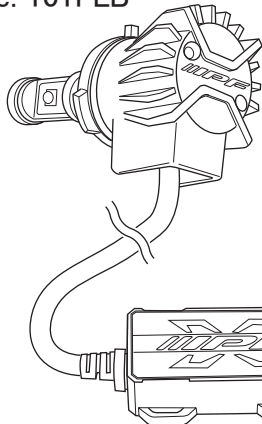


LED Bulb Installation Manual

(PSX24W(2504))

LED bulb lighting test points ※Do it before installation.

*image: 101FLB



<Test procedure>

1. Connect the LED bulb's connector to the vehicle's connector.
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.

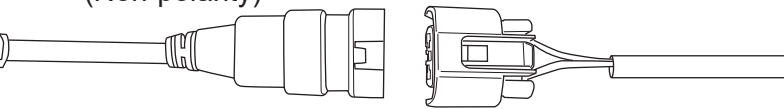


Warning

Do not turn on the switch if the bulb is not connected.

LED bulb connector
(Non-polarity)

Vehicle connector



LED bulb fitting

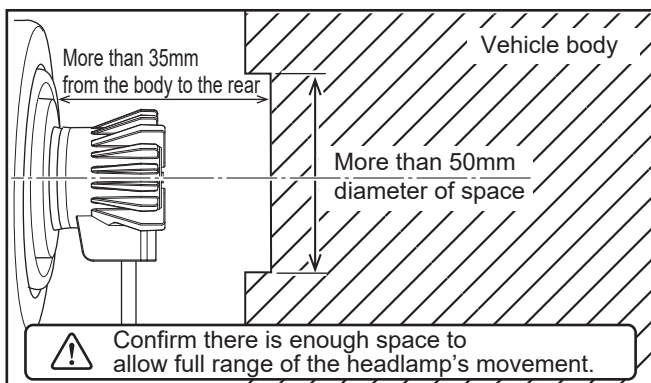


Caution

Not compatible with TOYOTA and SUBARU cars using PSX24W.

PSX24W type

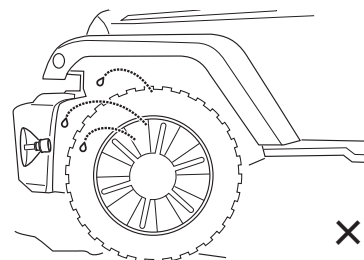
Space around the bulb



Direct contact with water, dirt or dust

Bad

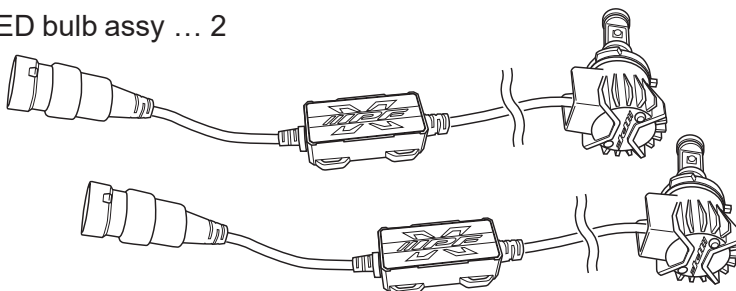
<Fender liner is not attached>



✗ Incorrect

Components

LED bulb assy ... 2



*image: H8/H11/H16 type

Cable ties...4



Hex wrench...1



Installation procedure

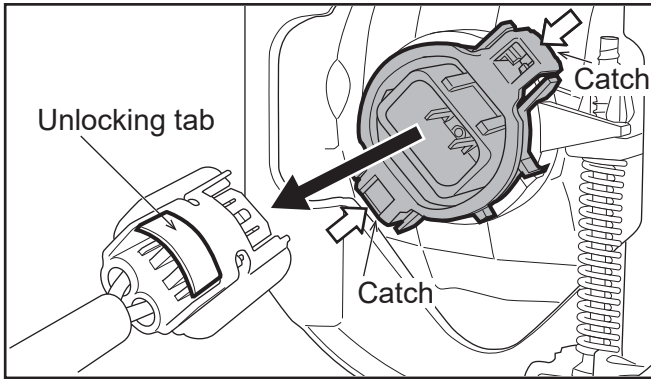
1 Haogen bulb check

Check the condition of the bulb's attachment.

If the check cannot be done visually or the space is too narrow, please remove the front bumper or surround component from the vehicle.

Refer to the vehicle's manual when changing or removing your halogen fog bulb.

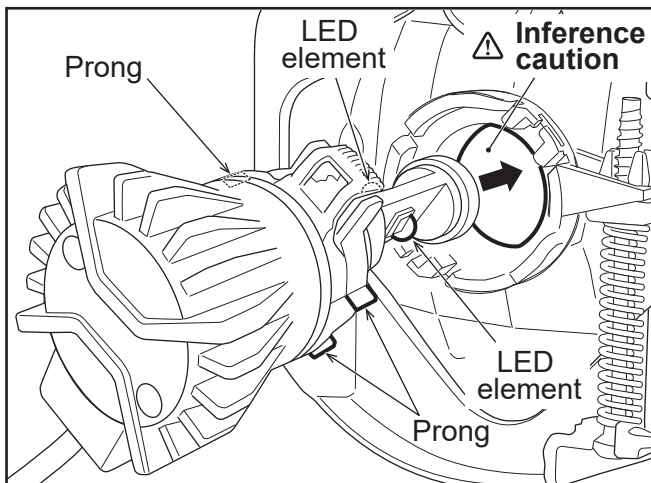
2 Removing halogen bulb



Remove the bulb. See the figure **2**.

- ① While still pushing the tab, pull the connector from the bulb.
- ② Remove the connector.
- ③ Remove the bulb while pushing on both sides of the catch.

3 Installing the LED bulb



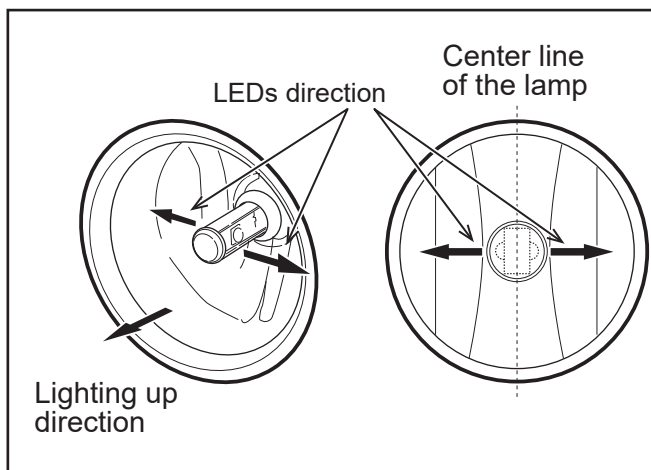
Orientate the insert angle as per the figure **3**.

- ① Insert the LED bulb into the fog lamp.
- ② Orientate the prongs to the insert hole.
- ③ Attach the LED bulb to the fog lamp, both sides of the catch securely fixed.

⚠ Caution

- When inserting the LED bulb, be careful not to hit or bump the LED element.
- If the LED element becomes scratched, the brightness or light distribution might reduce in range and the vehicle might not meet the standard requirements in a vehicle inspection.

4 Angle check



When facing the front lens of the fog lamp, verify that the LED elements facing toward right and left refer to the figure left.

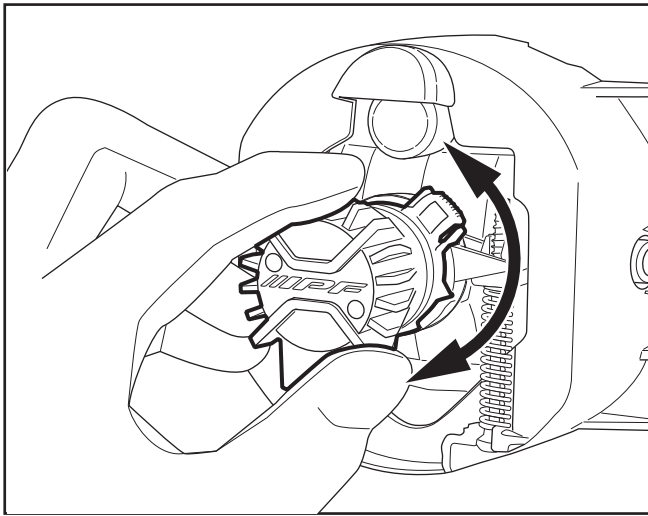
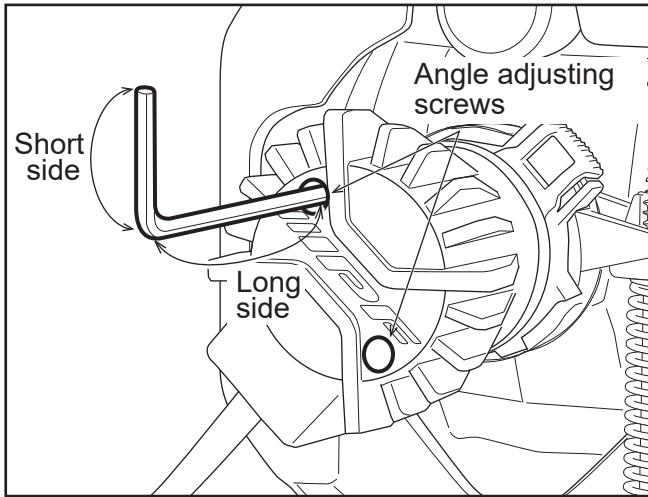
If the LED elements are not facing toward right and left properly, go to step **5** and adjust the angle of attachment.

After confirming the right position of LED elements then proceed to step **6**.

⚠ Warning

- If the angle of attachment is not level when installed, the brightness or light distribution might reduce in range and the vehicle might not meet the standard requirements in a vehicle inspection.

5 Angle adjustment



If the angle of attachment is not in the right position, adjust it using the long side of hex wrench by loosening the angle adjusting screws (two points), rotate the bulb and fix the angle. When finished the adjustment, secure the screws (two points), and go back to step **4** to check the angle of attachment.

⚠ Caution

This product carries the angle adjustment function which enables you to adjust bulb angle after installation procedure was finished.

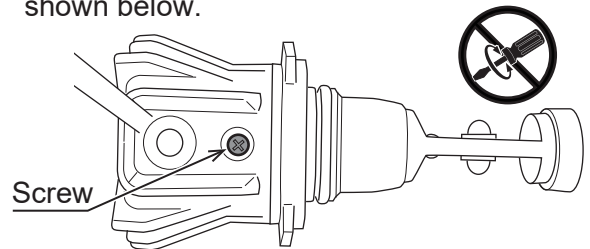
Adjustment can be done while you check light distribution by lighting up at a wall or screen in front of the vehicle. Wear heat-resistant gloves in this case, because LED bulb body becomes hot when lighting up. There might be a danger of burn yourself if you touch it barehanded.

⚠ Warning

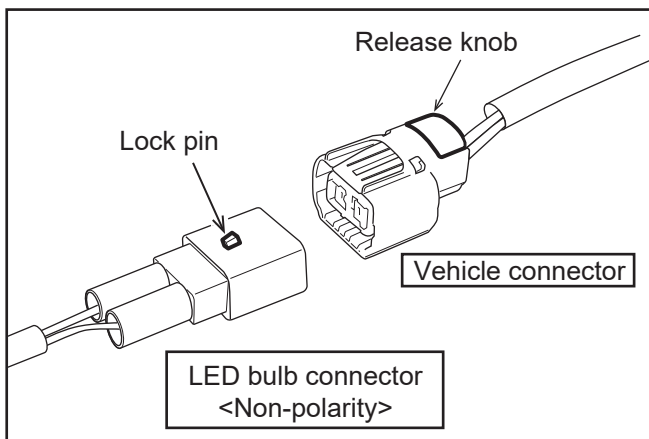
It causes a damage or installing/removing fault if you apply excessive or insufficient power when tightening the angle adjusting screws.

Recommended torque: $0.2-0.5\text{N} \cdot \text{m}$

Do not remove or loosen the screw as shown below.



6 Connecting and fixing the harness and drive unit



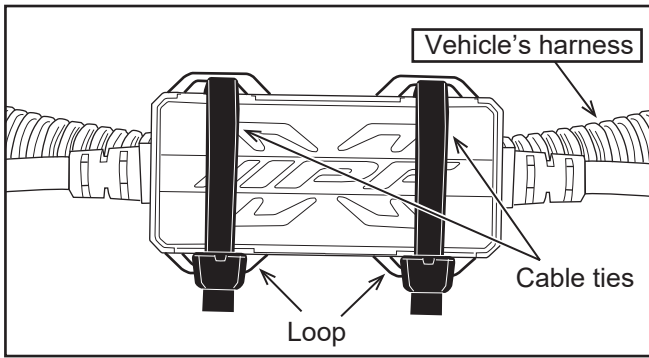
Connect the LED bulb connector with the vehicle's connector. Insert the connector all the way and align the lock pin.

Make sure the connector is locked into place.

⚠ Caution

In rare cases, the connector does not lock into place. Secure the connection with electrical tape.

The release knob may be on the side of vehicle's connector. (H8/H11/H16 type)
Be sure the drive unit and harness not to interfere with vehicle parts (a washer tank or horn etc.)



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

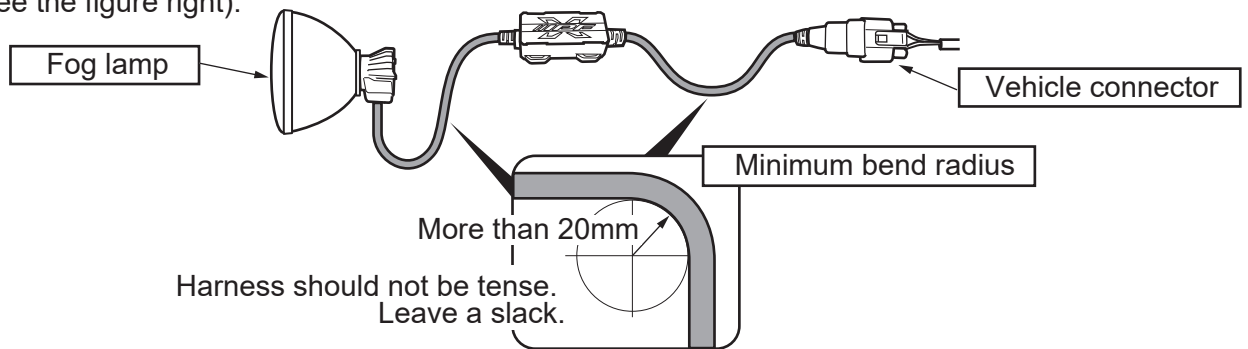
Verify that the LED bulb is secured tightly by wobbling it. If you removed front bumper or other parts, reinstall them into original positions.

⚠ **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).

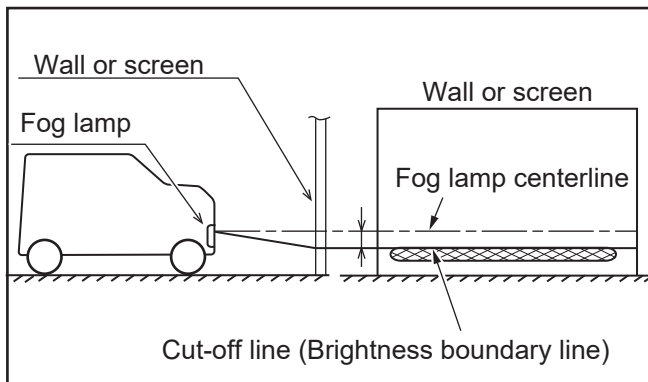


7 Lighting check and adjusting optical axis

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.