



OWNER'S GUIDE

ASSEMBLY · OPERATION · MAINTENANCE · REPAIR PARTS

SHOPSMITH

MULTI-PURPOSE
POWER TOOL
MODEL NO. 10ER

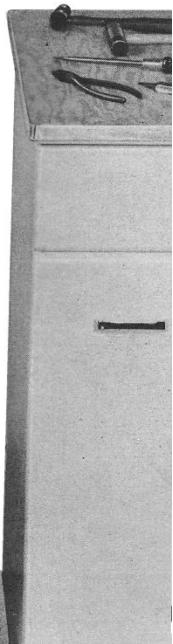
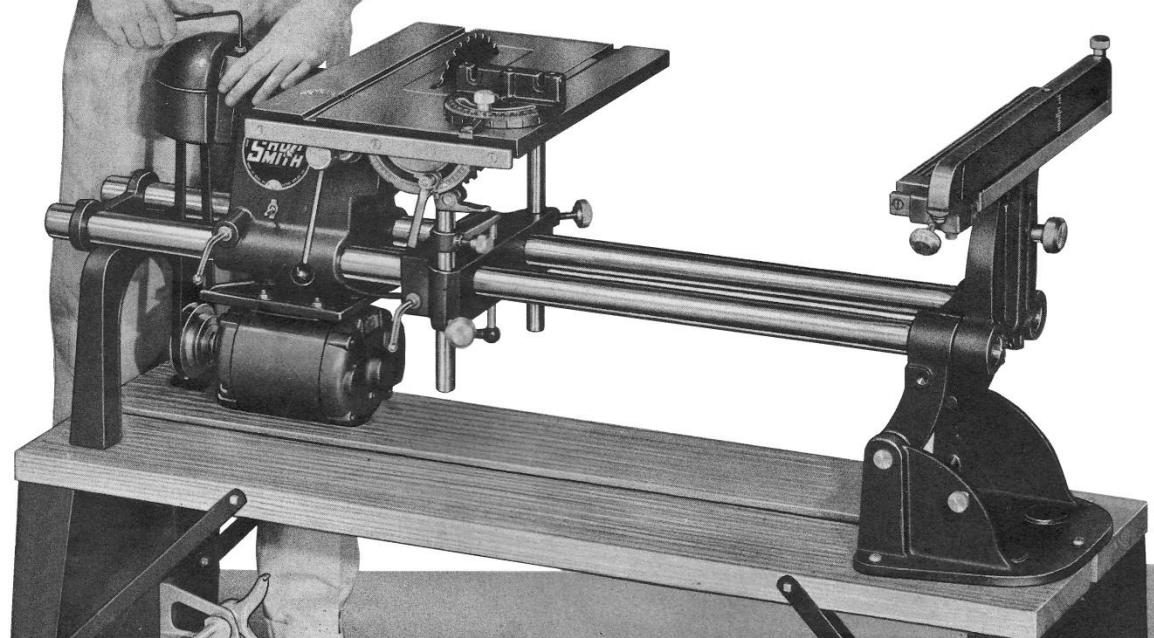
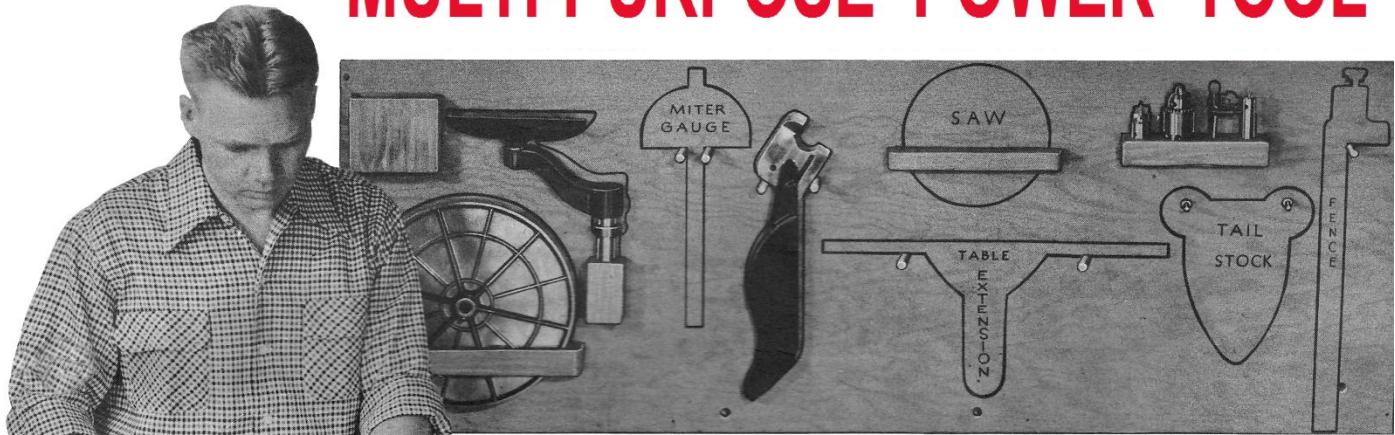
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MODEL NO. 10-ER

ARTICLE NOS. 25 TMG-3471A, 3470A

MULTI-PURPOSE POWER TOOL

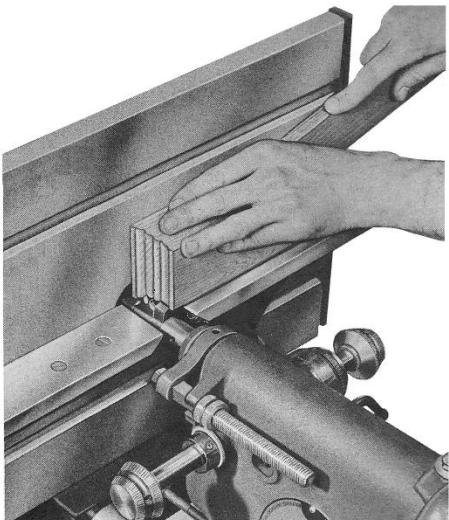


MAGNA ENGINEERING CORPORATION
MENLO PARK, CALIFORNIA

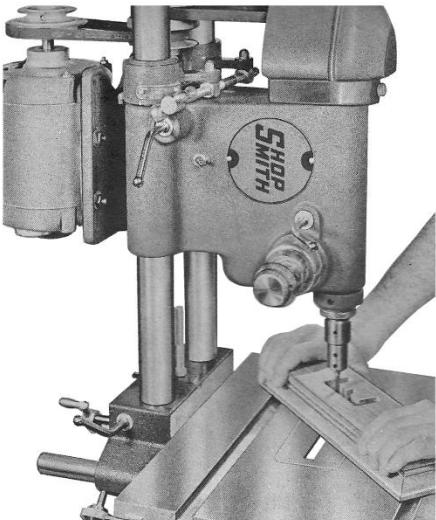
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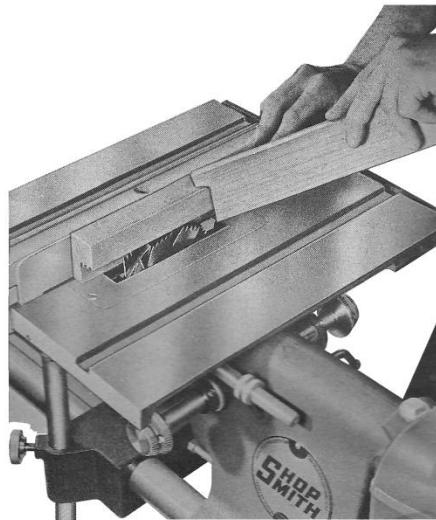
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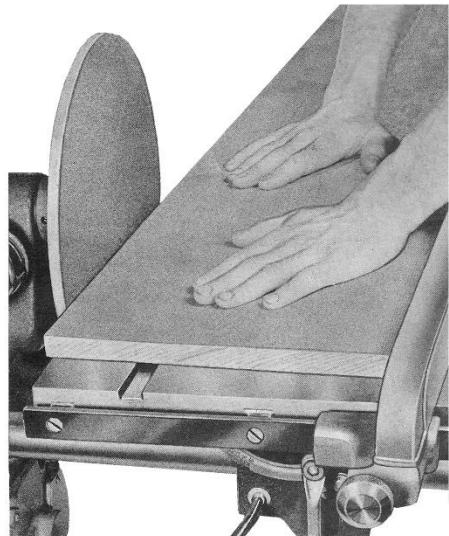
SHAPING, in Horizontal Position



ROUTING, using Variable Speed Changer



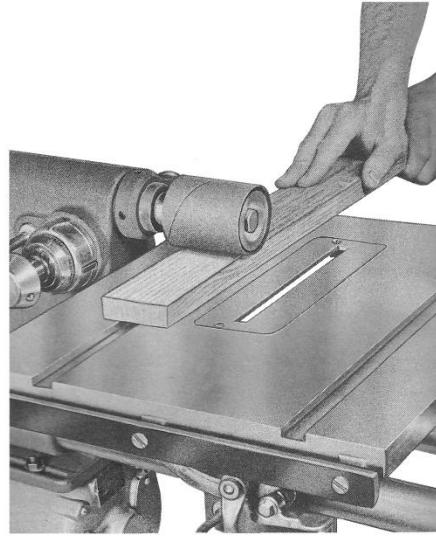
RABBETTING, with Dado Blade



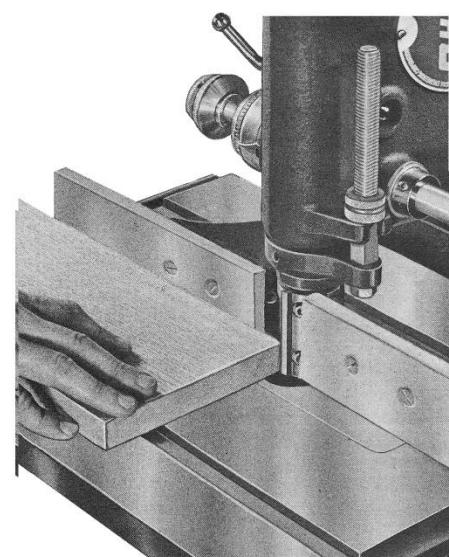
JOINTING, with Disc Sander



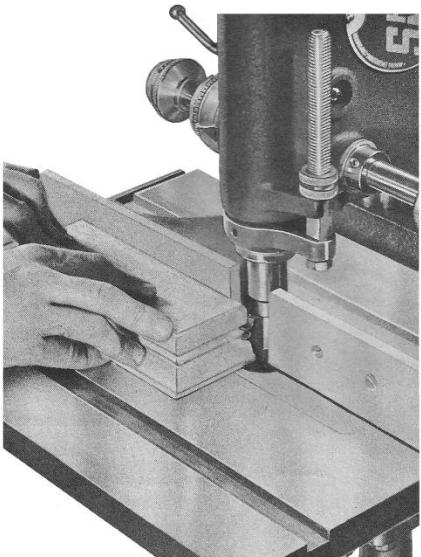
Bob Chambers,
with a Chrome (1947) 10E



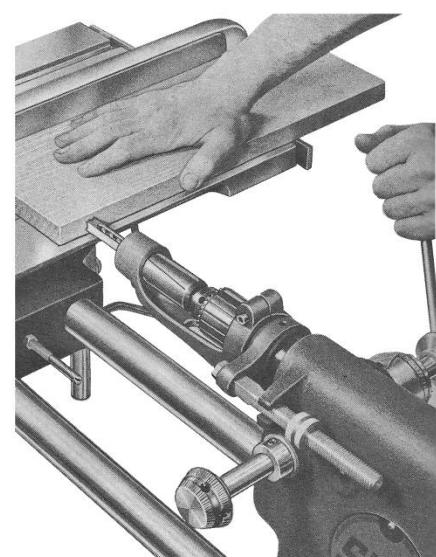
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JOINTING, in Vertical Position



SHAPING, in Vertical Position



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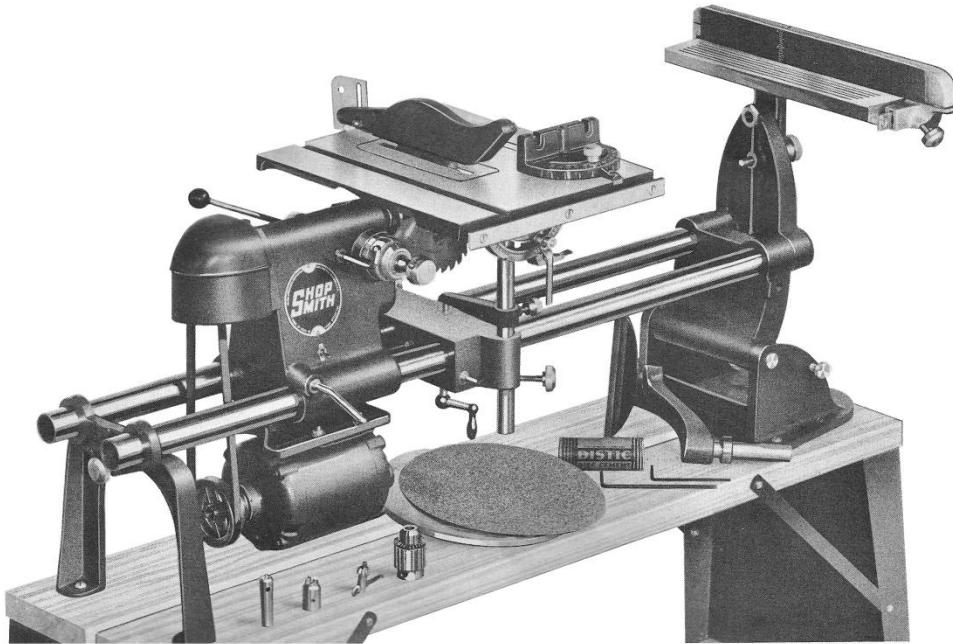


FIG. 1 Shopsmith in circular saw position with all basic attachments

SHOPSMITH MULTI-PURPOSE POWER TOOL

ASSEMBLY

PACKING LIST - The crate in which your Shopsmith multipurpose power tool is received contains the following items (Fig. 1):

1. Basic Shopsmith, complete with Frame Assembly, Head-stock, Table Assembly, and Tailstock
2. Fiber carton containing one each: Headrest, Rip Fence, Miter Gauge, Saw Guard and Splitter, Motor Pulley, Lathe Tool-Rest, Sanding Disc, 8-inch All-purpose Crosscut and Rip Circular Saw Blade, Saw Arbor, Jacobs Key Chuck, Lathe Spur Center, Lathe Tail Center, Feed Lever, Toggle Switch, four Cap Screws for attaching motor to motor bracket, Table Extension Bracket, Table Extension Knob, Table Extension, "V" Belt, Two Cap Screws for attaching Table Extension to bracket.
3. Envelope containing Blueprint and Instructions for constructing a suggested bench and a rack for your attachments, Warranty Card, Owner's Guide and Instruction Book, Shop-smith Shavings, and Accessory Catalog.

Before you do anything else, fill in your Warranty Card and drop it in the mail. With your Warranty Card on file at the manufacturer's, your Shopsmith 1-year guarantee is in effect, you receive, free, a dial speed selector for determining the proper speed for each operation, and you become eligible for future issues of Shopsmith Shavings and other communications from the company on new accessories, etc.

SETTING UP SHOPSMITH - Unpack carefully and check to see that you have all the parts listed above. Do not release any levers or force any parts until you have read the following instructions:

Assembly of Shopsmith will be facilitated if you first clean off the rust-resisting compound with which certain parts have been coated for shipment. Use a rag and kerosene and, after all parts have been thoroughly cleaned and wiped dry, cover all unpainted steel surfaces with a thin film of light machine oil to prevent rusting. These surfaces, the tubular ways in particular, should be kept lightly oiled at all times. The table, extension table, and knurled knobs are aluminum and do not require this attention. The entire machine should be protected with a canvas or similar type cover when not in use. This protection is especially recommended when the unit is to be installed in a basement shop.

Because Shopsmith is not a floor-type machine, a suitable base must be provided for mounting it. Shopsmith metal bench ends are available and provide an easily constructed serviceable bench. A blueprint and instructions for making an all wood bench are included in the envelope. The bench should be about 20 inches high; this measurement can be varied to suit individual requirements. The bench top should be strongly constructed and reinforced. If a plywood top is used, be sure it is suitably supported underneath. The bench need not be bolted to the floor since it may be convenient, when handling large stock or long pieces, to shift its position.

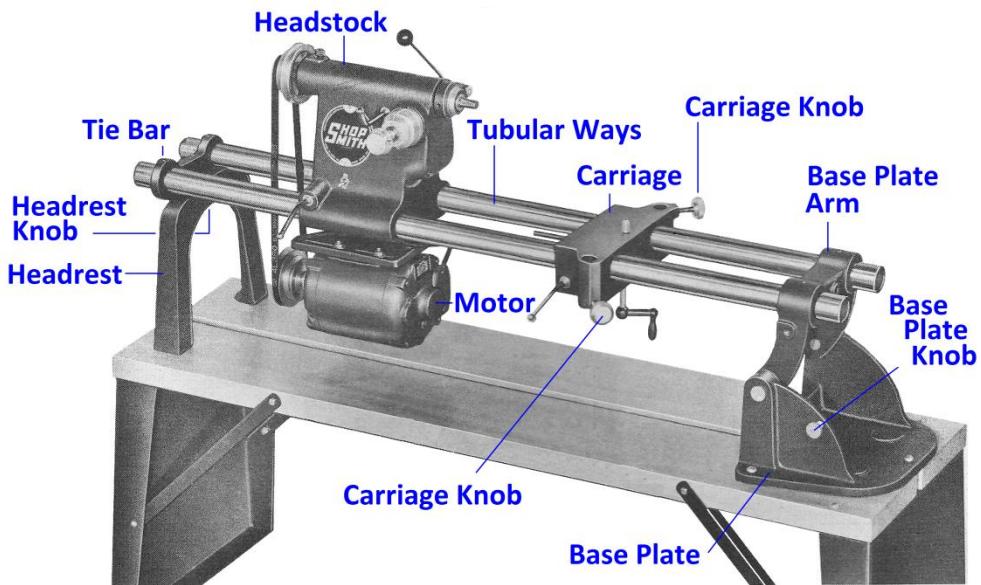


FIG. 2 Shopsmith with all attachments removed

If mobility is a factor to be considered, casters can be secured to the bench base or metal bench ends; however, they should be retractable to assure rigidity during operation.

With a properly constructed bench provided, the machine can be completely assembled.

For convenience in packing, Shopsmith is secured in its crate in a vertical position. To assemble, loosen the carriage knob (Fig. 2) and pull the table completely free of the carriage. Hold the tubular ways with the left hand (to prevent falling), loosen the base plate knob, and lower slowly until the ways rest on the bench. Unbolt base plate and remove Shopsmith from the crate.

Arrange Shopsmith on the bench top; locate and drill 3/8 or 1/2-inch holes for the base plate and bolt down securely with machine bolts. Drive bolts through from the top side and apply nuts from below with washers between them and the wood top.

It is unnecessary to remove tie-bar for all operations of the machine except outboard turning. If the headstock has to be removed from the ways, it is necessary to loosen the Allen setscrew and slide off the tie-bar. In returning the tie-bar to its position, locate the setscrew in the same spot as before to prevent marring of the ways.

ATTACHING HEADREST - Raise the tubular ways and place the headrest on the right side of tie-bar with the extended boss of the headrest on the side touching the tie-bar. Tighten the headrest knob, which then locks tubular ways to headrest. Mark the centers of the headrest bolt holes on the bench top. Do not drill holes at these points but move the center marks 1/8 inch toward the base plate. (This 1/8 inch will allow clearance between the tie-bar and headrest when Shopsmith is raised to the vertical position.) Drill 3/8 or 1/2-inch bolt holes and bolt headrest down solidly.

MOUNTING MOTOR - The special Shopsmith motor has been designed to be easily installed and to give maximum service.

If you do not have a Shopsmith motor, note carefully the following requirements: Shopsmith is designed to be operated by a 1/2 HP capacitor or repulsion-induction ball-bearing motor having a speed of 1725 RPM. Though some operations may be satisfactorily performed with a lighter motor, full utilization of this versatile tool can only be obtained by having adequate power. The motor shaft must be ball-bearing mounted to operate in both vertical and horizontal positions, and extreme caution must be taken to prevent sawdust or chips falling into the motor through the vent holes. When using other than the special Shopsmith motor, invert the end caps or shield the vent holes. Also, note that capacitor box should be side-mounted to eliminate interference with the bench.

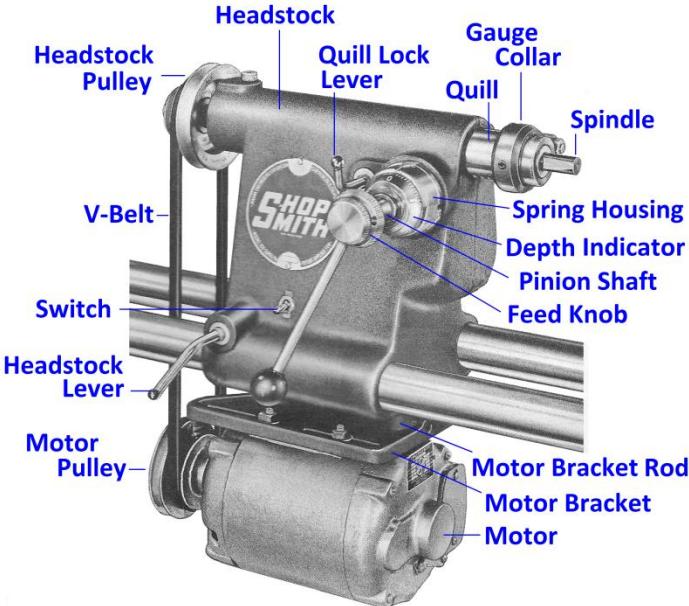


FIG 3. Headstock and motor with parts designated.

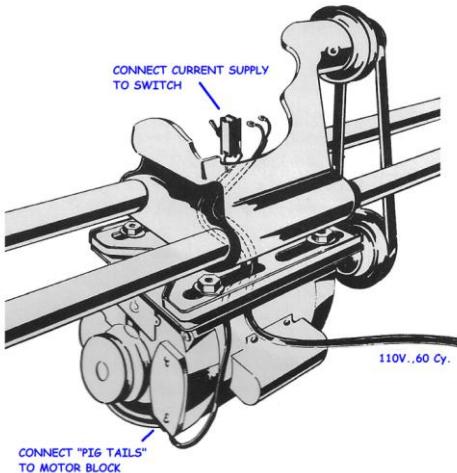


FIG. 4 Motor and Switch Connections.

switch, as shown (Fig. 4). Then insert the terminal end of the long lead cord through the motor bracket slot and make a loop knot (see Fig. 4) to take up strain which would otherwise be placed on switch connection. Secure all terminals to switch.

Remove both threaded lock-nuts and ON-OFF plate from the shank of the switch. Insert the switch between the motor bracket and headstock and put your hand through nameplate opening to guide the switch into the hole provided for it in the headstock. Replace ON-OFF plate and run the lock-nuts down hand-tight temporarily.

Do not tighten the switch in its final position until the OFF position of the toggle lever points toward the tubular ways. Installation of the switch in this way is a safety precaution and prevents accidental contacts from turning on the power. Replace nameplate screw and proceed as shown in the following section.

ADJUSTING PULLEYS AND BELTS - Attach motor pulley (small pulley closest to motor) on the motor shaft. With Shopsmith in its horizontal position - be sure setscrews on motor bracket rods are tight - align motor pulley with headstock pulley by adjusting motor until the two are in line. Tighten motor to bracket, but do not apply belt to pulley until motor wires have been connected to lead wire and switch and the motor tested for correct rotation. Motor should run clockwise when viewed from the motor pulley end (Fig. 2).

With correct rotation of the motor established, apply the V-belt. If the motor used has a larger diameter than the standard Shopsmith motor, a longer V-belt may be required-due to the difference in the center distance between shaft and motor bracket. Belt tension can be increased or diminished by adjusting motor bracket rods in the headstock. Belt should be sufficiently tight so that it will not rub against ways at any pulley speed. **Avoid excessive belt tension, which will impose a damaging load on bearings, shorten belt life and waste power.** Also, note that the motor and headstock pulleys should be accurately aligned. This can be readily accomplished by using a carpenter's square, with one leg lying on the table and the other against the two pulleys.

CAUTION: Should spindle bearings heat up, check belt tension immediately. Remember that the belt should be tightened sufficiently so that it will not rub against the tubular ways, but not so tight that the belt cannot be deflected approximately one inch by applying reasonable pressure against it at a point opposite the ways.

STORING ATTACHMENTS - Shopsmith will perform most efficiently if some provision is made at once for properly storing the interchangeable parts on hooks, shelves, racks or cabinets where they will be convenient to the basic unit. In addition, take the usual precautions against accidental damage and corrosion.

DESCRIPTION OF MAJOR PARTS

To understand and appreciate what Shopsmith can do, you should be familiar with the principal parts and their uses. Carefully observe the brief descriptions and illustrations that follow:

FRAME ASSEMBLY-is the basic structure (Fig. 2). It consists of two center-less-ground steel tubes, base plate, base plate arm, tie bar and headrest. With the exception of the tubes and headrest, all of these parts are high-quality cast iron, precisely bored in fixtures that assure their permanent alignment.

The headstock and carriage can be removed from the ways by releasing Allen screws on each side of the tie-bar and sliding off the headstock and carriage. The tubular ways have been factory-aligned but, if they should be loosened, re-align them as follows:

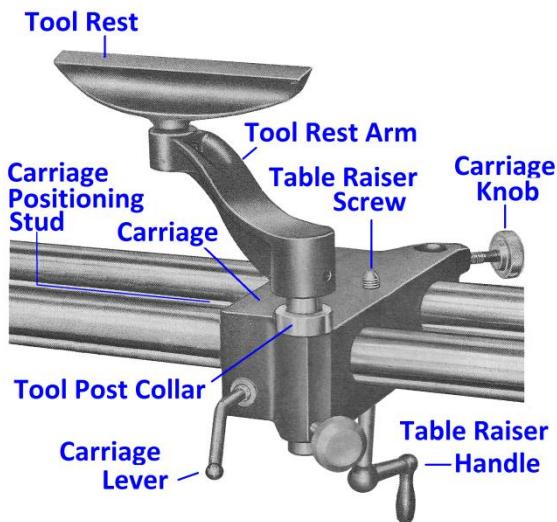


FIG. 5 Tool rest and Carriage with parts designated.

slowly and carefully so that spring will not unhook from its seat. **CAUTION: Ball bearings can be easily injured or ruined by improper handling.** The ball bearings used in Shopsmith should not be changed without proper tools. If a bearing needs replacement, return the entire drive sleeve assembly or the spindle and quill assembly, to your dealer who will arrange for factory repair.

Raise ways to vertical position and lock with base plate knob. Loosen Allen screws in base plate arm and slide tubes down until they rest on the base plate, - lock Allen screws.

CAUTION: Maintain tubular ways with care. Tools and heavy pieces of work falling on or striking tubular ways will raise burrs that prevent headstock and carriage from sliding freely. Any such burrs should be carefully smoothed down. Wipe abrasive dust or metal chips from the ways before sliding carriage or headstock. Always keep ways protected from rusting by a thin film of oil.

HEADSTOCK - Shopsmith headstock (Fig. 3) is the key operating unit and contains the headstock spindle-shaft and bearings, quill, pinion shaft and gear, pulley shaft and bearings. Since the bearings are of the grease-sealed type, it should never be necessary to disassemble the headstock. If, however, adjustment or replacement ever should be required, components can be disassembled as follows:

To remove pulley bearing-assembly, remove pulley guard and belt, loosen Allen screw and pull out total assembly; to remove quill assembly, unscrew nut from depth stop rod and wind out with feed lever. This must be done

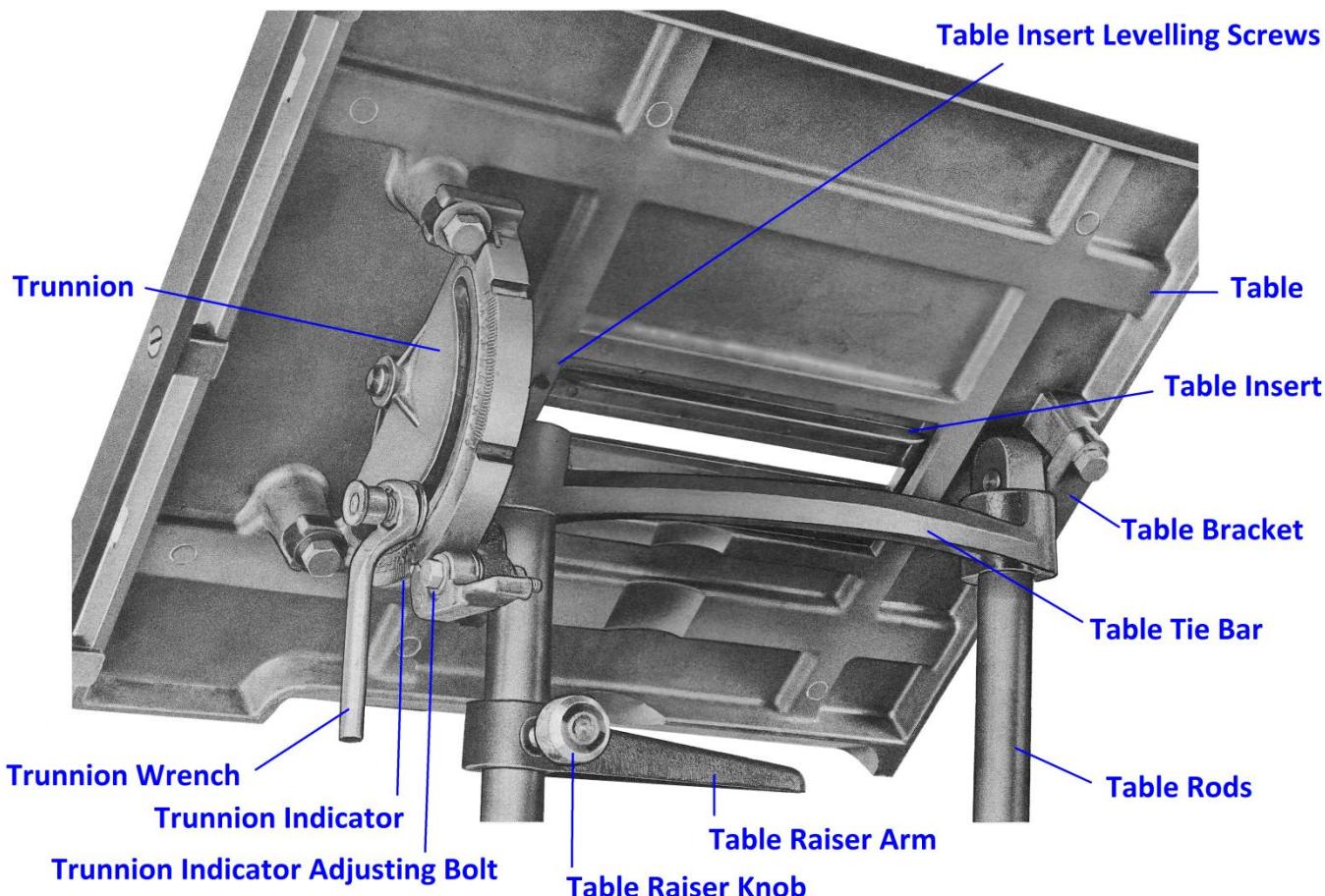


FIG. 6 Under side of saw table (tilted) with parts designated.

The headstock spindle is supported by ball bearings at either end of the quill, which is a movable steel sleeve. When the feed lever is turned, a simple rack-and-pinion gearing moves the quill and the spindle it supports.

When pressure on the feed lever is released, a coil spring returns the quill and spindle to their normal, retracted position. This spring is enclosed in a metal case on one side of the head-stock. Spring tension is adjusted at the factory; if a different tension is required, adjust as follows:

Remove nut from depth stop-rod; turn feed lever until quill rack disengages from pinion gear. Keep turning feed lever until desired tension is obtained. Remember that the external spline on the spindle and internal spline on the pulley shaft must mate; hold the pulley and turn spindle slightly when reinserting the quill and spindle.

LUBRICATION - To maintain quiet and smooth spindle and quill operation, regularly place a few drops of medium-weight machine oil on the outside of the quill. Extend the quill its full length and force a small amount of cup grease into the splined section of the spindle and drive shaft.

Release the quill and work it back and forth to distribute the lubricant evenly. Headstock "chatter" can nearly always be eliminated by greasing the spline.

CARRIAGE - The precision-bored carriage (Fig. 5) is locked at any position on the ways by the carriage lever, which applies soft metal wedges against the tubes. Carriage knobs on either side secure the table or lathe tool-rest at desired height.

CAUTION: Be sure that both carriage lever and knobs are tightened before starting any operation.

The stud extending from side of the carriage facing the headstock automatically (after initial adjustment) stops the carriage in the correct position in relation to the headstock for using the circular saw.

TABLE - Shopsmith's precision finished aluminum table (Fig. 6) is supported on the carriage by two steel rods, and the adjustment is held by the carriage knobs. The table can be tilted from 45 degrees in one direction to 90 degrees in the opposite direction. Shopsmith table can be rapidly raised or lowered, with precision adjustment by using the table raising screw.

Table trunnion (Fig. 6) permits the table to be tilted and locked at any desired angle. To tilt the table, loosen the trunnion nut with the trunnion wrench. Then depress the trunnion lever and tilt the table to the desired position. Automatic stops are provided at the most frequently used positions.

The table insert can be removed to accommodate dado heads and formed cutters if desired. Insert is leveled flush with surface of the saw table by adjusting Allen screws on under side. Two table slots allow the miter gauge to be used on either side of the saw blade. The Shopsmith exclusive miter gauge design permits rapid attachment or removal of a miter gauge face extension.

The saw guard and splitter (Fig. 7) combine for a clear view of the work with utmost safety; it can be adjusted to conform to any position of the table by releasing screw on back of table.

CAUTION: Use the saw guard and splitter for all sawing operations.

TABLE EXTENSION - The table bracket knob and studscrew holds the table bracket to the tailstock (Fig. 8). The bracket slides up and down in the machined channel on the back of the tailstock.

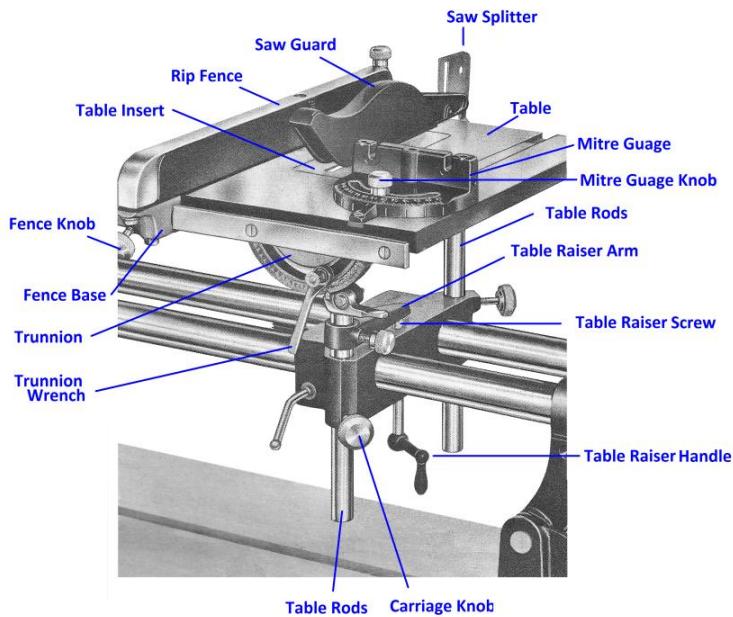


FIG. 7 Saw table and attachments with parts designated.

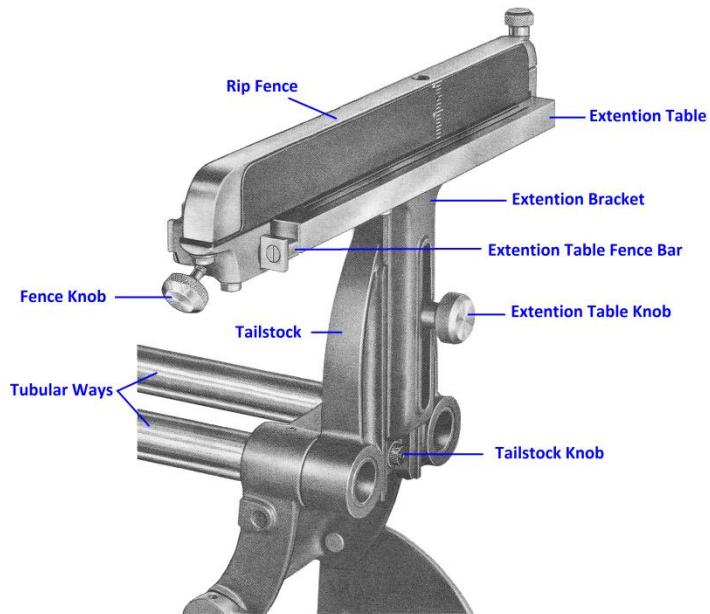


FIG. 8 Tailstock and table extension with parts designated.

The table extension has a fence bar to which the regular fence may be attached.

Table extension should be squared vertically and horizontally to the saw table before final bolting down. Level and lock both tables next to each other and slide rip fence across fence bar so that it is half on the saw table bar and half on the extension table bar. Tighten the fence knob and then bolt down the extension table. The bracket holes through which the table extension is bolted to the bracket are oversize. This permits the extension and bar to be rotated slightly and aligned with the saw table.

WOOD TURNING — PULLEY SPEEDS			
DIAMETER OF WORK	ROUGHING CUT	GENERAL CUTTING	FINISHING
Under 2 in.....	2	2	3
2 to 4 in.....	1	2	3
4 to 6 in.....	1	2	2
6 to 8 in.....	1	1	2
8 to 10 in.....	1	1	1
Over 10 in.....	1	1	1

TAILSTOCK - When used as a lathe in spindle-turning operations, Shopsmith departs from the conventional by using a fixed tailstock (Fig. 9) and a movable headstock. A "floating" sleeve bored to a No. 2 Morse taper is factory adjusted to align the cup center with the headstock drive center. Should this sleeve get out of alignment it may be readjusted as follows: loosen the large hex nut on the back of the tailstock; bring the points of the cup and drive centers together by moving headstock up to the tailstock; retighten the hex nut.

PULLEY SPEEDS - Matching three-step cone pulleys on motor shaft and headstock spindle provide the necessary high (3450 rpm), intermediate (1725 rpm), and low (850 rpm) speeds (Fig. 10). This range of speeds provides relatively wide latitude but, while the following operating speeds for various operations are suggested, it will be best to use the lower speed on any questionable job until experience determines use of a higher speed. The variable speed changer, a standard Shopsmith accessory, is available and will provide speeds of infinite range from 425 rpm to 6800 rpm.

OPERATION

WOOD-TURNING LATHE

When used for spindle turning (all work turned between centers, see (Fig. 9), square both ends of the work and locate center on each end. If hardwood, drill a small hole at each center point and make shallow diagonal saw cuts across the end to be driven by the spur center.

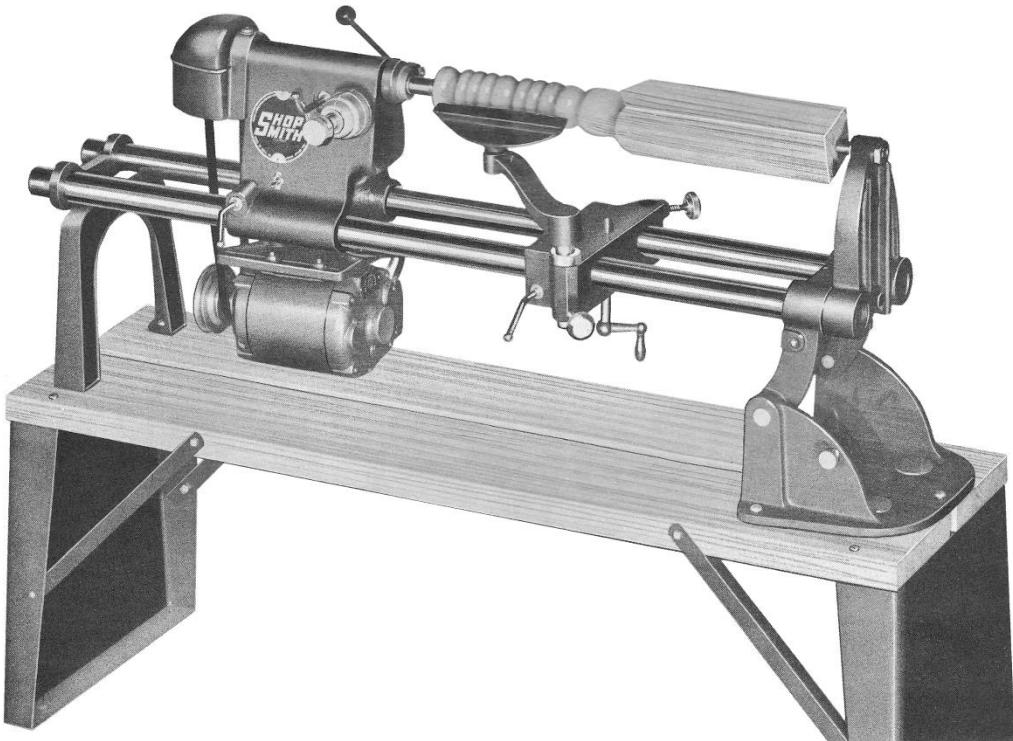


FIG. 9 Shopsmith set up for lathe spindle turning.

Do not drive work onto the center, do the opposite.

Remove the spur center from the spindle and **drive it into a firm seat in the wood** with a mallet.

Replace spur center on spindle and tighten setscrew. Be sure tailstock knob is tightly locked. Position and lock headstock on the ways so that the distance between centers will be approximately $\frac{1}{4}$ " greater than the length of stock to be turned. Locate the work between centers and advance quill feed lever to seat centers solidly; turn work by hand to see that it does not bind and tighten quill lock lever. Apply a drop or two of oil to the tailstock center before or after centering work.

The tool-rest (Fig. 5) is seated in carriage hole nearest the operator. A collar on the tool-rest rod is factory adjusted so that tool-rest is about 1/8" above lathe center line when the collar is seated on the carriage. This can be adjusted to meet personal preference. In moving the tool-rest up to the work, leave a clearance of about 1/8".

CAUTION: Always turn work by hand to see that it clears the tool-rest before starting motor.

CIRCULAR SAW	PULLEY POSITION
8-in. All Purpose Blade	3
SANDING AND GRINDING	
12-in. Disc Sander	2
3-in. Drum	2
4-in. Grinding Wheel	3
6-in. Grinding Wheel	3
Buffing and Polishing (cloth wheel)	3
Scratch Brushing (rough finish)	1
Scratch Brushing (smooth finish)	3
DRILL PRESS	
Wood Boring (Bits to 1/2 in.)	3
Wood Boring (Bits to 1 in.)	2
Wood Boring (Bits over 1 in.)	1
Mortising (Hardwood)	2
Mortising (Soft wood)	3
Routing	3
Shaping	3

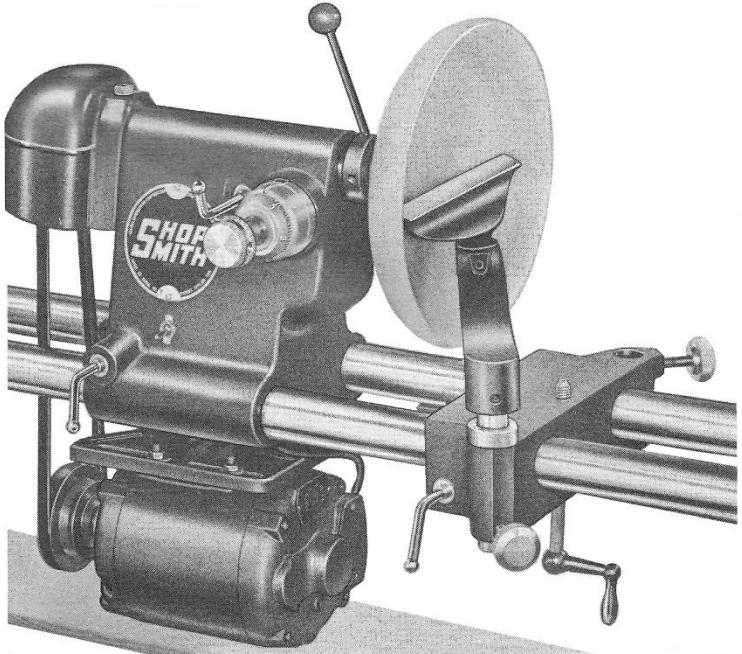


FIG. 10 Shopsmith set up for lathe face plate turning.

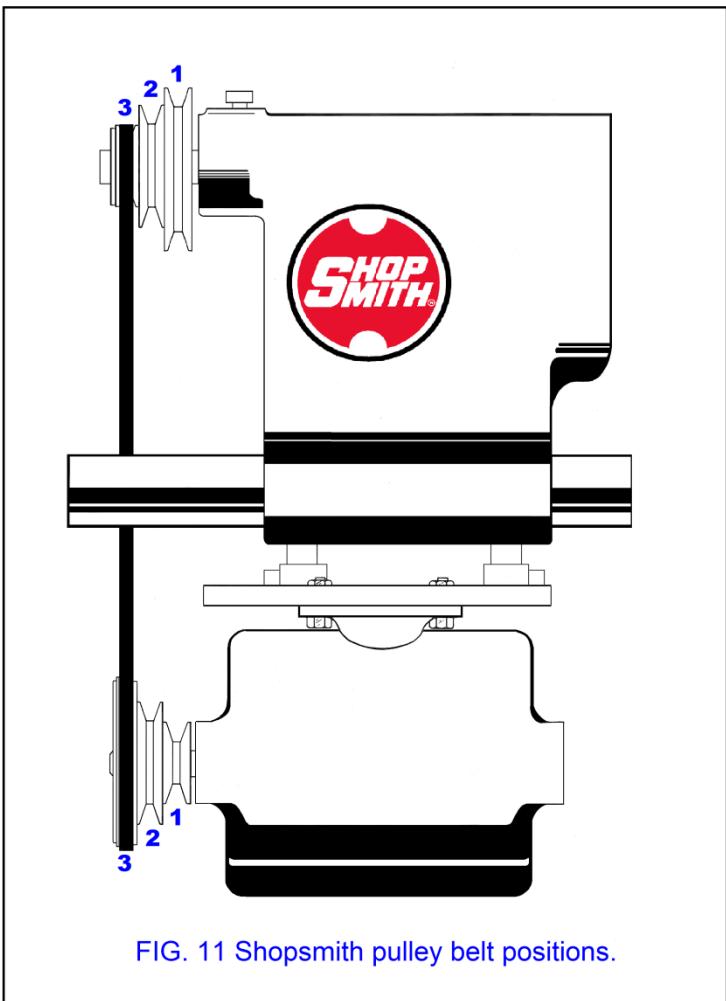


FIG. 11 Shopsmith pulley belt positions.

FACEPLATE TURNING - If the work to be turned cannot be held between lathe centers, it is generally mounted on a faceplate (Fig. 10) or chuck. Shopsmith faceplates are recommended, available in 3-3/4" and 6" diameter sizes. The tool-rest is easily turned parallel to the work. By removing the tailstock and then moving carriage and headstock to the extreme right position, the operator can face the work directly.

CIRCULAR SAW - Shopsmith, when used as a saw, is designed for use with an 8-inch saw blade with 5/8" arbor (Fig. 12). Smaller blades can be used, but the table slot will not accommodate larger ones. To attach saw blade, push the arbor onto the spindle as far as it will go and tighten setscrew against flat side on spindle.

(NOTE: All attachments used on the spindle should be located so that their setscrews, when tightened, will seat against this "flat"; otherwise, the spindle may be burred and attachments cannot be applied or removed freely.)

CAUTION: The user is cautioned not to make adjustments while the saw is in motion.

Place blade between washers (recessed side next to blade) large washer first with teeth pointing toward operator standing at front of table, with pulley or drive to the left hand side. Tighten nut.

Place saw table rods into carriage holes and lower to the point where they can be locked by the carriage knobs. Locate

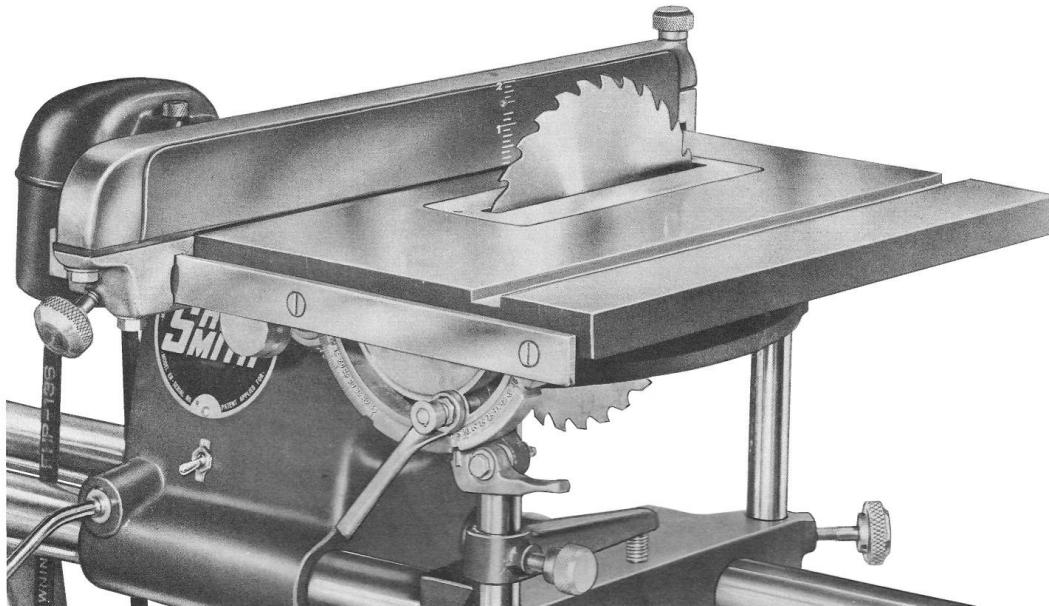


FIG. 12 Shopsmith saw table set in 0° position.

Headstock at desired point on the ways and lock with head-stock lever; slide carriage toward headstock until saw blade is directly below slot in table insert. When this location has been established, adjust the stud attached to front of carriage so that it just touches the headstock. Thereafter, or until the blade is changed on the saw arbor, this bolt will serve as an automatic stop for correctly positioning the table in sawing position.

Shopsmith is equipped with a table micro-raising mechanism (Fig. 12). Make rapid adjustments of table height by simply lifting or lowering the table; gripping the front table rod sometimes facilitates control of table descent. To make micro-adjustments of table height, first secure front carriage knob. Then release knob on table raising arm and lower until it fits over top of table raising screw; tighten knob.

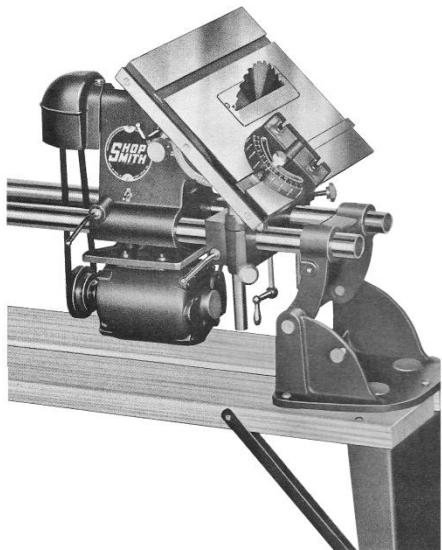


FIG. 13 Shopsmith saw table tilted for 45° bevel cut.

When the front carriage knob is released, the table can be raised or lowered by turning the ball-crank below the carriage.

NOTE: To slide the table raising arm up, it may be necessary to slightly loosen the table raising screw.

Always be sure both carriage knobs and carriage lever are locked before starting motor.

When tilting the table, note that because the pivot center of the table is below the table top, the saw slot will move in an arc; therefore the quill must be advanced and locked. This may be accomplished either by extending the quill at the same time as the table is being tilted or by raising the table to clear the blade while the adjustment is being made.

The rip fence is smoothly finished on both sides and can be used on either side of the saw. Adjustment is held by tightening front and back fence knobs. Use calibrations engraved in fence side for gauging depth of cut.

Double miter-gauge grooves on the table allow cutting right-or left-hand miters. Gauge pivots to 60 degrees in either direction. A quick-change wooden miter gauge extension and a miter gauge stop rod are available as standard Shopsmith accessories.

CAUTION: Miter gauge should be used only on right side of saw when table is tilted.

The exclusive table extension feature (Fig. 14) gives the Shopsmith the largest effective table of any 8-inch bench saw. Attached to the lathe tailstock by a knob and studscrew, the extension table can be adjusted to the height of the saw table, either by sighting along the main table or, more accurately, by sliding the carriage and headstock together to the tailstock and adjusting extension to table height.



FIG. 14 Crosscutting long board using extension table for support.

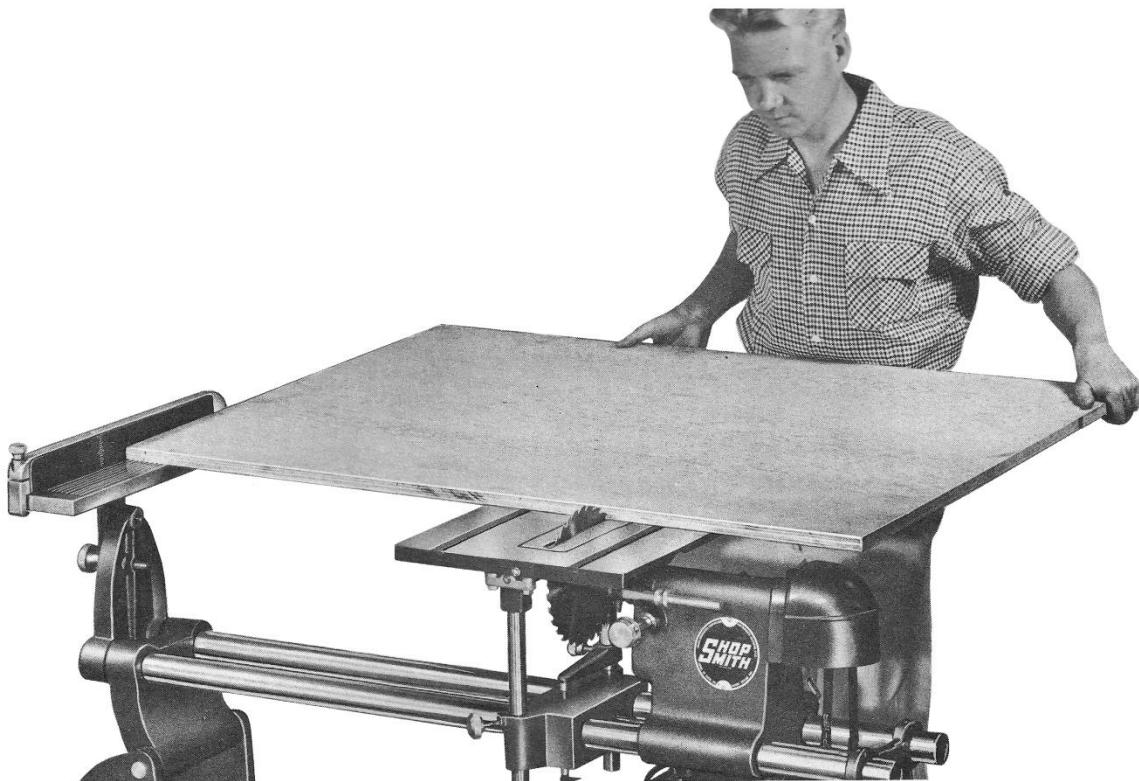


FIG. 15 Ripping wide panel with fence located on extension table.

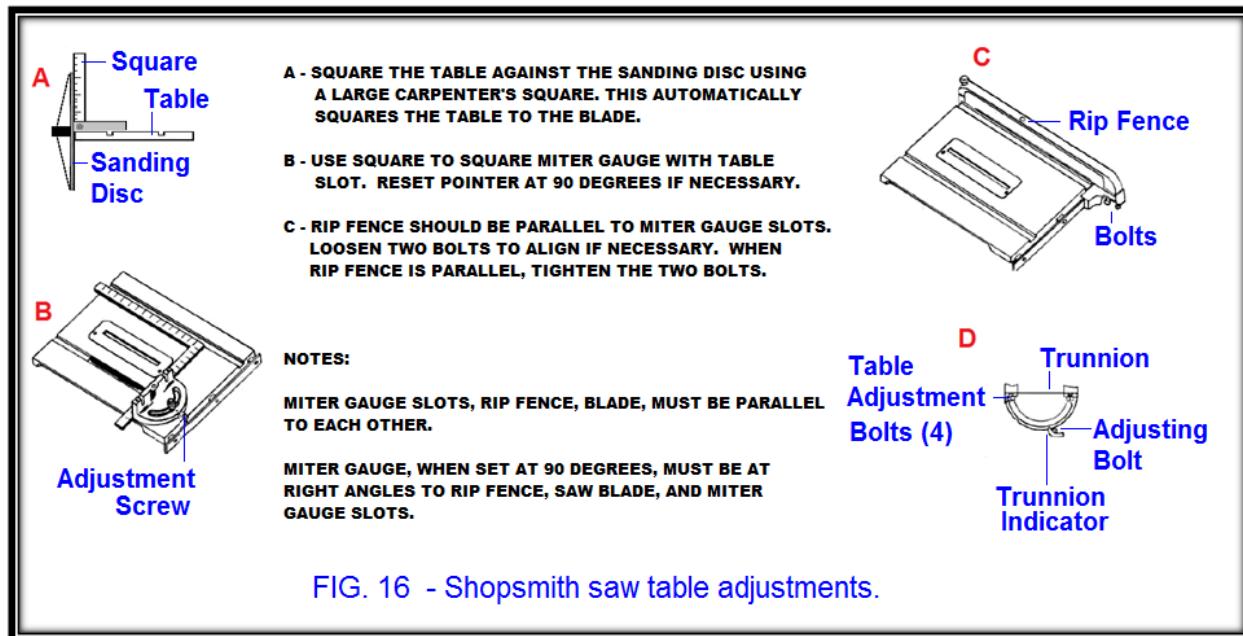


FIG. 16 - Shopsmith saw table adjustments.

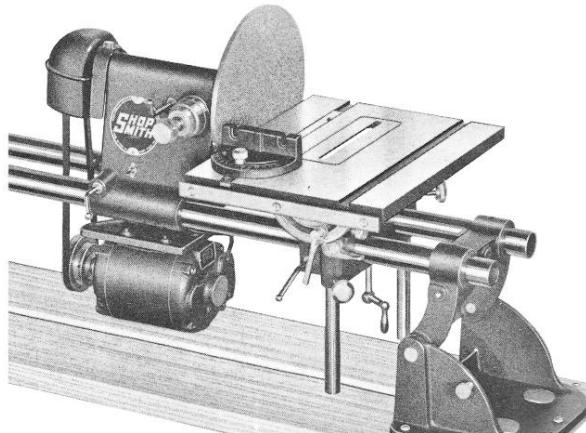


FIG. 17 Shopsmith set up as disc sander.

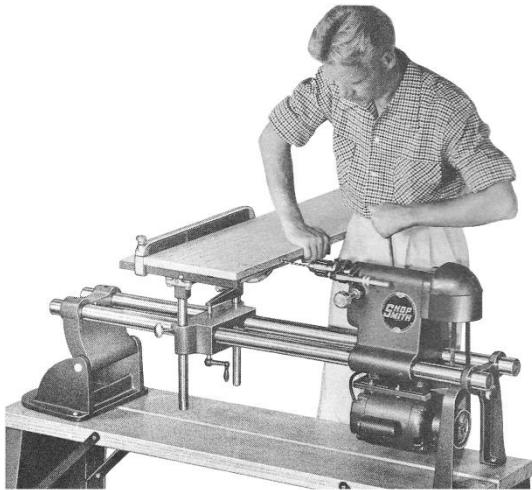


FIG. 18 Drilling for dowelling in horizontal position using rip fence as back-stop.

For crosscutting with the miter gauge, use the extension as a work rest. In making angle or miter cuts, be sure thumb screw lock on miter gauge is locked securely, and it is advisable to "trail the work" into the saw blade. To accommodate cross-cutting of extra wide work pieces, a front-table extension is available as an accessory. For ripping work beyond the capacity of the table, such as ripping a large panel (Fig. 15), the rip fence can be attached to the table extension.

Note that the table extension and tailstock fit on either end of the tubular ways. When applied to the left or motor end, the greatest effective table area will be obtained.

CAUTION: To prevent accidents, do not leave saw blade on the spindle when the machine is not in use.

When using the circular saw, always use "push sticks" to feed work close to the blade. Keep a set of such sticks in different widths where they will be easily available. Always use the saw guard; it will slide smoothly over the work and protect the operator. **Re-check to see that carriage lever and knobs are tight before starting the saw.**

Rotate the saw by hand, to check clearances before turning on the motor.

SAW ADJUSTMENTS - Miter-gauge slots on the saw table should be parallel to the saw blade; otherwise a true right-angle cannot be cut. Check by very carefully measuring the distance between the miter gauge and one tooth of the saw blade; then turn the blade to the opposite side and measure between the same tooth and the miter gauge. (The miter gauge stop-rod provides a simple and accurate means of making this measurement.) If the distance is not the same at front and back, the table must be "revolved."

To do this, loosen the four bolts underneath the table that hold it to the trunnion and table bearing. There is sufficient "play" to permit any adjustment the table might require. When alignment has been checked, tighten bolts.

To set trunnion stops, square the table to the sanding disc with a carpenter's square; tighten the trunnion wrench. Loosen the trunnion stop screw and press the trunnion stop pointer into the recess; tighten the screw. To check accuracy of miter gauge, lock it in the 90° position. Place it in right hand miter slot. Square the face of miter gauge with left hand miter slot using a carpenter's square.

screw and press the trunnion stop pointer into the recess; tighten the screw. To check accuracy of miter gauge, lock it in the 90° position. Place it in right hand miter slot. Square the face of miter gauge with left hand miter slot using a carpenter's square.

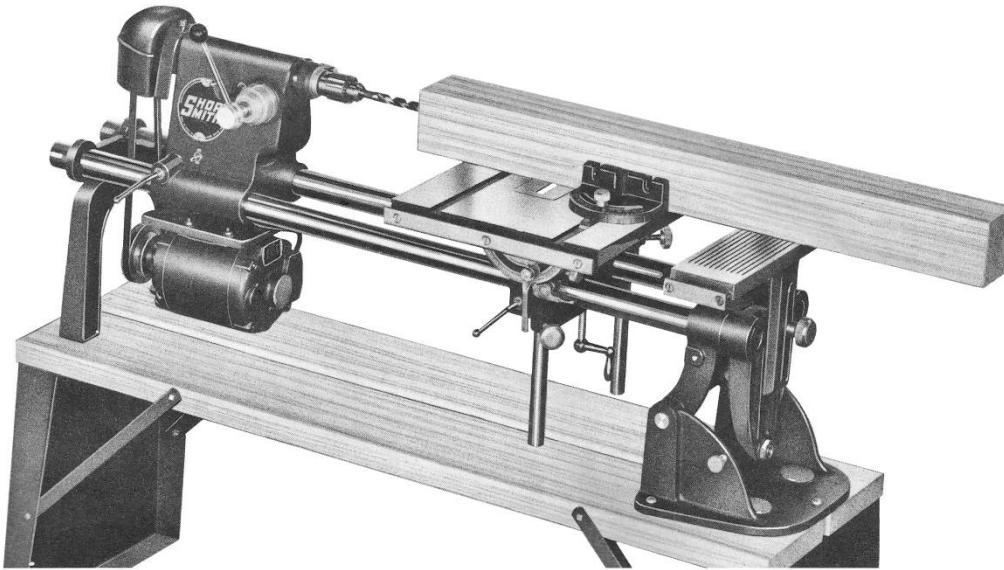


FIG. 19 Shopsmith set up as horizontal drill.

is tightly applied against the spindle "flat." Do not operate at excessive speed; use "second" or intermediate speed, which is fast enough for most purposes.

The saw table is used as a work support. Set surface of the table about 1-inch below center of the disc. Edge of table should clear disc by about 1/8 inch. Plain and compound miters are sanded by using the miter gauge, tilting the table, or both. New abrasive discs can be applied by stripping off the worn disc and holding a stick of adhesive against the revolving disc until evenly coated and then pressing fresh disc into even contact.

The headstock and carriage can be moved to the extreme right, which will give maximum operating convenience.

CAUTION: In sanding-disc operations, the table should always be horizontal or tilted away from the disc - never angle table into the disc.

HORIZONTAL DRILL PRESS - In addition to handling work too large or too awkward to be worked on a vertical drill press, Shopsmith, as a horizontal drill press, will do many jobs with greater precision and ease. Jacobs chuck is placed on the spindle and held in place by tightening its setscrew. Drills, reamers and other tools within the 1/2 inch capacity of the chuck are tightened or released by the accompanying chuck key.

CAUTION: Always be sure to remove key from chuck before applying power to motor.

Locate table at desired position on the ways and set for height with micro-table raising mechanism. The rip fence and miter gauge can be used either as guides or stops. For example: If it is required to drill a series of holes along the edge of a 1" x 12" plank (Fig. 18), adjust table so point of drill will center at required points and set the rip fence, as a guide, to bear against opposite side of the work. For end-drilling in long stock (Fig. 19), the work can be held to drill a true hole by clamping miter gauge to the table after the drill has been centered. When Shopsmith is used in its horizontal position, the feed lever should be screwed into the pinion shaft knob on the side nearest the operator, so that the drill feed can be made without reaching over the headstock.

The table extension can be used with the horizontal drill press by placing the tailstock upside down on the end of the ways. Then attach the table extension bracket to the tailstock, and the latter to the ways, with the bracket knob and studscrew.

VERTICAL DRILL PRESS - To change Shopsmith from any horizontal-operating unit to a vertical drill press simply raise and lock the table at its highest position and swing it at a right angle to the ways (Fig. 20). Then release carriage' knobs until table settles down against carriage. Move carriage to a point about 15 inches from base plate arm and tighten carriage lever. (This point will vary according to the operator's height to give the most convenient operating level). Move headstock up until chuck is about 8 inches from the table and lock headstock lever. Check to see that the base-plate knob is unscrewed and unscrew the headrest knob. Grip the ways with both hands near the headrest and swing entire unit up to the vertical position. Tighten base plate knob. The feed lever can be used on either side and the drill press operated from the right or left at the operator's convenience.

Lock-nuts on the depth stop-rod can be set to control length of spindle stroke or boring depth. To use the depth of stroke gauge, extend the quill until the drill touches the Work piece; lock the quill in this position. Then turn the depth gauge collar until the indicator points to zero.

To adjust it, loosen thumb knob and set screw in indicator block and move miter gauge body right or left until square. Be sure in so moving that the spring ball-bearing stop stays in the 90° notch. When square, lock assembly with thumb knob and tighten set screw. See (Fig. 16).

Rip fence should be parallel to the saw blade. When miter gauge slots have been checked (as above) the fence should be parallel to the slots. If adjustment should be necessary, loosen the two bolts in the rip fence base; correct alignment and tighten.

DISC SANDER - The 12-inch pressure-cast aluminum sanding disc (Fig. 17) fits directly onto the spindle tip. Be certain the setscrew

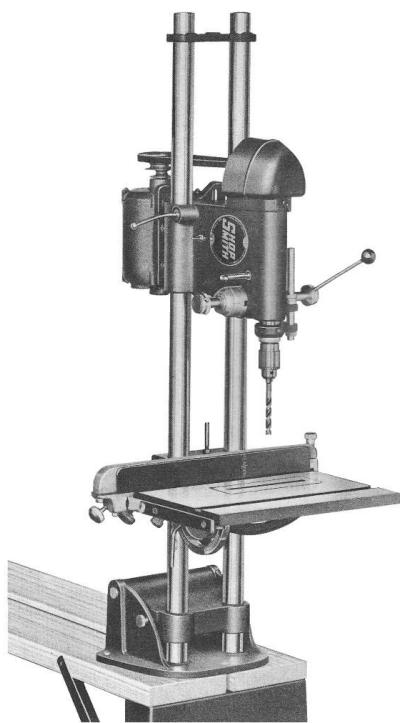


FIG. 20 Shopsmith set up as vertical drill press.

When the drill is further extended, the indicator will register the exact depth of cut. The quill lock-lever will hold the spindle at any extended position. The rip fence is a very useful guide for drilling a series of holes, or as part of a jig; the table will tilt to any desired angle.

It is advisable to use a piece of wood as a "pad" between the table and work to be drilled in order to prevent the table from being scarred.

CAUTION: When drilling metal, always support the work in a table vise or clamp, or clamp it securely to the table; do not attempt to hold such work in the hands. Re-check to be sure headstock lever and carriage lever are tight before raising to vertical drill-press position.

MISCELLANEOUS APPLICATIONS

BUFFING - Use buffing wheels on a Shopsmith 1/2 inch arbor (Fig. 21) and operate at high speed. Polishing compounds, such as tripoli, emery and rouge deposited on the ways should be carefully removed before sliding carriage or headstock.

SCRATCH BRUSHING - Steel or brass-wire scratch brushes in various degrees of fineness can be used to produce either a rough-textured or fine satin finish on metals, depending on type of brush and operating speed. Support on a Shopsmith 1/2 inch arbor.

DRUM SANDER - In either its horizontal or vertical position, Shopsmith can be used to excellent advantage as a drum sander (Fig. 22). Tool-rest can be used as a guide. The Shop-smith sanding drum, which fits "over" the spindle, is recommended. For precision type of surfacing or sanding, the Shop-smith shaper fence is recommended with sanding drum, see (Fig. 23).

ROUTER - The large work table makes an excellent surface for routing and veining operations. Both the miter gauge and rip fence can be used as guides. Use a Shopsmith router chuck to hold router bits. (See Instructions packed with Accessory).

SHAPER - Shopsmith can be used in either of two positions for shaping and molding: horizontal or vertical. Shopsmith shaper fence and arbors are available for this operation. (See Instructions packed with Accessory.)

FLEXIBLE SHAFT - Shopsmith makes a good source of power for a flexible shaft (Fig. 24). The table makes an excellent base for resting or clamping work when grinding, routing, and buffing, etc.

MORTISING - With Shopsmith mortising attachment (Fig. 25) accurate mortising can be accomplished in either the horizontal or vertical position. (See Instructions packed with Accessory.)

JOINTING - Using the Shopsmith shaper fence, and 2 1/2-inch jointer-cutter, edging or light jointing can be easily performed in either the horizontal or vertical position.

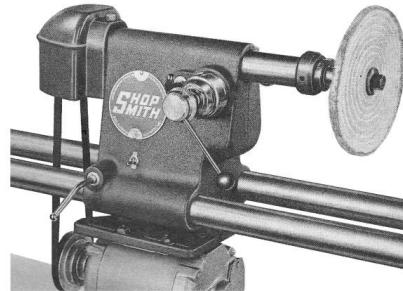


FIG. 21 Buffing wheel accessory (quill extended).

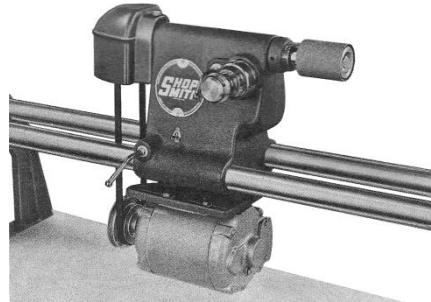


FIG. 22 Drum Sanding accessory - tool rest not shown

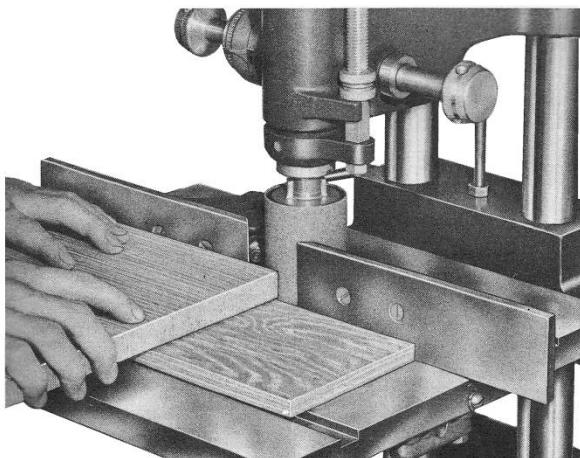


FIG. 23 Drum Sander in use with Shaper Fence attachment.
(Board rest for workpiece is necessary, as shown)

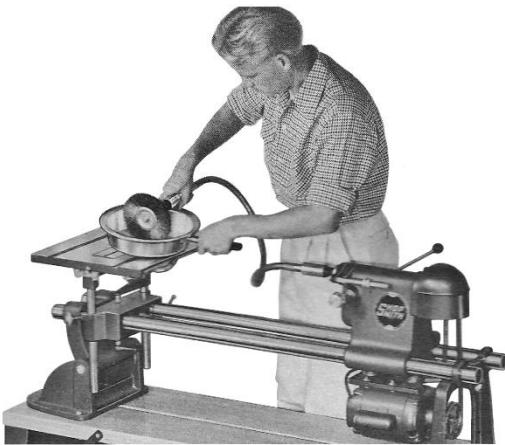


FIG. 24 Flexible Shaft accessory with wire brush attached.

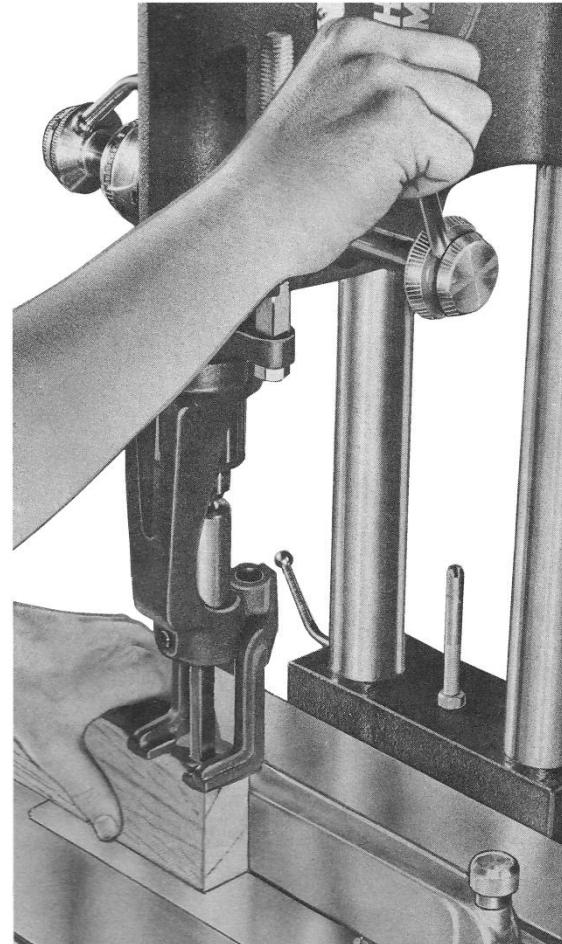


FIG. 25 Mortising accessories used with Shopsmith in vertical position.

SAFETY PRECAUTIONS Most accidents, whether they occur in industry, on the farm, at home, or on the highway, are caused by the failure of some individual to follow simple and fundamental safety rules or precautions. For this reason most accidents can be prevented, by recognizing the real cause and doing something about it before the accident occurs. Regardless of the care used in the design and construction of any kind of equipment, there are many conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation.

A careful operator is the best insurance against an accident. The complete observance of one simple rule would prevent many thousand serious injuries each year. The rule is: Never attempt to clean, oil or adjust machinery of any kind while it is under power or in motion. If your attention is distracted while operating any power tool, do two things first: 1. Turn off power; 2. Step away from the tool, then look. Always follow these safety measures:

1. Never make any adjustment while the motor is running.
2. Keep belt guard on - this is extremely important in the vertical position to prevent operator's hair from getting in the pulley.
3. Do not wear loose clothing -ties, loose sleeves, etc. - when operating power machinery of any kind.
4. Do not allow small children close to the unit when motor is running. Better still; do not allow children in room while operating under power. Always pull out electric plug when the machine is left unattended as someone might turn on power.

REPAIRS

SHOPSMITH PARTS

1. Order repair and replacement parts from your Shopsmith dealer. Be sure to take him the following information:
2. Part Number, Name and Description of part (see list).
3. Model Number appears on name plate.
4. Complete Serial Number stamped on nameplate on head-stock.

Your Shopsmith dealer may have to order the part from the factory. If so, please allow sufficient time for transportation.

MOTORS

If your motor requires service, return it to your dealer who will have it repaired at the motor manufacturer's local repair station. Do not return motor to Magna Engineering Corporation.

REPAIR PARTS

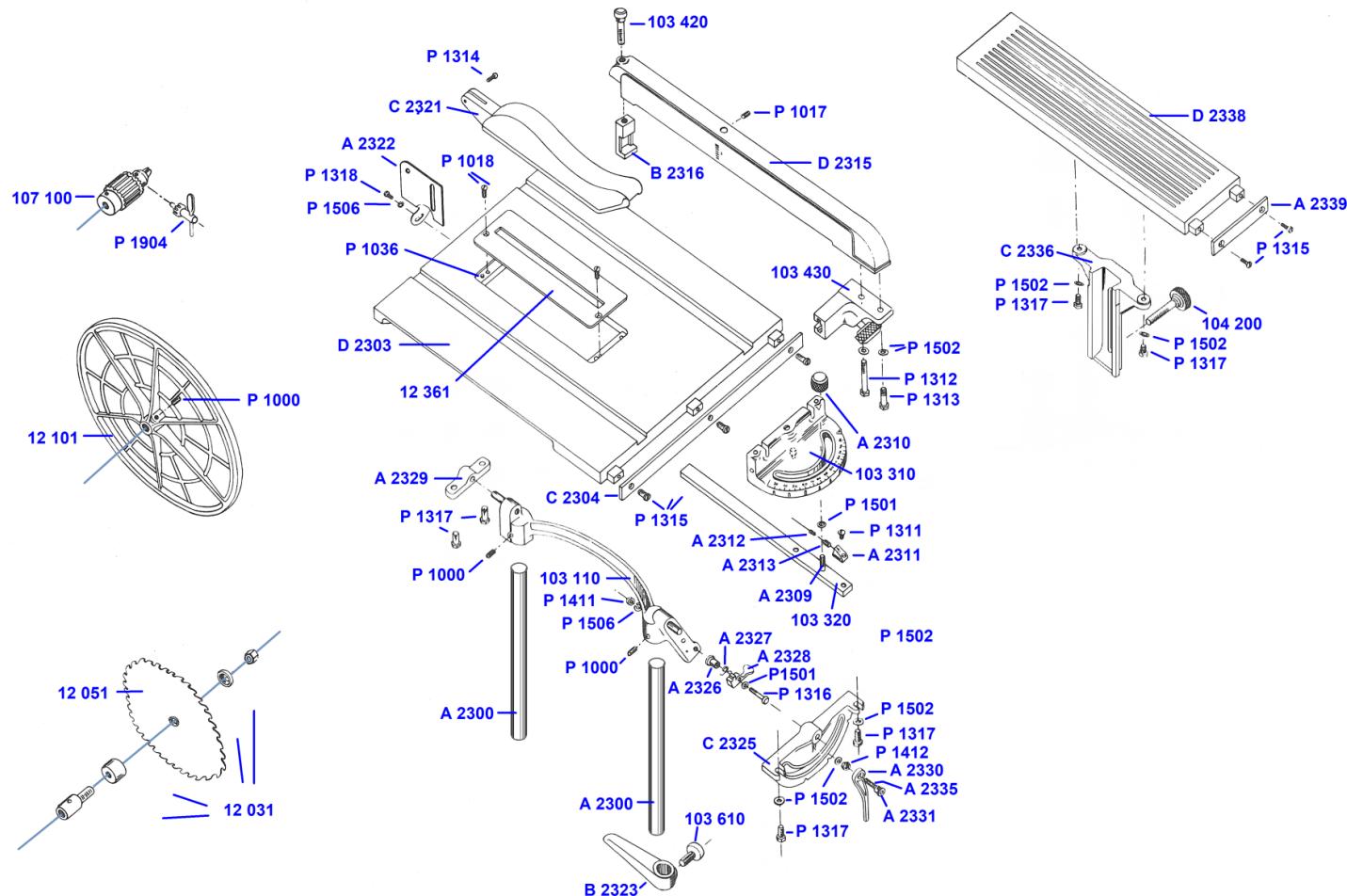


FIG. 26

PARTS ILLUSTRATION – TABLE AND ACCESSORIES

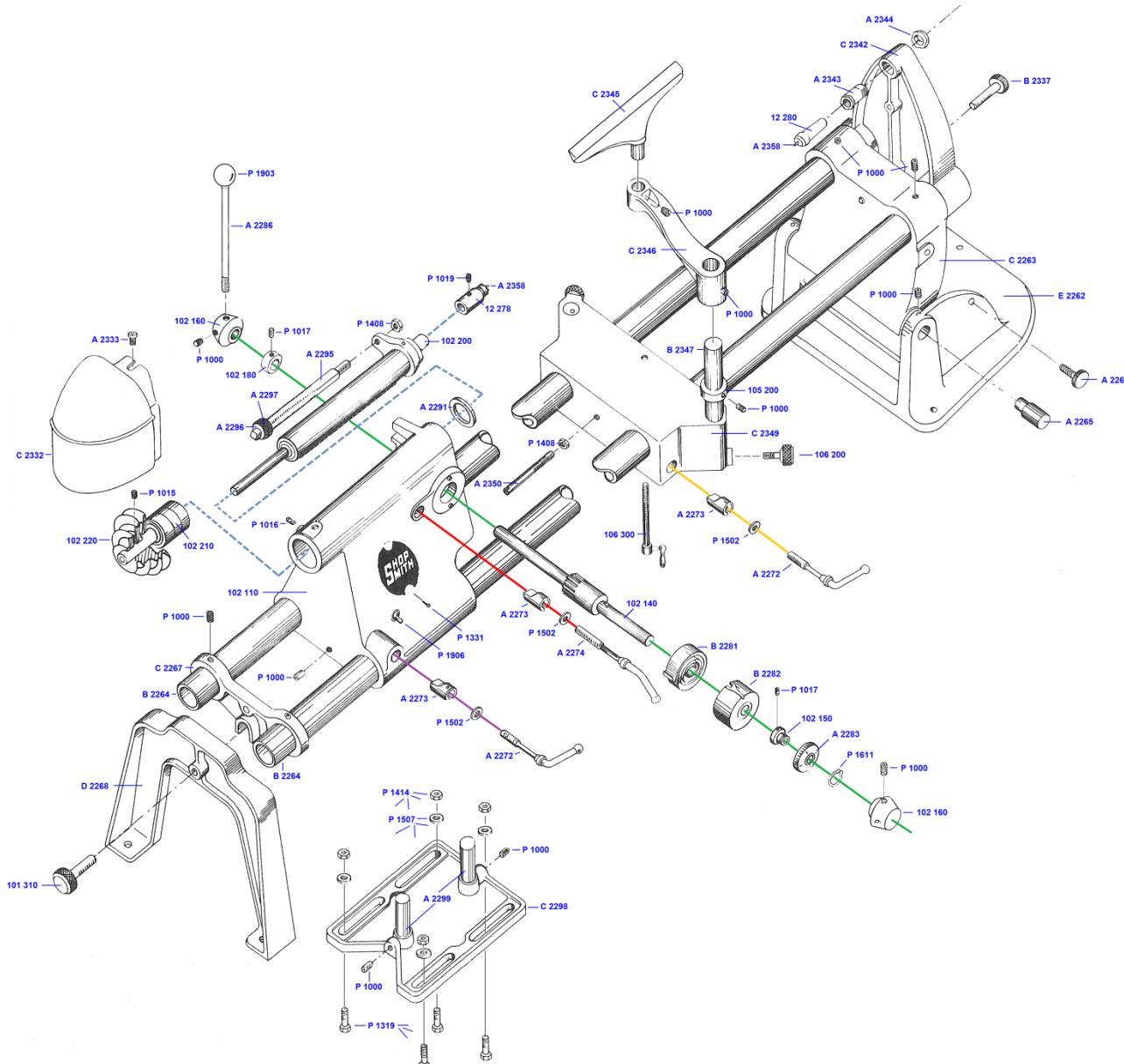


FIG. 27

PARTS ILLUSTRATION – MAIN SYSTEM – HEADSTOCK – WAY TUBES, ETC.

MODEL 10-ER
REPAIR PARTS and ASSEMBLIES

PART OR ASMBLY. NO.	NAME AND DESCRIPTION	PRICE EACH	LBS.	OZS.
ASSEMBLIES				
101 310	Knob and Stud	\$1.00	—	10
102 110	Headstock	22.50	35	—
102 140	Feed Pinion	4.50	3	2
102 150	Collar .....	.60	—	6
102 160	Feed Knob	1.50	—	6
102 180	Feed Shaft Collar (3/4" Diam.) .....	.60	—	5
102 310	Spindle and Quill	16.00	6	—
102 210	Drive Sleeve	13.00	2	4
102 220	Headstock Pulley	1.25	1	—
103 110	Tie Bar	7.25	6	—
103 310	Miter Gauge Casting	3.75	1	3
103 320	Miter Bar	2.25	1	3
103 420	Back Lock Knob .....	.65	—	10
103 430	Fence Base and Knob	2.00	1	—
103 610	Knob .....	.55	—	10
104 200	Extension Table Knob	1.25	—	10
105 200	Collar .....	.75	—	6
106 200	Rod Lock Knob .....	.75	—	8
106 300	Table Raiser Crank	1.65	—	10
107 100	Jacobs Chuck and Key	7.50	1	12
108 100	Motor Pulley	1.25	1	—
12 001	SHOPSMITH Motor, 1/2 H.P., Ball Bearing, Capacitor, 1725 R.P.M., Complete	34.50	35	—
12 026	3/16" Allen Wrench .....	.20	—	3
12 027	1/8" Allen Wrench .....	.20	—	3
12 031	5/8" Saw Arbor	1.25	—	14
12 051	All Purpose Blade	4.75	1	—
12 101	Sanding Disc	3.95	3	—
12 278	Drive Center	1.25	—	7
12 280	Cup Center .....	.95	—	8
12 361	Table Insert .....	.95	—	8
PARTS				
P 1000	Screw—Socket Set (3/8"-16x1/2") .....	.10	—	3
P 1036	Screw—Socket Set (1/4"-20x1/2") .....	.10	—	3
P 1015	Screw—Socket Set (5/16"-18x1/2") .....	.10	—	3
P 1016	Screw—Socket Set (5/8"-16x3/8") .....	.10	—	3
P 1017	Screw—Socket Set (1/4"-20x1/4") .....	.10	—	3
P 1018	Screw—Flathead (10-24x1/2") .....	.05	—	3
P 1019	Screw—Socket Set (1/4"-28x1/4") .....	.10	—	3
P 1311	Screw—Oval Head (1/4"-20x7/16") .....	.05	—	3
P 1312	Bolt—Hex Head .....	.10	—	4
P 1313	Bolt—Hex Head (5/8"-16x1 1/4") .....	.10	—	4
P 1314	Screw—Round Head (1/4"-20x3/4") .....	.05	—	3
P 1315	Screw—Flathead (1/4"-20x3/4") .....	.10	—	3
P 1316	Bolt—Hex Head (1/4"-20x1 1/2") .....	.05	—	3
P 1317	Screw—Cap (5/8"-16x1" Hex Head) .....	.05	—	3
P 1318	Screw—Round Head (1/4"-20x1 1/2") .....	.05	—	3
P 1319	Screw—Cap (5/16"-18x1") .....	.05	—	3
P 1331	Screw—Round Head (8-32 x 1/2") .....	.05	—	2
P 1408	Nut—Hex (5/8"-16) .....	.05	—	3
P 1411	Nut—Hex (1/4"-20) .....	.05	—	3
P 1412	Nut—Light Hex (3/8"-24) .....	.05	—	3
P 1414	Nut—Hex (5/16"-18) .....	.05	—	3
P 1501	Washer (1/4" SAE Std.) .....	.05	—	3
P 1502	Washer (5/8" SAE Std.) .....	.05	—	3
P 1506	Washer—Lock (1/4"x3/32"x1/16" SAE) .....	.05	—	3
P 1507	Washer (5/16" Std.) .....	.05	—	3
P 1611	Retaining Ring .....	.15	—	2

PART OR ASMBLY. NO.	NAME AND DESCRIPTION	PRICE EACH	LBS.	OZS.
P 1703	V-Belt—38" O.D.	\$1.10	—	8
P 1903	Feed Lever Knob .....	.25	—	4
P 1904	Chuck Key .....	.75	—	6
P 1906	Motor Switch	1.50	—	4
E 2262	Base	13.50	30	—
C 2263	Arm	9.00	15	—
B 2264	Tubular Way	8.00	19	—
A 2265	Pin .....	.75	—	9
A 2266	Screw .....	.50	—	6
C 2267	Tie Bar	3.50	3	—
D 2268	Headrest	6.25	7	—
A 2272	Headstock Lever	1.00	—	7
A 2273	Head Lock Wedge .....	.75	—	6
A 2274	Quill Lock Lever	1.00	—	7
B 2281	Quill Spring	1.00	—	9
B 2282	Spring Housing .....	.90	—	10
A 2283	Depth Indicator .....	.90	—	6
A 2286	Feed Lever .....	.25	—	6
A 2291	Quill Bumper Ring .....	.20	—	3
A 2295	Gauge Rod .....	.75	—	12
A 2296	Nut—Gauge Rod .....	.15	—	3
A 2297	Gauge Rod Washer .....	.15	—	—
C 2298	Motor Bracket	4.00	5	—
A 2299	Bracket Rod .....	.50	—	11
A 2300	Table Rod	2.00	4	8
D 2303	Saw Table	18.25	15	—
C 2304	Fence Bar	2.00	1	8
A 2309	Stud .....	.10	—	3
A 2310	Knob—Small (1/4"-20 Tap) .....	.25	—	5
A 2311	Indicator .....	.25	—	3
A 2312	Indicator Button .....	.05	—	2
A 2313	Indicator Spring .....	.05	—	2
D 2315	Fence	6.50	4	—
B 2316	Fence Back Lock .....	.85	—	8
D 2321	Saw Guard	3.50	1	10
A 2322	Saw Splitter .....	.90	—	8
B 2323	Table Raiser Bar	1.65	—	17
C 2325	Trunnion	3.00	1	—
A 2326	Indicator Spacer .....	.15	—	4
A 2327	Spring .....	.10	—	2
A 2328	Trunnion Stop Lever	1.00	—	3
A 2329	Table Bracket .....	.60	—	6
A 2330	Trunnion Wrench .....	.75	—	5
A 2331	Collar—Stud Cap .....	.15	—	3
C 2332	Belt Guard	3.00	3	—
A 2333	Screw—Socket—Knurl .....	.15	—	3
A 2335	Stud .....	.15	—	3
C 2336	Extension Table Bracket .....	.325	1	—
B 2337	Screw—Socket—Knurl .....	.60	—	8
D 2338	Extension Table	4.75	4	8
A 2339	Fence Bar	1.25	—	12
C 2342	Tailstock	7.00	11	—
A 2343	Floating Center	1.00	—	6
A 2344	Nut—Center Lock .....	.35	—	5
C 2345	Tool Rest	1.75	1	8
C 2346	Tool Rest Arm	2.00	3	—
B 2347	Tool Rest Post .....	.90	1	14
C 2349	Saw Table Carriage	9.50	15	—
A 2350	Stud .....	.15	—	6
A 2358	Center Pin .....	.10	—	3
A 9001	Owner's Guide .....	.25	—	6

REPAIR PARTS AND ASSEMBLIES PARTS LIST

MAGNA 10ER Owner's Guide v1.01 restored by Everett L. Davis - 2016 - Donated without cost to the worldwide Shopsmith Community

SHOPSMITH ACCESSORIES

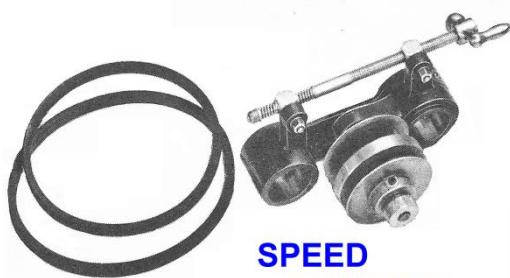
ACCES-SORY NO.	DESCRIPTION	LBS.	OZS.
11 100	Jigsaw	21	—
11 300	Speed Changer	5	2
11 400	Shaper Fence	4	4
12 001	½ H. P. Special Motor	35	—
12 002	¾ H. P. Special Motor	45	—
12 007	Metal Bench Ends (Pair)	22	—
12 008	Retractable Casters	10	10
12 011	SHOPSMITH Cover	3	—
12 013	Lamp Attachment	2	—
12 015	Key Switch	—	6
12 026	3/16" Allen Wrench	—	4
12 027	½" Allen Wrench	—	4
12 030	½" Arbor	—	15
12 031	½" Arbor	—	15
12 035	13/16" Headstock Pulley (2-Step)	—	12
12 039	¾" Motor Pulley (3-Step)	1	—
12 048	Magna-Lube—SHOPSMITH Grease	—	4
12 049	Rust Preventive Spray	1	—
12 051	8" Saw Blade—All Purpose	1	—
12 053	8" Saw Blade—Hollow Ground Comb..	1	—
12 054	8" Saw Blade—Crosscut	1	—
12 055	8" Saw Blade—Rip	1	—
12 056	8" Saw Blade—8 Tooth	1	—
12 063	6" Dado Blade	3	8
12 067	8" Flexible Metal Cut-Off Wheel	—	12
	Jigsaw Blades—5"—Packages of 6		
12 076	.028" thick x .250" wide, 7 teeth	—	1
12 077	.020" thick x .110" wide, 15 teeth	—	1
12 078	.010" thick x .040" wide, 18 teeth	—	1
12 079	.012" thick x .023" wide, 20 teeth	—	1
12 081	.020" thick x .070" wide, 7 teeth	—	1
12 082	.010" thick x .070" wide, 14 teeth	—	1
12 084	.020" thick x .110" wide, 20 teeth	—	1
12 085	.028" thick x .250" wide, 20 teeth	—	1
12 095	Jigsaw Machine Files (Set of 6)	—	5
12 101	12" Sanding Disc	2	8
12 104	Distic Adhesive	—	10
12 106	Liquid Adhesive	—	8
12 110	12" Sandpaper—Assorted (Pkg. of 6)...	1	12
12 111	12" Sandpaper—Coarse (Pkg. of 6)	1	12
12 112	12" Sandpaper—Medium (Pkg. of 6)	1	12
12 113	12" Sandpaper—Fine (Pkg. of 6)	1	12
12 126	Drum Sander	1	4
12 134	Drum Sander Sleeves—Asstd. (Pkg. of 6)	—	7
12 135	Drum Sander Sleeves—Coarse (Pkg. of 6)	—	7
12 136	Drum Sander Sleeves—Med. (Pkg. of 6)...	—	7
12 137	Drum Sander Sleeves—Fine (Pkg. of 6)	—	7
12 151	Mortising Attachment	2	10
12 152	Mortising Hold Down	1	7
12 160	¼" Mortising Chisel	—	4
12 161	¾" Mortising Chisel	—	4
12 162	½" Mortising Chisel	—	4
12 163	5/16" Mortising Chisel	—	4
12 165	¼" Mortising Bit	—	4
12 166	¾" Mortising Bit	—	4
12 167	½" Mortising Bit	—	4

ACCES-SORY NO.	DESCRIPTION	LBS.	OZS.
12 168	5/16" Mortising Bit	—	4
12 180	¼" Router Bit (½" Diam. Shank)	—	4
12 181	5/16" Router Bit (½" Diam. Shank)	—	4
12 182	¾" Router Bit (½" Diam. Shank)	—	4
12 183	½" Router Bit (½" Diam. Shank)	—	4
12 190	¼" Router Chuck	—	10
12 191	5/16" Router Chuck	—	10
12 193	½" Router Chuck	—	10
12 201	Auger Bits (Set of 5)	1	—
12 230	2½" Jointer-Cutter	1	5
12 232	½" Shaper Adapter	—	6
12 233	5/16" Shaper Adapter	—	5
12 235	Shaper Collars (Set of 4)	1	8
See Accessory Catalog	Shaper Cutters (15 different profiles) Each	—	2
12 276	Screw Center	—	6
12 281	Tailstock Chuck Arbor	—	7
12 282	Tailstock Live Center	—	12
12 283	½" Motor Pulley	1	1
12 290	3¾" Face Plate	1	—
12 291	6" Face Plate	1	12
12 301	Lathe Chisels (Set of 5)	2	14
12 311	Carbide Lathe Chisels (Set of 4)	1	10
12 312	½" Carbide Lathe Chisel—Square Nose	—	6
12 313	¼" Carbide Lathe Chisel—Square Nose	—	6
12 316	½" Carbide Lathe Chisel—Round Nose	—	6
12 317	¼" Carbide Lathe Chisel—Round Nose	—	6
12 326	Flexible Shaft	5	6
12 329	Flexible Shaft Adapter	—	6
12 330	6" Buffing Wheel	—	4
12 331	6" Wire Brush—Fine	—	7
12 332	6" Wire Brush—Coarse	—	8
12 345	Lambswool Polishing Pad (for 6" Face Plate)	—	4
12 347	Lambswool Polishing Bonnet (for Sanding Drum)	—	4
12 351	Front Table Extension	1	—
12 355	Miter Gauge Stop Rod	—	10
12 356	Miter Gauge Extension	—	15
12 360	Table Insert—Dado Slot	—	8
12 361	Table Insert—Saw Slot	—	8
12 362	Table Insert—No Slot	—	8

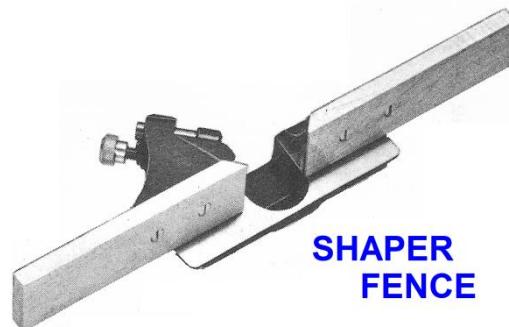
COMPLETE ASSEMBLIES		PRICE
102 000	Headstock Assembly	84.50
103 110	Table Tie Bar Assembly	7.25
103 200	Table Assembly	24.50
103 300	Miter Gauge Assembly	5.50
103 400	Fence Assembly	9.00
103 600	Table Raising Assembly	3.85
103 800	Trunnion Assembly	5.80
104 000	Extension Table Assembly	9.50
104 300	Tailstock Assembly	8.50

SHOPSMITH ACCESSORIES PARTS LIST

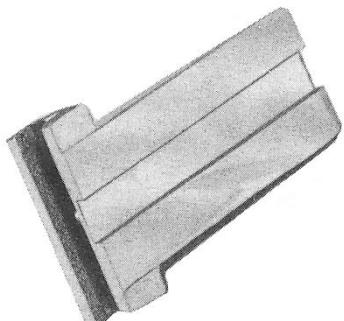
SHOPSMITH OPTIONAL ACCESSORIES



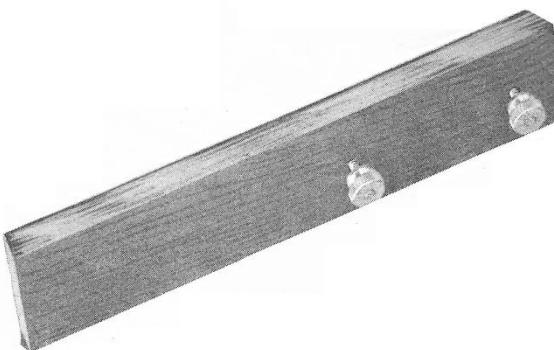
SPEED
CHANGER



SHAPER
FENCE



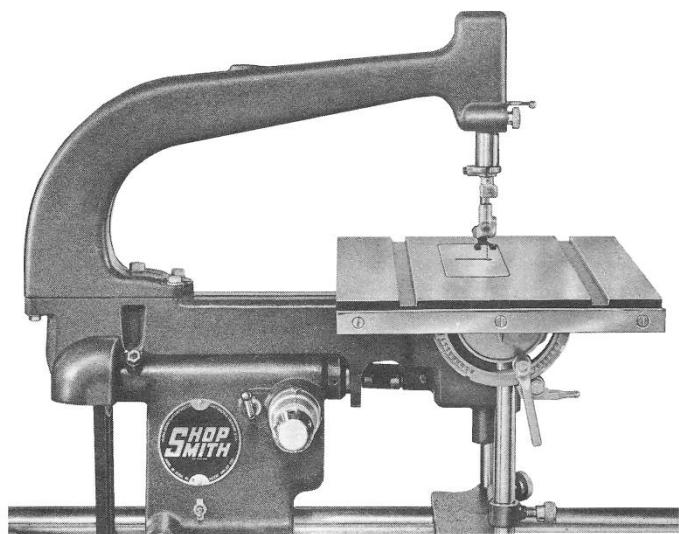
FRONT TABLE EXTENSION



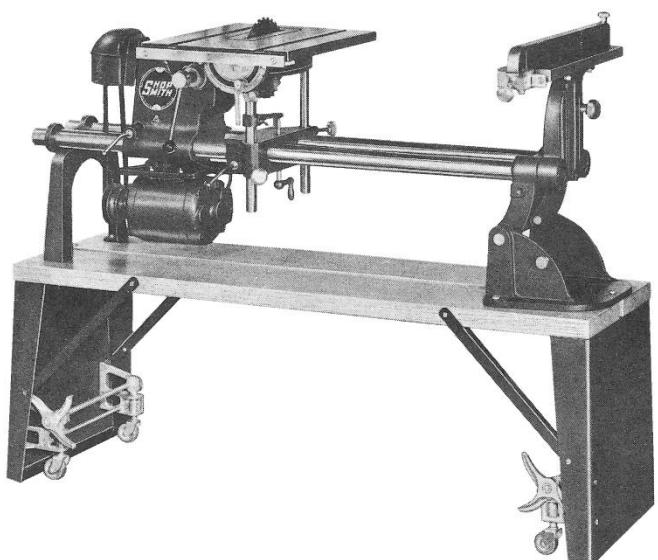
MITER GAUGE EXTENSION



MORTISING
HOLD DOWN



18" JIGSAW



SHOPSMITH RETRACTABLE CASTER ASSEMBLY

REPAIR PARTS

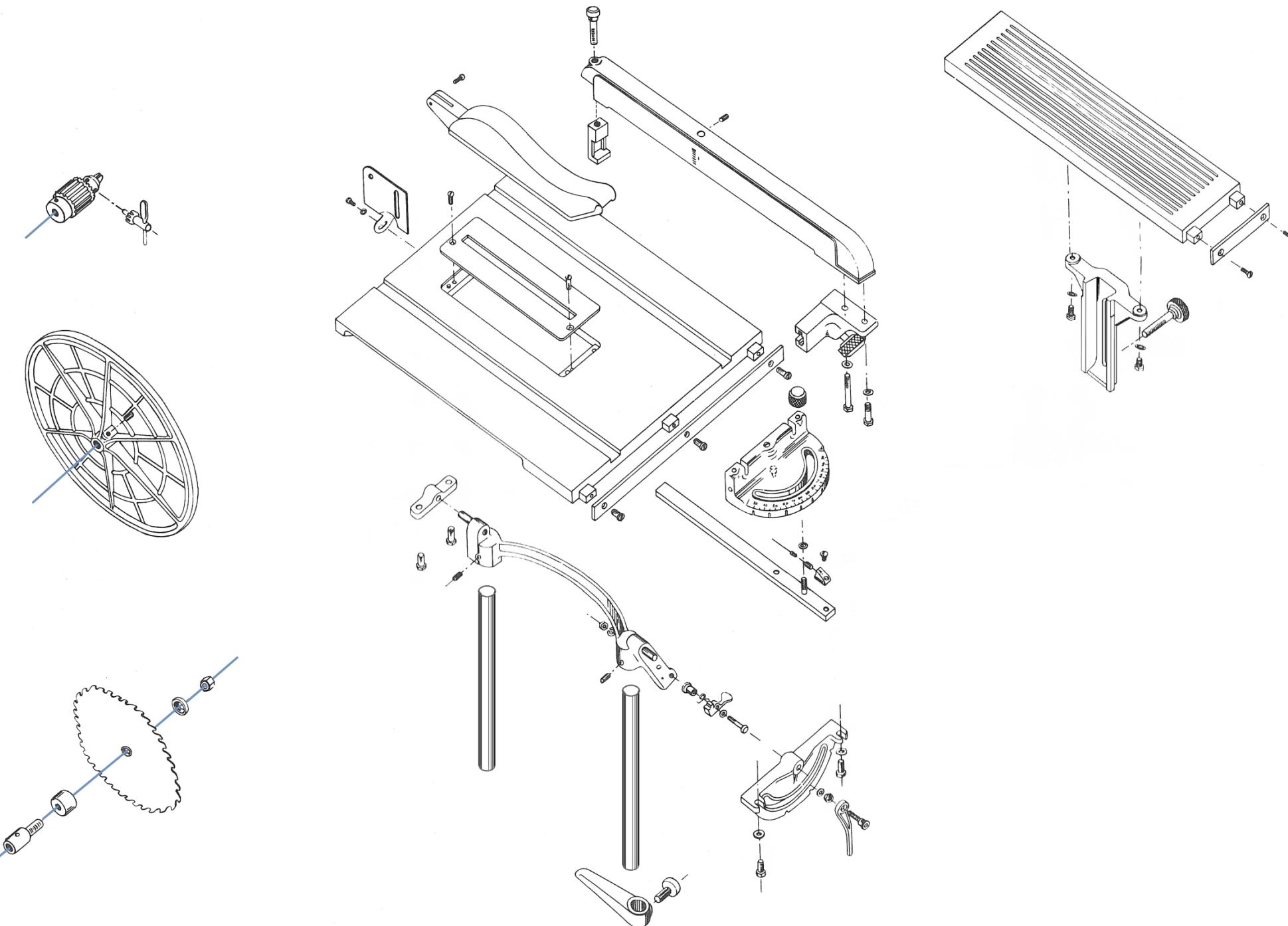


FIG. 26

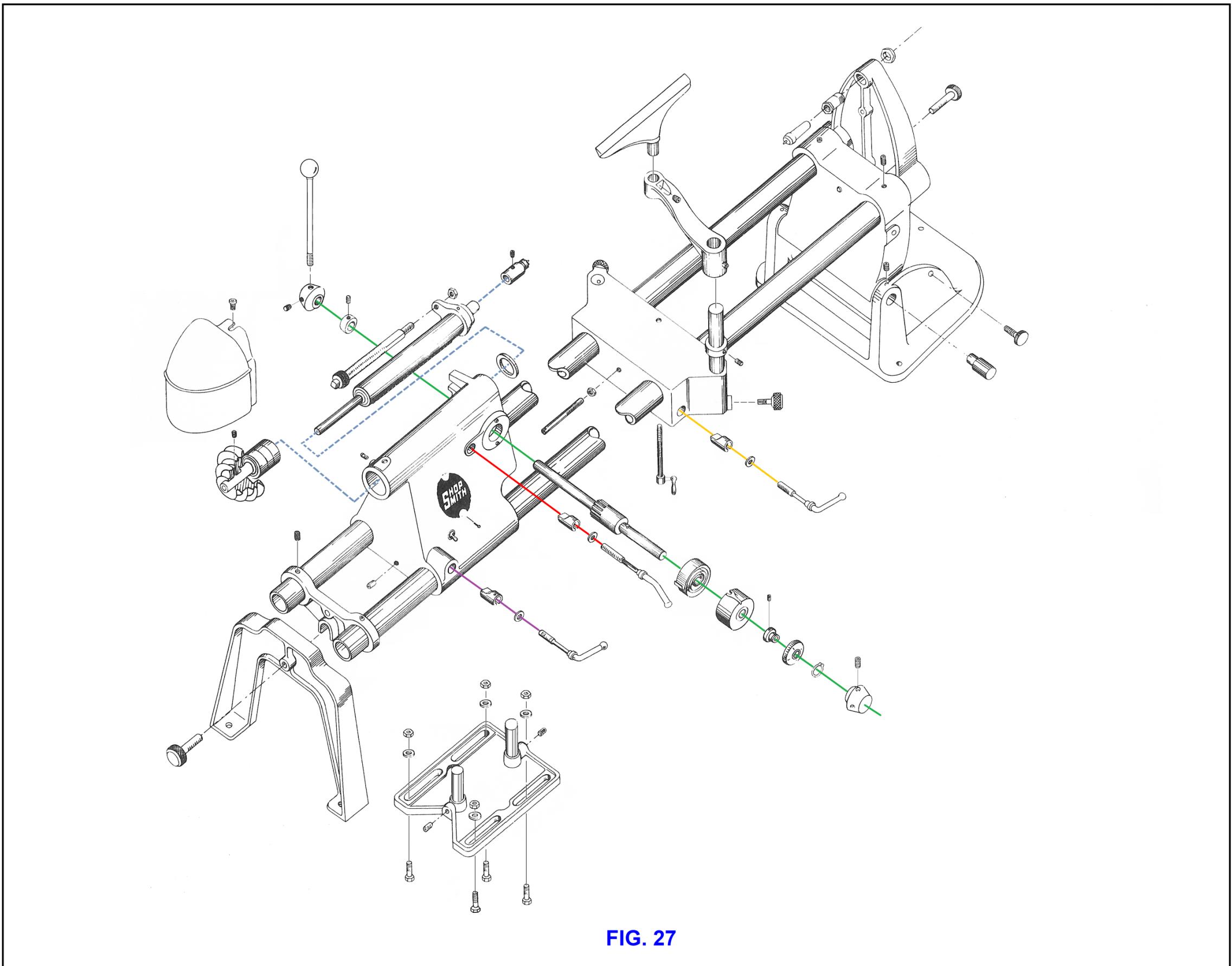
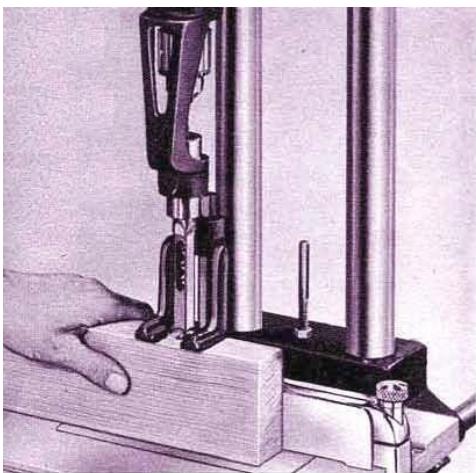
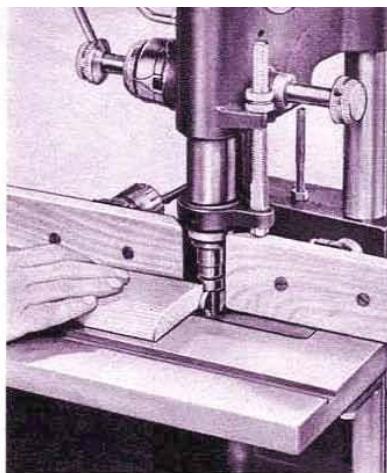


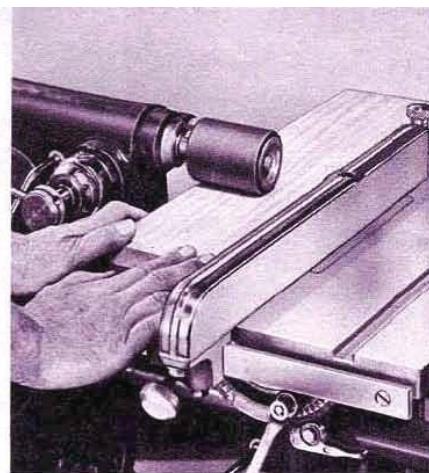
FIG. 27



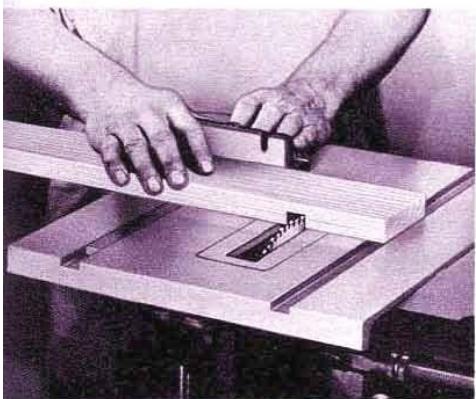
Mortising With Shopsmith



Shaping With Shopsmith



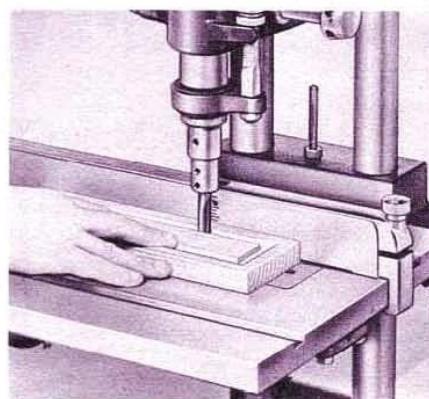
Drum Sanding With Shopsmith



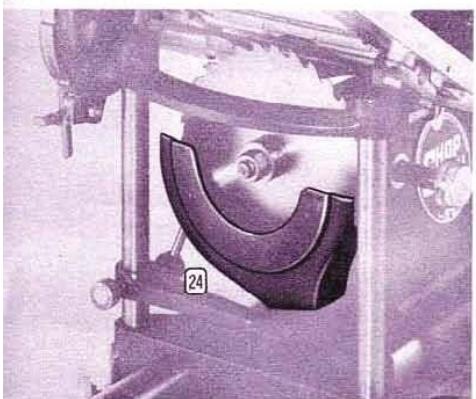
Magna Dado In Use



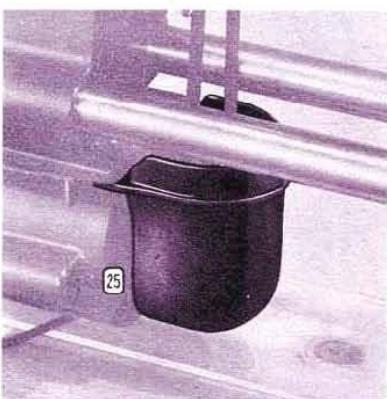
Flexible Shaft In Use



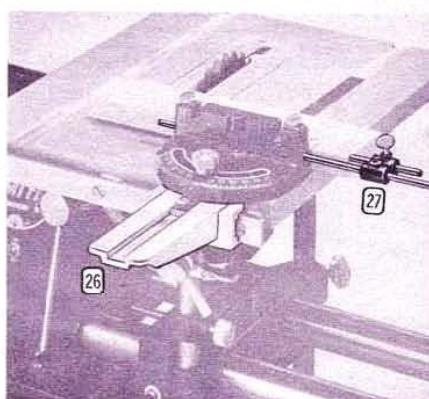
Routing With Shopsmith



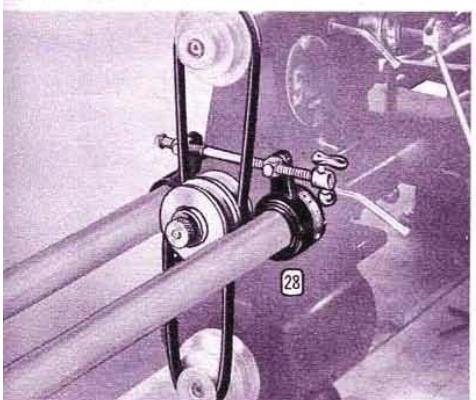
Undetectable Saw Guard



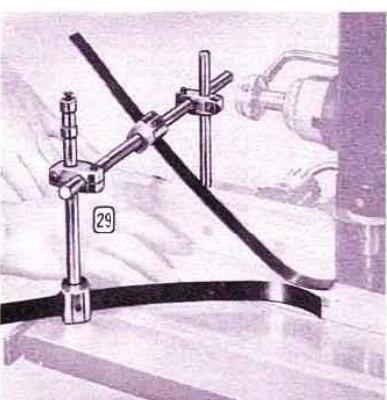
Motor Pulley Guard



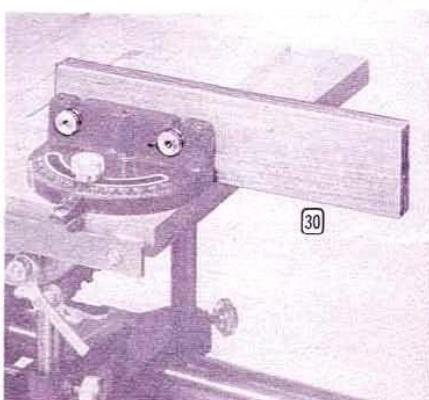
Front Table Extension and Stop Rods



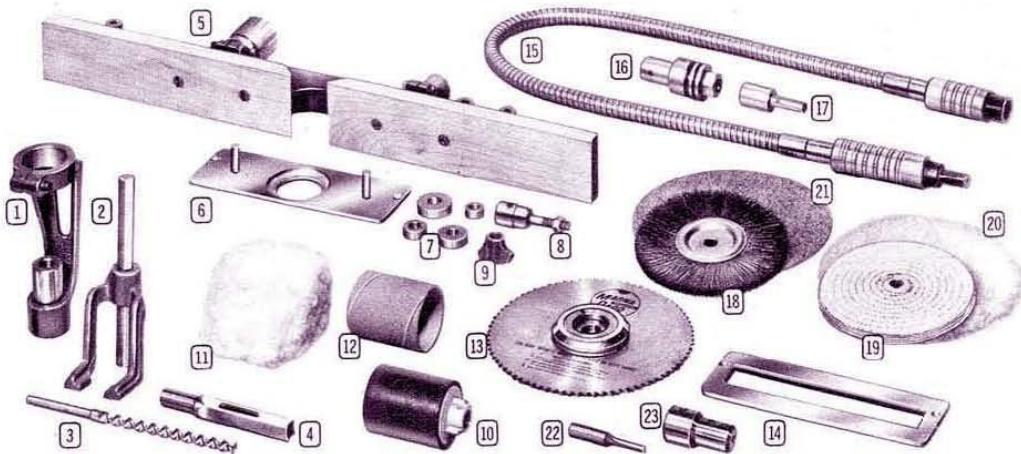
Speed Changer



Hold Down Attachment



Miter Gauge Extension



Accessories Make Shopsmith Even More Useful

1 to 4 MORTISING ACCESSORIES. See illustration on opposite page. Eliminates tedious hand work when forming mortise and tenon joints and other joints requiring a square cavity.

(1) MORTISING ATTACHMENT. Guides chisel and bit for cutting accurate square holes. Machined cast iron. Use on horizontal or vertical drill press. 84 WRP 3450—Mailed Postpaid. \$3.95

(2) MORTISING HOLD-DOWN. Adjusts for varying thicknesses. Holds work to table securely. Cast iron. 84 WRP 3451—Mailed Postpaid. \$1.95

(3) MORTISING BITS. Tempered steel. Use with chisels below. State $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$ or $\frac{1}{2}$ -in. size. 84 WRP 3135—Mailed Postpaid. Each \$1.85

(4) MORTISING CHISELS. Use with bits above for cutting square holes for mortise and tenon joints. Tempered steel. State $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$ or $\frac{1}{2}$ -in. size. 84 WRP 3134—Mailed Postpaid. Each \$3.50

5 to 9 SHAPING ACCESSORIES. See illustration on opposite page. Small views (A) to (R) below illustrate various profiles which may be used.

(5) SHAPER FENCE. Controls depth of cut for shaping straight-edged boards. Locks to table. Infeed, outfeed fences adjust for depth of cut. 84 WRP 3425—Mailed Postpaid. \$11.95

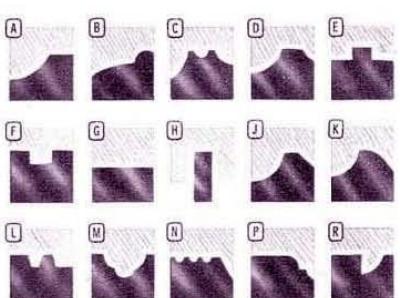
(6) TABLE INSERT. Cast aluminum. Use when shaping curved work against collars; when sanding edges. 84 WRP 3430—Mailed Postpaid. \$1.50

(7) SHAPER COLLARS. For controlled depth of cut on curved surfaces. Fit $\frac{1}{2}$ -in. shaper adapter. Set of four— $\frac{25}{32}$ to $1\frac{1}{2}$ -in. outside diam. (For $\frac{5}{16}$ -in. bore shaper collars, see Page 21.) 84 WRP 3139—Mailed Postpaid. Set of four \$1.45

(8) SHAPER ADAPTER ASSEMBLY. Use for mounting of 3-lip shaper cutters. Postpaid. 84 WRP 3459—For cutters with $\frac{5}{16}$ -in. bore. \$1.25

84 WRP 3460—For cutters with $\frac{1}{2}$ -in. bore. 1.25

(9) SHAPER CUTTERS. 3-lip type. $\frac{1}{2}$ -in. diam. bore. Choice of 15 profiles, see (A) to (R) below. (For $\frac{5}{16}$ -in. bore shaper cutters, see Page 21.) 84 WRP 3138—Postpaid. State Profile Letter. Ea. \$1.95



10 to 12 DRUM SANDING ACCESSORIES. See illustration on opposite page. For surface sanding of narrow boards, contour sanding, sanding rabbets to width. Sanding drum is adaptable for small polishing jobs using bonnet.

(10) SANDING DRUM. Expanding rubber type. $2\frac{1}{8}$ -in. diam. With 1 med. grit sanding sleeve. 84 WRP 2975—Mailed Postpaid. \$2.95

(11) LAMBSWOOL POLISHING BONNET. Fits (10). 84 WRP 3129—Mailed Postpaid. \$1.25

(12) SANDING SLEEVES. Fit drum above. State fine, medium, coarse or assorted grit. 84 WRP 3133—Mailed Postpaid. 6 for \$1.10

13 MAGNA DADO ASSEMBLY. See illustration on opposite page. 8-in. diam. geared precision model. Wobble type. Complete unit—no blades and chipper to assemble. One quick adjustment gives desired width of cut. Gear synchronized one-piece unit for grooving, dadoing, notching, cross cutting, ripping. Cuts grooves $\frac{5}{32}$ to $\frac{7}{8}$ in. wide... infinite settings possible. Blade is $\frac{1}{8}$ in. thick. Can also be used as a rip or crosscut blade. Cuts to 2 in. deep. Fits $\frac{5}{8}$ or $\frac{3}{4}$ -in. diam. arbors. 84 WRP 3300—Mailed Postpaid. \$14.95

14 TABLE INSERT. Cast aluminum. Postpaid. 84 WRP 2993— $1\frac{1}{16}$ -in. Dado slot. 95c

15 to 20 FLEXIBLE SHAFT AND ACCESSORIES. See illustration on opposite page. Made especially for Shopsmith. For sanding, buffing, polishing, etc., with accessories below. Shopsmith table useful for clamping work.

(15) FLEXIBLE SHAFT. Fits Shopsmith $\frac{5}{8}$ -in. spindle, $\frac{3}{8}$ -in. core, 50 in. long. All steel—complete ball bearing construction. Use with (16). 84 WRP 3140—Mailed Postpaid. \$15.95

(16) ARBOR ASSEMBLY. Fits flex shaft or Shopsmith spindle. Holds grinding wheels, etc. Postpaid. 84 WRP 2996X—Takes $\frac{1}{2}$ -in. bore accessories. \$1.25

84 WRP 2997X—Takes $\frac{5}{8}$ -in. bore accessories. 1.25

(17) FLEXIBLE SHAFT ADAPTER. Adapts any flex shaft with $\frac{1}{2}$ -in. bore motor coupling to fit Shopsmith spindle. Not required with (15). 84 WRP 2992—Mailed Postpaid. 95c

(18) WIRE BRUSH WHEELS. For removing paint, rust, etc. Durable solid metal, reinforced centers. 6-in. diameter. Use with $\frac{1}{2}$ -in. arbor. 84 WRP 3124—Fine. Postpaid. \$1.50

84 WRP 3125—Coarse. Postpaid. 1.25

(19) CLOTH BUFFING WHEEL. Fits $\frac{1}{2}$ -in. arbor.

84 WRP 3127—6-in. diam. Postpaid. 75c

(20) LAMBSWOOL PAD. Fits 6-in. face plate.

84 WRP 3128—Mailed Postpaid. \$1.50

(21) FLEXIBLE CUT-OFF WHEELS. Laminated

linen impregnated with cutting abrasive. 8-in. diam. Fits $\frac{5}{8}$ -in. arbor. Postpaid. \$2.95

84 WRP 3102—For cutting non-metallics. 2.95

22 to 23 ROUTING ACCESSORIES. See illustration on opposite page. Add to versatility of Shopsmith when used in drill press position.

(22) ROUTER BITS. $\frac{1}{2}$ -in. diam. shanks. Use with router chuck for routing, dadoing, grooving, etc. State $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$ or $\frac{1}{2}$ -in. cutting size. 84 WRP 3136—Mailed Postpaid. Each \$1.45

(23) ROUTER CHUCK. For routing and other operations involving added side thrust—carving, round end mortising, dowelling. Postpaid. 84 WRP 3457—Takes $\frac{1}{2}$ -in. diam. shanks. \$1.25

24 UNDERTABLE SAW GUARD. Protects under side of blade. Moves with quill—clears all undertable obstruction. Cast aluminum. Fastens securely to quill with Allen set screws. 84 WRP 3467—Mailed Postpaid. \$4.55

25 MOTOR PULLEY GUARD. Gives added protection. Cast aluminum. Need not be removed to change pulley speeds. 84 WRP 3466—Mailed Postpaid. \$3.50

26 FRONT TABLE EXTENSION. Increases cut-off width between miter gauge and blade to 12 in. Precision milled from aluminum alloy. 84 WRP 2981—Mailed Postpaid. \$2.75

27 MITER GAUGE STOP RODS. Use with miter gauge as a jig for crosscutting workpieces to same length. Adjustable from 0 to 18 in. 84 WRP 2988—Mailed Postpaid. \$1.25

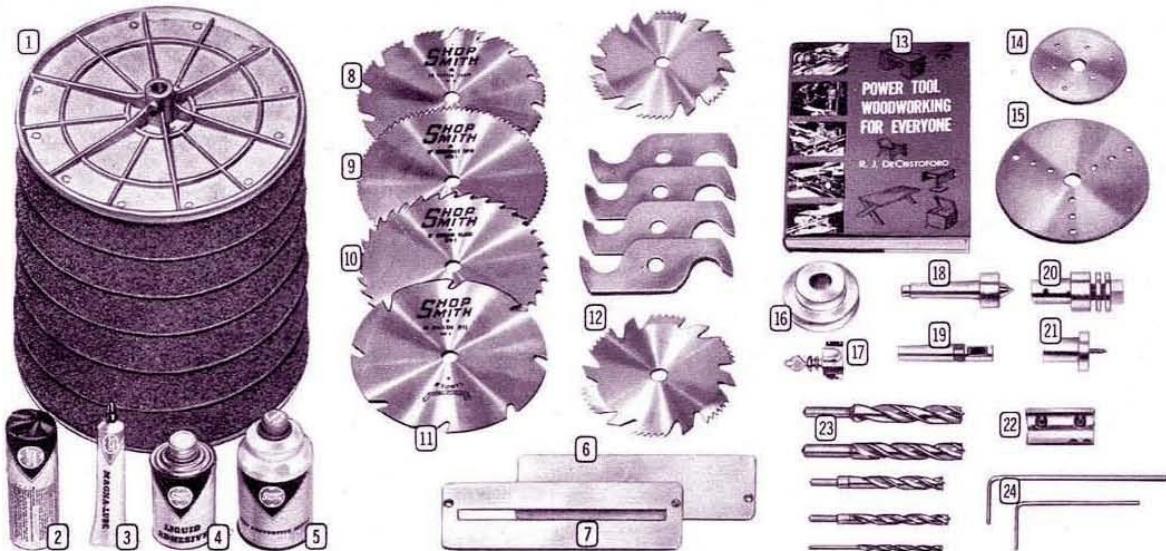
28 SHOPSMITH SPEED CHANGER. Provides an infinite range of speeds from 425 to 6800 RPM. Permits rapid selection of exact speed. Can be adjusted while Shopsmith is running. Insures proper speed for routing, shaping, lathe turning, etc. Quickly attached to bed ways and headstock. Mounted as an idler pulley between motor and headstock. Speed selected with ball crank handle and etched indicator. Speed chart, 2 $\frac{1}{2}$ " belts and instructions included. 84 WRP 2979—Mailed Postpaid. \$13.95

29 HOLD-DOWN ATTACHMENT. Mounts on miter gauge, rip fence or shaper fence. Holds work securely against fence and table. Prevents chatter by holding work firmly when shaping, routing, sawing, etc. Holds odd shaped pieces firmly for cutting. Long mounting bars allow maximum adjustment in thickness and width of work. Can be mounted on any side of Shopsmith table in horizontal or vertical position. 84 WRP 3426—Mailed Postpaid. \$7.95

30 MITER GAUGE EXTENSION. Provides extra large miter gauge face. Top grade hardwood, sealed against moisture. (Miter gauge not included.) Size $\frac{1}{8}$ -in. thick, $2\frac{1}{8}$ in. high, 12 in. long. 84 WRP 3461—Mailed Postpaid. \$1.25

For additional Shopsmith accessories and a complete description of Shopsmith itself, see the following four pages. Additional blades and dado heads listed on Page 7.

ALL WARDS 47



Complete Your Shop With Shopsmith Accessories

SANDING DISCS, ADHESIVES, TABLE INSERTS

1 DISC FOR SANDING. 12-in. diam. Precision machined, balanced. Speed work by ordering an extra disc for each grit. Order sandpaper below.
84 WRP 2977—*Mailed Postpaid*..... Each \$3.95

SANDPAPER DISCS FOR (1). 12-in. diameter. Paper Backing. *Mailed Postpaid*.

84 WRP 3108—For metal. Assorted grits. 6 for \$2.25

84 WRP 2978—For wood. State type grit—fine, medium, coarse or assorted. 6 for \$1.65

2 DISTIC ADHESIVE. Makes application and re-placement of sanding discs easy. Holds firmly.
84 WRP 2980—Tube 1 1/8x5 in. *Mailed Postpaid*. .50c

3 MAGNA-LUBE. Special grease for Shopsmith drive sleeve, spindle spline and quill rack teeth.
84 WRP 3101—2 fluid oz. *Mailed Postpaid*.... .50c

4 LIQUID ADHESIVE. Pressure-sensitive adhesive for sandpaper discs. Brush applicator.
84 WRP 3149—8 fluid oz. *Postpaid*..... .95c

5 RUST-PREVENTIVE SPRAY. Protects Shopsmith ways, keeps other tools free of rust.
84 WRP 3148—12 fluid oz. *Postpaid*..... \$1.45

6 **7** TABLE INSERTS. Sturdy cast-aluminum, heavily ribbed. *Mailed Postpaid*.

(6) 84 WRP 2994—No slot. (Drill Press)..... .95c

(7) 84 WRP 3146—1/4-in. saw slot.95c



48 WARDS ALL2

SAW BLADES, DADO HEAD, FACE PLATES

8 8-IN. COMBINATION SAW BLADE. Rip-crosscut 1/4 miter. Hollow ground. Produces smooth, easy cuts. Use for fine work and mitering cuts. Blade twists from teeth to teeth. **84 WRP 3122—5/8-in. arbor hole. Postpaid... \$4.45**

9 8-IN. CROSCUT SAW BLADE. Has special tooth design for smooth, fast cutting across grain. Use when a great deal of crosscutting is done. **84 WRP 3120—5/8-in. arbor hole. Postpaid... \$2.65**

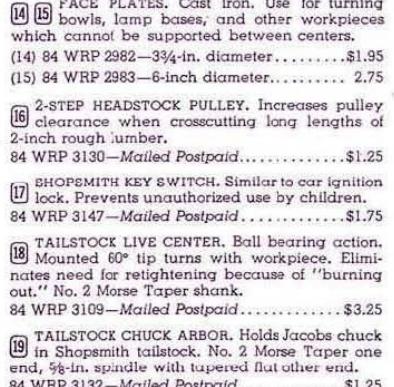
10 8-IN. RIP SAW BLADE. Designed especially for maximum efficiency when ripping. **84 WRP 3121—5/8-in. arbor hole. Postpaid... \$2.65**

11 8-IN. 8-TOOTH SAW BLADE. Performs ripping and crosscutting operations with minimum power consumption. Cuts cleanly, reduces "kickback." **84 WRP 3105—5/8-in. arbor hole. Postpaid... \$2.65**

ALL PURPOSE 8-IN. SAW BLADE (not shown). New 30 tooth design. Rips and crosscuts, eliminates need of blade change for specific operation. **84 WRP 3106—5/8-in. arbor hole. Postpaid... \$2.65**

12 6-IN. DADO HEAD. Tempered alloy steel. Use for dadoing, grooving, rabbeting, tenoning, etc. Maximum width of cut 13/16 in. Includes two 6-in. dado head blades and four chippers. Use with 5/8-in. arbor and 13/16-inch slot table insert. **84 WRP 3126—Mailed Postpaid... \$14.95**

13 POWER TOOL WOODWORKING FOR EVERYONE. By R. J. DeCristoforo. Learn the correct method to use and operate the Shopsmith. 450 illustrations demonstrate each step. Special chapter on sharpening tools, workshop safety hints, 283 pages. **53 WRP 1103—Mailed Postpaid... \$4.95**



AUGER BITS, CHISELS, JOINTER CUTTER

[20] ARBOR ASSEMBLY. Fits Shopsmith spindle. For mounting grinding wheels, saw blades, buffering wheels, wire brushes, etc. *Postpaid*.
 84 WRP 2996—Fits $\frac{1}{2}$ -inch bore accessories. \$1.25
 94 WRP 2997—Fits $\frac{5}{8}$ -inch bore accessories. 1.25

[21] SCREW CENTER. Holds small workpieces for hollowing or facing operations. Screw is replaceable with any No. 14 wood screw.
 84 WRP 2990—*Mailed Postpaid*. \$1.25

[22] JOINTER-CUTTER. For jointing stock up to $2\frac{1}{2}$ inches thick; 2-in. diameter. Use with jointer and shaper fence (84 WRP 3425 on Page 47). Three tool steel cutter blades are removable for sharpening and adjustment. Fits on spindle—use in either horizontal or vertical position.
 84 WRP 3453—*Mailed Postpaid*. \$9.95

[23] 5-PIECE AUGER BIT SET. Fits Shopsmith chuck. Best type bits for power drilling in soft and hard woods—especially large diameter holes. Set includes 5 bits: $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, and $\frac{3}{4}$ inch. $\frac{1}{4}$, $\frac{3}{8}$ and $\frac{1}{2}$ inch have $\frac{1}{4}$ -in. diam. shank; $\frac{5}{8}$ and $\frac{3}{4}$ in. have $\frac{1}{2}$ -in. diam. shank.
 84 WRP 3107—*Mailed Postpaid*. Set of five \$6.60

[24] EXTRA LONG ALLEN WRENCHES. Specially made for Shopsmith. $\frac{1}{8}$ -in. wrench longer than radius of saw blade; $\frac{1}{16}$ -in. wrench longer than radius of sanding disc. *State size. Postpaid*.
 84 WRP 3142— $\frac{1}{8}$ -in. size 20c $\frac{1}{16}$ -in. size 20c

[25] to [28] CARBIDE TIPPED TURNING CHISELS. Tips retain their razor-sharp edge longer than alloy steel type. Can be used for free hand turning of soft metals as well as plastics and woods. *Mailed Postpaid*.

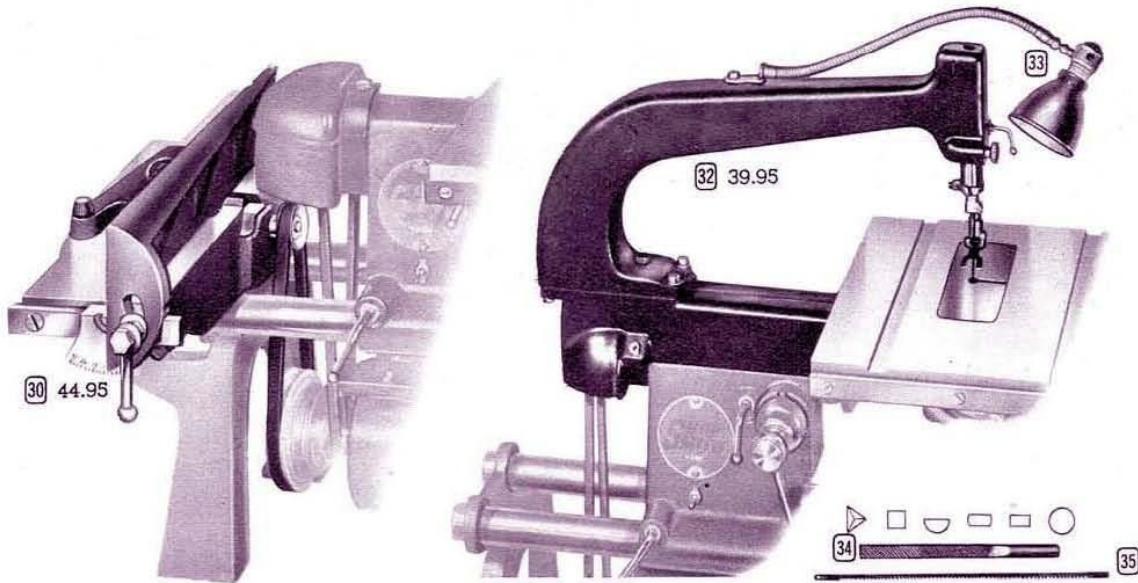
(25) 34 WRP 2087— $\frac{1}{8}$ -in. round nose \$3.95
 (26) 34 WRP 2088— $\frac{1}{4}$ -in. round nose 3.95
 (27) 34 WRP 2085— $\frac{1}{8}$ -in. square nose 3.95
 (28) 34 WRP 2086— $\frac{1}{4}$ -in. square nose 3.95

4-PIECE CHISEL SET. Save 85c by purchasing the entire set above. Includes one each (25) to (28).
 84 WRP 2089—*Mailed Postpaid*. Set of four \$14.95

[29] LATHE CHISEL SET. Alloy steel. Special selection of chisels most commonly used by skilled wood turners. Will handle all standard lathe operations. Set includes one each of the following: 1-inch skew; $\frac{3}{4}$ -inch gouge, $\frac{1}{2}$ -inch round nose, $\frac{1}{4}$ -inch gouge and $\frac{1}{2}$ -inch parting tool.
 84 WRP 3131—*Mailed Postpaid*. Set of five \$8.95

HINTS ON PROPER CARE OF SAW BLADES. To prevent rusting, saw blades, dado heads, etc., should be cleaned thoroughly, then given a coating of thin oil when being removed from the machine for storage. It is best to wrap them in oiled or waxed paper for complete rust protection.

HINTS ON PROPER CARE OF SAW BLADES. To prevent rusting, saw blades, dado heads, etc., should be cleaned thoroughly, then given a coating of thin oil when being removed from the machine for storage. It is best to wrap them in oiled or waxed paper for complete rust protection.



Now . . . Shopsmith Jointer and Jig Saw Attachments

NEW SHOPSMITH JOINTER ATTACHMENT 44.95

30 4-INCH BALL BEARING MODEL. Another important major tool accessory has been designed to make your Shopsmith even more versatile. Fits easily on headrest of Shopsmith (use Shopsmith Mounting Kit below), or may be used as a single purpose tool. Base is drilled for three point mounting as single tool. Jointer swings down when Shopsmith is used in vertical position. Ready for use in seconds when Shopsmith is returned to horizontal position. Heavy cast-iron construction reduces vibration and assures smooth operation.

Three-knife, $2\frac{1}{4}$ -inch diameter cutter head runs easily on 2 grease sealed ball bearings. Spring guard over cutter head, can be mounted on outfeed table during rabbeting operations to cover exposed cutter head behind fence. High-speed steel, precision ground knives retain their keen cutting edge longer . . . eliminates constant resharpening. Knife blades $4\frac{1}{2}$ -inches long, are individually adjustable with Allen wrench for quick, accurate setting to fixed out-feed table. Infeed table is $5\frac{1}{2} \times 13\frac{1}{4}$ inches long; outfeed table $4\frac{1}{2} \times 13\frac{1}{4}$ inches long. Infeed table has 2-inch rabbeting ledge for cut up to $\frac{5}{16}$ inch. Maximum depth of cut, single pass over cutter head $\frac{5}{16}$ inch. Maximum width of cut 4 inches. Large, easy-to-grip knob adjusts infeed table for depth of cut. Easily read depth indicator has adjustable pointer.

Sturdy cast-iron fence is 3 inches high by $2\frac{1}{4}$ inches long; two holes drilled in fence permit attaching high wood facings when jointing excessively wide or long stock. Fence tilts from 45° forward to 45° back, has adjustable automatic stops at 45° , 0, and 45° positions. Fence position secured tightly with hand lever, locks firmly in any position.

Jointer utilizes motor of Shopsmith when attached to headrest of Shopsmith (Order Mounting Kit below, for use with Shopsmith). As a single purpose tool, recommended for use with $\frac{1}{2}$ -HP 1725 RPM motor (order motor (31) below on this page); 5-inch diameter motor pulley; 44-inch "V" belt; tool stand 84 WR 2962M on Page 25. Jointer includes $1\frac{3}{4}$ -inch machine pulley. Overall size: 9 in. wide, $32\frac{1}{2}$ in. long and 7 in. high. Available about November 1, 1953. *Mailed Postpaid*.

84 WRP 3427 M—Only \$4.50 Down on Terms Cash \$44.95

SHOPSMITH JOINTER MOUNTING KIT (not shown). Required to attach Jointer (30) above to Shopsmith. With new headrest for Shopsmith, belt and 4 step motor pulley. Can be used with or without speed changer 84 WRP 2979. Fits $\frac{5}{8}$ or $\frac{3}{4}$ -inch diameter motor shaft. Available about November 1, 1953.

84 WRP 3428—*Mailed Postpaid* \$9.95

SHOPSMITH MOTORS, PULLEYS, CANVAS COVER

31 $\frac{1}{2}$ AND $\frac{3}{4}$ -HP SHOPSIMTH MOTORS. Manufactured especially for Shopsmith with "ceiling mount," short leads and separate cord and plug. Pre-lubricated ball bearings insure proper performance in either vertical or horizontal position. 1725 RPM capacitor type. Inverted end bells protect motor from sawdust, woodchips or dirt fouling. *Mailed Postpaid* from Factories in Cleveland, Ohio or near Oakland, California. Allow 10 days extra.

$\frac{1}{2}$ -HP MOTOR. For 110-120 volts, 60 cycle AC. $\frac{5}{8}$ -in. diam. shaft.

84 WRP 3143K—Only \$3.50 Down on Terms Cash \$34.50

$\frac{3}{4}$ -HP MOTOR. For 110-120/220-240 volts, 60 cycle AC. $\frac{5}{8}$ -in. diam. shaft.

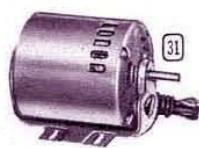
84 WRP 3144 K—Only \$4.50 Down on Terms Cash \$44.50

3-STEP MOTOR PULLEYS. Fit $\frac{1}{2}$ or $\frac{3}{4}$ -in. diameter motor shaft. *State size bore*.

84 WRP 3145—*Mailed Postpaid* \$1.25

SHOPSMITH COVER. Heavy canvas duck. Protects Shopsmith from moisture, dust, dirt or paint. Box-end design, no loose flapping ends.

84 WRP 3464—*Mailed Postpaid* \$5.95



SHOPSMITH JIGSAW ATTACHMENT 39.95

32 JIGSAW ATTACHMENT. This powerful, versatile jigsaw attaches easily to your Shopsmith in just a few seconds. It utilizes the same motor, bench and saw table, eliminates costly duplication. Driven from spindle. Built-in blower keeps cutting line clean . . . easy to follow. Maximum depth of cut 2 inches. Throat depth 18 inches; cuts to center of 36-inch circle. Can be used as a saber saw with unlimited capacity. Tilting table, 45° to the right, 15° to left allows operator to cut beveled curves.

Smooth ball and Ollite bearings. Chucks take 5-inch plain end blades—lower chuck takes $\frac{1}{4}$ -inch shank jigsaw files. Jigsaw can also be used as a filing machine to eliminate tedious hand filing. Frame is cast of close grain aluminum alloy; balanced crank drive mechanism is fully enclosed. Includes table insert, jigsaw blade (extra blades available below), mounting bolts, flexible couplings.

84 WRP 3452 M—*Mailed Postpaid*. Only \$4 Down. Cash \$39.95

33 ADJUSTABLE LAMP ATTACHMENT. Attaches easily to jigsaw (32) above or Shopsmith headstock. Provides proper illumination directly on the workpiece where all work can easily be seen. Handy on-off switch located at lamp base. With cord and plug.

84 WRP 3463—*Mailed Postpaid* \$4.45

34 JIGSAW FILES. Contains shapes most normally used for shop work. Includes 1 each: triangular, round, square, half-round, pillar, crochet (see profiles of each above). Use in jig or saber saw position.

84 WRP 3118—*Mailed Postpaid* Set of six \$4.95

35 JIGSAW BLADES. Oil tempered and hardened. Teeth are filed and set. Blades are 5 inches long with plain ends. *Mailed Postpaid*.

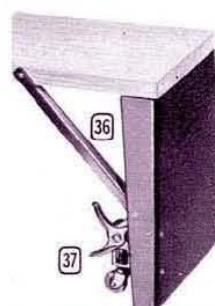
Use For	Cat. No.	Thick	Width	Teeth Per In.	6 for
Composition board	84 WRP 3110	.012 in.	.023 in.	20	30c
Wood, hard rubber	84 WRP 3111	.010 in.	.070 in.	14	30c
Plastics, bone	84 WRP 3112	.020 in.	.070 in.	7	35c
Wood, plastics, bone	84 WRP 3113	.010 in.	.040 in.	18	35c
Alum., copper, mild steel	84 WRP 3114	.020 in.	.110 in.	20	30c
Metals, wood, bone	84 WRP 3115	.020 in.	.110 in.	15	30c
Alum., copper, mild steel	84 WRP 3116	.028 in.	.250 in.	20	45c
Soft or hard Preswood	84 WRP 3117	.028 in.	.250 in.	7	45c

STEEL BENCH ENDS 11.95; RETRACTABLE CASTERS 11.95

36 SHOPSIMTH BENCH ENDS. Heavy-duty 16-gauge steel . . . provides strong support for your Shopsmith. Designed for proper height for efficient operation of Shopsmith. Predrilled holes . . . simply attach two $2 \times 8 \times 57$ -in. boards to bench ends (boards not included). Size 18 in. wide by $18\frac{1}{2}$ in. high. With four steel braces, bolts, nuts, washers and instructions. Order casters separately below.

84 WRP 2987 M—*Mailed Postpaid* . . . Pair \$11.95

37 RETRACTABLE CASTERS FOR SHOPSIMTH BENCH ENDS. Roll your Shopsmith easily to any job or out of the way for storage. A touch of your foot raises the bench $\frac{1}{2}$ -in. off the floor for rolling, another touch and the bench rests solidly on the floor. With retractable casters your Shopsmith takes even less space. Steel swivel casters insure long life. Bolts incl. 84 WRP 3465—*Postpaid* . . . Set \$11.95



CHASKEFO WARDS 49

APPENDIX 1 - WHERE TO GET PARTS TODAY

In one year from the time I am writing this, the MAGNA Shopsmith 10E introduced in 1947 will be 70 years old. The 10ER came next.

While the Magna Engineering Corporation and the subsequent owners and manufacturers of this machine no longer exist, many of the machines themselves survive to this day and are in daily use by those of us who value what this remarkable machine is capable of as we strive to preserve, restore and use them.

Skip Campbell who lives in the Dallas / Ft. Worth area, and who is both the founder of the 10ER Shopsmith Users Group at Yahoo <https://groups.yahoo.com/neo/groups/Shopsmith10ERusers/info> and the owner of MKC TOOLS <http://mkctools.com/index.html> is arguably the Dean of the Shopsmith 10E and 10ER. You can reach him by Email skip@mkctools.com or Call 817-319-2297

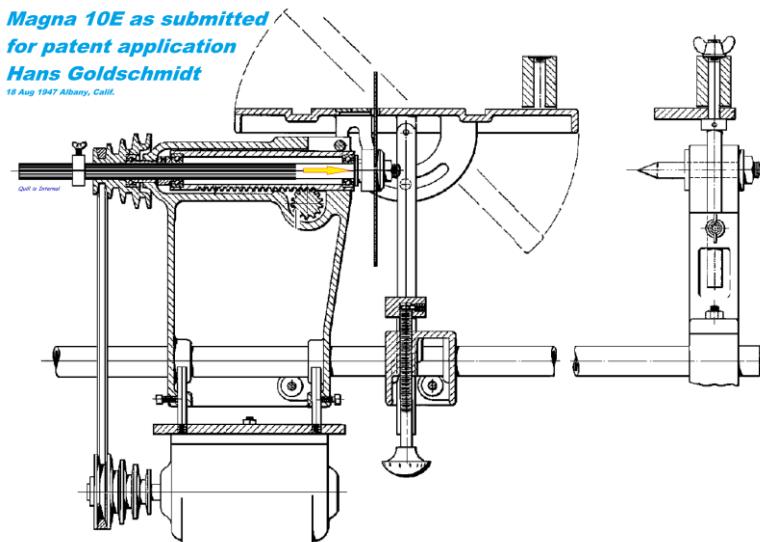
He has extensive knowledge and has a number of parts that he manufactures, or sources used and restores, plus a host of new creative and adaptive modifications he builds for them.

One can certainly get on eBay and find a good bit of parts that are available, but as a word to the wise, the machine you have may have been upgraded through the years and you need to know specifics of what piece you have and what you need to service or replace it. You need to join the Yahoo group where you will find many who freely offer help, and have parts that you can obtain to help you keep yours in top shape. Great folks there...

Do you have a 10E, an upgraded 10E, or a 10ER? Those are questions you can get the answers you need in the forum.

APPENDIX 2 - NOTES and COMMENTS

The Shopsmith multi-purpose woodworking machine was the invention of Hans Goldschmidt and with the help of a number of colleagues formed Magna Engineering Corporation in Menlo Park, California. The patent application for the machine was filed 18 Aug 1947 in Albany, California.



The 10E (the original model produced) came from the concepts of the drawing at the left, though select items such as the 4 step pulley set shown was not widely produced in production, if at all. It came with a 3 step pulley system, and few other small changes.

The 10E was produced for use with a table extension with a top plate made of wood. The rip fence, as shown would fit the work table, and could be secured to the wooden table extension via two bolts and wing nuts as shown on the right.

The 10ER is a revised version of the 10E discussed in this revised Owner's Guide, and Magna continued making dozens of production changes to the machine, and developing accessories during the seven (7) years of original manufacture.

The early adoption of the machine was enhanced dramatically when Montgomery Ward ordered 250 machines for their West Coast stores for Christmas of 1947. Response was so great that the department store chain made it a stocked item, nationwide, launching the Shopsmith all across America. This was the driving force that propelled the Shopsmith into a household brand for the DIY wood workers, home craftsmen, professional, and other woodworkers of all sorts, and the 10ER flourished.

I included 1953 Montgomery Wards Power Tool Catalog - Shopsmith Accessories Pages 46-49 to give you an idea of the breadth of that accessory innovation and 1950's availability present in today's products from the present RLF Shopsmith Inc. There you will find the drop-down jointer shown mounted with special bracket and headrest, even the lower saw blade and belt guards listed.

For a starting point on the history of the companies (factually, several unrelated companies made this machine in its lineage through the years), please read: Buying a Used Shopsmith – Revisited which I wrote in 2015 which is an in-depth review of the machines after the 10E / 10ER, how to tell them apart, and a bit on servicing them using links, photos and comments from the Shopsmith Forums, submitted and written by actual users and owners. See: https://www.shopsmith.com/ss_forum/viewtopic.php?p=185690#p185690

The subsequent models that came after 1953 10ER's named the (Mark 5) affectionately known as the 'Greenies', introduced in 1954 the most widely known 'profile' of the Shopsmith that remains in production today, with improvements and 21st century technologies aboard.

You need to be aware of the vast array of information that is contained in the forums, and I wholeheartedly invite you to become a member.... It's free. It is primarily focused on the newer gear 60 years old or less, but a good many owners have both vintages.

For those most interested in 10E and 10ER, one needs to join the 10ER Shopsmith Users Group at Yahoo.

<https://groups.yahoo.com/neo/groups/Shopsmith10ERusers/info>

Membership requires approval, but it is free as well.

My effort in this document has been to restore legible documentation that came in the **10ER Owner's Guides** which are hard to find in original form, and the poor quality photocopied manuals you can spend good money for on eBay and other sites often with poor legibility, can be painfully hard to read and the illustrations, almost illegible. There are several releases of the manual from 1948-1953 with minor revisions and updates. In 1953 Montgomery Wards catalog listed both the 10ER and the Mark 5 models.

For those of us who are optically challenged already (we don't see as well as we once did), this Restored guide is for you, and using PDF format, you can enlarge it to better view it.

USE THESE AND ALL TOOLS WITH DILIGENT CARE being mindful there are safer ways to accomplish some tasks today than are depicted in the Restored manual that follows.



One can use the Shopsmith as a Shaper or Router certainly, but there are safety features and functionality in Shaper / Routers today, not present in 1947 that you may want to consider today.

Equally, many of the safety features today can be retrofitted to your Shopsmith in some manner to improve your safety operating it. The 4" Jointer is but one example. The design of the Jointer other than how it mounted had not changed materially for decades when Shopsmith (Magna) applied to patent theirs, 1 Jun 1951.

The same basic machine, as sold today, has the following safety features that can be added to your 60 year old one.

The Auxiliary Fence Kit 555655 (left) is just under \$70 and far cheaper than any emergency room visit I can imagine.

The blade cover and feather board, which can retrofit your 60 year old unit, has been standard equipment for some time

Feather-boards of all types are available to improve safety. Order them today at Shopsmith 800 543-7586 - <https://www.shopsmith.com/>

Think – Safety First – it can never be second.

Before you dismiss the notion that upgrading and acquiring the safety features is not for you, if you won't do it for yourself, consider the child or grand-child that will someday inherit your tools, just as perhaps you have. As you introduce that next generation to the joys and rewards of woodworking, teaching them today about safety and having them help you do those things together is a teaching moment you, and grandma can justify, believe me.

This restored March 1953 MAGNA 10ER manual is donated without cost to the worldwide Shopsmith Community and is not to be sold.

IN APPRECIATION

Many thanks are given to James Grange Sr. and John Burger for their contributions in time helping me prepare and correct this document.

Everett