



Rockwell

MANUFACTURING COMPANY

The Rockwell Building • Pittsburgh, Pa.

418-04-651-5002

DATED IM 3-18-59

PM-1893

DELTA 8" JOINTER

Model 37-315 is furnished complete as illustrated in Fig. 1. Motor, stands and additional accessories may be obtained from your Delta dealer.

We urge you to read these instructions carefully and save them for future reference. Replacement parts can be obtained through your Delta dealer, always furnish part number, description, model number and serial number.

ASSEMBLY

Remove the protective coating from the machined surfaces and the cutterhead, using kerosene or a similar solvent. Do not use lacquer thinner or acetone.

The Jointer can be readily mounted on Delta No. 50-320 enclosed type steel stand or No. 37-320-A cast iron stand. Both of these stands are equipped with adjustable motor mounting plates which can be adjusted up or down for correct belt tension.

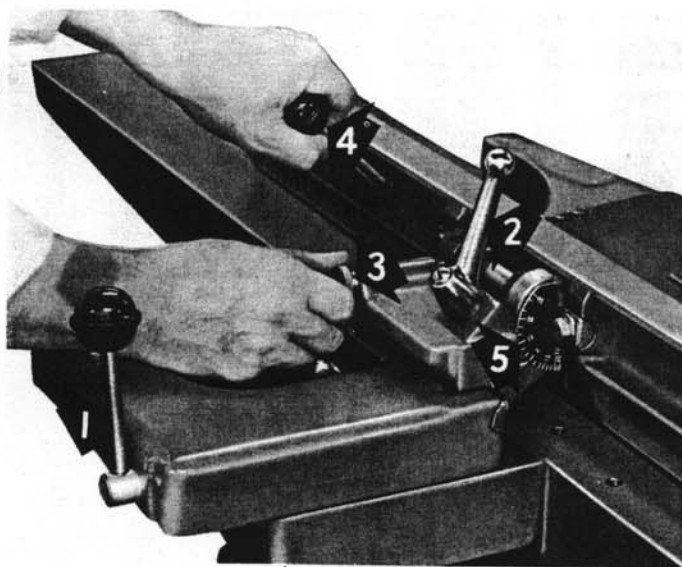


Figure 2

MOTORS

A $\frac{3}{4}$ H.P., 1 HP or $1\frac{1}{2}$ HP motor may be used. A complete listing of motors and switches is shown in the Delta catalog.

ELECTRICAL RECOMMENDATIONS

Make sure the electrical characteristics of the motor are the same as the power source which will be used. Do not use a circuit which will be overloaded. If an extension is used, it should contain the proper size wire to carry sufficient voltage. Using too small a wire will cause excessive loss of power.

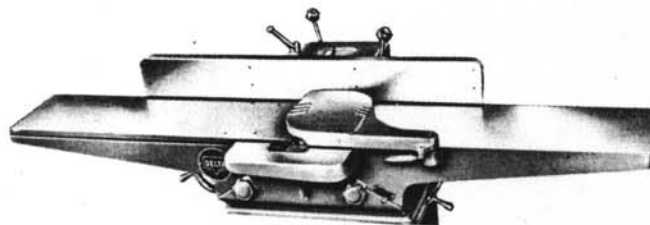


Figure 1

ADJUSTING FENCE FIG. 2

The fence is adjustable across the full width of the tables and is secured by means of a locking handle, (1).

To tilt the fence to the right or left, loosen handle (2) and pull out plunger (3). Note: the convenient tilting handle (4).

If the fence is not square with the table when the plunger is engaged in the slot of the index collar, it can be adjusted.

1. Check fence with accurate square and if not 90 deg. to table, loosen set screw in index collar, loosen lock handle (2) and tilt fence the desired amount. **NOTE:**— The index collar will rotate on shaft.
2. Tighten set screw in index collar and adjust pointer if necessary.
3. When the fence is tilted to 45° 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 necessary and held securely with lock nuts.
4. Locking handle (2) can be adjusted to lock in the most convenient position. Remove round head screw and reposition handle on the serrated portion of lock stud.

TABLE ADJUSTMENTS

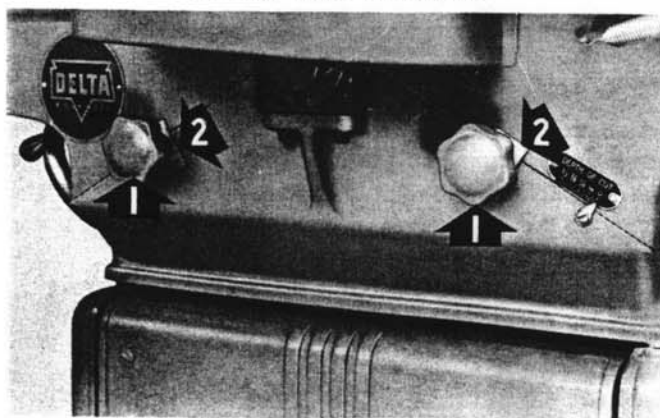


Figure 3

Both tables slide on "dovetail" ways and as normal wear occurs it can be compensated by adjustment.

To raise or lower the tables, loosen lock knob (1) Fig. 3, and turn handwheel. Tighten lock knob after table is set at desired position.

Between each table and base on the right hand side is a strip of steel called a "gib". (JA-123) Fig. 12. It is held in place by four screws visible from right hand side of Jointer.

If the tables cannot be moved readily the gibs may be set too tight. Loosen lock nuts and gib screws slightly. **NOTE:**— Always loosen lock knobs before moving tables.

If the tables move too freely, the gibs may not be set tight enough. Loosen lock nuts and tighten gib screws slightly starting with the end screws. To assist in tightening gib screws, always lift end of table a small amount.

IMPORTANT:— The rear table must be set AS HIGH as the top of the cutting circle, see Fig. 4. Raise or lower if necessary and set pointer to "0", See Fig. 3.

If the rear table is TOO HIGH, the material will be tapered, see Fig. 5.

If the rear table is TOO LOW, the material will be snipped at the trailing end, see Fig. 6.

KNIVES AND CUTTERHEAD

Clean the knives and cutterhead frequently with Delta Gum and Pitch Remover No. 4051.

SHARPENING KNIVES FIG. 7

The knives can be sharpened in the head using a fine sharpening stone.

1. Cover the stone with paper as shown.
2. Lay it on the front table. Lower the front table and turn the cutterhead by hand until the surface of the stone lies flat on the beveled surface of the knife.
3. 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.

If the knives are badly nicked they should be removed and ground. As a convenience you may obtain an extra set of knives, Delta No. 37-308, to be used while the original set is being ground.

Also available is a complete cutterhead with knives and bearing housings, Delta No. 37-810 which can be used while the original cutterhead is sent back to the factory so that the knives can be sharpened and reset in the head. Cutterheads may be returned to:

ROCKWELL MANUFACTURING COMPANY
Delta Power Tool Division
Bellefontaine, Ohio
Attention: Service Department

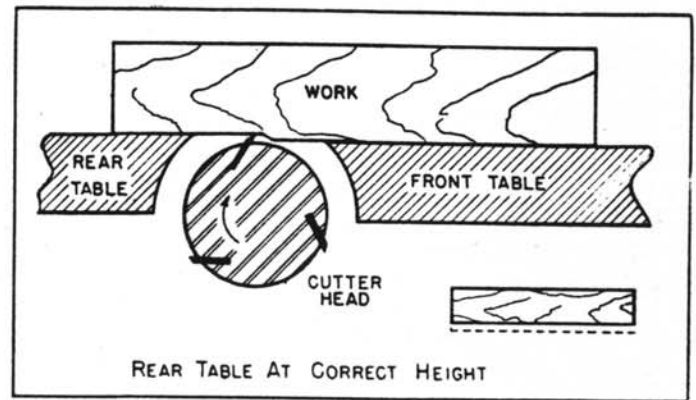


Figure 4

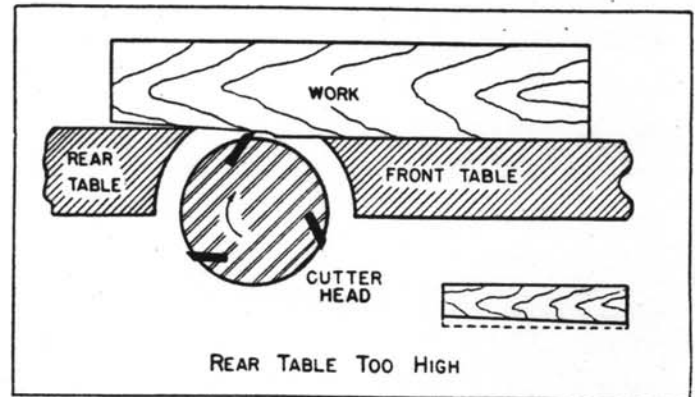


Figure 5

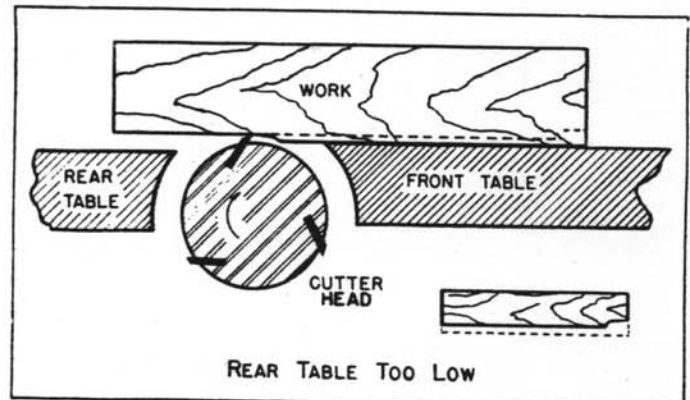


Figure 6

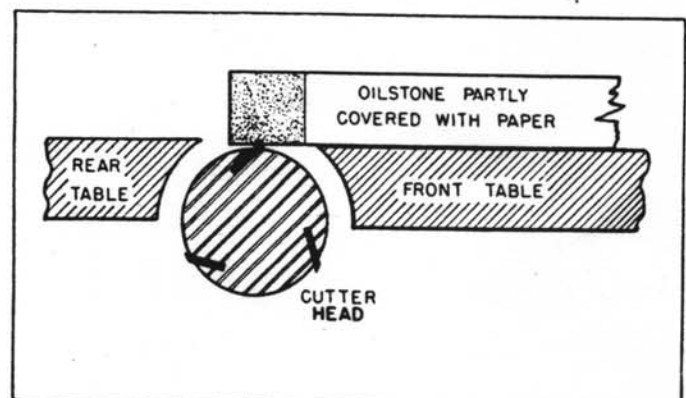


Figure 7

JOINTER KNIVES FIG. 8

The three knives should be set so that they are parallel to the table surfaces and the same height from the surface of the cutterhead. The slightest variation may not seriously effect the quality of the cut, however, for precision work, the knives should be "jointed".

1. Use a fine sharpening stone partly covered with paper as shown.
2. With rear table at highest point of cutting circle, start the jointer and place stone on rear table. Move it forward until it projects over the knives. USE CAUTION.
3. With the stone flat on the table, move it slowly lengthwise along the knives.
4. If the stone does not touch the knives along their entire length, lower rear table only a slight amount.
5. Repeat step three and four above until a uniform jointed edge appears on all three knives.

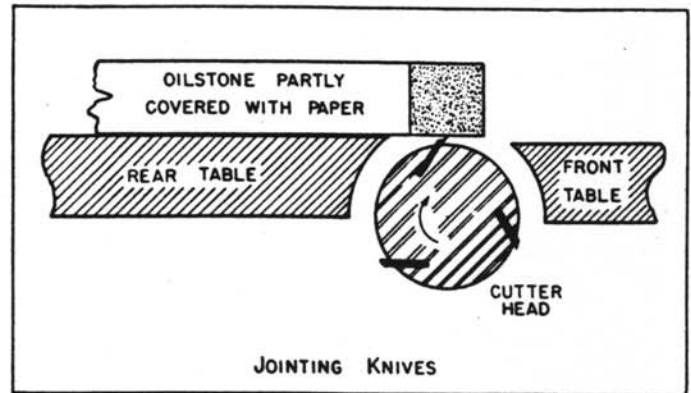


Figure 8

LUBRICATION

The cutterhead bearings are lubricated and sealed, and require no further lubrication. A small amount of fine oil should be applied to the table ways and raising screws.

SAFETY RULES

1. Always keep your hands on top of the work.
2. Always hold the work firmly on the table or against the fence.
3. Always turn the concave side of stock toward the table and cut with the grain, not against it.
4. Never run a piece of stock shorter than 12 inches across the jointer.
5. Do not operate the jointer unless the guard is in place and working.
6. Do not use the jointer when the knives are dull.
7. Never attempt to run a piece of wood across the jointer until the machine is running at full speed.
8. Set the fence at right angles to the table. Test with a square.
9. If the stock is not held down on the rear table after passing over the cutter head, the machine will not produce a true surface.

SETTING KNIVES

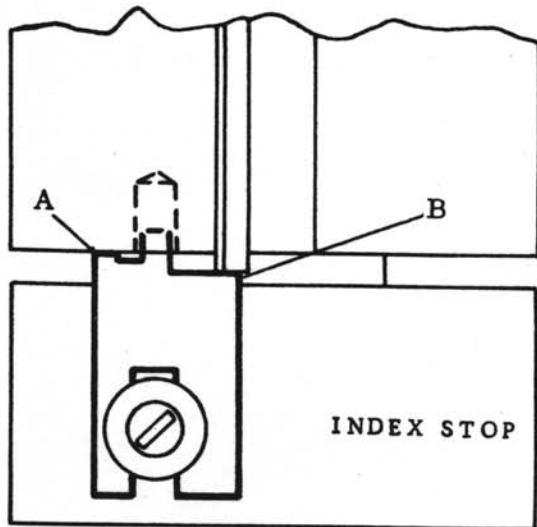


Figure 9

SETTING KNIVES

The knives should never be ground to a point beyond 17/32" in width. If they are nicked beyond this point they should be discarded.

Your Delta Jointer is equipped with an exclusive unique feature for quick and accurate setting of the knives.

1. Set rear table to 1/2" above bearing housing, see Fig. 10.
2. Remove guard, and move fence to the extreme right.
3. If replacing knives, thoroughly clean the cutterhead, knife lock bars and screws after removing the old knives. **CAUTION:— ALTHOUGH THE SMALL LIFTER SPRINGS UNDER EACH KNIFE ARE SECURELY SET IN THE CUTTERHEAD, MAKE SURE THAT THEY DO NOT BECOME LOST WHEN REMOVING THE KNIVES.**
4. Attach index stop to left hand bearing housing using a screw and washer, and with extreme end engaged in one of the three holes provided in the cutterhead, see Fig. 9. Make sure that index stop at "A" is against side of cutterhead.
5. Tighten screw, aligning index stop parallel to cutterhead.
6. Place knife in slot over lifter springs with left hand edge of knife against index stop at "B", Fig. 9. This will insure the necessary uniform projection of each knife for rabbetting.
7. Install knife lock bar positioning it centrally from left to right.
8. Turn the two end screws in lock bar to the left (backing them out) but do not lock knife securely.
9. Make up a "U" shaped block out of hardwood, laminate or aluminum etc., as shown in Fig. 11. Place this block on the rear table and gently push the knife down into the cutterhead.

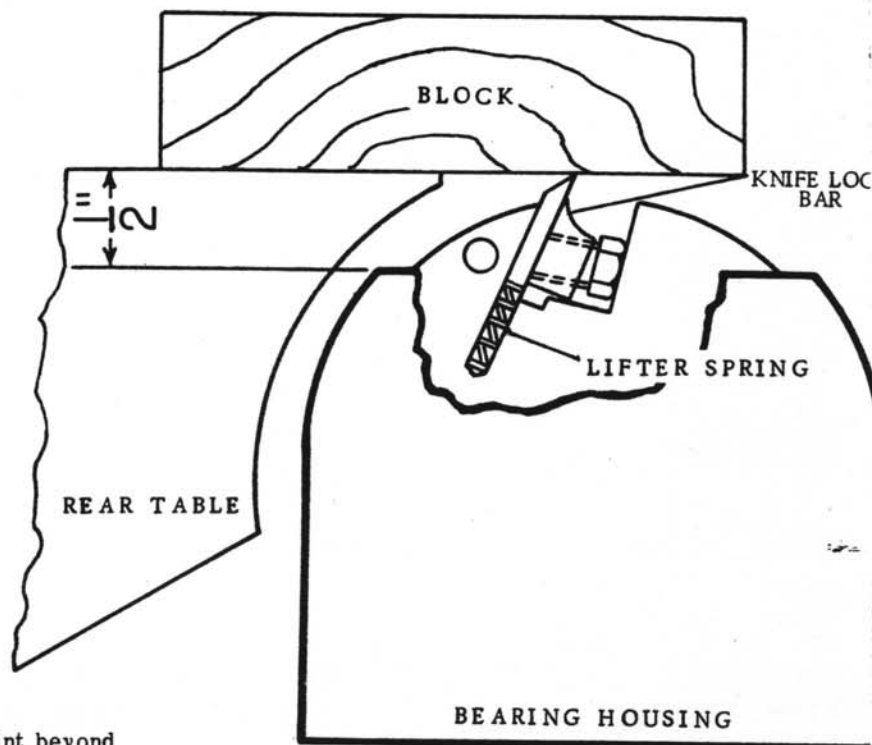


Figure 10

10. 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 lock screw.
11. Loosen screw holding index stop and rotate head to next position and repeat the above steps.
12. 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, see Fig. 10.

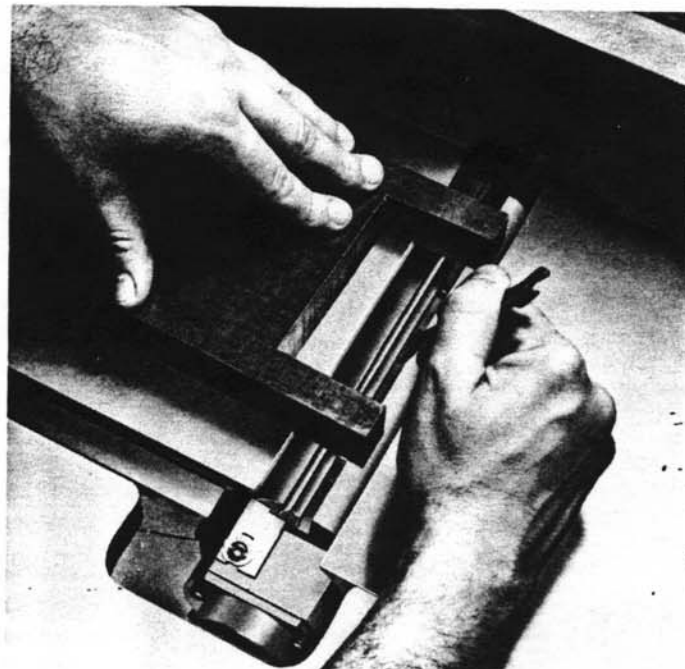
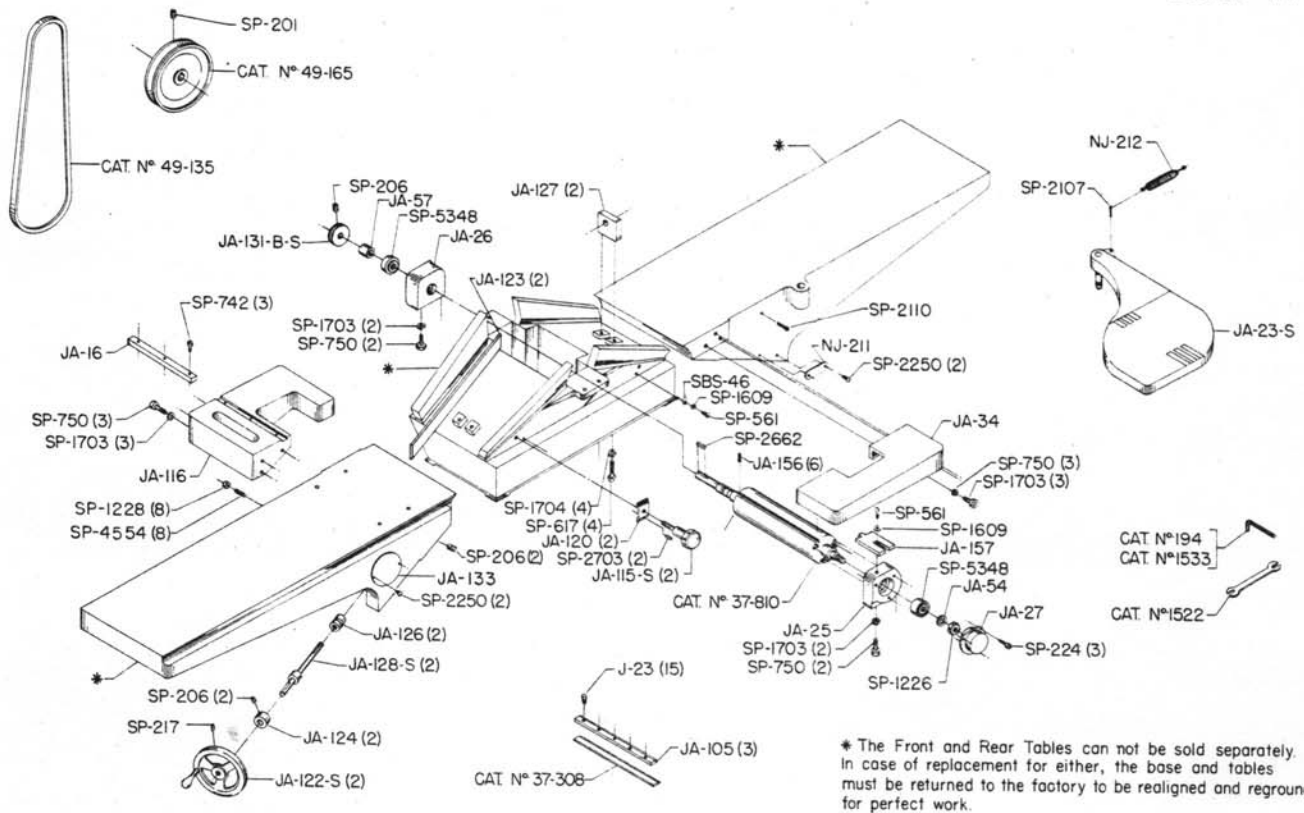
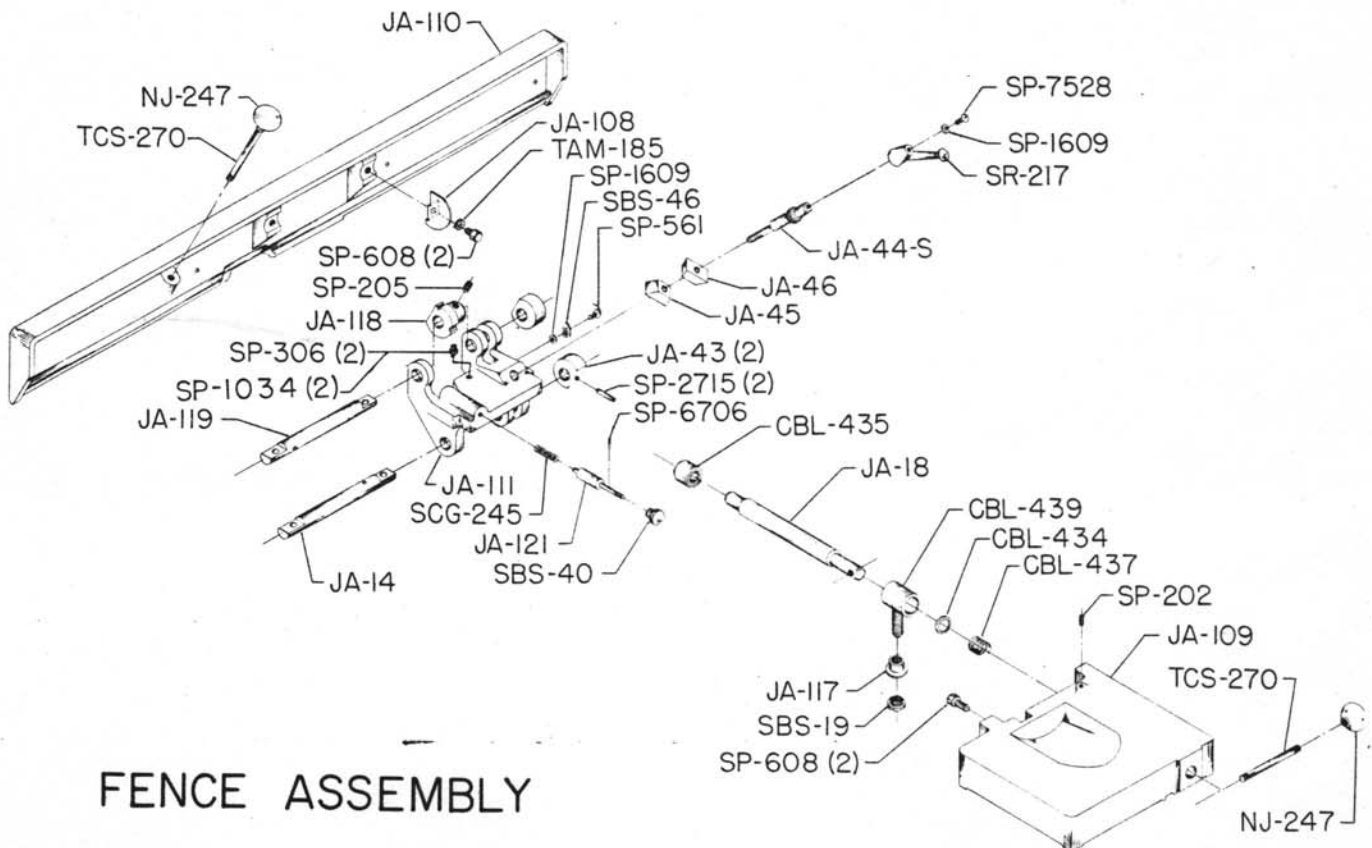


Figure 11



BASE ASSEMBLY

Figure 12



FENCE ASSEMBLY

Figure 13

Replacement Parts

Part No.	Description	Part No.	Description
CBL-434	Spec. Washer	JA-124	Collar
CBL-435	Eccentric Shaft Bushing	JA-126	Nut
CBL-437	Coil Spring	JA-127	Block
CBL-439	Clamp Eye Bolt	JA-128-S	Adj. Scr.
#37-810	Cutter Head, Incl:	JA-131-B-S	Cutterhead, Pulley, Incl:
#37-308	Set of 3 Knives	SP-206	5/16-18 x 5/16" Set Scr., Cup
J-23	1/4-28 Hex. Hd. Mach. Scr.	JA-133	Name Plate
JA-25	Front Bearing Housing	JA-157	Knife Stop
JA-26	Rear Bearing Housing	NJ-211	Scale
JA-27	Front Bearing Cap	NJ-247	Handle Ball
JA-54	Clamping Collar	SBS-19	Spec. Nut
JA-57	Clamping Nut	SBS-40	Spec. Nut
JA-105	Throat Block	SBS-46	Pointer
JA-156	Spring	SCG-245	Spring
SP-224	10-32 x 1/2" Cap Scr.	SP-202	1/4-20 x 1/2" Soc. Hd. Scr.
SP-1226	5/8-18" Hex. Jam Nut	SP-205	5/16-18 x 1/4" Soc. Hd. Scr.
SP-5348	Bearing #99504XIC	SP-206	5/16-18 x 5/16 Set Scr.
JA-14	Fence Pivot Shaft	SP-306	1/4-20 x 3/4" Set Scr.
JA-16	Key	SP-561	10-32 x 5/8" Rd. Hd. Scr.
JA-18	Clamping Shaft	SP-608	5/16-18 x 7/8" Cap Scr.
JA-23-S	Guard, Incl:	SP-617	3/8-16 x 1 1/2" Cap Scr.
NJ-212	Spring	SP-742	10-32 x 3/8" Fill. Hd. Scr.
SP-2107	Cotter Pin	SP-750	5/16-18 x 1" Cap Scr.
SP-2110	Cotter Pin	SP-1034	1/4-20" Hex. Nut
JA-34	Rabbeting Ledge	SP-1228	5/16-24" Hex. Jam Nut
JA-43	Fence Lock Collar	SP-1609	Washer
JA-44-S	Clamp Stud	SP-1703	Lockwasher
JA-45	Lower Wedge	SP-1704	Lockwasher
JA-46	Upper Wedge	SP-2250	4 x 3/16" Drive Scr.
JA-108	Fence Scale	SP-2662	Key
JA-109	Fence Base	SP-2703	1/8 x 1/2" Roll Pin
JA-110	Fence	SP-2715	3/16 x 1 1/8" Roll Pin
JA-111	Rocker Arm	SP-4554	5/16-24 x 1" Set Scr.
JA-115-S	Lock Knob	SP-6706	1/16 x 3/8" Roll Pin
JA-116	Fence Support	SP-7528	1/4-20 x 1/2" Mach. Scr.
JA-117	Clamping Bushing	SR-217	Handle
JA-118	Indexing Collar	TAM-185	5/16 x 5/8 x 1/16" Washer
JA-119	Upper Pivot Shaft	TCS-270	Stud
JA-120	Clamp Washer	#194	Wrench
JA-121	Indexing Pin	#1522	Wrench
JA-122-S	Hindwheel, Incl:	#1533	Wrench
SP-217	5/16-18 x 1/2 Hex. Set Scr.	#49-135	V-Belt
JA-123	Gib	#49-165	Motor Pulley, Incl:
		SP-201	5/16-18 x 5/16 Set Scr.