

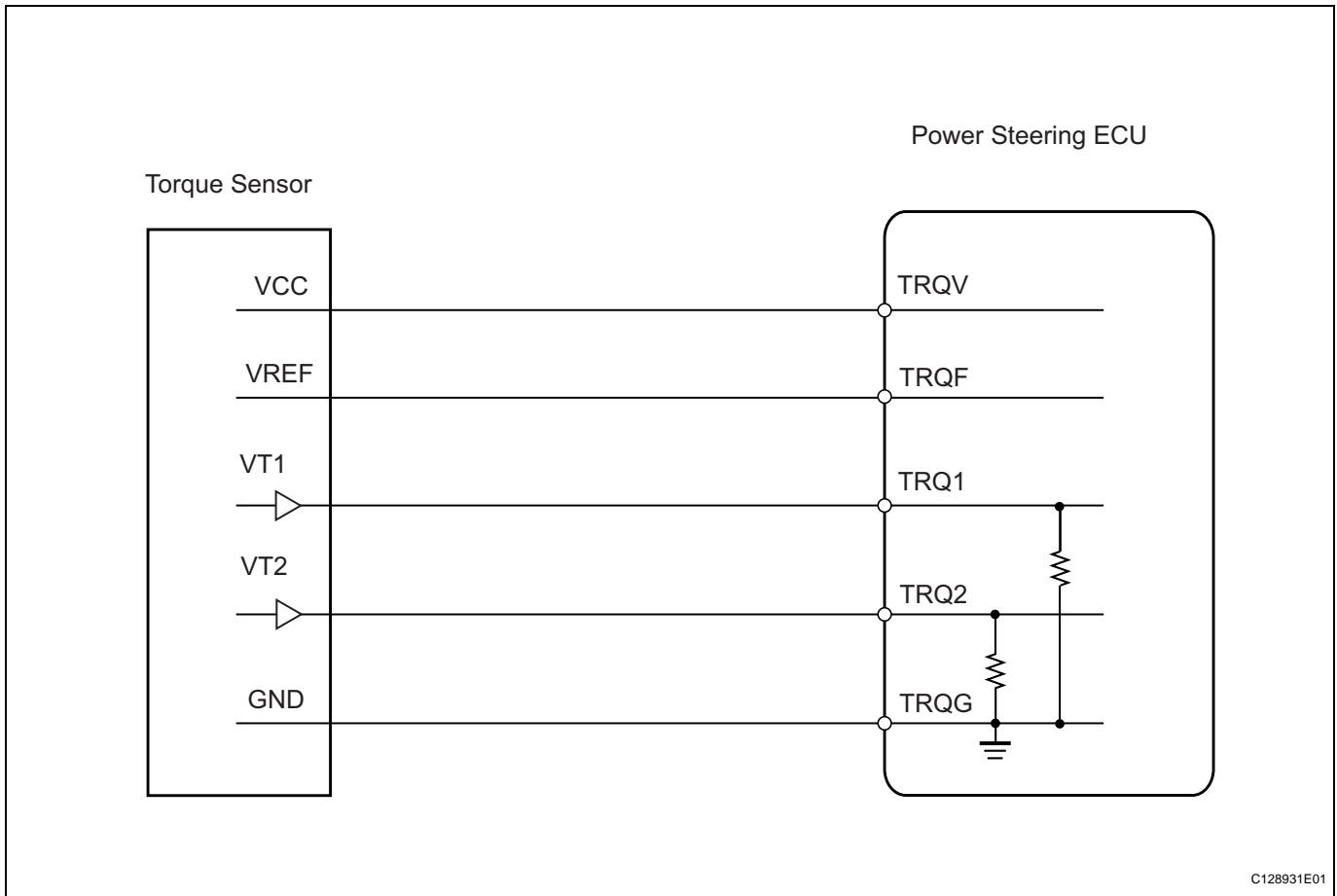
<b>DTC</b>	<b>C1511/11</b>	<b>Torque Sensor 1 Malfunction</b>
<b>DTC</b>	<b>C1512/11</b>	<b>Torque Sensor 2 Malfunction</b>
<b>DTC</b>	<b>C1513/11</b>	<b>Torque Sensor Deviation Excessive</b>
<b>DTC</b>	<b>C1514/11</b>	<b>Torque Sensor Power Supply Voltage Malfunction</b>

**DESCRIPTION**

The torque sensor converts the rotation torque input from the steering wheel into electric signals and sends them to the power steering ECU.

DTC No.	DTC Detection Condition	Trouble Area
C1511/11	Torque sensor malfunction	<ul style="list-style-type: none"> <li>• Torque sensor (built into steering column assembly)</li> <li>• Power steering ECU</li> <li>• Connector</li> </ul>
C1512/11		
C1513/11		
C1514/11		

**WIRING DIAGRAM**



**INSPECTION PROCEDURE**

**1 CHECK CONNECTOR CONNECTION CONDITION (TORQUE SENSOR - ECU)**

- (a) Check the installation condition of the torque sensor connector.

**OK:**

**Torque sensor connector is securely installed to the power steering ECU.**

**Result**

Result	Proceed to
NG	A
OK	B

**B** → **Go to step 3**

**A**

**2 RECONFIRM DTC**

- (a) Reinstall the torque sensor connector.
- (b) Check for DTCs.

**OK:**

**DTC is not output.**

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

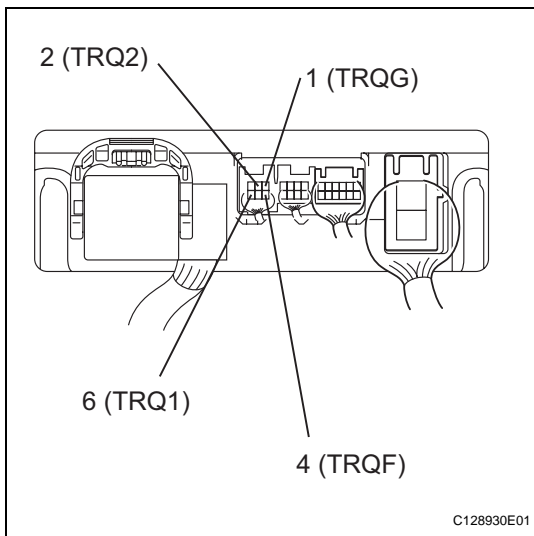
**B** → **END**

**A**

**3 INSPECT TORQUE SENSOR**

- (a) Turn the ignition switch ON.
- (b) Measure the voltage of the ECU.

**Standard voltage**



Tester Connection	Condition	Specified Condition
6 (TRQ1) - 1 (TRQG)	Steering wheel not turned (without load)	2.3 to 2.7 V
	Steering wheel turned to right with vehicle stopped	2.5 to 4.04 V
	Steering wheel turned to left with vehicle stopped	0.95 to 2.5 V

Tester Connection	Condition	Specified Condition
2 (TRQ2) - 1 (TRQG)	Steering wheel not turned (without load)	2.3 to 2.7 V
	Steering wheel turned to right with vehicle stopped	0.95 to 2.5 V
	Steering wheel turned to left with vehicle stopped	2.5 to 4.04 V
4 (TRQF) - 1 (TRQG)	Always	3.35 to 3.37 V
3 (TRQV) - 1 (TRQG)	Always	8.5 to 10.5 V

NG

REPLACE STEERING COLUMN ASSEMBLY

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE