

SILVERMASTER PLATEFORMER

PF60 • 60H、110H

SERVICE MANUAL

CONTENTS

1	INTRODUCTION	1
2	SPECIFICATION	2
3	OVERVIEW	3
4	INSTALLATION PROCEDURE	4
	4-1 INSTALLATION	
	4-2 UNPACKING	
	4-3 SETTING	
5	Adjustment Method Stopper	8
6	Replacement Procedure for Lever	9
7	Adjusting Position of Scale	10
8	Replacement Method of Stopper	11
9	Replacement Procedure of Biade	12
10	Replacement Procedure of Temperature	13
11	Position Adjustment Method (Top,Bottom) of Blade	14
12	Position Adjustment Method (Front,Back) of Biade	15
13	Adjustment Method of Pressure Contact Plate Groove Width	17
14	How Change Fahrenheit and Centigrade	
	Displays of the PF Machine Controoller	18
15	Wiring Dir	20

A list of errata

There are some descriptions that they are different from the facts on this manual. Please look at this list and correct them before you read this manual.

Thank you

Page	Item	errors	right
2	Specifications Main-Unit Dimension(mm) PF-60 60H	720×940×1030mm (28 11/32×37×40 9/16")	710×900×970 (27 61/64×35 7/16×38 3/16")
2	Specifications Main-Unit Dimension(mm) PF-110H	1420×940×1030mm (55 29/32×37×40 9/16")	1210×900×970 (47 41/64× 35 7/16×38 3/16")
6	1)-4 sitting space	720mm(28 11/32")×940mm(37")	710mm(27 61/64")×900mm(35 7/16")
6	sitting space	1420mm(55 29/32")×940mm(37")	1210mm(47 41/64")×900mm(35 7/16")
6	sitting space	1030mm(40 9/16")	970mm(38 3/16")
6	sitting space	940mm(37")	900mm(35 7/16")
6	Specifications Dimensions(W×D×H) PF-110H	1420mm×940mm×1030mm (55 29/32"×37"×40 9/16")	1210mm×900mm×970mm (47 41/64"×35 7/16"×38 3/16")
	Specifications Dimensions(W×D×H) PF-60 60H	720mm×940mm×1030mm (28 11/32"×37"×40 9/16")	710mm×900mm×970mm (27 61/64"×35 7/16"×38 3/16")

1 INTRODUCTION

This Manual is intended to be used for after-sale service on SLVER MASTER PLATEFORMER PF-60·60H,110H For operation of the machine and other details, refer to "SLVER MASTER PLATEFORMER PF-60·60H,110H OPERATION MANUAL" "TECHNICAL INFORMATION" and other related documents. Bear in mind that the machine structure and specifications are subject to change without notice. For parts ordering or consultation, let us know the following information,referring to "SLVER MASTER PLATEFORMER PF-60·60H,110H PARTS LIST"

- model SLVER MASTER PLATEFORMER PF-60 or PF-60H or PF-110H
- serial number
- reference numbers and descriptions of parts
- required quantities
- date of delivery

* Publication and duplication of this document are prohibited.

2 Main Specifications

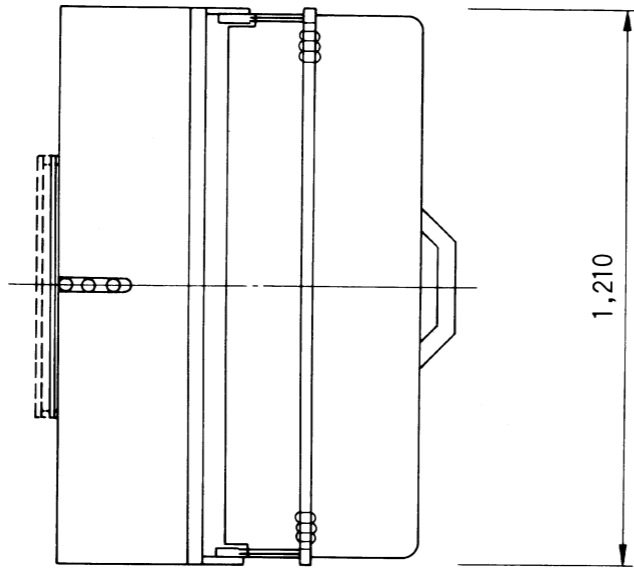
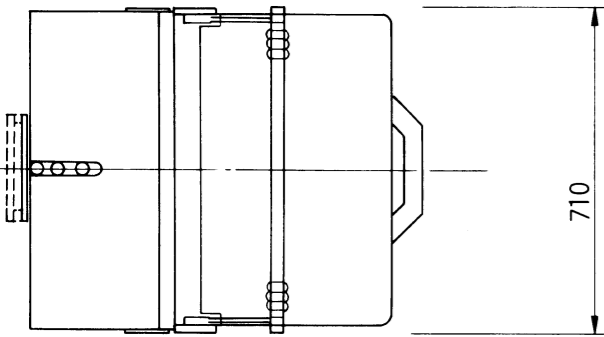
Item	Specification	
	PF-60·60H	PF-110H
Forming Method	Insert Blade Pressure Contacting Method	same as left
Registering Method	Edge Contact Method (Three forming positions can be preset)	same as left
Plate Material Used	Silver Master Film Plates and others	same as left
Effective Width	254 to 600 mm (10 to 23 5/8")	185 to 1100 mm (7 9/32 to 43 5/16")
Effective Length	No specific limitation, but up to about 500 mm (19 11/16")	same as left
Effective Thickness	0.125 to 0.20 mm (.005 to .008")	same as left
Effective Folding Margin	3 to 35 mm (1/8 to 1 3/8")	same as left
Forming Position Accuracy	± 0.1 mm (±.004") or less	same as left
Main Unit Dimensions (mm)	720 × 940 × 1030mm (28 11/32 × 37 × 40 9/16")	1420 × 940 × 1030 mm (55 29/32 × 37 × 40 9/16")
Weight	70Kg (154lbs)	140Kg (308lbs)
Electric Capacity	Single - phase 115~120V 1KW (for U.S.A) 220~240V 1KW (for Europe)	same as left

※ PF-60 needs no power supply.

3 OVERVIEW

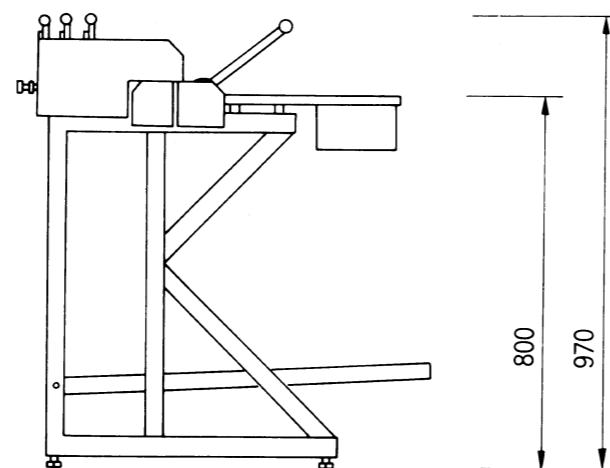
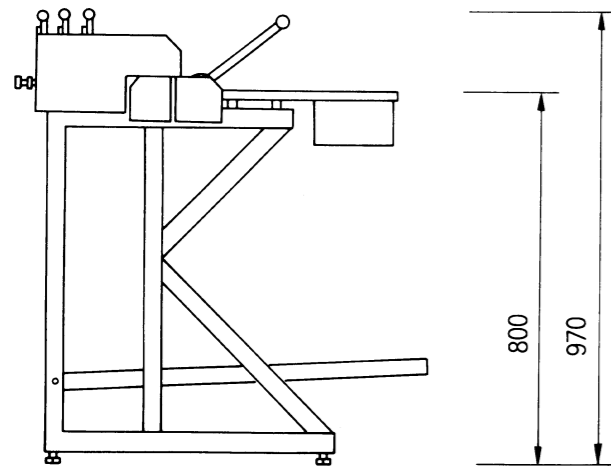
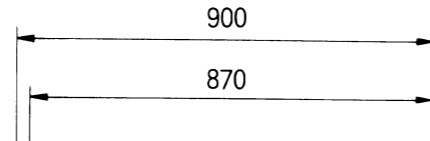
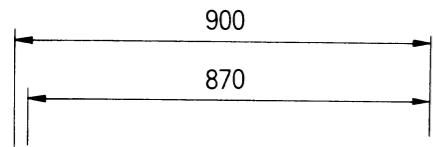
PF-60,60H

PF-110H



60-H

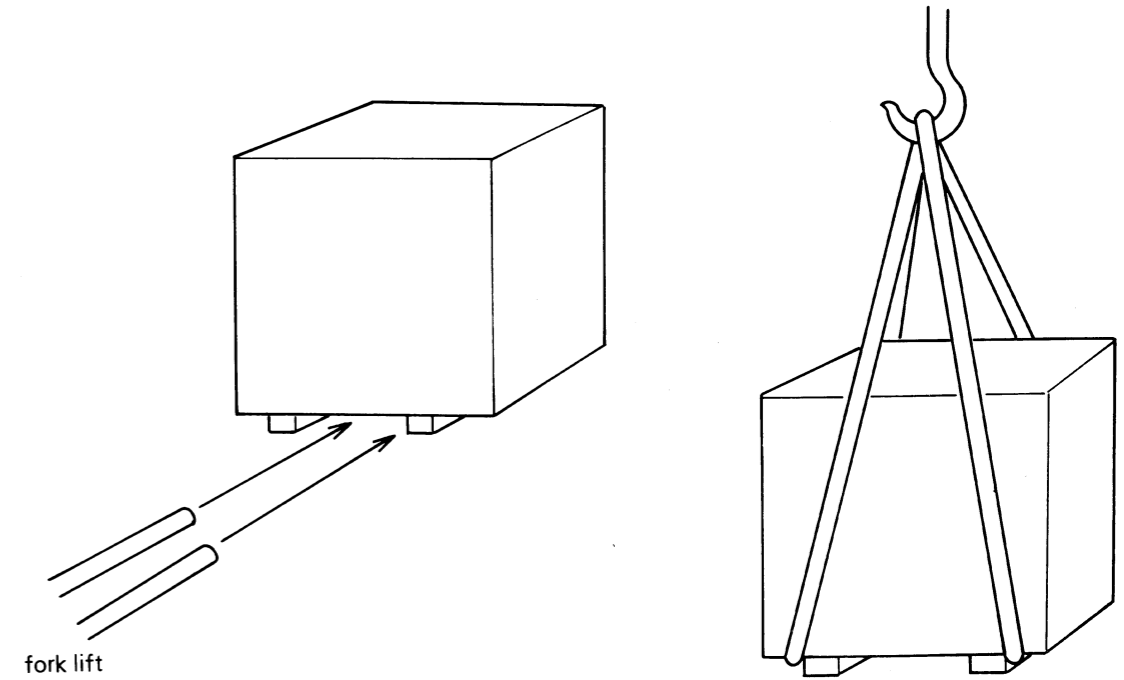
110-H



4 INSTALLATION PROCEDURE

1. Installation

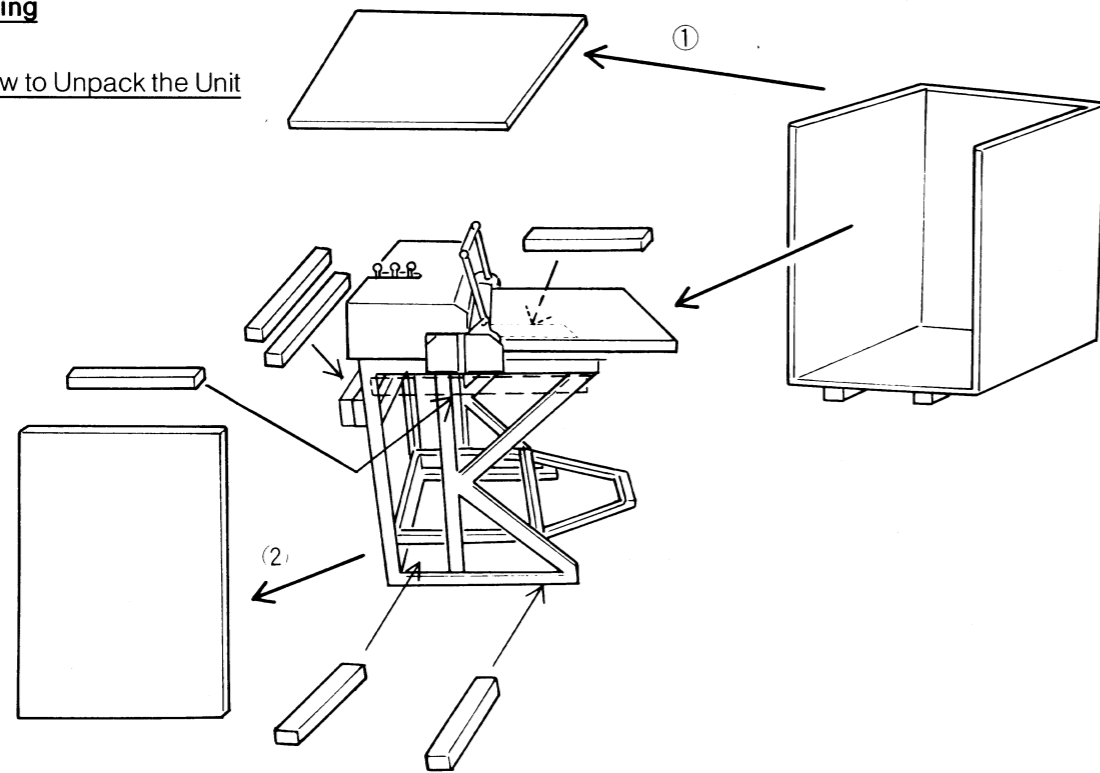
1) How to Install the Unit



When installing the main unit, lifting by fork lift and by winch are possible, however follow the method shown in the drawing.

2. Unpacking

1) How to Unpack the Unit



1. Remove the top panel ①.
2. Remove the side panel ②.
(Either of left or right panel.)
3. Remove the main unit retainer.
(Main unit retainer may come off along with the side plate ②.)
4. Take the main unit out of the wooden frame package.

2) Packaging List

1 Main Unit	1
2. Installation & Sitting Manual	1
3 Operation Manual	1
4. Fuse	1
5. Accessory Tools (1) T Wrench	1
(2) L Wrench	1
(3) Spanner 10X13	1
6. Mark Seal	3 pce.

3. Sitting

1) Sitting Conditions of the Unit

The following sitting conditions are required to ensure superb unit performance for a long time. For installation and sitting, select conditions that fully satisfy the following.

1. Floor Strength
The unit weights 70kg (154lbs) (for PF-60,60H), 140 kg.(308lbs) (for PF-110H) therefore install it on a floor that can fully bear this weight.
2. Power Supply
Wiring must carry single-phase 115~120V, 1KW(for U.S.A.), 220~240V,1KW (for Europe) and be able to withstand power fluctuations within $\pm 10\%$.
3. Avoid installation at a location subject to vibration. Select a floor surface that is flat.
4. Sitting Space
The sitting space is 720mm (28 11/32") \times 940 (37") (for PF-60,60H), 1420mm (55 29/32") \times 940mm (37") (for PF-110H). The unit's height is 1030mm (40 9/16"). Prepare the operation space at the 940mm (37") side.

Specifications

Dimensions (W \times D \times H)

PF-110H	1420 mm \times 940 mm \times 1030 mm (55 29/32" \times 37" \times 40 9/16")
PF-60、60H	720mm \times 940mm \times 1030mm (28 11/32" \times 37" \times 40 9/16")

Weight

PF-110H	140Kg. (308lbs)
PF-60•60H	70Kg. (154lbs)

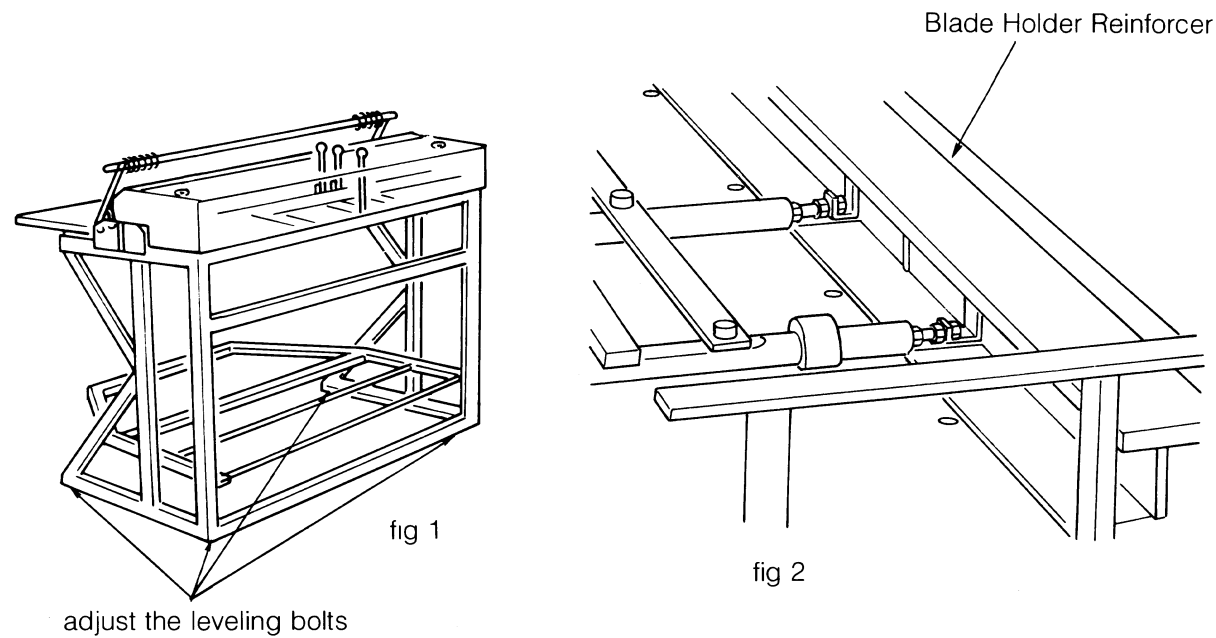
Electric Capacity

Single-phase	115~120V,1KW (for U.S.A.)
	220~240V,1KW (for Europe)

2) How to Set the Unit

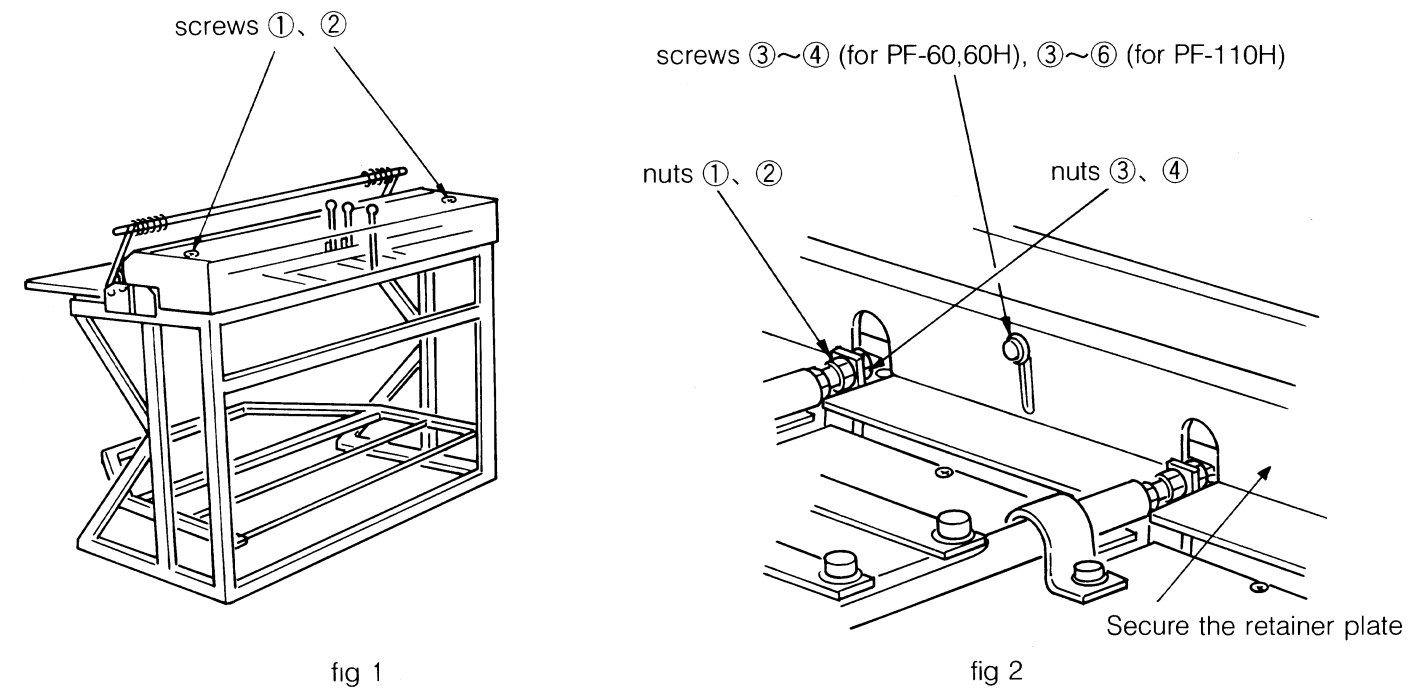
- (1) Transport the unit to the predetermined location. Hold the table or frame by the legs when moving the unit.
- (2) Place the unit at the predetermined location and check for any space between the floor and legs.
- (3) Check the unit levelness at the center of the main table unit with using the level.
- (4) To adjust levelness, adjust the leveling bolts up or down located on each of the four legs. (cf.fig 1)
- (5) Check the levelness, raise or lower the blade holder after leveling.
Place the level on the blade holder or blade holder Reinforcer to check the levelness. (cf.fig 2)
- (6) Loosen the balance adjustment bolt and check the levelness of the blade holder.

(For details on the adjustment method, see "Position Adjustment Method (Top, Bottom) of Blade" on p.14 of the service manual.)



5 Adjustment Method of Stopper

- 1 Remove screws ① and ② securing the cover, and remove the cover. (cf fig 1)
(First shut the power OFF and check that the heater has cooled sufficiently.)
- 2 Remove screws ③ and ④ (for PF-60,60H), ③ to ⑥ (for PF-110H) securing the retainer plate, and remove the retainer plate (cf.fig 2)
- 3 Carefully check the left and right stoppers and determine whether adjustment is necessary.
- 4 Using a spanner (supplied) (10 mm side)
 - 1) To increase the folding width, turn nut ① (or ②) at the opposite operation side slowly CCW (loosen), then turn nut ③ (or ④) at the operation side slowly CW (tighten) by the same amount as nut ① (or ②). Then turn nut ① (or ②) CW (tighten). (cf.fig 2)
 - 2) To reduce the folding width, turn nuts ③ (or ④) at the operation side slowly CCW (loosen), then turn nut ① (or ②) at the operation side slowly CW (tighten). Then turn nut ③ (or ④) CW (tighten). (cf.fig 2)
- 5 If positioning was determined by trial and error, move the stoppers toward nuts ①,②,③,④ Slowly CW (tighten). (cf.fig 2)
- 6 Secure the retainer plate with screws and ③ and ④ (for PF-60,60H), ③ to ⑥ (for PF-110H). (cf.fig 2)
- 7 Secure the covers with screws ① and ② (cf.fig 1)



6 Replacement Procedure for Set Lever

- 1 Remove screws ① and ② securing the cover, and remove the cover. (cf fig 1)
(First shut the power OFF, and check that the heater has cooled sufficiently)
- 2 Check that the set lever to be replaced is away from the stopper. (cf.fig 2)
- 3 Remove screw ③ securing the spring to the set lever, along with the spring. (cf.fig 2)
- 4 Loosen the nut of screw ④ securing the set lever, and remove the set lever from the mounting jig. (cf.fig 2)
- 5 Insert the new set lever to the groove of the mounting jig, insert screw ④ into the screw hole from the side, and tighten it with a nut. (cf.fig 2)
- 6 Attach screw ③ to the set lever. (cf.fig 2)
- 7 Install the cover (cf.fig 1)

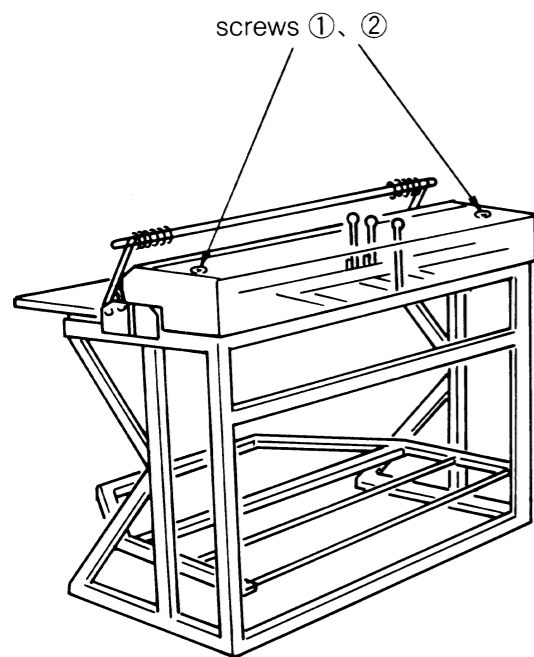


fig 1

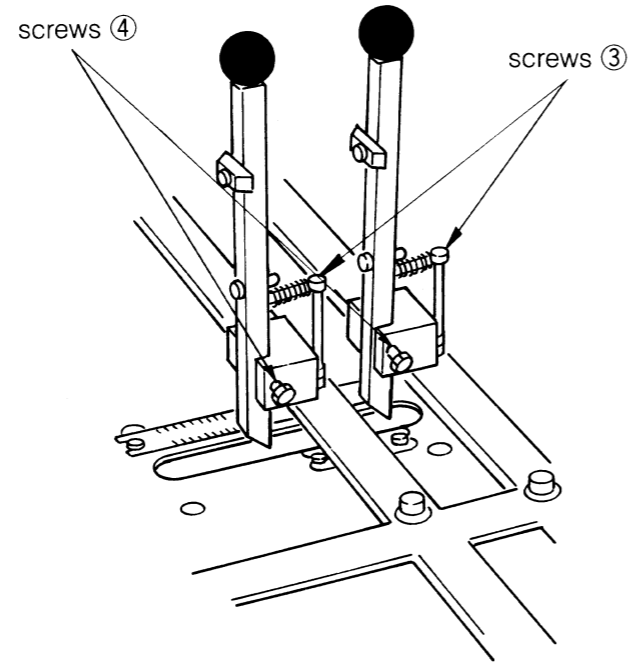


fig 2

7 Adjusting Position of Scale

- 1 Remove screws ① and ② securing the cover, and remove the cover. (cf.fig 1)
(First shut the power OFF, and check that the heater has cooled sufficiently.)
- 2 Carefully check the three scales, and determine which scale requires adjustment. (cf.fig 2)
- 3 Loosen screws ③ and ④ securing the scale that requires adjustment. (cf fig 2)
- 4 Press the tip of the scale at one end with a finger or screwdriver, and move the specified distance in the necessary direction. (cf.fig 2)
- 5 Tighten screws ③ and ④ at both ends of the scale. (cf.fig 2)
- 6 Install the cover. (cf.fig 1)

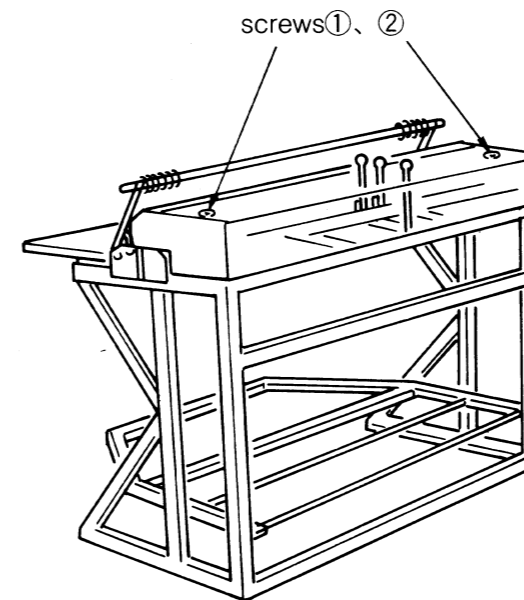


fig 1

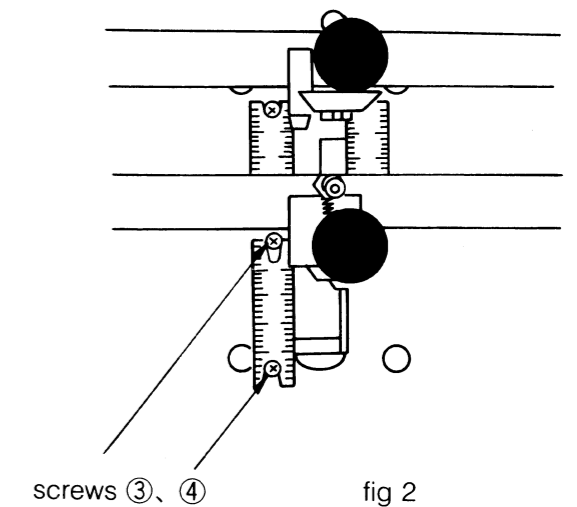


fig 2

8 Replacement Method of Stopper

- 1 Turn screw ③ securing the stopper to the left, and remove it until the stopper and the stopper securing the jig come away from the stopper rail. (cf.fig 1)
- 2 Turn the new stopper in the direction to where it protrudes inside, then insert screw ③ from the outside. Insert the stopper in the groove of the stopper rail, and screw it to the stopper securing the jig from the outside. (cf fig 1)
- 3 Gradually tighten screw ③ so that the stopper and protrusion of the jog securing the stopper fit into the stopper rail. (cf.fig 1)
- 4 Temporarily tighten the stopper to the scale, matching the specified folding width (cf.fig 1)
- 5 Set the set lever to the stopper, fold the plate, and closely check with a metal ruler whether or not the folding is the specified length
- 6 If not, perform steps 5 and 6 again. (cf.fig 1)
- 7 If the plate is folded to the specified length, tighten screw ③ of the stopper. (cf.fig 1)

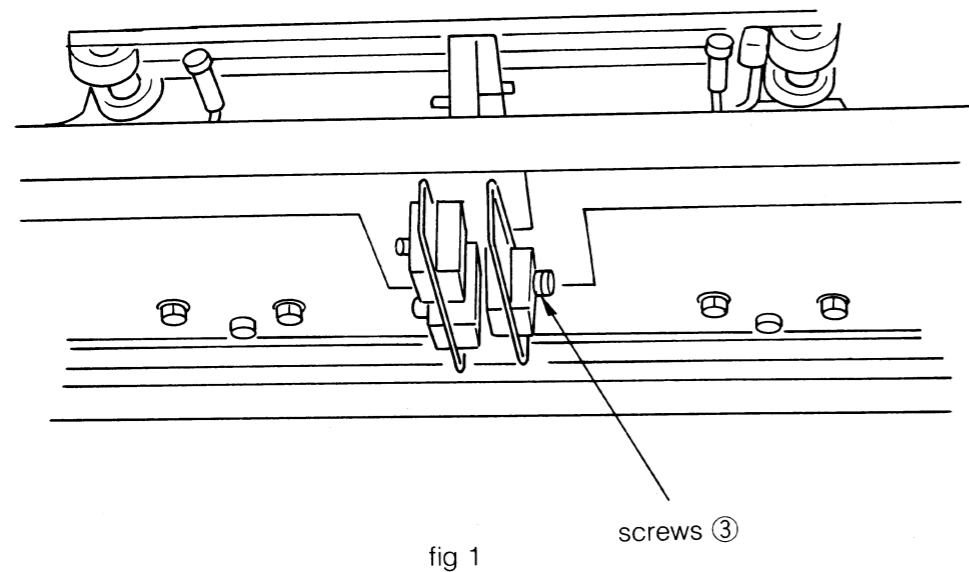


fig 1

9 Replacement Procedure of Blade

- 1 Remove screws ① and ② securing the cover, and remove the cover. (cf.fig 1)
(First shut the power OFF, and check that the heater has cooled sufficiently.)
- 2 Remove screws ③ to ⑩ (for PF-60,60H), or ③ to ⑱ (for PF-110H), securing the left and right of the blade, and remove the blade. (cf.fig 2)
- 3 Install the new blade and temporarily secure it. (cf.fig 2)
- 4 Place block gauges to the left, right and center, so that they contact the side surface of the pressure contact plate at the non-operation side. (cf.fig 2)
- 5 (for PF-110H) Place a 0.8 mm clearance gauge on the left and right block gauges.) (cf.fig 2)
- 6 Slowly lower the blade to the clearance gauge using the foot pedal, and lightly contact of the blade to the block gauge. (cf.fig 2)
- 7 When the blade is lowered, tighten screws ③ to ⑩ (for PF-60, 60H) or ③ to ⑱ (for PF-110H) from the center to both sides. (cf.fig 2)
- 8 Release the foot pedal and raise the blade. (cf.fig 2)
- 9 Remove the block gauges. (cf fig 2)
- 10 Install the cover that was removed (cf fig 1)

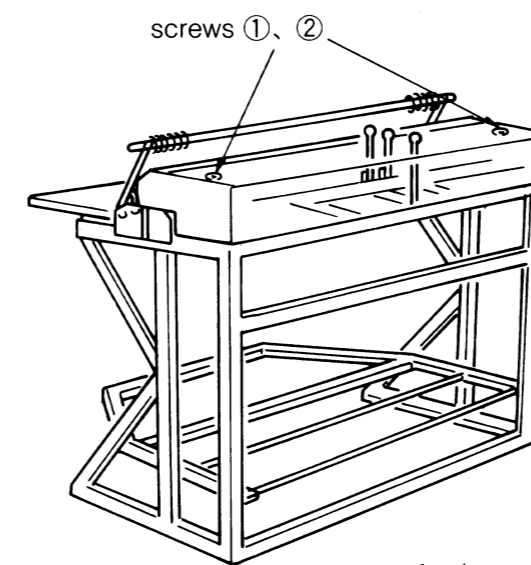


fig 1

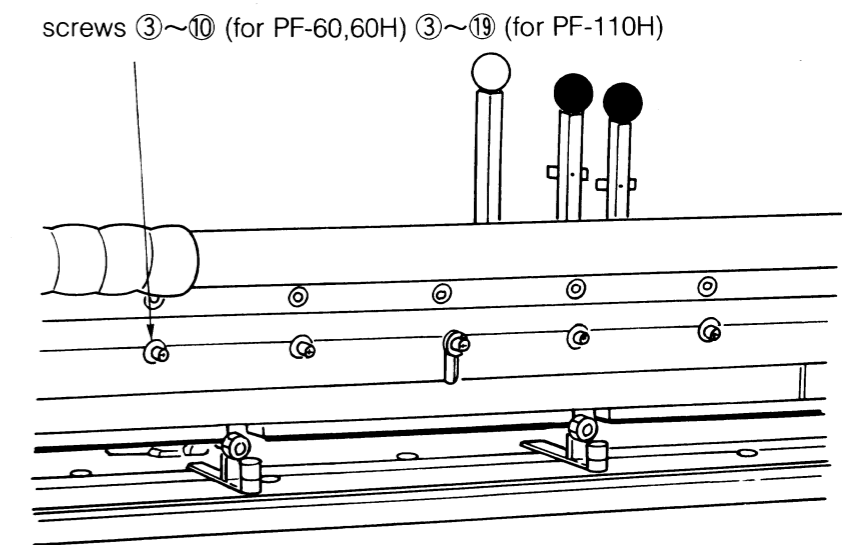
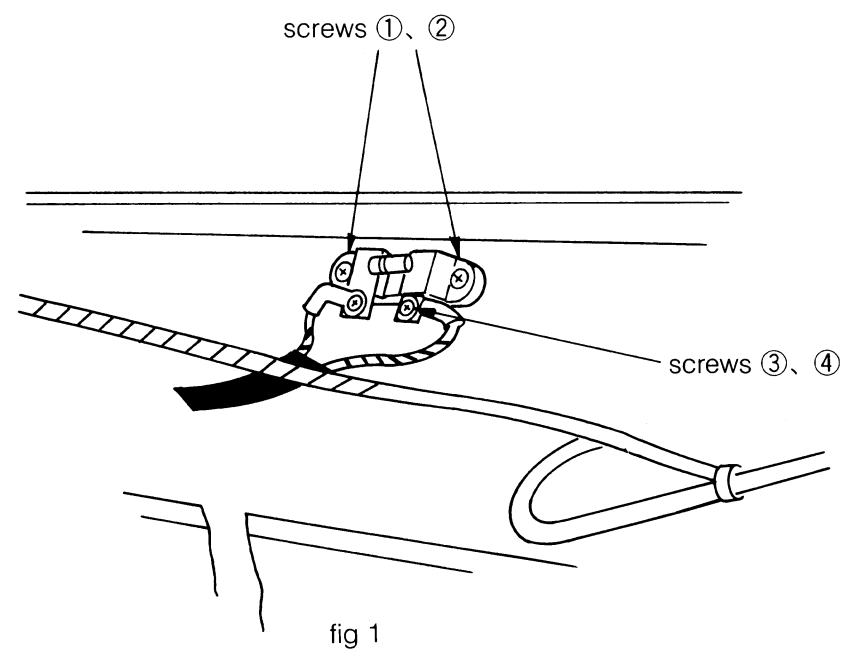


fig 2

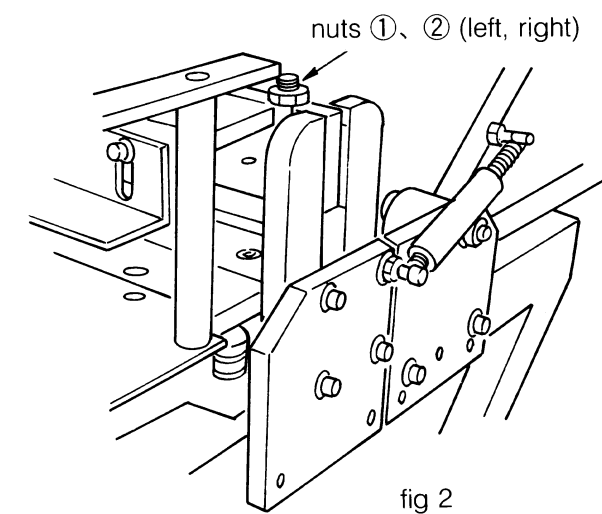
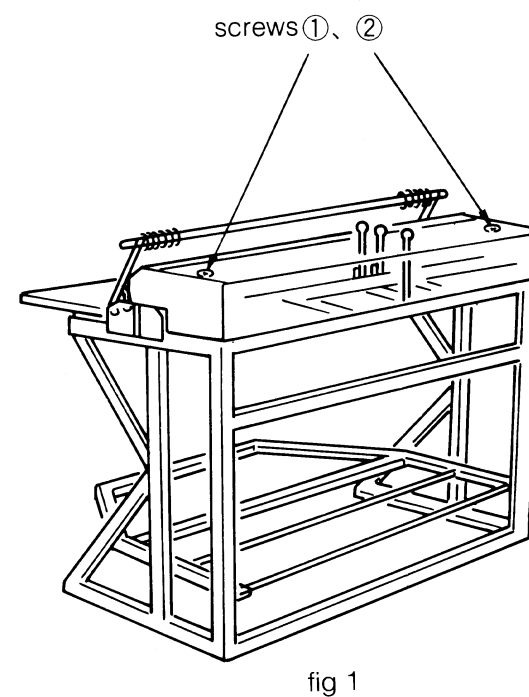
10 Replacement Procedure of Temperature Fuse

- 1 First shut the power OFF, and check that the heater has cooled sufficiently.
- 2 Remove screws ① and ② securing the temperature fuse cover at the back of the pressure contact part, and remove the temperature fuse cover. (cf.fig 1)
- 3 Loosen screws ③ and ④ at the fuse holder, and remove the blown fuse. (cf.fig 1)
- 4 Wrap the wiring of the new fuse around screws ③ and ④. (cf.fig 1)
- 5 Firmly tighten screws ③ and ④. (cf.fig 1)
- 6 Install the temperature fuse cover, and secure it with screws ① and ②. (cf.fig 1)
(Handle the cable with care.)
- 7 Turn the power ON and check that there are no abnormalities.



11 Position Adjustment Method (Top, Bottom) of Blade

- 1 Remove screws ① and ② securing the cover, and remove the cover. (cf.fig 1)
(First shut the power OFF, and check that the heater has cooled sufficiently.)
- 2 Next place block gauges at the left, right and center on the pressure contact plate.
- 3 Turn the left and right bolts ① and ② on the blade holder. (cf.fig 2)
Adjust a blade to made it level, turing either top or bottom nuts with bolts on both sides.
- 4 Check the balance at the left and right.
 - 1) Step on the foot lever and slowly lower the blade until it contacts the block gauge.
 - 2) Move the block gauges by hand, and check that the three gauges contact the blade.
 - 3) If they do not contact, repeat steps 4 and 5 by trial and error.
- 5 Remove the block gauges when adjustment is completed
- 6 Fighnten top and bottom nuts with bolts on both side, if necessary. (cf fig 2)
- 7 Install the cover that was removed. (cf.fig 1)



12 Position Adjustment Method (Front, Back) of Blade

- 1 Remove screws ① and ② securing the cover, and remove the cover. (cf.fig 1)
(First shut the power OFF, and check that the heater has cooled sufficiently.)
- 2 Remove screws ③ to ⑤ (for PF-60· 60H) or ③ to ⑦ (for PF-110H) securing the pressure contact plate at the operation side, and remove the pressure contact plate. (cf.fig 2)
- 3 Remove screws ⑥ to ⑬ (for PF-60· 60H) or ⑧ to ⑳ (for PF-110H) securing the blade, and remove the blade. (cf.fig 2)
- 4 Using three of the removed screws ⑥ to ⑬ (for PF-60· 60H) or ⑧ to ⑳ (for PF-110H), install block gauges at the left, right and center. (cf.fig 2)
- 5 Check the blade holder, and check the side that requires adjustment.
- 6 Turn nuts ① and ② of the side panel at the adjustment side CCW, loosening them. (cf fig 3)
- 7 Push the blade holder in the direction requiring adjustment. (cf.fig 3)
- 8 Turn nuts ① and ③ (or ② and ④) of the side panel mentioned in 6 above CW, and temporarily tighten them. (cf.fig 3)
- 9 Check that the adjustment is correct.
 { Insert the clearance gauges between the three block gauges and the pressure contact plate at the non-operation side, and check that all clearances are even and that they have the necessary width. If not, repeat steps 6 to 8 by trial and error. (cf.fig 3) }
 Prior to shipment the blade position is adjusted to 0.2 to 0.3 mm for values referred to in step 9 above. (A 0.2 mm gauge can be inserted, but not a 0.3 mm gauge.)
- 10 Remove the block gauges and replace the blade. (cf.fig 2)
- 11 Remove the Pressure contact plate. (cf.fig 2)
- 12 Install the cover that was removed. (cf.fig 1)

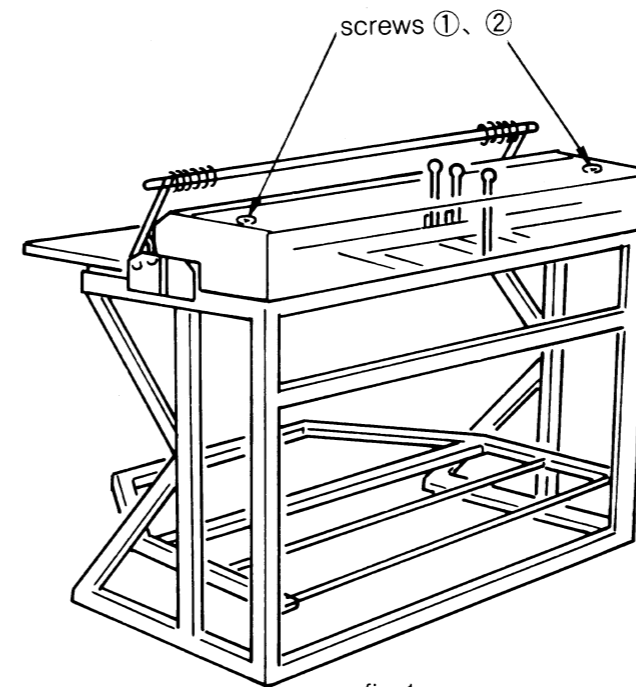
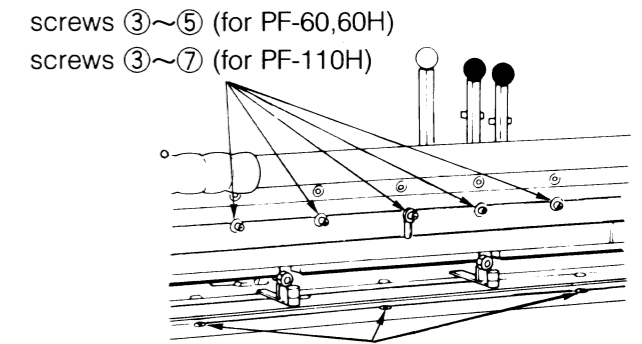


fig 1



screws ③~⑤ (for PF-60,60H)
screws ③~⑦ (for PF-110H)
screws ⑥~⑬ (for PF-60,60H)
screws ⑧~⑳ (for PF-110H)

fig 2

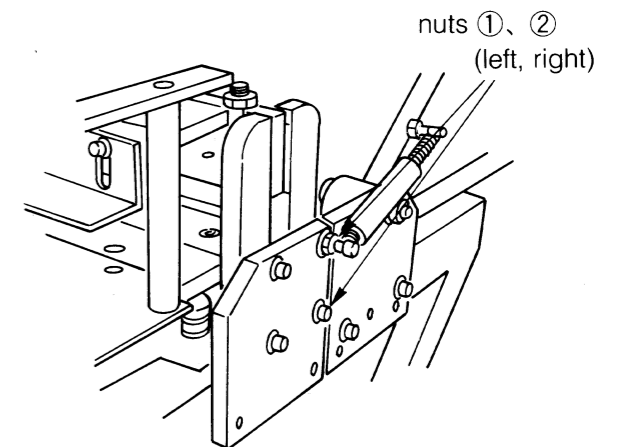


fig 3

13 Adjustment Method of Pressure Contact Plate Groove Width

- 1 Remove screws ① and ② securing the cover, and remove the cover. (cf.fig 1)
(First shut the power OFF, and check that the heater has cooled sufficiently.)
- 2 Turn nuts ① and ② at the left and right of the back of the table frame to the left to loose them. (cf.fig 1)
- 3 Push the bolts of under the table by apply tools and determine the groove width of the pressure contact plate. (cf.fig 1)
(First insert a clearance gauge of the groove width of the pressure contact plate (the groove in 1.7mm to 2.2mm, that in standard). into the groove.) (cf.fig 2)
- 4 Temporarily tighten nuts ① and ② at the left and right. (cf.fig 1)
- 5 Measure the groove width of the pressure contact plate from the left and right side plates with a clearance gauge (cf fig 2)
- 6 If adjustment is still required, repeat steps 2 to 5 by trial and error. (cf.fig 2)
- 7 Tighten nuts ① and ② at the left and right of the back of the frame. (cf.fig 1)
- 8 Install the cover that was removed. (cf.fig 1)

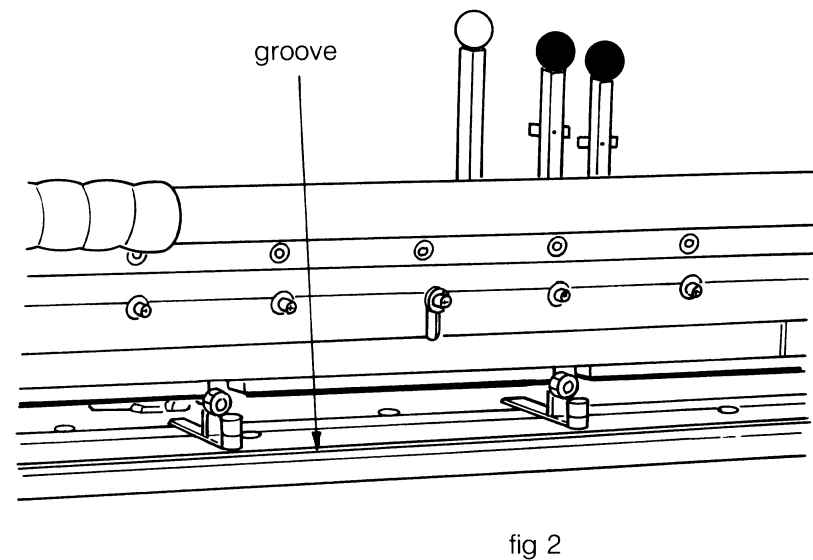
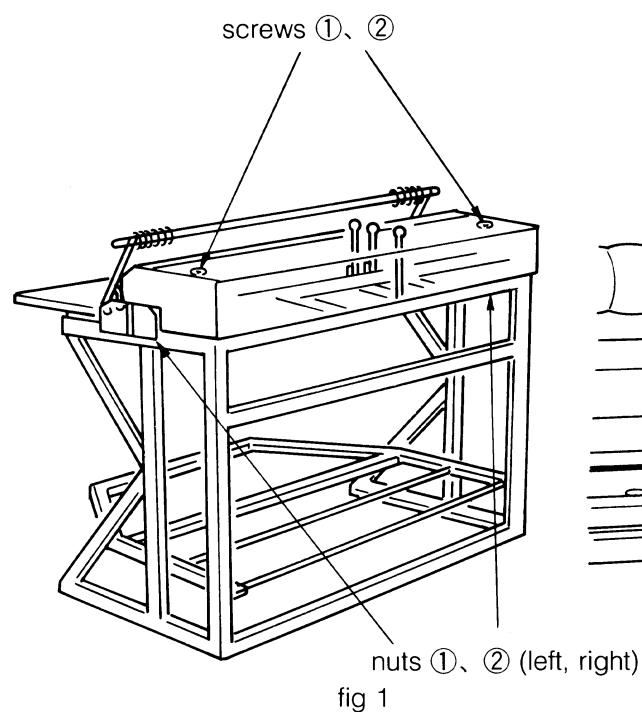


fig 2

14 How to Change Fahrenheit and Centigrade Displays of the PF Machine Controller

- 1 Turn the power ON.
 - 1) Insert the plug into the outlet.
 - 2) Turn the power switch of the controller ON. (cf.fig 1)
- 2 Press the **SET** key for 5 seconds. (cf.fig 1)
- 3 PV changes to ATU. (cf.fig 1)
- 4 Intermittently push the **SET** key. (cf.fig 1) The display changes in the following sequence:
P, →I, →d, →Ar, →T.
- 5 When the setting is LCE, set SV100→000. (cf.fig 1) (Clear data during input.)
- 6 Press the **SET** key once. (cf.fig 1) PV changes to ATU.
- 7 Press the ◀ key and **SET** key simultaneously for 5 seconds. (cf fig 1) PV changes to SL1.
- 8 Press the **SET** key. (cf.fig 1)
SL1 changes to SL2. At this time if SV is 010, the setting is in Centigrade.
If SV is 011, the setting is in Fahrenheit. Select one of the two settings.
- 9 Press the **SET** key. (cf fig 1) PV changes to SL3.
- 10 Press the **SET** key intermittently. (cf.fig 1)
PV changes in the following sequence: SL4, →SL5, →P6, →OH, →SLH.
- 11 Set the maximum temperature (cf.fig 1)
If SL2 is 010 (centigrade setting), set to 100°C.
If SL2 is 011 (Fahrenheit setting), set to 212°F.
- 12 Press the **SET** key. (cf.fig 1) PV changes to SLL.
- 13 Press the **SET** key for 5 seconds (cf.fig 1) Just then display digital values again.
- 14 Press the **SET** key for 5 seconds. (cf.fig 1) PV changes to ATU.
- 15 Press the **SET** key intermittently. (cf.fig 1) PV changes in the following sequence:
P, →I, →d, →Ar, →T, →LCE .

15 Wiring Dia

- 16 Change SV to 100. (cf fig 1)
- 17 Press the **SET** key. (cf.fig 1)
- 18 Shut the power OFF. (cf.fig 1)
- 19 Turn the power ON and check the maximum temperature.
- 20 Setting temperature. (cf.fig 1)
("How to set the Heater" is cf.PF-60·60H,110H operation manual)
- 21 Setting is now completed.

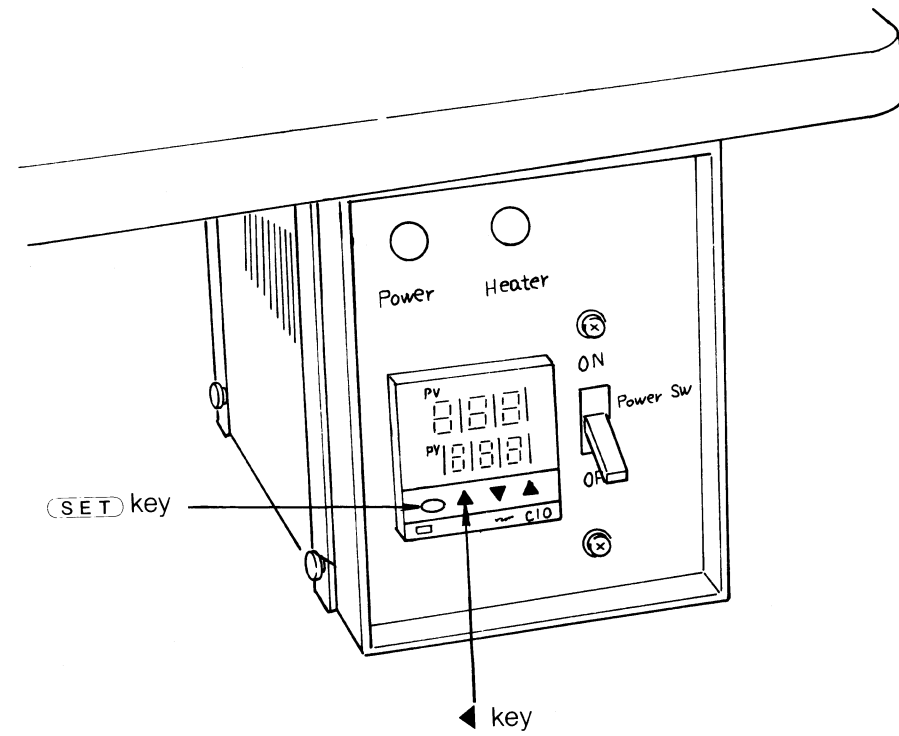
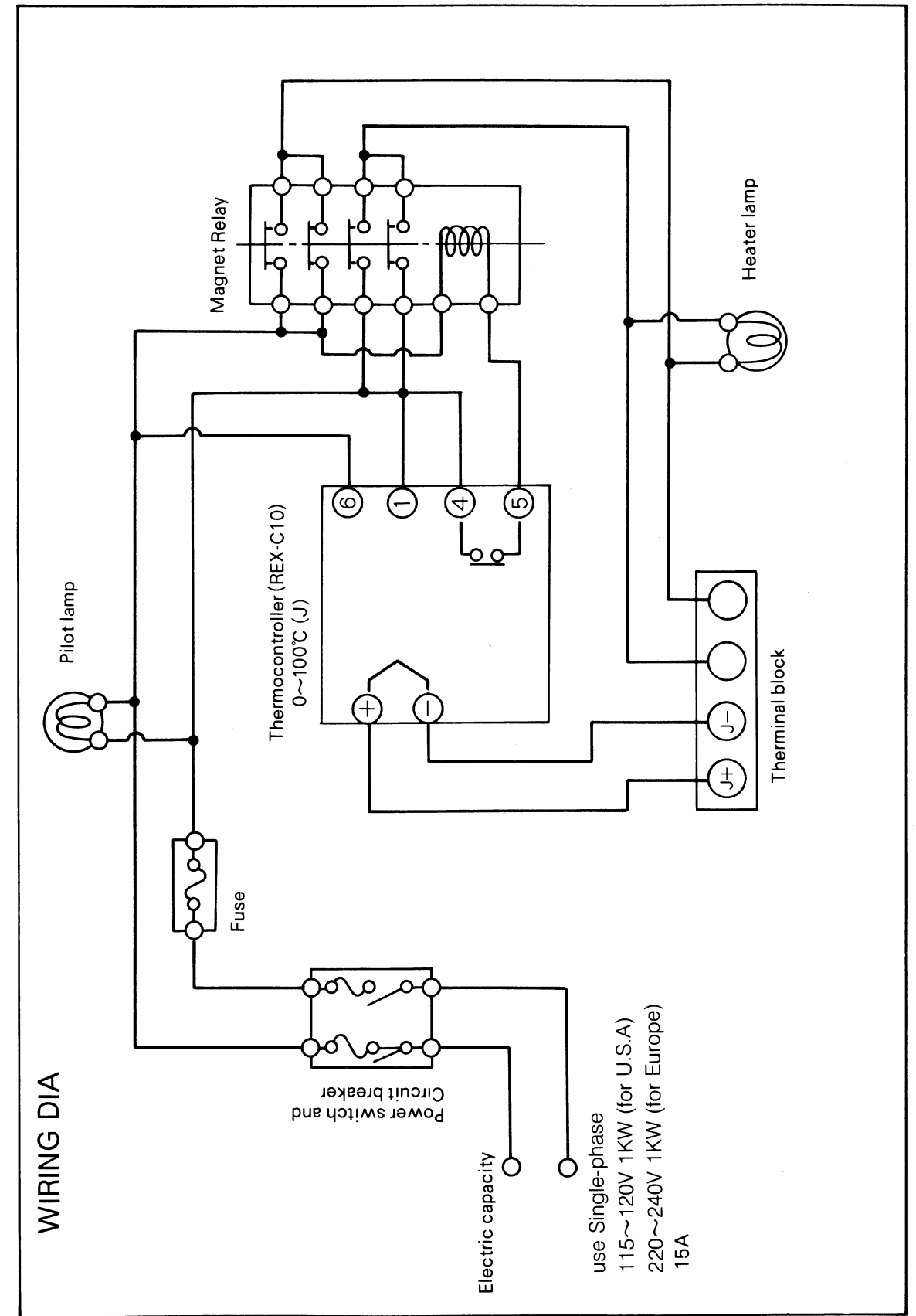


fig 1



mitsubishi paper mills limited

(Printed in Japan 92061TKA)