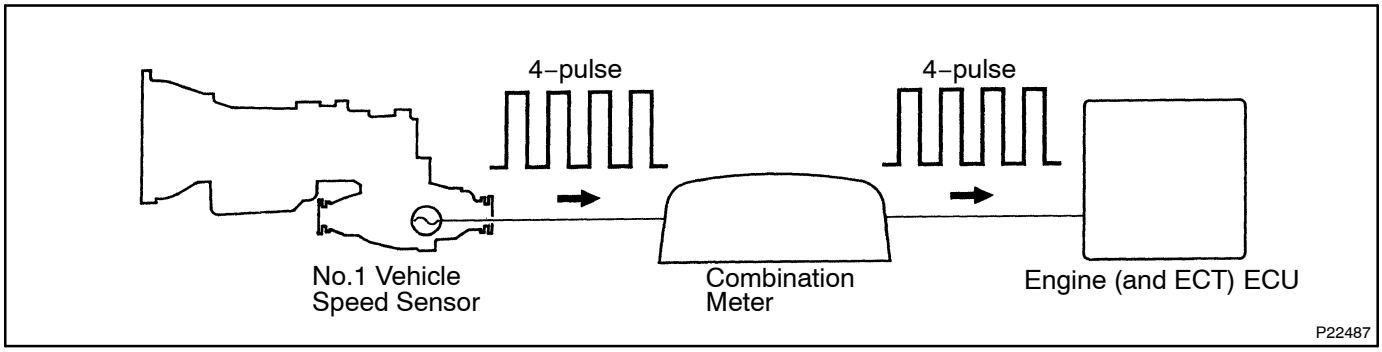
DI6AZ–03

DTC	P0500/42	Vehicle Speed Sensor Malfunction

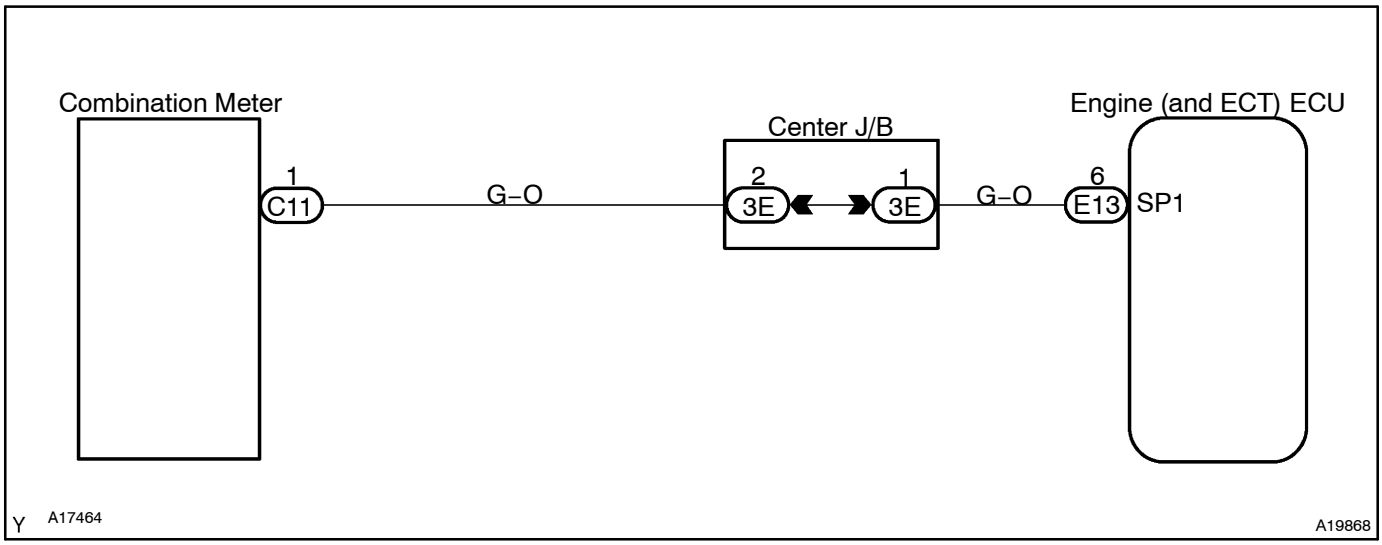
CIRCUIT DESCRIPTION

The No.1 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 wavefrom in the waveform shaping circuit inside the combination meter, it is then transmitted to the engine (and ECT) ECU. The engine (and 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 (and ECT) ECU under conditions (a) and (b): (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 (and ECT) ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Read the freeze frame data using the hand–held tester, which is recorded when a malfunction is detected on the engine. When troubleshooting, it is useful to determine whether the vehicle was running or stopped, the engine warmed up or not, the air–fuel ratio lean or rich, etc. at the time of a malfunction.

1	Check operation of speedometer.

CHECK:

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

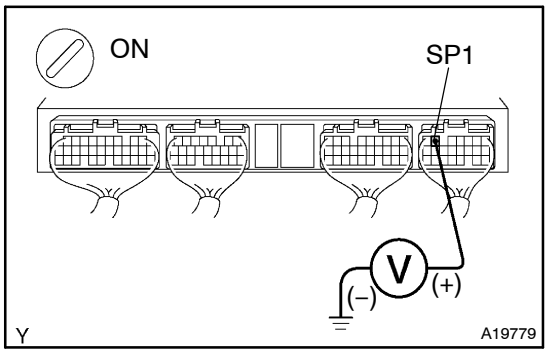
HINT:

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

NG → **Check speedometer circuit.**

OK ↓

2	Check voltage between terminal SP1 of engine (and ECT) ECU connector and body ground.



PREPARATION:

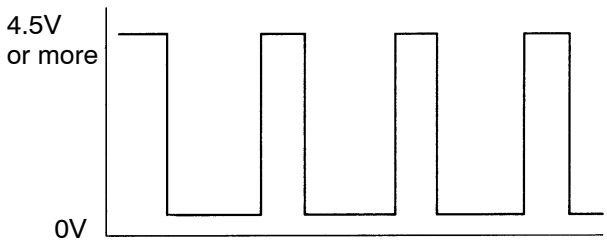
(a) Remove the glove compartment door.
(b) Shift the shift lever to N range.
(c) Lift up the vehicle.
(d) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminal SP1 of the engine (and ECT) ECU connector and the 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 (and ECT) ECU.**

OK ↓

Check and replace engine (and ECT) ECU (See page IN–20).