

# Your Ultimate Source for OEM Repair Manuals

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2009 FORD Taurus OEM Service and Repair Workshop Manual

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- Front evaporator shut off valve
- BJB (battery junction box) [also known as BCMC (body control module C) ]

## NOTICE

Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may damage the connector.

#### Y1 CHECK THE FRONT EVAPORATOR SHUT OFF VALVE POWER CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BJB (battery junction box) C1035C .
- Disconnect Front evaporator shut off valve HEV C1309 .
- Ignition ON.
- Measure:

| Positive Lead | Measurement / Action | Negative Lead |
|---------------|----------------------|---------------|
| C1309-1       | Ÿ                    | Ground        |

#### Is any voltage present?

| Yes | REPAIR the circuit. CLEAR all Diagnostic Trouble Codes (DTCs) and CARRY OUT the self-test of the |
|-----|--|
| 105 | SOBDMC (secondary on-board diagnostic control module C) .  |

No GO to Y2

#### Y2 CHECK THE FRONT EVAPORATOR SHUT OFF VALVE POWER CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.
- Measure:

Positive Lead Measurement / Action Negative Lead

|   | ositive Lead  | Measurement / Action  | Negative Lead  |  |
|---|---|---|--|--|
| C   | 21309-1   | Ω   | C1309-2  |  |
| the   | resistance gr   | eater than 10,000 ohms  | 5?   | 1  |
| es  | REFER to:<br>(412-03 Su<br>CLEAR all<br>(secondary  | 0   | f Valve<br>rol, Removal and<br>s (DTCs) and CARF   | Installation).<br>RY OUT the self-test of the SOBDMC<br>FEST the system for normal operation. If the |
| lo  | REPAIR the circuits. CLEAR all Diagnostic Trouble Codes (DTCs) and CARRY OUT the self-test of the SOBDMC (secondary on-board diagnostic control module C) . |   |  |  |
| 5 СНГ   |   | RECT BCMC (BODY CON   |  |  |
| <ul> <li>Ig</li> <li>Di</li> <li>di</li> <li>Re</li> </ul>                                    | nition OFF.<br>isconnect and<br>sconnected).<br>epair:<br>o corrosion<br>o damaged o<br>o pushed-ou<br>onnect all BCM<br>orrectly.                          | (install new connector or<br>or bent pins - install new<br>it pins - install new pins a   | control module C<br>terminal - clean i<br>terminals or pins<br>is necessary<br>C) electrical con | c) OPERATION<br>) electrical connectors (if not previously<br>module pins)                           |
| <ul> <li>Ig</li> <li>Di</li> <li>di</li> <li>Re</li> <li>Co</li> <li>co</li> <li>O</li> </ul> | nition OFF.<br>isconnect and<br>sconnected).<br>epair:<br>o corrosion<br>o damaged o<br>o pushed-ou<br>onnect all BCM<br>orrectly.                          | inspect all BCMC (body of<br>(install new connector or<br>or bent pins - install new<br>at pins - install new pins a<br>AC (body control module | control module C<br>terminal - clean i<br>terminals or pins<br>is necessary<br>C) electrical con | c) OPERATION<br>) electrical connectors (if not previously<br>module pins)                           |

| Yes | DIAGNOSE the CAN (controller area network) in question.<br>REFER to: Controller Area Network (CAN) Module Communications Network<br>(418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and<br>Testing). |
|-----|--|
| Νο  | The system is operating correctly at this time. VERIFY the integrity of the connectors and wiring for the CAN (controller area network) in question.   |

#### PINPOINT TEST AA : U0100:00

# **Normal Operation and Fault Conditions**

The ACCM (air conditioning control module) and the HVAC (heating, ventilation and air conditioning) control module communicates with the PCM (powertrain control module) over the CAN (controller area network). If messages are missing or not received from the PCM (powertrain control module), features such as the A/C (air conditioning) can be inoperative or can operate incorrectly, or the outside air temperature can be reporting incorrectly.

# DTC Fault Trigger Conditions

| DTC (diagnostic<br>trouble code)                                   | Description  | Fault Trigger Condition   |
|--|--|---|
| ACCM (air<br>conditioning control<br>module) U0100:00              | Lost Communication With<br>ECM/PCM 'A': No Sub Type<br>Information | Sets in continuous memory when the ACCM (air<br>conditioning control module) detects network<br>messages are missing from the PCM (powertrain<br>control module) for more than 5 seconds.                             |
| HVAC (heating,<br>ventilation and air<br>conditioning)<br>U0100:00 | Lost Communication With<br>ECM/PCM 'A': No Sub Type<br>Information | Sets in continuous memory when the HVAC (heating,<br>ventilation and air conditioning) control module<br>detects network messages are missing from the PCM<br>(powertrain control module) for more than 5<br>seconds. |

#### **Possible Sources**

- Network communication concern
- ACCM (air conditioning control module) concern
- HVAC (heating, ventilation and air conditioning) control module concern

|                             | sing a diagnostic scan tool, carry out the self-test for the ACCM (air conditioning control module)<br>tting the DTC (diagnostic trouble code) .  |
|-----------------------------|---|
|                             | y non-network Diagnostic Trouble Codes (DTCs) present?  |
| Yes                         | DIAGNOSE all non-network Diagnostic Trouble Codes (DTCs) first. REFER to the appropriate DTC (diagnostic trouble code) Chart in this section.   |
| Νο                          | GO to AA4   |
| AA4 CH                      | ECK FOR PCM (POWERTRAIN CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)   |
|                             | sing a diagnostic scan tool, carry out the PCM (powertrain control module) self-test.<br><b>y non-network Diagnostic Trouble Codes (DTCs) present?</b>  |
| Yes                         | REFER to the Diagnosis and Testing in the appropriate 303-14 section.   |
| No                          | GO to AA5   |
| AA5 RE                      | CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0100:00  |
| (di<br>co<br>• lgr<br>• lgr | sing a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs) for the module setting the DTC<br>iagnostic trouble code) ( ACCM (air conditioning control module) or HVAC (heating, ventilation and air<br>nditioning) control module).<br>nition OFF.<br>nition ON.<br>ait 10 seconds. |
| • Us<br>co                  | sing a diagnostic scan tool, carry out the self-test for the module setting the DTC (diagnostic trouble de) ( ACCM (air conditioning control module) or HVAC (heating, ventilation and air conditioning) ntrol module).   |
| Is DTC                      | (diagnostic trouble code) U0100:00 still present?   |
| Yes                         | GO to AA6   |

- damaged or bent pins install new terminals pins
- pushed-out pins install new pins as necessary
- Reconnect the PCM (powertrain control module) connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

## Is the concern still present?

CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action). If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,

Yes



Guided Routine available in the on-line Workshop Manual.

**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.

#### **PINPOINT TEST AB : U0111:00**

#### **Normal Operation and Fault Conditions**

The ACCM (air conditioning control module) communicates with the BECM (battery energy control module) over the CAN (controller area network). If messages are missing or not received from the BECM (battery energy control module), the A/C (air conditioning) can be inoperative.

#### DTC Fault Trigger Conditions

| DTC (diagnostic<br>trouble code)                      | Description  | Fault Trigger Condition  |
|---|--|--|
| ACCM (air<br>conditioning control<br>module) U0111:00 | Lost Communication With<br>Battery Energy Control Module<br>'A': No Sub Type Information | Sets in continuous memory when the ACCM (air<br>conditioning control module) detects network<br>messages are missing from the BECM (battery<br>energy control module) for more than 5 seconds. |

#### Possible Sources

|        | sing a diagnostic scan tool, carry out the self-test for the ACCM (air conditioning control module)<br>etting the DTC (diagnostic trouble code) .           |
|--------|---|
| Are an | y non-network Diagnostic Trouble Codes (DTCs) present?  |
| Yes    | DIAGNOSE all non-network Diagnostic Trouble Codes (DTCs) first. REFER to the appropriate DTC (diagnostic trouble code) Chart in this section.               |
| Νο     | GO to AB4   |
| AB4 CH | IECK FOR BECM (BATTERY ENERGY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)   |
|        | sing a diagnostic scan tool, carry out the BECM (battery energy control module) self-test.<br><b>y non-network Diagnostic Trouble Codes (DTCs) present?</b> |
| Yes    | REFER to: High Voltage Battery, Mounting and Cables - Electric(414-03A High Voltage Battery, Mounting and Cables, Diagnosis and Testing).                   |
|        |   |
| Νο     | GO to AB5   |
| AB5 RE | ECHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0111:00   |
|        |   |

The system is operating correctly at this time. The concern may have been due to incorrect parts No replacement procedures or incorrect module configuration. AB7 CHECK FOR CORRECT BECM (BATTERY ENERGY CONTROL MODULE) OPERATION Ignition OFF. Disconnect and inspect all the BECM (battery energy control module) connectors. Repair: • corrosion (install new connectors or terminals - clean module pins) • damaged or bent pins - install new terminals pins • pushed-out pins - install new pins as necessary • Reconnect the BECM (battery energy control module) connectors. Make sure they seat and latch correctly. • Operate the system and determine if the concern is still present. Is the concern still present? CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action) . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new Yes BECM (battery energy control module). REFER to: Battery Energy Control Module (BECM) - Electric (414-03A High Voltage Battery, Mounting and Cables, Removal and Installation). The system is operating correctly at this time. The concern may have been caused by module No connections. ADDRESS the root cause of any connector or pin issues.

#### **PINPOINT TEST AC : U0140:00**

Refer to Wiring Diagrams Cell 54for schematic and connector information.

**Normal Operation and Fault Conditions** Control Logic, REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) - System Operation and Component Description (412-00 Climate Control System - General Information, Description and Operation).

The ACCM (air conditioning control module) and the HVAC (heating, ventilation and air conditioning) control module communicate with the BCM (body control module) over the CAN (controller area network).

| AC2 CHE       | CK THE NETWORK COMMUNICATION  |
|---------------|---|
|               | g a diagnostic scan tool, carry out the network test.<br>BCM (body control module) pass the network test?   |
| Yes           | GO to AC3   |
| No            | REFER to: Controller Area Network (CAN) Module Communications Network(418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).  |
| AC3 CHE       | CK FOR NON-NETWORK DIAGNOSTIC TROUBLE CODES (DTCS)  |
| cont<br>(diag | ng a diagnostic scan tool, carry out the self-test for the module in question ( ACCM (air conditioning<br>strol module) or HVAC (heating, ventilation and air conditioning) control module) setting the DTC<br>gnostic trouble code) .<br><b>non-network Diagnostic Trouble Codes (DTCs) present?</b> |
| Yes           | DIAGNOSE all non-network Diagnostic Trouble Codes (DTCs) first. REFER to the appropriate DTC (diagnostic trouble code) Chart in this section.   |
| No            | GO to AC4   |
| AC4 CHE       | CK FOR NON-NETWORK BCM (BODY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)  |
|               | g a diagnostic scan tool, carry out the BCM (body control module) self-test.<br>non-network Diagnostic Trouble Codes (DTCs) present?  |
| Yes           | REFER to: Body Control Module (BCM)(419-10 Multifunction Electronic Modules, Diagnosis and Testing).  |
| No            | GO to AC5   |
| AC5 RECH      | HECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0140:00   |

The system is operating correctly at this time. The concern may have been due to incorrect parts No replacement procedures or incorrect module configuration.

## AC7 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect all BCM (body control module) electrical connectors (if not previously disconnected).
- Repair:
  - corrosion (install new connector or terminal clean module pins)
  - damaged or bent pins install new terminals or pins
  - pushed-out pins install new pins as necessary
- Connect all BCM (body control module) electrical connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

#### Is the concern still present?

#### **PINPOINT TEST AD : U0151:00**

Refer to Wiring Diagrams Cell 54for schematic and connector information.

Normal Operation and Fault Conditions Control Logic, REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) - System Operation and Component Description

Yes