

Help Sheet 1 – Band Saws

(A) The responsible capacity of a band saw depth of cut is usually about 2/3rds of the distance from the table and the depth guide. I.e. if a band saw has a 6" distance it normally cuts up to 4". Extreme care should be taken to feed the timber through at a pace suitable to the power of the band saw or damage may occur to the blade and the band saw.

(B) Care in choosing a band saw blade will save blade breakage. Always select a good quality blade. (A brand name if possible) Seek advice from a woodworking friend. (Learn from their mistakes) Or a saw supplier/manufacturer or dealer. Before installing a new blade, check that the weld is well finished and looks good quality. You may pay a little extra for good quality but it will be a worthwhile investment.

(C) Use the correct blade for the job. There are many different kinds of blades, each with its own speciality. There is no such thing as a general-purpose blade. As a rough guide, if you are cutting thin material with a lot of tight curves you should use a 1/4" or 1/8" blade with fine teeth. I.e. 14 - 24 teeth per inch, depending on the material and the finish you require. Three wheel band saws are particularly good for this purpose. For larger work and straight cuts such as planking or ripping we would recommend the larger two wheel saws. Straight cutting done with wood thicker than 3 1/2" in depth is better done with a 1/2" blade with 4 teeth per inch.

(D) Spend some extra time setting up your band saw. It will pay you back in the long term. Make sure the machine is unplugged. Adjust all guides back. (Both top and bottom) before you fit the new blade. Then fit the blade following the manufactures instructions. Turn the wheels by hand as you adjust the blade tension, this will allow the blade to find its natural position. **Do not over tension!** If your blade does not behave well consult your handbook for advice on tension and tracking. Once the blade is settled and looks OK, close the band saw and replace any guards and switch on. Run the saw for a few minutes to settle the blade into its natural position on the wheels then switch off and unplug from the mains. Adjust the guides to support the blade. As a rule the back supports should just miss the back of the blade. The side guides should also support without gripping. A good tip is to put sticky tape around the blade. Adjust the guides snug up to the tape and then remove the tape. This will leave sufficient gap for the blade to run smoothly through. Do not trap or push the blade out of line with the guides, they are there to support and keep the blade in line. They are not designed as an adjustment aid. Make sure that the blade teeth are set proud and clear of the front of the guides. If the blade is out of line and will not cut straight, it is probably the table that requires adjustment. Consult your handbook for instructions on the table alignment.

(E) Good blade maintenance and care will extend the life of your blade considerably. Cutting man made timber like MDF, plywood and chipboard will blunt a blade very quickly. It is a good idea to keep one blade for this purpose, remember **a blunt blade is no ones friend!** Pushing hard on a blade will tend to damage the set and lead to inaccurate cutting. You may also twist the blade; this will tend to increase breakages. If you are storing your blades when not in use, give them a light coat of oil and hang them in a dry place away from any danger of being crushed or bent. A good idea is to hang the blades on wooden pegs. Use three pegs for storing blades in different stages of their working life.

Peg "A" For new blades.

These should have a perfect set on them and are ideal for straight cutting. Do not cut circles with blades from this hook until you have had the best out of them. Sooner or later the set will go off slightly and the blade will not be as accurate as it was when new. This is the time to store this blade on peg "B".

Peg "B" For circular cutting blades.

This is where circular cutting blades are kept. A perfect set on the blade is not important for circular cutting.

Peg "C" Rough cutting blades

This is for storing blades that are past their best for straight and circular cutting. These blades can be used for rough cutting of MDF, chipboard and timber that may have grit or a hidden nail in it. It would be a shame to spoil a good blade cutting these materials.

When a blade is looked after in this way it will last some time. Blades usually break due to stress fractures. These will start at the back corners of the blade and are caused by constant straightening and bending. A good tip is to round off the back corner of the blade with a small oilstone. Just slightly rounding off the back of the blade will extend the blades life considerably. ***Much care must be taken NOT to get your fingers on the teeth while the blade is running.***

(F) Be safe, be kind to your band saw it will be a good friend.

As with all tools, always read and fully understand the manufacturer's instructions and safety information. Always wear suitable safety equipment, keep children and pets away from power tools and areas where work is taking place, and always think about what you are doing and use common sense.