

BEFORE REMOVING THE PROJECTION UNIT FROM THE UNIT AT THE USER'S LOCATION

CAUTION:

1. **Be sure to make a note of the LAMP RUN TIME (value A) in Service Mode (LCD Main C.B.A. (1)):**

SERVICE MODE RESET	1	←*1
TOTAL TIME		
130W	5535h	←*2
150W	0h	
LAMP RUN TIME	535h	←*3
130W	535h	←*4 Value A (changeable)
150W	0h	
FILTER TIME	190h	←*5 Value B (changeable)
2502:1	9002:1	2303:1
2706:1		2305:1

< Service Mode (LCD Main C.B.A. (1)) >

- *1: The number of Lamp resets
*2: The total elapsed Lamp operation time (in hours)
*3: The current elapsed Lamp operation time (in hours)
*4: The current elapsed Lamp operation time (in hours)
*5: The total elapsed Filter use time (in hours)

LAMP TIME is stored in EEPROM on the LCD Main C.B.A. Therefore, before removing the Projection Unit at the user's location, make a note of the LAMP RUN TIME (value A) in Service Mode.

Then, after installing the new Projection Unit (**without the Lamp**) at the user's location, be sure to install the original Lamp and set the LAMP RUN TIME to the original value (value A) in Service Mode.

Otherwise, OSD and LED indication to request for Lamp replacement will be displayed at the wrong time.

Note:

In case it is impossible to make a note of the LAMP RUN TIME because of a defective LCD Main C.B.A., ask the customer their daily average use and the approximate age of the current Lamp. Then, calculate the LAMP RUN TIME as follows and make a note.

Daily average use (hours)

 ×

Approx. age (days)

 =

LAMP RUN TIME (hours)

2. **Be sure to make a note of the FILTER TIME (value B) in Service Mode (LCD Main C.B.A. (1)):**

FILTER TIME is stored in EEPROM on the LCD Main C.B.A. Therefore, before removing the Projection Unit at the user's location, make a note of the FILTER TIME (value B) in Service Mode.

Then, after installing the new Projection Unit at the user's location, be sure to set the FILTER TIME to the original value (value B) in Service Mode.

Otherwise, OSD and LED indication to request for Air Filter cleaning will be displayed at the wrong time.

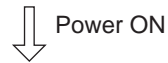
3. After removing the Projection Unit, take out the Lamp from the Projection Unit once and keep it. Then, be sure to install the Lamp into the new Projection Unit for replacement.

Service Mode Map

How to ENTER Service Mode:

VOLUME DOWN button + TV/VIDEO key
(on the Center Panel) (on the remote)

(for more than 5 seconds in power off condition)



SERVICE MODE
KEY DET IR:1 UNIT:1
IC3701:1 5003:1 5006:1
IC5301:1 5502:1 7201:1
IC6001 PORT V:1.00 B:15
P0 100-0111 P7 01001110
P1 00000000 P8 11000111
P2 11100000 P9 ---011
P4 -0-1-1-1 PA 00111000
P5 ---01001 PB 11000000
P6 00110001 PC ---1111

< Service Mode (TV Main C.B.A.) >

SWAP key (on the remote) ↓
(for more than 5 seconds)

↑ RECALL key (on the remote)

SERVICE MODE
LAMP / FILTER / IIC
IC2301PORT / SERIAL
VER:0202318
V9F 3F 81 01 9C 9C 20 33
P7F C3 00 9E 9E 01 00 00

< Service Mode (LCD Main C.B.A.) >

ACTION key (on the remote) ↙ ↘
RECALL key (on the remote)

↙ ↘ ACTION key (on the remote)

SERVICE MODE RESET	1	
TOTAL TIME		
130W	5535h	
150W	0h	
LAMP RUN TIME	535h	
130W	535h	
150W	0h	
FILTER TIME	190h	
2502:1	9002:1	2303:1
2706:1		2305:1

< Service Mode (LCD Main C.B.A.(1)) >

SERVICE MODE
IC2301 PORT
P0 00000000 P7 10000001
P1 --001000 P8 ---0001
P2 00001111 P9 -1110011
P3 00000010 P1010100000
P4 11001111 P11---00000
P5 11001110 P12-----0
P6 --000000
9202:12 9204:0E 9801:E2
9508:12 9501:00 9803:BB

< Service Mode (LCD Main C.B.A.(2)) >

How to Exit:
Power OFF

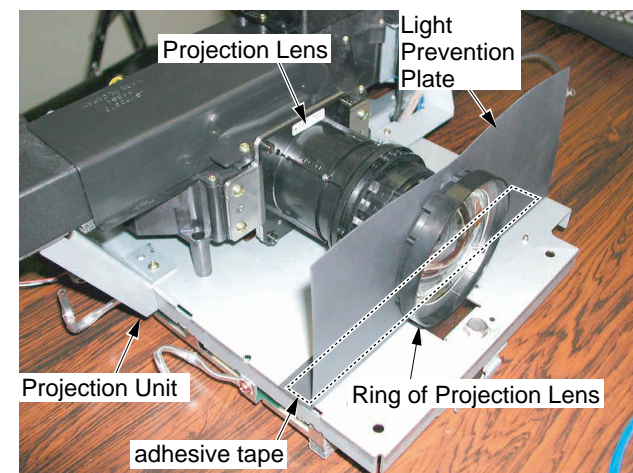
WHEN REPLACING THE PROJECTION UNIT ON THE UNIT AT THE USER'S LOCATION

Warning:

The unit MUST NOT be operated without an Air Filter!! Use Filter tool!!

CAUTION:

1. When removing the Projection Unit, take out the Lamp from the Projection Unit once and keep it. Then, be sure to install the Lamp in the new Projection Unit as a replacement.
2. When installing the Projection Unit, confirm that the Light Prevention Plate is installed correctly. If not, install the Light Prevention Plate as shown.
 - 1) Insert the hole of the Light Prevention Plate to the Projection Lens while opening slit.
 - 2) Contact it against the ring of the Projection Lens and paste with double-sided adhesive tape as shown.



ADJUSTMENT/SETTING of the Projection Unit

Be sure to do the following:

1. Picture Position Adjustment
2. Focus Adjustment

Note:

Item 2 is not always necessary. Perform this adjustment if necessary. (Normally, it is not necessary to adjust.)

3. Clogged Filter Detection Adjustment (Automatic adjustment)

Note:

Item 3 is always necessary when replacing the Projection Unit or the Front Fan.

4. Set LAMP RUN TIME to the original value

Note:

Item 4 is always necessary to use the original Lamp.

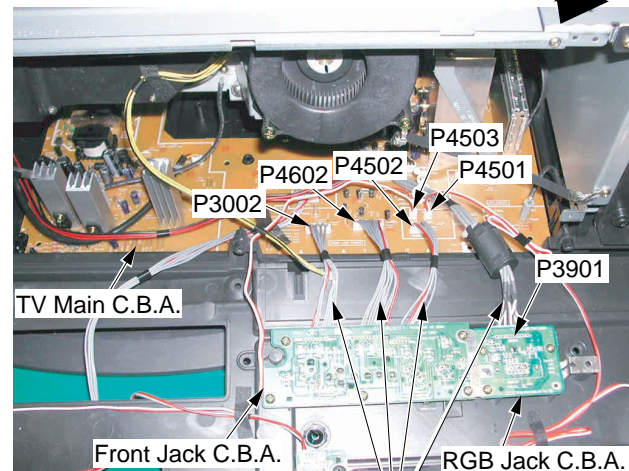
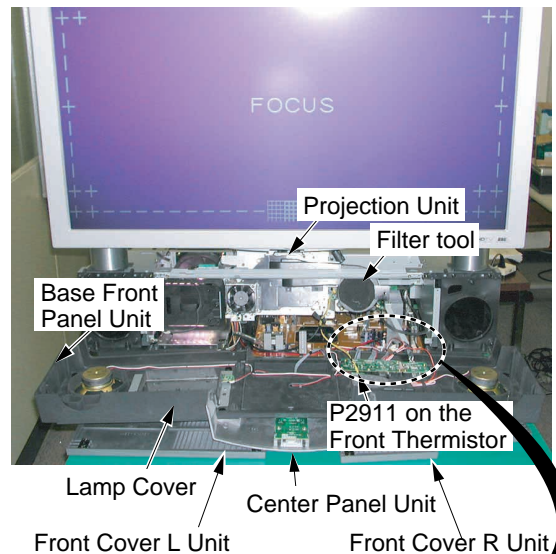
5. Set FILTER TIME to the original value

Note:

Item 5 is always necessary to use the original Air Filter. (If the Air Filter is cleaned, it is not necessary.)

Preparation of Adjustment

1. Install the original Lamp into the new Projection Unit. Then, install the new Projection Unit into the unit.
2. Connect Connector P2911 on the Front Thermistor and install the Center Panel Unit (Operation C.B.A.) and the Lamp Cover. Refer to "THE LAMP COVER SWITCH AND THE FRONT THERMISTOR CAUTIONS."
3. Connectors P3002, P4602, P4502 (cables from the Front Jack C.B.A.) and connector P3901 on the RGB Jack C.B.A. can be disconnected. Or, set the Front Cover L and Front Cover R Unit under the Base Front Panel Unit so as not to damage the these connectors on the TV Main C.B.A. as shown.
4. Install the **Filter tool** on the Front Fan. Refer to "COVERING THE FRONT FAN CAUTION."



These cables can be removed from the connectors for Picture Position and Focus Adjustments.

Fig. 4-1

5. Turn the power on.

1. Picture Position Adjustment

- 1) Press and hold the VOLUME DOWN button on the unit and the RECALL key on the remote for over 5 seconds in power on condition. The unit will go into the FACTORY mode. ("WORK MODE" will appear on the screen.)

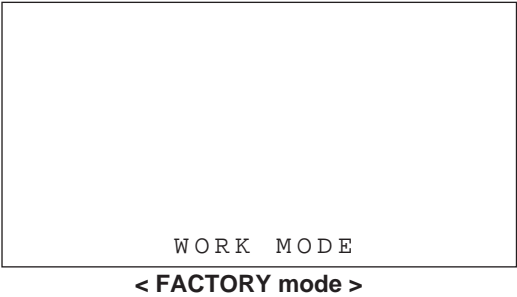


Fig. 4-2

- 2) Then, press and hold the VOLUME DOWN button on the unit and the SWAP key on the remote for over 5 seconds. The unit will go into the FACTORY ADJUST mode. (FACTORY ADJUST menu will appear.)

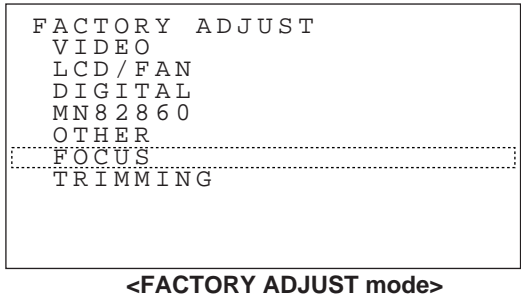


Fig. 4-3

- 3) Press CH UP/DOWN key on the remote to select "FOCUS" on menu and press the ACTION key. (The FOCUS screen will appear.)

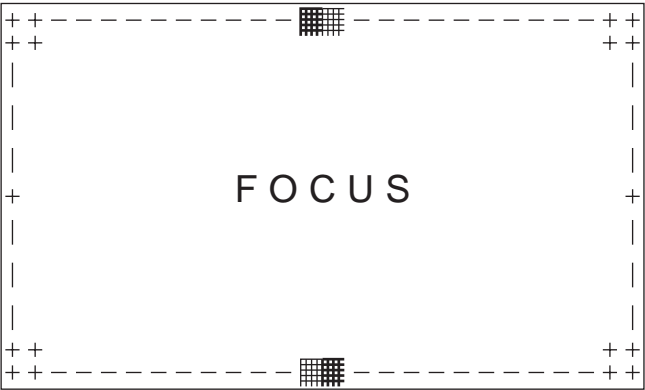


Fig. 4-4

- 4) Loosen Screws "a" and "b."

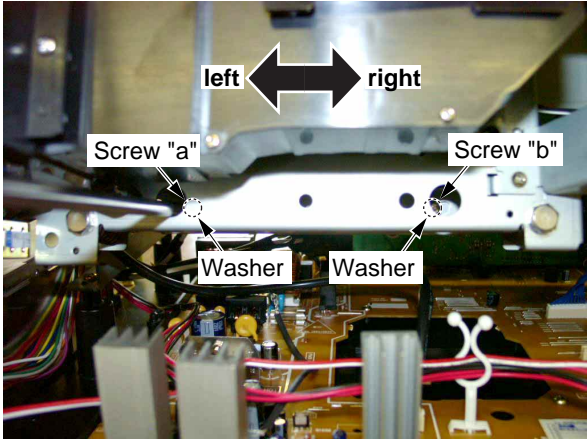


Fig. 4-5

- 5) Adjust the Projection Unit to the left or the right so that the width on the left ("A") and on the right ("B") are the same. (The top mark will be almost aligned with the right edge of the center line and the bottom mark will be almost aligned with the left edge of the center line as shown.)

Note:
If the Projection Unit is moved left, the Focus Screen moves right.
If the Projection Unit is moved right, the Focus Screen moves left.

(Tilt Adjustment)

Note:

There are 4 hex nuts "c1" "d1" "c2" "d2" on the Projection Unit.

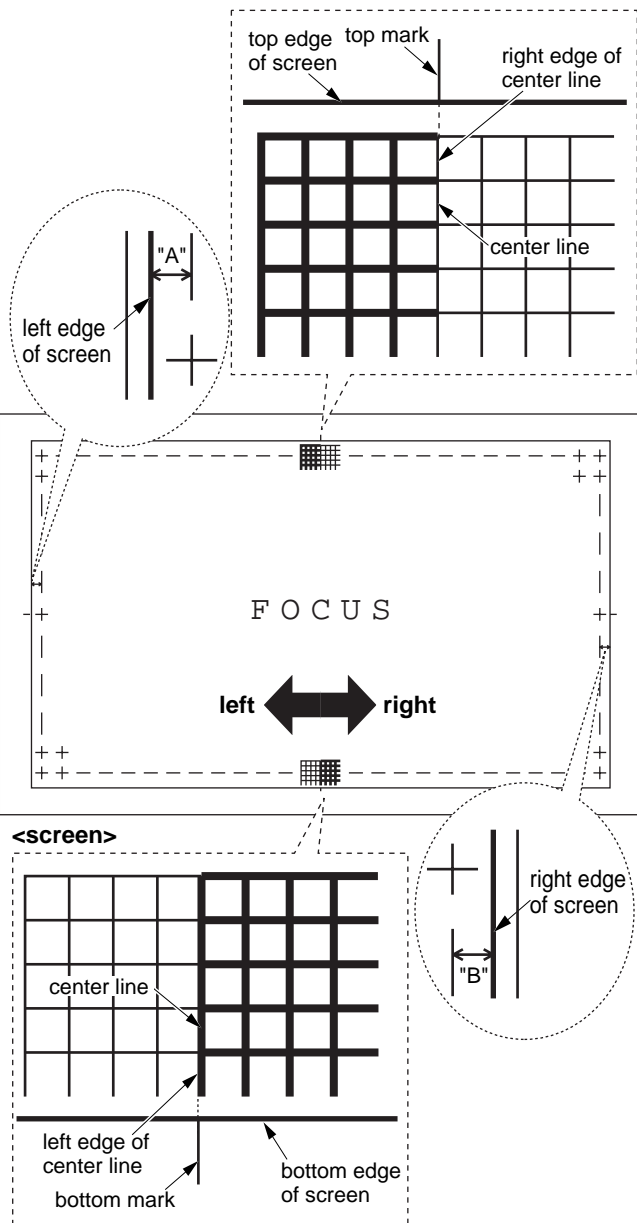


Fig. 4-6

- 6) Tighten screws "a" and "b" to fix the Projection Unit after adjustment.

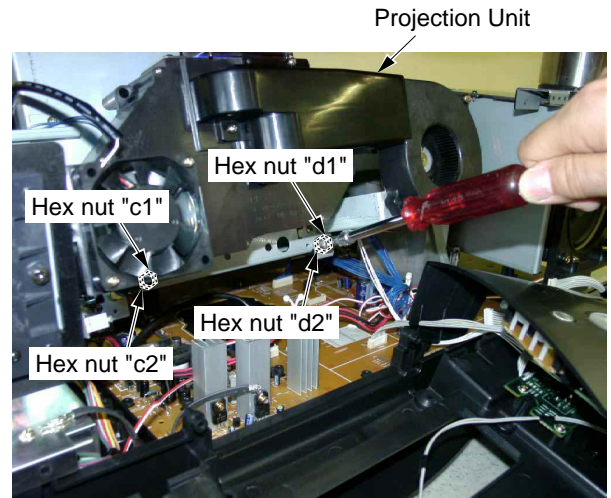


Fig. 4-7-1

- 7) Remove the hex nuts "c1" and "d1" using a 10 mm (0.4 inch) hex wrench.

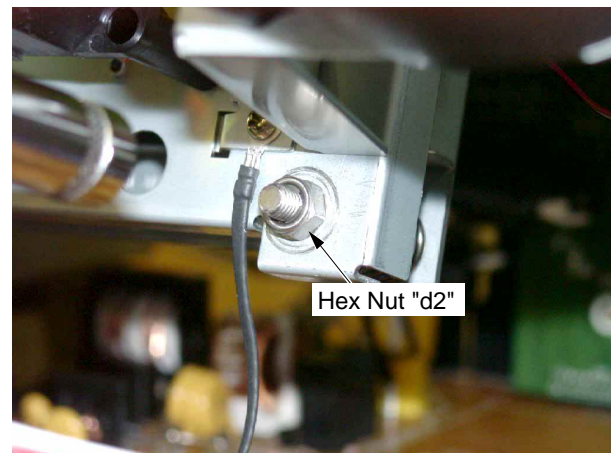
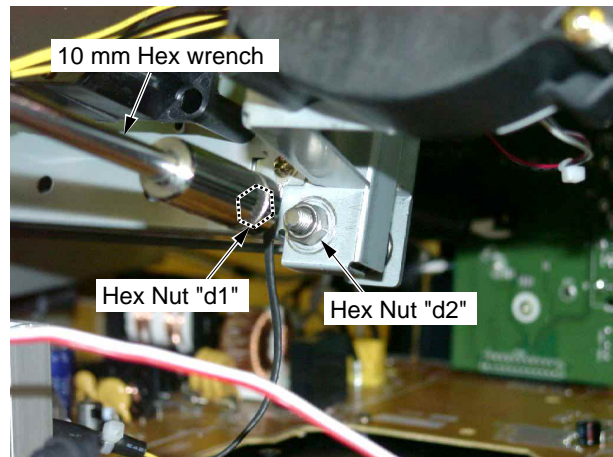


Fig. 4-7-2

- 8) Adjust the Projection Unit by turning the hex nuts "c2" and "d2" using a 10 mm (0.4 inch) hex wrench so that the width at the top ("C") and at the bottom ("D") are the same. (The right and left marks will be almost aligned with the center line as shown.)

Note:

If the hex nut "c2" is turned clockwise, the Right Focus Screen moves up.

If the hex nut "d2" is turned clockwise, the Left Focus Screen moves up.

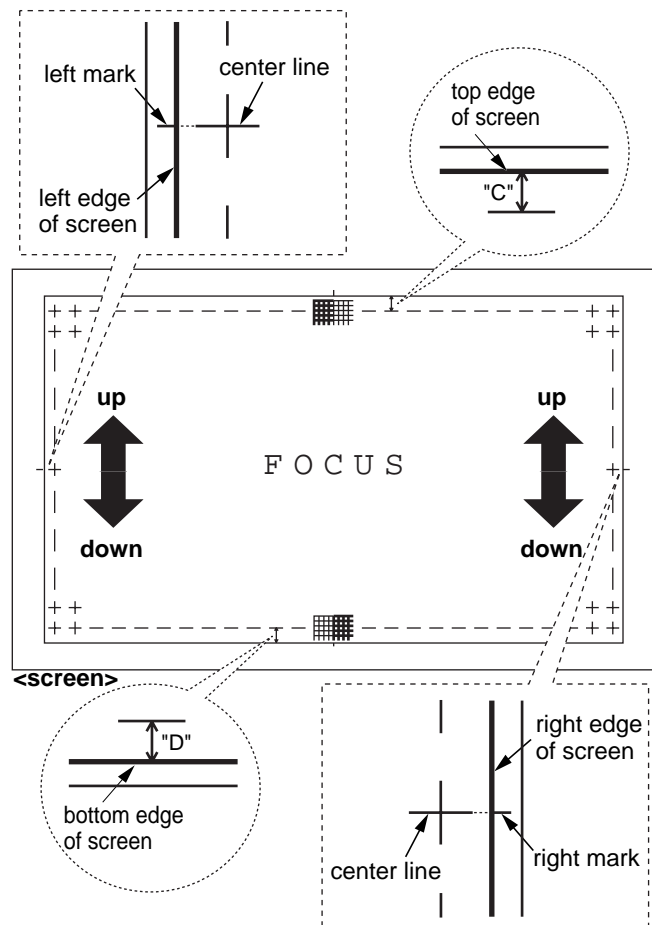


Fig. 4-7-3

- 9) Adjust the Projection Unit to the left, the right, up or down (repeat step 5) through 8)) until the picture is in the correct position.

- 10) After adjusting, install the hex nuts "c1" and "d1." Then, tighten the hex nuts "c1" and "d1" while fixing the hex nuts "c2" and "d2" by using a wrench.

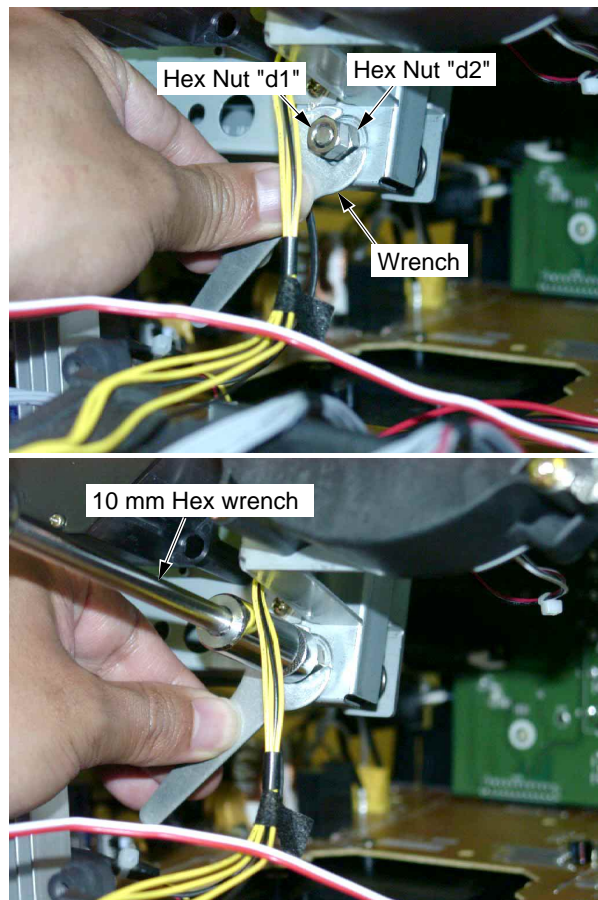


Fig. 4-7-4

- 11) Confirm that the Right and Left marks are centered.

2. Focus Adjustment

- 1) Loosen the 2 Screws on the Projection Lens until the Projection Lens can be moved.
- 2) Adjust the Projection Lens by rotating the Projection Lens so that each pixels in the seven portions are clearly visible to obtain the best focus.

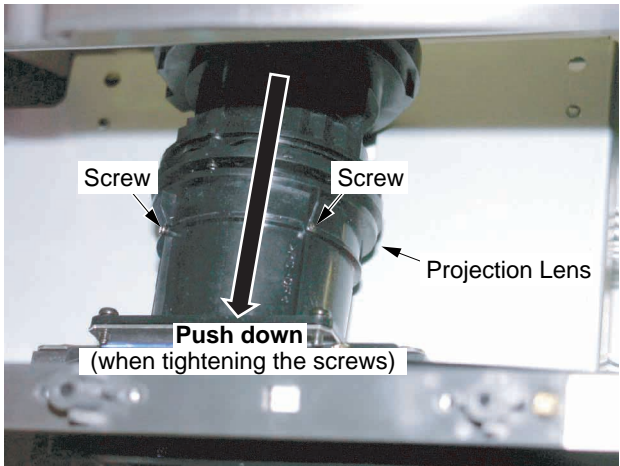


Fig. 4-8-1

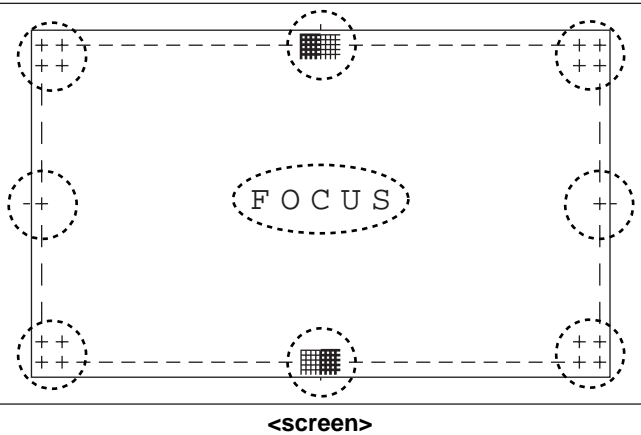


Fig. 4-8-2

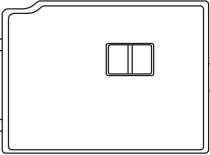
- 3) After adjusting, tighten the 2 Screws on the Projection Lens while pushing down the Projection Lens as shown above.

3. Clogged Filter Detection Adjustment (Automatic adjustment)

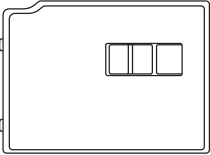
When replacing the Projection Unit or the Front Fan, perform this adjustment using the Filter Adjustment tool A (LSVQ0071) and the Filter Adjustment tool B (LSVQ0072).
Note:

Be sure to perform this adjustment after the Picture Position Adjustment and the Focus Adjustment are completed.

Filter Adjustment tool A (LSVQ0071)



Filter Adjustment tool B (LSVQ0072)



- 1) **Install the all cabinet parts firmly.**
- 2) Remove the Front Cover R Unit.

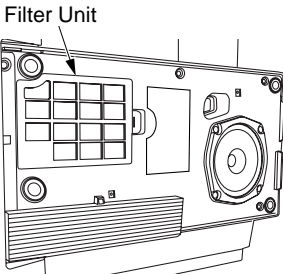
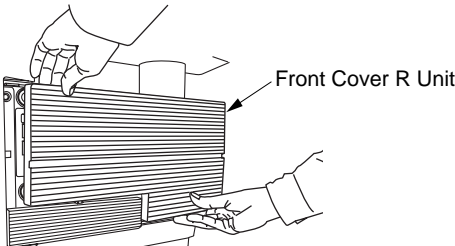
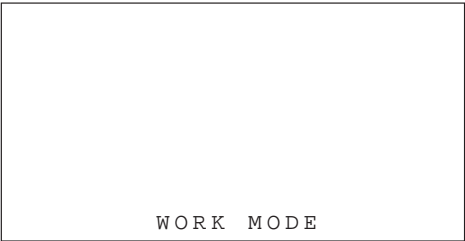


Fig. 3-4

- 3) Turn on the power.
- 4) Press and hold the VOLUME DOWN button on the unit and the RECALL key on the remote together for over 5 seconds in power on condition. The unit will go into the FACTORY mode. "WORK MODE" will appear on the screen.
- 5) Then, unplug AC Cord. Replace the Filter with the Filter tool A after the Front Fan stops completely.
- 6) Plug in AC Cord. The unit will go into the FACTORY mode automatically.

CAUTION:

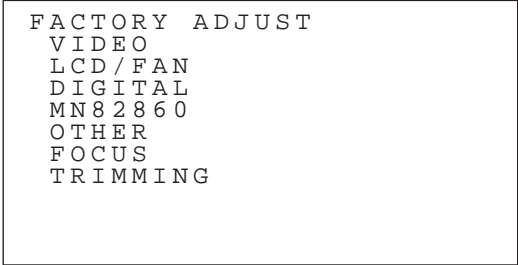
Perform steps 6) ~9) within 1 minute after the power is back on (FACTORY mode).



< FACTORY mode >

Fig. 3-5

- 7) Press and hold the VOLUME DOWN button on the unit and the SWAP key on the remote together for over 5 seconds. The unit will go into the FACTORY ADJUST mode. (FACTORY ADJUST menu will appear on the screen.)



< FACTORY ADJUST mode >

Fig. 3-6

- 8) Select "VIDEO" in FACTORY ADJUSTMENT mode, and then press the ACTION key on the remote. (FACTORY ADJUST sub menu will appear on the screen.)

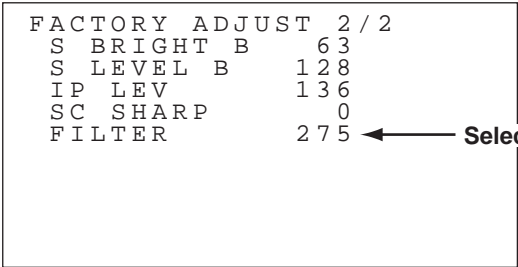
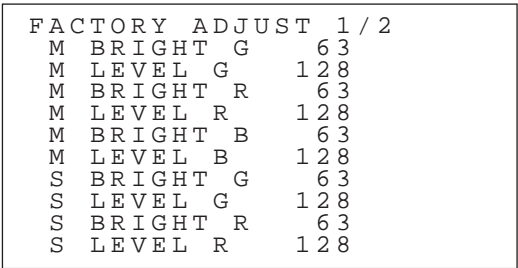


Fig. 3-7

- 9) Select "FILTER" in sub menu.
- 10) Confirm that the value of the FILTER will be changed by pressing and holding the ACTION key on the remote. After approx. 1 second, release the ACTION key on the remote. (Adjustment data will be stored in EEPROM (IC2303) automatically when returning to FACTORY mode.)

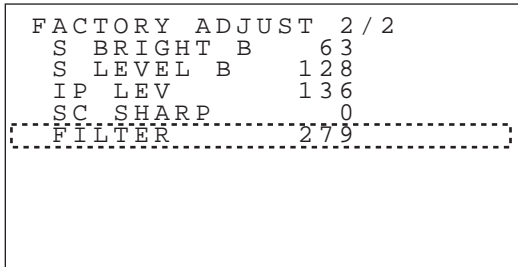


Fig. 3-8

- 11) Release from FACTORY ADJUST mode by pressing RECALL key on the remote twice (The unit will go into the FACTORY mode. "WORK MODE" will appear.) and turn the power off.
- 12) Replace the Filter tool A with Filter tool B after the Front Fan stops completely. Then turn the power back on.
- 13) Confirm that the following display **does not** appear even after approx. 6 seconds since the Lamp is back on.

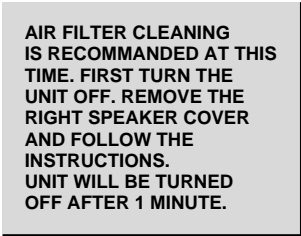


Fig. 3-9

- 14) Turn off the power and replace the Filter tool B with the regular Filter after the Front Fan stops completely.

4. Set LAMP RUN TIME to the original value

- 1) Select LAMP RUN TIME in Service Mode (LCD Main C.B.A. (1)).
- 2) Press the VOLUME UP/DOWN key on the remote to change to the original value (value A) that was noted before removing the Projection Unit at the user's location.

SERVICE MODE RESET				1
TOTAL TIME				
130W				535h
150W				0h
LAMP RUN TIME				535h
130W				535h ← Value A
150W				0h (changeable)
FILTER TIME				190h ← Value B
2502:1	9002:1	2303:1		(changeable)
2706:1		2305:1		

< Service Mode (LCD Main C.B.A. (1)) >

Fig. 3-10

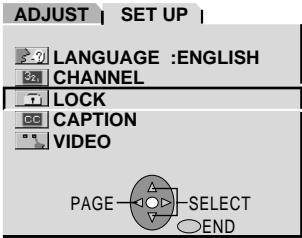
5. Set FILTER TIME to the original value

- 1) Select FILTER TIME in Service Mode (LCD Main C.B.A. (1)).
 - 2) Press the VOLUME UP/DOWN key on the remote to change to the original value (value B) that was noted before removing the Projection Unit at the user's location.
- Note:**
If the Air Filter is cleaned, reset the FILTER TIME (change to "0" (value B)).

RESET USER'S MEMORY FUNCTIONS

Be sure to reset the user's memory:

- After replacing the Rear Jack C.B.A.
 - If the secret code of V-chip is forgotten.
 - When moving the unit to a new location.
1. Turn on the power.
 2. Press the ACTION key on the remote to display the MENU screen. Then, select SET UP. The SET UP menu will appear.



3. Select LOCK by pressing CH UP/DOWN key on the remote. Then, press the ACTION key. The LOCK menu will appear.



4. Press and hold the VOLUME DOWN button on the unit and the ACTION key on the remote for more than 5 seconds while this LOCK menu is displayed. When reset is finished, power shuts off automatically (the user's memory is reset).