USER'S MANUAL

HEXAGONAL EMBOSS TYPE SEQUIN PRESS MACHINE TPS-E

Foreword

This manual is a guidebook for using the hexagonal-emboss-sequin press machine correctly. It describes about adjustment, setting and operation of the device, and items to notice using the device. Please read this manual thoroughly and understand the contents, and then use the device.

If any question about the product or contents of this manual arises, please consult your TAJIMA distributor. Please keep this manual carefully near the machine for quick reference when you need.

Tokai Industrial Sewing Machine Co., Ltd.

Important safety instructions

To use this device safely, it is necessary to handle it correctly.

Please read the IMPORTANT SAFETY INSTRUCTIONS in this manual carefully and do not attempt operation or maintenance of the machine before you thoroughly understand the items written under IMPORTANT SAFETY INSTRUCTIONS.

Items that require your special attention on operation and maintenance of the machine are specified below with the warning symbol and signal word. These items must be strictly observed to ensure safety during operation and maintenance. Signal word definition is given below.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury * or property damage.

- *: It does not necessitate hospitalization or visit to a hospital over a long period.
- 1 : Items that must be followed carefully to ensure safe operation
- O: Prohibited items
- : Items that explain the contents of sentences in detail and items that complement the contents.

[Notice]

- Copy, reprint, or reform of a part or whole of this manual without permission is prohibited.
- This manual may contain discrepancies in detailed information when compared with the actual product due to continued research and improvements.

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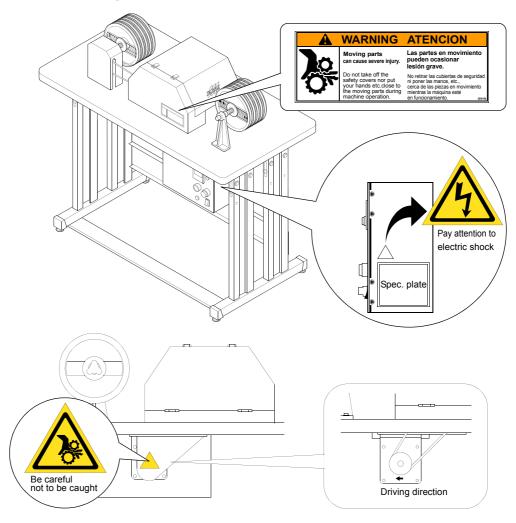
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Items to notice

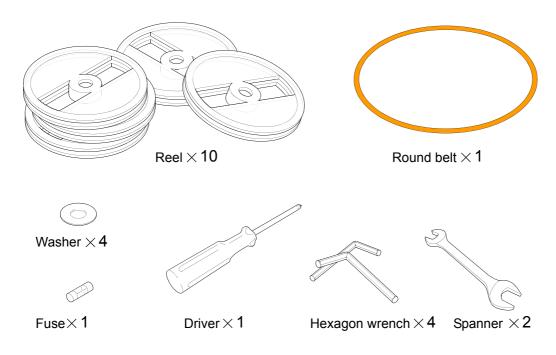
CAUTION

- When operating this machine, attach the cover. If using the machine with covers detached, you could be injured or get an electric shock.
- When detaching the cover to perform working, be sure to turn "OFF" the power switch. If performing working with the power switch turned "ON", unexpected malfunctioning of the machine could injure you.
- When performing maintenance, be sure to turn "OFF" the power switch. If performing working with the power switch turned "ON", unexpected malfunctioning of the machine could injure you.
- Opo not touch the screw painted in yellow. When detaching parts by removing the painted screw, adjustment by the technical personnel will be required.
- Opo not use easily torn materials or those with uneven distance between sequin holes or poor and fragile surface. They will cause bad processing or breakdown of the machine.

1 Caution/warning labels



2 Accessory



Fuse: 250V 5A

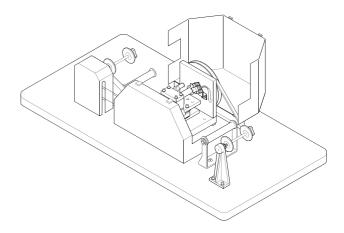
3 Specification

voltage	100-120V/200-240V
Frequency	50/60Hz
Power consumption	129VA (79W)
R. P. M.	700RPM
Corresponding sequin size	Outer diameter 5.0 to 7.0 mm

Setup

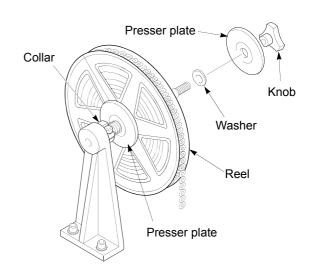
1 Cover

Remove the stopper to open the cover.

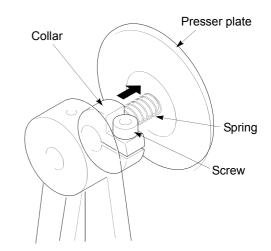


2 Attaching of feed reel

- 1. Set sequin reel to the main body.
- 2. Put a washer between a reel and a reel.
 - Insert a blank reel to the place where sequins are not used, and set five reels in total.
- **3.** Insert the presser plate to the last reel and tighten the reels using the knob.
 - When turning the knob, press the collar so that the knob does not run idle.



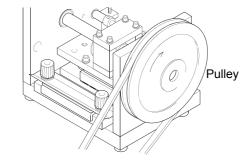
- **4.** Loosen the screw of the collar.
- **5**. After applying pressure a little to the spring so that reels do not bobble, tighten the screw.
 - Adjust spring pressure so that each reel can rotate individually.



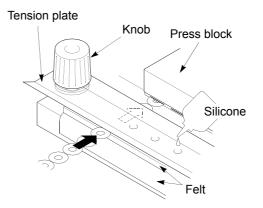
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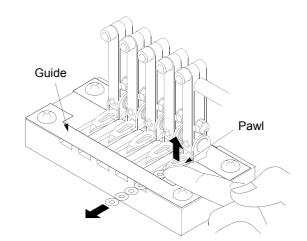
3 How to pass sequins

- 1. Turn the pulley to the direction indicated by the arrow so that the press block moves up.
 - Be careful not to clip your fingers by belt. The pulley rotates only in the direction indicated by an arrow.



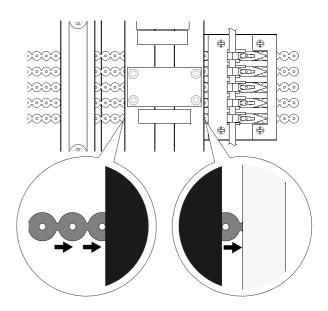
- **2.** Turn the knob to weaken tension to sequins.
 - When passing of sequins is finished, turn the knob to apply tension to sequins.
- **3**. Pass sequins between felt and felt.
 - Apply silicone a little bit to sequins from the hole of the tension plate so that pressed sequins are not scratched by the pawl.
- 4. Pass sequins to the groove of the press block.
- **5.** Pass sequins to the exit of the press block.
- **6.** Raise the pawl and pass sequins under the guide to be pulled out.
- 7. Pass sequins to all sections that are used.



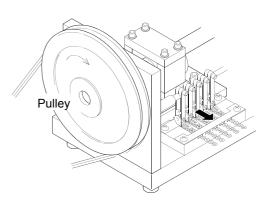


4 Adjustment of position of feed pawl

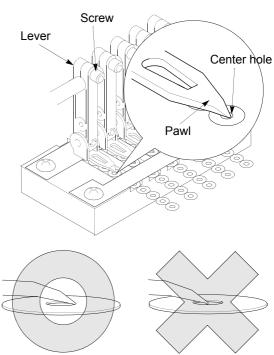
- 1. Look at the entrance and exit of sequins from the top of the press machine.
- 2. Adjust position of sequins which you can see from the entrance and exit of the press machine so that sequins become symmetrical.
 - Look at the exit side from a clearance between the press device and guide.



3. After adjusting all sequin positions, turn the pulley to the position where the feed pawl feeds sequins to the farthest.

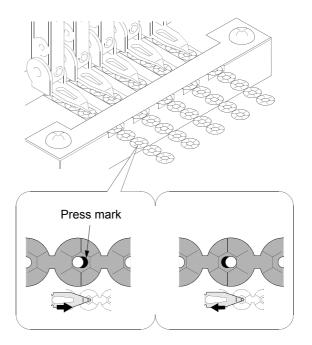


- **4.** Loosen the screw of the lever that fixes the feed pawl.
- **5.** After the feed pawl enters the center of sequin and is set at the position where the tip of the feed pawl presses sequin, tighten the screws to fix the feed pawl.
- **6.** Adjust all feed pawls to use.
 - Even if different feed pitch of sequins (7 mm and 6.8 mm) is used, it is possible to press simultaneously when adjusting the position of each feed pawl.

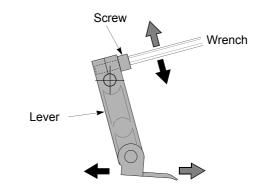


5 Fine adjustment

- **1.** Turn the pulley to feed out about 10 pieces of pressed sequins.
- 2. Check shape of hexagonal emboss of sequin.
- **3.** When sequins have mark of press scratch as shown in the right illustration, adjust position of the feed pawl.

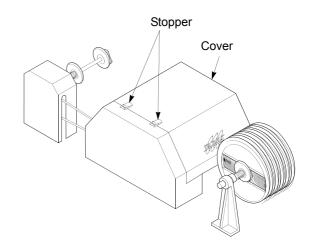


Loosen the screw to adjust the angle of the lever. At this time it will become easier to perform adjustment by changing angle using a wrench in the screw head.



6 Close the cover

Close the cover and fix it using the stopper.

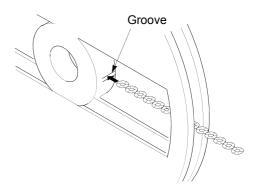


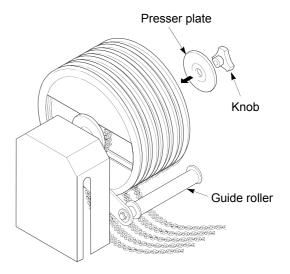
7 Preparation for running

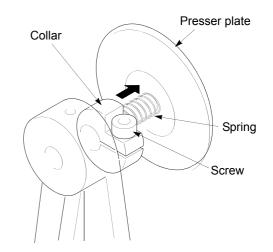
- 1. Turn on the main power supply.
- 2. Perform inching for necessary length.
 - Refer to "Operation panel: 3. Inching".
- **3.** Stop the machine.

8 Attaching of winding reel

- Dispose of non-processed extra sequins, and insert the tip section of effective sequins to the center groove of the reel.
- **2.** Rotate the reel by full circle or more not to make sequins come off.
- **3**. Set the reel to the main body of the press machine.
- 4. Pass sequins under the guide roller.
- **5.** Put a washer between a reel and a reel.
- Set sequin-wound reels, put the presser plate on the last reel, and then fix the reels using the knob.
 - When turning the knob, press the collar so that the knob does not run idle.
- 7. Loosen the screw of the collar.
- **8.** After applying pressure a little to the spring so that reels do not bobble, tighten the screw.
 - The stronger the reel is pressed, the tighter will be the winding of sequins. The weaker the reel is pressed, the looser will be the winding of sequins.



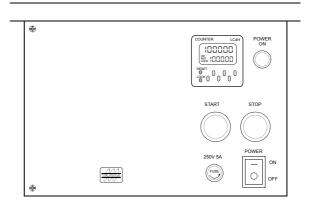




Operation panel

1 Basic operation

- Turning on the power switch will cause the power lamp to light in green.
 - If the fuse is broken, it is not possible to turn on the power. In this case, remove the cap of the fuse and replace it with new one.
- **2.** Pressing the start switch (green) will cause the machine to operate after inching two times.
- **3.** Pressing the stop switch (red) will cause the machine to stop after inching two times to press.



2 Start/stop switch

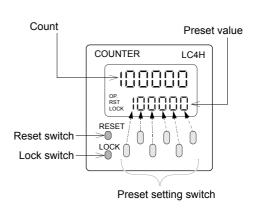
Start switch	Stop switch
Press the switch and release it	Press the switch and release it
 Starts operation after two 	 Stops operation after two
times of inching	times of inching
Keep pressing the switch.	
 Performs inching while the 	
switch is pressed, and starts	
operation when it is	
released	

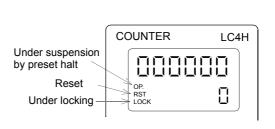
3 Inching

- 1. Press the start switch and stop switch at the same time to start the machine.
 - When releasing the switches, release the stop switch initially. If releasing the start switch initially, the machine will stop.
- **2.** Pressing the stop switch will cause the machine to stop.

4 How to use the counter

- Input a preset value to stop the machine by the preset setting switch.
 - When setting a preset value to "0", the machine will stop at count of 1,000,000 (Display: 000,000).
- 2. Press the reset switch to set the count to "0".
- **3.** When the count reaches the preset value during operation, the machine will stop.
 - If pressing the start switch while the mchine is under suspension (Display: OP.), the machine will perform inching while the start switch is pressed and it will stop when the start switch is released.
 - Pressing the lock switch will cause other switches than the lock switch to become invalid. Pressing it again will release the lock.
 - Count and preset value are being memorized even if the power switch is turned off.



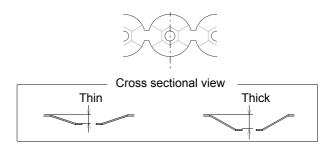


Adjustment of press

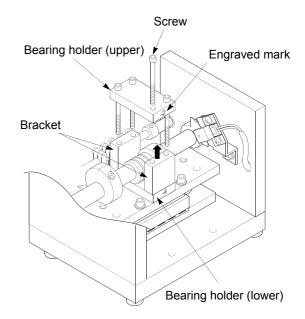
1 Change of thickness of hexagonal emboss

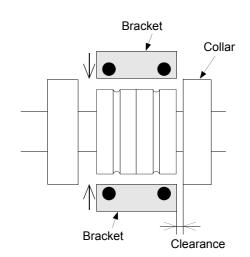
It is possible to change thickness of hexagonal emboss by counterchanging the bearing holders upper/lower.

- 1. Turn off the main power supply.
- 2. Disengage the stopper to detach the cover.



- **3**. Remove four pieces of screw of the bearing holder.
 - The bearing holder has engraved marks of numbers as eyemarks.
- 4. Remove the screw and bearing holder (upper).
- **5.** Detach the bracket.
- **6.** Counterchange the bearing holder (lower) with the bearing holder (upper).
 - When counterchanging upper/lower-bearing holders, align the direction of the engraved mark of one holder with the engraved mark of the other holder.
- 7. Set the bracket.
 - The bracket has the fixed direction to be set. Set the screw hole to the inside.
- **8.** Set the bearing holder (lower) on the bracket and tighten the screw.
 - When tightening the screw, check if there is a gap between the bracket and collar. If the bracket touches the collar, the main shaft will not rotate.



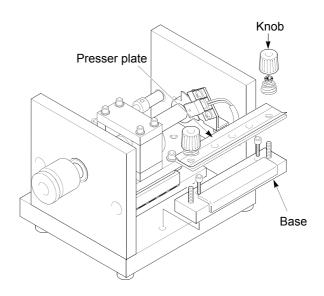


Replacement of the press block

When pressing sequins of different diameter, replace the press block and sequin guide.

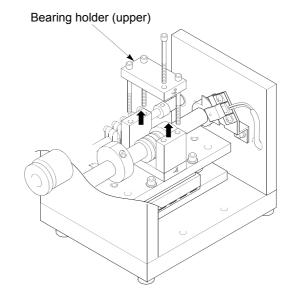
1 Detaching of the presser plate

- 1. Remove the knob to take out the presser plate.
- **2.** Remove the two pieces of screw to take out the base.

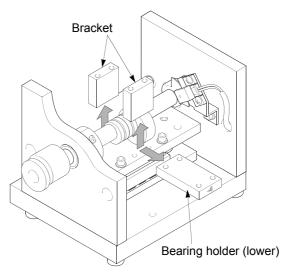


2 Detaching of the bearing holder

- 1. Remove the four pieces of screw.
- **2.** Remove the bearing holder (upper).



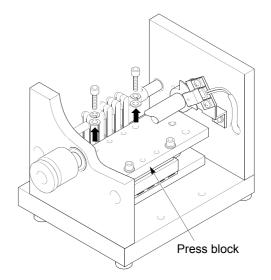
- **3.** Detach the bracket.
- 4. Remove the bearing holder (lower).
 - Direction of the bearing holder and bracket is designated. Pay attention so that the direction does not change to perform working.



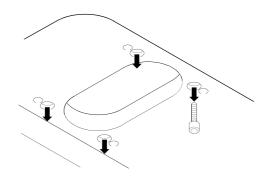
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3 Replacement of the press block

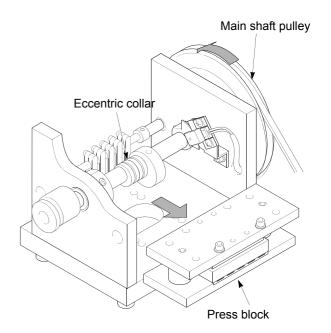
- 1. Remove the two pieces of screw that are positioned at the pawl side of the press block.
 - When detaching the press block, screws on the pawl side will interfere with the eccentric collar.



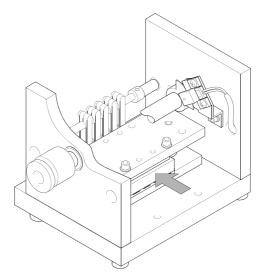
- **2.** Remove the screw on the backside of the table.
 - Four pieces of screw are painted in yellow.



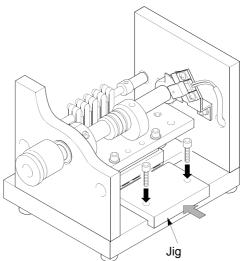
- **3.** Rotate the main shaft pulley by hand so that a clearance between the eccentric collar and the press block becomes widely open.
 - The main shaft pulley rotates only to one direction.
- **4.** Take out the press block.



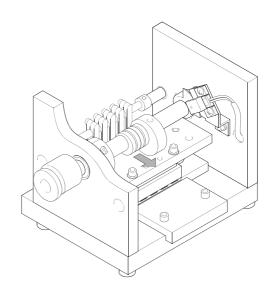
- **5.** Set the other press block.
 - Before setting the press block, remove the two pieces of screw on the pawl side.



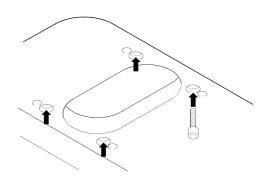
- **6.** Set the jig and fix it using the two pieces of screw
 - Press and fix the jig to the base.
 Use the screws that fixed the presser plate.



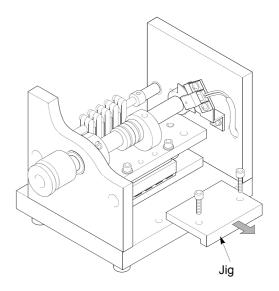
- 7. Press the press block to touch the jig so that its position becomes parallel.
 - Align the position of the press block with the jig precisely. Imprecise position adjustment will cause bad pressing.



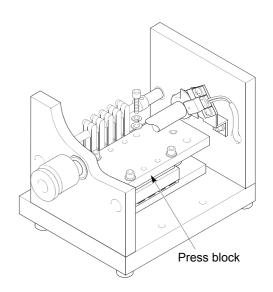
- **8.** Remove the screw on the backside of the table.
 - When tightening the screw, perform tightening so that the position of the press block becomes parallel to the jig.



9. Remove the screws to take out the jig.

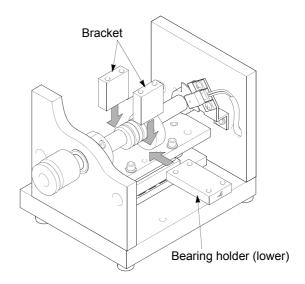


10. Attach the screws to the press block.

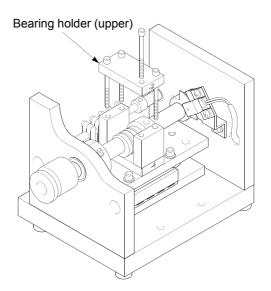


4 Attaching of the bearing holder

- 1. Set the bearing holder (lower) and the bracket.
 - Check the direction of the bearing holder and bracket.

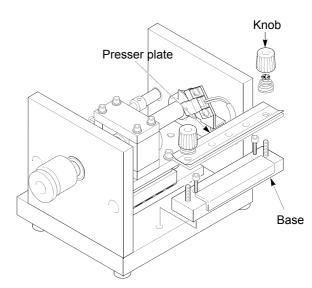


- 2. Set the bearing holder (upper) and fix it using the four pieces of screw.
 - When tightening the screw, rotate the main shaft pulley by hand to change the position of the eccentric collar for tightening.



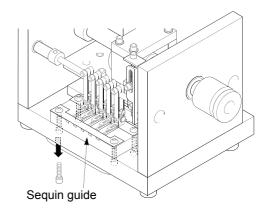
5 Attaching of the presser plate

- 1. Fix the base using two pieces of screw.
- **2**. Fix the presser plate using the knob.

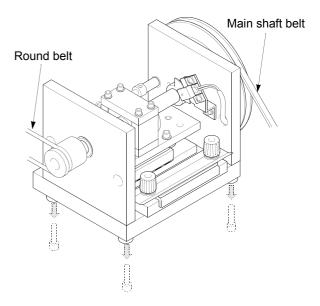


6 Replacement of the sequin guide

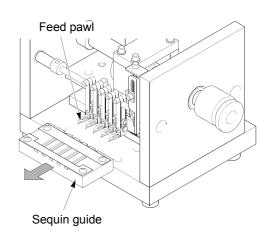
1. Remove the four pieces of screw that fix the sequin guide from the bottom of the table.



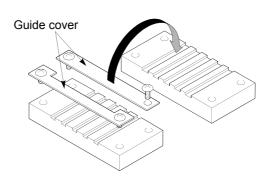
When the table blocks the screws of the sequin guide to be taken out, remove the round belt and the main shaft belt to take out the screws that fix the press section, and then perform working.



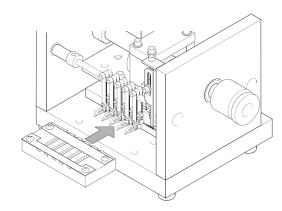
- **2.** Detach the sequin guide while paying attention to the feed pawl.
 - Rotate the main shaft pulley by hand to the position where the feed pawl moves up for easier working.



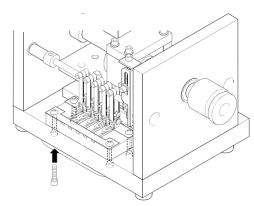
3. Detach the guide cover from the removed sequin guide and attach the guide cover to the sequin guide to change.



4. Set the sequin guide while paying attention to the feed pawl.

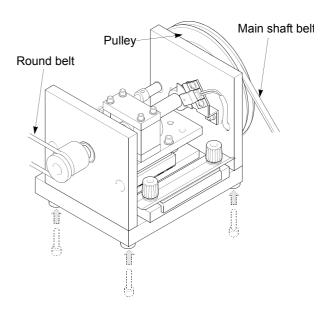


- **5**. Fix the sequin guide using screws from the bottom of the table.
 - After the attachment, perform "Position adjustment of feed stroke, Position adjustment of the feed pawl and Fine adjustment".



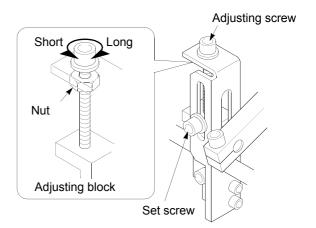
When the whole part of the press was taken out, fix the sequin guide, set the whole part of the press to the table and then fix the press using screws from the bottom of the table.

After the fixing, set the round belt and the main shaft belt to the pulley.

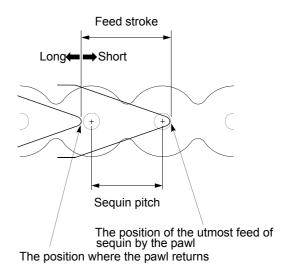


7 Feed stroke adjustment

1. Loosen the set screw and the nut.



- **2.** Rotate the pulley by hand to the position where the feed pawl returns.
- **3.** Rotate the adjusting screw so that the feed pawl comes to the position where it comes out a little from the sequin hole.
 - Regarding adjustment of each pawl, refer to "Fine adjustment".
- **4.** When the adjustment is finished, tighten the set screw and the nut.



Maintenance

1 Cleaning

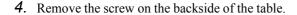
Perform cleaning once a week.

Detach the cover, and blow air to inside of the groove of the press block and vicinity of the feed pawl.

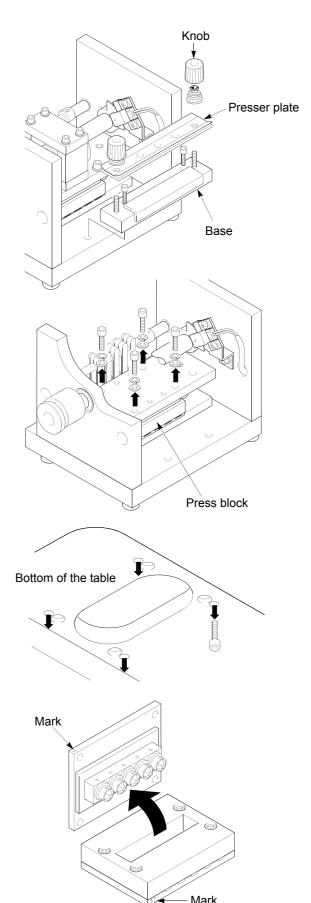
2 Cleaning of inside of the press

Perform cleaning in such cases as that it becomes impossible to pass sequins due to clogging of broken pieces of sequin inside the press by mispressing and so on, or bad pressing occurs.

- 1. Remove the knob to detach the presser plate.
- **2.** Turn the pulley so that the press block moves up.
- **3.** Remove the screw that fixes the male mold (upper).



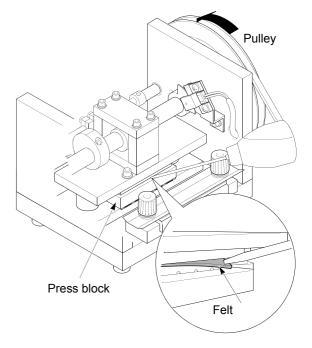
- Do not remove yellow-painted screws.
- **5.** Take out the press block, and open the mold to get rid of dust and so on.
- **6.** When the working is finished, return to the original in the reversed procedure.
 - Assemble the press block so that the spot of up/ down marks of the press block faces to the entrance of sequins.



3 Lubrication

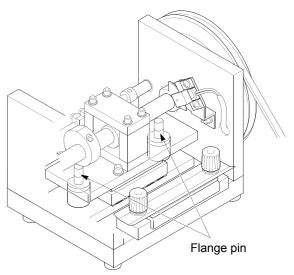
Perform lubrication once a week.

- 1. Turn the pulley to make the press block open.
- **2**. Perform lubrication to the felt positioned at the male mold.



4 Greasing

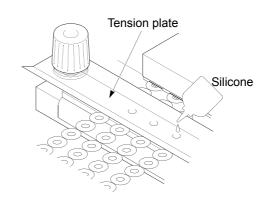
Apply grease on the flange pin once a month.



5 Silicone applying

If pressed sequins have scratches by the pawl, apply silicone a little bit to sequins from the hole of the tension plate.

Do not apply silicone too much. Silicone on sequins could make fabric dirty.



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1st Edition

November, 2004

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