

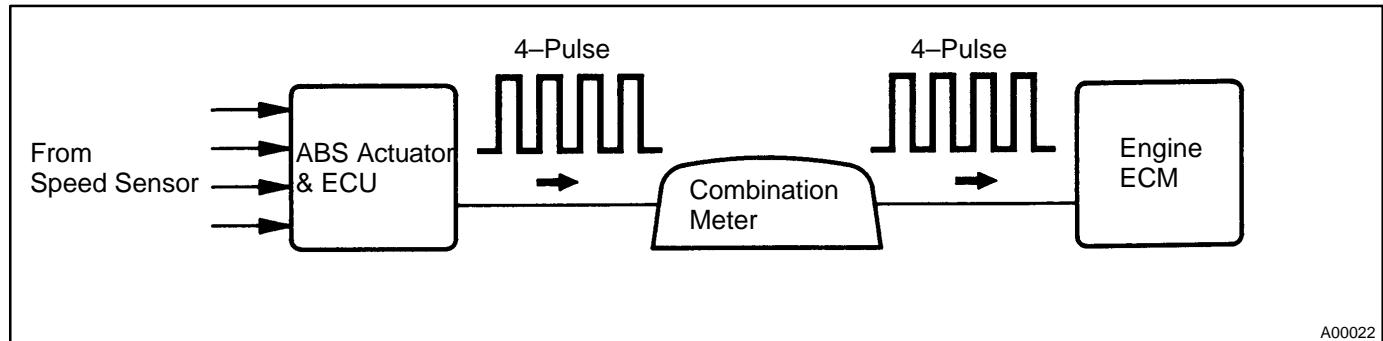
DTC

P0500

Vehicle Speed Sensor Malfunction

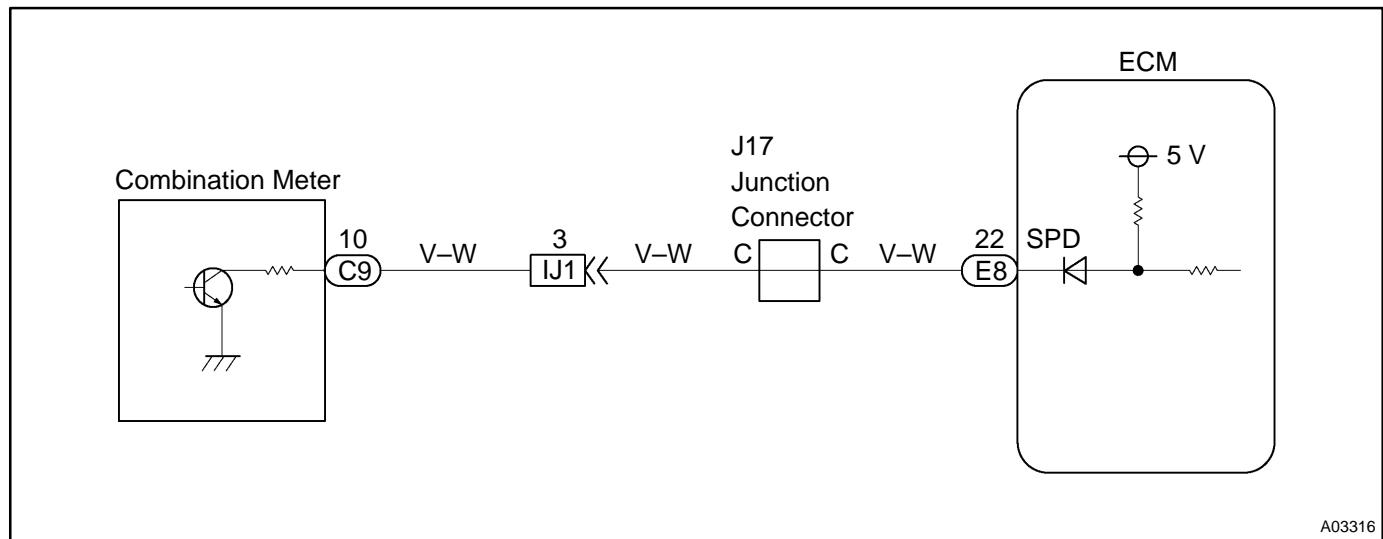
## CIRCUIT DESCRIPTION

The speed sensor detects the wheel speed and sends the appropriate signals to the skid control ECU. The skid control ECU converts these wheel speed signals into a 4-pulse signal and outputs it to the ECM via the combination meter. The ECM determines the vehicle speed based on the frequency of these pulse signals.



DTC No.	DTC Detecting Condition	Trouble Area
P0500	No vehicle speed sensor signal to Engine & ECT ECU under following conditions Vehicle is being driven	<ul style="list-style-type: none"> <li>Combination meter</li> <li>Open or short in speed sensor circuit</li> <li>ECM</li> </ul>

## WIRING DIAGRAM



## INSPECTION PROCEDURE

### HINT:

Read freeze frame data using LEXUS hand-held tester or OBD II scan tool, as freeze frame data records the engine conditions when the 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 | <b>Check operation of speedometer.</b> |
|---|--|

### CHECK:

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

### HINT:

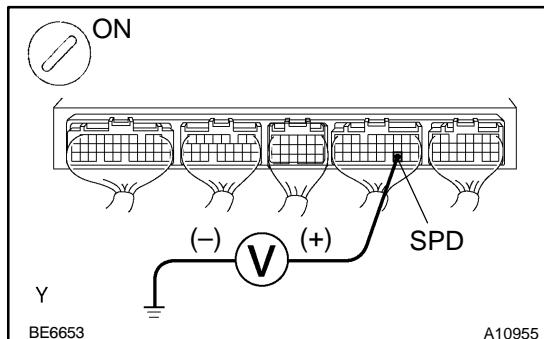
The vehicle speed sensor is operating normally if the speedometer display is normal.



**Check speedometer circuit. See combination meter troubleshooting (See page [BE-99](#)).**

**OK**

- |   |   |
|---|---|
| 2 | <b>Check voltage between terminal SPD of ECM connector and body ground.</b> |
|---|---|



### PREPARATION:

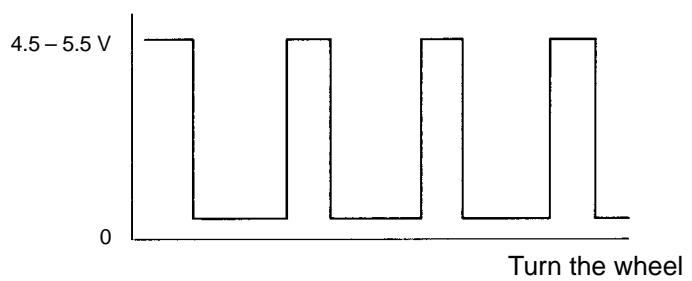
- Remove glove compartment (See page [BO-82](#)).
- Shift the shift lever to neutral.
- Jack up one of the front wheels.
- Turn ignition switch ON.

### CHECK:

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

### OK:

**Voltage is generated intermittently.**



**Check and repair harness and connector between combination meter and ECM (See page [IN-31](#)).**

OK

3 Check ECM (See page **IN-31**).

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Replace ECM.

OK

Check and repair transaxle (clutch, brake or gear etc.).