

Please read this owner's manual before use and keep it at hand for reference.

OWNER'S MANUAL



Warranty

Taylor Design Group, Inc. warrants this product for one year from date of purchase. We will repair any defects due to faulty material or workmanship, or at our option, replace the product free of charge. Please return the failing component only, postage prepaid, along with a description of the problem to the address on the back. This warranty does not apply to parts which have been subjected to improper use, alteration, or abuse.

Safety

Important safety instructions for using the INCRA Miter3000

- Before using the INCRA Miter3000, read and follow all of the instructions and safety information in this owner's manual.
- When using the INCRA Miter 3000 in conjunction with any other tool, first read and follow all instructions and safety information in that tool's owner's manual.
- Never let the saw blade come in contact with the aluminum or steel components of the INCRA Miter 3000.
- When using the INCRA Miter 3000, always keep your hands clear of the saw blade and the line of cut.
- Always turn off the power and make sure that the saw blade comes to a complete stop before changing the setting of any part of the INCRA Miter 3000.
- 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 or fence position of your INCRA Miter 3000, always verify safe clearance between the blade and fence before turning on the saw.
- After making any adjustments to the fence position on the INCRA Miter 3000, always make sure that the two socket head screws are securely tightened.
- When using the INCRA Flip Shop Stop to position a piece for a cut, always hold or otherwise clamp the board between the stop and the blade.

Assembly

Remove the hex bolt that secures the protractor head and replace with the large threaded knob included in the hardware pack. The washer on the hex bolt must be used with the threaded knob, **Fig. 1**.



Place the INCRA Miter 3000 in the left-hand miter slot of your table saw. Loosen the (2) 1/4-20 socket head screws that secure the fence to the fence mounting bracket and slide the fence to a position that leaves safe clearance between the end of the fence and the blade. Tighten the (2) 1/4-20 fasteners, **Fig. 3**.



If the miter slot in your table saw has a T-slot, attach the T-clip to the end of the miter bar as shown in **Fig. 2**.





Squaring the fence to your table saw top

The method used to join the fence mounting bracket to the protractor head makes it easy to fine-tune the fence perfectly perpendicular to your tabletop. To adjust, loosen the (3) #10-24 socket head screws that secure the bracket and slide a paper or plastic shim between the bracket and the protractor head. Placing the shim behind the screws will decrease the angle. Placing the shim in front of the screws will increase the angle.



Calibration

Adjust the Miter Bar

Adjust the miter bar at each of the (8) expansion mechanism locations for a good fit in your table saw's miter slot. Turning the screw clockwise expands the mechanism. You'll find (3) of the expansion locations in front of the fence and (1) underneath the fence. (You'll need to remove the fence for access.) Adjust these (4) front expansion points first, expanding a little at each of the locations until the bar slides smoothly, Fig. 4.



Remove the large clamping knob and disengage the rear actuator tooth from the $1/2^{\circ}$ adjustment plate. Pivot the protractor head to gain access to (3) of the rear expansion points. To gain access to the final rear expansion point, remove the rear actuator thumbscrew and pivot the actuator, Fig. 5. After adjustment, replace the rear actuator thumbscrew, re-engage the rear actuator tooth to the 0° notch on the $1/2^{\circ}$ adjustment plate, then replace the large clamping knob, washer and fence.



Adjust Fence Mounting Bracket 90° to Saw Blade

Loosen the large clamping knob and make sure that the rear actuator left-hand tooth is engaged firmly with the 0° notch on the 1/2° adjustment plate. Engage the front

actuator tooth with the 0° notch located on the protractor head, Fig. 6. Tighten the front actuator thumbscrew then tighten the large clamping knob.



Using the supplied 5/32" hex key, loosen the (3) socket head screws that secure the fence mounting bracket to the protractor head. Unplug your table saw, then use a reliable machinist

square to set the fence at 90° to the saw blade. Fig. 7. Tighten the (3) socket head screws.



This one-time calibration prepares your INCRA Miter 3000 for work in either miter slot. Just remember that the accuracy of the INCRA Miter 3000 at any subsequent setting is dependent upon the accuracy of your initial 90° calibration. Verify this important calibration with a test cut and fine tune as necessary.

Calibrating the $1/2^{\circ}$ Indexing Tooth

The $1/2^{\circ}$ indexing tooth located on the rear actuator is factory calibrated and should require no further adjustment. Follow the instructions below should you wish to check the calibration or re-calibrate.

Loosen the large clamping knob and the rear actuator

thumbscrew. Engage the left-hand tooth of the rear actuator firmly with the notch marked "CAL" on the rear scale and hold while you tighten the large clamping knob, Fig. 8.



Now pivot the rear actuator to engage the right-hand tooth with the notch marked "CAL" on the rear scale, Fig. 9. If adjusted properly, it will pivot perfectly into the notch. To adjust, loosen the

(3) socket head screws that secure the tooth and fine-tune the position to align with the "CAL" notch. Pivot back and forth between the two "CAL" notches to verify the calibration.



Operation - Changing Angle Settings

The dual actuator design of the INCRA Miter 3000 provides two levels of adjustment. The front actuator is used for coarse adjustments (5°), while the rear actuator is used for fine adjustments ($1/2^{\circ}$). For most mitering work, you'll have the left-hand tooth of the rear actuator engaged at 0°, while you make angle changes using only the front actuator. When using the rear actuator for fine adjustments, you are simply adding or subtracting from the coarse adjustment setting.

Five-degree Indexing (including 22.5° and 67.5° settings)

Loosen the large clamping knob and make sure that the rear actuator left hand tooth is engaged in the 0° notch on the $1/2^{\circ}$ adjustment plate. Loosen the front actuator thumbscrew and pivot the actuator tooth away from the notches located on the protractor head, **Fig. 10**.



Rotate the protractor head to the desired angle, then firmly engage the tooth on the front actuator with the corresponding notch on the protractor head. The actuator tooth should point directly to the desired angle on the scale. Tighten the large clamping knob, then tighten the front actuator thumbscrew, **Fig. 11**.



Caution: After making any adjustments to the miter angle of your INCRA Miter3000, always <u>verify safe</u> <u>clearance</u> between the fence and the blade before turning on the saw.

$1/2^{\circ}$ Indexing

Loosen the large clamping knob. Loosen the front actuator thumbscrew and pivot the actuator tooth away from the notches located on the protractor head. Rotate the protractor head and engage the front actuator tooth at the 5° notch closest to the angle you want. Tighten the front actuator thumbscrew, **Fig. 12**.



Loosen the rear actuator thumbscrew. Use the left-hand tooth to add or subtract from the coarse adjustment setting in 1° intervals. Use the right-hand tooth to add or subtract from the coarse adjustment setting in 1/2° increments. Engage the tooth firmly in the selected notch, then tighten the large clamping knob and the rear actuator thumbscrew, **Fig. 13**. **Important:** After completing your cut, don't forget to return the rear actuator setting to the 0° notch.



Continuous Adjustments

For angle settings finer than the $1/2^{\circ}$ settings, first use the $1/2^{\circ}$ indexing instructions above to locate the protractor head as close as possible to the desired angle. With the large clamping knob loosened, pivot the rear actuator tooth slightly away from the notch on the $1/2^{\circ}$ adjustment plate. Rotate the protractor head in the direction of required adjustment and tighten the large clamping knob. Do not tighten the rear actuator thumbscrew. As with any mitering tool, odd angle adjustments may require a little trial and error.

Made in America by: Taylor Design Group, Inc.

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