

- Turn on your saw and use your Miter Gauge to guide your workpiece through the cut. If the machine bogs down, slow your feed rate. **NEVER** push against the scrap end of the stock with your free hand, as this could cause binding and a dangerous kick-back.
- Turn off the saw and allow the blade to come to a complete stop before removing the workpiece or scrap.

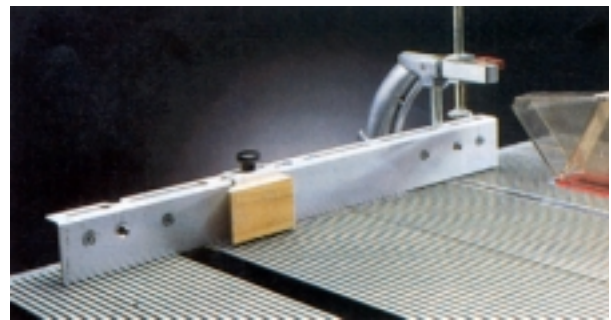
- **Some important crosscutting aids:**

- o When crosscutting long piece of stock, it's best to extend the length of the face on your Miter Gauge to provide additional workpiece support. A wooden Extension Face will provide about a foot of face for your stock to ride against.



**Wooden
Extension Face**

- o Another option is an Aluminum Extension Face. This device will provide a full TWO-FEET of Miter Gauge face for your stock to rest against during the cut. It even includes an adjustable stop that can be set to cut duplicate pieces of the same length.



Aluminum Extension Face

- o If you don't have a Miter Gauge with a Safety Grip, you can apply a strip of abrasive material to your Miter Gauge Face to keep your stock from slipping during the cut.

- o For the maximum in crosscutting convenience – especially when working with extremely long or wide workpieces – consider using a Crosscut Sliding Table. Measuring about 32” wide by 16” deep, it works like a “sled” to guide cumbersome pieces of stock through the cut with extreme accuracy...and safety.



Miter Gauge with Safety Grip

Since this accessory raises the workpiece off the surface of the saw table during the cut, it's best to use an Auxiliary Table (of the same thickness as the Crosscut Sliding Table) on the opposite

side of the main saw table to support the scrap stock and keep it from falling into the blade after your cut has been made.



Crosscut Sliding Table



Auxiliary Table

- o If you have a Model 500 Shopsmith MARK V and you need to crosscut wider pieces of stock, a Front Table Extension will help provide added support at the front (infeed) edge of your Worktable.
- o When you need to crosscut a number of pieces to the same length, a Miter Gauge Stop Rod will help you set and control those cuts....as is the Aluminum Extension Face mentioned previously.
- o If you're planning to make a number of very short (narrow) cut-offs for small projects, the opening in your Table Insert may be too wide to keep these cut-off pieces from falling through and getting caught in the blade and thrown – or sucked-up by your Dust Collector.

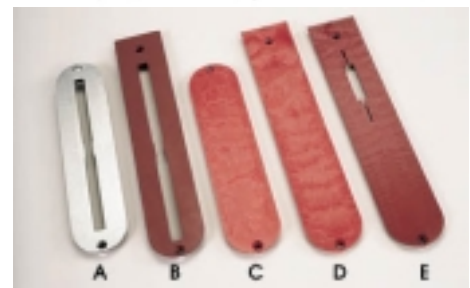


Front Table Extension



Miter Gauge Stop Rod

To avoid this, use a blank Plastic Insert. to prevent this fall-through. Raise the worktable to its maximum height and slide the Carriage to the right, away from the Saw Blade. Unplug the machine and install the blade you plan to use. Replace your standard Table Insert with the Blank Insert. Slide the Carriage back to the left until the Insert is centered over the Blade. Tighten the Carriage. Plug your MARK V in and turn it on (fairly slow speed). Slowly lower the Table down onto the blank Insert, cutting a slot in the center of the Insert.



Plastic Insert - Item D

Ripping

Ripping is the act of cutting your workpiece **with** the grain of the wood – or “cutting to width”.

- When making rip cuts, use a ripping or combination blade and **ALWAYS** guide your stock against a Rip Fence.
- Start by adjusting the distance between your blade and the Rip Fence face to match the desired stock width. Be sure to measure this distance from a blade tooth that is “set” toward the Rip Fence face. **Unplug your saw before taking this measurement.** If your Rip Fence is properly aligned, you need only measure this distance at **one** point.

However, if you're not confident of this alignment – or you're working on a project where the width of your finished board is critical to within 1/32” or so, it's a good idea to measure this distance at **two** points. Here's how. Find a tooth that's set toward the Rip Fence. Rotate this tooth forward until it's just above the saw table surface near the infeed edge of the table. Measure the distance to the Fence face. Rotate this same tooth backwards until it's in the same relative position near the outfeed edge of the table. Measure the distance to the Fence face. If these two distances aren't equal, your Fence is not properly aligned and an adjustment needs to be made.

- Begin your cut with one hand gripping your stock at the back edge in preparation for pushing it through the cut. If you're ripping short pieces of stock, position your other hand at the side of the stock (**forward of the infeed side of the blade**) and pressing in on your stock to hold it firmly against the Fence. This "pressing-in" hand should not be near the rotating blade or pressing the stock against the blade after the cut has been made. If pressure is applied at a point where it closes the freshly cut saw kerf on the blade, a dangerous kick-back will occur. If you're ripping longer pieces of stock where you need both of your hands to safely hold and guide the stock forward through the cut (and the width of your board and the set-up permits), use a Featherboard to hold your stock in against the Fence during the cut. Again, keep the Featherboard forward of the blade so it isn't pressing against the blade or closing the saw kerf after the cut has been made.
- When the distance between your Rip Fence and the saw blade permits, use a Push Block or Push Stick to move the stock through the cut once your "pushing" hand begins to approach the moving blade. When this distance is 1-1/2" to 3", use a Fence Straddler as a safety aid.

- If you're ripping long pieces of stock, be sure you have plenty of workpiece support, both before and after you make your cut. A special Support Table will be an invaluable aid in these situations. It will extend your outboard support 32" on the outfeed end of the Worktable. For even more support, an adjustable Roller Support Stand is recommended.



Support Table

- To keep your long or short workpiece from raising off the table surface while making your cut, use a Rip Fence Mounted Featherboard. It slides into the T-Slot groove in the top surface of your Rip Fence to exert downward pressure on your stock while cutting.



Rip Fence Mounted Featherboard

- As with any sawing operation, always stand off to the side of your workpiece while cutting. Doing so will protect you from being struck by your workpiece or scrap in the event of a kickback.



Roller Support Stand

Making Miter And Bevel Cuts

Miters are cuts made with the face of your Miter Gauge set at any angle other than 90-degrees to your Saw Blade. Miters cuts are made at an angle to the edge of a board and across its width. Most miters are cut at a 45-degree angle with the result being a 90-degree corner when the two mating components are joined together. The two most common uses for this procedure are picture frames and the joining of decorative moldings. However, miter cuts can be made at virtually any angle and for a number of purposes.