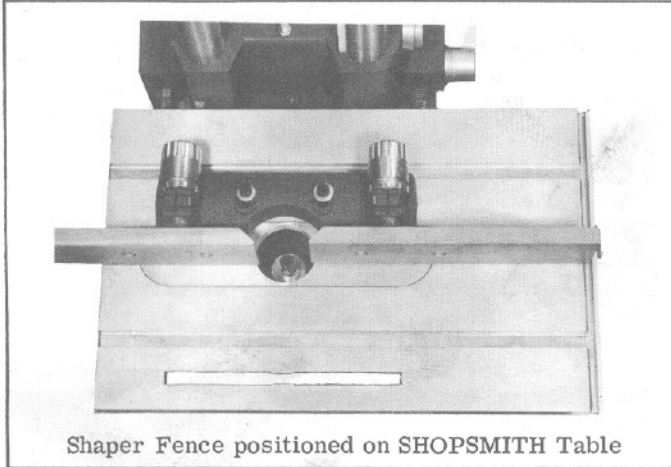
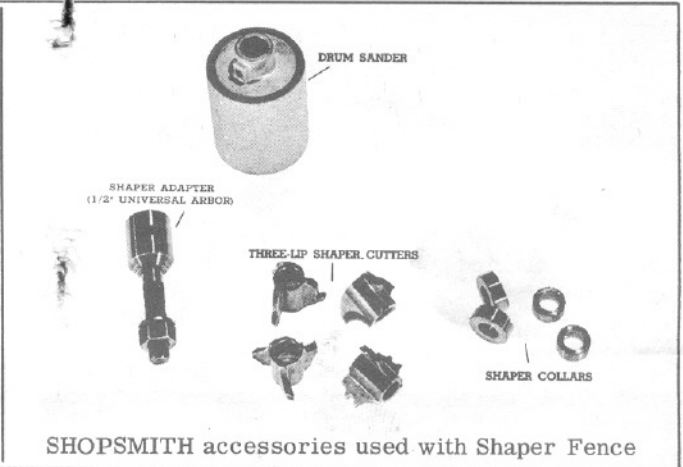




The SHOPSMITH UNIVERSAL Shaper Fence is intended for use not only with standard, three-lip shaper cutters, but with other accessories such as the drum sander, router bits, and similar tools. The Shaper Fence in combination with the Special Shaper Insert (No. 505509) is a complete unit capable of almost any shaping operation on the inside or outside edges of straight, curved, or circular work. The fence adjustment knobs with their exclusive "clickers" allow adjustments as fine as 1/64".



Shaper Fence positioned on SHOPSMTIH Table



SHOPSMTIH accessories used with Shaper Fence

Setting up the Shaper Fence

The Shaper Fence is shipped completely assembled except for the two Fence boards. Attach these to slotted brackets using two 1/4" -20 x 1" machine screws and 1/4" square nuts on each board. The screw heads must be down in counterbores of boards. The flats of the nuts fit between the low ribs on back of brackets so that the boards may be adjusted by using only a screw driver.

On the Mark VII Shopsmith shaping is done in "Shaper" position (unit tilted to left), with headstock underneath table. On Mark 5 and Mark 2 Shopsmiths, shaping is done in the vertical "Drill Press" position, with headstock above table.

Tilt Shopsmith to proper vertical position, according to model, and replace regular table insert with special shaper insert. The fulcrum pins supplied with shaper insert are not needed when insert is used with the fence.

Place shaper fence on table, positioning it to overlap that miter gauge slot which is between insert and the way tubes, and aligning elongated mounting holes in fence base casting with 13/32" dia. holes in table. (Note: A template is furnished for owners of Mark 2 Shopsmiths or Mark 5 Shopsmiths to enable easy layout and drilling of mounting holes). Secure fence to table with two 3/8" -16 x 1-3/4" socket head cap screws, two 3/8" plain washers and two rectangular nut plates. The screws which clamp the barrels of adjusting brackets and screws which fasten boards should be left slightly loose until fence has been bolted down. Center the curved notch in face of fence base casting to correspond with hole in insert and align boards of fence parallel to miter gauge slots in table, then tighten fence in place. Adjust boards to rest evenly on table. Be sure to tighten all bracket clamps and board screws before starting any shaping operation.

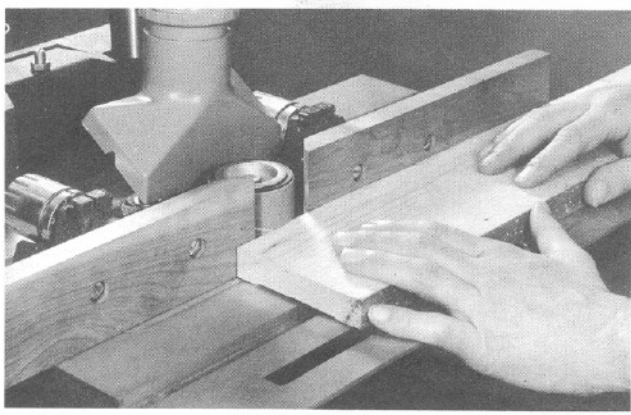
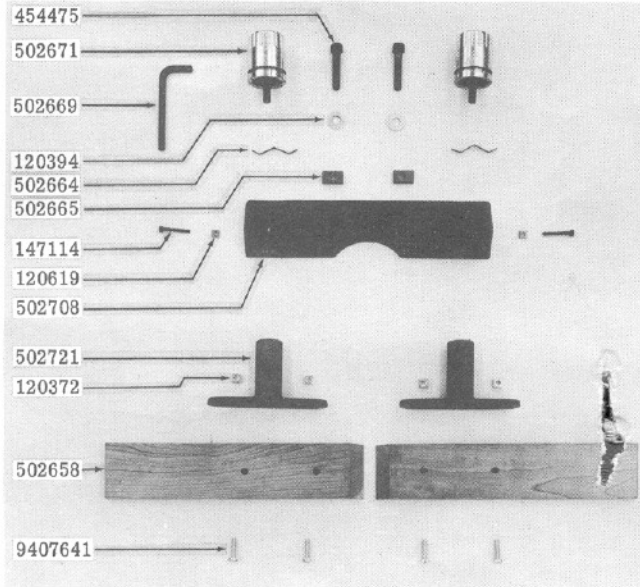
Make major adjustment for height position of cutter with relation to table, by moving table or headstock up or down. Make final fine adjustment by using quill feed lever. It is good practice on all shaping operations to hold quill extension to a minimum.

Operation

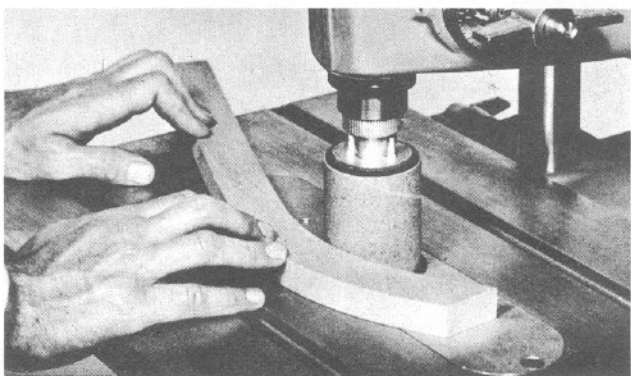
Shaping techniques are not difficult if the operator will remember never to force the work or make too deep a cut. Feed of the work, which is always against the direction of rotation of the cutting tool, should be slow and steady. Top speed should be used. When a heavy cut is required, make it in stages, adjusting the fence or changing collars (when shaping freehand) after each pass, until the depth of cut has been attained. Cuts made with the grain of the wood are always smoother and easier than cuts made against or across the grain. For this reason cross-grain cuts or cuts made against the grain should always be made more slowly and with less "bite" than with-the-grain cuts. When shaping is required on all four edges of a workpiece, made the cross-grain cuts first.

Whenever possible make the pass with the cutting tool under the work thereby using the work itself as a guard. Keep fingers away from the cutting area and hooked over the edges of the work to guard against slipping.

Always adjust the fence boards end-wise to minimize gap around the cutting tool. When a slim molding is needed shape it on the edge of a wider board and then cut off the shaped edge on the table saw. Never rush a shaping operation: Keep fence boards waxed. Should they become worn, sand them carefully and apply a coat of shellac.



Mark VII Shown



Mark 5 Shown

Shaper Fence parts list

Part No.	Description	No. Required
502665	Nut Plate	2
454475	Hex. Soc. Hd. Cap Screw 3/8 -16 x 1-3/4	2
120394	Washer (3/8 Nom.)	2
502708	Base—Fence	1
147114	Hex. Soc. Hd. Cap Screw #10 -24 x 1-1/4	2
120619	Nut—Square #10 -24	2
502664	Spring—Leaf	2
502671	Knob Assembly	2
502721	Bracket—Adjusting	2
502658	Board—Fence	2
9407641	Screw—Bind. Hd. Slot Mach. 1/4 -20 x 1"	4
120372	Nut—Square 1/4 -20	4
502669	Key—Allen Hex. Std. 5/16 Short Series	1

The drum sander may be used with the Shaper Fence for straight edge sanding, or it may be used with the Shaper Insert for freehand sanding of curved or circular edges. When used with the fence, the depth of cut setting should be very light. Its purpose here is not to remove a lot of material, but merely to smooth the edge. When curved edges are to be sanded, use the drum without the fence.

Should you desire further information on shaping techniques and procedures see the book **POWER TOOL WOODWORKING FOR EVERYONE** which is available through your local **SHOPSMITH** dealer.

Manufactured by
MAGNA AMERICAN CORPORATION
 Cincinnati, Ohio, U.S.A.