

The Off-Fence Mortising Kit

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The **Micro Fence Off-Fence Mortising Kit** has been designed to take optimum advantage of the Micro Fence's measuring capabilities in mortising operations with the hand-held router. The micrometer adjustment makes mortise and tenon joint tolerances simple, measurable and repeatable tasks.

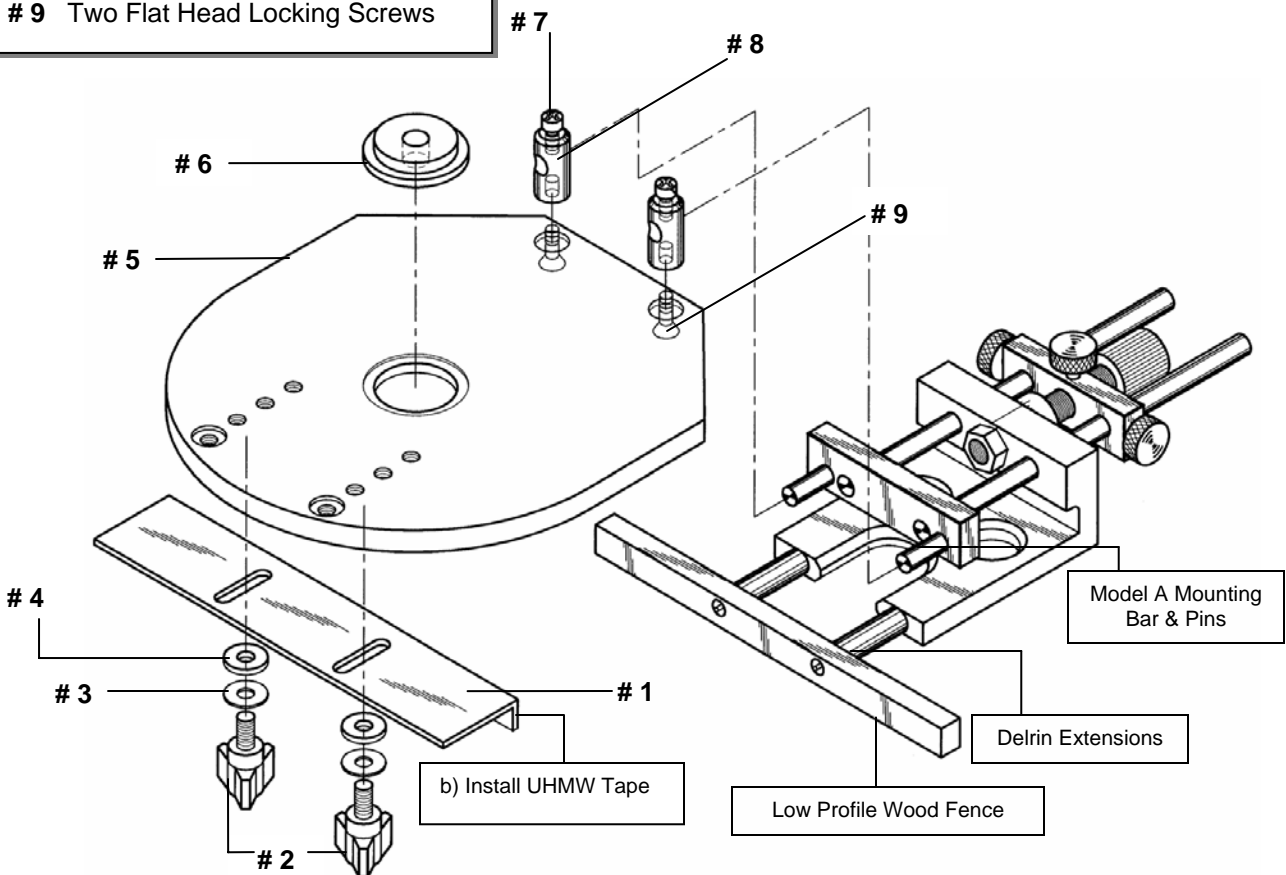
The Off-Fence Kit provides an aluminum secondary fence that opposes the Micro Fence Edge Guide and "entraps" the work piece, making it virtually impossible to spoil the cut by wandering from the edge of the material, (even when making multiple passes). We have chosen to standardize this accessory to be fitted with our **Model A Mounting Bar** which is required for its use.

The kit includes:

- # 1 One Aluminum Off-Fence
- # 2 Two ¼ - 20 Locking Knobs
- # 3 Two 5/8" Stainless Steel Washers
- # 4 Two Lock Washers
- # 5 One Universal Router Plate
- # 6 One Centering Hub
- # 7 Two Pan Head Locking Screws
- # 8 Two Trimmer Posts
- # 9 Two Flat Head Locking Screws

Initial Assembly:

- a) Drill holes in the appropriate configuration to mount your router (see steps below) on the Universal Router Plate (#5).
- b) Install the UHMW tape on the ½" face of the aluminum Off Fence before use. It will maximize smooth travel on wooden surfaces.
- c) Install lock washers (#4), then the stainless flat washers (#3) on the locking knobs #2).
- d) Fasten the Trimmer Posts (#8) in the .045" deep counter-bored holes on the top of the Universal Router Plate and fasten from the bottom with the two flat head screws (#9).
- e) Install the two Pan Head Locking Screws (#7) in the top of each Trimmer Post .



To Mount Your Router on the Universal Router Plate:

Each **Off-Fence Mortising Kit** includes an aluminum **Centering Hub (#6)** to assist you in properly mounting your router on the **Universal Router Plate (#5)**. This centering hub is made to fit the most popular template guide bushing recesses in router sub-bases (1.375").*

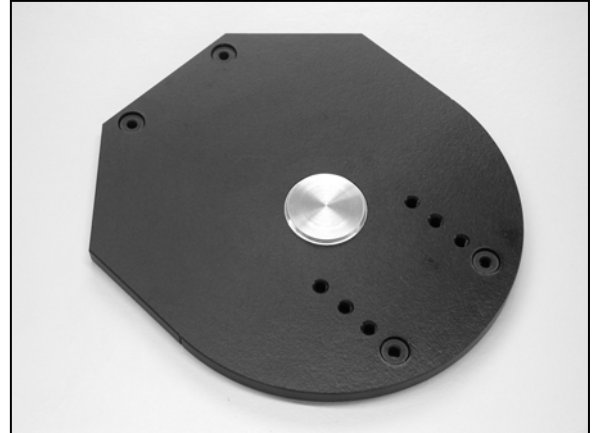
Seat the hub in the template guide bushing recess of the Micro Fence Plate as shown in the exploded-view diagram above. (The 1.375" diameter should be facing upward).

Remove the manufacturer's plastic sub-base from the bottom of your router and place it over the **Centering Hub** to locate it on the Micro Fence Router Plate. Pay attention to keep the sub-base bottom-side down and to position the mounting holes so that the router will mount in the posture you prefer.

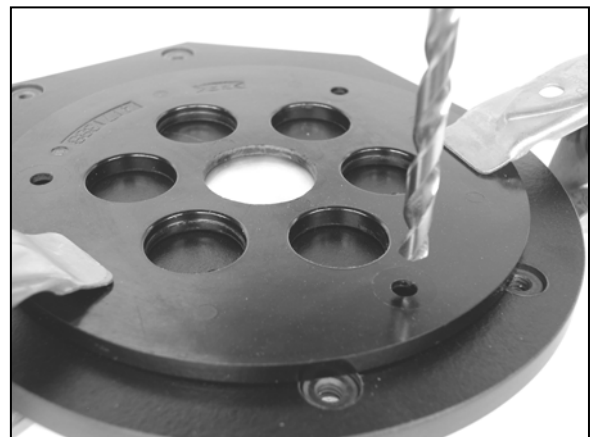
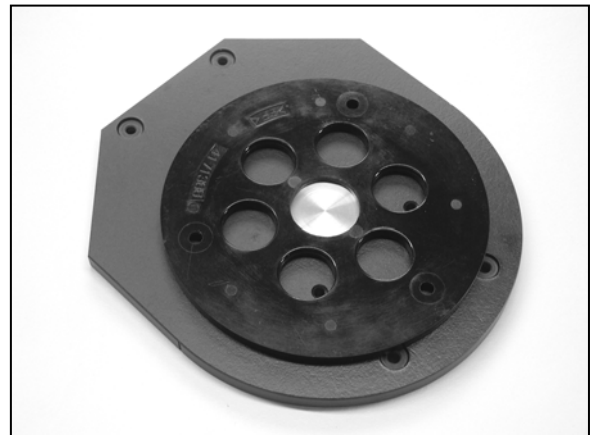
(Some considerations are the position of the handles in relation to the edge-guide, 90° being the generally accepted preference; and the position of the plunge lock on the router in relation to whether you are right or left-handed).

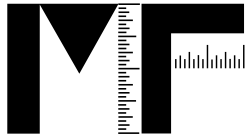
***If the opening in your sub-base is *not* 1.375" and cannot be fitted with the Centering Hub, try installing a 1/4" router bit or drill in the router's collet and use the through hole in the middle of the Centering Hub to position and mark the hole positions for your router base.**

We suggest that you clamp the sub-base in the desired position and use it as a template to drill thru holes in the **Universal Router Plate (#5)**. After drilling, remove the clamps and the Centering Hub, turn the Universal plate over and countersink, (or counter-bore), the thru holes deep enough to allow the manufacturer's base screws to engage at least several threads into the 3/8" thick Universal Router Plate. The heads of these screws, of course, should not seat proud of the plate's bottom surface.



1/4" through hole in Centering Hub not shown





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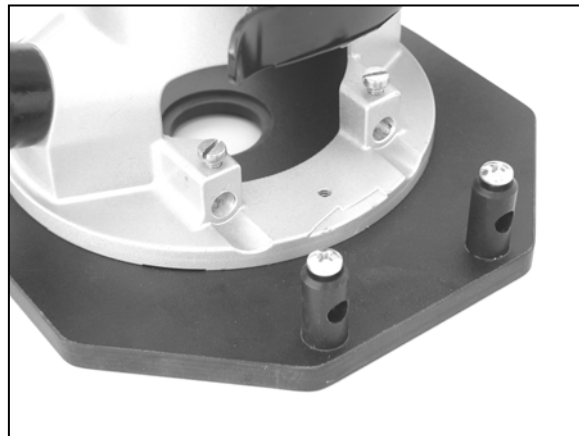
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After fastening the router's base to the **Universal Plate**, install the two **Trimmer Posts (#8)** using the 10-32 flat-head phillips screws (#9) from the bottom, and fitted with the pan-head screws (#7) in the top.

(Tip: Leaving the bottom screws slightly loosened will make the insertion of the Micro Fence **Mounting Bar** easier).

After insertion, tighten both top and bottom screws securely.



When the **Off-Fence** is installed, it will appear as in the photo at right, (purposely up-side down).

See the description of "Centered Mortise Cuts" below for general operating applications.

Note: The router at the right is fitted with a solid carbide, up-cut spiral chip-breaking bit which can be particularly effective when cutting through end-grain in hardwoods. (These bits are available directly from Micro Fence.)



Centered Mortise Cuts:

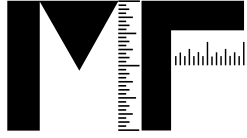
The initial set-up for centered cuts using the **Micro Fence Edge Guide** is a three-step procedure.

After installing the appropriate bit in the router, (a plunge-type router is usually the best choice for most mortising operations), **(1)** set the Micro Fence Dial at 50 (zero), and take an initial "test" cut at an approximated center position.* **(2)** measure the material left on either side of this first test cut and, **(3)** dial one-half of the difference between them toward center. This procedure will automatically and precisely produce a centered bit (cut) position.

Install the **Off-Fence** as shown in the exploded-view CAD drawing and tighten the locking knobs as securely as possible. There should be just enough clearance between the faces of the work piece and the fences for the router to travel smoothly without any side-to-side play.

Multiple cuts may be made with the plunge mechanism at successively greater depths without fear of wandering from the centerline. These may be pre-set using the stop turret of the plunge router. **[Tips: a).** As a rule of thumb, take conservative cuts until the machining quality of your material becomes familiar to you. **b).** an up-cut spiral bit may assist in chip removal when making deeper cuts].

Note: The **Universal Router Plate** is notched on both sides to mark the centerline of the plate's throat. This feature can be used to set initial "approximate" center positions. Always use a test cut to determine actual measurement.



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The photo at right shows the aluminum Off-Fence installed opposite the Micro Fence Edge Guide.



Optional Accessories:

By adding two additional Trimmer Posts on the curved side of the Universal Router Plate, a second Micro Fence Edge Guide can be installed. The two outer $\frac{1}{4}$ -20 tapped holes in the Router Plate are counter-bored to provide proper vertical clearance for the auxiliary Micro Fence to slide under the plate.

This type of set-up can be extremely useful when cutting off-center mortises or when maximum adjustability and ease of adjustment are critical.

The additional Trimmer Post sets are available from Micro Fence.

