

Pinpoint Test - DTC: AS

B00A0:11, B00A0:12, B1123:11, B1123:12

Refer to Wiring Diagrams Cell 46 for schematic and connector information.

Normal Operation and Fault Conditions

The BECMB provides battery voltage to the RCM and OCSM. The BECMB monitors each circuit for a short to voltage or a short to ground.

If a fault is detected, the BECMB stores the appropriate DTC in memory and sends a message to the RCM over HS-CAN1 and HS-CAN2, indicating that a BECMB fault is present. Upon receipt of this message, the RCM sets DTC U0413:92 and sends a message to the IPC to illuminate the airbag warning indicator.

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B00A0:11	Occupant Classification System: Circuit Short to Ground	A fault is indicated when the BECMB senses a short to ground on the OCSM voltage supply circuit.
B00A0:12	Occupant Classification System: Circuit Short to Battery	A fault is indicated when the BECMB senses a short to voltage on the OCSM voltage supply circuit.
B1123:11	Restraints Ignition Relay: Circuit Short to Ground	A fault is indicated when the BECMB senses a short to ground on the RCM voltage supply circuit.

B1123:12	Restraints Ignition Relay: Circuit Short to Battery	A fault is indicated when the BECMB senses a short to voltage on the RCM voltage supply circuit.
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Possible Sources

- Wiring, terminals or connectors
- BECMB
- RCM
- OCSM

PINPOINT TEST A : B00A0:11, B00A0:12, B1123:11 AND B1123:12

 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.
NOTICE: Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may cause damage to the connector.
NOTE: <i>Most faults are due to connector and/or wiring concerns. Carry out a thorough inspection and verification before proceeding with the pinpoint test.</i>
NOTE: <i>SRS components should only be disconnected or reconnected when instructed to do so within a pinpoint test step. Failure to follow this instruction may result in incorrect diagnosis of the SRS.</i>
NOTE: <i>Always make sure the correct SRS component is being installed. Parts released for other vehicles may not be compatible even if they appear physically similar. Check the part number listed in the Ford parts catalog to make sure the correct component is being installed. If an incorrect SRS component is installed, Diagnostic Trouble Codes (DTCs) may set.</i>
NOTE: <i>The SRS must be fully operational and free of faults before releasing the vehicle to the customer.</i>
A1 RETRIEVE OCSM (OCCUPANT CLASSIFICATION SYSTEM MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

-  **WARNING:** Before beginning any service procedure in this section, refer to Safety Warnings in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

REFER to: [Health and Safety Precautions](#) (100-00 General Information, Description and Operation).

- Ignition ON.
- Using a diagnostic scan tool, perform BECMB self-test.

Was DTC B00A0:11, B00A0:12, B1123:11 or B1123:12 retrieved during self-test?

Yes	This fault cannot be cleared until it is corrected and the DTC is no longer retrieved during the self-test. For DTC B00A0:11, GO to A2 For DTC B00A0:12, GO to A4 For DTC B1123:11, GO to A6 For DTC B1123:12, GO to A8
No	This is an intermittent fault. GO to A13

A2 CHECK THE OCSM (OCCUPANT CLASSIFICATION SYSTEM MODULE) POWER SUPPLY CIRCUIT FOR A SHORT TO GROUND

 **WARNING:** Turn the ignition OFF and wait one minute to deplete the backup power supply. Failure to follow this instruction may result in serious personal injury or death in the event of an accidental deployment.

- Ignition OFF.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Disconnect BECMB C2518.
- Disconnect OCSM C3285.

Is the resistance greater than 10,000 ohms?

Yes	GO to A3
No	REPAIR the circuit. Refer to Wiring Diagrams Cell 5 for schematic and connector information. GO to A14

A3 CHECK THE BECMB (EXTENDED POWER MODULE) DTC (DIAGNOSTIC TROUBLE CODE) FOR A FAULT STATUS CHANGE FROM SHORT TO GROUND

- Connect BECMB C2518.
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.
- Using a diagnostic scan tool, perform BECMB self-test.

Was DTC B00A0:11 retrieved during self-test?

Yes	GO to A10
No	GO to A12

A4 CHECK THE OCSM (OCCUPANT CLASSIFICATION SYSTEM MODULE) POWER SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE



WARNING: Turn the ignition OFF and wait one minute to deplete the backup power supply. Failure to follow this instruction may result in serious personal injury or death in the event of an accidental deployment.

- Ignition OFF.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Disconnect BECMB C2518.
- Disconnect OCSM C3285.
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.

Is any voltage present?

Yes	REPAIR the circuit. Refer to Wiring Diagrams Cell 5 for schematic and connector information. GO to A14
No	GO to A5

A5 CHECK THE BECMB (EXTENDED POWER MODULE) DTC (DIAGNOSTIC TROUBLE CODE) FOR A FAULT STATUS CHANGE FROM SHORT TO VOLTAGE

- Ignition OFF.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Connect BECMB C2518.
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.
- Using a diagnostic scan tool, perform BECMB self-test.

Was DTC B00A0:12 retrieved during self-test?

Yes	GO to A10
No	GO to A12

A6 CHECK THE RCM (RESTRAINTS CONTROL MODULE) POWER SUPPLY CIRCUIT FOR A SHORT TO GROUND

 **WARNING:** Turn the ignition OFF and wait one minute to deplete the backup power supply. Failure to follow this instruction may result in serious personal injury or death in the event of an accidental deployment.

- Ignition OFF.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Disconnect BECMB C2518.
- Disconnect RCM C310A and C310B.

Is the resistance greater than 10,000 ohms?

Yes	GO to A7
No	REPAIR the circuit. Refer to Wiring Diagrams Cell 5 for schematic and connector information. GO to A14

A7 CHECK THE BECMB (EXTENDED POWER MODULE) DTC (DIAGNOSTIC TROUBLE CODE) FOR A FAULT STATUS CHANGE FROM SHORT TO GROUND

- Connect BECMB C2518.
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.
- Using a diagnostic scan tool, perform BECMB self-test.

Was DTC B1123:11 retrieved during self-test?

Yes	GO to A10
No	GO to A11

A8 CHECK THE RCM (RESTRAINTS CONTROL MODULE) POWER SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE



WARNING: Turn the ignition OFF and wait one minute to deplete the backup power supply. Failure to follow this instruction may result in serious personal injury or death in the event of an accidental deployment.

- Ignition OFF.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Disconnect BECMB C2518.
- Disconnect RCM C310A and C310B.
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.

Is any voltage present?

Yes	REPAIR the circuit. Refer to Wiring Diagrams Cell 5 for schematic and connector information. GO to A14
No	GO to A9

A9 CHECK THE BECMB (EXTENDED POWER MODULE) DTC (DIAGNOSTIC TROUBLE CODE) FOR A FAULT STATUS CHANGE FROM SHORT TO VOLTAGE

- Ignition OFF.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Connect BECMB C2518.
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.
- Using a diagnostic scan tool, perform BECMB self-test.

Was DTC B1123:12 retrieved during self-test?

Yes	GO to A10
No	GO to A11

A10 CONFIRM THE BECMB (EXTENDED POWER MODULE) FAULT

NOTE: Make sure all BECMB, OCSM and RCM electrical connectors are connected before carrying out the self-test. If not, Diagnostic Trouble Codes (DTCs) will be recorded and modules will be unresponsive.

- Ignition OFF.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Prior to reconnecting any previously disconnected SRS component:
 - inspect connector(s) (including any inline connectors) for pushed-out, loose or spread terminals and loose or frayed wire connections at terminals.
 - inspect wire harness for any damage, pinched, cut or pierced wires.
 - repair any concerns found.
 Refer to Wiring Diagrams Cell 5 for schematic and connector information.

- Connect OCSM C3285 (if previously disconnected).
- Connect RCM C310A and C310B (if previously disconnected).
- Connect BECMB C2518 (if previously disconnected).
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.
- Using a diagnostic scan tool, perform BECMB self-test.

Was the original DTC retrieved during self-test?

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 BECMB. REFER to: Battery Energy Control Module B (BECMB) (501-20B Supplemental Restraint System, Removal and Installation). GO to A14
No	In the process of diagnosing the fault, the fault condition has become intermittent. Do not install any new SRS components at this time. SRS components should only be installed when directed to do so in the pinpoint test. GO to A13

A11 CONFIRM THE RCM (RESTRAINTS CONTROL MODULE) FAULT

NOTE: Make sure all BECMB, OCSM and RCM electrical connectors are connected before carrying out the self-test. If not, Diagnostic Trouble Codes (DTCs) will be recorded and modules will be unresponsive.

- Ignition OFF.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Prior to reconnecting any previously disconnected SRS component:
 - inspect connector(s) (including any inline connectors) for pushed-out, loose or spread terminals and loose or frayed wire connections at terminals.
 - inspect wire harness for any damage, pinched, cut or pierced wires.
 - repair any concerns found.
Refer to Wiring Diagrams Cell 5 for schematic and connector information.
- Connect RCM C310A and C310B (if previously disconnected).
- Connect BECMB C2518 (if previously disconnected).
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.
- Using a diagnostic scan tool, perform BECMB self-test.

Was the original DTC retrieved during self-test?

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 RCM. REFER to: Restraints Control Module (RCM) (501-20B Supplemental Restraint System, Removal and Installation). GO to A14
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No	In the process of diagnosing the fault, the fault condition has become intermittent. Do not install any new SRS components at this time. SRS components should only be installed when directed to do so in the pinpoint test. GO to A13
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A12 CONFIRM THE OCSM (OCCUPANT CLASSIFICATION SYSTEM MODULE) FAULT

NOTE: *Make sure all BECMB, OCSM and RCM electrical connectors are connected before carrying out the self-test. If not, Diagnostic Trouble Codes (DTCs) will be recorded and modules will be unresponsive.*

- Ignition OFF.
- Prior to reconnecting any previously disconnected SRS component:
 - inspect connector(s) (including any inline connectors) for pushed-out, loose or spread terminals and loose or frayed wire connections at terminals.
 - inspect wire harness for any damage, pinched, cut or pierced wires.
 - repair any concerns found.

Refer to Wiring Diagrams Cell 5 for schematic and connector information.
- Connect OCSM C3285 (if previously disconnected).
- Connect BECMB C2518 (if previously disconnected).
- Ignition ON.
- Using a diagnostic scan tool, perform BECMB self-test.

Was the original DTC retrieved during self-test?

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 OCS sensor. REFER to: Occupant Classification System (OCS) Sensor - Vehicles With: Multi-Contour Seats (501-20B Supplemental Restraint System, Removal and Installation). REFER to: Occupant Classification System (OCS) Sensor - Vehicles Without: Multi-Contour Seats (501-20B Supplemental Restraint System, Removal and Installation). GO to A14
No	In the process of diagnosing the fault, the fault condition has become intermittent. Do not install any new SRS components at this time. SRS components should only be installed when directed to do so in the pinpoint test. GO to A13

A13 CHECK FOR AN INTERMITTENT FAULT

- Ignition OFF.
- For DTC B00A0:11 or B00A0:12, disconnect OCSM C3285.
- Depower the SRS.
REFER to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Disconnect BECMB C2518.
- For DTC B00A0:11 or B00A0:12, connect OCSM C3285.
- For DTC B1123:11 or B1123:12, connect RCM C310A and C310B.
- Connect BECMB C2518.
- Repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.

- Using a diagnostic scan tool, perform BECMB self-test to retrieve Diagnostic Trouble Codes (DTCs).

Was DTC B00A0:11, B00A0:12, B1123:11 or B1123:12 retrieved during self-test?

Yes	The fault condition is now present. This fault cannot be cleared until it is corrected and the DTC is no longer retrieved during the self-test. For DTC B00A0:11, GO to A2 For DTC B00A0:12, GO to A4 For DTC B1123:11, GO to A6 For DTC B1123:12, GO to A8
No	CHECK for causes of the intermittent fault. ATTEMPT to recreate the hard fault by flexing the wire harness and cycling the ignition frequently. ACTIVATE other system in the same wire harness. Do not install any new SRS components at this time. Only install SRS components when directed to do so in the pinpoint test. REPAIR any intermittent concerns found. GO to A14

A14 CHECK FOR ADDITIONAL SRS (SUPPLEMENTAL RESTRAINT SYSTEM) DIAGNOSTIC TROUBLE CODES (DTCS)

- Ignition OFF.
- Reconnect all SRS components (if previously disconnected).
- If previously directed to depower the SRS, repower the SRS. Do not prove out the SRS at this time.
REFER to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).
- Ignition ON.
- **NOTE:** *When selecting Restraints from the Self Test menu, Diagnostic Trouble Codes (DTCs) are retrieved from the RCM, OCSM and BECMB.*

Using a diagnostic scan tool, perform **Restraints** self-test.

Are any RCM, OCSM, and/or BECMB Diagnostic Trouble Codes (DTCs) retrieved?

Yes	Do not clear any Diagnostic Trouble Codes (DTCs) until all Diagnostic Trouble Codes (DTCs) have been resolved. REFER to: Airbag Supplemental Restraint System (SRS) (501-20B Supplemental Restraint System, Diagnosis and Testing).
No	The repair is complete. RETURN the vehicle to the customer.

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