BE1D4–02

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.

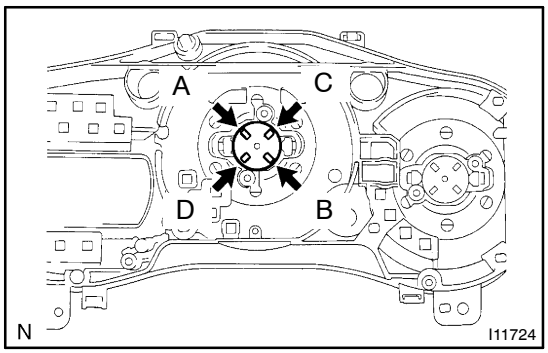
Europe Models

(mph)		(km/h)	
Standard indication	Allowable range	Standard indication	Allowable range
20	20 – 24.5	20	20 – 26
40	40 – 46.5	40	40 – 48
60	60 – 68.5	60	60 – 70
80	80 – 90.5	80	80 – 92
100	100 – 112.5	100	100 – 114
–	–	120	120 – 136
–	–	140	140 – 158
–	–	160	160 – 180

Australia

(mph)		(km/h)	
Standard indication	Allowable range	Standard indication	Allowable range
–	–	40	36 – 44
–	–	60	54 – 66
–	–	80	72 – 88
–	–	100	90 – 110
–	–	120	108 – 132
–	–	140	126 – 154
–	–	160	144 – 176

If error is excessive, replace the speedometer.

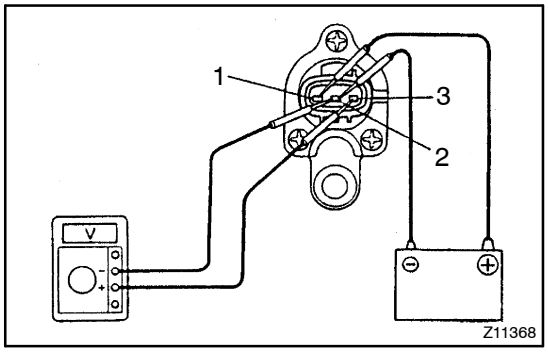


2. INSPECT SPEEDOMETER RESISTANCE

Measure the resistance between terminals with fixing pointer to the stopper.

Tester connection	Resistance (Ω)
A – B	250
C – D	250

If resistance value is not as specified, replace the meter.



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 negative (–) lead to terminal 2.

(c) Rotate 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 TACHOMETER ON–VEHICLE

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

NOTICE:

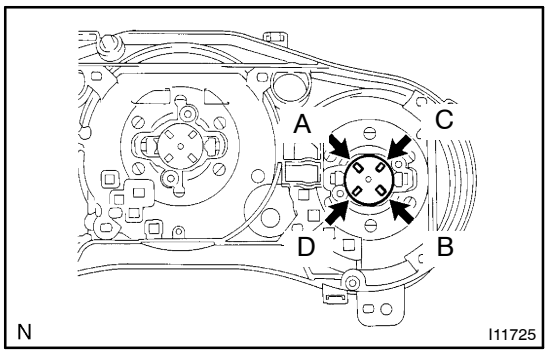
Reversing the connection of the tachometer will damage the transistors and diodes inside.

(b) Compare the tester indications with tachometer indications.

RPM (DC 13.5 V, 25 °C (77 °F))

Standard indication	Allowable range
700	700 – 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	5,800 – 6,200
7,000	6,800 – 7,200

If error is excessive, replace the tachometer.

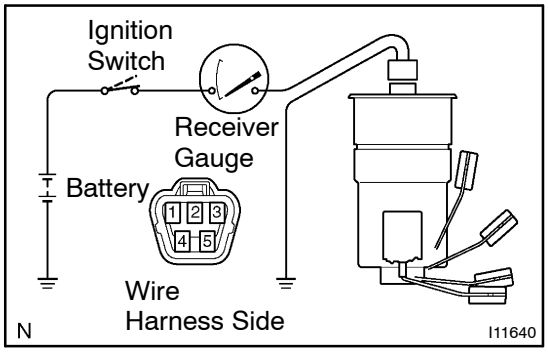


5. INSPECT TACHOMETER RESISTANCE

Measure the resistance between terminals with fixing pointer to the stopper.

Tester connection	Resistance (Ω)
A – B	250
C – D	250

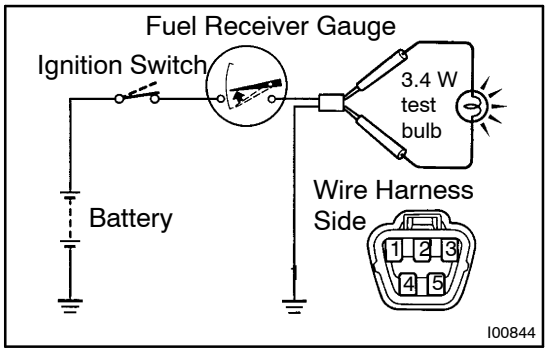
If resistance value is not as specified, replace the meter.



6. INSPECT FUEL RECEIVER GAUGE OPERATION

(a) Disconnect the connector from the sender gauge assembly.

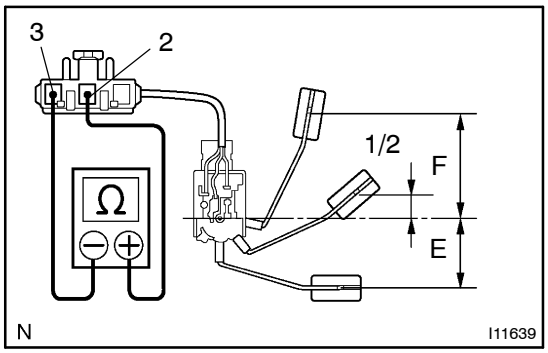
(b) Turn the ignition switch ON, check that the receiver gauge needle indicates EMPTY.



(c) Connect terminals 2 and 3 of 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 receiver gauge needle indicators EMPTY.

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



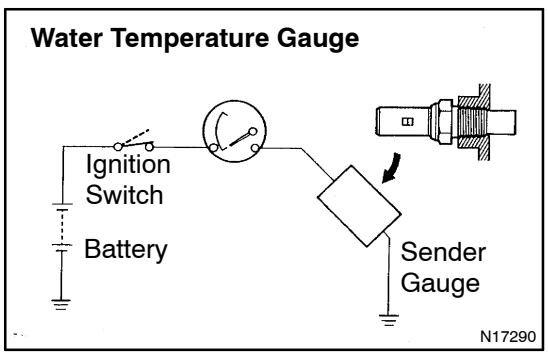
7. INSPECT FUEL SENDER GAUGE RESISTANCE

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

Float position: mm (in.)	Resistance (Ω)
F: Approx. 75.9 (2.99)	Approx. 3.0
1/2: Approx. 17.2 (0.68)	Approx. 31.6
E: Approx. 50.8 (2.00)	Approx. 110.0

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

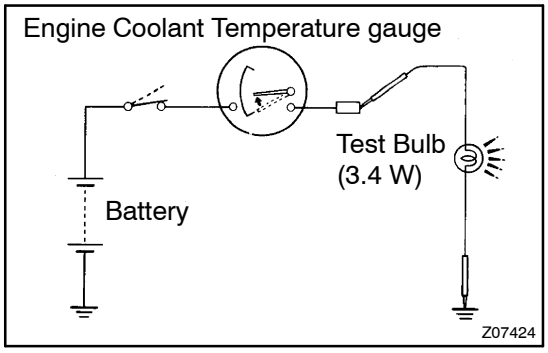
If resistance value is as specified, replace the combination meter.



8. INSPECT WATER TEMPERATURE RECEIVER GAUGE OPERATION

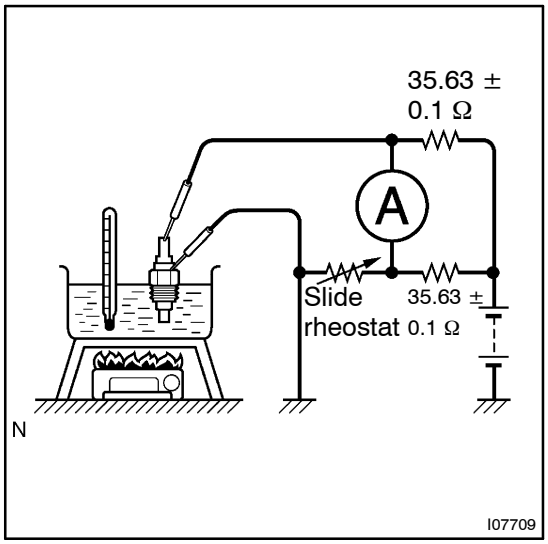
(a) Disconnect the connector from the sender gauge.

(b) Turn the ignition switch ON, check that the receiver gauge needle indicates COOL.



(c) Ground terminal of 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 toward the hot side.

If operation is not as specified, inspect the sender gauge.
Then recheck the system.

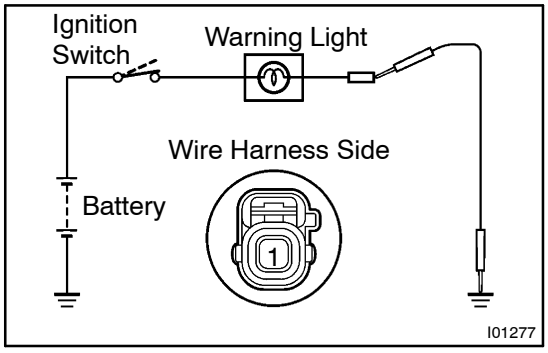


9. INSPECT WATER TEMPERATURE SENDER GAUGE RESISTANCE

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

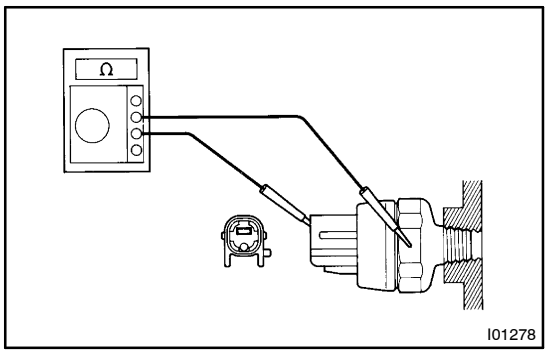
If resistance value is not as specified, replace the sensor gauge.
If resistance value is as specified, replace the combination meter.



10. INSPECT LOW OIL PRESSURE WARNING LIGHT

(a) Disconnect the connector from the warning switch and ground terminal of the wire harness side connector.
(b) Turn the ignition switch ON, check that the warning light lights up.

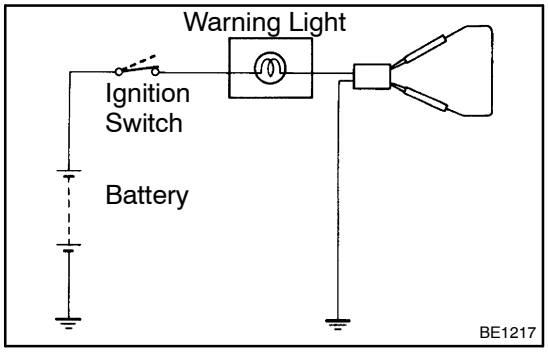
If the warning light does not light up, test the bulb or inspect wire harness.



11. INSPECT LOW OIL PRESSURE SWITCH CONTINUITY

(a) Check that continuity exists between terminal and ground with the engine stopped.
(b) Check that no continuity exists between terminal and ground with the engine running.

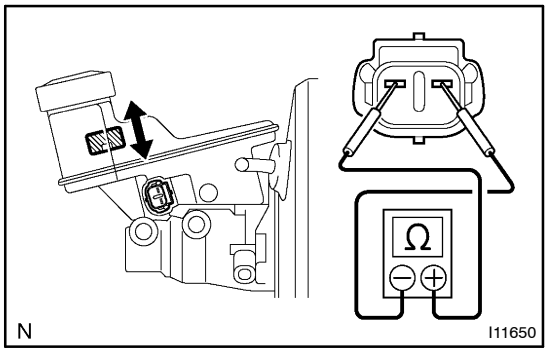
HINT:
Oil pressure should be over 24.5 kPa (0.25 kgf/cm^2, 3.55 psi)
If operation is not as specified, replace the switch.



12. INSPECT BRAKE WARNING SYSTEM LIGHT

(a) Disconnect the connector from the brake fluid warning switch.
(b) Connect terminals of the wire harness side of the level warning switch connector.
(c) Start the engine, check that the warning light lights up.

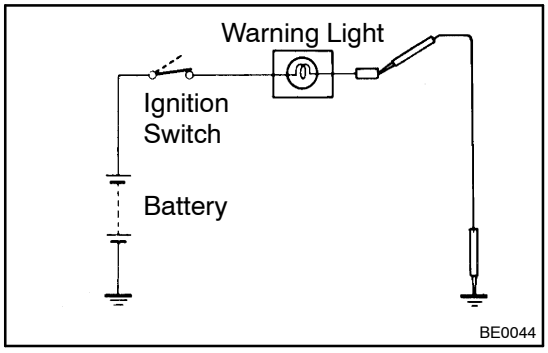
If the warning light does not light up, test the bulb or wire harness.



13. 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 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 terminals with the switch ON (float down).
(f) Pour the fluid back in the reservoir tank.

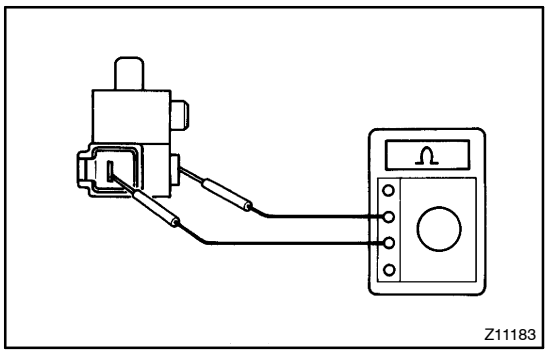
If operation is not as specified, replace the switch.



14. INSPECT PARKING BRAKE WARNING LIGHT

(a) Disconnect the connector from the parking brake switch.
(b) Ground terminal of the wire harness side connector.
(c) Start the engine, check that the warning light lights up.

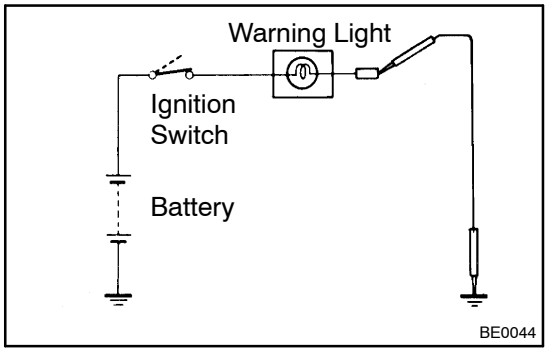
If the warning light does not light up, test the bulb or inspect wire harness.



15. INSPECT PARKING BRAKE SWITCH CONTINUITY

(a) Check that continuity exists between terminal and switch body with the switch ON (switch pin released).
(b) Check that no continuity exists between terminal and switch body with the switch OFF (switch pin pushed in).

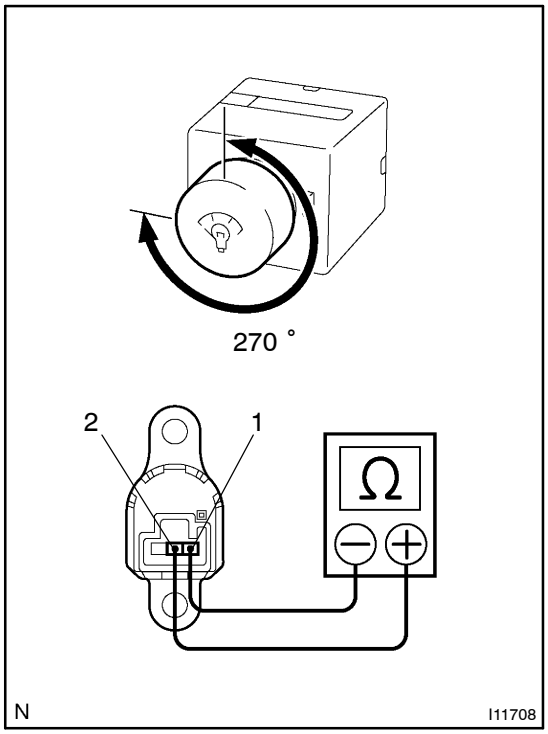
If operation is not as specified, replace the switch or inspect ground point.



16. INSPECT OPEN DOOR WARNING LIGHT

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

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



17. INSPECT LIGHT CONTROL RHEOSTAT OPERATION

Gradually, turn the rheostat knob from the bright side to dark side and check that the resistance decreases from 10 kΩ to 0 Ω between terminal 2 and 1. (Rheostat knob turned to clockwise)

If operation is not as specified, replace the rheostat light control.