

Parking, Rear and License Plate Lamps

DTC Chart: Body Control Module (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 Chart

DTC	Description	Action <i>New: hover over Pinpoint Test links to show title</i>
B10F3:11	Left Front Position Light: Circuit Short to Ground	GO to Pinpoint Test F
B10F3:15	Left Front Position Light: Circuit Short to Battery or Open	GO to Pinpoint Test F
B10F4:11	Right Front Position Light: Circuit Short to Ground	GO to Pinpoint Test F
B10F4:15	Right Front Position Light: Circuit Short to Battery or Open	GO to Pinpoint Test F
B1445:11	Rear Park Lamps Output: Circuit Short to Ground	- For vehicles not equipped with a bed, GO to Pinpoint Test I - For vehicles equipped with bed and incandescent rear lamps, GO to Pinpoint Test J - For vehicles equipped with bed and LED rear lamps, GO to Pinpoint Test K
B1445:15	Rear Park Lamps Output: Circuit Short to Battery or Open	- For vehicles not equipped with a bed, if the lamps are inoperative, GO to Pinpoint Test I - For vehicles equipped with bed and incandescent rear lamps, if the lamps are inoperative, GO to Pinpoint Test J - For vehicles equipped with bed and LED rear lamps, if the lamps are inoperative, GO to Pinpoint Test K - If the lamps are always on, GO to Pinpoint Test L
B1446:11	Front Park Lamps Output: Circuit Short To Ground	GO to Pinpoint Test B
B1446:15	Front Park Lamps Output: Circuit Short To Battery or Open	- If the lamps are inoperative, GO to Pinpoint Test B - If the lamps are always on, GO to Pinpoint Test C
B1447:11	Parklamp On Switch Input: Circuit Short to Ground	GO to Pinpoint Test A
B149E:11	Left Front Position/Sidemarkers: Circuit Short To Ground	GO to Pinpoint Test F
B149E:15	Left Front Position/Sidemarkers: Circuit Short To Battery or Open	GO to Pinpoint Test F
B149F:11	Right Front Position/Sidemarkers: Circuit Short To Ground	GO to Pinpoint Test F
B149F:15	Right Front Position/Sidemarkers: Circuit Short To Battery or Open	GO to Pinpoint Test F

DTC	Description	Action <i>New: hover over Pinpoint Test links to show title</i>
B14A2:11	Tailgate/Liftgate Applique Lamps: Circuit Short To Ground	- For vehicles not equipped with a bed, GO to Pinpoint Test I - For vehicles equipped with bed and incandescent rear lamps, GO to Pinpoint Test J - For vehicles equipped with bed and LED rear lamps, GO to Pinpoint Test K
B14A2:15	Tailgate/Liftgate Applique Lamps: Circuit Short To Battery or Open	- For vehicles not equipped with a bed, if the lamps are inoperative, GO to Pinpoint Test I - For vehicles equipped with bed and incandescent rear lamps, if the lamps are inoperative, GO to Pinpoint Test J - For vehicles equipped with bed and LED rear lamps, if the lamps are inoperative, GO to Pinpoint Test K - If the lamps are always on, GO to Pinpoint Test L
B14B2:11	Left Position Lamps: Circuit Short To Ground	GO to Pinpoint Test F
B14B2:15	Left Position Lamps: Circuit Short To Battery or Open	GO to Pinpoint Test F
B14B3:11	Right Position Lamps: Circuit Short To Ground	GO to Pinpoint Test F
B14B3:15	Right Position Lamps: Circuit Short To Battery or Open	GO to Pinpoint Test F
For other BCM Diagnostic Trouble Codes (DTCs)	-	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).

Symptom Chart(s)

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).

Symptom Chart

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).
All the parking lamps are always on	Refer to the Pinpoint Test	GO to Pinpoint Test A
All front parking and, if equipped, roof marker bed side marker and rear bed marker lamps are inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test B
All front parking and, if equipped, roof marker bed side marker and rear bed marker lamps are always on	Refer to the Pinpoint Test	GO to Pinpoint Test C
An individual front parking lamp is inoperative - halogen headlamps	Refer to the Pinpoint Test	GO to Pinpoint Test D

Condition	Possible Sources	Actions
An individual front parking lamp is inoperative - LED headlamps	Refer to the Pinpoint Test	GO to Pinpoint Test E
An individual front side marker lamp is inoperative or always on - halogen headlamps	Refer to the Pinpoint Test	GO to Pinpoint Test F
An individual front side marker lamp is inoperative - LED headlamps	Refer to the Pinpoint Test	Install a new headlamp assembly. REFER to: Headlamp Assembly (417-01 Exterior Lighting, Removal and Installation).
One or more roof marker lamps only are inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test G
One or more bed side marker and bed rear marker lamps only are inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test H
One or both rear parking lamps and both exterior mirror parking lamps (if equipped) are inoperative - vehicles not equipped with a bed	Refer to the Pinpoint Test	GO to Pinpoint Test I
An individual or all rear parking and/or license plate lamps are inoperative - vehicles equipped with bed and incandescent rear lamps	Refer to the Pinpoint Test	GO to Pinpoint Test J
An individual or all rear parking and/or license plate lamps are inoperative - vehicles equipped with bed and LED rear lamps	Refer to the Pinpoint Test	GO to Pinpoint Test K
All rear parking, license plate and exterior mirror parking (if equipped) lamps are always on	Refer to the Pinpoint Test	GO to Pinpoint Test L
All rear parking, license plate and, if equipped, bed side marker and rear bed marker lamps are inoperative	Refer to the Pinpoint Test	REPAIR the rear parking, license plate and, if equipped, bed side marker and rear bed marker lamps ground circuit for an open.
An individual exterior mirror parking lamp is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test M

Pinpoint Tests

[PINPOINT TEST A : ALL THE PARKING LAMPS ARE ALWAYS ON](#)

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 B1447:11	Parklamp On Switch Input: Circuit Short To Ground	An on-demand DTC that sets when the BCM detects a short to ground on the park lamps on input circuit.

Possible Sources

- Wiring, terminals or connectors
- Headlamp switch
- BCM

Visual Inspection and Pre-checks

- Inspect the headlamp switch for damage.

A1 CHECK LOW BEAMS OPERATION

- Ignition ON.
- Place the headlamp switch in the OFF position.
- Observe the operation of the low beam headlamps.

Are the low beams illuminated?

Yes	REFER to: Headlamps (417-01 Exterior Lighting, Diagnosis and Testing).
No	GO to A2

A2 CHECK THE HEADLAMP SWITCH

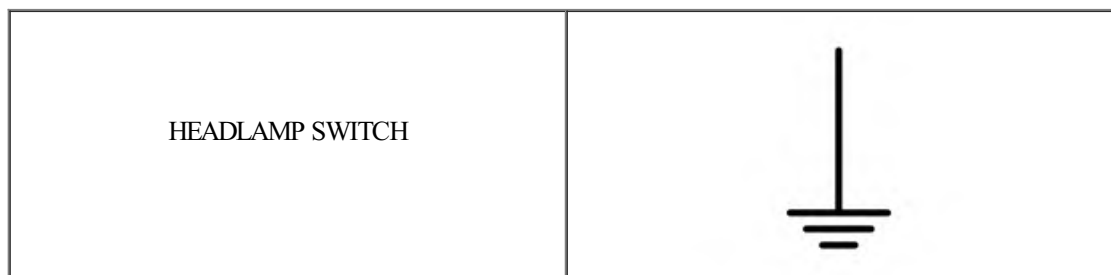
- Ignition OFF.
- Disconnect Headlamp Switch [C205](#) .
- Carry out the headlamp switch component test.
Refer to Wiring Diagrams Cell [149](#) for schematic and connector information.

Does the headlamp switch pass the component test?

Yes	GO to A3
No	INSTALL a new headlamp switch. REFER to: Headlamp Switch (417-01 Exterior Lighting, Removal and Installation).

A3 CHECK THE HEADLAMP SWITCH PARKING LAMPS CIRCUIT FOR A SHORT TO GROUND

- Disconnect BCM [C2280B](#).
- Measure:



Positive Lead	Measurement / Action	Negative Lead
C205-11	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to A4
No	REPAIR the circuit.

A4 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, INSTALL a new BCM. 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.

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 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 front parking lamp 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 from the front parking lamp output circuit.

Possible Sources

- Wiring terminals or connectors
- BCM

B1 BYPASS THE BCM (BODY CONTROL MODULE)

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect BCM [C2280G](#).
- Connect a fused jumper:

BODY CONTROL MODULE (BCM)	
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Positive Lead	Measurement / Action	Negative Lead
C2280G-3		Battery Positive

Do the front parking and, if equipped, roof marker bed side marker and rear bed marker lamps illuminate?

Yes	GO to B2
No	REPAIR the front parking and, if equipped, roof marker bed side marker and rear bed marker lamps supply circuit for an open.

B2 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors.
- Repair:
 - corrosion (install new connector or terminals â€“ clean module pins)
 - damaged or bent pins â€“ install new terminals/pins
 - pushed-out pins â€“ 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, INSTALL a new BCM. 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 C : ALL FRONT PARKING AND, IF EQUIPPED, ROOF MARKER BED SIDE MARKER AND REAR BED MARKER LAMPS ARE ALWAYS ON

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 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 a short to voltage from the front parking lamp output circuit.

Possible Sources

- Wiring, terminals or connectors
- BCM

C1 CHECK THE PARKING LAMPS VOLTAGE SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BCM [C2280G](#) .
- Ignition ON.

Do the front parking and, if equipped, roof marker bed side marker and rear bed marker lamps still illuminate?

Yes	GO to C2
No	REPAIR the front parking and, if equipped, roof marker bed side marker and rear bed marker lamps supply circuit for a short to voltage.

C2 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors.
- Repair:
 - corrosion (install new connector or terminals â€œ clean module pins)
 - damaged or bent pins â€œ install new terminals/pins
 - pushed-out pins â€œ 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, INSTALL a new BCM. 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 D : AN INDIVIDUAL FRONT PARKING LAMP IS INOPERATIVE - HALOGEN HEADLAMPS

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).

Possible Sources

- Bulb
- Wiring, terminals or connectors

D1 CHECK FOR VOLTAGE TO THE FRONT SIDE MARKER OR PARKING LAMP

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect Inoperative LH Front Park/Turn Lamp [C1023](#) or RH Front Park/Turn Lamp [C1043](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

PARK/TURN LAMP, LEFT FRONT	
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Positive Lead	Measurement / Action	Negative Lead
C1023-2		Ground

PARK/TURN LAMP, RIGHT FRONT	
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RH Front Park Lamp

Positive Lead	Measurement / Action	Negative Lead
C1043-2		Ground

Is the voltage greater than 11 volts?

Yes	GO to D2
No	REPAIR the front parking lamp voltage supply circuit for an open.

D2 CHECK THE FRONT PARKING LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

PARK/TURN LAMP, LEFT FRONT

LH Front Park Lamp

Positive Lead	Measurement / Action	Negative Lead
C1023-2		C1023-1

PARK/TURN LAMP, RIGHT FRONT

RH Front Park Lamp

Positive Lead	Measurement / Action	Negative Lead
C1043-2		C1043-1

Is the voltage greater than 11 volts?

Yes	INSTALL a new front park/turn lamp bulb. REFER to: Front Turn Signal Lamp Bulb (417-01 Exterior Lighting, Removal and Installation).
No	REPAIR the circuit.

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).

Possible Sources

- Wiring, terminals or connectors
- Headlamp assembly

E1 CHECK DRL (DAYTIME RUNNING LAMPS) OPERATION

- Make sure the DRL are enabled through the IPC.
- Make sure there is enough ambient lighting that the autolamps system will not automatically illuminate the headlamps.
- Place the headlamp switch in the AUTOLAMPS position.

Are the LED DRL/front parking lamps illuminated?

Yes	GO to E2
No	REFER to: Daytime Running Lamps (DRL) (417-01 Exterior Lighting, Diagnosis and Testing).

E2 CHECK THE LED (LIGHT EMITTING DIODE) CONTROL MODULE

- REMOVE the suspect LED control module (mounted on headlamp assembly).
- Substitute the known good LED control module from the opposite headlamp.
- 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.

Does the suspect headlamp operate?

Yes	REMOVE the known good LED control module. INSTALL a new LED control module. REFER to: Light Emitting Diode (LED) Control Module (417-01 Exterior Lighting, Removal and Installation).
No	REMOVE the known good LED control module. GO to E3

E3 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors.
- Repair:
 - corrosion (install new connector or terminals â€“ clean module pins)
 - damaged or bent pins â€“ install new terminals/pins
 - pushed-out pins â€“ 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, INSTALL a new BCM. 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 F : AN INDIVIDUAL FRONT SIDE MARKER LAMP IS INOPERATIVE OR ALWAYS ON - HALOGEN HEADLAMPS**

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 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 side marker lamp 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 from the LH front side marker lamp 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 side marker lamp 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 from the RH front side marker lamp output circuit.
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 side marker lamp 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 from the LH front side marker lamp 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 side marker lamp 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 from the RH front side marker lamp 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 side marker lamp 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 from the LH front side marker lamp 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 side marker lamp 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 from the RH front side marker lamp output circuit.

Possible Sources

- Bulb
- Wiring, terminals or connectors
- BCM

F1 DETERMINE IF A FRONT SIDE MARKER LAMP IS ALWAYS ON

- Ignition ON.
- Place the headlamp switch in the OFF position.

Is either front side marker lamp always on?

Yes	GO to F2
No	GO to F3

F2 CHECK THE FRONT SIDE MARKER LAMPS VOLTAGE SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BCM [C2280F](#) .
- Ignition ON.

Do the front side marker lamps still illuminate?

Yes	REPAIR the circuit.
No	GO to F8

F3 CHECK FOR VOLTAGE TO THE FRONT SIDE MARKER LAMP

- Ignition OFF.
- Disconnect Inoperative LH Front Side Marker Lamp [C1127](#) or RH Front Side Marker Lamp [C1126](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

SIDE LAMP, LEFT FRONT	
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LH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1127-2		Ground

SIDE LAMP, RIGHT FRONT	
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RH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1126-2		Ground

Is the voltage greater than 11 volts?

Yes	GO to F5
No	GO to F4

F4 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE FRONT SIDE MARKER LAMP

- 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 if DTC U1000:00 is present).
- Measure:

SIDE LAMP, LEFT FRONT	
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LH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1127-2		Ground

SIDE LAMP, RIGHT FRONT	
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RH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead

Positive Lead	Measurement / Action	Negative Lead
C1126-2		Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new front side marker lamp bulb.
No	GO to F6

F5 CHECK THE FRONT SIDE MARKER LAMP GROUND CIRCUIT FOR AN OPEN

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- Measure:

SIDE LAMP, LEFT FRONT

LH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1127-2		C1127-1

SIDE LAMP, RIGHT FRONT

RH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1126-2		C1126-1

Is the voltage greater than 11 volts?

Yes	INSTALL a new front side marker lamp bulb.
No	REPAIR the circuit.

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

SIDE LAMP, LEFT FRONT	BODY CONTROL MODULE (BCM)
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LH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1127-2	Ω	C2280F-30

SIDE LAMP, RIGHT FRONT	BODY CONTROL MODULE (BCM)
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RH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1126-2	Ω	C2280F-37

Is the resistance less than 3 ohms?

Yes	GO to F7
No	REPAIR the circuit.

F7 CHECK THE FRONT SIDE MARKER LAMP SUPPLY CIRCUIT FOR A SHORT TO GROUND

- Measure:

SIDE LAMP, LEFT FRONT	
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LH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1127-2	Ω	Ground

SIDE LAMP, RIGHT FRONT	
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RH Front Side Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C1126-2	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to F8
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, INSTALL a new BCM. REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).

F8 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors.
- Repair:
 - corrosion (install new connector or terminals â€“ clean module pins)
 - damaged or bent pins â€“ install new terminals/pins
 - pushed-out pins â€“ 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, INSTALL a new BCM. 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 G : ONE OR MORE ROOF MARKER LAMPS ONLY 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).

Possible Sources

- Wiring, terminals or connectors
- Roof marker lamp

G1 DETERMINE IF ALL ROOF MARKER LAMPS ARE INOPERATIVE

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

Are all roof marker lamps inoperative?

Yes	GO to G4
No	GO to G2

G2 CHECK THE INOPERATIVE ROOF MARKER LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect The inoperative roof marker lamp.
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

ROOF MARKER LAMP, LEFT	
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For LH Roof Marker Lamp (without SYNCÂ®)

Positive Lead	Measurement / Action	Negative Lead
C970-1		Ground

ROOF MARKER LAMP, LEFT	
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For LH Roof Marker Lamp (with SYNCÂ®)

Positive Lead	Measurement / Action	Negative Lead
C9701-1		Ground

ROOF MARKER LAMP, LEFT CENTER	
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For LH Center Roof Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C971-1		Ground

ROOF MARKER LAMP, CENTER	
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For Center Roof Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C972-1		Ground

ROOF MARKER LAMP, RIGHT CENTER	
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For RH Center Roof Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C973-1		Ground

ROOF MARKER LAMP, RIGHT	
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For RH Roof Marker Lamp (without SYNCÂ®)

Positive Lead	Measurement / Action	Negative Lead
C974-1		Ground

ROOF MARKER LAMP, RIGHT	
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For RH Roof Marker Lamp (with SYNCÂ®)

Positive Lead	Measurement / Action	Negative Lead
C9704-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to G3
No	REPAIR the circuit.

G3 CHECK THE INOPERATIVE ROOF MARKER LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

ROOF MARKER LAMP, LEFT

For LH Roof Marker Lamp (without SYNCÂ®)

Positive Lead	Measurement / Action	Negative Lead
C970-1		C970-2

ROOF MARKER LAMP, LEFT

For LH Roof Marker Lamp (with SYNCÂ®)

Positive Lead	Measurement / Action	Negative Lead
C9701-1		C9701-2

ROOF MARKER LAMP, LEFT CENTER

For LH Center Roof Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C971-1		C971-2

ROOF MARKER LAMP, CENTER

For Center Roof Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C972-1		C972-2

ROOF MARKER LAMP, RIGHT CENTER

For RH Center Roof Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C973-1		C973-2

ROOF MARKER LAMP, RIGHT

For RH Roof Marker Lamp (without SYNCÂ®)

Positive Lead	Measurement / Action	Negative Lead
C974-1		C974-2

ROOF MARKER LAMP, RIGHT

For RH Roof Marker Lamp (with SYNCÂ®)

Positive Lead	Measurement / Action	Negative Lead
C9704-1		C9704-2

Is the voltage greater than 11 volts?

Yes	INSTALL a new roof marker lamp.
No	REPAIR the circuit.

G4 CHECK THE ROOF MARKER LAMPS VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect Without SYNCÂ®, LH Roof Marker Lamp [C970](#) .
- Disconnect With SYNCÂ®, LH Roof Marker Lamp [C9701](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

ROOF MARKER LAMP, LEFT	
------------------------	--

Without SYNCÂ®

Positive Lead	Measurement / Action	Negative Lead
C970-1		Ground

ROOF MARKER LAMP, LEFT	
------------------------	--

With SYNCÂ®

Positive Lead	Measurement / Action	Negative Lead
C9701-1		Ground

Is the voltage greater than 11 volts?

Yes	REPAIR the roof marker lamps ground circuit for an open.
No	REPAIR the circuit.

☐ **PINPOINT TEST H : ONE OR MORE BED SIDE MARKER AND BED REAR MARKER LAMPS ONLY 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).

Possible Sources

- Wiring, terminals or connectors
- Bed side marker lamp
- Bed rear marker lamp

H1 DETERMINE IF ALL BED MARKER LAMPS ARE INOPERATIVE

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

Are all bed marker lamps inoperative?

Yes	GO to H4
No	GO to H2

H2 CHECK THE INOPERATIVE BED MARKER LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect The inoperative bed marker lamp.
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

SIDE LAMP 1, LH REAR	
----------------------	---

For LH Amber Bed Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4094-1		Ground

SIDE LAMP 2, LH REAR	
----------------------	--

For LH Red Bed Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
---------------	----------------------	---------------

Positive Lead	Measurement / Action	Negative Lead
C4095-1		Ground

REAR MARKER LAMP ASSEMBLY	
---------------------------	--

For Bed Rear Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4001-1		Ground

SIDE LAMP 1, RH REAR	
----------------------	--

For RH Amber Bed Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4096-1		Ground

SIDE LAMP 2, RH REAR	
----------------------	--

For RH Red Bed Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4097-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to H3
No	REPAIR the circuit.

H3 CHECK THE INOPERATIVE BED MARKER LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

SIDE LAMP 1, LH REAR

For LH Amber Bed Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4094-1		C4094-2

SIDE LAMP 2, LH REAR

For LH Red Bed Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4095-1		C4095-2

REAR MARKER LAMP ASSEMBLY

For Bed Rear Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4001-1		C4001-2

SIDE LAMP 1, RH REAR

For RH Amber Bed Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4096-1		C4096-2

SIDE LAMP 2, RH REAR

For RH Red Bed Marker Lamp

Positive Lead	Measurement / Action	Negative Lead
C4097-1		C4097-2

Is the voltage greater than 11 volts?

H4 CHECK THE BED MARKER LAMPS VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

Yes	INSTALL a new bed marker lamp.
No	REPAIR the circuit.

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect LH Rear Side Lamp 1 (Amber) Bed Marker Lamp [C4094](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:



Positive Lead	Measurement / Action	Negative Lead
C4094-1		Ground

Is the voltage greater than 11 volts?

Yes	REPAIR the bed marker lamps ground circuit for an open.
No	REPAIR the circuit.

☐ [PINPOINT TEST I : ONE OR BOTH REAR PARKING LAMPS AND BOTH EXTERIOR MIRROR PARKING LAMPS \(IF EQUIPPED\) ARE INOPERATIVE - VEHICLES NOT EQUIPPED WITH A BED](#)

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 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 rear parking lamp 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 from the rear parking lamp output circuit.
BCM B14A2:11	Tailgate/Liftgate Applique Lamps: 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 lamp output circuit.
BCM B14A2:15	Tailgate/Liftgate Applique Lamps: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open from the rear parking lamp output circuit.

Possible Sources

- Bulb
- Wiring, terminals or connectors
- BCM

I1 DETERMINE IF BOTH REAR PARKING LAMPS ARE INOPERATIVE

- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Observe both rear parking lamps.

Are both rear parking lamps inoperative?

Yes	GO to I4
No	GO to I2

I2 CHECK THE PARKING LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect Inoperative LH Rear Lamp [C423](#) or RH Rear Lamp [C422](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

REAR LAMP, LEFT	
-----------------	--

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C423-3		Ground

REAR LAMP, RIGHT	
------------------	--

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C422-3		Ground

Is the voltage greater than 11 volts?

Yes	GO to I3
No	REPAIR the circuit.

I3 CHECK THE REAR PARKING LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

REAR LAMP, LEFT

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C423-3		C423-2

REAR LAMP, RIGHT

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C422-3		C422-2

Is the voltage greater than 11 volts?

Yes	INSTALL a new bulb.
No	REPAIR the circuit.

I4 BYPASS THE BCM (BODY CONTROL MODULE)

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect BCM [C2280C](#) .
- Connect a fused jumper:

BODY CONTROL MODULE (BCM)	
---------------------------	--

Positive Lead	Measurement / Action	Negative Lead
C2280C-12		Battery Positive

Do the rear parking and license plate lamps illuminate?

Yes	GO to 16
No	If not equipped with exterior mirror parking lamps or the exterior mirror parking lamps operate correctly, GO to 15 If equipped with exterior mirror parking lamps and both exterior mirror parking lamps are inoperative, REPAIR the rear parking and exterior mirror parking lamps voltage supply circuit for an open.

15 CHECK THE INOPERATIVE PARKING LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Disconnect LH Rear Lamp [C423](#) .
- Measure:

REAR LAMP, LEFT	BODY CONTROL MODULE (BCM)
-----------------	---------------------------

Positive Lead	Measurement / Action	Negative Lead
C423-3	Ω	C2280C-12

Is the resistance less than 3 ohms?

Yes	REPAIR the rear parking lamps ground circuit for an open.
No	REPAIR the circuit.

I6 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors.
- Repair:
 - corrosion (install new connector or terminals â€“ clean module pins)
 - damaged or bent pins â€“ install new terminals/pins
 - pushed-out pins â€“ 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, INSTALL a new BCM. 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 J : AN INDIVIDUAL OR ALL REAR PARKING AND/OR LICENSE PLATE LAMPS ARE INOPERATIVE - VEHICLES EQUIPPED WITH BED AND INCANDESCENT REAR LAMPS

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 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 rear parking lamp 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 from the rear parking lamp output circuit.
BCM B14A2:11	Tailgate/Liftgate Applique Lamps: 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 lamp output circuit.
BCM B14A2:15	Tailgate/Liftgate Applique Lamps: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open from the rear parking lamp output circuit.

Possible Sources

- Bulb
- Wiring, terminals or connectors
- BCM

J1 DETERMINE WHICH PARKING AND LICENSE PLATE LAMPS ARE INOPERATIVE

- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Observe the rear parking and license plate lamps.

Are all the rear parking and both license plate lamps inoperative?

Yes	GO to J8
No	For an individual rear parking lamp inoperative, GO to J2 For an individual license plate lamp inoperative, GO to J4 If only all the rear parking lamps or only both the license plate lamps are inoperative, GO to J6

J2 CHECK THE REAR PARKING LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect For an upper rear parking lamp, inoperative LH Rear Park/Stop/Turn Lamp 1 [C4112](#) or RH Rear Park/Stop/Turn Lamp 1 [C4114](#) .
- Disconnect For an lower rear parking lamp, inoperative LH Rear Park/Stop/Turn Lamp 2 [C4113](#) or RH Rear Park/Stop/Turn Lamp 2 [C4115](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- For an upper rear parking lamp, measure:

PARK/STOP/TURN LAMP 1, LEFT REAR	
----------------------------------	--

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4112-2		Ground

PARK/STOP/TURN LAMP 1, RIGHT REAR	
-----------------------------------	--

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4114-2		Ground

- For an lower rear parking lamp, measure:

PARK/STOP/TURN LAMP 2, LEFT REAR	
----------------------------------	---

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4113-2		Ground

PARK/STOP/TURN LAMP 2, RIGHT REAR	
-----------------------------------	--

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead

Positive Lead	Measurement / Action	Negative Lead
J3 CHECK THE REAR PARKING LAMP GROUND CIRCUIT FOR AN OPEN		
For an upper rear parking lamp, measure:		Ground

PARK/STOP/TURN LAMP 1, LEFT REAR

Is the voltage greater than 11 volts?

Yes	GO to J3
No	REPAIR the circuit.

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4112-2		C4112-1

PARK/STOP/TURN LAMP 1, RIGHT REAR

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4114-2		C4114-1

- For an lower rear parking lamp, measure:

PARK/STOP/TURN LAMP 2, LEFT REAR

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4113-2		C4113-1

PARK/STOP/TURN LAMP 2, RIGHT REAR

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4115-2		C4115-1

Is the voltage greater than 11 volts?

Yes	INSTALL a new bulb.
No	REPAIR the circuit.

J4 CHECK THE LICENSE PLATE LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect inoperative LH License Plate Lamp [C452](#) or RH License Plate Lamp [C462](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

LICENSE PLATE LAMP, LEFT	
--------------------------	--

LH License Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C452-2		Ground

LICENSE PLATE LAMP, RIGHT	
---------------------------	---

RH License Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C462-2		Ground

Is the voltage greater than 11 volts?

Yes	GO to J5
No	REPAIR the circuit.

J5 CHECK THE LICENSE PLATE LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

LICENSE PLATE LAMP, LEFT

LH License Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C452-2		C452-1

LICENSE PLATE LAMP, RIGHT

RH License Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C462-2		C462-1

Is the voltage greater than 11 volts?

Yes	INSTALL a new bulb.
No	REPAIR the circuit.

J6 CHECK THE REAR PARKING AND LICENSE PLATE LAMPS VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.

- Disconnect For inoperative rear parking lamps, LH Rear Park/Stop/Turn Lamp 1 [C4112](#) .
- Disconnect For inoperative license plate lamps, LH License Plate Lamp [C452](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- For inoperative rear parking lamps, measure:

PARK/STOP/TURN LAMP 1, LEFT REAR	
----------------------------------	--

Positive Lead	Measurement / Action	Negative Lead
C4112-2		Ground

- For inoperative license plate lamps, measure:

LICENSE PLATE LAMP, LEFT	
--------------------------	--

Positive Lead	Measurement / Action	Negative Lead
C452-2		Ground

Is the voltage greater than 11 volts?

Yes	GO to J7
No	REPAIR the circuit.

J7 CHECK THE REAR PARKING AND LICENSE PLATE LAMPS GROUND CIRCUIT FOR AN OPEN

- For inoperative rear parking lamps, measure:

PARK/STOP/TURN LAMP 1, LEFT REAR

Positive Lead	Measurement / Action	Negative Lead
C4112-2		C4112-1

- For inoperative license plate lamps, measure:

LICENSE PLATE LAMP, LEFT

Positive Lead	Measurement / Action	Negative Lead
C452-2		C452-1

Is the voltage greater than 11 volts?

Yes	INSTALL a new bulb.
No	REPAIR the circuit.

J8 BYPASS THE BCM (BODY CONTROL MODULE)

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect BCM [C2280C](#) .
- Connect a fused jumper:

BODY CONTROL MODULE (BCM)	
---------------------------	--

Positive Lead	Measurement / Action	Negative Lead
C2280C-12		Battery Positive

Do the rear parking and license plate lamps illuminate?

Yes	GO to J10
No	If not equipped with exterior mirror parking lamps or the exterior mirror parking lamps operate correctly, GO to J9 If equipped with exterior mirror parking lamps and both exterior mirror parking lamps are inoperative, REPAIR the rear parking, license plate and exterior mirror parking lamps voltage supply circuit for an open.

J9 CHECK THE INOPERATIVE PARKING LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect LH Rear Park/Stop/Turn Lamp 1 [C4112](#) .
- Measure:

PARK/STOP/TURN LAMP 1, LEFT REAR	BODY CONTROL MODULE (BCM)
----------------------------------	---------------------------

Positive Lead	Measurement / Action	Negative Lead
C4112-2	Ω	C2280C-12

Is the resistance less than 3 ohms?

Yes	REPAIR the rear parking and license plate lamps ground circuit for an open.
No	REPAIR the circuit.

J10 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, INSTALL a new BCM. 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 K : AN INDIVIDUAL OR ALL REAR PARKING AND/OR LICENSE PLATE LAMPS ARE INOPERATIVE - VEHICLES EQUIPPED WITH BED AND LED \(LIGHT EMITTING DIODE\) REAR LAMPS](#)

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 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 rear parking lamp 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 from the rear parking lamp output circuit.
BCM B14A2:11	Tailgate/Liftgate Applique Lamps: 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 lamp output circuit.
BCM B14A2:15	Tailgate/Liftgate Applique Lamps: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open from the rear parking lamp output circuit.

Possible Sources

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

K1 DETERMINE WHICH PARKING AND LICENSE PLATE LAMPS ARE INOPERATIVE

- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Observe the rear parking and license plate lamps.

Are all the rear parking and both license plate lamps inoperative?

Yes	GO to K8
No	For an individual rear parking lamp inoperative, GO to K2 For an individual license plate lamp inoperative, GO to K4 If only all the rear parking lamps or only both the license plate lamps are inoperative, GO to K6

K2 CHECK THE REAR PARKING LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect Inoperative LH Rear Lamp [C4483](#) or RH Rear Lamp [C4484](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

REAR LAMP ASSEMBLY LH	
-----------------------	--

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4483-3		Ground

REAR LAMP ASSEMBLY RH	
-----------------------	---

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4484-3		Ground

Is the voltage greater than 11 volts?

Yes	GO to K3
No	REPAIR the circuit

K3 CHECK THE REAR PARKING LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

REAR LAMP ASSEMBLY LH

LH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4483-3		C4483-8

REAR LAMP ASSEMBLY RH

RH Rear Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C4484-3		C4484-8

Is the voltage greater than 11 volts?

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

K4 CHECK THE LICENSE PLATE LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.

- Disconnect Inoperative LH License Plate Lamp [C452](#) or RH License Plate Lamp [C462](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:

LICENSE PLATE LAMP, LEFT	
--------------------------	--

LH License Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C452-2		Ground

LICENSE PLATE LAMP, RIGHT	
---------------------------	--

RH License Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C462-2		Ground

Is the voltage greater than 11 volts?

Yes	GO to K5
No	REPAIR the circuit.

K5 CHECK THE LICENSE PLATE LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

LICENSE PLATE LAMP, LEFT

LH License Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C452-2		C452-1

LICENSE PLATE LAMP, RIGHT

RH License Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C462-2		C462-1

Is the voltage greater than 11 volts?

Yes	INSTALL a new bulb.
No	REPAIR the circuit.

K6 CHECK THE REAR PARKING AND LICENSE PLATE LAMPS VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect For inoperative rear parking lamps, LH Rear Lamp [C4483](#) .

- Disconnect For inoperative license plate lamps, LH License Plate Lamp [C452](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- For inoperative rear parking lamps, measure:

REAR LAMP ASSEMBLY LH	
-----------------------	--

Positive Lead	Measurement / Action	Negative Lead
C4483-3		Ground

- For inoperative license plate lamps, measure:

LICENSE PLATE LAMP, LEFT	
--------------------------	--

Positive Lead	Measurement / Action	Negative Lead
C452-2		Ground

Is the voltage greater than 11 volts?

Yes	GO to K7
No	REPAIR the circuit.

K7 CHECK THE REAR PARKING AND LICENSE PLATE LAMPS GROUND CIRCUIT FOR AN OPEN

- For inoperative rear parking lamps, measure:

REAR LAMP ASSEMBLY LH

Positive Lead	Measurement / Action	Negative Lead
C4483-3		C4483-8

- For inoperative license plate lamps, measure:

LICENSE PLATE LAMP, LEFT

Positive Lead	Measurement / Action	Negative Lead
C452-2		C452-1

Is the voltage greater than 11 volts?

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

K8 BYPASS THE BCM (BODY CONTROL MODULE)

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect BCM [C2280C](#) .
- Connect a fused jumper:

BODY CONTROL MODULE (BCM)	
---------------------------	--

Positive Lead	Measurement / Action	Negative Lead
C2280C-12		Battery Positive

Do the rear parking and license plate lamps illuminate?

Yes	GO to K10
No	If not equipped with exterior mirror parking lamps or the exterior mirror parking lamps operate correctly, GO to K9 If equipped with exterior mirror parking lamps and both exterior mirror parking lamps are inoperative, REPAIR the rear parking, license plate and exterior mirror parking lamps voltage supply circuit for an open.

K9 CHECK THE INOPERATIVE PARKING LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect LH Rear Lamp [C4483](#) .
- Measure:

REAR LAMP ASSEMBLY LH	BODY CONTROL MODULE (BCM)
-----------------------	---------------------------

Positive Lead	Measurement / Action	Negative Lead
C4483-3	Ω	C2280C-12

Is the resistance less than 3 ohms?

Yes	REPAIR the rear parking and license plate lamps ground circuit for an open.
No	REPAIR the circuit.

K10 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, INSTALL a new BCM. 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 L : ALL REAR PARKING, LICENSE PLATE AND EXTERIOR MIRROR PARKING (IF EQUIPPED) LAMPS ARE ALWAYS ON**

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 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 a short to voltage from the rear parking lamp output circuit.
BCM B14A2:15	Tailgate/Liftgate Applique Lamps: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open from the rear parking lamp output circuit.

Possible Sources

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

L1 CHECK THE BCM (BODY CONTROL MODULE) PARKING LAMP OUTPUT CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BCM [C2280C](#) .
- Ignition ON.

Do the rear parking , license plate and exterior mirror parking (if equipped) lamps continue to illuminate?

Yes	REPAIR the circuit.
No	GO to L2

L2 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, INSTALL a new BCM. 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 M : AN INDIVIDUAL EXTERIOR MIRROR PARKING LAMP IS 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).

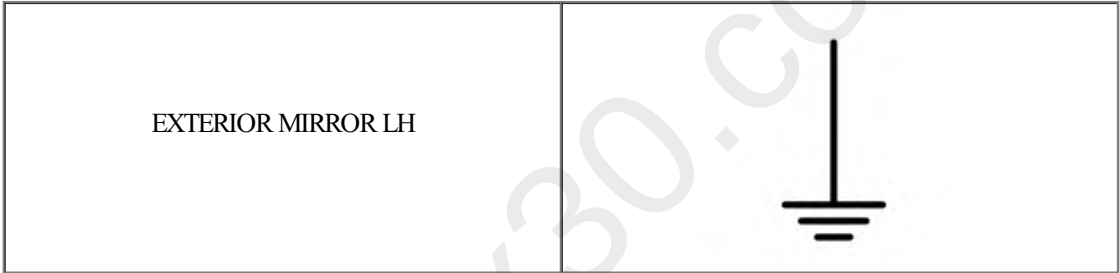
REFER to: Exterior Lighting - System Operation and Component Description (417-01 Exterior Lighting, Description and Operation).

Possible Sources

- Wiring, terminals or connectors
- Roof marker lamp

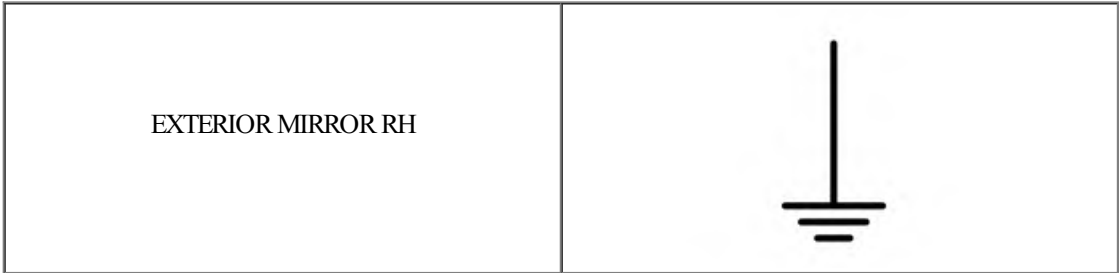
M1 CHECK THE INOPERATIVE EXTERIOR MIRROR PARKING LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect Inoperative LH Exterior Mirror [C521](#) or RH Exterior Mirror [C622](#) .
- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS position.
- Measure:



LH Exterior Mirror Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C521-12		Ground



For LH Exterior Mirror Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C622-12		Ground

Is the voltage greater than 11 volts?

Yes	GO to M2
No	REPAIR the circuit.

M2 CHECK THE INOPERATIVE EXTERIOR MIRROR PARKING LAMP GROUND CIRCUIT FOR AN OPEN

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- Measure:

EXTERIOR MIRROR LH

LH Exterior Mirror Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C521-12		C521-22

EXTERIOR MIRROR RH

For LH Exterior Mirror Parking Lamp

Positive Lead	Measurement / Action	Negative Lead
C622-12		C622-22

Is the voltage greater than 11 volts?

Yes	INSTALL a new exterior mirror parking/turn/spot lamp. REFER to: Exterior Mirror (501-09 Rear View Mirrors, Removal and Installation).
No	REPAIR the circuit.

