

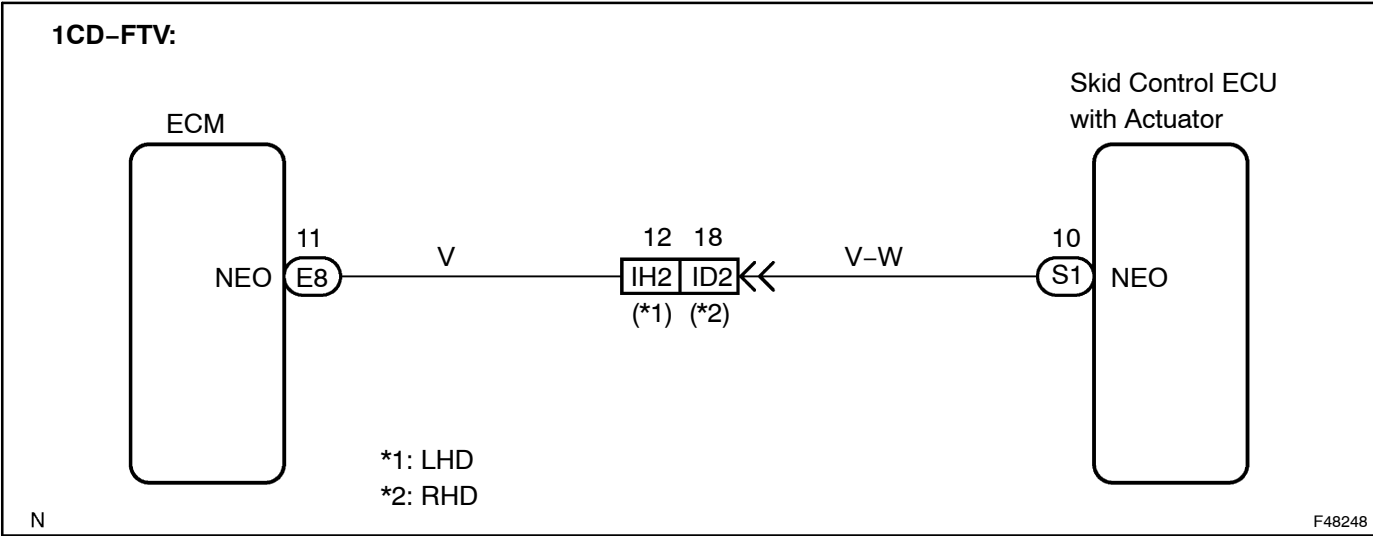
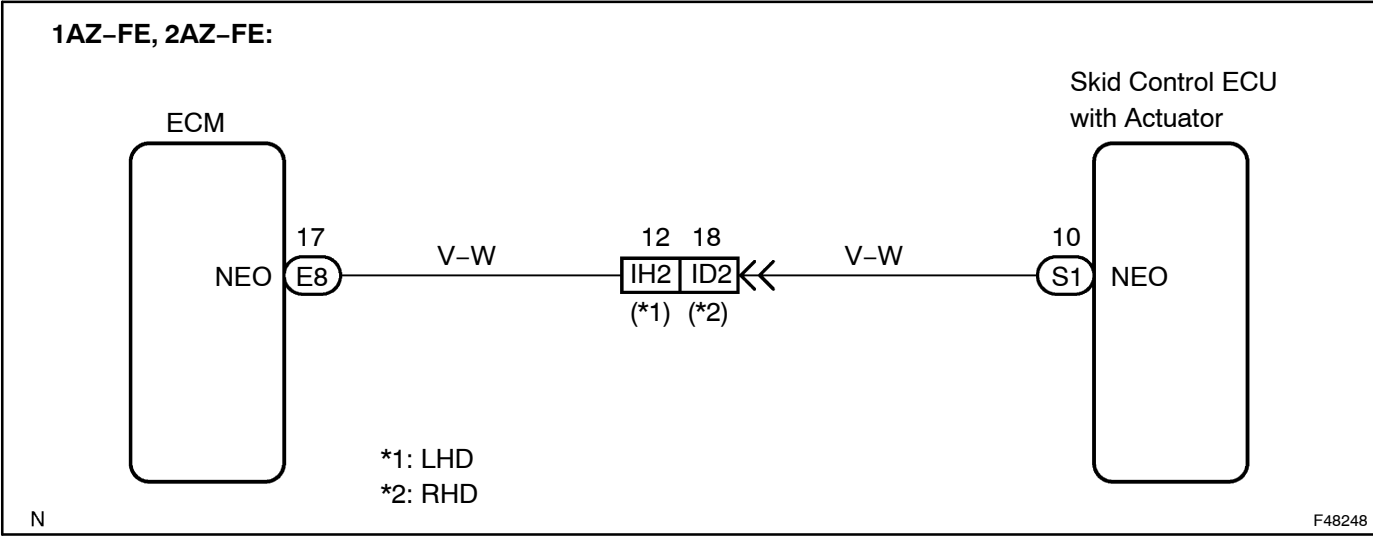
DTC	C1224/44	NE SIGNAL CIRCUIT
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CIRCUIT DESCRIPTION

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. <ul style="list-style-type: none"><li>•Data can be received properly from ECM at a speed of more than 19 mph (30 km/h).</li><li>•Open or short in engine rpm signal circuit.</li></ul> (2) All the following conditions continue for at least 0.24 seconds. <ul style="list-style-type: none"><li>•TRC is in operation.</li><li>•Open or short in engine rpm signal circuit.</li></ul>	<ul style="list-style-type: none"><li>•NEO circuit</li><li>•ECM</li><li>•Skid control ECU</li></ul>

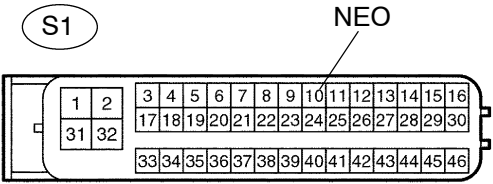
WIRING DIAGRAM



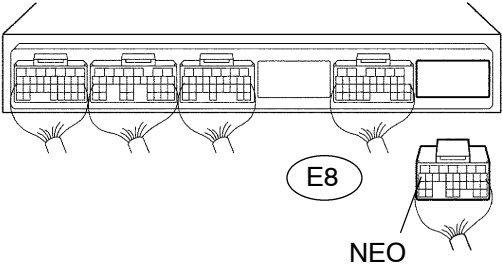
INSPECTION PROCEDURE

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

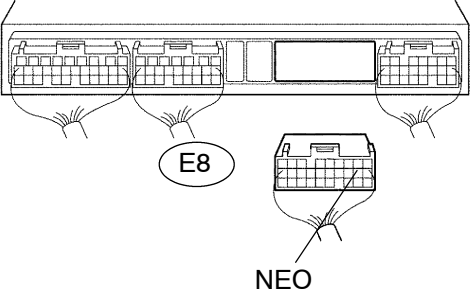
Skid Control ECU:



ECM (1AZ-FE, 2AZ-FE):



ECM (1CD-FTV):



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- (a) Disconnect the skid control ECU S1 connector and the ECM E8 connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard (1AZ-FE, 2AZ-FE):

Tester Connection	Specified Condition
S1-10 (NEO) - E8-17 (NEO)	Below 1 $\Omega$
S1-10 (NEO) - Body ground	10 k $\Omega$ or higher

Standard (1CD-FTV):

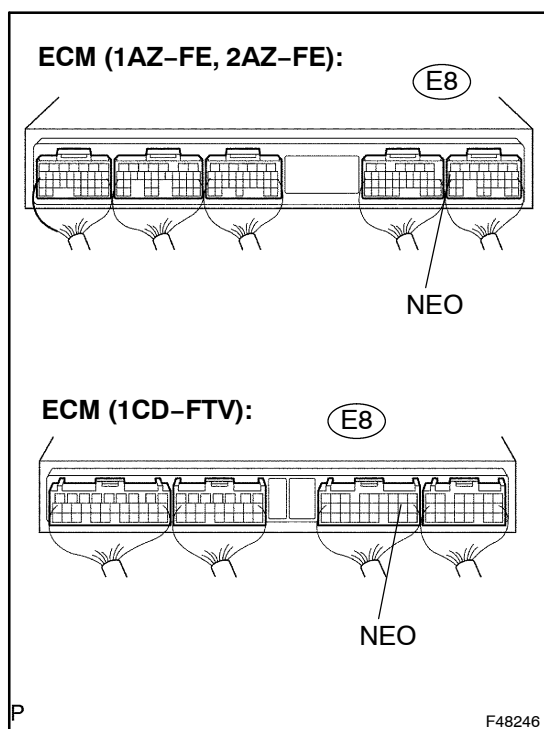
Tester Connection	Specified Condition
S1-10 (NEO) - E8-11 (NEO)	Below 1 $\Omega$
S1-10 (NEO) - Body ground	10 k $\Omega$ or higher

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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

## 2 INSPECT ECM TERMINAL VOLTAGE(NEO TERMINAL)



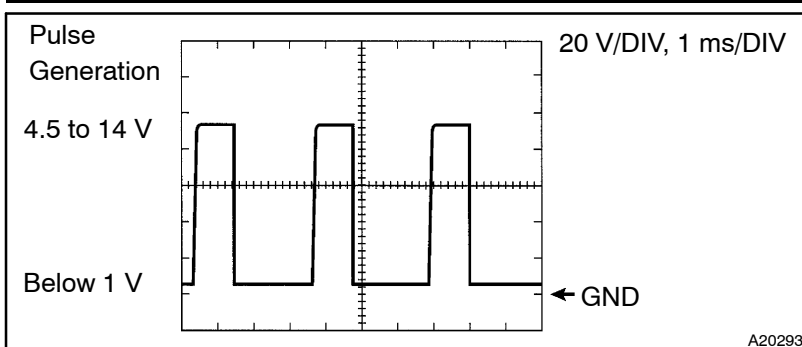
- Reconnect the ECM E8 connector and the skid control ECU S1 connector.
- Check the signal waveform between terminal NEO of the ECM and body ground.

### Standard (1AZ-FE, 2AZ-FE):

Tester Connection	Engine Condition	Specified condition
E8-17 (NEO) – Body ground	OFF (Ignition switch ON)	4.5 to 14 V or below 1 V
E8-17 (NEO) – Body ground	ON (Idling)	Pulse generation (4.5 to 14 V ↔ below 1 V)

### Standard (1CD-FTV):

Tester Connection	Engine Condition	Specified condition
E8-11 (NEO) – Body ground	OFF (Ignition switch ON)	4.5 to 14 V or below 1 V
E8-11 (NEO) – Body ground	ON (Idling)	Pulse generation (4.5 to 14 V ↔ below 1 V)



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REPLACE ECM

OK

## 3 INSPECT SKID CONTROL ECU CONNECTOR

- Check if the connector is connected.

OK:

The connector should be securely connected.

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CONNECT CONNECTOR TO ECU CORRECTLY

OK

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RECONFIRM DTC

- (a) Clear the DTCs (see page 05-625).
- (b) Turn the Ignition switch to the ON position.

Are the same DTCs recorded?

NO

PROCEED TO NEXT CIRCUIT INSPECTION  
SHOWN IN PROBLEM SYMPTOMS TABLE  
(SEE PAGE 05-620)

YES

REPLACE ABS & TRACTION ACTUATOR ASSY (SEE PAGE 32-20)

**NOTICE:**  
When replacing the ABS & TRACTION actuator assy, perform zero point calibration (see page 05-610).