

INSTRUCTION MANUAL

T-13A Thickener - Bench Mount (240V) 330 x 152mm



W813

HAFCO

WOODMASTER

User Manual

Read and understand this manual before using machine.

13" PLANER

Model Number
T-13A



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INTRODUCTION

This user manual is intended for use by anyone working with this machine. It should be kept available for immediate reference so that all operations can be performed with maximum efficiency and safety. Do not attempt to perform maintenance or operate this machine until you have read and understand the information contained in this manual.

The drawings, illustrations, photographs, and specifications in this user manual represent your machine at time of print. However, changes may be made to your machine or this manual at any time with no obligation to HAFCO Woodmaster.

PRODUCT SPECIFICATIONS

Motor Specifications

Type	Universal	Number of Blades	2
Amps	10	Cutterhead Diameter	50.8 mm
Voltage	240V	Table Size	330 x 236 mm
Phase	Single	Dust Port	63 & 101 mm
Hertz	50		
RPM	23000 ± 10% (No Load)		

Product Dimensions

Height	483 mm
Width	508 mm
Depth	622 mm
Total Net Weight	25 kg

Product Specifications

Feed Rate	26 FPM
Maximum Thickness of Stock	152 mm
Minimum Thickness of Stock	3.4 mm
Maximum Depth of Cut @152.4 mm	3.3 mm
Maximum Depth of Cut @330.2 mm	1.5 mm
Minimum Length of Stock Maximum	178 mm
Planing Width Cutterhead Speed	330 mm
	10000 RPM

Shipping Dimensions

Height	508 mm
Width	558 mm
Depth	406 mm
Gross Weight	27 kg

DEFINITION OF TERMS

Cutterhead – A rotating piece of adjustable blades that removes material from the workpiece.

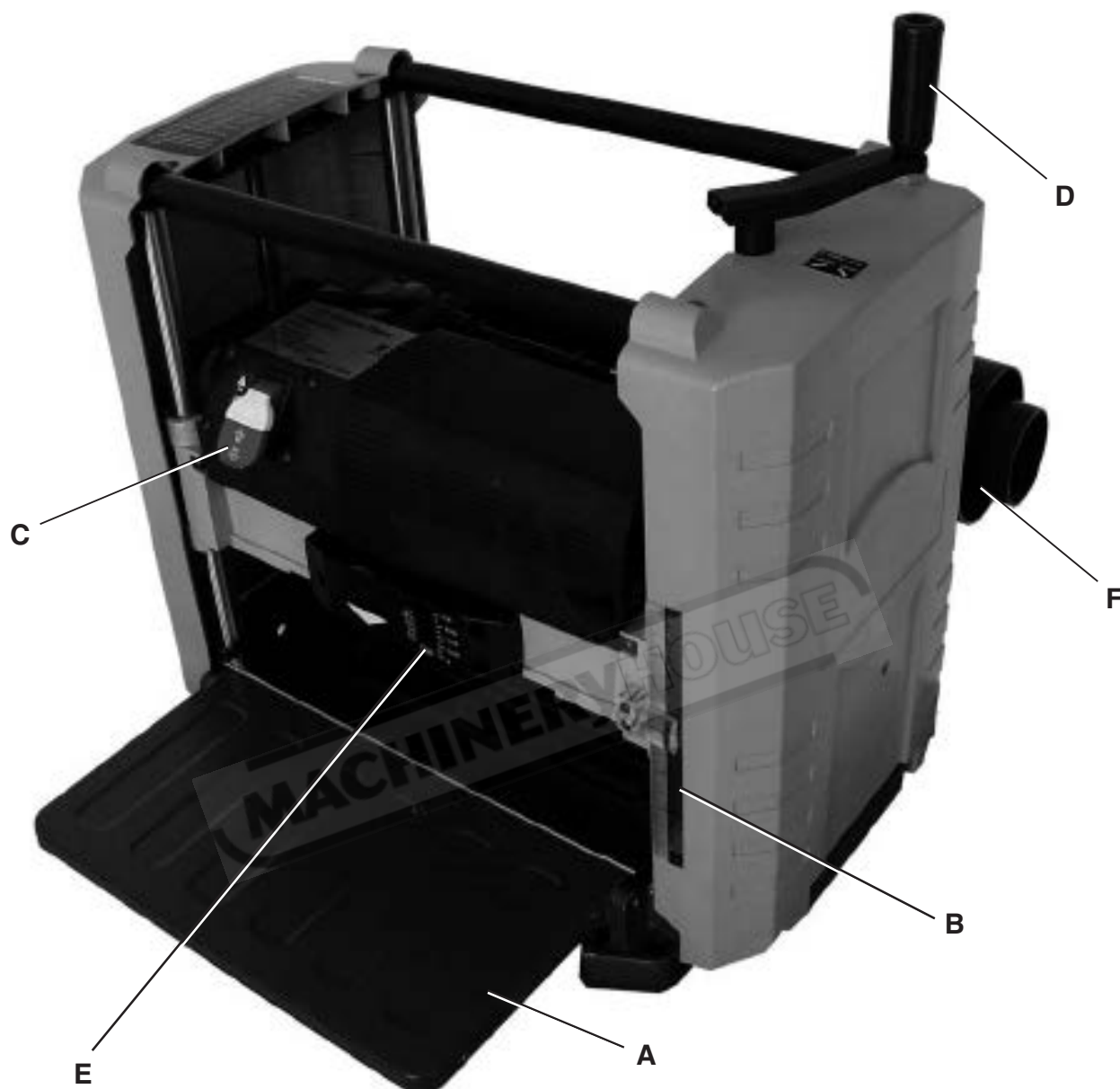
Gum, Pitch, or Resin – A sticky, sap based residue that comes from wood products.

Leading End – The end of the workpiece that is pushed into the planer first.

Snipe – Gouging or depression of the board at the ends. Snipe can occur at either the leading end of the board going into the planer, or at the end of the board as it exits the planer.

Workpiece – The piece of stock on which the work is being done.

FEATURE IDENTIFICATION



- A. Infeed Table
- B. Thickness Scale
- C. Power Switch
- D. Raise/Lower Handle
- E. Depth-of-Cut Indicator
- F. Dust Port

GENERAL SAFETY

WARNING

TO AVOID serious injury and damage to the machine, read and follow all Safety and Operating Instructions before assembling and operating this machine.

This manual is not totally comprehensive. It does not and can not convey every possible safety and operational problem which may arise while using this machine. The manual will cover many of the basic and specific safety procedures needed in an industrial environment.

Below is a list of symbols that are used to attract your attention to possible dangerous conditions.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

WARNING

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

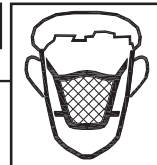
CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING



Exposure to the dust created by power sanding, sawing, grinding, drilling and other construction activities may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust.

Some examples of these chemicals are:

K Lead from lead-based paints.

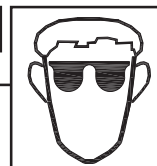
K Crystalline silica from bricks, cement and other masonry products.

K Arsenic and chromium from chemically-treated lumber.

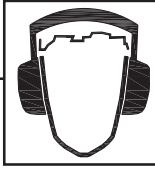
Always operate tool in well ventilated area and provide for proper dust removal. Use a dust collection system along with an air filtration system whenever possible. Always use properly fitting approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

1. To avoid serious injury and damage to the machine, read the entire User Manual before assembly and operation of this machine.

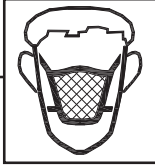
WARNING



2. **ALWAYS** wear eye protection. Any machine can throw debris into the eyes during operations, which could cause severe and permanent eye damage. Everyday eyeglasses are **NOT** safety glasses. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools.

⚠ WARNING

3. **ALWAYS** wear hearing protection. Plain cotton is not an acceptable protective device. Hearing equipment should comply with ANSI S3.19 Standards.

⚠ WARNING

4. **ALWAYS** wear an approved dust mask to prevent inhaling dangerous dust or air-borne particles.
5. **ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an area that has slippery floor surfaces from debris, grease, and wax.
6. **ALWAYS** unplug the machine from the electrical receptacle when making adjustments, changing parts or performing any maintenance.
7. **AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.

⚠ WARNING

8. **AVOID** a dangerous working environment. **DO NOT** use electrical tools in a damp environment or expose them to rain or moisture.

⚠ WARNING

9. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.
10. **DO NOT** use electrical tools in the presence of flammable liquids or gasses.

11. **DO NOT FORCE** the machine to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the machine was intended.
12. **DO NOT** stand on a machine. Serious injury could result if it tips over or you accidentally contact any moving part.
13. **DO NOT** store anything above or near the machine.
14. **DO NOT** operate any machine or tool if under the influence of drugs, alcohol, or medication.
15. **EACH AND EVERY** time, check for damaged parts prior to using any machine. Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breakage of all moving parts. Any guard or other part that is damaged should be immediately repaired or replaced.
16. Ground all machines. If any machine is supplied with a 3-prong plug, it must be plugged into a 3-contact electrical receptacle. The third prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the third prong.
17. Keep visitors and children away from any machine. **DO NOT** permit people to be in the immediate work area, especially when the machine is operating.
18. **KEEP** protective guards in place and in working order.
19. **MAINTAIN** your balance. **DO NOT** extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.
20. **MAINTAIN** all machines with care. **ALWAYS KEEP** machine clean and in good working order. **KEEP** all blades and tool bits sharp.
21. **NEVER** leave a machine running, unattended. Turn the power switch to the OFF position. **DO NOT** leave the machine until it has come to a complete stop.
22. **REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning the machine ON.
23. **SECURE** all work. When it is possible, use clamps or jigs to secure the workpiece. This is safer than attempting to hold the workpiece with your hands.
24. **STAY ALERT**, watch what you are doing, and use common sense when operating any machine. **DO NOT** operate any machine tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

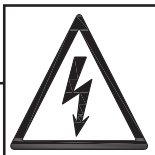
25. **USE ONLY** recommended accessories. Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the machine. If in doubt, **DO NOT** use it.
26. **THE USE** of extension cords is not recommended for 240V equipment. It is better to arrange the placement of your equipment and the installed wiring to eliminate the need for an extension cord.
27. Wear proper clothing, **DO NOT** wear loose clothing, gloves, neckties, or jewellery. These items can get caught in the machine during operations and pull the operator into the moving parts. Users must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.
28. **SAVE** these instructions and refer to them frequently and use them to instruct other users.



PRODUCT SAFETY

1. Serious personal injury may occur if normal safety precautions are overlooked or ignored. Accidents are frequently caused by lack of familiarity or failure to pay attention. Obtain advice from supervisor, instructor, or another qualified individual who is familiar with this machine and its operations.
2. Every work area is different. Always consider safety first, as it applies to your work area. Use this machine with respect and caution. Failure to do so could result in serious personal injury and damage to the machine.
3. Prevent electrical shock. All electrical connections and wiring should be made by qualified personnel only.

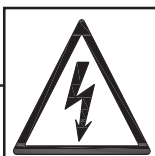
WARNING



4. **TO REDUCE** the risk of electrical shock. **DO NOT** use this machine outdoors. **DO NOT** expose to rain. Store indoors in a dry area.

5. **STOP** using this machine, if at any time you experience difficulties in performing any operation. Contact your supervisor, instructor or machine service center immediately.
6. Safety decals are on this machine to warn and direct you to how to protect yourself or visitors from personal injury. These decals **MUST** be maintained so that they are legible. **REPLACE** decals that are not legible.
7. **DO NOT** leave the unit plugged into the electrical outlet. Unplug the unit from the outlet when not in use and before servicing, performing maintenance tasks, or cleaning.
8. **ALWAYS** turn the power switch "OFF" before unplugging the jointer.

WARNING

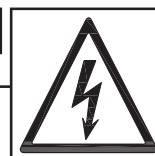


9. **DO NOT** handle the plug or jointer with wet hands.

10. **USE** only accessories as described in this manual.
11. **DO NOT** pull the jointer by the power cord. **NEVER** allow the power cord to come in contact with sharp edges, hot surfaces, oil or grease.

12. **DO NOT** unplug the jointer by pulling on the power cord. **ALWAYS** grasp the plug, not the cord.
13. **REPLACE** a damaged cord immediately. **DO NOT** use a damaged cord or plug. If the jointer is not operating properly, or has been damaged, left outdoors or has been in contact with water.
14. **DO NOT** use the jointer as a toy. **DO NOT** use near or around children.
15. **ENSURE** that the machine sits firmly before using. If the machine wobbles or is unstable, correct the problem by using shims or blocks prior to operation.
16. This machine is designed to process wood **ONLY**.

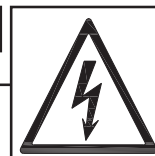
WARNING



17. **NEVER** position fingers or thumbs near the infeed roller.

18. Long pieces of stock should **ALWAYS** be supported with some type of fixture.
19. **DO NOT** operate jointer with dull or damaged blades.
20. **MAKE CERTAIN** that the jointer is properly adjusted prior to use.
21. **DO NOT** try and remove excessive amounts of wood in one single pass.
22. **INSPECT** all stock before planing, ensuring that there are no foreign objects embedded in the wood, loose knots, or knots that may become loose during operation.

WARNING



23. **DO NOT** attempt to remove jams until power is disconnected and all moving parts have come to a complete stop.

24. **MAKE SURE** that there is adequate operating space on both the infeed and outfeed sides of the jointer before operating.
25. **DO NOT** attempt to plane wood that is less than 7" long or less than 1/8-inch thick.

ELECTRICAL REQUIREMENTS

TO PREVENT electrical shock. All electrical connections and wiring should be made by qualified personnel only.

TO REDUCE the risk of electrical shock, **DO NOT** use machine outdoors. **DO NOT** expose to rain or moisture. Store indoors in a dry area.

DO NOT connect the machine to the power source before you have completed the set up process.

DO NOT connect the machine to the power source until instructed to do so.

The motors in these machines are designed to run on 240 volts.

GROUNDING INSTRUCTIONS

⚠ WARNING



This machine **MUST BE GROUNDED** while in use to protect the operator from electric shock.

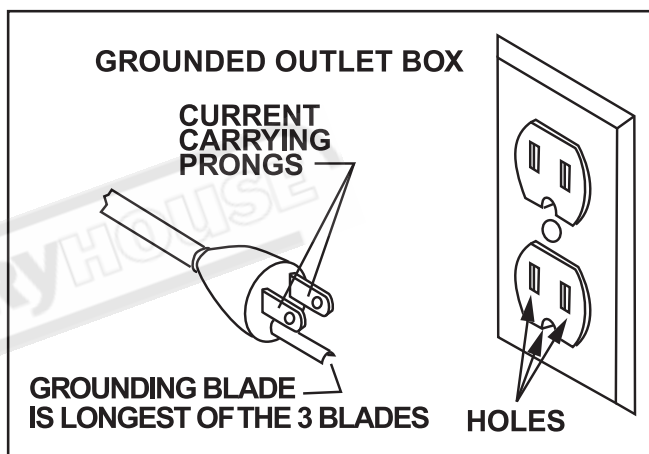
In the event of a malfunction or breakdown, **GROUNDING** provides the path of least resistance for electric current and reduces the risk of electric shock. The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

If a plug is provided with your machine **DO NOT** modify the plug. If it will not fit your electrical receptacle, have a qualified electrician install the proper connections to meet all electrical codes local and state.

IMPROPER ELECTRICAL CONNECTION of the equipment-grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment-grounding conductor. **DO NOT** connect the equipment-grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

Check with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

Fig. A



PLUGS / RECEPTACLES

WARNING



K Electrocution or fire could result if this machine is not grounded properly or if the electrical configuration does not comply with local and state electrical codes.

K **MAKE CERTAIN** the machine is disconnected from power source before starting any electrical work.

K **MAKE SURE** the circuit breaker does not exceed the rating of the plug and receptacle.

The motor supplied with your machine is a 240 volt, 50 hertz, single phase motor. Never connect the green or ground wire to a live terminal.

A machine with a 240 volt plug should only be connected to an outlet having the same configuration as the plug.

EXTENSION CORDS

WARNING



To reduce the risk of fire or electrical shock, use the proper gauge of extension cord. When using an extension cord, be sure to use one heavy enough to carry the current your machine will draw.

The smaller the gauge-number, the larger the diameter of the extension cord is. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.

CAUTION

USE ONLY a 3-wire extension cord that has a 3-prong grounding plug and a 3-pole receptacle that accepts the machine's plug.

Make certain the extension cord is properly sized, and in good electrical condition. Always replace a worn or damaged extension cord immediately or have it repaired by a qualified person before using it.

Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

UNPACKING & INVENTORY

Check shipping carton and machine for damage before unpacking. Carefully remove packaging materials, parts and machine from shipping carton. Always check for and remove protective shipping materials around motors and moving parts. Lay out all parts on a clean work surface.

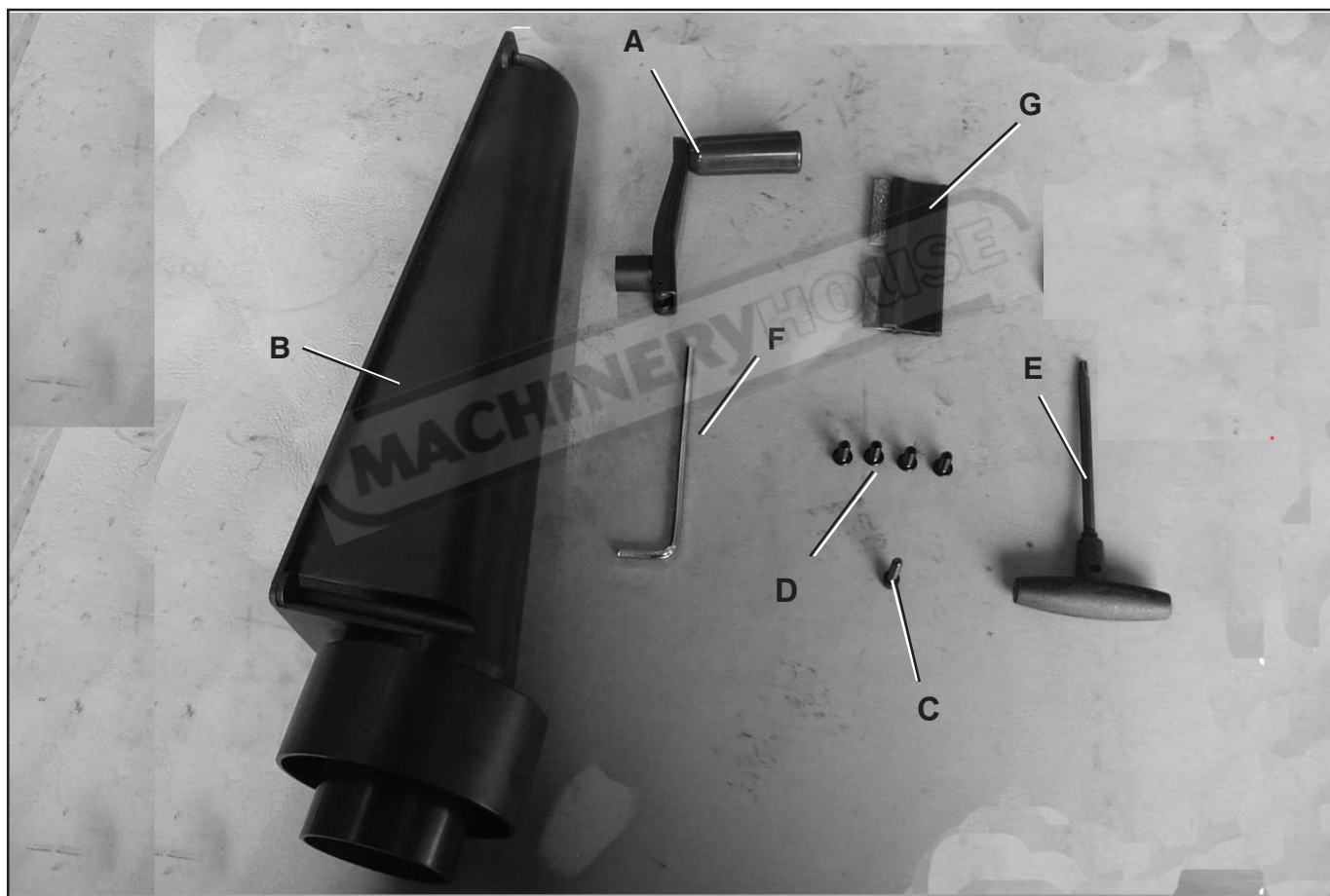
Remove any protective materials and coatings from all of the parts and the planer. The protective coatings can be removed by spraying WD-40 on them and wiping it off with a soft cloth. This may need to be redone several times before all of the protective coatings are removed completely.

After cleaning, apply a good quality paste wax to any unpainted surfaces. Make sure to buff out the wax before assembly.

Compare the items to inventory figures; verify that all items are accounted for before discarding the shipping box.

⚠ WARNING

If any parts are missing, do not attempt to plug in the power cord and turn "ON" the machine. The machine should only be turned "ON" after all the parts have been obtained and installed correctly.



- | | |
|-----------------------|----------------------------|
| A. Handle | D. Hex Soc head Cap Screw |
| B. Dust Port | E. Torx Wrench |
| C. Hex Soc Head Screw | F. Hex Wrench |
| | G. Knife Removal Tool Assy |

ASSEMBLY

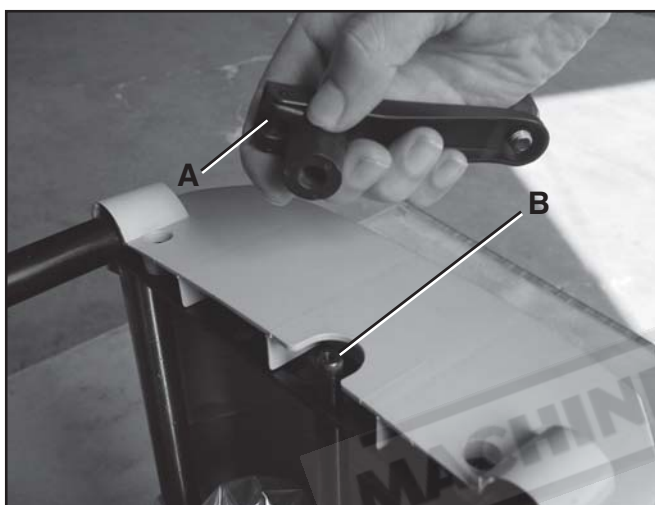
ATTACHING DEPTH ADJUSTMENT HANDLE

⚠ WARNING

MAKE CERTAIN THAT THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

1. Attach the depth adjustment handle (A) to the shaft (B) and fasten in place with 1 Hex Soc Head screw. Tighten screw using supplied hex wrench. **SEE FIG 1.**

Fig. 1



ATTACHING DUST PORT

The Dust Port is to be used when the planer is to be connected to a dust collector. It has a 4" port on it to accommodate most dust collection systems.

To install:

1. Install the dust port in the rear of the planer by tightening the soc head cap screws. (4) supplied. **SEE FIG 2.**

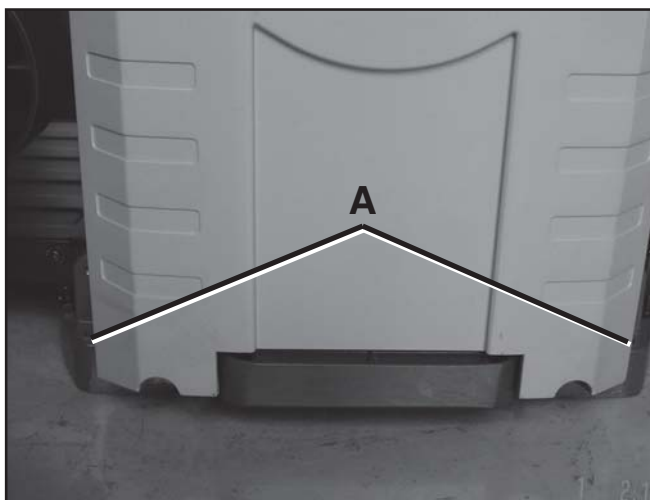
Fig. 2



SECURING PLANER TO A TABLE OR WORKBENCH

During operation, if there is any tendency for the planer to tip over, slide or walk, the planer **MUST** be secured to a supporting surface such as a workbench or table. Four holes are provided (2 are shown at (A)) to securely mount the planer. The surface you are mounting the planer to should be perfectly flat. **SEE FIG 3.**

Fig. 3



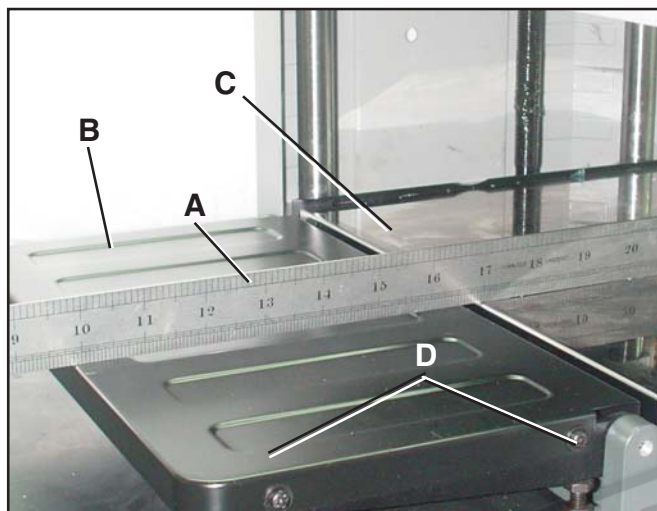
ADJUSTMENTS

LEVELING EXTENSION TABLES

The extension tables must be level with the planer table. To check the extension tables and adjust if necessary:

1. Lay a straight edge (A) on the planer table (C) with one end of the straight edge over the infeed table (B). **SEE FIG 4.**

Fig. 4



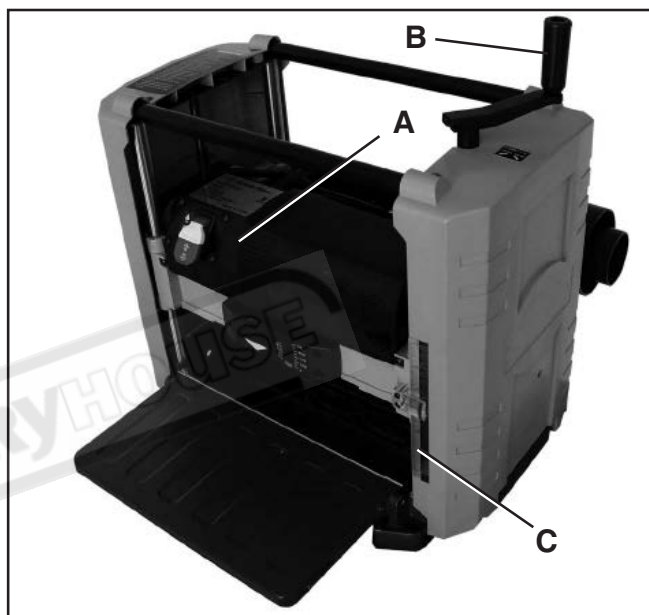
2. Check to make sure that the infeed table is level with the planer table.
3. If an adjustment is necessary, loosen and adjust Pan Head Screws (2) (D) on each side of the table until the infeed table is level with the planer table. This will adjust the outer edge of the infeed table.
4. Repeat this process for adjusting the outfeed table.

RAISING AND LOWERING HEAD ASSEMBLY

The head assembly consists of the cutterhead and knives, feed rollers, cutterhead guard, and the motor. Raising and lowering of the head assembly controls the depth of cut on the planer. To adjust:

1. To raise the head assembly (A), turn the adjusting handle (B) clockwise. **SEE FIG 5.**

Fig. 5



2. To lower the head assembly, turn the adjusting handle counterclockwise.

NOTE: One revolution of the handle will move the cutterhead up or down approximately 1/16". You can confirm this by referencing the scale (C) on the right side of the planer.

ADJUSTING / REPLACING KNIVES

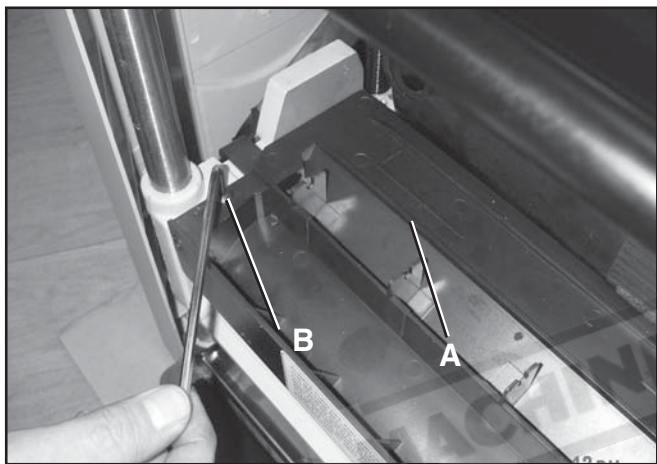
The knives supplied with the planer have an edge on both sides of the blade enabling you to flip the knives over when one edge becomes dull or pitted. To change:

⚠ WARNING

MAKE CERTAIN THAT THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

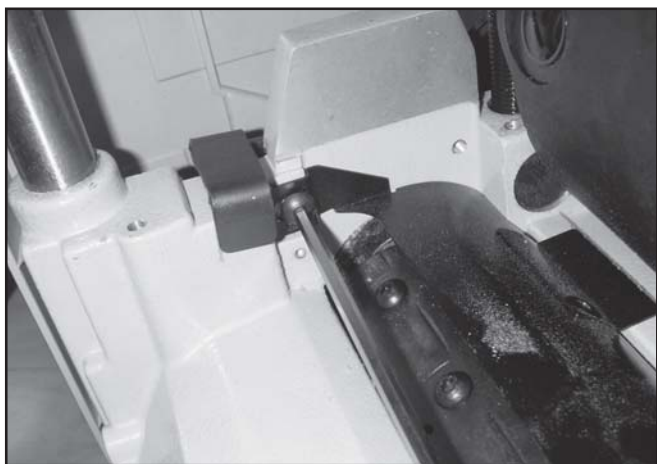
1. Remove the Dust Chute or Dust Port. Refer back to the section labeled ATTACHING DUST PORT OR DUST CHUTE in the ASSEMBLY section for information on removing the Chute or Port.
2. Remove the cutterhead guard (A) by removing the Hex Soc Head Cap Screws(B). **SEE FIG 6.**

Fig. 6



3. Hold the Cutterhead lock and rotate the cutterhead with the supplied Hex wrench. Rotate it to the position where the sharp edge of the blade is not visible from your sight angle. **SEE FIG 7.**

Fig. 7



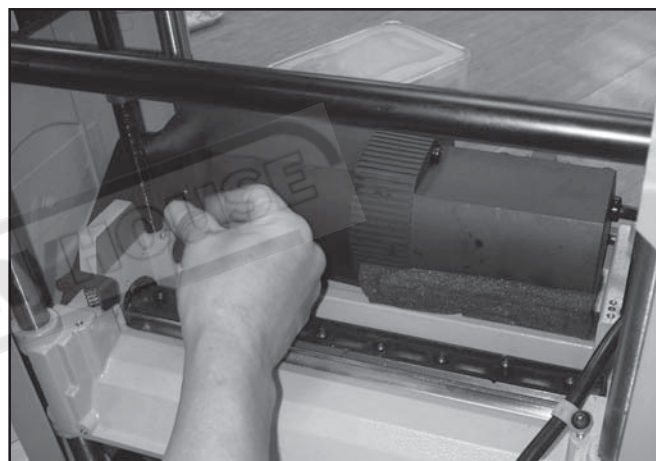
4. Loosen the screw on both sides and remove the deflector. Use the elevating handle to low down the upper frame to 2".

Fig. 8



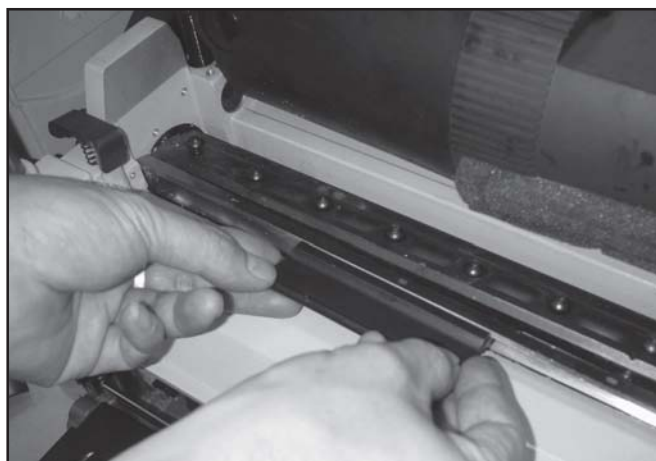
5. Use the supplied Hex wrench, insert it into the side cover hole. Rotate it to the lock position. **SEE FIG 8.**

Fig. 9



6. Using the supplied hex wrench, unscrew the eight screws just enough so that the locking bar separates from the knife, allowing the knife to be removed. Do not completely remove the screws. Insert the magnetic knife removal tool underneath the center of the locking bar. **SEE FIG 9 & 10.**

Fig. 10



7. Lift the tool up until the knife separates from the pins and remove the knife.
8. Rotate the knife 180 degrees so that the edge of the knife that was facing you is now facing away from you and reinsert the knife. If you have already used both edges of the knife, replace the knife at this time
9. Place the magnetic knife removal tool on top of the knife. Make sure that the tool is centered on the knife.
10. Place the knife on the pins in the cutterhead and remove the knife removal tool.

NOTE: When placing the knives on the pins, you will notice that there is some side to side movement available in the knife. This is normal as it allows for repositioning of the knives in case one of the knives gets a nick in it.

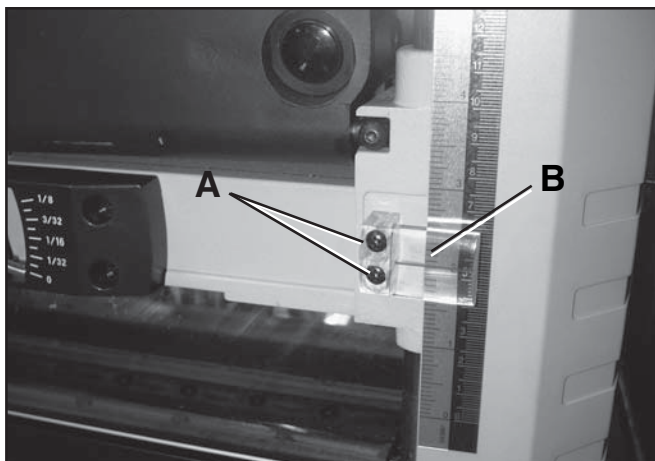
11. Retighten the eight screws loosened.
12. Repeat this process for the remaining knife.

NOTE: In order to rotate the cutterhead, you will have to depress the red lever. This will unlock the cutterhead allowing you to rotate it to the next knife to be changed.

THICKNESS SCALE ADJUSTMENT

The thickness scale, located on the right of the planer, shows the thickness of the finished workpiece. To make sure the scale is set properly, run a piece of wood through the planer and measure the thickness of the wood. If the scale is out of alignment, loosen the two round head screws (A) holding the scale indicator (B) and adjust the thickness indicator to the correct setting. Make sure to re-tighten the two screws once the adjustment is complete. **SEE FIG. 11**

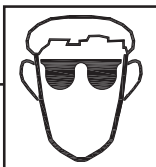
Fig. 11



OPERATIONS

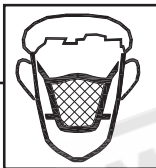
NOTICE: This operations section was designed to give instructions on the basic operations of this planer. However, it is in no way comprehensive of every planer operation. It is strongly recommended that you read books, trade magazines, or get formal training to maximize the potential of your planer while minimizing the risks.

⚠ WARNING



ALWAYS wear eye protection. Any machine can throw debris into the eyes during operations, which could cause severe and permanent eye damage. Everyday eyeglasses are **NOT** safety glasses. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools.

⚠ WARNING



ALWAYS wear an approved dust mask to prevent inhaling dangerous dust or airborne particles.

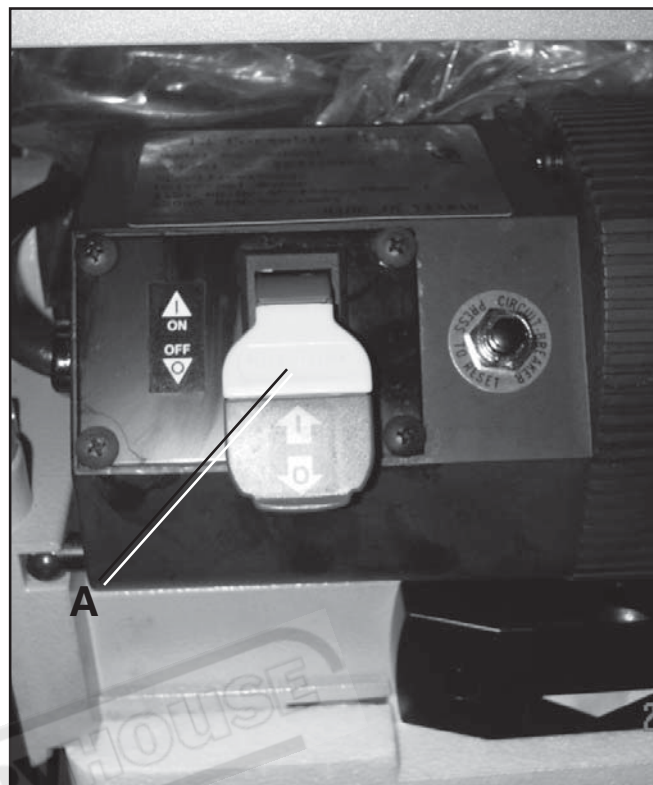
⚠ WARNING

This planer is designed to process wood **ONLY**.

POWER SWITCH

The planer is turned on by flipping the switch into the up position and it is turned off by flipping the switch in the down position. This planer is also equipped with a special lockout toggle switch that prevents unauthorized use. To prevent unauthorized use of the planer, simply pull out the yellow key (A) located on the face of the switch. **SEE FIG 12.**

Fig. 12

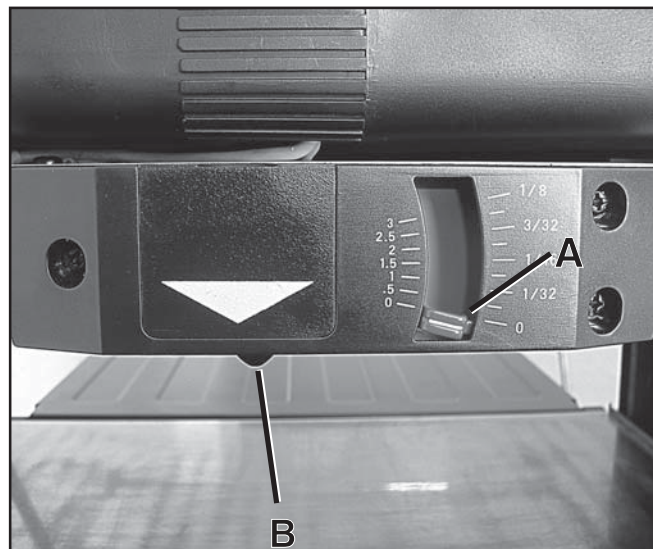


DEPTH OF CUT SCALE

The Depth Of Cut Scale, located on the front of the machine, is a convenient way to quickly determine how much material is being planed off in one pass.

1. With the machine OFF, insert your workpiece just under the depth of cut scale (A). **SEE FIG 13**

Fig. 13



2. Crank the raising / lowering handle until the button (B) comes in contact with the workpiece.
3. As you rotate the raising / lowering handle, the needle on the depth of cut scale will move showing you how much material will be removed in that pass.

GETTING PREPARED

It is always a good idea to use a piece of scrap wood for your first planing attempt. Also, before each use of the planer, make it a habit of checking for loose fasteners, fittings or hardware. Turn the planer ON and allow it to reach full speed. Pay close attention to any excessively loud noises that may be coming from the planer or any excessive vibration. If either occurs, shut down the planer immediately checking again for loose hardware. Go through the ASSEMBLY and ADJUSTMENTS sections again if necessary.



BASIC OPERATION

WARNING

To avoid serious personal injury, **NEVER** stand directly in line with the front or rear of the planer. If an object is thrown from the planer, it will travel in this direction.

1. Stand to either the left or right side of the planer.
2. Flip the switch to the ON position.
3. Lift the workpiece onto the infeed table by grabbing the edges of the board at the middle of the length.

NOTE: For longer pieces, be sure to use additional supports or stands

4. Push slightly on the board and allow the feed rollers to pull the board through the planer. Once the feed rollers start to pull the workpiece through, let go of the board and allow the rollers to do their job. **DO NOT** push or pull on the workpiece once the rollers have engaged.
5. Move to one side of the rear of the planer and receive the planed workpiece by grabbing the edges of the wood, just like you did when feeding the workpiece in.
6. It normally takes several passes of varying depths to achieve a smooth finish, so repeat this process as many times as necessary. Remember the less you take off in a pass, the smoother the finish will be.

THICKNESS PLANING

Thickness planing sizes the workpiece to a desired thickness, while at the same time creating a smooth and level surface. The thickness of each cut will depend on the type of wood, width of the workpiece, and condition of the workpiece (i.e. dryness, grain composition, straightness, etc). Always make thin test cuts on a scrap piece of wood prior to performing cuts on the workpiece.

GENERAL TIPS AND GUIDELINES

K Thickness planing always works best when at least one side of the workpiece has a flat surface. If both sides of the workpiece are rough, feed one face of the board over a jointer until the entire surface is flat

K **ALWAYS** plane both sides of the workpiece to reach the desired thickness

- **DO NOT** plane workpieces less than 1/8-in thick, less than 3/4-in wide, or shorter than 7-in long

K It is not recommended to use the planer at it's maximum depth of cut (1/16") and at it's full width (13"). Continuous use at the maximum settings will shorten the life of the motor.

K Light cuts create a smoother finish than heavier cuts

K If a smooth cut is not obtained, try reversing the board for proper grain orientation.

AVOIDING SNIPE

Snipe, gouging or depression of the board at the ends, can occur when the board is not properly supported. For workpieces longer than 4 ft, greater care must be taken to reduce the problem because the additional length of the workpiece translates into more unsupported weight pulling down on the end of the board. This unsupported weight will work against keeping the stock flat. Make sure to use supports or stands whenever long pieces are being planed to avoid this problem. Since snipe occurs at the end of the boards, it is good practice to start with a workpiece that is slightly longer than what you need so that you can simply cut

MAINTENANCE

Your planer should provide you with a long time of service provided you take the time to perform the following maintenance operations.

A quality paste wax should be applied to the planing table surface to ease the movement of the workpiece across it. Be sure to buff off all excess wax so that it does not get absorbed into the wood when planing.

Having clean feed rollers is essential for optimal results. Check feed rollers after each use for buildup of pitch, gum, or resin and be sure to clean off with a non flammable tar and pitch remover

Any moving parts should be cleaned regularly with a penetrating oil and lubricated with a light coating of medium weight machine oil

GEAR LUBRICATION

The gears in the gear box should be lubricated periodically.

⚠ WARNING

MAKE CERTAIN THAT THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

1. Remove the socket head cap screw (A) located on the top of the machine side panel. You will also need to remove the pan head screw with washer (B), located in the same position on the rear of the planer. **SEE FIG 14 & 15.**

Fig. 14

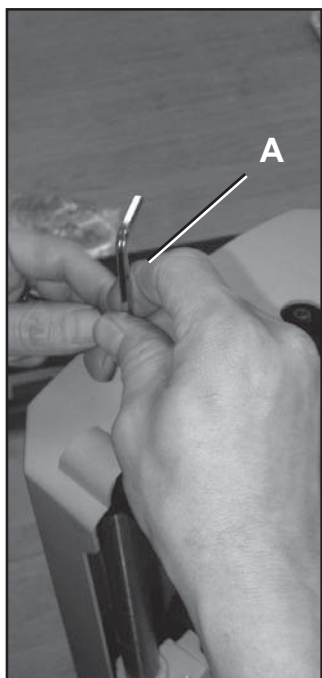
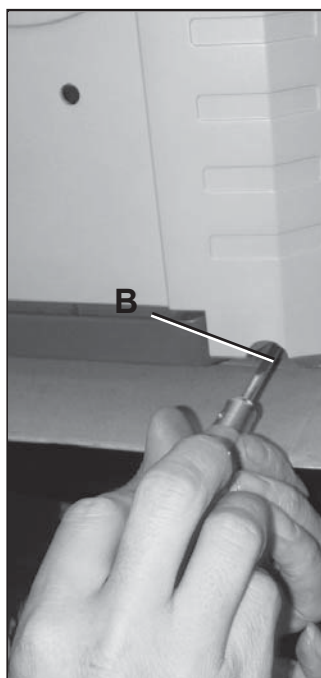
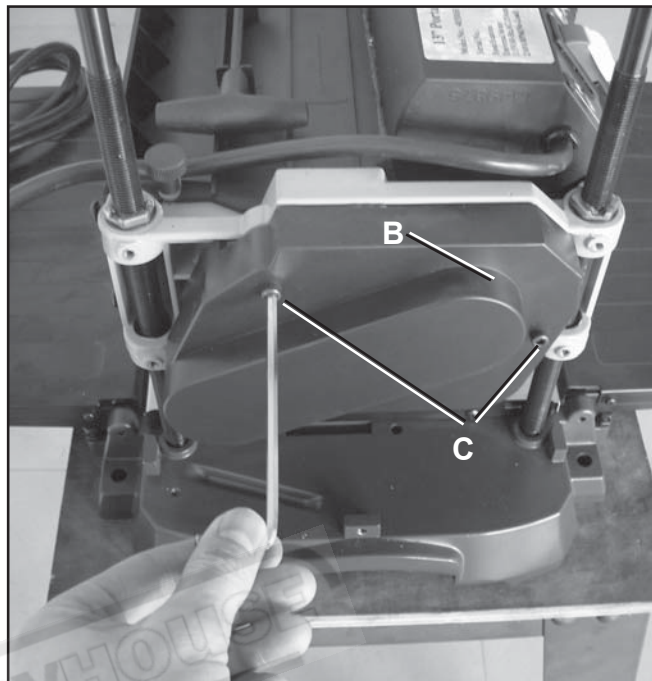


Fig. 15



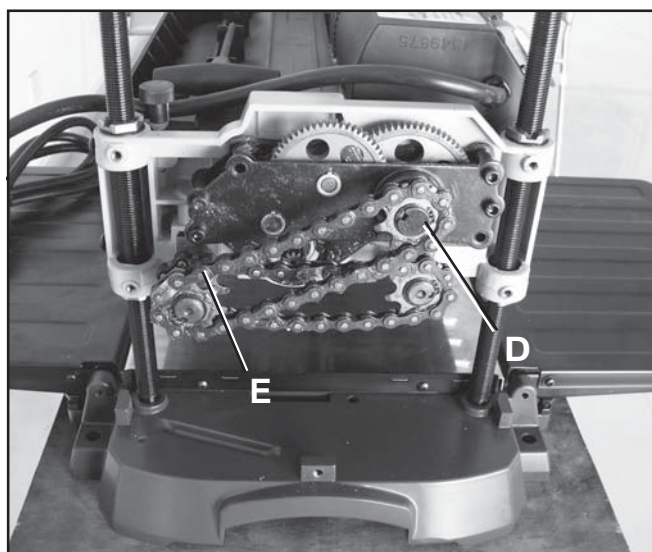
2. Remove the side panel to expose the gear box cover (B). **SEE FIG 16.**

Fig. 16



3. Remove the two screws (C) in order to remove the gear box cover and access the gear box
4. Place a light coat of multi purpose grease on the teeth of the gears (D) and a light coat of spray lubricant on the chain (E). Do not over-lubricate. **SEE FIG 17.**

Fig. 17



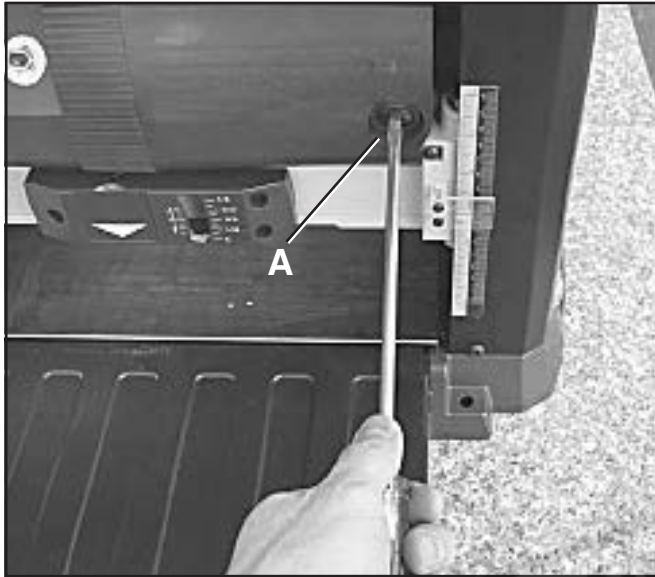
5. Replace all covers and guards that you removed once lubrication is complete.

BRUSH REPLACEMENT

Brush life will vary depending on the load placed on the motor. The brushes should be inspected every 10-15 hours of use. To inspect

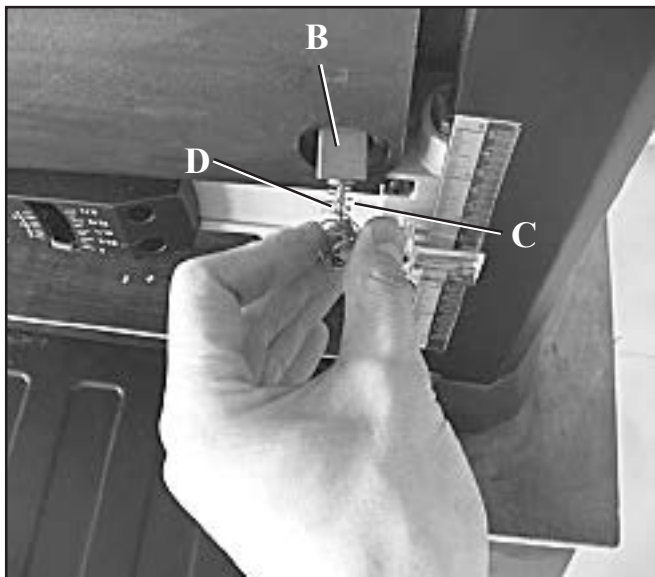
1. Remove the Brush Holders, one of which is shown at (A). The other is located in the same position on the rear of the motor assembly. The Brush Holder can be removed using a flat blade screwdriver. **SEE FIG 18.**

Fig. 18



2. Once the brush has been removed, inspect the carbon (B), the spring (C), and the wire (D). **SEE FIG 19.**

Fig. 19



3. If the carbon of either brush is worn down to 3/16" or less, both brushes should be replaced. Also if the spring or wire are burned or damaged in any way, both brushes should be replaced.

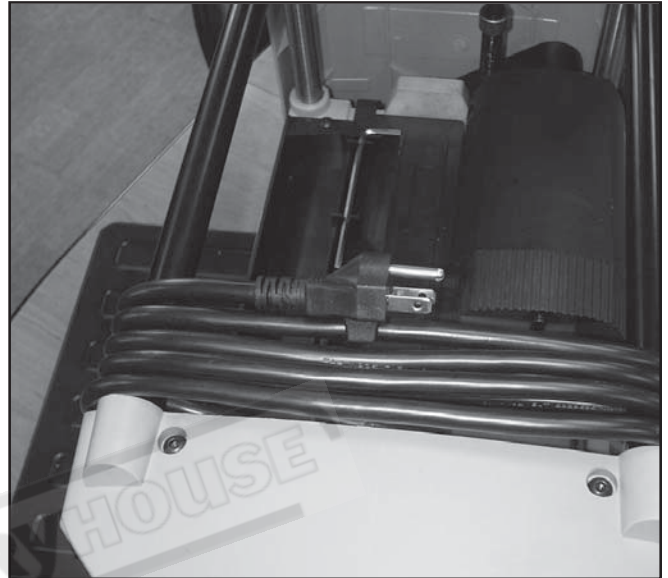
BLADE REPLACEMENT

For information on replacing blades refer to the section labeled ADJUSTING / REPLACING KNIVES in the ADJUSTMENT section of this manual.

ORGANIZING POWER CORD

Power cord can be organized by circulate on the top two stock rollers. Clip the plug to the cord. **SEE FIG. 20**

Fig. 20



TROUBLESHOOTING GUIDE

Motor and Machine Operation

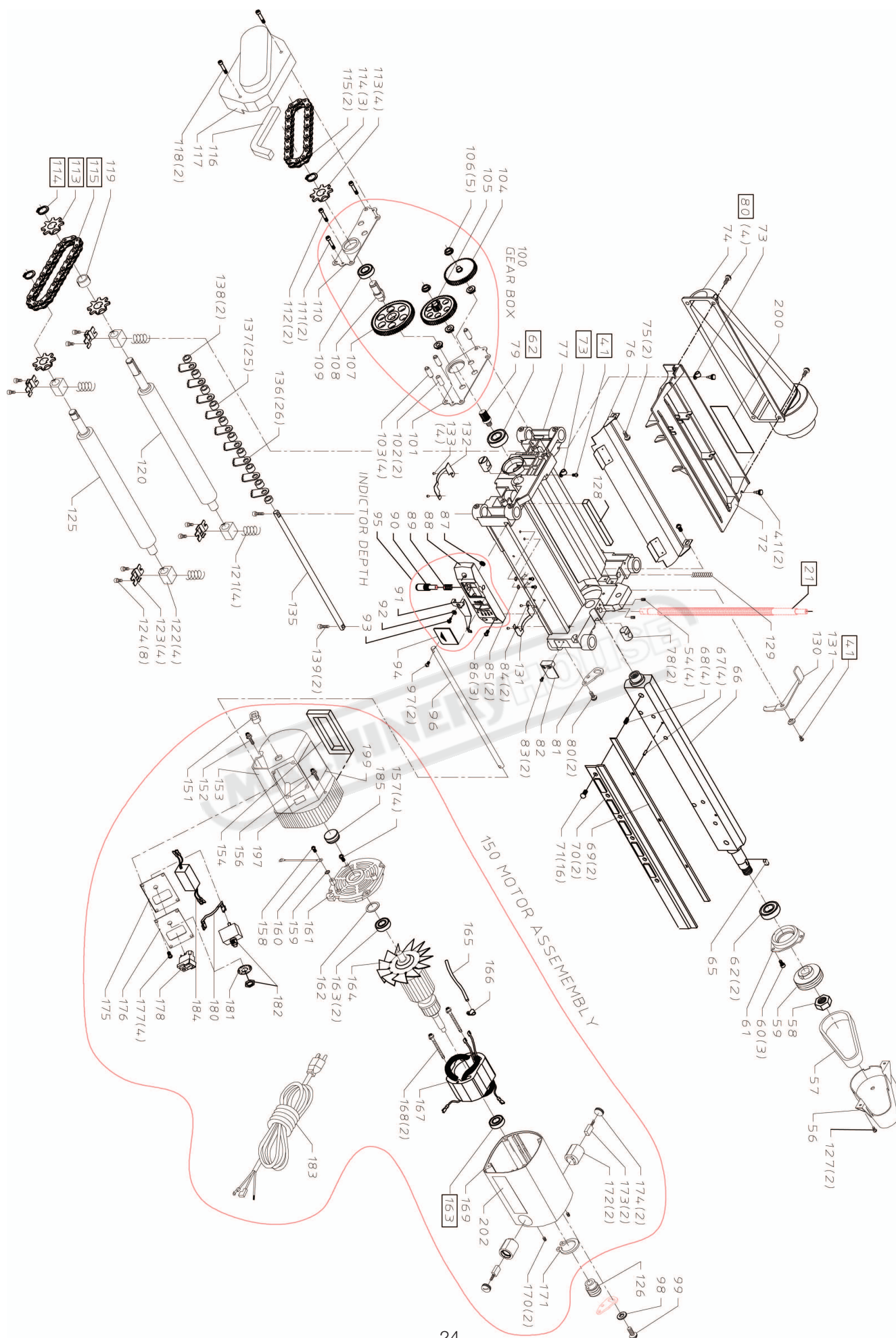
PROBLEM	LIKELY CAUSE(S)	SOLUTION
Snipe (depressions at end of workpiece)	Dull cutter blades. Infeed or outfeed tables out of adjustment.	Replace or turn cutter blades. Readjust tables.
Torn grain.	Too deep a blade setting. Workpiece being fed against grain. Dull cutter blades.	Reduce depth of cut. Feed other end of board first. Replace or turn cutter blades.
Fuzzy/rough grain.	High wood moisture content. Dull cutter blades. Too deep a blade setting. Incorrect feeding speed.	Dry wood before planing. Replace or turn cutter blades. Reduce depth of cut. Use slower feed rate.
Board thickness does not match depth scale indicator.	Depth scale incorrectly set.	Adjust depth scale.
Will not start.	Not plugged in. Blown circuit. Lockout key removed.	Check power source. Replace fuse, reset breaker, or call electrician. Replace lockout key.
Interrupted operation.	Unit overloaded. Circuit overloaded.	Reduce load. Operate on circuit separate from other appliances or motors or connect to circuit with adequate amp rating.

◆ NOTES ◆



This diagram is an exploded view of a mechanical assembly, likely a piece of industrial equipment. It shows various components and their assembly relationships, indicated by dashed lines. The parts are numbered as follows:

- 1: A long, thin rod or shaft.
- 2: A small cylindrical component.
- 3: A small cylindrical component.
- 4: A small cylindrical component.
- 5: A small cylindrical component.
- 6: A small cylindrical component.
- 7: A small cylindrical component.
- 8: A small cylindrical component.
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- 44: A small cylindrical component.
- 45: A small cylindrical component.
- 46: A small cylindrical component.
- 47: A small cylindrical component.
- 48: A small cylindrical component.
- 49: A small cylindrical component.
- 50: A small cylindrical component.
- 51: A small cylindrical component.
- 52: A small cylindrical component.



PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
1	HANDLE ASSEMBLY	1	58	M16xP2.0 L.H. HEX NUT	1
2	M5xP0.8x20L HEX SOC HD SCR	1	59	CUTTERHEAD DRIVE PULLEY	1
3	SPINDLE LEVER KNUCKLE	1	60	M5xP0.8x12L HEX SOC HD SCR	3
4	HAND KNOB	1	61	CUTTERHEAD BEARING CUP	1
5	SCREW	1	62	CUTTERHEAD BEARING (6203zz)	2
6	PLATE	1	65	5x5x12mm KEY	1
7	SPRING PIN	1	66	CUTTERHEAD	1
8	M6xP1.0 SPECIAL HEX SOC HD CAP SCR	4	67	CUTTERHEAD PIN	4
9	CONNECTION TUBE	2	68	SPRING	4
10	CONNECTION PLATE	2	69	KNIVES	2
11	SPACER	1	70	KNIVES LOCKING BAR	2
12	M5xP0.8x5L NYLOCK SCR SOC SET CUP PT	1	71	M6xP1.0x16L KNIVES TORX SCREW	16
13	M6xP1.0x10L HEX SOC HD CAP SCR	4	72	DUST CHUTE	1
14	COLUMN ASSY	4	73	POWER CORD CLAMP	2
15	RIGHT SIDE COVER	1	74	ADAPTER	1
16	SCALE	1	75	M6xP1.0x10L HEX SOC HD CAP SCR	2
17	M5xP0.8x12L PAN HD SCR W/WASH	5	76	DEFLECTOR	1
18	COLUMN PLUG I	4	77	UPPER FRAME	1
19	COLUMN	4	78	ELEVATION NUT	2
20	COLUMN PLUG II	4	79	CUTTERHEAD PINION GEAR	1
21	HEIGHT ADJ SPINDLE	1	80	M6xP1.0x12L HEX SOC HD CAP SCR	6
22	M4xP0.7x10L PAN HD SCR	4	81	MOTOR MTG PLATE	1
23	BASE GUIDE RAIL RIGHT	1	82	CURSOR	1
24	M6xP1.0x20L HEX HD SCREW	4	83	M3xP0.5x20L RUND HD SCR	2
25	M6xP1.0 HEX NUT	4	84	M5xP0.8x8L PAN HD SCR L/WASH	2
26	BASE	1	85	EXT TOOTH WASHER	2
27	SPRING WASHER	4	86	M4xP0.7x12L PAN HD SCR	3
28	M10xP1.5x40L HEX SOC HD SCR	4	87	SPECIAL NUT	1
29	INFEED / OUTFEED TABLE	2	88	POINTER HOUSING	1
30	TABLE SUPPORT	4	89	COIL SPRING	1
31	SPRING WASHER	4	90	ROD POINTER ELEVATING	1
32	TABLE BUSHING	4	91	POINTER	1
33	M6xP1.0x16L PAN HD SCR	4	92	BUSHING	1
34	SPINDLE	1	93	M4xP0.7x10L NYLOCK SCR PAN CR W/WASH	1
35	WEAR PLATE	1	94	POINTER HOUSING	1
36	BASE GUIDE RAIL LEFT	1	95	INDICATOR DEPTH ASSY	1
37	LEFT SIDE COVER	1	96	MOTOR PIVOT ROD	1
38	FLAT WASHER	2	97	M5xP0.8x16L HEX SOC HD CAP SCR	2
39	SPINDLE BEARINGS (6000ZZ)	2	98	FLAT WASHER	1
40	BASE BEARING RETAINER	2	99	M8xP1.25x20L HEX SOC HD CAP SCR	1
41	M5xP0.8x12L SPECIAL HEX SOC HD CAP SCR	8	100	GEARBOX ASSY	1
42	FLAT WASHER	2	101	REAR GEARBOX PLATE	1
43	SPINDLE SPROCKET	2	102	SPACER A	2
44	FLAT WASHER	2	103	SPACER B	4
45	M4xP0.7x12L NYLOCK HEX SOC HD SCR	2	104	GEAR-SMALL	1
46	ROLLER CHAIN	1	104A	GEAR SHAFT	2
47	TOOL HOLDER (FEMALE)	1	105	GEAR-INTERMEDIATE	1
48	KNIFE REMOVAL TOOL ASSY	1	106	BUSHING	5
48-1	KNIFE REMOVAL HANDLE	1	107	GEAR-LARGER	1
48-2	MAGNETIC	1	108	GEAR SHAFT	1
48-3	TOOL HOLDER(MALE)	1	109	BEARING (6002zz)	1
49	TORX WRENCH	1	110	FRONT GEARBOX PLATE	1
50	4x120mmL HEX WRENCH	1	111	M5xP0.8x27L HEX SOC HD SCR	2
51	M4xP0.7x6L PAN HD SCR W/WASH	8	112	M5xP0.8x35L HEX SOC HD SCR	2
52	BUSHING	1	113	SPROCKET	4
54	M5xP0.8x8L NYLOCK SCR SOC SET CUP PT	4	114	RING-EXT RET	3
56	BELT GUARD	1	115	GEARBOX DRIVE CHAIN	2
57	BELT	1	116	CUSHION	1

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
117	GEARBOX GUARD	1	199	NAMEPLATE LEAEL	1
118	M5xP0.8x45L HEX SOC HD SCR	2	200	BLADE CHANGE LEAEL	1
119	SPROCKET SPACER	1	201	WARNIN LEAEL	1
120	OUTFEED ROLLER	1	202	LOGO LEAEL	1
121	SPRING	4	203	SIDE PANEL LOGO LEAEL	2
122	BEARING BLOCK	4			
123	BEARING BLOCK RETAINER	4			
124	M5xP0.8x8L HEX SOC HD SCR	11			
125	INFEED ROLLER	1			
126	MOTOR PULLEY	1			
127	M4xP0.7x10L PAN HD SCR W/WASH	2			
128	CUSHION	1			
129	COIL SPRING	1			
130	CUTTERHEAD LOCKING	1			
131	BUSHING	1			
135	BAR	1			
136	ANTI-KICK JAW	26			
137	SPACER	25			
138	SPACER	2			
139	M5xP0.8x20L HEX SOC HD SCR	2			
150	MOTOR ASSY	1			
151	STRAIN RELIEF BUSHING	1			
152	M5xP0.8x16L PAN HD SCREW L/WASH	1			
153	AIR CHAMBER(MOTOR)	1			
154	CUSHION	1			
156	M5xP0.8x35L PAN HD SCREW W/LOCK	1			
157	M4.2xP1.7x20L TAPING SCR PAN HD CR L/WASH	4			
158	M5xP0.8x8L SCR PAN HD CR TYTT	1			
159	LOCKWASHER EXT	1			
160	GROUND WIRE	1			
161	MOTOR END CAP	1			
162	WAVE WASHER	1			
163	BALL BEARING	2			
164	ARMATURE	1			
165	SLEEVE	1			
166	POWER CORD CLAMP	1			
167	FIELD	1			
168	M4.8x75L TAP SCR PAN HD L/WASH	2			
169	MOTOR HOUSING	1			
170	M5xP0.8x8mm HEX SOC SET SCR	2			
171	RING RETAINING	1			
172	BRUSH HOLDER	2			
173	BRUSH	2			
174	BRUSH CAP	2			
175	INSULATOR	1			
175-1	SWITCH FIXED PLATE	1			
176	SWITCH COVER	1			
177	PAN HD TAP SCREW	4			
178	MAGNETIC SWITCH	1			
180	CONNECT WIRE	1			
181	NAME PLATE	1			
182	SWITCH RESET	1			
183	POWER CORD (UL/CSA)	1			
183-1	POWER CORD BAG	1			
184	WAVE FILTER	1			
185	PLUG	1			
197	ON/OFF LEAEL	1			
198	ELEVATION INDICATE LEAEL	1			



WARNING

General Machinery Safety Instructions

Machinery House
requires you to read this entire Manual before using this machine.

- 1. Read the entire Manual before starting machinery.** Machinery may cause serious injury if not correctly used.
- 2. Always use correct hearing protection when operating machinery.** Machinery noise may cause permanent hearing damage.
- 3. Machinery must never be used when tired, or under the influence of drugs or alcohol.** When running machinery you must be alert at all times.
- 4. Wear correct Clothing.** At all times remove all loose clothing, necklaces, rings, jewelry, etc. Long hair must be contained in a hair net. Non-slip protective footwear must be worn.
- 5. Always wear correct respirators around fumes or dust when operating machinery.** Machinery fumes & dust can cause serious respiratory illness. Dust extractors must be used where applicable.
- 6. Always wear correct safety glasses.** When machining you must use the correct eye protection to prevent injuring your eyes.
- 7. Keep work clean and make sure you have good lighting.** Cluttered and dark shadows may cause accidents.
- 8. Personnel must be properly trained or well supervised when operating machinery.** Make sure you have clear and safe understanding of the machine you are operating.
- 9. Keep children and visitors away.** Make sure children and visitors are at a safe distance for you work area.
- 10. Keep your workshop childproof.** Use padlocks, Turn off master power switches and remove start switch keys.
- 11. Never leave machine unattended.** Turn power off and wait till machine has come to a complete stop before leaving the machine unattended.
- 12. Make a safe working environment.** Do not use machine in a damp, wet area, or where flammable or noxious fumes may exist.
- 13. Disconnect main power before service machine.** Make sure power switch is in the off position before re-connecting.
- 14. Use correct amperage extension cords.** Undersized extension cords overheat and lose power. Replace extension cords if they become damaged.
- 15. Keep machine well maintained.** Keep blades sharp and clean for best and safest performance. Follow instructions when lubricating and changing accessories.
- 16. Keep machine well guarded.** Make sure guards on machine are in place and are all working correctly.
- 17. Do not overreach.** Keep proper footing and balance at all times.
- 18. Secure workpiece.** Use clamps or a vice to hold the workpiece where practical. Keeping the workpiece secure will free up your hand to operate the machine and will protect hand from injury.
- 19. Check machine over before operating.** Check machine for damaged parts, loose bolts, Keys and wrenches left on machine and any other conditions that may effect the machines operation. Repair and replace damaged parts.
- 20. Use recommended accessories.** Refer to instruction manual or ask correct service officer when using accessories. The use of improper accessories may cause the risk of injury.
- 21. Do not force machinery.** Work at the speed and capacity at which the machine or accessory was designed.
- 22. Use correct lifting practice.** Always use the correct lifting methods when using machinery. Incorrect lifting methods can cause serious injury.
- 23. Lock mobile bases.** Make sure any mobile bases are locked before using machine.
- 24. Allergic reactions.** Certain metal shavings and cutting fluids may cause an allergic reaction in people and animals, especially when cutting as the fumes can be inhaled. Make sure you know what type of metal and cutting fluid you will be exposed to and how to avoid contamination.
- 25. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.



WARNING

Planner Thicknesser Safety Instructions

Machinery House
requires you to read this entire Manual before using this machine.

- 1. Maintenance.** Make sure the Planner Thicknesser is turned off and disconnect from the main power supply and make sure all moving parts have come to a complete stop before any inspection, adjustment or maintenance is carried out.
- 2. Planner Thicknesser Condition.** Planner Thicknesser must be maintained for a proper working condition. Never operate a Planner Thicknesser that has damaged or worn parts. Scheduled routine maintenance should be performed on a scheduled basis.
- 3. Blade/Cutter Condition.** Never operate a Planner Thicknesser with dropped, cracked or badly worn blades or cutters. Before using a Planner Thicknesser inspect all blades and cutters. A damaged blade or cutter can cause serious injury.
- 4. Hand Hazard.** Keep hands and fingers clear from the cutterhead. Serious injury can occur.
- 5. Leaving a Planner Thicknesser Unattended.** Always turn the Planner Thicknesser off and make sure all moving parts have come to a complete stop before leaving the Planner Thicknesser. Do not leave Planner Thicknesser running unattended for any reason.
- 6. Avoiding Entanglement.** Blade guard must be used at all times. Remove loose clothing, belts, or jewelry items. Never wear gloves while machine is in operation. Tie up long hair and use the correct hair nets to avoid any entanglement with the Planner Thicknesser moving parts.
- 7. Understand the machines controls.** Make sure you understand the use and operation of all controls.
- 8. Power outage.** In the event of a power failure during use of the Planner Thicknesser, turn off all switches to avoid possible sudden start up once power is restored.
- 9. Work area hazards.** Keep the area around the Planner Thicknesser clean from oil, tools, chips. Pay attention to other persons in the area and know what is going on around the area to ensure unintended accidents.
- 10. Workpiece Handling.** Supporting the workpiece adequately at all times while cutting is crucial for making safe cuts and avoiding injury. Never attempt to make a cut with an unstable workpiece.
- 11. Hearing protection and hazards.** Always wear hearing protection as noise generated from cutterhead and workpiece vibration can cause permanent hearing loss over time.
- 12. Thicknesser Infeed clearance safety.** The infeed roller is designed to pull the workpiece into the cutterhead. Always keep hands, clothing, hair away from the infeed roller during operation to prevent serious injury.
- 13. Never look inside thicknesser.** Wood chips fly around inside the thicknesser at a high rate of speed. Do not look inside the thicknesser remove guards or covers during operation.
- 14. Operating position.** The workpiece may kick out during operation. To avoid getting hit, stand to the side of the machine during the entire operation.
- 15. Use correct material.** Only use natural timber. Do not use MDF, plywood, laminates, or other synthetic or man-made products. Thicknessing material not designed for this machine may cause serious injury.
- 16. Planner Cutterhead Alignment.** The top edge of the outfeed table should be aligned with the edge of the knife at top dead centre to avoid kickback. An unaligned table can cause serious injury.
- 17. Joining with the grain.** Jointing against the grain or jointing end grain is dangerous and could produce chatter or excessive chip out. Always joint with the grain.
- 18. Thicknessing Grain direction.** Thicknessing across the grain may cause the workpiece to kick out. Always thickness with the wood grain or at a small angle.
- 19. Use a Push Stick.** Always use a push stick when whenever surface planing. Never pass you hands directly over the cutterhead without a push stick.
- 20. Blade guards.** Always use blade guards except when rebating. Make sure you replace the guard after rebating.
- 21. Planner Cutting operation.** Always keep the workpiece moving toward the outfeed table until the workpiece has passed completely over the cutterhead. Never back the workpiece toward the infeed table.
- 22. Stalled blade.** In the case that the cutterhead stalls while in operation, turn the Planner Thicknesser off before freeing the stalled cutterhead.
- 23. Changing between Planner / Thicknesser mode.** Once changed to the required mode either Planner or Thicknesser, always ensure all safety guards and dust chutes are re-fitted before starting machine.
- 24. Workpiece safety.** Inspect your workpiece carefully before feeding it over the cutterhead. Never joint a board that has knots, nails, or staples.
- 25. Dust hazards.** Always use a dust collector when using machine.
- 26. Kickback.** Kickback is defined as high speed expulsion of workpiece from the Planner Thicknesser table cutterhead. Never stand in the kickback zone.
- 27. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.

PLANT SAFETY PROGRAM

NEW MACHINERY HAZARD IDENTIFICATION, ASSESSMENT & CONTROL

Planner Thickneser

Developed in Co-operation Between A.W.I.S.A and Australia Chamber of Manufactures
This program is based upon the Safe Work Australia, Code of Practice - Managing Risks of Plant in the Workplace (WHSA 2011 No10)

Item No.	Hazard Identification	Hazard Assessment	Risk Control Strategies (Recommended for Purchase / Buyer / User)
A	ENTANGLEMENT	HIGH	Eliminate, avoid loose clothing / Long hair etc.
B	CRUSHING	LOW	Heavier timber must be supported Be sure that when rising and falling planner tables hands are well away from locating, clamping and pivoting area.
C	CUTTING, STABBING, PUNCTURING	MEDIUM	Isolate power to machine prior to any checks or maintenance. Do not open or clean inside until the machine has completely stopped. Keep hands clear of all blades and moving parts. Use a push stick where necessary. Care must be taken when handling knives. Make sure all guards are secured shut when machine is on.
D	SHEARING	MEDIUM	Make sure all guards are secured shut when machine is on.
F	STRIKING	MEDIUM	Do not stand behind timber when feeding into machine. A face mask must be worn at all times. Ensure to use correct feed rates for material.
H	ELECTRICAL	MEDIUM	All electrical enclosures should only be opened with a tool that is not to be kept with the machine.
O	OTHER HAZARDS, NOISE, DUST.	LOW	Machine should be installed & checked by a Licensed Electrician. Wear hearing protection as required. Must be connected to dust extraction
Plant Safety Program to be read in conjunction with manufactures instructions			



www.machineryhouse.com.au



www.machineryhouse.co.nz

Authorised and signed by:
Safety officer:

Manager:

[Signature]

Revised Date: 12th March 2012