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 (Canada)

Standard Indication	Acceptable Range
20 km/h	17.5 to 21.5 km/h
40 km/h	38.0 to 42.0 km/h
60 km/h	58.0 to 63.0 km/h
80 km/h	78.0 to 84.0 km/h
100 km/h	98.5 to 104.5 km/h
120 km/h	119.0 to 125.0 km/h
140 km/h	139.0 to 146.0 km/h
160 km/h	159.0 to 167.0 km/h
180 km/h	179.0 to 188.0 km/h
200 km/h	199.0 to 209.0 km/h
220 km/h	219.0 to 230.0 km/h
240 km/h	239.0 to 251.0 km/h

Reference: mph (U.S.A.)

Standard Indication	Acceptable Range
20 mph	20.0 to 23.0 mph
40 mph	40.0 to 43.5 mph
60 mph	60.0 to 64.0 mph
80 mph	80.0 to 84.5 mph
100 mph	100.0 to 105.0 mph
120 mph	120.0 to 125.5 mph
140 mph	140.0 to 146.0 mph

NOTICE:

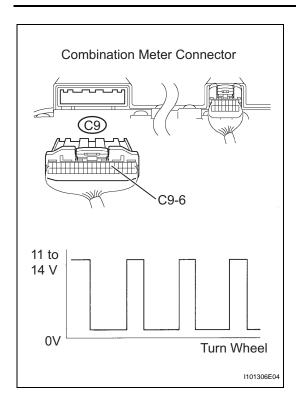
Tire wear and excessively high or low tire pressure affect indication errors.

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

Reference:

Below 0.5 km/h (0.3 mph)





2. INSPECT OUTPUT OF VEHICLE SPEED

- (a) Shift the transmission gear selector lever to the neutral position.
- (b) Jack up the vehicle.
- (c) Turn the ignition switch to ON.
- (d) Check the voltage while the wheel is turning slowly. **Standard**

Tester Connections	Specified Conditions
C9-6 - Body ground	Voltage generated intermittently

HINT:

The output voltage should fluctuate up and down as shown in the diagram on the left when the wheel is turning slowly.

3. INSPECT TACHOMETER

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

NOTICE:

- Reversing the connection of the tachometer will damage the transistors and the insides of the diodes.
- When removing or installing the tachometer, be careful not to drop or strike it.
- (2) Compare the result of the test with the standard indication.

DC 13.5 V, at 25°C (77°F)

Reference

Standard Indication (USA) (RPM) Standard Indication (CANADA) (r/min)	1GR-FE: Acceptable Range (USA) (RPM) Acceptable Range (CANADA) (r/min) Data in () are for reference	2TR-FE Acceptable Range (USA) (RPM) Acceptable Range (CANADA) (r/min) Data in () are for reference
700	630 to 770	630 to 770
1,000	(900 to 1,100)	(900 to 1,100)
2,000	(1,850 to 2,150)	(1,850 to 2,150)
3,000	2,800 to 3,200	2,800 to 3,200
4,000	(3,800 to 4,200)	(3,800 to 4,200)
5,000	4,800 to 5,100	4,800 to 5,200
6,000	(5,750 to 6,250)	(5,750 to 6,250)

Wire Harness Side: Fuel Sender Gauge Connector F19 Front View

4. INSPECT FUEL RECEIVER GAUGE

- (a) Disconnect the fuel sender gauge connector.
- (b) Turn the ignition switch to the ON position, then check the position of the receiver gauge needle. OK:

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 ignition switch to the ON position, then check the position of the receiver gauge needle. OK:

Needle position is on (FULL).

(e) Reconnect the fuel sender gauge connector.



5. INSPECT FUEL LEVEL WARNING LIGHT

- (a) Disconnect the fuel sender gauge connector.
- (b) Turn the ignition switch to the ON position, then check that the fuel level needle indicates EMPTY and the fuel level warning light comes on.

OK:

Fuel level warning light comes on.

(c) Reconnect the fuel sender gauge connector.

6. INSPECT LOW ENGINE OIL PRESSURE WARNING LIGHT

- (a) Disconnect the low oil pressure switch connector.
- (b) Turn the ignition switch to the ON position.
- (c) Ground the terminal of the wire harness side connector, then check the low oil pressure warning light.

OK:

Low oil pressure warning light comes on.

(d) Reconnect the low oil pressure switch connector.

7. INSPECT BRAKE WARNING LIGHT

- (a) Inspect the parking brake warning light.
 - (1) Disconnect the parking brake switch connector.
 - (2) Turn the ignition switch to the ON position.
 - (3) Ground the terminal of the wire harness side connector, then check the parking brake warning light.

OK:

Brake warning light comes on.

- (4) Reconnect the parking brake switch connector.
- (b) Inspect the brake fluid level warning light.
 - (1) Disconnect the brake fluid level warning switch connector.
 - (2) Turn the ignition switch to the ON position.
 - (3) Connect a terminal to the other terminal of the wire harness side connector, then check the brake fluid level warning switch.

OK:

Brake warning light comes on.

(4) Reconnect the brake fluid level warning switch connector.

8. INSPECT BRAKE FLUID LEVEL WARNING SWITCH

- (a) Remove the reservoir tank cap and strainer.
- (b) Disconnect the brake fluid level warning switch connector.
- (c) Measure the resistance between the terminals.

Standard Resistance:

Float up (switch off): 10 k Ω or higher

- (d) Use a syphon or a similar tool, to take fluid out of the reservoir tank.
- (e) Measure the resistance between the terminals.

Standard Resistance:

Float down (switch on): Below 1 Ω

(f) Pour the fluid back in the reservoir tank.



- (g) Reconnect the brake fluid level warning switch connector.
- (h) Reinstall the reservoir tank cap and strainer.

9. INSPECT WASHER FLUID LEVEL WARNING SWITCH

- (a) Disconnect the washer level warning switch connector.
- (b) Turn the ignition switch to the ON position.
- (c) Ground the terminal of the wire harness side connector, then check the washer level warning light.

OK:

Washer level warning light comes on.

(d) Reconnect the washer level warning switch connector.

10. MAINTENANCE LIQUID RESETTING PROCEDURE

Indicator Condition

State	Condition	Specified State
Blinking	The vehicle has run 4,500 miles since the previous setting	The indicator blinks for 15 seconds after the ignition switch is turned to the ON position (including 3 seconds for a valve check).
Continuously Illuminated	The vehicle has run 5,000 miles since the previous setting	The indicator is continuously illuminated after the ignition switch is turned to the ON position.

- (a) Turn the ignition switch to the ON position.
- (b) Set the ODO/TRIP indication to ODO.
- (c) While pressing the reset switch, turn the ignition switch OFF and ON again.
- (d) Press the reset switch for more than 5 seconds. (The oil maintenance indicator illuminates for 3 seconds, and then flashes in accordance with the distance run*.)

HINT:

- *: If the distance run is less than 4,500 mile, the indicator turns off. If the distance run is between 4,500 mile and 4999 miles, the indicator flashes for 2 seconds.
- If the distance run is more than 5,000 mile, the indicator turns off. If the reset switch is not pressed for at least 5 seconds, the reset procedure fails.
- The ODO/TRIP indicator indicates as follows while the reset switch is pressed for 5 seconds.



