

Swell Form Tactile Graphics Machine

Information / Ordering / Support

If you have any questions or problems, please do not hesitate to contact us. This can be done in a number of ways.

Website www.AmericanTheroform.com

E-Mail Sales@AmericanThermoform.com

Telephone (800) 331-3676

Address American Thermoform
1758 Brackett St
La Verne
CA
91750
USA



IMPORTANT

Please read this instruction booklet carefully before using your Zy[®]-Fuse Heater.
Failure to do so could result in damage to the machine, thereby rendering your warranty invalid.

Please retain all packaging for future transportation.



Swell Form User Guide

Safety Information

GENERAL

1. This machine should only be operated in well ventilated areas.
2. When the machine is used in accordance with the instructions contained in this manual, the machine is CE approved and complies with safety standards.
3. Always disconnect the mains supply lead before opening the case.
4. Use the machine in the correct position, i.e. the fans on top and the power lead to the rear. (Do not block any ventilation/cooling vents)
5. Leave adequate space in front and behind the machine for paper supply and removal.
6. Unauthorised modifications to this machine should not be carried out without supplier approval.
7. Warnings and safety labels must be kept legible.
8. Do not look directly at the lamp whilst in operation.
9. Always allow sufficient time for the machine to cool before opening the case.
10. Avoid any operational action that involves or may generate a hazardous situation.

ELECTRICAL

1. Check the detail contained on the Serial plate is suitable for use in your country before connecting this machine to the electrical supply.
2. The electrical supply to this machine should be fused to 13 Amps (UK).
3. In case of an electrical fault disconnect the machine from the mains supply and refer to the supplier.
4. This machine must be earthed.

Hints and Tips

The first step in creating a tactile diagram with your Zy-Fuse Heater is to produce an image on a sheet of Zy-tex2 swell paper.

You can print your image onto the zy-tex2 swell paper by using a photocopier, a printer or hand drawing with a marker pen or pencil. Hints and tips on using the paper with those products are in a separate leaflet. Braille and Moon text can also be used on the diagrams.

Diagram Production

Handy Hints

1. Keep it simple!! Consider the ability of the VI person. The diagram must match their abilities. If there is too much information on the paper, it will become confusing. When starting, try a variety of samples with the user. This will establish some parameters on what the VI person can and can't understand.
2. Colour can be a very useful tool. It does not rise when put through the heating machine. This would enable information to be put on the diagram that can be read by the helper but is not in the way of the raised images for the VI student.
3. Practise with all the drawing packages you have available. Practise makes better pictures. Use the one that is most suitable to your situation.
4. A tippex bottle is very useful and quick way of correcting diagrams. Diagrams can be photocopied from the book, etc and the unwanted information tippexed out. The finished image can then be photocopied onto swell paper.
5. Make the lines on the image of similar thickness. This will make it easier to fuse.
6. Don't use large expanses of black. This creates difficulties in fusing. It would be better to use a uniform texture.

Examples of the types of tactile diagrams that can be produced include:-

- Maps
- Pictures
- Symbols
- Graphs
- Labels
- Route Maps
- Building layouts

Troubleshooting

ELECTRICAL

⌚ **On/Off Switch does not illuminate**

Connect to the power supply. Check the mains lead is properly connected. Check/replace fuses. Ensure the case is properly closed.

⌚ **Machine has power but does not accept paper**

1. Check that you are feeding the paper into the correct slot.
2. There two safety cut outs. One ensures the machine stops if paper jams, the other is an over temperature cut out.

Switch the machine off and then open it up to check that the rollers are free of paper. Close the machine and switch it on again. This process should clear the paper jam cut out and enable the machine to operate as normal once more.

If the thermal cut out has operated unplug the machine, allow to cool, when reconnected the machine should now operate normally. IF THIS PROBLEM PERSISTS CONTACT YOUR SUPPLIER

Most apparent faults occur due to operator error, therefore please read the instructions carefully. If in any doubt please contact your supplier.

MECHANICAL

⌚ **Machine appears to operate normally but paper not drawn into machine**

You may be trying to put the paper into the exit slot, try the other one and re-read all of the operating instruction.

⌚ **Paper constantly jams in machine**

1. Ensure paper is flat when entering the machine, and that any curl that may have been induced during photocopying has been reduced.
2. The temperature of the machine is set too high making the paper curl during processing.
3. The diagram has very large solid black areas close to the edges of the page making the paper curl during processing, OR....
4. Roller fault. Contact supplier.
5. Do not re-feed paper through machine any more than 3 times.

⌚ **Paper does not pass smoothly through the machine, machine stops for no reason (appears to judder or stop momentarily)**

The drive belt may have become loose or lost the correct tension. Contact your supplier

Setting Up

1. Position the machine correctly on a firm surface. Fans uppermost, On/Off switch and Dimmer switch top left and the power supply lead socket to the rear. Ensure no loose packaging has entered the fuser.
2. The smaller of the two paper trays belongs at the front of the machine. To connect this tray open the machine (making sure it is not connect to the mains) and place the two small notches in the tray over the screws on the case outer. Press down the tray and tighten the two screws to secure in position. Close the lid of the machine.
3. The larger tray is attached by positioning over the two screws at the back of the machine and pressing down to secure in position.
4. Plug the mains lead into the machine, then plug into the wall socket and turn the supply on.
5. Turn on the neon switch on the top left of the machine, if there is electricity to the machine then it will illuminate and the fans will start.
6. If the neon light does not illuminate check the following: -
 - The mains lead is connected properly;
 - The Wall socket is turned on;
 - There is a fuse in the supplied lead (UK);
 - The fuse is functional (UK);
 - The machine case is fully closed;
 - Refer to the supplier.

The machine is now ready to commence operation

Normal Operation

Separate instructions are provided in this leaflet for the preparation of the images on ZY[®]-TEX2 Swell Paper to the point where the Images are to be developed by the ZY[®]-FUSE Heater.

1. For a diagram of medium line density set the temperature control to between 7-9. Turn the fuser on, the neon light glows and the cooling fans begin working.
2. Place the ZY[®]-TEX2 Swell Paper onto the centre of the small feed tray with the printed side (the side with the image) facing UPWARDS. The paper should be fed in to the Heater portrait orientation (NARROW-SIDE FIRST).
3. Slide the paper forward into the slot in the front of the machine. As the paper enters the machine a bright light will illuminate and pinch rollers will operate. Without hesitating keep sliding the paper forward until it engages the rollers and you can feel it being drawn into the machine.
4. The paper will be drawn through the machine and ejected from the rear. (The paper may not clear the machine completely and should be removed by hand as necessary) Remove this sheet and inspect the results. You may process it again if required or proceed with other sheets.
5. Once the paper has been removed from the machine another sheet can be processed immediately. In between sheets the light will go off and the rollers will stop operating.

(Do not begin to process a sheet until the preceding sheet has been removed from the machine)

Advanced Operation

1. It is necessary to alter the sensitivity of the machine to accommodate different conditions and types of diagram. This is done by adjusting the temperature using the dial on the top left of the machine. It is graduated 0 to 10, 10 being the hottest and 0 the coolest.
2. If the diagram contains very fine detail then higher temperatures may be required to raise it fully. This is especially noticeable if the machine has been stored in the cold or has just begun operation.
3. If the diagram contains large black areas then lower temperatures will be required; this is especially noticeable if the machine has already been in operation.
4. IF CONTINUOUS PROCESSING IS REQUIRED THEN THE TEMPERATURE SHOULD BE ADJUSTED DOWNWARDS WITH INCREASING NUMBERS OF SHEETS UNTIL A STABLE TEMPERATURE IS REACHED.
5. From the above instructions it can be deduced that it is inadvisable to have large black areas and very fine detail on the same diagram, where possible.
6. The feed tray on the ZY[®]-FUSE Heater has been made to fit perfectly the largest size of ZY[®]-TEX2 Swell Paper (A3) and to ensure it is heated evenly whilst passing through the machine. Where other sizes are used (e.g. A4), the narrower edge should enter the machine first, and the paper should be placed approximately in the centre of the tray (NOT AGAINST THE EDGE).
7. Ensure the paper is lying flat on the feed tray before processing. If the paper has curled slightly then this should not effect the Heating process because placing the paper in to the Heater narrow-sided first/portrait orientation should counter-act the curling of the (as this enables the rollers to 'grip' and 'clamp down' the edges).