## **GENUINE FOG LAMP KIT**

## Using (Installation) Instructions

## Applicable model: MAZDA 3 Part number: BGV4 V4 600 (North America) BHE4 V4 600 (EU and Other LHD/RHD) BHD2 V4 600 (EU LHD/RHD DE 2.2L)

Thank you very much for buying the Mazda Genuine Parts.

Before removal and installation, you are expected to carefully read these instructions.

To use it in its best conditions, be sure to read thoroughly these instructions for full understanding of the contents and to properly use it.

## <Cautions and Requests>

- A Caution and A Warning marks shown in these instructions indicate safety precautions, which you are requested to strictly comply with during installation and use.
- **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.

- Always avoid any installation and use that are not stated in these instructions.
- Do not ever alter the product when installing it.
- To ensure safety and reliability of the work, installation and removal work must be carried out by an Authorized Mazda Dealership.
- If you have any questions about the use of the product, 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.
- Be careful not to lose removed parts, and be sure that they are kept free from scratches, grease or other dirt.

## To the dealer

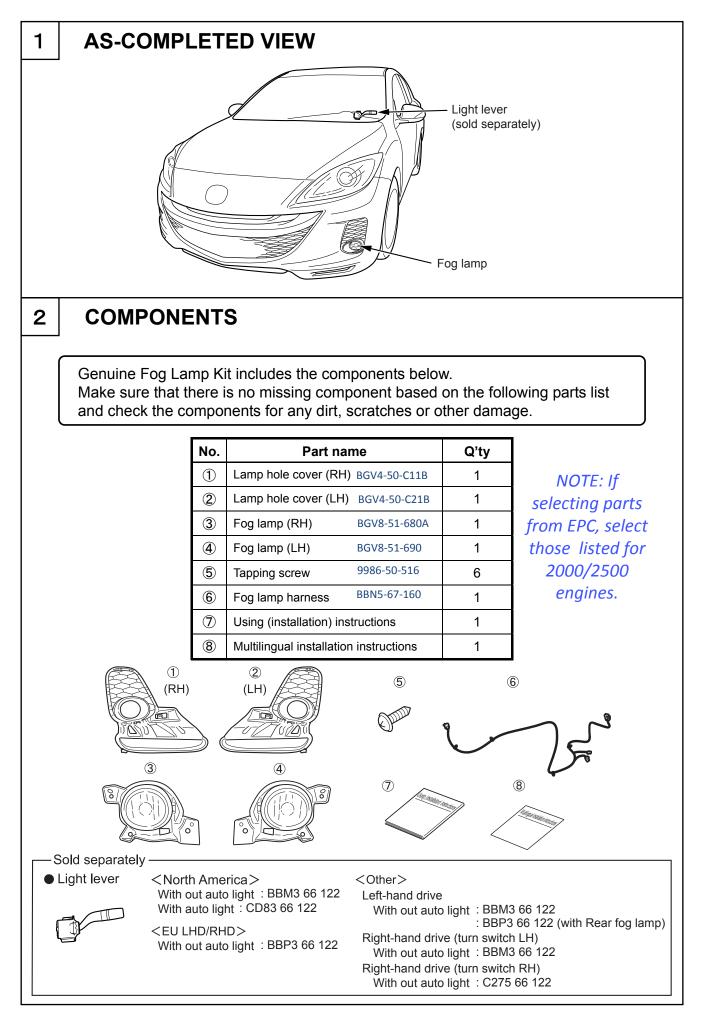
Please turn over these instructions to the customer after installation.

## 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 leave these instructions with it for the next owner.

#### Mazda Motor Corporation

3-1, Shinchi, Fuchu-cho, Aki-gun Hiroshima



# PREPARATORY WORK BEFORE INSTALLATION

Tools used (Have them ready at hand before starting the work.)

- Phillips screw driver & flat-blade screwdriver
- Fastener remover
- Protective sheet
- Wheel block

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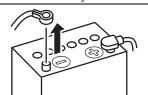
- Masking tape
- Socket wrench (8mm,10mm)
- Torque wrench

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• Make sure that operation is carried out on the level ground with the parking brake pedal and wheel block securely set. Otherwise, vehicle may start to move and injury may result.

## 

Disconnect the negative terminal of the battery and keep the terminal away from the battery. Otherwise short circuit, and accidents, electric shocks or fire may occur.



Hold the connectors when disconnecting / connecting them to ensure the disconnection / connection. Otherwise, accident or fire caused by breaking or contact failure may occur. Avoid exercising excessive force when pulling a wiring harness. Otherwise, accident caused by breaking or short-circuit, electrification or fire may occur.



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Use right tools appropriate for the purpose and size of the work to be done to ensure proper execution of the work.	Use a mat or any other protective material when removing / installing components. Otherwise, breakage of components may occur.	Place the removed parts and components on a protective sheet or equivalent to avoid any damage on such parts/components.	

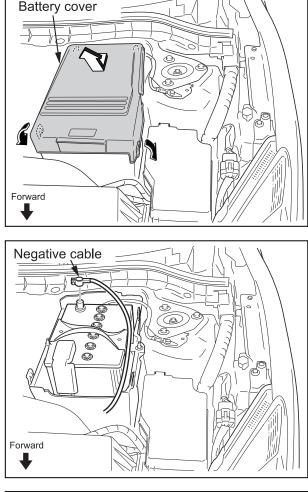
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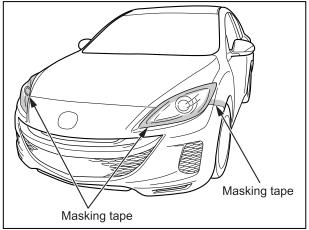
• When tightening a bolt, nut and screw, be sure to use torque wrench and tighten properly. Otherwise, improper connection, breakage or damage of the installed parts may occur.

## NOTE

- When the negative terminal of the battery gets disconnected, the memory of clock, radio and trip counter will be erased. Record the memory contents before starting the work.
- As for the removal or installation of vehicle parts, please refer to the vehicle workshop manual.

## **REMOVING THE VEHICLE COMPONENTS**





## - NOTE

- Since the removed components are to be reused when reassembling, keep them in a manner that will tell where to reinstall.
- Place the removed vehicle parts on a protective sheet to avoid any damage on the parts.

## Disconnecting the negative battery cable

- 1. Disconnect the negative cable of the battery following the instructions below.
  - ① Make sure that headlamp, air conditioner and other devices are switched off.
  - ② Disconnect the tab (two places) on the front side of the battery cover.
  - ③ Disconnect the tab (two places) on the rear side of the battery cover.
  - ④ Disconnect the negative cable of the battery.

## MARNING -

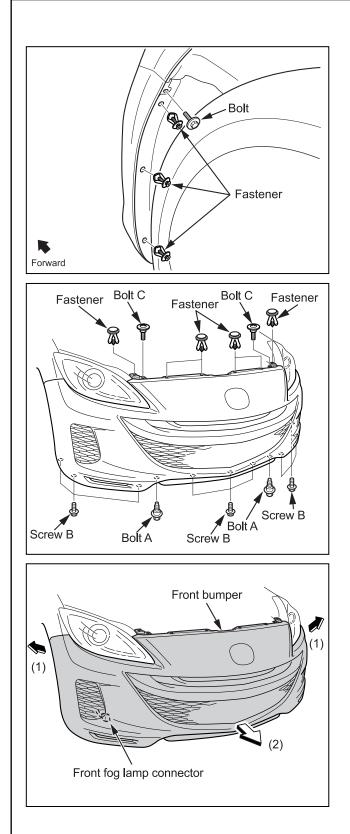
• Disconnect the negative terminal of the battery before starting the work and prevent it from contacting the terminal. Otherwise, damage to the parts, electrification or injury caused by short-circuit may occur.

#### Protecting the vehicle

 Apply the masking tape around the fenders and headlights in order to protect the vehicle from scratching or damage.

(Shaded area in the left figure)

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## Removing the front bumper

 Remove the bolt (one place) on the bumper and the fastener (three places) on the mudguard. (Perform the same procedure on the right side) Tightening torque

Bolt : 1.0~1.5N • m (When restored)

2. Remove the bolt A (two places) and the screw B (nine places) at the bottom of the bumper.

**Tightening torque** 

Bolt A :  $6.9 \sim 9.8$ N · m (When restored) Screw B :  $0.3 \sim 1.5$ N · m (When restored)

3. Remove the fastener (six places) and the bolt C (two places) at the top of the bumper.

#### **Tightening torque**

Bolt C : 6.9~9.8N • m (When restored)

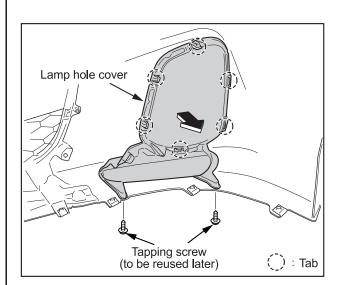
4. Pull the front bumper in the direction of the arrow (1) and disconnect the tabs from the front bumper.

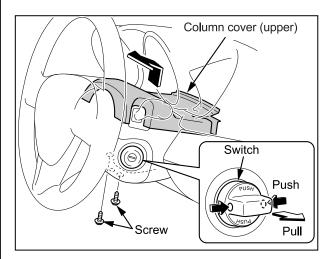
Hold the bumper and be careful not to drop it when disconnecting it.

5. Remove the front bumper by pulling it in the direction of the arrow (2).

## - /!\ Warning -

- Be sure not to pull the front bumper hard because it is connected to the front fog lamp harness.
   Otherwise, accident caused by breaking, short-circuit, electrification or fire may occur.
- 6. Disconnect the front fog lamp connector (one place) on the back surface of the lamp hole cover.





## Removing the lamp hole cover (RH/LH)

1. Remove the tapping screw (two places).

## -NOTE -

- Be careful not to lose the tapping screws because they are to be reused later.
- Disconnect the tab (six places) and remove the lamp hole cover in the direction of the arrow. (Perform the same procedure on the opposite side.)

The removed lamp hole cover will not be used with this product.

## Removing the column cover (upper)

1. Remove the switch by pushing the buttons on the both sides of the switch.

(Vehicles with advanced keyless system only)

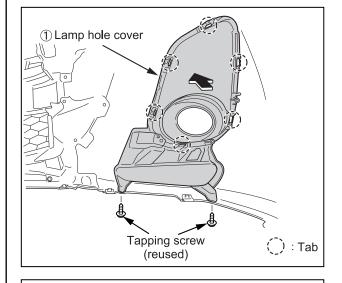
- 2. Release the lock by pulling the tilt lever down.
- 3. Hold down the steering wheel and pull it forward.
- 4. Remove the column cover (upper) by pulling it up.
- 5. Remove the screw (two places).

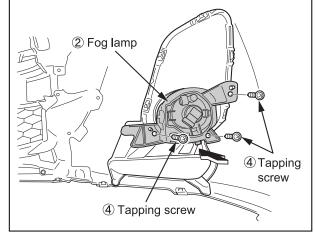
Tightening torque

Screw : 0.3~1.5N • m (When restored)

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## **INSTALLING THE FOG LAMPS**





## -NOTE –

• The procedures shown here is for the right-hand side only. Use the same procedure for the left-hand side parts.

## Installing the lamp hole cover (RH/LH)

1. Install the ① lamp hole cover in the reverse order of removing it.

### **Tightening torque**

Tapping screw (reused) : 0.3~1.5N · m

## Installing the fog lamp (RH/LH)

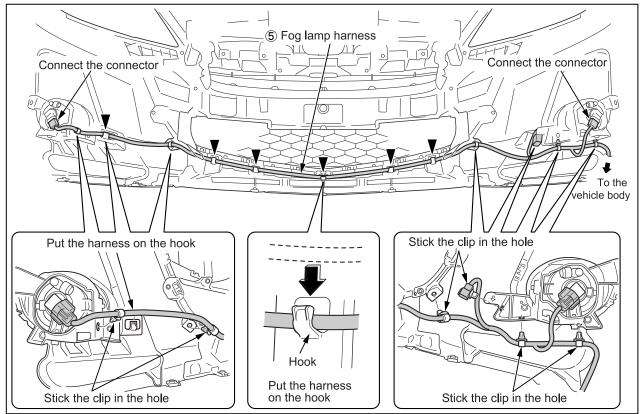
 Secure the ② fog lamp to the ① lamp hole cover with the ④ tapping screw (three places).

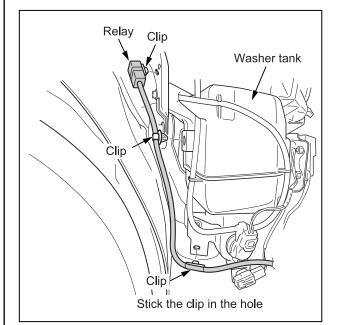
## Tightening torque

④ Tapping screw : 0.3~1.5N • m

### Routing the fog lamp harness

 Connect the connector of the (5) fog lamp harness to the fog lamp. Route the harness on the front bumper with the clip (six places) and the hook (▲ marks / six places) as shown in the diagram below.

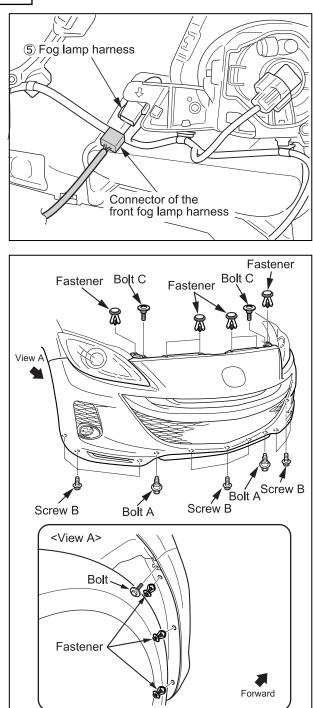




2. Route the (5) fog lamp harness on the vehicle components as shown in the left diagram and fix it with the clip (three places).

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## **RESTORING THE VEHICLE COMPONENTS**



## Restoring the front bumper

1. Connect the removed front fog lamp harness to the connector of the (5) fog lamp harness.

## · <u>/!</u>\ warning -

- When connecting the harnesses, insert the connectors firmly until they lock securely into place.
   Otherwise, fire or accidents by disconnection / poor contact may occur.
- 2. Install the front bumper in the reverse order of removing it.

(See the item "Removing the front bumper" in the page 5.)

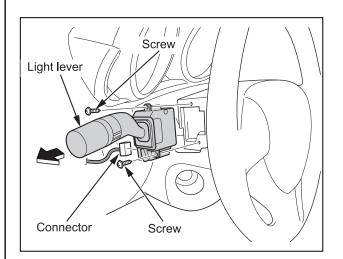
## -NOTE -

- Be sure to tighten the bolt A and the screw B at the bottom of the bumper after aiming adjustment is completed.
- 3. Removing the masking tapes.

## INSTALLING THE LIGHT LEVER AND THE WIPER LEVER

## (%Light lever is sold separately)

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## Removing/installing the light lever

- 1. Disconnect the connector of the existing light lever.
- Remove the screw (two places / to be reused later) to remove the existing light lever in the direction of the arrow.
- 3. Install the light lever (sold separately) in the reverse order of removing it.

## Tightening torque

Screw : 0.3~1.5N • m

The removed light lever will not be used with this product.

4. Perform an operation check. (See the item "8. CHECKING OPERATION)

## Installing the column cover

1. Install the column cover (upper) in the reverse order of removing it.

(See the item "Removing the column cover (upper)" in the page 6.)

## **CHECKING OPERATION**

## ∕!∖ WARNING

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- When starting the engine, clear area of all individuals around the vehicle or inside the vehicle. Serious accident may occur if the vehicle makes sudden movements.
- Do not start the engine in the place with bad ventilation such as garage. Exhaust gas can cause intoxication and suffocation.
- 1. Connect the negative cable of the battery.
- 2. Install the battery cover in the reverse order of removing it.
- 3. Perform an operation check following the instructions below.

#### <Operation check procedures>

#### Common for overseas

- 1. Turn the headlight switch to EDO 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.

#### EU/OTHER

- 5. Turn the headlight switch to  $\exists Dd \exists D$  position, and turn the front fog light switch to  $\ddagger D$  position, then check if the front fog lights are on.
- 6. Turn the fog light switch to ₺ and () ≠ position, and check if the front fog light indicator light and the rear fog light indicator light in the instrument cluster illuminates respectively.
- Turn the fog light switch to OFF position, and check if the front and rear fog light indicator lights are off. 7. Turn the headlight switch to ≣○ or 글Dd= position, and turn the fog light switch to \$\$\$\$ position, then check if the rear fog lights are on. (with rear fog lights only)
- 8. Turn the headlight switch to OFF position, and check if both the front and the rear fog lights are off.

#### North America

- 5. Set the lighting control lever on the low beam position and turn the fog light switch to  $10^{10}$  position, then check if the fog lights are on.
- 6. Turn the headlight switch to either ∃D0 = position or ≣○ position with high beam, check if the fog lights are off even the fog light switch is ‡○ position.
- 7. Turn the fog light switch to OFF position or turn the headlight switch to OFF position, and check if the fog lights are off.





If operation is normal, this completes the procedure.

<Please to check if operation is incorrect>

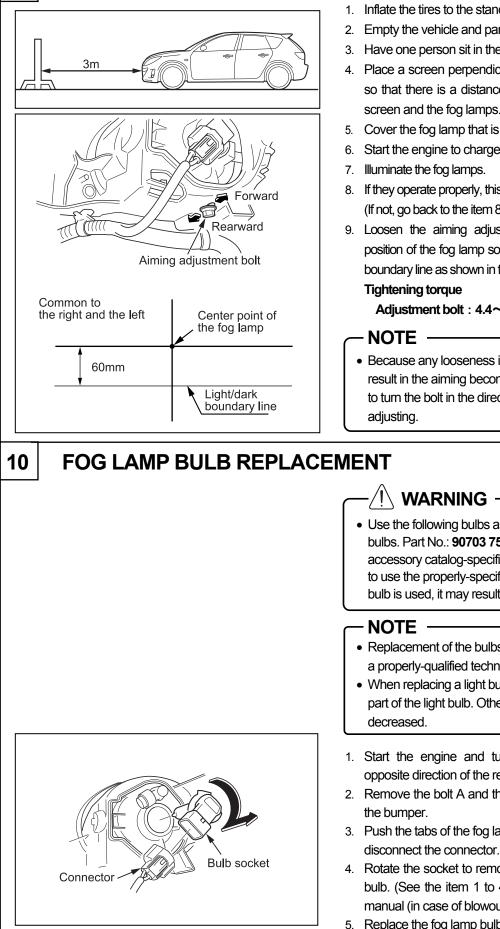
- Check that none of the harnesses are clamped.
- Check that all connectors are connected correctly.
- When the battery is disconnected, the windows will not fully open and close automatically. Perform the following procedure to resume operation:
- 1. Turn the ignition switch to the ON position.
- 2. Press the switch and fully open the window.
- 3. Pull up the switch and continue holding for about 2 seconds to fully open the window.
- 4. Check if the windows fully open and close automatically.
  - ※ If the function does not operate even after the ignition switch is turned off, contact an Authorized Mazda Dealer.
- Disconnecting the battery immobilizes the DSC system.

(At this point, the DSC OFF indicator light flashes and the TCS/DSC indicator light is illuminated.) To restore the DSC to an operable condition, perform the following procedures:

- 1. Turn the ignition switch to the ON position.
- 2. Turn the steering wheel completely to the right and then completely to the left.
- 3. Verify that the DSC OFF indicator light goes out.
- 4. Turn the ignition switch off and turn it back on.
- 5. Verify that the TCS/DSC indicator light goes out.
  - % If the TCS/DSC or DSC OFF indicator lights do not go out after turning the ignition switch to the ON position, consult your Mazda dealer.

## AIMING ADJUSTMENT

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- 1. Inflate the tires to the standard pressure.
- 2. Empty the vehicle and park it on a level surface.
- 3. Have one person sit in the driver's seat.
- 4. Place a screen perpendicularly in front of the vehicle so that there is a distance of 3 meters between the screen and the fog lamps.
- 5. Cover the fog lamp that is not being adjusted.
- 6. Start the engine to charge the battery.
- 7. Illuminate the fog lamps.
- 8. If they operate properly, this is the end of the adjustment. (If not, go back to the item 8 in the page 11)
- 9. Loosen the aiming adjustment bolt and adjust the position of the fog lamp so that it is within the light/dark boundary line as shown in the diagram.

**Tightening torque** Adjustment bolt : 4.4~5.3N • m

 Because any looseness in the adjustment bolt can result in the aiming becoming misaligned, be sure to turn the bolt in the direction of tightening when adjusting.

 Use the following bulbs as replacement fog lamp bulbs. Part No.: 90703 7550 [H11 12V 55W] or the accessory catalog-specified bulbs. Always be sure to use the properly-specified bulb. If an incorrect bulb is used, it may result in fire.

## NOTE

- Replacement of the bulbs should be carried out by a properly-qualified technician.
- When replacing a light bulb, do not touch the glass part of the light bulb. Otherwise, bulb life may be decreased.
- 1. Start the engine and turn the wheel fully in the opposite direction of the replaced bulb.
- 2. Remove the bolt A and the screw B at the bottom of the bumper.
- 3. Push the tabs of the fog lamp harness connector and disconnect the connector.
- 4. Rotate the socket to remove it. Pull out the fog lamp bulb. (See the item 1 to 4 of the Vehicle instruction manual (in case of blowout).)
- 5. Replace the fog lamp bulb with a new bulb.

## Installation inspection sheet

## FOG LAMP KIT

BGV4 V4 600 (North America) MAZDA 3 BHE4 V4 600 (EU and Other LHD/RHD) BHD2 V4 600 (EU LHD/RHD DE 2.2L)

## A. Restoring the vehicle components

• Reinstall the vehicle components in the reverse order of removing them.

## /I\ CAUTION -

- After reinstalling the vehicle parts, check for dirt. Clean any dirty parts.
- Check if the connectors are connected properly.

## B. Inspection items after installation

• Inspect the installed parts and removed and re-installed parts following the items below.

	Check point (O)					
Items to be checked	Gap / fit & finish	Scratch, stain, harness interference	Tightening & engagement	Function	Aiming adjustment	Operation check
Fog lamp (RH/LH)	0	0	0		0	0
Light lever		0	0	0		0
Fog lamp indicator light						0
Front bumper	0	0	0			
Mudguard	0	0	0			
Column cover	0	0	0			
Battery terminal			0			
Power window						0
DSC						0

## C. Priority items

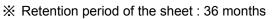
No.	Item	Check
1	Check if the fog lamps operate properly.	
2	Check if the bolts/ screws retaining the following component are securely fastened. <ul> <li>Battery terminal</li> </ul>	

#### [Important point]

Procedure	Part name	Specified torque	Torque value at the time of check	Inspector (name)
5 -1 (page 7)	④Tapping screw	0.3~1.5 N · m	N∙m	

#### Fog lamp kit installation inspection

Date	: /		/		
VIN No.					
Approved		Checked		Prepared	



CHECK

## [For the installation workshop]