3040 HEAT PRESS

OPERATORS MANUAL
V3

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

3040 HEAT PRESS

CONTENTS

J&A (International) Limited

GETTING STARTED

SETTING UP

1 Carefully remove the 3040 from the delivery box. KEEP THE BOX AND PACKAGING!
2 Place the 3040 on a solid, level surface at a comfortable working height. It is good practice to fasten the machine to the working surface to stop it moving around during operation.
3 Plug the 13 amp fused plug in to a 240V power supply.
4 Switch on a the rear of the machine. (Red switch)
5 The 3040's display shows the temperature (PIC A) of the heated plate and the target temperature. You will note that the head temperature will now start to rise towards the target. Once the target temperature is reached the machine will regulate itself and keep the head temperature at +/-10 Degrees of the target temperature.
When the temperature is out of operating temperature range the light will display RED and turn GREEN once the machine is within range.
Only commence a heat-sealing process when the light is GREEN. If the light is RED when a heat-sealing cycle is started the warning buzzer will sound and the display will read 'FAULT: WAIT NOT WITHIN BAND'
6 CARE – the heat-sealing head will become HOT. The base will also become hot with use.
7 The various parameters i.e. temperature, pressure and length of heat-sealing for various J&A heat-seal products are given on pages 6 & 7. To change the various parameters on the 3040, see page 3.

PIC A

PIC B

PIC C

HEAT-SEALING

1 Practice on some scrap garments or cloth before tackling something of value! Some handy practical advice is given on pages 5 & 6 and if you are new to heat-sealing we recommend familiarising yourself with this first.
2 Swing the heat-sealing head out of the way (PIC B) to give a clear view of the working area.
3 Check the display is showing the correct parameters for the type of decoration and change if necessary – see No 5 above.
4 Place the garment / item to be decorated over the base pad. (PIC C)
5 Carefully position the badge or transfer on the garment.
6 Grip handle and swing head back across as far as it will go so that it lines up with the base pad.
7 Pull the handle down as far as it will go. It will remain 'locked' in this position throughout the heat-sealing dwell time and does not need to be held down. You can however stop the heat-sealing at any time during the dwell period by simply lifting the handle up.
8 When the dwell period is complete a buzzer sounds. Lift the handle and swing the heat-sealing head out of the way. During the heat-sealing process it is possible to see how many seconds of the dwell time remain by selecting the 'count down' read out (See page 3)
9 CARE – After heat sealing the base pad and garment will be hot.
10 If the applied decoration is a transfer, peel away the transfer carrier. Check with Page 6 to see if this needs doing straight away or when the garment and decoration have cooled.

CHANGING THE SETTINGS

GENERAL
The three important factors for a heat-sealing process are time, temperature and pressure. The correct settings for each J&A product are found on the heat-seal parameters chart. (Page 6)
Each of the three settings may be changed on the 3040 as below.

Generally, the left (<MENU) and the right (MENU>) buttons move the display from one parameter to the next.

The button (+) increases, and the button (-) button decreases respectively the displayed setting.

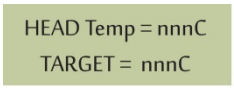
TIME
Press the (MENU>) button until the time screen is displayed (shown below).

Press (+) or (-) until the desired dwell period (in seconds) is shown.
When heat-sealing, the countdown display counts down from the dwell time to zero at which time the buzzer sounds and the display reads 'FINISHED RAISE HEAD'

Representation of display screen only.

TEMPERATURE
Press (MENU>) until the temperature screen is displayed (appears as below).

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



Representation of display screen only.

PRESSURE
CARE both top and bottom heat plates become hot during operation.
To increase the pressure between the heat plates rotate the bottom anticlockwise. To decrease the pressure rotate the plate clockwise.

COUNTER
The count registers the number of cycles completed and may be reset to zero as follows.
Press the (MENU>) button until the following screen appears:

Representation of display screen only.

NB The cursor is at the left of the digits.

Now press the (+ -) buttons together.

WARNING MESSAGES

DISPLAY READS	THIS MEANS	ACTION TO TAKE
WAIT NOT WITHIN BAND	Machine temperature is more than +/- 10 Degrees 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 Degrees C	Switch off. Allow to cool. NB – if the display temp is more than 15 degrees above set Temp – there is probably a Fault – switch off and return to J&A for repair.

CHANGING THE HEAT PLATES

BOTTOM PLATE
To remove the existing bottom plate – Swing head of machine to the side to give clear working access to the bottom plate. Simply pull out the bottom plate and change.

Rotate the bottom plate to increase or decrease pressure between the plates.

- Clockwise – decrease pressure
- Anticlockwise - increase pressure

TO INSTALL REPLACEMENT PLATE
Insert post of bottom platen into the receptacle on the machine.

TOP PLATE
The top plate can only be changed by returning the 3040 machine back to J&A (International) Ltd.

HEAT SEALING BEST PRACTICE

Basically the heat seal machine procedure comprises of 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 to download from the J&A International Website http://www.ja-int.co.uk
The parameters quoted are guidelines which are satisfactory for most fabrics but please read the points below and bear in mind they may occasionally dictate the 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 is required. Ther eis no exact formula to determine the time required – simply experiment with the particular fabric you are using as to what dwell works best.

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.

OPENING OUT GARMENTS
Wherever possible, only heat seal on to 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, pre-heat the area of fabric to be

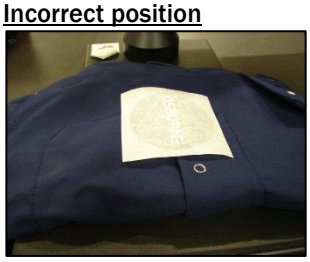
decorated using the heat seal machine before applying the badge or transfer as this can evaporate away or 'burn off' the finish in this area.

ADHESIVE SHOWING ROUND EDGES 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 heat-sealing 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 the lowest possible for the type of product used.

Correct position

Incorrect position



HEAT SEAL PARAMAETERS

For all heatseal parameters for all products please see the J&A (International) Ltd website at http://www.ja-int.co.uk

ROUTINE MAINTENANCE

3040 not working? – See troubleshooting guide on page 8.

Occasionally clean the 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 the reading on the display. The measure the inter-plate temperature you will require a digital thermometer fitted with a thin thermocouple.

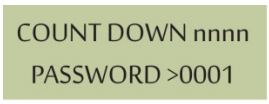
PROCEDURE
With the machine set at its usual temperature and dwell time, bring the head down sandwiching the thermocouple between the top plate and rubber base pad. Repeat 3 times allowing a few seconds in between, this allows the machine base pad to absorb heat and therefore replicate the operating temperature. On the third hit take the reading from the digital thermometer and this will give you an indication of the running temperature, and determine if the machine requires recalibrating.

CALIBRATION
Carry out the test above to determine if the 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:

Representation of display screen only.

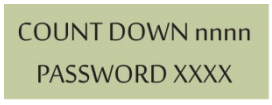
The '<' symbol indicates the the right hand two of the four digits may be adjusted by using the (+) or (-) buttons.

Then press the (MENU>) button to change the display to:



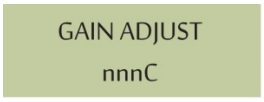
Representation of display screen only.

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



Representation of display screen only.

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



Representation of display screen only.

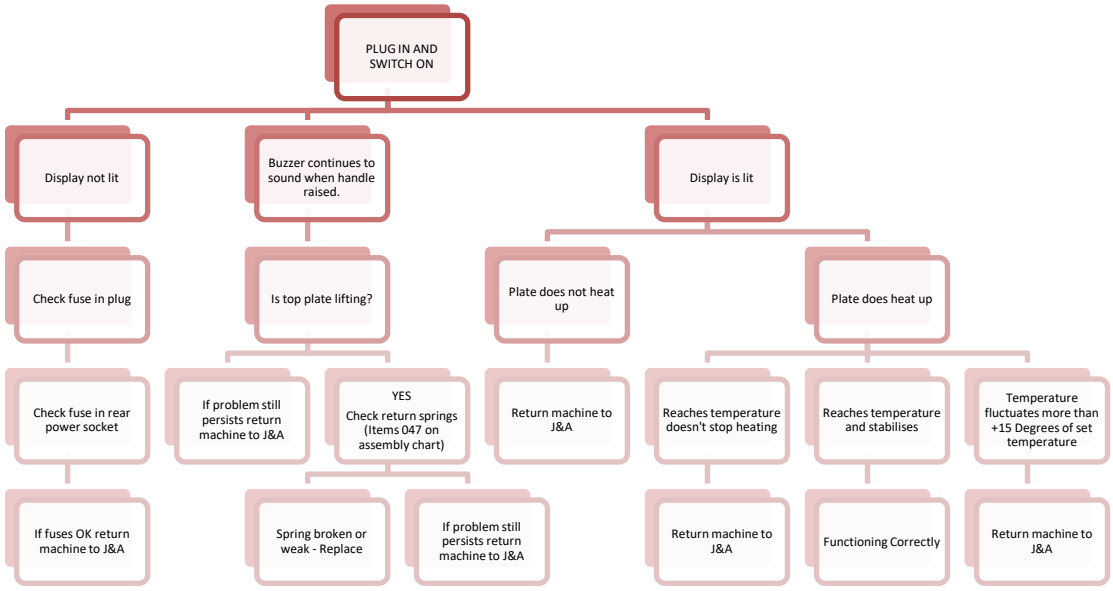
This screen is displaying the temperature between the plates and can be adjusted to read the same as the thermocouple by using the (+) or (-) buttons.
Once the temperature has been calibrated the 'GAIN ADJUST' screen may be disabled again by simply reverting to the password screen and altering the display digits to anything other than the password '0101'

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 service gives your machine a complete overhaul with a change of key components for a minimal fixed outlay each year.

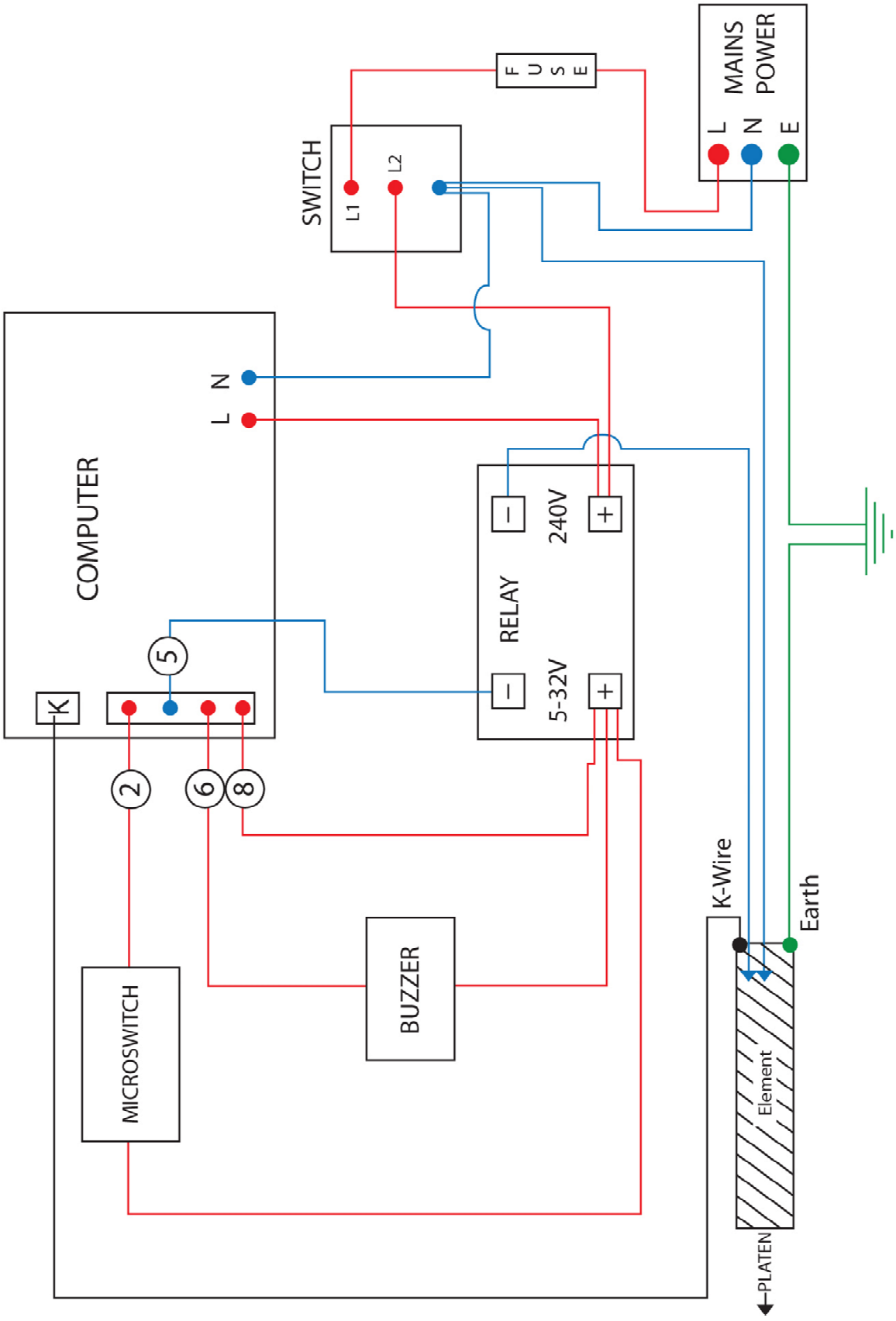
TROUBLESHOOTING

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 return box please ensure all packaging is placed around the machine.

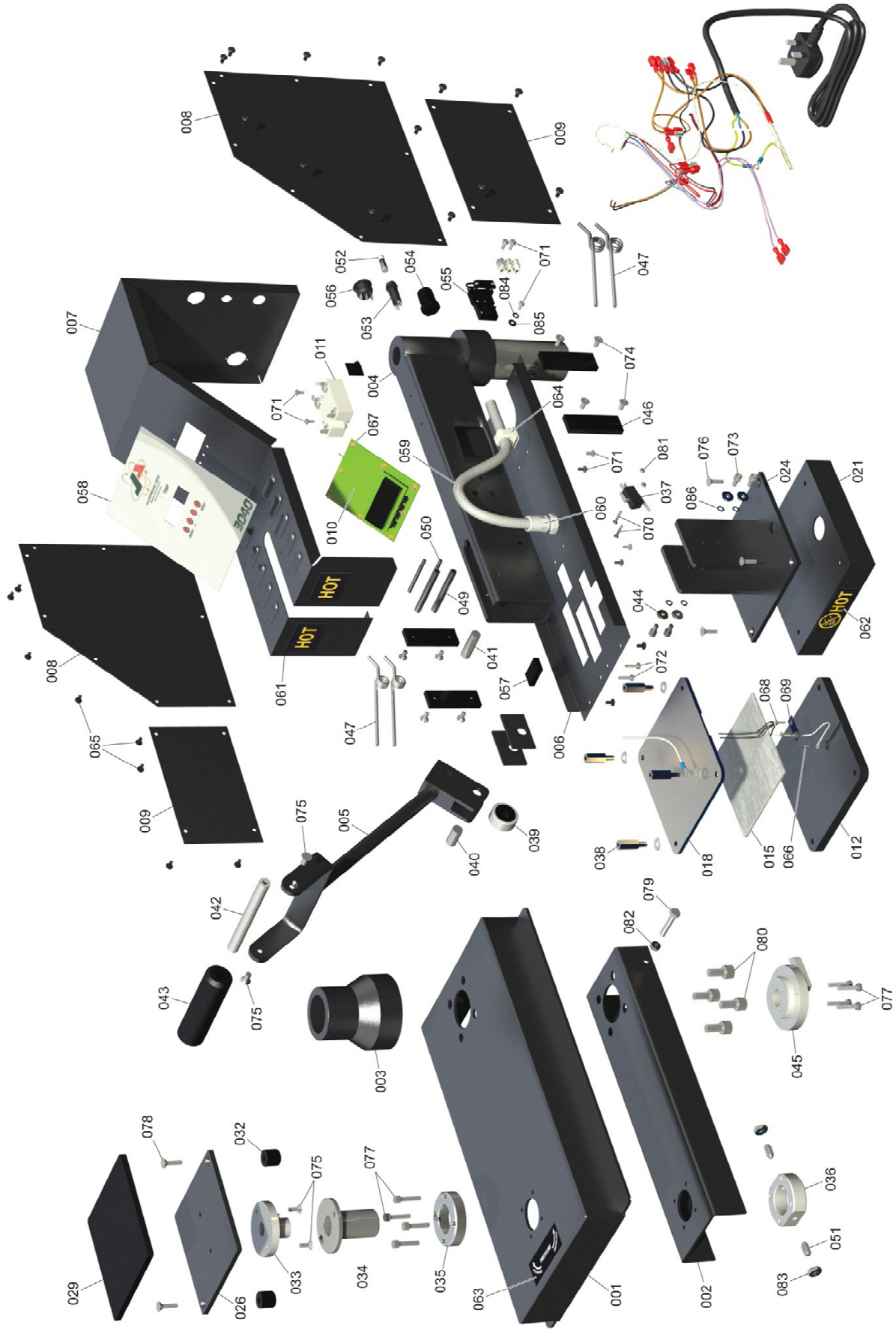


WIRING DIAGRAM

Below shows the wiring diagram for the 3040 machine:



MACHINE ASSEMBLY



PARTS LISTING

Item	Stock Code	Part Description
001	002	Base
002	003	Base Strengthener
003	005	Arm Bush Guide
004	010	Arm
005	053	Handle
006	064	Cover Bottom
007	065	Cover Top
008	066	Cover Sides (Electrics)
009	067	Cover Sides (Springs)
010	076	Computer
011	079	Solid State Relay
012	025	Aluminium Top Plate 6x6
013	027	Aluminium Top Plate 12x8
014	029	Aluminium Top Plate 13x13
015	098	Element 6x6
016	090	Element 12x8
017	091	Element 13x13
018	030	Element Cover 6x6
019	032	Element Cover 12x8
020	034	Element Cover 13x13
021	021	Guard 6x6
022	022	Guard 12x8
023	023	Guard 13x13
024	014	Top Platen 6x6
025	015	Top Platen 12x8, 13x13
026	039	Base Platen 6x6
027	040	Base Platen 12x8
028	043	Base Platen 13x13
029	095	Silicone Rubber 6x6
030	097	Silicone Rubber 12x8
031	099	Silicone Rubber 13x13
032	073	Base Platen Knob
033	050	Platen Collar
034	046	External Threaded Adjuster
035	047	Internal Threaded Adjuster
036	049	Base Collar
037	093	Microswitch
038	Contact J&A	Heater Spacers
039	060	Handle Bearing
040	058	Bearing Pin
041	061	Handle Pin
042	056	Handle Roller Pin
043	057	Handle Roller Nylon
044	100	6mm Platen Bearing
045	011	Arm Stop
046	074	Guides
047	101	Torsion Spring 6x6, 12x8
048	102	Torsion Sprint 13x13
049	103	8mm Roll Pin x75mm Long
050	104	5mm Roll Pin x60mm Long
051	107	Heavy Duty Spring Plungers
052	081	Fuse 10A (5 x 20mm)
053	084	Fuse Holder

054	085	Cable Clamp & Panel Fixing
055	086	Terminal Block & Clamp
056	087	Snap in ON/OFF Switch
057	072	Handle Stop Plastic
058	131	Front Panel Label
059	109	Spiraflex Tubing
060	111	Spiraflex Straight Connector
061	125	Hot Label – Square
062	124	Hot Label – Rectangular
063	123	Pressure Label
064	113	Spiraflex Clip
065	Contact J&A	Felt Tapping Screws M4
066	Contact J&A	M3 x5 C/S Pozi BZP
067	Contact J&A	M3 x6 Pan Pozi
068	Contact J&A	M3 x10 C/C Pozi
069	208	Element Cable Clamp Plate
070	Contact J&A	M3 x20 C/S Pozi
071	Contact J&A	M4 x10 Pan Pozi
072	Contact J&A	M4 x16 Pan Pozi BZP
073	Contact J&A	M5 x10 SKT
074	Contact J&A	M6 x12 C/S Allen BZP
075	Contact J&A	M6 x16 C/S Allen BZP
076	Contact J&A	M6 x20 C/S Allen BZP
077	Contact J&A	M6 x30 SKT BZP
078	Contact J&A	M6 x20 C/S BZP
079	Contact J&A	M6 x46 Hex Set BZP
080	Contact J&A	W12 x25 SKT
081	Contact J&A	M3 Nut
082	Contact J&A	M8 Nut BZP
083	Contact J&A	M10 Half Nut BZP
084	Contact J&A	M4 Shakeproof Washer
085	Contact J&A	M4 Washer
086	Contact J&A	M5 Spring Washer

POWER CONSUMPTION

The 3040 machine power consumption varies according the size of platen being used:

6x6 platen – 600W

12x8 platen – 1200W

13x13 platen – 1600W

WEEE LEGISLATION

The 3040 machines comes under the WEEE Legislation and is marked with the follow:

When you need to dispose of the heat-seal machine please contact J&A (International) Ltd on +44 (0) 1790 752757 to arrange a collection and disposal of the machine.