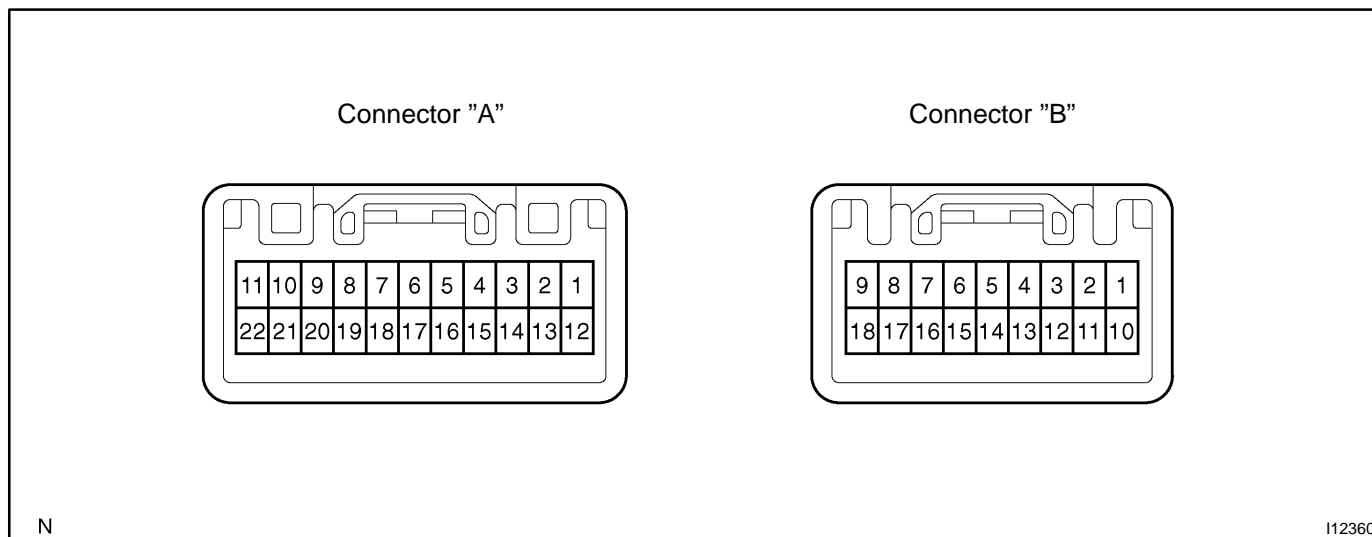


INSPECTION

1. Connector connected:

INSPECT COMBINATION METER CIRCUIT

Connect the connector "A" and "B" to the combination meter and inspect the wire harness side connectors from the back side as shown in the table.



| Tester connection | Condition | Specified condition |
|-------------------|--|--------------------------|
| A1 - Ground | Constant | Battery positive voltage |
| A2 - Ground | Ignition switch OFF | No voltage |
| A2 - Ground | Ignition switch ON | Battery positive voltage |
| A3 - Ground | Ignition switch ON and O/D off switch ON | No voltage |
| A3 - Ground | Ignition switch ON and O/D off switch OFF | Battery positive voltage |
| A4 - Ground | Light control switch OFF | No voltage |
| A4 - Ground | Light control switch HI | Battery positive voltage |
| A5 - Ground | Ignition switch OFF, LOCK or ACC | No voltage |
| A5 - Ground | Ignition switch ST | Battery positive voltage |
| A6 - Ground | Ignition switch ON and turn signal switch OFF or LEFT | No voltage |
| A6 - Ground | Ignition switch ON and turn signal switch RIGHT | Battery positive voltage |
| A9 - Ground | Ignition switch ON and window washer level warning switch float DOWN | No voltage |
| A9 - Ground | Ignition switch ON and window washer level warning switch float UP | Battery positive voltage |
| A11 - Ground | Ignition switch ON and driver's seat belt is unfastened | No voltage |
| A11 - Ground | Ignition switch ON and driver's seat belt is fastened | Battery positive voltage |
| A12 - Ground | Ignition switch ON and driver door is opened | No voltage |
| A12 - Ground | Ignition switch ON and driver door is closed | Battery positive voltage |

| | | |
|--------------|---|--------------------------|
| A13 - Ground | Ignition switch ON and passenger door is opened | No voltage |
| A13 - Ground | Ignition switch ON and passenger door is closed | Battery positive voltage |
| A14 - Ground | Constant | Continuity |
| A17 - Ground | Constant | Continuity |
| A18 - Ground | Ignition switch ON and fuel sender gauge float UP | 0.3 - 0.6 V |
| A18 - Ground | Ignition switch ON and fuel sender gauge float DOWN | 4.9 - 6.9 V |
| A19 - Ground | Ignition switch ON and slowly move the wheel | 4.5 - 5.5 V |
| A20 - Ground | Ignition switch ON and slowly move the wheel | Battery positive voltage |
| A21 - Ground | Key unlock warning switch ON (Key is inserted) | No voltage |
| A21 - Ground | Key unlock warning switch OFF (Key is removed) | Battery positive voltage |
| A22 - Ground | Ignition switch ON and passenger's seat belt is unfastened | No voltage |
| A22 - Ground | Ignition switch ON and passenger's seat belt is fastened | Battery positive voltage |
| B2 - Ground | Ignition switch ON and rheostat light control volume CANCEL position | No voltage |
| B2 - Ground | Ignition switch ON and rheostat light control volume maximum | Battery positive voltage |
| B4 - Ground | Light control switch OFF | No voltage |
| B4 - Ground | Light control switch TAIL or HEAD | Battery positive voltage |
| B5 - Ground | Ignition switch ON and engine coolant temperature HOT (Red) warning light light up | No voltage |
| B5 - Ground | Ignition switch ON and engine coolant temperature HOT (Red) warning light does not light up | Battery positive voltage |
| B6 - Ground | Ignition switch ON and engine coolant temperature COOL (Blue) warning light light up | No voltage |
| B6 - Ground | Ignition switch ON and engine coolant temperature COOL (Blue) warning light does not light up | Battery positive voltage |
| B7 - Ground | Ignition switch ON and engine oil level warning light up | No voltage |
| B7 - Ground | Ignition switch ON and engine oil level warning does not light up | Battery positive voltage |
| B8 - Ground | Ignition switch ON and engine is stopped | No voltage |
| B8 - Ground | Ignition switch ON and engine is running | Battery positive voltage |
| B11 - Ground | Constant | Continuity |
| B12 - Ground | Ignition switch OFF | No voltage |
| B12 - Ground | Ignition switch ON | Battery positive voltage |
| B13 - Ground | Ignition switch ON and engine is stopping | No voltage |
| B13 - Ground | Ignition switch ON and engine is running | Battery positive voltage |
| B14 - Ground | Ignition switch ON and SRS indicator light light up | No voltage |
| B14 - Ground | Ignition switch ON and SRS indicator does not light up | Battery positive voltage |
| B15 - Ground | Ignition switch ON, parking brake lever is released and brake fluid level warning switch float DOWN | No voltage |

BODY ELECTRICAL - COMBINATION METER

| | | |
|--------------|---|--------------------------|
| B15 - Ground | Ignition switch ON, parking brake lever is released and brake fluid level warning switch float UP | Battery positive voltage |
| B16 - Ground | Ignition switch ON and turn signal switch OFF or RIGHT | No voltage |
| B16 - Ground | Ignition switch ON and turn signal switch LEFT | Battery positive voltage |
| B17 - Ground | Ignition switch ON and ABS is error | No voltage |
| B17 - Ground | Ignition switch ON and ABS is normal | Battery positive voltage |
| B18 - Ground | Ignition switch ON and passenger's seat belt warning light up | No voltage |
| B18 - Ground | Ignition switch ON and passenger's seat belt warning does not light up | Battery positive voltage |

If circuit is not as specified, wiring diagram and inspect the circuits connected to other parts.

2. INSPECT SPEEDOMETER ON-VEHICLE

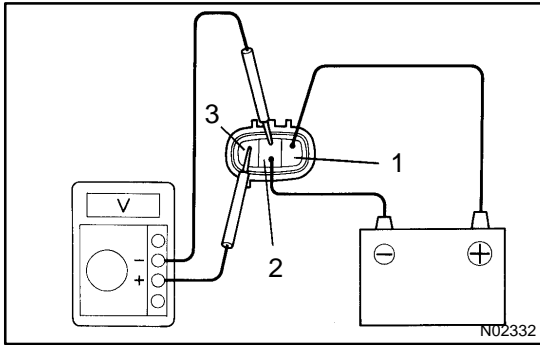
Using a speedometer tester, inspect the speedometer for allowable indication error and check the operation of the odometer.

HINT:

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

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

If error is excessive, replace the speedometer.



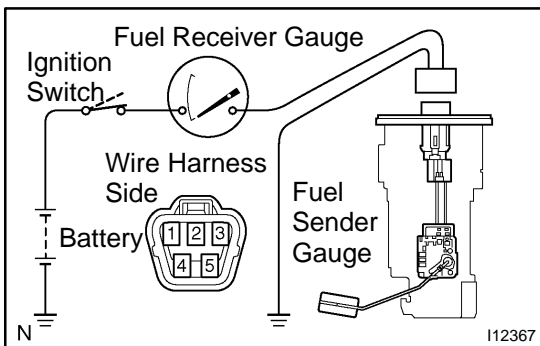
3. INSPECT VEHICLE SPEED SENSOR OPERATION

- (a) Connect the positive (+) lead from battery to terminal 1 and negative (-) lead to terminal 2.
- (b) Connect the positive (+) lead from tester to terminal 3 and the negative (-) lead to terminal 2.
- (c) Rotate the shaft.
- (d) Check that there is voltage change from approx. 0 V to 11 V or more between terminals 2 and 3.

HINT:

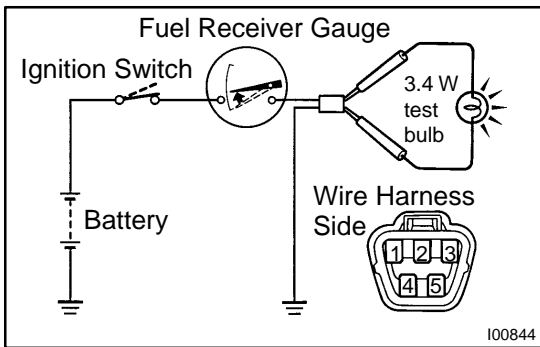
The voltage change should be 4 times for every revolution of the speed sensor shaft.

If operation is not as specified, replace the sensor.



4. INSPECT FUEL RECEIVER GAUGE OPERATION

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

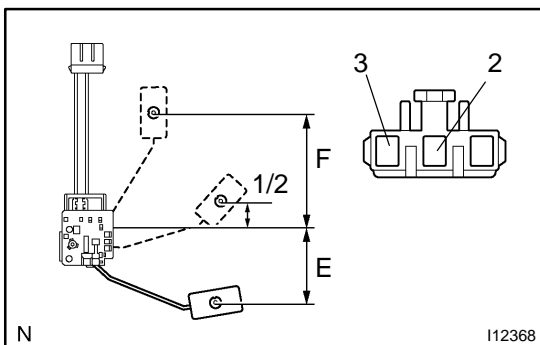


- (c) Connect terminals 2 and 3 on the wire harness side connector through a 3.4 W test bulb.
- (d) Turn the ignition switch ON, check that the bulb lights up and the receiver gauge needle moves towards the full side.

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.

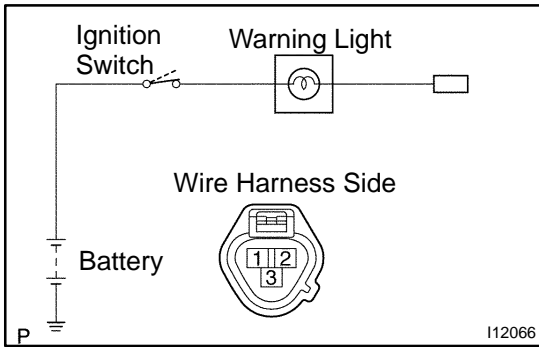


5. INSPECT FUEL SENDER GAUGE RESISTANCE

Measure the resistance between terminals 2 and 3 for each float position.

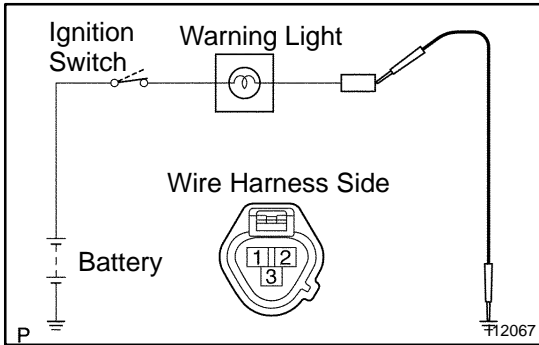
| Float position mm (in.) | Resistance (Ω) |
|-------------------------------------|-------------------|
| F: Approx. 83.8 (3.30) ± 3 (0.12) | Approx. 4.0 ± 1 |
| 1/2: Approx. 18.9 (0.74) ± 3 (0.12) | Approx. 55.0 ± 3 |
| E: Approx. 55.2 (2.17) ± 3 (0.12) | Approx. 107.0 ± 1 |

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

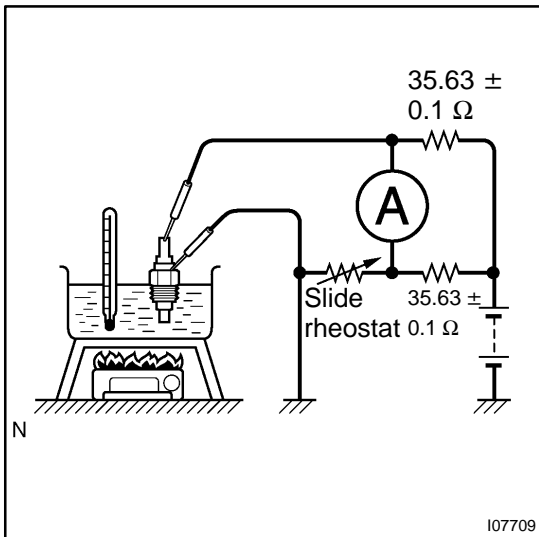


6. INSPECT ENGINE COOLANT TEMPERATURE RECEIVER GAUGE WARNING LIGHT

- (a) Disconnect the connector from the sender gauge.
- (b) Turn the ignition switch ON and check that the COOL warning light lights up.



- (c) Ground terminal 2 on the wire harness side, and check that the HOT warning light lights up.
- If operation is as specified, replace the sender gauge. Then recheck the system.
If operation is not as specified, measure the receiver gauge resistance.

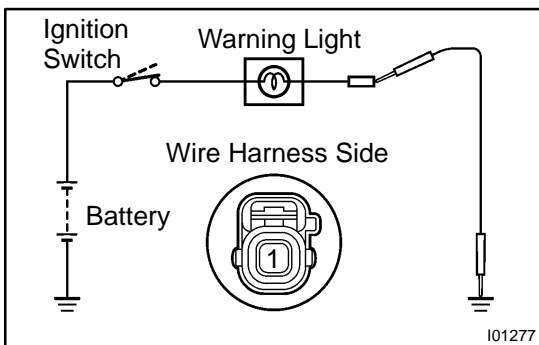


7. INSPECT ENGINE COOLANT TEMPERATURE SENDER GAUGE RESISTANCE

Connect the wire harness as shown in the illustration, and adjust the ammeter pointer to indicate "0" using the slide rheostat, then read the rheostat indication.

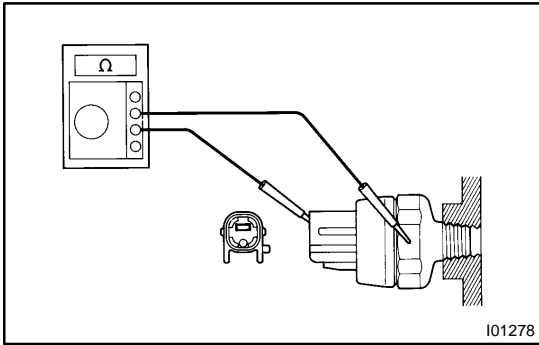
| Temperature °C (°F) | Resistance (Ω) |
|---------------------|----------------|
| 50 (122.0) | 160 - 240 |
| 120 (248.0) | 17.1 - 21.2 |

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



8. INSPECT LOW OIL PRESSURE WARNING LIGHT

- (a) Disconnect the connector from the warning switch and ground terminal on the wire harness side connector.
 - (b) Turn the ignition switch ON and check that the warning light lights up.
- If the warning light does not light up, test the bulb.

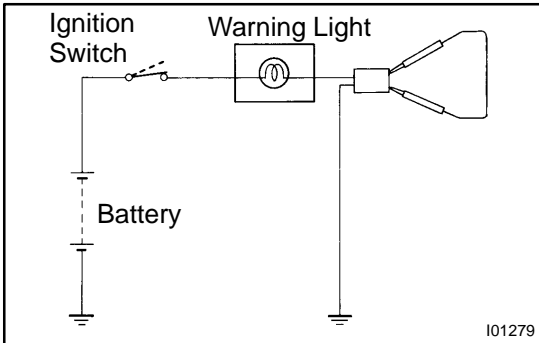


9. INSPECT LOW OIL PRESSURE SWITCH CONTINUITY

- (a) Disconnect the connector from the switch.
- (b) Check that continuity exists between terminal and ground with the engine stopped.
- (c) Check that no continuity exists between terminal and ground with the engine running.

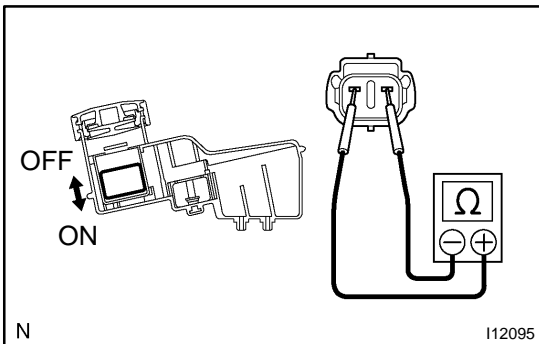
HINT:

Oil pressure should be over 24.5 kPa (0.25 kgf/cm², 3.55 psi). If operation is not as specified, replace the switch.



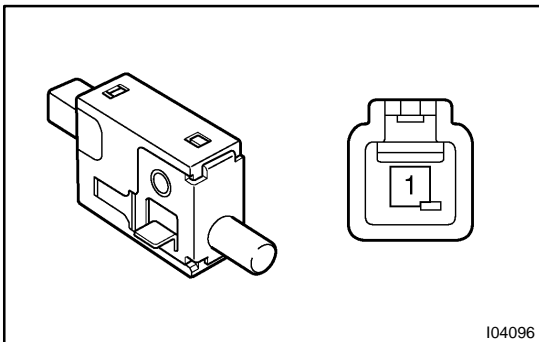
10. INSPECT BRAKE WARNING LIGHT

- (a) Disconnect the connector from the brake fluid warning switch.
- (b) Release the parking brake pedal.
- (c) Connect the terminals on the wire harness side of the level warning switch connector.
- (d) Start the engine, check that the warning light lights up. If the warning light does not light up, test the bulb or wire harness.



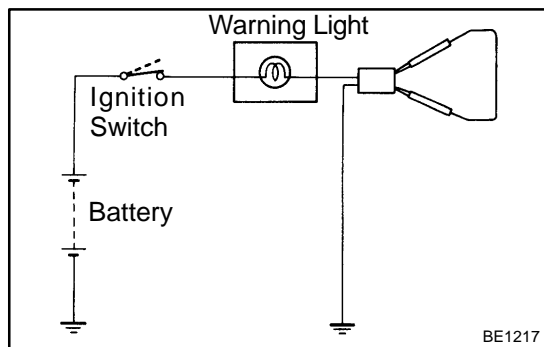
11. INSPECT BRAKE FLUID LEVEL WARNING SWITCH CONTINUITY

- (a) Remove the reservoir tank cap and strainer.
- (b) Disconnect the connector.
- (c) Check that no continuity exists between the terminals with the switch OFF (float up).
- (d) Use syphon, etc. to take fluid out of the reservoir tank.
- (e) Check that continuity exists between the terminals with the switch ON (float down)
- (f) Pour the fluid back in the reservoir tank. If operation is not as specified, replace the switch.



12. INSPECT PARKING BRAKE SWITCH CONTINUITY

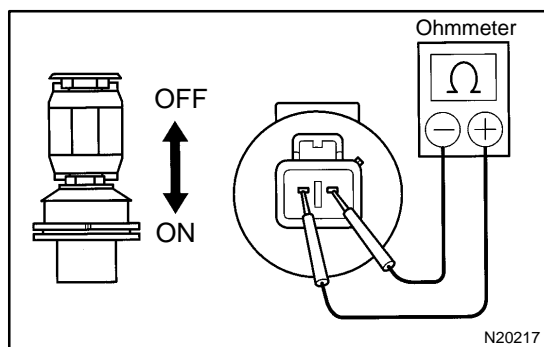
- (a) Check that continuity exists between the terminal and switch body with the switch ON (switch pin released).
 - (b) Check that no continuity exists between the terminal and switch body with the switch OFF (switch pin pushed in).
- If operation is not as specified, replace the switch or inspect ground point.



13. INSPECT WINDOW WASHER LEVEL 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.

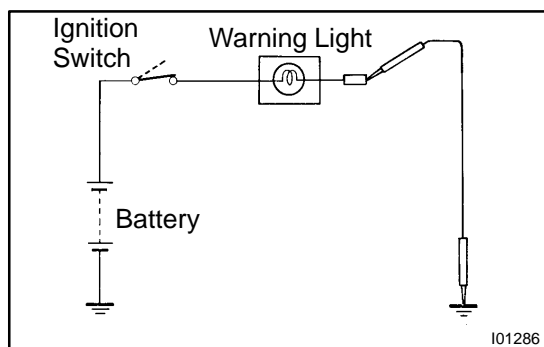
If the warning light does not light up, inspect the bulb or wire harness.



14. INSPECT WINDOW WASHER LEVEL WARNING SWITCH CONTINUITY

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

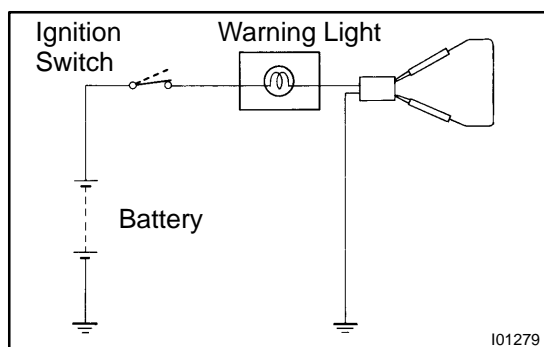
If operation is not as specified, replace the switch or inspect ground point.



15. INSPECT OPEN DOOR WARNING LIGHT

Disconnect the connector from the door courtesy switch and ground terminal 1 on the wire harness side, and check that the warning light lights up.

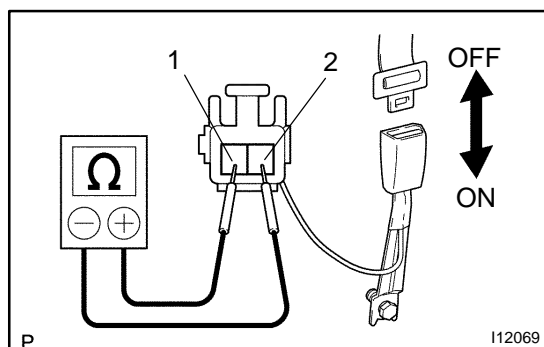
If the warning light does not light up, inspect the bulb or wire harness.



16. INSPECT SEAT BELT WARNING LIGHT

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

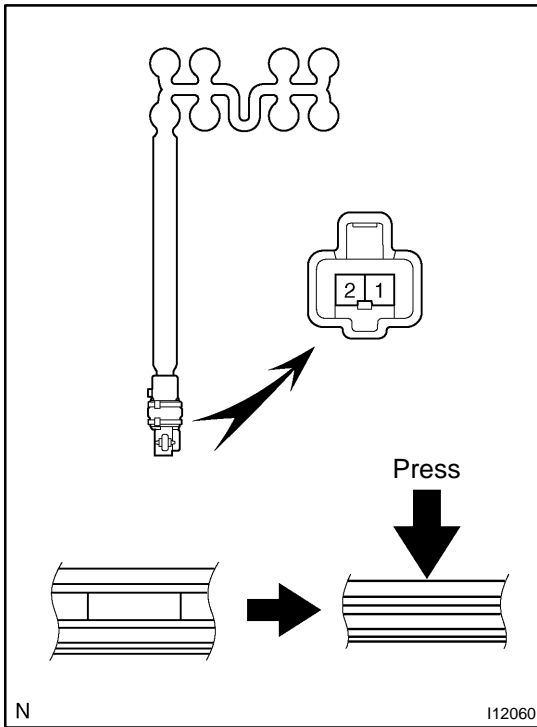
If the warning light does not light up, inspect the bulb or wire harness.



17. INSPECT BUCKLE SWITCH CONTINUITY

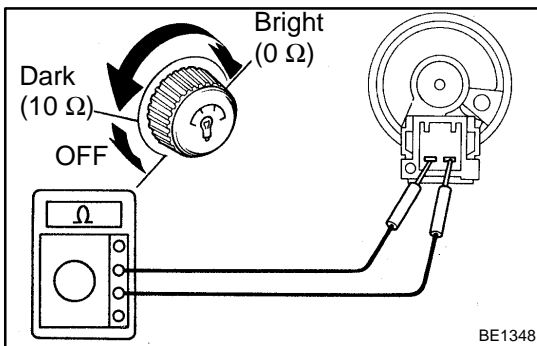
- Check that continuity exists between the terminals on the switch side connector with the switch ON (belt fastened).
- Check that no continuity exists between the terminals on the switch side connector with the switch OFF (belt unfastened).

If operation is not as specified, replace the seat belt inner belt.



**18. Passenger's seat only:
INSPECT SEAT BELT WARNING OCCUPANT DETECTION SENSOR CONTINUITY**

Check that continuity exists between the terminals 1 and 2 when pressing the sensing part.
If operation is not as specified, replace the sensor.



19. 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.