# 6" JOINTER

# INSTRUCTION MANUAL

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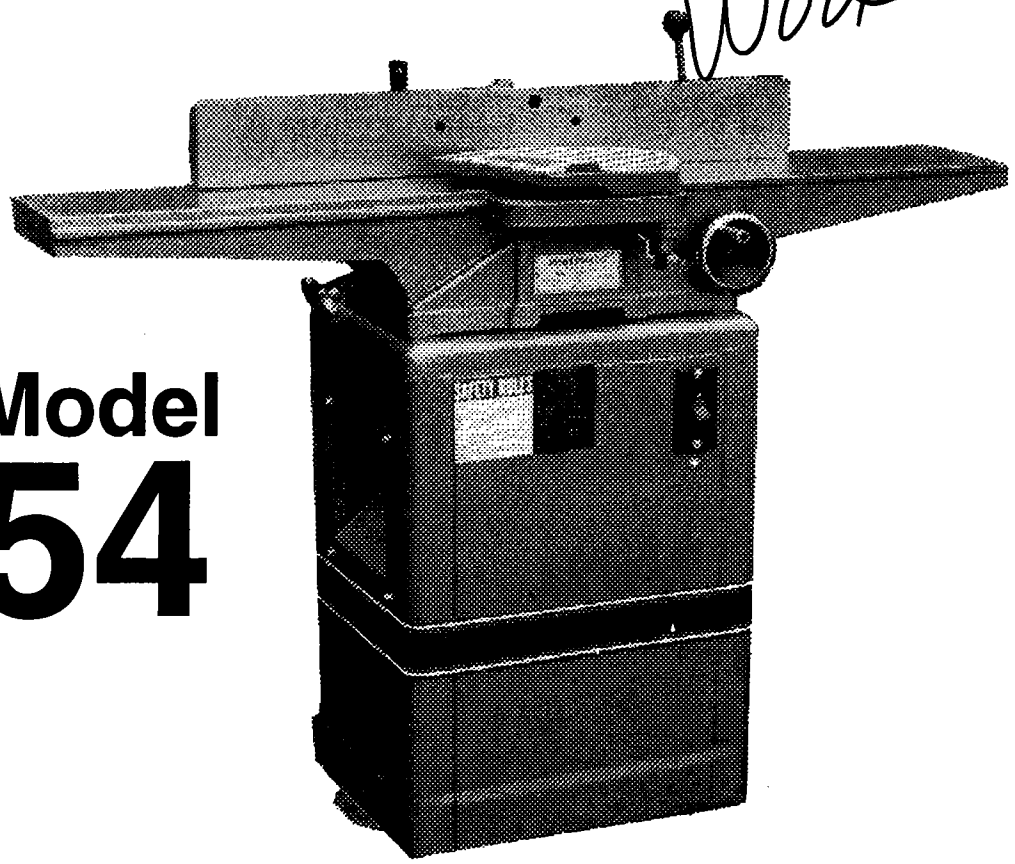

## Model 54

Better By Design

**POWERMATIC®**

McMINNVILLE, TENNESSEE 37110 □ AC 615 / 473-5551

**EDP# 0460184**

# FOREWORD

This manual has been prepared for the owner and those responsible for the operation of a Powermatic Model 54, Jointer.

Its purpose, aside from machine operation, is to promote safety through the use of accepted correct operating and maintenance procedures. Read the safety and maintenance instructions thoroughly before operating or servicing the machine.

In order to obtain maximum life and efficiency from your Powermatic jointer, and to aid in operating and maintaining the machine with safety, read this manual thoroughly and follow all instructions carefully.

The specifications put forth in this manual were in effect at the time of publication. However, owing to Powermatic's policy of continuous improvement, changes to these specifications may be made at any time without obligation on the part of Powermatic.

The information and recommendations contained in the publication come from sources believed to be reliable and to represent the best current practice. Powermatic does not intend this manual to be a complete course of instruction on how to use this machine with safety and does not guarantee or represent that the information is absolutely correct or sufficient. In addition, it cannot be assumed that all acceptable safety measures are listed or that other additional measures are not needed under particular or exceptional circumstances or conditions.

# POWERMATIC WARRANTY

Powermatic will repair or replace, at its expense and at its option, any Powermatic machine, machine part or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to the Authorized Powermatic Distributor from which the machine was purchased within one year and provides Powermatic with reasonable opportunity to verify the alleged defect by inspection. Powermatic will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse or repair or alteration made or specifically authorized by any one other than an authorized Powermatic service representative. Under no circumstances will Powermatic be liable for incidental or consequential damages resulting from defective products. This warranty is Powermatic's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products, all other warranties expressed or implied whether of merchantability, fitness for purpose or otherwise are expressly disclaimed by Powermatic.

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# SPECIFICATIONS

| | |
|---|---|
| Table | 7" x 42½" |
| Cutterhead speed | 4500 RPM (13,500 cuts per min.) |
| Maximum depth of cut | ½" |
| Knives | 3 |
| Fence size overall | 3⅞" x 29" |
| Fence tilt, right and left | -45° to +45° |
| Height with stand | 34⅝" |
| Motor | ¾HP, single phase, 115/230v (prewired 115v, 60Hz) |
| Base weight | 134 lbs. |
| Stand weight | 64 lbs. |

# ⚠ SAFETY

**READ THE MANUAL.** Read, understand, and follow the safety instructions found in this manual. Know the limitations and hazards in using the jointer. Safety rule decals and a caution decal are placed on each machine as reminders of good safety practice.

**KEEP GUARDS IN PLACE** and in working order.

**REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

**KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.

**DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.

**KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.

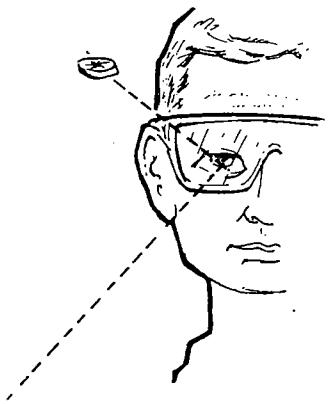
**MAKE WORKSHOP CHILD PROOF** with padlocks, master switches, or by removing starter keys.

**DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.

**USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.

**WEAR PROPER APPAREL.** Wear no loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

**ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are not safety glasses.

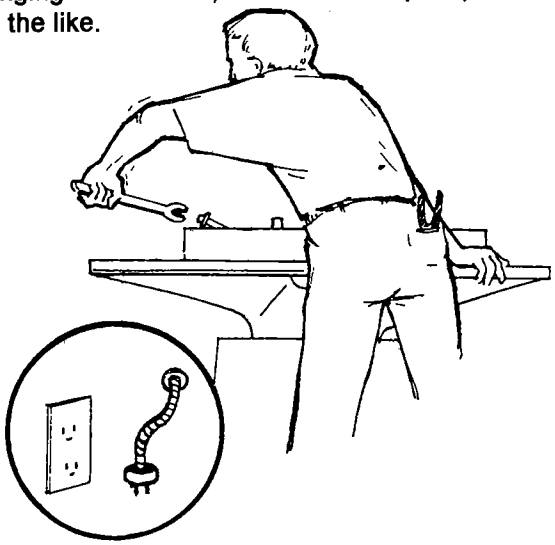


**SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.

**DON'T OVERREACH.** Keep proper footing and balance at all times.

**MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubrication and changing accessories.

**DISCONNECT TOOLS** before servicing: when changing accessories, such as blades, bits, cutters, and the like.



**REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.

**USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.

**NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.

**CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

**DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

**NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

**DO NOT PERFORM** jointing operations on material shorter than 8", narrower than 3/4 inch, or less than 1/4 inch thick.

**DO NOT PERFORM** planing operations on material shorter than 8", narrower than 3/4 inch, or wider than 6" or thinner than 1/2 inch.

**MAINTAIN** the proper relationships of infeed and outfeed table surfaces and cutter head knife path.

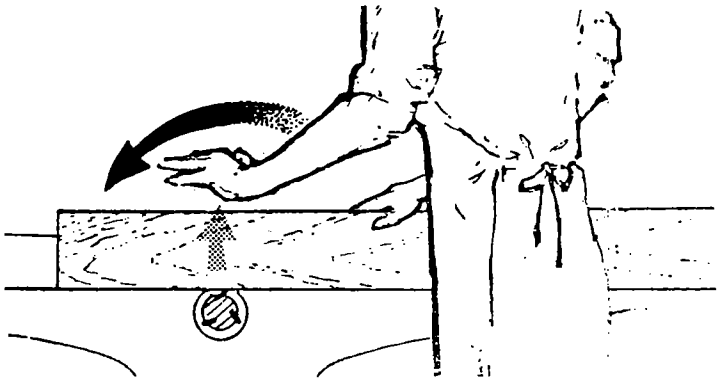
**SUPPORT THE WORK PIECE** adequately at all times during operation; maintain control of the work at all times.

**DO NOT BACK** the work toward the infeed table.

**DO NOT ATTEMPT** to perform an abnormal or little-used operation without study and the use of adequate hold-down/push blocks, jigs, fixtures, stops, and the like.

**HAND SAFETY** It is good practice to move the hands in an alternate motion from back to front as the work continues through the cut. Never pass the hands directly over the cutter knife. As one hand approaches the knives remove it from the stock in an arc motion and place it back on the stock in a position beyond the cutterknife.

⚠ **CAUTION:** At all times hold the stock firmly.



**3 INCH RULE.** When working a piece of wood on the jointer, follow the 3 inch radius rule. The hands must never be closer than 3 inches to the cutter head.

## RECEIVING THE JOINTER

Upon delivery, inspect the shipping carton for damage and report any damage to shipper immediately. Remove the jointer and parts from the carton and inspect for damage. Make sure all parts are in good condition. Any damage should be reported to your distributor and shipping agent immediately. Before proceeding further, read your manual and familiarize yourself thoroughly with correct assembly, set-up, maintenance and safety procedures. Moisten a soft cloth with kerosene and remove the protective coating from all machined surfaces of the jointer.

⚠ **DO NOT USE** GASOLINE, ACETONE, OR LACQUER THINNER. Although some users prefer a wax coating for the table surfaces, white talcum powder rubbed in vigorously once a week with a blackboard eraser will fill any casting pores and form a moisture barrier. Talcum powder will not stain wood or mar finishes.

## INSTALLATION

Locate the jointer in an area that is level and provides a solid foundation. Make sure that any potential kickback is not in line with aisles, doorways, wash stations or other work areas.

### JOINTER TO STAND ASSEMBLY

To assemble jointer to stand:

1. Position the jointer on the stand so that the pulley attached to the cutterhead on the jointer is directly above and on the same side as the motor pulley.
2. Use three hex. head cap screws and lock washers to firmly fasten the jointer to the stand. The screws are threaded up through the holes provided in the stand into the base of the jointer.

### BELT ASSEMBLY

To attach the belt to the cutterhead pulley and motor pulley, first loosen the four bolts holding the motor to the mount bracket and align the pulleys using the slotted holes on the mounting bracket. Raise the motor as high as possible and mount the belt on to both pulleys. Allow the motor to drop and create tension on the belt. Pull down on the motor to achieve the desired belt tension (the correct belt tension is achieved when the belt can be deflected approximately one inch at the center belt span using light finger pressure as shown in Figure 1.

Snug tight the four bolts.

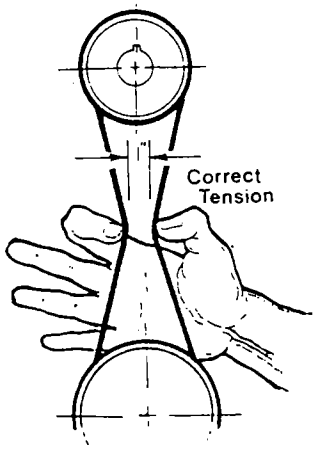
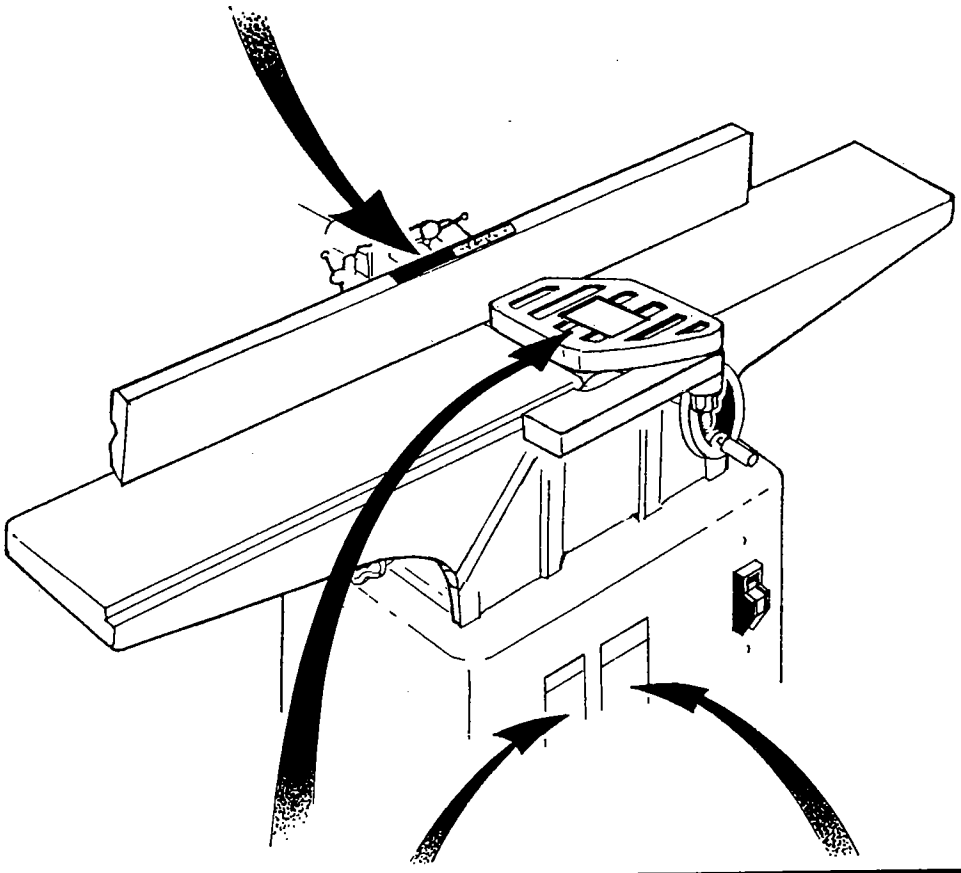



**FIGURE 1**

## SAFETY: DECAL INSTRUCTION

**CAUTION** KEEP HANDS CLEAR OF CUTTERHEAD



WARNING

For Your Own Safety Read Instruction Manual Before Operating Jointer

1. Wear Eye Protection.

2. Always keep cutterhead and drive guards in place and in proper operating condition. Do not remove guard for rabbeting operations.

3. Never make jointing or planing cut deeper than 1/8 inch.

4. Always use hold-down/push blocks for jointing material narrower than 3 inches, or planing material thinner than 3 inches.

## SAFETY RULES

CAREFULLY READ INSTRUCTION MANUAL BEFORE OPERATING MACHINE.

DO NOT OPERATE WITHOUT ALL GUARDS AND COVERS IN POSITION.

BE SURE MACHINE IS ELECTRICALLY GROUNDED.

REMOVE OR FASTEN LOOSE ARTICLES OF CLOTHING SUCH AS NECKTIES, ETC. CONFINE HAIR.

REMOVE JEWELRY SUCH AS FINGER RINGS, WATCHES, BRACELETS, ETC.

USE SAFETY FACE SHIELD, GOGGLES, OR GLASSES TO PROTECT EYES AND OTHER PERSONAL SAFETY EQUIPMENT AS REQUIRED.

STOP MACHINE BEFORE MAKING ADJUSTMENTS OR CLEANING CHIPS FROM WORK AREA.

KEEP THE FLOOR AROUND THE MACHINE CLEAN AND FREE FROM SCRAPS, SAWDUST, OIL OR GREASE TO MINIMIZE THE DANGER OF SLIPPING.

### BELT AND PULLEY COVER ASSEMBLY

The pulley cover is attached with a bolt and washer into the threaded hole in the base (see exploded view, page 21).

### FENCE INSTALLATION

Place the key into the machined slot of the fence support. The spring pin should go into the hole in the slot. The key should be firmly seated in the slot. Lightly coat the mating surfaces of the fence support and the fence slide base with oil. Place the fence slide base on the fence support, aligning the key with the machined slot in the fence slide base. Insert the locking screw through the hole in the fence slide base and through the slot in the fence support. Place the notched bolt on to the locking screw and tighten, align the tab of the screw with the slot in the fence support. When the locking screw is tightened the fence should be secure. Loosen the locking screw to slide the fence to the desired position on the table and retighten the locking screw.

## GROUNDING INSTRUCTIONS

⚠ **DANGER:** If the machine does not come wired to run, the electricals and motor wiring must be done by a qualified electrician. The machine must be properly grounded to help avoid electrical shock and possible death. Follow the recommendations made by the National Electrical Code for grounding:

1. All grounded, cord connected tools:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green, with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cord immediately.

2. Grounded, cord-connected tools intended for use on a supply circuit having a nominal rating less than 150 volts:

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Sketch A, Figure 2. The tool has a grounding plug that looks like the plug illustrated in Sketch A.

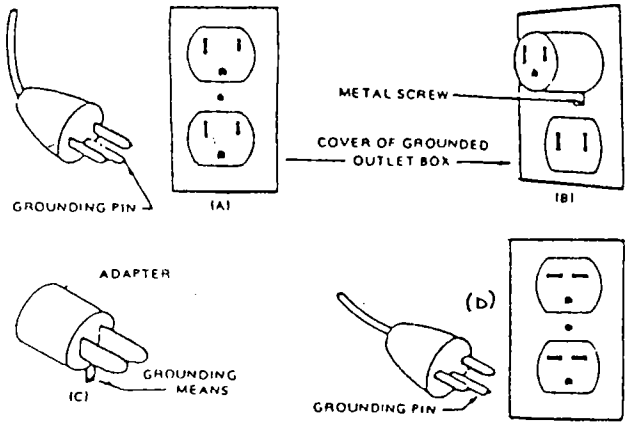



**FIGURE 2**

A temporary adapter, which looks like the adapter illustrated in Sketches B and C in Figure 2, 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, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

3. Grounded, cord-connected tools intended for use on a supply circuit having a nominal rating between 150-250 volts, inclusive:

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Sketch D Figure 2. The tool has a grounding plug that looks like the plug illustrated in Sketch D.

Make sure the tool is connected to an outlet having the same configuration as the plug. No adapter is available or should be used with this tool. If the tool must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel and after reconnection, the tool should comply with all local codes and ordinances.

## RAISING AND LOWERING TABLES

To raise or lower the infeed table:

1. Pull on the spring locking round knob A in Figure 3, located at rear of infeed table, and at the same time turn handwheel C, Figure 4 to set table at desired position.

2. When set, release spring loaded knob A, Figure 3.

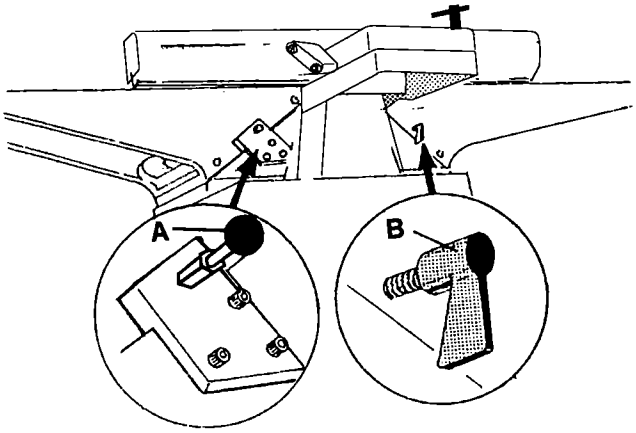



FIGURE 3

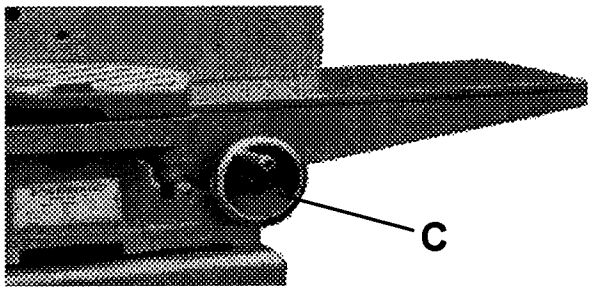



FIGURE 4

To raise or lower outfeed table:

1. Loosen thumbscrew B, Figure 3.
2. Turn handwheel E, Figure 5 located on the underside of the outfeed table.
3. When set, retighten thumbscrew B, Figure 3.

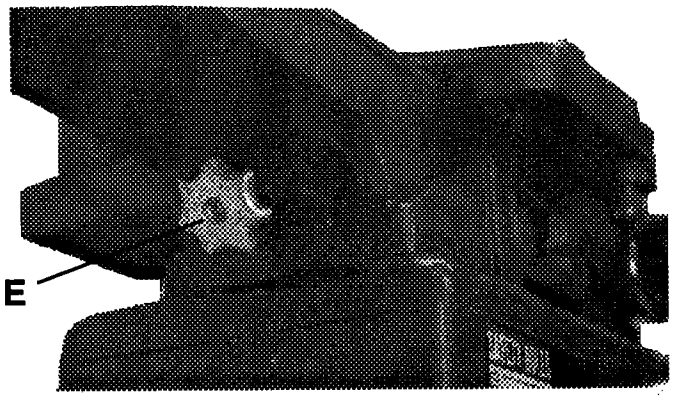



FIGURE 5

## INSTALLING NEW KNIVES

Unplug or disconnect jointer from power source and lock out power. When installing new knives remove only one knife at a time. Clean the knife slot and install the new knife. Adjust and lock new knife in cutterhead assembly before proceeding to next knife. To remove the old knives, loosen gib locking bolts A and remove gib, knife, and jack screws (Fig. 6). Using an allen wrench, turn jack screws B down one turn.

Clean the jack screws, gib, knife slot, and knife thoroughly and replace jack screws.

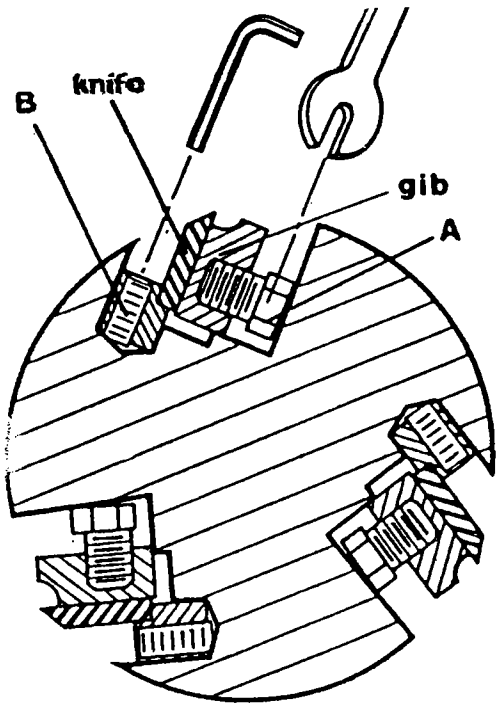



FIGURE 6

Sandwich knife and gib together and drop into knife slot. Be certain that the back of the knife is resting on the seat of the jack screw plug. Next, a shop scale should be placed flat on the end of the cutterhead. Slide the knife out until it is flush with the end of the shop scale. Set the knife locking gib 1/32 inch in from the end of the knife (Fig. 7).

⚠ **WARNING:** Set the knives no more than .015 inches above the body of the cutterhead to minimize the hazard of kickback and severe personal injury.

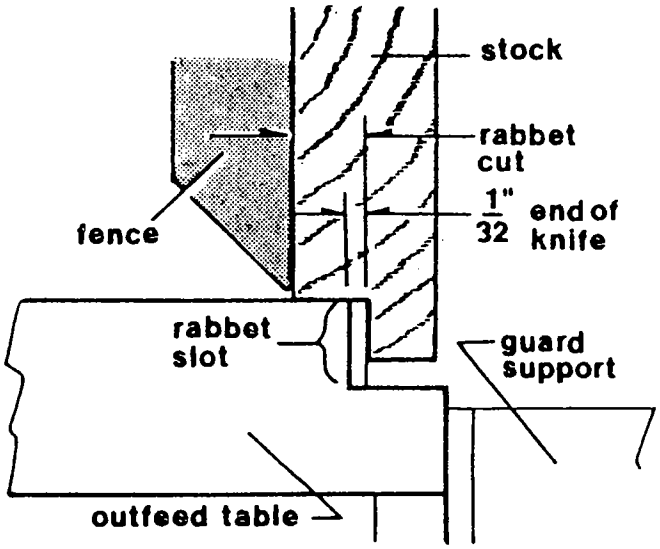



FIGURE 7

Snug the two outside gib locking screws. If you have a Model 150 knife setting gauge, place it on the outfeed table to the rear of the cutterhead with the movable platen over the cutterhead (Fig. 8). Insert an allen wrench into the jack screw, and rock the cutterhead back and forth. Watch the pointer on the 150 gauge. The pointer will begin moving downward toward "O".

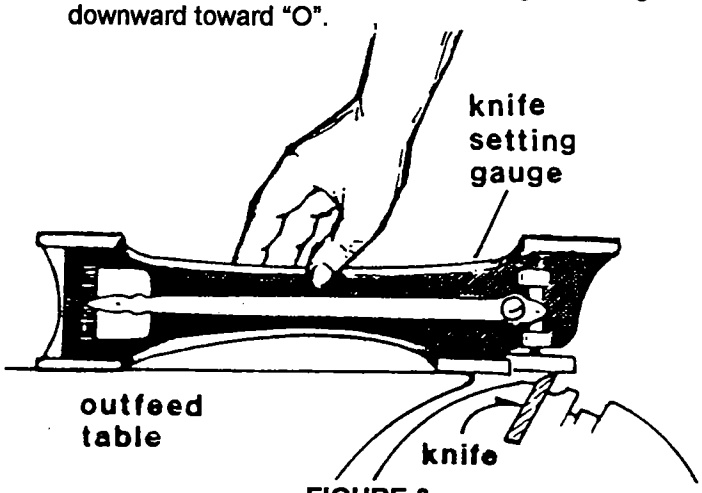



FIGURE 8

When the pointer reaches "O", it is parallel with the outfeed table. Move the gauge to the front of the cutterhead and repeat the above procedure.
This adjusting process puts the knife into the knife slot with the tip parallel and flush with the outfeed table.
Once the correct knife height has been established, secure the gib locking screws beginning with the center screw to prevent buckling or uneven knives.
If a Model 150 gauge is not available, use a standard shop scale. Stand the scale on its edge on the outfeed table. The scale should extend over the cutterhead. Using the above method, raise knife until it just touches the scale at the cutterhead arc apex.

### OUTFEED TABLE AND KNIVES

The outfeed table must be set exactly level with the knives at the highest point of their revolution. Knives must also be parallel to the outfeed table. To check alignment:

⚠ 1. **DISCONNECT MACHINE FROM POWER SOURCE.**

2. Place a steel straightedge on outfeed table and extend it over the cutterhead as shown in Figure 9.

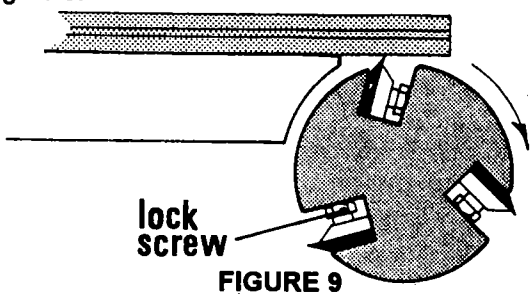



FIGURE 9

3. Rotate the cutterhead by hand. If a knife is too low or too high at either end, lightly loosen the two lock screws in the knife, as shown in Figure 9. Move the knife until it barely scrapes the straightedge, and tighten the lock screws securely. Make sure each knife does not extend, more than .015 inches beyond the cutterhead.
4. For a final check, set the infeed table for no more than a 1/64" cut, turn on machine and run a piece of wood over the cutterhead for 6 to 8 inches. The stock should rest firmly on both tables with no space under the finished cut as shown in Figure 9A. Remember, NEVER attempt to take off more that 1/64" in each pass when making outfeed table adjustments.

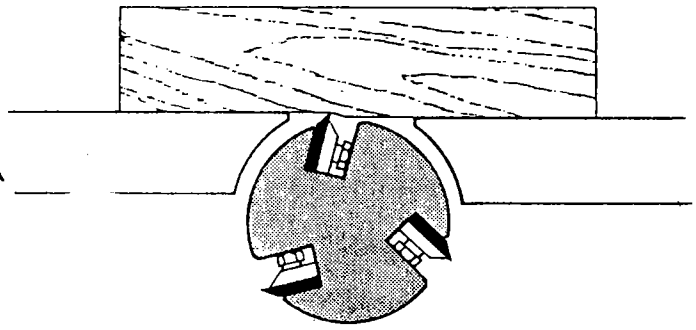


FIGURE 9A

## DEPTH OF CUT

Depth of cut is determined by the height of the infeed table relative to the high point of the knives on the cutterhead.

⚠ When **facing the width of a board**, (as opposed to the edge of a board) NEVER attempt to take off more than 1/64" with each pass.
The depth of cut is indicated by the scale located on the right side of the jointer base (see exploded view, page 21).

## JOINTING KNIVES

After extended use it will be necessary to sharpen the knives on the cutterhead assembly so that all three knives protrude exactly the same height above the cutterhead.
To joint the knives:

⚠ 1. **DISCONNECT MACHINE FROM POWER SOURCE.**

2. Remove the cutter guard (refer to page 12).
3. Wear approved eye protection.

4. Place a metal straightedge across both tables as shown in Figure 10, and make sure both tables are set to the exact height of the high point of the knives.

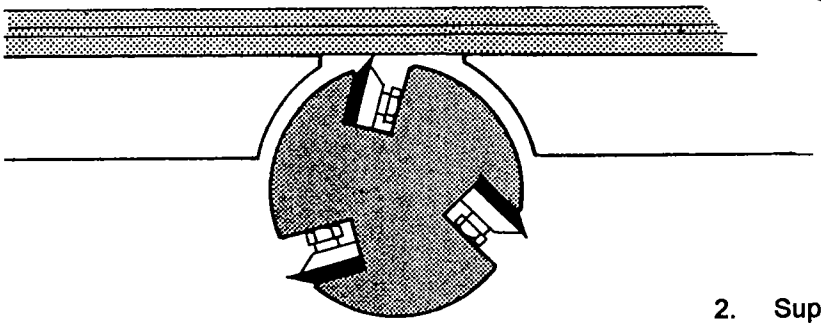


FIGURE 10

5. Clamp a block of wood across the infeed table as shown in Figure 11 in order to block the end of a fine India stone or oilstone during the jointing operation. This helps to prevent kickback of the stone.

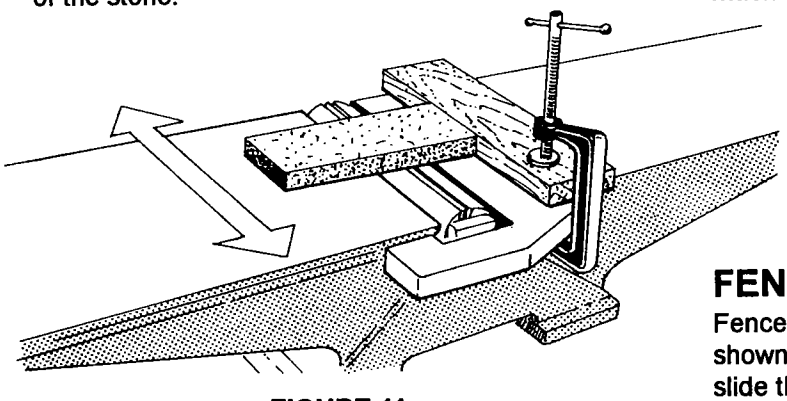


FIGURE 11

6. Turn machine on.
7. Keeping hands well clear of the cutterhead, place the stone into position as shown in Figure 11, and slide the oilstone back and forth across both tables until the knives are lightly jointed.
8. **TURN MACHINE OFF** and visually inspect each knife. If only the high knife has been touched, lower the OUTFEED table .003 inches and continue the sharpening process until all three knives have been touched by the stone.
9. Replace cutter guard (refer to page 11).

## TABLE GIBS AND LEVELING

The table gibs on your machine are factory-adjusted and may never require readjustment. Should any adjustment become necessary, do the following:

1. Lightly loosen the gib adjusting screws A, Figure 12. By loosening the lock nuts first the set screws should be loosened enough to move the table.

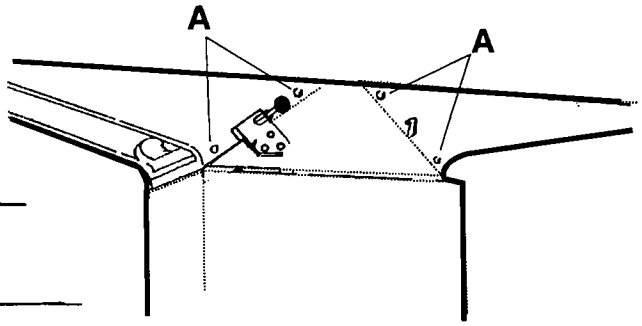



FIGURE 12

2. Support the end of the table and at the same time, raise it up slightly, (it is recommended that another person hold and support the table when performing these adjustments) snug the gib screws. Any adjustment of the gibs is very minute, perhaps even 1,000th of an inch. If the gibs are too tight the handwheel located at the front of the machine (for the infeed table) or under the outfeed table, would be locked and difficult to turn. If the gibs are too loose the tables could sag. Keep checking the level of the tables with a straightedge until leveling is achieved. When tables are level, tighten the lock screws.

## FENCE ADJUSTMENTS: TILT

Fence adjustments are made with the lock handles shown as A in Figure 13 and B in Figure 14. To slide the fence forward or back on the table, loosen lock handle A in Figure 13, slide the fence to the desired position and tighten handle A Figure 13 to secure fence.

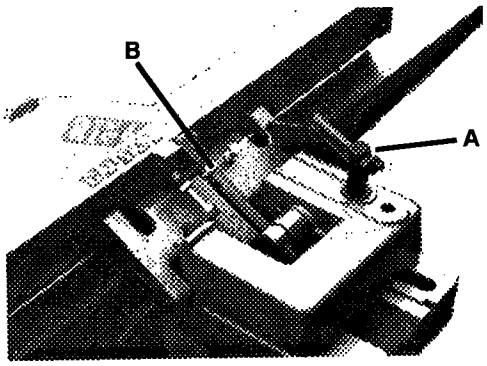



FIGURE 13

To tilt the fence **forward**:

1. Loosen lock handle B, Figure 14.
2. With a machinist protractor, or triangle, adjust the fence to the desired angle and tighten handle B to fix fence.

To tilt the fence **back**:

1. Loosen lock handle B, Figure 14.
2. Flip back the safety pivot stop block C.

3. Adjust the fence to the desired angle and tighten handle B to fix fence.

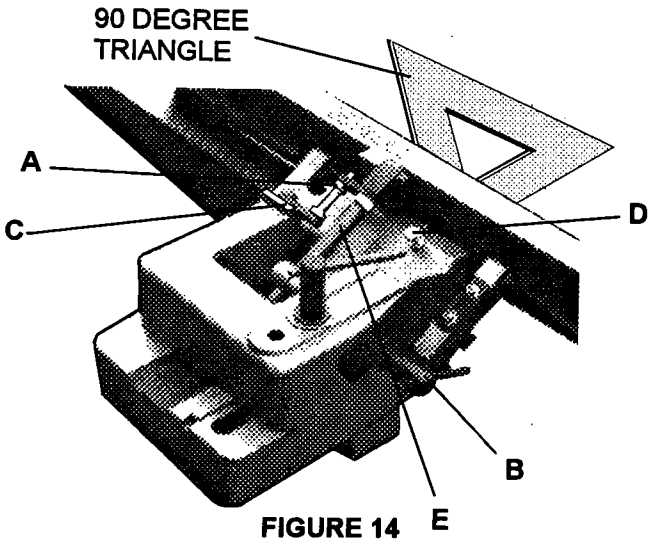



FIGURE 14

⚠ **CAUTION:** When the jointing operation is finished with the fence tilted back, **DO NOT FORGET** to flip the pivot stop block back to it's original position.

### FENCE ADJUSTMENTS: STOP

Periodically check the 90 degree and 45 degree tilt accuracy of the fence with a machinist's protractor. If adjustments are necessary, do the following:

**90 degree stop**

1. The 90 degree stop is controlled by the hexagonal stop screw A, shown in Figure 14.
2. Release the tilt lock handle shown as B in Figure 14.
3. Set the protractor beside the fence and move the fence to fit flush against the 90 degree angle by adjusting the stop screw.
4. Retighten the tilt lock handle.

**45 degree forward stop**

1. The 45 degree forward stop is controlled by the nut located on the end of the rod E in Figure 14.
2. Make adjustments by the same method used for the 90 degree stop using a 45° triangle.

**45 degree back stop**

1. NOTE: In order for the fence to move back at an angle past 90 degrees it is first necessary to flip back the safety tilt pivot block shown as C in Figure 14.
2. The 45 degree back stop is controlled by the hexagonal screw D Figure 14.
3. Make adjustments by the same method used for the 90 degree stop using the triangle set at 45 degrees beyond the right angle (a total of 135 degrees).

## GUARD ASSEMBLY AND REMOVAL

⚠ Use the jointer guard for all operations.

If guard is not assembled to table when shipped, do the following:

1. Disconnect jointer from power source.
2. Turn knob A, Figure 15 counterclockwise to create tension on spring.

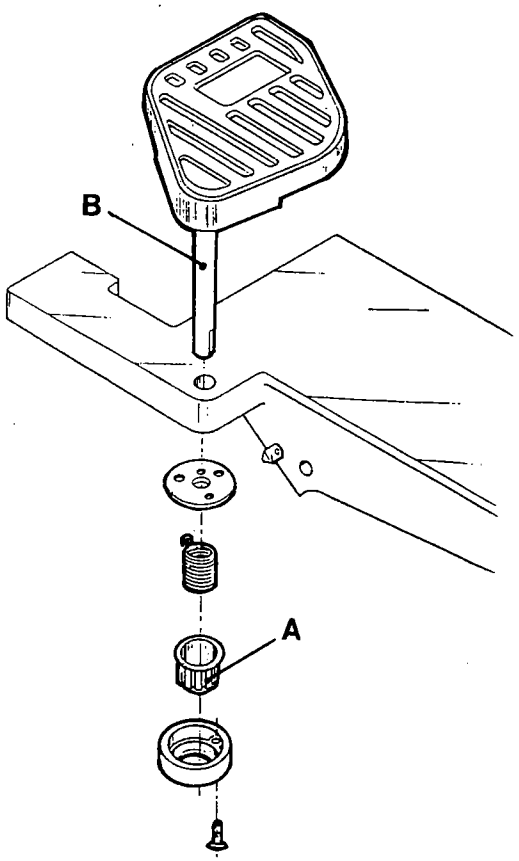



FIGURE 15

3. Insert guard post B down through hole in front of ledge as shown in Figure 15.
4. Assemble knob to guard post making sure that spring engages in slot located at end of guard post.
5. Check the guard for proper tension. If guard does not spring back into place when pulled back from cutterhead, remove guard and post and adjust spring tension by repeating steps 1-3 until correct tension is achieved. NEVER run the jointer without the guard being in place and in perfect working order.

## CUTTERHEAD REMOVAL

If removal of the cutterhead is necessary, do the following:

⚠ 1. **DISCONNECT JOINTER FROM POWER SOURCE.**

2. Remove entire fence assembly by removing lock handle A (Fig. 13) and lifting the fence off the machine.

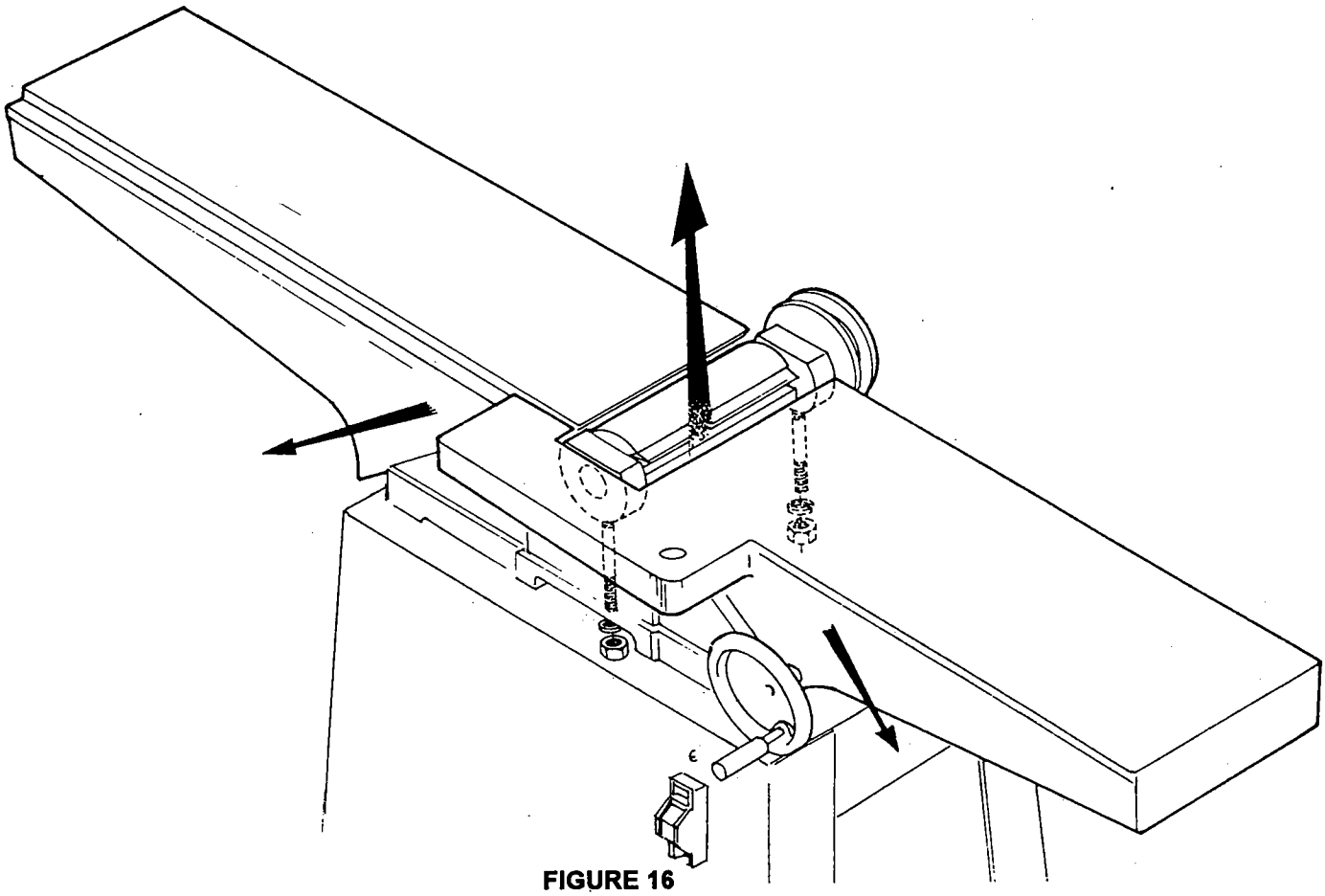


FIGURE 16

3. Loosen the bolts connecting the motor to the motor mount and remove the drive belt from cutterhead pulley (see exploded view, page 21).
4. Lower both infeed and outfeed tables to expose the cutterhead.
5. Remove the two hexagon head capscrews from the studs which connect the cutterhead to the base as shown in Figure 16.
6. Remove the cutterhead assembly, with studs attached, by lifting cutterhead straight up from base. The belt pulley may be left on cutterhead to assist in raising the cutterhead.
7. Remove pulley and both bearing housings with attached studs from cutterhead.

NOTE: You may wish to keep on hand an extra cutterhead in order to maintain shop productivity.

8. When mounting new cutterhead to base, make sure the curved seats of the base are cleaned and free of dust and grease.

## BASIC OPERATIONS

Before making any cuts on the stock, make a few practice cuts by raising the infeed table to "O" and disconnect power source. In this manner you will acquaint yourself with the feel of jointer operations.

### SURFACING

Adjust depth of cut. It is better to make cuts of approximately 1/64 inch. This will enable you to have better control over the material being surfaced. Make several passes if necessary to obtain proper stock removal.

Never surface pieces shorter than 12 inches or thinner than 3/8 inch without the use of a special work holding fixture. Never surface pieces thinner than 3 inches without the use of a push block. On stock 8" - 12" use a single two-handed push block (Fig. 17A). On stock longer than 12 inches use two push blocks (Fig. 17B). With narrow stock use the type push block shown in Fig. 17C. When surfacing short stock over 4 inches wide, use two (2) push blocks to guide material over cutterhead (Fig. 17D).

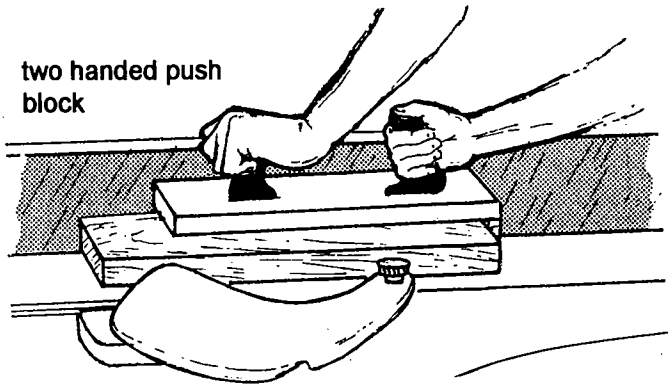



FIGURE 17A

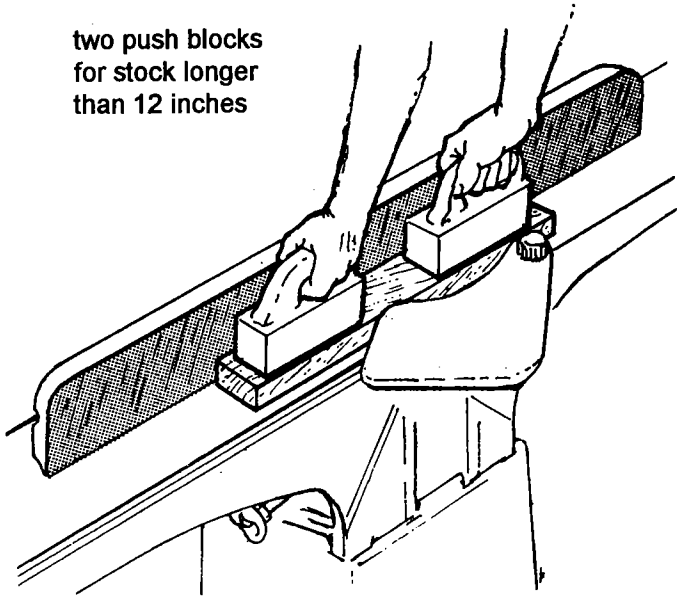



FIGURE 17B

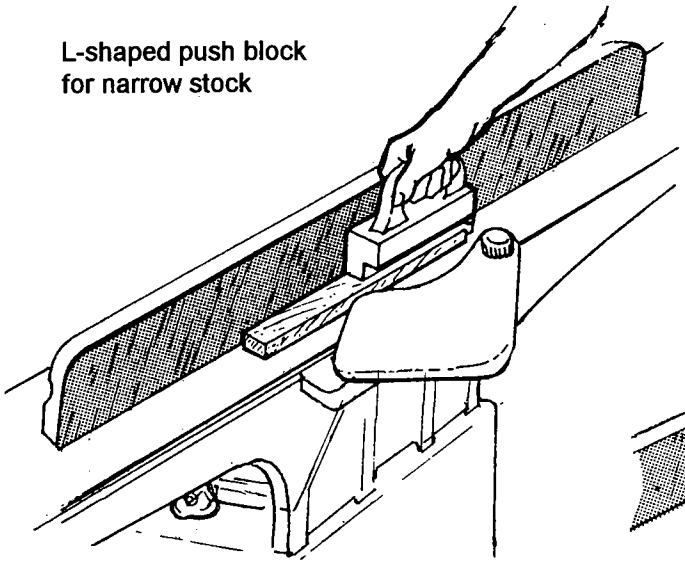



FIGURE 17C

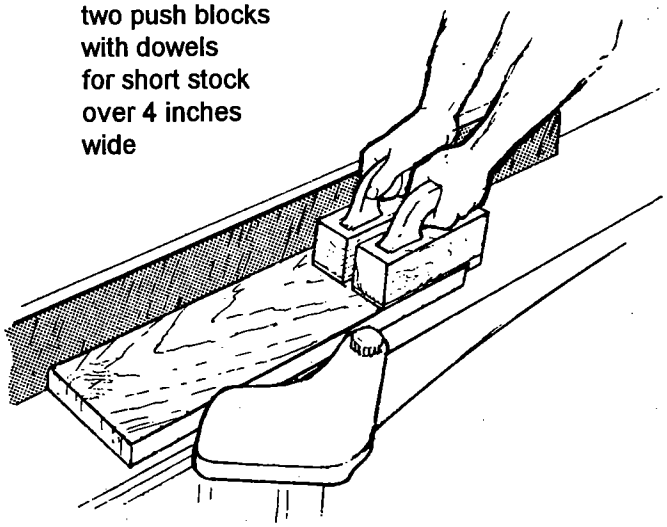



FIGURE 17D

## SURFACING: LONG BOARDS

The use of push blocks will help to insure against hands coming in contact with cutterhead in the event of a kickback and as trailing end of board passes over cutterhead.

When surfacing long stock, place push block near the front of piece and start feeding wood with the right hand until guard has opened and cut is started (Fig. 18A). Place second push block near the rear of infeed table and continue feeding stock using the hand over hand method (Fig. 18B). Before the left hand is in the 3 inch area of the cutterhead move it over to the outfeed side (Fig. 18C). As soon as possible follow with the right hand over to the outfeed side and continue through with cut (Fig. 18D).

Begin by feeding stock with right hand and apply pressure to front of stock with push block. When edging, make cuts of approximately 1/16 inch for hardwood and 1/8 inch for softwood.

When the stock is longer than twice the length of the infeed and outfeed tables, another helper or support table must be used to support the stock.

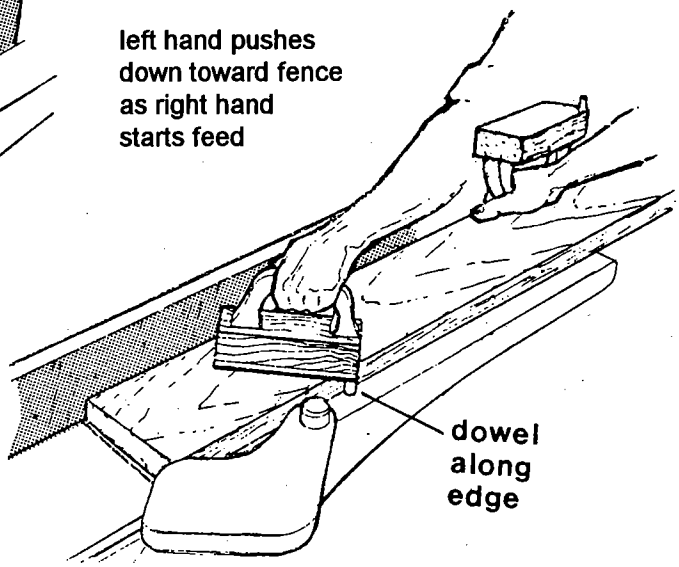



FIGURE 18A

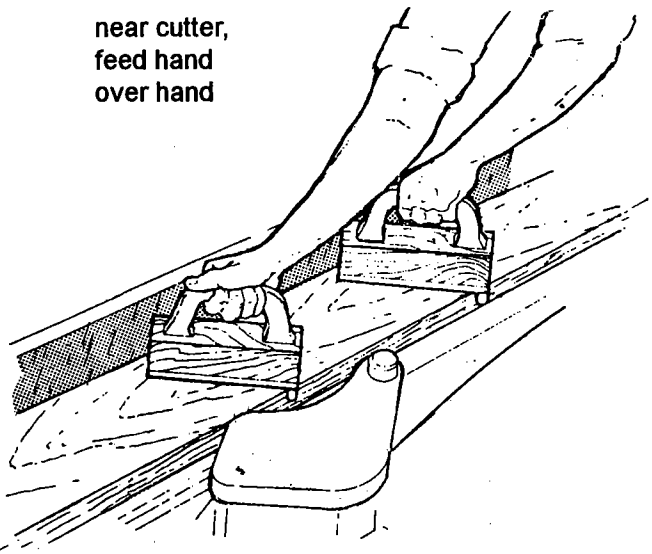



FIGURE 18B

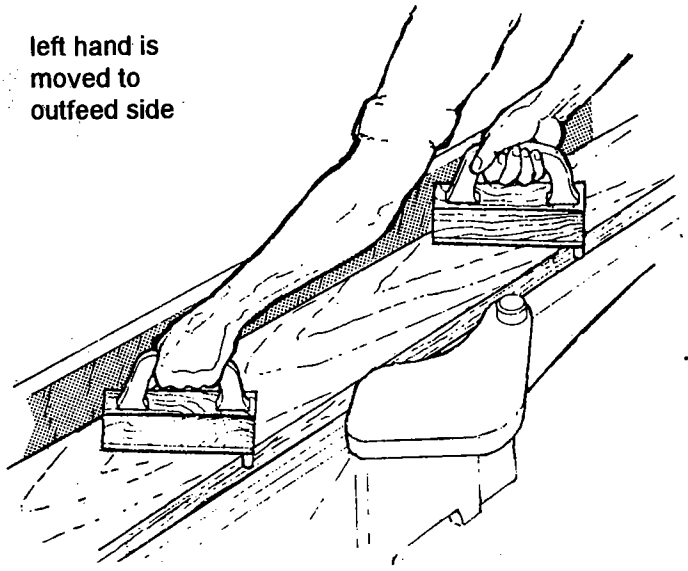



FIGURE 18C

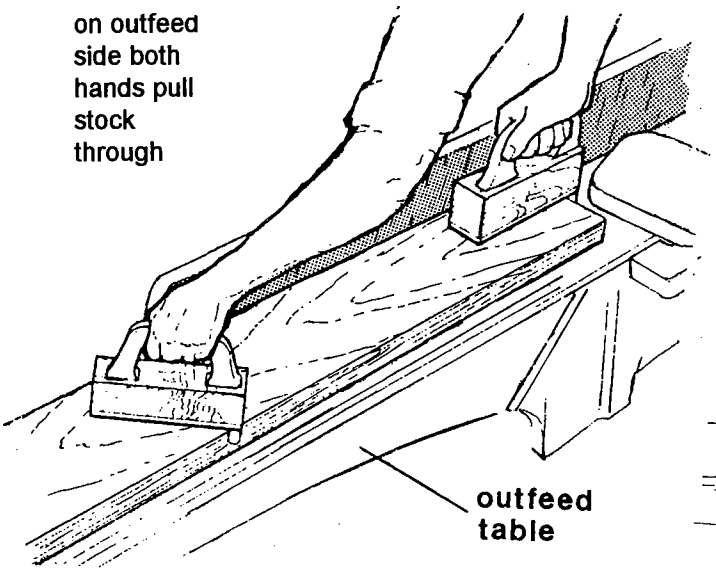



FIGURE 18D

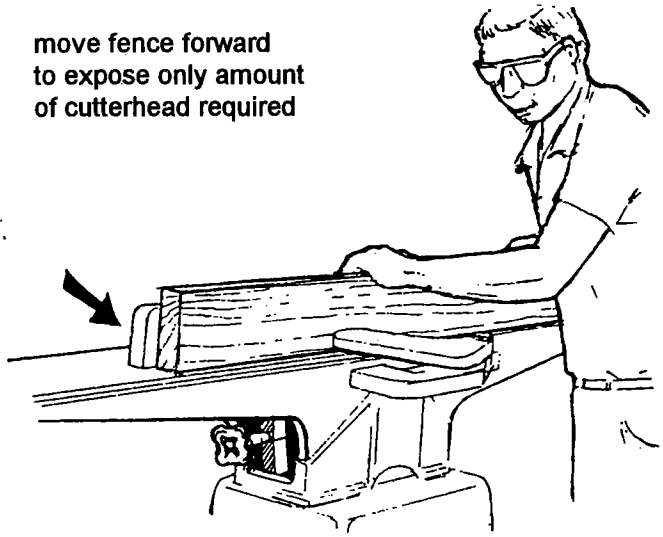
## JOINTING (or EDGING)

Never edge a board that is less than 3 inches wide, less than 1/4 inch thick, or 12 inches long, without using a push block.

⚠ **CAUTION:** When workpiece is twice the length of the jointer infeed or outfeed table use an infeed or outfeed support.

Begin by feeding stock with right hand and apply pressure to front of stock with push block. When edging, make cuts of approximately 1/16 inch for hardwood and 1/8 inch for softwood.

When edging wood wider than 3 inches lap the fingers over the top of the wood, extending them back over the fence such that they will act as a stop for the hands in the event of a kickback. Keep stock against the fence (Fig. 19).




## BEVELING FIGURE 19

When beveling never make cut deeper than 1/16 inch.

Make certain material being beveled is over 12 inches long, more than 1/4 inch thick and 1 inch wide.

⚠ Set fence to desired angle. **CAUTION:** Although fence may be tilted in or out for bevel cut, POWERMATIC recommends for safety reasons the fence be tilted in, if possible, making a cradled cut (Fig. 20A).

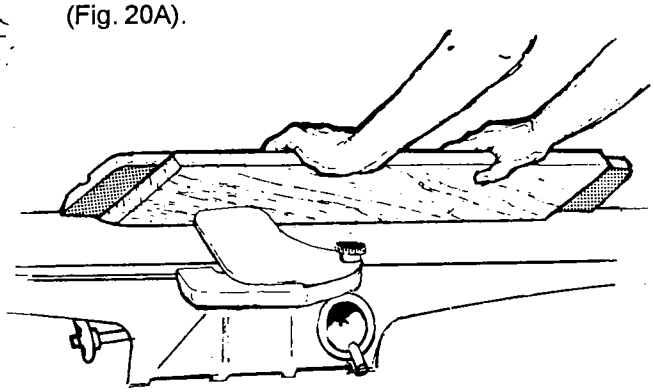


FIGURE 20A

For wood wider than 3 inches, hold with fingers close together near the top of the stock, lapping over the board and extending over the fence. When beveling material less than 3 inches wide, use beveled push blocks and apply pressure toward the fence. Keep fingers near top of push block (Fig. 20B).

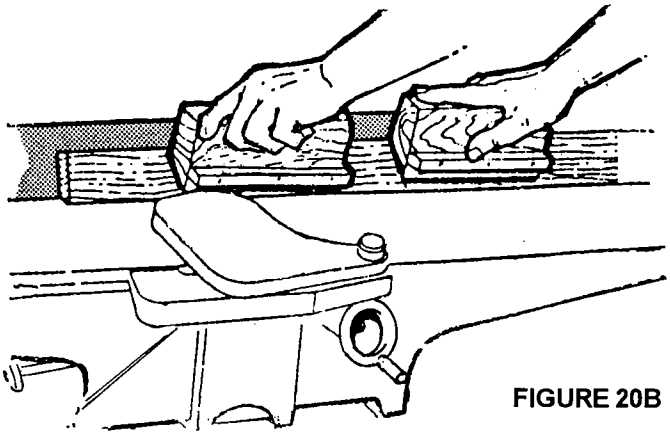


FIGURE 20B

When beveling short material use one bevel hold down and apply pressure toward the fence. Keep thumb above the ledge on hold down block (Fig. 20C).

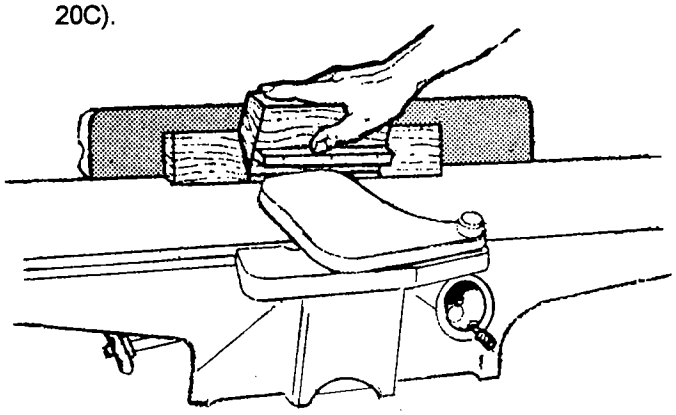


FIGURE 20C

### CROSS GRAIN

NOTE: When beveling around four edges of a workpiece, make cross grain cuts **first**. This will help clean up any chipping or splintering when beveling the end grain.

For long boards, follow the same hand-over-hand procedure used for surfacing long boards, (p. 13).

### SKEWING (SHEAR CUTTING)

When edging or facing burl or birds-eye maple, it is not unusual to deface or mar the surface being finished. This is caused by the cutterhead blades at times cutting against the grain. In order to prevent the defacing or marring of this type wood, it is necessary to skew, or angle finish, the material being worked.

Release the fence locking screw and remove the fence assembly. Remove the key from the fence slide base. Replace the fence assembly at the desired angle across the cutterhead as shown in Figure 21 and tighten the fence locking screw.

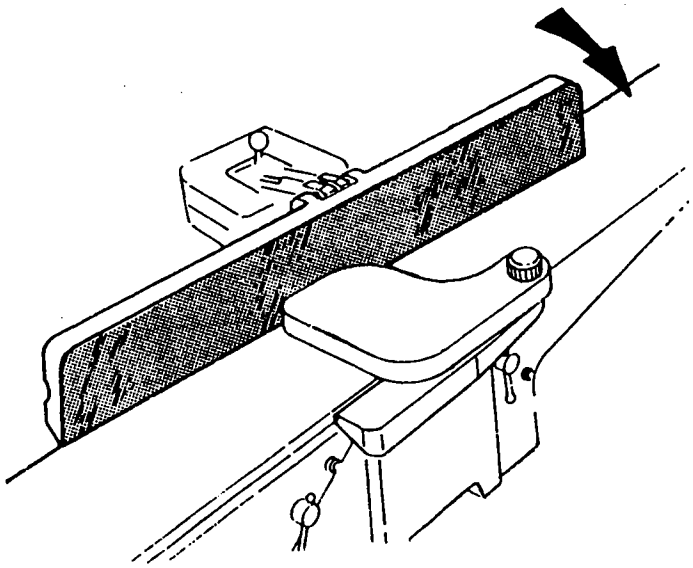
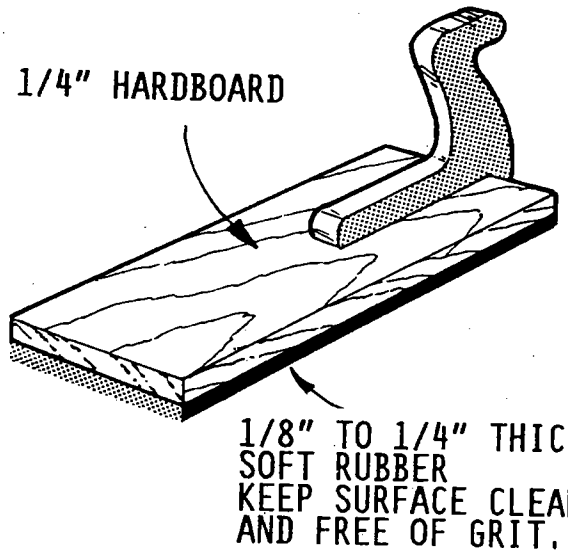


FIGURE 21

## PUSH BLOCKS

Push blocks are simple, yet necessary tools to assist the operator especially when jointing thin or short stock. Illustrated below in Figure 22 are three types of push blocks commonly used in jointing. Push blocks may be obtained commercially or easily constructed.



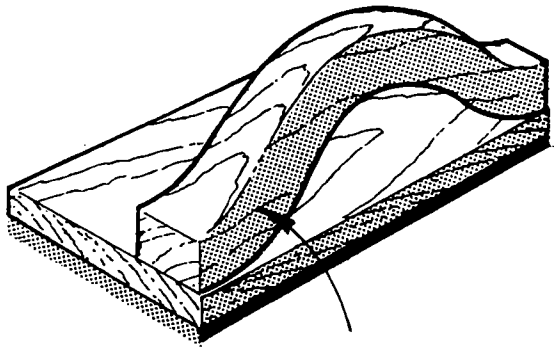




FIGURE 22

## SAFETY SWITCH

The jointer is equipped with a safety switch that allows it to be locked in the "off" position. When the switch is in the off position, the red portion of the switch can be pulled out. With this piece out the switch cannot be moved to the "on" position. When the machine is not in use, it is recommended that the safety switch be removed from the jointer. This will help prevent unauthorized use of the machine and accidental start-up.

**Use Proper Extension Cord**

Minimum gage for cord.

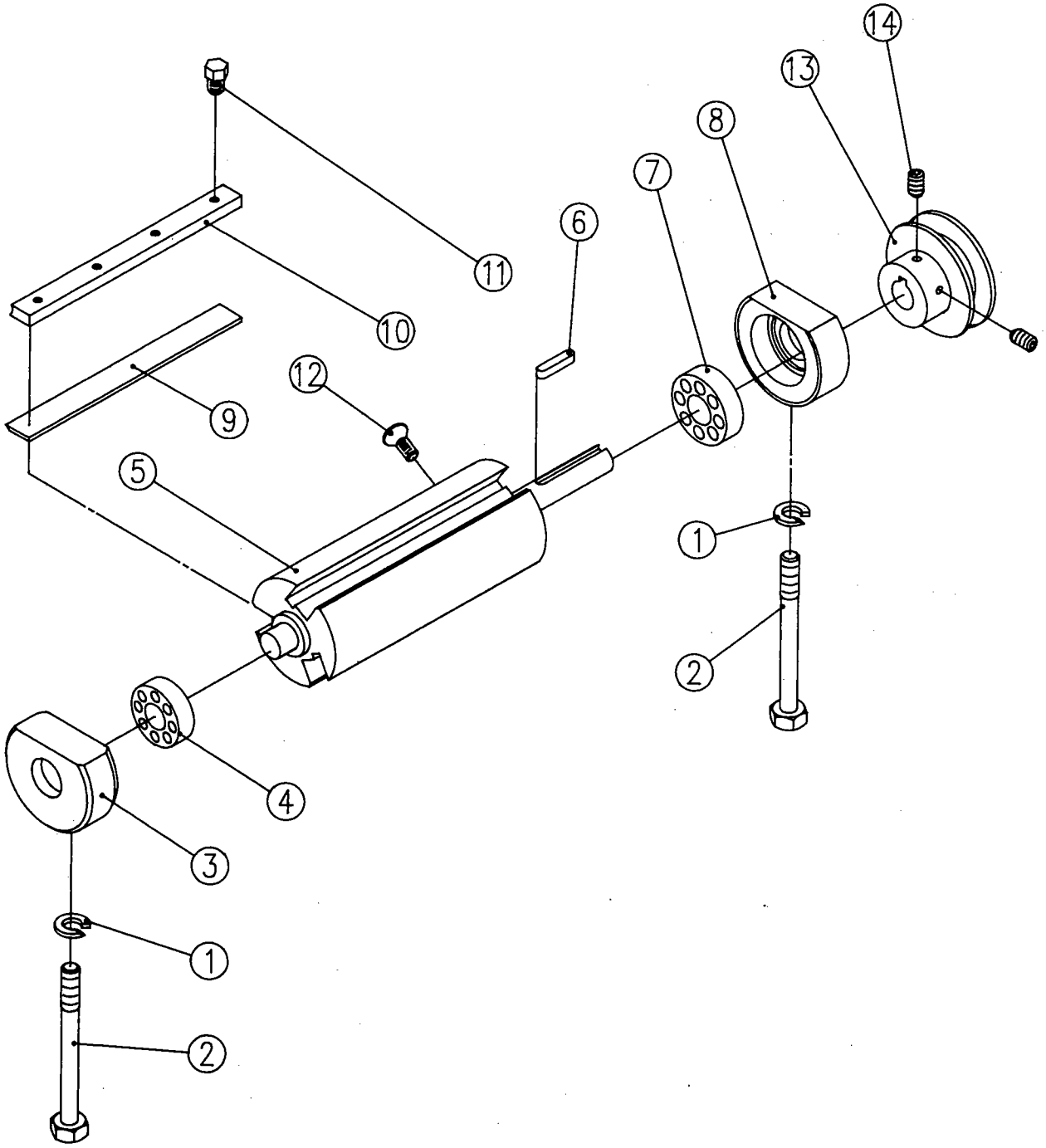
| Ampere Rating | | Volts | Total length of cord in feet | | | |
|---|---|---|---|---|---|---|
| | | 115/230 | 25' | 50' | 100' | 150' |
| More Than | Not More Than | AWG | | | | |
| 0 | 6 | | 18 | 16 | 16 | 14 |
| 6 | 10 | | 18 | 16 | 14 | 12 |
| 10 | 12 | | 15 | 16 | 14 | 12 |
| 12 | 16 | | 14 | 12 | | Not recommended |

**TABLE 1**

USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

# PARTS LIST / EXPLODED VIEW: CUTTERHEAD ASSEMBLY

| NO. | PART NO. | DESCRIPTION |
|---|---|---|
| | 6285938 | CUTTERHEAD ASSEMBLY |
| 1 | 6285852 | WASHER, SPRING |
| 2 | 6285853 | SCREW |
| 3 | 6285854 | HOUSING, BEARING |
| 4 | 6285855 | BEARING 6202 (2N) |
| 5 | 6285856 | CUTTERHEAD |
| 6 | 6285857 | KEY |
| 7 | 6285858 | BEARING 6203 (2N) |
| 8 | 6285859 | HOUSING, BEARING |
| 9 | 6285860 | KNIVES |
| | 6285925 | KNIFE LOCK ASSEMBLY |
| 10 | 6285861 | BAR, KNIFE LOCK |
| 11 | 6285862 | SCREW, HEX. |
| 12 | 6285863 | SCREW, FLAT SOCKET |
| 13 | 6285864 | PULLEY |
| 14 | 6285865 | SCREW |

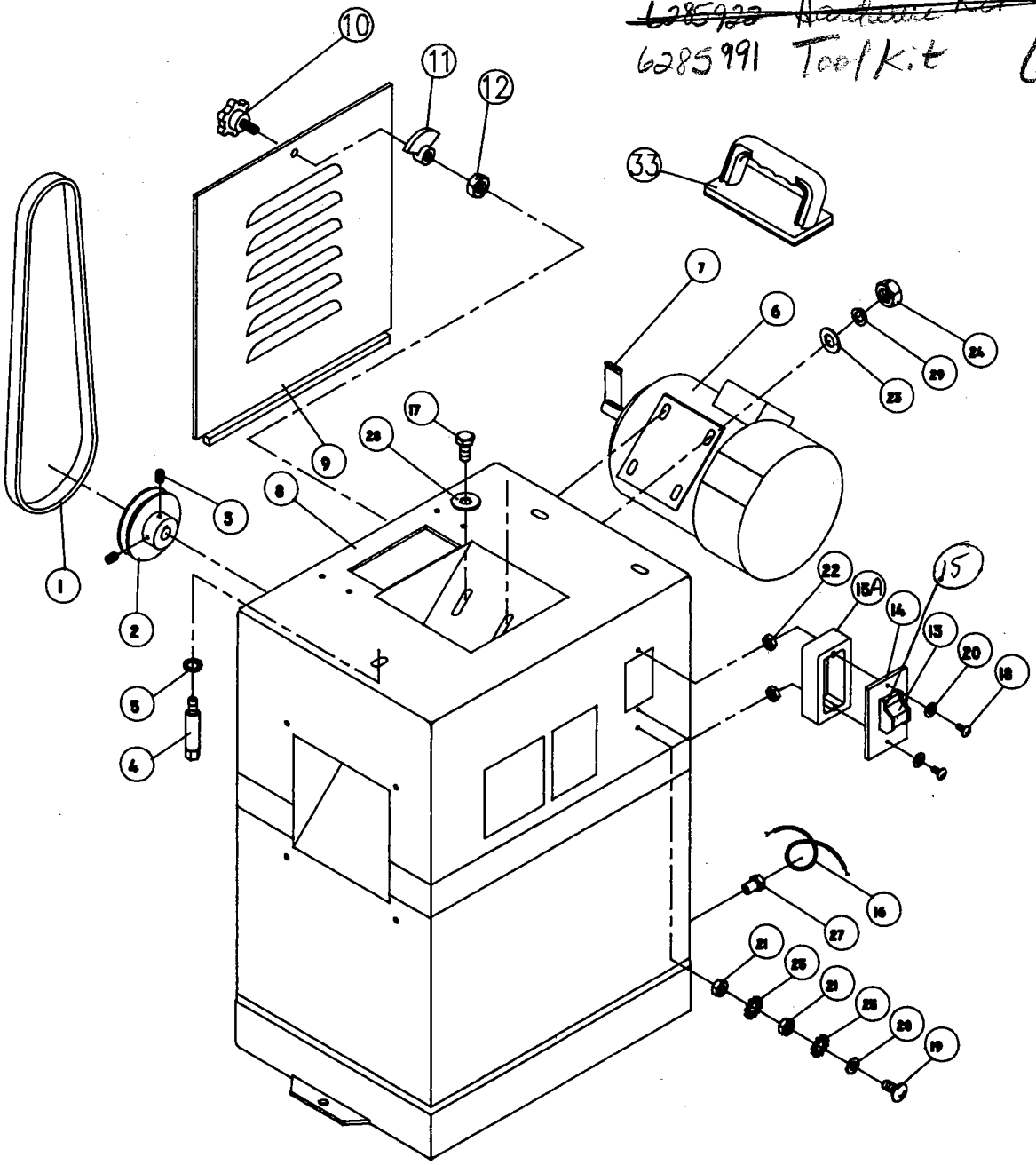


# PARTS LIST / EXPLODED VIEW: STAND AND MOTOR ASSEMBLY

| NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 6285972 | V-BELT |
| 2 | 6285819 | PULLEY, MOTOR |
| 3 | 6285820 | SCREW, SET |
| 4 | 6285822 | BOLT, LOCK |
| 5 | 6285821 | WASHER, SPRING |
| 6 | 6285824 | MOTOR, 115V, 60HZ, 3450RPM, 3/4HP |
| 7 | 6285978 | KEY |
| 8 | 6285973 | STAND, BODY |
| 9 | 6285974 | DOOR, DUST REMOVAL |
| 10 | 6285975 | KNOB, ADJUSTING SCREW |
| 11 | 6285976 | LOCK, DOOR |
| 12 | 6285977 | NUT, HEX |
| 13 | 6285918 | KEY, SWITCH |
| 14 | 6285979 | PLATE, SWITCH |

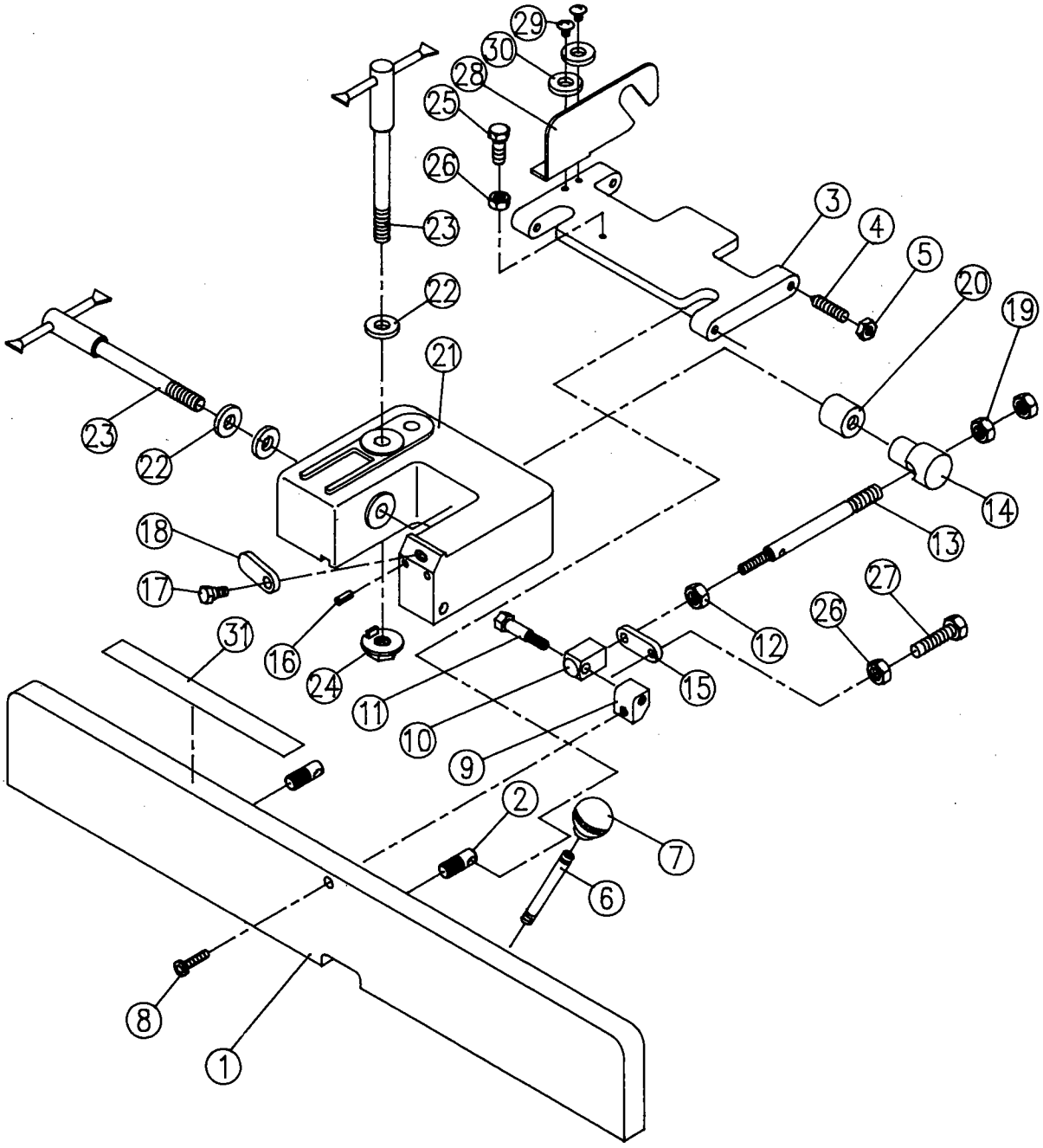
| NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 15A | ~~6285928~~ | ~~Switch Box~~ 6285923 |
| 15 | 6285826 | SWITCH [redacted] |
| 16 | 6285962 | POWER CORD |
| 17 | 6285980 | BOLT, HEX HD. |
| 18 | 6285981 | SCREW, PAN HD. |
| 19 | 6285982 | SCREW, PAN HD. |
| 20 | 6285983 | WASHER |
| 21 | 6285984 | NUT, HEX |
| 22 | 6285985 | NUT, HEX |
| 23 | 6285805 | WASHER |
| 24 | 6285806 | NUT |
| 25 | 6285986 | WASHER, STAR |
| 27 | 6285963 | STRAIN RELIEF |
| 28 | 6285987 | WASHER |
| 29 | 6285988 | WASHER, SPRING |
| 33 | 6285917 | HOLD DOWN |

~~6285928 Hardware Kit (Not Shown)~~
6285991 Tool Kit (Not Shown)



# PARTS LIST / EXPLODED VIEW: FENCE ASSEMBLY

| NO. | PART NO. | DESCRIPTION |
|---|---|---|
| | 6285971 | FENCE ASSEMBLY |
| 1 | 6285939 | FENCE BODY |
| 2 | 6285940 | STUD, PIVOT |
| 3 | 6285941 | FENCE LINK |
| 4 | 6285942 | SCREW, CONE PT |
| 5 | 6285943 | NUT, HEX |
| 6 | 6285944 | HANDLE, STUD |
| 7 | 6285945 | KNOB |
| 8 | 6285946 | SCREW, FLAT HEAD |
| 9 | 6285947 | BLOCK, FIXED |
| 10 | 6285948 | BLOCK, PIVOT |
| 11 | 6285949 | SCREW, SHOULDER |
| 12 | 6285950 | NUT, HEX HEAD |
| 13 | 6285951 | ROD |
| 14 | 6285952 | CLAMP |
| 15 | 6285953 | PLATE, STOP |
| 16 | 6285954 | PIN |
| 17 | 6285955 | BOLT, HEX HEAD |
| 18 | 6285956 | PLATE, ADJ. |
| 19 | 6285957 | NUT, HEX |
| 20 | 6285958 | SPACER |
| 21 | 6285959 | FENCE BRACKET |
| 22 | 6285960 | WASHER |
| 23 | 6285961 | SCREW, LOCK ASSEMBLY |
| 24 | 6285964 | NUT |
| 25 | 6285965 | BOLT, HEX HEAD |
| 26 | 6285966 | NUT, HEX |
| 27 | 6285967 | BOLT, HEX HEAD |
| 28 | 6285968 | PLATE, BRACE |
| 29 | 6285969 | CROSS-RECESSED HD. SCR. |
| 30 | 6285970 | WASHER |
| 31 | 3330305 | CAUTION DECAL |



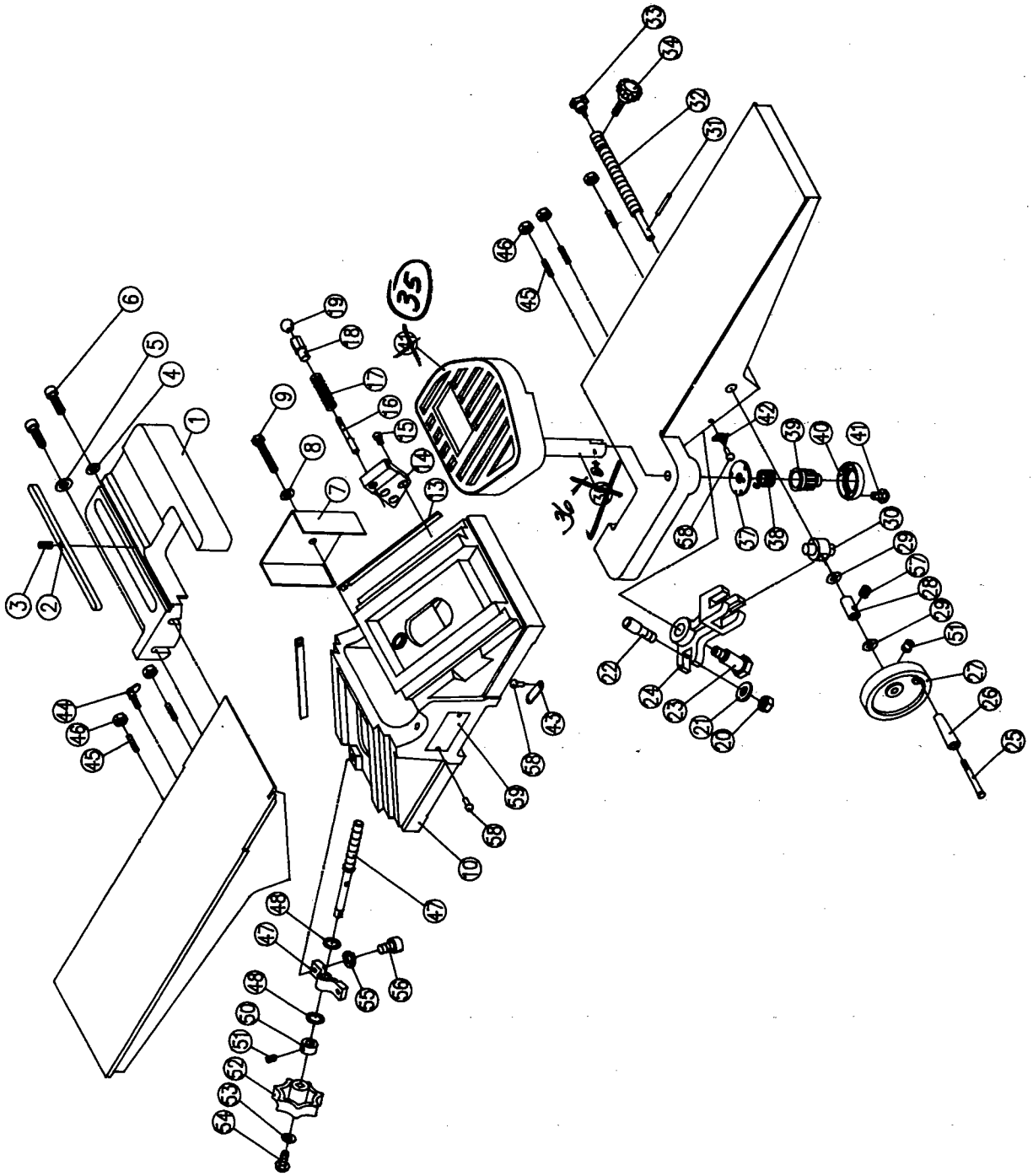
# PARTS LIST: BASE ASSEMBLY

| NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 6285926 | TABLE BRACKET |
| 2 | 6285927 | KEY |
| 3 | 6285928 | PIN, SPRING |
| 4 | 6285929 | WASHER, FLAT |
| 5 | 6285930 | WASHER, FLAT |
| 6 | 6285931 | SCREW, CAP |
| 7 | 6285932 | PULLEY COVER |
| 8 | 6285933 | WASHER, FLAT |
| 9 | 6285934 | SCREW, HEX |
| 10 | 6285866 | BASE & TABLE ASSEMBLY |
| 13 | 6285869 | GIB |
| 14 | 6285870 | MOUNT, AUTO. SET |
| 15 | 6285871 | SCREW, CAP |
| 16 | 6285872 | SHAFT, STATIONARY |
| 17 | 6285873 | SPRING |
| 18 | 6285874 | HOUSING, SPRING |
| 19 | 6285875 | KNOB |
| 20 | 6265876 | NUT, HEX |
| 21 | 6285877 | WASHER, LOCK |
| 22 | 6285878 | PIN, SHOULDER |
| 23 | 6285879 | PIN, PIVOT |
| 24 | 6285880 | CRANK, BALL |
| | 6285936 | HANDLE ASSEMBLY |
| 25 | 6285881 | SHAFT |
| 26 | 6285882 | HANDLE |
| 27 | 6285883 | HANDWHEEL |
| 28 | 6285884 | BUSHING |
| 29 | 6285885 | WASHER |
| 30 | 6285886 | NUT, ADJUSTING |
| 31 | 6285887 | PIN, SPRING |
| 32 | 6285888 | SCREW, ADJUSTING |
| 33 | 6285889 | SCREW, LOCK KNOB |
| 34 | 6285890 | SCREW, LOCK KNOB |
| | 6285919 | GUARD ASSEMBLY |
| 35 | 6285891 | GUARD, CUTTERHEAD |
| ~~36~~ | ~~6285892~~ | ~~POST, GUARD~~ |
| | 6285937 | GUARD LATCH |
| 37 | 6285893 | WASHER, RETAINING |
| 38 | 6285894 | SPRING |
| 39 | 6285895 | KNOB, SPRING |
| 40 | 6285896 | RETAINER |
| 41 | 6285897 | SCREW, RETAINER |
| 42 | 6285898 | SCALE, POINTER |
| 43 | 6285899 | SCALE |
| 44 | 6285900 | SCREW |
| 45 | 6285901 | SCREW, SET |
| 46 | 6285902 | NUT |
| 47 | 6285903 | SCREW, ADJUSTING |
| 48 | 6285904 | WASHER, COPPER |
| 49 | 6285905 | BRACKET |
| 50 | 6285906 | COLLAR, SET |
| 51 | 6285907 | SCREW, SET |
| 52 | 6285908 | WHEEL, HANDLE |
| 53 | 6285909 | WASHER |
| 54 | 6285910 | SCREW, HANDLE |
| 55 | 6285911 | WASHER, SPRING |
| 56 | 6285912 | SCREW, CAP |
| 57 | 6285913 | SCREW, SET |

36 6285992 Screw, Set, Guard

**NOTE:** Tables Not Sold Separately

## EXPLODED VIEW: BASE ASSEMBLY



## NOTES

To order parts or reach our service department, please call our toll free number between 8:00 A.M. and 4:30 P.M. (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately. Locating the EDP number of the part(s) required from your parts manual will also expedite your order.

Phone No. : 800-248-0144
Fax No. : 615-473-7819
If you are calling from Canada, please call 800-238-4746

# POWERMATIC®

McMINNVILLE, TENNESEE 37110



*January*