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## 1971 FORD Mustang OEM Service and Repair Workshop Manual

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- Disconnect: PDM (passenger door module) C652B.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C652B-23	$\Omega$	Ground


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

<b>Yes</b>	GO to <a href="#">E18</a>
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<b>No</b>	REPAIR the circuit.
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**E14 CHECK THE PDM (PASSENGER DOOR MODULE) DIAGNOSTIC TROUBLE CODES (DTCS) WITH THE RH (RIGHT-HAND) BLIS (BLIND SPOT INFORMATION SYSTEM) ®/ CTA (CROSS TRAFFIC ALERT) LED (LIGHT EMITTING DIODE) CIRCUITS JUMPED TOGETHER**

- Ignition OFF.
- Disconnect: RH (right-hand) BLIS (blind spot information system) ®/ CTA (cross traffic alert) LED (light emitting diode) C676.
- Connect:

Positive Lead	Measurement / Action	Negative Lead
C676-1		C676-2

- Ignition ON.
- Using a diagnostic scan tool, perform the PDM (passenger door module) self-test.

**Is DTC (diagnostic trouble code) B118D:11 present?**

<b>Yes</b>	REMOVE the fused jumper wire. INSTALL a new RH (right-hand) exterior mirror glass. REFER to: <a href="#">Exterior Mirror - Vehicles With: Long Arm Mirrors</a> (501-09 Rear View Mirrors, Removal and Installation). REFER to: <a href="#">Exterior Mirror - Vehicles With: Short Arm Mirrors</a>
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- Ignition OFF.
- Disconnect: PDM (passenger door module) C652B.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C622-13	$\Omega$	C652B-23
C622-20	$\Omega$	C652B-19

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

<b>Yes</b>	GO to <a href="#">E18</a>
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<b>No</b>	REPAIR the affected circuit.
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### **E17 CHECK FOR CORRECT DDM (DRIVER DOOR MODULE) OPERATION**

- Ignition OFF.
- Disconnect and inspect all DDM (driver door module) connector 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
- Reconnect the DDM (driver door module) connector and related in-line connectors. Make sure all connectors seat and latch correctly.
- 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
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## NOTICE

Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may cause damage to the connector. Use only Rotunda Flex Probes (NUD105-R025D)

Refer to Wiring Diagrams Cell 146 for schematic and connector information.

**Normal Operation and Fault Conditions** REFER to: [Blind Spot Information System - System Operation and Component Description](#)

(419-04A Side and Rear Vision, Description and Operation).

### DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
IPMA (image processing module A) B11D6:11	Driver Display Alert LED: Circuit Short To Ground	This DTC (diagnostic trouble code) sets in continuous memory and on-demand in the IPMA (image processing module A) when a higher than expected current draw is detected on the LH (left-hand) exterior mirror BLIS (blind spot information system) ®/ CTA (cross traffic alert) LED (light emitting diode) output circuit.
IPMA (image processing module A) B11D6:13	Driver Display Alert LED: Circuit Open	This DTC (diagnostic trouble code) sets in continuous memory and on-demand in the IPMA (image processing module A) when an open circuit is detected on the LH (left-hand) exterior mirror BLIS (blind spot information system) ®/ CTA (cross traffic alert) LED (light emitting diode) output circuit.
IPMA (image processing module A) B157E:11	Driver Display Alert LED 2: Circuit Short To Ground	This DTC (diagnostic trouble code) sets in continuous memory and on-demand in the IPMA (image processing module A) when a higher than expected current draw is detected on the RH (right-hand) exterior mirror BLIS (blind spot information system) ®/ CTA (cross traffic alert) LED (light emitting diode) output circuit.
IPMA (image processing module A) B157E:13	Driver Display Alert LED 2: Circuit Open	This DTC (diagnostic trouble code) sets in continuous memory and on-demand in the IPMA (image processing module A) when an open circuit is detected on the RH (right-hand) exterior mirror BLIS (blind spot information system) ®/ CTA (cross traffic alert) LED (light emitting diode) output circuit.

### Possible Sources

- Wiring, terminals or connectors

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

**Do the IPMA (image processing module A) pass the network test?**

<b>Yes</b>	GO to <a href="#">F4</a>
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<b>No</b>	REFER to: <a href="#">Controller Area Network (CAN) Module Communications Network</a> (418-00A Controller Area Network (CAN) Module Communications Network, Diagnosis and Testing).
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**F4 CHECK THE DIAGNOSTIC TROUBLE CODES (DTCs) FROM THE IPMA (IMAGE PROCESSING MODULE A) SELF-TESTS**

- Using a diagnostic scan tool, perform the IPMA (image processing module A) self-tests.

**Is DTC (diagnostic trouble code) B11D6:11, B11D6:13, B157E:11 or B157E:13 recorded?**

<b>Yes</b>	GO to <a href="#">F5</a>
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<b>No</b>	For all other Diagnostic Trouble Codes (DTCs), REFER to the IPMA (image processing module A) DTC (diagnostic trouble code) chart in this section.
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**F5 CHECK THE EXTERIOR MIRROR BLIS (BLIND SPOT INFORMATION SYSTEM) ®/ CTA (CROSS TRAFFIC ALERT) LED (LIGHT EMITTING DIODE) SUPPLY CIRCUIT FOR A SHORT TO GROUND**

- Ignition OFF.
- Disconnect: IPMA (image processing module A) C242A.
- Measure:

**For LH (left-hand) LED concern**

Positive Lead	Measurement / Action	Negative Lead
C242A-2	$\Omega$	Ground

**Is the resistance less than 2000 ohms?**

<b>Yes</b>	GO to <a href="#">F7</a>
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<b>No</b>	INSTALL a new exterior mirror glass for the mirror in question. REFER to: <a href="#">Exterior Mirror - Vehicles With: Long Arm Mirrors</a> (501-09 Rear View Mirrors, Removal and Installation). REFER to: <a href="#">Exterior Mirror - Vehicles With: Short Arm Mirrors</a> (501-09 Rear View Mirrors, Removal and Installation).
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**F7 CHECK THE EXTERIOR MIRROR BLIS (BLIND SPOT INFORMATION SYSTEM) ®/ CTA (CROSS TRAFFIC ALERT) LED (LIGHT EMITTING DIODE) SUPPLY CIRCUIT FOR AN OPEN**

- Disconnect: LH (left-hand) BLIS (blind spot information system) ®/ CTA (cross traffic alert) LED (light emitting diode) C576 ( LH (left-hand) LED (light emitting diode) concern).
- Disconnect: RH (right-hand) BLIS (blind spot information system) ®/ CTA (cross traffic alert) LED (light emitting diode) C676 ( RH (right-hand) LED (light emitting diode) concern).
- Measure:

**LH (left-hand) Exterior Mirror LED (light emitting diode)**

Positive Lead	Measurement / Action	Negative Lead
C242A-2	$\Omega$	C576-2

**RH (right-hand) Exterior Mirror LED (light emitting diode)**

Positive Lead	Measurement / Action	Negative Lead
C242A-3	$\Omega$	C676-2

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

<b>Yes</b>	GO to <a href="#">F9</a>
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- Disconnect: RH (right-hand) BLIS (blind spot information system) @/ CTA (cross traffic alert) LED (light emitting diode) C676 ( RH (right-hand) LED (light emitting diode) concern).

- Measure:

**LH (left-hand) Exterior Mirror LED (light emitting diode)**

Positive Lead	Measurement / Action	Negative Lead
C576-1	$\Omega$	Ground

**RH (right-hand) Exterior Mirror LED (light emitting diode)**

Positive Lead	Measurement / Action	Negative Lead
C676-1	$\Omega$	Ground

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

<b>Yes</b>	GO to <a href="#">F11</a>
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<b>No</b>	GO to <a href="#">F10</a>
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**F10 CHECK THE EXTERIOR MIRROR GROUND CIRCUIT FOR AN OPEN**

- Disconnect: LH (left-hand) Exterior Mirror C521 ( LH (left-hand) LED (light emitting diode) concern).
- Disconnect: RH (right-hand) Exterior Mirror C622 ( RH (right-hand) LED (light emitting diode) concern).
- Measure:

**LH (left-hand) Exterior Mirror LED (light emitting diode)**

Positive Lead	Measurement / Action	Negative Lead
C521-20	$\Omega$	Ground

- Disconnect and inspect IPMA (image processing module A) connector.
- 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 IPMA (image processing module A) connector. Make sure it seats and latches correctly.
- Operate the system to determine if the concern is still present.

**Is the concern still present?**

<b>Yes</b>	<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: <a href="#">Image Processing Module A (IPMA)</a> (419-07 Lane Keeping System, Removal and Installation).</p>
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<b>No</b>	<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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**F12 CHECK THE EXTERIOR MIRROR JUMPER HARNESS**

- Inspect the exterior mirror jumper harness between the vehicle harness and the mirror glass for:
  - Open or short circuits
  - Damaged or pushed out pins
  - Corrosion

**Is the harness OK?**

<b>Yes</b>	<p>INSTALL a new exterior mirror.</p> <p>REFER to: <a href="#">Exterior Mirror - Vehicles With: Long Arm Mirrors</a> (501-09 Rear View Mirrors, Removal and Installation).</p> <p>REFER to: <a href="#">Exterior Mirror - Vehicles With: Short Arm Mirrors</a> (501-09 Rear View Mirrors, Removal and Installation).</p>
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and SODR (side obstacle detection control module RH) cover for damage.

**Is any damage present?**

<b>Yes</b>	REPAIR or INSTALL new parts as necessary. REFER to: <a href="#">Rear Lamp Assembly</a> (417-01 Exterior Lighting, Removal and Installation). REFER to: <a href="#">Side Obstacle Detection Control Module (SODCM)</a> (419-04A Side and Rear Vision, Removal and Installation).
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<b>No</b>	For a SODL (side obstacle detection control module LH) concern, GO to <a href="#">G3</a> For a SODR (side obstacle detection control module RH) concern, GO to <a href="#">G4</a>
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**G3 CHECK FOR CORRECT SODL (SIDE OBSTACLE DETECTION CONTROL MODULE LH) OPERATION**

Sample

<b>Yes</b>	<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 SODR (side obstacle detection control module RH) .</p> <p>REFER to: <a href="#">Side Obstacle Detection Control Module (SODCM)</a> (419-04A Side and Rear Vision, Removal and Installation).</p>
<b>No</b>	<p>The system is operating correctly at this time. Concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.</p>

**PINPOINT TEST H : THE BLIS (BLIND SPOT INFORMATION SYSTEM) ® AND CTA (CROSS TRAFFIC ALERT) SYSTEM CANNOT BE TURNED OFF IN THE INFORMATION AND ENTERTAINMENT DISPLAY UNIT**

**Normal Operation and Fault Conditions**

REFER to: [Blind Spot Information System - System Operation and Component Description](#)(419-04A Side and Rear Vision, Description and Operation).

**Possible Sources**

- MyKey® in use
- Communication network concern
- Message center concern
- APIM (SYNC module) concern
- SODL (side obstacle detection control module LH) concern
- SODR (side obstacle detection control module RH) concern

**Visual Inspection and Pre-checks**

- Check for a MyKey® restricted key is in use. If a restricted key is in use, the BLIS (blind spot information system) ® or the CTA (cross traffic alert) system cannot be turned off in the information and entertainment display unit.

**H1 VERIFY WHETHER A MYKEY® RESTRICTED KEY IS IN USE**

- Verify whether a MyKey® restricted key is in use.

**Is a MyKey® restricted key in use?**

<b>Yes</b>	<p>The system is operating correctly at this time. INFORM the customer of normal operation. REFER to the Owner's Literature.</p>
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