

# 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.

2004 FORD Taurus OEM Service and Repair Workshop Manual

Go to manual page

	the BCM (body control module) for more than 5
	seconds.

#### **Possible Sources**

- Network communication concern
- Wiring, terminals or connectors
- Over or undervoltage concerns
- ACCM (air conditioning control module)
- HVAC (heating, ventilation and air conditioning) control module
- BCM (body control module)

#### **AD1 VERIFY THE CONCERN**

- Ignition ON.
- Verify there is an observable symptom present.

## Is an observable symptom present?



No

CLEAR the DTC (diagnostic trouble code). The system is operating correctly at this time. The DTC (diagnostic trouble code) may have been set due to high network traffic or an intermittent fault condition.

#### **AD2 CHECK THE NETWORK COMMUNICATION**

Using a diagnostic scan tool, carry out the network test.

#### Does the BCM (body control module) pass the network test?

Yes GO to AD3

No

REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

#### AD3 CHECK FOR NON-NETWORK DIAGNOSTIC TROUBLE CODES (DTCS)

No

The system is operating correctly at this time. The DTC (diagnostic trouble code) may have been set due to high network traffic or an intermittent fault condition.

#### AD6 CHECK FOR OTHER CAUSES OF NETWORK COMMUNICATION CONCERN

#### NOTE

If new modules were installed prior to the Diagnostic Trouble Code (DTC) being set, the module configuration can be incorrectly set during the Programmable Module Installation (PMI) or the Programmable Module Installation (PMI) may not have been carried out.

- Check the vehicle service history for recent service actions related to the BCM (body control module) and the module in question ( ACCM (air conditioning control module) or HVAC (heating, ventilation and air conditioning) control module) setting the DTC (diagnostic trouble code). If recent service history is found:
  - verify correct replacement module was installed
    - vehicle parts build list may be used to verify correct part fitment
  - verify the configuration of replacement module was correct
    - re-configure module using as-built data if prior configuration is suspect
  - verify the module was not obtained from a like vehicle and installed into vehicle with concern
    - return the swapped module to source vehicle and obtain new replacement module
- Operate the system and determine if the observable symptom is still present.

#### Is the observable symptom still present?

Yes	GO to	AD7

No

The system is operating correctly at this time. The concern may have been due to incorrect parts replacement procedures or incorrect module configuration.

#### AD7 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:

• HVAC (heating, ventilation and air conditioning) control module

#### **AE1 VERIFY THE CUSTOMER CONCERN**

- Ignition ON.
- Verify there is an observable symptom present.

## Is an observable symptom present?

No

CLEAR the DTC (diagnostic trouble code). The system is operating normally at this time. The DTC (diagnostic trouble code) may have been set due to high network traffic or an intermittent fault condition.

#### **AE2 CHECK THE COMMUNICATION NETWORK**

• Using a diagnostic scan tool, carry out the network test.

## Does the RCM (restraints control module) pass the network test?

Yes	GO to	AE3

DIAGNOSE the RCM (restraints control module) does not communicate with the diagnostic scan tool.

No

REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

# AE3 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE RCM (RESTRAINTS CONTROL MODULE) SELF-TEST

• Using a diagnostic scan tool, carry out the RCM (restraints control module) self-test.

#### Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes

REFER to: Airbag Supplemental Restraint System (SRS)(501-20B Supplemental Restraint System, Diagnosis and Testing).

#### **NOTE**

If new modules were installed prior to the Diagnostic Trouble Code (DTC) being set, the module configuration can be incorrectly set during the Programmable Module Installation (PMI) or the Programmable Module Installation (PMI) may not have been carried out.

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Ignition ON.
- Wait 10 seconds.
- Using a diagnostic scan tool, carry out the HVAC (heating, ventilation and air conditioning) control module self-test.

#### Is DTC (diagnostic trouble code) U0151:00 still present?



No

CLEAR the DTC (diagnostic trouble code). The system is operating correctly at this time. The DTC (diagnostic trouble code) may have been set due to high network traffic or an intermittent fault condition.

#### AE6 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0151:00 SET IN OTHER MODULES

- Using a diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Ignition ON.
- Wait 10 seconds.
- Using a diagnostic scan tool, retrieve all continuous memory Diagnostic Trouble Codes (DTCs).

#### Is DTC (diagnostic trouble code) U0151:00 set in other modules on the network?



#### AE7 CHECK FOR CORRECT RCM (RESTRAINTS CONTROL MODULE) OPERATION

#### 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 HVAC (heating, ventilation and air conditioning) control module.

REFER to: Heating, Ventilation and Air Conditioning (HVAC) Control Module (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 AF: U0155:00**

Refer to Wiring Diagrams Cell 55for schematic and connector information.

Normal Operation and Fault Conditions With the ignition ON, the IPC (instrument panel cluster) sends messages to the HVAC (heating, ventilation and air conditioning) control module over the MS-CAN (medium speed-controller area network). If the HVAC (heating, ventilation and air conditioning) control module does not receive these messages within the specified time frame, the module sets a DTC (diagnostic trouble code). This can be due to an IPC (instrument panel cluster) failure, a circuit failure on the MS-CAN (medium speed-controller area network) or an excessive load on the network. For information on the messages sent to the HVAC (heating, ventilation and air conditioning) control module by the IPC (instrument panel cluster), REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) - System Operation and Component Description

(412-00 Climate Control System - General Information, Description and Operation).

#### **DTC Fault Trigger Conditions**

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
HVAC (heating, ventilation and air conditioning) U0155:00	Lost Communication With Instrument Panel Cluster (IPC) Control Module: No Sub Type Information	If data messages received from the IPC (instrument panel cluster) over the MS-CAN (medium speed-controller area network) are missing for 5 seconds or more.

#### **Possible Sources**

Yes

REFER to: Instrumentation, Message Center and Warning Chimes(413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).

No

GO to AF4

## AF4 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE (HVAC) HEATING, VENTILATION AND AIR CONDITIONING CONTROL MODULE SELF-TEST

Using a diagnostic scan tool, carry out the HVAC (heating, ventilation and air conditioning) control
module self-test.

Is DTC (diagnostic trouble code) U3003:16 or DTC (diagnostic trouble code) U3003:17 recorded?

Yes	For U3003:16	GO to Pinpoint Test AM For U3003:17	GO to Pinpoint Test AN
		•	

No GO to AF5

# AF5 RECHECK THE (HVAC) HEATING, VENTILATION AND AIR CONDITIONING CONTROL MODULE DIAGNOSTIC TROUBLE CODES (DTCS)

#### **NOTE**

If new modules were installed prior to the Diagnostic Trouble Code (DTC) being set, the module configuration can be incorrectly set during the Programmable Module Installation (PMI) or the Programmable Module Installation (PMI) may not have been carried out.

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Ignition ON.
- Wait 10 seconds.
- Using a diagnostic scan tool, carry out the HVAC (heating, ventilation and air conditioning) control module self-test.

#### Is DTC (diagnostic trouble code) U0155:00 still present?

(413-01 Instrumentation, Message Center and Warning Chimes, 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.

## AF8 CHECK FOR CORRECT HVAC (HEATING, VENTILATION AND AIR CONDITIONING) CONTROL MODULE OPERATION

- Ignition OFF.
- Disconnect and inspect all HVAC (heating, ventilation and air conditioning) control module electrical connectors.
- Repair:
  - o corrosion (install new connector or terminal clean module pins)
  - o damaged or bent pins install new terminals or pins
  - o pushed-out pins install new pins as necessary
- Connect all HVAC (heating, ventilation and air conditioning) 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, INSTALL a new HVAC (heating, ventilation and air conditioning) control module.

REFER to: Heating, Ventilation and Air Conditioning (HVAC) Control Module (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 AG: U0253:00**

Refer to Wiring Diagrams Cell 55for schematic and connector information.

No

DIAGNOSE the APIM (SYNC module) does not communicate with the diagnostic scan tool, REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

## AG3 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE APIM (SYNC MODULE) SELF-TEST

• Using a diagnostic scan tool, carry out the APIM (SYNC module) self-test.

#### Are any Diagnostic Trouble Codes (DTCs) recorded?

No GO to AG4

## AG4 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE (HVAC) HEATING, VENTILATION AND AIR CONDITIONING CONTROL MODULE SELF-TEST

Using a diagnostic scan tool, carry out the HVAC (heating, ventilation and air conditioning) control
module self-test.

Is DTC (diagnostic trouble code) U3003:16 or DTC (diagnostic trouble code) U3003:17 recorded?

**Yes** For U3003:16 GO to Pinpoint Test AM For U3003:17 GO to Pinpoint Test AN

No GO to AG5

# AG5 RECHECK THE (HVAC) HEATING, VENTILATION AND AIR CONDITIONING CONTROL MODULE DIAGNOSTIC TROUBLE CODES (DTCS)

#### **NOTE**

If new modules were installed prior to the Diagnostic Trouble Code (DTC) being set, the module configuration can be incorrectly set during the Programmable Module Installation (PMI) or the

- o pushed-out pins install new pins as necessary
- Connect APIM (SYNC module) electrical connector. Make sure it seats and latches 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 APIM (SYNC module).

REFER to: SYNC Module [APIM] - Vehicles With: 8 Inch Center Display Screen/12 Inch Center Display Screen

(415-00 Information and Entertainment 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.

## AG8 CHECK FOR CORRECT HVAC (HEATING, VENTILATION AND AIR CONDITIONING) CONTROL MODULE OPERATION

- Ignition OFF.
- Disconnect and inspect all HVAC (heating, ventilation and air conditioning) control module electrical connectors.
- Repair:
  - o corrosion (install new connector or terminal clean module pins)
  - o damaged or bent pins install new terminals or pins
  - o pushed-out pins install new pins as necessary
- Connect all HVAC (heating, ventilation and air conditioning) 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, INSTALL a new HVAC (heating, ventilation and air conditioning) control module.

REFER to: Heating, Ventilation and Air Conditioning (HVAC) Control Module