



AIRCRAFT MAINTENANCE MANUAL

MAIN-DOOR ACTUATION-SYSTEM RELIEF VALVE - REMOVAL/INSTALLATION

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

1. General

- A. This section gives the procedures to remove and install the thermal and pressure relief valves of the main-door actuation system.
- B. These procedures are applicable to the pressure relief valve and to the thermal relief valve.
- 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
52-12-07-000-801-A	MAIN-DOOR ACTUATION-SYSTEM RELIEF VALVE - REMOVAL	AIRCRAFT WITH AIR-STAIRS DOOR
52-12-07-400-801-A	MAIN-DOOR ACTUATION-SYSTEM RELIEF VALVE - INSTALLATION	AIRCRAFT WITH AIR-STAIRS DOOR



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 52-12-07-000-801-A

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

2. MAIN-DOOR ACTUATION-SYSTEM RELIEF VALVE - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the thermal and pressure relief valves of the main-door actuation system.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
SB145-52-0016	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
114	114CR	Nose hydraulic compartment

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
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	Nose hydraulic compartment

I. Preparation

SUBTASK 841-002-A

- (1) On the circuit breaker panel, open the ELEC PUMP 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.

- (2) Open access door 114CR of the nose hydraulic compartment (AMM MPP 06-41-01/100).
- (3) Depressurize the hydraulic system ([AMM TASK 29-10-00-860-802-A/200](#)).
- (4) Fully release the pressure from the fluid chamber of the hydraulic accumulator of the main-door actuation system. For this, open the discharge valve and monitor the pressure gage until it shows the nitrogen precharge.
- (5) Release the pressure from the spring accumulator. For this, do the steps below:
 - (a) Open the main-door emergency valve in the cockpit.
 - (b) Manually open and close the main door two or three times.

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

SUBTASK 020-002-A

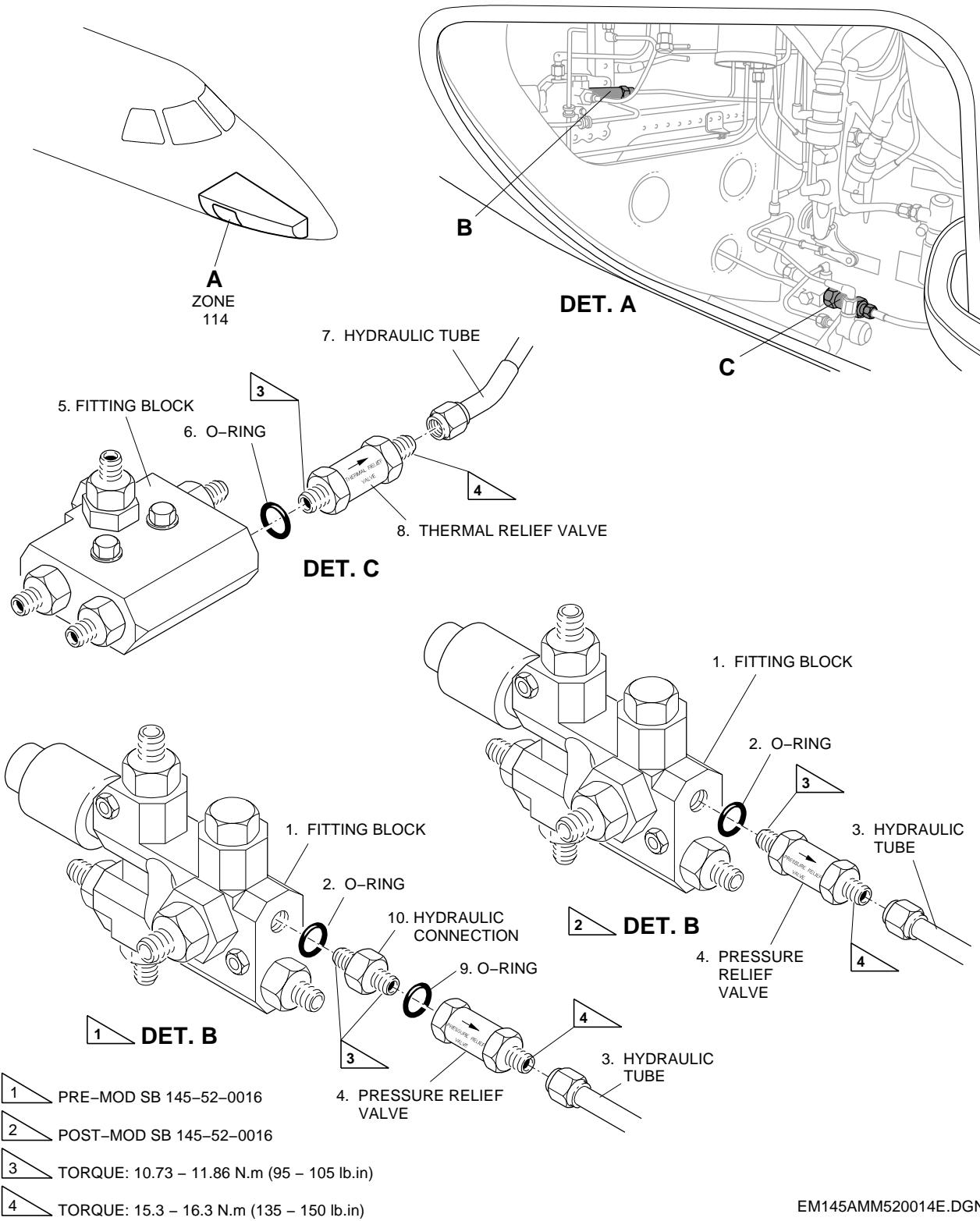
WARNING: THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE THE APPLICABLE RUBBER GOGGLES AND GLOVES. IF THE FLUID TOUCHES YOU, FLUSH YOUR SKIN WITH WATER. IF IT GETS IN YOUR EYES, FLUSH THEM WITH WATER AND GET MEDICAL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

- (1) Disconnect the hydraulic tube (3).
- (2) For aircraft PRE-MOD [SB145-52-0016](#), do as follows:
 - (a) Remove the pressure relief valve (4) and the hydraulic connection (10) from the fitting block (1).
 - (b) Remove and discard the old O-ring (2).
 - (c) Remove the hydraulic connection (10) from the pressure relief valve (4).
 - (d) Remove and discard the old O-ring (9).
- (3) For aircraft POST-MOD [SB145-52-0016](#), do as follows:
 - (a) Remove the pressure relief valve (4) from the fitting block (1).
 - (b) Remove and discard the old O-ring (2).
- (4) Disconnect the hydraulic tube (7).
- (5) Remove the thermal relief valve (8) from the fitting block nose (5).
- (6) Remove and discard the old O-ring (6).

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

Main-Door Actuation-System Relief Valves - Removal/Installation

Figure 401





EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 52-12-07-400-801-A

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

3. MAIN-DOOR ACTUATION-SYSTEM RELIEF VALVE - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the thermal and pressure relief valves of the main-door actuation system.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 52-12-07-700-801-A/500	MAIN-DOOR ACTUATION-SYSTEM RELIEF VALVE - OPERATIONAL TEST
IPC 52-12-00	MAIN DOOR - LIFTING AND LOWERING SYSTEM
SB145-52-0016	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
114	114CR	Nose hydraulic compartment

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
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
O-ring	IPC 52-12-00	AR

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Nose hydraulic compartment

I. Installation (Figure 401)

SUBTASK 420-002-A

WARNING: 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 new O-ring (6) in the thermal relief valve (8).

- (2) Install the thermal relief valve (8) (Det. C in (Figure 401)).

NOTE: Make sure that the arrow marked in the valve body stays in a position where you can see it and that it is pointed to the return line.

- (3) Connect the hydraulic tube (7).

- (4) For aircraft PRE-MOD [SB145-52-0016](#), do as follows:

- (a) Install the new O-ring (9) on the hydraulic connection (10).

- (b) Install the hydraulic connection (10) on the pressure relief valve (4).

- (c) Install the new O-ring (2) on the hydraulic connection (10).

- (d) Install the hydraulic connection (10) and the pressure relief valve (4) on the fitting block (1) (Det. B in (Figure 401)).

NOTE: Make sure that the arrow marked in the valve body stays in a position where you can see it and that it is pointed to the return line.

- (5) For aircraft POST-MOD [SB145-52-0016](#), do as follows:

- (a) Install the new O-ring (2) on the pressure relief valve (4).

- (b) Install the pressure relief valve (4) on the fitting block (1) (Det. B in (Figure 401)).

NOTE: Make sure that the arrow marked in the valve body stays in a position where you can see it and that it is pointed to the return line.

- (6) Connect the hydraulic tube (3).

J. Follow-on

SUBTASK 842-002-A

- (1) On the circuit breaker panel, close the ELEC PUMP 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.

- (2) Pressurize hydraulic system 1 ([AMM TASK 29-10-00-860-802-A/200](#)).

- (3) Do a check on the thermal and pressure relief valves for leaks.

- (4) Do an operational test of the relief valve ([AMM TASK 52-12-07-700-801-A/500](#)).

- (5) Close access panel 114CR of the nose hydraulic compartment (AMM MPP 06-41-01/100).