

Tabletop model automatic taping machine

User's Manual



TAIYO SEIKI CO., LTD.

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2. Introduction

Prior to installation, operation, maintenance, and inspections, please read the user's manual carefully to ensure proper use and maintenance of the machine. Please ensure that you have a good understanding of all the information and important safety points. It is also a good idea to store the user's manual near the machine for quick reference.

2-1. Safety precautions

Safety precautions are given as warnings or precautions. Dangerous areas on the main unit are clearly marked.

Marning:	A warning means that if the machine is used improperly, the operator is at risk of serious injury or death.
A Precaution:	A precaution means that improper use places the operator at risk of minor to moderate injury, and there could be possible damage to the materials or the machine itself in the banding process. It is also possible that unknown serious damages could occur.

Additionally, even the items listed under "precautions" could potentially lead to serious repercussions depending on the situation.

Since all of the contents in this section are important, please make sure to adhere to the warnings and precautions.

Marnings

- In the case of smoke or strange smells/sounds, immediately stop using the machine, turn off the power switch, and unplug the device from the outlet to avoid potential electrical shock or other injuries to the operator, damage to the machine, or possible fire hazard.
- · Never disassemble, repair, or rework the machine by yourself to avoid risk of injury or electrical shock, fire hazard, or potential damage to the machine.
- Do not use any power sources other than the ones that are indicated on the main unit. An improper power source could potentially cause electrical shock to the user, create a fire hazard, or damage the machine.
- Do not open the cover of the main unit or touch the control circuit board. This prevents dangerous exposure to high voltage electrical shock.
- Do not open the cover of the main unit or touch the inside of the machine to avoid potentially dangerous burns, electrical shock, or other injuries.

A Precautions

- Do not place or store the machine in an unstable location.
 If the machine were to fall over, it could potentially cause an injury and void the warranty.
- Do not use the machine in places where there is a lot of dust or high temperature/humidity, as such conditions increase the risk of fire or electrical shock.
- Do not touch the heater component when the power is on or has recently been shut off (approximately 60 min), as the heater runs at a high temperature and could potentially cause burns.
- Do not touch the operating components of the machine when the power is on. Contact with the operating components could potentially cause injuries.
- · Always turn the machine off after you have finished using it.

2-2. Notes on use

- Do not use any tape that is not the specified tape for this machine, as it could potentially damage the machine or make it inoperable.
- Use only the power sources indicated on the main unit, and operate the machine only in a location where there are few voltage fluctuations.
- · Ensure that the operating location is level and stable.
- · Perform a weekly standard cleaning of the machine to avoid causing defects in the sending of the tape. Cleaning the rollers is particularly important.
- Avoid using the machine in places with a lot of dust or high temperature/humidity because these conditions could damage the sending of the tape.
- · The warranty will be voided should you repair or rework the machine by yourself.

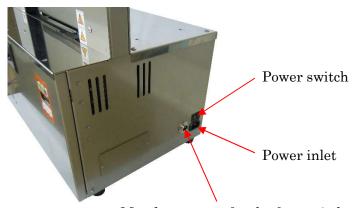
$3. \ Components$ enclosed in the storage case

1.	Main machine unit · · · · · · · 1
2.	Attachments A ······1
	Board to adjust the position of the
	band when performing banding.
3.	Attachments B · · · · · · 1
	Board to adjust the position of the
	band when performing banding.
4.	Knob bolts for attachments ······4
5.	Fuse (250V/3A)2
6.	Power cable ······1



4. Name of each part

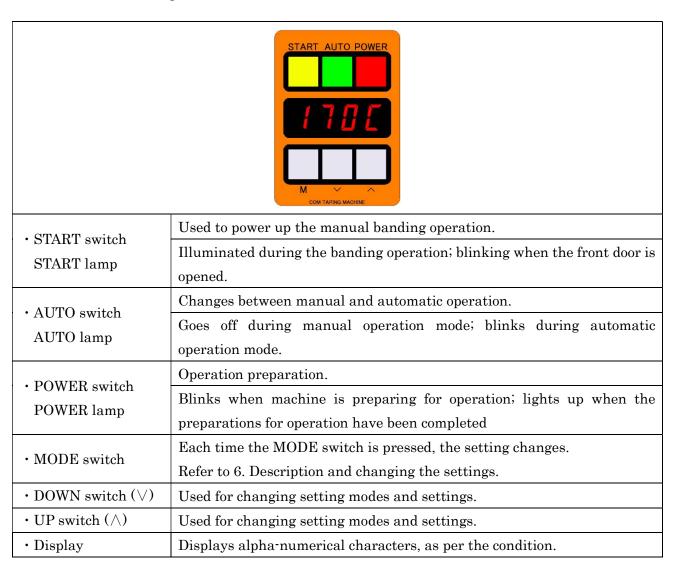




Metal connector for the foot switch

5. Instructions for use

5-1. Content and usage rules for the switch box



5-2. Preparing for operation

① Plug the power cord into the right side of the machine, and turn the power switch ON after plugging the power plug into the outlet.





② The POWER lamp flashes and the current temperature is shown on the display.

When the status of POWER lamp changes from flashing to lit, the preparation for operation is complete and the machine is ready for use.



5-3. Tape setting

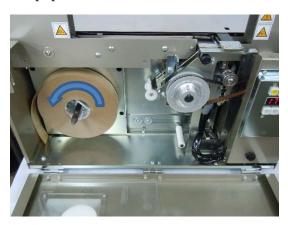
① Open the front door.(When the power is switched on, the START and POWER lamp flash).



2 Pull out the tape reel cover to the front.



③ Place a tape on the paper tube holder. *Be careful with the direction of the tape.

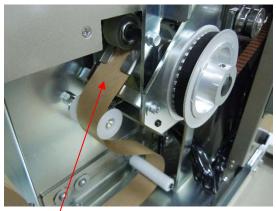


④ Draw the tape and hook it to the tape roller.



⑤ Insert the tape end into the tape guide, pass the tape until it touches the rubber roller, then lightly put a hand on the arrow, and hold the tape.

Press the tape setting switch. The tape is fed into the arched guide.





Attach hands lightly



As the roller, heater, and clamp operate, be careful to prevent your hand from getting caught in.

6 Put the tape reel cover back in position.





Close the front door.Tape setting is now complete.

5-4. Manual operation

Manual operation refers to using the START switch of the operation switch to perform banding.

- · Manual operation procedure
 - ① Place the product on top of the table and check the position of the band.



② Once the START switch is pressed, the tape is tightened, glued, and cut, and banding is completed.



③ When an article is removed from the table, the next tape is automatically set on the arched guide.



5-5. Automatic operation

Automatic operation refers to the performing of banding automatically via detection of an object using the product sensor.

Without using the START switch.

- Automatic operation procedure
 - ① Press the AUTO switch of the control switch.
 - ② The AUTO lamp will turn ON.
 (Automatic operation mode will be in effect as long as the AUTO lamp stays ON.)
 - ② Place a product on top of the table. The product sensor automatically detects the object, and the tape is automatically fastened and cut, after which the banding is complete.*The product sensor is located at opening of the front door.
 - ④ When an article is removed from the table, the next tape is automatically set on the arched guide.

 Afterwards, taping can be performed automatically and continuously by repeating processes ③ and ④.
 - (5) To stop automatic operation, press the AUTO switch of the control switch.

 The AUTO lamp will turn OFF, and the machine will switch to manual operation.



6. Description and change of settings

6-1. Changing the settings

Each time the MODE switch is pressed, the display part is changed as explained below.

- ① Temperature display : Display example "170C"(Refer to 6-2. Changing heater temperature setting).
- ② Taping counter display : Display example "1234"(Refer to 6-3. Taping counter).
- ③ Tightening mode switching display: "trq" or "PLS"(Refer to 6-4. Tightening mode switching and tape tightening strength).
- 4 Tightening strength display: In case the tightening mode is "trq", "100P". In the case of "PLS", "3000".

(Refer to 6-4. Tightening mode switching and tape tightening strength).

- ⑤ Tape feeding point display: "P-1"(Refer to 6-5. Tape feeding point).
- 6 Return to the temperature display. Then, repeat the procedure from ①.
- 7 For items other than the temperature display and taping counter display, setting values can be changed with the UP/DOWN switch after switching to each mode. For changing the temperature setting of the heater, refer to 6-2. Changing heater temperature setting.

6-2. Changing the heater temperature setting

If the glue on the tape is not completely adhesive, change the temperature setting on the heater.

- ① Please check that the display of the operation switch is in temperature view mode.
- ② When it is displaying the temperature, press the MODE switch and hold for 3 seconds to access the settings mode.
- ③ The display should change to [C-st].
- ④ Now press the MODE switch and hold it for 1 second to display the current heater temperature setting.
 - Example of the display of current heater temperature setting: 170 C
- (5) Use the UP switch (\wedge) and DOWN switch (\vee) to adjust the temperature settings.
- ⑥ Once the temperature has been reset, press the MODE switch down and hold for 3 seconds.
- The display shows the current temperature, and the system exits the settings mode.

The range of temperature setting is 150 °C-220 °C.

*If you take a misstep in the operation while in the settings mode, press the MODE switch down for 3 seconds, and the machine will exit the settings mode and return to displaying the current temperature setting.

6-3. Taping counter

The taping counter counts within the range of 0–9999.

When the count reaches 10000, the counter is automatically reset to 0.

Also, when the MODE switch is held down for 3 seconds, the current taping counter reading is reset to 0.

6-4. Changing tightening mode

There are 2 types of tightening modes, which is the tightening torque in case the display part is "trq" and tightening pulse in case of "PLS".

① Tightening torque "trq"

Setting values: 1–100P (P stands for percent).

The closer the value is to 1P, the weaker the tightening force and the closer the value is to 100P, the stronger the tightening force.

When the tightening force is weakened with the tightening torque, the tape winding speed is decreased but the products can be taped softly.

The tape winding speed increases when the tightening force is stronger, which provides a strong tightening force so that products can be taped hard.

② Tightening pulse "PLS"

Setting values: 1000-5500

The closer the value is to 1000, the lower the tightening strength and the closer the value is to 5500, the higher the tightening strength.

With the tightening pulse, tightening in accordance with the product circumference can be performed.

Even if the tightening strength is decreased or increased, the tape winding speed and power do not change.

For all settings, use the machine according to the product that has to be taped.

*If the product is elastic, the tape may not bond properly due to the repulsive force of the product.

In case the tape has not been bonded properly, hold down the repulsive force of the product by hand until the tape bonding and cutting are complete.

6-4. Tape feeding point

Setting values: P-1–P-6 (P stands for point) Total 6 points.

The tape feeding point is for determining the length of tape to be fed when a tape is set in the arched guide.

Set the tape feeding point (the length of tape to be fed) that is set in the servo motor first and change the length of tape to feed when setting a tape.

In case the length of the tape end is changed between the paper and film, for example, change this setting for use.

7. List of setting modes

*Notes: Generally, the specifications highlighted in red cannot be changed.

Contact the dealers if it is required.

Changing the settings other than the heater settings (highlighted in red) by the user is prohibited as it can lead to a malfunction.

List of settings modes

Display 1 [Settings]	Display 2 [Values of settings]	Settings Definitions	Initial values	Notes
C-st	* * * C *1	Heater temperature setting	170	1 = 1°C
Ht-r	-20~20	Heater temperature correction factor	0	1 = 1℃
AT 11	0~15	Maximum heater temperature		
AL-H		problem setting	15	1 = 1℃
AL-L	0~15	Minimum heater temperature		
		problem setting	15	1 = 1℃
H-rG	0~10	Range of heater temperature settings	5	1 = 1℃
H-CP	1~3	Problem with the timer for the heater		
H-CP		temperature	1	1=1分
Ht-t	0.0~5.0	Adhesive timer	0.0	0.1 = 0.1 秒
JOG	P-on	Inching mode		

^{*1 :} Places with *** display the current temperature setting.

8. Problem display, error indicators

*If a problem occurs, a problem number is displayed. Identify the issue, turn off the power, unplug the machine from the electrical outlet, and contact the store. Unauthorized work on the machine will void the warrantee.

Problem error indicator numbers

Error	l error mulcator			
Display	Issue	Possible cause	Troubleshooting	
Err.1	Heater problems	 The heater is not reaching the correct temperature setting. The heater is not able to maintain the temperature setting. A breakdown or disconnection of the cartridge heater has occurred. The thermocouple has become disconnected. 	Turn off the power switch and contact the store.	
Err.2	Cycle time problems	 An operation cycle is not being completed in 3 seconds or less. A breakdown in the motor has occurred. A breakdown or disconnection of the cam sensor has occurred. 	Turn off the power switch and contact the store.	
Err.3	Setting data error	• Reading of setting data error has occurred.	*1 Please refer to Err.3 initialization method.	
Err.4	Servo motor	• A servo motor error is output.	Turn off the power switch and contact the store.	
Err.5	Spacer home position error	• The spacer is not in the home position.	Press the tape setting switch and return the spacer to the home position.	
S.Err	Product sensor error	 An object is on the table when the machine is powered up, and the product sensor is dim. 	Remove the product from the top of the table.	

*1 Err.3 initialization method

If Err.3 occurs, please initialize the settings data per the following steps.

*Changing settings data will cause the settings data to return to factory default values.

After initialization, please change the settings data again.

Please contact the vendor if errors continue to occur after initialization has been performed.

Initialization method and procedure

- ① Turn power OFF, turn ON DIP switch number 7 on the circuit board.
- ② Turn power and wait for about 3 seconds.
- ③ Turn power OFF, turn OFF DIP switch number 7 on the circuit board.
- ④ Turn power ON, check that Err.3 has been removed.
 - * If Err.3 is not cleared at this time, turn the power off and on once.

If it is still not resolved,

Repeat the initialization steps 1 to 4 again and check if the error is cleared.

⑤ Changing settings data will cause the settings data to return to factory default values. After initialization, please change the settings data again.

9. Specifications

■ Machine performance

Model	Measurements of objects that can be bound	Banding capacity (minutes)	
JEZ II -150	Maximum (width 150mm, height 100mm)	24 times	
9 2 2 11 150	Minimum (width 30mm, height 5mm)	24 times	
JEZ II -300	Maximum (width 300mm, height 200mm)	22 times	
	Minimum (width 30mm, height 5mm)	22 times	
JEZ II -400	Maximum (width 400mm, height 200mm)		
	Minimum (width 30mm, height 5mm)	20 times	

■ Machine performance

Model tape width (mm)	Overall width	Overall height	Depth	Table height	Power source	Correct tape type
JEZ II -150	510mm	460mm				
JEZ II -300	510mm	540mm	330mm	273mm	220V, 230V	Film
JEZ II -400	610mm	540mm			50/60Hz	Paper

\blacksquare COM tape standards

Tape variety Tape width		Thickness	
Paper	20mm / 30mm / 40mm	Brown 70g / white 80g	
Film	20mm / 30mm / 40mm	40μ / 60μ / 80μ / 100μ	

^{*}Please use the specified tape.

WARRANTY

Taiyo Seiki Co., Ltd. warrants its products to be free from defects in material and

workmanship for a period of one year from the date of shipping invoice, provided Taiyo Seiki

Co., Ltd. sizes or approves application of the product. Within the warranty period, Taiyo Seiki

Co., Ltd. will repair or replace such products which are returned to it with shipping charges

prepaid and which are disclosed as defective upon examination by Taiyo Seiki Co., Ltd. This

warranty will not apply to any product which has been subject to misuse, negligence or

accident, or use not in accordance with Taiyo Seiki Co., Ltd.'s instructions or authorized

agent or employees of Taiyo Seiki Co., Ltd.

The provisions of the warranty are the sole obligations of Taiyo Seiki Co., Ltd. and exclude all

other warranties expressed or implied, including any warranties of merchantability. There are

no warranties which extend beyond this warranty.

Taiyo Seiki Co., Ltd. shall not be liable for any consequential damages, either in law or in

equity, or for losses or expenses or claims for the same arising from the use of, or inability of

use, the products of Taiyo Seiki Co., Ltd. for any purpose whatsoever.

Warranty becomes void if any alteration or deletion is made on any product of Taiyo Seiki

Co., Ltd. name, trademark, patent and or serial numbers.

Taiyo Seiki's continuing commitment to product improvements will make specifications

subject to change without notice.

This warranty is governed by the laws of Japan.

Warranty subject to change without notice.

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