Shanghai OK Machinery Co.,Ltd

Automatic Double Sides Labeling Machine

OK-660 Operating Manual

Catalog

Chapter 1 Preface 4

Chapter 2 Safty Tips 5

Chapter 3 Technical parameter 6

3.1 Drawings 6

3.2 Label size 7

3.3 Power supply 8

3.4 Coding machine (optional accessories) 8

3.5 Labeling speed 8

3.6 Application bottle type 8

3.7 Labeling accuracy 9

Chapter 4 Install 9

4.1Adjust the height and level of the machine 9

4.2 Connection of the electrical box and control box 10

4.3 Connection of power supply 10

Chapter 5 Function description and troubleshoot 10

5.1 Description of the Control MENU on touch screen 10

5.2 Adjustment of protection fence 14

5.3 Adjustment of labeler 15

5.4 Label installment 15

5.5 Tightness adjustment of the label paper 16

5.6 Adjustment of electric sensor 16

5.7 Adjustment of electric sensor for label 17

5.8 Adjustment of coder position(optional accessory) 18

5.9 Adjustment of bottle feeding device 19

5.10 Adjustment of bottle separate interval 19

Chapter 6 Basic operation and use 20

6.1 Basic operation and use 20

6.2 Example 21

Chapter 7 Main Points of Simple Malfunction and Elimination Methods 22

7.1 Malfunction1:No power supply 22

7.2 Malfunction2:Conveyor belt is out of work 23

7.3 Malfunction3: 24

7.4 Malfunction 4: No outputting of label 25

7.5 Malfunction5:Label wrinkling 26

7.6 Malfunction6:Outputting label all the time 26

7.7 Malfunction7:Outputting several labels in a time 27

7.8 Malfunction8:Label paper broken when labeling 27

7.9 Malfunction9:Length of label is different 28

Chapter 1 Preface

The body of the labeling machine widely adopts anodized aluminum and 304 stainless steel, making the overall structure of machine firmer and more durable.On the mechanical properties, modular and user-friendly design adopted to make it easier for high-speed adjustment and changing types.Adopting man-machine interface control, easy to understand and operate. Superior circuit design makes the labeling speed of the machine leading international level.The machine completely adopt a new design concept to develop, it's not only reduce the adjustment of mechanism, but also improve the accuracy and speed of labeling.

The detail description for operating the machine,please refer to follows.

Attention:

Please in strict accordance with the instruction during using and maintenance procedures.It is forbidden to disassemble during the warranty,otherwise, the damage caused thereby will be regarded as artificially damage and we will not provide free maintenance. If still have unclear points of operating the machine, please feel free to contact our company.

Chapter 2 Safty Tips

Dear user:

Before turn on the power of the machine, please read the safty tips and the right operating instruction on these manual carefully to avoid accidents and reduce the frequency of the damage to machine.

1.Keep the machine away from the corrosive environment and avoid direct contact with corrosive chemicals.

2.Avoid using the machine in vibration environment

3.Please don’t touch the running machine parts when the machine is running.

4.Avoid closing to high temperature environment and inflammable.

5.Avoid using the machine in excessive moisture environment,connect the input power supply ground wire correctly to avoid accident.

6.The operating workers should operate machine in a normal mental states,If take such as alcohol,sleeping drugs, or other drugs which damage to mental state, the workers should stop to operate the machine.

7.The worker should put on suitable work clothes, avoid the clothes to get involved in the rolling parts of the machine. Don’t place any extraneous items on the machine.

8.If there are noise and other abnormalities, please stop the machine immediately and check.

9.Non-engineering and technical personal, don’t debug the machine parts

arbitrarily.

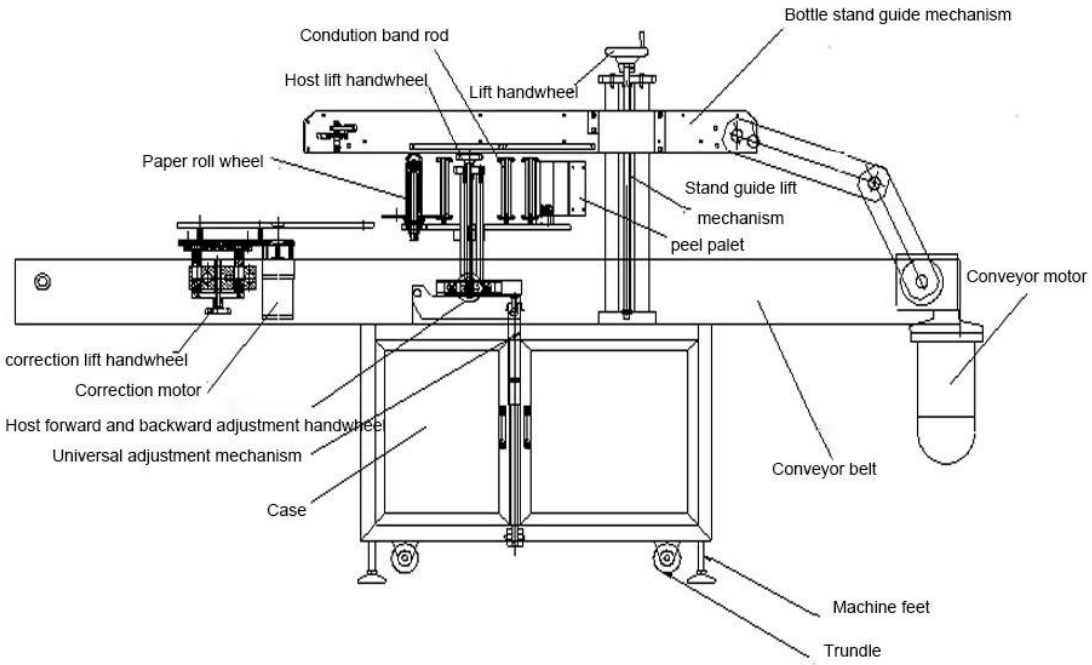
10.Regular maintenance and upkeep. Please avoid the water and other liquid splashing at the electronic control box and other electric components.

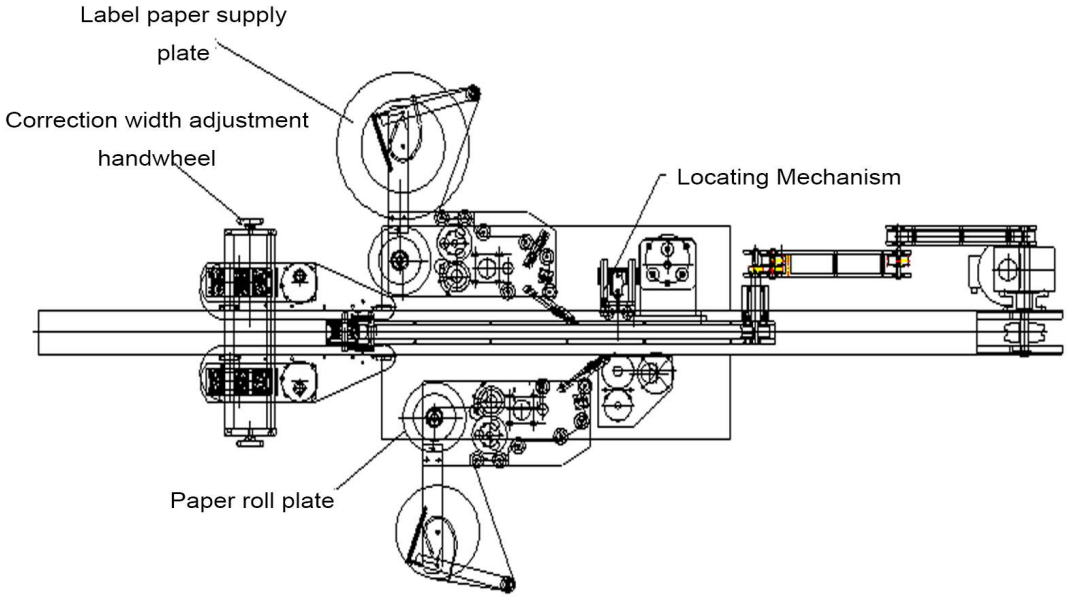
11.Please follow the normal operating procedures for the operation, keep exterior surface clean.

12.Coding machine installed on the labeling machine can’t operate alone,It must be synchronized with the labeling machine.

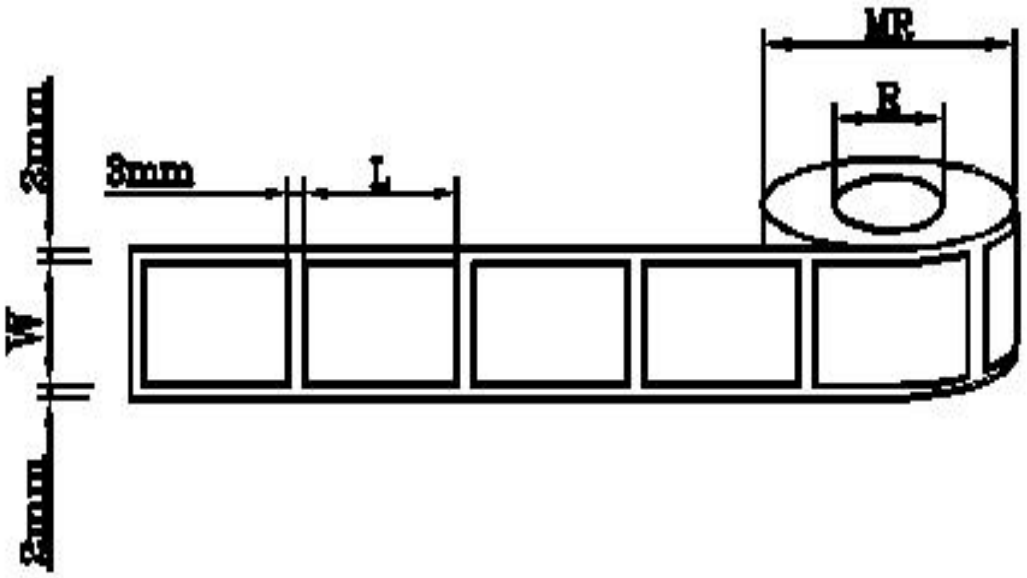
Chapter 3 Technical parameter

3.1 Drawings





3.2 Label size



Please left more than 3mm gap between the labels for the electric eye

detecting.

Material of under paper	Translucent paper
Paper pipe inner diameter	76mm(custom size available)
Label outer diameter	100mm~350mm(custom size available)
Width of the label	10mm~130mm(custom size available)
Length of the label	15mm~300mm(custom size available)

3.3 Power supply

Power: 220V(±2%) 50/60Hz single phase,3KW

3.4 Coding machine (optional accessories)

DL-7 hot code printer, Speed:0-100times/minute

Details please refer to the code printer instruction book.

3.5 Labeling speed

0~27m/minute

3.6 Application bottle type

Suitable for flat, square,oval,cylinder and other special shape container.

3.7 Labeling accuracy

±1mm

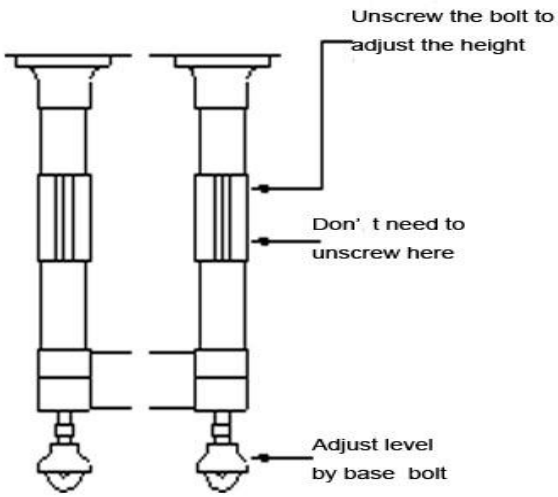
Chapter 4 Install

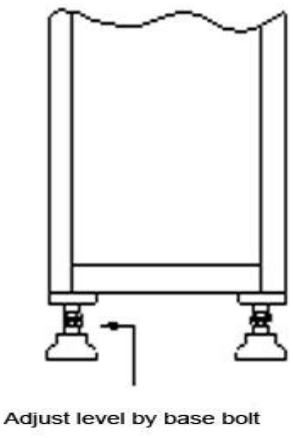
4.1Adjust the height and level of the machine

Height adjustment:unscrew the top bolt to adjust the height, recommend to use a jack as supporting.

Conveyor belt level adjustment:adjust level by base bolt,recommend to use leveling instrument for measurement.

Bottle feeding device adjustment(for ok-660 machine):adjust the screw foot at the same level with the transmission, in which standard that round bottle can transition to the conveyor belt smoothly.





4.2 Connection of the electrical box and control box

Connect the plugs /group sockets of electrical box and control box according to number of pins within the connector， the sensitive electronic sensors is also connected and the electrical apparatus must be earth or grounded

4.3 Connection of power supply

Connect the main power supply according to specifications of electrical devices，if the power supply fluctuation is too much, a voltage regulator should be installed before the supply to the main equipment . All power supply must be properly connected to earth.

Chapter 5 Function description and troubleshoot

5.1 Description of the Control MENU on touch screen

There are total three menu on touch screen.

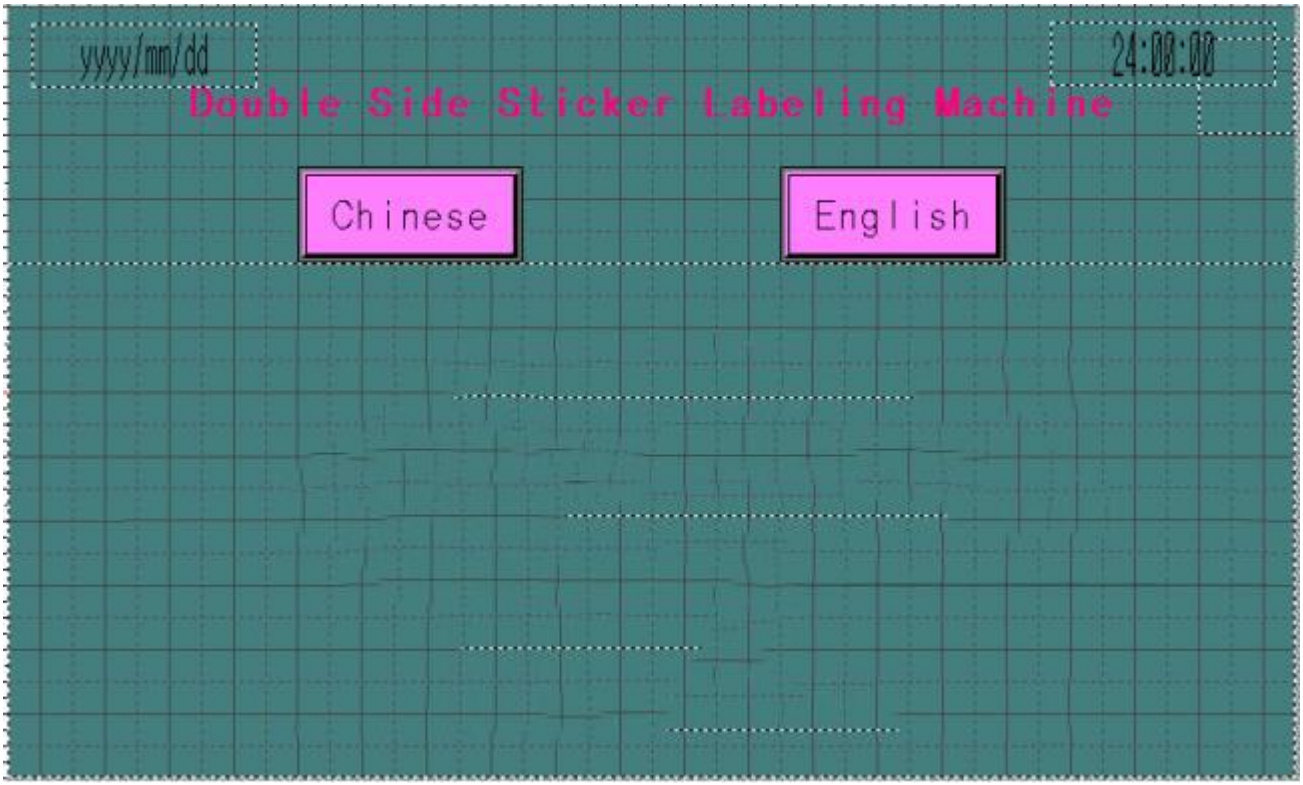
First: Operation language selection

Second:Operation and parameter settings

Third:Label installation

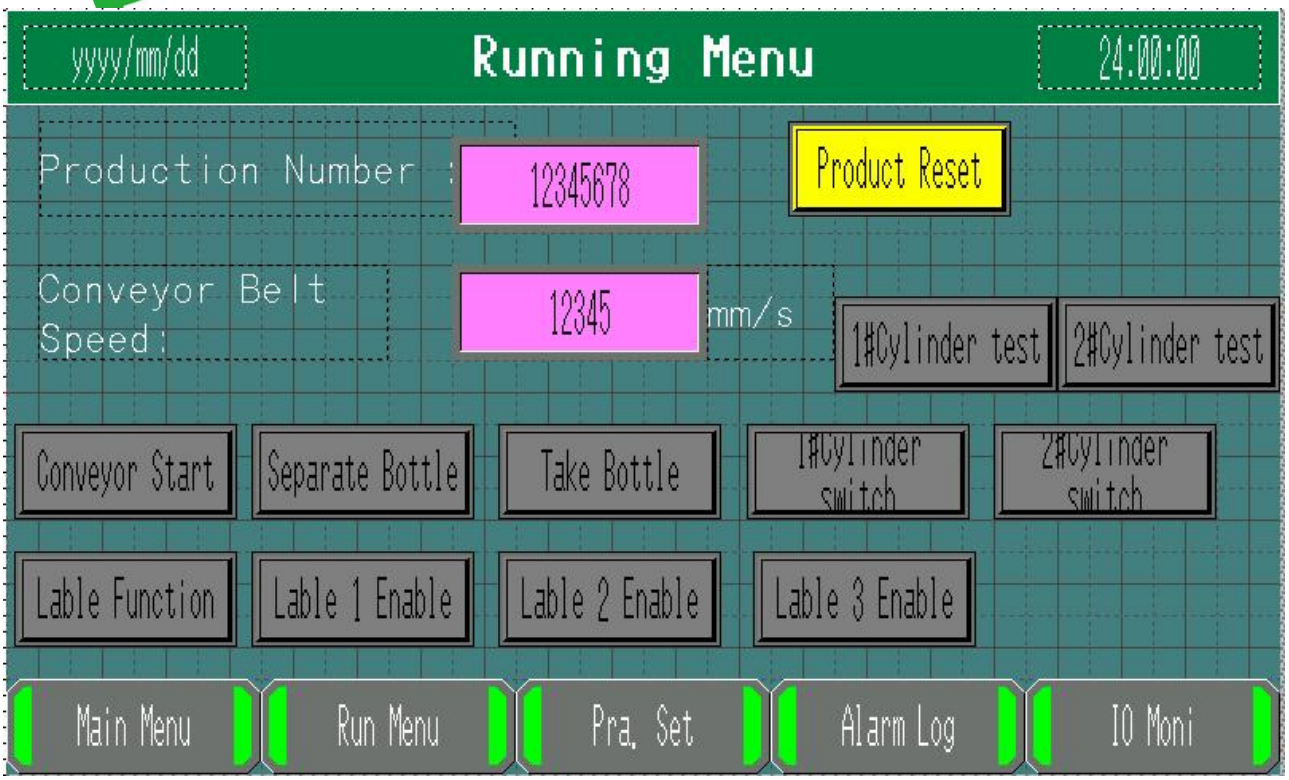
Detail description as follows:

Menu One



Touch Label winding diagram to enter the third menu.

Menu Two



Page Up: touch it back to the front page

Conveyor: touch it to start the conveyor belt, touch again to stop it.

Bottle Separate: touch it to make the bottle on conveyor divided and keep a suitable distance.

Bottle Pressing: touch it to have the sponge structure to press on the bottle after labeling and make the label stick tightly.

Parameter setting: touch it to adjust parameter.

Production Quantity：it shows the number of label output in a given period, can't touch to alter.

Clear: touch it to return to zero.

1# label head off: touch it to stop the work of 1# label head working

2# label head off: touch it to stop the work of 2#label head

Menu Three

Labeling Speed: the value scope is 0-300, it's proportional coefficient. The greater the value, the faster the speed, touch the number with finger can enter keyboard input way.

Length of labeling: the value scope is 0-999, it's proportional coefficient. It's the distance from head end of label to detect device of label,touch the number with finger can enter keyboard input way.

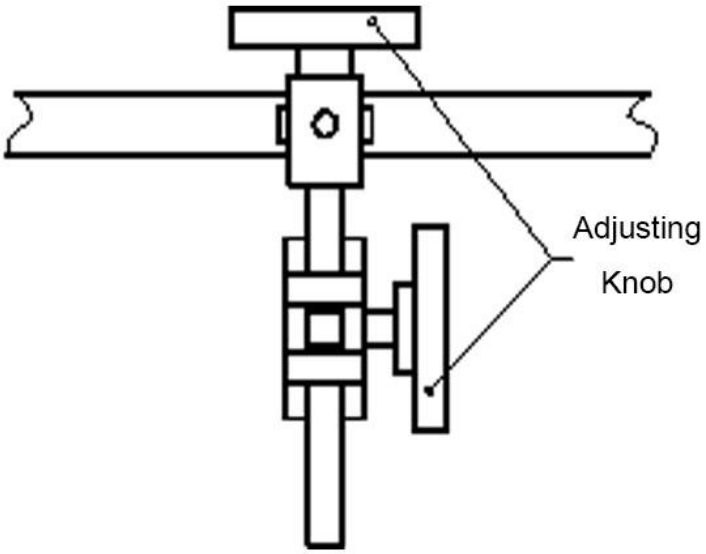
Position of labeling:the value scope is 0-999,it's proportional coefficient.It's the

the time length from electronic eye inspecting object to start outputting label, touch the number at right side of labeling position with finger can enter keyboard input way.

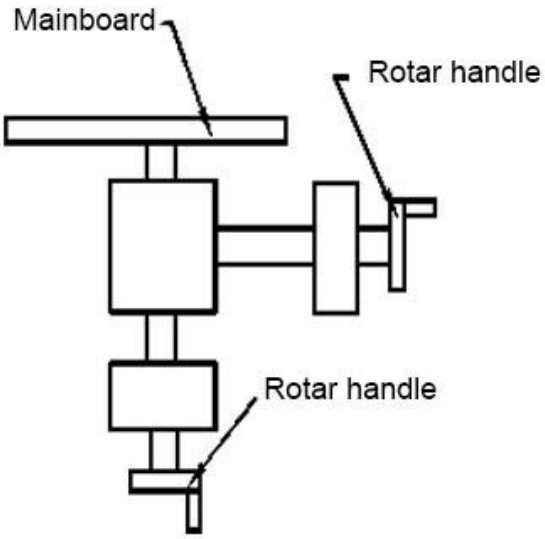
Transmission frequency: the value scope is 0-99,it's proportional coefficient. The higher the number, the faster the speed.

5.2 Adjustment of protection fence

In order to achieve the best result of bottle line,the adjustment should be carried out form the feeding direction, adjust it while the conveyor belt is running, it will achieve better result. Only need to loosen the adjusting knob,and then protection side guide according to required height and width,finally, lock the adjusting knob tightly.



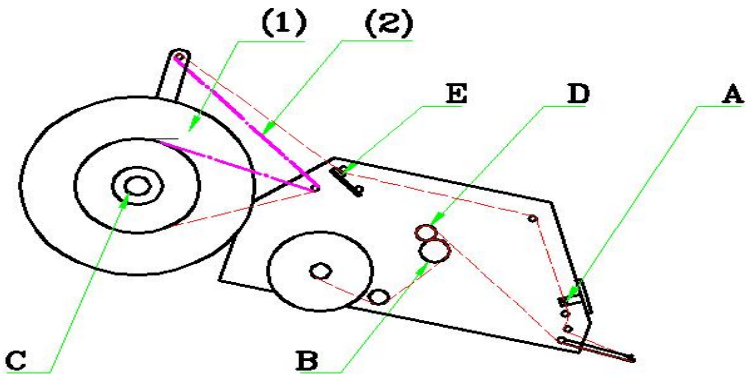
5.3 Adjustment of labeler



After adjustment of the protection fence, adjust the two turning handle as shown in the below picture, according to the height and position of labeling that the object can be labeled and pass through, and try to adjust to have a stable and smooth movement.

5.4 Label installment

Install the label as below picture(attention:Position A and Position B are the place easiest to install wrongly)



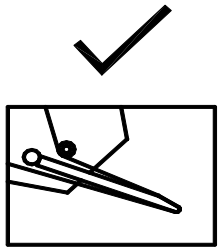
Label Installation

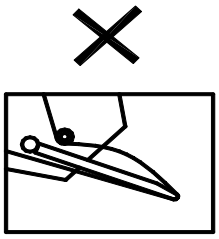
(1) :Label follows direction when label winding is on the inside.

(2) :Label follows direction when label winding is on the outside.

When install the label, please pull and loosen the label paper appropriately, tension the label paper with the turning wheel spindle C after installment.

5.5 Tightness adjustment of the label paper





Adjust positions of fillet wheel D and press plate E（refer to label installation diagrams DE）and then make label position of dispensing plate smooth as diagram.

5.6 Adjustment of electric sensor

(Normally, it has been adjusted before leaving factory.Users needn't to adjust again)

The electric sensor adopts infrared reflective optical fiber. First, put the object in front of the head of the optical fiber; then turn the sensitive adjusting knob to the minimum in anti-clockwise direction;then turn the knob in clockwise direction until the indicating lamp lighted in yellow green,continue to turn in

clockwise direction about 2 to 5 degrees. This is the optimum position and the standard is no secondary signal outputting when labeling object passes the electric sensor.

The position of electronic sensor should not be changed at discretion because it is relative with memory data.

5.7 Adjustment of electric sensor for label

(Normally, it has been adjusted before leaving factory.Users needn't to adjust again)

- When there is no shade between the electric sensor, the running signal(yellow light) should remain lit. If not, please press"+" button to increase the sensitivity.
- When set the label (with backing paper)between the electric sensor, the running signal(yellow lignt) shouldn't be light. If still light,please press"-"button until the yellow light be out.
- When take away the label(remain the backing paper), the running signal should light again,If not, please press"+"button to adjust a correct value.
- Pull the label straight between the electric sensor, and the pull the label paper, when the gap between the label through the electric sensor, the running signal will flicker.
- When finish all the above steps, please press the"+"button and "-"button at the same time for 3 seconds to lock the state to avoid the mistake

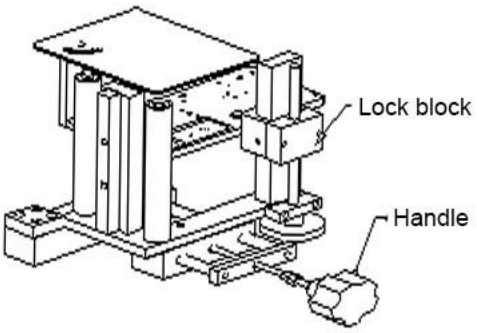
operation.

- If need adjustment again, please press"+" button or "-"button last 3 seconds to adjust according the above 4 steps.
- Please attention, there shouldn't be multiple sensor point in a piece of label.It would cause of wrong output length of label. If need to adjust the position of the electric sensor, please also adjust other parameter.

5.8 Adjustment of coder position(optional accessory)

Adjustment of horizontal position: turn the rotary handle

Adjustment of vertical position:Loosen lock knob, open coder according to movable sliding track and move to required position and tighten up lock knob again.



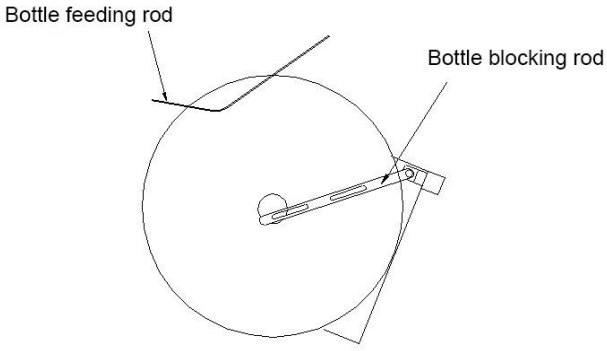
5.9 Adjustment of bottle feeding device

Bottle feeding rod and bottle blocking rod: loosen the fixed hexagonal nut and or triangle knob to adjust the height and position. Observe if the bottle will not fall down and can transmit to the conveyor smoothly, and then fasten up.

Adjustment of feeding bottle speed: turn on the switch(on the feeding device),turn the rotary knob to the “high”direction to quicken the feeding speed,on the contrary, turn the rotary knob to “low” direction, the feed speed will slow down. Adjust the feeding speed to make the bottles keep a suitable distance.

5.10 Adjustment of bottle separate interval

Firstly,adjust the protection fence and bottle feeding device,turn on the switch under the bottle separate device, turn the rotary knob to “HIGH” to decrease the distance between the bottle, on the contrary, the distance between bottles increases.



Chapter 6 Basic operation and use

6.1 Basic operation and use

Switch on the main power(located at the bottom of the conveyor belt), touch screen will appear the first menu after 1-2minutes.

Press the button of “Page down” to enter into the next menu. If need to input the target quantity,press the button of “Reset” to clear the quantity.

After enter into the second menu, confirm the quantity, the number means the number which needs to produce, press stop to start the belt. press stop labeling to start labeling. press stop print to start printing.

If it’s the first time to use the machine, please press the button of “page down” to enter into the third menu, in this page you can set the speed, position of print date and so on, detail operation please refer to the above chapters.

6.2 Example

Container dimension: diameter 54mm*L80mm　Cylinder

Label size: 150mm*50mm

Position of the electric sensor for label:between the guide rail

Position of the electric sensor for workpiece:

Distance between the cylinder:150mm

Parameter input: Synchronous speed:200,

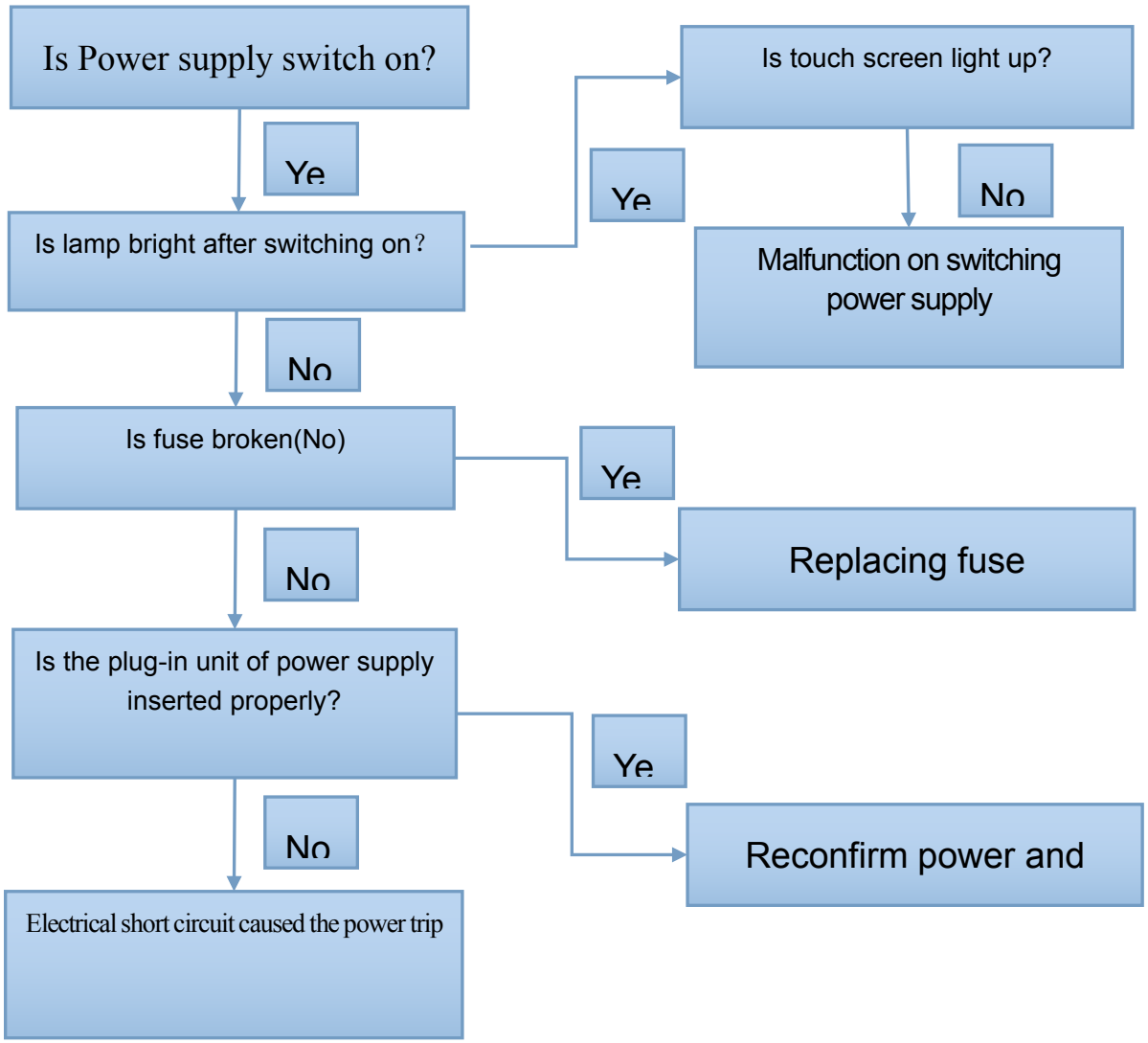
Length of labeling:65,

Position of labeling:30.

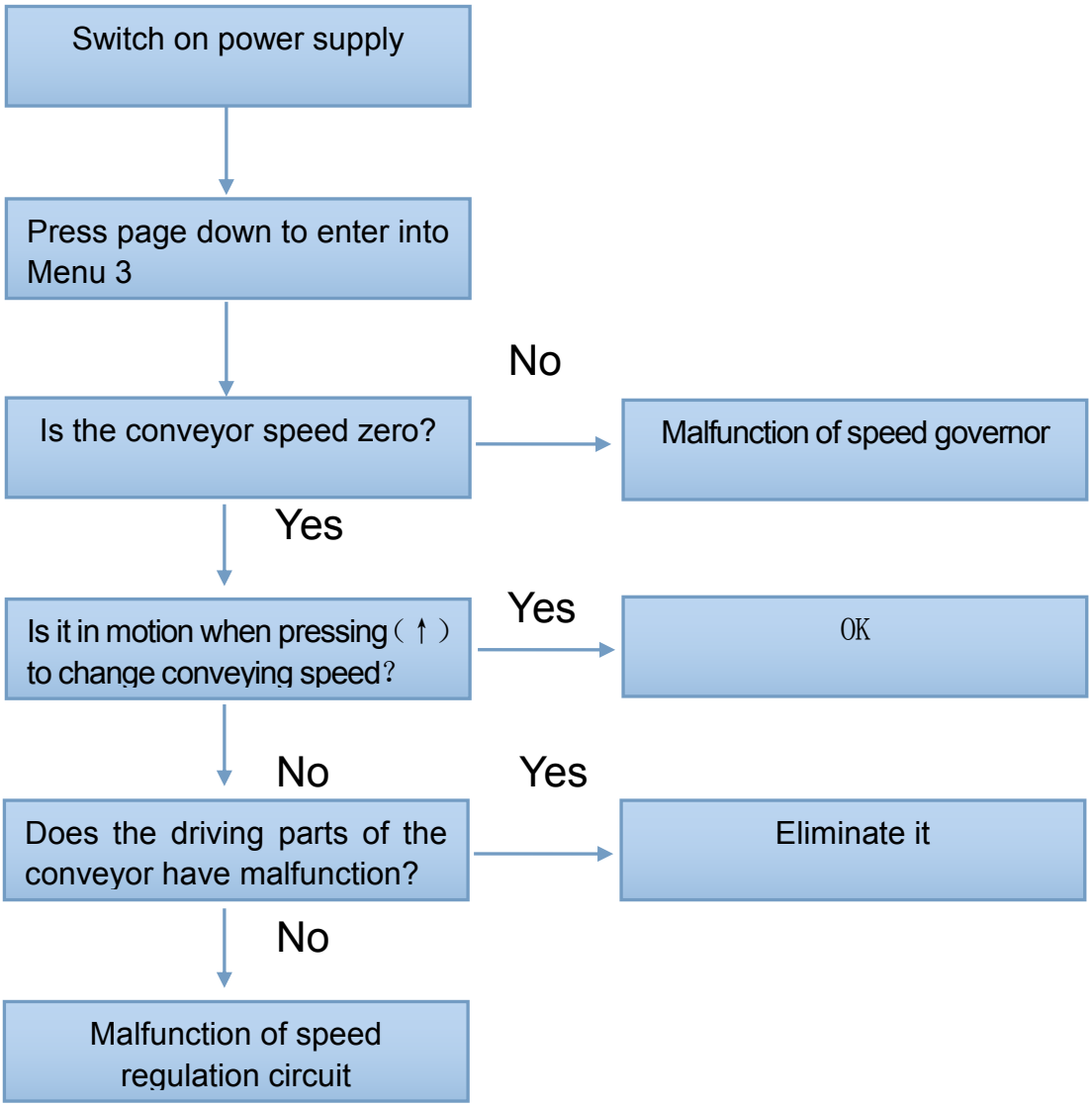
Labeling effect: Labeling speed；26m/min, about105pieces/min

Chapter 7 Main Points of Simple Malfunction and Elimination Methods

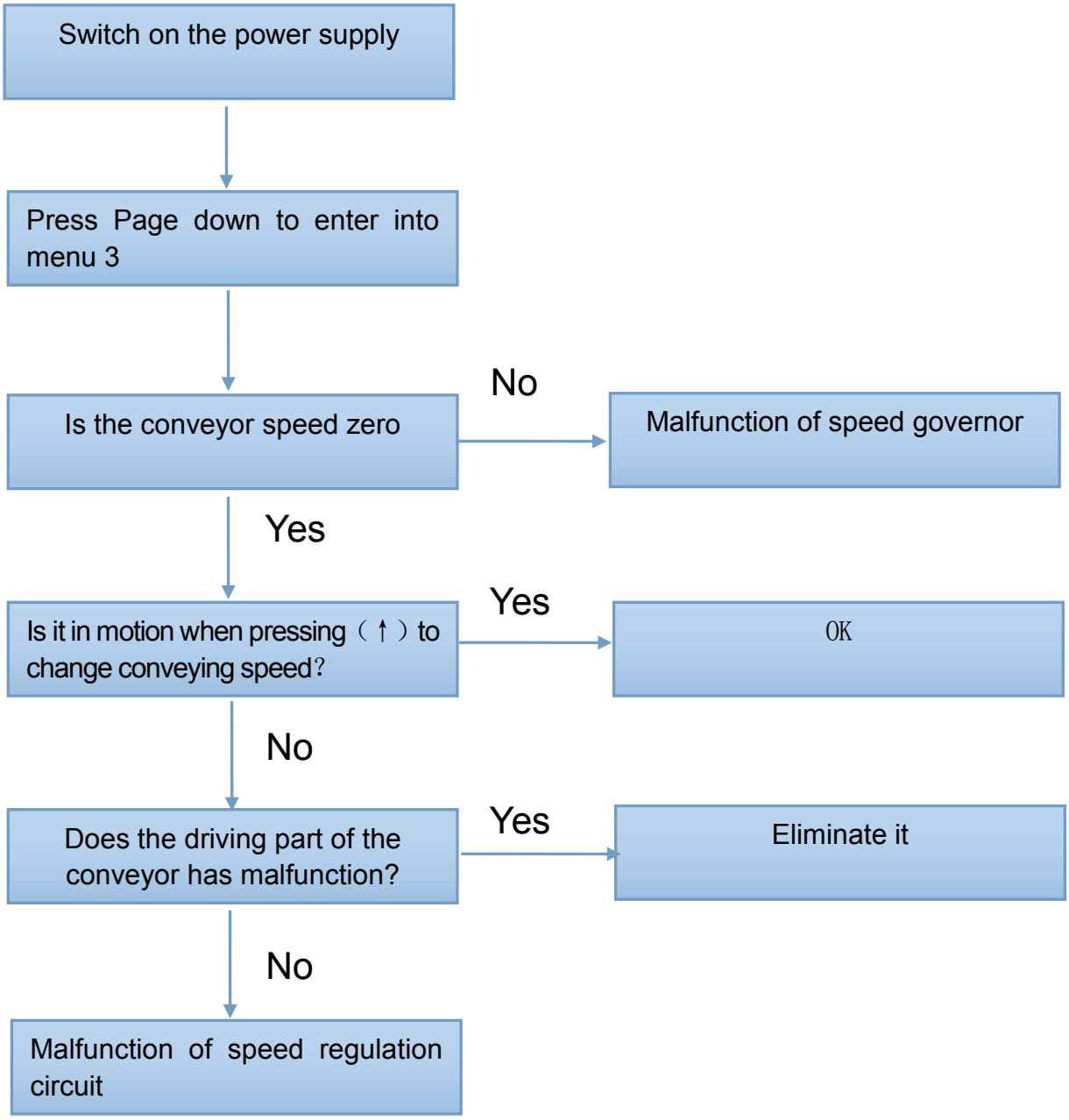
7.1 Malfunction1:No power supply



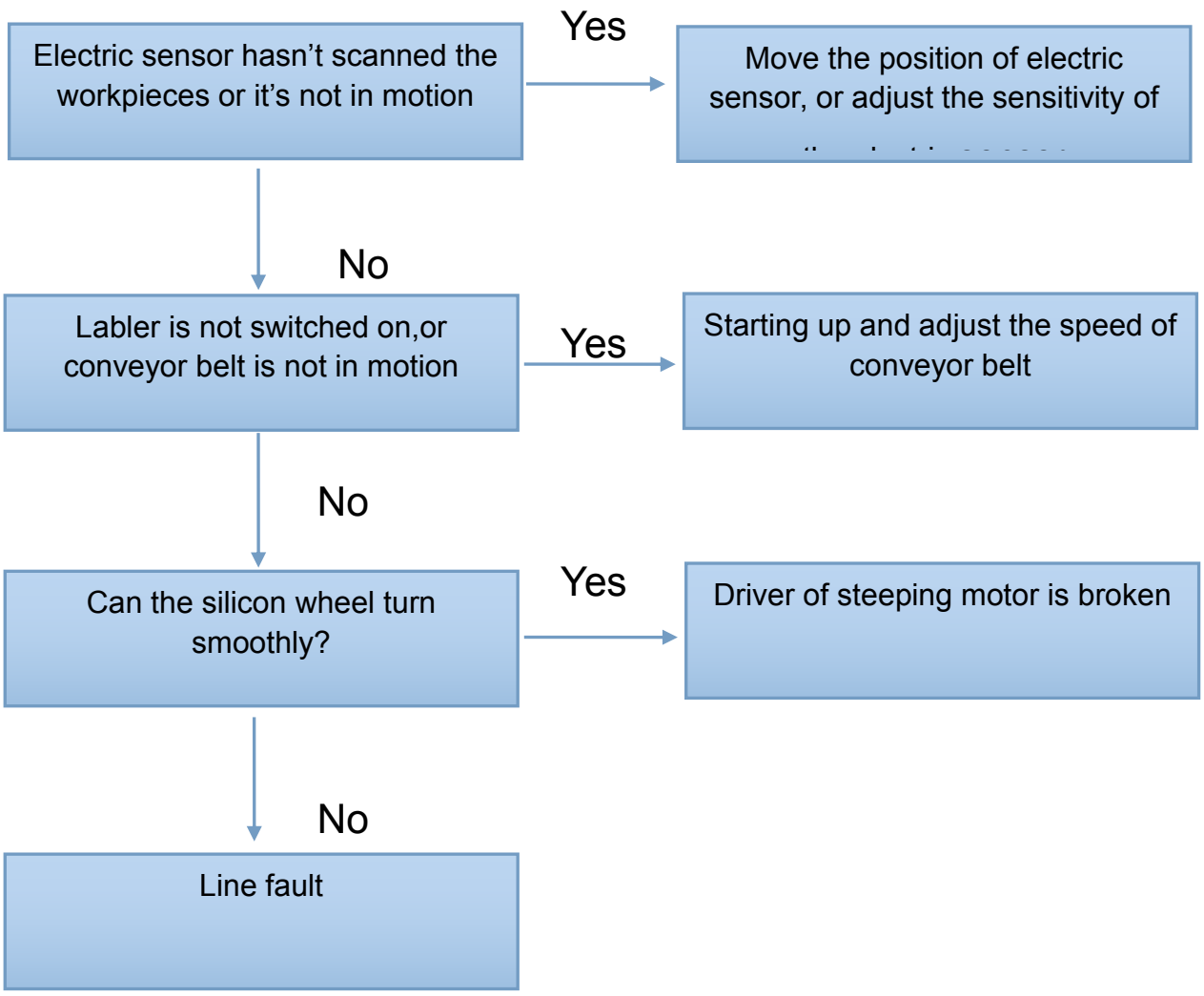
7.2 Malfunction2:Conveyor belt is out of work



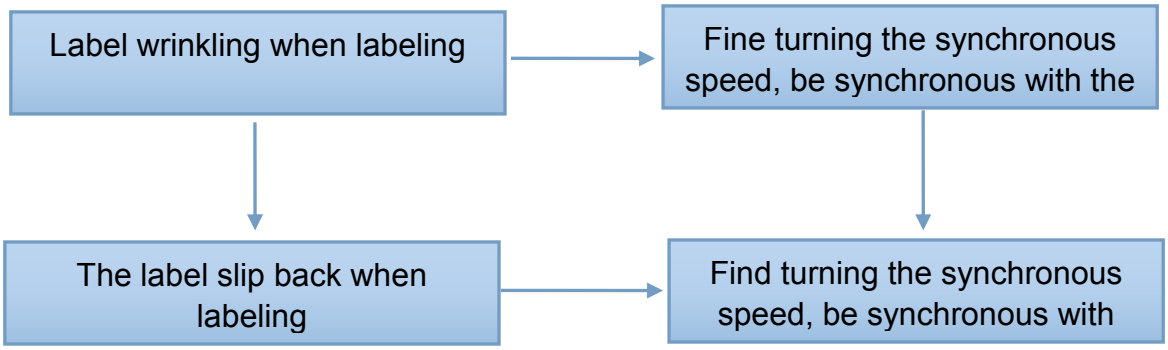
7.3 Malfunction3:



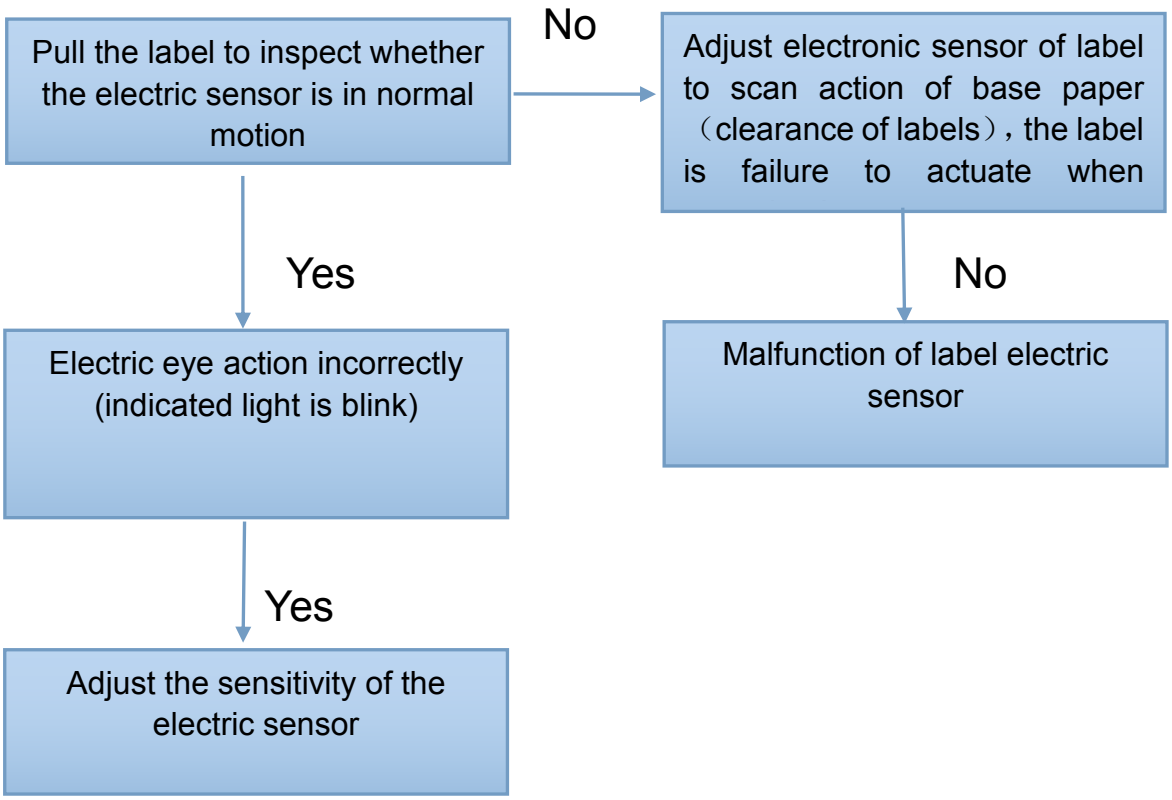
7.4 Malfunction 4: No outputting of label



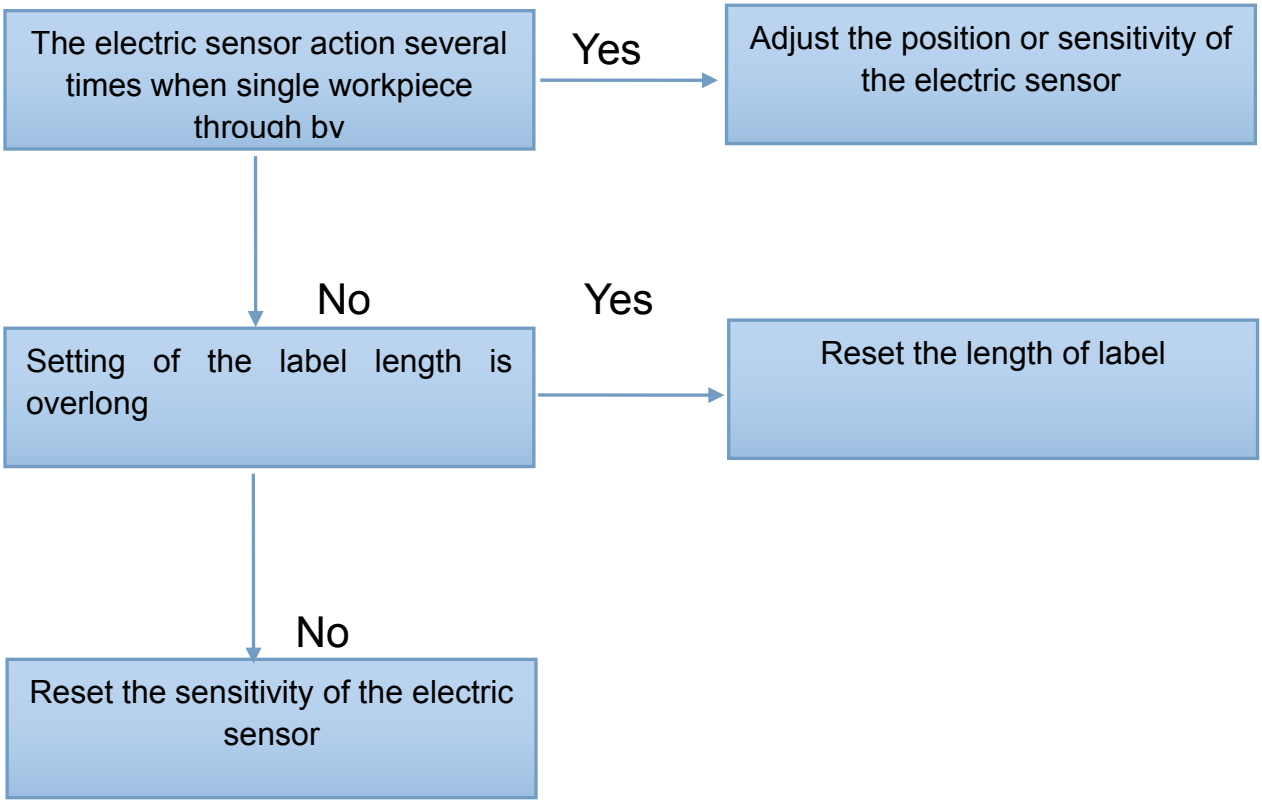
7.5 Malfunction5:Label wrinkling



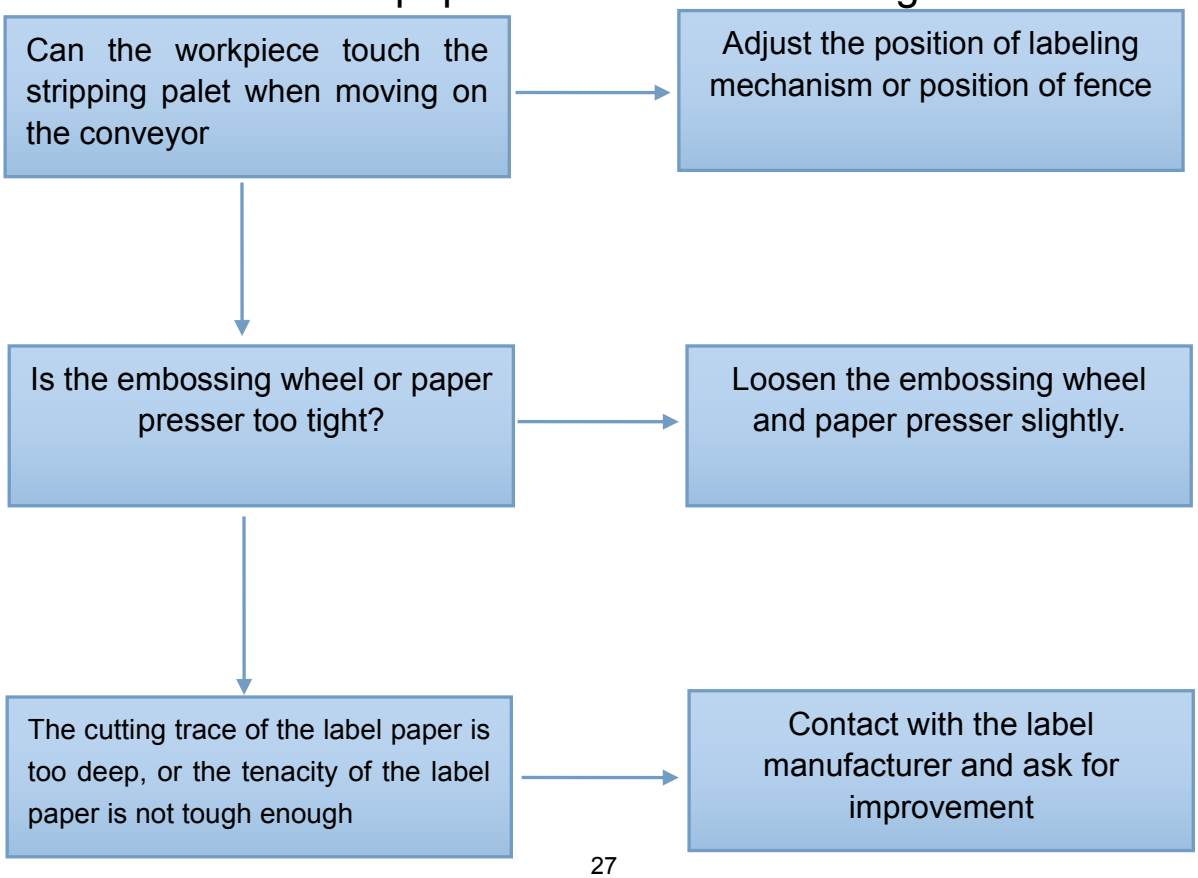
7.6 Malfunction6:Outputting label all the time



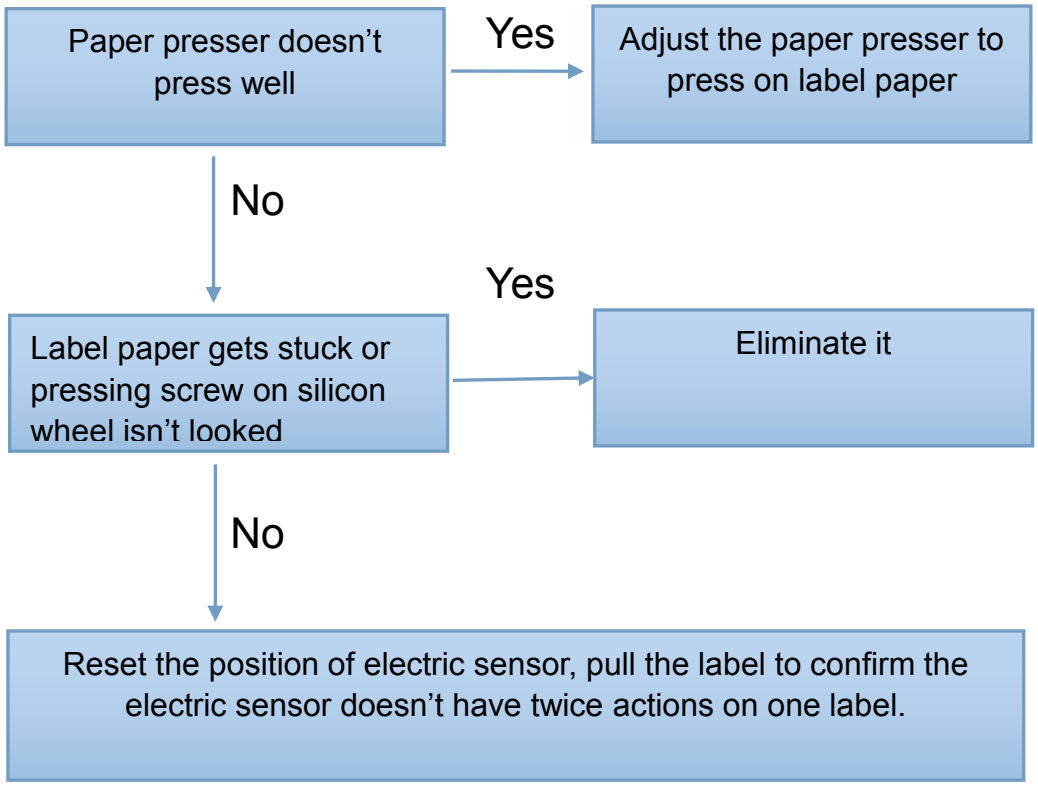
7.7 Malfunction7:Outputting several labels in a time



7.8 Malfunction8:Label paper broken when labeling



7.9 Malfunction9:Length of label is different



Parameter of labeling machine (Factory setting)

1#Labeling Speed: 0--999 (200)

1#Length of labeling: 0--999 (20)

1#Position of labeling: 0--999 (10)

Transmission frequency:0-50HZ (40)

2#Labeling Speed: 0--999 (200)

2#Length of labeling: 0--999 (20)

2#Position of labeling: 0--999 (10)

The parameter above is for your reference, please set the parameter according to the actual label size and bottle type.