THERMAL SWITCHES - REMOVAL/INSTALLATION

EFFECTIVITY: ACFT MODEL(S) EMB-135

1. General

A. This section gives the procedures to remove/install the thermal switches of the conditioned air distribution system.

B. Figure 401 shows the thermal switches, which are:

(1) Thermal switch which controls the air distribution valves and the RH recirculation fan (installed between the air distribution valves).

(2) Thermal switch which controls the LH recirculation fan (installed near the LH recirculation fan).

(3) Thermal switch which controls the gasper valve (installed near the gasper valve).

(4) Thermal switches which control the EFIS ventilation system shutoff valves.

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*
21-20-02-000-802-A	THERMAL SWITCH - REMOVAL	ACFT MODEL(S) EMB-135
21-20-02-400-802-A	THERMAL SWITCH - INSTALLATION	ACFT MODEL(S) EMB-135

TASK 21-20-02-000-802-A
EFFECTIVITY: ACFT MODEL(S) EMB-135

2. THERMAL SWITCH - REMOVAL

A. General

(1) This task gives the procedures to remove the thermal switches.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-02/100	-
AMM TASK 53-01-02-000-802-A/400	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
242	242BF	Passenger cabin floor
241	241DF	Passenger cabin floor
251	251HF	Passenger cabin floor
221	221CF	Cockpit floor
222	222BF	Cockpit floor

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Soldering Iron - 30 W	To disconnect electrical terminals	

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	Under the passenger cabin floor and cockpit floor

I. Preparation

SUBTASK 841-022-A

(1) On the circuit breaker panel, open the applicable circuit breaker(s) below and attach a DO-NOT-CLOSE tag to it (them):

– DISTR (Thermal switch of the air distribution valves and RH recirculation fan).

– COCKPIT RECIRC (Thermal switch of the LH recirculation fan).

– GASPER FAN (Thermal switch of the gasper valve).

– DISPLAY (Thermal switches of the EFIS ventilation shutoff valves).

(2) Remove the floor access panel (AMM TASK 53-01-02-000-802-A/400 and AMM MPP 06-41-02/100), as applicable:

– 242BF (Thermal switch of the air distribution valves and RH recirculation fan).

– 241DF (Thermal switch of the LH recirculation fan).

– 251HF (Thermal switch of the gasper valve).

– 221CF and 222BF (Thermal switches of the EFIS ventilation shutoff valves).

J. Removal (Figure 401)

SUBTASK 020-012-A

(1) Release the screws (5) and washers (4).

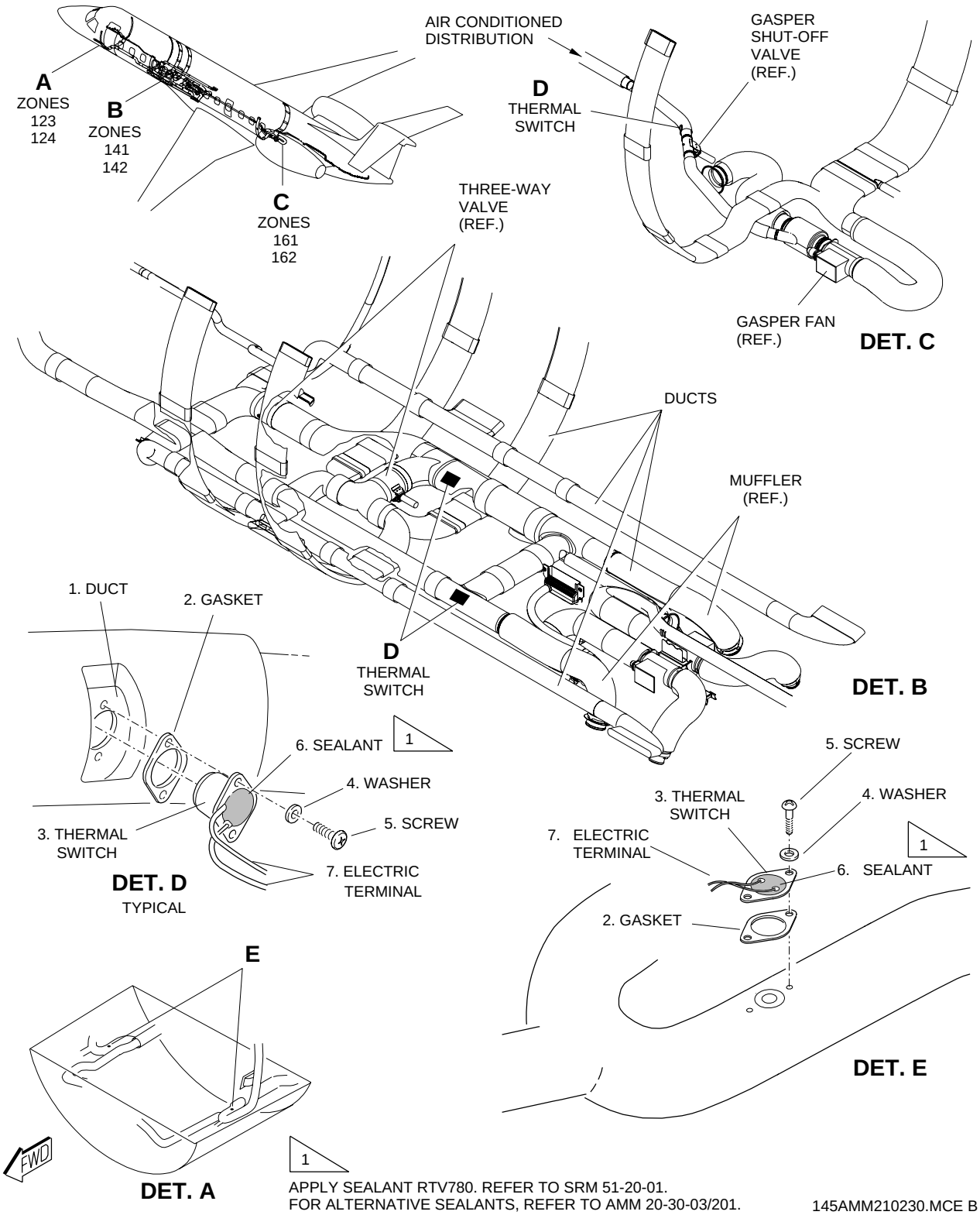
(2) Remove the sealant (6).

(3) Disconnect the electrical terminals (7), with a soldering iron.

(4) Remove the thermal switch (3).

(5) Install a cap on the duct.

EFFECTIVITY: ACFT MODEL(S) EMB-135
Thermal Switches - Removal/Installation
Figure 401



145AMM210230.MCE B

TASK 21-20-02-400-802-A
EFFECTIVITY: ACFT MODEL(S) EMB-135

3. THERMAL SWITCH - INSTALLATION

A. General

(1) This task gives the procedures to install the thermal switches.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-02/100	-
AMM TASK 28-41-00-200-801-A/600	-
AMM TASK 53-01-02-400-802-A/400	-
IPC 21-21-04	DISPLAY VENTILATION SYS

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
242	242BF	Passenger cabin floor
241	241DF	Passenger cabin floor
251	251HF	Passenger cabin floor
221	221CF	Cockpit floor
222	222BF	Cockpit floor

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Soldering Iron - 30 W	Connect electrical terminals	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
ASTM C-920	Sealant	AR

G. Expendable Parts

ITEM	*IPC REFERENCE (VENDOR REFERENCE)*	*QTY*
Gasket	IPC 21-21-04	1/LRU

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Under the passenger cabin floor and cockpit floor

I. Preparation

SUBTASK 841-023-A

(1) On the circuit breaker panel, make sure that the applicable circuit breaker(s) below is(are) open and with a DO-NOT-CLOSE tag attached to it (them):

– DISTR (Thermal switch of the air distribution valves and RH recirculation fan).

– COCKPIT RECIRC (Thermal switch of the LH recirculation fan).

– GASPER FAN (Thermal switch of the gasper valve).

– DISPLAY (Thermal switches of the EFIS ventilation shutoff valves).

(2) Remove the cap from the duct; make sure that the duct is clean.

J. Installation (Figure 401)

SUBTASK 420-012-A

(1) Connect the electrical terminals (7), with a soldering iron.

(2) Apply sealant (6) over the electrical terminals (7).

(3) Put the thermal switch (3) and gasket (2) on the duct (1).

(4) Install and tighten the screws (5) and washers (4).

K. Follow-on

SUBTASK 842-012-A

(1) 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 a part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations (Section 6) of the Maintenance Review Board Report (MRB).

(2) Install these floor panel(s), as applicable (AMM TASK 53-01-02-400-802-A/400 and AMM MPP 06-41-02/100):

– 242BF (Thermal switch of the air distribution valves and RH recirculation fan).

– 241DF (Thermal switch of the LH recirculation fan).

– 251HF (Thermal switch of the gasper valve).

– 221CF and 222BF (Thermal switches of the EFIS ventilation shutoff valves).

(3) On the circuit breaker panel, close the applicable circuit breaker(s) below and remove the DO-NOT-CLOSE tag from it (them):

- DISTR (Thermal switch of the air distribution valves and RH recirculation fan).
- COCKPIT RECIRC (Thermal switch of the LH recirculation fan).
- GASPER FAN (Thermal switch of the gasper valve).
- DISPLAY (Thermal switches of the EFIS ventilation shutoff valves).