

**SAFETY**

Before using the INCRA Miter V120, read and follow all of the instructions and safety information in this document.

- When using the INCRA Miter V120 in conjunction with any other tool, first read and follow all instructions and safety information in that tool's owner's manual.
- When using the INCRA Miter V120, always keep your hands clear of the cutter and the line of cut.
- Always turn off the power and make sure that the cutter comes to a complete stop before changing the setting of any part of the INCRA Miter V120.
- Always securely tighten the large black clamping knob before starting any cut.
- Wear safety glasses, hearing protection, and follow all normal shop safety practices.
- After making any adjustments to the miter angle of your INCRA Miter V120, always verify safe clearance between the cutter and all parts of the INCRA Miter V120, and its attachments.

**SETUP****Adjust the Miter Bar for a Perfect Fit in Your Miter Channel**

1 Place the Miter V120 in your Shopsmith's miter channel. The T-slot retainer has a rubber O-ring between the retainer and the underside of the bar to permit tightening the retainer to lock the Miter V120 into your miter slot. This will allow you to use the Miter V120 as a guide for horizontal boring or disc sanding. Take care not to overtighten the screw when using the locking feature. Overtightening can cause the retainer to take a set (a slight bend). If this happens, simply turn the retainer upside down and re-install, **Figure 1**. Screw the large clamping knob with washer through the protractor into the miter bar.

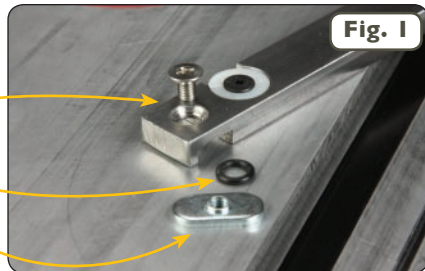


Fig. 1

Miter Bar  
O-Ring

T-Slot Retainer

2 Using the supplied 3/32" hex key, adjust each of the (3) visible miter bar expansion disks for a zero-sideplay, sliding fit in your Miter Channel as shown in **Figure 2**. Turning the fastener clockwise EXPANDS the bar width. The disks are designed to require a fair amount of adjustment torque for proper expansion.

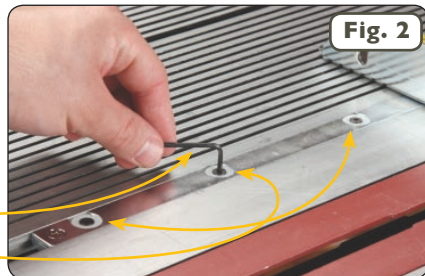


Fig. 2

3/32" Hex Key  
Expansion Disks

3 Remove the large clamping knob and disengage the indexing tooth from the protractor. Pivot the protractor head to access and adjust the fourth expansion point. See **Figure 3**. Replace the large clamping knob and washer.

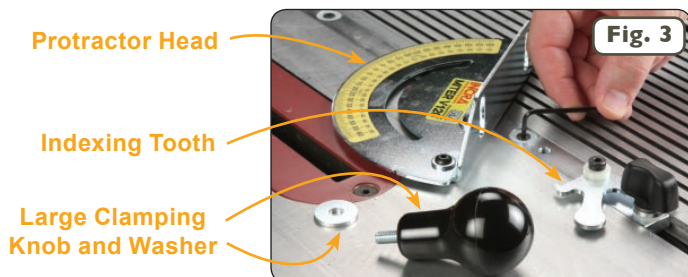


Fig. 3

Protractor Head

Indexing Tooth

Large Clamping Knob and Washer

**Square Miter Faceplate to your Application  
(table saw, router table, etc.)**

4 **Caution: Always unplug the power tool before squaring the faceplate to your application.** Loosen both the large and the small clamping knobs. Set the indexing tooth to 0 degrees, and tighten the small clamping knob, then tighten the large clamping knob. See **Figure 4**.

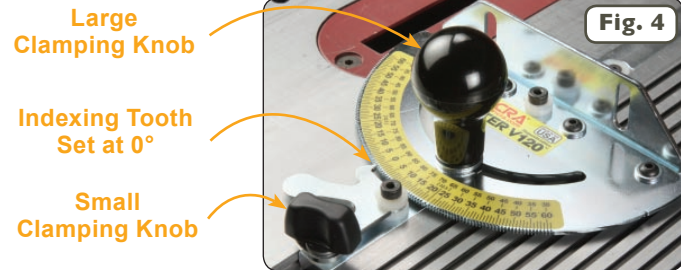


Fig. 4

Large Clamping Knob

Indexing Tooth Set at 0°

Small Clamping Knob

5 Using the supplied 1/8" hex key, loosen the (4) button head fasteners that secure the faceplate to the protractor and, depending on your application, square the faceplate to the blade, miter slot, sanding belt, etc. **NOTE:** When squaring to a saw blade (see **Figure 5**), use a reliable square for this important alignment. Securely retighten the (4) button head fasteners to complete the alignment.

This important one-time adjustment prepares your INCRA Miter V120 for perfect angles at all other indexing tooth positions. Verify the accuracy of your alignment with a test cut, and re-align if the cut is not exactly 90 degrees. Fine adjustments to the angle of the fence mounting bracket to your table top can also be made by loosening the same fasteners and placing a paper shim between the bracket and the underside of the protractor.

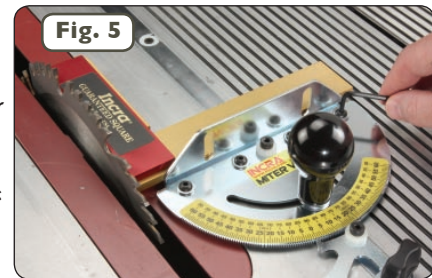


Fig. 5

**OPERATION**

Your INCRA Miter V120 is now ready to easily and accurately produce perfect angles. Just loosen both clamping knobs and engage the indexing tooth at the desired angle. Lock the indexing tooth clamping knob (the small knob), then lock the large clamping knob.

**ADDING A WOODEN AUXILIARY FENCE**

Your INCRA Miter V120's vertical faceplate doubles as a Universal Mounting Bracket that makes it easy to attach your own user-made auxiliary fence if you ever need one. Just cut a straight piece of wood to the desired length (18" to 24" is a good size), and attach with user-supplied wood screws and washers through the two slotted holes. See **Figure 6**.

Wooden Auxiliary Fence



Fig. 6

Visit our website at [www.incra.com](http://www.incra.com) for miter accessories along with many other exciting and practical incremental woodworking tools.

**INCRA - MAKING ACCURACY EASY!**

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INCRA Tools are protected by one or more of the following US patents: #4,793,604, #4,930,221, #5,195,730, #5,275,074, #5,423,360, #5,716,045, #6,237,457, #6,557,601, #6,672,190. Other patents granted or pending. INCRA is a Registered Trademark of Taylor Design Group, Inc. ©2008 Taylor Design Group, Inc. Rev.07.10.09