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1966 FORD Mustang GT 350 Shelby OEM Service and Repair Workshop Manual

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(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) B15EF:14	Side Obstacle Detector 'D': Circuit Short To Ground Or Open	An continuous memory DTC (diagnostic trouble code) that sets in the IPMA (image processing module A) if an excessive current draw is detected on the SODCMD (Side Obstacle Detection Control Module D) output circuit.
IPMA (image processing module A) B15EF:15	Side Obstacle Detector 'D': Circuit Short To Battery Or Open	An continuous memory DTC (diagnostic trouble code) that sets in the IPMA (image processing module A) when an open circuit is detected on the SODCMD (Side Obstacle Detection Control Module D) output circuit.

Possible Sources

- Wiring, terminals or connectors
- SODCMD (Side Obstacle Detection Control Module D)
- IPMA (image processing module A)

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)

AB1 CHECK THE IPMA (IMAGE PROCESSING MODULE A) DIAGNOSTIC TROUBLE CODES (DTCS)

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

Is DTC (diagnostic trouble code) B15EF:14 or DTC (diagnostic trouble code) B15EF:15 present?

Yes	For DTC (diagnostic trouble code) B15EF:14, GO to AB2 For DTC (diagnostic trouble code) B15EF:15, GO to AB5

Is the resistance greater than 10,000 ohms?

Yes	GO to AB4

No	REPAIR the circuit. After the repair, CLEAR the DTC (diagnostic trouble code) , CYCLE the ignition, and RUN the IPMA (image processing module A) on-demand self-test to re-enable the circuit.

AB4 CHECK IPMA (IMAGE PROCESSING MODULE A) CIRCUITS FOR A SHORT TOGETHER

- Measure:

Positive Lead	Measurement / Action	Negative Lead
C242C-11	Ω	C242C-2

Is the resistance greater than 10,000 ohms?

Yes	GO to AB7

No	REPAIR the circuits.

AB5 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) B15EF:15 WITH THE SODCMD (SIDE OBSTACLE DETECTION CONTROL MODULE D) CIRCUITS JUMPERED TOGETHER

- Ignition OFF.
- Disconnect: SODCMD (Side Obstacle Detection Control Module D) C4184.
- Connect:

Lead 1	Measurement / Action	Lead 2
C1484-1		C1484-4

AB7 CHECK FOR CORRECT IPMA (IMAGE PROCESSING MODULE A) OPERATION

- 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?

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 IPMA (image processing module A) REFER to: Image Processing Module A (IPMA) (419-07 Lane Keeping System, 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.

IPMA (image processing module A)	B11D6:11	Driver Display Alert LED: Circuit Short To Ground	GO to Pinpoint Test F
IPMA (image processing module A)	B11D6:13	Driver Display Alert LED: Circuit Open	GO to Pinpoint Test E
IPMA (image processing module A)	B11D6:13	Driver Display Alert LED: Circuit Open	GO to Pinpoint Test F
IPMA (image processing module A)	B157E:11	Driver Display Alert LED 2: Circuit Short To Ground	GO to Pinpoint Test E
IPMA (image processing module A)	B157E:11	Driver Display Alert LED 2: Circuit Short To Ground	GO to Pinpoint Test F
IPMA (image processing module A)	B157E:13	Driver Display Alert LED 2: Circuit Open	GO to Pinpoint Test E
IPMA (image processing module A)	B157E:13	Driver Display Alert LED 2: Circuit Open	GO to Pinpoint Test F
IPMA (image processing module A)	B15EC:14	Side Obstacle Detector "A": Circuit Short To Ground Or Open	GO to Pinpoint Test AE
IPMA (image processing module A)	B15EC:15	Side Obstacle Detector "A": Circuit Short To Battery Or Open	GO to Pinpoint Test AE
IPMA (image processing module A)	B15ED:14	Side Obstacle Detector "B": Circuit Short To Ground Or Open	GO to Pinpoint Test AF
IPMA (image processing module A)	B15ED:15	Side Obstacle Detector "B": Circuit Short To Battery Or Open	GO to Pinpoint Test AF

SODCMC (Side Obstacle Detection Control Module C)	B1599:78	Left Front Side Sensor Horizontal Alignment: Alignment Or Adjustment Incorrect	GO to Pinpoint Test U
SODCMC (Side Obstacle Detection Control Module C)	B159A:78	Left Front Side Sensor Vertical Alignment: Alignment Or Adjustment Incorrect	GO to Pinpoint Test U
SODCMC (Side Obstacle Detection Control Module C)	U2008:08	Sensor Cluster: Bus Signal/Message Failures	GO to Pinpoint Test Y
SODCMC (Side Obstacle Detection Control Module C)	U2100:00	Initial Configuration Not Complete: No Sub Type Information	GO to Pinpoint Test Z
SODCMC (Side Obstacle Detection Control Module C)	U2300:55	Central Configuration: Not Configured	GO to Pinpoint Test Z
SODCMC (Side Obstacle Detection Control Module C)	U3000:41	Control Module: General Checksum Failure	GO to Pinpoint Test AA
SODCMC (Side Obstacle Detection Control Module C)	U3000:42	Control Module: General Memory Failure	GO to Pinpoint Test AA
SODCMC (Side Obstacle Detection Control Module C)	U3000:44	Control Module: Data Memory Failure	GO to Pinpoint Test AA
SODCMC (Side Obstacle Detection Control Module C)	U3000:49	Control Module: Internal Electronic Failure	GO to Pinpoint Test AA
SODCMC (Side Obstacle Detection Control Module C)	U3002:62	Vehicle Identification Number: Signal Compare Failure	GO to Pinpoint Test AB

SODCMD (Side Obstacle Detection Control Module D)	U2300:55	Central Configuration: Not Configured	GO to Pinpoint Test Z
SODCMD (Side Obstacle Detection Control Module D)	U3000:41	Control Module: General Checksum Failure	GO to Pinpoint Test AA
SODCMD (Side Obstacle Detection Control Module D)	U3000:42	Control Module: General Memory Failure	GO to Pinpoint Test AA
SODCMD (Side Obstacle Detection Control Module D)	U3000:44	Control Module: Data Memory Failure	GO to Pinpoint Test AA
SODCMD (Side Obstacle Detection Control Module D)	U3000:49	Control Module: Internal Electronic Failure	GO to Pinpoint Test AA
SODCMD (Side Obstacle Detection Control Module D)	U3002:62	Vehicle Identification Number: Signal Compare Failure	GO to Pinpoint Test AB
SODCMD (Side Obstacle Detection Control Module D)	U3003:16	Battery Voltage: Circuit Voltage Below Threshold	GO to Pinpoint Test AC
SODCMD (Side Obstacle Detection Control Module D)	U3003:17	Battery Voltage: Circuit Voltage Above Threshold	GO to Pinpoint Test AD
SODL (side obstacle detection control module LH)	B13F3:54	Left Rear Side Sensor: Missing Calibration	GO to Pinpoint Test U
SODL (side obstacle detection control module LH)	B13F3:96	Left Rear Side Sensor: Component Internal Failure	GO to Pinpoint Test V

SODL (side obstacle detection control module LH)	U3000:49	Control Module: Internal Electronic Failure	GO to Pinpoint Test AA
SODL (side obstacle detection control module LH)	U3002:62	Vehicle Identification Number: Signal Compare Failure	GO to Pinpoint Test AB
SODL (side obstacle detection control module LH)	U3003:16	Battery Voltage: Circuit Voltage Below Threshold	GO to Pinpoint Test AC
SODL (side obstacle detection control module LH)	U3003:17	Battery Voltage: Circuit Voltage Above Threshold	GO to Pinpoint Test AD
SODR (side obstacle detection control module RH)	B13F4:54	Right Rear Side Sensor: Missing Calibration	GO to Pinpoint Test U
SODR (side obstacle detection control module RH)	B13F4:96	Right Rear Side Sensor: Component Internal Failure	GO to Pinpoint Test V
SODR (side obstacle detection control module RH)	B13F4:97	Right Rear Side Sensor: Component Or System Operation Obstructed Or Blocked	GO to Pinpoint Test W
SODR (side obstacle detection control module RH)	B13F4:98	Right Rear Side Sensor: Component Or System Over Temperature	GO to Pinpoint Test X
SODR (side obstacle detection control module RH)	B157D:78	Right Rear Side Sensor Vertical Alignment: Alignment Or Adjustment Incorrect	GO to Pinpoint Test U
SODR (side obstacle detection control module RH)	B159C:78	Right Rear Side Sensor Horizontal Alignment: Alignment Or Adjustment Incorrect	GO to Pinpoint Test U

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
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Controls > Inoperative	GO to Pinpoint Test A
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Controls > Inoperative	GO to Pinpoint Test B
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Controls > Inoperative	GO to Pinpoint Test H
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Controls > Inoperative	GO to Pinpoint Test I
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Controls > Inoperative	GO to Pinpoint Test O
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Performance > Inaccurate	GO to Pinpoint Test P
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Performance > Inaccurate	GO to Pinpoint Test Q
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Performance > Inaccurate	GO to Pinpoint Test S
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Performance > Inoperative	GO to Pinpoint Test A
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Performance > Inoperative	GO to Pinpoint Test B
Driver Aides & Information > Blind Spot (BLIS)/Cross Traffic > Performance > Inoperative	GO to Pinpoint Test O

Lighting/Glass/Vision > Mirror > Side > Inoperative	GO to Pinpoint Test D
Lighting/Glass/Vision > Mirror > Side > Inoperative	GO to Pinpoint Test E
Lighting/Glass/Vision > Mirror > Side > Inoperative	GO to Pinpoint Test F
Safe & Secure > Trailer Tow > Brake Control > Inoperative	GO to Pinpoint Test T

Symptom Chart(s)

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).

NOTE

The customer trailer needs to be connected to the vehicle to properly diagnose a BLIS (blind spot information system) ® with trailer tow system concern (if equipped).

NOTE

Rule out any base BLIS (blind spot information system) ®/ CTA (cross traffic alert) system concerns prior to diagnosing the BLIS (blind spot information system) ® with trailer tow system (if equipped).

Symptom Chart - BLIS (blind spot information system) ®

Condition	Action
A module does not respond to the diagnostic scan tool	GO to Pinpoint Test I
The BLIS (blind spot information system) ® is inoperative or does not function correctly	GO to Pinpoint Test A
The BLIS (blind spot information system) ® has poor or inconsistent performance	GO to Pinpoint Test