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2010 FORD C-Max OEM Service and Repair Workshop Manual

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- REFER to: [Supplemental Restraint System \(SRS\) Depowering](#)(501-20B Supplemental Restraint System, General Procedures).
- Disconnect: Driver Side Airbag In-line C3051.
- Disconnect: Driver Seat Control Switch C360.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C360-9	\bar{V}	Ground

Is the voltage greater than 11 volts?

Yes	GO to A3
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No	VERIFY BJB (battery junction box) fuse 30 (40A) is OK. If OK, REPAIR the circuit. If not OK, REFER to the Wiring Diagrams manual to identify the possible causes of the circuit short. GO to A10
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A3 CHECK THE SEAT CONTROL SWITCH GROUND CIRCUIT

- Measure:

Positive Lead	Measurement / Action	Negative Lead
C360-7	Ω	Ground

Is the resistance less than 3 ohms?

Yes	INSTALL a new driver seat control switch. REFER to: Front Seat Control Switch (501-10A Front Seats, Removal and Installation). GO to A10
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C360-6	Ω	C362-3
C360-5	Ω	C362-1

Are the resistances less than 3 ohms?

Yes	<p>INSTALL a new driver seat control switch. REFER to: Front Seat Control Switch (501-10A Front Seats, Removal and Installation). GO to A10</p>
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No	<p>REPAIR the circuit in question. GO to A10</p>
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A6 CHECK FOR VOLTAGE TO THE SEAT FRONT HEIGHT MOTOR

- REFER to: [Supplemental Restraint System \(SRS\) Depowering](#)(501-20B Supplemental Restraint System, General Procedures).
- Disconnect: Driver Side Airbag In-line C3051.
- Disconnect: Driver Seat Front Height Motor C382.

NOTE

The voltage being measured changes polarity depending upon which direction the seat control switch is activated.

While pushing the front height switch upward and downward, measure:

Positive Lead	Measurement / Action	Negative Lead
C382-1	\bar{V}	C382-3

Is the voltage greater than 11 volts when the seat control s witch is operated in both directions?

- Disconnect: Driver Side Airbag In-line C3051.
- Disconnect: Driver Seat Rear Height Motor C363.

NOTE

The voltage being measured changes polarity depending upon which direction the seat control switch is activated.

While pushing the rear height switch upward and downward, measure:

Positive Lead	Measurement / Action	Negative Lead
C363-1	\bar{V}	C363-3

Is the voltage greater than 11 volts when the seat control switch is operated in both directions?

Yes	<p>INSTALL a new driver seat track. REFER to: Front Seat Track (501-10A Front Seats, Removal and Installation). GO to A10</p>
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No	GO to A9
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A9 CHECK THE SEAT REAR HEIGHT MOTOR CIRCUIT FOR AN OPEN

- Disconnect: Driver Seat Control Switch C360.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C360-8	Ω	C363-3
C360-10	Ω	C363-1

- Seat control switch
- Seat track

Visual Inspection and Pre-checks

- Verify BJB (battery junction box) fuse 30 (40A) is OK.

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.

B1 CHECK THE SEAT OPERATION

- Attempt to operate the seat in all directions.


Is the seat inoperative in all directions?

Yes	GO to B2
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No	If only the recliner motor is inoperative, GO to B4 If only the horizontal motor is inoperative, GO to B6 If only the front height motor is inoperative, GO to B8 If only the rear height motor is inoperative, GO to B10
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B2 CHECK FOR VOLTAGE TO THE SEAT CONTROL SWITCH

- REFER to: [Supplemental Restraint System \(SRS\) Depowering](#)(501-20B Supplemental Restraint System, General Procedures).
- Disconnect: Driver Side Airbag In-line C3051.
- Disconnect: Driver Seat Control Switch C3387.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C3387-10		Ground

Is the voltage greater than 11 volts?

While pushing the recline switch forward and rearward, measure:

Positive Lead	Measurement / Action	Negative Lead
C3187-1		C3187-3

Is the voltage greater than 11 volts when the seat control switch is operated in both directions?

Yes	INSTALL a new driver front seat backrest frame. GO to B12
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No	GO to B5
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B5 CHECK THE SEAT RECLINER MOTOR CIRCUITS FOR AN OPEN

Sample

C362-1	V	C362-3
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Is the voltage greater than 11 volts when the seat control switch is operated in both directions?

Yes	INSTALL a new horizontal motor. REFER to: Front Seat Track Motor (501-10A Front Seats, Removal and Installation). GO to B12
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No	GO to B7
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B7 CHECK THE SEAT HORIZONTAL MOTOR CIRCUIT FOR AN OPEN

- Disconnect: Driver Seat Control Switch C3387.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C3387-14	Ω	C362-3
C3387-15	Ω	C362-1

Are the resistances less than 3 ohms?

Yes	INSTALL a new driver seat control switch. REFER to: Front Seat Control Switch (501-10A Front Seats, Removal and Installation). GO to B12
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No	REPAIR the circuit in question. GO to B12
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C3387-17	Ω	C382-1
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Are the resistances less than 3 ohms?

Yes	<p>INSTALL a new driver seat control switch. REFER to: Front Seat Control Switch (501-10A Front Seats, Removal and Installation). GO to B12</p>
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No	<p>REPAIR the circuit in question. GO to B12</p>
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B10 CHECK FOR VOLTAGE TO THE SEAT REAR HEIGHT MOTOR

- REFER to: [Supplemental Restraint System \(SRS\) Depowering](#)(501-20B Supplemental Restraint System, General Procedures).
- Disconnect: Driver Side Airbag In-line C3051.
- Disconnect: Driver Seat Rear Height Motor C363.

NOTE

The voltage being measured changes polarity depending upon which direction the seat control switch is activated.

While pushing the rear height switch upward and downward, measure:

Positive Lead	Measurement / Action	Negative Lead
C363-1	\bar{V}	C363-3

Is the voltage greater than 11 volts when the seat control switch is operated in both directions?

Yes	<p>INSTALL a new driver seat track. REFER to: Front Seat Track (501-10A Front Seats, Removal and Installation).</p>
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Did the SRS (supplemental restraint system) prove out successfully?

Yes	Repair is complete. RETURN the vehicle to the customer.
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No	REFER to: Airbag Supplemental Restraint System (SRS) (501-20B Supplemental Restraint System, Diagnosis and Testing).
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PINPOINT TEST C : THE POWER SEAT IS INOPERATIVE OR DOES NOT OPERATE CORRECTLY — PASSENGER, 8-WAY

Refer to Wiring Diagrams Cell 120 for 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
- Seat control switch
- Horizontal motor
- Seat track
- Seat backrest

Visual Inspection and Pre-checks

- Verify BJB (battery junction box) fuse 31 (30A) is OK.

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.

C1 CHECK THE SEAT OPERATION

- Attempt to operate the seat in all directions.

Is the seat inoperative in all directions?

Yes	GO to C2
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Yes	INSTALL a new passenger seat control switch. REFER to: Front Seat Control Switch (501-10A Front Seats, Removal and Installation). GO to C10
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No	REPAIR the circuit. GO to C10
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C4 CHECK FOR VOLTAGE TO THE SEAT RECLINER MOTOR

- REFER to: [Supplemental Restraint System \(SRS\) Depowering](#)(501-20B Supplemental Restraint System, General Procedures).
- Disconnect: Passenger Side Airbag In-line C3053.
- Disconnect: Passenger Seat Recliner Motor C3189.

NOTE

The voltage being measured changes polarity depending upon which direction the seat control switch is activated.

While pushing the recline switch forward and rearward, measure:

Positive Lead	Measurement / Action	Negative Lead
C3189-1	V	C3189-3

Is the voltage greater than 11 volts when the seat control switch is operated in both directions?

Yes	INSTALL a new passenger front seat backrest frame. GO to C10
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No	GO to C5
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C5 CHECK THE SEAT RECLINER MOTOR CIRCUITS FOR AN OPEN

- Disconnect: Passenger Seat Control Switch C3388.