

DIAGNOSIS AND TESTING > FRONT SEATS > PINPOINT TEST(S) > PINPOINT TEST R : DTC B103D

Refer to Climate Controlled Seats for schematic and connector information.

Normal Operation and Fault Conditions

The SCME is supplied voltage at all times, but the climate controlled seat system only operates with the engine running. The system can be operated with the ignition ON engine OFF by using a scan tool to bypass the climate controlled seat switches on the touchscreen interface. When commanding a heat or cool mode operation in this manner, the climate controlled seat system only operates in 15 second intervals. Both voltage supply circuits are spliced together internal to the SCME, so if one circuit becomes open, both seats can still be operated. However, if a fault occurs setting a DTC specific to either climate controlled seat, only the affected seat is disabled by the SCME.

Cabin air is drawn through and distributed to each of the blower motors located in the seat cushion and backrest. The blower motors then heat or cool the air. The air is then directed into the foam pad where it is distributed along the surface of the cushion and backrest of the seat. Once the system is activated, the SCME uses a set of flexible algorithms to control the heating/cooling modes and the blower speed dependant on the commanded climate controlled seat settings.

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B103D	Blower Driver Overtemperature	If the SCME outputs to the driver seat blower or any components within these circuit loops are shorted to ground or cause an excessive current draw, the SCME overheats, shuts down the driver seat system and sets this DTC.

Possible Causes

- Wiring, terminals or connectors
- Backrest blower motor
- Cushion blower motor
- SCME

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 **WARNING:** Incorrect repair techniques or actions can cause an accidental Supplemental Restraint System (SRS) deployment. Never compromise or depart from these instructions. Failure to precisely follow all instructions could result in serious

personal injury from an accidental deployment.

R1 CHECK THE BLOWER MOTOR FEED CIRCUIT FOR A SHORT TO GROUND

REFER to: Supplemental Restraint System (SRS) Depowering .

Disconnect: Driver Side Airbag In-line C3051 .

Disconnect: Passenger Side Airbag In-line C3053 .

Disconnect: Driver Backrest Blower Motor C3034 .

Disconnect: Driver Cushion Blower Motor C3035 .

Disconnect: SCME C3265C .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-16	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to R2
No	REPAIR the circuit. GO to R5

R2 CHECK THE BLOWER MOTOR FEED CIRCUITS FOR A SHORT TOGETHER

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-16	Ω	C3265C-15

Is the resistance greater than 10, 000 ohms?

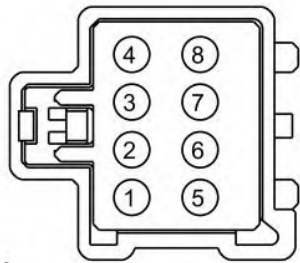
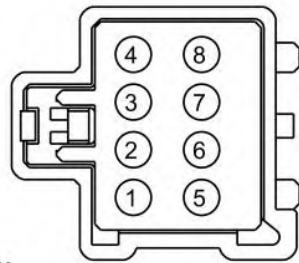
Yes	GO to R3
No	REPAIR the circuits. GO to R5

R3 CHECK THE BACKREST BLOWER AND CUSHION BLOWER RESISTANCES



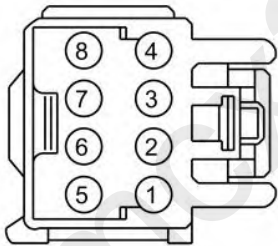
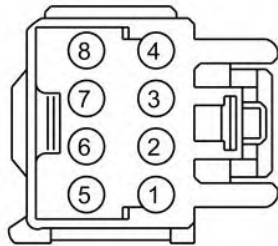
NOTE: The ohmmeter must be connected with the positive lead to pin 3 and the negative lead to pin 4 when measuring. Ohmmeter leads incorrectly connected results in false readings and leads to incorrect identification of components that are not faulty.

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead
 E160219 C3034-3, Component Side	Ω	 E160219 C3034-4, Component Side

 **NOTE:** The ohmmeter must be connected with the positive lead to pin 3 and the negative lead to pin 4 when measuring. Ohmmeter leads incorrectly connected results in false readings and leads to incorrect identification of components that are not faulty.

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead
 E160218 C3035-3, Component Side	Ω	 E160218 C3035-4, Component Side

Are the resistances between 4000 and 10, 000 ohms?

Yes	GO to R4
No	If the backrest blower motor resistance measurement failed, INSTALL a new backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to R5 If the cushion blower motor resistance measurement failed, INSTALL a new cushion blower motor. REFER to: Front Seat Cushion Blower Motor . GO to R5

R4 CHECK THE SCME (FRONT SEAT CLIMATE CONTROL MODULE) OPERATION

Ignition OFF.

Disconnect and inspect all of the SCME connectors.