# **Projector Lens Replacement Procedure**

### **Model Number**

## LNS-W50/LNS-W51/LNS-W52/LNS-S50/LNS-T50/LNS-T51

## **Notes on Lens Replacement**



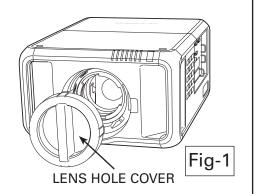
- Lens installation and replacement should be made by the qualified service personnel.
- Do not give a shock or excessive load to the projector or the lens components as the projector and lens components contain precision parts.
- When transporting the projector with the lens, remove the lens before transporting the projector. The lens and the lens shift mechanism may be damaged by improper handling during transportation.
- Before removing or installing the lens, be sure to turn off the projector, wait until the cooling fans stop, and turn off the main power switch.
- Do not touch the lens surface when removing or installing the lens.
- Keep fingerprints, dust or oil off the lens surface. Do not scratch the lens surface.
- Work on a level surface with a soft cloth under it to avoid scratching.
- If you remove and store the lens, attach the lens hole cover to the projector to keep off dust and dirt.
- When using the LNS-W52 lens unit, set the lens shift adjustment to the center of the screen. Otherwise, the edges of the screen may become darker or shadows may appear.

Printed in Japan 1AA6P1P5701-- (IFNR)

## **■**Installing or Removing the Optional Lens

1 Remove the Lens hole cover

Keep the lens hole cover in safe for later use. Use the lens hole cover to the projector during transportation.



2 Mount the Lens

- 1. Remove the protective caps (front and back) on the lens.
- Insert the lens into the Lens Bracket so that the red marks on the lens and Lens Bracket can match.
- 3. Slowly turn the lens clockwise until it clicks. Make sure that the lens is fully inserted to the projector.

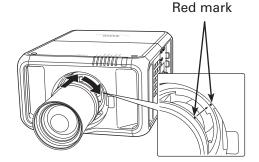


Fig-2

Remove the Lens

- Press and hold the LENS SHIFT button for more than 5 seconds to shift the lens to the center position.
- Turn off the projector, wait until the cooling fans stop, and then turn off the Main On/Off switch or unplug the AC power cord.
- 3. Push the Lens release button and turn the lens counter-clockwise and then take it out.

NOTE: Be careful not to drop the lens.

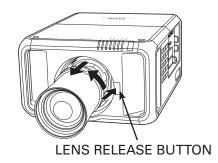
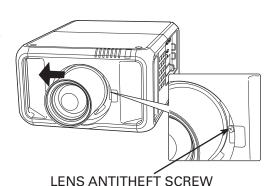


Fig-3

#### About the lens antitheft screw

To prevent removal of the installed lens, move the lens to the leftmost position with the Lens Shift function, and then loosen an antitheft screw on the right side of the lens until it will no longer be loosened.

Doing so makes the Lens release button unworkable and the lens will not be removed from the projector. When you replace the lens, tighten the antitheft screw.



## **■** Focus Correction

When the lens is attached to the projector and images are being projected onto the screen, the peripheral focus may be out of focus in some localized areas. If this happens, adjust the three focus adjustment screws on the lens mount to adjust the focus balance of the screen.

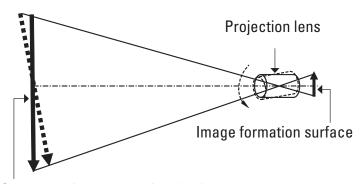
### About the focus balance

### Relationship between lens orientation and screen focus

If the projection lens is tilted with respect to the plane of the screen, uneven focus will result. For example, when the front side of the lens (screen side) is tilted downward as shown in the figure below (direction of the dotted arrrow), the upper part of the screen will be tilted backward and the lower part of the screen will be tilted forward.

Three focus adjustment screws on the lens mount may be used to compensate for uneven screen focus.

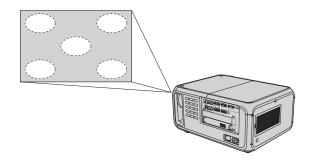
Please adjust the focus balance of the screen by turning the focus adjustment screws.



Screen surface versus focal point

### **Adjustment preparations**

- Set up the projector and project images on the screen.
- Press and hold the LENS SHIFT button for more than 5 seconds to shift the lens to the center position.
- Adjust the focus to make the center area sharpest, by using the focus adjustment of the projector.
- 4. When the peripheral focus is out of focus in some localized areas, follow the procedure on the next page and adjust the focus balance on the screen.



### Adjustment procedure

- 1. Loosen the focus locking screws (Black) of the adjustment point.
- 2. Turn the focus adjustment screws (Silver) to adjust the focus balance.
- 3. When adjustment is complete, tighten the locking screws (Black).

Three adjustment screws can work on the following focus balances respectively.

#### Point A

Adjust the focus balances of left and right side of the screen.

Turning the screw counter-clockwise

• Move the optimal focus of right side of the screen backward.

Turning the screw clockwise

Move the optimal focus of right side of the screen forward.

#### Point B

Adjust the focus balances of top left and bottom right of the screen.

Turning the screw counter-clockwise

Move the optimal focus of bottom right of the screen backward.

Turning the screw clockwise

Move the optimal focus of bottom right of the screen forward.

#### Point C

Adjust the focus balances of top right and bottom left of the screen.

Turning the screw counter-clockwise

• Move the optimal focus of top right of the screen backward.

Turning the screw clockwise

• Move the optimal focus of top right of the screen forward.

NOTE; Please use either a hexagon screwdriver or hexagon wrench (3 mm) for adjustment screws and locking screws.

