

Tabletop Compact Sealing Machine

**ET-99MU 99SU 899S 58S
99SF 99MF**

Technical Manual
Original Instructions

We won



TAIWAN PACKAGING STAR (TP STAR)



GOOD DESIGN PRODUCT



TAIWAN EXCELLENCE 2001



CE MARKING CERTIFIED



MINISTRY OF ECONOMIC AFFAIRS
INNOVATIVE RESEARCH AWARD



US LISTED CUL CERTIFICATE



EPH CERTIFICATE

INSTRUCTIONS :

Chaque appareil muni d'une fiche de raccordement polarisée à 2 fils doit être accompagné des instructions suivantes :

« Pour réduire le risque de décharge électrique, cet appareil est muni d'une fiche polarisée (une lame est plus large que l'autre). Cette fiche doit être insérée dans une prise polarisée que dans un seul sens.

Si vous n'arrivez pas à insérer entièrement la fiche dans la prise, branchez-la dans l'autre sens. Si elle ne correspond toujours pas, contactez un électricien qualifié pour installer la prise appropriée. Ne pas modifier la fiche de quelque façon que ce soit. »

Chaque unité destinée à un usage domestique doit comporter ces directives :

« Utilisation à l'intérieur de la maison seulement » et « Une surveillance étroite est requise lorsque ce produit est utilisé près des enfants. »

Un appareil de chauffage domestique muni d'un cordon d'alimentation d'une longueur inférieure à 1,4 m (4,5 pi) doit être accompagné des instructions suivantes :

Un cordon d'alimentation court (ou un cordon d'alimentation amovible) est fourni pour réduire le risque d'être emmêlé dans un cordon plus long ou de trébucher à cause de celui-ci.

Des rallonges (ou des cordons d'alimentation amovibles plus longs) sont disponibles et peuvent être utilisés avec précaution.

Dans ce cas, la rallonge (ou le cordon d'alimentation amovible plus long) doit (1) être du calibre électrique marqué sur le cordon d'alimentation amovible ou sur l'appareil, (2) si l'appareil est du type mis à la terre, la rallonge doit être un cordon de mise à la terre de type 3 fils, et (3) le cordon plus long doit être disposé de façon à ne pas pendre du comptoir ou de la table où il peut faire trébucher, être coincé ou tiré involontairement (surtout par les enfants).

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 care is exercised in their use.
- c. If an extension cord (or a longer detachable power-supply cord) is used,
(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).

CONTENT

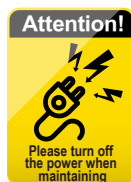
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※ When transporting the machine, carry it by hand from the left and right sides of the machine.

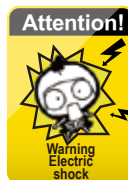
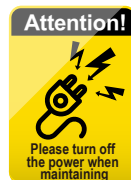
(1) CHARACTERISTIC FOR /ET- 99SU、 99MU、 99SF、 99MF



(1) CHARACTERISTIC FOR/ Model :ET-58



(2) USING OPERATION FLL-IN THE FILM



ET-99SU ET-99MU
ET-99SF ET-99MF



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 button, 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 INDICATOR 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°C)
 - (2) As for sealing well, the material of both container and film should be the same. (temperature range 160~180°C)



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

(2) USING OPERATION FLL-IN THE FILM

Step 1.

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 into the both sides



Step3. Put the object as picture step3 into Rolling System



Step4.

After put the Flim onto system than put on the 「Washer」 first : and 「Spring」 & 「Butterfly Clamps」



「Spring」 「Washer」 「Butterfly Clamps」

Step 5.FILL-IN THE FILM



Step 6.

Put the flim behind the iron Bar.



Step 7.

Turn on the ManualOperate the film 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. tomatically 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

(4) LED Indicator



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

	LOWER MOULD/CUP INPUT
	UPPER MOULD STANDBY
	UPPER MOULD SEALING
	LOWER MOULD/CUP OUTPUT
	FILM REWINDING
	SECURITY DOOR ERROR
	EYE-MARK SENSING
	TEMP HEATING
	MANUAL MODE OPERATION
	AUTO MODE OPERATION
	YF LED LOGO Indicating the power is online.

III.Function of setting:

1. System parameter table:

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

IV.Operating procedures:

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

A.	Press POWER to display YF/LCC,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 160~180℃,ES film 140~160℃)
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 SET key once more, the left display shows P5 , 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 up 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.

(5)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.

(6)ET-99SU 99MU ADJUSTMENT OF UPPER AND LOWER 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)

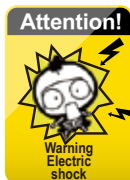
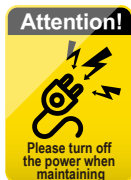


Graph 6-1 TO lubricate axle and fish eye No.8 once for a month.



Graph 6-2 Move the lower micro switch to the right position-match.

The plate to dotted line B.(Error code : E06).



(7)STRIP DOWN AND REBUILD THE UPPER MOULD



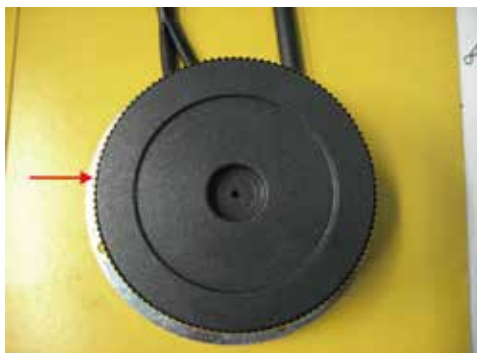
Graph 7-1 Using a clam strip down four B TYPE CLIPS, then take off the plate.



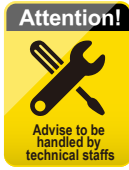
Graph 7-2 、 3 Using a wrench and box end wrench to separate the knife and heater. Then you can clean the mould and parts.



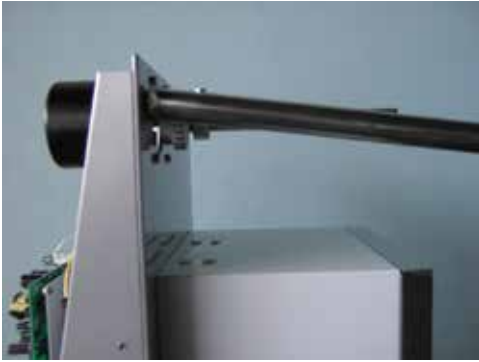
Graph 8-1 After cleaning, heater's position should be higher than the knife for 1mm.



Graph 8-1 The gap around the heater and knife should be equal.



(8)ADJUSTMENT 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.

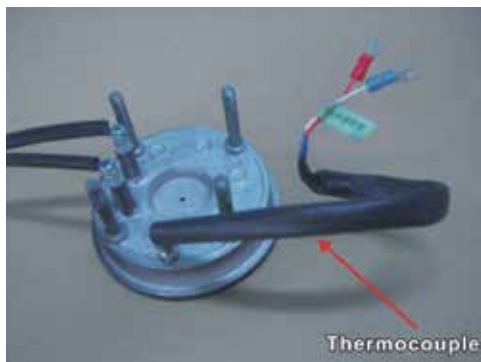


3. To measure the angle between the bar and machine with an angle square. It should be in 90 degree.

(9)TROUBLE SHOOTING

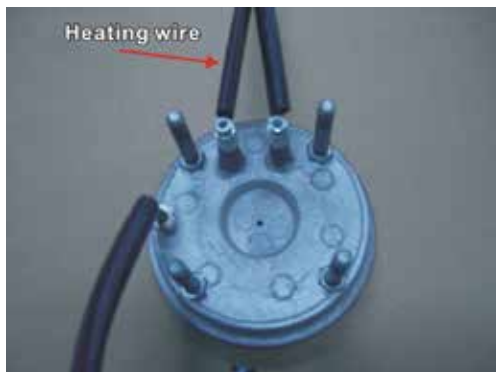


You cannot turn on the machine with wrong voltage, the PCB will display AC for wrong voltage.



Graph 9-1

For error code E00:Check the temperature wire of upper mould.



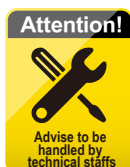
Graph 9-2

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.



(9)TROUBLE SHOOTING

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.

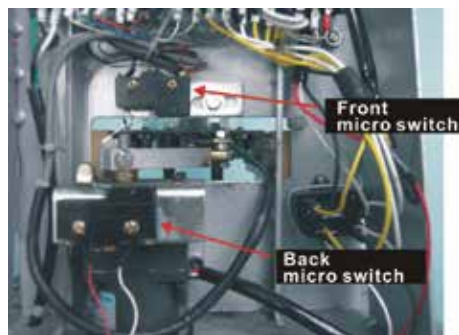


- ※ While the switch is turning off, the pin of the electric meter should be in right side as normal situation.



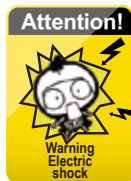
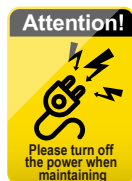
Graph 10-2

For error code E02:Check the micro switch of upper micro switch with a electric meter or upper motor.

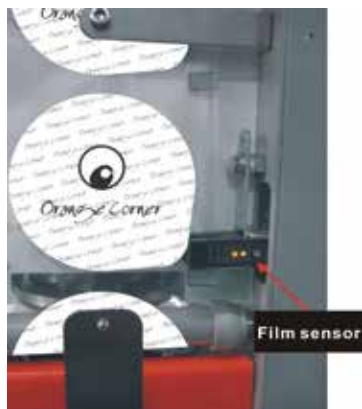


Graph 11-1

For error code E03 、E05:Check the micro switch with a electric meter at back or lower motor.



(9)TROUBLE SHOOTING



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.



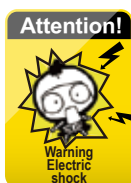
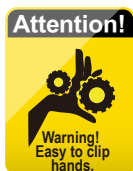
Graph 12-2

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

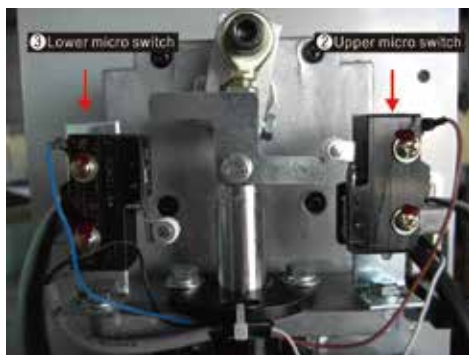


Graph 13-1

For error code E07: Check if the micro switch is broke.

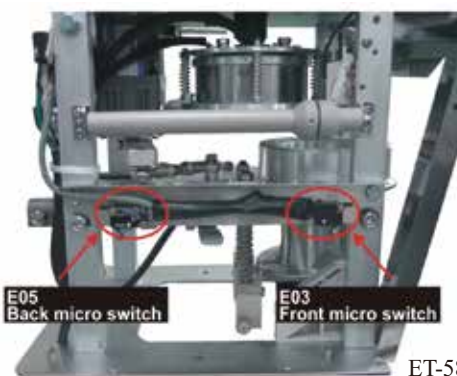
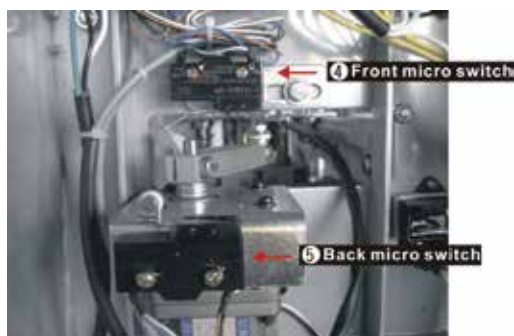


(9)TROUBLE SHOOTING



Graph E08

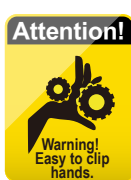
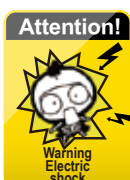
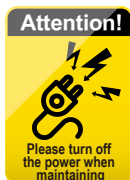
Micro switches are abnormal.(Check with electric meter.)



ET-58S

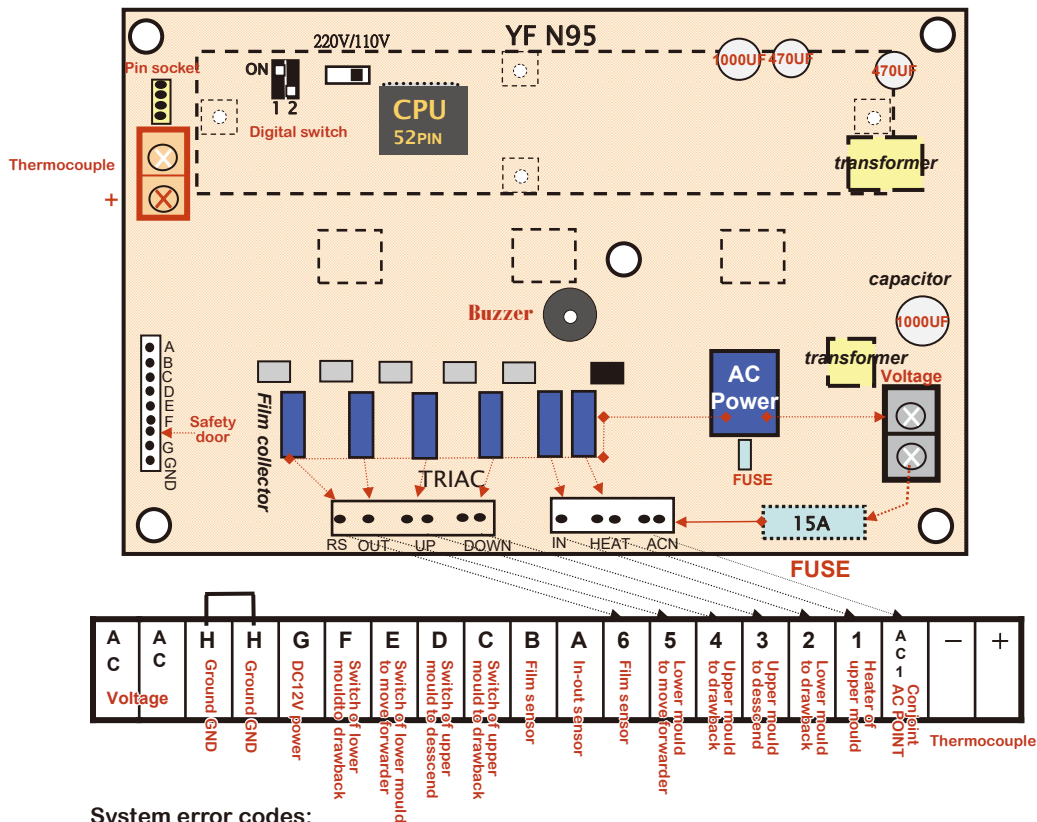
Graph 14

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



(10)CIRCUIT BOARD WIRING DIAGRAM

(forty-four feet)for ET-95SN/999SN sealing machine



System error codes:

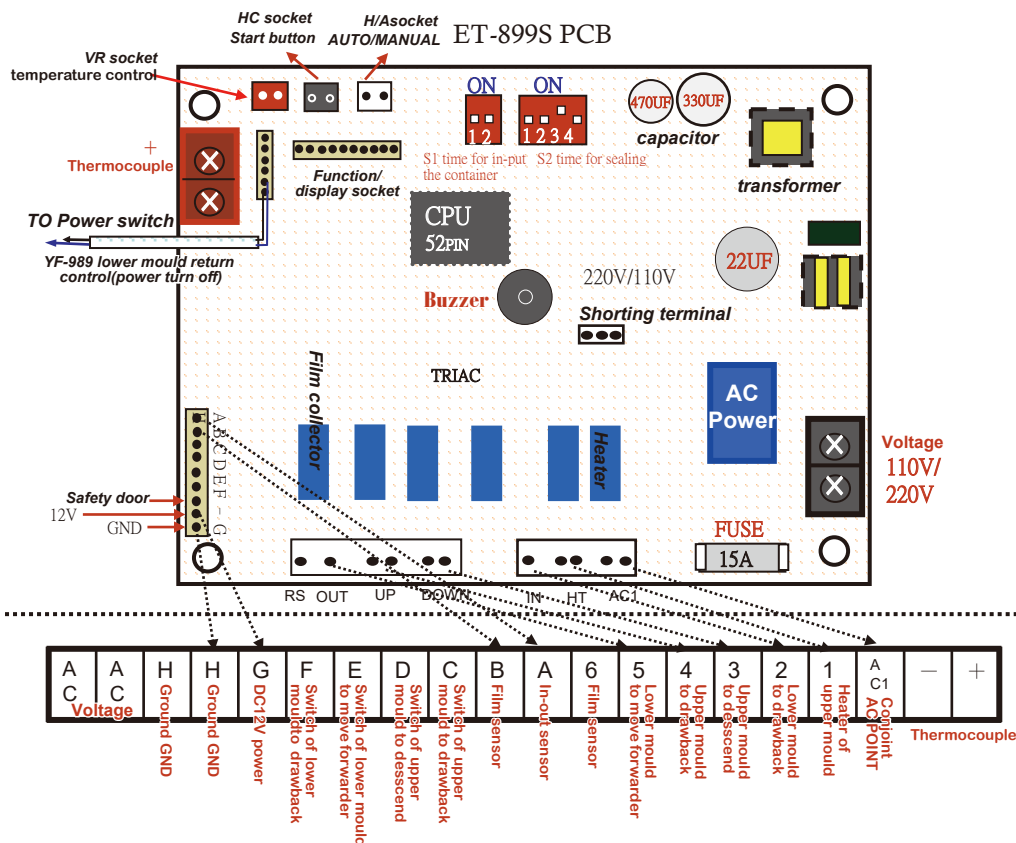
E-AC	Wrong voltage	E-07	Safety door is crashed
E-00	Temperature control system error	E-12	Upraise error of sealing motor.
E-01	Heater collector or heating wire error	E-13	Stretch error of cup motor.
E-02	Micro switch of upper mould error	E-15	Enter error of cup motor.
E-03	Micro switch of lower mould error	E-16	The parameter is out of range
E-04	Sealing film is not in the right position or the eye-marks sensor error.	E-19	P.C. board error
E-05	Micro switch of lower mould error	E-20	Short of DC12V(short of in-out sensor)
E-06	Micro switch of upper mould error		

Digital switch(1.2):

To roll the film before sealing, when it is "ON".
To roll the film after sealing, when it is "OFF".

(10)CIRCUIT BOARD WIRING DIAGRAM

(forty-four feet)for ET-899S sealing machine



*Press S1 DIP switch to choose film rewinding function

*Press S2 DIP switch to control sealing time

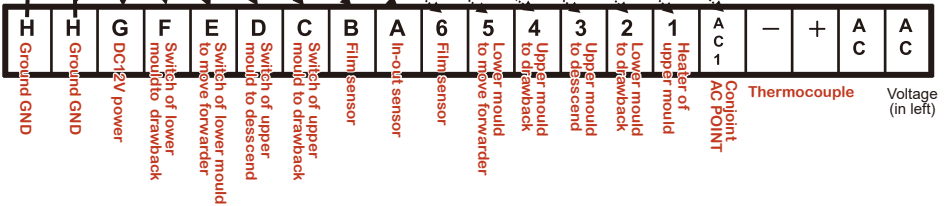
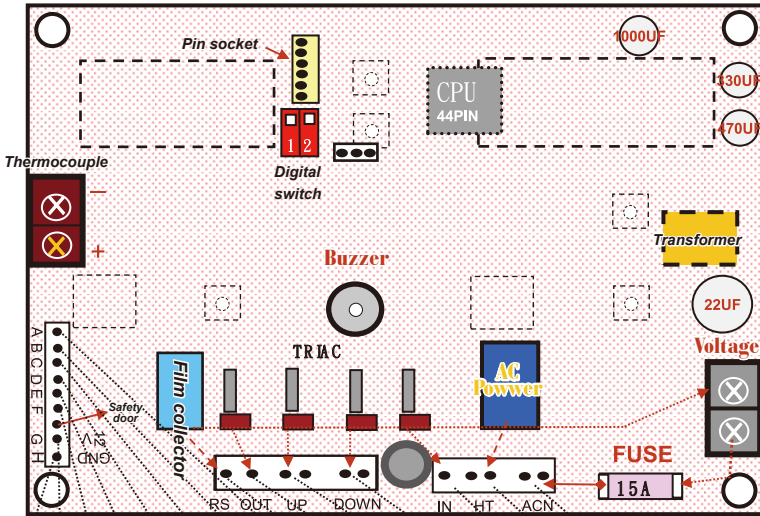
*From 2018.4.18 YF-98S/ET-8898 /89 M/588S/588 used this same PCB

*This version : Set P4 control cup setting time & film rolling jog function thru PCB in front panel.

Item	DIP Switch	Parameter Setting
S1 Choice for film rewinding	D1(NO Function)	NO Function
	D2:: ON	OFF: Rolling film first ON: Rollind film later
S2 Control for sealing time	D1:: ON	0.3 sec
	D2:: ON	Test for film rewinding 0.5 sec, Be OFF as usual
	D3:: ON	0.6 sec
	D4:: ON	0.9 sec
	D3+D4:: ON	1.5 sec

(10)CIRCUIT BOARD WIRING DIAGRAM

(forty-four feet)for ET-58S sealing machine



System error codes:

E-AC	Wrong voltage	E-07	Safety door is crashed
E-00	Temperature control system error	E-12	Upraise error of sealing motor.
E-01	Heater collector or heating wire error	E-13	Stretch error of cup motor.
E-02	Micro switch of upper mould error	E-15	Enter error of cup motor.
E-03	Micro switch of lower mould error	E-16	The parameter is out of range
E-04	Sealing film is not in the right position or the eye-marks sensor error.	E-19	P.C. board error
E-05	Micro switch of lower mould error	E-20	Short of DC12V(short of in-out sensor)
E-06	Micro switch of upper mould error		

Digital switch(1,2):
To roll the film before sealing, when it is "ON".
To roll the film after sealing, when it is "OFF".

Specifiation of motor 、gear box & capacitance

Model	Model name	Standards	Gearbox	110V	220V
ET-899S ET-999SN ET-95SN Sealing machine	Motor for upper mould	4RK25GN-A	4GN-75	12uf	3uf
	Motor for lower mould	2RK10GN-A	2GN-90	6uf	1.5uf
	Motor for film collector	15rpm/1min			
ET-58S Sealing machine	Motor for upper mould	4RK25GN-A	4GN-60	12-16uf	3uf
	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			
ET-19S (old) sealing Machine	Motor for upper mould	4RK25GN-A	4GN-75	12uf	3uf
	Motor for lower mould (teeth shape)	2RK6GN-A	2GN-30	4uf	1uf
	Motor for film collector	2RK4GN-A	2GN-120	4uf	1uf

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

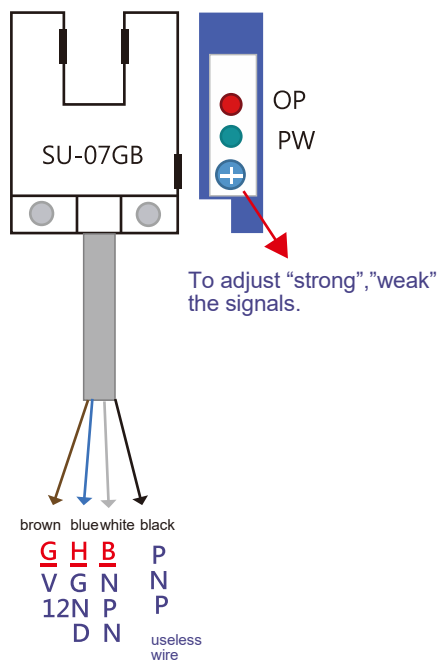
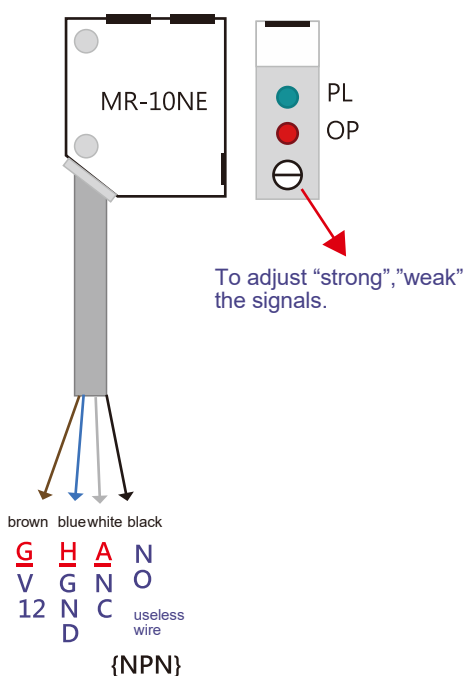
※Technical staffs must know the standards of the above details.

Tray input sensor · film eye-mary sensor

ET-59S ET-58S ET-899S ET-999SN ET-95SN ET-95MN ET-99SU ET-99SF ET-99MF	In-out sensor	MR-10NE	Bad at detecting the black containers.
	Film-sensor	SU-07GB	Good at detecting the black film. but bad at detecting the red film.
	● Film-sensor “G” to display green light “R”to display light.		

※ To display PL (green) lights usual, and to display OP (ren) light when detecting the containers.

※ To display both PW (green) and OP (ren) light as usual, and turn off OP (ren) light when detecting the eye-marks of containers.



(11) ERROR CODE AND SOLUTION

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 or proximity sensor of upper mould error.
8	E07	Safety door is touched or collided.
9	E12	Upraise error of sealing motor. 1.The sealing motor or motor gearbox broke. 2.Screws of the upper aluminum base are loose, or wire malfunction.
10	E13	Stretch error of cup motor. The Cup motor or motor gearbox broke Screws of the lower fixed base are loose, or wire malfunction.
11	E15	Enter error of cup motor. The Cup motor or motor gearbox broke Screws of the lower fixed base are loose, or wire malfunction.
12	E16	Push down error of sealing motor. 1.The sealing motor or motor gearbox broke. 2.Screws of the upper aluminum base are loose, or wire malfunction.
13	E19	PCB error : he main control system of PCB error PCB crashed.
14	E20	Short of DC12V.
15	Err	oltage error.

(11) ERROR CODE AND SOLUTION

Maintenance—2 ERROR CODE AND SOLUTION :

16	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.
17	Cannot seal the container smoothly : 1. Clean up the surface of upper mould. 2. defacement of lower mould or silicon rubber. 3. Deformation of the containers. 4. To increase the temperature or adjust the time for sealing. 5. The springs of upper mould is broken, so that the pressure is not at average. (it occurs about sealing 100 thousand times.) 6. The springs of heater is broken, so that the pressure in not at 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 ES film.(WRONG)
18	Film stops before sealing but PCB has no error code : 1. Clean up the film sensor. 2. To adjust the degree of the film sensor stronger. 3. To change a new film sensor as it is broken. PCB crashed.
19	No power of the machine : 1. Please plug the AC power wire. 2. The fuse of PCB is broken. 3. The short terminal of PCB is loosen.

(11) ERROR CODE AND SOLUTION

Maintenance—3 ERROR CODE AND SOLUTION :

20	Wrong position of the containers : To use lubricant on slide and jump rod everyday.
21	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. 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.
22	The lower mould lodge when sealing was finished : The micro switch is stuck by fructose. Please clean up the switch.
23	Shortage of voltage : 1. The extended line is too thin. 2. Conjoint with too many other electric machines for one extended line.
24	The safety door is crushed by the containers while sealing : 1. 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.
25	The film is not in the right position or turning around and around : 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	○ 145-165°C	○ 160-180°C	×	×	○ 160-170°C
Styrofoam containers	○ 125-150°C	×	×	△ 135-150°C	×
Paper containers	○ 130-150°C	×	○ 140-150°C	×	○ 140-160°C
PS containers	△ 150-165°C	×	×	○ 150-165°C	×
PET containers	△ 120-140°C	×	×	×	×

Recognition for containers

Item	Recycling Signs	Caliber	Characteristic
PP containers		95、75Φ	Polypropylene, heat-resistant for 20-140°C Tireless, light, bright, renitent, tear-resistant, heat-resistant, burning-nontoxic, non-smell, non-smoke
Styrofoam containers		95Φ	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		95、94Φ 90、78Φ	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		95Φ	Polystyrene, heat-resistant for 75-95°C light, had elasticity, easy-broken, cause smell while sealing, easy to be burn and cause smoke and smell
PET container		95Φ	Polyethylene terephthalate, heat-resistant for 50-60°C light, limp, firm, not heat-resistant, sour-resistant and salt-resistant, can be recycle and reuse

By Y-Fang Sealing Machine

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 Certificate

Date of delivery : _____

Customer :			
Address :			
Tel. :		Fax/Email :	
Model No. :		M/C No. :	
Inspection :	Annotation 1. Here we grant one year free service since the date of delivery. We will offer service of free maintenance and parts change. 2. 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. 3. It would be charged for parts and repair placement one year after delivery.		

Authorized by

※The contract would be avoid without authorization.