

STAND UP POUCH / TUBE SEALING MACHINE

Quick Start Guide

Please note as with any heat sealer the jaws on the machine can become hot with continuous use, **please use with caution**. Always keep the barrier tapes over the elements in good condition to avoid the elements shorting together. Always use the machine with the sealing jaws over the H-frame stand or screw the frame to a bench.

- 1) Check the correct voltage on the serial number plate on the left hand side of the machine is the same as your supply voltage
- 2) Lift the operating handle to the up position
- 3) Ensure the On/off switch is off and the heat and cool dials are on zero
- 4) Place your bag between the jaws of the machine and adjust the height to the correct position for the seal to be produced by undoing the 2 triknobs on the back of the machine and then retightening.
- 5) Plug the machine in to a power outlet, suitable for a 13Å supply
- 6) Switch the machine on with the on/off switch and ensure it illuminates
- 7) Put the Heat control on 1 and the cool control on 10
- 8) Place the Pouch or tube in the sealing position and close the handle until it is fully closed
- 9) Wait for both the heat and cool light to extinguish then lift the handle to open the jaws
- 10)Assuming the seal is not satisfactory then gradually increase the heat dial until a satisfactory seal is produced.
- 11)Then reduce the cool dial so a satisfactory seal is maintained and to increase production cycle times.

Please note the cool cycle should always be higher than the heating cycle to ensure longer life of the consumable spares, even if the bag seals well without a cooling cycle.

If in any doubt please contact Hulme Martin Heat Sealers on 01483 476767 where we are always willing to help

SAFETY INSTRUCTIONS – HEAT SEALING EQUIPMENT

- A. <u>Protection against hazards arising from the electrical equipment</u>
- 1. Safety warnings and instructions in the operators instruction sheets and attached to the machine should be followed with care.
- 2. The equipment has an earthed power cable with integral 5-amp plug to BS 1363/A fitted with a 5-amp fuse. The panel mounted fuse holder on the machine is fitted with a 3.15 antisurge fuse for additional protection. If either fuse fails the reason should be investigated and the machine inspected and tested to ensure that there are no causative faults. Higher value fuses must not be used, as they do not provide the required level of protection.
- 3. Ensure that the power is switched off and the cable plug is removed from the supply outlet before any servicing is undertaken on the product.
- 4. Increased user safety can be achieved if a residual current device (RCD) is used in the supply circuit to the heat sealer. This applies particularly in damp conditions but the equipment must not be allowed to get wet, either from sealing liquids, cleaning or inclement weather. Only specially designed water-resistant sealers should be used in these circumstances. Electrical components and internal wiring, unlike the element assembly, are not all protected by the low voltage safety transformer, which powers the element.
- 5. Switch off the power supply when the machine is not attended.
- 6. The equipment should be regularly serviced and subjected to Portable Appliance Test procedures in accordance with the Health and Safety Electricity At Work regulations 1989.
- 7. It is essential that only approved spares are used for servicing this equipment. Incorrect element wire can result in excessive electrical load on internal components, which can lead, to malfunction and failure.

Note

Hulme Martin Heat Sealing equipment satisfies the Health and Safety requirements of the Electrical Equipment (Safety) Regulations 1994, CE Low Voltage Directive 2006/95/EC

B. <u>Protection against non electrical hazards</u>

- 1. The equipment is designed to be operated on a flat, level surface to ensure machine stability. In the case of chain operated machines, the equipment should be securely screwed to the workbench using the flanges provided, to avoid dislodging the machine when the pedal is depressed.
- 2. Heat sealing machines must not be used for packing flammable or explosive materials unless specifically modified to do so.
- 3. When sealing PVC and some other plastic films, which may produce potentially harmful fumes, adequate airflow ventilation or extraction may be required.
- 4. The heating element and jaws can become hot during sealing and adequate cooling time must be allowed before touching these parts of the machine.
- 5. Care should be taken on machines fitted with cutting knives that the blade is moved to a safe position before attempting to reach between the jaws. On hand operated machines, which are pivoted at one end of the pressure bar the knife will slide towards the pivot point when the pressure bar is lifted. For safety ensure that the blade is positioned at the pivot end before lifting the pressure bar.
- 6. A timer allowing a maximum heating time of 4 seconds controls the heating cycle on impulse sealers. If the timer indicator light does not go out at the selected time and heating continues, switch off the power immediately and investigate the fault after removal or disconnection of the power.
- 7. Repeated operation of the machine without sufficient cooling time between cycles can cause accumulative heat build up in the element resulting in poor seals, damaged elements and excessive temperatures
- 8. Ensure that hands and fingers are clear of the pressure bar before actuating the foot pedal. The element will not operate until the pressure bar is fully closed but some discomfort will result from the pressure applied manually or by solenoid operated units.

IMPULSE SEALING EQUIPMENT

To ensure that satisfactory sealing performance is achieved and that service life of consumable spares (such as element wire, Teflon and rubber pressure pads) are maximised, it is necessary to understand the operating principles of this type of equipment.

- To adjust the heat setting for a particular thickness of material, the power output is not varied, and varying the length of time that the current passed through the element resistance wire effects adjustment. The timer control allows infinitely variable time adjustment up to a maximum of around 7 seconds.
- 2. When the red heating indicator light goes out the temperature has reached its maximum and the polythene is molten to effect the weld. It is important that before allowing the jaws to open for removal of the polythene a short cooling time is allowed to enable the polythene to solidify and to regain its original strength. On machines fitted with a dual timer control, the cooling time can be pre-set but on standard machines with simple heating time control, the operator should allow sufficient time for cooling before releasing the jaws. Depending on material thickness a cooling time of 1 to 7 seconds is usually sufficient.
- 3. To complete the seal in the minimum possible time considerable power is applied to the element for the short duration of the welding cycle. The instantaneous temperature reached during the brief cycle is very high, but close contact of the spring loaded rubber pressure pad removes excess temperature and prevents deterioration of the thin Teflon barrier tape.
- 4. It follows that if the pressure bar is released before the temperature reduces to a level that the Teflon can withstand, it will deteriorate rapidly and require premature replacement.
- 5. For this reason adequate cooling allowance is critical to the service life of the Teflon. Although capable of withstanding up to 20,000 seals before replacement, insufficient cooling time can cause burning within a very short period.

- 6. If the Teflon is not replaced when showing signs of wear, the polythene will stick and seal quality will deteriorate. Also the rubber pressure pad will start to wear and if this is allowed to continue to the stage where the surface of the pad is burnt and uneven, the resulting 'air gap' between the pad and element will reduce heat transfer and cause further rapid deterioration of the Teflon. Excessive burning will eventually result also in the element wire requiring replacement.
- 7. To avoid this 'vicious circle' always operate the machine at the minimum heat setting consistent with satisfactory seal quality. Allow sufficient cooling time between each successive seal. When sealing repetitively at high frequency reduce the heating time from its original setting to compensate for residual heat build up in the element.
- 8. The microswitch is set to avoid application of power to the element until the rubber pad is fully aligned and pressed closely to the Teflon to allow the necessary heat transfer. The rubber pressure pad is sufficiently pliable to accommodate several thickness' of polythene, but accidental closure onto thicker objects or attempting to seal bubble pack material and heavy paper laminate gusseted materials will cause deterioration of the Teflon for the reasons explained previously.
- **9.** The rubber pressure pad, and element wire strip are easily replaceable, but care in operating and maintenance of the Teflon barrier tape can extend the service interval before element reconditioning becomes necessary.
- 10. If the machine fails to seal, but the on-off switch and indicator lights show that the power and timer circuits are operating correctly, unplug the element and check the condition of the resistance wire and Teflon. Simple replacement of these low cost consumable spares will normally restore the full performance of the equipment.

STAND UP POUCH / TUBE HEAT SEALER

OPERATING INSTRUCTIONS

<u>General</u>

Before connecting the machine to the electricity supply, check the operating voltage on the name plate attached to the side of the machine.

The wires in the mains lead are coloured in accordance with the following code:-

Green & Yellow - Earth Blue - Neutral Brown - Live

Ensure that the machine is correctly earthed and connected to the mains supply with a 5 amp fused plug.

The heating element operates at a reduced safety voltage and the machine has its own 3.15 amp internal fuse, accessible at the side of the body.

The machine is fitted with a Double heat 6mm element wires.

Installation

Place the H-frame stand on a firm level surface. Loosen the 2 Tri-screws on the back on the machine and slide the sealing machine on to the stand. Tighten both Tri-screws when the sealing height has been adjusted for your product. Adjust the levelling feet on the stand to prevent the sealer rocking, or moving. Connect to the mains supply.

Operating Instructions

Switch on the machine using the amber on/off switch on the front of the machine. Check that the switch lights up to indicate that the machine is powered.

Keep the heat and cool controls on zero at this stage. The Stand Up Pouch / Tube sealer is fitted with dual electronic timer controlling the heating and cooling cycle. When pressure is applied to the operating handle, thus closing the sealing jaws, an audible 'click' of the micro switch will be heard. The illumination of the red indicator lights will confirm that the machine is correctly adjusted and that power is being applied to heat up the element. The heating time is variable between 0 and 7 seconds using the external control knob. The cooling cycle is also adjustable to allow a sufficient cooling time before the pressure bar is released.

If the operating handle is released before the LED lights go out, insufficient cooling will result in premature wear of the Teflon barrier tape and other consumable spares.

To extend the service life of the consumable items, always operate at the heating cycle at the minimum setting consistent with good seals and allow adequate cooling time before removal of the bag. A longer cooling period significantly extends the life of the sealing consumables.

Setting the Sealing cycle

Switch the machine on. Set the cooling timer control knob to maximum and select position No. 1 on the heat timer control knob. Place the material to be sealed between the jaws and close them by using the operating lever until it locks in to position. Both neon lights will illuminate. After 1 or 2 seconds the heat light will go off. Subsequently after the cycle is complete the cooling light will extinguish, indicating the jaws can be opened, please note the seal jaws will still be hot at this time. Examine the seal and adjust the heat control to achieve a satisfactory seal at the minimum setting. Reduce the cooling timer control to the minimum setting consistent with the thickness of polythene.

Maintenance

Firstly remove the Jaw guard by loosening the 4 screws holding it into place.

If required the complete element assembly can be removed from the machine jaws by undoing the white element power lead at each end and undoing the wing nuts holding the heater bars on to the arms so that it can be replaced with a new or reconditioned unit.

Removal of the Teflon barrier tape from the displaced element enables the wire to be inspected and replaced if kinked or damaged. When replacing the element wire ensure a holding pin is placed into the holes through the expansion brackets to avoid the expansion spring from popping out. Loosen the expansion bracket clamps to allow the element wire to be removed. Check the condition of the white rubber pad under the wire and the Tufnol heater bar. Then refit a new wire and clamp it down with the expansion bracket clamp plates. Slide the underwire barrier tape under the wire and then remove the holding pins. The bar can then have a new Teflon cover stuck over it. It is important that this excess is removed to avoid any risk of a short circuit to the metal body that can result in damage to the timer circuit.

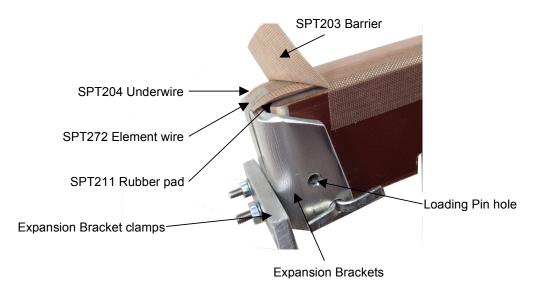
A few drops of oil can be placed on to the operating handle assembly if this becomes stiff.

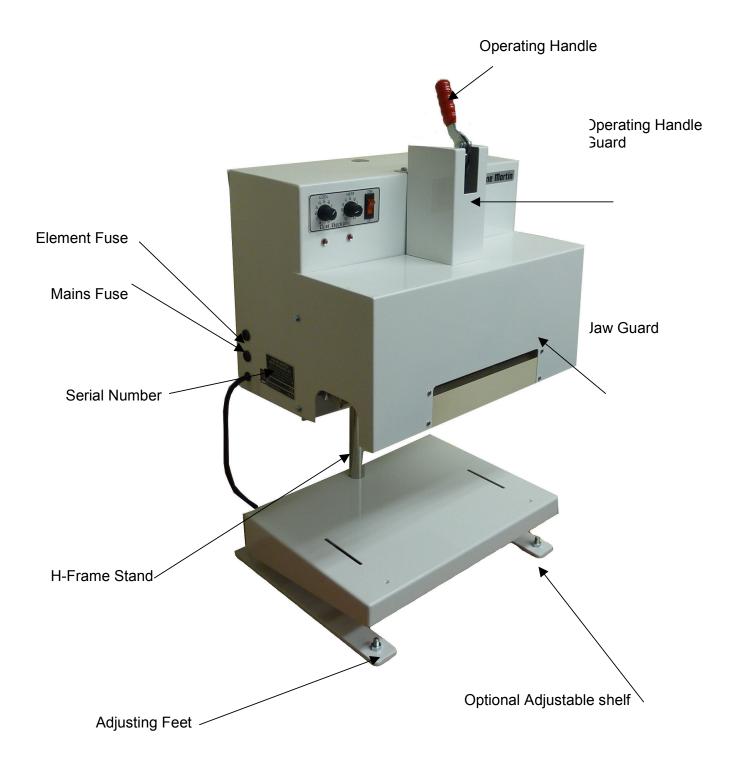
SPARES

The following consumable spares will enable the machine to be serviced as required.

SP0011	Front Heater Bar Assembly	each
SP0012	Rear Heater Bar Assembly	each
SPT211	Rubber Pressure Pad	each
SPT204	Underwire Insulating tape	pkt 5
SPT272	Resistance wire strips	pkt 5
SPT203	Teflon Barrier Tapes	pkt 5

When ordering spares please quote the serial number of the machine on the plate on the side of the machine. If special modifications have been fitted to the machine ensure that the spares department are informed when ordering these parts.





Hulme Martin Heat Sealers Duty of Care

Directive 2002/95/EC on the restriction of the use of certain hazardous substances in Electrical and Electronic Equipment(RoHS)

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive bans the placing on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants.

All machines manufactured from 1st April 2006 comply with the above directive.

Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE)

The WEEE Directive aims to reduce the quantity of waste from electrical and electronic equipment and increase its re-use, recovery and recycling. From 1st March 2007 Hulme Martin machines are marked with the 'crossed out wheeled bin symbol' to ensure they are dealt with separately from general waste. We can arrange to collect machines that are no longer required and ensure they are either recycled or disposed safely. We will record details of all collected and recycled machines. WEEE REG No WEE/DB1381SS

Packaging Directive

Directive 2004/12/EC (94/62/EC). Whilst we are not required to register under this directive we use minimal packaging to ensure your purchase reaches you in a first class condition. Packaging used has been recycled wherever possible and can be reused or recycled by the receiver.

EC Declaration of Conformity

Machinery Directive 2006/42/EC

The Low Voltage Directive 2006/95/EC

Electromagnetic compatibility directive 2004/108/EC.

Our machines comply with the above directives. All new machines are built to a high standard and subjected to visual and electrical tests at several stages during their manufacture. Once assembled we produce test seals to ensure quality standards are met. Finally every machine is Portable Appliance Tested to ensure electrical safety requirements are met.

ISO 9000 Quality Management

Hulme Martin Heat Sealers Ltd operates from documented quality management systems to ensure we meet our customers' requirements. We conform to the required directives as listed above, and our equipment meets CE requirements. Customers are welcome to visit our factory to inspect our documentation and manuals.

ISO 14000 Environmental Management

Hulme Martin Heat Sealers ensures its activities causes minimal effects on the environment. We continually monitor our practices to achieve the best possible improvement on our environmental performance.

<u>Warranty</u>

In the unlikely event that it becomes necessary to return the machine for repair or maintenance, please ensure that it is adequately packed to avoid accidental damage and include your advice note detailing the date of purchase and invoice reference number. Defects occurring from faulty materials or manufacture will be repaired free of charge within the 12 month warranty period provided that the machine has not been misused; is correctly maintained, and has not been subject to unauthorised repair. Consumable spares items such as the heating element assembly, resistance wire strips, teflon barrier tapes, rubber pressure pads and transportation costs are excluded from the warranty.

HULME MARTIN HEAT SEALERS LTD Unit 5B, Country Business Centre, White Cottage Farm, Lucas Green Road, West End, Woking, Surrey GU24 9LZ

 Telephone. 01483 476767
 Fax. 01483 486343

 www.hulmemartin.co.uk