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Model Year Start: 2016	Model: IS200T	Prod Date Range: [04/2013 - 10/2016]
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: VEHICLE STABILITY CONTROL SYSTEM: CALIBRATION; 2014 - 2016 MY IS200T IS250 IS300 IS350 [04/2013 - 10/2016]		

CALIBRATION

DESCRIPTION

(a) After replacing any VSC related components or performing wheel alignment adjustment, clear and read the sensor calibration data and system information.

Refer to the table below and then perform the necessary operation according to the part to be replaced in order to perform calibration.

PARTS TO BE REPLACED / OPERATION	NECESSARY OPERATION
Skid control ECU (brake actuator assembly)	Perform yaw rate and acceleration sensor zero point calibration and store system information.
Yaw rate and acceleration sensor	<ol style="list-style-type: none"> 1. Clear zero point calibration data and system information. 2. Perform yaw rate and acceleration sensor zero point calibration and store system information.
Wheel alignment adjustment	<ol style="list-style-type: none"> 1. Clear zero point calibration data and system information. 2. Perform yaw rate and acceleration sensor zero point calibration and store system information.

PERFORM YAW RATE AND ACCELERATION SENSOR ZERO POINT CALIBRATION AND STORE SYSTEM INFORMATION (When Using Techstream)

NOTICE:

- Stored system information cannot be overwritten unless it is cleared. Clear the stored information and then store new system information.
- While obtaining the zero point, keep the vehicle stationary and do not vibrate, tilt, move, or shake it.
- Be sure to perform this procedure on a level surface (with an inclination of less than 0.25 degrees).
- While obtaining the zero point, make sure the tire pressure is as specified and the vehicle is in full contact with the ground (not lifted up or loaded).

(a) Clear the zero point calibration data and system information.

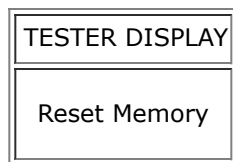
NOTICE:

Performing the following procedure will clear the zero points of the yaw rate and acceleration sensor and system information simultaneously.

- (1) Turn the engine switch off.
- (2) Check that the steering wheel is centered.
- (3) Apply the parking brake.
- (4) Check that the shift lever is in P.
- (5) Connect the Techstream to the DLC3.
- (6) Turn the engine switch on (IG).
- (7) Turn the Techstream on.

- (8) Select the skid control ECU (brake actuator assembly) to clear the zero point calibration data using the Techstream. Enter the following menus: Chassis / ABS/VSC/TRAC / Utility / Reset Memory.

Chassis > ABS/VSC/TRAC > Utility



- (9) Turn the engine switch off.

NOTICE:

- If the vehicle is driven after the zero point of the yaw rate and acceleration sensor and system information are cleared, DTCs will be stored.
- If the engine switch is turned on (IG) for more than 15 seconds with the shift lever in P after the 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 (brake actuator assembly) will store the zero point calibration for the acceleration sensor as not being completed. The skid control ECU (brake actuator assembly) will then also indicate this as a malfunction of the VSC system using the indicator light.

- (b) Perform the yaw rate and acceleration sensor zero point calibration and store system information.

NOTICE:

Performing the following procedure will perform the yaw rate and acceleration sensor zero points calibration and store system information simultaneously.

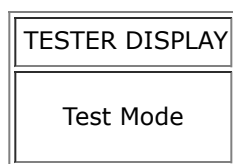
- (1) Turn the engine switch off.
- (2) Check that the steering wheel is centered.
- (3) Apply the parking brake.
- (4) Check that the shift lever is in P.

NOTICE:

- DTCs C1210 (Zero Point Calibration of Yaw Rate Sensor Undone) and C1336 (Zero Point Calibration of Acceleration Sensor Undone) will be stored if the shift lever is not in P.
- If a DTC is stored that indicates zero point calibration is incomplete, repeat the procedure starting at the step for clearing the zero point calibration data and system information.

- (5) Connect the Techstream to the DLC3.
- (6) Turn the engine switch on (IG).
- (7) Turn the Techstream on.
- (8) Switch the skid control ECU (brake actuator assembly) to Test Mode using the Techstream. Enter the following menus: Chassis / ABS/VSC/TRAC / Utility / Test Mode.

Chassis > ABS/VSC/TRAC > Utility



- (9) After Test Mode has been entered, keep the vehicle stationary on a level surface for 5 seconds or more.
- (10) Check that the slip indicator light comes on for several seconds and then blinks in the Test Mode pattern.

HINT:

- If the slip indicator light does not blink, perform zero point calibration again.

- Zero point calibration is performed only once after the system enters Test Mode.
- Calibration cannot be performed again until the stored data is cleared.

(11) Turn the engine switch off and disconnect the Techstream.

PERFORM YAW RATE AND ACCELERATION SENSOR ZERO POINT CALIBRATION AND STORE SYSTEM INFORMATION (When Using SST Check Wire)

NOTICE:

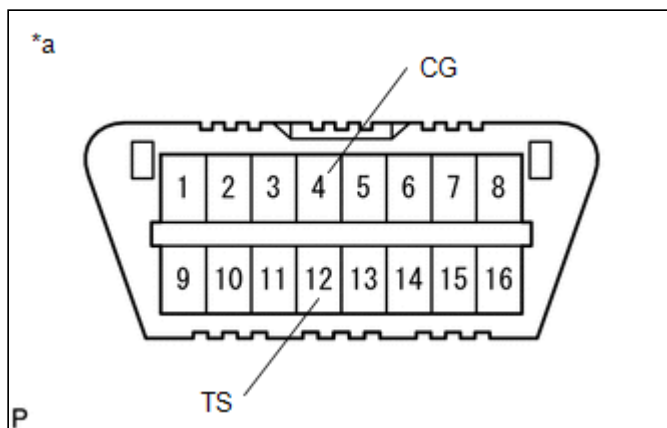
- Stored system information cannot be overwritten unless it is cleared. Clear the stored information and then store new system information.
- While obtaining the zero point, keep the vehicle stationary and do not vibrate, tilt, move, or shake it.
- Be sure to perform this procedure on a level surface (with an inclination of less than 0.25 degrees).
- While obtaining the zero point, make sure the tire pressure is as specified and the vehicle is in full contact with the ground (not lifted up or loaded).

(a) Clear the zero point calibration data and system information.

NOTICE:

Performing the following procedure will clear the zero points of the yaw rate and acceleration sensor and system information simultaneously.

- (1) Turn the engine switch off.
- (2) Check that the steering wheel is centered.
- (3) Apply the parking brake.
- (4) Check that the shift lever is in P.
- (5) Turn the engine switch on (IG).
- (6) The warning light and indicator light come on for 3 seconds to indicate that the initial check has completed.
- (7) Using SST, connect and disconnect terminals TS and CG of the DLC3 4 times or more within 8 seconds.



*a	Front view of DLC3
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(8) Check that the slip indicator light comes on.

NOTICE:

- If the vehicle is driven after the zero point of the yaw rate and acceleration sensor and system information are cleared, DTCs will be stored.
- If the engine switch is turned on (IG) for more than 15 seconds with the shift lever in P after the 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 (brake actuator assembly) will store the zero point calibration for the acceleration sensor as not being completed. The skid control ECU (brake actuator assembly) will then also indicate this as a malfunction of the VSC system using the indicator light.

(9) Turn the engine switch off.

(b) Perform the yaw rate and acceleration sensor zero point calibration and store system information.

NOTICE:

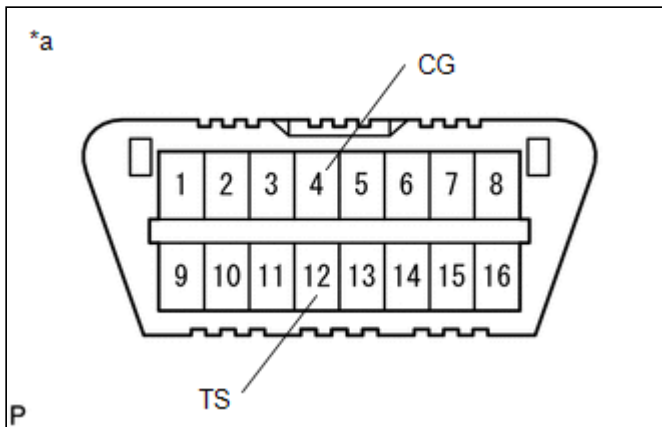
Performing the following procedure will perform the yaw rate and acceleration sensor zero point calibration, and also store system information simultaneously.

- (1) Turn the engine switch off.
- (2) Check that the steering wheel is centered.
- (3) Apply the parking brake.
- (4) Check that the shift lever is in P.

NOTICE:

- DTCs 36 (Zero Point Calibration of Yaw Rate Sensor Undone) and 98 (Zero Point Calibration of Acceleration Sensor Undone) will be recorded if the shift lever is not in P.
- If a DTC is stored that indicates zero point calibration is incomplete, repeat the procedure starting at the step for clearing the zero point calibration data and system information.

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



*a	Front view of DLC3
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SST: 09843-18040

- (6) Turn the engine switch on (IG).
- (7) After Test Mode has been entered, keep the vehicle stationary on a level surface for 5 seconds or more.
- (8) Check that the slip indicator light comes on for several seconds and then blinks in the Test Mode pattern.

HINT:

- If the slip indicator light does not blink, perform zero point calibration again.
- Zero point calibration is performed only once after the system enters Test Mode.
- Calibration cannot be performed again until the stored data is cleared.

(9) Turn the engine switch off and disconnect SST from the DLC3.

