



# 12" Parallelogram Jointer

## Owner's Manual



## **Warranty**

Oliver makes every effort possible to assure that its equipment meets the highest possible standards of quality and durability. All products sold by Oliver are warranted to the original customer to be free from defects for a period of 2 (two) years on all parts, excluding electronics and motors, which are warranted for 1 year. Oliver's obligation under this warranty shall be exclusively limited to repairing or replacing (at Oliver's option) products which are determined by Oliver to be defective upon delivery F.O.B. (return freight paid by customer) to Oliver, and on inspection by Oliver. This warranty does not apply to defects due, directly or indirectly, to misuse, abuse, negligence, accidents, unauthorized repairs, alterations, lack of maintenance, acts of nature, or items that would normally be consumed or require replacement due to normal wear. In no event shall Oliver be liable for death, personal or property injury, or damages arising from the use of its products.

## **Warning**

Read this manual thoroughly before operating the machine. Oliver Machinery disclaims any liability for machines that have been altered or abused. Oliver Machinery reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

## **For More Information**

Oliver Machinery is always adding new Industrial Woodworking products to the line. For complete, up-to-date product information, check with your local Oliver Machinery distributor, or visit [www.olivermachinery.net](http://www.olivermachinery.net)

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## SAFETY INSTRUCTIONS

For Your Safety Read Instruction Manual Before Operating Jointer

As with all machines, there is a certain amount of hazard involved with the use of this jointer. Use the machine with the respect and caution demanded where safety precautions are concerned. When normal safety precautions are overlooked or ignored, personal injury to the operator can result.

**Wear eye protection.**

**Always keep** cutter head and drive guards in place and in proper operating condition. Do not remove guard for rabbeting operations.

**Never make** jointing , planing, or rabbeting cut deeper than 1/8 in.

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

**Never perform** jointing. Planing, or rabbeting cuts (with jointers provided with a rabbeting guard) on pieces shorter than 8 inches (203 mm) in length.

**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 kid 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.

**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 (see Figure 9) 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.

**Wear proper apparel.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip 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 lubricating 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 tools, 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 operation on material shorter than 10 in, narrower than 3/4 in, or less than 1/4 in thick.

**Do not** perform planing operation on material shorter than 10 in, narrower than 3/4 in, or wider than 8 in or thinner than 1/2 in.

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

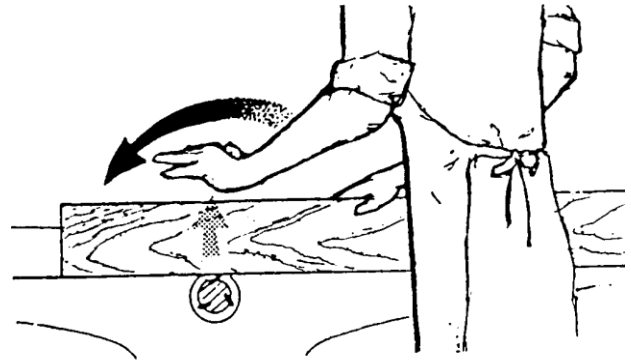
**Support** the work piece adequately at all times during operation; maintain control of the work at all times.

**Do not back** the work toward the infeed table.

**Do not attempt** to perform an abnormal or a 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.

**Three 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.



**Health hazards.** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- \* Lead from lead-based paint.
- \* Crystalline silica from bricks and cement and other masonry products.
- \* Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles.

**Familiarize yourself with the following safety notices used in this manual:**



**CAUTION:** (This means that if precautions are not heeded, it may result in minor or moderate injury and/or possible machine damage)

**WARNING:** (This means that if precautions are not heeded, it could result in serious injury or possibly even death).

## Uncrating the Machine

Uncrate the machine and inspect the unit for signs of shipping damage. If damage is found, contact your dealer immediately. Unbolt the machine from the pallet. Retain all packaging materials in case it becomes necessary to ship the machine to another site.

## Machine Preparation and Setup

The jointer must be positioned on a smooth, level surface. The area must be well lit and have plenty of room to maneuver with large pieces of wood.

Level the jointer front to back and side to side using a level placed on the table. Use shims under the corners, if necessary, but make sure the jointer is stable before being placed into service.

Clean all rust protected surfaces with a commercial solvent. Do not use acetone, gasoline, lacquer thinner or any type of flammable solvent, or a cleaner that may damage paint. Cover cleaned surfaces with WD-40 or a 20W machine oil.

**Warning :**The equipment used to lift this machine must have a rated capacity at, or above the weight of the jointer. Failure to comply may cause serious injury!

## Dust Collection

The 6" dust collection port (A, Fig. 1) is located below the outfeed table. Typically flex hose is used to run from this point to a central trunk line.

Note: Do not operate the jointer without dust collection.

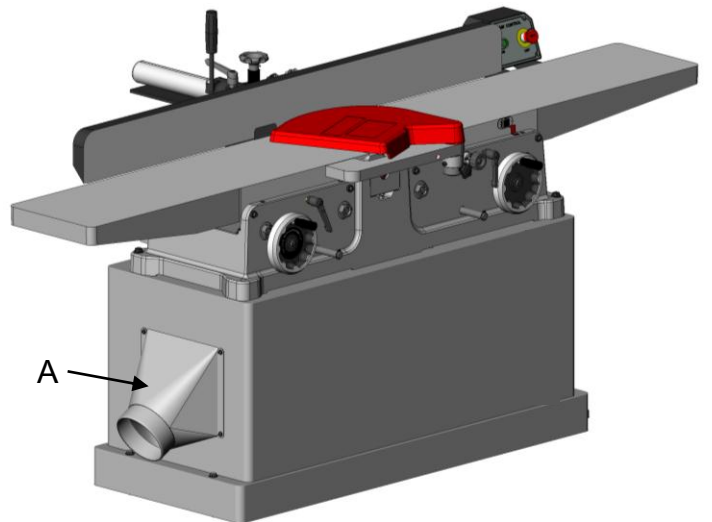
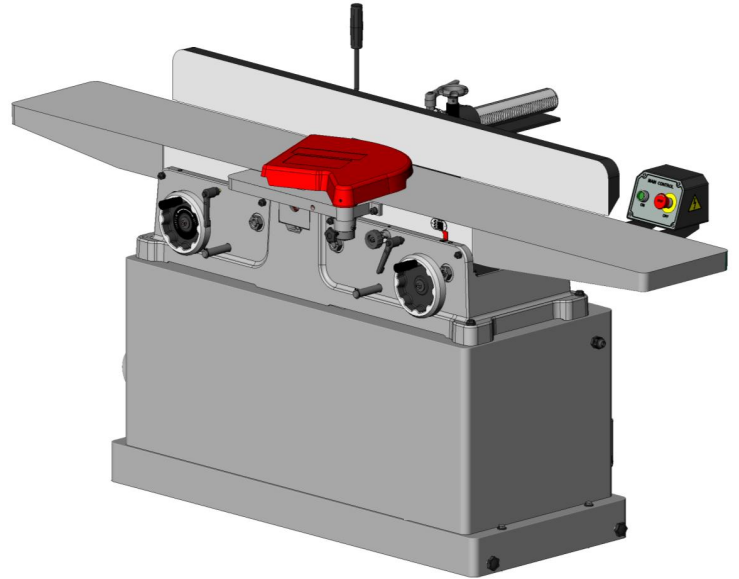
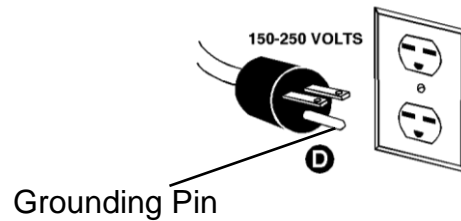


Fig. 1

## Electrical Connections

This jointer can be 1 Phase based on your order and is wired for 220 volt.



## Grounding Instructions

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 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 7. 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.

## EXTENSION CORDS

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. Figure 8 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

**Warning:** If the machine does not come wired to run, the electrical 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.

Ampere Rating		Volts	Total length of cord in feet			
		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	16	16	14	12	
12	16	14	12	Not recommended		



## On/Off Switch

Attach the On/Off switch (Fig.1) to holes A using the fixed bolts

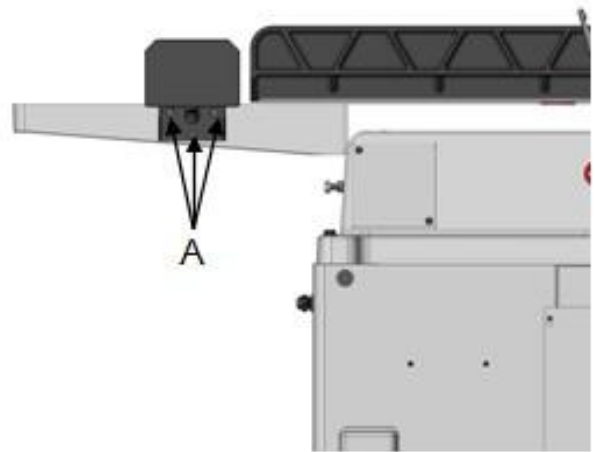


Fig. 1

## Control Box

The jointer is equipped with a control box provided with a key-operated power switch and ON . OFF push buttons. See Fig. 2. To lock the switch in the OFF position, remove the switch key from the switch. Place the key in a location that is in accessible to children and others not qualified to use the tool.

**! WARNING:** Ensure that your workplace is inaccessible to children by closing and locking all entrances when you are away. NEVER allow untrained visitors in workplace when assembling , adjusting or operating equipment.

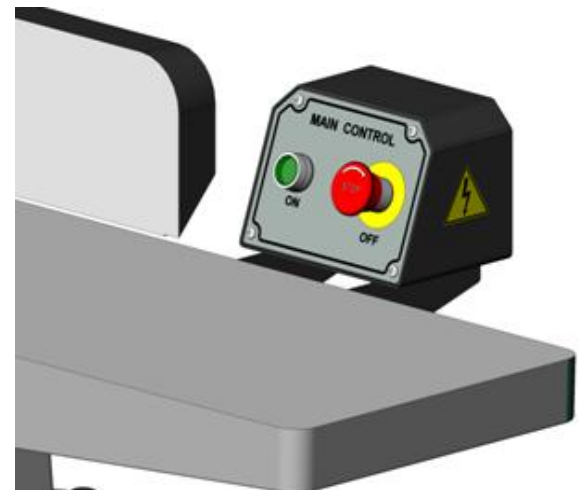


Fig. 2

## Cutterhead Guard Installing & Removal

1. Disconnect jointer from power source.
2. Turn knob (A) counterclockwise to create tension on spring, and hold it there Fig 3.
3. Insert guard post (B) down through hole in front of ledge.
4. Slightly turn set (A), if necessary, until the guard seats itself, and the spring engages the slot at the end of the 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 adjust spring tension by repeating steps 1-3 until correct tension is achieved. NEVER run the jointer without the guard.

**WARNING:** Use the jointer guard for all operations.

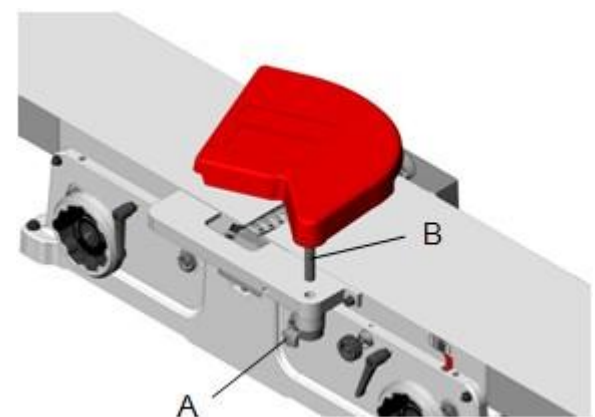


Fig. 3

## SHEAR-TEC II Cutterhead

**Knife inserts are dangerously sharp. Use extreme caution when inspecting, removing, or replacing knife inserts.**

The knife inserts on the Jointer are four-sided. When dull, simply remove each insert, rotate it 90° for a fresh edge, and re-install it. No further adjustment is necessary. Use the two provided torx wrench to remove the knife insert screw. Use one of the torx wrenches to help hold the cutterhead in position, and the other to remove the screw. See Fig. A. It is advisable to rotate all inserts at the same time to maintain consistent cutting. However, if one or more knife inserts develops a nick, rotate only those inserts that are affected. Each knife insert has an etched reference mark so you can keep track of the rotations.

**IMPORTANT:** When removing or rotating inserts, clean saw dust from the screw, the insert, and the cutterhead platform. Dust accumulation between these elements can prevent the insert from seating properly, and may affect the quality of the cut. Before installing each screw, lightly coat the screw threads with machine oil and wipe off any excess. Securely tighten each screw which holds the knife inserts before operating the jointer!

**Make sure all knife insert screws are tightened securely. Loose inserts can be propelled at high speed from a rotating cutterhead, causing injury.**

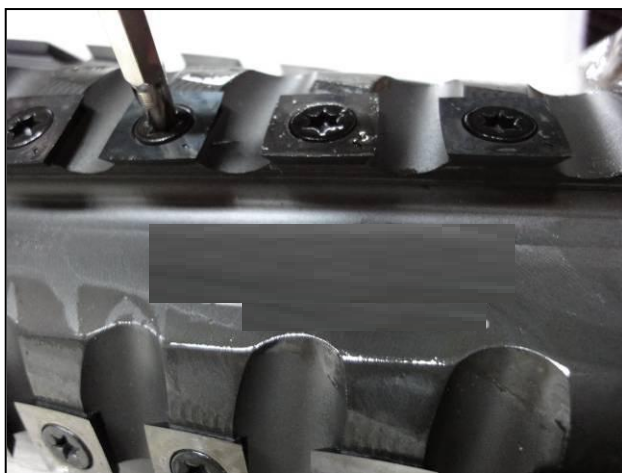


Fig. A

## Cutterhead Removal

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



**WARNING:** Disconnect jointer from power source.

1. Remove the entire fence assembly by releasing lock handle and removing hex nuts. Lift the fence off the machine.
2. Loosen the bolts connecting the motor to the motor mount and remove the drive belt from cutterhead pulley.
3. Lower both infeed and outfeed tables to expose the cutterhead.
4. Remove the two bolts and spring washers which secure the cutterhead to the base, as shown in Fig. B.
5. Remove the cutterhead as ssembly, with studs attached, by lifting cutterhead straight up from base. The belt pulley may be left on cutterhead to assist in raising the cutterhead.
6. Remove pulley and both bearing housings with attached studs from the cutterhead.

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

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

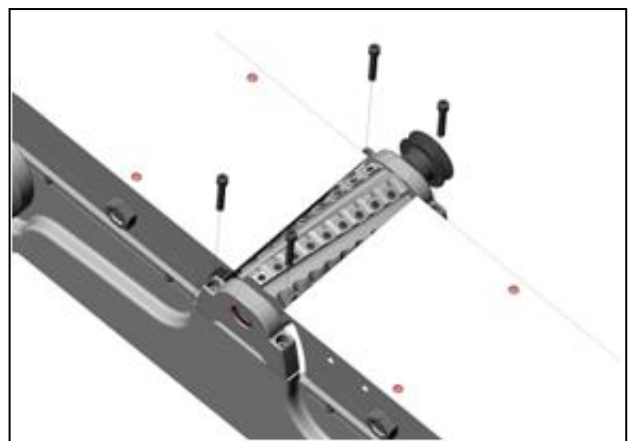


Fig B

## Fence

**Warning :** Never make any adjustments with the machine running!

### Installation of the Fence

The fence, although completely assembled, requires bolting to the machine as well as alignment.

1. Mount the fence (Fig. 5) to the machine base (Fig. 4) lining up the holes (A) with the matching holes of the fence bracket, using the allen bolts provided.

### Fence Legend

The various adjustments, locks and handles are shown in Fig.5.

- A. 90 degree adjust bolt.
- B. Angle lock handle.
- C. 90 degree flip stop.
- D. Width adjustment handle.
- E. 45 degree adjust bolt.
- F. Width lock handle.
- G. Fence angle adjust handle.

### Adjustment of the 90 Degree Stop

1. Lay a square on the infeed table as shown in Fig. 6
2. Loosen the angle lock handle (B, Fig. 5).
3. Ensure the 90 degree flip stop (C, Fig. 6) is in the 90 degree position.
4. Loosen the jam nut on the 90 degree adjusting bolt (A, Fig.6) and adjust the bolt against the flip stop until the fence becomes true with the square.
5. Tighten the jam nut while holding the bolt in position.

### Fence Operation

To tilt the fence, see Fig.5. Loosen angle lock handle 'B', flip up the stop 'C', and tilt the fence with the fence angle adjusting handle 'G' to the desired angle. Use a protractor or adjustable triangle to set the angle. A 45 degree stop, 'E' is provided for quick set-up at this angle.

To adjust the cutting width loosen the lock handle 'F' and turn the width adjustment handle 'D' to move the fence toward or away from the rabbeting ledge.

Once any adjustments are made be sure to lock them into place.

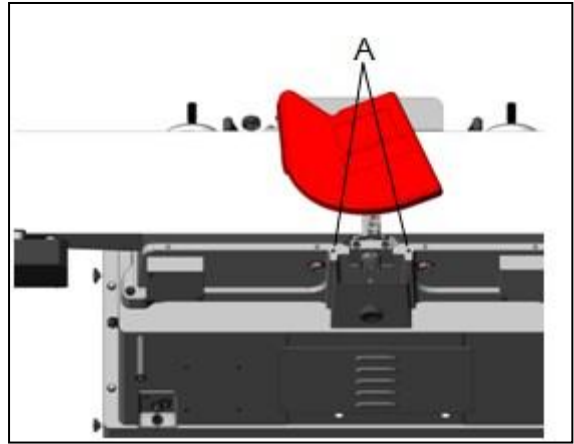


Fig. 4

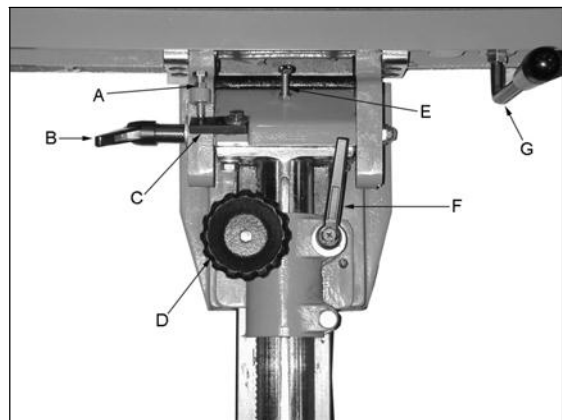


Fig. 5

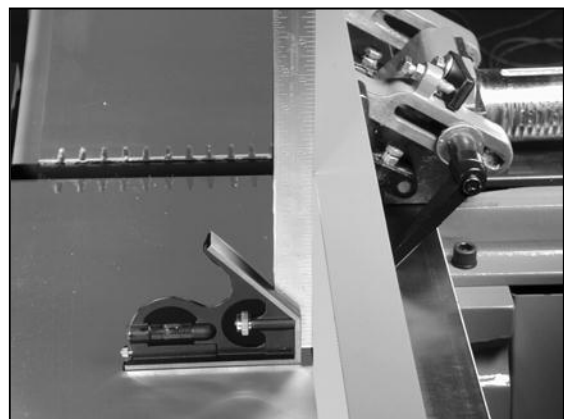


Fig. 6

## Hand Safety and Placement

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 cutter knife. See Fig 7.

When feeding the work piece, pressure is applied not only toward the cutterhead but against the fence and down to the table as well. At the start of the cut, the left hand holds the material down and toward the fence while the right hand pushes toward the cutterhead. As the material crosses the cutterhead the left hand comes up and over as in Fig 7 to continue the pressure but now on the outfeed table. As the right hand approaches the cutterhead it is time to move it up and over the cutterhead in the same fashion as the left in Fig 7 all the while continuing pressure as stated above.

**WARNING:** Disconnect jointer from power source. Keep all guards in place. Keep hands away from the cutterhead! Always use push stick when possible. Failure to comply may cause serious injury.

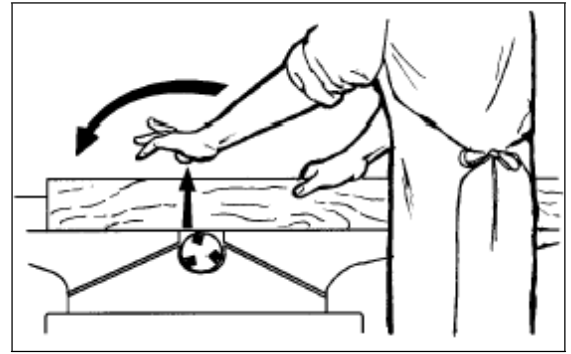


Fig. 7

## Jointing

In order to craft a good woodworking project, it is necessary to have a square piece of wood to start with. The way to do this is with a jointer. You need one straight edge and one flat face. After you have these, you can plane to thickness and rip to width and the resulting piece will be square and true on all four sides. At this point you can begin building your project.

## Direction of the Grain

To avoid tear out, always feed the material in the direction of the grain. If the direction of the grain changes half way through the board, try taking lighter cuts at a slower feed rate. If the results are still unsatisfactory, try turning the material around and feeding the other way. (Fig. 8)

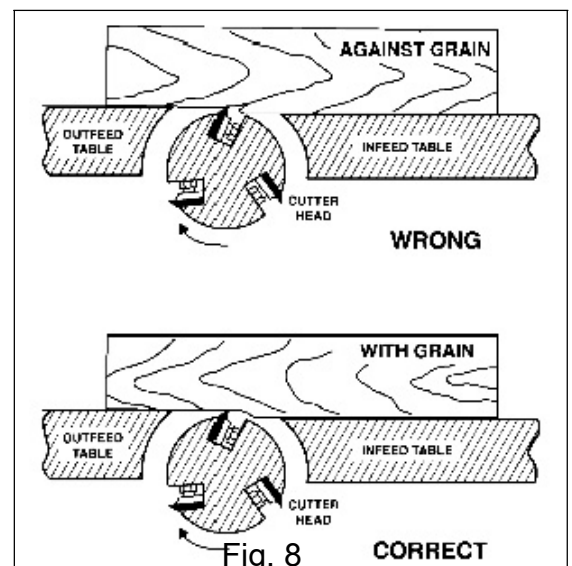


Fig. 8

## Edging

To give a good straight edge for gluing or joining, set the fence square with the table. Remove the least amount of material required to obtain a straight edge. Hold the best face of the piece firmly against the fence throughout the feed. When finished you will have a perfect starting point for your project. (Fig. 9)

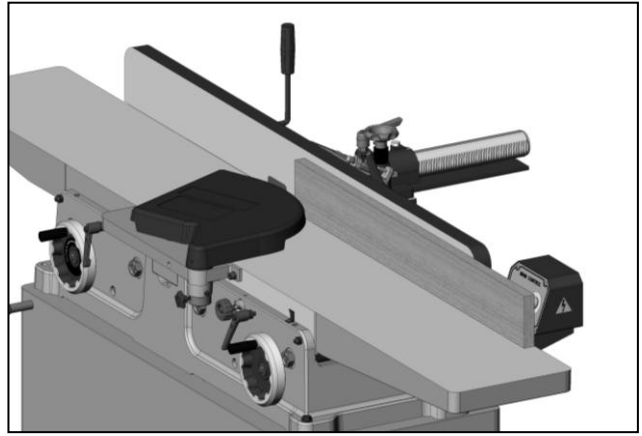


Fig. 9

## Facing

Once you have a good edge it is time to eliminate any warp or cup on the board. Keep in mind the outfeed table is the reference point and once the material is past the cutterhead, downward pressure should be applied to the outfeed table only. Putting downward pressure on the board over the infeed table will bend any cup or warp prior to hitting the cutterhead and after the pressure is released, the cup will spring back. At the same time try keeping a constant feed rate in order to give a good smooth cut with no burn marks.(Fig. 10)

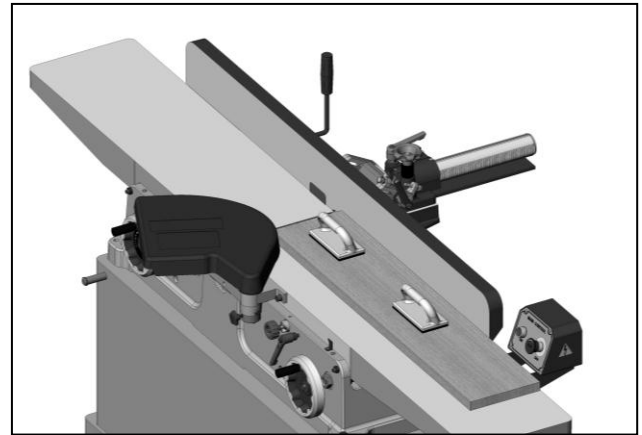


Fig. 10

## Beveling

For beveling (Fig 11), set the fence to the desired angle using a protractor and lock into place. Feed the material through pressing firmly against the fence and tables. Several passes may be necessary for the desired result.

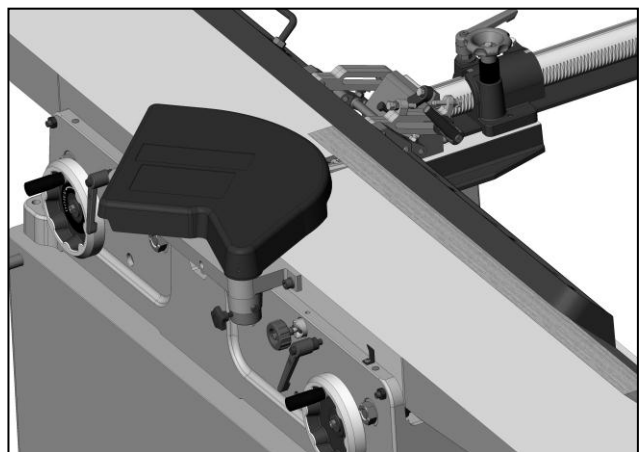


Fig. 11

## Rabbeting

1. Adjust the fence so that the distance between the edge of the knife and the fence is equal to the width of the desired rabbet (Fig 12).
2. Lower the infeed table to the depth of the rabbet required. If the rabbet is quite deep it may be necessary to do it in increments.

**WARNING :** Rabbeting requires removal of the blade guard. Use extreme caution and replace the guard after completion.

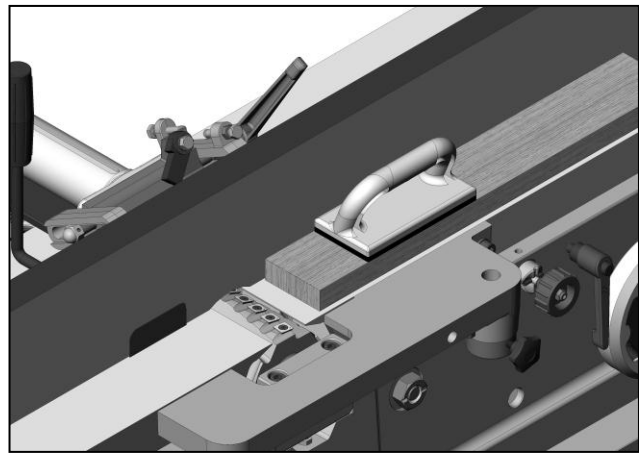


Fig. 12

## Adjusting the Infeed Table Height

The height of the infeed table with respect to the cutting circle will determine the amount of material to be removed from the work piece. To raise or lower the table, turn the height adjusting wheel (A, Fig 13) on the back of the infeed table to the desired height indicated by the guage (B, Fig 13).

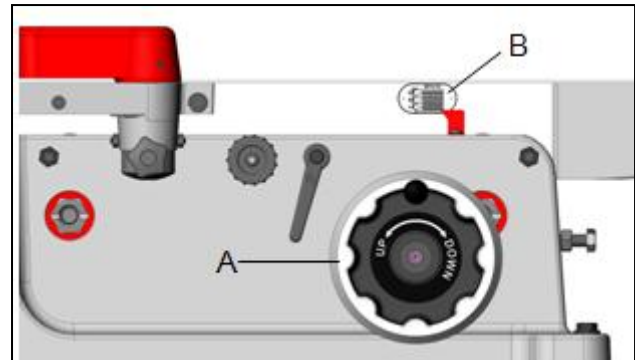


Fig. 13

## Adjusting V-Belts

After the first 20 hours of operation it is necessary to check the tension on of the V-belts. To do this, loosen the knob A open the pulley cover (C, Fig. 14). With medium finger pressure the belt should push in approximately 1/2" about midway between the pulleys. If there is too much play, remove the four screws (B, Fig. 14) and take the cover off. Adjust the tension by loosening the bottom jam nut on the bracket (A, Figure 15) and then turn down the top nut until the desired tension is achieved.

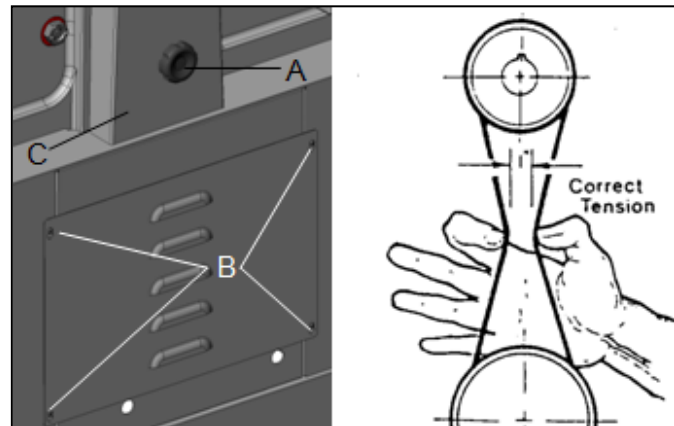


Fig. 14

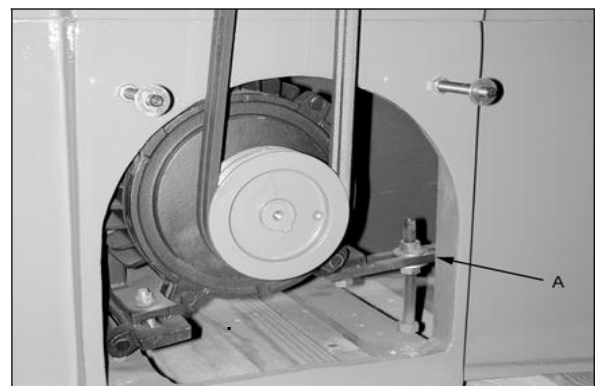


Fig. 15



## Lubrication

Periodically apply a lightgrease to the tables up/down lead screw. As well, apply a light oil to the dovetail ways from time to time to allow ease of movement.

The cutterhead bearings are permanently greased for life and do not require care.

## 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) on the front base Fig.16 by 32mm(not including) . By loosening the lock nuts first the set screws should be loose enough to move the table.
2. Remove two covers B (Fig. 17) form back of base then repeat step 1.
3. 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 adjustment handles will be 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.

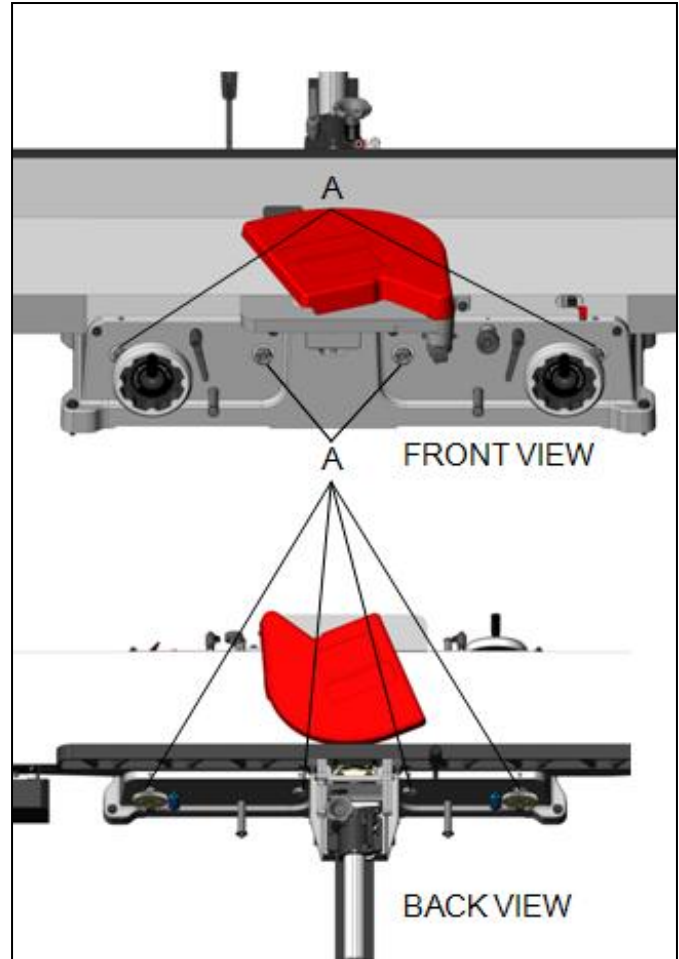


Fig. 16

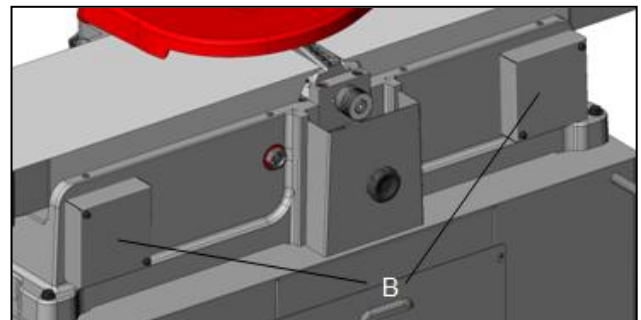


Fig. 17

## Basic Operations

Before making any cuts on the stock, make a few practice cuts by raising the infeed table to "0" and with the power disconnected. 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" to 12" long use a single two-handed push block (Fig. 18). On stock longer than 12 inches use two push blocks (Fig. 19). With narrow stock use the type push block shown in Fig. 20. When surfacing short stock over 4 inches wide, use two (2) push blocks to guide material over cutterhead (Fig. 21).

two handed push block

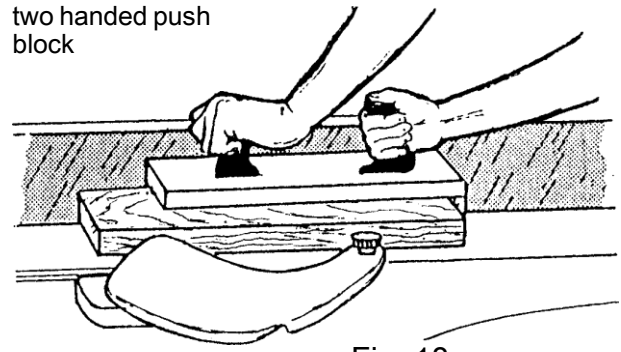


Fig. 18

two push blocks for stock longer than 12 inches

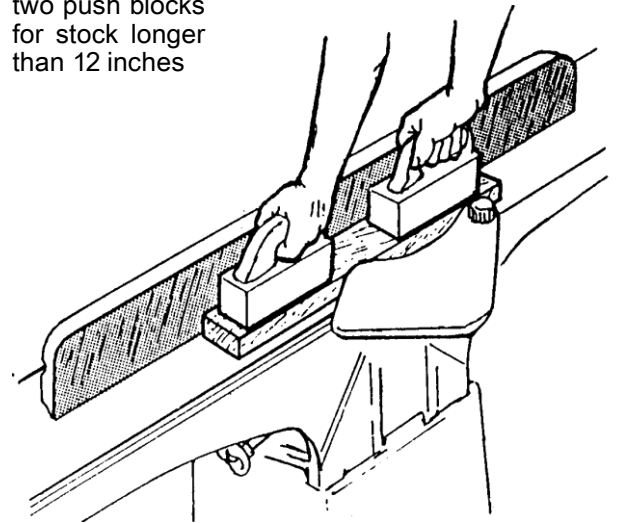


Fig. 19

L-shaped push block for narrow stock

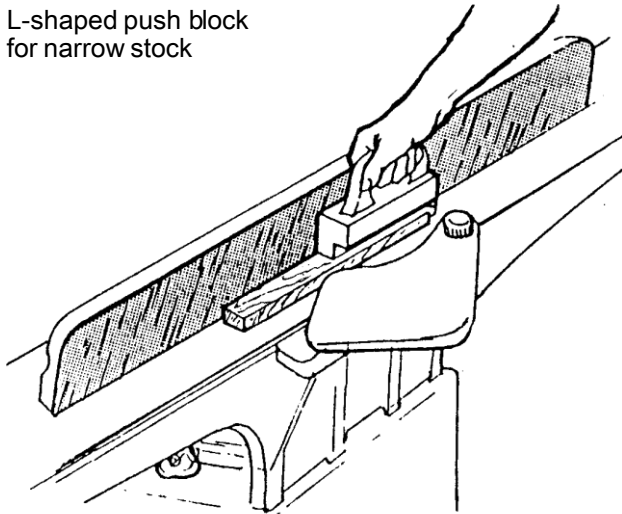


Fig. 20

two push blocks with dowels for short stock over 4 inches wide

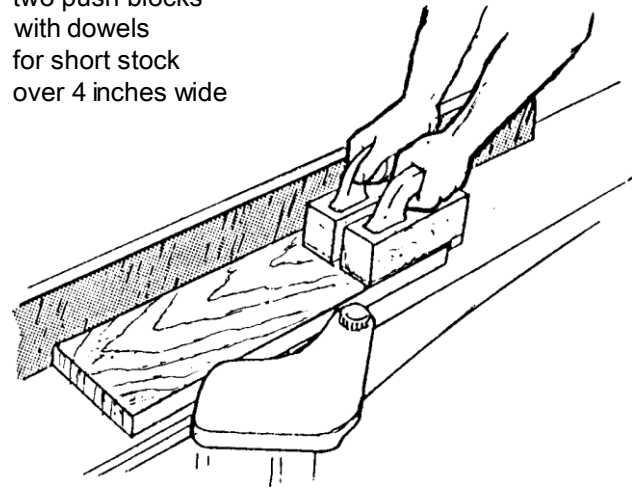


Fig. 21



## 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. 21). Place second push block near the rear of infeed table and continue feeding stock using the hand over hand method (Fig. 22). Before the left hand is in the 3 inch area of the cutterhead move it over to the outfeed side (Fig. 23). As soon as possible follow with the right hand over to the outfeed side and continue through with cut (Fig. 24).

Begin by feeding stock with right hand and apply pressure to front of stock with push block.

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.

left hand pushes down toward fence as right hand starts feed

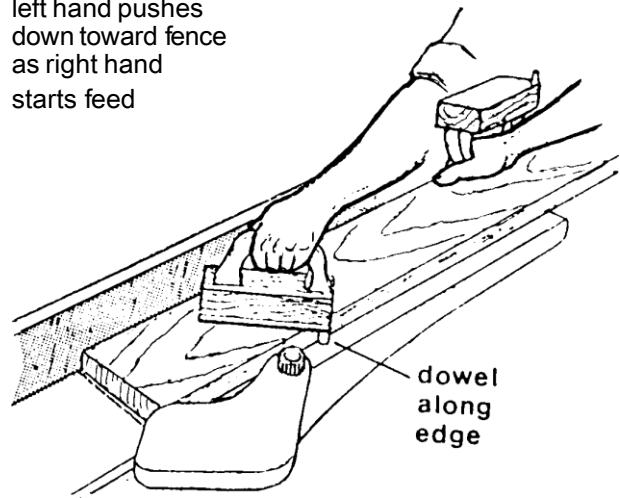
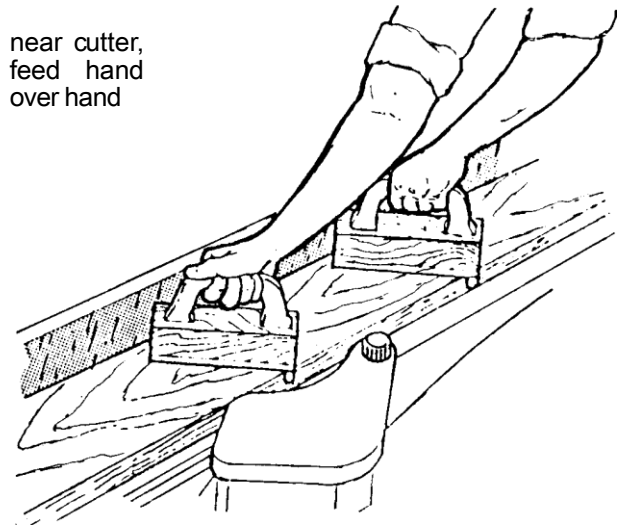


Fig. 21

near cutter, feed hand over hand



ig. Fig. 22

left hand is moved to outfeed side

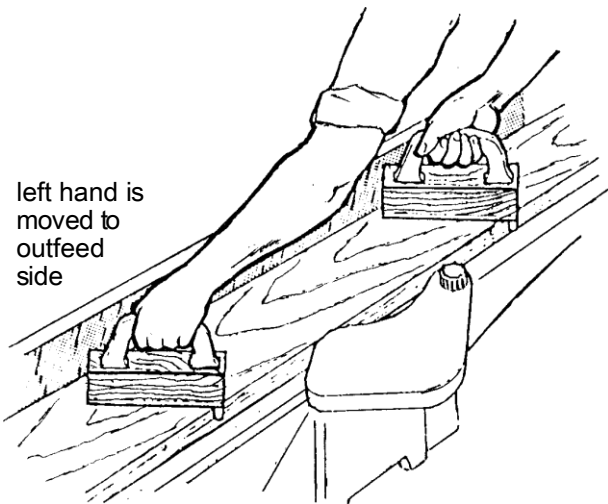


Fig. 23

On outfeed Side both hands pull stock through

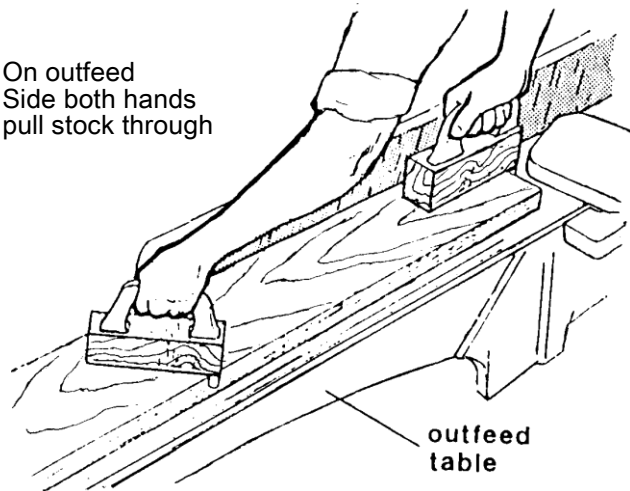


Fig. 24

## 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. 25).

move fence forward to expose only amount of cutterhead required

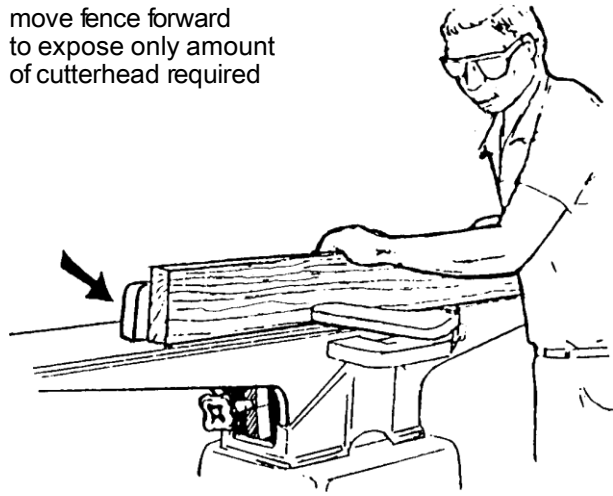


Fig. 25

## BEVELING

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, we recommends for safety reasons the fence be tilted in, if possible, making a cradled cut (Fig. 26).

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. 27).

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.28).

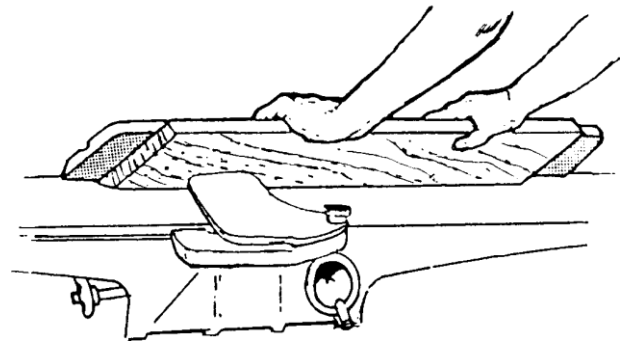


Fig. 26

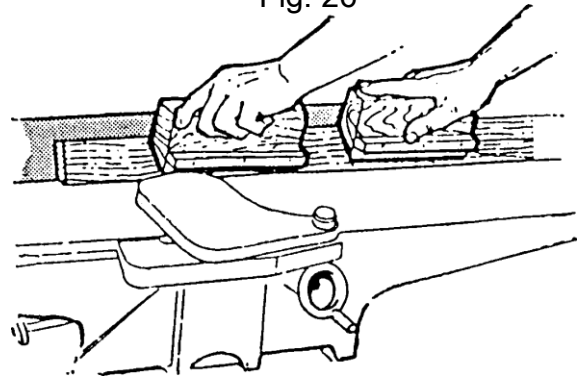


Fig. 27

## CROSS GRAIN

**NOTE:** When beveling round 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, (page 15).

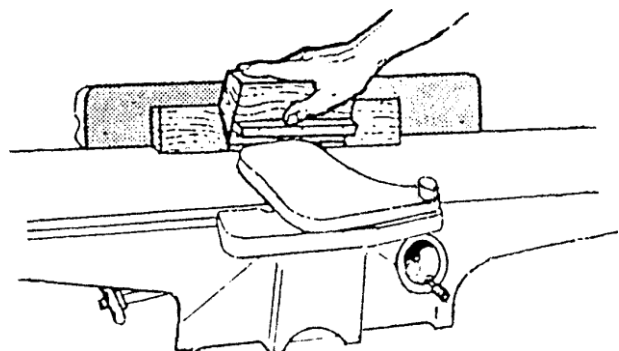


Fig. 28

## Push Blocks

Push blocks are simple, yet necessary tools to assist the operator especially when jointing thin or short stock. Illustrated in Figure 30 are three types of push blocks commonly used in jointing. Push blocks may be obtained commercially or easily constructed.

NOTE: The Jointer is supplied with two push block Figure 29 for feeding stock.

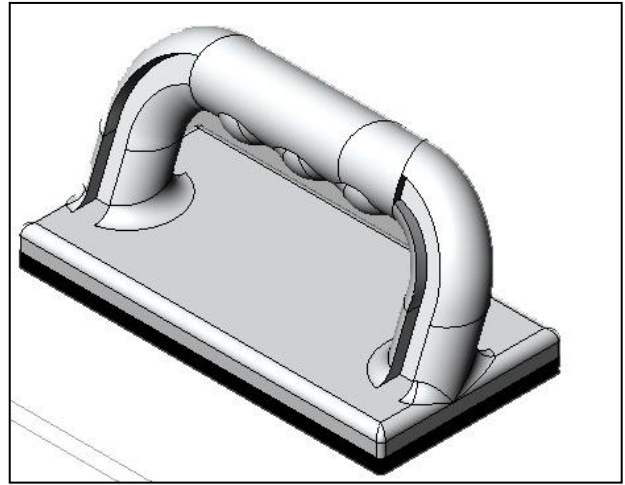


Fig. 29

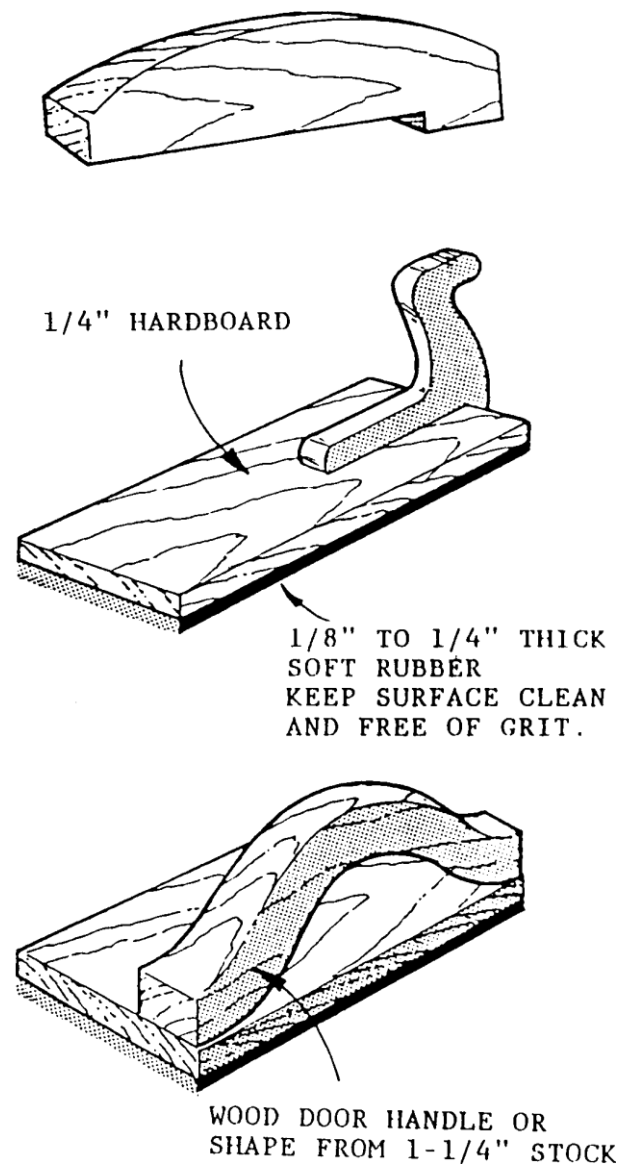
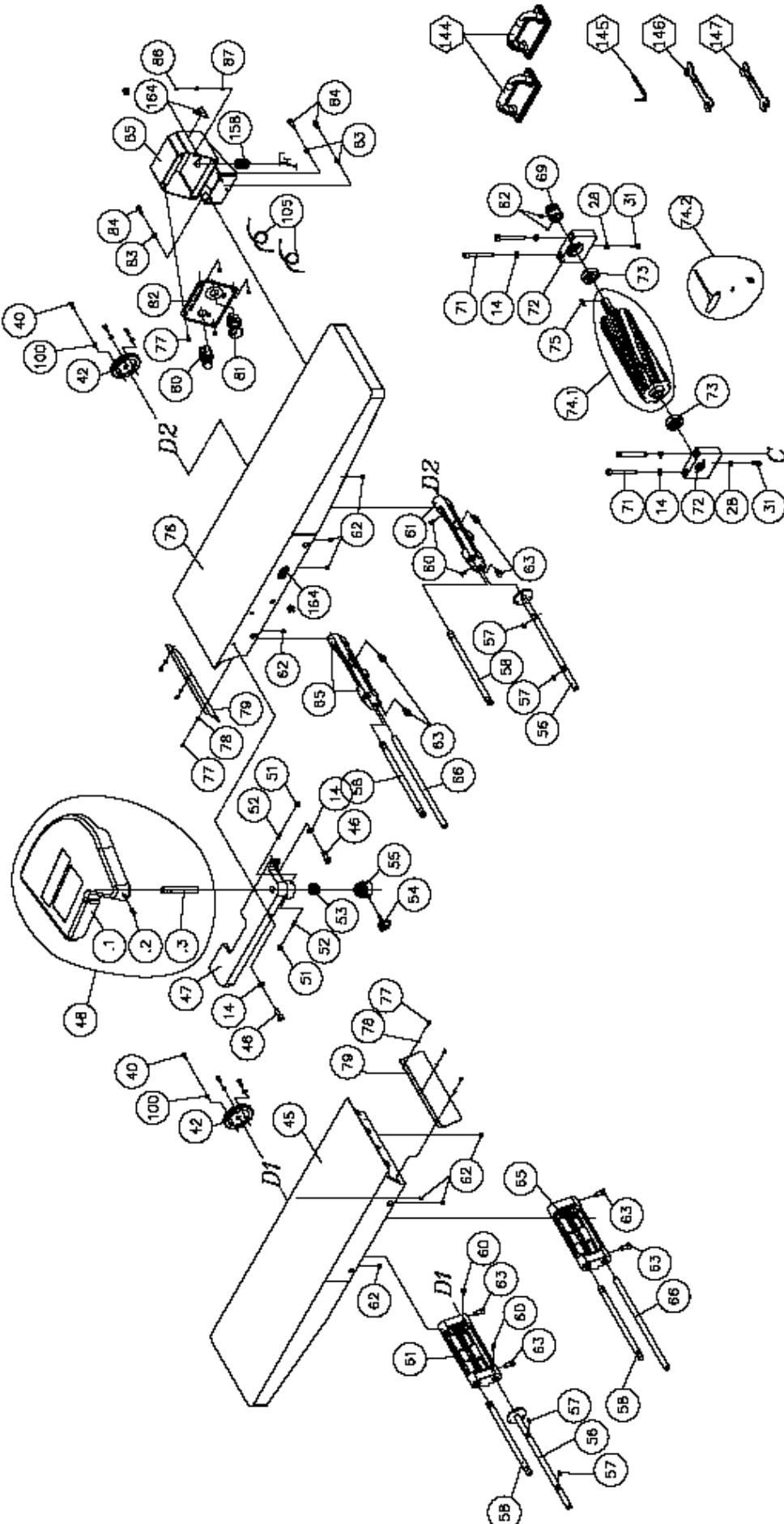


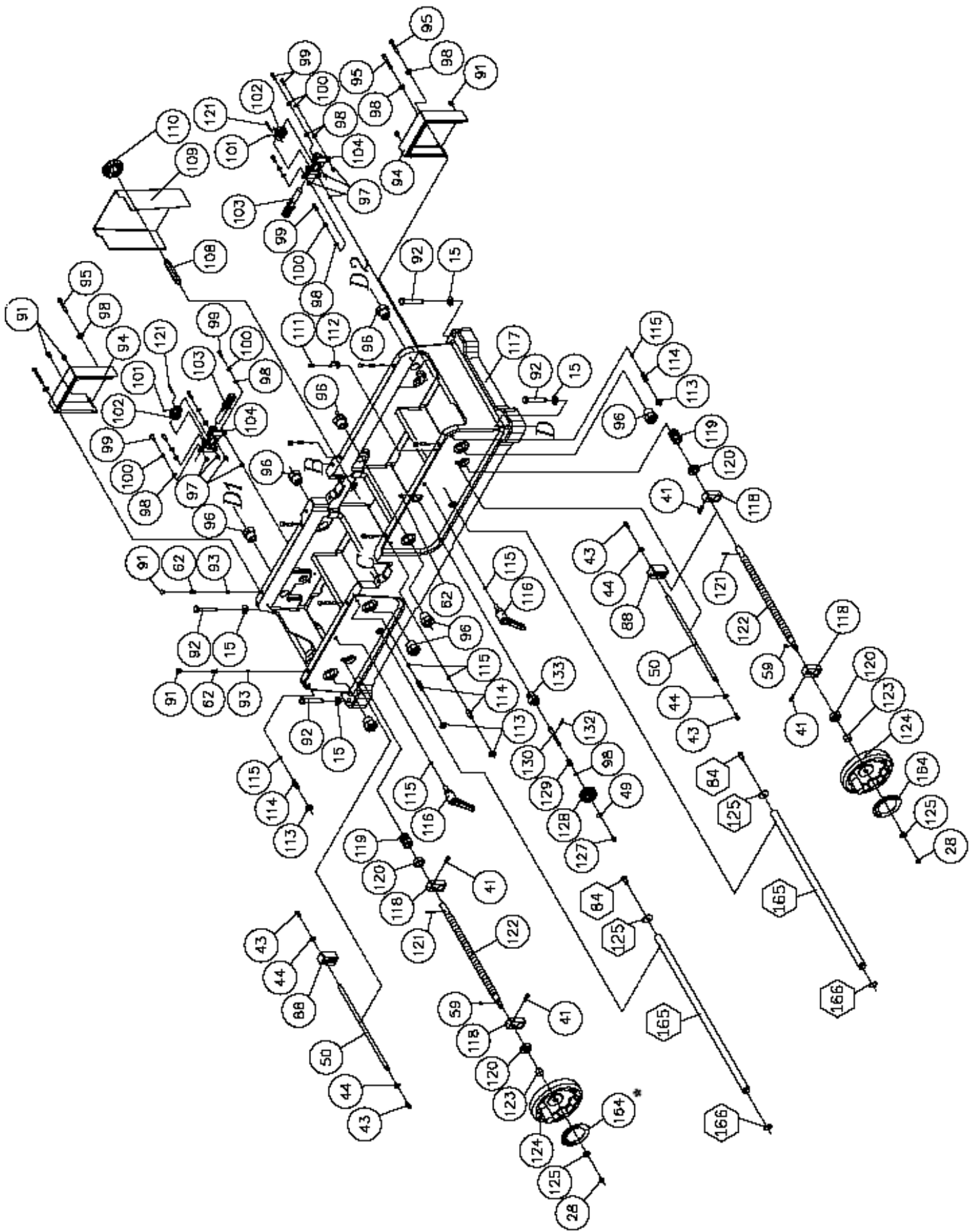
Fig. 30

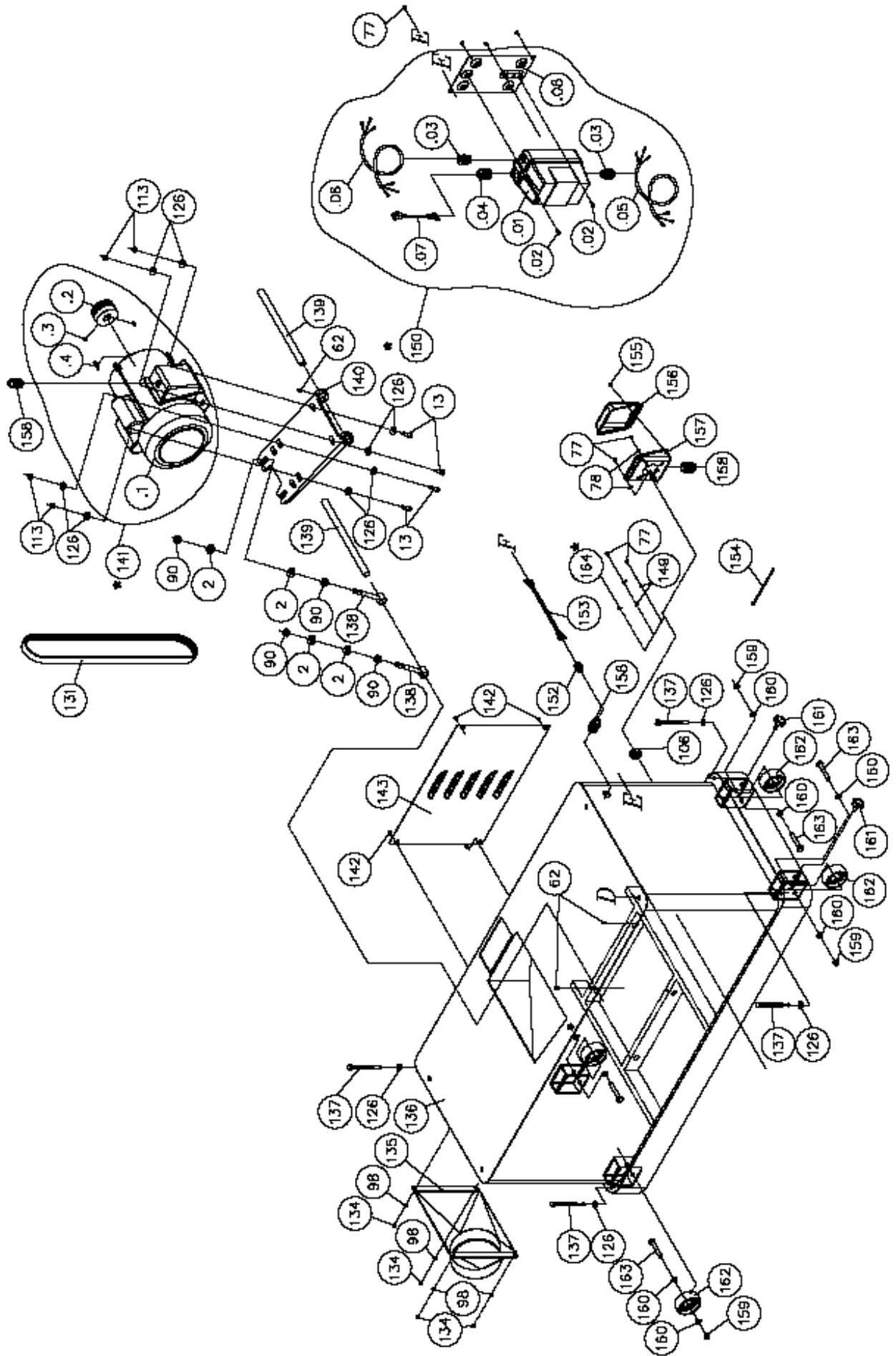
## Trouble shooting

Description of Symptoms	Possible Cause	Corrective Action
Machine will not start	<ol style="list-style-type: none"> <li>1. Fuse blown or circuit breaker tripped</li> <li>2. Cord Damaged</li> <li>3. Faulty switch</li> <li>4. Not connected to power source</li> <li>5. No power to machine</li> <li>6. Emergency stop button pressed</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace fuse or reset circuit breaker</li> <li>2. Have cord replaced</li> <li>3. Replace switch</li> <li>4. Check connection</li> <li>5. Check voltage</li> <li>6. Rotate emergency stop button clockwise until it pops out</li> </ol>
Cutterhead does not come up to speed	<ol style="list-style-type: none"> <li>1. Cable too light or too long</li> <li>2. Low current</li> <li>3. Motor not wired for correct voltage</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace with adequate size cable</li> <li>2. Contact local electric company</li> <li>3. Refer to motor nameplate for correct voltage</li> </ol>
Unsatisfactory finish	<ol style="list-style-type: none"> <li>1. Dull Knives</li> <li>2. Gum or pitch on knives</li> </ol>	<ol style="list-style-type: none"> <li>1. Sharpen or replace knives</li> <li>2. Clean or replace knives</li> </ol>
Excessive vibration	<ol style="list-style-type: none"> <li>1. Machine not level.</li> <li>2. Damaged knives</li> <li>3. Bad V-belts</li> <li>4. Bent pulley</li> <li>5. Improper motor mounting</li> <li>6. Loose hardware</li> </ol>	<ol style="list-style-type: none"> <li>1. Reposition on flat, level surface</li> <li>2. Replace knives</li> <li>3. Replace V-belts</li> <li>4. Replace pulley</li> <li>5. Check and adjust motor</li> <li>6. Tighten hardware</li> </ol>
Adjustments do not move freely.	Sawdust and debris in mechanisms	Clean and regrease
Finished stock is concave on the end	Knife is higher than the outfeed table	Adjust the outfeed table to the highest point of the cutting circle
Back end of the stock is thicker than the front end	Knife is higher than the outfeed table	Adjust the outfeed table to the highest point of the cutting circle
Finished stock is concave or convex in the middle	Tables are not level with each other.	Level one of the tables to the other.

PARTS  
DIAGRAMS







## PARTS LIST

Key	Part No.	Descriptions	Q'ty	
1	230262-000	LOCK HANDLE	1	
2	006002-096	FLAT WASHER	13.5*32*3.0t	6
3	000004-213	HEX. SCREW	M10*1.5P*65	1
4	008007-200	HEX. NUT	M10*1.5P(17B*8H)	1
5	000101-103	CAP SCREW	M4*0.7P*12	2
6	380832-901	KEY		2
7	240062-008	HANDWHEEL		1
8	000203-103	SET SCREW	M6*1.0P*10	3
9	380827-901	BUSHING		1
10	050902-000	BASE		1
11	320297-000	SHAFT		1
12	250702-615	COVER		1
13	000004-103	HEX. SCREW	M10*1.5P*30	6
14	006307-100	LOCK WASHER	10.2*18.5	10
15	006001-071	FLAT WASHER	10*25*3.0t	6
16	381047-905	RACK		1
17	000801-101	ROUND HEAD HEX SCREW	M6*1.0P*10	2
18	172365-008	PLATE		1
19	006305-100	LOCK WASHER	8.2*15.4	1
20	006001-056	FLAT WASHER	8.5*23*2.0t	1
21	380830-901	STOP FENCE		1
22	380829-901	COLLECT		1
23	000003-205	HEX. SCREW	M8*1.25P*25	1
24	360870-902	FIXING ROD		6
25	050904-000	SLIDING ARM - LEFT		1
26	922149-000	UNIVERSAL HANDLE		1
27	000003-209	HEX. SCREW	M8*1.25P*45	2
28	008006-100	HEX. NUT	M8*1.25P(13B*6.5H)	9
29	000003-110	HEX. SCREW	M8*1.25P*50	1
30	050903-000	SLIDING ARM - RIGHT		1
31	000003-204	HEX. SCREW	M8*1.25P*20	4
32	000105-101	CAP SCREW	M10*1.5P*20	4



Key	Part No.	Descriptions	Q'ty	
33	380828-902	CONNECT BOLCK	2	
34	070050-000	ROD	1	
35	922152-000	HANDEL ASSEMBLY	1	
36	051184-000	FENCE	1	
37	250462-615	PACKING	1	
38	006002-001	FLAT WASHER	4.3*10*1.0t	2
39	000302-204	PAN HD SCREW	M4*0.7P*12	2
40	000103-705	CAP SCREW	M6*1.0P*15	2
41	002602-103	CAP LOCK SCREW	M6*1.0P*16	4
42	381071-902	WORM		2
43	000103-103	CAP SCREW	M6*1.0P*12	4
44	006001-034	FLAT WASHER	6.7*16*2.0t	4
45	050654-000	TABLE OUTFEED		1
46	000105-103	CAP SCREW	M10*1.5P*30	4
47	051183-000	RIBBET		1
48	922158-000	CUTTERHEAD GUARD ASS'Y		1
49	006001-035	FLAT WASHER	6.7*19*1.0	1
50	361092-902	FIXING ROD		2
51	009004-100	HEX. NUT	1/4"-20NC	2
52	230275-000	SET SCREW		2
53	280165-000	SPRING		1
54	230273-000	KNOB		1
55	380825-901	BUSHING		1
56	923491-000	ELEVATION SHAFT ASSEMBLY		2
57	012003-004	KEY	5*5*15	4
58	360622-901	GUARD POST		4
59	012003-002	KEY	5*5*10	2
60	048201-201	LOCK NUT	M8*1.25P*20	4
61	050731-902	BASE ROD		2
62	001903-105	SET LOCK SCREW	M8*1.25P*8	22
63	002604-101	CAP LOCK SCREW	M10*1.5P*20	8
64	050907-000	BLOCK ASM DEPTH		1
65	050732-902	BASE ROD		2

Key	Part No.	Descriptions		Q'ty
66	360625-901	ELEVATION SHAFT		2
67	000106-110	CAP SCREW	M12*1.75P*30	2
68	006308-100	LOCK WASHER	12.2*21.6	2
69	381072-902	PULLEY		1
70	050905-000	CLAMP		1
71	000105-317	CAP SCREW	M10*1.5P*90	4
72	051182-000	BEARING HOUSING		2
73	030209-002	BALL BEARING	6205	2
74	923253-000	SHEARTEC 2 CUTTERHEAD ASSY		1
74.1	923254-000	SHEARTEC 2 CUTTERHEAD		1
74.2	040703-000	TORX WRENCH	T-25	2
	922844-000	INSERTS	15*15*2.5t	1
75	012004-002	KEY	6*6*30	1
76	050653-000	TABLE INFEED		1
77	000303-102	PAN HD SCREW	M5*0.8P*8	18
78	006001-009	FLAT WASHER	5.2*10*1.0t	8
79	171754-000	BRACKET MOTOR		2
80	490183-000	START SWITCH	GREEN	1
81	490591-000	STOP SWITCH	RED	1
82	573685-000	SWITCH PLATE		1
83	006001-049	FLAT WASHER	8.5*16*2.0t	3
84	000104-105	CAP SCREW	M8*1.25P*18	5
85	923195-000	CONTROLL BOX		1
86	000302-101	PAN HD SCREW	M4*0.7P*6	1
87	006501-100	LOCKWASHER	4.3*8.5	1
88	300085-000	FIXING BLOCK		2
90	008009-100	HEX. NUT	M12*1.75P	4
91	042502-000	PLUG	D9.5	12
92	000004-107	HEX. SCREW	M10*1.5P*70	4
93	160059-000	WASHER		8
94	173233-000	COVER		2
95	000103-122	CAP SCREW	M6*1.0P*55	4
96	130010-903	BUSHING		8

Key	Part No.	Descriptions	Q'ty	
97	160021-000	BUSHING	8	
98	006001-032	FLAT WASHER	6.6*13*1.0t	17
99	000801-104	ROUND HEAD HEX SCREW	M6*1.0P*20	8
100	006303-300	LOCK WASHER	6.1*12.3	14
101	000203-101	SET SCREW	M6*1.0P*6	2
102	361012-902	WORM SHAFT		2
103	361011-902	SHAFT		2
104	051186-902	WORM SHAFT		2
105	471001-001	MOTOR CORD	SJT18AWG*1C*85mm	2
106	021801-000	WIRE CLIP	NB-1722	1
108	380469-902	STUD PIVOT		1
109	171756-000	BELT GUARD		1
110	230324-000	KNOB		1
111	000304-103	PAN HD SCREW	M6*1.0P*12	1
112	173232-156	POINTER INDICATOR		1
113	008007-100	HEX. NUT	M10*1.5P	8
114	000205-102	SET SCREW	M10*1.5P*30	4
115	160025-000	WASHER		6
116	230343-000	LOCK HANDLE		2
117	051158-000	BASE		1
118	381190-902	BLOCK		4
119	361090-902	WORM SHAFT		2
120	030112-001	BALL BEARING	6002	4
121	011003-104	SPRING PIN	5*25	4
122	361010-902	SHAFT		2
123	160077-000	BUSHING		2
124	922700-000	HANDWHEEL		2
125	006001-040	FLAT WASHER	8*30*3t	4
126	006001-076	FLAT WASHER	10.3*23*2.0t	12
127	009103-100	HEX. NUT	1/4"-20NC	1
128	250461-615	HANDLE		1
129	280104-000	SPRING		1
130	360465-901	FIXING ROD		1

Key	Part No.	Descriptions		Q'ty
131	014343-000	POLY-V-BELT	490J-9	1
132	011002-106	SPRING PIN	4*25	1
133	130116-903	CAM		1
134	000304-110	PAN HD SCREW	M6*1.0P*6 全牙	4
135	171471-000	DUST CHUTE		1
136	173230-000	STAND		1
137	003902-202	WOOD SCREW	3/8-16NC*4-1/2"	4
138	380249-901	ADJUSTMENT ROD		2
139	360394-000	SHAFT		2
140	050321-008	MOTOR PLATE		1
141	900818-000	MOTOR ASSEMBLY	5HP*220V*60HZ*1PH	1
142	000804-103	ROUND HEAD HEX SCREW	M5*0.8P*10	4
143	173231-000	COVER		1
144	250035-629	PUSH BLOCK		2
145	040004-000	HEX. WRENCH	4mm	1
146	040203-000	OPEN WRENCH	11*13	1
147	040206-000	OPEN WRENCH	17*19	1
149	006502-100	LOCKWASHER	5.3*10	2
150	937672-000	MAGNETIC SWITCH ASSY	5HP*1PH	1
152	490696-000	CONNECTOR	2000H-06	1
153	475002-007	MOTOR CORD	SJT16AWG*5C*1400mm	1
154	023311-000	WIRE CLIP	ALC-110S	1
155	003303-102	PAN HD SCREW	3/16"-24NC*1/4"	1
156	490124-000	CONNECTION BOX - COVER		1
157	490609-000	CONNECTION BOX - BASE		1
158	021335-000	STRAIN RELIEF	MG20A-14B	4
159	009102-200	HEX. NUT	3/8"-16NC	4
160	006002-077	FLAT WASHER	10.5*19*1.0t	8
161	004001-101	LOCK KONB	5/16"-18NC*3/4"	2
162	051068-000	WHEEL		4
163	003005-206	HEX. SCREW	3/8"-16NC*2-1/2"	4
165	361013-902	ROD		2
166	010010-000	RETAINING RING	STW-20	2

