

ASK SMITTY

No woodworker (except *SMITTY*, of course) has ALL the answers. From time-to-time, everyone hits a snag, trying to figure out some sort of in-shop problem. Don't worry. *SMITTY* can help. Just use the special e-mail link directly below to send your questions to *SMITTY*. He'll do his best to get back to you soon, with the answers to those questions.

Here are the questions...and *SMITTY*'s answers for this issue...

Setting Jointer/Planer Knives Accurately

From "Willard" (e-mail question — city/state unknown)

I received a pair of magna-set planer knife setters as a gift. Can I use them to set the blades on my Shopsmith Planer? If so, do I just remove the top protective cover? It looks like that comes off with 2 Allen screws. How about my Shopsmith Jointer?

Yes, the jointer Magna-set can be used on your Shopsmith Jointer. I personally do not like the their procedures or the accuracy of setting the knives with this tool, however, many other people like the Magna-set for setting jointer knives. I prefer setting the jointer knives the way we recommend in the Jointer Owners Manual (pgs 10, 11, 12). This costs a lot less than the \$50 for the jointer Magna-set and (for me) is more accurate.

The Magna-set for the thickness planer can NOT be used on the SHOPSMITH Thickness Planer. This tool will not set the knives in the same position as they are set with either the knife setting gage or here in the factory.

If you're having trouble setting the planer knives (as some people do) I recommend that you send your cutterhead with newly sharpened knives to us to re-set. We can set them to an accuracy of .002" or less for just \$24.95 plus tax and shipping. You should call SHOPSMITH Customer Service (1-800-762-7555) first. They will walk you through all the steps to remove and pack your knives and cutterhead. This is the BEST and most accurate way to re-install knives in the SHOPSMITH Planer.

Mortising Attachment Problems

From Bob Bridwell (e-mail question — city/state unknown)

I purchased my Shopsmith Mark 5 in 1978 or 79. I have never been able to get the Mortising set-up to work properly. I have adjusted the depth of the drill bit in the chisel according to the Shopsmith manual and have had the same results. The drill cuts to the depth of the chisel edge and stops. Any suggestions as to what to do?

If I understand your question properly...the outside square chisel is not penetrating the wood but the drill bit is. There are three ways to improve this:

- 1.) Sharpen the square chisel. (see Shopsmith's textbook, "Power Tool Woodworking for Everyone", current edition, pages 304 & 305). To order the appropriate sharpening stone you'll have to be able to tell our Customer Service Rep when you purchased your mortising set when you call to place your order.

2.) Support the worktable. If you have a Model 500 machine, you can purchase a support leg (555627 pg. 30 of our 50th Anniversary Catalog) or use a 2x4 cut to length (approx. 30" to 36") to fit under the table. If you have upgraded to one of the newer table systems, you can support the table with the tubes and legs that came with your upgrade.

3.) Perhaps you don't realize how much force it takes to push the square chisel through the wood. With sharp chisels and the worktable supported properly, I would guess it takes 50 pounds of force on the quill handle to make the mortising cut. With dull chisels and/or unsupported table, MUCH more.

Routing & Shaping with and without the Shopsmith Speed Increaser

From "Ed" (e-mail question — city/state unknown)

I have a question about routing and shaping with the Shopsmith MARK V. Is the Shopsmith Speed Increaser required for performing these functions? I have tried to use a router bit in my MARK V in the past and I had very terrible results trying to accomplish simple routing. I have owned my MARK V for almost eight years. It was my Grandfather's, which he purchased in the 50's. I have not purchased a Speed Increaser and would like to create some large raised panels for installation onto a wall surface behind a bar area. By the way, the new Tips Page with the link about raised panels is great. Maybe in the future, you could have more items that include links to blow up plans.

There's no question that the speed increaser makes the MARK V a much better router than it is without this accessory. However, if you have an older MARK V (which you apparently do), part of your problem stems from the fact that you have a single bearing quill in your machine...combined with the age of this machine, of course.

Even when new, the single bearing quills would allow excessive "runout" and wobble during use...especially with operations involving a lot of side thrust (such as routing, shaping, drum sanding, etc.) This causes chatter and results in disappointing results. That's why Shopsmith switched to a two-bearing quill in 1984.

A two-bearing quill upgrade kit is available for your machine (Part # 555088 — about \$90)..and you should be able to install it yourself. This will make a significant difference in your routing/shaping results...and other operations, as well.

When routing, be sure to use the Router Chuck and not your drill chuck. Drill chucks are not designed to withstand the forces involved in side thrust operations.

Will the speed increaser improve your results? You bet it will! Especially with routing operations. That's because router bits typically have two flutes...and two-fluted bits cut more smoothly at higher speeds. The issue here is really one of "cuts-per-revolution". Consider that hand-held routers typically run at between 18,000 and 25,000 rpm's. At 20,000 rpm's, a 2-flute bit is making 40,000 cuts-per-minute !

The Speed increaser will make some difference in your shaping, as well...but top-end MARK V speeds (5,700) are acceptable for work with these THREE-flute cutters.

Another thing to consider when performing either of these operations on a MARK V is "how big of a bite" you're taking in a single pass. At lower speeds, it's important that you take lighter passes — and more of them.

For guidance on your 2-bearing quill upgrade, I advise you to contact our TOLL-FREE Technical Services Hotline at 1-800-762-7555. Hope this info helps.

Installing quarter-round moldings

From Jim Nejedlo (e-mail question — city/state unknown)

Do you have some tips/hints for installing (i.e., cutting, measuring staining, fitting) 3/4" x 3/4" quarter-round moldings between baseboards and the floor?

There are no real “tricks”...but here are a couple of tips:

First, I hope your room corners are 90-degrees square. If not, you’ll either have to “cope” the corners or use some filler where the miters fit together. Unfortunately, I do not have the ability to include drawings or photos in my responses...and instructions for coping are difficult without some sort of visual. Therefore, if you choose coping — and you’re unfamiliar with this technique — you’ll have to look this up in an instructional woodworking book at the library or a book store.

Start by measuring your distances from corner-to-corner very carefully, then cut your molding 1/4" or so longer than this distance...so it “bows-up” in the center, away from the floor. This way, when you nail it down, it will fit very snugly. Remember...it’s always better to cut the molding too long than too short. You can always remove more stock — but it’s tough to add it back. So, start long and keep making small, “trial cuts” until you’re satisfied that you have the right length.

If you do need to splice two pieces together to attain your desired length, do this with an over-lapping 45-degree “scarf-type” joint whereby the mating end of your left-hand piece is mitered front-to-back...and your right-hand piece back-to-front. The two pieces should be glued together...tacked with a very small brad or two, being careful not to split the wood...clamped and allowed to dry overnight before installing into position. I’m sure you realize that you should stain all moldings before installing them.

For installation, use small 4-penny finishing nails to nail them into position...into the floor...at a fairly steep (60-degree or so) angle. Use a nailset to set the heads and fill the nail holes with a matching colored wood putty.

Hopefully, this info will help and doesn’t seem too “elementary”. It really is a fairly simple process.

Resolving Jointer Fence alignment problems

From Steven Fish (e-mail question — city/state unknown)

Why can I square my Jointer Fence to the infeed table but not to the outfeed table?

There are two possible resolutions for this problem:

- 1) You may have sawdust or other debris between the glides on the bottom of the outfeed table and the cast-in “ways” on the body of the Jointer. Turn the Jointer over, upside-down and loosen the bolt to remove the outfeed table. Clean the ways thoroughly and apply a VERY LIGHT coating of grease.
- 2) Your fence could be twisted. Check this AFTER you’ve tried #1 above. Slide infeed tables and outfeed tables so they’re perfectly flat and in alignment with one another. Remove the fence and lay it face down on the aligned tables. If it “rocks”, it’s probably twisted. To be absolutely sure, lay the

fence on a large piece of glass or a piece of laminate-covered countertop (either of these are usually perfectly flat). If it's twisted, it needs to be replaced. Call Customer Services (800-762-7555) for a Return Authorization Number prior to shipping. It could be covered under warranty and qualify for a FREE replacement.

Keeping Model 500 Rip Fence setscrews from backing out

From Lou & Loraine Kritz (e-mail question — city/state unknown)

I have a Model 500 MARK V. I purchased a replacement set of setscrews for the Rip Fence on my machine because the originals were "loose and sloppy", needing constant adjustment. Unfortunately, the replacements have the same problem. It seems like the tapped holes may be a bit too large. Can I get the next larger size, and if so, what would it be ? Or is there a dressing I can put on them ? I thought of Loctite, but I'm afraid that might be too tight of a fix. Thanks for your help.

I assume you're talking about the setscrews that ride on the table rails and are used to adjust the parallelism of the fence with the saw blade...or to "offset" the fence for certain operations. If this is correct, here are three options:

- 1: You could apply a LIGHT coating of hot-melt adhesive to the setscrews prior to inserting them. You could also try silicone adhesive or even epoxy. In any of these cases, be sure your adhesive coating is LIGHT and allow the adhesive to dry thoroughly on the setscrew threads before you insert them back into the fence.
- 2: You could "flatten" the setscrew threads slightly by tapping them with a hammer. "Slightly" is the key word, here !
- 3: You could try Loctite "222MS". Loctite makes many versions of their thread sealers for a variety of purposes. "222MS" is a low-adhesion version of Loctite that will allow you to adjust the setscrews...yet hold them firmly in position, as well. Hope this works for you.