05IC0–01

ON–VEHICLE INSPECTION

1. INSPECT SPEEDOMETER

(a) Check the operation.

(1) Using a speedometer tester, inspect the speedometer for acceptable indication error and check the operation of the odometer.

Reference: km/h

Standard indication	Acceptable range (*1)	Acceptable range (*2)
20 km/h	18.0 to 22.0 km/h	21.0 to 25.0 km/h
40 km/h	38.0 to 42.0 km/h	42.0 to 46.0 km/h
60 km/h	58.0 to 62.0 km/h	63.0 to 67.0 km/h
80 km/h	78.0 to 82.0 km/h	84.0 to 88.0 km/h
100 km/h	97.0 to 103.0 km/h	104.0 to 109.0 km/h
120 km/h	117.0 to 123.0 km/h	125.0 to 130.0 km/h
140 km/h	138.0 to 143.0 km/h	146.0 to 151.0 km/h
160 km/h	157.0 to 163.0 km/h	167.0 to 173.0 km/h

*1: General countries, Australia

*2: Except Europe RHD models

Reference: mph (Europe RHD models)

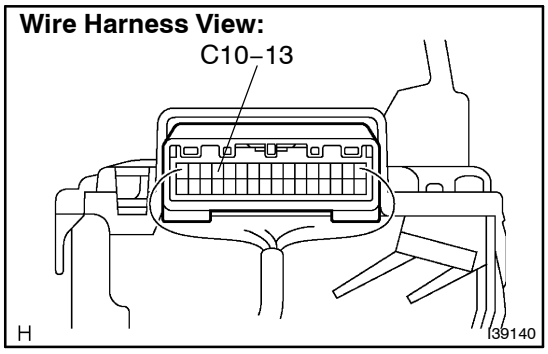
Standard indication	Acceptable range
20 mph	21.0 to 24.0 mph
40 mph	42.0 to 45.0 mph
60 mph	63.0 to 66.0 mph
80 mph	83.0 to 87.0 mph
100 mph	104.0 to 108.0 mph
120 mph	125.0 to 129.0 mph

NOTICE:

Tire wear and over or under tire pressure will affect indication error.

(1) Check the deflection width of the speedometer indicator.

Reference: Below 0.5 km/h (0.3 mph)



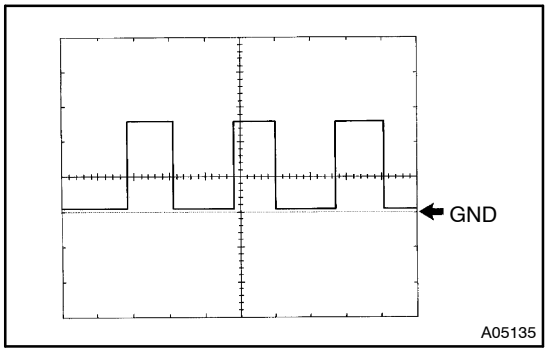
2. INSPECT OUTPUT SIGNAL OF VEHICLE SPEED

(a) Check the output signal waveform.

(1) Remove the combination meter assy.

(2) Connect the oscilloscope to the terminals C10–3 and body ground.

(3) Start the engine.



(4) Check the signal waveform according to the condition (s) in the table below.

Item	Condition
Tool setting	5 V/DIV, 20 ms/DIV
Vehicle condition	Driving at approx. 20 Km/h (12 mph)

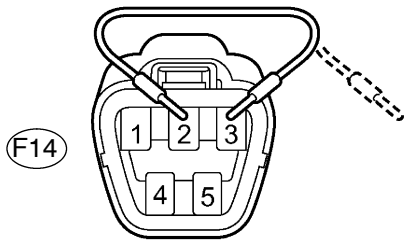
OK:

As shown in the illustration

HINT:

As vehicle speed increases, the cycle of the signal waveform narrows.

Fuel Sender Gauge
Connector Front View:



3. INSPECT FUEL RECEIVER GAUGE

(a) Disconnect the connector from the sender gauge.

(b) Turn the power switch ON (IG) position, then check the position of the receiver gauge needle.

Standard:

Needle position is on (EMPTY).

(c) Connect terminals 2 and 3 on the wire harness side connector of the fuel sender gauge.

(d) Turn the power switch to the ON position, then check the position of the receiver gauge needle.

Standard:

Needle position is on (FULL).

4. INSPECT FUEL LEVEL WARNING

(a) Disconnect the connector from the sender gauge.

(b) Turn the power switch ON (IG) position, then check that the fuel level indicates EMPTY and the fuel level warning light comes on.

Standard:

EMPTY (The No.1 segment blinks).

5. INSPECT LOW OIL PRESSURE WARNING LIGHT

(a) Disconnect the connector from the low oil pressure switch.

(b) Turn the power switch ON (IG) position.

(c) Ground the terminal of the wire harness side connector, then check the master warning light.

Standard:

Master warning light comes on.

6. INSPECT BRAKE WARNING LIGHT

(a) Inspect the parking brake warning light.

(1) Disconnect the connector from the parking brake switch.

(2) Turn the power switch ON (IG) position.

(3) Ground the terminal of the wire harness side connector, then check the parking brake warning light.

Standard:

Brake warning light comes on.

(b) Inspect the brake fluid level warning light.

(1) Disconnect the connector from the brake fluid level warning switch.

(2) Turn the power switch ON (ACC or IG) position.

(3) Connect a terminal to the other terminal of the wire harness side connector, then check the brake fluid level warning switch.

Standard:

Brake warning light comes on.

7. INSPECT BRAKE FLUID LEVEL WARNING SWITCH

(a) Remove the reservoir tank cap and strainer.
(b) Disconnect the connector.
(c) Measure the resistance between the terminals.
Standard:
Float up (switch off): 10 kΩ or higher
(d) Use a syphon, etc. to take fluid out of the reservoir tank.
(e) Measure the resistance between the terminals.
Standard:
Float down (switch on): Below 1 Ω
(f) Pour the fluid back in the reservoir tank.
(g) Reconnect the connector.