Subject: Service Stability Message On, Diagnostic Trouble Code (DTC) C0131, C0196, C0290 and/or C0292 Set (Inspect/Replace Yaw Rate Sensor/Lateral Accelerometer and Reprogram Electronic Brake Control Module (EBCM)) - (Feb 22, 2006)

Models: 2004-2006 Cadillac Escalade Models
2004-2006 Chevrolet Avalanche, Suburban, Tahoe
2004-2006 GMC Yukon Models
with Control, Active Brake (RPO JL4)

Condition

Some customers may comment on a Service Stability Message on the Drivers Information Center (DIC).

Diagnosis with a scan tool may indicate a DTC C0131, C0196, C0290 and/or C0292 is set.

Cause

There are two possible causes for this issue. Both possible causes are listed below:

- An internal fault within the yaw rate sensor/lateral accelerometer, P/N 15189628, may be the first possible cause.
- The vehicle stability enhancement system (VSES) electronic brake traction control module (EBCM) calibration may be the second possible cause.

DTC Diagnostic Information

- DTC C0131
- DTC C0196
- DTC C0290 or C0292 (w/JL4)

Correction

Follow the procedure below to inspect the part number on the yaw rate sensor/lateral accelerometer.

This bulletin is being revised to update model years. Please discard Corporate Bulletin Number 05-05-25-003A (Section 05 -- Brakes).
1. Inspect the part number on the yaw rate sensor/lateral accelerometer.
2. Remove the passenger seat from the vehicle in order to gain access to the sensor. Refer to Seat Replacement - Front Bucket in Seats.
3. Pull the carpet back in order to gain access to the sensor.

**Important:**
- **OLD** yaw rate sensors/lateral accelerometers have a part number on the sensor bracket of P/N 15189628.
- **IMPROVED** yaw rate sensors/lateral accelerometers have a part number on the sensor bracket of P/N 15220053.

4. Inspect the yaw rate sensor/lateral accelerometer part number located on the sensor bracket.
   - **OLD** yaw rate sensors/lateral accelerometers have a part number of P/N 15189628.
   - **IMPROVED** yaw rate sensors/lateral accelerometers have a part number of P/N 15220053.

**Important:** Replace the yaw rate sensor/lateral accelerometer, P/N 15189628, with new sensor, P/N 15220053

5. Remove the nuts retaining the yaw rate sensor/lateral accelerometer to the vehicle.
6. Disconnect the electrical connector from the yaw rate sensor/lateral accelerometer.
7. Remove the yaw rate sensor/lateral accelerometer from the vehicle.
8. Install the new yaw rate sensor/lateral accelerometer, P/N 15220053, to the vehicle.

**Notice:** Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

9. Install the nuts retaining the yaw rate sensor/lateral accelerometer to the vehicle.

**Tighten**
Tighten the nuts to 10 N·m (89 lb in).

**Important:** The yaw rate reference reset procedure must be performed when replacing the yaw rate sensor/lateral accelerometer.

10. Perform the YAW rate reference table reset procedure. Refer to Yaw Rate Reference Table Reset Procedure.
11. Connect the electrical connector to the yaw rate sensor/lateral accelerometer.
12. Install the carpet.
13. Install the passenger seat to the vehicle. Refer to Seat Replacement - Front Bucket in Seats.

**Important:** Failure to reprogram the EBCM may result in a repeat repair.

14. Reprogram the EBCM (referred to as the VSES Module in SPS) with the most current VSES software available through SPS. Refer to Service Programming System (SPS).

**Parts Information**
### Warranty Information

For vehicles repaired under warranty, use:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>15220053</td>
<td>Sensor, Yaw/Lateral Accelerometer</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labor Operation</th>
<th>Description</th>
<th>Labor Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2582</td>
<td>Sensor, Yaw Rate - Replace</td>
<td>Use Published Labor Operation Time</td>
</tr>
<tr>
<td>H9708</td>
<td>Electronic Brake Control Module Reprogram with SPS</td>
<td>0.4 hr</td>
</tr>
</tbody>
</table>

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