| DTC | C1223/43 | ABS Control System Malfunction |
|---|---|---|

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.

## DESCRIPTION

| DTC No. | DTC Detection Condition | Trouble Area |
|---|---|---|
| C1223/43 | Malfunction in ABS control system | ABS control system |

| 1 | CHECK DTC OUTPUT (FOR ABS SYSTEM) |
|---|---|

(a) Clear the DTCs (See page BC-21).
(b) Turn the ignition switch to the ON position.
(c) Are the same DTCs recorded (See page BC-21).

**Result**

| Result | Proceed to |
|---|---|
| DTC is output | A |
| DTC is not output | B |

B → PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

A → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS

| DTC | C1224/44 | NE Signal Circuit |
|---|---|---|

## DESCRIPTION

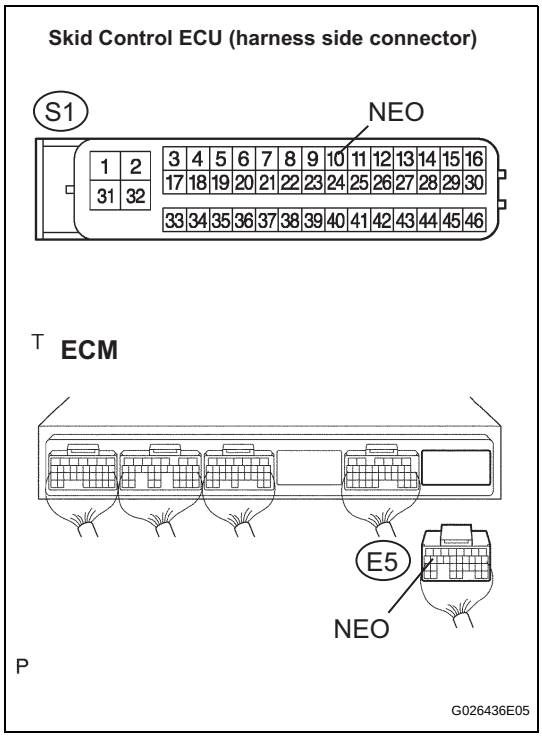
The skid control ECU receives engine revolution speed signals (NE signals) from the ECM.

| DTC No. | DTC Detection Condition | Trouble Area |
|---|---|---|
| C1224/44 | When any of the following (1 to 2) is detected:<br>1. All the following conditions continue for at least 10 seconds.<br>– Data can be received properly from ECM at a speed of more than 19 mph (30 km/h).<br>– Open or short in engine rpm signal circuit.<br>2. All the following conditions continue for at least 0.24 seconds.<br>– TRAC is in operation.<br>– Open or short in engine rpm signal circuit. | • NEO circuit<br>• ECM<br>• Skid control ECU |

## WIRING DIAGRAM


| 1 | 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.

**Resistance**

| Tester Connection | Specified Condition |
|---|---|
| S1-10 (NEO) - E5-17 (NEO) | Below 1 Ω |

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

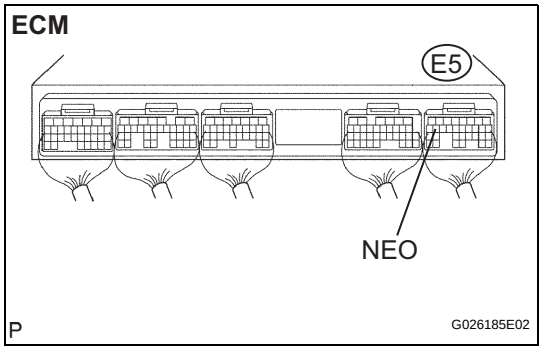
**Resistance**

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

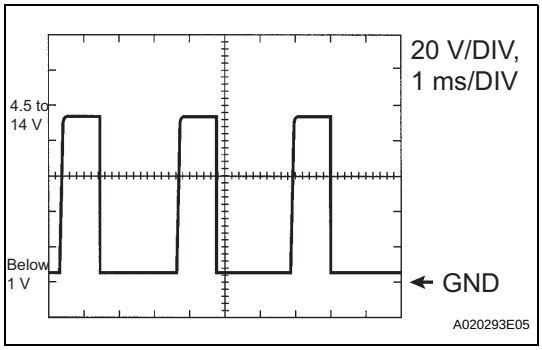
**NG** → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

## 2 INSPECT ECM TERMINAL VOLTAGE (NEO TERMINAL)




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




(b) Check the signal waveform between terminal NEO (E5-17) of the ECM and body ground for the engine conditions below.

**OK**

| Tester Connection | Engine Condition | Specified condition |
|---|---|---|
| E5-17 (NEO) - Body ground | OFF (Ignition switch ON) | 4.5 to 14 V or below 1 V |
| E5-17 (NEO) - Body ground | ON (Idling) | Pulse generation (4.5 to 14 V ←→below 1 V) |

**NG** → **REPLACE ECM**

**OK**

| 3 | INSPECT SKID CONTROL ECU CONNECTOR |
|---|---|

(a) Check if the connector is connected.
**OK:**
**The connector should be securely connected.**

**NG** → **CONNECT CONNECTOR CORRECTLY**

**OK**

| 4 | RECONFIRM DTC |
|---|---|

(a) Clear the DTCs (See page BC-21).
(b) Turn the ignition switch to the ON position.
(c) Are the same DTCs recorded.

**Result**

| Result | Proceed to |
|---|---|
| DTC is output | A |
| DTC is not output | B |

**NOTICE:**
**When replacing the ABS & TRACTION; actuator assembly, perform zero point calibration (See page BC-5).**

**B** → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE**

**A**

**REPLACE ABS AND TRACTION ACTUATOR**