

2010.0 X351, 413-09

WARNING DEVICES

DIAGNOSIS AND TESTING

PRINCIPLES OF OPERATION

For a detailed description of the Blindspot Monitoring system and operation, refer to the relevant Description and Operation sections in the workshop manual. REFER to: (413-09A Warning Devices)

[Blindspot Monitoring System](#) (Description and Operation),

[Blindspot Monitoring System](#) (Description and Operation),

[Blindspot Monitoring System](#) (Description and Operation).

INSPECTION AND VERIFICATION

⚠ CAUTION:

Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault, and may also cause additional faults in the vehicle being tested and /or the donor vehicle.

1. Verify the customer concern.

1. Visually inspect for obvious signs of damage and system integrity.

⚠ NOTE:

Particular attention should be paid to the following items where DTCs may not be logged:

- Check for contamination (e.g. dirt, grime, frosting, ice) around the blindspot monitoring sensors and clear.

Visual Inspection

MECHANICAL	ELECTRICAL
<ul style="list-style-type: none">▪ Exterior rear view mirror glass▪ Mud or sleet contamination around rear bumper area▪ Blindspot Monitoring Modules	<ul style="list-style-type: none">▪ Fuse(s)▪ Relay(s)▪ Wiring Harness▪ Electrical connector(s)

1. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.
1. If the cause is not visually evident verify the symptom and refer to the Symptom Chart, alternatively check for Diagnostic Trouble Codes (DTCs) and refer to the DTC Index.

SYMPTOM CHART

SYMPTOM	POSSIBLE CAUSE	ACTION
<ul style="list-style-type: none"> ▪ The instrument cluster displays 'BSM System Fault' ▪ DTC B11C915 is logged within the left hand Blind Spot Monitoring module ▪ The Left Alert icon is constantly illuminated 	<ul style="list-style-type: none"> ▪ Left driver display alert LED circuit - short to power 	<p>Refer to the electrical circuit diagrams and check left driver display alert LED circuit for short to power.</p>
<ul style="list-style-type: none"> ▪ The instrument cluster displays 'BSM System Fault' 	<ul style="list-style-type: none"> ▪ Left mirror ground 	<p>Refer to the electrical circuit diagrams and check the left mirror ground circuit for open circuit.</p>

- DTC B11C915 is logged within the left hand Blind Spot Monitoring module
- No short to power or open circuit fault on the driver display status LED circuit

circuit - open circuit

- The instrument cluster displays 'BSM System Fault'
- DTC B11C915 is logged within the right hand Blind Spot Monitoring module
- No short to power or open circuit fault on the driver display status LED circuit

- Right mirror ground circuit - open circuit

Refer to the electrical circuit diagrams and check the right mirror ground circuit for open circuit.

- The instrument cluster displays 'BSM System Fault'
- DTC U023200 is logged within the right hand Blind Spot Monitoring module
- The left driver display status LED does not illuminate when the vehicle is stationary, in

- Left driver display status LED circuit - short to ground

Refer to the electrical circuit diagrams and check left driver display status LED circuit for short to ground. Clear DTC and re-test. If DTC remains suspect the left hand Blindspot Monitoring module. Check and install a new left hand Blindspot Monitoring module only, refer to the new module/component installation note at the top of the DTC Index.

<p>Park and the ignition is on</p>	<ul style="list-style-type: none"> ■ Suspect left hand module failure 	
<ul style="list-style-type: none"> ■ The instrument cluster displays 'BSM System Fault' ■ DTC U023200 is logged within the right hand Blind Spot Monitoring module ■ When the system is powered up the left driver display alert LED does not illuminate during the bulb self-checks 	<ul style="list-style-type: none"> ■ Left driver display alert LED - short to ground, open circuit ■ Suspect left hand module failure 	<p>Refer to the electrical circuit diagrams and check left driver display alert LED circuit for short to ground, open circuit. Clear DTC and re-test. If DTC remains suspect the left hand Blindspot Monitoring module only, refer to the new module/component installation note at the top of the DTC Index.</p>
<ul style="list-style-type: none"> ■ The instrument cluster displays 'BSM System Fault' ■ DTC U023300 is logged within the left hand Blind Spot Monitoring module ■ The right driver display status LED is constantly illuminated 	<ul style="list-style-type: none"> ■ Right driver display status LED - short to power ■ Suspect right hand module failure 	<p>Refer to the electrical circuit diagrams and check right driver display status LED circuit for short to power. Clear DTC and re-test. If DTC remains suspect the right hand Blindspot Monitoring module only, refer to the new module/component installation note at the top of the DTC Index.</p>

<ul style="list-style-type: none"> ■ The instrument cluster displays 'BSM System Fault' ■ DTC U023300 is logged within the left hand Blind Spot Monitoring module ■ When the system is powered up the right driver display status LED does not illuminate during the bulb self-checks 	<ul style="list-style-type: none"> ■ Right driver display status LED - open circuit ■ Suspect right hand module failure 	<p>Refer to the electrical circuit diagrams and check right driver display status LED circuit for open circuit. Clear DTC and re-test. If DTC remains suspect the right hand Blindspot Monitoring module. Check and install a new right hand Blindspot Monitoring module only, refer to the new module/component installation note at the top of the DTC Index.</p>
<ul style="list-style-type: none"> ■ The instrument cluster displays 'BSM System Fault' ■ DTC U023300 is logged within the left hand Blind Spot Monitoring module ■ When the system is powered up both the right driver display LEDs do not illuminate during the bulb self-checks 	<ul style="list-style-type: none"> ■ Right mirror ground circuit - open circuit ■ Suspect right hand module failure 	<p>Refer to the electrical circuit diagrams and check the right mirror ground circuit for open circuit. Clear DTC and re-test. If DTC remains suspect the left hand Blindspot Monitoring module. Check and install a new left hand Blindspot Monitoring module only, refer to the new module/component installation note at the top of the DTC Index.</p>

For a list of Diagnostic Trouble Codes (DTCs) that could be logged on this vehicle, please refer to Section 100-00.

REFER to: [Diagnostic Trouble Code \(DTC\) Index - DTC: Blind Spot Monitoring System Module \(SODL/SODR\)](#) (100-00 General Information, Description and Operation).