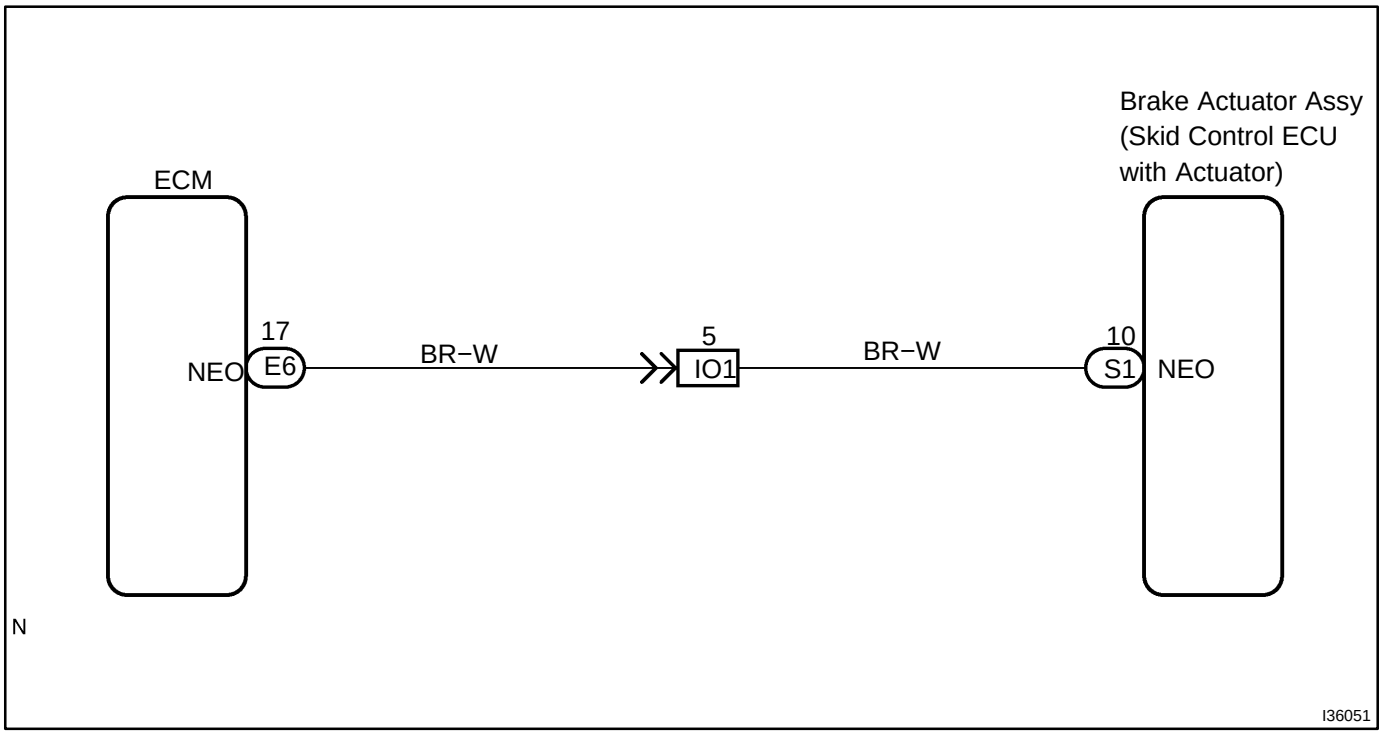
DTC C1224/44 NE SIGNAL CIRCUIT

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 any of the following (1 to 2) is detected: (1) All the following conditions continue for at least 10 seconds. • Data can be received properly from ECM at a speed of more than 18 mph (30 km/h). • Open or short in engine rpm signal circuit. (2) All the following conditions continue for at least 0.24 seconds. • TRAC is in operation. • Open or short in engine rpm signal circuit.	• NEO circuit • ECM • Brake actuator assy (skid control ECU)

WIRING DIAGRAM

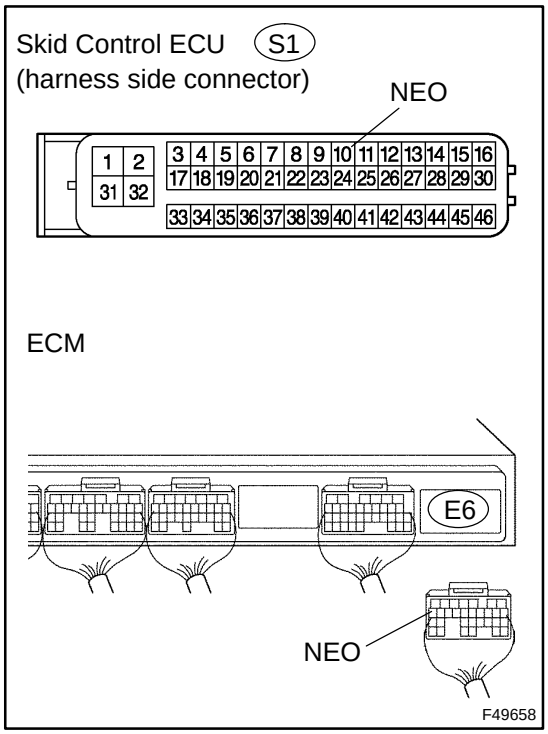


INSPECTION PROCEDURE

NOTICE:

When replacing the brake actuator assy, perform zero point calibration (see page 05−987).

1	CHECK HARNESS AND CONNECTOR(SKID CONTROL ECU − ECM)



(a) Disconnect the skid control ECU connector S1 and the ECM connector E6.

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

Standard:

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.

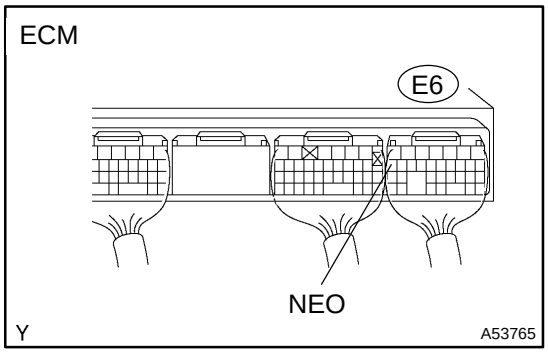
Standard:

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

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

OK

2 INSPECT ECM TERMINAL VOLTAGE(NEO TERMINAL)



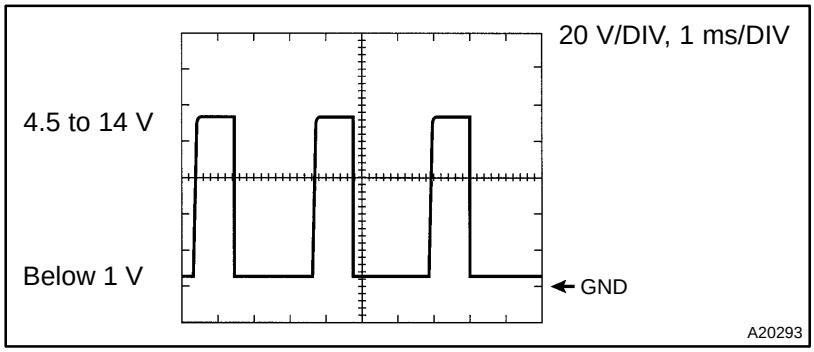
(a) Reconnect the ECM connector E6 and the skid control ECU connector S1.

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

OK:

A waveform similar to the illustration below is output.

Tester Connection	Engine Condition	Specified condition
E6−17 (NEO) − Body ground	Engine stopped	4.5 to 14 V or below 1 V
	Idling	4.5 to 14 V ↔ below 1 V (Pulse)



NG → **REPLACE ECM**

OK

3 RECONFIRM DTC

(a) Clear the DTCs (see page 05−1002).

(b) Turn the ignition switch to the ON position.

(c) Are the same DTCs recorded? (see page 05−1002)

NO → **END**

HINT:

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

YES

REPLACE BRAKE ACTUATOR ASSY (SEE PAGE 32−63)