

### CT086 6" JOINTER with OPEN STAND

**Instruction Manual** 



### TABLE OF CONTENTS

SAFETY RULES
ADDITIONAL SAFETY RULES FOR JOINTERS
SERIAL NUMBER LOCATION
DEFINITIONS OF JOINTING AND PLANING OPERATIONS
UNPACKING AND CLEANING
ASSEMBLY INSTRUCTIONS
Assembling Stand
Assembling Dust Chute To Stand ·····
Assembling Motor And Switch To Stand
Assembling Jointer To Stand ····
Assembling Infeed Table Adjustment Handle Sasembling Dust Chute Cover 10
Assembling Dust Collector Adapter
Assembling Motor Pulley · · · · · · · · · · · · · · · · · · ·
Assembling Belt, Aligning Pulleys, And Adjusting Belt Tension
Assembling Motor Pulley And Belt Guard
Assembling Fence: 11
Assembling Cutterhead Guard 12
EXTENSION CORDS12
CONNECTING JOINTER TO POWER SOURCE
Power Connections 13
Grounding Instructions
CHANGING VOLTAGE ······14
OPERATING CONTROLS AND ADJUSTMENTS
Starting And Stopping Jointer
Locking Switch In The OFF Position 15
Infeed Table Adjustments
Infeed Table Positive Stops
Outfeed Table Adjustments
Adjusting Table Gibs ······
Fence Operation
Adjusting Fence Positive Stops
Adjusting Fence Guards
Removing, Replacing And Resetting Knives
MAINTENANCE AND REPAIRS21
Whetting Knives
Removing Dust Chute Cover
OPERATIONS22
Placement Of Hands During Feeding22
Jointing An Edge
Planing Or Surfacing
Planing Or Surfacing
Planing Or Surfacing 23 Beveling 23 Taper Cuts 23
Planing Or Surfacing 23 Beveling 23 Taper Cuts 23 Cutting A Rabbet 23
Planing Or Surfacing 23 Beveling 23 Taper Cuts 23 Cutting A Rabbet 23 Planing Warped Pieces 24
Planing Or Surfacing 23 Beveling 23 Taper Cuts 23 Cutting A Rabbet 23

### SAFETY RULES

Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerable lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold – downs, featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer. REMEMBER: Your personal safety is your responsibility.

This machine was designed for certain applications only. Craftex strongly recommends that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted us to determine if it can or should be performed on the product.

# WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

- FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL.Learn the tool's application and limitations as well as the specific hazards peculiar to it.
- 2. KEEP GUARDS IN PLACE and in working order.
- 3. ALWAYS WEAR EYE PROTECTION.
- 4. GROUND ALL TOOLS. If tool is equipped with threeprong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.
- 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.
- 7. **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.
- 8. **KEEP CHILDREN AND VISITORS AWAY**. All children and visitors should be kept a safe distance from work area.
- MAKE WORKSHOP CHILDPROOF-with padlocks, master switches, or by removing starter keys.
- DON'T FORCE TOOL. It will do the job better and be safer at the rate for which it was designed.
- 11. **USE RIGHT TOOL**. Don't force tool or attachment to do a job for which it was not designed.
- 12. **WEAR RPOPER APPAREL**. No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- 13. ALWAYS USE SAFETY GLASSES. Wear safety glasses. Everyday eyeglasses only have impact resisitant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty.
- 14. **SECURE WORK**. Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

- DON'T OVERREACH. Keep proper footing and balance at all times.
- MAINTAIN TOOLS IN TOP CONDITION. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 17. **DISCONNECT TOOLS** before servicing and when changing accessories such as blades, bits, cutters, etc.
- 18. **USE RECOMMENDED ACCESSORIES**. The use of accessories and attachments not recommended by Jinteng may cause hazards or risk of injury to persons.
- REDUCE THE RISK OF UNINTENTIONAL START-ING. Make sure switch is in "OFF" position before plugging in power cord.
- NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
- 21. **CHECK DAMAGED PARTS**. Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure 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.
- 23. NEVERLEAVE TOOL RUNNING UNATTENDED.TURN POWER OFF. Don't leave tool until it comes to a complete stop.
- DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol or any medication.
- MAKE SURE TOOL IS DISCONNECTED FROM POW-ER SUPPLY while motor is being mounted, connected or reconnected.
- 26. WARNING: The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for properdust removal. Use wood dust collection systems whenever possible.

# ADDITIONAL SAFETY RULES FOR JOINTERS

- WARNING:Do not operate the jointer until it is completely assembled and installed according to the instructions.
- IF YOU ARE NOT thoroughly familiar with the operation of jointers, obtain advice from your supervisor, instructor or other qualified person.
- KEEP cutterhead sharp and free of all rust and pitch.
- 4. **BEFORE** starting machine, check cutterhead guard to make sure it is not damaged and operates freely.
- ALWAYS make sure exposed cutterhead behind the fence is guarded, especially when jointing near the edge.
- NEVER perform jointing or planing operations with the cutterhead guard removed.
- MAKE CERTAIN the infeed and outfeed tables are tightened before starting the machine.
- NEVER start the jointer with the workpiece contacting the cutterhead.
- ALWAYS hold the workpiece firmly against the tables and fence.
- 10. **NEVER** perform any operation "free-hand" which means using your hands to support or guide the workpiece. ALWAYS use the fence to position and guide the work.
- AVOID awkward operations and hand positions where a sudden slip could cause your hand to move into the cutterhead.
- 12. **ALWAYS** use hold down / push blocks for jointing material less than 3 inches in height or planing material thinner than 3 inches.
- 13. **DO NOT** perfrom jointing operations on material shorter than 10 inches, narrower than 3 / 4 inch or less than 1 / 2 inch thick.
- 14. **DO NOT** perform planing operations on material shorter than 10 inches, narrower than 3 / 4 inch, wider than 6 inches or less than 1 / 2 inch thick.

- 15. **NEVER** make jointing or planing cuts deeper than 1/8 inch. On cuts more than 1-1/2 inches wide, adjust depth of cut to 1/16 inch or less to avoid overloading machine and to minimize chance of kick back (work thrown back toward you).
- 16. **MAINTAIN** the proper relationship of infeed and outfeed table surfaces and cutterhead knife path.
- SUPPORT the workpiece adequately at all times during operation; maintain control of the work at all times.
- 18. DO NOT back the workpiece toward the infeed table.
- 19. **DO NOT** attempt to perform an abnormal or little-used operation without study and the use of adequate holddown / push blocks, jigs, fixtures, stops, push blocks, etc.
- 20. SHUT OFF power before servicing or adjusting jointer.
- DISCONNECT jointer from power source and clean the machine before leaving the machine.
- 22. MAKE SURE the work area is clean before leaving the machine.
- 23. **SHOULD** any part of your jointer be missing, damaged, or fail in any way, or any electrical component fail to perform properly, shut off switch and remove plug from power supply outlet. Replace missing, damaged or failed parts before resuming operation.
- 24. THE USE of attachments and accessories not recommended by us may result in the risk of injuiries.
- 25. SAVE THESE INSTRUCTIONS. Refer to them often and use them to instruct others.

### SERIAL NUMBER LOCATION

The identification label containing the Serial No. is located on the rear side of the outfeed table. Record this number on the front of this manual for future reference.

### DEFINITIONS OF JOINTING AND PLANING OPERATIONS



Fig. 2

Jointing Operations-Jointing cuts or edge jointing is the simplest and most common operation which can be done on the jointer and these cuts are made to square an edge of a workpiece. The fence is square with the table and the depth of cut is approximately 1/8 inch. The workpiece is positioned on the jointer with the narrow edge of the workpiece on the infeed table and the major flat surface of the workpiece against the fence, as shown in Fig. 2. The workpiece is moved from the infeed table, across the cutterhead to the outfeed table. The hand over the outfeed table presses the work down so that the newly-formed surface will make perfect contact with the table. The hand over the infeed table (usually the right hand) exerts no downward pressure, but simply advances the work to the cutterhead. Both hands exert pressure to keep the work in contact with the fence.

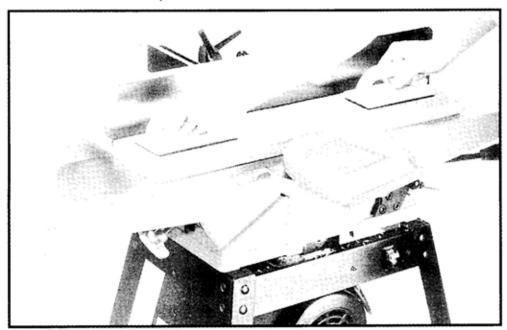
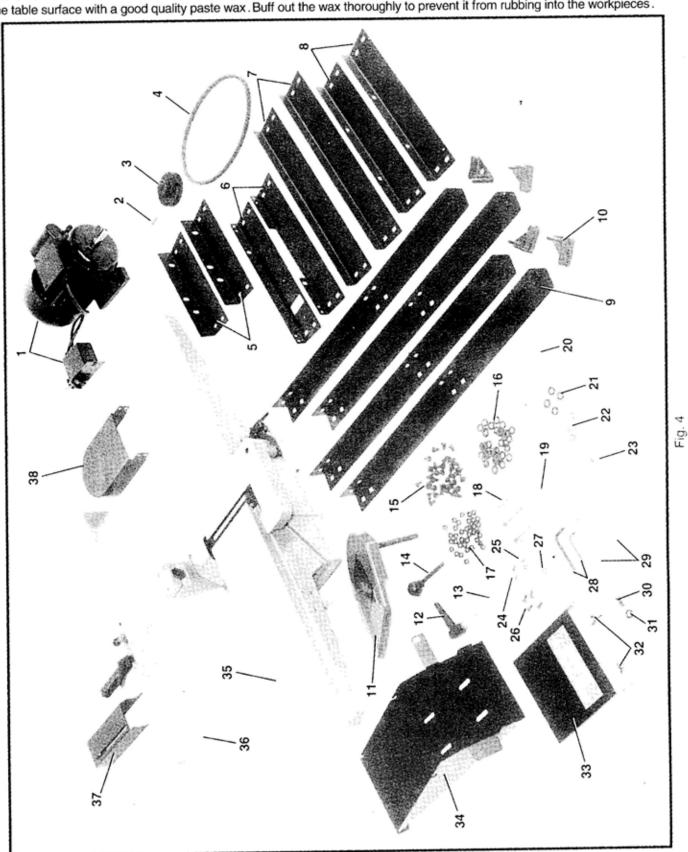


Fig. 3

**Planing Operations**-Planing or surfacing are identical to the jointing operation except for the position of the workpiece. For planing, the major flat surface of the workpiece is placed on the infeed table of the jointer with the narrow edge of the workpiece against the fence, as shown in Fig. 3. The workpiece is moved from the infeed table, across the cutterhead to the outfeed table establishing a flat surface on the workpiece. Always use push blocks when performing planing operations.

### **UNPACKING AND CLEANING**

WARNING: JOINTER WEIGHT IS APPROXIMATELY 175 LBS. CARE MUST BE TAKEN WHEN LIFTING JOINTER ONTO STAND. A MINIMUM OF TWO PEOPLE WILL BE REQUIRED TO LIFT THE MACHINE. Your new jointer is shipped complete in one carton. Carefully unpack the jointer and all loose items. Fig. 4 and Fig. 4A, illustrate the jointer and all loose items supplied with your machine. Remove the protective coating from the table surface and all unpainted parts. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning cover the table surface with a good quality paste wax. Buff out the wax thoroughly to prevent it from rubbing into the workpieces.



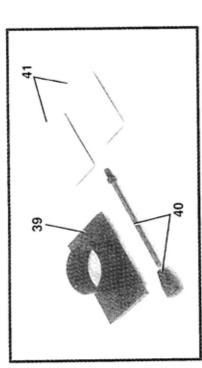


Fig. 4A

- Motor and Switch
- 2 Key for Motor Shaft and Pulley
- 3 Motor Pulley
- 4 V-Belt
- 5 Two Top End Braces for Stand (11-3/4" long)
- 6 Two Top Side Braces for Stand (15-3/4" long)
- 7 Two Lower Side Braces for Stand (20-1/2" long)
- 8 Two Lower End Braces for Stand (16-1/2" long)
- Four Legs for Stand
- Four Feet for Stand Legs
- 11 Cutterhead Guard
- 12 Fence Locking Handle
- 13 Flat Washer for Fence Locking Handle
- 14 Fence Tilting Handle
- 15 Thirty-six 1/2" long carriage bolts-(for assembling stand and dust chute to stand)
- 16 Thirty-six flat washers-(for assembling stand and dust chute to stand)
- 17 Thirty-six hex nuts-(for assembling stand and dust chute to stand)

- 18 Three special studs-(for assembling Jointer to stand)
- Three lockwashers for special studs-(for assembling jointer to stand)
- 20 Four 1-1/4" long carriage bolts-(for assembling motor to dust chute)
- 21 Four flat washers-(for assembling motor to dust chute)
- 22 Four lock washers-(for assembling motor to dust chute)
- 23 Four hex nuts-(for assembling motor to dust chute)
- 24 Two 3/8" long screws-(for assembling switch to stand)
- 25 Two flat washers-(for assembling switch to stand)
- 26 Four 1/2" long screws-(for assembling motor pulley and belt guard to Jointer)
- 27 Four lockwashers-(for assembling motor pulley and belt guard to Jointer)
- 28 Two Allen Wrenches
- 29 Two Open End Wrenches
- One 5/8" long scres-(for attaching rear cutterhead guard)
- One flat washer-(for attaching rear cutterhead guard)
- 32 Two wing screws-(for attaching cover to dust chute)
- 33 Dust chute cover
- 34 Dust chute
- 36 Fence

Jointer

35

- 37 Rear Cutterhead Guard
- 38 Motor Pulley and Belt Guard
- 39 Dust Collector Adapter
- 40 Infeed Table Adjustment Rod and Handle
- 41 Push Blocks

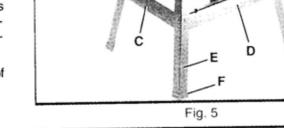
### **ASSEMBLY INSTRUCTIONS**

WARNING: FOR YOUR OWN SAFETY, DO NOT CONNECT THE JOINTER TO THE POWER SOURCE UNTIL THE JOINTER IS COMPLETELY ASSEMBLED AND YOU HAVE READ AND UNDERSTOOD THE ENTIRE OWNERS

MANUAL.

### **ASSEMBLING STAND**

- 1. Assemble two 11-3/4" long top end braces (A) Fig.5, two 15-3/4" long top side braces (B), two 16-1/2" long lower end braces (C), and two 20-1/2" long side braces (D) to four legs (E) as shown, using the thirty-two 1/2" long carriage bolts, flat washers, and hex nuts. Only tighten hex nuts fingertight at this time. IMPORTANT: The top lips of two upper end braces (A) must fit on top of the top lips of two upper side braces (B).
- Assemble four rubber feet (F) Fig. 5, to the bottom of each leg (E) as shown.



B.

# ASSEMBLING DUST CHUTE TO STAND

- The front of the stand is indicated by switch opening (B)
   Fig. 6, making the outfeed end of the stand (C) and the infeed end (A).
- Assemble dust chute (D) Fig. 6, to outfeed end of stand
   (C) as shown, using four 1/2" long carriage bolts (F), flat washers, and hex nuts. Only tighten hex nuts fingertight at this time.

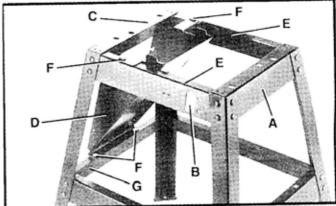


Fig. 6

# ASSEMBLING MOTOR AND SWITCH TO STAND

- The motor (B) Fig. 7, is assembled to the bottom of the dust chute using the four 1-1/4" long carriage bolts (A), flat washers, lockwashers and hex nuts as shown. Do not completely tighten hex nuts at this time as the motor must be adjusted for proper alignment and belt tension later.
- Assemble the switch (C) Fig.7, to the inside of switch opening (D) using the two 3/8" long screws (E) Fig.8, and flat washers as shown.

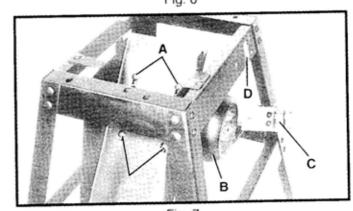


Fig. 7

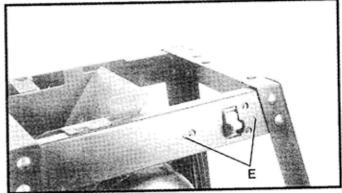


Fig. 8

### ASSEMBLING JOINTER TO STAND

- 1. WARNING: JOINTER WEIGHT IS APPROXIMATELY 175 LBS. CARE MUST BE TAKEN WHEN LIFTING JOINTER ONTO STAND. A MINIMUM OF TWO PEOPLE WILL BE REQUIRED TO LIFT THE MACHINE.
- 2. The infeed end of the jointer is fastened to the two holes (A) Fig.9, and the outfeed end of the jointer is fastened to hole (B) on the two top end braces. **NOTE:** Dust chute (C) is on outfeed end of jointer. Line up the three threaded holes on the bottom of the jointer with the three holes (A) and (B) in the stand end braces.
- 3. Using the supplied wrench, fasten the jointer to the top of stand using the three lockwashers and special studs. Two of the special studs are shown at (D) Fig. 10, for the infeed end of the machine, and one special stud is shown at (D) Fig. 11, for the outfeed end of machine.
- 4. Once the jointer is completely secured to stand, push downward on the top of jointer until the stand adjusts to the floor surface. Then using the supplied wrench, tighten all stand hardware.

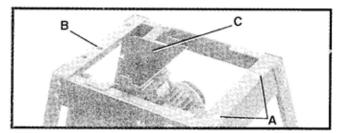


Fig. 9

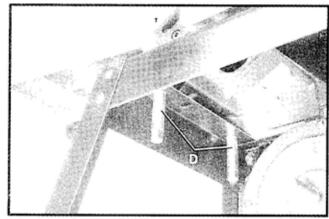


Fig. 10

# ASSEMBLING INFEED TABLE ADJUSTMENT HANDLE

- Turn locknut (C) Fig. 12, clockwise on infeed table adjustment handle (B) as far as it will go.
- 2. Thread handle (B) Fig. 12, into block (D) which is located below infeed table (E).
- Turn and tighten locknut (C) Fig. 13, against block(D).

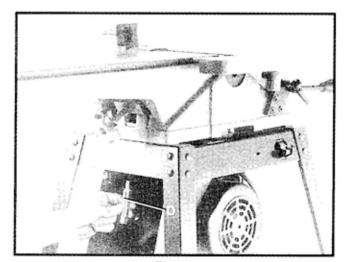


Fig. 11

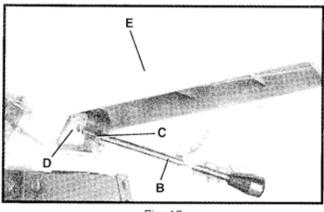


Fig. 12

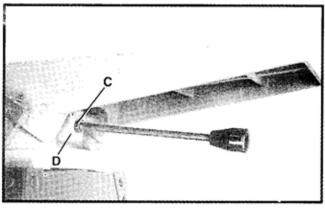


Fig. 13

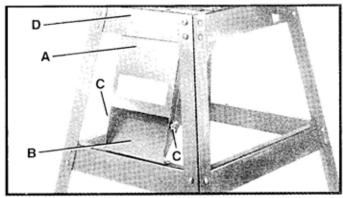


Fig. 14

### ASSEMBLING DUST CHUTE COVER

 Assemble dust chute cover (A) Fig.14, to dust chute (B) using two wing screws (C).IMPORTANT: Top of dust chute cover (A) must be inside top end brace (D) of stand and should completely cover the top of the dust chute.WARNING: During operation, the dust chute cover (A) must always be assembled as shown and should only be removed for cleaning.

### ASSEMBLING DUST COLLECTOR ADAPTER

If the machine is to be connected to a dust collection system, a dust collector adapter with a 4"O.D.opening is supplied with the jointer. To assemble the adapter:

- Remove two wing screws (C) Fig. 14, from dust chute cover (A).
- Assemble adapter (E) Fig. 15, over dust chute (A).
   Align two holes in dust chute (A) with holes in adapter (E) and fasten with two wing screws (C) which were removed in STEP 1.

### ASSEMBLING MOTOR PULLEY

 Assemble motor pulley (A) Fig. 16, to motor shaft with the hub of the pulley in the outer position as shown. Make sure key (B) is inserted in the keyway of the motor pulley and shaft.

### ASSEMBLING BELT, ALIGNING PULLEYS, AND ADJUSTING BELT TENSION

- Loosen two screws, one of which is shown at (A)
   Fig. 17, and remove cutterhead pulley guard (B)
- 2. Place the belt in groove of cutterhead pulley (C) Fig. 18, and motor pulley (D).
- 3. Make certain the motor pulley (D) Fig. 18, is aligned with the cutterhead pulley (C). If necessary, the motor pulley (D) can be moved in or out on the motor shaft to provide proper alignment. Then tighten two set screws (C) Fig. 16.
- 4. Correct belt tension is obtained when there is approximately 1" deflection at the centerspan of the belt using light finger pressure.

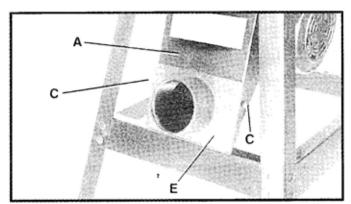


Fig. 15

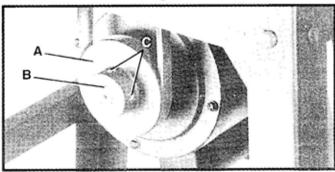


Fig. 16

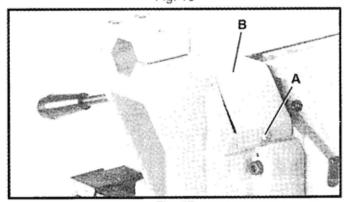


Fig. 17

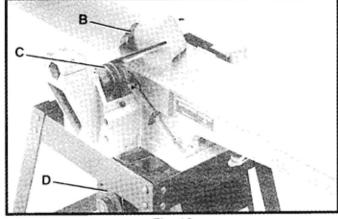


Fig. 18

- If an adjustment is required for belt tension, the motor can be raised or lowered to obtain the correct belt tension. Then tighten motor mounting hardware after tension is applied, making sure alignment of the pulleys is not disturbed.
- Replace cutterhead pulley grard (B) Fig. 18, which was removed in STEP 1

### ASSEMBLING MOTOR PULLEY AND BELT GUARD

1. Assemble the motor pulley and belt guard (A) Fig. 19, to the jointer base using the four 1/2" long screws, two of which are shown at (B), and four lockwashers.

WARNING: MAKE CERTAIN MOTOR PULLEY IS NOT CONTACTING GUARD.

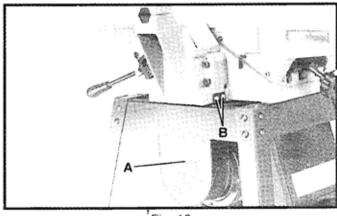


Fig. 19

### ASSEMBLING FENCE

 Insert hexagon rod (A) Fig. 20, of fence assembly into bracket (B) on jointer as shown.

NOTE: If fence does not slide in and out easily, loosen two screws (X) Fig. 20, and adjust bracket (B). Then tighten two screws (X).

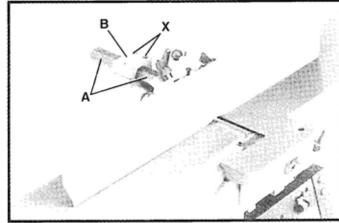


Fig. 20

 Assemble rear cutterhead guard (C) Fig. 21, to end of hexagon rod using the 5/8" long screw (D) and washer(E).

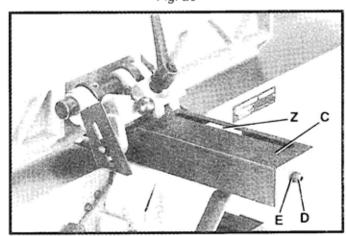


Fig. 21

- Thread fence locking handle assembly (F) Fig.22, and flat washer (G) into hole (Z) Fig.21.Lock handle (F) Fig.22, is spring-loaded and can be repositioned by pulling out the handle and repositioning it onto the serrated nut located under the handle.
- Thread fence tilting handle (H) Fig.22, to threaded hole in back of fence as shown.

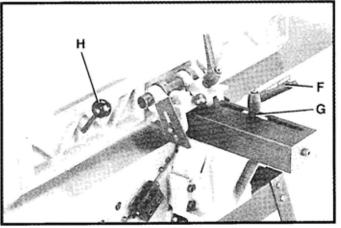
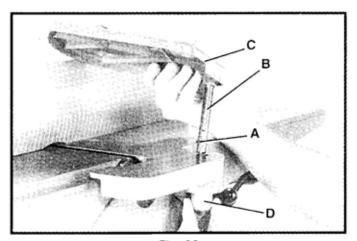


Fig. 22



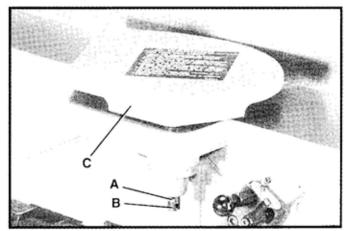


Fig. 23

Fig. 24

#### ASSEMBLING CUTTERHEAD GUARD

- Remove set screw (A) Fig. 23, from post (B) of cutterhead guard (C).
- 2. Assemble cutterhead guard (C) Fig. 23, to the jointer by inserting post (B) down through the hole in the infeed table. **NOTE:** A spring is supplied in knob assembly (D) that returns the guard (C) over the cutterhead after a cut has been made. Turn knob (D) to provide tension on the spring before inserting post (B). Make certain the spring engages in the slot of the post. If spring tension is too much or too little, adjust the spring accordingly by removing the guard and rotating knob (D).
- 3. Thread set screw (A) Fig. 24, which was removed in STEP 1, back into post (B) to keep cutterhead guard (C) in position during jointer operation.
- 4. Fig.24, illustrates the cutterhead guard (C) assembled to the infeed table.

### EXTENSION CORDS

Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong grounding type plug and a 3-pole receptacle which wil accept the tool's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the jointer. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. Fig. 25, shows the correct gage to use depending on the cord length. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

TOTAL LENGTH OF EXTENSION CORD FOR 120 VOLT OPERATION	TOTAL LENGTH OF EXTENSION CORD FOR 240 VOLT OPERATION	MINIMUM WIRE GAGE OF EXTENSION CORD
0 - 25 FT	0 - 50 FT	14 AWG
26 - 50 FT	51 - 100 FT	12 AWG
Greater than	Greater than	Not
50 FT	100 FT	Recommended

Fig. 25

### CONNECTING JOINTER TO POWER SOURCE

#### POWER CONNECTIONS

A separate electrical circuit should be used for your tools. This circuit should not be less than # 12 wire and should be protected with a 20 Amp fuse. Have a certified electrician replace or repair a worn cord immediately. Before connecting the motor to a power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as stamped on the motor name-plate. Running on low voltage will damage the motor.

WARNING: DO NOT EXPOSE THE TOOL TO RAIN OR OPERATE THE TOOL IN DAMP LOCATIONS.

#### GROUNDING INSTRUCTIONS

CAUTON: THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

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 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 type plugs and 3-hole receptacles that accept the tool's plug, as shown in Fig. 26.

Repair or replace damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet and a plug that looks like the one shown in Fig.26.A temporary adapter, which looks like the adapter illustrated in Fig.27, may be used to connect this plug to a 2-pole receptacle, as shown in Fig.27, 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. THIS ADAPTER IS NOT APPLICABLE IN CANADA. 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, as shown in Fig.27.

CAUTION: IN ALL CASES, MAKE CERTAIN THE RE-CEPTACLE IN QUESTION IS PROPERLY GROUND-ED.IF YOU ARE NOT SURE HAVE A CERTIFIED ELEC-TRICIAN CHECK THE RECEPTACLE.

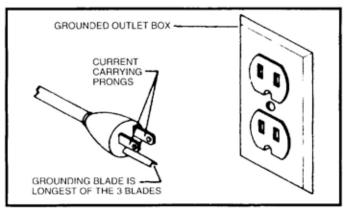


Fig. 26

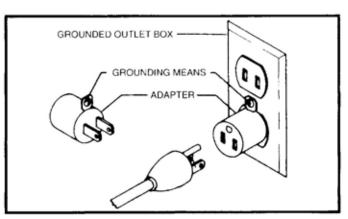


Fig. 27

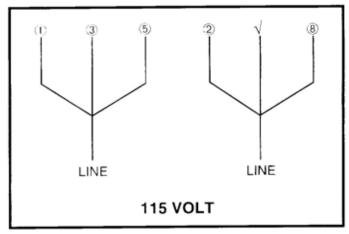


Fig. 28

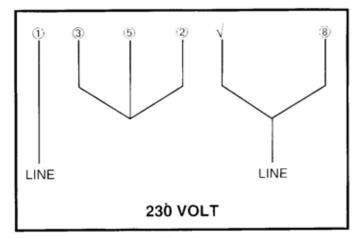


Fig. 29

#### CHANGING VOLTAGE

The motor supplied with your 6" Jointer is a dual voltage, 115/230 Volt, Single phase motor and is wired for 115 Volt operation. If you desire to operate the machine at 230 Volts, the following instructions must be followed:

### DISCONNECT THE MACHINE FROM THE POWER SOURCE.

- 2. The motor supplied with this jointer is supplied with six motor leads that are connected for 115 Volt operation, as shown in Fig.28. Reconnect these six motor leads for 230 Volt operation, as shown in Fig.29.
- 3. Remove the on/off switch from the stand.
- 4. Remove the three screws (A) Fig. 30, and remove the back switch cover.
- 5. The 115 Volt,single pole,on/off switch (B) Fig.31, must be replaced with a 230 Volt,double pole,on/off switch. The two leads (D) that are connected to the single pole switch (B) must be connected to the two terminals (E) on the double pole switch (C). Remove wire nut (F) and fasten two 1/4" disconnect terminals (available from an electrical supply house) to the two wires (G). Connect the two wires (G) to the two terminals (H) on the double pole switch (C).
- 6. The 115 Volt plug, supplied with the motor, must be replaced with a 230 Volt plug that has two flat, currentcarrying prongs in tandem, and one round or "U" shaped longer ground prong, as shown in Fig.32. This plug is used only with the proper mating 3-conductor grounded receptacle, as shown in Fig.32.

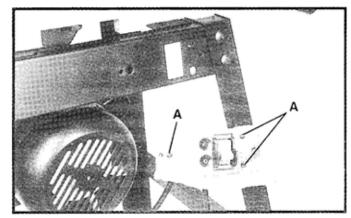


Fig. 30

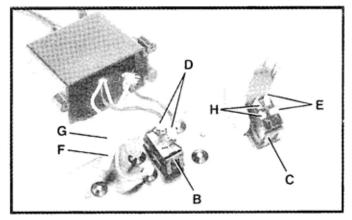


Fig. 31

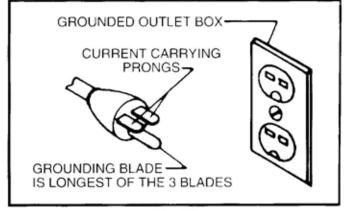
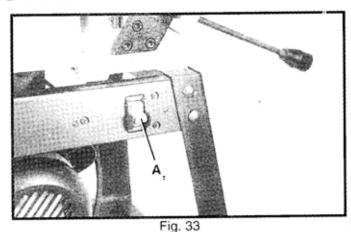


Fig. 32

### **OPERATING CONTROLS AND ADJUSTMENTS**

# STARTING AND STOPPING JOINTER

The on/off switch (A) Fig.33, is located on the top side brace of the stand. To turn the machine "ON", move the switch (A) to the up position. To turn the machine "OFF", move the switch (A) to the down position.

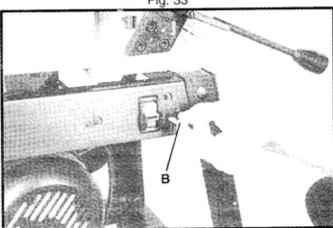


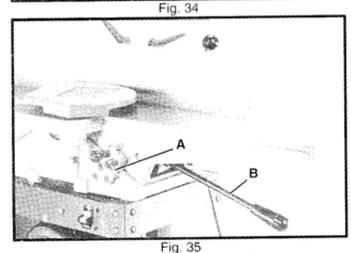
# LOCKING SWITCH IN THE "OFF" POSITION

We suggest that when the jointer is not in use, the switch be locked in the "OFF" position. This can be done by grasping the switch toggle (B) Fig. 34, and pulling it out of the switch as shown. With the switch toggle (B) removed, the switch will not operate. However, should the switch toggle be removed while the machine is running, it can be turned "OFF" once, but cannot be restarted without inserting the switch toggle (B).



- To raise or lower the infeed table, loosen table lockhandle (A) Fig.35, move the table raising and lowering hand lever (B) up or down until the table is at the desired position and tighten table lockhandle (A).
- 2. **NOTE:** When raising or lowering the infeed table a plunger located on other end of the index stop (C) Fig.36, automatically stops the table at 1/8 inch depth of cut. To move the table past this point it is necessary to pull out index stop (C) and move the table up or down. **IMPORTANT:** Always make sure table lockhandle (A) is tightened before operation. The table lockhandle (A) is spring-loaded and can be repositioned by pulling out the handle and repositioning it on the serrated nut located under the handle.
- The depth of cut of the infeed table (position of table in relationship with the cutting circle) can be read with the pointer (D) Fig. 36, and scale (E). Maximum table depth adjustment with this 6" jointer is 1/2 inch.





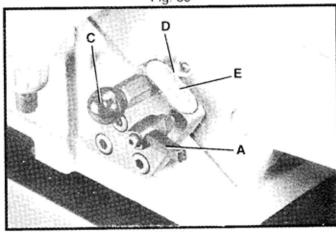


Fig. 36

### INFEED TABLE POSITIVE STOPS

1. Positive stops are provided to limit the height and depth of the infeed table. To adjust the stops, simply loosen two locknuts (F) and (G) Fig. 37, and turn the two adjusting screws (J) and (K) as required. Then retighten the locknuts (F) and (G). A good suggestion is to set the upper positive stop (J) for your finish or final cut. This means that you will be able to rapidly set the infeed table for a finish or final cut without checking the scale and pointer. Also the lower positive stop (K) can be set for the maximum 1/2" depth of cut or if you desire to limit the depth of cut, adjust the stop screw (K) accordingly.

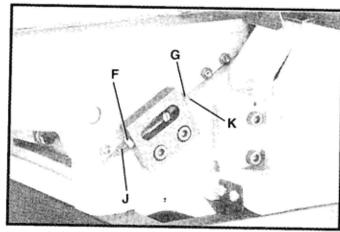


Fig. 37

### OUTFEED TABLE ADJUSTMENTS

For most jointing operations the outfeed table must be exactly level with the knives at their highest point of revolution. This means that the knives must be parallel to the outfeed table and project equally from the cutterhead. To move the outfeed table up or down, loosen lockscrew (A) Fig. 38, and turn hand knob (B). When the outfeed table is exactly level with the knives at their highest point of revolution, tighten lockscrew (A).

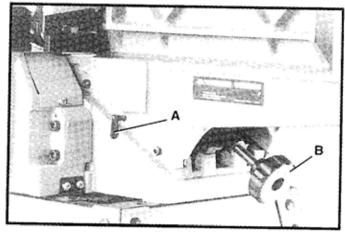
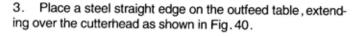


Fig. 38

# KNIFE AND OUTFEED TABLE ADJUSTMENTS

In order to do accurate work, the knives must be exactly level with the outfeed table. To check and adjust, proceed as follows:

- DISCONNECT MACHINE FROM POWER SOURCE.
- 2. Loosen locklever (A) Fig. 39, and lower the infeed table by pushing lever (B) down. Remove cutterhead guard (C).



 CAREFULLY rotate the cutterhead by turning the belt by hand. The knives should just touch the straight edge.

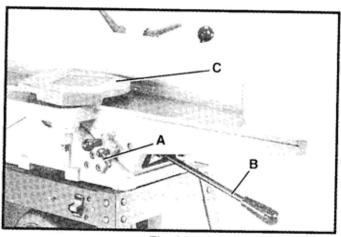


Fig. 39

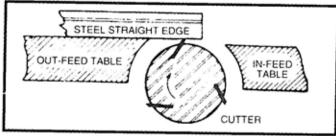
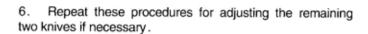
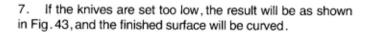
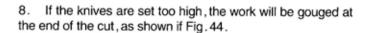


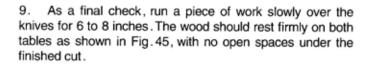
Fig. 40

5. If the knife is high or low at either end, slightly turn the four screws (D) Fig. 41, in the knife locking bar clockwise to loosen using the wrench (E) supplied. Then adjust the height of the knife by turning the knife raising screws (F) Fig. 42, counterclockwise to lower and clockwise to raise the knife. NOTE: If the knife is to be lowered it will be necessary to carefully push down on the knife after screws (F) have been turned.









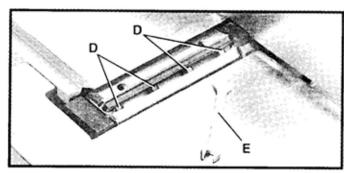


Fig. 41

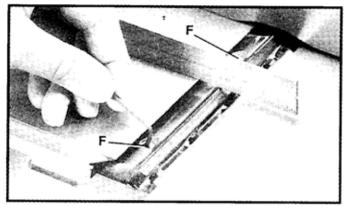


Fig. 42

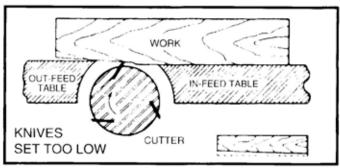


Fig. 43

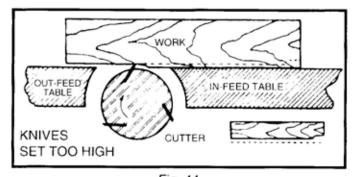


Fig. 44

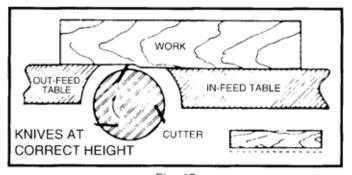


Fig. 45

#### ADJUSTING TABLE GIBS

"Gibs" are provided to take up all play between the mating dovetail ways of the base and the infeed and outfeed tables. The "gib" for the infeed table is shown at (A) Fig. 46, and the "gib" for the outfeed table is shown at (B) Fig. 47, Proper "gib" adjustment is necessary for the correct functioning of the jointer. The "gibs" were adjusted at the factory and should require no further adjustment. If, however, it becomes necessary to adjust the "gibs" proceed as follows:

- 1. To adjust the infeed or outfeed table "gibs", loosen three locknuts (F) Fig.46, for the infeed table or two locknuts (G) Fig.47, for the outfeed table. For the infeed table, make sure the table locking lever is loose. For the outfeed table, make sure the table locking screw (E) Fig.47, is loose.
- 2. Tighten or loosen three gib adjustment screws (C) Fig. 46, as necessary for the infeed table or two gib adjustment screws (D) Fig. 47, as necessary for the outfeed table; starting with the lower screw first and as you proceed to the top screw, gently raise the outboard edge of the table that is being adjusted. This will offset any tendency for the table casting to "droop or sag" and permit the gib to be adjusted to a secure fit. After the gibs have been adjusted, tighten locknuts (F) Fig. 46, (G) Fig. 47, table locking screw (E)

Fig. 47, and infeed table locking lever.

**IMPORTANT**: Do not leave the adjusting screws too loose. It should take a little bit of effort to move the tables up or down. Jointers are finishing machines and you can't expect to get good accuracy or finish if the tables are set loose and sloppy.

#### FENCE OPERATION

The fence can be moved across the table and can tilt 45 degrees right or left at any position on the table as follows:

- 1. To move the fence across the table, loosen lock handle (A) Fig. 48, slide fence to the desired position on the table and tighten lockhandle (A). As the fence is moved across the table, the rear cutterhead guard (B) covers and guards the cutterhead in back of the fence. NOTE: Lock handle (A) is spring-loaded and can be repositioned by pulling up on the handle and repositioning it on the serrated nut located underneath the hub of the handle.
- 2. To tilt the fence to the right or left loosen lock handle (C) Fig. 49, and pull out and turn plunger (D) to release the positive stop. A tilting lever (E) is provided on the back of the fence to assist in tilting the fence. **NOTE:** Lock handle (C) is spring-loaded and can be repositioned by pulling out the handle and repositioning it on the serrated nut located underneath the hub of the handle.
- 3. Tilt the fence to the desired angle, in or out, and tighten lock handle (C) Fig. 49. IMPORTANT: When cutting bevels and the angle is small there is little difference whether the fence is tilted in or out; however, at angles approaching 45 degrees it may become difficult to hold the work securely against the fence when the fence is tilted out, In these cases we suggest that the fence be tilted toward the table, as shown in Fig. 49. The fence will form a V-shape with the tables and the work is easily pressed into the pocket while passing across the knives.

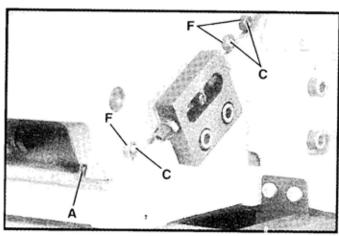


Fig. 46

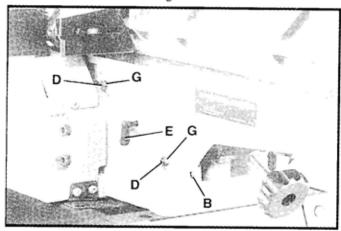


Fig. 47

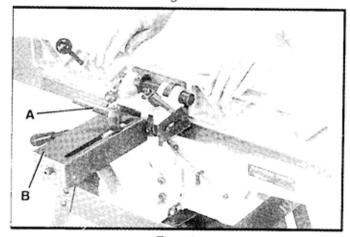


Fig. 48

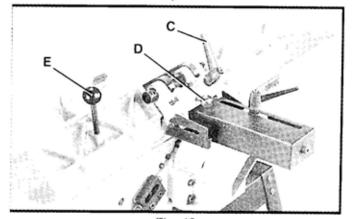


Fig. 49

# ADJUSTING FENCE POSITIVE STOPS

The fence on this jointer is equipped with positive stops that allow you to rapidly tilt the fence to the 90 and 45 degree angle to the table in the inward or outward position. To check and adjust the positive stops, proceed as follows:

- 1. Position the fence at 90 degrees to the table. Make certain the end of plunger (A) Fig. 50, is engaged in notch (B) in index collar as shown, and tighten lockhandle (C).
- Place a square (D) Fig. 51, on the table and against the fence and check if fence is 90 degrees to table.
- If an adjustment is necessary, loosen set screw (E)
   Fig. 50, in the index collar and loosen fence locking handle (C).
- 4. Tilt the fence until you are certain the fence is 90 degrees to the table and tighten lockhandle (C) Fig.50, and set screw (E).
- Loosen lockhandle (C) Fig. 52, pull out and turn plunger
   (A) and tilt fence out as far as it will go . Then tighten lock handle (C).
- Using square (D) Fig. 52, check to see if the fence is at a 45 degree outward angle from the table, as shown.
- 7. If an adjustment is necessary, loosen lockhandle (C) Fig.52.Loosen locknut (F) and turn adjusting screw (G) until fence is tilted 45 degrees outward. Then tighten locknut (F).
- 8. Loosen lockhandle (C) Fig. 53, and tilt fence inward as far as possible, as shown, and tighten lockhandle (C).
- 9. Using a square (D) Fig. 53, check to see if the fence is at a 45 degree inward angle to the table, as shown.
- If an adjustment is necessary loosen locknut (H)
   Fig. 54, and turn adjusting screw (J) until fence is tilted 45 degrees in. Then tighten lock nut (H).

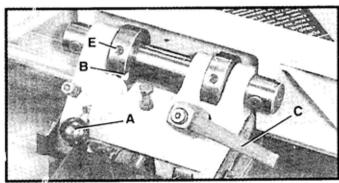


Fig. 50

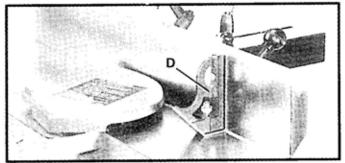


Fig. 51

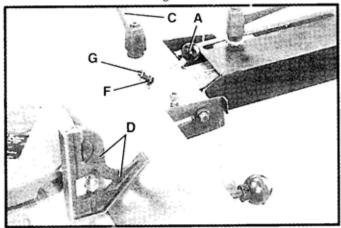


Fig. 52

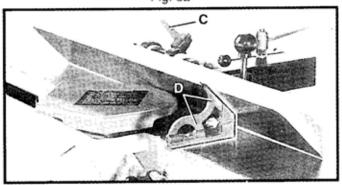


Fig. 53

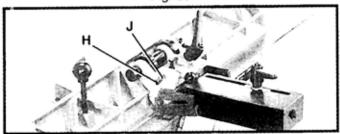


Fig. 54

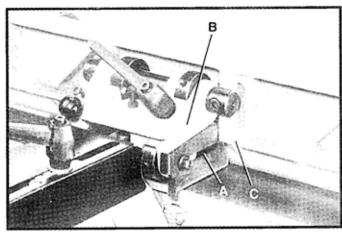


Fig. 55

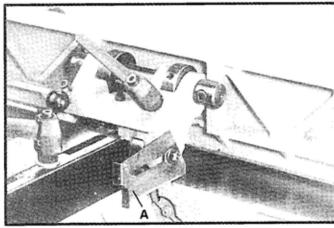


Fig. 56

### ADJUSTING FENCE GUARDS

Two guards, one of which is shown at (A) Fig.55, are provided on each side of the fence bracket to close up the opening between the fence bracket (B) and the fence (C) limiting access to the cutterhead. When the fence is tilted, the guard (A) Fig.56, can be pushed to the rear as shwon. After the fence is returned to the 90 degree position, simply push the guard (A) Fig.56, forward to close up the opening. Fig.55, illustrates the guard (A) properly adjusted.

### REMOVING, REPLACING AND RESETTING KNIVES

If the knives are removed from the cutterhead for replacement or regrinding, care must be used in removing, replacing and resetting them as follows:

- 1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.
- 2. Move the fence to the rear and remove the cutterhead guard. WARNING: BE EXTREMELY CAREFUL THAT YOUR HANDS DO NOT COME IN CONTACT WITH THE KNIVES.
- Using wrench (A) Fig. 57, slightly loosen the four locking screws (B) in each knife slot by turning the screws (B) clockwise. This relieves stress in the cutterhead.
- Loosen screws (B) Fig.57, further and remove knife and knife locking bar.
- Fig. 58, illustrates the knife (C) and knife locking bar(D) removed from the cutterhead. Remove the remaining two knives and locking bars, in the same manner.
- Using wrench (E) Fig.58, lower the two knife adjustment blocks by turning screws (F) counterclockwise in all three slots of the cutterhead.
- Before replacing knives make certain the knife locking bars are thoroughly clean and free of gum and pitch.
- 8. Replace the knife locking bars (D) Fig.58, and knives (C) into each slot in the cutterhead. WARNING: CARE MUST BE TAKEN WHEN INSERTING THE KNIVES AS THE CUTTING EDGES ARE VERY SHARP. Push the knife down as far as possible and snug up the screws (B) Fig.57, by turning each screw counterclockwise just enough to hold the knife in position. Replace the remaining two knives in the same manner. NOTE: KNIVES MUST BE INSTALLED CORRECTLY AS SHOWN IN FIG.59.

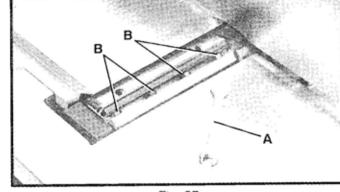


Fig. 57

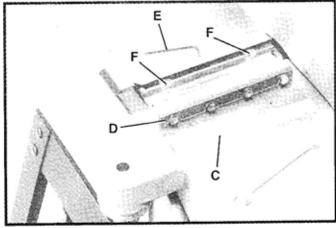


Fig. 58

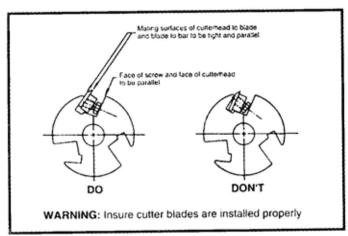


Fig. 59

- The knives are adjusted correctly when the cutting edge of the knife extends out . 060" from the cutterhead diameter.
- Carefully rotate the cutterhead (G) Fig.60, until the round portion of the cutterhead is on top as shown.
- 11. Place a .060" feeler gage (H) Fig. 60, on the cutterhead and using a straight edge (J) on the rear table adjust the height of the rear table until it is .060" above the cuttinghead diameter, as shown.
- Lock the rear table in position and remove the feeler gage.
- Lower the infeed table and place a straight edge (J)
   Fig.61, on the outfeed table extending over the cutterhead as shown.
- 14. Rotate the cutterhead by hand until the knife is at its highest point at each end of the cutterhead. To raise the knife, use wrench (E) Fig. 61, and turn raising screw clockwise until the knife just touches the straight edge (J) on each end and center of the cutterhead when the knife is at its highest point. When you are certain the knife is adjusted properly, tighten the four locking screws (B) by turning them counterclockwise.

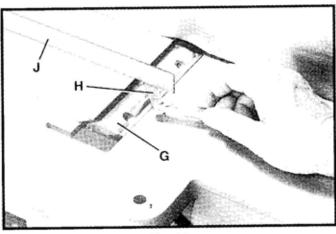


Fig. 60

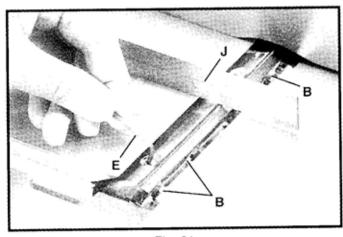


Fig. 61

- 15. Adjust the remaining two knives in the same manner. WARNING: MAKE CERTAIN THAT ALL KNIVES ARE SECURELY FASTENED IN CUTTERHEAD BEFORE TURNING ON POWER.
- Replace cutterhead guard.

### MAINTENANCE AND REPAIRS

After considerable use, the knives will become dull and it will not be possible to do accurate work. Unless badly damaged by running into metal or other hard material, the knives may be sharpened as follows:

### WHETTING KNIVES

DISCONNECT THE MACHINE FROM THE POWER SOURCE. Use a fine carborundum stone, cover it partly with paper as indicated in Fig. 62 to avoid marking the table. Lay the stone on the infeed table, lower the table and turn the cutterhead forward until the stone lies flat on the bevel of the knife as shown. Hold the cutterhead from turning, and whet the bevelled edge of the knife, stroking lengthwise by sliding the stone back and forth across the table. Do the same amount of whetting on each of the three knives.

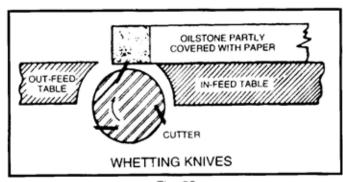


Fig. 62

### REMOVING DUST CHUTE COVER

The dust chute cover (A) Fig. 63, can be removed, for cleaning purposes, by removing the two wing screws (B). WARNING: MAKE CERTAIN THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE BEFORE REMOVING THE DUST CHUTE COVER. THE DUST CHUTE COVER (A) MUST ALWAYS BE ASSEMBLED TO THE DUST CHUTE DURING OPERATION.

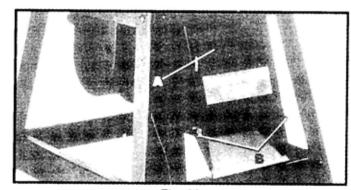


Fig. 63

#### **OPERATIONS**

The following directions will give the beginner a start on jointer operations. Use scrap pieces of lumber to check settings and to get the feel of the operations before attempting regular work.

WARNING: ALWAYS USE CUTTERHEAD GUARD AND KEEP HANDS AWAY FROM CUTTERHEAD.

ALWAYS USE PUSH BLOCKS WHENEVER POSSIBLE.

NEVER MAKE JOINTING AND PLANING CUTS DEEPER THAN 1/8" IN ONE PASS.

### PLACEMENT OF HANDS DURING FEEDING

At the start of the cut, the left hand holds the work firmly against the infeed table and fence, while the right hand pushes the work toward the knives. After the cut is underway, the new surface rests firmly on the outfeed table as shown in Fig. 64. The left hand should then be moved to the work on the outfeed table, at the same time maintaining flat contact with the fence. The right hand presses the work forward, and before the right hand reaches the cutterhead, it should be moved to the work on the outfeed table.

CAUTION: NEVER PASS HANDS DIRECTLY OVER THE CUTTERHEAD.

### JOINTING AN EDGE

This is the most common operation for the jointer. Set the guide fence square with the table. Depth of cut should be the minimum required to obtain a straight edge. Hold the best face of the piece firmly against the fence throughout the feed as shown in Fig. 65. Maximum depth of cut should not be more than 1/8" in one pass.

DO NOT PERFORM JOINTING OPERATIONS ON MATERIAL SHORTER THAN 10 INCHES, NARROWER THAN 3/4 INCH, OR LESS THAN 1/2 INCH THICK (REFER TO FIG.66).

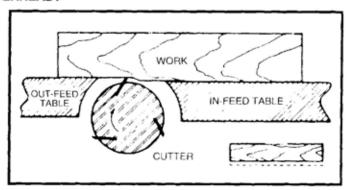


Fig. 64

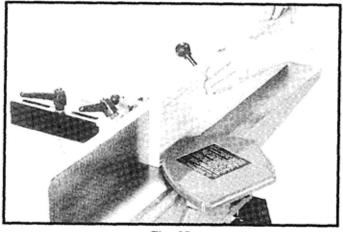


Fig. 65

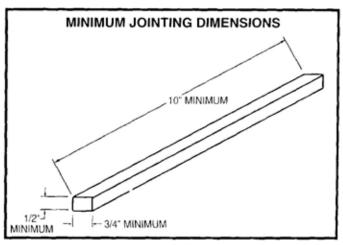


Fig. 66

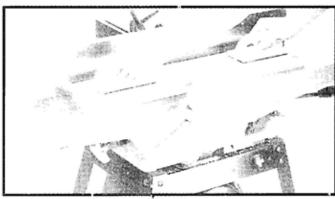
#### PLANING OR SURFACING

Planing or surfacing is identical to the jointing operation except for the position of the workpiece. For planing, the major flat surface of the workpiece is placed on the infeed table of the jointer with the narrow edge of the workpiece against the fence, a shown in Fig.67. The workpiece is moved from the infeed table, across the cutterhead to the outfeed table establishing a flat surface on the workpiece. Always use push blocks when performing planing operations and never pass your hands directly over the cutterhead. Maximum depth of cut should not be more than 1/8" in one pass.

#### BEVELING

To cut a bevel, lock the fence at the required angle and run the work across the knives while keeping the work firmly against the fence and tables. Several passes may be necessary to arrive at the desired result. When the angle is small, there is little difference whether the fence is tilted to the right or left. However, at greater angles approaching 45 degrees, it is increasingly difficult to hold the work properly when the fence is tilted to the right. The advantage of the double-tilting fence is appreciated under such conditions.

When tilted to the left, the fence forms a V-shape with the tables, and the work is easily pressed into the pocket while passing it across the knives as shown in Fig. 68. If the bevel is laid out on the piece in such direction that this involves cutting against the grain, it will be better to tilt the fence to the right.



Éia. 67

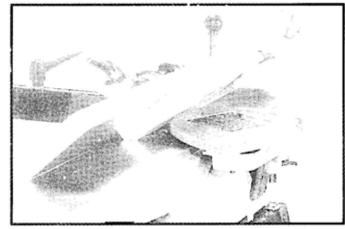


Fig. 68

### TAPER CUTS

One of the most useful jointer operations is cutting an edge to a taper. The method can be used on a wide variety of work. Tapered legs of furniture are a common example.

Instead of laying the piece on the infeed table, lower the forward end of the work onto the outfeed table. Do this very carefully, as the piece will span the knives, and they will take a "bite" from the work with a tendency to kick back unless the piece is firmly held. Now push the work forward as in ordinary jointing. The effect if to plane off all the stock in front of the knives, to increasing depth, leaving a tapered surface.

The ridge left by the knives when starting the taper may be removed by taking a very light out according to the regular method for jointing, with the infeed table raised to its usual position.

Practice is required in this operation, and the beginner is advised to make trial cuts on waste material. Taper outs over part of the length and a number of other special operations can easily be done by the experienced craftsman.

### **CUTTING A RABBET**

When making a rabbet cut, as shown in Fig. 69, the cutterhead guard must be removed. AFTER THE RABBET CUT IS COMPLETED, BE CERTAIN GUARD IS REPLACED.

- 1. Adjust the fence so that the distance between the end of the knives and the fence is equal to the width of the rabbet.
- 2. Lower the infeed table an amount equal to the depth of the rabbet. If the rabbet is quite deep, it may be necessary to cut it in two or more passes. In that event, the table is lowered an amount equal to about half the depth of the rabbet for the first pass, then lowered again to proper depth to complete the cut. Maximum depth of cut when rabbeting with this jointer is 1/2 inch.

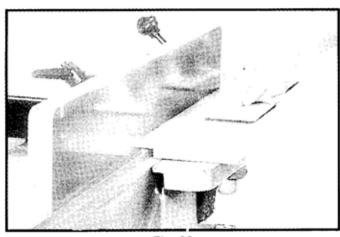


Fig. 69

#### PLANING WARPED PIECES

If the wood to be planed is dished or warped, take light cuts until the surface is flat. Avoid forcing such material down against the table; excessive pressure will spring it while passing the knives, and it will spring back and remain curved after the cut is completed.

### PLANING SHORT OR THIN WORK

When planing short or thin pieces, always use push blocks to minimize all danger to the hands. Fig. 70, illustrates using the push blocks properly.

DO NOT PERFORM PLANING OPERATIONS ON MATE-RIAL SHORTER THAN 10 INCHES, NARROWER THAN 3/4 INCH, WIDER THAN 6 INCHES, OR LESS THAN 1/2 INCH THICK (REFER TO FIG. 70).

#### DIRECTION OF GRAIN

Avoid feeding work into the jointer against the grain as shown in Fig.72. The result will be chipped and splintered edges. Feed with the grain as shown in Fig.73, to obtain a smooth surface.

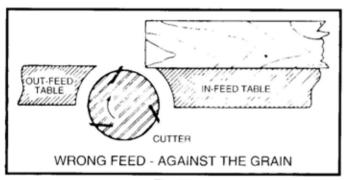


Fig. 72

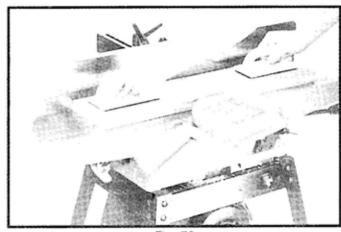


Fig. 70

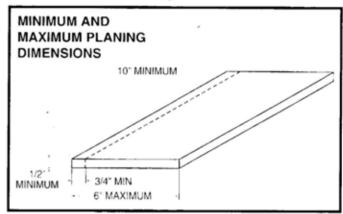


Fig. 71

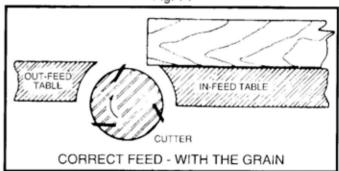


Fig. 73



#### CRAFTEX 2 YEAR LIMITED WARRANTY

Craftex warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers 2 year for parts and 90 days for labour (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etceteras. Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

#### RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom. Craftex is a brand of equipment that is exclusive to Busy Bee Tools.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY(2879), and have your credit card and part number handy.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- We do not accept collect shipments.
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse (see locations on inside back cover of this manual).
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an unused condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with
  the exception of some products that require the return to their authorized repair depots. A Busy Bee representative
  will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.

For more information, please call Toll Free: 1-800-461-BUSY or visit www.busybeetools.com