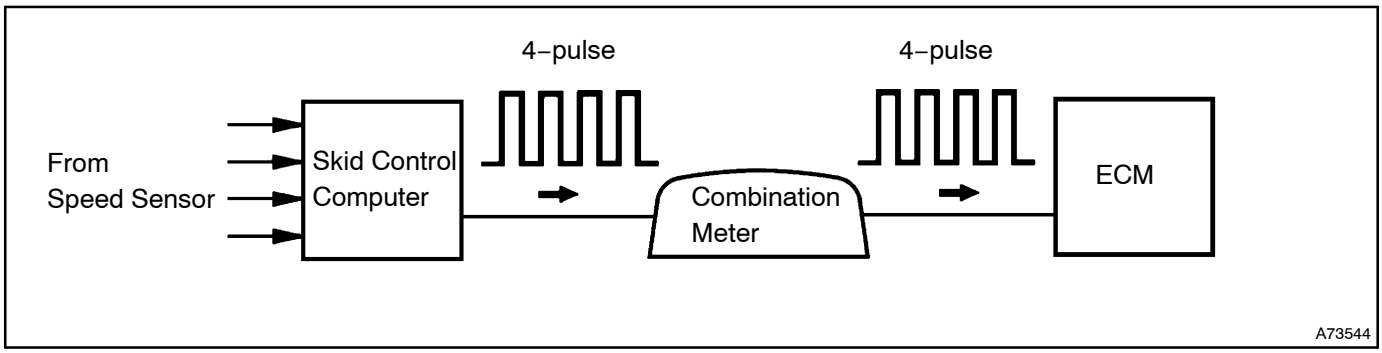
DTC 42 VEHICLE SPEED SENSOR SIGNAL CIRCUIT

CIRCUIT DESCRIPTION

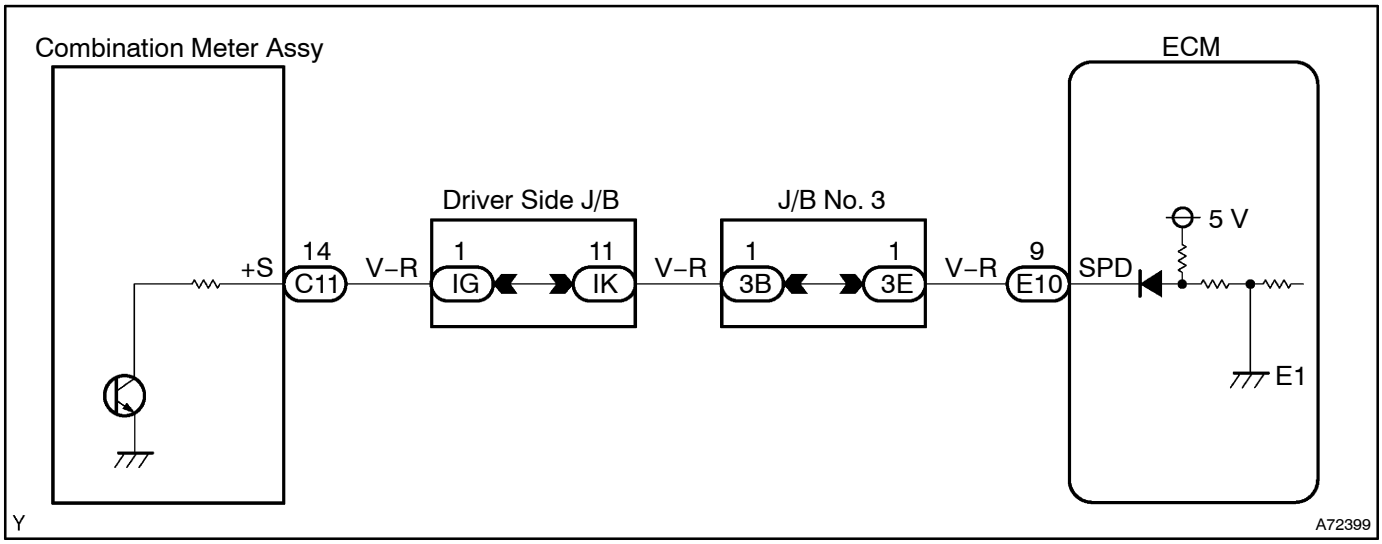
The speed sensor for skid control computer detects the wheel speed and sends the appropriate signals to the skid control computer.
The ECM converts these signals into a 4–pulse signal and outputs it to the combination meter.
After this signal is converted into a more precise rectangular waveform by the 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.



DTC No.	DTC Detecting Condition	Trouble Area
42	During vehicle is being driven, no vehicle speed sensor signal to ECM (2 trip detection logic)	• Combination meter assy • Open or short in speed sensor circuit • Speed sensor • ECM • Skid control computer assy

HINT:
In test mode, DTC 42 is output when vehicle speed is 5 km/h (3 mph) or below.

WIRING DIAGRAM



INSPECTION PROCEDURE

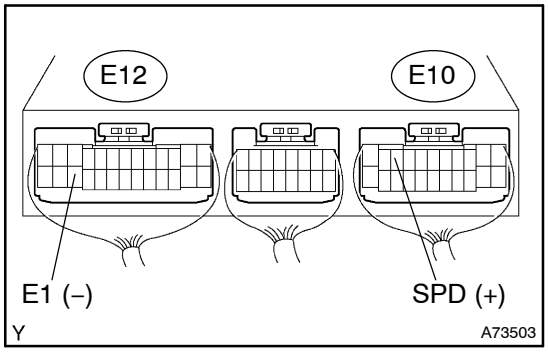
1 CHECK OPERATION OF SPEEDOMETER

(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.

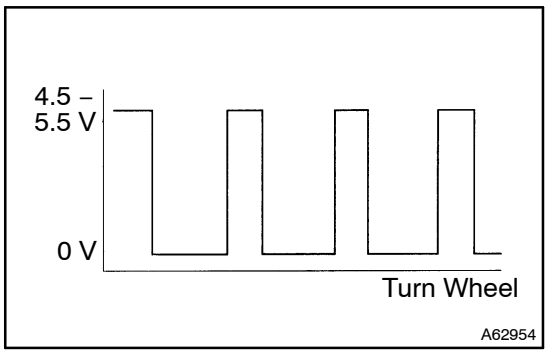
NG → **CHECK SPEEDOMETER CIRCUIT (See page 05–1560)**

OK

2 CHECK ECM (CHECK VOLTAGE)



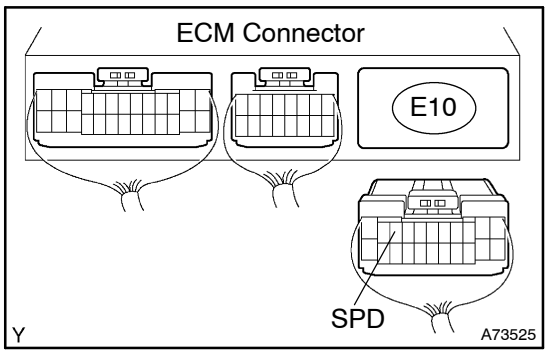
(a) Shift the lever to the neutral position.
(b) Jack up the vehicle.
(c) Turn the ignition switch ON.
(d) Measure the voltage between terminal SPD of the ECM connector and body ground when the wheel is turned slowly.
Result: Voltage is generated intermittently



OK → **CHECK AND REPLACE ECM (See page 01–36)**

NG

3 CHECK HARNESS AND CONNECTOR (ECM ⇔ COMBINATION METER ASSY)



(a) Disconnect the E10 ECM connector.
(b) Disconnect the C11 connector.
(c) Check the continuity between the wire harness side connectors.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
SPD (E10–9) ⇔ +S (Terminal arrangement on 05–1554)	Continuity

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
SPD (E10–9) or +S (Terminal arrangement on 05–1554) ⇔ Other terminals and body ground	No continuity

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE ECM (See page 01–36)