SERVICE MANUAL



AP-1622A L-Sealer

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IMPORTANT-PLEASE READ THIS CAREFULLY

The development of a good safety program, that is rigidly enforced, is absolutely imperative when involved in the operation of industrial equipment. Our machinery is well designed and includes extremely important safety features. The part you play through proper installation and maintenance procedures is of far greater significance than our designs. Only properly trained individuals following rigidly enforced safety rules, should be allowed to operate these machines.

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UNPACKING

THOOUGHLY INSPECT EQUIPMENT UPON ARRIVAL.

If goods are received short or in a damaged condition, it is important that you notify the carrier's driver **before he leaves your company** and insist on a notation of the loss or damage across the face of the freight bill. Unless this is done, no claim can be enforced against the trans portion.

If concealed loss or damage is discovered, notify the carrier at once and insist on an inspection. This absolutely necessary! A concealed damage report must be made no later ten (10) days from the date the shipment was delivered. Unless you do this, the carrier will not consider any claim for loss or damage. The carrier's agent will then make an inspection and grant a concealed damage notation. If you give the transportation company a clear receipt for the goods the have been damaged or lost in transit, you do so at your own risk and expense.

All claims must be filed within six (6) months of delivery date or carrier will not accept them.

We are willing to assist in every possible manner to collect claims for loss or damage; however, this does not make Alpha-Pack responsible for collection on claims or replacement of material.

WARRANTY

IMPORTANT WARRANTY NOYICES

OPERATING AND MAINTENANCE MANUAL

The operating and maintenance manual has been carefully prepared to provide the user with all the information needed to properly install, operate, and maintain your Alpha-PACK equipment.

Please read this manual carefully and refer to it for information on the care and use of your Alpha-Pack equipment. It is recommended that additional copies be ordered for use by production, maintenance, and supervisory personnel. Although care design of this sealer incorporates safeguards to protect personnel, care should be used in operating, adjusting, and servicing.

Attention is directed to the warranty which accompanies all your equipment. The terms and conditions of this warranty apply only to unmodified units. Any unauthorized modifications to the equipment voids automatically this warranty.

We warrant each new product manufactured to be free from defects in material and workmanship for a period of one (1) year from date of shipment by us.

This warranty is not transferable with any subsequent resale.

Defective parts under warranty must be returned to us freight prepaid. our sole obligation and purchaser's sole remedy in the event of a warranty dispute shall be, at our option, to repair or replace the part in question Labor incurred in removing or installing the defective part is not covered by this warranty. Prior to returning any parts for any reason, contact us for a Return Authorization Number. This number must accompany all returns.

This warranty shall not apply if equipment has been tampered with, misused, improperly installed, altered, or has received damage due to abuse, carelessness, accident or failure to follow recommended regular maintenance procedures or has been serviced by someone other than a duly authorized factory representative without the express written consent of us.

This warranty is in lien of all other warranties, expressed or implied, including but not limited to warranties of merchantability and fitness for a particular purpose, non-infringement or any other matter.

We shall have no liability to any person for direct, indirect, incidental or consequential damages or delay resulting from any defect negligence, or tort and customer hereby waives for itself any and all claims for punitive damages and all claims of negligence of strict liability or both. In no event shall our

liability exceed the purchase price of the product which was actually paid.

We reserves the right to make changes, additions, or improvements to our products with no obligation to make such changes in any previously shipped product covered by this warranty.

We shall not be held liable for any damages arising out of or in connection with the operation of the equipment should customer or its agent fail to maintain equipment in safe operating condition. This warranty shall become unenforceable if and to the extent the customer or its agents remove, disconnect, or otherwise render useless any safety device and or parts designed or affixed by us or fails to maintain and service equipment in a manner as advised.

WARRAMTU EXCEPTIONS

The following sealer parts are considered to be consumable and not under warranty:

- 1. Conveyor Belt
- 2. Silicone Sponge
- 3. Nichrome Wire
- 4. Teflon Tapes
- 5. Nylon Sleeves

WARNINGS

Every effort has been taken to ensure your safety while operating this machine; however, there still remain certain risks. Do not allow this machine to be operated before informing all personnel of the following warnings.

WARNING.....

Do not tamper with the electrical wiring. Only use a licensed electrician for maintenance. Always disconnect the electrical power before attempting any maintenance to all electrical and/or moving parts.

WARNING.....

In order to prevent injury to personnel and/or machinery DO NOT INCREASE SETTINGS OR RATINGS ON EITHER ELECTRICAL OR MECHANICAL OVERLOAD SAFETY DEVICES.

WARNING.....

KEEP HANDS AWAY FROM MOVTNG CONVEYORS AND ASSEMBLIES. Conveyor belts that have become worn or frayed are capable of being hazardous. They should be replaced promptly.

WARNING.....

NEVER OPERATE THIS OR ANY MOVING EQUIPMENT WITHOUT ALL COVERS AND GUARDS IN PLACE. The internal mechanism of most packaging machinery contains numerous shear, pinch, and in running nip points, many of which are capable of causing severe injury and/or permanent disfigurement.

WARNING.....

To minimize the potential for personnel injury, always be sure that

machine operators and others working on the machinery are properly trained in the correct usage of the correct usage of the equipment and properly instructed regarding the safety procedures for operation.

WARNING.....

Heat sealing arms and jaws on packaging machinery can become very hot after a period of use. KEEP HANDS AWAY WHILE IN OPERATION AND USE CAUTION IF THE MACHINE HAS BEEN RUNNING RECENTLY. WARNING.........

ANY MODIFICATIONS TO EITHER THE ELECTRICAL CIRCUITRY OR THE MECHANICAL ASSEMBLIES OF THE MACHINERY WILL VOID ANY WARRANTTES ASSOCIATED WITH THIS EQUIPMENT. Such modifications may introduce hazards that would not otherwise be associated with this machinery. We will not be responsible for any consequences resulting from such unauthorized modifications.

WARNING.....

The use of certain types of plastic films in sealing and/or shrinking equipment may result in the release of HAZARDOUS FUMES due to the degradation of the film at high temperatures. Before using any plastic film in this equipment, the manufacturer or supplier of the film should be contacted for specific information concerning the potential release of hazardous fumes. ADEQUATE VENTILATION MUST BE PROVIDED AT ALL TIMES.

DESCRIPTION AND SPECIFICATIONS OF AP-1622 SEALER

DESCRIPTION:

The purpose of the AP-1622 sealer is for low volume packaging requiring excellent seals and minimal maintenance. It features impulse and polyethylene modes for sealing bags. This model incorporates an electromagnetic hold-down system, allowing the operator to load another package while the preceding package is being sealed. This system provides consistent seals. In addition, a package take-away convey or increases production speed by automatically discharging product into the tunnel.

SPECIFICATIONS:

Model: AP-1622A

Seal Area: Width-16"

Length-22"

Volts: 220VAC,SINGLE PHASE

Amperage: 15

Machine Size: Width-27"

Length-63"

Weight: 300lbs

INSTALLATION AND BASIC SET-UP

IMPORTANT

Read this manual carefully, and make it available to everyone connected with the supervision, maintenance, or production of this machine. Additional copes are available at your request. (Contact your distributor for this information.) Be very careful when operating, adjusting, or servicing this equipment. If in doubt, stop and obtain qualified help before proceeding.

INSTALLATION OF AP-1622 SEALER

Place the sealer in the desired location with the required electrical power source available. (See power requirements.) Make certain that proper electrical wiring is provided to guard against low voltage. If the voltage is too low, the equipment will not function properly.

Finding the proper location is a most important function of the initial set-up. One must take several factors into consideration:

- 1. Adequate power source.
- 2. Relationship to source of product.
- 3. Relationship to tunnel and any conveyors necessary to remove finished product.
- 4. Convenience of operator.

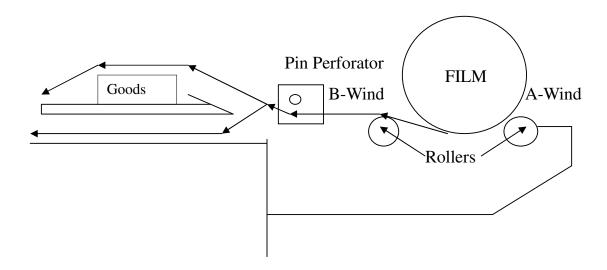
If there is any doubt, get qualified assistance to do the initial installation.

Do not take any chances!

Do not attempt to install, adjust, or operate this machine without first reading the contents of this manual. Although the design of the equipment

incorporates safeguards to protect operating and maintenance personnel, care should be used in operating, adjusting, and servicing.

FILM THREADING DLAGRAM



SEQUENCE OF OPERATION

OPERATING PANEL			
POWER	CONVEYOR	SEALING	

- A. Product is placed on the film separator tray.
- B. The product tray functions as a means to separate the film, allowing placement of product between upper and lower portions of the film.
- C. Move product into seal head area by pushing the product to the left.
- D. Manually pull the seal head down. As the seal head meets the lower seal pad, the machine automatically activates the seal wires. The timer activates the magnets and is adjustable from zero (0) to three (3) seconds.
- E. Take-away Conveyor Unit-Once the seal is completed, the seal head automatically releases and the take-away conveyor begins to run. It is adjustable from zero (0) to three (6) seconds.

NOTE: If too much tension is on the film while the bag is being made, the seals will, more than likely, be weak or will "blowout" in the seal area while passing through the shrink tunnel. Make sure to relax the film tension prior to sealing.

MOUNTING FILM

Select the proper width of center-fold film for the item being packaged,

allowing for width and height of package. With the package properly positioned within the film in the sealing area, allow sufficient film to overlap the sealing bars so that a seal may readily be made without any possibility of open areas due to insufficient film.

Place film roll on cradle mount film rack. See page 13 for a detailed drawing. The center-fold is to be placed away from the operator, toward the rear of the machine. Position film roll on rack and tighten film guide nuts to hold film roll in position.

Decide whether the film is A-wind or B-wind and thread it accordingly through the pin perforator. Note that the perforator wheel turns freely and is not binding. See diagram on page 13. Once threaded, separate film top from bottom and insert product tray between. Make sure that the center-fold of film is placed at the rear of the product tray. This allows the operator to insert product between the layers of film on the product tray and to prepare to move product and film into the sealing area. When threading film, make sure to pull more than sufficient film through the rollers, across the product tray, and into the sealing area to ensure sufficient film to begin operation.

Place product against rear of film separator tray. Then move product into seal area. Be sure to leave the bag loose around the product when making the seal. This helps eliminate the seals from blowing out in the shrink tunnel. This completes threading and/or mounting film.

PIN PERFORATOR

Located between the lower idler rollers, the pin perforator is completely

synchronized with the seal arm and creates holes for air escape during shrinking each time a new seal is made.

The pin perforator is adjustable and must be properly placed in conjunction with the width of the desired package. The positioning should always be re-evaluated when setting the machine for different size product or different size film. Adjustments may be made with the adjustment knob attached to the bottom of the film rack.

FILM BRAKE

The film brake is located on the operator side of the film cradle. It serves to create tension on the dispensing film, in order to prevent over-run and/or slack. From time to time, the operator shoulder-evaluate its setting to ensure proper tension.

PRODUCT TRAY

The product tray is an adjustable metal platform used to separate film and to insert product between top and bottom layers of film.

The tray is adjustable to achieve proper depth, equal to the depth of the package; thereby, allowing product to be placed exactly in the center fold of the film each time.

OPERATION OF AP-1622A SEALER

After completion of film threading as described on page 13, plug the sealer's cord into the power source.

Because of the importance of the adjustment of the element compensator to the successful operation of the sealer, the following explanation of its operation is given.

PRODUCTION OPERATION OF THE SEALER

After setting the element compensator for the film type in use, proceed as follows:

- A. With film threaded, (See instructions for mounting film) using right hand, slide product into the upper left hand corner of the film (i.e. corner formed by folded rear edge of film and previously sealed left edge of film).
- B. Still using left hand, move package and film into lower right corner of sealing area and then slightly back and away from the comer formed by the sealing bars. This will allow some slack film between the package and the sealing bars.
- C. Press sealing handle down. **IMMEDIATELY** release pressure. The sealing head will remain down for the duration of the time set on the seal timer.
- D. The operator may then load the next package onto the product tray, thus speeding up the sealing operation.

TROUBLE SHOOTING CHART

The following trouble shooting chart is provided to aid in determining the source of any operation difficulties which may develop. In performing the tests and checks which follow, carefully inspect for any loose components, broken or loose wires, poor electrical connections, etc. While testing the various switches, controls, relays, transformers, etc. For checking electrical problems, use a voltage meter.

Note: While trouble shooting use caution to avoid danger of electrical shock. When power is not required for checking for the presence or value of voltages used. Always have it disconnected.

Refer to components placement sheet and electrical schematic diagrams to assist in all trouble shooting efforts.

Problem	Procedure	
NO ELEMENT HEAT	1. Check that the sealer is plugged in and	
	that power is present at the socket.	
	2. Check element pulse switch	
	adjustment. Also, press switch by hand-if	
	no click is heard, replace it.	
	3. Check Breaker BS3.	
	4. Check to see if KM1 is pulling in and	
	voltage is present at coil.	
	5. Check circuit continuity through	
	normally closed switch contact of timer	
	KT2. KT2 needs to be set above zero (0)	

on time dial.

- 6. Check for operation of contactor KM3&4.
- 7. Check circuit continuity through operated contact of contactor KM3&KM4. If required, clean or replace contact points.
- 8. Check element compensator setting. You should always have a gap of at least 1/8" to 1/4"between the compensator and the adjustment screw. If the compensator screw is touching the compensator the seal wire will not heat up.
- 9. Check for voltage present at both secondaries of transformer TF1 as per values shown in the voltage specifications.
- 10. Check for continuity from TF1 through wiring the sealing elements.
- 11. Check for continuity through sealing elements and replace if open circuit.
- 12. Check main power switch to determine if damaged or broken.

SHORT ELEMENT LINE

Check element compensator setting.
 (See element compensator on page 23)

- 2. Improper element installation.
- 3. Weak spring at element termination (left end of front element, rear end of side element). If questionable, replace.
- 4. Be certain that heat sink has firm flat contact with element. If deformed, replace or straighten heat sink.

WEAK SEALS AND/OR POOR FILM CUT-OFF

- 1. Improper setting of element compensator.
- 2. Improper operating technique. Too much film tension, make sure film is relaxed prior to sealing.
- 3. Check sealing element wire to see if cleaning or replacement is necessary.
- 4. Burned Teflon tapes 1/2" or 3/4" replace.
- 5. Wavy silicone rubber sealing padReplace. (See instructions on page 22)
- 6. Seal pad pressure incorrect. (See pages 22 and 23)
- 7. Hold-down pressure uneven or incorrect on magnets.

MAGNETIC HOLD-DOWN MAGNETS NOT OPERATING

1. Check for 220 Volts (nominal) to primary of transformer TF1.

ON MAGNET SEALERS
(SEALING HEAD WILL NOT
STAYDOWN) SEALER
OPERATES NORMALLY
OTHERWISE

- 2. If voltage is present to primary winding of transformer. Check for 30 (nominal) volts AC output from the wire number LM and N61 on secondary of the transformer.
- 3. Check for 24 (nominal) volts DC output from + (positive) and (negative) wire numbers 28 & 29 on terminals of rectifier. If no DC voltage, replace rectifier.
- 4. Check wire circuit continuity to hold-down magnets from rectifier.
- 5. Check for circuit continuity through windings of hold-magnets.
- 6. Check seal timer (KT2) setting make sure it is not set on zero. Also check to see if timer is burned of damaged.

CONVEYOR DO NOT RUN

- 1. Check Breaker BS2.
- 2. Check conveyor timer KT1, make sure timer is not set on zero.
- 3. Check conveyor belt and make sure it is not too tight.
- 4. Check that conveyor motor sprocket set screws are not loose on shaft.
- 5. Check that conveyor chain is not jammed or broken.

- 6. Make sure wire number R, S & T are connected to the conveyor motor.
- 7. Make sure wire number S & T are connected to capacitor C.
- 8. Make sure the Pulse Switch can work properly.

EXCESSIVE FILM DRAG

- 1. Check for proper film threading. (See diagram on page 13).
- 2. Loosen film roll brake. (See diagram.)

EXCESSIVE FILM
WINDING OR "SPILL"

1. Tighten film roll brake.

SERVICE ADJUSTMENTS

ELEMENT COMPENSAOR ADJUSTMENT

Adjustment of the element compensator may be required under the following conditions:

- 1. During continuous use. After about 15 minutes of sealer operation, check seal quality and, if required, reset compensator. This may be necessary as a result of heat buildup in the sealing head.
- 2. After installing new sealing elements.
- 3. If charring of film is noted (too much heat).
- 4. If sealing is incomplete (not enough heat).

To adjust the element compensator, refer to the adjustment instructions given below:

ALL FILMS EXCEPT POLYETHYLENE

Adjust the element compensator (located at the end of the front seal bar) by loosening the wing nut and turning the knurled-head screw until a 1/4"air gap exists. With folded film (i.e. two layers of film) in the sealing position, bring down the sealing head. Set the seal timer from 1 to 3 setting then examine the seal. Experimentally, in small increments, increase the element compensator air gap setting until a setting is obtained which yields a satisfactory seal and film cut off. It is important to remember that the smallest air gap at which a satisfactory seal and film nut off is obtained is the correct setting. If using PVC film we recommend to use a 2"x 3mill Teflon cloth or tape over the sealing wires for a clean cut off and reduced smoking.

POLYETHYLENE FILMS

On the element compensator, loosen the wing nut and turn the knurled-head screw until a 1/4" air gap exists. Tighten the wing nut. With folded film (i.e.) two layers of film) in the sealing position, bring down the sealing head. Set the seal timer to position 1 or 2 on the timer dial setting.

Ordinarily, it will not be possible to obtain a satisfactory seal with the 1/4"gap setting. Experimentally, in small increments, increase the element compensator air gap setting until a setting is obtained which yields a satisfactory seal and film cut off.

*Please note: Any time you are using polyethylene films we recommend a 2" x 3mill Teflon cloth or tape to be placed over the seal wire for a better seal and performance.

SEALING ELEMENT REPLACEMENT

The sealing elements are subject to constant wear and will eventually require replacement. To replace sealing elements proceed as described below.

REPLACING FRONT ELEMENT

- 1. Remove heat sink by removing the two screws on front and backside of compensator. Note: Always check for excessive wear and replace heat sink if necessary. (Heat sink part # 1521-08)
- 2. Loosen the two set screws on the side and front bars. (This holds the opposite end of the front seal wire in place.) Loosen the two set screws on the compensator. Remove old wire. When the wire was

originally installed it extended out of the top of the bar 2" and had a loop or book on it to prevent injury to hands. It may be necessary to cut the loop off to remove seal wire.

- 3. Cut off a piece of new seal wire 5" or 6" longer than necessary. Using long-nosed pliers, measure 3" from one end and form a 90 degree bend. Push the wire through the corner bead and tighten set screws. Note: For safety, lease take your pliers and bend a loop in the wire that is extending out of the top of the bar.
- 4. Insert wire through compensator hole. With long-nosed pliers, grab wire on back-side of compensator, turn long-nosed pliers toward seal bar until there is approximately 1/8" gap between compensator and seal bar. Tighten down Allen-Head screw. Cut excess wire off.
- 5. Remount heat sink making sure it fits snug against the wire. If it is not snug, the wire will become too hot in this area and break.
- 6. Make sure the wire lies properly in the bead groove the entire length of the bar. If not, pulse the machine, With the head in the up position. Do this several times to stretch the wire then reset wire temperature for making bags.

IMPORTANT: After replacing sealing wire, be sure to adjust the setting of the element compensator.

TAPE REPLACEMENT

The item most subject to wear on the sealer is the Teflon tape used to cover the silicone sponge rubber on the sealing bar. This tape should never be

permitted to burn through. To replace tape, proceed as follows:

- 1. Strip off old tape.
- 2. Cut off proper length of new Teflon, peel off backing, and press new tape into position.

SILICONE RUBBER SEALING PAD REPLACEMENT

Occasionally it will be necessary to replace the silicone rubber sealing pads.

This should be done if the following effect are noted:

Gaps in the seal

Weak seals

Improper film cut-off

Excessive sealing pressure required

To replace rubber, proceed as follows:

- 1. Seal pads are designed with a channel for easy replacement. Pull silicone rubber out of the channel.
- 2. Replace with new silicone rubber. Press rubber back into channel.
- 3. Put 3/4" 10 mil Teflon tape on top of rubber.
- 4. Put 1/2"- 10 mil teflon tape over the 3/4" tape.

SEALING PAD PRESSURE ADJUSTMENT FOR HEAD RETURN CYLINDER

Uniform pressure between the sealing elements and the sealing pads

must always be maintained for proper sealing uniformity, and to prevent element hot-spots and premature burnout. This adjustment should be checked periodically, and should always be checked when sealing gaps occur. Proceed as follows:

- 1. Disconnect the sealer's power pug from the power source. Loosen all five bolts on lower pads just enough to maintain a moderate sliding pressure.
- 2. With sealing head resting on lower pads, make sure there are no air gaps, then tighten the five bolts on the lower pad.
- 3. Adjust magnets (see below for adjustment of magnets)
- 4. At the rear of the machine (making sure head cylinder is straight from front to back), firmly grasp air cylinder bracket and pull full length of cylinder and tighten down set screws.
- 5. Cycling head up and down, adjust set screw for proper head speed and cushion.

ELEMENT PULSE SWITCH ADJUSYMENT

The sealing cycle should not begin until the sealing head is within 1/4" or less of the film to be sealed. If the magnets energize before the head is within 1/4" of the film, loosen the lock-nut and turn the screw (located at the rear end of the side seal bar)up slightly (counterclockwise when viewed from above). The correct adjustment has been obtained when the magnets energize just as the seal bar comes into contact with lower pads.

ADJUSTMENT OF MAGNETS FOR CORRECT SEALING PRESSURE

All magnets have been factory adjusted for equal sealing pressure throughout the length of both the front and side seal bars. However, if an adjustment is required, proceed as follows:

- 1. Disconnect the sealer's power source.
- 2. Loosen the lower magnet bolts on all lower magnets so that the magnets settle to their lowest position in the mounting slots.
- 3. Lower the sealer's operating handle fully and lift lower magnets to within 1/16" from the holders. Tighten the mounting bolts securely to retain the proper adjustment.

CONVEYOR

From time to time it will be necessary to disassemble the convey as it will need adjustments or replacement of worn parts and general maintenance. The following information is given to assist the operator in that general fashion. If the problem does not recify itself with these general exlanation, discuss it with an authorized distributor of Alpha-Pack or with Alpha-pack directly.

REPLACING CONVEYOR MOTOR

- 1. Disconnect power plug from source of power.
- 2. Disconnect the three power wires from the rear of the motor.
- 3. Loosen the four bolts that hold the motor mount bracket to the

conveyor and slide motor mount forward.

- 4. Loosen set screw on sprocket that is attached to he motor and remove sprocket.
- 5. Remove four bolts. These bolts hold the motor in place. Hold motor while removing these bolts so the motor does not drop.
- 6. Follow steps 2-5 in the opposite order to reinstall new motor against the conveyor frame and tighten set screws.

FRONT AND SIDE SEAL BAR

A. Beads in Front Bar

- 1. Install standard V-Bead.
- 2. Be certain that the beads are flush with the end of the seal bar. If the end bead is extending out of the bar, use side-cutters to cut the bead down to size.

B. Beads in Side Bar

- 1. Install corner bead.
- 2. On either side of the comer bead, install a beveled bead. For the remaining length of the bar, follow steps A-1 and A-2.
- 3. Place a screw in the hole at the end of the bar to hold the beads in place.

C. Set screws – Hold seal wire

- 1. Place set screws in threaded holes of seal bars. Make sure set screw holds seal wire tightly in place.
- 2. Place knurled nut on screw. Make sure nut holds seal wire tightly in place. (For front and side wire)

- D. Compensator and springs in side bar
 - 1. Use one 23/8" spring lightly greased and place in hole first.
 - 2. Install compensator with 2"shaft lightly greased. Slide compensator into side seal bar. While holding, compensator guide screw can be installed.
 - 3. Insert insulated guide screw.

PLACING FRONT AND SIDE SEAL BARS

- 1. Turn power switch to "OFF".
- 2. Remove wire L63 from side bar compensator.
- 3. Remove wire L64 from front bar compensator.
- 4. Remove wire L62 from temperature control bracket.
- 5. Remove temperature control bracket.
 - Note: Bracket is held in place with two screws. Also, do not lose the insulators.
- 6. Compress front bar compensator all the way in using your thumb and hold.
- 7. Remove compensator guide screw.

Warning: Remove compensator slowly, applying tension, as compensator is spring loaded.

- 8. Remove bolt holding front seal bar to the outfeed bar.
- 9. Remove bolts holding side seal bars to casting.
- 10. Remove seal head from entrance casting and outfeed bar.
- 11. Remove the side bar compensator following steps 6, & 7.
- 12. Remove upper magnet holder on side bar.

13. Remove handle.

INSTALLATION OF SEAL BAR COMPENSATORS AND TEMPERATURE CONTROL BRACKET

- 1. Lightly grease two compensator springs and put on each seal bar.
- 2. Insert compensator and compress in all the way.
- 3. Install compensator guide screw assemblies.
- 4. On the front bar, install the temperature adjustment bracket.

Important: The temperature adjusting bracket must be insulated from the casting to work properly.

- 5. Install new seal wire and reset temperature adjustment screw assembly.
- 6. Reconnect wires to seal head assembly.
- 7. Install upper magnet holder on side bar.
- 8. Installing handle and tighten set screws on each end.
- 9. Double check all work done before starting the machine.

MAINTENANCE PERIOD

PER DAY

- Cleaning the machine with soft cloth, check if the silicone rubber sealing pad and the pin perforator and the electric units are good, if not good, please change it.
- 2. Check if the conveyor belt is broken, if it's broken, please change it.
- 1. Check and adjust the element compensator of the film.

PER WEEK

1. Put the lubricating oil on the chain.

PER MONTH

- 1. Check if the chain wheel bearing is not good, if not good, please change it.
- 2. Check if the wires connection is good, if it's not good, please fix it.
- 3. Check if the insulation of the electric circuitry and the motors are good, if not, please repair it.
- 4. Check if the sealing knife base is good, if it's not good, please change it.

PER YEAR

1. Check if the motor bearing is good, if not, please repair it.

LAYOUT

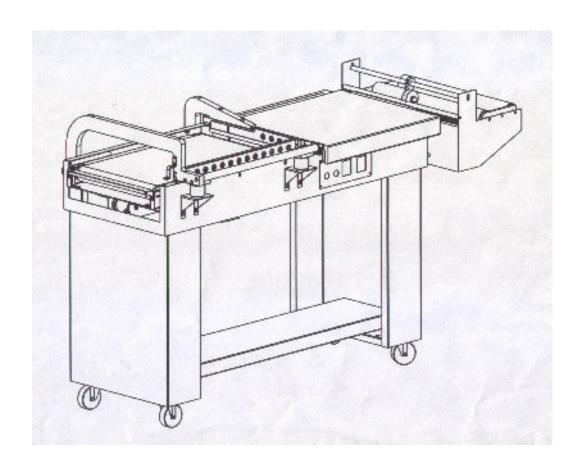


FIGURE 1-AP1622A

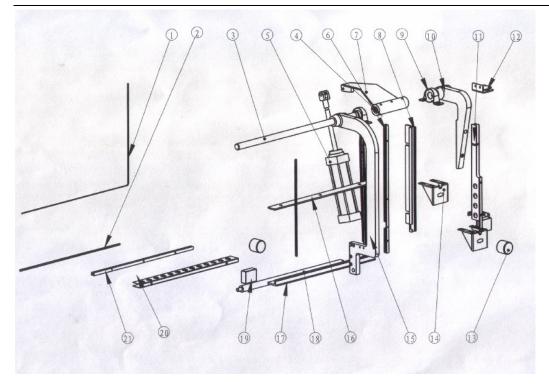


FIGURE 2

NO	NAME	QUAN.
M2.1	HEATER	2
M2.2	HOLDER OF HEATER	2
M2.3	SHAFT	1
M2.4	WIRE-WAY	1
M2.5	CYLINDER	1
M2.6	1#FIXATION BOARD OF HEATER	1
M2.7	CONNECTION BOARD	1
M2.8	SILICA GEL SLOT-BOARD 1	1
M2.9	P-TYPE BEARING PEDESTAL	2
M2.10	SWING PERCH CROSSBEAM 2	1
M2.11	RADIATOR (PRESS) BOARD 1	1
M2.12	SHALF	1
M2.13	MAGNET VALVES	2
M2.14	MAGENT VALVE SUPPORTERS	2
M2.15	SWING PERCH CROSSBEAM 1	1
M2.16	SCALE BOARD	1
M2.17	SILICA GEL SLOT-BOARD 2	1
M2.18	KNIGHT HEAD	1
M2.19	JRON-BLOCKS	2
	2.4	

M2.20	RADIATOR	(PRESS)	BOARD 2	1
M2.21	FIXATION BO	OARD OF H	EATER 2	1

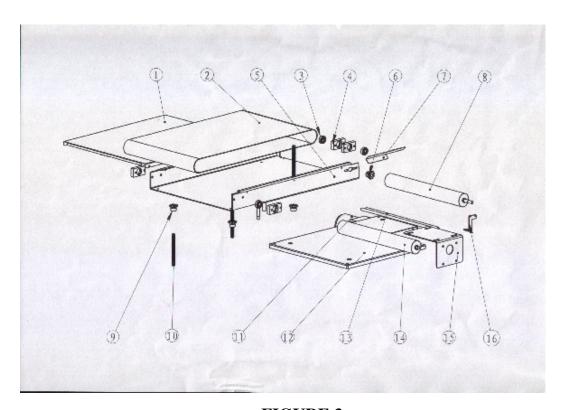


FIGURE 3

NO	N A	AME	QUAN.
M3.1	STRAP TRAY		1
M3.2	TRANSNISSION BELT		1
M3.3	BEARING		4
M3.4	BEARING PEDESTAL		4
M3.5	TRANSFER TRUNK		1
M3.6	MAIN DRIVER		1
M3.7	CHAIN WHEEL COVER		1
M3.8	MAIN ROLLER		1
M3.9	CHAIN WHEEL		4
M3.10	SCREW		1
M3.11	MOTOR		1
M3.12	PLATE		1
M3.13	SUPPORT SHAFT		2
M3.14	BRIVEN ROLLER		1
M3.15	Motor Board		1
M3.16	ROLLER SUPPORTER		2

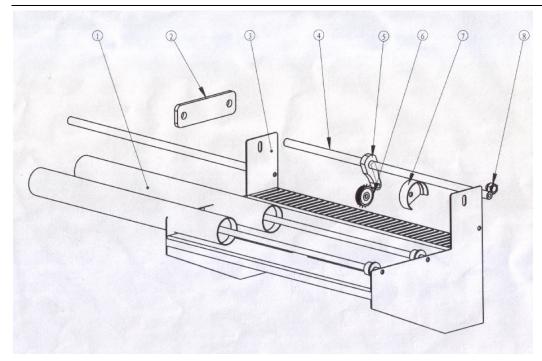
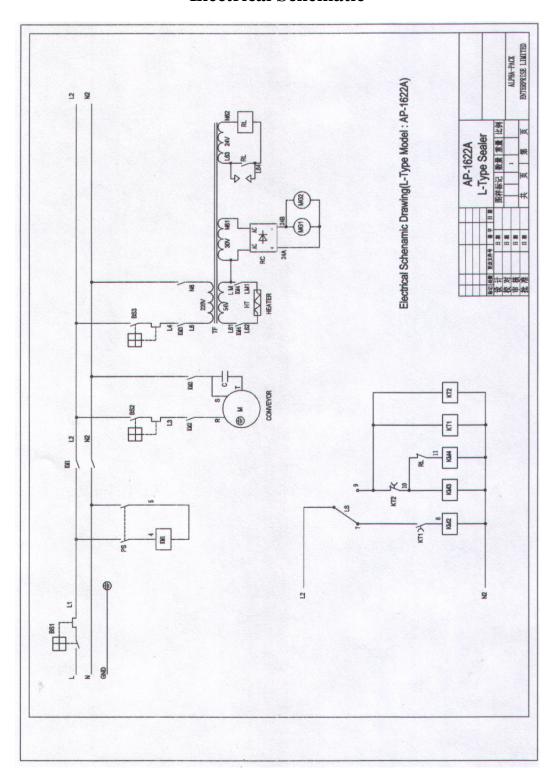


FIGURE 4

NO	NAME	QUAN.
M4.1	ROLLER	2
M4.2	BREAK PLATE	2
M4.3	FILM FEEDING SUPPORTER	1
M4.4	AXIS (SHAFT)	1
M4.5	WHEEL WITH NEEDLE	1
M4.6	PLASTIC COVER	1
M4.7	MAIN DRIVER COVER	1
M4.8	HEXAGRAM NUT	1
M4 9	STAINLESS STEEL BOLT - M8X40	1

Electrical Schematic



REPLACED ELECTRICAL PARTS LIST

NO.	ITEM	NAME	DESCRIPTION	QTY	RMK.
E1	PS	PS	POWER SWITCH	1	
E2	BS1	BRAEKER	DZ47-C15, 1P, 15A	1	CHINT
E3	BS2	BREAKER	DZ47-D1, 1P, 1A	1	CHINT
E4	BS3	BREAKER	DZ47-D1, 1P, 5A	1	CHINT
E5	TF	TRANSFORMER	220V/50V,30V,24V, 800VA	1	
E6	RC	RECTIFIER	3510	1	
E7	MG1-2	MAGNET	MAGNET	2	Alpha-pack
E8	M	MOTOR	4IK25GN-C,25W,220VAC,0.3A,	1	Orient
			5GN-10K		
E9	C	CAPACITOR	400VAC, 1.5UF	1	Orient
E10	HT	Heating Element	0.35*5mm	1	Alpha-pack
E11	KM1,2,4	CONTACTOR	CJX2-0910, AC220V, 9A, 1NO	3	CHINT
E12	KM3	CONTACTOR	CJX2-0901, AC220V, 9A, 1NC	1	CHINT
E13	RL	RELAY	MY2J, 24VAC	1	OMRON
E14	KT1	TIMER	AH3-NA, 3s, 220VAC, ON-DELAY	1	ANLY
E15	KT2	TIMER	APS-2,10S,220VAC,OFF-DELAY	1	ANLY
E16	LS	PULSE SWITCH	D4MC-5000	1	OMRON