ROCKLER[®]

WOODWORKING



AND HARDWARE

Incra Ultra-RT Precision Fence Positioner



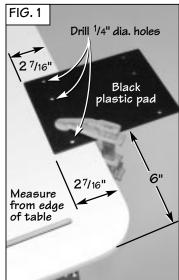
- Before using the Incra Ultra-RT, read and follow all of the instructions and safety information in this manual.
- When using the Incra Ultra-RT in conjunction with any other tool, first read and follow all instructions and safety information in that tool's owner's manual.
- When the Incra Ultra-RT is mounted to the table surface, make sure that all mounting screws are securely tightened.
- Always turn off the power and make sure that the bit or blade is fully stationary before moving the Incra Ultra-RT to any new setting.
- Always keep both hands behind the fence when moving the Incra Ultra-RT to any new setting.

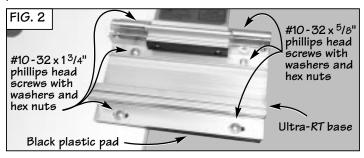
- Before making any cut, always make sure that the carriage clamp is locked and the fence end clamping knobs are securely tightened.
- When using the Incra Ultra-RT with any other tool, make sure that all safety guards and other safety equipment supplied by the manufacturer of that tool are securely in place and functional. Never let the Incra Ultra-RT interfere with another tool's safety equipment.
- Use appropriate safety devices. Keep hands clear of the bit or blade. Always use a push stick, rubber soled push block, or other safety devices to keep your hands safely away from the cutting tool.
- Wear safety glasses, hearing protection, and a dust mask, and follow all normal shop safety practices.

Assembly

Attach base to table edge

If mounting holes are not already predrilled in your router table, clamp the black base pad to the edge of your router table using the dimensions shown in Fig. 1, then use the black base pad as a drill guide to locate (3) 1/4" dia. holes. Now place the ULTRA-RT on top of the black base pad, and attach to the table using (3) #10-32 x 1³/₄" phillips head screws with washers and hex nuts, Fig. 2 Do not tighten the fasteners at this time. Using (3) #10-32 x 5/8" phillips head screws with washers and hex nuts, secure the base pad to the rear of the Ultra-RT.

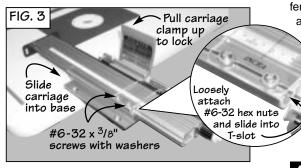




Install carriage and attach hairline cursor

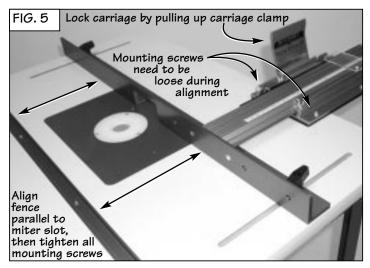
Slide the Ultra-*RT* carriage into the base and pull the carriage clamp up to lock in place. Place a washer on each of the (2) #6-32 x ³/8" screws and insert through the holes in the plastic cursor. Loosely attach the #6-32 hex nuts and slide the nuts into the

T-slot at the rear of the Ultra-RT's base as shown. Align the cursor flush with the edge of the base and tighten the mounting screws. **Fig 3**.



Align the fence parallel to the miter slot

With the Ultra-*RT* locked in place (carriage clamp pulled up), align the fence parallel with the miter slot. The mounting screws that secure the Ultra-*RT*'s base to the table should be loose during the alignment. Once aligned, tighten all six phillips head screws on the Ultra-*RT*'s base. **Fig 5**.

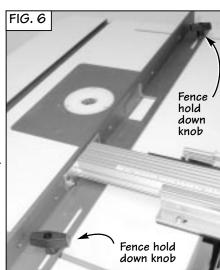


Install fence hold downs

Insert the 5/16-18 x 1-1/2" T-bolts from under the table through the slots in both the table and fence and thread on the black clamping knobs. **Fig 6**. **Note:** When moving the

fence to any new position always pull the Ultra-RT

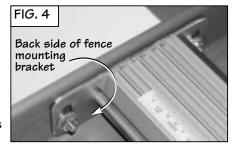
carriage clamp up into the locked position, **before** tightening the fence hold down clamping knobs.



Attach the fence to the end of the carriage

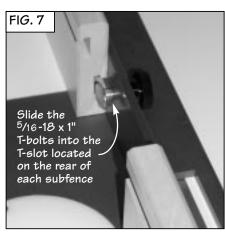
Attach the fence to the end of the carriage using the (2) #10-32 x 5/8" phillips flat head screws with washers and lock nuts. If your fence is not predrilled for the fasteners, cut out the included drill

template, then drill and countersink the holes as described on template. Fig 4. Note: If you do not have a countersink bit, use the supplied #10-32 x 5/8" socket head fasteners instead of the flat head fasteners for mounting.



Install wooden subfences

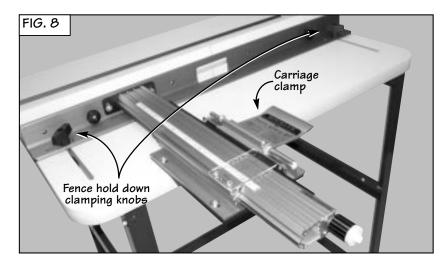
Insert the 5/16-18 x 1"
T-bolts through the holes on the front of the aluminum fence and loosely thread on the (4) round clamping knobs. Slide the T-bolts into the T-slot located on the rear of each of the (2) wooden subfences. Fig 7. Position the subfences as required and tighten the clamping knobs.



Operation

Moving to a new scale setting

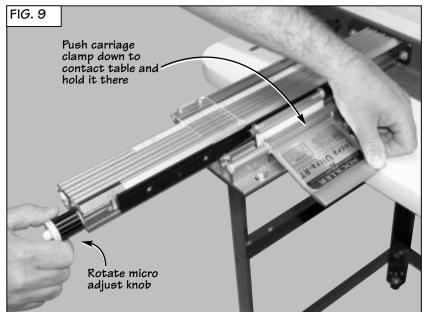
To move the fence to a new position, first loosen the two fence hold down clamping knobs. Now push the carriage clamp down and release the clamp handle to unlock the carriage. Slide the fence to the new position, aligning the measurement on the scale directly under the hairline cursor. To secure the fence at the new position, pull the carriage clamp up into the locked position, then tighten the two fence hold down clamping knobs. **Fig 8**.



Micro adjusting

The micro adjust feature of the Ultra-*RT* allows for precise positioning of the fence to any location between the ½32" tooth spacing of the Incra sawtooth racks. You'll find it especially useful for setup operations like "zeroing" the fence to the router bit. Here's how to use the micro adjuster:

- Loosen the fence hold down clamping knobs and push the carriage clamp down to unlock the Ultra-*RT* carriage.
- Engage the micro adjust mechanism by pushing the carriage clamp handle down until it contacts the router table surface, then hold it there. Fig 9.
- Turn the micro adjust knob <u>clockwise</u> to move the fence <u>toward</u> the cutter (forward), and <u>counterclockwise</u> to move the fence <u>away</u> from the cutter (backward). The carriage clamp must be held down as the knob is turned.
- Pull the carriage clamp up into the locked position, then tighten the two fence hold down clamping knobs.

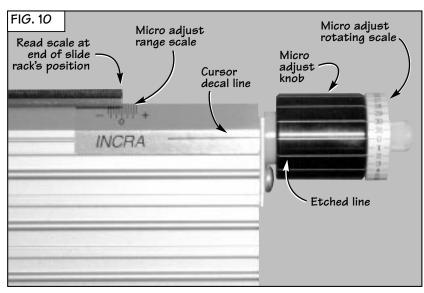


Reading the micro adjust scales

Gauging the distance moved when micro adjusting is easy:

- A FULL turn of the knob equals 1/32" adjustment
- A HALF turn equals 1/64"
- For smaller adjustments, use the etched lines on the knob as a reference
- For each etched line that passes the corresponding cursor decal line on the carriage, you have moved the fence .002" (two thousandths of an inch).
- Micro adjust range is plus or minus 5/32" with each of the ten marks on the gold scale representing 1/32". Read the scale at the end of the slide rack.

At the end of the knob you'll find a scale that can be aligned to read zero at any of the etched line positions on the knob. This allows you to re-zero the scale after any micro adjustment. Loosen the thumbscrew to rotate the scale. **Fig 10**.

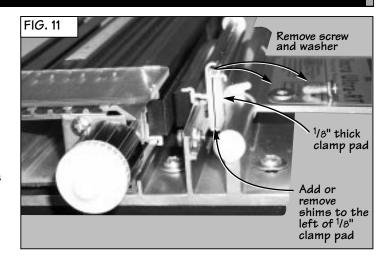


Adjusting the clamping pressure

The Ultra-RT carriage clamp was designed to make it easy for the operator to adjust the clamping pressure to his/her preference using the supplied clamp pad shims.

Here's how:

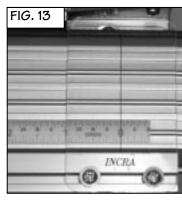
After mounting the Ultra-*RT* to your router table, unlock the carriage clamp and remove the phillips head screw and washer that caps either end of the clamp pad slot. Your hardware pack includes (3) .005" X ⁷/8" X 4" clamp pad shims. If you want to increase the clamping pressure, add one of the shims, check the clamping pressure, and adjust further as necessary. The shims should be placed to the <u>left</u> of the ¹/8" thick clamp pad so that the clamp always touches the ¹/8" thick pad and not the thin shims. To decrease clamping pressure, simply remove one or more of the shims. Replace the phillips head screw and washer. **Fig 11**.

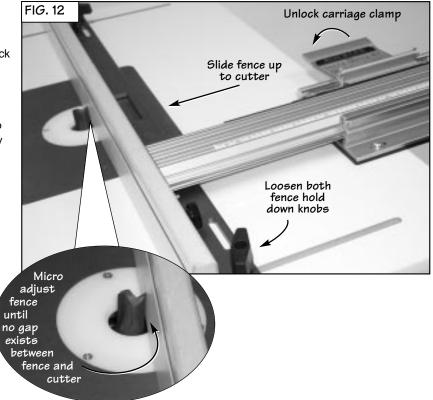


Zeroing the fence and scale

In order to ensure accurate results, the fence must first be "zeroed" to the cutter.

- To zero, loosen the fence hold down knobs and unlock the carriage clamp.
- 2 Slide the fence up to the edge of the cutter.
- Sight down the length of the fence to check for a gap between the fence and cutter. Fig 12. Fine-tune any remaining distance by holding down the carriage clamp as you micro adjust the fence position.
- Return the carriage clamp to the locked position, tighten the fence hold down knobs, then slide the scale to read 0" under the hairline cursor. Fig 13.





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 below. This warranty does not apply to parts which have been subjected to improper use, alteration, or abuse.

LIFETIME WARRANTY ON POSITIONING RACKS

If an INCRA positioning rack in this tool becomes damaged for ANY reason, Taylor Design Group will replace it free of charge for as long as you own your tool. Return the damaged rack, postage prepaid, and allow 1 to 2 weeks for delivery.

NOTE: Replacements cannot be sent unless damaged racks have been received by Taylor Design Group.