4040

HEATPRESS

OPERATORS MANUAL

J&A (International) Limited

Insignia House, Vale Road, Spilsby, Lincolnshire PE23 5HE
Telephone + 44 (0)1790 752757
www.ja-int.co.uk

4040 HEAT PRESS

CONTENTS

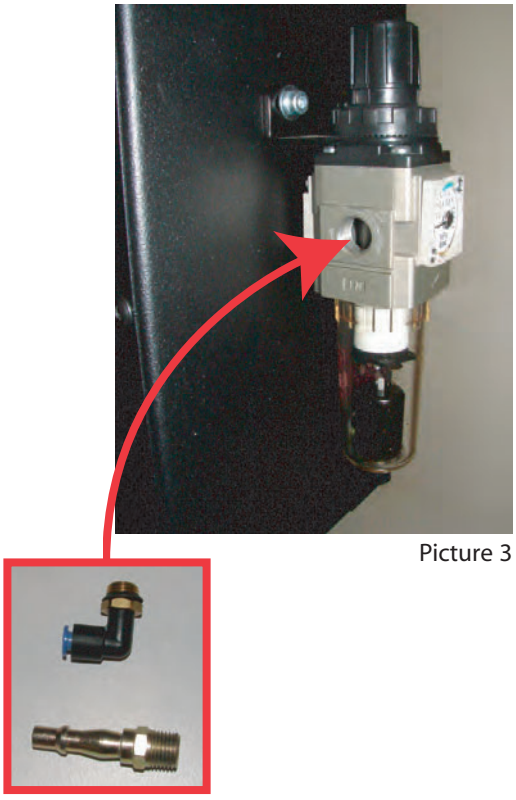
J&A (International) Limited

Picture 1

Picture 2

SETTING UP

1. Carefully remove the 4040 from the delivery box.
   KEEP THE BOX AND PACKAGING! (Picture 1)
   The box contains the 40-40 machine and additional size platens.
   Please Note: This item is heavy and would recommend a two person lift.
2. Place the 4040 on a solid, level surface at a comfortable working height.
3. Plug the 13 amp fused plug in to a 240V power supply. (Picture 2)
4. Connect the air supply. This can be done via numerous connections to suit your air supply system. (Picture 3 - parts not supplied)
5. Switch on at rear of machine base.
6. The 40-40's display shows the temperature of the heated plate and the target temperature.
   You will note that the head temperature will now start to rise towards the target. Once at the target temperature the machine will regulate itself and keep the head temperature at +/- 5 Degrees C of the target temperature.
   When the temperature is out of its operating temperature range the light will display red and turns green once the machine is within range. Only commence a heatsealing process when the light is green.
   If the light is red when a heatsealing cycle is started the warning buzzer will sound and display will read
   'FAULT: WAIT NOT WITHIN BAND'
   PLEASE NOTE: The heatsealing head will become hot. The base will also become hot with use.
7. The various parameters of temperature, pressure and length of heatsealing time recommended for J&A heatseal products can be downloaded from ja-int.co.uk



Picture 3

CHANGING THE SETTINGS

GENERAL

The three important factors for a heatsealing process are time, temperature and pressure. The correct settings for each J&A product can be downloaded from the J&A International web site ja-int.co.uk. Each of the three settings may be changed on the 4040 as below.

Generally, the lef t (❮Menu) and the right (Menu❯) buttons move the display from one parameter to the next.

The (+) and (-) buttons increase and decrease respectively the displayed setting.

TIME

Press the (Menu❯) button until the time screen is displayed (shown below).

Press (+) or (-) until the desired dwell period (in seconds) is shown.

When heatsealing, the count down display counts down from the dwell time to zero at which time the buzzer sounds and the display reads 'FINISHED'

COUNT DOWN nnnS
DWELL TIME nnnS

Representation of display scr een

Picture 4

TEMPERATURE

Press (Menu❯) until the temperature screen is displayed (appears as below).

Press (+) or (-) until the desired temperature (in Celsius) is displayed.

HEAD Temp = nnnC
TARGET = nnnC

Representation of display scr een

PRESSURE

CARE BOTH TOP AND BOTTOM HEAT PLATES BECOME HOT DURING OPERATION.

To increase or decrease the pressure between the heat plates rotate the air regulator to increase or decrease the 'bar' pressure. (Picture 4)

COUNTER

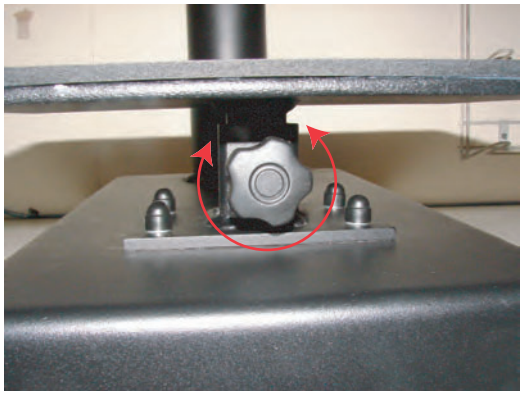
The count registers the number of cycles completed and may be reset to zero as follows: Press the (RESET) button:

COUNT nnnn
PASSWORD >0000

WARNING MESSAGES

DISPLAY READS	THIS MEANS	ACTION TO TAKE
WAIT NOT WITHIN BAND	Machine temperature is more than +/- 5 C outside of set temperature	Raise head and wait until light turns green.
BROKEN PROBE	Probe is broken or become detached from earth connection	Return machine to J&A for repair
OVER TEMPERATURE	Temperature reading from head is in excess of 250 C	Switch off. Allow to cool NB - if the displayed temp is more than 15 Degrees C above set temp - there is probably a fault - switch off & return to J&A

CHANGING THE HEAT PLATES



Picture 5

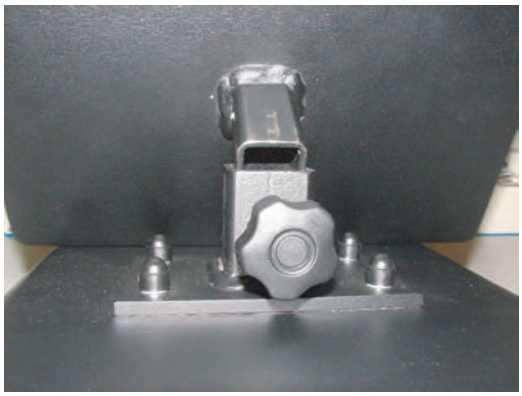
BOTTOM PLATE

TO REMOVE EXISTING BOTTOM PLATE

Unscrew anticlockwise the knob under the base plate. Lift out the plate and replace with the required size. (Picture 5)

TO INSTALL REPLACEMENT PLATE

Simply replace the plate and retighten the knob clockwise. (Picture 6)



Picture 6

TOP PLATE

The top plate can only be changed by returning the 4040 machine to J&A (International) Ltd.

HEAT SEALING BEST PRACTICE

Basically the heat seal procedure comprises three essential elements of time, temperature and pressure.These elements need varying for different fabrics, products etc. The tips and hints below will help you to achieve perfect results every time.

DIFFERENT TYPES OF BADGES/TRANSFERS

The correct heat seal parameters for each type of decoration supplied by J&A (International) Ltd are given on the product packaging and on the 'Heat Seal Parameters' chart available on request from J&A, or avaialble for download from ja-int.co.uk.

The parameters quoted above are guidelines which are satisfactory for most fabrics but do please read the points below and bear in mind they may occasionally dictate that parameters are set outside usual ranges. J&A (International) Ltd accept no liability for goods damaged by the heat sealing process.

DIFFERENT FABRIC TYPES

Differing fabrics require differing heat seal parameters to ensure good adhesion of the decoration and prevent marking/damaging the fabric/garment. J&A (International) Ltd have built up an extensive data-base of optimum parameters for various fabrics and will be pleased to advise and recommend settings.

FABRIC THICKNESS

Principally, the thicker the fabric, the longer the dwell time required. There is no exact formula to determine the time required - simply experiment with the particular fabric you are using as to what dwell works best.

OPENING OUT GARMENTS

Wherever possible, only heat seal onto one thickness of fabric This, for example, entails opening out garments and putting only either the front or back, as appropriate, over the base plate.

FABRIC FINISHES

Modern fabrics can be coated or finished with a variety of different chemicals to achieve different fabric properties and performances. Most do not affect the strength of adhesion of J&A heat seal products. On the rare occasions that the adhesion is not as strong as would be expected and fabric coatings are suspected as the cause, try heating the area of fabric to be decorated using the heat seal machine before applying the badge or transfer as this can evaporate away or burn off the finish in this area.

ADHESIVE SHOWING ROUND EDGE OF TRANSFERS

This can sometimes be seen when applying transfers to darker garments. In such cases the visible adhesive can be greatly reduced by removing the transfer release-paper in the normal manner after heatsealing and then sealing the transfer again for about 5 seconds.

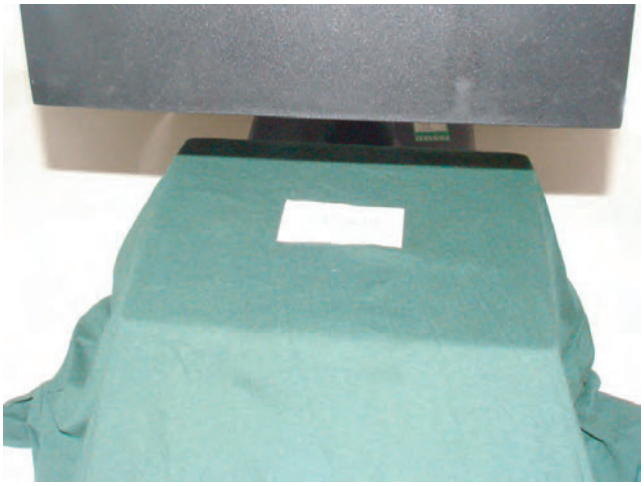
DELICATE FABRICS

Some fabrics with a low melt point can show an imprint of the heat plates after heat sealing. This effect can be reduced / eliminated by, prior to sealing, covering the transfer and whole area of the garment that will be touched by the top plate with a sheet of silicone paper. Also reduce temperature to lowest possible for the type of product used.

GARMENT SEAMS, STUDS ETC

Wherever possible, make sure that any raised or thick parts of the garment, such as seams, buttons, studs etc fall outside of the heat area as shown below . Such factors entail reduced pressure and unsatisfactory adhesion which is not always immediately apparent.

CORRECT POSITION



INCORRECT POSITION

ROUTINE MAINTENANCE

Not working? - see the trouble shooting guide on page 7

Occasionally clean top and bottom heat plates with a solvent such as J&A Superspray and a clean, dry cloth.

Regularly check that the temperature between the heat plates is the same as is reading on the display . To measure the inter -plate temperature you will require a digital thermometer fitted with a thin thermocouple.

PROCEDURE

Set the dwell time to 60 seconds.
Place a thermocouple between the plates and pull down head.
The thermometer reading will rapidly rise and then level out.
If the reading is still rising at the end of the 60 second dwell period simply repeat until it does level out. The temperature indicated on the thermometer should be within +/- 3C of the set temperature. If not, calibrate the machine as below .

CALIBRATION

Carry out the test above to determine if machine needs calibrating.

In order to access the temperature adjust mode a four digit password must be entered to match the password set by the manufacturer at 0101 Change the display by pressing the MENU button until the following screen appears:

COUNT nnnn PASSWORD 0000<	Representation of display screen

The <symbol indicates that the right hand two of the four digits may be adjusted by using the (+) and (-) buttons.
Then press the MENU button to change the display to:

COUNT nnnn PASSWORD >0001	Representation of display scr een

Indicating that the lef t hand two of the four digits may be adjusted using the (+) and (-) buttons.
Enter the password 0101 and wait for about 10 seconds.
The display will then change to:

COUNT nnnn PASSWORD XXXX	Representation of display scr een

The MENU button may now be used to advance to a previously unavailable screen showing:

GAIN ADJUST nnnC	Representation of display scr een

This screen is displaying the temperature between the plates and can be adjusted to read the same as the thermocouple by using the (+) and (-) buttons.

Once the temperature has been calibrated the Gain adjust screen may be disabled again by simply reverting to the password screen and altering the displayed digits to be anything other then the password (0101).

ROUTINE MAINTENANCE

A WEEKLY check of the oil level in the air regulator is required. If there is oil in the regulator it needs to be drained.
This is achieved by:
1) Disconnect the air supply.
2) Unscrew the bottom of the regulator (Picture 6)
3) Drain the oil.
4) Retighten the regulator and reconnect the air supply.

Picture 6

Unscrew Here

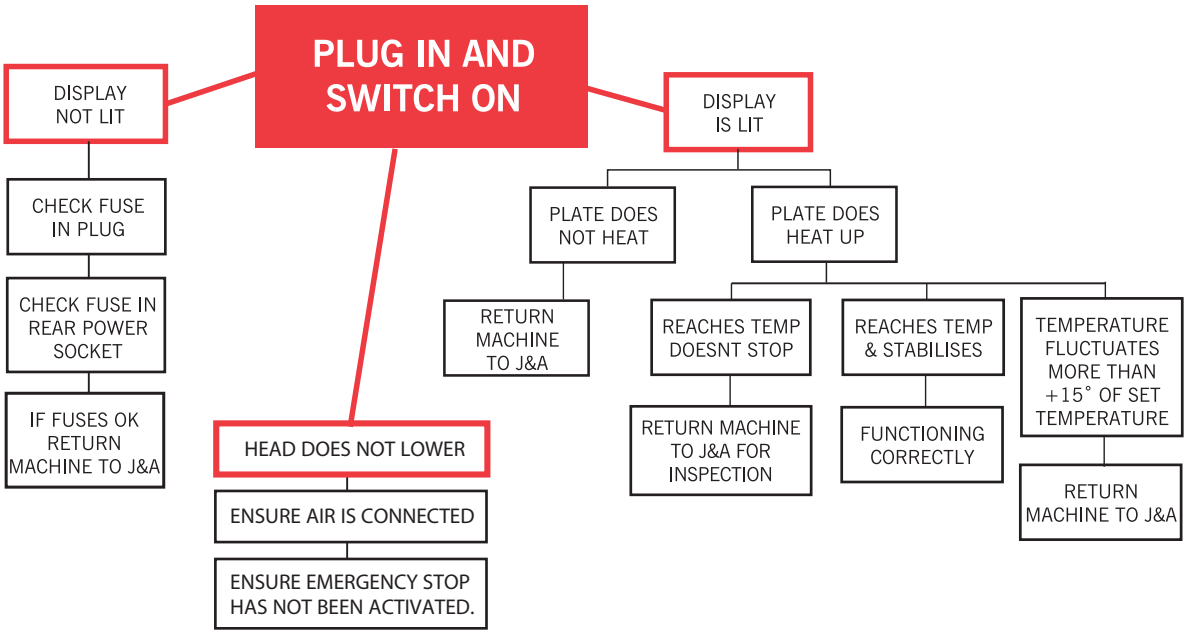
SERVICING

Where a machine is owned (rather than rented on the J&A Seal-Deal scheme) the J&A annual service is recommended. This full return-to -base, strip-down and return system gives your machine a complete overhaul with change of key components for a minimal fixed outlay each year .

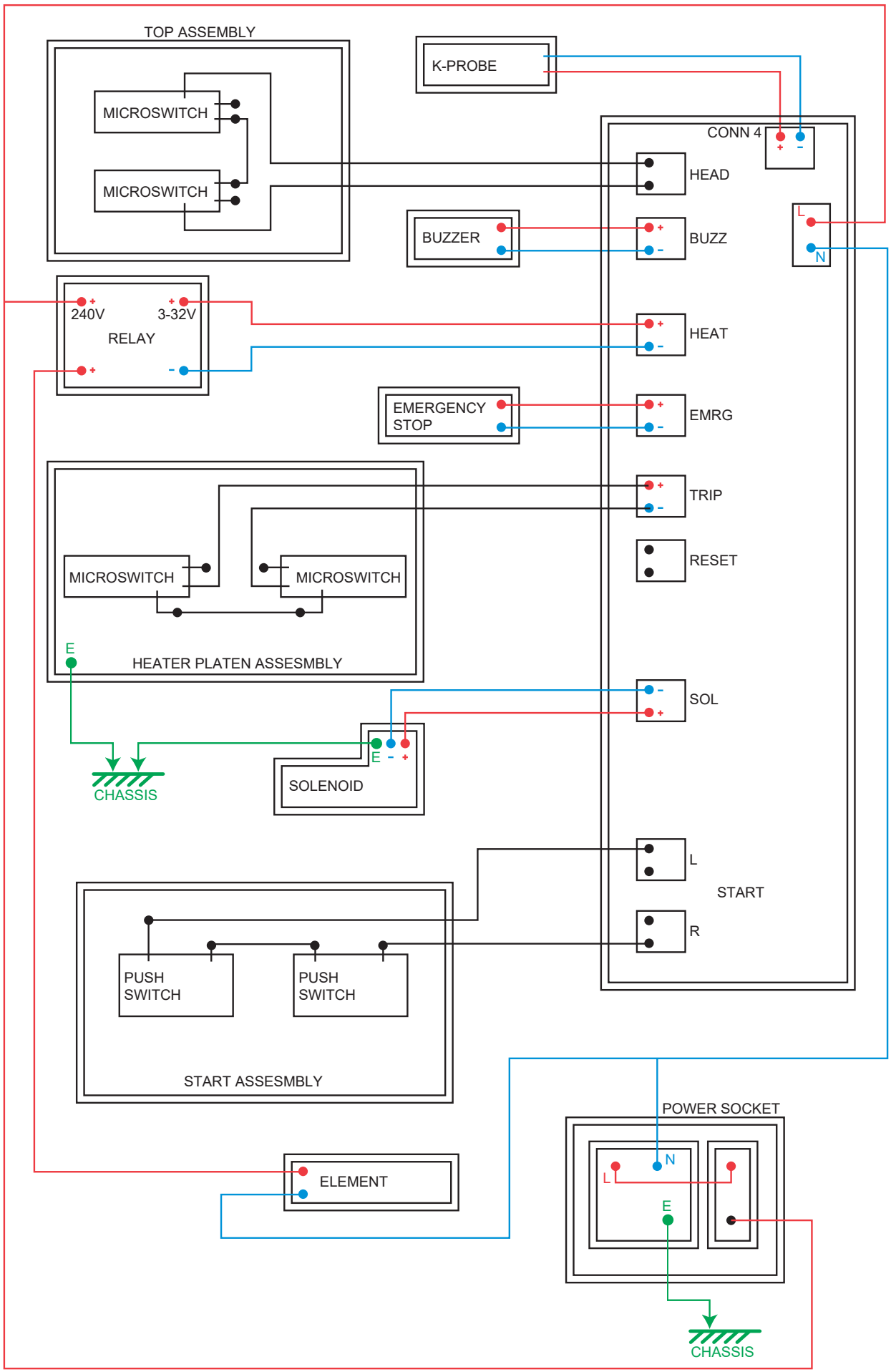
TROUBLESHOOTING FLOW CHART

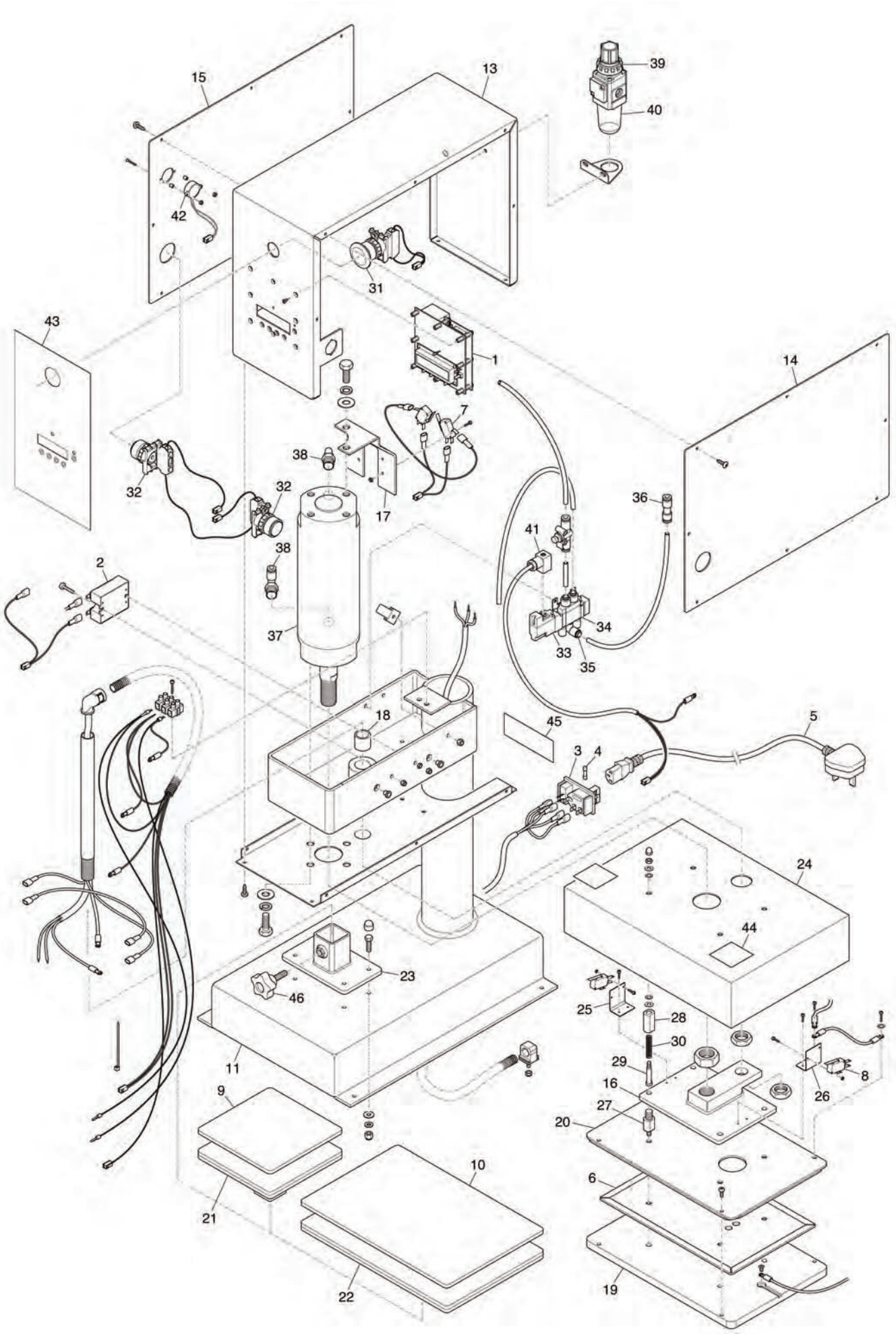
NB - Seal Deal customers - please simply return the machine to J&A (Keep in mind repairs to non wear and tear damage is chargeable under the Seal Deal agreement.)

When placing the machine in the returns box please disconnect the power cable and place in the box loose.



WIRING DIAGRAM




15
13
39
40
42
31
43
1
14
7
38
32
32
17
36
41
2
38
37
34
33
35
18
45
5
3
4
24
44
23
46
25
28
30
29
16
27
20
8
26
11
9
10
6
21
22
19

Item	Stock Code	Part Description	Quantity
1	127426	Computer	1
2	127431	Solid state relay	1
3	127432	Snap in Power socket	1
4	127433	Fuse for above	1
5	127406	Power Lead	1
6	127407	Element 12 x 8	1
7	127408	microswitch	2
8	127409	High temperature microswitch	2
9	127402	Silicone rubber pad 6 x 6	1
10	127403	Silicone rubber pad 12 x 8	1
11	127404	Base	1
12	127434	Cover Base	1
13	127435	Cover Top	1
14	127436	Cover R/H	1
15	127437	Cover L/H	1
16	127438	Top Platen	1
17	127439	Microswitch bracket	1
18	127440	Top Bush	2
19	127441	Aluminium Top Plate 12 x 8	1
20	127442	Element Cover 12 x 8	1
21	127401	Base platen top 6 x 6	1
22	127400	Base platen top 12 x 8	1
23	127444	Base platen bottom	1
24	127445	Guard 12 x 8	1
25	127446	High Temperature Microswitch brkt L/H	1
26	127447	High Temperature Microswitch brkt R/H	1
27	127448	Platen Assembly Spacer 1	4
28	127449	Platen Assembly Spacer 2	4
29	127450	Platen Assembly Pin	4
30	127451	Platen Assembly Spring	4
31	127410	Emergency Stop Assembly	1
32	127411	Start Button Assembly	2
33	127415	12V Pneumatic Solenoid	1
34	127416	Solenoid Silencers	2
35	127417	Solenoid Air Fitting	1
36	127418	Non Return Valve	1
37	127419	Cylinder	1
38	127420	Air Fitting for Cylinder	2
39	127421	Regulator	1
40	127422	Regulator Air Fitting	1
41	127423	Airflow Regulator	1
42	127594	Buzzer	1
43	127424	Front panel label	1
44	127425	Hot Label, 12x8	2
45	127617	serial number label	1
46	127628	Base Knob	1

OPERATING THE MACHINE

1 Practice on some scrap garments or cloth before tackling something of value! Some handy practical advice is given on pages 4 & 5 and if you are new to heatsealing we recommend familiarising yourself with this first.

2 Check the display is showing the correct parameters for the type of decoration and change if necessary.

3 Place the garment/item to be decorated over the base pad

4 Carefully position the badge or transfer on the garment.

5 Push the two green buttons either side of the 40-40
During the heatsealing process it is possible to see how many seconds of the dwell time remain by selecting the count down read- out. (see page 3)

6 CARE
AFTER HEATSEALING, THE BASE PAD AND GARMENT WILL BE HOT

7 If the applied decoration is a transfer , peel away the transfer release paper. Check with the parameters to see if this needs doing straight away or when the garment and decoration have cooled.

8 At any point in the process the Emeregency stop can be pressed to stop the machine.

Emergency Stop

GREEN Start button

Heated Plate

Base Plate

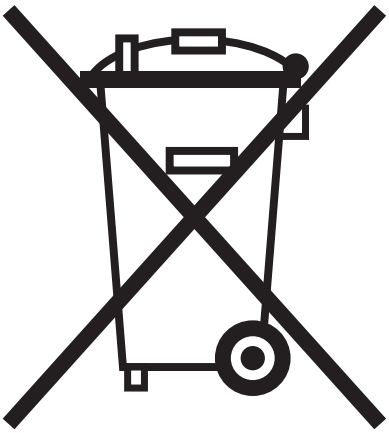
Display & Controls

GREEN Start button

Base Plate removal / replacement

WASTE FROM ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE) REGULATIONS

Your heatseal machine comes under the WEEE Regulations and is marked with the following:



When you need to dispose of your Heatseal machine please contact J&A International Ltd on 01790 752757 to arrange disposal.