

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...

Bandsaw Blade Problems

From Rob B. via e-mail

Please provide instructions for adjusting the 1/16" Bandsaw Blade. I have followed the instructions in the Shopsmith book and set tension at 1/8". The problem is...the blade keeps popping off the tire when backing it out of a cut. Also, what is the clearance for the "cool Blocks

The 1/16" bandsaw blade is the most sensitive to back-out...and for tracking problems. I suspect that there is not enough tilt on the upper wheel. One of two things has happened: If this is a new machine, it was not adjusted properly. If it is an old machine (as I suspect) there can be a couple problems.

First, the bearings in the upper wheel may be worn. Test for this by removing the blade and gently wiggling the upper wheel. If it feels loose, the bearings are bad and the upper wheel needs to be replaced.

Second, the axle in the upper arm that supports the upper wheel no longer sits at the proper angle. Over time, with the constant tension of the blade, the angle of the axle is reduced by a slight amount. The arm actually twists very slightly and takes a set. This can be corrected by removing the blade, grasping the wheel at the top and bottom and pulling the bottom of the wheel out while pushing the top in toward the frame with **LIGHT** pressure.

To test whether this twisting was effective, lay a straightedge on the upper wheel. There should be a 2" to 2-1/2" space between the straight-edge and the top edge of the lower wheel. If there is less than the above space, repeat the twisting procedure above. If there is more than a 2-1/2" space, flex the wheel in the opposite direction until the proper space is obtained. If this happens again it can be adjusted again but this is a sign that the arm has become weak. Plan to replace the upper arm soon.

Regarding the Cool Blocks: There is no gap between the Cool Blocks and the blade. They are designed to run in contact with the blade. With the blade centered in the blocks, tighten the Cool Blocks in place while gently squeezing them against the blade. The friction of the blade rubbing against the blocks makes a custom seat to guide the blade.

Eliminating Face Shield Static

From Jerry Nutter via e-mail

I have a new full-face shield which is just GREAT - third one I've owned and by far the best. Thanks to Shopsmith for carrying it. Its only drawback is the static attraction of sawdust onto the surface. Cleaning with a soft, dry cloth helps for a bit, but the very act of rubbing the surfaces (inside and outside) seems to enhance the "magnetic personality" of the mask. Do you know of any anti-static spray which can be used to clean it...or should I just run a ground wire from the mask to the nearest convenient iron stake in the ground?

Well, now...that's an interesting picture! If you had terminal lugs on your neck (ala Frankenstein), you could simply ground the mask to your neck and you'd only have to run the wire a short distance. Just kidding, Jerry.

A web search produced this spray-on, anti-static product. Check it out. Good luck. Thanks for the chuckle!

Self-Sharpening Your Jointer Knives

From Colby H. via e-mail

*I have three questions: **FIRST:** What is the best way to sharpen Jointer knives? I need them to be as sharp as possible, because I do a good bit of planing and when they get a little dull, my results are just too rough. I don't really want to spend the money for something like a Tormek, because by the time you get the grinder and the jig to do the jointer/planer blades, you could have \$400 dollars invested. I doubt that I could sharpen them with just a wetstone, because I'm just not used to sharpening without some kind of guide. **SECOND:** What is the angle used to hone jointer knives? **THIRD:** What is the difference between hollow ground, and flat ground?*

If you have a Shopsmith MARK V, there is an attachment available to sharpen your Jointer knives on the MARK V (Part # 555471). It is designed to be used with our Conical Sanding Disk (Part # 555477). You can find these products (and photos of them) in Shopsmith's On-Line Woodworking Catalog. With this fail-safe system, you'll only have a little over \$100 invested and the sharpening process will be fairly simple. Your only other option is to have them professionally sharpened by a local sharpening service.

The correct angle for "Multi-Purpose" cutting using Shopsmith Jointer Knives is about 45-degrees.

"Hollow Ground" is when you sharpen against a circular grinding wheel, creating a concave edge. Although many claim you can get a sharper edge this way, it is a far less durable edge.

Solving Dust Collection Problems

From Ray Jackson, Poole Dorset, U.K.

I am trying to improve the dust collection on my Model 510 MARK V. I have been using the Shopsmith Dust Collector and have also used a more powerful one but most of the sawdust seems to end up on the floor! Any ideas?

First of all...be sure to use your upper saw guard. The second most frequent cause of this problem is having the sides of the lower saw guard set too close to the blade.

To solve the problem, loosen the lower saw guard and open it up to as wide as possible so you have more clearance between the guard sides and the blade. If you then tilt the table, you may have to close it back up to accommodate the table tilt.

Using Non-Shopsmith Dado Blades

From Rob T. via e-mail

I have a non-Shopsmith dado blade and am wondering whether or not I can use it on my MARK V?

Yes, of course you can. As long as it's not over 10" in diameter and has a 5/8" arbor hole. Of course, if you don't have a 5/8" arbor, you'll have to order one (Part # 555321 for a Model 500 or # 555608 for a Model 510). You can order these through the Shopsmith catalog on the Shopsmith.com website.

Bandsaw Blade Problems

From Terry Logie via e-mail from South Africa

Hi there...what size (diameter) table leg can I turn using the speed reducer? 6 inches? 7 inches? I'd like to know BEFORE I buy the reducer. I live in South Africa and it's expensive getting parts here.

You should have no problem turning a 6" to 7" diameter table leg with the speed reducer. However, when turning such large diameter workpieces, it's always best to do whatever you can to "pre-round" your turning stock as much as possible BEFORE mounting it on the lathe.

Do this by making a series of table saw rip cuts (at a 45-degree angle) or passes across your jointer. The object is to make your turning blank octagonal prior to turning. This will reduce the mass and make the job much safer.

Two more important points:

1): Be sure your lathe centers are "buried" in the workpiece as deep as possible. Shopsmith's dead

centers are quite small and heavy workpieces can work loose from them if they're not well seated in the ends of the stock.

2): Be sure your workpiece is evenly dried prior to turning. I once bought a 6" x 8" piece of oak that had been resting on the ground outdoors. One side was air dried...the other side (in contact with the ground) was wet with moisture. When I chucked it up in the Lathe, it practically vibrated my teeth out and promptly tore the dead center out of the end of the stock...then shot across the shop like a bullet. Largely because it was out of balance.

Just remember that turning large workpieces requires extra caution. Be very careful.