

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

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

DTC No.	DTC Detecting Condition	Trouble Areas
C1223/43	ABS control system abnormal	ABS control system

BC**INSPECTION PROCEDURE****1****CHECK DTC**

- (a) Clear the DTC (See page [BC-45](#)).
 (b) Check if the same DTC is recorded (See page [BC-45](#)).

Result

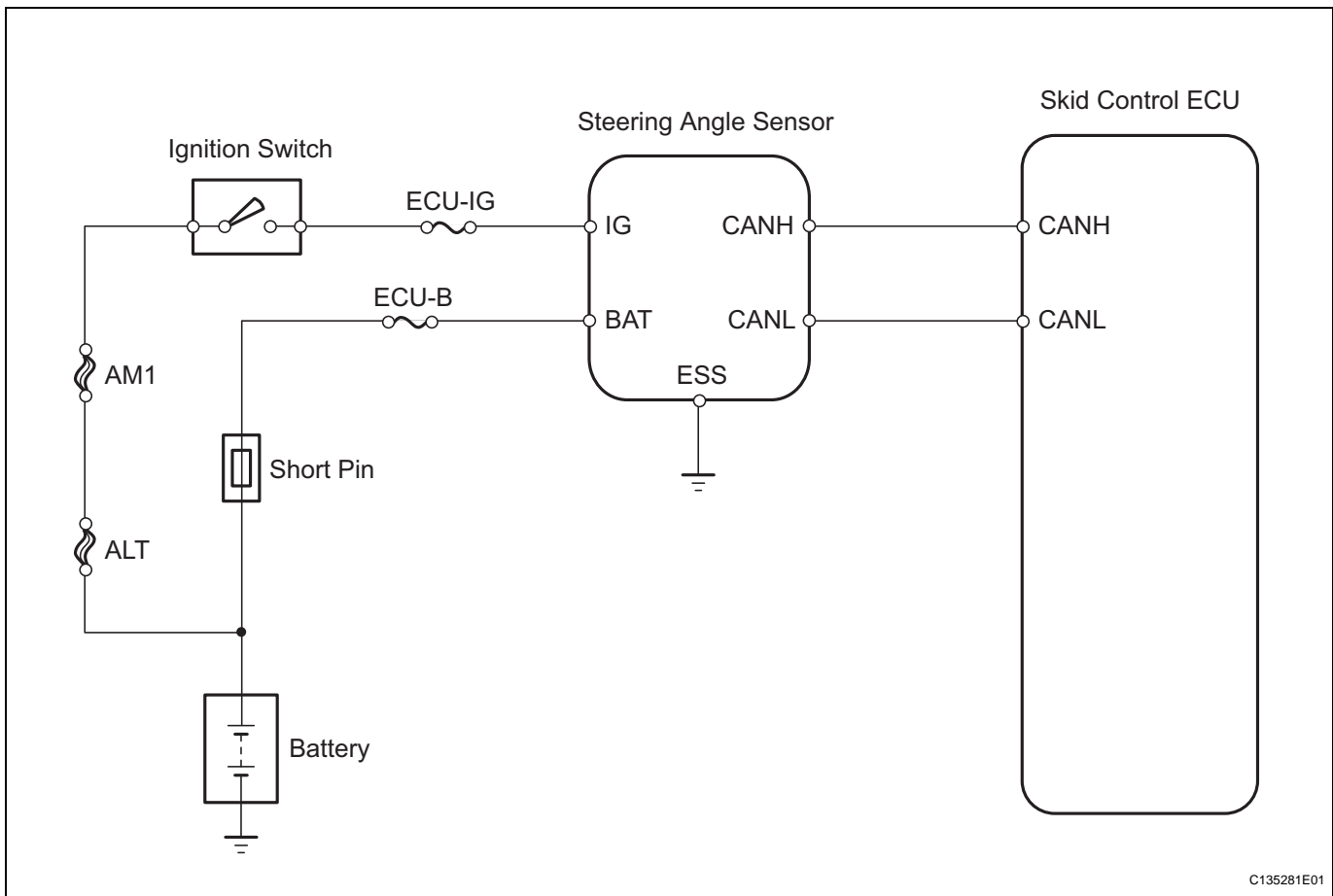
Result	Proceed to
DTC output	A
DTC not output	B

B**END****A****REPAIR CIRCUITS INDICATED BY OUTPUT DTCS**

DTC**C1231/31****Steering Angle Sensor Circuit Malfunction****DTC****C1290/66****Steering Angle Sensor Zero Point Malfunction****BC****DESCRIPTION**

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

DTC No.	DTC Detecting Conditions	Trouble Areas
C1231/31	When ECU IG1 terminal voltage 9.5 V or more, steering angle sensor malfunction signal received.	<ul style="list-style-type: none"> Steering angle sensor Steering angle sensor circuit CAN communication system Master cylinder solenoid (skid control ECU)
C1290/66	Steering angle sensor zero point calibration position significantly differs from recorded value.	Steering angle sensor

WIRING DIAGRAM

C135281E01

INSPECTION PROCEDURE**NOTICE:**

When replacing the master cylinder solenoid, perform zero point calibration (See page [BC-24](#)).

HINT:

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

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

1 CHECK CAN COMMUNICATION SYSTEM

- (a) Check for CAN communication system DTCs (See page CA-14).

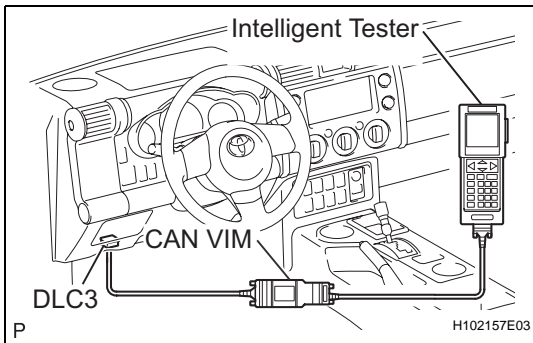
Result

Result	Proceed to
DTC not output	A
DTC output	B

B REPAIR CAN COMMUNICATION SYSTEM

A

2 CHECK MOMENTARY INTERRUPTION (STEERING ANGLE SENSOR)



- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch on.
- (c) Turn the tester on.
- (d) Using a intelligent tester, check for any momentary interruption in the wire harness and connector corresponding to a DTC.
Select the following menu items: DIAGNOSIS / OBD/ MOBD / select vehicle / ABS/VSC / DATA LIST.

DATA LIST: ABS/VSC

Item	Measurement Item / Range (Display)	Normal Condition
STEERING SEN	Steering angle sensor open detection : OPN_DET or NORMAL	OPN_DET: Momentary interruption NORMAL: Normal

OK:
There are no momentary interruptions.

Result

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

B PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

C Go to step 4

A

3 RECONFIRM DTC

BC

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

Result

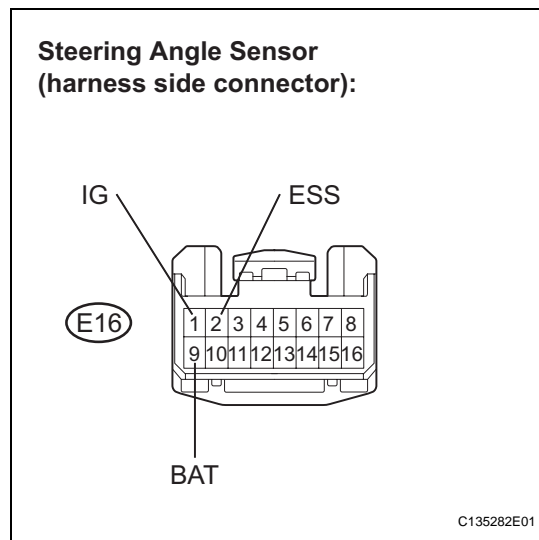
Result	Proceed to
DTC output	A
DTC not output	B

B → **END**

A

REPLACE MASTER CYLINDER SOLENOID

4 CHECK TERMINAL VOLTAGE (STEERING ANGLE SENSOR)



- (a) Remove the steering wheel and the column lower cover.
- (b) Disconnect the steering angle sensor connector.
- (c) Turn the ignition switch on.
- (d) Measure the voltage.

Standard voltage

Tester Connection	Specified Condition
E16-1 (IG) - E16-2 (ESS)	11 to 14 V
E16-9 (BAT) - E16-2 (ESS)	11 to 14 V

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

OK

5 REPLACE STEERING ANGLE SENSOR

- (a) Replace the steering angle sensor (See page [BC-205](#)).

NEXT

6 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



BC

