

Daytime Running Lamps (DRL)

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 <i>New: hover over Pinpoint Test links to show title</i>
B124A:11	Right Daytime Running Light: Circuit Short To Ground	GO to Pinpoint Test A
B124A:15	Right Daytime Running Light: Circuit Short To Battery or Open	GO to Pinpoint Test A
B124B:11	Left Daytime Running Light: Circuit Short To Ground	GO to Pinpoint Test A
B124B:15	Left Daytime Running Light: Circuit Short To Battery or Open	GO to Pinpoint Test A
For other BCM Diagnostic Trouble Codes (DTCs)	-	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).

Symptom Chart(s)

Symptom Chart: Daytime Running Lamps (DRL)

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

NOTE: Before beginning diagnostics, refer to Description and Operation in this section for proper DRL operation.

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

Pinpoint Tests

[PINPOINT TEST A : THE DRL \(DAYTIME RUNNING LAMPS\) ARE INOPERATIVE OR ALWAYS ON](#)

Refer to Wiring Diagrams Cell [85](#) for schematic and connector information.

Normal Operation and Fault Conditions

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

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

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Condition
BCM B124A:11	Right Daytime Running Light: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the RH DRL voltage supply circuit.
BCM B124A:15	Right Daytime Running Light: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the RH DRL voltage supply circuit.
BCM B124B:11	Left Daytime Running Light: Circuit Short To Ground	A continuous memory and on-demand DTC that sets when the BCM detects a short to ground from the LH DRL voltage supply circuit.
BCM B124B:15	Left Daytime Running Light: Circuit Short To Battery Or Open	A continuous memory and on-demand DTC that sets when the BCM detects an open or short to voltage from the LH DRL voltage supply circuit.

Possible Sources

- Wiring, terminals or connectors
- Headlamp assembly
- LED control module
- BCM

NOTE: Before beginning this test, refer to Description and Operation in this section for proper DRL operation.

A1 CHECK THE OPERATION OF THE PARKING LAMPS

- Ignition ON.
- For halogen headlamps, place the headlamp switch in the HEADLAMPS position and observe the low beam headlamps.
- For LED headlamps, place the headlamp switch in the PARKING LAMPS position and observe the LED DRL/front park lamps.

Do the lamps operate correctly?

Yes	For low halogen headlamps, if one of the DRL are inoperative, GO to A9 For LED headlamps, if the one of the DRL are inoperative, GO to A4 If all of the DRL are inoperative or always on, GO to A3 For LED headlamps, If one of the DRL are always on, GO to A2
No	For halogen headlamps, REFER to: Headlamps (417-01 Exterior Lighting, Diagnosis and Testing). For LED headlamps, REFER to: Parking, Rear and License Plate Lamps (417-01 Exterior Lighting, Diagnosis and Testing).

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 OR DISABLED

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

Are the DRL correctly enabled or disabled?

Yes	For halogen headlamps, GO to A9 For LED headlamps, GO to A4
No	For conventional DRL, Using a diagnostic scan tool, enable or disable the DRL. For configurable DRL, enable or disable 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, LEFT	
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LH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-4		Ground

HEADLAMP, RIGHT	
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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, LEFT	
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LH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1284-4		Ground

HEADLAMP, RIGHT	
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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, LEFT	
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LH Headlamp

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

HEADLAMP, RIGHT	
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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, Removal and Installation).

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

- Measure:

HEADLAMP, LEFT	BODY CONTROL MODULE (BCM)
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LH Headlamp

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

HEADLAMP, RIGHT	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, 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.

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