

INSPECTION

1. INSPECT SPEEDOMETER ON-VEHICLE

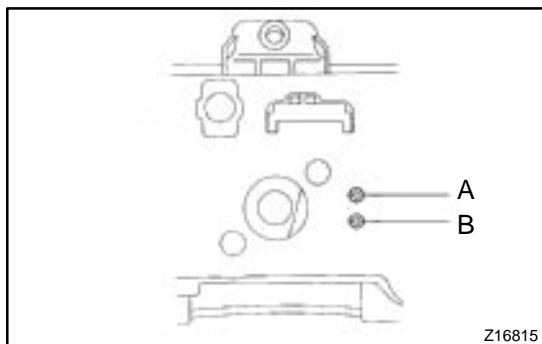
Using a speedometer tester, inspect the speedometer for allowable indication error and check the operation of the odometer.

HINT:

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

If error is excessive, replace the speedometer.

km/h		mph	
Standard indication	Allowable range	Standard indication	Allowable range
20	17 – 24	20	18 – 24
40	38 – 46	40	38 – 44
60	57.5 – 67	60	58 – 66
80	77 – 88	80	78 – 88
100	96 – 109	100	98 – 110
120	115 – 130	–	
140	134 – 151.5	–	
160	153 – 173	–	



2. INSPECT VEHICLE SPEED SENSOR OPERATION

Check that there is continuity between terminals A and B 4 times for every revolution of the speedometer shaft.

If operation is not as specified, replace the speedometer.

3. INSPECT TACHOMETER ON-VEHICLE

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

NOTICE:

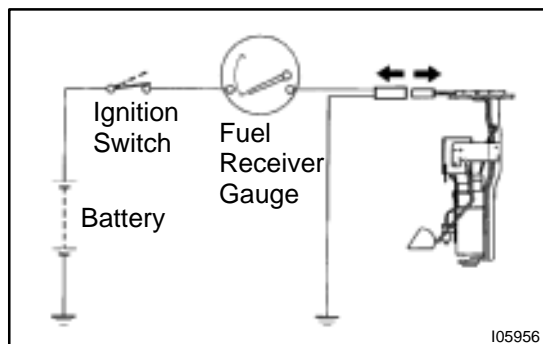
The connection of the tachometer in reverse will damage the transistors and diodes inside. When removing or installing the tachometer, be careful not to drop or subject it to heavy shocks.

(b) Compare the tester and tachometer indications.

DC 13.5 V 25°C (77 °F)

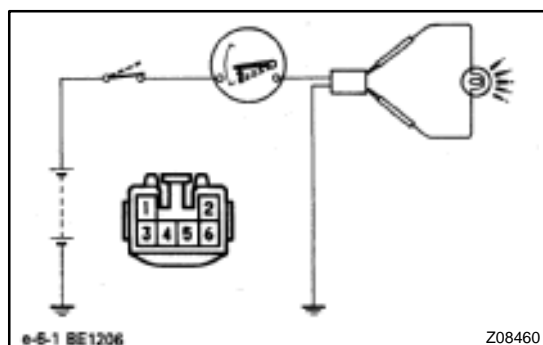
Standard indication (rpm)	Allowable range (rpm)
700	630 – 770
1,000	900 – 1,100
2,000	1,850 – 2,150
3,000	2,800 – 3,200
4,000	3,800 – 4,200
5,000	4,800 – 5,200
6,000	5,750 – 6,250
7,000	6,700 – 7,300

If error is excessive, replace the tachometer.



4. INSPECT FUEL RECEIVER GAUGE OPERATION

- Disconnect the connector from the sender gauge.
- Turn the ignition switch ON, check that the receiver gauge needle indicates EMPTY.



- Connect terminals 3 and 4 on the wire harness side connector through a 3.4 W test bulb.
- Turn the ignition switch ON, and check that the bulb lights up and the receiver gauge needle moves towards the full side.

HINT:

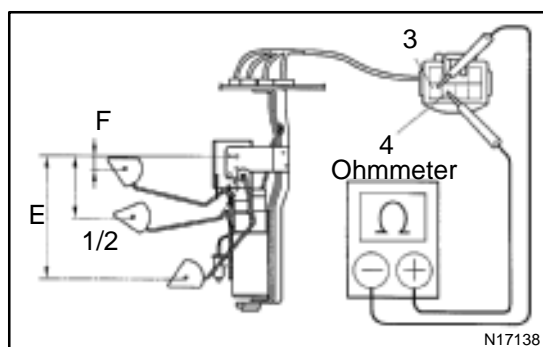
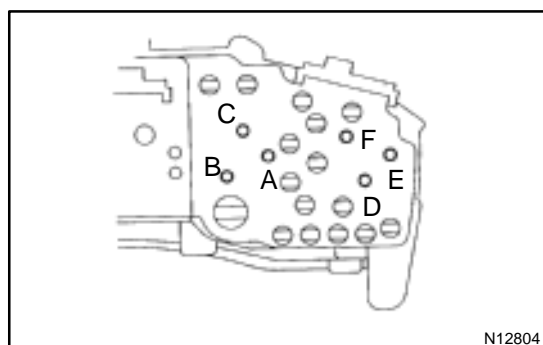
Because of the silicon oil in the gauge, it will take a short time for needle to stabilize.

If operation is not as specified, inspect the receiver gauge resistance.

5. INSPECT FUEL RECEIVER GAUGE RESISTANCE

Measure the resistance between terminals.

Between terminals	Resistance (Ω)
A - B	Approx. 115.8
A - C	Approx. 177.2
B - C	Approx. 61.4

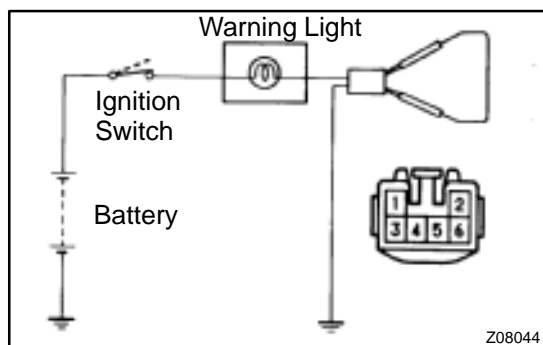


6. INSPECT FUEL SENDER GAUGE RESISTANCE

Measure the resistance between Red Cable and Black Cable.

Float position : mm (in.)	Resistance (Ω)
F : 13 ± 3 (0.5 \pm 0.1)	3 ± 1.0
1/2 : 61 (2.4)	29 ± 4.8
E : 124 ± 3 (4.8 \pm 0.1)	110 ± 7.7

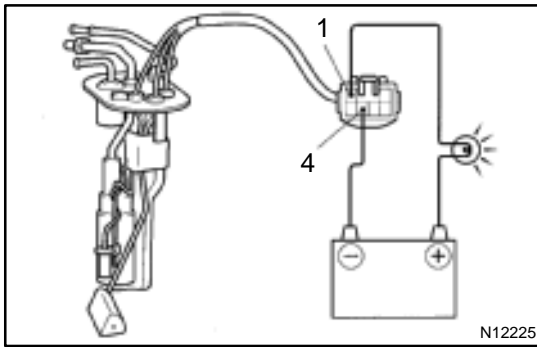
If resistance value is not as specified, replace the sender gauge.



7. INSPECT FUEL LEVEL WARNING LIGHT

- Disconnect the connector from the sender gauge.
- Connect terminals 1 and 4 on the wire harness side connector.
- Turn the ignition switch ON, and check that the warning light lights up.

If the warning light does not light up, test the bulb.

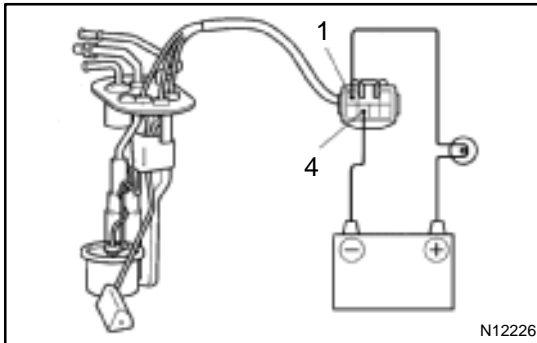


8. INSPECT FUEL LEVEL SWITCH OPERATION

- (a) Apply battery voltage between terminals and through a 3.4 W test bulb, and check that the bulb lights up.

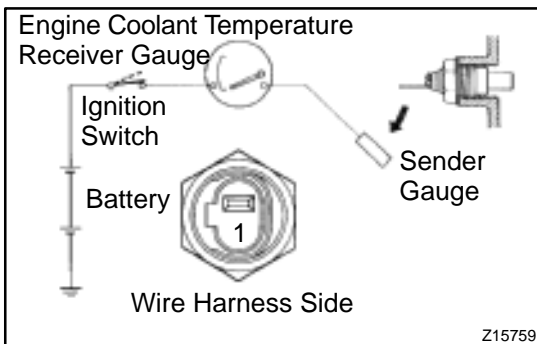
HINT:

It will take a short time for bulb to light up.



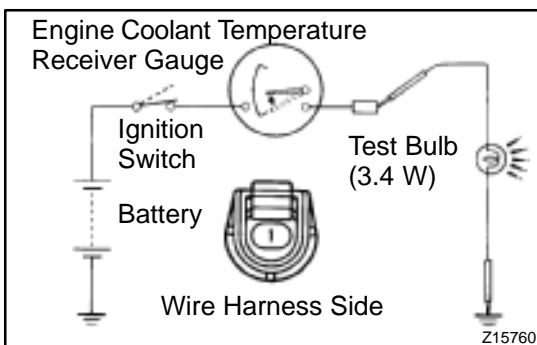
- (b) Submerge the switch in fuel, and check that the bulb goes out.

If operation is not as specified, replace the sender gauge.



9. INSPECT ENGINE COOLANT TEMPERATURE RECEIVER GAUGE OPERATION

- (a) Disconnect the connector from the sender gauge.
- (b) Turn the ignition switch ON, and check that the receiver gauge needle indicates COOL.

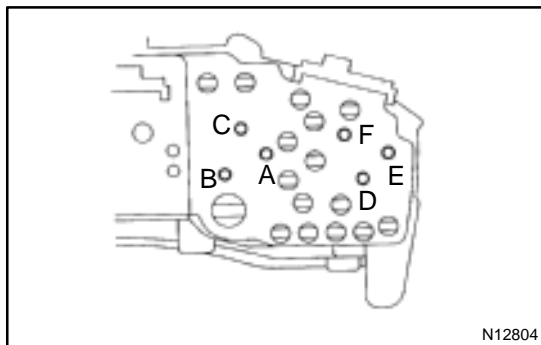


- (c) Ground terminal on the wire harness side connector through a 3.4 W test bulb.

- (d) Turn the ignition switch ON, and check that the bulb lights up and the receiver gauge needle moves to the hot side.

If operation is as specified, replace the sender gauge. Then, re-check the system.

If operation is not as specified, measure the receiver gauge resistance.



10. INSPECT ENGINE COOLANT TEMPERATURE RECEIVER GAUGE RESISTANCE

Measure the resistance between terminals.

Puerto Rico:

Between terminals	Resistance (Ω)
D – E	Approx. 51.0
D – F	Approx. 152.8
E – F	Approx. 203.8

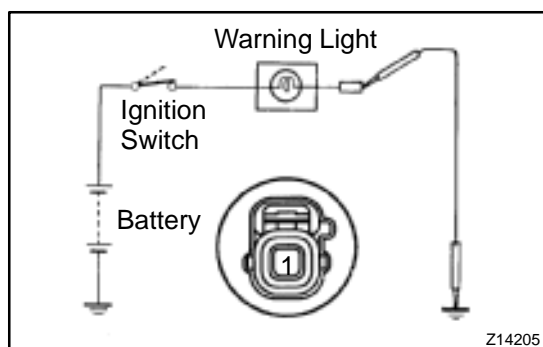
Others:

Between terminals	Resistance (Ω)
D – E	Approx. 51.0
D – F	Approx. 148.6
E – F	Approx. 199.6

HINT:

Connect the test leads so that the current from the ohmmeter can flow according to the above order. This circuit includes the diode.

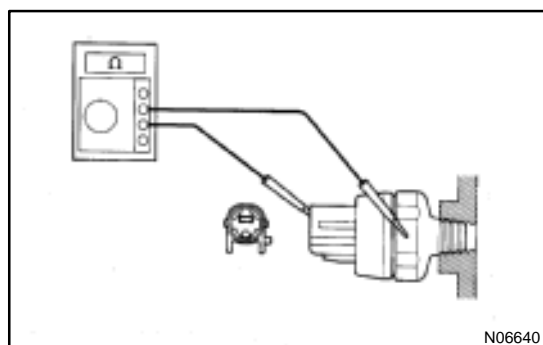
If resistance value is not as specified, replace the receiver gauge.



11. INSPECT LOW OIL PRESSURE WARNING LIGHT

- Disconnect the connector from the warning switch and ground terminal on the wire harness side connector.
- Turn the ignition switch ON, and check that the warning light lights up.

If the warning light does not light up, test the bulb.



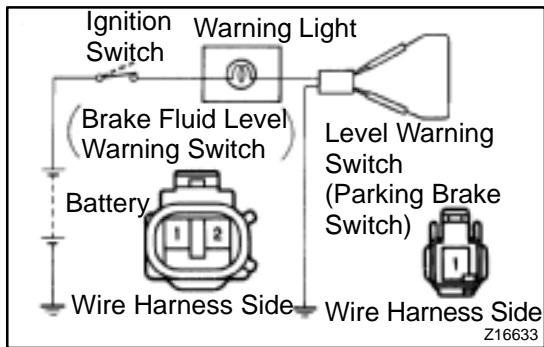
12. INSPECT LOW OIL PRESSURE SWITCH CONTINUITY

- Disconnect the connector from the switch.
- Check that there is continuity between terminals and ground with the engine stopped.
- Check that there is no continuity between terminals and ground with the engine running.

HINT:

Oil pressure should be over 30 kPa (0.3 kgf/cm², 4.4 psi).

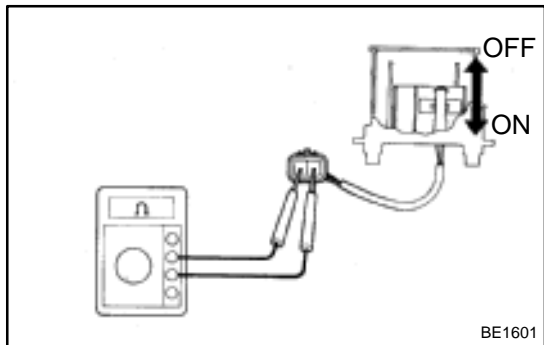
If operation is not as specified, replace the switch.



13. INSPECT BRAKE WARNING LIGHT

- Disconnect the connectors from the level warning switch and parking brake switch.
- Connect terminals on the wire harness side connector of the level warning switch connector.
- Turn the ignition switch ON, and check that the warning light lights up.

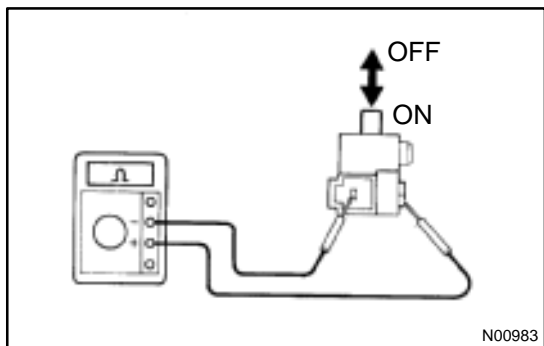
If the warning light does not light up, test the bulb.



14. INSPECT BRAKE FLUID LEVEL WARNING SWITCH CONTINUITY

- Check that there is no continuity between terminals with the switch OFF (float up).
- Check that there is continuity between terminals with the switch ON (float down).

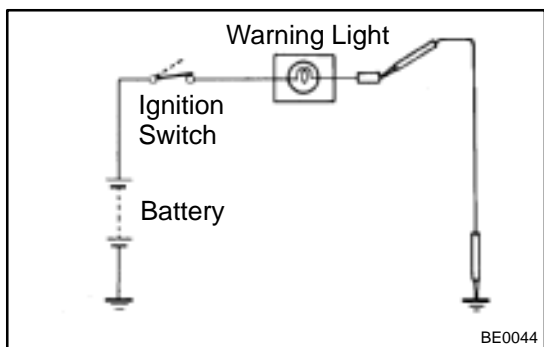
If operation is not as specified, replace the switch.



15. INSPECT PARKING BRAKE SWITCH CONTINUITY

- Check that there is continuity between terminals and switch body with the switch ON (switch pin released).
- Check that there is no continuity between terminals and switch body with the switch OFF (switch pin pushed in).

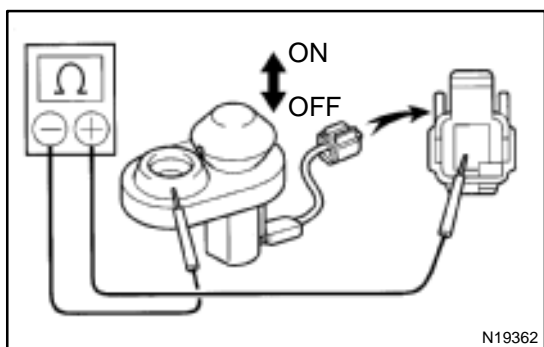
If operation is not as specified, replace the switch or inspect ground point.



16. INSPECT OPEN DOOR WARNING LIGHT

- Disconnect the connectors from the door courtesy switch and ground terminal on the wire harness side connector.
- Turn the ignition switch ON, and check that the warning light lights up.

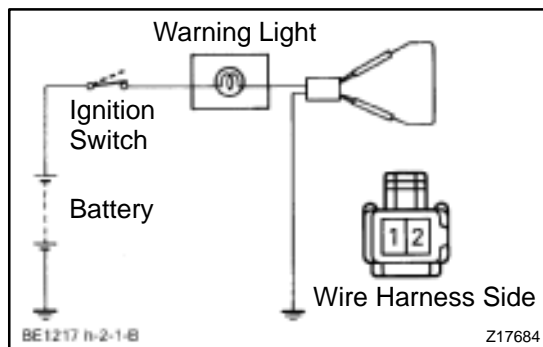
If the warning light does not light up, test the bulb.



17. INSPECT DOOR COURTESY SWITCH CONTINUITY

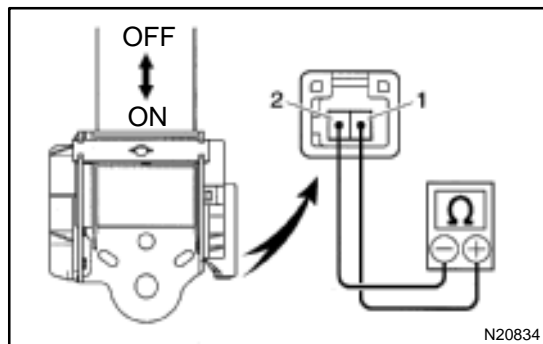
- Check that there is continuity between terminals and the switch body with the switch ON (switch pin released: opened door).
- Check that there is no continuity between terminals and the switch body with the switch OFF (switch pin pushed in: closed doors).

If operation is not as specified, replace the switch.

**18. INSPECT SEAT BELT WARNING LIGHT**

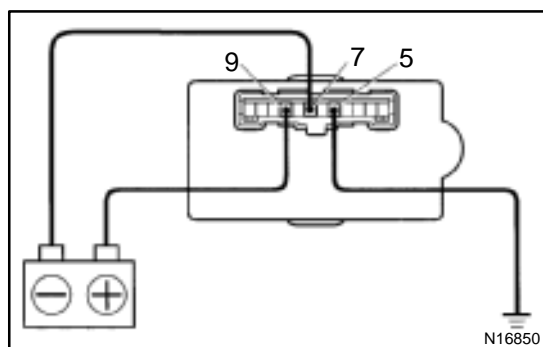
- Disconnect the connector from the driver's seat belt retractor assembly.
- Connect terminals 1 and 2 on the wire harness side connector.
- Turn the ignition switch ON, and check that the warning light lights up.

If the warning light does not light up, test the bulb.

**19. INSPECT RETRACTOR SWITCH CONTINUITY**

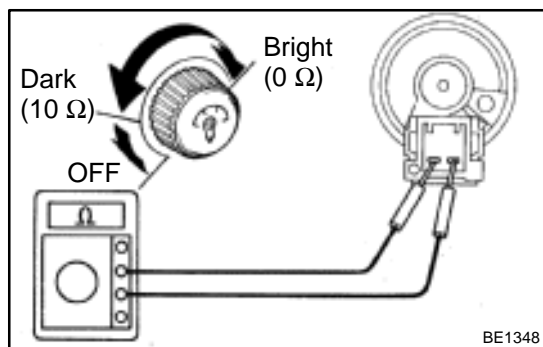
- Check that there is continuity between terminals on the switch side connector with the switch ON (belt downward).
- Check that there is continuity between terminals on the switch side connector with the switch OFF (belt upward).

If continuity is not as specified, replace the retractor assembly.

**20. Seat Belt Warning Buzzer:****INSPECT INTEGRATION RELAY OPERATION**

- Disconnect the connector from the integration relay and connect the positive (+) lead from the battery to terminal 9 and negative (-) lead to terminal 7.
- Connect the terminal 5 and body ground.
- Check the warning buzzer sounds.

If operation is not as specified, replace the relay.

**21. INSPECT LIGHT CONTROL RHEOSTAT**

- Turn the rheostat knob OFF, and check that there is no continuity between terminals. (Rheostat knob turned to fully counterclockwise.)
- Gradually, turn the rheostat knob from the dark side to bright side, and check that the resistance decreases from 10 to 0 Ω. (Rheostat knob turned to clockwise.)

If operation is not as specified, replace the rheostat.