

The following must be read in conjunction with SP01 General Workshop Safety Rules.

The two 14 inch* bandsaws and 17.5 inch* bandsaw are versatile saws that can be used to perform a wide variety of cuts in wood stock up to approximately 150mm thick. These saws are not capable of making precision cuts and are therefore mainly used to make hand guided curved cuts that cannot be performed on other saws.

The main hazard when operating a bandsaw is accidental contact with the moving blade which can result in serious injury to hands or fingers. Inhalation of fine sawdust is another hazard.

Bandsaw Safety Rules

1. Always check that the blade is tensioned before starting the saw. – *If the blade is not under tension it can come off the wheels at speed and potentially cause serious injury and damage the saw and blade.*
2. Set the height of the upper blade guide bearings to just be clear of the thickest part of the work-piece by approximately 15mm. (*This minimises exposure of hands or fingers to the blade and improves cutting accuracy*)
3. Use a push stick when fingers or hands get close to the blade. Ensure that push sticks are within easy reach before starting the cut.
4. Never start the saw with the blade in contact with the work-piece.
5. Do not attempt to back out of a long cut while the saw is running. Switch the saw off and wait until the blade has stopped then back out of the cut. (*Reason- If the saw is running it is easy to pull the blade off the bandsaw wheels which will result in a damaged blade and possible serious injury as the moving blade jumps forward out of the control of the bearing guides.*)
6. Never use force to make straight or curved cuts – *If force is needed something is wrong. With curved cuts, if force is needed, it is likely that the curve radius is too tight for the blade. The minimum cutting radius is approximately 15mm for the ¼ inch* blades on the 14 inch* bandsaws and 105 mm for the 5/8 inch* blade on the 17.5 inch* bandsaw.*
7. Use a V Block to cross cut or rip cut cylindrical stock. (*Refer to page 2 for details*)
8. Do not attempt to cut an irregular shaped work-piece that does not have a large flat surface in contact with the table directly under the blade. – *Non compliance with this rule can cause the blade to grab; possibly pulling fingers or hands onto the blade and almost certainly bending the blade.*
9. Always use an appropriately designed support jig to cut an irregular shaped work-piece that does not have a flat surface to support the work-piece directly under the blade.
10. If the blade jams, switch the saw OFF before moving the work piece.
11. Do not attempt to remove small “off cuts” that are adjacent to or close to the blade until the blade stops.
12. Never leave a bandsaw running unattended; turn the saw off and wait for the blade to stop before leaving the saw, even if it is for a short period.
13. Unplug the bandsaw before changing the blade or conducting any maintenance.

**Note: The bandsaw size in inches is the distance between the blade and the vertical bandsaw frame. Inches are still used since the mass market for bandsaws is the USA and many manufacturers make machines for that market. Blade size is the width of the blade measured from the tips of the teeth to the back edge of the blade and this is also usually specified in inches.*

Prepared By: Jim Spence Date: 27 February 2013	Approved By: Tony Blair Signature:	Date:	Ver: 01
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Hornsby Woodworking Men's Shed

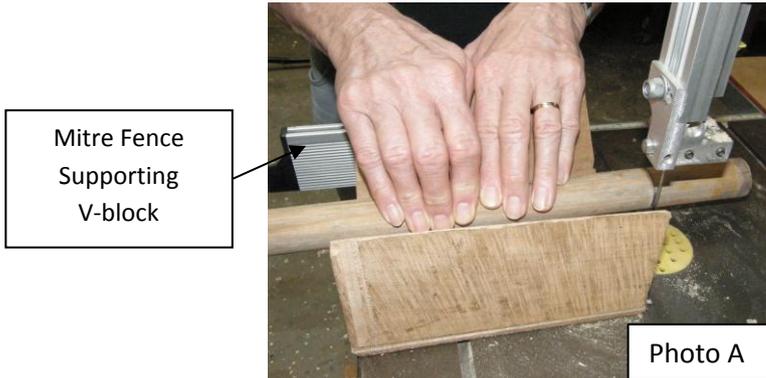
Cross Cutting

Cross cutting means cutting across the grain.

When making straight cross cuts in rectangular stock use the mitre fence to support the work whenever possible.

When cross cutting cylindrical stock a V-block jig or other means must be used to prevent the stock from rotating during the crosscutting operation. If a V block or other support method is not used, it is highly likely the cylindrical stock will rotate when the blade starts to cut. Apart from being dangerous for the operator, the stock may twist and jam the blade usually causing irreparable blade damage. When making straight cuts the V-block should be supported by the mitre fence wherever possible.

Photo A below shows a rod being squared off using a V-block



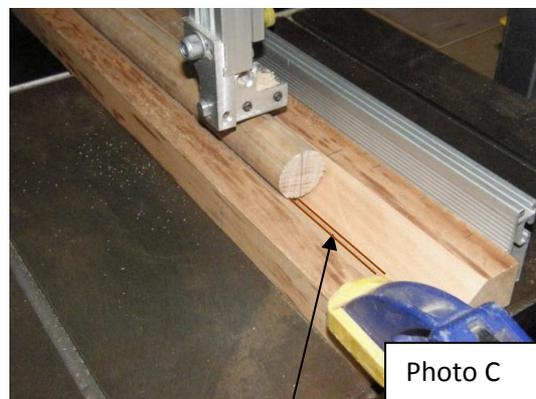
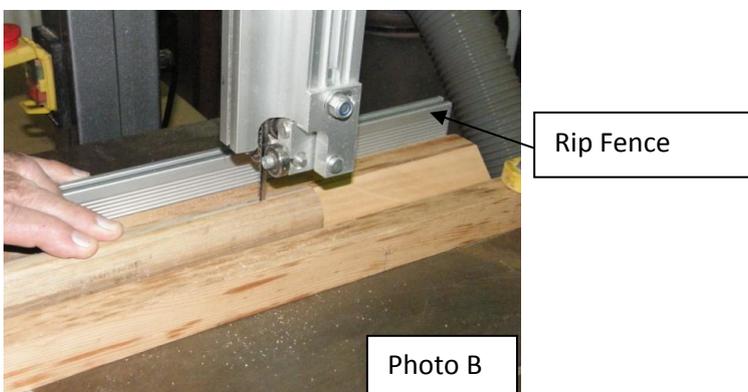
Rip Cutting

Rip cutting means cutting along the grain

When making straight rip cuts use the rip fence to support the work whenever possible.

In most situations a custom jig must be made to support cylindrical stock to prevent it from rotating during the rip cutting process. The desired output of rip cutting round stock varies depending on the project and this will determine the type of custom support jig that must be made to prevent stock rotation.

As an example, Photos B & C show a V-jig for cutting a rod or dowel in half along its axis. A simple custom made V jig similar to that shown below will prevent the stock from rotating. A jig like that in the photos can be made by cutting the V groove on a table saw with the blade angle set at 45 degrees.



Narrow slot in the base of the V. It extends half way along the jig to accommodate the blade and allow the jig to be set up and clamped to the table before starting to make the cut.