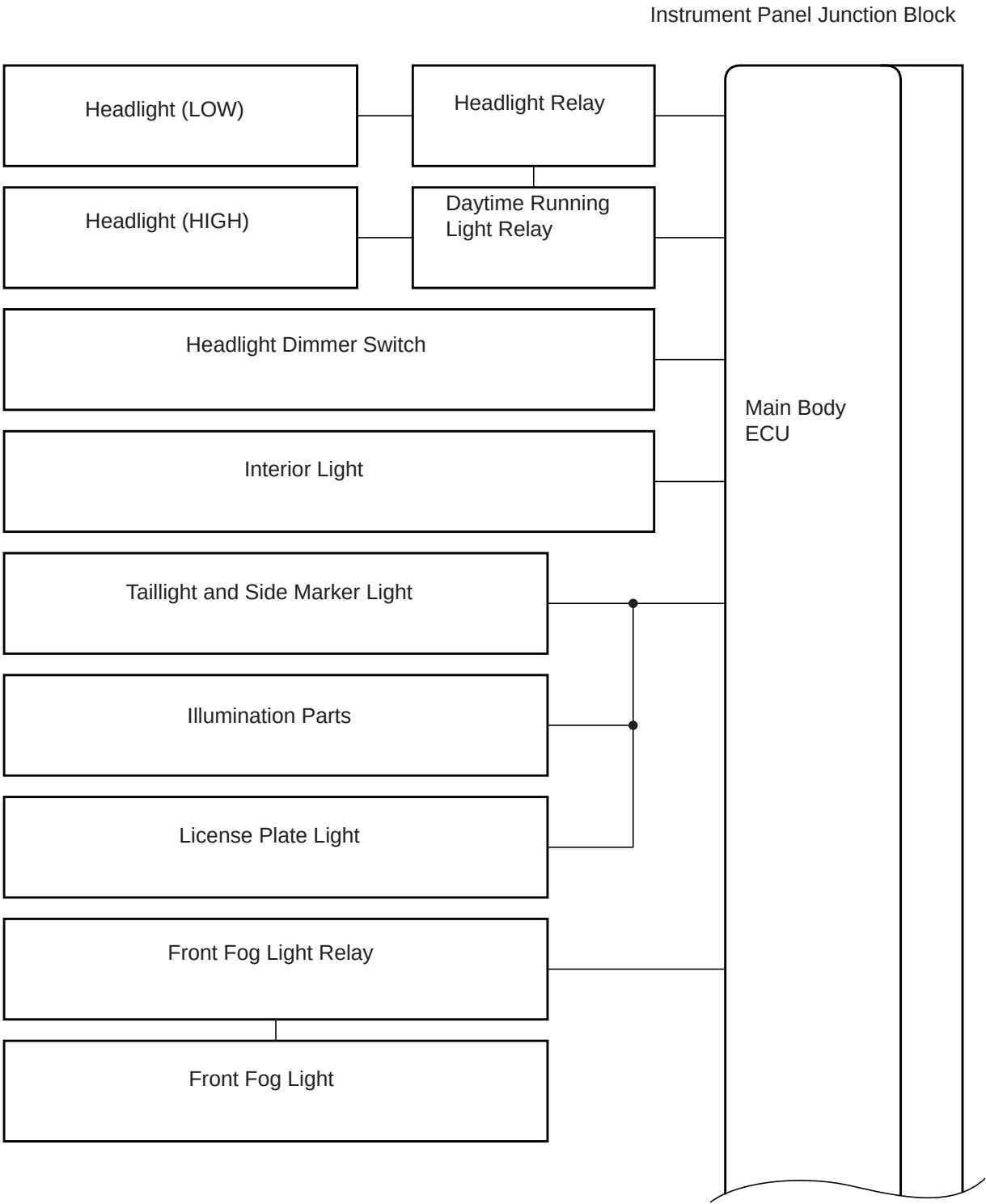
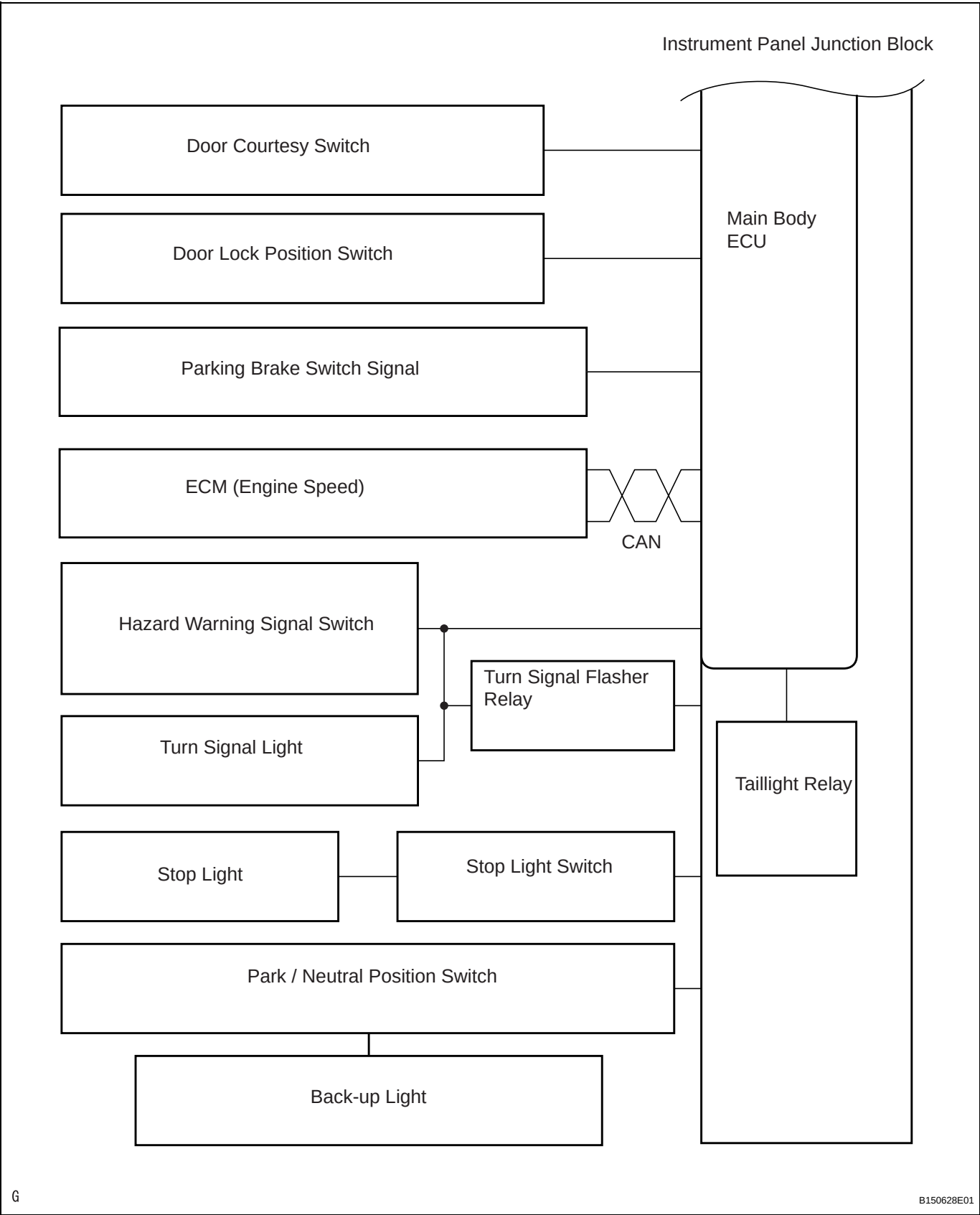


SYSTEM DIAGRAM





INSTALLATION

1. **INSTALL TRANSPONDER KEY AMPLIFIER** (See page [SR-18](#))
2. **INSTALL STEERING COLUMN COVER** (See page [SR-20](#))
3. **INSTALL STEERING WHEEL ASSEMBLY** (See page [SR-21](#))
4. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
5. **INSPECT STEERING WHEEL CENTER POINT**
6. **INSTALL STEERING PAD ASSEMBLY** (See page [RS-336](#))
7. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
8. **INSPECT STEERING PAD ASSEMBLY** (See page [RS-337](#))
9. **CHECK SRS WARNING LIGHT**
 - (a) Check the SRS warning light (see page [RS-337](#)).

SYSTEM DESCRIPTION

1. LIGHTING SYSTEM

- (a) Illumination control system (Illuminated entry system):

When the doors are unlocked by a key or transmitter operation, or when a door is opened or closed, the illuminated entry system turns on the room light, map light, foot light and ignition key cylinder light*1 or transponder key amplifier*2.

- (1) The main body ECU receives the following signals (A).

- Door courtesy switch signal
- Door detection switch signal
- Ignition switch signal

- (2) The main body ECU controls the following signal based on the signals listed in A.

- Illumination operation signal

- (3) The main body ECU controls the on/off and fade-in/fade-out operation of the following parts.

- Room light
- Map light
- Foot light
- Ignition key cylinder light*1 or transponder key amplifier*2

HINT:

*1: w/o Engine immobiliser system

*2: w/ Engine immobiliser system

- (b) Battery saver system:

When the ignition switch is turned off and any of the doors is open continuously for 20 minutes, the main body ECU turns the illumination operation signal off. As a result, the room light, map light, foot light and ignition key cylinder lights*1 or transponder key amplifier*2 turn off.

HINT:

*1: w/o Engine immobiliser system

*2: w/ Engine immobiliser system

- (1) The main body ECU receives the following signals (B).

- Door courtesy switch signal
- Ignition switch signal

- (2) The main body ECU controls the following signal based on the signals listed in B (C).

- Illumination operation signal

- (3) The main body ECU controls the illumination period of the following parts based on the signals listed in C.

- Room light
- Map light
- Foot light
- Ignition key cylinder light*1 or transponder key amplifier*2

HINT:

*1: w/o Engine immobiliser system

*2: w/ Engine immobiliser system

(c) Manual light control system:

This system functions when lights such as the headlights and taillights are illuminated by manual operation of the light control switch.

(1) The main body ECU receives the following signals (D).

- Light control switch signal
- Headlight dimmer switch signal
- Front fog light switch signal

(2) The main body ECU controls the following signals based on the signals listed in D (E).

- Headlight relay operation signal
- Taillight relay operation signal
- Daytime running light No. 2 relay operation signal
- Daytime running light No. 3 relay operation signal
- Daytime running light No. 4 relay operation signal
- Front fog light relay operation signal

(3) The main body ECU controls the on/off operation of the following parts based on the signals listed in E.

- Headlight (LOW)
- Headlight (HIGH)
- Side marker light (front and rear)
- Front fog light

(d) Light auto turn off system:

When the headlights and taillights are illuminated by the operation of the light control switch, if the ignition switch is turned OFF, this system continues illuminating the headlights and taillights for approximately 30 seconds, and then turns off the lights. However, when all the doors are locked manually, using the door lock button, using the key or pressing LOCK on the transmitter turns the headlights and taillights off immediately.

(1) The main body ECU receives the following signals (F).

- Door courtesy switch signal
- Ignition switch signal

(2) The main body ECU controls the following signals based on the signals listed in F (G).

- Headlight relay operation signal
- Taillight relay operation signal
- Daytime running light No. 2 relay operation signal
- Daytime running light No. 3 relay operation signal
- Daytime running light No. 4 relay operation signal
- Front fog light relay operation signal

- (3) The main body ECU controls the illumination period of the following parts based on the signals listed in G.
 - Headlight (LOW)
 - Headlight (HIGH)
 - Side marker light (front and rear)
 - Front fog light
- (e) Daytime running light system:

This system is directly connected to the high-beam headlights and is designed to automatically activate the daytime running lights in order to increase the visibility of the vehicle.

 - (1) The main body ECU receives the following (H).
 - Ignition switch signal
 - Engine speed
 - Parking brake switch signal
 - Light control switch signal
 - (2) The main body ECU controls the following signal based on the signals listed in H (I).
 - Daytime running light No. 2 relay operation signal
 - (3) The main body ECU controls the on/off operation of the following part based on the signal listed in I.
 - Headlight (HIGH)

HOW TO PROCEED WITH TROUBLESHOOTING

HINT:

- Use these procedures to troubleshoot the lighting system.
- *: Use the intelligent tester.

1 VEHICLE BROUGHT TO WORKSHOP

NEXT

2 INSPECT BATTERY VOLTAGE

Standard voltage:

11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3 REFER TO PROBLEM SYMPTOMS TABLE

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B

Go to step 5

A

4 OVERALL ANALYSIS AND TROUBLESHOOTING*

(a) DATA LIST / ACTIVE TEST (See page [LI-22](#))

(b) Terminals of ECU (See page [LI-19](#))

NEXT

5 ADJUST, REPAIR OR REPLACE

NEXT

6 CONFIRMATION TEST

NEXT

END

OPERATION CHECK

1. ILLUMINATED ENTRY SYSTEM OPERATION CHECK

- (a) The illuminated entry system controls the following lights:

- Ignition key cylinder light*1 or transponder key amplifier*2
- Foot light
- Map light and room light

HINT:

*1: w/o Engine immobiliser system

*2: w/ Engine immobiliser system

- (b) Check that the lights come on when unlocking any of the doors that are closed and locked with the ignition switch OFF. Then check that the lights fade out under the following conditions:
- (1) Leave the doors unlocked for 15 seconds.
 - (2) Turn the ignition switch ACC or ON.
 - (3) Lock all the doors.
- (c) Check that the lights stay on for at least 15 seconds after opening any of the doors before fading out. Then check that the lights fade out 15 seconds after closing all the doors.
- (d) Check that the lights stay lit after turning the ignition switch OFF with all the doors closed and the ignition switch in the ACC or ON position. Then check that the lights fade out under the following conditions:
- (1) Leave the doors unlocked for 15 seconds.
 - (2) Turn the ignition switch ACC or ON.
 - (3) Lock all the doors.
- (e) Check that the lights stay on for at least 15 seconds after opening any of the doors. Then check that the lights fade out 15 seconds after closing all the doors.
- (f) Check that the lights come on when opening any of the doors and fade out when closing and locking all the doors or turning the ignition switch to the ACC or ON position.

2. FOOT LIGHT OPERATION CHECK

- (a) Check that the lights come on when unlocking any of the doors that are closed and locked with the ignition switch OFF. Then check that the lights fade out under the following conditions:
- (1) Leave the doors unlocked for 15 seconds.
 - (2) Lock all the closed doors and turn the ignition switch OFF.
- (b) Check that the lights stay on for at least 15 seconds under the following conditions before going off.
- (1) Turn the ignition switch to the ON position, and move the shift lever to the P position.
 - (2) Open any of the doors.
- (c) Check that the lights dim before going off when turning the ignition switch ON and shifting the shift lever into any position other than P.



- (d) Check the conditions below before the lights go off.
 - (1) The lights dim when shifting the shift lever into a position other than P and closing all the doors with the ignition switch ON.
 - (2) The lights come on for 15 seconds and fade out when shifting the shift lever into the P position and closing all the doors with the ignition switch OFF.
- (e) Check that the lights come on after opening any of the doors.
- (f) Check that the lights fade out 15 seconds after closing all the doors, or locking all the doors.
- (g) Check that the lights come on gradually with the ignition switch ON and the shift lever in the P position.
- (h) Check that the lights dim when shifting the shift lever from P into another position with all the doors closed.
- (i) Check that the lights stay dimmed with the ignition switch ON and the shift lever in a position other than P.

3. BATTERY SAVER OPERATION CHECK

- (a) Turn the ignition switch OFF and close all the doors.
- (b) Open any door to turn the room light on, and leave it open. Check that the light goes off after about 20 minutes.
- (c) After the room light goes off, close the driver's door.
- (d) Open any door to turn the room light on, and then open another door. Check that the room light goes off within 20 minutes after opening the doors.
- (e) Close all the doors. Open any door to turn the room light on. Check that the room light goes off within 20 minutes.

4. LIGHT AUTO TURN OFF OPERATION CHECK

- (a) Turn the ignition switch ON, and turn the light control switch to the TAIL or HEAD position.
- (b) Turn the ignition switch OFF and open the driver's door, and check that the headlights go off after about 30 seconds.
- (c) Turn the ignition switch to the ON position, and turn the light control switch to the TAIL or HEAD position.
- (d) Turn the ignition switch OFF and open the driver's door. Before the headlight goes off after about 30 seconds, lock all the doors and press the LOCK switch on the wireless transmitter. Check that the headlights go off immediately.

5. DAYTIME RUNNING LIGHT OPERATION CHECK

- (a) Check that the headlights come on when the light control switch is off with the engine running and the parking brake released. Then check that the lights go off under the following conditions:
 - (1) Turn the light control switch to the TAIL or HEAD position.

- (2) Turn the ignition switch OFF. Check that the headlights go off immediately.

CUSTOMIZE PARAMETERS

HINT:

The following items can be customized.

NOTICE:

- When the customer requests a change in a function, first make sure that the function can be customized.
- Be sure to make a note of the current settings before customizing.
- When troubleshooting a function, first make sure that the function is set to the default setting.

Illuminated entry

Display (Item)	Default	Contents	Setting
LIGHTING TIME (Lighting Time)	15 seconds	Changes illumination duration after door closure. (It will quickly fade out in case of turning ignition switch ON.)	7.5/15/30 (seconds)
I/L ON /ACC OFF (Room light illuminates when ignition switch turned OFF)	ON	Illuminates light when ignition switch turned to ACC. (Room light illuminated when interior light switch in DOOR position)	ON/OFF
I/L ON / UNLOCK (Room light illuminates when door key unlocked.)	ON	Function to light up room light when unlocking with door key cylinder. (Room light illuminated when interior light switch in DOOR position)	ON/OFF
LIGHT CONTROL	ON	Function to light up foot light when ignition switch is ON and shift position is not P.	ON/OFF

Light control (USA)

Display (Item)	Default	Contents	Setting
DRL FUNCTION	ON	Daytime running light function ON or OFF.	ON/OFF

HINT:

Sensitivity adjustments are difficult to confirm. Check by driving the customer's vehicle.

PROBLEM SYMPTOMS TABLE

(2005/11-2006/01)

HINT:

Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Headlight and taillight system

Symptom	Suspected area	See page
"Low beam" does not come on (One side).	1. HEAD LL fuse, HEAD RL fuse	LI-31
	2. Bulb	LI-31
	3. Light control switch circuit	LI-62
	4. Headlight relay circuit	LI-28
	5. Instrument panel junction block	LI-19
"Low beam" does not come on (Both sides).	1. HEAD LL fuse, HEAD RL fuse	LI-31
	2. Bulb	LI-31
	3. Light control switch circuit	LI-62
	4. Headlight relay circuit	LI-28
	5. Instrument panel junction block	LI-19
"High beam" does not come on (One side).	1. HEAD LH fuse, HEAD RH fuse	LI-41
	2. HEAD RL fuse	LI-31
	3. Bulb	LI-42
	4. Light control switch circuit	LI-62
	5. Headlight (Hi-beam) circuit	LI-37
	6. Instrument panel junction block	LI-19
"High beam" does not come on (Both sides).	1. HEAD LH fuse, HEAD RH fuse	LI-41
	2. HEAD RL fuse	LI-31
	3. Bulb	LI-42
	4. Light control switch circuit	LI-62
	5. Headlight (Hi-beam) circuit	LI-37
	6. Instrument panel junction block	LI-19
"Low beam" and "High beam" do not come on (One side).	1. HEAD LL fuse, HEAD RL fuse	LI-31
	2. HEAD LH fuse, HEAD RH fuse	LI-41
	3. Bulb (high)	LI-42
	4. Bulb (low)	LI-31
	5. Light control switch circuit	LI-62
	6. Headlight relay circuit	LI-28
	7. Headlight (Hi-beam) circuit	LI-37
	8. Instrument panel junction block	LI-19
"Low beam" and "High beam" do not come on (Both sides).	1. HEAD LL fuse, HEAD RL fuse	LI-31
	2. HEAD LH fuse, HEAD RH fuse	LI-41
	3. Bulb (high)	LI-42
	4. Bulb (low)	LI-31
	5. Light control switch circuit	LI-62
	6. Headlight relay circuit	LI-28
	7. Headlight (Hi-beam) circuit	LI-37
	8. Instrument panel junction block	LI-19
"Flash" does not come on (Low beam and Hi-beam are normal).	1. Light control switch circuit	LI-62
	2. Instrument panel junction block	LI-19

Symptom	Suspected area	See page
Headlight is dark.	1. Bulb	-
	2. Wire harness	-
Taillight does not come on (All).	1. TAIL fuse	LI-87
	2. Light control switch circuit	LI-62
	3. Taillight relay circuit	LI-83
	4. Instrument panel junction block	LI-19
Only one front side marker light comes on.	1. Bulb	LI-90
	2. Wire harness	LI-90
Only one taillight comes on.	1. Rear combination light	LI-107
	2. Wire harness	LI-91
Only one rear side marker light comes on.	1. Bulb	LI-92
	2. Wire harness	LI-92
Daytime running light system does not operate.	1. Light control switch circuit	LI-62
	2. CAN communication line	CA-58
	3. Parking brake switch circuit	PB-14
	4. Daytime running light relay circuit	LI-33
	5. Instrument panel junction block	LI-19

Light auto turn off system

Symptom	Suspected area	See page
Light auto turn off system does not operate.	1. Light control switch circuit	LI-62
	2. Ignition switch	ST-18
	3. Door courtesy switch circuit	LI-66
	4. Instrument panel junction block	LI-19

Fog light system

Symptom	Suspected area	See page
Front fog light does not come on with light control switch in TAIL or HEAD position.	1. FF FOG fuse	LI-48
	2. Front fog light relay	LI-49
	3. Light control switch circuit	LI-62
	4. Front fog light circuit	LI-45
	5. Instrument panel junction block	LI-19
Only one front fog light does not come on.	1. Bulb	LI-48
	2. Wire harness	LI-45

Turn signal and hazard warning system

Symptom	Suspected area	See page
"Hazard" and "Turn" do not come on.	1. HAZ fuse	LI-59
	2. ECU-IG2 fuse	LI-53
	3. Ignition switch	ST-18
	4. Turn signal flasher relay	LI-145
	5. Wire harness	-
Hazard warning light does not come on (Turn is normal).	1. Hazard warning switch	LI-60
	2. Wire harness	LI-56
Turn signal does not come on (Hazard is normal).	1. Headlight dimmer switch (turn signal switch)	LI-54
	2. Wire harness	LI-50
Turn signal does not come on in one direction.	1. Headlight dimmer switch (turn signal switch)	LI-54
	2. Wire harness	LI-50
Only one bulb does not come on.	1. Bulb	LI-56
	2. Wire harness	LI-50

Stop light system

Symptom	Suspected area	See page
Stop light does not operate (All).	1. STOP fuse	LI-26
	2. BRK relay	LI-151
	3. Stop light switch	BR-13
	4. Wire harness	LI-24
Only one stop light does not operate.	1. Rear combination light	LI-107
	2. Wire harness	LI-24

Illuminated entry system

Symptom	Suspected area	See page
Illuminated entry of multiplex network body ECU control does not operate (All).	1. Ignition switch	ST-18
	2. Door lock position circuit	LI-70
	3. Door courtesy switch circuit	LI-66
	4. Illumination circuit	LI-75
	5. Instrument panel junction block	LI-19

Foot light system

Symptom	Suspected area	See page
Step light of body ECU control does not operate.	1. Ignition switch	ST-18
	2. Door lock position switch	LI-70
	3. Door courtesy switch circuit	LI-66
	4. Footwell light circuit	LI-73
	5. Instrument panel junction block	LI-19

Others

Symptom	Suspected area	See page
Vanity light does not operate.	1. Bulb	LI-127
	2. Vanity light switch	LI-128
	3. Wire harness	-
Back-up light does not come on (All).	1. GAUGE1 fuse	LI-61
	2. Park / neutral position switch	AX-108
	3. Wire harness	LI-59
Back door courtesy light does not come on.	1. Bulb	LI-122
	2. DOME fuse	-
	3. Back door courtesy switch	LI-143
	4. Wire harness	-
Center console illumination does not come on.	1. Center console light	LI-130
	2. Wire harness	-

PROBLEM SYMPTOMS TABLE

(2006/01-)

HINT:

Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Headlight and taillight system

Symptom	Suspected Area	See page
"Low beam" does not comes on (One side).	1. HEAD LL fuse, HEAD RL fuse	LI-31
	2. Bulb	LI-31
	3. Light control switch circuit	LI-62
	4. Headlight relay circuit	LI-28
	5. Instrument panel junction block	LI-19
"Low beam" does not come on (Both sides).	1. HEAD LL fuse, HEAD RL fuse	LI-31
	2. Bulb	LI-31
	3. Light control switch circuit	LI-62
	4. Headlight relay circuit	LI-28
	5. Instrument panel junction block	LI-19
"High beam" does not come on (One side).	1. HEAD LH fuse, HEAD RH fuse	LI-41
	2. HEAD RL fuse	LI-31
	3. Bulb	LI-42
	4. Light control switch circuit	LI-62
	5. Headlight (Hi-beam) circuit	LI-37
	6. Instrument panel junction block	LI-19
"High beam" does not come on (Both sides).	1. HEAD LH fuse, HEAD RH fuse	LI-41
	2. HEAD RL fuse	LI-31
	3. Bulb	LI-42
	4. Light control switch circuit	LI-62
	5. Headlight (Hi-beam) circuit	LI-37
	6. Instrument panel junction block	LI-19
"Low beam" and "High beam" do not come on (One side).	1. HEAD LL fuse, HEAD RL fuse	LI-31
	2. HEAD LH fuse, HEAD RH fuse	LI-41
	3. Bulb (high)	LI-42
	4. Bulb (low)	LI-31
	5. Light control switch circuit	LI-62
	6. Headlight relay circuit	LI-28
	7. Headlight (Hi-beam) circuit	LI-37
	8. Instrument panel junction block	LI-19
"Low beam" and "High beam" do not come on (Both sides).	1. HEAD LL fuse, HEAD RL fuse	LI-31
	2. HEAD LH fuse, HEAD RH fuse	LI-41
	3. Bulb (high)	LI-42
	4. Bulb (low)	LI-31
	5. Light control switch circuit	LI-62
	6. Headlight relay circuit	LI-28
	7. Headlight (Hi-beam) circuit	LI-37
	8. Instrument panel junction block	LI-19
"Flash" does not come on (Low beam and Hi-beam are normal).	1. Light control switch circuit	LI-62
	2. Instrument panel junction block	LI-19

Symptom	Suspected Area	See page
Headlight is dark.	1. Bulb	-
	2. Wire harness	-
Taillight does not come on (All).	1. TAIL fuse	LI-87
	2. Light control switch circuit	LI-62
	3. Taillight relay circuit	LI-83
	4. Instrument panel junction block	LI-19
Only one front side marker light comes on.	1. Bulb	LI-90
	2. Wire harness	LI-90
Only one taillight comes on.	1. Rear combination light	LI-107
	2. Wire harness	LI-91
Only one rear side marker light comes on.	1. Bulb	LI-92
	2. Wire harness	LI-92
Daytime running light system does not operate.	1. Light control switch circuit	LI-62
	2. CAN communication line	CA-60
	3. Parking brake switch circuit	PB-14
	4. Daytime running light relay circuit	LI-33
	5. Instrument panel junction block	LI-19

Light auto turn off system

Symptom	Suspected Area	See page
Light auto turn off system does not operate.	1. Light control switch circuit	LI-62
	2. Ignition switch	ST-18
	3. Door courtesy switch circuit	LI-66
	4. Instrument panel junction block	LI-19

Fog light system

Symptom	Suspected Area	See page
Front fog light does not come on with light control switch in TAIL or HEAD position.	1. FF FOG fuse	LI-48
	2. Front fog light relay	LI-49
	3. Light control switch circuit	LI-62
	4. Front fog light circuit	LI-45
	5. Instrument panel junction block	LI-19
Only one front fog light does not come on.	1. Bulb	LI-48
	2. Wire harness	LI-45

Turn signal and hazard warning system

Symptom	Suspected Area	See page
"Hazard" and "Turn" do not come on.	1. HAZ fuse	LI-59
	2. ECU-IG2 fuse	LI-53
	3. Ignition switch	ST-18
	4. Turn signal flasher relay	LI-145
	5. Wire harness	-
Hazard warning light does not come on (Turn is normal).	1. Hazard warning switch	LI-60
	2. Wire harness	LI-56
Turn signal does not come on (Hazard is normal).	1. Headlight dimmer switch (turn signal switch)	LI-54
	2. Wire harness	LI-50
Turn signal does not come on in one direction.	1. Headlight dimmer switch (turn signal switch)	LI-54
	2. Wire harness	LI-50
Only one bulb does not come on.	1. Bulb	LI-56
	2. Wire harness	LI-50

Stop light system

Symptom	Suspected Area	See page
Stop light does not operate (All).	1. STOP fuse	LI-26
	2. BRK relay	LI-151
	3. Stop light switch	BR-13
	4. Wire harness	LI-24
Only one stop light does not operate.	1. Rear combination light	LI-107
	2. Wire harness	LI-24

Illuminated entry system

Symptom	Suspected Area	See page
Illuminated entry of multiplex network body ECU control does not operate (All).	1. Ignition switch	ST-18
	2. Door lock position circuit	LI-70
	3. Door courtesy switch circuit	LI-66
	4. Illumination circuit	LI-75
	5. Instrument panel junction block	LI-19

Foot light system

Symptom	Suspected Area	See page
Step light of body ECU control does not operate.	1. Ignition switch	ST-18
	2. Door lock position switch	LI-70
	3. Door courtesy switch circuit	LI-66
	4. Footwell light circuit	LI-73
	5. Instrument panel junction block	LI-19

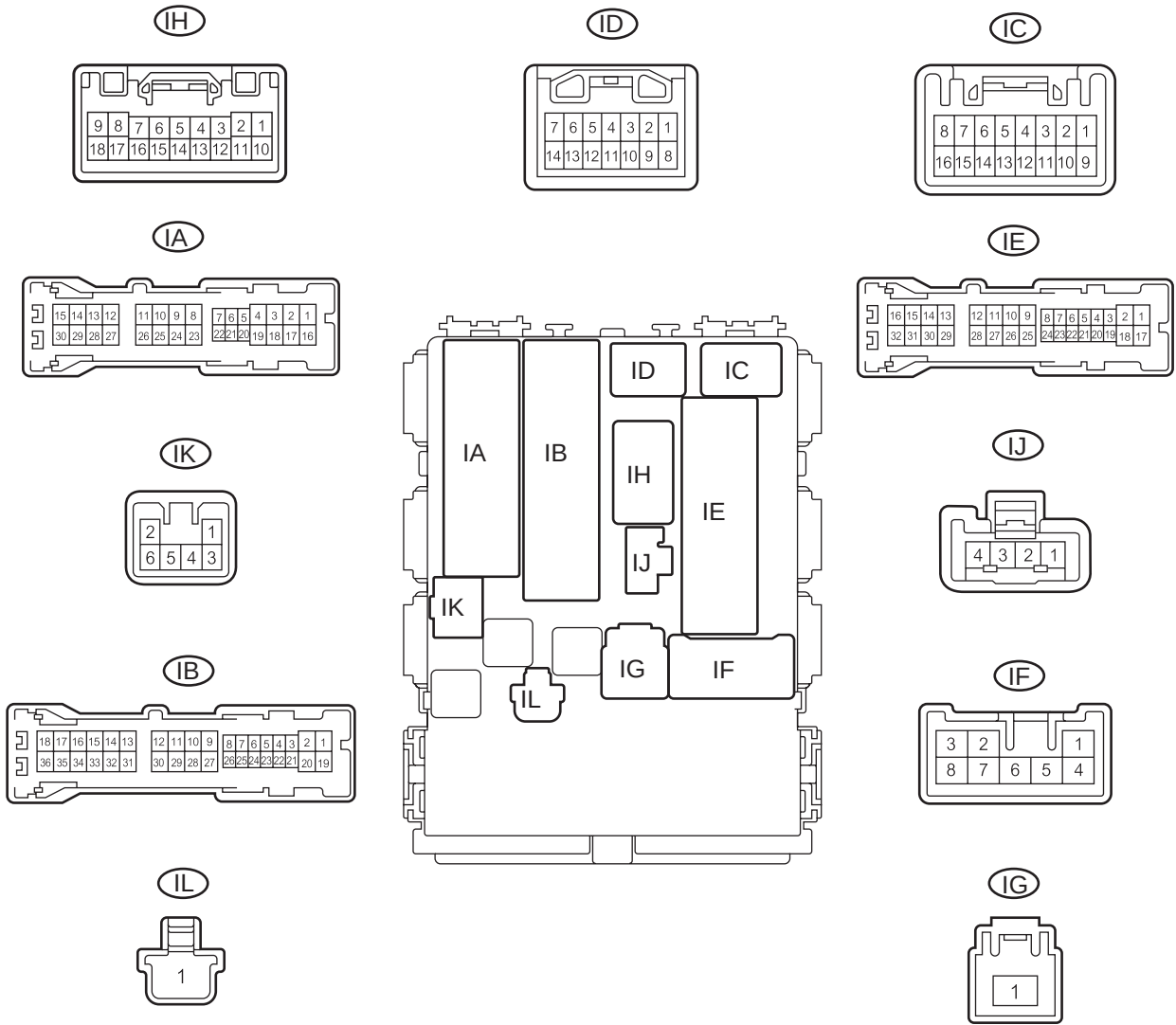
Others

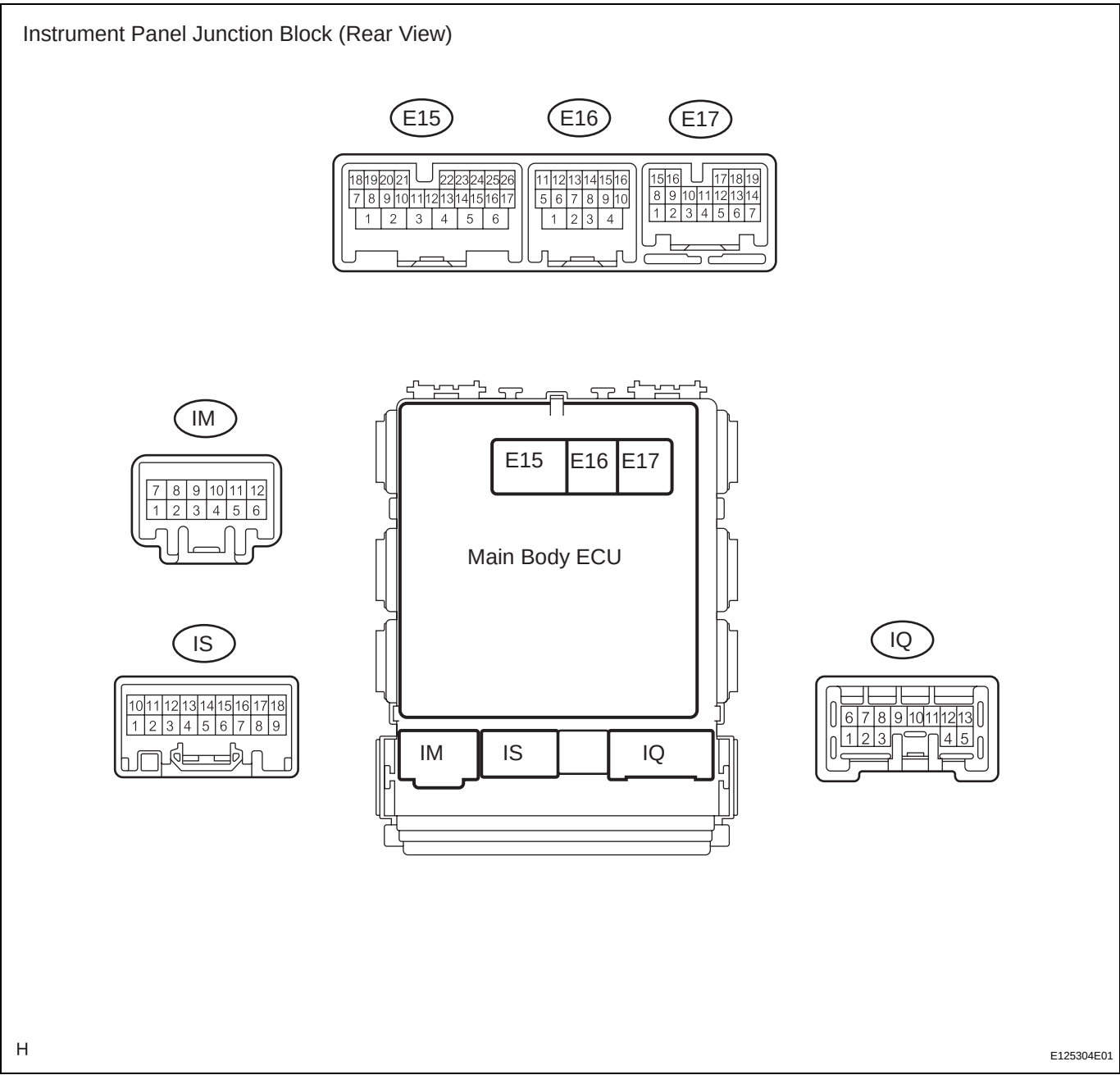
Symptom	Suspected Area	See page
Vanity light does not operate.	1. Bulb	LI-127
	2. Vanity light switch	LI-128
	3. Wire harness	-
Back-up light does not come on (All).	1. GAUGE1 fuse	LI-61
	2. Park / neutral position switch	AX-108
	3. Wire harness	LI-59
Back door courtesy light does not come on.	1. Bulb	LI-122
	2. DOME fuse	-
	3. Back door courtesy switch	LI-143
	4. Wire harness	-
Center console illumination does not come on.	1. Center console light	LI-130
	2. Wire harness	-

TERMINALS OF ECU

1. CHECK INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

Instrument Panel Junction Block (Front View)





(a) Measure the voltage of the connectors.

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
HRLY (E15-20) - GND1 (IE-17)	BR - W-B	Headlight Relay (HEAD signal)	Light control switch is OFF or TAIL	10 to 14 V
HRLY (E15-20) - GND1 (IE-17)	BR - W-B	Headlight Relay (HEAD signal)	Light control switch is HEAD	Below 1 V
DIM (E16-3) - GND1 (IE-17)	LG - W-B	Daytime running light Relay (High beam signal)	Light control switch is HEAD	Below 1 V
DIM (E16-3) - GND1 (IE-17)	LG - W-B	Daytime running light Relay (High beam signal)	Light control switch is HEAD	10 to 14 V
TAIL (E15-21) - GND1 (IE-17)	W - W-B	Taillight relay (TAIL signal)	Light control switch is OFF	Below 1 V
TAIL (E15-21) - GND1 (IE-17)	W - W-B	Taillight relay (TAIL signal)	Light control switch is TAIL	10 to 14 V

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
ILE (IK-2) - GND1 (IE-17)	W - W-B	Illumination signal	- Room light switch position is DOOR - Door closed	10 to 14 V
ILE (IK-2) - GND1 (IE-17)	W - W-B	Illumination signal	- Room light switch position is DOOR - Door open	Below 1 V
FSPT (E15-2) - GND1 (IE-17)	V - W-B	Foot light illumination (Illumination signal)	Foot light illumination OFF	10 to 14 V
FSPT (E15-2) - GND1 (IE-17)	V - W-B	Foot light illumination (Illumination signal)	Foot light illumination ON	Below 1 V
HU (IJ-4) - GND1 (IE-17)	O - W-B	Headlight dimmer switch (HIGH signal)	Light control switch is HEAD Headlight dimmer switch is LOW	10 to 14 V
HU (IJ-4) - GND1 (IE-17)	O - W-B	Headlight dimmer switch (HIGH signal)	Light control switch is HEAD Headlight dimmer switch is HIGH	Below 1 V
LCTY (E15-8) - GND1 (IE-17)	SB - W-B	Courtesy switch (Rear left door circuit)	Rear left door is closed	Below 1 V
LCTY (E15-8) - GND1 (IE-17)	SB - W-B	Courtesy switch (Rear left door circuit)	Rear left door is open	10 to 14 V
FFGO (E17-17) - GND1 (IE-17)	G - W-B	Front fog relay (Front fog circuit)	Front fog light is OFF	10 to 14 V
FFGO (E17-17) - GND1 (IE-17)	G - W-B	Front fog relay (Front fog circuit)	Front fog light is ON	Below 1 V
DCTY (IA-21) - GND1 (IE-17)	W - W-B	Courtesy switch (Front left door circuit)	Front left door is open	Below 1 V
DCTY (IA-21) - GND1 (IE-17)	W - W-B	Courtesy switch (Front left door circuit)	Front left door is closed	10 to 14 V
RRCY (ID-7) - GND1 (IE-17)	LG - W-B	Courtesy switch (Rear right door circuit)	Rear right door is open	Below 1 V
RRCY (ID-7) - GND1 (IE-17)	LG - W-B	Courtesy switch (Rear right door circuit)	Rear right door is closed	10 to 14 V
HF (E15-22) - GND1 (IE-17)	R - W-B	Headlight dimmer switch (FLASH signal)	Headlight dimmer switch is OFF	10 to 14 V
HF (E15-22) - GND1 (IE-17)	R - W-B	Headlight dimmer switch (FLASH signal)	Headlight dimmer switch is FLASH	Below 1 V
FFOG (E17-13) - GND1 (IE-17)	GR - W-B	Front fog light switch (Front fog light signal)	Light control switch is TAIL Fog light switch is OFF	10 to 14 V
FFOG (E17-13) - GND1 (IE-17)	GR - W-B	Front fog light switch (Front fog light signal)	Light control switch is TAIL Fog light switch is ON	Below 1 V
PCTY (IC-14) - GND1 (IE-17)	BR - W-B	Courtesy switch (Front right door circuit)	Front right door is open	Below 1 V
PCTY (IC-14) - GND1 (IE-17)	BR - W-B	Courtesy switch (Front right door circuit)	Front right door is closed	10 to 14 V
BCTY (IA-7) - GND1 (IE-17)	LG - W-B	Courtesy switch (Back door)	Back door is open	Below 1 V
BCTY (IA-7) - GND1 (IE-17)	LG - W-B	Courtesy switch (Back door)	Back door is closed	10 to 14 V
LSWP (E15-10) - GND1 (IE-17)	Y - W-B	Door lock position switch (Front right door)	Front right door is in unlock position	10 to 14 V
LSWP (E15-10) - GND1 (IE-17)	Y - W-B	Door lock position switch (Front right door)	Front right door is in lock position	Below 1 V
LSWD (E15-25) - GND1 (IE-17)	Y - W-B	Door lock position switch (Front left door)	Front left door is in unlock position	10 to 14 V
LSWD (E15-25) - GND1 (IE-17)	Y - W-B	Door lock position switch (Front left door)	Front left door is in lock position	Below 1 V

If the result is not as specified, the junction block (main body ECU) may have a malfunction.

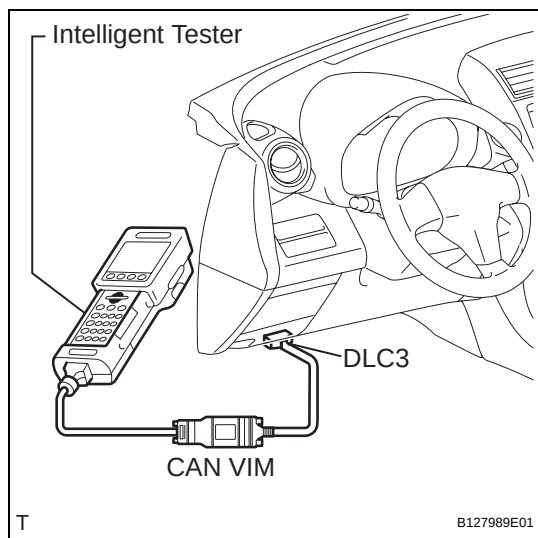
DATA LIST / ACTIVE TEST

1. READ DATA LIST

HINT:

Using the intelligent tester's DATA LIST allows switch, sensor, actuator and other item values to be read without removing any parts. Reading the DATA LIST early in troubleshooting is one way to save time.

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch ON.
- Read the DATA LIST according to the display on the tester.



Main body ECU

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
ACC SW	ACC switch signal / ON or OFF	ON: Ignition switch is in ACC, ON or START position OFF: Ignition switch is in OFF position	-
IG SW	IG switch signal / ON or OFF	ON: Ignition switch is in ON or START position OFF: Ignition switch is in OFF or ACC position	-
D DOR CTY SW	Driver's door courtesy switch signal / ON or OFF	ON: Driver's door is open OFF: Driver's door is closed	-
D LOCK POS SW	Driver's door lock position switch signal / ON or OFF	ON: Door lock is in unlock position OFF: Door lock is in lock position	-
P DOR CYT SW	Passenger's door courtesy switch signal / ON or OFF	ON: Front passenger's door is open OFF: Front passenger's door is closed	-
P LOCK POS SW	Front passenger's door lock position switch signal / ON or OFF	ON: Front passenger's door lock is in unlock position OFF: Front passenger's door lock is in lock position	-
RR DOR CTY SW	Rear door RH courtesy switch signal / ON or OFF	ON: Right rear door is open OFF: Right rear door is closed	-
DIMMER SW	Headlight dimmer switch signal / ON or OFF	ON: Headlight dimmer switch is in HI or FLASH position OFF: Headlight dimmer switch is in LO position	-
HIGH FLASHER SW	Headlight dimmer switch signal / ON or OFF	ON: Headlight dimmer switch is in FLASH position OFF: Headlight dimmer switch is in except FLASH position	-
F FOG LIGHT SW	Front fog light switch signal / ON or OFF	ON: Front fog light switch is ON position OFF: Front fog light switch is OFF position	-
HEAD LIGHT SW	Headlight control switch signal / ON or OFF	ON: Light control switch is in HEAD position OFF: Light control switch is in except HEAD position	-

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
TAIL LIGHT SW	Taillight switch signal / ON or OFF	ON: Light control switch is in TAIL or HEAD position OFF: Light control switch is in OFF position	-
RL DOR CTY SW	Rear door LH courtesy switch signal / ON or OFF	ON: Left rear door is open OFF Left rear door is closed	-
BK DOR CTY SW	Back door courtesy switch signal / ON or OFF	ON: Back door is open OFF: Back door is closed	-

2. PERFORM ACTIVE TEST

HINT:

Performing the intelligent tester's ACTIVE TEST allows relay, VSV, actuator and other items to be operated without removing any parts. Performing the ACTIVE TEST early in troubleshooting is one way to save time. The DATA LIST can be displayed during the ACTIVE TEST.

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch ON.
- Perform the ACTIVE TEST by following the directions on the tester screen.

Main body ECU

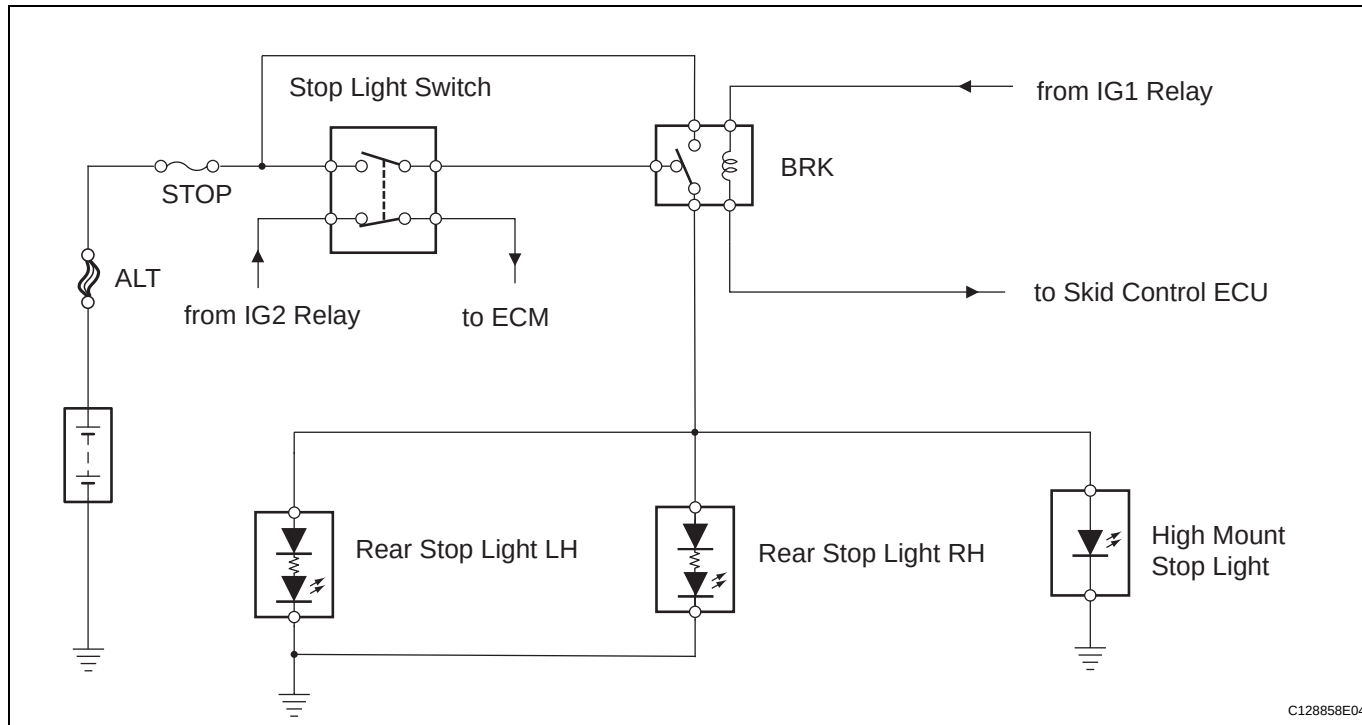
Item	Test Details	Diagnostic Note
HAZARD	Turn hazard light flasher relay ON / OFF	-
F FOG LIGHT RLY	Turn front fog light relay ON / OFF	-
HEAD LIGHT	Turn headlight relay ON / OFF	-
HEAD LIGHT (HI)	Turn headlight dimmer relay (Headlight dimmer switch HI position) ON / OFF	-
TAIL LIGHT	Turn taillight relay ON / OFF	-
ILLUMI OUTPUT	Test Details: Turn interior light and key illumination ON / OFF Vehicle Condition: Interior light switch is in DOOR position and all doors are closed	-
STEP LIGHT	Foot light illumination ON / OFF	-

Stop Light Switch Circuit

DESCRIPTION

When the stop light switch is turned on, current flows to the stop lights to illuminate them.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT FUSE (STOP)

- Remove the STOP fuse from the instrument panel junction block.
- Measure the resistance of the fuse.

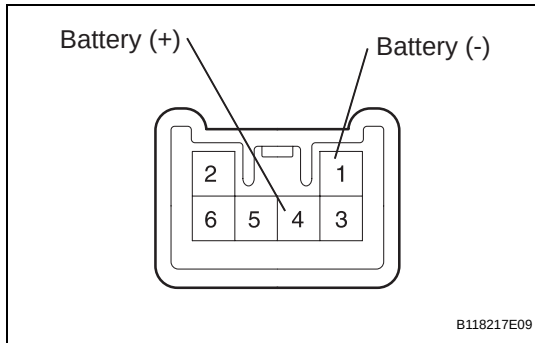
Standard resistance:

Below 1 Ω

NG

REPLACE FUSE

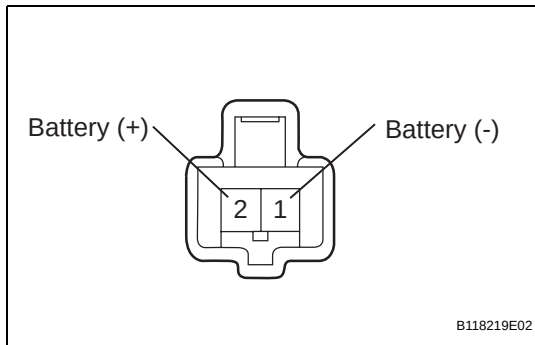
OK

2 INSPECT STOP LIGHT (REAR COMBINATION LIGHT)

- (a) Remove the rear combination light.
 (b) Connect the positive (+) lead from the battery to terminal 4 and the negative (-) lead to terminal 1, then check that the light comes on.

OK:

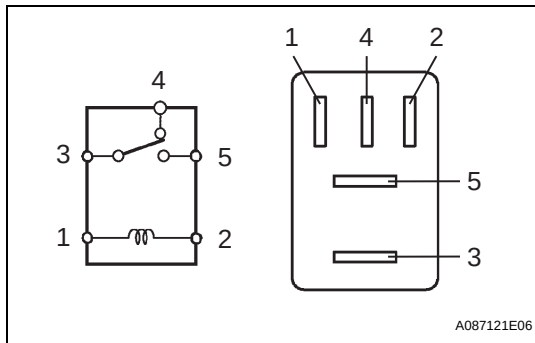
Light comes on.

NG**REPLACE REAR COMBINATION LIGHT****OK****3 INSPECT REAR STOP LIGHT (HIGH MOUNT STOP LIGHT)**

- (a) Remove the high mount stop light assembly.
 (b) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the light comes on.

OK:

Light comes on

NG**REPLACE HIGH MOUNT STOP LIGHT ASSEMBLY****OK****4 INSPECT BRK RELAY**

- (a) Remove the BRK relay from the engine room No. 1 relay block.
 (b) Measure the resistance of the relay.

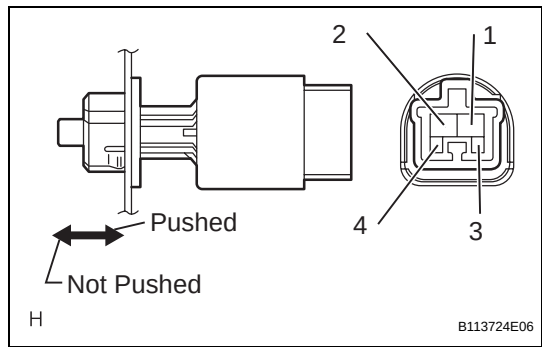
Standard resistance

Tester Connection	Specified Condition
3 - 4	Below 1 Ω
3 - 4	10 k Ω or higher (Battery voltage applied to terminals 1 and 2)
3 - 5	10 k Ω or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

NG**REPLACE BRK RELAY****OK**

5

INSPECT STOP LIGHT SWITCH



- (a) Remove the stop light switch.
(b) Measure the resistance of the switch.

Standard resistance

Tester Connection	Condition	Specified Condition
1 - 2	Switch pin not pushed	Below 1 Ω
3 - 4	Switch pin pushed	10 kΩ or higher
1 - 2	Switch pin pushed	10 kΩ or higher
3 - 4	Switch pin not pushed	Below 1 Ω

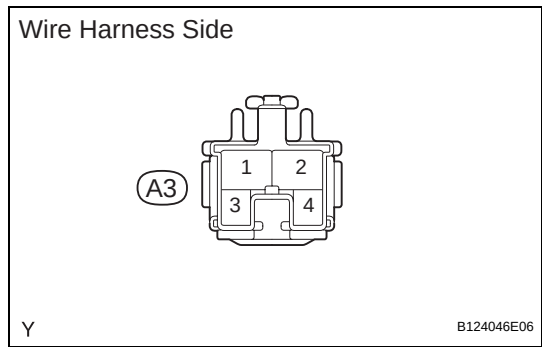
NG

REPLACE STOP LIGHT SWITCH

OK

6

CHECK WIRE HARNESS (STOP LIGHT SWITCH - BATTERY)



- (a) Disconnect the A3 stop light switch connector.
(b) Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Specified Condition
A3-2 - Body ground	10 to 14 V

NG

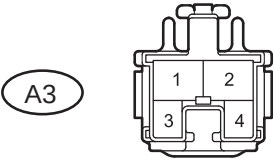
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

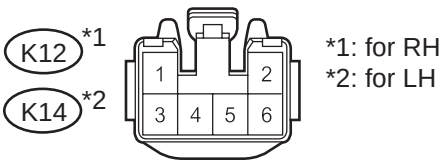
7 CHECK WIRE HARNESS (STOP LIGHT SWITCH - REAR STOP LIGHT)

Wire Harness Side

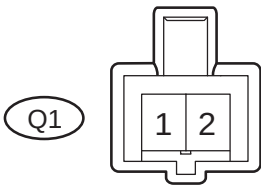
Stop Light Switch



Rear Combination Light



High Mount Stop Light



E125081E03

- (a) Disconnect the A3 stop light switch connector.
- (b) Disconnect the K12 and K14 rear combination light connectors.
- (c) Disconnect the Q1 high mount stop light connector.
- (d) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
A3-1 - K12-4	Below 1 Ω
A3-1 or K12-4 - Body ground	10 k Ω or higher
A3-1 - K14-4	Below 1 Ω
A3-1 or K14-4 - Body ground	10 k Ω or higher
A3-1 - Q1-2	Below 1 Ω
A3-1 or Q1-2 - Body ground	10 k Ω or higher

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

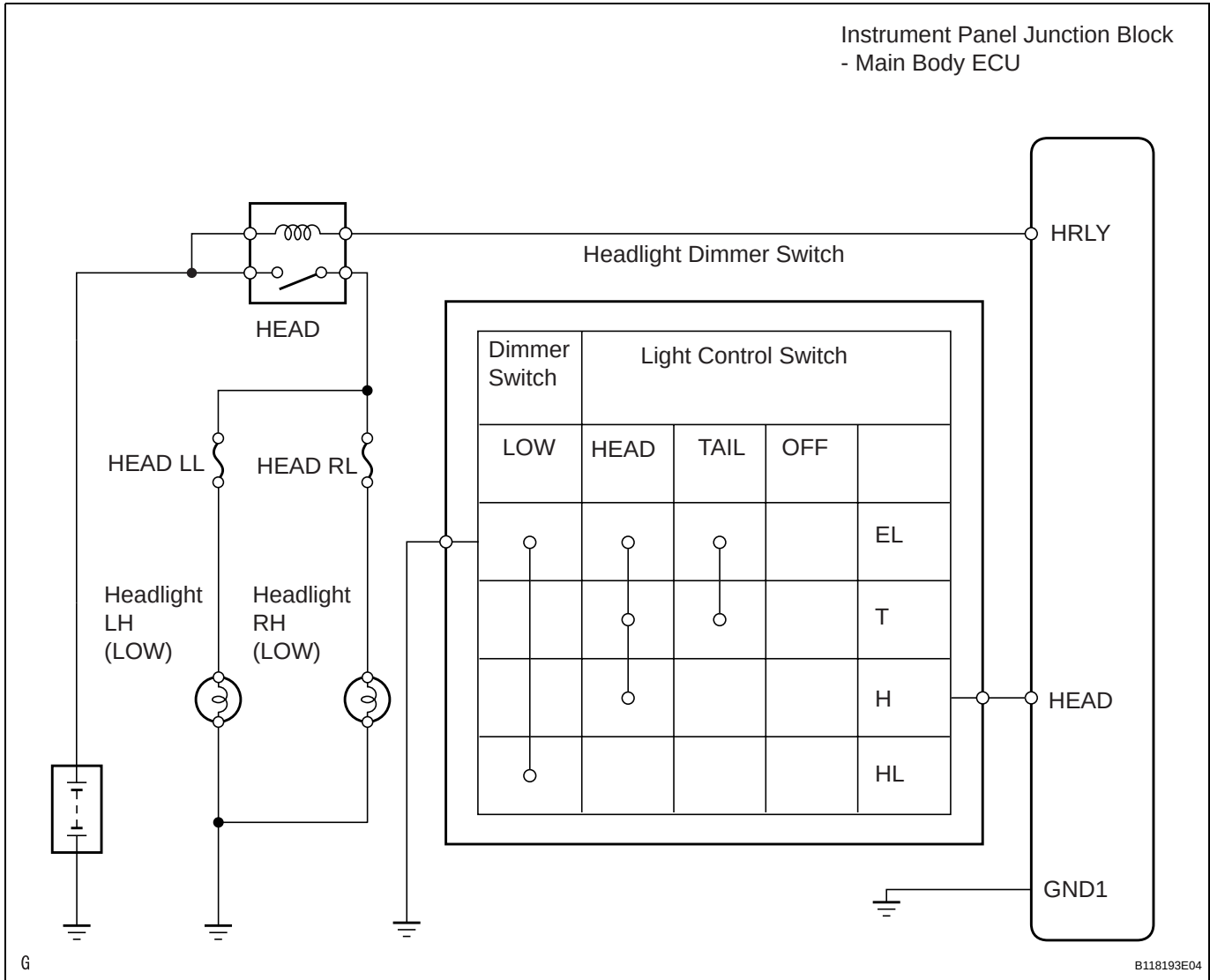
REPAIR OR REPLACE HARNESS AND CONNECTOR (REAR STOP LIGHT - BODY GROUND)

Headlight Relay Circuit

DESCRIPTION

When the light control switch, located on the headlight dimmer switch, is turned to the HEAD position, the HEAD relay illuminates the headlights.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER (HEADLIGHT)

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch ON and press the intelligent tester main switch ON.
- Select the item below in the ACTIVE TEST and then check the relay operation.

Main body ECU

Item	Test Details: Display (Range)	Diagnostic Note
HEAD LIGHT	Headlight Relay ON/OFF	-

OK:
Headlight comes on

OK

Go to step 7

NG

2 INSPECT FUSE (HEAD LL, HEAD RL)

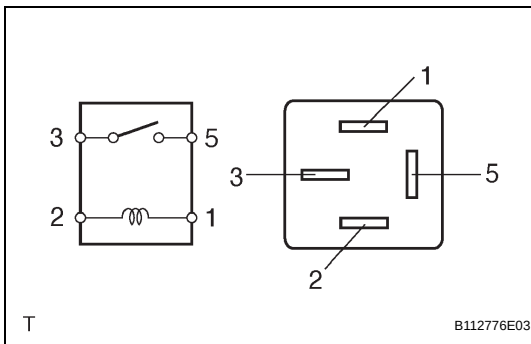
- Remove the HEAD LL fuse and HEAD RL fuse from the engine room No. 2 relay block.
- Measure the resistance of the fuses.

Standard resistance:
Below 1 Ω

NG

REPLACE FUSE

OK

3 INSPECT HEADLIGHT RELAY (Marking: HEAD)

- Remove the headlight relay from the engine room No. 2 relay block.
- Measure the resistance of the relay.

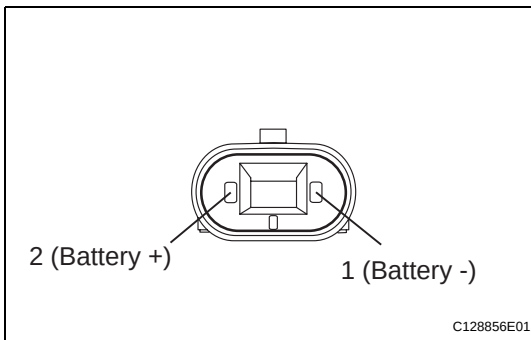
Standard resistance

Tester Connection	Specified Condition
3 - 5	10 k Ω or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

NG

REPLACE HEADLIGHT RELAY

OK

4 INSPECT BULB (HEADLIGHT BULB)

- Remove the headlight bulbs (LOW).
- Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the bulb illuminates.

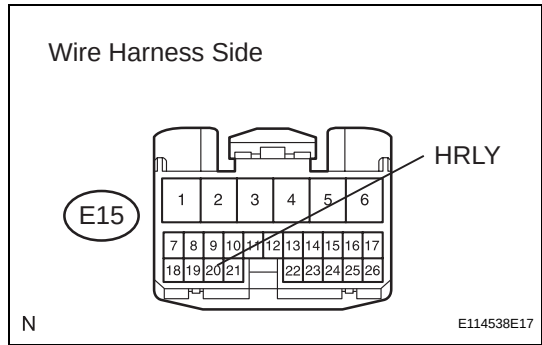
OK:
Bulb illuminates.

NG

REPLACE BULB

OK

5 CHECK WIRE HARNESS (MAIN BODY ECU - BATTERY)



- (a) Disconnect the E15 main body ECU connector.
(b) Measure the voltage of the wire harness side connector.
Standard voltage

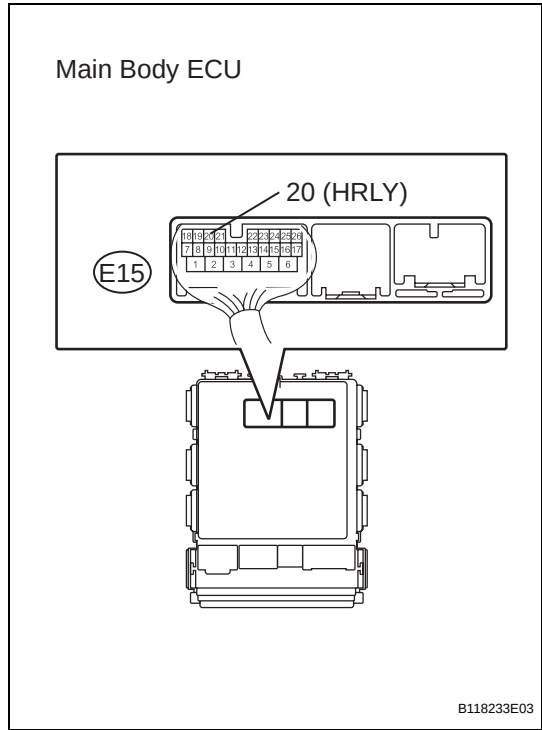
Tester Connection	Specified Condition
E15-20 (HRLY) - Body ground	10 to 14 V

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

6 CHECK INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)



- (a) Measure the voltage of the main body ECU.
Standard voltage

Tester Connection	Condition	Specified Condition
E15-20 (HRLY) - Body ground	Light control switch OFF	10 to 14 V
E15-20 (HRLY) - Body ground	Light control switch HEAD	Below 1 V

NG

REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

OK

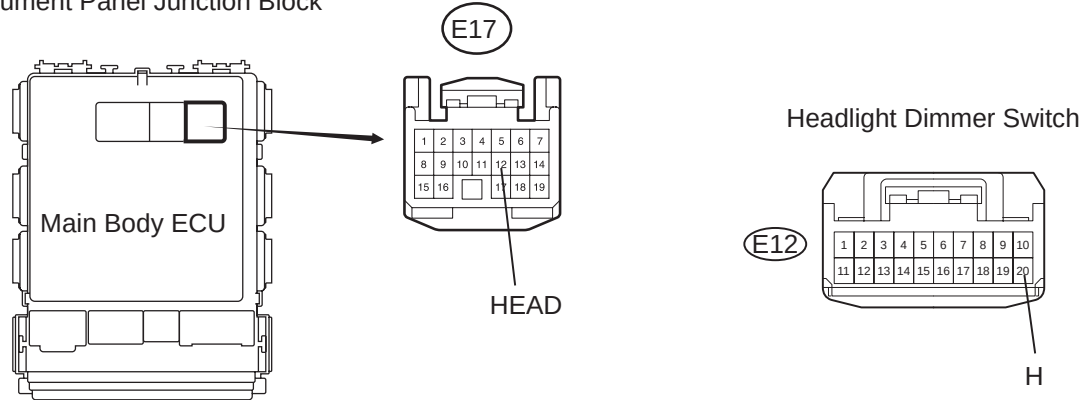
REPAIR OR REPLACE HARNESS AND CONNECTOR (HEAD RELAY - HEADLIGHT BULB AND BODY GROUND)

7

CHECK WIRE HARNESS (HEADLIGHT DIMMER SWITCH - MAIN BODY ECU)

Wire Harness Side

Instrument Panel Junction Block



B128083E01

- Disconnect the E17 main body ECU connector.
- Disconnect the E12 headlight dimmer switch connector.
- Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
E17-12 (HEAD) - E12-20 (H)	Below 1 Ω
E17-12 (HEAD) or E12-20 (H) - Body ground	10 k Ω or higher

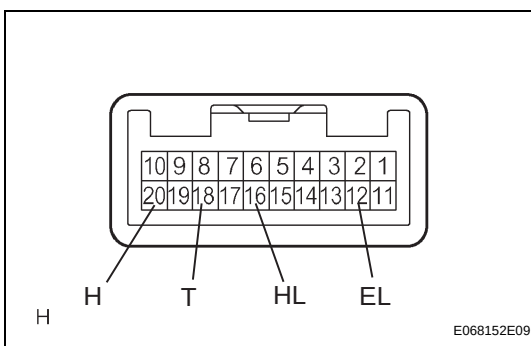
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

8

INSPECT HEADLIGHT DIMMER SWITCH



E068152E09

- Disconnect the E12 headlight dimmer switch.
- Measure the resistance of the switch.

Standard resistance

Tester Connection	Switch Condition	Specified Condition
18 (T) - 12 (EL)	TAIL	Below 1 Ω
18 (T) - 12 (EL)	OFF	10 k Ω or higher
20 (H) - 12 (EL)	HEAD	Below 1 Ω
20 (H) - 12 (EL)	OFF	10 k Ω or higher
16 (HL) - 12 (EL)	LOW	Below 1 Ω
16 (HL) - 12 (EL)	HIGH	10 k Ω or higher

NG

REPLACE HEADLIGHT DIMMER SWITCH ASSEMBLY

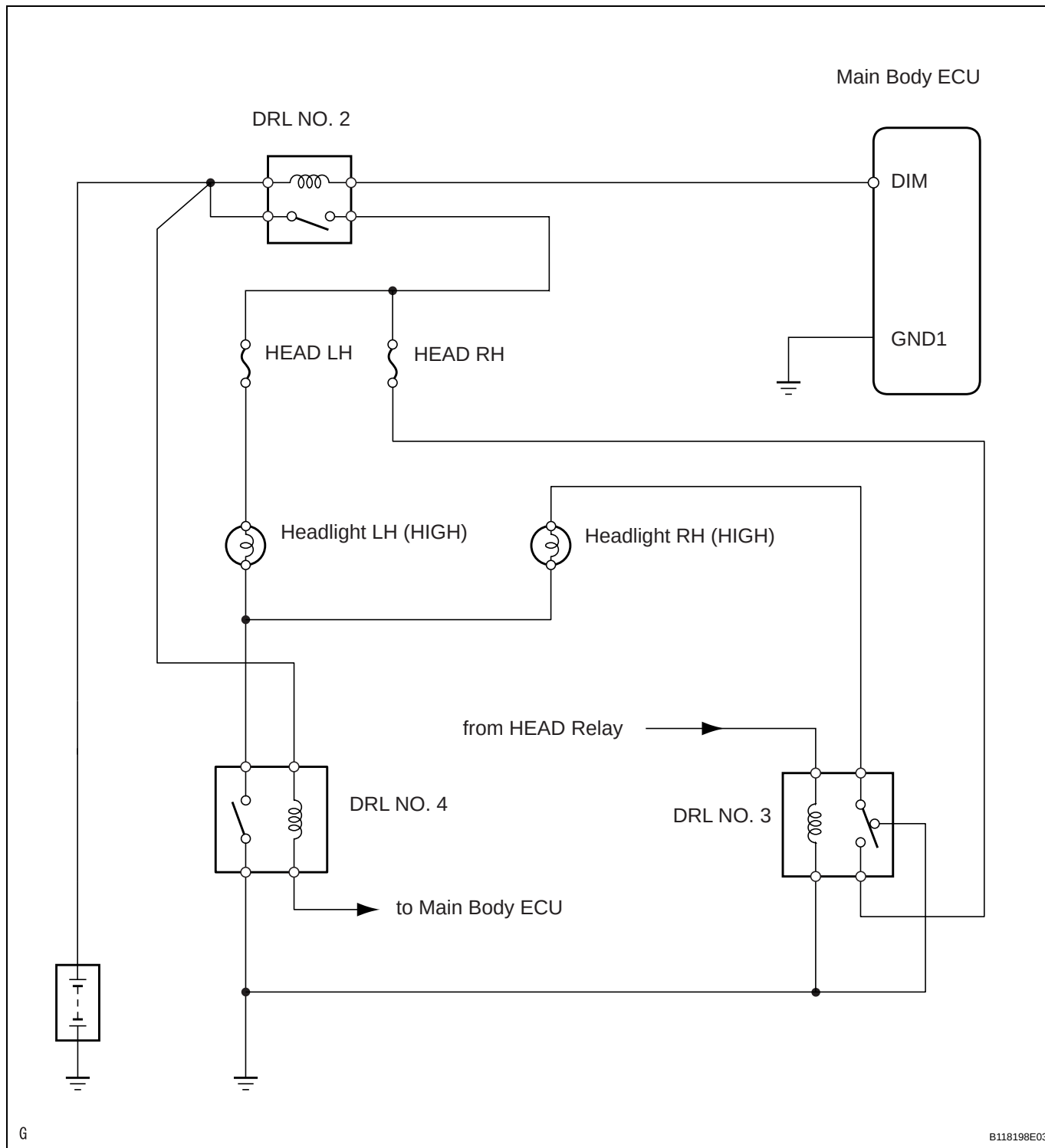
OK

REPAIR OR REPLACE HARNESS AND CONNECTOR (HEADLIGHT DIMMER SWITCH - BODY GROUND)

DESCRIPTION

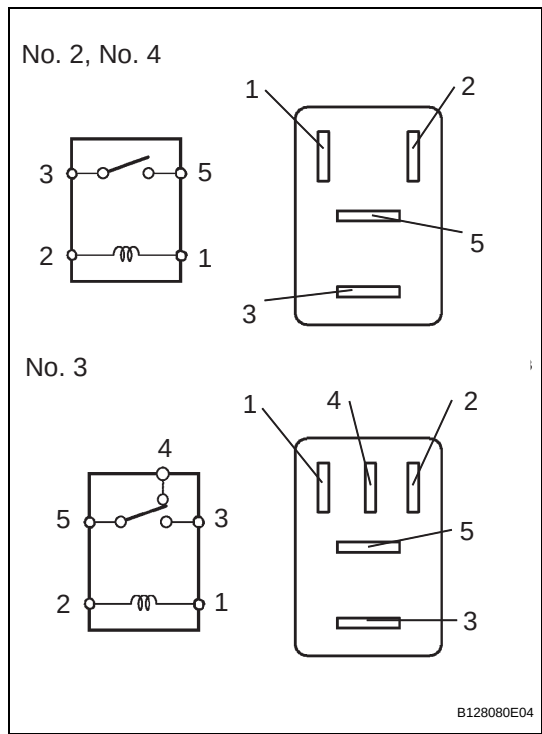
The main body ECU controls the daytime running light No. 2 relay (Marking: DRL NO.2).

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT DAYTIME RUNNING LIGHT RELAY (Marking: DRL NO. 2, DRL NO. 3, DRL NO. 4)



- (a) Remove the No. 2 relay, No. 3 relay and No. 4 relay from the engine room No. 2 relay block.
- (b) Measure the resistance of the relays.

Standard resistance:
No. 2, No. 4

Tester Connection	Specified Condition
3 - 5	10 kΩ or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

No. 3

Tester Connection	Specified Condition
4 - 5	Below 1 Ω
4 - 5	10 kΩ or higher (Battery voltage applied to terminals 1 and 2)
3 - 5	10 kΩ or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

NG

REPLACE DAYTIME RUNNING LIGHT RELAY

OK

2 INSPECT FUSE (HEAD LH)

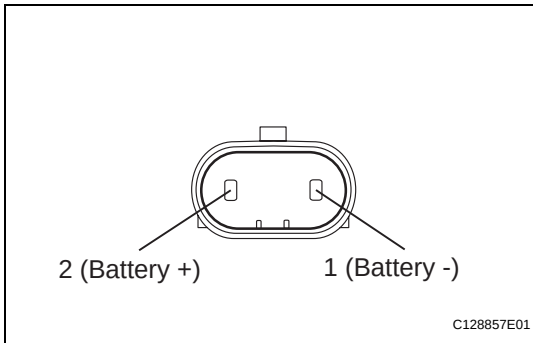
- (a) Remove the HEAD LH fuse from the engine room No. 2 relay block.
- (b) Measure the resistance of the fuse.

Standard resistance:
Below 1 Ω

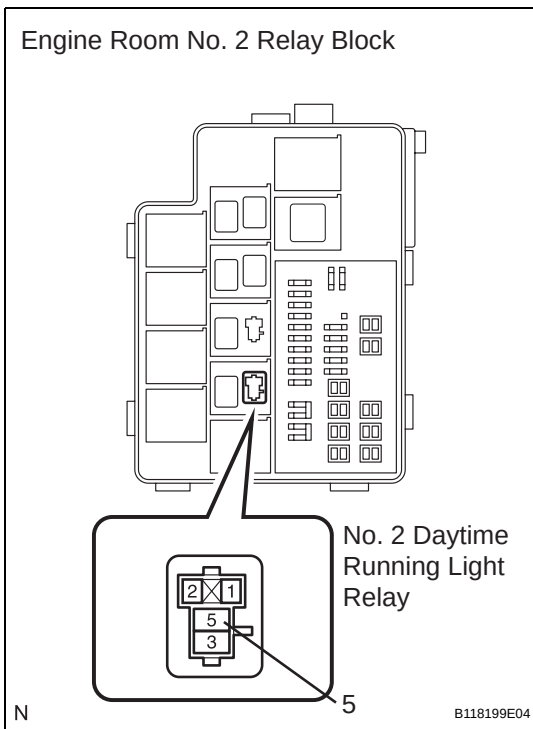
NG

REPLACE FUSE

OK

3 INSPECT HEADLIGHT BULB (HIGH)

- (a) Remove the headlight bulb (high).
- (b) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the bulb illuminates.

NG**REPLACE HEADLIGHT BULB (HIGH)****OK****4 CHECK WIRE HARNESS (BATTERY - NO. 2 DAYTIME RUNNING LIGHT RELAY)**

- (a) Remove the No. 2 daytime running light relay from the engine room No. 2 relay block.
- (b) Measure the voltage of the relay block.

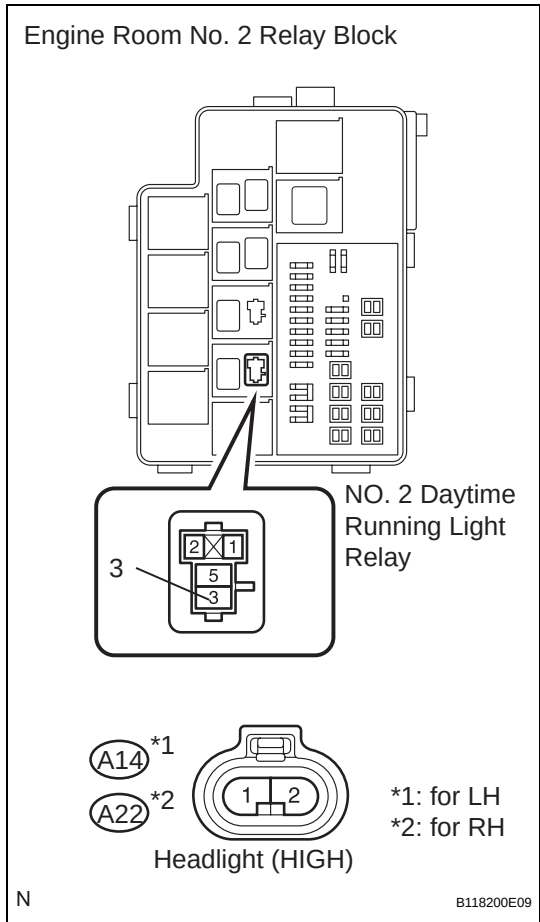
Standard voltage

Tester Connection	Specified Condition
Relay block daytime running light No. 2 relay terminal 5 - Body ground	10 to 14 V

NG**REPAIR OR REPLACE HARNESS AND CONNECTOR****OK**

5

CHECK WIRE HARNESS (NO. 2 DAYTIME RUNNING LIGHT RELAY - HEADLIGHT BULB AND BODY GROUND)



- (a) Remove the No. 2 daytime running light relay from the engine room No. 2 relay block.
- (b) Disconnect the A14 and A22 headlight (HIGH) connectors.
- (c) Measure the resistance of the wire harness side connectors and relay block.

Standard resistance

Tester Connection	Specified Condition
Relay block daytime running light No. 2 relay terminal 3 - A14-2	Below 1 Ω
A14-2 - Body ground	10 k Ω or higher
A14-1 - A22-1	Below 1 Ω
A14-1 - Body ground	10 k Ω or higher
A22-2 - Body ground	Below 1 Ω

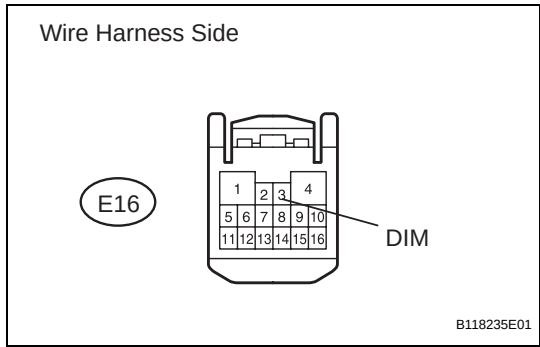
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

6

CHECK WIRE HARNESS (MAIN BODY ECU - BATTERY)



- (a) Disconnect the E16 main body ECU connector.
- (b) Measure the voltage of the wire harness side connector.
- Standard voltage

Tester Connection	Specified Condition
E16-3 (DIM) - Body ground	10 to 14 V

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

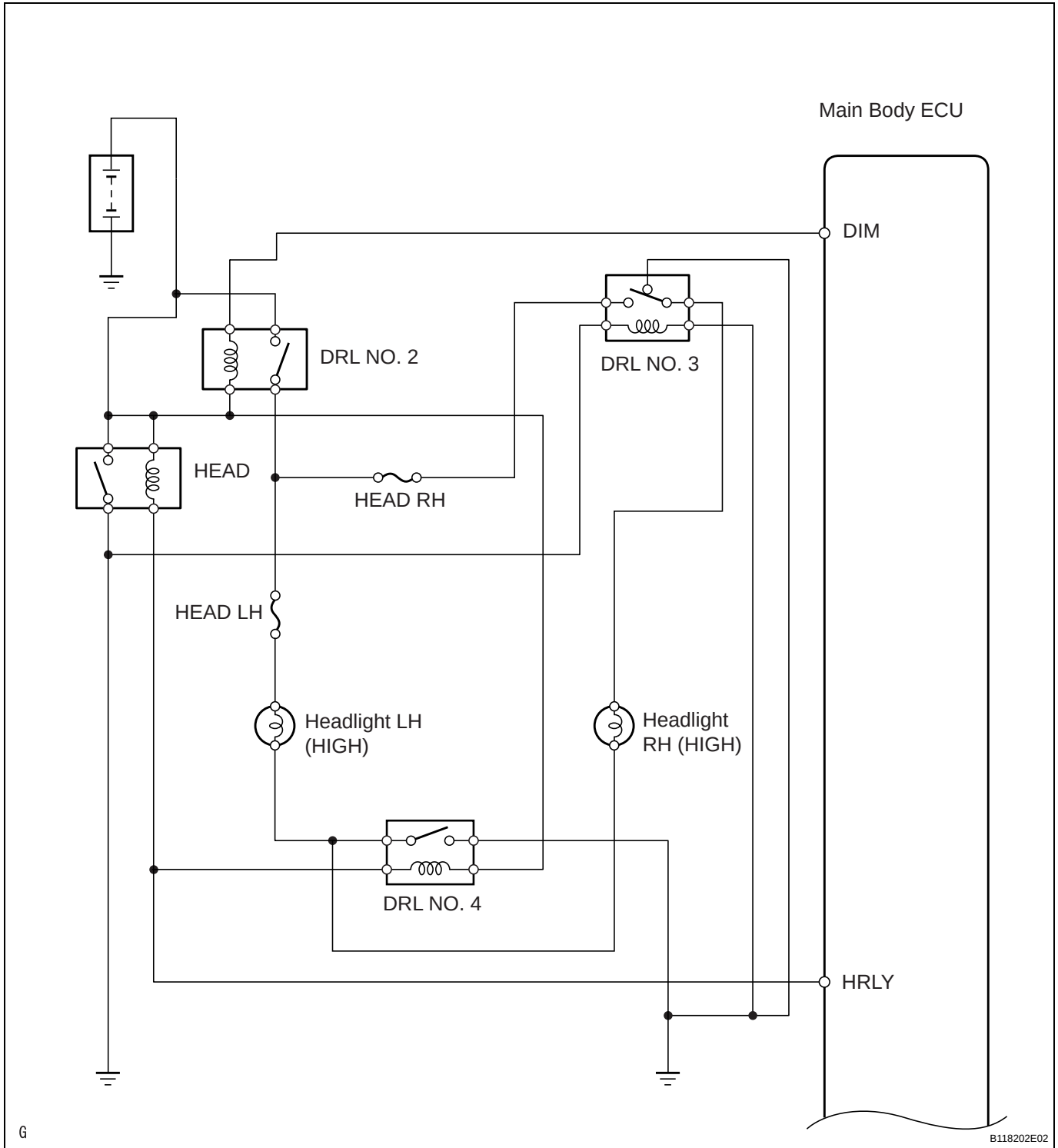
REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

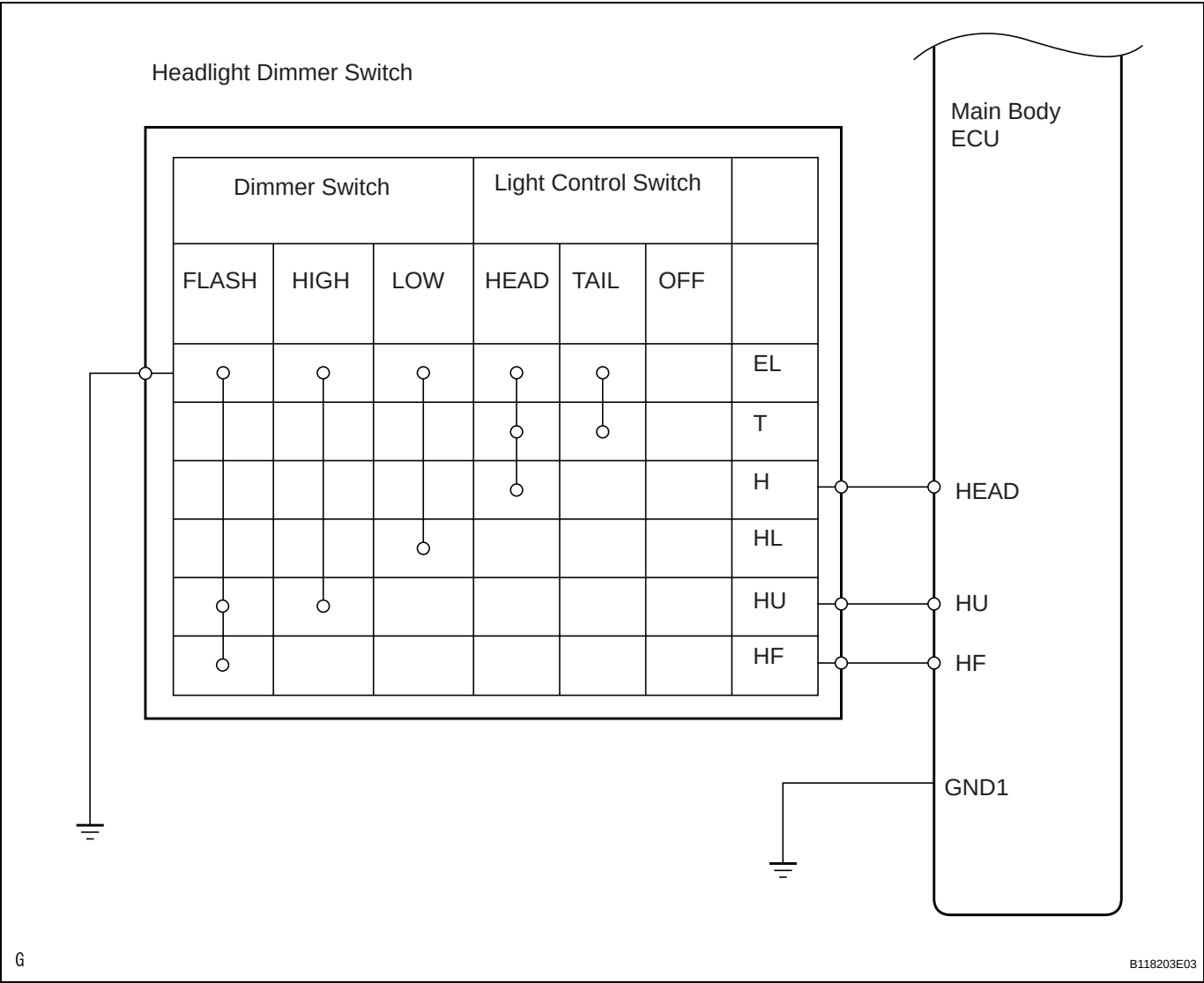
Headlight (HI-BEAM) Circuit

DESCRIPTION

The body ECU controls the headlight relay, No. 2 daytime running light relay (Marking: DRL NO. 2) and No. 4 daytime running light relay (Marking: DRL NO. 4).

WIRING DIAGRAM





INSPECTION PROCEDURE

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

L

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch to the ON position and press the intelligent tester main switch ON.
- (c) Select the item below in the ACTIVE TEST and then check the relay operation.

Main body ECU

Item	Test Details	Diagnostic Note
HEADLIGHT HI	Turn headlight dimmer relay (Headlight dimmer switch HI position): ON / OFF	-

OK:
Headlight (HIGH) comes on.

OK

Go to step 10

NG

2 CHECK HEADLIGHT (LOW)

- (a) Check that the headlight (LOW) comes on when the light control switch is on (HEAD).

OK:**Headlight (LOW) comes on.**

NG

GO TO HEADLIGHT RELAY CIRCUIT

OK

3 INSPECT FUSE (HEAD LH, HEAD RH)

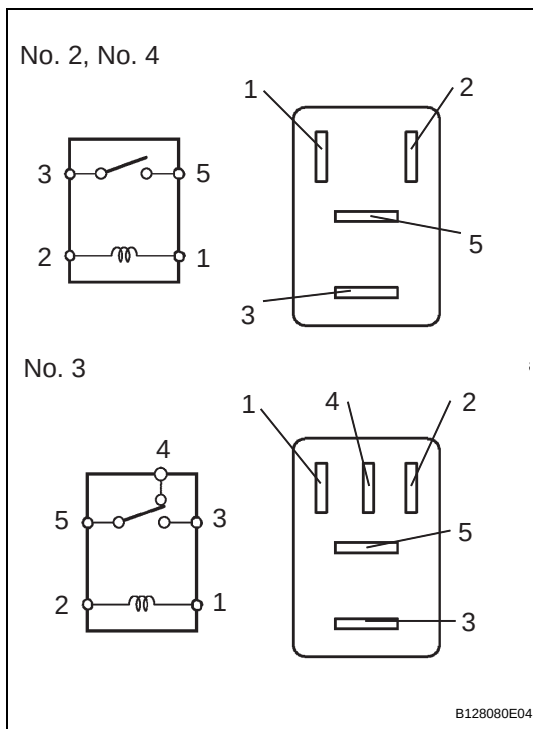
- (a) Remove the HEAD LH fuse and HEAD RH fuse from the engine room No. 2 relay block.
- (b) Measure the resistance of the fuses.

Standard resistance:**Below 1 Ω**

NG

REPLACE FUSE

OK

4 INSPECT DAYTIME RUNNING LIGHT RELAY (Marking: DRL NO. 2, DRL NO. 3, DRL NO. 4)

- (a) Remove the No. 2 relay, No. 3 relay and No. 4 relay from the engine room No. 2 relay block.

- (b) Measure the resistance of the relays.

Standard resistance:**No. 2, No. 4**

Tester Connection	Specified Condition
3 - 5	10 k Ω or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

No. 3

Tester Connection	Specified Condition
4 - 5	Below 1 Ω
4 - 5	10 k Ω or higher (Battery voltage applied to terminals 1 and 2)
3 - 5	10 k Ω or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

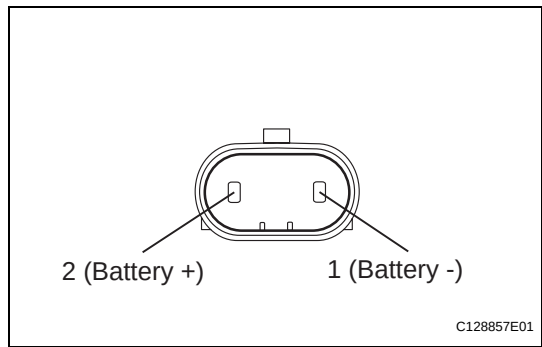
NG

REPLACE DAYTIME RUNNING LIGHT RELAY

OK

5

INSPECT HEADLIGHT BULB (HIGH)



- (a) Remove the headlight bulb (HIGH).
- (b) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the bulb illuminates.

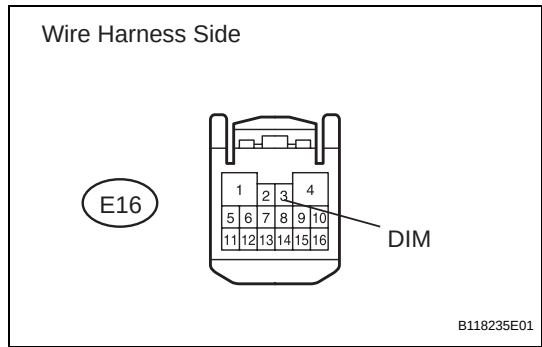
NG

REPLACE HEADLIGHT BULB (HIGH)

OK

6

CHECK WIRE HARNESS (MAIN BODY ECU - BATTERY)



- (a) Disconnect the E16 main body ECU connector.
 - (b) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
E16-3 (DIM) - Body ground	10 to 14 V

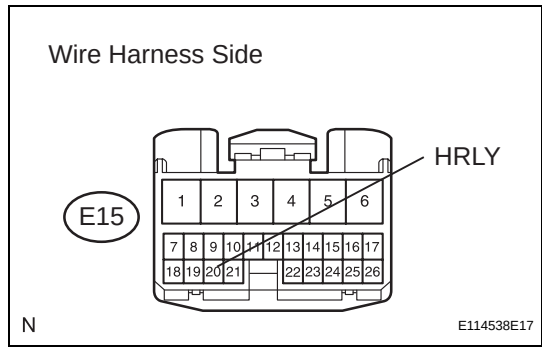
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

7

CHECK WIRE HARNESS (MAIN BODY ECU)



- (a) Remove the headlight relay from the engine room No. 2 relay block.
 - (b) Disconnect the E15 main body ECU connector.
 - (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
E15-20 (HRLY) - Body ground	10 to 14 V

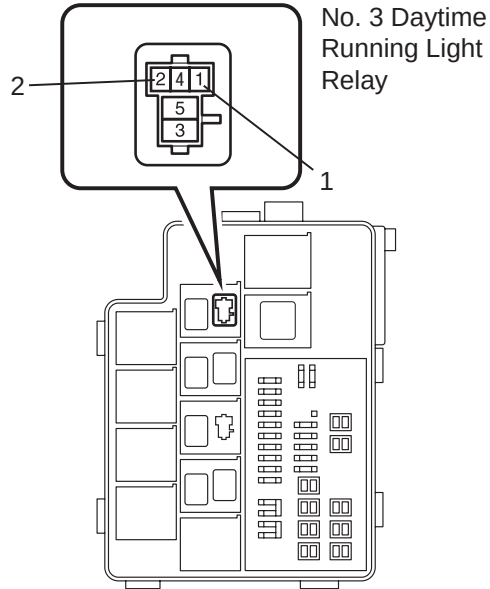
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

8**CHECK WIRE HARNESS (HEADLIGHT RELAY - NO. 3 DAYTIME RUNNING LIGHT RELAY AND BODY GROUND)**

Engine Room No. 2 Relay Block



N

B118205E04

- (a) Remove the No. 3 daytime running light relay from the engine room No. 2 relay block.
- (b) Measure the voltage and resistance of the relay block.

Standard voltage

Tester Connection	Condition	Specified Condition
Relay block No. 3 daytime running light relay terminal 1 - Body ground	Light control switch ON (HEAD) Dimmer switch position LOW	10 to 14 V

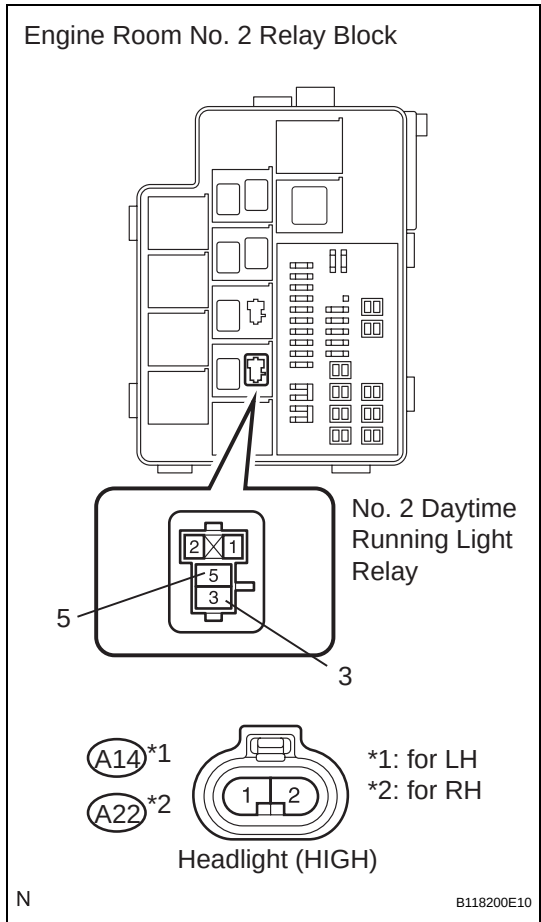
Standard resistance

Tester Connection	Specified Condition
Relay block No. 3 daytime running light relay terminal 2 - Body ground	Below 1 Ω

NG**REPAIR OR REPLACE HARNESS AND CONNECTOR****OK**

9

CHECK WIRE HARNESS (BATTERY - NO. 2 DAYTIME RUNNING LIGHT RELAY, BULB AND BODY GROUND)



- (a) Remove the No. 2 daytime running light relay from the engine room No. 2 relay block.
- (b) Remove the A14 and A22 headlight bulb connectors.
- (c) Measure the voltage and resistance of the relay block.

Standard voltage

Tester Connection	Specified Condition
Relay block No. 2 daytime running light relay terminal 5 - Body ground	10 to 14 V

Standard resistance

Tester Connection	Condition	Specified Condition
Relay block No. 2 daytime running light relay terminal 3 - A14-2	Always	Below 1 Ω
Relay block No. 2 daytime running light relay terminal 3 - Body ground	Always	10 kΩ or higher
A14-1 - A22-1	Always	Below 1 Ω
A14-1 or A22-1 - Body ground	Always	10 kΩ or higher
A22-2 - Body ground	Always	Below 1 Ω
Relay block No. 2 daytime running light relay terminal 3 - A22-2	Light control switch ON (HEAD) Dimmer switch position LOW	Below 1 Ω
Relay block No. 2 daytime running light relay terminal 3 - Body ground	Light control switch ON (HEAD) Dimmer switch position LOW	10 kΩ or higher
A22-1 - Body ground	Light control switch ON (HEAD) Dimmer switch position LOW	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

L

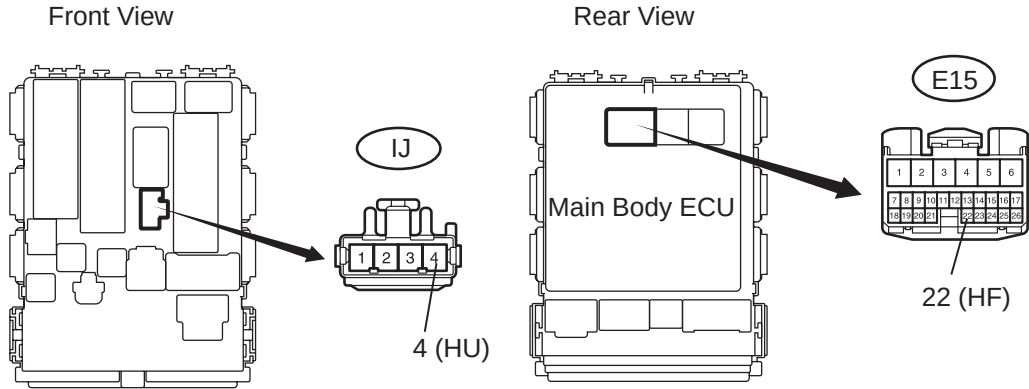
OK

REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

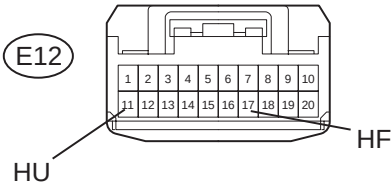
10 CHECK WIRE HARNESS (MAIN BODY ECU - DIMMER SWITCH)

Wire Harness Side

Instrument Panel Junction Block



Headlight Dimmer Switch



B118220E01

- (a) Disconnect the E15 main body ECU connector.
- (b) Disconnect the E12 headlight dimmer switch connector.
- (c) Disconnect the IJ instrument panel junction block connector.
- (d) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
E15-22 (HF) - E12-17 (HF)	Below 1 Ω
E15-22 (HF) or E12-17 (HF) - Body ground	10 k Ω or higher
IJ-4 (HU) - E12-11 (HU)	Below 1 Ω
IJ-4 (HU) or E12-11 (HU) - Body ground	10 k Ω or higher

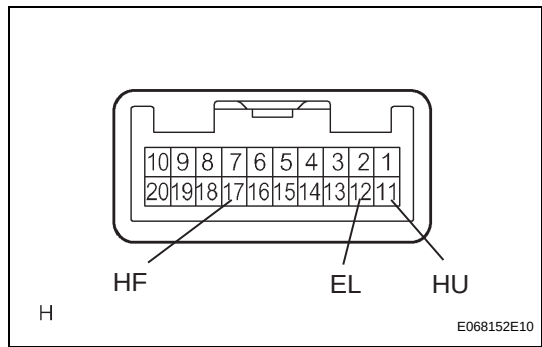
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

11

INSPECT HEADLIGHT DIMMER SWITCH



- (a) Remove the headlight dimmer switch.
- (b) Measure the resistance of the switch.

Standard resistance

Tester Connection	Condition	Specified Condition
11 (HU) - 12 (EL)	Dimmer switch HIGH	Below 1 Ω
17 (HF) - 12 (EL)	Dimmer switch FLASH	Below 1 Ω

NG

REPLACE HEADLIGHT DIMMER SWITCH ASSEMBLY

OK

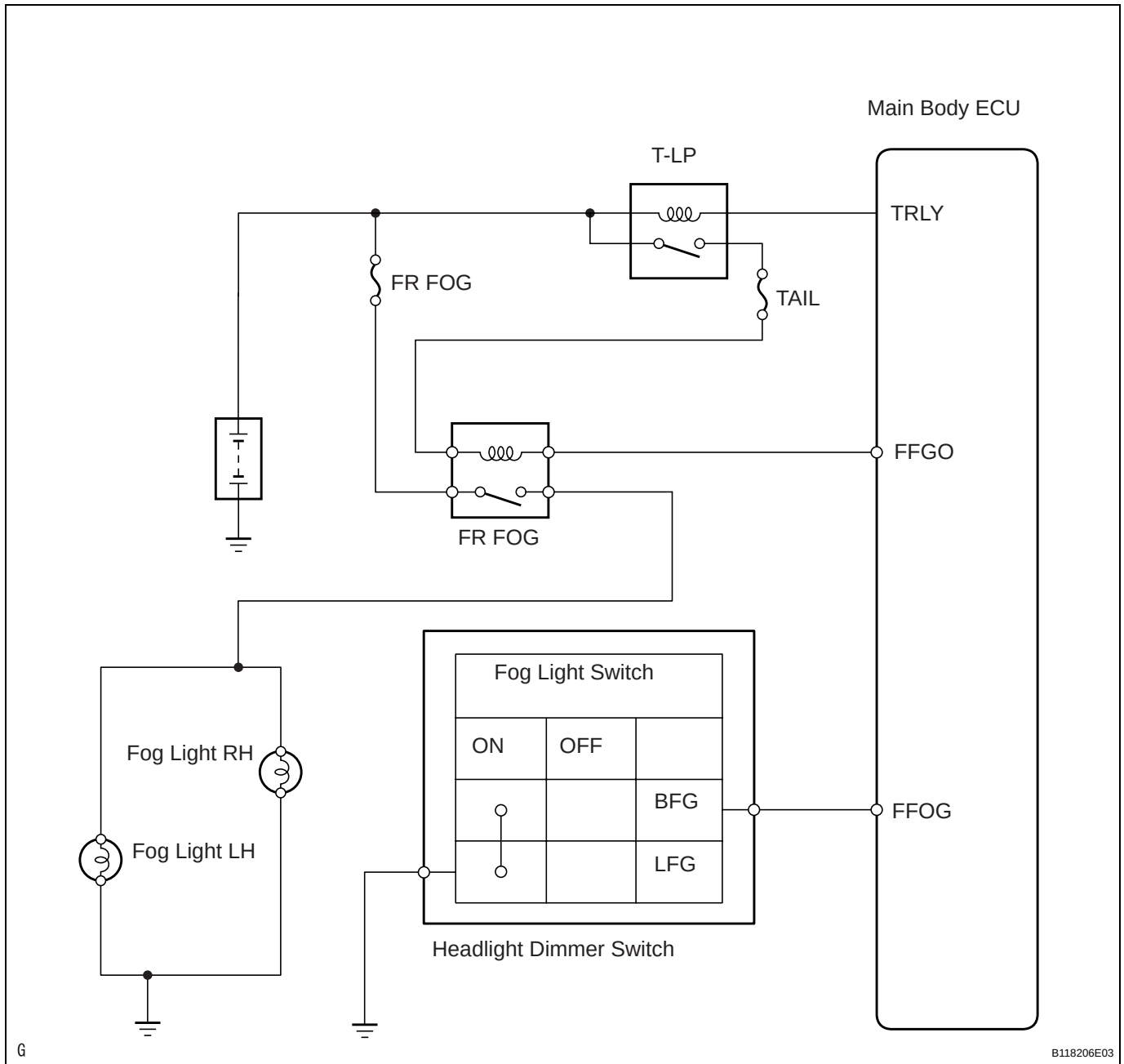
REPAIR OR REPLACE HARNESS AND CONNECTOR (HEADLIGHT DIMMER SWITCH - BODY GROUND)

Front Fog Light Circuit

DESCRIPTION

The main body ECU controls the front fog light relay (Marking: FR FOG) when a signal is received from the headlight dimmer switch.

WIRING DIAGRAM



INSPECTION PROCEDURE

1

PERFORM ACTIVE TEST BY INTELLIGENT TESTER

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.

- (b) Turn the ignition switch to the ON position and press the intelligent tester main switch ON.
- (c) Select the item below in the ACTIVE TEST and then check the relay operation.

Main body ECU

Item	Test Details	Diagnostic Note
F FOG LIGHT RLY	Turn front fog light relay: ON / OFF	-

OK:**Front fog light comes on.****OK** →**Go to step 9****NG****2****CHECK TAILLIGHT**

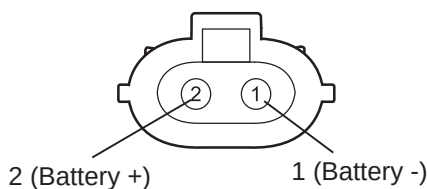
- (a) Check that the taillight comes on when the light control switch is on (TAIL).

OK:**Taillight comes on.****NG** →**GO TO TAILLIGHT RELAY CIRCUIT****OK****3****INSPECT FUSE (FR FOG)**

- (a) Remove the FR FOG fuse from the instrument panel junction block.
- (b) Measure the resistance of the fuses.

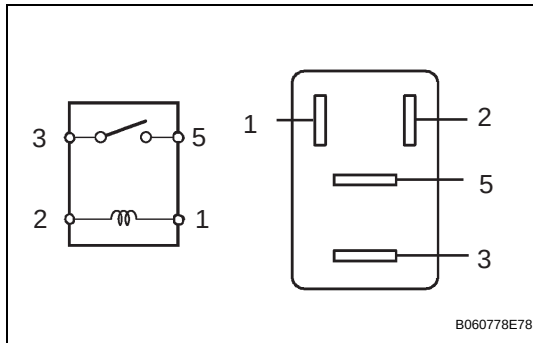
Standard resistance:**Below 1 Ω****NG** →**REPLACE FUSE****OK****4****INSPECT FOG LIGHT BULB**

- (a) Remove the fog light bulb.
- (b) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the bulb illuminates.

OK:**Bulb illuminates.****NG** →**REPLACE FOG LIGHT BULB**

B128063E02

OK

5 INSPECT FRONT FOG LIGHT RELAY (Marking: FR FOG)

(a) Remove the front fog light relay from the No. 6 relay block.

(b) Measure the resistance of the relay.

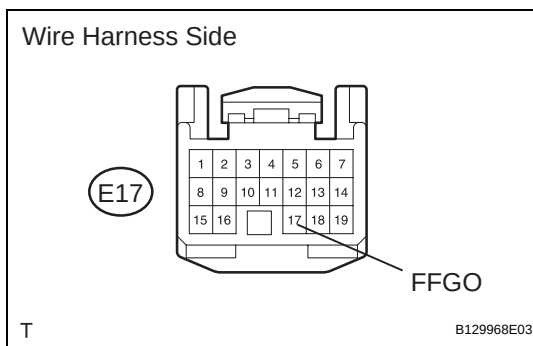
Standard resistance

Tester Connection	Specified Condition
3 - 5	10 k Ω or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

NG

REPLACE FRONT FOG LIGHT RELAY

OK

6 CHECK WIRE HARNESS (BATTERY - MAIN BODY ECU)

(a) Disconnect the E17 ECU connector.

(b) Measure the voltage of the wire harness side connector.

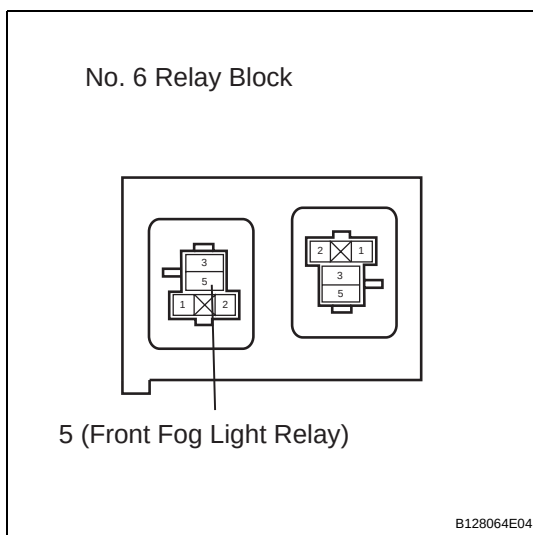
Standard voltage

Tester Connection	Condition	Specified Condition
E17-17 (FFGO) - Body ground	Light control switch on (TAIL)	10 to 14 V

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

7 CHECK WIRE HARNESS (FRONT FOG LIGHT RELAY - BATTERY)

(a) Remove the front fog light relay from the No. 6 relay block.

(b) Measure the voltage of the relay block.

standard voltage

Tester Connection	Specified Condition
No. 6 relay block front fog light relay terminal 5 - Body ground	10 to 14 V

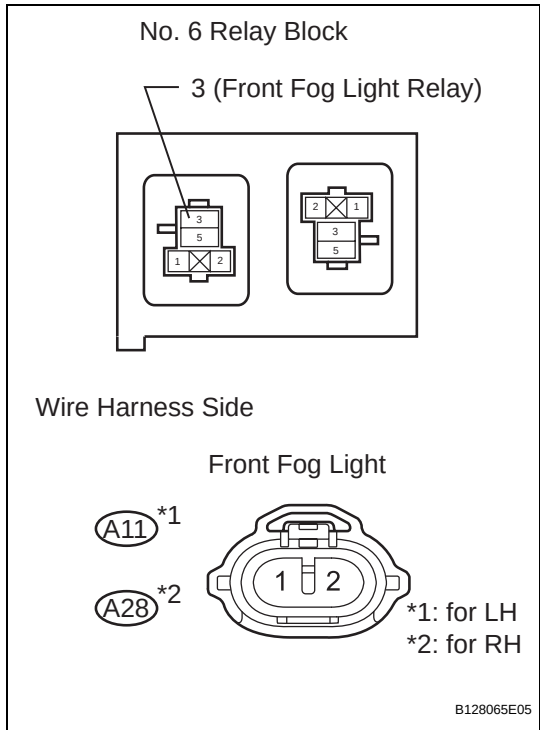
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

8

CHECK WIRE HARNESS (FRONT FOG LIGHT RELAY - FRONT FOG LIGHT AND BODY GROUND)



- (a) Remove the front fog light relay from the No. 6 relay block.
- (b) Disconnect the A11 and A28 front fog light connectors.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
No. 6 relay block front fog light relay terminal 3 - A11-2	Below 1 Ω
No. 6 relay block front fog light relay terminal 3 or A11-2 - Body ground	10 kΩ or higher
No. 6 relay block front fog light relay terminal 3 - A28-2	Below 1 Ω
No. 6 relay block front fog light relay terminal 3 or A28-2 - Body ground	10 kΩ or higher
A11-1 - Body ground	Below 1 Ω
A28-1 - Body ground	Below 1 Ω

NG

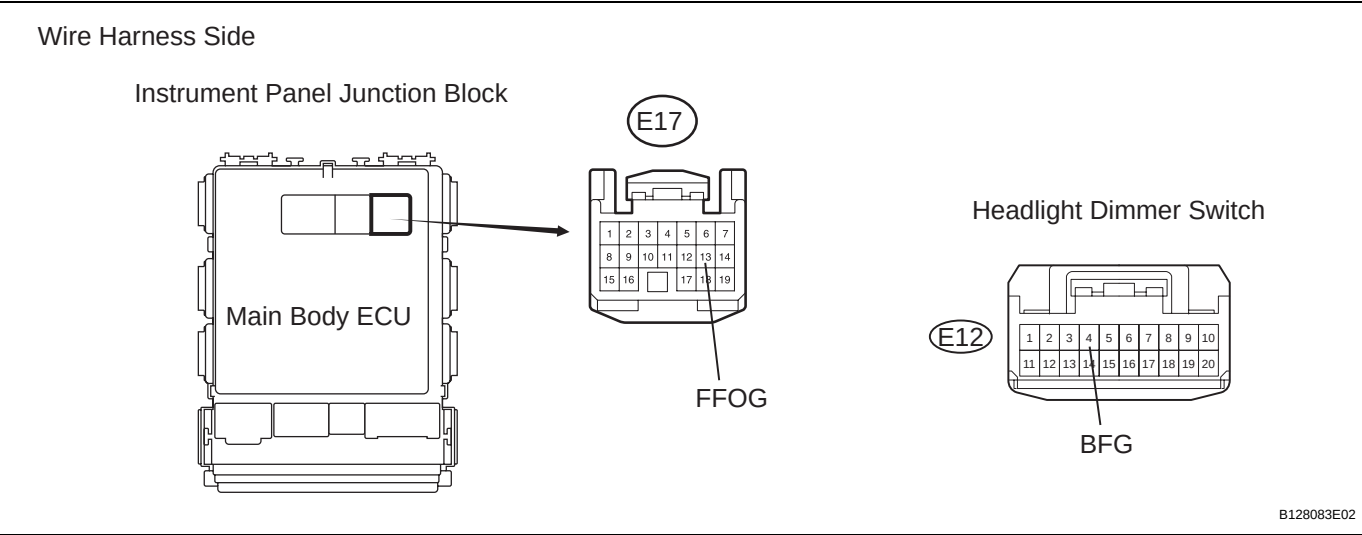
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

9

CHECK WIRE HARNESS (DIMMER SWITCH - MAIN BODY ECU AND BODY GROUND)



- (a) Disconnect the E12 headlight dimmer switch connector.
- (b) Disconnect the E17 main body ECU connector.

- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

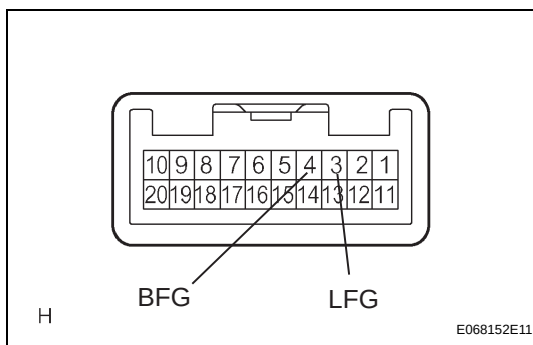
Tester Connection	Specified Condition
E17-13 (FFOG) - E12-4 (BFG)	Below 1 Ω
E17-13 (FFOG) or E12-4 (BFG) - Body ground	10 k Ω or higher

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

10 INSPECT FOG LIGHT SWITCH



- (a) Remove the headlight dimmer switch.
(b) Measure the resistance of the switch.

Standard resistance

Tester Connection	Condition	Specified Condition
4 (BFG) - 3 (LFG)	Fog light switch OFF	10 k Ω or higher
4 (BFG) - 3 (LFG)	Fog light switch ON	Below 1 Ω

NG

REPLACE HEADLIGHT DIMMER SWITCH ASSEMBLY

OK

REPAIR OR REPLACE HARNESS AND CONNECTOR (HEADLIGHT DIMMER SWITCH - BODY GROUND)

- (b) Inspect vanity light switch.

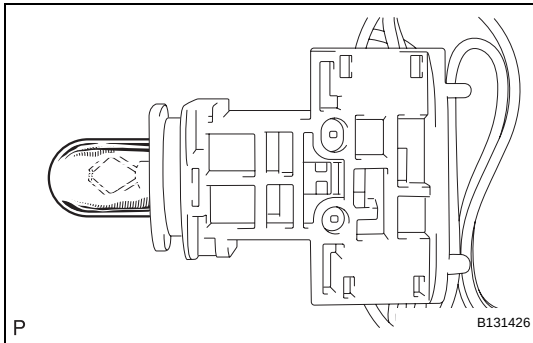
Standard resistance

Tester Connection	Condition	Specified Condition
1 (L) - 2 (B)	Visor raise	10 k Ω or higher
	Visor lower and mirror cover open	Below 1 Ω
	Visor lower and mirror cover close	10 k Ω or higher

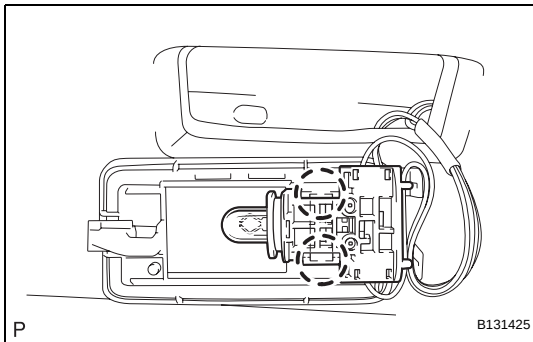
If the result is not as specified, replace the visor assembly.

INSTALLATION**1. INSTALL VANITY LIGHT BULB**

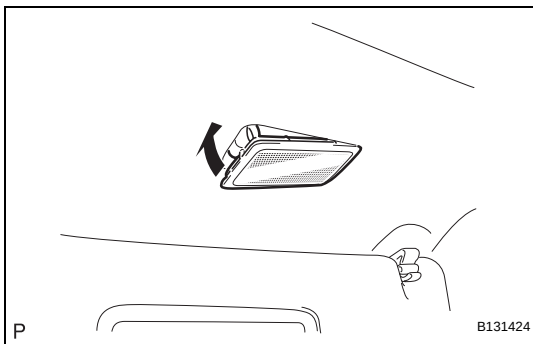
- (a) Install the light bulb to the vanity light.

**2. INSTALL VANITY LIGHT ASSEMBLY**

- (a) Attach the 2 claws and install the vanity light lens to the vanity light.

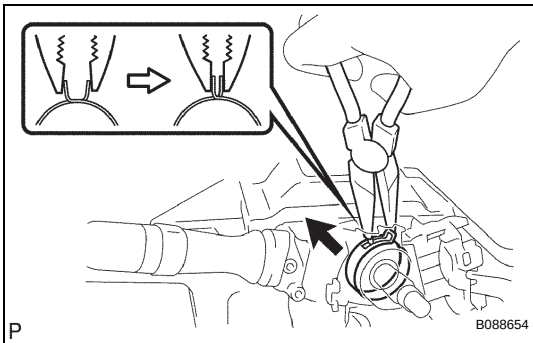
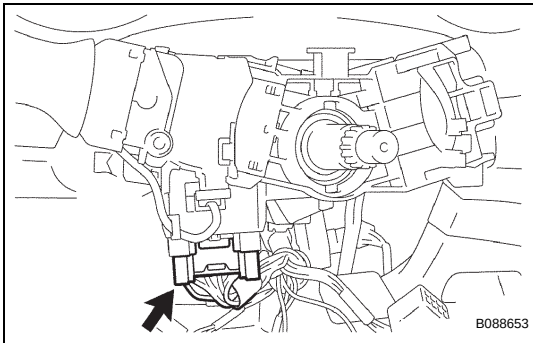


- (b) Install the vanity light.

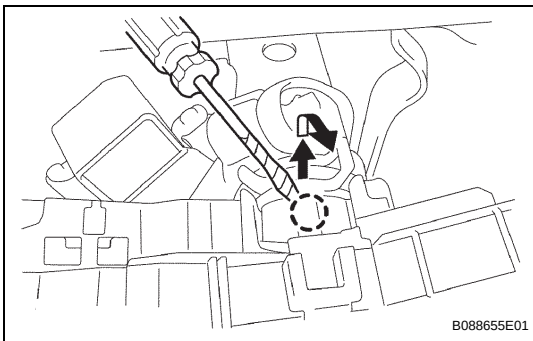
3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

REMOVAL

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
CAUTION:
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.
2. PLACE FRONT WHEELS FACING STRAIGHT AHEAD
3. REMOVE STEERING PAD ASSEMBLY (See page [RS-336](#))
4. REMOVE STEERING WHEEL ASSEMBLY (See page [SR-12](#))
5. REMOVE STEERING COLUMN COVER (See page [SR-12](#))
6. REMOVE SPIRAL CABLE SUB-ASSEMBLY (See page [RS-346](#))
7. REMOVE WIPER AND WASHER SWITCH (See page [WW-27](#))
8. REMOVE HEADLIGHT DIMMER SWITCH ASSEMBLY
 - (a) Disconnect the connector.



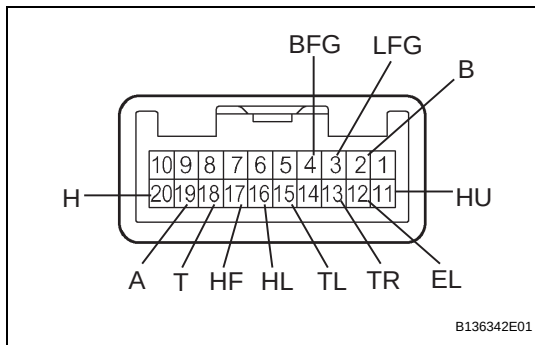
- (b) Using needle-nose pliers, remove the band clamp as shown in the illustration.



- (c) Using a screwdriver, detach the claws and remove the switch.

HINT:

Tape the screwdriver tip before use.



INSPECTION

1. INSPECT HEADLIGHT DIMMER SWITCH ASSEMBLY

- (a) Measure the resistance of the switch.

Standard resistance:

Light control switch

Tester Connection	Switch Condition	Specified Condition
12 (EL) - 18 (T)	OFF	10 k Ω or higher
12 (EL) - 19 (A)	OFF	10 k Ω or higher
12 (EL) - 20 (H)	OFF	10 k Ω or higher
12 (EL) - 18 (T)	TAIL	Below 1 Ω
12 (EL) - 20 (H)	HEAD	Below 1 Ω
12 (EL) - 18 (T)	HEAD	Below 1 Ω
12 (EL) - 19 (A)	AUTO	Below 1 Ω

Headlight dimmer switch

Tester Connection	Switch Condition	Specified Condition
12 (EL) - 11 (HU)	FLASH	Below 1 Ω
12 (EL) - 16 (HL)	FLASH	Below 1 Ω
12 (EL) - 16 (HL)	LO BEAM	Below 1 Ω
12 (EL) - 11 (HU)	HI BEAM	Below 1 Ω

Turn signal switch

Tester Connection	Switch Condition	Specified Condition
12 (EL) - 13 (TR)	Right turn	Below 1 Ω
12 (EL) - 15 (TL)	Neutral	10 k Ω or higher
12 (EL) - 13 (TR)	Neutral	10 k Ω or higher
12 (EL) - 15 (TL)	Left turn	Below 1 Ω

Fog light switch

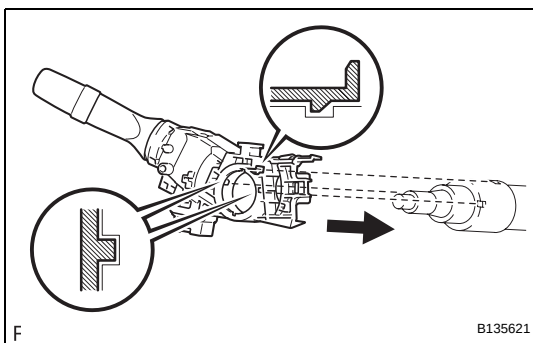
Tester Connection	Switch Condition	Specified Condition
3 (LFG) - 4 (BFG)	OFF	10 k Ω or higher
3 (LFG) - 4 (BFG)	ON	Below 1 Ω

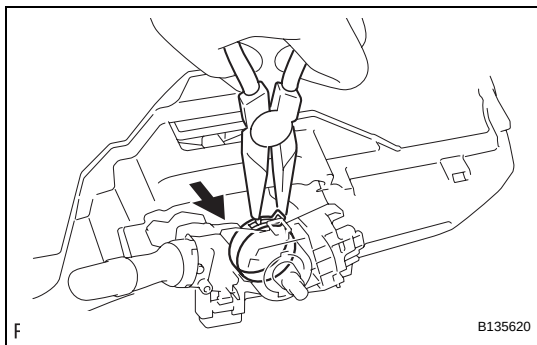
If the result is not as specified, replace the dimmer switch assembly.

INSTALLATION

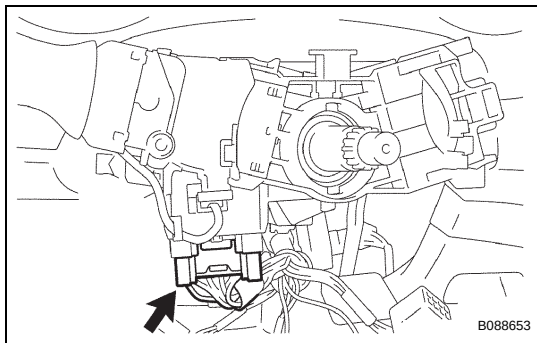
1. INSTALL HEADLIGHT DIMMER SWITCH ASSEMBLY

- (a) Attach the claw to install the headlight dimmer switch with the claw as shown in the illustration.





(b) Install the headlight dimmer switch with the clamp.



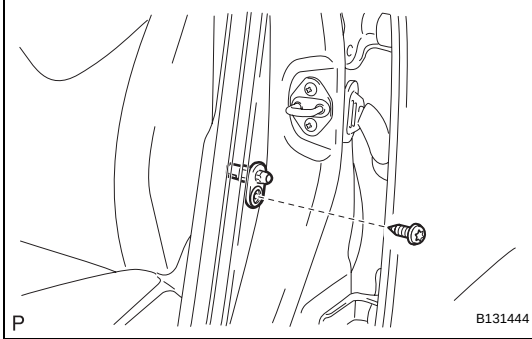
(c) Connect the connector.

2. **INSTALL WIPER AND WASHER SWITCH ASSEMBLY** (See page [WW-29](#))
3. **INSTALL SPIRAL CABLE SUB-ASSEMBLY** (See page [RS-347](#))
4. **INSTALL STEERING COLUMN COVER** (See page [SR-20](#))
5. **INSTALL STEERING WHEEL ASSEMBLY** (See page [SR-21](#))
6. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
7. **INSPECT STEERING WHEEL CENTER POINT**
8. **INSTALL STEERING PAD ASSEMBLY** (See page [RS-336](#))
9. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
10. **INSPECT STEERING PAD ASSEMBLY** (See page [RS-337](#))
11. **CHECK SRS WARNING LIGHT**
 - (a) Check the SRS warning light (see page [RS-337](#)).

INSTALLATION

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.
- A bolt without a torque specification is shown in the standard bolt chart (see page [SS-2](#)).

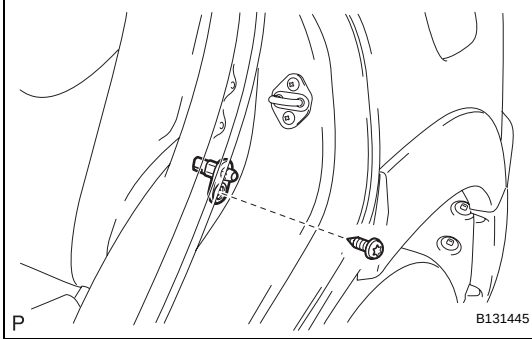


- 1. INSTALL FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY**
 - (a) Connect the connector.
 - (b) Install the switch with the bolt.
- 2. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

INSTALLATION

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.
- A bolt without a torque specification is shown in the standard bolt chart (see page [SS-2](#)).



- 1. INSTALL REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY**
 - (a) Connect the connector.
 - (b) Install the switch with the bolt.
- 2. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

INSTALLATION

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.
- A bolt without a torque specification is shown in the standard bolt chart (see page [SS-2](#)).



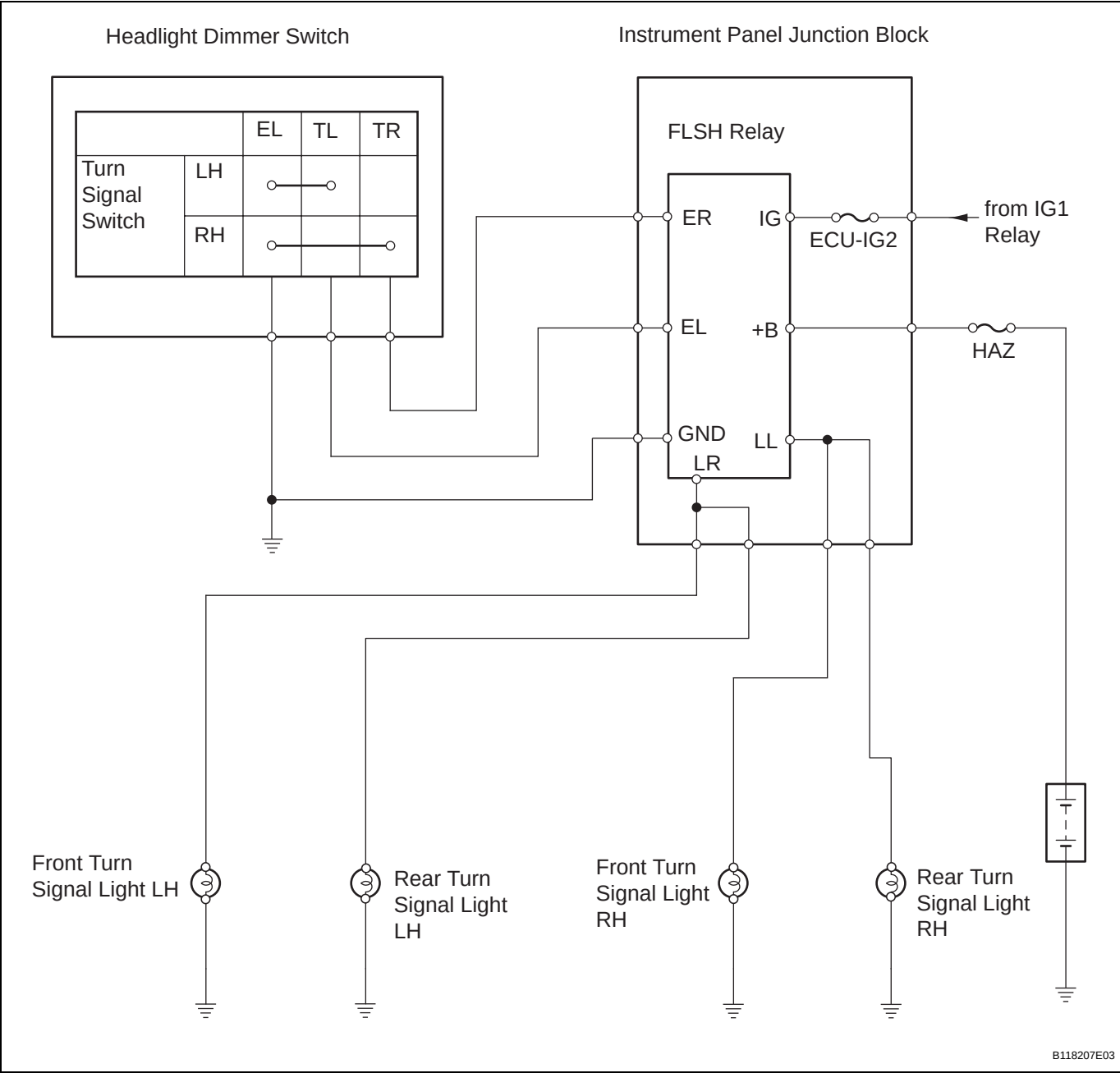
- 1. INSTALL BACK DOOR COURTESY LIGHT SWITCH ASSEMBLY**
 - (a) Connect the connector.
 - (b) Install the switch with the bolt.
- 2. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

Turn Signal Light Circuit

DESCRIPTION

The turn signal flasher relay (Marking: FLSH) in the main body ECU turns on when it receives signals from the headlight dimmer switch integrated with the turn signal switch, causing the turn signal lights to flash.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK OPERATION OF TURN SIGNAL LIGHT

- (a) When the turn signal light switch is operated, check that the appropriate turn signal light flashes.

Result

Condition	Proceed to
All lights do not flash	A
Front turn signal light (LH or RH) does not flash	B
Rear turn signal light (LH or RH) does not flash	C

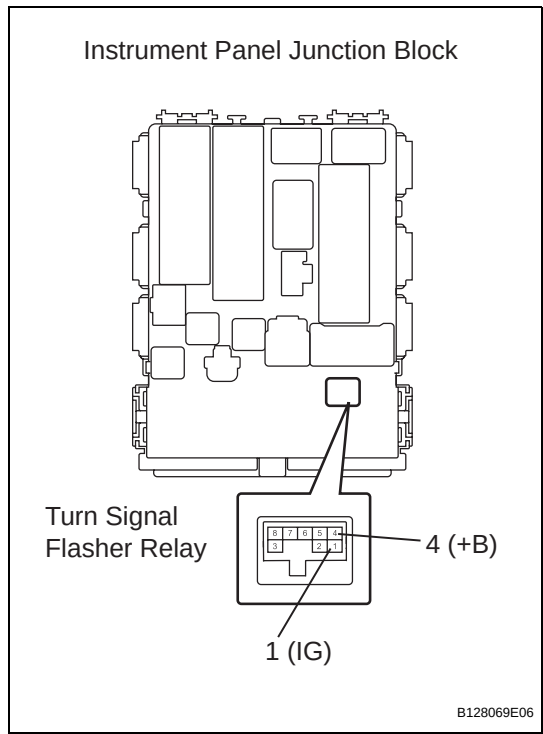
B**Go to step 6****C****Go to step 8****A****2** INSPECT FUSE (ECU-IG2, HAZ)

- (a) Remove the ECU-IG2 fuse from the instrument panel junction block.
 (b) Remove the HAZ fuse from the engine room No. 1 relay block.
 (c) Measure the resistance of the fuses.

Standard resistance:**Below 1 Ω** **NG****REPLACE FUSE****OK**

3

CHECK WIRE HARNESS (BATTERY - TURN SIGNAL FLASHER RELAY)



- (a) Disconnect the IB instrument panel junction block connector.
- (b) Remove the turn signal flasher relay from the instrument panel junction block.
- (c) Measure the voltage of the wire harness side connectors.

Standard voltage

Tester Connection	Condition	Specified Condition
Junction block turn signal flasher relay terminal 4 (+B) - Body ground	Always	10 to 14 V
Junction block turn signal flasher relay terminal 1 (IG) - Body ground	Ignition Switch ON	10 to 14 V

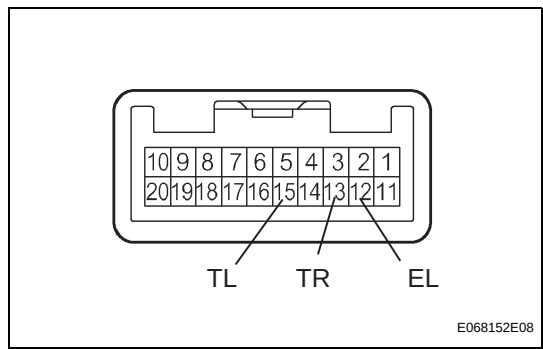
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

4

INSPECT HEADLIGHT DIMMER SWITCH



- (a) Remove the headlight dimmer switch.
- (b) Inspect the turn signal switch.
- (c) Measure the resistance of the switch.

Standard resistance

Tester Connection	Condition	Specified Condition
13 (TR) - 12 (EL)	Right	Below 1 Ω
13 (TR) - 12 (EL)	Neutral	10 k Ω or higher
15 (TL) - 12 (EL)	Left	Below 1 Ω
15 (TL) - 12 (EL)	Neutral	10 k Ω or higher

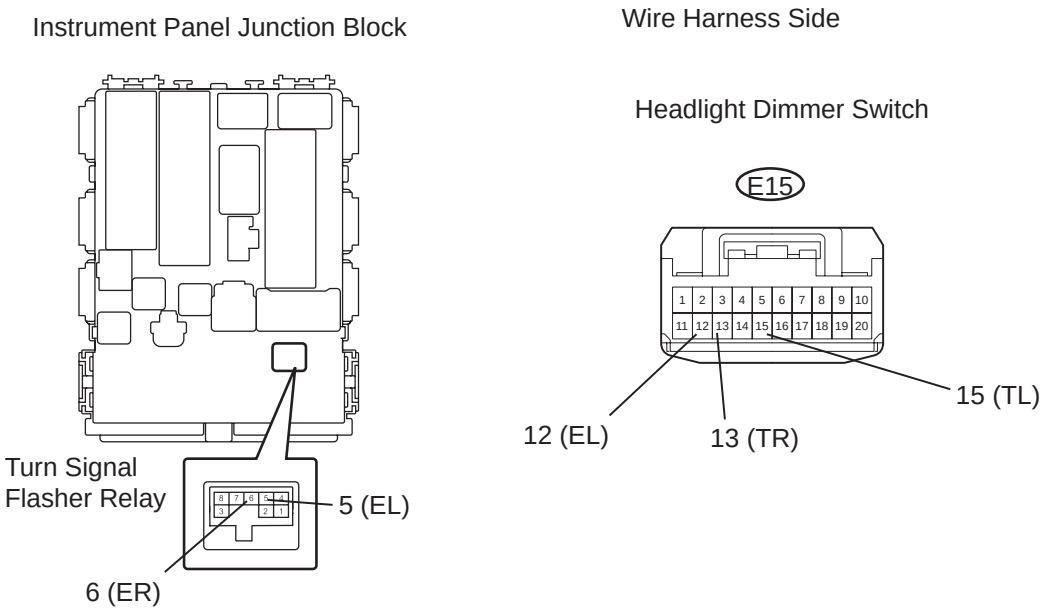
NG

REPLACE HEADLIGHT DIMMER SWITCH

OK

5

CHECK WIRE HARNESS (HEADLIGHT DIMMER SWITCH - INSTRUMENT PANEL JUNCTION BLOCK)



B128070E02

- (a) Remove the turn signal flasher relay.
- (b) Disconnect the E15 headlight dimmer switch connector.
- (c) Measure the resistance of the wire harness side connectors and junction block.

Standard resistance

Tester Connection	Specified Condition
Junction block turn signal flasher relay terminal 5 (EL) - E15-15 (TL)	Below 1 Ω
Junction block turn signal flasher relay terminal 5 (EL) or E15-15 (TL) - Body ground	10 k Ω or higher
Junction block turn signal flasher relay terminal 6 (ER) - E15-13 (TR)	Below 1 Ω
Junction block turn signal flasher relay terminal 6 (ER) or E15-13 (TR) - Body ground	10 k Ω or higher
E15-12 (EL) - Body ground	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE TURN SIGNAL FLASHER RELAY

6

INSPECT FRONT TURN SIGNAL LIGHT

- (a) Remove the front turn signal light.
- (b) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, then check that the light comes on.

OK:
Light comes on.

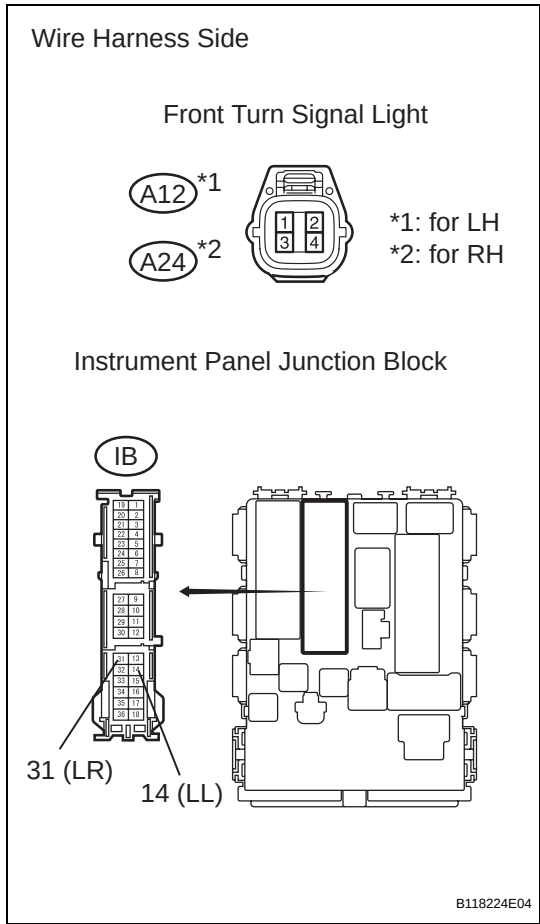
NG

REPLACE BULB

OK

7

CHECK WIRE HARNESS (INSTRUMENT PANEL JUNCTION BLOCK - FRONT TURN SIGNAL LIGHT)



- (a) Disconnect the A12 and A24 front turn signal light connectors.
- (b) Disconnect the IB instrument panel junction block connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

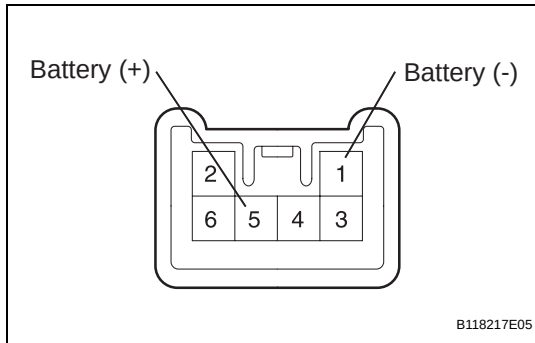
Tester Connection	Specified Condition
IB-31 (LR) - A24-1	Below 1 Ω
IB-31 (LR) or A24-1 - Body ground	10 kΩ or higher
IB-14 (LL) - A12-1	Below 1 Ω
IB-14 (LL) or A12-1 - Body ground	10 kΩ or higher

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

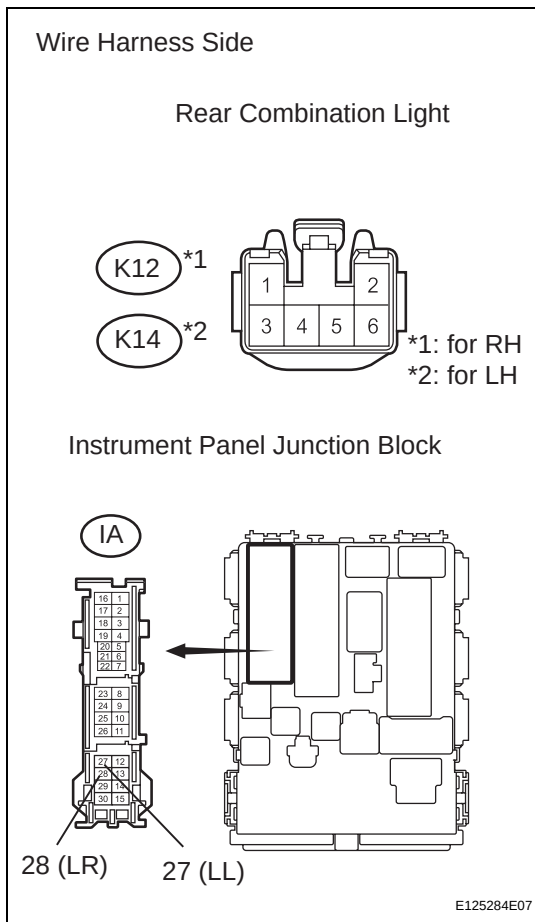
REPAIR OR REPLACE HARNESS AND CONNECTOR (FRONT TURN SIGNAL LIGHT - BODY GROUND)

8 INSPECT REAR TURN SIGNAL LIGHT

- Remove the rear combination light.
- Connect the positive (+) lead from the battery to terminal 5 and the negative (-) lead to terminal 1, then check that the light comes on.

OK:

Light comes on.

NG**REPLACE BULB****OK****9 CHECK WIRE HARNESS (INSTRUMENT PANEL JUNCTION BLOCK - REAR TURN SIGNAL LIGHT)**

- Disconnect the K12 and K14 rear combination light connectors.
- Disconnect the IA instrument panel junction block connector.
- Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
IA-28 (LR) - K12-5	Below 1 Ω
IA-28 (LR) or K12-5 - Body ground	10 k Ω or higher
IA-27 (LL) - K14-5	Below 1 Ω
IA-27 (LL) or K14-5 - Body ground	10 k Ω or higher

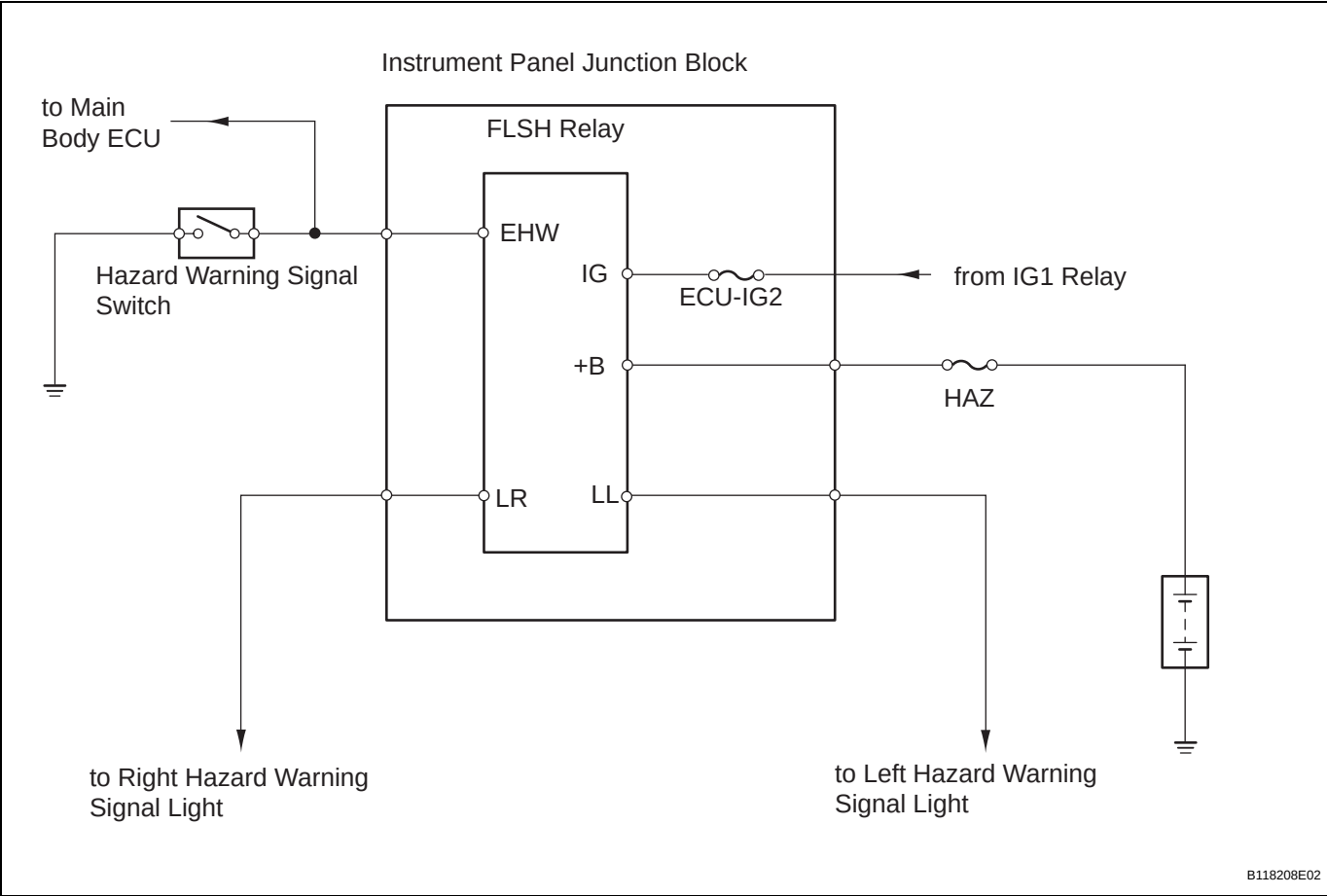
NG**REPAIR OR REPLACE HARNESS AND CONNECTOR****OK****REPAIR OR REPLACE HARNESS AND CONNECTOR (REAR TURN SIGNAL LIGHT - BODY GROUND)**

Hazard Warning Switch Circuit

DESCRIPTION

When the hazard warning signal switch is turned on, the turn signal flasher relay (Marking: FLSH) in the main body ECU turns on to flash the hazard warning signal lights.

WIRING DIAGRAM



INSPECTION PROCEDURE



1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch ON and press the intelligent tester main switch ON.
- (c) Select the item below in the ACTIVE TEST and then check the relay operation.

Main body ECU

Item	Test Details/Display (Range)	Diagnostic Note
HAZARD	HAZARD ON/OFF	-

OK:
All hazard warning signal lights flash.

OK

Go to step 5

NG

2 INSPECT FUSE (HAZ)

- (a) Remove the HAZ fuse from the engine room No. 1 relay block.
- (b) Measure the resistance of the fuse.

Standard resistance:**Below 1 Ω**

NG

REPLACE FUSE

OK

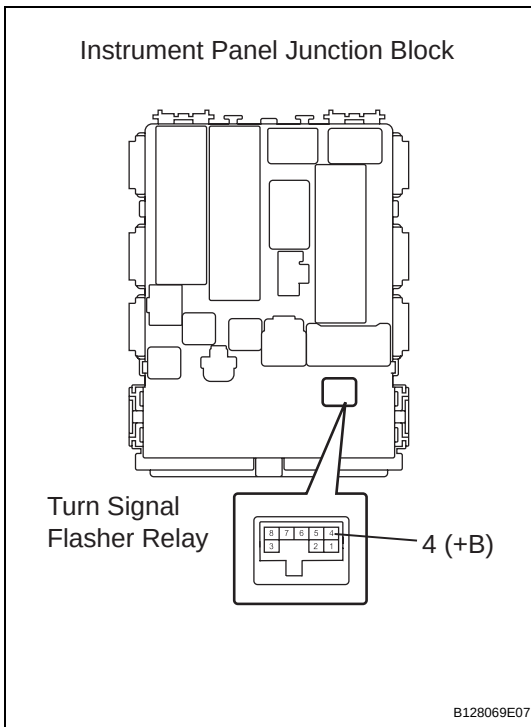
3 CHECK WIRE HARNESS (TURN SIGNAL FLASHER RELAY - BATTERY)

- (a) Remove the turn signal flasher relay from the instrument panel junction block.
- (b) Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Specified Condition
Junction Block turn signal flasher Relay terminal 4 (+B) - Body ground	10 to 14 V

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

4 CHECK OPERATION OF TURN SIGNAL FLASHER RELAY (Marking: FLSH)

- (a) Replace the turn signal flasher relay with a normally functioning one or a new one.
- (b) Check that the appropriate turn signal light flashes.
- (c) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (d) Turn the ignition switch ON and press the intelligent tester main switch ON.

- (e) Select the item below in the ACTIVE TEST and then check the relay operation.

Main body ECU

Item	Test Details / Display (Range)	Diagnostic Note
HAZARD	HAZARD ON / OFF	-

OK:

All hazard warning signal lights flash.

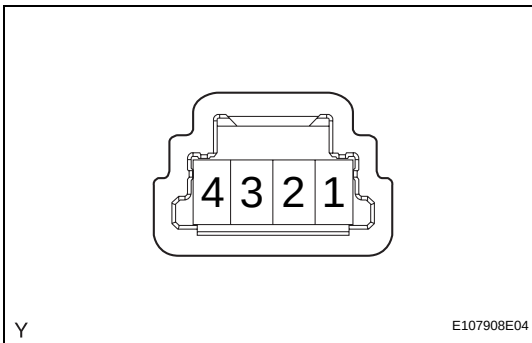
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR (JUNCTION BLOCK - HAZARD WARNING SIGNAL SWITCH)

OK

REPLACE TURN SIGNAL FLASHER RELAY

5 INSPECT HAZARD WARNING SIGNAL SWITCH



- (a) Remove the hazard warning signal switch.

- (b) Measure the resistance of the switch.

Standard resistance

Tester Connection	Condition	Specified Condition
1 - 4	OFF	10 k Ω or higher
1 - 4	ON	Below 23.4 Ω

NG

REPLACE HAZARD WARNING SIGNAL SWITCH

OK

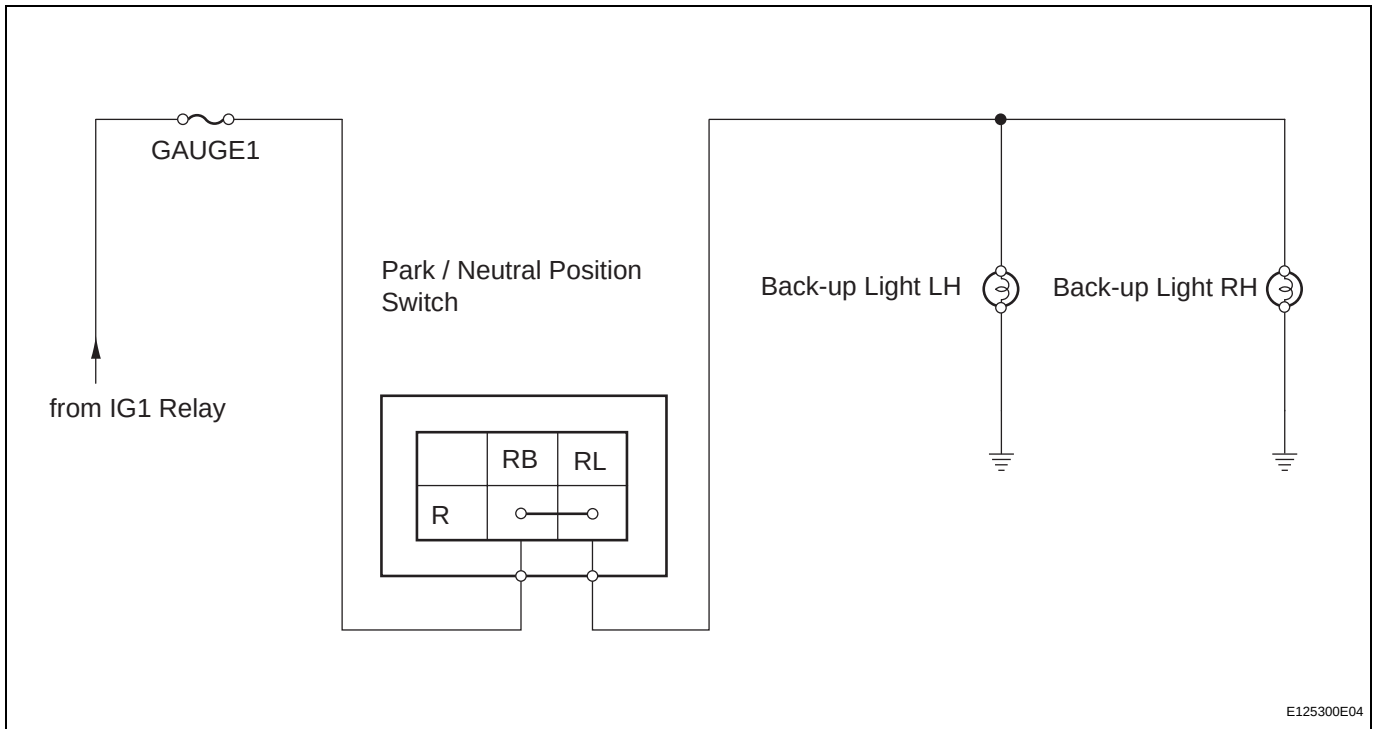
REPAIR OR REPLACE HARNESS AND CONNECTOR (HAZARD WARNING SIGNAL SWITCH - BODY GROUND)

Back-up Light Circuit

DESCRIPTION

The park / neutral position switch turns on when the shift lever is moved into the R position, causing the back-up lights to illuminate.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT FUSE (GAUGE1)

- Remove the GAUGE1 fuse from the instrument panel junction block.
- Measure the resistance of the fuse.

Standard resistance:

Below 1 Ω

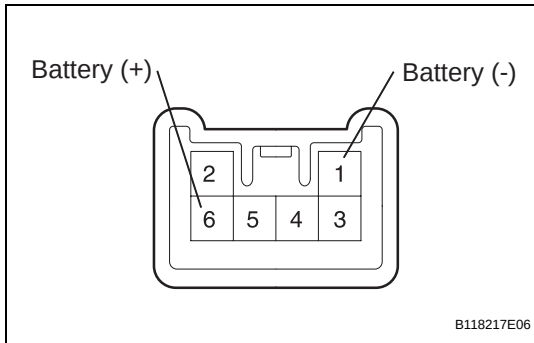
NG

REPLACE FUSE

OK

LI

2 INSPECT BACK-UP LIGHT



- Remove the rear combination light.
- Connect the positive (+) lead from the battery to terminal 6 and the negative (-) lead to terminal 1, then check that the light comes on.

OK:

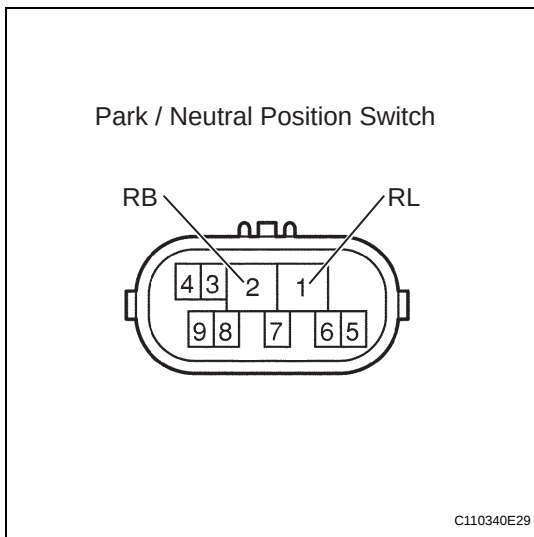
Light comes on.

NG

REPLACE BULB

OK

3 INSPECT PARK / NEUTRAL POSITION SWITCH



- Disconnect the B26 park / neutral position switch connector.
- Measure the resistance of the switch.

Standard resistance

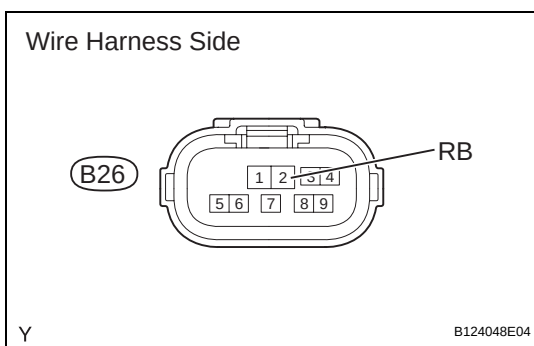
Tester Connection	Shift Position	Specified Connection
2 (RB) - 1 (RL)	R	Below 1 Ω
2 (RB) - 1 (RL)	Except R	10 k Ω or higher

NG

REPLACE PARK / NEUTRAL POSITION SWITCH

OK

4 CHECK WIRE HARNESS (PARK / NEUTRAL POSITION SWITCH - BATTERY)



- Disconnect the B26 park / neutral position switch connector.
- Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Condition	Specified Condition
B26-2 (RB) - Body ground	Ignition switch ON	10 to 14 V

NG

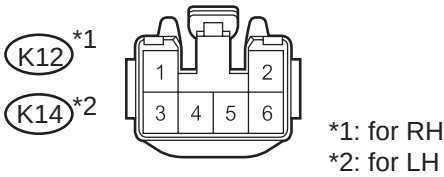
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

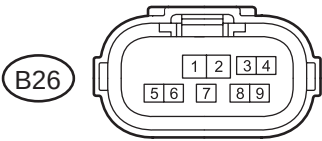
5 CHECK WIRE HARNESS (PARK / NEUTRAL POSITION SWITCH - BACK-UP LIGHT)

Wire Harness Side

Rear Combination Light



Park / Neutral Position Switch



E125301E03

- (a) Disconnect the B26 park / neutral position switch connector.
- (b) Disconnect the K12 and K14 rear combination light assembly connectors.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
B26-1 - K12-6	Below 1 Ω
B26-1 or K12-6 - Body ground	10 k Ω or higher
B26-1 - K24-6	Below 1 Ω
B26-1 or K24-6 - Body ground	10 k Ω or higher

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

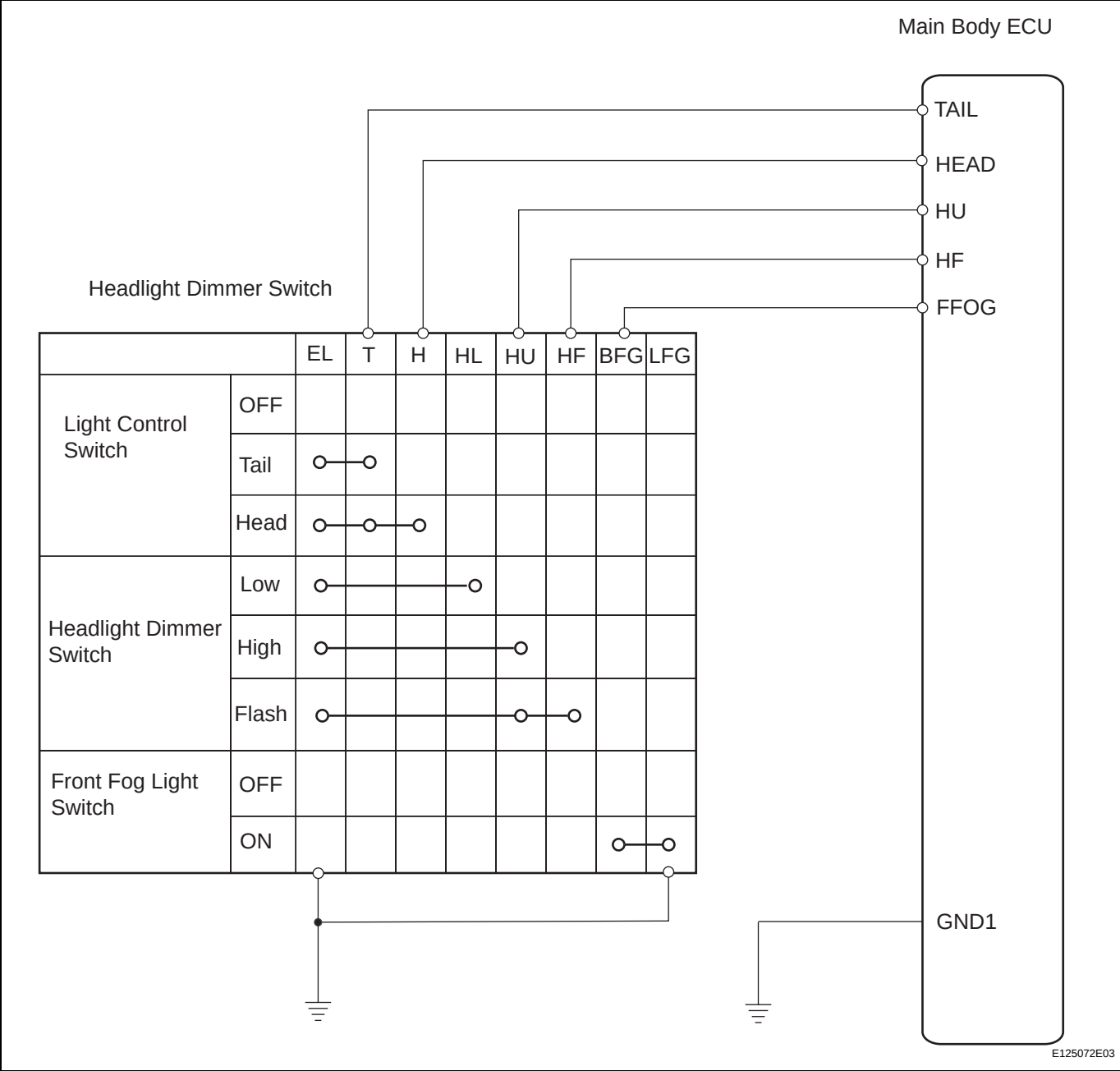
REPAIR OR REPLACE HARNESS AND CONNECTOR (BACK-UP LIGHT - BODY GROUND)

Light Control Switch Circuit

DESCRIPTION

This circuit detects the state of the headlight dimmer switch.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE OF INTELLIGENT TESTER (MAIN BODY ECU)

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch ON and press the intelligent tester main switch ON.

- (c) Select the items below in the DATA LIST, and read the displays on the intelligent tester.

Main body ECU

Item	Measurement / Display (Range)	Normal Condition	Diagnostic Note
DIMMER SW	Headlight dimmer switch signal / ON or OFF	ON: Headlight dimmer switch is in HI or FLASH position OFF: Headlight dimmer switch is in LO position	-
PASSING LIGHT SW	Passing light switch signal / ON or OFF	ON: Headlight dimmer switch is in FLASH position OFF: Headlight dimmer switch is in except FLASH position	-
FRONT FOG LIGHT SW	Front fog light switch signal / ON or OFF	ON: Front fog light switch is in ON position OFF: Front fog light switch is in OFF position	-
HEADLIGHT SW	Headlight control switch signal (HEAD) / ON or OFF	ON: Light control switch is in HEAD position OFF: Light control switch is in except HEAD position	-
HEADLIGHT SW (Tail)	Headlight control switch signal (TAIL) / ON or OFF	ON: Light control switch is in TAIL or HEAD position OFF: Light control switch is in except OFF position	-

OK:

ON is displayed on the intelligent tester screen.

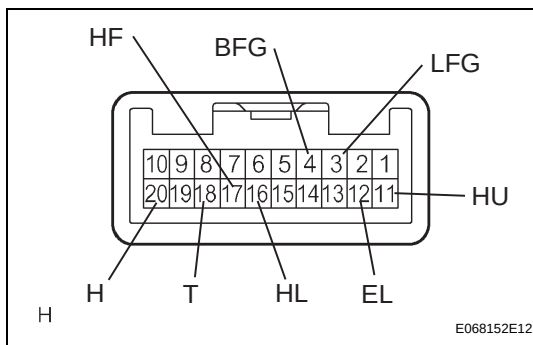
OK

**PROCEED TO NEXT INSPECTION
PROCEDURE SHOWN IN PROBLEM
SYMPTOMS TABLE**

NG

2

INSPECT HEADLIGHT DIMMER SWITCH



- (a) Remove the headlight dimmer switch.

- (b) Measure the resistance of the switch.

Standard resistance

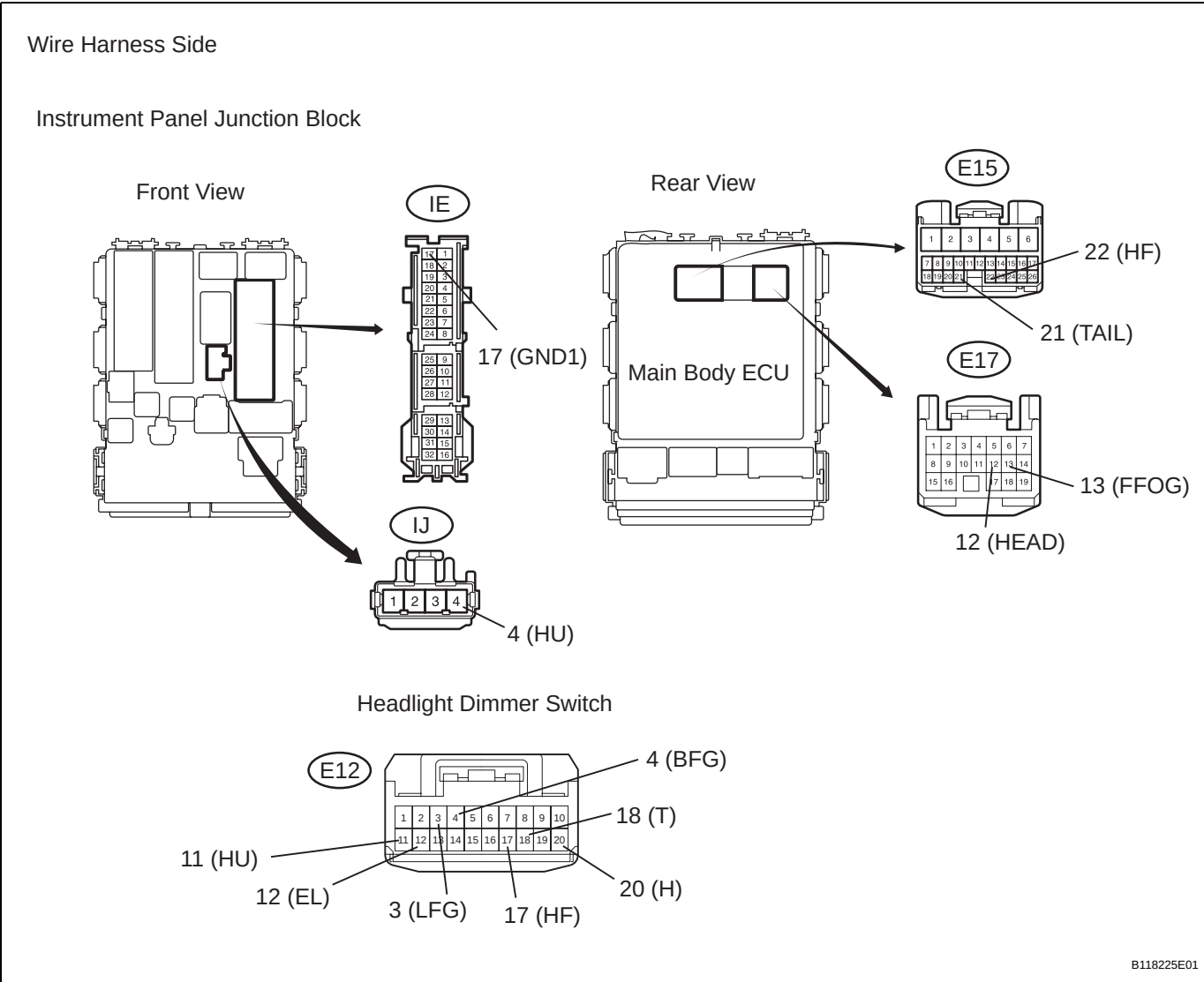
Tester Connection	Condition	Specified Condition
18 (T) - 12 (EL)	OFF	10 k Ω or higher
18 (T) - 12 (EL)	TAIL	Below 1 Ω
20 (H) - 12 (EL)	OFF	10 k Ω or higher
20 (H) - 12 (EL)	HEAD	Below 1 Ω
16 (HL) - 12 (EL)	HIGH or FLASH	10 k Ω or higher
16 (HL) - 12 (EL)	LOW	Below 1 Ω
11 (HU) - 12 (EL)	LOW or FLASH	10 k Ω or higher
11 (HU) - 12 (EL)	HIGH	Below 1 Ω
17 (HF) - 12 (EL)	LOW or HIGH	10 k Ω or higher
17 (HF) - 12 (EL)	FLASH	Below 1 Ω
4 (BFG) - 3 (LFG)	Fog light switch OFF	10 k Ω or higher
4 (BFG) - 3 (LFG)	Fog light switch ON	Below 1 Ω

NG

**REPLACE HEADLIGHT DIMMER SWITCH
ASSEMBLY**

OK

3 CHECK WIRE HARNESS (MAIN BODY ECU - DIMMER SWITCH AND BODY GROUND)



- (a) Disconnect the E12 headlight dimmer switch connector.
- (b) Disconnect the IE and IJ instrument panel junction block connectors.
- (c) Disconnect the E15 and E17 main body ECU connectors.
- (d) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
E15-22 (HF) - E12-17 (HF)	Below 1 Ω
E15-22 (HF) or E12-17 (HF) - Body ground	10 kΩ or higher
E15-21 (TAIL) - E12-18 (T)	Below 1 Ω
E15-21 (TAIL) or E12-18 (T) - Body ground	10 kΩ or higher
E17-12 (HEAD) - E12-20 (H)	Below 1 Ω

Tester Connection	Specified Condition
E17-12 (HEAD) or E12-20 (H) - Body ground	10 k Ω or higher
E17-13 (FFOG) - E12-4 (BFG)	Below 1 Ω
E17-13 (FFOG) or E12-4 (BFG) - Body ground	10 k Ω or higher
IJ-4 (HU) - E12-11 (HU)	Below 1 Ω
IJ-4 (HU) or E12-11 (HU) - Body ground	10 k Ω or higher
E12-12 (EL) - Body ground	Below 1 Ω
E12-3 (LFG) - Body ground	Below 1 Ω
IE-17 (GND1) - Body ground	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

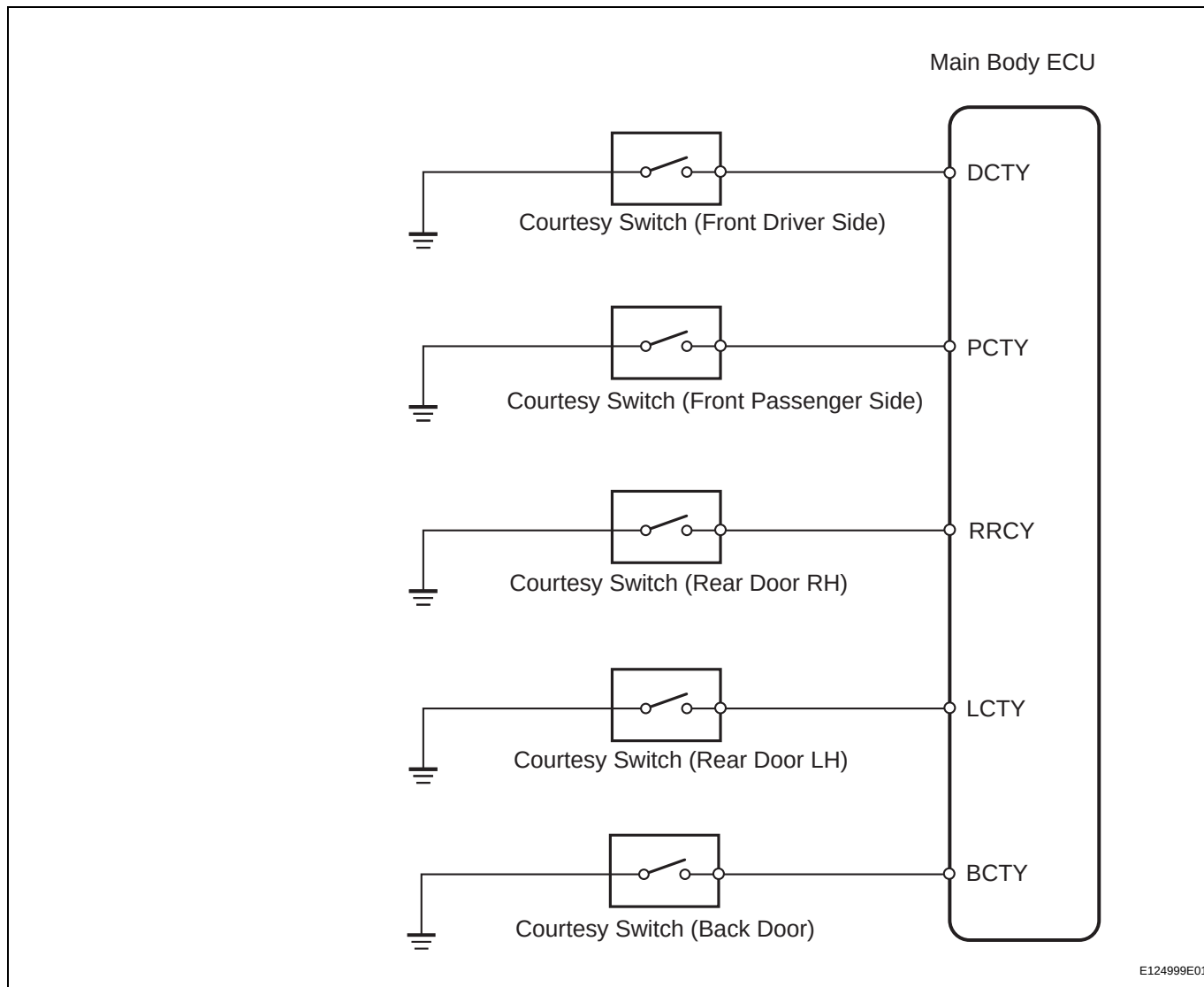
REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

Door Courtesy Switch Circuit

DESCRIPTION

The main body ECU detects the condition of the door courtesy switch.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE OF INTELLIGENT TESTER (DOOR COURTESY LIGHT SWITCH)

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch to the ON position and press the intelligent tester main switch ON.
- (c) Select the items below in the DATA LIST, and read the displays on the intelligent tester.

Main body ECU

Item	Measurement Item/Display (Range)	Normal Condition	Diagnostic Note
D DOR CTY SW	Driver's door courtesy switch signal/ON or OFF	ON: Driver side door is open OFF: Driver side door is closed	-
P DOR CYT SW	Passenger's door courtesy switch signal/ON or OFF	ON: Front passenger side door is open OFF: Front passenger door is closed	-
RR DOR CTY SW	Rear door courtesy switch signal/ON or OFF	ON: Rear right passenger side door is open OFF: Rear right passenger side door is closed	-
RL DOR CTY SW	Rear door courtesy switch signal/ON or OFF	ON: Rear left passenger side door is open OFF: Rear left passenger side door is closed	-
BK DOR CTY SW	Back door courtesy switch signal/ON or OFF	ON: Back door is open OFF: Back door is closed	-

OK:

Condition sign can be displayed.

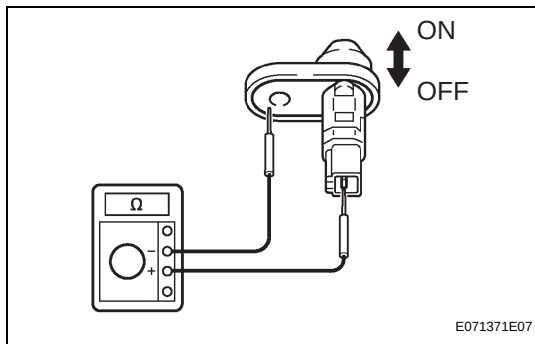
OK

**PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN IN PROBLEM SYMPTOMS TABLE**

NG

2

INSPECT COURTESY LIGHT SWITCH



- (a) Remove the door courtesy light switch.
(b) Measure the resistance of the switch.

Standard resistance:**Front LH, Front RH, Rear LH, Rear RH, Back Door**

Tester Connection	Condition	Specified Condition
1 - Body ground	OFF	10 k Ω or higher
	ON	Below 1 Ω

NG

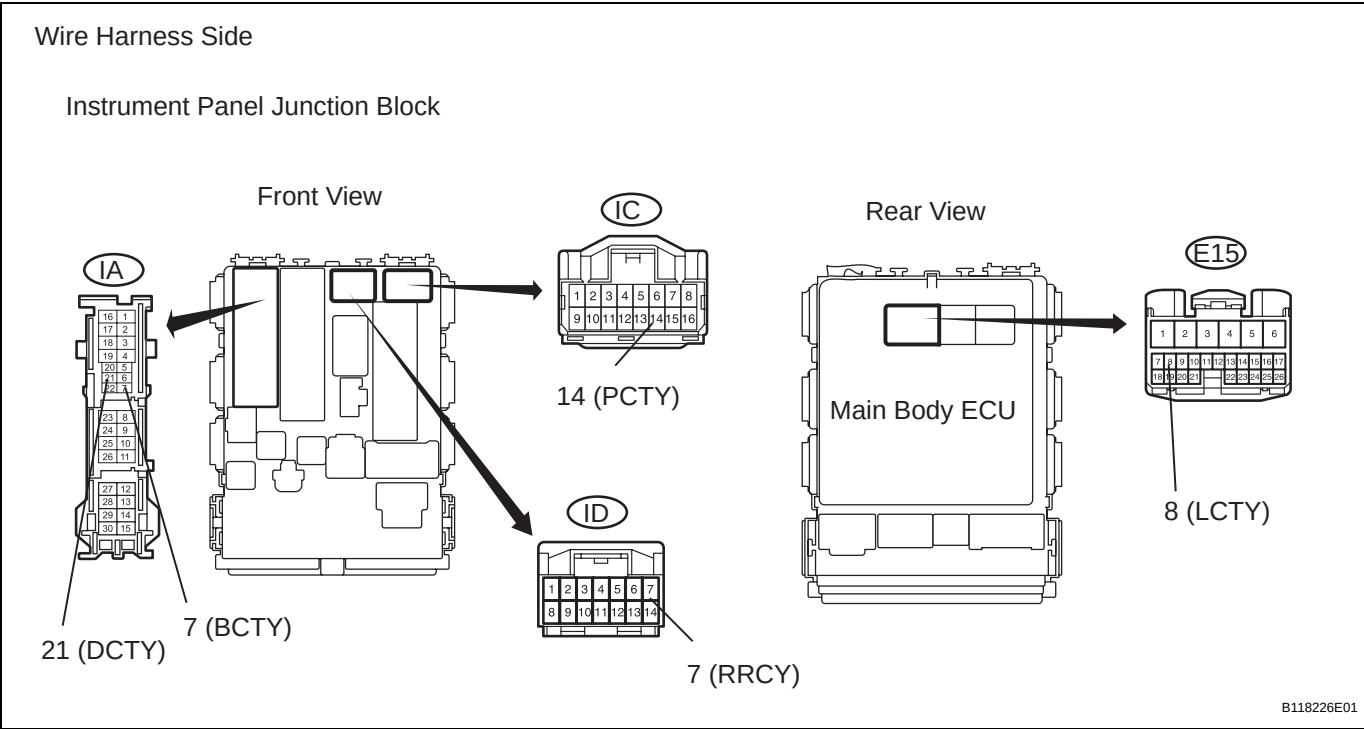
**REPLACE DOOR COURTESY LIGHT
SWITCH**

OK

LI

3

CHECK WIRE HARNESS (MAIN BODY ECU - COURTESY LIGHT SWITCH)



- (a) Connect the courtesy light switch.
- (b) Disconnect the IA, IC and ID instrument panel junction block connectors.
- (c) Disconnect the E15 main body ECU connector.
- (d) Measure the resistance of the wire harness side connectors.

Standard resistance:
Front door LH

Tester Connection	Condition	Specified Condition
IA-21 (DCTY) - Body ground	Front LH door is opened	Below 1 Ω
	Front LH door is closed	10 kΩ or higher

Front door RH

Tester Connection	Condition	Specified Condition
IC-14 (PCTY) - Body ground	Front RH door is opened	Below 1 Ω
	Front RH door is closed	10 kΩ or higher

Rear door RH

Tester Connection	Condition	Specified Condition
ID-7 (RRCY) - Body ground	Rear RH door is opened	Below 1 Ω
	Rear RH door is closed	10 kΩ or higher

Rear door LH

Tester Connection	Condition	Specified Condition
E15-8 (LCTY) - Body ground	Rear LH door is opened	Below 1 Ω
	Rear LH door is closed	10 kΩ or higher

Back door

Tester Connection	Condition	Specified Condition
IA-7 (BCTY) - Body ground	Back door is opened	Below 1 Ω
	Back door is closed	10 k Ω or higher

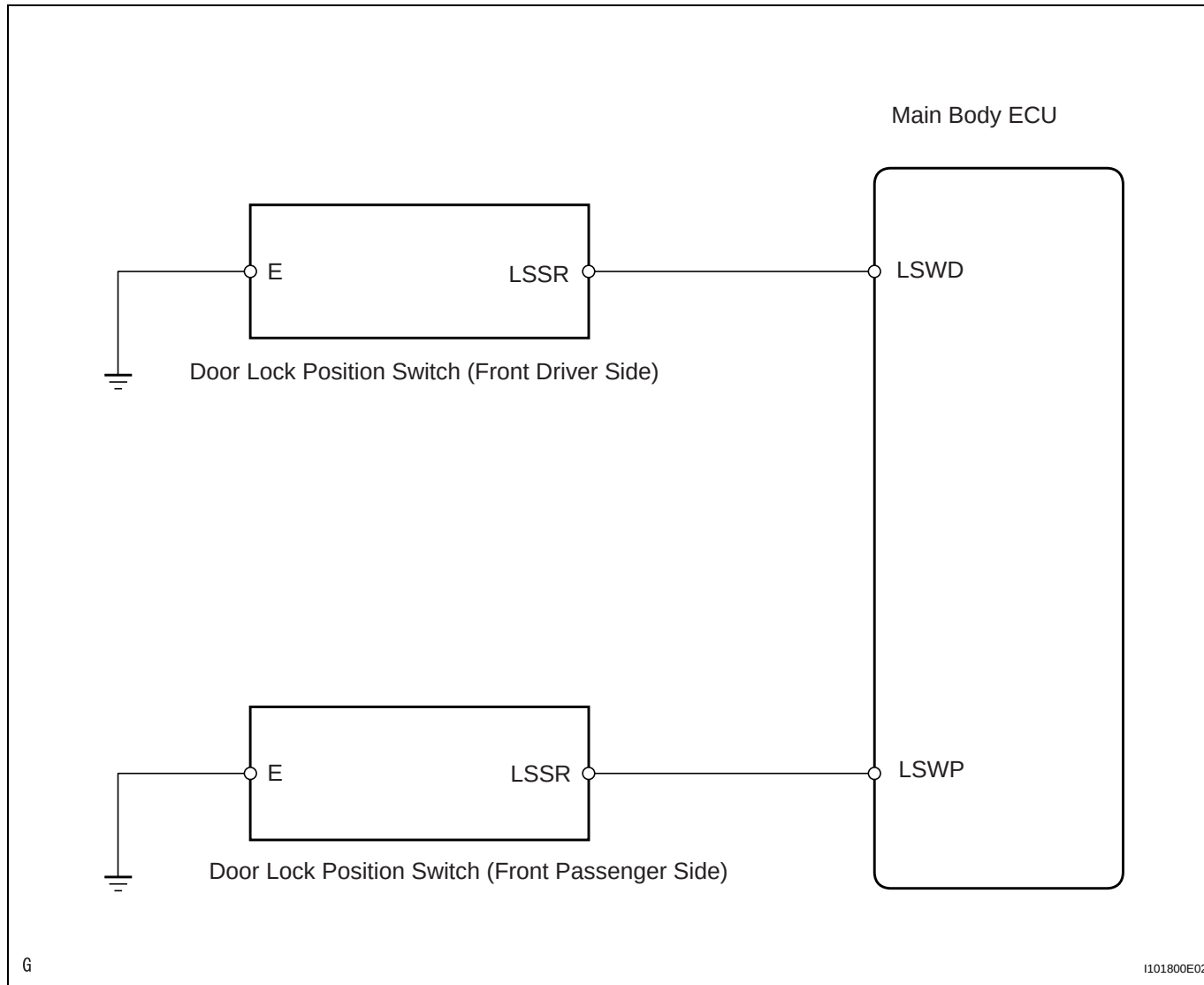
NG**REPAIR OR REPLACE HARNESS AND CONNECTOR****OK****REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)**

Door LOCK Position Circuit

DESCRIPTION

This circuit detects the state of the door lock detection sensor and sends it to the main body ECU.

WIRING DIAGRAM



INSPECTION PROCEDURE

1

READ VALUE OF INTELLIGENT TESTER (DOOR LOCK POSITION)

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch to the ON position and press the intelligent tester main switch ON.
- Select the items below in the DATA LIST, and read the displays on the intelligent tester.

Main body ECU

Item	Measurement item/Display (Range)	Normal Condition	Diagnostic Note
D LOCK POS SW	Driver's door lock position switch signal/ON or OFF	ON: Door lock is in unlock position OFF: Door lock is in lock position	-
P LOCK POS SW	Front passenger's door lock position switch signal/ON or OFF	ON: Front passenger's door lock is in unlock position OFF: Front passenger's door lock is in lock position	-

OK:

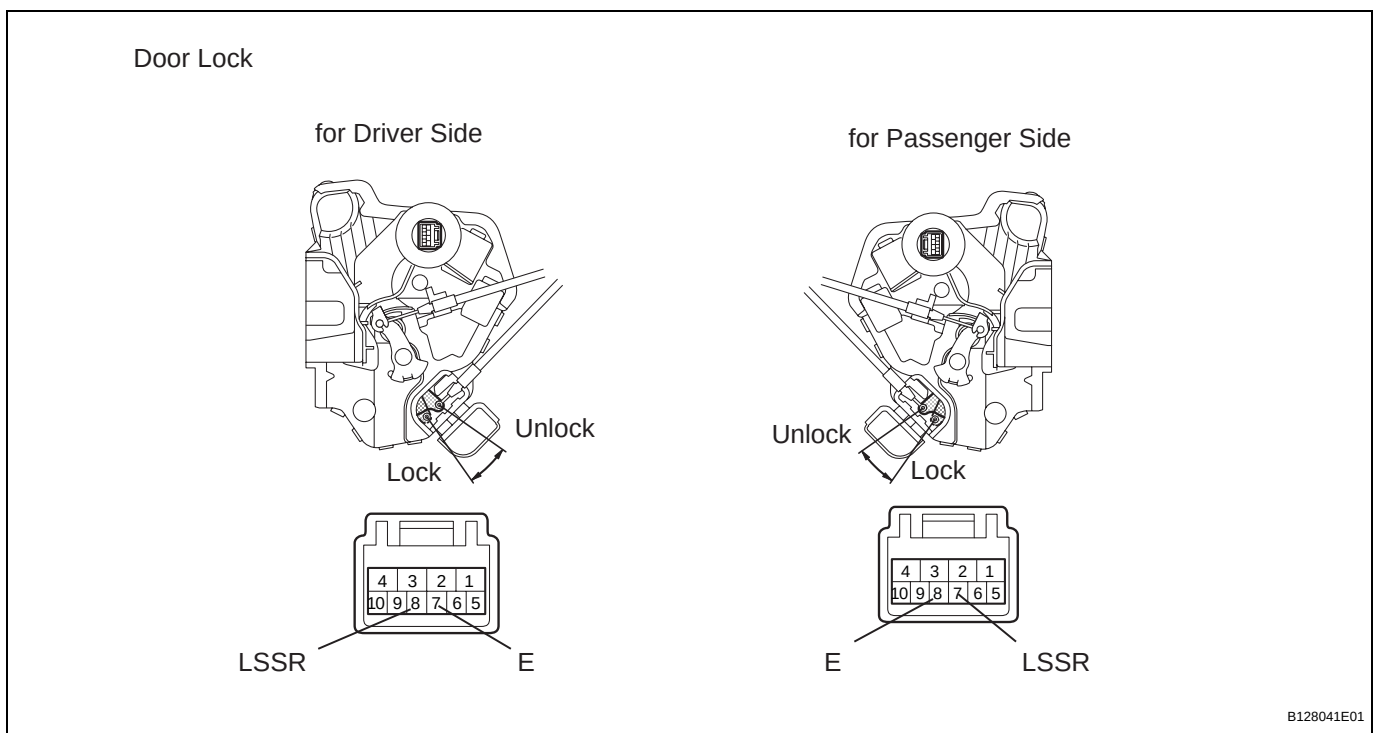
Condition sign can be displayed.

OK

**PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN IN PROBLEM SYMPTOMS TABLE**

NG

2 INSPECT FRONT DOOR LOCK



- Remove the front door lock (driver side or passenger side).
- Measure the resistance of the door lock.

Standard resistance:**Front door lock (for Driver Side)**

Tester Connection	Condition	Specified Condition
8 (LSSR) - 7 (E)	LOCK	Below 1 Ω
	UNLOCK	10 k Ω or higher

Front door lock (for Passenger Side)

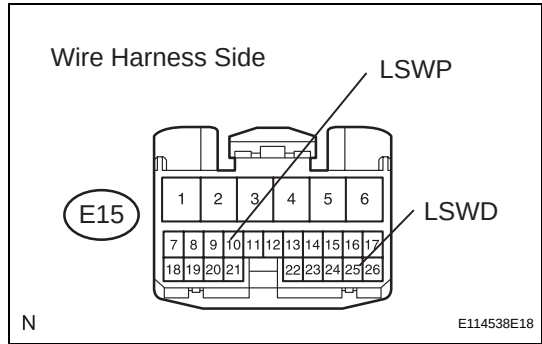
Tester Connection	Condition	Specified Condition
7 (LSSR) - 8 (E)	LOCK	Below 1 Ω
	UNLOCK	10 kΩ or higher

NG

REPLACE FRONT DOOR LOCK ASSEMBLY

OK

3 CHECK WIRE HARNESS (MAIN BODY ECU - DOOR LOCK AND BODY GROUND)



- (a) Disconnect the E15 main body ECU connector.
(b) Measure the resistance of the wire harness side connector.

Standard resistance:
Front door lock (for Driver Side)

Tester Connection	Condition	Specified Condition
E15-25 (LSWD) - Body ground	LOCK	Below 1 Ω
	UNLOCK	10 kΩ or higher

Front door lock (for Passenger Side)

Tester Connection	Condition	Specified Condition
E15-10 (LSWP) - Body ground	LOCK	Below 1 Ω
	UNLOCK	10 kΩ or higher

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

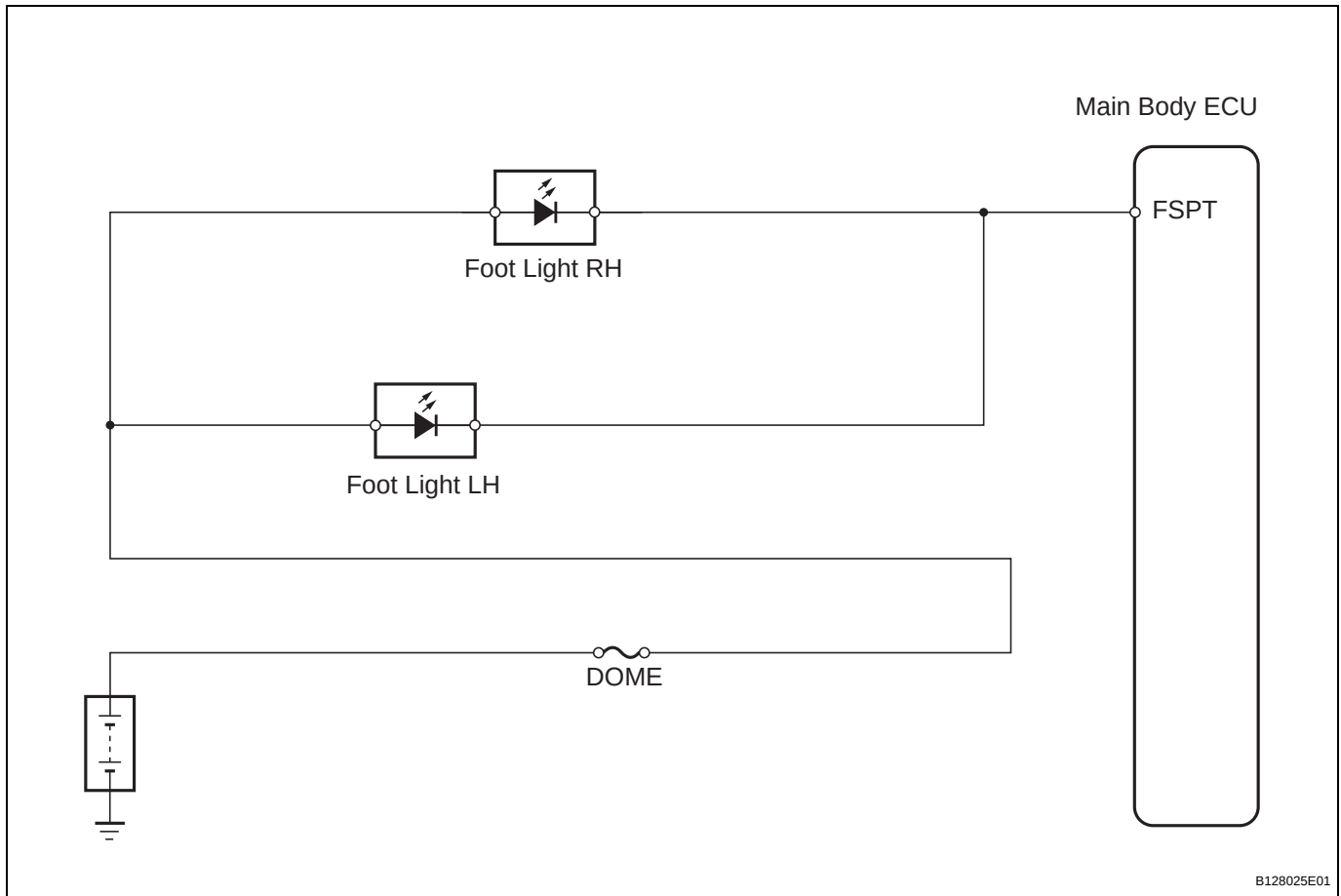
REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

Footwell Light Circuit

DESCRIPTION

The main body ECU receives information regarding the door lock position switch and ignition switch, and turns on each foot light.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER (MAIN BODY ECU)

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch to the ON position and press the intelligent tester main switch ON.
- Select the items below in the ACTIVE TEST and then check the relay operation.

Main body ECU

Item	Test Details	Diagnostic Note
STEP LIGHT	Foot light ON/OFF	-

OK:
Light comes on.

OK

**PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN IN PROBLEM SYMPTOMS TABLE**

NG

2 INSPECT FUSE (DOME)

- Remove the DOME fuse from the engine room No. 2 relay block.
- Measure the resistance of the fuse.

Standard resistance:
Below 1 Ω

NG

REPLACE FUSE

OK

3 INSPECT FOOT LIGHT

- Remove the foot light.
- Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the light comes on.

OK:
Light comes on.

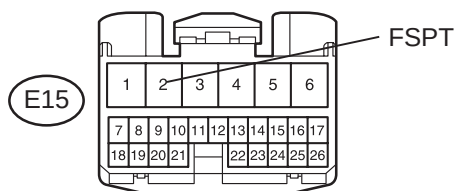
NG

REPLACE FOOT LIGHT ASSEMBLY

OK

4 CHECK WIRE HARNESS (BATTERY - MAIN BODY ECU)

Wire Harness Side



N

E114538E19

- Install the foot light.
- Disconnect the E15 main body ECU connector.
- Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Specified Condition
E15-2 (FSPT) - Body ground	10 to 14 V

NG

**REPAIR OR REPLACE HARNESS AND
CONNECTOR**

OK

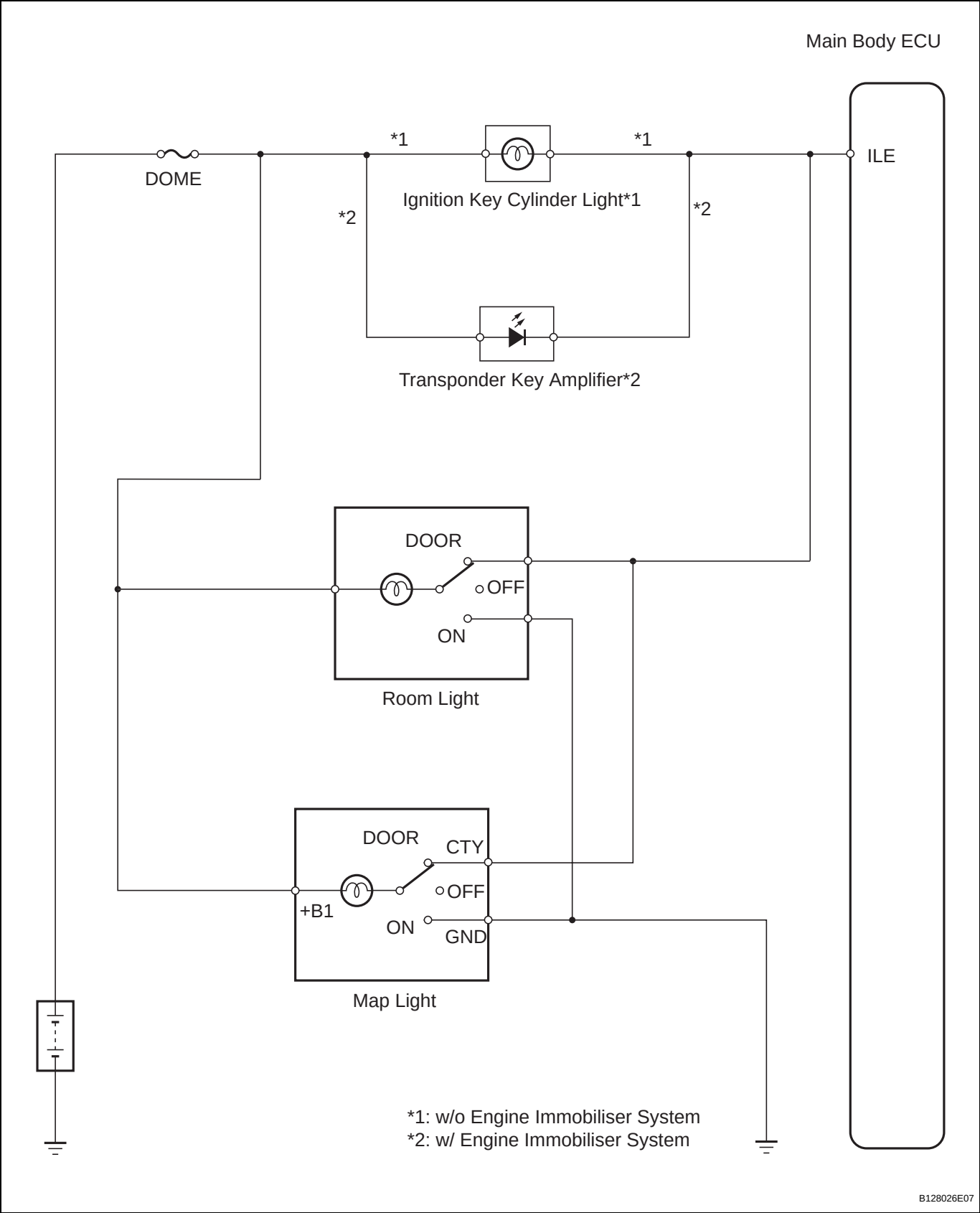
REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

Illumination Circuit

DESCRIPTION

The main body ECU receives information regarding the door courtesy switch and door lock position switch, and turns on the room light.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER (MAIN BODY ECU)

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch to the ON position and press the intelligent tester main switch ON.
- (c) Select the items below in the ACTIVE TEST and then check the main body ECU operation.

Main body ECU

Item	Test Details	Diagnostic Note
ILLUMI OUTPUT	Test Details: Turn interior light and key illumination ON/ OFF Vehicle Condition: Interior light SW is in DOOR position and all doors are closed	-

OK:
Light comes on.

OK

**PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN IN PROBLEM SYMPTOMS TABLE**

NG

2 INSPECT FUSE (DOME)

- (a) Remove the DOME fuse from the engine room No. 2 relay block.
- (b) Measure the resistance of the fuse.

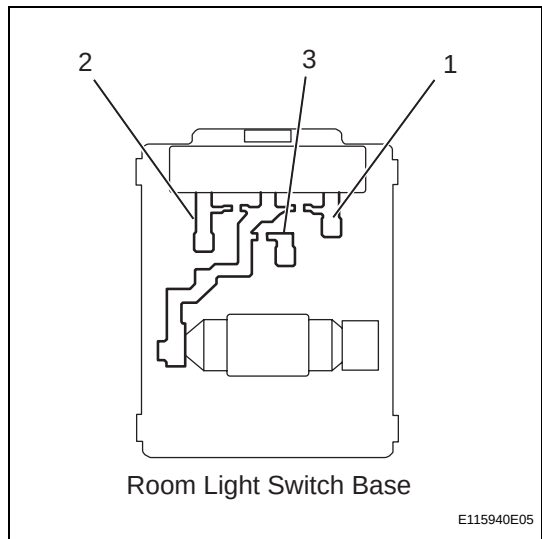
Standard resistance:
Below 1 Ω

NG

REPLACE FUSE

OK

3INSPECT ROOM LIGHT ASSEMBLY



- (a) Remove the room light assembly.
(b) Measure the resistance of the room light switch base.
Standard resistance

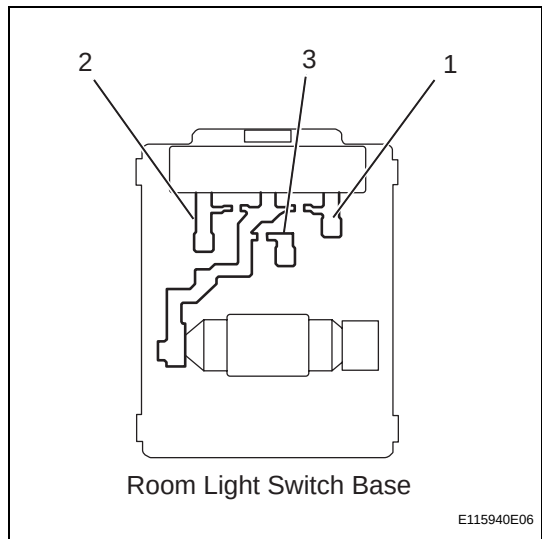
Tester Connection	Switch Condition	Specified Condition
1 - 2 1 - 3	OFF	10 kΩ or higher
1 - 2	DOOR	Below 1 Ω
1 - 3	ON	Below 1 Ω

NG

REPLACE ROOM LIGHT ASSEMBLY

OK

4INSPECT ROOM LIGHT BULB



- (a) Remove the room light assembly.
(b) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, then check that the light comes on when the switch is in the DOOR position.
OK:
Light comes on.
(c) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 3, then check that the light comes on when the switch is in the ON position.
OK:
Light comes on.

NG

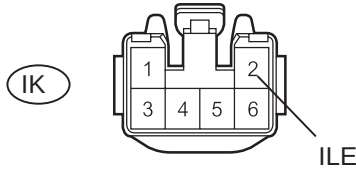
REPLACE BULB

OK



5**CHECK HARNESS AND CONNECTOR (BATTERY - ROOM LIGHT AND MAIN BODY ECU)**

Wire Harness Side



H

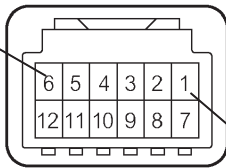
B123802E07

- (a) Disconnect the IK instrument panel junction block connector.
 (b) Measure the voltage of the wire harness side connector.
Standard voltage

Tester Connection	Condition	Specified Condition
IK-2 (ILE) - Body ground	Room light switch in DOOR position	10 to 14 V

NG**REPAIR OR REPLACE HARNESS AND CONNECTOR****OK****6****INSPECT MAP LIGHT BULB**

Battery (+)



Battery (-)

H

E073293E05

- (a) Remove the map light assembly.
 (b) Connect the positive (+) lead from the battery to terminal 6 and the negative (-) lead to terminal 1, then check that the light comes on when the switch is in the DOOR position.

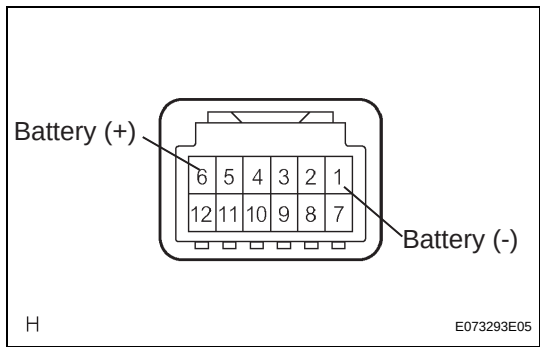
OK:**Light comes on.**

- (c) Connect the positive (+) lead from the battery to terminal 6 and the negative (-) lead to terminal 7, then check that the light comes on when the switch is in the ON position.

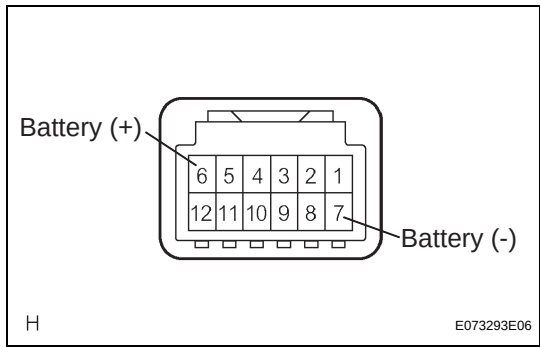
OK:**Light comes on.****OK****Go to step 8****NG**

7

INSPECT MAP LIGHT



- (a) Replace the map light bulb with a normally functioning one or a new one.
- (b) Connect the positive (+) lead from the battery to terminal 6 and the negative (-) lead to terminal 1, then check that the light comes on when the switch is in the DOOR position.
- OK:**
Light comes on.



- (c) Connect the positive (+) lead from the battery to terminal 6 and the negative (-) lead to terminal 7, then check that the light comes on when the switch is in the ON position.
- OK:**
Light comes on.

NG

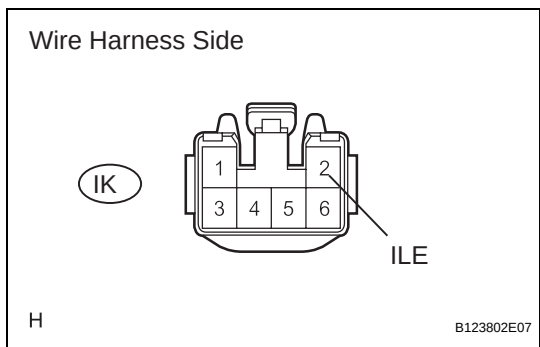
REPLACE MAP LIGHT ASSEMBLY

OK

REPLACE MAP LIGHT BULB

8

CHECK WIRE HARNESS (BATTERY - MAP LIGHT AND MAIN BODY ECU)



- (a) Disconnect the IK instrument panel junction block connector.
- (b) Measure the voltage of the wire harness side connector.
- Standard voltage**

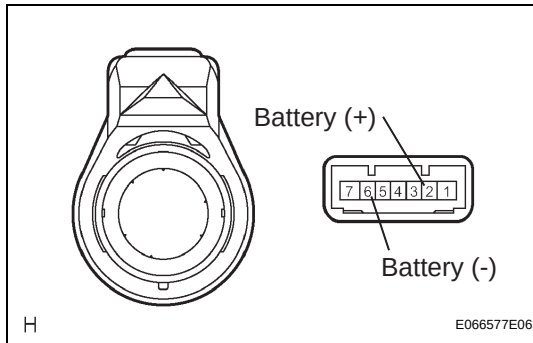
Tester Connection	Condition	Specified Condition
IK-2 (ILE) - Body ground	Room light switch in DOOR position	10 to 14 V

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

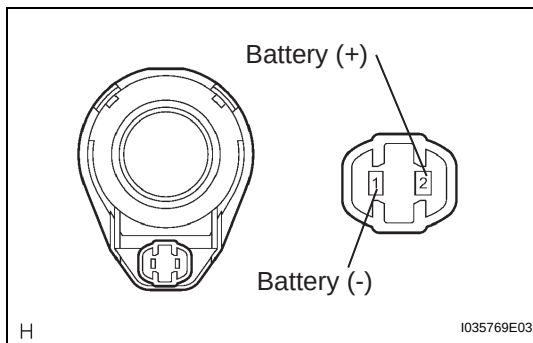
9 INSPECT IGNITION KEY CYLINDER LIGHT



- (a) w/ Engine Immobiliser System
- (1) Remove the transponder key amplifier (ignition key cylinder light).
 - (2) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 6, then check that the light comes on.

OK:

Light comes on.



- (b) w/o Engine Immobiliser System
- (1) Remove the ignition key cylinder light.
 - (2) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the light comes on.

OK:

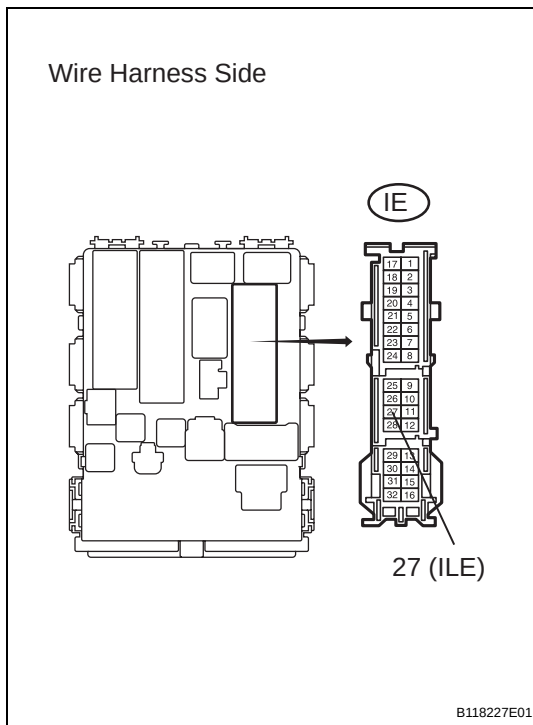
Light comes on.

NG

REPLACE IGNITION KEY CYLINDER LIGHT

OK

10 CHECK WIRE HARNESS (BATTERY - MAIN BODY ECU)



- (a) Disconnect the IE instrument panel junction block connector.
- (b) Measure the voltage of the wire harness side connector.

Tester Connection	Specified Condition
IE-27 (ILE) - Body ground	10 to 14 V

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

LI

OK

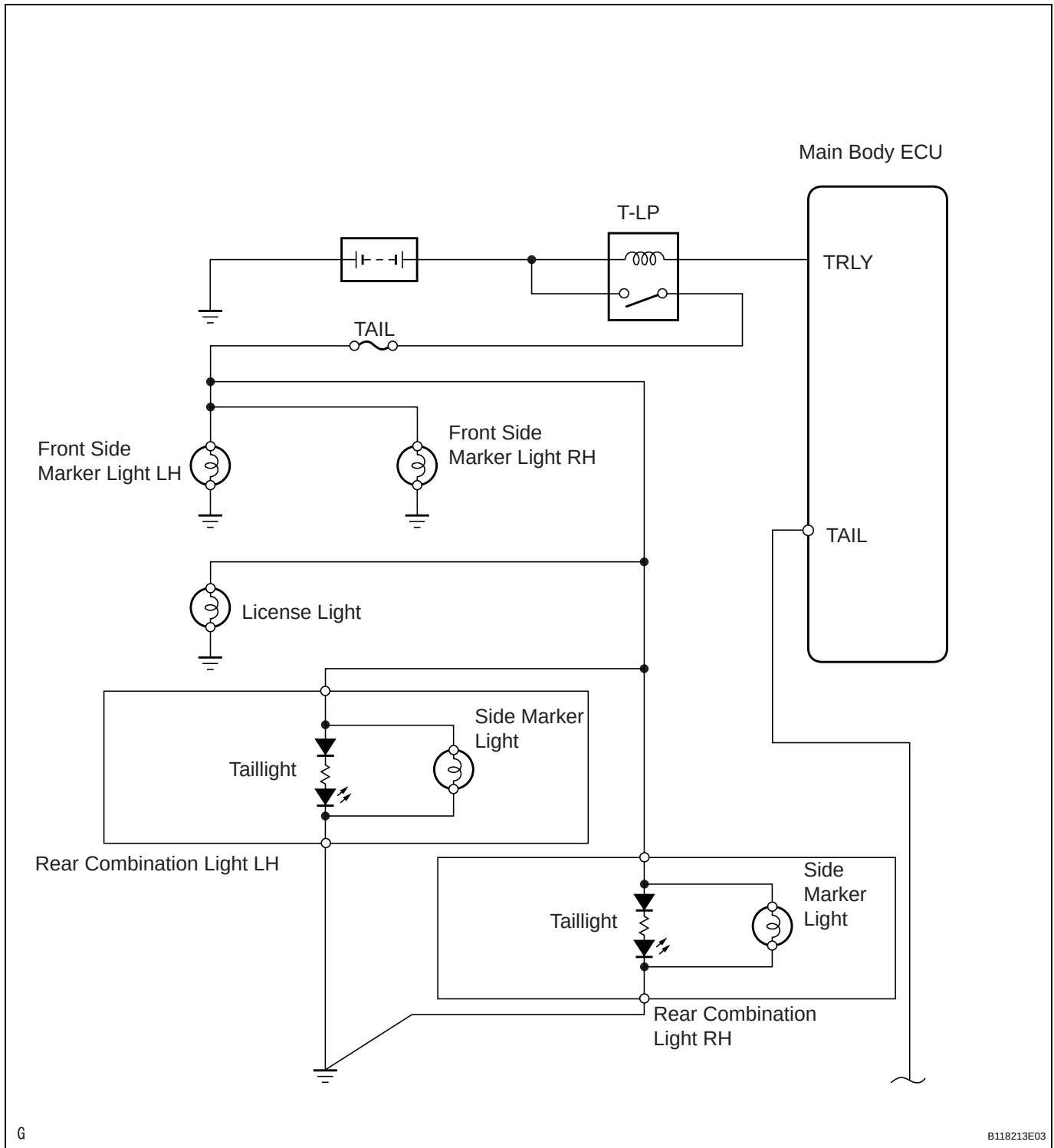
REPLACE INSTRUMENT PANEL JUNCTION BLOCK

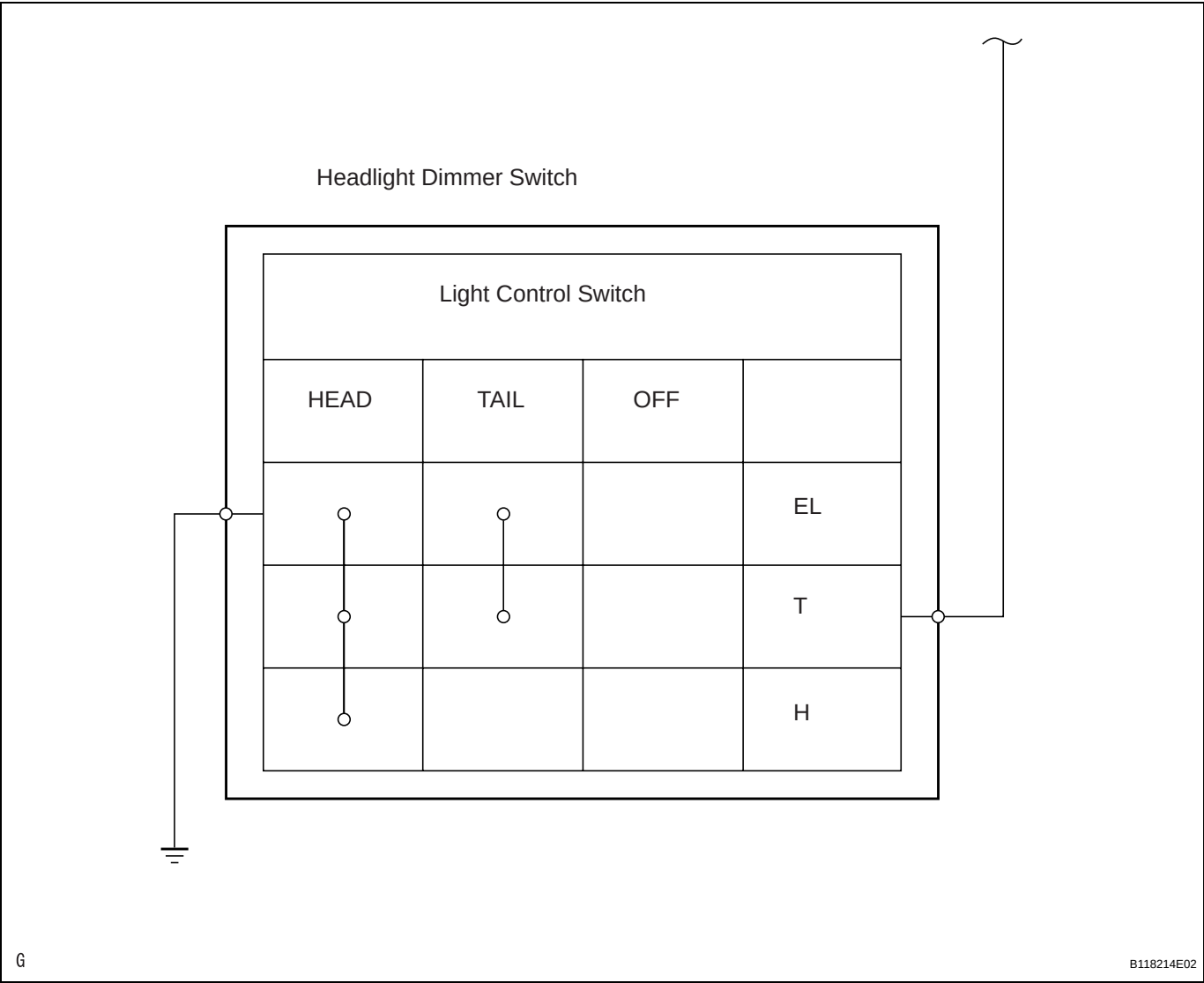
Taillight Relay Circuit

DESCRIPTION

When the light control switch, located on the headlight dimmer switch, is turned to the TAIL position, the taillight relay (Marking: T-LP) turns on to illuminate the front side marker lights, rear taillights, side marker lights and license plate light.

WIRING DIAGRAM





INSPECTION PROCEDURE

1	CHECK WHETHER LIGHTS ILLUMINATE
---	---------------------------------



- (a) Check whether the following lights illuminate: front side marker lights, rear taillights, side marker lights and license plate light.

Result

Result	Proceed to
All lights do not illuminate	A
Front side marker lights do not illuminate	B
Rear taillights do not illuminate	C
License plate light does not illuminate	D
Rear side marker light do not illuminate.	E



Go to step 8



Go to step 10

D

Go to step 11

E

Go to step 12

A

2

INSPECT FUSE (TAIL)

- (a) Remove the TAIL fuse from the instrument panel junction block.

- (b) Measure the resistance of the fuse.

Standard resistance:**Below 1 Ω**

NG

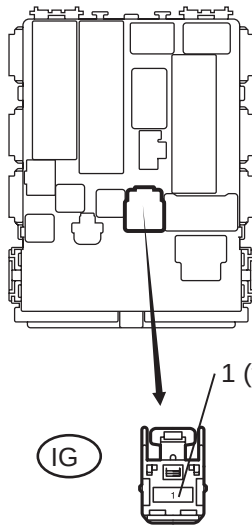
REPLACE FUSE

OK

3

CHECK WIRE HARNESS (BATTERY - INSTRUMENT PANEL JUNCTION BLOCK)

Wire Harness Side



B118228E01

- (a) Disconnect the IG instrument panel junction block connector.

- (b) Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Specified Condition
IG-1 - Body ground	10 to 14 V

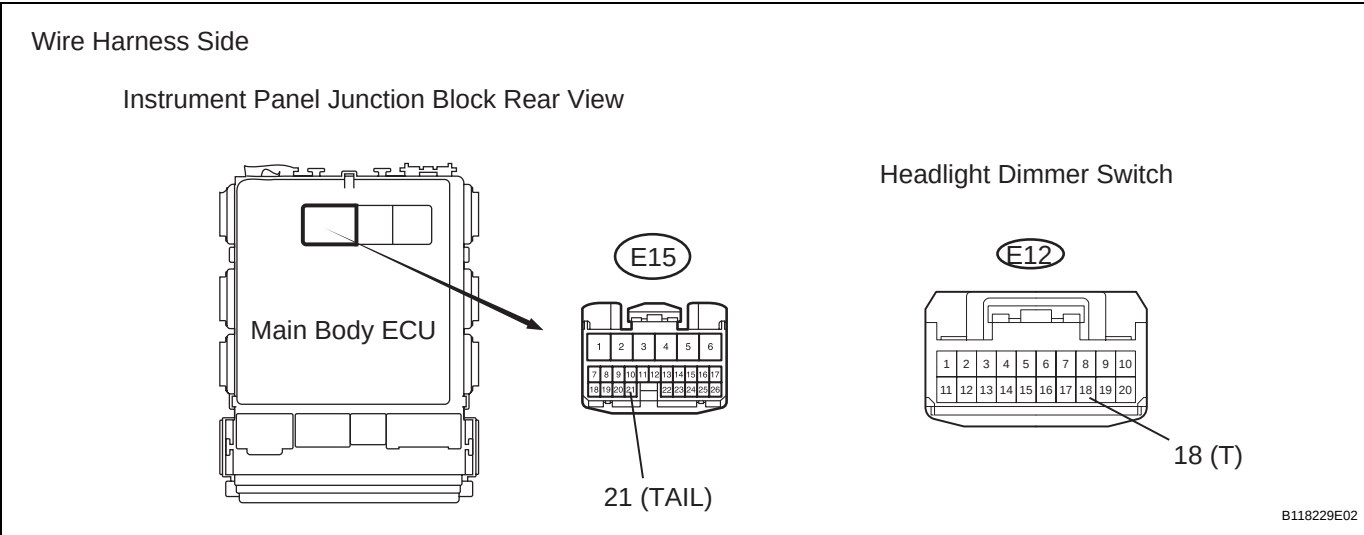
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

4

CHECK WIRE HARNESS (MAIN BODY ECU - HEADLIGHT DIMMER SWITCH)



- (a) Disconnect the E15 main body ECU connector.
- (b) Disconnect the E12 headlight dimmer switch connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
E15-21 (TAIL) - E12-18 (T)	Below 1 Ω

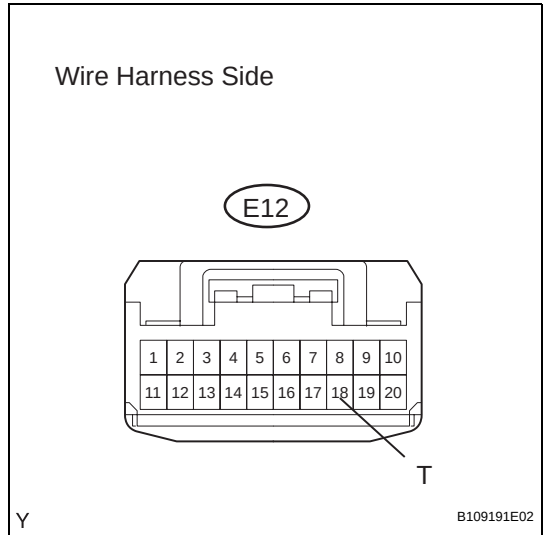
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

5

CHECK WIRE HARNESS (BATTERY - HEADLIGHT DIMMER SWITCH)



- (a) Connect the E15 main body ECU connector.
- (b) Disconnect the E12 headlight dimmer switch connector.
- (c) Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Specified Condition
E12-18 (T) - Body ground	10 to 14 V

NG

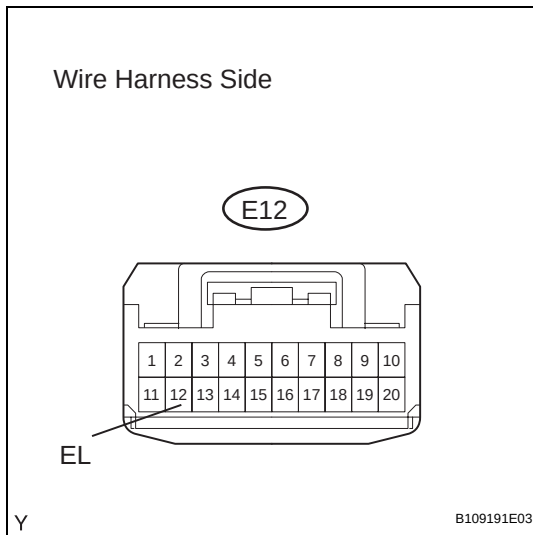
REPLACE INSTRUMENT PANEL JUNCTION BLOCK

OK

6

CHECK WIRE HARNESS (HEADLIGHT DIMMER SWITCH - BODY GROUND)

Wire Harness Side



- (a) Disconnect the E12 headlight dimmer switch connector.
(b) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
E12-12 (EL) - Body ground	Below 1 Ω

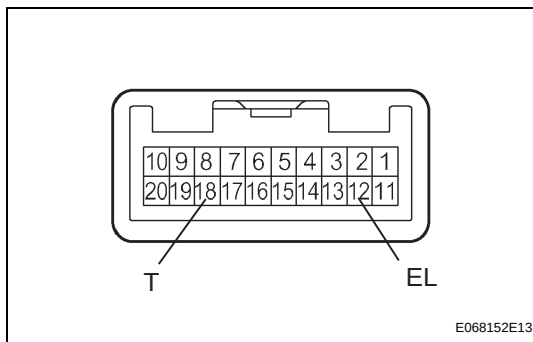
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

7

INSPECT HEADLIGHT DIMMER SWITCH



- (a) Remove the headlight dimmer switch.
(b) Measure the resistance of the switch.

Standard resistance

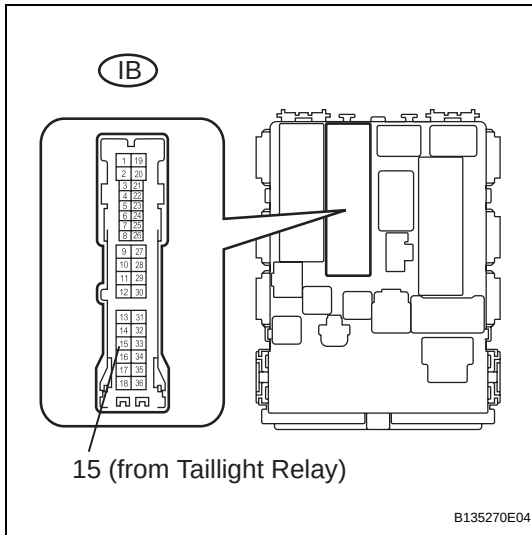
Tester Connection	Condition	Specified Condition
18 (T) - 12 (EL)	OFF	10 k Ω or higher
18 (T) - 12 (EL)	TAIL	Below 1 Ω

NG

REPLACE HEADLIGHT DIMMER SWITCH

OK

REPLACE INSTRUMENT PANEL JUNCTION BLOCK

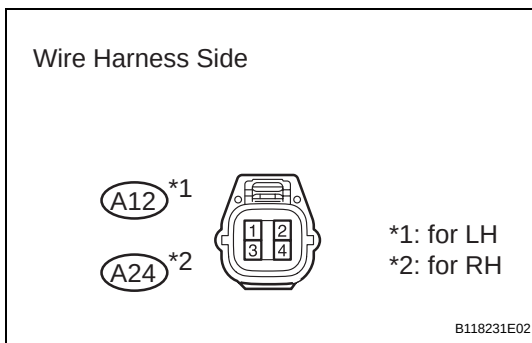
8**CHECK INSTRUMENT PANEL JUNCTION BLOCK (TAILLIGHT RELAY)**

- (a) Disconnect the IB instrument panel junction block connector.

- (b) Measure the voltage of the junction block.

Standard voltage

Tester Connection	Condition	Specified Condition
Junction block IB terminal 15 - Body ground	Light control switch TAIL	10 to 14 V

NG**REPLACE INSTRUMENT PANEL JUNCTION BLOCK****OK****9****CHECK WIRE HARNESS (TAILLIGHT RELAY - FRONT SIDE MARKER LIGHT AND BODY GROUND)**

- (a) Disconnect the A12 and A24 front side marker light connectors.

- (b) Measure the voltage and resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Condition	Specified Condition
A12-4 - Body ground	Light control switch on (TAIL)	10 to 14 V
A24-4 - Body ground	Light control switch on (TAIL)	10 to 14 V

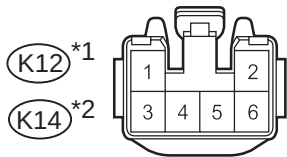
Standard resistance

Tester Connection	Specified Condition
A12-1 - Body ground	Below 1 Ω
A24-1 - Body ground	Below 1 Ω

NG**REPAIR OR REPLACE HARNESS AND CONNECTOR****OK****REPLACE BULB**

10 CHECK WIRE HARNESS (MAIN BODY ECU - REAR COMBINATION LIGHT)

Wire Harness Side



*1: for RH
*2: for LH

H

B123802E08

- Disconnect the K12 and K14 rear combination light connectors.
- Measure the voltage and resistance of the wire harness side connectors.

Standard voltage

Tester Connection	Condition	Specified Condition
K14-2 - Body ground	Light control switch on (TAIL)	10 to 14 V
K12-2 - Body ground	Light control switch on (TAIL)	10 to 14 V

Standard resistance

Tester Connection	Specified Condition
K14-1 - Body ground	Below 1 Ω
K12-1 - Body ground	Below 1 Ω

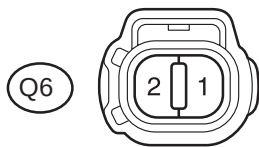
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE REAR COMBINATION LIGHT**11 CHECK WIRE HARNESS (MAIN BODY ECU - LICENSE PLATE LIGHT AND BODY GROUND)**

Wire Harness Side



B118232E01

- Disconnect the Q6 license plate light connector.
- Measure the voltage and resistance of the wire harness side connector.

Standard voltage

Tester Connection	Condition	Specified Condition
Q6-2 - Body ground	Light control switch on (TAIL)	10 to 14 V

Standard resistance

Tester Connection	Specified Condition
Q6-1 - Body ground	Below 1 Ω

NG

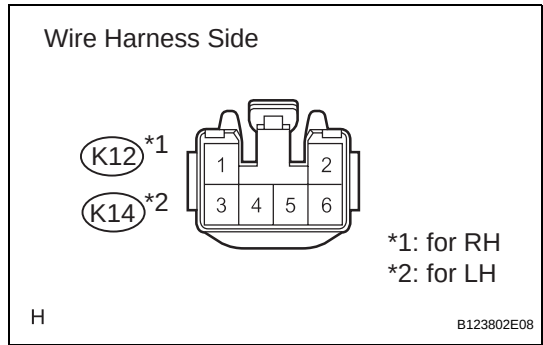
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE BULB

12

CHECK WIRE HARNESS (MAIN BODY ECU - REAR COMBINATION LIGHT)



- (a) Disconnect the K12 and K14 rear combination light connectors.
- (b) Measure the voltage and resistance of the wire harness side connectors.

Standard voltage

Tester Connection	Condition	Specified Condition
K14-2 - Body ground	Light control switch on (TAIL)	10 to 14 V
K12-2 - Body ground	Light control switch on (TAIL)	10 to 14 V

Standard resistance

Tester Connection	Specified Condition
K14-1 - Body ground	Below 1 Ω
K12-1 - Body ground	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

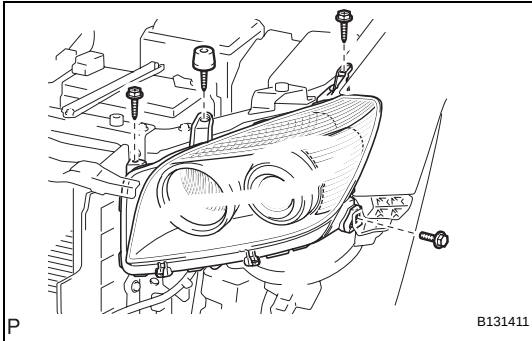
REPLACE BULB

REMOVAL

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
2. **REMOVE FRONT FENDER LINER LH** (See page [ET-4](#))
3. **REMOVE FRONT FENDER LINER RH** (See page [ET-4](#))
4. **REMOVE RADIATOR SUPPORT OPENING COVER** (See page [ET-4](#))
5. **REMOVE FRONT BUMPER COVER** (See page [ET-5](#))
6. **REMOVE FRONT BUMPER REINFORCEMENT SUB-ASSEMBLY UPPER**
 - (a) Disconnect the 2 horn connectors.
 - (b) Remove the 2 bolts and reinforcement.
7. **REMOVE HEADLIGHT ASSEMBLY**
 - (a) Remove the 3 screws and bolt.
 - (b) Disconnect the connectors and remove the headlight.



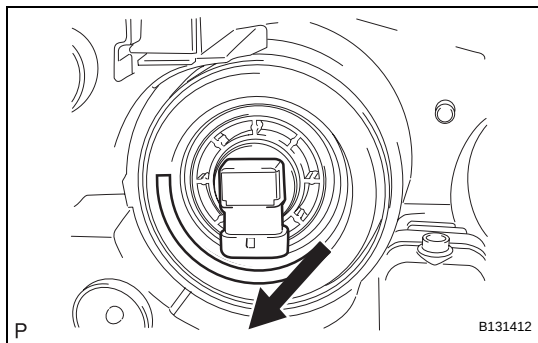
DISASSEMBLY

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

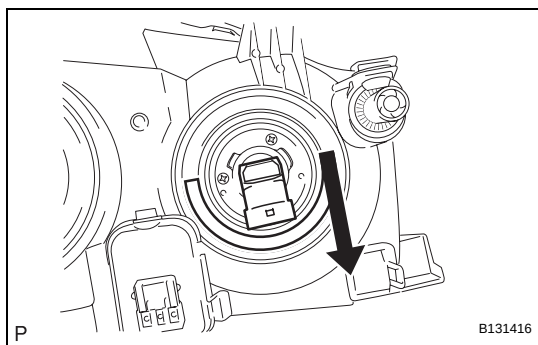
1. REMOVE NO. 1 HEADLIGHT BULB

- (a) Turn the bulb in the direction indicated by the arrow and pull to remove it.



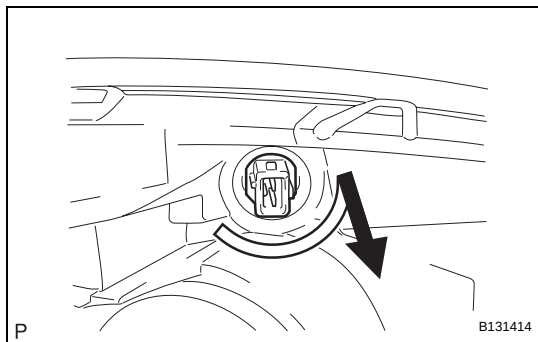
2. REMOVE NO. 2 HEADLIGHT BULB

- (a) Turn the bulb in the direction indicated by the arrow and pull to remove it.



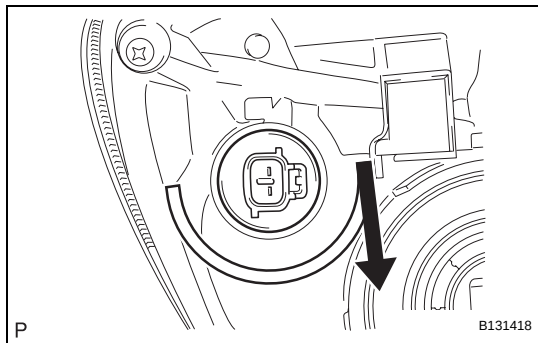
3. REMOVE CLEARANCE LIGHT BULB

- (a) Turn the bulb in the direction indicated by the arrow and pull to remove it.



4. REMOVE FRONT TURN SIGNAL LIGHT BULB

- (a) Turn the bulb/socket unit in the direction indicated by the arrow and pull to remove it.
(b) Remove the bulb from the socket.



ADJUSTMENT

1. VEHICLE PREPARATION FOR HEADLIGHT AIM ADJUSTMENT

- (a) Prepare the vehicle:
- Ensure that the vehicle has no damage or deformation around the headlights.
 - Fill up the fuel tank.
 - Make sure that all of the different types of oil in the vehicle (engine oil, etc.) are filled to the specified levels.
 - Make sure that the coolant is filled to the specified level.
 - Inflate the tires to the appropriate pressure.
 - Place the spare tire, tools, and jack in their original positions.
 - Unload the vehicle.
 - Have a person that weighs approximately 55 kg (121 lb) sit in the driver seat.

2. PREPARATION FOR HEADLIGHT AIMING (Using a Screen)

- (a) Prepare the vehicle according to the following conditions:
- Move the vehicle to a location that is sufficiently dark so that the headlight cutoff line can be visually checked. The cutoff line is an imaginary plane below which headlight light is projected and above which light is not projected.
 - Move the vehicle to a level surface.
 - Point the front of the vehicle at a wall. The wall must be perpendicular to the surface that the vehicle is on.
 - Position the vehicle 10 m (32.8 ft.) from the wall.
 - Push down on the vehicle several times to settle the suspension. Do not damage the suspension.

HINT:

A distance of 10 m (32.8 ft.) between the vehicle and the wall is necessary for proper aim adjustment. If unavailable, secure a distance of exactly 3 m (9.8 ft.). In the illustrations below, view the part of the illustration applicable to the distance from the vehicle to the wall.

NOTICE:

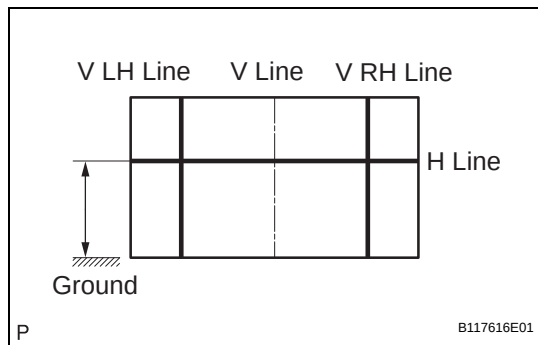
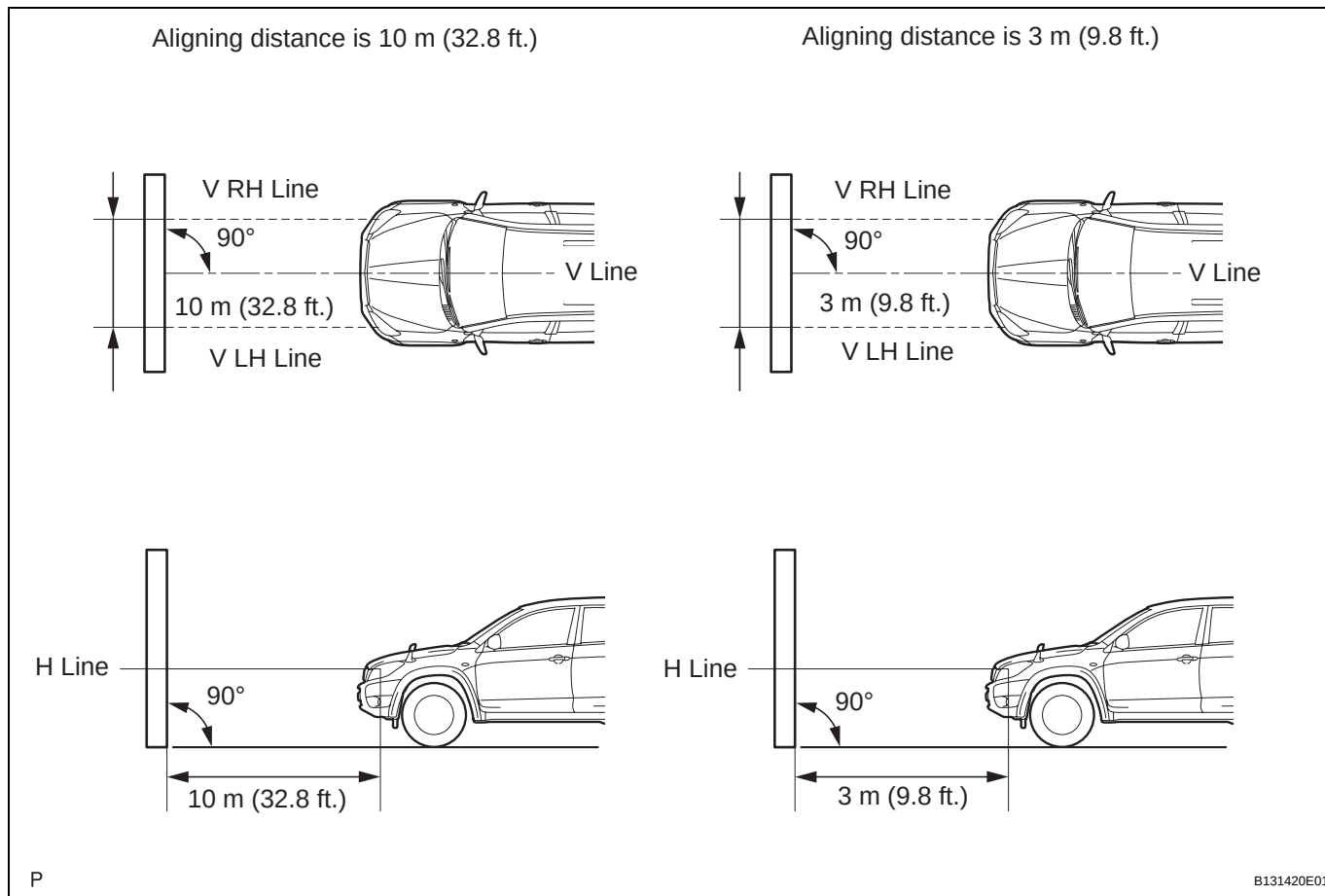
Be careful not to damage the suspension.

- (b) Prepare a piece of thick white paper that is approximately 2 m (6.6 ft.) (height) x 4 m (13.1 ft.) (width) to use as a screen.
- (c) Draw a vertical line down the center of the screen (V line).
- (d) Set the screen as shown in the illustration.

HINT:

- Stand the screen perpendicular to the ground.

- Align the V line on the screen with the center of the vehicle.



- (e) Draw base lines (H line and V LH, V RH lines) on the screen as shown in the illustration.

HINT:

- The base lines differ for "lo beam inspection" and "hi beam inspection".
- Mark the headlight bulb center marks on the screen. If the center mark cannot be observed on the headlight, use the center of the headlight bulb or the manufacturer's name marked on the headlight as the center mark.

- H line (headlight height):**
Draw a horizontal line across the screen so that it passes through the center marks. The H line should be at the same height as the headlight bulb center marks of the lo beam headlights.
- V LH line, V RH line (center mark position of LH and RH headlights):**
Draw 2 vertical lines so that they intersect the H line at each center mark.

3. INSPECT HEADLIGHT AIMING

- (a) Choose a headlight to inspect first. Cover or disconnect the connector of the other headlight to prevent light from that headlight from affecting the headlight aiming inspection.

HINT:

When checking the aim of the hi beam bulb, cover the lo beam bulb or disconnect the connector.

NOTICE:

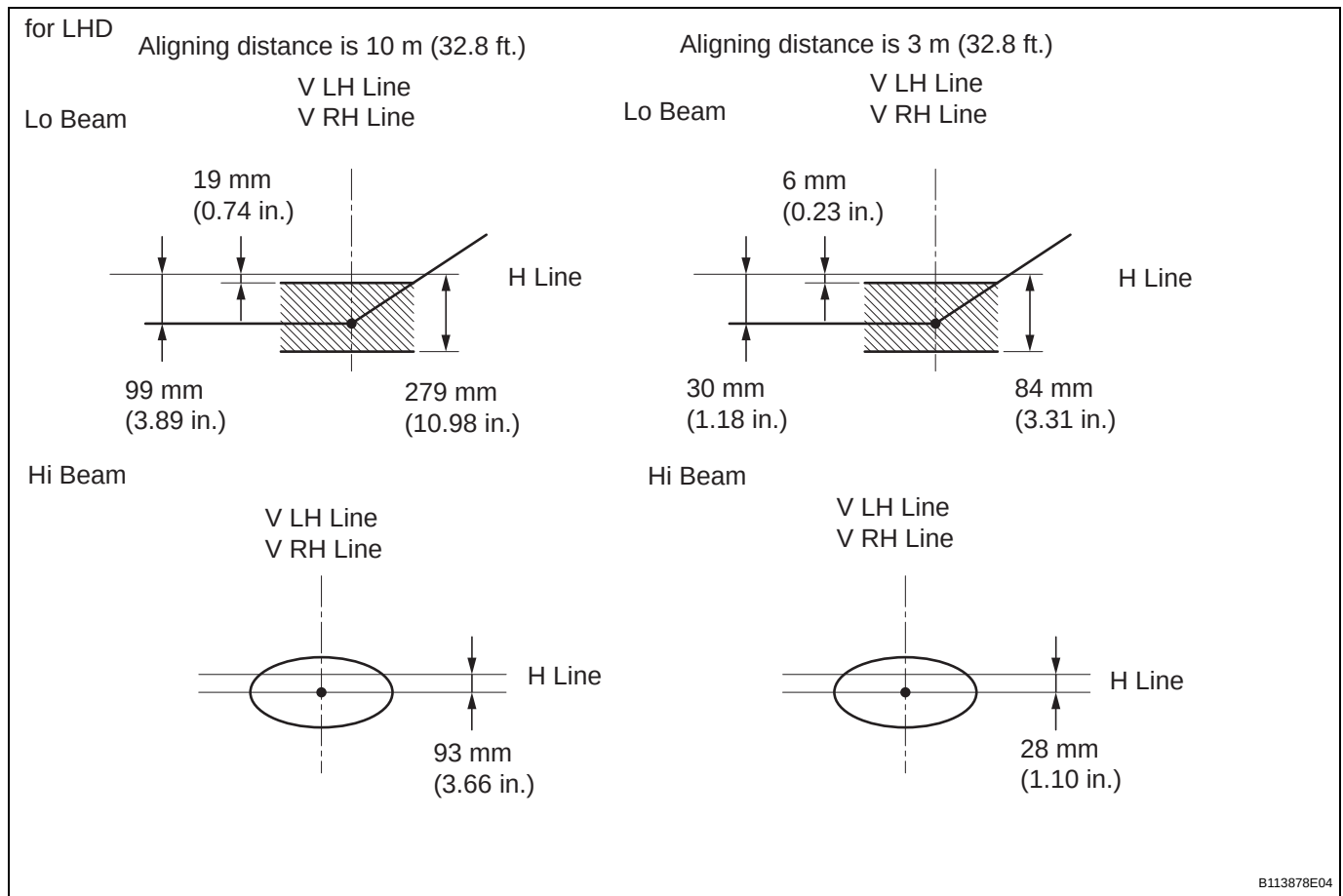
Do not keep the headlight covered for more than 3 minutes. The headlight lens is made of synthetic resin, and may easily melt or be damaged due to heat.

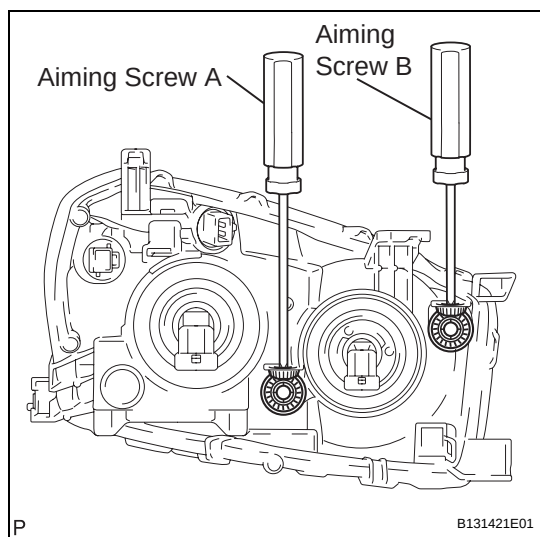
- (b) Start the engine.

NOTICE:

Engine speed must be 1,500 rpm or more.

- (c) Turn on the headlights and make sure that the cutoff line is within the specified area shown in the illustration.





4. ADJUST HEADLIGHT AIMING

- (a) Adjust the vertical headlight aim into the specified range by turning aiming screw A with a screwdriver.
HINT:

- Perform lo beam aim adjustment.
- The headlight aim moves down when turning the aiming screw clockwise, and moves up when turning the aiming screw counterclockwise.
- Adjust the aim vertically by turning the vertical aiming screw and the horizontal aiming screw at a 5:4 ratio (5 turns of the vertical aiming screw for 4 turns of the horizontal aiming screw).

NOTICE:

If the screw is tightened too much, loosen it and then retighten it so that the final turn of the screw is in the clockwise direction.

- (b) Adjust the horizontal headlight aim into the specified range by turning aiming screw B with a screwdriver.
HINT:

Perform lo beam aim adjustment.

NOTICE:

If the screw is tightened too much, loosen it and then retighten it so that the final turn of the screw is in the clockwise direction.

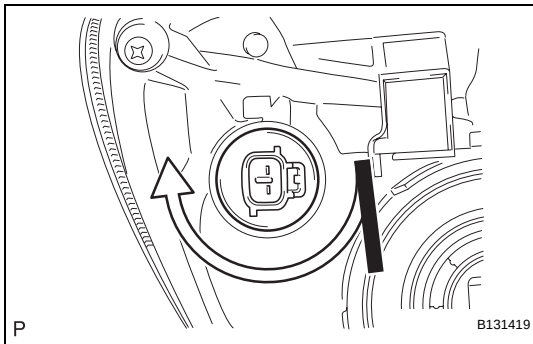
REASSEMBLY

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

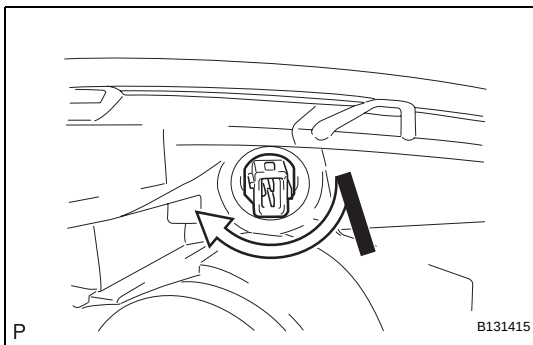
1. INSTALL FRONT TURN SIGNAL LIGHT BULB

- (a) Install the bulb to the socket.
- (b) Insert the bulb/socket unit into the headlight.
- (c) Turn the bulb/socket unit in the direction indicated by the arrow to install it.



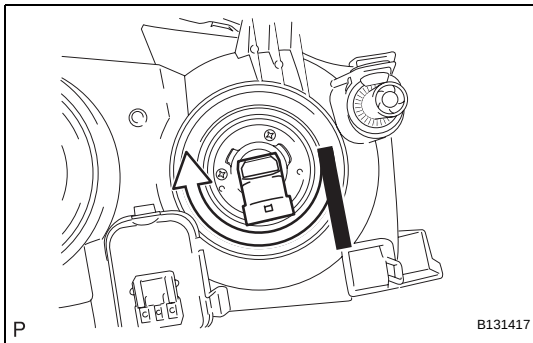
2. INSTALL CLEARANCE LIGHT BULB

- (a) Insert the bulb into the headlight.
- (b) Turn the bulb in the direction indicated by the arrow to install it.



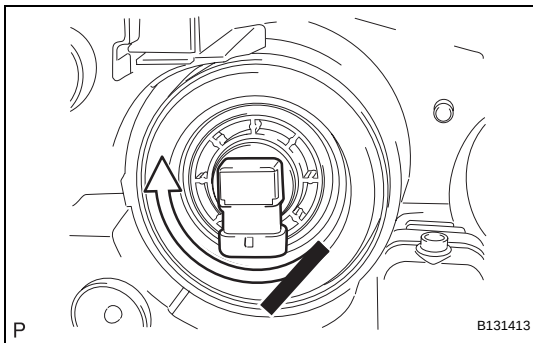
3. INSTALL NO. 2 HEADLIGHT BULB

- (a) Insert the bulb into the headlight.
- (b) Turn the bulb in the direction indicated by the arrow to install it.



4. INSTALL NO. 1 HEADLIGHT BULB

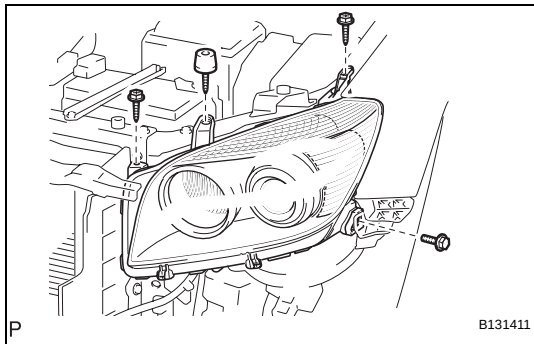
- (a) Insert the bulb into the headlight.
- (b) Turn the bulb in the direction indicated by the arrow to install it.



INSTALLATION

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.



- 1. INSTALL HEADLIGHT ASSEMBLY LH**
 - (a) Connect the connectors with the headlight.
 - (b) Install the 3 screws and bolt.
- 2. INSTALL FRONT BUMPER REINFORCEMENT SUB-ASSEMBLY UPPER**
 - (a) Install the reinforcement with the 2 bolts.
 - (b) Connect the 2 horns connectors.
- 3. INSTALL FRONT BUMPER COVER (See page [ET-11](#))**
- 4. INSTALL RADIATOR SUPPORT OPENING COVER (See page [ET-12](#))**
- 5. INSTALL FRONT FENDER LINER RH (See page [ET-10](#))**
- 6. INSTALL FRONT FENDER LINER LH (See page [ET-12](#))**
- 7. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
- 8. ADJUST HEADLIGHT AIMING**
 - (a) Adjust the headlight aiming (see page [LI-94](#)).

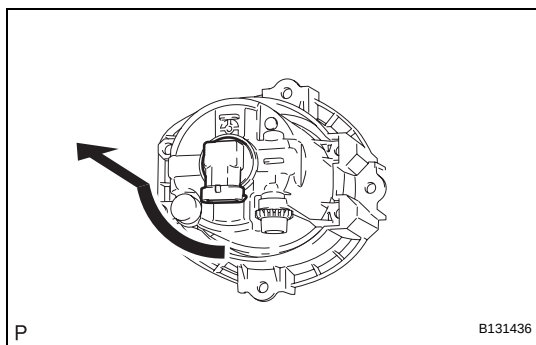
DISASSEMBLY

HINT:

- Use the same procedures for the RH side and LH sides.
- The procedures listed below are for the LH side.

1. REMOVE FOG LIGHT BULB

- (a) Turn the bulb in the direction indicated by the arrow and pull to remove it.



ADJUSTMENT

1. VEHICLE PREPARATION FOR FOG LIGHT AIM ADJUSTMENT

- (a) Prepare the vehicle:
- Ensure that the vehicle has no damage or deformation around the fog lights.
 - Fill up the fuel tank.
 - Make sure that all of the different types of oil in the vehicle (engine oil, etc.) are filled to the specified levels.
 - Make sure that the coolant is filled to the specified level.
 - Inflate the tires to the appropriate pressure.
 - Place the spare tire, tools, and jack in their original positions.
 - Unload the vehicle.
 - Have a person that weighs approximately 55 kg (121 lb) sit in the driver seat.

2. PREPARATION FOR FOG LIGHT AIMING (Using Screen)

- (a) Prepare the vehicle according to the following conditions:
- Move the vehicle to a location that is sufficiently dark so that the fog light cutoff line can be visually checked. The cutoff line is an imaginary plane below which fog light light is projected and above which light is not projected.
 - Move the vehicle to a level surface.
 - Point the front of the vehicle at a wall. The wall must be perpendicular to the surface that the vehicle is on.
 - Position the vehicle 10 m (32.8 ft.) from the wall.
 - Push down on the vehicle several times to settle the suspension.

HINT:

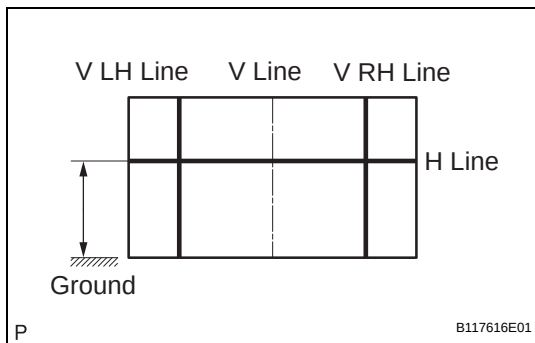
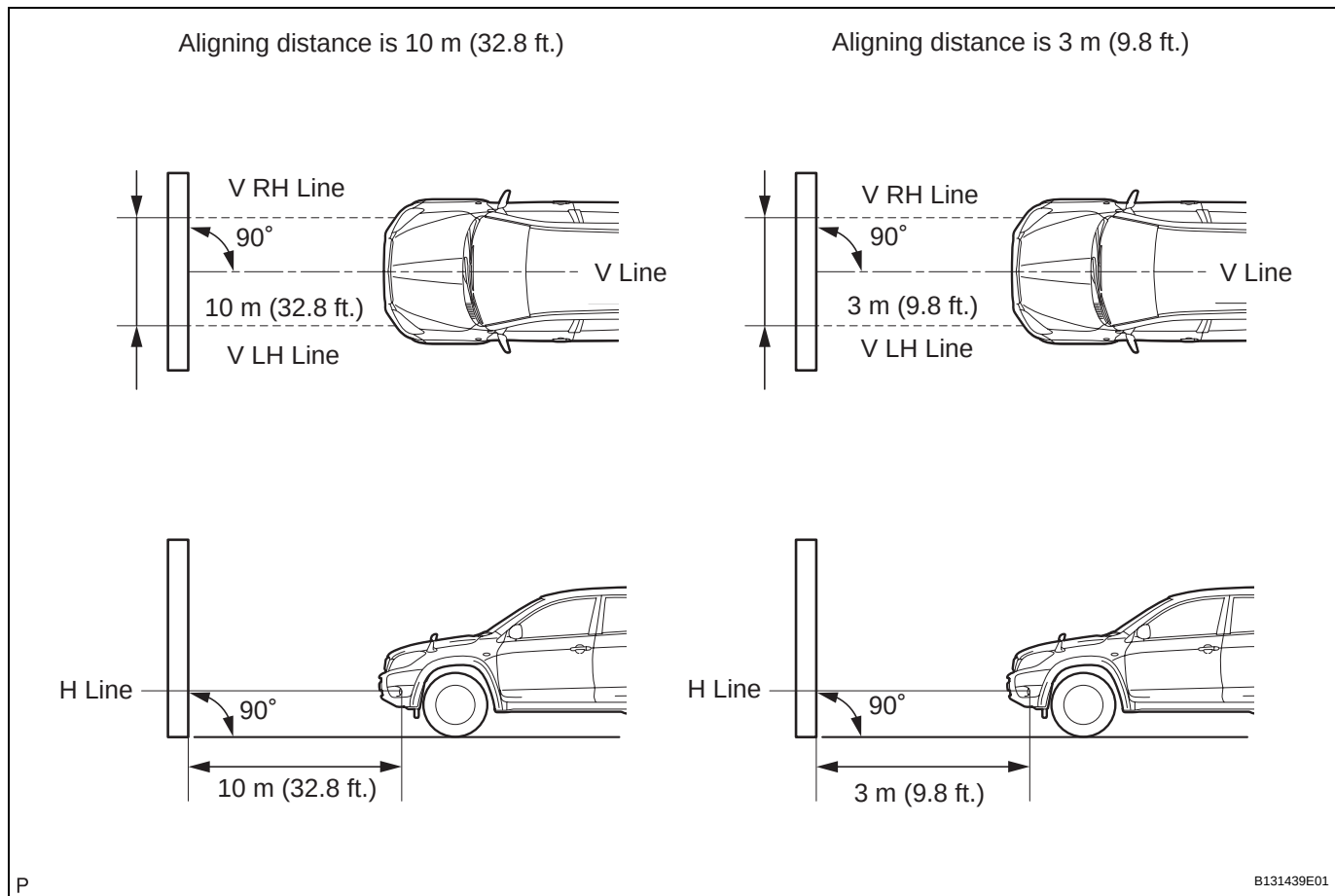
A distance of 10 m (32.8 ft.) between the vehicle and the wall is necessary for proper aim adjustment. If unavailable, secure a distance of exactly 3 m (9.8 ft.). In the illustrations below, view the part of the illustration applicable to the distance from the vehicle to the wall.

NOTICE:

Be careful not to damage the suspension.

- (b) Prepare a piece of thick white paper that is approximately 2 m (6.6 ft.) (height) x 4 m (13.1 ft.) (width) to use as a screen.
- (c) Draw a vertical line down the center of the screen (V line).
- (d) Set the screen as shown in the illustration.
- HINT:**
- Stand the screen perpendicular to the ground.

- Align the V line on the screen with the center of the vehicle.



- (e) Draw base lines (H line, V LH and V RH lines) on the screen as shown in the illustration.

- (1) H Line (fog light height):

Draw a horizontal line across the screen so that it passes through the center marks. The H line should be at the same height as the bulb center marks of the fog lights.

- (2) V LH Line, V RH Line (center mark position of LH and RH fog lights):

Draw 2 vertical lines so that they intersect the H line at each center mark.

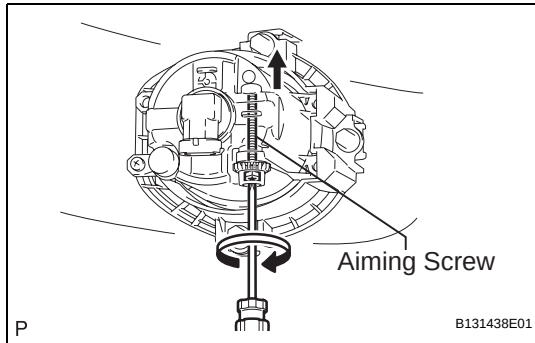
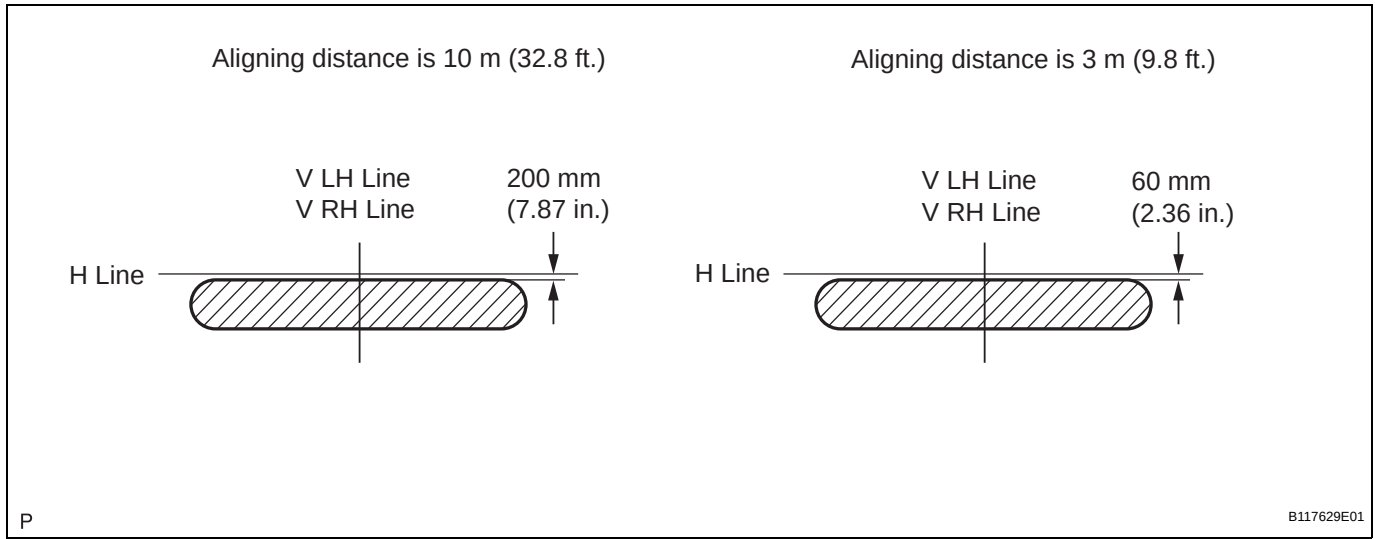
3. INSPECT FOG LIGHT AIMING

- (a) Choose a fog light to inspect first. Cover or disconnect the connector of the other fog light to prevent light from that fog light from affecting the fog light aiming inspection.
- (b) Start the engine.

NOTICE:

Engine rpm must be 1,500 or more.

- (c) Turn on the fog lights and make sure that the cutoff line is within the specified area shown in the illustration.



4. ADJUST FOG LIGHT AIMING

- (a) Adjust the fog light aim into the specified range by turning the aiming screw with a screwdriver.

NOTICE:

If the screw is tightened too much, loosen it and then retighten it so that the final turn of the screw is in the clockwise direction.

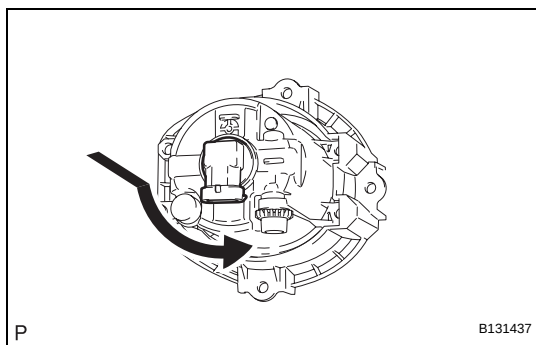
REASSEMBLY

HINT:

- Use the same procedures for the RH side and LH sides.
- The procedures listed below are for the LH side.

1. INSTALL FOG LIGHT BULB

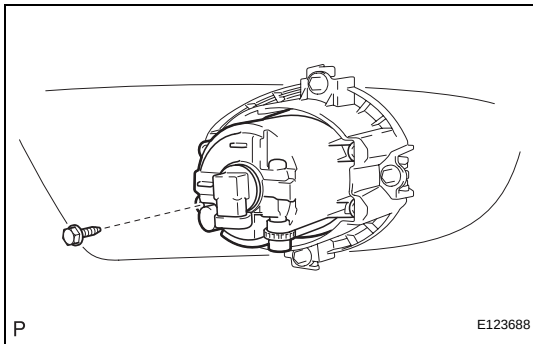
- (a) Turn the bulb in the direction indicated by the arrow to install it.



INSTALLATION

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.



1. **INSTALL FOG LIGHT ASSEMBLY**
 - (a) Install the fog light with the bolt.
 - (b) Connect the connector.
2. **INSTALL FRONT BUMPER COVER** (See page [ET-11](#))
3. **INSTALL RADIATOR SUPPORT OPENING COVER** (See page [ET-12](#))
4. **INSTALL FRONT FENDER LINER RH** (See page [ET-12](#))
5. **INSTALL FRONT FENDER LINER LH** (See page [ET-12](#))
6. **INSTALL CABLE TO NEGATIVE BATTERY TERMINAL**

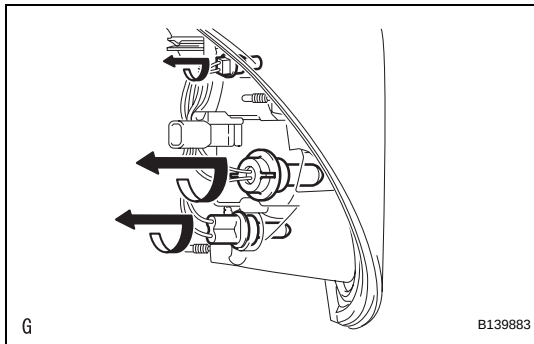
DISASSEMBLY

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

1. REMOVE REAR COMBINATION LIGHT BULB

- (a) Turn the 3 bulbs in the direction indicated by the arrows and pull to remove them.



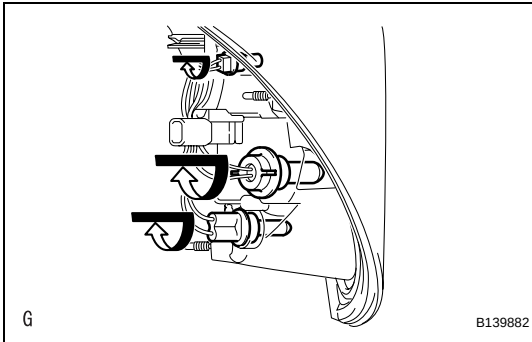
REASSEMBLY

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

1. INSTALL REAR COMBINATION LIGHT BULB

- (a) Turn the 3 bulbs in the direction indicated by the arrows to install them.



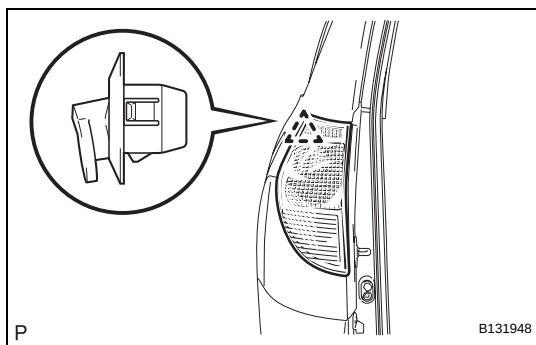
INSTALLATION

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

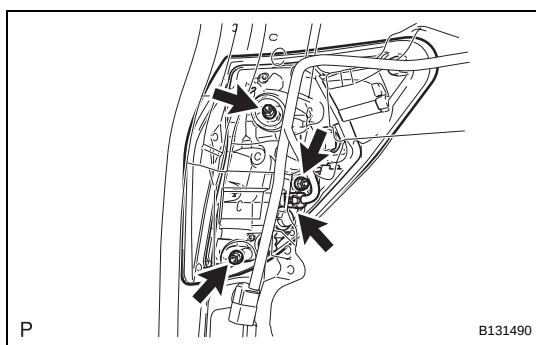
1. INSTALL REAR COMBINATION LIGHT ASSEMBLY

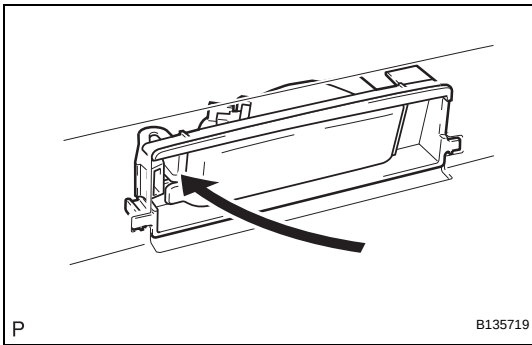
(a) Attach the clip to install the light.



(b) Install the 3 nuts and connect the connector.

2. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL





INSTALLATION

1. **INSTALL LICENSE PLATE LIGHT ASSEMBLY**
(a) Install the light as shown in the illustration.
2. **INSTALL BACK DOOR LOWER OUTSIDE GARNISH SUB-ASSEMBLY** (See page [ET-61](#))
3. **INSTALL BACK DOOR TRIM BOARD** (See page [ED-66](#))
4. **INSTALL BACK DOOR SIDE GARNISH RH** (See page [ED-67](#))
5. **INSTALL BACK DOOR SIDE GARNISH LH** (See page [ED-67](#))
6. **INSTALL BACK DOOR CENTER GARNISH** (See page [ED-67](#))
7. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

- (b) Connect the battery's positive (+) lead to terminal 6 and the negative (-) lead to terminal 7, and then check that the light comes on when the switch is in the ON position.

OK:

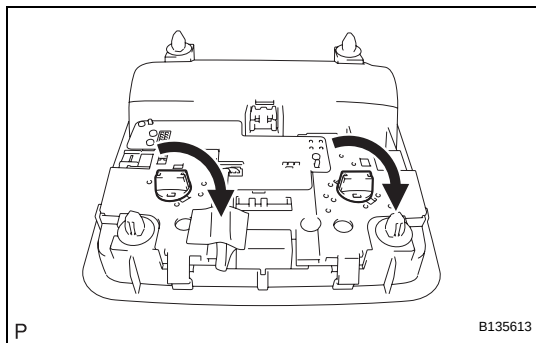
Light comes on.

If the result is not as specified, replace the light assembly.

REASSEMBLY

1. INSTALL MAP LIGHT BULB

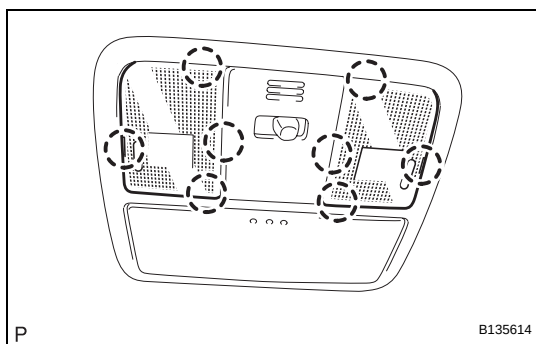
- (a) Install the 2 bulbs to the light.



INSTALLATION

1. INSTALL MAP LIGHT LENS

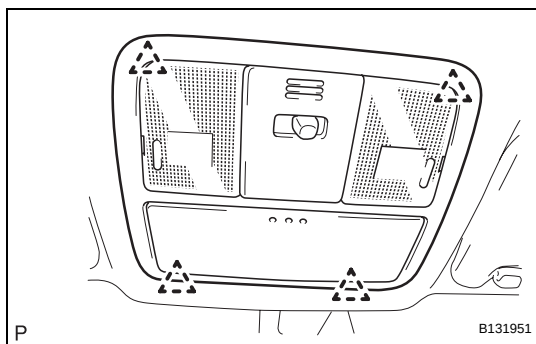
- (a) Attach the 8 claws to install the map light lens.

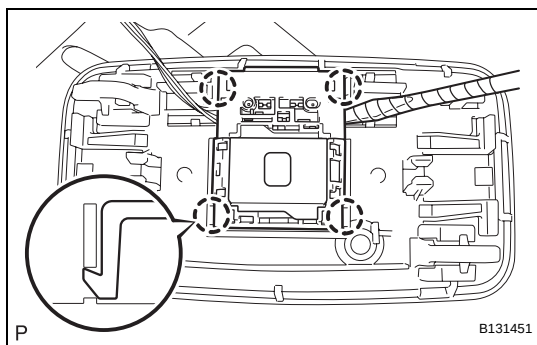


2. INSTALL MAP LIGHT ASSEMBLY

- (a) Connect the light connector.
(b) Attach the 4 clips to install the map light.

3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

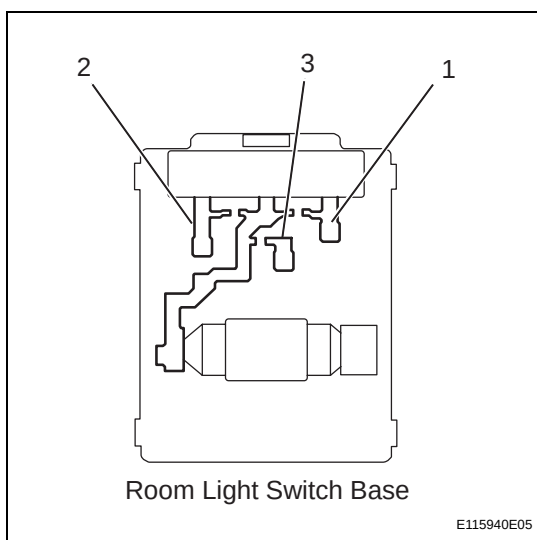




- (d) Using a screwdriver, detach the 4 claws and remove the room light switch base.

HINT:

Tape the screwdriver tip before use.



INSPECTION

1. INSPECT ROOM LIGHT

- (a) Connect the battery's positive (+) lead to terminal 1 and the negative (-) lead to terminal 2, and then check that the light comes on when the switch is in the DOOR position.

OK:

Light comes on.

If the result is not as specified, replace the light assembly.

- (b) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 3, then check that the light comes on when the switch is in the ON position.

OK:

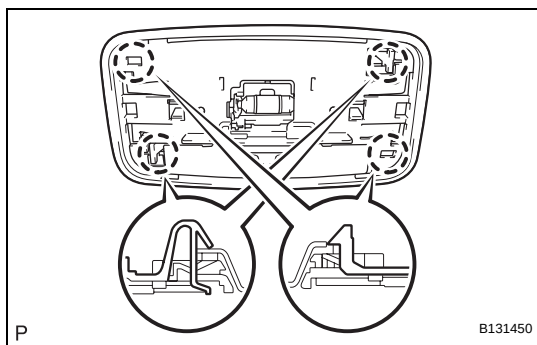
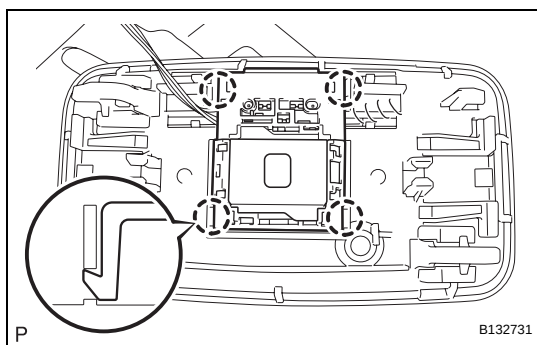
Light comes on.

If the result is not as specified, replace the light assembly.

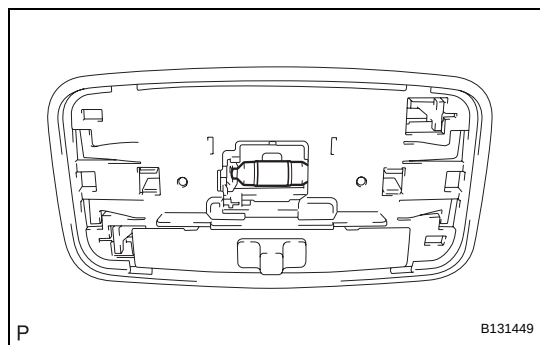
INSTALLATION

1. INSTALL ROOM LIGHT ASSEMBLY

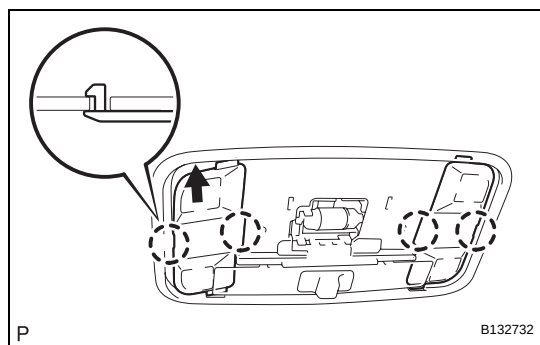
- (a) Attach the 4 claws to install the room light switch base.



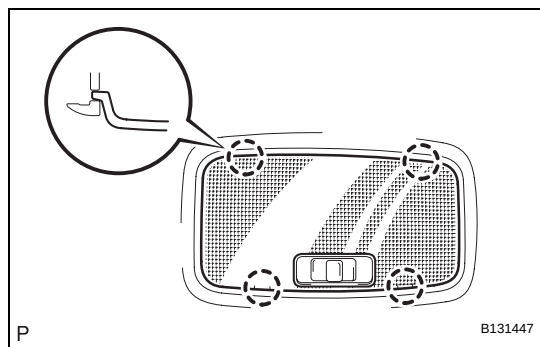
- (b) Attach the 4 claws to install the room light.



(c) Install the bulb to the room light switch base.



(d) Attach the 4 claws to install the 2 covers.



2. INSTALL ROOM LIGHT LENS

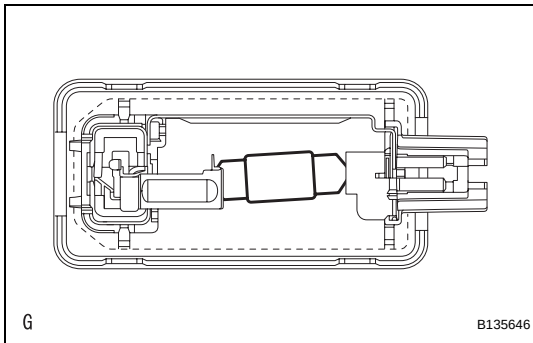
(a) Attach the 4 claws to install the lens.

3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

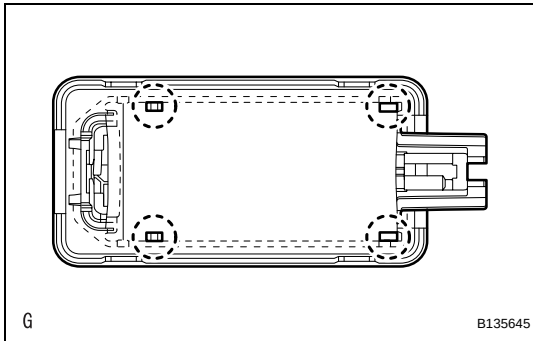
INSTALLATION

1. INSTALL BACK DOOR COURTESY LIGHT ASSEMBLY

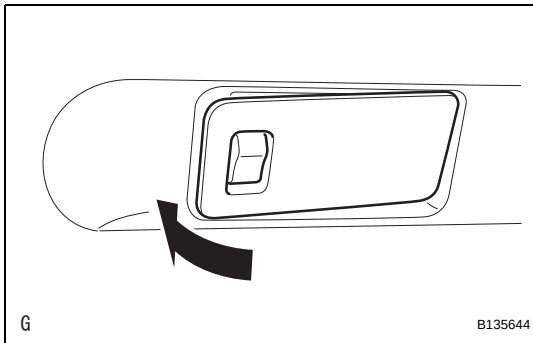
(a) Install the bulb to the light.



(b) Attach the 4 claws to install the light shade.



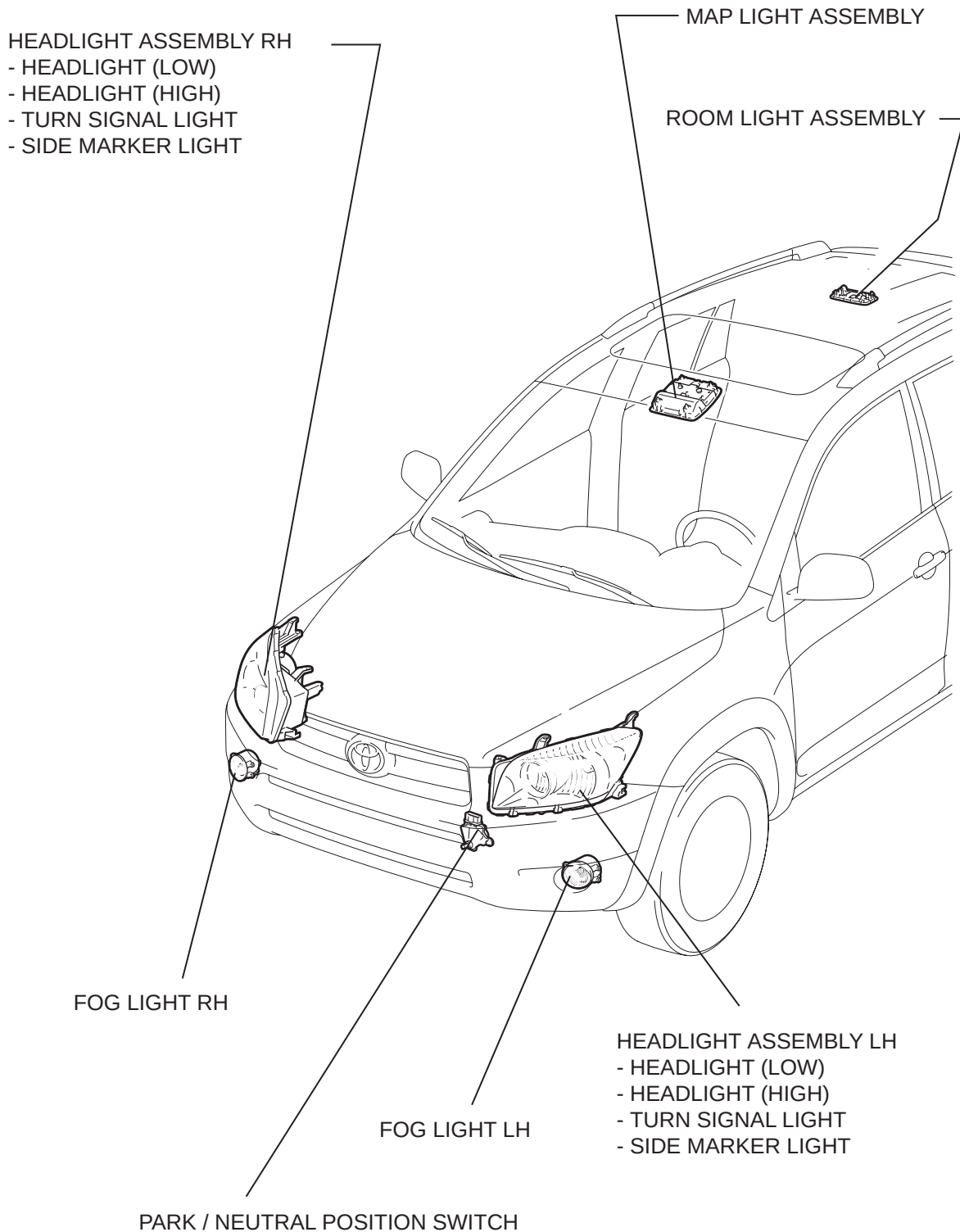
(c) Install the light as shown in the illustration.

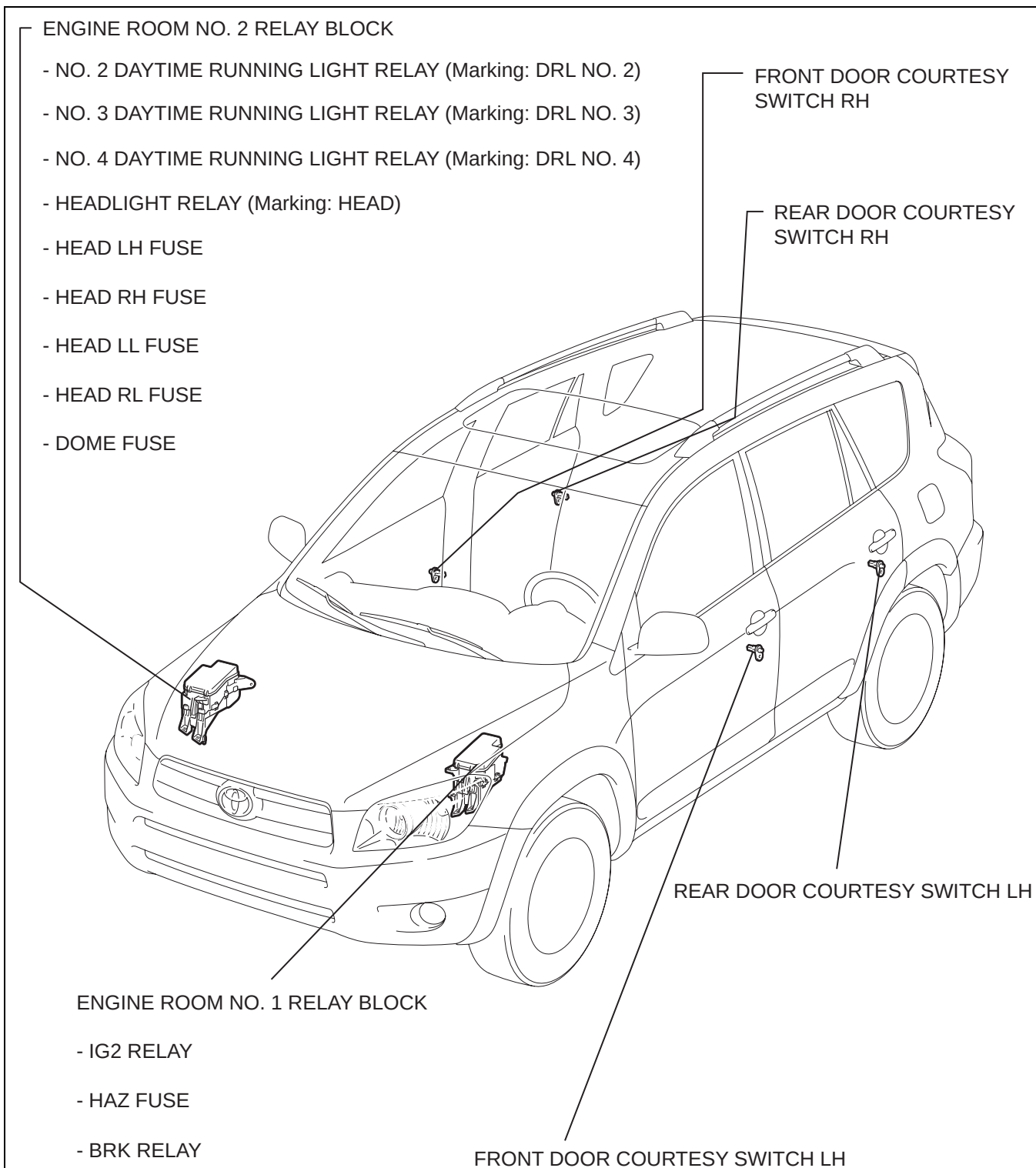


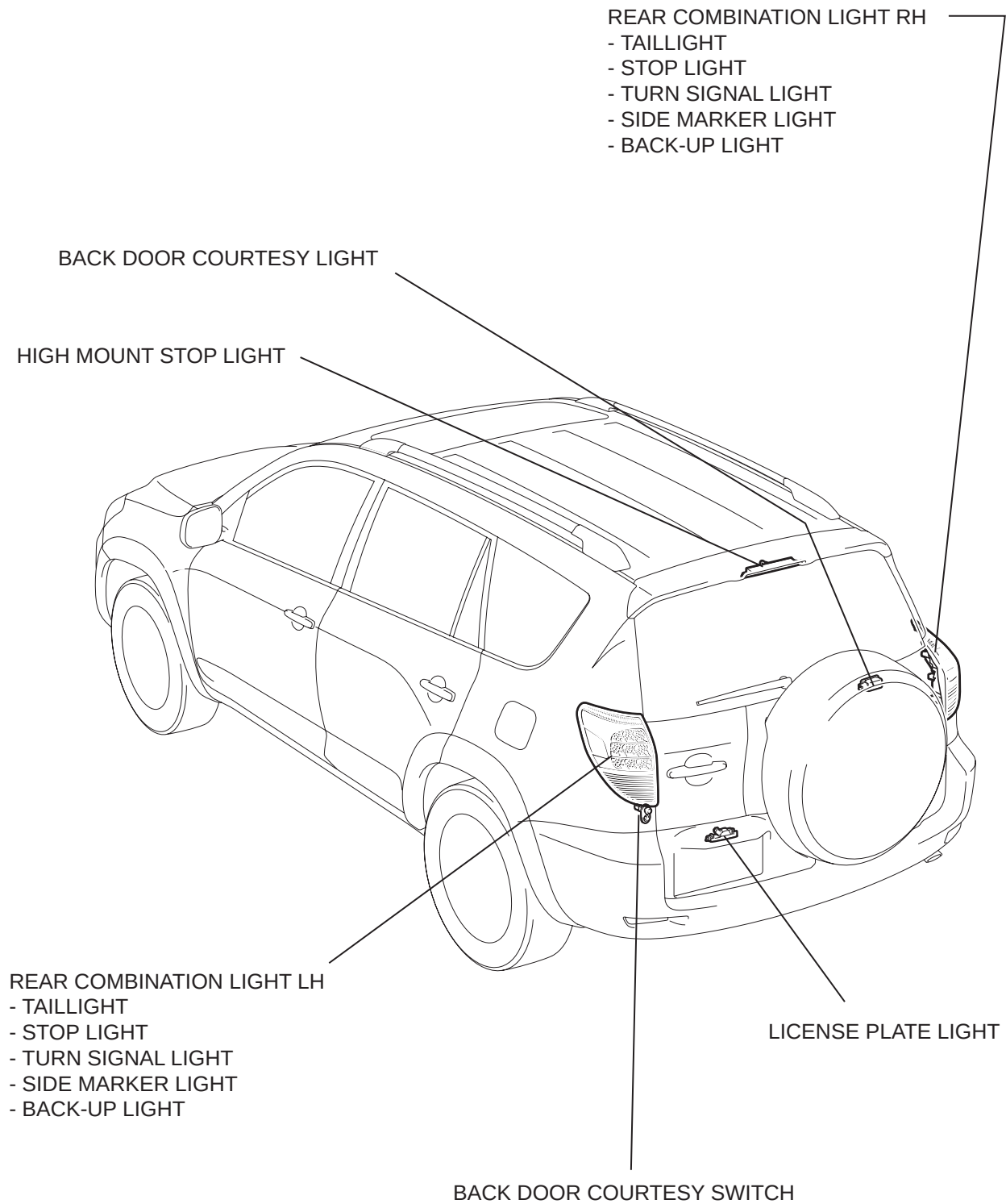
2. INSTALL BACK DOOR TRIM BOARD (See page [ED-66](#))
3. INSTALL BACK DOOR SIDE GARNISH RH (See page [ED-67](#))
4. INSTALL BACK DOOR SIDE GARNISH LH (See page [ED-67](#))
5. INSTALL BACK DOOR CENTER GARNISH (See page [ED-67](#))
6. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

LIGHTING SYSTEM

PARTS LOCATION







INSTRUMENT PANEL JUNCTION BLOCK

- MAIN BODY ECU
- TAILLIGHT RELAY (Marking: T-LP)
- TURN SIGNAL FLASHER RELAY (Marking: FLSH)
- FR FOG FUSE
- ECU-IG1 FUSE
- ECU-IG2 FUSE
- STOP FUSE
- GAUGE1 FUSE
- TAIL FUSE

HEADLIGHT DIMMER SWITCH

CENTER CONSOLE ILLUMINATION

HAZARD WARNING SIGNAL SWITCH

DLC3

FOOT LIGHT LH

FOOT LIGHT RH

NO. 6 RELAY BLOCK

- FRONT FOG LIGHT RELAY (Marking: FR FOG)

IGNITION KEY CYLINDER LIGHT*1

(TRANSPONDER KEY AMPLIFIER*2)

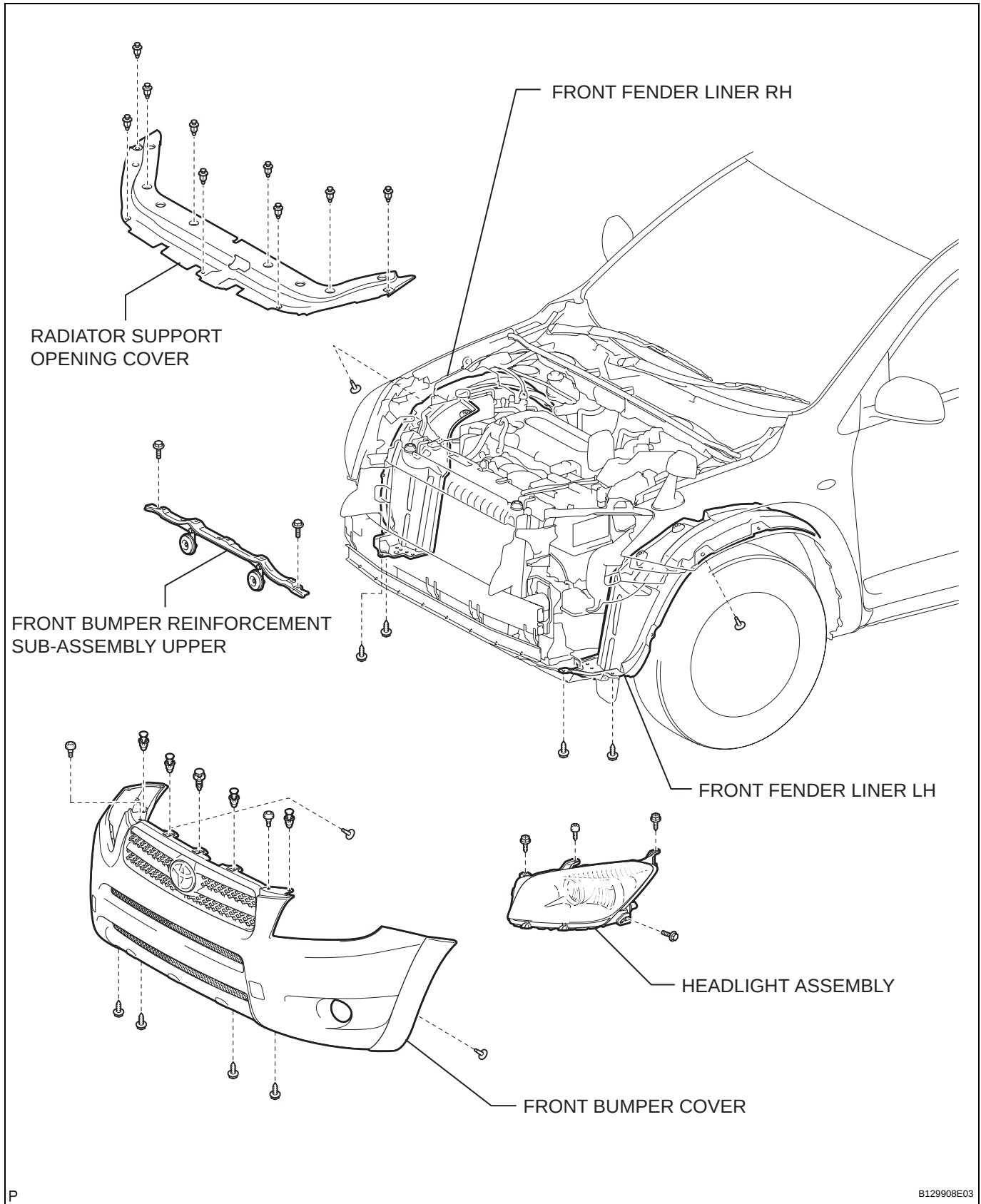
STOP LIGHT SWITCH

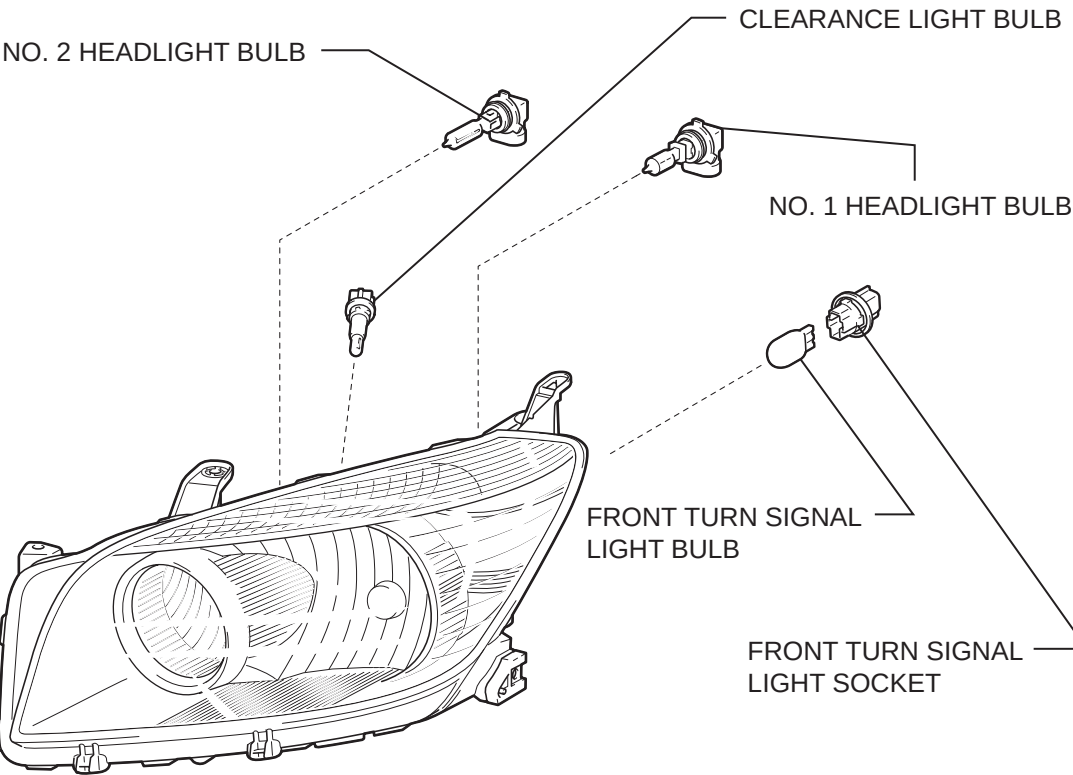
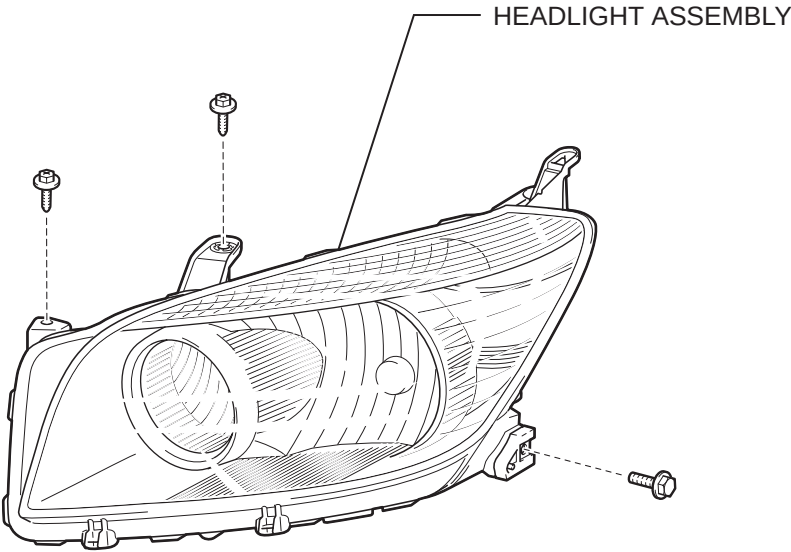
*1: w/o Engine Immobiliser System

*2: w/ Engine Immobiliser System

HEADLIGHT ASSEMBLY

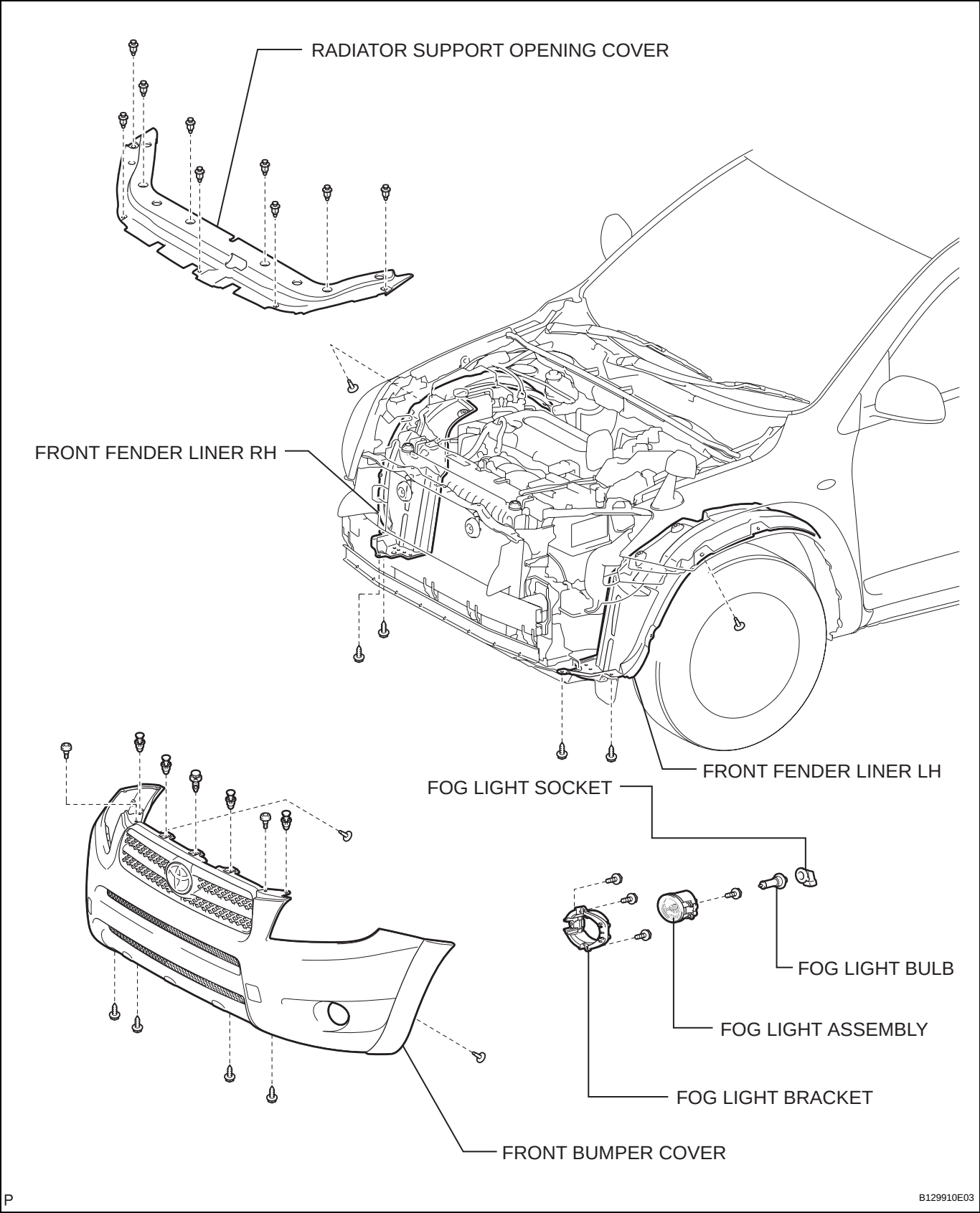
COMPONENTS





FOG LIGHT ASSEMBLY

COMPONENTS



REMOVAL

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. REMOVE FRONT FENDER LINER LH (See page [ET-6](#))

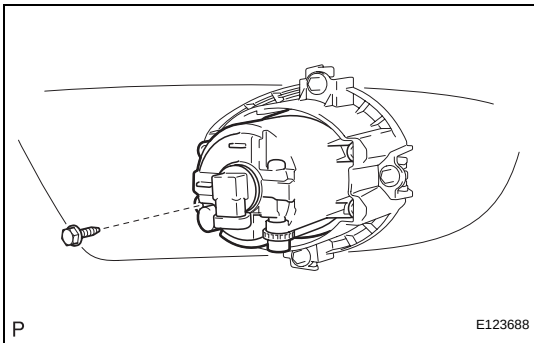
3. REMOVE FRONT FENDER LINER RH (See page [ET-4](#))

4. REMOVE RADIATOR SUPPORT OPENING COVER (See page [ET-4](#))

5. REMOVE FRONT BUMPER COVER (See page [ET-5](#))

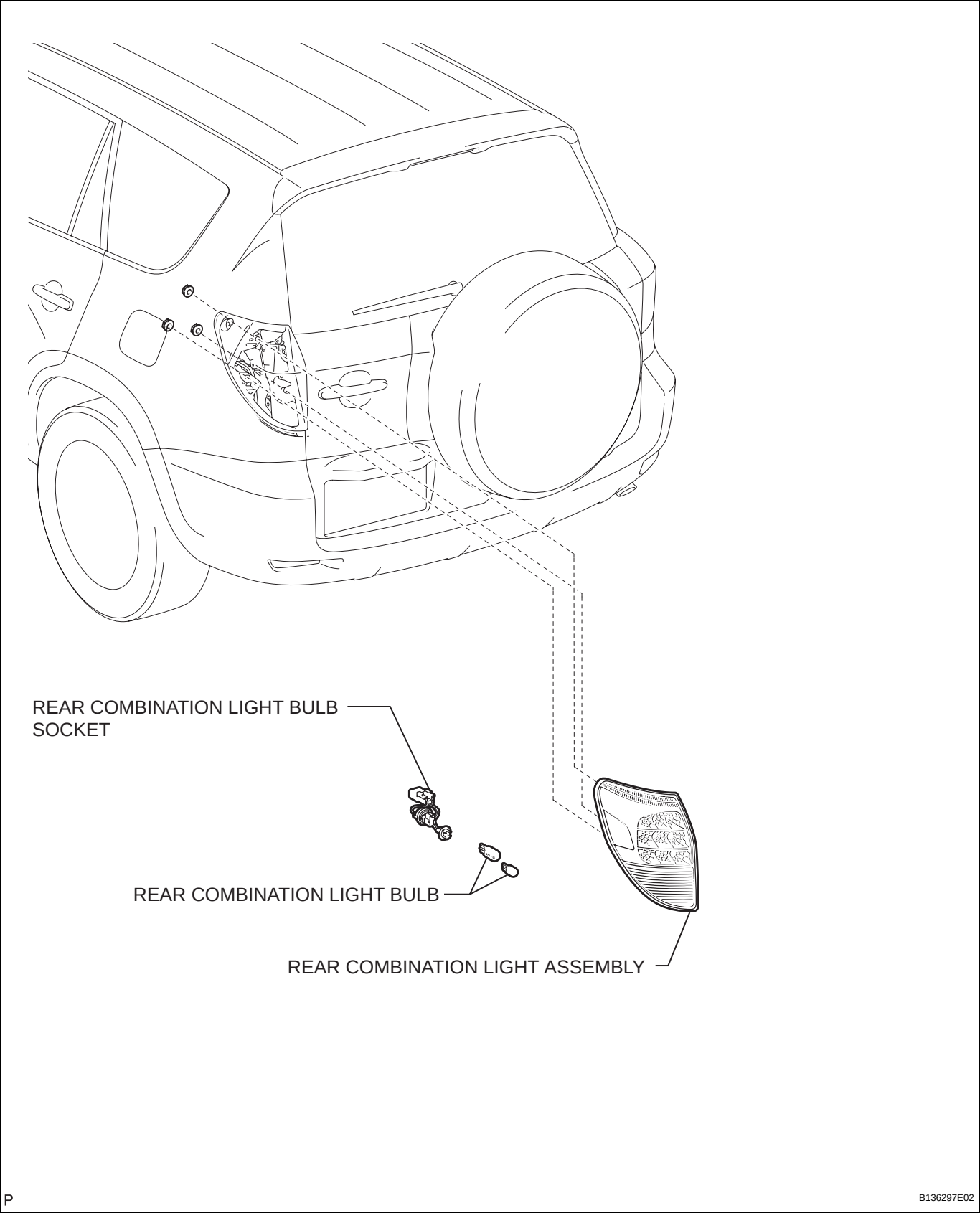
6. REMOVE FOG LIGHT ASSEMBLY

- (a) Disconnect the connector.
- (b) Remove the bolt and fog light.



REAR COMBINATION LIGHT ASSEMBLY

COMPONENTS



REMOVAL

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

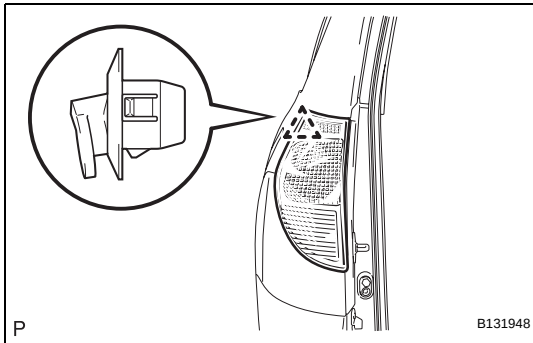
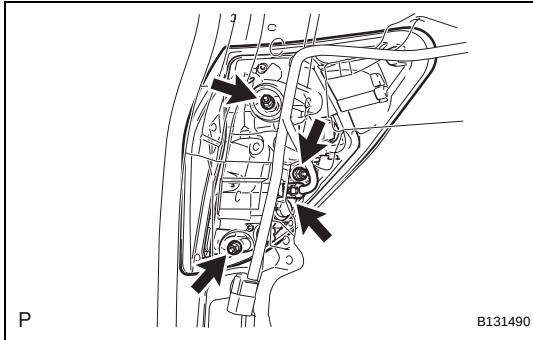
1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. REMOVE REAR COMBINATION LIGHT ASSEMBLY

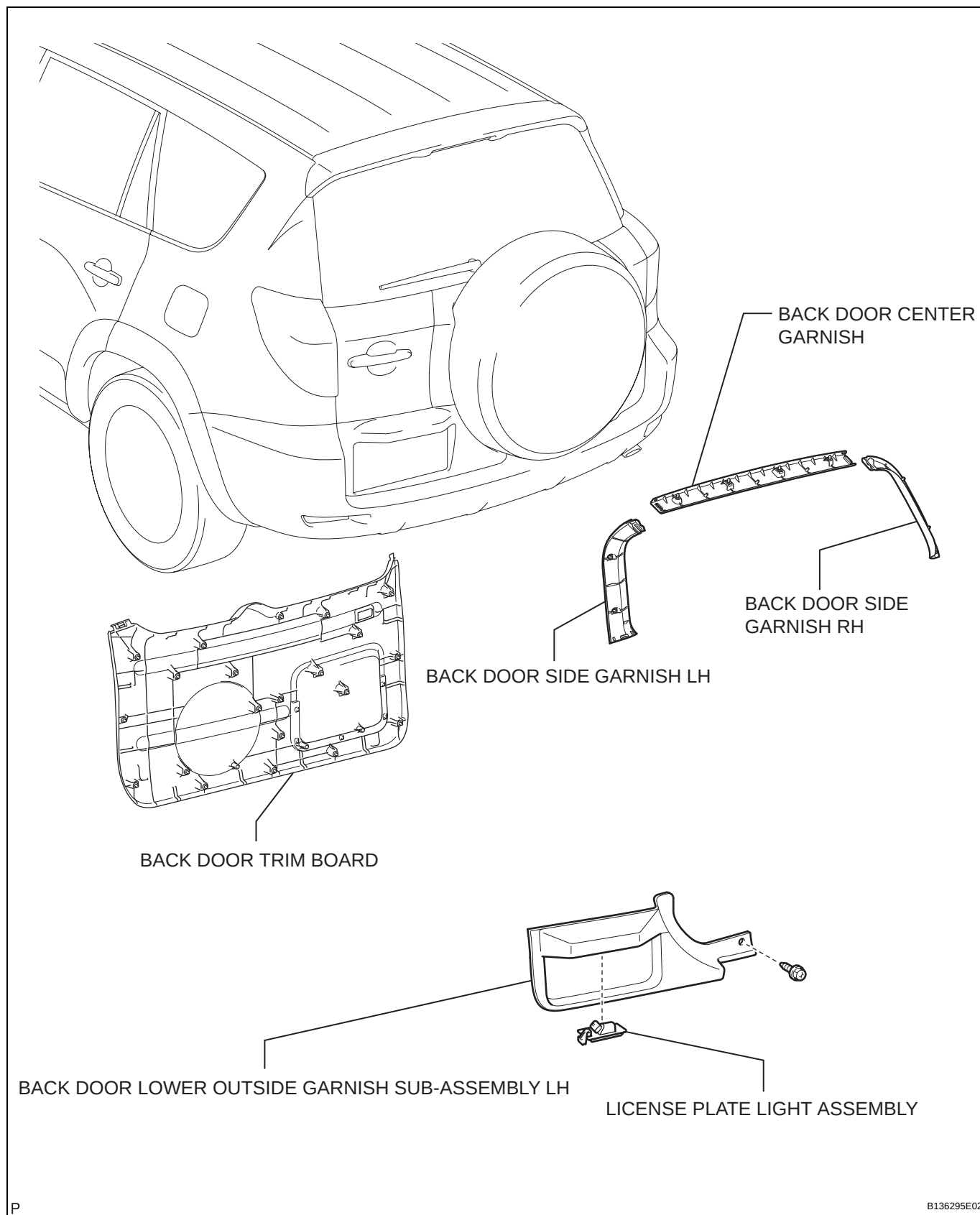
(a) Remove the 3 nuts and disconnect the connector.



(b) Detach the clip and remove the light.

LICENSE PLATE LIGHT ASSEMBLY

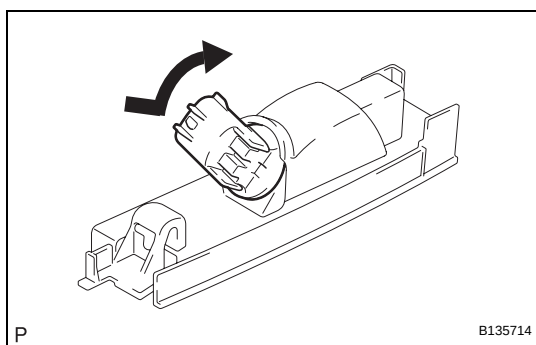
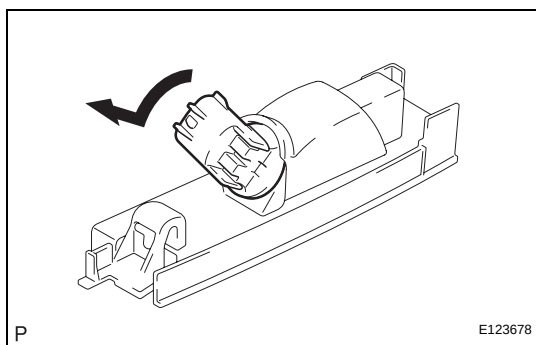
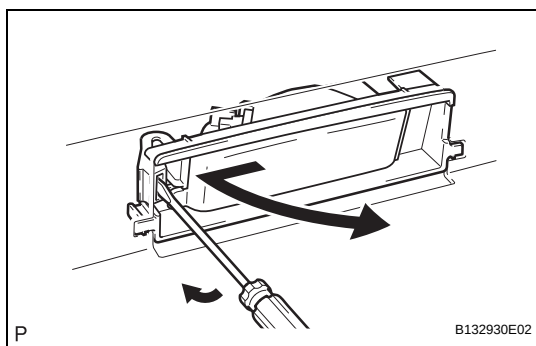
COMPONENTS



LI

REMOVAL

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
CAUTION:
 Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.
2. **REMOVE BACK DOOR CENTER GARNISH** (See page [ED-59](#))
3. **REMOVE BACK DOOR SIDE GARNISH LH** (See page [ED-59](#))
4. **REMOVE BACK DOOR SIDE GARNISH RH** (See page [ED-59](#))
5. **REMOVE BACK DOOR TRIM BOARD** (See page [ED-59](#))
6. **REMOVE BACK DOOR LOWER OUTSIDE GARNISH SUB-ASSEMBLY LH** (See page [ET-60](#))
7. **REMOVE LICENSE PLATE LIGHT ASSEMBLY**
 - (a) Disconnect the connector.
 - (b) Using a screwdriver, remove the light as shown in the illustration.



DISASSEMBLY

1. **REMOVE LICENSE PLATE LIGHT BULB**
 - (a) Turn the bulb/socket unit in the direction indicated by the arrow and pull to remove it.
 - (b) Remove the bulb from the socket.

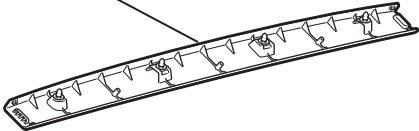
REASSEMBLY

1. **INSTALL LICENSE PLATE LIGHT BULB**
 - (a) Install the bulb to the socket.
 - (b) Insert the bulb/socket unit into the headlight.
 - (c) Turn the bulb/socket unit in the direction indicated by the arrow to install it.

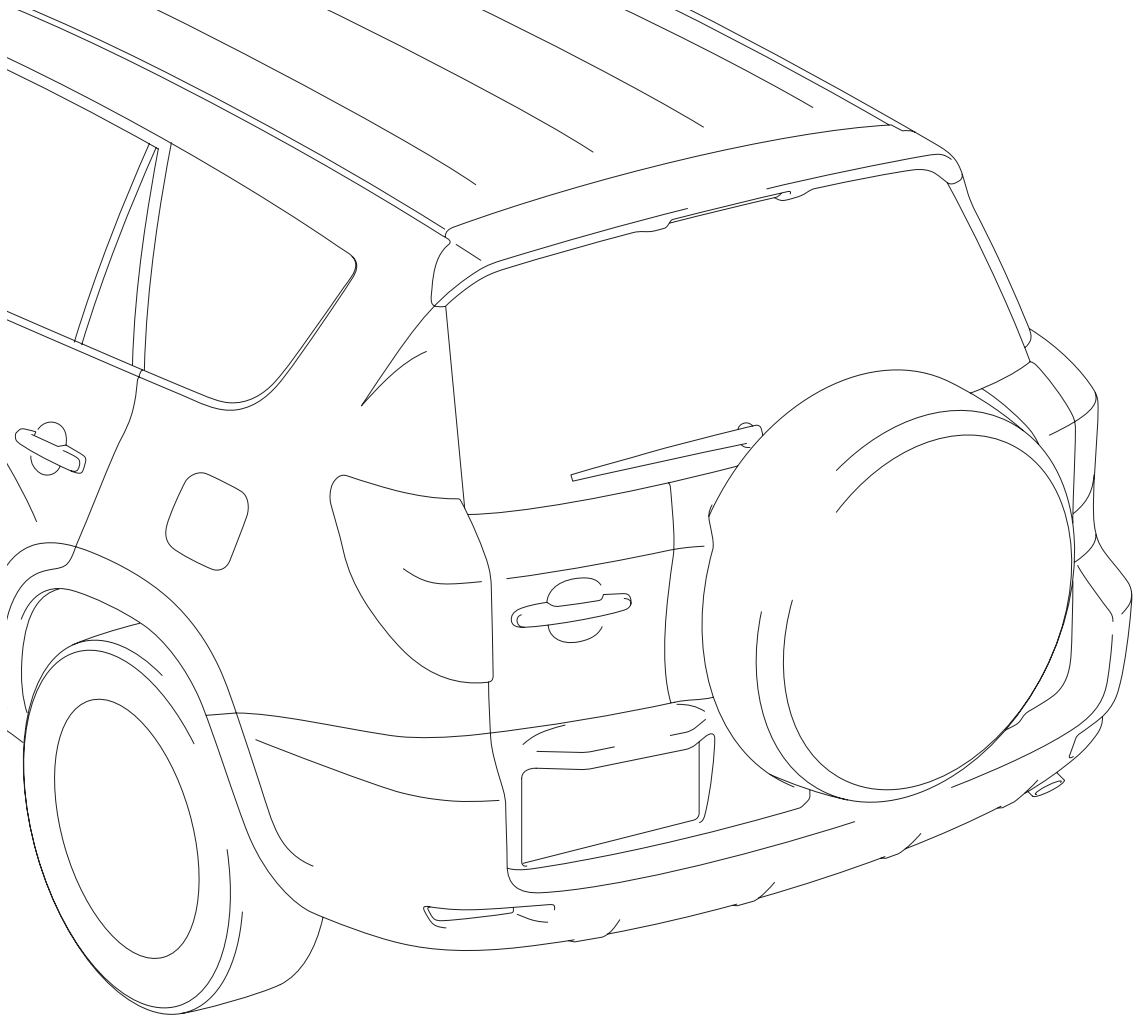
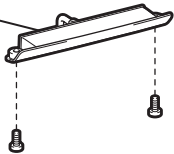
HIGH MOUNTED STOP LIGHT ASSEMBLY

COMPONENTS

BACK DOOR CENTER GARNISH



CENTER STOP LIGHT ASSEMBLY



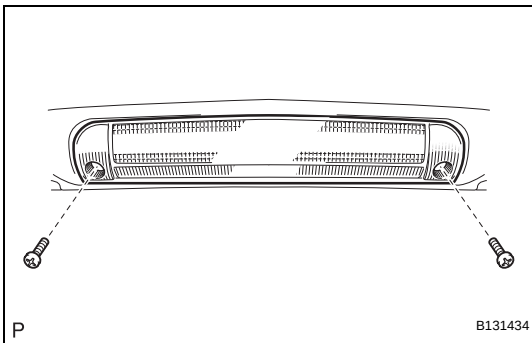
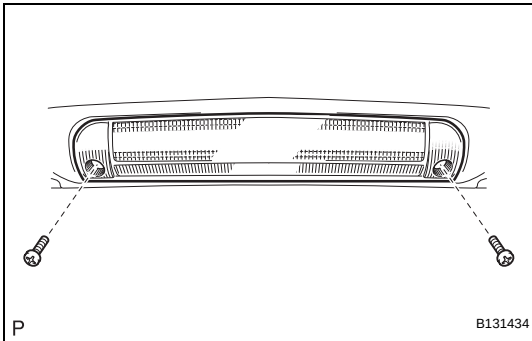
REMOVAL

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. **REMOVE BACK DOOR CENTER GARNISH** (See page [ED-59](#))
3. **REMOVE CENTER STOP LIGHT ASSEMBLY**
 - (a) Disconnect the connector.
 - (b) Remove the 2 screws and center stop light.

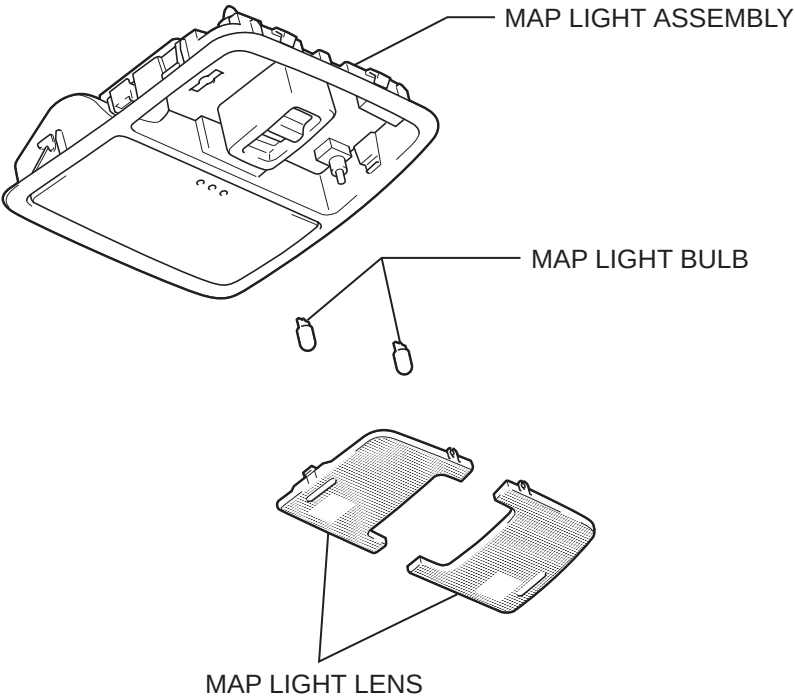
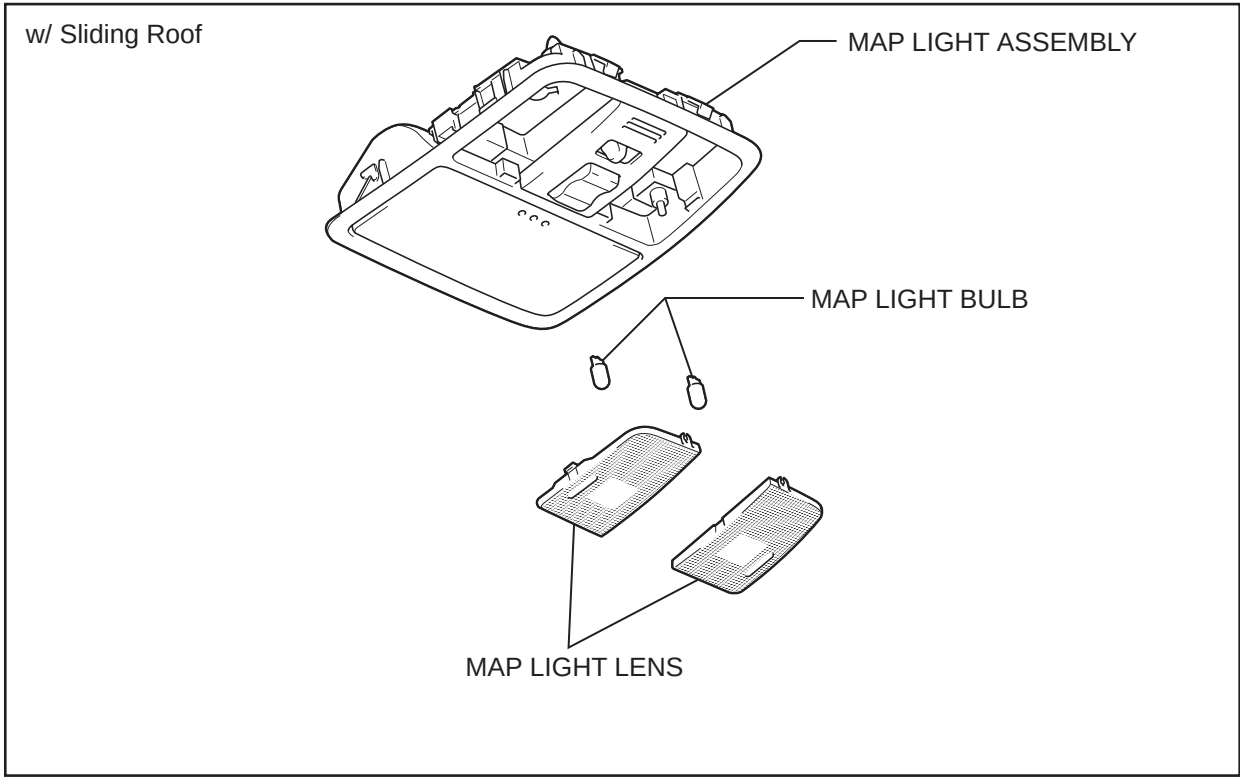


INSTALLATION

1. **INSTALL CENTER STOP LIGHT ASSEMBLY**
 - (a) Install the center stop light with the 2 screws.
 - (b) Connect the connector.
2. **INSTALL BACK DOOR CENTER GARNISH** (See page [ED-67](#))
3. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

MAP LIGHT ASSEMBLY

COMPONENTS



REMOVAL

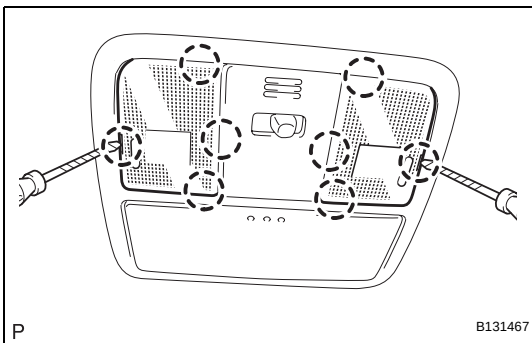
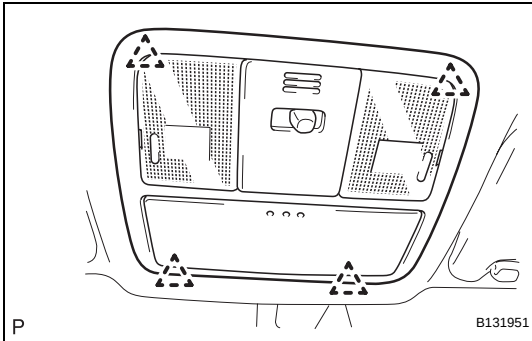
1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. **REMOVE MAP LIGHT ASSEMBLY**

- (a) Detach the 4 clips and remove the map light.
- (b) Disconnect the light connector.

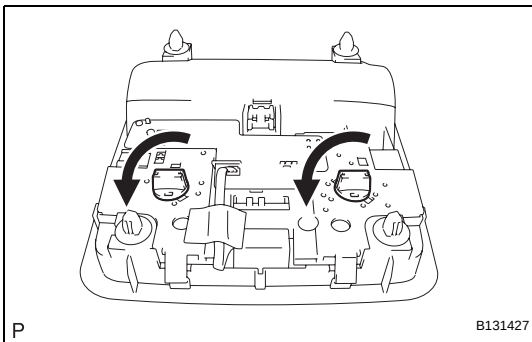


3. **REMOVE MAP LIGHT LENS**

- (a) Using a screwdriver, pry out the 8 claws and remove the map light lens.

HINT:

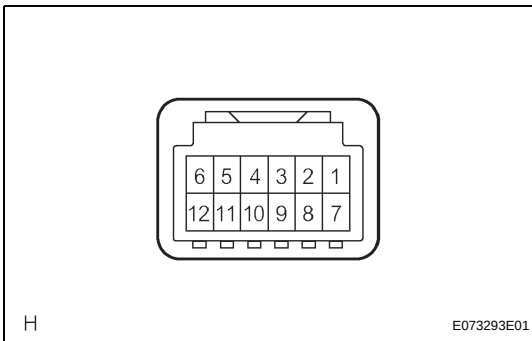
Tape the screwdriver tip before use.



DISASSEMBLY

1. **REMOVE MAP LIGHT BULB**

- (a) Remove the 2 bulbs from the light.



INSPECTION

1. **INSPECT MAP LIGHT ASSEMBLY**

- (a) Connect the battery's positive (+) lead to terminal 6 and the negative (-) lead to terminal 1, and then check that the light comes on when the switch is in the DOOR position.

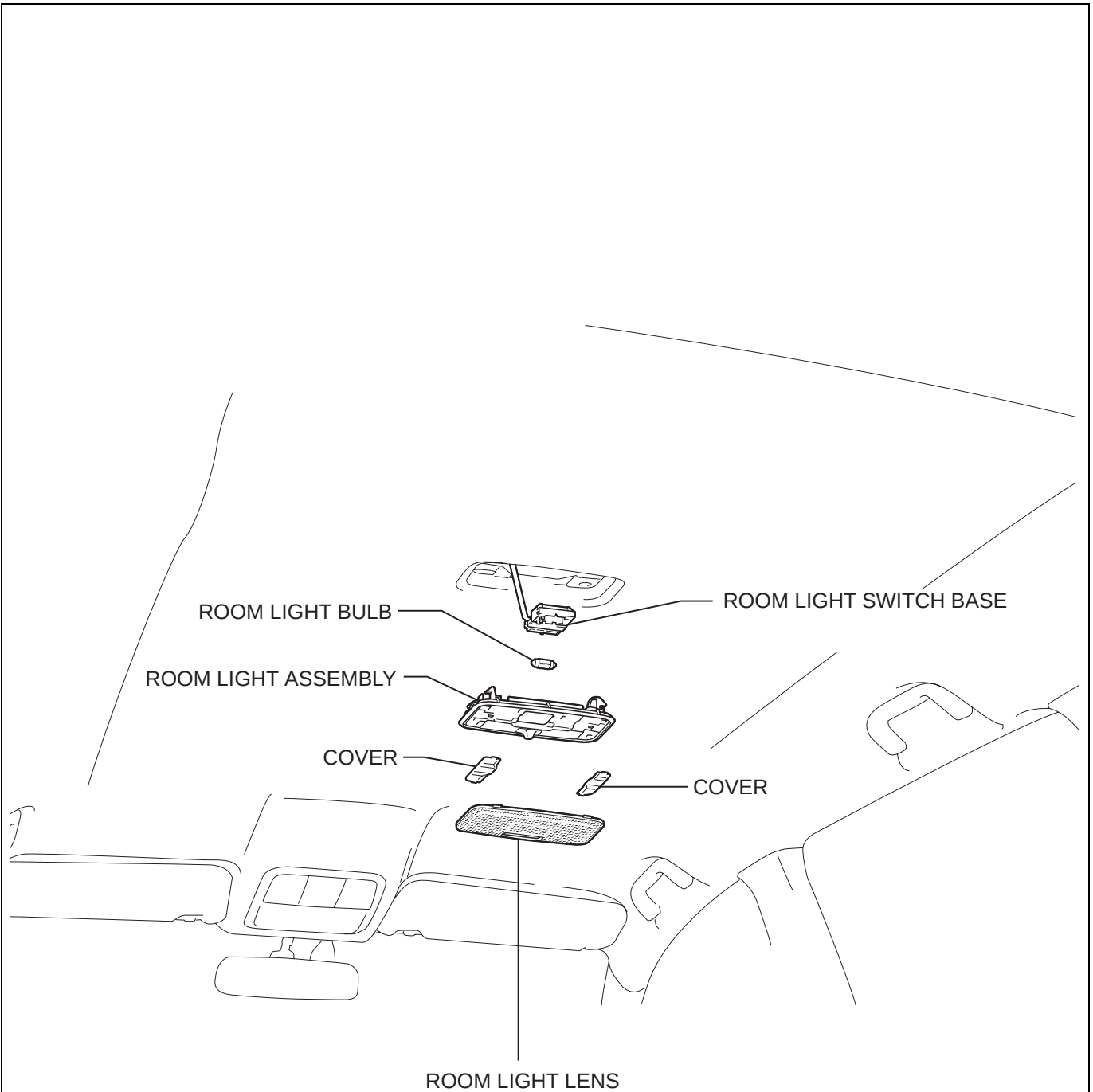
OK:

Light comes on.

If the result is not as specified, replace the light assembly.

ROOM LIGHT ASSEMBLY

COMPONENTS



REMOVAL

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

CAUTION:

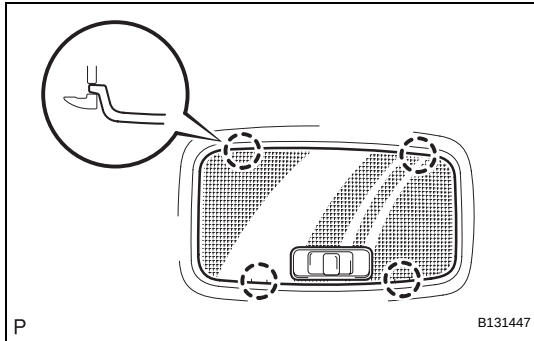
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. **REMOVE ROOM LIGHT LENS**

- (a) Using a screwdriver, detach the 4 claws and remove the lens.

HINT:

Tape the screwdriver tip before use.

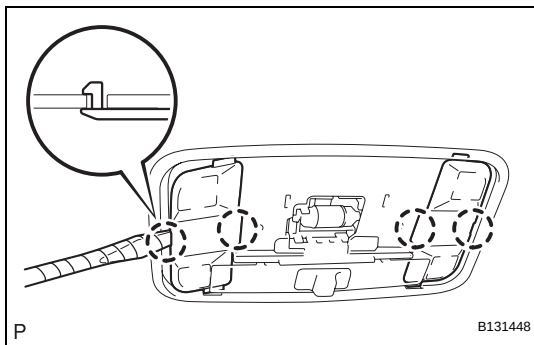


3. **REMOVE ROOM LIGHT ASSEMBLY**

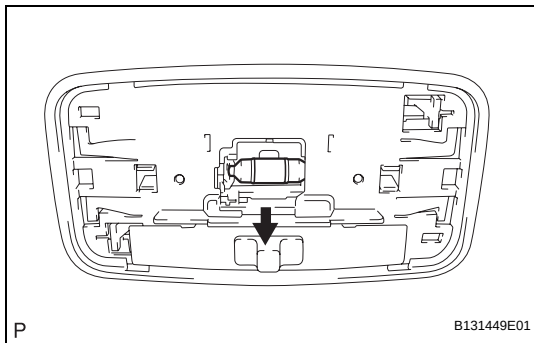
- (a) Using a screwdriver, detach the 4 claws and remove the 2 covers.

HINT:

Tape the screwdriver tip before use.



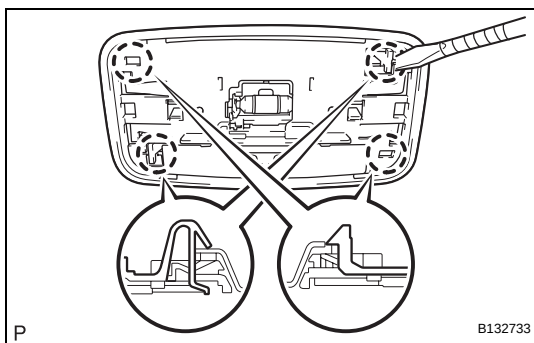
- (b) Remove the bulb from the room light switch base.



- (c) Using a screwdriver, detach the 4 claws and remove the light.

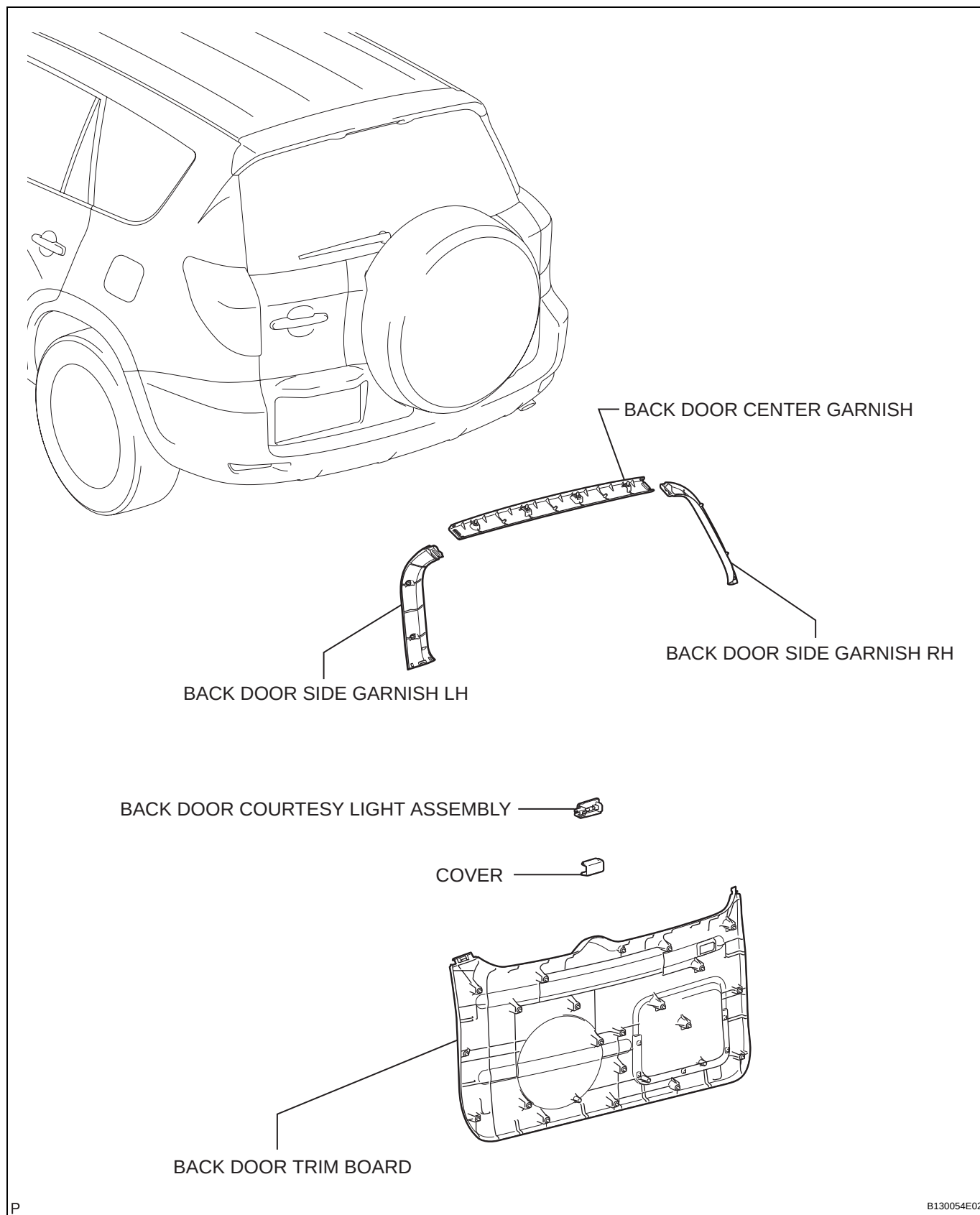
HINT:

Tape the screwdriver tip before use.



LUGGAGE ROOM LIGHT

COMPONENTS



REMOVAL

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

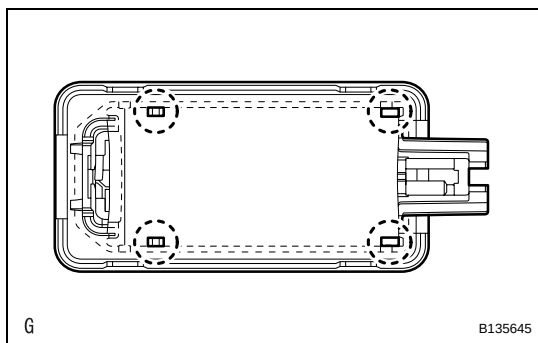
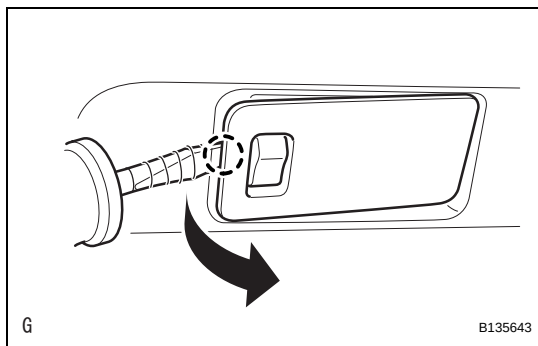
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. REMOVE BACK DOOR CENTER GARNISH (See page [ED-59](#))
3. REMOVE BACK DOOR SIDE GARNISH LH (See page [ED-59](#))
4. REMOVE BACK DOOR SIDE GARNISH RH (See page [ED-59](#))
5. REMOVE BACK DOOR TRIM BOARD (See page [ED-59](#))
6. REMOVE BACK DOOR COURTESY LIGHT ASSEMBLY

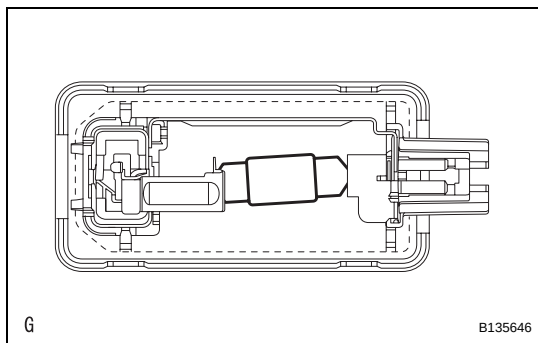
- (a) Using a screwdriver, pry out the light as shown in the illustration.

HINT:

Tape the screwdriver tip before use.



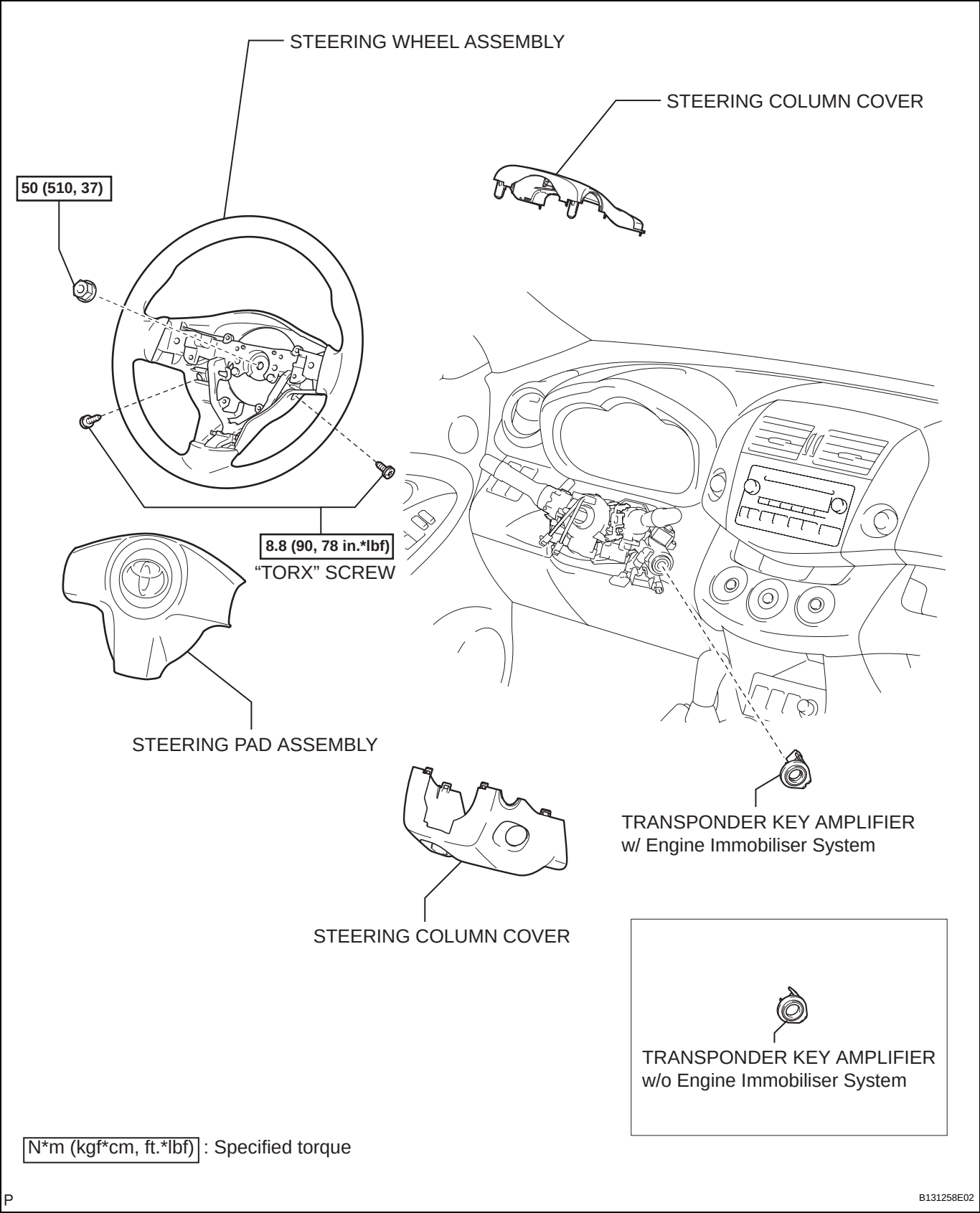
- (b) Detach the 4 claws and remove the light shade.



- (c) Remove the light bulb from the light.

IGNITION KEY CYLINDER LIGHT

COMPONENTS

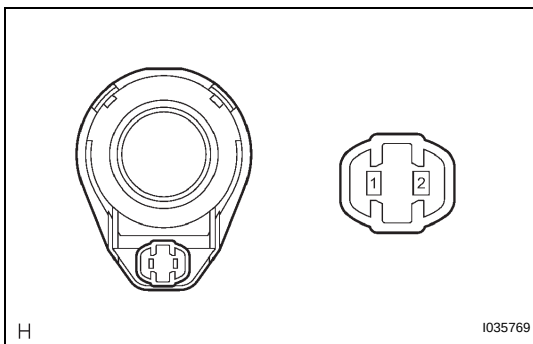
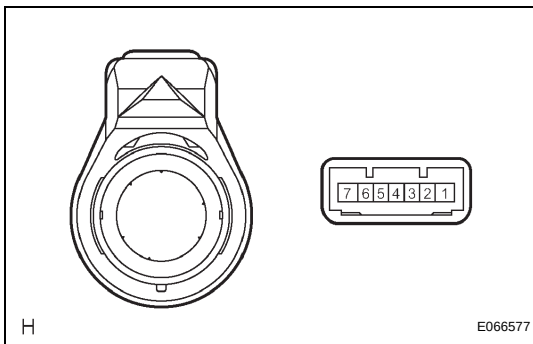


REMOVAL

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY**
CAUTION:
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.
2. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
3. **REMOVE STEERING PAD ASSEMBLY** (See page [RS-336](#))
4. **REMOVE STEERING WHEEL ASSEMBLY** (See page [SR-12](#))
5. **REMOVE STEERING COLUMN COVER** (See page [SR-12](#))
6. **REMOVE TRANSPONDER KEY AMPLIFIER** (See page [SR-14](#))

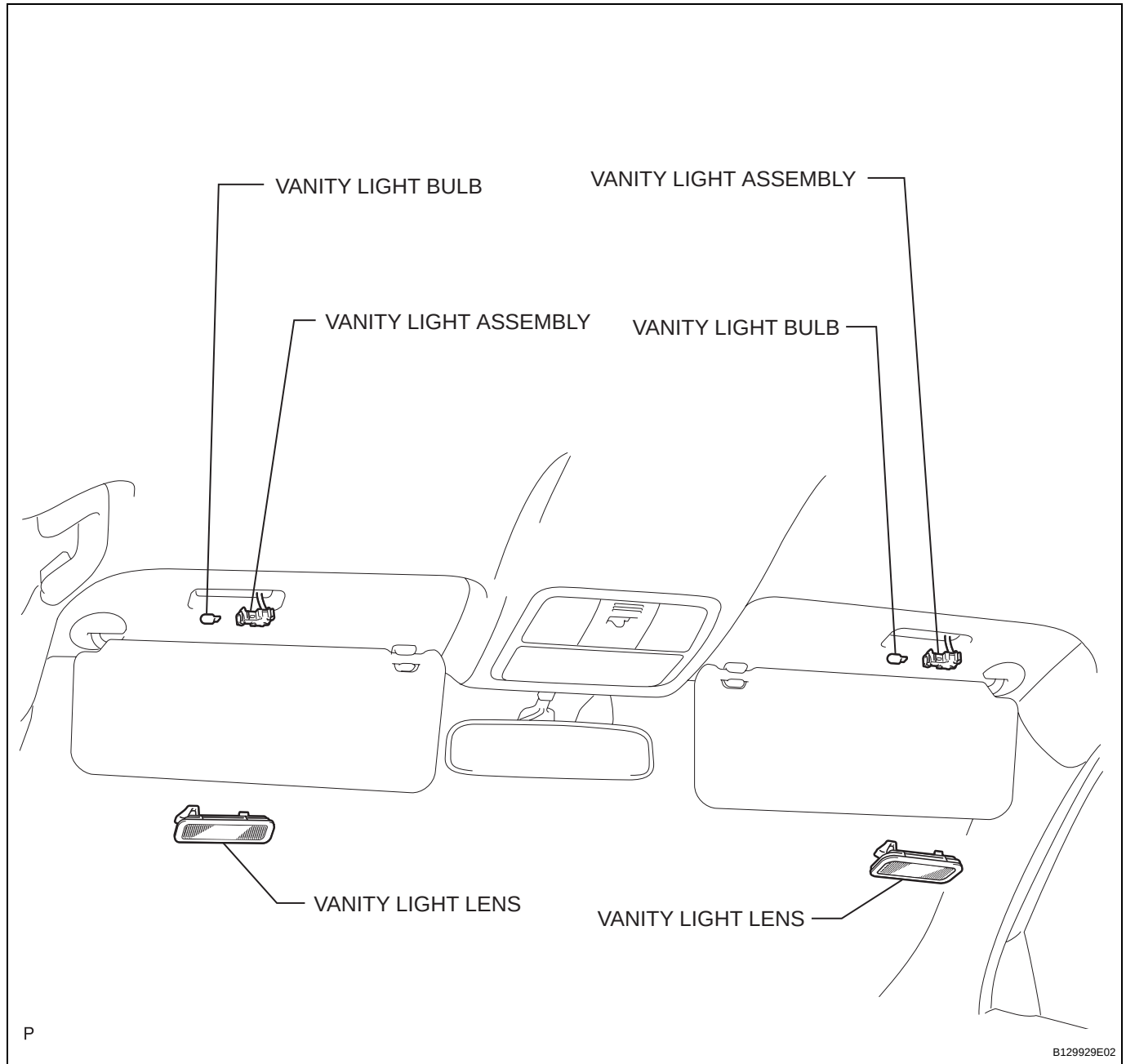
INSPECTION

1. **INSPECT TRANSPONDER KEY AMPLIFIER**
 - (a) w/ Engine immobiliser system:
 - (1) Connect the battery's positive (+) lead to terminal 2 and the negative (-) lead to terminal 6, and then check that the light comes on.
OK:
LED illuminates.
If the result is not as specified, replace the transponder key amplifier.
 - (b) w/o Engine immobiliser system:
 - (1) Connect the battery's positive (+) lead to terminal 2 and the negative (-) lead to terminal 1, and then check that the light comes on.
OK:
LED illuminates.
If the result is not as specified, replace the transponder key amplifier.



VANITY LIGHT

COMPONENTS



REMOVAL

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

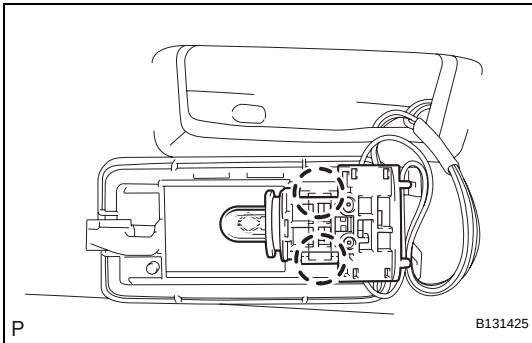
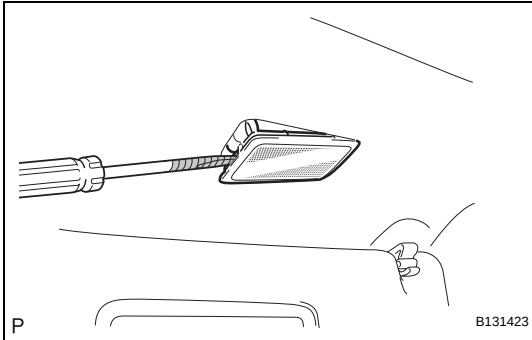
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. REMOVE VANITY LIGHT ASSEMBLY

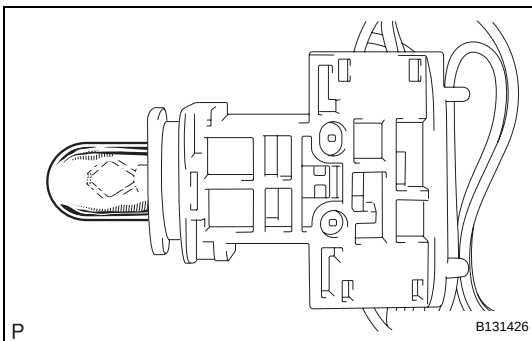
- (a) Using a screwdriver, pry out the vanity light.

HINT:

Tape the screwdriver tip before use.

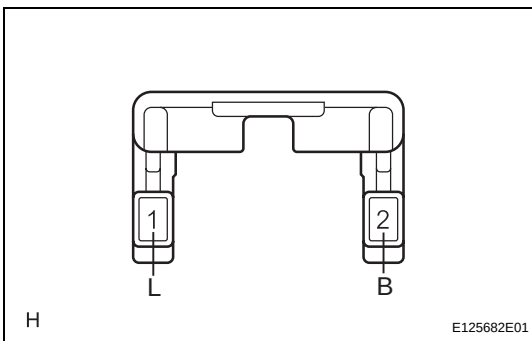


- (b) Detach the 2 claws and vanity light.



3. REMOVE VANITY LIGHT BULB

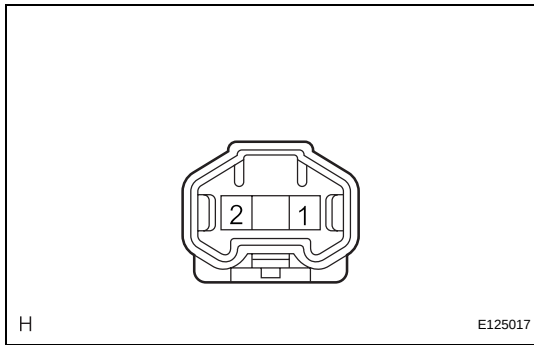
- (a) Remove the light bulb from the vanity light.



INSPECTION

1. INSPECT VISOR ASSEMBLY

- (a) Remove the visor assembly.



FRONT CONSOLE ILLUMINATION

ON-VEHICLE INSPECTION

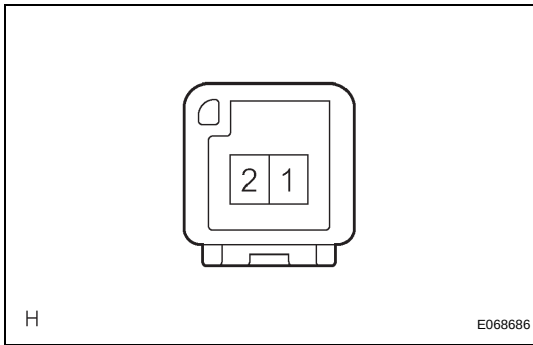
1. INSPECT FRONT CONSOLE ILLUMINATION

- (a) Connect the battery's positive (+) lead to terminal 1 and the negative (-) lead to terminal 2, then check that the light comes on.

OK:

Light comes on.

If the result is not as specified, replace the front console illumination.



FOOTWELL LIGHT

ON-VEHICLE INSPECTION

1. INSPECT FOOTWELL LIGHT

- (a) Connect the battery's positive (+) lead to terminal 2 and the negative (-) lead to terminal 1, then check that the light comes on.

OK:

Light comes on.

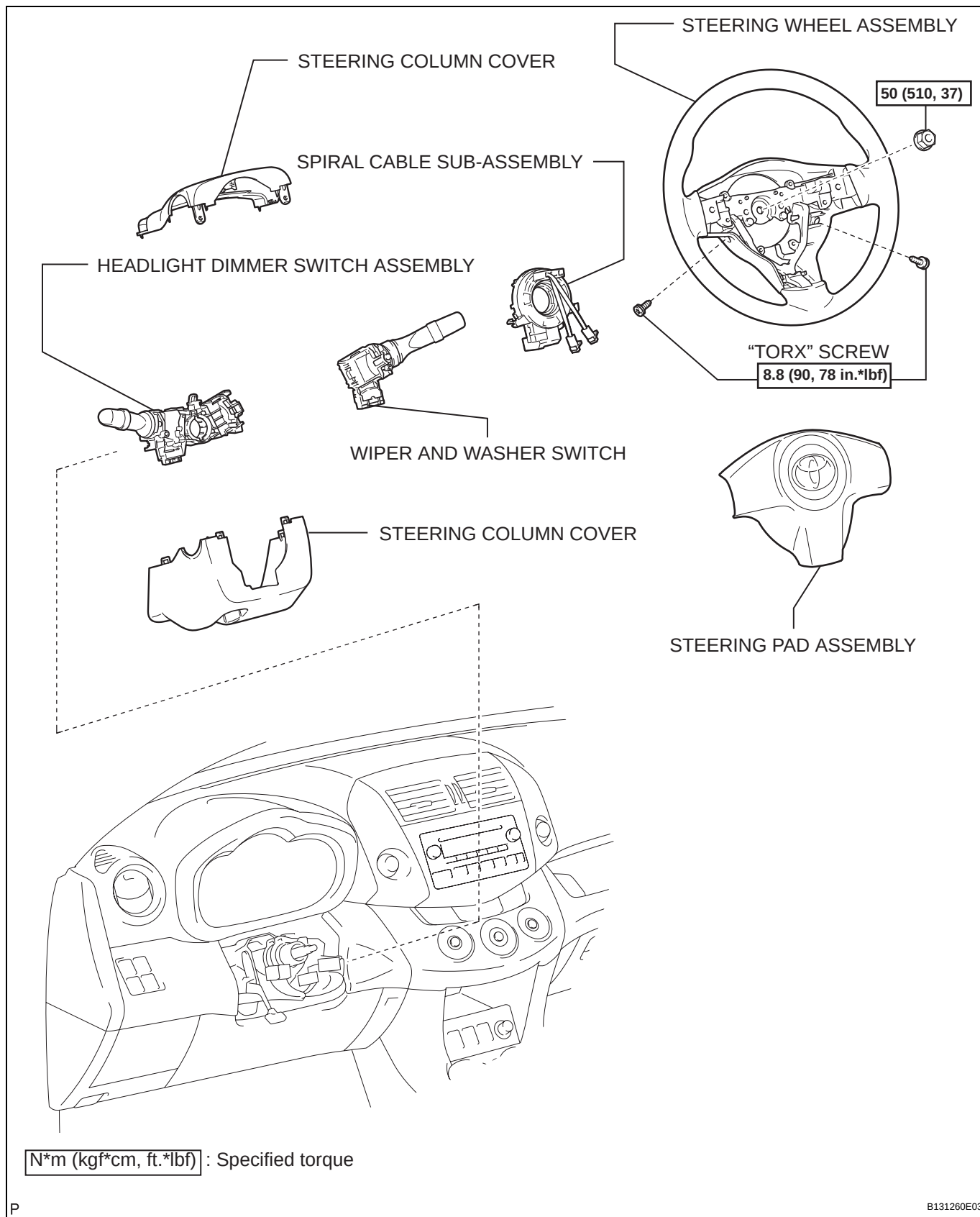
If the result is not as specified, replace the light.

HEADLIGHT DIMMER SWITCH

PRECAUTION

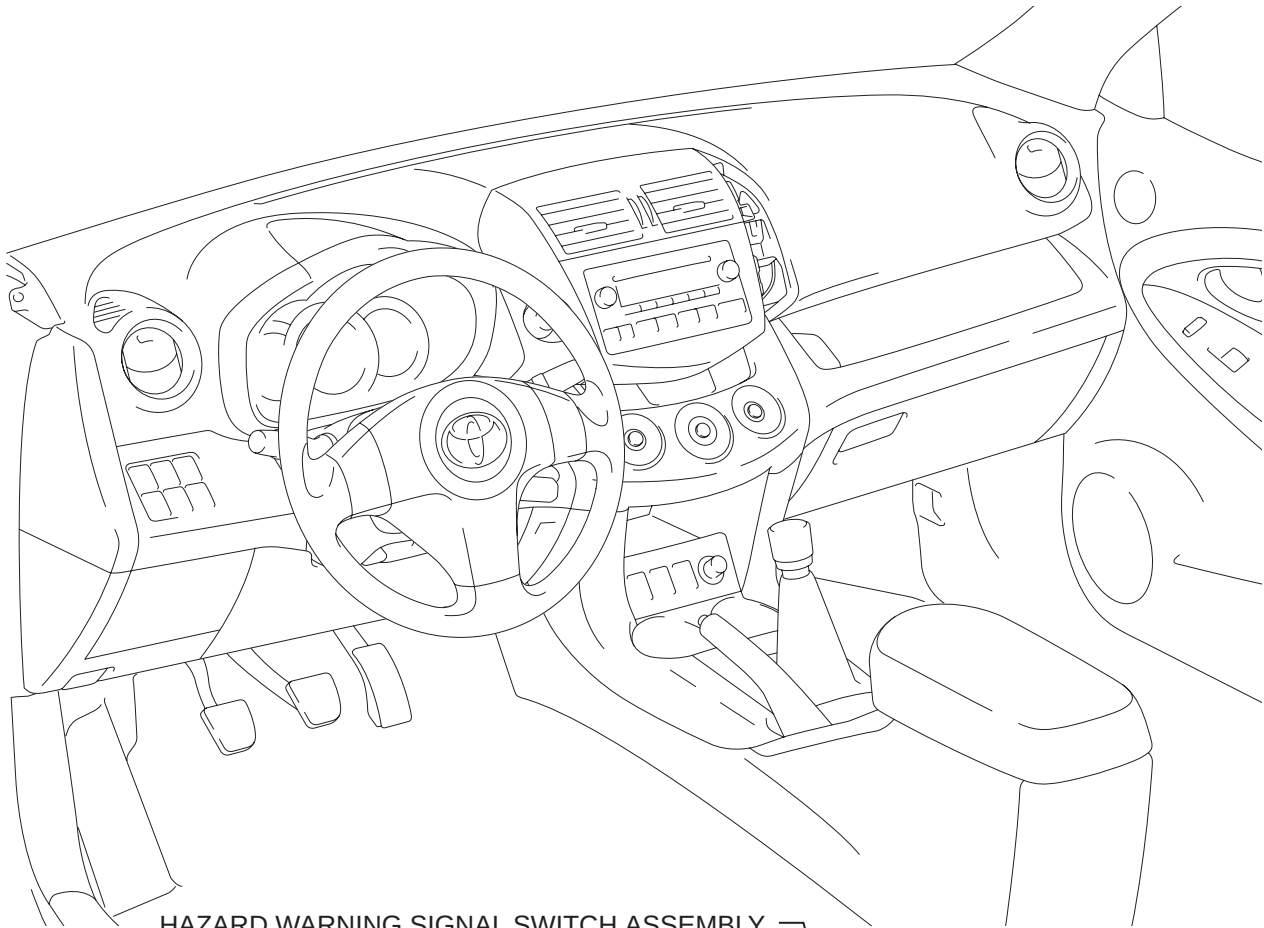
1. **PRECAUTION FOR VEHICLE WITH SRS**
 - (a) Some procedures in this section may affect the Supplemental Restraint System (SRS). Prior to performing the procedures, read the SRS section's "Precaution" (see page [RS-1](#)).

COMPONENTS

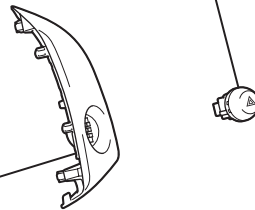


HAZARD WARNING SWITCH

COMPONENTS



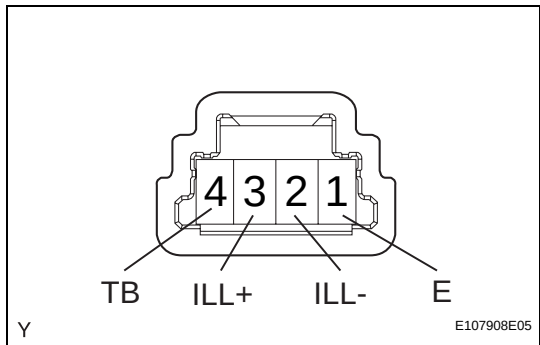
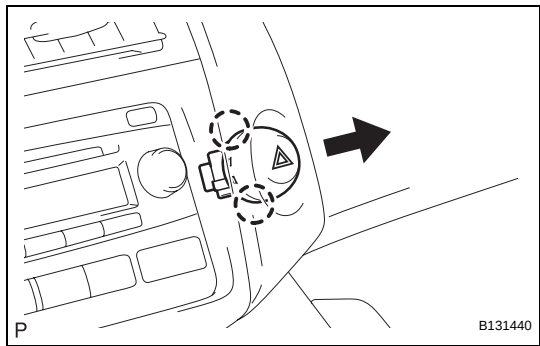
HAZARD WARNING SIGNAL SWITCH ASSEMBLY



NO. 1 INSTRUMENT CLUSTER FINISH PANEL CENTER

REMOVAL

- 1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
CAUTION:
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.
- 2. REMOVE NO. 1 INSTRUMENT CLUSTER FINISH PANEL CENTER (See page IP-5)
- 3. REMOVE HAZARD WARNING SIGNAL SWITCH ASSEMBLY
(a) Detach the 2 claws and remove the switch.



INSPECTION

- 1. INSPECT HAZARD WARNING SIGNAL SWITCH ASSEMBLY
(a) Measure the resistance of the switch.
Standard resistance

Tester Connection	Switch Condition	Specified Condition
4 (TB) - 1 (E)	OFF (Not pushed)	10 kΩ or higher
4 (TB) - 1 (E)	ON (Pushed)	Below 1 Ω

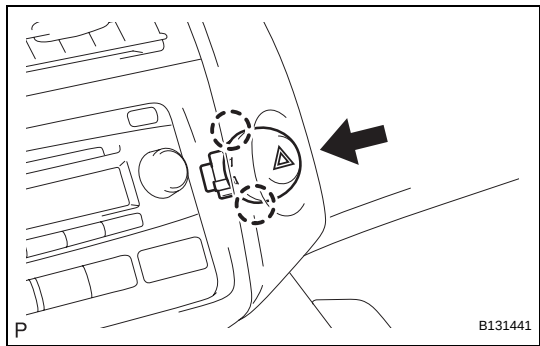
If the result is not as specified, replace the switch assembly.

- (b) Inspect the switch illumination.
 - (1) Connect the battery positive (+) lead to terminal 3 (ILL+) and the negative (-) lead to terminal 2 (ILL-), then check that the light comes on.
- OK:
LED comes on.

If the result is not as specified, replace the light.

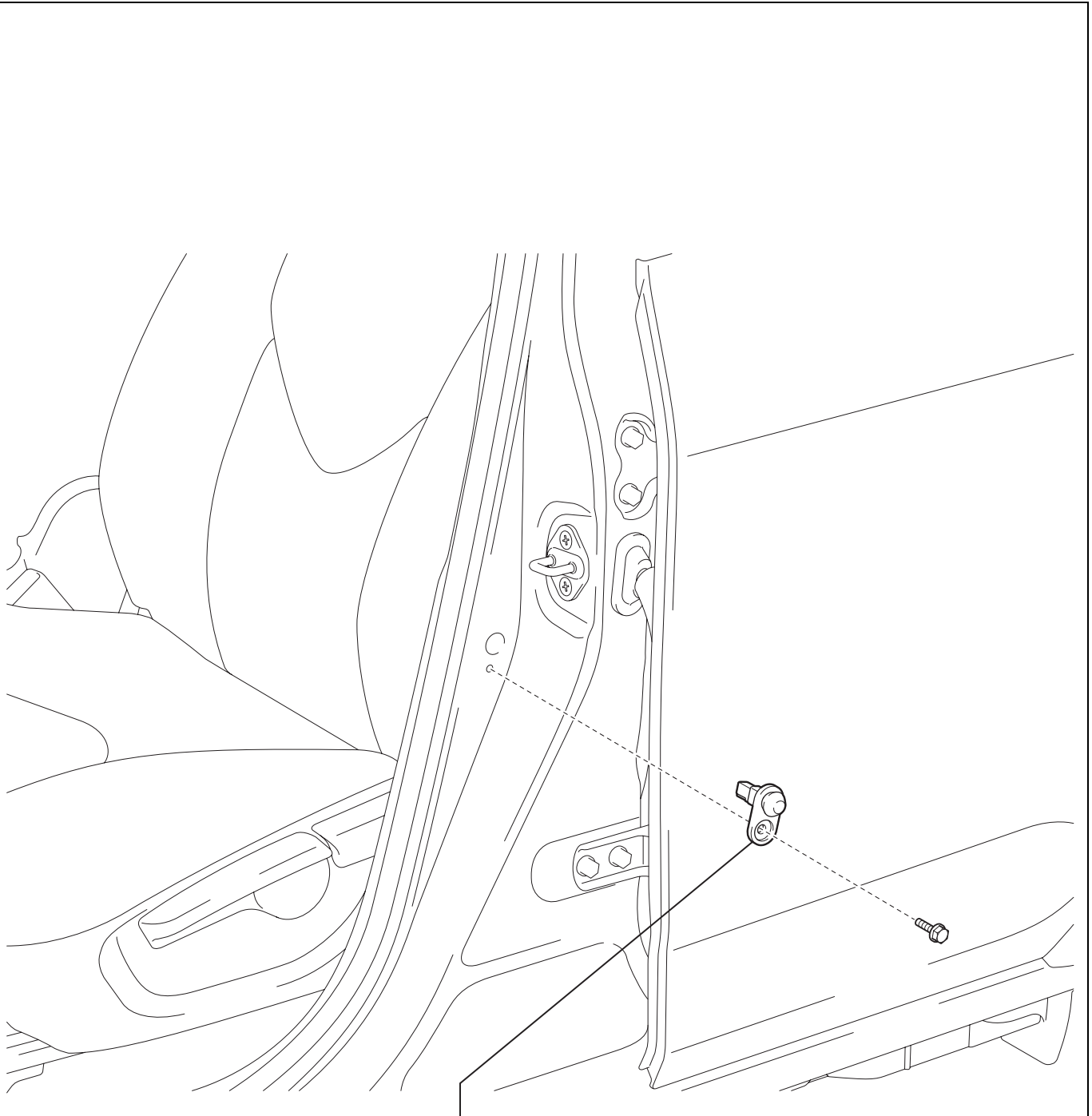
INSTALLATION

- 1. INSTALL HAZARD WARNING SIGNAL SWITCH ASSEMBLY
(a) Attach the 2 claws to install the switch.
- 2. INSTALL NO. 1 INSTRUMENT CLUSTER FINISH PANEL CENTER (See page IP-10)
- 3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL



FRONT DOOR COURTESY SWITCH

COMPONENTS



FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY

REMOVAL

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

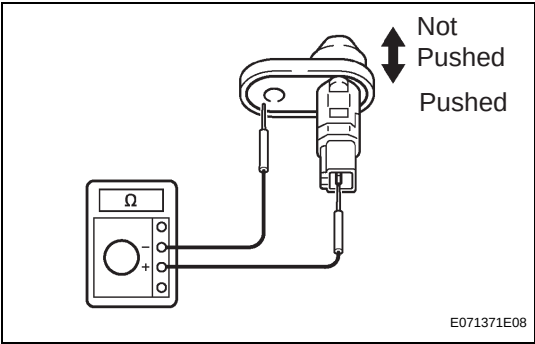
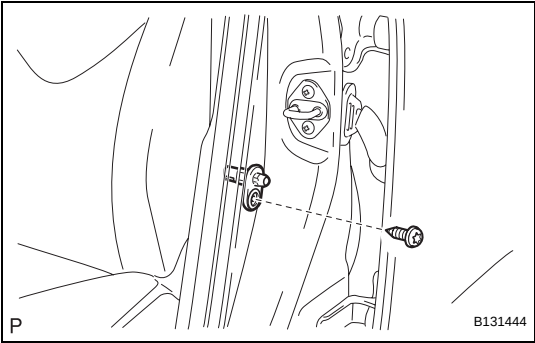
1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. REMOVE FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY

- (a) Remove the bolt and switch.
- (b) Disconnect the connector.



INSPECTION

1. INSPECT FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY

- (a) Measure the resistance of the switch.

Standard resistance

Tester Connection	Switch Condition	Specified Condition
1 - Switch body	Pushed	10 kΩ or higher
1 - Switch body	Not pushed	Below 1 Ω

If the result is not as specified, replace the switch assembly.

REAR DOOR COURTESY SWITCH

COMPONENTS



REMOVAL

HINT:

- Use the same procedures for the RH and LH sides.
- The procedures listed below are for the LH side.

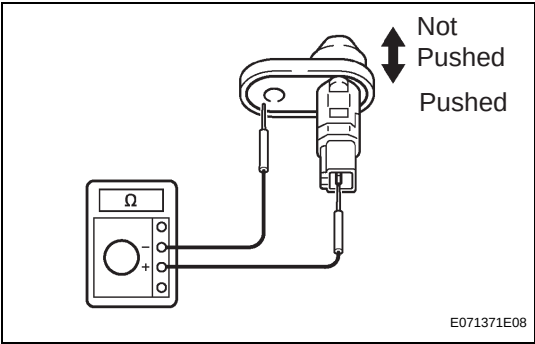
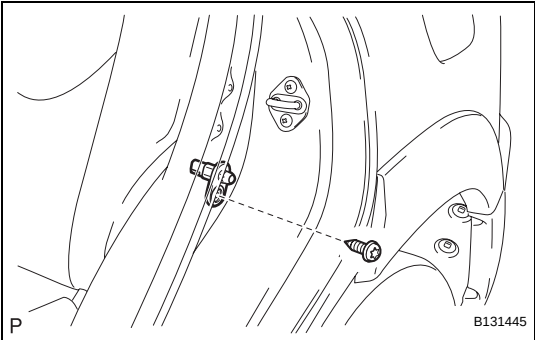
1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. REMOVE REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY

- (a) Remove the bolt and switch.
- (b) Disconnect the connector.



INSPECTION

1. INSPECT REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY

- (a) Measure the resistance of the switch.

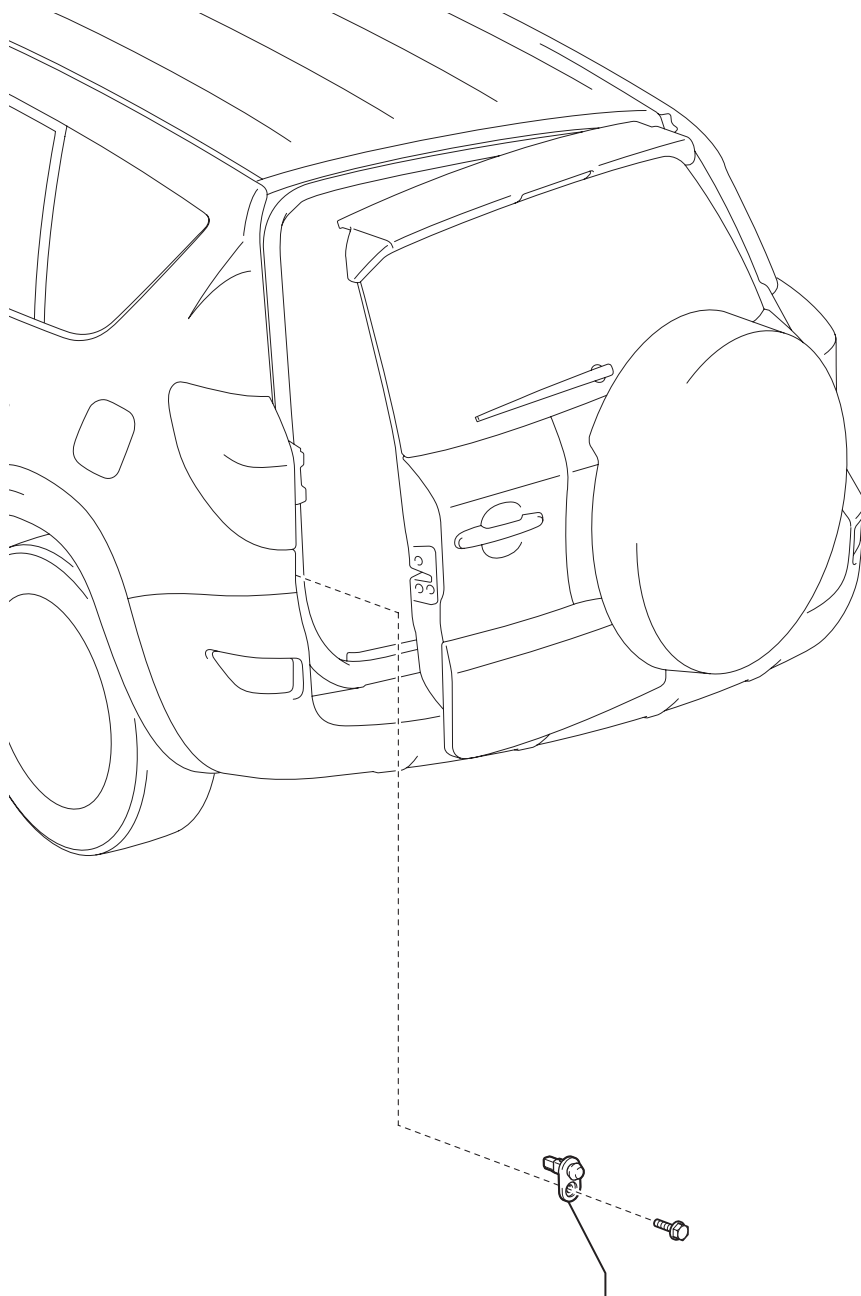
Standard resistance

Tester Connection	Switch Condition	Specified Condition
1 - Switch body	Pushed	10 k Ω or higher
1 - Switch body	Not pushed	Below 1 Ω

If the result is not as specified, replace the switch assembly.

BACK DOOR COURTESY SWITCH

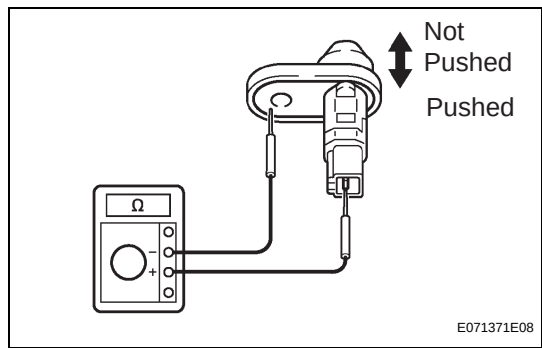
COMPONENTS



BACK DOOR COURTESY LIGHT SWITCH ASSEMBLY

REMOVAL

- 1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
CAUTION:
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.
- 2. REMOVE BACK DOOR COURTESY LIGHT SWITCH ASSEMBLY
 - (a) Remove the bolt and switch.
 - (b) Disconnect the connector.

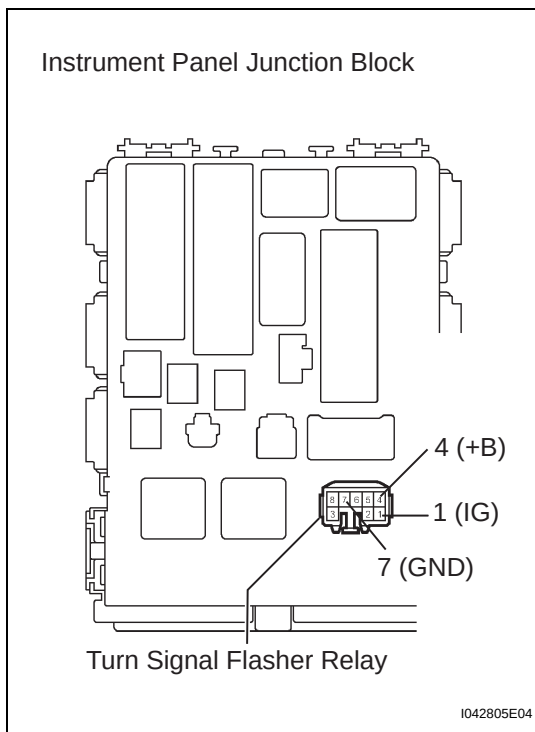


INSPECTION

- 1. INSPECT BACK DOOR COURTESY LIGHT SWITCH ASSEMBLY
 - (a) Measure the resistance of the switch.
Standard resistance

Tester Connection	Condition	Specified Condition
1 - Switch body	Pushed	10 kΩ or higher
1 - Switch body	Not pushed	Below 1 Ω

If the result is not as specified, replace the switch assembly.



TURN SIGNAL FLASHER ASSEMBLY

ON-VEHICLE INSPECTION

1. INSPECT TURN SIGNAL FLASHER CIRCUIT

- (a) Check the power source circuit and ground circuit.
 - (1) Remove the turn signal flasher relay from the instrument panel junction block.
 - (2) Measure the voltage and resistance of the instrument panel junction block.

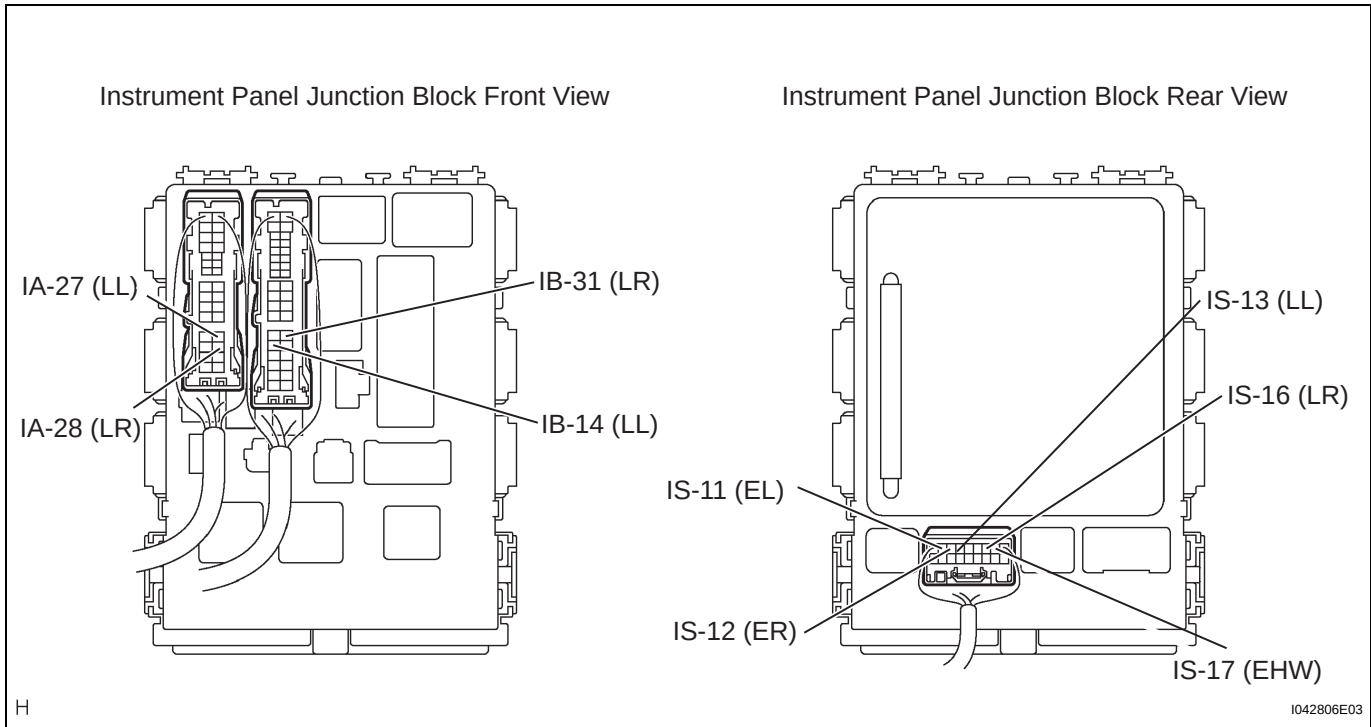
Standard voltage

Tester Connection	Condition	Specified Condition
Instrument panel junction block turn signal flasher relay terminal 1 (IG) - Body ground	Ignition switch OFF	Below 1 V
Instrument panel junction block turn signal flasher relay terminal 1 (IG) - Body ground	Ignition switch ON	10 to 14 V
Instrument panel junction block turn signal flasher relay terminal 4 (+B) - Body ground	Always	10 to 14 V

Standard resistance

Tester Connection	Specified Condition
Instrument panel junction block turn signal flasher relay terminal 7 (GND) - Body ground	Below 1 Ω

- (b) Check the output operation signal.
 (1) Install the turn signal flasher relay onto the instrument panel junction block.



- (2) Measure the voltage of the instrument panel junction block.

Standard voltage

Tester Connection	Condition	Specified Condition
IA-27 (LL) - Body ground	Hazard warning switch OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IA-27 (LL) - Body ground	Turn signal switch (left turn) OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IA-28 (LR) - Body ground	Hazard warning switch OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IA-28 (LR) - Body ground	Turn signal switch (right turn) OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IB-14 (LL) - Body ground	Hazard warning switch OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IB-14 (LL) - Body ground	Turn signal switch (left turn) OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IB-31 (LR) - Body ground	Hazard warning switch OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IB-31 (LR) - Body ground	Turn signal switch (right turn) OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IS-11 (EL) - Body ground	Turn signal switch (left turn) OFF → ON	10 to 14 V → 0 V
IS-12 (ER) - Body ground	Turn signal switch (right turn) OFF → ON	10 to 14 V → 0 V
IS-13 (LL) - Body ground	Hazard warning switch OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IS-13 (LL) - Body ground	Turn signal switch (left turn) OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IS-16 (LR) - Body ground	Hazard warning switch OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IS-16 (LR) - Body ground	Turn signal switch (right turn) OFF → ON	0 V → 10 to 14 V (60 to 120 times per minute)
IS-17 (EHW) - Body ground	Hazard warning switch OFF → ON	10 to 14 V → 0 V

If the result is not as specified, replace the turn signal flasher relay.

HEADLIGHT RELAY

ON-VEHICLE INSPECTION

1. REMOVE HEADLIGHT RELAY
- (a)

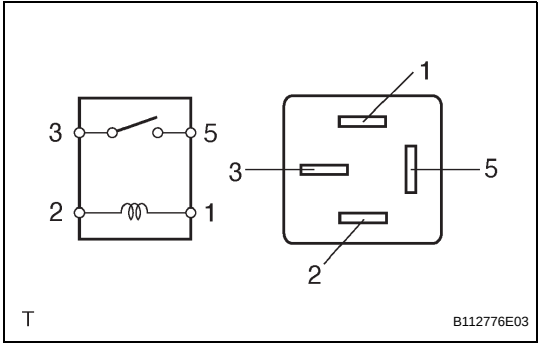
Remove the headlight relay from the engine room No. 2 relay block.
- (b)

Measure the resistance of the relay.

Standard resistance

Tester Connection	Specified Condition
3 - 5	10 kΩ or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

If result is not as specified, replace the relay.



DAYTIME RUNNING LIGHT RELAY

ON-VEHICLE INSPECTION

1. INSPECT DAY TIME RUNNING LIGHT RELAY

- (a) Remove the No. 2 relay, No. 3 relay and No. 4 relay from the engine room No. 2 relay block.
- (b) Measure the resistance of the relays.

Standard resistance:

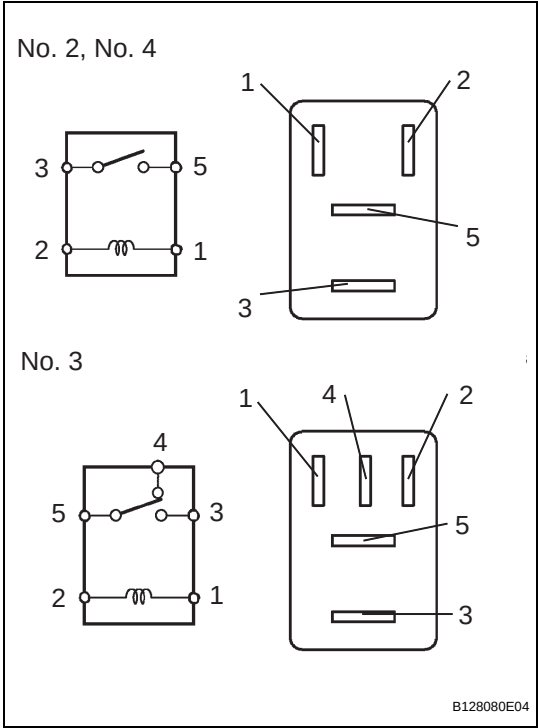
No. 2, No. 4

Tester Connection	Specified Condition
3 - 5	10 kΩ or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

No. 3

Tester Connection	Specified Condition
4 - 5	Below 1 Ω
4 - 5	10 kΩ or higher (Battery voltage applied to terminals 1 and 2)
3 - 5	Below 1 Ω
3 - 5	10 kΩ or higher (Battery voltage applied to terminals 1 and 2)

If the result is not as specified, replace the relay.



FOG LIGHT RELAY

ON-VEHICLE INSPECTION

1. INSPECT FRONT FOG LIGHT RELAY
- (a)

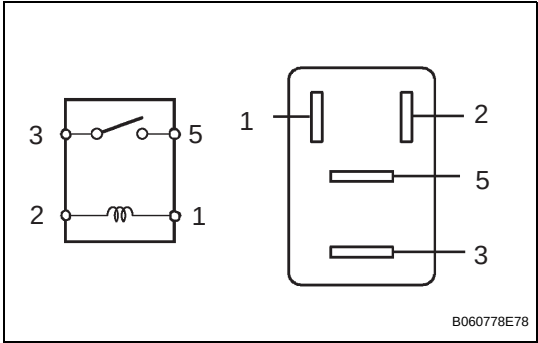
Remove the front fog relay from the No. 6 relay block.
- (b)

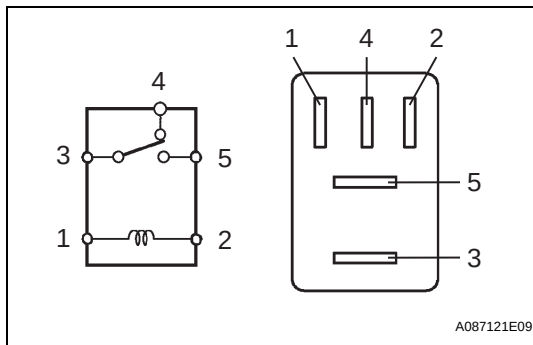
Measure the resistance of the relay.

Standard resistance

Tester Connection	Specified Condition
3 - 5	10 kΩ or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

If the result is not as specified, replace the relay.





BRK RELAY

ON-VEHICLE INSPECTION

1. INSPECT BRK RELAY

- Remove the BRK relay from the engine room No. 1 relay block.
- Measure the resistance of the relay.

Standard resistance

Tester Connection	Specified Condition
3 - 4	Below 1 Ω
3 - 4	10 k Ω or higher (Battery voltage applied to terminals 1 and 2)
3 - 5	10 k Ω or higher
3 - 5	Below 1 Ω (Battery voltage applied to terminals 1 and 2)

If the result is not as specified, replace the relay.