

A2 CHECK THE BCM (BODY CONTROL MODULE) DRL (DAYTIME RUNNING LAMPS) CIRCUIT FOR A SHORT TO VOLTAGE

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

Do the DRL continue to illuminate?

Yes	REPAIR the DRL circuit in question.
No	GO to A6

A3 CHECK THAT THE DRL (DAYTIME RUNNING LAMPS) ARE ENABLED

- For conventional DRL, check if the DRL are enabled through a diagnostic scan tool.
- For configurable DRL, check if the DRL are enabled through the IPC.

Are the DRL enabled?

Yes	GO to A4
No	For conventional DRL, Using a diagnostic scan tool, ENABLE the DRL. For configurable DRL, enable the DRL. REFER to the Owner's Literature for information on enabling the DRL.

A4 CHECK THE DRL (DAYTIME RUNNING LAMPS) CIRCUIT FOR VOLTAGE

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect:LH Headlamp [C1284](#) or RH Headlamp [C1285](#).
- Ignition ON.
- Make sure there is enough ambient lighting that the autolamps system will not automatically illuminate the headlamps.
- Place the headlamp switch in the AUTOLAMPS position.
- Measure:

HEADLAMP ASSEMBLY LH	
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LH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-4		Ground

HEADLAMP ASSEMBLY RH	
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RH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1285-4		Ground

Is the voltage greater than 11 volts?

Yes	GO to A6
No	GO to A5

A5 REPEAT THE ON-DEMAND SELF-TEST AND CHECK THE DRL (DAYTIME RUNNING LAMPS) CIRCUIT FOR VOLTAGE

- Place the headlamp switch in the OFF position.
- Using a diagnostic scan tool, perform the BCM self-test.
- Clear the Diagnostic Trouble Codes (DTCs) and repeat the self-test (required to enable the lamp output driver).
- Ignition OFF.
- Ignition ON.
- Place the headlamp switch in the AUTOLAMPS position.
- Measure:

HEADLAMP ASSEMBLY LH	
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LH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-4		Ground

HEADLAMP ASSEMBLY RH	
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RH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1285-4		Ground

Is the voltage greater than 11 volts?

Yes	GO to A6
No	GO to A7

A6 CHECK THE LED (LIGHT EMITTING DIODE) CONTROL MODULE

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Connect: Inoperative LH Headlamp [C1284](#) or RH Headlamp [C1285](#) if previously disconnected.
- Connect: BCM [C2280F](#) if previously disconnected.
- Ignition ON.
- CLEAR the Diagnostic Trouble Codes (DTCs), REPEAT the self-test (required to enable the lamp output driver) and cycle the ignition OFF and ON. REPEAT the self-test.
- Activate the hazard flasher lamp function.
- Operate the system and determine if the concern is still present.

Is the concern still present or does any Diagnostic Trouble Codes (DTCs) return?

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

A7 CHECK THE DRL (DAYTIME RUNNING LAMPS) CIRCUIT FOR A SHORT TO GROUND

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

HEADLAMP ASSEMBLY LH	
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LH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-4	Ω	Ground

HEADLAMP ASSEMBLY RH



RH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1285-4	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to A8
No	REPAIR the circuit. After the repair: If no Diagnostic Trouble Codes (DTCs) are present, TEST the system for normal operation. If DTC U1000:00 is present, CLEAR the Diagnostic Trouble Codes (DTCs) and REPEAT the self-test (required to enable the lamp output driver if DTC U1000:00 is present). If DTC U3000:49 is present, INSTALL a new BCM. REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).

A8 CHECK THE DRL (DAYTIME RUNNING LAMPS) CIRCUIT FOR AN OPEN

- Measure:

HEADLAMP ASSEMBLY LH	BODY CONTROL MODULE (BCM)
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LH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-4	Ω	C2280F-40

HEADLAMP ASSEMBLY RH	BODY CONTROL MODULE (BCM)
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RH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1285-4	Ω	C2280F-36

Is the resistance less than 3 ohms?

Yes	GO to A9
No	REPAIR the circuit.

A9 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM and all related in-line connectors.
- Repair:
 - corrosion (install new connector or terminals â€“ clean module pins)
 - damaged or bent pins â€“ install new terminals/pins
 - pushed-out pins â€“ install new pins as necessary
- Reconnect the BCM and all 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 service articles: TSB, GSB, SSM or FSA. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new BCM. REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).
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.

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Fog Lamps

Diagnostic Trouble Code (DTC) Chart

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.
REFER to: Diagnostic Methods (100-00 General Information, Description and Operation).

Diagnostic Trouble Code Chart

Module	DTC	Description	Action <i>New: hover over Pinpoint Test links to show title</i>
BCM	B1147:11	Left Front Fog Lamps: Circuit Short To Ground	GO to Pinpoint Test B
BCM	B1147:15	Left Front Fog Lamps: Circuit Short To Battery or Open	GO to Pinpoint Test B
BCM	B1148:11	Right Front Fog Lamps: Circuit Short To Ground	GO to Pinpoint Test B
BCM	B1148:15	Right Front Fog Lamps: Circuit Short To Battery or Open	GO to Pinpoint Test B
BCM	B1499:11	Exterior Lamps Power Supply "A": Circuit Short To Ground	GO to Pinpoint Test B
BCM	B1499:15	Exterior Lamps Power Supply "A": Circuit Short To Battery or Open	GO to Pinpoint Test B
BCM	B149D:11	Exterior Lamps Power Supply "B": Circuit Short To Ground	GO to Pinpoint Test B
BCM	B149D:15	Exterior Lamps Power Supply "B": Circuit Short To Battery or Open	GO to Pinpoint Test B
BCM	B1A79:11	Rear Fog Lamp: Circuit Short To Ground	GO to Pinpoint Test C
BCM	B1A79:15	Rear Fog Lamp: Circuit Short To Battery or Open	GO to Pinpoint Test C
BCM	â€”	All other BCM Diagnostic Trouble Codes (DTCs)	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).

Symptom Charts

Symptom Chart: Fog Lamps

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.
REFER to: Diagnostic Methods (100-00 General Information, Description and Operation).

Condition	Possible Sources	Actions

Condition	Possible Sources	Actions
A module does not respond to the diagnostic scan tool	• Fuse • Wiring, terminals or connectors • Module	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).
Both front fog lamps are inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test A
An individual front fog lamp is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test B
The rear fog lamp is inoperative or always on	Refer to the Pinpoint Test	GO to Pinpoint Test C

Pinpoint Tests

☐ [PINPOINT TEST A : BOTH FRONT FOG LAMPS ARE INOPERATIVE OR ALWAYS ON](#)

Refer to Wiring Diagrams Cell [86](#) for schematic and connector information.

Normal Operation and Fault Conditions

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

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

Possible Sources

- Wiring, terminals or connectors
- Headlamp switch
- BCM

Visual Inspection and Pre-checks

- Inspect the headlamp switch for damage.

A1 CHECK THE HEADLAMP SWITCH

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

Are any headlamp switch module BCM Diagnostic Trouble Codes (DTCs) present?

Yes	REFER to: Headlamps (417-01 Exterior Lighting, Diagnosis and Testing).
No	INSTALL a new headlamp switch. REFER to: Headlamp Switch (417-01 Exterior Lighting, Removal and Installation). TEST the system for normal operation. If the condition returns, GO to A2

A2 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION