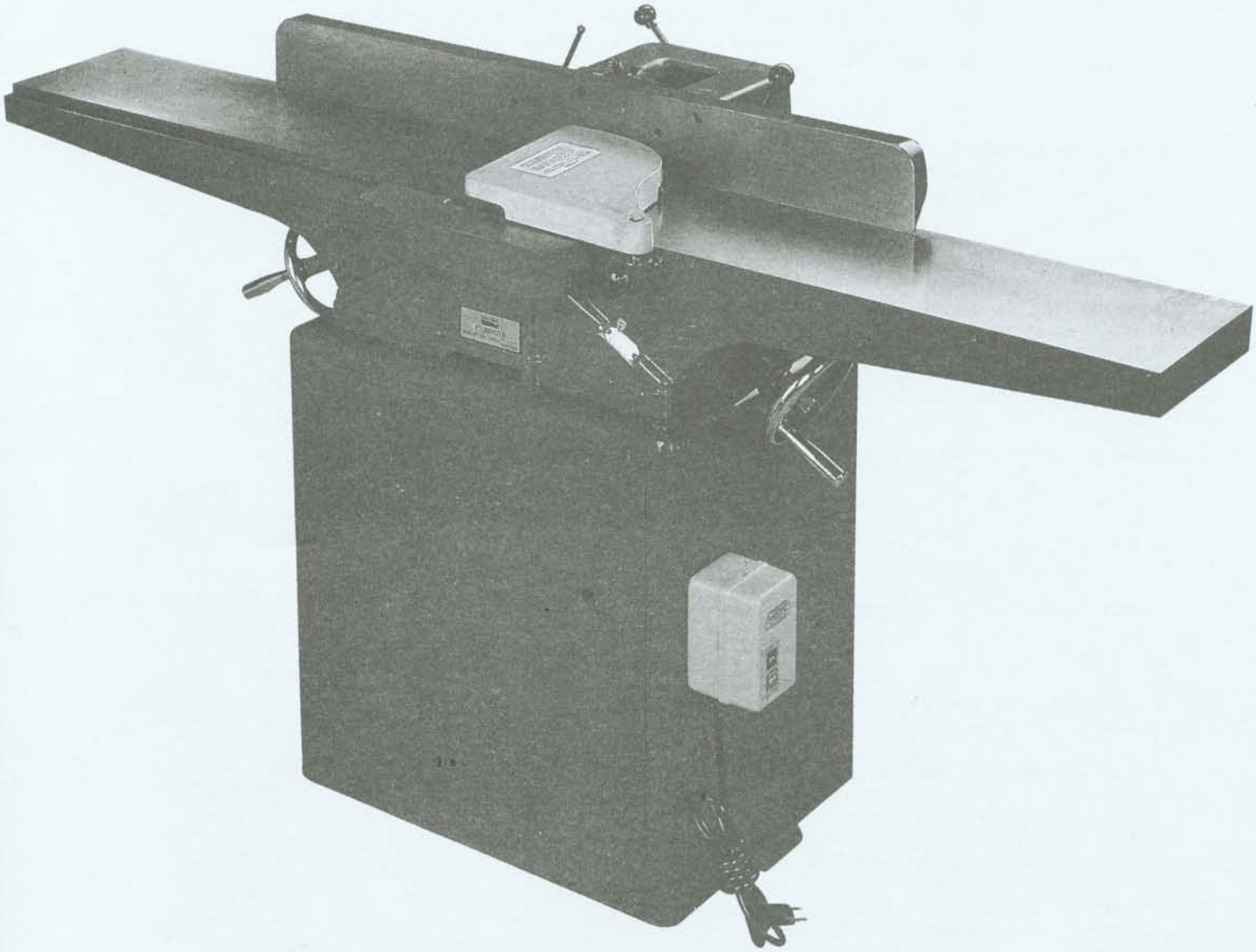
8" JOINTER



8" JOINTER SHOWN WITH STEEL STAND AND ELECTRICALS

INTRODUCTION

Your new 8" Long Bed Jointer is a precision-engineered tool incorporating all the advanced features that have been asked for by cabinet makers, carpenters, maintenance men, pattern makers, school shop instructors, farmers and dozens of other users. It is designed to satisfy the great demand for a high quality jointer at a relatively low cost.

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. We 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 us and we have advised you.

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 JOINTERS

1. **KEEP** cutterhead sharp and free of all rust and pitch.

2. **ALWAYS** use a push block when jointing stock that does not give a reasonable distance of safety for your hands.

3. **NEVER** pass hands directly over cutterhead.

4. **ALWAYS** make sure exposed cutterhead behind the fence is guarded, especially when jointing near the edge.

5. **DO NOT** perform jointing operations on material shorter than 8 inches, narrower than 3/4 inch, or less than 1/4 inch thick.

6. **DO NOT** perform planing operations on material shorter than 8 inches, narrower than 3/4 inch, wider than 4 inches, or thinner than 1/2 inch.

7. **MAINTAIN** the proper relationship of infeed and outfeed table surfaces and cutterhead knife path.

8. **SUPPORT** the work pier adequately at all times during operation; maintain control of the work at all times.

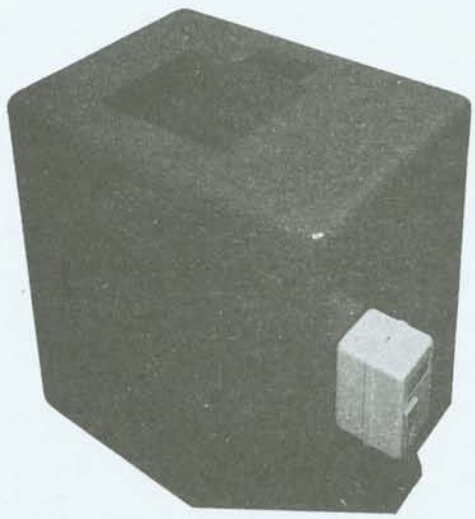
9. **DO NOT** back the work toward the infeed table.

10. **DO NOT** attempt to perform an abnormal or little - used operation without study and the use of adequate hold-down/push blocks, jigs, fixture, stops, etc.

11 **DO NOT** make cuts deeper than 1/8" in a single pass. On cuts more than 1½" wide, adjust depth of cut to 1/16" or less to avoid overloading machine and to minimize chance of kick-back.

UNPACKING AND CLEANING

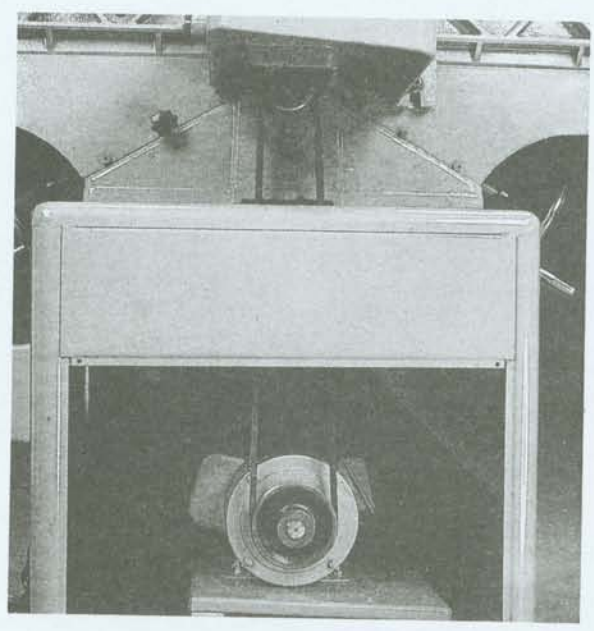
Carefully unpack the jointer, stand, and all loose items from the cartons. Remove the protective coating from the machined surfaces of the jointer. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover all unpainted surfaces with a good quality paste wax.



ASSEMBLING JOINTER TO STAND

1. When assembling the jointer to the stand, make sure the pulleys of jointer and moter in the stand are on the same side.

2. 3 Hex Head Cap Screws and Lockwashers are used to fasten the jointer to the stand. Place the 3 lockwashers on the 3 screws and insert the stand and thrdad the screws up through the 3 holes in the stand and thread the screws in the 3 holes in the bale of the jointer.



BELT ADJUSTING

Release four pieces of screw, and press the table tightly, then fix firmly the four pieces of screw.

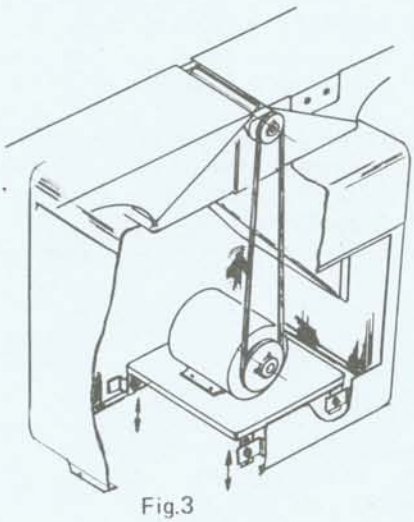


Fig.3

ASSEMBLING CUTTER HEAD GUARD

A: Knife gage
B: Protrusion
C: Locking bar
D: The five screws
E: Spring
F: Knife

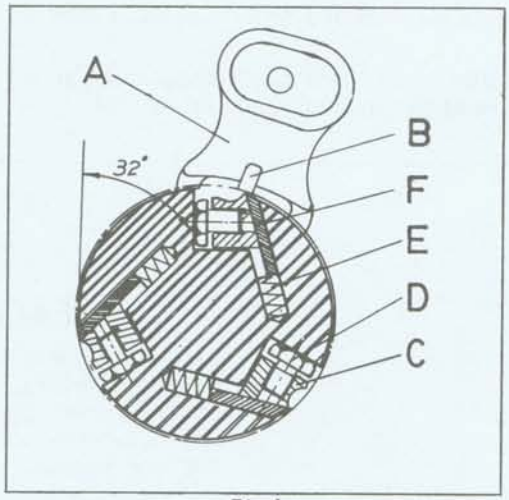


Fig.4

THE CONSTRUCTION OF SHAFF

Release about 3 to 4 threads of the screw (A) to take off the guard. Please use the reverse order for the assembling.

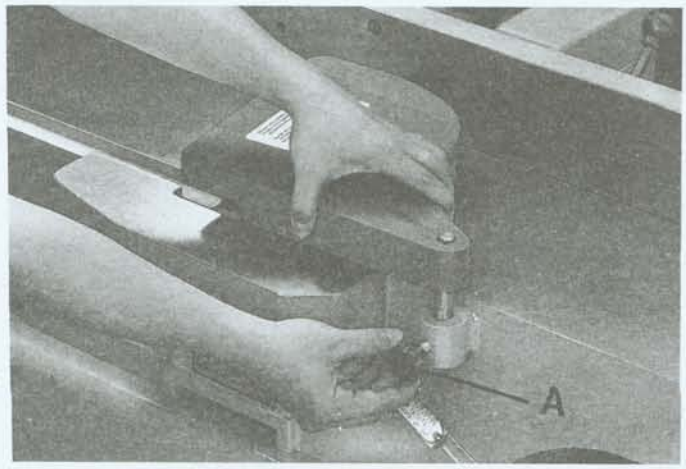


Fig.5

ELECTRICAL CONNECTIONS

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

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

Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

The tool has a grounding plug that looks like the plug for a standard grounding outlet illustrated in Sketch A in Figure 6. A temporary adapter, which looks like the adapter illustrated in Sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in Sketch B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, etc. extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

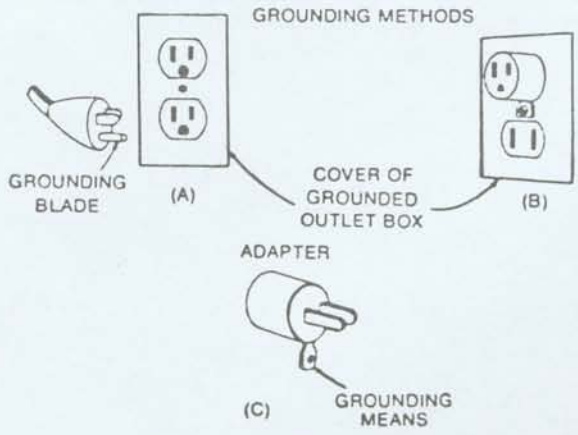


Figure 6 — Wiring Methods

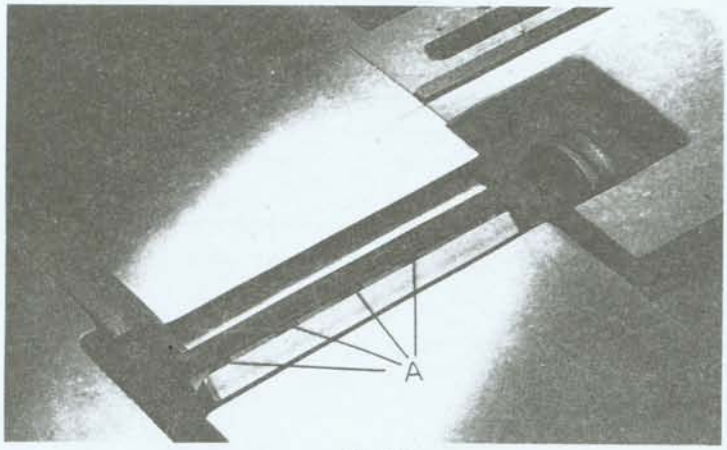


Fig.7A

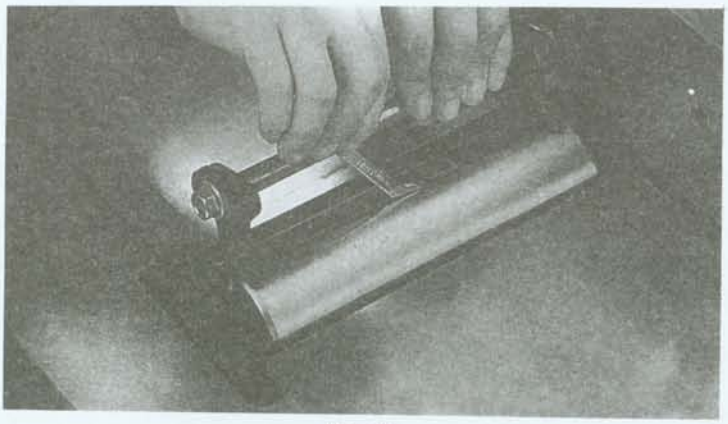


Fig.7B

CHECK MOTOR ROTATION

For proper operation, the motor must rotate COUNTER CLOCKWISE when viewed from the shaft end. Place the motor on a solid foundation and plug it in and observe rotation. REMOVE PLUG FROM OUTLET. If the rotation is in the wrong direction, reverse the motor rotation according to the instructions furnished with the motor.

KNIVES REPLACING

For taking out of the knife, shown asFig. (7A), release 5 pieces of the screw and take them out together with locking bar. There are two springs placed below the knife, after taking off, then can be moved. Keep well the little springs, and don't be lost. In case want to mount on the knife, first insert the springs into the hole and put in the locking bar, then place the knife. When adjusting, place the knife gage at the positioning shown as Fig. (7B) and press downward, then fix tightenly the 5 pieces of screw.

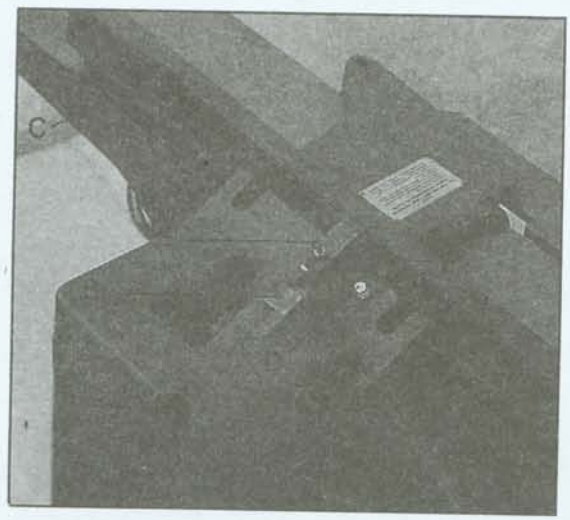
WARNING!

This tool is intended for use on a circuit that has a rating of less than 150 volts (110V - 120V, 60 Hz AC).

If a motor is used other than 115V (230V - 460V etc.) the power supply cord provided should not be used. Check with a qualified licensed electrician for recommendations.

FENCE ADJUSTMENTS

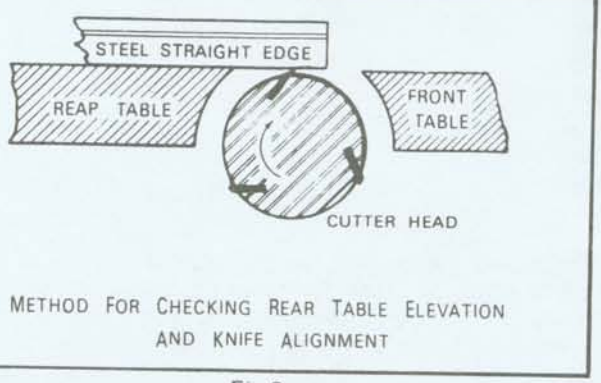
When adjusting angle, please loosen screw A and pull fence B upward, hold handle C to adjust left-right hand. The fence B is 90° fixing plate; D is right 45° positioning screw; E is left 45° positioning screw; F is 90° positioning screw; and G screw can adjust horizontally for the fence.



REAR TABLE AND KNIFE ADJUSTMENT

For accurate work in most jointing operations, the rear table must be exactly level with the knives at their highest point of revolution. This means, of course, that the knives must be parallel to the table and project equally from the cutterhead.

To check this alignment proceed as follows:



METHOD FOR CHECKING REAR TABLE ELEVATION AND KNIFE ALIGNMENT

Fig.9

1. Disconnect the jointer from the power source.

2. Raise or lower the rear table as required, by turning the rear table hand lever, until the rear table is exactly level with the knives of the cutterhead at their highest point of revolution.

3. Place a straight edge on the rear table, extending over the cutterhead as shown in Fig. 9 .

4. Rotate the cutterhead by hand. The blades should just touch the straight edge. If a knife is too low or too high at either end, loosen the lock screws in the knife slightly, shift the knife until it just touches the straight edge, and tighten the screws securely.

After the rear table has been set at the correct height, it should not be changed except for special operations and after sharpening knives.

If the rear table is too high, the result will be as shown in Fig. 10. The finished surface will be curved.

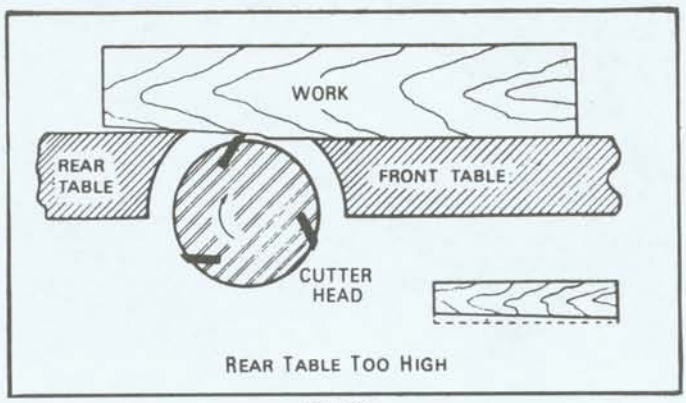


Fig. 10

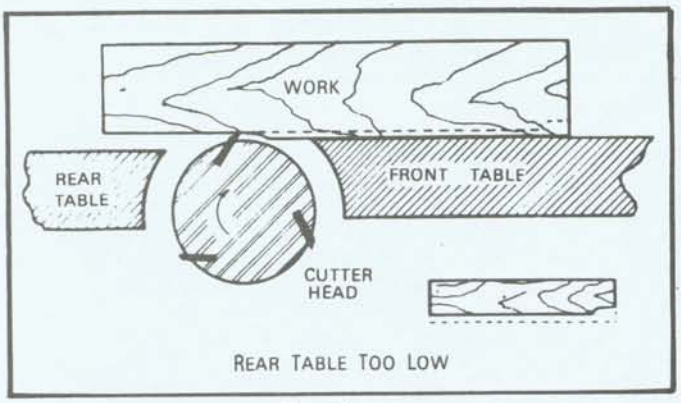


Fig. 11

When the rear table is too low, the condition will be as illustrated in Fig. 11. The work will be gouged at the end of the cut.

As a final check of the rear table adjustment, run a piece of wood slowly over the knives for 6 to 8 inches; it should rest firmly on both tables, as shown in Fig. 12, with no open space under the finished cut.

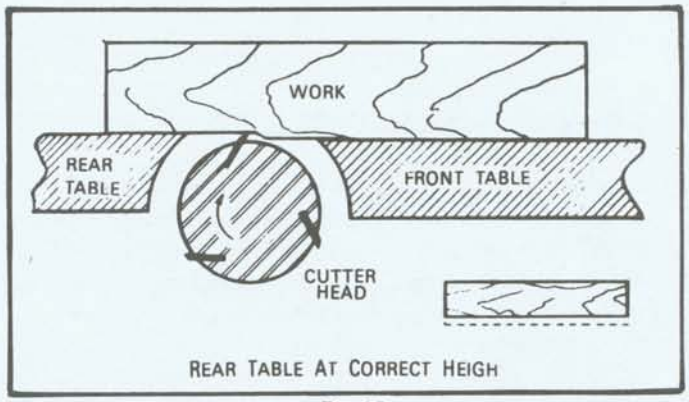


Fig. 12

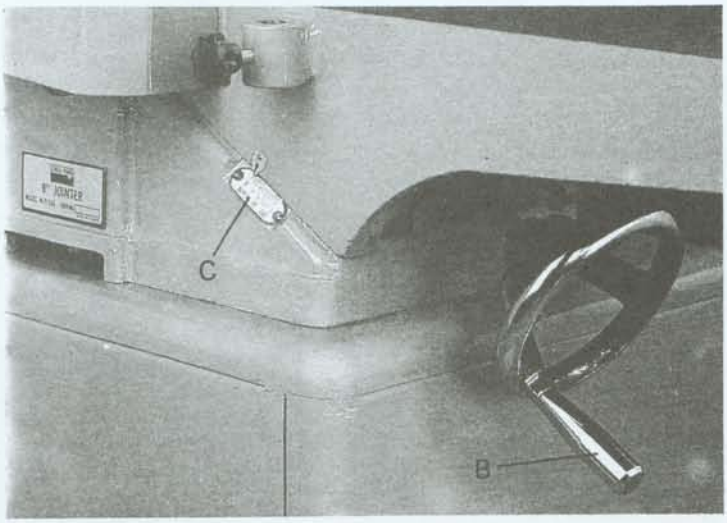


Fig. 13

TABLE ADJUSTMENT

When machining, turn the hand wheel B to move vertically the table. The measuring scale C is designed to be regulated for machining requirement.

IMPORTANT: Do not leave the screws too loose. It should take a little bit of effort to crank the table up and down. Your Jointer is a Finishing Machine and you can't expect to get a very good jointer finish if the table is set loose and sloppy.

SETTING KNIVES

If the knives are removed from the head for replacement or regrinding, care must be used in re-setting them as follows:

1. DISCONNECT MACHINE FROM POWER SOURCE.

2. Place a knife in its groove so that the rear edge of the bevel is 1/16" from the surface of the cutterhead.

3. Slip lock-bar into place and tighten lock screws lightly.

4. Place a knife setting bar, made of a piece of hardwood, approximately 12" long, jointed straight on one edge, on the rear table, as shown in Fig. 14.

5. Rotate head backwards by hand and adjust blade until it just touches the bar.

6. Using bar, check blade at each end so that it is parallel to table top and tighten the screws.

7. Insert the other two knives and repeat above instructions.

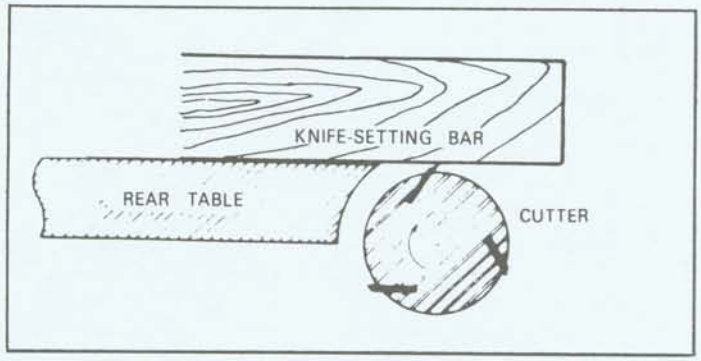


Fig. 14

OPERATION

The following directions will give the beginner a start on jointer operation. Use scrap pieces of lumber to check settings and to get the feel of the operations before attempting regular work. ALWAYS USE GUARD AND KEEP HANDS AWAY FROM CUTTERHEAD.

PLACEMENT OF HANDS DURING FEEDING

At the start of the cut, the left hand holds the work firmly against the front table and fence, while the right hand pushes the work toward the knives. After the cut is under way, the new surface rests firmly on the rear table as shown in Fig. 15. The left hand should press down on this part, at the same time maintaining flat contact with the fence. The right hand presses the work forward and before the right hand reaches the cutterhead it should be moved to the work on the rear table. NEVER PASS HANDS DIRECTLY OVER THE CUTTERHEAD.

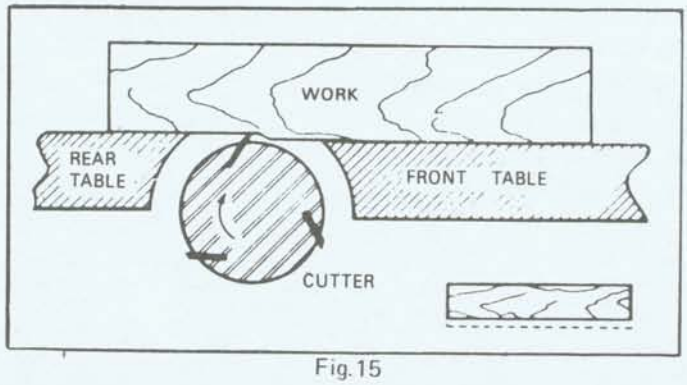


Fig. 15

JOINTING AN EDGE

This is the most common operation for the jointer. Set the guide fence square with the table. Depth of cut should be the minimum required to obtain a straight edge. Hold the best face of the piece firmly against the fence throughout the feed.

JOINTING WARPED PIECES

If the wood to be jointed is dished or warped, take light cuts until the surface is flat. Avoid forcing such material down against the table; excessive pressure will spring it while passing the knives, and it will spring back and remain curved after the cut is completed.

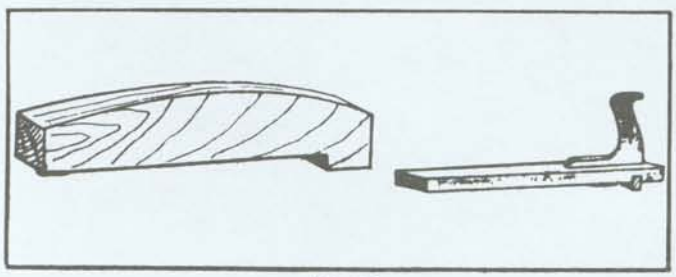


Fig. 16

JOINTING SHORT OR THIN WORK

When jointing short or thin pieces, use a push block to eliminate all danger to the hands. Two types are shown in Fig. 16. They are easily made from scrap material.

DIRECTION OF GRAIN

Avoid feeding work into the jointer against the grain as shown in Fig. 17. The result will be chipped and splintered edges.

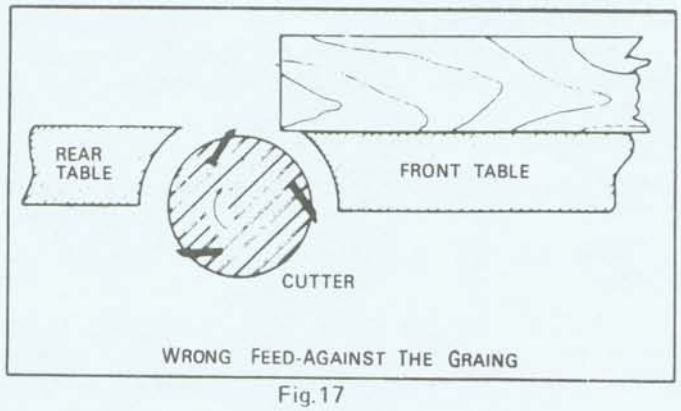


Fig.17

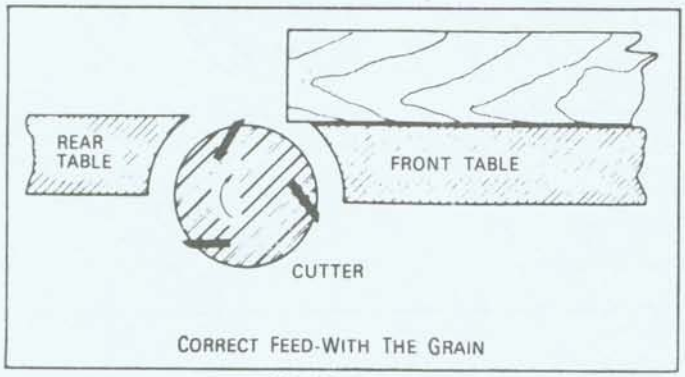


Fig.18

Feed with the grain as in Fig. 18 to obtain a smooth surface.

PUSH BUTTON SWITCH CIRCUIT

If you purchased push button switch machine.
As shown in Fig. 19
Power source: A1, A2
Grounding: A3
Motor source: B1, B2
Grounding: B3

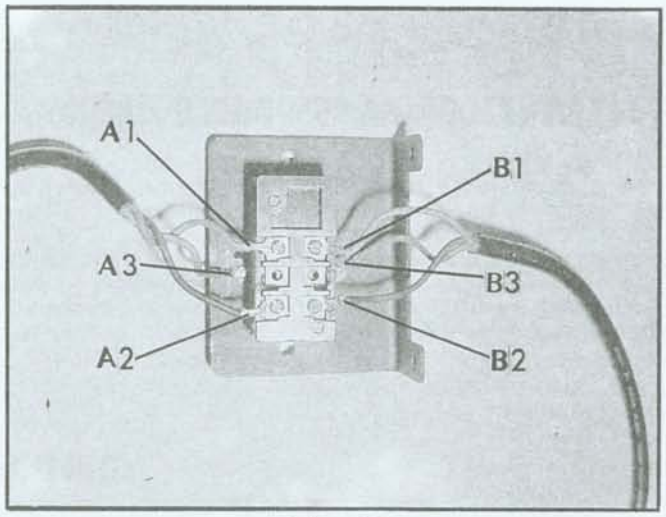


Fig. 19

MAGNETIC CONTACTOR CIRCUIT

If you used single phase motor
Power source: A.C.
Motor source: A.C.
Grounding: D
If you used three phases motor
Power source: A.B.C
Motor source: A.B.C.
Grounding: D

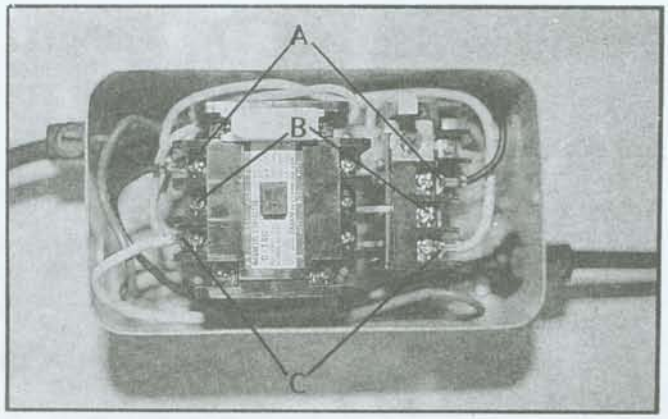


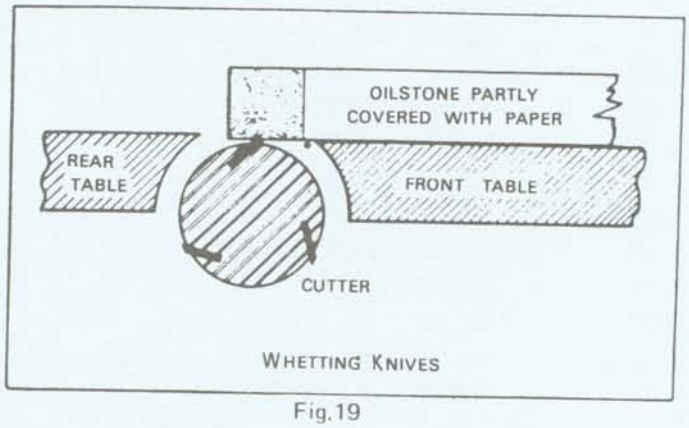
Fig. 20

CUTTERHEAD MAINTENANCE AND REPAIRS

After considerable use, the knives will become dull and it will not be possible to do accurate work. Unless badly damaged by running into metal or other hard material, they may be sharpened as follows:

WHETTING KNIVES

DISCONNECT THE MACHINE FROM POWER SOURCE. Use a fine carborundum stone; cover it partly with paper as indicated in Fig. 19 to avoid marking the table. Lay the stone on the front table, lower the table and turn the cutter head forward until the stone lies flat on the bevel of the knife, as shown. Hold the cutter head from turning, and whet the bevelled edge of the knife, stroking lengthwise by sliding the stone back and forth across the table. Do the same amount of whetting on each of the three blades.



WHETTING KNIVES

Fig.19

BEVELING

To cut a bevel, lock the fence at the required angle and run the work across the knives while keeping it firmly against the fence and tables. Several passes may be necessary to arrive at the desired result.

When the angle is small, there is little difference whether the fence is tilted to the right or left. However, at greater angles approaching 45 degrees, it is increasingly difficult to hold the work properly when the fence is tilted to the right. The advantage of the double-tilting fence is appreciated under such conditions.

When tilted to the left, the fence forms a V-shape with the tables, and the work is easily pressed into the pocket while passing it across the knives. If the bevel is laid out on the piece in such direction that this involves cutting against the grain, it will be better to tilt the fence to the right.

TAPER CUTS

One of the most useful jointer operations is cutting an edge to a taper. The method can be used on a wide variety of work. Tapered legs of furniture are a common example.

Instead of laying the piece on the front table, lower the forward end of the work onto the rear table. Do this very carefully, as the piece will span the knives, and they will take a "bite" from the work with a tendency to kick back unless the piece is firmly held. Now push the work forward as in ordinary jointing. The effect is to plane off all the stock in front of the knives, to increase depth, leaving a tapered surface.

The ridge left by the knives when starting the taper may be removed by taking a very light cut according to the regular method for jointing, with the front table raised to its usual position.

Practice is required in this operation, and the beginner is advised to make trial cuts on waste material. Taper cuts over part of the length and a number of other special operations can easily be done by the experienced craftsman.

MAINTENANCE

Check all screws and fasteners occasionally and keep them tightened securely.

In time rust may appear on the table and fence and other parts of the jointer, resulting in less efficiency and accuracy of the machine. Use paste wax which can be applied to prevent rust formation. If however, rust has already formed on these parts use "Rust Remover" which will restore the machine to its original accuracy when applied.

CUTTERHEAD REPAIRS

The entire cutterhead assembly may be removed for cleaning, bearing or blade replacement or any other cutterhead maintenance procedures. To remove it, lower both feed tables to clear the cutterhead. Remove the bearing retaining stud hex nuts (Part No. 44) and remove the entire cutterhead assembly, with bearings, studs and bearing housings. When reinstalling the assembly, be sure the machined curved seats of the base casting are free of dirt, dust, grease, ect. to obtain a good tight fit.

BLADE CARE

When these blades become dull enough so that it is noticeable when cutting, they should be resharpened. A sharp blade works easier and results in longer blade life. The penalty paid for a dull blade is less blade life and greater wear and tear on all parts of the machine.

When the knives cannot be properly re-touched as described in "Whetting Knives", they must be ground and re-surfaced to a new bevel edge. Check in the "Yellow Pages" of your local phone directory under "Sharpening Service" or "Tool Grinding or Sharpening". It may be less expensive to pruchase a new set of blades. If the jointer is used often, keeping a spare set of blades on hand is recommended.

Gum and Pitch which collects on the blades causes excessive friction as the work continues, resulting in over heating the blades, less efficient cutting, and consequently loss of blade life. Use "Gum and Pitch Remover" to wipe this off the blades.

LUBRICATION

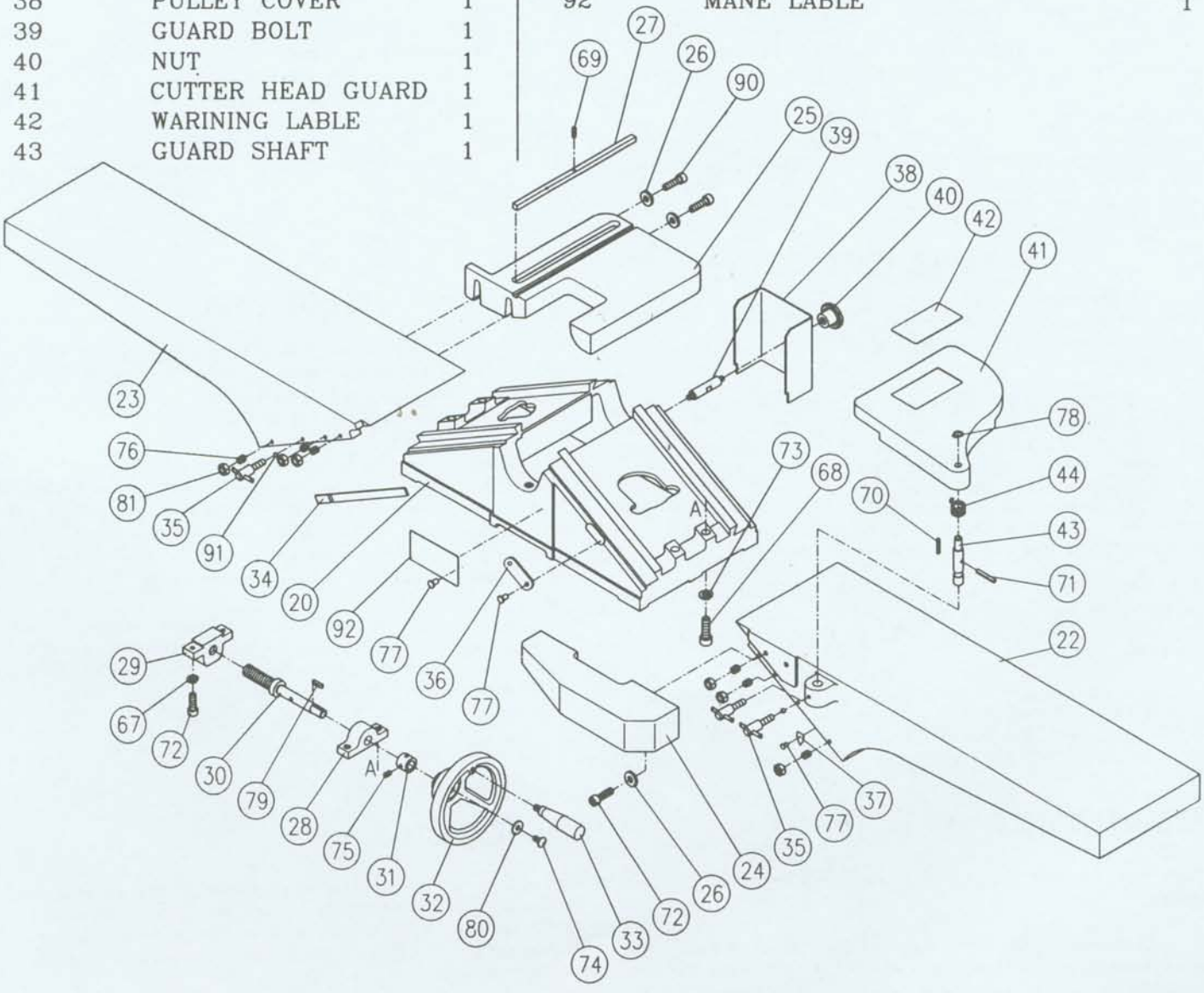
We suggest using a good grade of light grease on the steel adjusting screws for the raising and lowering mechanisms of the front and rear work tables. Occasionally apply a few drops of light machine oil to the gibs on the right side of each work table so the tables will slide freely in relation to the base casting.

The cutterhead runs in two single row sealed and shielded ball bearings, which are pre-lubricated for their entire life.

BASE ASSEMBLY

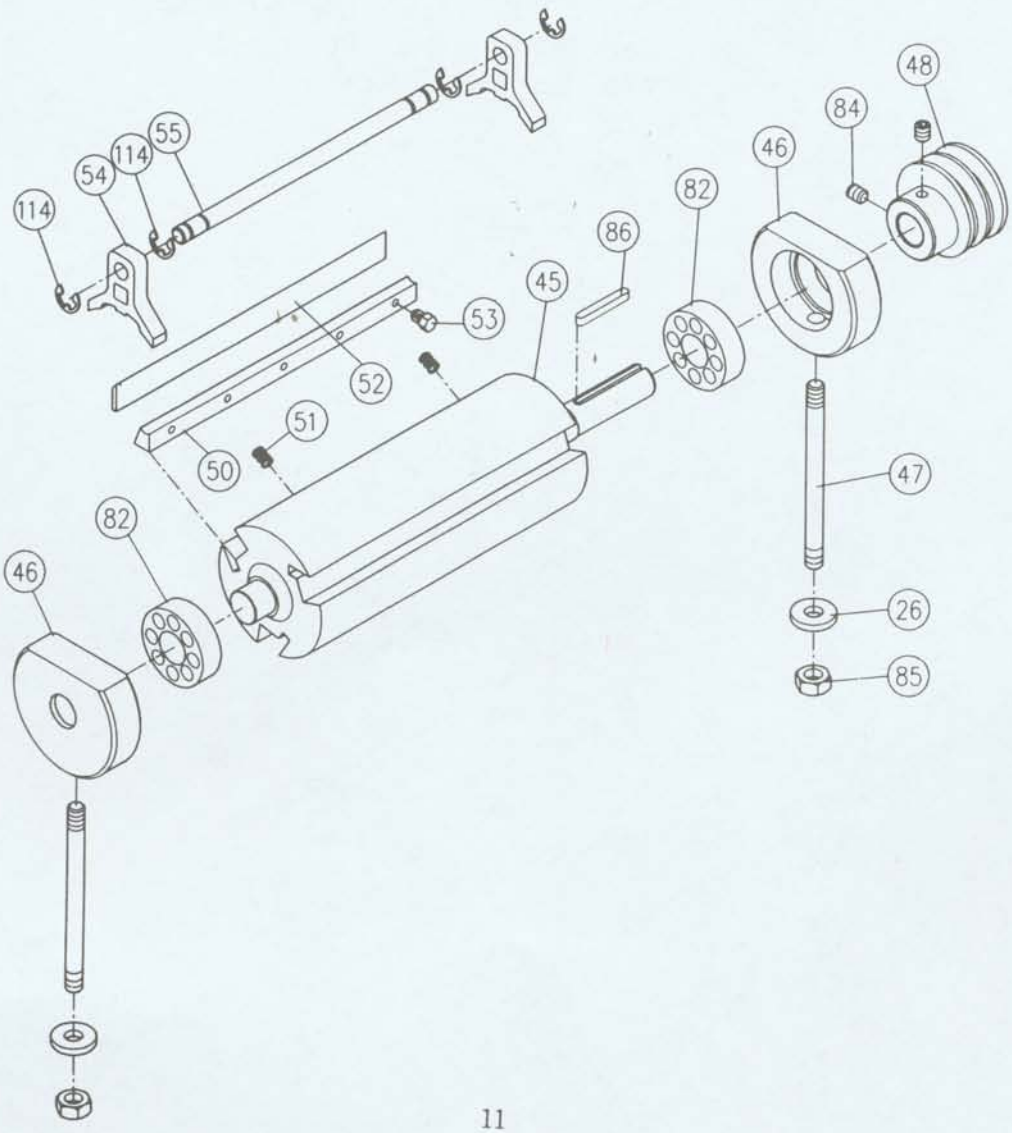
INDEX NO.	PARTS DECRIPTION	QTY.
20	BASE	1
22	FRONT TABLE	1
23	REAR TABLE	1
24	RABBETTING ARM	1
25	TABLE BRACKET	1
26	WASHER, 10.2x25x4	4
27	KEY	1
28	BRACKET	2
29	FEEDSCREW BRACKET	2
30	FEEDSCREW	2
31	BUSH	2
32	ADJUSTING WHEEL	2
33	WHEEL HANDLE	2
34	GIB	2
35	SCREW	3
36	SCALE	1
37	DEPTH POINTER	1
38	PULLEY COVER	1
39	GUARD BOLT	1
40	NUT	1
41	CUTTER HEAD GUARD	1
42	WARINING LABLE	1
43	GUARD SHAFT	1

INDEX NO.	PARTS DECRIPTION	QTY.
67	SPRING WASHER, 10.2 x16.2x2.2	4
68	CAP SCREW, 1/2"-12NCx1-1/2"	4
69	SPRING PIN, 4x14	1
70	SPRING PIN, 6x40	1
71	SPRING PIN, 5x28	1
72	CAP SCREW, 3/8"-16NCx1-1/4"	6
73	SPRING WAHER, 13.3x21x2.6	4
74	PAN SCREW, 5/16"-18NCx1/2"	2
75	SET SCREW, 1/4"-20NCx3/8"	4
76	SET SCREW, 5/16"-18NCx1-1/4"	6
77	RIVET, 2x5	7
78	RING ,STW 11	1
79	KEY, 5x5x22	2
80	WASHER, 5/16"x23x2	2
81	NUT, 5/16"-18NC	6
90	CAP SCREW, 3/8"-16NCx1-1/2	2
91	BALL, 6	3
92	MANE LABLE	1



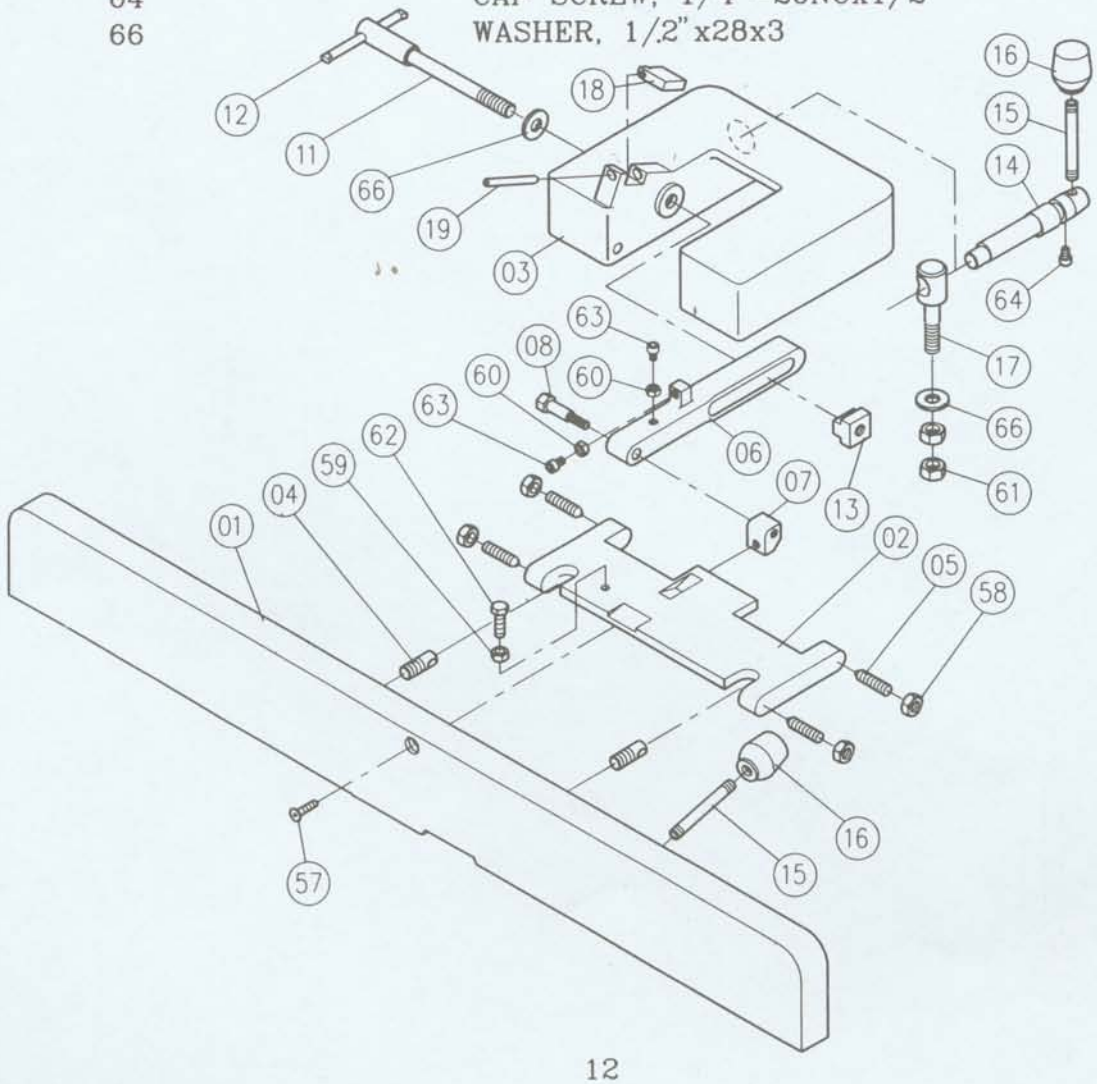
CUTTER-HEAD

INDEX NO.	PARTS DECRIPTION	QTY
26	WASHER, 10.2x25x4	2
45	CUTTER-HEAD	1
46	BEARING HOUSING	2
47	CUTTER-HEAD SET BOLT	2
48	BELT PULLEY	1
50	KNIFE LOCK BAR	3
51	SPRING,ø0.6mm	6
52	KNIVES	3
53	SCREW	15
54	KNIFE GAGE	2
55	CLUB OF KNIFE GAGE	1
82	BEARING,6204ZZ	2
84	SET SCREW,5/16"-18NCx3/8"	2
85	NUT, 3/8"-24UNF	2
86	KEY, 5x5x22	1
114	RING, ETW 9	4



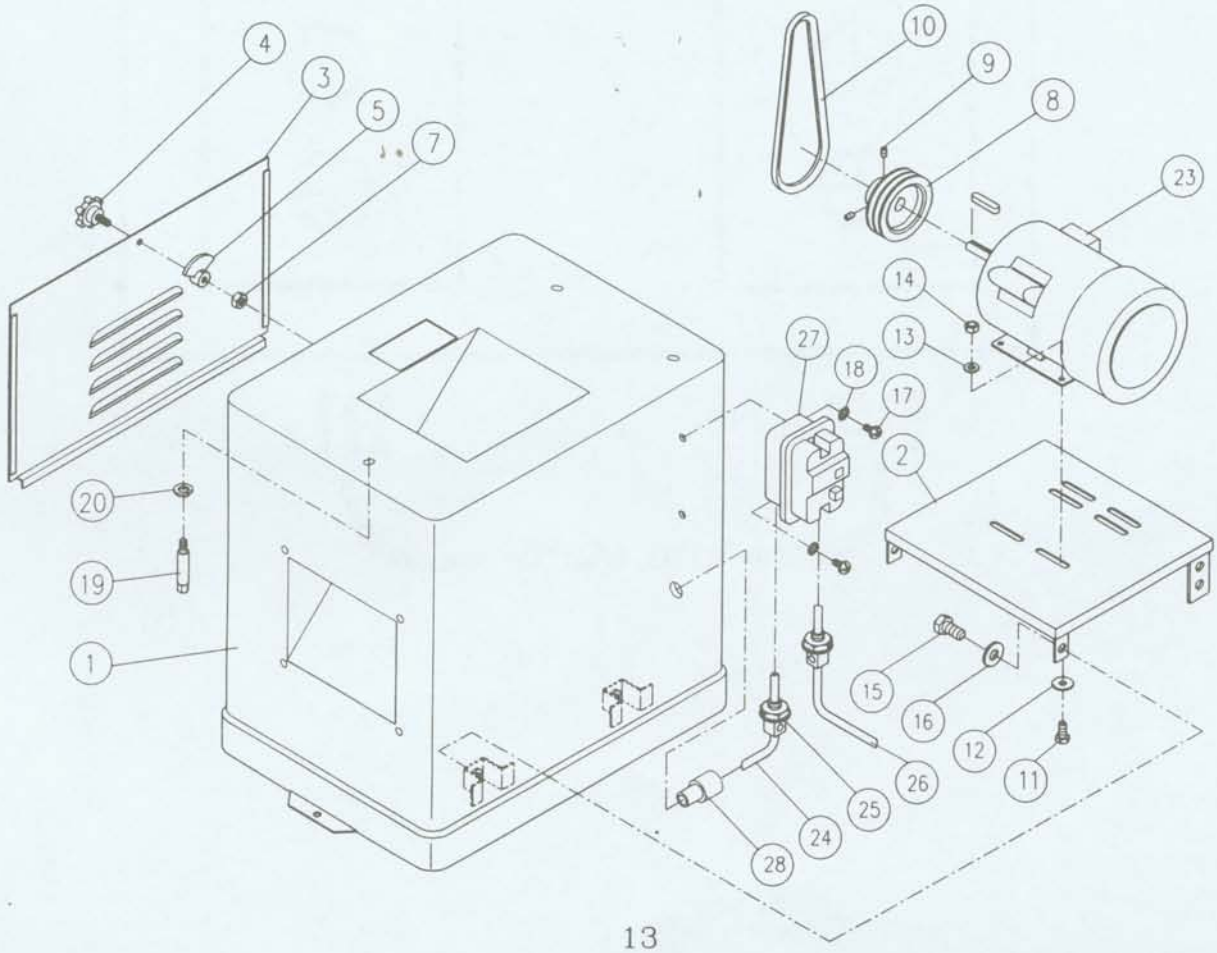
FENCE ASSEMBLY

INDEX NO.	PARTS DECRIPTION	QTY.
1	FENCE BODY	1
2	FENCE LINK	1
3	FENCE BRACKET	1
4	BOLT, 1/2"-20NF	2
5	BOLT,3/8"-16NC	4
6	LOCKING LINK	1
7	JOINT PLATE	1
8	SCREW	1
11	LOCKING BOLT	1
12	HANDLE	1
13	NUT	1
14	LOCKING SHAFT	1
15	HANDLE	2
16	KNOB	2
17	EYEBOLT	1
18	STOP BLOCK	1
19	PIN, 5x50	1
57	SCREW, 5/16"-18NCx1-1/2"	1
58	NUT, 3/8"-16NC	4
59	NUT, 5/16"-18NC	1
60	NUT, 1/4"-20NC	2
61	NUT, 1/2"-12NC	2
62	HEX SCREW, 5/16-18NCx1-1/4"	1
63	CAP SCREW, 1/4"-20NCx1-1/4"	2
64	CAP SCREW, 1/4"-20NCx1/2"	1
66	WASHER, 1/2"x28x3	2



STAND AND MOTOR ASSEMBLY

INDEX NO.	PARTS DECRIPTION	QTY.
1	STAND	1
2	MOTOR MOUNT	1
3	COVER	1
4	SCREW	1
5	KEY	1
7	NUT, 3/8"-16NC	1
8	MOTOR PULLEY	1
9	SET SCREW, 3/8"-16NCx3/8"	2
10	V-BELT	2
11	HEX HEAD SCREW, 5/16"-18NCx3/4"	4
12	WASHER, 5/16"x23x2	4
13	WASHER, 5/16"x16x1.5	4
14	NUT, 5/16"-18NC	4
15	HEX HEAD SCREW, 1/2"-12NCx1"	4
16	WASHER, 1/2"x28x3	4
17	SCREW, 3/16"-24NCx3/4"	2
18	TOOTH WASHER, BW-5	2
19	LOCK BOLT, 3/8"-16NC	3
20	WASHER, 10.2x18.4x2.5	3
23	MOTOR	1
24	MOTOR CORD	1
25	STRAIN RELIEF, 1/2"	2
26	POWER CORD	1
27	SWITCH(MAGNETIC SWITCH:OPTIONAL ACC.)	1
28	STRAIN RELIEF, SB8R-3	1



Motor's terminal drawing