

Interior Lighting

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).

BCM DTC Chart

DTC	Description	Action
B1175:01	Driver Door Ajar Switch: General Electrical Failure	• If the courtesy lamps are always on, GO to Pinpoint Test C • If the courtesy lamps are inoperative, GO to Pinpoint Test A
B1176:01	Passenger Door Ajar Switch: General Electrical Failure	• If the courtesy lamps are always on, GO to Pinpoint Test C • If the courtesy lamps are inoperative, GO to Pinpoint Test A
B11C0:01	Driver Side Rear Door Ajar Switch: General Electrical Failure	• If the courtesy lamps are always on, GO to Pinpoint Test C • If the courtesy lamps are inoperative, GO to Pinpoint Test A

B11C1:01	Passenger Side Rear Door Ajar Switch: General Electrical Failure	• If the courtesy lamps are always on, GO to Pinpoint Test C • If the courtesy lamps are inoperative, GO to Pinpoint Test A
B12C2:11	Puddle Lamp: Circuit Short To Ground	GO to Pinpoint Test J
B12C2:15	Puddle Lamp: Circuit Short To Battery or Open	GO to Pinpoint Test J
B1313:11	Interior Lighting Output: Circuit Short To Ground	GO to Pinpoint Test B
B1313:15	Interior Lighting Output: Circuit Short To Battery or Open	• If the interior courtesy lamps are always on, GO to Pinpoint Test D • If the interior courtesy lamps are inoperative, GO to Pinpoint Test B
B145C:11	Ambient Lighting Power Supply Output: Circuit Short To Ground	GO to Pinpoint Test H
B145C:15	Ambient Lighting Power Supply Output: Circuit Short To Battery or Open	GO to Pinpoint Test H
B1465:00	Ambient Lighting Bus 1: No Sub Type Information	• If all the ambient lighting is inoperative or always on, GO to Pinpoint Test H • If one or more of the ambient lighting Light Emitting Diodes (LEDs) are inoperative, GO to Pinpoint Test I
B1467:00	Ambient Lighting Bus 3: No Sub Type Information	• If all the ambient lighting is inoperative or always on, GO to Pinpoint Test H • If one or more of the ambient lighting Light Emitting Diodes (LEDs) are inoperative, GO to Pinpoint Test I
B14A7:11	Puddle/Cargo Switch Input: Circuit Short To Ground	GO to Pinpoint Test J

B14AA:11	Demand Lamp Output: Circuit Short To Ground	GO to Pinpoint Test E
B14AA:15	Demand Lamp Output: Circuit Short To Battery or Open	GO to Pinpoint Test E
B14D8:11	Bed Lamp Output: Circuit Short To Ground	GO to Pinpoint Test J
B14D8:15	Bed Lamp Output: Circuit Short To Battery or Open	GO to Pinpoint Test J
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.
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 other BCM Diagnostic Trouble Codes (DTCs)	-	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules) .

DTC Chart: Driver Door Module (DDM)

DDM DTC Chart

DTC	Description	Action
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B1165:11	Left Front Puddle Lamp Output: Circuit Short To Ground	GO to Pinpoint Test G
B1165:15	Left Front Puddle Lamp Output: Circuit Short To Battery Or Open	GO to Pinpoint Test G
For other DDM Diagnostic Trouble Codes (DTCs)	-	REFER to: Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing).

DTC Chart: Passenger Door Module (PDM)

PDM DTC Chart

DTC	Description	Action
B1166:11	Right Front Puddle Lamp Output: Circuit Short To Ground	GO to Pinpoint Test G
B1166:15	Right Front Puddle Lamp Output: Circuit Short To Battery Or Open	GO to Pinpoint Test G
For other PDM Diagnostic Trouble Codes (DTCs)	-	REFER to: Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing).

Symptom Chart(s)

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: Interior Lighting

Symptom Chart

Condition	Possible Sources	Actions
A module does not respond to the scan tool	• Fuse • Wiring, terminals or connectors • Module	REFER to: Communications Network (418-00 Module Communications Network) .
The courtesy lamps do not illuminate with a door open	Refer to the Pinpoint Test	GO to Pinpoint Test A
One or more interior courtesy lamps are inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test B
A puddle lamp is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test G
All the courtesy lamps stay on continuously	Refer to the Pinpoint Test	GO to Pinpoint Test C
The interior courtesy lamps stay on continuously	Refer to the Pinpoint Test	GO to Pinpoint Test D
One or more demand lamps are inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test E
The cargo lamps, bed lamps, scuff plate lamps or trailer assist lamp is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test J
The battery saver does not deactivate after time-out	Refer to the Pinpoint Test	GO to Pinpoint Test F
The ambient lighting is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test H
One or more of the ambient lighting Light Emitting Diodes (LEDs) are inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test I

Pinpoint Tests

The Courtesy Lamps Do Not Illuminate With a Door Open

Refer to Wiring Diagrams Cell 117 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1175:01	Driver Door Ajar Switch: General Electrical Failure	An on-demand DTC that sets when the BCM detects a fault on the LH front door ajar circuit.
B1176:01	Passenger Door Ajar Switch: General Electrical Failure	An on-demand DTC that sets when the BCM detects a fault on the RH front door ajar circuit.
B11C0:01	Driver Side Rear Door Ajar Switch: General Electrical Failure	An on-demand DTC that sets when the BCM detects a fault on the LH rear door ajar circuit.
B11C1:01	Passenger Side Rear Door Ajar Switch: General Electrical Failure	An on-demand DTC that sets when the BCM detects a fault on the RH rear door ajar circuit.

Possible Sources

- Wiring, terminals or connectors
- Door latch
- BCM

PINPOINT TEST A : THE COURTESY LAMPS DO NOT ILLUMINATE WITH A DOOR OPEN

NOTE: Make sure the dark car feature is not enabled in the BCM. The dark car feature disables activation of courtesy lamps due to a door unlock, door ajar or removing the key from the ignition cylinder. The feature can be disabled using a scan tool.

A1 CHECK THE OPERATION OF THE COURTESY LAMP FUNCTION FROM THE FRONT/DRIVER INTERIOR LAMP

- Ignition OFF.
- Use the courtesy lamp switch on the front interior lamp to activate the overhead courtesy lamps.

Do the overhead courtesy lamps illuminate?

Yes	GO to A2
No	GO to Pinpoint Test B

A2 CHECK THE DOOR AJAR SWITCH OPERATION

- Deactivate the overhead courtesy lamps from the front interior lamp.
- Disconnect suspect door latch.

Do the courtesy lamps illuminate?

Yes	For a front door, INSTALL a new front door latch. REFER to: Front Door Latch (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). For a SuperCab rear door, INSTALL a new rear door ajar switch. For a SuperCrew rear door, INSTALL a new rear door latch. REFER to: Rear Door Latch - SuperCrew (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).
No	GO to A3

A3 CHECK THE DOOR AJAR SWITCH INPUT CIRCUIT FOR A SHORT TO GROUND

- Disconnect BCM C2280E.
- Measure:

Click to display connectors

RH Rear Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
C820-1	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 and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals – clean module pins)
 - damaged or bent pins – install new terminals/pins
 - pushed-out pins – install new pins as necessary
- Reconnect the BCM connectors and related in-line connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) 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. CLEAR the Diagnostic Trouble Codes (DTCs).

One Or More Interior Courtesy Lamps Are Inoperative

Refer to Wiring Diagrams Cell 89 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1313:11	Interior Lighting Output: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the interior lighting output circuit.
B1313:15	Interior Lighting 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 interior lighting output circuit.

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.
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.

Possible Sources

- Wiring, terminals or connectors
- Interior lamp
- BCM

PINPOINT TEST B : ONE OR MORE INTERIOR COURTESY LAMPS ARE INOPERATIVE

B1 CHECK THE OPERATION OF ALL THE INTERIOR COURTESY LAMPS

- Open a door and observe the interior courtesy lamps.

Is the interior lamp (regular cab) or all the interior courtesy lamps (SuperCab and CrewCab) inoperative?

Yes	GO to B2
No	If only the front interior lamp is inoperative, for vehicles without an overhead console, INSTALL a new front interior lamp. If only the front interior lamp is inoperative, for vehicles with an overhead console, INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation). If only one rear interior lamp is inoperative, GO to B7 For vehicles with vista roof, if both rear interior lamps are inoperative, GO to B9

B2 CHECK FOR VOLTAGE TO THE FRONT COURTESY LAMP

- Close the door.
- Disconnect For vehicles without overhead console, Front Interior/Map Lamps Assembly C931.
- Disconnect For vehicles with overhead console, Overhead Console C930.
- Ignition ON.
- Open a door.
- Measure:

Click to display connectors

Vehicles With Overhead Console

Positive Lead	Measurement / Action	Negative Lead
C930-11	  	Ground

Is the voltage greater than 11 volts?

Yes	GO to B6
No	GO to B3

B3 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE FRONT COURTESY 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:

Click to display connectors

Vehicles With Overhead Console

Positive Lead	Measurement / Action	Negative Lead
C930-11		Ground

Is the voltage greater than 11 volts?

Yes	For vehicles without an overhead console, INSTALL a new front interior lamp. For vehicles with an overhead console, INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).
No	GO to B4

B4 CHECK THE BCM (BODY CONTROL MODULE) COURTESY LAMP OUTPUT CIRCUIT FOR A SHORT TO GROUND

- Disconnect BCM C2280C.

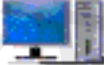
- Measure:

Click to display connectors

Vehicles With Overhead Console

Positive Lead	Measurement / Action	Negative Lead
C930-11	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to B5
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).

B5 CHECK THE BCM (BODY CONTROL MODULE) COURTESY LAMP OUTPUT CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

Vehicles With Overhead Console

Positive Lead	Measurement / Action	Negative Lead
C930-11	Ω	C2280C-13

Is the resistance less than 3 ohms?

Yes	GO to B12
No	REPAIR the circuit.

B6 CHECK THE FRONT COURTESY LAMP GROUND CIRCUIT

- Measure:

Click to display connectors

Vehicles With Overhead Console

Positive Lead	Measurement / Action	Negative Lead
C930-11		C930-1

Is the voltage greater than 11 volts?

Yes	For vehicles without an overhead console, INSTALL a new front interior lamp. For vehicles with an overhead console, INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).
No	REPAIR the circuit.

B7 CHECK FOR VOLTAGE TO THE REAR COURTESY LAMP

- Close the door.
- Disconnect For vehicles without vista roof, Rear Interior Lamp C901.
- Disconnect For vehicles with vista roof, LH Rear Interior Lamp C963 or RH Rear Interior Lamp C964.
- Ignition ON.
- Measure:

Click to display connectors

RH Rear Interior Lamp, Vehicles With Vista Roof

Positive Lead	Measurement / Action	Negative Lead
C964-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to B8
No	REPAIR the circuit.

B8 CHECK THE REAR COURTESY LAMP GROUND CIRCUIT

- Measure:

Click to display connectors

RH Rear Interior Lamp, Vehicles With Vista Roof

Positive Lead	Measurement / Action	Negative Lead
C964-1		C964-3

Is the voltage greater than 11 volts?

Yes	For vehicles without an overhead console, INSTALL a new rear interior lamp. For vehicles with an overhead console, GO to B9
No	For vehicles without an overhead console, GO to B9 For vehicles with an overhead console, REPAIR the circuit.

B9 CHECK THE REAR LAMP CONTROL CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect For vehicles without overhead console, Front Interior/Map Lamps Assembly C931.
- Disconnect For vehicles with overhead console, Overhead Console C930.
- Ignition ON.
- Measure:

Click to display connectors

Vehicles With Overhead Console

Positive Lead	Measurement / Action	Negative Lead
C930-5		Ground

Is any voltage present?

Yes	REPAIR the circuit.
No	GO to B10

B10 CHECK THE REAR LAMP CONTROL CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH Rear Interior Lamp, Vehicles With Vista Roof

Positive Lead	Measurement / Action	Negative Lead
C964-2	Ω	C930-5

Is the resistance less than 3 ohms?

Yes	For vehicles without an overhead console, INSTALL a new front interior lamp. For vehicles with an overhead console, GO to B11
No	REPAIR the circuit.

B11 CHECK THE REAR LAMP CONTROL CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.

Is the resistance greater than 10,000 ohms?

Yes	For vehicles not equipped with vista roof, INSTALL a new rear interior lamp. If the condition is still present, INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation). For vehicles equipped with vista roof, if both rear interior lamps are inoperative, INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation). For vehicles equipped with vista roof, if only one rear interior lamp is inoperative, INSTALL a new rear interior lamp.
No	REPAIR the circuit.

B12 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals – clean module pins)
 - damaged or bent pins – install new terminals/pins
 - pushed-out pins – install new pins as necessary
- Reconnect the BCM connectors and related in-line connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern,  Click here to access Guided Routine (BCM).
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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. CLEAR the Diagnostic Trouble Codes (DTCs).
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All The Courtesy Lamps Stay On Continuously

Refer to Wiring Diagrams Cell 117 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1175:01	Driver Door Ajar Switch: General Electrical Failure	An on-demand DTC that sets when the BCM detects a fault on the LH front door ajar circuit.
B1176:01	Passenger Door Ajar Switch: General Electrical Failure	An on-demand DTC that sets when the BCM detects a fault on the RH front door ajar circuit.
B11C0:01	Driver Side Rear Door Ajar Switch: General Electrical Failure	An on-demand DTC that sets when the BCM detects a fault on the LH rear door ajar circuit.
B11C1:01	Passenger Side Rear Door Ajar Switch: General Electrical Failure	An on-demand DTC that sets when the BCM detects a fault on the RH rear door ajar circuit.

Possible Sources

- Wiring, terminals or connectors
- Ajar switch

- BCM

PINPOINT TEST C : ALL THE COURTESY LAMPS STAY ON CONTINUOUSLY

C1 CHECK THE DOOR AJAR SWITCH PARAMETER IDENTIFICATIONS (PIDS)

- Ignition ON.
- Using a diagnostic scan tool, view BCM Parameter Identifications (PIDs).
- Monitor the BCM DOOR_SW_DRVR, DOOR_SW_PSGR, DOOR_SW_LR and DOOR_SW_RR Parameter Identifications (PIDs) while opening and closing all the doors.

Do all the door ajar switch PID values agree with the door positions?

Yes	For the interior courtesy lamps, GO to Pinpoint Test D For the puddle lamps, GO to Pinpoint Test G
No	GO to C2

C2 BYPASS THE SUSPECT DOOR LATCH

- Disconnect suspect door latch.
- Connect a fused jumper wire:

Click to display connectors

RH Rear Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
C820-1		C820-2

- Using a diagnostic scan tool, view BCM Parameter Identifications (PIDs).
- Monitor the BCM DOOR_SW_DRVR, DOOR_SW_PSGR, DOOR_SW_LR and DOOR_SW_RR Parameter Identifications (PIDs).

Does the PID indicate the door in question is closed?

Yes	REMOVE the fused jumper wire. For a front door, INSTALL a new front door latch. REFER to: Front Door Latch (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). For a SuperCab rear door, INSTALL a new rear door ajar switch. For a SuperCrew rear door, INSTALL a new rear door latch. REFER to: Rear Door Latch - SuperCrew (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).
No	REMOVE the fused jumper wire. GO to C3

C3 BYPASS THE DOOR LATCH GROUND CIRCUIT

- Connect a fused jumper wire:

Click to display connectors

RH Rear Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
C820-1		Ground

- Monitor the BCM DOOR_SW_DRVR, DOOR_SW_PSGR, DOOR_SW_LR and DOOR_SW_RR Parameter Identifications (PIDs).

Does the PID indicate the door in question is closed?

Yes	REMOVE the fused jumper wire. REPAIR the ground circuit for an open.
No	REMOVE the fused jumper wire. GO to C4

C4 CHECK THE SUSPECT DOOR AJAR SWITCH INPUT CIRCUIT FOR AN OPEN

- Disconnect BCM C2280E.
- Measure:

Click to display connectors

RH Rear Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
C820-1	Ω	C2280E-19

Is the resistance less than 3 ohms?

Yes	GO to C5
No	REPAIR the door ajar input circuit in question.

C5 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals – clean module pins)
 - damaged or bent pins – install new terminals/pins
 - pushed-out pins – install new pins as necessary
- Reconnect the BCM connectors and related in-line connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) 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. CLEAR the Diagnostic Trouble Codes (DTCs).

The Interior Courtesy Lamps Stay On Continuously

Refer to Wiring Diagrams Cell 89 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1313:15	Interior Lighting 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 interior lighting output circuit.

Possible Sources

- Wiring, terminals or connectors
- Interior lamp
- BCM

PINPOINT TEST D : THE INTERIOR COURTESY LAMPS STAY ON CONTINUOUSLY

D1 CHECK THE OPERATION OF ALL THE INTERIOR COURTESY LAMPS

- Close all doors and observe the courtesy lamps.

Are only the rear interior courtesy lamp(s) always on?

Yes	For vehicles without overhead console, GO to D2 For vehicles with overhead console, INSTALL a new rear interior lamp.
No	GO to D3

D2 CHECK THE REAR LAMP CONTROL CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.
- Disconnect Front Interior/Map Lamp Assembly C931.
- Disconnect Rear Interior Lamp C901.

Is the resistance greater than 10,000 ohms?

Yes	INSTALL a new front interior lamp.
No	REPAIR the circuit.

D3 ISOLATE THE BCM (BODY CONTROL MODULE)

- Ignition OFF.
- Disconnect BCM C2280C.
- Ignition ON.

Do the interior courtesy lamps continue to illuminate?

Yes	GO to D4
No	GO to D5

D4 CHECK THE BCM (BODY CONTROL MODULE) COURTESY LAMP OUTPUT CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect For vehicles without overhead console, Front Interior/Map Lamps Assembly C931.
- Disconnect For vehicles with overhead console, Overhead Console C930.
- Ignition ON.

Is any voltage present?

Yes	REPAIR the circuit.
No	For vehicles without an overhead console, INSTALL a new front interior lamp. For vehicles with an overhead console, INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).

D5 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals – clean module pins)
 - damaged or bent pins – install new terminals/pins
 - pushed-out pins – install new pins as necessary
- Reconnect the BCM connectors and related in-line connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) 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. CLEAR the Diagnostic Trouble Codes (DTCs).

One Or More Demand Lamps Are Inoperative

Refer to Wiring Diagrams Cell 89 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B14AA:11	Demand Lamp Output: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the demand lighting output circuit.
B14AA:15	Demand Lamp 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 demand lighting output circuit.

Possible Sources

- Wiring, terminals or connectors
- Demand lamp

- BCM

Visual Inspection and Diagnostic Pre-checks

- Inspect the interior lamps for damage.

PINPOINT TEST E : ONE OR MORE DEMAND LAMPS ARE INOPERATIVE

E1 CHECK THE DEMAND LAMP OPERATION

- Ignition ON.
- Check the operation of the LH vanity mirror, RH vanity mirror, overhead map and glove box lamps.

Do any of the LH vanity mirror, RH vanity mirror, overhead map or glove box lamps illuminate?

Yes	If a vanity mirror lamp is inoperative, GO to E3 If the glove compartment lamp is inoperative, GO to E5 If an overhead map lamp is inoperative, GO to E7 If the floor console front or rear bin lamp is inoperative, GO to E9
No	GO to E2

E2 CHECK THE DEMAND LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect Glove Compartment Lamp C254.
- Disconnect BCM C2280C.

Is the resistance less than 3 ohms?

Yes	GO to E11
No	REPAIR the circuit.

E3 CHECK THE VANITY MIRROR VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect Inoperative LH Vanity Mirror Lamp C907 or RH Vanity Mirror Lamp C906.
- Ignition ON.
- Measure:

Click to display connectors

RH Vanity Mirror Lamp

Positive Lead	Measurement / Action	Negative Lead
C906-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to E4
No	REPAIR the circuit.

E4 CHECK THE VANITY MIRROR GROUND CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH Vanity Mirror Lamp

Positive Lead	Measurement / Action	Negative Lead
C906-1		C906-2

Is the voltage greater than 11 volts?

Yes	INSTALL a new sun visor for the lamp in question.
No	REPAIR the circuit.

E5 CHECK THE GLOVE COMPARTMENT LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect Glove Compartment Lamp C254.
- Ignition ON.

Is the voltage greater than 11 volts?

Yes	GO to E6
No	REPAIR the circuit.

E6 CHECK THE GLOVE COMPARTMENT LAMP GROUND CIRCUIT FOR AN OPEN

Is the voltage greater than 11 volts?

Yes	INSTALL a new glove compartment lamp.
No	REPAIR the circuit.

E7 CHECK THE OVERHEAD INTERIOR LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect For vehicles without overhead console, Front Interior/Map Lamps Assembly C931.
- Disconnect For vehicles with overhead console, Overhead Console C930.
- Disconnect For vehicles without vista roof, Rear Interior Lamp C901.
- Disconnect For vehicles with vista roof, LH Rear Interior Lamp C963 or RH Rear Interior Lamp C964.
- Ignition ON.
- Measure:

Click to display connectors

RH Rear Map Lamp, Vehicles With Vista Roof

Positive Lead	Measurement / Action	Negative Lead
C964-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to E8
No	REPAIR the circuit.

E8 CHECK THE OVERHEAD INTERIOR LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH Rear Map Lamp, Vehicles With Vista Roof

Positive Lead	Measurement / Action	Negative Lead
C964-1		C964-3

Is the voltage greater than 11 volts?

Yes	For the front interior lamp, vehicles without an overhead console, INSTALL a new front interior lamp. For the front interior lamp, vehicles with an overhead console, INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation). For a rear interior lamp, INSTALL a new rear interior lamp.
No	REPAIR the circuit.

E9 CHECK THE FLOOR CONSOLE BIN LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect Inoperative Console Front Ambient LED (floor console front bin lamp) C3554 or Media Bin Ambient LED (floor console rear bin lamp) C3553.
- Ignition ON.
- Measure:

Click to display connectors

Floor Console Rear Bin Lamp

Positive Lead	Measurement / Action	Negative Lead
C3553-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to E10
No	REPAIR the circuit.

E10 CHECK THE FLOOR CONSOLE BIN LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

Floor Console Rear Bin Lamp

Positive Lead	Measurement / Action	Negative Lead
C3553-1		C3553-3

Is the voltage greater than 11 volts?

Yes	INSTALL a new bin lamp in question.
No	REPAIR the circuit.

E11 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals – clean module pins)
 - damaged or bent pins – install new terminals/pins
 - pushed-out pins – install new pins as necessary
- Reconnect the BCM connectors and related in-line connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) 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. CLEAR the Diagnostic Trouble Codes (DTCs).

The Battery Saver Does Not Deactivate After Time-out

Refer to Wiring Diagrams Cell 89 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

Possible Sources

- Wiring, terminals or connectors
- BCM

PINPOINT TEST F : THE BATTERY SAVER DOES NOT DEACTIVATE AFTER TIME-OUT

F1 CHECK THE DEMAND LAMP VOLTAGE SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BCM C2280C.
- Turn any demand (map or vanity mirror) lamp on.

Does the demand lamp turn on?

Yes	REPAIR the circuit.
No	GO to F2

F2 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals – clean module pins)
 - damaged or bent pins – install new terminals/pins
 - pushed-out pins – install new pins as necessary
- Reconnect the BCM connectors and related in-line connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern,  Click here to access Guided Routine (BCM).
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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. CLEAR the Diagnostic Trouble Codes (DTCs).
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A Puddle Lamp Is Inoperative Or Always On

Refer to Wiring Diagrams Cell 89 for schematic and connector information.

Refer to Wiring Diagrams Cell 124 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1165:11	Left Front Puddle Lamp Output: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the DDM detects a short to ground from the puddle lamp output circuit.
B1165:15	Left Front Puddle Lamp Output: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the DDM detects an open or a short to voltage from the puddle lamp output circuit.
B1166:11	Right Front Puddle Lamp Output: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the PDM detects a short to ground from the puddle lamp output circuit.

B1166:15	Right Front Puddle Lamp Output: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the PDM detects an open or a short to voltage from the puddle lamp output circuit.
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Possible Sources

- Wiring, terminals or connectors
- Puddle lamp
- Exterior mirror
- DDM
- PDM

Visual Inspection and Diagnostic Pre-checks

- Inspect the exterior mirror for damage.

PINPOINT TEST G : A PUDDLE LAMP IS INOPERATIVE OR ALWAYS ON

G1 CHECK THE OPERATION OF THE INTERIOR COURTESY LAMPS	
• Ignition ON. • Ignition OFF. • Open and close a door. • Observe the interior courtesy lamp operation for 30 seconds.	
Do the interior courtesy lamps operate correctly?	
Yes	If a puddle lamp is always on, GO to G2 If a puddle lamp is inoperative, GO to G3
No	REFER to the Interior Lamps Symptom Chart in this section and diagnose the interior courtesy lamps.

G2 CHECK THE PUDDLE LAMP POWER SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE

- Disconnect DDM C501B (LH puddle lamp).
- Disconnect PDM C652B (RH puddle lamp).
- Ignition ON.

Does the puddle lamp continue to illuminate?

Yes	REPAIR the circuit.
No	INSTALL a new door module in question. For a LH door module, REFER to: Driver Door Module (DDM) (419-10 Multifunction Electronic Modules, Removal and Installation). For a RH door module, REFER to: Passenger Door Module (PDM) (419-10 Multifunction Electronic Modules, Removal and Installation).

G3 CHECK THE MIRROR OPERATION

- Ignition ON.
- Using the exterior mirror control switch, operate the exterior power mirrors.

Do the exterior power mirrors operate?

Yes	GO to G4
No	REFER to: Rear View Mirrors (501-09 Rear View Mirrors, Diagnosis and Testing).

G4 CHECK FOR VOLTAGE TO THE PUDDLE LAMP

- Ignition OFF.
- Disconnect Inoperative LH Exterior Mirror C521 or RH Exterior Mirror C622.
- Ignition ON.
- Open any door.
- Measure:

Click to display connectors

RH Exterior Mirror

Positive Lead	Measurement / Action	Negative Lead
C622-14		Ground

Is the voltage greater than 11 volts?

Yes	GO to G7
No	GO to G5

G5 CHECK THE PUDDLE LAMP VOLTAGE SUPPLY CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.
- Disconnect DDM C501B (LH puddle lamp).
- Disconnect PDM C652B (RH puddle lamp).
- Measure:

Click to display connectors

RH Exterior Mirror

Positive Lead	Measurement / Action	Negative Lead
C622-14	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to G6
No	REPAIR the circuit.

G6 CHECK THE PUDDLE LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH Exterior Mirror

Positive Lead	Measurement / Action	Negative Lead
C622-14	Ω	C652B-10

Is the resistance less than 3 ohms?

Yes	INSTALL a new door module in question. For a LH door module, REFER to: Driver Door Module (DDM) (419-10 Multifunction Electronic Modules, Removal and Installation). For a RH door module, REFER to: Passenger Door Module (PDM) (419-10 Multifunction Electronic Modules, Removal and Installation).
No	REPAIR the circuit.

G7 CHECK THE EXTERIOR MIRROR GROUND CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH Exterior Mirror

Positive Lead	Measurement / Action	Negative Lead
C622-14		C622-8

Is the voltage greater than 11 volts?

Yes	CHECK the exterior mirror jumper harness between the vehicle harness and the puddle lamp for open circuits and damaged or pushed-out pins. If the jumper harness is OK, INSTALL a new puddle lamp. REFER to: Exterior Mirror - Vehicles With: Long Arm Mirrors (501-09 Rear View Mirrors, Removal and Installation). REFER to: Exterior Mirror - Vehicles With: Short Arm Mirrors (501-09 Rear View Mirrors, Removal and Installation). If the jumper harness is not OK, REPAIR the jumper harness.
No	REPAIR the circuit.

The Ambient Lighting Is Inoperative Or Always On

Refer to Wiring Diagrams Cell 89 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B145C:11	Ambient Lighting Power Supply Output: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the ambient light module conditioned power supply output circuit.
B145C:15	Ambient Lighting Power Supply 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 ambient light module conditioned power supply output circuit.
B1465:00	Ambient Lighting Bus 1: No Sub Type Information	A continuous memory DTC that sets when the BCM detects a fault on an ambient lighting LIN circuit.
B1467:00	Ambient Lighting Bus 3: No Sub Type Information	A continuous memory DTC that sets when the BCM detects a fault on an ambient lighting LIN circuit.
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.
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.

Possible Sources

- Wiring, terminals or connectors
- FDIM
- BCM

PINPOINT TEST H : THE AMBIENT LIGHTING IS INOPERATIVE OR ALWAYS ON

H1 CHECK FOR BCM (BODY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

- Ignition ON.
- Using a diagnostic scan tool, perform the BCM self-test.

Is DTC B1465:00, B1467:00, B145C:11 or B145C:15 present?

Yes	For DTC B1465:00, GO to H2 For DTC B1467:00, GO to H5 For DTC B145C:11, GO to H8 For DTC B145C:15, GO to H9
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No	GO to H11
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H2 CHECK THE DOOR AND FRONT SEAT (REAR FOOTWELL) AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BCM C2280C.
- Disconnect BCM C2280E.
- Ignition ON.

Is voltage present?

Yes	REPAIR the circuit.
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No	GO to H3
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H3 CHECK THE DOOR AND FRONT SEAT (REAR FOOTWELL) AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect LH Front Door C573.

Is the resistance less than 3 ohms?

Yes	GO to H4
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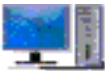
No	REPAIR the circuit.
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H4 CHECK THE DOOR AND FRONT SEAT (REAR FOOTWELL) AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR A SHORT TO GROUND

- Disconnect RH Front Door C649.
- Disconnect For SuperCrew, LH Rear Door C737.
- Disconnect For SuperCrew, RH Rear Door C837.
- Disconnect For SuperCrew, LH Front Seat Ambient Lighting Lamp (rear footwell) C3458.
- Disconnect For SuperCrew, RH Front Seat Ambient Lighting Lamp (rear footwell) C3457.

Is the resistance greater than 10,000 ohms?

Yes	GO to H11
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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).
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H5 CHECK THE AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BCM C2280C.
- Disconnect BCM C2280B.
- Ignition ON.

Is voltage present?

Yes	REPAIR the circuit.
No	GO to H6

H6 CHECK THE AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect LH Front Footwell Lamp C209.

Is the resistance less than 3 ohms?

Yes	GO to H7
No	REPAIR the circuit.

H7 CHECK THE AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR A SHORT TO GROUND

- Disconnect RH Front Footwell Lamp C266.
- Disconnect RH Instrument Panel Ambient Lamp C2476.
- Disconnect Floor Console Cup Holder Ambient Lamp C3349.

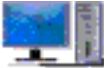
Is the resistance greater than 10,000 ohms?

Yes	GO to H11
No	REPAIR the circuit.

H8 CHECK THE AMBIENT LIGHTING VOLTAGE CIRCUIT FOR A SHORT TO GROUND

- Disconnect BCM C2280C.
- Disconnect LH Front Door C573.
- Disconnect RH Front Door C649.
- Disconnect LH Rear Door C737 (SuperCrew only).
- Disconnect RH Rear Door C837 (SuperCrew only).
- Disconnect LH Front Footwell Lamp C209.
- Disconnect RH Front Footwell Lamp C266.
- Disconnect RH Instrument Panel Ambient Lamp C2476.
- Disconnect Floor Console Cup Holder Ambient Lamp C3349.
- Disconnect LH Front Seat (Rear Footwell) Lamp C3458.
- Disconnect RH Front Seat (Rear Footwell) Lamp C3457.

Is the resistance greater than 10,000 ohms?

Yes	GO to H11
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).

H9 CHECK THE AMBIENT LIGHTING VOLTAGE CIRCUIT FOR AN OPEN

- Disconnect BCM C2280C.
- Disconnect LH Front Footwell Lamp C209.

Is the resistance greater than 10,000 ohms?

Yes	GO to H10
No	REPAIR the circuit.

H10 CHECK THE AMBIENT LIGHTING VOLTAGE CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition ON.

Is voltage present?

Yes	REPAIR the circuit.
No	GO to H11

H11 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals – clean module pins)
 - damaged or bent pins – install new terminals/pins
 - pushed-out pins – install new pins as necessary
- Reconnect the BCM connectors and related in-line connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) 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. CLEAR the Diagnostic Trouble Codes (DTCs).

One Or More Of The Ambient Lighting LEDs Are Inoperative

Refer to Wiring Diagrams Cell 89 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1465:00	Ambient Lighting Bus 1: No Sub Type Information	Sets when the BCM detects a fault in the LIN circuit to the door ambient lighting Light Emitting Diodes (LEDs).
B1467:00	Ambient Lighting Bus 3: No Sub Type Information	Sets when the BCM detects a fault in the LIN circuit to the footwell and center console ambient lighting Light Emitting Diodes (LEDs).

Possible Sources

- Wiring, terminals or connectors
- Ambient lighting LED
- BCM

PINPOINT TEST I : ONE OR MORE OF THE AMBIENT LIGHTING LIGHT EMITTING DIODES (LEDS) ARE INOPERATIVE

I1 CHECK THE AMBIENT LIGHTING LIGHT EMITTING DIODES (LEDS)

- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS ON position.
- Observe the operation of all the ambient lighting Light Emitting Diodes (LEDs).

Are all the front and rear door, instrument panel, cup holder and footwell ambient lighting Light Emitting Diodes (LEDs) inoperative?

Yes	GO to Pinpoint Test H
No	GO to I2

I2 CHECK FOR VOLTAGE TO THE LED (LIGHT EMITTING DIODE)

- Ignition OFF.
- Disconnect Inoperative ambient lighting LED.
- Ignition ON.
- Place the headlamp switch in the PARKLAMPS position.
- Measure:

Click to display connectors

RH Rear Door

Positive Lead	Measurement / Action	Negative Lead
C837-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to I3
No	REPAIR the LED voltage supply circuit in question.

I3 CHECK THE LED (LIGHT EMITTING DIODE) GROUND CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH Rear Door

Positive Lead	Measurement / Action	Negative Lead
C837-4		C837-1

Is the voltage greater than 11 volts?

Yes	GO to I4
No	REPAIR the ground circuit in question.

I4 CHECK THE AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR AN OPEN

- Ignition OFF.
- Place the headlamp switch in the OFF position.
- Disconnect BCM C2280E (door and rear footwell Light Emitting Diodes (LEDs)).
- Disconnect BCM C2280B (cup holder, instrument panel and front footwell Light Emitting Diodes (LEDs)).
- Measure:

Click to display connectors

RH Rear Door

Positive Lead	Measurement / Action	Negative Lead
C837-2	Ω	C2280E-38

Is the resistance less than 3 ohms?

Yes	INSTALL a new ambient lighting LED in question.
No	REPAIR the circuit.

The Cargo Lamps, Bed Lamps, Scuff Plate Lamps Or Trailer Assist Lamp Is Inoperative Or Always On

Refer to Wiring Diagrams Cell 89 for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting (417-02 Interior Lighting) .

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B12C2:11	Puddle Lamp: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the cargo and trailer assist lamps output circuit.
B12C2:15	Puddle 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 cargo and trailer assist lamps output circuit.
B14A7:11	Puddle/Cargo Switch Input: Circuit Short To Ground	A continuous and on-demand DTC that sets when the BCM detects a short to ground on the cargo lamp switch (integrated into the headlamp switch) input circuit.
B14D8:11	Bed Lamp Output: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the bed lamps output circuit.
B14D8:15	Bed Lamp 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 bed lamps output circuit.
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.

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.
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Possible Sources

- Wiring, terminals or connectors
- Bed lamp
- Cargo lamp bulb
- Cargo lamp (integrated into the high mounted stoplamp)
- Cargo lamp bulb (if not equipped with LED cargo lamps)
- Trailer assist lamp
- Scuff plate lamp
- Cargo lamp switch (integrated into the headlamp switch)
- BCM

PINPOINT TEST J : THE CARGO LAMPS, BED LAMPS, SCUFF PLATE LAMPS OR TRAILER ASSIST LAMP IS INOPERATIVE OR ALWAYS ON

J1 CHECK THE OPERATION OF THE BED, TRAILER ASSIST, SCUFF PLATE AND CARGO LAMPS

- Close all the doors and observe the cargo, bed, scuff plate and trailer assist lamps.
- Observe the bed (if equipped), trailer assist (if equipped), scuff plate (if equipped) and cargo lamp operation for 30 seconds.

Do all the bed (if equipped), trailer assist (if equipped), scuff plate (if equipped) and cargo lamps stay on after 30 seconds?

Yes	GO to J2
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No	If only the trailer assist lamp (if equipped), scuff plate lamps (if equipped) and cargo lamps are inoperative, GO to J6 If only the trailer assist lamp is inoperative, GO to J11 If only the scuff plate lamp(s) are inoperative, GO to J13 If only the bed lamp(s) are inoperative, GO to J15 If only the bed lamps are always on, GO to J20 For vehicles equipped with trailer assist and bed lamps, if all bed, trailer assist, scuff plate and cargo lamps are inoperative, GO to J21
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J2 CHECK THE CARGO/BED LAMP SWITCHES INPUT CIRCUIT FOR GROUND

- Ignition OFF.
- Disconnect BCM C2280E.
- Make sure the cargo lamp switch (integrated into the headlamp switch) is OFF.
- Make sure the truck bed lamp switch is OFF (if equipped).

Is the resistance greater than 10,000 ohms?

Yes	For vehicles not equipped with bed lamps, GO to J5 For vehicles equipped with bed lamps, GO to J21
No	GO to J3

J3 ISOLATE THE CARGO LAMP SWITCH

- Disconnect Headlamp Switch C205.

Is the resistance greater than 10,000 ohms?

Yes	INSTALL a new headlamp switch. REFER to: Headlamp Switch (417-01 Exterior Lighting, Removal and Installation).
No	If not equipped with truck bed lamps, REPAIR the cargo lamp switch input circuit for a short to ground. If equipped with truck bed lamps, GO to J4

J4 ISOLATE THE TRUCK BED LAMP SWITCH

- Disconnect Truck Lamp Bed Switch C4496.

Is the resistance greater than 10,000 ohms?

Yes	INSTALL a new truck bed lamp switch.
No	REPAIR the cargo/bed lamp switches input circuit for a short to ground.

J5 CHECK THE BCM (BODY CONTROL MODULE) CARGO/TRAILER ASSIST LAMP OUTPUT CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BCM C2280C.
- Ignition ON.

Are the lamps still illuminated?

Yes	REPAIR the circuit.
No	GO to J21

J6 CHECK FOR VOLTAGE TO THE CARGO LAMPS

- Disconnect For vehicles with halogen high mounted stoplamp, High Mounted Stoplamp C904.
- Disconnect For vehicles with LED high mounted stoplamp, High Mounted Stoplamp C9030.
- Ignition ON.
- Open a door.
- Measure:

Click to display connectors

LED High Mounted Stoplamp

Positive Lead	Measurement / Action	Negative Lead
C9030-2		Ground

Is the voltage greater than 11 volts?

Yes	GO to J10
No	GO to J7

J7 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE CARGO LAMPS

- 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:

Click to display connectors

LED High Mounted Stoplamp

Positive Lead	Measurement / Action	Negative Lead
C9030-2		Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new high mounted stoplamp. REFER to: High Mounted Stoplamp (417-01 Exterior Lighting, Removal and Installation).
No	GO to J8

J8 CHECK THE BCM (BODY CONTROL MODULE) CARGO/SCUFF PLATE/ TRAILER ASSIST LAMPS OUTPUT CIRCUIT FOR A SHORT TO GROUND

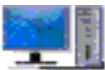
- Disconnect BCM C2280C.
- Measure:

Click to display connectors

LED High Mounted Stoplamp

Positive Lead	Measurement / Action	Negative Lead
C9030-2	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to J9
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).

J9 CHECK THE BCM (BODY CONTROL MODULE) CARGO/SCUFF PLATE/ TRAILER ASSIST LAMPS OUTPUT CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

LED High Mounted Stoplamp

Positive Lead	Measurement / Action	Negative Lead
C9030-2	Ω	C2280C-26

Is the resistance less than 3 ohms?

Yes	GO to J21
No	REPAIR the circuit.

J10 CHECK THE CARGO LAMP GROUND CIRCUIT

- Measure:

Click to display connectors

LED High Mounted Stoplamp

Positive Lead	Measurement / Action	Negative Lead
C9030-2		C9030-1

Is the voltage greater than 11 volts?

Yes	INSTALL a new high mounted stoplamp. REFER to: High Mounted Stoplamp (417-01 Exterior Lighting, Removal and Installation).
No	REPAIR the circuit.

J11 CHECK THE TRAILER ASSIST LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Close the door.
- Disconnect Trailer Assist Lamp C4500.
- Ignition ON.
- Open a door.

Is the voltage greater than 11 volts?

Yes	GO to J12
No	REPAIR the circuit.

J12 CHECK THE TRAILER ASSIST LAMP GROUND CIRCUIT FOR AN OPEN

Is the voltage greater than 11 volts?

Yes	INSTALL a new trailer assist lamp.
No	REPAIR the circuit.

J13 CHECK THE SCUFF PLATE LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Disconnect LH Scuff Plate Lamp C3251 Or RH Scuff Plate Lamp C3250.

- Measure:

Click to display connectors

RH Scuff Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C3250-1		Ground

Is the voltage greater than 11 volts?

Yes	GO to J14
No	REPAIR the circuit.

J14 CHECK THE SCUFF PLATE LAMP GROUND CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH Scuff Plate Lamp

Positive Lead	Measurement / Action	Negative Lead
C3250-1		C3250-2

Is the voltage greater than 11 volts?

Yes	INSTALL a new scuff plate lamp.
No	REPAIR the circuit.

J15 CHECK FOR VOLTAGE TO THE BED LAMPS

- Disconnect If one bed lamp is inoperative, LH Truck Bed Lamp C4494 or RH Truck Bed Lamp C4495.
- Disconnect If both bed lamps are inoperative, LH Truck Bed Lamp C4494 and RH Truck Bed Lamp C4495.
- Ignition ON.
- Open a door.
- If one bed lamp is inoperative, measure:

Click to display connectors

RH Truck Bed Lamp

Positive Lead	Measurement / Action	Negative Lead
C4495-1		Ground

- If both bed lamps are inoperative, measure:

Click to display connectors

LH Truck Bed Lamp

Positive Lead	Measurement / Action	Negative Lead
C4494-1	  	Ground

Is the voltage greater than 11 volts?

Yes	If both bed lamps are inoperative, REPAIR the truck bed lamps ground circuit. If a single bed lamp is inoperative, GO to J19
No	If both bed lamps are inoperative, GO to J16 If a single bed lamp is inoperative, GO to J18

J16 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE BED LAMPS

- 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:

Click to display connectors

LH Truck Bed Lamp

Positive Lead	Measurement / Action	Negative Lead
C4494-1	  	Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new truck bed lamp.
No	GO to J17

J17 CHECK THE BCM (BODY CONTROL MODULE) BED LAMPS OUTPUT CIRCUIT FOR A SHORT TO GROUND

- Disconnect BCM C2280B.

- Measure:

Click to display connectors

LH Truck Bed Lamp

Positive Lead	Measurement / Action	Negative Lead
C4494-1	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to J18
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).

J18 CHECK THE BCM (BODY CONTROL MODULE) BED LAMPS OUTPUT CIRCUIT FOR AN OPEN

- If one bed lamp is inoperative, measure:

Click to display connectors

RH Truck Bed Lamp

Positive Lead	Measurement / Action	Negative Lead
C4495-1	Ω	C2280B-44

- If both bed lamps are inoperative, measure:

Click to display connectors

LH Truck Bed Lamp

Positive Lead	Measurement / Action	Negative Lead
C4494-1	Ω	C2280B-44

Is the resistance less than 3 ohms?

Yes	GO to J21
No	REPAIR the circuit.

J19 CHECK THE BED LAMP GROUND CIRCUIT

- If one bed lamp is inoperative, measure:

Click to display connectors

RH Truck Bed Lamp

Positive Lead	Measurement / Action	Negative Lead
C4495-1		C4495-2

Is the voltage greater than 11 volts?

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

J20 CHECK THE BCM (BODY CONTROL MODULE) BED LAMPS OUTPUT CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition ON.
- Disconnect BCM C2280B.

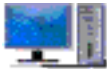
Are the bed lamps still illuminated?

Yes	REPAIR the circuit.
No	GO to J21

J21 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM connectors and related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals – clean module pins)
 - damaged or bent pins – install new terminals/pins
 - pushed-out pins – install new pins as necessary
- Reconnect the BCM connectors and related in-line connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) 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. CLEAR the Diagnostic Trouble Codes (DTCs).