GENERAL

WOODWORKING MACHINERY

INSTRUCTIONS MANUAL AND PARTS LIST

MODEL NO. J 80

SERIAL NO.

IMPORTANT: WHEN ORDERING REPLACEMENT PARTS ALWAYS GIVE MODEL NUMBER, SERIAL NUMBER OF MACHINE AND PART NUMBER, ALSO GIVE DESCRIPTION AND QUANTITY OF EACH ITEMS

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GENERAL MFG. CO. LTD.

MANUFACTURER OF CIRCULAR SAW, BAND SAW, WOOD LATHE, PLANER, JOINTER, MORTISER, DRILL PRESS, SHAPER AND SANDER

SHEET: J-800
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GENERAL

4" JOINTER

OPERATING AND MAINTENANCE OPERATIONS

BE SURE TO READ THESE INSTRUCTIONS THROUGH BEFORE OPERATING YOUR NEW GENERAL JOINTER. The requirements for setting up and operating the tool are quite easy to follow and the tool requires a minimum of adjustments. It is very important, however, that the installation and alignment be done correctly in order to assure perfect performance. This manual will give you the simple directions for setting up and getting started the right way. It will also suggest several ways in which you can get greater satisfaction and performance from you new jointer.

Recommended Motor Power - The General Model J-80 Jointer should be run at a speed of about 3450 RPM. A 1/3 H.P. 60 cycle, 1725 RPM Motor with a 4" pulley on the shaft will provide adequate power to the 2" pulley on the machine. The ratio will provide around 3450 R.P.M. In either case, a 3 phase motor will give faster starting power and will draw less current than the single phase if you have the necessary current. Check your power supply with the electric company before installing the heavy-duty motor.

SETTING UP THE MACHINE

The General Jointer is shipped completely assembled with the exception of the Fence Assembly and the Fence Quadrant. Remove the machine and the others parts from the carton and lay them out for installation and assembly. Be sure to check for any damage that might have occured in shipment.

Mounting the Machine to the Bench - It is most important to operating accuracy that the machine is mounted to the work-bench in a position that will not twist the base and throw the tables out of aligment. Great care has been taken in manufacturing your jointer to see that the base is not only designed to counteract warping and twisting, but that the pads on which the base rests are machined perfecly flat and level. Place tje machine on the bench where it will be used. Press on alternate diagonal corners of both the front and rear tables to see if there is any rocking of the machine. Place metal shims under any pads that do not touch the bench until the machine rests securely and without rocking at either corner. Bolt the machine to the bench using the bolts holes provided in the base and turn the nuts down alternately so that undue tension will be eliminated.

The Fence of the jointer sits lenghtwise across the tables of the machine along the right side. It is secured at the front end by a quadrant which locks into a sliding mechanism. The convenient knob arrangement holds the fence securely in position at whatever angle it is set.

Remove the two caps screws from the machined end of the fence. Take the lock slide knob from the slide plate and put the quadrantin position on the slide. Replace the lock knob, but do not tighten it. Slide the quadrant upward until the two holes at the top line up with the screw holes in the face of the fence. Put the quadrant cap screws through these two holes and fasten them securely. The fence is now ready to use .

Guard: A guard is held over the knives by a tension spring. Leave the guard in place for all operations except rabbeting.

ADJUSTING AND ALIGNING

Your General Jointer-Planer was carefully tested and inspected at the factory before it was shipped. It is possible that misalignment of the tables and/or blades may have occured in shipment. Be sure to check all the fittings and adjustments before operating the machine. Make sure that all the settings are secure. Alignment should be checked each time the blade is sharpened with particular attention to the front and rear tables. They should always be reset to "zero" .

Aligning the Tables - The basic alignment necessary on the jointer-planer is that of the cutter blades with the forward edge of the rear table. Place any straight edge flat on the rear table and sight along the front end to make sure that the blade just touches the straight edge across its full length. Be sure that the rear table is turned up to its highest elevation by the rear table adjusting screw at the back end. If this alignment checks out perfectly, fasten the rear adjusting knob securely. All further adjustments will be made with the front table elevation knob.

Check the front table setting with the straight edge in the same manner. When you are certain that both surfaces are exactly even and the blade just touches the straight edge, adjust the depth pointer on the depth gauge to the zero mark.

Aligning the Fence - Set the fence at the zero mark and check the fence angle with the surface of the table. Use a good "T"-square and adjust the tilt until you are satisfied that the fence is exactly at 90° to the table. Now adjust the tilt pointer to the zero mark. The stops work automatically.

Aligning the Cutter-Head - Three blades and chip breakers are mounted in the cutter-head with three blade clamp screws holding each blade. Using the special wrench supplied with the machine, adjust the blades. Always be sure that the blades are evenly set and securely fastened before the machine is started.

OPERATING YOUR GENERAL JOINTER

General Operation - The jointer is the running mate of the table-saw and the second work horse of the shop. The fast-moving cutters shave wood from the edge or face of the work as the material is slowly moved across the front table and along the fence. A small depth of cut is the primary rule for clean and smooth work. With the fence set square to the table surface, the front table is lowered slightly by the front adjusting knob and the work is fed across the knives. The left hand maintains work pressure against the fence. The right hand exerts no downard pressure. Always use the best-dressed side of the work against the fence when jointing. When jointing across the grain at a board end, take a very fine cut to prevent tearing out at the corner. Make your cuts with the direction of the grain whenever possible to prevent a fuzzy surface. To make beval cuts, tilt the fence to the desired angle, force the material against the fence and down on the table. Make several passes until the beval is complete. Never allow your fingers to move close to the blade.

Cutting Tapers - Make a series of marks on the edge of the work starting at the middle and going out to the end that will be the widest part of the taper. The marks should be placed about 10" or 12 " apart alway less than the length of the front table. Set the front table to make a sma cut and place the work over the blade at the center mark. Pull the work through while holding it firmly against the fence. Start the second cut at the next mark, and so on. Short tapers are cut by using a block to support the front end of the work on the rear table.

Rabbeting - For rabbeting cuts, the guard must be removed. Slide the fence over until the exposed blade is exactly the width of the rabbet. If the rabbet is not too deep, the table may be lowered to the full cut and the operation completed in one pass. If the rabbet is over 1/4" deep, set the front table about 3/16" down, make one or more rough cuts and finish with a very thin cut. Tenons are made in the same way except that the shoulders should first be cut with the saw. Always use a steady and uniform pressure and speed when feeding the work into the jointer.

MAINTENANCE AND REPAIRS

Should any trouble develop with your General Jointer write to the factory immediately giving full identification of the machine and the parts affected. Consult the Part List for accurate identification and part numbers involved. We cannot guarantee any service or repairs made by anyone other than our own service shop.

Maintenance of the General Jointer is very simple and requires a minimum of time. Attention to a few directions, keeping all parts clean and in good working order, and keeping the blade sharp, will greatly increase the life of your jointer-planer and will add much to both the accuracy of your work and your pleasure in using this very efficient shop tool.

Lubrication - The main bearing of the General Jointer are shielded, prelubricated ball bearings. They will not need lubricating during the life of the bearings. When they do need replacing, they should be removed and sent to the factory for servicing. Remove the machine from the bench and apply a heavy grease from the underside. From time to time, apply a light dusting of graphite to the threads of the raising arm of the front table.

Sharpening the blades - All edged tools work better and safer when the cutting edges are SHARP. Nowhere in the shop is this more true than with the jointer-planer. Keen edges can be maintained for a long time with regular honing of the blades and without removing them from the cutter-head. First, check the blades carefully with the rear table to see that they are all exactly in line. Use a large, flat, medium-grade oil stone and drop the front table about 1/8". Cover the front table surface with heavy paper to prevent marking it and turn the cutter-head until the stone can rest on the flat of the blade and also on the table. Wedge the cutter-head in this position with a small block of wood. Using an even pressure across the flat of the blade in a diagonal motion, stroke the entire length. Count the number OF STROKES UNTIL THE BLADE IS RAZOR SHARP. Give each of the blades the same treatment.

SAFETY IS NO ACCIDENT

As with all shop machinery, the jointer does require certain sensible precautions in preventing accidents. The blade moves very fast and the cutters are very sharp. There are a few simple rules which should be observed at all times when using the General Jointer. Remember that most accidents occur when someone forgets or overlooks a simple safety rule.

1. DON'T start the motor until you have rotated the pulley by hand to make sure everything is clear.

2. DON'T remove the blades guard for any operation except rabbeting. Keep it swinging freely.

3. DON'T make fence or depth adjustments with the motor running.

4. DON'T operate the machine until you have checked both blades and fence. They must be secure.

5. DON'T feed short or thick stock past the cutters without using a pusher stick.

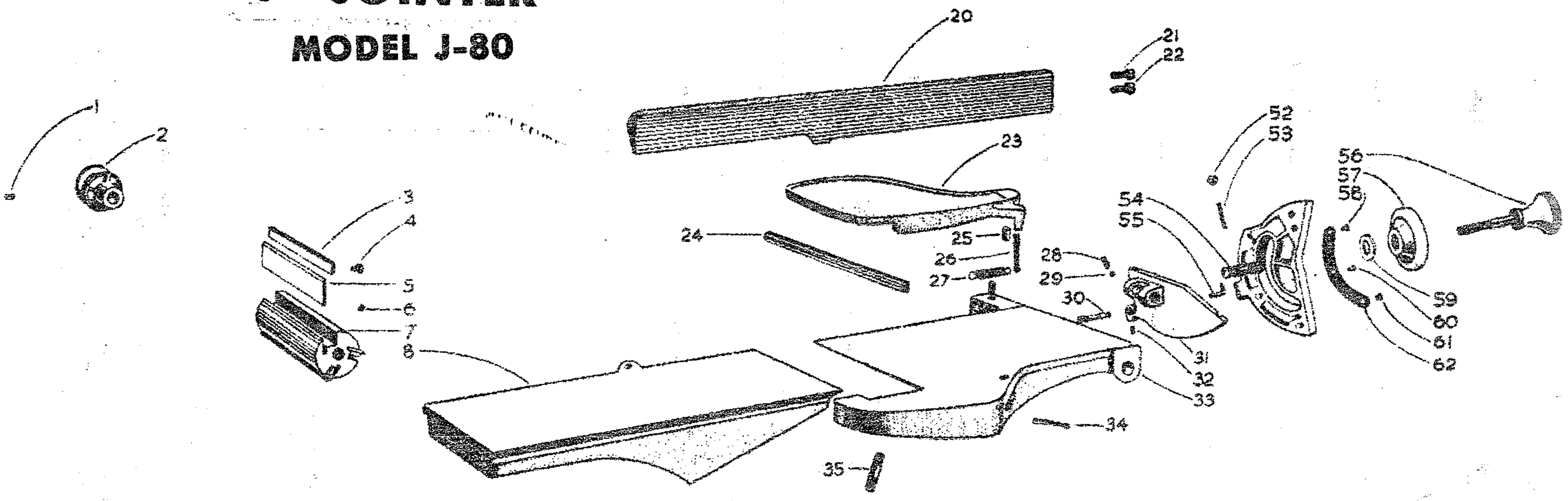
6. DON'T permit your fingers to hold the edges or end of the work going into the blade. KEEP THUMBS UP !.

As for a reminder in the general installation and operation of the machine, be sure that the base is bolted only to an even surface and do not lower the front table beyond the specified depth of 3/8" on the Model J-80.

GUARANTEE

All General machines have been carefully tested and inspected at the Factory, and are guaranteed to be free from any defect in workmanship or material. The Company will, under this guarantee, repair or replace any parts which prove, upon examination, to be defective. Defective parts must be returned prepaid to the Factory. Repairs made by others unless authorized automatically voids this guarantee.

4" JOINTER
MODEL J-80



ITEM NO.	DWG. NO.	DESCRIPTION	QUANTITY PER MACHINE
1		Sock. Hd. Set screw 5/16" x 5/16"	1
2		Pulley 7/16" bore	1
3	J-80-16	Chip Breaker	3
4	J-80-20	Blade clamp screw	9
5		Set of blades	3
6		Sock. Hd. set screw 1/4" x 1/4"	2
7	J-80-10	Cutter-head	1
8	J-80-3	Rear Table	1
9	J-80-11	Spindle	1
10,40		Ball bearing 6201-ZZ	2
11,38	J-80-17	Raising screw	2
22	J-80-1	Base	1
13,39	J-80-12	Raising knob	2
14,43		Lockwasher 1/4"	2
15,44		Rd. hd. Mach. screw 1/4" x 1"	2
16,18,46,50		Hold-down washer 17/32"	4
17,47	J-80-15	Hold-down spring	2
19		Hex. jam nut 1/2"	2
20	J-80-4	Fence	1
21,22		Quadrant Fill. Hd. Mach. screw 5/16" x1"	2
23	J-80-7	Guard	1
24	J-80-28	Fence bar	1
25		Groove pin #4 5/16" x 7/8"	1
26,34		Cotter pin 3/32" x 3/4"	2
27	J-80-30	Guard spring	1
28	J-80-28	Plunger spring	1
29		Plunger ball 3/16" dia.	1
30	J-80-26	Stop plunger	1
31	J-80-6	Fence slide	1
32		Slotted Hd. set screw #10-24 x 3/8"	1
33	J-80-2	Front table	1
35	J-80-14	Hold-down stud	2
36	J-80-9	R-H Bearing plug	1
37	J-80-8	L.H. " "	1
41	J-80-19	Depth pointer	1
42		Depth ppinter Drive screw #8-32 x 5/16"	1
45	J-80-50	Name plate	1
48,49,58,60,61		Drive screw #2 x 1/4"	7
52		Jam nut #10-24	1
53		Slotted hd. set screw #10-24 x 7/8"	1
54	J-80-22	Tilt stud	1
55	J-80-25	Tilt pointer	1
56	J-80-32	Fence slide lock	1
57	J-80-13	Tilt lock knob	1
59		Tilt washer 5/8" dia.	1
62	J-80-24	Tilt gauge	1
	J-80-5	Quadrant	1
Not shown		Depth Gauge	1
"	J-80-31	Quadrant pin	1
"		Sock. hd. set screw 5/16" x 5/8"	3