

<b>DTC</b>	<b>P0500</b>	<b>VEHICLE SPEED SENSOR "A"</b>
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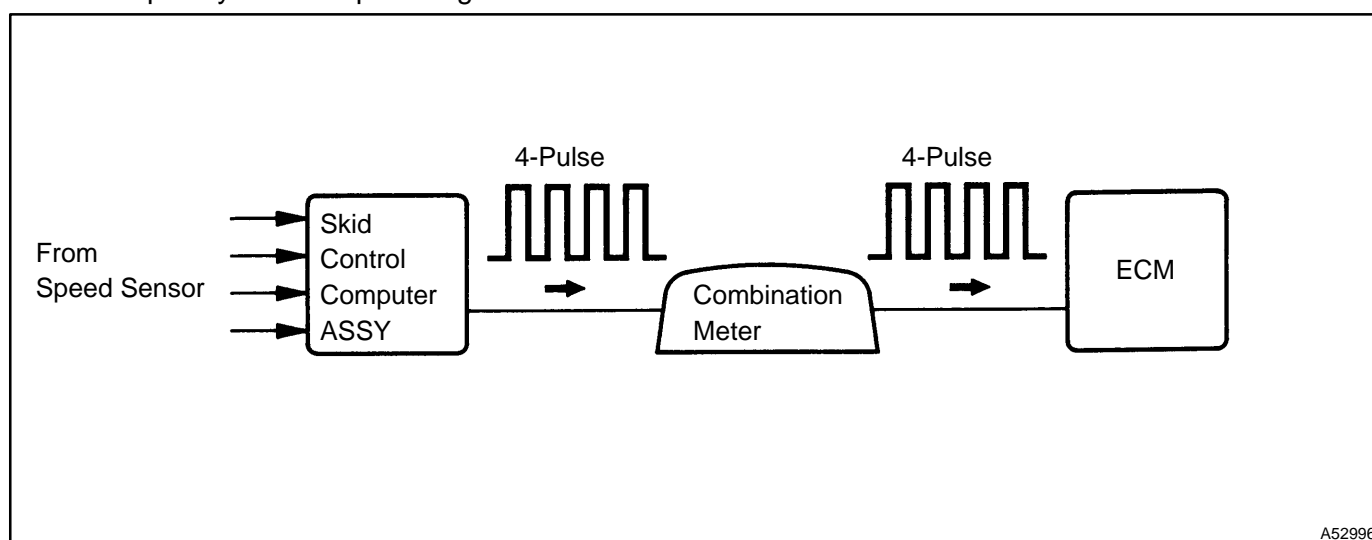
<b>DTC</b>	<b>P0503</b>	<b>VEHICLE SPEED SENSOR "A" INTERMITTENT/ERRATIC/HIGH</b>
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## CIRCUIT DESCRIPTION

The speed sensor for skid control computer assy detects the wheel speed and sends the appropriate signals to the skid control computer assy.

The skid control computer assy converts these signals into a 4-pulse signal and outputs it to the combination meter.

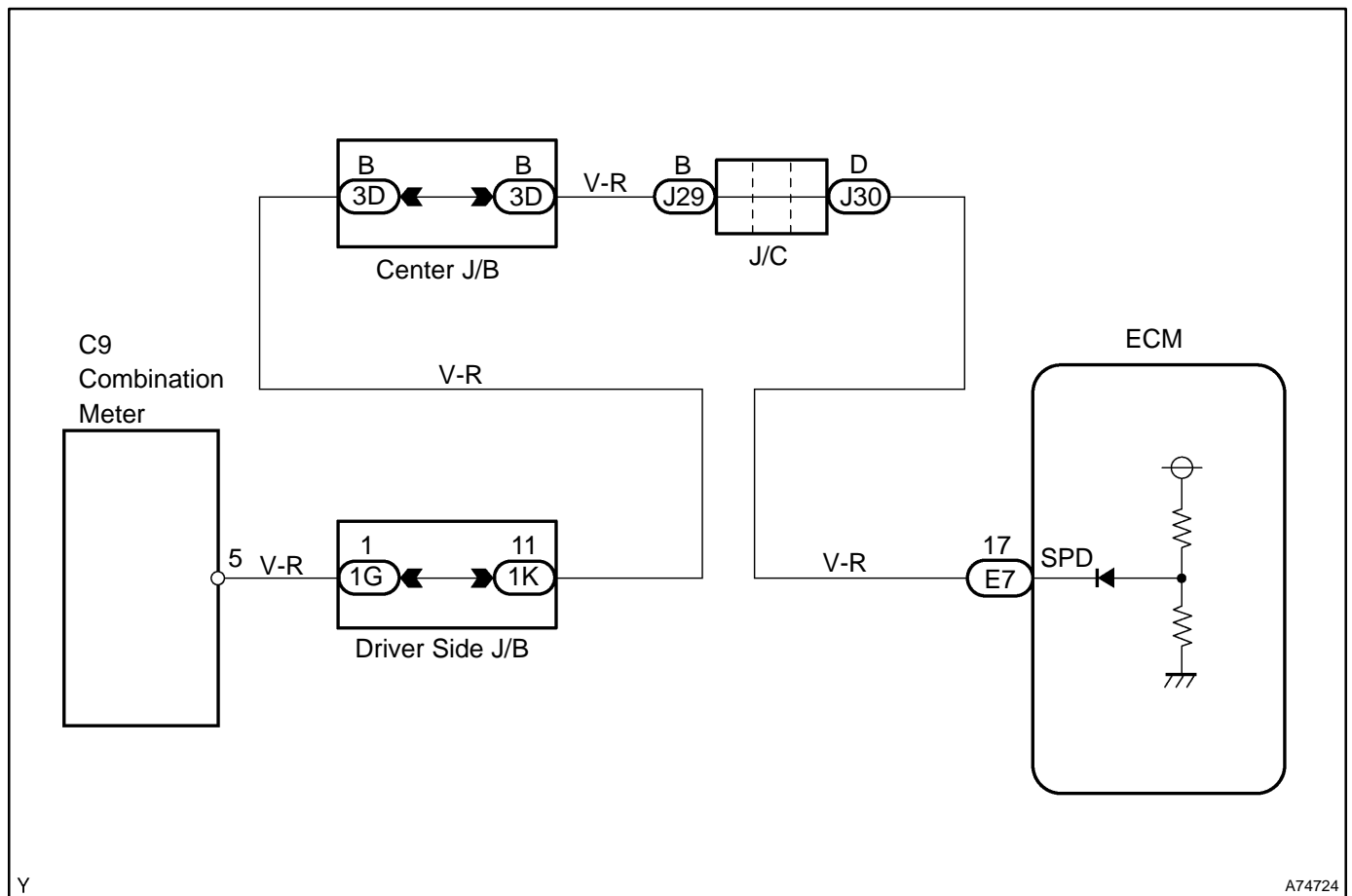
After this signal is converted into a more precise rectangular waveform by the waveform shaping circuit inside the combination meter, it is then transmitted to the ECM. The ECM determines the vehicle speed based on the frequency of these pulse signals.



A52996

DTC No.	DTC Detection Condition	Trouble Area
P0500 P0503	ECM detects following condition simultaneously for 500 times (2 trip detection logic) <ul style="list-style-type: none"> <li>• No SP1 (speed sensor) signal while ECM detects SP2 (No. 2 speed sensor) signal</li> <li>• Vehicle speed is 9 km/h (6 mph) or more for 4 sec.</li> <li>• Park/neutral position switch is OFF (Except P and N position)</li> <li>• Transfer is except N position (4WD)</li> </ul>	<ul style="list-style-type: none"> <li>• Open or short in speed sensor circuit</li> <li>• Speed sensor</li> <li>• Combination meter</li> <li>• ECM</li> <li>• Skid control computer assy</li> </ul>

## WIRING DIAGRAM



## INSPECTION PROCEDURE

## HINT:

Read freeze frame data using the hand-held tester or the OBD II scan tool, as freeze frame data 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.

<b>1</b>	<b>CHECK OPERATION OF SPEEDOMETER</b>
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(a) Drive the vehicle and check if the operation of the speedometer in the combination meter is normal.

## HINT:

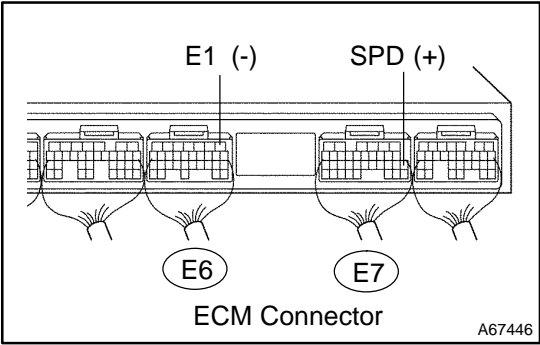
The vehicle speed sensor is operating normally if the speedometer display is normal.

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**CHECK SPEEDOMETER CIRCUIT**  
(See page 05-1067 )

OK

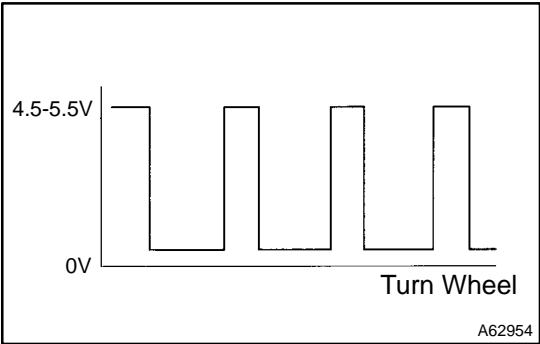
2 INSPECT ECM( SPD VOLTAGE)



- (a) Shift the lever to the neutral position.
- (b) Jack up the vehicle.
- (c) Turn the ignition switch ON.
- (d) Measure the voltage between the terminals of the E6 and E7 ECM connectors with turning the wheel slowly.

**Standard:**

Symbols (Terminal No.)	Specified condition
SPD (E7-17) ↔ E1 (E6-1)	Generated intermittently



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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE ECM (See page 01-35 )