

**Semi-Automatic Round  
Bottle Labeling Machine**

**Model: YLT-50**

**Operational Manual**

## **WARNING!**

- a) Be sure to read the instruction before the first use.
- b) Make sure the power switch is off before the machine is plugged in and operate the machine as the instructions say.
- c) ***Attention: Do not press the pressure bottle arm if there is no bottle on the rubber roller, otherwise the work switch may be crushed.***

## **Semi-Automatic Round Bottle Labeling Machine**

1. Working Principle
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## 1. Working Principle

High-precision smart magic eye and high reliability PLC control the labeling progress. Horizontally placed the round containers (such as round bottles, jars and cups) on the rubber rollers and use another rubber roller to press on the bottle. The adhesive label will be precisely labeled on the bottle when the bottle rotates with the rubber rollers.

Machine has the ability to suitable for different size of label and round containers.

## 2. Advantages of Product

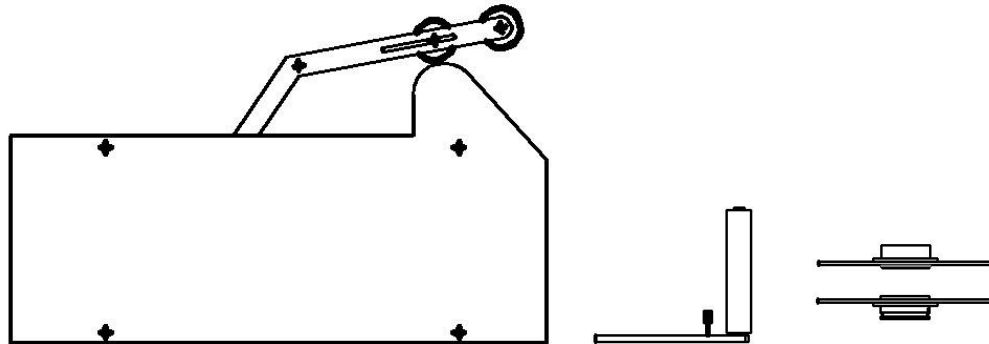
- a) High efficiency.
- b) High reliability
- c) Machine can be adjusted to meet various sizes of bottles, various sizes of label and different labeling position.
- d) Good labeling effect, no bubbles, no creases.
- e) Modular design, easy to maintenance.

## 3. Technical parameter

Items	Parameters	
	S.A.E.	Metric
Applicable Diameter	25/64" - 5-29/32"	10-150mm
Label Size	Width: 25/64" - 5-1/8" Length: 25/64" - 7-7/8"	Width: 10 - 130mm Length: 10 - 200mm
Labeling Speed	≤40pcs/min	
Labeling Accuracy	±0.004"	±0.1mm
Label Roll	External Diameter: 7-7/8" Inner Diameter: 2-61/64"	External Diameter: 200mm Inner Diameter: 75mm
Prewired	110±5V, 60Hz	
Power	0.16 HP	120W
Machine size	2.13" × 1.48" × 1.48"	650 × 450 × 450 mm
Machine weight	48 lb	22kg

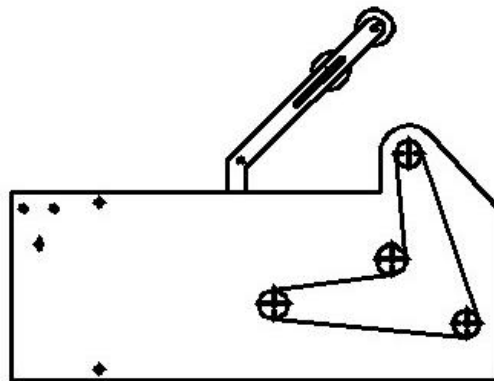
## 4. Installation steps after disassembling

**Fig.1** Machine and Accessories



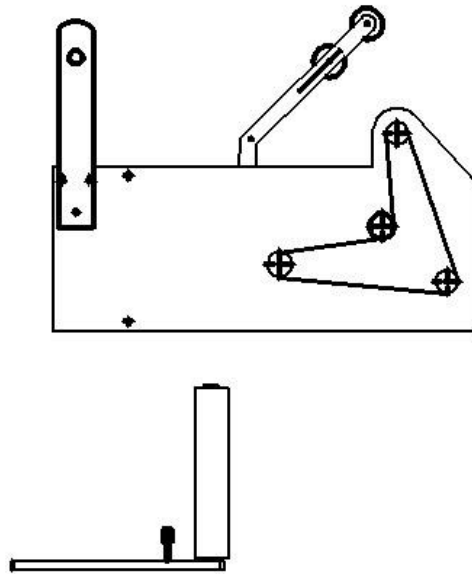
After receiving the semi-automatic round bottle labeling machine, take out the machine and accessories, put them on the workbench. First tear the outer wrapping film, take out the hex wrench from toolkit, loosen the socket head cap screws fixed on the housing, and finally remove the case. As shown Fig.2.

**Fig.2**



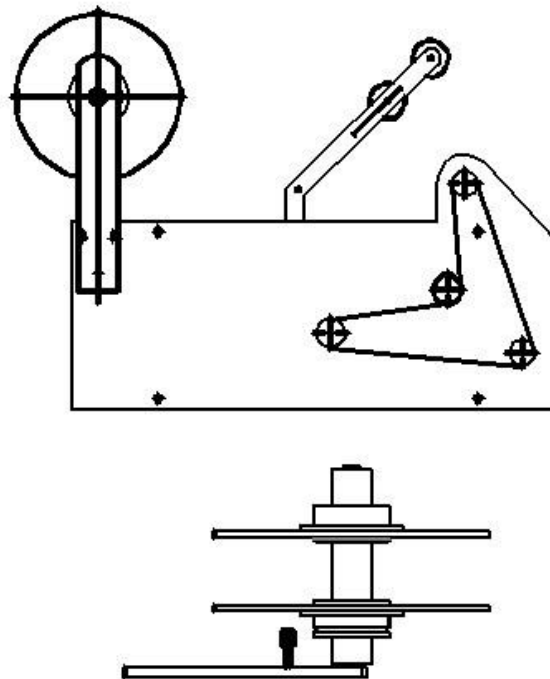
Tear the outside wrapping film of the accessory and remove the 3 M8 socket head cap screws attached to the machine. Install the roll stand to the specified positions use M8 socket head cap screws. As shown Fig.3.

**Fig.3**



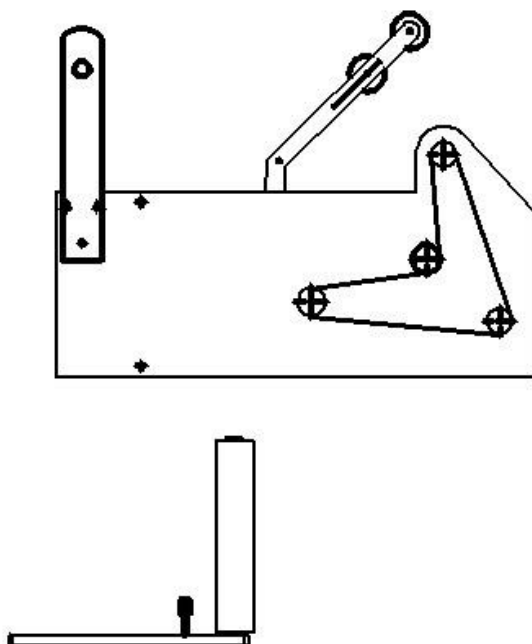
Insert the 2-roll collar fixed plate into the roll stand respectively, place the label roll in the middle of the two reels, set the green friction line to the specified position, tighten the hexagon screw. As shown Fig.4.

**Fig.4**



After the above steps are completed, attach the case to the fuselage, align with the four screw holes and fasten them with diagonal hex screws. As shown Fig.5

**Fig.5**



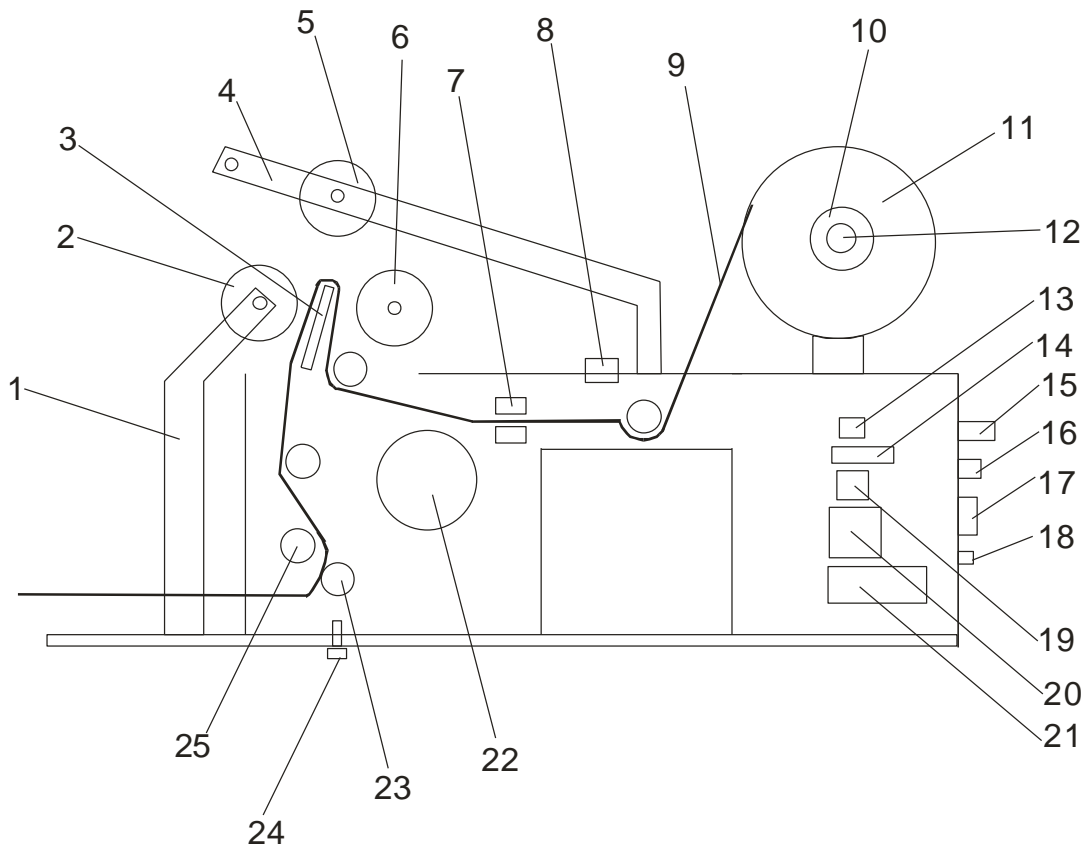
## **5. Operation Methods**

- a. Install two *Organic Glass Trays*(Fig.6-11) on *Fixed Blocks*(Fig.6-10) and fixed them. Then insert the inside organic glass tray (there is a circular groove on the fixed block) on *Tray Pivot*(Fig.6-11), and put the green belt on the circular groove of the fixed block.
- b. Install the label tape spool. Insert the label tape spool on the inside organic glass tray make sure that the label tape is clockwise taken out. Then install the outside organic glass tray and fixed it.
- c. Install the label tape as shown in Fig.6, and lock *Clamping Label Guide Wheel* (Fig.6-23) by tightening *Paper Feed Adjustment Screw*(Fig.6-24). When lock *Clamping Label Guide Wheel* (Fig.6-23), pay attention to the balance of the two ends of *Rubber Roller Label Balance* (Fig.6-6).
- d. Adjust the label tape under the magic eye. If magic eye is too close to the back end of a label, the label will appear too long and make the labeling position is not right. If the magic eye is too close to the front end of a label, the label will appear too short and may make the labeling progress failure. If the magic eye is just on the top of a gap between two labels, the label signal will be abnormal after the power is connected.
- e. Adjust label stop position. Label stop position means the label length out of the stripping board before labeling progress. Generally, the label stop position should be adjusted to make the label just be adsorption on the bottle.
- f. Adjust the position of *Positioning Arm*(Fig.6-1) and *Rubber Roller*(Fig.6-5). For different diameters of round bottles, the position of *Positioning Arm*(Fig.6-1) and

Rubber Roller (Fig.6-5) should be adjusted. First loosen Positioning Arm(Fig.6-1), move it to make sure about half of the round bottle is under Positioning Roll(Fig.6-2) and Rubber Roller Label Balance(Fig.6-6), tighten Positioning Arm(Fig.6-1). Then loosen Rubber Roller(Fig.6-5), make sure the Rubber Roller(Fig.6-5) is on the top of the bottle when Rubber Roller(Fig.6-5) is pressed down.

- g. Plug the plug into the power supply of 110±5V, 60Hz. (Ensure the machine is well grounded.)
- h. Press down the Pressure Bottle Arm(Fig.6-4), then the adhesive label will be precisely labeled on the round bottle.

**Fig.6**



**Fig.1**

1	Positioning Arm	2	Positioning Roll
3	Stripping Plate	4	Pressure Arm
5	Rubber Roller	6	Rubber Roller Label Balance
7	Magic Eye	8	Start Switch
9	Label	10	Fixed Block
11	Organic Glass Tray	12	Tray Pivot
13	Motor Start Capacitance	14	Amplifier
15	Power Cables	16	Fuse
17	Power Switch	18	Label Signals Reset switch



19	Relay	20	Label Signal Generator
21	Power Transformer	22	Brake Motors
23	Clamping Label Guide Wheel	24	Paper Feed Adjustment Screw
25	Guide Wheel	26	

## 6. Troubleshooting

Failures	Elimination
Labeling action abnormal	<p>Check if the label position on the machine is normal.</p> <p>Check if there is a label on the transmission mechanism or the transmission mechanism is stuck by other foreign material.</p> <p>Check if the <i>Clamping Label Guide Wheel</i> (Fig.6-23) is locked.</p>
Label is uneven on the bottle.	Check if the rubber roller can normally rotate after the bottle is pressed.
Label tape cannot move.	Check if the clamp guide is tight or the tension is too tight.
Label cannot be adsorbed.	Check if the label stop position is correct.
Label is skewed on the bottle.	Check if the clamping force between the two ends of <i>Clamping Label Guide Wheel</i> (Fig.6-23) is balanced.