



OPERATING INSTRUCTIONS  
AND PARTS LIST FOR

# **PARKS**

## **13" THICKNESS PLANER**

**IMPORTANT:** This list is valuable. It will enable you to secure prompt service on replacement parts and avoid unnecessary correspondence with our factory. We suggest that you keep it filed away with other valuable papers.

**THE PARKS WOODWORKING MACHINE COMPANY**

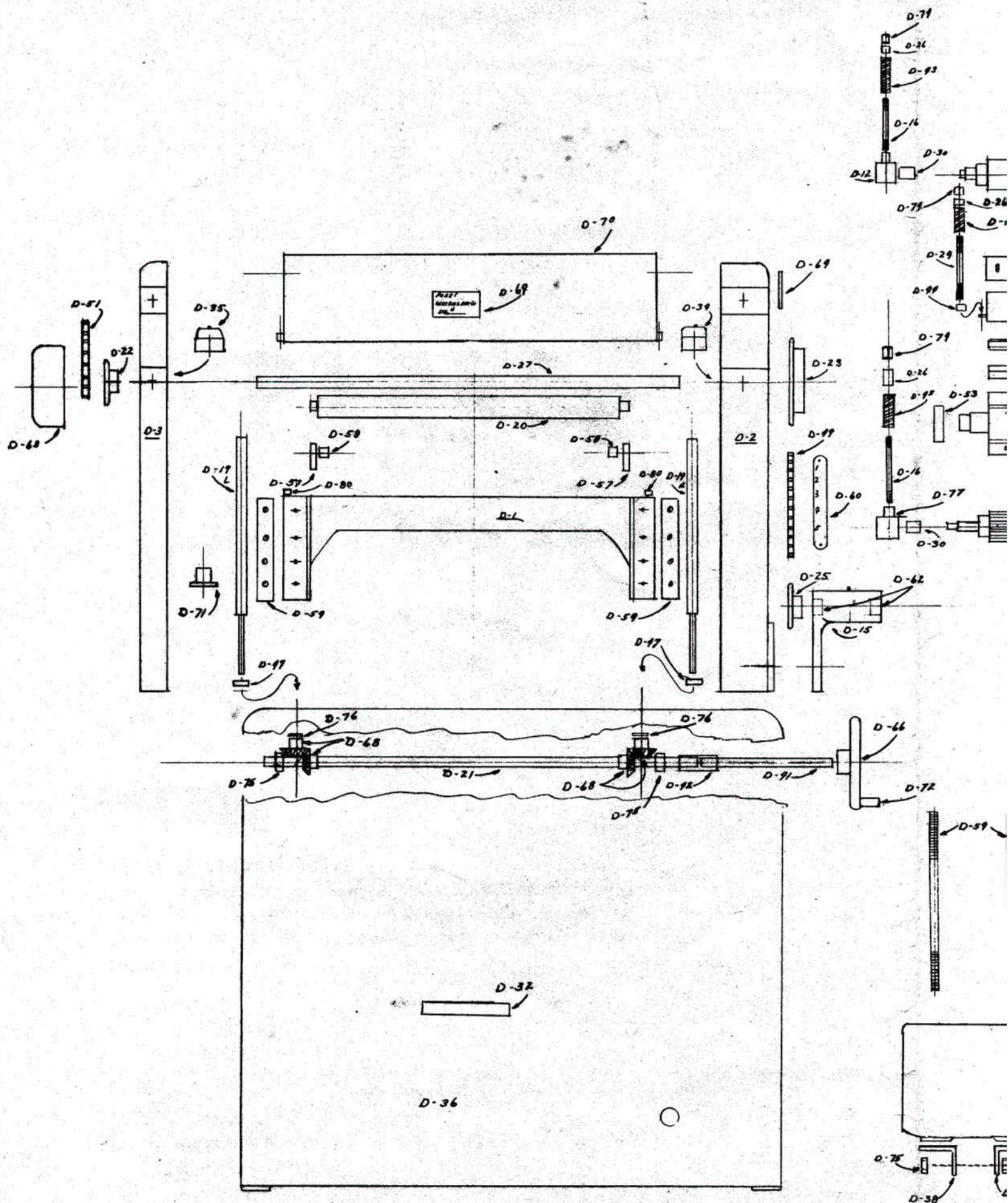
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Cincinnati, Ohio 45223

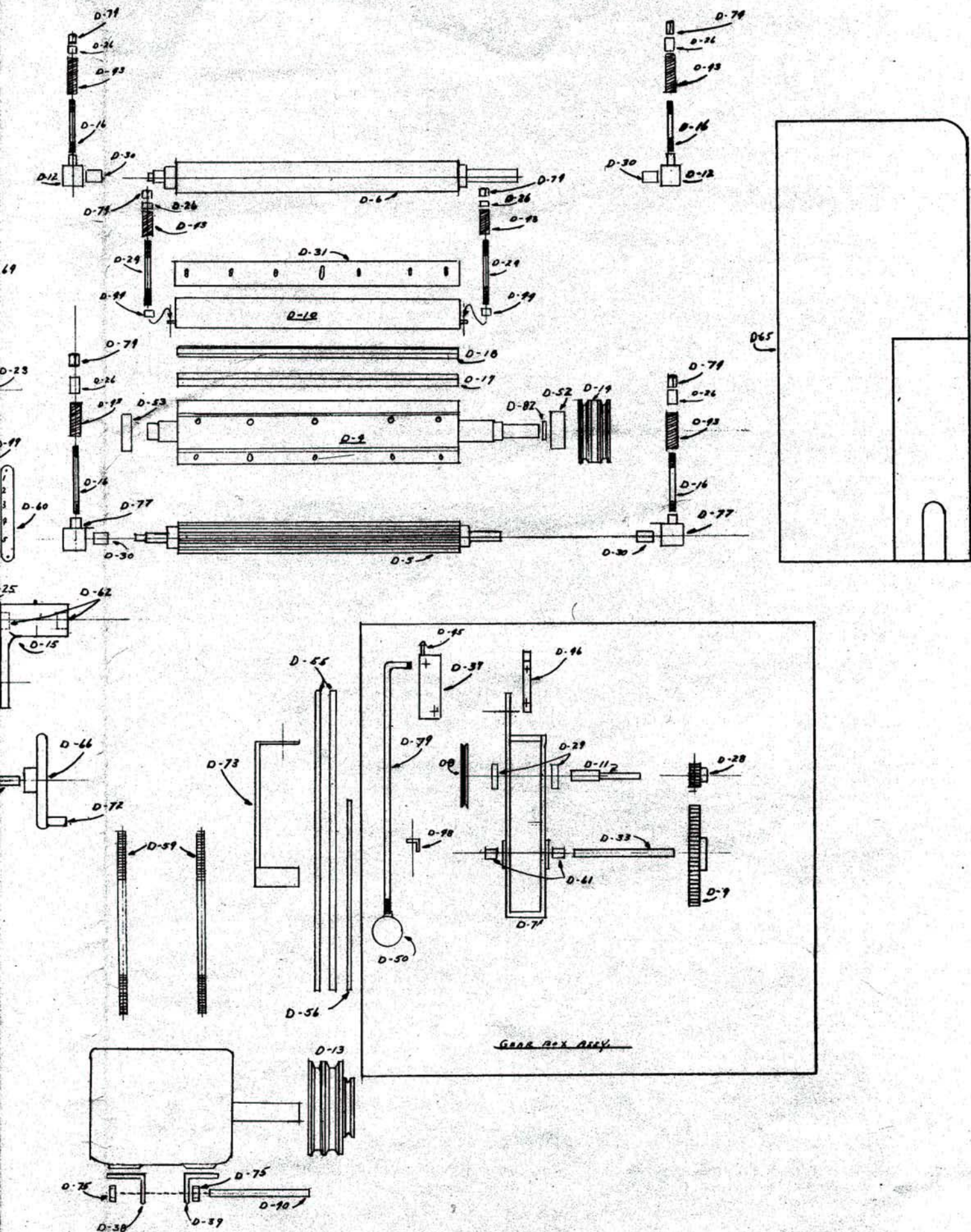
# **PARTS LIST** **13 PLANER**

Part No.	Description	No. Req'd.	Part No.	Description	No. Req'd.
D-1	Table	1	D-41	Horizontal elevating shaft, small	1
D-2	R.H. Side casting	1	D-42	Shaft coupling	1
D-3	L.H. Side casting	1	D-43	Tension Springs	6
D-4	Cutterhead with shaft	1	D-44	Pressure bar sleeve	2
D-5	Fluted Feed Roller	1	D-45	Stop bolt 3/8-16	1
D-6	Smooth Feed Roller	1	D-46	Stop plate	1
D-7	Gear Box	1	D-47	Thrust bearings	2
D-8	Sheave Drive	1	D-48	Support bracket	1
D-9	128-tooth Gear	1	D-49	Drive chain No. 41	1
D-10	Pressure Bar	1	D-50	Shift Knob	1
D-11	Drive Shaft	1	D-51	Feed Roll Chain No. 41	1
D-12	Smooth feed roll bearing	2	D-52	Bearing R.H. SKF 3205S	1
D-13	Motor Pulley — 2-groove	1	D-53	Bearing L.H. SKF 3204S	1
D-14	Cutterhead Pulley — 2-groove	1	D-54	Table Gib	2
D-15	Gear box bracket	1	D-55	V-Belt No. 2560	2
D-16	Roll bearing stud	4	D-56	V-Belt No. 2480	1
D-17	13" High Speed Steel Knives	4	D-57	Table Roll Bearing	8
D-18	Chip breakers (lock bars for knives)	4	D-58	Table Roll Bearing Bushing	8
D-19	Elevating screws R.H. & L.H.	2	D-59	Motor adjusting rods	2
D-20	Table Rollers	4	D-60	Scale	1
D-21	Horizontal elevating shaft	1	D-61	Bushing, gear box 3/4" I.D.	2
D-22	Drive Sprocket	2	D-62	Bushing, gear box bracket	2
D-23	32-tooth Sprocket, drive	1	D-63	Cover L.	1
D-24	Pressure bar studs	2	D-64	Guard clip	1
D-25	12-tooth Sprocket	1	D-65	Drive Cover	1
D-26	Spring Collar	6	D-66	Handwheel	1
D-27	Tie Rods	2	D-67	Pointer	1
D-28	20-tooth Gear	1	D-68	Bevel Gear	4
D-29	Gear box bearing ND-7502	2	D-69	Serial Plate	1
D-30	Roll bearing bushing 1" lg.	4	D-70	Shaving Hood	1
D-31	Chip deflector	1	D-71	Table adjusting plug	1
D-32	Nameplate	1	D-72	Handwheel handle	1
D-33	Long gear shaft	1	D-73	Belt retainer	1
D-34	Bearing Cap, right	1	D-74	Special 5/8" hex nut	6
D-35	Bearing Cap, left	1	D-75	Shaft collar 3/4"	4
D-36	Steel Base	1	D-76	Thrust washer	2
D-37	Shifting rod link	1	D-77	Fluted roll bearing	2
D-38	L.H. Motor bracket	1	D-79	Shifting rod assembly	1
D-39	R.H. Motor bracket	1	D-80	Table rail	2
D-40	Motor hinge rod	1	D-82	Spacer	as req'd.











# Instructions for Operation and Maintenance of The PARKS 13" THICKNESS PLANER

## GENERAL SET-UP

When Planer is received check for shipping damage.

Clean all greased and coated surfaces before operating.

Mount Planer on flat, solid surface in dry, well ventilated area.

**Capacity**—This machine will plane material up to 13 inches wide by 5 inches thick. Maximum cut is 3/16 inch. It will take pieces as short as 6 inches and as thin as 1/16 inch.

**Lubrication**—Your Planer is a precision built machine and should be given the best of care. If kept clean and properly lubricated it will give many years of trouble free service.

The ball bearings are grease packed at the factory and are alemitie fitted. We suggest lubricating these about twice a year. Table roll bearings and feed roll bearings should be oiled each day if the Planer is used daily. Auto engine oil S.A.E. 30 is recommended.

**Resetting Planer Knives**—After the knives have been reground uniform they may be set in the cutterhead so that the beveled knife edges just clear the cutterhead by 1/32". Two set screw type knife jacks are provided in the cutterhead for adjusting each knife to the proper setting. Have the set screws that lock the gibs against the knives just firm enough to hold the knives. Place two pieces of hardwood of uniform thickness on the table at either end of the head. The table is then raised to the level of the highest knife. When adjustments are completed tighten all twenty of the set screws securely against the four gibs — then recheck your adjustments to be certain they are accurate.

A second method of setting the knives is by means of the Parks KS-1 Knife Setting Device. This device is held against the surface of the head and the knife raised so that the cutting edge just touches the flat point of the set screw on the device. Tighten the five set screws securely against the knife gib. Repeat for the other three knives. Note: The set screw on the Knife Setting Device is factory preset — do not readj.

**Caution:** Be sure that all knives are locked securely before running the machine.

**Adjustments**—Although the Planer has been factory adjusted for general planing operations it is possible that the adjustments may loosen or that the factory adjustment is not precisely right for a specific type of work you wish to perform. A common indication of this will be a slight gouging at the end of the board. This condition is generally caused by (1) Loose table gibs (2) Table rollers are set too high (3) Mal-adjustment of the Pressure Bar. Gouging becomes accentuated if you attempt to take too deep of a cut. Should you encounter gouging when planing the type (hardness) or size (thickness) workpiece which you are customarily handling or intend to handle in sufficient quantity to warrant resetting the adjustment then start with the first adjustment in the following list and work through the listed adjustments in sequence until the trouble is remedied.

1. **Level Table:** Should it be necessary to re-level the table this may be done as follows:

Note the Brass Spanner Nut on the left elevating screw underneath the table. Loosening the set screw on the Nut and turning the plug permits the table to be brought in precise relation to the knives. This is gaged by running a board through the right side of the machine, then without changing the table setting pass the same board through the left side of the machine. In this manner it can be determined whether the left side of the table should be brought up or down (Turn the elevating handwheel to raise or lower the left side). Be sure to re-tighten the set screw on the nut after the table has been brought in alignment.

2. **Adjust Table Rollers:** The four Table Rollers should be about 1/64" higher than the table top; just high enough so that they turn when a board is manually moved across the table.

3. **Table Gibs:** These should be tightened if there is any 'play' in the Table, i.e. if the Table can be moved up and down at all the gibs are loose. Do not tighten to the extent that the Table will not raise and lower easily. To tighten each gib, loosen

An exhaust system is recommended, especially when Planer is used in high production where there is a sizable buildup of shavings.

Check motor nameplate or wiring diagram and switch for proper voltage connection. Run motor without load to check for proper rotation.

the locknuts and turn the locknut studs clockwise, then tighten the locknuts.

4. **Adjust Fluted Feed Roll:** Feed a workpiece through at one end of the Roll taking about a 1/8" cut but stop it half way through by disengaging the feed. Loosen the hex nut and jam nut on top of the side casting at this end of the roll. Retighten the jam nut finger tight then loosen it (turn counterclockwise) one full turn. Hold it thus, and tighten the hex nut on top. Do the same at the other end of the roll with the same board and the same depth of cut as before.

5. **Adjust Pressure Bar:** Without changing the depth of cut and using the same workpiece as above, again feed the work through at one side and stop it half way. Loosen the hex nut and jam nut at this end of the Pressure Bar until the Pressure Bar will hold the work stationary when the feed is again engaged (so that the work should travel through the machine). Now tighten the jam nut until the work just moves smoothly forward through the machine. Hold it thus and tighten the hex nut. Do the same at the other side of the Pressure Bar.

6. **Adjust Smooth Feed Roll:** This adjustment is the same as for the Fluted Feed Roll (para. 4 above) except that the jam nuts are to remain finger tight and are not loosened unless it is necessary to loosen them slightly in order to have the work travel through the machine smoothly. Do one side at a time.

7. **Adjust Shaving Hood:** Plane a board smooth. Again run it through the machine using the same depth of cut adjustment and stop it half way by disengaging the feed. Loosen lock nuts and adjust the screws until the Hood rests on the workpiece with the screw heads just touching the bearing plates on the Fluted Feed Roll Bearings.

## FOR SAFE OPERATION BE SURE THAT:

The Knives are sharp and are securely and accurately mounted before using the machine.

There are no nails (etc.) in your workpiece.

There are no small tools or metal pieces lying on the machine table where they might be pushed into the knives.

You are not wearing any loose apparel (such as tie or sleeve) which could possibly become entangled with the work or moving parts of the machine.

You have a proper support ready behind the machine to carry the overhanging planed end of a long workpiece. Without support, the weight of the overhanging end will make it difficult and possibly dangerous to feed the work all the way through the machine.

You stop the machine before attempting to dislodge a 'stuck' workpiece or clear away loose chips from the table.

Your machine is clean and well lubricated at all times.

## DO NOT:

Force-feed work through the machine if the rollers should fail to travel the work through as intended.

Try to exceed the maximum cut of 3/16" for which your machine is designed.

Allow your fingers to get under the front column tie rod at any time when the machine is in operation. When you are holding work that is traveling through the machine, keep a sharp watch on your hand positions and move your hands back whenever they get as close as three inches to this tie rod.