

SONY.

COLOR VIDEO PROJECTOR

VPH-1041Q/1041QM

VPH-1042Q/1042QM

Installation Manual for Dealers page 2

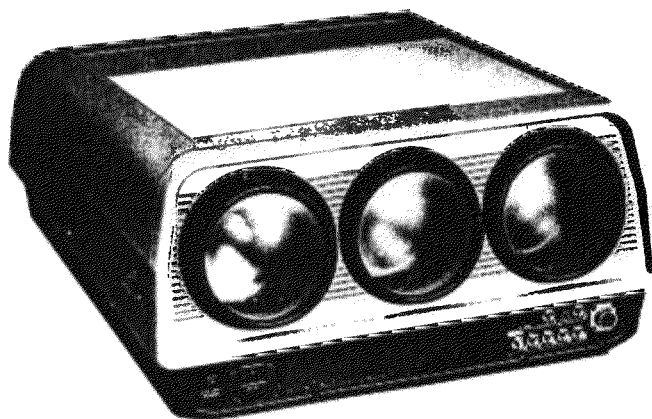
Before operating the unit, please read this manual thoroughly and retain it for future reference.

Manuel d'installation du concessionnaire page 20

Avant la mise en service de cet appareil, prière de lire attentivement ce mode d'emploi que l'on conservera pour toute référence ultérieure.

Installationsanleitung für Händler Seite 38

Vor der Inbetriebnahme lesen Sie diese Anleitung sorgfältig durch und bewahren Sie sie zum späteren Nachschlagen auf.



Super Bright

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Installation Possibilities

The installation procedures and required adjustments vary depending on the projection size, installation location, etc. For details on the installation dimensions, refer to each type of installation described on page 4 through 11.

Projection size	Type of installation	Installation location	Screen to be used	Accessory for installation	Required adjustments	Page
100"	1	Desk	VPS-100F1 flat screen	—	—	—
	2	Floor	VPS-100HG1 curved screen	SU-722 pedestal	Lens focus adjustment Registration adjustment	15 16
	3	Ceiling	VPS-100F1 flat screen	PSS-722 and PSS-10 suspension supports	Polarity change	14
	4	Ceiling	VPS-100HG1 curved screen		Polarity change Lens focus adjustment Registration adjustment	14 15 16
72"	5	Desk	VPS-100F1 flat screen	—	Lens focus adjustment Registration adjustment	15 16
	6	Floor	VPS-72HG1 curved screen	SU-722 pedestal		
	7	Ceiling	VPS-100F1 flat screen	PSS-722 and PSS-10 suspension supports	Polarity change Lens focus adjustment Registration adjustment	14 15 16
	8	Ceiling	VPS-72HG1 curved screen			
70"	9	Desk	VPS-700R universal rear screen	—	Polarity change Lens focus adjustment Registration adjustment Spacer change (level and upturned level projections only)	*1
	10	Ceiling		PSS-722 and PSS-10 suspension supports		
	11	Level projection		—		
	12	Upturned level projection		PSS-722 and PSS-10 suspension supports		
100" - 250"	13	Floor	100" - 250" flat screen	—	Lens focus adjustment Registration adjustment	15 16
	14	Ceiling		PSS-722 and PSS-10 suspension supports	Polarity change Lens focus adjustment Registration adjustment Internal conversion*2	14 15 16 18

*1 For changing the spacer, refer to the installation manual provided with the VPS-700R universal rear screen.

*2 For 150" - 250" projection, perform internal conversion before other adjustments.

Installation Procedures

Perform the procedures required for each type of installation only.

- 1 Install the screen. (Refer to the screen's installation manual.)
- 2 Change the polarity. (See page 14.)
- 3 Place the projector on a desk, base, or the SU-722 pedestal, or install it on the ceiling using the PSS-722 suspension support.
- 4 Adjust the lens focus. (See page 15.)
- 5 Adjust the registration. (See page 16.)
- 6 Connect the projector to other equipment. (Refer to the projector's operating instructions.)

Note

Be sure to perform the registration adjustment after the lens focus adjustment. Otherwise, the registration should be readjusted after the lens focus adjustment is completed.

Caution

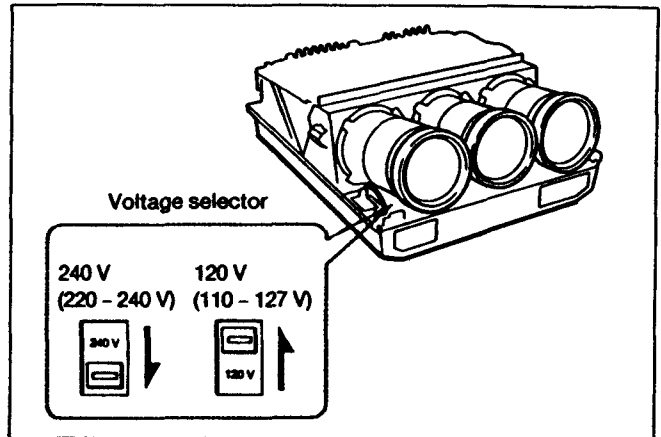
Take care not to touch portions of the projector other than those indicated in this manual because dangerous high voltages are present. To change the polarity, first turn the POWER switch off.

Before Installing

Operating Voltage Selection

The operating voltage of this unit is preset at the factory to 120 V (110 - 127 V) AC or 240 V (220 - 240 V) AC according to your local power line voltage.

If adaptation to your local power line voltage is necessary, before connecting the unit to the AC outlet, open the cabinet and set the voltage selector to the appropriate position using a screwdriver. Make a note of your voltage setting. For removing the cabinet, see page 13.

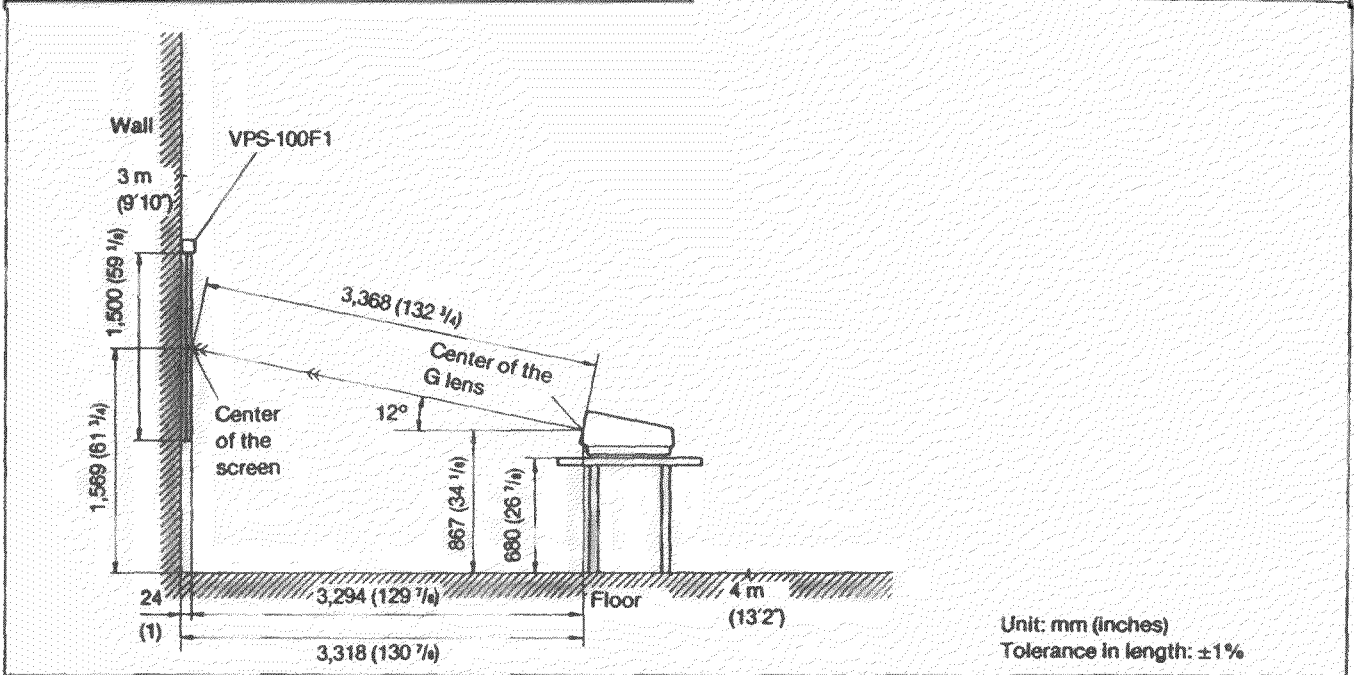


Illumination

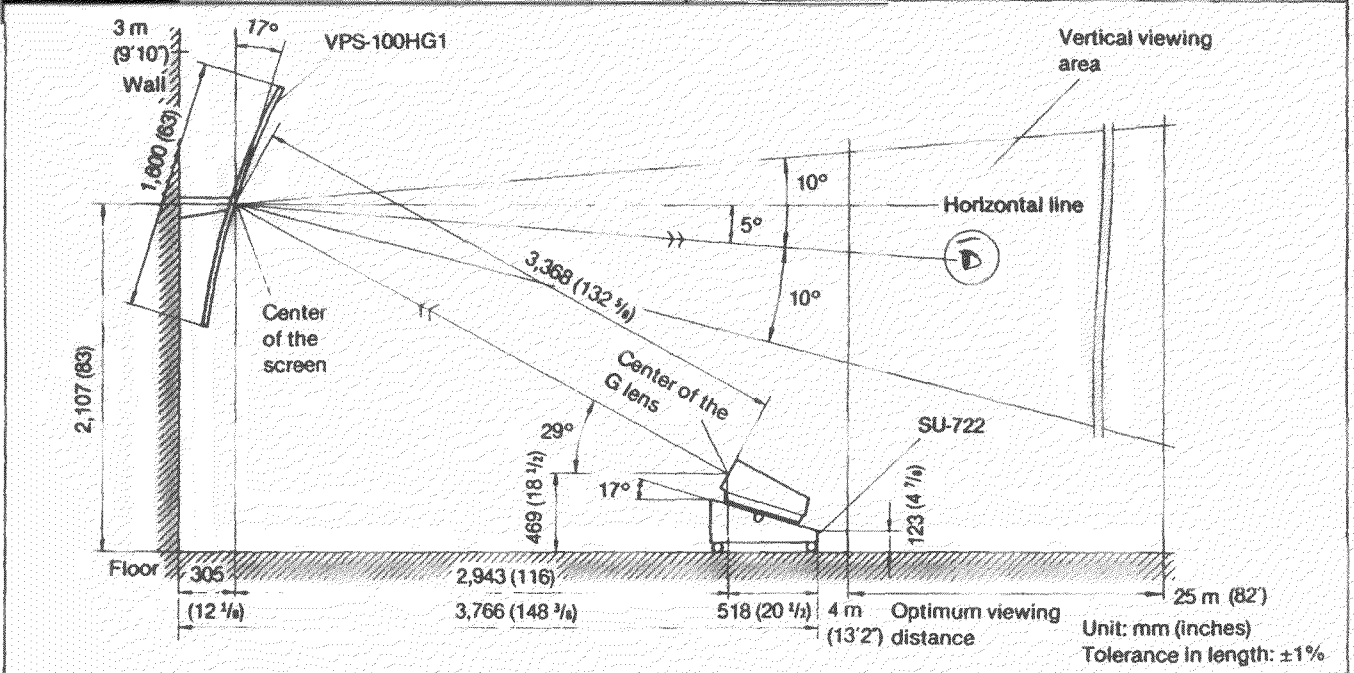
To obtain a clear picture, the screen should not be exposed to illumination or sunlight directly from the front.

- Ceiling mounted spot lighting is recommended. Use a construction over lightscattering illumination such as fluorescent lamps.
- Cover the windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room whose floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it would be desirable to change to a dark carpet and wall paper.

Type 1	100" projection Desk top VPS-100F flat screen	No projector adjustments are necessary.
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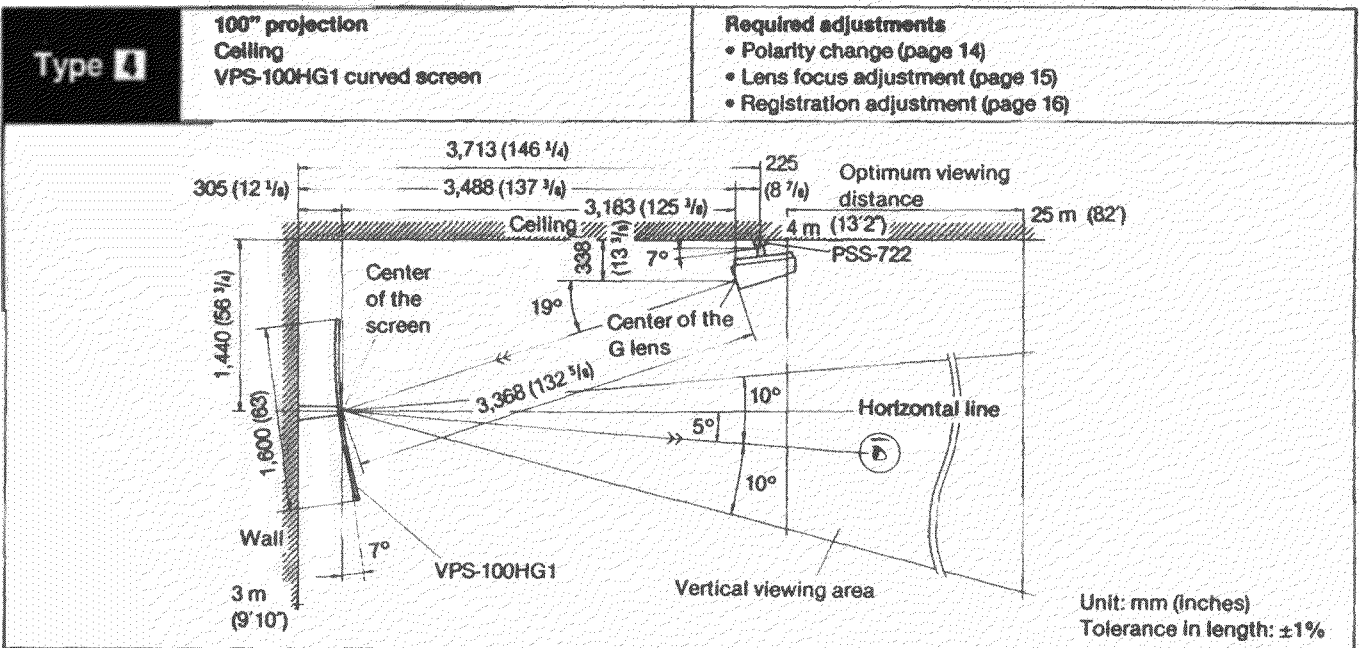
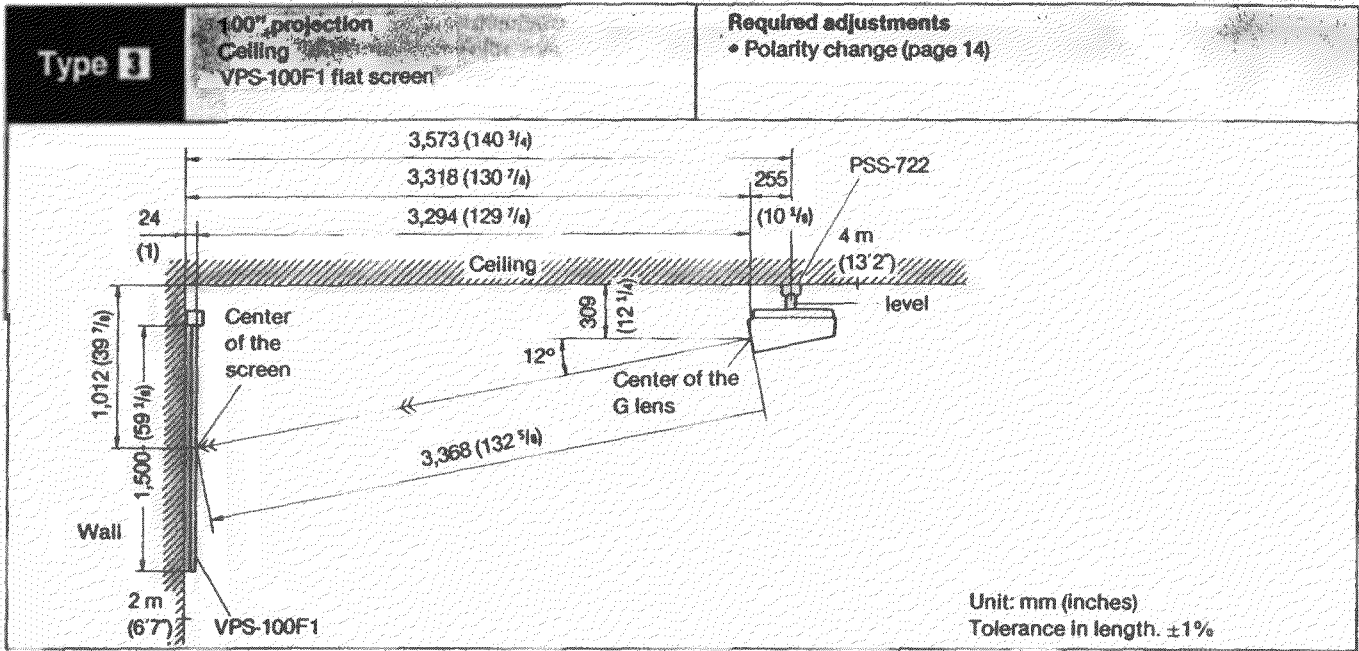


Type 2	100" projection Floor VPS-100HG1 curved screen	Required adjustments <ul style="list-style-type: none"> • Lens focus adjustment (page 15) • Registration adjustment (page 16)
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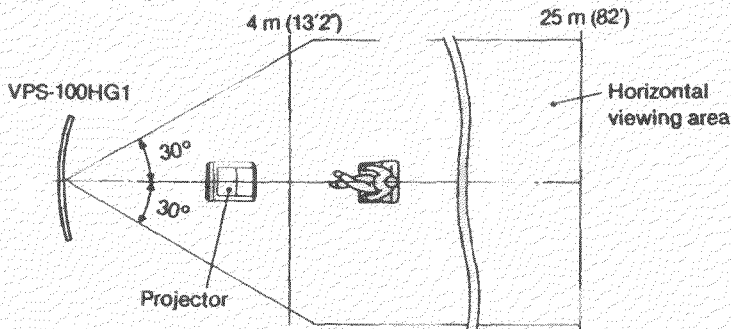


The projector is preadjusted at the factory for the indicated throwing distance. If the throwing distance should be changed more than $\pm 1\%$ of the indicated value, lens focus and registration readjustments may be required for optimum projection.

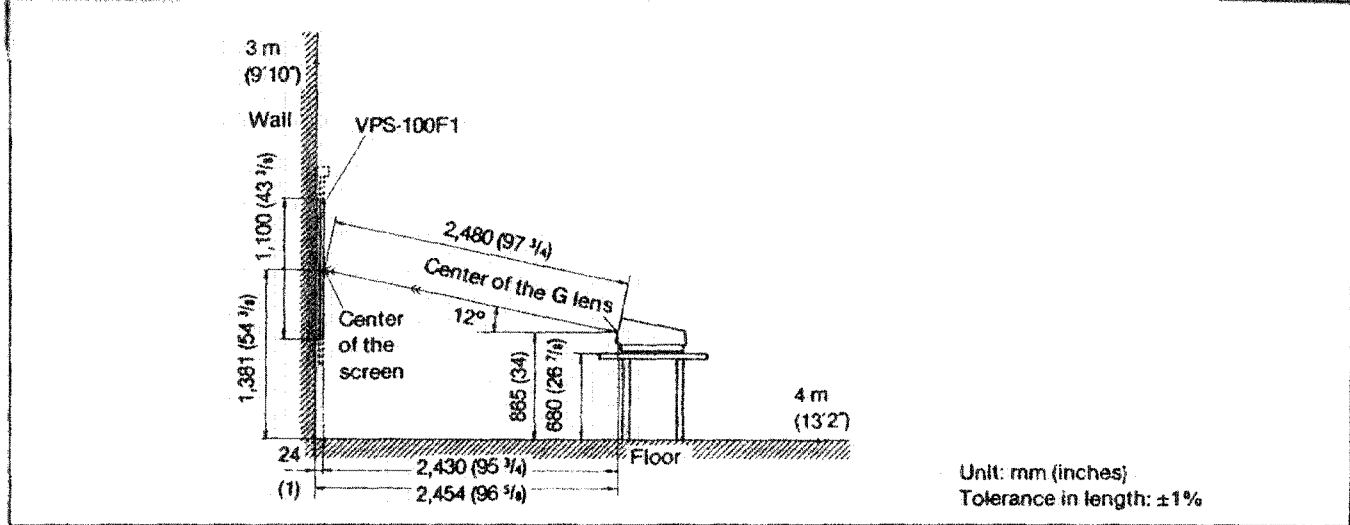
100"



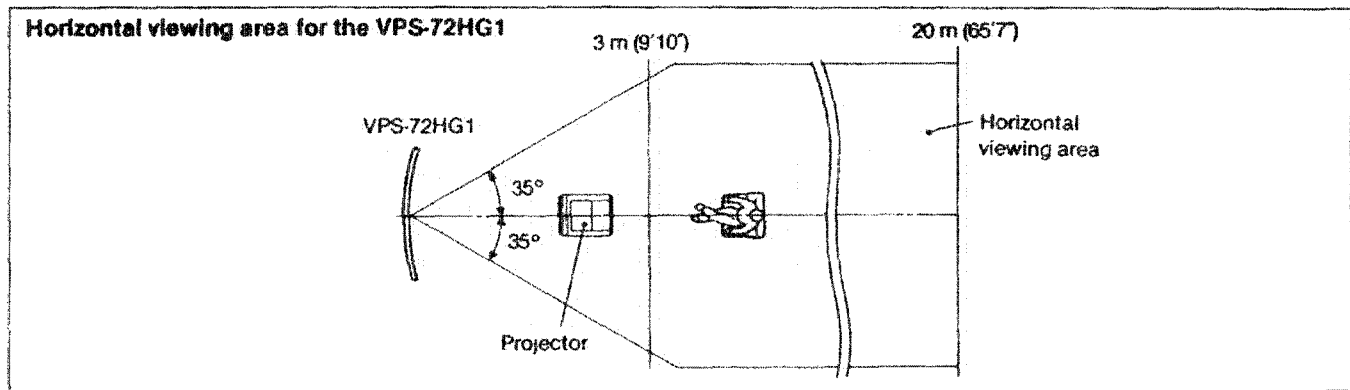
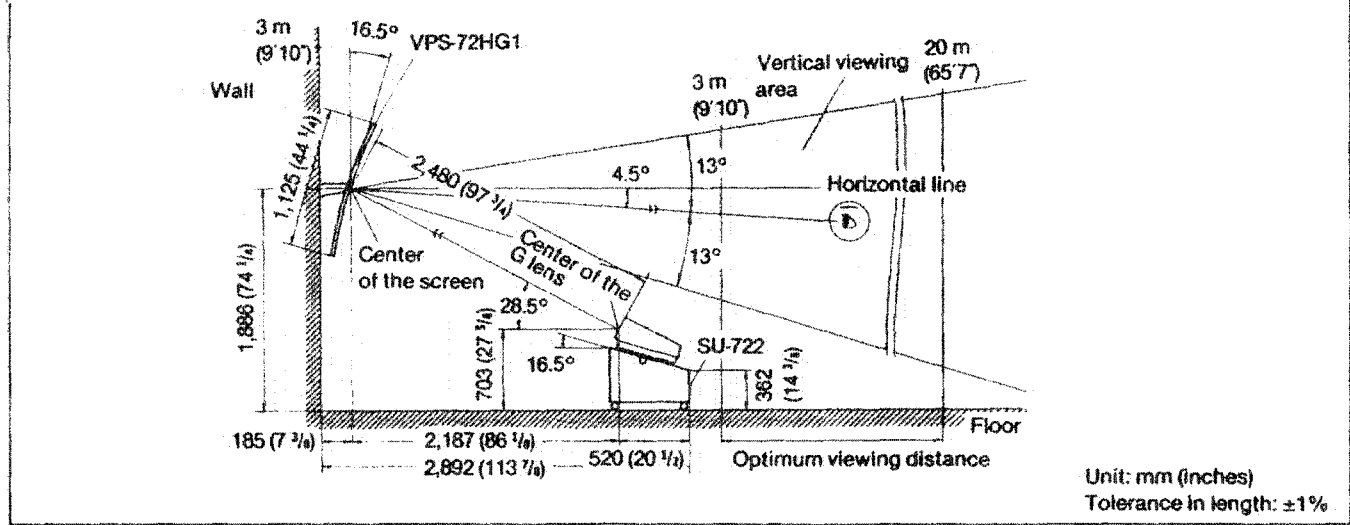
Horizontal viewing area for the VSP-100GH1



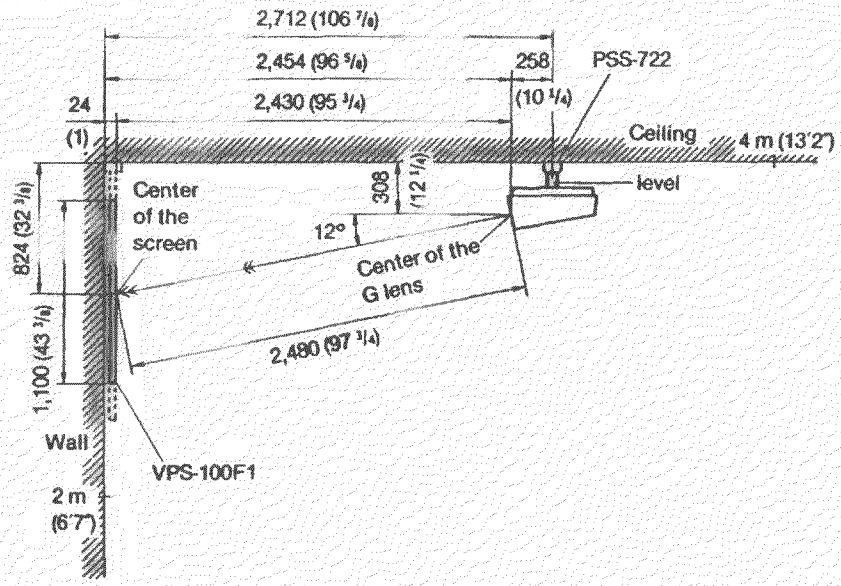
Type B	72" projection Desk top VPS-100F1 flat screen	Required adjustments • Lens focus adjustment (page 15) • Registration adjustment (page 16)
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Type G	72" projection Floor VPS-72HG1 curved screen	Required adjustments • Lens focus adjustment (page 15) • Registration adjustment (page 16)
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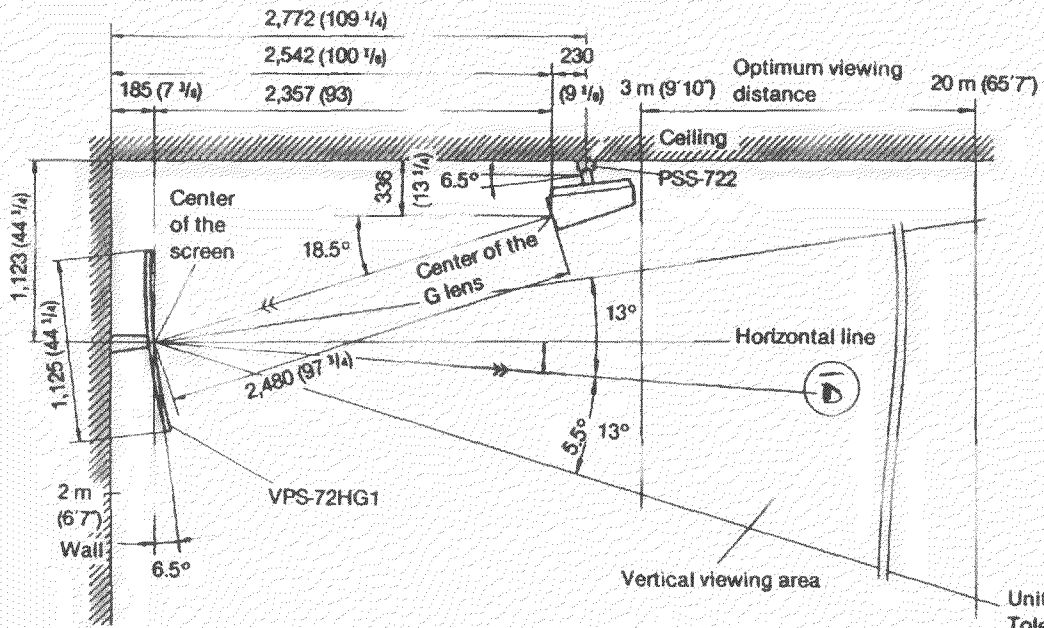


Type 7	72" projection Ceiling VPS-100F1 flat screen	Required adjustments
		<ul style="list-style-type: none"> • Polarity change (page 14) • Lens focus adjustment (page 15) • Registration adjustment (page 16)



Unit: mm (inches)
Tolerance in length: ±1%

Type 8	72" projection Ceiling VPS-72HG1 curved screen	Required adjustments
		<ul style="list-style-type: none"> • Polarity change (page 14) • Lens focus adjustment (page 15) • Registration adjustment (page 16)



Unit: mm (inches)
Tolerance in length: ±1%

Type I	70" rear projection Desk VPS-700R universal rear screen	Required adjustments <ul style="list-style-type: none"> • Polarity change (page 14) • Lens focus adjustment (page 15) • Registration adjustment (page 16)
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The viewing area is set upwards.

Unit: mm (inches)
Tolerance in length: ±1%

* Distance between the rear of the screen and the center of the G lens

Type II	70" rear projection Ceiling VPS-700R universal rear screen	Required adjustments <ul style="list-style-type: none"> • Polarity change (page 14) • Lens focus adjustment (page 15) • Registration adjustment (page 16)
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The viewing area is set downwards.

Unit: mm (inches)
Tolerance in length: ±1%

Installing the VPS-700R using mirrors
 When the projector installation space is limited, use mirrors to obtain the same viewing areas as types 9 through 12. For the installation dimensions, refer to the supplemental information.

Type III	70" rear projection Level projection VPS-700R universal rear screen	Required adjustments <ul style="list-style-type: none"> • Polarity change (page 14) • Lens focus adjustment (page 15) • Registration adjustment (page 16) • Spacer change (Refer to the VPS-700R's installation manual.)
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The viewing area is set approximately direct (approx. 1° upward).

Unit: mm (inches)
Tolerance in length: ±1%

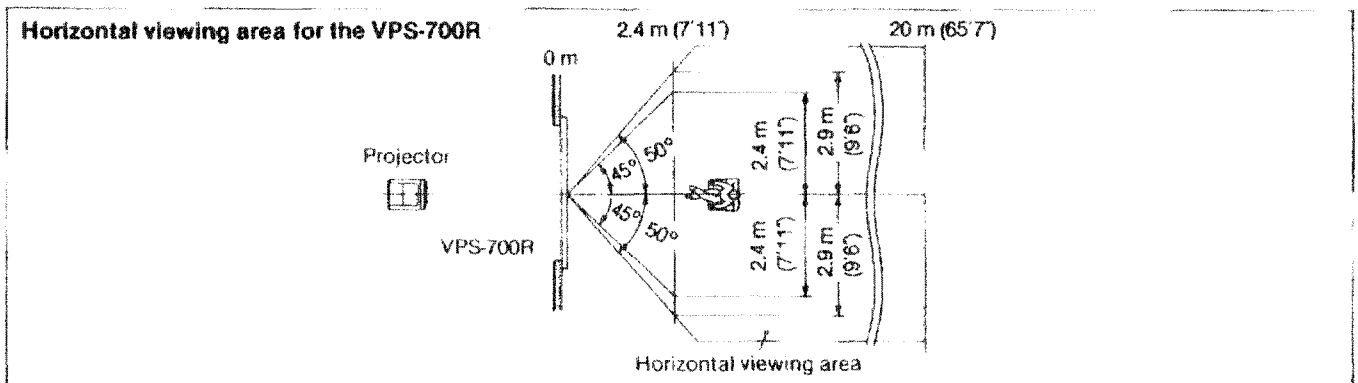
* Distance between the rear of the screen and the center of the G lens

Type II	70" rear projection (Upturned level projection) VPS-700R universal rear screen	Required adjustments <ul style="list-style-type: none"> • Polarity change (page 14) • Lens focus adjustment (page 15) • Registration adjustment (page 16) • Spacer change (Refer to the VPS-700R's installation manual.)
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The viewing area is set approximately direct (approx. 1° downward).

Unit: mm (inches)
Tolerance in length: ±1%

* Distance between the rear of the screen and the center of the G lens



Type III 100"–250" projection Flat screen

Required adjustments

- Lens focus adjustment (page 14)
- Registration adjustment (page 14)

Decide the length, height, and depth according to the screen size to be used.

Screen size	150 inches	200 inches	250 inches
Length - mm	4850 (191")	6410 (252 1/2")	7980 (313 1/2")
Height - mm	1410 (55 1/2")	1740 (68 1/2")	2080 (82")
Depth - mm	260 (10 1/4")	220 (8 5/8")	170 (6 3/4")

Unit: mm (inches)
Tolerance in length: ±1%

Type IV 100"–250" projection Ceiling Flat screen

Required adjustments

- Polarity change (page 14)
- Lens focus adjustment (page 15)
- Registration adjustment (page 16)

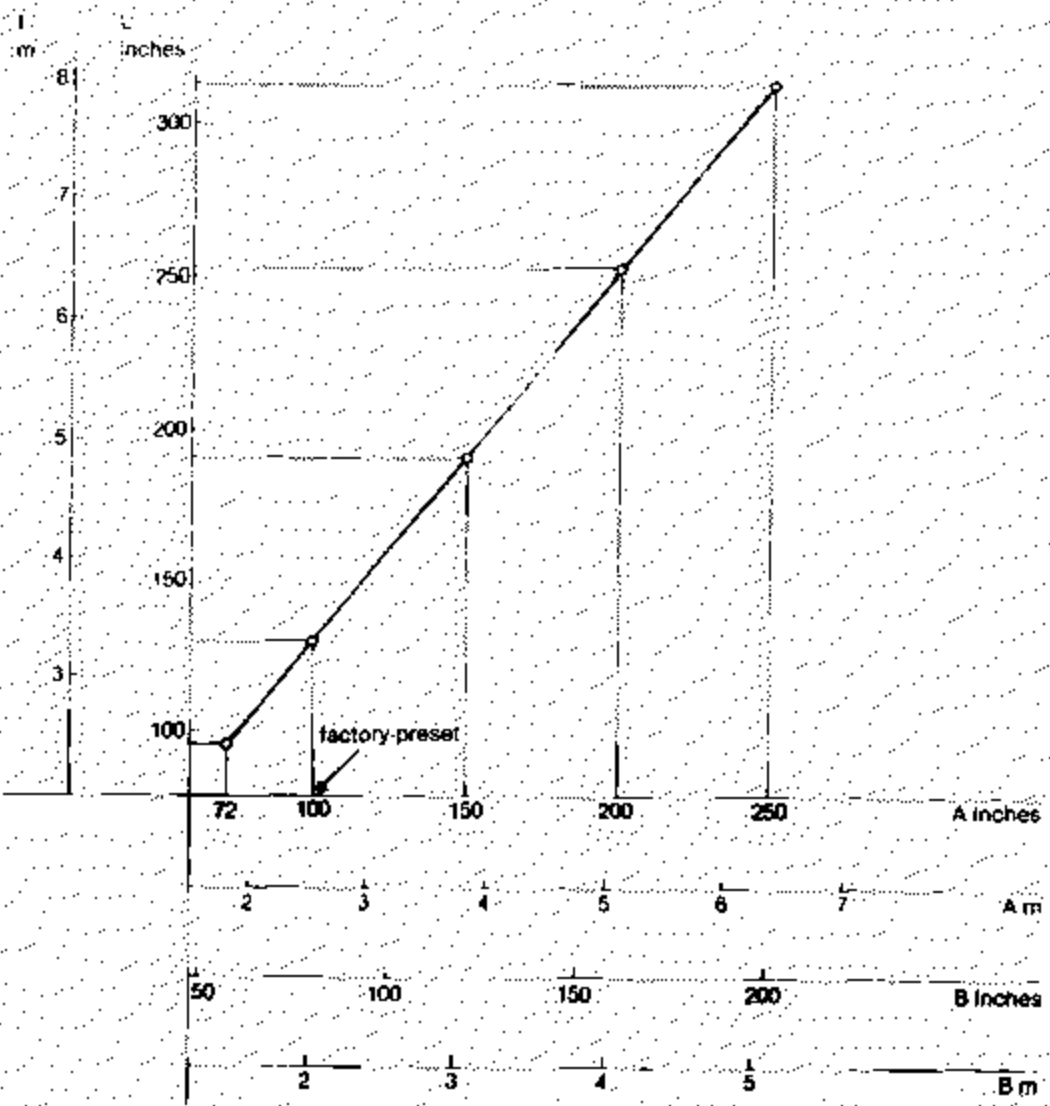
Decide the length, height, and depth according to the screen size to be used.

Screen size	150 inches	200 inches	250 inches
Length - mm	4850 (191")	6410 (252 1/2")	7960 (313 1/2")
Height - mm	1350 (53 1/4")	1680 (66 1/4")	2020 (79 1/2")
Depth - mm	200 (7 7/8")	160 (6 3/4")	110 (4 3/8")

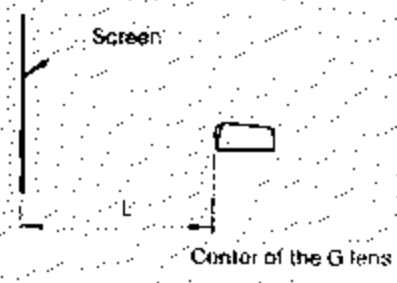
Unit: mm (inches)
Tolerance in length: ±1%

Type III
and
Type II

For details on how to use this chart, see page 10, and the following graph to decide the distance between the screen and projector.



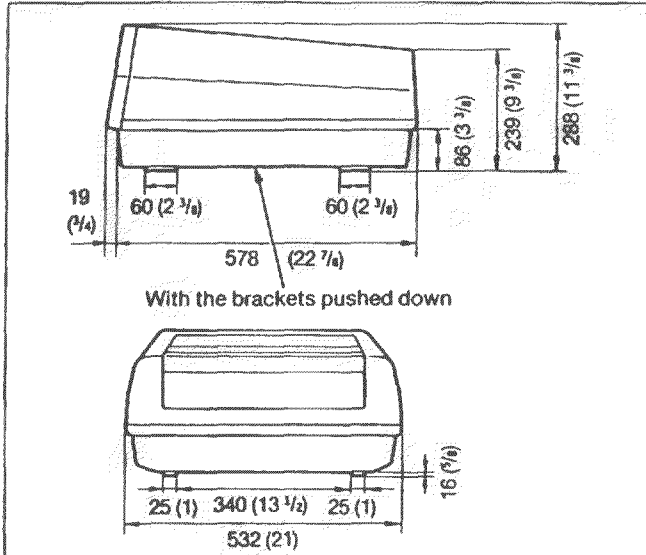
Viewable area of the screen



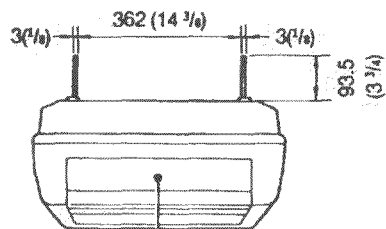
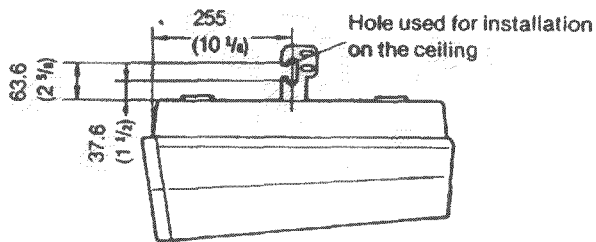
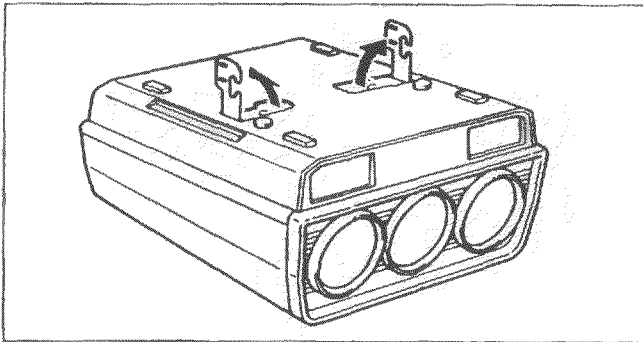
Notes on Installation

Projector's Dimensions

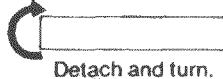
Unit: mm (inches)



Raise the brackets when installing the projector on the ceiling or floor.

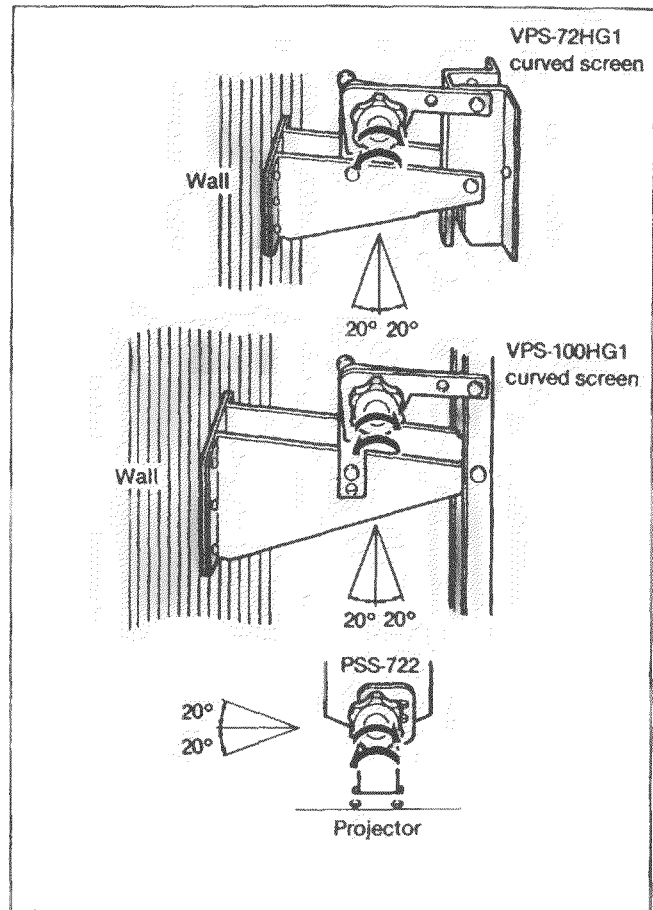


You may change the position of the nameplate.



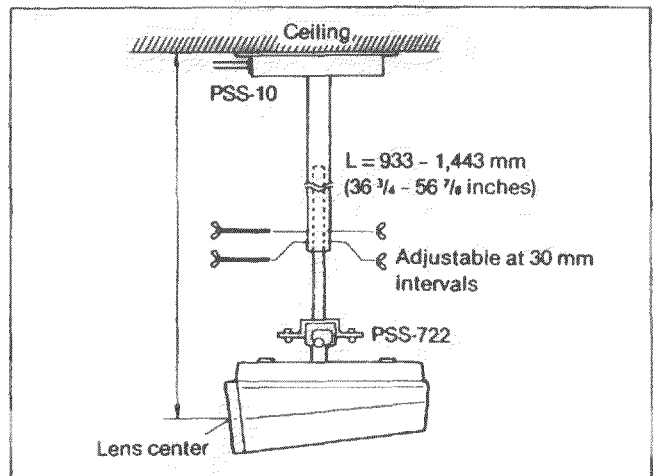
To Adjust the Angle of the Screen/Projector

Loosen the knobs, adjust the angle, then tighten the knobs down firmly.



When the PSS-10 projector suspension support (optional) is used in combination with the PSS-722

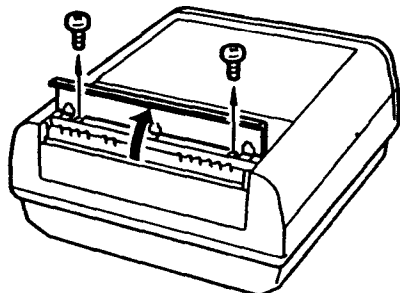
The PSS-10 allows you to adjust the distance between the ceiling and the projector.



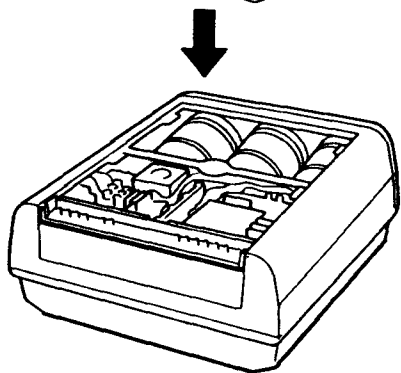
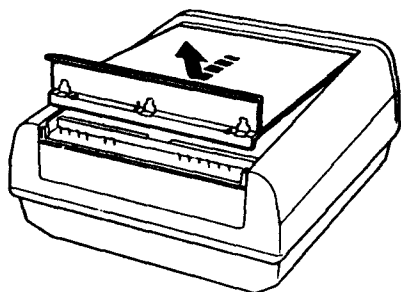
To Open the Top Panel

You will need a medium size Phillips head screwdriver.

- 1 Open the control panel cover.
- 2 Remove the two screws.



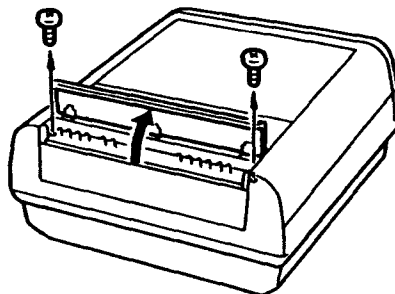
- 3 Pull the top panel slightly toward you and remove it.



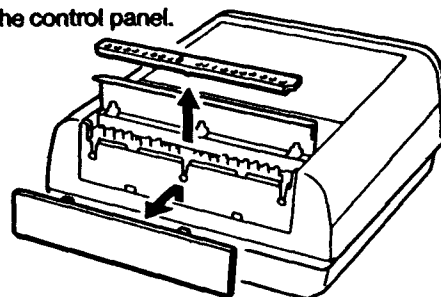
To Open the Cabinet

Open the cabinet when changing the voltage selector setting and when converting the unit for 200' projection.

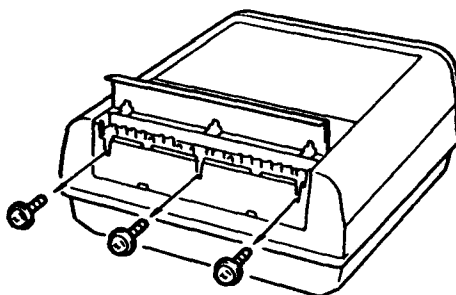
- 1 Open the control panel cover.
- 2 Remove the two screws on the control panel.



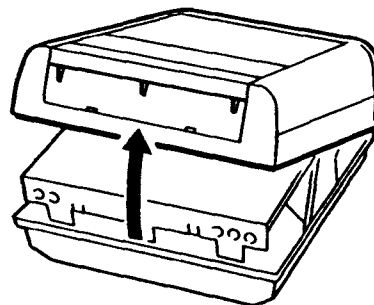
- 3 Slide the nameplate upward and pull it toward you to remove.
- 4 Remove the control panel.



- 5 Remove the three screws.



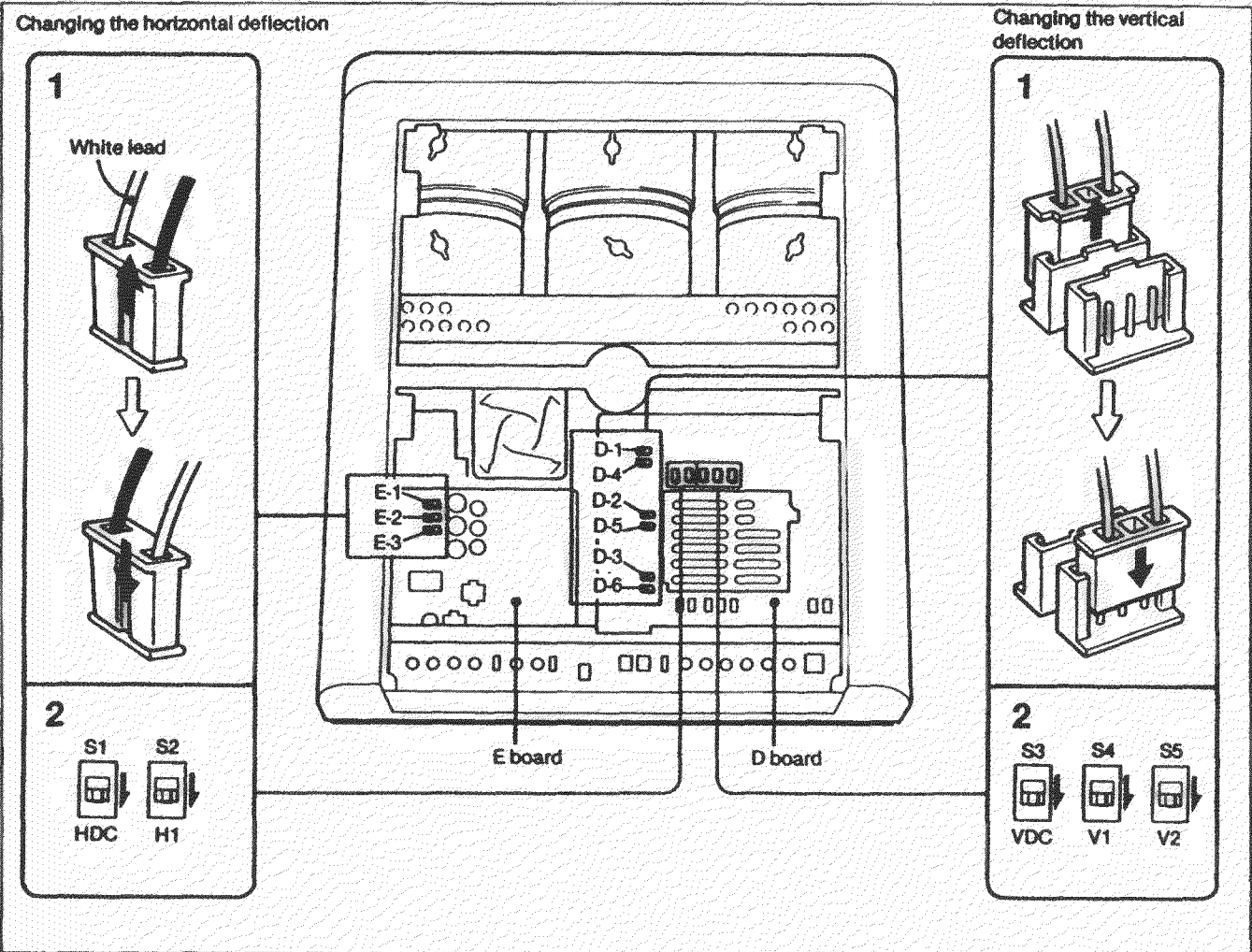
- 6 Raise the cabinet to remove.



Polarity Change

The projector is preadjusted at the factory for the front projection facing the screen, on desk or floor. When the projector is installed on the ceiling with the bracket side up or used for the rear projection, the polarity should be changed. Horizontal and/or vertical deflection should be changed depending on the type of projection and installation location.

Projection type	Installation location	Type of Installation	Horizontal deflection change	Vertical deflection change
Front projection	Ceiling	3 4 7 8 14	Necessary	Necessary
Rear projection	Desk, floor or level projection	9 11	Necessary	Unnecessary
	Ceiling or upturned level projection	10 12	Unnecessary	Necessary



Preparations

- Make sure that power is not connected.
- Open the top panel. (See page 13.)

To change the horizontal deflection

- 1 Reverse the polarity of connectors E-1, E-2 and E-3 on E board.
- 2 Set switches S1 and S2 on D board to the control panel side position.

To change the vertical deflection

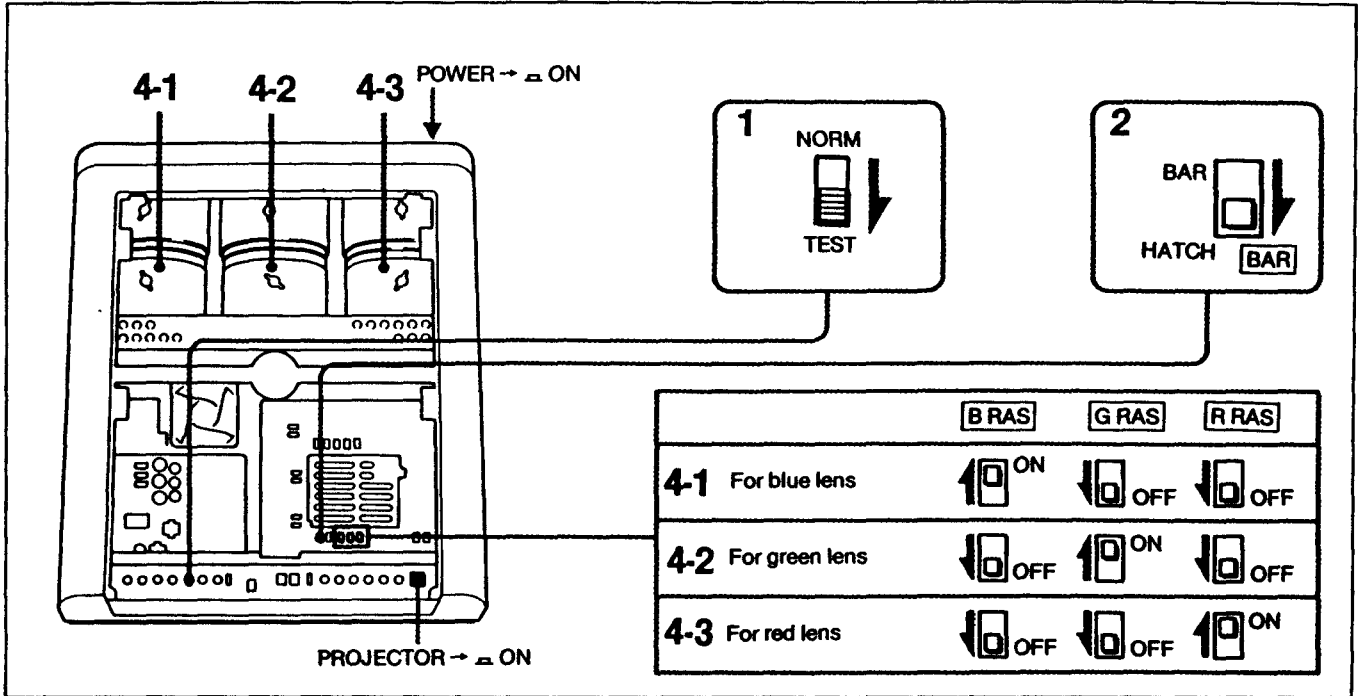
- 1 Move the connectors on D board from receptacles D-1, D-2 and D-3 to receptacles D-4, D-5 and D-6, respectively.
- 2 Set switches S3, S4 and S5 on D board to the control panel side position.

Note

Check that the connectors are inserted firmly, then proceed to lens focus adjustment with the projector's top panel removed.

Lens Focus Adjustment

The lens focus is preadjusted at the factory for 100" flat screen. For other type screens, the lens focus should be adjusted.

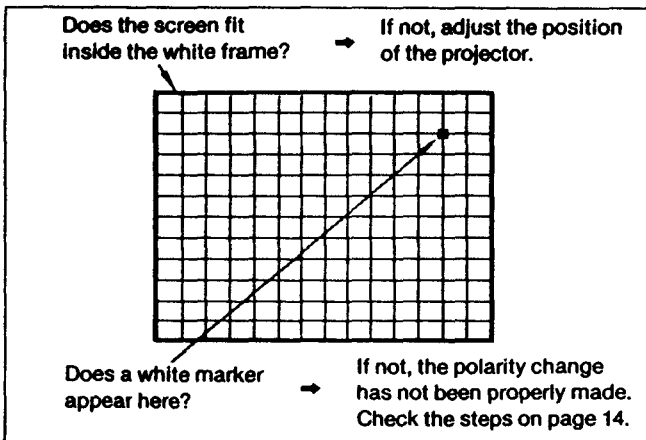


Preparations

- Install the projector in the correct position on the floor or ceiling.
- Connect the supplied power cord to the AC IN socket and to an AC outlet, depress the POWER switch on the connector panel and the PROJECTOR switch. The green POWER lamp will light.
- Open the top panel. (See page 13.)

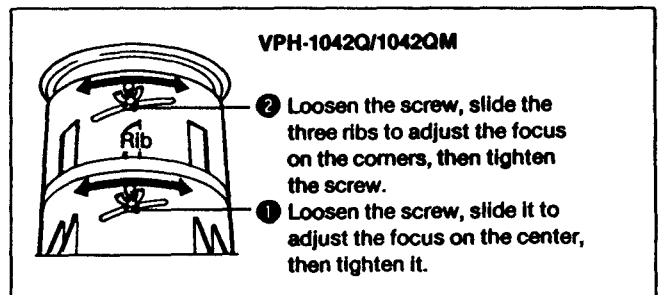
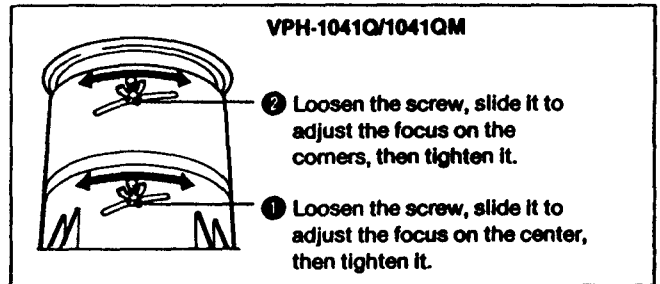
Adjustment

- 1 Set the NORM/TEST switch to TEST.
- 2 Set the BAR switch to HATCH.
- 3 A cross hatch pattern will be displayed. Check the following.



4 Adjust the lens focus.

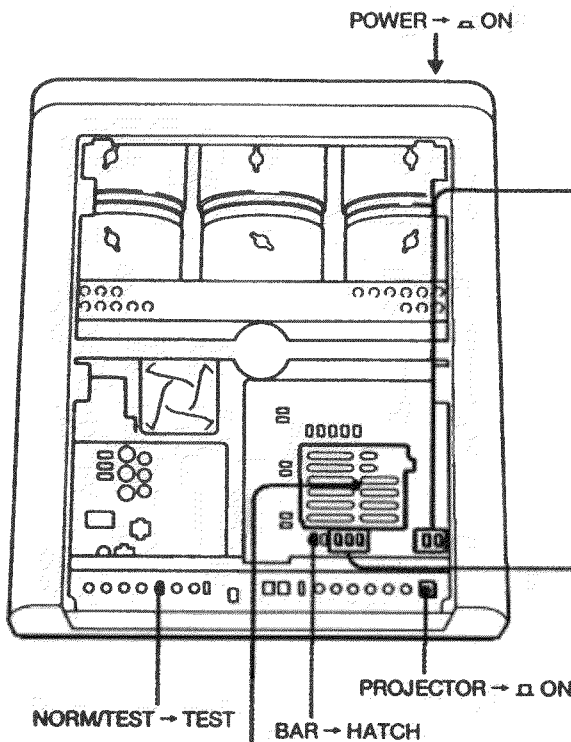
For adjusting each lens, first set the B RAS, G RAS and R RAS switches as illustrated above, then adjust the lens as illustrated below.



Proceed to registration adjustment.

Registration Adjustment

Use a small screwdriver to adjust the controls through the holes.

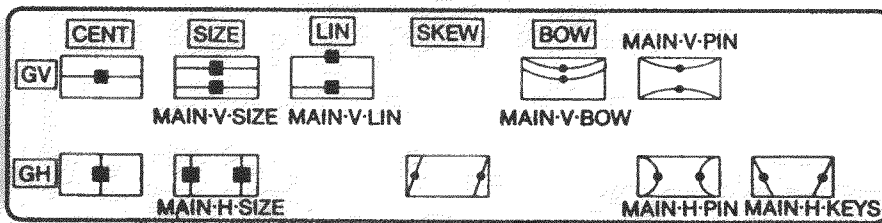


Screen size	MODEL SELECT	SIZE SELECT
72" (70" - 85")	<input type="checkbox"/> 100	<input checked="" type="checkbox"/> 150/72
100" (85" - 125")	<input type="checkbox"/> 100	<input type="checkbox"/> NORMAL
150" (125" - 175")	<input checked="" type="checkbox"/> 200	<input checked="" type="checkbox"/> 150/72
200" (175" - 250")	<input checked="" type="checkbox"/> 200	<input type="checkbox"/> NORMAL

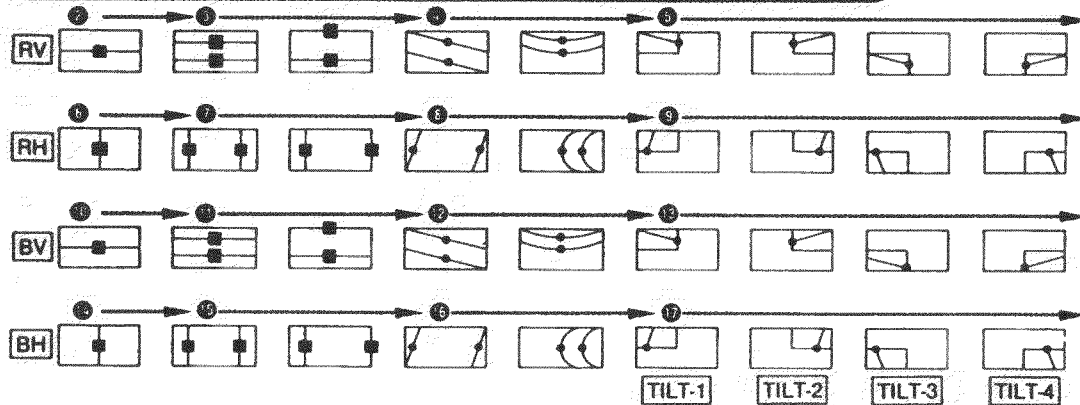
For registration of:	B RAS	G RAS	R RAS
red and green	<input checked="" type="checkbox"/> OFF	<input type="checkbox"/> ON	<input type="checkbox"/> ON
blue and green	<input type="checkbox"/> ON	<input type="checkbox"/> ON	<input checked="" type="checkbox"/> OFF

Controls for registration adjustment

The circled numbers refer to the sequence of adjustment.



These controls are used for the reference green picture readjustment. If readjustment is necessary, consult the qualified Sony personnel.

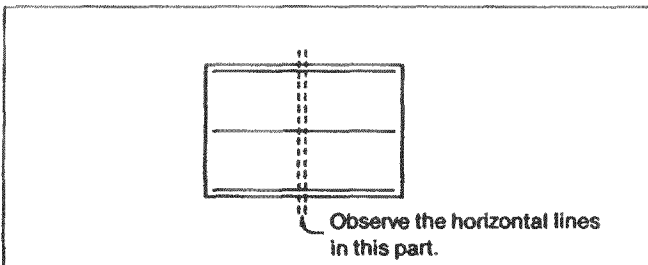


Preparations

- Keep the G RAS switch at ON and set the B RAS and R RAS switches to OFF. A green cross hatch pattern will be displayed.
- Check the position of the projector, polarity and lens focus referring to page 15.
- Set the MODEL SELECT and SIZE SELECT switches according to the screen size.
Set the MODEL SELECT switch to 100 for 70"– 125" projection, and to 200 for 125"– 250" projection.
Set the SIZE SELECT switch to NORMAL for 85"– 125" and 175"– 250" projection, and to 150/72 for 70"– 85" and 125"– 175" projection.

Vertical registration of the red and green pictures

- ① Set the B RAS switch to OFF and the G RAS and R RAS switches to ON.
- ② Adjust the RV CENT control so that the red horizontal lines and the green horizontal lines converge in the middle of the screen.
- ③ Adjust the RV SIZE control (and the RV LIN control, if necessary) so that the red horizontal lines and the green horizontal lines converge at the upper and lower sides of the screen.

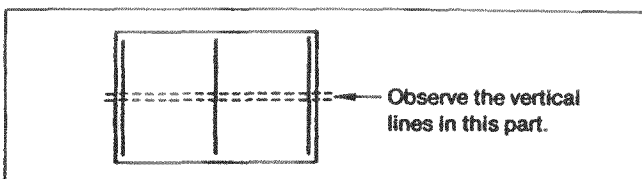


(Repeat steps ② and ③ as necessary.)

- ④ Adjust the RV SKEW and RV BOW controls if the red horizontal lines and the green horizontal lines do not converge in the middle of the screen.
- ⑤ Adjust the RV TILT-1 through TILT-4 controls so that the red horizontal lines and the green horizontal lines converge in the corners of the screen.

Horizontal registration of the red and green pictures

- ⑥ Adjust the RH CENT control so that the red vertical lines and the green vertical lines converge in the middle of the screen.
- ⑦ Adjust the RH SIZE control (and the RH LIN control, if necessary) so that the red vertical lines and the green vertical lines converge at the right and left sides of the screen.



(Repeat steps ⑥ and ⑦ as necessary.)

- ⑧ Adjust the RH SKEW and RH BOW controls so that the red vertical lines and the green vertical lines converge in the middle of the screen.
- ⑨ Adjust the RH TILT-1 through TILT-4 controls so that the red vertical lines and the green vertical lines converge at the corners of the screen.

Proceed to the following adjustments in the same manner as with red and green registration, setting the R RAS switch to OFF and the B RAS and G RAS switches to ON.

Vertical registration of the blue and green pictures

- ⑩ Adjust the BV CENT control.
- ⑪ Adjust the BV SIZE control, and BV LIN if necessary.
- ⑫ Adjust the BV SKEW and BV BOW controls, if necessary.
- ⑬ Adjust the TILT-1 through TILT-4 controls.

Horizontal registration of the blue and green pictures

- ⑭ Adjust the BH CENT control.
- ⑮ Adjust the BH SIZE control, and BH LIN if necessary.
- ⑯ Adjust the BH SKEW and BH BOW controls.
- ⑰ Adjust the BH TILT-1 through TILT-4 controls.

When registration is complete

Set the switches to the following positions.

R, G, B RAS switches → ON position

BAR switch → BAR

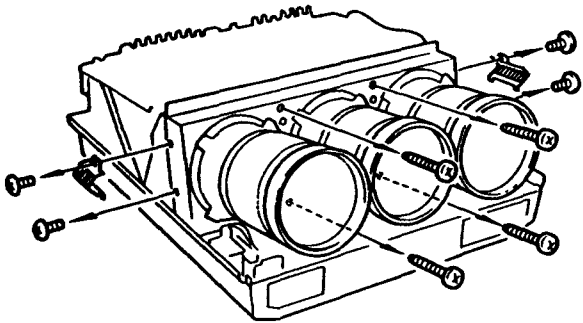
NORM/TEST switch → NORM

Replace the top panel. (Reverse the steps given on page 13.)

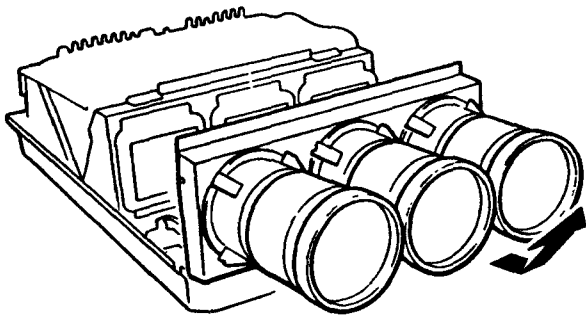
Conversion for 200" (150"-250") Projection

1 Separate the lens block from the main body.

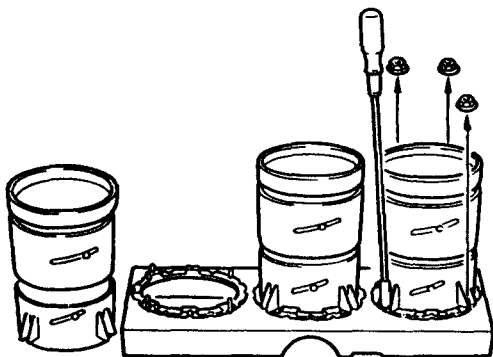
- 1 Open the cabinet. (See page 13.)
- 2 Remove the 4 screws from the sides of the projector.
- 3 Remove the 4 screws from the lens base.



- 4 Pull the lens block out.

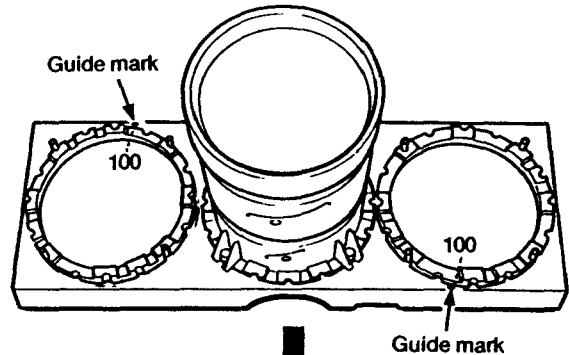


- 5 Remove the 4 nuts and detach the red and blue lenses from the lens base. Use an 8 mm nutdriver.

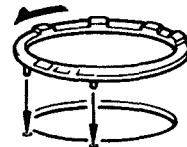


2 Change the positions of the lens rings.

For 100" (and 72") projection

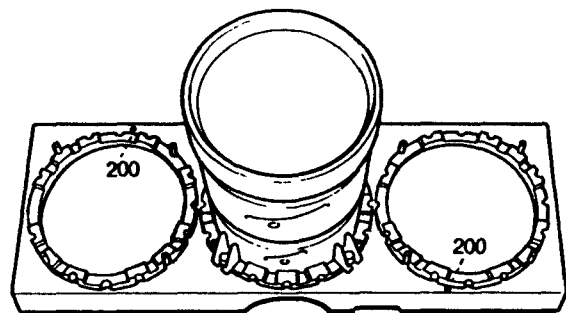


For 200" projection



Turn the ring so that the figure 200 is aligned with the guide mark.

Align and insert



3 Adjust the mounting angles of the CRTs.

Use an 8 mm nutdriver.

- 1 Loosen the nuts and remove all the spacers from the top and bottom of each lens.
- 2 Insert the supplied spacers for 200" projection, 0.3 mm spacers and G spacers as follows:
R and B lenses: A spacer for 200" and a 0.3 mm spacer for the top; a spacer for 200" for the bottom
G lens: A G spacer removed in step 1 and a 0.3 mm spacer for the top; a G spacer removed in step 1 for the bottom
Insert the spacers for 200" with the thinner end toward the center CRT.
- 3 Tighten, all the nuts completely for accurate angles of the lenses.

After adjustment is complete, replace the lens block in the main body and close the cabinet.
(Reverse the steps given in section 1.)

For 100" (and 72") projection

