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1996 FORD Expedition OEM Service and Repair Workshop Manual

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BCM (body control module) B1465:96	Ambient Lighting Bus 1: Component Internal Failure	A continuous memory DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a fault on an ambient lighting LIN (local interconnect network) circuit.
BCM (body control module) B1467:00	Ambient Lighting Bus 3: No Sub Type Information	A continuous memory DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a fault on an ambient lighting LIN (local interconnect network) circuit.
BCM (body control module) B1467:96	Ambient Lighting Bus 3: Component Internal Failure	A continuous memory DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a fault on an ambient lighting LIN (local interconnect network) circuit.

#### **Possible Sources**

- Wiring, terminals or connectors
- Information and entertainment display unit (touchscreen)
- BCM (body control module)

#### H1 CHECK THE INFORMATION AND ENTERTAINMENT DISPLAY UNIT AUDIO CONTROLS

- Ignition ON.
- check the operation of the audio system using the information and entertainment display unit controls.

## Does the audio system operate correctly from the information and entertainment display unit controls?

controls?	
V	113

Yes GO to H2

No

REFER to: Information and Entertainment System(415-00 Information and Entertainment System - General Information, Diagnosis and Testing).

#### H2 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.

Positive Lead	Measurement / Action	Negative Lead
C573-1	Ω	C2280E-38

#### Is the resistance less than 3 ohms?

Yes	GO to	H5

# H5 CHECK THE DOOR AND REAR FOOTWELL AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR A SHORT TO GROUND

- Disconnect RH (right-hand) front door ambient lamp C649.
- Disconnect For SuperCrew, LH (left-hand) rear door ambient lamp C737.
- Disconnect For SuperCrew, RH (right-hand) rear door ambient lamp C837.
- Disconnect For SuperCrew, LH (left-hand) front seat lamp(rear footwell) C3458.
- Disconnect For SuperCrew, RH (right-hand) front seat lamp(rear footwell) C3457.
- Measure:

Positive Lead Measurement / Action	Negative Lead
C573-1	Ground

#### Is the resistance greater than 10,000 ohms?

Yes	GO to	H12

# No REPAIR the circuit. After the repair: If no Diagnostic Trouble Codes (DTCs) are present, TEST the system for normal operation. If DTC (diagnostic trouble code)

Positive Lead	Measurement / Action	Negative Lead
C2280B-13	Ω	C209-2

#### Is the resistance less than 3 ohms?

Yes	GO to	Н8

No	REPAIR the circuit.

## H8 CHECK THE AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR A SHORT TO GROUND

- Disconnect RH (right-hand) front footwell lamp C266.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C2280B-13	Ω	Ground

#### Is the resistance greater than 10,000 ohms?

Yes GO to H12

**No** REPAIR the circuit.

#### H9 CHECK THE AMBIENT LIGHTING VOLTAGE CIRCUIT FOR A SHORT TO GROUND

- Disconnect BCM (body control module) C2280C.
- Disconnect LH (left-hand) front door ambient lamp C573.
- Disconnect RH (right-hand) front door ambient lamp C649.
- Disconnect For SuperCrew, LH (left-hand) rear door ambient lamp C737.

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#### Is the resistance greater than 10,000 ohms?

Yes	GO to	H11

#### H11 CHECK THE AMBIENT LIGHTING VOLTAGE CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C2280C-4	₩	Ground

#### Is voltage present?

Yes	REPAIR the circuit.

No GO to H12

#### H12 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Disconnect and inspect all BCM (body control module) connectors and related in-line 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

		on an ambient lighting LIN (local interconnect network) circuit.
BCM (body control module) B1467:00	Ambient Lighting Bus 3: No Sub Type Information	A continuous memory DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a fault on an ambient lighting LIN (local interconnect network) circuit.
BCM (body control module) B1467:96	Ambient Lighting Bus 3: Component Internal Failure	A continuous memory DTC (diagnostic trouble code) that sets when the BCM (body control module) detects a fault on an ambient lighting LIN (local interconnect network) circuit.

#### **Possible Sources**

- Wiring, terminals or connectors
- Ambient lighting LED (light emitting diode)
- BCM (body control module)

#### 11 CHECK THE AMBIENT LIGHTING LIGHT EMITTING DIODES (LEDS)

- Ignition ON.
- Place the headlamp switch in the PARKING LAMPS ON position.
- Observe the operation of all the ambient lighting Light Emitting Diodes (LEDs).

Are all the front and rear door, footwell ambient lighting Light Emitting Diodes (LEDs) inoperative?

Yes	GO to Pinpoint Test H	
No	GO to 12	

#### 12 CHECK FOR VOLTAGE TO THE LED (LIGHT EMITTING DIODE)

- Ignition OFF.
- Place the headlamp switch in the OFF position.
- Disconnect Inoperative ambient lighting LED (light emitting diode) .
- Ignition ON.
- Place the headlamp switch in the PARKLAMPS ON position.
- Measure:

#### LH (left-hand) front footwell lamp

Positive Lead	Measurement / Action	Negative Lead
C737-1	₩	Ground

#### RH (right-hand) front door ambient lamp

Positive Lead	Measurement / Action	Negative Lead
C649-3	₩	Ground

#### RH (right-hand) rear door ambient lamp

Positive Lead	Measurement / Action	Negative Lead
C837-1	₹	Ground

#### Is the voltage greater than 11 volts?



**No** REPAIR the LED (light emitting diode) voltage supply circuit in question.

#### 13 CHECK THE LED (LIGHT EMITTING DIODE) GROUND CIRCUIT FOR AN OPEN

• Measure:

#### LH (left-hand) front footwell lamp

Positive Lead	Measurement / Action	Negative Lead

C737-1	Ÿ	C737-4
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#### RH (right-hand) front door ambient lamp

Positive Lead	Measurement / Action	Negative Lead
C649-3	ν̈	C649-4

#### RH (right-hand) rear door ambient lamp

Positive Lead	Measurement / Action	Negative Lead
C837-1	Ÿ	C837-4

#### Is the voltage greater than 11 volts?

Yes	GO to	14

**No** REPAIR the ground circuit in question.

#### 14 CHECK THE AMBIENT LIGHTING LIN (LOCAL INTERCONNECT NETWORK) CIRCUIT FOR AN OPEN

- Ignition OFF.
- Place the headlamp switch in the OFF position.
- Disconnect BCM (body control module) C2280E (door and rear footwell Light Emitting Diodes (LEDs)).
- Disconnect BCM (body control module) C2280B (front footwell Light Emitting Diodes (LEDs)).
- Measure:

#### LH (left-hand) front footwell lamp

Positive Lead Measurement / Action	Negative Lead
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C737-2	Ω	C2280E-38
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#### RH (right-hand) front door ambient lamp

Positive Lead	Measurement / Action	Negative Lead
C649-1	Ω	C2280E-38

#### RH (right-hand) rear door ambient lamp

Positive Lead	Measurement / Action	Negative Lead
C837-2	Ω	C2280E-38

#### Is the resistance less than 3 ohms?

Yes	INSTALL a new ambient lighting LED (light emitting diode) in question.

**No** REPAIR the circuit.

# PINPOINT TEST J: THE CARGO LAMPS, BED LAMPS, SCUFF PLATE LAMPS OR TRAILER ASSIST LAMP IS INOPERATIVE OR ALWAYS ON

Refer to Wiring Diagrams Cell 89for schematic and connector information.

**Normal Operation and Fault Conditions** REFER to: Interior Lighting - System Operation and Component Description

(417-02 Interior Lighting, Description and Operation).

#### **DTC Fault Trigger Conditions**

DTC (diagnostic trouble code)	Fault Trigger Condition
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- Trailer assist lamp
- Scuff plate lamp
- Cargo lamp switch (integrated into the headlamp switch)
- Truck bed lamp switch
- BCM (body control module)

#### J1 CHECK THE OPERATION OF THE TRAILER ASSIST, SCUFF PLATE AND CARGO LAMPS

- Close all the doors and observe the cargo, scuff plate and trailer assist lamps.
- Observe the trailer assist (if equipped), scuff plate (if equipped) and cargo lamp operation for 30 seconds.

Do all the trailer assist (if equipped), scuff plate (if equipped) and cargo lamps stay on after 30 seconds?



No

If only the trailer assist lamp (if equipped), scuff plate lamps (if equipped) and cargo lamps are inoperative, GO to J10 If only the trailer assist lamp is inoperative, GO to J15 If only the scuff plate lamp(s) are inoperative, GO to J17 For vehicles equipped with trailer assist lamps, if all trailer assist, scuff plate and cargo lamps are inoperative, GO to J2

#### J2 CHECK THE OPERATION OF THE CARGO/BED LAMP SWITCH(ES)

• While operating the switch(es), observe the bed (if equipped), trailer assist (if equipped), scuff plate (if equipped) and cargo lamp operation.

Do all the bed (if equipped), trailer assist (if equipped), scuff plate (if equipped) and cargo lamps operate correctly from the switch(es)?

Yes

The system is operating correctly at this time. The concern may have been caused by connections. ADDRESS the root cause of any connector or pin issues. CLEAR the Diagnostic Trouble Codes (DTCs).

No

If only the bed lamp(s) are inoperative, GO to J19 If only the bed lamps are always on, GO to J25 If all lamps are inoperative from the cargo lamp or truck bed lamp switch(es), GO to J3