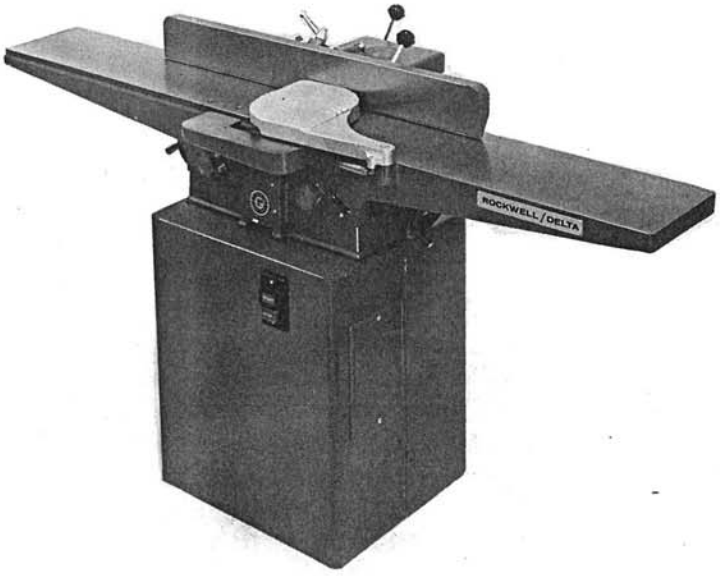
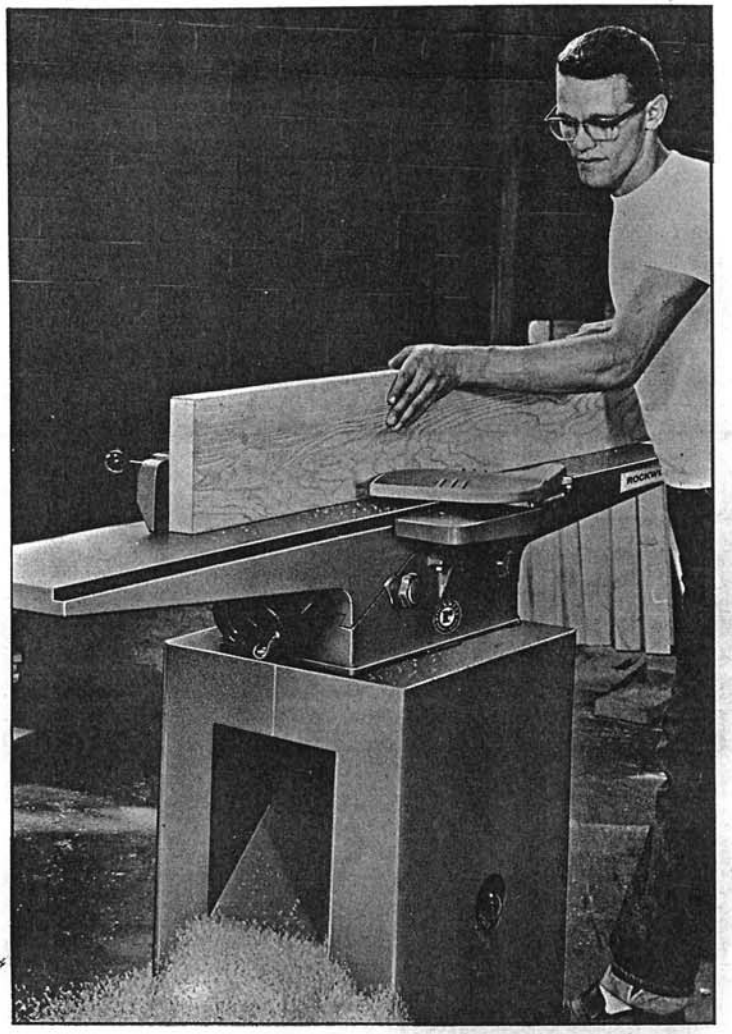
Rockwell International

PM 418-04-651-5002
DATED 5-15-72

8'' Long–Bed JOINTER
(beginning with Serial No. EX–3690)



8'' LONG-BED JOINTER
SHOWN WITH ACCESSORY
50-370 ENCLOSED STEEL STAND
AND ELECTRICALS

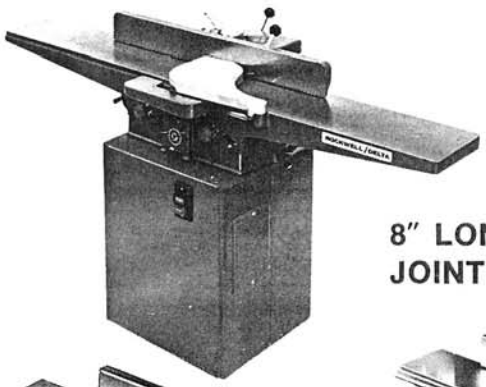


INTRODUCTION

The Rockwell Delta 8'' Long-Bed Jointer joints and surfaces stock up to 8-1/16'' wide and cuts rabbets 1/2'' deep by 8-1/16'' wide. Your Jointer has an extra-long 5-1/2 foot bed and a big 4 x 34 inch center mounted fence.

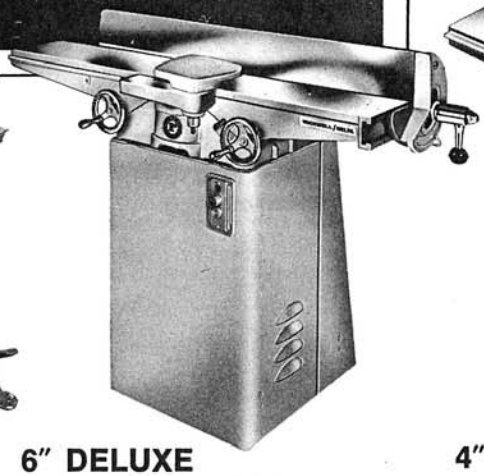
This Rockwell Delta Jointer is especially ideal where speed, accuracy and low maintenance are required. It is ideal for sash and door producers, furniture manufacturers, cabinet shops, shipyards, schools, etc.

SAFETY SUGGESTIONS FOR ROCKWELL DELTA JOINTERS

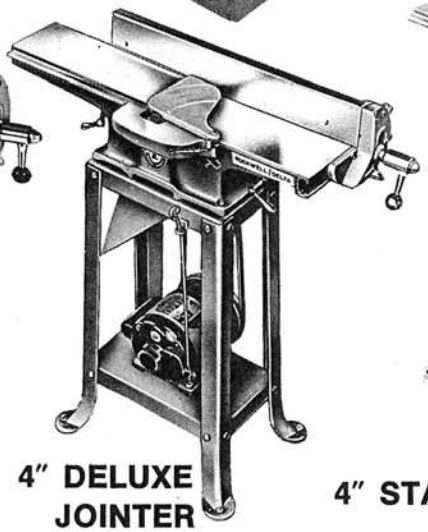


8" LONG-BED JOINTER

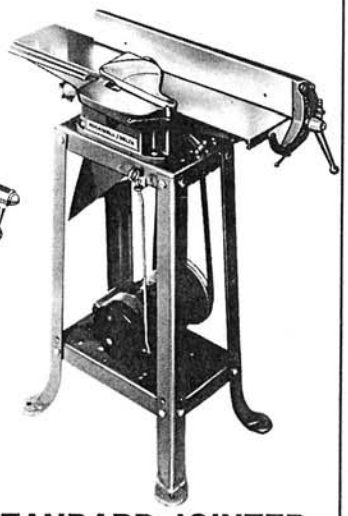
6" JOINTER



6" DELUXE LONG-BED JOINTER



4" DELUXE JOINTER



4" STANDARD JOINTER

1. IF YOU ARE NOT thoroughly familiar with the operation of Jointers, obtain advice from your supervisor or instructor.

2. REMOVE tie, rings, watch and other jewelry, and roll up sleeves.

3. ALWAYS wear safety glasses or a face shield.

4. KEEP cutterhead sharp and free of all rust and pitch.

5. MAKE ALL adjustments with the power off.

6. GUARDS should be in place and used at all times.

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

8. NEVER joint stock under 6" long.

9. NEVER pass hands directly over cutterhead.

10. ALWAYS make sure exposed cutterhead behind the fence is guarded, especially when jointing near the edge or rabbeting.

11. DISCONNECT jointer from the power source when making repairs.

12. SHUT OFF the power and clean the jointer before you leave it.

CLEANING THE JOINTER

Remove the protective coating from the machine surface 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 surface with a good quality paste wax.

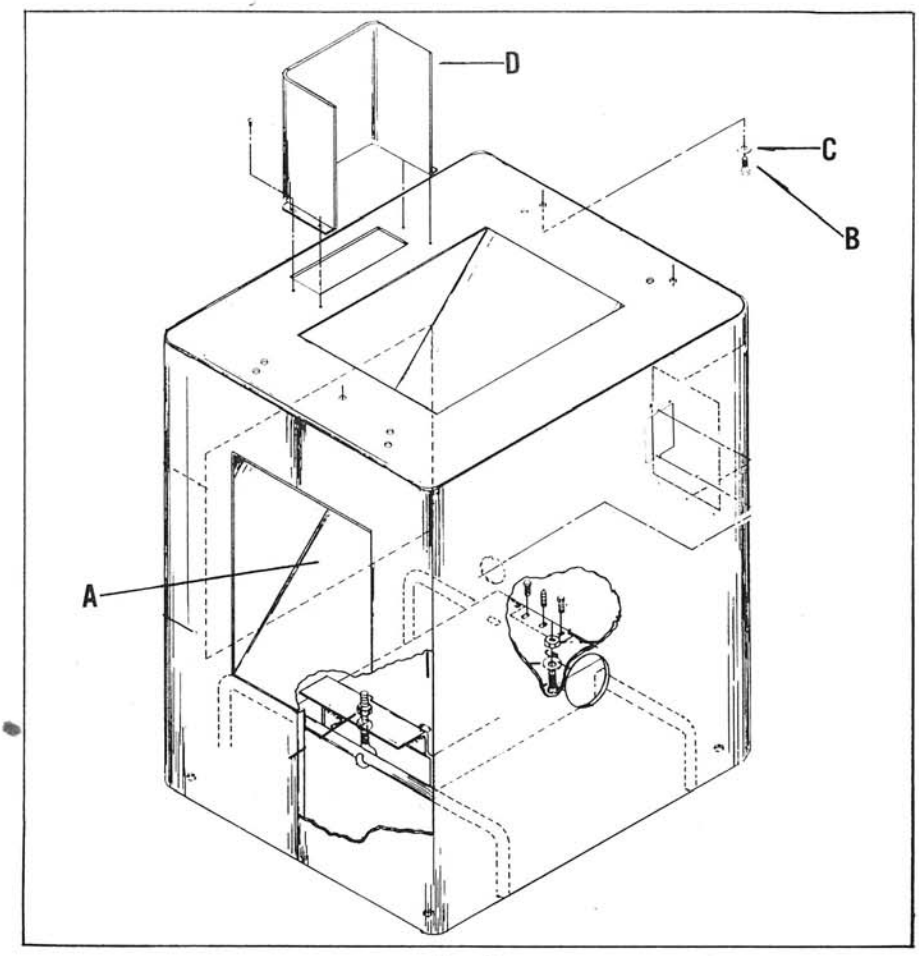


Fig. 2

ASSEMBLING JOINTER TO STAND

The jointer can be mounted on a suitable wood stand or bench, or the 50-370 Enclosed Steel Stand. If the jointer is mounted to a wood stand or a bench, care must be taken that a hole is provided in the stand or bench to facilitate the removal of jointer chips.

The jointer as illustrated on the front cover is shown mounted on the 50-370 enclosed steel stand. This stand may be purchased with motor and controls completely assembled and wired inside the stand along with the motor pulley and V-belt. If you have purchased the 50-370 enclosed steel stand with motor and electricals installed, proceed as follows:

1. Place the jointer on the stand with the dust chute opening (A) Fig. 2, underneath the out-feed table of the jointer.

2. Fasten jointer securely to the stand using the four bolts (B) and lockwashers (C) supplied. The bolts (B) Fig. 2, go up through the stand into the tapped holes in the jointer base.

3. Assemble the motor pulley to the motor and line up the motor and cutterhead pulleys. NOTE: It will be necessary to reposition the motor on the motor plate in order to line up the motor and cutterhead pulleys.

4. Place the V-belt on the pulleys and assemble the belt and pulley guard (D) Fig. 2, to the jointer stand using the four self-tapping screws supplied.

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, as shown in Fig. 3. MAKE SURE THE JOINTER IS PROPERLY GROUNDED.

WIRE AND FUSE SIZE

HP	SINGLE PHASE				THREE PHASE			
	115 VOLTS		230 VOLTS		200-230 VOLTS		460 VOLTS	
	WIRE SIZE	TIME LAG FUSE*	WIRE SIZE	TIME LAG FUSE*	WIRE SIZE	TIME LAG FUSE*	WIRE SIZE	TIME LAG FUSE*
1	12	20	14	15	14	15	14	15
1-1/2	–	–	12	20	14	15	14	15

Fig. 3

*Size fuse selected for branch circuit protection.

SINGLE PHASE INSTALLATION

If the motor on your machine is wired for 115-V 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. 4.

An adapter is available to permit the use of 3-conductor type plugs in 2-conductor outlets, however, it is perferable to use the properly grounded receptacle as shown in Fig. 4.

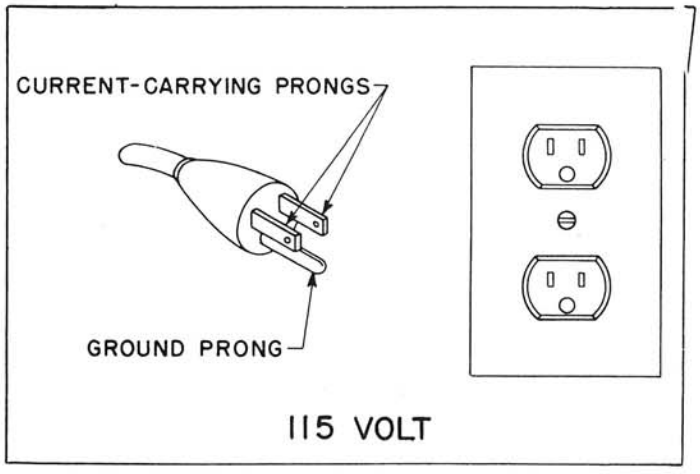


Fig. 4

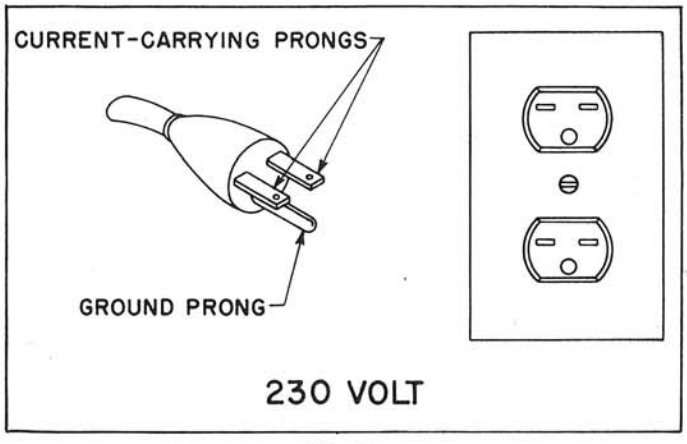


Fig. 5

If the motor on your machine is wired for 230V 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. 5. 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.

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

THREE PHASE INSTALLATION

If the motor on your machine is wired for 200V, 230V, 460V, or 575V three phase, the necessary wiring from the starter to the power source should be completed by a competent electrician.

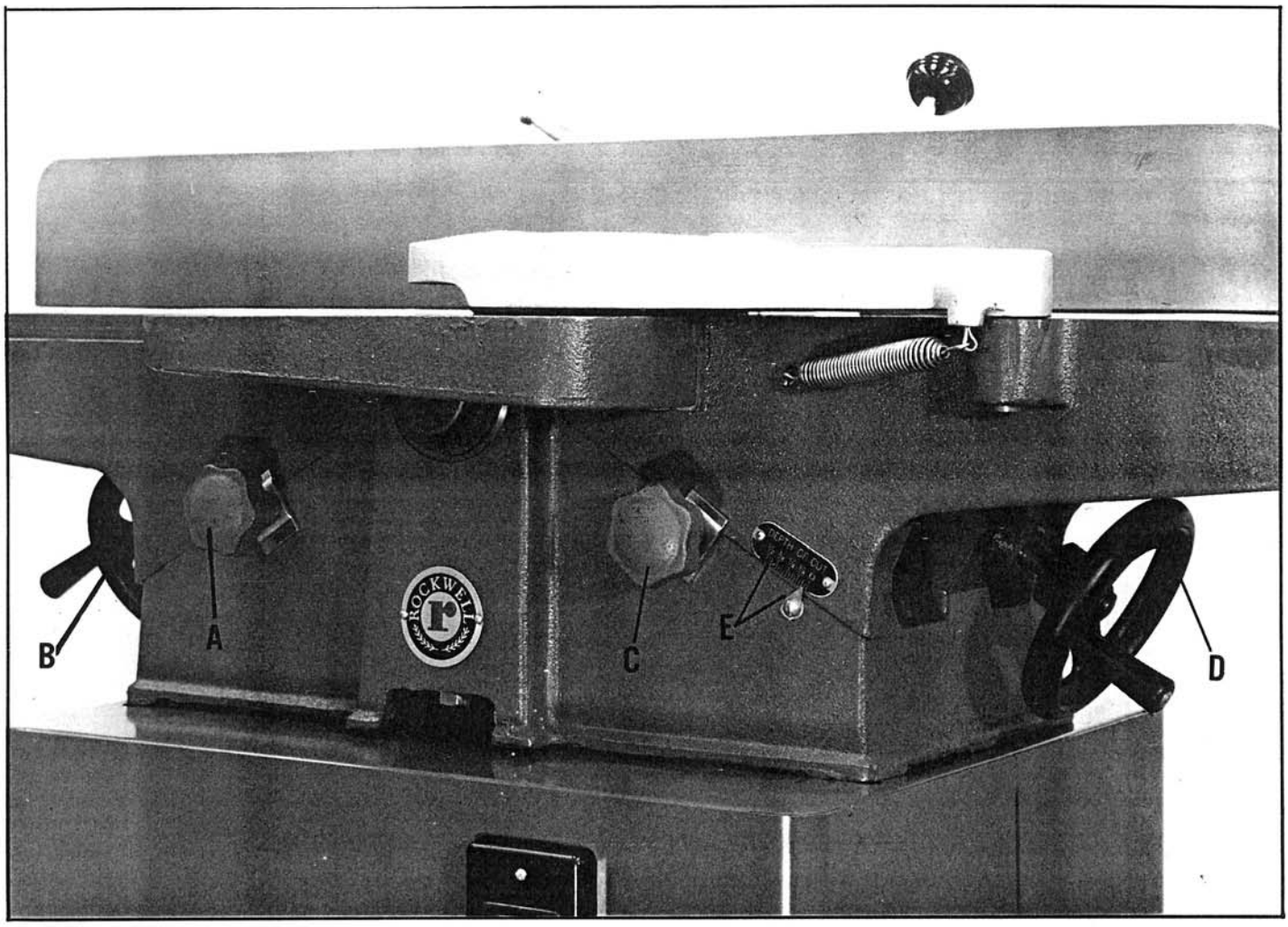


Fig. 6

RAISING AND LOWERING TABLES

To raise or lower the rear table, loosen lock knob (A) Fig. 6, and turn handwheel (B). Tighten lock knob (A) when table is set at desired position.

The amount of material removal by a single cut can be any thickness from a very thin shaving to 1/2''. To adjust for depth of cut, raise or lower the front table by loosening lock knob (C) Fig. 6, and turning handwheel (D). The pointer and scale (E) Fig. 6, indicates the amount the table has been raised or lowered. When the front table is set at the desired position, tighten lock knob (C).

IMPORTANT: ALWAYS LOOSEN LOCK KNOBS (A) AND (C) FIG. 6, BEFORE MOVING TABLES.

The pointer should point to the ''O'' mark on the scale when the front table is exactly level with the knives at their highest point of revolution. If the pointer requires adjustment, loosen the slotted screw and adjust the pointer accordingly.

SETTING KNIVES

Your Jointer is equipped with a special knife-setting feature for quick and accurate setting of the knives. To set the knives, proceed as follows:

1. DISCONNECT THE JOINTER FROM THE POWER SOURCE.

2. Move the rear table to 1/2'' above the bearing housing, as shown in Fig. 7.

3. Remove guard and move the fence to the extreme right.

4. If replacing knives, thoroughly clean the cutterhead, knife lock bars and screws after removing the old knives. IMPORTANT: ALTHOUGH THE SMALL LIFTER SPRINGS FIG. 7, UNDER EACH KNIFE ARE SECURELY SET IN THE CUTTERHEAD, MAKE SURE THAT THEY DO NOT BECOME LOST WHEN REMOVING THE KNIVES.

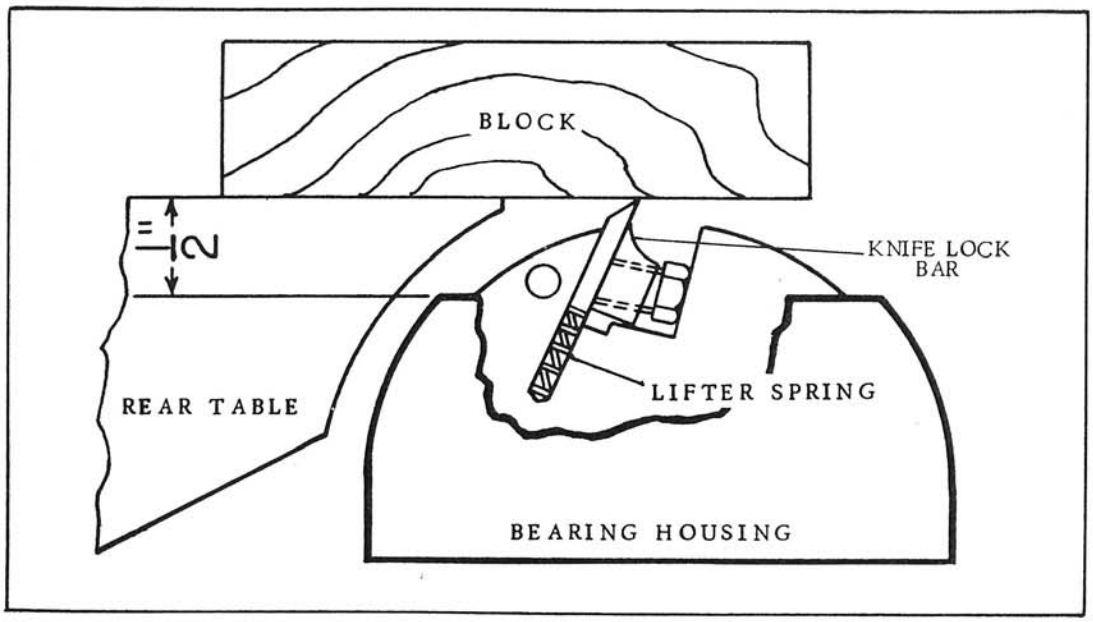


Fig. 7

5. Attach index stop (A) Fig. 8, to left hand bearing housing, using screw and washer (B), making sure the end of the stop (C) is engaged in one of the three holes (D) provided in the cutterhead, as shown in Fig. 8. Make sure the index stop, at point (E), Fig. 8, is against side of cutterhead, as shown.

6. Tighten screw (B) Fig. 8, aligning the index stop (A) parallel to cutterhead.

7. Place knife in slot over lifter springs, as shown in Fig. 7, with left hand edge of knife against index stop at point (F) as shown in Fig. 8. This will insure the necessary uniform projection of each knife for rabbeting.

8. Install knife lock bar, shown in Fig. 7, positioning it centrally in the cutterhead.

9. Turn two end screws in the knife lock bar to the left (backing them out) but do not lock knife securely.

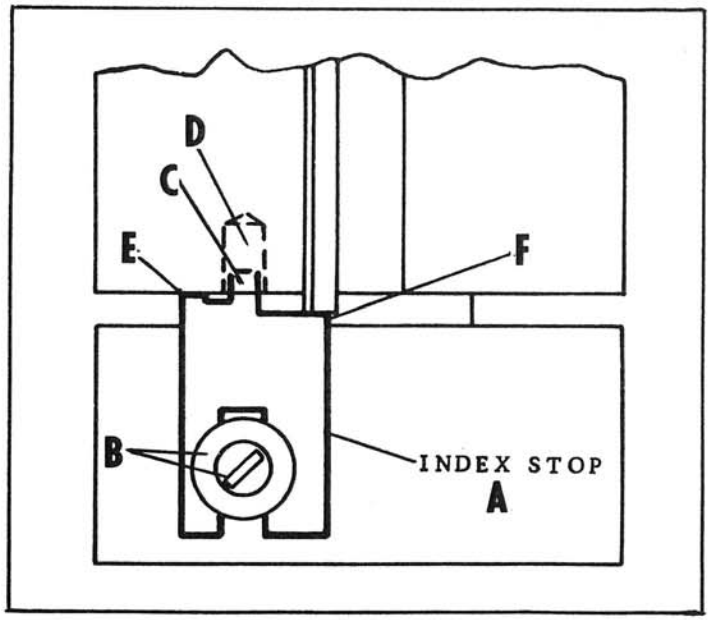


Fig. 8

10. Make a "U" shaped block out of hardwood, laminate or aluminum etc. Place this block on the rear table and gently push the knife down into the cutterhead, as shown in Fig. 9.

11. Turn the two end screws in the lock bar (backing them out) until they clamp the knife in place. Turn the remaining three screws in the same manner applying uniform pressure to the lock screws, as shown in Fig. 9.

12. Loosen screw holding index stop and rotate cutterhead to the next position and repeat the above steps.

13. After the three knives are installed, the rear table must be raised slightly because the position of each knife when set was below top dead center, of the cutting circle. Adjust the rear table exactly level with the knives by referring to REAR TABLE ADJUSTMENT.

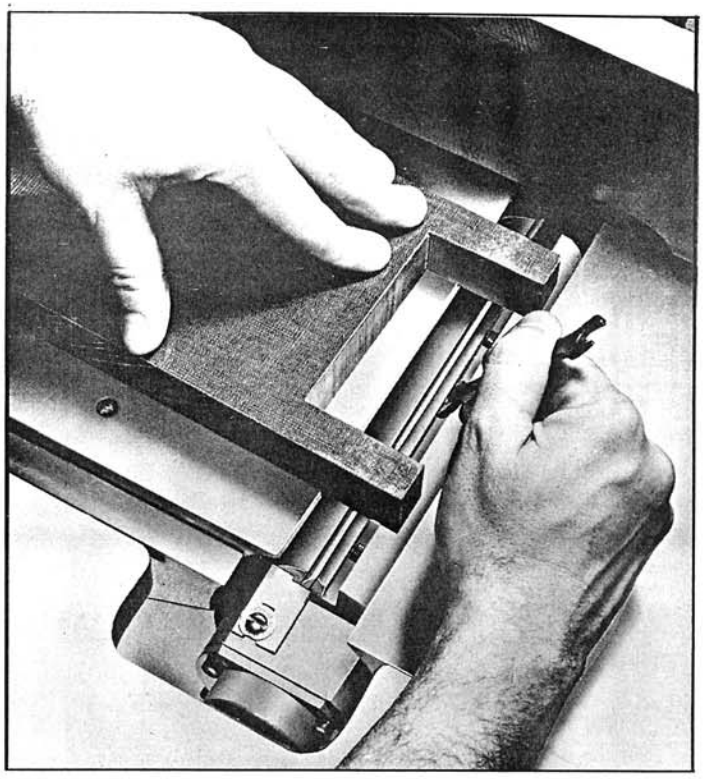
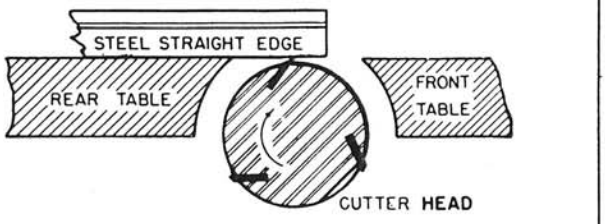


Fig. 9

REAR TABLE 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. 10

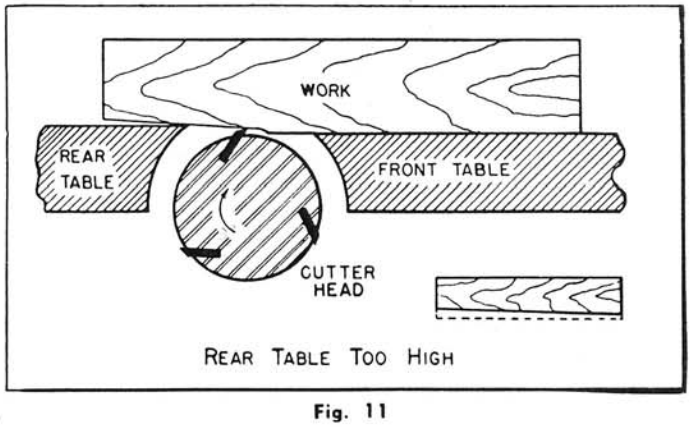
1. DISCONNECT THE JOINTER FROM THE POWER SOURCE.

2. Place a straight edge on the rear table, extending over the cutterhead, as shown in Fig. 10.

3. Raise or lower the table as required until the rear table is exactly level with the knives of the cutterhead at their highest point of revolution.

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 shown in Fig. 11. The finished surface will be curved.



REAR TABLE TOO HIGH

Fig. 11

When the rear table is too low, the condition will be as illustrated in Fig. 12. The work will be gouged at the end of the cut.

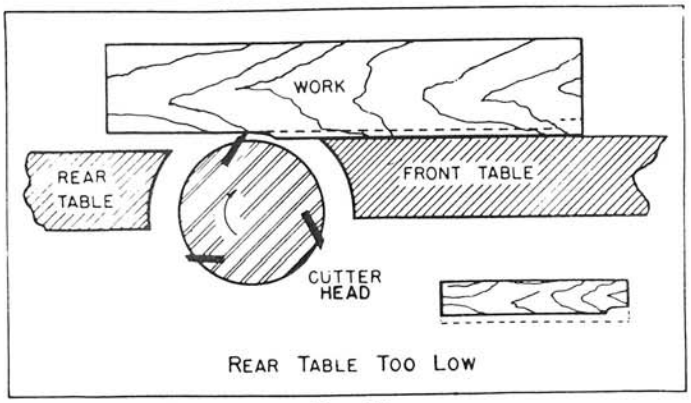


Fig. 12

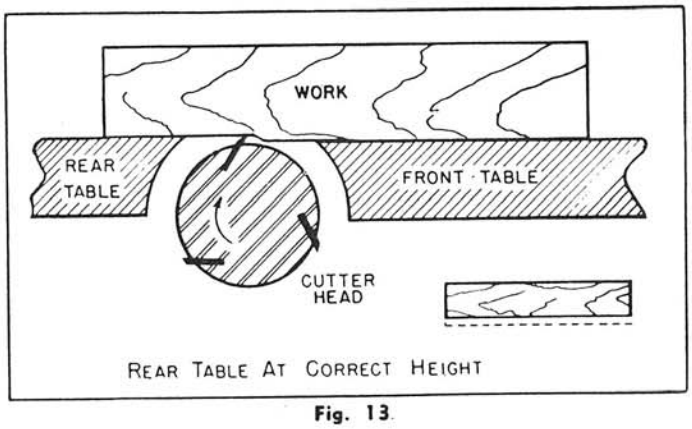


Fig. 13

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. 13, with no open space under the finished cut.

ADJUSTING TABLE GIBS

"Gibs" are provided to take up all play between the mating dovetailed ways of the base and the front and rear tables of your jointer. The "gib" for the front table is located between the dovetailed ways (A) Fig. 14, of the front table (B) and base (C). 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:

1. Loosen all four of the gib adjusting screws (D) Fig. 14. NOTE: The four locknuts located on the gib adjusting screws must first be loosened.

2. Proceed to retighten the four gib adjusting screws (D) starting with the lowest screw first and as you proceed toward the top, raise up gently on the outboard edge of the table being adjusted, as shown in Fig. 14. This will offset any tendency of the table casting to "droop" or. "sag" and permit the gib to be brought up to a good secure fit.

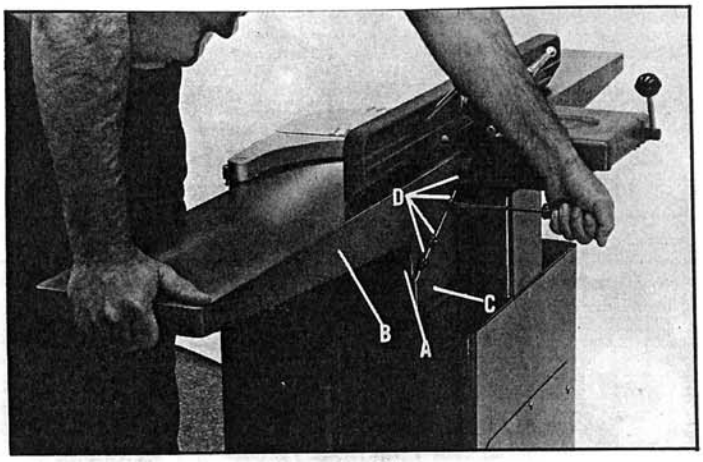


Fig. 14

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.

FENCE ADJUSTMENT

The fence can be moved across the table by loosening locking handle (A) Fig. 15, move the fence to the desired position and retighten locking handle (A).

To tilt the fence to the right or left, loosen handle (B), pull out plunger (C) and using the tilting handle (D), move the fence to the desired angle, as shown in Fig. 15. IMPORTANT: When cutting a bevel, we suggest that whenever possible the fence be tilted to the left. The fence will then form a V-shape with the tables, and the work is easily pressed into the pocket while passing it across the knives.

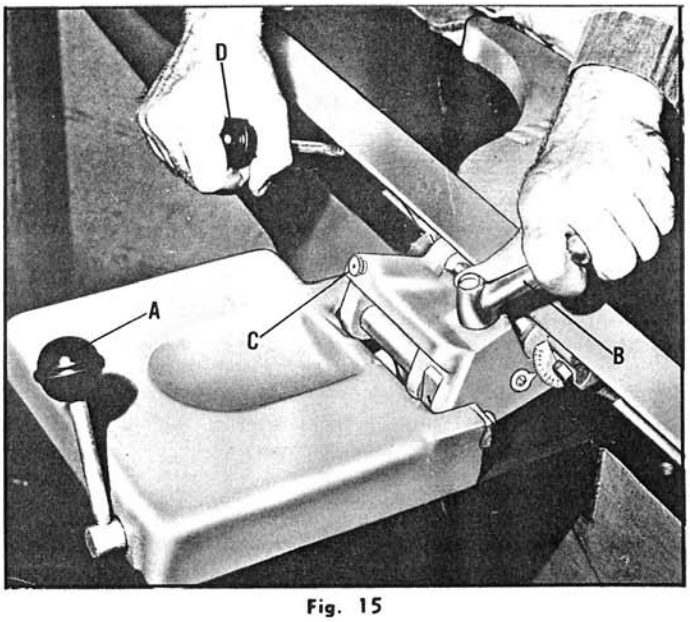


Fig. 15

If the fence is not square with the table when the plunger (C) Fig. 16, is engaged in the slot of the index collar (E), it can be adjusted as follows:

1. Check the fence and table with an accurate square and if the fence is not 90^{o} to the table, loosen set screw (F) in the index collar (E) Fig. 16.

2. Loosen the fence locking handle (B) Fig. 15, and tilt the fence the desired amount to bring it exactly at 90^{o} to the table. Then tighten the locking handle (B) Fig. 15.

3. When you are sure the fence is at 90^{o} to the table, tighten set screw (F) in the index collar (E) Fig. 16, and adjust pointer if necessary.

4. When the fence is tilted 45^{o} right or left, it comes to rest on "positive stops". These stops are in the form of set screws and can be adjusted in or out if neccessary and held securely with lock nuts.

5. The locking handle (B) Fig. 15, can be adjusted to lock in the most convenient position by removing the round head screw and repositioning the handle.

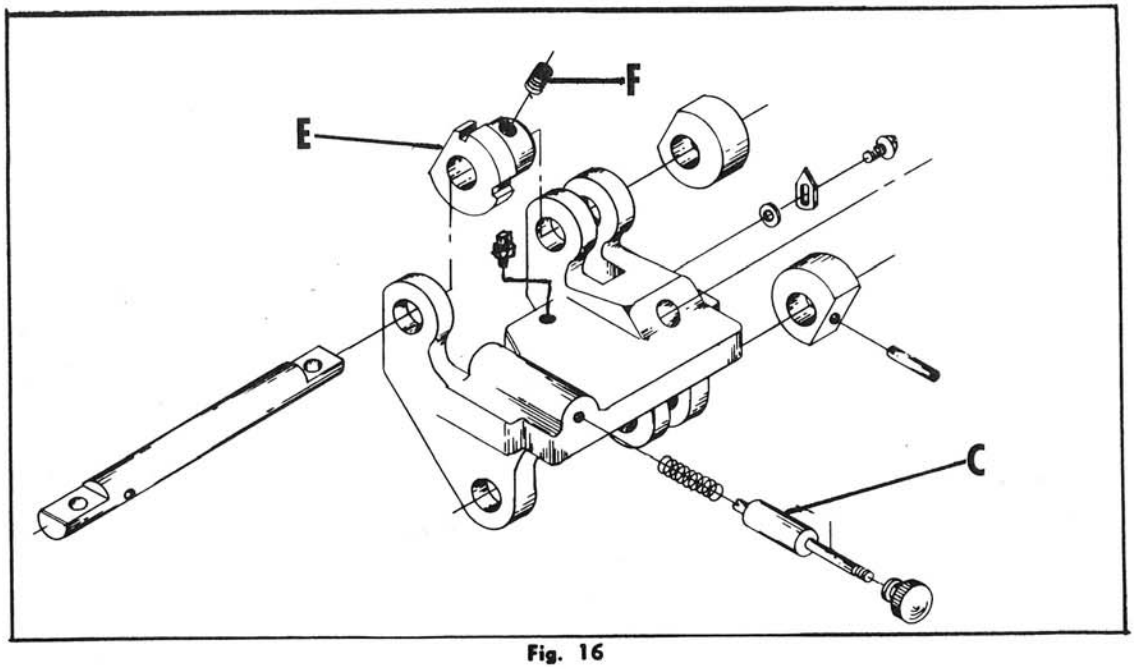


Fig. 16

SHARPENING KNIVES

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:

1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.

2. Use a fine carborundum stone and cover it partly with paper to avoid marking the table, as shown in Fig. 17.

3. Lay the stone on the front table, lower the table and turn the cutterhead forward until the stone lies flat on the bevel of the knife, as shown in Fig. 17.

4. Hold the cutterhead to prevent it from turning and slide the stone back and forth, lengthwise over the knife making the same amount of strokes on each knife.

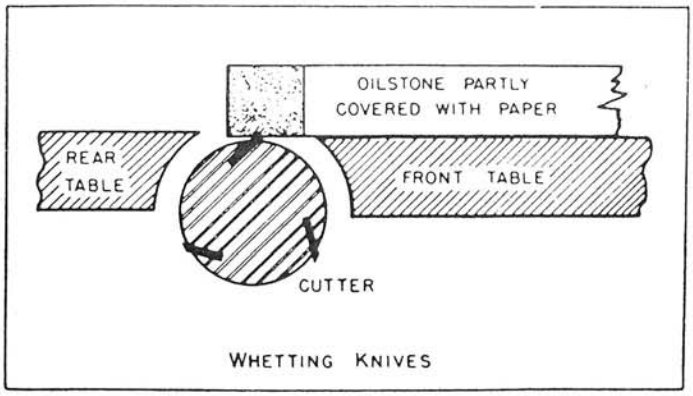


Fig. 17

CUTTERHEAD REPAIRS

When the knives cannot be properly sharpened by the methods described above, they must be ground to a new bevel edge. In such cases, or when bearings need replacement, remove the entire cutterhead with bearings and housings from the base and return it to the factory. Remove the cutterhead as follows:

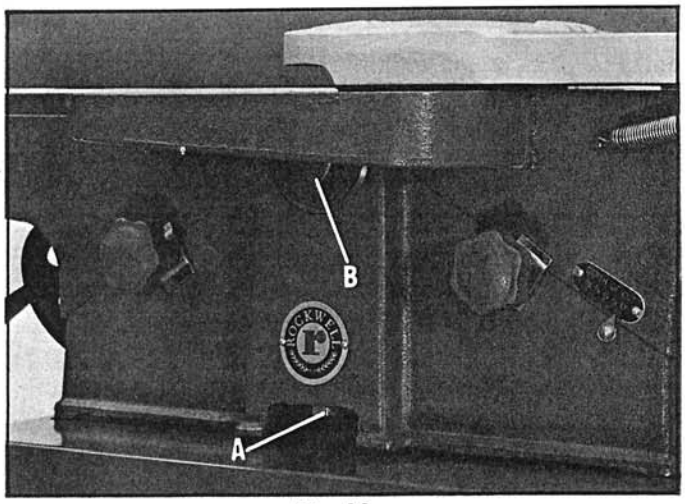


Fig. 18

1. DISCONNECT MACHINE FROM THE POWER SOURCE.

2. Remove the belt and pulley guard and remove the belt from the cutterhead pulley.

3. Unscrew the hex head screw (A) Fig. 18, until it is free from the bearing housing (B). Also unscrew the hex head screw located on the opposite end of the jointer base.

4. Tilt the fence out of the way as shown in Fig. 19.

5. Using masking tape, cover the three knives in the cutterhead, as shown in Fig. 19.

6. Lower the tables to their lowest positions and lift up and remove the cutterhead as shown in Fig. 19.

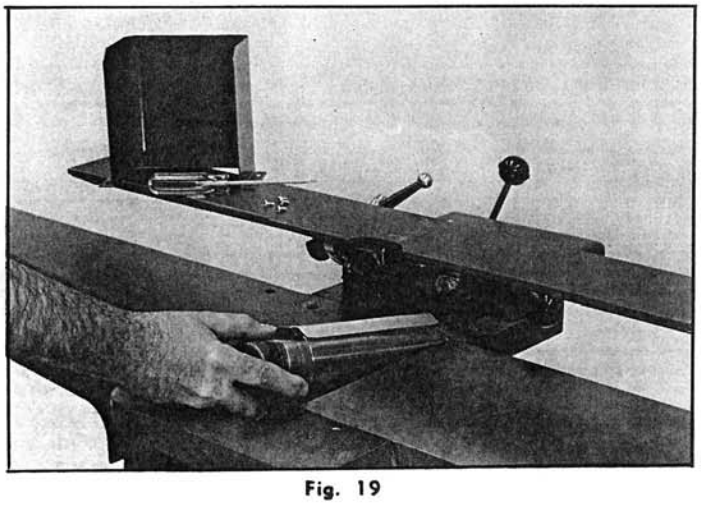
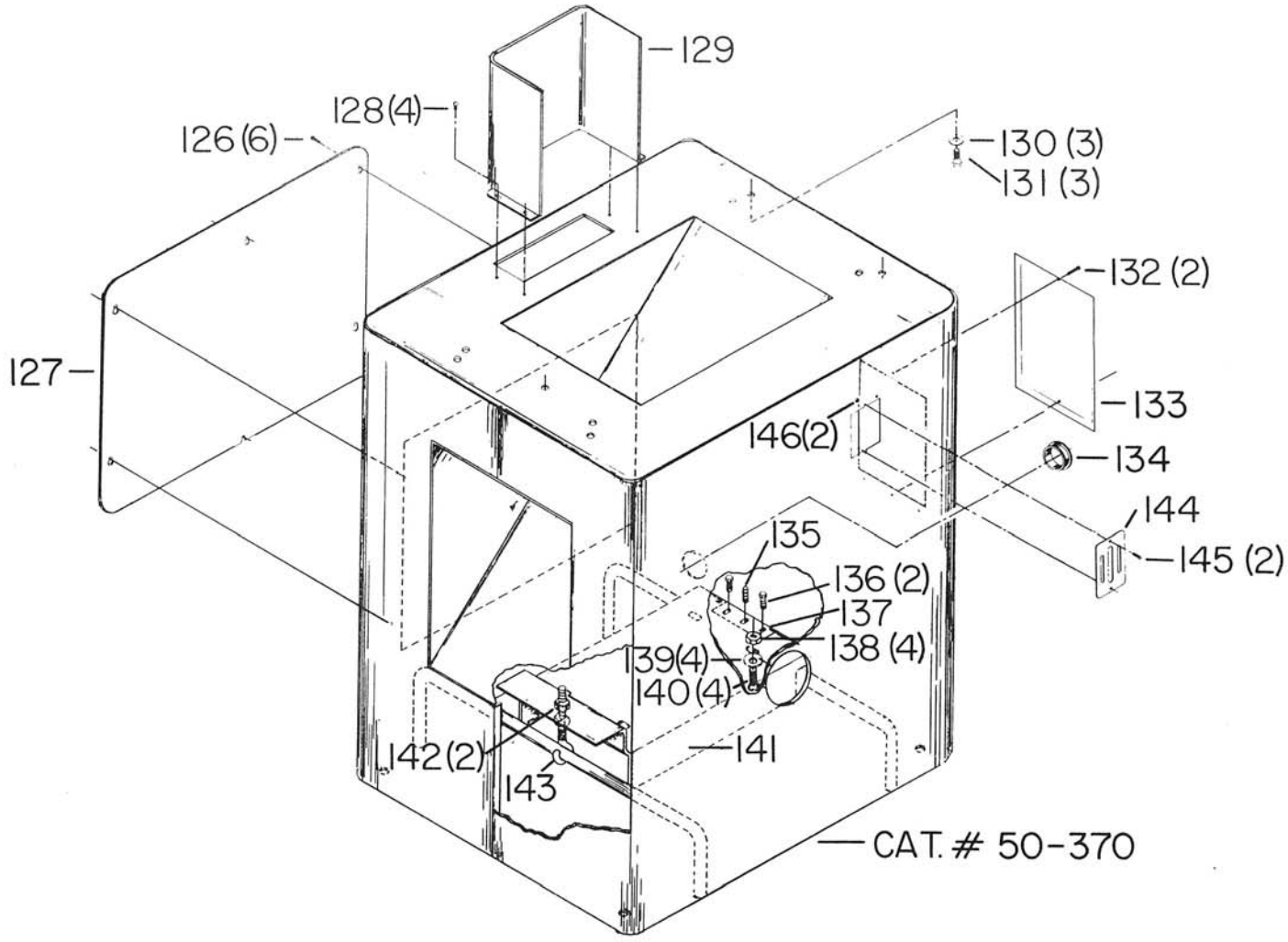
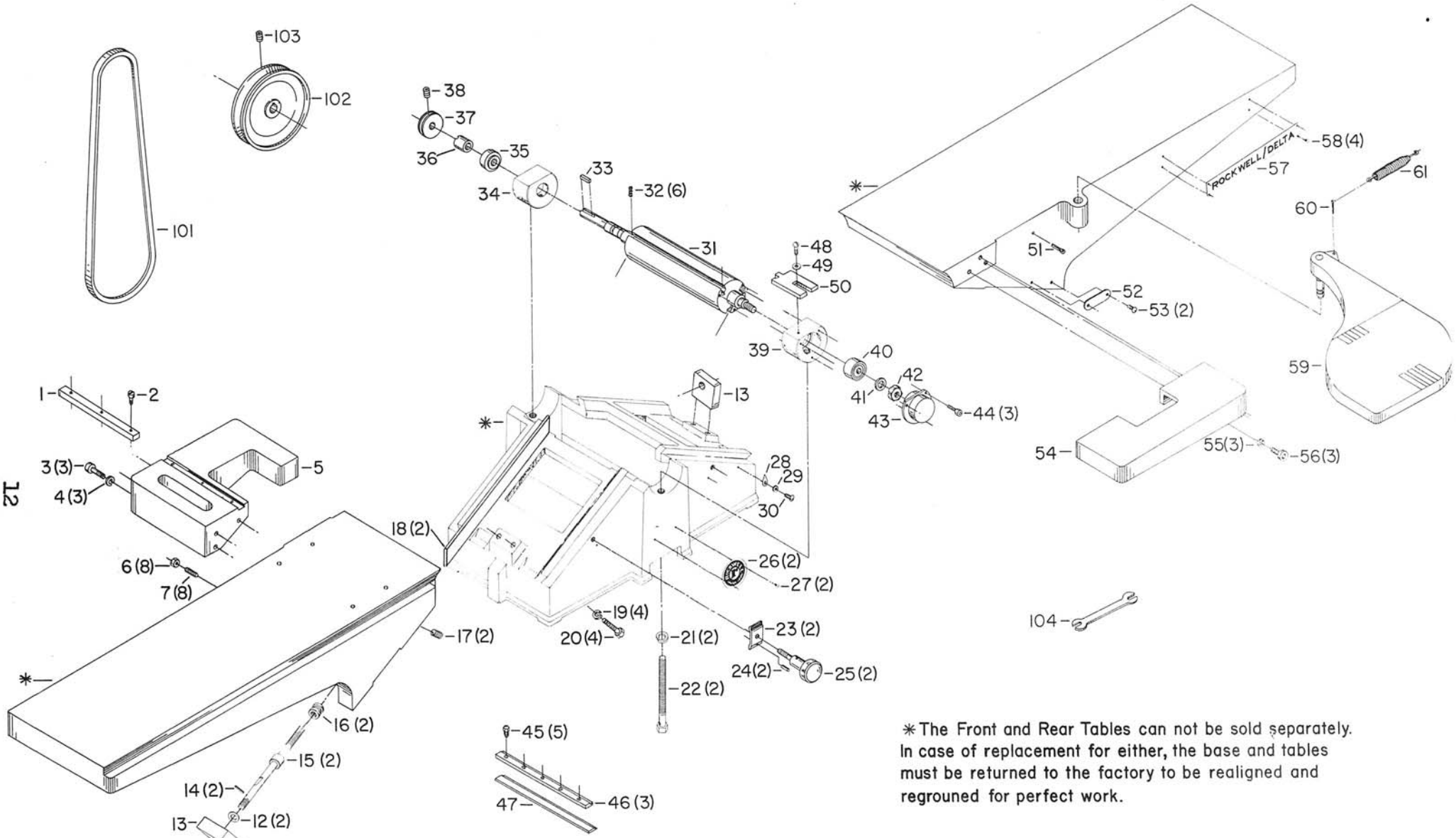


Fig. 19



Replacement Parts

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	Cat. # 50-370	Enclosed Steel Stand Incl:	135	SP-1178	1/4-20 x 3/4 Soc. Set Screw
126	SP-3009	#10 x 1/2 Self Tapping Screw	136	SP-2301	1/4-20 x 1/2 Hex Hd. Mach. Screw
127	JA-154	Cover	137	JA-146	1 x 1 x 1/8 x 3" Angle
128	SP-3007	#8 x 3/8 Self Tapping Screw	138	SP-1300	5/16-18 Hex Nut
129	JA-151	Belt Guard	139	SP-1620	11/32 x 11/16 x 1/16 Steel Washer
130	SP-1606	7/16 x 1 x 5/64 Steel Washer	140	SP-649	5/16-18 x 1 Hex Hd Cap Screw
131	SP-640	3/8-16 x 3/4 Hex Hd. Cap Screw	141	JA-145	Motor Support
132	SP-3025	#8 x 5/8 Truss Hd. Slotted Screw	142	SP-5900	3/8-16 Hex Nut
133	438-01-021-0130	Cover	143	JA-153	Eyebolt
134	438-01-011-0020	Bushing	144	DP-572	Cover
			145	901-02-010-0553	#6-32 x 1/2 Rd. Hd. Mach. Screw
			146	902-01-120-9232	#6-32 Hex Nut



BASE ASSEMBLY

*The Front and Rear Tables can not be sold separately. In case of replacement for either, the base and tables must be returned to the factory to be realigned and regrounded for perfect work.

Replacement Parts

Ref. No.	Part No.	Description
*		Base
*		Front Table
*		Rear Table
1	JA-16	Key
2	SP-742	#10-32 x 3/8 Fil. Hd. Mach. Screw
3	SP-750	5/16-18 x 1 Hex. Soc. Cap Screw
4	SP-1703	5/16 Lockwasher
5	JA-116	Fence Support
6	SP-1228	5/16-24 Hex Jam Nut
7	SP-4554	5/16-24 x 1 Set Screw
8	0903879	1/2-20 Self Locking Nut
9	1086488	Handwheel Assembly
10	JA-124	Collar
11	SP-206	5/16-18 x 5/16 Hex Soc. Set Screw
12	DSS-36	.86 x 1/2 x 1/16 Fibre Washer
13	JA-127	Block
14	SP-2704	1/8 x 3/4 Roll Pin
15	1085834	Adjusting Screw
16	JA-126	Nut
17	SP-206	5/16-18 x 5/16 Hex Soc. Set Screw
18	JA-123	Gib
19	SP-1704	3/8 Lockwasher
20	SP-617	3/8-16 x 1-1/2 Hex Hd. Cap Screw
21	SP-1705	1/2 Lockwasher
22	SP-685	1/2-20 x 5 Hex Hd. Cap Screw
23	JA-120	Clamp Washer
24	SP-2703	1/8 x 1/2 Roll Pin
25	JA-115-S	Lock Knob
26	960-02-012-0037	Nameplate
27	SP-2250	#4 x 3/16 Drive Screw
28	SBS-46	Pointer
29	SP-1609	13/64 x 7/16 x 1/16 Steel Washer
30	SP-561	#10-32 x 3/8 Rd. Hd. Mach. Screw
** 31	Cat # 37-342	Cutterhead Assembly, Incl:
32	JA-156	Spring
33	SP-2662	Key
34	1086796	Rear Bearing Housing
35	SP-5348	Bearing # 99504
36	JA-57	Clamping Nut
37	JA-131-S	Cutterhead Pulley, Incl:
38	SP-206	5/16-18 x 5/16 Hex Soc. Set Screw
39	1086797	Front Bearing Housing
40	SP-5348	Bearing # 99504
41	JA-54	Clamping Collar
42	902-01-201-8563	5/8-18 Left Hand Hex Jam Nut
43	JA-127	Front Bearing Cap
44	SP-224	#10-32 x 1/2 Soc. Hd. Cap Screw
45	J-23	1/4-28 Hex Hd. Mach. Screw
46	JA-105	Throat Block
47	Cat. # 37-308	Set of 3 Knives
48	SP-561	#10-32 x 3/8 Rd. Hd. Mach. Screw
49	SP-1609	13/64 x 7/16 x 1/16 Steel Washer
50	JA-157	Knife Stop
51	SP-2110	1/8 x 1/2 Cotter Pin
52	NJ-211	Scale
53	SP-2250	#4 x 3/16 Drive Screw
54	JA-34	Rabbeting Ledge
55	SP-1605	3/8 x 7/8 x 1/16 Steel Washer
56	SP-750	5/16-18 x 1 Hex Soc. Cap Screw
57	960-01-012-0019	Nameplate
58	SP-2252	#2 x 3/16 Drive Screw
59	JA-23-S	Guard, Incl:
60	SP-2107	1/8 x 3/4 Cotter Pin
61	NJ-212	Spring
101	Cat. # 49-025	V-belt
102	Cat. # 41-053	Motor Pulley, Incl:
103	SP-206	5/16-18 x 5/16 Hex Soc. Set Screw
104	Cat. #37-522	Wrench

* IMPORTANT: Base, front and rear tables cannot be supplied separately, as the re-assembled machine would not be accurate. For true alignment, we finish-grind our jointer tables after assembly on the base. When a new table or base is required, ship the machine, less fence and knife guard, to the factory for rebuilding. The cost will be the list price for the new part plus a fixed charge for assembling and grinding the tables.

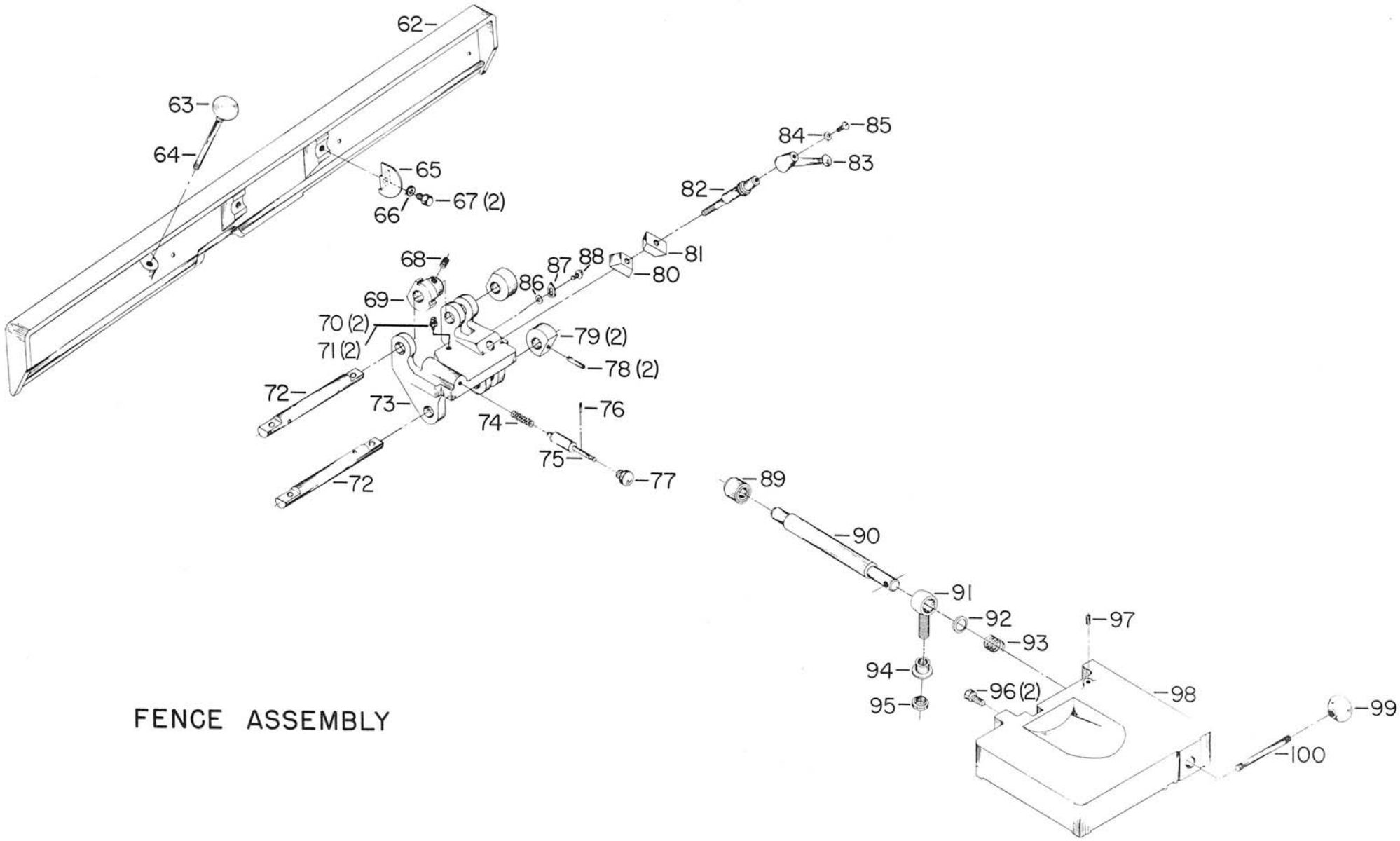
** NOTE: - Cutterhead Repairs: Special tools are required to remove and replace ball bearings on the cutterhead. When the bearings or cutterhead need replacement, order a complete new cutterhead assembly #37-342, or return the old one to us for repairing for which there is nominal charge covering repair work plus a small labor charge per bearing for installing.

Knife Sharpening Service: Our charge for re-grinding and setting knives will be a nominal net charge per cutterhead, F.O.B. factory.

Be sure to send the complete cutterhead assembly with bearings and housing, less pulley, by prepaid express or parcel post insured.

Cutterheads may be returned to:

ROCKWELL MANUFACTURING COMPANY
Power Tool Division
Tupelo, Mississippi
Attention: Service Department



FENCE ASSEMBLY

Replacement Parts

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
62	JA-110	Fence	82	JA-44-S	Clamp Stud
63	NJ-247	Handle Ball	83	SR-217	Handle
64	TCS-270	Stud	84	SP-1609	13/64 x 7/16 x 1/16 Steel Washer
65	JA-108	Fence Scale	85	SP-7528	1/4-20 x 1/2 Mach. Screw
66	SP-1620	11/32 x 11/16 x 1/16 Steel Washer	86	SP-1609	13/64 x 7/16 x 1/16 Steel Washer
67	SP-608	5/16-18 x 7/8 Hex Hd. Cap Screw	87	SBS-46	Pointer
68	SP-205	5/16-18 x 1/4 Hex Soc. Set Screw	88	SP-561	#10-32 x 3/8 Rd. Hd. Mach. Screw
69	JA-118	Indexing Collar	89	CBL-435	Eccentric Shaft Bushing
70	SP-306	1/4-20 x 3/4 Sq. Hd. Set Screw	90	JA-18	Clamping Shaft
71	SP-1034	1/4-20 Hex Nut	91	CBL-439	Clamp Eye Bolt
72	JA-119	Pivot Shaft	92	CBL-434	Special Washer
73	JA-111	Rocker Arm	93	CBL-437	Coil Spring
74	SCG-245	Spring	94	JA-117	Clamping Bushing
75	JA-121	Indexing Pin	95	SBS-19	Special Nut
76	SP-6706	1/16 x 3/8 Roll Pin	96	SP-608	5/16-18 x 1/4 Hex Soc. Set Screw
77	SBS-40	Special Nut	97	SP-202	1/4-20 x 1/2 Hex. Soc. Set Screw
78	SP-2715	3/16 x 1-1/8 Roll Pin	98	JA-109	Fence Base
79	JA-43	Fence Lock Collar	99	NJ-247	Handle Ball
80	JA-45	Lower Wedge	100	TCS-270	Stud
81	JA-46	Upper Wedge			