TABLE TOP TYPE SEALING MACHINE

ET-999SN , 95SN , 899S , 58S ET-99SU, 99MU

OPERATION MANUAL











Y-FANG SEALING MACHINE LTD.

[CAUTION: BURN HAZARD]
Cleaning and maintenance should be performed by trained personnel only & Keep children away from machine.

INSTRUCTIONS -

A. Each unit provided with a 2-wire polarized attachment plug shall be provided with the following instructions:

"To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way".

- B. Each unit intended for household use shall include the following instruction:
- "Household indoor use only" and "Close supervision is required when this product is used near children.
- C. A household heating appliance provided with a power-supply cord less than 1.4 m (4½ ft.) in length shall be provided with the following instructions:
 - a. A short power-supply cord (or detachable power supply cord) is provided to reduce the risk resulting from becoming entangled in or tripping over a longer cord.
 - b. Extension cords (or longer detachable power-supply cords) are available may be used if cared is exercised in their use.
 - c. If an extension cord (or a longer detachable power-supply cord) is use,

 (1) the marked electrical rating of the detachable power-supply cord or
 extension cord should be at least as great as the electrical rating of the
 appliance, (2) if the appliance is of the grounded type, the extension cord
 should be a grounding-type 3-wire cord, and (3) the longer cord should be
 arranged so that it will not drape over the countertop or tabletop where it
 can be tripped over, snagged, or pulled on unintentionally (especially by
 children).

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《1》 CHARACTERISTIC INTRODUCTION

ET-999SN ET-95SN ET-99SU ET-99MU



1. FILM CLAMP 2. FILM SENSOR 3. ROLLER 4. FILM PIN 5. LOWER MOULD PLATE 6. CUP JACK 7. LOWER MOULD 8. SAFETY DOOR 9. FRONT PANEL 10. FILM CLAMP 11. FILM COLLECTOR



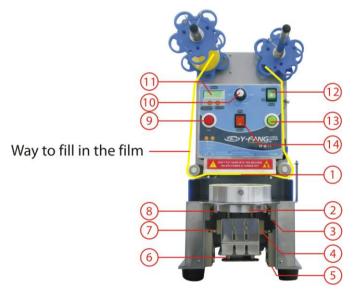
- 1 · UPPER MOULD 2 · IN-OUT SENSOR 3 · SLIDE 4 · CUP JACK 5 · BEARING

- 6 · JUMP ROD 7 · BEARING BUSH 605zz 8 · BEARING BUSH 699zz

ET-899



1. FILM CLAMP 2. FILM SENSOR 3. ROLLER 4. FILM PIN 5. LOWER MOULD PLATE 6. CUP JACK 7. LOWER MOULD 8. SAFETY DOOR 9. FRONT PANEL 10. FILM CLAMP 11. FILM COLLECTOR



1 · UPPER MOULD 2 · IN-OUT SENSOR 3 · SLIDE 4 · CUP JACK 5 · BEARING 6 · JUMP ROD 7 · BEARING BUSH 605zz 8 · BEARING BUSH 699zz 9 · EMERGENCY BOTTON 10 · TEMPERATURE CONTROLLER 11 · COUNTER 12 · POWER 13 · START BUTTON 14 · AUTOMATIC/MANUAL CONTROL

Please turn off the power when aintaining.

Warning! Warning! High edge.

Temperature



FILM SENSOR
 FILM ANCHORAGE
 LOWER MOULD PLATE
 LOWER MOULD
 SAFETY DOOR
 FRONT PANEL
 FILM CLAMP
 FILM COLLECTOR



1 · UPPER MOULD 2 · SLIDE 3 · CUP JACK(BIG) 4 · BEARING 5 · BEARING BUSH 605zz 6 · BEARING WHEEL

《2》 USER'S OPERATION



FILL-IN THE FILM



ET-999SN 95SN ET-899 ET-58

- 1. Fill in the film in correct direction as the above picture. If you fill in the wrong way, the film would be stuck with the heater of upper mould. After loading the film, please match the eye-mark of film to the place of film sensor.
- 2. Plug the AC power wire, turn on the power botton, the lower mould will push out at the same time. Further, the upper mould will be increasing the temperature automatically.
- 3. After 5~7 minutes, the TEMPERATURE INDICATIR shall shut off when the upper mould's temperature set ready. Till now, the auto function is ready for work. It could be only in manual while the temperature is not ready.
- 4. The way to choose the container and film:
 - (1)PET/ES film is suitable for any kind of trays. (temperature range 140~160 $^{\circ}\text{C})$
 - (2)As for sealing well, the material of both container and film should be the same. (temperature range $160~180~^{\circ}$ C)

*PS: Unemployed and children are forbidden to close to the machines.
To forbidden the accident, don't put hands in the machines unless you pull out the power wire.

Rolling System



Step1. Take off the Right side of

「Plastic flim clamps」&

「Spring」、「Washer」、

「Butterfly Clamps」

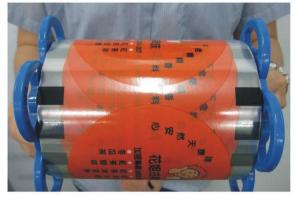


Step2. Put the Right side of

「Plastic flim clamps」 into
the central paper roll of flim
to the both sides

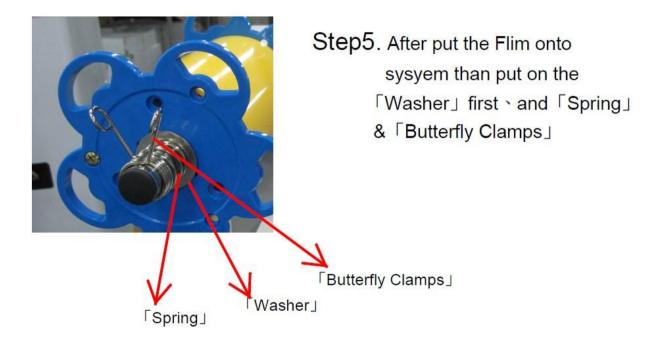
Step3. OK

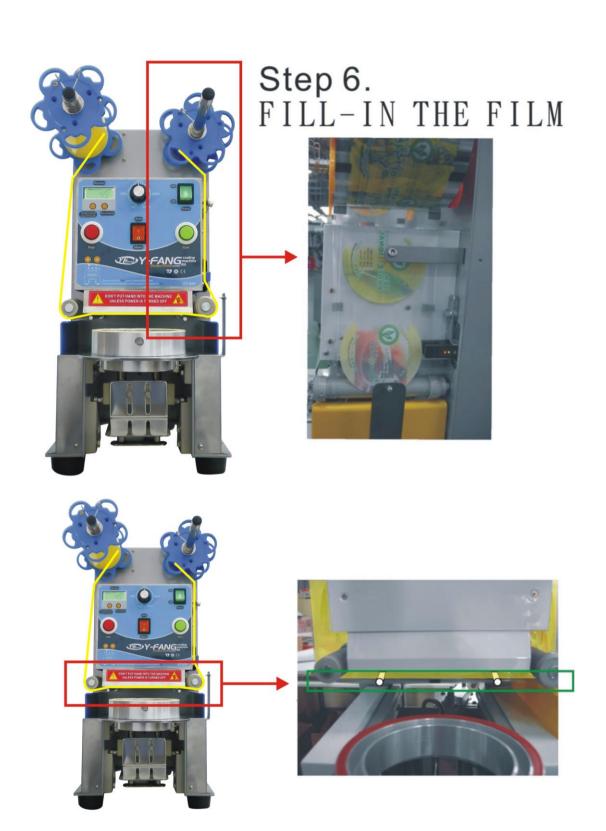






Step4. Put the object as picture step3 onto Rolling System





Step 7.
Put the flim
behind the iron Bar.



Step8.

Turn on the 「ManualOperate」 the flim is OK to be rolled on the flim system.



《3》FRONT PANEL INTRODUCTION

I. Indicator



II. Function of buttons:

- (1)Power indicator: Indicating the power is online or offline.
- (2) **Power key**: Press power key to start up the machine. After displaying "YF-LCC" pattern, the machine begins to service you. Oppositely, "PO" pattern means the power is off.
- (3) Auto/Manual choice key: Providing you to select auto or manual operation;
 - A. If manual is selected, the machine is waiting for pressing the manual key to go on sealing process.
 - B. If auto is selected, the machine is automatically doing sealing process. (Cups will be sealed automatically.)
- 4. Manual Operate KEY: Work in situation 3-A.
- 5. **Reset key:** Reset the function of microcomputer's parameters, and special function.
- 6. Temperature Key: Lighting up as increasing temperature, off oppositely.
- 7. Right screen: A. To display the temperature as usual condition.
 - B. To display the parameter of function as changing the parameter setting.
 - C. To display error code.
- 8. "UP" and "DOWN" Keys: To increase or decrease one unit value.
- 9. Counter Key: To display the amount or count back to zero.
- 10. Left screen: A. To display the amount as usual condition.
 - B. To display the parameter setting. Symbolizing P1~P5.

I. LED Indicator



ET-999SN ET-95SN ET-99SU ET-99MU

1. : LOWER MOULD/CUP INPUT

2. **: UPPER MOULD SEALING

3. **: UPPER MOULD STANDBY

4. : LOWER MOULD/CUP OUTPUT

5. FILM REWINDING

6. SECURITY DOOR ERROR

7. EYE-MARK SENSING

8. **W**: TEMP HEATING

9. ** : MANUAL MODE OPERATION

10. AUTO MODE OPERATION

III. Function of setting

1. System parameter table:

Symbol	Function	Range	Parameter Setting
	Setting		(Set in factory)
P1	Set	PP (160~180°C) ES (140~160°C)	160℃
гі	Temperature		
P2	Counter	LOK: LOCK / OPN: UNLOCK	N (can be reset)
P3	Sealing	001~030 unit (0.1sec~3sec)	010 unit (1sec)
го	time		
P4	Cup settled	000~030 unit (0.0sec~3sec)	010 unit (1sec)
Γ4	time		
	Film	000~060 unit (0.1sec~6sec)	000(controlled by
P5	rolling		sensor)
	time		

IV. Operating procedures:

The procedures of machine as: A->B->C->D->E->F->G->H->I

- A. Press POWER to display YF/LCO, then left screen shows counter and right screen shows TEMP. The machine is now ready for using.
- B. Press SET key, the left screen displays P1, the right screen displays temperature, then use up or down Key to increase or decrease one degree. (PP film 160° C, ES film 140° 160°C)
- C. Press SET Key, then the left screen display P2, the right screen shows counting mode, OPN means can be reset to zero and recounting from one, LOK means cannot be reset to zero, but continuously counting day after day.
- D. Press SET key once more, the left screen shows P3, and right screen shows sealing time, then use up and down key to increase or decrease the value by one unit (0.1 second). Generally, the value is assigned between 005 and 015.
- E. Press SET key once more, the left display shows P4, and right display shows cup settling time, then use up and down key to increase or decrease the value by one unit (0.1 second). Generally, the value is assigned between 005 and 010.
- F. Press <u>SET</u> key once more, the left display shows <u>P5</u>, and right display shows plastic paper advancing time. If the paper has a sensed point (eye mark), then set the value at 000, else depends on the length of the paper unit, and use <u>up</u> and down key to adjust the correct time, generally, is set around 006 and 020.
- G. Press SET key once again, the left display shows YF, and right display shows LCC, means all set procedures are finished. The left display goes to normal

- counting, and the right display shows the temperature of the heater, and going to warm up.
- H. As the temperature ready, the machine goes to normal working, according to AUTO mode or MANUAL mode.
- I. To stop the machine, only need to press the POWER key once again, the lower mould will draw back; the left and right displays are going off. At this time, the power indicator is still on, and that's normal. This means the controller is sleeping, press POWER key once again to wake it up if you want to work continuously. To off the power indicator, you need to unplug the power line.

V. System erroe codes:

The machine is going to buzz as the microcomputer detecting any failures.

- A. E00: Temperature control system error.
- B. E01: Heating circuit or temperature wire error.
- C. E02: Upper motor draw back or micro switch error.
- D. E03: Lower motor advanced or micro switch error.
- E. E04: Sealing film is not in the right position or the eye-marks not detected.
- F. E05: Lower motor draw backor micro switch error.
- G. E06: Upper motor advanced or micro switch error.
- H. E07: Safety door is touched or collided.
- I E19: P.C board error.

To stop the buzzer, please off the power for five seconds, then on power gain, if it is still buzzing, please contact your local dealer for service.

4 USER'S MAINTENANCE

Any time do maintenance, should un-plug the AC power wire.

I. Daily check point

- (1) Check the upper mould and clean by wet cloth or rough plastic sheet. If not, the dirty plastic sheet or powder will stick on the heating plate.
- (2) Keep both the right and left slider those fixed under the lower mould plate clean and lubricated, if not, the input and output of the lower mould operation will be unsmooth.
- (3) Clean the groove of the lower mould.
- (4) Clean the jack system. (Jack slider, spring roller, bearing etc), keep it operate smoothly.
- (5) Clean the film sensor and lower mould in-out sensor.

II. Other maintenance and repair placement:

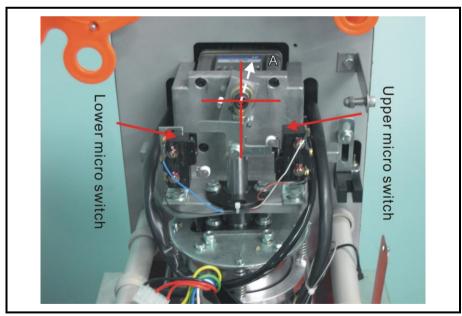
Please contact with your local dealer for service and cooperate with the maintenance staff.



(5) UPPER AND LOWER MICRO SWITCHES OF UPPER MOULD

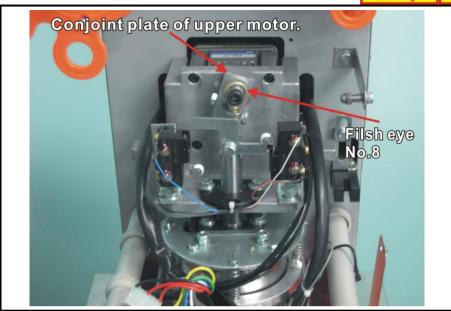


Graph 5-1 Open the front panel and control box.

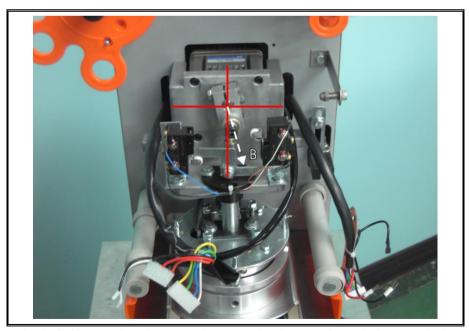


Graph 5-2 Move the upper micro switch to the right position - match The plate to dotted line A. (Error code: E02).





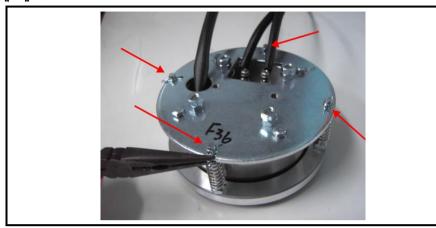
Graph 6-1 To lubricate axle and fish eye No. 8 once for a month.



Graph 6-2 Move the lower micro switch to the right position - Match the plate to dotted line B. (Error code: E06) \circ



(6) STRIP DOWN AND REBUILD THE UPPER MOULD



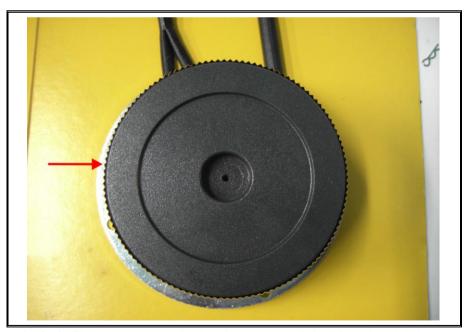
Graph 7-1 Using a clam to strip down four B TYPE CLIPS , then take off the plate.



Graph $7-2 \cdot 3$ Using a wrench and box end wrench to separate the knife and heater. Then you can clean the mould and parts.

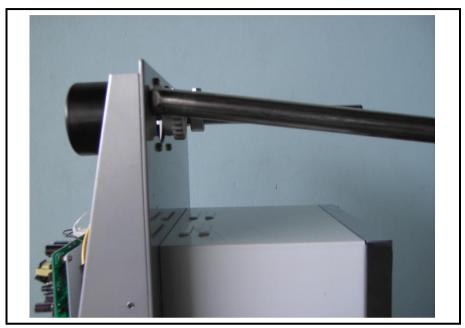


Graph 8-1 After cleaning, heater's position should be higher than the knife for 1 mm $^{\circ}$

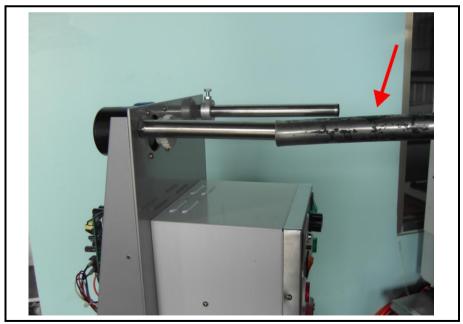


Graph 8-2 The gap around the heater and knife should be equal.

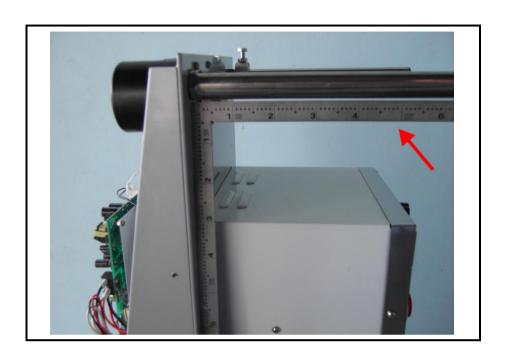
《7》AJUSTMETN OF CENTRAL BAR

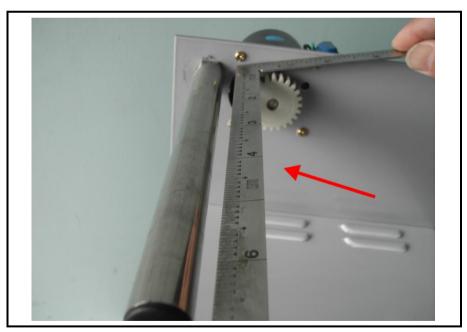


1. The central bar will lie down or sloped by crash.



2 Using a pipe to adjust the bar to the right position.





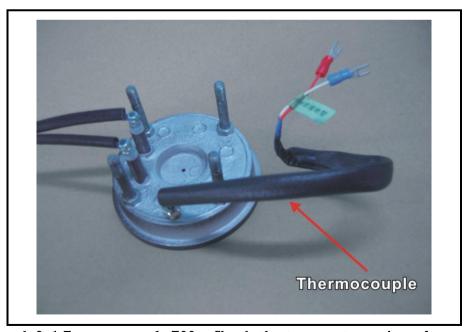
3 To measure the angle between the bar and machine with an angle square. It should be in 90 degree.

Advise to be handled by technical staffs.

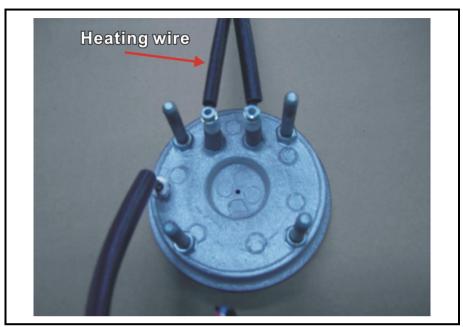
《8》TROUBLE SHOOTING



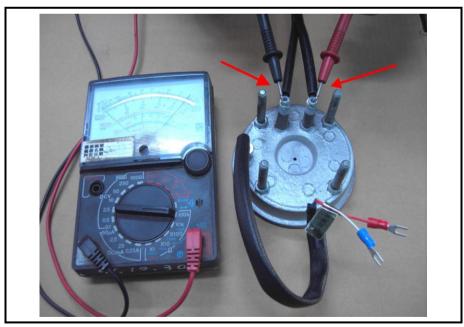
You cannot turn on the machine with wrong voltage, the PCB will display AC for wrong voltage.



 $\hbox{ Graph 9-1 For error code E00: Check the temperature wire of upper mould. }$

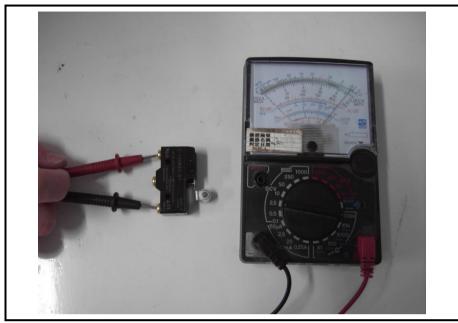


Graph 9-2 For error code E01: Check the heating wire with a Electric meter.

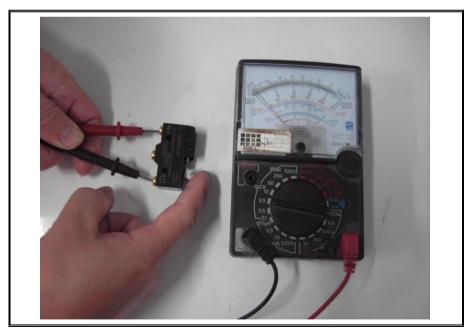


Graph 10-1 For error code E01: Check the heater with a electric meter.

Annotation: Check for micro switch

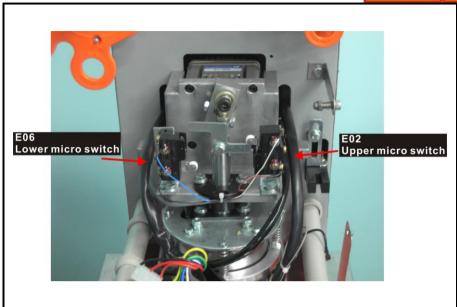


**Please strip the thin wire group of PCB as you check all the micro switches. To set the electric meter as above graph. Graph 13-2 While the switch is turning on, the pin of the electric meter should be in right side as normal situation.

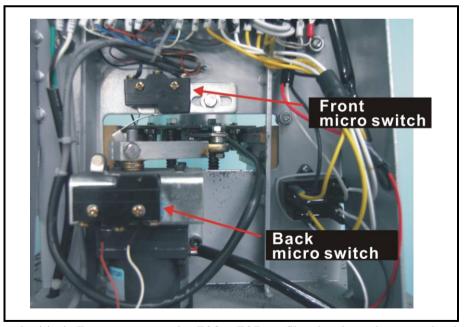


* While the switch is turning off, the pin of the electric meter should be in right side as normal situation.

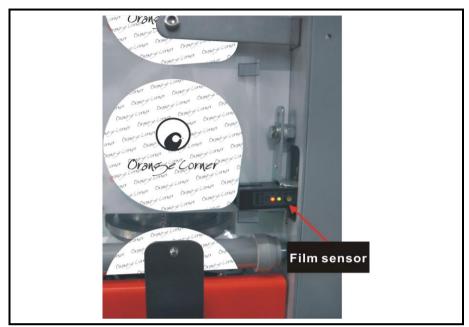




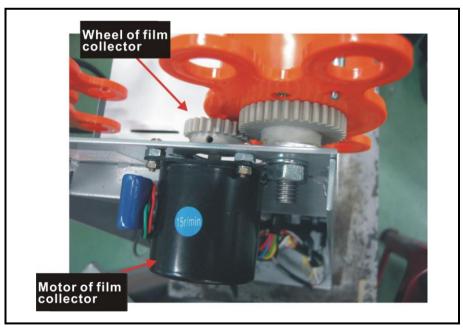
Graph 10-2 For error code E02 > E06: Check the micro switch of upper micro switch with a electric meter or upper motor.



Graph 11-1 For error code E03 \ E05: Check the micro switch with a electric meter at back or lower motor.



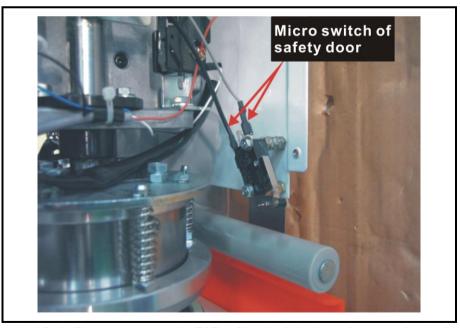
Graph 11-2 For error code E04: 1. Check if the sealing film is not detected by film sensor. (The eye-marks are not detected) 2. Clean the sensor or exchange the sensor.



Graph 12-1 For error code E04: Check the wheels beside the film collector.



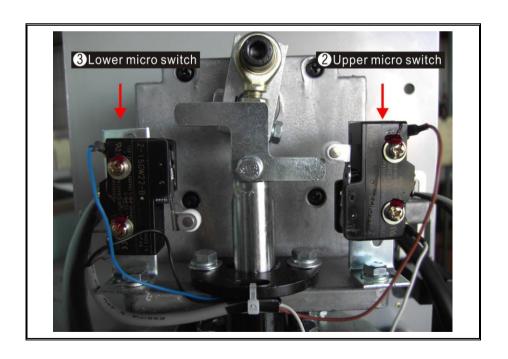
Graph 12-2 For error code E07: Check the safety door and adjust the door to the right position. (Touch the micro switch.)



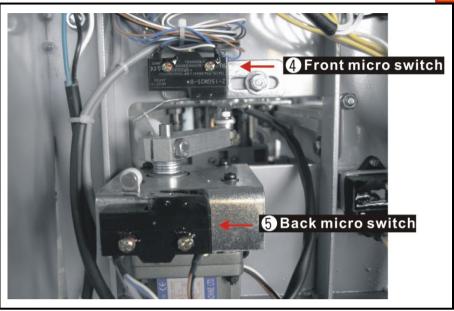
Graph 13-1 For error code E07: Check if the micro switch is broke.

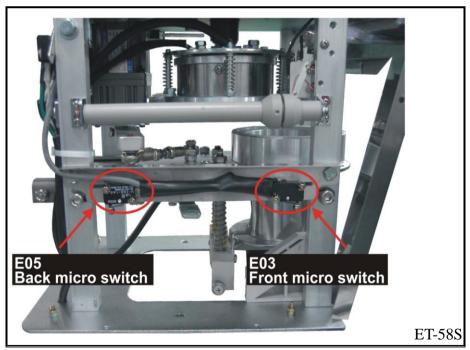


Graph E08 Micro switches are abnormal. (Check with electric meter.)



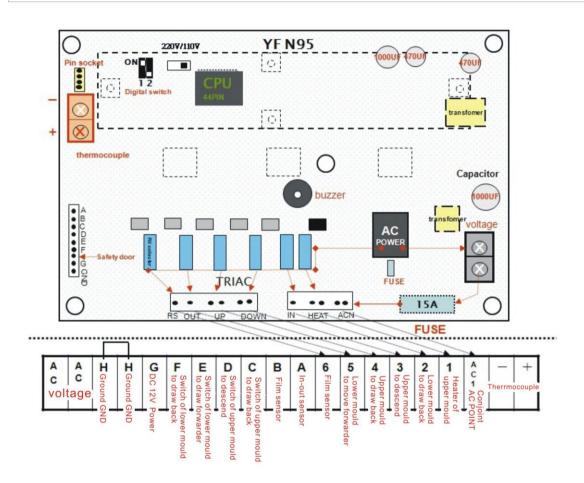






Graph 14 For error code E03 · E05: Check the micro switch of lower micro switch with a electric meter or lower motor.

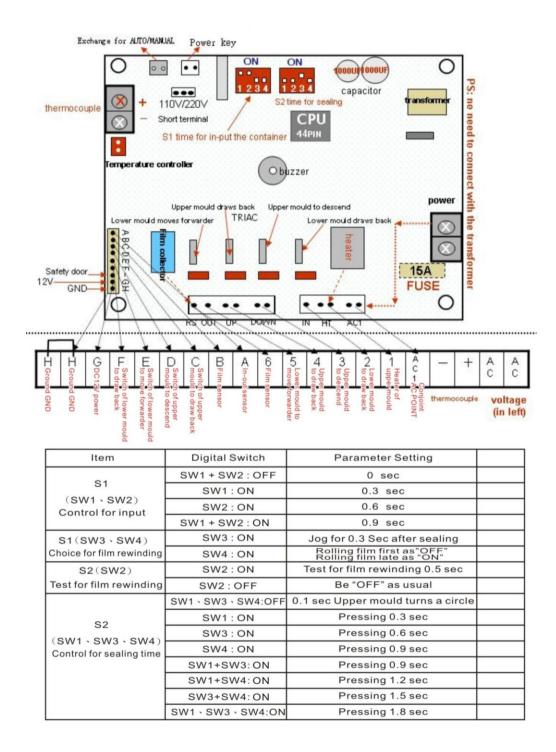
Circuit board wiring Diagram(forty-four feet) for ET-95SN/999SN sealing machine



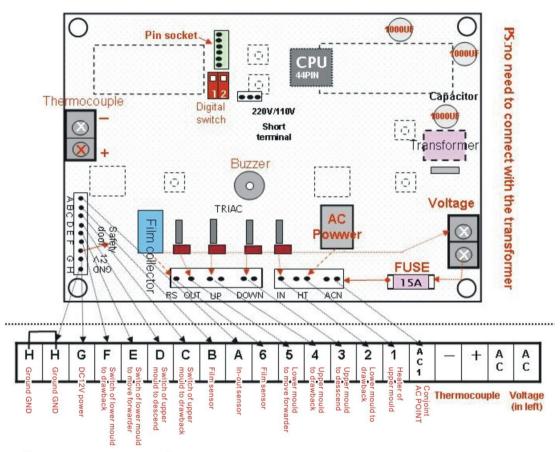
System error codes:

E-AC	Wrong voltage	E-16	The parameter is out of range
E-00	Temperature control system error	E-17	The parameter is not detected
E-01	Heater collector or heating wire error	E-18	The parameter is not loaded
E-02	Micro switch of upper mould error	E-19	P.C. board error
E-03	Micro switch of lower mould error	E-20	Short of DC12V(short of in-out sensor)
E-04	Sealing film is not in the right position or the eye-marks sensor error.		
E-05	Micro switch of lower mould error	-	switch(1)
E-06	Micro switch of upper mould error	To roll the film before sealing, when it is "ON To roll the film after sealing, when it is "OFF	
E-07	Safety door is crashed		

Circuit board wiring Diagram (forty-four feet) for ET-899S sealing machine



Circuit board wiring Diagram (forty-four feet) for ET-58S sealing machine



System error codes:

	V=		
E-AC	Wrong voltage	E-16	The parameter is out of range
E-00	Temperature control system error	E-17	The parameter is not detected
E-01	Heater collector or heating wire error	E-18	The parameter is not loaded
E-02	Micro switch of upper mould error	E-19	P.C. board error
E-03	Micro switch of lower mould error	E-20	Short of DC12V(short of in-out sensor)
E-04	Sealing film is not in the right position or the eye-marks sensor error.		
E-05	Micro switch of lower mould error	0	switch(1.2):
E-06	Micro switch of upper mould error		the film before sealing, when it is "ON". the film after sealing, when it is "OFF".
E-07	Safety door is crashed		~

Specification of motor, gear box & capacitance

Model	Model name	Standards	Gearbox	110V	220V
ET-899S ET-999SN	Motor for upper mould	4RK25GN-A	4GN-75	12uf	3uf
ET-95SN Sealing	Motor for lower mould	2RK10GN-A	2GN-90	6uf	1.5uf
machine	Motor for film collector	15rpm/1min			
ET-585	Motor for upper mould	4RK25GN-A	4GN-60	12- 16uf	3uf
Sealing machine	Motor for lower mould	2RK10GN-A	2GN-90	6uf	1.5uf
	Motor for film collector	15rpm/1min			
ET-59S ET-99S (old) sealing Machine	Motor for upper mould	4RK25GN-A	4GN-75	12uf	3uf
	Motor for lower mould (teeth shape)	2RK6GN-A	2GN-30(110V) 2GN-25(220V)	4uf	1.5uf
	Motor for film collector	15rpm/1min			
	Motor for upper mould	4RK25GN-A	4GN-75	12uf	3uf
ET-195 (old) sealing Machine	Motor for lower mould (teeth shape)	2RK6GN-A	2GN-30	4uf	luf
	Motor for film collector	2RK4GN-A	2GN-120	4uf	luf

[※]One-Phase motor needs a capacitor to adjust the suitable voltage for the motor.

^{*}Technical staffs must know the standards of the above details.

Tray input sensor · film eye-mark sensor

ET-59S	In-out sensor	MR-10NE	Bad at detecting the black containers.
ET-58S ET-899S ET-999SN	Film sensor	SU-07 <u>G</u> B	Good at detecting the black film but bad at detecting the red film
ET-95SN	×film sensor ॡ to	display green ligh	nt "R" to display red light
	L (green) lights usual, and red) light when detecting the	as usua	splay both PW (green) and OP (red) light I, and to turn off OP (red) light when g the eye-marks of containers.
	MR-10NE	PL OP	SU-07GB
		adjust "strong"," w signals.	veak" To adjust "strong"," we the signals.
	rown blue white black H A N G N O 12 N C usels II		brown blue white black G H B P V G N N 12 N P P

Maintenance-1

ERROR CODE AND SOLUTION :

1	E00	Temperature control system error.
2	E01	Heating circuit or temperature wire error.
3	E02	Upper motor or micro switch of upper mould error.
4	E03	Lower motor or micro switch of lower mould error.
5	E04	Sealing film is not in the right position or the eye-mark sensor error.
6	E05	Lower motor or micro switch of lower mould error.
7	E06	Upper motor or micro switch of upper mould error.
8	E07	Safety door is touched or collided.
9	E19	PCB error: The main control system of PCB error PCB crashed.
10	E20	Short of DC12V.
11	Err	Voltage error.

Maintenance-2

ERROR CODE AND SOLUTION :

	Cannot in-put the containers under Auto setting: 1. The film sensor of lower mould is too strong or too weak. please
	clean the sensor or adjust the degree of sensor.
	2. The black paint on lower mould is peeled off. Please paint it
	·
	again smoothly. Change a film sensor if above adjustment is useless.
	Cannot seal the container smoothly :
ľ	 Clean up the surface of upper mould.
2	2. defacement of lower mould or silicon rubber.
[3. Deformation of the containers.
4	4. To increase the temperature or adjust the time for sealing.
ļ	5. The springs of upper mould is broken, so that the pressure is not
13	at average. (it occurs about sealing 100 thousand times.)
6	6. The springs of heater is broken, so that the pressure in not at
a	average.(it occurs about sealing 300 thousand times.)
-	The knife of upper mould is stuck. Please ask the technical staffs to
	clean up the knife. Wrong use of film material: Sealing paper
	containers with PP film.(WRONG)Sealing Styrofoam containers with
E	ES film.(WRONG)
F	Film stops before sealing but PCB has no error code :
,	Clean up the film sensor.
14	2. To adjust the degree of the film sensor stronger.
[3. To change a new film sensor as it is broken.
F	PCB crashed.
1	No power of the machine :
45	Please plug the AC power wire.
15	2. The fuse of PCB is broken.
	3. The short terminal of PCB is loosen.

Maintenance-3

ERROR CODE AND SOLUTION :

16	Wrong position of the containers :		
10	To use lubricant on slide and jump rod everyday.		
	Cannot cut down the film:		
	1. To clean the surface of the upper mould.		
	2. Please ask the technical staffs to clean up the knife of upper		
	mould.		
17	3. Defacement of lower mould or silicon rubber.		
''	4. Adjust the depth of pressing for upper mould.		
	5. The springs of upper mould is broken, so that the pressure is not		
	at average.		
	6. The PET film is too thick to cut down.		
	7. The knife of upper mould is not sharp enough or broken.		
18	The lower mould lodge when sealing was finished:		
	The micro switch is stuck by fructose. Please clean up the switch.		
19	Shortage of voltage :		
	The extended line is too thin.		
	2. Conjoint with too many other electric machines for one extended		
	line.		
	The safety door is crushed by the containers while sealing :		
20	The jack rod collide with the inner edge of lower mould.		
2. Clean up the jump rod/bar and use lubricant on it.			
	3. Change a new spring of jump rod as it is broken.		
	The film is not in the right position or turning around and around :		
21	Please avoid to put the sealing machine under the sunshine directly,		
	or it would cause the misunderstanding of in-put and film sensor.		

《12》 RELATIONSHIP AMONG MACHINE, FILM, AND CONTAINER

	ES Film	PP Film	PE Film	PS Film	Pool
PP containers			×	×	
Styrofoam containers		×	×		×
Paper containers		×		×	
PS containers		×	×		×
PET containers		×	×	×	×

Recognition for containers

Item	Recycling Signs	Caliber	Characteristic
PP containers	25) PP	95、75Ф	Polypropylene, heat-resistant for 20~140°C Tireless, light, bright, renitent, tear-resistant, heat-resistant, burning-nontoxic, non-smell, non-smoke
Styrofoam containers	£65 №	95Ф	Polystyrene, heat-resistant for 75-95°C light, easy -broken, good for keeping warm, heat insulation, cannot use in sour drink (would cause poisons), easy to be burn and cause smoke and smell
Paper containers	55	95 · 94Ф 90 · 78Ф	heat-resistant for 80~100°C light, not heat-resistant, easy broken by liquid, not plastic container, can be recycle and reuse, less damage of environment
PS containers	£65 ⋈	95Ф	Polystyrene, heat-resistant for 75-95°C light, badelasticity, easy-broken, cause smell while sealing, easy to be burn and cause smoke and smell
PET container	PET	95Ф	Polyethylene terephthalate, heat-resistant for 50-60°Clight, limpid, firm, not heat-resistant, sour-resistant and salt-resistant, can be recycle and reuse

By Y-Fang Sealing Machine

Dec 13, 2013

Insurance and Warranty Statement

Insurance with the responsibility for twenty-four million by Taiwan Fire & Marine Insurance Co., Ltd.

Insurance No.: 1687 No.96000075

Content:

Warranty Certifi	cate
	Date of delivery:
Customer :	
Address :	
Tel.:	Fax/Email:
Model No:	M/C No.:
Inspection:	 Annotation Here we grant one year free service since the date of delivery. We will offer service of free maintenance and parts change. Damages caused by natural disaster, re-equip without consulting with the dealer, due to operator's fault or wrong operation to make it malfunctioned or damaged, a malfunction caused by move or shift would be charged for parts and repair placement. It would be charged for parts and repair placement one year after delivery.
Authorized by *The contract would	be avoid without authorization.