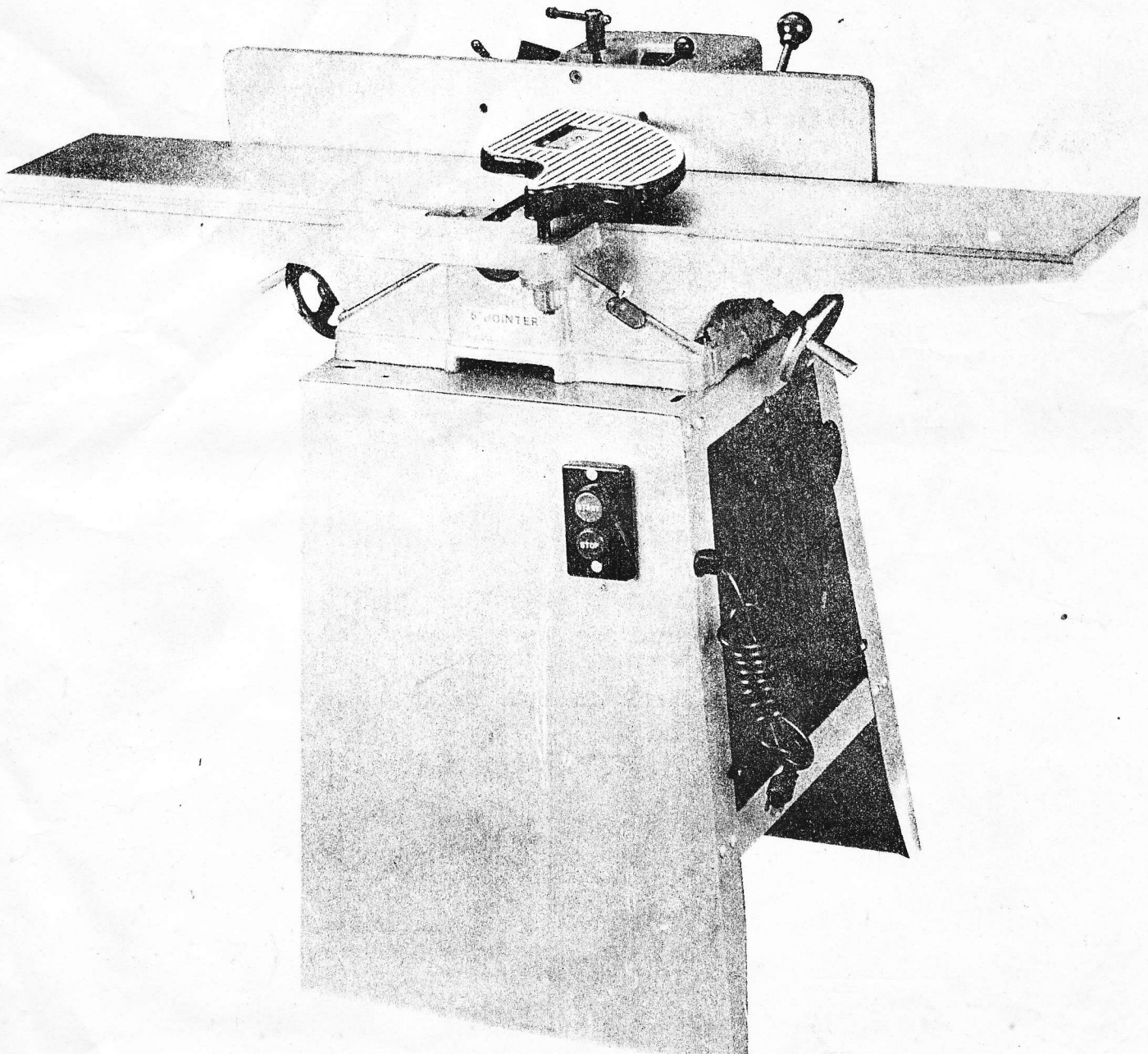


6" JOINTER MANUAL



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 piece 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 1 1/2" 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.

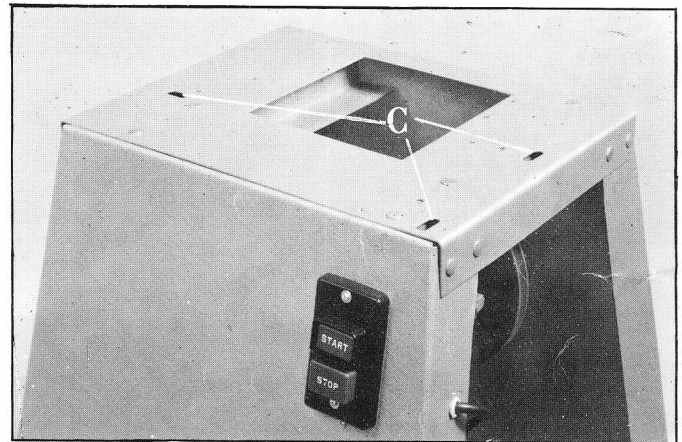


FIGURE 1

ASSEMBLING JOINTER TO STAND

1. When assembling the jointer to the stand, make sure the pulleys of jointer and motor in the stand are on the same side.
2. Three pcs of Hex screw and spring washer are used to fasten the jointer body to the stand.

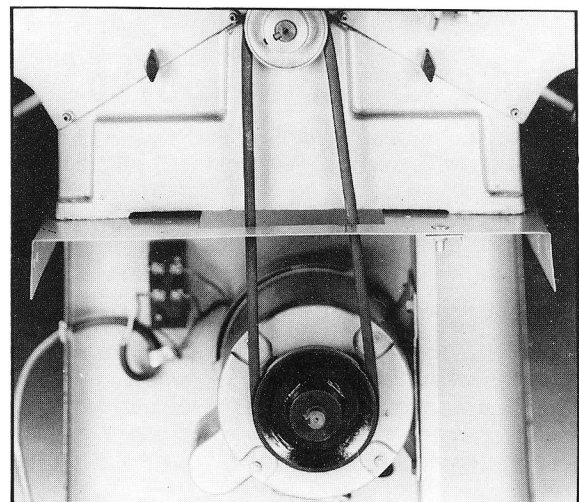


Fig.2

ASSEMBLING BELT, ALIGNING PULLEYS AND ADJUSTING BELT TENSION

Assemble the belt (C) to the cutterhead pulley and motor pulley (D), as shown in Fig. 3. If necessary loosen the nuts and bolts (E) that fasten the motor to the motor plate and move the motor up or down on the motor plate until correct belt tension is obtained. Correct tension is obtained when there is approximately 1" deflection in the center span of the belt using light finger pressure. Using a straight edge, align the motor pulley to the cutterhead pulley. If necessary both pulleys can be moved in or out on the shafts or the complete motor plate assembly can be moved in or out to bring the pulleys into alignment.

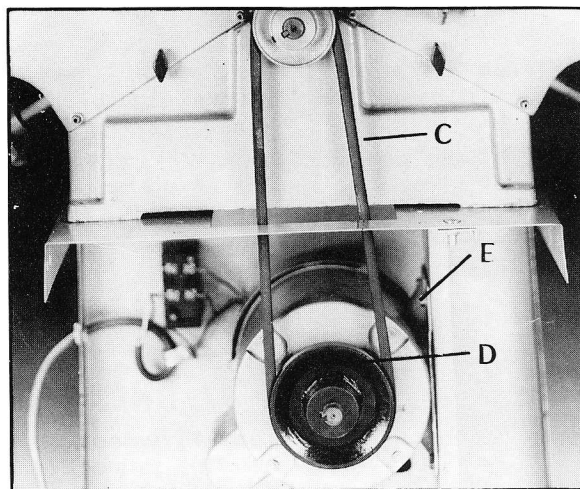


Fig.3

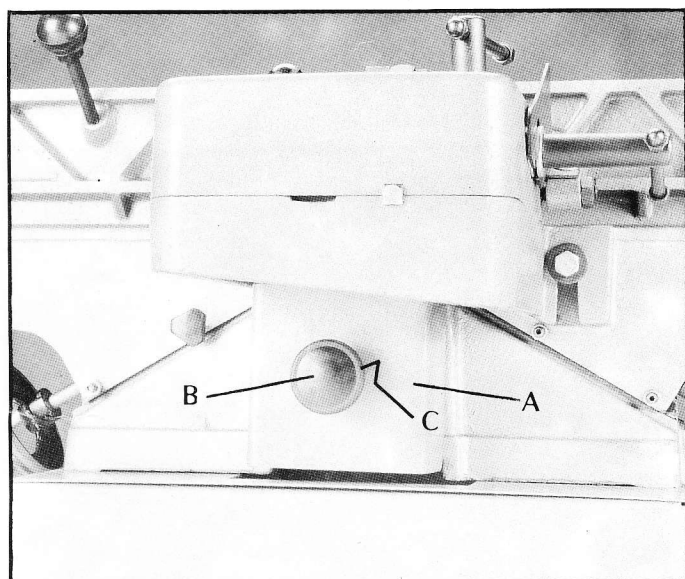


Fig.4

ASSEMBLING CUTTERHEAD GUARD

Assemble the cutterhead guard assembly (A) Fig. 5, to the jointer, by inserting the post (B) of the guard assembly down through the hole in the front table. A spring is supplied in the knob assembly (C) Fig. 5, that returns the guard over the cutterhead after a cut has been made. To provide spring tension, turn the knob (C) Fig. 5, to put tension on the spring before inserting the post (B). When inserting the post (B) down through the hole in the front table, make sure the spring, enclosed in the knob (C), engages the slot provided in the end of the post (B). If spring tension is too much or not enough, remove the guard and post and adjust spring tension accordingly by rotating knob (C).

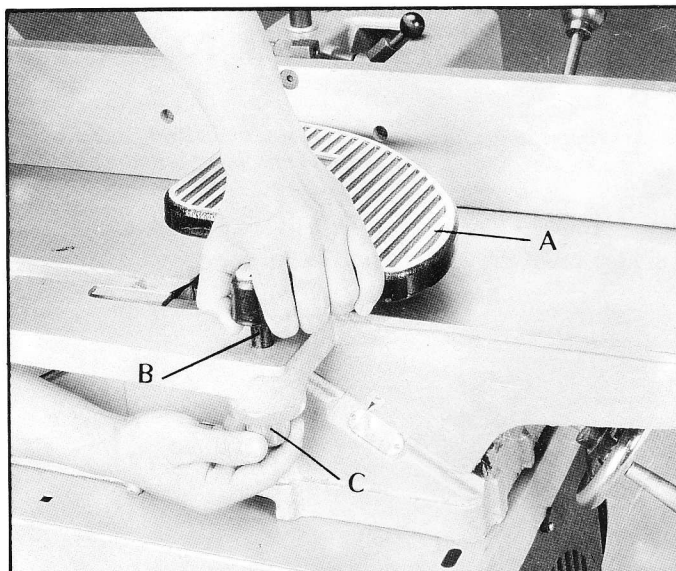


Fig.5

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.

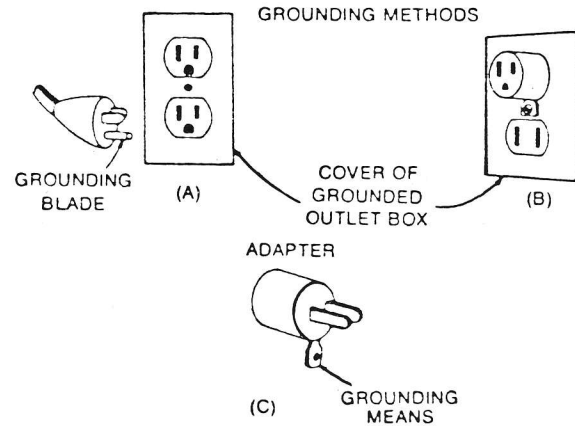


Figure 6 — Wiring Methods

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.

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.

CENTER MOUNTED DUAL TILT FENCE

With adjustable positive stops for 90° and 45° right and left for making straight bevel and chamfer cuts. Sliding bar "T"-handle controls fence angle adjustment and locking with a single control. A single lever type control handle locks fence in any position across width of work tables.

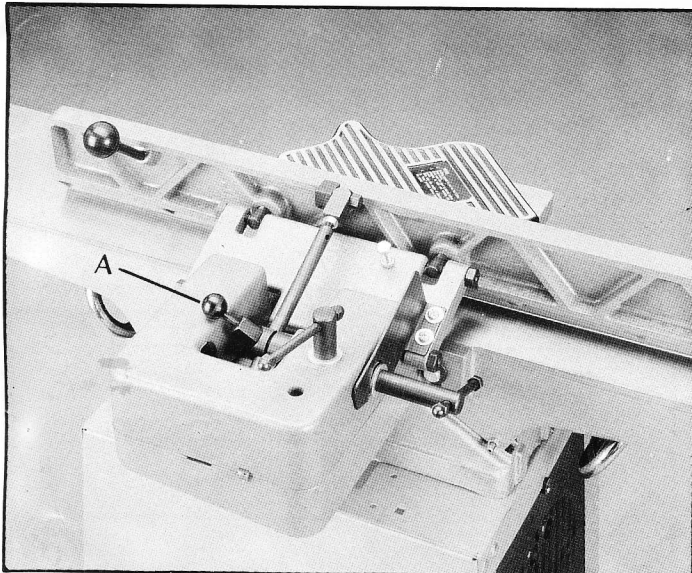


Fig.7

RAISING AND LOWERING TABLES

To raise or lower the front table, and turn handwheel Fig. 8 (A).

To raise or lower the rear table, and turn handwheel Fig. 8 (B).

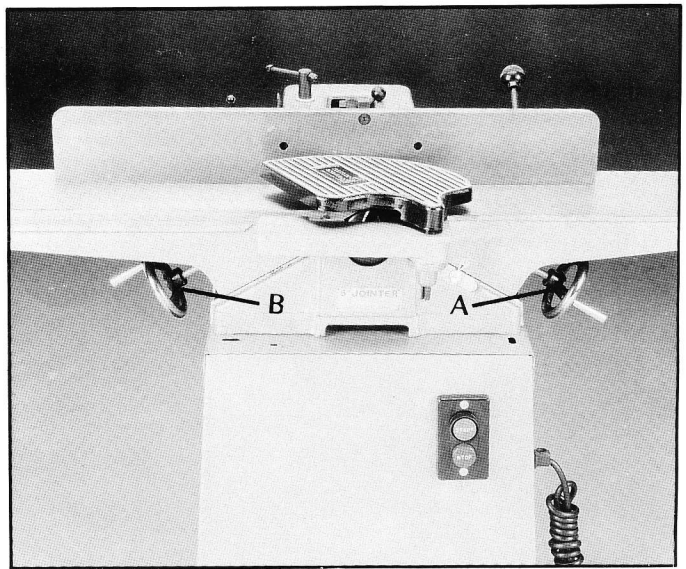


Fig.8

REAR TABLE AND KNIFE ALIGNMENT

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:

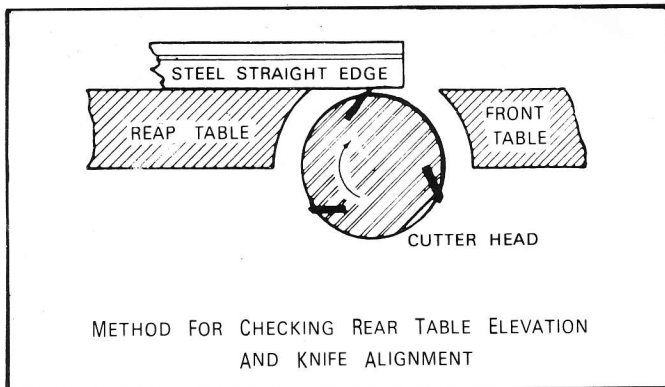


Fig.9

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.

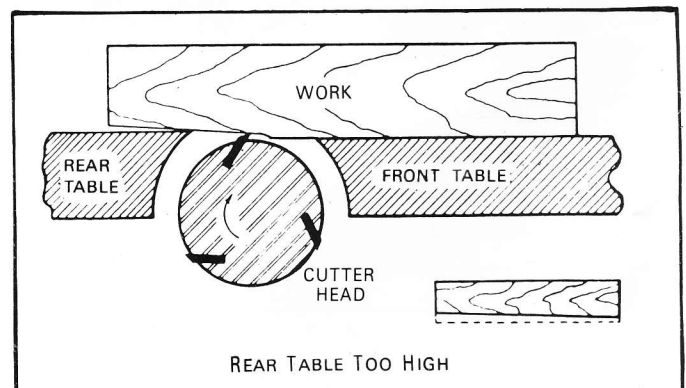


Fig.10

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.

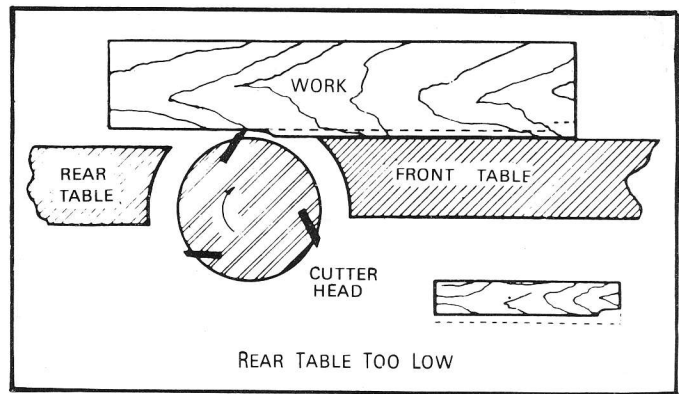


Fig.11

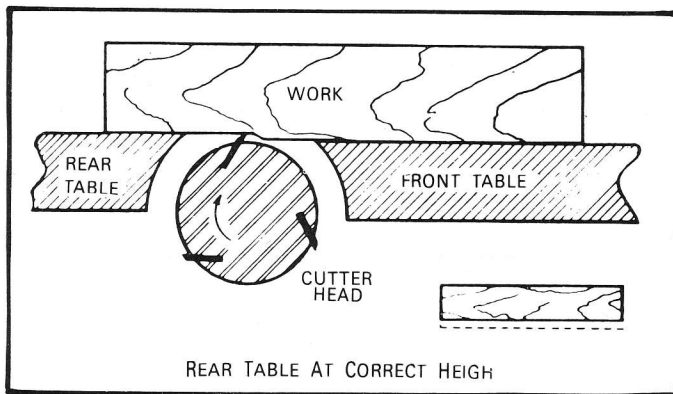


Fig.12

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.

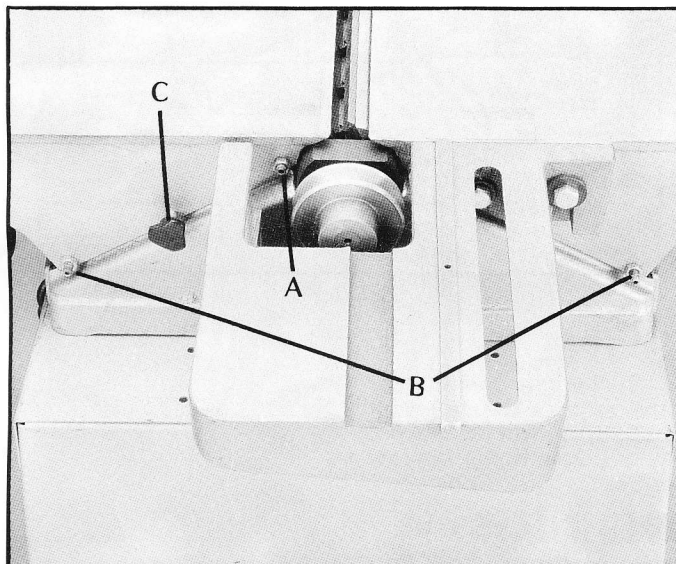


Fig.13

ADJUSTING TABLE GIBS

"Gibs" are provided to take up all play between the mating dovetail ways of the base and the front and rear tables of your jointer. The "Gibs" are located between the dovetailed ways of the front and rear tables and the base. Proper gib adjustment is necessary for the correct functioning of the jointer. The "gibs" on your machine were adjusted at the factory and should require no further adjustment, however, if it ever becomes necessary to adjust the "gibs" proceed as follows:

If the table is set loose and sloppy, fix screw (B) at proper degree by using screw nut (A). When operating, if need to fix the table, use screw (C) to fixing without tools.

Screw (B) total in 5 pcs.

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.

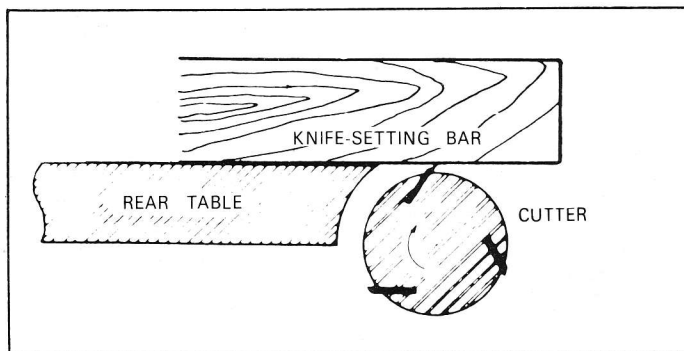


Fig.14

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.

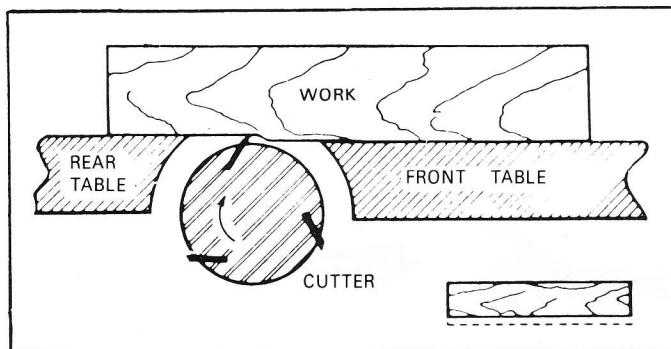


Fig.15

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.

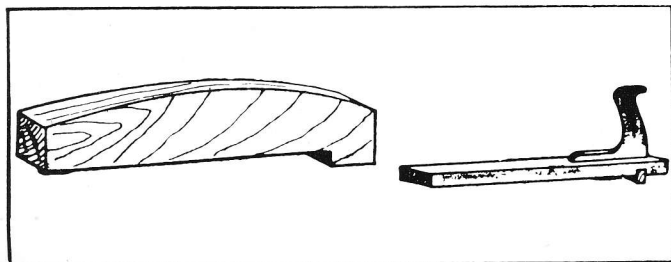


Fig.16

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.

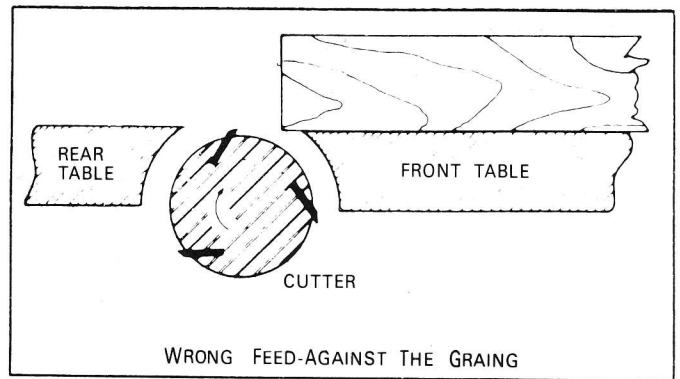


Fig.17

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

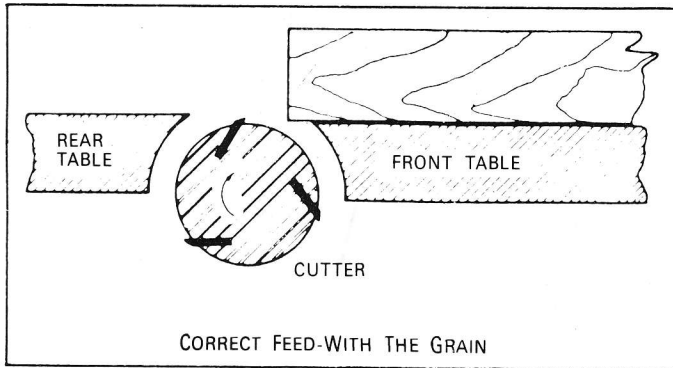


Fig.18

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.

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.

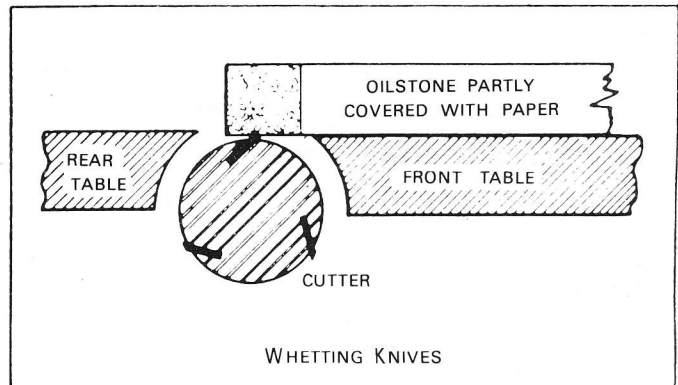


Fig. 19

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 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, etc. 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 purchase 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.

MAINTENANCE

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

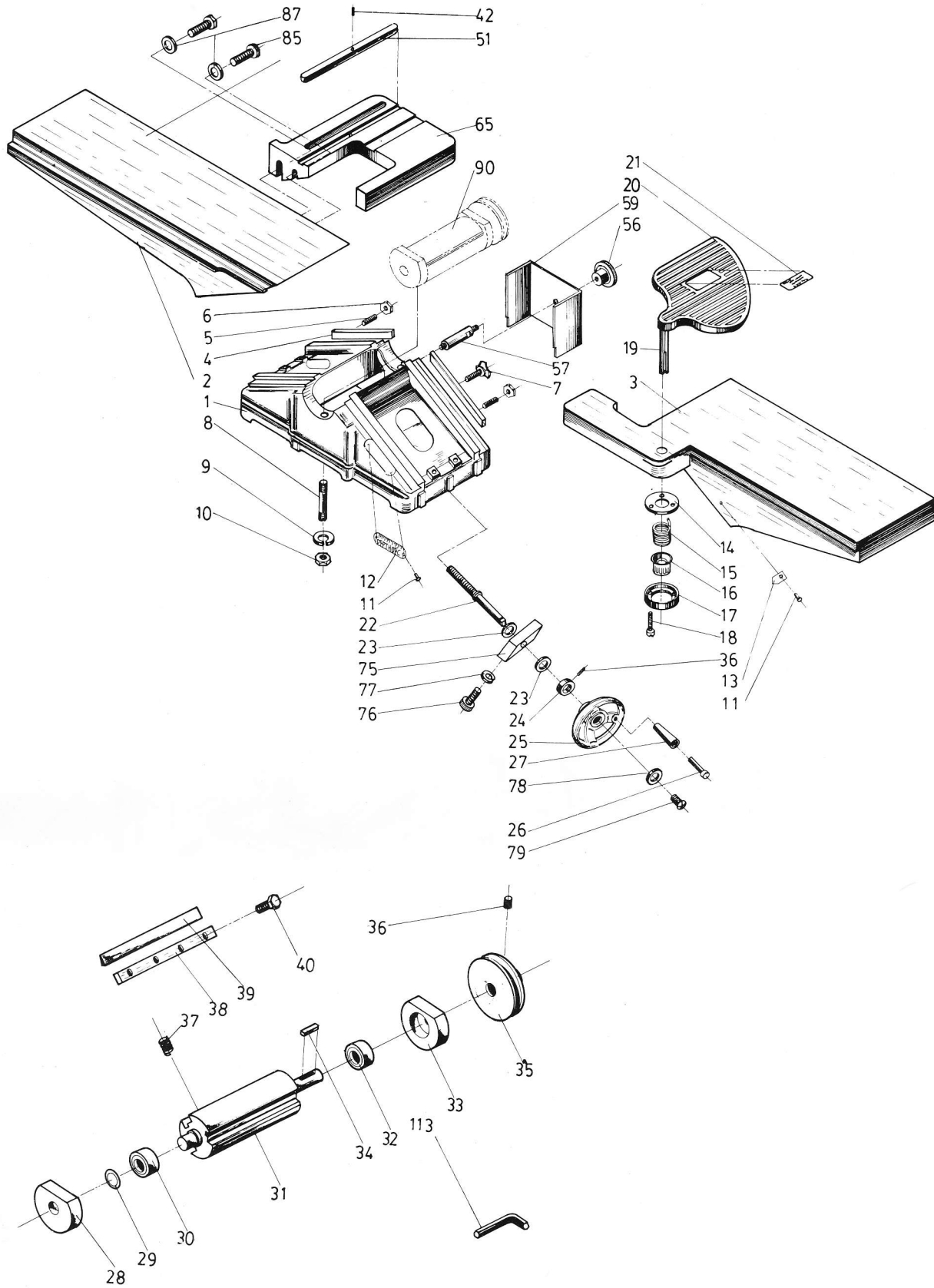
In time rust may appear on the table and fence and other parts of the jointer, resulting in less efficiency and accuracy of the machine. Use paste wax which can be applied to prevent rust formation. If however, rust has already formed on these parts use "Rust Remover" which will restore the machine to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

LUBRICATION

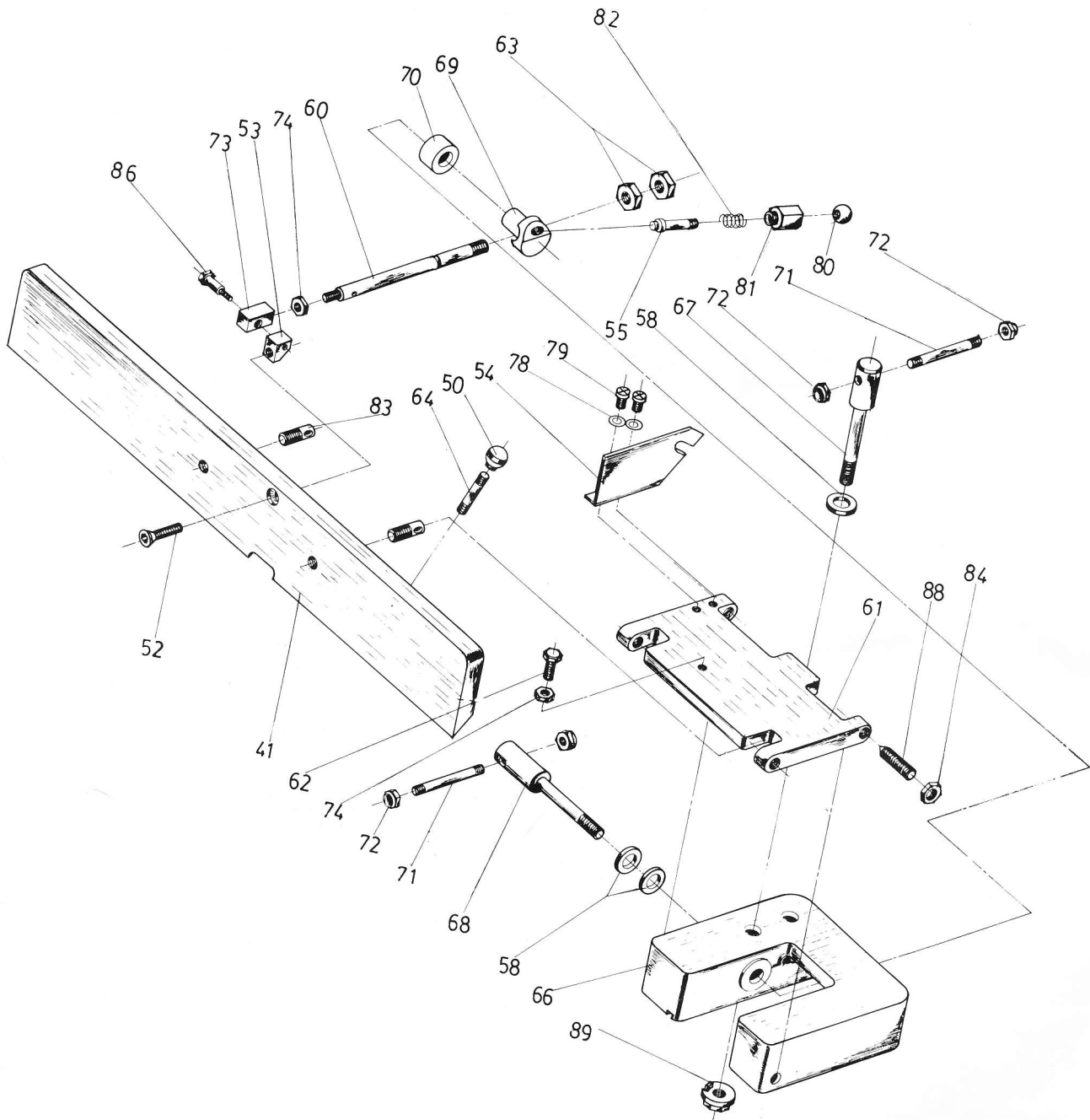
We suggest using a good grade of light grease on the steel adjusting screws for the raising and lowering mechanisms of the front and rear work tables. Occasionally apply a few drops of light machine oil to the gibs on the right side of each work table so the tables will slide freely in relation to the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

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

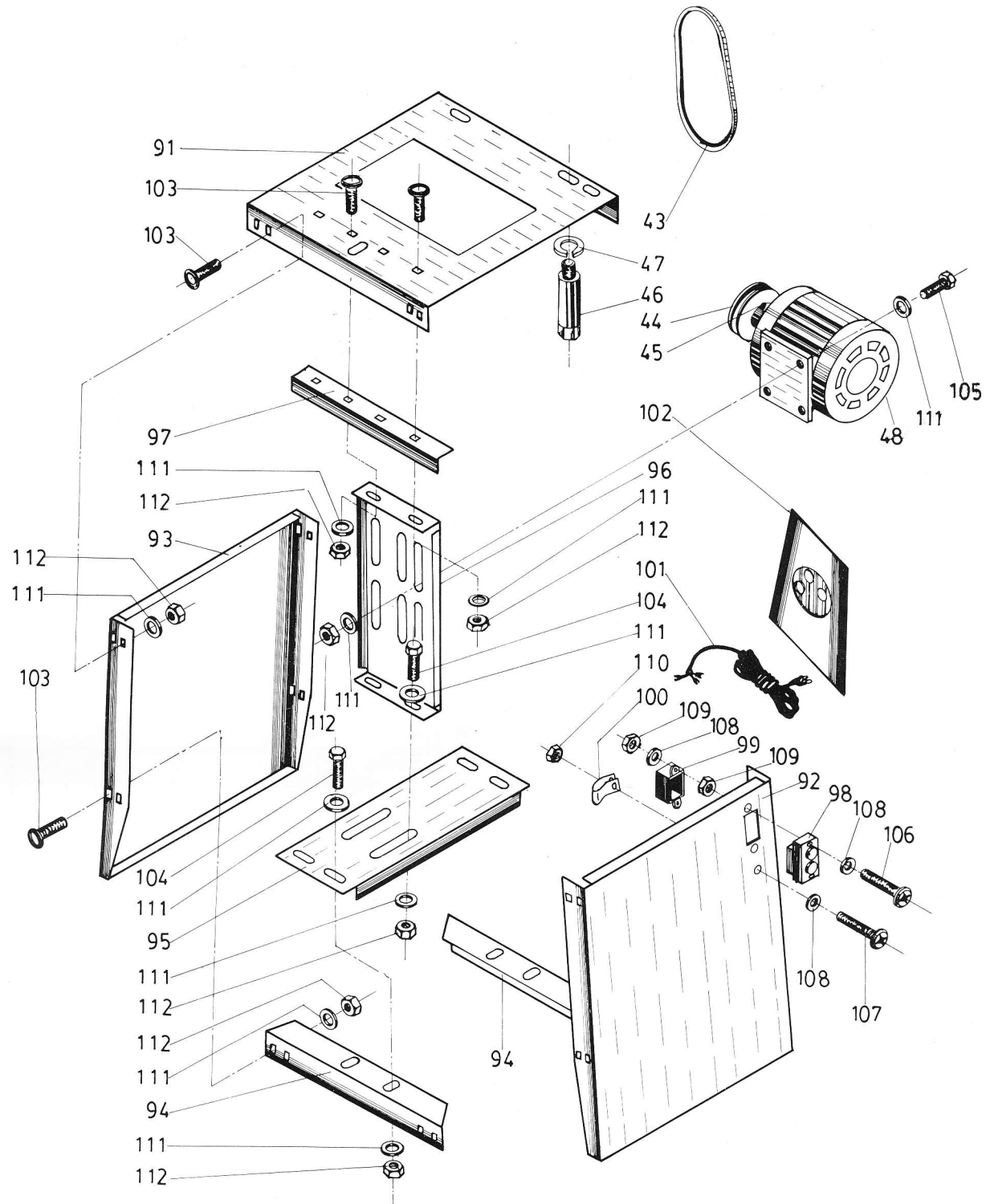
ASSEMBLY DIAGRAM



ASSEMBLY DIAGRAM



STAND ASSEMBLY DIAGRAM



Part	Description	Q'ty
1	Base	1
2	Rear Table	1
3	Front Table	1
4	Gib	2
5	Set Screw 1/4"-20x1"	5
6	Hex Nut 1/4"-20	5
7	Adjusting Screw 1/4"-20x1"	1
8	(Knife Sheft Set Stud) 3/8"-24x4 Stud	2
9	Spring Washer 3/8"	2
10	Hex Nut 3/8"-24	2
11	Rivet	3
12	Depth Scale	1
13	Depth Pointer	1
14	Retainer Washer	1
15	Torsion Spring	1
16	Spring Knob	1

Part	Description	Q'ty
17	Retainer Cap	1
18	Slotted Head Machine Screw 5/32"-32NCx5/8"	3
19	Guard Shaft	1
20	Cutter Guard	1
21	Note Indication	1
22	Adjusting Screw	2
23	Copper Washer	4
24	Set Coller	2
25	Adjusting Wheel	2
26	Handle Shaft	2
27	Handle	2
28	Bearing Housing ϕ 35	1
29	Wave Washer BWW-6202	1
30	Boll Bearing 6202 ZZ	1
31	Cutter Head	1
32	Boll Bearing 6203 ZZ	1

Part	Description	Q'ty
67	Locating Stud	1
68	Setting Bolt	1
69	Locating Body	1
70	Spacing Ring	1
71	Handle	2
72	Domed Cap Nut	4
73	Joint Head	1
74	Hex Nut 5/16"-18NC	2
75	Bracket	2
76	Cap Screw 5/16"-18NCx1-1/4"	4
77	Spring Washer 5/16"	4
78	Washer ϕ 7 x ϕ 16 x 1	3
79	Cross-Recessed Head Screw 1/4"-20x1/2"	3
80	Knob	1
81	Spring Housing	1
82	Spring	1

Part	Description	Q'ty
83	Bolt	2
84	Hex Nut 3/8"-16NC	4
85	Hex Head Screw 3/8"-16NC	2
86	Hex Head Bolt	1
87	Washer 3/8"	2
88	Bolt 3/8"-16NC	4
89	Nut 1/2"-12NC	1
113	Wrench	1

Part	Description	Q'ty
33	Bearing Housing ϕ 40	1
34	Key 5x5x23	1
35	Maching Pulley	1
36	Set Screw 1/4"-20x3/8"	4
37	Spring	6
38	Knife Lock Bar	3
39	Knives	3
40	Knife Lock Screw 1/4-28NC-1/4"	12
41	Fence Body	1
42	Spring Pin ϕ 4x12	1
49	Floor Stand	
50	Knob	1
51	Key	1
52	Flat Head Bolt 5/16"-18NCx1-1/4"	1

Part	Description	Q'ty
53	Joint Body	1
54	Angle Set Stiffening Plate	1
55	Plunger	1
56	Nut	1
57	Guard Bolt	1
58	Washer	3
59	Pulley Cover	1
60	Locating Link	1
61	Fence Link	1
62	Hex Head Screw	1
63	Hex Nut	2
64	Handle Stud	1
65	Table Bracket	1
66	Fence Bracket	1

Part	Description	Q'ty
43	V-Belt A-32	1
44	Motor Puller	1
45	Set Screw 5/16"-18NCx3/8"	2
46	Locking Bolt	3
47	Spring Washer 3/8"	3
48	Motor 1 HP	1
91	Top Panel	1
92	Front Side Panel	1
93	Rear Side Panel	1
94	Support Pail	2
95	Motor Mount Support Rail	1
96	Motor Mount	1
97	Motor Mount Stiffener	1
98	Switch	1
99	Switch Bot	1

Part	Description	Q'ty
100	Cord Clip	1
101	Cord of Power-Source	1
102	Plastic Side	2
103	Cup Head Square neck Bolt 5/16"x18NCx5/8"	20
104	Hex Screw 5/16"x18NC-3/4"	6
105	Hex Screw 5/16"-18NCx1/2"	4
106	Slotted Head Machine Screw M4x0.7P-25	2
107	Slotted Head Machine Screw 5/32"-32NC-1/2"	1
108	Wacher M4	5
109	Nut M4x0.7P	2
110	Nut 5/32-32NC	1
111	Washer 5/16"	40
112	Hex Nut 5/16"	30