Rip Fence for the MKV Model 500
555646

This updates your MARK V Model 500 manual’s Parts List and Exploded View for the rip fence, as well as the fence’s assembly and alignment instructions.

The new fence for the MARK V Model 500 has been redesigned to operate like the one for the Model 510. This means the fence is made of ribbed aluminum for freer workpiece flow, and now features a rear clamp and clamp lever. Also, the new fence for the Model 500 has a T-slot in the top, so you can use locking “T-nuts” to slide and anchor helpful jigs. These instructions cover assembling and aligning the fence. The numbers in parentheses are reference numbers listed above in the Parts list and Exploded View.

### Safety

**WARNING**

- Always keep your hands, fingers, and other parts of your body out of the danger zone.
- Use pushsticks, push blocks and other safety devices to help guide and control workpieces.
- Never operate the table saw without the upper and lower saw guards in place. The one exception to this rule is when you saw part way through a board - cutting a dado, groove or rabbet - then you must remove the upper saw guard. Whenever you remove the upper saw guard, keep the lower saw guard in place and work with extreme caution. Use safety devices to move the stock past the blade.
Never stand directly in front of or in back of the blade; always stand to one side or the other.

Make all adjustments with the blade stopped, with the one exception of changing the speed. Never try to change the configuration of the table or the power plant before the machine has completely stopped.

Let the blade get up to full speed before cutting.

Always cut against the rotation of the blade. This keeps the blade from grabbing the wood out of your hands.

Use the miter gauge or rip fence to guide your work. Freehand cuts are extremely dangerous, inaccurate and not recommended.

Make a five-point check: all five locks - power plant, carriage, table height, table tilt and quill - should be secure.

Never reach under the table to tighten the locks, remove scrap or make adjustments while the saw is running.

Never reach over the blade while it is running, even with the upper guard in place.

Do not rip large sheets of plywood or similar materials by yourself. Get at least one helper.

Always use the proper table insert for the operation.

Turn off the power and let the machine come to a full stop before you remove workpieces or clear scraps away from the blade.

**Tools Needed for Assembly and Alignment:**

· 5/32" Allen Wrenches, long and short
· 1/2" Wrench
· Miter Gauge

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**ASSEMBLE THE FENCE**

1. Place two washers (14) on the shaft of the handle (13), as in Fig. 1.

2. Place the spring (18) on the shaft of the handle, as shown in Fig. 3.
3. Place the front fence lock (19) and then the special square nut (20) on the shaft of the handle, as illustrated in Fig. 4.

4. Turn the handle so the special hex nut is secured on the handle threads, as seen in Fig. 5.

5. Use a 5/32" Allen wrench to slightly loosen the socket head screws (16) attaching the fence base to the fence, as shown in Fig. 6.

6. Also use a 5/32" Allen wrench to back out both setscrews (12) located in the fence base, as seen in Fig. 7. The setscrews should be recessed into the fence base just enough so they will not touch the fence bar when the fence is attached to the table.

7. Place the fence on the table, as seen in Fig. 8. Tighten the base handle (13), as shown in Fig. 9, then lock down the rear clamp lever (10), as shown in Fig. 10.

ADJUST THE REAR CLAMP
8. If the rear clamp is too tight (rear clamp lever is hard to lock or won’t lock at all), or too loose (allowing fence slippage once it is locked), then the rear clamp needs adjusting. To adjust the rear clamp, do the following:

   a. If too tight, raise the handle, then use a 1/2" wrench to loosen the special hex nut (3). Continue loosening this nut until the rear clamp lever can be locked firmly. See Fig. 11.

   b. If too loose, raise the handle, then use a 1/2" wrench to tighten the special hex nut (3). Continue tightening this nut until the rear clamp lever can be locked firmly. See Fig. 11.

ALIGN THE RIP FENCE TO THE WORKTABLE

9. Place the miter gauge in the left slot of the worktable on the infeed side, as shown in Fig. 12.

10. Insert the long 5/32" Allen wrench through the miter gauge and secure it using a short 5/32" Allen wrench and a setscrew borrowed from the lathe tool rest, as seen in Fig. 12.

11. Move the rip fence toward the Allen wrench until it just touches. Tighten the handle, then lock the rear clamp lever to secure both ends of the rip fence, as shown in Fig. 13.

12. Slide the miter gauge back and forth in the slot, as seen in Figs. 14 and 15. The tip of the Allen wrench should keep in slight contact with the rip fence. Watch that you don’t scratch the fence.
13. If it pulls away from or binds against the rip fence, the fence needs aligning. To align the rip fence, do the following:

a. Loosen the rear clamp lever.

b. Adjust the fence by pulling or pushing it closer to, or farther from, the 5/32” Allen wrench, as shown in Fig. 15. Lock the rear clamp lever. Again, slide the miter gauge from front to back, as described in Step 12. The fence should be parallel with the miter gauge slot. If not, repeat Steps 12 and 13.

c. Once aligned, tighten the socket screws (16) with a 5/32” Allen wrench, as shown in Fig. 16. Repeat Step 12 to double check alignment.

Operations with the Fence

**WARNING**

Follow all warnings and cautions in your MARK V manual - as well as page one of this product literature - for all operations using the fence.

Using the new fence for the MARK V Model 500 is similar to the older model fence. Just remember to place the fence on the worktable, as demonstrated in Fig. 17, and move the fence to the desired distance from the saw blade. After the fence is in position, tighten the handle and then lock down the rear clamp lever. For more information on using the fence, refer to the Shopsmith textbook, *Power Tool Woodworking for Everyone.*