

NEHOC Australia Pty Ltd

Technical support - Phone:(02) 9979 9700 Fax: (02) 9979 9201
E-mail: support@nehoc.com.au Internet: www.nehoc.com.au

This online version is not printable. A printable version of this manual is available on the NEHOC Training CD (code: CD1) and paper copy included in all NEHOC packages.

Screen Correction Manual

Please take a quick minute to read the following information, as these 5 items will help you avoid the most common printing problems, increase the speed of your printing and importantly ensure you receive clear professional prints from each screen.

1. Artwork Preparation - eliminate moisture & excess carbon prior to imaging
2. Screen Masking Tape - strengthen designs and block solid areas
3. Table Adhesive - stops items moving and eliminates smudging
4. Height Adjusters - Off contact printing using opaque inks onto dark fabrics
5. Correction Fluid - blocks holes in the mesh

#1 Problem is Moisture in Artwork

Did you know paper naturally absorbs moisture, plus some laser printers deposit too much carbon on the paper to image a screen?

It's these two elements, moisture and excess carbon, which cause over 99% of problems when making a screen.

By preparing your artwork before you image a screen, you will eliminate the cause of the problems and not only receive a clear print result but ensure no problems arise whilst printing, such as pinholes from excess carbon in the artwork.



It's important to know there are several methods you can use and you should adapt your preparation method to suit your individual situation, i.e. using a good quality laser print [low in carbon density] immediately straight out of the printer does not always require preparation, as the printer has eliminated the moisture from the paper [when fusing the toner] and the low carbon content of the toner will not lift off and block the mesh.

There are two simple rules which will always apply:

- 1. If laser or photocopied artwork is not imaged within 1 minute of printing it will require preparation to eliminate moisture.**
- 2. If in any doubt, prepare your artwork by eliminating moisture & excess carbon!**

See page 2 for recommended preparation methods →

Artwork Preparation

The quality of your print is directly related to the quality of your artwork and how it is prepared for imaging.

Artwork Clean-Up Paper, [Code: S-155] pictured right, is used with all systems to prepare artwork before imaging, to eliminate the two most common problems that occur.



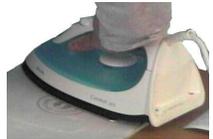
1. Moisture from the artwork - moisture sits inside the paper, under the carbon, causing the bond between the carbon and mesh to become greater than the bond between the carbon and paper when artwork is removed.

2. Excess carbon - sits on top of the design and will lift off to block the mesh when the artwork is removed.

Print Lamp Imaging Systems

For this procedure you will require an iron set to permanent press - STEAM OFF, Artwork Clean-Up Paper [S-155] and a work area which is heat resistant.

1. Set up your machine ready for imaging before you begin
2. Tear off a piece of clean up paper sufficient to cover the design area
3. Place the artwork face up on top of several sheets of paper or a surface that will not be affected by heat
4. Lay the clean up paper on top of the artwork
5. Place the DRY iron over the paper moving the iron from one side to the other, taking no more than 2 seconds to pass over the design
6. Repeat this process a further 3 times [4 passes in total] before lifting artwork and slowly peeling off the clean up paper.



Note: Do not heat for longer than 3 seconds per pass as this will overheat the carbon

7. On a NEW FRESH piece of clean-up paper repeat steps 5 and 6
8. On a third piece repeat steps 5 and 6. By this stage there should be a clear carbon image transferred onto the clean up paper. This is normal, if this is not occurring see 'points to note' below
9. On a fourth and final piece repeat steps 5 and 6. After this your artwork will be warm and paper noticeably crisp - YOU ARE READY TO IMAGE THE DESIGN.

Full details in your systems operation manual, online and with video demonstrations on the NEHOC Training CD.

Thermal-Copier Systems

The clean up process is performed using the reusable heat lamp in the machine, similar to how a screen is imaged.

It is highly recommended artwork clean up be performed before imaging all screens.



1. Tear off a piece of clean up paper sufficient to cover the design area
2. Place your artwork face up in your Thermal Carrier and lay the clean up paper over the artwork. Ensure the clean up paper covers all the design or this will image to the front of your carrier.
3. Close the cover of your carrier and insert into the machine using the required clean up setting - details in your machines operation manual [general setting is 5-6]
4. Open the carrier and peel the clean up paper off the artwork - you can now image your screen.

NOTE: Some laser printers contain excess carbon and may require a 2nd pass, using a new piece of clean up paper, to remove the excess carbon before imaging.

Making Corrections

Corrections to screens are best done following your very first [initial] test print onto a piece of blank white paper. We are looking for pinholes or marks that require repair, these are generally easily spotted on the white paper.

Perform your first test print on a piece of white or coloured paper, to reveal any pinholes or registration marks that need attention. You can also hold the screen up to the light as this will reveal the pinholes, as pictured right.



→ Leave any remaining ink on the screen as this will 'set' most of the tiny pinholes without the need for correction.

→ If you continue to print after the first print, pinholes and marks will remain open and become more difficult to repair.

Screen Masking Tape [Code: T36]



Masking around the design is not always required, however Screen Masking tape has 3 uses when applied:

1. Tape over the edges from the mesh to the frame to provide strength and stop the mesh from moving on the double sided tape.

2. When printing multiple colours the tape helps reduce ink from previous colours lifting off the fabric and marking the mesh.

3. The most common use is to block larger areas of the mesh where pinholes or registration marks have been used - a cheaper and faster alternative to using correction fluid over large areas.

USAGE: Applied to the back of the screen - film side of the ScreenMaster - leaving a 1cm wide border around the outside of the design, cover the outside area of the screen with Screen Masking Tape. Attach the tape to the back of the screen - film side of the ScreenMaster.

→ Do not tape too close to the design - under 3mm - as the raised edge from the tape may cause ink to bleed on the edge of the design area.



Table Adhesive [Code: HTAH165]



Table adhesive is pressure sensitive glue, applied to the board under your print area to hold the item still whilst printing and stop lifting.

Holding the item still eliminates movement which causes smudges, blurring and misprints, plus is also critical when printing multiple colours.

USAGE: On initial application apply 1 **DROP** per 5cm and spread using card/ paper - allow to soak in and dry before use.

Re-application use 1 drop per 10cm in design area only.

Plastic Height Adjusters [Code: S-9112]

Used to elevate the height of frames for 'off contact' printing, the plastic can also be used for corner registration guides.

'Off contact' printing, also called raised or snap printing, is used when printing non-absorbent surfaces such as glass, metal, plastic & glazed ceramics, but most commonly used when printing Opaque Fabric Ink, which contains a much thicker pigmentation than standard inks.

→ Standard colours will appear transparent if printed on dark colours
→ Full details on Printing Opaque Fabric Inks see Information Sheet #34 in the Training section of the NEHOC web site - www.nehoc.com.au

USAGE: Score plastic to required width/ size using a sharp blade or knife. Snap plastic at score marks to create required Height Adjusters.

Place Height Adjusters under frame in corners to elevate the frame to required height. When the correct height has been achieved, tape Height Adjusters to frame in position using Screen Masking Tape.

→ For correct height see Information Sheet #34



Correction Fluid [Code: S-767]

Pinholes can be caused by microscopic pieces of carbon in the artwork, dust and many other factors picked up by the system when imaging.

Correction Fluid is used to block any pinholes, registration or unwanted marks that appear after imaging your screen, during the test print or during actual printing.

Correction Fluid blocks the mesh and is used on small areas and pinholes using the brush tip of the applicator.

USAGE: Unscrew the lid and use the brush applicator attached to the lid. Carefully brush Correction Fluid over the required area using the applicator.

→ Apply Correction Fluid to the film side of the screen
→ Allow Correction Fluid to dry before starting your printing

Perform another test print to check the screen to ensure the pin holes were blocked, reapply as required.

Important Note

Use caution not to place Correction Fluid over design area or the screen will block and your design will not print, as illustrated right.

If you don't have a steady hand, place your screen face down and steady with your other hand when applying the Correction Fluid.

→ If you incorrectly touch the design, you can use a pin head to CAREFULLY remove the correction fluid

