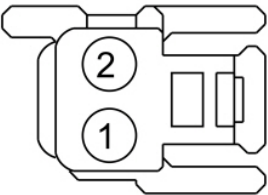
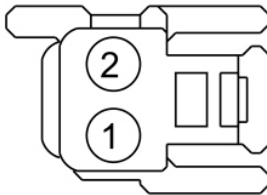
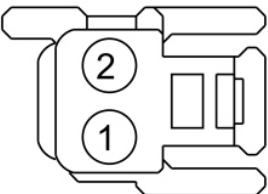


Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2016 FORD B-Max OEM Service and Repair Workshop Manual

[Go to manual page](#)

Positive Lead	Measurement / Action	Negative Lead
 <p>E158488</p> <p>C335-1, Component Side</p>	Ω	 <p>E158488</p> <p>C335-2, Component Side</p>
 <p>E158488</p> <p>C335-2, Component Side</p>	Ω	<p>Ground</p>

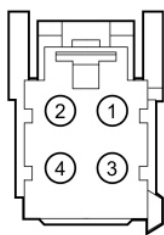
Is the resistance between 0.6 and 2 ohms between pins 1 and 2; and greater than 10,000 ohms between pin 2 and ground?

Yes	GO to M12
------------	---------------------------

No	<p>INSTALL a new passenger seat backrest heater mat.</p> <p>REFER to: Seat Heater Mat Removal (501-10A Front Seats, General Procedures).</p> <p>GO to M15</p>
-----------	---

M12 CHECK THE CIRCUIT BETWEEN THE CUSHION HEATER MAT AND BACKREST HEATER MAT FOR AN OPEN AND SHORT TO GROUND

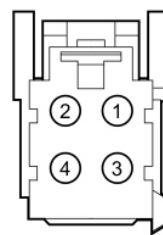
- Measure:



E158484

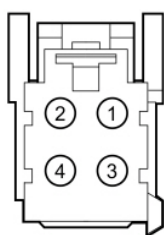
C334-2, Component Side

Ω



E158484

C334-3, Component Side



E158484

C334-2, Component Side

Ω

Ground

Is the resistance between 300 and 300,000 ohms between pins 2 and 3; and greater than 10,000 ohms between pin 2 and ground?

Yes

GO to [M14](#)

No

INSTALL a new passenger seat cushion heater mat.

REFER to: [Seat Heater Mat Removal](#)

(501-10A Front Seats, General Procedures).

GO to [M15](#)

M14 CHECK THE HVAC (HEATING, VENTILATION AND AIR CONDITIONING) MODULE OPERATION

- Ignition OFF.
- Disconnect and inspect all of the HVAC (heating, ventilation and air conditioning) module connectors.
- Repair:
 - corrosion (install new connector or terminals - clean module pins)

PINPOINT TEST N : BOTH HEATED SEATS ARE INOPERATIVE — WITH HEATED/VENTILATED SEATS

Refer to Wiring Diagrams Cell 119for schematic and connector information.

Normal Operation and Fault Conditions REFER to: [Front Seats - System Operation and Component Description](#)
(501-10A Front Seats, Description and Operation).

Possible Sources

- Fuse
- Wiring, terminals or connectors
- HVAC (heating, ventilation and air conditioning) module
- DSM (driver front seat module)

Visual Inspection and Pre-checks

- Verify the BJB (battery junction box) fuse 38 (40A) is OK.

N1 CHECK FOR DSM (DRIVER FRONT SEAT MODULE) DIAGNOSTIC TROUBLE CODES (DTCs)

- Ignition OFF.
- Ignition ON.
- Using a diagnostic scan tool, perform DSM (driver front seat module) self-test.

Are any DSM (driver front seat module) Diagnostic Trouble Codes (DTCs) present?

Yes	REFER to the DTC (diagnostic trouble code) Chart.
No	GO to N2

N2 CHECK THE HVAC (HEATING, VENTILATION AND AIR CONDITIONING) MODULE HEATED SEAT CONTROL SWITCH PARAMETER IDENTIFICATIONS (PIDS)

- Ignition ON.
- Using a diagnostic scan tool, monitor the Parameter Identifications (PIDs) while pressing and releasing the driver and passenger heated seat control switches.
 - Access the HVAC (heating, ventilation and air conditioning) and monitor the CC_SW_D_HSEATS (Driver Heated Seat) PID (parameter identification)
 - Access the HVAC (heating, ventilation and air conditioning) and monitor the CC_SW_P_HSEATS (Passenger Heated Seat) PID (parameter identification)

Do the Parameter Identifications (PIDs) change when the driver and passenger heated seat control switches are pressed and released?

- Ignition OFF.
- Disconnect: DSM (driver front seat module) Module C341A and C341C.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C341A-9	Ω	Ground

Positive Lead	Measurement / Action	Negative Lead
C341C-13	Ω	Ground
C341C-14	Ω	Ground

Are the resistances less than 3 ohms?

Yes	GO to N5
------------	--------------------------

No	REPAIR the circuit in question. GO to N6
-----------	--

N5 CHECK THE DSM (DRIVER FRONT SEAT MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect all of the DSM (driver front seat module) 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 DSM (driver front seat module) connectors. Make sure they seat and latch correctly.
- Reconnect all previously disconnected connectors.
- Ignition ON.

(501-10A Front Seats, Description and Operation).

DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
DSM (driver front seat module) B1153:4B	Driver Seat Cushion: Over Temperature	Sets when the DSM (driver front seat module) senses the left front cushion temperature has exceeded 64°C (147°F) for more than 4 seconds. When this DTC (diagnostic trouble code) sets, the DSM (driver front seat module) disables the circuit until the ignition is cycled.
DSM (driver front seat module) B1156:11	Driver Seat: Circuit Short To Ground	Sets when the DSM (driver front seat module) senses the left front heater element current draw has exceeded a specified threshold. When this DTC (diagnostic trouble code) sets, the DSM (driver front seat module) disables the circuit until the ignition is cycled.
DSM (driver front seat module) B1156:12	Driver Seat: Circuit Short To Battery	Sets when the DSM (driver front seat module) senses the left front heater circuit voltage is above a specified threshold when the driver is active. When this DTC (diagnostic trouble code) sets, the DSM (driver front seat module) disables the circuit until the ignition is cycled.
DSM (driver front seat module) B1208:11	Driver Seat Cushion Temperature Sensor: Circuit Short To Ground	Sets when the DSM (driver front seat module) senses the left front heater sensor voltage is out-of-range low. When this DTC (diagnostic trouble code) sets, the DSM (driver front seat module) disables the circuit until the ignition is cycled.
DSM (driver front seat module) B1208:2A	Driver Seat Cushion Temperature Sensor: Stuck in Range	Sets when the DSM (driver front seat module) senses the left front heater sensor voltage is stuck in range. When this DTC (diagnostic trouble code) sets, the DSM (driver front seat module) disables the circuit until the ignition is cycled.

Possible Sources

- Wiring, terminals or connectors
- Heater mat
- HVAC (heating, ventilation and air conditioning) module
- DSM (driver front seat module)

O3 CHECK THE HEATED SEAT VOLTAGE SUPPLY CIRCUITS FOR AN OPEN

- REFER to: [Supplemental Restraint System \(SRS\) Depowering](#)(501-20B Supplemental Restraint System, General Procedures).
- Disconnect: Driver Side Airbag In-line C3051.
- Disconnect: DSM (driver front seat module) Module C341D.
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C341D-1	\overline{V}	Ground
C341D-2	\overline{V}	Ground

Are the voltages greater than 11 volts?

Yes	GO to O4
-----	--------------------------

No	REPAIR the affected circuit. GO to O16
----	--

O4 CHECK THE HEATED SEAT GROUND CIRCUITS FOR AN OPEN

- Ignition OFF.
- Disconnect: DSM (driver front seat module) Module C341A and C341C.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C341A-9	Ω	Ground

- REFER to: [Supplemental Restraint System \(SRS\) Depowering](#)(501-20B Supplemental Restraint System, General Procedures).
- Disconnect: Driver Side Airbag In-line C3051 (if not previously disconnected).
- Disconnect: DSM (driver front seat module) C341B, C341C and C341D (if not previously disconnected).
- Disconnect: Left Front Seat Cushion Heater C3298.
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C3298-1	\bar{V}	Ground

Is any voltage present?

Yes	REPAIR the circuit. GO to O16
------------	---

No	GO to O6
-----------	--------------------------

O6 CHECK THE HEATER ELEMENT POWER CIRCUIT FOR AN OPEN OR SHORT TO GROUND

- Ignition OFF.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C3298-1	Ω	Ground

- Measure:

Positive Lead	Measurement / Action	Negative Lead
---------------	----------------------	---------------

- Ignition OFF.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C3298-2	Ω	Ground

- Measure:

Positive Lead	Measurement / Action	Negative Lead
C3298-2	Ω	C341D-15

Is the resistance greater than 10,000 ohms between the driver seat cushion heater mat and ground; and less than 3 ohms between the driver seat cushion heater mat and the DSM (driver front seat module) ?

Yes	GO to O9
------------	--------------------------

No	REPAIR the circuit. GO to O16
-----------	---

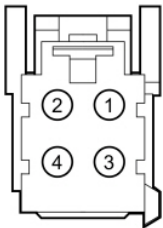
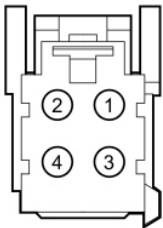
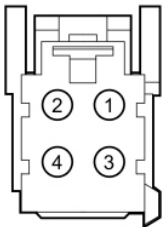
O9 CHECK THE HEATED SEAT TEMPERATURE SENSOR RETURN CIRCUIT FOR AN OPEN OR SHORT TO GROUND

- Measure:

Positive Lead	Measurement / Action	Negative Lead
C3298-3	Ω	Ground

- Measure:

between:

Positive Lead	Measurement / Action	Negative Lead
 E158484 C3298-1, Component Side	Ω	 E158484 C3298-4, Component Side
 E158484 C3298-1, Component Side	Ω	Ground

Is the resistance between 0.6 and 2 ohms between pins 1 and 4; and greater than 10,000 ohms between pin 1 and ground?

Yes	GO to O12
------------	---------------------------

No	INSTALL a new driver seat cushion heater mat. REFER to: Seat Heater Mat Removal (501-10A Front Seats, General Procedures). GO to O16
-----------	---

O12 CHECK THE BACKREST HEATED SEAT MAT FOR AN OPEN OR SHORT TO GROUND