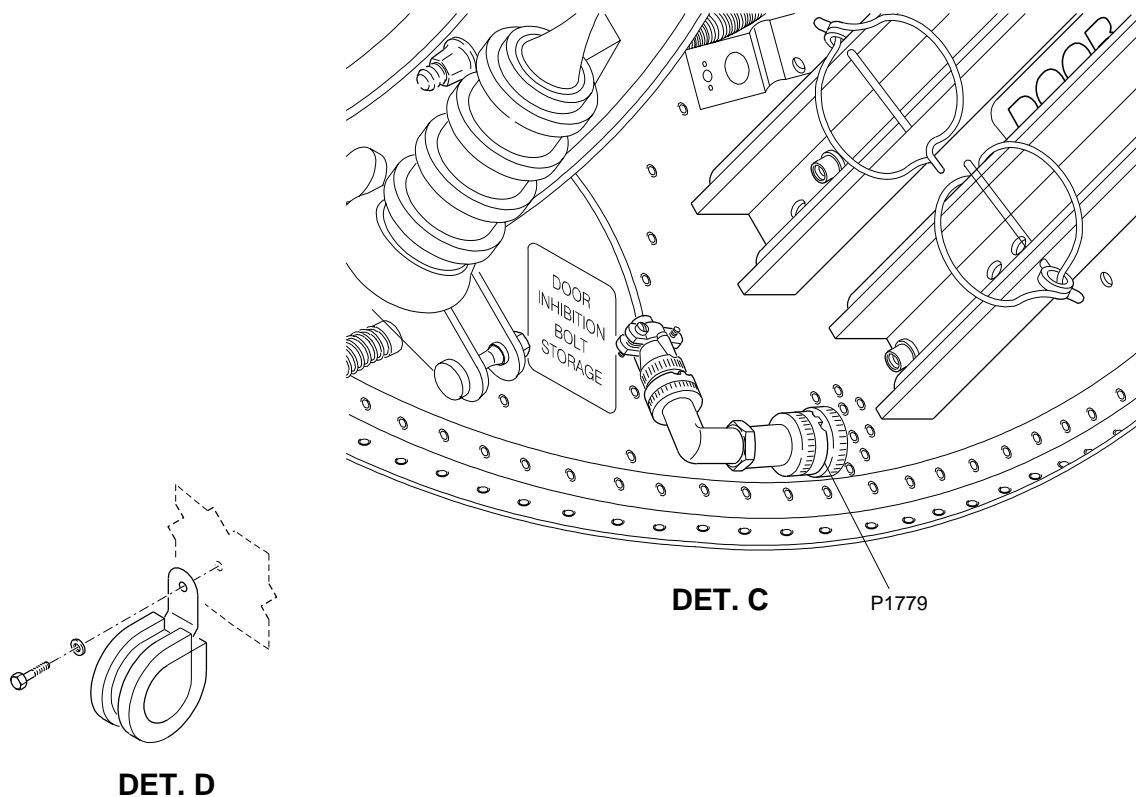
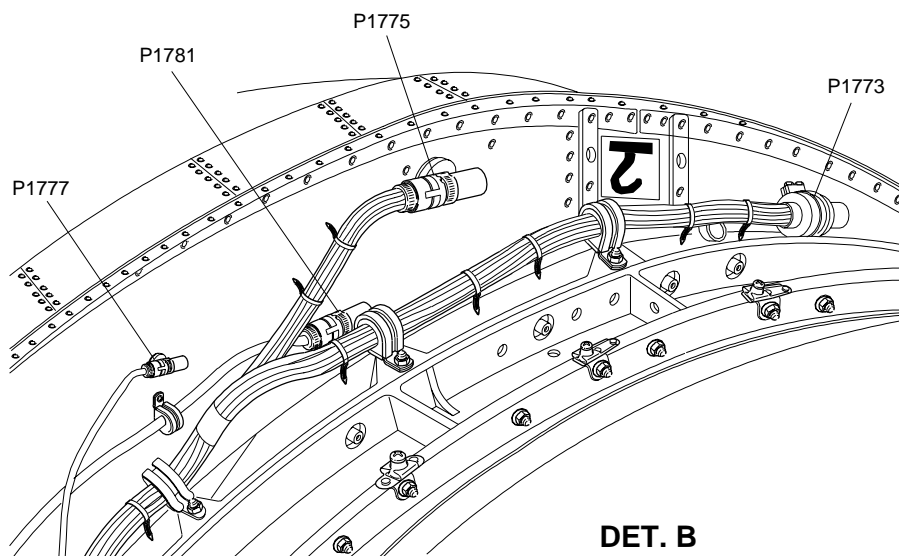


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EFFECTIVITY: ALL

Thrust Reverser Harness - Torsion Box/Pylon Connection (LH TYPICAL)

Figure 401 - Sheet 2

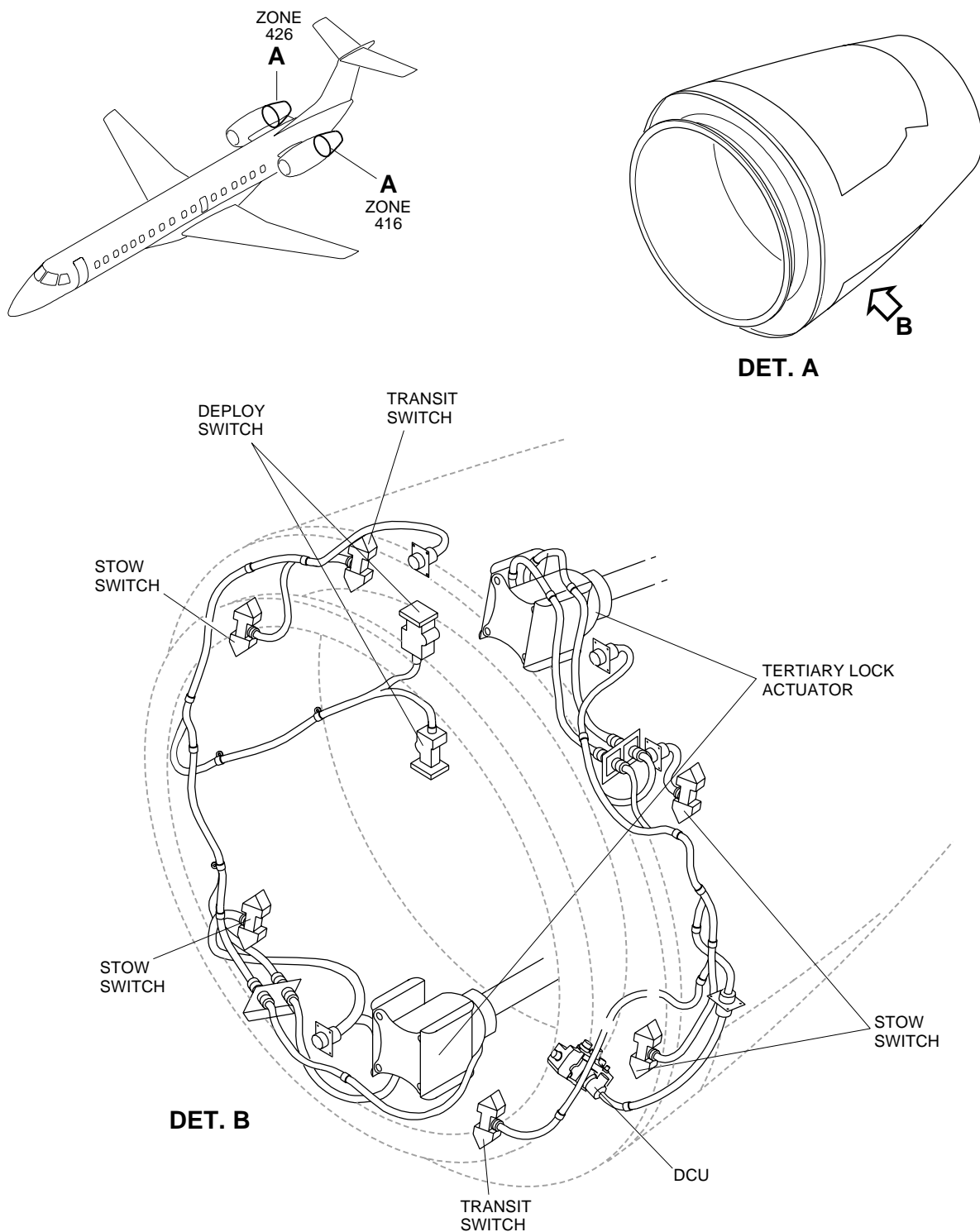


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EFFECTIVITY: ALL

Thrust Reverser Harness - General

Figure 402

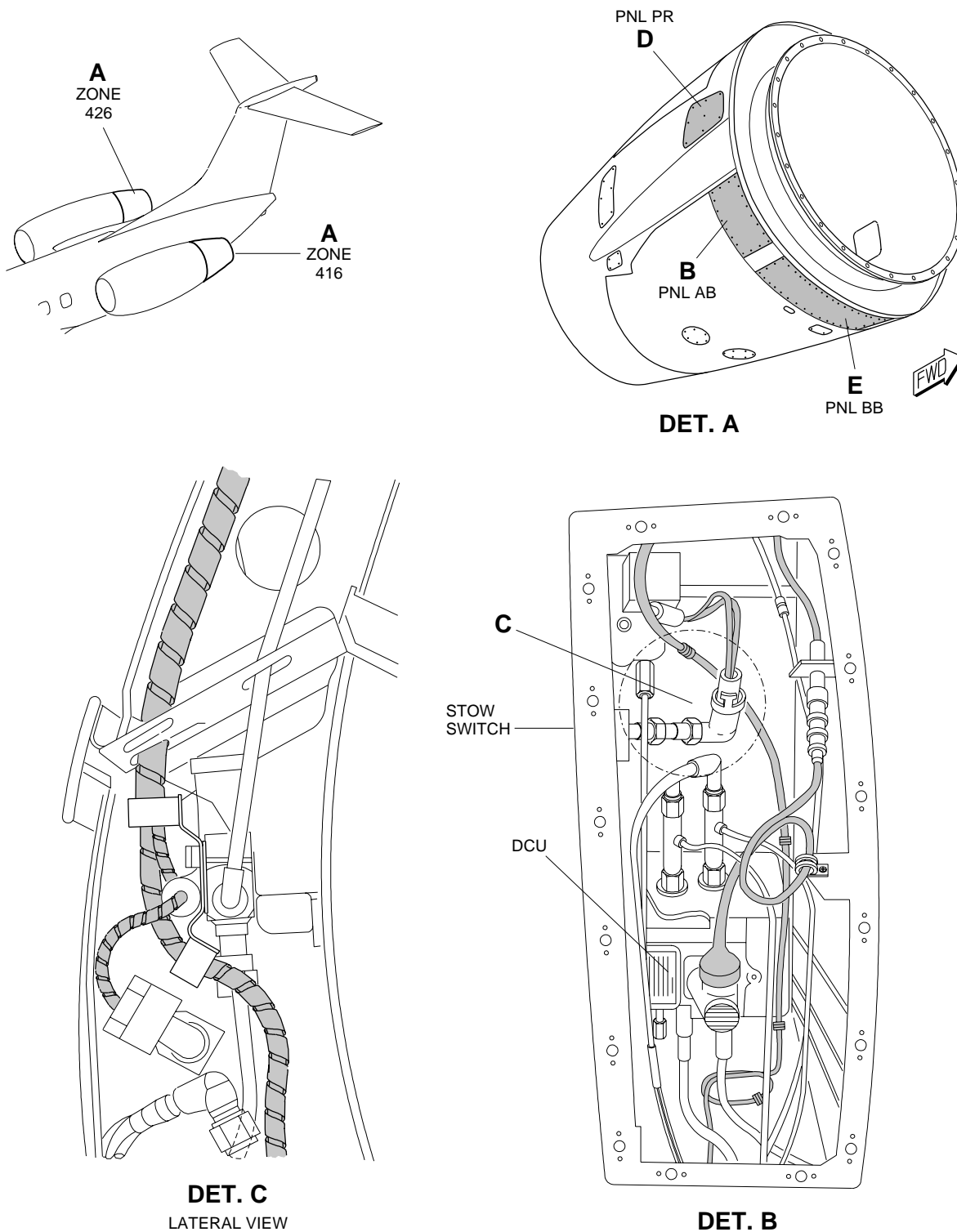


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EFFECTIVITY: ALL

Thrust Reverser Harness Attachment

Figure 403 - Sheet 1

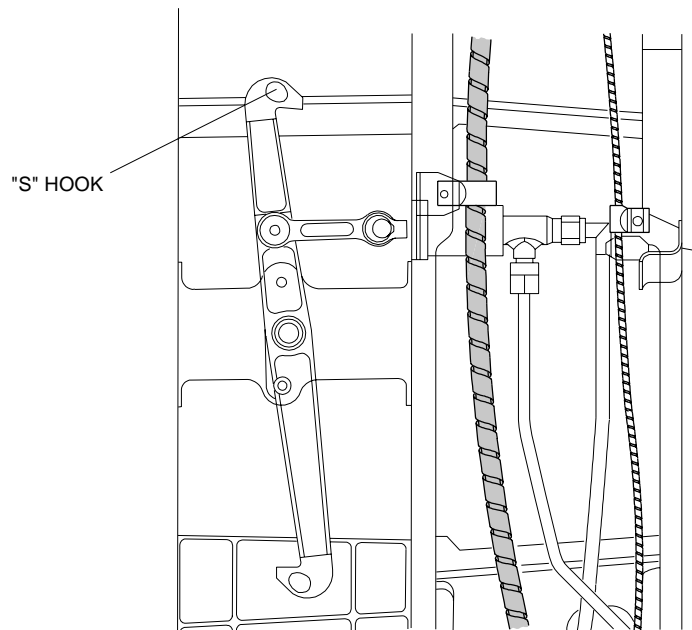


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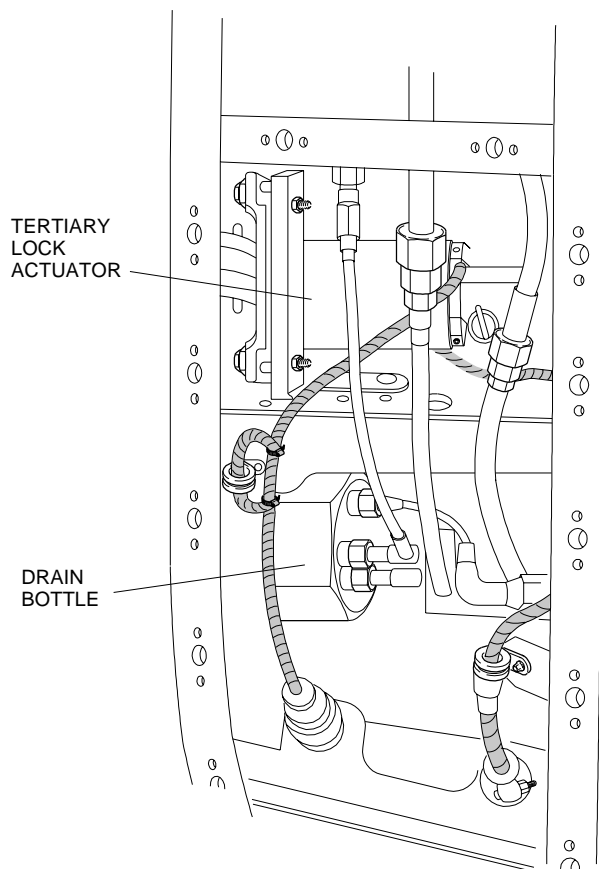
EFFECTIVITY: ALL

Thrust Reverser Harness Attachment

Figure 403 - Sheet 2



DET. D



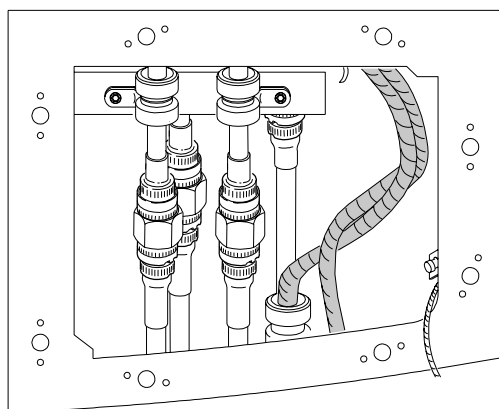
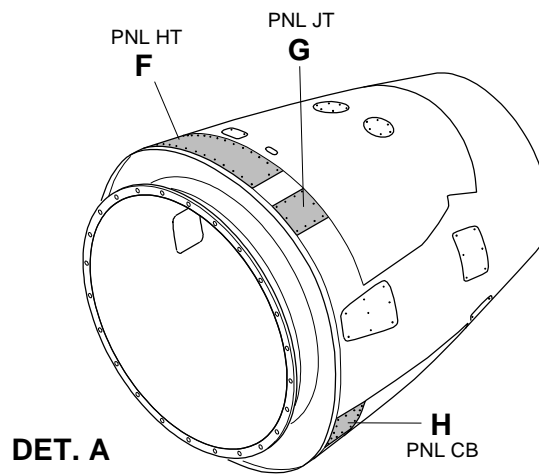
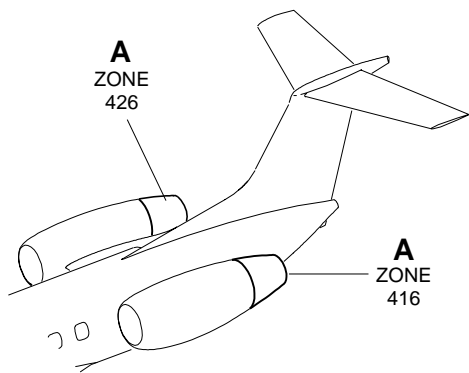
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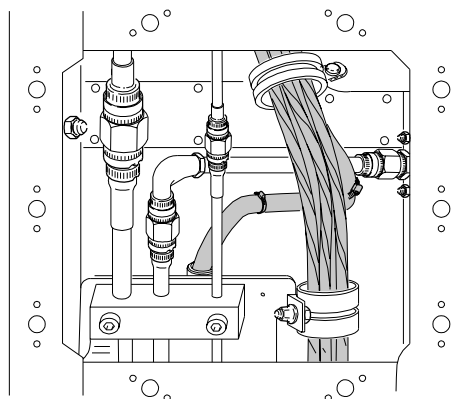
EFFECTIVITY: ALL

Thrust Reverser Harness Attachment

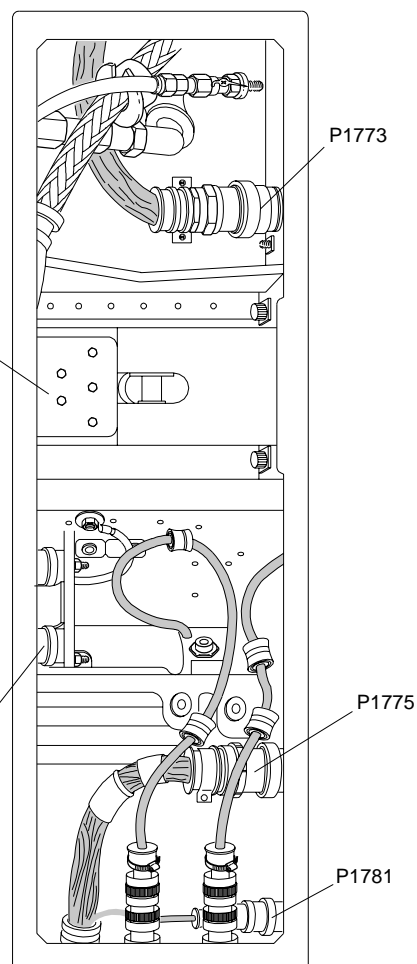
Figure 403 - Sheet 3



DOOR ACTUATOR
ATTACH POINT



TERTIARY LOCK
ACTUATOR

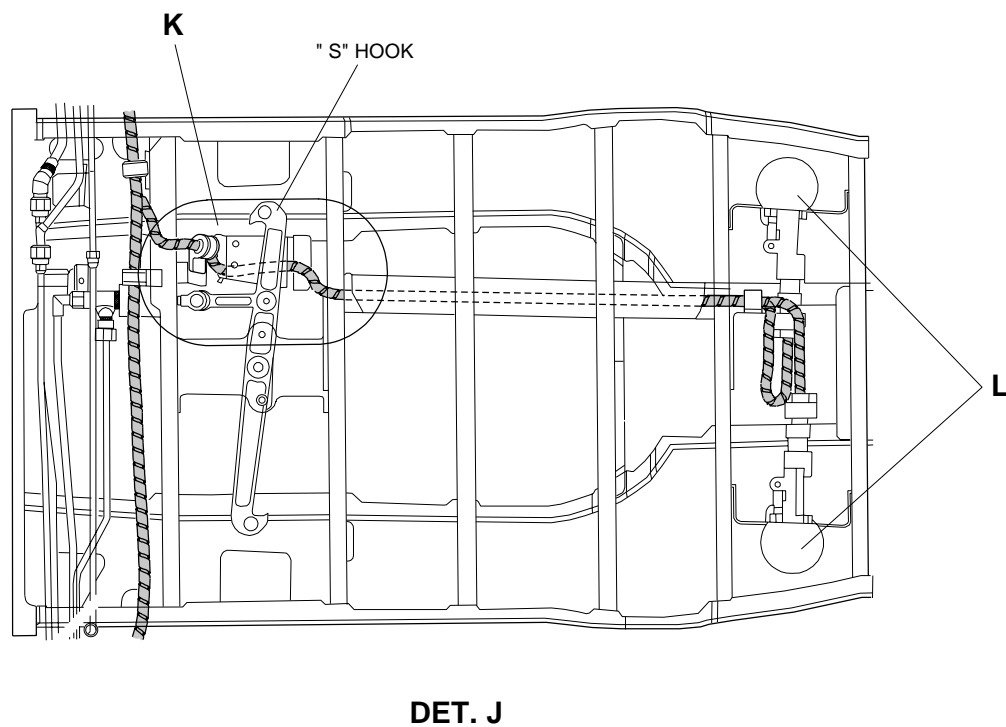
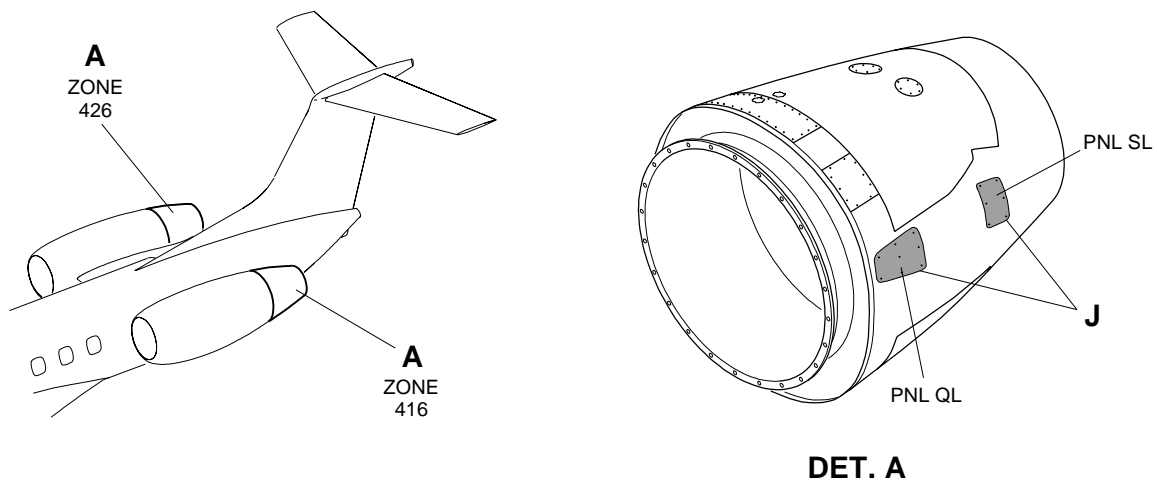


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EFFECTIVITY: ALL

Thrust Reverser Harness Attachment

Figure 403 - Sheet 4

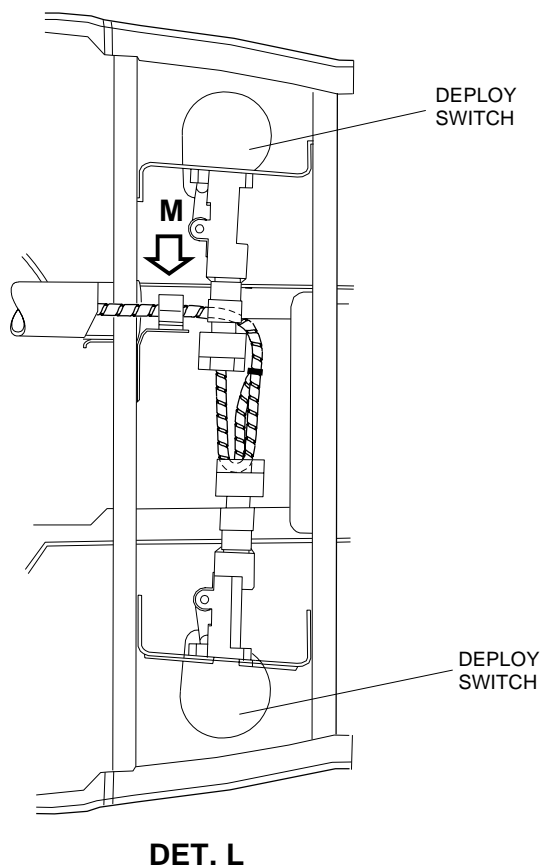
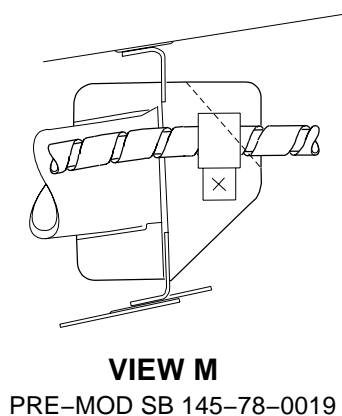
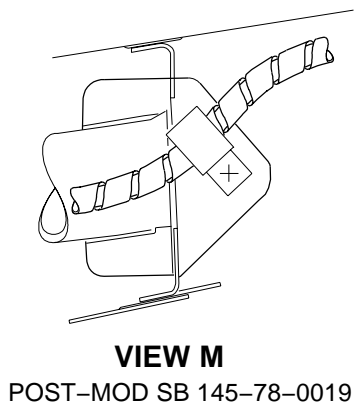
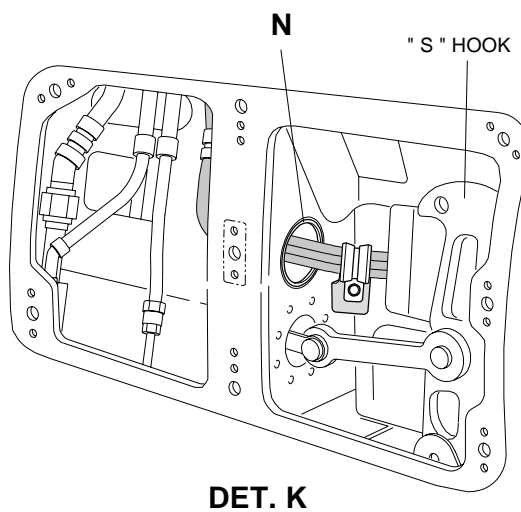
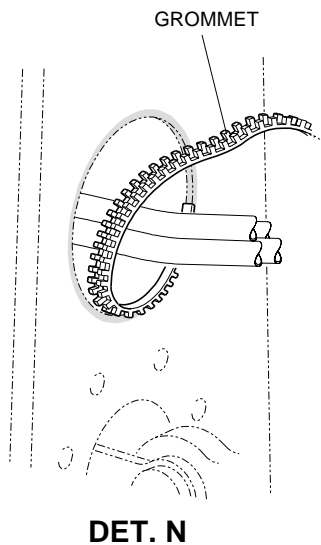


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EFFECTIVITY: ALL

Thrust Reverser Harness Attachment

Figure 403 - Sheet 5

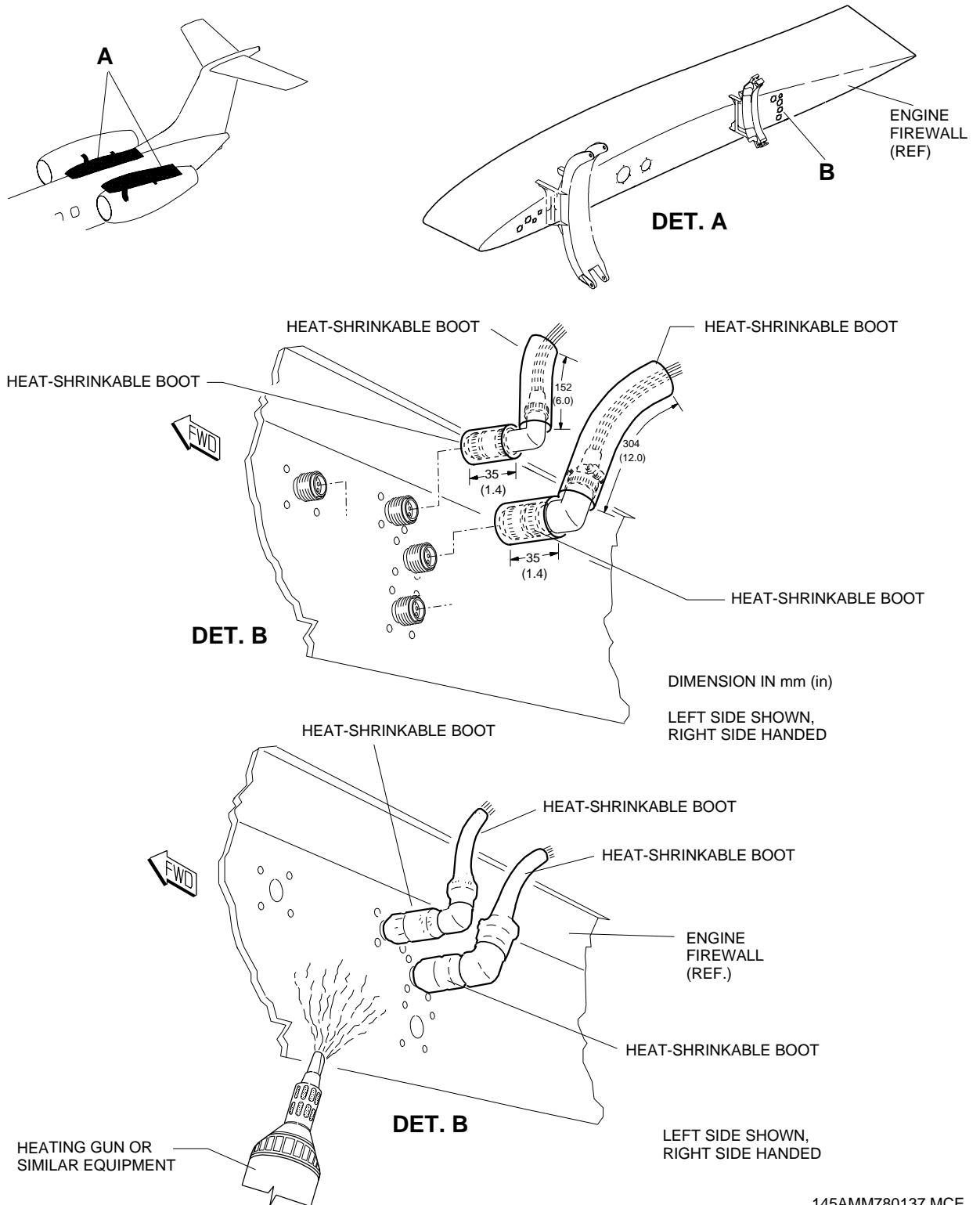


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EFFECTIVITY: ALL

Thrust Reverser Harness - Pylon Connection (LH TYPICAL)

Figure 404



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TASK 78-35-01-400-801-A

EFFECTIVITY: ALL

3. THRUST REVERSER HARNESS - INSTALLATION

A. General

- (1) The procedures given in this task are related to the harness assembly installed on the thrust reverser structure.
- (2) This task is applicable to the LH and RH thrust reversers.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM MPP 78-30-00/200	- MAINTENANCE PRACTICES
AMM TASK 54-52-01-400-801-A/400	PYLON FAIRINGS - INSTALLATION
AMM TASK 71-11-01-400-801-A/400	ENGINE UPPER COWLING - INSTALLATION
AMM TASK 71-12-01-400-801-A/400	ENGINE LOWER COWLING - CLOSING
AMM TASK 78-31-01-700-801-A/500	THRUST REVERSER - OPERATIONAL CHECK
AMM TASK 78-33-01-980-801-A/200	ISOLATION CONTROL UNIT - INHIBITION PROCEDURES
WM 20-10-00	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
416	416HT	LH Thrust reverser
416	416JT	LH Thrust reverser
416	416QL	LH Thrust reverser
416	416SL	LH Thrust reverser
416	416CB	LH Thrust reverser
416	416PR	LH Thrust reverser
416	416BB	LH Thrust reverser
416	416AB	LH Thrust reverser
426	426HT	RH Thrust reverser
426	426JT	RH Thrust reverser
426	426QL	RH Thrust reverser
426	426SL	RH Thrust reverser
426	426CB	RH Thrust reverser
426	426PR	RH Thrust reverser
426	426BB	RH Thrust reverser
426	426AB	RH Thrust reverser

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the thrust reverser	
Commercially available	Heating gun	To shrink the original heat-shrinkable boot	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
FIT-621-2 or CFHR-TW-2000	Heat -shrinkable boot	AR
FIT-621-3, HRNF-300-S or CFHR-TW-3000	Heat -shrinkable boot	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Thrust reverser

I. Installation (Figure 401) (Figure 402) (Figure 403) (Figure 404)

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 THRUST REVERSERS ARE DEENERGIZED. ENERGIZED CIRCUITS CAN CAUSE INJURY TO PERSONS.

- (1) Remove the protection caps from the disconnect points, if applicable.

CAUTION: MAKE SURE THAT THE THRUST REVERSER HARNESSES ARE CORRECTLY ATTACHED AND THERE IS NO CHAFING AGAINST THE THRUST REVERSER COMPONENTS, PIPES, AND STRUCTURE. THIS CAN CAUSE SERIOUS PROBLEMS TO THE CORRECT THRUST REVERSER OPERATION. REFER TO FIGURE 403 FOR THE CORRECT ROUTING OF THE HARNESSES.

- (2) Put the harness on the thrust reverser. Refer to (Figure 401), (Figure 402) and (Figure 403).
- (3) Install the bolts, washers, and nuts with the clamps to attach the harness to the thrust reverser structure.

- (4) Connect the electrical connectors installed at the thrust reverser structure and components.
- (5) Cover the connectors (engine 1: P1769 and P1771; or engine 2: P1770 and P1772) with the heat-shrinkable boots. Refer to (Figure 404).

WARNING: OBEY THE SAFETY PRECAUTIONS GIVEN IN WM 20-10-00 TO USE THE HEATING GUN. EXPLOSIONS CAN OCCUR IF YOU USE THE HEATING GUN INCORRECTLY NEAR FLAMMABLE MATERIALS OR FLUID VENTS.

- (6) Connect the two electrical connectors of the thrust reverser on the pylon. If applicable, heat the heat-shrinkable boots with a heating gun or similar equipment.
- (7) Install tie straps as necessary to prevent the harness looseness.

J. Follow-on

SUBTASK 842-002-A

CAUTION: MAKE SURE THAT NO CHAFING OCCURS DURING THE THRUST REVERSER OPERATION. THIS CAN CAUSE DAMAGE TO THE THRUST REVERSER SYSTEM.

- (1) Do a visual inspection on the thrust reverser harness. It must not show:
 - (a) Chafing areas;
 - (b) Harness looseness;
 - (c) Loose connections.
- (2) Install access panels 416HT, 416JT, 416QL, 416SL, 416CB, 416PR, 416AB and 416BB (engine 1) or 426HT, 426JT, 426QL, 426SL, 426CB, 426PR, 426AB, and 426BB (engine 2), as applicable ([AMM MPP 06-43-00/100](#)).
- (3) Install the pylon lower fairing ([AMM TASK 54-52-01-400-801-A/400](#)).
- (4) Install the engine upper cowling ([AMM TASK 71-11-01-400-801-A/400](#)), if necessary.
- (5) Close the engine lower cowling ([AMM TASK 71-12-01-400-801-A/400](#)).
- (6) De-inhibit the ICU ([AMM TASK 78-33-01-980-801-A/200](#)).
- (7) Remove the workstand from under the engine thrust reverser.
- (8) Remove the DO-NOT-OPERATE-THE-THRUST-REVERSERS sign from the instrument panel, in the cockpit.
- (9) On the circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tag from them:
 - (a) THRUST REVERSER 1/2;
 - (b) HYD. ELEC. PUMP 1/2.
- (10) Do the Thrust Reverser operational check ([AMM TASK 78-31-01-700-801-A/500](#)).