

Daytime Running Lamps (DRL)

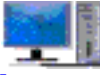
DTC Chart: Body Control Module (BCM)

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
B1493:11	Daytime Running Light: Circuit Short To Ground	GO to Pinpoint Test A
B1493:15	Daytime Running Light: Circuit Short To Battery or Open	• If the lamp is inoperative, GO to Pinpoint Test A • If the lamp is always on, GO to Pinpoint Test B
B14A3:11	Signature Lamps: Circuit Short To Ground	GO to Pinpoint Test A
B14A3:15	Signature Lamps: Circuit Short To Battery or Open	• If the lamp is inoperative, GO to Pinpoint Test A • If the lamp is always on, 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 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, 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 begining 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 - LED headlamps	Refer to the Pinpoint Test	GO to Pinpoint Test A
The DRL are always on - LED headlamps	Refer to the Pinpoint Test	GO to Pinpoint Test B
The DRL are inoperative or always on -halogen headlamps	Refer to the Pinpoint Test	GO to Pinpoint Test C

Pinpoint Tests

The DRL Are Inoperative - LED Headlamps

Refer to Wiring Diagrams Cell 85 for schematic and connector information.

Normal Operation and Fault Conditions

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

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1493:11	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 DRL voltage supply circuit.

B1493:15	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 DRL voltage supply 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
- Front parking lamp concern
- Headlamp assembly
- Ballast
- BCM

PINPOINT TEST A : THE DRL (DAYTIME RUNNING LAMPS) ARE INOPERATIVE - LED (LIGHT EMITTING DIODE) HEADLAMPS

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

A1 CHECK THE OPERATION OF THE HEADLAMPS

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

Do the headlamps operate correctly?

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

A2 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 the DRL are enabled through the IPC.
- Make sure there is enough ambient lighting that the autolamps system will not automatically illuminate the headlamps.
- Place the headlamp switch in the AUTOLAMPS position.
- Measure:

Click to display connectors

RH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1285-4		Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new ballast. REFER to: Ballast (417-01 Exterior Lighting, Removal and Installation). Test the system for normal operation. If the condition is still present, INSTALL a new headlamp assembly. REFER to: Headlamp Assembly (417-01 Exterior Lighting, Removal and Installation).
No	GO to A3

A3 REPEAT THE ON-DEMAND SELF-TEST AND CHECK THE DRL (DAYTIME RUNNING LAMPS) CIRCUIT FOR VOLTAGE

- 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

RH Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1285-4		Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new ballast. REFER to: Ballast (417-01 Exterior Lighting, Removal and Installation). Test the system for normal operation. If the condition is still present, INSTALL a new headlamp assembly. REFER to: Headlamp Assembly (417-01 Exterior Lighting, Removal and Installation).
No	GO to A4

A4 CHECK THE DRL (DAYTIME RUNNING LAMPS) CIRCUIT FOR A SHORT TO GROUND

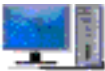
- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: BCM C2280F.
- Measure:

Click to display connectors

RH Headlamp

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

Is the resistance greater than 10,000 ohms?

Yes	GO to A5
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).

A5 CHECK THE DRL (DAYTIME RUNNING LAMPS) CIRCUIT FOR AN OPEN

- Measure:

Click to display connectors

RH Headlamp

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

Is the resistance less than 3 ohms?

Yes	GO to A6
No	REPAIR the circuit.

A6 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

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

Is the concern still present?

Yes	CHECK OASIS for any applicable 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.

The DRL Are Always On - LED Headlamps

Refer to Wiring Diagrams Cell 85 for schematic and connector information.

Normal Operation and Fault Conditions

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

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1493:15	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 bumper mounted DRL circuit.

Possible Sources

- Wiring, terminals or connectors
- BCM

PINPOINT TEST B : THE DRL (DAYTIME RUNNING LAMPS) ARE ALWAYS ON - LED (LIGHT EMITTING DIODE) HEADLAMPS

NOTE: Before begining this test, refer to Description and Operation in this section for proper DRL operation.
B1 CHECK THE BCM (BODY CONTROL MODULE) DRL (DAYTIME RUNNING LAMPS) CIRCUIT

- Ignition OFF.
- Disconnect: BCM C2280F.
- Ignition ON.

Do the DRL continue to illuminate?

Yes	REPAIR the DRL circuit in question for a short to voltage.
No	GO to B2

B2 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

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

Is the concern still present?

Yes	CHECK OASIS for any applicable 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.

The DRL Are Inoperative Or Always On - Halogen Headlamps

Normal Operation and Fault Conditions

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

Possible Sources

- Wiring, terminals or connectors
- BCM

Visual Inspection and Diagnostic Pre-checks

- Inspect the LH multifunction switch for damage.

PINPOINT TEST C : THE DRL (DAYTIME RUNNING LAMPS) ARE INOPERATIVE OR ALWAYS ON - HALOGEN HEADLAMPS

C1 CHECK THE OPERATION OF THE HEADLAMPS	
• Ignition ON. • Place the headlamp switch in the HEADLAMPS position and observe the headlamps. • Place the headlamp switch in the OFF position and observe the headlamps.	
Do the headlamps operate correctly?	
Yes	GO to C2
No	REFER to: Headlamps (417-01 Exterior Lighting, Diagnosis and Testing).
C2 CHECK THAT THE DRL (DAYTIME RUNNING LAMPS) ARE ENABLED	

- Check if the DRL are enabled through the IPC.

Are the DRL enabled?

Yes	GO to C3
No	Enable the DRL. REFER to the Owner's Literature for information on enabling the DRL.

C3 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

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

Is the concern still present?

Yes	CHECK OASIS for any applicable 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.