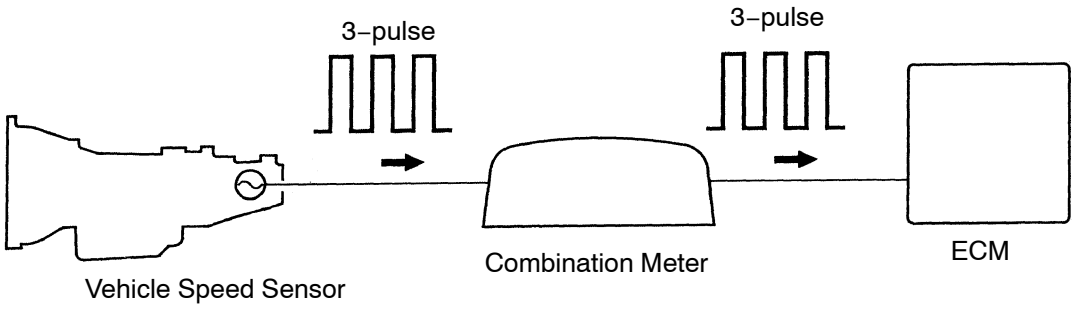
DTC	42	VEHICLE SPEED SENSOR SIGNAL CIRCUIT MALFUNCTION

CIRCUIT DESCRIPTION

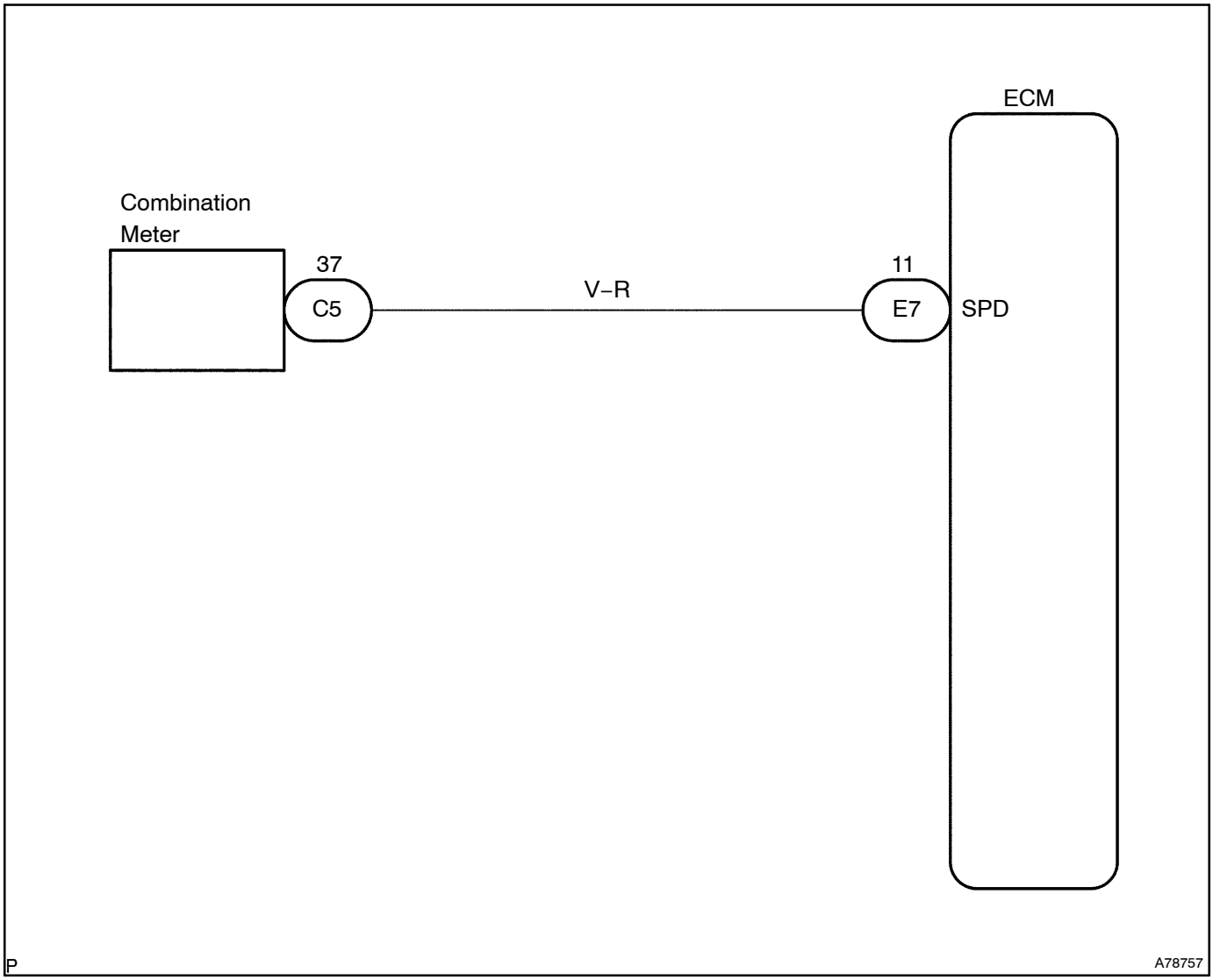
The vehicle speed sensor outputs a 4–pulse signal for every revolution of the rotor shaft, which is rotated by the transmission output shaft via the driven gear. After this signal is converted into a more precise rectangular waveform by the waveform shaping circuit inside the combination meter, it is then transmitted to the ECM. The ECM determines the vehicle speed based on the frequency of these pulse signals.



A65454

DTC No.	DTC Detection Condition	Trouble Area
42	All conditions below are detected continuously with vehicle speed of 30 km/h or more: (a) Vehicle speed signal: 0 km/h (0 mph) (b) Engine speed: 2,400 – 4,000 rpm (c) Engine coolant temp.: 60°C (176°F) or more (d) Accelerator pedal opening angle : 29 % or more	• Open or short in vehicle speed sensor circuit • Vehicle speed sensor • Combination meter • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK CHECK OPERATION OF SPEEDOMETER

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

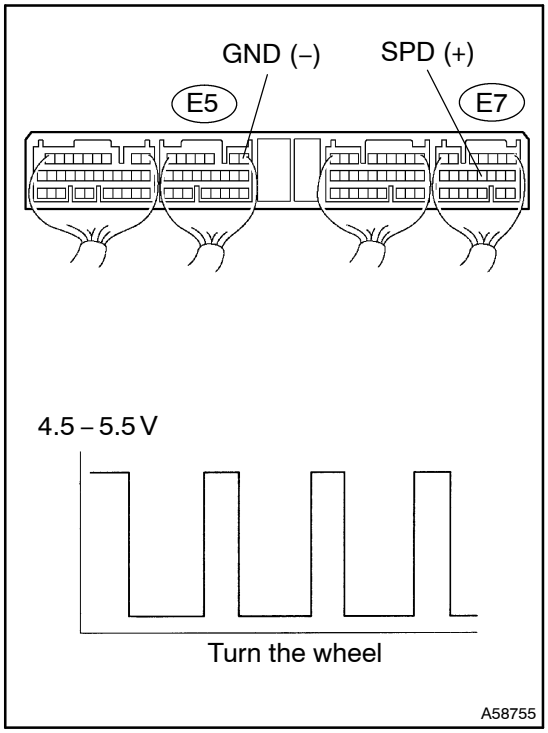
HINT:

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

NG → **GO TO COMBINATION METER SYSTEM (See page 71–2)**

OK

2	CHECK ECM (VOLTAGE)



(a) Shift the shift lever into the neutral position.

(b) Jack up the rear wheels.

(c) Turn the ignition switch ON.

(d) Measure the voltage between terminals SPD of the E7 ECM connector and GND of the E5 ECM connector when the wheels are turned slowly.

Result: Voltage is generated intermittently.

NG → **CHECK AND REPLACE HARNESS AND CONNECTOR**

OK

CHECK AND REPLACE ECM