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## 2008 FORD Explorer OEM Service and Repair Workshop Manual

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<b>No</b>	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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**PINPOINT TEST B : ALL AUXILIARY SWITCH ON INDICATORS OR CONTROLLED COMPONENTS ARE INOPERATIVE OR ALWAYS ON**

Refer to Wiring Diagrams Cell 140 for schematic and connector information.

**Normal Operation and Fault Conditions** The upfitter switch indicators have a unique ground circuit. If an upfitter device operates, but the indicator does not illuminate, then the switch or ground is bad. REFER to: [Auxiliary Switches](#) (419-10 Multifunction Electronic Modules, Description and Operation).

**Possible Sources**

- Wiring, terminals or connectors
- Upfitter (auxiliary) switch assembly
- BCM (body control module)

**B1 CHECK THE UPFITTER SYSTEM**

- Ignition OFF.
- Operate all the upfitter accessories.

**Are the upfitter accessories always ON?**  
all

<b>Yes</b>	GO to <a href="#">B2</a>
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<b>No</b>	If some, but not all, auxiliary switch ON indicators are inoperative, INSTALL a new upfitter switch assembly. REFER to: <a href="#">Auxiliary Switches</a> (419-10 Multifunction Electronic Modules, Removal and Installation). For all other symptoms, GO to <a href="#">B4</a>
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**B2 CHECK THE DEMAND LAMP VOLTAGE SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE**

- Disconnect BCM (body control module) C2280C .

## Do the upfitter accessories operate?

<b>Yes</b>	GO to <a href="#">B5</a>
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<b>No</b>	GO to <a href="#">B6</a>
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## B5 CHECK THE UPFITTER SWITCH INDICATOR GROUND

- Ignition OFF.
- Disconnect Upfitter switch C9120 .
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C9120-6	$\Omega$	Ground

## Is the resistance less than 3 ohms?

<b>Yes</b>	INSTALL a new upfitter switch assembly. REFER to: <a href="#">Auxiliary Switches</a> (419-10 Multifunction Electronic Modules, Removal and Installation).
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<b>No</b>	REPAIR the circuit.
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## B6 CHECK FOR VOLTAGE TO THE UPFITTER SWITCH

- Ignition OFF.
- Disconnect Upfitter switch C9120 .
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
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## Body Control Module (BCM)

<b>419-10 Multifunction Electronic Modules</b>	<b>2022 F-150</b>
<b>Diagnosis and Testing</b>	<b>Procedure revision date: 09/6/2022</b>

### Body Control Module (BCM)

#### 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 (diagnostic trouble code)	Description	Action
BCM (body control module)	B11D8:01	Restraint Event Notification: General Electrical Failure	<a href="#">GO to Pinpoint Test A</a>
BCM (body control module)	U0100:87	Lost Communication With ECM/PCM "A": Missing Message	<a href="#">GO to Pinpoint Test B</a>
BCM (body control module)	U0101:87	Lost Communication with TCM: Missing Message	<a href="#">GO to Pinpoint Test C</a>
BCM (body control module)	U0121:87	Lost Communication With Anti-Lock Brake System (ABS) Control Module: Missing Message	<a href="#">GO to Pinpoint Test D</a>
BCM (body control module)	U0122:87	Lost communication with Vehicle Dynamics: Missing Message	<a href="#">GO to Pinpoint Test E</a>

BCM (body control module)	U0232:87	Lost Communication With Side Obstacle Detection Control Module "A": Missing Message	<a href="#">GO to Pinpoint Test T</a>
BCM (body control module)	U0233:87	Lost Communication With Side Obstacle Detection Control Module "B": Missing Message	<a href="#">GO to Pinpoint Test T</a>
BCM (body control module)	U023A:87	Lost Communication With Image Processing Control Module A: Missing Message	<a href="#">GO to Pinpoint Test U</a>
BCM (body control module)	U0241:87	Lost Communication With Headlamp Control Module "A": Missing Message	<a href="#">GO to Pinpoint Test V</a>
BCM (body control module)	U0252:87	Lost Communication With Lighting Control Module: Rear "B": Missing Message	<a href="#">GO to Pinpoint Test W</a>
BCM (body control module)	U0253:87	Lost Communication With Accessory Protocol Interface Module: Missing Message	<a href="#">GO to Pinpoint Test X</a>
BCM (body control module)	U0256:87	Lost Communication With Front Controls Interface Module "A": Missing Message	<a href="#">GO to Pinpoint Test Y</a>
BCM (body control module)	U0293:87	Lost Communication With Hybrid/EV Powertrain Control Module "A": Missing Message	<a href="#">GO to Pinpoint Test Z</a>
BCM (body control module)	U0298:87	Lost Communication With DC/DC Converter Control Module "A": Missing Message	<a href="#">GO to Pinpoint Test AA</a>
BCM (body control module)	U1000:00	Solid State Driver Protection Active: Driver Disabled: No Sub Type Information	<a href="#">GO to Pinpoint Test AB</a>
BCM (body control module)	U1018:87	Lost Communication With Generic Function Module: Missing Message	<a href="#">GO to Pinpoint Test AC</a>
BCM (body control module)	U1A4C:55	Build/End of Line Mode Active: Not Configured	<a href="#">GO to Pinpoint Test AD</a>
BCM (body control module)	U2005:85	Vehicle Speed: Signal Above Allowable Range	<a href="#">GO to Pinpoint Test AE</a>
BCM (body control module)	U202B:61	In-Use Application Signing Key: Signal Calculation Failure	<a href="#">GO to Pinpoint Test AF</a>

BCM (body control module)	U3014:17	Control Module Input Power "D": Circuit Voltage Above Threshold	<a href="#">GO to Pinpoint Test AJ</a>
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## Symptom Chart

### Symptom Chart: Multifunction Electronic Modules

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	Action
A module does not respond to the diagnostic scan tool	<ul style="list-style-type: none"> <li>REFER to: <a href="#">Controller Area Network (CAN) Module Communications Network</a> (418-00 Controller Area Network (CAN) Module Communications Network) .</li> <li>REFER to: <a href="#">Controller Area Network (CAN) Module Communications Network - Electric</a>(418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).</li> </ul>

## Pinpoint Tests

### PINPOINT TEST A : B11D8:01

Refer to Wiring Diagrams Cell 46for schematic and connector information.

**Normal Operation and Fault Conditions** The BCM (body control module) monitors the RCM (restraints control module) event status and verifies the voltage state is normal on the event notification circuit input.

#### DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
BCM (body control module) B11D8:01	Restraint Event Notification: General Electrical Failure	This DTC (diagnostic trouble code) sets when the BCM (body control module) detects a short to power, ground or open on the event notification circuit.

#### Possible Sources

- Wiring, terminals or connectors
- RCM (restraints control module)

### A3 CHECK THE CIRCUIT FOR SHORT TO GROUND

- Ignition OFF.
- Disconnect BCM (body control module) C2280E .
- Disconnect PCM (powertrain control module) C1232B 2.7L .
- Disconnect PCM (powertrain control module) C1551B 3.3L.
- Disconnect PCM (powertrain control module) C175B 3.5L.
- Disconnect PCM (powertrain control module) C1381B 5.0L.
- Disconnect PCM (powertrain control module) C1232B 5.2L.
- Disconnect BECM (battery energy control module) BEV (battery electric vehicle) C4816A .
- Disconnect BECM (battery energy control module) HEV (hybrid electric vehicle) C4237A .
- Disconnect TCU (telematic control unit module) (Export) C4803A .
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C310B-42	$\Omega$	Ground

Is the resistance greater than 10,000 ohms?

<b>Yes</b>	GO to <a href="#">A4</a>
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<b>No</b>	Repair the circuit.
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### A4 CHECK THE CIRCUIT FOR AN OPEN

- Measure:

Positive Lead	Measurement / Action	Negative Lead
C310B-42	$\Omega$	C2280E-49

Is the resistance 3 ohms or less?

- Operate the system and determine if the concern is still present.

### Is the concern still present?

<b>Yes</b>	CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin) , GSB (General Service Bulletin) , SSM (special service message) or FSA (Field Service Action) . 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 (body control module) .  REFER to: <a href="#">Body Control Module (BCM)</a> (419-10 Multifunction Electronic Modules, Removal and Installation).
<b>No</b>	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.

### PINPOINT TEST B : U0100:87

Refer to Wiring Diagrams Cell 14 for schematic and connector information.

**Normal Operation and Fault Conditions** REFER to: [Module Controlled Functions - System Operation and Component Description](#)

(419-10 Multifunction Electronic Modules, Description and Operation).

#### DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
BCM (body control module) U0100:87	Lost Communication With ECM/PCM 'A': Missing Message	A continuous memory DTC (diagnostic trouble code) that sets in the BCM (body control module) if powertrain data messages from the PCM (powertrain control module) are missing.

#### Possible Sources

- Communication network concern
- Charging system concern
- BCM (body control module)
- PCM (powertrain control module)



- Using a diagnostic scan tool, perform the PCM (powertrain control module) KOEO (key on, engine off) self-test.

**Are any PCM (powertrain control module) DTCs present?**

<b>Yes</b>	Diagnose those DTCs first. REFER to the Master DTC (diagnostic trouble code) Chart.
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<b>No</b>	GO to <a href="#">B4</a>
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**B4 RETRIEVE THE BCM (BODY CONTROL MODULE) DTCS**

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

**Are any BCM (body control module) DTCs recorded?**

<b>Yes</b>	REFER to the Master DTC (diagnostic trouble code) Chart.
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<b>No</b>	GO to <a href="#">B5</a>
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**B5 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0100:87 SET IN OTHER MODULES**

- Using a diagnostic scan tool, clear the DTCs.
- Ignition OFF.
- Wait 10 seconds.
- Ignition ON.
- Using a diagnostic scan tool, retrieve all CMDTCs.

**Is DTC (diagnostic trouble code) U0100:87 set in other modules?**

<b>Yes</b>	GO to <a href="#">B6</a>
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<b>No</b>	GO to <a href="#">B7</a>
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**B6 CHECK FOR CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION**

- Ignition OFF.

FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new BCM (body control module) .

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.

### PINPOINT TEST C : U0101:87

Refer to Wiring Diagrams Cell 14 for schematic and connector information.

**Normal Operation and Fault Conditions** REFER to: [Module Controlled Functions - System Operation and Component Description](#)

(419-10 Multifunction Electronic Modules, Description and Operation).

#### DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
BCM (body control module) U0101:87	Lost Communication with TCM: Missing Message	Sets in the BCM (body control module) if transmission data messages from the TCM (transmission control module) are missing.

#### Possible Sources

- Communication network concern
- Battery voltage concern
- TCM (transmission control module)
- BCM (body control module)

### C1 CHECK THE COMMUNICATION NETWORK

- Ignition ON.
- Connect the diagnostic tool.
- Using a diagnostic scan tool, perform a network test.

**Does the TCM (transmission control module) pass the network test?**

**Yes**

GO to [C2](#)