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2006 FORD Fiesta 5 Doors OEM Service and Repair Workshop Manual

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Stoplamps

417-01 Exterior Lighting	2022 F-150
Diagnosis and Testing	Procedure revision date: 06/24/2022

Stoplamps

Diagnostic Trouble Code (DTC) Chart

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#)

(100-00 General Information, Description and Operation).

Diagnostic Trouble Code Chart

Module	DTC (diagnostic trouble code)	Description	Action
BCM (body control module)	B1115:11	High Mounted Stop Lamp Control: Circuit Short To Ground	GO to Pinpoint Test B
BCM (body control module)	B1115:15	High Mounted Stop Lamp Control: Circuit Short To Battery Or Open	GO to Pinpoint Test B
BCM (body control module)	B1115:15	High Mounted Stop Lamp Control: Circuit Short To Battery Or Open	GO to Pinpoint Test C
BCM (body control module)	B1247:11	Left Rear Turn Indicator: Circuit Short To Ground	GO to Pinpoint Test B
BCM (body control module)	B1247:15	Left Rear Turn Indicator: Circuit Short To Battery or Open	GO to Pinpoint Test B

Global Customer Symptom Code (GCSC) Chart

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#)

(100-00 General Information, Description and Operation).

Global Customer Symptom Code Chart

Customer Symptom	Action
Lighting/Glass/Vision > Exterior Lighting > Stop > Inoperative	GO to Pinpoint Test A
Lighting/Glass/Vision > Exterior Lighting > Stop > Inoperative	GO to Pinpoint Test B
Lighting/Glass/Vision > Exterior Lighting > Stop > Stays On	GO to Pinpoint Test C
Lighting/Glass/Vision > Exterior Lighting > Center High Mount Stop (CHMSL) > Inoperative	GO to Pinpoint Test A
Lighting/Glass/Vision > Exterior Lighting > Center High Mount Stop (CHMSL) > Inoperative	GO to Pinpoint Test B
Lighting/Glass/Vision > Exterior Lighting > Center High Mount Stop (CHMSL) > Stays On	GO to Pinpoint Test C

Symptom Chart(s)

Symptom Chart: Stoplamps

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#)

(100-00 General Information, Description and Operation).

Symptom Chart

Condition	Possible Sources	Actions
A module does not respond to the diagnostic	<ul style="list-style-type: none">Fuse	REFER to: Exterior Lighting - System Operation and Component Description (417-01 Exterior Lighting,

- 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	<p>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) .</p> <p>REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).</p>
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No	<p>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.</p>
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PINPOINT TEST B : ONE OR MORE STOPLAMPS ARE INOPERATIVE

Refer to Wiring Diagrams Cell 90 for 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) B1115:11	High Mounted Stop Lamp control: 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 high mounted stoplamp voltage supply circuit.

BCM (body control module) B1448:15	Right Rear Stop/Position Lamp Output: 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 or short to voltage from the right RH (right-hand) stoplamp voltage supply circuit.
BCM (body control module) B14A0:11	Left Tailgate/Liftgate Lamps: 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) rear stoplamp voltage supply circuit.
BCM (body control module) B14A0:15	Left Tailgate/Liftgate Lamps: 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 or short to voltage from the LH (left-hand) rear stoplamp voltage supply circuit.
BCM (body control module) B14A1:11	Right Tailgate/Liftgate Lamps: 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 right RH (right-hand) stoplamp voltage supply circuit.
BCM (body control module) B14A1:15	Right Tailgate/Liftgate Lamps: 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 or short to voltage from the right RH (right-hand) stoplamp voltage supply circuit.

Possible Sources

- Bulb (incandescent rear lamps only)
- Wiring, terminals or connectors
- Rear lamp assembly (LED (light emitting diode) rear lamps only)
- High mounted stoplamp
- BCM (body control module)

B1 IDENTIFY THE INOPERATIVE STOPLAMP

- Ignition ON.
- Apply the brake pedal and observe the rear and high mounted stoplamps.

Is only an individual stoplamp inoperative?

Yes	For the high mounted stoplamp, GO to B3 For a rear lamp stoplamp, GO to B8
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No

REPAIR the circuit.


B3 CHECK FOR VOLTAGE TO THE HIGH MOUNTED STOPLAMP

- Ignition OFF.
- Disconnect: Incandescent High Mounted Stoplamp C904.
- Disconnect: LED (light emitting diode) High Mounted Stoplamp C9030 (without 360 camera).
- Disconnect: LED (light emitting diode) High Mounted Stoplamp C9125 (without 360 camera).
- Ignition ON.
- While applying the brake pedal, measure:


Incandescent High Mounted Stoplamp

Positive Lead	Measurement / Action	Negative Lead
C904-3		Ground

LED (light emitting diode) High Mounted Stoplamp Without 360 Camera

Positive Lead	Measurement / Action	Negative Lead
C9030-3		Ground

LED (light emitting diode) High Mounted Stoplamp With 360 Camera

Positive Lead	Measurement / Action	Negative Lead
C9125-8		Ground

Is the voltage greater than 11 volts?

Yes

GO to [B5](#)

high mounted stoplamp, INSTALL a new high mounted stoplamp.

REFER to: [High Mounted Stoplamp](#)

(417-01 Exterior Lighting, Removal and Installation).


No

GO to [B6](#)


B5 CHECK THE HIGH MOUNTED STOPLAMP GROUND CIRCUIT FOR AN OPEN

- While applying the brake pedal, measure:


Incandescent High Mounted Stoplamp

Positive Lead	Measurement / Action	Negative Lead
C904-3		C904-1

LED (light emitting diode) High Mounted Stoplamp Without 360 Camera

Positive Lead	Measurement / Action	Negative Lead
C9030-3		C9030-1

LED (light emitting diode) High Mounted Stoplamp With 360 Camera

Positive Lead	Measurement / Action	Negative Lead
C9125-8		C9125-6

Is the voltage greater than 11 volts?

Yes

For an incandescent high mounted stoplamp, INSTALL a new high mounted stoplamp bulb.

For LED (light emitting diode)

high mounted stoplamp, INSTALL a new high mounted stoplamp.

No

REPAIR the circuit. After the repair:

If no Diagnostic Trouble Codes (DTCs) are present, TEST the system for normal operation.

If DTC (diagnostic trouble code)

U1000:00 is present, CLEAR the Diagnostic Trouble Codes (DTCs) and REPEAT the self-test (required to enable the lamp output driver if DTC (diagnostic trouble code)

U1000:00 is present).

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).

B7 CHECK THE HIGH MOUNTED STOPLAMP SUPPLY CIRCUIT FOR AN OPEN

- Measure:

Incandescent High Mounted Stoplamp


Positive Lead	Measurement / Action	Negative Lead
C904-3	Ω	C2280E-13

LED (light emitting diode) High Mounted Stoplamp Without 360 Camera


Positive Lead	Measurement / Action	Negative Lead
C9030-3	Ω	C2280E-13

LED (light emitting diode) High Mounted Stoplamp With 360 Camera


Positive Lead	Measurement / Action	Negative Lead
C9125-8	Ω	C2280E-13

Positive Lead	Measurement / Action	Negative Lead
C412A-3		Ground


LH (left-hand) Lower Stop Lamp

Positive Lead	Measurement / Action	Negative Lead
C412A-1		Ground

RH (right-hand) Upper Stop Lamp


Positive Lead	Measurement / Action	Negative Lead
C415A-3		Ground

RH (right-hand) Lower Stop Lamp

Positive Lead	Measurement / Action	Negative Lead
C415A-1		Ground

- For LED (light emitting diode) rear lamps, while applying the brake pedal, measure:


LH (left-hand) Stop Lamp

Positive Lead	Measurement / Action	Negative Lead
C4483-2		Ground


RH (right-hand) Stop Lamp

- For incandescent rear lamps equipped with BLIS (blind spot information system) , while applying the brake pedal, measure:


LH (left-hand) Upper Stop Lamp

Positive Lead	Measurement / Action	Negative Lead
C412A-3		Ground


LH (left-hand) Lower Stop Lamp

Positive Lead	Measurement / Action	Negative Lead
C412A-1		Ground

RH (right-hand) Upper Stop Lamp

Positive Lead	Measurement / Action	Negative Lead
C415A-3		Ground

RH (right-hand) Lower Stop Lamp

Positive Lead	Measurement / Action	Negative Lead
C415A-1		Ground

- For LED (light emitting diode) rear lamps, while applying the brake pedal, measure:

LH (left-hand) Stop Lamp

Positive Lead	Measurement / Action	Negative Lead