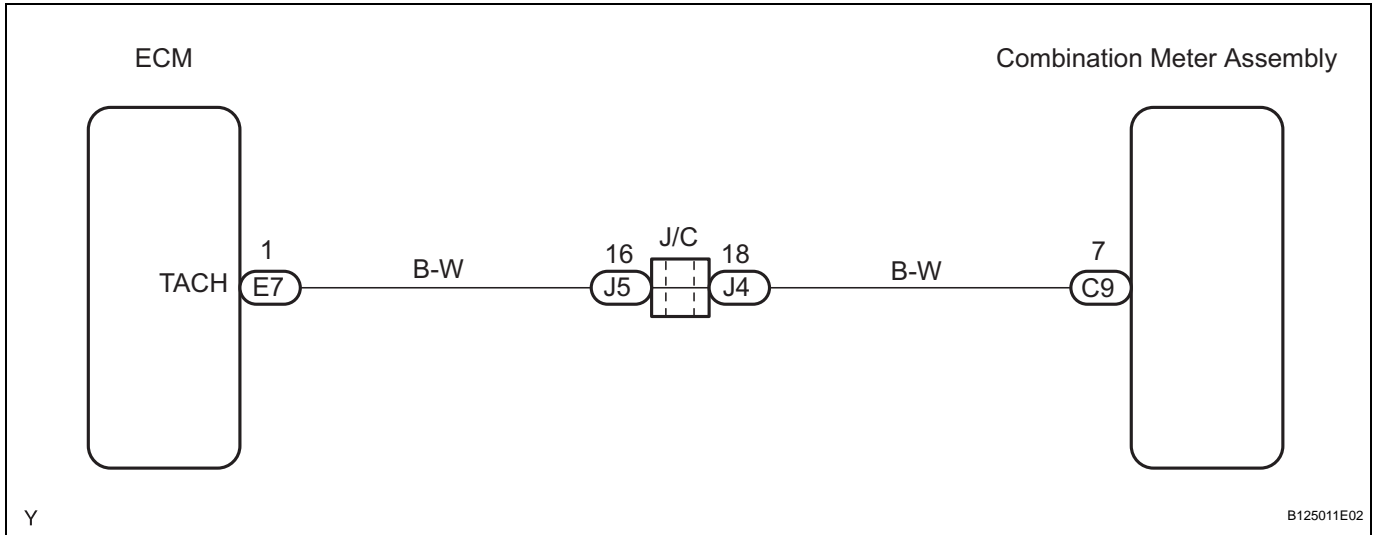


## Tachometer Malfunction

### WIRING DIAGRAM



### 1 READ VALUE OF INTELLIGENT TESTER (ENGINE SPEED)

- (a) Connect an intelligent tester to the DLC3.
- (b) Turn the ignition switch to ON.
- (c) Turn the tester ON.
- (d) On the tester, select the following menu items:  
DIAGNOSIS / ENHANCED OBD II / DATA LIST / ALL / ENGINE SPD.
- (e) Read the value displayed on the tester.

**OK:**

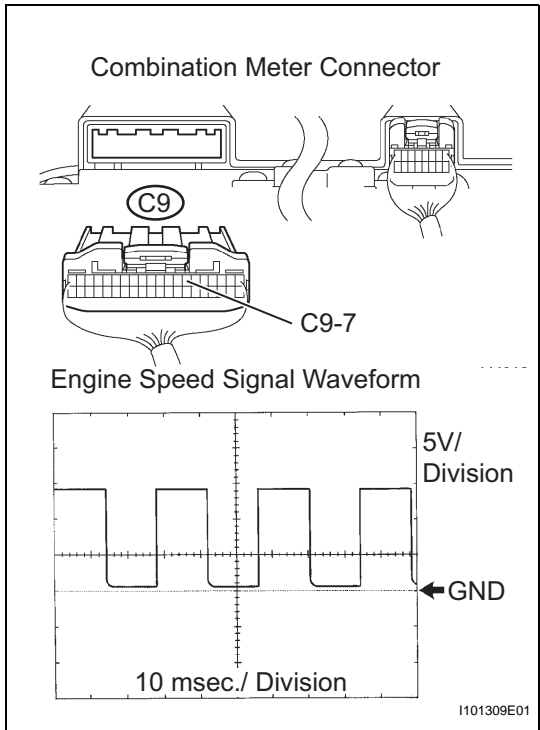
Engine speed displayed on the tester is almost the same as the actual engine speed.

**NG** →

**GO TO ENGINE CONTROL SYSTEM**

**OK**

**2 INSPECT COMBINATION METER ASSEMBLY**



- (a) Inspect the combination meter using an oscilloscope.
- (b) While the engine is running, check the waveform between the terminals of the C9 combination meter connector and body ground.

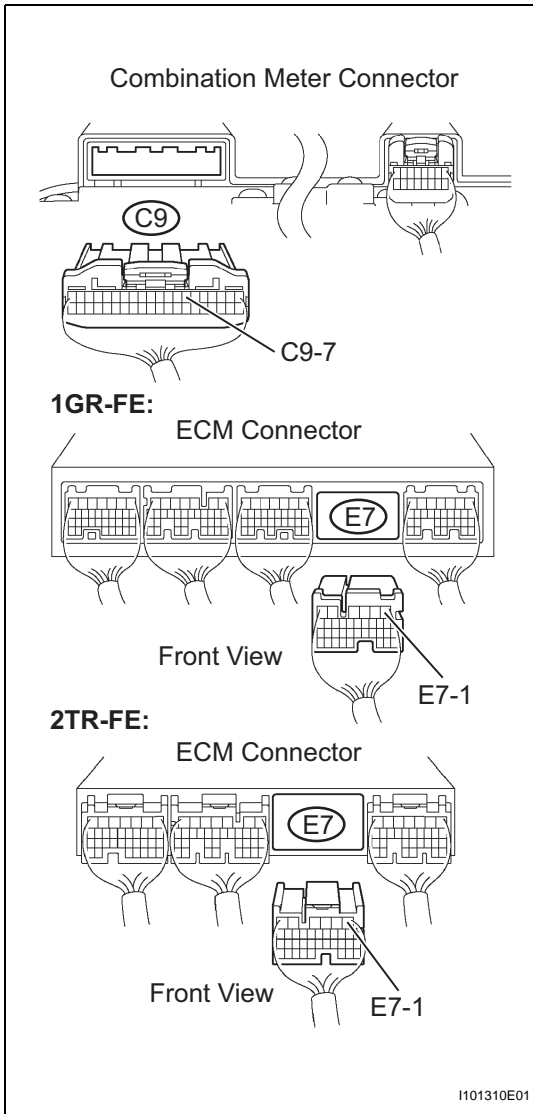
**Standard**

Tester Connection	Specified Condition
C9-7 - Body ground	Correct waveform shown

**OK** → **REPLACE COMBINATION METER ASSEMBLY**

**NG**

**3 CHECK HARNESS AND CONNECTOR (COMBINATION METER ASSEMBLY - ECM)**



- (a) Disconnect the C9 combination meter connector.
- (b) Disconnect the E7 ECM connector.
- (c) Measure the resistance.

**Standard Resistance**

Tester Connection	Specified Condition
C9-7 - E7-1	Below 1 Ω
C9-7 or E7-1 - Body ground	10 kΩ or higher

- (d) Reconnect the ECM connector.
- (e) Reconnect the combination meter connector.

**NG** **REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

**REPLACE ECM**