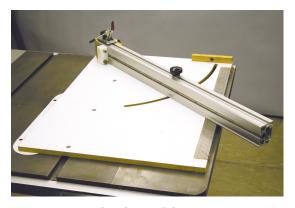
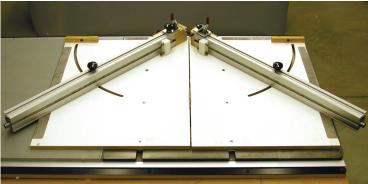
## SET-UP INSTRUCTIONS FOR THE DUBBY™ CUTOFF FIXTURE





Single Dubby™

**Double Dubby™** 

We want you to be completely satisfied with the Dubby $^{\text{TM}}$  Cutoff Fixture, and strongly urge you to read the Set-Up Instructions completely and carefully prior to starting set-up. If you take your time and follow our instructions carefully, you will have a tool that is not only a pleasure to use, but also the most accurate and versatile cutoff and mitering device available anywhere for use on a table saw.

The first steps in set-up are in table saw preparation. Refer to your owners manual when making any adjustments, or go to our website at **www.in-lineindustries.com** for assistance in getting your table saw properly aligned and in top condition related to performance.

Since the Dubby<sup>™</sup> is available in both left hand and right hand models, we have shown both in our Instructions. Please refer to the appropriate Illustrations when setting up your Dubby<sup>™</sup> Cutoff Fixture.

We have a complete video demonstration of Dubby™ set-up and our other fine products on our "Products of In-Line Industries DVD.

We also have updated information on our website in the "Shop Tips & Techniques" Section.

Most Articles in this section are in PDF format that can be downloaded and printed on your computer.

#### **TABLE SAW PREPARATION**

<u>Disconnect Electrical Power</u> to the Table Saw.

<u>Check the table saw Miter Slots</u> for any rust, burrs, or contamination that may cause the Dubby™ quide bar(s) to drag. Clean and/or de-burr the slots as needed.

**Check the extension wing(s)** to make sure they are perfectly level with the table saw top. If the extension(s) are not level with the saw top, it can cause the Dubby<sup>TM</sup> guide bar(s) to drag.

**Check the table saw top** for any rust or contamination that may cause the Dubby<sup>TM</sup> platform(s) to drag and wear prematurely. Apply a coat of paste wax or surface sealant to the top of the table saw.

**Install a saw blade** that you normally use for cut-off work.

*Check the blade tilt* to make sure the blade is set square (exactly 90 degrees) to the table saw top.

<u>Check the table saw's alignment</u> to make sure the blade is running parallel to the miter slots on the saw. If the saw needs to be aligned, we would recommend that you align it prior to setting up the Dubby<sup>TM</sup>. Refer to your owner's manual, or visit our website at <u>www.in-lineindustries.com</u> for help in getting the saw aligned.

Lower the saw blade below the table saw top. Your saw is now ready, and you can proceed with set-up.

#### **INVENTORY THE PARTS**

The packaging for the Dubby™ normally insures you receive the unit in good condition. Please unpack and inventory all of the contents of the package. If any parts are missing or damaged, please contact us immediately at (508) 949-2968 so we can correct any problem you may have. If you receive a damaged platform, check to see if the damaged area is on the blade side of the platform. You will cut the platform during set-up, and there is a chance you will cut the damaged area off. If this is the case, there would be no reason to replace the platform. In the Package(s) you should find:

- **Platform Assembly** The platform comes partially assembled, with the positive stop block and pivot point T-nut installed. Inspect the platform for any damage.
- **Backstop Shipping Sleeve** In this package, you should find:
- Aluminum backstop, with a replaceable wood end (pre-mounted on the backstop), plastic "memory block" (pre-installed in the channel), and adjustable stop system (in the channel).
  - **3 Mylar slide strips**, 1" x 27" long, that will be applied to the platform bottom to reduce wear.
  - 3. Hardware Package with the following contents: (Parts Illustrated on Page 4)
    - 2 ea. Locking knob assemblies

    - 2 ea. 1/4" metal flat washers2 ea. 1/4" plastic flat washers
    - 4 ea. 1/4" x 3/4" flat head screws
- 1 ea. 1/4" 20 T-nut
- 1 ea. 1/4" 20 Thumbscrew
- 1 ea. Hex key (Allen wrench)
- 4 ea. #6 x 3/8" Pan head screws
- 4. <u>Hold-Down Clamp Package</u> with clamp, spindle hardware, mounting plate and screws.
- 5. Adjustable Miter Bar and Angle Scale

## APPLY THE MYLAR SLIDE STRIPS TO THE PLATFORM

Thoroughly clean the platform (Acetone is recommended) to remove any dirt or contamination that will prevent the Mylar slide strips from sticking to the platform. Lay the platform face down on a clean, dry surface. Make sure your hands are clean, to prevent getting the adhesive side of the Mylar dirty.

In the Illustrations below, you can see the platforms face-down. Though there is no exact point at which the strips are positioned, we recommend you position them in the general locations of:

- One strip about 1/16" 1/8" in from the "Scale side of the platform.
- One strip between the guide bar and the arc in the platform. **Do not go over the arc**.
- One strip between the guide bar and pivot hole in the platform. **Do not go over the pivot hole**.

**Note in the Illustrations** that the strips overhang the platform on both ends front-to-back. This is done to allow you to roll the strips over the ends of the platform, and attach the ends of the strips to the top surface of the platform. This will prevent the strips from "rolling under" as you use the Dubby.

#### **Left Platform Bottom View**



#### **Right Platform Bottom View**



**Helpful Hint**: To apply a strip, I usually use a razor knife to separate the Mylar from the paper backing at one end of the strip. I try to peel the Mylar away from the paper backing (about 2" or so) and fold the paper backing back under itself. While trying not to touch the adhesive side with my fingers, I position the strip so about 1 5/8" of the Mylar hangs over the platform bottom at the front edge of the platform. I press down on the strip at the top edge of the platform, while holding the end of the strip with the paper backing attached up off the other end of the platform. **See Illustration below.** 



As you install the strips, be sure to keep slight pressure while pulling the strip tight, and try to avoid getting any wrinkles in the strips as you press them down onto the platform surface. If you to see a wrinkle as you apply the strips, pull upward on the unattached end, and press the wrinkles out as you apply the strips.

When the strip has been applied to the platform bottom, remember to roll the excess Mylar around the ends of the platform, and apply it to the top surface of the platform. Once the strips are properly applied, I recommend you rub over them with hard pressure to help them stay firmly attached to the platform.

## **ADJUST AND INSTALL THE MITER BAR**

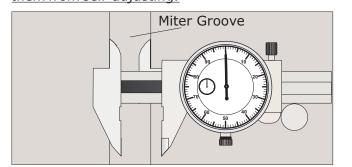
Our patented "Smart Bar" is the latest upgrade to the Dubby. Table saw miter grooves vary in width. On some table saws, there may even be a slight difference between the widths of the left and right grooves. With a few minutes of effort, the "Smart Bar" will give you a perfect fit, even if the groove of the saw is worn.

We have not pre-installed the bar in the Dubby platform to help make adjustment of the bar easier.

There are 6 spring plungers threaded (side-to-side) in the bar. To get the proper fit, these may require some initial adjustment. Before starting the adjustment, we recommend that you have on hand some semi-permanent thread locking compound (such as <u>blue Loc-Tite</u>) to insure that once the plungers have been adjusted they will not move and come out of adjustment.

**The most accurate way to adjust the bar** is to use vernier calipers to measure the width of the groove, and then adjust the plungers so they are just a couple of thousandths wider than the groove of the saw.

Measure the inside width of the saw miter slot, as shown in the Illustration below (left). Measure the width of the bar at one of the plungers, as shown in the Illustration below (right). Adjust the plunger so the measurement is between two and five thousandths (.002" - .005") of an inch larger than the width of the slot. Re-check the measurement, and carefully apply a drop of thread locking compound to the threads of the plungers. Be certain you do not get any on the tips of the plungers, as this will prevent them from self-adjusting.



**If you don't have vernier calipers**, you will need to adjust each plunger one-at-a-time, and then "test-fit" it in the miter groove of the saw. The plungers should be adjusted to eliminate any "slop" in the groove, but should not be so tight that it will cause the bar to drag as it slides in the groove.

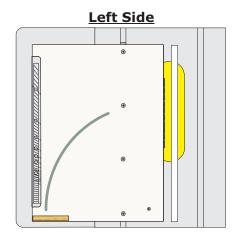
When the bar has been adjusted and the plungers have thread locking compound applied, the bar should be placed in the groove of the saw **with the plunger tips pointing away from the saw blade.** 

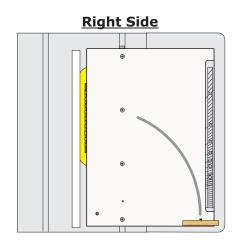
Place the platform over the bar and align the holes in the platform with the threaded holes in the bar. Install the (4) 1/4''-20 flat head screws, and tighten them so the head of the screws is just slightly below the top surface of the platform.

## TRIM THE PLATFORM

<u>With the saw blade lowered below the table saw top</u>, position the platform on the table saw, <u>as shown</u> in the <u>Illustration(s) below</u></u>. Slide the platform back and forth to insure there is no drag between the platform guide bar and table saw miter slot.

<u>With the platform clear of the saw blade</u>, raise the blade about 1" above the table saw top, turn on the saw, and cut the excess material off the platform, <u>as shown in the Illustration(s) below.</u> Turn off the saw. Using 220 grit sandpaper, lightly break the top and bottom edges of the side you just cut.



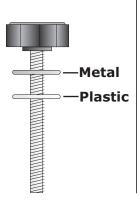


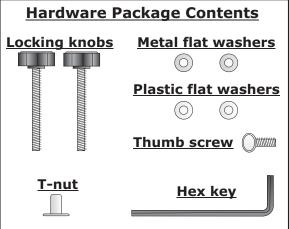
## **INSTALL THE BACKSTOP**

To install the backstop, you will need the following parts from the hardware package:

- 2 ea. Locking knob assemblies
- 2 ea. Metal flat washers
- 2 ea. Plastic flat washers
- 1 ea. 1/4"-20 T-nut

Place one metal flat washer and then one plastic flat washer on each of the Locking knob studs, as shown in the Illustration to the right. These acts as spacers, and allow us to use slightly longer studs, which is helpful if you own both sides of the Dubby, and want to tie them together. This is shown on the "Products of In-Line Industries DVD.

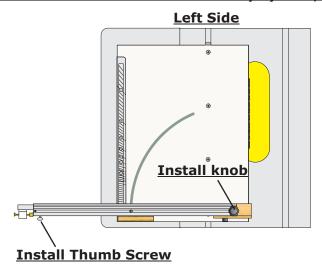


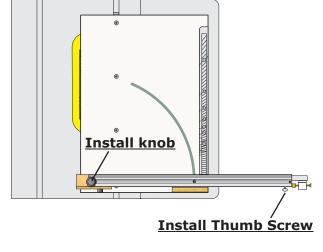


**Position the backstop on the platform, as shown in the Illustration(s) below**. The wood end of the backstop should be at the blade side of the platform, and the open channel of the backstop should be facing forward, toward the rear of the saw.

<u>Align the hole in the backstop</u> (next to the wood end) over the pivot T-nut, and <u>install one of the Locking knobs</u> (with washers), <u>as shown in the Illustration(s) below</u>. Lightly finger-tighten the locking knob.

## Install the Thumb screw for the Stop system, as shown in the Illustrations below.

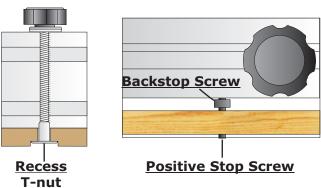




**Right Side** 

**Install the other locking knob** in the hole on the backstop that aligns with the arc in the platform. **Insert the T-nut** into the recessed area in the platform bottom, **as shown in the Illustration to the right**. Thread the knob into the T-nut, and lightly tighten the locking knob.

**Check the alignment** between the backstop screw and the positive stop screw in the wood block. If they aren't perfectly aligned, loosen the backstop screw and align them, **as shown in the Illustration to the far-right**.



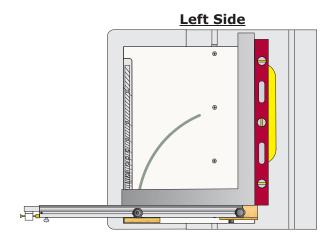
## **SQUARING THE BACKSTOP**

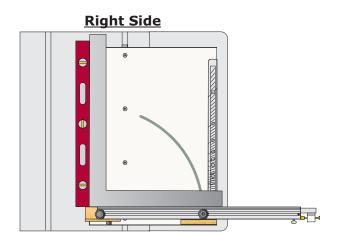
After you have installed the backstop on the platform, the next steps in set-up are in squaring the face of the backstop to edge that was cut on the saw. To start, you will need some type of straightedge (that is thicker than the platform and perfectly straight), and a square.

#### Lower the saw blade below the table saw top.

**Place the straightedge against the edge of the platform that was cut**, and against the face of the wood end of the backstop that protrudes past the platform edge. **In the Illustrations on the next page**, we show a level being used for this purpose.

**Place a square on the platform**, and position it so that one side is against the straightedge, and the other is toward the backstop face, **as shown in the Illustrations on the next page**.





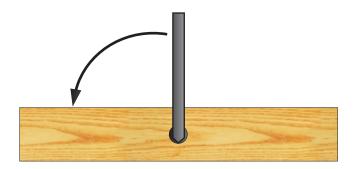
If the edge of the square that is toward the backstop face is not perfectly flush with the backstop face, the backstop will need to be adjusted. The direction in which the backstop needs to be moved will determine what you will do to correct the problem.

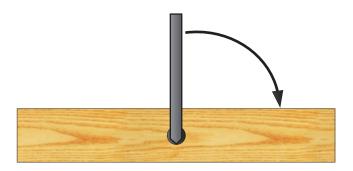
If the square is against the straightedge, and there is a gap between the other edge of the square and the "pivot end" of the backstop, the backstop is too far forward on the "scale end", and needs to be moved rearward (toward you) on the platform.

**To move the backstop rearward**, you would loosen the locking knob on the scale end, and use the hex key provided in the hardware package to adjust the set screw in the positive stop block in a counter-clockwise direction, **as shown in the Illustration below**.

If the square is against the straightedge, and there is a gap between the other edge of the square and the "scale end" of the backstop, the backstop is not forward far enough on the "scale end", and needs to be moved forward (away from you) on the platform.

**To move the backstop forward**, you would loosen the locking knob on the scale end, and use the hex key provided in the hardware package to adjust the set screw in the positive stop block in a clockwise direction, **as shown in the Illustration below**.





<u>Using a piece of sheet stock that measures about 20" x 20"</u>, mark the panel (depending on the side of the Dubby you are setting up), <u>as shown in the Illustrations below</u>. <u>Be sure that the "Start" side of the panel is straight, so it will rest solid against the backstop face as you start to make your cuts</u>.

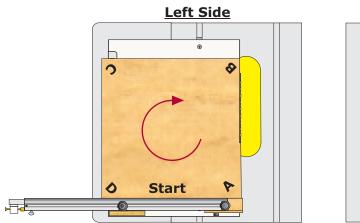
**Left Side Test Panel** 

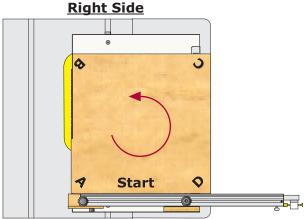


**Right Side Test Panel** 

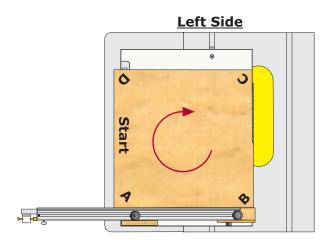


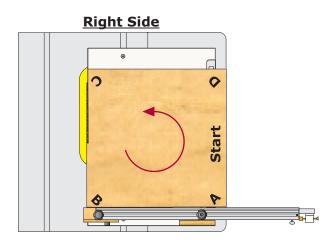
With the saw blade raised above the platform surface about 1", place the panel on the Dubby<sup>TM</sup> as shown in the Illustrations below. With the Dubby<sup>TM</sup> pulled toward you so the panel clears the saw blade, place the "B to A" edge of the panel about 1/8" past the platform edge. Turn on the saw, slide the Dubby<sup>TM</sup> forward, and cut the edge of the panel. Turn off the saw.



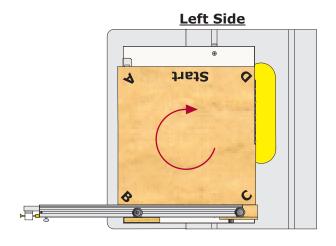


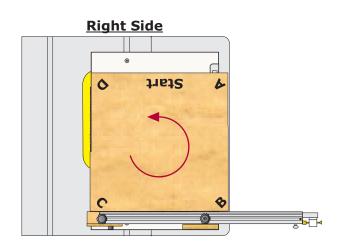
**Rotate the panel 90°** (clockwise on the left side, and counter-clockwise on the right side). Pull the Dubby<sup>TM</sup> toward you so the panel clears the blade, and slide the panel to place the "C to B" edge of the panel about 1/8" past the platform edge. Turn on the saw, slide the Dubby<sup>TM</sup> forward, and cut the edge of the panel, **as shown in the Illustrations below**. Turn off the saw.





**Rotate the panel 90°** (clockwise on the left side, and counter-clockwise on the right side). Pull the Dubby<sup>TM</sup> toward you so the panel clears the blade, and slide the panel to place the "D to C" edge of the panel about 1/8" past the platform edge. Turn on the saw, slide the Dubby<sup>TM</sup> forward, and cut the edge of the panel, **as shown in the Illustrations below**. Turn off the saw.





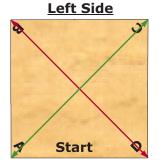
## THIS IS THE MOST IMPORTANT STEP IN SET-UP, AND SHOULD BE DONE CORRECTLY

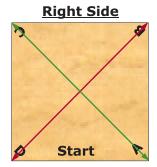
To check the panel to see if it is perfectly square, you must very carefully measure the diagonals (corner-to corner) to see if they are absolutely equal, as shown in the Illustrations below.

If the panel is not perfectly square, the backstop is not perfectly square, either. If this is the case, and you "zero" the scale at this point, none of your cuts (including miters) will be accurate.

**Measure the diagonal "A to C", (Shown in Green in the Illustrations below)**, and record the measurement.

<u>Measure the diagonal "B to D", (Shown in Red in the Illustrations below)</u>, and compare it to the measurement taken on the "A to C" diagonal.





## WHAT THE DIAGONAL MEASUREMENTS TELL US:

**IF THE DIAGONAL MEASUREMENTS ARE EQUAL**, the backstop is perfectly square, and you can "zero" the Dubby<sup>TM</sup> angle scale.

<u>If measurement "A to C" is longer than "B to D"</u>, the backstop needs to be adjusted rearward (toward you). Loosen the locking knob in the arc, and while holding the backstop against the positive stop screw, use the hex key to adjust the positive stop screw (slightly) in a <u>counter-clockwise</u> direction.

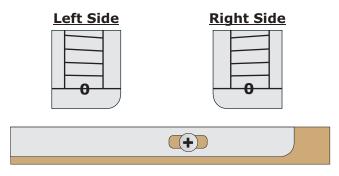
Tighten the locking knob, and repeat the 3 cuts on the test panel. Repeat this procedure until the panel's diagonal measurements are equal.

**If measurement "B to D" is longer than "A to C"**, the backstop needs to be adjusted forward (away from you). Loosen the locking knob in the arc, and while holding the backstop against the positive stop screw, use the hex key to adjust the positive stop screw (slightly) in a <u>clockwise</u> direction.

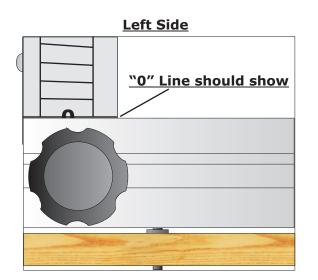
Tighten the locking knob, and repeat the 3 cuts on the test panel. Repeat this procedure until the panel's diagonal measurements are equal.

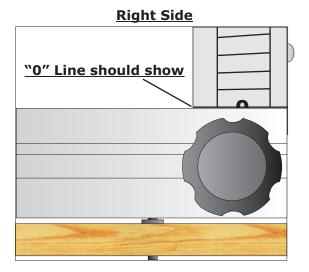
# ADJUST THE SCALE

As shown in the Illustrations to the right, the angle scales have excess material below the "zero" (0) line, and adjustment slots on the edge of the scale where screws are used to hold the scale in position.



**To adjust the scale**, loosen the screws in the edge of the platform and slide the scale to position the "zero" (0) line where the line just touches the backstop face, as shown in the Illustrations below. When you tighten the screws, be sure not to over-tighten them, as this can cause the top of the scale to lift above the top of the platform.

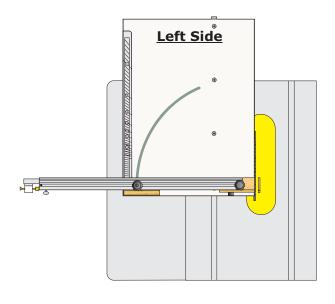


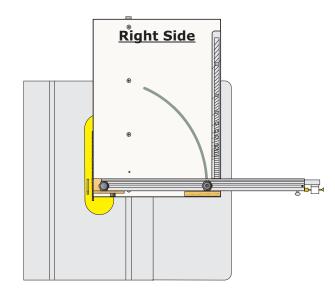


#### TRIM THE BACKSTOP END

**The wood end of the backstop** overhangs the platform edge, and should be cut at this time. Raise the saw blade to a height that will allow you to cut the end off. Turn on the saw, and push the Dubby forward to cut off the end, **as shown in the next Illustration**. Turn off the saw.

**Helpful Hint**: The end of the backstop will become "rounded" as you cut angles with the Dubby $^{\text{TM}}$ . At this time, I would recommend that you adjust the backstop to different angles and cut the wood end. This will make a much neater looking end than it will if you only cut partially through it as you do angle cuts with the blade lower. *On some saws*, you can also adjust the wood end to place the rounded end at the platform edge, and cut it square. This will create a gap between the thick wood block and extrusion end. By doing this, you can adjust the position of the wood end to place the front corner at the platform edge at any angle. This would give you "zero clearance", which will prevent tear-out on the outside edges of the pieces as you make cuts.





#### MOUNTING THE HOLD-DOWN CLAMPS

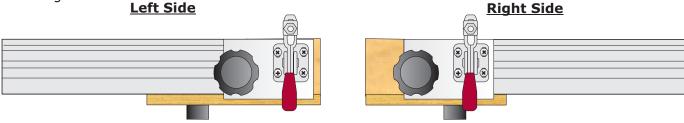
The placement of the Hold-Down Clamps is determined by the design of the saw on which the Dubby<sup>TM</sup> is being set-up. The main thing that needs to be addressed when installing the clamps is safety. The hold-down clamps offer a very large safety benefit to the Dubby<sup>TM</sup>, but only when properly installed.

**The main thing to be considered as to where the clamps can be mounted** is whether they can possibly make contact with the saw blade. This will normally be determined by the distance between the saw blade and miter slots on the table saw, and on which side of the pivot knob the clamp is positioned.

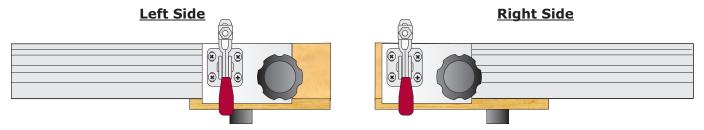
If the distance between the miter slot and the saw blade is less than 5", the hold-down clamp should be mounted on the "away side" of the pivot knob.

If the distance between the miter slot and the saw blade is 5" or more, the hold-down clamp can be mounted between the pivot point and the saw blade.

<u>In the Illustrations below</u>, you see what would be a typical installation on a <u>left-tilt saw</u>, where the distance between the miter slot and saw blade on the left side of the blade would be further than it would on the right side.

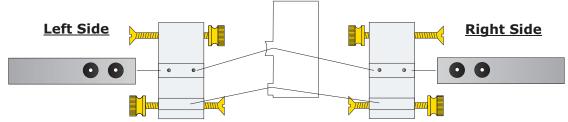


<u>In the Illustration below</u>, you see what would be a typical installation on a <u>right tilt saw</u>, where the distance between the miter slot and saw blade on the left side of the blade would be shorter than it would on the right side.



## **MOUNTING THE STOP SYSTEM HEAD(S)**

With the stop system head placed face down, position the holes in the stop rod over the head. Align the small holes in the rod over the pre-drilled holes in the head, and use the flat head screws provided to firmly secure the head to the rod.



In-Line Industries 661 South Main Street Webster, MA 01570 Fax (508) 949-0859

Tel (508) 949-2968

www.in-lineindustries.com