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2012 FORD Mondeo Wagon OEM Service and Repair Workshop Manual

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- Check the recorded Diagnostic Trouble Codes (DTCs) from the RCM (restraints control module) self-test.

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

Yes	GO to Pinpoint Test BD

No	GO to AT4

AT4 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE BCM (BODY CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform BCM (body control module) self-test.
- Check for recorded Diagnostic Trouble Codes (DTCs) from the BCM (body control module) self-test.

Is BCM (body control module) DTC (diagnostic trouble code) U3003:16 or U3003:17 recorded?

Yes	REFER to: Body Control Module (BCM)(419-10 Multifunction Electronic Modules, Diagnosis and Testing).

No	GO to AT5

AT5 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0140:00 SET IN OTHER MODULES

- Ignition ON.
- Using a diagnostic scan tool, perform self-test for all modules.

Is DTC (diagnostic trouble code) U0140:00 set in the ABS (anti-lock brake system) Module or in the IPC (instrument panel cluster) ?

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).

> **NOTE**
>
> Most faults are due to connector and/or wiring concerns. Carry out a thorough inspection and verification before proceeding with the pinpoint test.

> **NOTE**
>
> SRS (supplemental restraint system) 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 (supplemental restraint system) .

> **NOTE**
>
> Always make sure the correct SRS (supplemental restraint system) 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 (supplemental restraint system) component is installed, Diagnostic Trouble Codes (DTCs) may set.

> **NOTE**
>
> The SRS (supplemental restraint system) must be fully operational and free of faults before releasing the vehicle to the customer.

AU1 CHECK THE COMMUNICATION NETWORK

- > **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.

- Ignition ON.
- Using a diagnostic scan tool, carry out a network test.

Does the GWM (gateway module A) pass the network test?

| Yes | GO to AU2 |

AU4 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE GWM (GATEWAY MODULE A) SELF-TEST

- Using a diagnostic scan tool, perform GWM (gateway module A) self-test.
- Check for recorded Diagnostic Trouble Codes (DTCs) from the GWM (gateway module A) self-test.

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

Yes	GO to Pinpoint Test BD

No	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 GWM (gateway module A) . REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing). REPEAT the RCM (restraints control module) self-test. If DTC (diagnostic trouble code) U0146:00 returns, INSTALL a new RCM (restraints control module) . REFER to: Restraints Control Module (RCM) (501-20B Supplemental Restraint System, Removal and Installation).

PINPOINT TEST AV : U0154:00

Normal Operation and Fault Conditions

REFER to: Airbag and Seatbelt Pretensioner Supplemental Restraint System (SRS) - System Operation and Component Description(501-20B Supplemental Restraint System, Description and Operation).

The RCM (restraints control module) uses information contained in messages from the OCSM (occupant classification system module) sent on the HS-CAN2 (high-speed controller area network 2) .

DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
RCM (restraints control module) U0154:00	Lost Communication with Restraints Occupant Classification	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not

The SRS (supplemental restraint system) must be fully operational and free of faults before releasing the vehicle to the customer.

AV1 CHECK THE COMMUNICATION NETWORK

- > **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.

- Ignition ON.
- Using a diagnostic scan tool, carry out a network test.

Does the OCSM (occupant classification system module) pass the network test?

Yes	GO to AV2

No	To diagnose no communication with the OCSM (occupant classification system module) , REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

AV2 CHECK THE RCM (RESTRAINTS CONTROL MODULE) CONTINUOUS MEMORY DIAGNOSTIC TROUBLE CODES (CMDTCS)

- Ignition ON.
- Using a diagnostic scan tool, perform RCM (restraints control module) self-test.
- Using a diagnostic scan tool, clear RCM (restraints control module) Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Using a diagnostic scan tool, perform RCM (restraints control module) self-test.

Is DTC (diagnostic trouble code) U0154:00 retrieved again?

Yes	GO to AV3

REFER to: Occupant Classification System (OCS) Sensor - Vehicles With: Multi-Contour Seats (501-20B Supplemental Restraint System, Removal and Installation).
or REFER to: Occupant Classification System (OCS) Sensor - Vehicles Without: Multi-Contour Seats (501-20B Supplemental Restraint System, Removal and Installation).

PINPOINT TEST AW : U023B:00

Normal Operation and Fault Conditions

REFER to: Airbag and Seatbelt Pretensioner Supplemental Restraint System (SRS) - System Operation and Component Description(501-20B Supplemental Restraint System, Description and Operation).

The RCM (restraints control module) uses information contained in messages from the IPMA (image processing module A) sent on the HS-CAN2 (high-speed controller area network 2) . The functions of the IPMB (image processing module B) are now contained in the IPMA (image processing module A) .

DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
RCM (restraints control module) U023B:00	Lost Communication With Image Processing Module B: No Sub Type Information	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the IPMA (image processing module A) .

Possible Sources
- Network traffic
- IPMA (image processing module A)
- RCM (restraints control module)

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WARNING

</div>

Do not handle, move or change the original horizontal mounting position of the Restraints Control Module (RCM) while the Restraints Control Module (RCM) is connected and the ignition switch is ON. Failure to follow this instruction may result in the accidental deployment of the Safety Canopy® and cause serious personal injury or death.

No	To diagnose no communication with the IPMA (image processing module A) , REFER to: Controller Area Network (CAN) Module Communications Network (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).

AW2 CHECK THE RCM (RESTRAINTS CONTROL MODULE) CONTINUOUS MEMORY DIAGNOSTIC TROUBLE CODES (CMDTCS)

- Ignition ON.
- Using a diagnostic scan tool, perform RCM (restraints control module) self-test.
- Using a diagnostic scan tool, clear RCM (restraints control module) Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Using a diagnostic scan tool, perform RCM (restraints control module) self-test.

Is DTC (diagnostic trouble code) U023B:00 retrieved again?

Yes	GO to AW3

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.

AW3 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE RCM (RESTRAINTS CONTROL MODULE) SELF-TEST

- Check the recorded Diagnostic Trouble Codes (DTCs) from the RCM (restraints control module) self-test.

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

Yes	GO to Pinpoint Test BD

No	GO to AW4

PINPOINT TEST AX : U0253:00

Normal Operation and Fault Conditions

REFER to: [Airbag and Seatbelt Pretensioner Supplemental Restraint System (SRS) - System Operation and Component Description](#)(501-20B Supplemental Restraint System, Description and Operation).

The RCM (restraints control module) uses information contained in messages from the APIM (SYNC module) sent on the HS-CAN2 (high-speed controller area network 2) .

DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
RCM (restraints control module) U0253:00	Lost Communication With Accessory Protocol Interface Module: No Sub Type Information	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the APIM (SYNC module) .

Possible Sources

- Network traffic
- APIM (SYNC module)
- RCM (restraints control module)

WARNING

Do not handle, move or change the original horizontal mounting position of the Restraints Control Module (RCM) while the Restraints Control Module (RCM) is connected and the ignition switch is ON. Failure to follow this instruction may result in the accidental deployment of the Safety Canopy® and cause serious personal injury or death.

NOTE

Most faults are due to connector and/or wiring concerns. Carry out a thorough inspection and verification before proceeding with the pinpoint test.

NOTE

- Using a diagnostic scan tool, clear RCM (restraints control module) Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Using a diagnostic scan tool, perform RCM (restraints control module) self-test.

Is DTC (diagnostic trouble code) U0253:00 retrieved again?

Yes	GO to AX3

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.

AX3 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE RCM (RESTRAINTS CONTROL MODULE) SELF-TEST

- Check for recorded Diagnostic Trouble Codes (DTCs) from the RCM (restraints control module) self-test.

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

Yes	GO to Pinpoint Test BD

No	GO to AX4

AX4 RETRIEVE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE APIM (SYNC MODULE) SELF-TEST

- Using a diagnostic scan tool, perform APIM (SYNC module) self-test.
- Check for recorded Diagnostic Trouble Codes (DTCs) from the APIM (SYNC module) self-test.

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

Yes	REFER to the appropriate section in 415-00 to DIAGNOSE the battery voltage Diagnostic Trouble Codes (DTCs). Refer to the appropriate section in Group 415for the procedure.

No	GO to AX5

module) sends configuration data to the RCM (restraints control module) and the RCM (restraints control module) compares the message to the message that was received during the very first ignition cycle. **DTC Fault Trigger Conditions**

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
RCM (restraints control module) U0401:00	Invalid Data Received from ECM/PCM A: No Sub Type Information	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the PCM (powertrain control module) .
RCM (restraints control module) U0401:81	Invalid Data Received from ECM/PCM A: Invalid Serial Data Received	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the PCM (powertrain control module)
RCM (restraints control module) U0415:00	Invalid Data Received from Anti-Lock Brake System (ABS) Control Module 'A': No Sub Type Information	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the ABS (anti-lock brake system) control module.
RCM (restraints control module) U0415:81	Invalid Data Received from Anti-Lock Brake System (ABS) Control Module 'A': Invalid Serial Data Received	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the ABS (anti-lock brake system) control module.
RCM (restraints control module) U0420:00	Invalid Data Received from Power Steering Control Module 'A': No Sub Type Information	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the BCM (body control module) .
RCM (restraints control module) U0422:00	Invalid Data Received From Body Control Module: No Sub Type Information	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the BCM (body control module) .
RCM (restraints control module) U0422:56	Invalid Data Received From Body Control Module: Invalid/Incompatible Configuration	This DTC (diagnostic trouble code) sets if the RCM (restraints control module) does not receive an expected message from the BCM (body control module) .