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2010 FORD Fiesta 5 Doors OEM Service and Repair Workshop Manual

Go to manual page

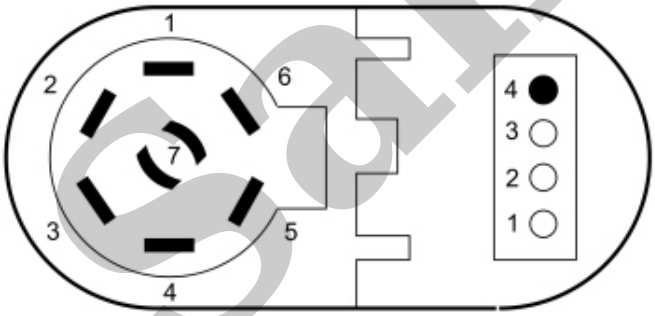
- Trailer tow connector
- BCMC (body control module C) (also known as the BJB (battery junction box))
- Trailer concern

Visual Inspection and Pre-checks

- Verify the BCMC (body control module C) (also known as the BJB (battery junction box)) fuse 58 (10A) is OK.
- Inspect the trailer tow connector for signs of corrosion or damage. Repair or install a new trailer tow connector as required.

E1 CHECK FOR VOLTAGE THROUGH THE TRAILER TOW CONNECTOR

- Ignition OFF.
- Disconnect: Trailer.
- Apply the parking brake.
- Ignition ON.
- Place the gear selector lever in REVERSE.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
 E181986 7-Pin Connector, Pin 7	V	Ground

- Place the gear selector lever in PARK.
- Measure:

Positive Lead	Measurement /	Negative

C4099-7	V	Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new trailer tow connector. TEST the system for normal operation.

No	VERIFY the BCMC (body control module C) (also known as the BJB (battery junction box)) fuse 58 (10A) is OK. If OK, GO to E3 If not OK, REFER to the Wiring Diagrams manual to identify the possible causes of the circuit short.

E3 CHECK THE TRAILER TOW REVERSING LAMPS RELAY ENERGIZE CIRCUIT FOR VOLTAGE

- Place the gear selector lever in PARK.
- Ignition OFF.
- Disconnect: BCMC (body control module C) (also known as the BJB (battery junction box)) C1035C.
- Apply the parking brake.
- Ignition ON.
- Place the gear selector lever in the REVERSE.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C1035C-22	V	Ground

Is the voltage greater than 11 volts?

Yes	GO to E4

No	GO to E5

E4 CHECK THE TRAILER TOW REVERSING LAMPS RELAY GROUND CIRCUIT

- Measure:

Positive Lead	Measurement / Action	Negative Lead
C2280G-19	Ω	C1035C-22

Is the resistance less than 3 ohms?

Yes	GO to E11

No	REPAIR the circuit.

E7 CHECK THE TRAILER TOW REVERSING LAMPS RELAY OUTPUT CIRCUIT FOR AN OPEN

- Measure:

Positive Lead	Measurement / Action	Negative Lead
C4099-7	Ω	C1035C-10

Is any voltage present?

Yes	REPAIR the circuit.

No	INSTALL a new BCMC (body control module C) (also known as the BJB (battery junction box)). REFER to: Body Control Module C (BCMC) (419-10 Multifunction Electronic Modules, Removal and Installation).

E8 CHECK THE TRAILER TOW REVERSING LAMPS RELAY OUTPUT CIRCUIT FOR A SHORT TO VOLTAGE

- Place the headlamp switch in the OFF position.

E10 CHECK THE TRAILER TOW REVERSING LAMPS RELAY ENERGIZE CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect: BCM (body control module) C2280G.
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C1035C-22	V	Ground

Is any voltage present?

Yes	REPAIR the circuit.

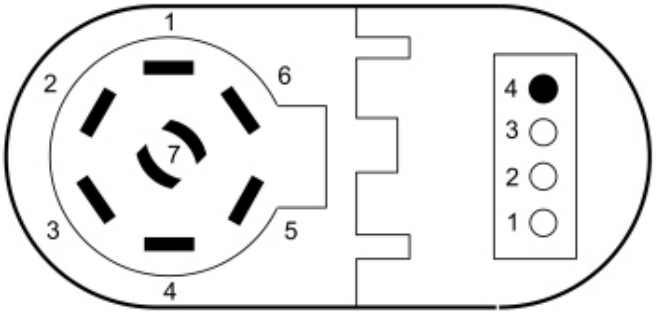
No	GO to E11

E11 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM (body control module) 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 the BCM (body 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?

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).

Positive Lead	Measurement / Action	Negative Lead
 E181986 7-Pin Connector, Pin 5	V	Ground

Is the voltage greater than 11 volts?

Yes	The vehicle is operating correctly. SEND the trailer to an authorized camper/trailer repair facility.

No	GO to F2

F2 CHECK FOR VOLTAGE TO THE TRAILER TOW CONNECTOR (VEHICLE HARNESS)

- Ignition OFF.
- Disconnect: Trailer Tow C4099.
- Ignition ON.
- Using a diagnostic scan tool, view the TRM (trailer module) Parameter Identifications (PIDs).
- Access the TRM (trailer module) and control the PWR_PT_RLY (Power Point Output Relay) PID (parameter identification)
- Command the Power Point Output Relay active command ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead

C2498C-12	Ω	C4099-5

Is the resistance less than 3 ohms?

Yes	GO to F5

No	REPAIR the circuit.

F5 CHECK FOR CORRECT TRM (TRAILER MODULE) OPERATION

- Disconnect and inspect all TRM (trailer module) 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 the TRM (trailer 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?

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 TRM (trailer module) . REFER to: Trailer Module (TRM) (417-01 Exterior Lighting, 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.

PINPOINT TEST G : U0100:87

- Wait 10 seconds.
- Repeat the TRM (trailer module) self-test.

Is DTC (diagnostic trouble code) U0100:87 set again?

Yes	GO to G3

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.

G3 PERFORM THE PCM (POWERTRAIN CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform the PCM (powertrain control module) KOEO (key on, engine off) and KOER (key on, engine running) self-test.

Are any PCM (powertrain control module) Diagnostic Trouble Codes (DTCs) recorded?

Yes	Diagnose the PCM (powertrain control module) Diagnostic Trouble Codes (DTCs). Refer to the appropriate section in Group 303for the procedure.

No	GO to G4

G4 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0100:87

- Using a diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Ignition ON.
- Wait 10 seconds.
- Using a diagnostic scan tool, perform the continuous memory self-test.
- Retrieve the Continuous Memory Diagnostic Trouble Codes (CMDTCs) from all modules.

Is DTC (diagnostic trouble code) U0100:87 set in the ABS (anti-lock brake system) module?

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

No	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.

H2 CHECK THE COMMUNICATION NETWORK

- Using a diagnostic scan tool, perform the network test.

Does the ABS (anti-lock brake system) module pass the network test?

Yes	GO to H3

No	REFER to: Exterior Lighting - System Operation and Component Description(417-01 Exterior Lighting, Description and Operation).

H3 PERFORM THE ABS (ANTI-LOCK BRAKE SYSTEM) MODULE SELF-TEST

- Using a diagnostic scan tool, perform the ABS (anti-lock brake system) module self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Anti-Lock Brake System (ABS) and Stability Control(206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).

No	GO to H4

H4 RECHECK THE TRM (TRAILER MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

NOTE

If new modules were installed prior to the DTC (diagnostic trouble code) being set, the module configuration may be incorrectly set during the PMI (programmable module installation) , or the PMI (programmable module installation) may not have been carried out.

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Repeat the TRM (trailer module) self-test.

TRM (trailer module) Continuous U0131:87	Lost Communication With Power Steering Control Module 'A': Missing Message	A continuous memory DTC (diagnostic trouble code) that sets in continuous memory if the TRM (trailer module) does not receive data messages from the PSCM (power steering control module) module are missing for 5 seconds or longer.

Possible Sources

- Communication concern
- Battery voltage concern
- PSCM (power steering control module)
- TRM (trailer module)
-

I1 VERIFY THE CUSTOMER CONCERN

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

Is an observable symptom present?

Yes	GO to I2

No	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.

I2 CHECK THE COMMUNICATION NETWORK

- Using a diagnostic scan tool, perform the network test.

Does the PSCM (power steering control module) pass the network test?

Yes	GO to I3

No	REFER to: Exterior Lighting - System Operation and Component Description(417-01 Exterior Lighting, Description and Operation).