

- Restricted backrest blower motor filter
- Crushed or restricted backrest foam pad
- Backrest blower motor
- SCME

DIAGNOSIS AND TESTING > FRONT SEATS > PINPOINT TEST(S) > PINPOINT TEST AE : DTC B272B > PINPOINT TEST AE : DTC B272B

 **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.*

AE1 CHECK THE SCME (FRONT SEAT CLIMATE CONTROL MODULE) FOR ON-DEMAND DIAGNOSTIC TROUBLE CODES (DTCS)

Start the vehicle and set the passenger seat to HIGH heat.

Using a diagnostic scan tool, perform the SCME self-test.

Was DTC B272B retrieved on-demand during the self-test?

Yes	GO to AE2
No	GO to AE5

AE2 CHECK THE PASSENGER SEAT BACKREST BLOWER MOTOR THERMISTOR CIRCUITS FOR A SHORT TO GROUND

REFER to: Supplemental Restraint System (SRS) Depowering .

Disconnect: Passenger Side Airbag In-line C3053 .

Disconnect: SCME C3265B .

Disconnect: Passenger Backrest Blower Motor C3039 .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-4	Ω	Ground
C3265B-5	Ω	Ground

Are the resistances greater than 10, 000 ohms?

Yes	GO to AE3
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No	REPAIR the circuit in question. GO to AE22
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AE3 CHECK THE PASSENGER SEAT BACKREST BLOWER MOTOR THERMISTOR AND WIRING

Connect: Passenger Backrest Blower Motor C3039 .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-4	Ω	C3265B-5

Compare the measured resistance value with the following table:

Ambient Temperature	Resistance
0-10 ° C (32-50 ° F)	2, 782-1, 663 ohms
10-20 ° C (50-68 ° F)	1, 837-1, 140 ohms
20-30 ° C (68-86 ° F)	1, 260-806 ohms
30-40 ° C (86-104 ° F)	893-570 ohms
40-50 ° C (104-122 ° F)	630-428 ohms

Is the resistance within the limits indicated?

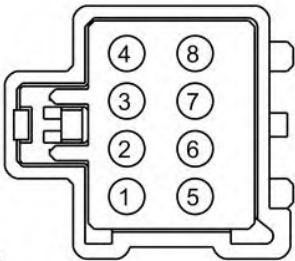
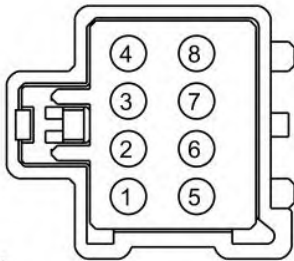
Yes	GO to AE18
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No	GO to AE4
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AE4 CHECK THE PASSENGER SEAT BACKREST BLOWER MOTOR THERMISTOR

Disconnect: Passenger Backrest Blower Motor C3039 .

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead
 E160219	Ω	 E160219

Compare the measured resistance value with the following table:

Ambient Temperature	Resistance
0-10 ° C (32-50 ° F)	2, 782-1, 663 ohms
10-20 ° C (50-68 ° F)	1, 837-1, 140 ohms
20-30 ° C (68-86 ° F)	1, 260-806 ohms
30-40 ° C (86-104 ° F)	893-570 ohms
40-50 ° C (104-122 ° F)	630-428 ohms

Is the resistance within the limits indicated?

Yes	REPAIR circuit VHS36 (YE/BU) or RHS20 (GN/BU) for an open or high resistance. GO to AE22
No	INSTALL a new passenger seat backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AE22

AE5 CONFIRM THE FAULT WHILE MONITORING THE SCME (FRONT SEAT CLIMATE CONTROL MODULE) SEAT BACK THERMO-ELECTRIC DEVICE TEMPERATURE (PBKTEMP) AND SEAT CUSHION THERMO-ELECTRIC DEVICE TEMPERATURE (PCSHTEMP) PARAMETER IDENTIFICATIONS (PIDS)

Set the passenger seat to OFF.

Using a diagnostic scan tool, clear the SCME Diagnostic Trouble Codes (DTCs).

Using a diagnostic scan tool, monitor the SCME PBKTEMP and PCSHTEMP.

 **NOTE:** A crushed seat backrest foam pad may be the cause of the fault making it necessary to occupy the seat to recreate and identify the fault.

Attempt to recreate the fault. Start the vehicle and set the passenger seat to HIGH heat for at least 15 minutes while occupying the seat.

Do the Parameter Identifications (PIDs) increase incrementally (gradually) and stay within 15 ° C (27 ° F) of each other?

Yes	Fault not present at this time. Fault may have been set due to a past failure, incorrect use of the climate controlled seat system by repeated switching between heat and cool modes or due to excessive passenger compartment temperature.
No	If the PBKTEMP PID increases incrementally and is greater than 15 ° C (27 ° F) of the PCSHTEMP PID, GO to AE6 If the PBKTEMP PID increases quickly (temperature "jumps" and does not increase incrementally) and is greater than 15 ° C (27 ° F) of the PCSHTEMP PID, GO to AE16

AE6 COMPARE OPERATION OF THE DRIVER AND PASSENGER SEATS

With the engine running, set both front seats to HIGH cool.

Note the airflow exhausting from the passenger seat backrest blower motor and compare it to the airflow exhausting from the driver seat backrest blower motor.

Carry out a wiggle test of the wire harnesses between the SCME and the passenger seat backrest blower motor while monitoring blower operation. The blower should operate consistently and not change speeds.

Is the airflow exhausting from the passenger seat backrest blower motor comparable to the airflow exhausting from the driver seat backrest blower motor with no change in operation when carrying out the wiggle test?

Yes	GO to AE7
No	If the airflow exhausting from the passenger seat backrest blower motor is not comparable to the airflow exhausting from the driver seat backrest blower motor, GO to AE8 If the passenger seat backrest blower motor blower operation changed while carrying out the wiggle test, IDENTIFY and REPAIR the wiring fault.

AE7 COMPARE OPERATION OF THE DRIVER AND PASSENGER SEATS WHILE OCCUPIED

Note the airflow exhausting from the passenger seat backrest blower motor with the passenger seat occupied and compare it to the airflow exhausting from the driver seat backrest blower motor with the driver seat occupied.

Is the airflow exhausting from the passenger seat backrest blower motor comparable to the airflow exhausting from the driver seat backrest blower motor?

Yes	GO to AE16
No	INSTALL a new passenger seat backrest foam pad.

AE8 CHECK THE PASSENGER SEAT BACKREST BLOWER FOR AN OBSTRUCTION OR RESTRICTED FILTER

Ignition OFF.

Inspect the blower of the passenger seat backrest blower motor assembly for an obstruction or for a restricted filter.

Is the blower obstructed or the filter restricted?

Yes	REMOVE the obstruction or INSTALL a new passenger seat backrest blower. REFER to: Front Seat Backrest Blower Motor .
No	GO to AE9

AE9 CHECK THE PASSENGER SEAT BACKREST BLOWER SPEED CONTROL CIRCUIT FOR AN

OPEN

REFER to: Supplemental Restraint System (SRS) Depowering .

Disconnect: Passenger Side Airbag In-line C3053 .

Disconnect: SCME C3265C .

Disconnect: Passenger Backrest Blower Motor C3039 .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-4	Ω	C3039-7

Is the resistance less than 3 ohms?

Yes	GO to AE10
No	REPAIR the circuit. GO to AE22

AE10 CHECK THE PASSENGER SEAT BACKREST BLOWER CIRCUIT FOR A SHORT TO VOLTAGE

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-7		Ground

Is any voltage present?

Yes	REPAIR the circuit. GO to AE22
No	GO to AE11

AE11 CHECK THE PASSENGER SEAT BACKREST BLOWER CIRCUIT FOR A SHORT TO GROUND

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-8	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to AE12
No	REPAIR the circuit. GO to AE22

AE12 CHECK THE PASSENGER SEAT BACKREST BLOWER CIRCUITS FOR AN OPEN

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-8	Ω	C3039-3
C3265C-7	Ω	C3039-4

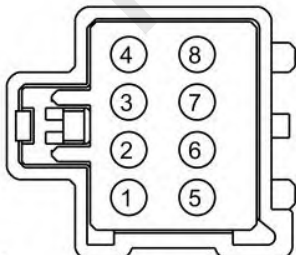
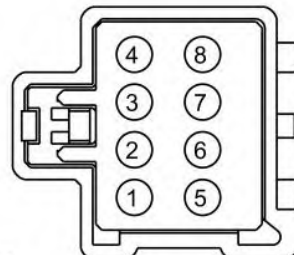
Are the resistances less than 3 ohms?

Yes	GO to AE13
No	REPAIR the circuit in question. GO to AE22

AE13 CHECK THE PASSENGER SEAT BACKREST BLOWER RESISTANCE

 **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 C3039-3, Component Side	Ω	 E160219 C3039-4, Component Side

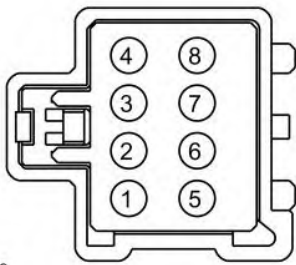
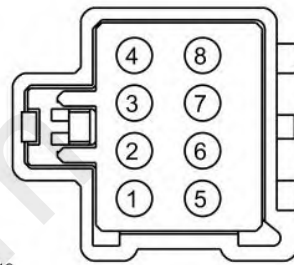
Is the resistance between 4, 000 and 10, 000 ohms?

Yes	GO to AE14
No	INSTALL a new passenger seat backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AE22

AE14 CHECK THE PASSENGER SEAT BACKREST BLOWER SPEED CONTROL RESISTANCE

 **NOTE:** The ohmmeter must be connected with the positive lead to pin 7 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 C3039-7, Component Side	Ω	 E160219 C3039-4, Component Side

Is the resistance between 240K and 400K ohms?

Yes	GO to AE15
No	INSTALL a new passenger seat backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AE22

AE15 CHECK THE PASSENGER SEAT BACKREST BLOWER MOTOR INSTALLATION AND FOR CRUSHED SEAT BACKREST

Ignition OFF.

Remove the passenger seat. REFER to: Front Seat .

Remove the passenger seat backrest cover. REFER to: Front Seat Backrest Cover .

Inspect the passenger seat backrest for the following:

Passenger seat backrest blower motor correctly installed

Passenger seat backrest seat backrest foam pad crushed or restricted

Is the passenger seat backrest blower motor correctly installed and are there no signs of damage to the foam pad?

Yes	INSTALL the passenger seat backrest cover and seat. GO to AE18
No	CORRECTLY install the passenger seat backrest blower motor or INSTALL a new passenger

	seat backrest foam pad. GO to AE22
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AE16 CHECK THE PASSENGER SEAT BACKREST BLOWER MOTOR THERMISTOR AND WIRING

REFER to: Supplemental Restraint System (SRS) Depowering .

Disconnect: Passenger Side Airbag In-line C3053 .

Disconnect: SCME C3265B .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-4	Ω	C3265B-5

Compare the measured resistance value with the following table:

Ambient Temperature	Resistance
0-10 ° C (32-50 ° F)	2, 782-1, 663 ohms
10-20 ° C (50-68 ° F)	1, 837-1, 140 ohms
20-30 ° C (68-86 ° F)	1, 260-806 ohms
30-40 ° C (86-104 ° F)	893-570 ohms
40-50 ° C (104-122 ° F)	630-428 ohms

Is the resistance within the limits indicated?

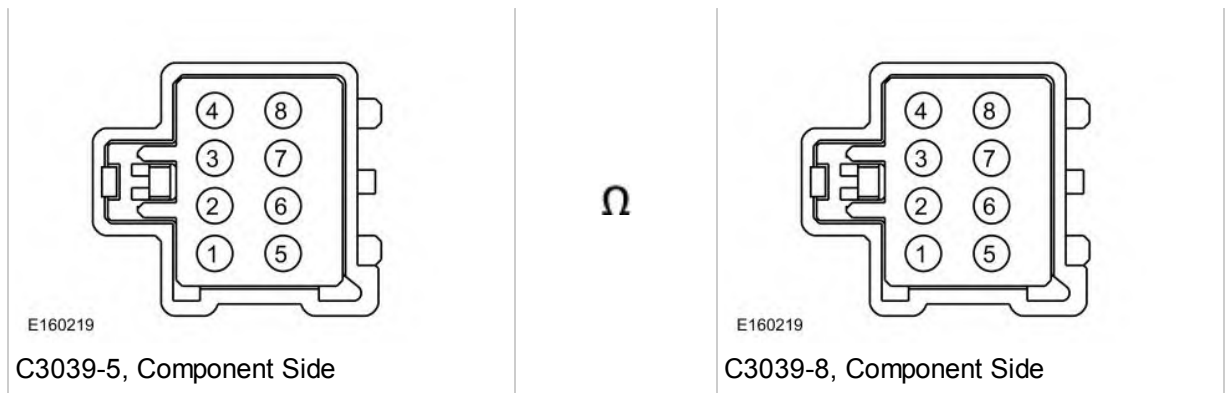
Yes	GO to AE18
No	GO to AE17

AE17 CHECK THE PASSENGER SEAT BACKREST BLOWER MOTOR THERMISTOR

Disconnect: Passenger Backrest Blower Motor C3039 .

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead



Compare the measured resistance value with the following table:

Ambient Temperature	Resistance
0-10 ° C (32-50 ° F)	2, 782-1, 663 ohms
10-20 ° C (50-68 ° F)	1, 837-1, 140 ohms
20-30 ° C (68-86 ° F)	1, 260-806 ohms
30-40 ° C (86-104 ° F)	893-570 ohms
40-50 ° C (104-122 ° F)	630-428 ohms

Is the resistance within the limits indicated?

Yes	REPAIR circuit VHS36 (YE/BU) or RHS20 (GN/BU) for an open or high resistance. GO to AE22
No	INSTALL a new backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AE22

AE18 CHECK THE PASSENGER SEAT BACKREST BLOWER MOTOR HEATING/COOLING CIRCUITRY CURRENT DRAW

Connect all SCME, blower motor and Body Harness-to-Seat Harness Connectors.

 **NOTE:** It may be necessary to open the seat wire harness conduit to allow placing the inductive current probe around the circuit as described in the following step. Care must be taken when opening up the wire harness so as not to damage any wiring or connectors. Do not damage any wiring or induce stress on any wiring or connectors. Close up the wire harness once repairs to the seat are complete.

 **NOTE:** Use a commercially available inductive current probe (such as Electronic Specialties Current Probe/Multimeter 685 or a Fluke I410 [used with a digital multimeter]) or the low current probe from the VMM available for use with IDS. If these are unavailable, the inductive current probe feature from a battery tester may be substituted.

Place an inductive current probe around circuit CHS06 (BU/BN) near SCME C3265A-C and monitor the current draw.

Start the engine and set the passenger seat to HIGH heat.

Is the current draw less than 11 amps?

Yes	GO to AE19
No	INSTALL a new backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AE22

AE19 CHECK RESISTANCE OF THE PASSENGER SEAT BACKREST BLOWER MOTOR AND WIRING

Ignition OFF.

Disconnect: SCME C3265A .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265A-C	Ω	C3265A-D

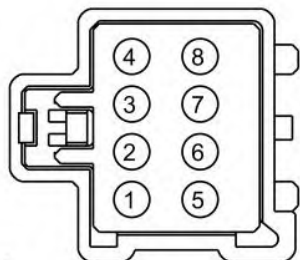
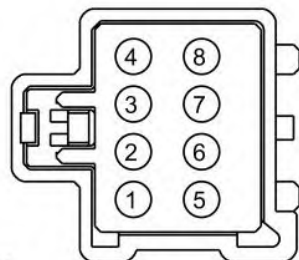
Are the resistances between 0.9 and 10 ohms?

Yes	GO to AE21
No	GO to AE20

AE20 CHECK THE RESISTANCE OF THE PASSENGER SEAT BACKREST BLOWER MOTOR

Disconnect: Passenger Backrest Blower Motor C3039 .

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead
 E160219 C3039-1, Component Side	Ω	 E160219 C3039-2, Component Side

Is the resistance between 0.9 and 10 ohms?

Yes	REPAIR circuit CHS06 (BU/BN) or RHS06 (WH) for an open or high resistance. GO to AE22
No	INSTALL a new backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AE22

AE21 CHECK THE SCME (FRONT SEAT CLIMATE CONTROL MODULE) OPERATION

Ignition OFF.

Disconnect and inspect all of the SCME connectors.

Repair:

corrosion (install new connector or terminals - clean module pins)

damaged or bent pins - install new terminals/pins as necessary

pushed-out pins - install new pins as necessary

Reconnect the SCME connectors. Make sure they seat and latch correctly.



NOTE: Do not reconnect Passenger Side Airbag In-line C3053 at this time.

Reconnect all previously disconnected connectors.

Ignition ON.

Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new SCME. REFER to: Front Seat Climate Control Module [SCME] . GO to AE22
No	The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues. GO to AE22

AE22 VERIFY THE SRS (SUPPLEMENTAL RESTRAINT SYSTEM) PROVES OUT SUCCESSFULLY

REFER to: Supplemental Restraint System (SRS) Depowering .

Connect: Passenger Side Airbag In-line C3053 .

Connect all previously disconnected connectors.

REFER to: Supplemental Restraint System (SRS) Repowering .

Did the SRS prove out successfully?

Yes	Repair is complete. RETURN the vehicle to the customer.
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