

PRINTMAKING REGISTRATION SYSTEM

by Maurice Fykes III

Several years ago (1999 to be exact) I remember a comment from a fellow printmaker regarding the printing of an edition of reduction prints. Her comment was "reduction prints mean that you ultimately wind up reducing the original number of prints in your edition to something far less than you intended because of a poor registration system."

At that time, Printmakers were using a variety of different registration systems to insure that each printed color printed in the exact location on every print. T-bar, measured marks, masking tape, cutting marks on the print paper, punching holes in the print paper. There were, and still are, an endless variety of registration systems being utilized by relief printers world wide.

I must agree with some of my associates, a few of the current systems are incapable of maintaining accuracy for the entire edition.

I began searching for ways to increase the accuracy and yield of edition prints. I started looking back at my days as a undergrad printmaking student at Pacific Northwest College Art (PNCA), here in Portland, Oregon. Back then I was in love with screen printing. One of the tools we used to maintain perfect registration was the "pin and tab" system. This was a set of two stainless steel pin, and two plastic tabs, taped to each sheet in an edition. The system was almost flawless, and the alignment of each color was spot on. The pins and tabs are also reusable hundreds of times over. This system would be a perfect registration system for woodblocks and linoleum prints, if I could only work out the issue of the pin heads, press roller, and the blankets. I didn't want the pin heads to damage either. Well, I think I've got it! But, before I go any further, I must make this clear. This system is NOT something that will replace any and all existing registration systems being used by relief printers. If your system works for you, keep using it!

This system has worked for me time after time with a few exceptions. Those exceptions usually wind up being "operator error!" That's right, I will always screw the process up somewhere along the way by placing a sheet

on the pins backwards, not securing a tab onto the paper securely, or even worse, pulling the print off of the plate by the paper instead of removing the tabs from the pins first.

Lastly, I have tested this registration with countless students every year since 2000 with out any major problems.

Let's get started!

MATERIAL

Stainless Steel Pins and Mylar Tabs

They can be purchased from TERNES-BURTON Co.

www.ternesburton.com

Book board (the thicker the better)

White Glue such as Elmer's

Two types of tape, Masking and a strong shipping tape

Print paper (tear or cut your paper 1 1/2" larger than the dimensions of your plate. You will trim them down when you are done printing).

Your plate (wood or linoleum)



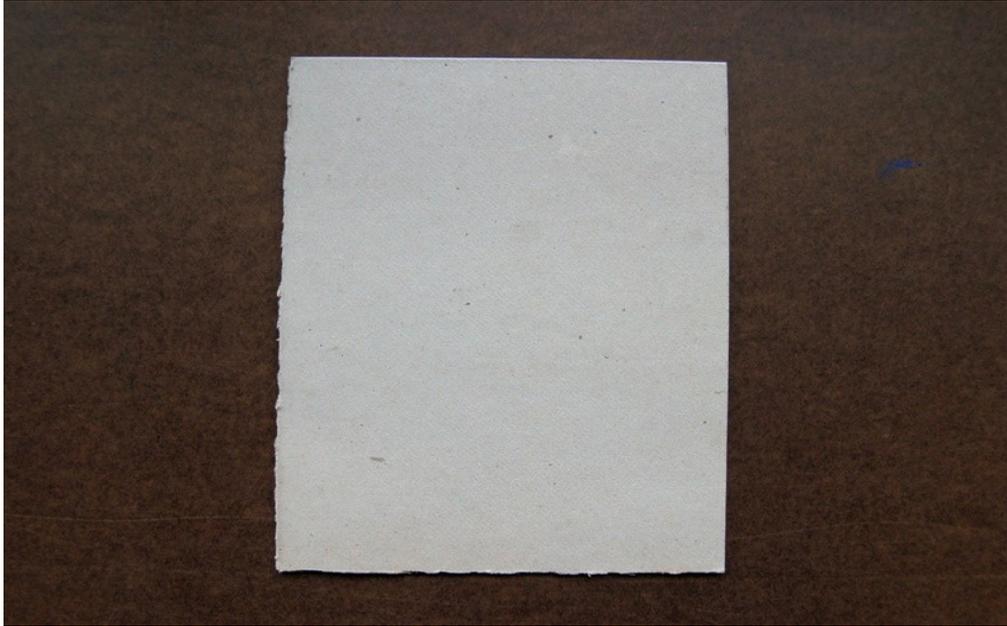
A bag of 1000 Mylar tabs and stainless pins

Pins and Tabs:



The stainless pins are available in over 120 sizes and variations. The ones pictured above are 1/4 .155R. The mylar tabs are punched with two types of hole configurations and are the non-adhesive type.

- Book board (the thicker the better):



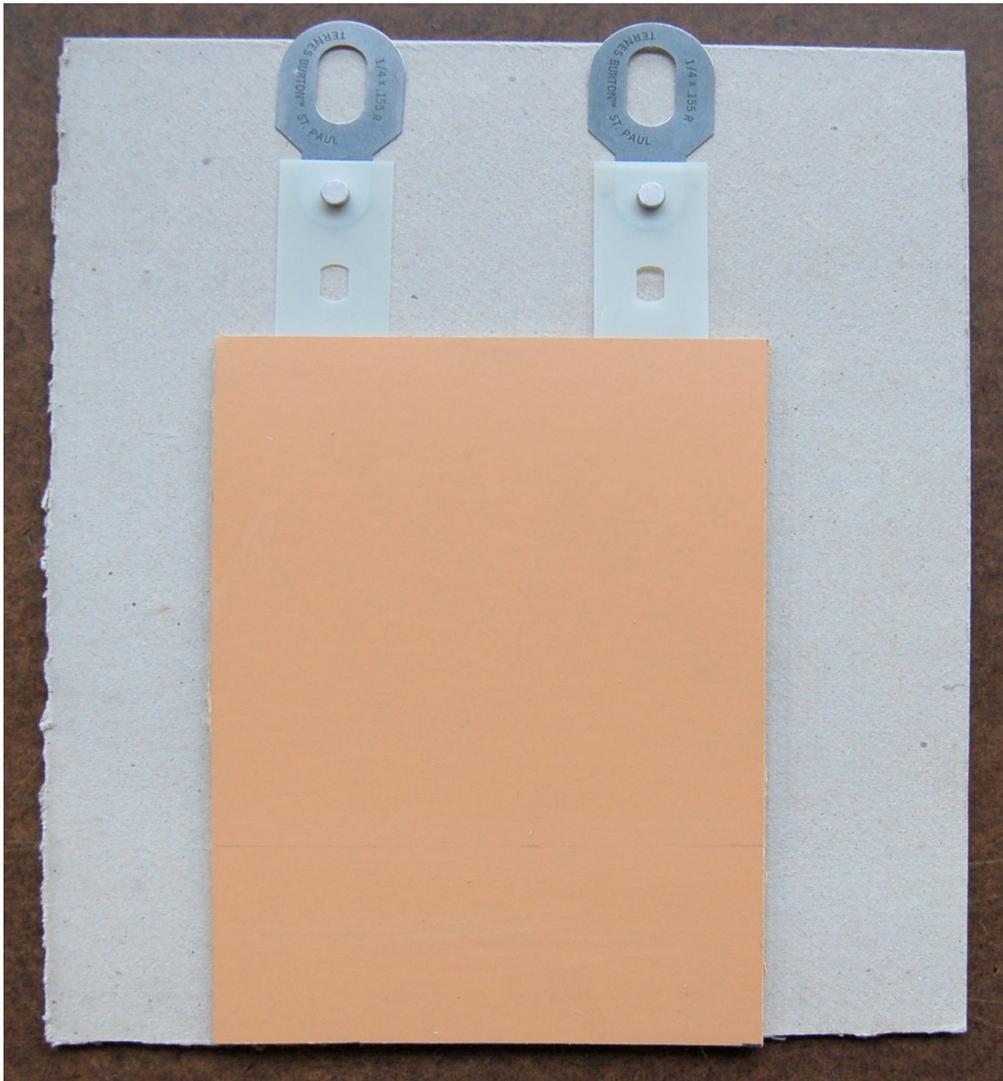
I use book board because Matt board will warp after you glue your plate to it.

White glue and tape:



Position your plate on top of the book board. Above your plate,

position both pins with the two tabs attached, one per pin. Don't glue or tape anything yet, we just need to locate the set of pins in relationship to our plate. The ends of the tabs should touch the edge of your plate but not extend on top of your plate.



Now, the pins, tabs, and your plate are located on your book. Next, take your shipping tape (don't use Scotch tape, electrical tape, or masking tape when securing the metal tabs to the book board). Without moving the metal pins, tape both of them on to the book board. Make sure you press the tape on the pins and book board

firmly.

Next, take a pencil and draw the outline of the plate on to the book board. Remove the plate and apply the white glue within the marked area of your book board. A medium amount will do fine. Spread it around to insure good coverage. Now place your plate in the glued area and press it down firmly. CAREFUL! It will slide on you. Your glued and taped assembly should resemble the example below when you are done.

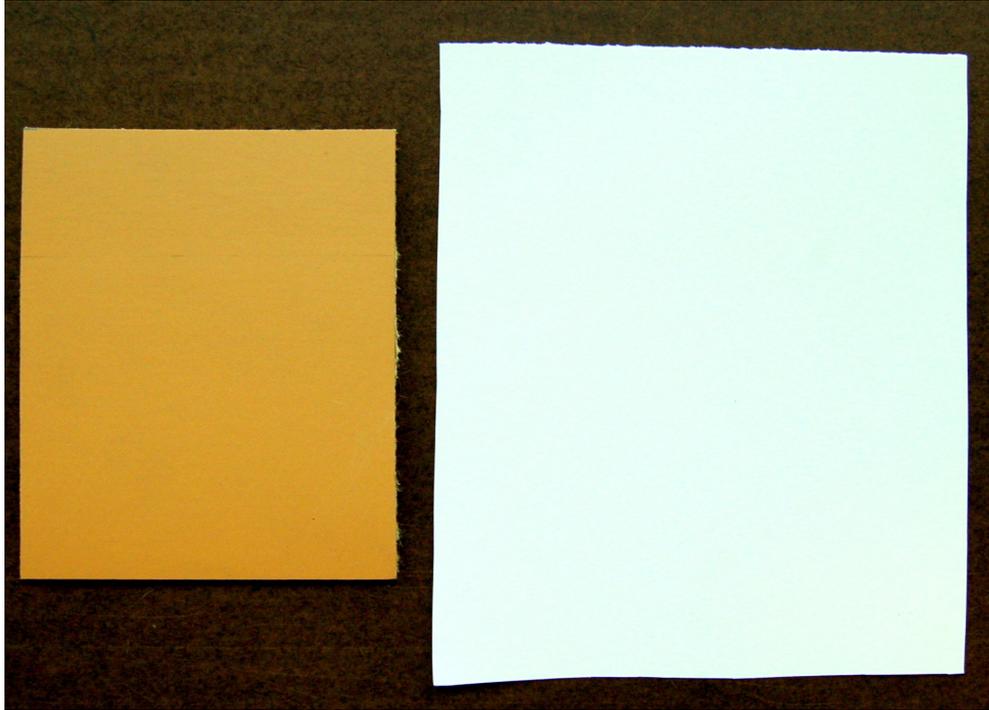


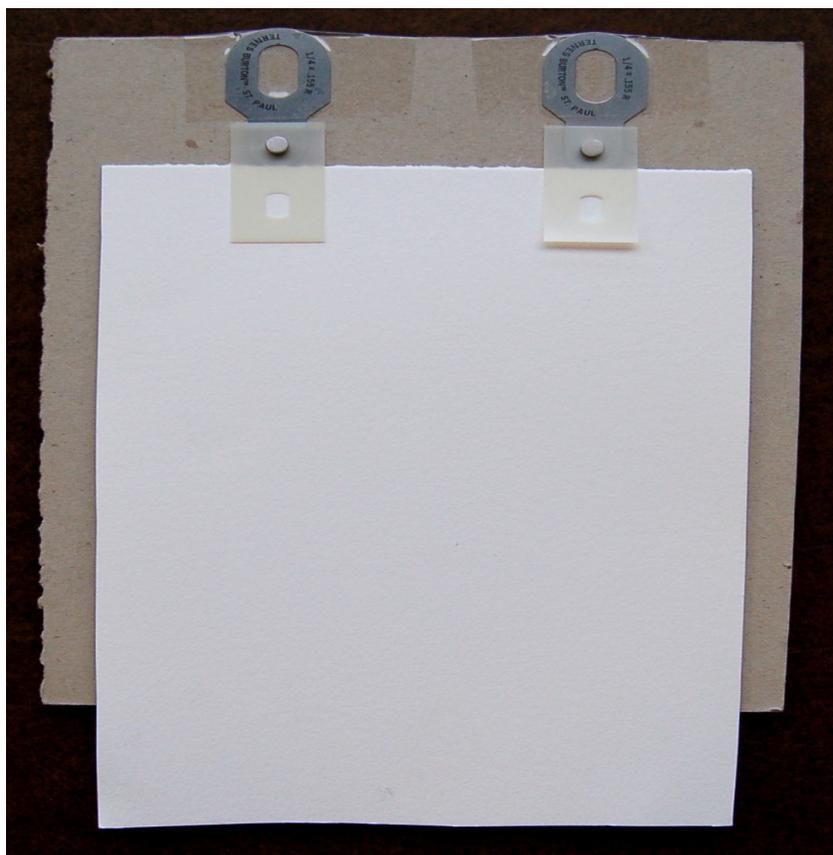
Now place the assembly between two heavy objects to dry over night.

Once the assembly has dried, it's time to register each piece of paper in your edition to the plate.

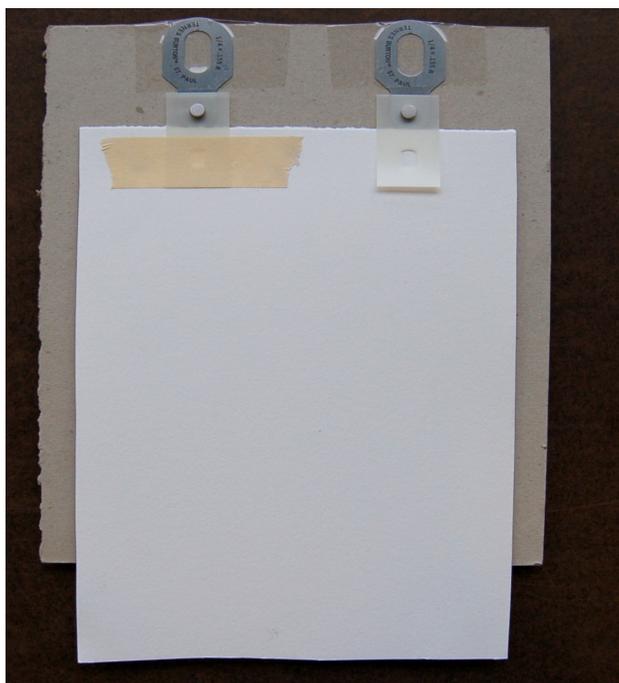
Attaching the tabs to your edition paper will take some time, so get your best Brazilian jazz CD's of Adriana Calcanhotto, Marisa Monte, and Bebel Gilberto and lets get started.

Before you attach the mylar tabs to your paper, make sure that you tear or cut your paper 1 1/2" larger than the dimensions of your plate. You will trim them down when you are done printing.





Take the first sheet of edition paper and slide it under the two tabs as shown above. Remember, your edition paper should be cut at least 1 1/2" larger than the dimensions of your plate so there will be some over hanging. The mylar tabs are positioned so that they will not interfere with the plate during the printing process.



Cut off two pieces of masking tape, enough to cover across the tabs and make contact with the paper. Using your finger, press the tape to the tabs, and paper, **FIRMLY!** If anything goes wrong during the printing process, tab adhesion is the first suspect.



To remove the paper with attached tabs, release the tabs, one at a time, from the pins and set it aside.



Now place a fresh set of tabs on to the pins, slide the next sheet of paper under the tabs, tape it down, and so on, until every sheet of paper in your edition has a set of tabs attached to it.



Now that every sheet of paper is tabbed, its time to print.

But first, it's important to understand how this registration system works. You will notice that everything is "fixed", or attached to the book board. Your plate is never removed from the book board until the completion of your project. The plate is carved, inked, printed, and cleaned while attached to the book board. Before you ink up the plate, set the pressure on the printing press and write the pressure on the face of the book board so you don't forget it. This will also come in handy if other people are using the press with different pressure settings.

Once your plate is inked and a sheet of paper is connected to the tabs, the whole assembly is placed on the press bed, covered with a piece of newsprint and the blankets and then cranked through. Because the pins and your plate are anchored to the book board, the

registration will stay true (as long as you DON'T remove the paper from the pins by pulling on it! Release the tabs from the pins FIRST, then remove the paper).

If I were printing an edition with 6 colors (white, pale yellow, pale blue, ocher, green, and black), I would list the lightest color to the darkest color on the back or front side of the book board, get the pressure reading from the press, and mark it on to the face of the book board.

Since my lightest color is white, I'll use the color of of the paper (if it is white).

1. Carve away all of the areas you want to remain paper white.
2. Next, roll up your plate with your second color, Pale yellow. Print every sheet in your edition with pale yellow.
3. Clean off your plate and carve away all of the areas you want to remain pale yellow.
4. Now, roll up your plate with pale blue and reprint the edition.
5. Repeat steps 3, cleaning and carving away the colors you want to keep and 4 printing each color in order until you have printed the black color.

Your edition should be finished with the printing of the black. If this is the case, remove the tape, tabs, and the metal pins, trim down your paper, and keep the tabs and the metal pins for your next edition. Again, this system isn't the best, but it has made edition work much easier and simpler for me. Feel free to forward any ideas you think will improve this system.

Be well,

Maurice Fykes III
m.fykes@hotmail.com