Interior Lighting

DTC Chart: BCM

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices. REFER to: <u>Diagnostic Methods</u> (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, <u>GO to Pinpoint Test D</u> If the courtesy lamps are inoperative, <u>GO to Pinpoint Test A</u> 	
B1176:01	Passenger Door Ajar Switch: General Electrical Failure	 If the courtesy lamps are always on, <u>GO to Pinpoint Test D</u> If the courtesy lamps are inoperative, <u>GO to Pinpoint Test A</u> 	
B12C2:11	Puddle Lamp: Circuit Short To Ground	GO to Pinpoint Test C	
B12C2:15	Puddle Lamp: Circuit Short To Battery or Open	GO to Pinpoint Test C	
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	GO to Pinpoint Test B	
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 <u>BCM</u> 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 <u>BCM</u> can withstand. The cause of the excessive current draw MUST be corrected before a new <u>BCM</u> is installed. ADDRESS all other Diagnostic Trouble Codes (DTCs) first. After the cause of the concern is corrected,	
		VIN required to access Guided Routine (BCM)	
All other <u>BCM</u> Diagnostic Trouble Codes (DTCs)	-	REFER to: <u>Body Control Module (BCM)</u> (419-10 Multifunction Electronic Modules, Diagnosis and Testing).	

DTC Chart: Body Control Module B (BCMB)

Body Control Module B (BCMB) DTC Chart

DTC	Description	Action
B127B:11	Ambient Lighting Zone 1 Output Red LED:	GO to Pinpoint Test I

DTC	Description	Action
	Circuit Short To Ground	
B127B:15	Ambient Lighting Zone 1 Output Red LED: Circuit Short To Battery or Open	GO to Pinpoint Test I
B127D:11	Ambient Lighting Zone 3 Output Red LED: Circuit Short To Ground	GO to Pinpoint Test I
B127D:15	Ambient Lighting Zone 3 Output Red LED: Circuit Short To Battery or Open	GO to Pinpoint Test I
B127E:11	Ambient Lighting Zone 1 Output Green LED: Circuit Short To Ground	GO to Pinpoint Test I
B127E:15	Ambient Lighting Zone 1 Output Green LED: Circuit Short To Battery or Open	GO to Pinpoint Test I
B1280:11	Ambient Lighting Zone 3 Output Green LED: Circuit Short To Ground	GO to Pinpoint Test I
B1280:15	Ambient Lighting Zone 3 Output Green LED: Circuit Short To Battery or Open	GO to Pinpoint Test I
B1281:11	Ambient Lighting Zone 1 Output Blue LED: Circuit Short To Ground	GO to Pinpoint Test I
B1281:15	Ambient Lighting Zone 1 Output Blue LED: Circuit Short To Battery or Open	GO to Pinpoint Test I
B1283:11	Ambient Lighting Zone 3 Output Blue LED: Circuit Short To Ground	GO to Pinpoint Test I
B1283:15	Ambient Lighting Zone 3 Output Blue LED: Circuit Short To Battery or Open	GO to Pinpoint Test I
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 Body Control Module B (BCMB) 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 Body Control Module B (BCMB) can withstand. The cause of the excessive current draw MUST be corrected before a new Body Control Module B (BCMB) is installed. ADDRESS all other Diagnostic Trouble Codes (DTCs) first. After the cause of the concern is corrected, INSTALL a new Body Control Module B (BCMB). REFER to: Body Control Module B (BCMB) (419-10 Multifunction Electronic Modules, Removal and Installation).

DTC	Description	Action
All other Body Control Module B (BCMB) Diagnostic Trouble Codes (DTCs)	-	REFER to: <u>Body Control Module B (BCMB)</u> (419-10 Multifunction Electronic Modules, Diagnosis and Testing).

Symptom Chart(s)

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

REFER to: <u>Diagnostic Methods</u> (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, Diagnosis and Testing).
The courtesy lamps do not illuminate with a door open	Refer to the Pinpoint Test	GO to Pinpoint Test A
One or both interior overhead courtesy lamps are inoperative or the interior courtesy lamps stay on continuously	Refer to the Pinpoint Test	If one or both map lamps are also inoperative, <u>GO to Pinpoint Test E</u> If the map lamps operate correctly, <u>GO to Pinpoint Test B</u>
One or both pony projection lamps are inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test C
All the 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 luggage compartment lamp is inoperative or on continuously	Refer to the Pinpoint Test	GO to Pinpoint Test F
The battery saver does not deactivate after time-out	Refer to the Pinpoint Test	GO to Pinpoint Test G
The ambient lighting is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test H
The ambient lighting does not cycle through all color combinations	Refer to the Pinpoint Test	GO to Pinpoint Test I
An individual ambient lighting <u>LED</u> is inoperative/does not cycle through all color combinations	Refer to the Pinpoint Test	GO to Pinpoint Test J

Pinpoint Tests

The Courtesy Lamps Do Not Illuminate With a Door Open

Refer to Wiring Diagrams Cell <u>117</u> for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1175:01	Driver Door Ajar Switch: General Electrical Failure	An on-demand <u>DTC</u> that sets when the <u>BCM</u> detects a fault on the <u>LH</u> front door ajar circuit.
	Passenger Door Ajar Switch: General Electrical Failure	An on-demand <u>DTC</u> that sets when the <u>BCM</u> detects a fault on the <u>RH</u> front 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

A1 CHECK THE DOOR AJAR SWITCH OPERATION

• Disconnect suspect door latch.

Do the courtesy lamps illuminate?

	INSTALL a new front door latch. REFER to: Front Door Latch (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).
No	GO to <u>A2</u>

A2 CHECK THE DOOR AJAR SWITCH INPUT CIRCUIT FOR A SHORT TO GROUND

- Disconnect BCM C2280E.
- Measure:

Click to display connectors

LH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C525</u> Pin 3	Ω	Ground

Click to display connectors

RH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C609</u> Pin 6	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to <u>A3</u>
No	REPAIR the circuit.

A3 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 <u>BCM</u> 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 <u>OASIS</u> for any applicable service articles: <u>TSB</u>, <u>GSB</u>, <u>SSM</u> or <u>FSA</u>. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,







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 Both Interior Overhead Courtesy Lamps Are Inoperative Or 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 - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions	
B1313:11	Interior Lighting Output: Circuit Short To Ground	A continuous memory and on-demand <u>DTC</u> that sets when the <u>BCM</u> 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 \underline{DTC} that sets when the \underline{BCM} detects an open or short o voltage from the interior lighting output circuit.	
U1000:00	Solid State Driver Protection Active -Driver Disabled: No Sub Type Information	This <u>DTC</u> sets when the <u>BCM</u> 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 <u>BCM</u> 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 <u>DTC</u> sets when the <u>BCM</u> 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 <u>BCM</u> can withstand. CORRECT the cause of the excessive current draw before installing a new <u>BCM</u> .	

Possible Sources

- Wiring, terminals or connectors
- Bulb
- Interior lamp

PINPOINT TEST B: ONE OR BOTH INTERIOR OVERHEAD COURTESY LAMPS ARE INOPERATIVE OR THE INTERIOR COURTESY LAMPS STAY ON CONTINUOUSLY

B1 CHECK THE COURTESY LAMP OPERATION WITH THE DOORS CLOSED

- Close the doors.
- Press the RKE LOCK button.

Do the interior courtesy lamps turn off?

	If one interior overhead courtesy lamp is inoperative, INSTALL a new courtesy lamp bulb. If the lamp is still inoperative, INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).	
	If both interior overhead courtesy lamps are inoperative, GO to <u>B2</u>	
No	GO to <u>B5</u>	

B2 CHECK FOR VOLTAGE TO THE INTERIOR OVERHEAD COURTESY LAMPS

- Disconnect Overhead Console C930.
- Open a door.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 4	₩	Ground

Is the voltage greater than 11 volts?

Yes	GO to <u>B3</u>
No	GO to B4

B3 CHECK THE INTERIOR OVERHEAD COURTESY LAMPS GROUND CIRCUIT

Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 4	₩	<u>C930</u> Pin 5

Is the voltage greater than 11 volts?

	INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).
No	REPAIR the circuit

B4 CHECK THE INTERIOR OVERHEAD COURTESY LAMPS VOLTAGE CIRCUIT FOR AN OPEN

- Disconnect <u>BCM</u> <u>C2280C</u>.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 4	Ω	<u>C2280C</u> Pin 13

Is the resistance less than 3 ohms?

Yes	GO to <u>B6</u>
No	REPAIR the circuit.

B5 CHECK THE INTERIOR OVERHEAD COURTESY LAMPS VOLTAGE CIRCUIT FOR A SHORT TO VOLTAGE

- Disconnect BCM C2280C.
- Disconnect Overhead Console C930.
- Ignition ON.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 4	₩	Ground

Is any voltage present?

Yes	REPAIR the circuit.
No	GO to <u>B6</u>

B6 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all <u>BCM</u> 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 <u>OASIS</u> for any applicable service articles: <u>TSB</u>, <u>GSB</u>, <u>SSM</u> or <u>FSA</u>. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,





VIN required to access Guided Routine (BCM)

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 Both Pony Projection Lamps Are Inoperative Or Always On

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

Normal Operation and Fault Conditions

REFER to: Interior Lighting - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions	
B12C2:11	Puddle Lamp: Circuit Short To Ground	A continuous memory and on-demand <u>DTC</u> that sets when the <u>BCM</u> detects a short to ground from the puddle lamp (pony projection lamp) output circuit.	
B12C2:15	Puddle Lamp: Circuit Short To Battery or Open	A continuous memory and on-demand <u>DTC</u> that sets when the <u>BCM</u> detects an open or a short to voltage from the exterior door handle puddle lamp (pony projection lamp) output circuit.	
U1000:00	Solid State Driver Protection Active -Driver Disabled: No Sub Type Information	This <u>DTC</u> sets when the <u>BCM</u> 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 <u>BCM</u> 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 <u>DTC</u> sets when the <u>BCM</u> 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 <u>BCM</u> can withstand. CORRECT the cause of the excessive current draw before installing a new <u>BCM</u> .	

Possible Sources

- · Wiring, terminals or connectors
- Exterior mirror assembly
- · Pony projection lamp
- BCM

Visual Inspection and Diagnostic Pre-checks

· Inspect the exterior mirror assembly for damage.

PINPOINT TEST C: ONE OR BOTH PONY PROJECTION LAMPS ARE INOPERATIVE OR ALWAYS ON

C1 CHECK THE PONY PROJECTION LAMP OPERATION WITH THE DOORS CLOSED

- Close the doors.
- Press the RKE LOCK button.

Do the pony projection lamps turn off?

	If one pony projection lamp is inoperative, GO to <u>C2</u> If both pony projection lamps are inoperative, GO to <u>C5</u>
No	GO to <u>C7</u>

C2 CHECK THE PONY PROJECTION LAMP VOLTAGE SUPPLY CIRCUIT FOR VOLTAGE

- Disconnect <u>LH</u> exterior mirror <u>C520</u> or <u>RH</u> exterior mirror <u>C626</u>.
- Ignition ON.
- Using a diagnostic scan tool, select the <u>BCM</u> Courtesy Puddle Step Lamps (PUDDLE_LMPS) active command.
- Command the pony projection lamps (Courtesy Puddle Step Lamps) ON.
- Measure:

Click to display connectors

LH Pony Projection Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C520</u> Pin 5	₩	Ground

Click to display connectors

RH Pony Projection Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C626</u> Pin 5	₩	Ground

Is the voltage greater than 11 volts?

Yes	GO to <u>C3</u>
No	GO to <u>C4</u>

C3 CHECK THE PONY PROJECTION LAMP GROUND CIRCUIT

• Measure:

Click to display connectors

LH Pony Projection Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C520</u> Pin 5	₩	<u>C520</u> Pin 7

Click to display connectors

RH Pony Projection Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C626</u> Pin 5	₩	<u>C626</u> Pin 7

Is the voltage greater than 11 volts?

	INSTALL a new pony projection lamp. REFER to: Exterior Mirror (501-09 Rear View Mirrors, Removal and Installation).
No	REPAIR the circuit.

C4 CHECK THE PONY PROJECTION LAMP CIRCUIT FOR AN OPEN TO THE LAMP

- Ignition OFF.
- Disconnect BCM C2280C.
- Measure:

Click to display connectors

LH Pony Projection Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C520</u> Pin 5	Ω	<u>C2280C</u> Pin 26

Click to display connectors

RH Pony Projection Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C626</u> Pin 5	Ω	<u>C2280C</u> Pin 26

Is the resistance less than 3 ohms?

Yes	GO to <u>C8</u>
No	REPAIR the circuit.

C5 CHECK THE PONY PROJECTION LAMP CIRCUIT FOR AN OPEN

- Disconnect <u>LH</u> exterior mirror <u>C520</u>.
- Disconnect <u>BCM</u> <u>C2280C</u>.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C520</u> Pin 5	Ω	<u>C2280C</u> Pin 26

Is the resistance less than 3 ohms?

Yes	GO to <u>C6</u>
No	REPAIR the circuit.

C6 CHECK THE PONY PROJECTION LAMP CIRCUIT FOR A SHORT TO GROUND

- Disconnect <u>RH</u> exterior mirror <u>C626</u>.
- Measure:

Click to display connectors

LH Pony Projection Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C520</u> Pin 5	Ω	Ground

Click to display connectors

RH Pony Projection Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C626</u> Pin 5	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to <u>C8</u>
No	REPAIR the circuit.

C7 CHECK THE PONY PROJECTION LAMP CIRCUIT FOR A SHORT TO VOLTAGE

- Disconnect BCM C2280C.
- Observe the pony projection lamps.

Are the pony projection lamps illuminated?

Yes	REPAIR the circuit.
No	GO to C8

C8 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all <u>BCM</u> 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 <u>OASIS</u> for any applicable service articles: <u>TSB</u>, <u>GSB</u>, <u>SSM</u> or <u>FSA</u>. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,





VIN required 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).

All The Courtesy Lamps Stay On Continuously

Refer to Wiring Diagrams Cell <u>117</u> for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Interior Lighting - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

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

Possible Sources

- · Wiring, terminals or connectors
- Ajar switch
- BCM

PINPOINT TEST D: ALL THE COURTESY LAMPS STAY ON CONTINUOUSLY

D1 CHECK THE DOOR AJAR SWITCH PARAMETER IDENTIFICATIONS (PIDS)

- Ignition ON.
- Using a diagnostic scan tool, view <u>BCM</u> Parameter Identifications (PIDs).
- Monitor the <u>BCM</u> DOOR_SW_DRVR and DOOR_SW_PSGR Parameter Identifications (PIDs) while opening and closing the doors.

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

	For the interior courtesy lamps, <u>GO to Pinpoint Test B</u> For the pony projection lamps, <u>GO to Pinpoint Test C</u>
No	GO to D2

D2 BYPASS THE SUSPECT DOOR LATCH

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

Click to display connectors

LH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C525</u> Pin 3		<u>C525</u> Pin 5

Click to display connectors

RH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C609</u> Pin 6		<u>C609</u> Pin 4

- Using a diagnostic scan tool, view <u>BCM</u> Parameter Identifications (PIDs).
- Monitor the <u>BCM</u> DOOR_SW_DRVR and DOOR_SW_PSGR Parameter Identifications (PIDs).

Does the PID indicate the door in question is closed?

Yes	REMOVE the fused jumper wire. INSTALL a new front door latch.			
	REFER to: Front Door Latch (501-14 Handles, Locks, Latches and Entry Systems, Removal and			
	Installation).			

No	REMOVE the fused jumper wire. GO to D3

D3 BYPASS THE DOOR LATCH GROUND CIRCUIT

Connect a fused jumper wire:

Click to display connectors

LH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C525</u> Pin 3		Ground

Click to display connectors

RH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C609</u> Pin 6		Ground

Monitor the <u>BCM</u> DOOR_SW_DRVR and DOOR_SW_PSGR Parameter Identifications (PIDs).

Does the <u>PID</u> indicate the door in question is closed?

	REMOVE the fused jumper wire. For vehicles without a memory seat, REPAIR the circuit. For vehicles with a memory seat, GO to D5
No	REMOVE the fused jumper wire. GO to <u>D4</u>

D4 CHECK THE SUSPECT DOOR AJAR SWITCH INPUT CIRCUIT FOR AN OPEN

- Disconnect <u>BCM C2280E</u>.
- Measure:

Click to display connectors

LH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C525</u> Pin 3	Ω	<u>C2280E</u> Pin 33

Click to display connectors

RH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C609</u> Pin 6	Ω	C2280E Pin 21

Is the resistance less than 3 ohms?

Yes	GO to <u>D6</u>
No	REPAIR the door ajar input circuit in question.

D5 CHECK THE DOOR LATCH RETURN CIRCUIT TO THE DOOR MODULE FOR AN OPEN

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

Click to display connectors

LH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C501B</u> Pin 12		Ground

Click to display connectors

RH Front Door Ajar Switch

Positive Lead	Measurement / Action	Negative Lead
<u>C652B</u> Pin 12		Ground

- Close the door.
- Monitor the BCM DOOR SW DRVR and DOOR SW PSGR Parameter Identifications (PIDs).

Does the PID indicate the door is closed?

Ì	Yes REMOVE the fused jumper wire. For LH door, GO to D7 For RH door, GO to D8	
Ī	No	REMOVE the fused jumper wire. REPAIR the door latch return circuit in question.

D6 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?

CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern.





VIN required to access Guided Routine (BCM)

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).

D7 CHECK FOR CORRECT DDM (DRIVER DOOR MODULE) OPERATION

- Disconnect and inspect all DDM 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 DDM connectors. Make sure they seat and latch correctly.
- · Operate the system and determine if the concern is still present.

Is the concern still present?

		CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . 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 <u>DDM</u> . REFER to: <u>Driver Door Module (DDM)</u> (419-10 Multifunction Electronic Modules, Removal and Installation).
		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).

D8 CHECK FOR CORRECT PDM (PASSENGER DOOR MODULE) OPERATION

- Disconnect and inspect all <u>PDM</u> 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 PDM connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

	CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . 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 <u>PDM</u> . REFER to: <u>Passenger Door Module (PDM)</u> (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. 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 - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

Possible Sources

- · Wiring, terminals or connectors
- Demand lamp
- BCM

Visual Inspection and Diagnostic Pre-checks

- Inspect the bulbs and make sure they are OK.
- Inspect the interior lamps for damage.

PINPOINT TEST E: ONE OR MORE DEMAND LAMPS ARE INOPERATIVE

E1 CHECK THE DEMAND LAMP OPERATION

- Ianition ON.
- Check the operation of the LH vanity mirror, RH vanity mirror, overhead map, center console bin and glove box lamps.

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

Yes If a vanity mirror lamp is inoperative, GO to E6

If the glove compartment lamp is inoperative, GO to E8

If both overhead map lamps are inoperative, GO to E10

If a single overhead map lamp is inoperative, INSTALL a new map lamp bulb. If the lamp is still inoperative, INSTALL a new overhead console.

REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).

If the center console bin lamp is inoperative, GO to E12

No GO to E2

E2 CHECK FOR VOLTAGE TO THE PASSENGER OVERHEAD MAP LAMP

- Ignition OFF.
- Disconnect Overhead Console C930.
- Ignition ON.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 3	₩	Ground

Is the voltage greater than 11 volts?

Yes	GO to <u>E10</u>
No	GO to <u>E3</u>

E3 REPEAT THE ON-DEMAND SELF-TEST AND CHECK FOR VOLTAGE TO THE PASSENGER OVERHEAD MAP LAMP

- Using a diagnostic scan tool, perform the <u>BCM</u> self-test.
- Clear the Diagnostic Trouble Codes (DTCs) and repeat the self-test (required to enable the lamp output driver if <u>DTC</u> U1000:00 is present).
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 3	₩	Ground

Is the voltage greater than 11 volts?

	INSTALL a new overhead console. REFER to: <u>Overhead Console</u> (501-12 Instrument Panel and Console, Removal and Installation).
No	GO to <u>E4</u>

E4 CHECK THE BCM (BODY CONTROL MODULE) DEMAND LAMP OUTPUT CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.
- Disconnect BCM C2280C.
- Disconnect Center Console Lock Assembly <u>C3463</u>.
- Disconnect Glove Compartment Lamp <u>C254</u>.
- Disconnect <u>LH</u> Vanity Mirror Lamp <u>C907</u> and <u>RH</u> Vanity Mirror Lamp <u>C906</u>.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
C2280C Pin 14	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to <u>E5</u>
	REPAIR the circuit. After the repair: If no Diagnostic Trouble Codes (DTCs) are present, TEST the system for normal operation. If <u>DTC</u> U1000:00 is present, CLEAR the Diagnostic Trouble Codes (DTCs) and REPEAT the self-test (required to enable the lamp output driver if <u>DTC</u> U1000:00 is present). If <u>DTC</u> U3000:49 is present,
	VIN required to access Guided Routine (BCM)

E5 CHECK THE BCM (BODY CONTROL MODULE) DEMAND LAMP OUTPUT CIRCUIT FOR AN OPEN

Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 3	Ω	<u>C2280C</u> Pin 14

Is the resistance less than 3 ohms?

Yes	GO to <u>E14</u>
No	REPAIR the circuit.

E6 CHECK THE VANITY MIRROR VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

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

Click to display connectors

LH Vanity Mirror Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C907</u> Pin 1	₩	Ground

Click to display connectors

RH Vanity Mirror Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C906</u> Pin 1	₩	Ground

Is the voltage greater than 11 volts?

Yes	GO to <u>E7</u>
No	REPAIR the circuit.

E7 CHECK THE VANITY MIRROR GROUND CIRCUIT FOR AN OPEN

Measure:

Click to display connectors

LH Vanity Mirror Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C907</u> Pin 1	₩	<u>C907</u> Pin 2

Click to display connectors

RH Vanity Mirror Lamp

Positive Lead	Measurement / Action	Negative Lead
<u>C906</u> Pin 1	₩	<u>C906</u> Pin 2

Is the voltage greater than 11 volts?

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

E8 CHECK THE GLOVE COMPARTMENT LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect Glove Compartment Lamp <u>C254</u>.
- Ignition ON.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C254</u> Pin 1	₩	Ground

Is the voltage greater than 11 volts?

Yes	GO to <u>E9</u>
No	REPAIR the circuit.

E9 CHECK THE GLOVE COMPARTMENT LAMP GROUND CIRCUIT FOR AN OPEN

Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C254</u> Pin 1	₩	<u>C254</u> Pin 2

Is the voltage greater than 11 volts?

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

E10 CHECK THE OVERHEAD INTERIOR LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect Overhead Console <u>C930</u>.
- Ignition ON.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 3	₩	Ground

Is the voltage greater than 11 volts?

Yes	GO to <u>E11</u>
No	REPAIR the circuit.

E11 CHECK THE OVERHEAD INTERIOR LAMP GROUND CIRCUIT FOR AN OPEN

Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C930</u> Pin 3	₩	<u>C930</u> Pin 5

Is the voltage greater than 11 volts?

	INSTALL a new overhead console. REFER to: Overhead Console (501-12 Instrument Panel and Console, Removal and Installation).	
No	REPAIR the circuit.	

E12 CHECK THE CENTER CONSOLE BIN LAMP VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

- Ignition OFF.
- Disconnect Center Console Lock Assembly C3463.
- Ignition ON.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C3463</u> Pin 2	₩	Ground

Is the voltage greater than 11 volts?

Yes	GO to <u>E13</u>
No	REPAIR the circuit.

E13 CHECK THE CENTER CONSOLE BIN LAMP GROUND CIRCUIT FOR AN OPEN

Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C3463</u> Pin 2	₩	<u>C3463</u> Pin 3

Is the voltage greater than 11 volts?

Yes	INSTALL a new center console bin lamp.	
No	REPAIR the circuit.	

E14 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 <u>BCM</u> 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 <u>OASIS</u> for any applicable service articles: <u>TSB</u>, <u>GSB</u>, <u>SSM</u> or <u>FSA</u>. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,





VIN required 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 Luggage Compartment Lamp Is Inoperative Or On Continuously

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

Normal Operation and Fault Conditions

REFER to: Interior Lighting - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

Possible Sources

- · Wiring, terminals or connectors
- Luggage compartment lid latch
- Luggage compartment lamp bulb

PINPOINT TEST F: THE LUGGAGE COMPARTMENT LAMP IS INOPERATIVE OR ON CONTINUOUSLY

F1 DETERMINE IF THE LAMP IS ON WITH THE LUGGAGE COMPARTMENT LID OPEN

- Ignition ON.
- Make sure the luggage compartment lid is fully open and observe the luggage compartment lamp.

Is the luggage compartment lamp illuminated?

Yes	GO to <u>F2</u>
No	GO to <u>F3</u>

F2 CHECK THE LUGGAGE COMPARTMENT LAMP GROUND CIRCUIT FOR A SHORT TO GROUND

Disconnect Luggage Compartment Lid Latch <u>C4339</u>.

Does the luggage compartment lamp continue to illuminate?

Yes	REPAIR the circuit.	
No	INSTALL a new luggage compartment lid latch.	
	REFER to: <u>Luggage Compartment Lid Latch - Coupe</u> (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).	
	REFER to: <u>Luggage Compartment Lid Latch - Convertible</u> (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).	

F3 CHECK THE OPERATION OF THE DEMAND LAMPS

- Ignition ON.
- Check the operation of the <u>LH</u> vanity mirror, <u>RH</u> vanity mirror, overhead map, center console bin and glove box lamps.

Does the interior demand lamps illuminate?

Yes	GO to <u>F4</u>
No	GO to Pinpoint Test E

F4 CHECK FOR VOLTAGE TO THE LUGGAGE COMPARTMENT LAMP

- Disconnect Luggage Compartment Lamp C428.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C428</u> Pin 1	₩	Ground

Is the voltage greater than 11 volts?

Yes	GO to <u>F5</u>
No	REPAIR the luggage compartment lamp voltage supply circuit for an open.

F5 ISOLATE THE LUGGAGE COMPARTMENT LAMP BULB SOCKET

Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C428</u> Pin 1	₩	<u>C428</u> Pin 3

Is the voltage greater than 11 volts?

Yes	INSTALL a new luggage compartment lamp bulb socket.
No	GO to <u>F6</u>

F6 CHECK THE LUGGAGE COMPARTMENT LAMP GROUND CIRCUIT FOR AN OPEN

- Ignition OFF.
- Connect Luggage Compartment Lamp <u>C428</u>.
- Disconnect Luggage Compartment Lid Latch C4339.
- Connect a fused jumper:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C4339</u> Pin 2		Ground

Does the luggage compartment lamp illuminate?

Yes	REMOVE the fused jumper wire. GO to <u>F7</u>
No	REMOVE the fused jumper wire. REPAIR the circuit.

F7 CHECK THE LUGGAGE COMPARTMENT LID LATCH GROUND CIRCUIT FOR AN OPEN

Connect:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C4339</u> Pin 2		<u>C4339</u> Pin 4

Does the luggage compartment lamp illuminate?

Yes	REMOVE the fused jumper wire. INSTALL a new luggage compartment lid latch.	
	REFER to: <u>Luggage Compartment Lid Latch - Coupe</u> (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).	
	REFER to: <u>Luggage Compartment Lid Latch - Convertible</u> (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).	
No	REMOVE the fused jumper wire. REPAIR the circuit.	

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 - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

Possible Sources

- · Wiring, terminals or connectors
- BCM

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

G1 CHECK THE DEMAND LAMP VOLTAGE SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE

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

Does the demand lamp turn on?

Yes	REPAIR the circuit.
No	GO to <u>G2</u>

G2 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?

CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u>, <u>GSB</u>, <u>SSM</u> or <u>FSA</u>. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,





VIN required 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 Ambient Lighting Is Inoperative

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

Normal Operation and Fault Conditions

REFER to: Interior Lighting - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

Possible Sources

- · Wiring, terminals or connectors
- IPC
- BCMB

PINPOINT TEST H: THE AMBIENT LIGHTING IS INOPERATIVE

H1 CHECK THE IPC (INSTRUMENT PANEL CLUSTER) MESSAGE CENTER OPERATION

NOTE: Ambient lighting color and dim settings can only be changed during nighttime ambient lighting conditions.

- Ignition ON.
- Check the operation of other <u>IPC</u> message center settings.

Can other IPC message center settings be changed and saved?

Yes	GO to <u>H2</u>
	REFER to: <u>Instrumentation, Message Center and Warning Chimes</u> (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).

H2 CHECK THE AMBIENT LIGHTING LED (LIGHT EMITTING DIODE) RETURN CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect BCMB C4368A.
- Disconnect <u>BCMB</u> <u>C4368B</u>.
- Ignition ON.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C4368A</u> Pin 24	₩	Ground

Is voltage present?

Yes	GO to <u>H3</u>
No	REPAIR the circuit.

H3 CHECK THE AMBIENT LIGHTING LED (LIGHT EMITTING DIODE) RETURN CIRCUIT FOR AN OPEN

Ignition OFF.

Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C4368B</u> Pin 9	→ +	<u>C4368A</u> Pin 24

Does the meter indicate the circuit is good?

Yes	GO to <u>H4</u>
No	REPAIR the circuit.

H4 CHECK FOR CORRECT BCMB (BODY CONTROL MODULE B) OPERATION

- Disconnect and inspect all <u>BCMB</u> 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 **BCMB** 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 <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . 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 <u>BCMB</u> . REFER to: <u>Body Control Module B (BCMB)</u> (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. CLEAR the Diagnostic Trouble Codes (DTCs).

The Ambient Lighting Does Not Cycle Through All Color Combinations

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

Normal Operation and Fault Conditions

REFER to: Interior Lighting - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions	
B127B:11	Ambient Lighting Zone 1 Output Red LED: Circuit Short To Ground	A continuous memory and on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects a short to ground from the zone 1 red ambient lighting output circuit	
B127B:15	Ambient Lighting Zone 1 Output Red LED: Circuit Short To Battery or Open	ed LED: Circuit open or a short to voltage from the zone 1 red ambient lighting output circuit.	

DTC	Description	Fault Trigger Conditions	
B127D:11	Ambient Lighting Zone 3 Output Red LED: Circuit Short To Ground	A continuous memory and on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects a short to ground from the zone 3 red ambient lighting output circuit	
B127D:15	Ambient Lighting Zone 3 Output Red LED: Circuit Short To Battery or Open	An on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects an open or a short to voltage from the zone 3 red ambient lighting output circuit.	
B127E:11	Ambient Lighting Zone 1 Output Green LED: Circuit Short To Ground	A continuous memory and on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects a short to ground from the zone 1 green ambient lighting output circuit	
B127E:15	Ambient Lighting Zone 1 Output Green LED: Circuit Short To Battery or Open	An on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects an open or a short to voltage from the zone 1 green ambient lighting output circuit.	
B1280:11	Ambient Lighting Zone 3 Output Green LED: Circuit Short To Ground	A continuous memory and on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects a short to ground from the zone 3 green ambient lighting output circuit	
B1280:15	Ambient Lighting Zone 3 Output Green LED: Circuit Short To Battery or Open	An on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects an open or a short to voltage from the zone 3 green ambient lighting output circuit.	
B1281:11	Ambient Lighting Zone 1 Output Blue LED: Circuit Short To Ground	A continuous memory and on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects a short to ground from the zone 1 blue ambient lighting output circuit	
B1281:15	Ambient Lighting Zone 1 Output Blue LED: Circuit Short To Battery or Open	An on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects an open or a short to voltage from the zone 1 blue ambient lighting output circuit.	
B1283:11	Ambient Lighting Zone 3 Output Blue LED: Circuit Short To Ground	A continuous memory and on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects a short to ground from the zone 3 blue ambient lighting output circuit	
B1283:15	Ambient Lighting Zone 3 Output Blue LED: Circuit Short To Battery or Open	An on-demand <u>DTC</u> that sets when the Body Control Module B (BCMB) module detects an open or a short to voltage from the zone 3 blue ambient lighting output circuit.	
U1000:00	Solid State Driver Protection Active -Driver Disabled: No Sub Type Information	This <u>DTC</u> sets when the Body Control Module B (BCMB) 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 Body Control Module B (BCMB) 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 <u>DTC</u> sets when the Body Control Module B (BCMB) 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 Body Control Module B (BCMB) can withstand. CORRECT the cause of the excessive current draw before installing a new Body Control Module B (BCMB).	

Possible Sources

- · Wiring, terminals or connectors
- Ambient lighting <u>LED</u>
- IPC
- BCMB

PINPOINT TEST I: THE AMBIENT LIGHTING DOES NOT CYCLE THROUGH ALL COLOR COMBINATIONS

11 CHECK THE AMBIENT LIGHTING

NOTE: Ambient lighting color and dim settings can only be changed during nighttime ambient lighting conditions.

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

• Observe the operation of all the ambient lighting Light Emitting Diodes (LEDs) while adjusting the color.

Are all ambient lighting Light Emitting Diodes (LEDs) effected?

Yes	GO to <u>12</u>
	If only the <u>IPC</u> is effected, GO to <u>I5</u> For all other ambient lighting Light Emitting Diodes (LEDs), GO to <u>I4</u>

12 CHECK THE COMMUNICATION NETWORK

• Using a diagnostic scan tool, perform a network test.

Does the IPC and BCMB pass the network test?

Yes	GO to <u>13</u>
	DIAGNOSE no communication with the module. REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

13 CHECK THE BCMB (BODY CONTROL MODULE B) CONTINUOUS MEMORY DIAGNOSTIC TROUBLE CODES (CMDTCS)

Using a diagnostic scan tool, check the <u>BCMB</u> Continuous Memory Diagnostic Trouble Codes (CMDTCs).

Is DTC U0155:87 present?

Yes	
	REFER to: <u>Body Control Module B (BCMB)</u> (419-10 Multifunction Electronic Modules, Diagnosis and Testing).
No	GO to <u>16</u>

14 CHECK THE AMBIENT LIGHTING COLOR OUTPUT CIRCUITS

- Ignition OFF.
- Disconnect <u>BCMB</u> <u>C4368A</u>.
- Disconnect BCMB C4368B.
- For front footwell, interior door release handle and cup holder Light Emitting Diodes (LEDs), measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C4368B</u> Pin 11	→ +	<u>C4368A</u> Pin 24
<u>C4368B</u> Pin 12	→ +	<u>C4368A</u> Pin 24
<u>C4368B</u> Pin 13	→ +	<u>C4368A</u> Pin 24

• For scuff plate trim panel Light Emitting Diodes (LEDs), measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C4368B</u> Pin 9	→ +	<u>C4368A</u> Pin 24
<u>C4368B</u> Pin 10	→ +	<u>C4368A</u> Pin 24
<u>C4368B</u> Pin 23	→ +	<u>C4368A</u> Pin 24

Does the meter indicate the circuit is good?

Yes	GO to <u>l6</u>
No	REPAIR the <u>LED</u> voltage supply circuit in question.

15 CHECK FOR CORRECT IPC (INSTRUMENT PANEL CLUSTER) OPERATION

- Disconnect and inspect the IPC connector.
- 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 IPC connector. Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u>, <u>GSB</u>, <u>SSM</u> or <u>FSA</u>. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,







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).

16 CHECK FOR CORRECT BCMB (BODY CONTROL MODULE B) OPERATION

- Disconnect and inspect all <u>BCMB</u> 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 BCMB 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 <u>OASIS</u> for any applicable service articles: <u>TSB</u>, <u>GSB</u>, <u>SSM</u> or <u>FSA</u>. 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 <u>BCMB</u>.

REFER to: <u>Body Control Module B (BCMB)</u> (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. CLEAR the Diagnostic Trouble Codes (DTCs).

An Individual Ambient Lighting <u>LED</u> Is Inoperative/Does Not Cycle Through All Color Combinations

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

Normal Operation and Fault Conditions

REFER to: Interior Lighting - System Operation and Component Description (417-02 Interior Lighting, Description and Operation).

Possible Sources

- · Wiring, terminals or connectors
- Ambient lighting <u>LED</u>
- IPC
- BCMB

PINPOINT TEST J: AN INDIVIDUAL AMBIENT LIGHTING LED (LIGHT EMITTING DIODE) IS INOPERATIVE/DOES NOT CYCLE THROUGH ALL COLOR COMBINATIONS

J1 CHECK THE AMBIENT LIGHTING

NOTE: Ambient lighting color and dim settings can only be changed during nighttime ambient lighting conditions.

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

Is only a scuff plate trim panel ambient lighting <u>LED</u> effected?

Yes	GO to <u>J2</u>
No	For an interior door release handle ambient lighting <u>LED</u> , GO to <u>J3</u> For a footwell ambient lighting <u>LED</u> , GO to <u>J4</u> For the center console cup holder ambient lighting <u>LED</u> , GO to <u>J5</u> For the <u>IPC</u> ambient lighting <u>LED</u> , GO to <u>J6</u>

J2 CHECK THE SCUFF PLATE TRIM PANEL LIGHTING COLOR SUPPLY CIRCUITS

- Ignition OFF.
- Disconnect <u>LH</u> Scuff Plate Lamp <u>C3369</u> or <u>RH</u> Scuff Plate Lamp <u>C3370</u>.
- Disconnect <u>BCMB</u> <u>C4368A</u>.
- Disconnect BCMB C4368B.
- For the <u>LH</u> scuff plate lamp, measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C3369</u> Pin 3	Ω	<u>C4368B</u> Pin 9
C3369 Pin 2	Ω	<u>C4368B</u> Pin 10
C3369 Pin 1	Ω	<u>C4368B</u> Pin 23
C3369 Pin 4	Ω	<u>C4368A</u> Pin 24

For the <u>RH</u> scuff plate lamp, measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C3370</u> Pin 3	Ω	<u>C4368B</u> Pin 9
<u>C3370</u> Pin 2	Ω	<u>C4368B</u> Pin 10
<u>C3370</u> Pin 1	Ω	<u>C4368B</u> Pin 23
<u>C3370</u> Pin 4	Ω	<u>C4368A</u> Pin 24

Is the resistance less than 3 ohms?

Yes	INSTALL a new ambient lighting <u>LED</u> .	
No	REPAIR the <u>LED</u> voltage supply circuit in question.	

J3 CHECK THE INTERIOR DOOR RELEASE HANDLE LIGHTING COLOR SUPPLY CIRCUITS

- Ignition OFF.
- Disconnect <u>LH</u> Interior Door Release Handle Ambient Lighting Lamp <u>C573</u> or <u>RH</u> Interior Door Release Handle Ambient Lighting Lamp <u>C649</u>.
- Disconnect <u>BCMB</u> <u>C4368A</u>.
- Disconnect BCMB C4368B.
- For the <u>LH</u> interior door release handle ambient lighting lamp, measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C573</u> Pin 1	Ω	<u>C4368B</u> Pin 11
<u>C573</u> Pin 3	Ω	<u>C4368B</u> Pin 12
<u>C573</u> Pin 5	Ω	<u>C4368B</u> Pin 13
<u>C573</u> Pin 4	Ω	<u>C4368A</u> Pin 24

For the RH interior door release handle ambient lighting lamp, measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C649</u> Pin 1	Ω	<u>C4368B</u> Pin 11
<u>C649</u> Pin 3	Ω	<u>C4368B</u> Pin 12
<u>C649</u> Pin 5	Ω	<u>C4368B</u> Pin 13
<u>C649</u> Pin 4	Ω	C4368A Pin 24

Is the resistance less than 3 ohms?

Yes	INSTALL a new ambient lighting <u>LED</u> .	
No	REPAIR the LED voltage supply circuit in question.	

J4 CHECK THE FOOTWELL LIGHTING COLOR SUPPLY CIRCUITS

- Ignition OFF.
- Disconnect <u>LH</u> Footwell Lamp <u>C209</u> or <u>RH</u> Footwell Lamp <u>C266</u>.
- Disconnect <u>BCMB</u> <u>C4368A</u>.
- Disconnect <u>BCMB</u> <u>C4368B</u>.
- For the <u>LH</u> footwell lamp, measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
C209 Pin 1	Ω	<u>C4368B</u> Pin 11
C209 Pin 2	Ω	<u>C4368B</u> Pin 12
C209 Pin 3	Ω	<u>C4368B</u> Pin 13
C209 Pin 4	Ω	<u>C4368A</u> Pin 24

• For the RH footwell lamp, measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C266</u> Pin 1	Ω	<u>C4368B</u> Pin 11
C266 Pin 2	Ω	<u>C4368B</u> Pin 12
C266 Pin 3	Ω	<u>C4368B</u> Pin 13
<u>C266</u> Pin 4	Ω	<u>C4368A</u> Pin 24

Is the resistance less than 3 ohms?

Yes	INSTALL a new ambient lighting <u>LED</u> .
No	REPAIR the <u>LED</u> voltage supply circuit in question.

J5 CHECK THE CENTER CONSOLE CUP HOLDER LIGHTING COLOR SUPPLY CIRCUITS

- Ignition OFF.
- Disconnect Center Console Cup Holder Ambient Lighting Lamp <u>C3349</u>.
- Disconnect <u>BCMB</u> <u>C4368A</u>.
- Disconnect <u>BCMB</u> <u>C4368B</u>.
- Measure:

Click to display connectors

Positive Lead	Measurement / Action	Negative Lead
<u>C3349</u> Pin 1	Ω	<u>C4368B</u> Pin 11
<u>C3349</u> Pin 2	Ω	<u>C4368B</u> Pin 12
C3349 Pin 3	Ω	<u>C4368B</u> Pin 13
<u>C3349</u> Pin 4	Ω	C4368A Pin 24

Is the resistance less than 3 ohms?

Yes	INSTALL a new ambient lighting <u>LED</u> .
No	REPAIR the <u>LED</u> voltage supply circuit in question.

J6 CHECK FOR CORRECT IPC (INSTRUMENT PANEL CLUSTER) OPERATION

- Disconnect and inspect the <u>IPC</u> connector.
- 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 <u>IPC</u> connector. Make sure it seats and latches 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,

VIN required to access Guided Routine (IPC)

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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