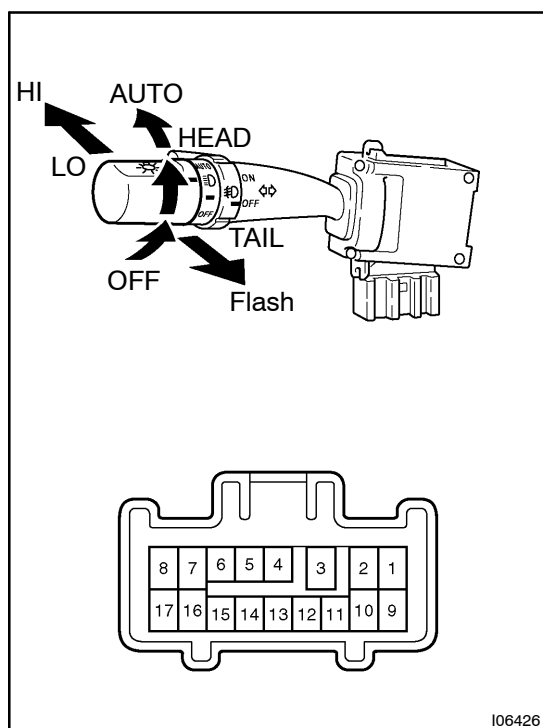


INSPECTION

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 flashing is inspected.	When an error occurs in the output voltage (open or short) or flashing 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. INSPECT LIGHT CONTROL SWITCH CONTINUITY

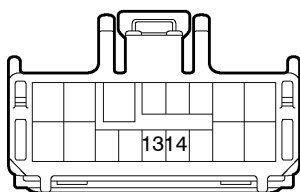
Switch position	Tester connection	Specified condition
OFF	–	No continuity
TAIL	14 – 16	Continuity
HEAD	13 – 14 – 16	Continuity
AUTO	12 – 16	Continuity

If continuity is not as specified, replace the switch.

3. INSPECT HEADLIGHT DIMMER SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
Low beam	16 – 17	Continuity
High beam	7 – 16	Continuity
Flash	7 – 8 – 16	Continuity

If continuity is not as specified, replace the switch.

Wire Harness Side

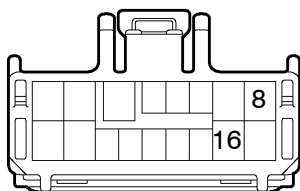
I07233

4. Connector disconnected:
INSPECT LIGHT CONTROL SWITCH CIRCUIT

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

Tester connection	Condition	Specified condition
13 – Ground	Constant	Battery positive voltage
14 – Ground	Constant	Battery positive voltage

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

Wire Harness Side

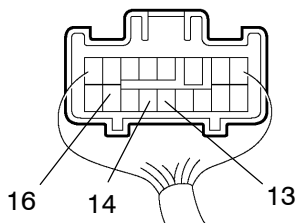
I07233

5. Connector disconnected:
INSPECT HEADLIGHT DIMMER SWITCH CIRCUIT

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
8 – Ground	Constant	Battery positive voltage

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

From Back Side

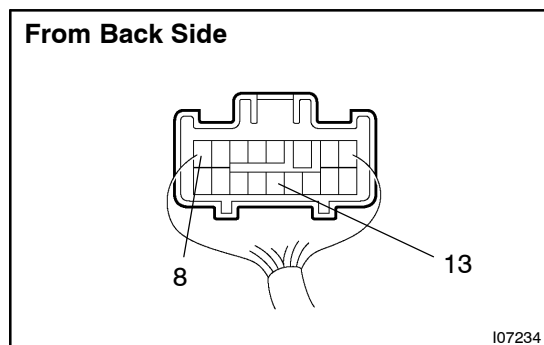
I07234

6. Connector connected:
INSPECT LIGHT CONTROL SWITCH CIRCUIT

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
16 – Ground	Constant	Continuity
13 – Ground	Light control switch OFF or TAIL	Battery positive voltage
13 – Ground	Light control switch HEAD	No voltage
14 – Ground	Light control switch OFF	Battery positive voltage
14 – Ground	Light control switch TAIL or HEAD	No voltage

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



7. Connector connected:

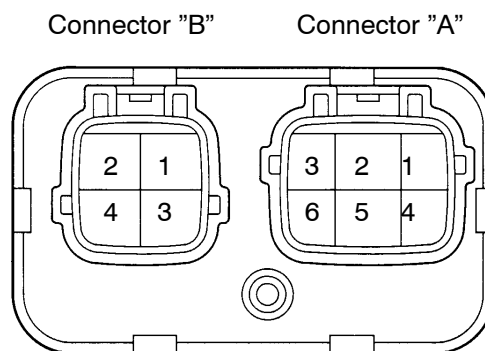
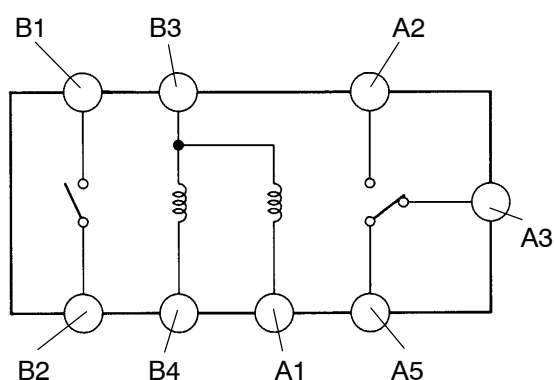
INSPECT HEADLIGHT DIMMER SWITCH CIRCUIT

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	No voltage
8 – Ground	Headlight dimmer switch LOW or HIGH	Battery positive voltage
13 – Ground	Light control switch HEAD and dimmer switch LOW and fog light switch ON	No voltage
13 – 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.

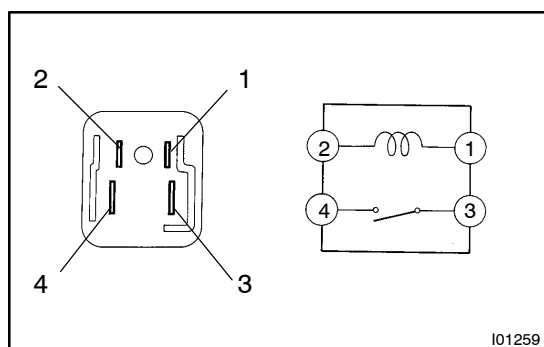
8. INSPECT DAYTIME RUNNING LIGHT NO.3 AND NO.4 RELAY CONTINUITY



I04036

Tester connection	Condition	Specified condition
A1 - B3	Constant	Continuity
A3 - A5	Constant	Continuity
B3 - B4	Constant	Continuity
A2 - A5	Apply battery positive voltage between terminals A1 and B3.	Continuity
B1 - B2	Apply battery positive voltage between terminals B3 and B4.	Continuity

If continuity is not as specified, replace the relay.



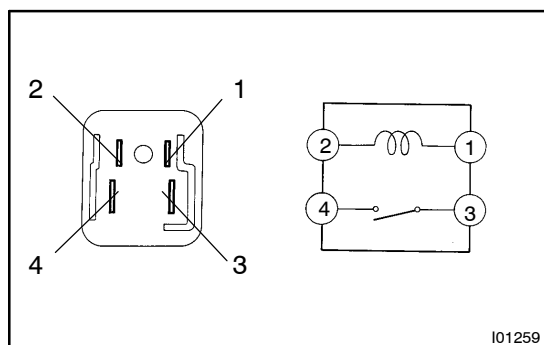
I01259

9. 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.

10. INSPECT HEADLIGHT CONTROL RELAY CIRCUIT (See page BE-17)



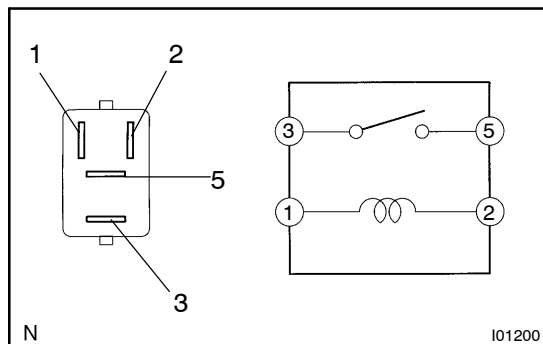
I01259

11. INSPECT HEADLIGHT DIMMER (DAYTIME RUNNING LIGHT NO.2) RELAY CONTINUITY

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

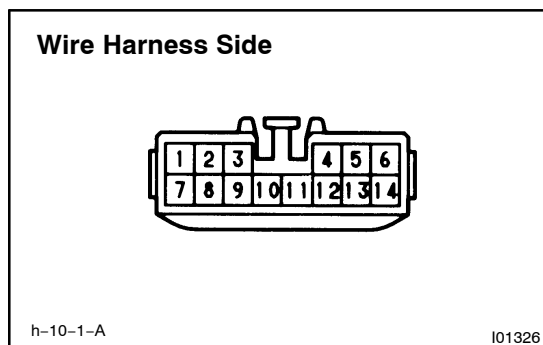
If continuity is not as specified, replace the relay.

12. INSPECT HEADLIGHT DIMMER (DAYTIME RUNNING LIGHT NO.2) RELAY CIRCUIT(See page BE-17)

**13. INSPECT TAILLIGHT CONTROL RELAY CONTINUITY**

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

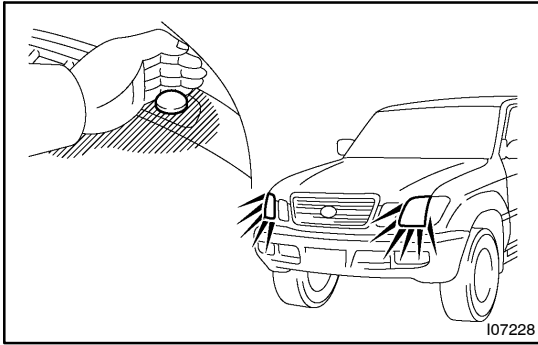
If continuity is not as specified, replace the relay.

14. INSPECT TAILLIGHT CONTROL RELAY CIRCUIT (See page BE-17)**15. INSPECT DAYTIME RUNNING LIGHT MAIN RELAY CIRCUIT**

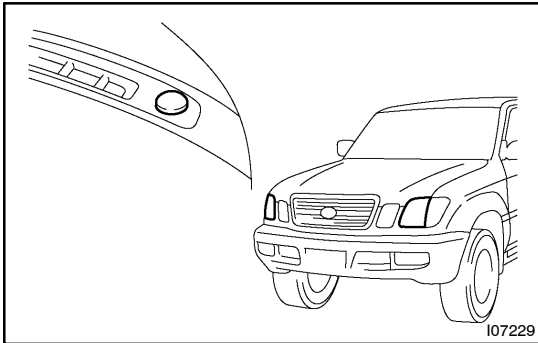
Disconnect the connector from the relay and inspect the connector on the wire harness side.

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	No continuity
4 – Ground	Light control switch TAIL or HEAD	Continuity
6 – Ground	Headlight dimmer switch FLASH	Continuity
7 – Ground	Light control switch OFF	No continuity
7 – Ground	Light control switch TAIL	Continuity
10 – Ground	Constant	Continuity
13 – Ground	Headlight dimmer switch FLASH or HI	Continuity
3 – Ground	Constant	Battery positive voltage
8 – Ground	Ignition switch OFF	No voltage
8 – Ground	Ignition switch ON	Battery positive voltage
9 – Ground	Terminal 3 ground	Battery positive voltage
11 – Ground	Rear fog light switch ON, terminal 3 ground	Battery positive voltage
12 – Ground	Constant	Battery positive voltage
14 – Ground	Terminal 5 ground	Battery positive 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.

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

- (a) Turn the ignition switch ON.
- (b) Turn the light control switch to AUTO.
- (c) Gradually cover the top of the sensor.
- (d) Check the accessory lights and the headlights should turn ON.

**17. AUTO OFF:****INSPECT AUTOMATIC LIGHT CONTROL**

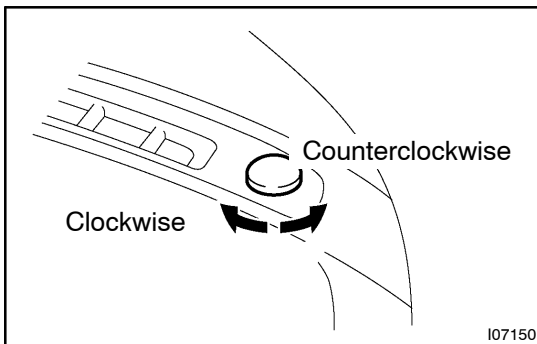
- (a) Gradually expose the sensor.
- (b) Check the headlights and the accessory lights should turn OFF.

18. INSPECT LIGHT-OFF CONDITION

- (a) Turn the ignition switch ON.
- (b) Lights auto ON:
Gradually cover the top of the sensor.
- (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.

19. INSPECT LIGHTS-ON CONDITION

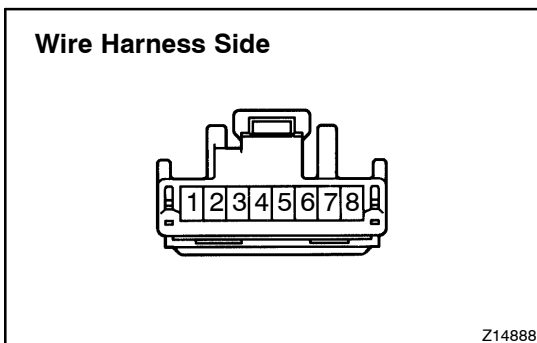
- (a) Open the driver's door while the ignition switch is OFF.
- (b) Turn the light control switch to AUTO leaving the door open and cover the top of the sensor, and verify that the lights go on when the ignition switch is turned ON.

**20. ADJUST AUTOMATIC LIGHT CONTROL SENSOR**

- (a) Adjustment of the light control is performed by turning the sensitivity knob on the sensor.
- (b) This will be determined at what light condition the automatic control will take place.

If response is too quick, turn the knob clockwise.

If response is too slow, turn the knob counterclockwise.

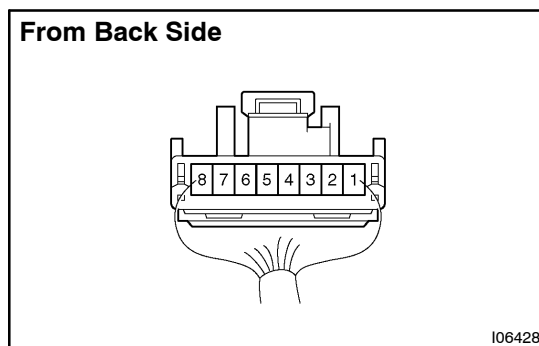
**21. Connector disconnected:****INSPECT AUTOMATIC LIGHT CONTROL SENSOR CIRCUIT**

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	Driver's door courtesy switch OFF	No continuity
3 – Ground	Driver's door courtesy switch ON	Continuity
5 – Ground	Headlight control switch HEAD	Continuity
6 – Ground	Headlight control switch AUTO	Continuity
7 – Ground	Headlight control switch TAIL	Continuity
1 – Ground	Ignition switch ON	Battery positive voltage
1 – Ground	Ignition switch LOCK or ACC	No voltage
2 – Ground	Constant	Battery positive voltage

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.



22. Connector connected: INSPECT AUTOMATIC LIGHT CONTROL SENSOR CIRCUIT

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
1 – Ground	Ignition switch ON	10 V or more
1 – Ground	Ignition switch OFF	1 V or less
3 – Ground	Door courtesy switch OFF	9 V or more
3 – Ground	Door courtesy switch ON	1 V or less
5 – Ground	Headlight dimmer switch FLASH	0.3 V or less
5 – Ground	Vehicle is under the direct sun light (Sensor is not covered.)	1.8 V or less
7 – Ground	Vehicle is under the direct sun light (Sensor is not covered.)	1.5 V or less

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.