

- Wiring, terminals or connectors
- Restricted backrest blower motor filter
- Crushed or restricted backrest foam pad
- Cushion or backrest blower motor
- SCME

DIAGNOSIS AND TESTING > FRONT SEATS > PINPOINT TEST(S) > PINPOINT TEST AF : DTC B272C > PINPOINT TEST AF : DTC B272C

 **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.*

AF1 CHECK THE SCME (FRONT SEAT CLIMATE CONTROL MODULE) FOR ON-DEMAND DIAGNOSTIC TROUBLE CODES (DTCs)

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

Was DTC B2729 or B2730, retrieved on-demand during the self-test?

Yes	For DTC B2729, GO to Pinpoint Test AJ For DTC B2730, GO to Pinpoint Test AK
No	GO to AF2

AF2 MONITOR SCME (FRONT SEAT CLIMATE CONTROL MODULE) BLOWER MOTOR TEMPERATURE PARAMETER IDENTIFICATIONS (PIDs)

Using a diagnostic scan tool, monitor the following SCME Parameter Identifications (PIDs):

Passenger Cushion Thermal Electric Device (TED) Temperature (PCSHTMP)

Passenger Back (TED) Temperature (PBKTMP)

Seat cushion thermal electric device temperature (CSHTEMP)

Seat back thermal electric device temperature (BKTMP)

 **NOTE:** *Make sure the temperature of the climate controlled seats has stabilized before monitoring the Parameter Identifications (PIDs). Not allowing stabilization can cause incorrect readings and lead to incorrect identification of components that are not faulty.*

Monitor blower motor temperature Parameter Identifications (PIDs) with the climate controlled

seats OFF. Compare the PID values of the driver seat to those of the front passenger seat, this can help identify if there is a concern with the driver seat cushion or backrest PID value readings.

Are both driver seat blower motor temperature Parameter Identifications (PIDs) within 10 ° C (18 ° F) of the ambient temperature?

Yes	GO to AF3
No	If the driver seat cushion PID varies 10 ° C (18 ° F) or more from ambient temperature, GO to AF16 If the driver seat backrest PID varies 10 ° C (18 ° F) or more from ambient temperature, GO to AF32

AF3 CONFIRM THE FAULT IS IN THE SEAT CUSHION OR THE BACKREST

Ignition OFF.

Start the engine.

 **NOTE:** A crushed seat cushion foam pad may be the cause of the fault. It may be necessary to sit on the seat or place something of reasonable size and weight on the seat to recreate the fault.

After cycling the ignition and with the engine running, set the driver seat to high heat. Allow the seat to heat for at least 15 minutes while monitoring the blower motor temperature Parameter Identifications (PIDs) of the driver seat.

Do the driver seat cushion blower motor and backrest blower motor Parameter Identifications (PIDs) vary more than 60 ° C (108 ° F) from each other?

Yes	If the driver seat cushion PID is 60 ° C (108 ° F) hotter than the backrest PID, GO to AF5 If the driver seat backrest PID is 60 ° C (108 ° F) hotter than the cushion PID, GO to AF20
No	GO to AF4

AF4 CHECK THE BLOWER MOTOR COOLING PERFORMANCE

Check the blower motors cooling performance on the affected seat. Refer to Component Test - Blower Motor Cooling Performance .

Did the blower motors pass the component test?

Yes	The DTC may have been set by extreme cabin temperatures or excessive sunload on the seat causing the system to enter recovery mode. Occupant size and weight characteristics can also be a factor. CLEAR the Diagnostic Trouble Codes (DTCs). REPEAT the self-test. TEST the system for normal operation. If a concern cannot be found or duplicated, RETURN the vehicle to the customer.
No	CHECK the affected seat cushion or backrest for correct installation of the climate controlled

	seat components (blower motor, air ducts and foam pad). CHECK for airflow restrictions (blower motor inlets and outlets, filters and ducts) and REPAIR as needed. CHECK for an intermittent wiring fault. REPAIR as needed. CLEAR the Diagnostic Trouble Codes (DTCs). REPEAT the self-test.
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AF5 CHECK FOR CORRECT BLOWER MOTOR INSTALLATION AND FOR CRUSHED FOAM

Ignition OFF.

Remove the seat. REFER to: Front Seat .

Remove the seat cushion trim cover. REFER to: Front Seat Cushion Cover .

Inspect the seat cushion for the following:

Cushion blower obstructed

Blower filter restricted or plugged

Blower motor correctly installed

Seat cushion foam pad crushed or restricted

Is the blower motor correctly installed and the foam pad OK?

Yes	GO to AF6
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No	Correctly INSTALL the cushion blower motor or INSTALL a new seat cushion foam pad.
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AF6 CHECK BACKREST BLOWER MOTOR RETURN CIRCUIT FOR A SHORT TO VOLTAGE

REFER to: Supplemental Restraint System (SRS) Depowering .

Disconnect: Driver Side Airbag In-line C3051 .

Disconnect: Passenger Side Airbag In-line C3053 .

Position the driver seat in the vehicle and connect the seat-to-floor connectors.

Disconnect: SCME C3265A .

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265A-K		Ground

Is any voltage present?

Yes	REPAIR the circuit. GO to AF36
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No	GO to AF7
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AF7 CHECK BACKREST BLOWER MOTOR FEED CIRCUIT FOR A SHORT TO GROUND

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265A-J	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to AF8
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No	REPAIR the circuit. GO to AF36
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AF8 CHECK THE RESISTANCE OF THE BACKREST BLOWER MOTOR AND WIRING

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265A-J	Ω	C3265A-K

Are the resistances between 0.9 and 10 ohms?

Yes	GO to AF10
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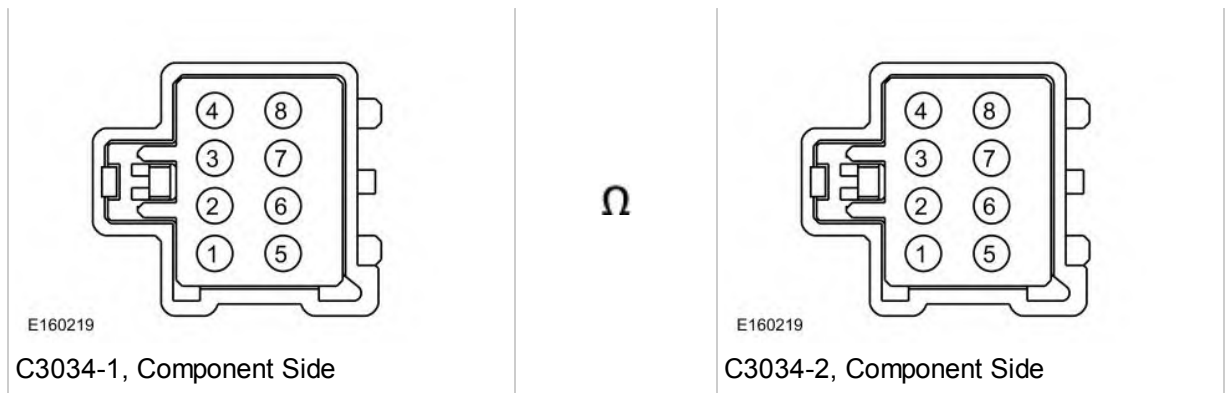
No	GO to AF9
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AF9 CHECK THE RESISTANCE OF THE BACKREST BLOWER MOTOR

Disconnect: Driver Backrest Blower Motor C3034 .

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead
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Are the resistances between 0.9 and 10 ohms?

Yes	REPAIR circuit CHS01 (GY/VT) or RHS01 (WH/VT) for an open or high resistance. GO to AF36
No	INSTALL a new backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AF36

AF10 CHECK BLOWER CIRCUIT AND SPEED CONTROL CIRCUIT FOR A SHORT TO VOLTAGE

Disconnect: SCME C3265C .

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-16		Ground
C3265C-11		Ground

Is any voltage present?

Yes	REPAIR the circuit in question. GO to AF36
No	GO to AF11

AF11 CHECK BLOWER AND SPEED CONTROL CIRCUITS FOR A SHORT TO GROUND

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-16	Ω	Ground
C3265C-11	Ω	Ground

Are the resistances greater than 10, 000 ohms?

Yes	GO to AF12
No	REPAIR the circuit in question. GO to AF36

AF12 CHECK THE BLOWER AND WIRING

 **NOTE:** The ohmmeter must be connected with the positive lead to pin 16 and the negative lead to pin 15 when measuring. Ohmmeter leads incorrectly connected results in false readings and leads to incorrect identification of components that are not faulty.

Measure:

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

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

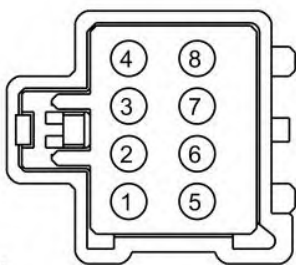
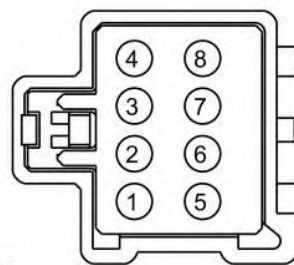
Yes	GO to AF14
No	GO to AF13

AF13 CHECK THE BLOWER RESISTANCE

Disconnect: Driver Cushion Blower Motor C3035 .

 **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	Ω	 E160219

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

Yes	REPAIR the circuit in question. GO to AF36
No	INSTALL a new driver seat cushion blower motor. REFER to: Front Seat Cushion Blower Motor . GO to AF36

AF14 CHECK THE BLOWER SPEED CONTROL AND CIRCUIT RESISTANCE

 **NOTE:** The ohmmeter must be connected with the positive lead to pin 11 and the negative lead to pin 15 when measuring. Ohmmeter leads incorrectly connected results in false readings and leads to incorrect identification of components that are not faulty.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-11	Ω	C3265C-15

Is the resistance between 240K and 400K ohms?

Yes	GO to AF16
No	GO to AF15

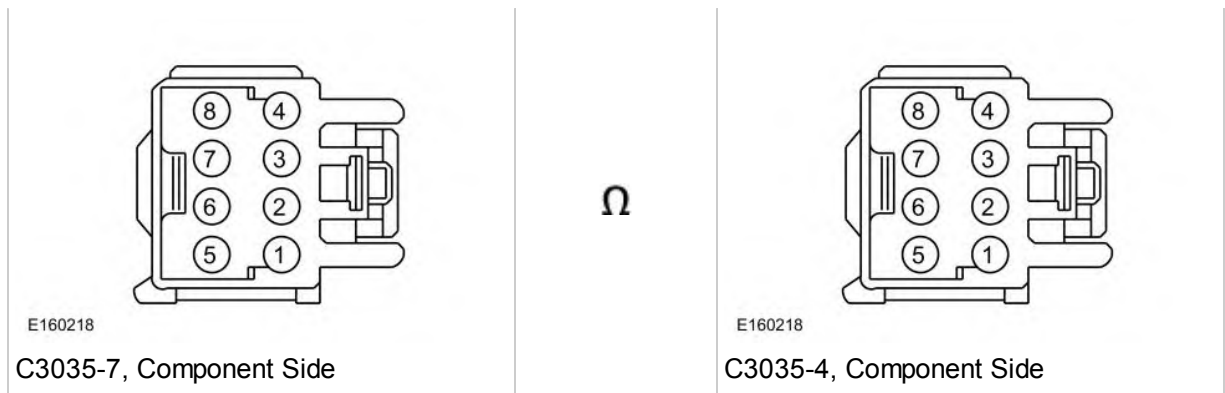
AF15 CHECK THE BLOWER SPEED CONTROL RESISTANCE

Disconnect: Driver Cushion Blower Motor C3035 .

 **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



Is the resistance between 240K and 400K ohms?

Yes	REPAIR the circuit in question. GO to AF36
No	INSTALL a new driver seat cushion blower motor. REFER to: Front Seat Cushion Blower Motor . GO to AF36

AF16 CHECK THERMISTOR CIRCUIT FOR A SHORT TO VOLTAGE

REFER to: Supplemental Restraint System (SRS) Depowering .

Disconnect: Driver Side Airbag In-line C3051 .

Disconnect: Passenger Side Airbag In-line C3053 .

Disconnect: SCME C3265B .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-7		Ground

Is any voltage present?

Yes	REPAIR the circuit. GO to AF36
No	GO to AF17

AF17 CHECK THERMISTOR CIRCUIT FOR A SHORT TO GROUND

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-7	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to AF18
No	REPAIR the circuit. GO to AF36

AF18 CHECK THE BLOWER MOTOR THERMISTOR AND WIRING RESISTANCE AT THE SCME (FRONT SEAT CLIMATE CONTROL MODULE)

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-7	Ω	C3265B-8

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

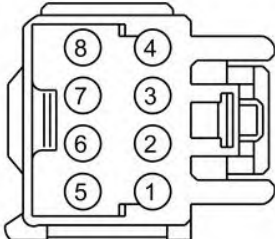
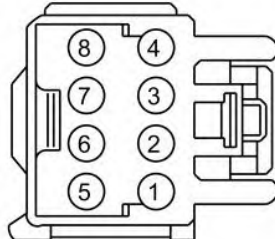
Is the resistance within the limits indicated?

Yes	GO to AF35
No	GO to AF19

AF19 CHECK THE BLOWER MOTOR THERMISTOR RESISTANCE

Disconnect: Driver Cushion Blower Motor C3035 .

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead
 E160218 C3035-5, Component Side	Ω	 E160218 C3035-8, Component Side

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 VHS26 (VT) or RHS05 (YE/VT) for an open or high resistance. GO to AF36
No	INSTALL a new driver seat cushion blower motor. REFER to: Front Seat Cushion Blower Motor . GO to AF36

AF20 CHECK FOR CORRECT BLOWER MOTOR INSTALLATION AND FOR CRUSHED FOAM

Ignition OFF.

Remove the driver seat. REFER to: Front Seat .

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

Inspect the driver seat backrest for the following:

Backrest blower obstructed

Blower filter restricted or plugged

Blower motor correctly installed

Seat backrest foam pad crushed or restricted

Is the blower motor correctly installed and the foam pad OK?

Yes	GO to AF21
No	Correctly INSTALL the backrest blower motor or INSTALL a new seat backrest foam pad. INSTALL the seat. GO to AF36

AF21 CHECK CUSHION BLOWER MOTOR CIRCUIT FOR A SHORT TO VOLTAGE

REFER to: Supplemental Restraint System (SRS) Depowering .

Disconnect: Driver Side Airbag In-line C3051 .

Disconnect: Passenger Side Airbag In-line C3053 .

Position the driver seat in the vehicle and connect the seat-to-floor connectors.

Disconnect: SCME C3265A .

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265A-H		Ground

Is any voltage present?

Yes	REPAIR the circuit. GO to AF36
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No	GO to AF22
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AF22 CHECK CUSHION BLOWER MOTOR FEED CIRCUIT FOR A SHORT TO GROUND

REFER to: Supplemental Restraint System (SRS) Depowering .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265A-G	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to AF23
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No	REPAIR the circuit. GO to AF36
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AF23 CHECK THE RESISTANCE OF THE CUSHION BLOWER MOTOR AND WIRING

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265A-G	Ω	C3265A-H

Is the resistance between 0.9 and 10 ohms?

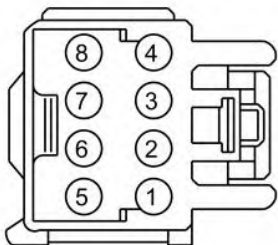
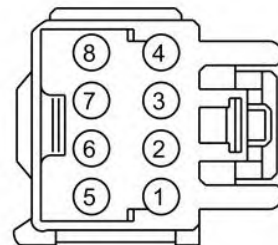
Yes	GO to AF25
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No	GO to AF24
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AF24 CHECK THE CUSHION BLOWER MOTOR RESISTANCE

Disconnect: Driver Cushion Blower Motor C3035 .

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead
 E160218 C3035-1, Component Side	Ω	 E160218 C3035-2, Component Side

Is the resistance between 0.9 and 10 ohms?

Yes	REPAIR the circuit(s) in question. GO to AF36
No	INSTALL a new driver seat cushion blower motor. REFER to: Front Seat Cushion Blower Motor . GO to AF36

AF25 CHECK BLOWER CIRCUIT AND SPEED CONTROL CIRCUIT FOR A SHORT TO VOLTAGE

Disconnect: SCME C3265C .

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-16		Ground
C3265C-12		Ground

Is any voltage present?

Yes	REPAIR the circuit in question. GO to AF36
No	GO to AF26

AF26 CHECK BLOWER AND SPEED CONTROL CIRCUITS FOR A SHORT TO GROUND

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
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C3265C-16	Ω	Ground
C3265C-12	Ω	Ground

Are the resistances greater than 10, 000 ohms?

Yes	GO to AF27
No	REPAIR the circuit in question. GO to AF36

AF27 CHECK THE BLOWER AND WIRING RESISTANCE

 **NOTE:** The ohmmeter must be connected with the positive lead to pin 16 and the negative lead to pin 15 when measuring. Ohmmeter leads incorrectly connected results in false readings and leads to incorrect identification of components that are not faulty.

Measure:

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

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

Yes	GO to AF29
No	GO to AF28

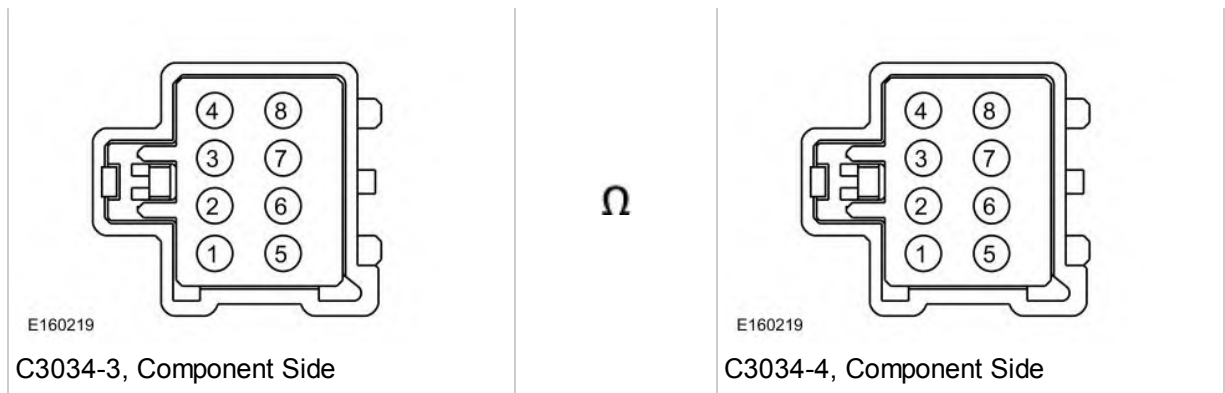
AF28 CHECK THE BLOWER RESISTANCE

Disconnect: Driver Backrest Blower Motor C3034 .

 **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



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

Yes	REPAIR the circuit(s) in question. GO to AF36
No	INSTALL a new backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AF36

AF29 CHECK THE BLOWER SPEED CONTROL AND CIRCUIT RESISTANCE

 **NOTE:** The ohmmeter must be connected with the positive lead to pin 12 and the negative lead to pin 15 when measuring. Ohmmeter leads incorrectly connected results in false readings and leads to incorrect identification of components that are not faulty.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265C-12	Ω	C3265C-15

Is the resistance between 240K and 400K ohms?

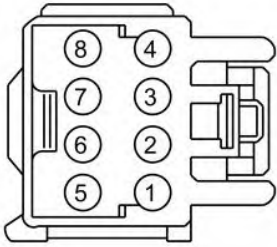
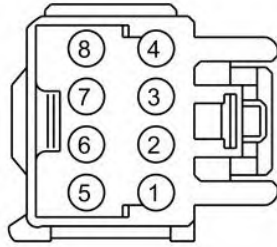
Yes	GO to AF31
No	GO to AF30

AF30 CHECK THE BLOWER SPEED CONTROL RESISTANCE

Disconnect: Driver Backrest Blower Motor C3034 .

 **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
 E160218 C3034-7, Component Side	Ω	 E160218 C3034-4, Component Side

Is the resistance between 240K and 400K ohms?

Yes	REPAIR the circuit(s) in question. GO to AF36
No	INSTALL a new backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AF36

AF31 CHECK THERMISTOR CIRCUIT FOR A SHORT TO VOLTAGE

Disconnect: SCME C3265B .

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-9		Ground

Is any voltage present?

Yes	REPAIR the circuit. GO to AF36
No	GO to AF32

AF32 CHECK THERMISTOR 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: SCME C3265B .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-9	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to AF33
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No	REPAIR the circuit. GO to AF36
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AF33 CHECK THE BLOWER MOTOR THERMISTOR AND WIRING RESISTANCE

Measure:

Positive Lead	Measurement / Action	Negative Lead
C3265B-9	Ω	C3265B-10

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 AF35
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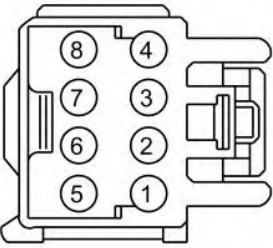
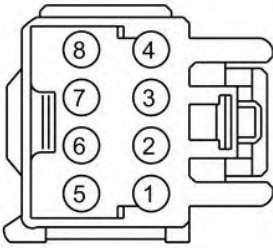
No	GO to AF34
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AF34 CHECK THE BLOWER MOTOR THERMISTOR RESISTANCE

Disconnect: Driver Backrest Blower Motor C3034 .

Measure the **component side resistance** between:

Positive Lead	Measurement / Action	Negative Lead
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 E160218 C3034-5, Component Side	Ω	 E160218 C3034-8, Component Side
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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 CHS14 (GN) or CHS29 (WH/BU) for an open or high resistance. GO to AF36
No	INSTALL a new backrest blower motor. REFER to: Front Seat Backrest Blower Motor . GO to AF36

AF35 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 Driver Side Airbag In-line C3051 or Passenger Side Airbag In-line C3053 at this time.

Reconnect all previously disconnected connectors.