

COLOR REGISTRATION

REGISTRATION OF COLOR PRINTING ELEMENTS:

Registration in printmaking is similar to registration for a college class. It simply means positioning the plate where it belongs and positioning the paper where it belongs in relation to the plate while printing. Two simple means of registering are described below:

Registration method #1

1) Ink the key plate, the first one made, in white ink. Wipe the plate with paper or tarlatons. This does not have to be a very refined wiping.

2) Cut a 2nd plate the same dimensions as the first and prepare paper by soaking and calendering. The new plate should be coated in advance with asphaltum baked on. This provides a black surface against which the white ink is quite easily seen.

3) The first plate (or key plate) should be run through the press against the calendared paper. Under the plate in the bed of the press should be newsprint or cheap paper that can be sacrificed for purposes of keeping the press clean and for purposes of registration. The cheap paper, the plate, the printing paper, the felts – everything is run through the press to make a normal print.

4) After the plate has run through the press, do not pick the paper up immediately but instead mark the position of the good paper on the underlying cheap paper by putting tick marks around the sides of the paper. It's a good idea to put 3 tick marks on one side and 2 on the other so you can distinguish the sides from each other. Only after doing that should you lift the printing paper from the plate. Do not lift the plate.

5) With a sharp pencil outline the plate on the backing sheet that's on the bed of the press.

6) Now you can lift the plate and place the dark asphaltum plate in its place. Using the tick marks as a guide, you should immediately reposition the printing paper, reposition the felts, and run the whole sandwich back through the press.

7) Assuming that everything remains in alignment, you should have a white impression on a dark background. At this point you can easily trace the forms using a needle and etch briefly the image into the plate.

Registration method #2:

The second technique uses physical restraint to position the plate and paper. There are numerous variations that one can make up using magnets, weights, etc., but this a basic version. In this case the paper is intentionally oversized with a lengthy strip extending on one end. If the paper you have available is too small, you can use Kraft tape and tape a temporary "tail" onto the printing paper. In addition to an extension on the paper, you will need 2 scrap pieces of metal, perhaps as large as the plate itself and, ideally, 2 heavy weights.

1) Once again, the key plate is inked in white or an ink that will show up against black and prepare to print. The oversized piece of paper is laid on top of the printing element with the majority of the excess paper extending behind it. The plate is run through the press far enough to clear the roll, but not far enough to release the paper.

2) The felts and the printed paper are now wrapped back around the roller,

leaving the plate on the bed of the press. Using the left hand to hold down the printing plate, the right hand should slide a scrap piece of metal alongside the printing element. (At this point, if you have a magnet or a heavy weight, that should be placed on top of the scrap metal.)

3) Keeping the left hand on the printing plate, a second copper piece is placed against another edge of the copper forming an "L" shape. Again with a heavy weight placed on the scrap metal, the plate should be locked in place.

4) Once the 2 scrap pieces are secured, you can lift up the original printing plate and replace it with a new one onto which the image is transferred. If you're doing multiple plates, more than 2, it is imperative that you create your L shaped corner in the same place each time. In other words, don't change sides of the plate in the middle of registration.

5) At this point, the scrap metal is pulled away and the paper is lowered over the 2nd piece of copper. The entire sandwich is run back through the press and the image transferred.

Because the pressure of the press is used to hold the paper in place, it has not been moved and is very accurately placed. Because scrap metal has been used to physically control the position of the 2nd plate, it is also accurately positioned. The result should be a very accurate registration. When you print this sequence of plates, you must use the same corner as a guide.