

Cove Cutting Jig

Instruction
Manual
Part # 1533



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Cove Cutting Jig Instructions

Introduction

Often used for decorative trim molding and raised panels, coves have become a very popular way to make an ordinary project into something distinct and unique. Coves can be cut on your table saw with relative simplicity using our Cove Cutting Jig. You can cut a wide variety of shapes and sizes by using different size saw blades and by changing the angle of the blade and the Cove Cutting jig itself. You can use standard size saw blades or smaller size saw blades with this jig. If you decide to use a smaller sized blade, you will produce a smaller, tighter diameter cove with a steeper curve. It is generally recommended to use a finer tooth standard kerf saw blade when making cove cuts on your table saw. You could use a thin kerf blade, however a blade with a thicker more rigid body will stand up to the sideways pressure of work piece as it is being fed through the jig and the saw. Now it's time to get started making some cove cuts on our table saw.

But first - let's talk about safety.

Read and follow all safety instructions

Caution:

Please read, understand and follow all manufacturers instructions, guidelines and owners manuals that come with your power tools. Peachtree Woodworking Supply Inc. and its subsidiaries assume no liability for accidents or injuries caused by improper use of this product.

Safety Tips

Creating cove moldings that look like they have been hand cut will add curb appeal or distinction to any of your projects. To get the best performance and results out of your dovetail jig, we recommend the following tips:

1. Always wear safety glasses, hearing protection and dress properly. No loose clothing, hair, draw strings or jewelry that might get caught in moving parts.
2. Keep work area clean. Messy work areas invite injuries.
3. Make deeper or larger cuts in multiple passes and NEVER use dull saw blades. Forcing a deep cut in one pass or using a dull blade can result in injury. Inspect the blade for damage or chips in carbide.
4. Keep all safety guards in place.
5. Always unplug your saw before changing saw blade.
6. Secure you jig. Always use all four miter bar locks when possible. Make sure bar locks are securely lock into the miter slot of your saw.
7. Make sure the jig is clean with no build up or debris for smooth operation.
8. Make sure the blade is rotating freely and not contacting the jig.
9. Follow all manufacturer safety guidelines provided with you table saw.
10. Support longer stock properly so that it does not lift out of the jig.
11. Make sure all four knobs on the steel tie bars are tight and secure before making a cut with the cove cutting jig.

The Cove Cutting Jig Includes:

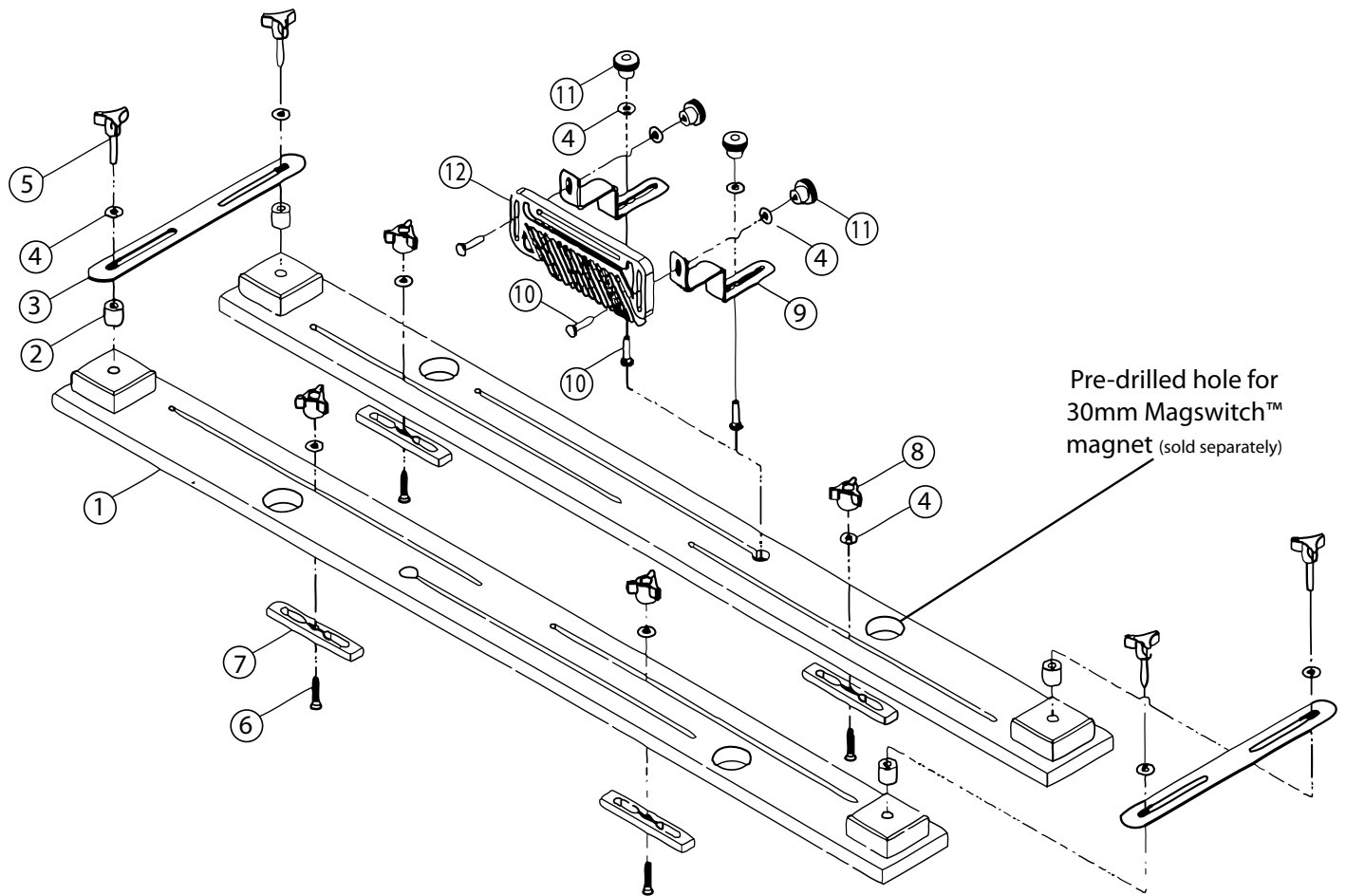
4 Ea. Miter slot locking devices

1 Ea. Featherboard hold down

2 Ea. Jig Rails

All the necessary hardware





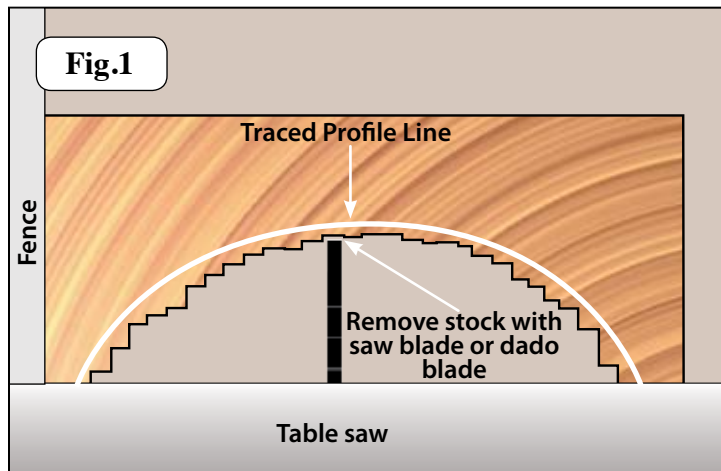
Part #	Part Description	Quantity
1	Guide Rail Fence	2
2	Plastic Washer	4
3	Steel Tie Bar	2
4	Washer	12
5	Stud Knob	4
6	Taper Screw	4

Part #	Part Description	Quantity
7	Miter Bar Lock	4
8	Star knobs	4
9	Feather board Bracket	2
10	Carriage Bolt	4
11	Round Knurled Knob	4
12	Featherboard	1

Cutting Coves

Stock Preparation:

Before setting up the cove cutting jig, you will need to prepare your stock that is to be cut. Make sure your stock is flat and the edges are square. There are two ways to remove stock when cutting coves. The first way is to set your cove cutting jig up and raise your blade 1/8" one pass at a time until you reach the desired depth. The second way is to trace your desired pattern on to the end of your stock piece. Next, begin to remove the majority of the material with multiple saw blade cuts or by using a dado blade. (See **Fig. 1**) You should end up about 1/8" shy of your pattern you traced on the end of your work piece. Doing this not only speeds up the process, it also saves your saw from a lot of unnecessary wear and tear. In this example, we will be using the second method to make our cove cuts.



Caution

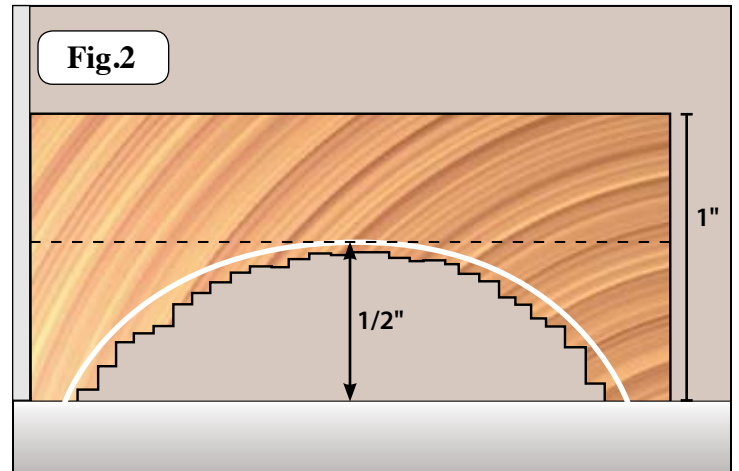
When using the cove cutting jig, do not try to make a full depth cut in one pass, doing so may damage your saw or result in injury

Step #1:

Trace the outline of your desired profile on the end of the stock. Using your saw blade or dado blade, remove the bulk of the material just shy of the traced outline (See **Fig. 1**).

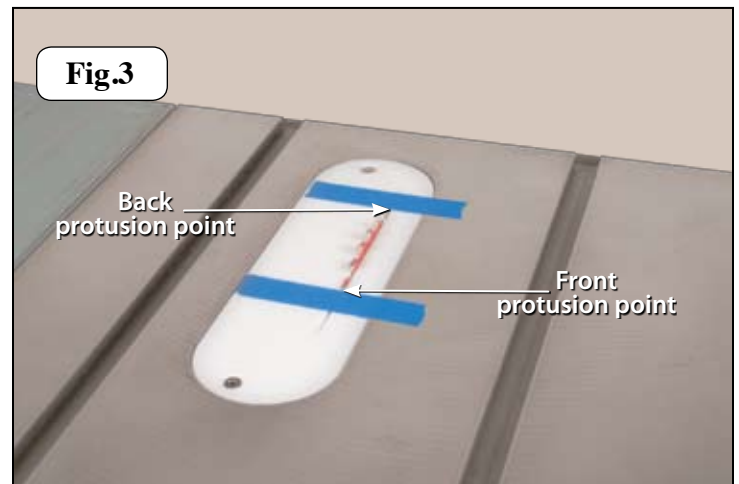
Step #2:

Place the stock to be cut on a flat surface and measure the distance from the flat surface to the upper most point of the traced pattern. The stock we are using is 1" by 4" and the distance between the flat surface and the top of our pattern is 1/2" (See **Fig. 2**). This means the saw blade height needs to be set at 1/2".



Step #3:

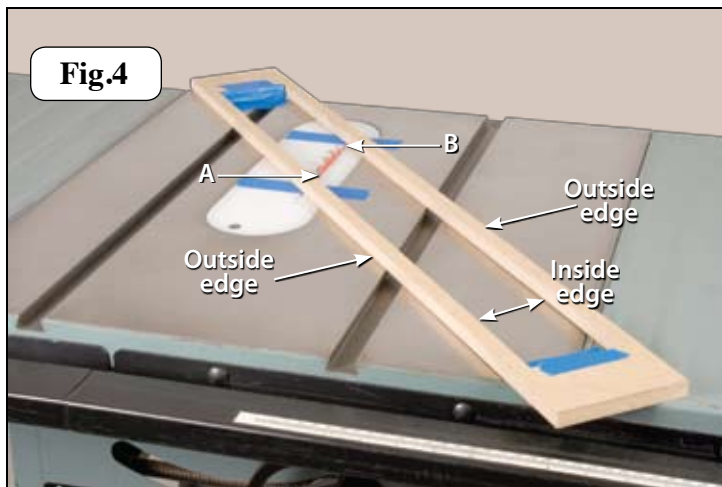
Once you have set the height of the saw blade, use a pencil or a piece of masking tape and mark the front and back location where the saw blade protrude's out of the table top. (See **Fig. 3**).



Step #4:

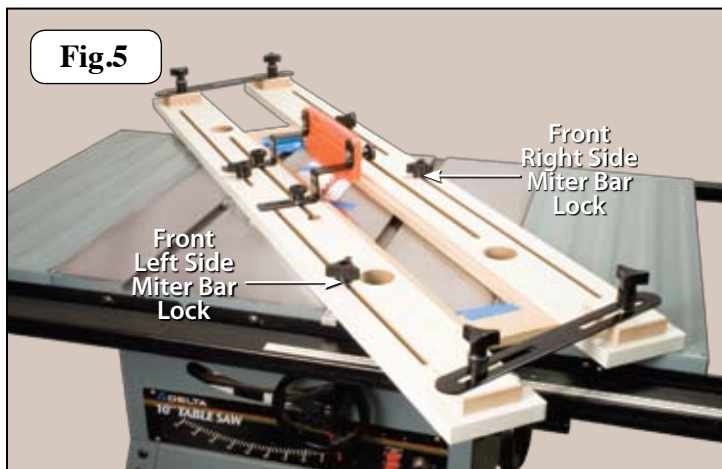
To set the angle of the cove cut, you will need to make a template out of plywood, MDF, or a rigid piece of cardboard. Cut the template to the width of you molding stock and at least 36" in length. Next, cut out the center of the template to the width of your cove pattern. Once you have made your template, place it on the top of your table saw. Align one inside edge with the front of the saw

blade (A) where the saw blade protrudes from the table top (masking tape mark). Align the other inside edge with the back of the saw blade (B) where the saw blade protrudes from the table top (masking tape mark). Place a piece of tape on both ends of the jig to temporarily hold the jig in place (See Fig. 4). We use the template to show us where to position and secure our cove cutting jig.



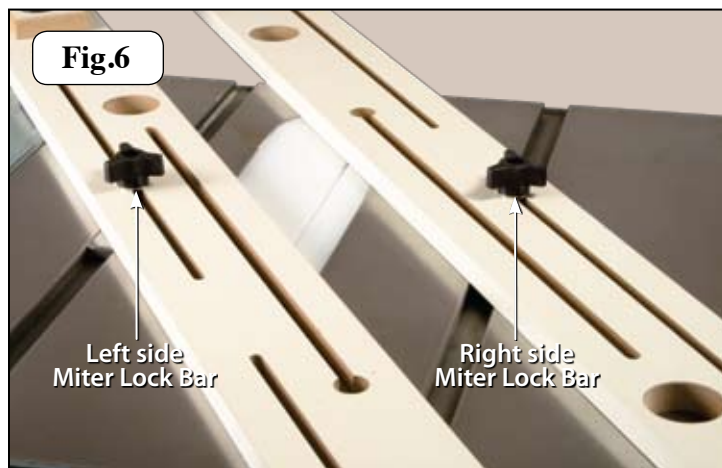
Step #5:

With your cove cutting jig fully assembled and with the knobs slightly loose for adjustability, place both of the inside edges of your jig to the outside edges of your template. When cutting wider coves, the front right and left miter bar locks (part #7) should be installed in the right side miter slot of the saw. The left and right rear miter bar locks (part #7) should be installed in the left side miter slot of the saw. Next, snug both sides of your cove cutting jig against the template and tighten the knobs on the miter bar locks. Once the miter bar locks are secure, tighten the four knobs on the steel tie bars (part #3). Last, adjust the feather board so that it is centered over the saw blade and set just below the top surface of your molding stock. Your secured cove cutting jig should now look like Fig. 5.



Shop Notes:

When cutting skinnier stock or smaller angles, the cove cutting jig may not allow to use all four miter lock bars. Make sure you have at least one miter lock bar secured in each of the table saw miter slots. (See Fig. 6)



Caution

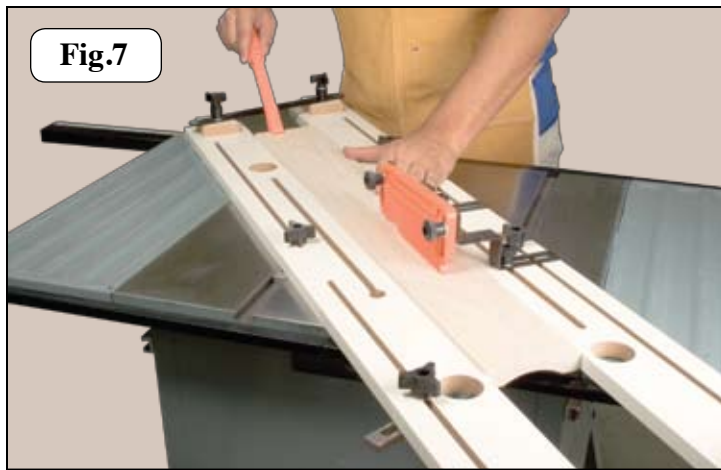
When only using two of your miter lock bars, make absolutely certain that the knobs on the steel tie bars are secured tightly. Failure to do so could let you cove cutting jig move, which could result in a possible kick-back and cause injury.

Step #6:

With your saw Un-plugged, it is always a good idea to check the set-up of your cove cutting jig. With the saw blade set at the proper height, slide your stock with the traced pattern facing the saw blade into the jig up to the starting point of the saw blade. Walk around your saw and sight the saw blade to your traced pattern of your cove. The profile of the saw blade should match the pattern you traced on the end of your stock.

Step #7:

Before starting your cut, lower the blade completely, and slide your molding stock through cove cutting jig past the blade making sure the stock slides smoothly without any play. With your jig properly adjusted and secure, raise the blade so that it will remove approximately 1/16" of your stock. Turn on your table saw, and using a safety device (push stick), feed your stock slowly through the saw blade. Once your cut is made, raise the blade another 1/16" and repeat this step, until you are approximately 1/32" away from the edge of your traced pattern edge or final depth of the cove (See **Fig. 7**).



Shop Notes:

If the stock begins to burn during the cut, feed the stock a little bit fast through the saw blade.

Step #8:

When making the final pass of your cove molding, you only want to remove 1/32" at a time. Feeding the stock very slowly to prevent excessive saw blade marks. Use a fine grit sandpaper or a gooseneck cabinet scraper to smooth out any saw blade marks on the stock. Your final molding stock should resemble **Fig. 8**.



Optional Accessories

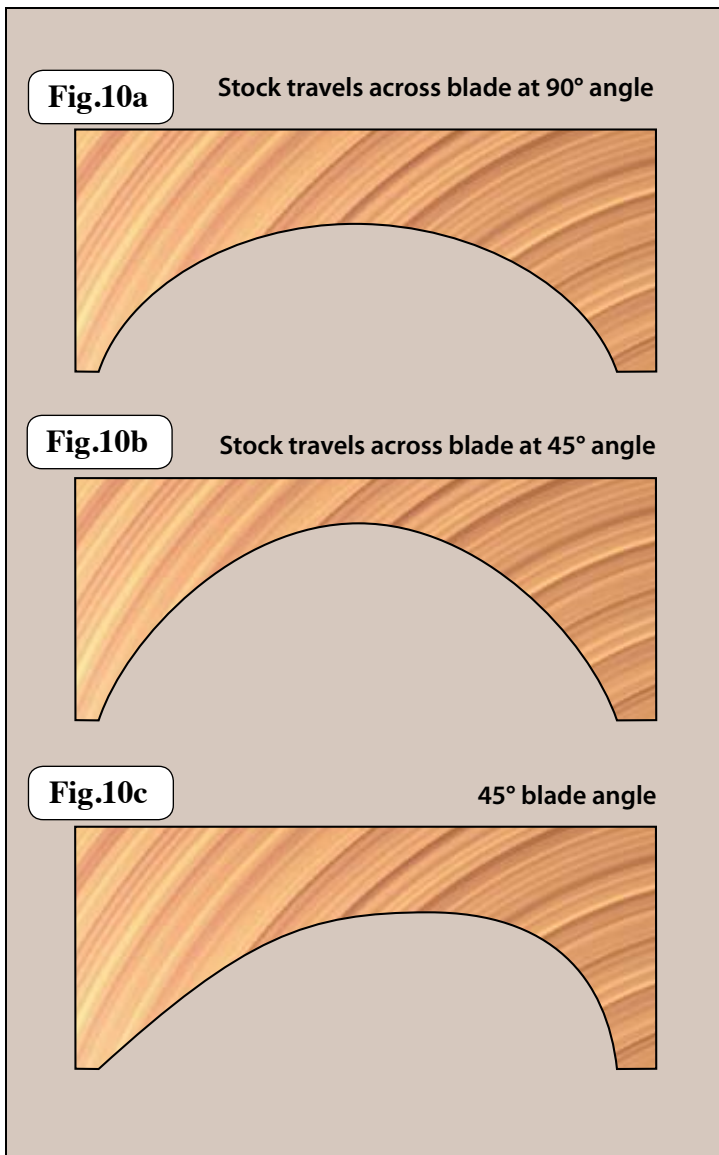
One of the unique features of the Peachtree Cove Cutting Jig, is we have machined two holes on each guide rail fence to accept 30mm Magswitches™ (sold separately). The Magswitches™ provide great holding power to keep your cove cutting jig securely in place on your cast iron table saw top. The Magswitches™ allow for a much quicker set-up for any type of cove cutting project. When using the Magswitches™, you will no longer use the miter lock bars (See **Fig. 9**).



Use the same basic instructions for cutting all types of cove molding. There are many different ways to achieve all sorts of profiles on your table saw. Instead of trying to explain the geometry of these types of cuts, we are going to give you some basic ideas on how to alter your cove profiles. If you pass the stock across the saw blade at a 90 degree angle it will produce a cut similar to **Fig. 10a**. If you pass the stock across the saw blade at a 45 degree angle it would produce a cut similar to **Fig. 10b**. If you pass the stock across the saw blade tilted at a 45 degree angle it would produce a cut similar to **Fig. 10c**. By changing the angle we feed our stock across the blade and changing the angle of the blade itself, there are literally thousands of different profiles you can create with our cove cutting jig.

Peachtree Cove Cutting Jig

The Peachtree Cove Cutting Jig is a simple, easy to use jig that produces great looking coves. In this manual we have outlined several different types of coves as well as how to use the cove cutting jig. The possibilities that can be applied are virtually endless. Thank you for your purchase and we hope you enjoy your brand new Peachtree Cove Cutting Jig.



Peachtree Cove Cutting Jig.
For accessory router bits, visit us online at www.ptreeusa.com or call us toll free at: 1-888-512-9069

