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.

1992 FORD Fiesta 5 Doors OEM Service and Repair Workshop Manual

Go to manual page

LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1021-1	V	Ground

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1041-1	V	Ground

Is the voltage greater than 11 volts?

Yes	GO to A15

No	GO to A12

A12 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE HEADLAMP LOW BEAM CIRCUIT

- Place the headlamp switch in the OFF position.
- Using a diagnostic scan tool, perform the BCM (body control module) self-test.
- Clear the Diagnostic Trouble Codes (DTCs) and repeat the self-test (required to enable the lamp output driver).
- Ignition OFF.
- Ignition ON.
- Place the headlamp switch in the HEADLAMPS position.
- Measure:

  LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead

C1041-1	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to A14

No	REPAIR the circuit. After the repair: If no Diagnostic Trouble Codes (DTCs) are present, TEST the system for normal operation. If any BCM (body control module) Diagnostic Trouble Codes (DTCs) other than DTC (diagnostic trouble code) U3000:49 are present, CLEAR the Diagnostic Trouble Codes (DTCs), REPEAT the self-test (required to enable the lamp output driver) and cycle the ignition OFF and ON. TEST the system for normal operation. If DTC (diagnostic trouble code) U3000:49 is present, INSTALL a new BCM (body control module). REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).

A14 CHECK THE LOW BEAM CIRCUIT FOR AN OPEN

- Measure:
  LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1021-1	Ω	C2280G-4

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1041-1	Ω	C2280G-2

- Disconnect and inspect all BCM (body control module) and all related in-line 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) and all related in-line 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).

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 B : ONE OR BOTH LOW BEAMS IS INOPERATIVE OR ALWAYS ON - LED (LIGHT EMITTING DIODE) HEADLAMPS

Refer to Wiring Diagrams Cell 85for schematic and connector information.

Normal Operation and Fault Conditions REFER to: Exterior Lighting - Overview
(417-01 Exterior Lighting, Description and Operation).
REFER to: Exterior Lighting - System Operation and Component Description
(417-01 Exterior Lighting, Description and Operation).

DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
BCM (body control module)	Exterior Lamps Power Supply 'C': Circuit Short To	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control

BCM (body control module) B1D00:11	Left Low Beam: Circuit Short To Ground	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a short to ground from the LH (left-hand) low beam output circuit.
BCM (body control module) B1D00:15	Left Low Beam: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) detects an open from the LH (left-hand) low beam output circuit.
BCM (body control module) B1D01:11	Right Low Beam: Circuit Short To Ground	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a short to ground from the RH (right-hand) low beam output circuit.
BCM (body control module) B1D01:15	Right Low Beam: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) detects an open from the RH (right-hand) low beam output circuit.

Possible Sources

- Wiring, terminals or connectors
- LED (light emitting diode) control module
- Headlamp assembly
- BCM (body control module)
- BCMC (body control module C) (also known as the BJB (battery junction box))

Visual Inspection and Pre-checks

- Verify the BCMC (body control module C) (also known as the BJB (battery junction box)) fuse 100 (15A) (LH (left-hand) headlamp) and fuse 101 (15A) (RH (right-hand) headlamp) is OK.
- Inspect the headlamp assembly for damage.

B1 CHECK LOW BEAMS OPERATION

- Ignition ON.
- Place the headlamp switch in the OFF position.
- Observe the operation of the LH (left-hand) and RH (right-hand) low beam.
- Place the headlamp switch in the HEADLAMPS position.
- Observe the operation of the LH (left-hand) and RH (right-hand) low beam.

Are either of low beams always illuminated?

No	GO to B9

B4 CHECK THE HEADLAMP SWITCH VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect: Headlamp Switch C205.
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C205-6	V	Ground

Is the voltage greater than 11 volts?

Yes	GO to B5

No	VERIFY the BCM (body control module) fuse 19 (5A) is OK. If OK, REPAIR the circuit. If not OK, REFER to the Wiring Diagram manual to identify the possible causes of the circuit short.

B5 CHECK THE HEADLAMP SWITCH GROUND CIRCUIT FOR AN OPEN

- Measure:

Positive Lead	Measurement / Action	Negative Lead
C205-6	V	C205-1

Is the voltage greater than 11 volts?

Yes	GO to B6

No	REMOVE the fused jumper wire. GO to B8

B8 CHECK THE LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C2280B-49	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	INSTALL a new headlamp switch. REFER to: Headlamp Switch (417-01 Exterior Lighting, Removal and Installation). TEST the system for normal operation. If the low beams continue to illuminate, GO to B9

No	REPAIR the circuit.

B9 CHECK THE LOW BEAM CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect: BCM (body control module) C2280G.
- Disconnect: LH (left-hand) Headlamp C1284 or RH (right-hand) Headlamp C1285.
- Ignition ON.
- Measure:

  LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-1	V	Ground

C1035C-1	Ω	Ground

Is the resistance less than 3 ohms?

Yes	GO to B24

No	REPAIR the circuit.

B12 CHECK FOR VOLTAGE TO THE HEADLAMP LED (LIGHT EMITTING DIODE) CONTROL MODULE

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: LH (left-hand) Headlamp C1284 or RH (right-hand) Headlamp C1285.
- Ignition ON.
- Measure:

LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-8	V	Ground

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1285-8	V	Ground

Is the voltage greater than 11 volts?

Yes	GO to B17

No	GO to B14

B14 CHECK THE HEADLAMP RELAY ENERGIZE CIRCUIT FOR A SHORT TO GROUND

- Place the gear selector lever in PARK.
- Ignition OFF.
- Disconnect: BCM (body control module) C2280G.
- Measure:
  LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C2280G-11	Ω	Ground

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C2280G-6	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to B15

No	REPAIR the circuit.

B15 CHECK THE HEADLAMP RELAY ENERGIZE CIRCUIT FOR AN OPEN

- Measure:
  LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead

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).

B17 CHECK FOR VOLTAGE FROM THE HEADLAMP LOW BEAM CIRCUIT

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: LH (left-hand) Headlamp C1284 or RH (right-hand) Headlamp C1285.
- Ignition ON.
- Place the headlamp switch in the HEADLAMPS position.
- Measure:

LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-1	V	Ground

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1285-1	V	Ground

Is the voltage greater than 11 volts?

Yes	GO to B21