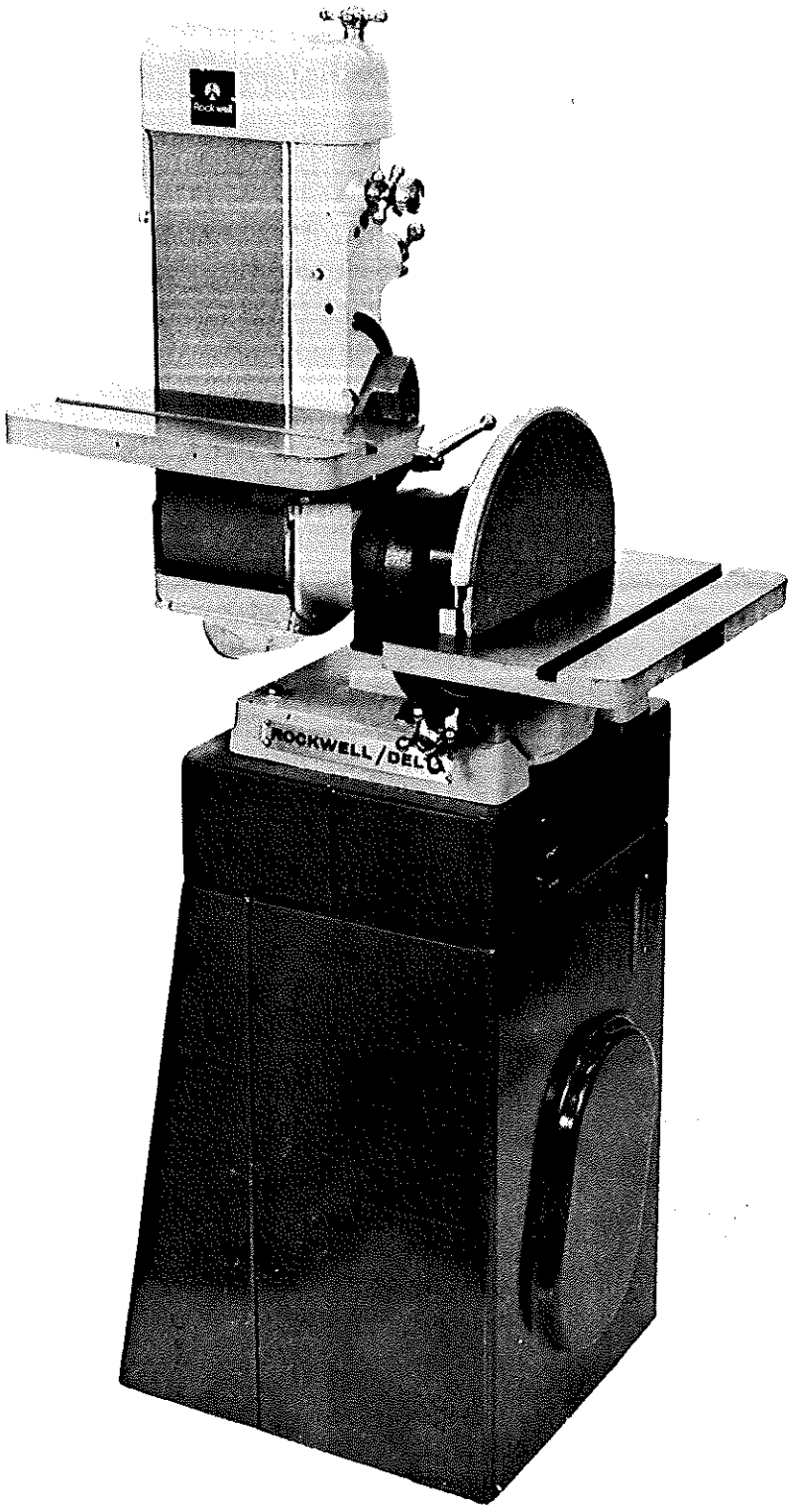
6" Belt and 12" Disc Abrasive Finishing Machine

Instruction manual



6" BELT AND 12" DISC ABRASIVE FINISHING MACHINE SHOWN WITH ENCLOSED STEEL STAND AND ELECTRICALS

Rockwell

Part No. 420-01-651-0004

Dated 3-20-80

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
TOOL GROUP
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 accomodate 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. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.

7. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.

8. MAKE WORKSHOP CHILDPROOF - 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 for which it was not designed.

11. WEAR PROPER APPAREL. No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip foot wear is recommended. Wear protective hair covering to contain long hair.

12. USE SAFETY GLASSES. Also use face of dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses; they are NOT safety glasses.

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 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, etc.

17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause hazards.

18. AVOID ACCIDENTAL STARTING. Make sure switch is in "OFF" position before plugging in power 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 carefully checked to ensure 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.

21. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

22. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

23. DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol or any medication.

24. MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY while motor is being mounted, connected or reconnected.

ADDITIONAL SAFETY RULES FOR ABRASIVE FINISHING MACHINES

1. IF YOU ARE NOT throughly familiar with the operation of Abrasive Finishing Machines, obtain advice from your supervisor, instructor or other qualified person.

2. MAINTAIN minimum clearance between the table and sanding belt or disc.

3. MAKE SURE abrasive belt is tracking correctly and properly installed on machine.

4. MAKE SURE the abrasive belt is not torn or loose.

5. ALWAYS keep hands away from abrasive surfaces.

6. ALWAYS use a backstop when using sanding arm in a horizontal position.

7. NEVER wear gloves or hold the work with a rag when sanding.

8. SAND with the grain of the wood.

9. ALWAYS sand on downward side of disc when using this disc finishing machine, so that the work is held securely on the table.

10. DISCONNECT machine from power source when making repairs.

11. SHUT OFF power and do not leave until the machine has come to a complete stop and the work area is clean.

IMPORTANT

IMPORTANT: YOUR MACHINE IS SHIPPED WITHOUT BELT TENSION APPLIED TO THE SANDING BELT. BEFORE OPERATING THE MACHINE IT IS VERY IMPORTANT THAT THE SANDING BELT IS PROPERLY ADJUSTED FOR CORRECT BELT TENSION AND IS TRACKING PROPERLY AS EXPLAINED IN THE SECTION "ADJUSTING TENSION AND TRACKING OF THE SANDING BELT."

UNPACKING

Carefully unpack the machine, stand and all loose items from the cartons. remove the protective coating from machined surfaces of the machine. This coating may be removed with a soft cloth mositened 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.

STAND AND ELECTRICALS

If you purchased your machine complete with stand and electricals, factory mounted and wired, the stand is shipped as shown in Figs. 2 and 3. The motor plate (A), motor (B), and switch (C) are completely assembled to the stand. The necessary wiring from the motor to the switch has been completed.

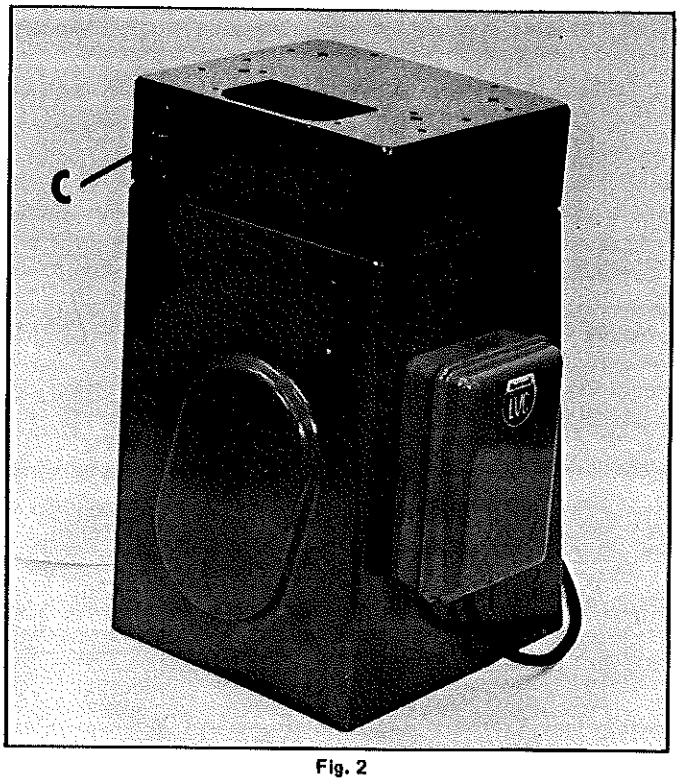


Fig. 2

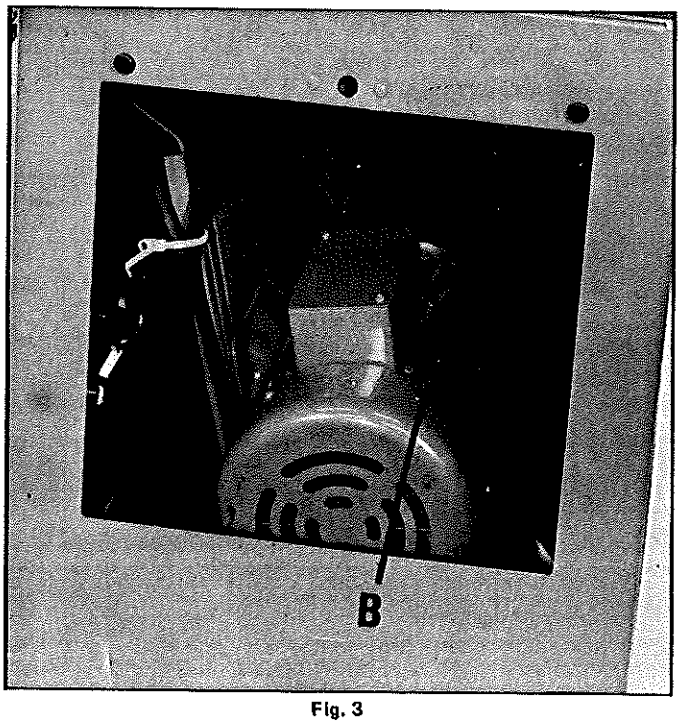


Fig. 3

ASSEMBLING MACHINE TO STAND

Place the machine on the stand with the arbor pulley over the opening (B) Fig. 4, on the top of the stand. The drive belt is shipped on the arbor pulley of the machine and must be inserted down through the opening (B). The disc end of the machine is to be positioned on the same end of the stand that the switch (C) Fig. 4, is located. Fasten the base of the machine to the four threaded holes (D) Fig. 4, on the top of the stand using the four 3/8 – 16 x 3" long hex head screws and the four flat washers supplied.

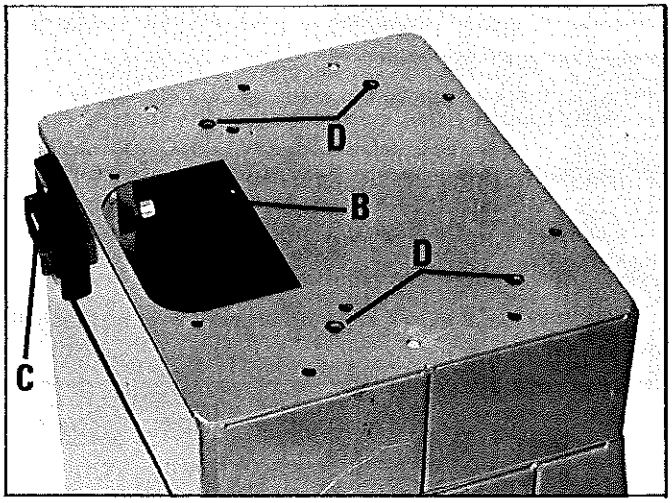


Fig. 4

ASSEMBLING BELT TO MOTOR AND ARBOR PULLEYS, ALIGNING PULLEYS, AND ADJUSTING BELT TENSION

Assemble the belt (A) Fig. 5, to the arbor pulley and motor pulley. Loosen the nuts and bolts that fasten the motor (B) to the motor plate (C) and move the motor up or down on the motor plate unitl correct belt tension is obtained. Correct tension is obtained when there is approximately 1" deflection in the center span of the belt (A) Fig. 5, using light finger pressure. Visually align the motor pulley to the arbor pulley. If necessary the motor pulley can be moved in or out on the motor shaft or the complete motor plate assembly (C) Fig. 5, can be shifted to bring the pulleys into alignment.

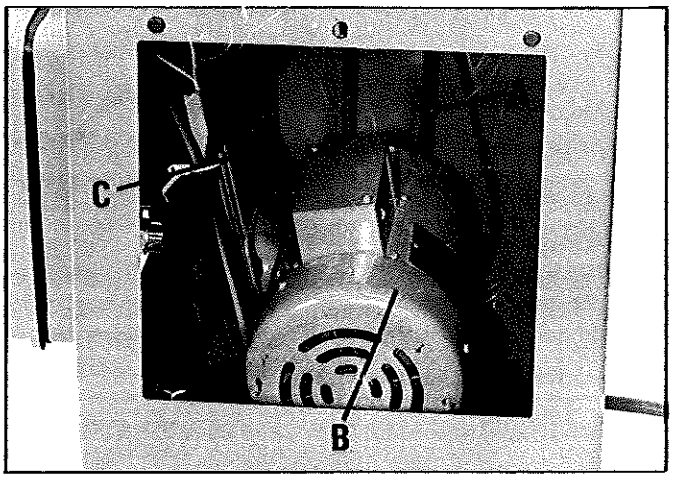


Fig. 5

ELECTRICAL CONNECTIONS

IMPORTANT: Make sure the electrical characterisitics are the same between the motor nameplate and the power source and make sure the power circuit the machine will be used on is properly fused and that wire size is correct.

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

SINGLE PHASE INSTALLATION

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. 6.

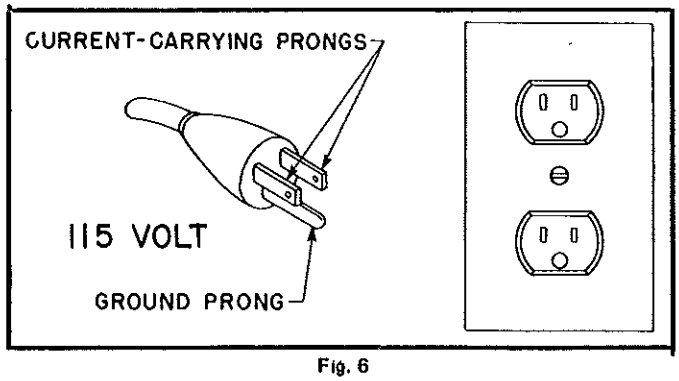


Fig. 6

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. 7.

When the three-prong plug on your machine 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.

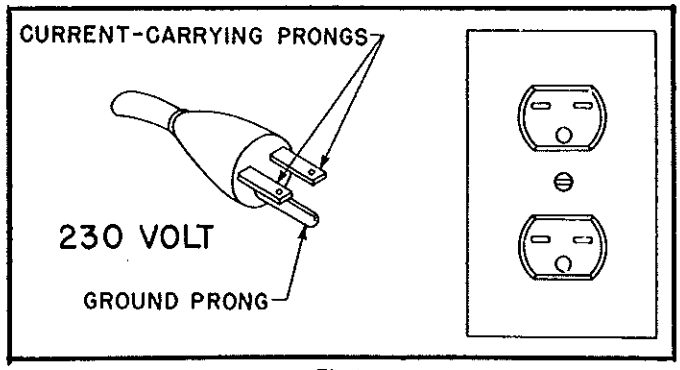


Fig. 7

THREE PHASE INSTALLATION

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

ADJUSTING TENSION AND TRACKING OF THE SANDING BELT

Your machine is shipped without belt tension applied to the sanding belt. Before operating the machine it is very important that the sanding belt is properly adjusted for correct belt tension and is tracking properly, as follows:

1. Remove lock knob (A) and top cover (B) Fig. 8.

2. Turn the belt tension handle (C) Fig. 9, clockwise to increase belt tension. Correct tension is determined by two things:
   (1) The belt should be flat on the platen.
   (2) The belt should be sufficiently tensioned to prevent slipping on very heavy work. For ordinary work, a tension just sufficient to take the curl out of the belt is recommended.

3. Loosen tracking lock knob (D) Fig. 10, and while rotating the belt (F) by hand, as shown, tighten or loosen tracking knob (E) until the belt is running true on the pulleys.

4. Then jog the machine on and off to check further if the belt is tracking properly. If the belt is leading to one side or the other, very gently turn the tracking knob (E) Fig. 10, clockwise to move the belt toward the adjusting screw and counterclockwise to move the belt away from the adjusting screw while jogging the machine on and off.

5. A final adjustment can be made with the motor running. THIS ADJUSTMENT IS USUALLY VERY SLIGHT. After the belt is tracking properly, tighten the lock knob (D) Fig. 10, being careful the adjusting screw (E) does not turn.

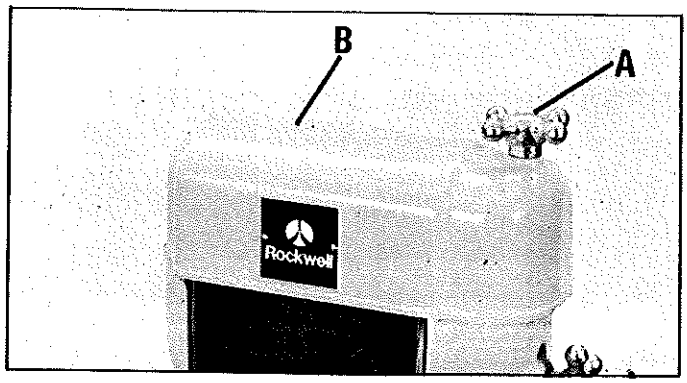


Fig. 8

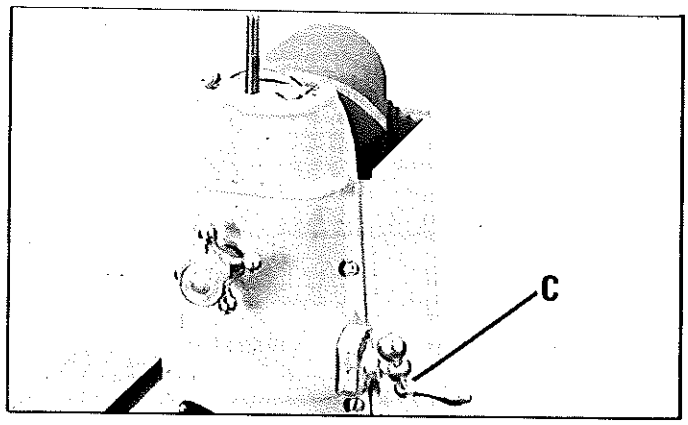


Fig. 9

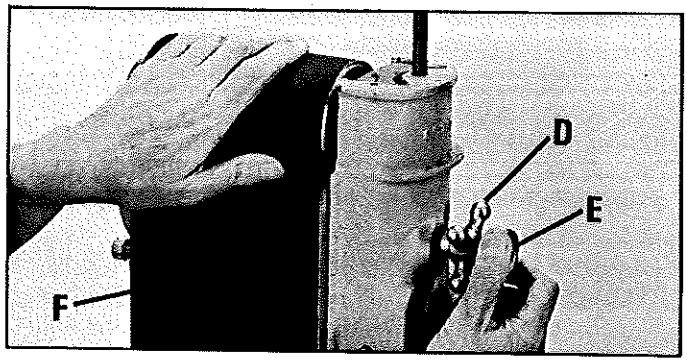


Fig. 10

INSTALLING ABRASIVE DISC TO DISC SANDER

We recommend the use of the Cat. No. 49-503 Disc Adhesive when applying the abrasive disc to the disc sander. This disc adhesive is a stick glue which melts under heat generated by friction, and then quickly hardens. It will not dry out or cake on the sanding disc. Abrasive sheets can be applied in a few seconds as follows:

1. The disc adhesive is applied by holding the stick of adhesive against the disc as it is turning, as shown in Fig. 11. The adhesive should be at least 1/16 of an inch thick on the disc.

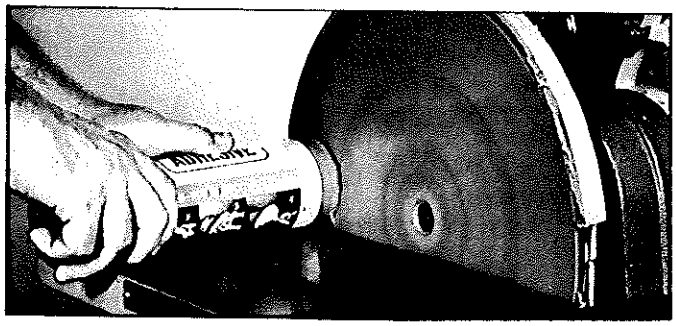


Fig. 11

2. Apply the adhesive also to the back of the abrasive disc by laying the disc on a flat surface and rubbing the adhesive onto the back of the disc.

3. The sheet is then placed firmly onto the disc, as shown in Fig. 12.

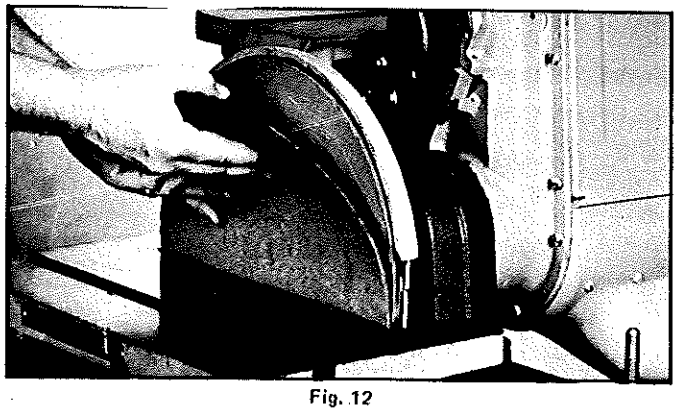


Fig. 12

OPERATING AND ADJUSTING BELT SANDER TABLE

To tilt the table, loosen the table tilting handle (A) Fig.13, move the table to the desired angle, and lock the table tilting handle. The table tilting handle can be repositioned by loosening the screw (B) four or five turns, pull out the table tilting handle (A) and reposition it on the serrated nut located underneath the handle. Positive table stops are provided at 90^{0} and 45^{0}. To adjust the stops, proceed as follows:

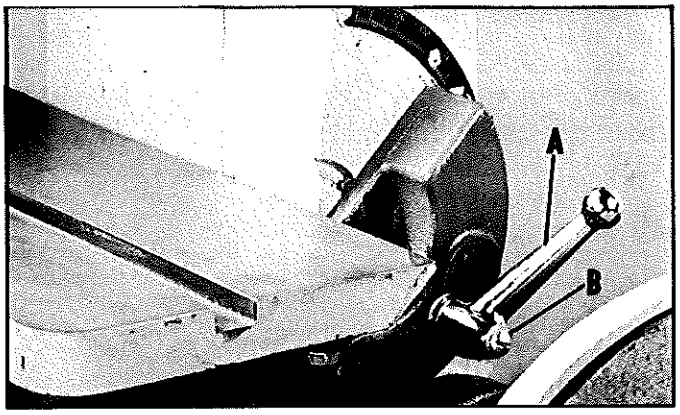


Fig. 13

1. Loosen the table tilting handle (A) and lift the table up to approximately 10^{0}, as shown in Fig. 14.

2. Flip out the stop bracket (B) and lower the table until the adjustable screw (C) contacts the stop bracket (B) Fig. 14.

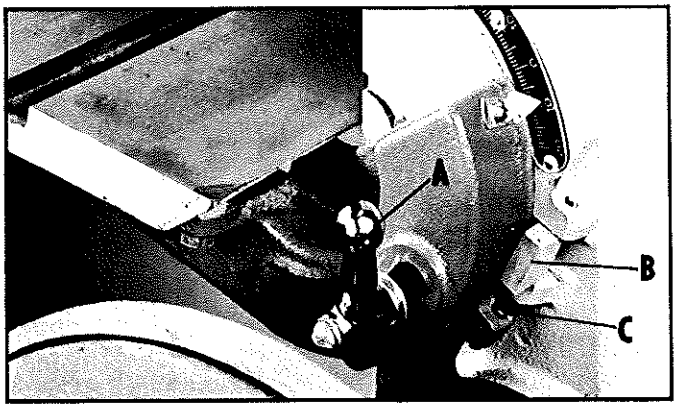


Fig. 14

3. Place a square on the table with one end of the square against the platen.

4. Loosen lock screw (A) Fig. 15, and turn the adjusting screw (B) until the table is 90^{0} to the platen. Then tighten lock screw (A) and adjust the pointer (C) to the 0^{0} mark on the scale.

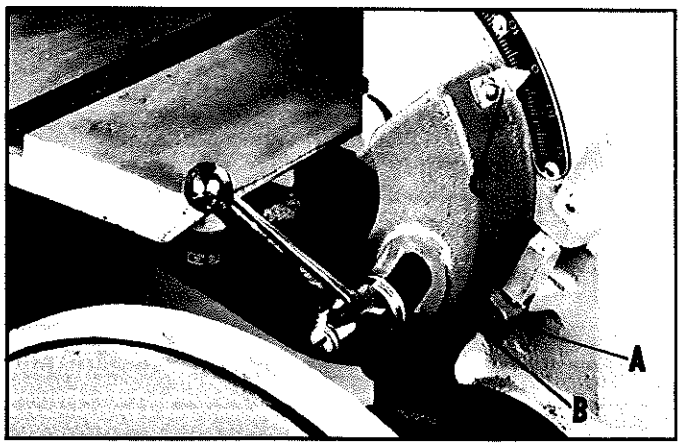


Fig. 15

5. The same procedure is followed when adjusting the table to stop at the 45^{0} position as shown in Fig. 16.

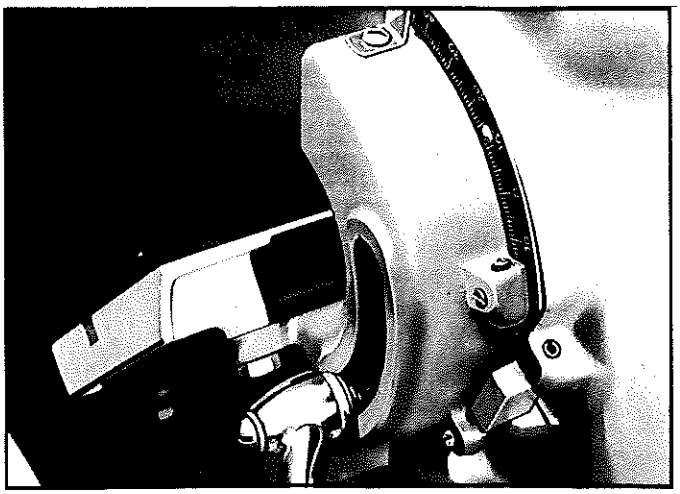


Fig. 16

CHANGING POSITION OF SANDING ARM

The sanding arm can be positioned in the vertical or horizontal position, or at any desired angle in between as follows:

1. Loosen two bolts (A) Fig. 17, move the sanding arm to the desired position, and lock the two bolts. CAUTION: THE SANDING ARM SHOULD NEVER BE REPOSITIONED WHILE THE MACHINE IS RUNNING.

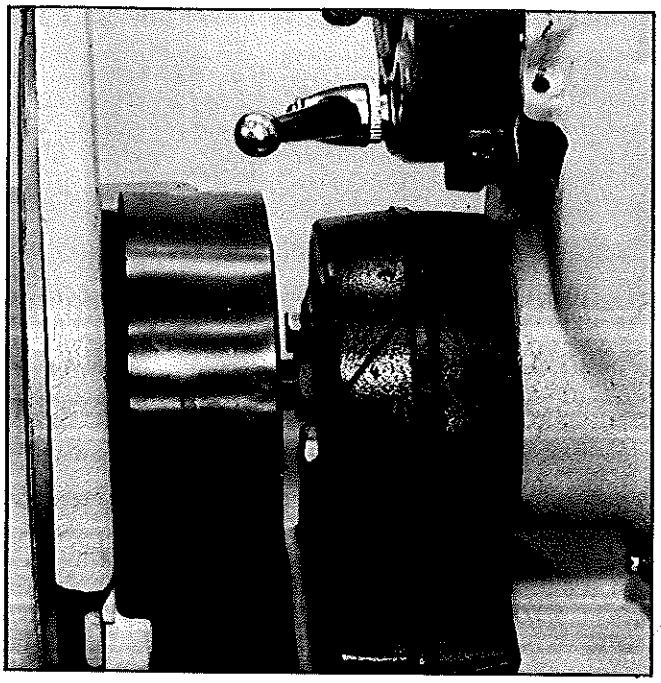


Fig. 17

2. When moving the sanding arm to the horizontal position, the arm will contact the stop (A) as shown in Fig. 18. IMPORTANT: BEFORE STARTING THE MACHINE AFTER REPOSITIONING THE SANDING ARM ALWAYS CHECK THE TRACKING OF THE BELT.

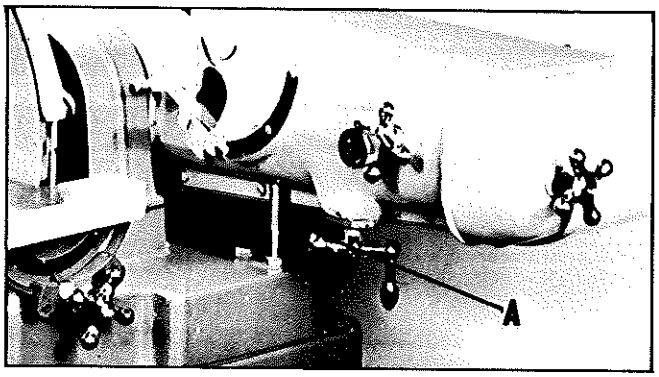


Fig. 18

ADJUSTING UPPER HALF OF DISC SANDER GUARD AND DUST DEFLECTOR

The upper half of the disc sander guard and dust deflector should be adjusted so the top lip of the guard is as close as possible but does not extend beyond the face of the sanding disc and interfere with the workpiece.

1. To tilt the guard forward at the top, slightly loosen the four screws that attach the guard to the disc sander (two of the screws are shown at (A) Fig. 16).

2. Loosen screw (C) and tighten screw (B) Fig. 16, to adjust the guard to the desired forward position at the top. NOTE: The adjusting screws at the opposite end of the disc sander must also be adjusted.

3. To tilt the top of the guard to the rear, follow the same procedure as above, except loosen screw (B) and tighten screw (C) Fig. 16.

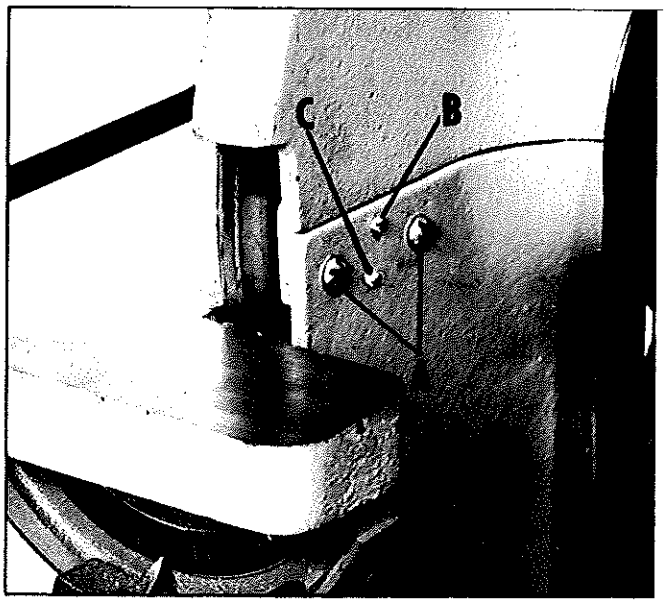


Fig. 19

ADJUSTING THE DISC SANDER TABLE

The table is set at the factory so that the edge of the table is approximately 3/32" away from the abrasive disc. This is done to provide enough clearance for the table when it is tilted to 45 degrees. If it is ever necessary to move the table away from or closer to the disc, loosen the four screws that hold the table to the trunnions and move the table away from or closer to the disc. If you cannot obtain enough movement of the table with this method, remove the belt guard (A) by removing the two screws, one of which is shown at (B) Fig. 20. Then loosen the two screws (C) Fig. 21, and move the disc (D) in or out on the shaft. Then tighten the two screws (C) Fig. 21. NOTE: After this adjustment is made make sure the miter gage slot is parallel with the disc by following instructions under ADJUSTING MITER GAGE SLOTS PARALLEL WITH BELT AND DISC.

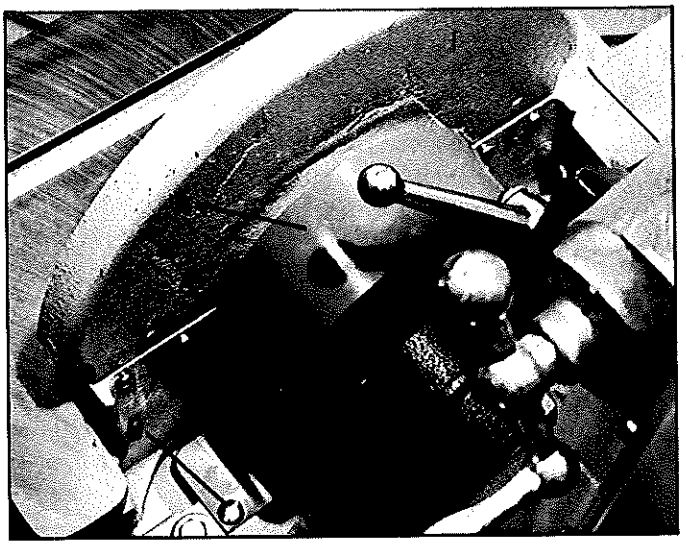


Fig. 20

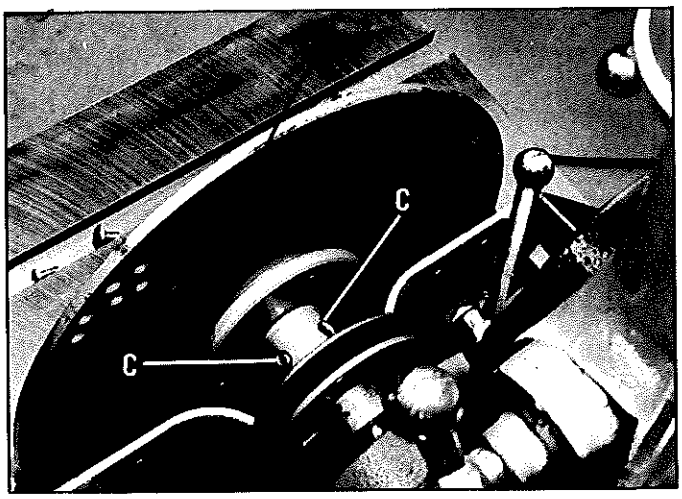


Fig. 21

ADJUSTING TABLE SQUARE WITH SANDING DISC

1. Place an accurate square on the table with one end of the square against the disc, as shown in Fig. 22.

2. Loosen the table locking knobs (A) Fig. 22, which are located on each end of the table and move the table until it is at 90 degrees to the disc. Then tighten the table locking knobs (A).

3. Adjust the pointer (B) Fig. 22, so it points to the "0" mark on the scale.

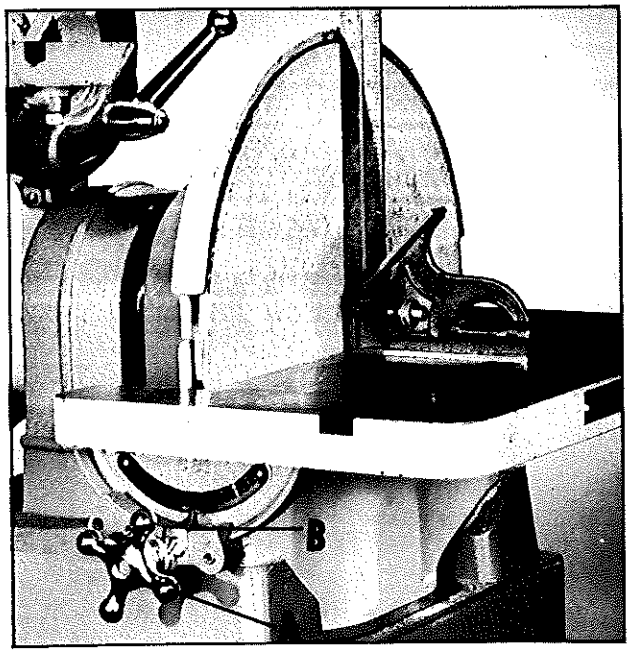


Fig. 22

ADJUSTING MITER GAGE SLOTS PARALLEL WITH THE BELT AND DISC

These adjustments are made at the factory, however, during shipment they may have been disturbed. If an adjustment is necessary, proceed as follows:

BELT SANDER

1. Check to see if the miter gage slot is parallel with the sanding belt by placing a square in the miter gage slot with one end of the square against the belt, as shown in Fig. 23.

2. Slide the square the full width of the belt checking to be sure the distance between the miter gage slot and the belt is the same.

3. If an adjustment is necessary, loosen the three screws that hold the table to the bracket and shift the table until the slot is parallel to the belt. Then tighten the three screws.

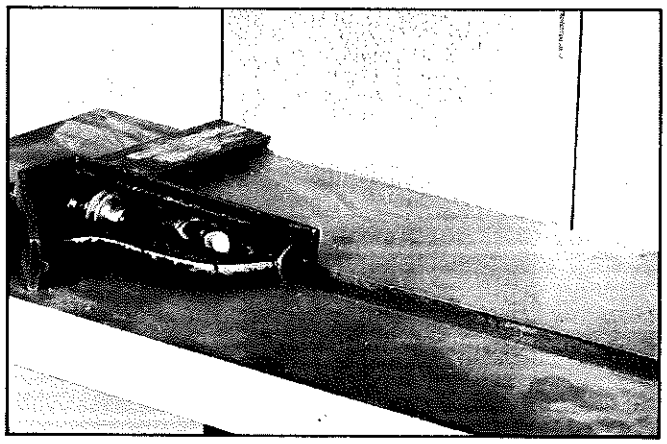


Fig. 23

DISC SANDER

1. Check to see if the miter gage slot is parallel with the sanding disc by placing a square in the miter gage slot with one end of the square against the sanding disc, as shown in Fig. 24.

2. Using a pencil, make a mark on the sanding disc where the square contacts the disc, as shown in Fig. 24.

3. Rotate the sanding disc to the other end of the table and check the distance with the miter gage.

4. If an adjustment is necessary, loosen the four screws that hold the table to the trunnions and adjust the table until the miter gage groove is parallel with the sanding disc. NOTE: When making this adjustment be sure the table locking handles are tightened.

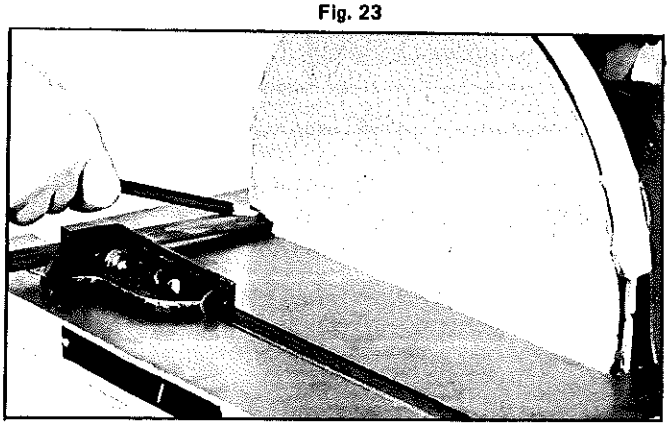


Fig. 24

ADJUSTING THE PLATEN

The platen is set at the factory 1/32 of an inch higher than the crown of the drums. This allows the belt, when properly tensioned, to lay flat on the platen and eliminate stretching and bulging which might occur if the platen is not at the right height.

When using the machine with a loose belt for "strapping", the platen is removed and replaced as follows:

1. Remove the side guard and the idler drum guard.

2. Remove the three screws (A) Fig. 25, that attach the platen to the machine and remove the platen.

3. When replacing the platen, attach it to the machine with the three screws (A) Fig. 25. Do not tighten the three screws.

4. Using a straight edge, as shown in Fig. 25, adjust the platen so it is 1/32" higher than the crown of the drums and tighten the three screws (A).

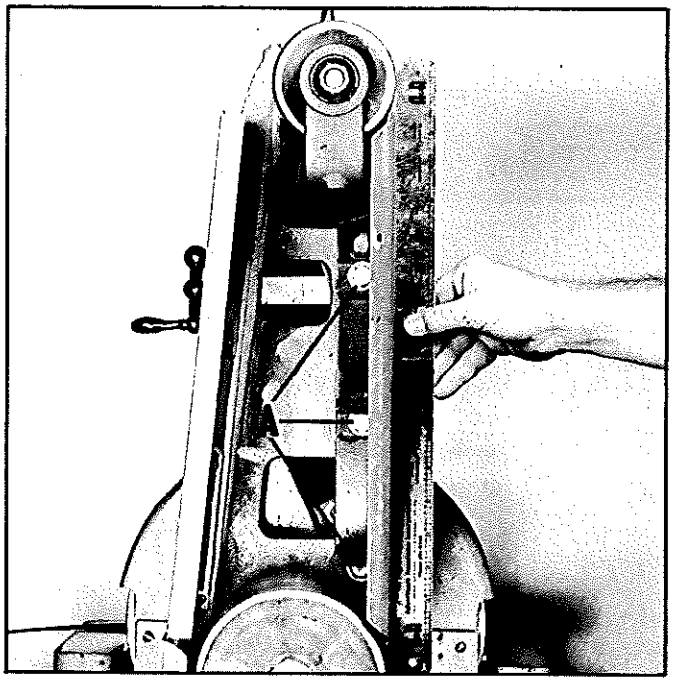


Fig. 25

REMOVING AND REPLACING V-BELT AND PULLEY

1. Remove disc sander table, sanding disc, and belt and pulley guard.

2. Remove upper guard and dust deflector.

3. Make a scribe line on the flange (A) Fig. 26, extending it onto the back of disc wheel (B). When reassembling the flange and disc wheel, make sure the scribe lines coincide with each other.

4. Remove three socket screws (A) Fig. 27, and remove disc wheel (B).

5. Loosen set screws (A) and flange (B) Fig. 28.

6. Remove V-belt from motor pulley.

7. If your machine is not equipped with the disc sander dust chute, the V-belt (A) Fig. 29, can now be removed from the machine by passing it between the shaft (B) and the lower disc guard (C).

If your machine is equipped with the disc sander dust chute it will be necessary to loosen the four screws that hold the machine to the stand and shift the unit on the stand to enable the belt to be manipulated around the dust chute.

8. If the pulley (D) Fig. 29, is to be replaced, the bottom half of the disc sander guard will have to be removed by removing the two screws that attach the bottom guard to the base of the disc sander.

9. Reassemble in the reverse order.

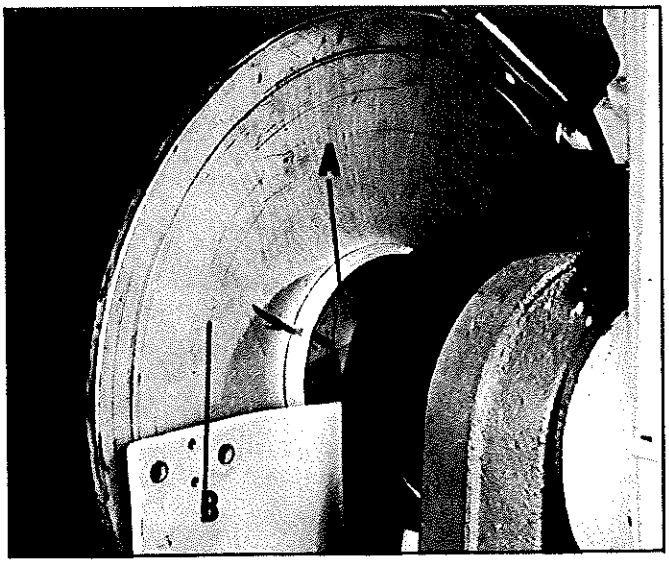


Fig. 26

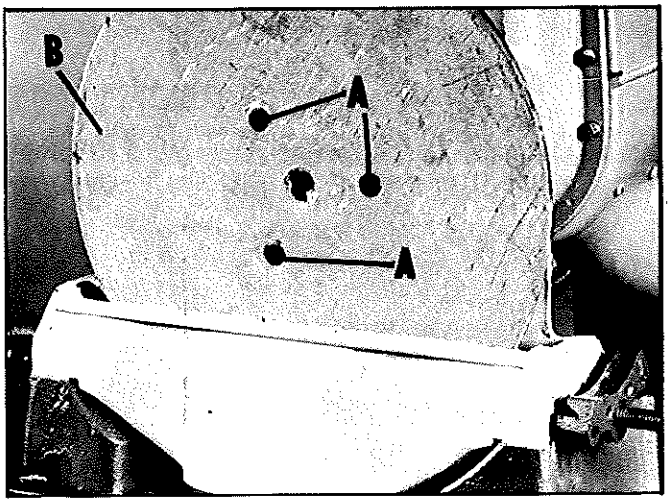


Fig. 27

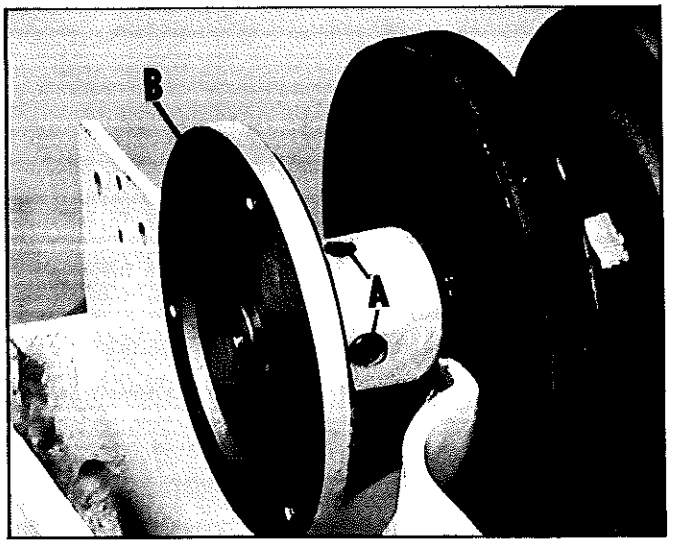


Fig. 28

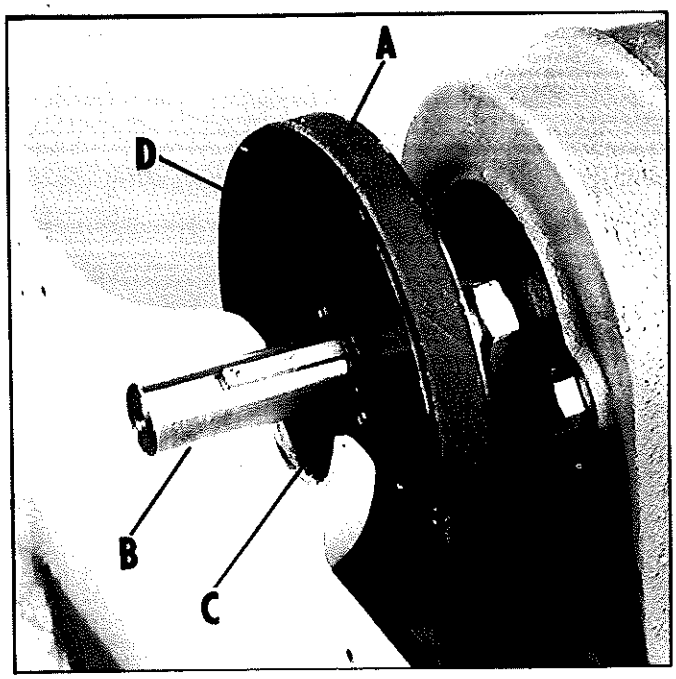


Fig. 29

ABRASIVE BELTS & DISCS — THEIR SELECTION AND USE

We supply a wide range of belts and discs for use on your Belt and Disc Finishing Machine. These belts and discs are recommended for a wide range of work on wood, metals, plastics and other materials. However, when a large amount of production work of one kind is to be done, it is best to call in a coated abrasive specialist for his specific belt recommendations. Certain jobs are best done with a silicon carbide, aluminum oxide, or garnet belt.

All materials may be worked on a dry belt or disc. But for professional quality or for production work a low melting point grease should be used for cooler cutting, better finish, and for longer belt life. Even coarse belts will "load" when grinding aluminum dry, and so a lubricant should always be used for this material. To a varying degree, this is true of other non-ferrous metals like soft brass and zinc.

A grease stick is often applied to the belt or disc to prevent "loading" of the belt on softer materials especially aluminum. When grinding steel or some kinds of plastic, the grease stick is often used to prevent over-heating of the work piece.

Many times a single belt is used for both stock removal and for finish, just by lubricating one half of the belt with light grease for stock removal and the other side or half of the belt with a heavy grease for polishing to bring out a good finish. This can be done only when the parts are very small and need not be moved across the face of the belt.

When an abrasive belt smaller than 6" is desired, the 6" belt can be split. This can be done by turning the belt inside out and with a knife or other sharp instrument cut a slot in the belt at the desired width. Then proceed to tear the belt.

CAUTION: ONLY TEAR THE BELT A FEW INCHES AT A TIME ONE WAY THEN REVERSE THE TEARING ACTION. THIS METHOD WILL REDUCE THE TENDENCY OF THE BELT TO UNRAVEL.

For certain applications, a mist coolant attachment (not supplied by us) will be found to be helpful. If the use of a mist coolant causes the Abrasive Belt to slip on the lower drive pulley, this can be corrected by using a "tire" which can be homemade by wrapping the pulley with a piece of coated abrasive belt. The gri is, of course, turned to the outside and cement should be used sparingly to avoid lumps under the "tire".

ACCESSORIES

No. 50-114 Enclosed Stand. Includes basic stand, motor mounting plate, steel riser block, grommets for portholes and hardware for mounting finishing machine. 55 lbs.

No. 31-401 (old 1401) Tilting Table, with trunnion assembly. 14 lbs.

No. 31-403 (old 1403) Backstop, complete with bracket. 4 lbs.

No. 31-014 (old 1410) Wood Fence, 3¼ x 17½", with brackets. 6 lbs.

No. 31-142 (old 1412) Garnet Belt for wood, 6 x 48", 80 grit, fine. ¼ lb.

No. 31-314 (old 1413) Garnet Belt for wood, 6 x 48", 40 grit, coarse. ¼ lb.

No. 31-404 (old 1414) Al. Oxide Belt for metal, 6 x 48", 100 grit, coarse. ¼ lb.

No. 31-405 (old 1415) Al. Oxide Belt for metal, 6 x 48", 50 grit, coarse. ¼ lb.

No. 31-427 (old 1427) Garnet Disc for wood, 12" diameter, 50 grit, medium (½ doz.) 1¼ lbs.

No. 31-428 (old 1428) Al. Oxide Disc for metal, 12" diameter, 60 grit, medium (½ doz.) 1¼ lbs.

No. 31-034 (old 1430) Disc Assembly with flange and set screws. 11 lbs.

No. 34-895 Auto-Set® Miter Gage. For straight and angle finishing. Has ⅜ x ¾ 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. Accommodates No. 34-568 Clamp Attachment. 3½ lbs.

No. 34-568 Clamp Attachment for 34-895 Miter Gage. 1½ lbs.

No. 41-032 Motor Pulley, 2¾" diameter, ½" bore. 1lb.

No. 41-033 Motor Pulley, 2¾" diameter, ⅝" bore. 1lb.

No. 41-034 Motor Pulley, 2¾" diameter, ¾" bore. 1lb.

400-06-133-0005 59" O.C. Vibration Free belt ½lb.

No. 49-503 Disc Adhesive. 1 lb.

No. 31-856 Attachment Parts for 6" Abrasive Belt Finishing Machine and for Belt Unit of Combination Belt and Disc Finishing Machine when used with Metal Dust Collector 49-826, 49-831 or 49-909. Includes 3 x 22" hose, two hose flanges, two hose clamps and adapter. 7 lbs.

No. 49-225 "T" Connector, for use with 49-255 Vacuum Cleaner. For 2½" hose. Recommended when one vacuum cleaner is used to collect dust from both the belt and disc at the same time. (Order extra 49-229 2½" x 6' hose separately.) 1 lb.

No. 49-589 Attachment Parts for Belt Finishing Machine when used with Vacuum Cleaner 49-255. Includes 49-233 Flange for connecting to 2½" hose. 1½ lbs.

No. 50-140 Attachment Parts for 12" Abrasive Disc Finishing Machine when used with Vacuum Cleaner 49-255. Includes cast iron funnel and flange for connecting to 2½" hose. 8¼ lbs.

No. 50-141 Attachment Parts for 12" Abrasive Disc Finishing Machine when mounted on Enclosed Stand 50-139 with 31-123 Sub-base and for Disc Unit of Combination Belt and Disc Finishing Machine when used with Metal Dust Collectors 49-826, 49-831 or 49-909. Includes cast iron funnel. 13½ lbs.

No. 49-229 Hose, 2½" diameter x 6' long. Same as standard hose supplied with Vacuum cleaner. 4 lbs.

Rockwell International

Industrial Machinery
One Year Limited Warranty

Rockwell will repair or replace, at its expense and at its option, any Rockwell machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer notifies his supplying distributor of the alleged defect within one year from the date of delivery to him of the product and provides Rockwell with reasonable opportunity to verify the defect by inspection. Rockwell may require that electric motors be returned prepaid to the supplying distributor or authorized service center for inspection and repair or replacement. Rockwell will not be responsible for any asserted defect which has resulted from misuse, abuse or repair or alternation made or specifically authorized by anyone other than an authorized Rockwell service facility or representative. Under no circumstances will Rockwell be liable for incidental or consequential damages resulting from defective products. This warranty is Rockwell's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Rockwell.

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Phone: (602) 269-5617

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Los Angeles 90007
2400 South Grand Avenue
Phone: (213) 749-0386

Orange 92668
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Phone: (714) 634-4111

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Phone: (916) 452-0228

Santa Clara 95050
2305 De La Cruz Boulevard
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7465 Raytheon Road
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3039 Teagarden Street
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Van Nuys 91406
16259 Stagg Street
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Tampa 33609
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Phone: (813) 877-9585

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Columbus 43214
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Monroeville Mall Annex
Mall Circle Drive
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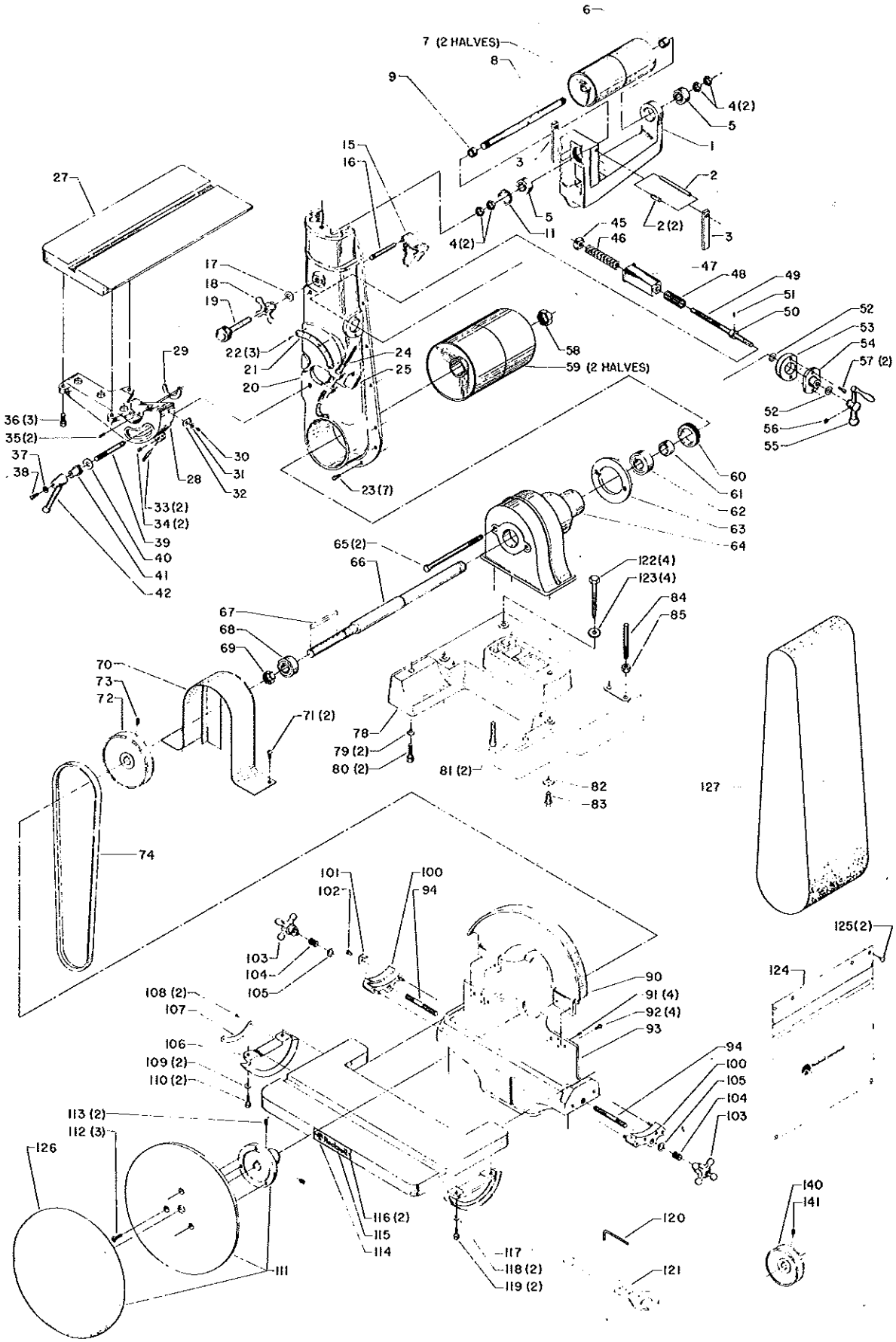
LITHO U. S. A.

Rockwell International

6" BELT AND 12" DISC FINISHING MACHINE

AFM-7A
420-01-651-0005
Revised 4-10-80



Replacement Parts

Ref. No.		Part No.	Description
*		406-03-362-0001	Idler Drum Brkt. Ass'y., Const. of:
1		406-03-014-0001	Idler Drum Brkt.
2		905-04-071-3117	Pin (Early Models)
2	n	905-01-010-5085	5/16 x 3/4" Roll Pin (Current Models)
3		406-03-071-0001	Key
4		902-01-201-2558	Hex Nut
5		920-08-040-5354	Bearing (Early Model - See B)
5		920-04-010-7273	Bearing (Current Model - See B)
6		904-10-031-3805	Spacer (Early Model - See B)
6		406-03-104-0002	Spacer (Current Model - See B)
7		406-03-362-0003	Idler Drum (Pair)
8		406-03-108-0001	Idler Drum Shaft
9		904-10-031-3802	Spacer (Early Model - See B)
9		406-03-104-0001	Spacer (Current Model - See B)
11		902-07-020-7174	Bearing Closure Nut
15		406-03-067-0001	Belt Tension Lever
16		406-03-071-0002	Belt Tension Lever Pin
17		904-07-010-5567	Fiber Washer
18		406-03-100-0001	Star Wheel
19		406-03-412-0005	Belt Adj. Scr. Ass'y.
20		406-03-049-0002	Bracket
21		951-02-010-7822	Tilting Scale
22		901-06-450-2250	#4 x 3/16" Drive Screw
23		901-02-050-0715	1/4 - 20 x 1/2" Fil. Hd. Scr.
24		905-01-010-2705	7/32 x 1-7/8" Roll Pin
25		418-03-088-0001	Stop Lock
*		31-401	Tilting Table Ass'y., Const. of:
27		406-03-091-0002	Tilting Table
28		406-03-396-0001	Trunnion, Incl.:
29		418-03-055-0001	Segment
30		901-02-010-0551	#10 - 32 x 1/4" Rd. Hd. Scr.
31		904-01-010-1609	Washer
32		422-04-075-5002	Pointer
33		901-09-020-6142	1/4 - 28 x 1" St. Scr. (Early Model - See A)
33		901-04-193-1064	Stop Scr. (Current Model - See A)
34		901-04-410-4561	1/4 - 28 x 1/4" Set Scr. (Early Model - See A)
35		905-02-010-6859	Grove Pin
36		901-01-060-0688	3/8 - 24 x 3/4" Hex Hd. Scr.
37		904-01-010-1603	Washer
38		901-02-010-0503	1/4 - 20 x 5/8" Rd. Hd. Scr.
39		901-07-261-3207	Stud
40		904-01-010-1606	Washer
41		902-04-030-1408	Serrated Nut
42		931-04-010-3635	Clamp Handle
*		1086998	Scr. Ass'y., Const. of:
45		902-02-010-1304	7/16 - 14 Sq. Nut
46		928-01-041-3386	Spring
47		406-03-031-0001	Cover
48		928-01-021-3381	Spring
49		1086990	Screw Ass'y., Incl:
50		904-10-031-3804	Collar
51	n	905-01-010-2704	1/8 x 3/4" Roll Pin
52		904-07-011-5711	Fiber Washer
53		1086988	Spacer (Intermediate Model)
54		406-03-020-0001	Cap
55		930-05-991-1643	Ball Crank, Incl.:
56		901-04-190-0225	5/16 - 18 x 1/4" Set Scr.
57		0919783	#10 - 32 x 7/8" Fil. Hd. Scr.
58		902-01-201-2560	Drive Shaft Nut
59		406-01-362-0006	Drive Drum (Pair)
60		406-03-079-0001	Bearing Retainer
61		904-10-031-3806	Spacer (Early Model - See B)
61		406-03-104-0003	Spacer (Current Model - See B)
62		920-08-020-5339	Bearing (Early Model - See B)
62		920-04-020-5360	Bearing (Current Model - See B)
63		406-03-027-0001	Clamp Ring
64		406-03-012-0001	Brg. Housing
65		901-01-060-0639	7/16 - 14 x 5-1/2" Hex Hd. Scr.
66		420-01-106-0002	Drive Shaft (Early Model - See B)
66		420-01-106-0003	Drive Shaft (Current Model - See B)
67		927-03-010-2656	Key
68		920-04-010-7273	Brg. (Early Model - See B)
68		920-04-020-5348	Brg. (Current Model - See B)
69		902-07-030-7171	Bearing Nut
70		420-01-354-0003	Belt Guard
71		901-02-120-7528	1/4 - 20 x 1/2" Truss Hd. Scr.
72		41-084	5" Dia. Arbor Pulley (3/4" Bore), Incl.:
73	n	901-04-150-0206	5/16 - 18 x 5/16" Set Screw
72	n	41-064	4" Dia. Arbor Pulley (3/4" Bore, 31-730 only), Incl.:
73	n	901-04-150-0206	5/16 - 18 x 5/16" Set Screw
74		51-010	V-Belt - 67" O.C.
74	n	400-06-133-0005	V-Belt - 59" O.C., (31-730 only)
78		420-01-005-0002	Base
79		904-02-020-1704	3/8" Lockwasher
80		901-01-060-0642	3/8 x 16 x 1" Hex Hd. Scr.
81		901-03-011-9984	3/8 - 24 x 1-1/2" Soc. Hd. Cap Scr.
82		904-01-010-1606	Washer
83		901-01-060-0688	3/8 - 24 x 3/4" Hex Hd. Scr.
84		952-01-031-3260	Stop Pin
85		902-01-201-2579	7/16 - 14 Hex Nut
90		416-02-054-0001	Upper Guard
91		901-04-121-3603	#8-32 x 5/16 Hdless Set Scr.
92		901-02-010-0560	#10-32 x 7/16 Rd. Hd. Scr.
93		416-02-054-0002	Lower Guard
94		901-07-261-3212	Stud
100		416-02-327-0002	Clamp w/pins
101		420-01-075-0001	Pointer
102		901-02-010-0502	1/4 - 20 x 1/4" Rd. Hd. Scr.
103		931-03-011-4097	Star Wheel
104		928-01-021-4125	Coil Spring
105		904-01-031-2925	Washer
*		416-02-396-0001	Trunnion Ass'y., Const. of:
106		416-02-095-0001	Trunnion
107		951-02-010-7820	Tilting Scale
108		901-06-450-2252	#2 x 3/16" Drive Scr.
109		904-01-010-1603	Washer
110		901-01-060-0612	1/4 - 20 x 5/8" Hex Hd. Scr.
111		31-034	Disk Ass'y., Incl.:
112		901-03-030-0761	1/4 - 20 x 1/2" Hex Soc. Flt. Hd. Scr.
113		901-04-190-0201	5/16 - 18 x 5/16" Set Screw
114		416-02-091-0001	Table
115	n	960-02-012-1420	Nameplate
116		901-06-450-2250	#4 x 3/16" Drive Scr.
117		416-02-095-0001	Trunnion
118		904-01-010-1603	Washer
119		901-01-060-0612	1/4 - 20 x 5/8" Hex Hd. Scr.
120		48245	5/16" Hex Wrench (Early Models Only)
121		43-520	1-1/16" Open End and 5/8" Hex Box Wrench (Early Models Only)
122	n	901-01-060-0645	3/8 - 16 x 3" Hex Hd. Scr.
123	n	904-01-010-1606	3/8" Washer
124	n	400-06-603-0001	Envelope
125	n	400-06-079-0001	Retainer
126			Garnet Disc (50 Grit)
127			Garnet Belt (80 Grit)

ACCESSORY BELTS AND DISCS

126	31-427	Garnet Disc (50 Grit) Pkg. of 6
126	31-428	Alum. Oxide Disc (60 Grit) Pkg. of 6
127	31-142	Garnet Belt (80 Grit)
127	31-314	Garnet Belt (40 Grit)
127	31-404	Alum. Oxide Belt (100 Grit)
127	31-405	Alum. Oxide Belt (50 Grit)
**	49-503	Disc Adhesive

INCLUDED WITH STAND AND ELECTRICALS

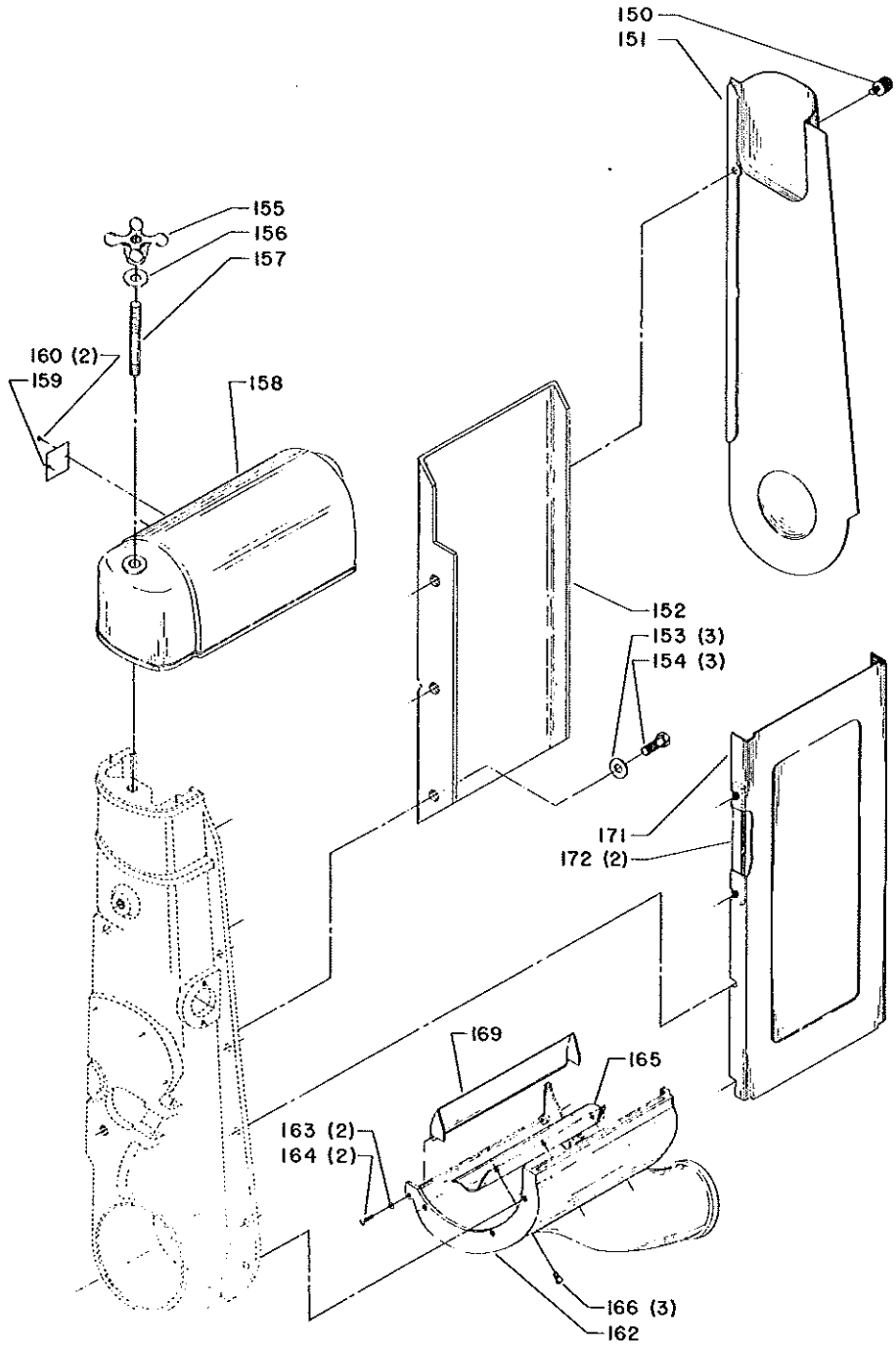
140		41-052	3-1/2" Dia. Mtr. Pulley (1/2" Bore), Incl.:
141		901-04-150-0206	5/16 - 18 x 5/16" Set Scr.
140		41-053	3-1/2" Dia. Mtr. Pulley (5/8" Bore), Incl.:
141		901-04-150-0206	5/16 - 18 x 5/16" Set Scr.
140		41-054	3-1/2" Dia. Mtr. Pulley (3/4" Bore), Incl.:
141		901-04-150-0206	5/16 - 18 x 5/16" Set Scr.
140	n	41-033	2-3/4" Dia. Mtr. Pulley (5/8" Bore, 31-730 only), Incl.:
141	n	901-04-150-0206	5/16 - 18 x 5/16" Set Scr.

* Not Shown Assembled
** Not Shown

SERVICE NOTES

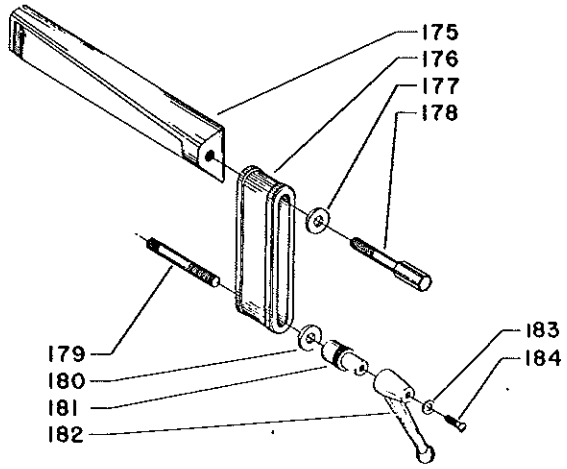
"A" Early Models used set screw to lock stop screw. Current Models have self-locking stop screw.

"B" Early Models built prior to 10-75 used bearings with extended inner race. Current Models built since 10-75 use bearings with flush inner races. Early and late model bearings spacers and drive shafts are not interchangeable on an individual basis. They may, however, be replaced as a set on either the drive or idler drums.

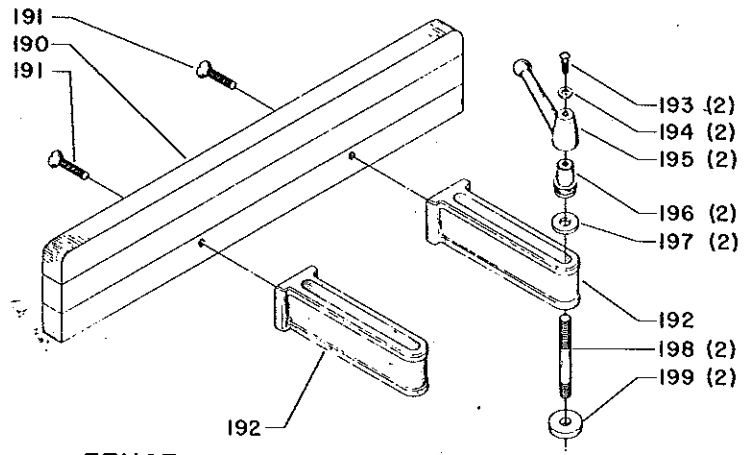


Replacement Parts

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
150	901-04-340-7605	Spec. Thumb Screw	162	406-03-054-0002	Dr. Drum Guard
151	406-03-054-0003	Side Guard	163	904-02-010-1726	#8 Lockwasher
152	406-03-391-0003	Platen	164	901-02-010-0553	6-32 x 1/2" Rd. Hd. Scr.
153	904-01-010-1605	Washer	165	406-03-036-0002	Dust Deflector
154	901-01-060-0640	3/8-16 x 3/4" Hex Hd. Scr.	166	901-02-010-7562	#10-32 x 5/16" Rd. Hd. Scr.
155	931-03-011-4097	Star Wheel	169	406-03-036-0001	Deflector Plate Guard
156	904-01-031-2925	Washer	171	406-03-054-0004	Bottom Guard
157	901-07-261-3207	Stud	172	406-03-004-0001	Clamp Bar
158	406-03-354-0013	Idler Drum Guard, Incl:			
159 n	1088275	Nameplate			
160	901-06-450-2250	Drive Screw			



BACKSTOP



FENCE

Replacement Parts

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
		ACCESSORIES - NOT FURNISHED WITH BASIC MACHINE			
*	31-403	Backstop Ass'y., Const. of:	*	31-014	Fence Ass'y., Const. of:
175	406-03-088-0001	Backstop	190 n	406-03-043-0004	Fence
176	406-03-014-0001	Link for Backstop	191	901-02-030-0409	5/16-18 x 1-1/4" Fil. Hd. Scr.
177	904-10-031-2097	Special Steel Washer	192	406-03-014-0002	Fence Bracket
178	901-09-070-6124	Special Clamp Screw	193	901-02-010-0503	1/4-20 x 5/8" Rd. Hd. Scr.
179	901-07-261-3207	7/16-14 x 2-13/16" Stud	194	904-01-010-1603	Washer
180	904-10-031-2097	Special Steel Washer	195	931-04-010-3635	Clamp Handle
181	432-01-027-0004	Serrated Nut	196	902-04-030-1408	Serrated Nut
182	931-04-010-3635	Clamp Handle	197	904-10-031-2097	Special Steel Washer
183	904-01-010-1603	Washer	198	901-07-261-3207	7/16-14 x 2-13/16" Stud
184	901-02-010-0503	1/4-20 x 5/8" Rd. Hd. Scr.	199	904-10-031-3803	29/64" Special Washer
			**	34-568	Cl. Attach. for Miter Gage
			**	34-895	Miter Gage

* Not Shown Assembled
** Not Shown

LITHO U. S. A.