BC

DTC	C1203/53	ECM Communication Circuit Malfunction

DESCRIPTION

The circuit sends TRAC, A-TRAC and VSC control information from the skid control ECU to the ECM, and engine control information from the ECM to the skid control ECU via the CAN communication system.

DTC No.	DTC Detecting Condition	Trouble Areas
C1203/53	Information relating to engine drive source or destination stored in ECM does not match that stored in skid control ECU.	• CAN communication system • ECM

INSPECTION PROCEDURE

1	CHECK DTC (CAN COMMUNICATION SYSTEM)

(a) Check if any DTC is recorded for the CAN communication system (See page CA-14).

Result

Result	Proceed to
DTC not output	A
DTC output	B

B ▷ **REPAIR CAN COMMUNICATION SYSTEM**

A ▽

2	CHECK DTC (ENGINE CONTROL SYSTEM)

(a) Check if any DTC is recorded for the engine control system (See page ES-38).

Result

Result	Proceed to
DTC output	A
DTC not output	B

B ▷ **REPLACE ECM**

A ▽

REPAIR ENGINE CONTROL SYSTEM

DTC	C1210/36	**Zero Point Calibration of Yaw Rate Sensor Undone**

DTC	C1336/39	**Zero Point Calibration of Acceleration Sensor Undone**

DESCRIPTION

The skid control ECU receives signals from the yaw rate sensor and deceleration sensor via the CAN communication system.

The deceleration sensor is built into the yaw rate sensor.

If there is trouble in the bus lines between the yaw rate sensor and deceleration sensor and the CAN communication system, the DTCs U0123/62 (yaw rate sensor communication trouble) and U0124/95 (deceleration sensor communication trouble) are output.

These DTCs are also output when the calibration has not been completed.

DTC No.	DTC Detecting Conditions	Trouble Areas
C1210/36	When either of following 1 or 2 detected: 1. When battery terminal connected, shift lever moved to non-P position (A/T) or parking brake OFF (M/T) within 15 seconds of ECU terminal IG1 initially turned ON. 2. Yaw rate sensor zero point recorded in ECU deleted.	• Yaw rate sensor and deceleration sensor • Zero point calibration not complete • PNP switch circuit (P position) (A/T) • Parking brake switch circuit (M/T) • Master cylinder solenoid (skid control ECU)
C1336/39	When either of following 1 or 2 detected: 1. In TEST mode, shift lever shifted to non-P position (A/T) or parking brake OFF (M/T) 2 seconds after ECU terminal IG1 initially turned ON. 2. Deceleration sensor zero point recorded in ECU deleted.	• Yaw rate sensor and deceleration sensor • Zero point calibration not complete • PNP switch circuit (P position) (A/T) • Parking brake switch circuit (M/T) • Master cylinder solenoid (skid control ECU)

WIRING DIAGRAM

C135280E01
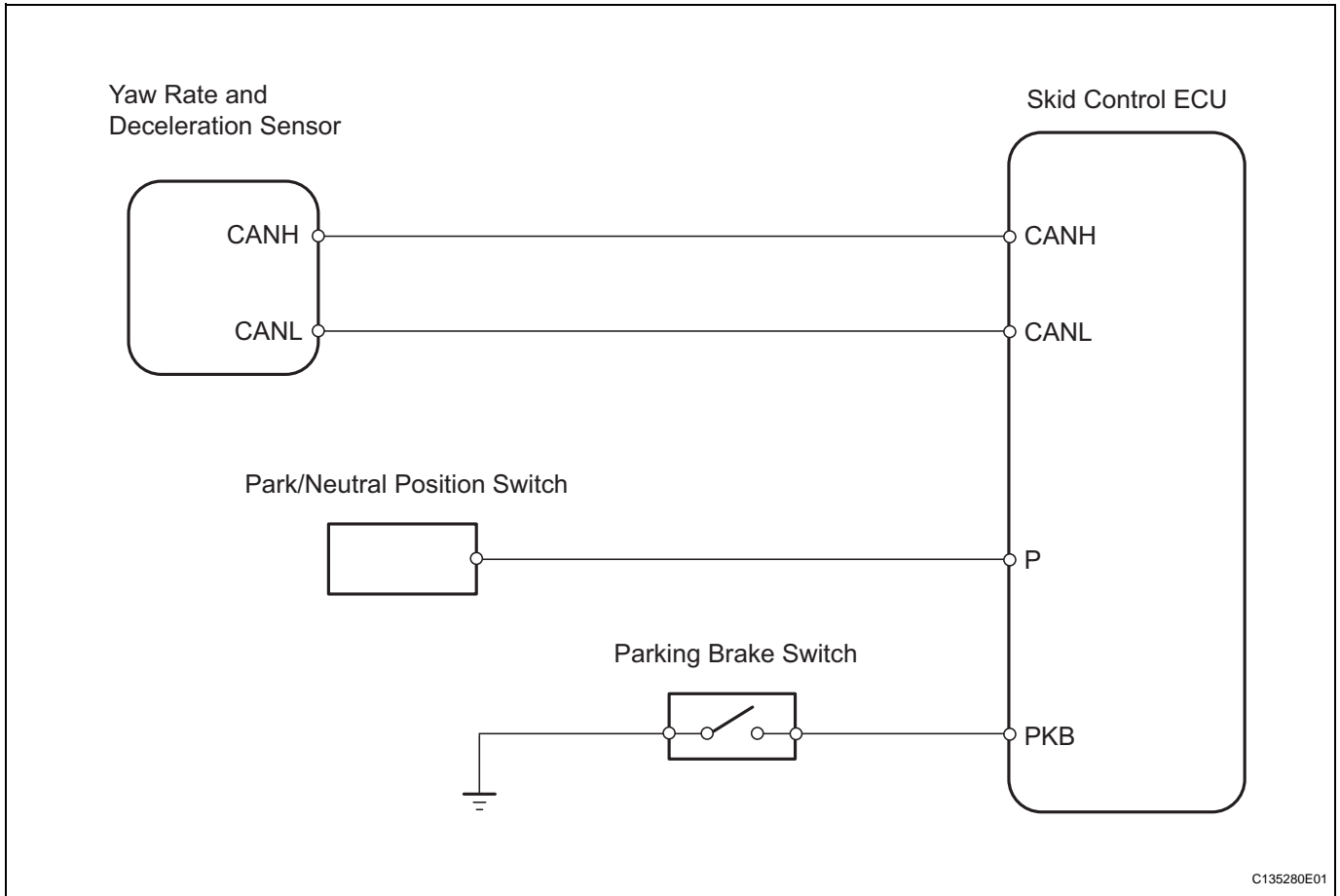
INSPECTION PROCEDURE

HINT:
When U0073/94, U0100/65, U0123/62, U0124/95 or U0126/63 are output accompanied by C1210/36 or C1336/39, inspect and repair the trouble areas indicated by U0073/94, U0100/65,U0123/62, U0124/95 or U0126/63 first.

1	PERFORM YAW RATE AND DECELERATION SENSOR ZERO POINT CALIBRATION

(a) Perform the zero point calibration of the yaw rate sensor and deceleration sensor (See page BC-24).

NEXT

2	RECONFIRM DTC

(a) Clear the DTCs (See page BC-45).
(b) Check if the same DTCs are recorded (See page BC-45).

Result

Result	Proceed to
DTC output	A
DTC not output	B

B	END

A

3	**CHECK YAW RATE AND DECELERATION SENSOR INSTALLATION**

(a) Check that the yaw rate and deceleration sensor has been installed properly (See page BC-202).
OK:
    The sensor is tightened to the specified torque.
   **The sensor is not tilted.**

NG	INSTALL YAW RATE SENSOR CORRECTLY

OK

4	**CHECK HARNESS AND CONNECTOR (ECU - PARK/NEUTRAL POSITION SWITCH OR PARKING BRAKE SWITCH)**

**Skid Control ECU
(harness side connector):**

**Park/Neutral Position Switch
(harness side connector):**

F052381E02

(a) A/T
  (1) Disconnect the skid control ECU connector.
  (2) Disconnect the Park/Neutral position switch connector.
  (3) Measure the resistance.
     Standard resistance

Tester Connection	Specified Condition
A4-14 (P/R) - B35-6 (PL)	**Below 1 Ω**

**Skid Control ECU
(harness side connector):** A4

PKB

**Parking Brake Switch
(harness side connector):**

E22

C124797E02
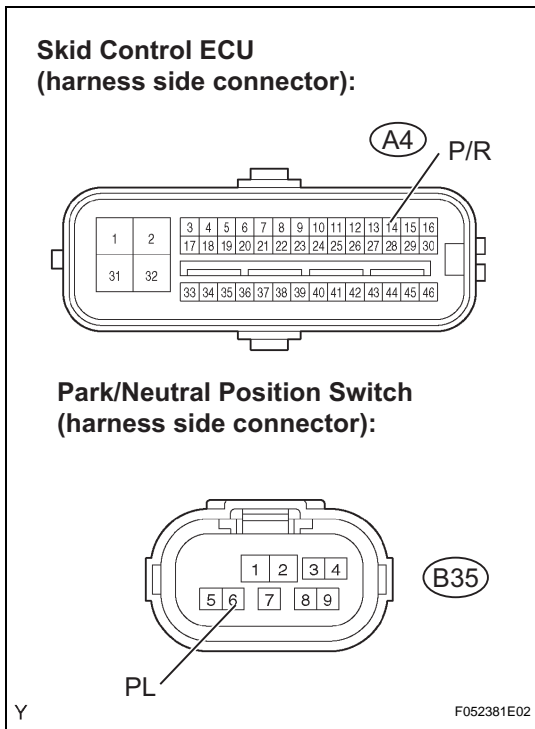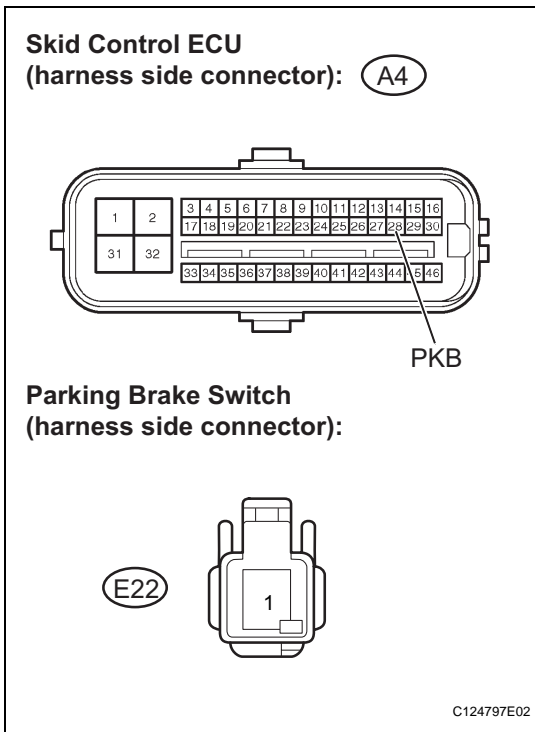
(b) M/T:
    (1) Disconnect the skid control ECU connector.
    (2) Disconnect the parking brake switch connector.
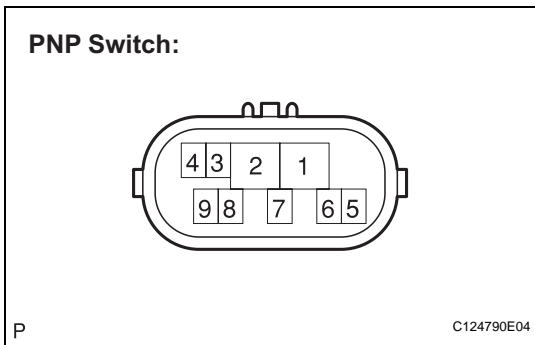   (3) Measure the resistance.
       Standard resistance

Tester Connection	Specified Condition
A4-28 (PKB) - E22-1	Below 1 Ω

NG ▷ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK ▽

5	INSPECT PARK/NEUTRAL POSITION SWITCH OR PARKING BRAKE SWITCH

PNP Switch:

P   C124790E04

(a) Inspect the Park/Neutral Position (PNP) switch (for A/T models).
    (1) Disconnect the PNP switch connector.
    (2) Check the resistance when the transmission gear selector lever is moved to each position.
       Standard resistance

Gear Selector Lever Positions	Tester Connections	Specified Conditions
P	2 - 6, 4 - 5	Below 1 Ω
R	1 - 2	Below 1 Ω
N	2 - 9, 4 - 5	Below 1 Ω
D	2 - 7	Below 1 Ω
2	2 - 3	Below 1 Ω
L	2 - 8	Below 1 Ω

Parking Brake Switch:

⇐ Pushed in

⇒ Released

Y   C129357E04
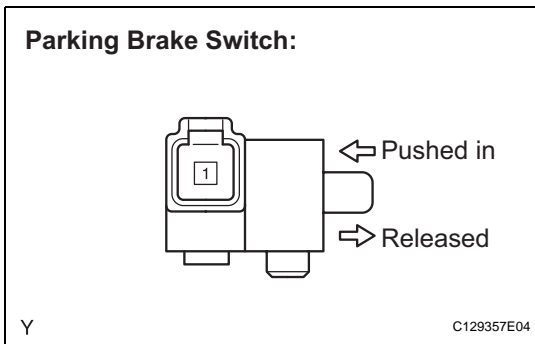
(b) Inspect the parking brake switch (for M/T models).
    (1) Disconnect the parking brake switch connector.
    (2) Measure the resistance.
       Standard resistance

Tester Connection	Condition	Specified Condition
1 - Ground part	Parking brake switch ON (Switch pin released)	Below 1 Ω
1 - Ground part	Parking brake switch OFF (Switch pin pushed in)	10 kΩ or higher

BC

| NG | REPLACE PARK/NEUTRAL POSITION SWITCH OR PARKING BRAKE SWITCH |

OK

| 6 | REPLACE YAW RATE AND DECELERATION SENSOR |

(a) Replace the yaw rate and deceleration sensor (See page BC-201).

NEXT

| 7 | PERFORM YAW RATE AND DECELERATION SENSOR ZERO POINT CALIBRATION |

(a) Perform the zero point calibration of the yaw rate sensor and deceleration sensor (See page BC-24).

NEXT

| 8 | RECONFIRM DTC |

(a) Clear the DTCs (See page BC-45).
(b) Check if the same DTCs are recorded (See page BC-45).

Result

Result	Proceed to
DTC output	A
DTC not output	B

| B | END |

A

| REPLACE MASTER CYLINDER SOLENOID |