

14. Headlight Assembly

A: REMOVAL

CAUTION:

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

NOTE:

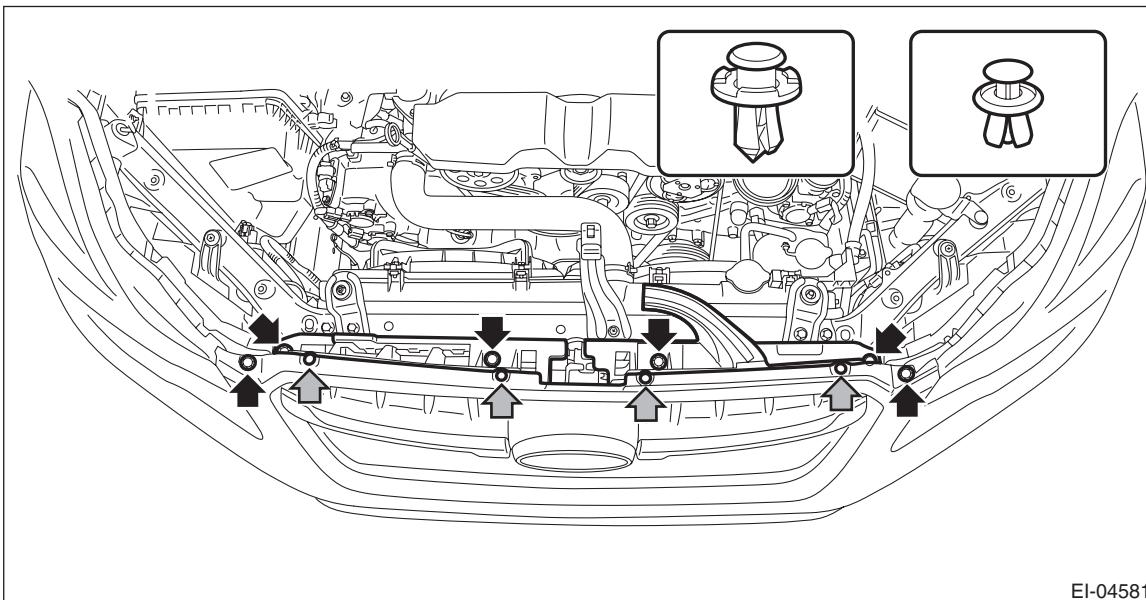
For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

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

CAUTION:

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

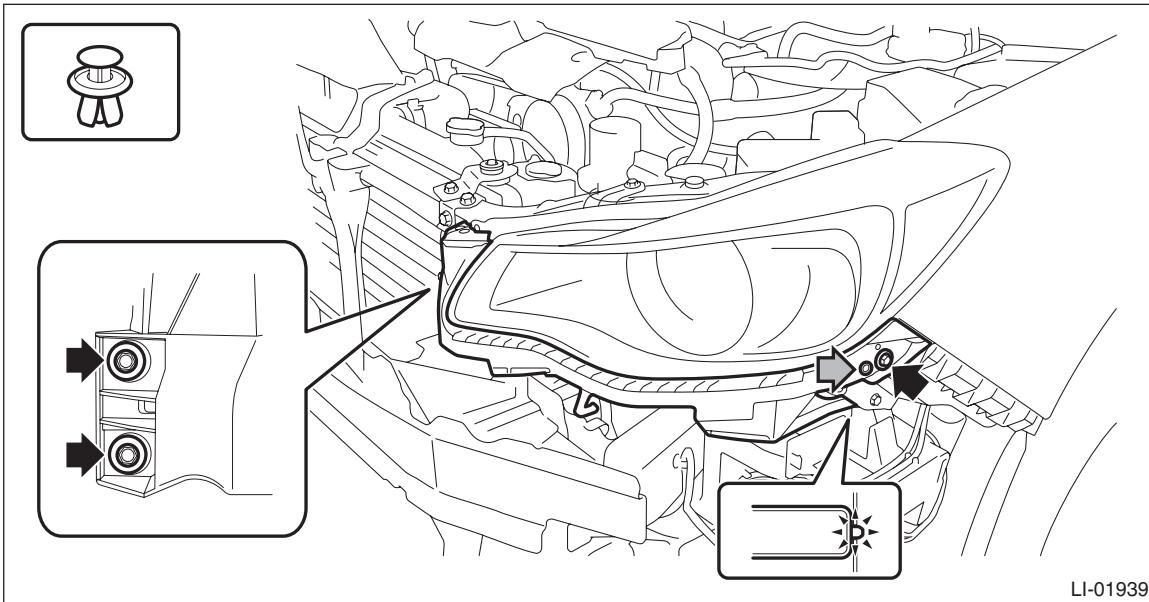


4) Remove the bumper face - front. <Ref. to EI-40, REMOVAL, Front Bumper.>

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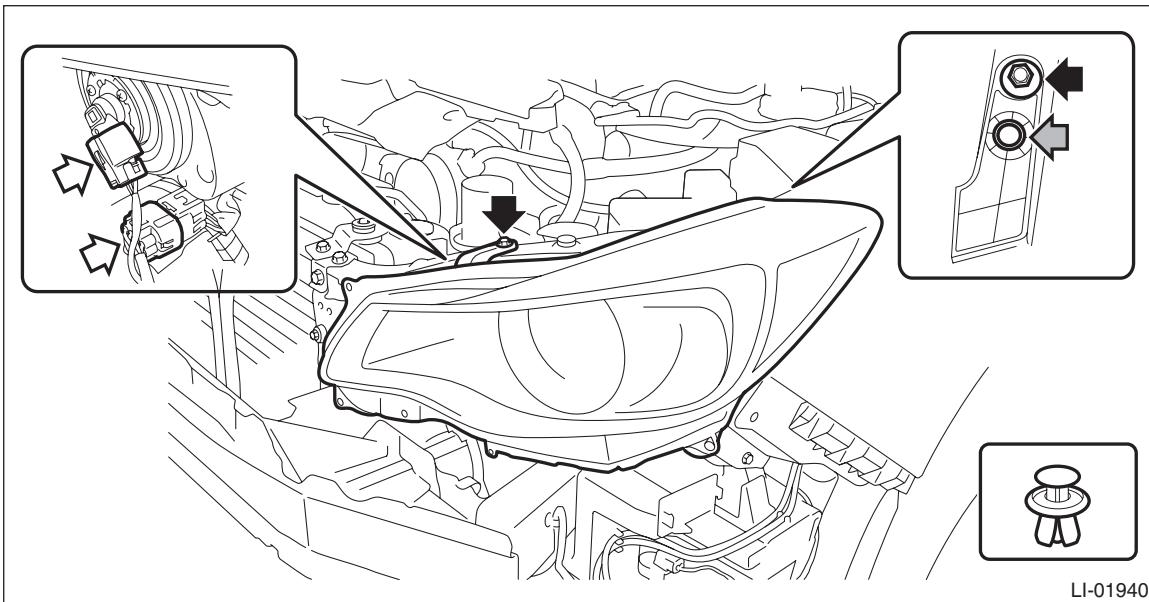
LIGHTING SYSTEM

5) Remove the bolts and clips, and remove the bracket - front bumper corner.



6) Remove the light assembly - head.

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

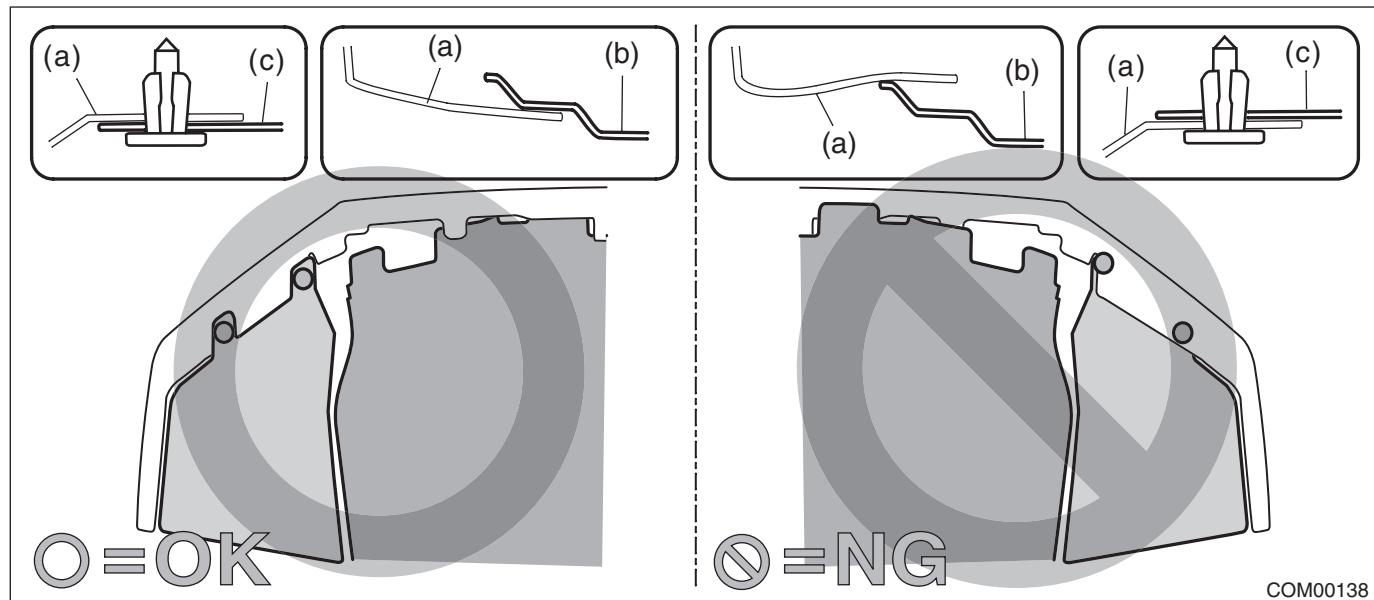


B: INSTALLATION

- 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 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) 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-55, FOG LIGHT AIMING, ADJUSTMENT, Front Fog Light Assembly.>

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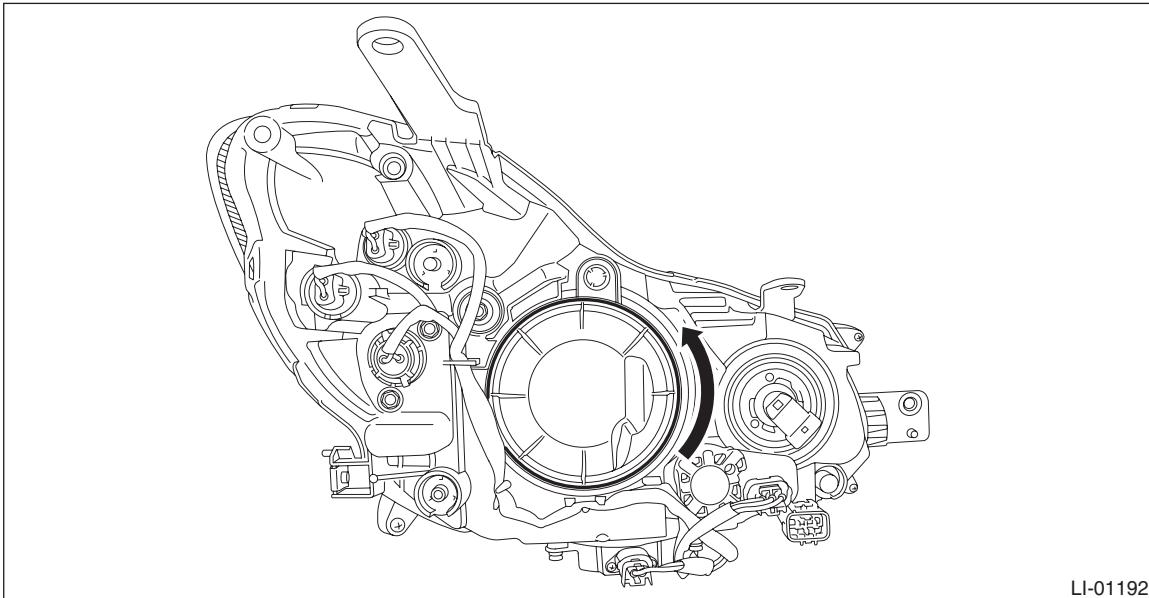
C: DISASSEMBLY

1. HID HEADLIGHT BALLAST

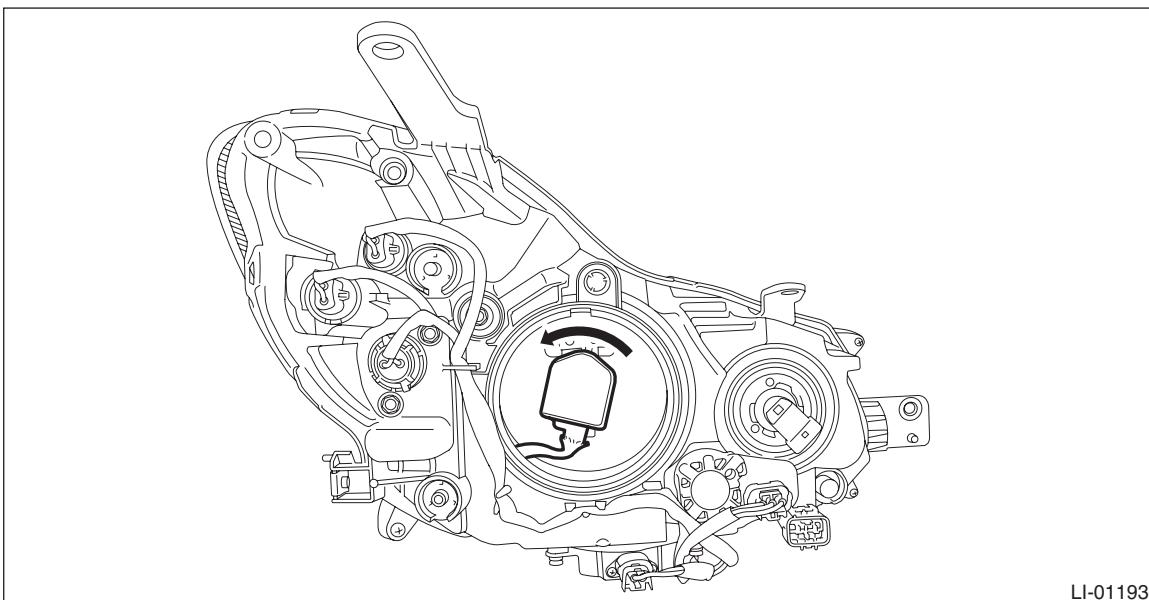
CAUTION:

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) Remove the cover - headlight.



- 2) Disconnect the bulb socket.



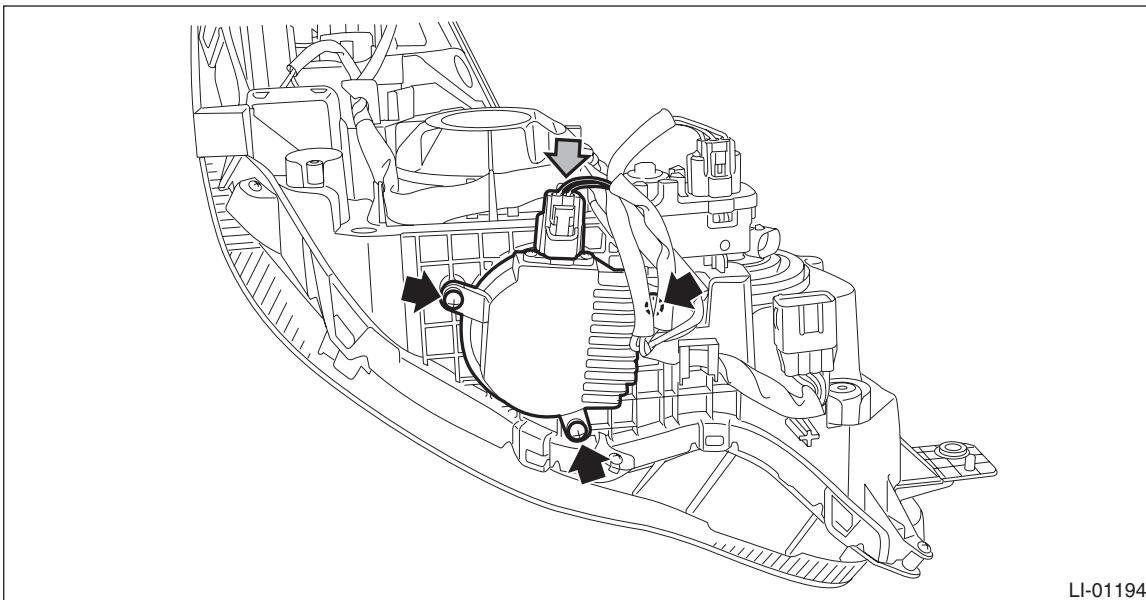
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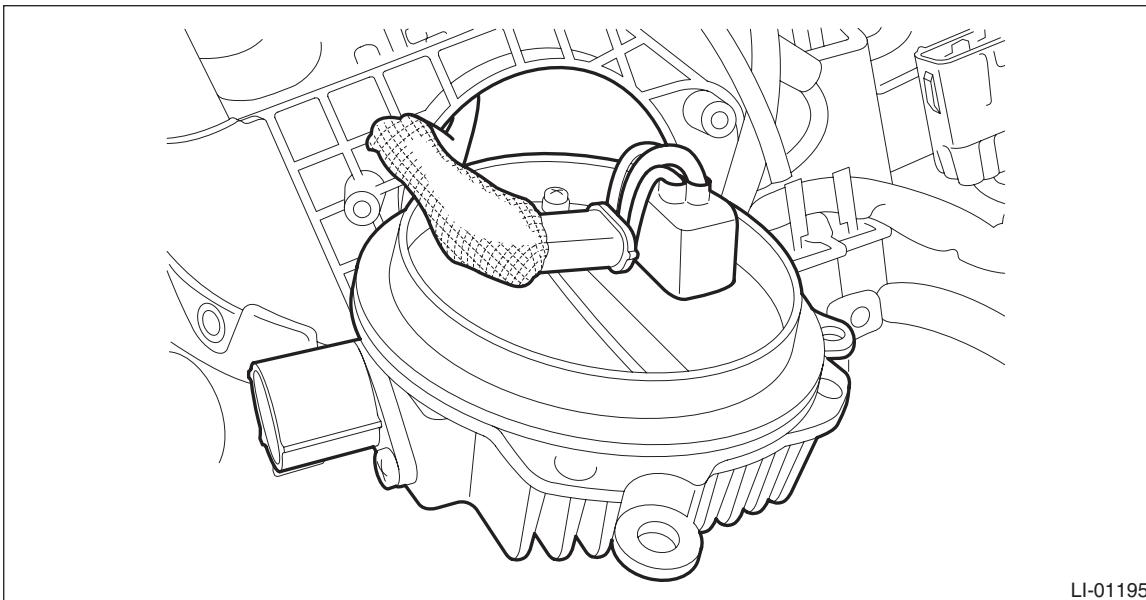
3) Remove the ballast - headlight.

(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.



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D: ASSEMBLY

1. HID HEADLIGHT BALLAST

CAUTION:

When installing the ballast - headlight, be sure to install the gasket.

Assemble each part in the reverse order of disassembly.

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 emitted from the headlight, use a light shield or equivalent.

Do not apply the tape on the lens or place the cloth over it. 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.

• The vehicle is parked on a level surface.

• The inflation pressure of tires is correct.

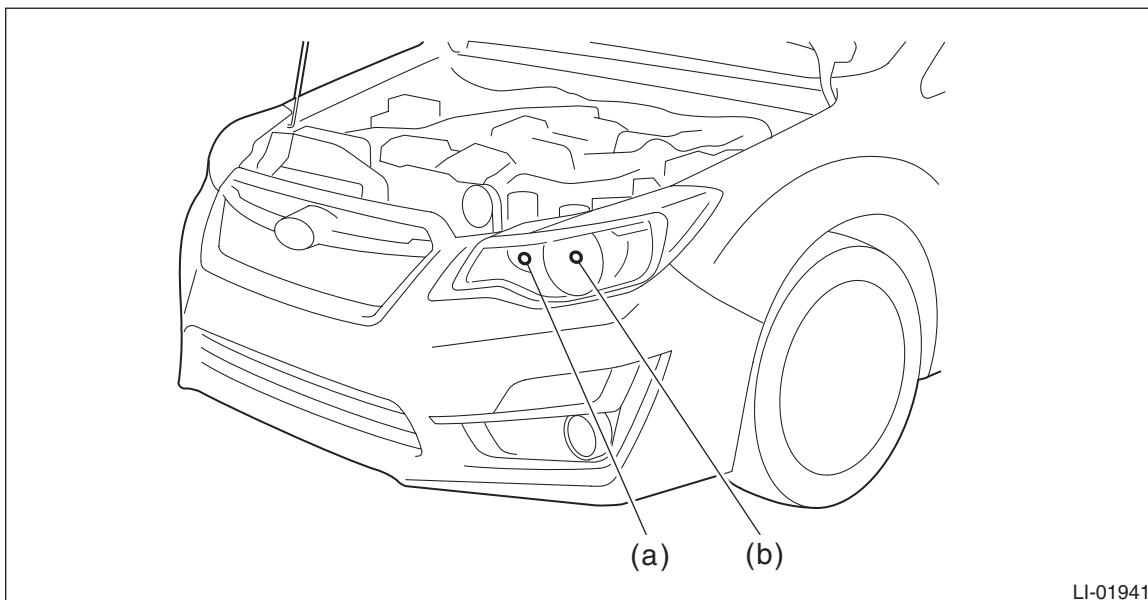
• The vehicle does not have load.

• 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.



LI-01941

(a) High beam

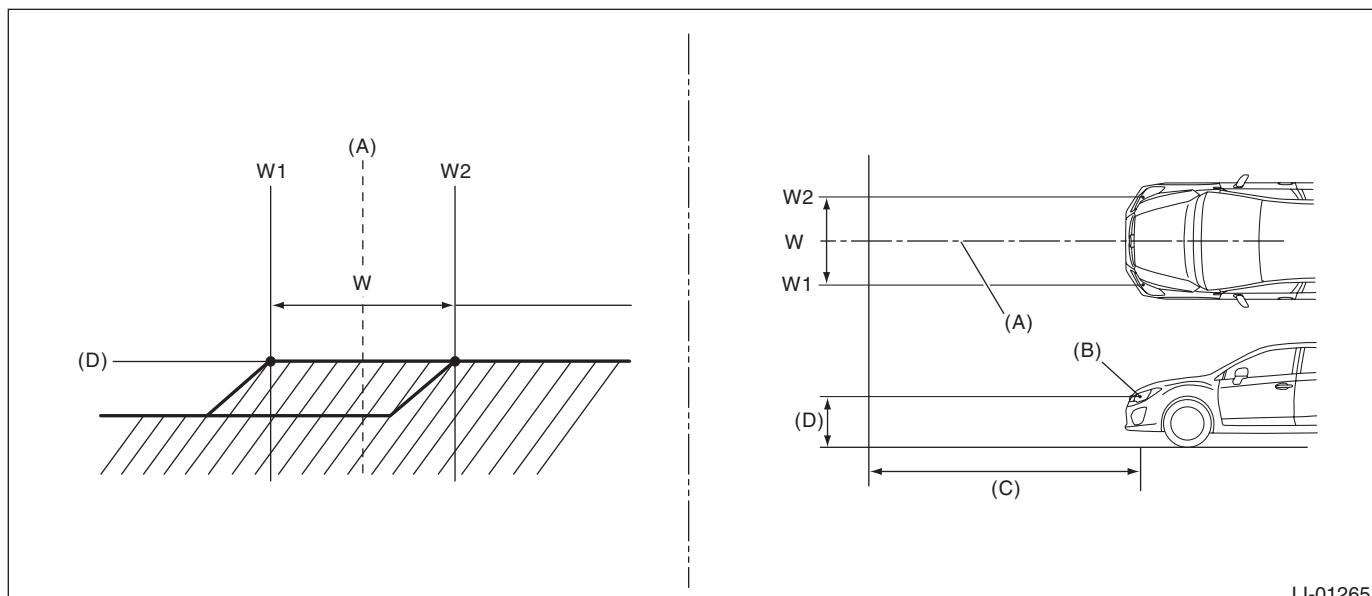
(b) Low beam

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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.



(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.

