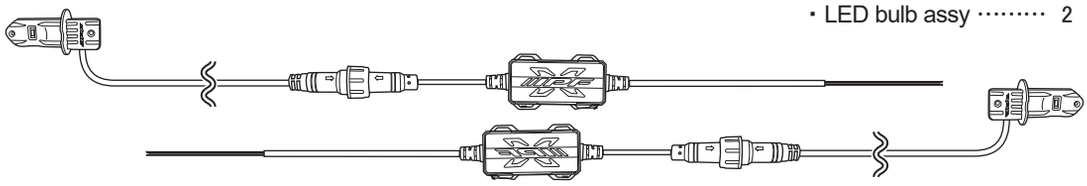
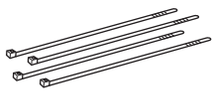
LED Bulb Installation Manual

(H3, H3c)

Components



・Cable ties ····· 4

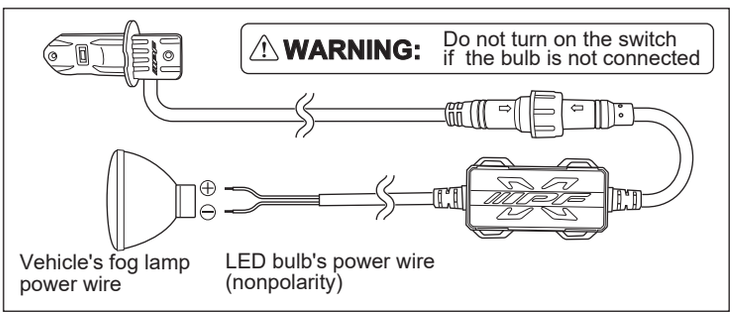


LED bulb lighting test points

※Do it before installation.

＜Test procedure＞

1. Remove the vehicle's power wire from halogen bulb and connect to the LED bulb's power wire.
2. Turn on the lamp, Test for correct lighting.
3. Check the vehicles gauges for any warning signs. If no warnings, the test is finished.

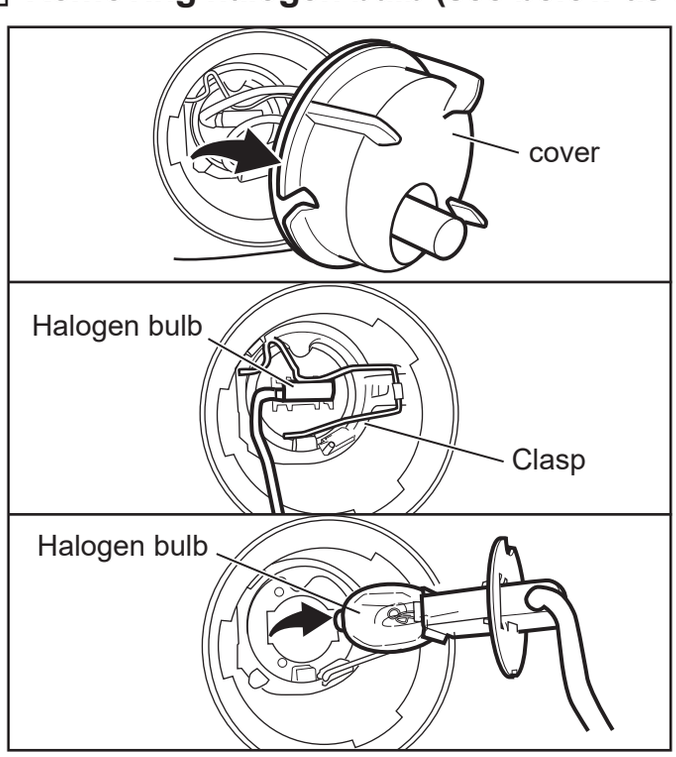


Installation procedure

1 Halogen bulb check

Check the condition of the halogen bulb attachment.
If the check cannot be done visually or the space is too narrow,
please remove the headlamp unit from the vehicle.
Refer to the vehicle's manual when changing or removing your halogen headlamp bulb.

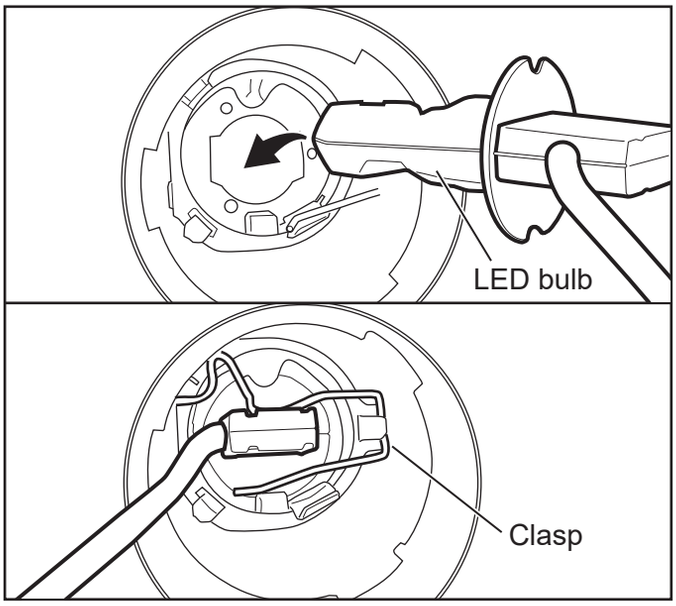
2 Removing halogen bulb (see below as an example)



Remove the lamp unit cover, unclasp and remove the bulb.

Refer to the vehicle's manual for fog lamp removal procedure, as it can differ between vehicles.

3 Installing the LED bulb (see below as an example)



Insert the LED bulb into the fog lamp.
(opposite procedure of removing)

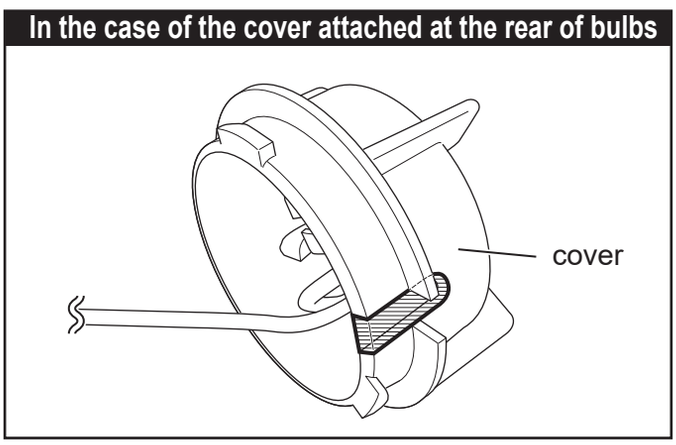
⚠Caution

- Check the correct orientation of the bulb as its socket has two different cutouts (round & square-shaped).
- Do not forcibly bend the wiring at all times.

Advice

Vehicle's fog lamp wiring is NOT used in this installation procedure.
Insulate the wiring using insulating tape etc. and avoid contact with the LED bulb.

In the case of the cover attached at the rear of bulbs



Make a hole in the cover or headlamp unit in order to pass LED bulb's harness.

Advice

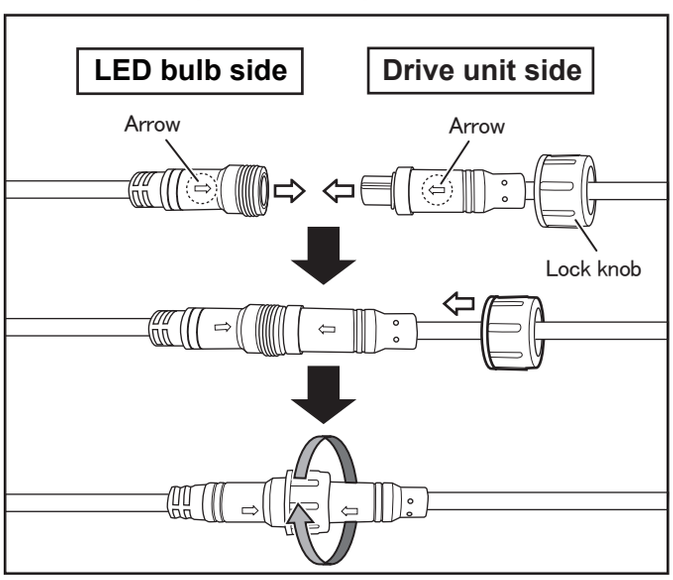
- Make a slit in the cover refer to the figure right.
- Making a hole or slit in the downside of the cover to avoid dust and water entry.

Pass the LED bulb's harness through the cover.
Apply caulking material to fill a gap in the cover to avoid dust and water entry.

⚠Caution

- Water entry into the headlamp unit may result in technical malfunction.

4 Connecting and fixing the harness and drive unit

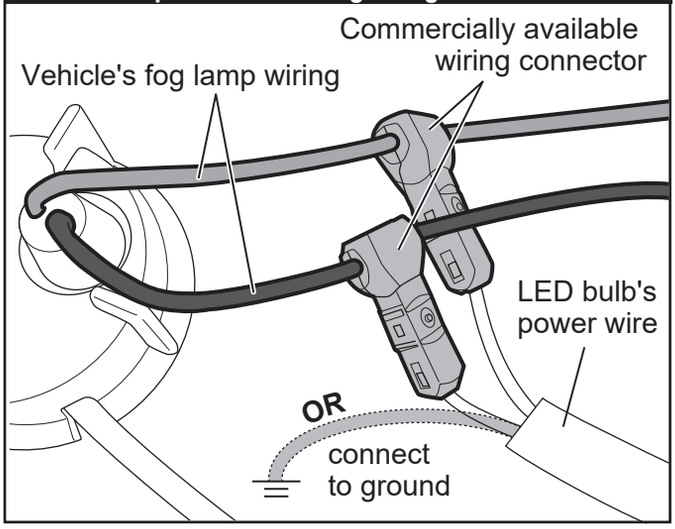


Connect LED bulb's connector to drive unit's connector.

⚠Caution

- Insert the driver unit's connector into LED bulb's connector, the arrows in a straight line.
  Rotate the lock knob clockwise and tighten it securely.
  Prevent LED bulb's failure from water entry into the joint part.
  If the joint part is not locked securely, water entry may result.

Example of connecting using a connector



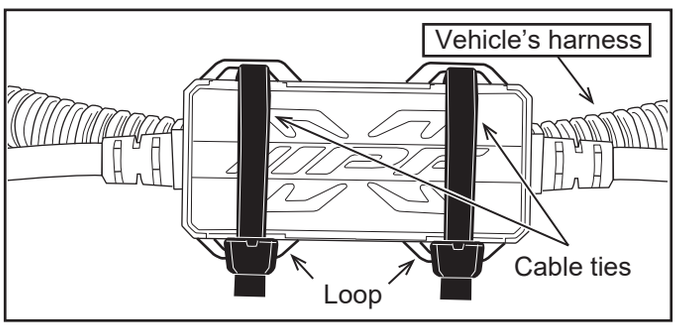
Connect the vehicle's wiring to the LED bulb's wiring using commercially available wiring connector.

⚠ Caution

- Use water proof connector if you connect wirings outside of the fog lamp unit.
- Using non-water proof connectors may corrode wirings.

Advice

- LED bulb's power wire has no polarity and AWG20.
- Use appropriate size of connectors as thickness of vehicle's fog lamp wiring can differ between vehicles and fog lamps.
- Connect to ground if vehicle's fog lamp with no negative wiring.

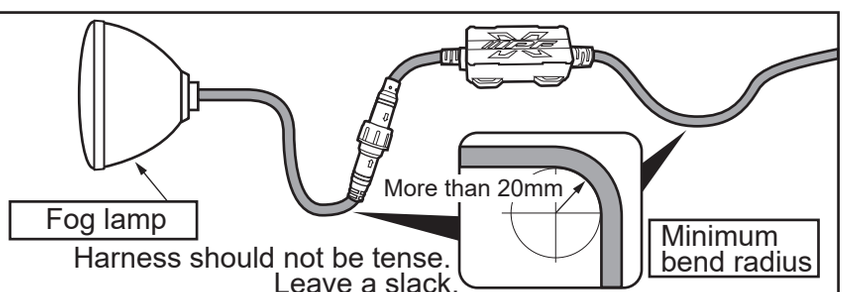


Insert cable ties into the loops and fix them on the vehicle's harness as shown in the image.

Verify that the LED bulb is secured tightly by wobbling it. If you removed front bumper or other parts, reinstall them into original positions.

⚠ Warning (prevent disconnecting)

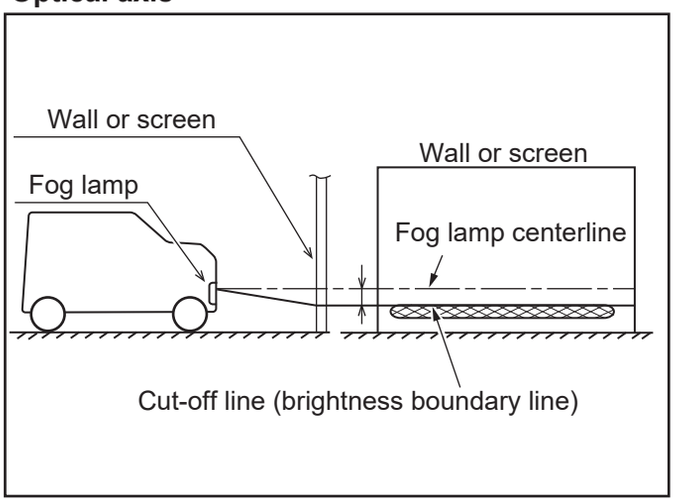
Do not tie the harness together with the drive unit.
Do not bend or pull the harness by excessive power.
Leave a slack in the harness.
Harness's minimum bend radius should be more than 20mm (see the figure right).



5 Lighting check and adjusting optical axis

Turn on the engine. Switch on the head lamp. Check to see the LED bulb lights up properly.
Make adjustment to the optical axis refer to the figure below. Check to see if the fog lamp indicator on the dash is lighting up properly.

Optical axis



Park your vehicle in a flat place. Turn on the fog lamp towards a wall or screen. Adjust the optical axis so that a cut-off line (brightness boundary line) comes below the centerline of the fog lamp.
For more information about an optical axis adjustment method, please check it with car maintenance books you have or from your dealer.

Advice

In general vehicles, rear wheel side sinks by loading to trunk or getting into backseats.
It makes an optical axis upward.
This product is brighter than genuine halogen fog bulb. Upward lighting by such optical axis reduces proper fog lamp function. It may cause a glare to oncoming or leading vehicles.
Assume that load capacity on backseats or trunk and adjust to lower a cut-off line (brightness boundary line) beforehand.