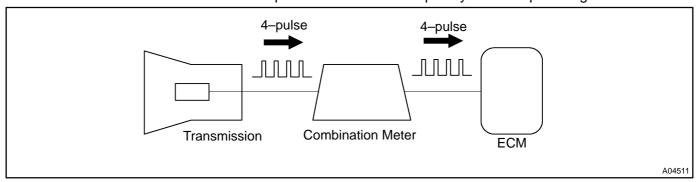
		DISCQ-11
DTC	P0500	Vehicle Speed Sensor "A"
DTC	P0503	Vehicle Speed Sensor "A"Intermittent/Erratic/High

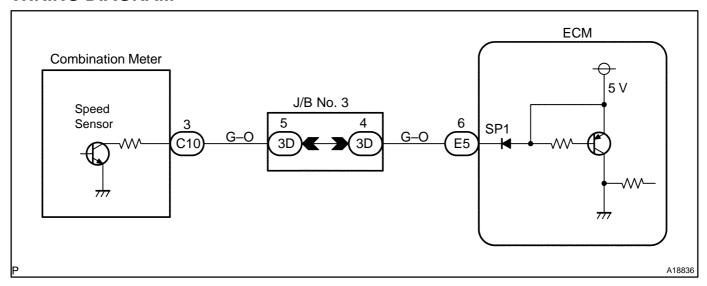
CIRCUIT DESCRIPTION

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 waveform by the waveform shaping circuit inside the combination meter, it is then transmitted to the ECM. The ECM determines the vehicle speed based on the frequency of these pulse signals.



DTC No.	DTC Detection Condition	Trouble Area
P0500 P0503	No speed sensor signal to ECM under following conditions: (2 trip detection logic) For A/T (a) Park/neutral position switch is OFF (b) Vehicle is being driven For M/T (c) Engine speed is between 1,800 rpm and 4,800 rpm	Combination meter Open or short in vehicle speed sensor circuit Vehicle speed sensor ECM

WIRING DIAGRAM



2003 TOYOTA TACOMA (RM1002U)

Author: Date: 640

INSPECTION PROCEDURE

HINT:

Read freeze frame data using the hand-held tester or the OBD II scan tool, as freeze frame records the engine conditions when a malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air-fuel ratio was lean or rich, etc. at the time of the 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 is operating normally if the speedometer display is normal.

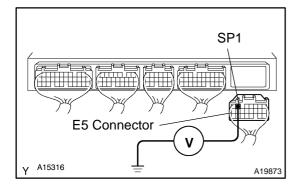
NG

Check speedometer circuit (See page BE-37).

OK

2

Check voltage between terminal SP1 of ECM connector and body ground.



PREPARATION:

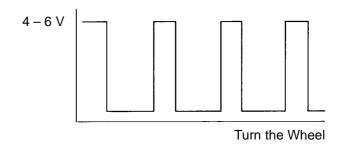
- (a) Remove the glove compartment (See page SF-63).
- (b) Disconnect the E5 connector from the ECM.
- (c) Shift the shift lever to the neutral.
- (d) Jack up a rear wheel on one side.
- (e) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminal SP1 of the ECM connector and body ground when the wheel is turned slowly.

OK:

Voltage is generated intermittently.



AT7809

NG

Check and repair harness and connector between combination meter and ECM.

ОК

2003 TOYOTA TACOMA (RM1002U)

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Check and replace ECM (See page IN-28).

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