Wadkin Bursgreen
WB T630 HD Thicknesser

Supplied by Advanced Machinery Services

Tel: 0844 844 9949
Fax: 0844 844 4744
www.advancedmachinery.co.uk

THICKNESSER

P-508,P-630

OPERATION MANUAL AND PARTS LIST

Tel 0044 116 2769111 spares@advancedmachinery.co.uk

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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 commonsense 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. WADKIN Machinery strong 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 WADKIN to determine if it can or should be performed on the product.

WADKIN

BURSGREEN

SPECIFICATIONS

MOTOR	P-508CE	P-630CE
ELECTRICS:		
Planer Motor	10HP 3PH 30AMP	10HP 3PH 30AMP
Table Life Motor	1/2HP 3PH 1.5AMP	1/2HP 3PH 1.5AMP
Total Required Amperage	34.5AMP	34.5AMP
CAPACITY:		
Max. Width of Stock	508mm	630mm
Max. Thickness of Stock	300mm	300mm
Max. Depth of Cut	8mm	8mm
Min. Length (unbutted)	220mm	220mm
CUTTERHEAD:		
Number of Knives	4PCS	4PCS
Diameter	96mm	96mm
Cutting Circle	100mm	100mm
Speed	4800 RPM	4800 RPM
TABLE SIZE:		
Width	562mm	685mm
Length	748mm	870mm
FEED ROLLERS:		
Infeed (One Sectional) Dia.	76mm-one	76mm-one
Outfeed (Two Solid) Dia.	60mm-one	60mm-two
Table Roller (Two Smooth) Dia.	72mm-two	72mm-two
Feed Rate (Variable Speed)	19 FPM to 39FPM	19 FPM to 39FPM
MACHINE SIZE (LxWxH)	1170x868x1200mm	1305x960x1200mm
PACKING SIZE (LxWxH)	1280x870x1280mm	1130x970x1320mm
NET WEIGHT	720KGS	820KGS
GROSS WEIGHT	820KGS	920KGS
GRINDING ATTACHMENT	30KGS	30KGS

Tel 0044 116 2769111 spares@advancedmachinery.co.uk

FEATURES OF YOUR P-508CE PLANER

W

1. Dust Hood
2. Top Cover
3. Thickness Micro Adjustment
4. Frame Cover
5. Cutter Head Cover
6. Lock Knobs
7. Right Side Cover
8. Power Indicator
9. Digital Scale
10. Table Raising Button
11. Start Button, Planer
12. Start Feeding Button
13. Work Table
14. Control Panel
15. Limit Block, Width
16. Table Roller
18. Table Roller Adjustment Handle
19 Machine Base
20 Access Door
22 Table Roller Adjustment Lock
23. Inch Scale

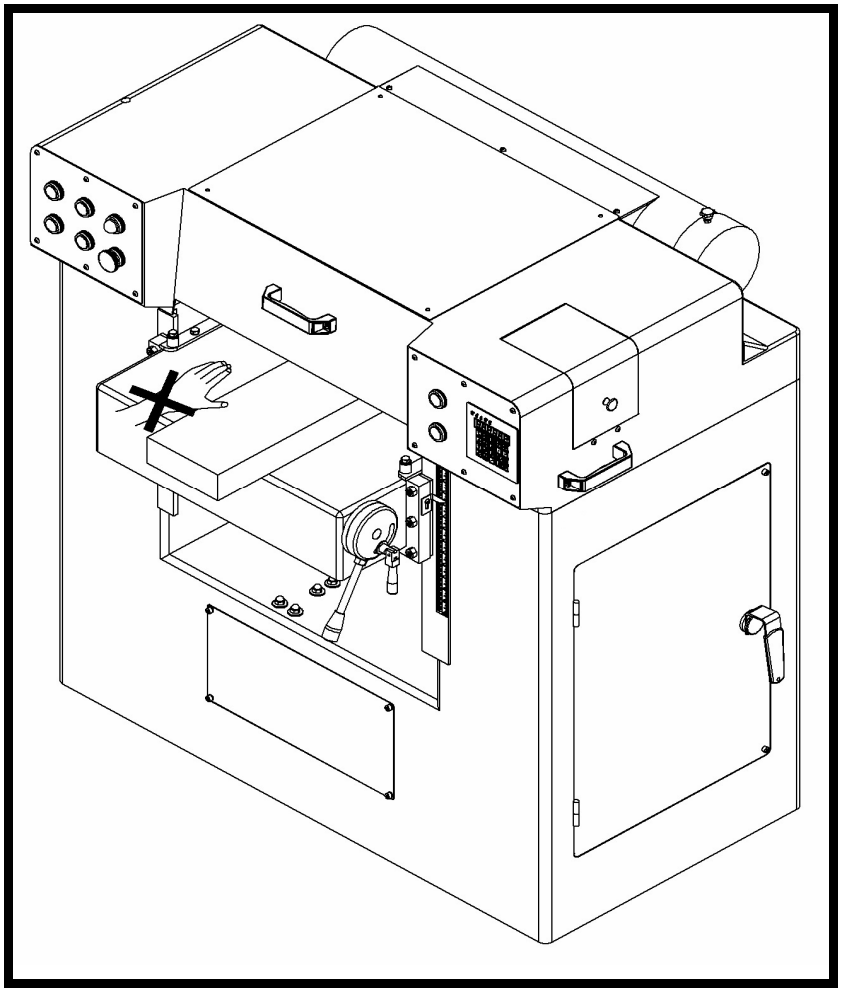
GENERAL SAFETY INSTRUCTIONS

1. Keep Guards In Place. Safety guards must be kept in place and in working order.
2. Remove Adjusting Keys And Wrenches. Before turning on machine, check to see that the keys, chucks and adjusting wrenches are removed from the tool.
3. Reduce The Risk Of Unintentional Starting. Make sure switch is in the off position before plugging in the tool.
4. Do Not Force Tools. They will do a job better and safer at the rate for which they were designed.
5. Use Right Tool. Do not force a tool or an attachment to do a job for which it was not designed.
6. Secure Work. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tools.
7. Maintain Tools With Care. Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
8. Disconnect Tools From Power. Before servicing, or when changing accessories such as bits, blades, cutters, etc. disconnect form power.
9. Use Recommended Accessories. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injuries.
10. Check Damaged Parts. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect the tools operation. A guard or other part that is damaged should be properly or replaced.
11. Turn Power Off. NEVER LEAVE TOOL RUNNING UNATTENDED. Do not leave tool until it comes to a complete stop.
12. Keep Work Area Clean. Cluttered areas and benches invite accidents.
13. Do Not Use In Dangerous Environment. Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
14. Keep Children Away. All visitors should be kept at a safe distance from the work area.
15. Make Workshop Child Proof. Use padlocks, master switches, and remove starter keys.
16. Wear Proper Apparel. Loose clothing, gloves, neckties, rings, bracelets or other jewelry may get caught in moving parts. Non-ship footwear is recommended. Wear protective hair covering to contain long hair.
17. Always Use Safety Glasses And Dust Masks. Use face or dust mask if cutting operation is dusty. Every day eyeglasses only have impact resistant lenses, they are not safety at all times.
18. Never Stand On Tool. Serious injuries could occur if a moving part is unintentionally contacted.

ADDITIONAL SAFETY RULES FOR YOUR PLANER

1. This machine has been designed with as many safety features as humanly possible, however, always remember that a planer is only as safe as its operator.
2. Before starting the planer, be sure to check the following:
   A. Table must be completely free of all foreign matter.
   B. Cutterhead knives MUST be inspected before each operation. Check for Tightness in cutterhead and make certain knives are not fractured in any place. Flying knives are DANGEROUS.
   C. Check knives for sharpness.
3. Check material thickness and depth of cut desired. NEVER overload planer, or try to cut beyond its capacity.
4. As material is fed into machine, stand to side of board near switch (never directly behind). “Kick-back” is caused by improper gripping of lumber by infeed roll and chipbreaker, can cause serious injury.
5. NEVER stand directly behind or work behind machine when it is running. Direction of cutterhead rotation usually throws chips or any foreign material from rear of machine.
6. In case it is necessary to stop material as it is through machine, switch off feed system and turn machine off. Wait until cutterhead has completely stopped before lowering table to remove material. Attempted removal while cutterhead is turing may cause “Kick-back”.
7. NEVER hourse around a running planer. “PLAY” should absolutely be forbidden as 9 out of 10 accidents are the results are the results of carelessness and playing with machine as though it were a toy.
8. Always stop machine for adjustment of when leaving immediate area. Disconnect power source when working on or around any moving parts.
9. CAUTION-Kickback can result and board fly from machine with high velocity. When sectional infeed rolls and chipbreakers are installed, it is possible to feed several narrow boards through machine.
10. Use only factory authorized replacement parts and knives.
11. Keep all guards in place at all times.
12. Extra care should be taken when running short pieces, but with another piece of material of equal thickness and stand ASIDE.
13. DO NOT tie strings to the table elevating screws or remove the protective rubber boots. The screws will be rusty and plastic embeds on the screws. Failure to comply with the above warnings may cause personal injury and/or damage to the machine.
14. The person who is not well train operator shall not alloured to stand beside the machine to avoid being hurt by flying chips；splinter and antikick back material.

15. When ever execute the maintenance, adjustment replacement … etc. If a restant action is necessary, It is required that the hand or arm shall away from belt；chains, cutterhead.
16. A eertain safety distance is required between the operation and the machine as well as standing with a proper position when the operation is using the machine.
17. It is not allow to stretch your arm or hand into the area of transmission parts or cutter head when the width of workpiece is smoller the work table width.



CUTTING TOOL SPECIFICATION

1. The cutter block of this machine are designed and manufactured by Chen Kuang Wood Machinery Works Co., Ltd.
2. Please refer to the specification table in 1.1 for the maximum speed of the cutter block
3. These cutter blocks designed for MEC (for hand respectively integrated feed)
4. Blade dimensions:

Blade Dimension	Length (mm)	Width (mm)	Height (mm)
P-508CE	515	3	30
P-630CE	630	3	30

5. Blade material :

   HS : High speed steel (more than 12% total of alloying component W, Mo, V, Co)

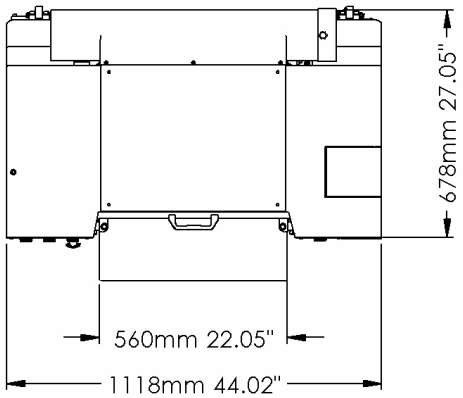
   HW : Uncoated hard metal on tungsten carbide base.

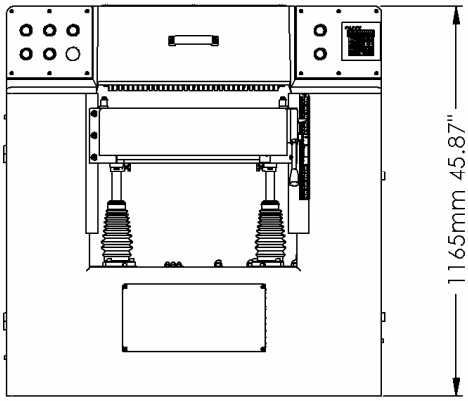
6. Minimum clamping length: 20 mm

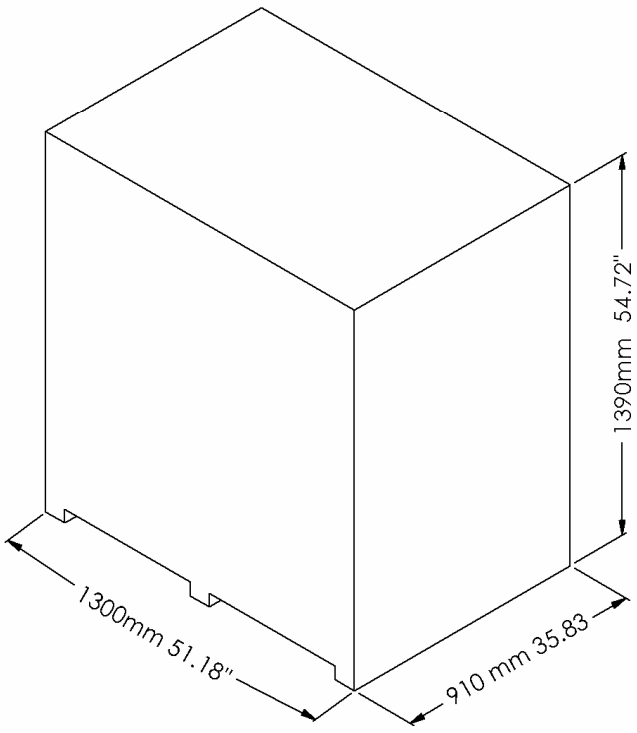
NOISE LEVE

1. NOISE DECLARATION STATEMENT:
   The figure quote are emission levels and are not necessaryily safe working levels. Whilst is a correlation between the emission and exposure levels, this can not be used reliably to determine whether or not further precautions are required. Factors that influence the actural level of exposure of the work-force include the characteristics of the work room, the othere sources of noise, etc. i.e. the number of machines and other adjacent processes. Also the permissible exposure level can vary from country to country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.
2. The noise level of the this machine is under 80 dB which is checked before the machine leave the factory.
3. The operator shall be instructed about level of noise likely to be produced during the normal use of the machine and on factors that influence exposure. These factors include:
4. Correct speed selection.
5. Correct tool selection.
6. Correct tool and macihne maintenance.
7. Type of material being processed.
8. The proper use of ear protection or muffer.

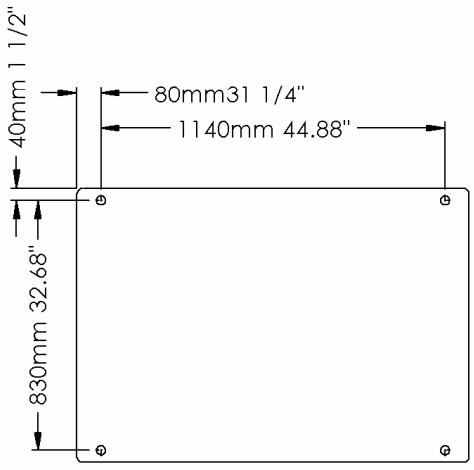
DIMENSIONS







Packing: Outside Measurement



Base Dimensions

DOUBLE SHAPE

The installation distance between wall & machine.

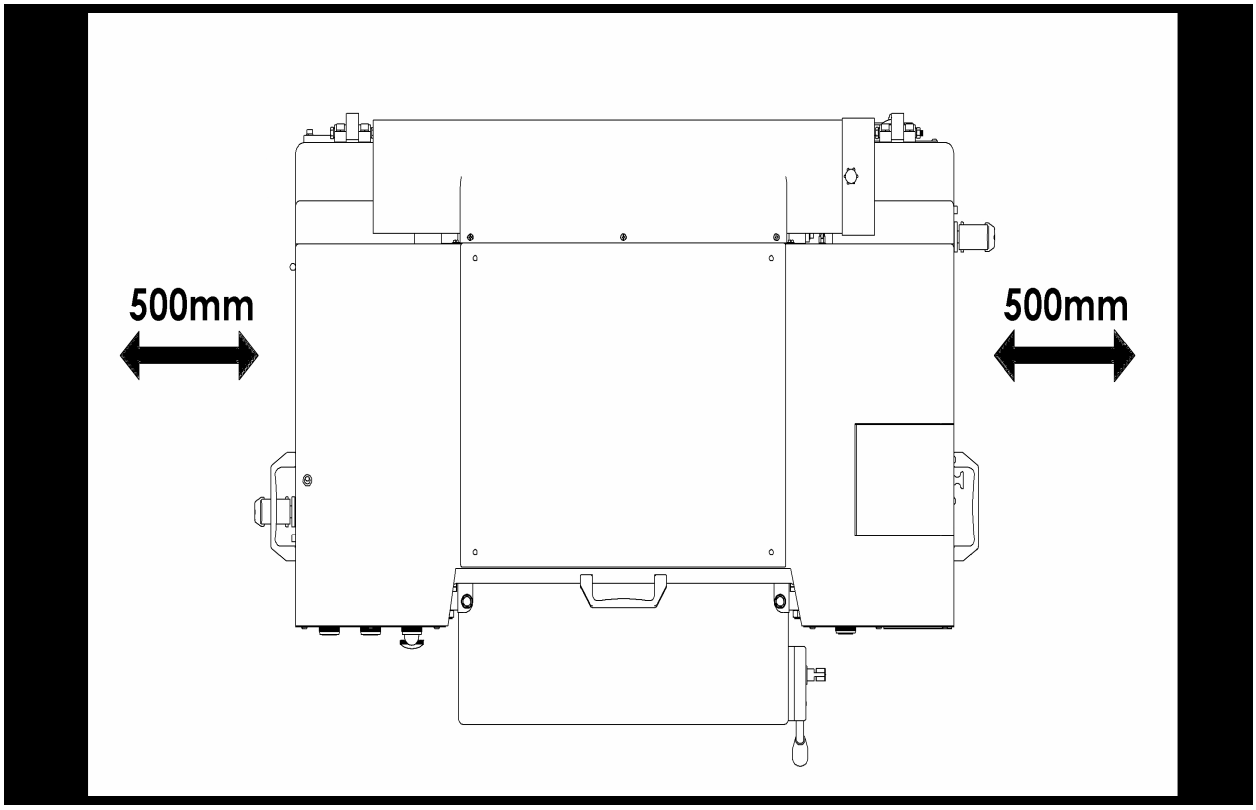


Fig. 1

UNPACKING AND CLEAN-UP

To ensure maximum performance from your planer, clean it properly, and install it accurately before use.

As soon as you receive the planer, we recommend you follow the procedures:

1. Inspect packing crate for damage in transit. Record damage and report it immediately to shipper.
2. Open crate and check that machine arrived in good condition. If not, let the distributor know immediately.
3. Before lifting machine, remove all bolts from its shipping base.
4. Transport machine to location with a hand truck or dolly.
5. ** IMPORTANT **

   REMOVE THE PROTECTIVE COATING FROM THE TABLE, TABLE ROLLERS, FEED ROLLERS, CUTTERHEAD AND LOOSE ITEMS PACKED WITH THE MACHINE.
6. The coating may be removed with a soft cloth moistened with Kerosene.

   NOTE: DO NOT USE ACETONE, GASOLINE, OR LACQUER THINNER FOR THIS PURPOSE.
7. DO NOT use solvents on plastic parts; they will dissolve plastic.
8. ** CAUTION **

   CARE MUST BE TAKEN WHEN CLEANING THE CUTTERHEAD. The knives are in the cutterhead and are very sharp.
9. For lifting, please refer to Fig. 2.

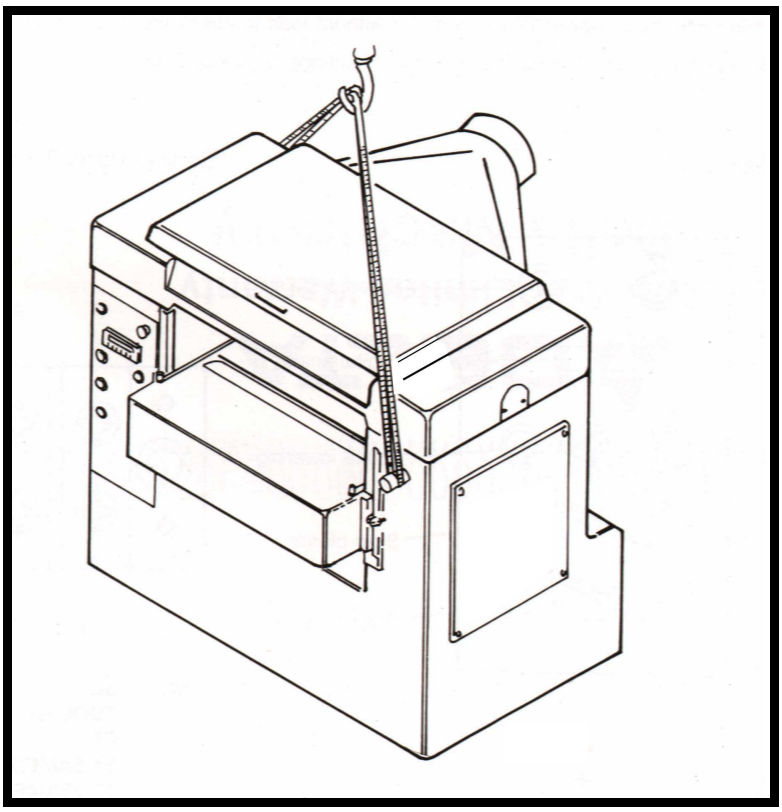


Fig. 2

CHIP AND DUST EXTRACTION

1. The location of the chip and dust extraction.

(diagram)

2. Specification of the chip and dust extraction

Motor (Hp/3 phase)	3
Air Speed (M./Sec)	22-25
Air Delivery (M3 /min)	50
Collector Bag (CM)	ϕ51

3. Geometrical dimension of each connectjion outlet hole: 152.4 mm (6“) A Fig. 3.

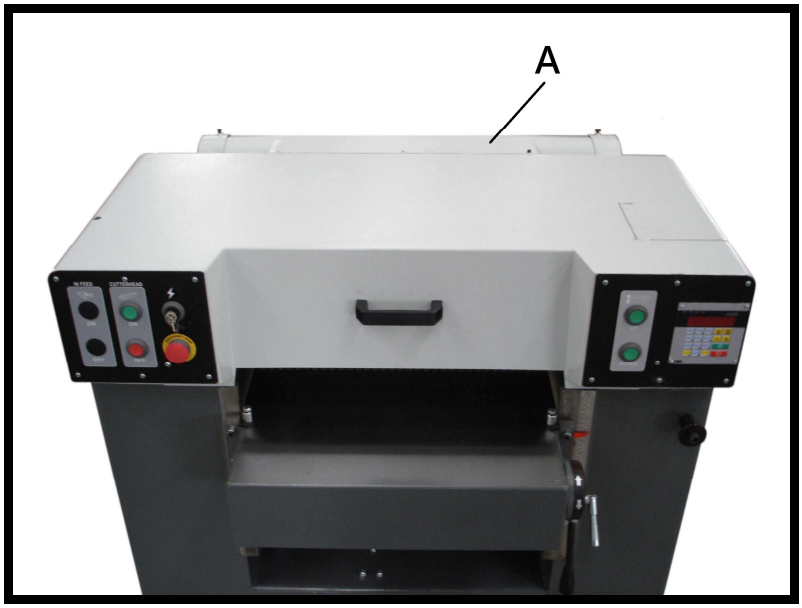


Fig. 3

4. The operator shall be aware of the hazards from exposure to dust and the factors which may influence exposure. The factors are:
   A. The maintenance condition of the tool and machine.
   B. What type material being processed.
   C. Importance of local extraction (capture at source).
   D. Proper adjustment of hoods/baffles/chutes.
5. It is required that the dust extraction system should be connected to the machine and switched on before machining commences. The extraction system shall ensure the parameters are the same as 2.

INSTALLATION INSTRUCTIONS

IMPORTANT PLEASE READ CAREFULLY

Installing

Mount machine securely to solid, even base foundation. Concrete base mounting preferred . Locate in clean, dry, well lighted and well ventilated building if possible. With machine in position, test table surface lengthwise and crosswise with machinist level. Place metal shims under low corners. Check that all four corners are supported.

GROUNDING INFORMATION AND POWER CONNECTIONS

1. ** IMPORTANT **

   Before connecting to the power source, be sure that the voltage is of the same characteristics as tied on terminal box.

RUNNING ON WRONG VOLTAGE WILL INJURY THE MOTOR

2. The necessary wiring to the power source should be completed by a competent electrician. For personal safety, this machine must be properly grounded. Base of machine should be grounded to central grounding system.
3. NOTE: After wiring into the power source, run motor without load to check the direction of rotation.
4. Please refer to Fig. 4, Fig. 5 of Control Panel and Connections To Power Source.

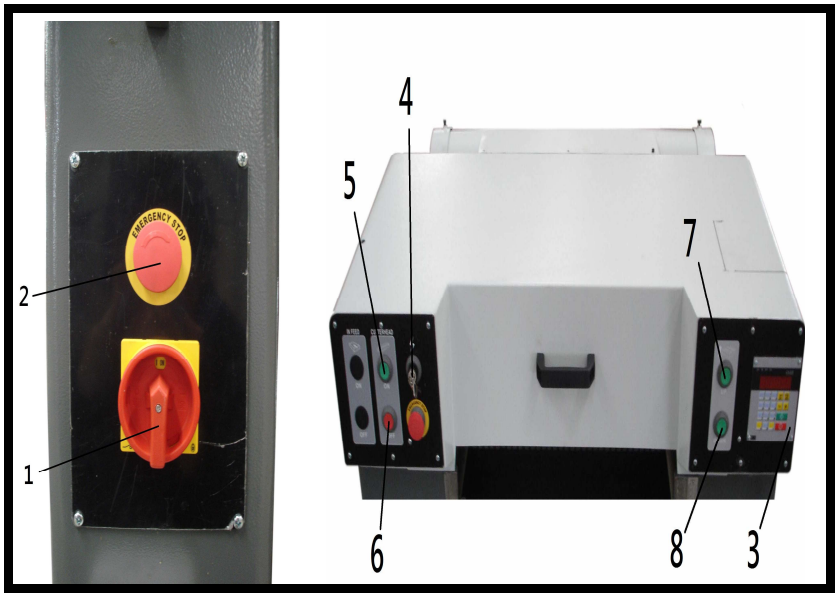


Fig. 4

CONTROL PANEL

1. MAIN POWER BREAKER
2. EMERGENCY STOP
3. DIGITAL SCALE
4. POWER (ON/OFF)
5. START PLANER
6. STOP PLANER
7. TABLE RAISING
8. TABLE LOWERING

CONNECTION TO POWER SOURCE

NOTE: SELECT WIRE SIZE TO MEET TOOL REQUIRED AMPERAGE OF 34.5AMP/220V
17.25AMP/440V

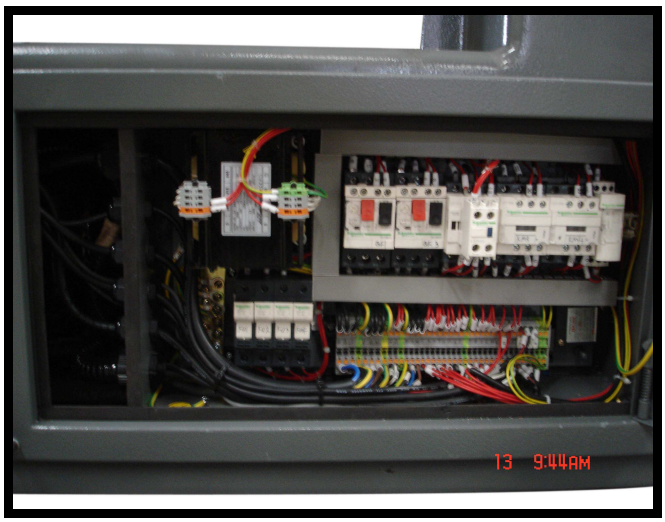


Fig. 5

5. When starting current is more than 60 Amp or the full load current is more than 8 Amp, a star delta start is required to install on the machine, please refer to the circuit diagram in chapter 31 such installation.

ADJUSTMENTS AND OPEAATION

Disconnect machine from the power source before adjusting this machine.

OPERATING ADJUSTMENTS.

WARNING: Before checking adjustments, always make sure the planer is disconnected form the power source.

WORK TABLE

The work table is mounted on the frame and is raised or lowered on four screws mounted on thrust bearings. The work table is raised or lowered by 1/2HP motor power control or micro adjustment. The work table MUSE BE parallel to the cutterhead. This can be checked by lowering the work table to permit placing a small square block between the work table and the cutterhead at the extreme right side of the table. Raise the table with the handle until the block just touch the cutterhead and move the block to the left side of the table and check the cutterhead. If the table is not parallel to the cutterhead, perform the adjustment procedures as follow:

1. Disconnect the machine from the power source.
2. Remove the boot (C) for access to screw.
3. Loosen lock bar (A) and turn acme screw (B) in clockwise direction, then adjust it to accurate position as shown in Fig. 6.

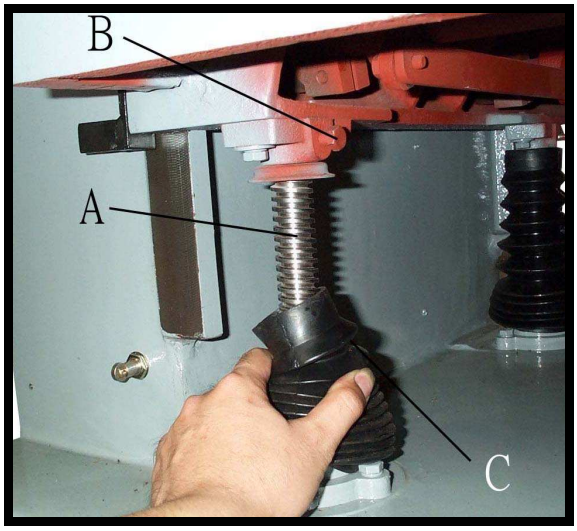


Fig. 6

Limitation for work table raising or lowering, there is a limit switch (A) for each direction of table movement. The power table switches off to prevent damage in maximum high and low position as show in Fig. 7. (B) is a limit block, micro-switch block.

(A) Limit switch

(B) Limit switch stop

NOTE: The most accurate way to check cutter alignment with table parallel is with the use of a dial indicator mounted on a surface gage.

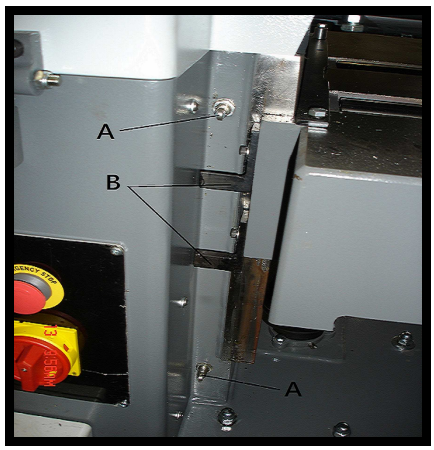


Fig. 7

DISCONNECT MACHINE FROM THE POWER SOURCE BEFORE ADJUSTING THIS MACHINE.

TABLE ROLLERS

The table rollers are adjusted to the proper height with the quick-set handle mounted on the right side of the work table. As general rule, when planing rough stock, the table rollers should be set at high position, and when planing smooth stock, the table rollers should be set at low position.

NOTE: The table rollers must always be set parallel to the work table.

1. Quick adjustment for planing rough stock and smooth stock:
   A. Loosen lock handle (A) and move adjusting handle (B) up to the expected position as show in Fig. 8
   B. Lock handle (A)
2. Table rollers can be adjusted depending on working situation. However, the Max. adjustment height is .125" as shown in Fig. 9.

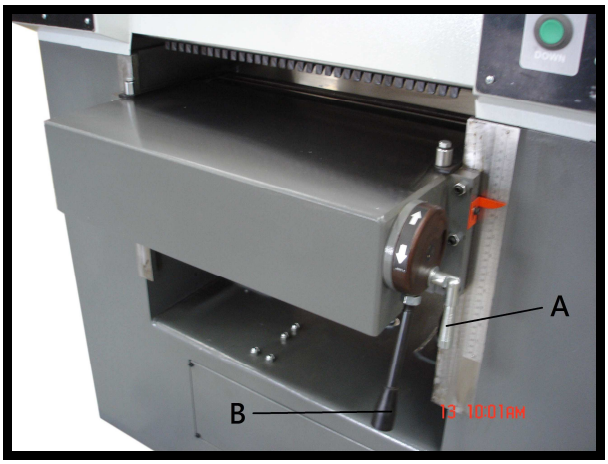


Fig. 8

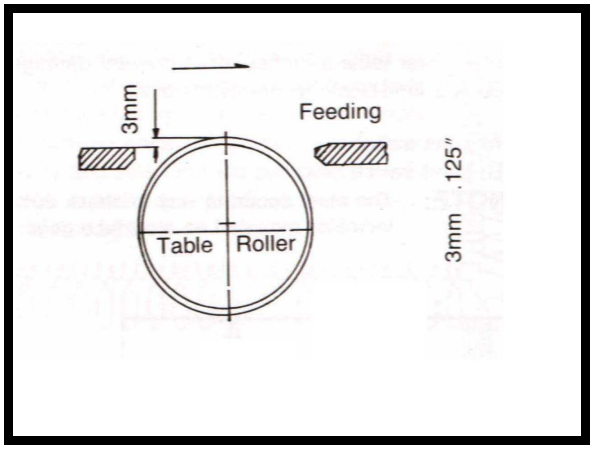
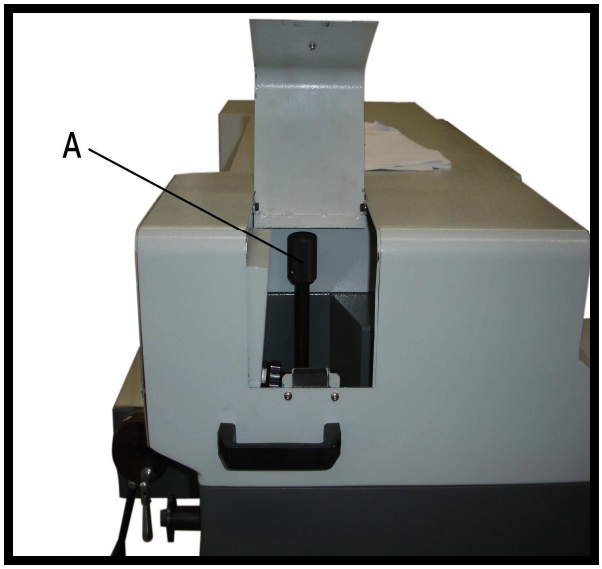


Fig. 9

THE DEPTH OF CUT

This planer is equipped with easy-to-read digital thickness display and a thickness scale. Cutting thickness is up to 11-3/4". Power table up and down travel makes it easy to select desired material thickness. When power table reaches the approximate material size, use the micro adjustment for manual positioning. The digital display displays increments of .001" see Fig. 10 and Fig. 11.



A. MANUAL MIICRO ADJUSTMENT
B. THICKNESS SCALE
C. DIGITAL DISPLAY

Fig. 10

Fig. 11

CUTTERHEAD

The cutterhead is equipped with four knives. It is important that knives should be kept sharp. The knives do all of the work and they will not work if they are DULL. The set of knives are matched and balanced at the factory. When the knives are sharpened, care should be taken that they are kept in balance. If the knives are removed for sharpening, care must be exercised in replacing and resetting them, proceed as follow:

CAUTION

1. Disconnect the machine from the power source.
2. Clean the cutterhead.
3. To remove knives, loosen the knife gib (D), by turning the square head screw (E) into the knife gib (D). then remove the knife gib (D), knife (C) and two lifting springs (F) which located under the knife. Please take note that the springs may pop out while removing the same manner.
4. Remove the remaining three knives in the same manner.
5. Throughly clean the knife slots, knife gibs, springs and square head locking screws. Check the screws if they appear worn or shripped or if the heads are becming rounded, replace them.
6. In sequence to insert springs, knife, and knife gib into slot of the cutterhead. Backing out square head screws just enough to hold the knife in the cutterhead.
7. Place the knife setting gage (B) over the knife. Loosen all square head screws by turning them into the knife gib until cutting edge of knife comes into contact with the protrusion of gage. Then lightly back out the square screws against the slot.

NOTE: AT THIS TIME, ONLY TIGHTEN THE SCREWS JUST ENOUGH TO HOLD THE KNIFE IN POSITION.

8. Replace and reset the other three knives in the same manner.
9. After all four knives are set in position, back out and tighten the square head screws against the slot starting with the end screws first and the center screws first and the center screws until the knife is securely held in the cutterhead. Tighten the remaining three knives in the same manner.

NOTE: Double check all screws for tightness.

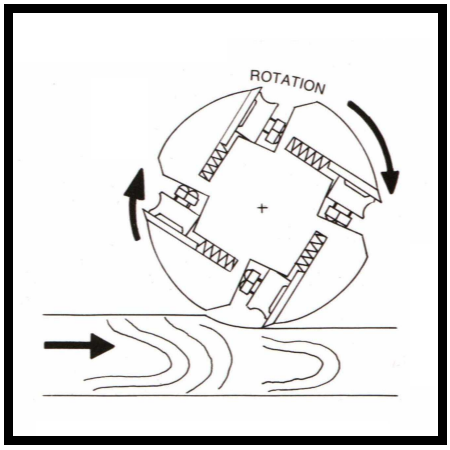


Fig. 12

Always feed against the cutter rotation as show in Fig.12

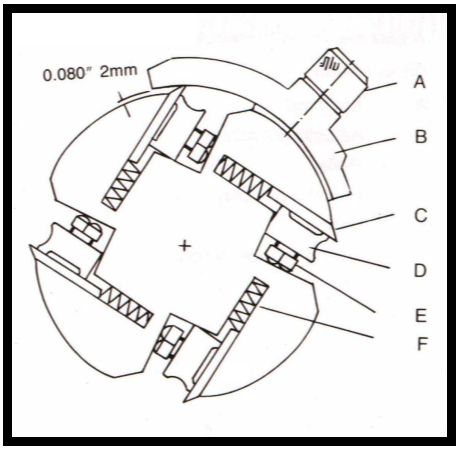


Fig. 13

A. KNOB
B. KNIFE SEETING GAGE
C. KINIFE
D. KNIFE GIB
E. SQUARE HEAD SCREW
F. LIFTING SPRING

INFEED ROLLER, CHIPBREAKER, PRESSURE BAR, AND OUTFEED ROLLER

The infeed roller, Chipbreaker, pressure bar, and outfeed rollers are adjusted at the factory. The infeed roller and the chipbreaker are to be set .020" below the cutting circle, the pressure bar is to be set .040" bellow the cutting circle and the outfeed rollers are to be set .020" below the cutting circle, as show in Fig. 14. For example to check and adjust the outfeed roller below the cutting circle .020", proceed as follows:

1. Disconnect machine from the power source.
2. Make sure the knives are adjusted properly.
3. Place a square block on the table directly underneath the cutterhead. Place a feeler gage on top of the square block. Raise the work table until the knife tip just touches the feeler gage. Do not move the work table any more until the outfeed roller is adjusted as shown in Fig. 14.
4. If an adjustment to the outfeed roller is necessary, loosen the lock nut (A) and turn screws (B) until the outfeed roller just touches the square block. Then tighten lock nut (A) as shown in Fig. 15.
5. Check and adjust opposite end of the outfeed roller in the same manner.

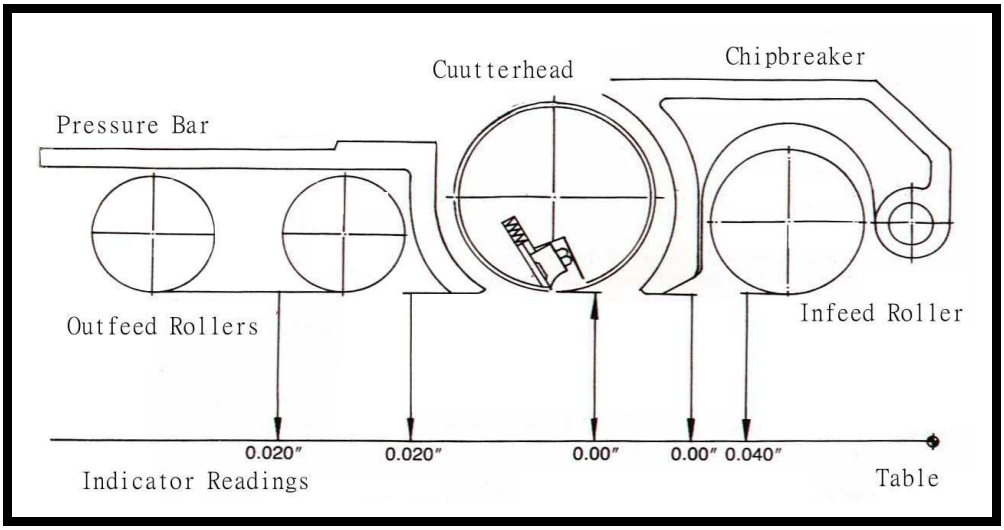


Fig. 14

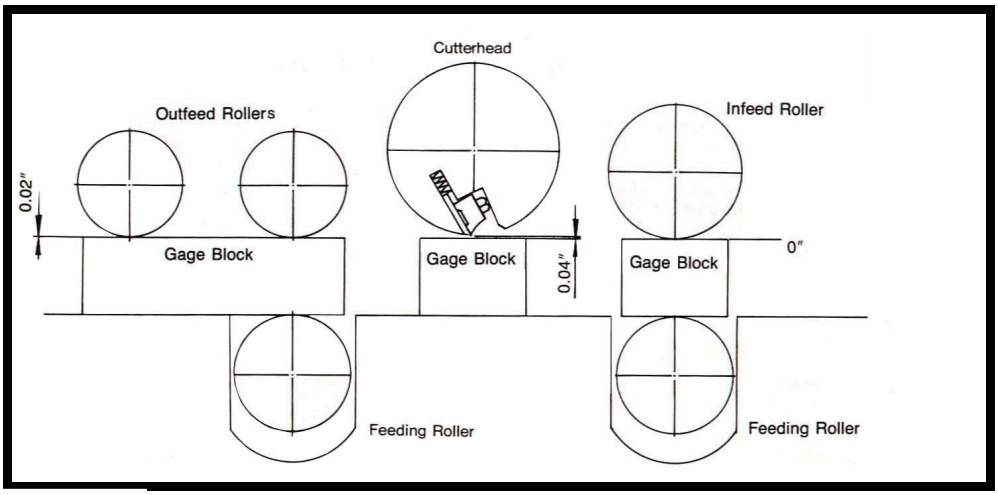


Fig. 15

TENSION ADJUSTMENT OF INFEED AND OUTFEED ROLLERS

Adjust the spring tension of the infeed and outfeed rollers by turning the spring tension adjustment screw (F) as shown in Fig. 16.

A. Lock nut.
B. Adjustment screw.
C. Roller
D. Bushing housing
E. Spring
F. Spring tension screw

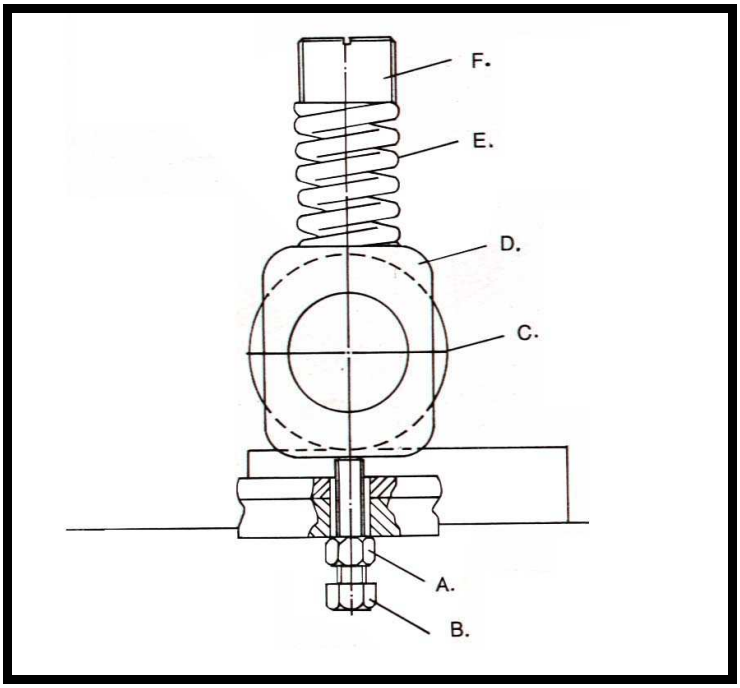


Fig. 16

MAINTENANCE

BEFORE STARTING MAINTENANCE OR LUBRCATION, PLEASE DISCONNECT MACHINE FROM THE POWER SOURCE.

1. Daily Maintenance

Make sure all nuts and bolts are tight and retainer springs are secured. Keep knives sharp. Observe all safety precautions. Care should be taken to prevent dust from embedding on moving parts in the machine.

It is worth to do regular and careful cleaning of machines that can forestall many of the common drawbacks that arise during running, as helping cut maintenance costs.

Clean the machine after the end of shift.

2. Lubrication

Lubricate the lub points as shown in Fig. 17.

Lubrication Guide Of Your Planer

Index	Position	Interval	Type Of Oil
A.	Feed Roller Bushings	Oil daily	SAE-30
B.	Table Life Screws (4)	Frequently	Grease
C.	Table Slide Ways (4)	Frequently	SAE-30

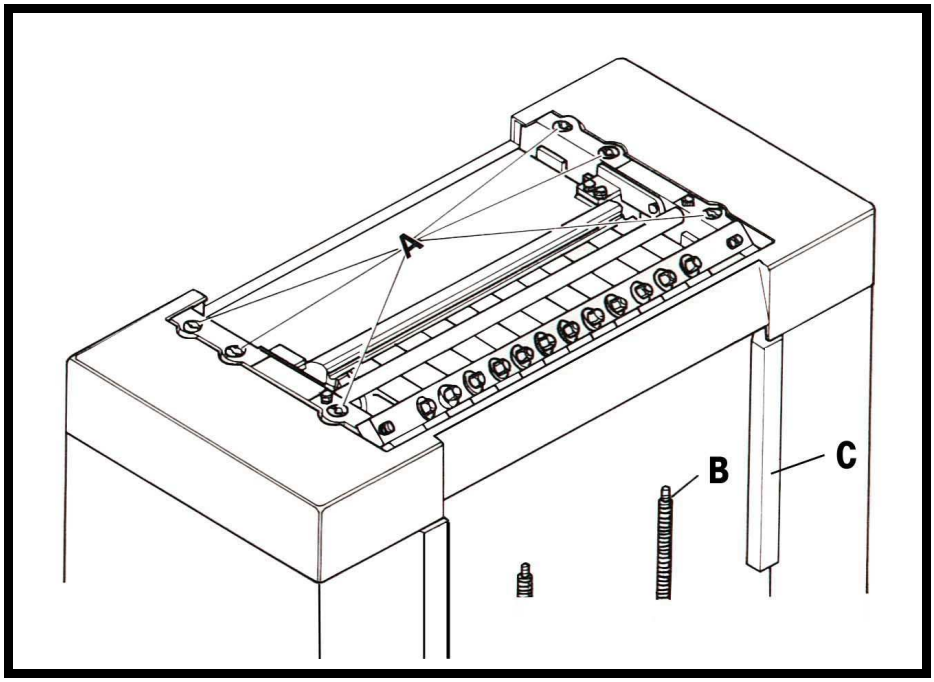


Fig. 17

TROUBLE SHOOTING

System	Possible Causes And Check
1. If clip or snip appears at beginning of stock.	* Pressure bar may be set too low. * Chipbreaker may be set too high. * Upper infeed sectional roller may by set too high. * Table infeed roller may be set too high. * Spring tension may be too light on pressure bar. * Table rollers may be too high.
2. If clip or snip appears on end stock.	* Pressure bar may be set too high. * Table outfeed roller may be set too high. * Upper Outfeed roller may be set too low. * Stock may not be butted. * Grain may be running against knives. * Knives are dull.
3. If knives raise the grain.	* Feed may be too fast. * Moisture content may be too high. * Cut may be too heavy. * Cutting angle may be too large. * Grain may be running against knives. * Knives are dull.
4. If knives raise the grain.	* Feed may be too fast. * Cutting angle may be too large. * Moisture content of stock may be too high * Cut may be too heavy. * Knives need sharpening.
5. If chip marks appear on stock.	* Blower system may not be strong enough. No suction. * Feed may be too fast. * Exhaust pipe may connect with too large on angle to main blower pipe. * Check knife edge.

TROUBLE SHOOTING

Systom	Possible Causes And Check
6. If panels are taper across the width.	* Planer bed out of parallel with cutterhead. * Knives not set even in cutterhead.
7. If undesired glossy finish appears.	* Knives may be dull. * Feed may be too slow.
8. If washboard finish appears.	* Knives may have been driven back into the head. * Machine may be completely out of adjustment. * Planer bed loose and rocking in ways.
9. If revolution mark shows up.	* Knives may be ground poorly. * Knives not set properly or evenly.
10. If lines appear at right angles to the knife marks.	* Knives may have nicked by overgrinding and Taking temper out of steel. * Chip may have wedged between rolls and tables. * Pressure bar may be dragging.
11. If stock twists in machine.	* Pressure bar may be cocked. * Upper outfeed roller may be cocked. * Upper outfeed roller may have uneven spring tension. * Table rollers may be cocked.
12. If machine is noisy, vibrates and pounds.	* Knives may be too dull. * Machine may not be leveled correctly. * Machine may not be on solid foundation. * Pressure bar may be cocked.
13. If stock sticks or hesitates in machine.	* Pressure bar may be set too low. * Table rollers may be set too low. * Feed rollers may not be set low enough. * Cut may be too heavy. * A push board may help stock through machine. * Check moisture content.

TROUBLE SHOOTING

Systom	Possible Causes And Check
14. If motor kicks out.	* Knives may be dull, thus overloading motors. * Pressure bar may be set too low, putting drag on motors. * Motors may be drawing high current because other machiery in the plant in use has pulled down the voltage. * Machine may be out of adjustment. * Table rollers may be set too low. * Too heavy cuts with continued work load.