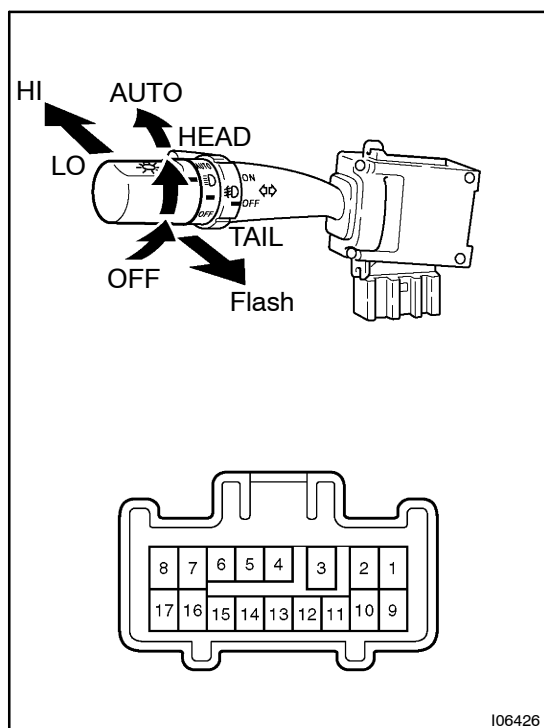


INSPECTION

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. LHD Models :

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

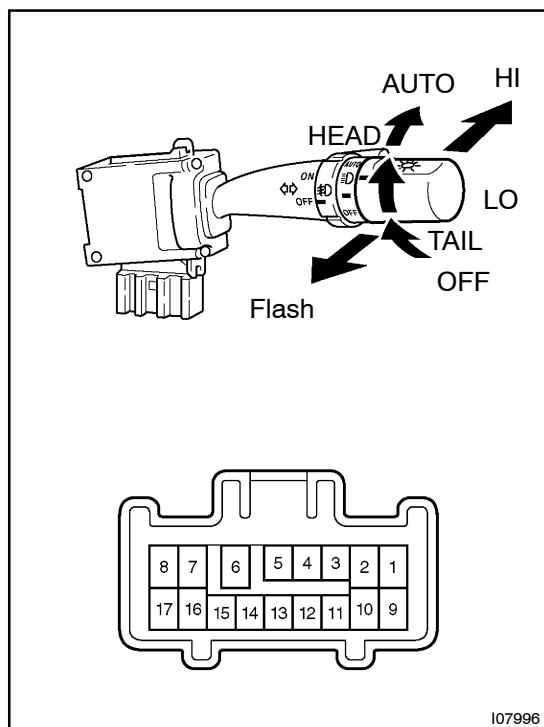
If continuity is not as specified, replace the switch.

3. LHD Models :

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.

**4. RHD Models :****INSPECT LIGHT CONTROL SWITCH CONTINUITY**

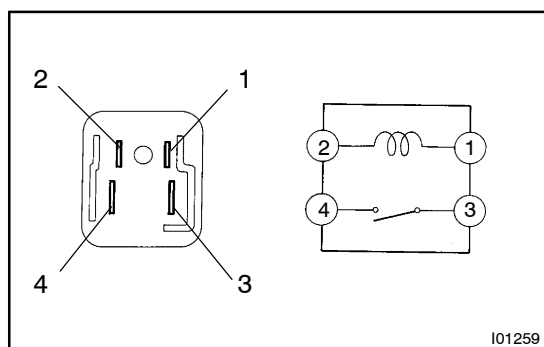
Switch position	Tester connection	Specified condition
OFF	-	No continuity
TAIL	9 - 15	Continuity
HEAD	9 - 14 - 15	Continuity
AUTO	9 - 13	Continuity

If continuity is not as specified, replace the switch.

5. RHD Models :**INSPECT HEADLIGHT DIMMER SWITCH CONTINUITY**

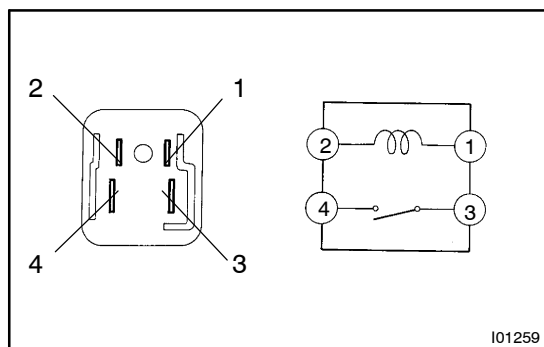
Switch position	Tester connection	Specified condition
Low beam	9 - 10	Continuity
High beam	2 - 9	Continuity
Flash	1 - 2 - 9	Continuity

If continuity is not as specified, replace the switch.

**6. INSPECT HEADLIGHT CONTROL RELAY CONTINUITY**

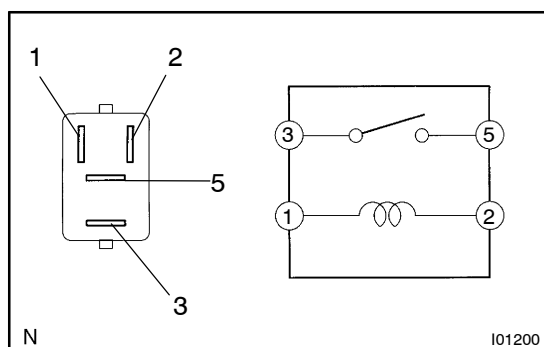
Condition	Tester connection	Specified condition
Constant	1 - 2	Continuity
Apply B+ between terminals 1 and 2.	3 - 4	Continuity

If continuity is not as specified, replace the relay.

**7. 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

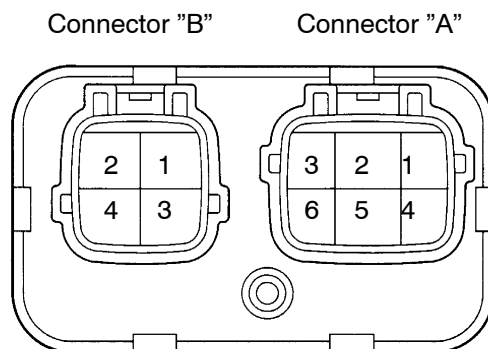
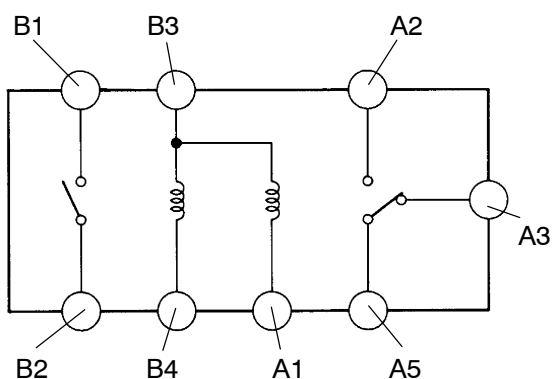
If continuity is not as specified, replace the relay.

**8. 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.

9. w/ Daytime running light System :**INSPECT DAYTIME RUNNING LIGHT NO.3 AND NO.4 RELAY CONTINUITY**

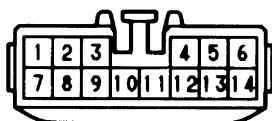


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Tester connection	Condition	Specified condition
A1 - B3	Constant	Continuity
A3 - A5	Constant	Continuity
B3 - B4	Constant	Continuity
A2 - A5	Apply battery positive voltage between terminals A1 and B3.	Continuity
B1 - B2	Apply battery positive voltage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

If continuity is not as specified, replace the relay.

Wire Harness Side



h-10-1-A

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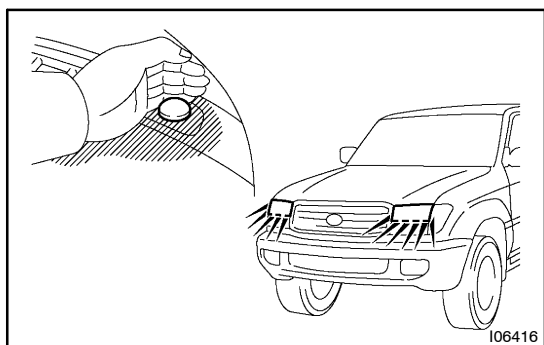
10. w/ Daytime running light System : INSPECT DAYTIME RUNNING LIGHT MAIN RELAY CIRCUIT

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	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

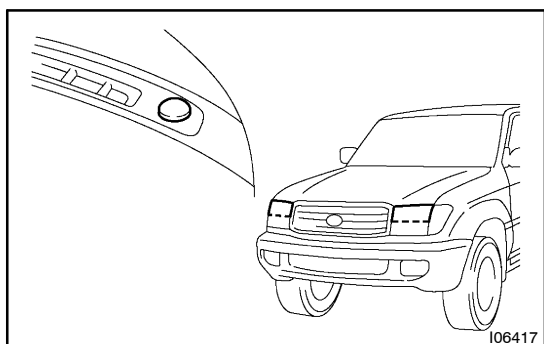
13 – Ground	Headlight dimmer switch FLASH or HI	Continuity
3 – Ground	Constant	Battery voltage
8 – Ground	Ignition switch OFF	No voltage
8 – Ground	Ignition switch ON	Battery voltage
9 – Ground	Terminal 3 ground	Battery voltage
11 – Ground	Rear fog light switch ON, terminal 3 ground	Battery voltage
12 – Ground	Constant	Battery voltage
14 – Ground	Terminal 5 ground	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.



11. 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.



12. INSPECT AUTOMATIC LIGHT CONTROL AUTO OFF:

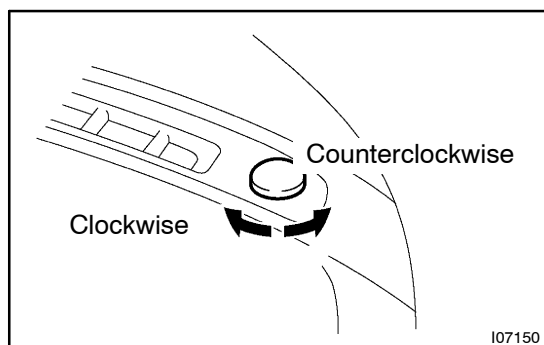
- Gradually expose the sensor.
- Check the headlights and the accessory lights should turn OFF.

13. INSPECT LIGHT-OFF CONDITION

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

14. INSPECT LIGHTS-ON CONDITION

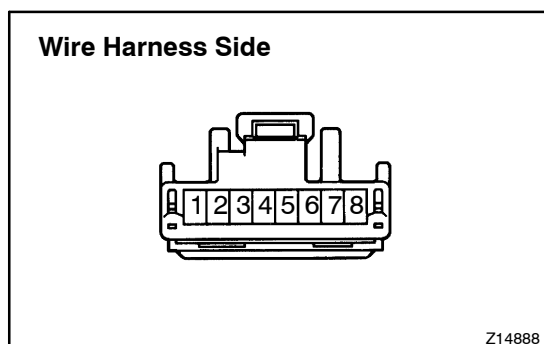
- (a) Open the driver's door while the ignition switch is OFF.
- (b) Turn the light control switch to AUTO leaving the door open and cover the top of the sensor, and verify that the lights go on when the ignition switch is turned ON.

**15. 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.

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

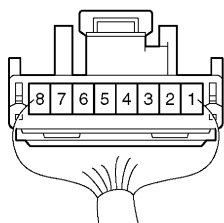
Disconnect the connector from the sensor and inspect the connector on the wire harness side, as shown in the table.

Tester connection	Condition	Specified condition
3 – Ground	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.

From Back Side



I06428

17. 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
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.