SHOPSMITH SAW GUARD SYSTEM

If your Mark V did not come with a sawguard system like the one enclosed, you will need to make some modifications to your unit. We recommend that Shopsmith or a qualified machine shop perform those modifications. For Factory information call 1-800-543-7586 (OHIO 1-800-762-7555). We will provide shipping instructions and a quoted cost for the work. If you wish to have a showroom do the work, give them a call first so they can schedule a time to provide prompt service. If, however, you do prefer to re-work the unit yourself, please follow the instructions and procedures below.

Tools For The Job

Drill bits - #7 and #21
Taps - ¼-20 and 10-32 (right-hand thread)
Tap handle
Center punch or other pointed tool
Clear tape
5/32" hex key
Blade screwdriver
9/16" wrench
Scissors or art knife and straight edge
Light weight oil (sewing machine oil)
1 flat file

You will want to be very precise in your work. A center punch or other pointed tool will help you set the drill point so the bit does not wander as you start a hole. Please refer to Page 2 of the enclosed Saw Guard System brochure for nomenclature and the assembled location of the parts.

1. Set the table to the 0^{o} position. Place the front edge on your work surface. Cut out the two templates that have been provided in this package. The template with one notch at the top is for the rear shield. Although you will drill the hole on this template later on, tape it now on the flat of the tie bar just below the trunnion boss. Visually check the surface of the flat below the template. If there is a radius of metal extending left from the tube collar, file it flat.

   Now, place the Upper Saw Guard Mounting Bracket on the rear of the tie bar as shown in the Saw Guard System brochure. You will be using the bracket to locate the holes. Slide the bracket up until it fits snug against the tie bar shoulder. It should not ride up on the tie bar shoulder. Assure that the face of the bracket is parallel with the rear surface of the table by sighting along the table tube from the bottom. Hold the bracket firmly to the tie bar keeping it parallel and mark your holes with the center punch. Remove the bracket. Take your #7 drill bit and drill two through holes being careful to remain squared-up with the table top surface. The lower hole need only be drilled through to the center of the tube.

2. Before tapping these holes, remove tie bar from the table. To do so, remove the four 9/16" hex screws which hold the trunnions. Remove the rear trunnion by sliding it off the pivot pin. To remove the front trunnion, first remove the table locking handle, then loosen the vernier plate and slide the trunnion off the pivot pin. Leave the pivot pins and the trunnion stud attached.

   Before tapping, apply a generous coat of light weight oil or spray lubricant to the drilled hole and tap. Be sure the tap is aligned with hole. After the tap has penetrated past the tapered end - use a half turn forward/quarter turn back motion. Do not force the tap through the tie bar. Taps are brittle and will fracture or break if stressed. Be sure the tap is well lubricated at all times.

3. The Tie Bar Shield. Again you will be using the part to establish hole locations. Find the tie bar shield and note its position on the tie bar as shown in the Saw Guard System brochure. Change to your #21 drill bit.

   Place the shield on the tie bar. It should fit comfortably against the bar. The slots in the shield should be resting against the bar. Again, center punch your two hole locations while holding the shield against the tie bar. The two holes you drill with your #21 bit should be perpendicular to the chrome tie bar posts. Tap and check fit using the two screws with the big square tab heads.

4. Now all that remains is one hole each for the small front and rear shields. Don't neglect these as they are both an important link in sealing for sawdust collection and for your safety. These two holes also require your #21 drill bit.

   The template with two notches is for the front face of the tie bar. It should fit snugly against the face just below the trunnion stud boss and flush with the left and right edges. Tape it in place and center punch the hole location. Through drill the hole and tap. The shield fits onto the back side of the front vertical not the front face where you located and drilled the hole. Check for fit using one of the small slotted rectangular head screws. DO NOT use the large tab screws here as 10" saw blades will not clear them!

   To drill and tap for the rear shield, remove the upper guard mounting bracket if you have left it in place. Check the template you left taped to the rear face for position. Adjust if necessary, center punch the hole location and drill a through hole. Tap and check fit, again mounting the shield on the inside face using the remaining slotted rectangular head screw.

Reassemble the table and check its alignment to the spindle. Complete alignment procedures are found in the Owner's Manual and in "Power Tool Woodworking for Everyone". Once the table is aligned with the spindle, check the alignment of the Saw Guard with the table slot. If you have hand drilled and tapped the holes you may find a slight misalignment. If this occurs, use a washer to shim between the splitter blade and plastic block until aligned. This may only be required on one of the screws.

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