# LCD PROJECTOR LENS MODEL NO. LNS-W03

## LENS REPLACEMENT AND INSTALLATION PROCEDURES

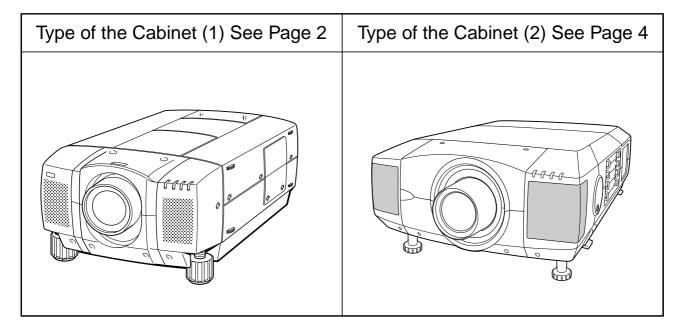
#### NOTES ON REPLACEMENT AND INSTALLATION

The procedures and the needed pars for lens installation depend on the type of cabinet. Before installing or replacing the lens, make sure the type of cabinet and be sure to refer to the Installations corresponding with your projector.

When installing or replacing the lens, make sure the Lens Model No. matches with your projector. Refer to the catalog, or contact your sales dealer for the proper Lens Model No.

#### TYPE OF THE CABINET AND INSTALLATION PROCEDURES

Refer to the Installation procedure corresponding to your projector and install the lens correctly. (See the chart below.)



For use the other models (other than above cabinet), contact your sales dealer.

## NOTES ON LENS INSTALLATION

The ZOOM, FOCUS and LENS SHIFT adjustment on the Top Control or the Remote Control cannot be operated with this Lens.

- Lens installation and replacement should be made by the qualified service per-
- Be sure to install the lens following this procedure precisely.
- The lens cover is on the lens for protection. Be sure to replace the lens cover before installation.
- When installing or replacing the lens, be careful not to stain, scratch or damage the lens.

#### LIST OF CONTENTS

Following parts are included in the packing.

 LENS 1 pc. DRIVER 1 pc. LIGHT-BLOCK SHEET 2 pcs.

> Type FE1 (Part No. 610 280 2634) For use the Type (1) Cabinet Type FB1 (Part No. 610 285 8211) For use the Type (2) Cabinet

## ♠ BE SURE TO CHECK FOR SAFETY

After installing or replacing the lens, be sure to check the following for safety.

- 1. Check the lens is securely fixed by 4 screws.
- 2. Check no part is missing, or no mounting part is loose.

Some parts are not used for installation or replacement. Keep these parts for later use.

Note: Figures in this manual may be differ from the actual product.

### LENS REPLACEMENT AND INSTALLATION PROCEDURE (Type 1 Cabinet)

**UPPER LENS COVER** 

C

Fig-1

LOWER LENS COVER

Perform the steps 1 to 5 for lens replacement and installation.

First set the lens at the center position with lens shift adjustment.

- 1 REMOVE THE LENS COVER. (See figure-1)
- 1. Remove screws A (2 screws).
- 2. Pull down the lower lens cover while pushing the part D, then remove it.
- 3. Remove screws B (2 screws).
- 4. Remove screws C (2 screws) and remove upper lens cover.



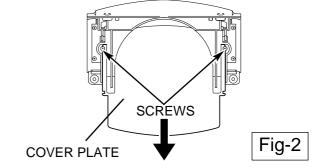
#### IN CASE OF MODEL WITHOUT LENS

REMOVE THE COVER PLATE OF THE LENS COVER. (See figure-2)

Remove 2 screws and pull down the plate.

(At the step 4, insert the light-block sheet in the same position as the removed cover plate has been placed. Two screws are not used.)

Disconnect the Lens Shift connector ("K16A") from circuit board. (See Fig. 3.)

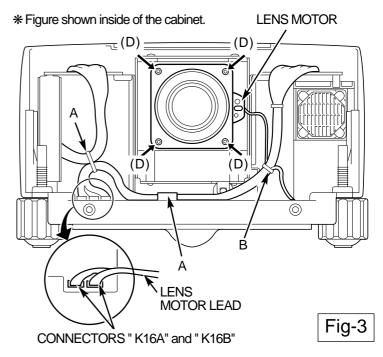


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#### IN CASE OF MODEL WITH LENS

REMOVE THE LENS. (See figure-3.)

- Disconnect the Lens Shift connector "K16A" from circuit board.
- 2. Disconnect the Zoom and Focus connector "K16B" from circuit board.
- 3. Loosen the A, B wire holder and remove the lens motor lead.
- 4. Remove screws D (4 screws) which fastens the lens and remove the lens.



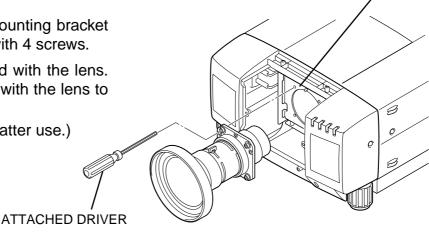
3 INSTALL THE LENS. (See figure-4)

1. Remove protective caps(front and back) on the lens.

2. Mount the lens on mounting bracket of the main cabinet with 4 screws.

Use the screws included with the lens. Use the driver included with the lens to fasten the screws.

(After using, keep it for latter use.)



4 INSTALL THE LIGHT-BLOCK SHEET. (See figure-5)

Install the light-block sheet around the lens as shown in the illustration. Use the sheet included with the lens.

Make sure the part no. and mark (TOP and BACK) on Light-Block Sheet and set them properly.

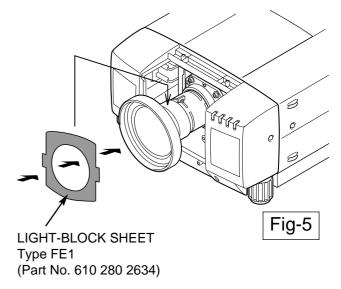
#### **ADJUST FOCUS**

Adjust focus following Focus Adjustment on page 6.

## 5 MOUNT THE LENS COVER. (See figure-6)

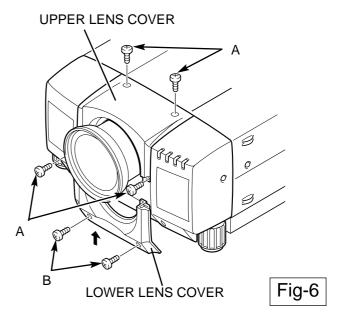
When in install the both upper and lower lens covers, install the light-block sheet so that it should be placed in the guide slot. (place of the cover plate had been placed. See figure-2.) If the installation of light-block sheet is incorrect, it will be the cause of leakage of light or the dust entering at the main cabinet.

- 1. Insert the upper part lens cover and fix them with screws A (4 screws).
- 2. Insert the lower part lens cover and fix them with screws B. (2 screws).



LENS MOUNTING BRACKET

Fig-4



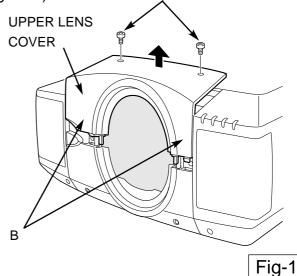
### LENS REPLACEMENT AND INSTALLATION PROCEDURE (Type 2 Cabinet)

Perform the steps  $\boxed{1}$  to  $\boxed{7}$  for lens replacement and installation.

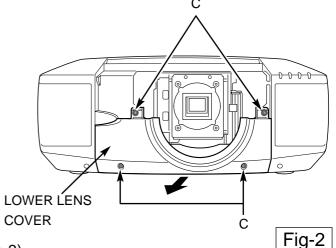
First set the lens at the center position with lens shift adjustment.

1 REMOVE THE UPPER LENS COVER. (See figure-1)

- 1. Remove screws A (2 screws).
- 2. Push part B and pull Upper Lens Cover up.

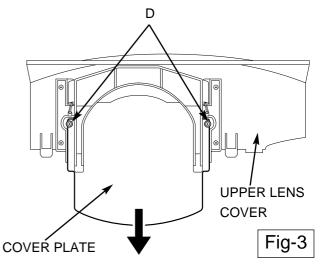


- 2 REMOVE THE LOWER LENS COVER. (See figure-2)
- 1. Remove screws C (4 screws).
- 2. Pull Lower Lens Cover toward front and remove.



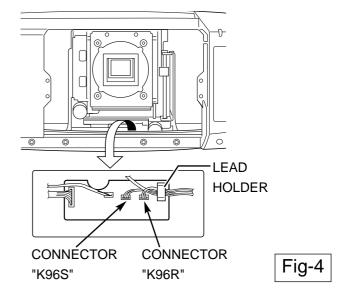
- REMOVE THE COVER PLATE. (See figure-3)
- 1. Remove screws D (2 screws) and Cover Plate on the back of Upper Lens Cover.

(At the step 6, insert the light-block sheet in the same position as the removed cover plate has been placed. Two screws are not used.)



## 4 DISCONNECT THE LENS SHIFT CONNECTORS. (See figure-4)

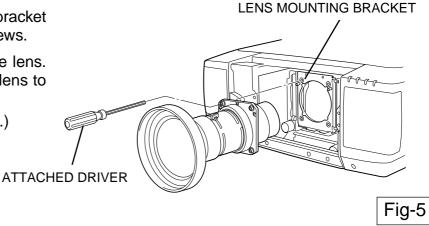
Disconnect the Lens Shift Connectors ("K96S" and "K96R") from circuit board.



- 5 INSTALL THE LENS. (See figure-5)
- 1. Remove protective caps(front and back) on the lens.
- 2. Mount the lens on mounting bracket of the main cabinet with 4 screws.

Use the screws included with the lens. Use the driver included with the lens to fasten the screws.

(After using, keep it for latter use.)



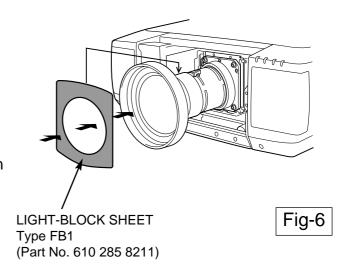
### 6 INSTALL THE LIGHT-BLOCK SHEET. (See figure-6)

Install the light-block sheet around the lens as shown in the illustration. Use the sheet included with the lens.

Make sure the part no. and mark (TOP and BACK) on Light-Block Sheet and set them properly.

#### **ADJUST FOCUS**

Adjust focus following Focus Adjustment on page 6.

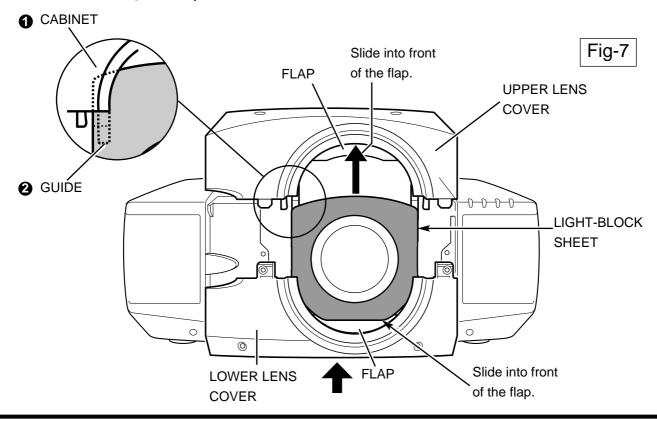


## 7 MOUNT THE LENS COVER. (See figure-7)

- 1. Replace Lower Lens Cover. Slide Light-Block Sheet into the guide of Lower Lens Cover and set them in front of the flap. (See Fig. 7.) Fix Lower Lens Cover with 4 Screws C. (See Fig. 2.)
- Replace Upper Lens Cover. Slide Light-Block Sheet into the guide of Upper Lens Cover and set them in front of the flap. (See Fig. 7.) Fix Upper Lens Cover with 2 Screws A. (See Fig. 1.)

Slide upper both side of LIGHT BLOCK

Sheet into between 1 and 2



### **FOCUS ADJUSTMENT**

Set up the projector and project image on the screen.

- 1. Loosen the Focus Lock Screw on the projection lens.
- 2. Rotate the projection lens to obtain proper focus on center area of the screen.

When the distance of the screen and lens is 1 meter, set mark (yellow) of the lens on Focus Lock Screw position.

3. Lock the Focus Lock Screw securely.

When proper focus is not observed at outer area of the screen, proceed following adjustments.

- 4. Loosen the Focus Lock Ring on the projection lens. (Turn the Lock Ring to counter-clockwise.)
- 5. Rotate the lens to obtain proper focus on outer area of the screen.
- 6. Lock the Focus Lock Ring securely. (Turn the Lock Ring to clockwise.)

If proper focus is not observed entire screen, repeat above adjustment 1~ 6.

