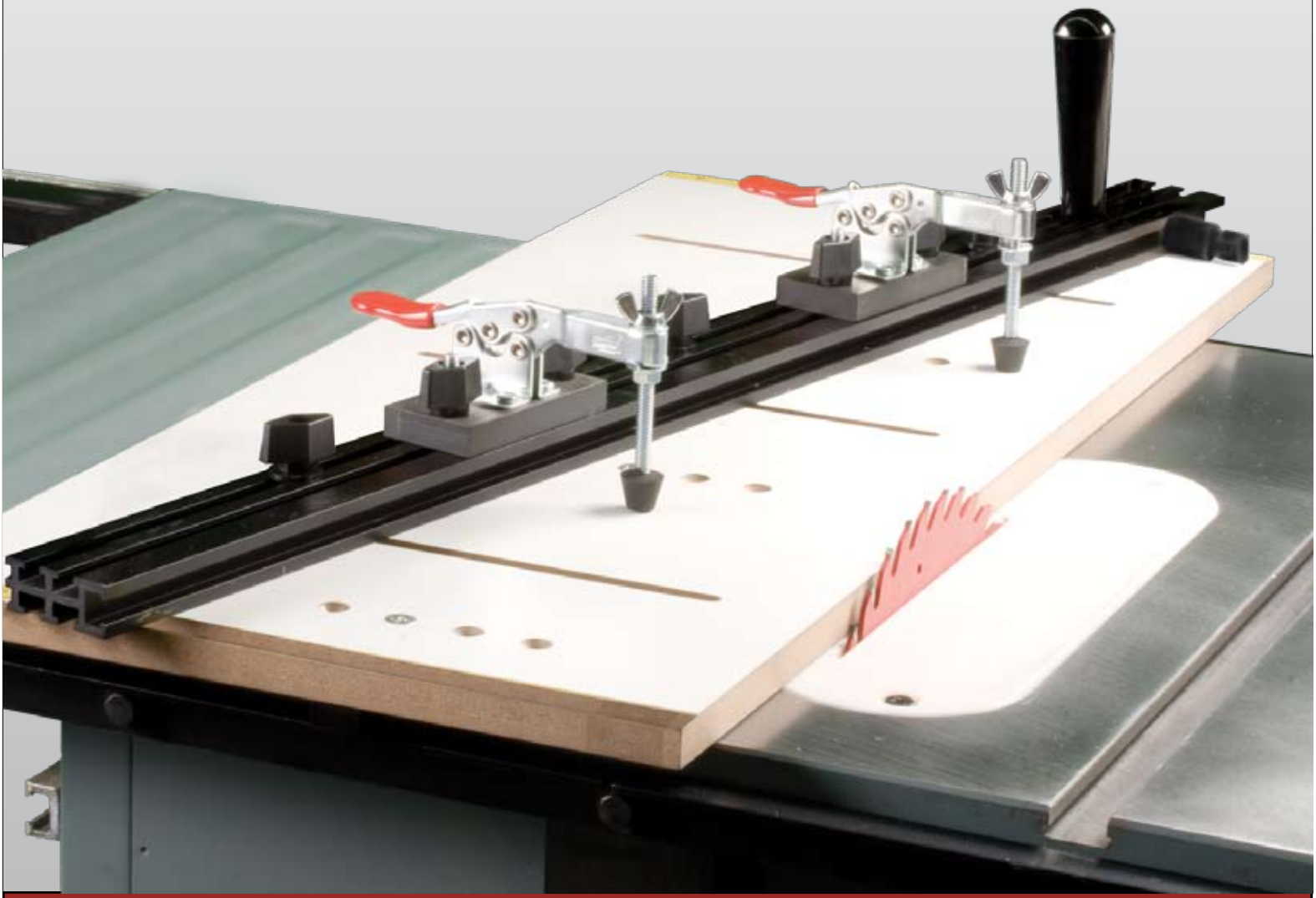
Dubby™ Taper Jig

Instruction Manual
Part # 3170

Taper jigs don't get much better than The Dubby™Taper Jig with hold-downs. The Dubby™ Taper Jig slides into a standard table saw miter slot and the heavy duty hold down toggles keep your stock firmly on the platform. To use the Taper Jig you simply mark the angled cut-line(s) on your work piece, position the Dubby™ Taper Jig Fence so the inside edge of the jig fence is against the work piece. Align the marked cut-line on the work piece with the outside edge of the jig toward the saw blade. Secure in place with the hold-down toggles and make your tapered cut. It's that simple!



CAUTION:

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

Dubby Taper Jig

Part #3170

Before assembling your Dubby Taper Jig:

(1) Read these instructions.

(2) Make sure you have all the required parts (See Diagram #1 and Diagram #2).

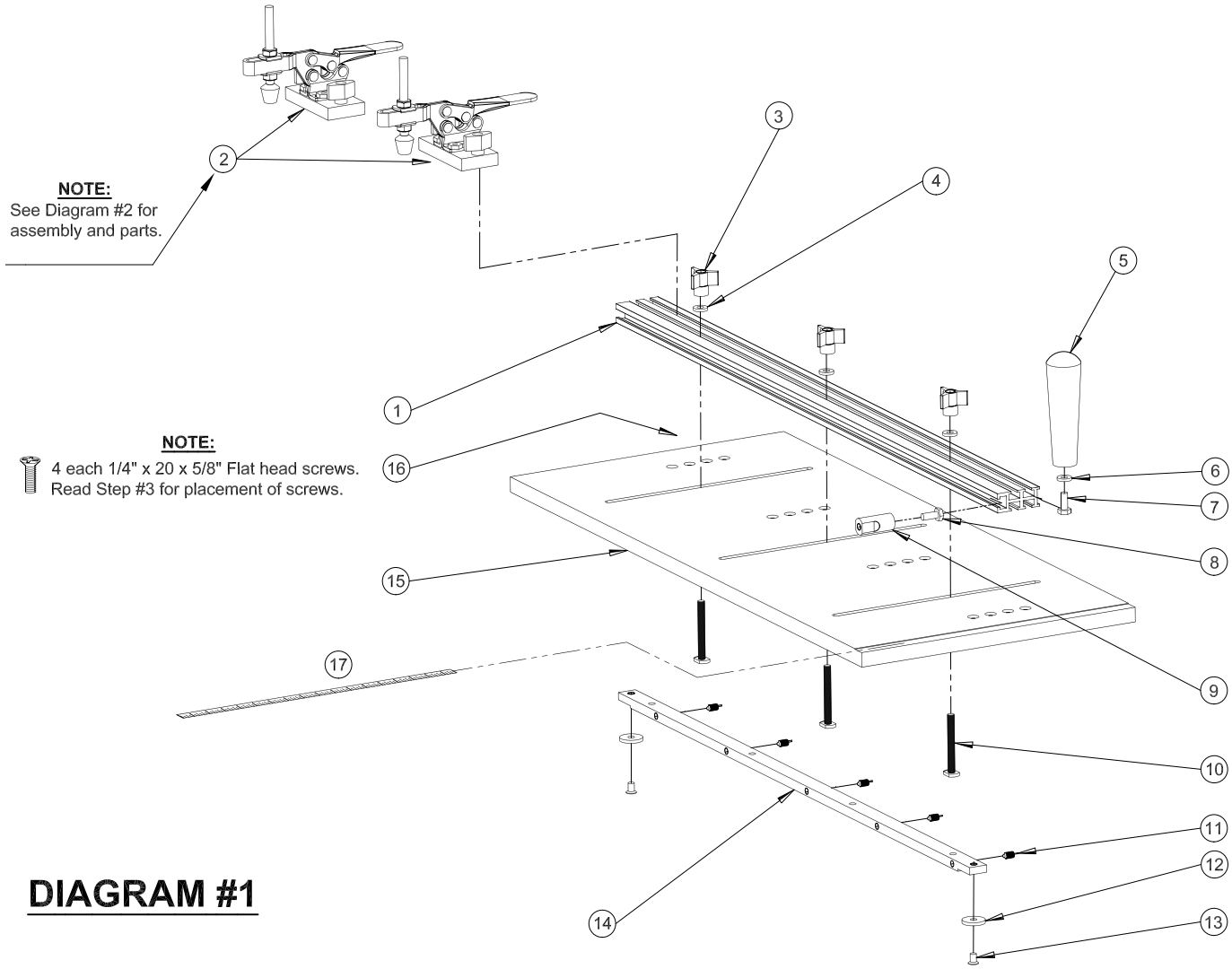


DIAGRAM #1

Dubby™ Taper Jig Parts List Diagram #1		
No	Description	Qty
1	Fence	1
2	Hold Down Toggles	2
3	1/4” - 20 Star Knob	3
4	1/4” Spacer	3
5	Handle	1
6	Washer	1
7	Handle	1
8	1/4” - 20 x 1/2” T-Bolt	1
9	Stop Pin	1

Dubby™ Taper Jig Parts List Diagram #1		
No	Description	Qty
10	1/4” - 20 x 1-7/8” Fence T-Bolt	3
11	Adjustable Plunger	5
12	T-Slot Miter Disc	2
13	Disc Bolt	2
14	Miter Bar	1
15	Platform	1
16	1/4” x 5/8” Flathead Machine Screw	4
17	12” Scale	1
18	1" x 29" slick tape	2

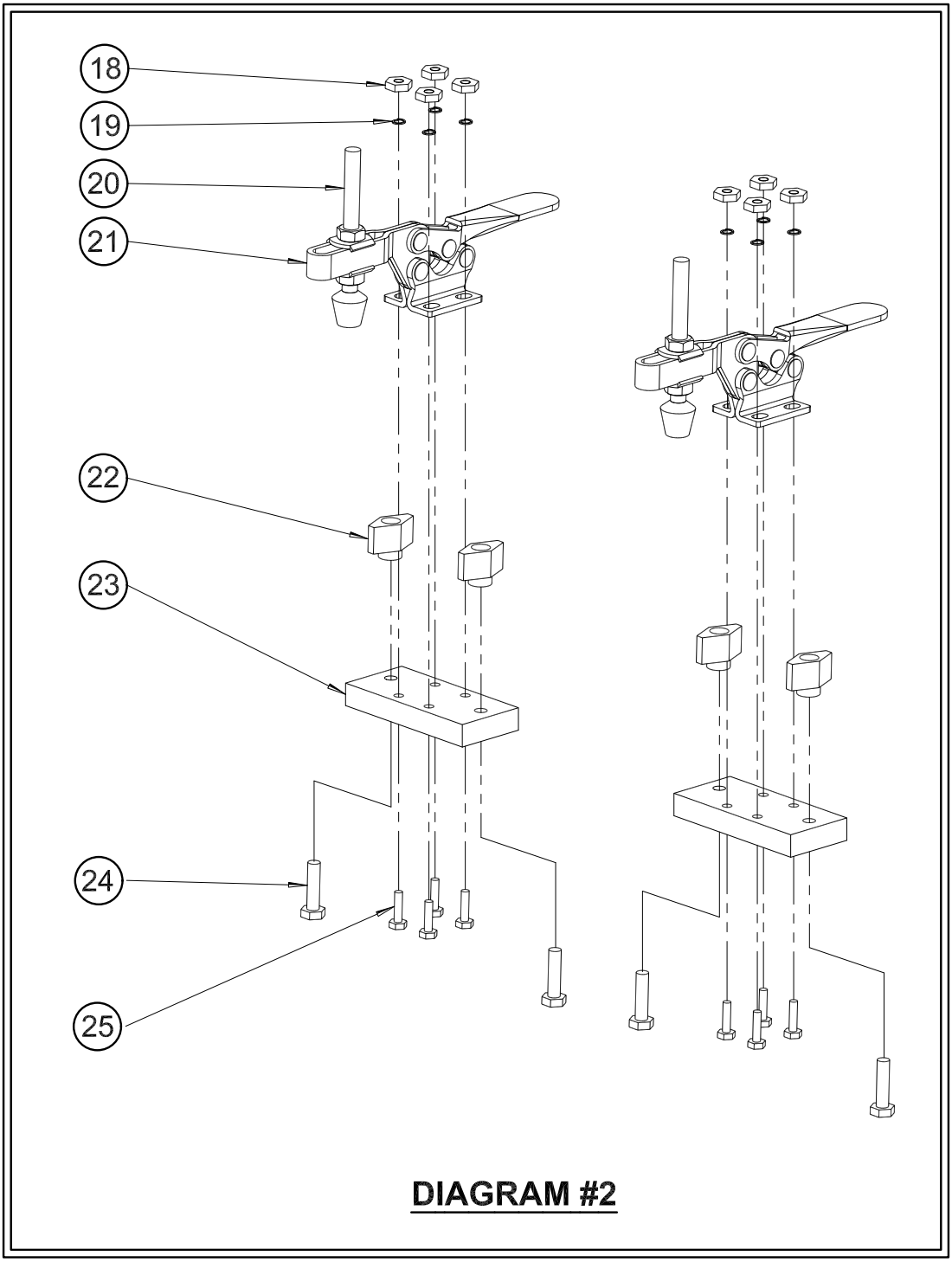


DIAGRAM #2

Dubby™ Taper Jig Parts List Diagram #2		
No	Description	Qty
18	10-32 Toggle Nuts	8
19	#10 Lock Washer	8
20	Adjustable Foot	2
21	Hold Down Toggle	2

Dubby™ Taper Jig Parts List Diagram #2		
No	Description	Qty
22	1/4” T-Knob	4
23	Raiser Mounting Block	2
24	1/4” - 20 x 1-7/8” Toggle Adjustment Bolt	4
25	10 - 32 x 1/2” Toggle mounting Bolt	8

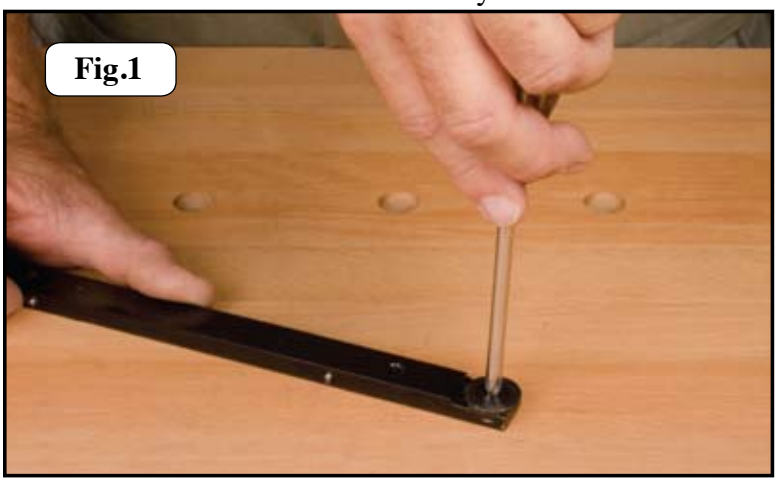
Getting Started

The Dubby™ taper jig will work on the right or left table saw miter slot. Being right handed, we prefer the right miter slot. Insure that your miter slots are 3/8" deep x 3/4" wide (standard miter slots) with t-slot. Your table saw miter slot must be parallel to the saw blade. If it is not, you will need to make the necessary adjustments to your saw to align the saw blade parallel to the miter slot to prevent burning or binding.

Dubby Taper Jig Assembly

Step 1

Install the t-slot miter discs (part #12) on the miter bar (part #14). See **Fig. 1**. The t- slot miter discs must remain on the miter bar to help support the sled when it is extended beyond either end of the table saw. If your miter slot does not have a t-slot, then the miter discs can be removed for use *(please note caution below)*. When cutting longer stock we recommend you support the under side of the taper jig on both the in-feed and out-feed side of your saw.



Caution:

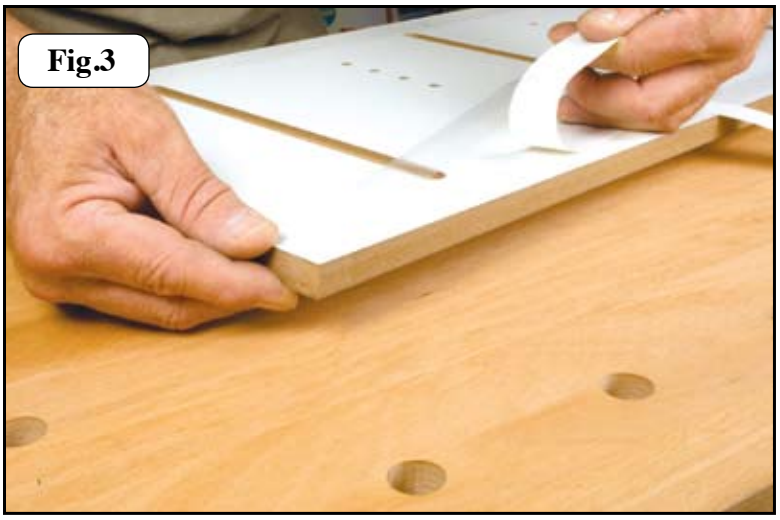
If t-slot miter discs are removed you must support the taper jig and stock on the in-feed and out-feed side of the saw to prevent the jig from lifting out of the saw.

Step 2

Adjust the plungers (part # 11) in the miter bar to get proper fit in your miter slot. See **Fig. 2**

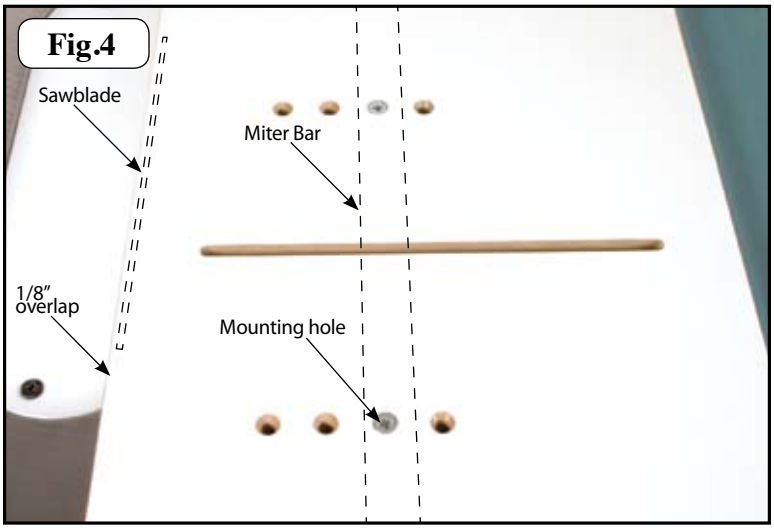
Step 3

Install the self sticking slick tape length wise on either side of the Dubby™ taper jig 1/8" in from the edge, wrapping around the ends of the platform (See **Fig. 3**). The slick tape will make your taper jig glide smoothly across the top of your table saw.



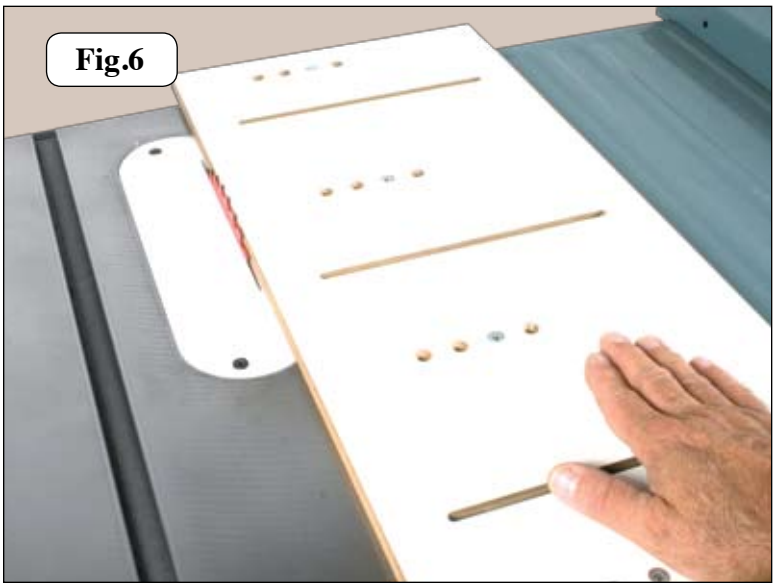
Step 4

Install the miter bar to the platform (part #15), using the four 1/4" - 20 x 5/8" flat head machine screws (part #16). Choose the set of holes that line up with miter slot so the platform will overlap the cutting path of the saw blade by 1/8" or more. The saw blade must be lowered all the way down before installing the platform. Use the set of holes that will give the least overlap of the saw blade. (See **Fig. 4**)

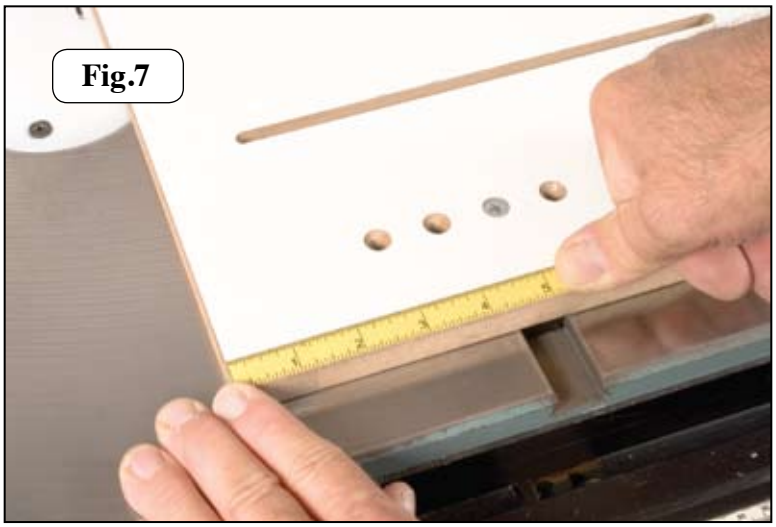


Step 5
Tighten the four flat head screws (part #16) and the place the Dubby™ taper jig into the table saw miter slot. With the saw blade lowered and the table saw turned off, test the fit of the platform in the miter slot (See **Fig. 5**). If the platform is not sliding smoothly, you may need to make an adjustment or two to fix this. First, try adjusting the t-slot miter discs to give more space between the bottom of the platform and the top edge of the miter disc. We do this by adding a thin shim(s) (not included) underneath the t-slot miter disc, until there is no binding and the platform operates smoothly. Second, try adjusting the miter bar plungers, as shown in step # 2., until there is no binding and the platform operates smoothly.

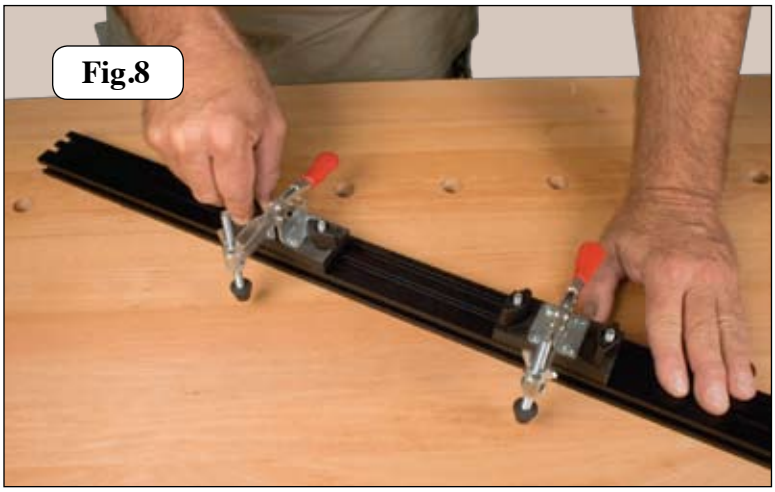
Step 6
Make sure the taper jig is away from the saw blade. Raise the saw blade to height to cut off the overlap piece of the platform. Turn the saw on and slide the Dubby™ Taper Jig through the saw blade, cutting off the edge of the Platform. (See **Fig. 6**)
Turn off the table saw, lower the saw blade, and disconnect the power, make sure the saw blade is below the saw table.



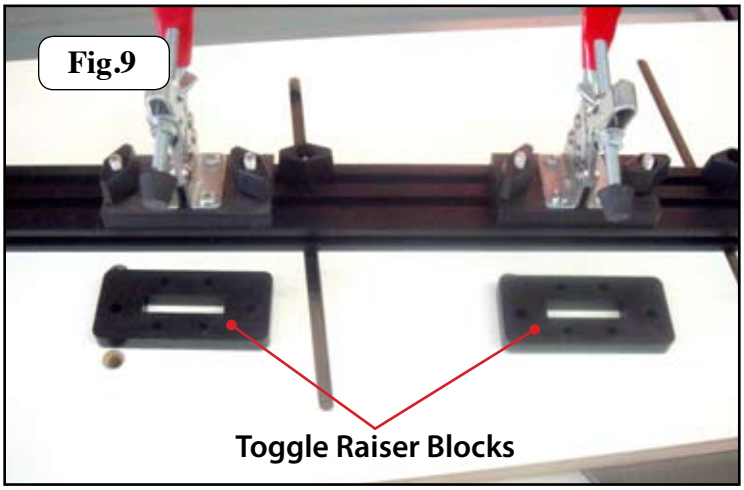
Step 7
Install the 12" scale (part #17) on the recessed end, by lining up the 1st measurement of the scale with the cut edge of the platform (part #15). (See **Fig. 7**)



Step 8
Assemble the hold down toggle clamp using diagram #2. Install hold down toggles (part #2) on taper jig fence so that the rubber head of the toggle is on the side of the fence with the t-slot (part #1). The toggle clamps can be installed and adjusted anywhere along the t-slots on top of the taper jig fence using the hex-bolts (part #24) between the locking knobs or push handle. (See **Fig. 8 & 9**)

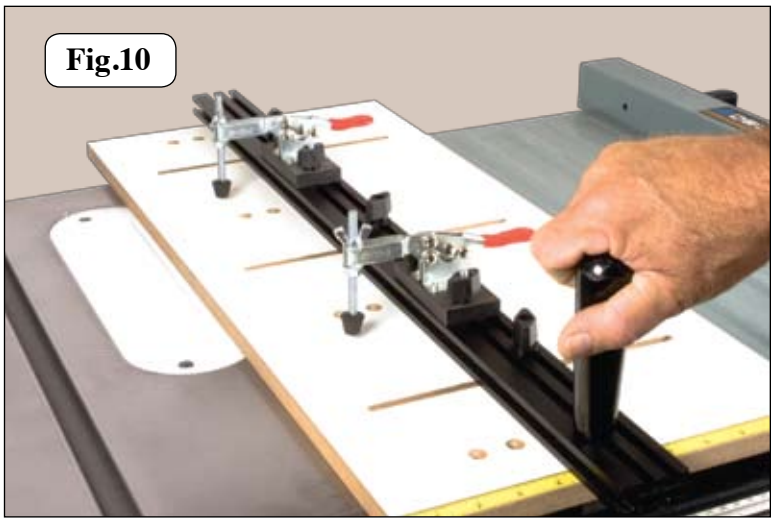


Optional Raiser Blocks are available for stock greater than 1" thick. (See **Fig. 9**)



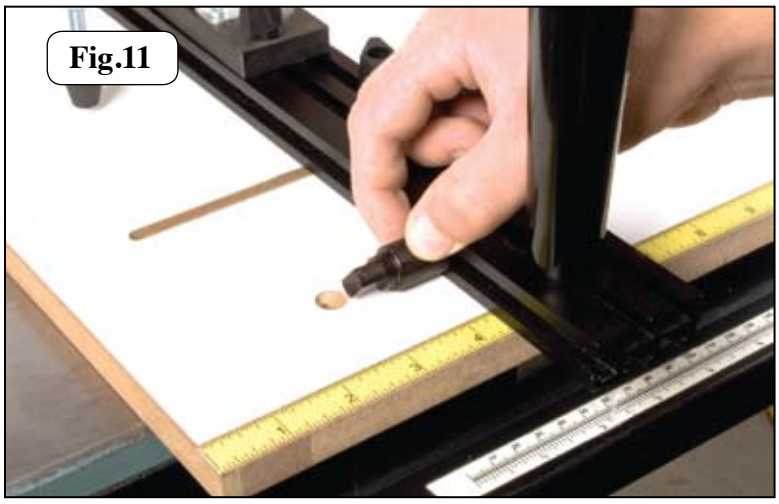
Step 9
Place the fence on the platform so that the side with the t-slot and toggle hold-downs face the saw blade. Install the three 1/4 - 20” x 1-7/8” t-bolts through the bottom of the platform and fence, then install spacers and star knobs on the top of your fence, then secure in place. Install the long push handle (part #5) into the t-slot approximately 1" in from the back edge of the fence, then secure in place. (See **Fig. 10)**

Fig.10



Step 10
Attach the adjustable stop pin (part #9) to the t-slot on the side of the fence using the 1/4”-20 x 1/2” hex head bolt (part #7). The stop prevents the stock from moving backward on the taper jig and allows for repetitive cuts.

Fig.11



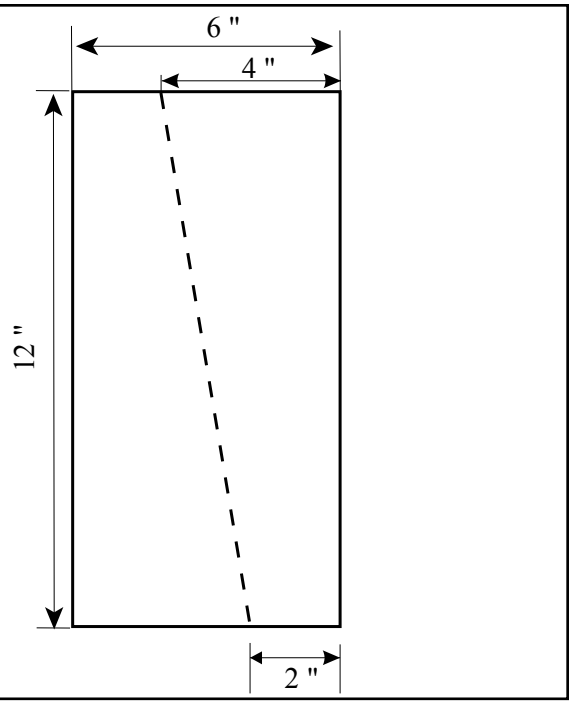
Caution:
When cutting tapers make sure the stop does not extend past the cut edge of the platform. Doing so may result in damage of jig, saw blade or even injury.

Your new Dubby™ taper jig is now assembled and ready for use! Now follow the basic use instructions on how to make a sample tapered cut.

Basic Use of The Dubby™ Taper Jig

There are three different ways to set the taper angle, which are outlined in the following basic use instructions. One of the easiest ways set a taper angle, is to use the cut edge of the Dubby™ taper jig platform as a reference line. In this example we will be cutting a taper that is 4” at it’s widest point, down to 2” at it’s narrow point, from a piece of stock that is 6” wide x 12” long x 3/4” thick. (See **Fig.12**)

Fig.12

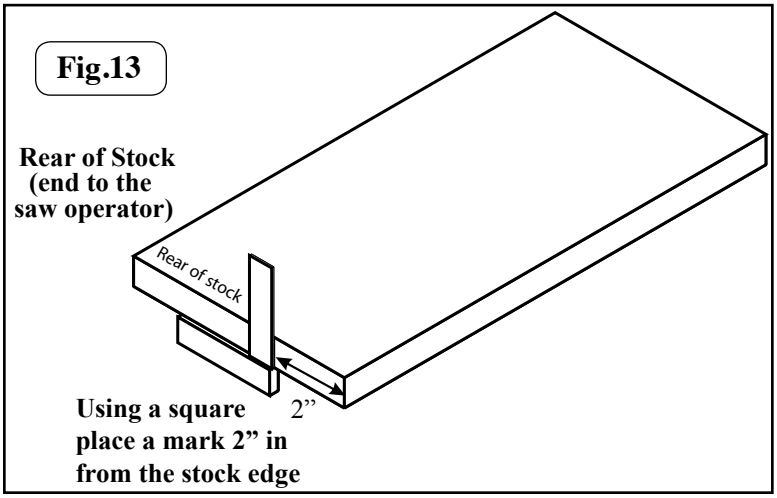


Please Note:
When cutting stock on the table saw you must insure the stock is flat with one edge against the jig fence and the back edge against the stop.

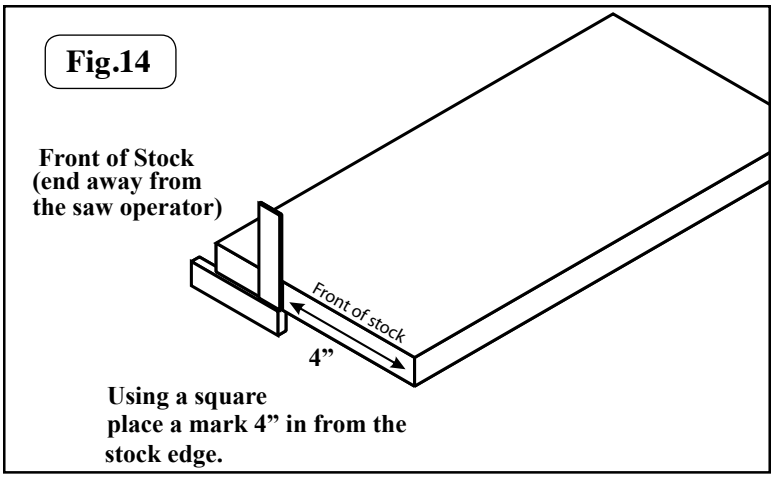
Stock Preparation

Step 1.
Begin by first choosing the stock end that you want to be the narrow end, then mark that end 2” toward the center of the board from the edge that will be against the jig fence. Use a square to mark the full thickness of the stock. (See **Fig. 13**)

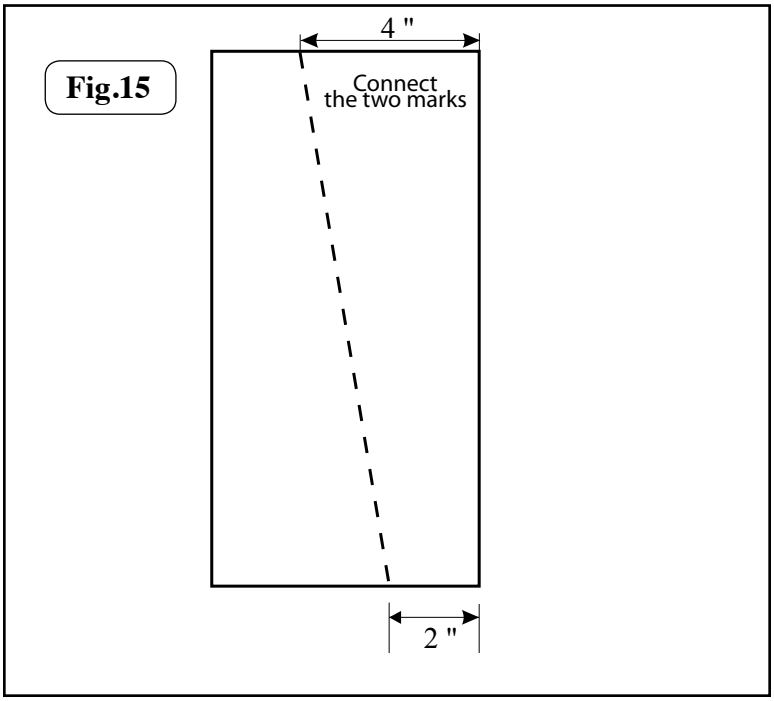
Fig.13



Step 2
Next mark the wide end of the stock at 4” from the stock edge that will be against the jig fence. Use a square to mark the full thickness of the stock. (See **Fig. 14**)

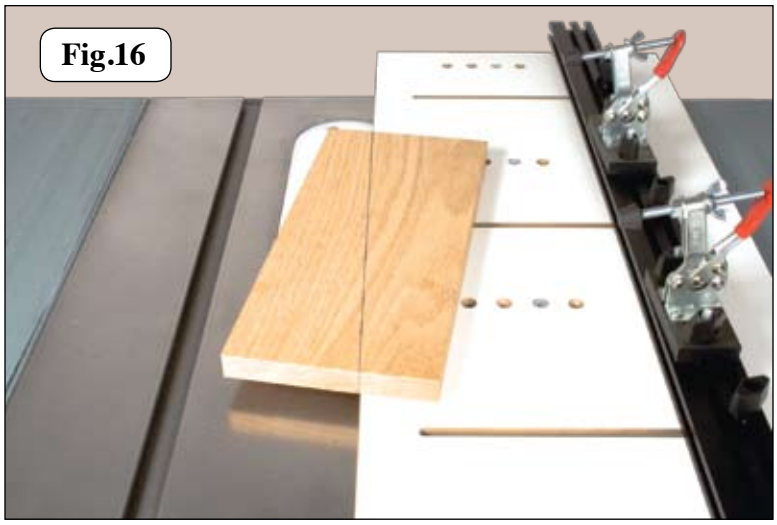


Step 3
Complete the lay out by connecting the marks with a line on the top face of the stock starting at the 2” narrow end and ending at the 4” mark on the wide end.
(See **Fig. 15**)

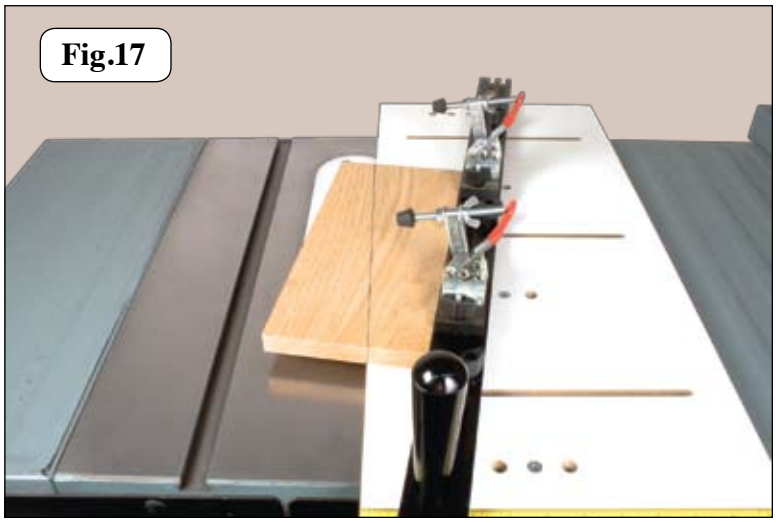


Aligning The Jig

Step 1
With the jig installed in the table saw miter slot and the saw blade lowered below the table, place the work piece to be tapered on the jig with 2” marked end toward the saw operator lining up the pencil mark with cut edge of the platform. (See **Fig, 16**)

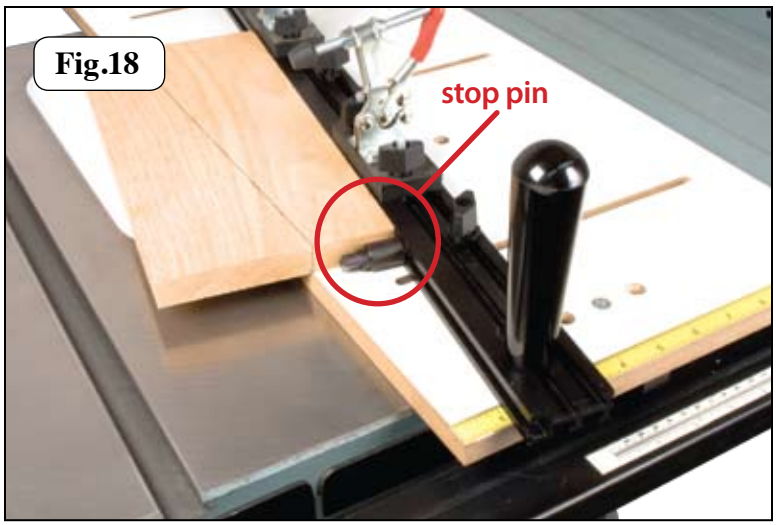


Step 2
With the layout lines aligned with the cut edge of the jig bring the jig fence in contact with the work piece and lock the jig fence in place with the jig fence locking star knobs. (See **Fig. 17**)



Caution:
When cutting tapers make sure the fence does not extend past the cut edge of the platform. Doing so may result in damage of fence, sawblade or even injury.

Step 3
Slide the stop pin forward in the t-track slot until it contacts the 2" end of the work piece, (See **Fig. 18**) and secure the stop in place.



Step 4
Double check the alignment of the layout line to the jig platform cut edge and fence to work piece then clamp the work piece to the jig platform with the jig fence toggle clamps. (See **Fig. 19**). Make sure the fence, toggle clamps and stop are not in line with the cutting line of the saw-blade! Adjust if necessary.

Please Note:
Adjust your toggles for the proper thickness of your stock and secure rubber foot in place with wing nut. Do not over pressure the toggles. Doing so may result in damage of your taper jig fence.

Making The Cut

SAFETY FIRST!
Be sure to keep hands and fingers out of harms way and wear all necessary safety gear.
DO NOT MAKE ANY CUT THAT YOU ARE UNCOMFORTABLE WITH.

To make the taper cut, pull the Dubby™ taper jig back towards the saw operator to a point were the jig and work piece are in front of the table saw blade. Raise the saw blade to a height just above the thickness of the work piece and jig platform. Turn the saw on and using the push handle, slowly push the Dubby™ taper jig with clamped work piece through the saw blade. (See **Fig. 20**)

Please Note:
Once cut is complete, turn off the table saw, lower the blade and wait until the blade comes to a complete stop before removing stock out of the taper jig. Do not slide your taper jig backward in the miter slot while the saw blade is exposed or running.

Finished Cut

You have now completed a successful tapered cut with your Dubby™ taper jig (See **Fig. 21**). By following this simple set-up, you will be able to cut all types and lengths of tapers. You can also set your saw blade at an angle when using your taper jig for all types of compound tapers. Perfect for segmented bowl turning.

Using Scale to set Angles

Another method for setting your Dubby™ Taper Jig is using measuring scale to set the jig. Your taper jig is 27½" long and 11¾" wide. Using the front cut edge of the platform and the scale you can cut from 1° to 20° tapers. Here is a quick reference for cutting some common degree tapers from 4" long to 27″ long. Simply set your desired angle and slide your stop to the desired length of the cut.

5° - Position the front edge of the fence flush with the front cut edge of the platform and adjust back edge of fence to 2-7/16" on the scale. (See **Fig. 22**) Lock fence in place with knobs.

10° - Position the front edge of the fence flush with the front cut edge of the platform and adjust back edge of fence to 4-3/4" on the scale. (See **Fig. 22**) Lock fence in place with knobs.

15° - Position the front edge of the fence flush with the front cut edge of the platform and adjust back edge of fence to 7-1/8" on the scale. (See **Fig. 22**) Lock fence in place with knobs.

20° - Position the front edge of the fence flush with the front cut edge of the platform and adjust back edge of fence to 9-23/32" on the scale. (See **Fig. 22**) Lock fence in place with knobs.

*Toggles and hardware have been removed from this photo for clarity.

Caution:

When cutting tapers using this method make sure the front of the fence does not extend past the cut edge of the platform. Doing so may result in damage of fence, sawblade or even injury.

In-Line

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Using a Protractor to set Angles

Whether you have an old fashioned or a new digital protractor, you can set-up your Dubby™ taper jig in snap. Since you have cut the platform parallel to the saw blade, this becomes the main edge you will use to set the jig. With the jig installed in the table saw miter slot and the saw blade lowered below the table, simply set the desired angle to be cut on your protractor, then place one edge of the protractor against the cut edge of jig and slide the fence over until it uniformly contacts the protractor. Lock fence in place with knobs.
(See Fig. 23)

Straighten your curved stock

Since your Dubby™ taper jig is guided by the miter slot and not the fence, it works great for straightening out curved stock pieces. Simply align the fence of the taper jig parallel to the cut edge of the platform. Slide you stop to the back edge of the stock and secure, then lock your stock down with the toggle clamps and make your cut.
(See Fig. 24)