DTC	**C1210/36**	**ZERO POINT CALIBRATION OF YAW RATE SENSOR UNDONE**

DTC	**C1232/32**	**MALFUNCTION IN DECELERATION SENSOR**

DTC	**C1234/34**	**MALFUNCTION IN YAW RATE SENSOR**

DTC	**C1243/43**	**MALFUNCTION IN DECELERATION SENSOR**

DTC	**C1244/44**	**OPEN OR SHORT IN DECELERATION SENSOR CIRCUIT**

DTC	**C1245/45**	**MALFUNCTION IN DECELERATION SENSOR**

DTC	**C1336/39**	**ZERO POINT CALIBRATION OF DECELERATION SENSOR UNDONE**

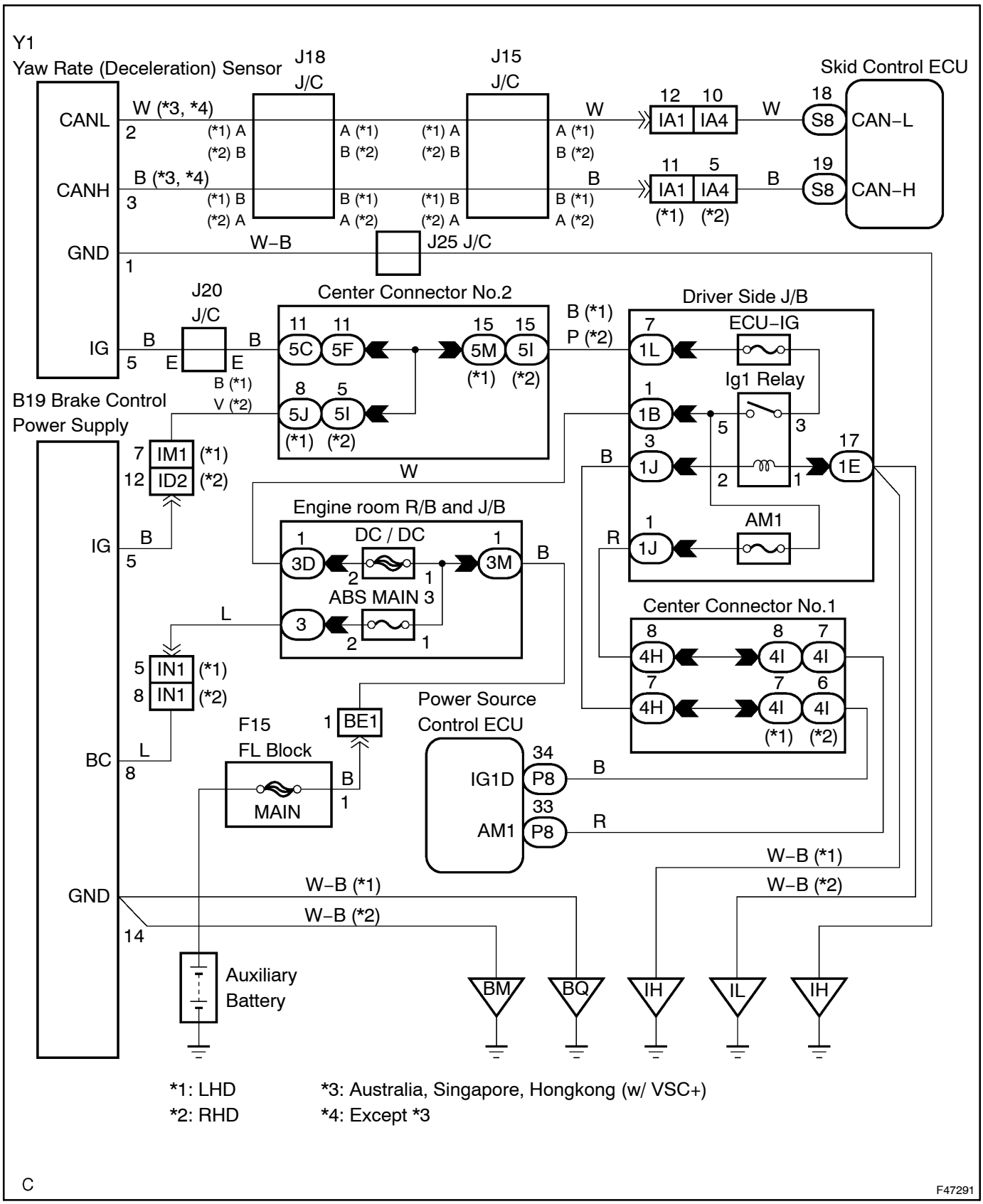
DTC	**C1381/97**	**MALFUNCTION IN POWER SUPPLY VOLTAGE YAW/DECELERATION SENSOR**

CIRCUIT DESCRIPTION

The yaw rate and deceleration sensor detect any gravity applied to the vehicle and transmit the signal to the skid control ECU via CAN communication (vehicle equipped with VSC+).
When a malfunction occurs in the communication line with the yaw rate sensor, DTC U0123/62 (yaw rate sensor communication malfunction) and DTC U0124/95 (deceleration sensor communication malfunction) are output.

DTC No.	DTC Detecting Condition	Trouble Area
C1210/36	Yaw rate sensor zero point calibration is unfinished.	• Zero point calibration undone (Perform zero point calibration and check DTC. If DTC is not output again, the sensor is normal.)
C1232/32	One GL1/2 signal fluctuation is within 80 mV and the other is 1.9 V or more for at least 30 sec. when vehicle speed is 10 km/h (6 mph)	• Yaw rate (deceleration) sensor • Skid control ECU
C1234/34	Signal of malfunction that is detected at sensor self–check is received when communication with the sensors is valid.	• Yaw rate (deceleration) sensor
C1243/43	Sensor sticking can be seen 16 times or more in a series at a speed between 30 km/h (18 mph) and 0 km/h (0 mph).	• Yaw rate (deceleration) sensor • Skid control ECU
C1244/44	Difference between GL1 and GL2 is not less than 0.4 G for at least 60 sec. after the difference is 0.6 G or more when the vehicle speed is 0 km/h (0 mph). Malfunction signal from deceleration sensor is received.	• Yaw rate (deceleration) sensor • Yaw rate (deceleration) sensor installation • Zero point calibration not done • Skid control ECU
C1245/45	Difference between the G value calculated from deceleration sensor value and vehicle speed exceeds 0.35 G for at least 60 sec. when vehicle speed is 30 km/h (18 mph).	• Yaw rate (deceleration) sensor • Zero point calibration not done • Skid control ECU
C1336/39	Vehicle speed increases with unfinished zero point calibration. Zero point calculation is not within specified range when zero point calibration is finished.	• Zero point calibration undone (Perform zero point calibration and check DTC. If DTC is not output again, the sensor is normal.)
C1381/97	Power source voltage is not within specified range when communication between skid control ECU and sensor is valid.	• Yaw rate (deceleration) sensor circuit • Harness and connector • Skid control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK DTC

(a) Clear the DTCs (see page 05–738).
(b) Turn the power switch ON (READY).
(c) Check that the trouble code for CAN communication DTCs U0073/94 and U0123/62 are not output.
Result:

A	CAN communication DTCs are not output.
B	CAN communication DTC U0073/94 or U0123/62 is output.
C	Only unfinished zero point calibration DTC C1210/36 or C1336/39 is output.

B → **REPAIR CIRCUIT INDICATED BY OUTPUT CODE**

C → **Go to step 5**

A

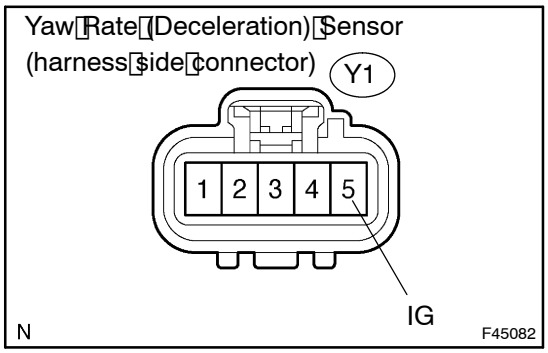
2	CHECK SENSOR INSTALLATION (YAW RATE (DECELERATION) SENSOR)

(a) Check that the yaw rate (deceleration) sensor has been installed properly.
OK:
- **The sensor should be tightened to the specified torque.**
- **The sensor should not be tilted.**

NG → **INSTALL YAW RATE SENSOR CORRECTLY (SEE PAGE 32–84)**

OK

3	CHECK HARNESS AND CONNECTOR (IG TERMINAL)



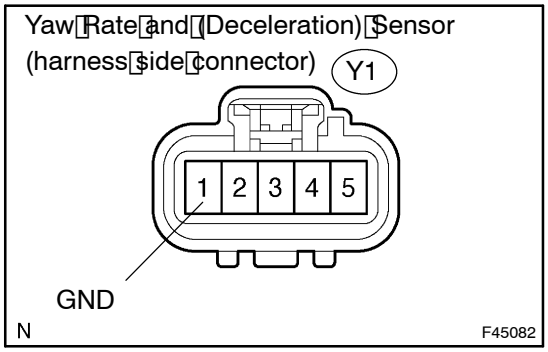
(a) Disconnect the yaw ratn (deceleration) sensor connector.
(b) Turn the power switch ON (READY).
(c) Measure the voltage according to the value(s) in the table below.
Standard:

Tester Connection	Specified Condition
Y1–5 (IG) – Body ground	10 to 14 V

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (IG CIRCUIT)**

OK

4	CHECK HARNESS AND CONNECTOR(GND TERMINAL)



(a) Disconnect the yaw rate and deceleration sensor connector.

(b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
Y1–1 (GND) – Body ground	Below 1 Ω

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE YAW RATE SENSOR

5	PERFORM ZERO POINT CALIBRATION OF YAW RATE SENSOR AND DECELERATION SENSOR

(a) Perform the zero point calibration of the yaw rate sensor and deceleration sensor (see page 05–723).

NEXT

6	RECONFIRM DTC

(a) Clear the DTCs.

(b) Turn the power switch ON (READY).

(c) Check the same DTCs are recorded (see page 05–738).

Result:

DTC is not output	A
DTC is output	B

B → **REPLACE YAW RATE SENSOR**

A

END

HINT:
This DTC may be memorized due to a malfunction in the connector terminal.