# CALIBRATION

### 1. DESCRIPTION

- (a) After replacing the VSC relevant components or performing "Front wheel alignment adjustment", clearing and reading the sensor calibration data are necessary.
- (b) Follow the chart to perform calibration.

Replacing Parts	Necessary Operations
Skid Control ECU	Yaw rate sensor and deceleration sensor zero point calibration.
Yaw Rate Sensor	<ol> <li>Clearing zero point calibration data.</li> <li>Yaw rate sensor and deceleration sensor zero point calibration.</li> </ol>
Front Wheel Alignment	<ol> <li>Clearing zero point calibration data.</li> <li>Yaw rate sensor and deceleration sensor zero point calibration.</li> </ol>

## 2. CLEAR ZERO POINT CALIBRATION (for Using a Intelligent Tester) HINT:

After replacing the yaw rate and deceleration sensor, be

sure to clear the zero point calibration data in the skid control ECU and perform zero point calibration.

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch to the ON position.
- (c) Operate the intelligent tester to erase the DTCs.





(d) Perform zero point calibration of the yaw rate and deceleration sensor using the intelligent tester.

#### 3. PERFORM ZERO POINT CALIBRATION OF YAW RATE SENSOR AND DECELERATION SENSOR (for Using a Intelligent Tester) HINT:

After replacing the yaw rate and deceleration sensor, be sure to clear the zero point calibration data in the skid control ECU and perform zero point calibration.

#### NOTICE:

- While obtaining the zero point, do not vibrate the vehicle by tilting, moving or shaking it and keep it stationary. (Do not start the engine.)
- Be sure to do this on a level surface (with an • inclination of less than 1 degree).
- (a) Procedures for test mode.
  - (1) Turn the ignition switch to OFF.
  - (2) Check that the steering wheel is in the straightahead position.
  - (3) A/T: Check that the shift lever is in the P position and apply the parking brake. M/T: Check that the shift lever is in neutral and apply the parking brake. NOTICE: DTC C1210/36 and C1336/39 will be recorded if the shift lever is not in the P position.
  - (4) Connect the intelligent tester to the DLC3.
  - (5) Turn the ignition switch to the ON position.





Switch the ECU to test mode using the intelligent tester. Select the following menu items: DIAGNOSTIC / OBD/MOBD / select vehicle / ABS/VSC / TEST MODE.







- (7) Keep the vehicle stationary on a level surface for 2 seconds or more.
- (8) Check that the VSC TRAC warning light blinks as shown in the illustration.
   NOTICE:

The VSC TRAC warning light (and VSC OFF indicator light (4WD, with rear differential lock)) stay ON when obtaining the zero point. HINT:

- If the VSC TRAC warning light does not blink, perform the 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 once.
- (9) Turn the ignition switch to OFF.

## 4. CLEAR ZERO POINT CALIBRATION (for Using a Intelligent Tester) HINT:

After replacing the yaw rate and deceleration sensor, be sure to clear the zero point calibration data in the skid control ECU and perform zero point calibration.

- (a) Turn the ignition switch to the ON position.
- (b) Using SST, connect and disconnect terminals TS and CG of the DLC3 4 times or more within 8 seconds.

SST 09843-18040

- (c) Check that the warning light blinks in a normal system indication pattern.
- (d) Remove the SST from the terminals of the DLC3.
- (e) Perform zero point calibration of the yaw rate and deceleration sensor using a check wire.
- 5. PERFORM ZERO POINT CALIBRATION OF YAW RATE SENSOR AND DECELERATION SENSOR (for Using a SST Check Wire) HINT:

After replacing the skid control ECU and/or yaw rate and deceleration sensor, be sure to perform yaw rate sensor and deceleration sensor zero point calibration. **NOTICE:** 

- While obtaining the zero point, do not vibrate the vehicle by tilting, moving or shaking it and keep it stationary. (Do not start the engine.)
- Be sure to do this on a level surface (with an inclination less than 1 degree).
- (a) Procedures for test mode:(1) Turn the ignition switch to OFF.







- (2) Check that the steering wheel is in the straightahead position.
- (3) A/T: Check that the shift lever is in the P position and apply the parking brake. M/T: Check that the shift lever is in neutral and apply the parking brake.

## NOTICE:

DTC C1210/36 and C1336/39 will be recorded if the shift lever is not in the P position.

(4) Using SST, connect terminals TS and CG of the DLC3.

## SST 09843-18040

- (5) Turn the ignition switch to the ON position.
- (6) Keep the vehicle stationary on a level surface for 2 seconds or more.
- (7) Check that the VSC TRAC warning light blinks as shown in the illustration. NOTICE:

The VSC TRAC warning light (and VSC OFF indicator light (4WD, with rear differential lock)) stay ON when obtaining the zero point. HINT:

- If the VSC warning light does not blink, perform the 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 once.

