CALIBRATION

1. DESCRIPTION

- After replacing the VSC relevant components or performing front wheel alignment adjustment, clear and read the sensor calibration data.
- Follow the chart below to perform calibration.

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<th>REPLACING PARTS / OPERATION</th>
<th>NECESSARY OPERATION</th>
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<td>Yaw rate and acceleration sensor zero point calibration</td>
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<td>Yaw rate and acceleration</td>
<td>1. Clearing zero point calibration data</td>
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</table>

2. OBTAIN ZERO POINT OF YAW RATE AND ACCELERATION SENSOR (When Using the Techstream)

NOTICE:

- While obtaining the zero point, keep the vehicle stationary and do not vibrate, tilt, move, or shake it. (Do not start the engine.)
- Be sure to perform this procedure on a level surface (with an inclination of less than 1 degree).

(a) Clear the zero point calibration data.

   (1) Turn the ignition switch off.
   (2) Check that the steering wheel is centered.
   (3) Check that the shift lever is in P (for automatic transaxle model) or the parking brake is applied (for manual transaxle model).
   (4) Connect the Techstream to the DLC3.
   (5) Turn the ignition switch to ON.
   (6) Turn the Techstream on.
   (7) Select the skid control ECU to clear the zero point calibration data using the Techstream. Enter the following menus: Chassis / ABS/VSC/TRAC / Utility / Reset Memory.
   (8) Turn the ignition switch off.
NOTICE:
If the ignition switch is turned to ON for more than 15 seconds with the shift lever in P (for automatic transaxle model) or the parking brake applied (for manual transaxle model) after zero point of the yaw rate and acceleration sensor has been cleared, only the zero point of the yaw rate sensor will be stored. If the vehicle is driven under these conditions, the skid control ECU will store the zero point calibration for the acceleration sensor as not being completed. The skid control ECU will then also indicate this as a malfunction of the VSC system using the indicator lights.

(b) Perform zero point calibration of the yaw rate and acceleration sensor.
(1) Turn the ignition switch off.
(2) Check that the steering wheel is centered.
(3) Check that the shift lever is in P (for automatic transaxle model) or the parking brake is applied (for manual transaxle model).

NOTICE:
DTCs C1210/36 and C1336/39 will be recorded if the shift lever is not in P (for automatic transaxle model) or the parking brake is not applied (for manual transaxle model).

(4) Connect the Techstream to the DLC3.
(5) Turn the ignition switch to ON.
(6) Turn the Techstream on.
(7) Switch the skid control ECU to Test Mode using the Techstream. Enter the following menus: Chassis / ABS/VSC/TRAC / Utility / Test Mode.
(8) After the system enters Test Mode, keep the vehicle stationary on a level surface for 2 seconds or more.

(9) Check that the VSC OFF indicator light comes on for several seconds and then blinks in Test Mode.

HINT:
- The slip indicator light remains on during Test Mode because traction control operation is prohibited (The slip indicator light goes off when the VSC OFF switch is on).
- If the VSC OFF indicator light does not blink, perform zero point calibration again.
- The zero point calibration is performed only once after the system enters Test Mode.
- Calibration cannot be performed again until the stored data is cleared.

(10) Turn the ignition switch off and disconnect the Techstream.

3. OBTAIN ZERO POINT OF YAW RATE AND ACCELERATION SENSOR (When not Using the Techstream)

NOTICE:
- While obtaining the zero point, keep the vehicle stationary and do not vibrate, tilt, move, or shake.
it. (Do not start the engine.)

Be sure to perform this procedure on a level surface (with an inclination of less than 1 degree).

(a) Clear the zero point calibration data.

1. Turn the ignition switch off.
2. Check that the steering wheel is centered.
3. Check that the shift lever is in P (for automatic transaxle model) or the parking brake is applied (for manual transaxle model).
4. Turn the ignition switch to ON.
5. The warning and indicator light come on for 3 seconds to indicate that the initial check is completed.

(b) Perform zero point calibration of the yaw rate and acceleration sensor.

1. Turn the ignition switch off.
2. Check that the steering wheel is centered.
3. Check that the shift lever is in P (for automatic transaxle model) or the parking brake is applied (for manual transaxle model).

**NOTICE:**

If the ignition switch is turned to ON for more than 15 seconds with the shift lever in P (for automatic transaxle model) or the parking brake applied (for manual transaxle model) after zero point of the yaw rate and acceleration sensor has been cleared, only the zero point of the yaw rate sensor will be stored. If the vehicle is driven under these conditions, the skid control ECU will store the zero point calibration for the acceleration sensor as not being completed. The skid control ECU will then also indicate this as a malfunction of the VSC system using the indicator lights.

(6) Using SST, connect and disconnect terminals TS and CG of the DLC3 4 times or more within 8 seconds.

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(7) Check that the VSC OFF indicator light comes on.

**NOTICE:**

**DTCs C1210/36 and C1336/39 will be recorded if the shift lever is not in P (for automatic transaxle model) or the parking brake is not applied (for manual transaxle model).**
(5) Turn the ignition switch to ON.

(6) Keep the vehicle stationary on a level surface for 2 seconds or more.

(7) Check that the VSC OFF indicator light comes on for several seconds and then blinks in Test Mode.

**HINT:**

- The slip indicator light remains on during Test Mode because traction control operation is prohibited (The slip indicator light goes off when the VSC OFF switch is on).
- If the VSC OFF indicator light does not blink, perform zero point calibration again.
- The zero point calibration is performed only once after the system enters Test Mode.
- Calibration cannot be performed again until the stored data is cleared.

(8) Turn the ignition switch off and disconnect SST from the DLC3.