

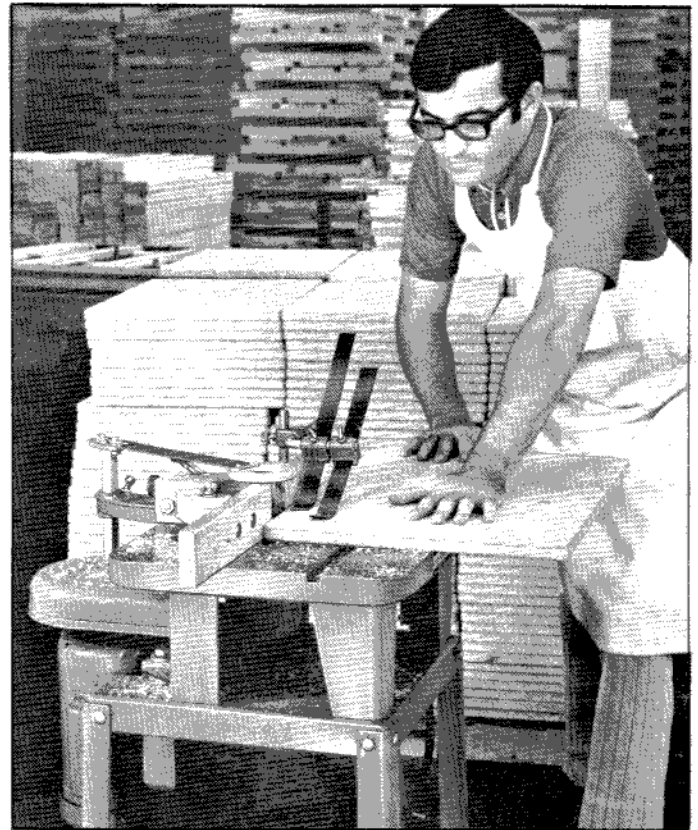
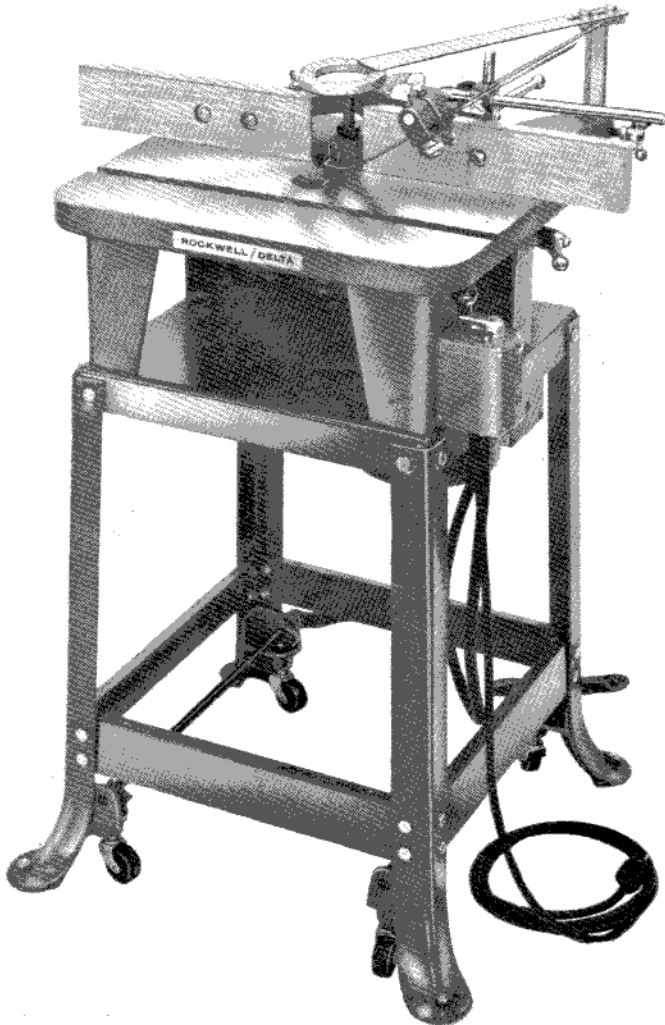
Rockwell

432-01-651-0001

DATED 12-1-72

43-110

ROCKWELL DELTA WOOD SHAPER



Wood Shaper with Motor, On-Off and Reversing Switch, Pulley, V-Belt, Stand and Accessory Ring Guard, Spring Hold Downs and Casters.

INTRODUCTION

Your Shaper is a quality-built machine, capable of dependable, precision performance throughout its lifetime. To take full advantage of these capabilities you should thoroughly understand the construction and assembly of the shaper and the proper techniques for operating it. Therefore we suggest you read this booklet carefully before assembling the shaper and that you save it for future reference.

SAFETY RULES FOR ALL TOOLS

As with all power tools there is a certain amount of hazard involved with the operator and his use of the tool. Using the tool with the respect and caution demanded as far as safety precautions are concerned will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or completely ignored, personal injury to the operator can develop.

There are also certain applications for which this tool was designed. Rockwell strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Rockwell and we have advised you.

Rockwell Manufacturing Company
Power Tool Division
400 North Lexington Avenue
Pittsburgh, Pa. 15208

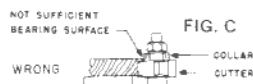
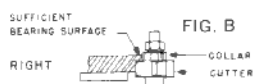
1. **KNOW YOUR POWER TOOL.** Read the owner's manual carefully. Learn the tools applications and limitations, as well as the specific potential hazards peculiar to it.
2. **KEEP GUARDS IN PLACE** and in working order.
3. **GROUND ALL TOOLS.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter wire must be attached to a known ground. Never remove the third prong.
4. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
5. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
6. **AVOID DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations. Keep your work area well illuminated.
7. **KEEP VISITORS AWAY.** All visitors should be kept a safe distance from work area.
8. **MAKE WORKSHOP KIDPROOF** - with padlocks, master switches, or by removing starter keys.
9. **DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.
10. **USE RIGHT TOOL.** Don't force tool or attachment to do a job it was not designed for.
11. **WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber-soled footwear is recommended for best footing.
12. **USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
13. **SECURE WORK.** Use clamps or a vise to hold work, when practical. It's safer than using your hand and frees both hands to operate tool.
14. **DON'T OVERREACH.** Keep your proper footing and balance at all times.
15. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DISCONNECT TOOLS** before servicing and when changing accessories such as blades, bits, cutters.
17. **USE RECOMMENDED ACCESSORIES.** Consult owner's manual. Use of improper accessories may be hazardous.
18. **AVOID ACCIDENTAL STARTING.** Make sure switch is in "OFF" position before plugging in cord.
19. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
20. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be checked to assure that it will operate properly and perform its intended function -- check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

ADDITIONAL SAFETY RULES FOR WOOD SHAPERS

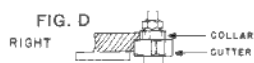
1. **NEVER** run the stock between the fence and the cutter.
2. **ALWAYS** feed against the cutter rotation, as shown in Fig. A.



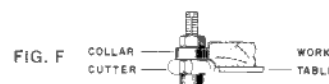
3. **WHEN SHAPING** with collars and starting pin, the collar **MUST** have sufficient bearing surface, as shown in Fig. B. Fig. C, illustrates the wrong way for this operation as the collar **DOES NOT** have sufficient bearing surface.



4. **WHEN SHAPING** with collars and starting pin, the work must be fairly heavy in proportion to the cut being made as shown in Fig. D. **UNDER NO CIRCUMSTANCES** should short work of light body be shaped against the collars as shown in Fig. E.



5. **WHEN SHAPING** with collars and starting pin, the cutter should be positioned below the collar whenever possible, as shown in Fig. F.



6. **THE FENCE** should be adjusted endwise so the opening is never more than is required to clear the cutter.

7. **ALWAYS** use a miter gage and clamp attachment when edge shaping work less than 6" wide. The fence should be removed during this operation.

UNPACKING AND CLEANING

Remove the machine from the carton and remove the protective coating from the machined surfaces of the shaper. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover all unpainted surfaces with a good quality paste wax.

ASSEMBLING STAND

NOTE: If a stand is not used, the machine must be bolted to a table top.

If you purchased the Catalog No. 50-305 Steel Stand, assemble it as follows:

1. Lay the top shelf upside down on a table or floor.
2. Fasten the four legs to the top shelf using the eight hex head screws, lock washers and nuts supplied. Note: Only tighten the nuts finger tight at this time.
3. Assemble the four tie bars to the legs, making sure the lip (C) Fig. 2, will be toward the top of the stand as shown, using the sixteen hex head screws, lockwasher and nuts supplied. Only tighten the nuts finger tight at this time.
4. Turn the stand to the upright position, as shown in Fig. 2, and tighten the nuts and bolts in the following order. First the eight lower tie bar bolts and nuts (D); second the eight upper tie bar bolts and nuts (E); third the eight top shelf bolts and nuts (F), Fig. 2.

IMPORTANT: If, during normal operation, there is any tendency for the tool to tip over, slide, or walk on supporting surface, the legs of the stand must be secured to the floor.

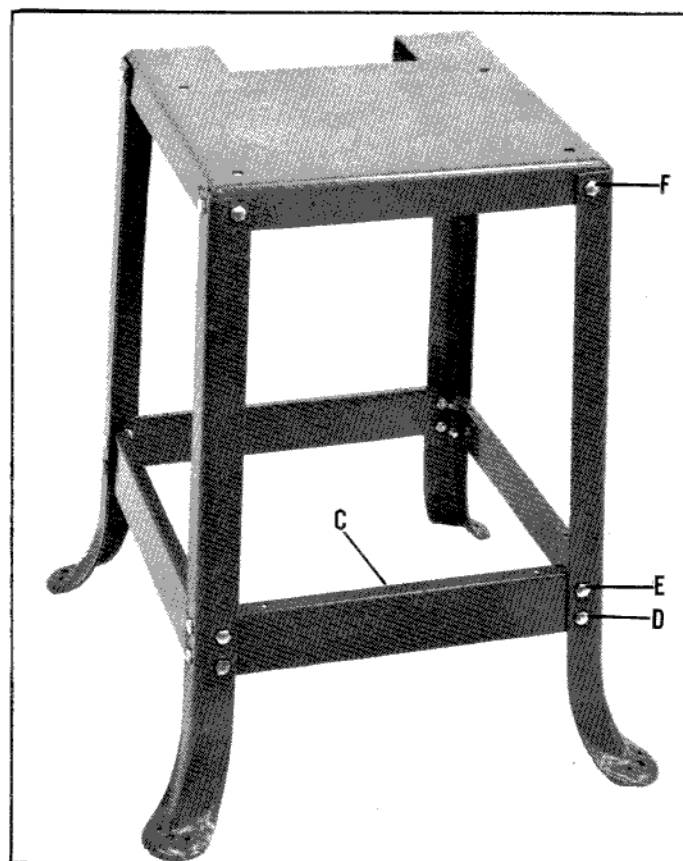


Fig. 2

ASSEMBLING SHAPER TO STAND

Place the shaper on the top shelf of the stand. The back of the shaper is toward the cut out portion of the top shelf. Line up the four holes in the shelf with the four holes of the shaper legs and insert the four 1/2"-20 X 1" hexagon head cap screws up through the underneath of the shelf and into the tapped holes in the shaper legs.

ASSEMBLING RETRACTABLE CASTER ATTACHMENT

If you purchased the #49-362 Retractable Caster Attachment for use on the Steel Stand, assemble it to the stand as follows:

1. Before assembling caster set to stand, determine which side of the stand would be most convenient for the foot levers. The foot lever end of the shaft has a cam (A) Fig. 3, assembled in place at the factory.
2. The shaft should be fitted across the narrow side of the steel stand.
3. Assemble the cams (B) on both shafts (C) at hole (D) Fig. 3. Assemble one cam on each shaft. Cams on each shaft must match when assembled, as shown in Fig. 3.

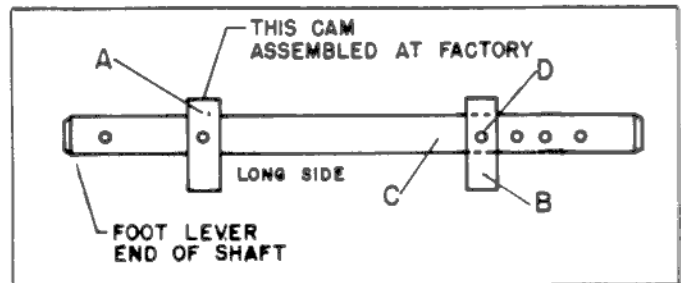


Fig. 3

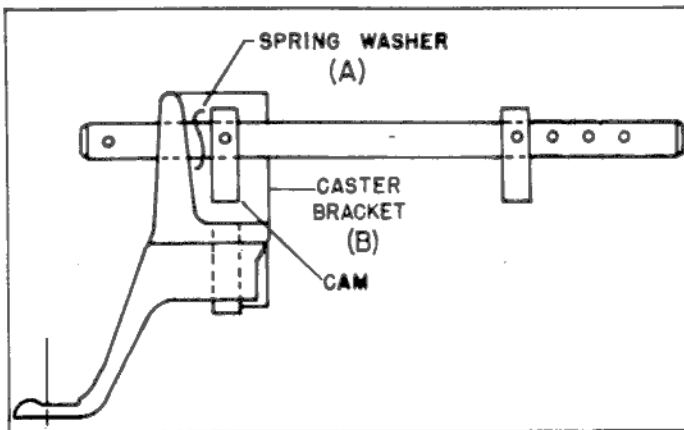


Fig. 4

4. Assemble spring washer (A) and caster mount bracket (B) on each shaft, as shown in Fig. 4.

5. Assemble foot lever (A) Fig. 5, to the end of the shaft using the pin supplied. Foot lever is assembled to each shaft in the same manner, as shown in Fig. 5.
6. Tilt the steel stand by placing a 2 X 4 under it so that the legs will be off the floor about 2 inches.

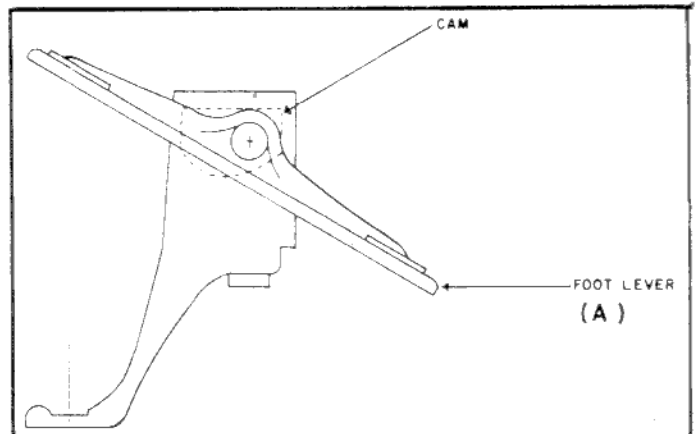


Fig. 5

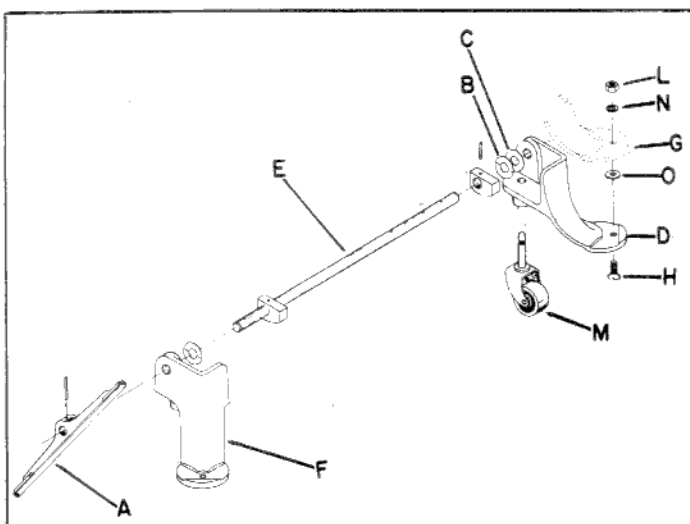


Fig. 6

7. Place spring washer (B), fiber washer (C) and caster mount bracket (D) on opposite end of shaft (E) Fig. 6. NOTE: The fiber washers (C) are to be used as shims. These washers can be placed on the shaft end opposite the foot lever and between the spring washer (B) and caster mount (D) Fig. 6.
8. Place caster mount bracket (D) and (F) with shaft (E) and foot lever (A) inside and under steel stand legs (G) Fig. 6.
9. Insert flat head machine screw (H) through hole in bracket (D) and through washer (O) steel stand leg (G) and fasten in place with washer (N) and nut (L) Fig. 6. Do not tighten nut securely at this time.
10. Fasten the other bracket (F) Fig. 6, to the steel stand in the same manner and tighten both nuts (L) securely.
11. This same method of application is to be followed in assembling shaft to opposite pair of steel legs. The caster (M) can then be assembled to the attachment.

ASSEMBLING MOTOR TO MOTOR PLATE

1. Bolt the motor to the motor mounting plate using the four carriage bolts, washers and nuts supplied, as shown in Fig. 7. Do not tighten the nuts securely at this time.

2. Partially insert cap screws (A), lockwasher and flat washers to top of motor mounting plate, as shown in Fig. 7.

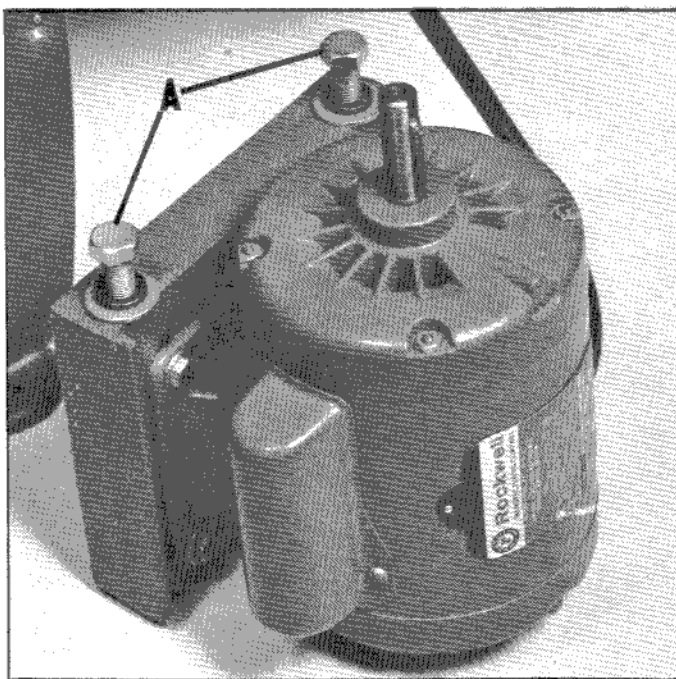


Fig. 7

ASSEMBLING MOTOR AND MOTOR PLATE TO SHAPER

1. Place motor and motor plate on rear of shaper, with cap screws (A) in slots of rear table support, as shown in Fig. 8, and tighten cap screws.

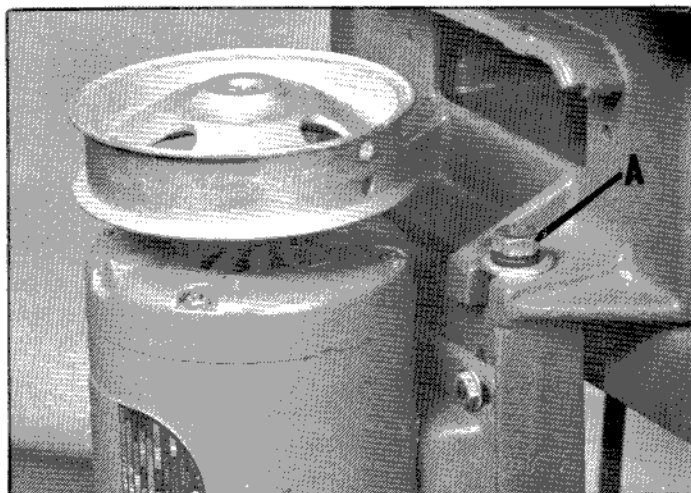


Fig. 8

ASSEMBLING MOTOR PULLEY

1. Place motor pulley on motor shaft as shown in Fig. 8, and tighten two set screws in the pulley against the key or flat of motor shaft. If pulley does not readily slip onto motor shaft, do not force it. Check the motor shaft and the hole in the pulley for any burrs or other obstructions which should be removed. If necessary, enlarge the hole in the pulley by using a round file or piece of sandpaper wrapped around a small dowel rod.

ALIGNING PULLEYS, ASSEMBLING BELT AND ADJUSTING BELT TENSION

1. Raise the spindle to the top position by loosening lock handle (A) and moving spindle control lever (B) Fig. 9, to the right.

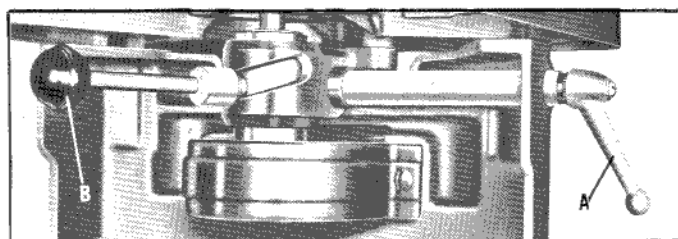


Fig. 9

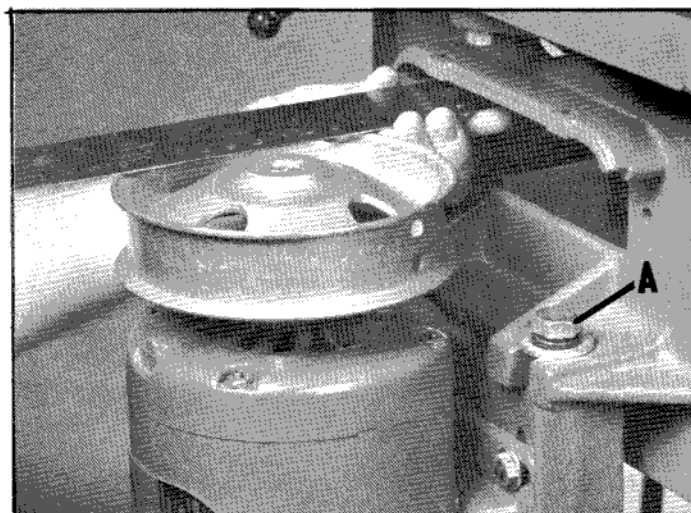


Fig. 10

2. When the spindle is at the top position the top edge of the motor pulley and the top edge of the spindle pulley must be in line. Use a straight edge to align pulleys as shown in Fig. 10, and tighten motor mounting bolts. If necessary the set screws in the pulley may be loosened and the pulley can be moved up or down on the motor shaft.

3. Assemble the belt to the two pulleys and adjust for correct belt tension by loosening two cap screws (A) Fig. 10, and move motor mounting plate in or out.

ASSEMBLING BELT GUARD

Assemble belt guard to the top ledge on the rear of the shaper using the two cap screws and washers supplied, as shown in Fig. 11.

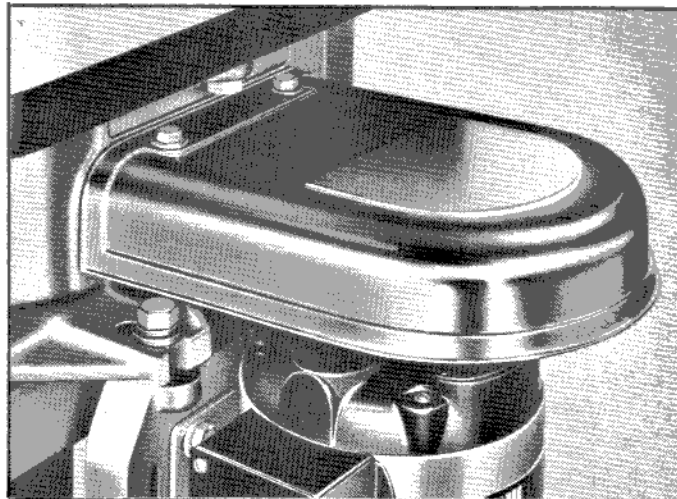


Fig. 11

WIRING CONNECTIONS

We recommend your machine be used with either a Manual Control Push Button Switch or a Reversing Drum Switch. The following instructions must be followed when making the necessary connections from the switch to the motor and power cord.

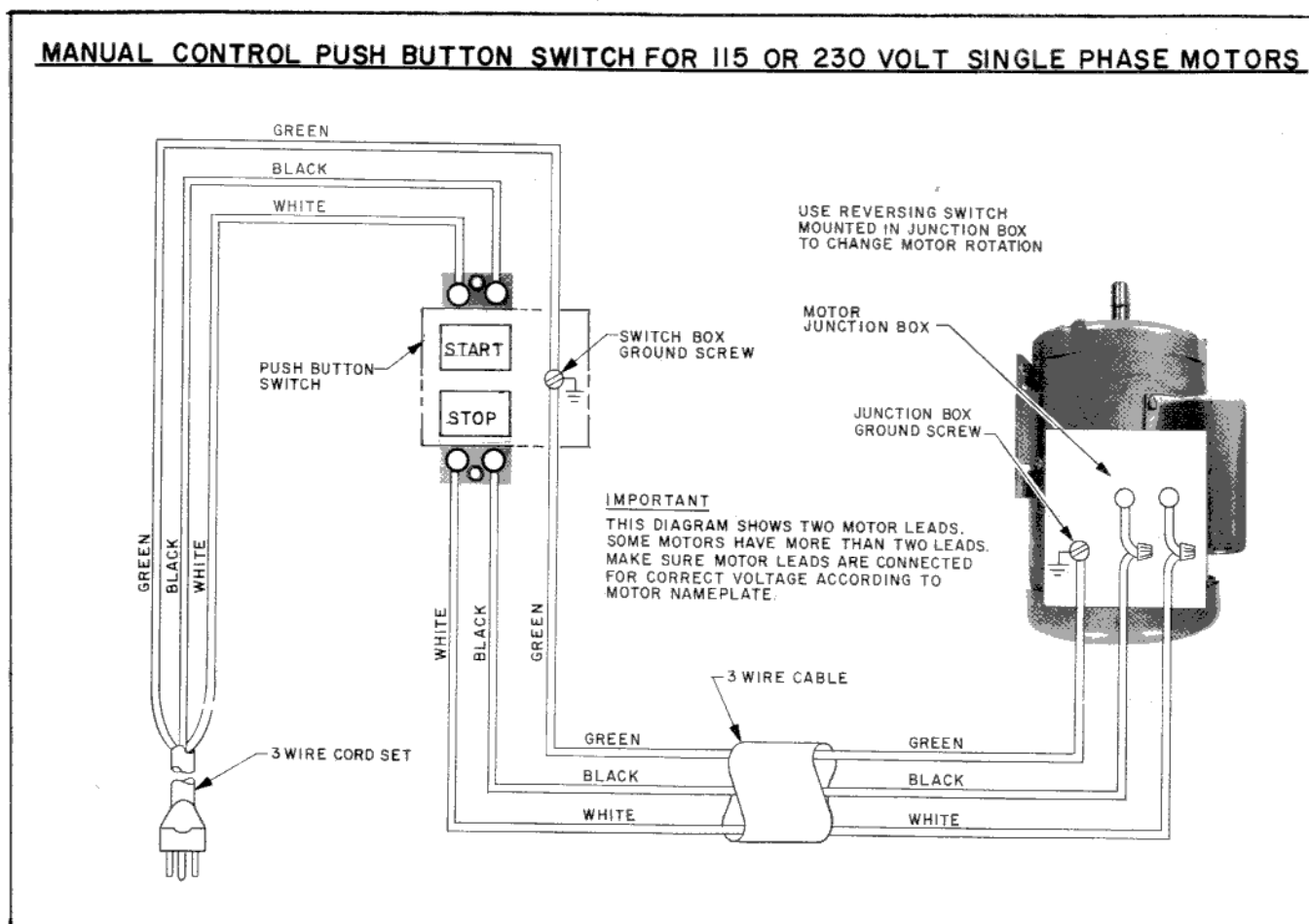


Fig. 12

MANUAL CONTROL PUSH BUTTON SWITCH

Make the necessary wiring connections from the motor to the manual control push button switch and to the 3-wire cord set, by following the wiring diagram in Fig. 12. NOTE: To change motor rotation use the reversing switch mounted in the motor junction box.

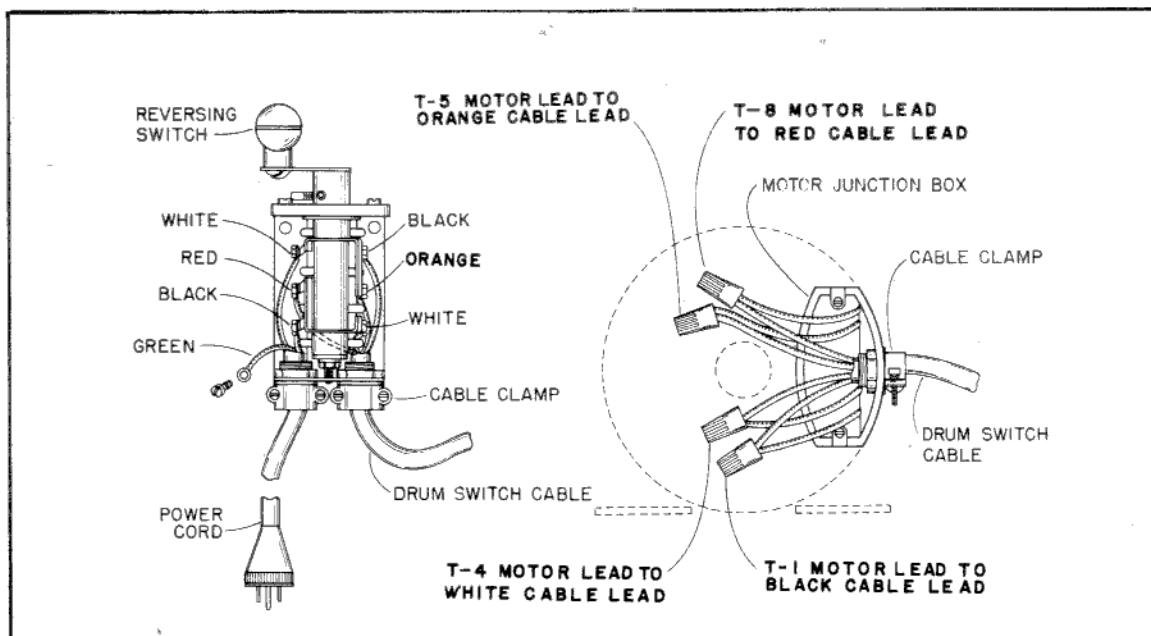


Fig. 13

REVERSING DRUM SWITCH

The reversing drum switch can be readily wired to the motor as follows:

1. Remove cover from reversing switch and attach cable clamps in the two holes in the bottom.
2. Attach switch to the leg of shaper using screws, washers and nuts provided.
3. Connect the colored wires of the switch cord (striped end) to the switch. (See Fig. 13).
4. Connect the black and white wires of the power cord to the switch and the GREEN wire to the left side of the switch box using one of the screws that holds the cover, (See Fig. 13). Replace switch cover.
5. Remove the junction box cover from the end of the motor and attach the other end of the drum switch cable to the cable connector in the motor. (See Fig. 13).
6. Connect the colored wires of the drum switch cable to the motor as shown in Fig. 13. Strip the wires back 1/2", twist together, and screw on the wire nuts (plastic connectors) and replace cover.

POWER CONNECTIONS

A separate electrical circuit should be used for your power tools. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. Never use long extension cords. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tools plug. Replace or repair damaged or worn cord immediately. Before connecting the motor to the power line, be sure that the electric current is of the same characteristics as stamped on motor nameplate. All line connections should make good contact. Running on low voltage will injure the motor.

GROUNDING INFORMATION

115 VOLT, SINGLE PHASE

If the motor on your machine is wired for 115 Volt, single phase, the power cord is equipped with a plug that has two flat, parallel current-carrying prongs and one longer, round or "U"-shaped, ground prong which requires a mating 3-conductor grounded type receptacle as shown in Fig. 14.

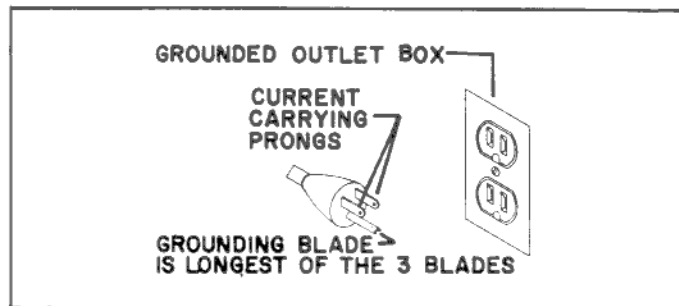


Fig. 14

An adapter, shown in Fig. 15, is available for connecting 3-prong grounding type plugs to 2-prong receptacles. THIS ADAPTER IS NOT APPLICABLE IN CANADA. The green grounding wire extending from the adapter, must be connected to a permanent ground such as to properly grounded outlet box, as shown in Fig. 15.

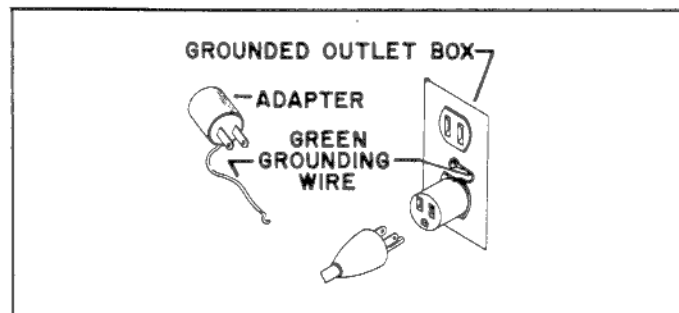


Fig. 15

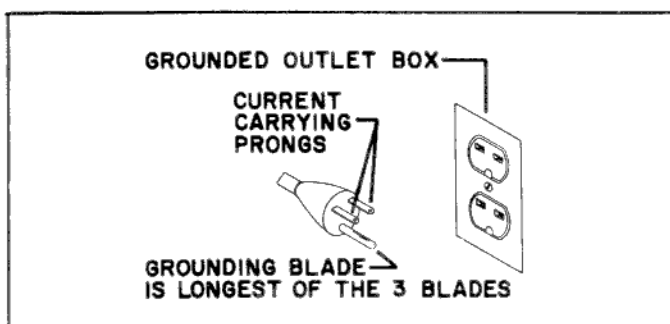


Fig. 16

230 VOLT, SINGLE PHASE

If the motor on your machine is wired for 230 Volt, single phase the power cord is equipped with a plug that has two flat, current-carrying prongs in tandem, and one round or "U"-shaped longer ground prong. This is used only with the proper mating 3-conductor grounding type receptacle as shown in Fig. 16.

IN ALL CASES, MAKE SURE THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED.

200 VOLT, 230 VOLT AND 460 VOLT THREE PHASE

If the motor on your machine is wired for 200V, 230V or 460V three phase, the necessary wiring from the starter to the power source should be completed by a competent electrician.

ASSEMBLING AND INSTALLING SHAPER FENCE

The Shaper Fence is included as standard equipment with the basic machine. Assemble the fence using the parts drawing on page 16, as a guide. Thread the two studs (A) Fig. 17, in the holes in the table. Place the complete fence assemble in position over the two studs (A) Fig. 17, and fasten in place using the two washers and wing nuts (B).

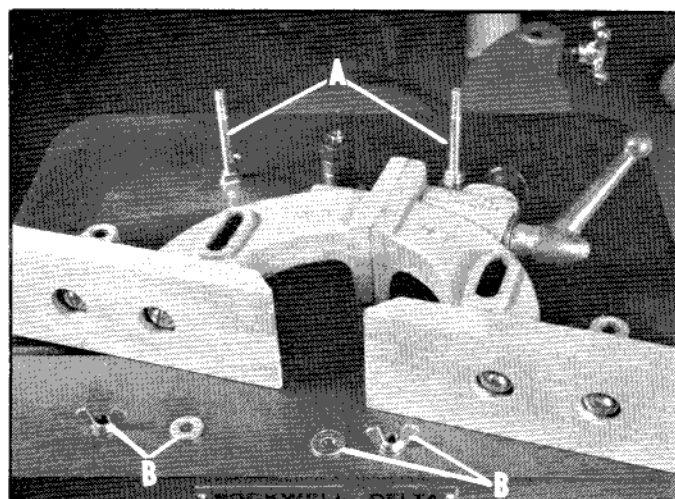


Fig. 17

OPERATING CONTROLS FOR THE FENCE

Either half of the fence can be moved independently depending on the type of work you are doing. To move the fence, loosen the lock handle (A) Fig. 18, and loosen one of the wing nuts (B) depending on which fence half is to be moved. Turn the knurled knob (C) until the correct setting is obtained. Then lock wing nut (B) and lock handle (A).

Each wooden fence half should be adjusted as close to the knife as possible. This is done by loosening the round head screws in the counterbored holes in the fence half.

Two extra fence mounting holes are provided in the table for mounting the fence.

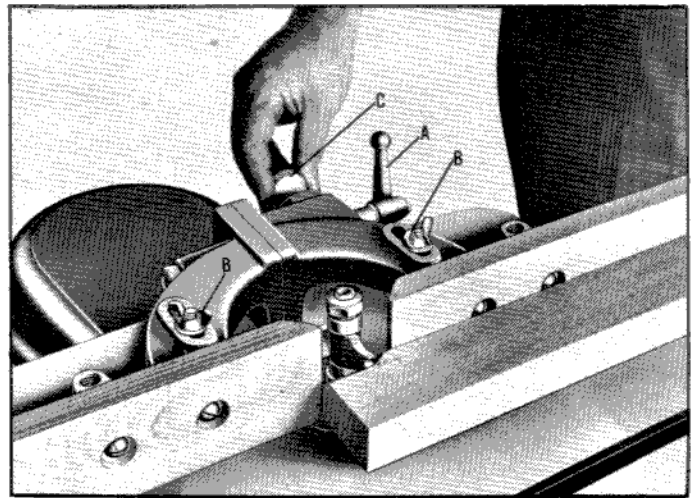


Fig. 18

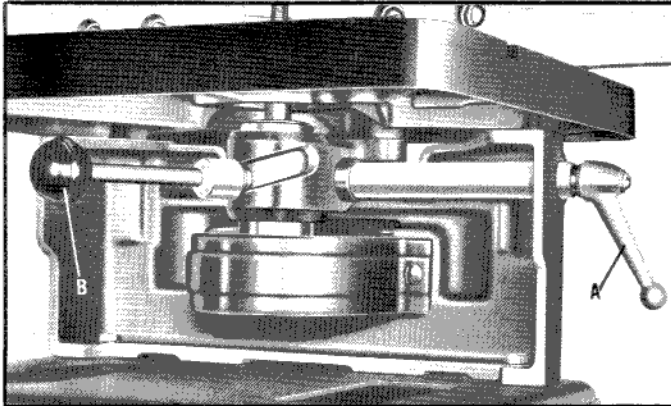


Fig. 19

SPINDLE CONTROLS

The spindle can be moved up or down $\frac{7}{8}$ of an inch. To raise or lower the spindle, loosen lock handle (A) Fig. 19, and move lever (B). Always tighten lock handle (A) after raising or lowering the spindle.

CHANGING SPINDLES

The spindle is held in place with tie rod and nut and is readily interchangeable as follows:

1. Place wrench on flat (G) Fig. 20, on top of the spindle and loosen and remove tie rod nut (B).
2. Remove spindle and tie rod assembly from the spindle cartridge (C) Fig. 20, by lifting straight up.
3. Unscrew and remove tie rod (D) Fig. 20, from spindle (E) and assemble tie rod to new spindle.
4. When installing spindle, align notch (F) Fig. 20, located on the spindle, with pin located inside housing.
5. Always place "keyed" washer (A) Fig. 20, on spindle before screwing on nut (H). The "keyed" washer (A) prevents the nut (H) from loosening when spindle turns counterclockwise.

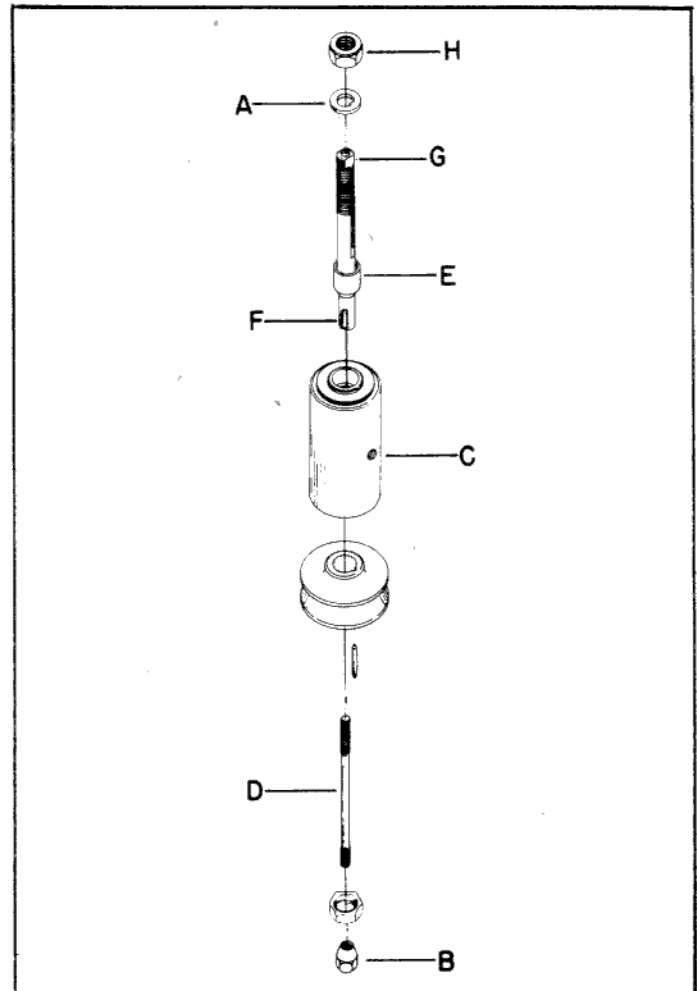


Fig. 20

43-198 TABLE INSERTS

Two table inserts, accessory Catalog No. 43-198, are available for use with your shaper. These inserts are shown at (A) Fig. 21, and replace the standard insert (B) supplied with your machine. These inserts have guide shoulders, 2-3/8" O.D. and 1-5/8" O.D., and are for shaping without the use of collars.

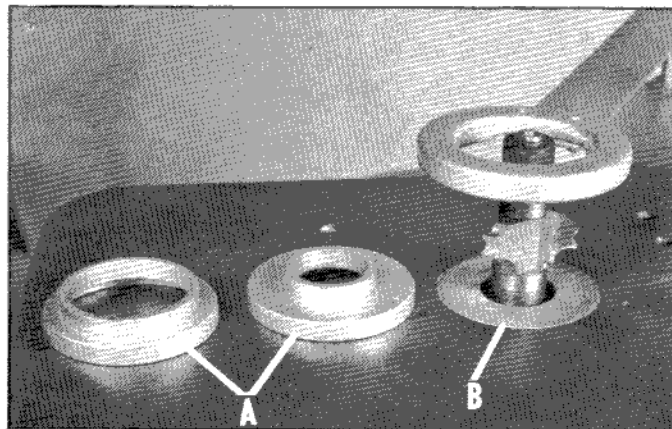


Fig. 21

43-817 RING GUARD

Available as an accessory for your shaper is the Catalog No. 43-817 Ring Guard for added safety and convenience on curved and circular edge shaping operations. Assemble the ring guard as follows:

1. Fasten the mounting bracket (A) to the rear of the shaper table using the two cap screws and nuts supplied, as shown in Fig. 22.
2. Place the hex post (B) Fig. 22, in the hex hole in the mounting bracket and lock in place with hand knob (C), as shown.
3. Assemble hold down bar (D) to the top of the post using the two cap screws, flat washers, lockwashers, and nuts, as shown in Fig. 22. The ring guard (E) should be positioned directly over the spindle and as close as possible to the cutter, as shown.

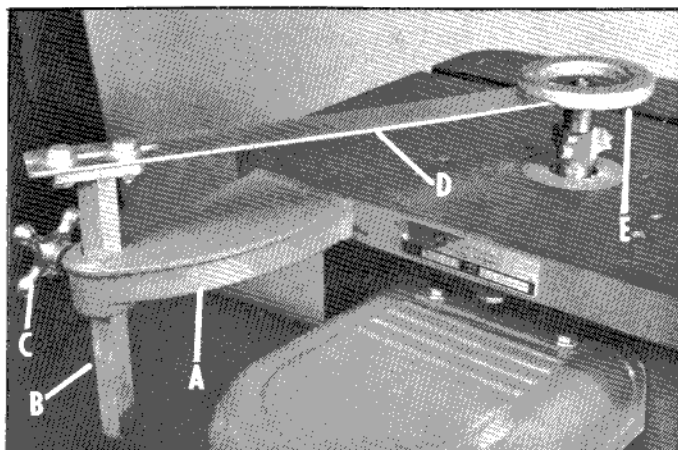


Fig. 22

43-983 SPRING HOLD DOWNS

Available as an accessory for use on the shaper fence for straight shaping operations is the 43-983 Spring Hold Down. This accessory holds the work firmly against the fence and table.

Assemble the 43-983 Spring Hold Down to the shaper fence as shown in Fig. 23.

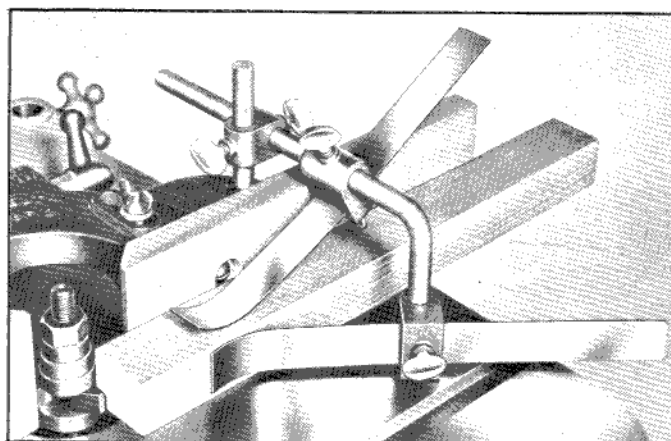


Fig. 23

OPERATION

The following is an explanation of the setting up and operational procedure when using the fence, collars and starting pin. Please study this information carefully before turning on the power to avoid damage to the machine or injury to yourself.

SHAPING WHEN USING THE FENCE AS A GUIDE

Shaping with the fence is the safest and most satisfactory method of working, and this method should always be used when the work permits. Almost all straight work can be used with the fence.

1. For average work, where a portion of the original edge of the work is not touched by the cutter, both the front and rear fences are in a straight line, as shown in Fig. 24.

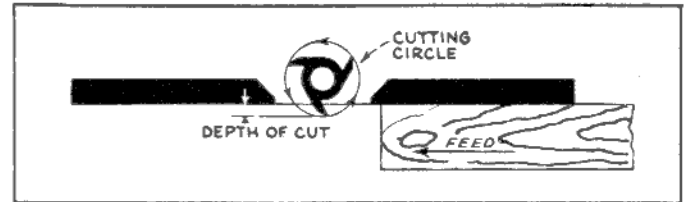


Fig. 24

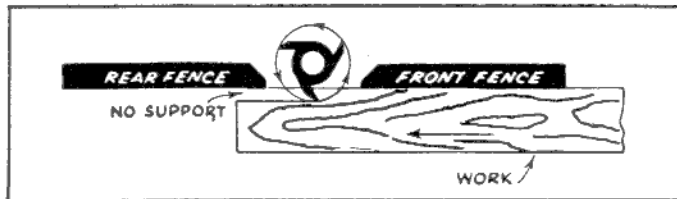


Fig. 25

3. The rear fence should then be advanced to contact the work, as shown in Fig. 26. The rear fence will then be in line with the cutting circle.

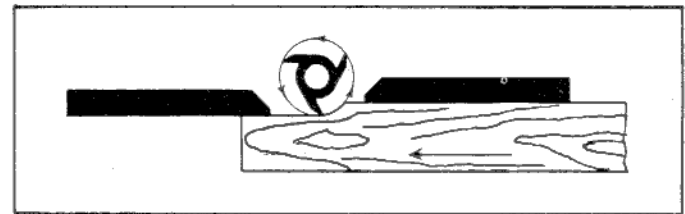


Fig. 26

SHAPING WITH COLLARS AND STARTING PIN

When shaping with collars and starting pin, the following rules must always be followed for good work and safety in operation:

1. Collars **MUST** be smooth and free from all gum or other substances.
2. The edge of the work to be shaped **MUST** be smooth, as any irregularity in the surface which rides against the collar will be duplicated on the moulded surface.
3. A portion of the edge of the work **MUST** remain untouched by the cutters in order that the collar will have sufficient bearing surface. Fig. 27 illustrates the wrong way for this operation while Fig. 28 illustrates the right way.

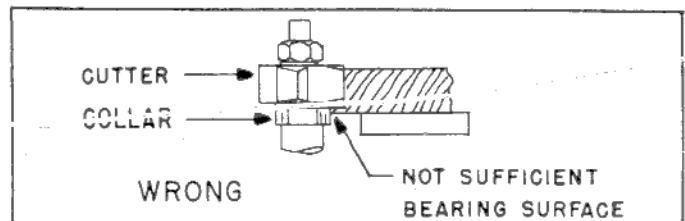


Fig. 27

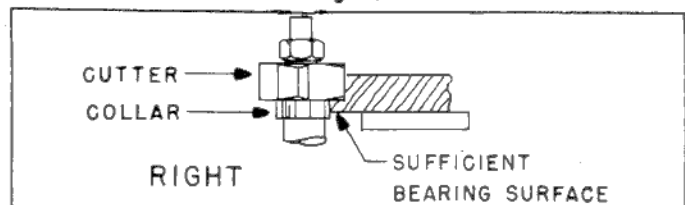


Fig. 28

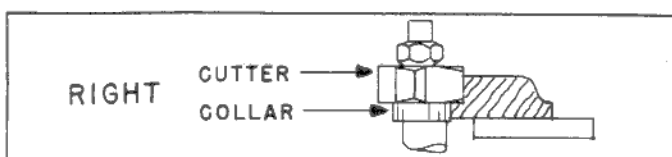


Fig. 29

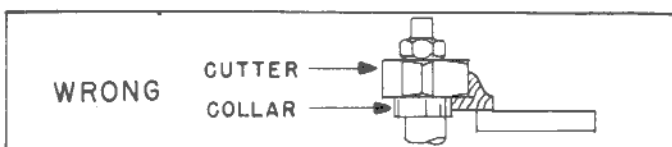


Fig. 30

4. The work **MUST** be fairly heavy in proportion to the cut being made as shown in Fig. 29. Under **NO** circumstances should short work of light body be shaped against the collars as shown in Fig. 30.

5. When shaping with collars and starting pin, we suggest the accessory #43-817 Ring Guard always be used.

Position of Collars

1. The collars may be used in any of the following positions: above, below or between two cutters.

2. When the collar is used below the cutter, as shown in Fig. 31, the progress of the cut can be observed at all times. However, any accidental lifting of the work will gouge the wood and ruin the workpiece.

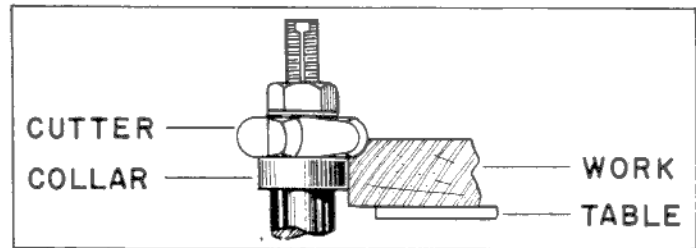


Fig. 31

3. When the collar is used above the cutter as shown in Fig. 32, the cut cannot be seen, yet this method offers some advantage in that the cut is not affected by slight variations in the thickness of the stock. Also, accidental lifting of the work will not gouge the workpiece. Simply correct the mistake by repeating the operation.

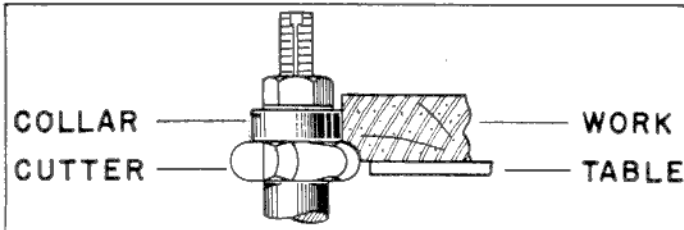


Fig. 32

4. The collar between cutters method, as shown in Fig. 33, has both the advantages and disadvantages of the first two methods and is frequently used where both edges of the work are to be moulded.

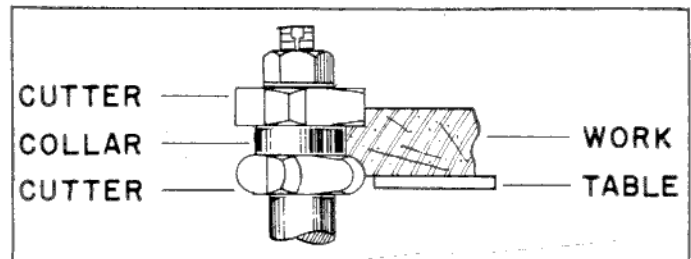


Fig. 33

Starting Pin

1. Your machine is supplied with a tapered starting pin which is used as a support when starting the cut. The starting pin is placed in one of the tapered holes in the table.

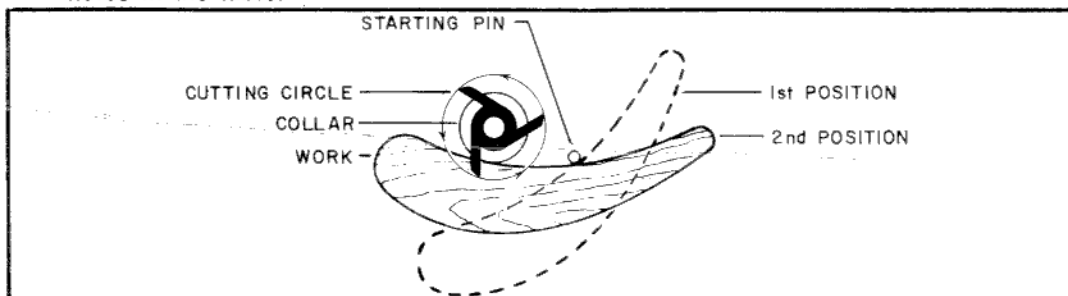


Fig. 34

2. The work should be placed in the first position using the guide pin as a support, as shown in Fig. 34. Then swing the work into the cutter as shown in the second position. The work will now be supported by the collar and starting pin as shown in Fig. 34.

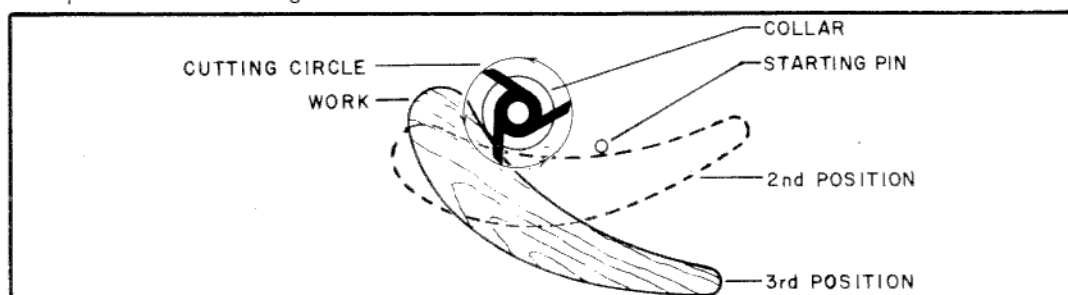


Fig. 35

3. After the cut has been started, the work is swung free of the starting pin and rides only against the collar as shown in the third position in Fig. 35. ALWAYS FEED AGAINST THE ACTION OF THE CUTTER.

IMPORTANT: If the work would be advanced to the cutter without the side support of the starting pin, it would invariably be kicked back.

LUBRICATION

Apply a drop of light oil occasionally on the outside of the spindle cartridge to allow free movement when raising or lowering the spindle.

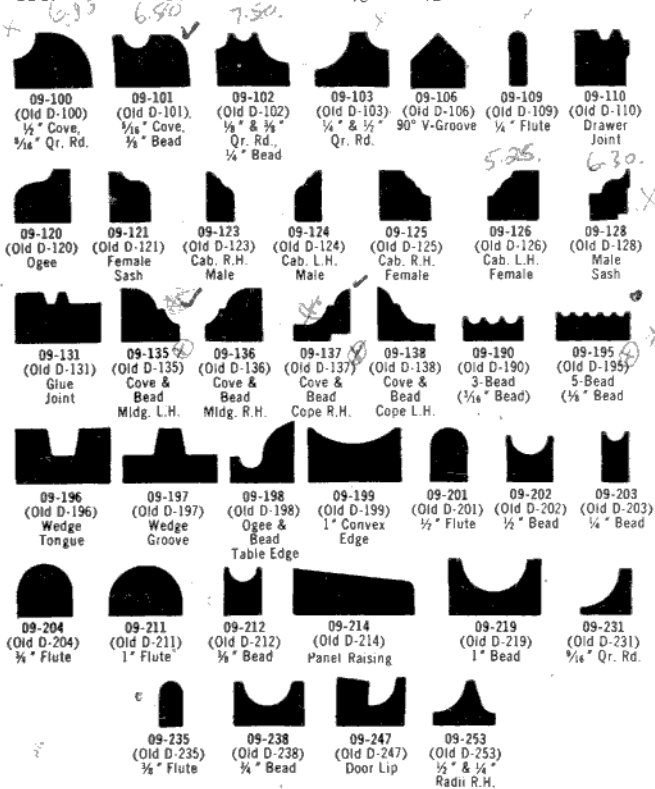
The bearings inside the spindle cartridge are sealed and require no further lubrication.

REPLACING SPINDLE CARTRIDGE

The spindle cartridge contains ball bearings which are preloaded (a process which practically eliminates all "play" between balls and races). The tapered spindle housing is accurately ground after it is installed at the factory in the preloaded bearings. DO NOT ATTEMPT TO REPAIR THIS CARTRIDGE OR REPLACE THE BEARINGS, BUT PURCHASE A NEW CARTRIDGE.

3-LIP SHAPER CUTTERS

All have $\frac{1}{2}$ " spindle hole. Involute relief design permits honing of the face without changing the shape. Cutters 09-128 and 09-137 are counterbored to fit Stub Spindle No. 43-190. Cutters are shown $\frac{3}{8}$ size. $\frac{1}{2}$ lb. each.



Straight Cutters— $\frac{1}{2}$ " Hole

Number	Thickness	Dia.	Number	Thickness	Dia.
09-107 (Old D-107)	$\frac{1}{2}$ "	$1\frac{1}{4}$ "	09-108 (Old D-108)	$\frac{1}{4}$ "	$1\frac{1}{4}$ "
09-130 (Old D-130)	$\frac{3}{4}$ "		09-127 (Old D-127)	$\frac{3}{8}$ "	$1\frac{1}{4}$ "
09-104 (Old D-104)	1"		09-139 (Old D-139)	$\frac{1}{4}$ "	$2\frac{1}{2}$ "
09-105 (Old D-105)	$1\frac{1}{2}$ "		09-129 (Old D-129)	$\frac{3}{8}$ "	$2\frac{1}{2}$ "

Spacing Collars— $\frac{1}{2}$ " Hole

Number	Dia.	Thickness	Number	Dia.	Thickness
09-133 (Old D-133)	$1\frac{1}{4}$ "	$\frac{1}{4}$ "	09-144 (Old D-144)	1"	$\frac{3}{8}$ "
09-150 (Old D-150)	$1\frac{3}{4}$ "	$\frac{3}{8}$ "	09-173 (Old D-173)	$1\frac{1}{4}$ "	
09-155 (Old D-155)	$\frac{3}{4}$ "	$\frac{1}{4}$ "	09-145 (Old D-145)	$1\frac{1}{2}$ "	
09-217 (Old D-217)	$1\frac{1}{2}$ "		09-132 (Old D-132)	$1\frac{1}{2}$ "	
09-134 (Old D-134)	$1\frac{1}{2}$ "		09-141 (Old D-141)	$1\frac{1}{2}$ "	
09-140 (Old D-140)	$1\frac{1}{4}$ "		09-146 (Old D-146)	$1\frac{1}{4}$ "	
09-215 (Old D-215)	$1\frac{1}{2}$ "		09-174 (Old D-174)	$1\frac{1}{4}$ "	
09-151 (Old D-151)	$1\frac{1}{4}$ "		09-175 (Old D-175)	$1\frac{1}{4}$ "	
09-142 (Old D-142)	$\frac{3}{4}$ "	$\frac{3}{8}$ "	09-176 (Old D-176)	$1\frac{1}{4}$ "	
09-171 (Old D-171)	$1\frac{1}{4}$ "		09-147 (Old D-147)	$1\frac{1}{2}$ "	
09-143 (Old D-143)	$\frac{3}{4}$ "		09-148 (Old D-148)	$1\frac{1}{2}$ "	
09-172 (Old D-172)	$1\frac{1}{4}$ "		09-177 (Old D-177)	$1\frac{1}{2}$ "	
			09-178 (Old D-178)	$1\frac{1}{4}$ "	
			09-179 (Old D-179)	$1\frac{1}{4}$ "	
			09-180 (Old D-180)	$1\frac{1}{4}$ "	
			09-149 (Old D-149)	$1\frac{1}{4}$ "	

No. 34-884 Auto-Set® Miter Gage. $3\frac{1}{2}$ lbs.
No. 43-805 Motor Pulley, $\frac{5}{8}$ " bore. 2 lbs.
No. 49-105 V-belt, 30 $\frac{1}{8}$ " O.C. $\frac{1}{2}$ lb.
No. 50-305 Open Steel Stand. 26 $\frac{1}{4}$ " high. 35 lbs.
No. 49-362 Retractable Casters. 12 lbs.
No. 43-982 (old 982) Shaper Fence. Included with basic machine. 12 lbs.
No. 43-190 (old 1190) Stub Spindle. For counterbored $\frac{1}{2}$ " hole 3-lip shaper cutters: 09-128 (old D-128) and 09-137 (old D-137). 1 lb.

No. 43-935 $\frac{1}{2}$ " Spindle. Included with basic machine. For $\frac{1}{2}$ " hole 3-lip shaper cutters. 1 lb.

No. 43-198 (old 1198) Table Insert. With Guide Shoulders. For shaping with template without the use of collars. 3" O.D. and $1\frac{3}{8}$ " I.D.

No. 43-817 Ring Guard. Added safety and convenience on curved and circular edge shaping operations. Complete with mounting bracket. 6 $\frac{1}{2}$ lbs.

SPRING HOLD DOWNS

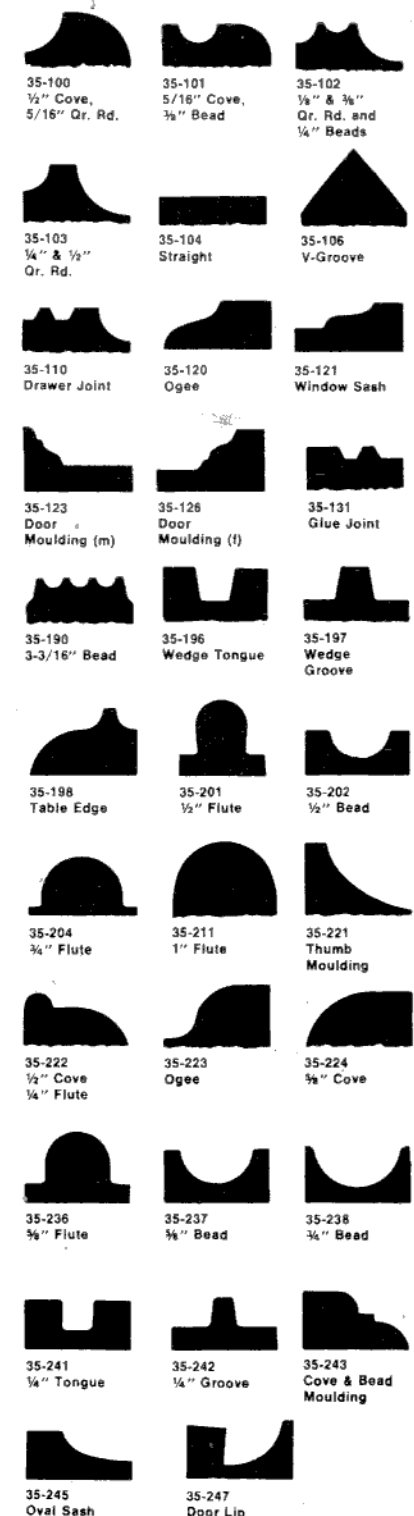
No. 43-983. Used in conjunction with the shaper fence on straight shaping operations to hold work against the fence and table

3-KNIFE CUTTERHEAD

No. 43-343. For use with cutterhead knives. With bushing for use on $\frac{1}{2}$ " and $\frac{3}{4}$ " shaper spindles

CUTTERHEAD KNIVES

Each consists of 3 knives



Rockwell

AUTHORIZED DELTA PARTS DISTRIBUTORS

CALIFORNIA

LOS ANGELES, 90007
Rockwell Manufacturing Company
2400 South Grand Avenue
Phone: (213) 749-0386

OAKLAND, 94601
Rockwell Manufacturing Company
4621 Malat Street
Post Office Box 7327
Phone: (415) 535-2424

COLORADO

DENVER, 80207
Rockwell Manufacturing Company
4900 East 39th Avenue
Phone: (303) 388-5803

GEORGIA

ATLANTA (Doraville), 30340
Rockwell Manufacturing Company
3500 McCall Place
Phone: (404) 458-2263

HAWAII

HONOLULU, 96819
Rockwell Manufacturing Company
3209 Koapaka Street
Phone: (808) 847-2048

ILLINOIS

CHICAGO, (Melrose Park), 60160
Rockwell Manufacturing Company
4533 North Avenue
Phone: (312) 345-8900

MASSACHUSETTS

BOSTON, (Allston), 02134
Rockwell Manufacturing Company
414 Cambridge Street
Phone: (617) 782-1700

MICHIGAN

DETROIT (Southfield), 48075
Rockwell Manufacturing Company
18650 West Eight Mile Road
Phone: (313) 358-1000

MISSOURI

N. KANSAS CITY, 64116
Rockwell Manufacturing Company
1141 Swift Avenue
Phone: (816) 221-2070

NEW YORK

NEW YORK, 10013
Rufolf Bass, Incorporated
175 Lafayette Street, Cor. Grand Street
Phone: (212) CA 6-4000

BUFFALO, 14204
Karle Saw Company, Incorporated
138-150 Chicago St., Cor. So. Park Ave.
Phone: (716) 853-8053 or 853-8054

OHIO

CINCINNATI, 45203
Rockwell Manufacturing Company
906 Dalton Street
Phone: (513) 241-2737

PENNSYLVANIA

PHILADELPHIA, 19120
Rockwell Manufacturing Company
4433-37 Whitaker Avenue
Phone: (215) 455-7907

PITTSBURGH, 15208
Rockwell Manufacturing Company
400 North Lexington Avenue
Phone: (412) 241-8400

TEXAS

DALLAS, 75247
Rockwell Manufacturing Company
2934 Iron Ridge Street
Post Office Box 47767
Phone: (214) 631-1890

WASHINGTON

SEATTLE, 98101
Rockwell Manufacturing Company
1918 Minor Avenue
Phone: (206) 622-4576

WISCONSIN

MILWAUKEE, 53222
Rockwell Manufacturing Company
10700 West Burleigh Street
Phone: (414) 774-3650

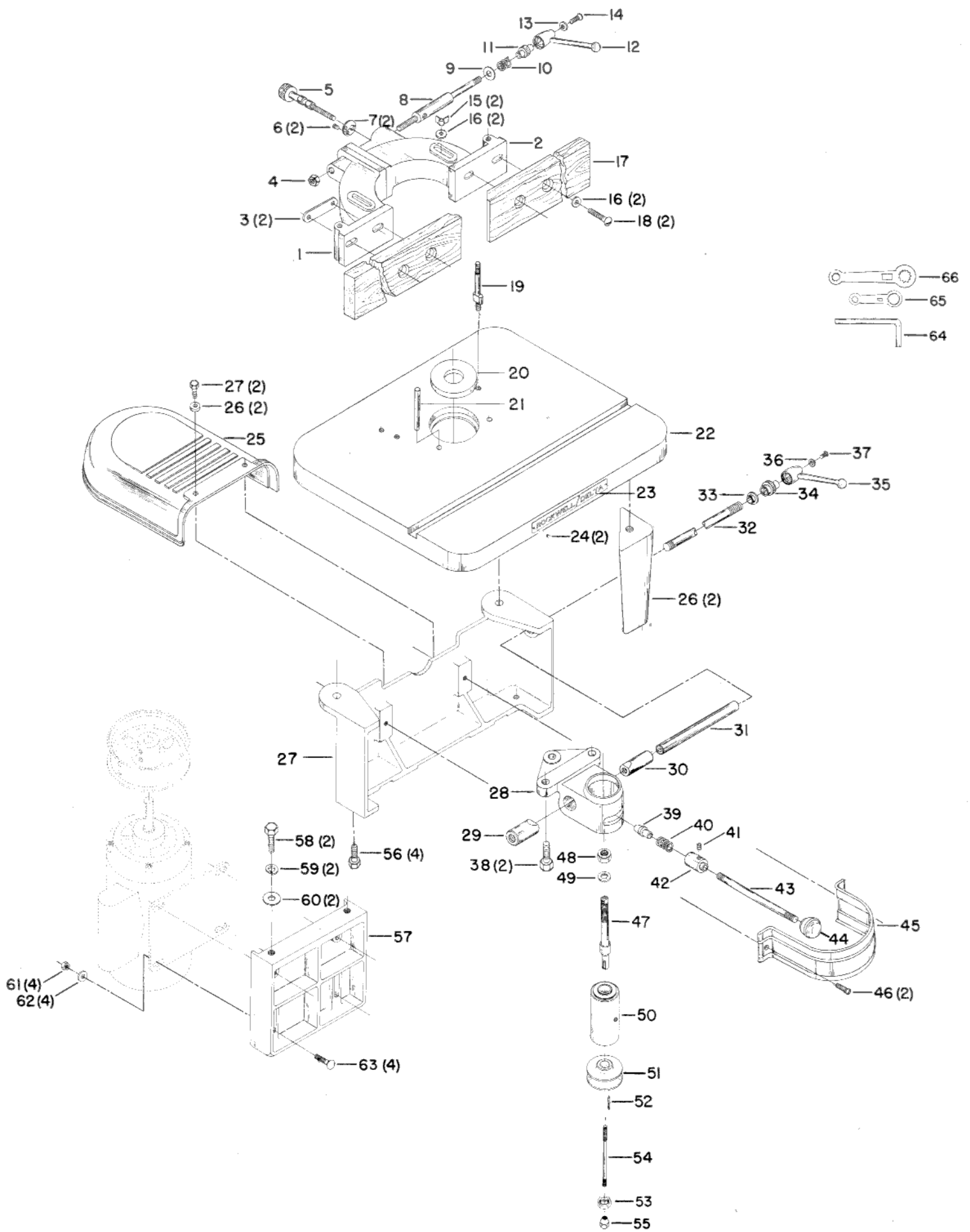
CANADA

GUELPH, ONTARIO
Rockwell Manufacturing Company
of Canada Limited
40 Wellington Street
Post Office Box 848
Phone: (519) 822-2840

PUERTO RICO

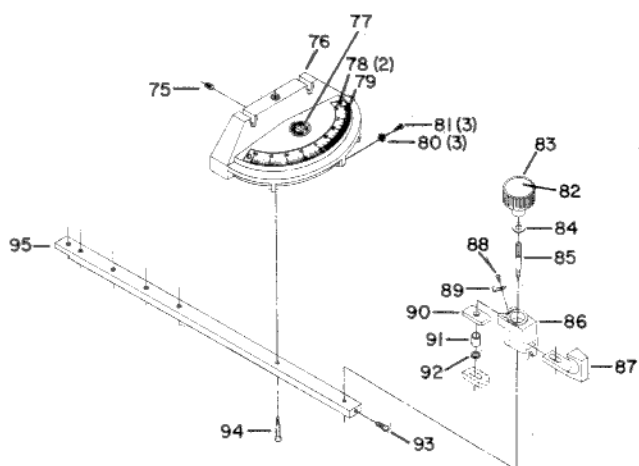
RIO PIEDRAS, 00923
Calle Valverde
Entre Almeria y Ubeda
Phone: (809) 764-2373

Authorized Delta Parts Distributors stock a complete line of replacement parts. To save time and shipping cost send your parts orders to your nearest distributor and in most cases they will be filled and shipped within 48 hours. We do not fill any parts orders direct from the factory.

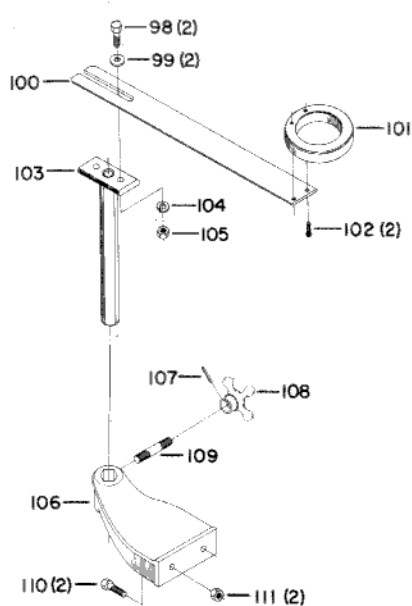


Replacement Parts

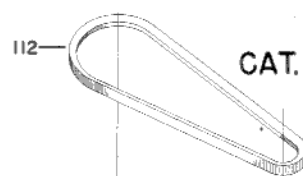
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	SF-1	Fence Body, L. H.	34	SR-218	1/2-13 Serrated Nut
2	SF-2	Fence Body, R. H.	35	SR-217	Adj. Clamp Handle
3	SF-4	Clamp Plate	36	SP-1603	1/4 X 9/16 X 3/64 Washer
4	SP-1002	7/16-14 Hex, Jam Nut	37	SP-509	1/4-20 X 1/2 Rd. Hd. Scr.
5	SF-6	3/8-16 X 2-3/8 Kurled Adj. Scr.	38	SP-672	1/2-20 X 1-1/4 Hex Hd. Cap Scr.
6	SP-551	#10-32 X 1/4 Rd. Hd. Scr.	39	SR-227	Bearing Cone
7	SF-19	Half Collar	40	SR-228	Coil Spring
8	SF-3	Clamp Stud	41	SP-103	5/16-18 X 1/4 Headless Set Scr.
9	DDL-174	29/64 X 1 X 1/8 Washer	42	SR-226	Spring Collar
10	NCS-33	Coil Spring	43	SR-225	Stud 7/16 X 5-27/32
11	SF-18	7/16-14 Serrated Nut	44	SP-3607	1/2 Dia Handle Ball
12	SR-217	Adj. Clamp Handle	45	SR-277	Spindle Pulley Guard
13	SP-1603	1/4 X 9/16 X 3/64 Washer	46	SP-507	5/16-18 X 3/4 Rd. Hd. Scr.
14	SP-509	1/4-20 X 1/2 Rd. Hd. Scr.	47	Cat. # 43-935	1/2" Cutter Spindle Incl.
15	SP-1403	5/16-18 Wing Nut	48	SR-230	1/2-16 Special Hex Nut
16	SP-1604	5/16 X 3/4 X 1/16 Washer	49	SR-234	1/2 X 7/8 X 5/64 Keyed Lockwasher
17	SF-10	Wooden Fence Plate	50	SR-206-S	Spindle Housing w/Brngs., Incl.
18	SP-515	5/16-18 X 1-1/4 Rd. Hd. Scr.	51	SR-224	Pulley
19	SF-17	Clamp Stud	52	SR-223	3/32 X 7/8 Steel Pin
20	SR-237	Table Insert	53	BM-23	.679-28 Special Hex Jam Nut
21	SP-2422	#6 X 2-3/4 Taper Pin	54	SR-221	Tie Rod
22	SR-101	Table	55	SR-235	1/4-28 Special Hex Nut
23	960-02-012-1420	Nameplate	56	SP-671	1/2-20 X 1 Hex Hd. Cap Scr.
24	SP-2250	#4 X 3/16 Drive Scr.	57	432-01-089-0015	Motor Mounting Plate
25	SR-276	Belt Guard	58	SP-672	1/2-20 X 1-1/4 Hex Hd. Cap Scr.
26	SP-1604	5/16 X 3/4 X 1/8 Washer	59	SP-1705	1/2 X 7/8 X 1/8 Lockwasher
27	SP-605	5/16-18 X 1/2 Hex. Hd. Cap Scr.	60	SP-1607	1/2 X 1-1/4 X 5/64 Steel Washer
28	SR-205	Brkt. for Spindle Housing	61	SP-5435	5/16-18 Hex Jam Nut
29	SR-214	Housing Clamp Sleeve, L. H.	62	SP-1604	5/16 X 3/4 X 1/16 Washer
30	SR-215	Housing Clamp Sleeve, R. H.	63	SP-808	5/16-18 X 1 Carriage Bolt
31	SR-216	Spacer Sleeve	64	Cat. #194	5/32 Hex Wrench
32	SR-213	Stud, 1/2-13 X 10-3/8	65	Cat. #1526	7/16 & 9/16 Double End Wrench
33	SR-236	Steel Bushing	66	Cat. #1524	9/16 & 7/8 Double End Wrench



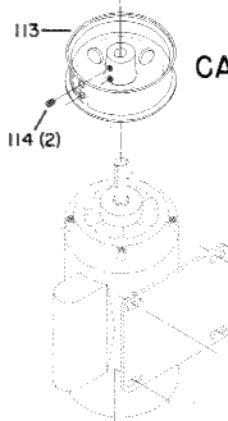
CAT. No. 34-884 MITER GAGE



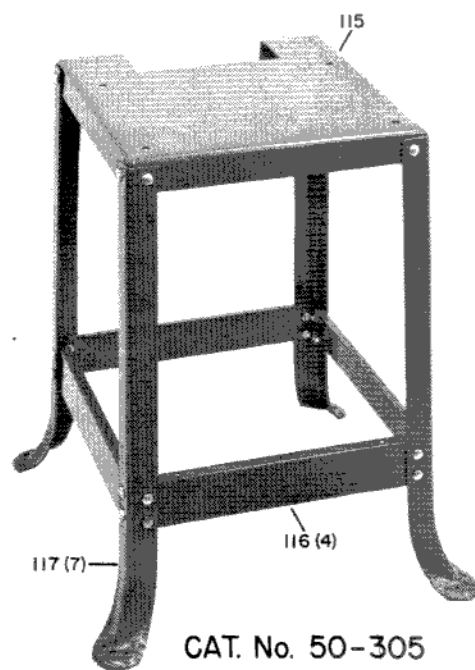
CAT. No. 43-817 RING GUARD



CAT. No. 49-105 V-BELT



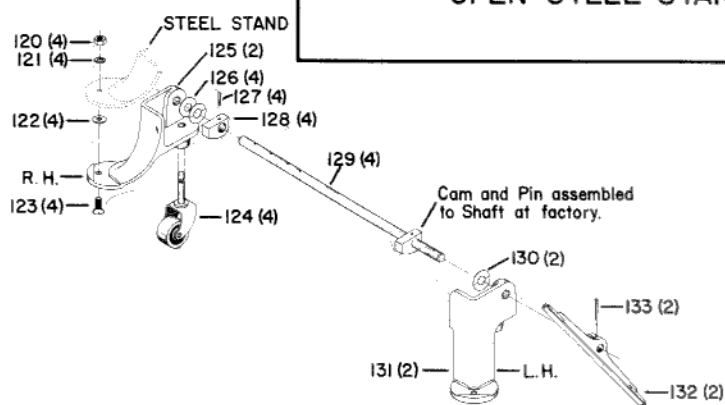
CAT. No. 43-805 MOTOR PULLEY



CAT. No. 50-305
OPEN STEEL STAND



CAT. No. 43-198
TABLE INSERT



CAT. No. 49-362 RETRACTABLE CASTERS

Replacement Parts

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
75	Cat. #34-884	Miter Gage, Including:		Cat. #50-305	Open Steel Stand, including:
76	422-16-350-0001	Miter Gage Body	115	1086758	Shelf
77	960-03-012-0419	Emblem	116	1086755	Tie Bars
78	901-05-151-7375	#6-32 X 1/4 Pan Hd. Thread Forming Scr.	117	436-02-066-0021	Legs
79	960-03-012-0421	Scale	*	MS-62	Spec. 5/16-24 Hex Hd. Scr. (Use To Assemble Stand)
80	NCS-173	#8-32 Hex Jam Nut	*	SP-1206	5/16-24 Hex Nut (Use To Assemble Stand)
81	SP-723	#8-32 X 1/2" Fil. Hd. Scr.	*	SP-1750	5/16 Int. Tooth Lockwasher (Use To Assemble Stand)
82	1086950	Insert	*	SP-649	5/16-18 X 1 Hex Hd Cap Scr. (Use To Mount Wood Shaper To Stand)
83	931-02-012-0489	Knurled Knob	*	SP-1604	5/16 X 3/4 X 1/16 Steel Washer (Use To Mount Wood Shaper to Stand)
84	SP-1620	11/32 X 11/16 X 1/16" Washer	*	SP-1703	5/16 Lockwasher (Use To Mount Wood Shaper To Stand)
85	422-16-411-0003	Stud	*	SP-1300	5/16-18 Hex Nut (Use to Mount Wood Shaper To Stand)
86	422-16-310-0002	Clamp Block		Cat. #43-198	Table Insert, consisting of:
87	422-16-088-0001	Stop	118	SR-253	Collar
88	901-05-151-7375	#6-32 X 1/4" Pan Hd. Thread Forming Scr.	119	SR-254	Collar
89	422-16-375-0001	Pointer		Cat. #49-362	Retractable Casters, consisting of:
90	422-16-027-0001	Clamp	120	SP-1300	5/16-18 Hex Nut
91	422-16-017-0002	3/8 X 1/2 X 13/32 Bushing	121	SP-1703	5/16 Lockwasher
92	904-01-031-7720	21/64 X 1/2 X .032 Washer	122	SP-5552	5/16 X 3/4 X 1/16 Fiber Washer
93	SP-721	#10-32 X 1/2" Fil Hd. Scr.	123	SP-478	5/16-18 X 1/2 Flat Hd. Mach. Scr.
94	NCS-168	Special Pivot Screw	124	MS-108	Caster
95	422-04-004-0002	Guide Bar	125	MS-101	R. H. Caster Mount
	Cat. #43-817	Ring Guard, Consisting of:	126	DSS-36	Fiber Washer
98	SP-607	5/16-18 X 3/4 Hex Hd. Cap Scr.	127	SP-2733	5/32 X 7/8 Roll Pin
99	SP-1604	5/16 X 3/4 X 1/16 Steel Washer	128	MS-103	Cam
100	SG-4	Flat Spring	129	MS-107	Shaft
101	432-02-054-0001	Guard	130	MS-109	Spring Washer
102	SP-554	#8-32 X 3/8 Rd. Hd. Mach. Scr.	131	MS-100	L. H. Caster Mount
103	SG-6-S	Post	132	MS-102	Foot Lever
104	SP-1703	5/16" Lockwasher	133	SP-2732	5/32 X 1 Roll Pin
105	SP-5435	5/16-18 Hex Jam Nut			
106	SG-10	Bracket	*	Not Shown	
107	SP-2721	1/8 X 7/8 Roll Pin			
108	NCS-32	Hand Wheel			
109	SG-15	Stud			
110	SP-608	5/16-18 X 7/8 Hex Hd. Cap Screw			
111	SP-1300	5/16-18 Hex Nut			
112	Cat. #49-105	V-belt			
113	Cat. #43-805	Motor Pulley, including:			
114	SP-206	5/16-18 X 5/16" Hex. Soc. Set Screw			

YOUR ROCKWELL WARRANTY

Rockwell is proud of the quality of the power tools which it sells. The component parts of our tools are inspected at various stages of production, and each finished tool is subjected to a final inspection before it is placed in its specially designed carton to await shipment. Because of our confidence in our engineered quality, Rockwell agrees to repair or replace any part or parts of Rockwell Power Tools or Rockwell Power Tool Accessories which examination proves to be defective in workmanship or material. In order to take advantage of this guarantee, the complete portable power tool or accessory, or in the case of machinery, the part must be returned prepaid to the appropriate factory, Rockwell service center, or authorized service station for examination. This guarantee, of course, does not include repair or replacement required because of misuse, abuse, or normal wear and tear. Repairs made by other than our factory, service center, or authorized service station, relieves Rockwell of further liability under this guarantee. THIS GUARANTEE IS MADE EXPRESSLY IN PLACE OF ALL OTHER GUARANTEES OR WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.