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2013 FORD Explorer OEM Service and Repair Workshop Manual

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- 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) U023A:87 set in other modules?

Yes	GO to U6
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No	GO to U7
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U6 CHECK FOR CORRECT IPMA (IMAGE PROCESSING MODULE A) OPERATION

- Ignition OFF.
- Disconnect and inspect all IPMA (image processing module A) connections.
- 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 all IPMA (image processing module A) connections. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	<p>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 IPMA (image processing module A) .</p> <p>REFER to: Image Processing Module A (IPMA) (419-07 Lane Keeping System, Removal and Installation).</p>
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No	<p>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.</p>
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messages received from the HCM (headlamp control module) are missing.

Possible Sources

- Communication network concern
- Battery voltage concern
- HCM (headlamp control module)
- BCM (body control module)

V1 CHECK THE COMMUNICATION NETWORK

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

Does the HCM (headlamp control module) pass the network test?

Yes	GO to V2
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No	REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).
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V2 CHECK THE BCM (BODY CONTROL MODULE) CONTINUOUS MEMORY DIAGNOSTIC TROUBLE CODES (CMDTCS)

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Using a diagnostic scan tool, check the BCM (body control module) CMDTCS.

Is DTC (diagnostic trouble code) **U3006:16, U3006:17, U3007:16, U3007:17, U3013:16, U3013:17, U3014:16 or U3014:17** recorded?

Yes	For DTC (diagnostic trouble code) U3006:16, U3007:16, U3013:16 or U3014:16, GO to Pinpoint Test AI For DTC (diagnostic trouble code) U3006:17, U3007:17, U3013:17 or U3014:17, GO to Pinpoint Test AJ
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No	GO to V3
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No

GO to [V7](#)

V6 CHECK FOR CORRECT HCM (HEADLAMP CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect all HCM (headlamp control module) connections.
- 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 all HCM (headlamp control module) connections. 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 (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 HCM (headlamp control module) .
REFER to: [Headlamp Control Module \(HCM\)](#)
(417-01 Exterior Lighting, 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.

V7 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect all BCM (body control module) connections.
- 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 all BCM (body control module) connections. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

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

Does the TRM (trailer module) pass the network test?

Yes	GO to W2
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No	REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).
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W2 CHECK THE BCM (BODY CONTROL MODULE) CONTINUOUS MEMORY DIAGNOSTIC TROUBLE CODES (CMDTCS)

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Using a diagnostic scan tool, check the BCM (body control module) CMDTCS.

Is DTC (diagnostic trouble code) U3006:16, U3006:17, U3007:16, U3007:17, U3013:16, U3013:17, U3014:16 or U3014:17 recorded?

Yes	For DTC (diagnostic trouble code) U3006:16, U3007:16, U3013:16 or U3014:16, GO to Pinpoint Test AI For DTC (diagnostic trouble code) U3006:17, U3007:17, U3013:17 or U3014:17, GO to Pinpoint Test AJ
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No	GO to W3
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W3 RETRIEVE THE TRM (TRAILER MODULE) DTCS

No

GO to [W7](#)

W6 CHECK FOR CORRECT TRM (TRAILER MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the Disconnect and inspect the TRM (trailer module) 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 TRM (trailer module) 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 (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 TRM (trailer module) .
REFER to: [Trailer Module \(TRM\)](#)
(417-01 Exterior Lighting, 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.

W7 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the BCM (body control module) 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 (body control module) connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

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

Does the APIM (SYNC module) pass the network test?

Yes	GO to X2
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No	REFER to: Module Controlled Functions - System Operation and Component Description (419-10 Multifunction Electronic Modules, Description and Operation).
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X2 CHECK THE BCM (BODY CONTROL MODULE) CONTINUOUS MEMORY DIAGNOSTIC TROUBLE CODES (CMDTCS)

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Using a diagnostic scan tool, check the BCM (body control module) CMDTCS.

Is DTC (diagnostic trouble code) U3006:16, U3006:17, U3007:16, U3007:17, U3013:16, U3013:17, U3014:16 or U3014:17 recorded?

Yes	For DTC (diagnostic trouble code) U3006:16, U3007:16, U3013:16 or U3014:16, GO to Pinpoint Test AI For DTC (diagnostic trouble code) U3006:17, U3007:17, U3013:17 or U3014:17, GO to Pinpoint Test AJ
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No	GO to X3
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X3 RETRIEVE THE APIM (SYNC MODULE) DTCS

- Using a diagnostic scan tool, perform the APIM (SYNC module) self-test.

Are any APIM (SYNC module) DTCS recorded?

Yes	Diagnose those DTCS first. REFER to: Information and Entertainment System (415-00 Information and Entertainment System - General Information, Diagnosis and Testing).
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- damaged or bent pins - install new terminals/pins
- pushed-out pins - install new pins as necessary
- Reconnect the APIM (SYNC module) 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	<p>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 APIM (SYNC module) .</p> <p>REFER to: SYNC Module [APIM] - Vehicles With: 8 Inch Center Display Screen/12 Inch Center Display Screen (415-00 Information and Entertainment System - General Information, Removal and Installation).</p>
No	<p>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.</p>

X7 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the BCM (body control module) 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 (body control module) 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	<p>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) .</p> <p>REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).</p>
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Y2 CHECK THE BCM (BODY CONTROL MODULE) CONTINUOUS MEMORY DIAGNOSTIC TROUBLE CODES (CMDTCS)

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Using a diagnostic scan tool, check the BCM (body control module) CMDTCS.

Is DTC (diagnostic trouble code) U3006:16, U3006:17, U3007:16, U3007:17, U3013:16, U3013:17, U3014:16 or U3014:17 recorded?

Yes	For DTC (diagnostic trouble code) U3006:16, U3007:16, U3013:16 or U3014:16, GO to Pinpoint Test AI For DTC (diagnostic trouble code) U3006:17, U3007:17, U3013:17 or U3014:17, GO to Pinpoint Test AJ
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No	GO to Y3
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Y3 RETRIEVE THE FCIM (FRONT CONTROLS INTERFACE MODULE) DTCS

- Using a diagnostic scan tool, perform the FCIM (front controls interface module) self-test.

Are any FCIM (front controls interface module) DTCS recorded?

Yes	Diagnose those DTCS first. REFER to: Information and Entertainment System (415-00 Information and Entertainment System - General Information, Diagnosis and Testing).
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No	GO to Y4
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Y4 RECHECK THE BCM (BODY CONTROL MODULE) CMDTCS

- Using a diagnostic scan tool, clear the DTCs.
- Wait 10 seconds.
- Using a diagnostic scan tool, check the BCM (body control module) CMDTCS.

Is DTC (diagnostic trouble code) U0256:87 still present?

FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new FCIM (front controls interface module) .

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.

Y7 CHECK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the BCM (body control module) 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 (body control module) 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 (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: [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 Z : U0293:87

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](#)