Geom JEZ I Series

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.

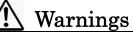
2-1. Safety precautions

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.



- 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 attachments4
5.	Fuse (250V/3A)2
6.	Power cable ······1



4. Name of each part



5. Instructions for use

5-1. Content and usage rules for the switch box $% \left[{{{\rm{S}}_{\rm{s}}}} \right]$

	START AUTO POWER			
• START switch	Used to power up the manual banding operation.			
START Switch	Illuminated during the banding operation; blinking when the front door is			
START lamp	opened.			
• AUTO switch	Changes between manual and automatic operation.			
	Goes off during manual operation mode; blinks during automatic			
AUTO lamp	operation mode.			
DOWED : 1	Operation preparation.			
POWER switch	Blinks when machine is preparing for operation; lights up when the			
POWER lamp	preparations for operation have been completed			
MODE	Each time the MODE switch is pressed, the setting changes.			
• MODE switch	Refer to 6. Description and changing the settings.			
• DOWN switch (\lor)	Used for changing setting modes and settings.			
• UP switch (\wedge)	Used for changing setting modes and settings.			
• Display	Displays alpha-numerical characters, as per the condition.			

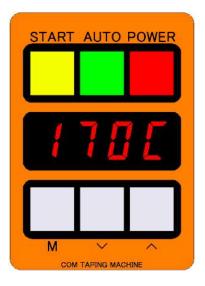
5-2. Preparing for operation

 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.





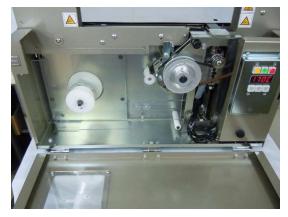
The POWER lamp flashes and the current temperature is shown on the display.
 When the status of POWER lamp changes from flashing to lit, the preparation for operation is complete and the machine is ready for use.



5-3.Tape setting

1 0 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.

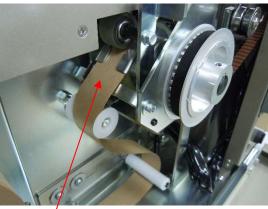


④ Draw the tape and hook it to the tape roller.



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.



- ⑦ 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.)
 - ③ 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.
 - 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.



Product sensor

6. Settings and how to change

6-1. Settings and switching display

In main mode, press the MODE switch each time, the display changes as follows.

Main mode = Display for current temperature and setting value confirmation Setting mode = Setting value change mode for each setting item

How to check the settings and switch the display (Main mode)

- ① Display for Temperature Sample display : "160C" Refer to [6-3. Change the heater temperature setting : Display section "C-st"]
 ↓
- ② Display for bundle counter
 Sample display : "1234"
 Refer to [6-8. About bundle counter]
 ↓
- ③ Display for tightening mode
 Sample display : "trq" or "PLS"
 Refer to [6-4. Change the tightening mode: Display "tP-S"]
 ↓
- ④ Display for tightening power setting value
 Sample display : If the tightening mode is for "trq", it's "100P", and for "PLS", it's "3000"
 Refer to [6-5. Change the tightening torque setting value : Display "trq"]
 Refer to [6-6. Change the tightening pulse setting value : Display "PLS"]
 ↓
- (5) Display for Tape feeding point
 Sample display : "P-3"
 Refer to [6-7. Change the tape feeding point : Display "FEEd"]
 ↓
- 6 Return to display for temperature. Then, repeat from 1.

6-2. How to switching the mode

How to check the current mode

Main mode : Banding operation possible mode

POWER lamp flashes or lights.

AUTO lamp flashes or lights. (Lights when selected AUTO mode)

Change the setting mode : Mode for changing the setting value for each. All blinking AUTO, START, POWER lamps.

How to switch to main mode and setting change mode

- 1 In main mode, check the display shows "current temperature display".
- ② Press and hold the MODE switch for more than 3 seconds. After confirming that the display has changed to [C-st], release the MODE switch. At this time, AUTO, START, and POWER lamps will all be flashing.
- (3) Press the UP switch (Λ) / DOWN switch (V) to display to change settings.
- ④ After showing the display you want to change the settings for, press the MODE switch once to display the current settings.
- (5) Press the UP switch (\Lambda) / DOWN switch (\mathbf{v}) to change the setting value. After changing each setting value, press and hold the MODE switch for more than 3 seconds.
- 6 Check the display has changed to "current temperature display" and then release the MODE switch.

At this time, AUTO, START, and POWER lamps will be all stop flashing.

If the main power is turned off in setting change mode, the changed settings will not be overwritten.

Overwriting the setting value becomes effective only when returning from setting change mode to main mode.

If you confused during the setting mode, press and hold the MODE switch for more than 3 seconds. Then, the setting mode ends and the display changes to display the current temperature.

6-3. Change the heater temperature setting : Display section "C-st"

Setting range : $150^{\circ}C \sim 220^{\circ}C$ Initial value : $160^{\circ}C$

When the tape adhesion is poor, change the temperature setting of the heater.

- ① Use the UP (Λ) and DOWN (V) switches to change the display to "C-st".
- ② Press the MODE switch once to display the current setting value.
- 3 Use the UP (A) and DOWN (V) switches to change the set value.
- ④ After changing the settings, press the MODE switch once. The display will change to "C-st".

6-4. Change the tightening mode: Display "tP-S"

Setting range : "trq" or "PLS" Initial value : trq

There are two types of tightening modes. When the display shows "trq", it is called "tightening torque". When it shows "PLS", it is called "tightening pulse".

- 1 Use the UP (A) and DOWN (V) switches to change the display to "tP-S".
- ② Press the MODE switch once to display the current setting value.
- 3 Use the UP (A) and DOWN (V) switches to change the set value
- ④ After changing the settings, press the MODE switch once. The display will change to "tP-S".

6-5. Change the tightening torque setting value : Display "trq"

Setting range : 1P~100P Initial value : 30P

The tightening torque is;

If the tightening power is weakened, the speed at which the tape is wound will decrease, but the product will be bound more softly.

If you increase the tightening power, the tape winding speed will increase and the tightening power will become stronger, making it possible to create a hard band on the product. The closer it is to 1P, the weaker the tightening power is, and the closer it is to 100P, the stronger the tightening power is.

- 1 Use the UP (A) and DOWN (V) switches to change the display to "trq".
- ② Press the MODE switch once to display the current setting value.
- 3 Use the UP (A) and DOWN (V) switches to change the set value.
- ④ After changing the settings, press the MODE switch once. The display will change to "trq".

6-6. Change the tightening pulse setting value : Display "PLS"

Setting range : 1000~5500 Initial value : 3000

The tightening pulse is;

Tightening can be done according to the outer circumference of the product. Even if you tighten the tape less or more, the speed and power with which you wind the tape will not change.

The closer it is to 1000, the less the tightening amount will be, and the closer it is to 5500, the more the tightening amount will be.

- 1 Use the UP (A) and DOWN (V) switches to change the display to "PLS".
- ② Press the MODE switch once to display the current setting value.
- 3 Use the UP (A) and DOWN (V) switches to change the set value.
- ④ After changing the settings, press the MODE switch once. The display will change to "PLS".

6-7. Change the tape feeding point : Display "FEEd"

Setting range : P-1~P-6 Initial value : P-3

The tape feeding point is;

This is to determine the amount of tape feed when the tape is set in the arch guide. Select the tape feeding point (tape feeding amount) that is preset on the servo motor. This selects how much tape to feed when setting the tape. Use when the amount of tape tip differs between paper and film.

- 1 Use the UP (A) and DOWN (V) switches to change the display to "FEEd".
- ② Press the MODE switch once to display the current setting value.
- 3 Use the UP (A) and DOWN (V) switches to change the set value.
- ④ After changing the settings, press the MODE switch once. The display will change to "FEEd".

6-8. About bundle counter

The bundle counter counts from 1 to 9999.

When it reaches 10000 times, it will be automatically reset to 0.

- *If you press and hold the mode switch for 3 seconds when the display shows the band counter, the current counter will be reset to 0.
- *Since the bundle counter is not recorded, the current counter will be reset to 0 when the power is turned off.

The next time the power is turned on, the count will start from 0.

7. Setting mode list

*Attention

The settings in red letters can be changed by turning ON dip switch No. 6 on the board.

However, there is no need to change it for normal use.

Do not change that parts in red letters as this may cause malfunction.

If you need to make any changes, please contact us each time.

Setting	mode	list
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Display 1 [Items]	Display 2 [Range]	Contents	Initial value	Remarks
C-st	$150 \sim 220$	Heater temperature setting	160	1 = 1°C
tP-S	"trq" or "PLS"	Torque and Pulse switching	trq	
trq	1~100	Torque setting value	30	
PLS	$1000 \sim 5500$	Pulse setting value	3000	
FEEd	1~6	Tape feeding point setting	3	
Ht-r	-20~20	Heater temperature correction factor	0	1 = 1°C
AL-H	0~15	Maximum heater temperature		
	0 10	problem setting	15	$1 = 1^{\circ} \mathbb{C}$
AL-L	$0 \sim 15$	Minimum heater temperature		
	0.10	problem setting	15	1 = 1°C
H-rG	0~10	Range of heater temperature settings	5	1 = 1°C
н-ср	1~3	Problem with the timer for the heater		
		temperature	1	1=1分
Ht-t	$0.0 \sim 5.0$	Adhesive timer	0.1	0.1 = 0.1 秒
JOG	P-on	Inching mode		

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.

Error Display	Issue	Possible cause	Troubleshooting	
Err.1 temperature setting. temperature setting. • The heater is not able to maintain 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 	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.	Please refer to "About setting data abnormality ".	
Err.4	Servo motor error	• 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.	

Problem error indicator numbers

9. About setting data abnormality

Err.3 is a specification that automatically overwrites the initial value.

If Err.3 occurs even after turning the main power OFF to ON after Err.3 occurs, please refer to the steps below to initialize the setting data.

*If the setting data has been changed, the setting data will be returned to the factory state. When Err.3 occurs or done the initialization, change the setting data.

*If Err.3 is not released, the main board needs to be replaced. Please contact your agent.

How to initialize

- ① Turn off the main power and turn ON dip switch No. 7 on the board.
- ② Turn on the main power and keep until the current temperature is showed on the display.
- ③ Turn off the main power and turn OFF dip switch No. 7 on the board.
- ④ Turn on the main power and check that Err.3 has released.
- (5) The setting data will be returned to the factory state.If the setting data has been changed before, after initialization, change the setting data.

*After the initialization or during normal use, be sure to set dip switch No. 7 on the board to "OFF". Please be careful that if you continue to use it with it ON, not be able to change the setting data.

10. Specifications

■ Machine performance

Model	Measurements of objects that can be bound (minute		
JEZ II -150	Maximum (width 150mm, height 100mm)		
9HZ II 150	Minimum (width 30mm , height 5mm)	24 times	
JEZ II -300	Maximum (width 300mm , height 200mm)	22 times	
3EZ II 500	Minimum (width 30mm , height 5mm)		
JEZ II - 400	Maximum (width 400mm , height 200mm)	20 times	
0 LZ II ~400	Minimum (width 30mm , height 5mm)	20 times	

■ Machine performance

Model tape width (mm)	Overall	Overall	Depth Table he	Donth Table heigh	Tabla haight	Power	Correct
Model tape width (mm)	width	height		Table neight	source	tape type	
JEZ II -150	510mm	460mm			22017 22017	T2'1	
JEZ II -300	510mm	540mm	330mm	273mm	220V,230V	Film	
JEZ II -400	610mm	540mm			50/60Hz	Paper	

■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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