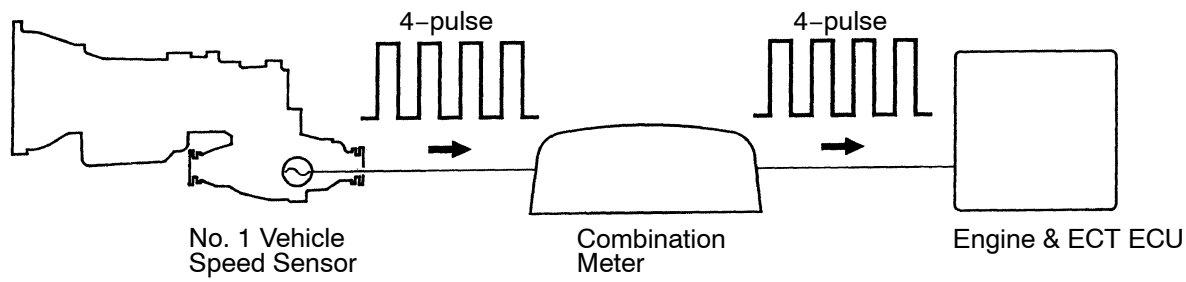
DIAG7–01

CIRCUIT INSPECTION

DTC	P0500/42	Vehicle Speed Sensor Malfunction

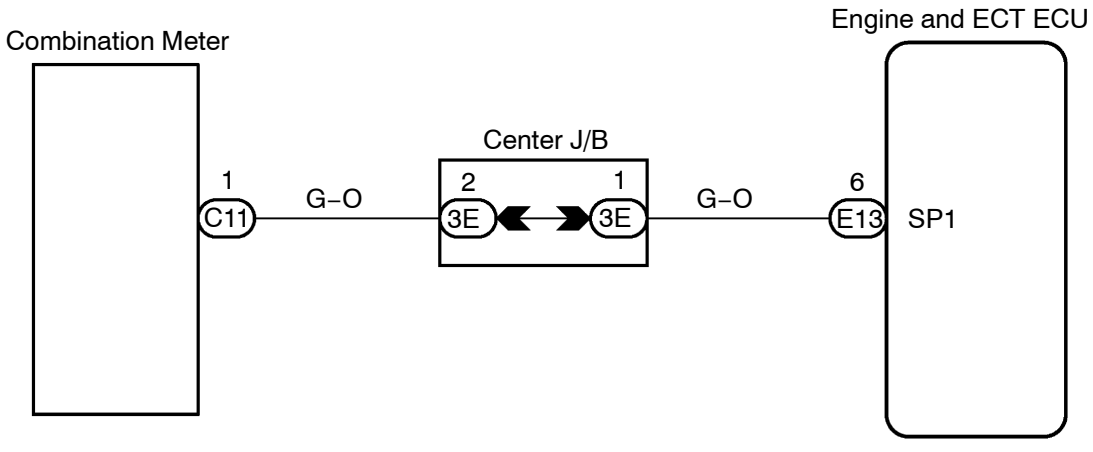
CIRCUIT DESCRIPTION

The vehicle speed sensor outputs a 4–pulse signal for every revolution of the rotor shaft, which is rotated by the transmission output shaft via the driven gear. After this signal is converted into a more precise rectangular wave from by the waveform shaping circuit inside the combination meter, it is then transmitted to the Engine & ECT ECU. The Engine & ECT ECU determines the vehicle speed based on the frequency of these pulse signals.



DTC No.	DTC Detecting Condition	Trouble Area
P0500/42	No vehicle speed sensor signal to Engine & ECT ECU under conditions (a) and (b); (2–trip detection logic) (a) Neutral start switch is OFF. (b) Vehicle is being driven.	• Open or short in No. 1 vehicle speed sensor circuit • No. 1 vehicle speed sensor • Combination meter • Engine & ECT ECU • Automatic transmission (clutch, brake or gear etc.)
	Clutch or brake slips or gear is broken	

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.

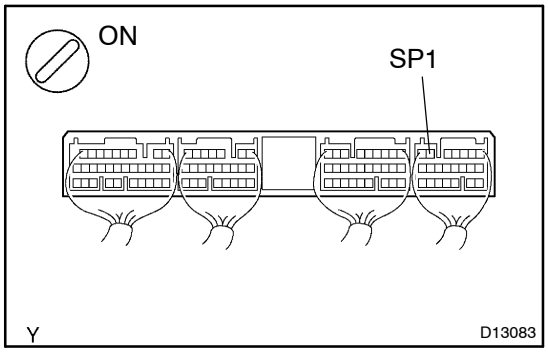
HINT:

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

NG → **Check speedometer circuit (See page BE–1).**

OK

2	**Check voltage between terminal SP1 of Engine & ECT ECU connector and body ground.**



PREPARATION:

(a) Shift the shift lever to neutral.

(b) Jack up the vehicle.

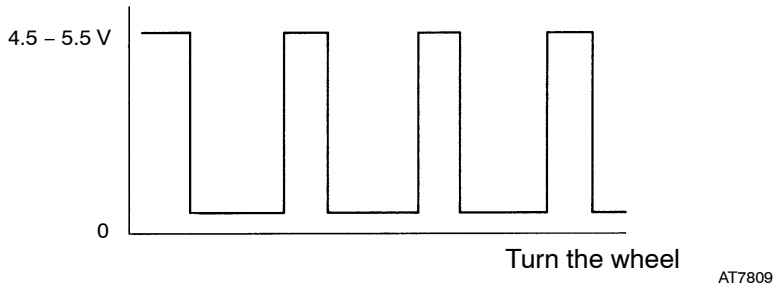
(c) Turn ignition switch ON.

CHECK:

Measure voltage between terminal SP1 of the Engine & ECT 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 Engine & ECT ECU (See page IN–26).**

OK

3	**Check Engine & ECT ECU (See page IN–26).**

NG → **Replace Engine & ECT ECU.**

OK

Check and replace transmission (clutch, brake or gear etc.).