

## 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

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	-
<a href="#">AMM TASK 32-44-02-910-801-A/200</a>	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.

- (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](#))

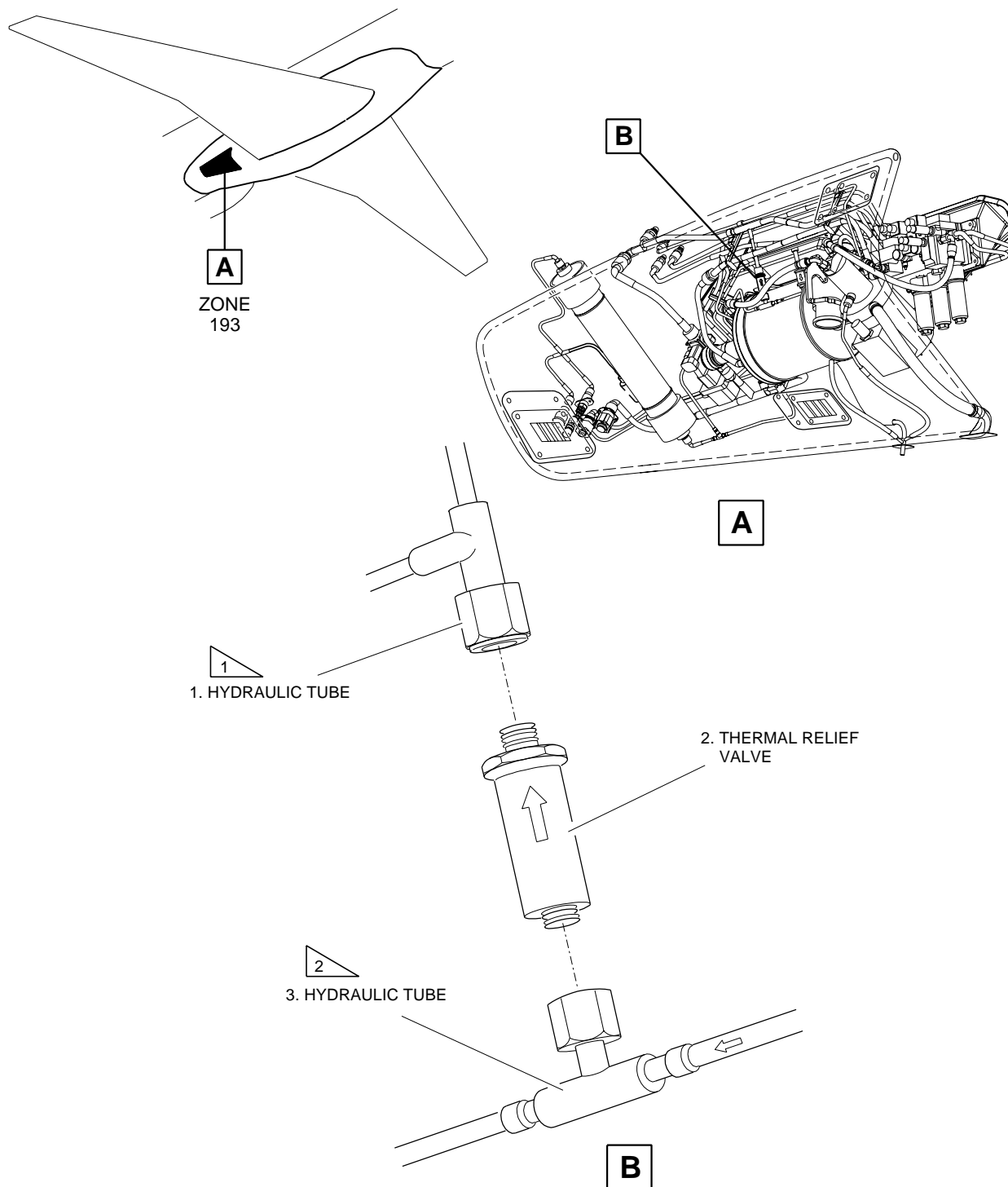
*SUBTASK 020-002-A*

- (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

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).