

SCROLLSAWS

By Jacob von Holzen

SETTING UP YOUR SCROLLSAW;

You have just bought your new Scroll saw and brought it home in its box and put it down on the workbench. You tear open the package and want to start playing with it immediately. But hold on a moment. A good idea is to find and read the manual first. Check that every component is included in the package, and familiarise yourself with the machine and how it operates. Most machines are supplied almost completely assembled, generally leaving only the feet and perhaps the dust blower and guard to be fitted.

POSITIONING;

Your new machine will either be freestanding or require bolting to a bench. Either way be sure to have your work table at a comfortable height. Being in a hunched position while working can become uncomfortable for your spine, shoulders and neck.

Set up near a power point. Avoid trailing power leads. Great things to trip over. If the position you have chosen is not well lit, use a well placed lamp. Natural light is best.

BLADE FITTING;

Most machines come with the blade fitted. It is a good idea to practice changing the blades and tensioning, before you start a serious project, thus familiarising yourself with the particular blade holders on your saw. Some saws require the removal of the blade clamps and securing in a special jig to change the blade. The simplest is a winged nut. Whatever the method, always ensure that the teeth of the blade are facing downwards. Otherwise the blade will tend to pick up the workpiece off the worktable on the upward stroke. Always ensure that the blade is secured tightly in the clamps so it cannot slip out in operation. This could result in a bent blade which in most cases is difficult to straighten.

BLADE TENSION;

There is possibly a scientific formula as to how tight a blade should be tightened. I find the simplest way is to "**ping**" the blade with my finger while tightening the tension nut or lever until it strikes a pleasing high pitch note. Much like tuning a stringed musical instrument. Rely on your ear and practice. A slack blade will curve backwards and trail in the work and make accurate cutting and turning difficult. My philosophy is "**better a tight blade than a slack blade**"

When using your Scroll saw for the first time ensure you have plenty of blades on hand, because breakages will be inevitable.

TILT TABLE STOP;

Using a good small set square, check that the blade is square to the table. Adjust if necessary. Most saws have some form of adjustable table stop. Usually a simple bolt and lock



nut.

Some saws will have a tilt scale. I still like to use a protractor or a bevel square for acute angle setting.

DUST REMOVAL;

Many saws have a dust blower. Usually a bellows with a tube directed onto the work immediately in front of the blade to blow away the dust to keep the saw line clear.

PATTERN TO WORKPIECE;

In most cases you need a design on your workpiece as a cutting guide. There are a number of methods to choose from.

One off; Measurements can be transferred and marked directly onto the timber and cut out.

Tracing Paper; This method involves using a sheet of typist black carbon copy paper to trace the design onto the workpiece. I use a "dry" fine tip ball point pen for this on the rare occasions I use this method. After the piece is cut out all traces of the carbon have to be removed so as not to spoil the finish.

Templates; Made from thin M.D.F. for shapes you will use often.

Photocopies; This is the easiest and most fool proof of methods. I have the master copy of the design photo copied and use the copy. Thus the master copy is saved for future use.

Cut out the components from the photo copy and fix to the timber.

METHOD OF FIXING;

A spray adhesive can be used to fix the photo copy to the timber. The advantage of this method is that the whole of the design is fixed to the timber. The disadvantage is that all traces of glue residue need be removed from the timber after the design has been cut out, or the final finish could be affected.

The method I use is to cellotape the design to the timber. (masking tape could be used instead) This leaves the work clean and free from glue and is easy to peel from the under side of the workpiece. The only inconvenience is that the design only being taped around the edges of the workpiece, fingers need to be kept close to each side of the blade to stop the design from lifting as you cut. I still have 10 digits and have used this method for more years than I can remember. If you keep your fingers on each side of the blade there is no possible way they will be cut.

SCROLLSAW MAINTANENCE;

Periodical checking your saw for loose bolts, nuts, screws, power connection, etc. and oil where necessary. Doing this could add years to the working life of your machine.

Polish the worktable with wax, thus giving a nice gliding surface to turn on while cutting.

End of part 2.