



**THERMAL SWITCH - ADJUSTMENT/TEST**

*EFFECTIVITY: ALL*

1. General

- A. This section gives the procedures to do a check on the hydraulic fluid thermal switch.
- 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).

<i>TASK NUMBER</i>	<i>DESCRIPTION</i>	<i>EFFECTIVITY</i>
29-30-05-700-801-A ♦	THERMAL SWITCH - OPERATIONAL CHECK	ALL



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 29-30-05-700-801-A

EFFECTIVITY: ALL

2. THERMAL SWITCH - OPERATIONAL CHECK

A. General

- (1) This procedure is applicable to the thermal switch of hydraulic systems 1 and 2.
- (2) The contact of the thermal switch closes at 90°C (194°F) and opens at 80°C (176°F).

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-00/100	-
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 29-30-05-000-801-A/400	THERMAL SWITCH - REMOVAL
AMM TASK 29-30-05-400-801-A/400	THERMAL SWITCH - INSTALLATION

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
193	193BL	Hydraulic compartment of system 1
193	193CR	Hydraulic compartment of system 2

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Heat Gun -150°C (302°F)	To increase the temperature of the thermal switch	
Commercially available	Thermometer - 150°C (302°F)	To measure the temperature	
GSE 044	Headset - Ramp	To permit communication between the technicians	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

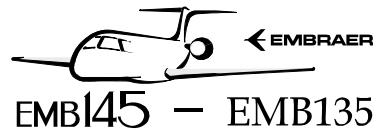
Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Hydraulic system compartments 1 and 2
1	Helps the other technician	Cockpit



## I. Preparation

## SUBTASK 841-002-A

- (1) Remove access panels 193BL (SYS 1) and 193CR (SYS 2) (AMM MPP 06-41-00/100).
- (2) Remove the thermal switches ([AMM TASK 29-30-05-000-801-A/400](#)).
- (3) With thermal switches removed from the reservoirs, connect the connectors to them.
- (4) Put the thermometer near the thermal switch to monitor the temperature.
- (5) Energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

J. Operationally Check HYD SYS OVHT Message ([Figure 501](#))

## SUBTASK 710-002-A

- (1) Do the check below to make sure that the EICAS display shows the HYD SYS 1 OVHT caution message:

**CAUTION:** • POINT THE HOT AIR JET TO THE TIP OF THE THERMAL SWITCH TO PREVENT DAMAGE TO THE WIRING.

- IF THE EICAS DISPLAY DOES NOT SHOW THE HYD SYS 1 OVHT MESSAGE AT 110°C (230°F), STOP THE PROCEDURE AND FIND THE FAILURE.

- (a) Increase the temperature of the thermal switch with the heat gun until approximately 90°C (194°F).

Result:

- 1 The EICAS display shows the HYD SYS 1 OVHT caution message.

- (b) Turn off the heat gun and permit the thermal switch to cool until approximately 80°C (176°F).

Result:

- 1 The HYD SYS 1 OVHT caution message goes out of view.

- (2) Do step (1) for the HYD SYS 2 OVHT message.

## K. Follow-on

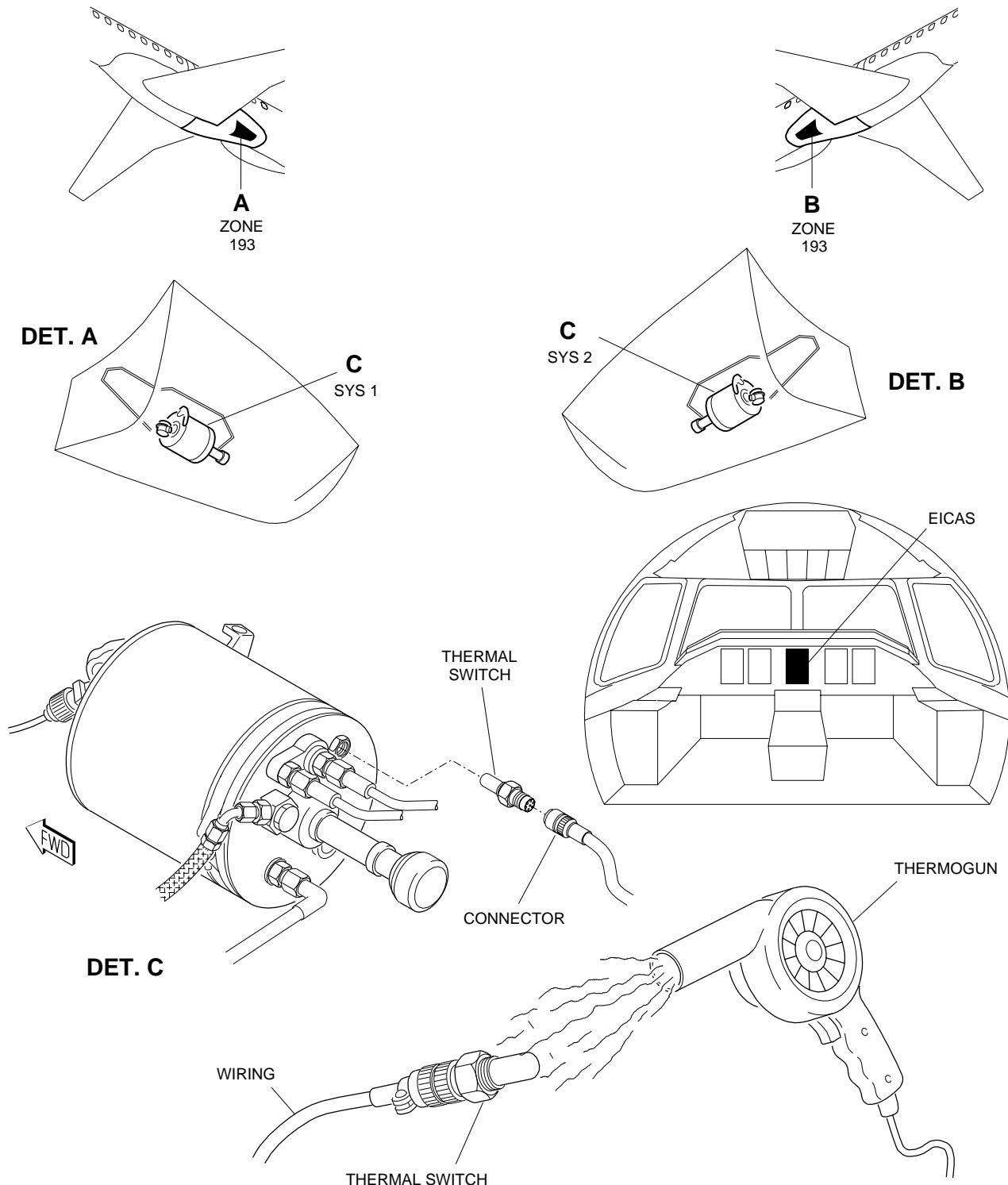
## SUBTASK 842-002-A

- (1) Deenergize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).
- (2) Remove the thermometer.
- (3) Install the thermal switches ([AMM TASK 29-30-05-400-801-A/400](#)).
- (4) Install access panels 193BL (SYS 1) and 193CR (SYS 2) (AMM MPP 06-41-00/100).

**EFFECTIVITY: ALL**

Thermal Switch - Operational Check

Figure 501



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