

## 14. Headlight Assembly

### A: REMOVAL

#### 1. WHEN REMOVING RH SIDE

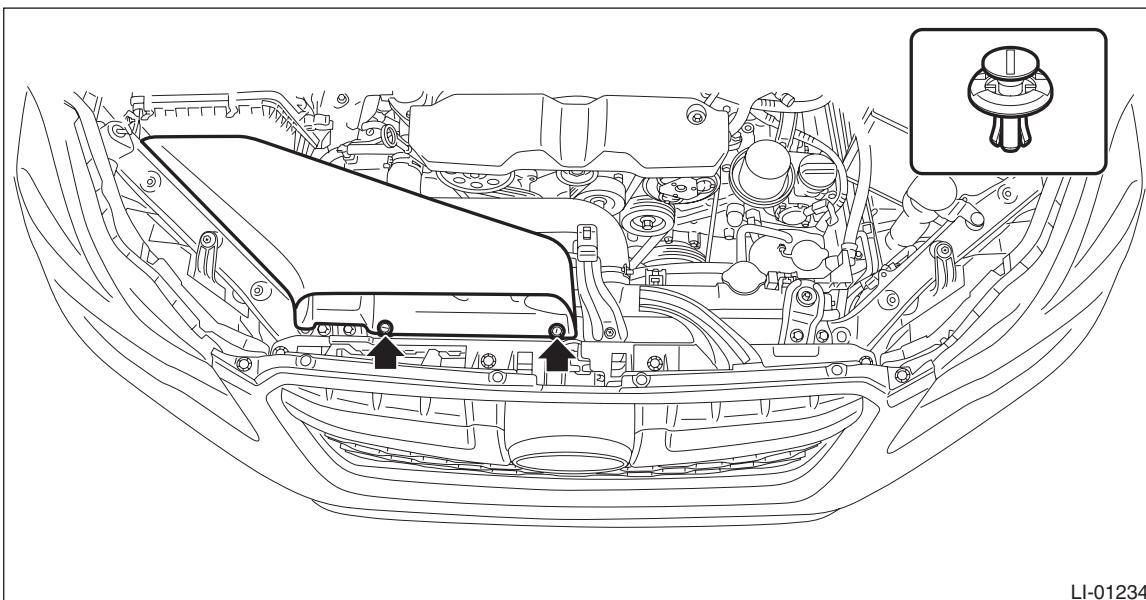
**WARNING:**

Because the headlight system uses high voltage, be careful not to perform work with wet hands. There is a possibility of electrical shock.

**CAUTION:**

The HID type uses very high voltages for the lighting circuit. Make sure that the power supply is turned OFF before working.

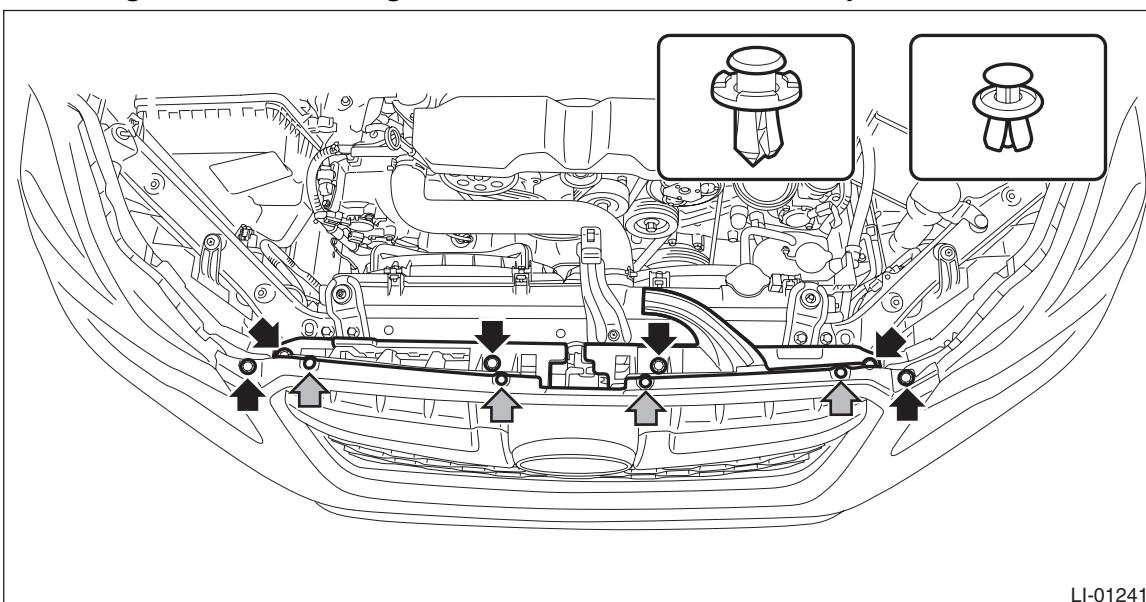
- 1) Disconnect the ground cable from battery.
- 2) Remove the clips and remove the air intake duct.



- 3) Remove the clip, and remove the bracket - grille.

**CAUTION:**

To prevent damage to the bracket - grille, make sure to remove all clips.



# Headlight Assembly

## LIGHTING SYSTEM

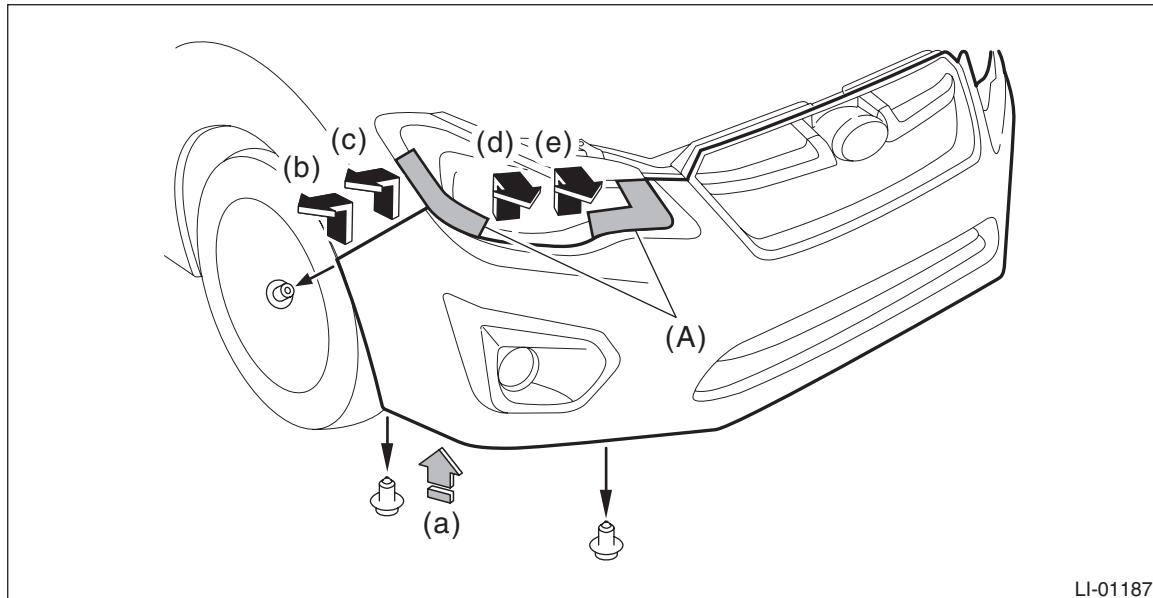
4) Detach the flange section on the right side of the bumper face - front.

(1) Apply protective tape (A) to the light assembly - head.

(2) Release the clips, and while pushing up the lower side (a) of the bumper face - front, remove from (b) to (e).

### CAUTION:

**Do not pull forcibly. It may damage the flange sections of the bumper face - front.**



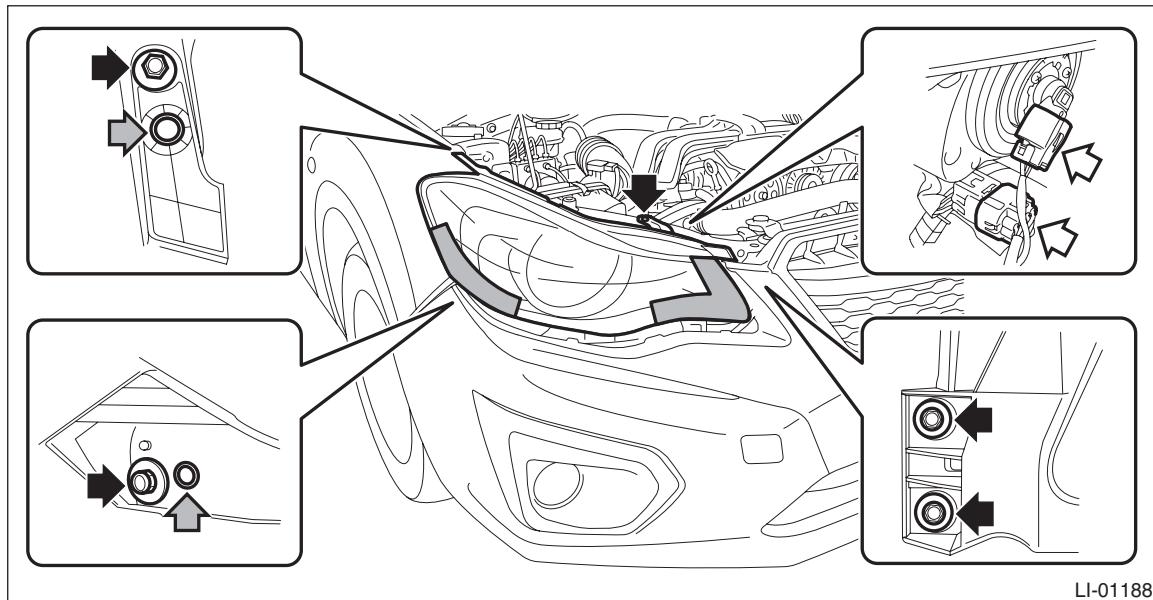
5) Remove the light assembly - head.

### CAUTION:

**Be careful not to damage the light assembly - head, fender COMPL - front, and bumper face - front.**

(1) Disconnect connectors.

(2) Remove the bolts and clips, and remove the light assembly - head.



## 2. WHEN REMOVING LH SIDE

**WARNING:**

Because the headlight system uses high voltage, be careful not to perform work with wet hands. There is a possibility of electrical shock.

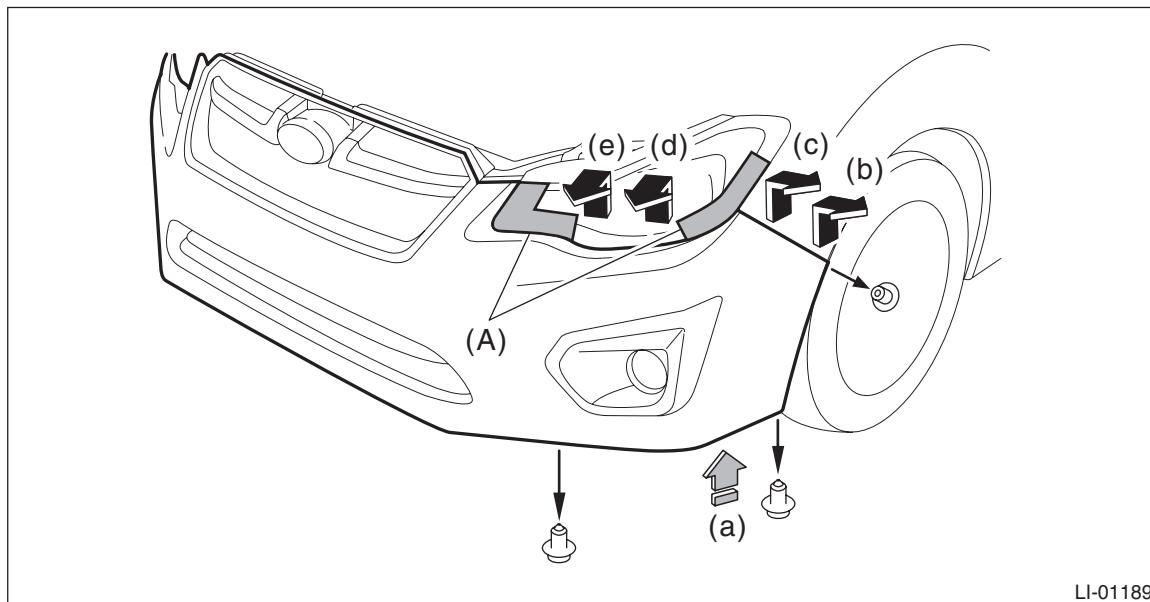
**CAUTION:**

The HID type uses very high voltages for the lighting circuit. Make sure that the power supply is turned OFF before working.

- 1) Disconnect the ground cable from battery.
- 2) Detach the flange section on the bumper face - front left side.
  - (1) Apply protective tape (A) to the light assembly - head.
  - (2) Release the clips, and while pushing up the lower side (a) of the bumper face - front, remove in the order from (b) to (e).

**CAUTION:**

Do not pull forcibly. It may damage the flange sections of the bumper face - front.



# Headlight Assembly

## LIGHTING SYSTEM

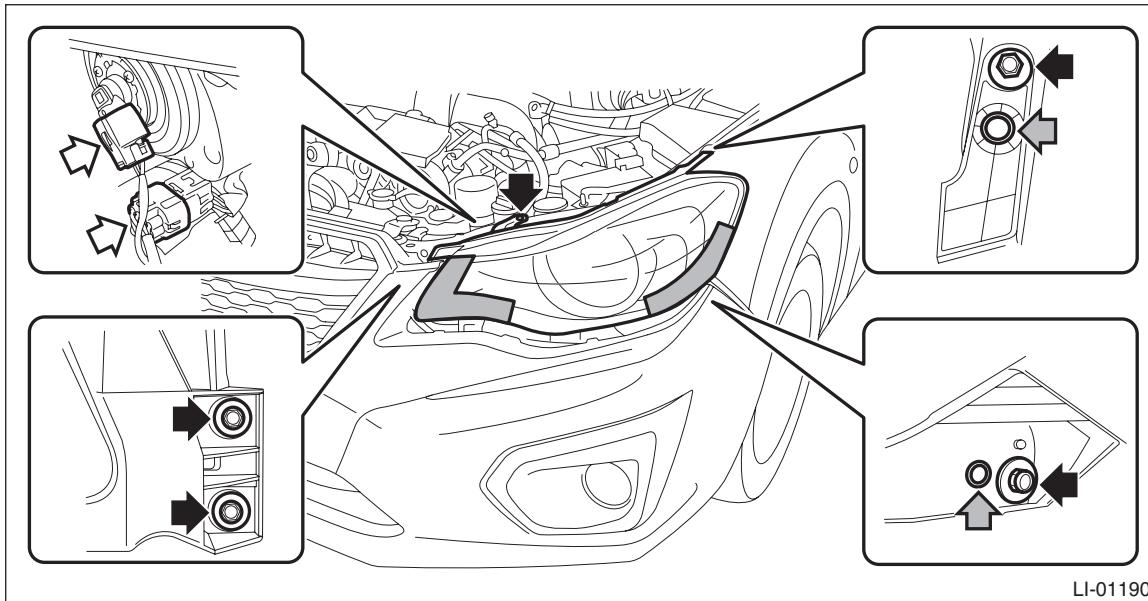
3) Remove the light assembly - head.

### CAUTION:

**Be careful not to damage the light assembly - head, fender COMPL - front, and bumper face - front.**

(1) Disconnect connectors.

(2) Remove the bolts and clips, and remove the light assembly - head.



LI-01190

## 3. WHEN REMOVING BOTH SIDE

### WARNING:

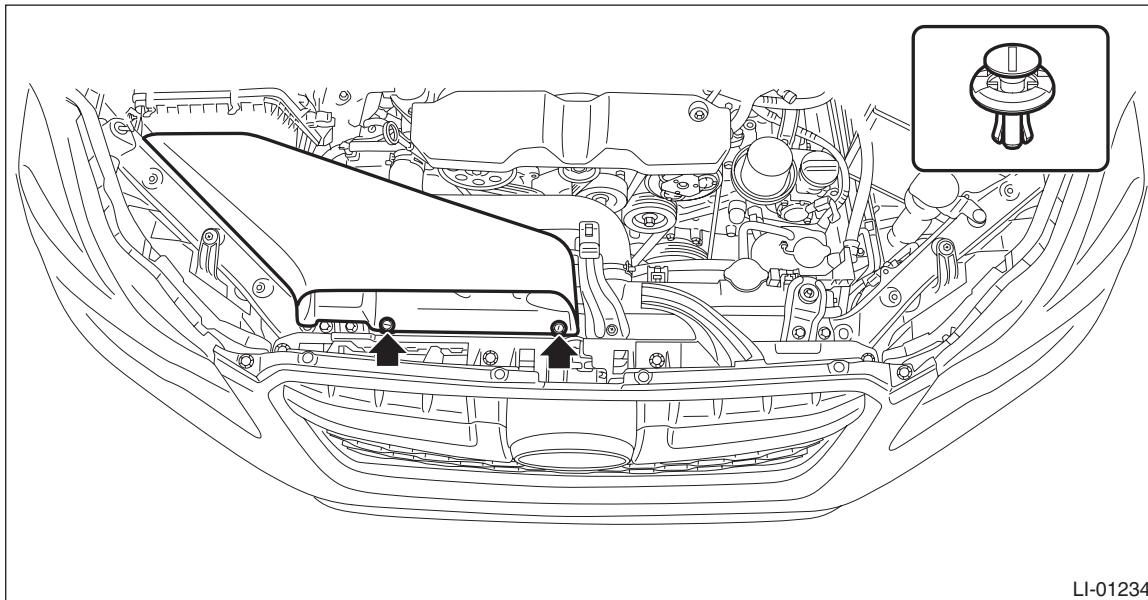
Because the headlight system uses high voltage, be careful not to perform work with wet hands. There is a possibility of electrical shock.

### CAUTION:

The HID type uses very high voltages for the lighting circuit. Make sure that the power supply is turned OFF before working.

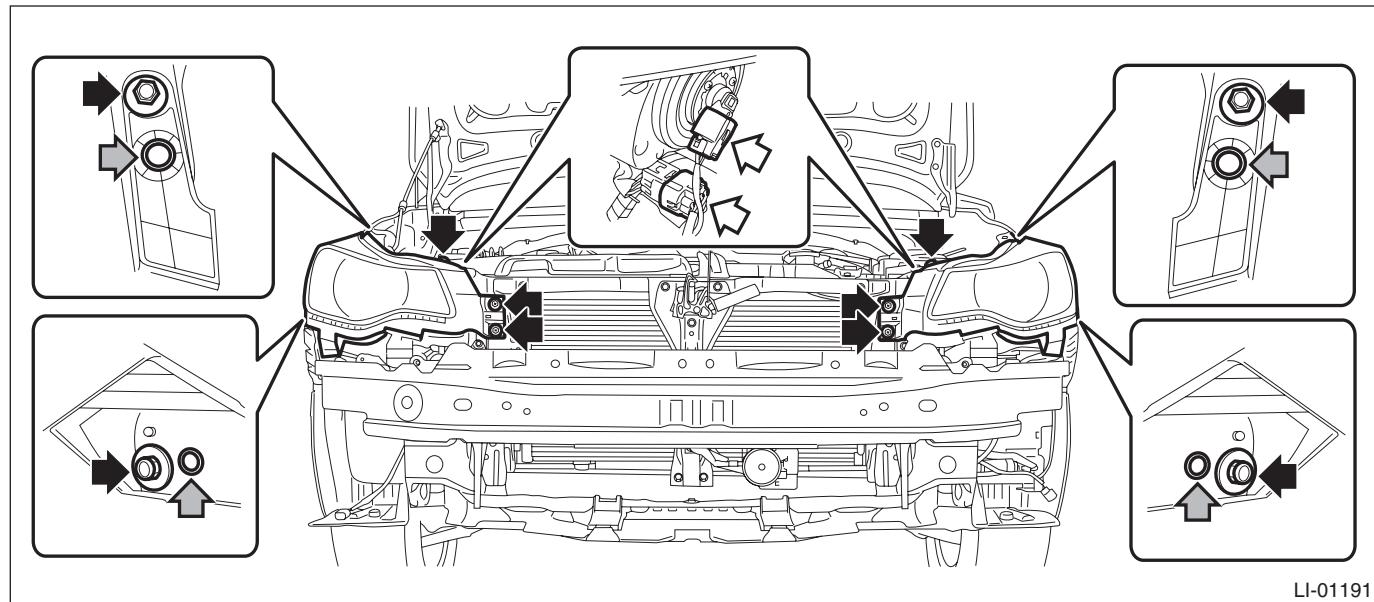
1) Disconnect the ground cable from battery.

2) Remove the clips and remove the air intake duct.



LI-01234

- 3) Remove the bumper face - front. <Ref. to EI-34, REMOVAL, Front Bumper.>
- 4) Remove the light assembly - head.
  - (1) Disconnect connectors.
  - (2) Remove the bolts and clips, and remove the light assembly - head.



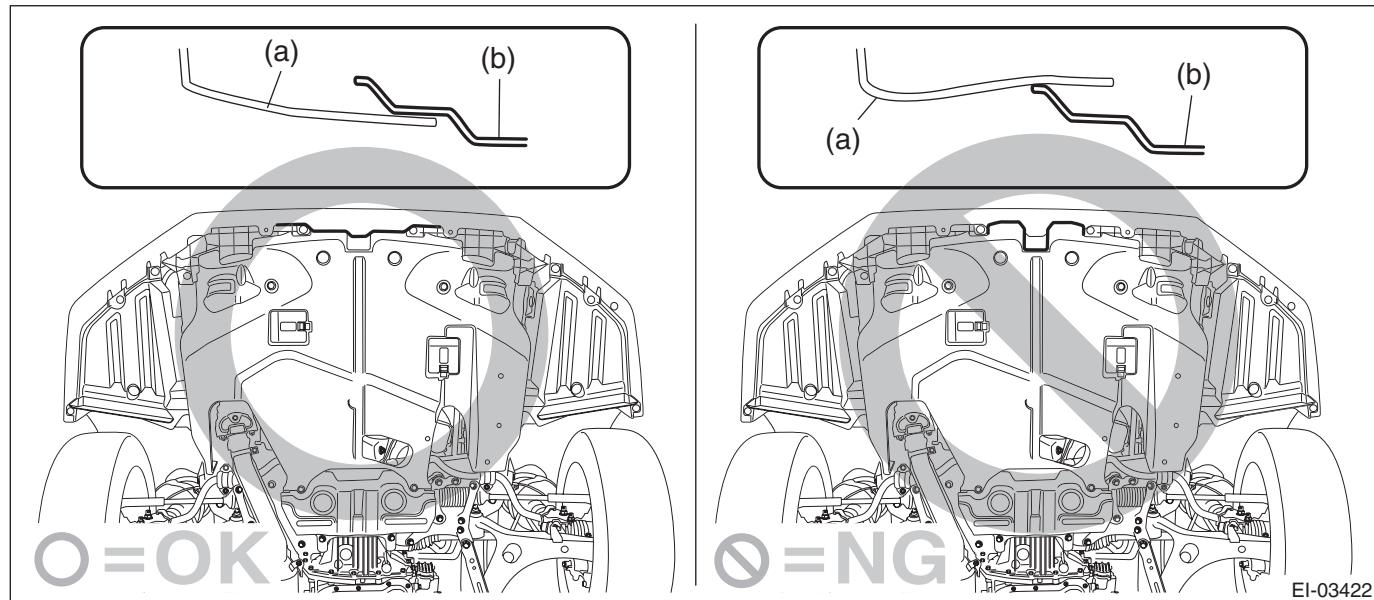
LI-01191

## B: INSTALLATION

- 1) Install each part in the reverse order of removal.
- 2) Secure the flange section of the bumper face - front to the bracket - front bumper side.

### CAUTION:

Install the bumper face - front so that the front end of the under cover (b) comes inside the bumper face - front (a).



EI-03422

### Tightening torque:

**Light assembly - head: 7.5 N·m (0.76 kgf·m, 5.5 ft·lb)**

- 3) Adjust the headlight beam and fog light beam.
  - Adjust the headlight beam. <Ref. to LI-34, HEADLIGHT BEAM ADJUSTMENT, ADJUSTMENT, Headlight Assembly.>
  - Adjust the fog light beam. (Model with fog light) <Ref. to LI-54, FOG LIGHT AIMING, ADJUSTMENT, Front Fog Light Assembly.>

# Headlight Assembly

## LIGHTING SYSTEM

### C: DISASSEMBLY

#### 1. HID HEADLIGHT BALLAST

##### WARNING:

Because the headlight system uses high voltage, be careful not to perform work with wet hands. There is a possibility of electrical shock.

##### CAUTION:

• The HID type uses very high voltages for the lighting circuit. Make sure that the power supply is turned OFF before working.

• Do not leave the light assembly - head without the ballast - headlight for a long time. Dust, moisture, etc. entering the light assembly - head may affect its performance.

1) Disconnect the ground cable from battery.

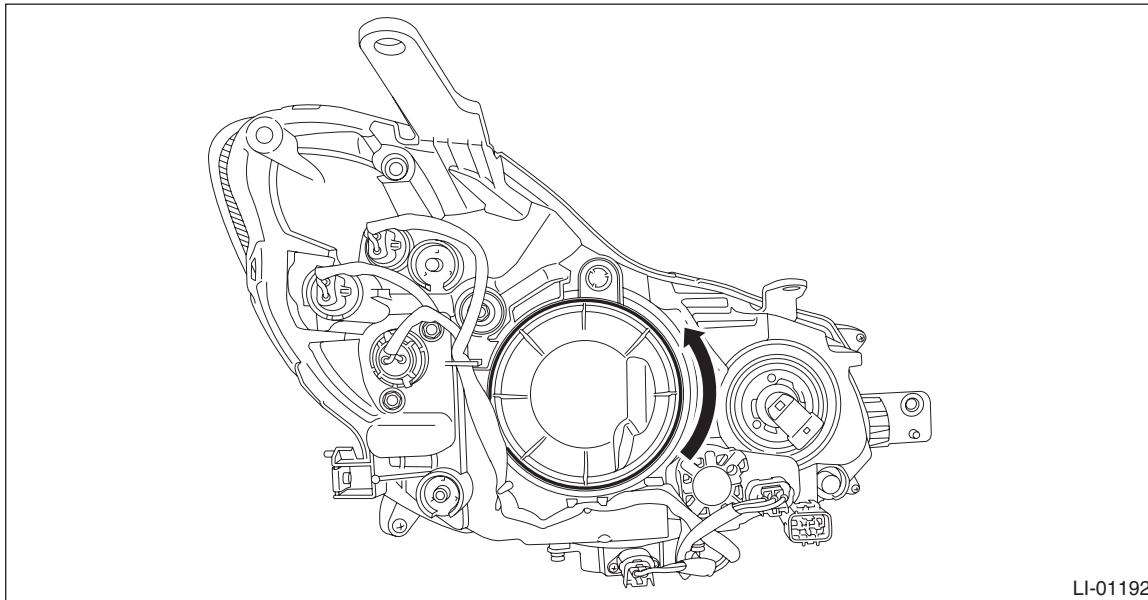
2) Remove the light assembly - head.

• RH side: <Ref. to LI-27, WHEN REMOVING RH SIDE, REMOVAL, Headlight Assembly.>

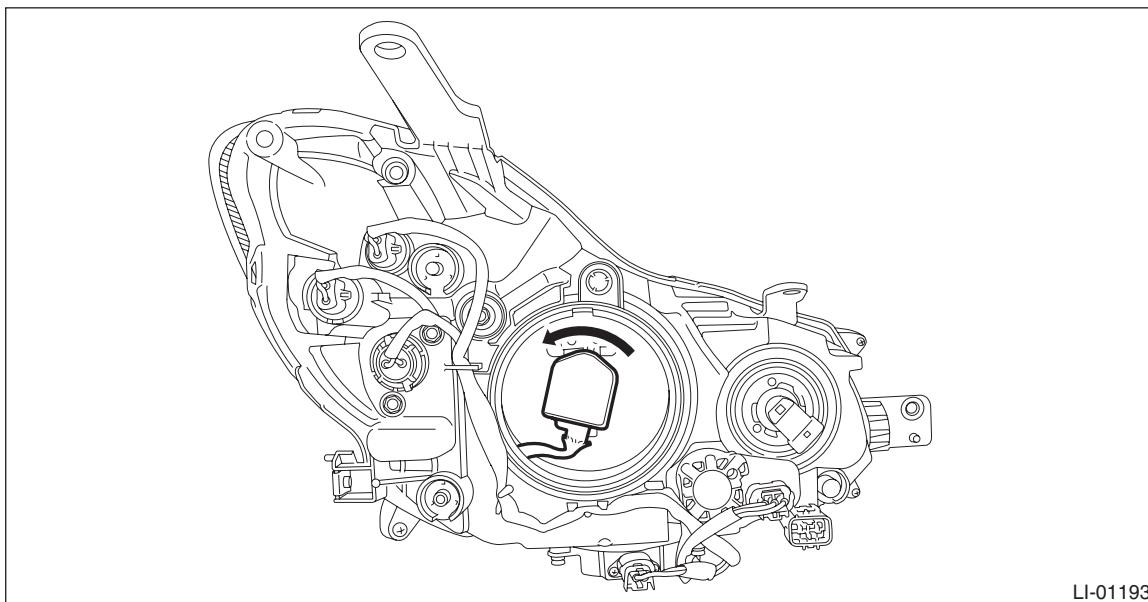
• LH side: <Ref. to LI-29, WHEN REMOVING LH SIDE, REMOVAL, Headlight Assembly.>

• Both sides: <Ref. to LI-30, WHEN REMOVING BOTH SIDE, REMOVAL, Headlight Assembly.>

3) Remove the cover - headlight.



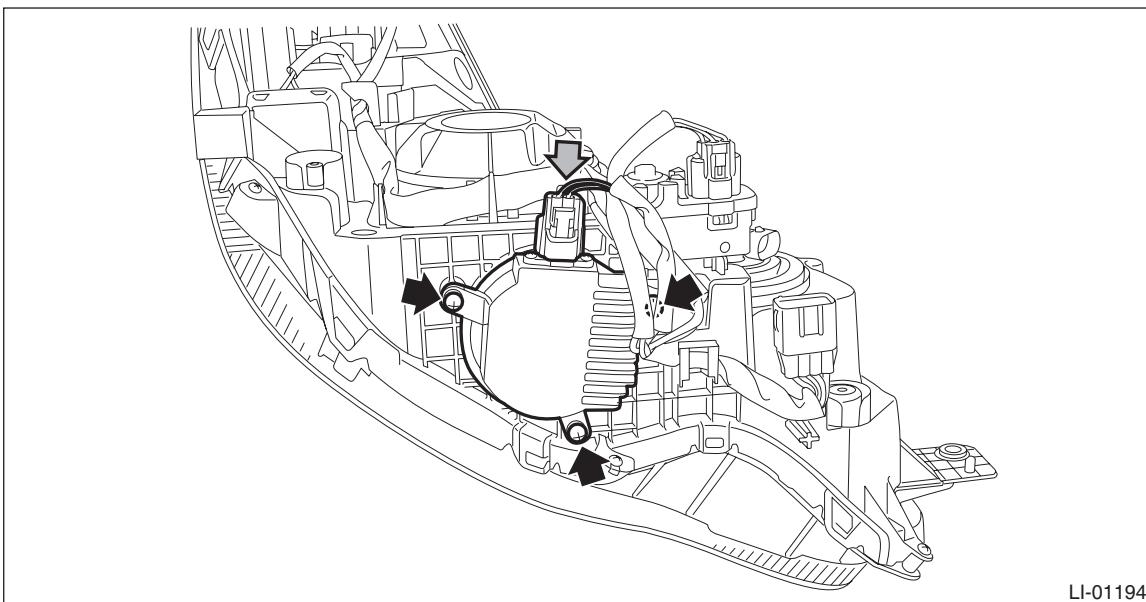
4) Disconnect the bulb socket.



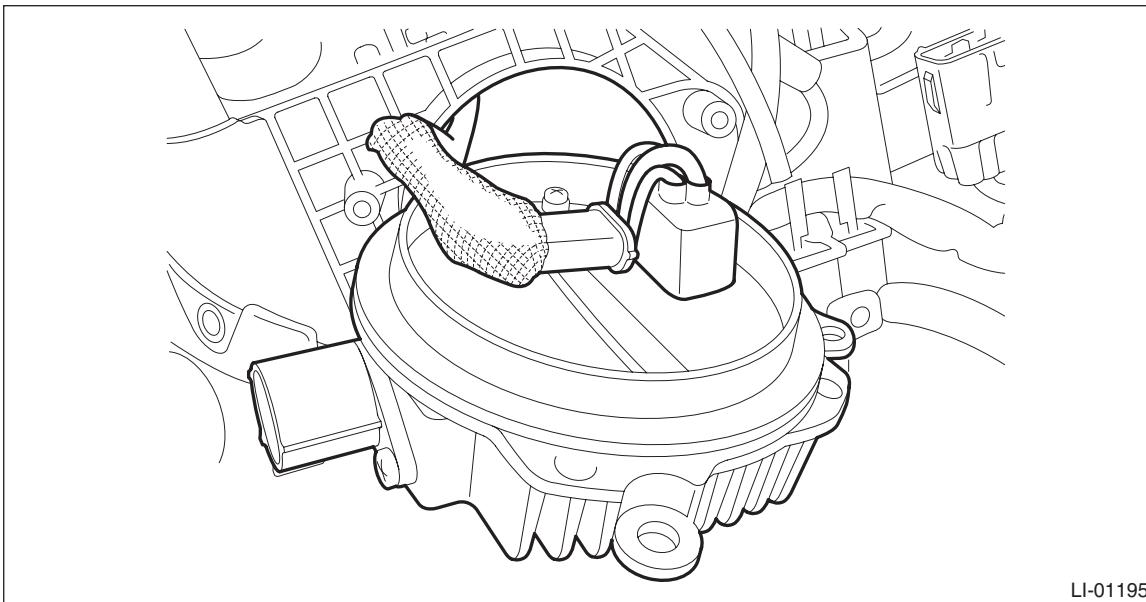
5) Remove the ballast - headlight.

(1) Disconnect the connector.

(2) Remove the screws and remove the ballast - headlight.



(3) Guiding the bulb socket through the gap between housing and reflector, pull out the ballast - headlight.



## D: ASSEMBLY

### 1. HID HEADLIGHT BALLAST

#### CAUTION:

- When installing the ballast - headlight, be sure to install the gasket.
- After installing the ballast to the vehicle, be sure to perform beam adjustment.

Assemble each part in the reverse order of disassembly.

#### *Tightening torque:*

*Light assembly - head: 7.5 N·m (0.76 kgf·m, 5.5 ft-lb)*

# Headlight Assembly

## LIGHTING SYSTEM

### E: ADJUSTMENT

#### 1. HEADLIGHT BEAM ADJUSTMENT

##### CAUTION:

• Turn off the light before adjusting the beam level of the light assembly - head. If it is necessary to inspect the beam level, do not keep the light on for two minutes or more.

• When blocking the light that come from outside, use a closure plate or the like.

Do not apply tape to the lens or cover it with a cloth. It may raise the temperature in the light and cause deformation/bubble formations of the plastic lens.

1) Before checking the beam level of the light assembly - head, be sure of the following:

• The area around the light assembly - head has not sustained any scratches, damage or other type of deformation.

• Vehicle is parked on a level surface.

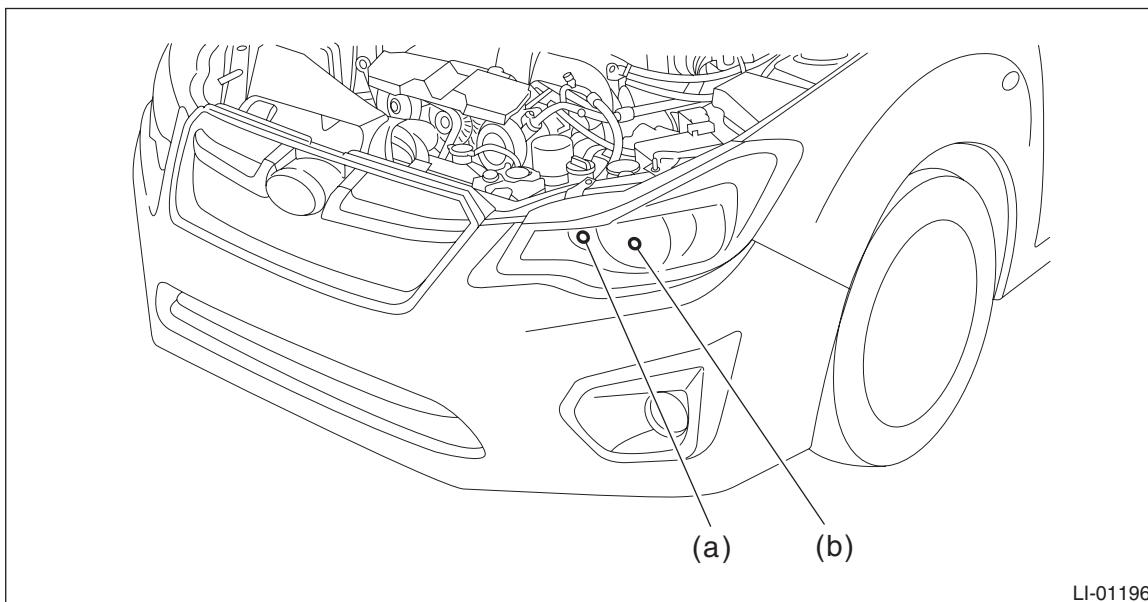
• The inflation pressure of tires is correct.

• Vehicle's fuel tank is fully filled.

2) Bounce the vehicle several times to normalize the suspension.

3) Make certain that someone is seated in the driver's seat.

4) Measure the distance between the low beam bulb centers and the height of the bulb center.



(a) High beam

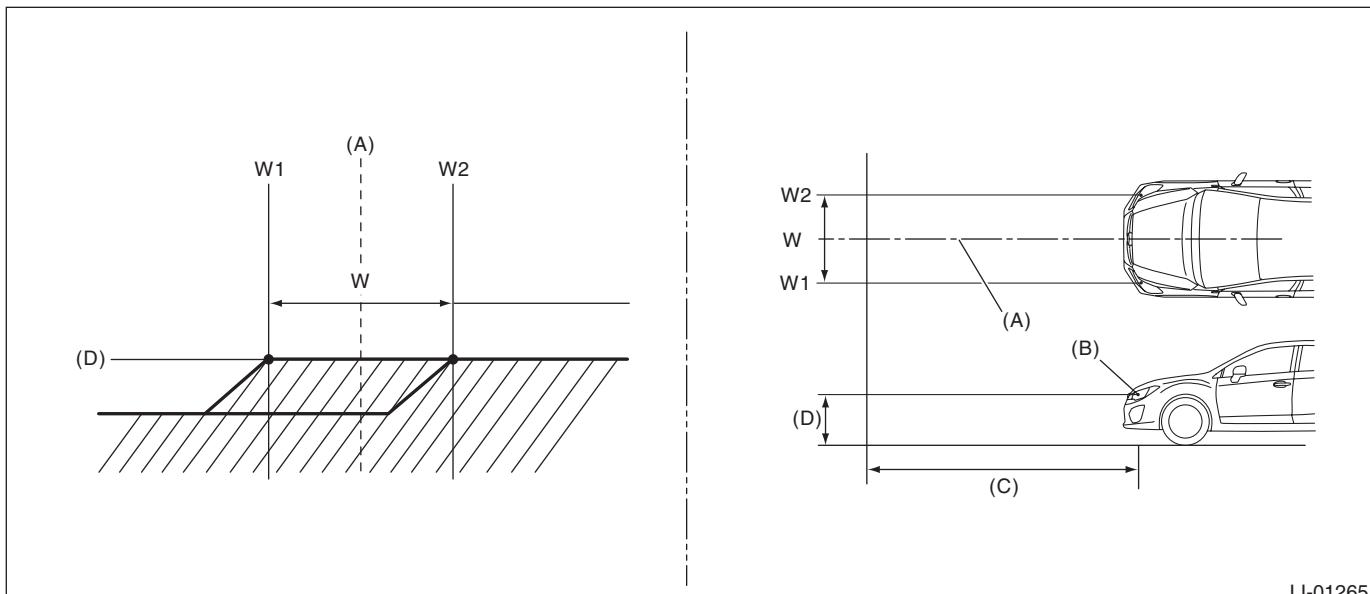
(b) Low beam

# Headlight Assembly

## LIGHTING SYSTEM

5) Adjust the beam level of the light assembly - head.

(1) Place the vehicle with the front end facing to the measurement panel, then illuminate the low beam.



LI-01265

(A) Vehicle center

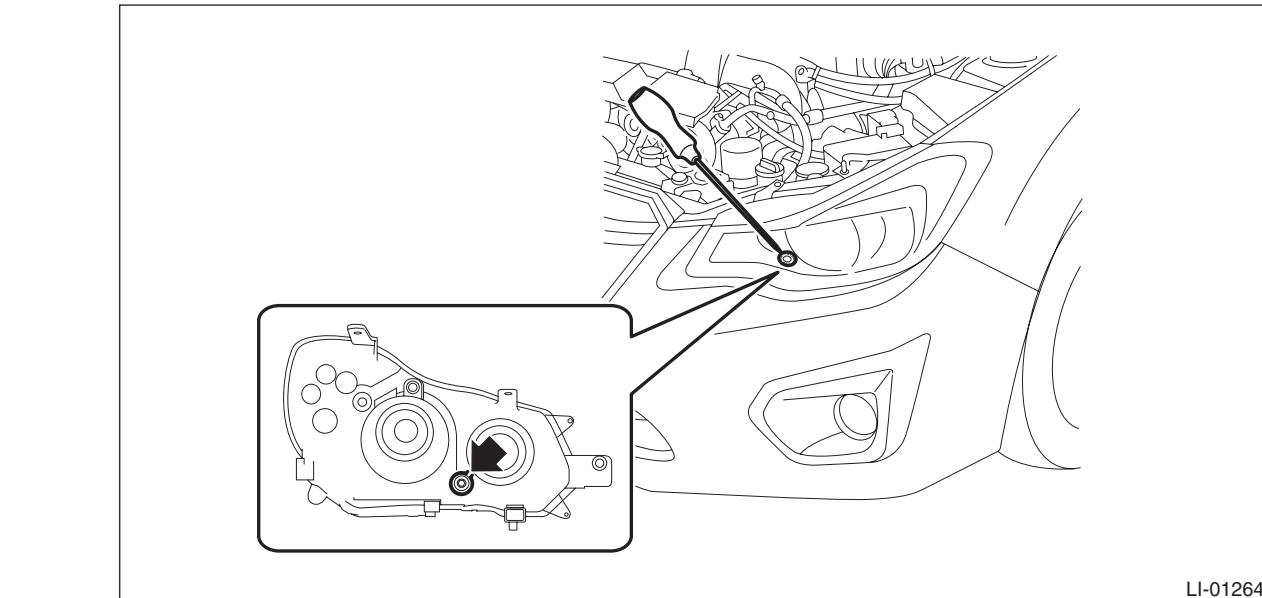
(C) 3 m (10 ft)

(D) Height of headlight center

(B) Bulb center marking

W mm (in)
1,281 (50.44)

(2) Adjust the low beam by turning the aiming screw.



LI-01264