

Tachometer Malfunction

WIRING DIAGRAM



ME

HINT:

When using the intelligent tester, start from *1. When not using the intelligent tester, start from *2.

1 READ VALUE OF INTELLIGENT TESTER (ENGINE SPEED SIGNAL)*1

(a) Check the DATA LIST for proper functioning of the engine speed signal.

ECM

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
ENGINE SPD	Engine speed / Min.: 0 rpm, Max.: 16,383 rpm	Idling: 650 to 750 rpm	-

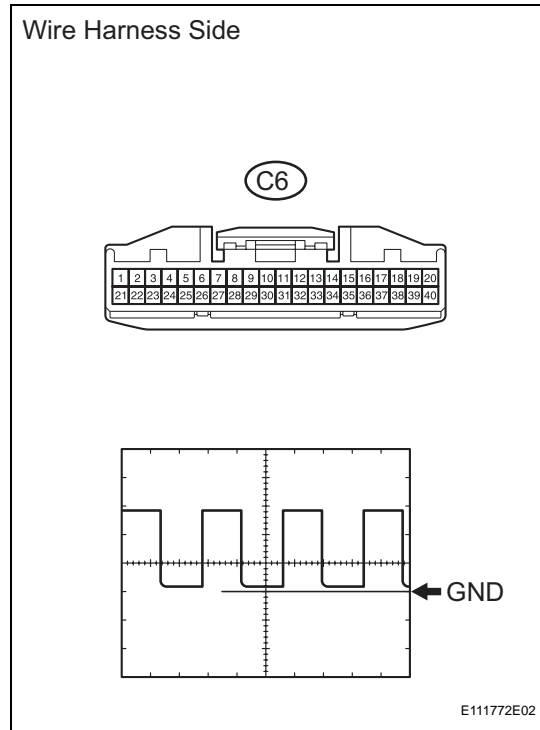
OK:

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

NG → **GO TO ENGINE CONTROL SYSTEM**

OK

2 CHECK COMBINATION METER ASSEMBLY*2



- (a) Disconnect the C6 meter connector.
- (b) Using an oscilloscope, check the signal waveform of the meter.

Tester Connection	Tool Setting	Vehicle Condition
C6-26 - Body ground	5 V/DIV., 10 msec./DIV.	Engine idle speed

OK:

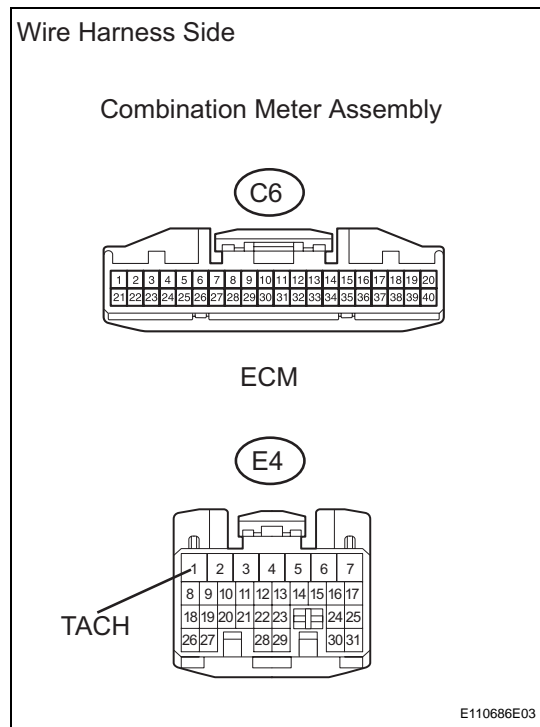
As shown in the illustration.

OK → **REPLACE COMBINATION METER ASSEMBLY**

ME

NG

3 CHECK WIRE HARNESS (COMBINATION METER - ECM)



- (a) Disconnect the C6 meter connector.
- (b) Disconnect the E4 ECM connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
C6-30 - E4-1 (TACH)	Below 1 Ω
C6-30 - Body ground	10 kΩ or higher

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE ECM

ME