

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 memorized, there is no malfunction in the skid control ECU.

DTC No.	DTC Detecting Condition	Trouble Area
C1223/43	Malfunction in ABS control system	ABS control system

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

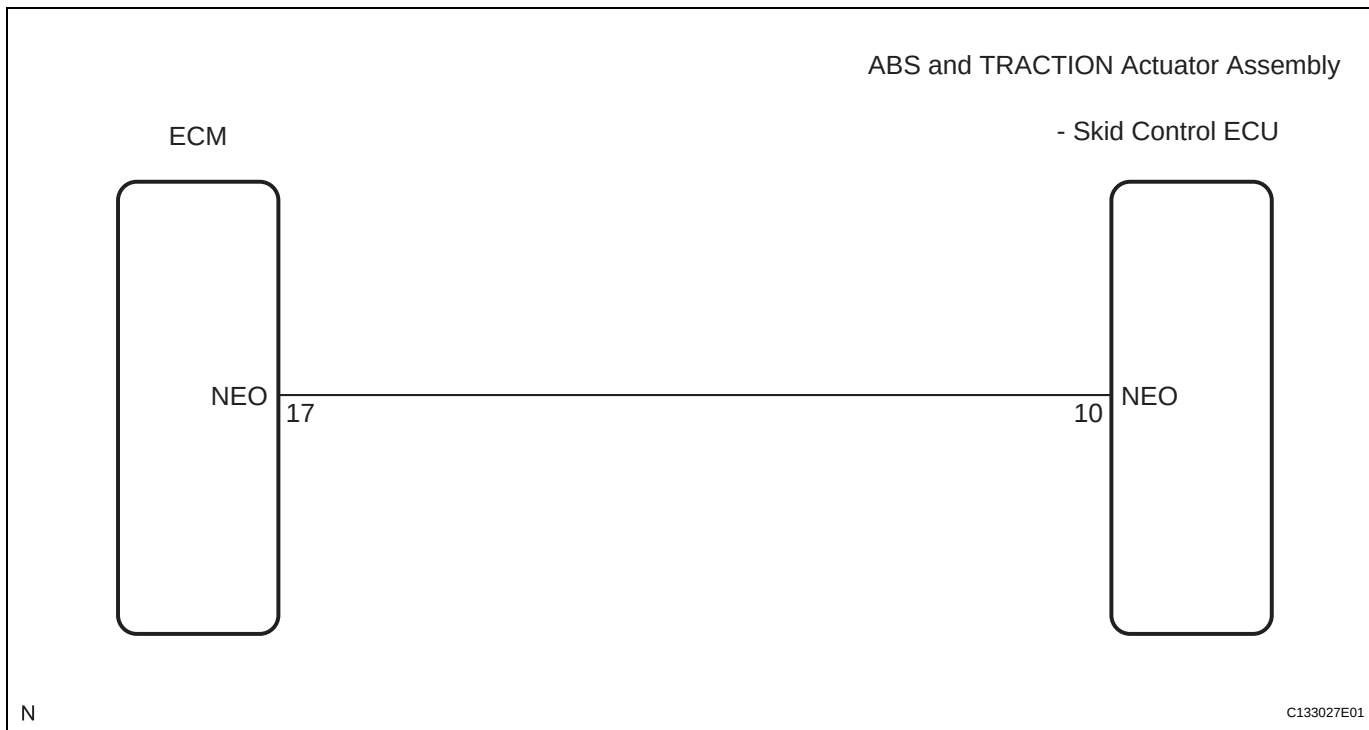
- Clear the DTCs (See page [BC-96](#)).
- Turn the ignition switch to the ON position.
- Are the DTCs of the ABS system recorded? (See page [BC-96](#))

NO**END****YES****REPAIR CIRCUIT INDICATED BY OUTPUT DTC**

DTC**C1224/44****NE Signal Circuit****DESCRIPTION**

The skid control ECU receives engine revolution speed signals (NE signals) from the ECM.

DTC No.	DTC Detecting Condition	Trouble Area
C1224/44	When either of the following (a and b) is detected: (a) All the following condition continues for at least 10 seconds. * Data can be received properly from ECM at a speed of more than 19 mph (30 km/h). * Open or short in engine rpm signal circuit. (b) All the following condition continues for at least 0.24 seconds. * TRAC is in operation. * Open or short in engine rpm signal circuit.	• NEO circuit • ECM • Skid control ECU

WIRING DIAGRAM**INSPECTION PROCEDURE****NOTICE:**

When replacing the ABS and TRACTION actuator assembly, perform zero point calibration (See page [BC-80](#)).

1**INSPECT SKID CONTROL ECU CONNECTOR SECURELY CONNECTED**

(a) Check if the connector is connected.

OK:

The connector should be securely connected.

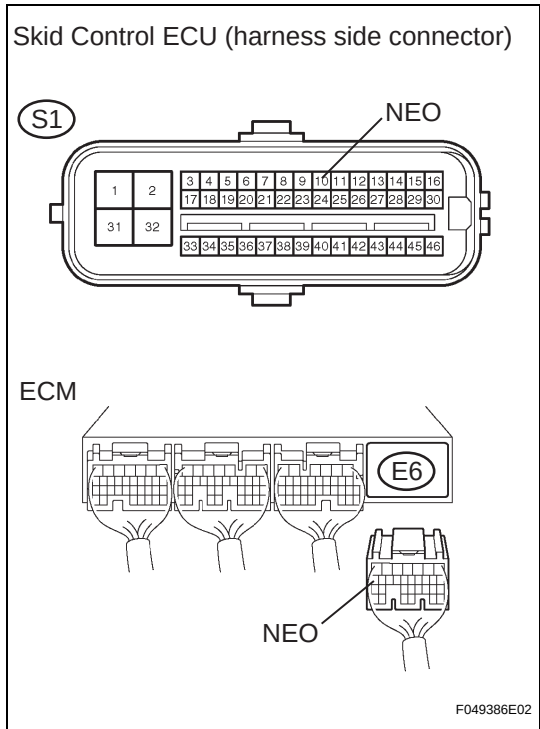
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**CONNECT CONNECTOR TO ECU
CORRECTLY**

OK

2

CHECK HARNESS AND CONNECTOR (SKID CONTROL ECU - ECM)



- (a) Disconnect the skid control ECU connector and the ECM connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Specified Condition
S1-10 (NEO) - E6-17 (NEO)	Below 1 Ω

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

Standard resistance

Tester Connection	Specified Condition
S1-10 (NEO) - Body ground	10 kΩ or higher

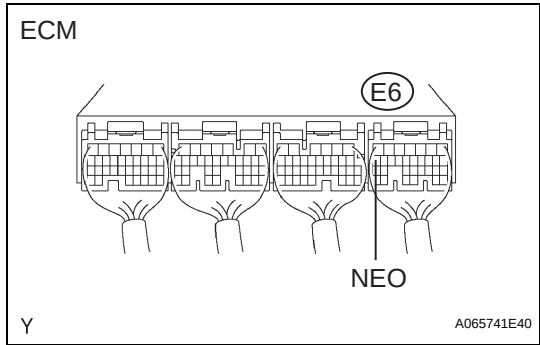
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REPAIR OR REPLACE HARNESS OR CONNECTOR

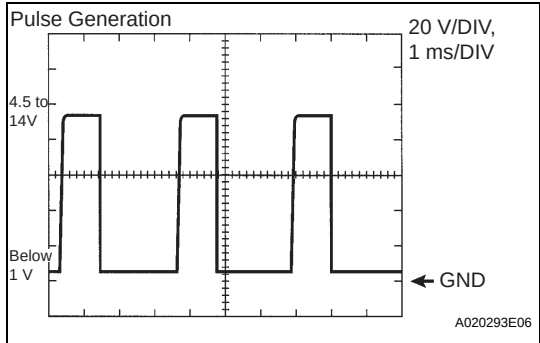
OK

3

INSPECT ECM (NEO TERMINAL)



- (a) Reconnect the ECM connector and the skid control ECU connector.



- (b) Check the signal waveform between terminal NEO (E6-17) of the ECM and body ground for the engine conditions below.

Standard voltage

Tester Connection	Engine Condition	Specified Condition
E6-17 (NEO) - Body ground	OFF (Ignition switch ON)	4.5 to 14 V or below 1 V
E6-17 (NEO) - Body ground	ON (Idling)	Pulse generation (4.5 to 14 V ↔ below 1 V)

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REPLACE ECM

OK

4

RECONFIRM DTC

- (a) Clear the DTCs (See page [BC-96](#)).
- (b) Turn the ignition switch to the ON position.
- (c) Are the same DTCs recorded?

NO

END

YES

REPLACE ABS AND TRACTION ACTUATOR ASSEMBLY