15. Headlight Bulb

A: REMOVAL

1. HIGH BEAM

CAUTION:

- Do not perform work with wet hands, because there is a possibility of electrical shock.
- 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. <Ref. to NT-5, BATTERY, NOTE, Note.>

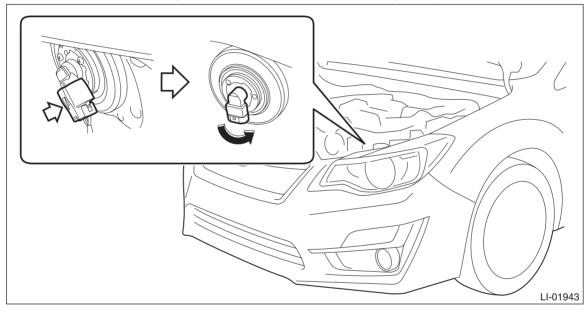
NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

- 2) Remove the air intake duct. (When removing the right side of gasoline engine model) <Ref. to IN(H4DO(w/o HEV))-13, REMOVAL, Air Intake Duct.>
- 3) Disconnect the connector and remove the high beam bulb.

CAUTION:

Use a dry clean cloth so that no grease or water adheres to the glass portion of the bulb.



2. HALOGEN TYPE LOW BEAM

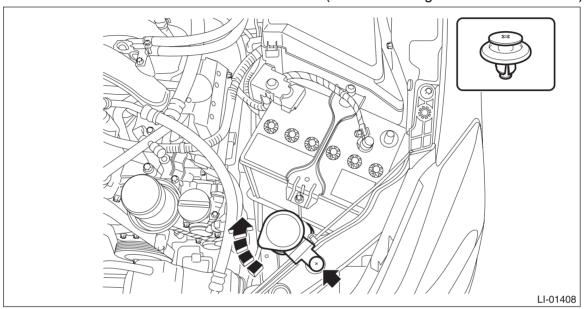
CAUTION:

- Do not perform work with wet hands, because there is a possibility of electrical shock.
- 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. <Ref. to NT-5, BATTERY, NOTE, Note.>

NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

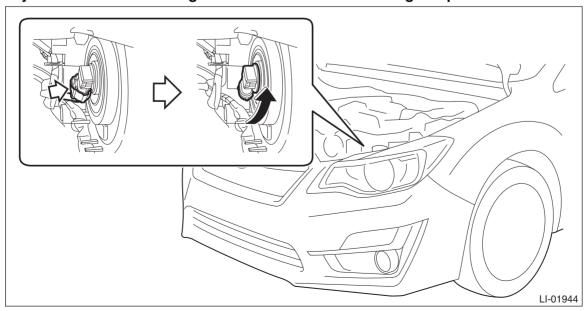
- 2) Remove the air intake duct. (When removing the right side of gasoline engine model) <Ref. to IN(H4DO(w/o HEV))-13, REMOVAL, Air Intake Duct.>
- 3) Turn the filler neck of the tank washer front clockwise. (When removing the low beam bulb LH)



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.
- Use a dry clean cloth so that no grease or water adheres to the glass portion of the bulb.



3. HID TYPE LOW BEAM

When removing RH side

CAUTION:

- Do not perform work with wet hands, because there is a possibility of electrical shock.
- 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. <Ref. to NT-5, BATTERY, NOTE, Note.>

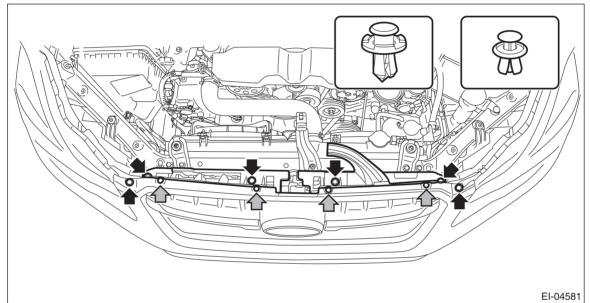
NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

- 2) Remove the air intake duct. (Gasoline engine model) <Ref. to IN(H4DO(w/o HEV))-13, REMOVAL, Air Intake Duct.>
- 3) Remove the clip, and remove the bracket grille.

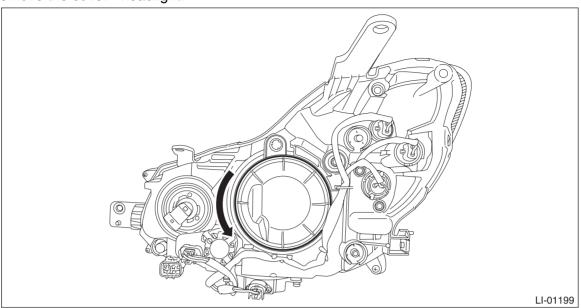
CAUTION:

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

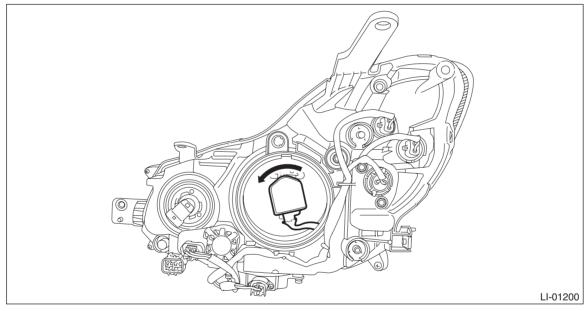


- 4) Remove the bumper face front. <Ref. to EI-40, REMOVAL, Front Bumper.>
- 5) Remove the light assembly head. <Ref. to LI-29, REMOVAL, Headlight Assembly.>

- 6) Remove the low beam bulb.
 - (1) Remove the cover headlight.



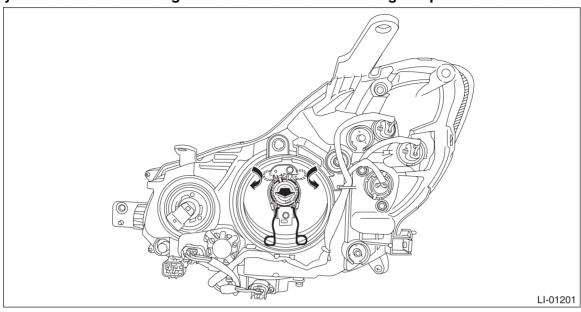
(2) Remove the valve socket.



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

CAUTION:

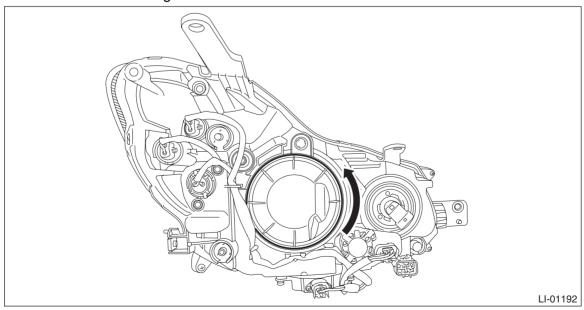
Use a dry clean cloth so that no grease or water adheres to the glass portion of the bulb.



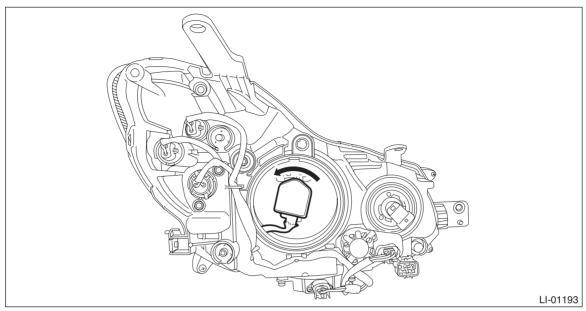
When removing LH side

CAUTION:

- Do not perform work with wet hands, because there is a possibility of electrical shock.
- 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) Remove the battery.
- Gasoline engine model: <Ref. to SC(H4DO(w/o HEV))-52, REMOVAL, Battery.>
- HEV model: <Ref. to SC(H4DO(HEV))-39, REMOVAL, Battery.>
- 2) Remove the low beam bulb.
 - (1) Remove the cover headlight.



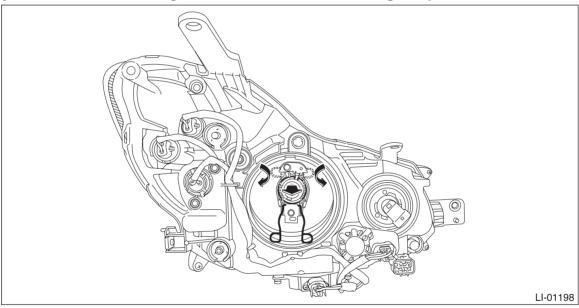
(2) Remove the valve socket.



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

CAUTION:

Use a dry clean cloth so that no grease or water adheres to the glass portion of the bulb.

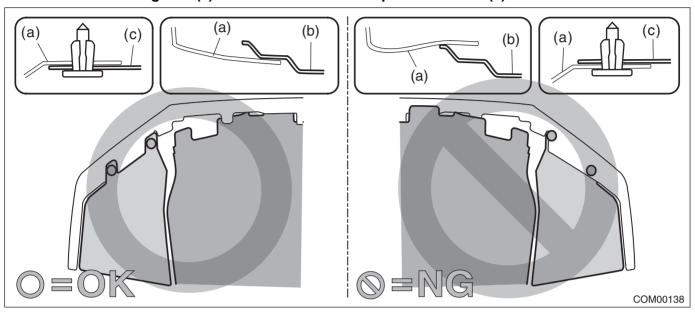


B: INSTALLATION

- 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 so that the front end of the under cover (b) comes inside the bumper face - front (a), and the front end of the mud guard (c) comes outside the bumper face - front (a).



Tightening torque:

Light assembly - head: 7.5 N·m (0.76 kgf-m, 5.5 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-55, 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.