



Rockwell

MANUFACTURING COMPANY

The Rockwell Building • Pittsburgh, Pa.

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ROCKWELL DELTA HEAVY DUTY WOOD SHAPER



INTRODUCTION

Your new Rockwell Delta Wood Shaper is a favorite in cabinet shops, furniture factories, specialty shops, school shops, sash and door companies and similar installations because of its unequalled versatility.

Your new shaper will accept six interchangeable spindles: 5/16", 1/2", 3/4" and 1" standard spindles, 1/2" stub spindle and a 3/4" extra long spindle. There is practically no limit to the variety of cut your shaper will produce due to the wide range of shaper cutter sizes it will accommodate.

TABLE OF CONTENTS

INTRODUCTION	1
SAFETY SUGGESTIONS	2
NOMENCLATURE CHART	3
INSTALLING THE MOTOR AND EXTENSION TABLE	4
GROUNDING INFORMATION	4
ADJUSTING BELT TENSION	5
TABLE INSERTS	5
OPERATING CONTROLS FOR THE FENCE	5
SPINDLE CONTROLS	6
CHANGING SPINDLES	6
OPERATION	
SHAPING WHEN USING THE FENCE AS A GUIDE	6
SHAPING WITH COLLAR AND STARTING PIN	7
Position of Collars	7
Starting Pin	8
LUBRICATION	8
REPLACING SPINDLE CARTRIDGE	8
AUTHORIZED PARTS DISTRIBUTORS LIST	9
ROCKWELL GUARANTEE	10
ACCESSORIES	10, 11
EXPLODED VIEW DRAWINGS AND PARTS LIST	12, 13, 14, 15

SAFETY SUGGESTIONS

1. If you are not thoroughly familiar with the operation of this machine, obtain advice from your supervisor or instructor. Use safety guards whenever possible.
2. Thoroughly read the instruction manual before operating the machine.
3. Remove tie, rings, watch and other jewelry and roll up sleeves.
4. Always wear safety glasses or a face shield.
5. Disconnect machine from the power source when making repairs and adjustments.
6. Keep cutters sharp and free of all rust and pitch.
7. Always use miter gage and clamp attachment when edge shaping work less than 6" wide. Fence should be removed during this operation.
8. The fence should be adjusted endwise so the opening is never more than is required to clear the cutter.
9. Always feed against the cutter rotation.

NOMENCLATURE CHART

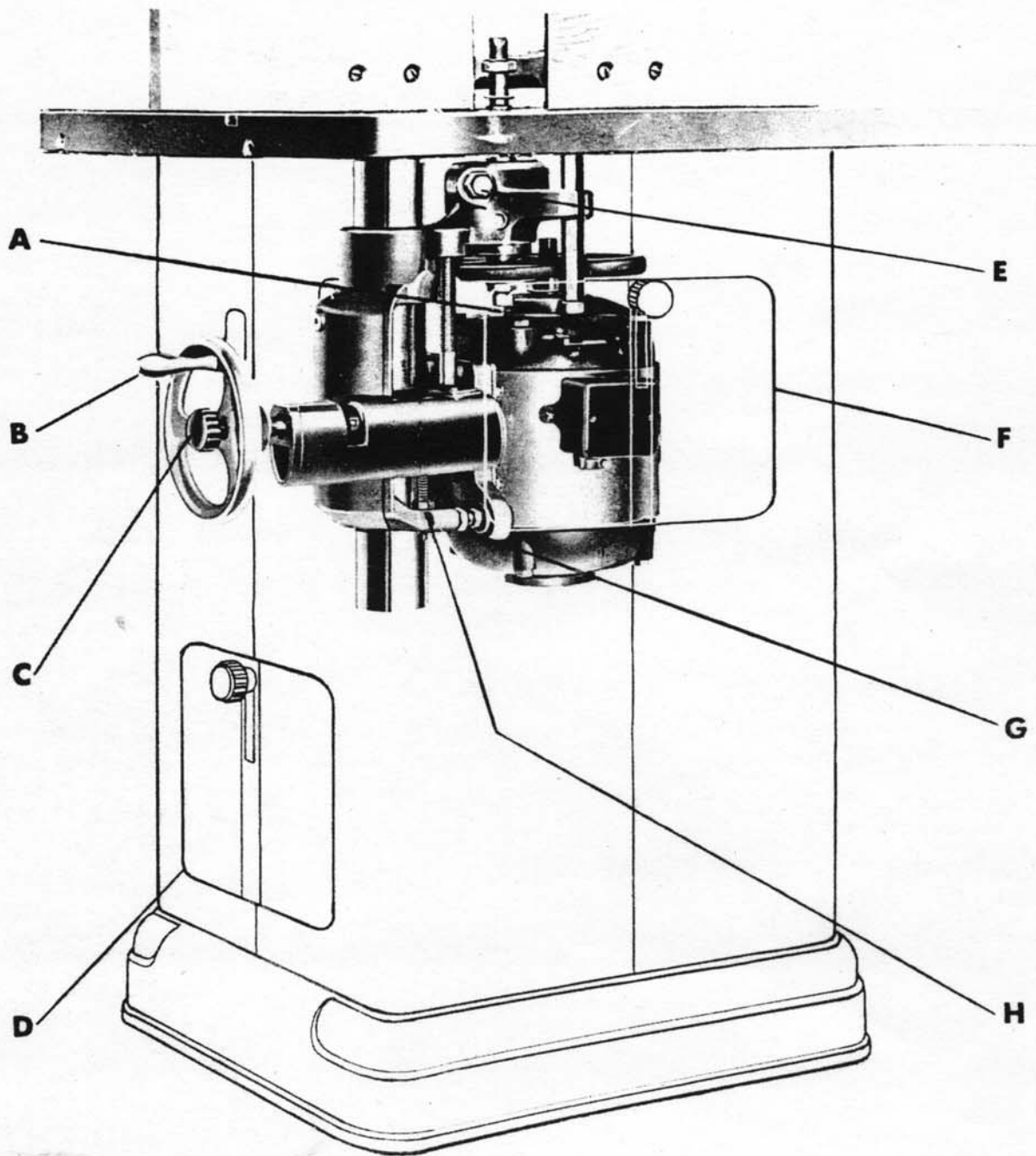


Fig. 1

- A. Spindle Tie-Rod Nut
- B. Spindle Raising Handwheel
- C. Spindle Position Lock Knob
- D. Cleanout Door
- E. Bearing Cartridge Clamp Screw
- F. Adjustments Accessible Through Door
- G. Belt Tension Adjustment
- H. Spindle Stop Screw

INSTALLING THE MOTOR AND TABLE EXTENSION

If your shaper was purchased factory mounted and wired, you may disregard these instructions.

On the other hand, if installing your own motor, the motor mounting plate will accommodate NEMA 56 and 145T Frame motors, and Rockwell 8-1/2 Frame motors.

1. Turn the shaper upside down and remove handwheel.
2. Remove four cap screws that hold the cabinet to the table and lift off the cabinet.
3. Assemble motor to motor plate and place motor pulley on the motor shaft.
4. Align motor pulley with spindle pulley using a straight edge and assemble the belt to the pulleys.
5. Apply proper belt tension by following instructions listed under ADJUSTING BELT TENSION.
6. Replace cabinet and return shaper to the upright position.
7. Replace handwheel.
8. Attach table extension. NOTE: If extension is not flush with table, loosen only one bolt at a time and tap extension up or down sufficiently and tighten bolts.

GROUNDING INFORMATION

If your machine has a 115V single phase motor, 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. 2.

An adapter is available to permit the use of 3-conductor type plugs in 2-conductor outlets. We DO NOT recommend the use of this adapter, however, if an adapter must be used, have a licensed electrician make the ground connection to be certain that adequate ground exists.

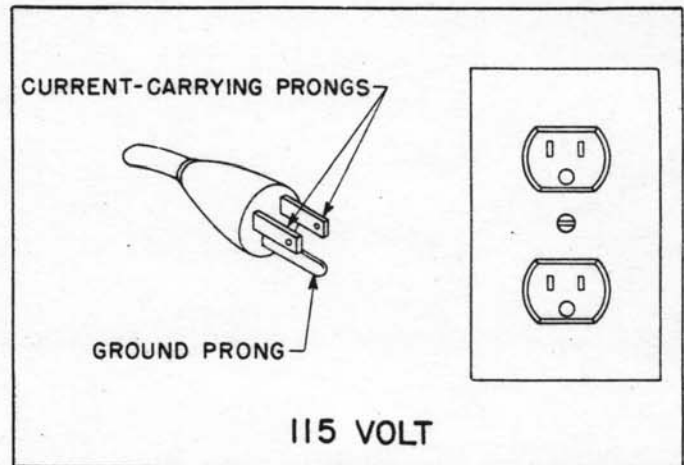


Fig. 2

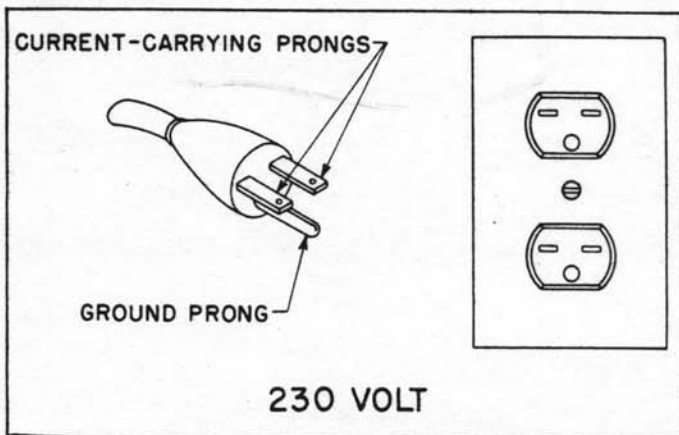


Fig. 3

If your machine has a 230V single phase motor, 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. 3.

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

When the three-prong plug on your tool is plugged into a grounded, 3-conductor receptacle, the long ground prong on the plug contacts first so the machine is properly grounded before electricity reaches it.

ADJUSTING BELT TENSION

The motor plate is hinged so that tension can be applied to the belt. To adjust tension, loosen locknut (A) Fig. 4, and turn screw (B) in or out until correct tension is applied to the belt.

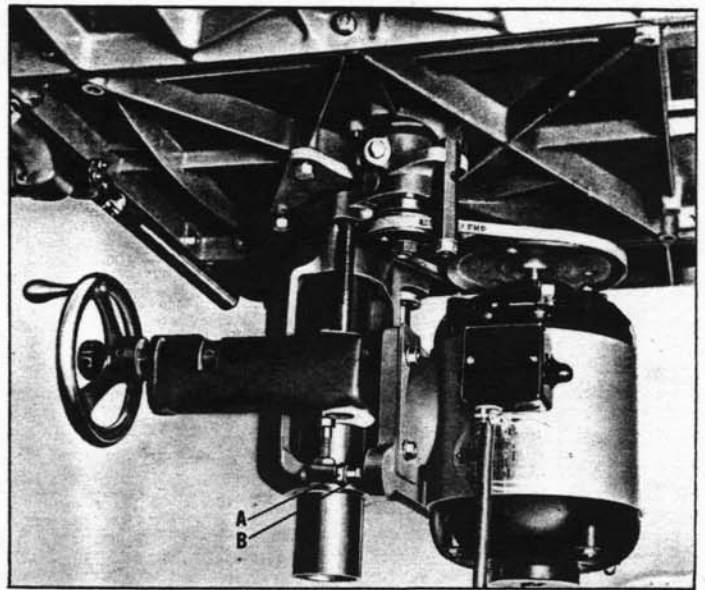


Fig. 4

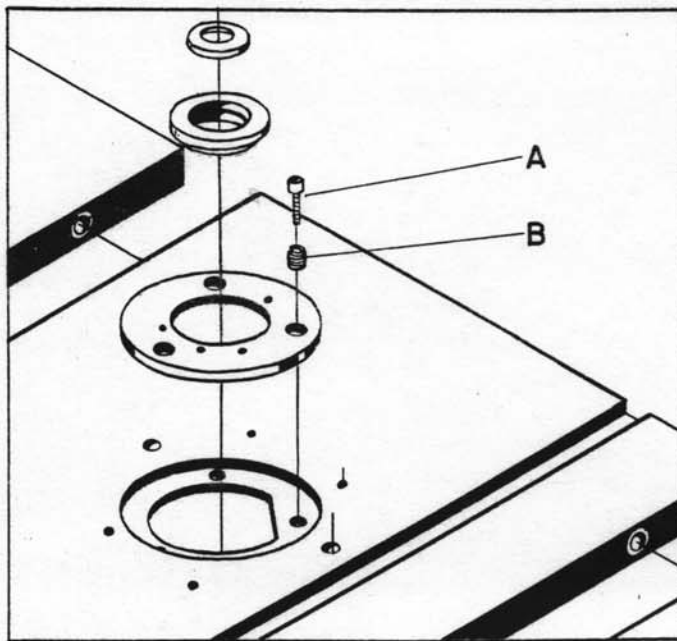


Fig. 5

TABLE INSERTS

Three table inserts are provided for various size cutters. The large insert is adjustable and should be set flush with the table as follows:

1. Remove the three slotted head screws (A) Fig. 5.
2. Using a screwdriver, turn adjusting screws (B) Fig. 5, which will raise or lower the insert.
3. When the insert is flush with the table, replace the slotted head screws (A) Fig. 5.

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. 6, 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 cutter as possible. This is done by loosening the round head screws in the counterbored holes in the fence half.

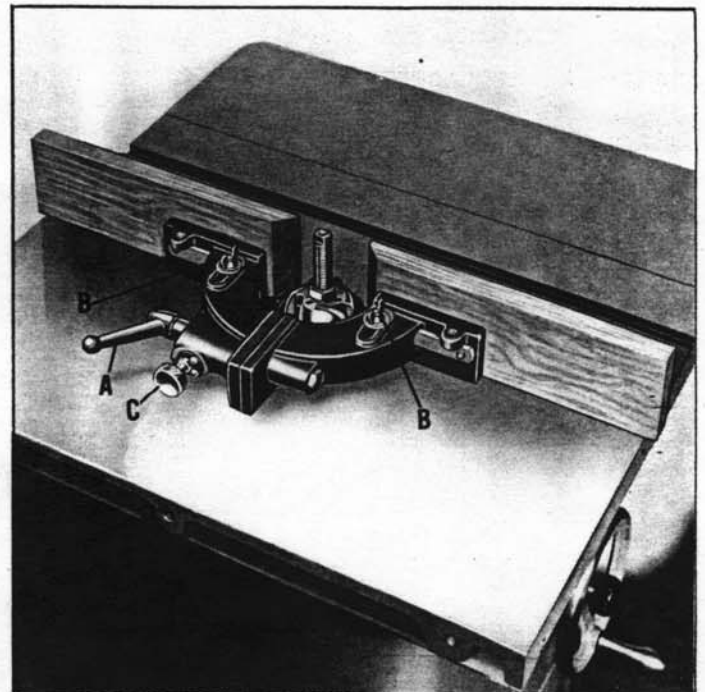


Fig. 6

SPINDLE CONTROLS

The spindle can be raised and lowered by loosening handknob (A) and turning handwheel (B) Fig. 7. Always tighten handknob (B) after raising or lowering the spindle.

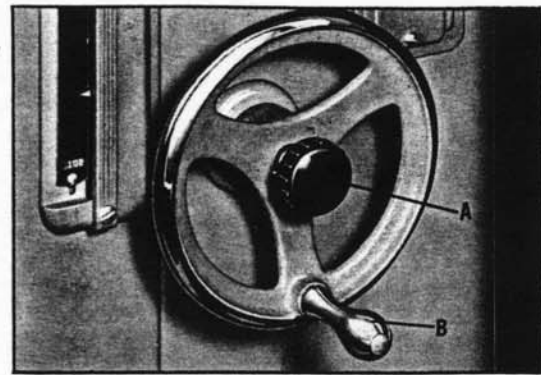


Fig. 7

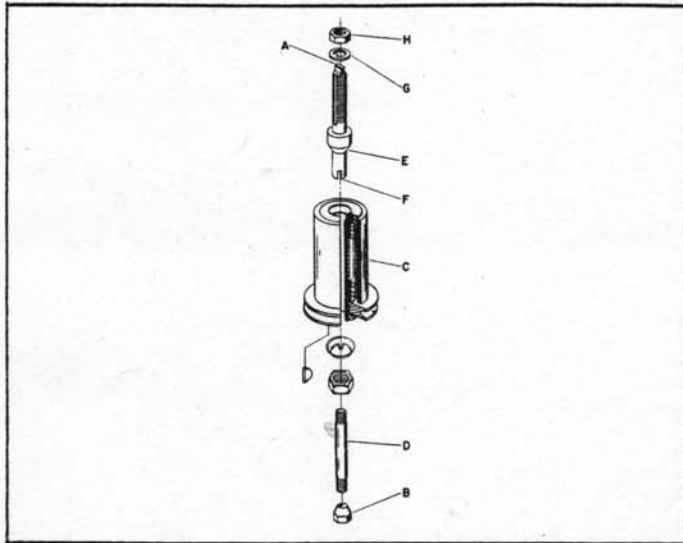


Fig. 8

CHANGING SPINDLES

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

1. Place wrench on flat (A) Fig. 8, 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. 8, by lifting straight up.
3. Unscrew and remove tie rod (D) Fig. 8, from spindle (E) and assemble tie rod to new spindle.
4. When installing spindle, align spindle slot (F) Fig. 8, with pin inside housing.
5. Always place "keyed" washer (G) Fig. 8, on spindle before screwing on nut (H). The "keyed" washer (G) prevents the nut (H) from loosening when spindle turns counterclockwise.

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. 9.

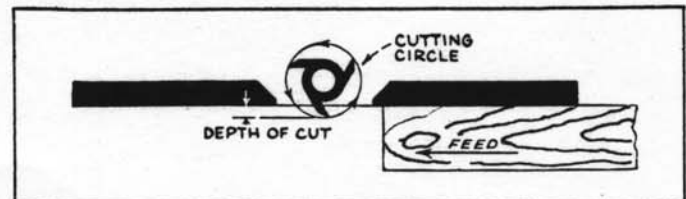


Fig. 9



Fig. 10

2. When the shaping operation removes the entire edge of the work, e.g., in jointing or making a full bead, the shaped edge will not be supported by the rear fence when both fences are in line, as shown in Fig. 10. In this case, the work should be advanced to the position shown in Fig. 11, and stopped.

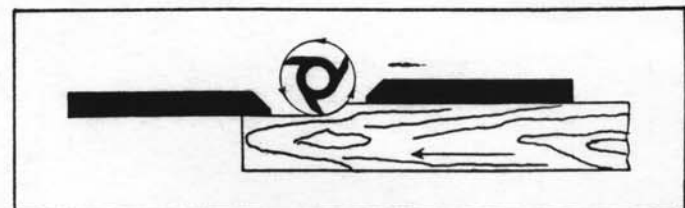


Fig. 11

3. The rear fence should then be advanced to contact the work, as shown in Fig. 11. The rear fence will then be in line with the cutting circle.

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. 12 illustrates the wrong way for this operation while Fig. 13 illustrates the right way.

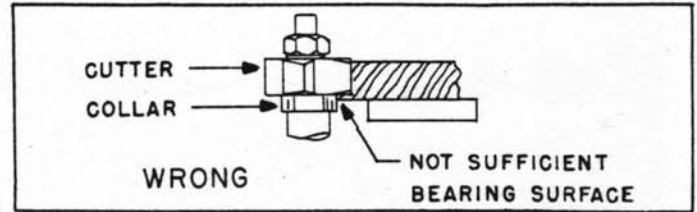


Fig. 12

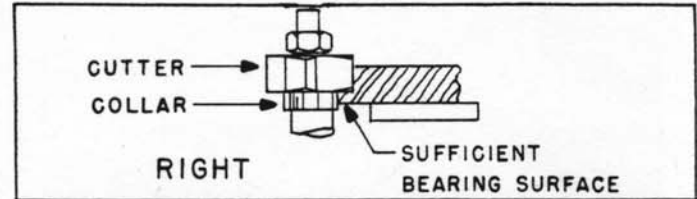


Fig. 13

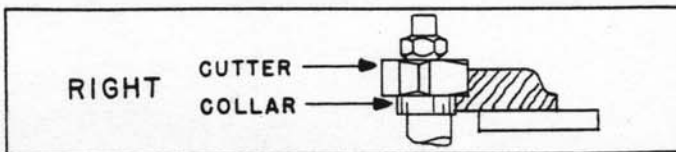


Fig. 14

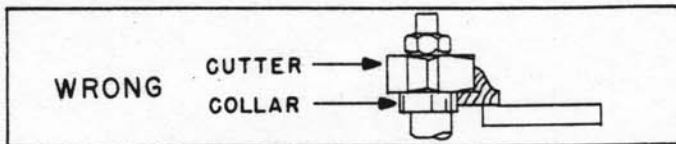


Fig. 15

4. The work **MUST** be fairly heavy in proportion to the cut being made as shown in Fig. 14. Under **NO** circumstances should short work of light body be shaped against the collars as shown in Fig. 15.

5. When shaping with collars and starting pin, we suggest the accessory #1348 Ring Guard with Hold Down Feature 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. 16, 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.

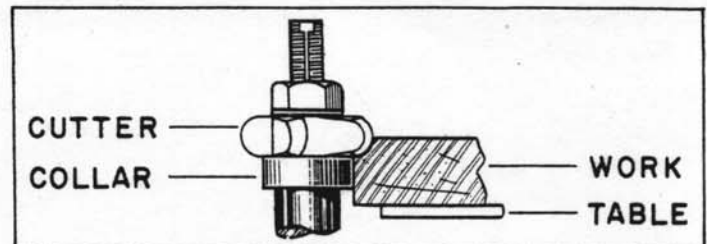


Fig. 16

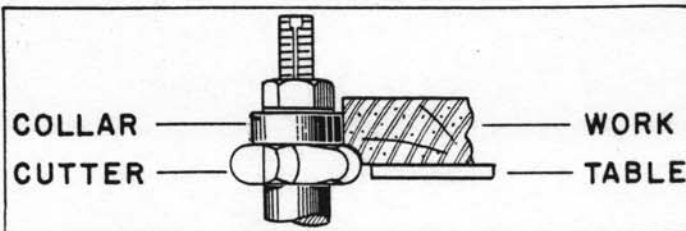


Fig. 17

3. When the collar is used above the cutter as shown in Fig. 17, 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.

4. The collar between cutters method, as shown in Fig. 18, 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.

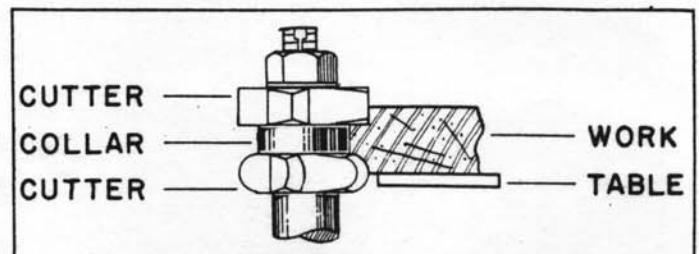


Fig. 18

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.

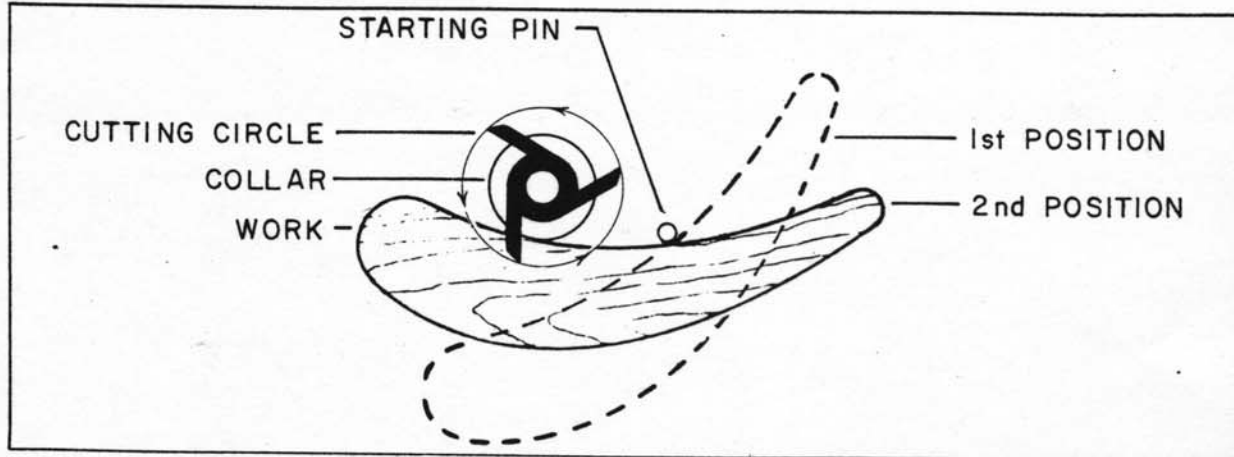


Fig. 19

2. The work should be placed in the first position using the guide pin as a support, as shown in Fig. 19. 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. 19.

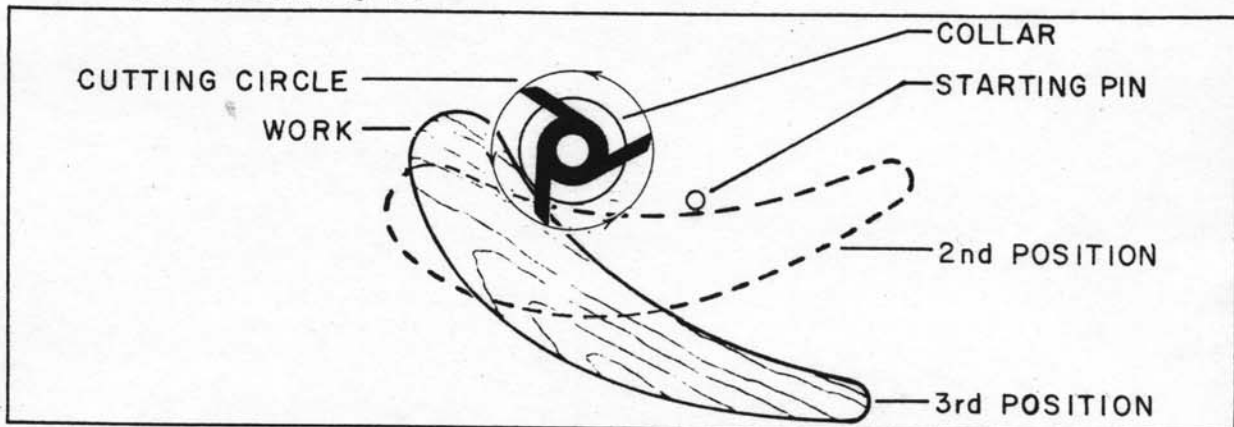


Fig. 20

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. 20. 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 small amount of fine oil to raising screw and column. No other lubrication is necessary.

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.**

AUTHORIZED PARTS DISTRIBUTORS

CALIFORNIA

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

OAKLAND, 94601
Rockwell Manufacturing Company
445 Lesser Street
Phone: 415 535-2424

COLORADO

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

GEORGIA

ATLANTA, 30318
Rockwell Manufacturing Company
1495 Northside Drive N.W.
Phone: 404 351-5434

HAWAII

HONOLULU, 96819
Rockwell Manufacturing Company
3209 Koapaka Street
Phone: 808 872-048

ILLINOIS

CHICAGO, (Melrose Park), 60160
Rockwell Manufacturing Company
4533 North Avenue
Phone: 312 921-2650

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

KANSAS CITY, 64108
Rockwell Manufacturing Company
1649 Jarboe Street
Phone: 816 221-2070

NEW YORK

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

BUFFALO, 14204
Karle Saw Company, Incorporated
138-150 Chicago Street, Cor. So. Park Avenue
Phone: 716 853-8053 or 853-8054

OHIO

CINCINNATI, 45203
Rockwell Manufacturing Company
906 Dulton Street
Phone: 513 241-2737

CLEVELAND, 44114
Rockwell Manufacturing Company
1234 East 26th Street
Phone: 216 621-6329

OREGON

PORTLAND, 97232
Rockwell Manufacturing Company
2755 Northeast Broadway
Phone: 503 288-6888

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
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: 807 822-2840

Authorized 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.

ROCKWELL GUARANTEE

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, we agree 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, factory branch, or authorized service station for our 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, factory branch, or authorized service station, relieves Rockwell of further liability under this guarantee. This guarantee is made expressly in place of all other guarantees expressed or implied with respect to fitness, merchantability or quality.

DELTA QUALITY ACCESSORIES FOR INCREASED JOB PERFORMANCE

No. 1346 5/16" Spindle. For 3-lip shaper cutters with $\frac{5}{16}$ " hole. 1 lb.

No. 1347 1/2" Spindle. Included with basic machine. For 3-lip shaper cutters with $\frac{1}{2}$ " hole. 1 lb.

No. 1345 1/2" Stub Spindle. For cope cutters with $\frac{1}{2}$ " hole. 1 lb.

No. 43-937 3/4" Spindle. Included with basic machine. For use with cutterheads with $\frac{3}{4}$ " hole. $\frac{3}{4}$ lb.

No. 43-826 Extra Long 3/4" Spindle Cartridge Assembly for clockwise or counter-clockwise rotation. Provides $4\frac{3}{8}$ " capacity under nut. For use with wide cutters for fluting and rearing. 2 lbs.

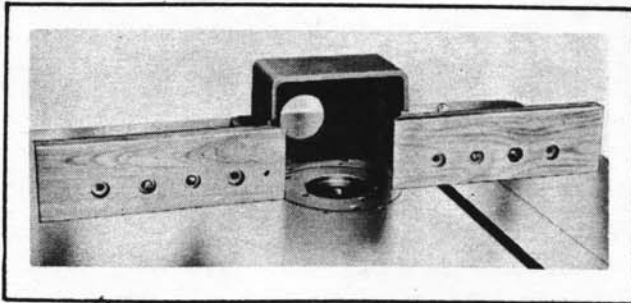
No. 43-828 1" Spindle Cartridge Assembly for use with 1" hole cutters. For clockwise or counter-clockwise rotation. 2 lbs.

No. 41-134 Motor Pulley, $7\frac{1}{2}$ " diameter, $\frac{3}{4}$ " bore.

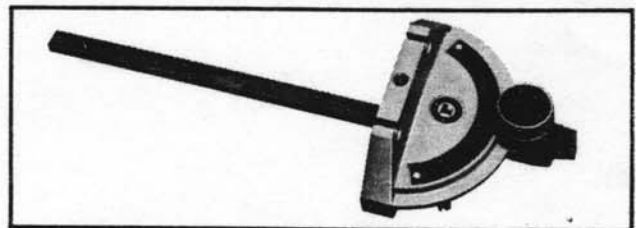
No. 41-136 Motor Pulley, $7\frac{1}{2}$ " diameter, $\frac{5}{8}$ " bore.

No. 41-140 Motor Pulley, $7\frac{1}{2}$ " diameter, $\frac{7}{8}$ " bore.

No. 49-101 V-belt, $29\frac{1}{8}$ " O.C.



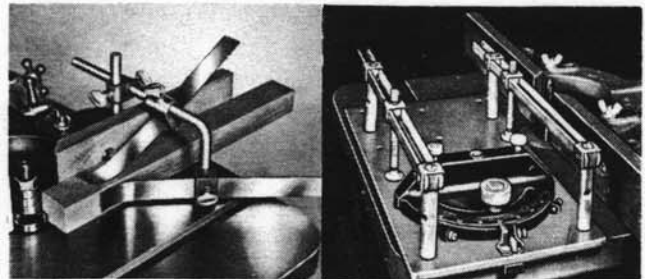
No. 43-830 Fence Guard Assembly. For large diameter cutters. Fence halves adjust independently. Accommodates cutters up to 6" in diameter when used with 43-828 1" diameter Spindle Cartridge Assembly.



No. 34-833 Auto-Set® Miter Gage. For straight and angle operations. Has $\frac{3}{4} \times \frac{3}{8} \times 18$ " guide bar and pivoting work support body with pointer and calibrations reading through 120° swing. Adjustable, positive stops at 90° and 45° positions are quickly selected by means of a new, fast operating stop block. Body slotted for quick mounting of auxiliary face plate. Accommodates No. 865 Clamp Attachment. 4 lbs.

No. 865 Clamp Attachment for miter gage. Holds work evenly and safely when edge shaping with miter gage. Includes clamp bar, two sliding clamp screws, front and rear posts. $2\frac{1}{4}$ lbs.

No. 873 Extra Clamp Screw and Bracket for clamp attachment. 1 lb.



(Left) No. 983 Spring Hold Downs. Used with shaper fence on straight shaping operations. Holds work firmly against fence and table. Accommodates work up to $3\frac{1}{2}$ " thick, any length. 2 lbs.

(Right) No. 1186 Sliding Shaper Jig. For horizontal shaping operations such as tenon and groove cutting. Securely holds short and narrow work, prevents slipping. 19 lbs.

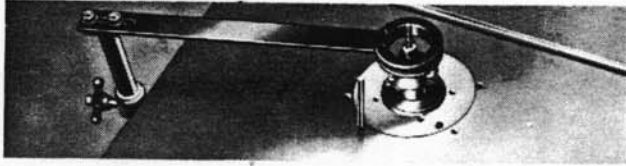
No. 1170 Tenoner. Used with 1186 Shaper Jig Base. Simplifies vertical shaping operations as in-face shaping and drawer construction. 21 lbs.

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ROCKWELL DELTA INDUSTRIAL WOODWORKING MACHINES

ROCKWELL DELTA HEAVY DUTY WOOD SHAPER

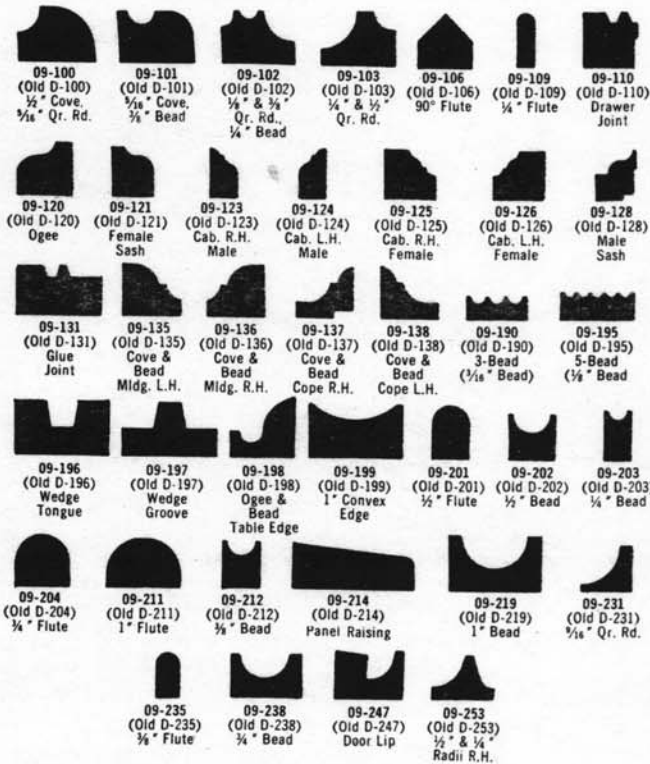
ACCESSORIES—Continued



No. 1348 Safety Ring Guard. For added safety and convenience on curved and circular edge shaping operations. Complete with mounting bracket. 8 lbs.

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. 1345. 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)	$\frac{1}{2}$ "		09-108 (Old D-108)	$\frac{1}{4}$ "	
09-130 (Old D-130)	$\frac{3}{8}$ "	$1\frac{1}{16}$ "	09-127 (Old D-127)	$\frac{3}{8}$ "	$1\frac{1}{16}$ "
09-104 (Old D-104)	1"		09-139 (Old D-139)	$\frac{1}{2}$ "	$2\frac{1}{2}$ "
09-105 (Old D-105)	$1\frac{1}{2}$ "		09-129 (Old D-129)	$\frac{3}{8}$ "	

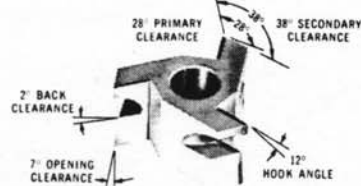
Spacing Collars— $\frac{1}{2}$ " Hole

Number	Dia.	Thickness	Number	Dia.	Thickness
09-133 (Old D-133)	$1\frac{3}{16}$ "	$\frac{1}{4}$ "	09-144 (Old D-144)	1"	
09-150 (Old D-150)	$1\frac{3}{8}$ "	$\frac{3}{16}$ "	09-173 (Old D-173)	$1\frac{1}{8}$ "	
09-155 (Old D-155)	$\frac{3}{4}$ "		09-145 (Old D-145)	$1\frac{1}{4}$ "	
09-217 (Old D-217)	$1\frac{1}{2}$ "		09-132 (Old D-132)	$1\frac{3}{8}$ "	
09-134 (Old D-134)	$1\frac{3}{8}$ "	$\frac{1}{4}$ "	09-146 (Old D-146)	$1\frac{1}{2}$ "	
09-140 (Old D-140)	$1\frac{3}{8}$ "		09-174 (Old D-174)	$1\frac{3}{8}$ "	
09-215 (Old D-215)	$1\frac{1}{2}$ "		09-175 (Old D-175)	$1\frac{3}{8}$ "	$\frac{3}{8}$ "
09-151 (Old D-151)	$1\frac{3}{8}$ "		09-176 (Old D-176)	$1\frac{3}{8}$ "	
09-142 (Old D-142)	$\frac{3}{4}$ "		09-147 (Old D-147)	$1\frac{3}{8}$ "	
09-171 (Old D-171)	$1\frac{3}{8}$ "	$\frac{3}{8}$ "	09-148 (Old D-148)	$1\frac{3}{8}$ "	
09-143 (Old D-143)	$\frac{7}{8}$ "		09-177 (Old D-177)	$1\frac{3}{8}$ "	
09-172 (Old D-172)	$1\frac{3}{8}$ "		09-178 (Old D-178)	$1\frac{3}{8}$ "	
			09-179 (Old D-179)	$1\frac{3}{8}$ "	
			09-180 (Old D-180)	$1\frac{3}{8}$ "	
			09-149 (Old D-149)	$1\frac{3}{8}$ "	

CARBIDE-TIPPED DOOR LIP SHAPER CUTTERS

The special design of the cutters assures a sharp edge on the tool lip, resulting in these user benefits: Cutter runs cool and will not overload the machine. Cutter lasts longer because a heavy cutting corner can be maintained. The cutter won't burn the work. Cutter stays sharp longer and will not heel. Finally, the pattern can be ground many times.

No. 43-900 Door Lip Cutter. For clockwise rotation. Cuts with rabbet down, feed left to right. $2\frac{3}{16}$ " diam. with bushing for use on $\frac{1}{2}$ " and $\frac{3}{4}$ " spindles. 10 oz.



No. 43-901 Door Lip Cutter. For counter-clockwise rotation. Same as 43-900 except right to left feed. 10 oz.

COLLAR SETS

No. 1210 Set of 7 Collars. $\frac{3}{4}$ " to $1\frac{1}{8}$ " diameter. 09-142, 09-143, 09-144, 09-145, 09-171, 09-172, 09-173. $\frac{3}{4}$ lb.

No. 1211 Set of 6 Collars. $1\frac{3}{16}$ " to $1\frac{1}{2}$ " diameter. 09-141, 09-146, 09-147, 09-148, 09-174, 09-175. 1 lb.

No. 1212 Set of 6 Collars. $1\frac{1}{16}$ " to $1\frac{7}{8}$ " diameter. 09-149, 09-176, 09-177, 09-178, 09-179, 09-180. $1\frac{1}{2}$ lbs.

No. 1191 Set of 4 Collars for Sash Cutters. 09-140, 09-141, 09-150 and 09-151. $\frac{1}{2}$ lb.

No. 1198 Set of Table Inserts With Guide Shoulders. For template shaping operations where collars are not used. Set of two— $2\frac{3}{8}$ " and $1\frac{5}{8}$ " diameter. $1\frac{1}{2}$ lbs.

CUTTER AND COLLAR SETS

No. 1182 Standard Cutter Set. Consists of Cutters 09-100 to 09-109 inclusive and Collars 09-142 to 09-149 inclusive. Packed in wood box. $3\frac{1}{2}$ lbs.

No. 1213 Cove and Bead Cutter Set. Consists of Cutters 09-129, 09-135 to 09-139 inclusive and Collars 09-132 and 09-134. Packed with 1345 Stub Spindle Assembly and SP-10 Wrench. 2 lbs.

No. 1214 Sash and Cabinet Cutter Set. Consists of Cutters 09-108, 09-120, 09-121, 09-123 to 09-128 inclusive and Collars 09-140, 09-141, 09-150 and 09-151. Packed with 1345 Stub Spindle Assembly and SP-10 Wrench. 3 lbs.

3-KNIFE SAFETY CUTTERHEAD

Enables circular saw moulding cutter knives to be used on the wood shaper.

No. 1343 Cutterhead. Includes wrench and bushing for use with $\frac{1}{2}$ " and $\frac{3}{4}$ " shaper spindles. Furnished without knives. $1\frac{1}{2}$ lbs. For actual size and shape of cutters, see Section "G6."



SAFETY CUTTERHEAD AND BLANK KNIVES

For special mouldings that cannot be made with standard shaper cutters. Knives are self-hardening and sand-blasted so that desired cutter shape may be drawn directly on them and ground to shape.

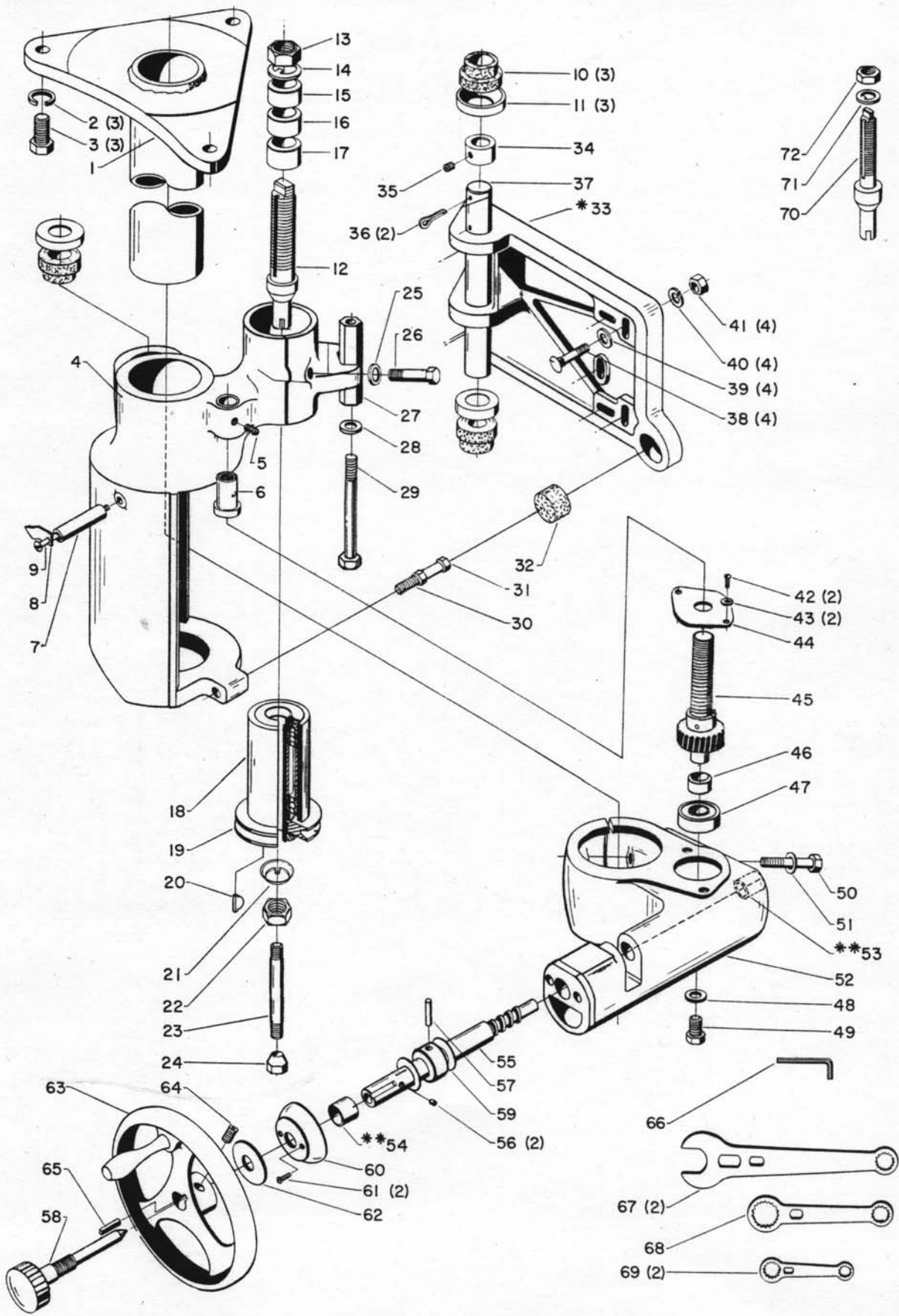
No. 1342 Cutterhead. For use with $\frac{3}{4}$ " spindle. $2\frac{3}{16}$ " high, with tightening block; less knives. $1\frac{1}{2}$ lbs.

No. 1192 Cutterhead. For use with $\frac{1}{2}$ " spindle. $2\frac{3}{16}$ " high, with tightening block; less knives. $1\frac{1}{2}$ lbs.

Blank Knives—Set of Two. For use with 1342 and 1192 cutterheads. All $\frac{1}{8}$ " thick with 30° clamping angle.



Number	1193	1194	1195	1196
Size	$\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{3}{4}$ x $2\frac{1}{2}$	1" x $2\frac{1}{2}$	$1\frac{1}{2}$ x $2\frac{1}{2}$



* THE OLD STYLE MOTOR PLATE IS USED WITH THE DELTA # 8 1/2 FRAME MOTOR USED ON MACHINES WITH SERIAL NUMBERS PRIOR TO SERIAL No. EC-7415. CAT. No. 41-834, 7 1/2" DIA., 3/4" BORE MOTOR PULLEY AND CAT. No. 287, V-BELT, SHOULD BE USED WITH THIS MOTOR PLATE. THE REVISED MOTOR PLATE IS USED ON MACHINES WITH SERIAL No. EC-7415 AND HIGHER. THIS NEW MOTOR PLATE IS DESIGNED TO BE USED WITH EITHER THE OLD STYLE DELTA # 8 1/2 MOTOR OR THE NEW FACTORY MOUNTED MOTORS AND CONTROLS.

** REPLACEMENT BUSHINGS ARE FURNISHED UNDERSIZE AND MUST BE REAMED TO FIT AFTER INSTALLATION.

Replacement Parts

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	LSR-5-S	Flange Assembly	41	SP-5435	5/16-18 Hex. Jam Nut
2	SP-1705	1/2" Lockwasher	42	SP-509	1/4-20 x 1/2 Rd. Hd. Mach. Screw
3	SP-672	1/2-20 x 1-1/4" Hex. Hd. Cap Screw	43	SP-1702	1/4" Lockwasher
4	LSR-2-R	Spindle Housing, incl.:	44	LSR-15	Cover Plate
5	SP-302	5/16-18 x 1/2" Sq. Hd. Set Screw	45	LSR-13-S	Raising Screw Assembly
6	LSR-76	Raising Nut	46	LSR-14	Collar
7	LSR-19	Pointer Spacer	47	SP-5336	Ball Bearing
8	LTA-429	Pointer	48	SP-1620	11/32 x 11/16 x .065 Washer
9	SP-915	1/4-20 x 3-1/2" Rd. Hd. Stove Bolt	49	SP-605	5/16-18 x 1/2 Hex. Hd. Cap Screw
10	LSR-7	Rubber Bushing	50	SP-3101	7/16 -14 x 3 Hex. Hd. Cap. Screw
11	LSR-8	Bushing Retainer	51	SP-1716	7/16 Lockwasher
12	Cat. #43-937	3/4" Spindle, incl.:	52	LSR-3-R	Adjusting Screw Bracket, incl.:
13	LSR-29	3/4" Spec. Spindle Nut	** 53	LSR-33	9/16 I.D. Bushing
14	LSR-30	Spec. Spindle Lockwasher	** 54	LSR-34	15/16 I.D. Bushing
15	LSR-52	1/2" Collar	55	LSR-16-R	Pinion Shaft, Incl.
16	LSR-53	3/4" Collar	56	TAM-181	Lock Pin
17	LSR-54	1" Collar	57	SP-2431	#4 x 1-1/4 Taper Pin
18	LSR-63-S	Sleeve Assembly, incl.:	58	LTA-561-S	Lock Knob
19	LSR-63	Pulley	59	H-11	Spec. Fiber Washer
20	SP-2606	1/8" x 5/8" Hi-Pro Key	60	LSR-18	Flange
21	LSR-23	Spec. Lockwasher	61	DDL-105	#10-32 x 7/16 Spec. Fil. Hd. Screw
22	LBS-86	Spec. Hex. Nut	62	LTA-461	3/4 x 1-5/8 x 3/64 Fiber Washer
23	LSR-24	Tie Rod	63	LTA-420-S	Handwheel Assembly, incl.:
24	LSR-25	Tie Rod Nut	64	SP-201	5/16-18 x 5/16 Hex. Hd. Soc. Set Screw
25	SP-1704	3/8" Lockwasher	65	SP-2650	3/16 x 3/16 x 1-3/8 Key
26	SP-646	3/8-16 x 2" Hex. Hd. Cap Screw	66	Cat. #194	Hex. Wrench for 5/16 Hex. Soc. Set Screw
27	LSR-12	Hex. Guide Post	67	Cat. #1520	1-1/16 Open End and 5/8 Hex. Box Wrench
28	CBL-447	33/64 x 7/8 x 1/16 Washer	68	Cat. #1524	9/16 and 7/8 Hex. Box Wrench
29	SP-685	1/2-20 x 5" Hex. Hd. Cap. Screw	69	Cat. #1526	7/16 and 9/16 Hex. Box Wrench
30	SP-5438	7/16-14 Hex. Jam Nut	70	Cat. #1347	1/2 Spindle, incl.:
31	LSR-68	Stop Screw	71	SR-234	Spec. Keyed Lockwasher
32	LSR-10	Rubber Bumper	72	SR-230	Spec. Nut
33	LSR-4	Motor Plate			
34	H-5-S	Set Collar, incl.:			
35	SP-201	5/16-18 x 5/16 Hex. Soc. Set Screw			
36	SP-2106	1/8 x 1-1/4 Cotter Pin			
37	LSR-9	Steel Pin			
38	SP-830	5/16 x 1-1/4 Carriage Bolt			
39	LTA-520	21/64 x 11/16 x 1/8 Washer			
40	SP-1703	5/16 Lockwasher			

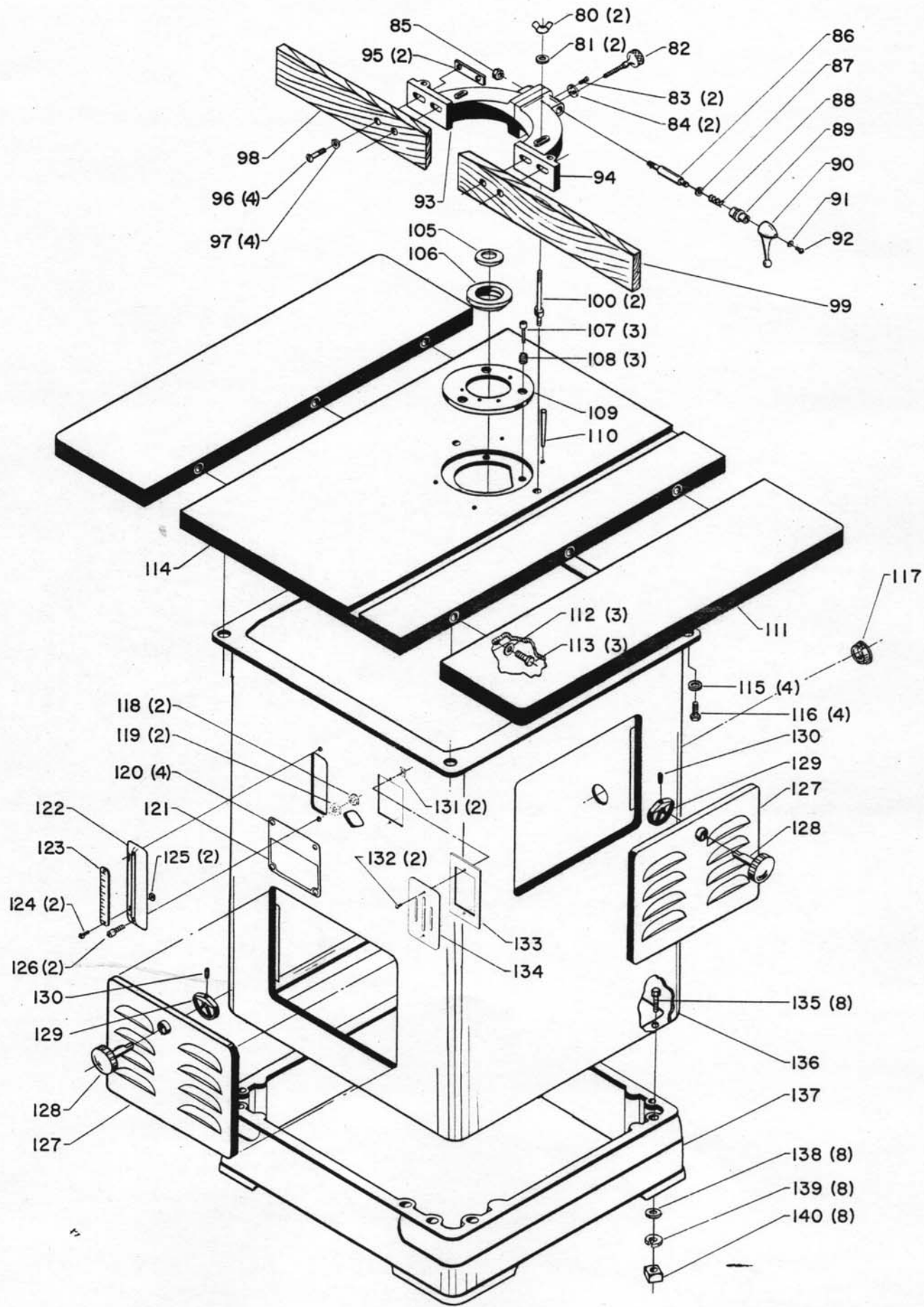
Note: Motors and controls (including motor pulley and V-belt) are not furnished with the Basic Machine. They are furnished with the factory mounted and wired machines. The customer must specify the proper motor pulley and belt for his machine.

***	Cat. #287	V-Belt
***	Cat. #41-134	7-1/2 dia., 3/4 Bore Motor Pulley, incl.:
***	SP-206	5/16-18 x 5/16 Hex. Soc. Set Screw
***	Cat. #41-136	7-1/2 dia., 5/8 Bore Motor Pulley (Serial #EC-7415 and higher), incl.:
***	SP-206	5/16-18 x 5/16 Hex. Soc. Set Screw
***	Cat. #41-140	7-1/2 dia., 7/8 Bore Motor Pulley (Serial #EC-7415 and Higher), incl.:
***	SP-206	5/16-18 x 5/16 Hex. Soc. Set Screw
***	Cat. #49-101	V-Belt (Serial #EC-7415 and higher)

The old style motor plate is used with the Delta #8-1/2 frame motor used on machines with serial numbers prior to Serial #EC-7415. Cat. #41-834, 7-1/2" dia. 3/4" Bore Motor Pulley and Cat. #287, V-Belt, should be used with this motor plate. The revised motor plate is used on machines with Serial #EC-7415 and higher. This new motor plate is designed to be used with either the old style Delta 8-1/2 frame motor or the new factory mounted motors and controls.

** Replacement bushings are furnished undersize and must be reamed to fit after installation.

*** Not shown.



Replacement Parts

Ref. No.	Part No.	Description
	Cat. #1354	Fence Assembly, consisting of:
80	SP-1403	5/16-18 Wing Nut
81	SP-1604	5/16 x 3/4 x 1/16 Washer
82	SF-6	Adjusting Screw
83	SP-551	#10-32 x 1/4 Rd. Hd. Mach. Scr.
84	SF-19	Half Collar
85	SP-1002	7/16-14 Hex. Jam Nut
86	SF-3	Clamp Stud
87	DDL-174	29/64 x 1 x 1/8 Spec. Washer
88	NCS-33	Coil Spring
89	SF-18	Serrated Nut
90	SR-217	Clamp Handle
91	SP-1603	1/4 x 9/16 x 3/64 Washer
92	SP-509	1/4-20 x 1/2 Rd. Hd. Mach. Scr.
93	SF-1	Main Casting, L.H.
94	SF-2	Main Casting, R.H.
95	SF-4	Clamp Plate
96	SP-523	5/16-18 x 1-1/2 Rd. Hd. Mach. Screw
97	SP-1604	5/16 x 3/4 x 1/16 Washer
98	LSR-38	Wood Fence, L.H.
99	LSR-39	Wood Fence, R.H.
100	SF-17	Clamp Stud
105	SR-237	Small Table Insert
106	LSR-17	Table Insert
107	SP-725	1/4-20 x 1 Fil. Hd. Cap Screw
108	LSR-70	Special Screw for Insert
109	LSR-69	Support
110	SP-2422	#6 x 2-3/4 Taper Pin
111	Cat. #1349	Extension Table, incl.:
112	SP-1716	7/16 Lockwasher
113	SP-664	7/16-20 x 1 Hex. Hd. Cap Scr.
114	LSR-71	Table
115	DDL-174	29/64 x 1 x 1/8 Spec. Washer
116	SP-680	7/16-20 x 3/4 Hex. Hd. Cap Screw
117	438-01-011-0020	Insulator
118	SP-1034	1/4-20 Hex. Nut
119	SP-1757	1/4 Ext. Tooth Lockwasher
120	SP-2250	#4 x 3/16 Drive Screw
121	960-02-012-1429	Nameplate
122	LSR-37	Scale Plate
123	LSR-59	Scale
124	SP-565	#6-32 x 5/16 Rd. Hd. Mach. Screw
125	SP-1301	#6-32 Sq. Nut
126	SP-710	1/4-20 x 7/8 Fil. Hd. Cap Scr.
127	LTA-481-A	Cabinet Door
128	LTA-483-S	Door Lock Pin
129	LTA-484	Cam
130	SP-206	5/16-18 x 5/16 Hex. Soc. Set Screw
131	SP-2954	Speed Nut
132	SP-564	#6-32 x 3/8 Rd. Hd. Mach. Screw
133	422-04-116-0001	Gasket
134	DP-572	Cover
135	SP-830	5/16 x 1-1/4 Carriage Bolt
136	LSR-45-S	Cabinet
137	LSR-49	Cabinet Base
138	SP-1605	3/8 x 7/8 x 1/16 Washer
139	SP-1703	5/16 Lockwasher
140	SP-1303	5/16-18 Sq. Nut



FOR

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QUALITY

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WOODWORKING and METALWORKING

MACHINES
and
POWER TOOLS