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OPERATING AND MAINTENANCE MANUAL "ROBIN" "L" SEALER

This machine is designed for use with Polypropylene (Polyolefin) films and is **not** suitable for use with PVC or Polythene.



DECLARATION OF CONFORMITY

We hereby declare that this machine complies with the essential health and safety requirements of :-

- The Machinery Directive 2006 / 42 / EC
- The Low voltage Directive 2006 / 95 / EC
- The requirements of the Electromagnetic Compatibility Directive 2004 / 108EC, 91 / 263 / EEC, 92 / 31 / EEC
- The General Safety of Machinery and food processing Standards applicable
- Materials and Articles intended to come into contact with food -Regulation (EC) No. 1935 / 2004
- Good manufacturing practice for Materials intended to come into contact with food Regulation (EC) No. 2023 / 2006

	Signed	ned					
	D. Osmundsen – Quality and Conformance Manager						
	Date						
	Machine FG Code.		Machine Serial No.				
A technical construction file for this machine is retained at the following address: MONO EQUIPMENT Queensway, Swansea West Industrial Park, Swansea SA5 4EB UK							
MONO EQUIPMENT is a business name of AFE GROUP Ltd Registered in England No.3872673 VAT registration No.923428136							
Registered office: Unit 35, Bryggen Road, North Lynn Industrial Estate, Kings Lynn Norfolk, PE30 2HZ							

SAFETY SYMBOLS

The following safety symbols are used throughout this product documentation and manual (available at www.monoequip.com).

Before using your new equipment, read the instruction manual carefully and pay special attention to information marked with the following symbols.



Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

WARNING

Indicates a hazardous situation which, if not avoided, will result in electric shock.



CAUTION

Indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

ELECTRICAL SAFETY AND ADVICE REGARDING SUPPLEMENTARY ELECTRICAL PROTECTION

Commercial kitchens and food service areas are environments where electrical appliances may be located close to liquids or operate in and around damp conditions or where the restricted movement for installation and service is evident.

The installation and periodic inspection of the appliance should only be undertaken by a qualified, skilled and competent electrician, and connected to the correct power supply suitable for the load as stipulated by the appliance data label.

The electrical installation and connections should meet the necessary requirements of the local electrical wiring regulations and any safety guidelines.

We recommend:-

- Supplementary electrical protection with the use of a Residual Current Device (RCD)
- Fixed wiring appliances should also incorporate a locally situated switch disconnector to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnector must meet the specification requirements of IEC 60947.

Your attention is drawn to:-BS 7671:2018 – Guidance Note 8 – 8.13: Other locations of increased safety risk

It is recognised that there may be locations of increased risk of electrical shock other than those specifically addressed in Part 7 of BS 7671. Examples of such locations could include laundries where there are washing and drying machines in close proximity and water is present, and commercial kitchens with stainless steel units, where once again, water is present. Where, because of the perception of additional risks being likely, the installation designer decides that an installation or location warrants further protective measures, the options available includes:

- Automatic Disconnection of Supply (ADS) by means of a residual current device having a residual operating current not exceeding 30 mA;
- Supplementary protective equipotential bonding; and
- Reduction of maximum fault clearance time.

The provision of RCDs and supplementary bonding must be specified by the host organisation's appointed installation designer or electrical contractor and installed by a suitably qualified and competent electrician so as to comply with Regulations 419.2 and 544.2.



The supply to this machine must be protected by a 30mA-rated Type A RCD

Failure to adhere to the cleaning and maintenance instructions detailed in this booklet could affect the warranty of this machine.





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CONTACT INFORMATION

1.0 INTRODUCTION

Please take time to read carefully through this manual and then keep it in a safe place for reference when required. With over 30 years of experience in the film wrapping business we may be able to help with any difficulties you may encounter and would be very pleased to assist in any way we can.

The ROBIN sealing machine combined with Polyolefin/Polypropylene film offers the most efficient use of space and gives the ultimate in protection and eye appeal to your products.

Film is supplied in various sizes and with different perforation patterns (different permeability rates) to suit your entire product range.

The aim is always to have a neat and tidy pack with the minimum amount of trim waste off the sealing machine.

Perforated film is suitable for all filled crusty bread/roll products.

Perforated films of a lesser permeability are used for packaging doughnuts, filled soft rolls, sausage rolls etc.

Anti-fog film which is ideally suited to the packing of plated salads and similar moist items, when these are to be displayed in a chill cabinet, is also available.

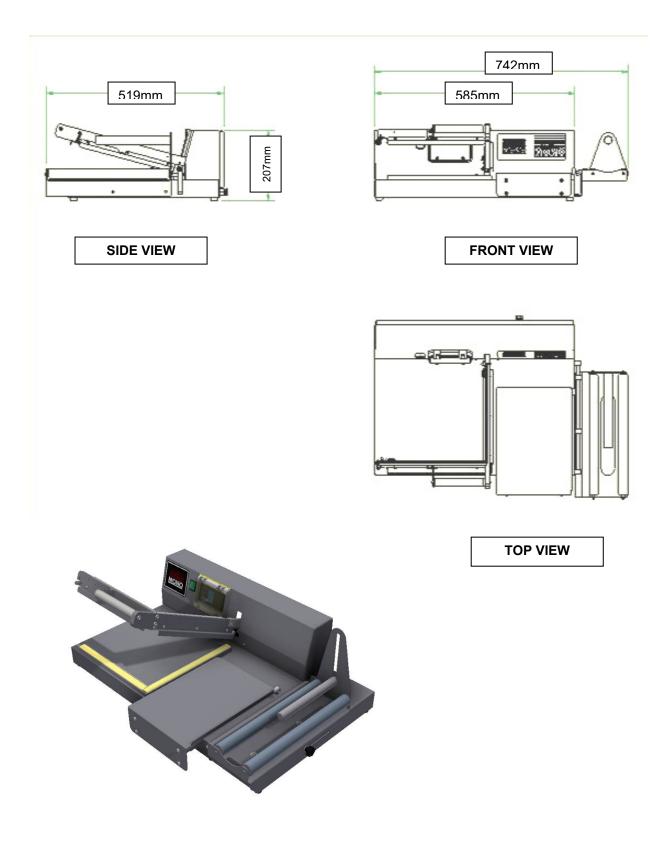
Plain (non-perforated) film should be used for packing cake, scones, sandwiches, plated salads etc. except where these are to be displayed in a chill cabinet.

For speedy and efficient operations it is essential to have simple flowing lines to permit the operator to work within the area of the machine, always working from right to left. It pays to remember that a clean and tidy machine should give a clean and tidy pack.



Whilst the ROBIN has been designed primarily for use in Catering operations with attention given to the ease of hygienic cleaning, the unit can also be effectively used for the packaging of non-food items.

2.0 DIMENSIONS



3.0 SPECIFICATIONS

APPROX. DIMENSIONS

Height closed	207mm
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Height open -- 370mm

Width -- 742mm

Depth -- 519mm

POWER -- See serial No. plate

230/250v. AC., 50Hz, single phase 13amp.



The supply to this machine must be protected by a **30mA-rated Type A RCD**

NOTE

If a sensitive magnetic trip is used in the supply line, this must allow for a peak impulse current of 20amps.

FUSES

13amp in plug. 1amp fuse.

SEALING PLATFORM

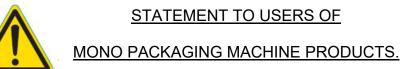
Sealing wire 22swg.

Sealing pad surface material P.T.F.E.

Operation only when sealing arm is within 3mm-4mm of sealing pads.

This machine is designed for use with Polypropylene (Polyolefin) films and is **not suitable for use with PVC or Polythene.**

4.0 SAFETY





(HEALTH & SAFETY AT WORK ACT 1974)

Under the terms of the above Act it is obligatory, rather than simply a matter of good business practice, to advise our customers on the safe use of our products. There are no significant known hazards in the use of our products provided they are handled according to normal good safety practice and in accordance with the information in this instruction manual. We would nevertheless draw your attention to the following information which must be taken into account to ensure safe working.

MACHINES

1. The sealing and cutting wire is heated by electrical impulse each time the machine is operated and therefore care should be taken to avoid touching any part of the wire when hot or within one minute of operation (due to residual heat).

Cleanliness in the vicinity of the seal wire and the use of minimum heat setting, sufficient only to seal and cut, is important to minimise any fuming that might occur.

2. Machine electrical compartments must not be opened, due to the danger of electrical shock, except by a competent person and only then after first being isolated from the mains electrical supply.

3. This machine is designed for use with Polypropylene (Polyolefin) films and is <u>not suitable</u> for use with PVC or Polythene.

MATERIALS

1. FLAMMABILITY

Polyolefin films are combustible when exposed to ignition sources and should be stored in an area equipped with fire control safeguards. This is particularly important if large quantities of material are to be stored, in which case we recommend heat and smoke detection perhaps coupled with a water sprinkler system. In common with other combustible materials, polyolefin films burning freely in a fire will produce complex combustion products dependent upon factors such as temperature, the degree of ventilation and the fire dynamics of the situation. It is therefore not possible to specify the combustion products precisely, but typically they would include carbon monoxide, carbon dioxide, trace levels of organic compounds and water. For this reason it is recommended that all areas in the proximity of a fire should be immediately evacuated of all personnel and fire-fighters should be equipped with self-contained breathing apparatus.

2. HEAT SEALING & TRIMMING

The heat sealing and cutting of plastic films inevitably gives rise to some fumes. Analysis of the fumes generated by this process and given off from Polyolefin/Polypropylene film indicates that under typical operation conditions no organic compounds are present in concentrations greater than 5% of the Occupational Exposure Limits determined by the Health & Safety Executive, with concentrations generally less than 1% of OEL. However, even low concentrations of fumes can be irritating to sensitive persons and it is recommended that adequate ventilation should be provided to the working area to avoid a build-up of fumes over a period of time. It is advisable to ensure that operatives and personnel in the working area do not have a history of respiratory or pulmonary illness and that the sealing equipment is maintained in good and clean condition.

Attention to the cleanliness of the trim sealing heads is important as an accumulation of dirt or melted plastic can cause excessive fuming. Running the heat control at too high a setting can also contribute to excessive fuming and it is usually found in these circumstances that a reduction in the heat setting, combined with increased pressure on the sealing head, will give a better seal performance.

3. STATIC ELECTRICITY

Build-up of static electricity in rolls of plastic film may cause problems when the charge earths by sparking. Where work involves potential fire or explosion hazards, steps should be taken to eliminate safely the static charge and to prevent subsequent recharging during further processing. Because of the possibility of generating and or discharging an electrostatic charge, protective wrappings should not be removed from film rolls in areas where the atmosphere conditions are such as to present a fire or explosion hazard.

4. SLIP

Most plastic films are high slip materials and if allowed to lie on the floor, can present a safety hazard to pedestrians. Care should therefore be exercised to ensure that scrap off-trims of film, are tidied away in appropriate disposal containers and not be allowed to litter the floor.

5. DISPOSAL

Disposal of scrap film should either be through the normal trade re-use outlets, burial or incineration. Incineration can be used for disposal where the incinerator is designed to cope with corrosive flue gasses.

NOTE!

The Materials information set out above is based on information supplied by a manufacturer of Polyolefin Film and is correct to the best of our knowledge and belief. However, whatever film you decide to use, since the chemical composition may vary from manufacturer to manufacturer, you must satisfy yourself, by reference to the material supplier, that the material is safe to use on a heat seal and cut machine such as the ROBIN and that any fumes given off are not toxic or harmful.

Mono Equipment does not accept any liability whatsoever for any consequences arising from your choice of wrapping film.

5.0 INSTALLATION

- The sealer will be supplied completely assembled and ready for use, including a fitted power supply plug.
- The sealer's electrical supply must be 230/250V a.c., Single Phase, 50Hz, capable of carrying 13 amps.



The supply to this machine must be protected by a **30mA-rated Type A RCD**

- If a sensitive magnetic trip is used in the supply line, this must be rated at 20 amps. to allow for the peak impulse current.
- The sealer must be installed on a level surface.
- Check the sealing arm is level and adjust if necessary.



• Ventilation should be adequote to allow the small amount of fumes to be removed from the working area.



• The sealer should be installed away from areas where the atmospheric conditions are such as to present a fire or explosion hazard. (dust ,flour etc.)

6.0 ISOLATION

'ON/OFF' ROCKER SWITCH / POWER LIGHT.

This switch provides power to the machine and incorporates a light to indicate 'POWER ON'. Press to turn on/off.



MAIN ISOLATION

Before maintenance work or cleaning, unplug the machine from the mains socket.

The machine's electrical supply is fused at the supply plug, which should be fitted with a 13 amp fuse when replacing.

7.0 CLEANING INSTRUCTIONS

ALL CLEANING AND MAINTENANCE OPERATIONS MUST BE MADE WITH THE MACHINE DISCONNECTED FROM THE POWER SUPPLY



DO NOT ALLOW WATER TO ENTER THE CONTROL PANEL AREA.

DO NOT USE A SPIRIT OR SOLVENT TO CLEAN THE MACHINE.

DAILY CLEANING

- 1. Brush crumbs etc. off tables.
- 2. Wipe metalwork with a damp cloth and sanitising solution.

WEEKLY CLEANING

- Vacuum clean the machine. (Paying special attention to the underside of the sealing platform).
- 2. Wipe metalwork with a damp cloth and sanitising solution.
- 3. Check condition of sealing pads. (Replace if burn marks are excessive).
- Check condition of sealing wires. (Clean off residual deposits with a stiff brush).

8.0 ADJUSTMENTS

It should be noted at this point that no two heat sealable materials will work the same at the same machine settings.

WIRE TEMPERATURE CONTROLLER.

This component is used to control the level of impulse temperature. The desired setting is

controlled by altering the digital display by pressing the plus or minus buttons.



WIRE TEMPERATURE.

Controlled as set out above. For all gauges and types of film it is recommended that a low setting is first tried, gradually increasing to find the lowest setting at which a satisfactory clean cut-off is achieved. The number (on the controller) thus established should be noted for future reference in relation to the particular type and gauge of film in use. On no account should too high a setting be used as this will reduce the life of both sealing wire and sealing pads and might give rise to unpleasant fumes.

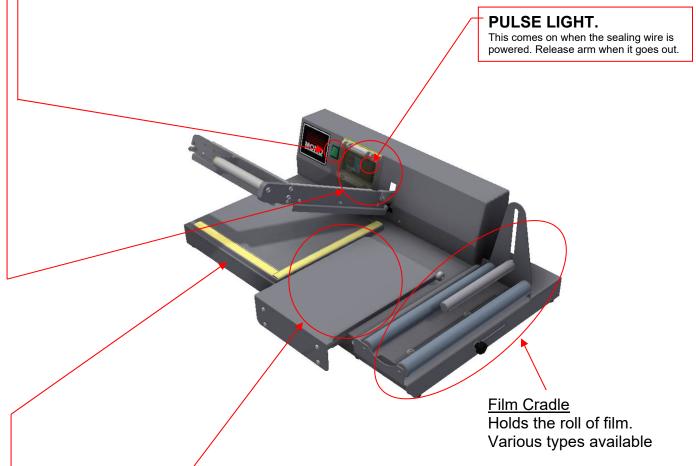
9.0 CONTROLS

WIRE TEMPERATURE.

This component is used to control the level of impulse temperature. The desired setting is controlled by altering the digital display by pressing the plus or minus buttons.

'ON/OFF' SWITCH / POWER LIGHT.

This switch provides power to the machine and incorporates a light to indicate 'POWER ON'.



LOADING PLATFORM/FILM SEPARATOR.

This component, which is a combined film splitting and product loading plate, can be slid in and out to suit the film width being used.

SEALING PLATFORM.

Flat wipe clean surface to hold the product whilst sealing.

10.0 OPERATING INSTRUCTIONS

- 1. Place the desired type and size of centrefolded film on the film cradle with the open side of film facing to the front. To align the film relative to the front seal pad and to suit the product to be packed, slide the cradle backwards or forwards to the desired position.
- **2.** Place the loading platform/film separator between the film layers pulling the free end of film under the seal arm. Ideally the platform should be positioned so that it's tip comes to within half the pack height of the film fold line.
- **3.** Switch power 'ON' and observe 'POWER ON' light is illuminated.
- **4.** Set 'WIRE TEMP.' to specified recommendation and with the film under the right-hand sealing arm, lower arm onto the film and hold down under moderate pressure. When the light, on the temperature simulator, goes out, release the arm and observe welded film. There should be a clean cut-off and weld with no gaps evident.
- **5.** Place product between the film layers, on the loading plate and move to the left and into the sealing area. The product and film should always be pulled into position rather than pushed to protect the leading seal.
- **6.** Close the seal arm and hold down firmly until the simulator light goes out, at which point the arm can be released as the film will have been welded and cut from the roll.

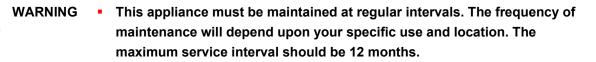


WASTE FILM IS GENERATED FROM THIS PROCESS AND, SINCE IT IS SLIPPERY AND COULD CAUSE AN ACCIDENT, THIS SHOULD NOT BE LEFT TO PILE UP ON THE FLOOR.

WIRE TEMPERATURE.

Controlled as set out above. For all gauges and types of film it is recommended that a low setting is first tried, gradually increasing to find the lowest setting at which a satisfactory clean cut-off is achieved. The number (on the simulator) thus established should be noted for future reference in relation to the particular type and gauge of film in use. On no account should too high a setting be used as this will reduce the life of both sealing wire and sealing pads and might give rise to unpleasant fumes.

11.0 MAINTENANCE



- Service and maintenance should only be undertaken by suitably qualified, trained, and competent engineers.
- You must immediately report any damage or defect arising with the appliance.
- Unsafe equipment is dangerous. Do not use the appliance. Isolate the power supply and contact MONO or your appointed service agent.



ALL CLEANING AND MAINTENANCE OPERATIONS MUST BE MADE WITH THE MACHINE DISCONNECTED FROM THE POWER SUPPLY

<u>Weekly</u>

Check condition of sealing pads and top cover tape for excessive burn and replace tape if necessary.

Check condition of and clean, seal wires and seal wire insulation strips. To clean wires, operate machine two or three times to heat the wires, switch off machine, then with a wire brush, clean the wires. Repeat if necessary. In the absence of a wire brush, a ball of Crispywrap film or a cloth can be used.

Six Monthly (Mechanical)

Carry out weekly service.

Check condition of seal wire insulation strips and replace if badly burned showing deep grooves. To replace, cut off old strip, clean metal surface and apply a suitable contact adhesive. Apply new strip to prepared surface and press down into position. When replacing insulation strips, always replace the sealing wires and ensure when so doing that the wire tension springs are properly fitted.

Check condition of seal pads. If cover tape (PTFE) has been changed at regular weekly service periods, these components should be serviceable. If however, the pads have been badly burned, new pads should be fitted. Pads may NOT be turned over to extend their life, due to a metal strip used in construction which could cause an electrical short.

Six Monthly (Electrical)

Disconnect machine from Mains Electrical Supply and remove the Console rear cover. Inspect condition of wiring insulation and examine all terminals for security.



SERVICE REPAIRS (MECHANICAL).

SEAL PAD COVERING.

A length of adhesive backed, 13mm wide, P.T.F.E. glass tape, is fixed to the pads for protection. This replaceable tape should be renewed when seals become sub-standard, if the film sticks to the pad or pronounced burn marks are apparent.

SEALING WIRE INSULATION STRIPS.

These components may become damaged due to incorrect machine setting or heavy usage and require replacement.

SEALING PADS.

These components may become damaged due to incorrect machine setting or failure to replace the cover tape and require replacement.



<u>CAUTION!</u> Isolate machines from mains electrical supply before opening electrical compartment

LEVELLING OF SEALING ARM & ADJUSTING 'HEAT ON' SWITCH.

The arm is levelled by adjusting the two bearings housed in the Control Console. After isolating the machine from the Mains Electrical Supply and opening the Console rear door, the procedure for adjustment is as follows:-

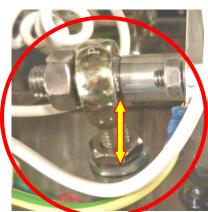
Pull the arm down onto the pad and look along the length of both pads to see if there are any gaps.

If gaps are noted, adjust following the steps below:-

- a. If the left-hand end of the front seal arm is not touching the seal pad, raise the right-hand bearing.
- b. If the right-hand end of the front seal arm is not touching the seal pad, raise the left-hand bearing.
- c. If the rear of the transverse seal arm is not touching the seal pad, lower both bearings.
- d. If the transverse seal arm is touching the rear of the seal pad long before the front seal arm reaches the front seal pad, raise both bearings.





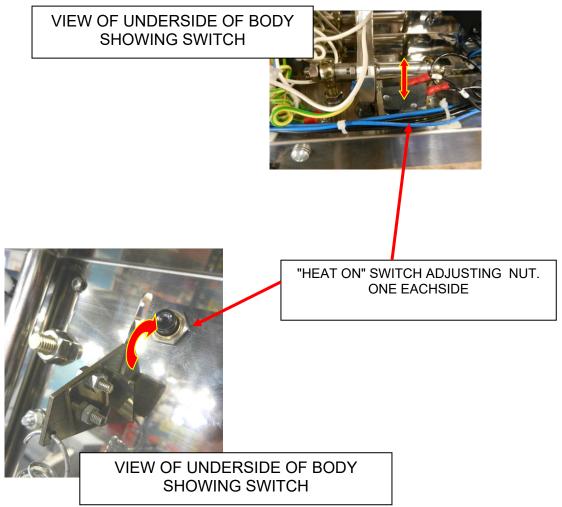


If there are no visible gaps, check fine levelling using a 1" wide strip of paper. Place the paper strip between the pad and seal arm, close the arm using one hand and with the other, pull the paper across the pad, checking whether the paper is being gripped. This should be tried along the length of both pads and if an area of poor grip is found, adjustment should be carried out as detailed above.

A further test is to use strips or a sheet of Kraft paper over the full length of both pads and operate the machine. When the seal frame releases, burn lines will be seen on the Kraft paper which should be of even thickness, indicating even pressure over the full length of both wires. If the burn is not even or there are gaps, the seal arm should be levelled.

ADJUSTING 'HEAT ON' SWITCH

After adjusting the bearings, check that the "Heat On" Switch actuating screw is set so that the switch is actuated when the seal arm is within 3mm to 4mm of touching the front seal pad.



CHANGING SEALING WIRES.

1. To remove the old wire, loosen earth screw 1, located in the right-hand front corner of the seal arm, loosen the nut 2 at the spring loaded end and remove the two broken pieces.

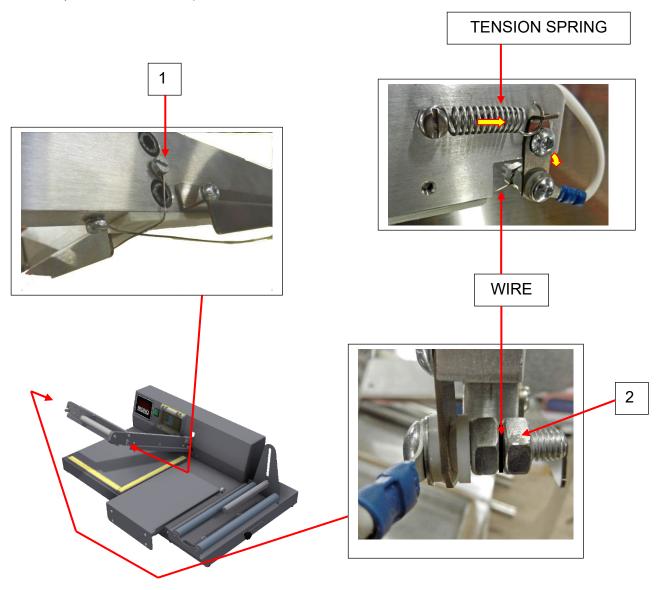
2. Locate the new wire around the wire holder screw, between the nuts and tighten the end nut.

3. Next, locate the other end of the wire around the earth screw 1, pulling to tension the spring at the other end and tighten earth screw 1.

4. Take care that the 'Tail' of the new wire at either end does not touch any metal part (other than the screw to which it is fastened) either when the seal arm is 'UP' or 'Closed', otherwise an electrical short will result.

5. Repeat procedure for the side wire replacement.

ALWAYS ensure that the front to back (side) wire lies over the front wire (looking up from below) at the crossover point.



12.0 SPARES AND SERVICE

If a fault arises, please do not hesitate to contact the Customer Service Department, quoting the **machine serial number** on the silver information plate of the machine and on the front cover of this manual



Queensway Swansea West Industrial Estate Swansea. SA5 4EB UK

Main switchboard and service Tel. +44(0)1792 561234

Spares Tel. +44(0)1792 564039

email: spares@monoequip.com

Web site: www.monoequip.com

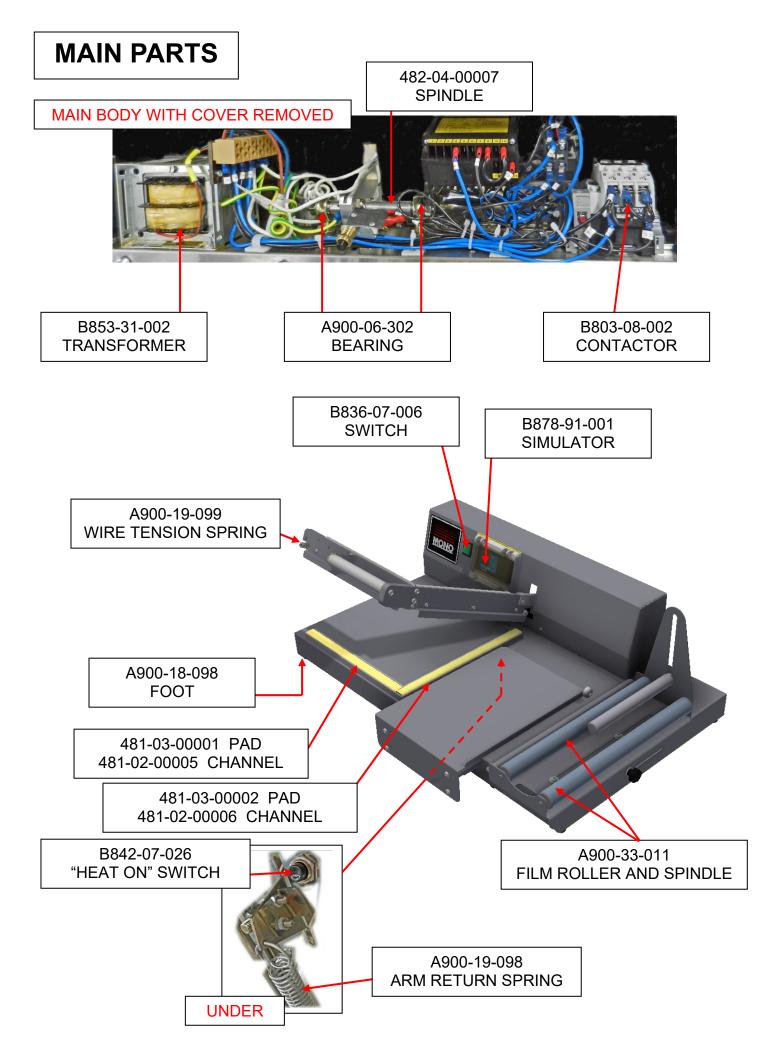
RECOMMENDED SPARES

The machine is supplied with a basic spares kit, however, we recommend that in order to minimise machine down time, users should at least hold:-

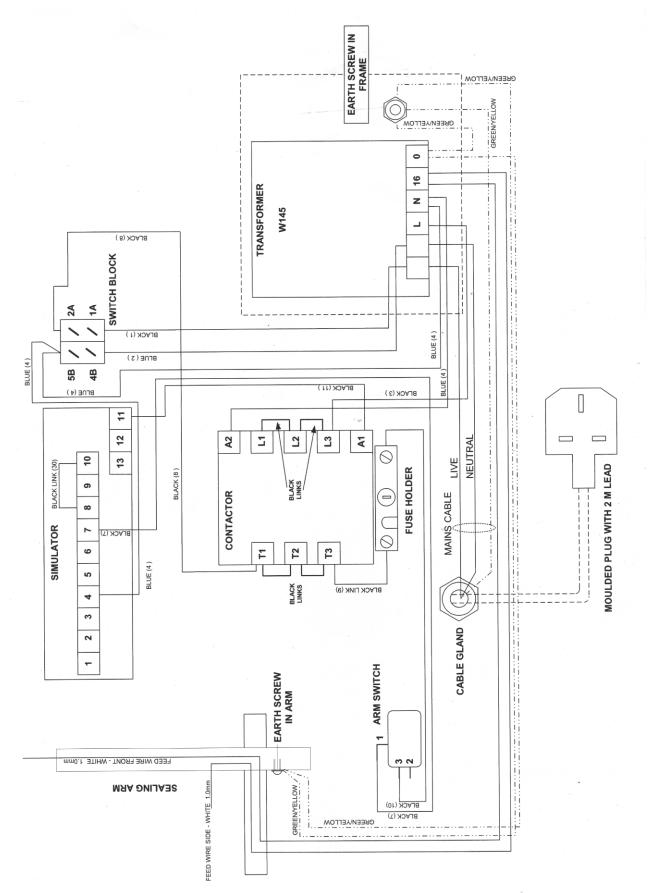
1 - Reel 22swg Seal Wire ----- Pt No B944-95-002

- 1 Roll 13mm wide P.T.F.E. Glass Tape (1.2Mtrs) Pt No A900-12-120
- 1 Packet 13 amp. Fuses (10) ------ Pt No B842-85-011

For these and other spares please contact Mono spares dept. Tel. 01792 564039



13.0 ELECTRICAL



FAULT TRACING TABLE

FAULT	CAUSE	ACTION
Wires burning out	Wires shorting on frame. Worn insulating strips. Excessive heat setting used. Faulty simulator. Faulty contactor, wires heat as soon as m/c is turned on.	Replace faulty items.
One wire continually breaking at cross- over corner.	Poor earth on the wire that does NOT break.	Clean arm surface under BOTH earth screws.
No heat on wire with power "ON" light healthy.	Mcb tripped out. Broken supply wire. Bad earth termination. Heat "ON" switch not triggering. Faulty contactor. Faulty transformer. Faulty simulator.	Replace. Replace. Check, ensure the wires are clean and properly clamped. Adjust actuating screw or replace switch. Check coil. Manually depress coil with screwdriver. If centre does not move, change contactor. Check and replace if necessary. Check and replace if necessary.
Light dims when operating machine.	Poor neutral return.	Check supply neutral. Poor connection in supply plug or terminal block.
Fuse blows in supply plug.	High resistance in earth return- broken earth wire. Seal wire or clamp screw shorting on arm. Insulation strip missing. Supply wire bare and shorting to frame. Short circuit in control console. See also "Wires burning out".	Look for break in wire. Look for burn marks.

FAULT	CAUSE	ACTION
Wires too hot on lowest simulator setting.	Faulty simulator	Change simulator.
Only one wire heats up.	Bad earth connection. Broken supply lead.	Check both.
Seal Pad strips burnt out.	Continued use of excessive heat or failure to replace tape when necessary.	Change Seal Pads.
Pack seal bursts open.	Dirty seal area. Dirty seal wire. Pack too tight in film. Insufficient clamp pressure.	Change tape. Clean wires. Allow more slack. Increase pressure.
Power switch "ON" but light does not light.	No fault	Ensure power supply is "ON"
	Power supply is faulty.	Check fuse in plug, wiring and supply.
Fault remains.	Light has failed, machine working.	Replace switch.
Film cuts off but fails to weld.	Tension on film does not permit seal during cut- off.	Relax tension on film when sealing.
Seal wire insulation strip badly burnt.	Continued use of excessive heat. Maintenance schedule not followed.	Replace insulation strips.





Queensway Swansea West Industrial Estate Swansea. SA5 4EB UK Tel. 01792 561234

Mono spares dept. Tel. 01792 564039

Email: <u>marketing@monoequip.com</u> Web site: www.monoequip.com

DISPOSAL

Care should be taken when the machine comes to the end of its working life. All parts should be disposed of in the appropriate place, either recycling or other means as the law permits at the time.