



# AIRCRAFT MAINTENANCE MANUAL

## THERMAL RELIEF VALVE - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

### 1. General

- A. This section gives the procedures to remove and install the thermal relief valve of the emergency/parking brake system.
- 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
32-44-06-000-801-A	THERMAL RELIEF VALVE OF THE EMERGENCY/PARKING BRAKE SYSTEM- REMOVAL	ALL
32-44-06-400-801-A	THERMAL RELIEF VALVE OF THE EMERGENCY/PARKING BRAKE SYSTEM- INSTALLATION	ALL



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TASK 32-44-06-000-801-A

EFFECTIVITY: ALL

2. THERMAL RELIEF VALVE OF THE EMERGENCY/PARKING BRAKE SYSTEM- REMOVAL

## A. General

- (1) This procedure gives the instructions to remove the thermal relief valve of the emergency/parking brake system.

## B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 32-44-02-910-801-A/200	HYDRAULIC ACCUMULATOR EMERGENCY/PARKING BRAKE - RELEASE

## C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
193	193CR	Hydraulic compartment 2

## 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	Hydraulic compartment 2

## I. Preparation

## SUBTASK 841-002-A

- (1) On the circuit breaker panel, open the ELEC PUMP 2 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (2) Control the rudder to the left and to the right until the pressure of the hydraulic system shows zero PSI on the EICAS.



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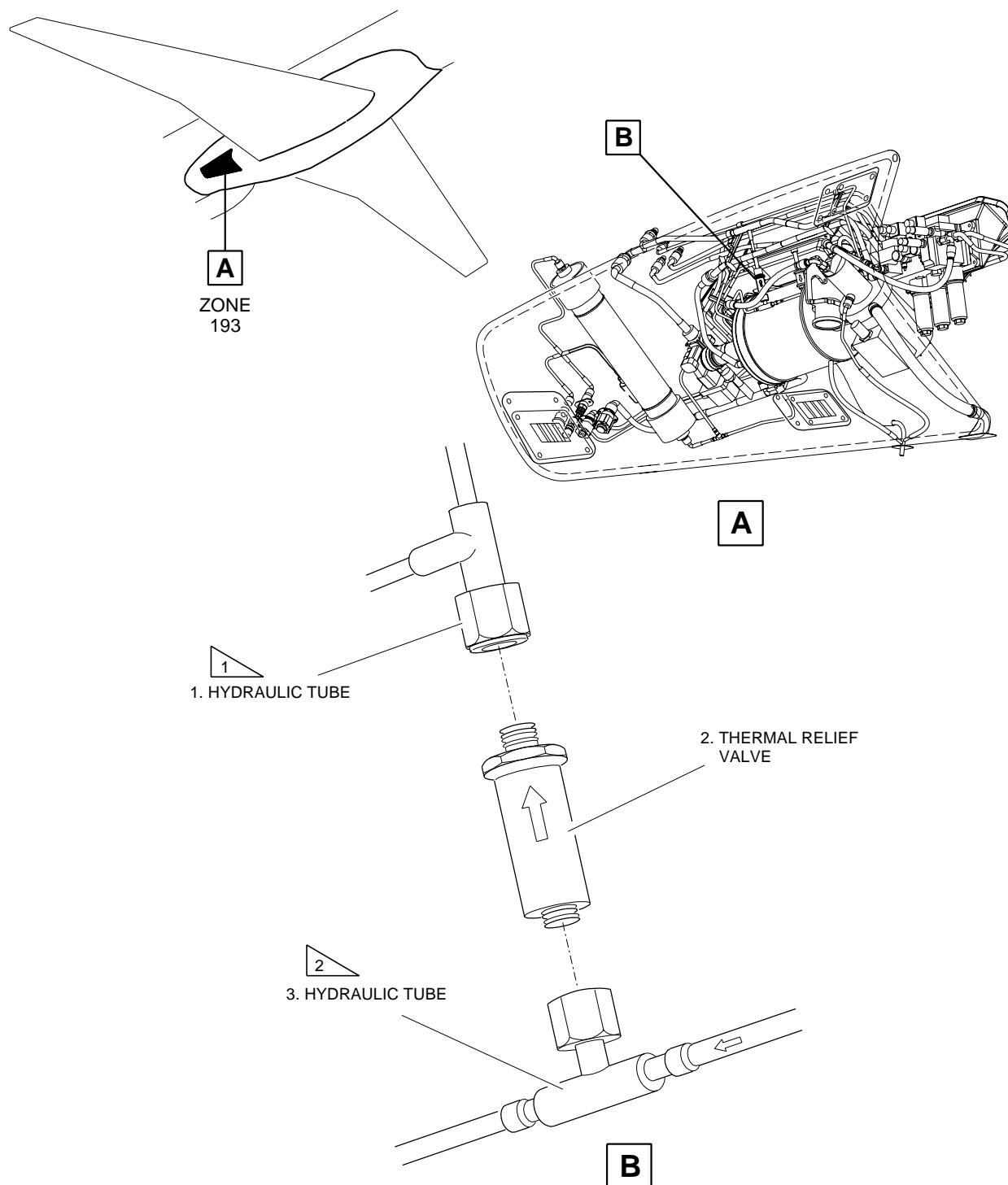
- (3) Fully release the pressure from the fluid chamber of the emergency/parking brake system hydraulic accumulator ([AMM TASK 32-44-02-910-801-A/200](#)).
- (4) Remove access panel 193CR from hydraulic compartment 2 (AMM MPP 06-41-01/100).
- (5) Slowly open the charging valve of the nitrogen chamber of the hydraulic accumulator to let all pressure in it go out.

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

SUBTASK 020-002-A

- (1) Disconnect the hydraulic tubes (1) and (3).
- (2) Remove the thermal relief valve (2).

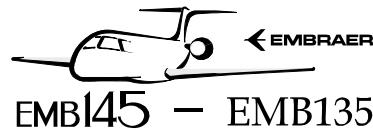
**EFFECTIVITY: ALL**

 Thermal Relief Valve of the Emergency/Parking Brake System - Removal/Installation  
 Figure 401


 1 TORQUE: 11.8 – 13.1 N.m (104 – 116 lb.in)

 2 TORQUE: 15 – 16.6 N.m (133 – 147 lb.in)

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TASK 32-44-06-400-801-A

EFFECTIVITY: ALL

3. THERMAL RELIEF VALVE OF THE EMERGENCY/PARKING BRAKE SYSTEM- INSTALLATION

## A. General

- (1) This procedure gives the instructions to install the thermal relief valve of the emergency/parking brake system.
- (2) For thermal relief valve whose storage life is to be exceeded, you must perform the functional test ([AMM TASK 32-44-06-700-801-A/500](#)).

## B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
<a href="#">AMM TASK 29-10-00-860-801-A/200</a>	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS
<a href="#">AMM TASK 32-40-00-800-801-A/200</a>	NORMAL BRAKE AND EMERGENCY PARKING BRAKE SYSTEMS - BLEEDING
<a href="#">AMM TASK 32-44-02-600-801-A/300</a>	EMERGENCY/PARKING BRAKE ACCUMULATOR - CHARGE
<a href="#">AMM TASK 32-44-06-700-801-A/500</a>	THERMAL RELIEF VALVE - FUNCTIONAL CHECK
CMM 32-44-06	-

## C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
193	193CR	Hydraulic compartment 2

## D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque Wrench (Range: 0 to 500 lb.in)	To torque the hydraulic tubes.	

## 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



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H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Hydraulic compartment 2

I. Preparation

SUBTASK 841-003-A

- (1) Make sure that the functional check of the thermal relief valve was performed in the last 24 months before you install it ([AMM TASK 32-44-06-700-801-A/500](#)).

**NOTE:** The storage life of thermal relief valve is 24 months (Refer to CMM 32-44-06).

J. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Put the thermal relief valve in its installation position between the hydraulic tubes (1) and (3).

**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.

- (2) Install the hydraulic tube (1).
- (3) Apply a torque of 11.8 to 13.1 N.m (104 to 116 lb.in) to hydraulic tube (1).
- (4) Install the hydraulic tube (3).
- (5) Apply a torque of 15 to 16.6 N.m (133 to 147 lb.in) to hydraulic tube (3).

K. Follow-on

SUBTASK 842-002-A

- (1) Pressurize the nitrogen chamber of the hydraulic accumulator ([AMM TASK 32-44-02-600-801-A/300](#)).

- (2) On the circuit breaker panel, close the ELEC PUMP 2 circuit breaker and remove the DO-NOT-CLOSE tag from it.

- (3) Pressurize hydraulic system 2 ([AMM TASK 29-10-00-860-801-A/200](#)).

- (4) Do a check on the thermal relief valve for leaks.

- (5) Bleed the brake hydraulic lines ([AMM TASK 32-40-00-800-801-A/200](#)).

- (6) With hydraulic system 2 depressurized, make sure that the pressure in the emergency/parking brake pressure accumulator is kept.

**NOTE:** The pressure must fall approximately 100 psi after the electric pump is turned off. See the pressure after 5 minutes. Make sure that this pressure is kept after 1 hour.

- (7) Install access panel 193CR of hydraulic compartment 2 (AMM MPP 06-41-01/100).