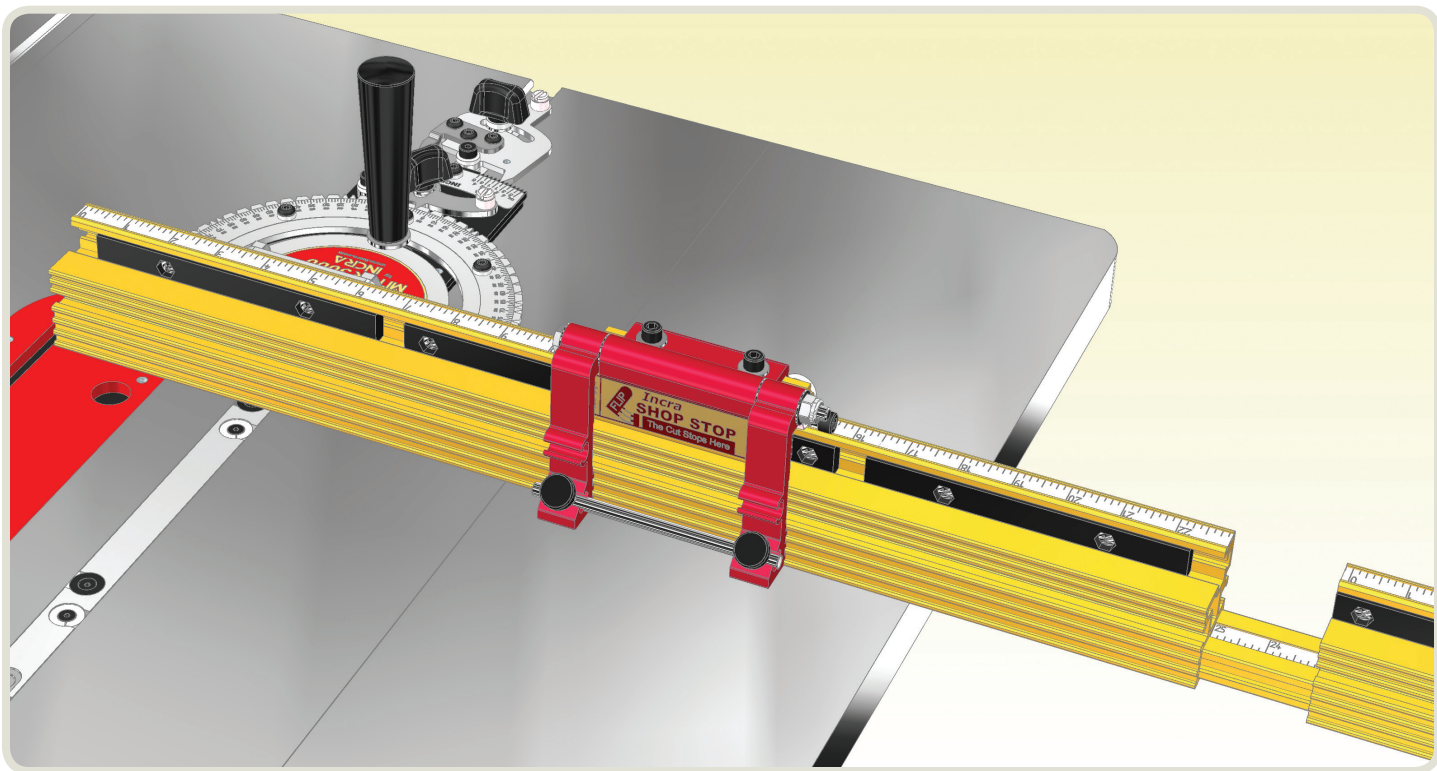


MITER 3000SE[™] by INCRA[®]

OWNER'S MANUAL

Before using the INCRA Miter3000SE, read and follow all of the instructions and safety information in this owner's manual.



SAFETY

Important safety instructions for using the **INCRA Miter3000SE**

Before using the INCRA Miter3000SE, read and follow all of the instructions and safety information in this owner's manual.

- When using the INCRA Miter3000SE 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 Miter3000SE.
- When using the INCRA Miter3000SE, 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 Miter3000SE.
- 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 Miter3000SE, 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 Miter3000SE, 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 AND CALIBRATION

1. Attach Clamping Knob and T-Clip

Remove the hex bolt that secures that 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**.

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**.

2. Adjust the Miter Bar

Loosen the (2) fasteners that secure the fence to the fence mounting bracket and remove the fence. Adjust the miter bar at each of the (4) expansion mechanism locations for a good fit in your table saw's miter slot. Turning the screw clockwise expands the mechanism. You'll find (2) of the expansion locations in front of the protractor. Adjust these (2) front expansion points first, expanding a little at each of the locations until the bar slides smoothly, **Fig. 3**.

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 one of the rear expansion points. To gain access to the final rear expansion point, remove the rear actuator thumbscrew and pivot the actuator, **Fig. 4**. 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.

3. Attach the Fence

Place your Miter3000SE in the preferred miter slot at your table saw. (Note: Left hand miter slot use shown. See step 4 to convert fence for use in right hand miter slot.) Attached 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. 5**.

Fig. 1 Attach Clamping Knob

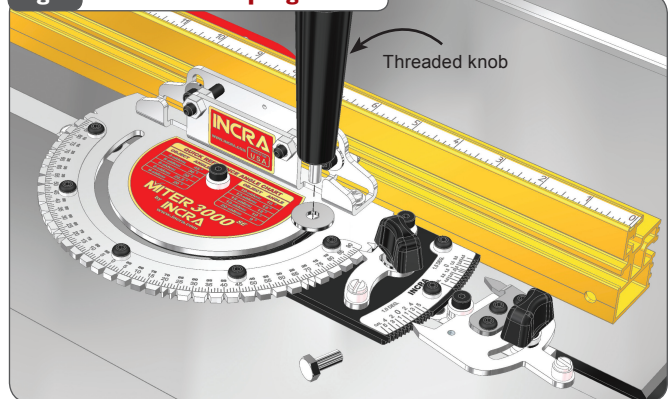


Fig. 2 Attach T-Clip

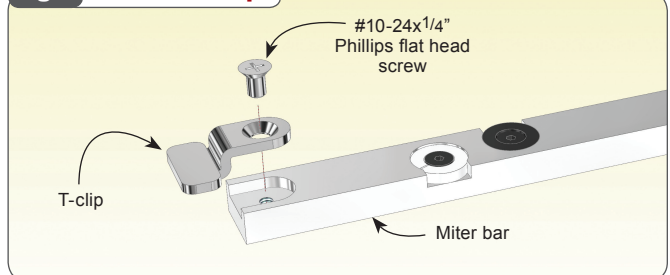


Fig. 3 Adjust Miter Bar - Front

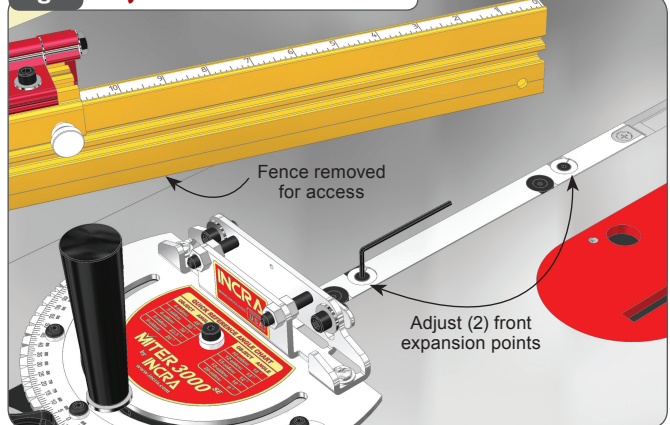


Fig. 4 Adjust Miter Bar - Rear

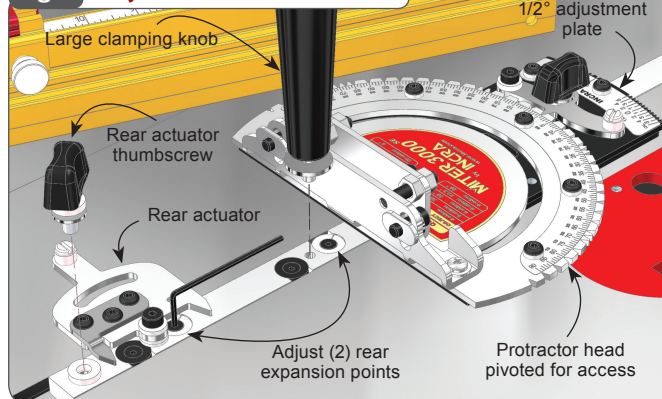
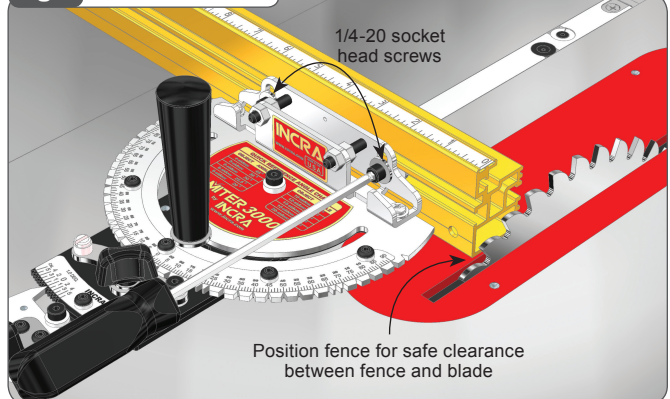


Fig. 5 Attach Fence



4. Left or Right of Blade

Your new Miter3000SE fence is factory configured for use to the left of the blade. If you prefer to use your Miter3000SE in the right hand miter slot just follow the steps below.

Loosen the 1/4-20 socket head screw located at the end of the 23" section of the fence, then slide out the 4" section of fence along with the attached extender bar. Move the socket head screw, washer and rectangular nut to the hole on the opposite end of the fence. Slide the extender bar assembly into the end of fence, capturing the rectangular nut in the T-slot on the extender bar. The higher numbers on the extender bar scale should be closest to the saw blade. Loosen the (2) socket head fasteners that secure the 4" section of fence and reverse it. Tighten all fasteners, **Fig. 6**. Slide the scale in the top of the 23" fence out and replace with the included reverse reading scales.

TIP: About Your Fence Scales

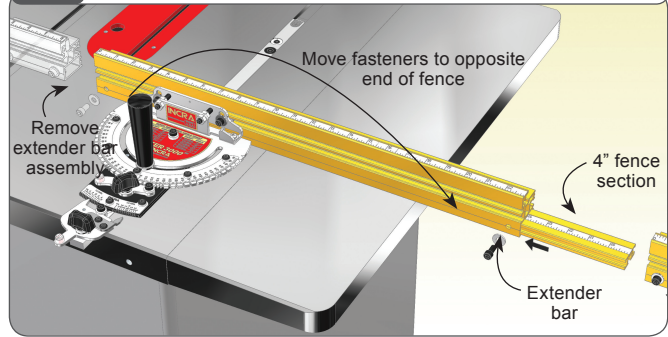
All INCRA products use overlapping 16" long Lexan scales. The overlap allows fine-tuning the scale from one end to the other to agree with the high degree of accuracy provided by the INCRA saw toothed positioning racks. As they are slid into the scale slot on the fence, the ends are overlapped and aligned using the optical window located at the end of the second scale. The friction fit will keep the scales in place. If you wish, you can use a small piece of double faced tape at the overlap to ensure that the scales move together when changing your zeroed setups for mitering.

5. 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.7**. Tighten the front actuator thumbscrew then tighten the large clamping knob. Using a Phillips head screw driver, loosen the (3) Phillips 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. 8**. Tighten the (3) Phillips head screws.

This one time calibration prepares your INCRA Miter3000SE for work in either miter slot. Just remember that the accuracy of the INCRA Miter3000SE 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.**

Fig. 6 Converting Fence for Use on Right Side of Blade



TIP About Your Fence Scales

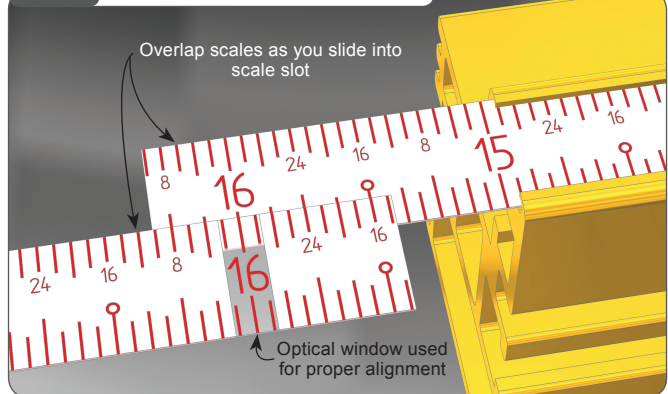


Fig. 7 Lock Front and Rear Actuator to 0°

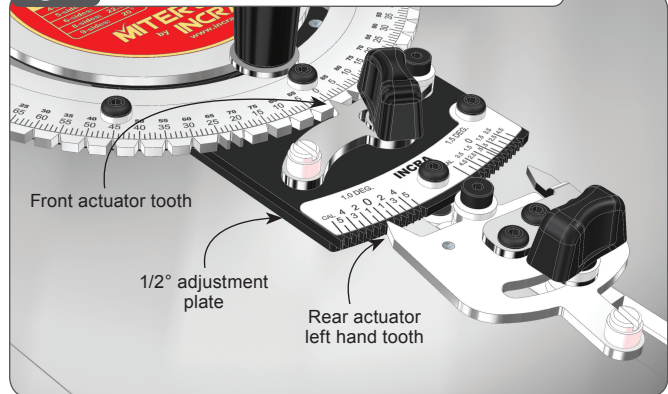
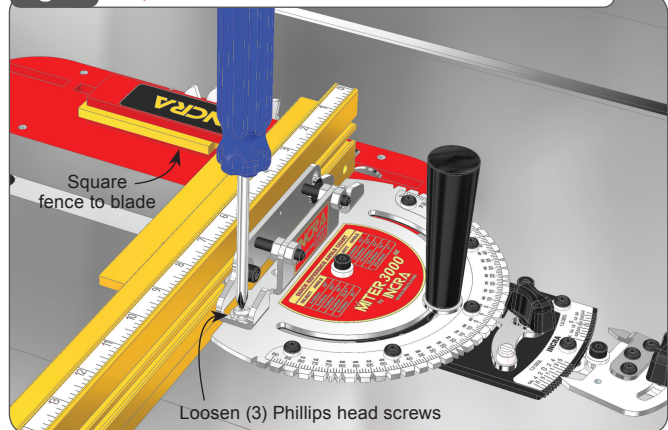


Fig. 8 Adjust Fence Bracket 90° to Saw Blade

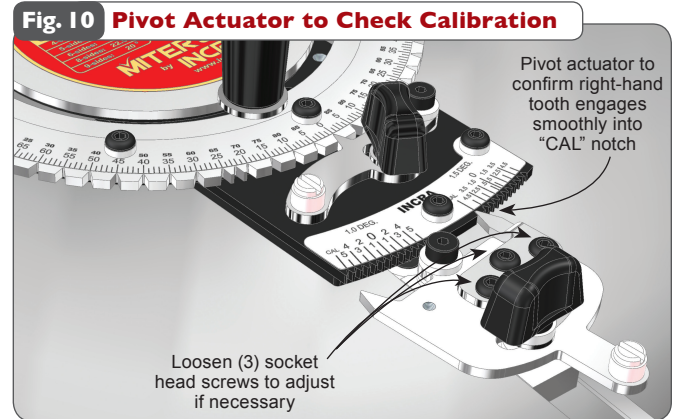
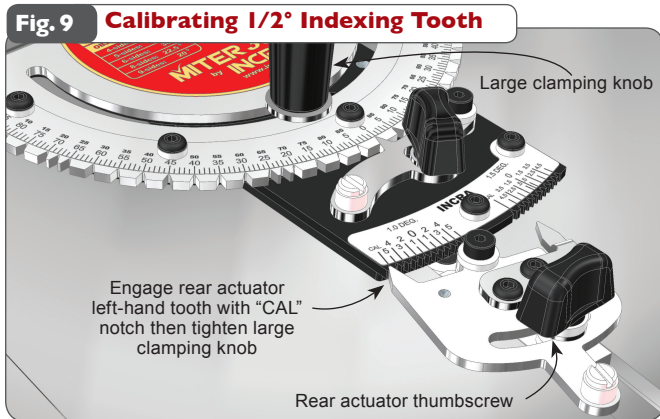


6. Calibrating the 1/2° Indexing Tooth

The 1/2° 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" with the notch marked "CAL"

on the rear scale and hold while you tighten the large clamping knob, **Fig. 9**. Now pivot the rear actuator to engage the right hand tooth with the notch marked "CAL" on the rear scale, **Fig. 10**. 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.



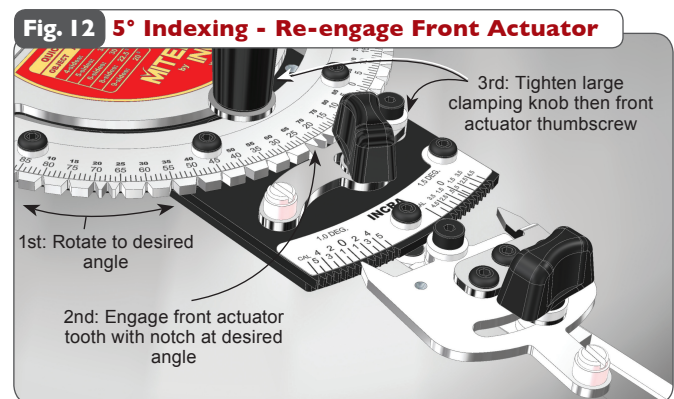
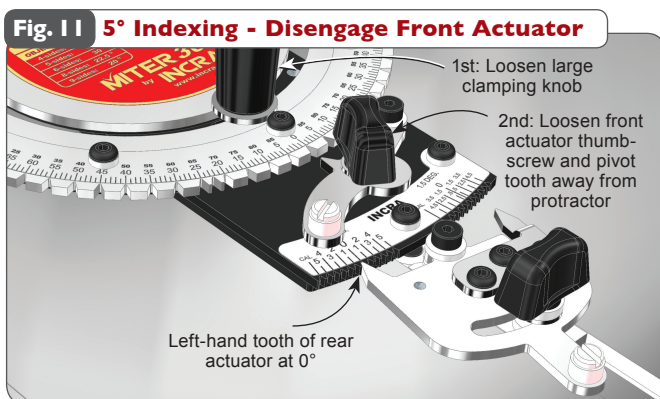
OPERATION – CHANGING ANGLE SETTINGS

The dual actuator design of the INCRA Miter3000SE 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°). For most mitering work, you'll have the left hand tooth of the rear actuator engaged at the 0° notch, 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.

5° Indexing (including 22.5° and 67.5° settings)

1. 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° adjustment plate. Loosen the front actuator thumbscrew and pivot the actuator tooth away from the notches located on the protractor head, **Fig. 11**.

2. 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. 12**.



1/2° Indexing

1. 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. 13**.

2. 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° intervals. Engage the tooth firmly in the selected notch then tighten the large clamping knob and the rear actuator thumbscrew, **Fig. 14**.

Important: After completing your cut don't forget to return the rear actuator setting to the 0° notch.

CAUTION:

AFTER MAKING ANY ADJUSTMENTS TO THE MITER ANGLE OF YOUR INCRA MITER3000SE, ALWAYS VERIFY SAFE CLEARANCE BETWEEN THE FENCE AND THE BLADE BEFORE TURNING ON THE SAW.

Fig. 13 1/2° Indexing - Engage Front Actuator

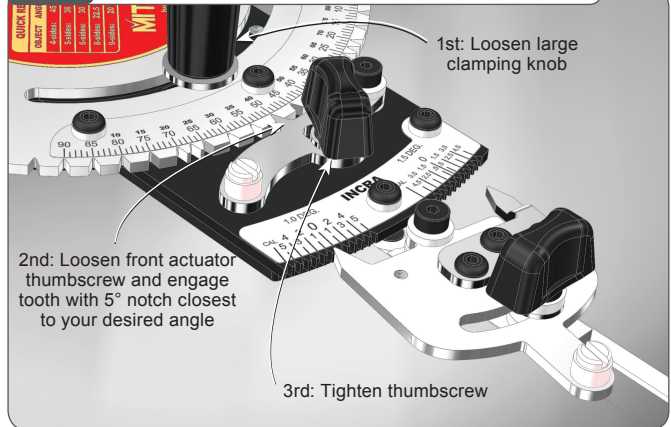
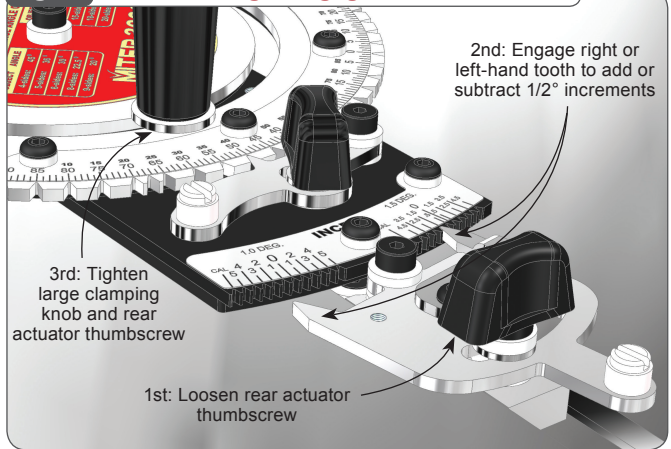


Fig. 14 1/2° Indexing - Engage Rear Actuator



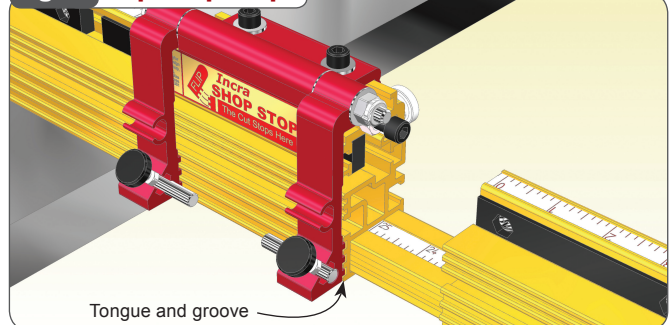
Continuous Adjustments

For angle settings finer than the 1/2° settings, first use the 1/2° 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° 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.

FLIP FENCE AND FLIP SHOP STOP - CALIBRATION AND OPERATION

As you look at your new INCRA Flip Shop Stop and Flip Fence for the first time you will see an interesting detail. The front face of the fence uses a tongue and groove arrangement to accept a mating feature on the flip arms, **Fig. 15**. When the flip arm is down with the two opposing features engaged, it becomes impossible for the sharp corner of a mitered board end to wedge between the fence and flip arm. Combined with INCRA's famous incremental positioning capabilities, you'll soon be duplicating cut off lengths with machine shop precision.

Fig. 15 Flip Shop Stop



Zeroing the Fence Scales

To zero the main fence scale for 90° work, first set the protractor to the 0° setting and lock in place. Clamp the Flip Shop Stop to the fence so that the 0" mark on the fence scale reads directly under the end of the gold component of the Flip Shop Stop, **Fig. 16**. Now loosen the (2) 1/4-20 socket head screws that secure the fence to the fence mounting bracket and slide the fence toward the blade until the Flip Arm on the stop contacts the blade. Re-tighten the fasteners, **Fig. 16A**.

For stopped cuts beyond the range of the main fence you'll need to calibrate the extender bar scale. Clamp the INCRA Flip Shop Stop to the 4" fence extender. (Use the scale on the short section of fence as a reference for clamping the stop to the same position each time you use it.) Now loosen the 1/4-20 socket head screw located at the end of the longer fence and slide the 4" fence and extender bar out. Use a tape measurer to set the distance between the blade and the Flip Arm at 25" and re-tighten the fastener, **Fig. 17**. Now simply slide the scale in the extender bar to read 25" at the end of the longer main fence section, **Fig. 17A**.

Fig. 16 Zeroing Fence Scale

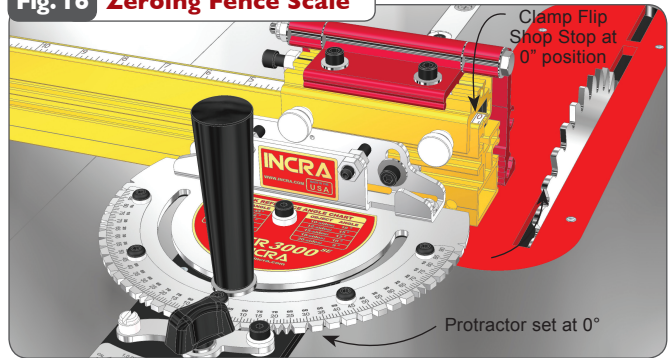


Fig. 16A Slide Fence to Blade

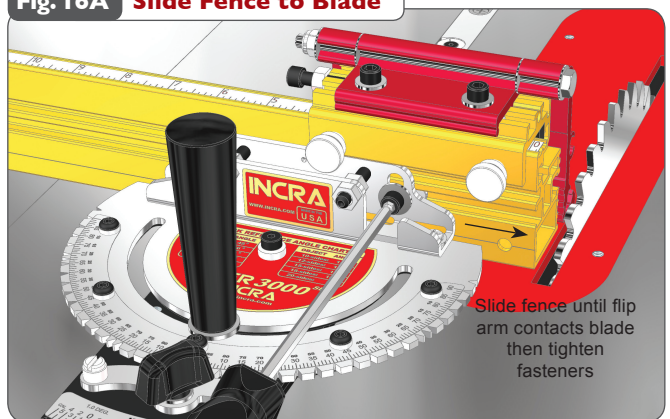


Fig. 17 Setting Extender Bar Scale

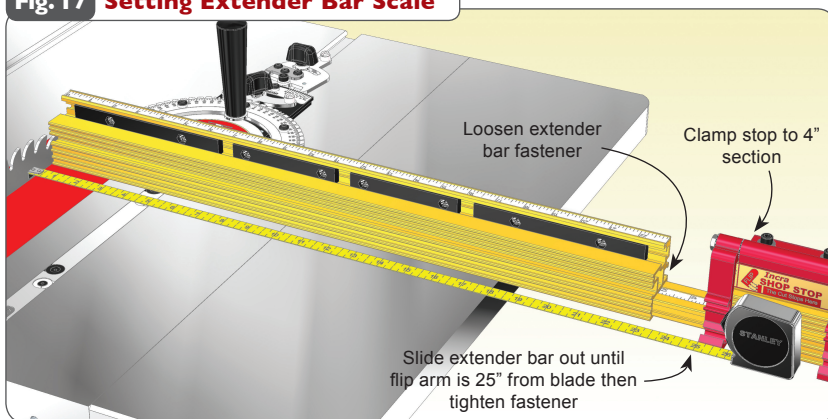
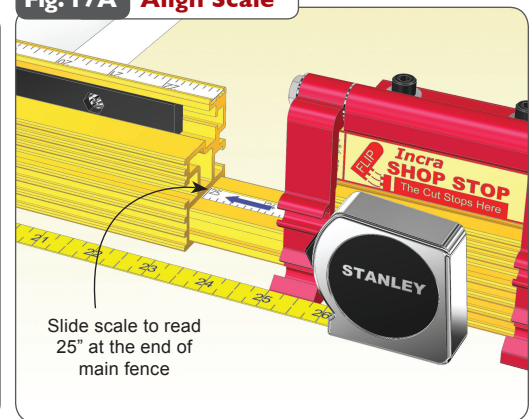
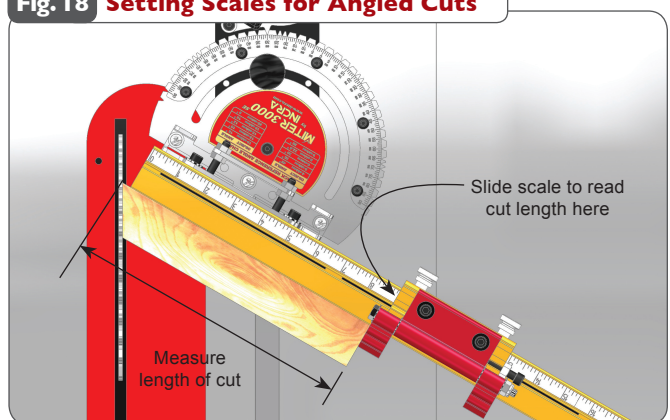


Fig. 17A Align Scale



For mitered cutting, a test cut is often the most accurate means of setting the fence and extender bar scales since measuring to the tooth of a blade set at an angle to the fence can be difficult. Begin by setting the desired miter angle and check for safe clearance between the fence and blade. Clamp the stop to the fence about 10" away from the blade. Miter a piece of scrap stock with this setup. Measure the length of the cut piece, **Fig. 18**. Then simply slide the scale on the fence to read the length of the cut directly under one end of the stop.

Fig. 18 Setting Scales for Angled Cuts



Micro Adjusting

To micro adjust your Flip Shop Stop's position, begin by loosening the (2) socket head screws located on the top of the stop body. Now turn the micro adjust socket head screw to fine tune the stop position, **Fig. 19**. When unscrewing the micro adjust screw, apply pressure to the stop body to keep it against the screw end. After adjustment, always tighten the (2) socket head screws on top of the stop body.

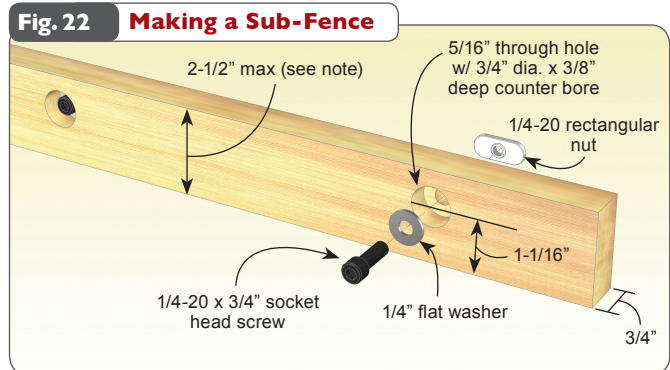
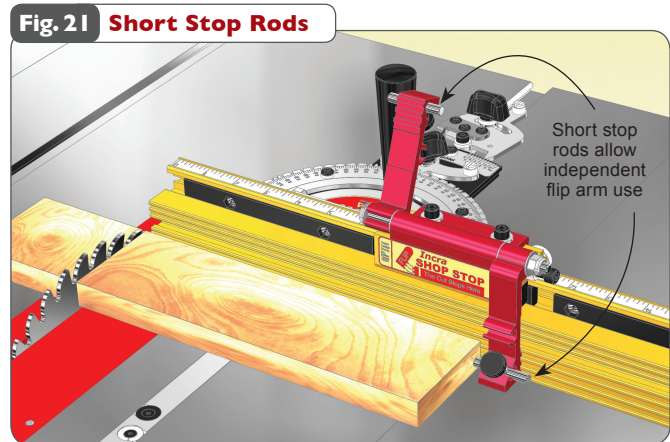
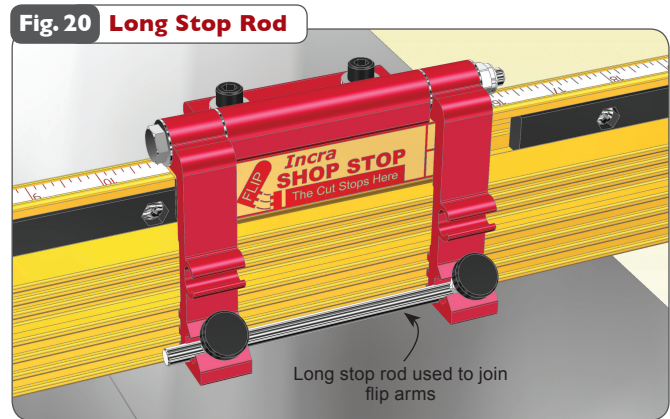
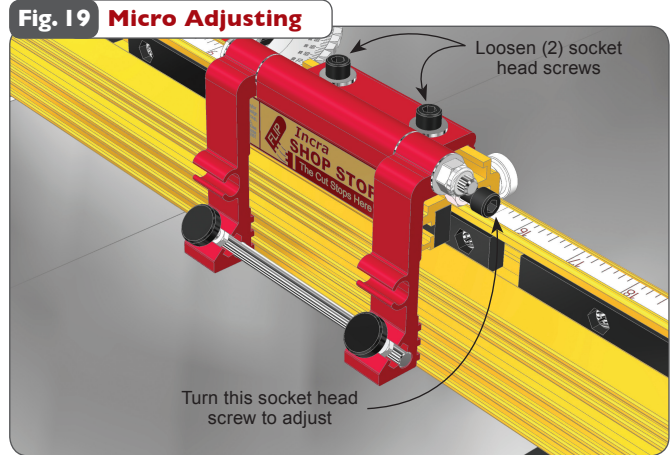
Flip Arms and Stop Rods

The dual flip arms and stop rods provide a variety of stop configurations. The flip arms can be used without the stop rods when you want to take advantage of the fence/arm tongue and groove feature for stop control on mitered board ends. Typically, you will use the longer rod to join the two arms together, **Fig. 20**. This produces an arrangement that, when pivoted, moves both arms simultaneously. The rod can be positioned so that it is the actual stop surface or it can be positioned slightly behind the front of the arm so that the aluminum arm is the actual stop surface.

By placing one of the shorter 1-1/2" rods in each of the two stop arms, you can use the two stop arms independently, **Fig. 21**. For example, you can calibrate one for work to the left of the blade and the other for work to the right. On one side of the blade you might want to position the stop rods to provide two different cut off lengths from one stop position. By using varying combinations of long or short rods you can create as much as 7-3/4" between the two stop positions.

Making a Zero Clearance Wooden Sub-Fence

A sub-fence can be used to provide tear out control as well as support for your workpiece up to and beyond the blade. A good material to use for making your zero clearance sub-fence is 3/4" medium density fiberboard (MDF). Use the drill and counter bore dimensions shown in **Fig. 22**. Attach using the supplied fasteners. Adjust the length of the fence to accommodate your application. Note: In applications where the incremental stopping capability of the Flip Shop Stop is required, the wooden sub fence can be no taller than 2-1/2".



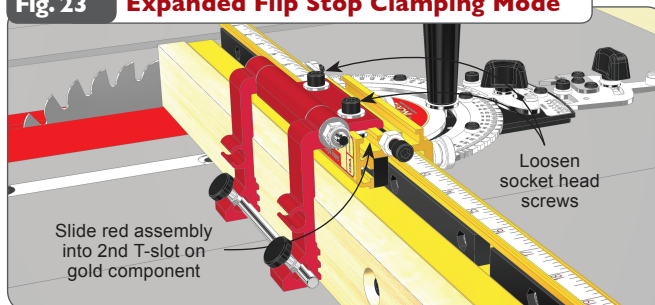
TIP

To avoid the saw blade pulling your workpiece into the cut, add a strip of adhesive backed sandpaper to the front face of the wooden sub fence

Expanded Flip Stop Clamping Mode

The two-part body design of the INCRA Flip Shop Stop allows for use with up to a 3/4" thick wooden sub-fence. To expand the INCRA Flip Shop Stop, loosen the (2) socket head screws located on the top of the stop body, then slide the upper portion of the stop off. Now slide the upper portion back on, capturing the rectangular nuts in the second T-slot located on the lower portion (gold component) of the stop body, **Fig. 23**.

Fig. 23 Expanded Flip Stop Clamping Mode



ADJUSTABLE FENCE MOUNTING BRACKET

Your INCRA Miter3000SE Fence has been adjusted square to the table at the factory so no further adjustment should be required. If adding a wooden sub-fence, fine adjustments to the angle can be easily made as described below.

Incra's fence mounting bracket enables any fence to be quickly and easily adjusted for perfect squareness to the table. We have provided two adjustment points so you can also neutralize twist or thickness variation that is sometimes present in homemade wooden fences or sub-fences.

1) Place a square against the front face of your fence. If you see a gap between the top of the fence and your square first loosen both outside nuts. Tighten one of inside nuts about 1/6 turn against the rear leg of the bracket as shown in **Fig. 24**, and then tighten the other inside nut by the same amount in the same direction against the rear leg. Alternate this 1/6 turn procedure between the two nuts until the fence is perfectly square to the table. **DO NOT TURN THE SET SCREW** and **DO NOT** over tighten the nuts. It usually takes less than one full turn of the nuts to square your fence to the table.

If you see a gap between the bottom of your fence and the square, first loosen both inside nuts. Tighten one of outside nuts about 1/6 turn against the rear leg of the bracket as shown in **Fig. 25**, and then tighten the other outside nut by the same amount in the same direction against the rear leg. Alternate this 1/6 turn procedure between the two nuts until the fence is perfectly square to the table. **DO NOT TURN THE SET SCREW** and **DO NOT** over tighten the nuts. It usually takes less than one full turn of the nuts to square your fence to the table.

2) After the fence has been squared to the table as described above, tighten both of the loose nuts against the rear leg of the bracket to secure your setting, **Fig. 26**. **DO NOT TURN THE SET SCREW**.

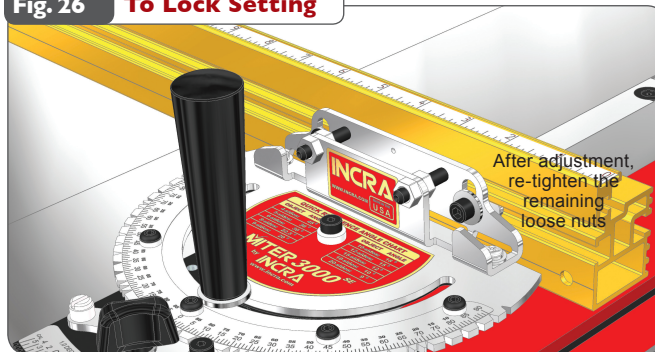
Fig. 24 To Tilt Fence Forward



Fig. 25 To Tilt Fence Back



Fig. 26 To Lock Setting



Manufactured by:
Taylor Design Group, Inc.
P.O. Box 810262 Dallas, TX 75381
www.incra.com

P: 972-242-9975/F: 972-242-9985
INCRA is a Registered Trademark of Taylor Design Group, Inc.



ONLINE WARRANTY REGISTRATION

Scan this QR code to register your product online ▶

You can also register your INCRA product online at www.incra.com

It's quick and easy!

