

# GENUINE FRONT FOG LAMP KIT

## INSTALLATION AND USER'S INSTRUCTIONS

Thank you for purchasing a Genuine Mazda Accessory.

Before removal and installation, please thoroughly read these instructions.

For your safety, please read the contents of this booklet to properly install and use the front fog lamp kit.

Keep these instructions with your vehicle records for future reference.



- There are several **⚠ WARNING** and **⚠ CAUTION** sections in this booklet concerning safety when installing or removing the front fog lamp kit. Always read and follow the instructions in order to prevent injuries, accidents, and possible damage to the vehicle.

**⚠ WARNING:** Indicates a situation in which serious injury or death could result if the warning is ignored.

**⚠ CAUTION:** Indicates a situation in which bodily injury or damage to the vehicle could result if the caution is ignored.

- For areas indicating the tightening torque in this instruction manual, tighten to the specified torque by using a torque wrench. For areas in which the tightening torque is indicated inside parentheses ( ), the tightening torque is indicated as a reference value, however tightening using a torque wrench is not necessary
- Do not modify the front fog lamp kit.
- Do not install the front fog lamp kit in any way other than described in the following instructions.
- If in doubt, please contact your Mazda dealer to install the accessory in order to prevent errors in installation.
- If you have any questions about the use of the accessory, ask your Mazda dealer for proper advice before using it.
- Mazda and its suppliers are not responsible for injuries, accidents, and damage to persons and property that arise from the failure of the dealer or installer to follow these instructions.
- To ensure safety and reliability of the work, installation, removal and disposal work must be carried out by an Authorized Mazda Dealership.
- Be careful not to lose removed parts, and be sure that they are kept free of dirt, scratches, or damage.

<b>PART NAME:</b>	<b>FRONT FOG LAMP KIT</b>
<b>PART NUMBER:</b>	<b>KB7W V4 600A</b>
<b>VEHICLE:</b>	<b>MAZDA CX-5</b>

### NOTE

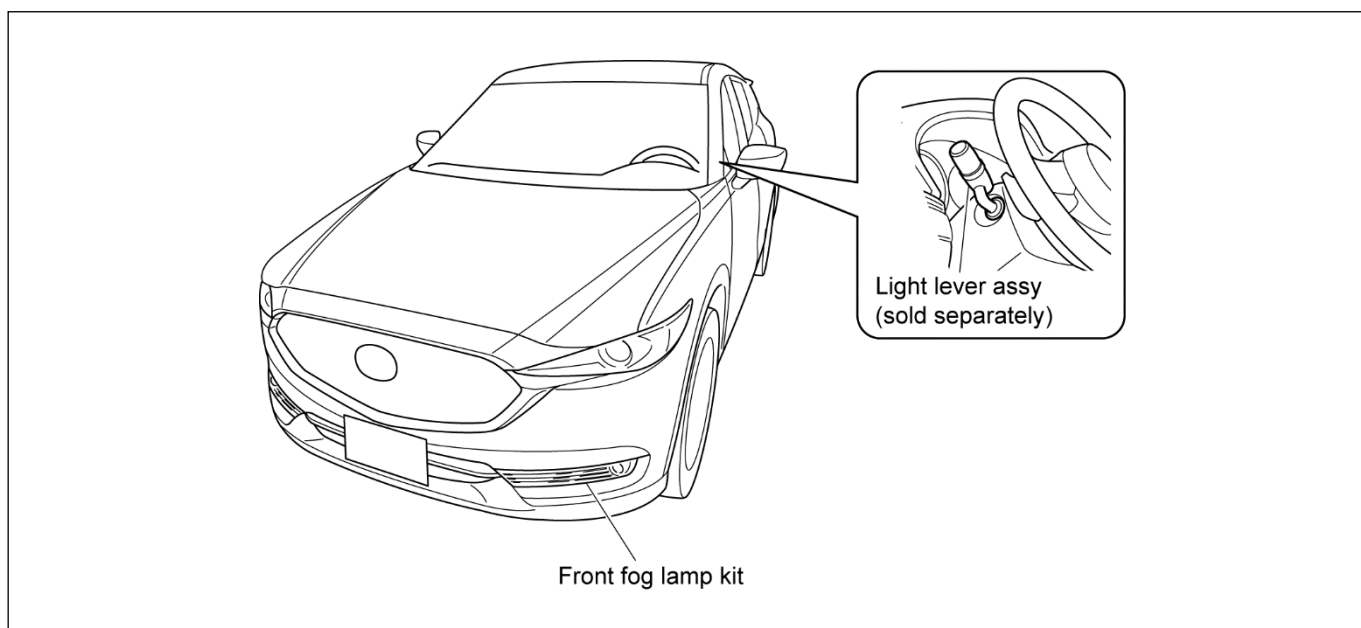
#### To the dealer

- Please turn over these instructions to the customer after installation.

#### To the customer

- Keep these instructions after installation. The instructions may be necessary for installing other optional parts or removal of this accessory.
- Should the vehicle or this accessory be resold, Always transfer these instructions to the next owner.

# 1. INSTALLATION VIEW



# 2. PARTS

- Before installation, verify that the kit includes all the following parts and that they are free of dirt, scratches, or damage.

Part	Part name	Qty	Part	Part name	Qty	Part	Part name	Qty
	Fog lamp (RH, LH)	Each 1		Lamp hole cover A (RH, LH)	Each 1		Lamp hole cover B (RH, LH)	Each 1
	Fog lamp bracket (RH, LH)	Each 1		Bolt	8		Tapping screw (M5x12)	2
	Tapping screw (M5x16)	2		Installation inspection sheet	1		Installation and user's instructions	1

## 【Separate purchase】

Part	Part name	Qty
	Light switch assy	1

## 3. BEFORE INSTALLATION

### ■ REQUIRED TOOLS

☆ Phillips screwdriver

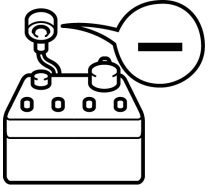
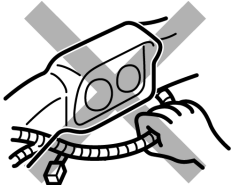
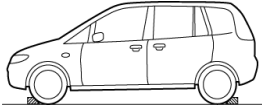

☆ Flathead screwdriver

☆ Torque wrench (10mm)

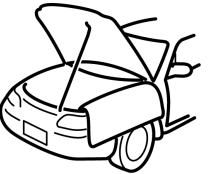
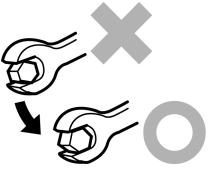
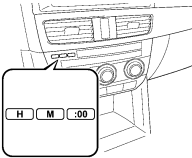
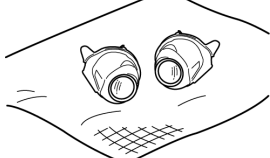
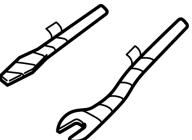
☆ Socket wrench (8mm, 10mm)

☆ Fastener remover

### ⚠ WARNING

<p>When the negative battery cable is connected during operation, it may cause electric shock or other injuries. Disconnect the negative battery cable before removal/installation.</p>	<p>Do not pull wiring harnesses with excessive force. Doing so can cause breakage or a short circuit-related accident, as well as an electrical short or fire.</p>	<p>Park the vehicle on a flat, level surface, apply the parking brake and block the wheels so that the vehicle does not move during installation.</p>	<p>When connecting/disconnecting connectors, grasp the connectors, not the wires. Otherwise a short, an accident from poor contact or fire may occur.</p>
			

### ⚠ CAUTION

<p>Be sure to cover the vehicle body with protectors or mats to prevent stains, scratches and damage when removing/installing the vehicle parts</p>	<p>Using improper tools may cause damage and or broken parts. Use the correct tool for the installation.</p>	<p>When the negative battery cable is disconnected from the battery, the clock, radio, trip meters and other memories will be erased. Before performing work, record the content of the memory.</p>	<p>Put the removed parts and the parts in the kit on the protective sheet to prevent scratches.</p>
			
<p>Wrap protective tape around screwdrivers and fastener remover tools to prevent scratching the vehicle.</p>			
			

### Advice

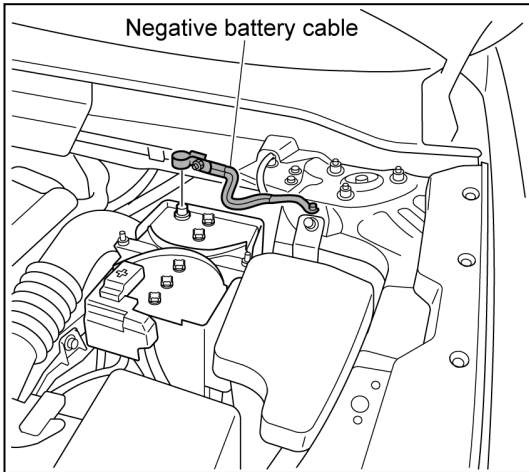
Refer to the Workshop Manual for removal and installation of vehicle parts. Not following the procedures for removal/installation in the Workshop Manual could result in an accident or vehicle malfunction.



## 4. VEHICLE PART REMOVAL

### ⚠ CAUTION

- Be careful not to damage or lose any parts removed from the vehicle since they will be reused.



### Negative battery cable disconnection

1. Set the selector lever to P range.  
(AT vehicles only)

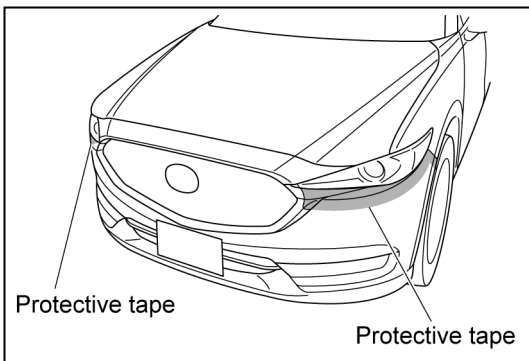
### ⚠ WARNING

- When removing/installing the parts, park the vehicle on level ground and apply the side brake securely. Be sure to turn the ignition switch off, otherwise the vehicle can move, causing injury or vehicle damage.

2. Disconnect the negative battery cable and wrap tape around it to insulate.

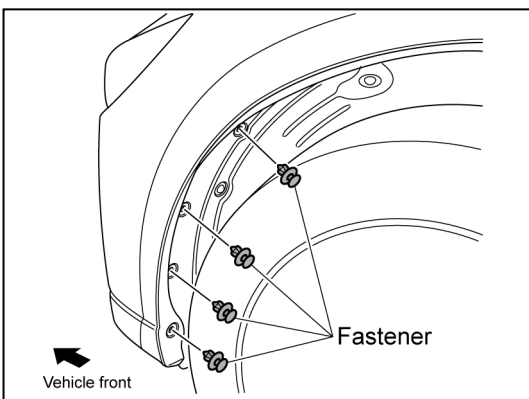
### ⚠ WARNING

- When the negative battery cable is connected during operation, it may cause electrocution or other injuries. Disconnect the negative battery cable before removal/installation.

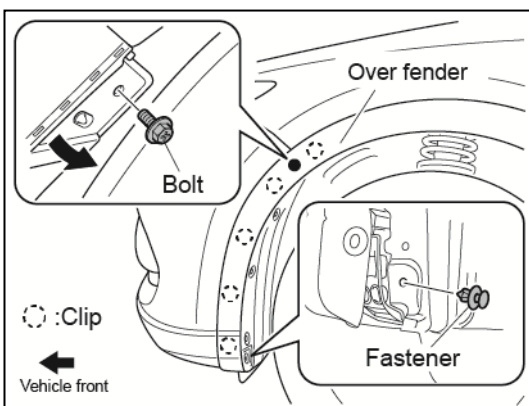


### Front bumper removal

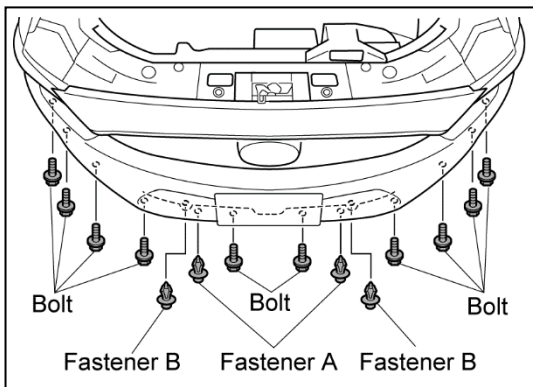
1. Attach protective tape to the front bumper as shown in the illustration at left to protect the vehicle.



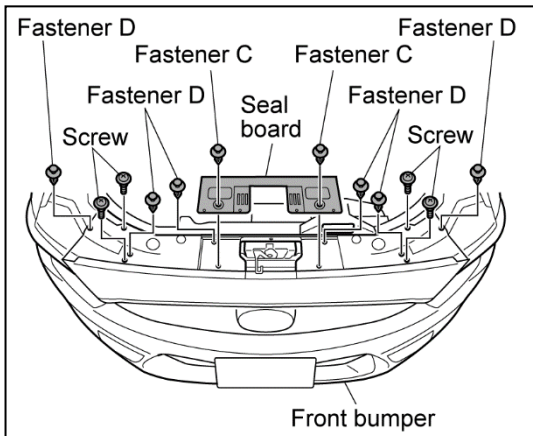
2. Remove the mudguard fasteners (4 places).  
(Remove from the opposite side in the same way.)



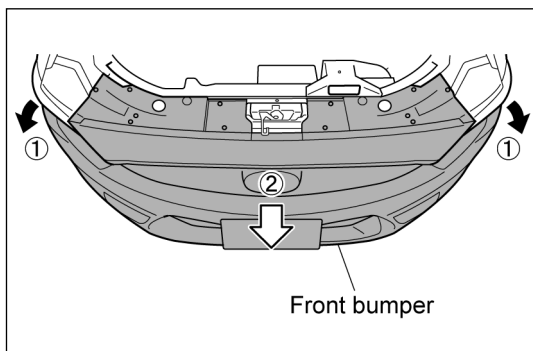
3. Disengage the five over fender clips.
4. Pull the over fender outward, and then remove the bolt and the fastener. (Remove from the opposite side in the same way.)



5. Remove the fasteners A (2 places) and the bolts (10 places) underneath the front bumper.
6. Pull down the under cover, then remove the fasteners B (2 places).



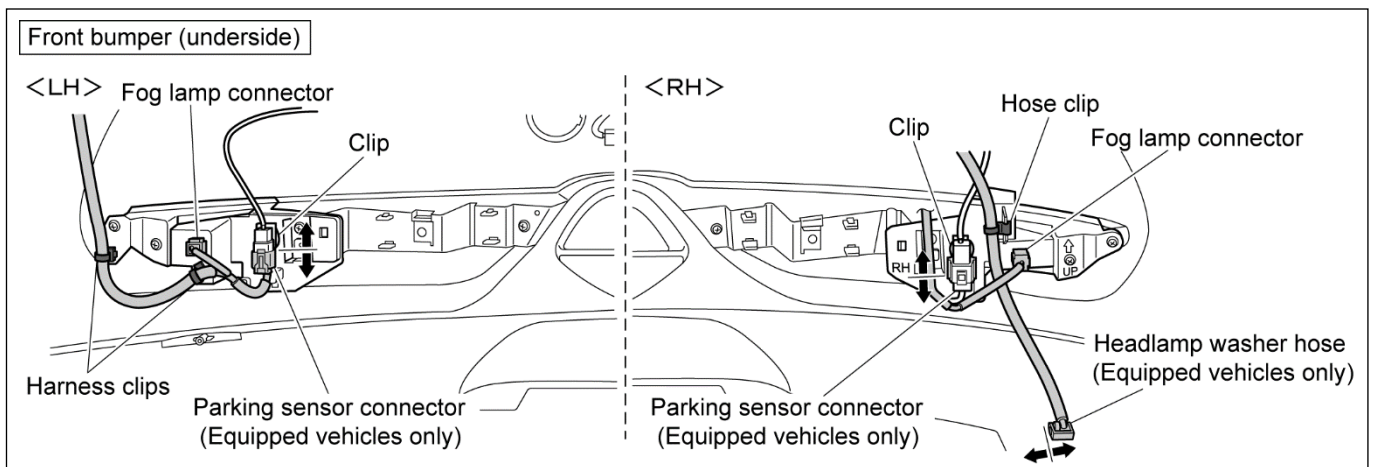
7. Remove the two fasteners C, and seal board upper cover.
8. Remove the fasteners D (6 places) and the screws (4 places).

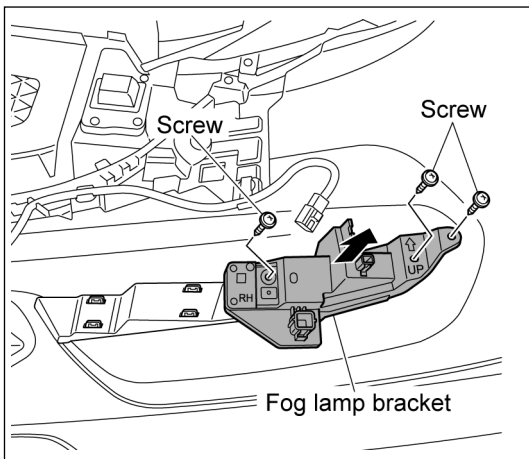


9. Pull the front bumper in the direction of ① to disengage it from the tabs of the bumper retainers.
10. Pull the front bumper in the direction of ② to remove it from the vehicle.

- When removing the front bumper, do not pull it too strongly. There are connectors and harness clips connected to it.

11. Disconnect the LH and RH fog lamp connectors and the LH harness clips (2 places).
12. Disconnect the LH and RH parking sensor connectors and clips (1 place each). (**Equipped vehicles only**)
13. Disconnect the headlamp washer hose and the hose clip (1 place). (**Equipped vehicles only**)



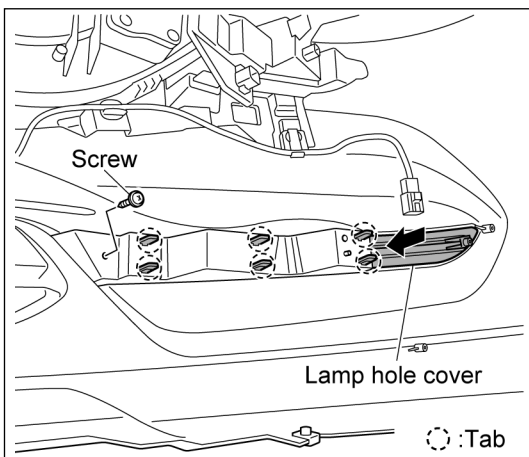


### Fog lamp bracket

1. Remove the screws (3 places).
2. Remove the fog lamp bracket in the direction of the arrow.

- The removed screws (3 places) will be reused.
- The removed fog lamp bracket will not be reused.

3. Remove from the opposite side in the same way.

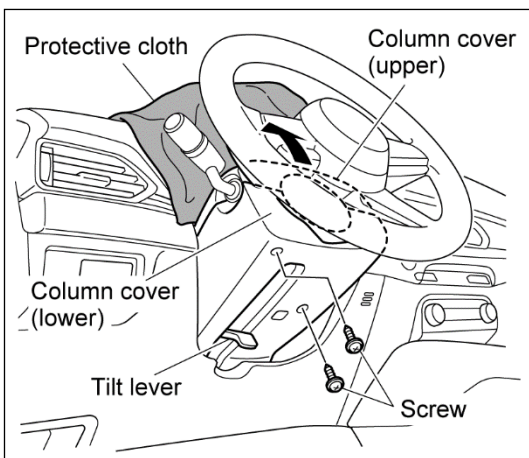


### Lamp hole cover

1. Remove the screw (1 place).
2. Disengage the tabs (6 places), and then remove the lamp hole cover in the direction of the arrow.

- The removed screw will be reused.
- The removed lamp hole cover will not be reused.

3. Remove from the opposite side in the same way.



### Column cover

- Cover the surface of the meter with the protective cloth to prevent it from becoming scratched.

1. Lower the tilt lever to unlock the steering column.
2. Cover the meter with the protective cloth.
3. Lower the steering wheel and then pull it forward.
4. Pull the column cover (upper) upward to disengage it.
5. Remove the screws (2 places) which are securing the column cover (lower).

- The removed screws and column covers will be reused.

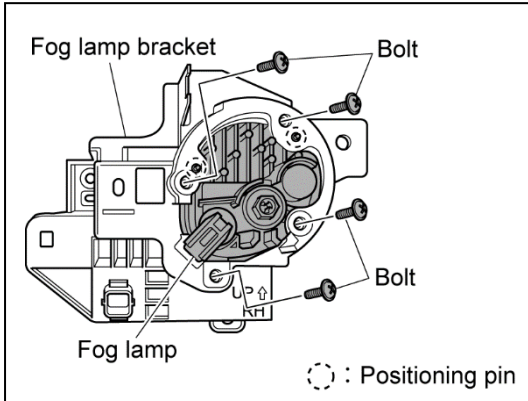
## 5. INSTALLATION OF THE FOG LAMP KIT

### Fog lamp installation

- The illustration shows the right side of the vehicle. Follow the same procedure when installing to the left side.

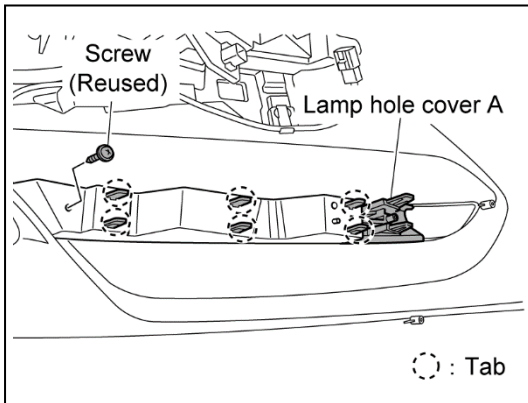
- Assemble the fog lamp and the fog lamp bracket, and secure them with the bolts (4 places).

**Bolt tightening torque: (2.1—4.0 N·m)**



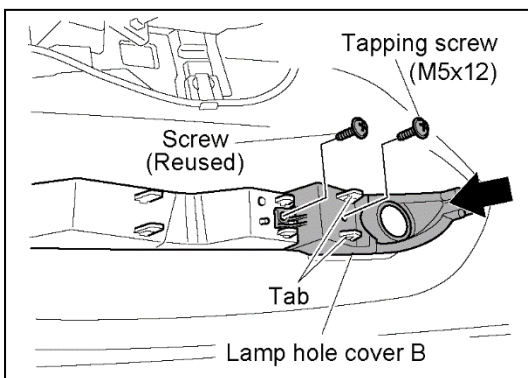
- Engage the tabs (six places) of lamp hole cover A from the top of the front bumper.
- Install and tighten using the screw (1 place: reused).

**Screw tightening torque: (0.3—0.9 N·m)**



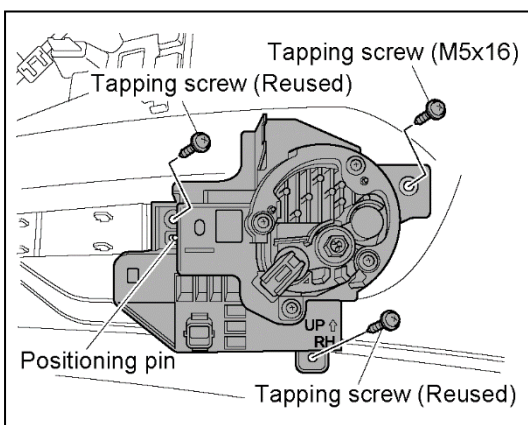
- Assemble lamp hole cover B to lamp hole cover A with the tabs (2 places) from the underside of the front bumper.
- Install and tighten the tapping screws (2 places).

**Tapping screw tightening torque: (0.3—0.9 N·m)**

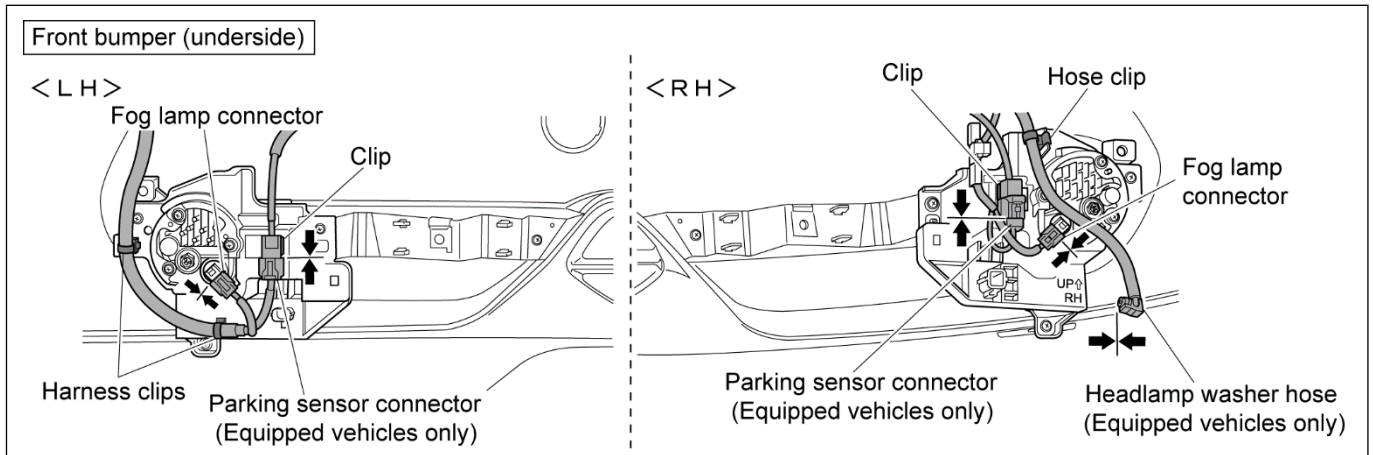


- Install the fog lamp which was assembled in step 1 to the lamp hole cover.
- Tighten the tapping screw (M5x16).
- Secure with the tapping screws (2 places: reused).

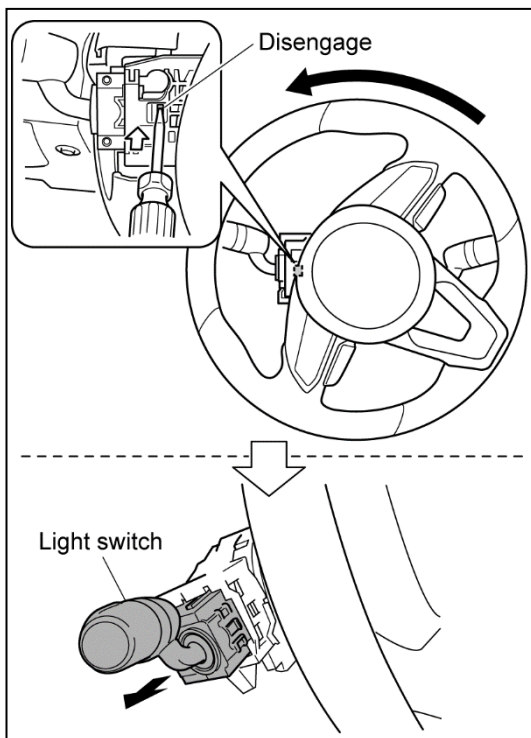
**Tapping screw tightening torque: (0.3—0.9 N·m)**



9. Return the connectors and the clips which were removed during the "Front bumper removal" procedure to their original positions.
10. Connect the fog lamp connector (1 place) on the vehicle side to the fog lamp bulb socket, and then install the harness clips (LH side: 2 places).



11. Reinstall the front bumper by following the removal procedure in reverse.



### Light switch installation

1. Turn the steering wheel (refer to the illustration at left) to disengage the hook of the light switch.
2. Remove the light switch by pulling it in the direction of the arrow.

- The removed light switch will not be reused.

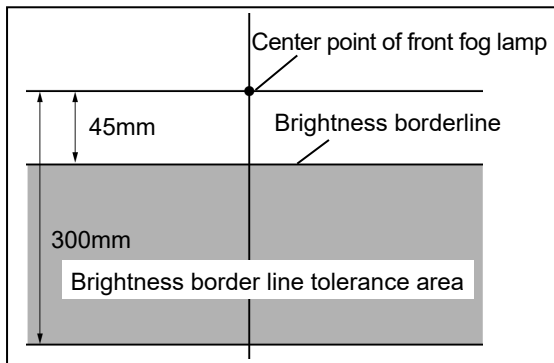
3. Install the new light switch by following the procedure for removing the existing light switch in reverse.

### Column cover installation

1. Install the column covers by following the removal procedures in reverse.

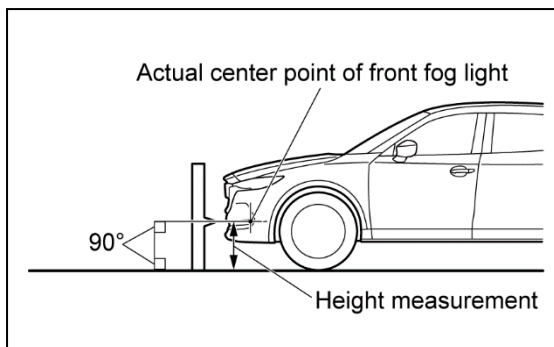
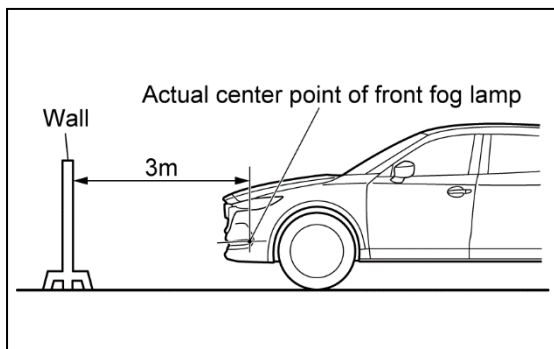


## 6. FOG LAMP AIMING



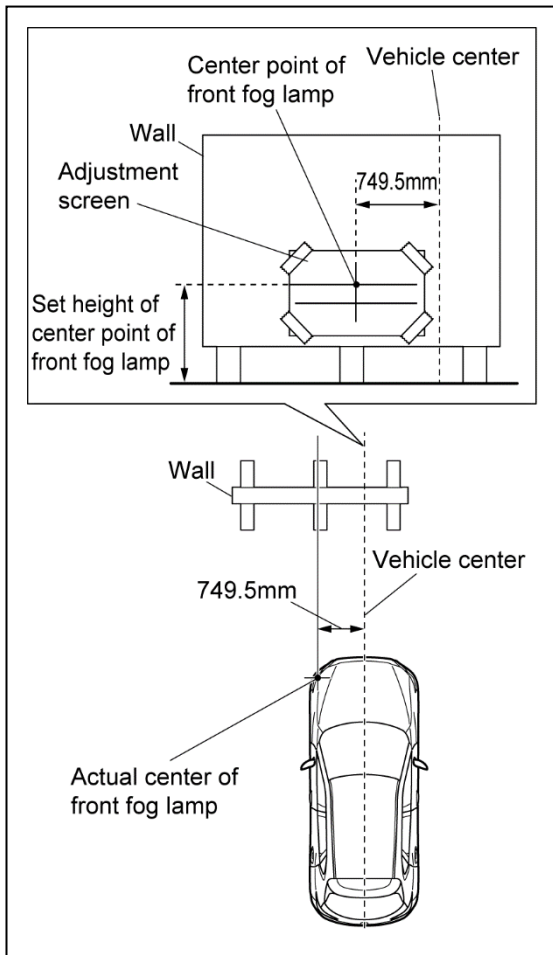
### Front fog lamp aiming adjustment

1. Empty vehicle of cargo and passengers to be at standard vehicle equipped weight.
2. Adjust the tire pressure to the specification.
3. Move the vehicle to level ground.
4. Driver must sit inside vehicle during aiming.
5. Make an adjustment screen as shown in the figure using double-weight, white paper. (Common to both left and right)
6. Line up the vehicle with the wall so that the distance to the fog lamp is 3 m from the wall.
7. Measure the height at the center point of the front fog lamp.

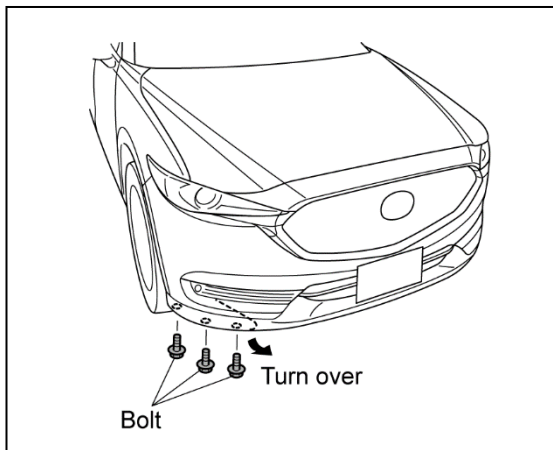


#### NOTE

- Measure the height at the center point of the front fog lamp in which the aiming is being adjusted because the vehicle height differs depending on vehicle conditions.

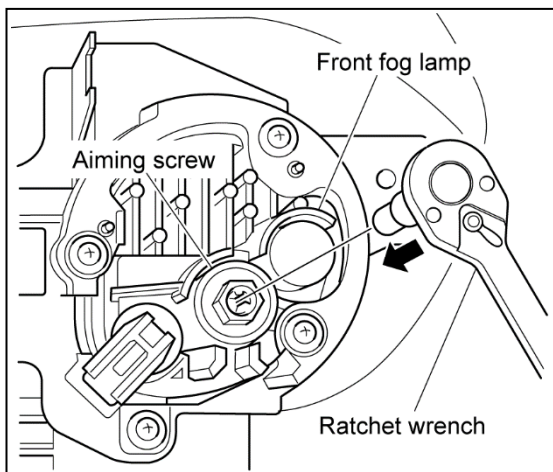


8. Align the center point of the front fog lamp with the center point of the adjustment screen center point.
9. Set a partition in front of the front fog lamp which is not being adjusted to block the light.
10. Start the engine and charge the battery.
11. Turn the front fog lamps on.
12. Verify that the actual brightness border line (Cut off line) is in the brightness border line tolerance area indicated on the adjustment screen.

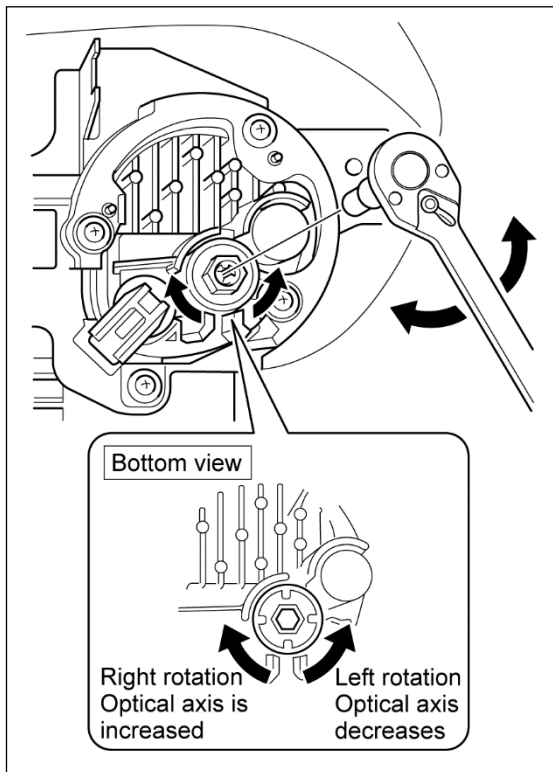


13. If the brightness border line in step 12 is not in the brightness border line tolerance area indicated on the adjustment screen, carry out the following adjustment.

- ① Remove the three front mud guard bolts underneath the front bumper, and then pull the under cover outward.



- ② Insert a ratchet wrench upward into the aiming screw at the back of the front fog lamp.



- ③ When the ratchet wrench is turned in the direction of the arrow, the aiming screw turns and the optical axis can be adjusted. Adjust so that the brightness border line is aligned with the brightness border reference line.
- ④ Return the front mudguard to its original position, and then install the bolts (3 places).








## 7. OPERATION CHECK

Connect the current sensor connector.  
Connect the negative battery cable.

**Nut tightening torque : 4.0—6.0 N·m**

- If the battery would be disconnected, some functions will no longer operate. See the vehicle workshop manual or owner's manual, and perform "Servicing after re-connecting the negative battery cable"
- Turn the ignition switch to ON and check the operation of the fog lamp.

### Fog lamp operation check

1. Turn the headlight switch to  position, and check if the position (parking) lights are on.
2. Turn the headlight switch to  position, and check if the headlights are on.
3. Push the lighting control lever forward, and check if the high beam headlights are on. Pull the lighting control lever back to original position, and check if the high beam headlights are off.  
Check if the headlight high beam indicator light in the instrument cluster illuminates when the high beam headlights are on.
4. Move the turn signal lever down/up, and check if the each turn signals flash.  
Check if the turn signal indicator lights flash during the turn signal lever is down/up position.  
Check the self-cancel for turn signal after the turn is completed.
5. Set the lighting control lever on the low beam position and turn the fog lamp switch to  position, then check if the fog lamps are on.
6. Turn the fog lamp switch to  position, and check if the fog lamp indicator light in the instrument cluster illuminates.  
Turn the fog lamp switch to OFF position, and check if the fog lamp indicator light is off.
7. Turn the headlight switch to either  position or  position with high beam, check if the fog lamp are off even the fog lamp switch is  position.
8. Turn the fog lamp switch to OFF position or turn the headlight switch to OFF position, and check if the fog lamp are off.