

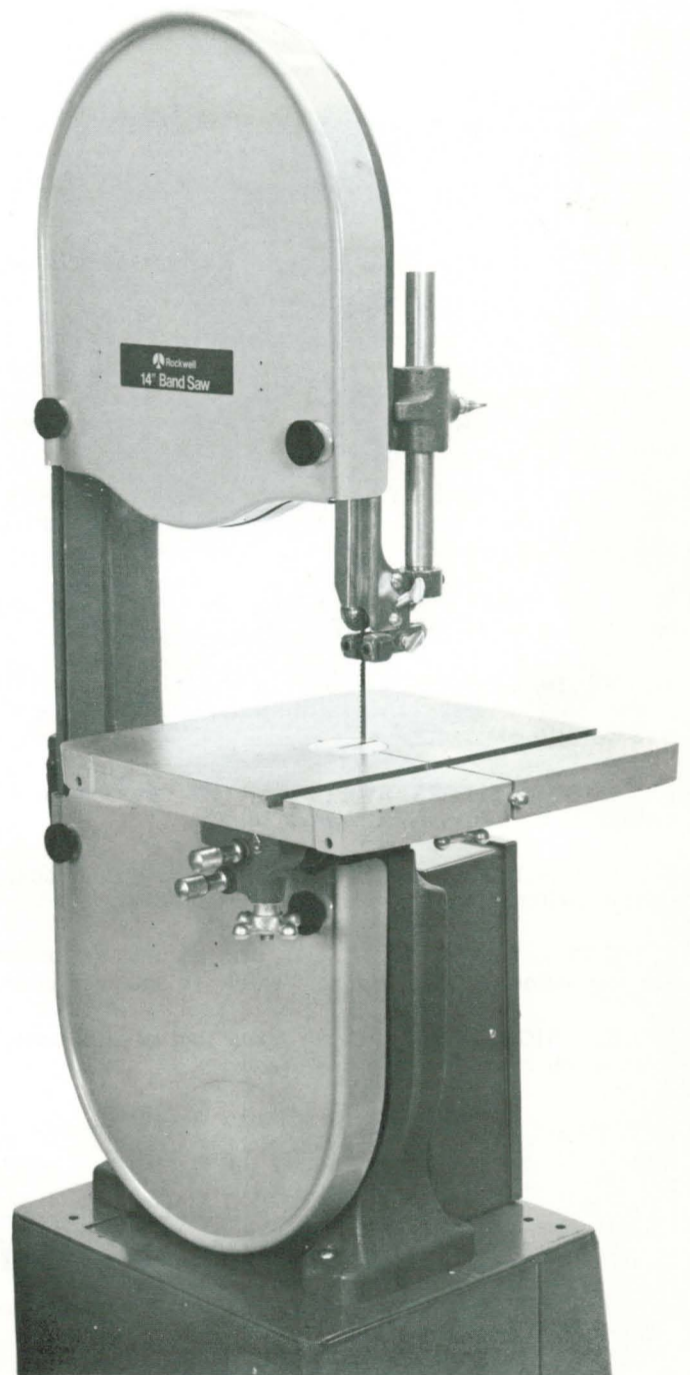


28-200 AND 28-230 14" WOOD CUTTING BAND SAWS

INTRODUCTION

Your new Band Saw will accurately perform all the usual woodworking band saw operations; straight cutting, curve cutting, cutting plastics and light aluminum, etc.

All Rockwell Band Saws are carefully inspected and tested before shipment. While in transit, however, it is possible that the machine may get out of alignment. Therefore, before putting the machine into operation give it a careful check and make adjustments where necessary. A carefully set up machine will save you time, trouble and money. We suggest that you read this booklet carefully before assembling the Band Saw 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 International
Manager of Product Safety
Power Tool Division
400 North Lexington Avenue
Pittsburgh, Pennsylvania 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 lug 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 BAND SAWS

1. **ADJUST** the upper guide about 1/8" above the material being cut.
2. **MAKE SURE** that blade tension and blade tracking are properly adjusted.
3. **STOP** the machine before removing scrap pieces from the table.
4. **ALWAYS** keep hands and fingers away from blade.
5. **CHECK** for proper blade size and type.
6. **DO NOT** attempt to saw stock that does not have a flat surface, unless a suitable support is used.
7. **HOLD** material firmly and feed into blade at a moderate speed.
8. **TURN OFF** machine if the material is to be backed out of an uncompleted cut.
9. **MAKE** "release" cuts before cutting long curves.

UNPACKING AND CLEANING

Carefully unpack the band saw, stand, and all loose items from the cartons. Remove the protective coating from the machined surfaces of the band saw. 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, MOTOR PLATE, MOTOR AND MOTOR PULLEY

If you purchased your band saw complete with stand and electricals factory mounted and wired, as shown in Fig. 2, it is necessary to remove the small knockout (A) located on top of the stand. The motor plate, motor, motor pulley and switch are completely assembled to the stand, as shown in Fig. 2 and Fig. 3.

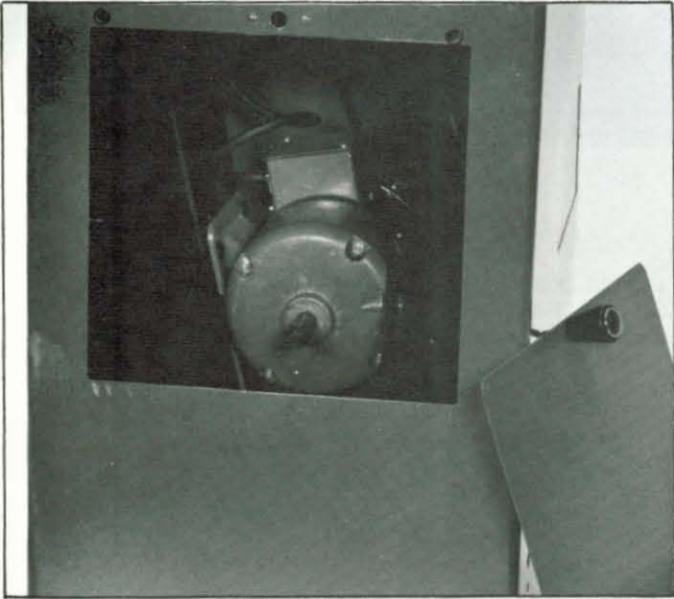


Fig. 3

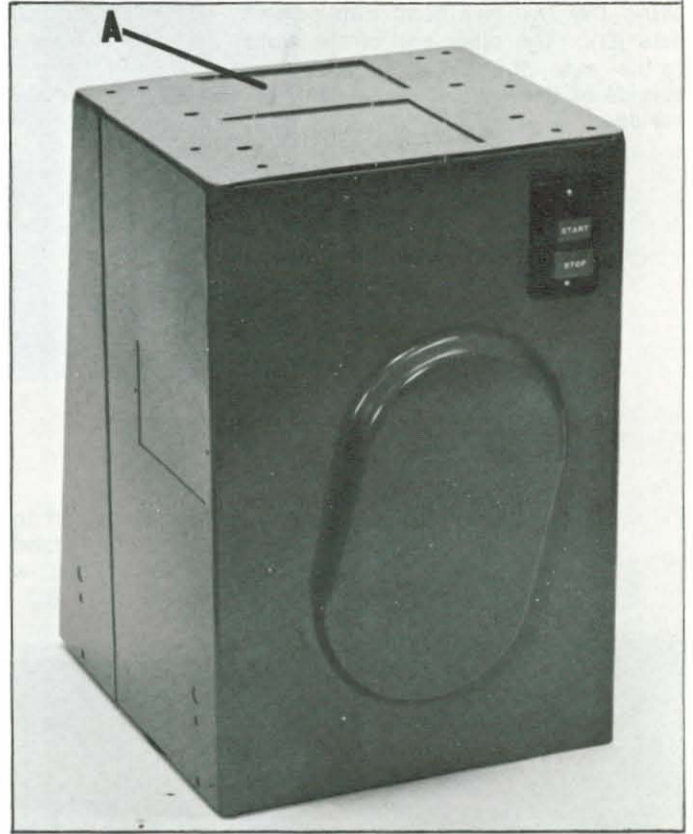


Fig. 2

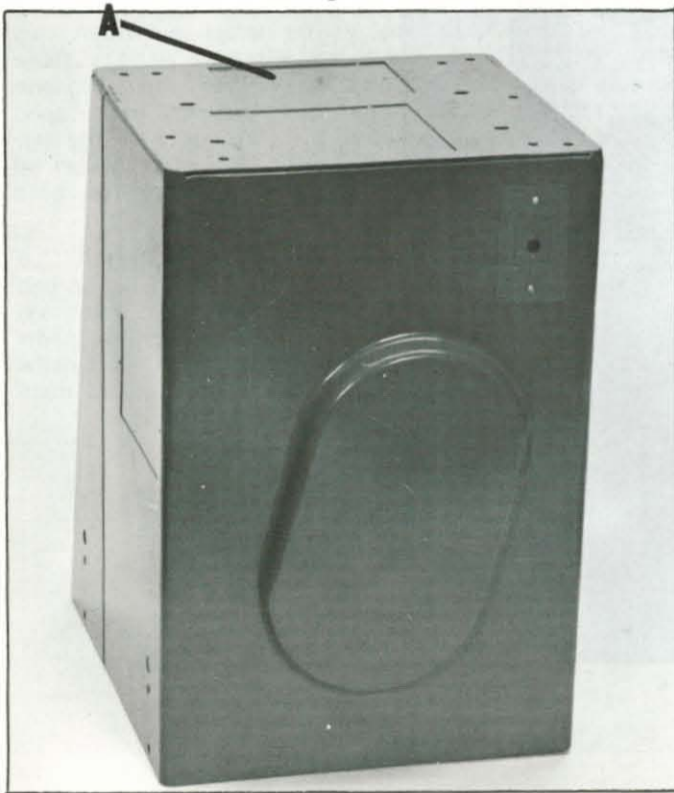


Fig. 4

If you purchased your band saw with separate stand and electricals NOT factory mounted and wired, the stand is supplied as shown in Fig. 4. Remove the small knockout (A) Fig. 4, located on top of the stand and proceed as follows to assemble the motor plate, motor, motor pulley and switch:

1. Turn the stand upside down.

2. Assemble the motor mounting plate (A) Fig. 5, using the two hex head cap screws, flat washers and nuts (B). The other end of the motor plate is fastened to the side of cabinet using a carriage bolt from the outside of the cabinet and a flat washer and nut on the inside.

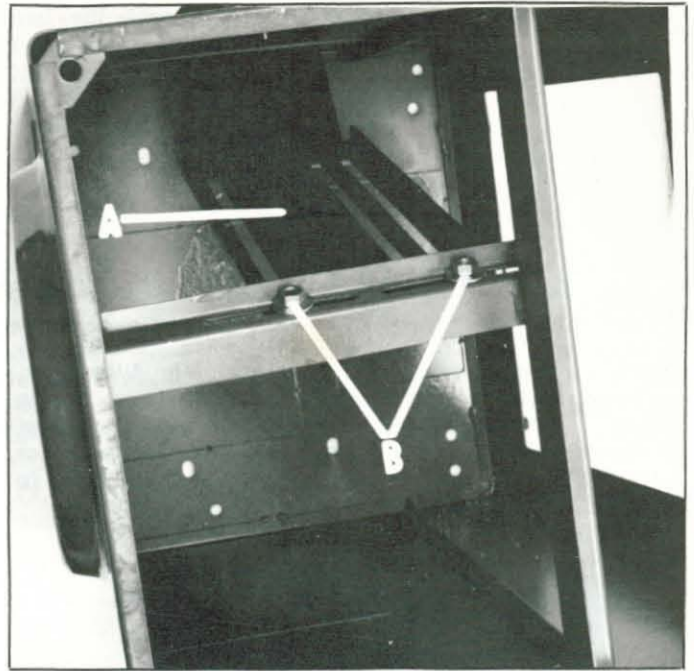


Fig. 5

3. Return the stand to the upright position and assemble band saw to stand using four 1-1/2" round head slotted screws, flat washers, lockwashers and nuts, as shown in Fig. 6.



Fig. 6

4. Assemble the motor to the motor mounting plate, as shown in Fig. 7, using the four carriage bolts, flat washers and square nuts. Consult your Rockwell Dealer or Catalog for the recommended motor for use with your saw.

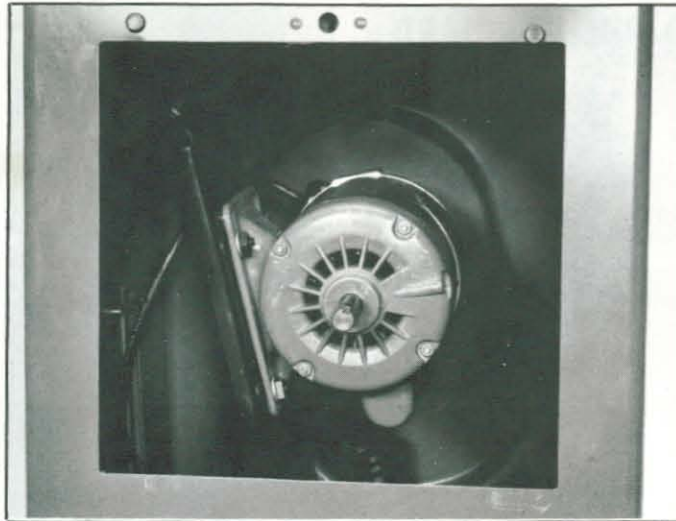


Fig. 7

5. Assemble motor pulley (A) Fig. 8 to the motor shaft. Make sure the set screw in the motor pulley engages with key in motor shaft. Using a straight edge, make sure the motor pulley (A) and driven pulley (B) are in alignment. If necessary, both pulleys can be moved in or out. The motor mounting plate (C) can also be moved if necessary.

6. Assemble the V-Belt (D) Fig. 8, to the two pulleys and adjust for proper belt tension by raising or lowering the motor on the motor plate. Keep pulleys in alignment when doing this. Correct belt tension is obtained when there is approximately 1" deflection in the center span of the pulleys with light finger pressure.

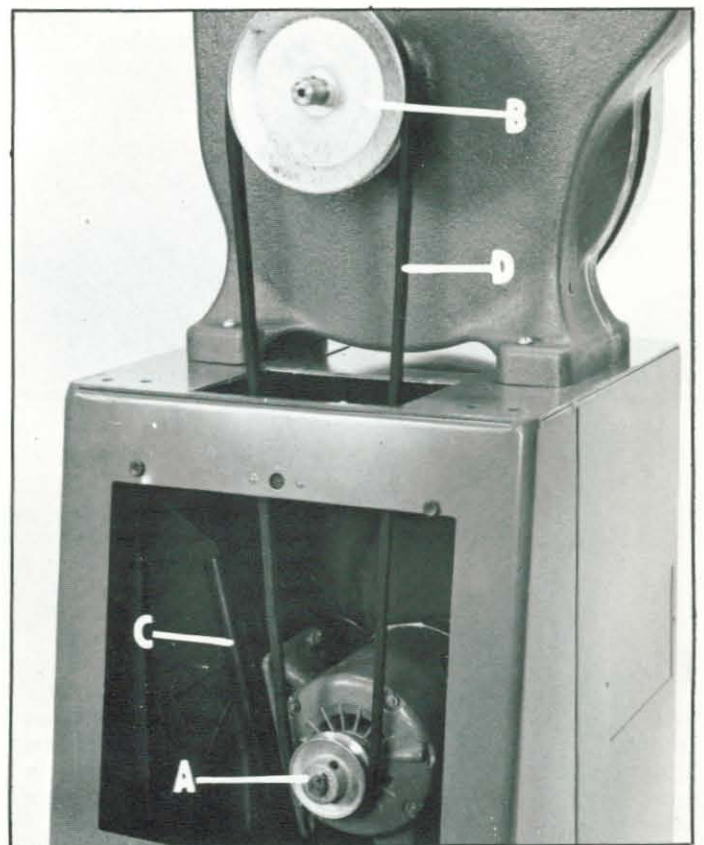


Fig. 8

ASSEMBLING BELT AND PULLEY GUARD

1. Remove V-Belt (A) Fig. 12.
2. Place the belt and pulley guard (B) Fig. 12, on the top shelf over the belt opening and position the two clamps (C) over the guard flanges and under the top of the stand as shown. Use the four round head screws in the bottom of clamps to fasten in place.
3. Replace the V-Belt and place door (D) Fig. 12, on hinges.

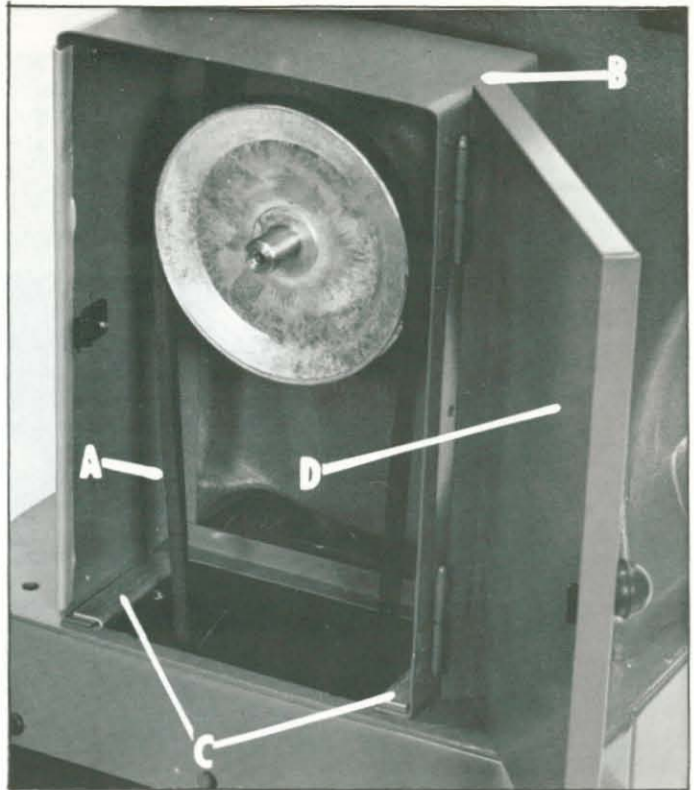


Fig. 12

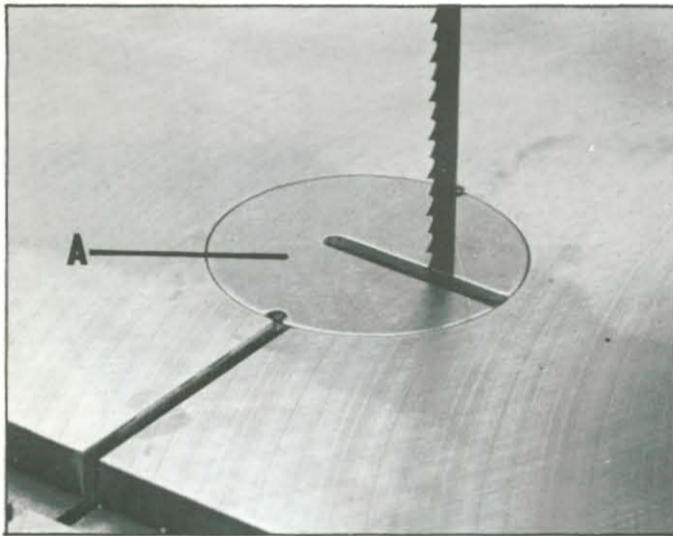


Fig. 13

TABLE INSERT

Place table insert (A) Fig. 13, in the hole provided in the table making sure the pin in the table engages one of the indents in the table insert.

TILTING THE TABLE

The table on your band saw can be tilted 45 degrees to the right and 10 degrees to the left. To tilt the table, loosen the two star wheels (A) Fig. 14, tilt the table to the desired angle and tighten the two star wheels (A).

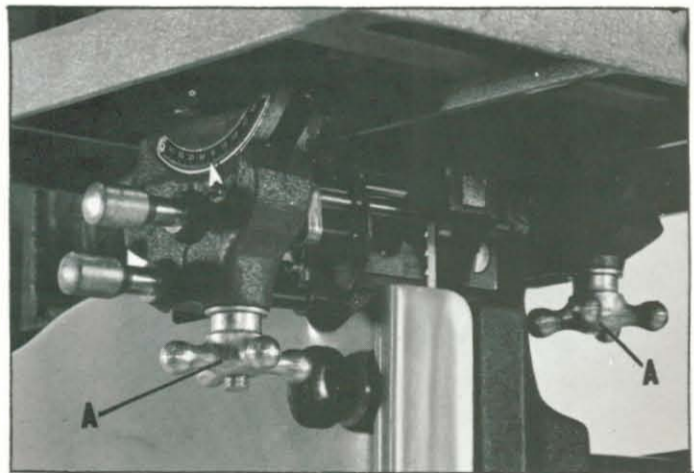


Fig. 14

90 DEGREE TABLE ADJUSTMENT

Your band saw is equipped with an adjustable stop to insure that the table is at 90 degrees to the blade. To adjust:

1. Tilt the table to the right slightly.
2. Place the stop (A) Fig. 15, on the adjusting screw.
3. Tilt the table until it is at 90 degree to the blade, making sure by placing a square on the table and against the blade.
4. When the table is at 90 degrees to the blade, the stop (A) should come into contact with the bottom of the table. If an adjustment is necessary, loosen nut (B) Fig. 15, and turn adjusting screw until the stop (A) contacts the table.
5. It is necessary to remove the stop (A) Fig. 15, when tilting the table to the left.

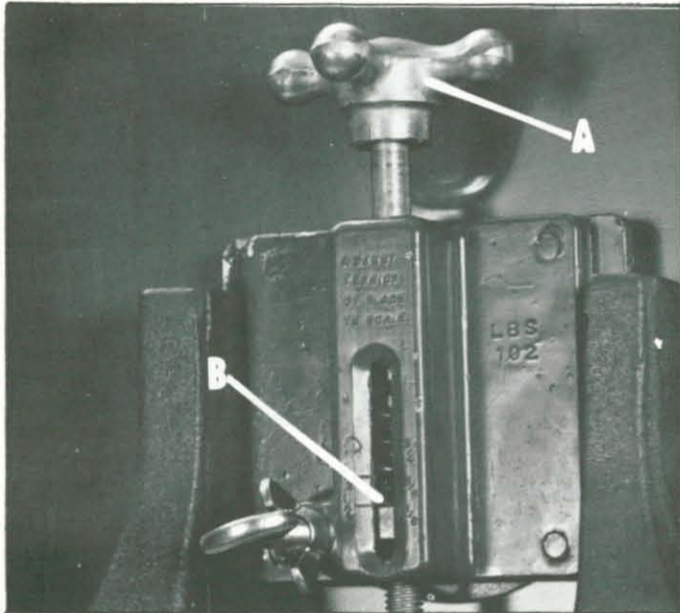


Fig. 15

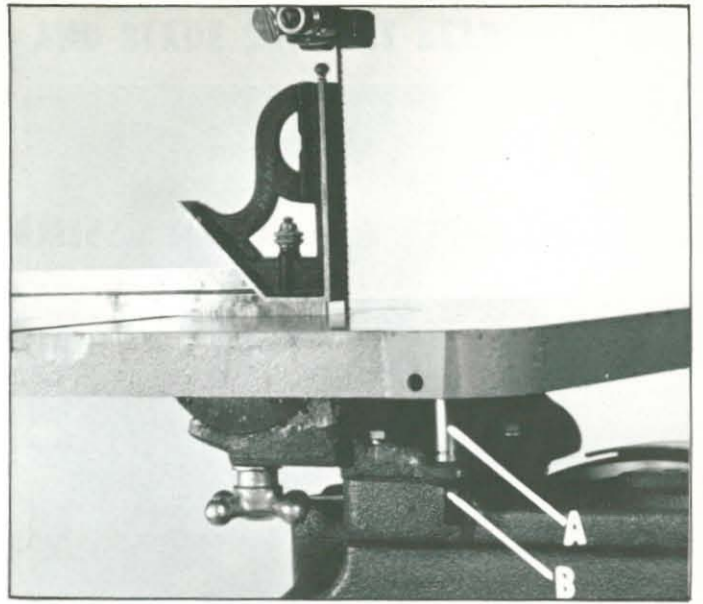


Fig. 16

ADJUSTING BLADE TENSION

On the back of the upper wheel slide bracket there is a series of graduations. These indicate the proper tension for various widths of blades. With the blade on the wheels, turn the star wheel (A) Fig. 16, to raise or lower the wheel, until the red fiber washer (B) is in line with the proper graduation for the size of blade being used.

The graduations will be found correct for average work, and are not affected by rebrazing of the saw blade. We urge you to use these graduations until you have become familiar enough with the operation of the Band Saw to vary the tension for different kinds of blades or work. Over-straining is a common cause of blade breakage and other unsatisfactory blade performance. Relax the tension when the machine is not in use.

TRACKING THE BLADE

IMPORTANT: Before tracking the blade, make sure the blade guides and blade support bearings are clear of the blade so as not to interfere with the tracking adjustment.

After tension has been applied to the blade, revolve the wheels slowly forward by hand and watch the blade (A) Fig. 17, to see that it travels in the center of the upper tire. If the blade begins to creep toward the front edge, loosen the wing nut (B) and tighten the thumb screw (C). This will tilt the top of the wheel toward the back of the machine and will draw the blade toward the center of the tire. If the blade creeps toward the back edge, turn the thumb screw in the opposite direction. Adjust the thumb screw (C) only a fraction of a turn at a time. **NEVER TRACK THE BLADE WHILE THE MACHINE IS RUNNING.** After the blade is tracking in the center of the tires, tighten the wing nut (B) Fig. 17.

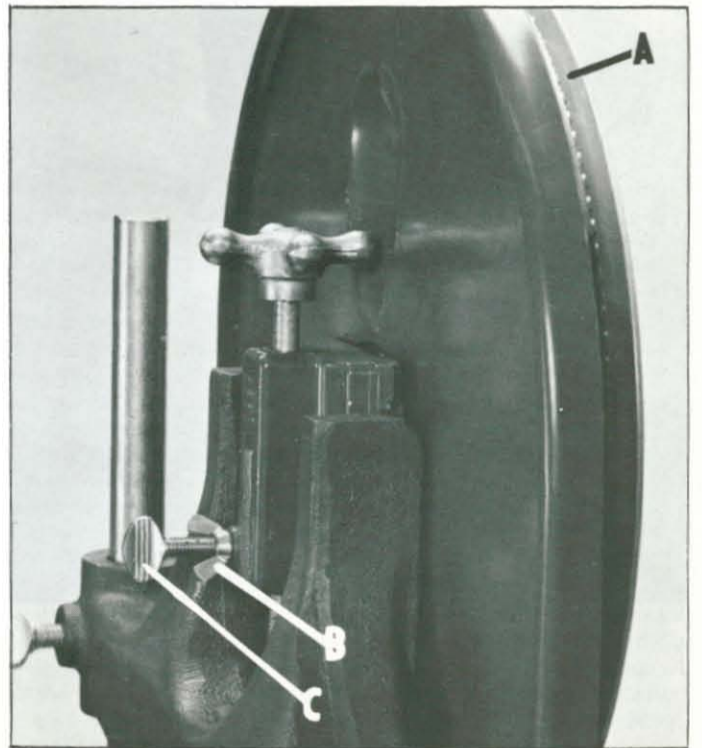


Fig. 17

ADJUSTING UPPER BLADE GUIDE ASSEMBLY

The upper blade guide assembly (A) Fig. 18, should always be set as close as possible to the top surface of the material being cut by loosening thumb screw (B) and moving the guide assembly (A) to the desired position.

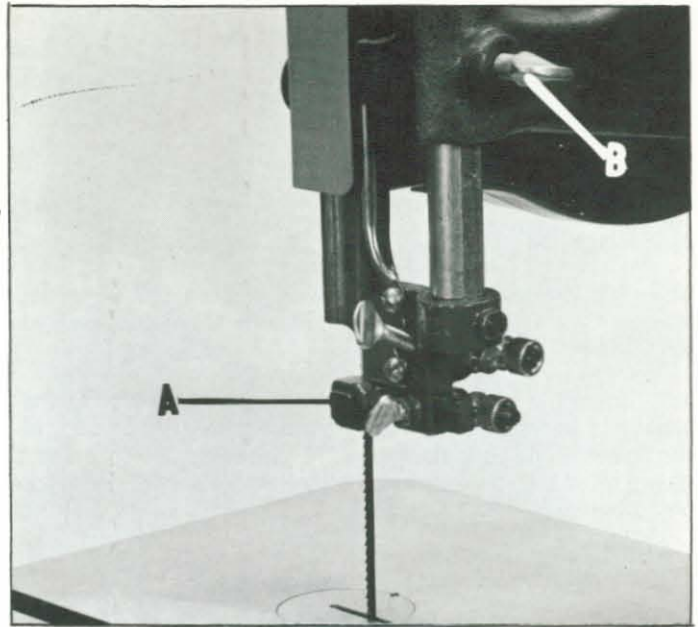


Fig. 18

The upper blade guide assembly should also be adjusted so that the blade guides (A) Fig. 19, are flat with the blade. If an adjustment is necessary, loosen screw (B) and rotate the complete guide assembly (C) until the blade guides are flat with the blade.

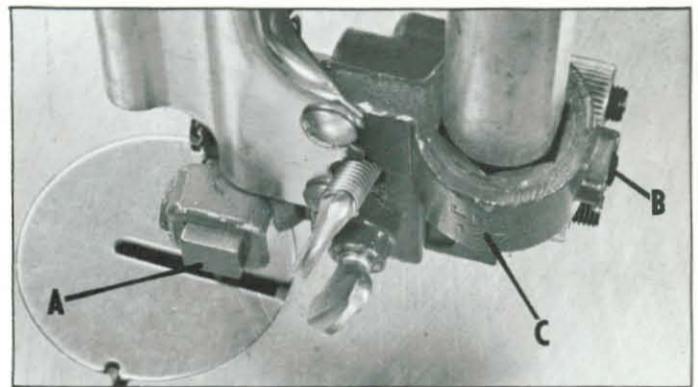


Fig. 19

ADJUSTING UPPER BLADE GUIDES AND BLADE SUPPORT BEARING

The upper blade guides and blade support bearings are adjusted only after the blade is tensioned and tracking properly. To adjust proceed as follows:

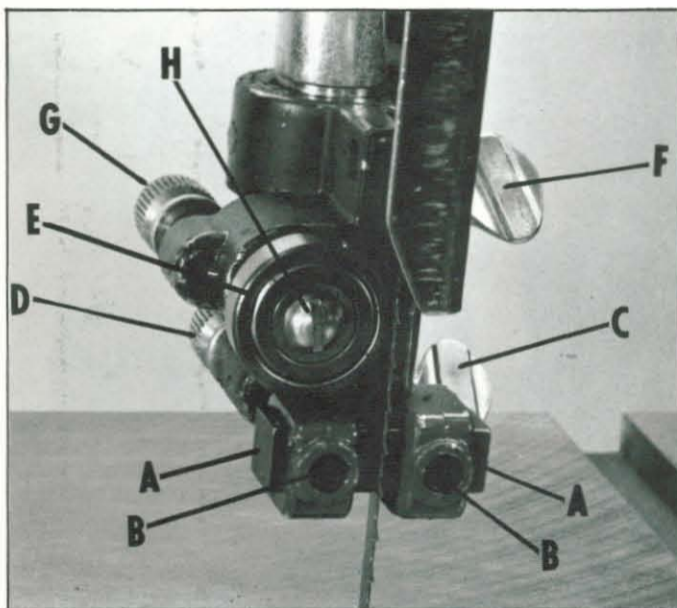


Fig. 20

1. The upper blade guides (A) Fig. 20, are held in place by means of the set screws (B). Loosen the set screws (B) to move the guides (A) as close as possible to the side of the blade, being careful not to pinch the blade. Then tighten the screws (B).
2. The guides (A) Fig. 20, should then be adjusted so that the front edge of the guides are just behind the "gullets" of the saw teeth. The complete guide block bracket can be moved in or out by loosening thumb screw (C) and turning knurled knob (D) Fig. 20. When guides (A) are set properly, tighten thumb screw (C).
3. The upper blade support bearing (E) Fig. 20, prevents the blade from being pushed too far to the back which could damage the set in the saw teeth. The support bearing (E) should be set $1/64''$ behind the blade by loosening thumb screw (F) and turning knurled knob (G) to move the support bearing (E) in or out.
4. The blade support bearing (E) should also be adjusted so the back edge of the blade overlaps the outside diameter of the ball bearing by about $1/16''$. The bearing (E) is set on an eccentric and to change position remove screw (H) and bearing (E) Fig. 20. Loosen thumb screw (F), back out screw (G) and re-position shaft that bearing (E) is attached to.

ADJUSTING LOWER BLADE GUIDES AND BLADE SUPPORT BEARING

The lower blade guides and blade support bearing should be adjusted at the same time as the upper guides and bearing as follows:

1. Loosen the two screws (A) Fig. 21, and move the guides (B) as close as possible to the side of the blade, being careful not to pinch the blade. Then tighten screws (A).
2. The front edge of the guide blocks (B) should be adjusted so they are just behind the "gullets" of the saw teeth by turning the knurled knob (C) Fig. 21.
3. The lower blade support bearing (D) Fig. 21, should be adjusted so it is about 1/64" behind the back of the blade by turning the knurled knob (E).

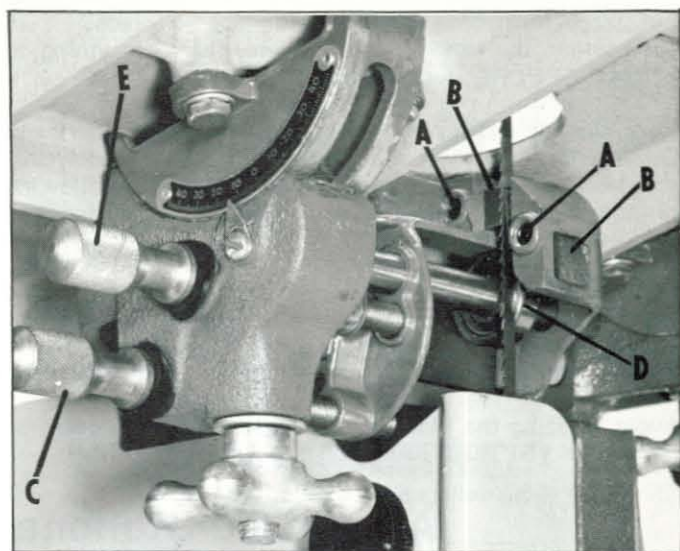


Fig. 21

CHANGING BLADES

To change blades, proceed as follows:

1. Remove the upper and lower wheel guards.
2. Release tension on the band saw blade.
3. Remove the table adjustment pin and table insert.
4. Slip the blade off the wheel and guide it out through the slot in the table.
5. To install a new blade, reverse the above procedure.

BAND SAW BLADES

A band saw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain long use from a band saw blade if you give it fair treatment. Be sure you use blades of the proper thickness, width and temper for the various types of material to be cut.

Always use the widest blade possible. Use the narrow blades only for sawing small, abrupt curves and for fine delicate work. This will save blades and will produce better work. Band saw blades may be purchased, welded, set and sharpened ready for use. For cutting wood and similar materials we can supply them in widths of 1/8, 3/16, 1/4, 3/8, 1/2 and 3/4 inches.

File and set the wood cutting blades whenever you find it requires pressure to make them cut. If a blade is broken it can be brazed or welded; however, if it has become badly work-hardened it will soon break in another place. If you are not equipped to file, set and braze or weld blades take them to a saw filer for reconditioning. Under average conditions, blades should be resharpened after 4 hours of operation.

Any one of a number of conditions may cause a band saw blade to break. Blade breakage is, in some cases, unavoidable, being the natural result of the peculiar stresses to which such blades are subjected. It is, however, often due to avoidable causes, most often to lack of care or judgment on the part of the operator in mounting or adjusting the blade or guides. The most common causes of blade breakage are: (1) faulty alignments and adjustments of the guides, (2) forcing or twisting a wide blade around a curve of short radius, (3) feeding too fast, (4) dullness of the teeth or absence of sufficient set, (5) excessive tightening of the blade, (6) top guide set too high above the work being cut, (7) using a blade with a lumpy or improperly finished braze or weld and, (8) continuous running of the saw blade when not in use for cutting.

New blades for the standard 14 inch Band Saw are 93½ inches long. The adjustment will accommodate blades up to a maximum length of 94 inches and to a minimum length of 91½ inches. When equipped with the No. 28-984 Height Attachment, new blades should be 105 inches long; maximum and minimum lengths are 106 and 103½ inches.

OPERATING THE BAND SAW

Before starting the machine, see that all adjustments are properly made and the guards are in place. Turn the pulley by hand to make sure that everything is correct BEFORE turning on the power.

Keep the top guide down close to the work at all times. Do not force the material against the blade too hard. Light contact with the blade will permit easier following of the line and prevent undue friction, heating and work-hardening of the blade at its back edge.

KEEP THE SAW BLADE SHARP and you will find that very little forward pressure is required for average cutting. Move the stock against the blade steadily and no faster than will give an easy cutting movement.

Avoid twisting the blade by trying to turn sharp corners. Remember you must saw around corners.

CUTTING CURVES

When cutting curves, turn the stock carefully so that the blade may follow without being twisted. If a curve is so abrupt that it is necessary to repeatedly back up and cut a new kerf, either a narrow blade is needed or a blade with more set is required. The more set a blade has, the easier it will allow the stock to be turned, but the cut is usually rougher than where a medium amount of set is used.

In withdrawing the piece being cut, in order to change the cut, or for any other reason, the operator must be careful that he does not accidentally draw the blade off the wheels. In most cases it is easier and safer to turn the stock and saw out through the waste material, rather than try to withdraw the stock from the blade.

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Authorized Stationary 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.

ACCESSORIES

No. 41-032 Motor Pulley, 2 $\frac{3}{4}$ " diameter, $\frac{1}{2}$ " bore. $\frac{1}{2}$ lb.

No. 41-033 Motor Pulley, 2 $\frac{3}{4}$ " diameter, $\frac{5}{8}$ " bore. $\frac{1}{2}$ lb.

No. 41-034 Motor Pulley, 2 $\frac{3}{4}$ " diameter, $\frac{3}{4}$ " bore. $\frac{1}{2}$ lb.

No. 49-173 V-Belt, 57 $\frac{1}{8}$ " O.C.

No. 50-122 Enclosed Steel Stand. Includes 50-139 basic stand, 50-136 motor plate and 50-135 belt guard. 54 lbs.

No. 40-882 (old 882) Lamp Attachment
—Uses standard 15 or 25-watt bulb (not included). Includes mounting bracket, shade, socket and 115 V 8-foot cord with plug. 1 $\frac{1}{2}$ lbs.

Height Attachment—Increases capacity of 14" Band Saw from 6 $\frac{1}{4}$ " to 12 $\frac{1}{4}$ " under the guide. Add at any time. Needs 105" blades.



No. 28-984 (old 894) Height Attachment with cast block, dowels and bolt, extension front blade guard, wood back blade guard. 12 lbs.

No. 34-895 Sliding Jig—For straight and angle operations. Has $\frac{3}{8}$ x $\frac{3}{4}$ x 18" guide bar and pivoting work support body with pointer and calibrations reading through 120° swing. Adjustable, positive stops at 90° and 45° positions. 4 lbs.

No. 34-568 (old 865) Clamp Attachment for Sliding Jig—With clamp bar, two sliding clamp screws, and front and rear posts. 1 $\frac{1}{2}$ " lbs.

No. 34-873 (old 873) Extra Clamp Screw and Block—For Clamp Attachment. $\frac{1}{2}$ lb.

WOOD CUTTING BAND SAW BLADES

For 14" Band Saws: 93 $\frac{1}{2}$ " blades are standard; 105" blades used with 28-984 Height Attachment. $\frac{1}{2}$ lb.

Number (93 $\frac{1}{2}$ " Long)	Number (105" Long)	Width	Min. Cut. Rad.	Teeth per In.
28-032 (old 1032)	28-045 (old 1045)	$\frac{1}{8}$ "	$\frac{1}{4}$ "	6
28-033 (old 1033)	28-046 (old 1046)	$\frac{3}{16}$ "	$\frac{5}{16}$ "	6
28-034 (old 1034)	28-047 (old 1047)	$\frac{1}{4}$ "	$\frac{3}{8}$ "	6
28-036 (old 1036)	28-048 (old 1048)	$\frac{3}{8}$ "	1 $\frac{7}{16}$ "	5
28-038 (old 1038)	28-050 (old 1050)	$\frac{1}{2}$ "	2 $\frac{1}{2}$ "	5
28-040 (old 1040)	28-052 (old 1052)	$\frac{3}{4}$ "	5 $\frac{7}{16}$ "	4

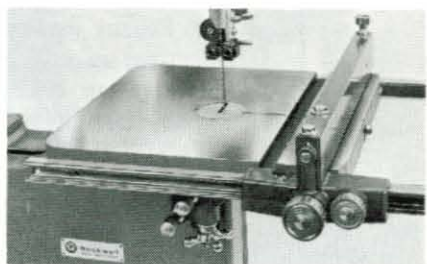


No. 28-810 Sanding Attachment—Includes flat and curved platens with guides and mounting brackets. 1 lb.



No. 28-836 Sanding Belt—Garnet type, five, No. 80 grit, fine, $\frac{1}{2}$ " wide, 91" long. 1 lb.

No. 28-837 Sanding Belt—Garnet type, five, No. 40 grit, medium, $\frac{1}{2}$ " wide, 91" long. 1 lb.



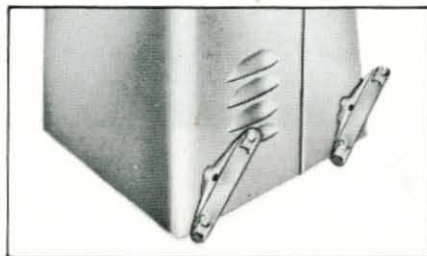
No. 28-843 Rip Fence—With 18" guide bars and mounting screws. 13 lbs.

No. 28-845 Rip Fence—With 32" guide bars and mounting screws. 10 lbs.

RETRACTABLE CASTER SETS

Make your Rockwell Delta Band Saws mobile and increase their usefulness to your operation.

With Delta Retractable Casters on your machines, you can easily wheel them about your plant or shop—right to the job site. 13 lbs.



No. 50-111 Retractable Caster Set—For 50-122 enclosed steel stand. Has built-in leveling screws. 13 lbs.

A decorative border with a repeating floral pattern surrounds the central text box.

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.