

Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2011 FORD F-150 Raptor SVT OEM Service and Repair Workshop Manual

[Go to manual page](#)

LDCMB (Lighting Driver Control Module B)	U3003:17	Battery Voltage: Circuit Voltage Above Threshold	GO to Pinpoint Test T
LDCMB (Lighting Driver Control Module B)	U3003:A2	Battery Voltage: System Voltage Low	GO to Pinpoint Test T
LDCMB (Lighting Driver Control Module B)	U3003:A3	Battery Voltage: System Voltage High	GO to Pinpoint Test T
SCCM (steering column control module)	B124C:96	Turn Indicator Stalk Switch Pack: Component Internal Failure	GO to Pinpoint Test E
SCCM (steering column control module)	B124C:9E	Turn Indicator Stalk Switch Pack: Stuck On	GO to Pinpoint Test E

Global Customer Symptom Code (GCSC) 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).

Global Customer Symptom Code Chart

Customer Symptom	Action
Lighting/Glass/Vision > Exterior Lighting > Headlamp > Appearance	GO to Pinpoint Test F
Lighting/Glass/Vision > Exterior Lighting > Headlamp > Inoperative	GO to Pinpoint Test A
Lighting/Glass/Vision > Exterior Lighting > Headlamp > Inoperative	GO to Pinpoint Test B
Lighting/Glass/Vision > Exterior Lighting > Headlamp > Inoperative	GO to Pinpoint Test C
Lighting/Glass/Vision > Exterior Lighting > Headlamp > Inoperative	GO to Pinpoint Test D

(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 (diagnostic trouble code)	Description	Fault Trigger Condition
BCM (body control module) B14E0:11	Exterior Lamps Power Supply 'C': Circuit Short To Ground	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a short to ground from the LH (left-hand) low beam output circuit.
BCM (body control module) B14E0:15	Exterior Lamps Power Supply 'C': Circuit Short To Battery Or Open	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a short to voltage from the LH (left-hand) low beam output circuit.
BCM (body control module) B14E1:11	Exterior Lamps Power Supply 'D': Circuit Short To Ground	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) detects an open from the RH (right-hand) low beam output circuit.
BCM (body control module) B14E1:15	Exterior Lamps Power Supply 'D': Circuit Short To Battery Or Open	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) detects an open or a short to voltage from the RH (right-hand) low beam output circuit.
BCM (body control module) B1533:02	Headlamp Switch Module: General Signal Failure	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) is missing data from the messages sent from the headlamp switch over the LIN (local interconnect network) circuit.
BCM (body control module) B1533:08	Headlamp Switch Module: Bus Signal/Message Failures	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control module) has lost communication with the headlamp switch over the LIN (local interconnect network) circuit.
BCM (body control module)	Headlamp Switch Module: Internal Electronic Failure	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the BCM (body control

LDCMA (Lighting Driver Control Module A) B1D00:13	Left Low Beam: Circuit Open	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the LDCMA (Lighting Driver Control Module A) detects an open from the LH (left-hand) headlamp internal low beam circuit.
LDCMA (Lighting Driver Control Module A) B1D00:14	Left Low Beam: Circuit Short To Ground Or Open	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the LDCMA (Lighting Driver Control Module A) detects an open or short to ground from the LH (left-hand) headlamp internal low beam circuit.
LDCMA (Lighting Driver Control Module A) B1D00:16	Left Low Beam: Circuit Voltage Below Threshold	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the LDCMA (Lighting Driver Control Module A) detects a low voltage on the LH (left-hand) headlamp internal low beam circuit.
LDCMA (Lighting Driver Control Module A) B1D00:1E	Left Low Beam: Circuit Resistance Out Of Range	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the LDCMA (Lighting Driver Control Module A) detects an incorrect resistance on the LH (left-hand) headlamp internal low beam circuit.
LDCMA (Lighting Driver Control Module A) B1D00:4B	Left Low Beam: Over Temperature	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the LDCMA (Lighting Driver Control Module A) detects a high temperature LH (left-hand) headlamp internal low beam circuit driver.
LDCMA (Lighting Driver Control Module A) B1D00:62	Left Low Beam: Signal Compare Failure	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the LDCMA (Lighting Driver Control Module A) detects a difference in the low beam state from the HCM (headlamp control module) over the CAN (controller area network) and the low beam circuit from the BCM (body control module) .
LDCMA (Lighting Driver Control Module A) B1D00:87	Left Low Beam: Missing Message	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the LDCMA (Lighting Driver Control Module A) detects a message missing from the HCM (headlamp control module) over the CAN (controller area network) .

		CAN (controller area network) and the low beam circuit from the BCM (body control module) .
LDCMB (Lighting Driver Control Module B) B1D01:87	Right Low Beam: Missing Message	A continuous memory and on-demand DTC (diagnostic trouble code) that sets when the LDCMB (Lighting Driver Control Module B) detects a message missing from the HCM (headlamp control module) over the CAN (controller area network) .

Possible Sources

- Wiring, terminals or connectors
- Headlamp assembly
- LDCMA (Lighting Driver Control Module A) (LH (left-hand) headlamp)
- LDCMB (Lighting Driver Control Module B) (RH (right-hand) headlamp)
- BCM (body control module)

Visual Inspection and Pre-checks

- Inspect the headlamp assembly for damage.
- Inspect the headlamp switch for damage.
- Verify the BCM (body control module) fuse 19 (5A) is OK.
- Verify the BCMC (body control module C) (also known as the BJB (battery junction box)) fuse 100 (25A) (LH (left-hand) headlamp) or fuse 101 (25A) (RH (right-hand) headlamp) is OK.



A1 CHECK THE PARKING LAMPS AND FRONT TURN SIGNAL LAMP OPERATION

- Ignition ON.
- Activate the hazard lamp function and observe the front turn signal lamps.
- Place the headlamp switch in the PARKING LAMPS position.
- Place the LH (left-hand) steering column multifunction switch in the high beam position and observe the high beams.



Are the LH (left-hand) low beams, front parking lamps and turn signals all inoperative or are the RH (right-hand) low beams, front parking lamps and turn signals all inoperative?

Yes	VERIFY the BCMC (body control module C) (also known as the BJB (battery junction box)) fuse 100 (25A) (LH (left-hand) headlamp) or fuse 101 (25A) (RH (right-hand) headlamp) is OK. If OK, GO to A2 If not OK, REFER to the Wiring Diagrams manual to identify the possible causes of the circuit short.
No	If the LH (left-hand) and RH (right-hand) low beams are inoperative or are always ON, GO to A15 If only the LH (left-hand) low beams or only the RH (right-hand) low beams are inoperative or not

LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1509-3		C1509-2
C1509-3		C1509-4

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1510-3		C1510-2
C1510-3		C1510-4

Is the voltage greater than 11 volts?

Yes	GO to A21
------------	---------------------------

No	REPAIR the circuit in question.
-----------	---------------------------------

A4 CHECK FOR LDCMA (LIGHTING DRIVER CONTROL MODULE A) OR LDCMB (LIGHTING DRIVER CONTROL MODULE B) DIAGNOSTIC TROUBLE CODES (DTCS)

- Using a diagnostic scan tool, perform the LDCMA (Lighting Driver Control Module A) (LH (left-hand) headlamp) or LDCMB (Lighting Driver Control Module B) (RH (right-hand) headlamp) self-test.

Is LDCMA (Lighting Driver Control Module A) DTC (diagnostic trouble code) B1D00:16, B1D00:1E or B1D00:4B or LDCMB (Lighting Driver Control Module B) DTC (diagnostic trouble code) B1D01:16, B1D01:1E or B1D01:4B present?

A7 CHECK THE VEHICLE HISTORY

- Check the vehicle history for LDCMA (Lighting Driver Control Module A) DTC (diagnostic trouble code) B1D00:16, B1D00:1E or B1D00:4B or LDCMB (Lighting Driver Control Module B) DTC (diagnostic trouble code) B1D01:16, B1D01:1E or B1D01:4B

Has the vehicle set the same DTC (diagnostic trouble code) in the past?



Yes	GO to A8
------------	--------------------------

No	INSPECT the front turn signal lamp, wiring, headlamp and LDCM (Lighting Driver Control Module) for damage. REPAIR the wiring or REPLACE any damaged components. If not signs of damage are found, the system is operating correctly at this time.
-----------	---

A8 CHECK THE HEADLAMP MOUNTED LDCM (LIGHTING DRIVER CONTROL MODULE) VOLTAGE CIRCUITS FOR AN OPEN

- Place the headlamp switch in the OFF position.
- Ignition OFF.
- Disconnect: Suspect LH (left-hand) Headlamp C1509 or RH (right-hand) Headlamp C1510.
- Ignition ON.
- Place the headlamp switch in the HEADLAMPS position.
- Measure:

LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1509-3		Ground
C1509-5		Ground

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead

C1510-3	V	C1510-4
---------	---	---------

Is the voltage greater than 11 volts?

Yes	GO to A10
------------	---------------------------

No	REPAIR the circuit in question.
-----------	---------------------------------

A10 CHECK FOR LOW BEAM VOLTAGE AT THE HEADLAMP

- Measure:

LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1509-1	V	Ground

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1510-1	V	Ground

Is the voltage greater than 11 volts?

Yes	GO to A12
------------	---------------------------

No	GO to A11
-----------	---------------------------

C1509-1	V̄	C1509-2
C1509-1	V̄	C1509-4

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1510-1	V̄	C1510-2
C1510-1	V̄	C1510-4

Is the voltage greater than 11 volts?

Yes	GO to A21
------------	---------------------------

No	REPAIR the circuit in question.
-----------	---------------------------------

A13 CHECK THE LOW BEAM SUPPLY CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.
- Place the headlamp switch in the OFF position.
- Disconnect: BCM (body control module) C2280G.
- Measure:

LH (left-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
---------------	----------------------	---------------

RH (right-hand) Headlamp

Positive Lead	Measurement / Action	Negative Lead
C1510-1	Ω	C2280G-2

Is the resistance less than 3 ohms?

Yes	GO to A22
------------	---------------------------

No	REPAIR the circuit.
-----------	---------------------

A15 CHECK FOR BCM (BODY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

- Ignition ON.
- Using a diagnostic scan tool, perform the BCM (body control module) self-test.

Is DTC (diagnostic trouble code) **B1533:02, B1533:08, B1533:49 or B1533:56** present?

Yes	<p>For BCM (body control module) DTC (diagnostic trouble code) B1533:02 or B1533:08, GO to A16</p> <p>For BCM (body control module) DTC (diagnostic trouble code) B1533:49, INSTALL a new headlamp switch.</p> <p>REFER to: Headlamp Switch (417-01 Exterior Lighting, Removal and Installation).</p> <p>For BCM (body control module) DTC (diagnostic trouble code) B1533:56, using the diagnostic scan tool, execute the BCM (body control module) LIN (local interconnect network) New Module Initialization routine. Follow the diagnostic scan tool directions. If the initialization routine fails, INSTALL a new headlamp switch.</p> <p>REFER to: Headlamp Switch (417-01 Exterior Lighting, Removal and Installation).</p>
No	<p>INSTALL a new headlamp switch.</p> <p>REFER to: Headlamp Switch (417-01 Exterior Lighting, Removal and Installation).</p>