

AIRCRAFT MAINTENANCE MANUAL

TEMPERATURE CONTROL - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the operational check of the temperature control system of the cockpit and passenger cabin independently.
- 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
21-60-00-700-801-A ♦	TEMPERATURE CONTROL SYSTEM - OPERATIONAL CHECK	ALL



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 21-60-00-700-801-A

EFFECTIVITY: ALL

2. TEMPERATURE CONTROL SYSTEM - OPERATIONAL CHECK

A. General

- (1) This task gives the procedures to do the operational test of the Temperature Control System.
- (2) The Temperature Control System adjusts the environment in the aircraft. There are two temperature controlled zones: the cockpit and the passenger cabin.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-02/100	-
AMM SDS 34-22-00/1	
AMM TASK 36-00-00-860-801-A/200	PNEUMATIC ENERGY - AIR BLEED THROUGH ONE OF THE ENGINES
AMM TASK 36-00-00-860-802-A/200	PNEUMATIC ENERGY - AIR BLEED THROUGH THE APU
AMM TASK 53-01-02-000-802-A/400	-
AMM TASK 53-01-02-400-802-A/400	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
241	241DF	Passenger cabin floor
251	251BF	Passenger cabin floor

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Thermogun	To make the temperature sensor hot	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Plastic ice bag	To make the temperature sensor cold	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	A - Does the task	Cockpit
1	B - Helps technician A	Cockpit and passenger cabin

I. Preparation
SUBTASK 841-002-A

- (1) Remove floor access panel 251BF or 241DF, as applicable (AMM MPP 06-41-02/100 and AMM TASK 53-01-02-000-802-A/400).
- (2) Supply pneumatic energy ([AMM TASK 36-00-00-860-801-A/200](#)) or ([AMM TASK 36-00-00-860-802-A/200](#)).
- (3) Set the ECS page on MFD1 (2) ([AMM SDS 34-22-00/1](#)).
- (4) Set these switches as follows:
 - (a) RECIRC switch - OFF.
 - (b) GASPER switch - OFF.

J. Operationally Check Temperature Control ([Figure 501](#)) ([Figure 502](#)) ([Figure 503](#))
SUBTASK 710-002-A

- (1) The steps below refer to the operational check of the cockpit temperature control.
- (2) Set the PACK 1 switch to ON.
- (3) Set the CKPT temperature selector to MAN.
 - (a) Turn the CKPT temperature selector knob clockwise up to 1 - 3 o'clock position, and keep it in this position for 2 minutes.

NOTE: Do not turn the selector knob further 3 o'clock position or fully clockwise to prevent incorrect behavior/results on the operational test.

Result:

- 1 The air flow through the general outlets becomes hot.

- (b) Turn the CKPT temperature selector knob fully counterclockwise and keep it in this position for 2 minutes.

Result:

- 1 The air flow through the general outlets becomes cold.

- (4) Set the CKPT temperature selector to AUTO.

- (a) With an ice bag, decrease the temperature of the cockpit temperature sensor down to less than 18°C (64.4°F) (See on the ECS page, on the MFD).

- (b) Turn the CKPT temperature selector knob fully clockwise and keep it in this position for 2 minutes.

Result:

- 1 The air flow through the general outlets becomes hot.

- (c) With a thermogun, increase the temperature of the cockpit temperature sensor to more than 30°C (86°F) (See on the ECS page, on the MFD).
- (d) Turn the CKPT temperature selector knob fully counterclockwise and keep it in this position for 2 minutes.
 Result:
 1 The air flow through the general outlets becomes cold.
- (5) Set the PACK 1 switch to OFF.
- (6) Set the CKPT temperature selector to the intermediate position.
- (7) The steps below refer to the operational check of the passenger-cabin temperature control.
NOTE: In the passenger cabin, the cold air flows through the outlets in the upper position and the hot air flows through the outlets in the lower position.
- (8) Set the PACK 2 switch to ON.
- (9) Set the PASS CABIN temperature selector to MAN.
 - (a) Turn the PASS CABIN temperature selector knob clockwise up to 1 - 3 o'clock position, and keep it in this position for 2 minutes.
NOTE: Do not turn the selector knob further 3 o'clock position or fully clockwise to prevent incorrect behavior/results on the operational test.
 Result:
 1 The air flow through the lower outlets becomes hot.
 - (b) Turn the PASS CABIN temperature selector knob fully counterclockwise and keep it in this position for 2 minutes.
 Result:
 1 The air flow through the upper outlets becomes cold.
- (10) Set the PASS CABIN temperature selector to AUTO.
 - (a) With an ice bag, decrease the temperature of the passenger-cabin temperature sensor down to less than 18°C (64.4°F) (See on the ECS page, on the MFD).
 - (b) Turn the PASS CABIN temperature selector knob fully clockwise and keep it in this position for 2 minutes.
 Result:
 1 The air flow through the lower outlets becomes hot.
 - (c) With a thermogun, increase the temperature of the passenger-cabin temperature sensor to more than 30°C (86°F) (See on the ECS page, on the MFD).
 - (d) Turn the PASS CABIN temperature selector knob fully counterclockwise and keep it in this position for 2 minutes.
 Result:
 1 The air flow through the upper outlets becomes cold.
- (11) Set the PASS CABIN temperature selector to the ATTD position.

- (12) With the passenger-cabin temperature control on the flight attendant panel (CABIN TEMP CONTROL light (2) ON):
- With an ice bag, decrease the temperature of the passenger-cabin temperature sensor down to less than 18°C (64.4°F) (See on the ECS page, on the MFD).
 - Move the CABIN TEMP CONTROL knob (1) fully to the HOT position and keep it in this position for 2 minutes.
Result:
1 The air flow through the lower outlets becomes hot.
 - With a thermogun, increase the temperature of the passenger-cabin temperature sensor to more than 30°C (86°F) (See on the ECS page, on the MFD).
 - Move the CABIN TEMP CONTROL knob (1) fully to the COLD position and keep it in this position for 2 minutes.
Result:
1 The air flow through the upper outlets becomes cold.
- (13) Set the PACK 2 switch to OFF.
- (14) Set the PASS CABIN temperature selector to the intermediate position.

K. Follow-on

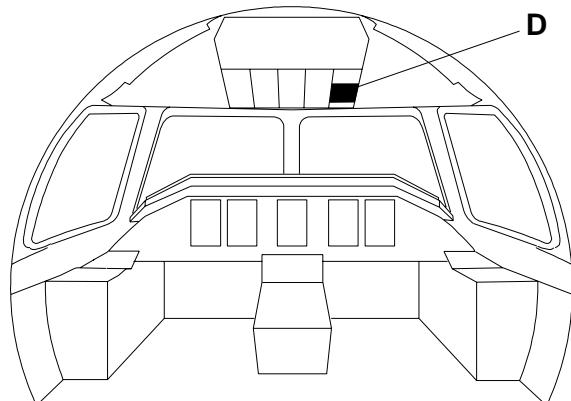
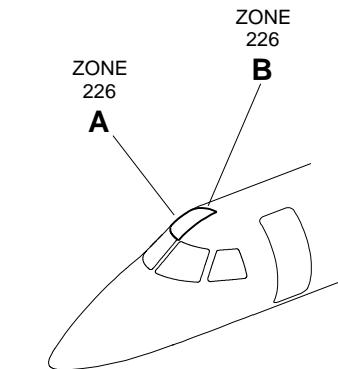
SUBTASK 842-002-A

- Shut off the pneumatic energy ([AMM TASK 36-00-00-860-801-A/200](#)) or ([AMM TASK 36-00-00-860-802-A/200](#)).
- Install floor access panel 251BF or 241DF, as applicable (AMM MPP 06-41-02/100 and AMM TASK 53-01-02-400-802-A/400).

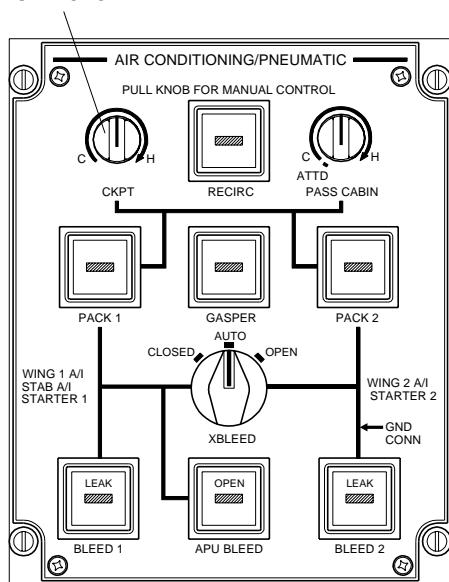
EFFECTIVITY: ALL

Cockpit Temperature Control - Location

Figure 501

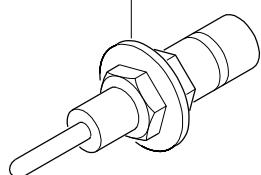


COCKPIT TEMPERATURE
SELECTOR

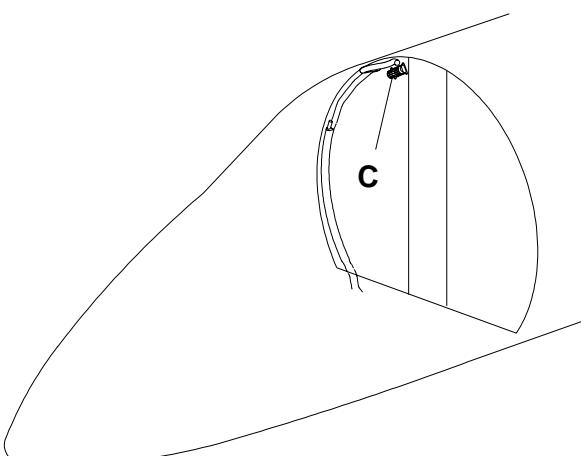


DET. D

COCKPIT TEMPERATURE
SENSOR



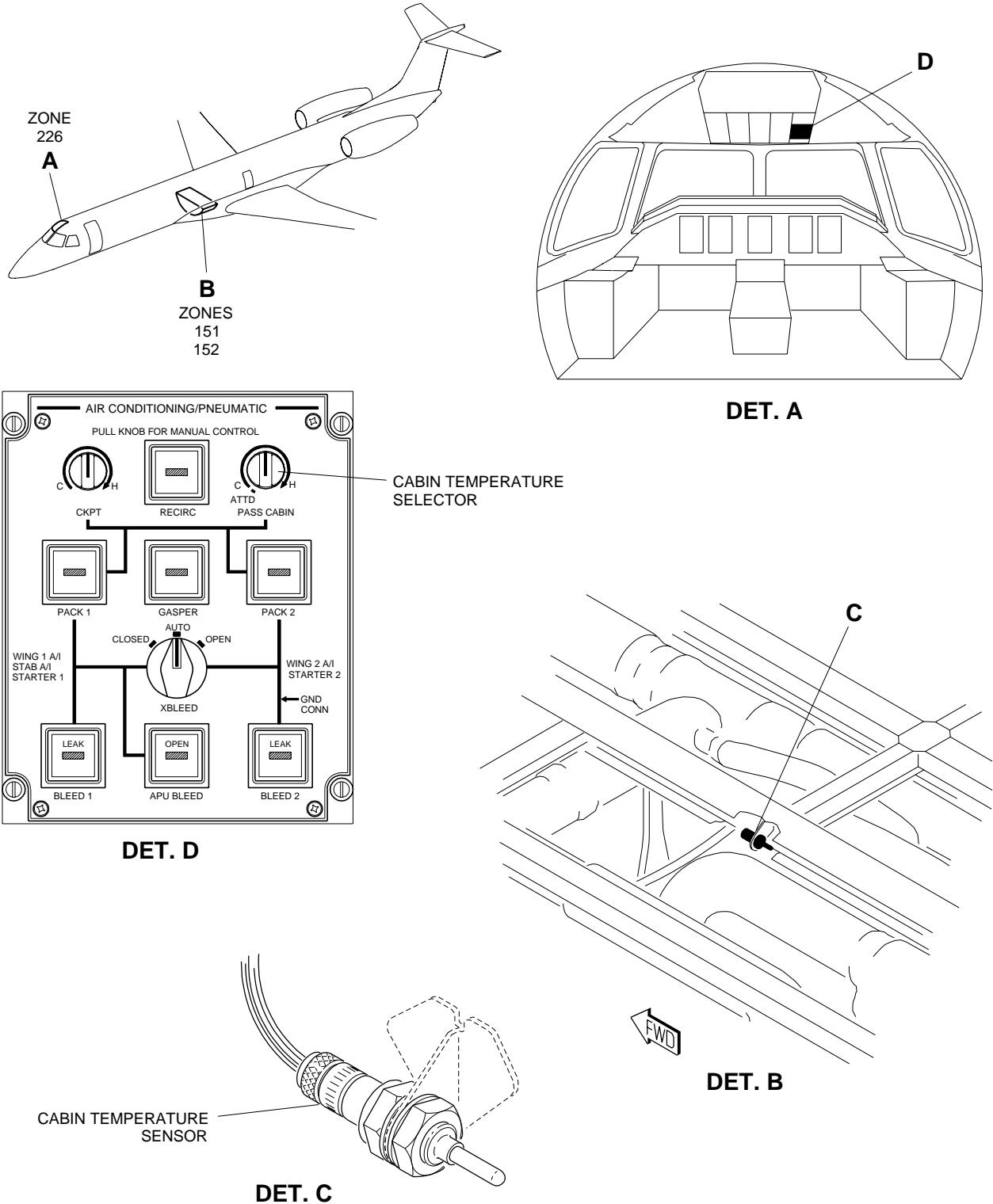
DET. C



DET. B

EFFECTIVITY: ALL

Passenger-Cabin Temperature Control - Location
Figure 502

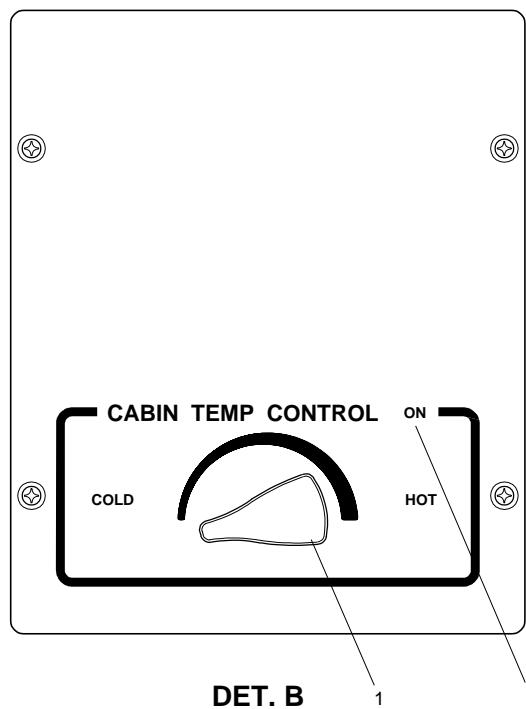
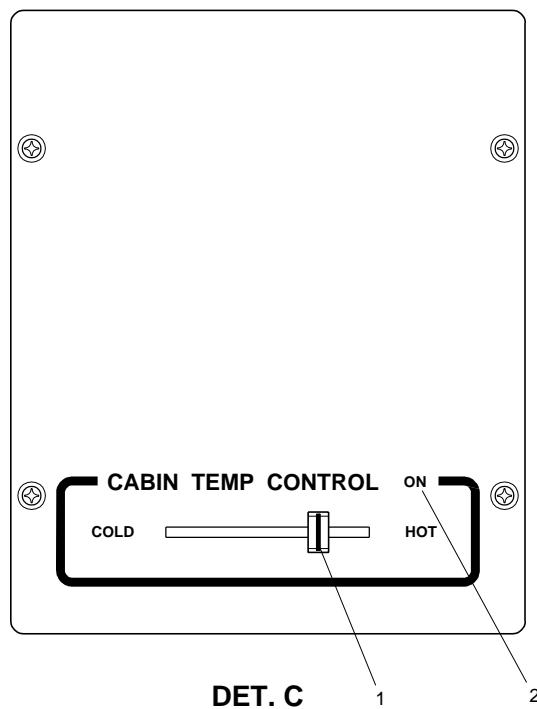
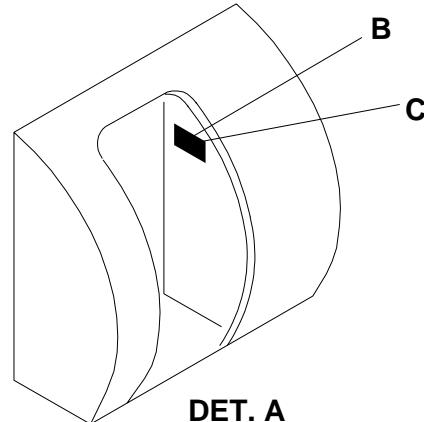
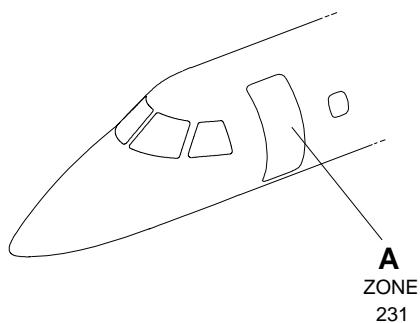


145AMM210036.MCE C

EFFECTIVITY: ALL

Passenger-Cabin Temperature Control - Flight Attendant Panel - Location

Figure 503



2 EMB-145 MODELS

1 EMB-135 MODELS

145AMM210215.MCE A