

## ON-VEHICLE INSPECTION

### 1. INSPECT SPEEDOMETER

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

**Reference:**

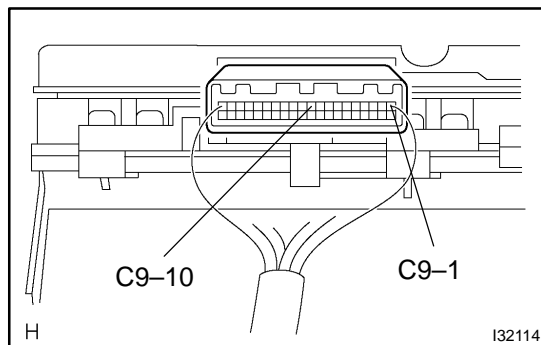
USA (mph)		CANADA (km/h)	
Standard indication	Allowable range	Standard indication	Allowable range
20	19 – 22	20	18 – 23
40	39 – 42.5	40	40 – 44
60	59 – 63	60	60 – 64.5
80	79 – 83.5	80	80 – 85
100	99 – 104	100	100 – 105
–	–	120	120 – 125.5
–	–	140	140 – 146
–	–	160	160 – 167

**NOTICE:**

Tire wear and tire over or under inflation will increase the indication error.

- (2) Check the deflection width of the speed meter indicator.

**Reference: Below 0.5 km/h / 0.3 mph**



### 2. INSPECT OUTPUT SIGNAL OF VEHICLE SPEED

- (a) Check for standard signal.
- (1) While driving the vehicle at the speed of 10 km/h, check the voltage between the terminals C9-10 and C9-1 of the combination meter assy.

**Standard: Fluctuation between 10 to 14 V or less is repeated 7 times within 1 sec.**

**NOTICE:**

**Check it with the ignition switch ON and the connector connected.**

### 3. INSPECT TACHOMETER

(a) Check the operation

- (1) Connect a tune-up test tachometer, and start the engine.

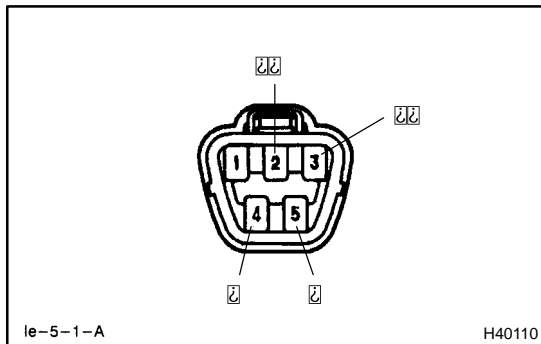
#### NOTICE:

- Reversing the connection of the tachometer will damage the transistors and diodes inside.
- When removing or installing the tachometer, be careful not to drop or subject it to heavy shocks.

- (2) Compare the test and tachometer indications.

**DC 13.5 V, 25 °C at (77 °F)**

Standard indication (r/min)	Allowable range (r/min) Data in ( ) are for reference
700	630 – 770
1,000	(900 – 1,100)
2,000	(1,850 – 2,150)
3,000	2,800 – 3,200
4,000	(3,800 – 4,200)
5,000	4,800 – 5,200
6,000	(5,750 – 6,250)
7,000	6,700 – 7,300



### 4. INSPECT FUEL RECEIVER GAUGE

(a) Inspect the circuit.

- (1) Disconnect the connector from the sender gauge.
- (2) Turn the ignition switch ON, then check the position of the receiver gauge needle.

**Needle position: EMPTY**

- (3) Connect terminals 2 and 3 on the wire harness side connector and Turn the ignition switch ON, then check the position of the receiver gauge needle.

**Needle position: FULL**

### 5. INSPECT FUEL LEVEL WARNING

(a) Inspect the circuit.

- (1) Disconnect the connector from the sender gauge.
- (2) Turn the ignition switch ON, check the fuel level needle indicates EMPTY and fuel level warning lights light on.

### 6. INSPECT WATER TEMPERATURE RECEIVER GAUGE WARNING LIGHT

(a) Inspect the circuit.

- (1) Disconnect the connector from the sender gauge.
- (2) Turn the ignition switch ON, check the position of the water temperature receiver gauge needle.

**Needle position: COOL**

- (3) Connect between terminals on the wire harness side connector, then check the position of the water temperature receiver gauge needle.

**Needle position: HOT**

**7. INSPECT LOW OIL PRESSURE WARNING LIGHT**

- (a) Inspect the circuit.
- (1) Disconnect the connector from the low oil pressure switch.
  - (2) Turn the ignition switch ON.
  - (3) Connect the terminal of wire harness side connector and ground, then check the warning low oil pressure warning light.

**Low oil pressure warning light: Light on**

**8. INSPECT LOW OIL PRESSURE SWITCH**

- (a) Check the continuity.
- (1) Disconnect the connector from the low oil pressure switch.
  - (2) Check that continuity exists between terminal and ground.

**Engine stopped: continuity**

**Engine running: no continuity**

**9. INSPECT BRAKE WARNING LIGHT**

- (a) Inspect the parking brake warning light.
- (1) Disconnect the connector from the parking brake switch and ground terminal on the wire harness side connector.
  - (2) Turn the ignition switch ON and check that the warning light lights up.
- (b) Inspect the brake fluid level warning light.
- (1) Disconnect the connector from the brake fluid level warning switch and connect terminals on the wire harness side connector.
  - (2) Turn the ignition switch ON and check that the warning light lights up.

**10. INSPECT BRAKE FLUID LEVEL WARNING SWITCH**

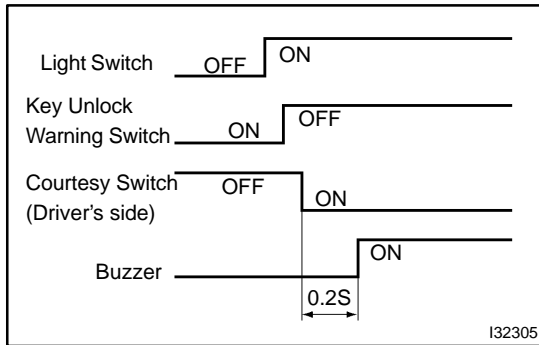
- (a) Inspect the continuity.
- (1) Remove the reservoir tank cap and strainer.
  - (2) Disconnect the connector.
  - (3) Check that the continuity exists between the terminals.

**Float up (switch off): No continuity**

- (4) Use syphon, etc., to take fluid out of the reservoir tank.
- (5) Check that the continuity exists between the terminals.

**Float down (switch on): Continuity**

- (6) Pour the fluid back in the reservoir tank.



## 11. INSPECT LIGHT AUTO TURN OFF BUZZER

(a) Check the operation.

HINT:

When the key unlock warning and light auto turn off warning is output simultaneously, the key unlock warning precedes the other.

- (1) Remove the ignition key with the tail light switch ON and the driver side door open and check for the buzzer.

**Buzzer sound: Continuous**

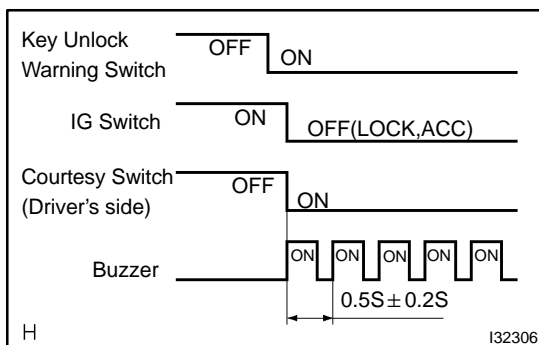
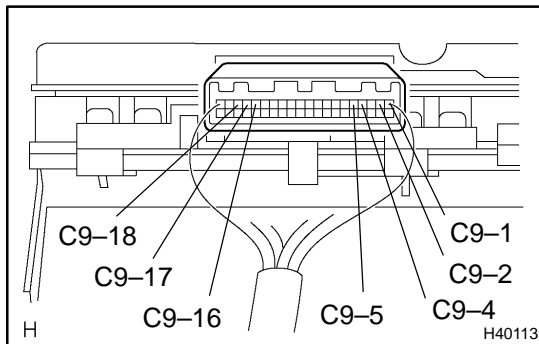
- (2) While the buzzer is sounding, perform any of the following and check that the buzzer sound is stopped.
  - Turn the tail light switch OFF.
  - Close the driver side door.
  - Insert the ignition key into the key cylinder.

(b) Check the function.

- (1) Remove the combination meter.
- (2) Connect the position (+) lead from battery to terminal C9-5 and negative (-) lead to terminal C9-1 and C9-2.
- (3) Connect the position (+) lead from battery to terminal C9-18 and negative (-) lead to terminal C9-16 and C9-17, check that the buzzer sound.

**Buzzer sound: Continuous**

- (4) While the buzzer is sounding, connect the battery positive terminal to terminal C9-4 and check that the buzzer sound is stopped.



## 12. INSPECT KEY UNLOCK WARNING BUZZER

(a) Check the operation.

HINT:

When the key unlock warning and light auto turn off warning is output simultaneously, the key unlock warning precedes the other.

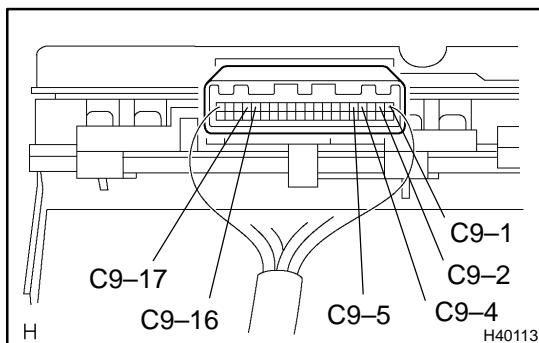
- (1) While the driver side door is open, insert the ignition key, set the ignition switch to OFF (LOCK or ACC) and check for the buzzer sound.

**Buzzer sound: Intermittent**

(b) Check the function.

- (1) Remove the combination meter.
- (2) Connect the position (+) lead from battery to terminal C9-5 and negative (-) lead to terminal C9-1 and C9-2.
- (3) Connect the negative (-) lead to terminal C9-16 and C9-17, check that the buzzer sound.

**Buzzer sound: Intermittent**



- (4) While the buzzer is sounding, connect the battery positive terminal to terminal C9-4 and check that the buzzer sound is stopped.