

OWNER'S MANUAL



CT090- 15" PLANER W/STAND & ROLLERS





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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 considerably 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

- 1.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.
- 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.
- 10. 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 PROPER 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.

- 15.DON' T OVERREACH. Keep proper footing and balance at all times.
- 16. 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 us may cause hazards or risk of injury to persons.
- 19. REDUCE THE RISK OF UNINTENTIONAL START-ING. Make sure switch is in " OFF" position before plugging in power cord.
- 20. 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.
- 22. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- 23. NEVER LEAVE TOOL RUNNING UNATTEND-ED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.
- 24. DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol or any medication.
- 25. MAKE SURE TOOL IS DISCONNECTED FROM POWER 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 proper dust removal. Use wood dust collection systems whenever possible.

UNPACKING

Your new 15" Planer is shipped complete in one crate mounted to a shipping skid. Remove the wooden crate from around the machine and remove the two screws that fasten the machine to the shipping skid. Remove the machine and all loose items from the shipping skid. IMPORTANT: The machine is very heavy. Care must be taken when removing the machine from the skid.

Figure 2 illustrates the machine removed from the crate and shipping skid.

Figure 3 illustrates the loose items supplied with your machine.

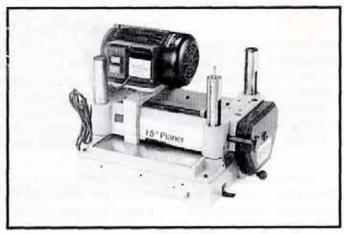


Fig. 2

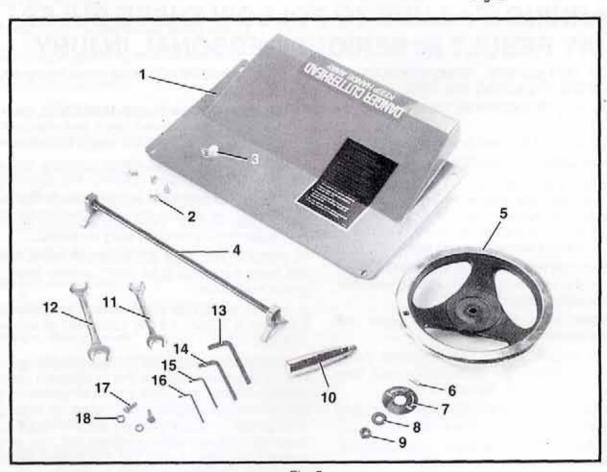


Fig. 3

- 1 Top cover
- 2 M6 x 16mm hex flange screw(4)- for fastening top cover to machine
- 3 Cord clamp
- 4 Knife setting gage
- 5 Raising and lowering handwheel
- 6 Key for raising and lowering handwheel
- 7 Decal for raising and lowering handwheel
- 8 M10 flat washer for raising and lowering handwheel
- 9 M10 hex nut for raising and lowering handwheel
- 10 Handle for raising and lowering handwheel

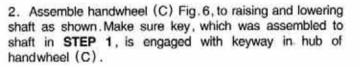
- 11 Open end wrench(10 and 12mm)
- 12 Open end wrench (14 and 17mm)
- 13 Hex wrench (6mm)
- 14 Hex wrench (5mm)
- 15 Hex wrench (3mm)
- 16 Hex wrench(2.5mm)
- *17 M6 x 16mm Screw(2)- for fastening switch bracket to machine
- *18 M6 flat washer(2)- for fastening switch bracket to machine
- * Supplied with three phase machines only

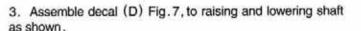
REMOVING SHIPPING STRAPS

 Remove screw (A) Fig.4, and remove and discard shipping strap (B) From base of machine. Remove remaining shipping strap from other side of machine in the same manner.



 Insert key (A) Fig.5, into keyway (B) of raising and lowering shaft.





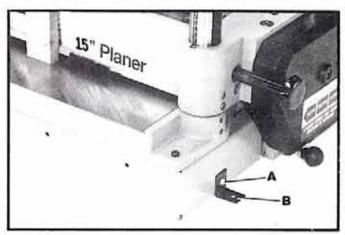


Fig. 4

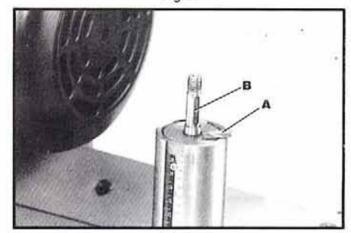


Fig. 5

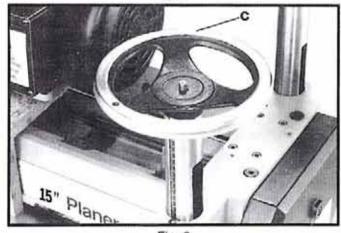


Fig. 6

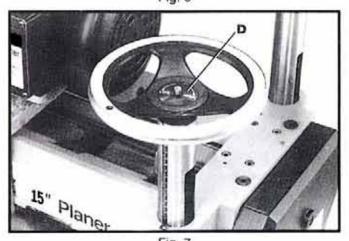


Fig. 7

 Fasten handwheel (C) Fig.8, to raising and lowering shaft using flat washer and nut (E) supplied.

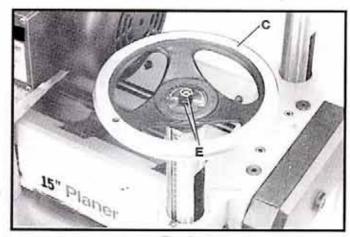


Fig. 8

5. Assemble handle (F) Fig.9, to handwheel (C) as shown.

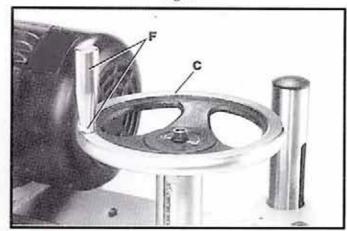


Fig. 9

Loosen two head locking knobs, one of which is shown at (G) Fig. 10, and turn handwheel assembly
 (H) clockwise to raise head assembly. Remove the protective wooden shipping block (J).

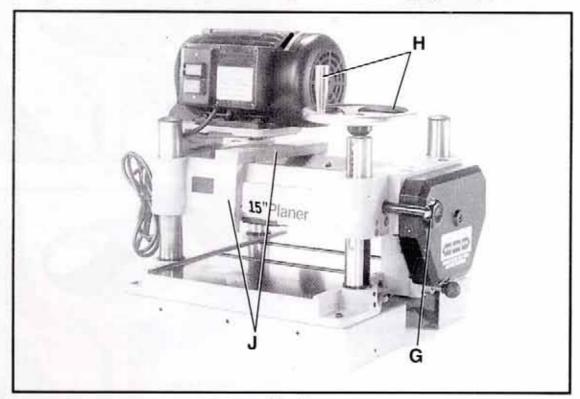
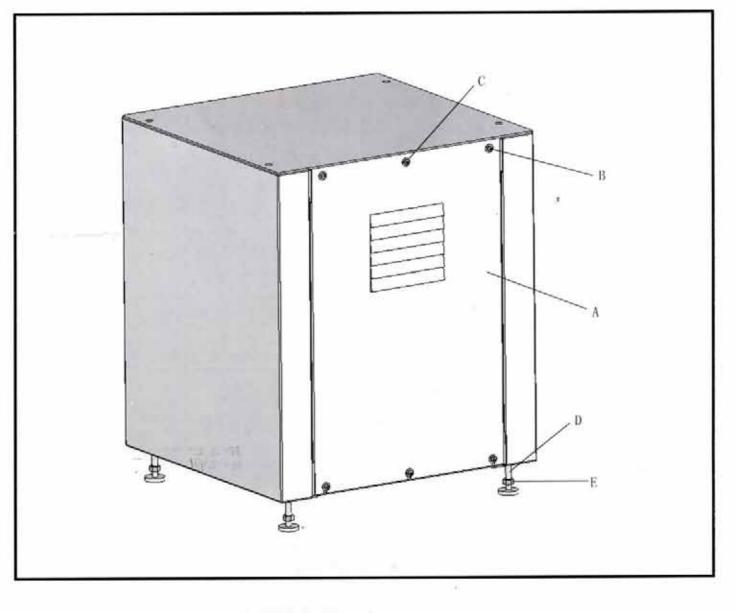


Fig. 10



ASSEMBLING CABINET STAND

To assemble the cabinet stand, the steps as follows:

- Open the shipping carton and take out the cabinet.Remove six cross pan hd screws (B) and flat washers (C), Fig. 11. Take off the front panel (A) and take out the hardware package supplied in the cabinet.
- 2. Insert four adjusting screws (D) and Hex Nut (E) to the four holes on the bottom of cabinet. Adjust screw(s) (D) to acquire suitable leveling of the cabinet then tight Hex Nuts (E).
- Lifting the planer to position it on cabinet (refer to "LIFTING THE MACHINE"). Use the screws supplied to fasten planer on cabinet then put on the front panel (A) again. Note: Place the planer on the cabinet with the front (infeed) end of the machine to the front panel (A).

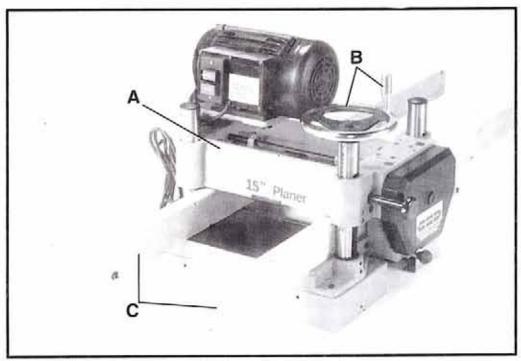


Fig. 12

LIFTING THE MACHINE

- 1. IMPORTANT: CARE MUST BE TAKEN WHEN LIFTING THE MACHINE ONTO A STAND OR WORKBENCH. THE PLANER IS VERY HEAVY AND A MINIMUM OF FOUR PEOPLE WILL BE REQUIRED TO LIFT THE MACHINE AS FOLLOWS:
- 2. Raise the cuttinghead (A) Fig.12, by turning the raising and lowering handwheel (B) clockwise, and insert two 6 or 8 foot long 2×4 's (C) between the cuttinghead and table as shown. Make sure the 2×4 's (C) are positioned solidly between the table and cuttinghead so they will not rotate during lifting. Then with two people on each end of the 2×4 's, move the machine to its desired location.

ASSEMBLING TOP COVER AND DUST CHUTE

- Fasten the top cover and dust chute (A) Fig. 13, to the top of the planer, as shown, using the three screws (B) supplied. IMPORTANT: The dust chute opening (C) must point to the rear as shown.
- 2. Fasten the left corner of the cover to the top of the planer using the remaining screw (D) Fig. 14, and cord clamp (E). **NOTE:** The motor cord (F) must be inserted and positioned into the cord clamp as shown.

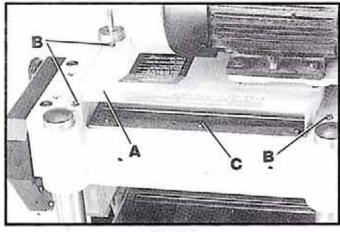


Fig. 13

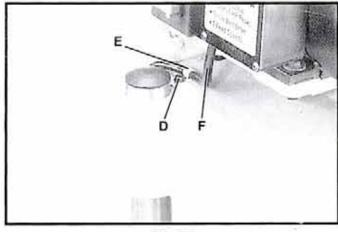


Fig. 14

CONNECTING PLANER TO POWER SOURCE ELECTRICAL CONNECTIONS

The motor supplied with your 15" Planer is a 3 horsepower, single phase motor. The motor is wired for 220 Volt operation.

Before connecting your machine to an electrical power system, be sure the motor rating agrees with the electrical system it is to be connected to . We also recommend that # 12 wire, fused with a 20 amp, dual element time lag fuse, be used to supply power to all machines regardless of their electrical rating.

230 VOLT, SINGLE PHASE OPERATION

If the motor on your machine is wired for 230 Volt, Single Phase operation, the power cord from the motor is equipped with a plug that has two flat, current-carrying prongs in tandem, and one round or "U" -shaped longer ground prong, as shown in Fig. 15. This plug is used only with the proper mating 3-conductor grounding type receptacle as shown.

When the three prong plug on your machine is plugged into a grounded 3-conductor receptacle, as shown in Fig. 15, the long ground prong on the plug contacts first so that the machine is properly grounded before electricity reaches it.

WARNING: MAKE SURE THE RECEPTACLE IN QUES-TION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE, HAVE A CERTIFIED ELECTRICIAN CHECK THE RECEPTACLE.

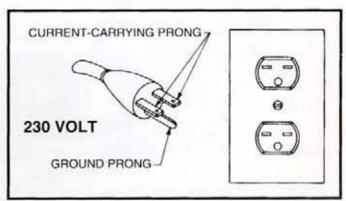
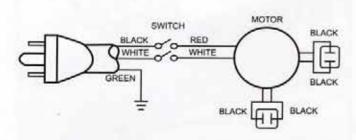


Fig. 15

OPERATING CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING MACHINE SINGLE PHASE MACHINE

The on -off push button switch is located on the motor junction box. To turn the machine "ON" push the start button (A) Fig. 16, and to turn the machine "OFF" push the stop button (B).



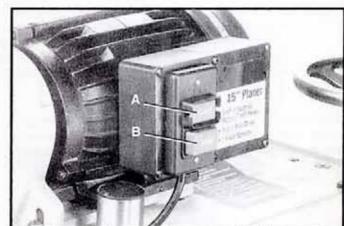


Fig. 16

LOCKINGSWITCHIN THE"OFF"POSITION

SINGLE PHASE MACHINE ONLY

IMPORTANT: We suggest that when the planer is not in use, the on-off switch be locked in the "OFF" position using a padlock(C) Fig. 17. through the two holes in back of the start button as shown. Available as an accessory from Jinteng is the 50-325 padlock, shown at (C).

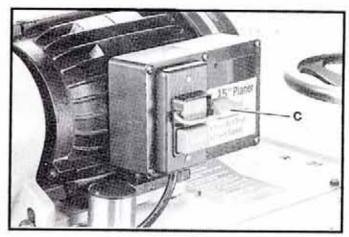


Fig. 17

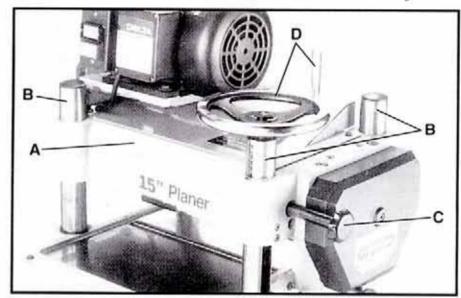


Fig. 18

DEPTH OF CUT ADJUSTMENT

The depth of cut on your planer is controlled by raising or lowering the head assembly (A) Fig. 18, which contains the cutterhead and feed rolls. The head assembly (A) raises and lowers on four precision ground steel columns, three of which are shown at (B). To adjust for depth of cut, simply loosen the two head assembly lock knobs, one of which is shown at (C), and turn the head raising and lowering handwheel (D). Turning the handwheel (D) clockwise, raises the head assembly and counterclockwise, lowers the head assembly. Then tighten the two head assembly lock knobs (C).

The maximum depth of cut when planing stock narrower than 6 inches wide is 3/16" when the stock is run through the planer on one side or the other of the cutterhead. A limiter (E) Fig.19, is provided to limit the depth of cut to 1/8" on stock wider than 6 inches.

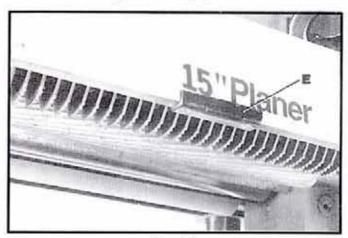


Fig. 19

FEED ROLL SPEED CONTROL

Two feed roll speeds of 16and 30 feet per minute are provided with your planer. Generally speaking, the slower feed rate providea more cuts per inch, thus a finer, smoother finish of the workpiece is obtained. A good rule to follow would be to operate the machine at the faster feed rate for general planing and switch to the slower feed rate for the final finished dimension of the workpiece. When planing wide storck (wider than 8") particularly in hard wood, the slower feed roll speed (16 feet per minute) is more desirabe as there is less strain on the motor and a better finish is obtained since there are more cuts per inch of stock length.

When the shifter knob (A) Fig. 20, is pushed all the way in as shown, the feed roll speed will be 30 feet per minute.

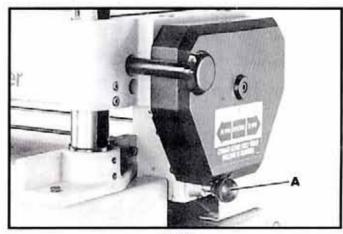


Fig. 20

When the shifter knob (A) Fig.21, is pulled all the way out as shown, the feed roll speed will be 16 feet per minute.

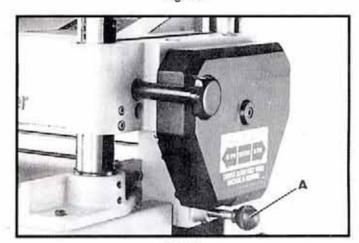


Fig. 21

when the shifter knob (A) Fig. 22, is in the center(neutral) position as shown, the feed rolls are disengaged and the machine will stop feeding.

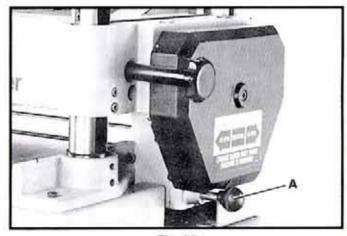


Fig. 22

IMPORTANT: ONLY CHANGE FEED ROLL SPEEDS WHEN THE MACHINE IS RUNNING.



Fig. 23

ANTI-KICKBACK FINGERS

A series of anti-kickback fingers (A) Fig. 23, are provided on the infeed planer, to prevent kickback of the workpiece during the planing operation. These anti-kickback fingers operate by pravity and no adjustment is required. It is necessary, however, to inspect them occasionally to make sure they are free of gum and pitch and that they move independently and operate correctly.

WARNING: WHEN INSPECTING AND CLEANING THE ANTI-KICKBACK FINGERS, MAKE SURE THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

ADJUSTING BELT TENSION

- DISCONNECT THE MACHINE FROM THE POWER SOURCE.
- Remove four screws (A) Fig.24, and remove the belt and pulley guard cover (B).
- Place a 2 x 4(D) Fig. 25, between the motor plate and the top of the head casting as shown.
- 4. Loosen the two screws (C) Fig.25, and pry up on motor plate until correct belt tension is obtained. Correct tension is when there is approximately 1/4" deflection in the center span of the belts using light finger pressure. Then tighten the two screws (C) and replace belt and pulley guard cover.

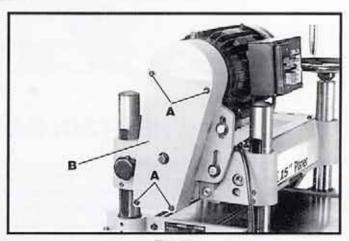


Fig. 24

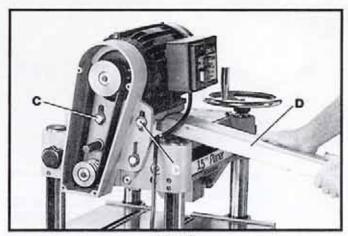


Fig. 25

CHECKING, ADJUSTING AND REPLACING KNIVES

To check, adjust or replace the knives, proceed as follows:

- 1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.
- 2. Remove four screws (A) Fig. 26 and Fig. 27, and remove top cover (B).
- 3. Loosen two screws (C) Fig. 28, and pivot motor assembly (D) to the front, as shown in Fig. 29. NOTE: Belt tension is not disturbed when pivoting the motor forward. WARNING: THE CUTTERHEAD AND KNIVES ARE NOW EXPOSED AND CARE SHOULD BE TAKEN AS THE KNIVES ARE VERY SHARP.
- 4. Remove the three screws (E) Fig. 30, and remove the chip deflector (F).
- 5. To check and adjust the knives, proceed as follows:
 - A. Carefully place the knife setting gage (G) Fig. 31, on the cutterhead as shown.
 - B. When the knives are adjusted correctly, the knife (H) Fig. 32, should just contact the bottom of the gage (J), at each end of the gage. Check the remaining two knives in the same manner.
 - C. If any of the knives require an adjustment, slightly loosen the knife locking bar in each of the three knife slots by turning the locking screws (Two of which are shown at (K) Fig. 33), clockwise into the locking bar just enough to relieve stress in the cutterhead but not disturb the setting of the knives.
 - D. To adjust the knife that must be reset, loosen all five locking screws, two of which are shown at (K) Fig.33, by turning them clockwise into the lock bar. Then using the wrench supplied, turn allen screw (L) Fig.33, counterclockwise to lower or clockwise to raise the knife on each end of the cutterhead until the cutting edge of knife (H) Fig.32, just touches the bottom of the gage (J). Then snug up the knife locking bar by lightly backing out the five locking screws, two of which are shown at (K) Fig.33, against the knife slot. IMPORTANT: AT THIS TIME, ONLY TIGHTEN THE KNIFE INTO THE SLOT E-NOUGH TO HOLD IT IN POSITION.
 - E. If additional knives must be reset, repeat STEP D.
 - F. After all three knives are set, back out and tighten the five locking screws, two of which are shown at (K) Fig.33, against the slot, starting with the end screws first, then the center screws until the knife is securely held in the cutterhead. Tighten the remaining two knives in the same manner.
- 6. If the knives are removed for sharpening, care must be exercised in replacing and resetting them, as follows:
 - A. Remove the three knives, locking bar and locking screws from the cutterhead.
 - B. Thoroughly clean the knife slots, knife bars and screws. Check the screws. If the threads appear worn or stripped or if the heads are becoming rounded, replace them.
 - C. Insert knives, knife locking bars and screws into all three slots in the cutterhead. Back out the locking screws, two of which are shown at (K) Fig. 33, just enough to hold all three knives in the cutterhead.
 - D. Adjust all three knives as explained under STEP 5.
- 7. **IMPORTANT:** After knives have been adjusted, replace chip deflector that was removed in **STEP 4**, top cover that was removed in **STEP 2** and return motor assembly to the upright position.

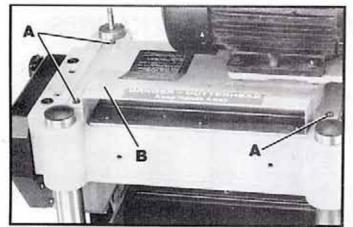


Fig. 26



Fig. 27

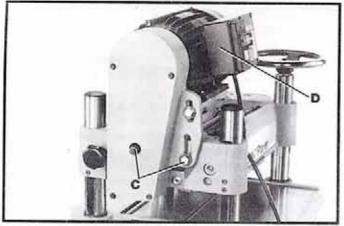


Fig. 28

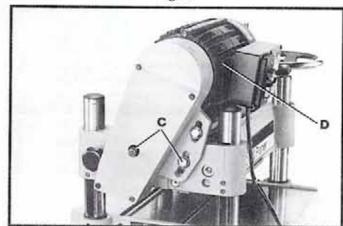


Fig. 29

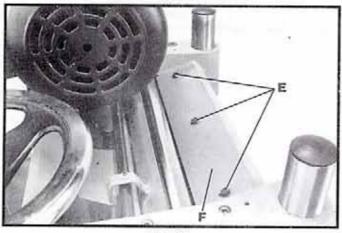


Fig. 30

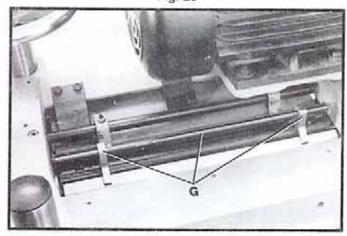


Fig. 31

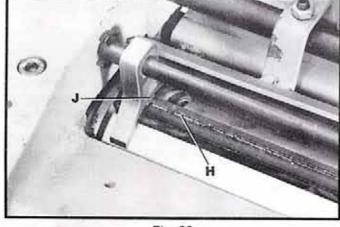


Fig. 32

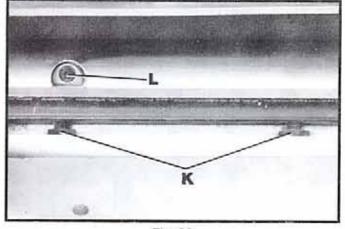


Fig. 33

CONSTRUCTING GAGE BLOCK

In order to check and adjust the height of the chipbreaker, infeed and outfeed roll and adjust the cutterhead parallel to the table, you will need a homemade gage block made of hard wood. This gage block can be easily constructed by following the dimensions shown in Fig. 34.

ADJUSTING HEIGHT OF CHIPBREAKER

The chipbreaker extends down around the front of the cutterhead and raises as stock is fed through the planer. The chipbreaker "breaks or curls" the chips as they leave the cutterhead and the bottom edge of the chipbreaker helps hold the stock flat down on the table during the planing operation. The bottom of the chipbreaker must be parallel to the knives and set0.020"below the cutting circle. To check and adjust, proceed as follows:

DISCONNECT THE MACHINE FROM THE POWER SOURCE.

- Make certain the knives are adjusted properly as explained under "CHECKING, ADJUSTING AND RE PLACING KNVIES."
- 3. Place the gage block (A) Fig. 35, on the table directly under the cutterhead as shown. Using a o.020" feeler gage (B) placed on top of the gage block, raise or lower the head assembly until one of the knives just touches the feeler gage when the knife is at its lowest point. Then lock the head assembly in this position.
- 4. Place the gage block(A) Fig.36, minus the feeler gage under one end of the chipbreaker (C), as shown. The bottom of the chipbreaker(C) should just touch the top of the gage block, as shown.
- If the height of the chipbreaker must be adjusted, remove the top cover of the machine. Loosen nut(D) Fig.37, and turn screw(E) until that end of the chipbreaker is properly adjusted. Then tighten nut(D).
- Place the gage block on the other end of the chipbreaker and if an adjustment is necessary loosen nut(F) .37, and turn adjusting screw(G).

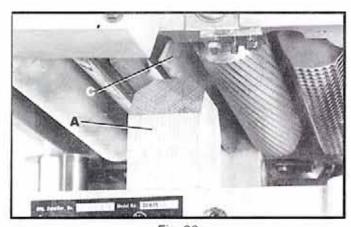


Fig. 36

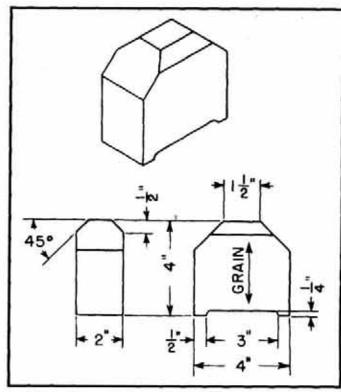


Fig. 34

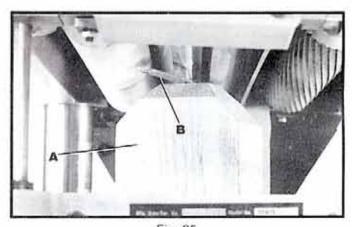


Fig. 35

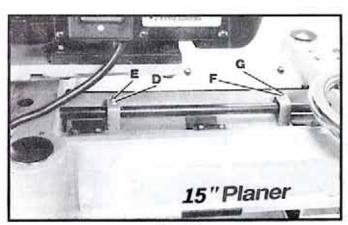


Fig. 37

ADJUSTING HEIGHT OF INFEED ROLL

The infeed roll is adjusted at the factory at 0.040" below the cutting circle. To check and adjust the height of the infeed roll, proceed as follows:

- 1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.
- Make sure the knives are adjusted properly as explainer under "CHECKING, AJUSTING AND REPLC-ING KNIVES."
- 3. Place the gage block(A) Fig.38, on the table directly underneath the cutterhead, as shown. Using a 0.040" feeler gage(B) placed on top of the gage block, raise or lower the head assembly until one of the knives just touches the feeler gage when the knife is at its lowest point. Then tighten the head locking knobs.
- 4. Move the gage block(A) Fig.39, minus the feeler gage, under one end of the infeed roll(C). The bottom of the infeed roll(C) should just touch the top of the gage block(A), as shown.
- If the height of the infeed roll must be adjusted, loosen nut(D)Fig.39, and turn adjusting screw(E) until that end of the infeed roll just touches the top of the gage block.
 Then tighten nue(D).
- 6. Repeat this adjustment with the gage block on the opposite end of the infeed roll.



The outfeed roll is adjusted at the factory to be **0.040**"below the cutting circle. To check and adjust the height of the outfeed roll, proceed as follows:

- DISCONNECT THE MACHINE FROM THE POWER SOURCE.
- Make sure the knives are adjusted properly as explained under "CHECKING, ADJUSTING AND REPLACING KNIVES."
- 3. Place the gage block(A) Flg. 40, on the table directly underneath the cutterhead, as shown. Using a 0.040" feeler gage(B) Fig. 40, placed on top of the gage block as shown, raise or lower the head assembly until one of the knives just touches the feeler gage when the knife is at its lowest point. then tighten the head locking knobs.
- Move the gage block(A) Fig. 41, minus the feeler gage, under the end of the outfeed roll(C). The bottom of the outroll(C) should just touch the top of the gage block(A).
- If the height of the outfeed roll must be adjusted, loosen nut(D) Fig.41, and turn screw(E) until the outfeed roll is properly adjusted.
- Repeat this adjustment procedure on the opposite end of the outfeed roll in the same manner.

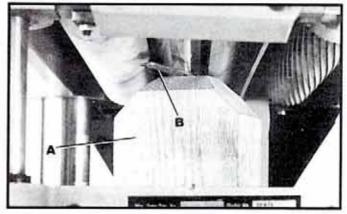


Fig. 38

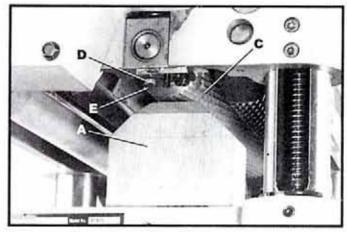


Fig. 39

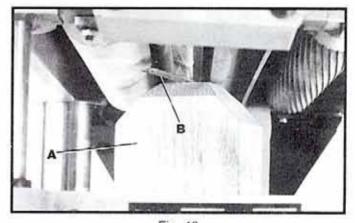


Fig. 40

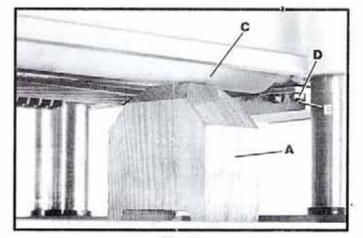


Fig. 41

ADJUSTING SPRING TENSION OF INFEED AND OUTFEED ROLLS

The infeed and outfeed rolls are those parts of your planer that feed the stock while it is being planed. The feed rolls are under spring tension and this tension must be sufficient to feed the stock uniformly through the planer without slipping but should not be too tight that it causes damage to the board. The tension should also be equal at both ends of each roll.

To adjust the spring tension of the infeed roll, turn two screws, one of which is shown at (A) Fig.42. The other screw is located on the opposite side of the machine. A good starting point to use in setting tension of the infeed roll is to adjust the two screws (A) until there are **FOUR** threads showing above the table casting. To increase or decrease the spring tension further, adjust screws (A).

To adjust the spring tension of the outfeed roll, turn two screws, one of which is shown at (B) Fig. 42. The other screw is located on the opposite side of the machine. A good starting point to use in setting the spring tension of the out-

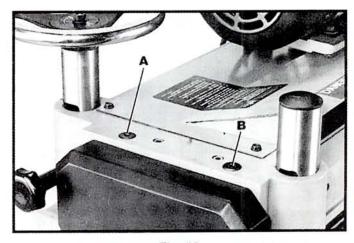


Fig. 42

feed roll is to adjust the two screws (B) until there is **ONE** thread showing above the table casting. To increase or decrease the spring tension further, adjust screws (B).

ADJUSTING TABLE ROLLS

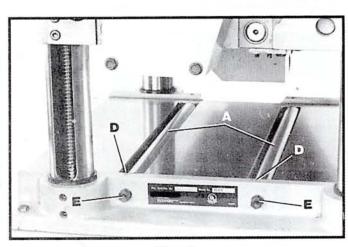


Fig. 44

Fig. 43

Your planer is supplied with two table rolls (A) Fig. 43, which aid in feeding the stock by reducing friction and turn as the stock is fed through the planer. It is not possible to give exact dimensions on the proper height setting of the table rolls because each type of wood behaves differently. As a general rule, however, when planing rough stock the table rolls should be set **HIGH** (0.003" to 0.005") above the table surface and when planing finish stock the table rolls should be set **LOW**, 0.001" above the table surface or level with the table surface.

The table rolls on your planer are set for average planing and are parallel to the table surface. If you desire to adjust the table rolls higher or lower, proceed as follows:

1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.

2. Lay a straight edge (B) Fig. 44, across both rolls and with a feeler gage (C) underneath the straight edge as shown, adjust height of table rolls by loosening set screws (D) Fig. 43, and turn screws (E) to raise or lower table rolls (A). Table rolls must be adjusted on the opposite end of table in the same manner. The table rolls must always be set parallel to the table. IMPORTANT: The adjustment screws (E) Fig. 43, on both sides of the planer are on eccentrics and care should be taken when adjusting to keep the rolls from leading the stock to one side or the other. This can be accomplished by turning screws (E) Fig. 43, clockwise to raise or lower the rolls and turning the two screws on the opposite end of the rolls counterclockwise or vice versa.

ADJUSTING CUTTINGHEAD PARALLEL TO TABLE

The cuttinghead is set parallel to the table at the factory and no further adjustment should be necessary. If your machine is planing a taper, first check to see if the knives are set properly in the cutterhead. Then check to see if the cuttinghead is set parallel to the table as follows:

DISCONNECT THE MACHINE FROM THE POWER SOURCE.

- Place gage block (A) Fig. 45, on table directly under front edge of head casting (B) as shown.lower head casting until front edge of head casting (B) just touches the top of the gage block.
- Move gage block (A) Fig. 46, to opposite end of table, as shown. Distance from table to edge of head casting should be the same.
- 4. Repeat STEPS 2 and 3 on outfeed end of table.
- 5. If head casting is not parallel to table, tilt planer on its side as shown in Fig. 47, Remove bolt (C) and loosen bolt (D) Fig. 47, which will allow you to move the idler sprocket assembly (E) far enough to release tension on chain as shown in Fig. 48. Remove chain from sprocket on end of headcasting that must be adjusted. In this case chain has been removed from sprocket (F).
- 6. Turn sprocket (F) Fig. 48, by hand to bring that corner into adjustment with the other three corners.IMPORTANT: THIS ADJUSTMENT IS VERY SENSITIVE AND IT SHOULD NOT BE NECESSARY TO TURN THE SPROCKET MORE THAN ONE OR TWO TEETH. Turning sprocket (F) clockwise will decrease the distance between the table and headcasting. Counterclockwise will increase the distance.
- Replace chain being careful not to disturb the position of the sprockets and replace idler sprocket assembly (E) Fig. 47.

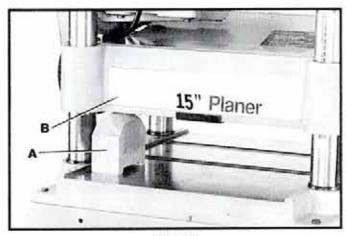


Fig. 45

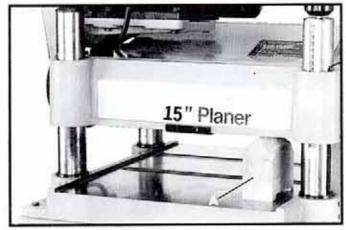


Fig. 46

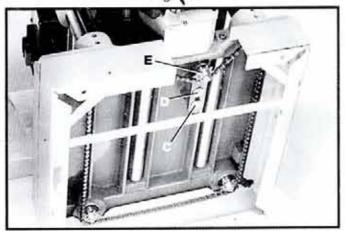


Fig. 47

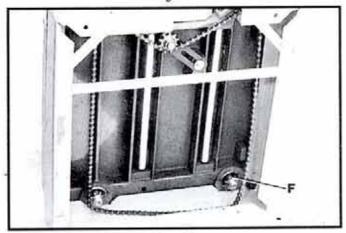
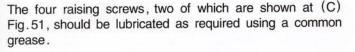


Fig. 48

LUBRICATION

The gear box oil should be changed once a year using extreme pressure gear oil. The gear box drain plug is shown at (A) Fig.49. The oil fill and level plug is shown at (B) Fig.50.



Periodically remove screw (D) Fig. 51, and side cover (E). Thoroughly clean chains and sprockets (F) Fig. 52, and lubricate using a light machine oil. Replace side cover.

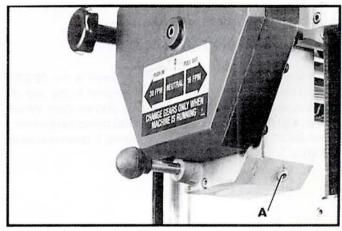


Fig. 49

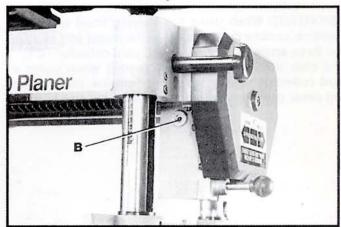


Fig. 50

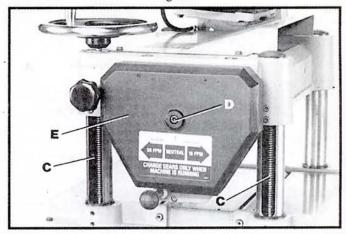


Fig. 51

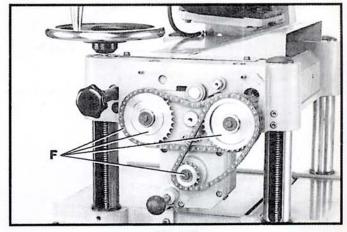


Fig. 52

ACCESSORY 22-678 SHAVING HOOD

Available as an accessory for your 15" Planer is the 22-678 Shaving Hood (A) Fig. 53, which is assembled to the rear of the machine, as shown, using two screws and washers. When the shaving hood (A) is connected to a dust collection system, it provides an efficient means of maintaining a clean and safe work area.

IMPORTANT: When using the shaving hood with your machine, remove the top cover of the planer and remove the three screws (B) Fig.54, and chip deflector (C). The chip deflector (C) is not needed when using a dust collection system with your machine. Replace the top cover of the planer befor operation.

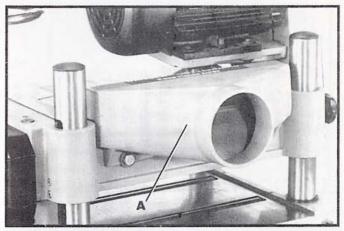


Fig. 53

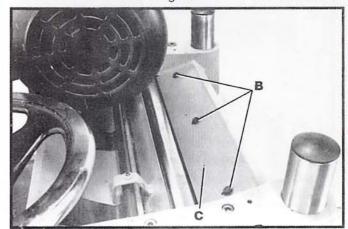
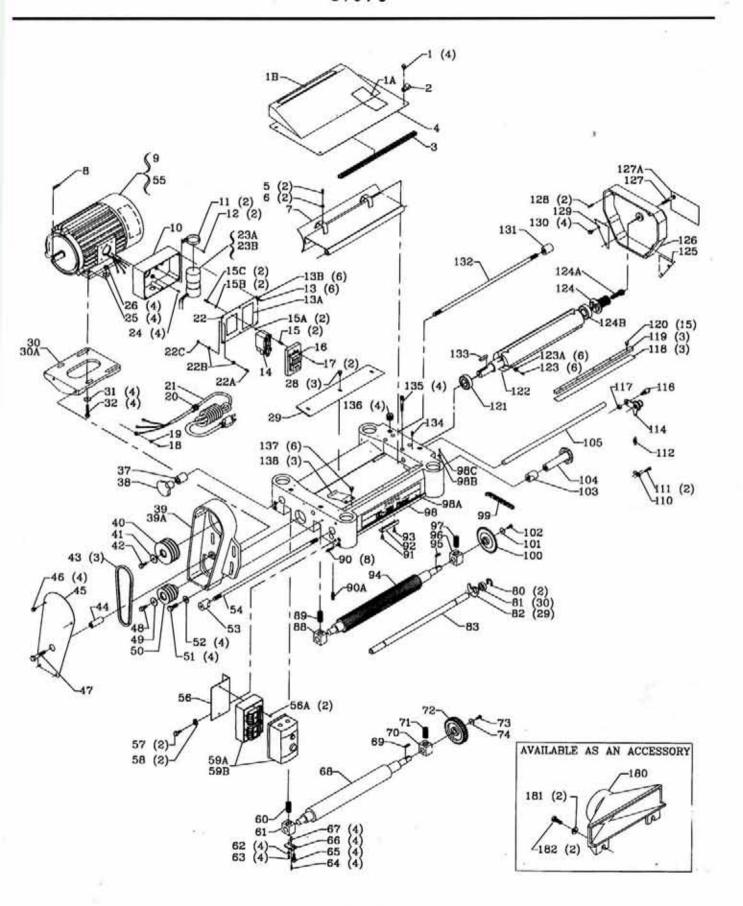


Fig. 54



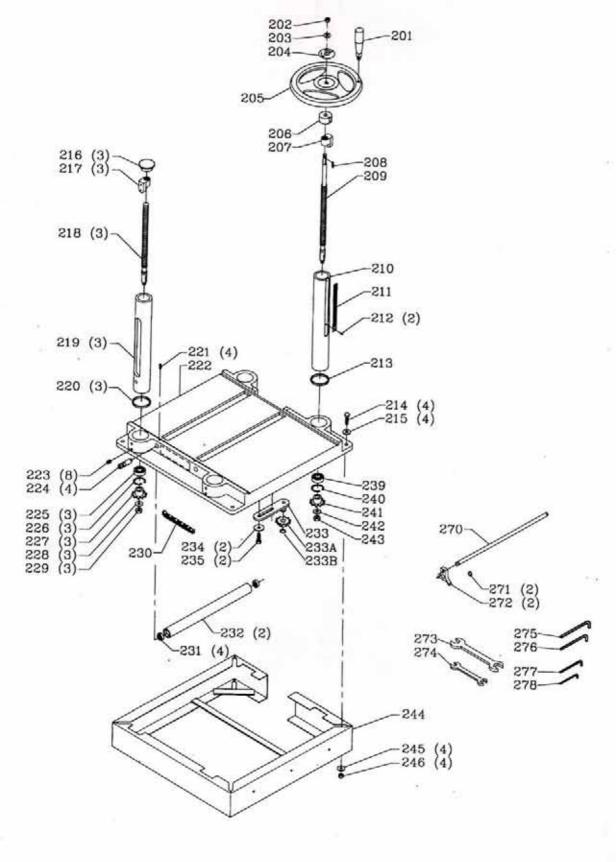
Page 1

REPLACEMENT PARTS

REF.	DESCRIPTION	REF. NO.	DESCRIPTION		
1	M6 × 16MM HEX FLANGE SCR	62	M5 HEX NUT		
1A	WARNING LABEL	63	M5 × 12MM HEX SOC SET SCR		
1B	WARNING LABEL	64	M4 × 16MM SPRING PIN		
- 2	CLAMP	65	M8 × 16MM HEX HD SCR		
3	SEAL	66	PLATE		
4	UPPER COVER	67	M5 × 20MM SPRING PIN		
5	M6× 18MM HEX SOC SET SCR	68	OUTFEED ROLLER		
6	M6 HEX NUT	69	KEY		
7	CHIP BREAKER	70	ROLLER BUSHING		
8	KEY	71	SPRING		
9	MOTOR ASSY (MODEL 22-680, 3HP, 1PH), INCL:	72	FEED SPROCKET M6 × 15MM HEX HD SCR		
10	SWITCH BOX	73 74	M6.4 FLAT WASHER		
11	CLAMP	80	EXT RET RING		
12	M4.2×10MM PAN HD SCR	81	COLLAR		
13	M4.2×10MM PAN HD SCR	82	ANT-KICKBACK FINGER		
13A	FEATURE LABEL	83	SHAFT		
13B 14	3/16" EXT TOOTH WASHER	88	ROLLER BUSHING		
15	1 PH MANUAL SWITCH	89	SPRING		
15A	SPACER # 06-32HEX NUT	90	M6 × 20MM HEX SOC SET SCR		
15B	EXT TOOTH WASHER	90A	M8 × 12MM HEX SOC SET SCR		
15C	# 06-32 × 5/16" PAN HD SCR	91	M6 × 8MM FLAT HD SCR		
16	SWITCH COVER ASSY	92	LIMITER PLATE		
17	# 06-32 × 1/4" ROUND HD SCR	93	M6 × 8MM FLAT HD SCR		
18	M5 × 16MM PAN HD SCR	94	INFEED ROLLER		
19	M5.3 EXT TOOTH WASHER	95	KEY		
20	BUSHING	96	ROLLER BUSHING		
21	POWER CORD	97	SPRING HEAD CASTING		
22	SWITCH PLATE	98	NAMEPLATE		
22A	# 10-24 × 3/8" PAN HD SCR	98A 98B	POINTER		
22B	3/16"EXT TOOTH WASHER	98C	RIVIT		
22C	# 10-24 HEX NUT	99	CHAIN		
23A	CAPACITOR (500 UF)	100	FEED SPROCKET		
23B	CAPACITOR (20 UF, MODEL 22-680, 3HP, 1PH)	101	M6.4 FLAT WASHER		
24 25	M5 × 20MM CHEESE HD SCR	102	M6 x 15MM HEX HD SCR		
26	M8.4 FLAT WASHER	103	BUSHING		
28	M8 HEX NUT M6 × 12MM HEX FLANGE SCR	104	HANDLE		
29	DEFLECTOR PLATE	105	SHAFT		
30	MOTOR BRACKET(CMO)	110	HANGER		
30A	MOTOR BRACKET (EMO)	. 111	M6 × 10MM HEX SOC HD SCR		
31	M8.4 FLAT WASHER		(SEE NOTE A)		
32	M8 × 45MM HEX HD SCR	112	SPRING		
37	BUSHING	114	IDLER PULLEY ASSY		
38	KNOB	116	PIVOT		
39	PULLEY GUARD (CMO)	117	COLLAR KNIVES (SET OF THREE)		
39A	PULLEY GUARD (EMO)	118 119	KNIFE LOCKING BAR		
40	MOTOR PULLEY	120	SCR SCR		
41	M8.4 FLAT WASHER	121	BALL BEARING		
42	M8 × 20MM HEX HD SCR	122	CUTTERHEAD		
43	V-BELT (SET OF 3)	123	M5 × 16MM HEX SOC SET SCR		
44 45	SPACER BUILDY COVER	123A	ADJUSTING NUT		
46	PULLEY COVER M6× 12MMHEX FLANGE SCR	124	PINION		
47	M10 × 80MM HEX HD SCR	124A	M6 × 20MM HEX SOC HD SCR		
48	M8 × 25MM HEX HD SCR	124B	BALL BEARING		
49	M8.4 FLAT WASHER	125	PLATE		
50	CUTTERHEAD PULLEY	126	COVER		
51	M10 × 30MM HEX HD SCR	127	M8 × 45MM HEX SOC HD SCR		
52	M10.5FLAT WASHER	127A	GEARBOX LABEL		
53	BUSHING	128	M6 × 20MM SPRING PIN		
54	LOCK BOLT	129	PLATE M6×12MM HEX FLANGE SCR		
55	MOTOR ASSY (MODEL 22-681, 3HP, 3PH)	130	BUSHING		
56	BRACKET (3PH ONLY)	131 132	LOCKBOLT		
56A	M4 × 10MM CHEESE HD SCR (3PH ONLY)	133	KEY		
57	M6 × 16MM HEX HD SCR(3PH ONLY)	133	M6 × 18MM HEX SOC SET SCR		
58	M6.1 LOCK WASHER (3PH ONLY)	135	M8 × 50MM HEX SOC HD CR		
59A	MOTOR STARTER (3PH, 200/220V)	136	ADJ.SCR		
59B * *	MOTOR STARTER (3PH, 440V)	137	M6 × 12MM HEX FLANGE SCR		
**	CONNECTOR (QTY 2)	138	SPRING		
60	MOTOR CORD SPRING		II ADI E AC AN ACCECCODY		
61	ROLLER BUSHING	AVA	AVAILABLE AS AN ACCESSORY		
٠.	TOLLET (DOO! III G	180	DUST HOOD, INCL:		
		181	M11.5 FLAT WASHER		
		182	M10 × 30MM HEX HD SCR		
		100			

* * NOT SHOWN
EMO = EARLY MODELS ONLY
CMO = CURRENT MODELS ONLY

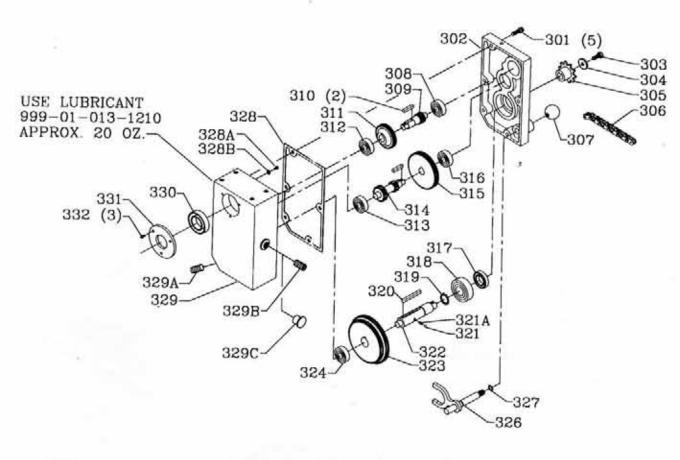
NOTE A: USE THREAD SEALANT WHEN REINSTALLING ITEM 111 FOR SERVICE.



REPLACEMENT PARTS

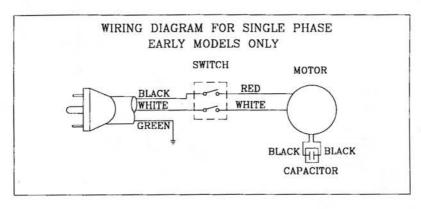
REF.	DESCRIPTION
NO.	DESCRIPTION
201	HANDLE
202	M10 HEX NUT
203	M10 FLAT WASHER
204	DIRECTIONAL PLATE
205	HANDWHEEL
206	BUSHING
207	NUT
208	KEY
209	ELEVATING SCR
210	COLUMN
211	SCALE
212	M3 × 6MM CHEESE HD SCR
213	COLUMN SPACER
214	M8 × 30MM HEX HD SCR
215	M8.4 FLAT WASHER
216	COLUMN CAP
217	NUT
218	ELEVATING SCR
219	COLUMN COLUMN SPACER
220	M6 × 16MM HEX SOC SET SCR
221	TABLE
222	M10 x 12MM HEX SOC SET SCR
223	ECCENTRIC STUD
224	BALL BEARING
225 226	INT RET RING
227	SPROCKET
228	M10 FLAT WASHER
229	M10 HEX NUT
230	CHAIN
231	BALL BEARING
232	BED ROLLER
233	SUPPORT ASSY, INCL:
233A	IDLER
233B	EXT RET RING
234	M8 FLAT WASHER
235	. M8 × 20MM HEX HD SCR
239	BALL BEARING
240	INT RET RING
241	SPROCKET
242	M10 FLAT WASHER
243	M10 HEX NUT
244	BASE
245	M8.4 FLAT WASHER
246	M8 HEX NUT
*	KNIFE GAGE ASSY, CONST OF:
270	BAR
271	EXT RET RING
272	KNIFE GAGE BLOCK
273	WRENCH 14MM × 17MM
274	WRENCH 10MM × 12MM
275	6MM HEX WRENCH
276	5MM HEX WRENCH
277	3MM HEX WRENCH
278	2.5MM HEX WRENCH

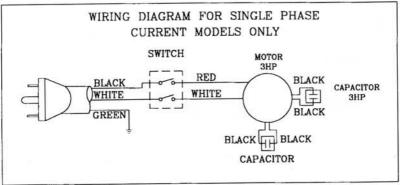
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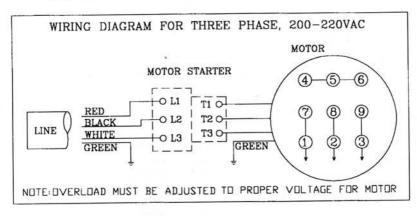


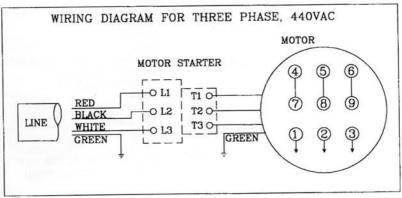
REF.	DESCRIPTION	REF. NO.	DESCRIPTION
301	M6 × 20MM HEX SOC HD SCR	320	KEY
302	COVER	321	SPRING
303	M8 x 16MM HEX HD SCR	321A	BALL
304	M8.8 FLAT WASHER	322	SHAFT
305	SPROCKET	323	GEAR
306	CHAIN	324	BALL BEARING
307	KNOB	326	HANDLE ROD ASSY
308	BALL BEARING	327	ORING
309	PINION	328	GASKET
310	KEY	328A	(DIN 84)M6 × 8MM CHEESE HD SCR
311	GEAR	3288	M6.4 FLAT WASHER
312	BALL BEARING	329	GEAR BOX HOUSING
313	BALL BEARING	329A	PLUG
314	PINION	3298	PLUG
315	GEAR	329C	OIL LEVEL PLUG
316	BALL BEARING	330	OIL SEAL
317	OIL SEAL	331	OIL SEAL COVER
318	BALL BEARING	332	M5 x 12MM PAN HD SCR
319	EXT RET RING	* *	LUBRICANT (APPROX 20 OZ)

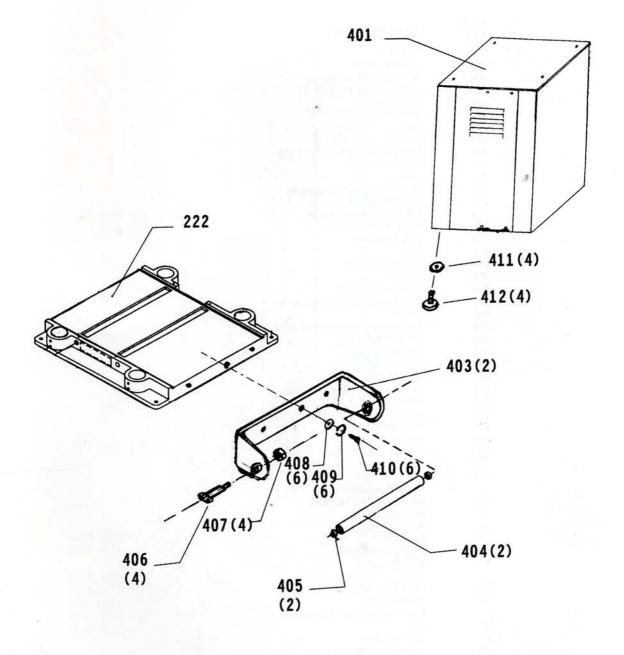
REPLACEMENT PARTS











REF.	DESCRIPTION
401	CABINET ASSY INCL:
222	TABLE
403	EXTENDED WORKING BRACKET
404	BED ROLLER
405	BALL BEARING
406	SPECIAL SCR
407	HEX NOT
408	FLAT WASHER
409	LOCK WASHER
410	M6 × 20 HEX SOC HD SCR
411	3/8 - 16 HEX NOT
412	PIASTIC COVERED PAD