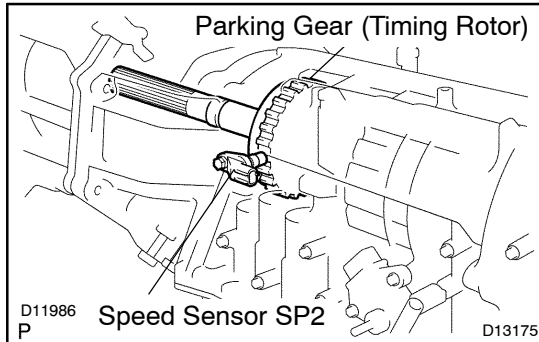


DTC	P0722	Output Speed Sensor Circuit No Signal
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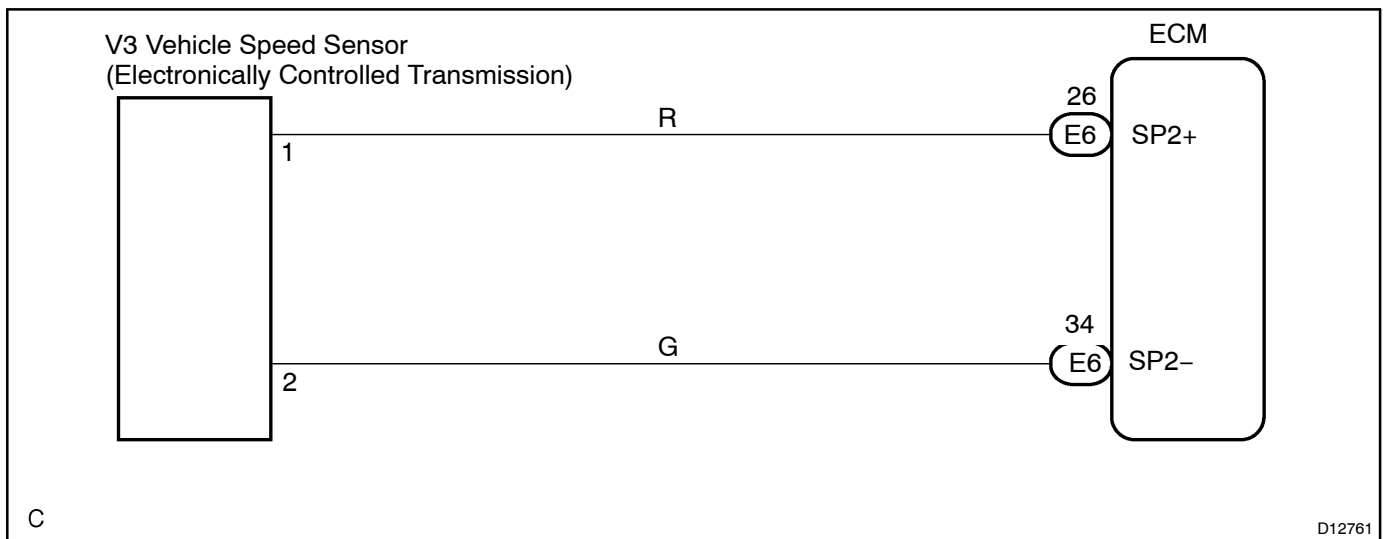
CIRCUIT DESCRIPTION



The speed sensor SP2 detects the rotation speed of the transmission output shaft and sends signals to the ECM. The ECM determines the vehicle speed based on these signals. An AC voltage is generated in the speed sensor SP2 coil as the parking gear mounted on the rear planetary gear assembly rotates, and this voltage is sent to the ECM. The parking gear on the rear planetary gear is used as the timing rotor for this sensor. The gear shift point and lock-up timing are controlled by the ECM based on the signals from this vehicle speed sensor and the throttle position sensor signal. If the speed sensor SP2 malfunctions, the ECM uses input signals from the speed sensor NT as a back-up signal.

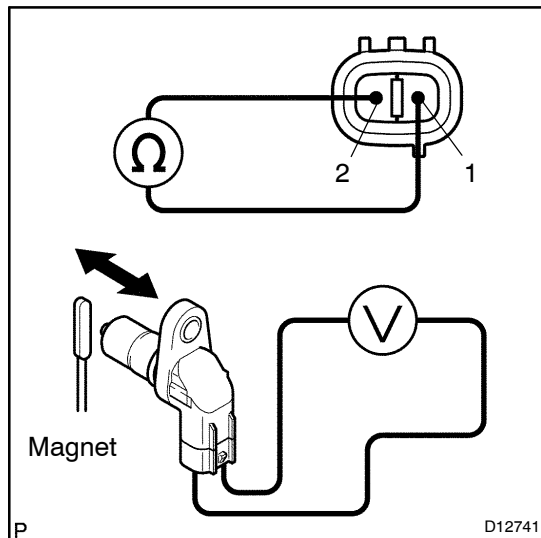
DTC No.	DTC Detection Condition	Trouble Area
P0722	All conditions below are detected 500 times or more continuously (1-trip detection logic) (a) No signal from speed sensor SP2 is input to ECM while 4 pulses of No. 1 vehicle speed sensor signal are sent (b) Vehicle speed is 9 km/h (6 mph) or more for at least 4 sec. (c) Park/neutral position switch is OFF. (d) Transfer position is except neutral (4WD).	• Open or short in speed sensor SP2 circuit • Speed sensor SP2 • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check speed sensor SP2.

**PREPARATION:**

Remove the speed sensor SP2.

CHECK:

- (a) Measure the resistance between the sensor terminals.
Standard: 560 – 680 Ω at 20 °C (68 °F)
- (b) Measure the voltage between the sensor terminals when a magnet is put close to the front end of the sensor then taken away quickly.
Standard: Sensor generates voltage intermittently.

HINT:

The generated voltage is extremely low.

OK:

Standard.

NG

Replace speed sensor SP2.

OK

2 Check harness and connector between ECM and speed sensor SP2 (See page [IN-36](#)).

NG

Repair or replace harness and connector.

OK

Check and replace the ECM (See page [IN-36](#)).