

# Headlight Bulb

## LIGHTING SYSTEM

### 15. Headlight Bulb

#### A: REMOVAL

##### 1. HIGH BEAM

###### WARNING:

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

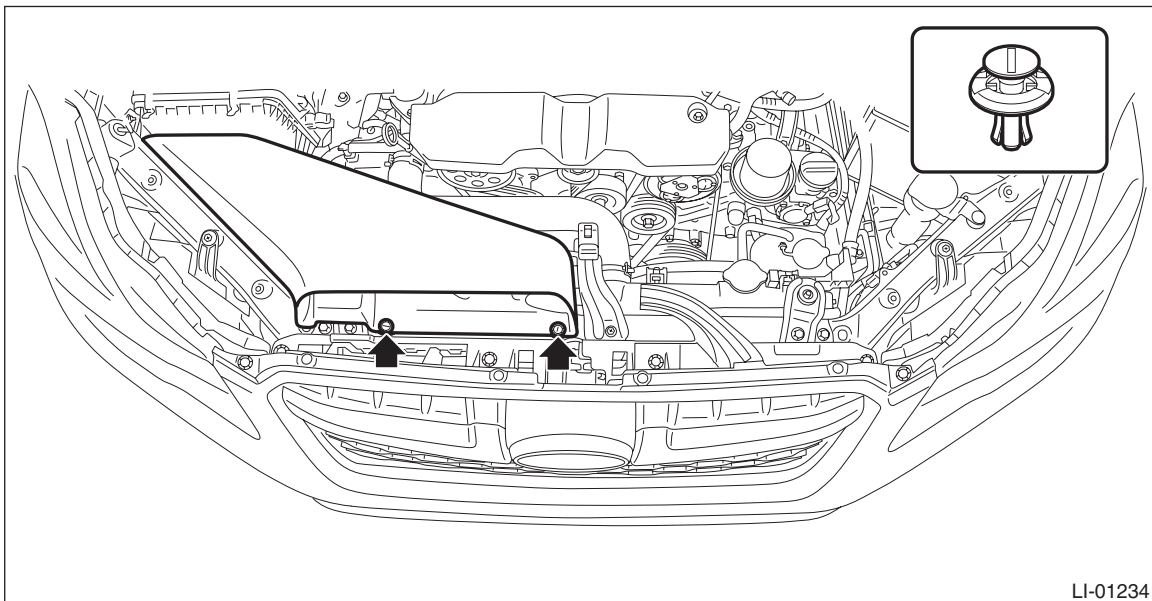
###### CAUTION:

- Because the halogen bulb operates at a high temperature, dirt and oil on the bulb surface reduces the bulb's service life. Hold the flange portion when replacing the bulb. Never touch the glass portion.

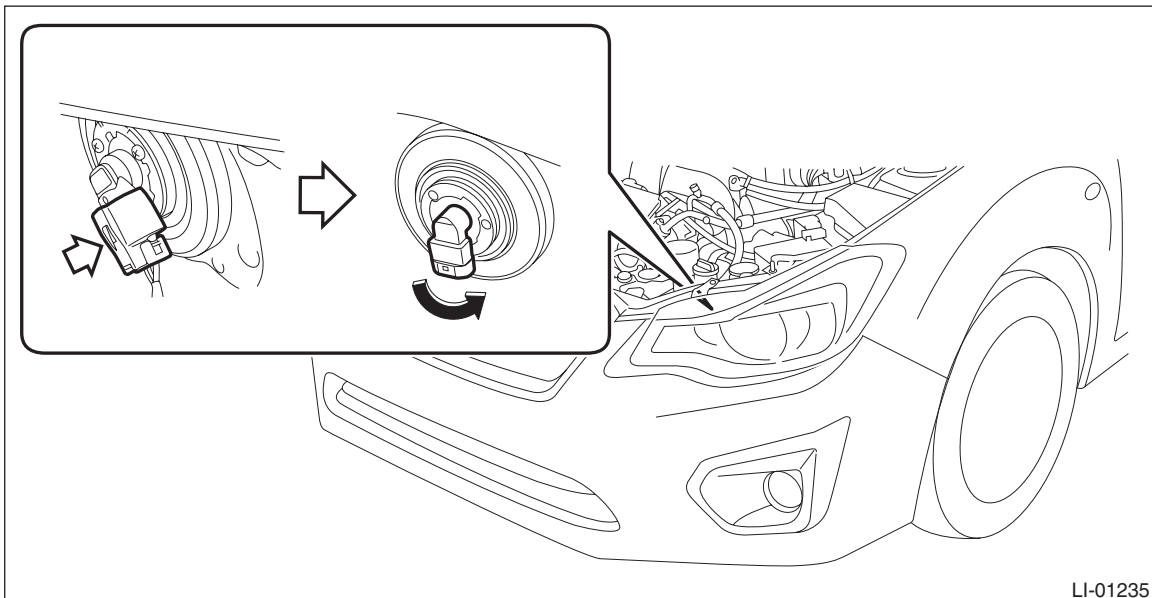
- Do not leave the light assembly - head without the bulb for a long time. Dust, moisture, etc. entering the light may affect its performance.

1) Disconnect the ground cable from battery.

2) Remove the clips and remove the air intake duct. (When removing the high beam bulb RH)



3) Disconnect the connector and remove the high beam bulb.



## 2. HALOGEN TYPE LOW BEAM

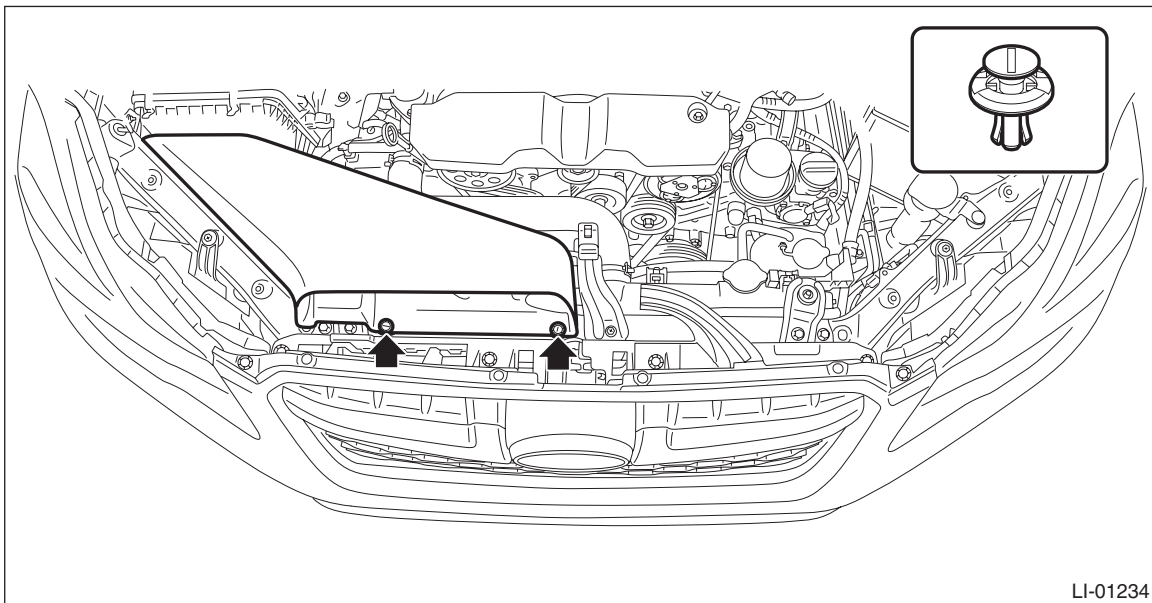
### WARNING:

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

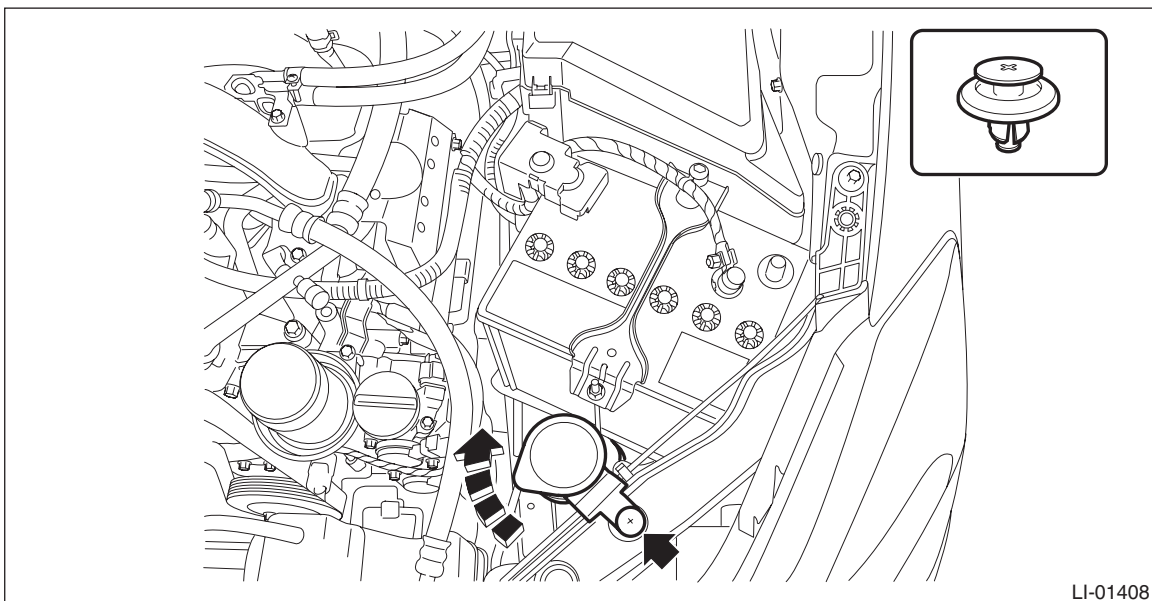
### CAUTION:

- Because the halogen bulb operates at a high temperature, dirt and oil on the bulb surface reduces the bulb's service life. Hold the flange portion when replacing the bulb. Never touch the glass portion.
- Do not leave the light assembly - head without the bulb for a long time. Dust, moisture, etc. entering the light may affect its performance.

- 1) Disconnect the ground cable from battery.
- 2) Remove the clips and remove the air intake duct. (When removing the low beam bulb RH)



- 3) Turn the filler neck of the tank - washer front clockwise. (When removing the low beam bulb LH)



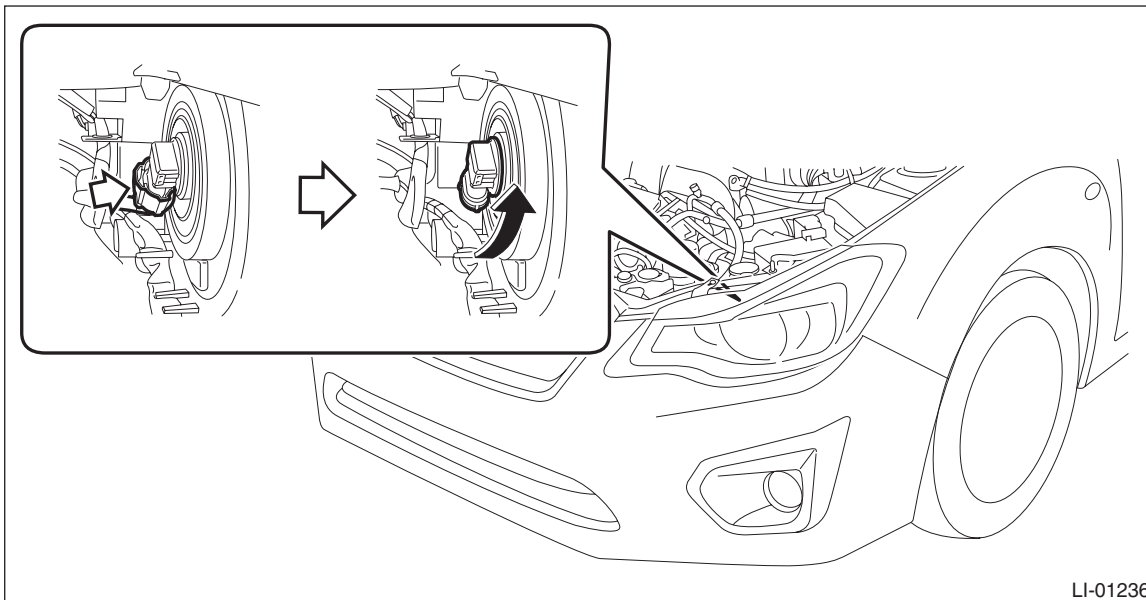
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4) Disconnect the connector and remove the low beam bulb.

### CAUTION:

Make sure to check if any bulb O-ring is remained on the housing side as this may sometimes happen.



### 3. HID TYPE LOW BEAM

When removing RH side

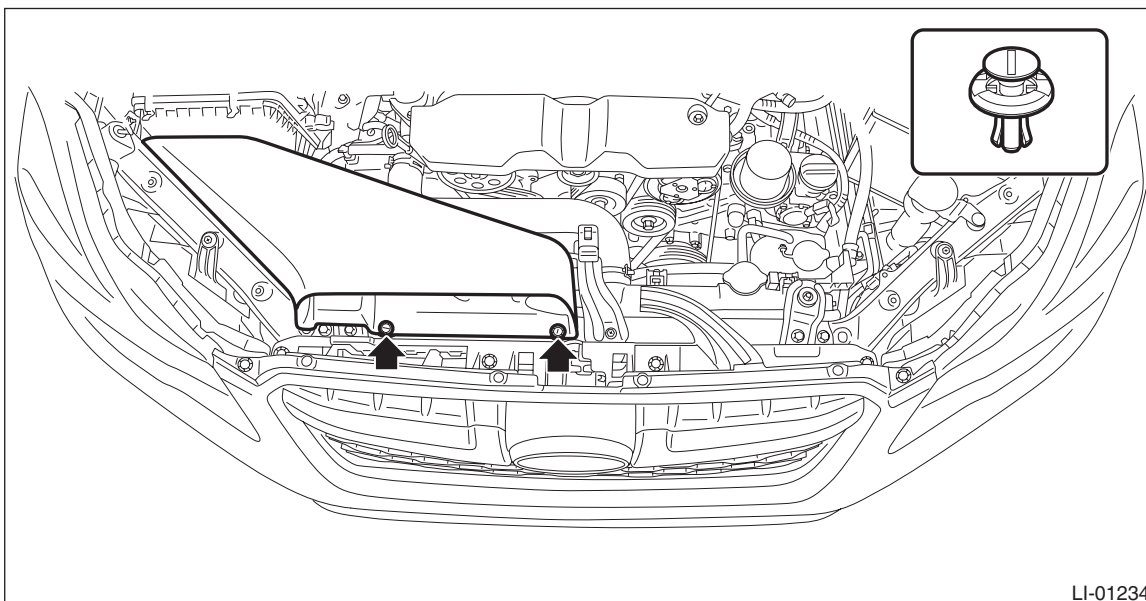
### WARNING:

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

### CAUTION:

- Because the lighting circuit uses high voltage, be sure to confirm that the power supply is turned off before operation.
- When replacing bulb, hold the flange area. Be careful not to touch the glass area.
- Do not leave the light assembly - head without the bulb and cover - headlight for a long time. Dust, moisture, etc. entering the light may affect its performance.

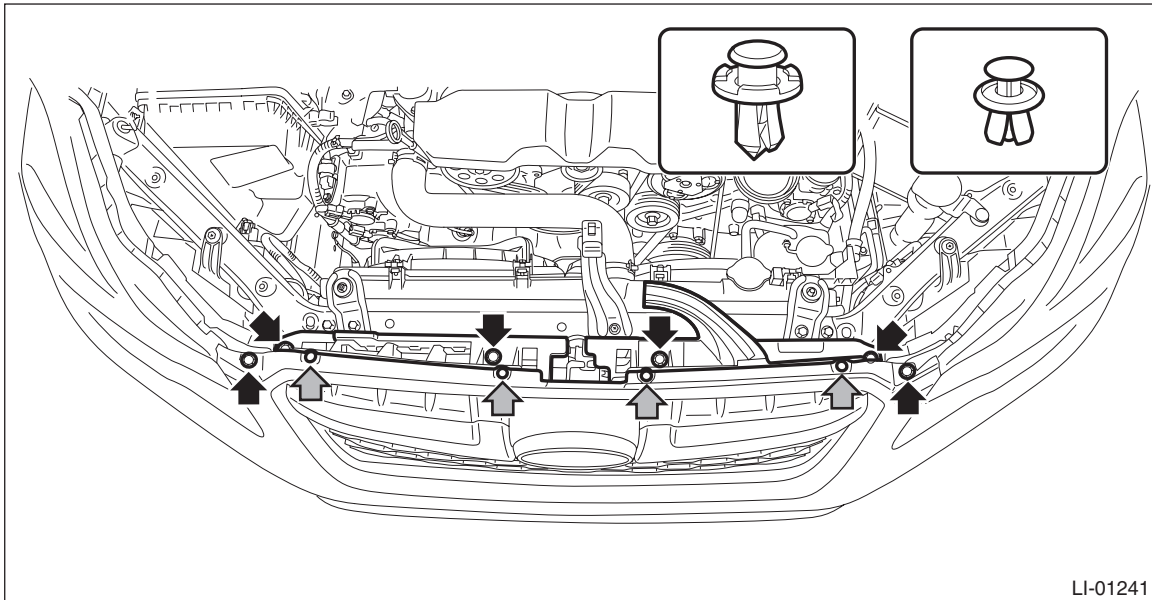
- 1) Disconnect the ground cable from battery.
- 2) Remove the clips and remove the air intake duct.



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

**CAUTION:**

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



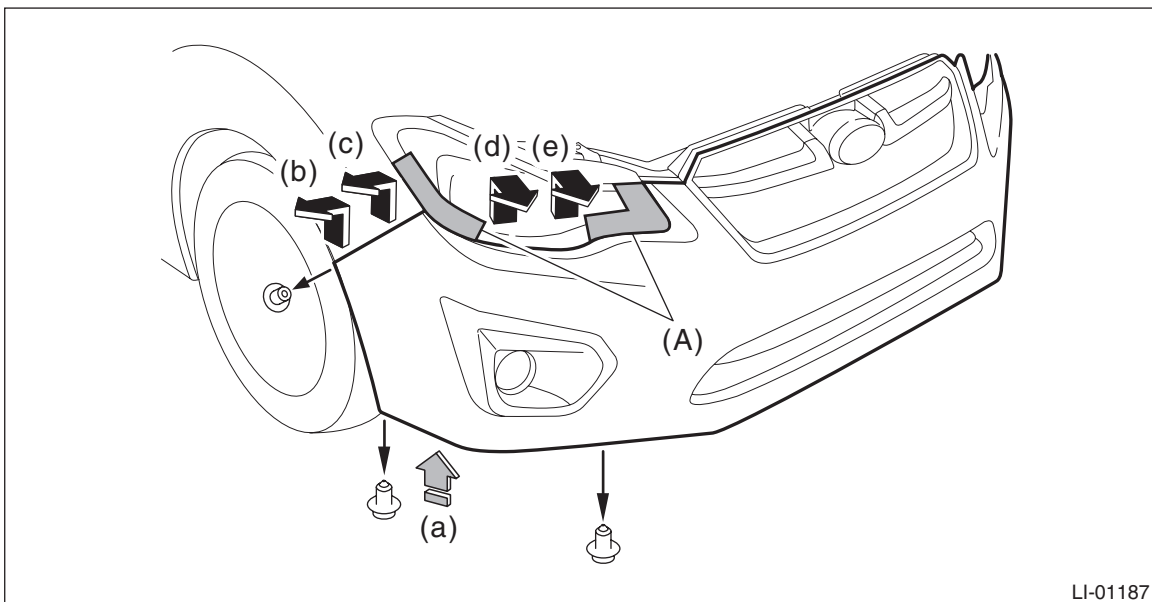
4) Detach the flange section on the right side of the bumper face - front.

(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.



# Headlight Bulb

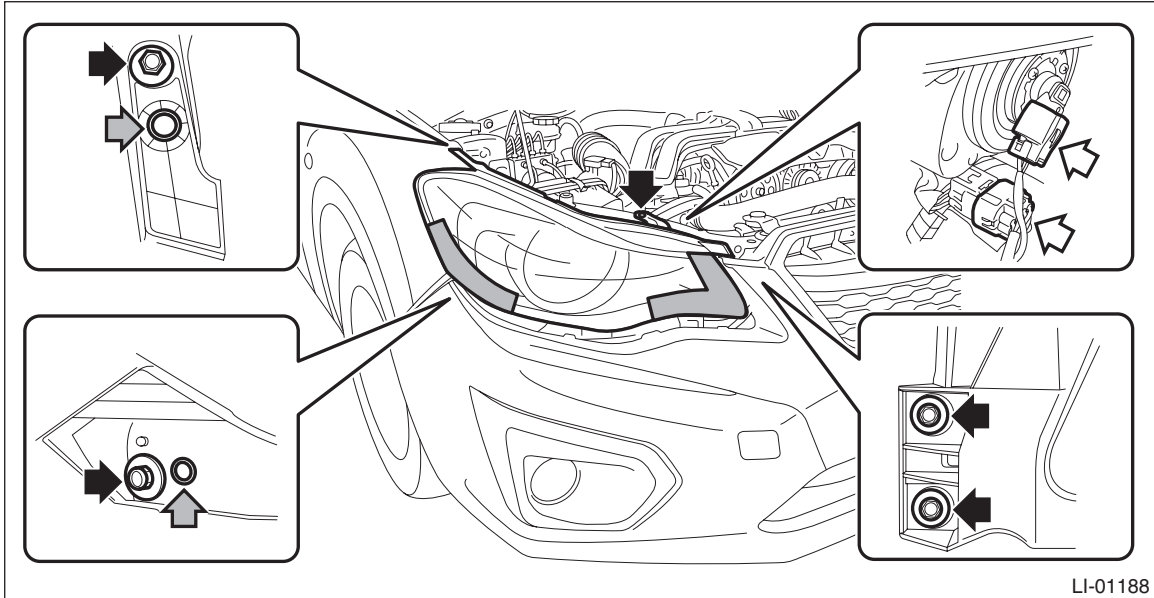
## LIGHTING SYSTEM

5) Remove the light assembly - head.

### CAUTION:

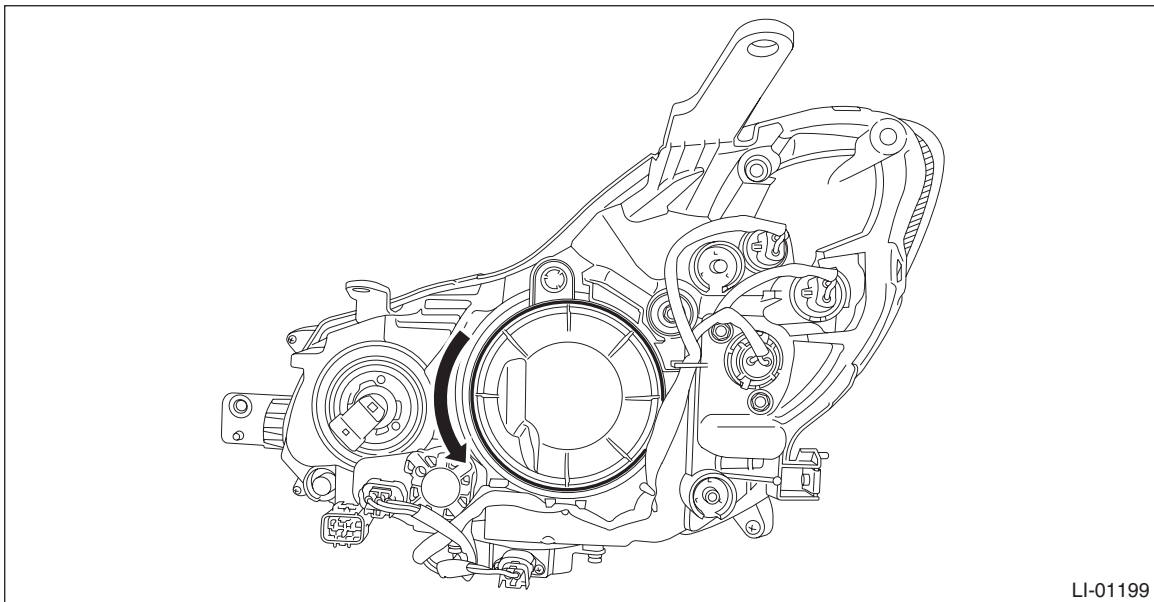
Be careful not to damage the light assembly - head, fender COMPL - front, and bumper face - front.

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

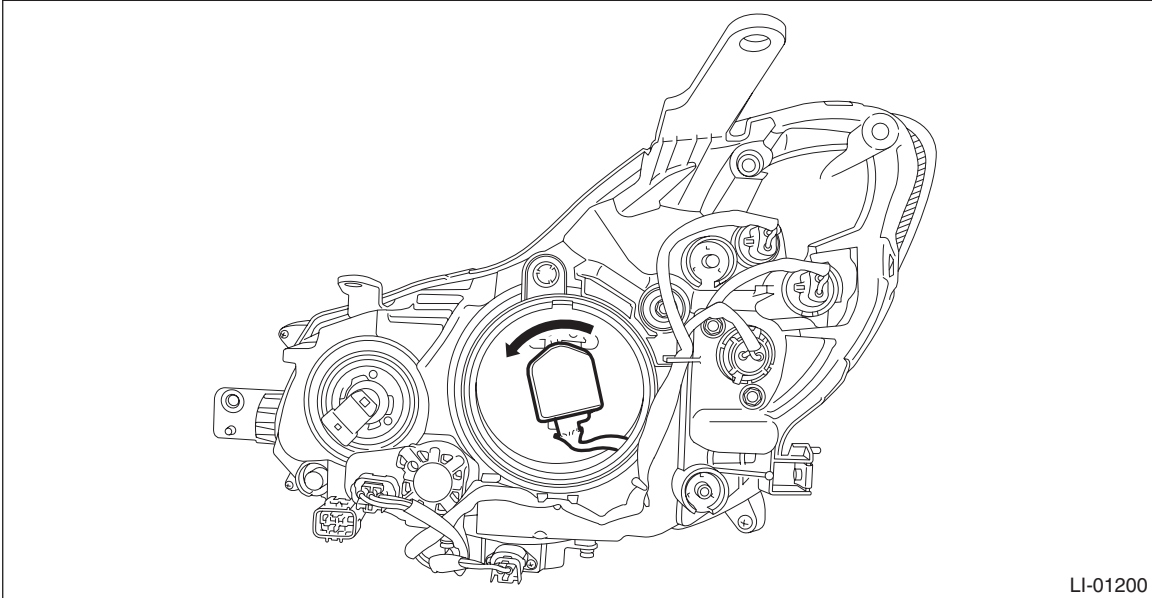


6) Remove the low beam bulb.

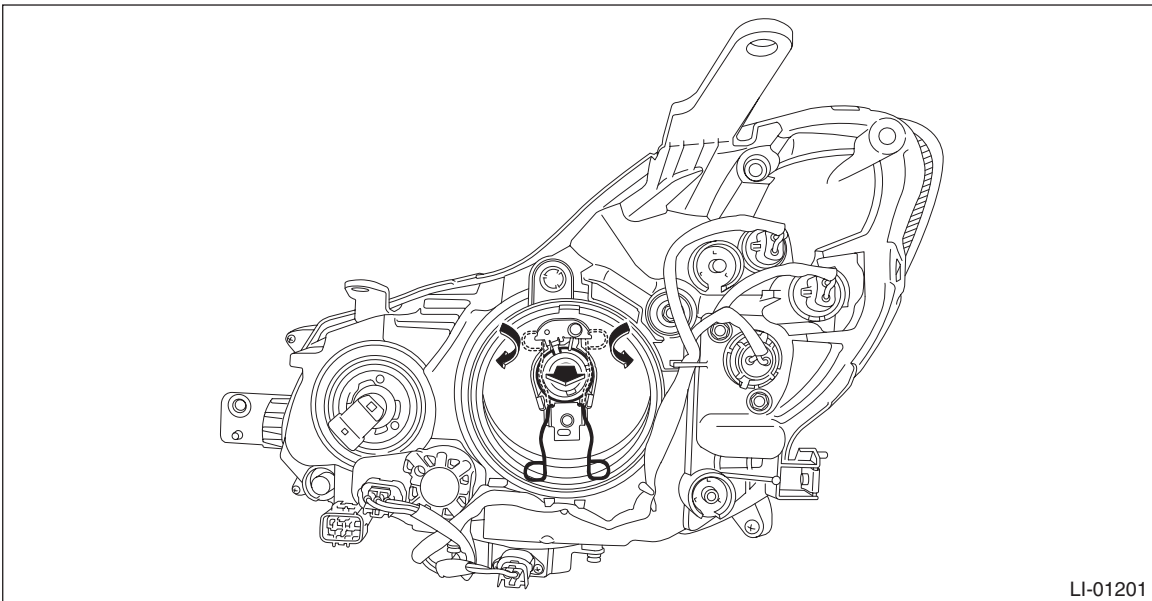
- (1) Remove the cover - headlight.



(2) Remove the valve socket.



(3) Unlock the bulb spring, and remove the low beam bulb.



# Headlight Bulb

## LIGHTING SYSTEM

### 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.

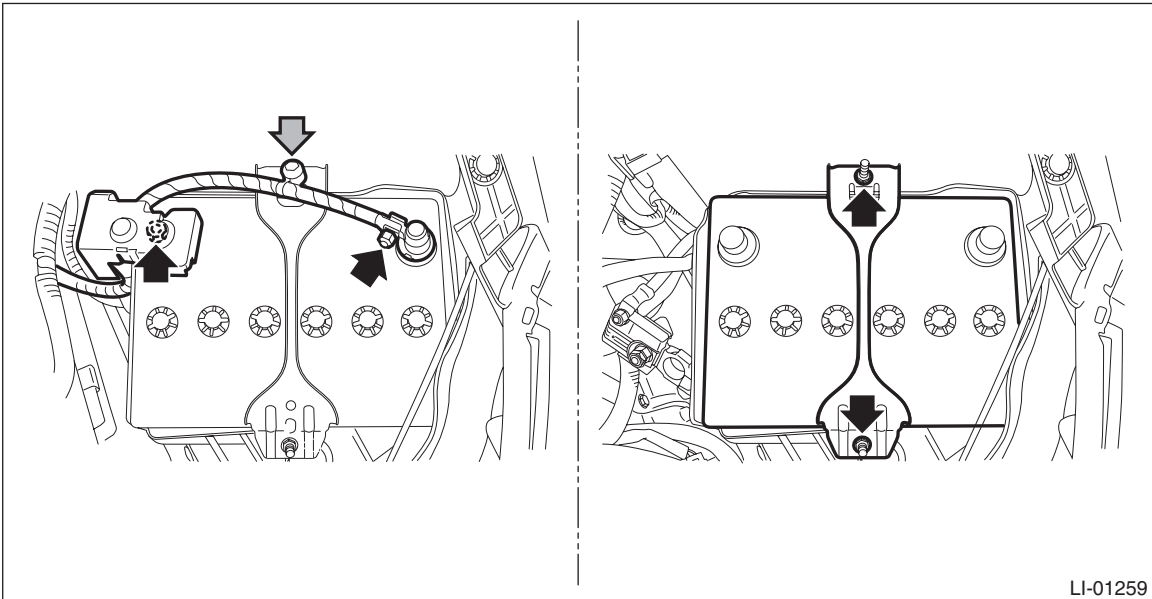
#### CAUTION:

- Because the lighting circuit uses high voltage, be sure to confirm that the power supply is turned off before operation.
- When replacing bulb, hold the flange area. Be careful not to touch the glass area.
- Do not leave the light assembly - head without the bulb and cover - headlight for a long time. Dust, moisture, etc. entering the light may affect its performance.

#### 1) Remove the battery.

(1) Disconnect the negative terminal of battery, and then the positive terminal, and remove the battery cable holder from the battery rod.

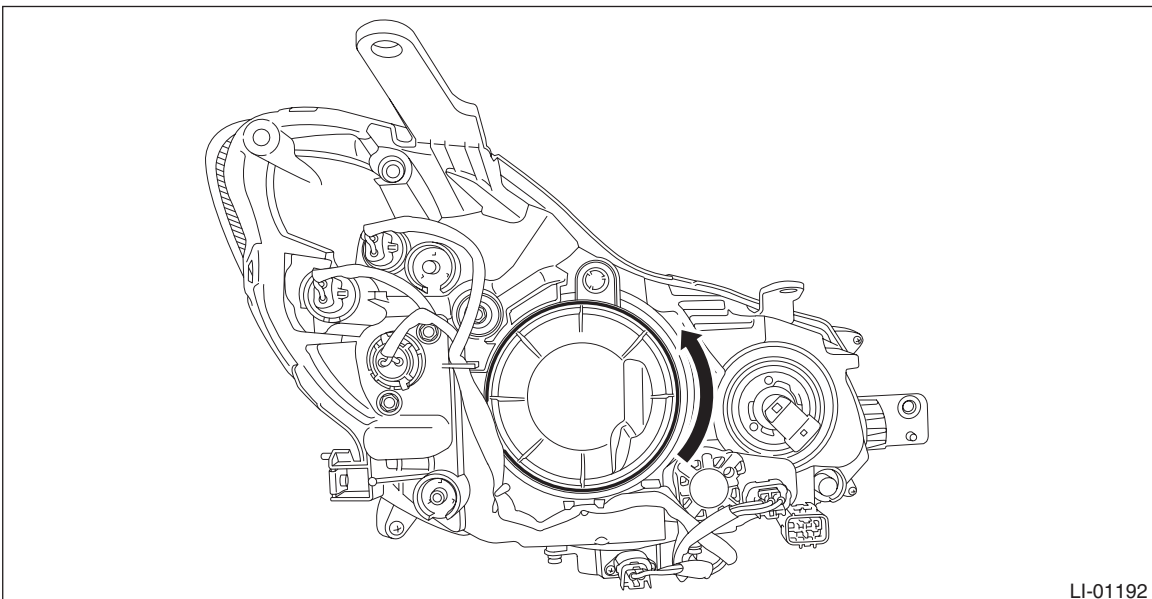
(2) Remove the flange nut from battery rod and remove battery holder.



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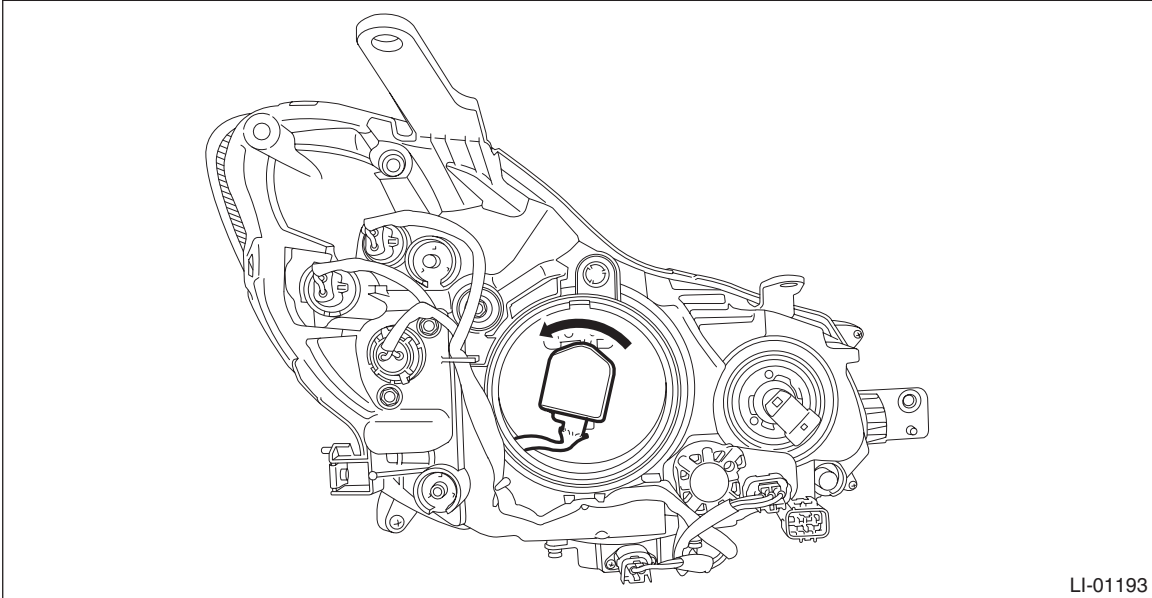
#### 2) Remove the low beam bulb.

(1) Remove the cover - headlight.

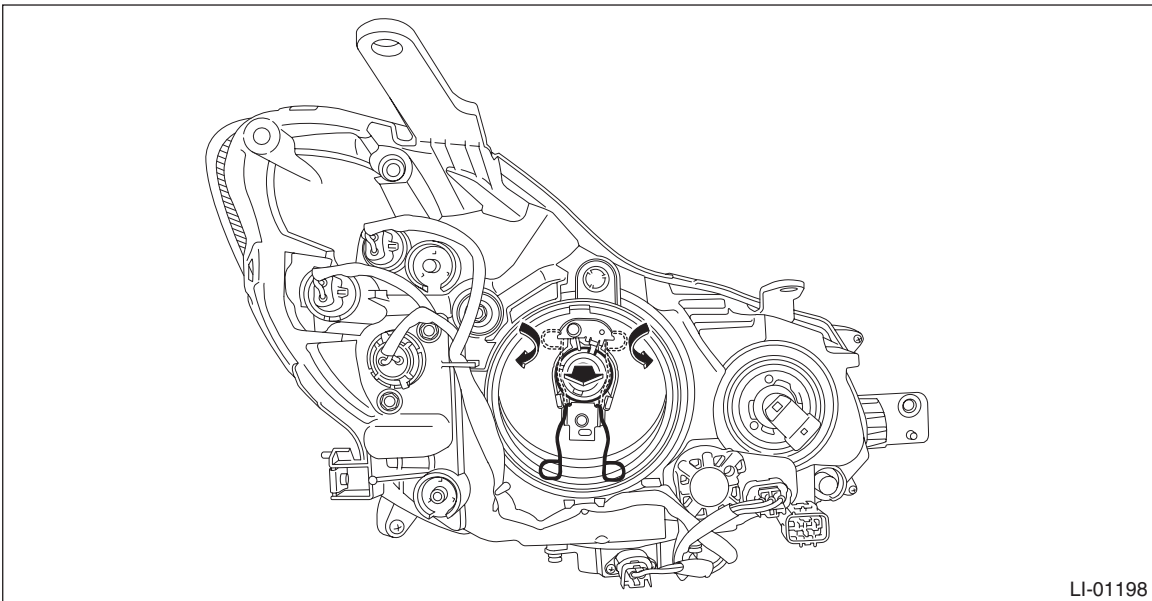


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(2) Remove the valve socket.



(3) Unlock the bulb spring, and remove the low beam bulb.





# Headlight Bulb

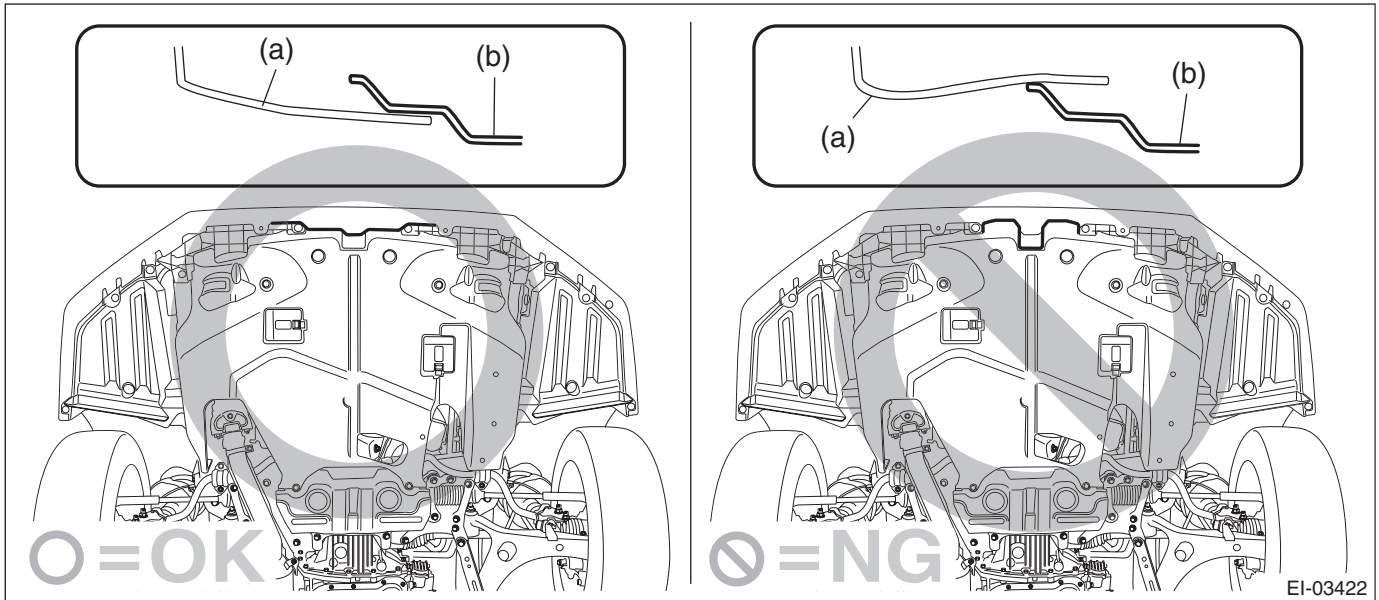
## LIGHTING SYSTEM

### B: INSTALLATION

- 1) Install each part in the reverse order of removal.
- 2) When performing the work of HID type low beam RH, 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).



#### Tightening torque:

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

**Battery holder: 3.5 N·m (0.36 kgf-m, 2.6 ft-lb)**

- 3) When performing the work of HID type low beam RH, adjust the fog light beam. (Model with fog light) <Ref. to LI-54, FOG LIGHT AIMING, ADJUSTMENT, Front Fog Light Assembly.>

## C: INSPECTION

### 1. HALOGEN TYPE

#### 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:

- Because the halogen bulb operates at a high temperature, dirt and oil on the bulb surface reduces the bulb's service life. Hold the flange portion when replacing the bulb. Never touch the glass portion.

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

- 1) Visually check the bulb for blow out.

- 2) Check the bulb specification. <Ref. to LI-2, SPECIFICATION, General Description.>

- 3) Replace the bulb if it is found defective.

### 2. HID TYPE

#### 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:

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

- When lit (lighting switch is ON), do not touch the harness, light internals, or metal parts of the light.

- When performing a lighting test, make sure that the headlight is mounted on the vehicle, and the power supply is connected to the connector on the vehicle's side.

- 1) Check the bulb specification. <Ref. to LI-2, SPECIFICATION, General Description.>

- 2) Install the factory HID bulb to check whether it lights properly.

- 3) If it does not light properly, replace with a new bulb.

- 4) Inspect the HID ballast.

Inspect the ballast in the following manner, and determine whether or not to reuse.

- (1) Perform cold starts (light the headlight after turning off for 10 minutes or more), and hot starts (light the headlight for 15 minutes or more, then turn off for 1 minute and relight) several times, to make sure that the headlight lights properly.

- (2) Monitor the lighting condition right after a cold start up to a stable state (approx. 5 min.), to see if there are any unstable conditions such as flickering.

- (3) Install bulbs with the same number of operating hours on both headlights, and light for approximately 30 minutes. Check for whether there is a difference in brightness on the right and left sides.

- 5) Replace the ballast if it is found defective.