

DTC	Description	Action <i>New: hover over Pinpoint Test links to show title</i>
U3000:49	Control Module: Internal Electronic Failure	The module has permanently disabled an output because an excessive current draw fault (such as a short to ground) has exceeded the limits that the BCM can withstand. The cause of the excessive current draw MUST be corrected before a new BCM is installed. ADDRESS all other Diagnostic Trouble Codes (DTCs) first. After the cause of the concern is corrected, Click here to access Guided Routine (BCM) . For additional information on BCM Field Effect Transistor (FET) protection, REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).
For other BCM Diagnostic Trouble Codes (DTCs)	-	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).

Symptom Charts

Symptom Chart: Parking, Rear and License Plate Lamps

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).

Condition	Possible Sources	Actions
A module does not respond to the diagnostic scan tool	- Fuse - Wiring, terminals or connectors - Module	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).
One or more parking, signature, rear or license plate lamps are inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test A
The parking, rear or license plate lamps are on continuously	Refer to the Pinpoint Test	GO to Pinpoint Test B
One fascia mounted signature lamp is brighter than the other	Refer to the Pinpoint Test	GO to Pinpoint Test B
One or more front LED daytime running lamp/front parking lamp is inoperative or does not dim if DRL are active - mid and high series headlamps only	Refer to the Pinpoint Test	GO to Pinpoint Test A

Pinpoint Tests

[PINPOINT TEST A : ONE OR MORE PARKING, SIGNATURE, REAR OR LICENSE PLATE LAMPS ARE INOPERATIVE](#)

Refer to Wiring Diagrams Cell [92](#) 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	Description	Fault Trigger Condition
BCM B109B:11	License Plate Light: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the rear parking lamps output circuit to the LH and RH rear lamps and, if equipped, the LH and RH reversing lamps.
BCM B109B:15	License Plate Light: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the rear parking lamps output circuit to the LH and RH rear lamps and, if equipped, the LH and RH reversing lamps.
BCM B10F3:11	Left front position light: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the LH front parking lamps output circuit.
BCM B10F3:15	Left front position light: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the LH front parking lamps output circuit.
BCM B10F4:11	Right front position light: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the RH front parking lamps output circuit.
BCM B10F4:15	Right front position light: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the RH front parking lamps output circuit.
BCM B1445:11	Rear Park Lamps Output: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the license plate lamps output circuit.
BCM B1445:15	Rear Park Lamps Output: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the license plate lamps output circuit.
BCM B1446:11	Front Park Lamps Output: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the rear parking lamps output circuit to the LH and RH rear lamps and, if equipped, the LH and RH reversing lamps.
BCM B1446:15	Front Park Lamps Output: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the rear parking lamps output circuit to the LH and RH rear lamps and, if equipped, the LH and RH reversing lamps.
BCM B149E:11	Left Front Position/Sidemarkers: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the LH front parking lamps output circuit.
BCM B149E:15	Left Front Position/Sidemarkers: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the LH front parking lamps output circuit.
BCM B149F:11	Right Front Position/Sidemarkers: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the RH front parking lamps output circuit.
BCM B149F:15	Right Front Position/Sidemarkers: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the RH front parking lamps output circuit.
BCM B14B2:11	Left Position Lamps: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the LH front parking lamps output circuit.
BCM B14B2:15	Left Position Lamps: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the LH front parking lamps output circuit.

BCM B14B3:11	Right Position Lamps: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the RH front parking lamps output circuit.
BCM B14B3:15	Right Position Lamps: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the RH front parking lamps output circuit.
BCM U1000:00	Solid State Driver Protection Active - Driver Disabled: No Sub Type Information	This DTC sets when the BCM has temporarily shut down the output driver. The module has temporarily disabled an output because an excessive current draw exists (such as a short to ground). The BCM cannot enable the output until the cause of the short is corrected, the Diagnostic Trouble Codes (DTCs) have been cleared and a successful self-test is run. For additional information on BCM Field Effect Transistor (FET) protection, REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).
BCM U3000:49	Control Module: Internal Electronic Failure	This DTC sets when the BCM has permanently shut down the output driver. The module has permanently disabled an output because an excessive current draw fault (such as a short to ground) has exceeded the limits that the BCM can withstand. CORRECT the cause of the excessive current draw before installing a new BCM. For additional information on BCM Field Effect Transistor (FET) protection, REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).

Possible Sources

- Bulb
- Wiring, terminals or connectors
- Headlamp assembly
- Rear lamp assembly
- BCM

A1 DETERMINE IF ALL THE PARKING LAMPS ARE INOPERATIVE

- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.

Are all the parking lamps inoperative?

Yes	GO to A22
No	For base series headlamps, if the side marker lamp and front parking lamp is inoperative, GO to A2 For mid and high series headlamps, if the side marker lamp and front LED daytime running lamp/front parking lamp is inoperative or does not dim if the DRL are active, INSTALL a new headlamp assembly. GO to A2 If only a front side marker lamp is inoperative, INSTALL a new headlamp assembly. REFER to: Headlamp Assembly (417-01 Exterior Lighting, Removal and Installation). For base series headlamps, if only a front parking lamp is inoperative and the side marker lamp operates correctly, INSTALL a new front park/turn bulb. REFER to: Front Turn Signal Lamp Bulb (417-01 Exterior Lighting, Removal and Installation). For mid and high series headlamps, if only a front LED daytime running lamp/front parking lamp is inoperative or does not dim if the DRL are active and the side marker lamp operates correctly, INSTALL a new headlamp assembly. REFER to: Headlamp Assembly (417-01 Exterior Lighting, Removal and Installation). If both license plate lamps and the liftgate parking lamp (part of the reversing lamp assembly) are inoperative, REPAIR the license plate and liftgate parking lamps ground circuit for an open. If both license plate lamps only are inoperative, GO to A8 If one license plate lamps are inoperative, VERIFY the license plate bulb(s) are OK. INSTALL new bulb(s) if necessary. If the bulb(s) are OK, REPAIR the liftgate moulding wiring harness. If the harness can not be repaired, INSTALL a new liftgate moulding. REFER to: Liftgate Moulding (501-08 Exterior Trim and Ornamentation, Removal and Installation). If one of the rear parking lamps or liftgate parking lamps (part of the reversing lamp assembly) is inoperative, GO to A19 If all of the rear parking lamps and liftgate parking lamps (part of the reversing lamp assembly) is inoperative, GO to A13

A2 CHECK FOR VOLTAGE TO THE FRONT PARKING LAMPS

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: Inoperative LH Headlamp [C1284](#) or RH Headlamp [C1285](#).
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

HEADLAMP ASSEMBLY LH	
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LH Front Side Marker And Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C1284-1		Ground

HEADLAMP ASSEMBLY RH	
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RH Front Side Marker And Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C1285-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to A4
No	GO to A3

A3 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE FRONT PARKING LAMPS

- Place the headlamp switch in the OFF position.
- Using a diagnostic scan tool, perform the BCM 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 PARKING LAMPS position.
- Measure:

HEADLAMP ASSEMBLY LH	
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LH Front Side Marker And Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C1284-1		Ground

HEADLAMP ASSEMBLY RH	
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RH Front Side Marker And Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C1285-1		Ground

Is the voltage greater than 11 volts?

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Yes	For base series headlamps, INSTALL a new front park/turn lamp bulb. REFER to: Front Turn Signal Lamp Bulb (417-01 Exterior Lighting, Removal and Installation). For mid and high series headlamps, GO to A7
No	GO to A5

A4 CHECK THE FRONT PARKING LAMP GROUND CIRCUIT FOR AN OPEN

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- Measure:

HEADLAMP ASSEMBLY LH

LH Front Side Marker And Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C1284-1		C1284-9
C1284-1		C1284-12
C1284-1		C1284-16

HEADLAMP ASSEMBLY RH

RH Front Side Marker And Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C1285-1		C1285-9
C1285-1		C1285-12
C1285-1		C1285-16

Does the voltage greater than 11 volts?

Yes	For base series headlamps, INSTALL a new front park/turn lamp bulb. REFER to: Front Turn Signal Lamp Bulb (417-01 Exterior Lighting, Removal and Installation). For mid and high series headlamps, GO to A7
No	REPAIR the circuit in question.

A5 CHECK THE FRONT PARKING LAMP SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: BCM [C2280C](#).
- Measure:

HEADLAMP ASSEMBLY LH	BODY CONTROL MODULE (BCM)
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LH Front Side Marker And Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C1284-1	Ω	C2280C-30

HEADLAMP ASSEMBLY RH	BODY CONTROL MODULE (BCM)
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RH Front Side Marker And Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C1285-1	Ω	C2280C-37

Is the resistance less than 3 ohms?

Yes	GO to A6
No	REPAIR the circuit.

A6 CHECK THE FRONT PARKING LAMP SUPPLY CIRCUIT FOR A SHORT TO GROUND

- Measure:

HEADLAMP ASSEMBLY LH	
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LH Front Side Marker And Parking Lamp

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

HEADLAMP ASSEMBLY RH	
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RH Front Side Marker And Parking Lamp

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

Is the resistance greater than 10,000 ohms?

Yes	GO to A22
No	REPAIR the circuit. After the repair: If no Diagnostic Trouble Codes (DTCs) are present, TEST the system for normal operation. If DTC U1000:00 is present, CLEAR the Diagnostic Trouble Codes (DTCs) and REPEAT the self-test (required to enable the lamp output driver if DTC U1000:00 is present). If DTC U3000:49 is present, ☐ Click here to access Guided Routine (BCM) .

A7 CHECK FOR LED (LIGHT EMITTING DIODE) FRONT PARKING LAMP OPERATION

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Connect: Inoperative LH Headlamp [C1284](#) or RH Headlamp [C1285](#).
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	INSTALL a new headlamp assembly. REFER to: Headlamp Assembly (417-01 Exterior Lighting, Removal and Installation).
No	The system is operating correctly at this time. The concern may have been caused by headlamp connections. ADDRESS the root cause of any connector or pin issues.

A8 CHECK FOR VOLTAGE TO THE LICENSE PLATE LAMP

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: Rear Parking Aid Camera (license plate lamp) [C4357](#).
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

REAR PARKING AID CAMERA	
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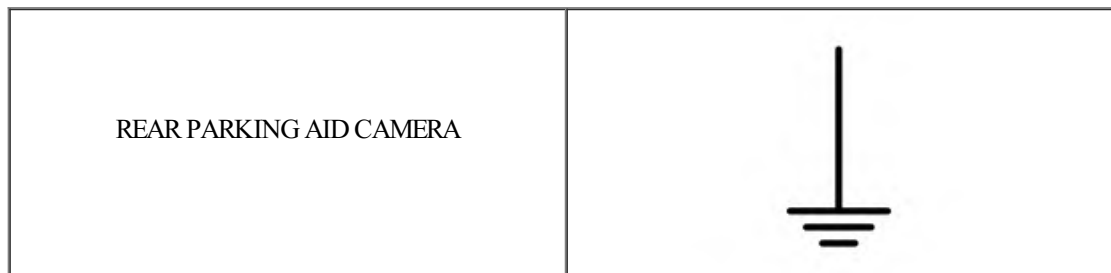
Positive Lead	Measurement / Action	Negative Lead
C4357-7		Ground

Is the voltage greater than 11 volts?

Yes	GO to A10
No	GO to A9

A9 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE LICENSE PLATE LAMP

- Place the headlamp switch in the OFF position.
- Using a diagnostic scan tool, perform the BCM 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 PARKING LAMPS position.
- Measure:



Positive Lead	Measurement / Action	Negative Lead
C4357-7		Ground

Is the voltage greater than 11 volts?

Yes	REPAIR the liftgate moulding wiring harness. If the harness can not be repaired, INSTALL a new liftgate moulding. REFER to: Liftgate Moulding (501-08 Exterior Trim and Ornamentation, Removal and Installation).
No	GO to A11

A10 CHECK THE LICENSE PLATE LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

REAR PARKING AID CAMERA

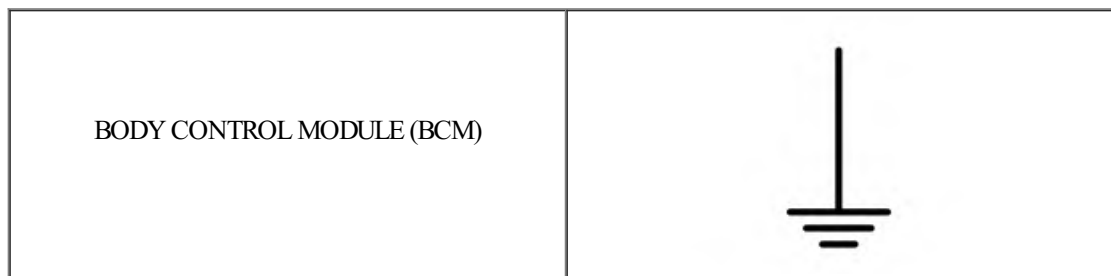
Positive Lead	Measurement / Action	Negative Lead
C4357-7		C4357-8

Is the voltage greater than 11 volts?

Yes	REPAIR the liftgate moulding wiring harness. If the harness can not be repaired, INSTALL a new liftgate moulding. REFER to: Liftgate Moulding (501-08 Exterior Trim and Ornamentation, Removal and Installation).
No	REPAIR the circuit.

A11 CHECK THE LICENSE PLATE LAMP SUPPLY CIRCUIT FOR A SHORT TO GROUND

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: BCM [C2280F](#).
- Measure:



Positive Lead	Measurement / Action	Negative Lead
C2280F-12	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to A12
No	REPAIR the circuit. After the repair: If no Diagnostic Trouble Codes (DTCs) are present, TEST the system for normal operation. If DTC U1000:00 is present, CLEAR the Diagnostic Trouble Codes (DTCs) and REPEAT the self-test (required to enable the lamp output driver if DTC U1000:00 is present). If DTC U3000:49 is present, ☐ Click here to access Guided Routine (BCM) .

A12 CHECK THE LICENSE PLATE LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Measure:

REAR PARKING AID CAMERA	BODY CONTROL MODULE (BCM)
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Reversing Lamp

Positive Lead	Measurement / Action	Negative Lead
C4357-7		C2280F-12

Is the resistance less than 3 ohms?

Yes	GO to A22
No	REPAIR the circuit.

A13 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE LH (LEFT-HAND) REAR PARKING LAMP

- Place the headlamp switch in the OFF position.
- Using a diagnostic scan tool, perform the BCM self-test.
- Clear the Diagnostic Trouble Codes (DTCs) and repeat the self-test (required to enable the lamp output driver).
- Ignition OFF.
- Disconnect: LH Rear Lamp [C412](#).
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:



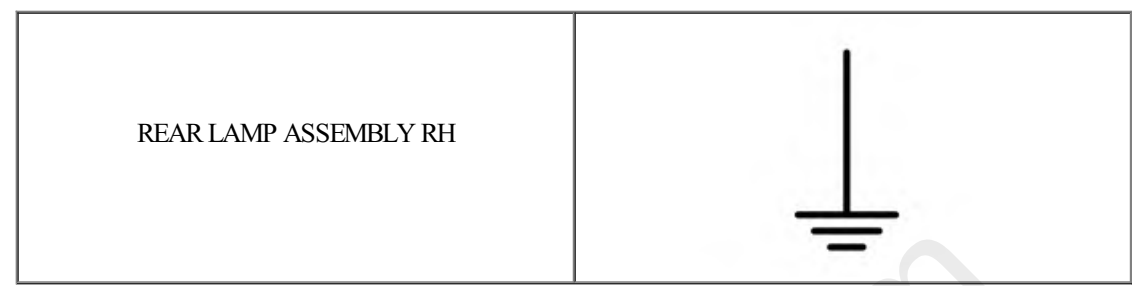
Positive Lead	Measurement / Action	Negative Lead
C412-4		Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new LH rear lamp assembly. REFER to: Rear Lamp Assembly (417-01 Exterior Lighting, Removal and Installation).
No	GO to A14

A14 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE RH (RIGHT-HAND) REAR PARKING LAMP

- Place the headlamp switch in the OFF position.
- Using a diagnostic scan tool, perform the BCM self-test.
- Clear the Diagnostic Trouble Codes (DTCs) and repeat the self-test (required to enable the lamp output driver).
- Ignition OFF.
- Disconnect: RH Rear Lamp [C415](#).
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:



Positive Lead	Measurement / Action	Negative Lead
C415-4		Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new RH rear lamp assembly. REFER to: Rear Lamp Assembly (417-01 Exterior Lighting, Removal and Installation).
No	For vehicles without 12 speaker audio system, GO to A17 For vehicles with 12 speaker audio system, GO to A15

A15 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE LH (LEFT-HAND) REVERSING LAMP

- Place the headlamp switch in the OFF position.
- Using a diagnostic scan tool, perform the BCM self-test.
- Clear the Diagnostic Trouble Codes (DTCs) and repeat the self-test (required to enable the lamp output driver).
- Ignition OFF.
- Disconnect: LH Reversing Lamp [C4113](#).
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

PARK/STOP/TURN LAMP 2, LEFT REAR	
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Positive Lead	Measurement / Action	Negative Lead
C4113-2		Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new LH reversing lamp. REFER to: Reversing Lamp (417-01 Exterior Lighting, Removal and Installation).
No	GO to A16

A16 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE RH (RIGHT-HAND) REVERSING LAMP

- Place the headlamp switch in the OFF position.
- Using a diagnostic scan tool, perform the BCM self-test.
- Clear the Diagnostic Trouble Codes (DTCs) and repeat the self-test (required to enable the lamp output driver).
- Ignition OFF.
- Disconnect: RH Reversing Lamp [C4114](#).
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

PARK/STOP/TURN LAMP 1, RIGHT REAR	
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Positive Lead	Measurement / Action	Negative Lead
C4114-2		Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new RH reversing lamp. REFER to: Reversing Lamp (417-01 Exterior Lighting, Removal and Installation).
No	GO to A17

A17 CHECK VOLTAGE CIRCUIT TO THE REAR PARKING LAMP FOR A SHORT TO GROUND

- Measure:

REAR LAMP ASSEMBLY LH	
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Positive Lead	Measurement / Action	Negative Lead
C412-4	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to A18
No	REPAIR the circuit. After the repair: If no Diagnostic Trouble Codes (DTCs) are present, TEST the system for normal operation. If DTC U1000:00 is present, CLEAR the Diagnostic Trouble Codes (DTCs) and REPEAT the self-test (required to enable the lamp output driver if DTC U1000:00 is present). If DTC U3000:49 is present, ☐ Click here to access Guided Routine (BCM) .

A18 CHECK THE REAR PARKING LAMPS SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: BCM [C2280B](#).
- Measure:

REAR LAMP ASSEMBLY LH	BODY CONTROL MODULE (BCM)
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LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C412-4	Ω	C2280B-3

Is the resistance less than 3 ohms?

Yes	GO to A22
No	REPAIR the circuit.

A19 CHECK THE FOR VOLTAGE TO THE REAR PARKING LAMP OR LIFTGATE PARKING LAMP (PART OF THE REVERSING LAMP ASSEMBLY)

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: Inoperative LH Rear Lamp [C412](#) or RH Rear Lamp [C415](#).
- Disconnect: For vehicles with 12 speaker audio system, inoperative LH Reverse Lamp [C4113](#) or RH Reverse Lamp [C4114](#).
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

REAR LAMP ASSEMBLY LH	
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LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C412-4		Ground

REAR LAMP ASSEMBLY RH	
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RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C415-4		Ground

PARK/STOP/TURN LAMP 2, LEFT REAR	
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LH Reversing Lamp

Positive Lead	Measurement / Action	Negative Lead
C4113-2		Ground

PARK/STOP/TURN LAMP 1, RIGHT REAR	
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RH Reversing Lamp

Positive Lead	Measurement / Action	Negative Lead
C412-4		C412-5

A20 CHECK THE REAR PARKING LAMP (PART OF THE REVERSING LAMP ASSEMBLY) GROUND CIRCUIT

- Measure:

Is the voltage greater than 11 volts? REAR LAMP ASSEMBLY LH

Yes	GO to A20
No	GO to A21

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C412-4		C412-5

REAR LAMP ASSEMBLY RH

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C415-4		C415-5

PARK/STOP/TURN LAMP 2, LEFT REAR

LH Reversing Lamp

Positive Lead	Measurement / Action	Negative Lead
C4113-2		C4113-3

PARK/STOP/TURN LAMP 1, RIGHT REAR

RH Reversing Lamp

Positive Lead	Measurement / Action	Negative Lead
C4114-2		C4114-3

Is the voltage greater than 11 volts?

Yes	For inoperative rear parking lamp, INSTALL a new rear lamp assembly. REFER to: Rear Lamp Assembly (417-01 Exterior Lighting, Removal and Installation). For inoperative reversing lamp parking lamp, INSTALL a new reversing lamp. REFER to: Reversing Lamp (417-01 Exterior Lighting, Removal and Installation).
No	REPAIR the circuit.

A21 CHECK THE REAR PARKING LAMP SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: BCM [C2280B](#).
- Measure:

REAR LAMP ASSEMBLY LH	BODY CONTROL MODULE (BCM)
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LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C412-4	Ω	C2280B-3

REAR LAMP ASSEMBLY RH	BODY CONTROL MODULE (BCM)
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RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C415-4	Ω	C2280B-3

PARK/STOP/TURN LAMP 2, LEFT REAR	BODY CONTROL MODULE (BCM)
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LH Reversing Lamp

Positive Lead	Measurement / Action	Negative Lead
C4113-2	Ω	C2280B-3

PARK/STOP/TURN LAMP 1, RIGHT REAR	BODY CONTROL MODULE (BCM)
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RH Reversing Lamp

Positive Lead	Measurement / Action	Negative Lead
C4114-2	Ω	C2280B-3

Is the resistance less than 3 ohms?

Yes	GO to A22
No	REPAIR the circuit.

A22 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM 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 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 for any applicable service articles: TSB, GSB, SSM or FSA. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, Click here to access Guided Routine (BCM) .
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 : THE PARKING, REAR OR LICENSE PLATE LAMPS ARE ON CONTINUOUSLY

Refer to Wiring Diagrams Cell [92](#) 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	Description	Fault Trigger Condition
BCM B109B:15	License Plate Light: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the rear parking lamps output circuit to the LH and RH rear lamps and, if equipped, the LH and RH reversing lamps.
BCM B10F3:15	Left front position light: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the LH front parking lamps output circuit.
BCM B10F4:15	Right front position light: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the RH front parking lamps output circuit.
BCM B1445:15	Rear Park Lamps Output: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the license plate lamps output circuit.
BCM B1446:15	Front Park Lamps Output: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the rear parking lamps output circuit to the LH and RH rear lamps and, if equipped, the LH and RH reversing lamps.
BCM B149E:15	Left Front Position/Sidemarkers: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the LH front parking lamps output circuit.
BCM B149F:15	Right Front Position/Sidemarkers: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the RH front parking lamps output circuit.
BCM B14B2:15	Left Position Lamps: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the LH front parking lamps output circuit.
BCM B14B3:15	Right Position Lamps: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the RH front parking lamps output circuit.

Possible Sources

- Wiring, terminals or connectors
- Low beams concern
- BCM

B1 CHECK LOW BEAM HEADLAMP OPERATION

- Ignition ON.
- Place the headlamp switch in the OFF position.
- Observe the operation of the LH and RH low beams.

Are the low beams illuminated?

Yes	REFER to: Headlamps (417-01 Exterior Lighting, Diagnosis and Testing).
No	GO to B2

B2 CHECK THE BCM (BODY CONTROL MODULE) PARKING LAMP OUTPUT CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect: BCM [C2280B](#) (For rear parking and liftgate parking lamps).
- Disconnect: BCM [C2280C](#) (For front parking and side marker lamps).
- Disconnect: BCM [C2280F](#) (For license plate lamps).
- Ignition ON.

Do the parking lamps continue to illuminate?

Yes	REPAIR the affected circuit.
No	GO to B3

B3 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM 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 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 for any applicable service articles: TSB, GSB, SSM or FSA. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, Click here to access Guided Routine (BCM) .
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.

Reversing Lamps

DTC Charts

DTC Chart: BCM

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).

DTC	Description	Action <i>New: hover over Pinpoint Test links to show title</i>
B1277:11	Reverse Lamp: Circuit Short To Ground	GO to Pinpoint Test A
B1277:15	Reverse Lamp: Circuit Short To Battery or Open	- If the reversing lamps are is inoperative, GO to Pinpoint Test A - If the reversing lamps are always on, GO to Pinpoint Test C
U1000:00	Solid State Driver Protection Active -Driver Disabled: No Sub Type Information	The module has temporarily disabled an output because an excessive current draw exists (such as a short to ground). The BCM cannot enable the output until the cause of the short is corrected. ADDRESS all other Diagnostic Trouble Codes (DTCs) first. After the cause of the concern is corrected, CLEAR the Diagnostic Trouble Codes (DTCs). REPEAT the self-test. For additional information on BCM Field Effect Transistor (FET) protection, REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).
U3000:49	Control Module: Internal Electronic Failure	The module has permanently disabled an output because an excessive current draw fault (such as a short to ground) has exceeded the limits that the BCM can withstand. The cause of the excessive current draw MUST be corrected before a new BCM is installed. ADDRESS all other Diagnostic Trouble Codes (DTCs) first. After the cause of the concern is corrected, Click here to access Guided Routine (BCM) . For additional information on BCM Field Effect Transistor (FET) protection, REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).
For other BCM Diagnostic Trouble Codes (DTCs)	-	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).

Symptom Charts

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: Reversing Lamps

Condition	Possible Sources	Actions
A module does not respond to the diagnostic scan tool	- Fuse - Wiring, terminals or connectors - Module	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).
Both reversing lamps are inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test A

Condition	Possible Sources	Actions
An individual reversing lamp is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test B
The reversing lamps are on continuously	Refer to the Pinpoint Test	GO to Pinpoint Test C

Pinpoint Tests

PINPOINT TEST A : BOTH REVERSING LAMPS ARE INOPERATIVE

Refer to Wiring Diagrams Cell [93](#) 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	Description	Fault Trigger Condition
BCM B1277:11	Reverse Lamp: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the reversing lamps output circuit.
BCM B1277:15	Reverse Lamp: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the reversing lamps output circuit.
BCM U1000:00	Solid State Driver Protection Active -Driver Disabled: No Sub Type Information	This DTC sets when the BCM has temporarily shut down the output driver. The module has temporarily disabled an output because an excessive current draw exists (such as a short to ground). The BCM cannot enable the output until the cause of the short is corrected, the Diagnostic Trouble Codes (DTCs) have been cleared and a successful self-test is run. For additional information on BCM Field Effect Transistor (FET) protection, REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).
BCM U3000:49	Control Module: Internal Electronic Failure	This DTC sets when the BCM has permanently shut down the output driver. The module has permanently disabled an output because an excessive current draw fault (such as a short to ground) has exceeded the limits that the BCM can withstand. CORRECT the cause of the excessive current draw before installing a new BCM. For additional information on BCM Field Effect Transistor (FET) protection, REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).

Possible Sources

- Wiring, terminals or connectors
- Gear range concern
- BCM

A1 CHECK THE REVERSE GEAR PID (PARAMETER IDENTIFICATION)