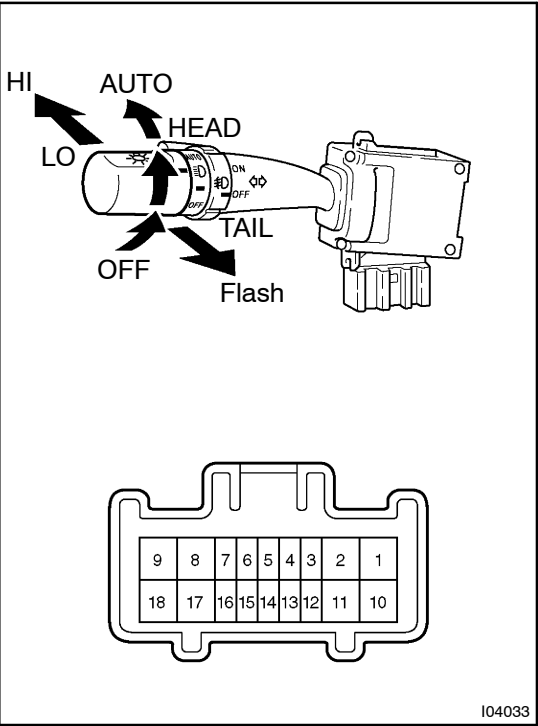


INSPECTION

1. FAIL-SAFE FUNCTION
(Light Control ECU)

When input error is inspected.	When input voltage is not within the range of operation voltage (9 to 16 V), lighting of the headlight stops. As soon as the voltage comes within the range, it lights up again. However if the input voltage becomes low after lighting up, sufficient voltage is maintained until light of bulb completely goes off.
When output error is inspected (Open or short). When light flushing is inspected.	When an error occurs in the output voltage (open or short) or flushing symptom occurs on the bulb, lighting of the headlight stops, the condition is maintained until power is turned ON again (headlight dimmer switch OFF → ON). In this case, it can not be judged whether lighting malfunction is caused by an output error or other reasons (fuse blown out, etc.). Check that there is no error in fuse and wiring (including power source) and replace the bulb in the first place, when the error still appears, replace the light control ECU.



2. Ex. Australia Models:
INSPECT LIGHT CONTROL SWITCH CONTINUITY

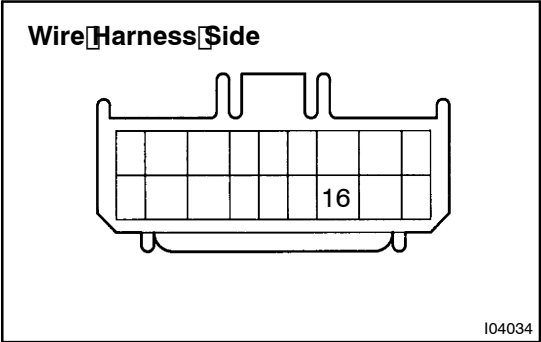
Switch position	Tester connection	Specified condition
OFF	–	No continuity
TAIL	15 – 16	Continuity
HEAD	14 – 15 – 16	Continuity
AUTO	13 – 16	Continuity

If continuity is not as specified, replace the switch.

3. Ex. Australia Models:
INSPECT HEADLIGHT DIMMER SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
Low beam	17 – 18	Continuity
High beam	8 – 17	Continuity
Flash	8 – 9 – 17	Continuity

If continuity is not as specified, replace the switch.

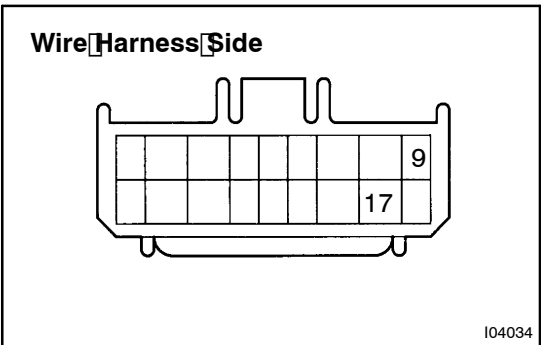


4. Ex. Australia Models:
INSPECT LIGHT CONTROL SWITCH CIRCUIT
Connector disconnected:
(See page DI-668)

Disconnect the connector from the switch and inspect the connector on the wire harness side, as shown.

Tester connection	Condition	Specified condition
16 - Ground	Constant	Continuity

If circuit is not as specified, inspect the wire harness.

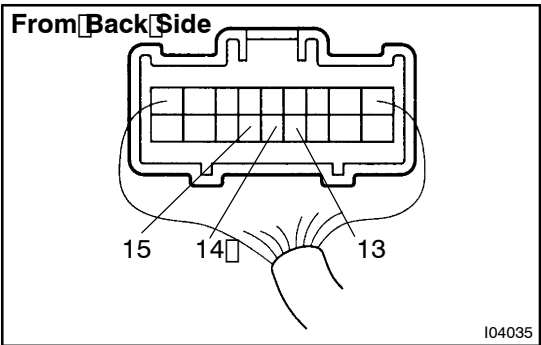


5. Ex. Australia Models:
INSPECT HEADLIGHT DIMMER SWITCH CIRCUIT
Connector disconnected:
(See page DI-668)

Disconnect the connector from the switch and inspect the connector on the wire harness side, as shown.

Tester connection	Condition	Specified condition
17 - Ground	Constant	Continuity
9 - Ground	Light control switch HEAD	Battery positive voltage

If circuit is not as specified, inspect the wire harness.

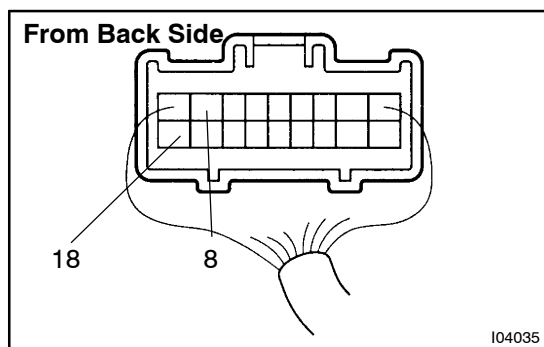


6. Ex. Australia Models:
INSPECT LIGHT CONTROL SWITCH CIRCUIT
Connector connected:

Connect the wire harness side connector to the light control and dimmer switch and inspect the connector from the back side, as shown.

Tester connection	Condition	Specified condition
13 – Ground	Light control switch OFF, TAIL or HEAD	No voltage
13 – Ground	Light control switch AUTO	Battery positive voltage
14 – Ground	Light control switch OFF or TAIL	No voltage
14 – Ground	Light control switch HEAD	Battery positive voltage
15 – Ground	Light control switch OFF	No voltage
15 – Ground	Light control switch TAIL or HEAD	Battery positive voltage

If circuit is not as specified, inspect the wire harness.



7. Ex. Australia Models:

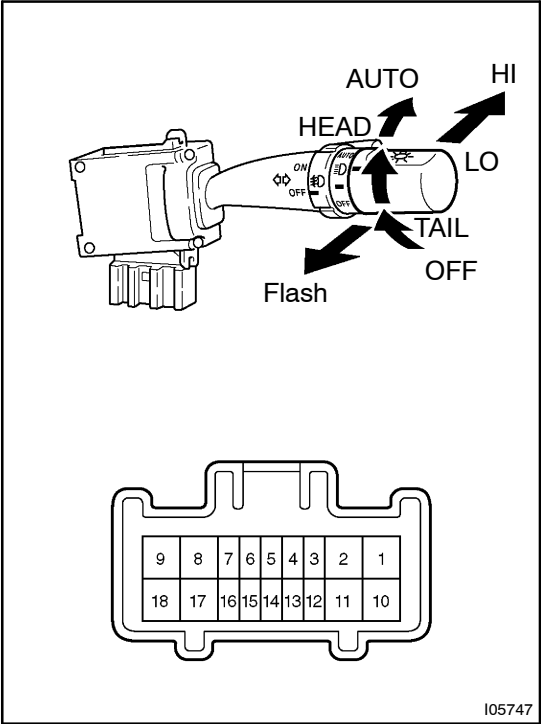
INSPECT HEADLIGHT DIMMER SWITCH CIRCUIT

Connector connected:

Connect the wire harness side connector to the light control and dimmer switch and inspect the connector from the back side, as shown.

Tester connection	Condition	Specified condition
8 – Ground	Headlight dimmer switch FLASH Light control switch HEAD and dimmer switch HIGH	No voltage
8 – Ground	Light control switch HEAD and dimmer switch LOW	Battery voltage
18 – Ground	Light control switch HEAD and dimmer switch LOW and fog light switch ON	No voltage
18 – Ground	Light control switch HEAD and dimmer switch HIGH or FLASH and fog light switch ON	Battery voltage

If circuit is not as specified, inspect the wire harness.



8. Australia Models:
INSPECT LIGHT CONTROL SWITCH CONTINUITY

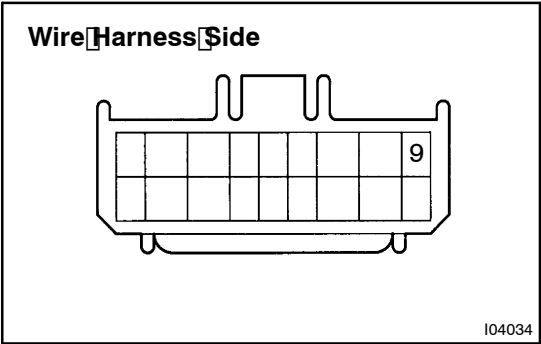
Switch position	Tester connection	Specified condition
OFF	-	No continuity
TAIL	9 - 15	Continuity
HEAD	9 - 14 - 15	Continuity
AUTO	9 - 13	Continuity

If continuity is not as specified, replace the switch.

9. Australia Models:
INSPECT HEADLIGHT DIMMER SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
Low beam	9 - 10	Continuity
High beam	2 - 9	Continuity
Flash	1 - 2 - 9	Continuity

If continuity is not as specified, replace the switch.



10. Australia Models:
INSPECT LIGHT CONTROL SWITCH CIRCUIT

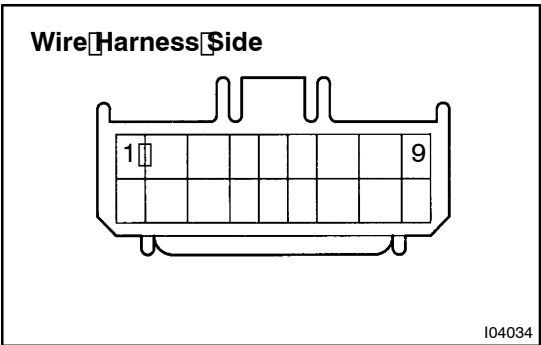
Connector disconnected:

(See page DI-668)

Disconnect the connector from the switch and inspect the connector on the wire harness side, as shown.

Tester connection	Condition	Specified condition
9 - Ground	Constant	Continuity

If circuit is not as specified, inspect the wire harness.



11. Australia Models:
INSPECT HEADLIGHT DIMMER SWITCH CIRCUIT

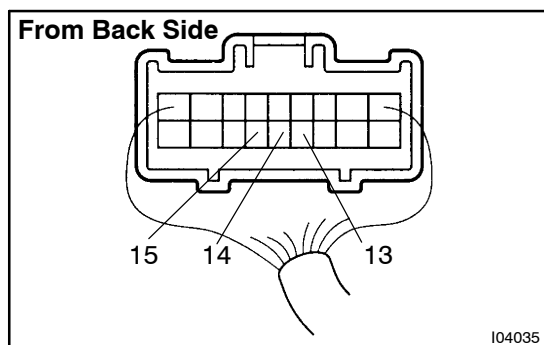
Connector disconnected:

(See page DI-668)

Disconnect the connector from the switch and inspect the connector on the wire harness side, as shown.

Tester connection	Condition	Specified condition
9 – Ground	Constant	Continuity
1 – Ground	Light control switch HEAD	Battery voltage

If circuit is not as specified, inspect the wire harness.



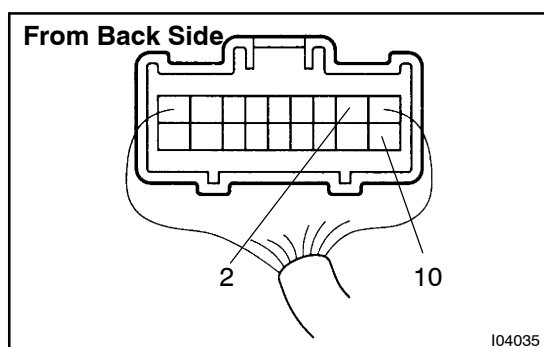
12. Australia Models: INSPECT LIGHT CONTROL SWITCH CIRCUIT

Connector connected:

Connect the wire harness side connector to the light control and dimmer switch and inspect the connector from the back side, as shown.

Tester connection	Condition	Specified condition
13 – Ground	Light control switch OFF, TAIL or HEAD	No voltage
13 – Ground	Light control switch AUTO	Battery voltage
14 – Ground	Light control switch OFF or TAIL	No voltage
14 – Ground	Light control switch HEAD	Battery voltage
15 – Ground	Light control switch OFF	No voltage
15 – Ground	Light control switch TAIL or HEAD	Battery voltage

If circuit is not as specified, inspect the wire harness.



13. Australia Models: INSPECT HEADLIGHT DIMMER SWITCH CIRCUIT

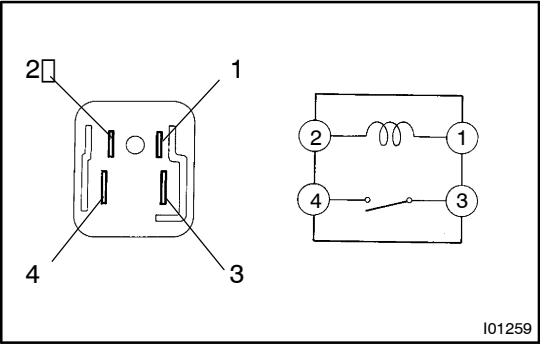
Connector connected:

Connect the wire harness side connector to the light control and dimmer switch and inspect the connector from the back side, as shown.

Tester connection	Condition	Specified condition
2 – Ground	Headlight dimmer switch FLASH Light control switch HEAD and dimmer switch HIGH	No voltage
2 – Ground	Light control switch HEAD and dimmer switch LOW	Battery positive voltage

10 - Ground	Light control switch HEAD and dimmer switch LOW and fog light switch ON	No voltage
10 - Ground	Light control switch HEAD and dimmer switch HIGH or FLASH and fog light switch ON	Battery positive voltage

If circuit is not as specified, inspect the wire harness.

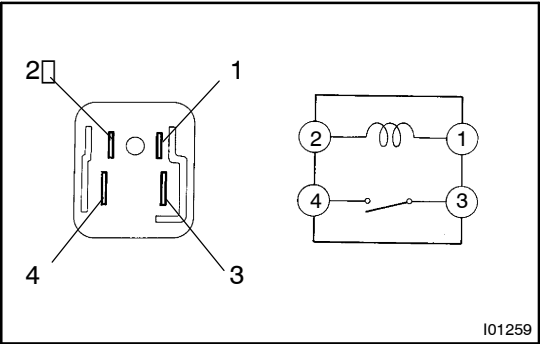


14. INSPECT HEADLIGHT CONTROL RELAY CONTINUITY

Condition	Tester connection	Specified condition
Constant	1 - 2	Continuity
Apply B+ between terminals 1 and 2.	3 - 4	Continuity

If continuity is not as specified, replace the relay.

15. INSPECT HEADLIGHT CONTROL RELAY CIRCUIT (See page DI-683 and BE-21)

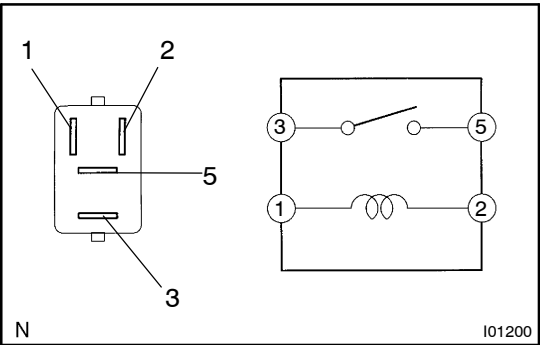


16. INSPECT HEADLIGHT DIMMER RELAY CONTINUITY

Condition	Tester connection	Specified condition
Constant	1 - 4 2 - 3	Continuity
Apply B+ between terminals 2 and 4.	1 - 3 - 3	Continuity

If continuity is not as specified, replace the relay.

17. INSPECT HEADLIGHT DIMMER RELAY CIRCUIT (See page BE-21)

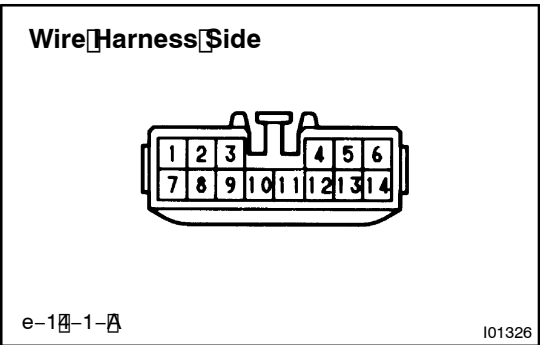


18. INSPECT TAILLIGHT CONTROL RELAY CONTINUITY

Condition	Tester connection	Specified condition
Constant	1 - 2	Continuity
Apply B+ between terminals 1 and 2.	3 - 5	Continuity

If continuity is not as specified, replace the relay.

19. INSPECT TAILLIGHT CONTROL RELAY CIRCUIT (See page DI-681 and BE-21)

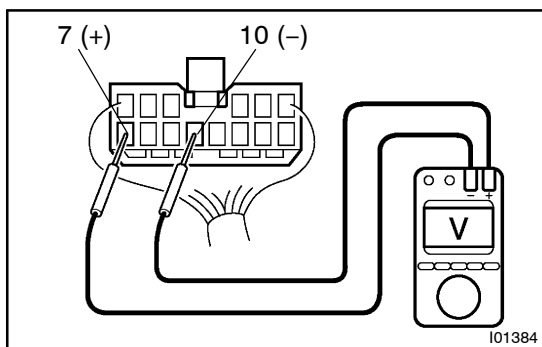


20. w/Daytime Running Light System: INSPECT DAYTIME RUNNING LIGHT MAIN RELAY CIRCUIT

Disconnect the connector from the relay and inspect the connector on the wire harness side.

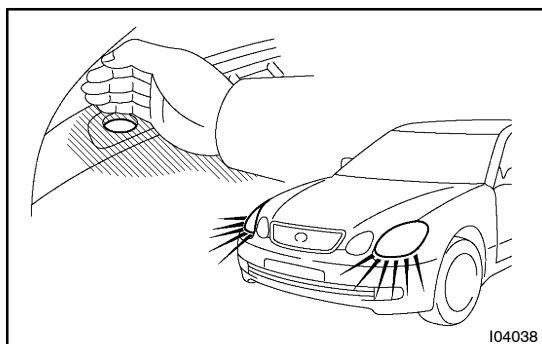
Tester connection	Condition	Specified condition
2 – Ground	Light control switch OFF	No continuity
2 – Ground	Light control switch TAIL or HEAD	Continuity
4 – Ground	Light control switch OFF or TAIL	No continuity
4 – Ground	Light control switch HEAD	Continuity
6 – Ground	Headlight dimmer switch LOW beam or HIGH beam	No continuity
6 – Ground	Headlight dimmer switch FLASH	Continuity
7 – Ground	Constant	Continuity
10 – Ground	Constant	Continuity
13 – Ground	Headlight dimmer switch LOW beam	No continuity
13 – Ground	Headlight dimmer switch HIGH beam or FLASH	Continuity
1 – Ground	Ignition switch LOCK or ACC	No voltage
1 – Ground	Ignition switch ON or START	Battery voltage
3 – Ground	Constant	Battery voltage
5 – Ground	Constant	Battery voltage
8 – Ground	Engine Stop	No voltage
8 – Ground	Engine Running	Battery voltage
9 – Ground	Constant	No voltage
9 – Ground	Ground terminal 3	Battery voltage
12 – Ground	Constant	Battery voltage
14 – Ground	Constant	No voltage
14 – Ground	Ground terminal 5	Battery voltage

If circuit is specified, try replacing the relay with a new one.
If circuit is not as specified, inspect the circuits connected to other parts.



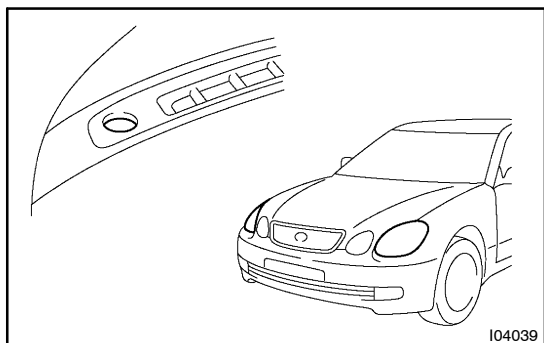
**21. w/ Daytime Running Light System:
INSPECT DAYTIME RUNNING LIGHT MAIN RELAY
OPERATION**

- Connect the positive (+) lead from the voltmeter to terminal 7 and the negative (–) lead to terminal 10.
- Check that there is battery voltage with the light control switch turned to ON.



**22. INSPECT AUTOMATIC LIGHT CONTROL
AUTO ON:**

- Turn the ignition switch ON.
- Turn the light control switch to AUTO.
- Gradually cover the top of the sensor.
- Check the accessory lights and the headlights should turn ON.



I04039

23. INSPECT AUTOMATIC LIGHT CONTROL AUTO OFF:

- (a) Gradually expose the sensor.
- (b) Check the headlights and the accessory lights should turn OFF.

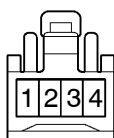
24. INSPECT LIGHT-OFF CONDITION

- (a) Turn the ignition switch ON.
- (b) Gradually cover the top of the sensor.
Lights auto ON:
- (c) Check that the lights go off under the following conditions.
 - (1) Light control switch is OFF.
 - (2) The area surrounding the sensor gets bright.
 - (3) The driver's door is opened with the ignition switch OFF.

25. INSPECT LIGHTS-ON CONDITION

- (a) Open the driver's door while the ignition switch is OFF.
- (b) Turn the light control switch to AUTO leaving the door open and cover the top of the sensor, and verify that the lights go on when the ignition switch is turned ON.

Wire Harness Side



I01254

26. INSPECT AUTOMATIC LIGHT CONTROL SENSOR CIRCUIT

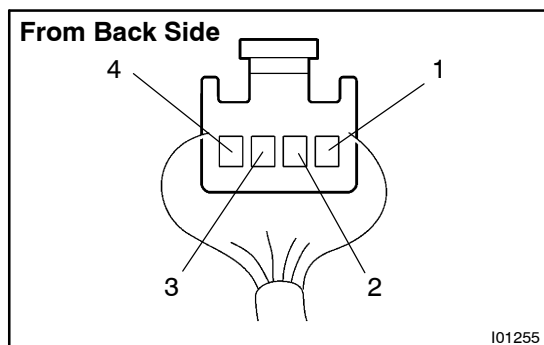
Connector disconnected:

Disconnect the connector from the sensor and inspect the connector on the wire harness side, as shown in the table.

Tester connection	Condition	Specified condition
3 – Ground	Constant	Continuity
1 – Ground	Ignition switch LOCK or ACC	No voltage
1 – Ground	Ignition switch ON	Battery voltage
4 – Ground	Ignition switch LOCK or ACC	No voltage
4 – Ground	Ignition switch ON	5.2 – 9.0 V

If circuit is as specified, perform the inspection on the following page.

If the circuit is not as specified, inspect the circuit connected to other parts.



27. INSPECT AUTOMATIC LIGHT CONTROL SENSOR CIRCUIT

Connector connected

Connect the wire harness side connector to the sensor and inspect wire harness side connector from the back side, as shown.

HINT:

- Ignition switch ON.
- Light control switch AUTO.
- Vehicle's surroundings are bright.

Tester connection	Condition	Specified condition
3 - Ground	Constant	Continuity
1 - Ground	Ignition switch LOCK or ACC	No voltage
1 - Ground	Ignition switch ON	9.5 V or more
Vehicle is under the direct sun light. (Sensor is not covered)		Taillight and Headlight are ON.

If circuit is as specified, try replacing the sensor with a new one.
If the circuit is not as specified, inspect the circuit connected to other parts.