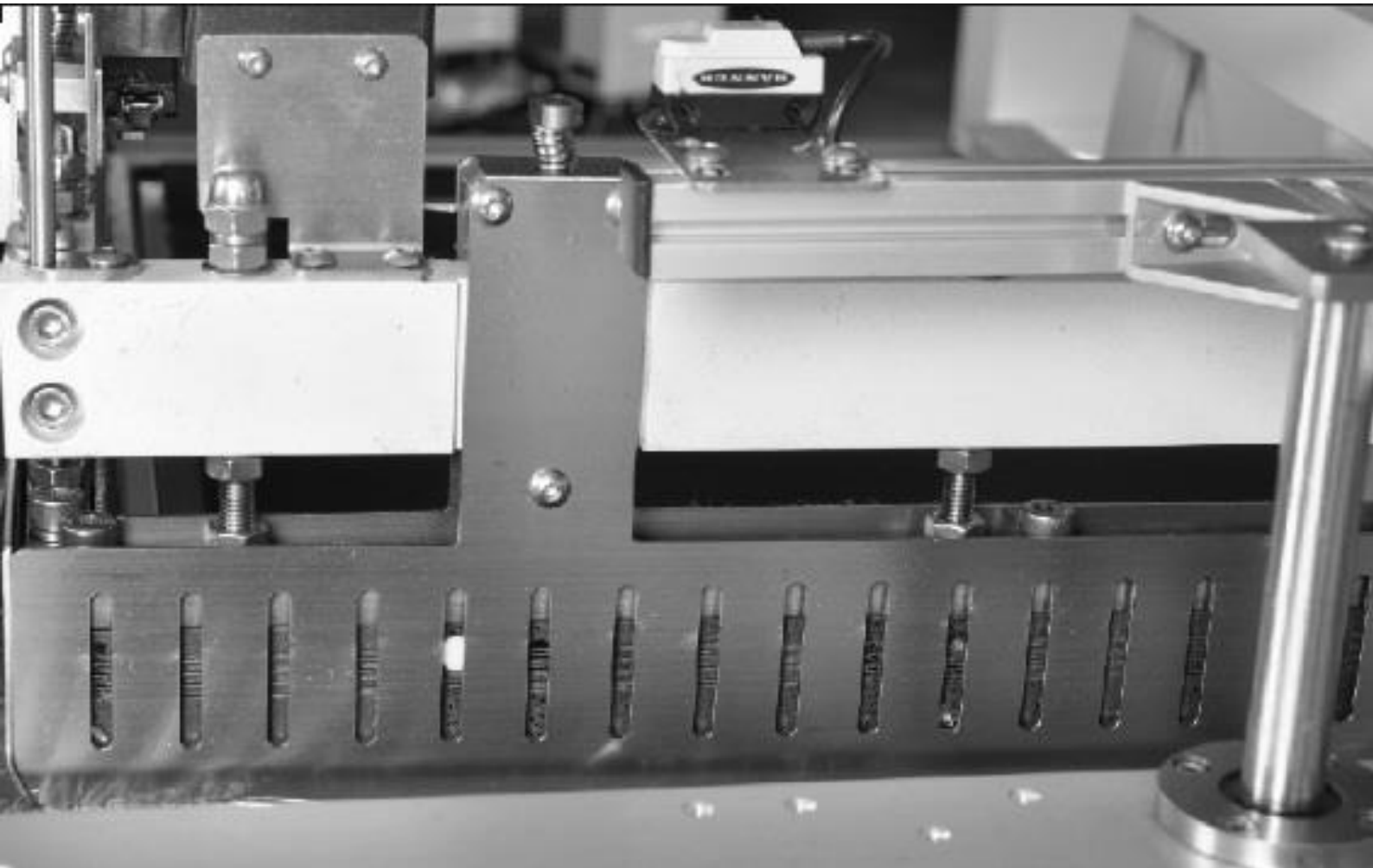




AN ISO 9001:2015 CERTIFIED COMPANY

USER MANUAL

Automatic L - Sealer

QS5545LA



CONTENT

Sl no	Description	Page no
1.	Foreword	3
2.	How to use this manual	4
3.	Safety precautions	4
4.	Case and machine dimensions	5
5.	Packing slip	5
6.	Technical specifications	6
7.	Unpacking	7
8.	List of parts	8
9.	Control panel	14
10.	Setting up the machine for operation	15
11.	Film roll mounting	16
12.	Operation	17
13.	Collection of waste film	18
14.	Microcontroller settings	19
15.	Maintenance	21
16.	Electrical schematic	22
17.	Troubleshooting	23
18.	Service log	24

1. FOREWORD

Thank you for choosing Sevana. You now belong to the Sevana family of over one million satisfied customers across the world. We are confident that you will have many years of complete satisfaction from this Sevana product.

We want you to derive maximum value from Sevana's reliable service and support infrastructure in India. We maintain Sevana's service mission of working continuously to provide customers with highest level of service, thereby ensuring mutually successful long term business association.

You can contact us through

Email	:	support@sevana.com	
Phone	:	+91-484-2680780	Monday to Saturday
Mobile	:	+91-9388180781	8.30 am – 5.00pm IST
Fax	:	+91-484-2680680	

We value your partnership

Yours sincerely

For Sevana Electrical Appliances Pvt. Ltd.

Manager in charge, Customer support

While contacting the support centre kindly provide the following information for a speedier support and service.

- i. Model
- ii. Serial no.
- iii. The nature of problem

2. HOW TO USE THIS MANUAL

- ❖ Please read this manual carefully before installing and commissioning the machine.
- ❖ Please keep a copy of this manual for reference near the machine.

The information in this document is believed to be accurate and reliable. However, Sevana Electrical Appliances Pvt Ltd, cannot accept any financial or other responsibilities that may result from the use of this information. No warranties are granted or extended by this document.

Sevana Electrical Appliances reserves the right to change any or all information contained herein without prior written notice. Revisions may be issued at the time of such changes and/or deletions.

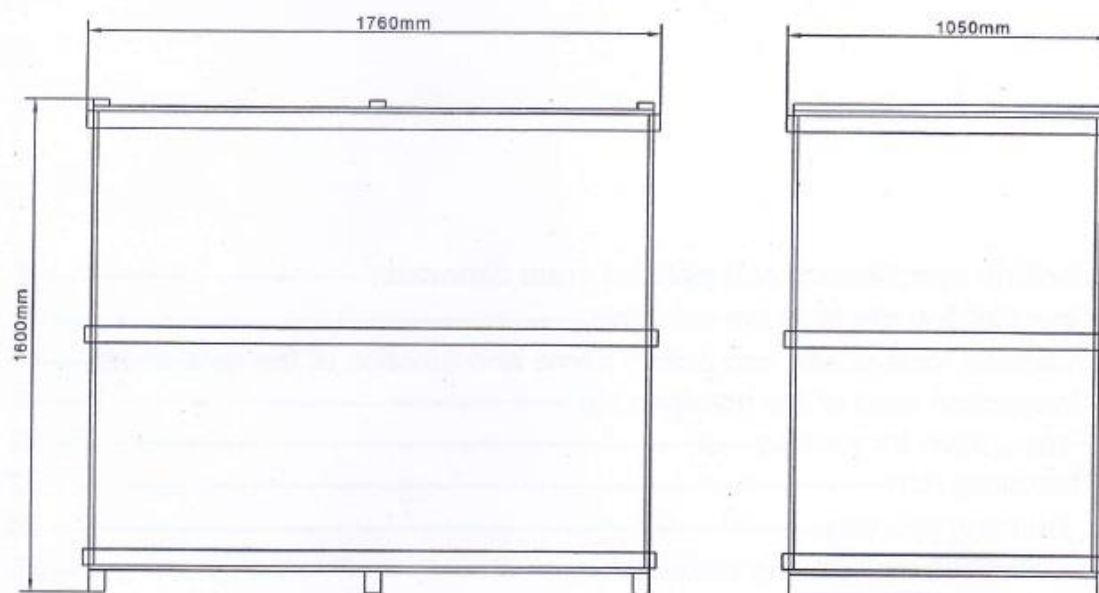
3. SAFETY PRECAUTIONS

Machines of Sevana have been designed to provide extremely safe and dependable operation when properly used. Safety precautions must be observed during normal operation and when servicing the machines of Sevana.

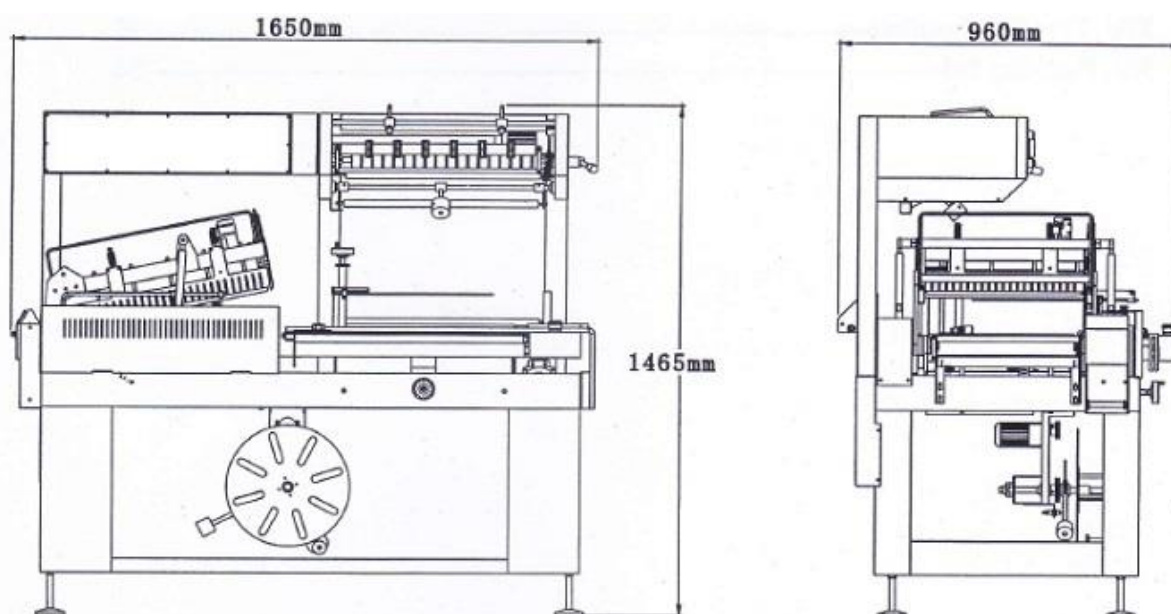
- a. The machine has to be grounded properly before using.
- b. Do not place your hand and finger on the sealing/cutting blade while the machine is in operation.
- c. Do not put any metal/hard parts on the sealing/cutting blade.
- d. Do not allow any liquid to go in to the machine.
- e. Isolate electric and pneumatic power at the end of every day's operation.
- f. Clean the machine with compressed air at the end of every day's operation
- g. Kindly do not leave any tools or objects on the machine.
- h. While doing any periodic or preventive maintenance on the machine; ensure that the electric and pneumatic power is isolated to prevent any injury to the person.

4. CASE AND MACHINE DIMENSIONS

a. Dimensions of packing case



b. Dimensions of machine



5. PACKING SLIP

Name	Quantity
User manual	1
Tool set	1
Machine	1

6. TECHNICAL SPECIFICATIONS

Machine's dimensions (L x W x H)		1650 mm x 960 mm x 1465 mm
Conveyor belt top height		800 mm + 70 mm
Maximum seal dimensions(WXL)		450 mm × 500 mm
Conveyor speed	In feed	21.3 mtr/min
	Out feed	20.0 mtr/min
Film feed speed		17.6 mtr/min
Film towing out speed		19.4 mtr/min
Sealing temperature		50-250°C The sealing temperature may be set depending on the ambient temperature, thickness and type of film.
Power supply		Single phase, 240 Vac , 50Hz, 2.5KW
		(1) In-feed conveyor motor : 90W
		(2) Out-feed conveyor motor : 90W
		(3) Film providing motor : 45W (with brake)
		(4) Film clipping motor : 45W (with brake)
		(5) Film rolling motor : 45W
		(6) Heater Horizontal sealing : 900W Longitudinal sealing : 1200W
Air supply input		6-8 bar
Sealing time		Normally 1sec; it can be adjusted according to grade and thickness of film
Suitable film		POF

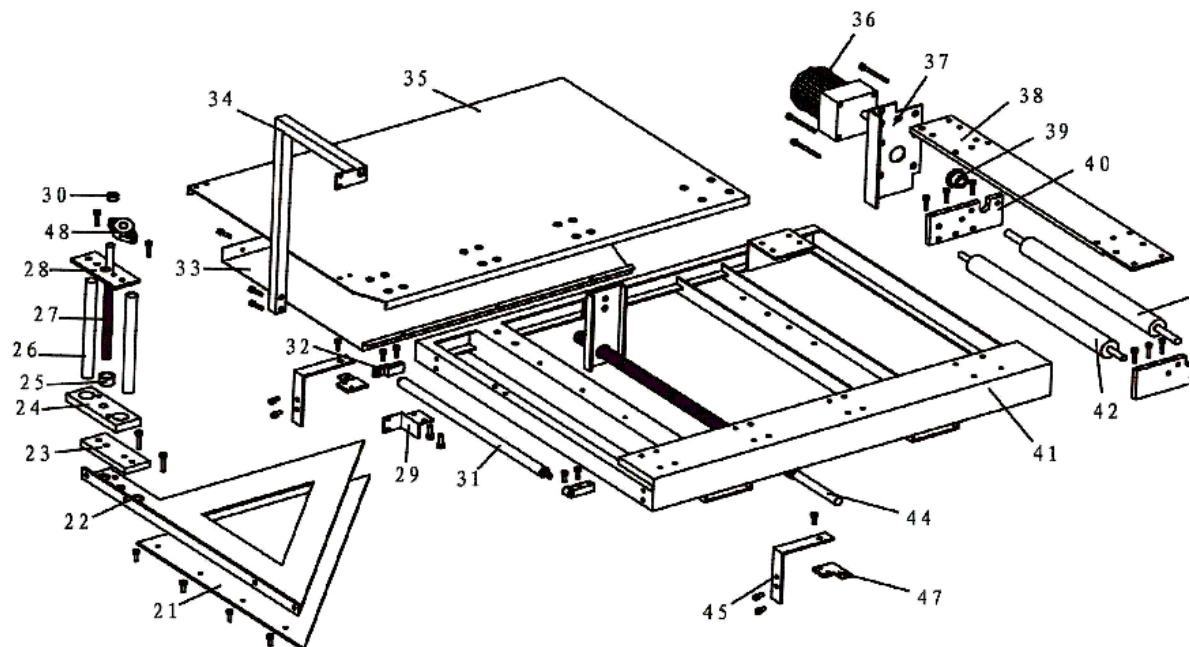
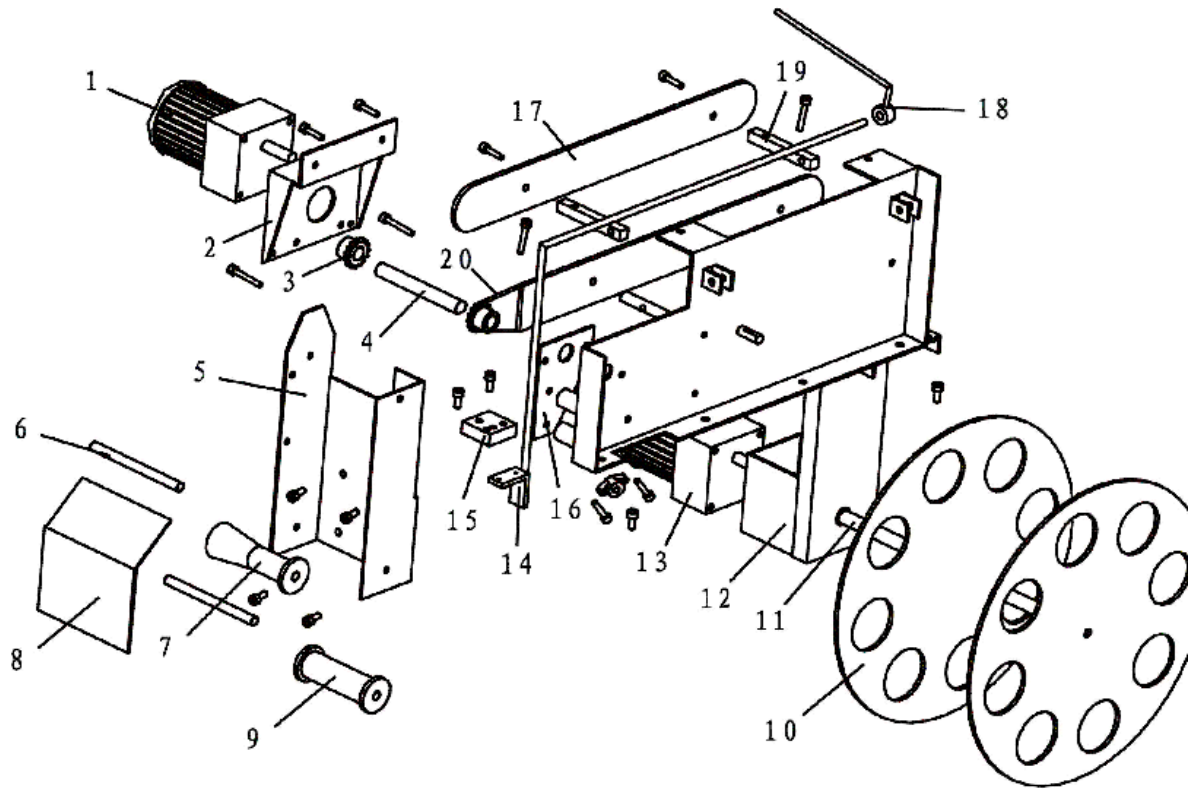
7. UNPACKING

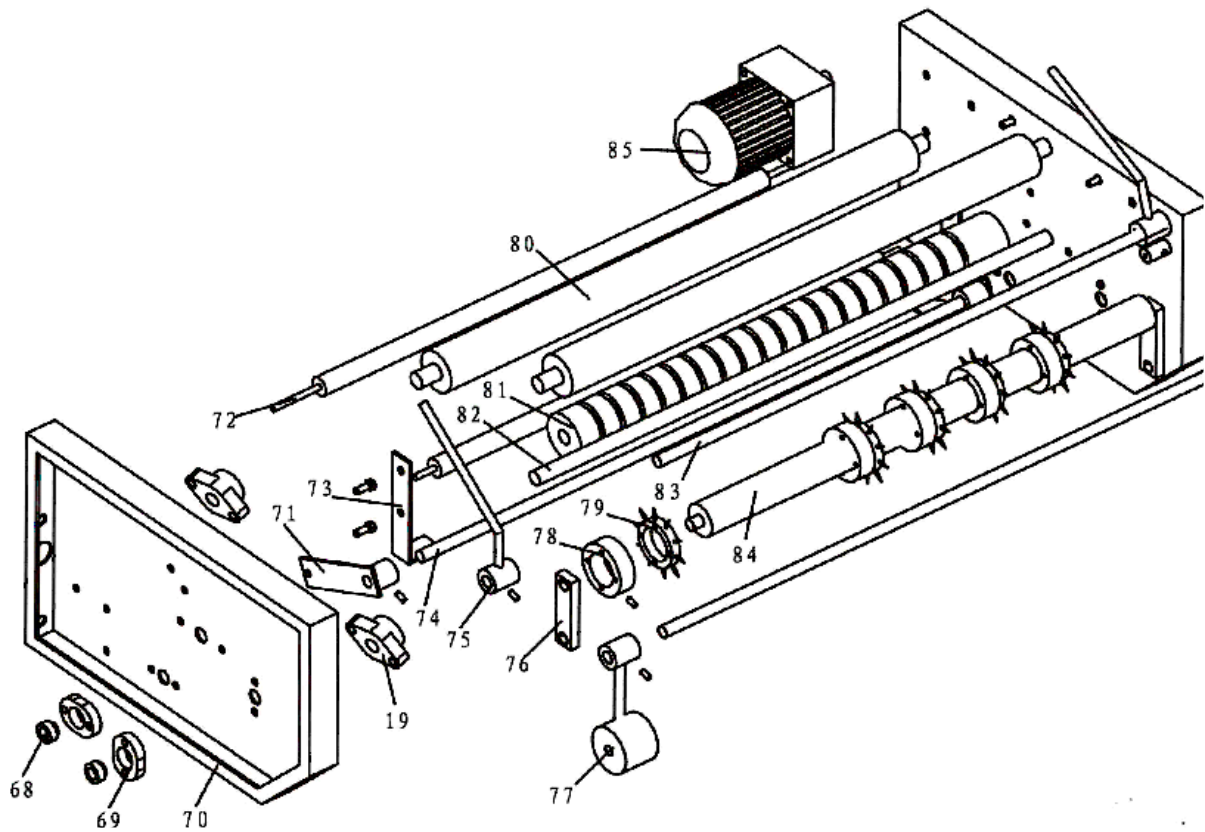
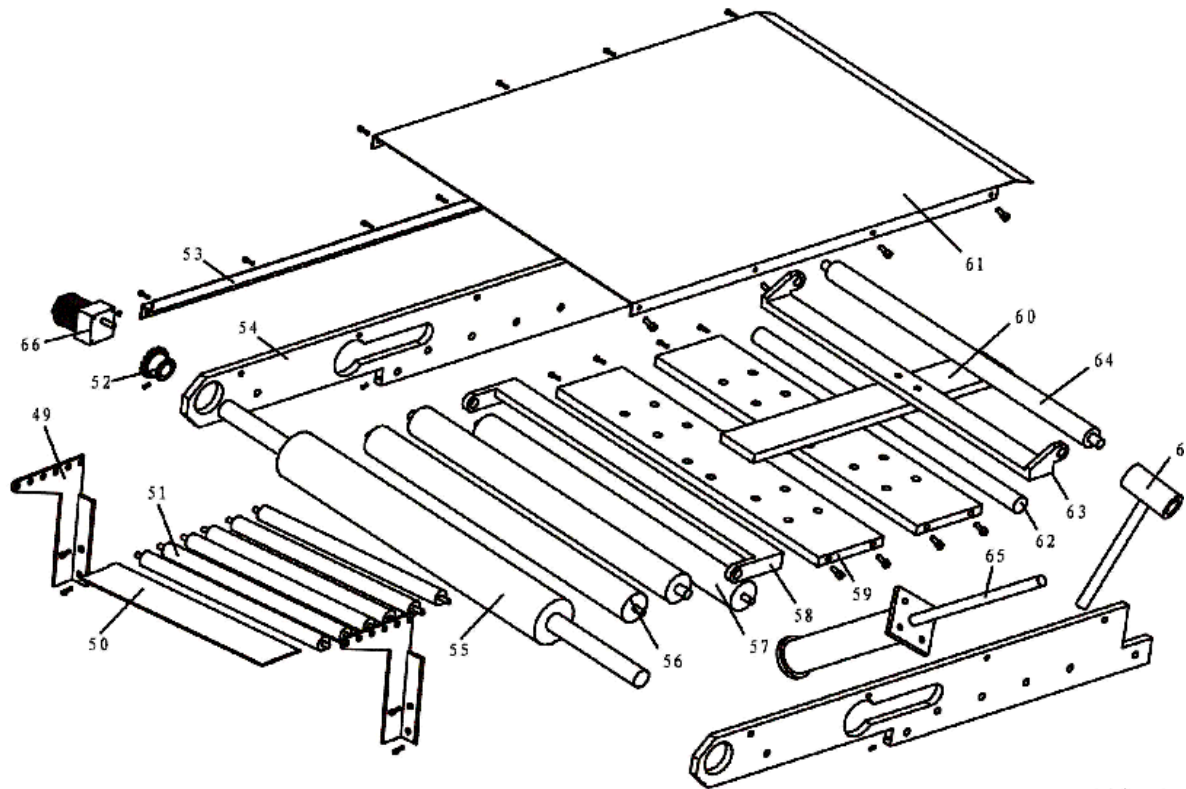
Note: Please verify the items with the packing slip.

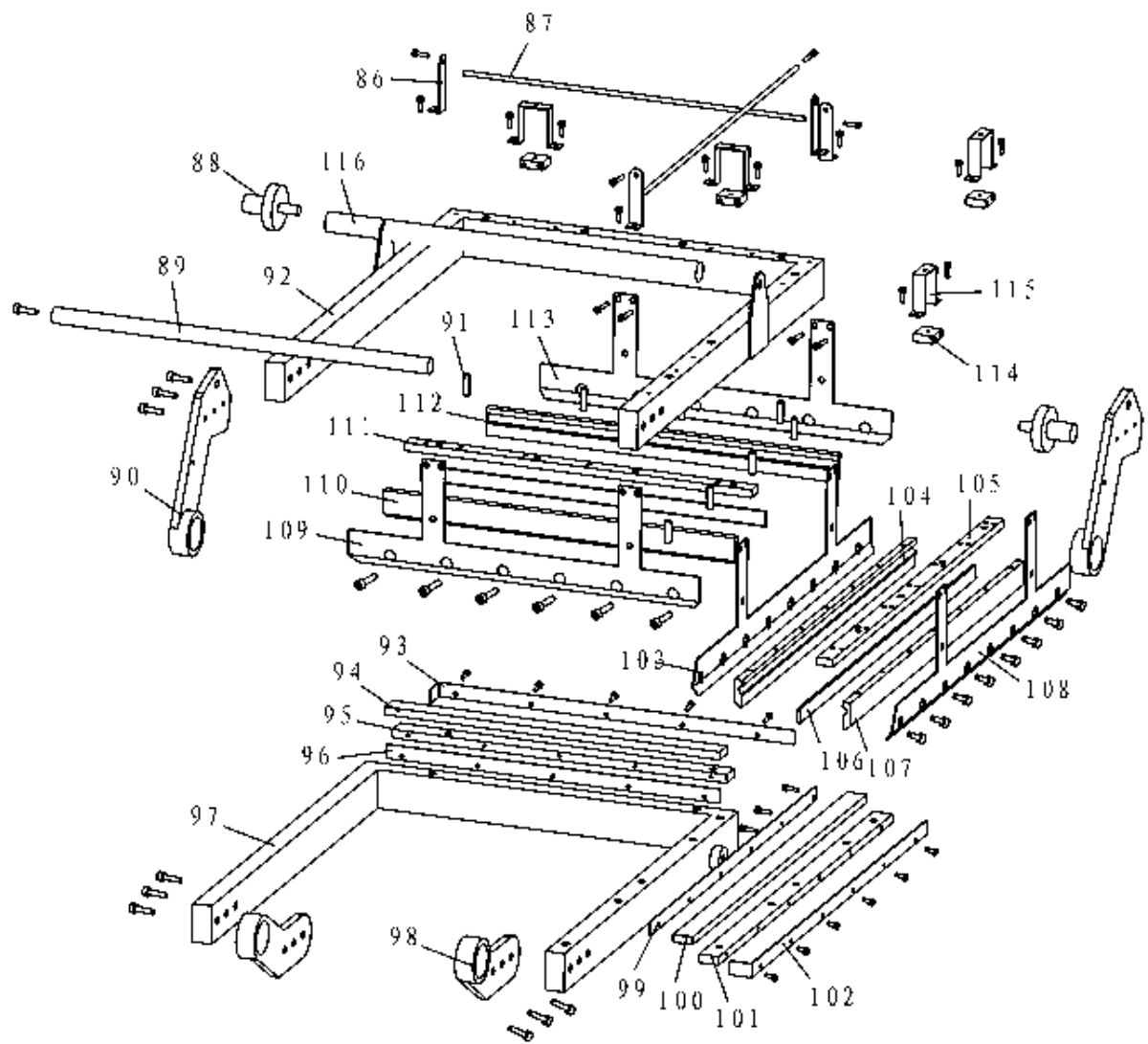
- ❖ Inspect for any transit damage. If there are any, notify your dealer/transporter/insurance company or us immediately.
- ❖ The machine is shipped well packed in a wooden box with four bolts holding the machine to the bottom panel.
- ❖ Place the wooden box with the “TOP” Marked to the top.
- ❖ Remove all the side panels and top panel of the box.
- ❖ Lift the machine with the bottom panel using a pallet jack.
- ❖ Remove the packing bolts.
- ❖ Remove all packing materials.
- ❖ Lower the pallet jack and slide the machine to the floor.

Tools required to unpack
• Pry bar/Crowbar • Claw hammer

8. LIST OF PARTS







Sl No	Name of item
1	In feed Conveyor motor
2	Motor mounting plate
3	Sprocket wheel
4	Sprocket wheel shaft
5	Film reclaim shaft mounting bracket
6	Film reclaim spool shaft
7	'III' film reclaiming roller
8	Chain box cover
9	I' film reclaiming roller
10	Film reclaiming turn plate
11	Roller's pole
12	Motor installing board
13	Waste film recovery motor.
14	Film isolation shaft
15	Shaft's base of film isolation
16	Sprocket wheel mounting bracket
17	Chain guide
18	Link staff of film isolation shaft
19	Chain guide support
20	Chain
21	Upper triangular film guide
22	Lower triangular film guide
23	Mounting block of lifting rack
24	Lifting rack mounting posts
25	Sliding ringer
26	Fixing staff of lifting rack
27	Lifting screw
28	Hand wheel installing board
29	'III' Supporting rack of induce switch
30	Spacer
31	Driven shaft
32	Supporting rack of driven shaft

22	Under clapboard of conveyor belt
34	'II' Supporting rack of induce switch
35	Upper clapboard of conveyor belt
36	Out feed Conveyor motor
37	Motor mounting plate
38	Drive roller mounting bracket holder
39	Sprocket wheel
40	Driven shaft installing board on right
41	Out feed conveyor frame
42	Idler roller
43	Conveyor drive roller
44	Out conveyor position Adjusting screw
45	'I' supporting rack of induce switch
46	Drive shaft installing board on left
47	Installing board of induce switch
48	Axletree with base
49	Supporting board of conveying rack
50	Link board of conveying rack
51	Conveying rack's roller.
52	Chain wheel
53	Side clapboard
54	Supporting rack of conveying line
55	Drive roller
56	Roller I
57	Roller II
58	Front fixing board for sliding slot
59	Fixing board of cylinder
60	Sliding slot
61	Clapboard
62	Fixing staff
63	Hinder fixing board of sliding slot
64	Roller 'III'
65	Cylinder
66	Motor

67	Screw
68	Position limited block of guide staff V
69	Fix block of guide staff V
70	Supporting rack
71	Turning board
72	Guide staff I
73	Position limited board
74	Guide staff II
75	Film roller fix staff
76	Linked board
77	Sliding staff
78	Perforator wheel
79	Perforator
80	Roller I
81	Perforator base
82	Guide shaft III
83	Guide shaft V
84	Perforator's pole I
85	Motor
86	Line rack
87	Line rack pole
88	Linked staff of supporting shaft II.
89	Supporting shaft I
90	Linked board of upper sealing
91	Screw
92	Upper sealing frame
93	Side board IV of slot which for supported rubber.
94	Supported rubber II
95	Supported rubber slot II
96	Side board III of slot which for supported rubber
97	Upper sealing frame
98	Linked board of selectable sealing
99	Side board II of slot which for supported rubber.
100	Supported rubber I

101	Supported rubber slot I
102	Side board I of slot which for supported rubber
103	Cover board II for front blade slot
104	Front blade slot II
105	Fix board I of blade slot
106	Sealing blade
107	Front blade slot I
108	Cover board I for front blade slot
109	Cover board for side blade slot II
110	Side blade slot II
111	Fix board II of blade slot
112	Side slot I
113	Cover board I for side blade slot
114	String pad
115	String press board
116	Supporting shaft II

9. CONTROL PANEL

1	Power on/off switch (MCB)
2	Temperature controller lengthwise heater
3	Temperature controller widthwise heater
4	LCD display
5	Control buttons

10. SETTING UP THE MACHINE FOR OPERATION

1. Give single phase/240Vac/50Hz power to the machine.
2. Sealing jaw is pneumatically operated. Use 8mm PU tube to connect compressed air supply of 6Kg/cm² to FRL(Filter Regulator Lubricator) provided with the machine & regulate the air pressure.
3. Release the Emergency stop button.
4. Turn on the MCB. The power on LED will be light up.
5. Refer Micro controller settings.
6. Set the sealing time and temperature.
7. Recommended product advance value is half the height of the product.
8. Load shrink film on film support rollers and guide the film as per diagram shown.
9. Adjust the height between film guiding triangular plates and guide on the conveyor as per the product.
10. Select manual mode, then press down/feed button to feed the film and lead the film to waste film spool as per diagram shown.
11. Set parameters (sealing time, product advance) as per the film & the product.
12. After reaching required temperature, press up/seal button to make sealing and pack few products by manual mode. If required, change the settings.
13. After the final adjustments and trials, put the machine on auto mode and continue the operation.

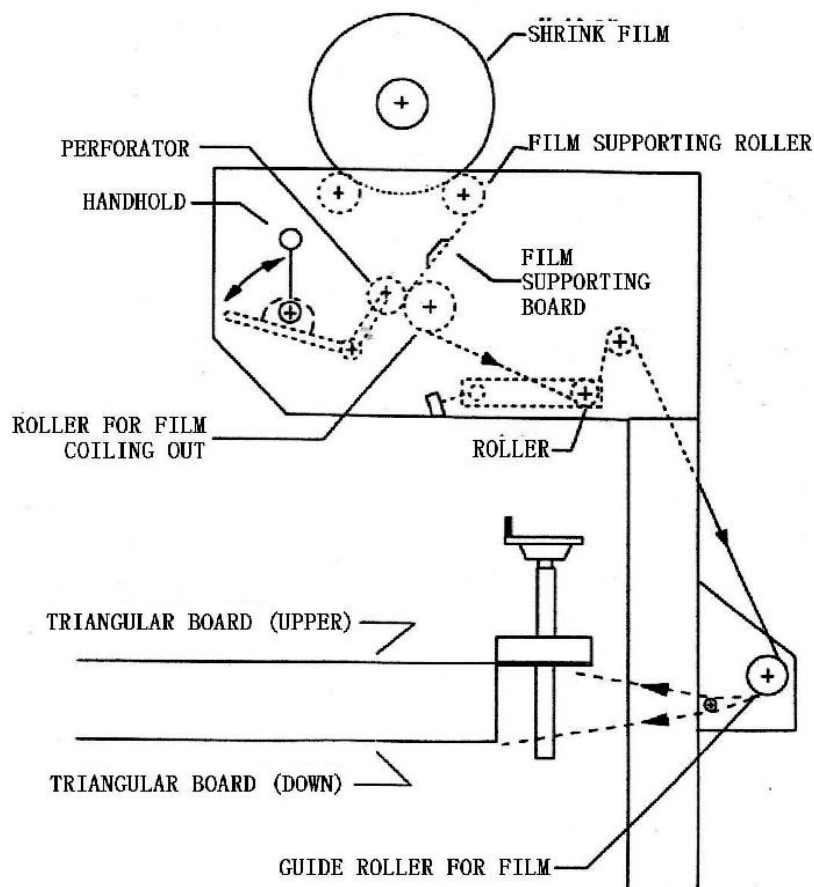
11. FILM ROLL MOUNTING



Precaution

Switch off the machine during the mounting of the film and setting it up to avoid any injuries.

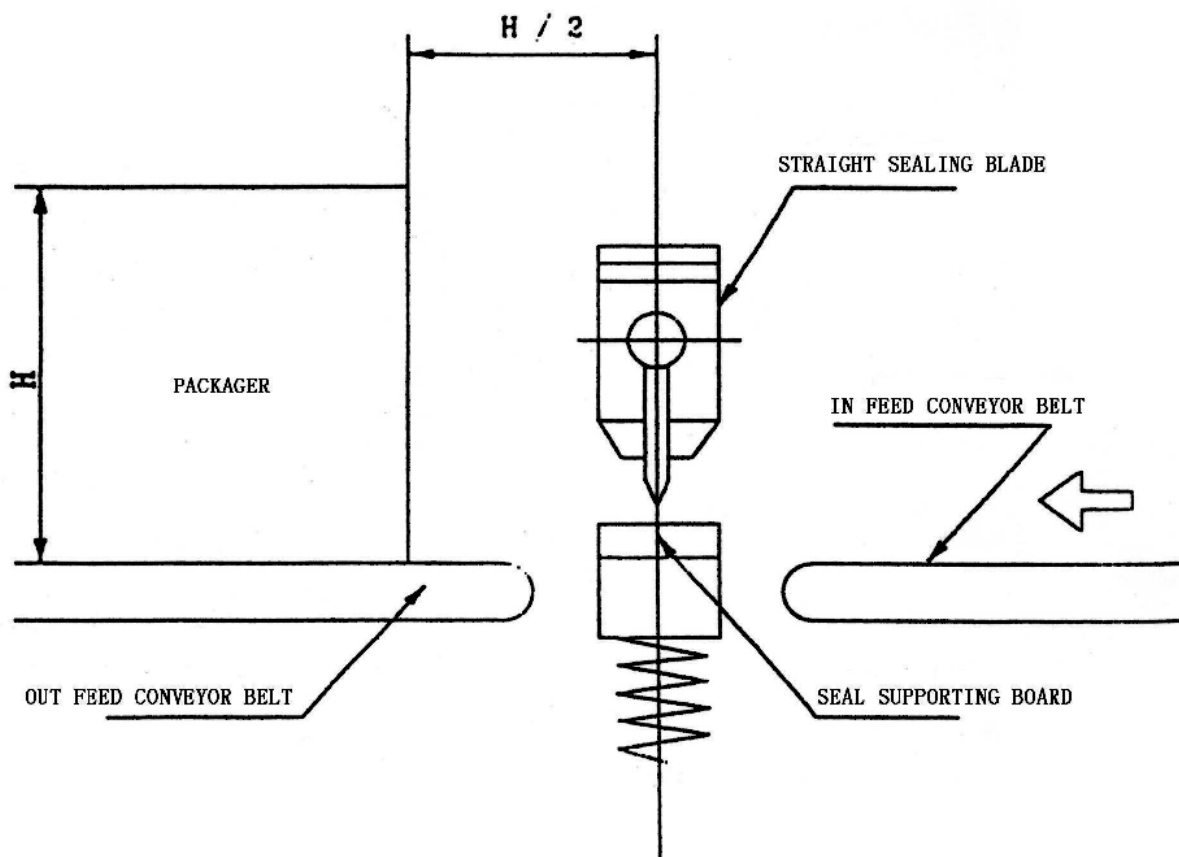
- i. Put film roller on the two supporting rollers.
- ii. Release the film perforator by turning 90 degrees.
- iii. Pull the film and pass it as per the drawing given below till it passes through the 6th Roller from the film roll.
- iv. Engage the film perforator.
- v. Pull additional 30cm of film and pass it through the upper and lower triangular film turning plates, spreading on to that and making a 45 degree turn such that the inside of the film becomes out side and pull it further and clamp as shown in the diagram.



12. OPERATION

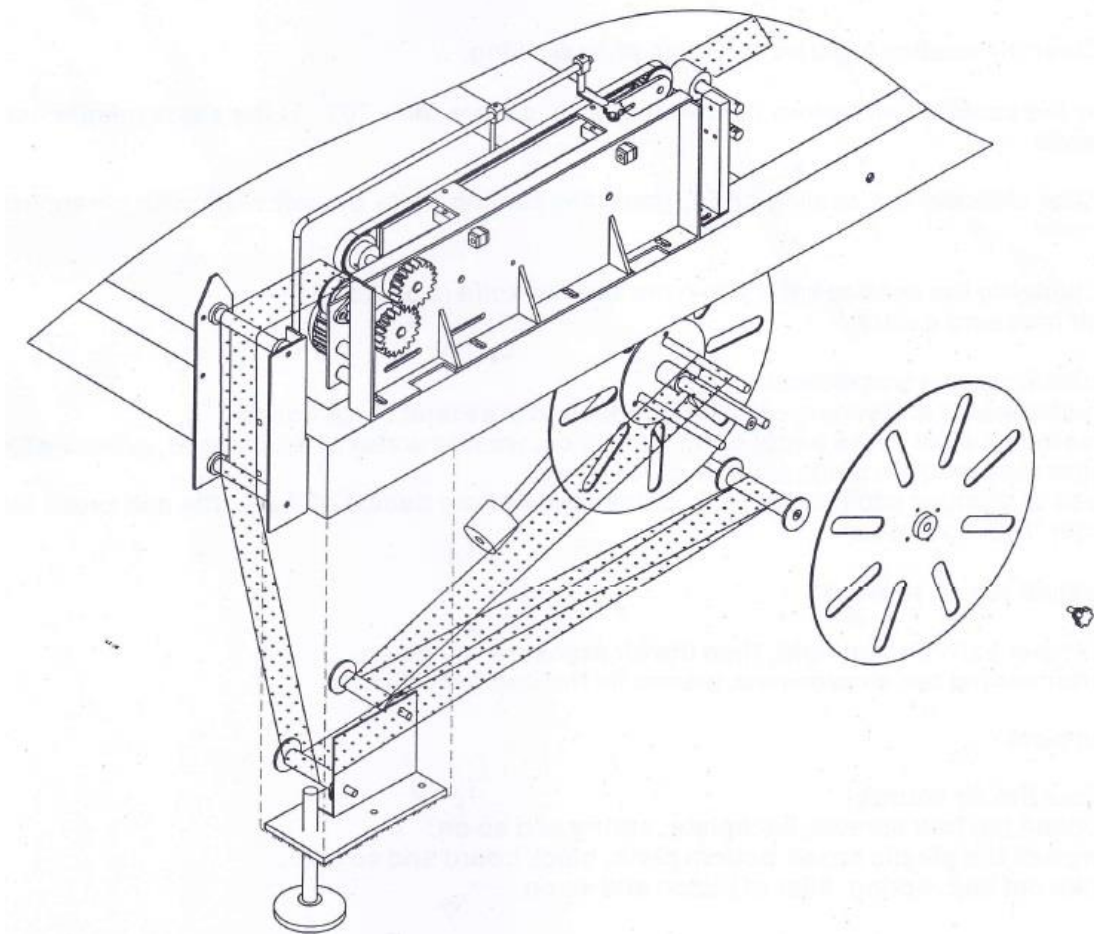
1. Switch on the machine.
2. Set the temperatures of the sealing jaws depending on the type and thickness of film.
3. Set the sealing time and product advance time in preset/mode. The recommended "Product Advance" value is half the height of the product.
4. Set the distance between the sealing line and the end of packing.
5. Adjust the distance between the triangular plates to match with the height of object to be packed. It is recommended to add 10 mm more for shrinkage of film.
6. After the set temperature has reached, pack a few packets by the manual mode. Shrink the samples. If required, alter the settings for the best results.
7. After the final adjustments and trials, put the machine on auto mode and start continuous operation.
8. After a few hundreds of packing, inspect the shrunk packages and do the final adjustments.

➤ POSITION OF THE PRODUCT WHILE SEALING



13. COLLECTION OF WASTE FILM

- ❖ When the waste film gets more than one meter, its end could be fixed to the waste film collecting spool. From then on wards, the machine will automatically wind the waste Film.
- ❖ When the spool is filled with waste film, it must be removed.



14. MICROCONTROLLER SETTINGS

When the machine is switched ON, the display will show the version of the software.

INITIALIZING.....

SEVANA

AUTOMATIC
L-SEALER Ver 1.6

➤ PRESET PROGRAMS/MODES

Preset mode/program can be selected by pressing the MODE/RESET switch.

a. Automatic H-SENS

This mode can be used when the width of the product is less than the height of the product.

AUTOMATIC H-SENS
COUNT:00000

b. Automatic V-SENS

This mode can be used when the width of the product is more than the height of the product.

AUTOMATIC V-SENS
COUNT:00000

c. Manual MODE

This mode can be used when the product sealed manually.

MANUAL MODE
COUNT:00000

➤ PRESET PARAMETERS

In the automatic modes we can set two parameters.

a. Input advance

Settable values: 0 seconds to 2 second

b. Output advance

Settable values: 0 seconds to 2 seconds

c. Sealing Time

Settable values: 0 seconds to 2 seconds

d. High speed

Settable values: ON/OFF

e. Bridge

Settable values: ON/OFF

➤ ERROR DISPLAYS

If the waste/excess film winding is broken:

WASTE FILM BROKEN CHECK & RESET

If the product dimensions are bigger than sealing dimensions:

PRODUCT OVER SIZE CHECK & RESET

If the air pressure is too low to seal:

AIR PRESSURE LOW CHECK & RESET
--

If the product is jammed between the sealing jaws:

PRODUCT JAMMED CHECK & RESET
--

If the emergency stop button is pressed:

EMERGENCY STOP RELEASE & RESET
--

Correct the error and press the MODE/RESET button to continue.

15. MAINTENANCE

To get the best performance for a long time, kindly do the following maintenance.

1.Daily maintenance

- a. Clean the machine with compressed air.
- b. Clean the sealing blade carefully with a soft fabric.
- c. Apply a thin layer of oil with a soft fabric on to the sealing blade.

2.Weekly maintenance

- a. Inspect the sealing blade to see if the Teflon coating has peeled off. If the Teflon coating has peeled off, replace it with a new blade.
- b. Drain off the water collected in FRL unit.
- c. Confirm the pressure output of the FRL unit has not deviated from the set pressure. If deviated, reset the FRL unit.
- d. Check the oil level in the lubricator unit. If required add oil.
- e. Lubricate all moving parts like chain, bearings etc

17. TROUBLESHOOTING

No.	Complaint	Reasons	Remedy
1	Machine doesn't work/Power on LED doesn't light up/No display	1.No AC supply. 2.Fuse blown/MCB tripped. 3.Mains cord failure. 4.No control transformer output.	1.Restore AC supply. 2.Check for any short circuit or replace the fuse/reset the MCB. 3.Replace mains cord. 4.Check the voltages & replace it if defective.
2	Conveyor is not working and can move by hand	1.Conveyor belt tension may be too high/low. 2.Defective capacitor of motor.	1.Adjust the tension. 2.Replace the capacitor.
3	Conveyor is not working and cannot move by hand	1.Conveyor belt tension is too high. 2.Defective motor. 3.Damaged gear. 4.Defective limit switch. 5.Defective relay in the relay PCBA.	1.Adjust the tension. 2.Check the motor connection for any breakage and replace it if defective. 3.Replace it. 4.Replace the switch. 5.Check the relay output from the PCBA and replace it if defective.
4	Film feeding is not doing/Film roller is not moving	1.Defective limit switch. 2.Defective motor/Capacitor. 3.Defective motor brake. 4.Defective relay in the relay PCBA. 5.The tension shaft is not on the level. 6.The position of tension roller is not proper. 7.The triangular plate is not properly fixed 8.The tension of clamping chain is too tight or loose.	1.Check the connections and replace it if defective. 2.Replace the defective part. 3.Replace it. 4.Check and replace the defective. 5.Adjust it. 6.Adjust it. 7.Adjust it. 8.Adjust or lubricate it.
5	Machine doesn't seal/Improper sealing	1.Low air pressure. 2.Defective cartridge heater. 3.Defective relay in the relay PCBA. 4.Fuse blown. 5.Defective temperature controller/temperature sensor. 6.Voltage is too low. 7.Incorrect parameters settings. 8.Defective sealing blade. 9.Defective teflon tape. 10.Defective limit switch. 11.Defective SSR.	1.Check and correct it. 2.Check for any open circuit and replace it if defective. 3.Check and replace the defective. 4.Ref case2 of complaint1. 5.Replace the defective part. 6.Check the voltage. 7.Adjust the parameters as per film and product. 8.Replace it. 9.Replace them. 10.Replace it. 11.Replace it if defective.
6	Error messages doesn't work properly	1.Open connections. 2.Defective limit switch. 3.Misaligned sensor/ Defective sensor.	1.Check and do proper connections. 2.Check and replace if defective. 3.Adjust the position/Replace it if defective.
7.	Waste film collection system is not working properly.	1.Poor quality film. 2.Defective motor/Capacitor. 3.Incorrect alignment of guiding rollers.	1. Use quality film. 2. Replace the capacitor/motor. 3.Adjust the guiding rollers adjacent to the outer conveyor.

18. SERVICE LOG

[illegible]