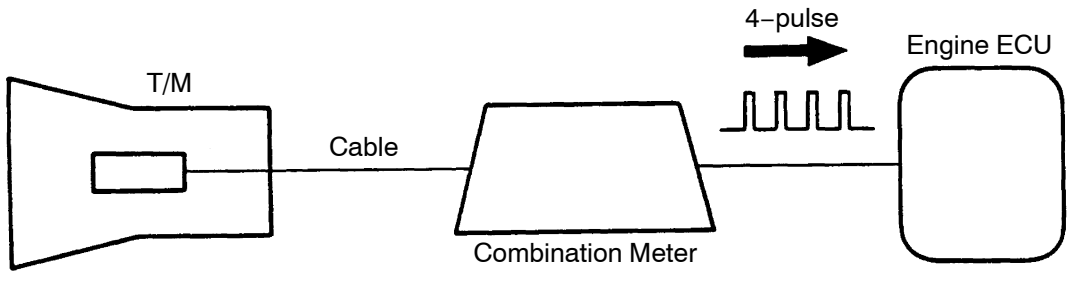
DI9SL–01

DTC	42	Vehicle Speed Sensor Signal Circuit

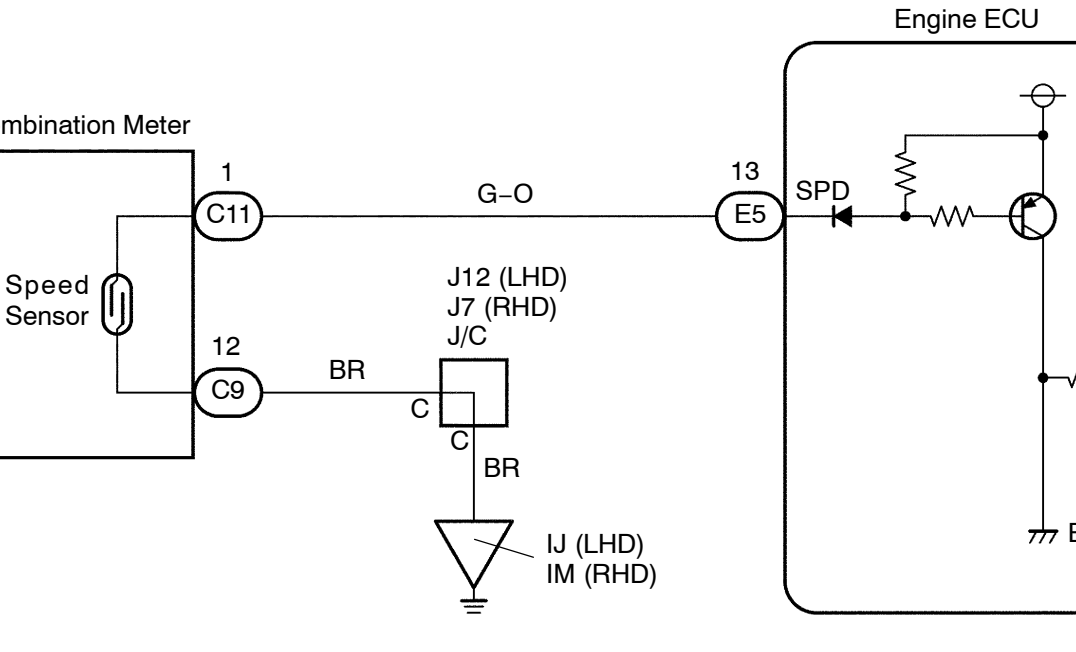
CIRCUIT DESCRIPTION

This sensor is mounted in the combination meter. It contains a magnet which is rotated by the speedometer cable.
Turning the reed switch ON and OFF 4 times for every revolution of the speedometer.
It is then transmitted to the engine ECU. The engine ECU determines the vehicle speed based on the frequency of these pulse signals.



DTC No.	DTC Detection Condition	Trouble Area
42	No vehicle speed sensor signal to ECU under condition (a), (b) and (c): (a) Vehicle is being driven (b) Engine coolant temp. is between 60°C (140°F) and 70°C (158°F) (c) Engine speed is between 1,800 and 4,000 rpm	• Combination meter • Speedometer cable • Open or short in vehicle speed sensor circuit • Vehicle speed sensor • Engine ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check operation of speedometer.**

CHECK:

Drive the vehicle and check if the operation of the speedometer in the combination meter is normal.

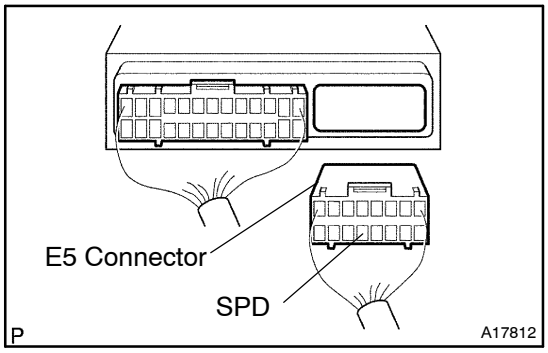
HINT:

The vehicle speed sensor is operating normally if the speedometer display is normal.

NG → **Check speedometer and cable (See Pub. No. RM585E).**

OK

2	**Check for short in harness and connector between terminal SPD of engine ECU connector and body ground.**



PREPARATION:

(a) Remove the glove compartment.

(b) Disconnect the E5 connector of the engine ECU.

CHECK:

Check the continuity between terminal SPD of the engine ECU connector and body ground.

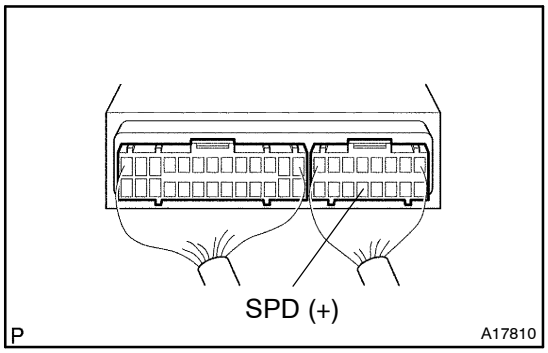
OK:

No continuity (1 MΩ. or higher)

NG → **Repair of replace harness or connector.**

OK

3	Check voltage between terminal SPD of engine ECU connector and body ground.



PREPARATION:

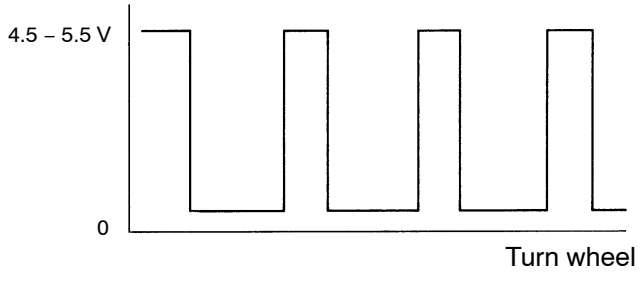
(a) Remove the glove compartment.
(b) Shift the shift lever to neutral.
(c) Jack up the vehicle.
(d) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminal SPD of the engine ECU connector and body ground when the wheel is turned slowly.

OK:

Voltage is generated intermittently.



NG → **Check and repair harness and connector between combination meter and ECM.**

OK

Check and replace engine ECU (See page IN–19).