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.

2010 FORD Taurus OEM Service and Repair Workshop Manual

Go to manual page

Yes	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 BCM (body control module) . REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).

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.

U7 VERIFY CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect all PCM (powertrain control module) electrical connectors.
- Repair:
  - corrosion (install new connector or terminals – clean module pins)
  - damaged or bent pins – install new terminals/pins
  - pushed-out pins – install new pins as necessary
- Reconnect all PCM (powertrain 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?

Yes	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,  Guided Routine available in the on-line Workshop Manual.

diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs) and carry out a self-test of the SOBDMC (secondary on-board diagnostic control module C) . The SOBDMC (secondary on-board diagnostic control module C) self-test requests the climate control systems to activate. **DTC Fault Trigger Conditions**

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
ACCM (air conditioning control module) P0562:00	System Voltage Low: No Sub Type Information	This DTC (diagnostic trouble code) sets when the ACCM (air conditioning control module) detects low voltage system voltage is below 8.5 volts. The A/C (air conditioning) electric compressor motor is stopped. A/C doesn't work.
ACCM (air conditioning control module) P0563:00	System Voltage High: No Sub Type Information	This DTC (diagnostic trouble code) sets when the ACCM (air conditioning control module) detects low voltage system voltage is above 16.5 volts. The A/C (air conditioning) electric compressor motor is stopped. A/C doesn't work.
ACCM (air conditioning control module) P0AFA:16	Hybrid/EV Battery System Voltage Low: Circuit Voltage Below Threshold	This DTC (diagnostic trouble code) sets when the ACCM (air conditioning control module) detects high voltage system voltage drops below 100 volts. The A/C (air conditioning) electric compressor motor is stopped. A/C doesn't work.
ACCM (air conditioning control module) P0AFB:17	Hybrid/EV Battery System Voltage High: Circuit Voltage Above Threshold	This DTC (diagnostic trouble code) sets when the ACCM (air conditioning control module) detects High voltage system voltage greater than 494 volts. The A/C (air conditioning) electric compressor motor is stopped. A/C doesn't work.
ACCM (air conditioning control module) P0AFB:1C	Hybrid/EV Battery System Voltage High: Circuit Voltage Out Of Range	This DTC (diagnostic trouble code) sets when the ACCM (air conditioning control module) detects High voltage system voltage greater than 650 volts. The A/C (air conditioning) electric compressor motor is stopped. A/C doesn't work.
ACCM (air conditioning control module) B11EE:19	A/C Compressor: Circuit Current Above Threshold	This DTC (diagnostic trouble code) sets when the ACCM (air conditioning control module) detects excessive current on the low voltage circuit. The A/C

SOBDMC (secondary on-board diagnostic control module C) P2D42:00	A/C Compressor 'A' Motor Voltage 'B' Low: No Sub Type Information	Test fails when ACCM (air conditioning control module) indicates motor voltage "B" fault.
SOBDMC (secondary on-board diagnostic control module C) P2D44:00	A/C Compressor 'A' Motor Performance: No Sub Type Information	Test fails when ACCM (air conditioning control module) indicates motor performance fault.

Possible Sources

- Low refrigerant charge
- Network concerns
- Fuse
- Wiring, terminals or connectors
- ACCM (air conditioning control module) [A/C (air conditioning) electric compressor]

W1 CHECK THE AIR CONDITIONING (A/C) SYSTEM PRESSURE

NOTE

Static refrigerant pressure, under perfect conditions, should approximately reflect ambient air temperature. Do not rely upon the static refrigerant pressure alone to determine if the system is properly charged. Refer to the current Ford Web Based Technical Training courses for basic HVAC system refrigerant operation.

- Ignition OFF.
- Connect the appropriate manifold gauge set.
- Check for minimum A/C (air conditioning) system pressure.

Is the A/C (air conditioning) system pressure above 290 kPa (42 psi)?

Yes	GO to W2

No	CHECK the A/C (air conditioning) system for leaks. GO to Pinpoint Test AN

W2 CHECK THE COMMUNICATION NETWORK

No	DIAGNOSE the A/C (air conditioning) pressure transducer. GO to Pinpoint Test A

W4 CARRY OUT THE DCDC (DIRECT CURRENT/DIRECT CURRENT CONVERTER CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, carry out the DCDC (direct current/direct current converter control module) self-test.

Are any DCDC (direct current/direct current converter control module) Diagnostic Trouble Codes (DTCs) present?

Yes	DIAGNOSE the DCDC (direct current/direct current converter control module) Diagnostic Trouble Codes (DTCs). REFER to: Direct Current/Direct Current (DC/DC) Converter Control Module - Electric (414-05 Voltage Converter/Inverter, Diagnosis and Testing).

No	GO to W5

W5 CARRY OUT THE BECM (BATTERY ENERGY CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, carry out the BECM (battery energy control module) self-test.

Are any BECM (battery energy control module) Diagnostic Trouble Codes (DTCs) present?

Yes	DIAGNOSE the BECM (battery energy control module) Diagnostic Trouble Codes (DTCs). REFER to: High Voltage Battery, Mounting and Cables - Electric (414-03A High Voltage Battery, Mounting and Cables, Diagnosis and Testing).

No	GO to W6

W6 RECHECK THE ACCM (AIR CONDITIONING CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

WARNING

Access the ACCM (air conditioning control module) and monitor the MAINECUV (Main ECU voltage supply) (V) PID (parameter identification)

.

Is the voltage PID (parameter identification) between 9 volts and 16 volts?

Yes	GO to W10

No	GO to W8

W8 CHECK THE ACCM (AIR CONDITIONING CONTROL MODULE) LOW VOLTAGE SUPPLY CIRCUIT

NOTICE

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

- Ignition OFF.
- Disconnect ACCM (air conditioning control module) C1803A .
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C1803A-1	V	Ground

Is the voltage greater than 11 volts?

Yes	GO to W9

No	VERIFY BCMC (body control module C) fuse 8 (20A) 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.

W9 CHECK THE ACCM (AIR CONDITIONING CONTROL MODULE) GROUND CIRCUIT

wiring are identified by orange harness tape or orange wire covering. All high-voltage components are marked with high-voltage warning labels with a high-voltage symbol. Failure to follow these instructions may result in serious personal injury or death.

- Ignition OFF.
- De-energize (Depower) the High Voltage Battery system.
  REFER to: High Voltage System De-energizing - Full Hybrid Electric Vehicle (FHEV)(414-03A High Voltage Battery, Mounting and Cables, General Procedures).
- Disconnect ACCM (air conditioning control module) C1803B .
- Disconnect DCDC (direct current/direct current converter control module) C1457A .
- Measure:
  HEV (hybrid electric vehicle)

Positive Lead	Measurement / Action	Negative Lead
C1457A-1	Ω	C1803B-A
C1457A-4	Ω	C1803B-B

Are the resistances less than 3 ohms?

Yes	GO to W12
No	INSPECT the high voltage cable between the ACCM (air conditioning control module) and the DCDC (direct current/direct current converter control module) for signs of an obvious short condition. INSTALL new cable. REFER to: High Voltage Battery Cables - Electric (414-03A High Voltage Battery, Mounting and Cables, Removal and Installation). INSPECT the high voltage low current fuse, GO to W12

W12 CHECK THE HIGH VOLTAGE LOW CURRENT FUSE

WARNING

- Place vehicle in Ready to Drive mode.
- Using a diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Wait 10 seconds.
- Place vehicle in Ready to Drive mode.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	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 A/C (air conditioning) electric compressor. REFER to: Air Conditioning (A/C) Compressor - 3.5L V6 PowerBoost (CN) (412-00 Climate Control System - General Information, Removal and Installation).
No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.

PINPOINT TEST X : P2611:00, P2612:00, P2613:00

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

Normal Operation and Fault Conditions High voltage battery chiller shut off valve, REFER to: Supplemental Climate Control - System Operation and Component Description (412-03 Supplemental Climate Control, Description and Operation).

To validate repairs have been completed, using a diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs) and carry out a self-test of the SOBDMC (secondary on-board diagnostic control module C) . The SOBDMC (secondary on-board diagnostic control module C) self-test requests the climate control valve to actuate. **DTC Fault Trigger Conditions**

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
BCMC (body control module C) P2611:00	A/C Refrigerant Distribution Valve 'A' Control Circuit/Open: No Sub Type Information	Test fails when BCMC (body control module C) reports an open circuit on the battery chiller shut off valve control circuit

- Disconnect High voltage battery chiller C1980 .
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C1980-1	V⎓	Ground

Is any voltage present?

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

No	GO to X2

X2 CHECK THE HIGH VOLTAGE BATTERY CHILLER POWER CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C1980-1	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to X3

No	REPAIR the circuit. CLEAR all Diagnostic Trouble Codes (DTCs) and CARRY OUT the self-test of the SOBDMC (secondary on-board diagnostic control module C) .

	concern is still present, GO to X5

No	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) .

X5 CHECK FOR CORRECT BCMC (BODY CONTROL MODULE C) OPERATION

- Ignition OFF.
- Disconnect and inspect all BCMC (body control module C) 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 BCMC (body control module C) 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?

Yes	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 BCMC (body control module C) . REFER to: Body Control Module C (BCMC) (419-10 Multifunction Electronic Modules, Removal and Installation).

No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.

PINPOINT TEST Y : P0EE3:00, P0EE4:00, P0EE5:00

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

Normal Operation and Fault Conditions Front evaporator shut off valve, REFER to: Supplemental Climate Control - System Operation and Component Description