

**DTC****C1223/43****ABS Control System Malfunction****DESCRIPTION**

DTC No.	DTC Detection Condition	Trouble Area
C1223/43	ABS control system is abnormal	ABS control system

**HINT:**

- This DTC is output when the VSC system detects a malfunction in the ABS system.
- When DTC C1223/43 is memorized, there is no malfunction in the skid control ECU.

**INSPECTION PROCEDURE****1 CHECK DTC (FOR ABS SYSTEM)**

- Clear the DTC (See page [BC-39](#)).
- Check if DTC is recorded.

**Result**

Condition	Proceed to
DTC is output	A
DTC is not output	B

A

B

END

**REPAIR REPAIR CIRCUIT INDICATED BY OUTPUT DTC**

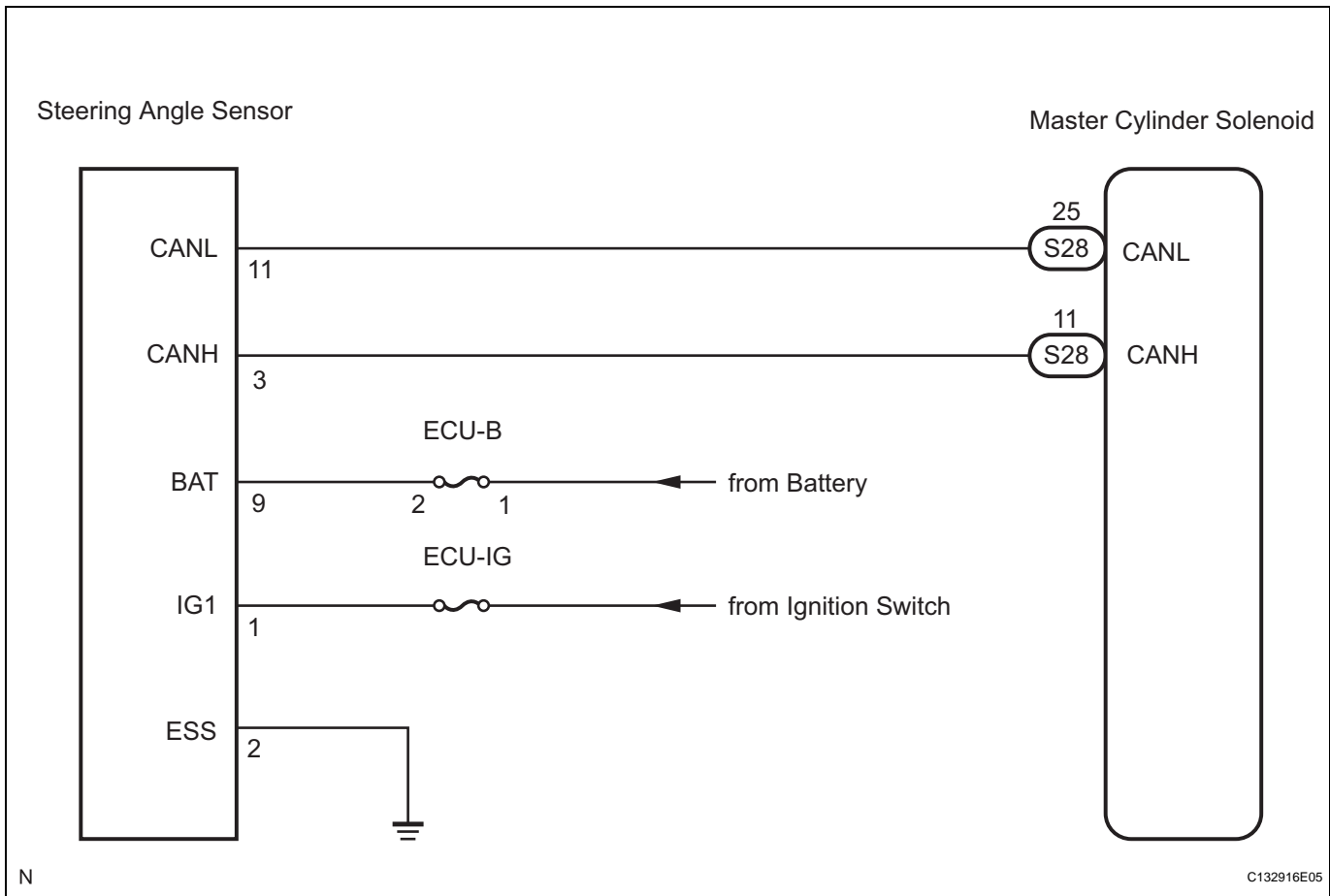
<b>DTC</b>	<b>C1231/31</b>	<b>Steering Angle Sensor Circuit Malfunction</b>
<b>DTC</b>	<b>C1290/66</b>	<b>Steering Angle Sensor Zero Point Malfunction</b>

**DESCRIPTION**

The steering angle sensor signal is sent to the skid control ECU through the CAN communication system. When there is a malfunction in the communication system, it will be detected by the diagnosis function.

DTC No.	DTC Detection Condition	Trouble Area
C1231/31	When ECU IG1 terminal voltage is 9.5 V or more, the steering angle sensor malfunction signal is received.	<ul style="list-style-type: none"> <li>Steering angle sensor</li> <li>Steering angle sensor circuit</li> <li>Steering angle sensor power supply</li> <li>CAN communication system</li> </ul>
C1290/66	The steering angle sensor zero point calibration position vastly differs from the recorded value.	Steering angle sensor

**WIRING DIAGRAM**



BC

**INSPECTION PROCEDURE**

**NOTICE:**

When replacing the master cylinder solenoid, perform zero point calibration (See page BC-20).

**HINT:**

- When U0073/94, U0100/65, U0123/62, U0124/95 or U0126/63 is output together with C1231/31 and C1290/66, inspect and repair the trouble areas indicated by U0073/94, U0100/65, U0123/62, U0124/95 or U0126/63 first.

- When the speed sensor or the yaw rate and acceleration sensor has trouble, DTCs of the steering angle sensor may be output even when the steering angle sensor is normal. When DTCs of the speed sensor (C0200/31, C0205/32, C0210/33, C0215/34, C1235/35, C1236/36, C1238/38, C1239/39) or yaw rate and acceleration sensor (C1232/32, C1234/34, C1243/43, C1244/44, C1245/45, C1381/97) are output together with other DTCs of the steering angle sensor, inspect and repair the speed sensor and yaw rate and acceleration sensor first, and then inspect and repair the steering angle sensor.

**1 READ VALUE OF INTELLIGENT TESTER (STEERING ANGLE SENSOR)**

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch to the ON position and push the intelligent tester main switch ON.
- (c) Select "DATA LIST" mode on the intelligent tester.

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
STEERING ANG	Steering angle sensor/ Min.: -1152 deg/s, Max.: 1150.875 deg/s	Left turn: Increase Right turn: Decrease	-

- (d) Check that the steering wheel turning angle value of the steering angle sensor displayed on the intelligent tester changes when turning the steering wheel.

**OK:**

**Steering angle sensor value changes.**

**BC Result**

Condition	Proceed to
OK (When troubleshooting in accordance with DTC CHART)	A
OK (When troubleshooting in accordance with PROBLEM SYMPTOMS TABLE)	B
NG	C

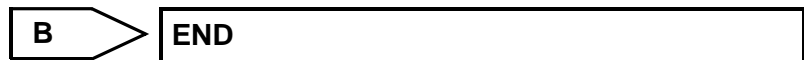


**2 RECONFIRM DTC**

- (a) Clear the DTCs (See page BC-39).
- (b) Drive the vehicle at a speed of approximately 6 mph (10 km/h) or more for 10 seconds or more.
- (c) Check if the same pending DTCs are detected (See page BC-39).

**Result**

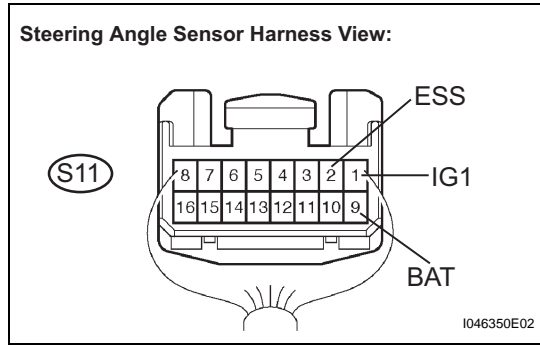
Condition	Proceed to
DTC is output	A
DTC is not output	B



A

**REPLACE MASTER CYLINDER SOLENOID**

**3 INSPECT STEERING ANGLE SENSOR (POWER SOURCE AND GROUND TERMINAL)**



- (a) Remove the steering wheel and the column cover lower.
- (b) Disconnect the steering angle sensor connector.
- (c) Measure the voltage according to the value(s) in the table below.

**Standard voltage**

Tester Connection	Condition	Specified Condition
S11-1 (IG1) - Body ground	Ignition switch ON	10 to 14 V
S11-9 (BAT) - Body ground	Always	10 to 14 V

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

**Standard resistance**

Tester Connection	Condition	Specified Condition
S11-2 (ESS) - Body ground	Ignition switch OFF	Below 1 Ω

**HINT:**

- When troubleshooting in accordance with the DTC CHART, check DTCs before replacing the steering angle sensor (See page BC-39).
- When troubleshooting in accordance with the PROBLEM SYMPTOMS TABLE, be sure to follow the table before replacing the steering angle sensor (See page BC-33).

**NG** **REPAIR OR REPLACE HARNESS OR CONNECTOR (POWER SOURCE OR GROUND CIRCUIT)**

OK

**REPLACE STEERING ANGLE SENSOR**

BC