



AIRCRAFT
MAINTENANCE MANUAL

SPEED BRAKE PRESSURE REDUCER - REMOVAL/INSTALLATION

EFFECTIVITY: FOR AIRCRAFT WITH SPEED BRAKE PRESSURE REDUCER INSTALLED

1. General

- A. This section gives the procedures to remove and install the pressure reducer of the speed brake system.
- B. The pressure reducer is installed on the RH side of the wing stub.
- 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
27-62-07-000-801-A	PRESSURE REDUCER - REMOVAL	FOR AIRCRAFT WITH SPEED BRAKE PRESSURE REDUCER INSTALLED
27-62-07-400-801-A	PRESSURE REDUCER - INSTALLATION	FOR AIRCRAFT WITH SPEED BRAKE PRESSURE REDUCER INSTALLED



EMB145 - EMB135

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TASK 27-62-07-000-801-A

EFFECTIVITY: FOR AIRCRAFT WITH SPEED BRAKE PRESSURE REDUCER INSTALLED

2. PRESSURE REDUCER - REMOVAL

A. General

- (1) This task gives the instructions to remove the pressure reducer of the speed brake system.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
156		RH Wing stub
192	192BR	Center lower fairing

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid Resistant	Protection for the hands	1 pair
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid Resistant	Protection for the eyes	1 pair

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing stub - RH side

I. Preparation

SUBTASK 841-002-A

- (1) On the Circuit Breaker Panel, open the SPEED BRAKE, ELEC PUMP 1, and ELEC PUMP 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (2) Remove access panel 192BR (AMM MPP 06-41-01/100).



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

SUBTASK 020-002-A

WARNING: • MAKE SURE THAT THE HYDRAULIC SYSTEM IS NOT PRESSURIZED ([AMM TASK 29-10-00-860-801-A/200](#)).

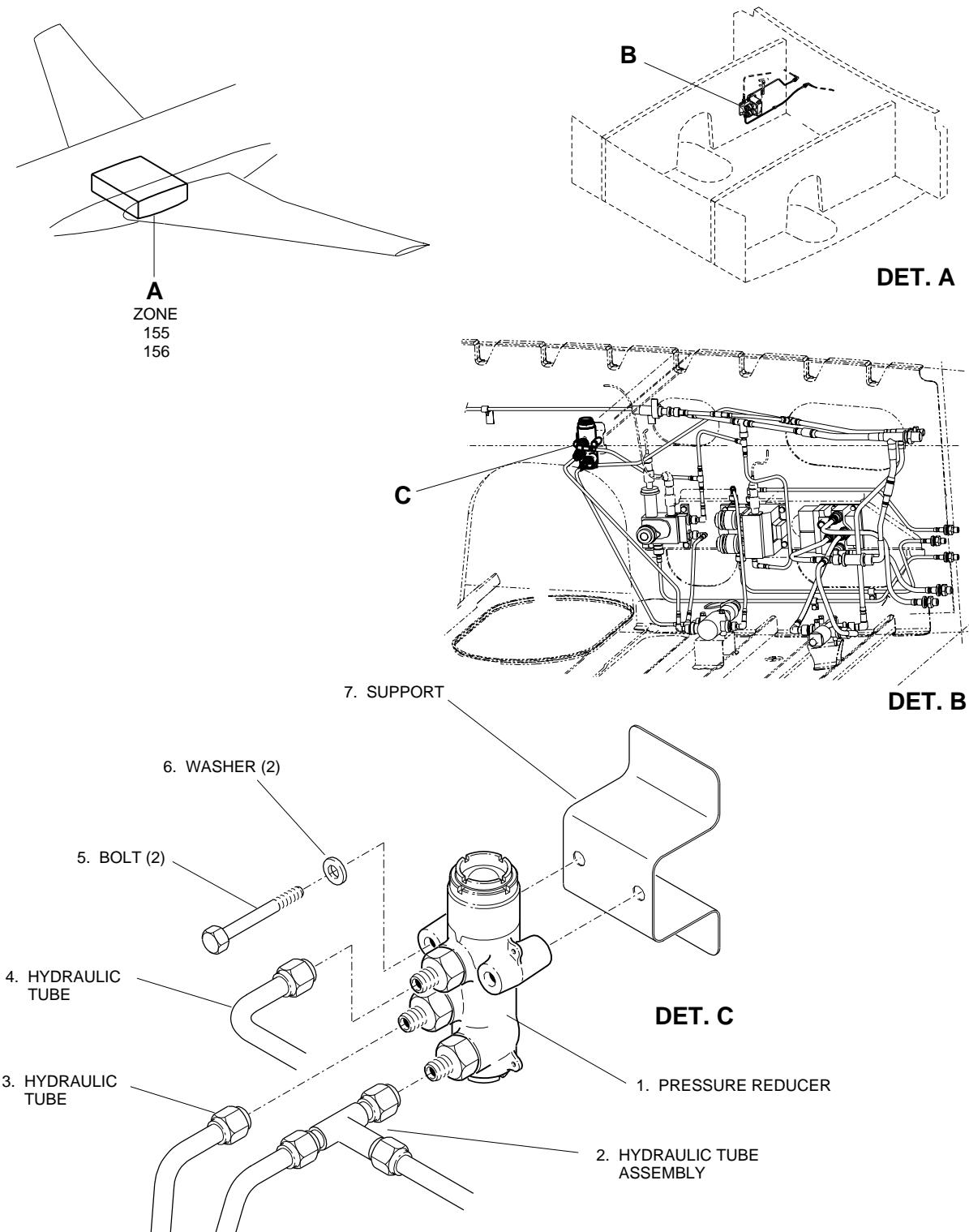
• THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE THE APPLICABLE RUBBER GOGGLES AND GLOVES. IF THE FLUID TOUCHES YOU, FLUSH YOUR SKIN WITH WATER. IF IT GETS IN YOUR EYES, FLUSH THEM WITH WATER AND GET MEDICAL HELP.

- (1) Disconnect the hydraulic tubes (3) and (4) from the pressure reducer (1).
- (2) Disconnect the hydraulic tube assembly (2) from the pressure reducer (1).
- (3) Remove the bolts (5) and washers (6) (2 positions) to release the pressure reducer (1) from the support (7).
- (4) Remove the pressure reducer (1).

EFFECTIVITY: FOR AIRCRAFT WITH SPEED BRAKE PRESSURE REDUCER INSTALLED

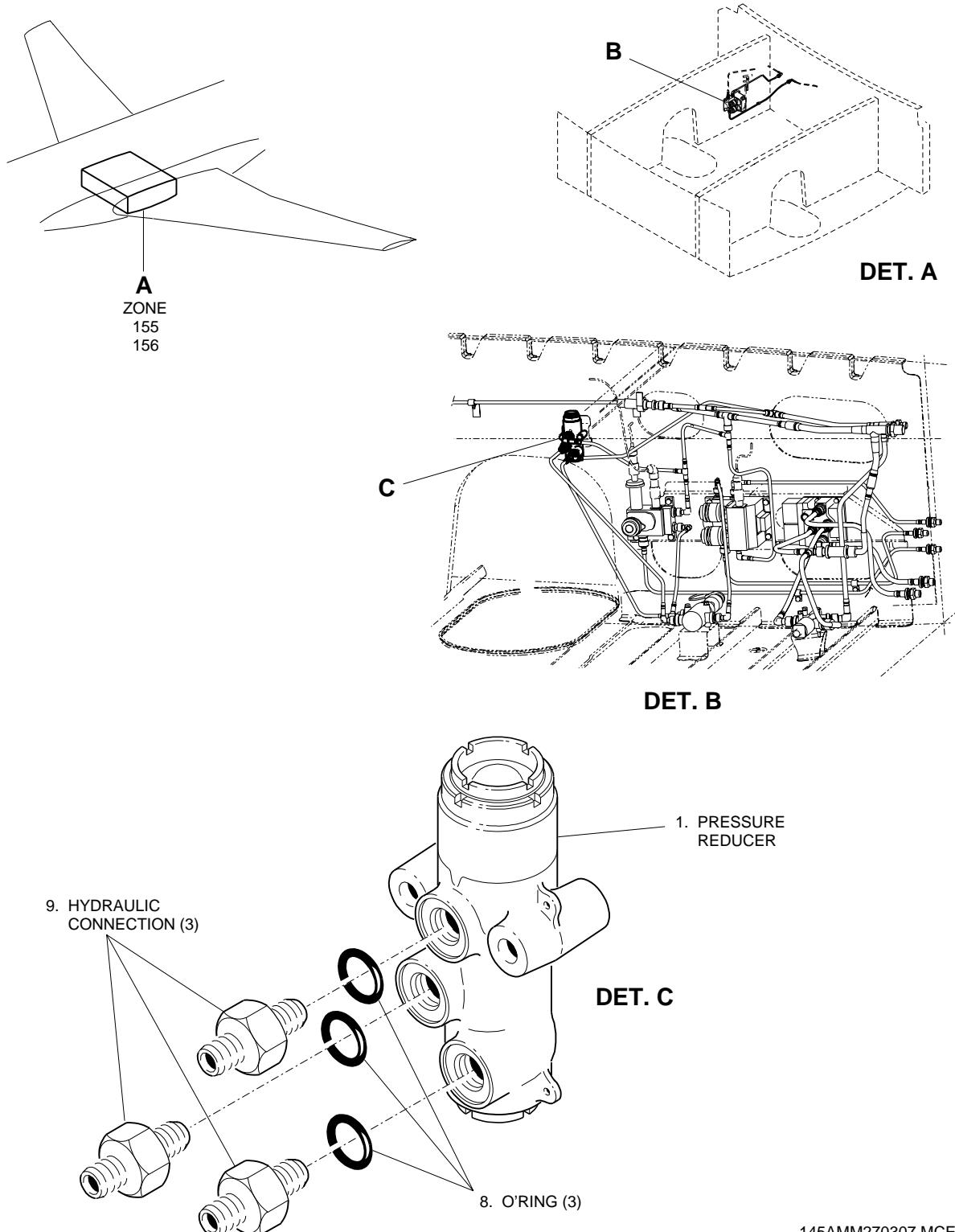
Pressure Reducer of the Speed Brake System - Removal/Installation

Figure 401



145AMM270308.MCE A

EFFECTIVITY: FOR AIRCRAFT WITH SPEED BRAKE PRESSURE REDUCER INSTALLED
 Hydraulic Connections of the Pressure Reducer - Removal/Installation
 Figure 402



145AMM270307.MCE A



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TASK 27-62-07-400-801-A

EFFECTIVITY: FOR AIRCRAFT WITH SPEED BRAKE PRESSURE REDUCER INSTALLED

3. PRESSURE REDUCER - INSTALLATION

A. General

(1) This task gives the instructions to install the pressure reducer of the speed brake system.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 27-63-01-700-801-A/500	SPOILER SYSTEM - OPERATIONAL CHECK
AMM TASK 28-41-00-200-801-A/600	-
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS
AMM TASK 29-10-00-860-803-A/200	HYDRAULIC SYSTEM - BLEED OF AIR

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
156		RH Wing stub
192	192BR	Center lower fairing

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid Resistant	Protection for the hands	1 pair
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid Resistant	Protection for the eyes	1 pair

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
NAS1612-5	O-ring	3

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing stub - RH side

I. Preparation (Figure 402)

SUBTASK 841-003-A

- (1) Remove the hydraulic connections (9) (3 positions) from the pressure reducer (1) and keep them.
- (2) Remove and discard the old O-rings (8) (3 positions).
- (3) Install the new O-rings (8) to the pressure reducer (1).
- (4) Install the hydraulic connections (9) (3 positions) to the pressure reducer (1).

J. Installation (Figure 401)

SUBTASK 420-002-A

WARNING: • **MAKE SURE THAT THE HYDRAULIC SYSTEM IS NOT PRESSURIZED (AMM TASK 29-10-00-860-801-A/200).**

• **THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE THE APPLICABLE RUBBER GOGGLES AND GLOVES. IF THE FLUID TOUCHES YOU, FLUSH YOUR SKIN WITH WATER. IF IT GETS IN YOUR EYES, FLUSH THEM WITH WATER AND GET MEDICAL HELP.**

- (1) Put the pressure reducer (1) on the support (7).
- (2) Attach the pressure reducer (1) to the support (7) with the bolts (5) and washers (6) (2 positions).
- (3) Connect the hydraulic tube assembly (2) to the pressure reducer (1).
- (4) Connect the hydraulic tubes (3) and (4) to the pressure reducer (1).

K. Follow-on

SUBTASK 842-002-A

- (1) On the Circuit Breaker Panel, close the SPEED BRAKE, ELEC PUMP 1, and ELEC PUMP 2 circuit breakers and remove the DO-NOT-CLOSE tag from them.
- (2) Bleed the air from the hydraulic system lines ([AMM TASK 29-10-00-860-803-A/200](#)).
- (3) Make sure that there are no leaks in the pressure reducer.
- (4) Do an operational check of the spoiler system ([AMM TASK 27-63-01-700-801-A/500](#)).
- (5) Do an inspection on the fuel quantity indication harness (AMM TASK 28-41-00-200-801-A/600).

NOTE: The inspection of fuel quantity indication harness is part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations of the Aircraft Maintenance Program.

- (6) Install access panel 192BR (AMM MPP 06-41-01/100).

