

## 2012 - Mazda6 - Body and Accessories

### NO.5 BSM INDICATOR LIGHT DOES NOT ILLUMINATE WHILE UNDER BSM INDICATOR LIGHT-ILLUMINATION CONDITIONS [BLIND SPOT MONITORING (BSM)]

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5               | BSM indicator light does not illuminate while under BSM indicator light-illumination conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| DESCRIPTION     | <ul style="list-style-type: none"> <li>The BSM indicator light does not illuminate despite satisfying the conditions to illuminate the BSM indicator light (vehicle speed above <b>32 km/ h { 20 mph} or more</b>, turn signals off, and vehicle in warning zone).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Possible Causes | <ul style="list-style-type: none"> <li>The BSM control module mistakenly recognizes a vehicle as being outside of the warning zone when it actually inside of it. <ul style="list-style-type: none"> <li>Radar (BSM control module integrated) is not emitted inside of warning zone (unable to emit radar inside warning zone) <ul style="list-style-type: none"> <li>Damage, deformity or looseness to installation bracket or vehicle frame (including moderate impacts)</li> <li>Malfunction in steering angle sensor (communication error between BCM and BSM control module, or steering angle sensor malfunction)</li> <li>Problem with rear bumper such as soiling to radar emitting/receiving area, application of stickers (including transparent types), repairs using putty application</li> </ul> </li> <li>BSM control module does not receive echo-back correctly</li> </ul> </li> <li>BSM control module (radar) malfunction</li> <li>Problem with rear bumper such as soiling to radar emitting/receiving area, application of stickers (including transparent types), repairs using putty application.</li> </ul> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>Rear bumper problem such defective installation of rear bumper, excessive soiling on the radar emitting/receiving area, sticker adhesion (including transparent types), repairs to rear bumper using putty.</li> </ul> |

- Non-genuine bumper, paint, or installation of after-market parts negatively affecting radar echo-back ability.
  - After-market electrical parts interfere with BSM system
- BSM control module does not recognize vehicle speed correctly (BSM control module mistakenly recognizes vehicle speed as being within **32 km/ h { 20 mph} or more**)
  - PCM communication error with BSM control module
  - Malfunction in ABS wheel-speed sensor related parts
- BSM control module mistakenly recognizes that shift lever is in R position
  - Transaxle range switch malfunction (ATX)
  - Back-up light switch malfunction (MTX)
  - TCM communication error with BSM control module (ATX)
  - BCM communication error with PCM (MTX)
  - PCM communication error with BSM control module (MTX)
- Malfunction in BSM indicator light related parts
  - Open circuit in wiring harness between BSM indicator light and BSM control module
  - Open circuit in wiring harness or poor ground between BSM control module and ground
  - BSM indicator light malfunction

## Diagnostic Procedure

| Step | Inspection                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Action                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <p><b>VERIFY DTCs</b></p> <ul style="list-style-type: none"> <li>• Retrieve DTCs from the BSM control module, BCM, PCM, and TCM using the M-MDS.</li> </ul> <p>(See <b>DTC INSPECTION [BLIND SPOT MONITORING (BSM)]</b>.)</p> <p>(See <b>DTC INSPECTION [BCM]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC TEST [MZR 2.5]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC TEST [MZI 3.7 V6]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [FS5A-EL]</b>.)</p> | <p>Yes Go to the applicable DTC inspection.</p> <p>(See <b>DTC TABLE [BLIND SPOT MONITORING (BSM)]</b>.)</p> <p>(See <b>DTC TABLE [BCM]</b>.)</p> <p>(See <b>DTC TABLE [MZR 2.5]</b>.)</p> <p>(See <b>DTC TABLE [MZI 3.7 V6]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [FS5A-EL]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [AY6A-EL]</b>.)</p> <p>No Go to the next step.</p> |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |                                                                                                                                                                                                                                                                                                                                                                     |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <p>(See <b>ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [AY6A-EL]</b>.)</p> <ul style="list-style-type: none"> <li>Are any DTCs displayed?</li> </ul>                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                                                                                                                     |
| 2 | <p><b>INSPECT IF MALFUNCTION IS IN INPUT SIGNAL OR BSM CONTROL MODULE</b></p> <ul style="list-style-type: none"> <li>Monitor the following PIDs on the suspected side of the BSM control module using the M-MDS.</li> </ul> <p>(See <b>PID/ DATA MONITOR INSPECTION [BLIND SPOT MONITORING (BSM)]</b>.)</p> <ul style="list-style-type: none"> <li>VSPD</li> <li>SWA_POS</li> <li>SHIFT_R</li> <li>Is the monitoring value normal?</li> </ul> | Yes | Go to Step 7.                                                                                                                                                                                                                                                                                                                                                       |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                               | No  | <ul style="list-style-type: none"> <li>If the PID VSPD monitoring value is not normal, go to the next step.</li> <li>If the PID SWA_POS monitoring value is not normal, go the Step 4.</li> <li>If the PID SHIFT_R monitoring value is not normal, go the Step 5. (ATX)</li> <li>If the PID SHIFT_R monitoring value is not normal, go the Step 6. (MTX)</li> </ul> |
| 3 | <p><b>INSPECT VEHICLE SPEED SIGNAL</b></p> <ul style="list-style-type: none"> <li>Monitor the PID VSS for the PCM using the M-MDS.</li> </ul> <p>(See <b>ON-BOARD DIAGNOSTIC TEST [MZR 2.5]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC TEST [MZI 3.7 V6]</b>.)</p> <ul style="list-style-type: none"> <li>Is the monitoring value normal?</li> </ul>                                                                                            | Yes | <p>Replace the BSM control module.</p> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION</b>.)</p>                                                                                                                                                                                                                                        |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                               | No  | <p>Inspect the ABS wheel-speed sensor related parts.</p> <p>(See <b>FRONT ABS WHEEL-SPEED SENSOR INSPECTION</b>.)</p> <p>(See <b>REAR ABS WHEEL-SPEED SENSOR INSPECTION</b>.)</p>                                                                                                                                                                                   |
| 4 | <p><b>INSPECT STEERING ANGLE SIGNAL</b></p> <ul style="list-style-type: none"> <li>Monitor the PID STEER_ANGL for the DSC HU/CM using the M-MDS.</li> </ul> <p>(See <b>ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)]</b>.)</p> <ul style="list-style-type: none"> <li>Is the monitoring value normal?</li> </ul>                                                                                                                       | Yes | <p>Replace the BSM control module.</p> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION</b>.)</p>                                                                                                                                                                                                                                        |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                               | No  | <ul style="list-style-type: none"> <li>Inspect the steering angle signal.</li> </ul> <p>(See <b>STEERING ANGLE SENSOR INSPECTION</b>.)</p> <ul style="list-style-type: none"> <li>Perform steering angle sensor initialization.</li> </ul>                                                                                                                          |

|   |                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                   |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | <p><b>INSPECT TRANSAXLE POSITION SIGNAL</b></p> <ul style="list-style-type: none"> <li>• Monitor the PID TR for the TCM using the M-MDS.</li> <li>• Is the monitoring value normal?</li> </ul>                                                                                                                                                                                                          | <p>Yes Replace the BSM control module.<br/>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION.</b>)</p> <p>No Inspect the transaxle range switch.<br/>(See <b>TRANSAXLE RANGE (TR) SWITCH INSPECTION [FS5A-EL].</b>)<br/>(See <b>TRANSAXLE RANGE (TR) SWITCH INSPECTION [AY6A-EL].</b>)</p> |
| 6 | <p><b>INSPECT R POSITION SIGNAL</b></p> <ul style="list-style-type: none"> <li>• Monitor the PID R_GEAR_SW for the BCM using the M-MDS.</li> <li>• Is the monitoring value normal?</li> </ul>                                                                                                                                                                                                           | <p>Yes Replace the BSM control module.<br/>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION.</b>)</p> <p>No Inspect the back-up light switch.<br/>(See <b>BACK-UP LIGHT SWITCH REMOVAL/ INSTALLATION [G66M-R].</b>)</p>                                                                   |
| 7 | <p><b>INSPECT REAR BUMPER</b></p> <ul style="list-style-type: none"> <li>• Inspect the rear bumper at the BSM installation area for the following: <ul style="list-style-type: none"> <li>▪ Installation condition</li> <li>▪ Sticker adhesion</li> <li>▪ Excessive soiling</li> <li>▪ Repairs using putty</li> </ul> </li> <li>• Is the rear bumper condition normal?</li> </ul>                       | <p>Yes Go to the next step.</p> <p>No Repair or replace malfunctioning parts, or replace the rear bumper.<br/>(See <b>REAR BUMPER REMOVAL/ INSTALLATION.</b>)</p>                                                                                                                                                 |
| 8 | <p><b>VERIFY THE CONDITION OF THE BSM CONTROL MODULE</b></p> <ul style="list-style-type: none"> <li>• Remove the rear bumper.<br/>(See <b>REAR BUMPER REMOVAL/ INSTALLATION.</b>)</li> <li>• Inspect the BSM control module for the following: <ul style="list-style-type: none"> <li>▪ Looseness</li> <li>▪ Damage or deformity to the bracket</li> <li>▪ Distortion at vehicle</li> </ul> </li> </ul> | <p>Yes Go to the next step.</p> <p>No Repair or replace the malfunctioning part.</p>                                                                                                                                                                                                                              |

|    |                                                                                                                                                                                                                                                                                                                           |     |                                                                                                                                                                                                                                                                         |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <p>installation surface</p> <ul style="list-style-type: none"> <li>Is the BSM control module installation condition normal?</li> </ul>                                                                                                                                                                                    |     |                                                                                                                                                                                                                                                                         |
| 9  | <p><b>VERIFY IF CAUSE OF MALFUNCTION IS IN AFTER-MARKET ELECTRICAL PRODUCT OR ELSEWHERE</b></p> <ul style="list-style-type: none"> <li>Remove the after-market electrical product.</li> <li>Verify that the malfunction symptom recurs as stated by the customer.</li> <li>Does the malfunction symptom recur?</li> </ul> | Yes | Go to the next step.                                                                                                                                                                                                                                                    |
|    |                                                                                                                                                                                                                                                                                                                           | No  | The after-market electrical product is causing the malfunction.                                                                                                                                                                                                         |
| 10 | <p><b>INSPECT BSM CONTROL MODULE (RADAR)</b></p> <ul style="list-style-type: none"> <li>Inspect the BSM control module.</li> </ul> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE INSPECTION.</b>)</p> <ul style="list-style-type: none"> <li>Is the BSM control module normal?</li> </ul>                         | Yes | <ul style="list-style-type: none"> <li>Temporary malfunction with the radar echo-back.</li> <li>If the same symptom recurs repeatedly, replace the BSM control module.</li> </ul> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION.</b>)</p> |
|    |                                                                                                                                                                                                                                                                                                                           | No  | <p>Replace the BSM control module.</p> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION.</b>)</p>                                                                                                                                            |

## 2012 - Mazda6 - Body and Accessories

### NO.5 BSM INDICATOR LIGHT DOES NOT ILLUMINATE WHILE UNDER BSM INDICATOR LIGHT-ILLUMINATION CONDITIONS [BLIND SPOT MONITORING (BSM)]

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5               | BSM indicator light does not illuminate while under BSM indicator light-illumination conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| DESCRIPTION     | <ul style="list-style-type: none"> <li>The BSM indicator light does not illuminate despite satisfying the conditions to illuminate the BSM indicator light (vehicle speed above <b>32 km/ h { 20 mph} or more</b>, turn signals off, and vehicle in warning zone).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Possible Causes | <ul style="list-style-type: none"> <li>The BSM control module mistakenly recognizes a vehicle as being outside of the warning zone when it actually inside of it. <ul style="list-style-type: none"> <li>Radar (BSM control module integrated) is not emitted inside of warning zone (unable to emit radar inside warning zone) <ul style="list-style-type: none"> <li>Damage, deformity or looseness to installation bracket or vehicle frame (including moderate impacts)</li> <li>Malfunction in steering angle sensor (communication error between BCM and BSM control module, or steering angle sensor malfunction)</li> <li>Problem with rear bumper such as soiling to radar emitting/receiving area, application of stickers (including transparent types), repairs using putty application</li> </ul> </li> <li>BSM control module does not receive echo-back correctly</li> </ul> </li> <li>BSM control module (radar) malfunction</li> <li>Problem with rear bumper such as soiling to radar emitting/receiving area, application of stickers (including transparent types), repairs using putty application.</li> </ul> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>Rear bumper problem such defective installation of rear bumper, excessive soiling on the radar emitting/receiving area, sticker adhesion (including transparent types), repairs to rear bumper using putty.</li> </ul> |

- Non-genuine bumper, paint, or installation of after-market parts negatively affecting radar echo-back ability.
  - After-market electrical parts interfere with BSM system
- BSM control module does not recognize vehicle speed correctly (BSM control module mistakenly recognizes vehicle speed as being within **32 km/ h { 20 mph} or more**)
  - PCM communication error with BSM control module
  - Malfunction in ABS wheel-speed sensor related parts
- BSM control module mistakenly recognizes that shift lever is in R position
  - Transaxle range switch malfunction (ATX)
  - Back-up light switch malfunction (MTX)
  - TCM communication error with BSM control module (ATX)
  - BCM communication error with PCM (MTX)
  - PCM communication error with BSM control module (MTX)
- Malfunction in BSM indicator light related parts
  - Open circuit in wiring harness between BSM indicator light and BSM control module
  - Open circuit in wiring harness or poor ground between BSM control module and ground
  - BSM indicator light malfunction

## Diagnostic Procedure

| Step | Inspection                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Action                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <p><b>VERIFY DTCs</b></p> <ul style="list-style-type: none"> <li>• Retrieve DTCs from the BSM control module, BCM, PCM, and TCM using the M-MDS.</li> </ul> <p>(See <b>DTC INSPECTION [BLIND SPOT MONITORING (BSM)]</b>.)</p> <p>(See <b>DTC INSPECTION [BCM]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC TEST [MZR 2.5]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC TEST [MZI 3.7 V6]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [FS5A-EL]</b>.)</p> | <p>Yes Go to the applicable DTC inspection.</p> <p>(See <b>DTC TABLE [BLIND SPOT MONITORING (BSM)]</b>.)</p> <p>(See <b>DTC TABLE [BCM]</b>.)</p> <p>(See <b>DTC TABLE [MZR 2.5]</b>.)</p> <p>(See <b>DTC TABLE [MZI 3.7 V6]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [FS5A-EL]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [AY6A-EL]</b>.)</p> <p>No Go to the next step.</p> |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |                                                                                                                                                                                                                                                                                                                                                                     |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <p>(See <b>ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [AY6A-EL]</b>.)</p> <ul style="list-style-type: none"> <li>Are any DTCs displayed?</li> </ul>                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                                                                                                                     |
| 2 | <p><b>INSPECT IF MALFUNCTION IS IN INPUT SIGNAL OR BSM CONTROL MODULE</b></p> <ul style="list-style-type: none"> <li>Monitor the following PIDs on the suspected side of the BSM control module using the M-MDS.</li> </ul> <p>(See <b>PID/ DATA MONITOR INSPECTION [BLIND SPOT MONITORING (BSM)]</b>.)</p> <ul style="list-style-type: none"> <li>VSPD</li> <li>SWA_POS</li> <li>SHIFT_R</li> <li>Is the monitoring value normal?</li> </ul> | Yes | Go to Step 7.                                                                                                                                                                                                                                                                                                                                                       |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                               | No  | <ul style="list-style-type: none"> <li>If the PID VSPD monitoring value is not normal, go to the next step.</li> <li>If the PID SWA_POS monitoring value is not normal, go the Step 4.</li> <li>If the PID SHIFT_R monitoring value is not normal, go the Step 5. (ATX)</li> <li>If the PID SHIFT_R monitoring value is not normal, go the Step 6. (MTX)</li> </ul> |
| 3 | <p><b>INSPECT VEHICLE SPEED SIGNAL</b></p> <ul style="list-style-type: none"> <li>Monitor the PID VSS for the PCM using the M-MDS.</li> </ul> <p>(See <b>ON-BOARD DIAGNOSTIC TEST [MZR 2.5]</b>.)</p> <p>(See <b>ON-BOARD DIAGNOSTIC TEST [MZI 3.7 V6]</b>.)</p> <ul style="list-style-type: none"> <li>Is the monitoring value normal?</li> </ul>                                                                                            | Yes | <p>Replace the BSM control module.</p> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION</b>.)</p>                                                                                                                                                                                                                                        |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                               | No  | <p>Inspect the ABS wheel-speed sensor related parts.</p> <p>(See <b>FRONT ABS WHEEL-SPEED SENSOR INSPECTION</b>.)</p> <p>(See <b>REAR ABS WHEEL-SPEED SENSOR INSPECTION</b>.)</p>                                                                                                                                                                                   |
| 4 | <p><b>INSPECT STEERING ANGLE SIGNAL</b></p> <ul style="list-style-type: none"> <li>Monitor the PID STEER_ANGL for the DSC HU/CM using the M-MDS.</li> </ul> <p>(See <b>ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)]</b>.)</p> <ul style="list-style-type: none"> <li>Is the monitoring value normal?</li> </ul>                                                                                                                       | Yes | <p>Replace the BSM control module.</p> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION</b>.)</p>                                                                                                                                                                                                                                        |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                               | No  | <ul style="list-style-type: none"> <li>Inspect the steering angle signal.</li> </ul> <p>(See <b>STEERING ANGLE SENSOR INSPECTION</b>.)</p> <ul style="list-style-type: none"> <li>Perform steering angle sensor initialization.</li> </ul>                                                                                                                          |



|   |                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | <p><b>INSPECT TRANSAXLE POSITION SIGNAL</b></p> <ul style="list-style-type: none"> <li>• Monitor the PID TR for the TCM using the M-MDS.</li> <li>• Is the monitoring value normal?</li> </ul>                                                                                                                                                                                                          | <p>Yes Replace the BSM control module.<br/>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION.</b>)</p> <p>No Inspect the transaxle range switch.<br/>(See <b>TRANSAXLE RANGE (TR) SWITCH INSPECTION [FS5A-EL].</b>)<br/><br/>(See <b>TRANSAXLE RANGE (TR) SWITCH INSPECTION [AY6A-EL].</b>)</p> |
| 6 | <p><b>INSPECT R POSITION SIGNAL</b></p> <ul style="list-style-type: none"> <li>• Monitor the PID R_GEAR_SW for the BCM using the M-MDS.</li> <li>• Is the monitoring value normal?</li> </ul>                                                                                                                                                                                                           | <p>Yes Replace the BSM control module.<br/>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION.</b>)</p> <p>No Inspect the back-up light switch.<br/>(See <b>BACK-UP LIGHT SWITCH REMOVAL/ INSTALLATION [G66M-R].</b>)</p>                                                                        |
| 7 | <p><b>INSPECT REAR BUMPER</b></p> <ul style="list-style-type: none"> <li>• Inspect the rear bumper at the BSM installation area for the following: <ul style="list-style-type: none"> <li>▪ Installation condition</li> <li>▪ Sticker adhesion</li> <li>▪ Excessive soiling</li> <li>▪ Repairs using putty</li> </ul> </li> <li>• Is the rear bumper condition normal?</li> </ul>                       | <p>Yes Go to the next step.</p> <p>No Repair or replace malfunctioning parts, or replace the rear bumper.<br/>(See <b>REAR BUMPER REMOVAL/ INSTALLATION.</b>)</p>                                                                                                                                                      |
| 8 | <p><b>VERIFY THE CONDITION OF THE BSM CONTROL MODULE</b></p> <ul style="list-style-type: none"> <li>• Remove the rear bumper.<br/>(See <b>REAR BUMPER REMOVAL/ INSTALLATION.</b>)</li> <li>• Inspect the BSM control module for the following: <ul style="list-style-type: none"> <li>▪ Looseness</li> <li>▪ Damage or deformity to the bracket</li> <li>▪ Distortion at vehicle</li> </ul> </li> </ul> | <p>Yes Go to the next step.</p> <p>No Repair or replace the malfunctioning part.</p>                                                                                                                                                                                                                                   |

|    |                                                                                                                                                                                                                                                                                                                           |     |                                                                                                                                                                                                                                                                         |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <p>installation surface</p> <ul style="list-style-type: none"> <li>Is the BSM control module installation condition normal?</li> </ul>                                                                                                                                                                                    |     |                                                                                                                                                                                                                                                                         |
| 9  | <p><b>VERIFY IF CAUSE OF MALFUNCTION IS IN AFTER-MARKET ELECTRICAL PRODUCT OR ELSEWHERE</b></p> <ul style="list-style-type: none"> <li>Remove the after-market electrical product.</li> <li>Verify that the malfunction symptom recurs as stated by the customer.</li> <li>Does the malfunction symptom recur?</li> </ul> | Yes | Go to the next step.                                                                                                                                                                                                                                                    |
|    |                                                                                                                                                                                                                                                                                                                           | No  | The after-market electrical product is causing the malfunction.                                                                                                                                                                                                         |
| 10 | <p><b>INSPECT BSM CONTROL MODULE (RADAR)</b></p> <ul style="list-style-type: none"> <li>Inspect the BSM control module.</li> </ul> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE INSPECTION.</b>)</p> <ul style="list-style-type: none"> <li>Is the BSM control module normal?</li> </ul>                         | Yes | <ul style="list-style-type: none"> <li>Temporary malfunction with the radar echo-back.</li> <li>If the same symptom recurs repeatedly, replace the BSM control module.</li> </ul> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION.</b>)</p> |
|    |                                                                                                                                                                                                                                                                                                                           | No  | <p>Replace the BSM control module.</p> <p>(See <b>BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/ INSTALLATION.</b>)</p>                                                                                                                                            |