



THICKNESSER

Model T-13B

Order Code W812

Edition No : T-13B-1

Date of Issue : 11/2020

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MACHINE DETAILS

MACHINE	THICKNESSER
MODEL NO.	T-13B
SERIAL NO.	
DATE OF MANF.	

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NOTE:

This manual is only for your reference. Owing to the continuous improvement of the HAFCO machines, changes may be made at any time without obligation or notice. Please ensure the local voltage is the same as listed on the specification plate before operating this electric machine.



NOTE

In order to see the type and model of the machine, please see the specification plate. Usually found on the back of the machine. See example (Fig.1)



Fig.1



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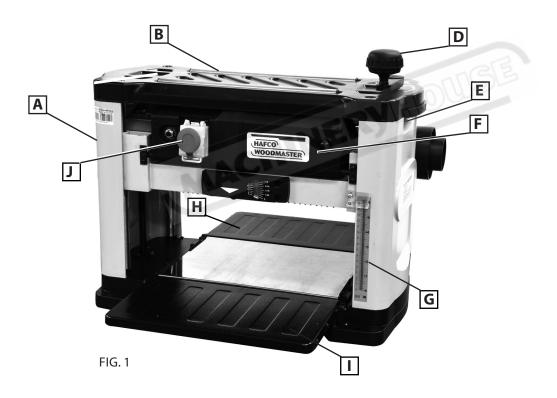
1.1 SPECIFICATIONS

ORDER CODE	W812
MODEL	T-13B
Material Width Capacity (mm)	330
Max. Stock Thickness (mm)	152
Minimum Material Length (mm)	300
Maximum Depth of Cut At Width (mm)	0.8mm > 152mm Wide 2.8mm < 152mm Wide
Cutter Type	HSS Blades
Quantity of Cutters (No.)	2
Cutter Block Diameter (mm)	50
Cutter Block Speed (R.P.M)	8500
Feed Rate (m/mm)	6
Length of Table (mm)	190
Length of Table with Extensions (mm)	630
Feed Speed (M/Min)	6
Dust Outlet Diameter (mm)	102/65
Motor Power (Watts)	1500
Power Requirement	240V, 50Hz, 1Ph
Full-Load Current Rating (Amps)	7
Minimum Circuit Size (Amps)	10
Floor Space (W x D x H)	600 x 630 x 480
Shipping Dimensions (L x W x H)	630 x 410 x 480
Nett Weight (Kgs.)	30



1.2 IDENTIFICATION





Α	MAIN FRAME	F	CUTTERHEAD & MOTOR ASSEMBLY
В	RETURN ROLLERS	G	HEIGHT GAUGE
С	DUST CHUTE	Н	OUT-FEED EXTENSION WING
D	HAND WHEEL	ı	IN-FEED EXTENSION WING
E	LIFTING HANDLES	J	ON/OFF SWITCH



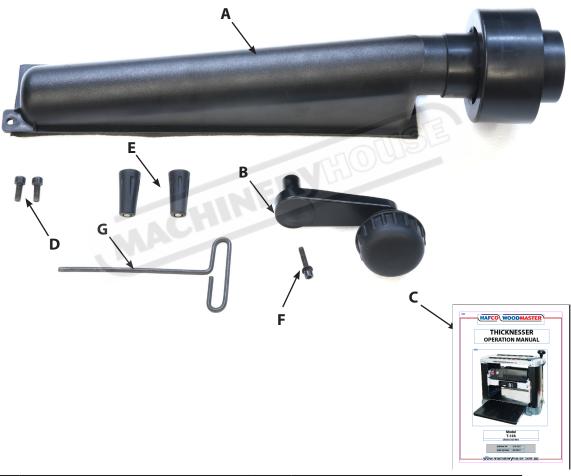
1.3 UNPACKING & ACCESSORIES

The machine was carefully packaged at the factory for safe transportation. Remove the packaging materials from around the machine and inspect it. If you find that the machine is damaged, contact your distributor and report it imeadiately.

If the machine has been damaged while in transit, save all the packing materials for possible inspection by the carrier.

Do not dispose of the packing materials until the machine has been assembled and any shipment disputes have been settled.

PACKING LIST



Α	Dust Port & Adaptor	E	Magnets
В	Crank Handle	F	Crank Handle Screw & Washer
С	Manual	G	Нех Кеу
D	Socket Head Screw	Н	Machine (Not displayed)

2. IMPORTANT INFORMATION

2.1 GENERAL WOODWORKING MACHINE SAFE PRACTICES

DO NOT use this machine unless you have read this manual or have been instructed in the use of this machine in its safe use and operation



WARNING

This manual provides safety instructions on the proper setup, operation, maintenance, and service of this machine. Save this manual, refer to it often, and use it to instruct other operators. Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine is solely responsible for its safe use. This responsibility includes, but is not limited to proper installation in a safe environment, personnel training and authorization to use, proper inspection and maintenance, manual availability and comprehension, of the application of the safety devices, integrity, and the use of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.













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:



- ☐ Lead from lead-based paints.
- ☐ Crystalline silica from bricks, cement and other masonry products.
- ☐ Arsenic and chromium from chemically-treated timber.

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.

- ✓ Always wear safety glasses or goggles and protective footwear.
- ✓ Wear dust masks when required.
- ✓ Wear hearing protection that is suitable for the level and frequency of the noise you are exposed to in the woodworking area. If you have trouble hearing someone speak from one metre away, the noise level from the machine may be hazardous.
- ✓ Use gloves to protect hands from splinters when handling wood but do not wear them near rotating blades and other machinery parts where the gloves can catch.



2.1 GENERAL WOODWORKING MACHINE SAFE PRACTICES Cont.

- ✓ Make sure the guard that is in position is in good working condition, and guards the machine adequately before operating any equipment or machine. Check and adjust all other safety devices.
- ✓ Make sure the equipment is properly grounded before use.
- ✓ Check that keys and adjusting wrenches are removed from the machine before turning on the power.
- ✓ Inspect stock for nails or other materials before cutting, planning, routing or carrying out similar activities.
- ✓ Make sure that all machines have start and stop buttons within easy and convenient reach of an operator. Start buttons should be protected so that accidental contact will not start machine.
- ✓ Ensure that all cutting tools and blades are clean, sharp, and in good working order so that they will cut freely, not forced.
- ✓ Turn the power off and unplug the power cord (or lock out the power source) before inspecting, changing, cleaning, adjusting or repairing a blade or a machine.
- ✓ Use a "push stick" to push material into the cutting area. Jigs are also useful in keeping hands safe during cutting procedures. Keep hands out of the line of the cutting blade.
- ✓ Always use a push stick for pieces less than 30 cm (1 ft) in length, or for the last 30 cm of a longer cut, and to remove the cut piece.
- ✓ Clamp down and secure all work pieces when drilling or milling.
- ✓ Use good lighting so that the work piece, cutting blades, and machine controls can be seen clearly. Position or shade lighting sources so that they do not shine in the operator's eyes or cause any glare and reflections.
- ✓ Ensure that the floor space around the equipment is sufficient to enable you to machine the size of work piece being processed safely without bumping into other workers or equipment.
- ✓ Woodworking machines should be fitted with efficient and well-maintained local exhaust ventilation systems to remove sawdust or chips that are produced.
- ✓ Electric power cords should be above head level or in the floor in such a way that they are not tripping hazards.
- ✓ Keep work area free of clutter, clean, well swept, and well lit. Spills should be cleaned up immediately. Floor areas should be level and non-slip. Good housekeeping practices and workplace design will reduce the number of injuries and accidents from slips, trips, and falls.
- ✓ Do not wear loose clothing, work gloves, neckties, rings, bracelets or other jewelry that can become entangled with moving parts. Confine long hair.
- ✓ Avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool or blade.
- ✓ Do not remove sawdust or cuttings from the cutting head by hand while a machine is running. Use a stick or brush when the machine has stopped moving.
- ✓ Do not use compressed air to remove sawdust, turnings, etc. from machines or clothing.
- ✓ Do not leave machines running unattended. Do not leave a machine until the power is turned off and the machine comes to a complete stop.



2.1 GENERAL WOODWORKING MACHINE SAFE PRACTICES Cont.

- ✓ Do not try to free a stalled blade before turning the power off.
- ✓ Do not distract or startle an operator while he or she is using woodworking equipment.
- ✓ Horseplay should be prohibited. It can lead to injuries.

HAZARDS ASSOCIATED WITH MACHINES include, but are not limited to:

- Being struck by ejected parts of the machinery
- Being struck by material ejected from the machinery
- Contact or entanglement with the machinery
- Contact or entanglement with any material in motion

Health Hazards (other than physical injury caused by moving parts)

- Chemicals hazards that can irritate, burn, or pass through the skin
- Airborne substances that can be inhaled, such as oil mist, metal fumes, solvents, and dust
- Heat, noise, and vibration
- Ionizing or non-ionizing radiation (X-ray, lasers, etc.)
- Biological contamination and waste
- Soft tissue injuries (for example, to the hands, arms, shoulders, back, or neck) resulting from repetitive motion, awkward posture, extended lifting, and pressure grip)

Other Hazards

- Slips and falls from and around machinery during maintenance
- Unstable equipment that is not secured against falling over
- Safe access to/from machines (access, egress)
- Fire or explosion
- Pressure injection injuries from the release of fluids and gases under high pressure
- Electrical Hazards, such as electrocution from faulty or ungrounded electrical components
- Environment in which the machine is used (in a machine shop, or in a work site)

MACHINES ARE SAFEGUARDED TO PROTECT THE OPERATOR FROM INJURY OR DEATH WITH THE PLACEMENT OF GUARDS. MACHINES MUST NOT BE OPERATED WITH THE GUARDS REMOVED OR DAMAGED.



2.2 ADDITIONAL SAFETY FOR THICKNESSERS.

DO NOT use this machine unless the operator has been instructed in its safe use and operation and has read and understood this manual



Safety glasses must be worn at all times in work areas.



Long and loose hair must be contained or restrained.



Appropriate protective footwear with substantial uppers must be worn.



Close fitting, protective clothing or a workshop apron is encouraged.



Rings and jewellery must not be worn.



Hearing protection will be required when operating this machinery.

PRE-OPERATIONAL SAFETY CHECKS

- 1. Check workspaces and walkways to ensure that no slip/trip hazards are present.
- 2. Check material to be planed for defects, splits, dead knots, or nails.
- 3. Ensure in-feed table is clear of debris and free from gum or resin residue.
- 4. Locate and ensure you are familiar with the operation of the ON/OFF starter and E-Stop.
- 5. Do not exceed maximum 0.8mm depth of cut for timber wider than 152mm..
- 6. Ensure all locks are securely tightened before operating the machine.
- 7. Start the dust extraction unit before using the machine.
- 8. Faulty equipment must not be used. Immediately report suspect machinery.

OPERATIONAL SAFETY CHECKS

- 1. Never leave the machine running unattended.
- 2. Timber less than 300 mm in length must not be planed on this machine.
- 3. Feed timber to machine with the grain.
- 4. Feed only one piece of timber at a time.
- 5. Never look through machine feed opening when cutter block is revolving.
- 6. Never plane any timber with embedded nails, etc.
- 7. Stand to one side of material being fed through machine in case of kickback.
- 8. Before making adjustments or before clearing the in-feed or out-feed tables switch off and bring the machine to a complete standstill.

HOUSEKEEPING

- 1. Switch off the machine.
- 2. Leave the machine in a safe, clean and tidy state.

POTENTIAL HAZARDS

- Rotating and moving parts timber may be flung back violently
- Excessive noise

- Pinch and squash injuries Flying chips and debris

Eye injuries

2.2 ADDITIONAL SAFETY FOR THICKNESSERS

IN-FEED AND OUT-FEED EXTENSION WINGS

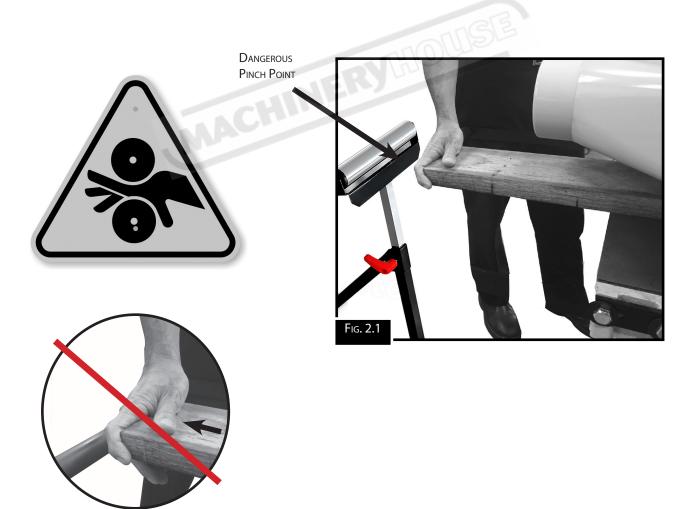
This machine is designed to feed material into and away from the spinning cutterhead, and doing so clamps the material firmly to the table. To avoid serious personal injury, always keep hands, clothing, jewelery, and long hair away from the in-feed and out-feed tables during operation.

DISCONNECT BEFORE ADJUSTMENTS.

To avoid unexpected start-up and serious personal injury, always disconnect the thicknesser from the power before performing adjustments, maintenance, or service.

PINCH POINTS

Beware of pinch points that can cause serious damage to fingers and hands especially if using a support roller stand on the out feed. (Fig.2.1) It is best practice to wait for the workpiece to stop feeding before removing.



2.3 LIFTING INSTRUCTIONS

The thicknesser in this manual is heavy. Serious personal injury could occur if safe moving methods are not used. Get assistance and use the correct lifting posture to move the shipping crate and when removing the machine from the crate.

NOTE: Check the weight of the machine on the specification plate before lifting the machine and seek help if needed.



Stand (optional)

The thicknesser is not supplied with a stand, but can be used on a bench or on a optional stand (Order Code W810). The machine has inbuilt lifting handles (Fig. 2.2) to assist in the lifting process.. Make sure that machine is kept in a level position while lifting.

MACHIN



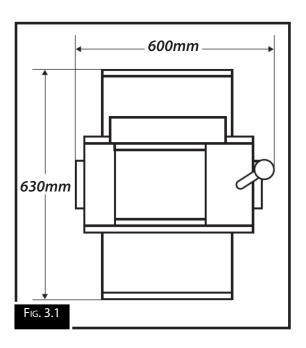
3. INSTALLATION

3.1 SELECTING A LOCATION

Check the weight and footprint specifications of your machine to ensure that the bench or stand is able to support both the machine and the workpiece.

Placement Location

Consider the existing and all anticipated needs, the size of the material to be processed through the machine, and extra space for auxiliary stands, work tables or other machinery when picking a location for the machine. See Fig. 3.1 for the minimum working clearances.

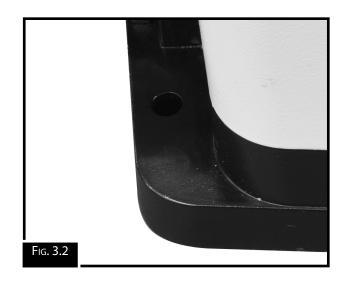


3.2 SETTING UP THE THICKNESSER

MOUNTING OPTION

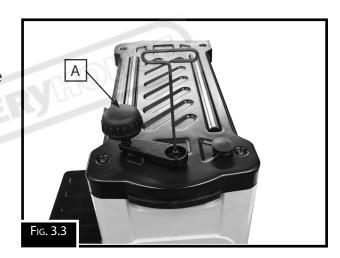
The thicknesser is supplied with an option for mounting to a workbench or stand.

There are 4 x holes in the base to place bolts through the base and into a bench or stand. (Fig. 3.2)



ATTACHING THE HAND WHEEL

Attach the depth adjustment handle (A) to the shaft and fasten in place with a Hex Socket Head screw. Tighten screw using supplied hex wrench. (Fig. 3.3)

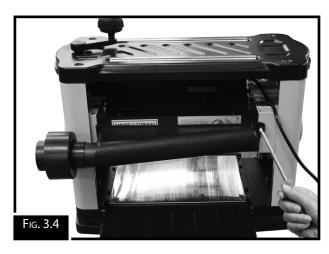


ATTACHING THE DUST HOOD

The Dust Port is used to direct the waste away from the machine, and is most commonly used when the thicknesser is connected to a dust collector. It has a 4" port to accommodate most dust collection systems.

To install:

1. Install the dust port to the rear of the thicknesser and attach using the 2 socket head cap screws supplied with the machine. (Fig. 3.4)





3.3 ELECTRICAL INSTALLATION

Place the machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure there is access to a means of disconnecting the power source. The electrical circuit must meet the requirements for 240V. To minimize the risk of electrocution, fire, or equipment damage, these machines should be plugged directly into the power socket.

NOTE: The use of an extension cord is not recommended as it may decrease the life of electrical components on your machine.

ELECTRICAL REQUIREMENTS

Nominal Voltage	240V
Cycle	50 Hz
Phase	Single Phase
Power Supply Circuit	10 Amps
Full Load Current	7.0 Amps

(Full load current rating is also on the specification plate on the motor.)

3.4 FULL-LOAD CURRENT RATING

The full-load current rating is the amperage a machine draws when running at 100% of the output power. Where machines have more than one motor, the full load current is the amperage drawn by the largest motor or a total of all the motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating for these machine at 240V is 7 Amps

It should be noted that the full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating and if the machine is overloaded for a long period of time, damage, overheating, or fire may be caused to the motor and circuitry.

This is especially true if connected to an undersized circuit or a long extension lead. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements.





Earth Pin

3.5 TEST RUN

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying that the motor powers up and the machine runs correctly. When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises. If, during the test run, you cannot easily locate the source of unusual noise or vibration, stop using the machine immediately, then review the Troubleshooting section on Page 23. If you still cannot remedy a problem, contact your distributor

4. OPERATION

4.1 BASIC CONTROLS.

The following descriptions will help you to become familiar with the basic controls of your machine.

ON/OFF Switch: Starts/stops the spindle and the drive rollers of the Thicknesser. (Fig. 4.1)

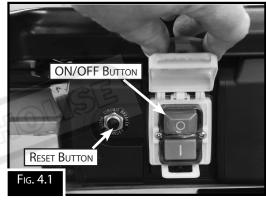
Overload Reset Button: This machine has a motor thermal overload protection switch, which will trip if the motor becomes too hot. To reset the switch, move the ON/OFF switch to OFF, wait a few minutes to allow the motor to cool, then press the reset button.

Height Adjustment Handle: The thicknesser depth of cut is controlled by using the elevation crank on top of the machine. Rotating the crank clockwise raises the cutterhead. (Fig. 4.2)

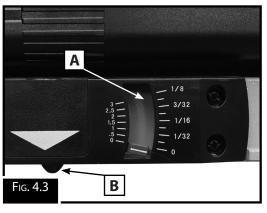
Depth of Cut Scale: The Depth Of Cut Scale, located on the front of the machine, is a convenient way to quickly determine how much material is being planed off in one pass. (Fig. 4.3)

- 1. With the machine OFF, insert your workpiece just under the depth of cut scale
- 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 under the depth of cut scale.

NOTE: The manual depth gauge can be reset by adjusting the three fixing screws that hold the gauge to the machine.







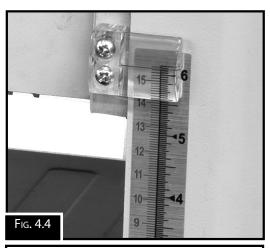
Thickness Scale: The Depth of cut can also be read directly from the inch/millimeter scale on the front of the thicknesser, as shown. (Fig. 4.4)

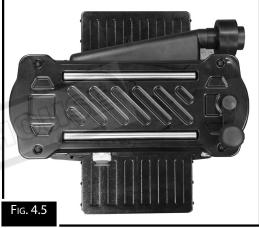
Although the correct depth of cut varies according to wood hardness and workpiece width, we recommend a maximum depth of cut at full width, of no more than 1.5mm. A series of light cuts will give a better end result and put less stress on the motor than trying to take off too much material in a single pass. Adjust the depth of cut to make an initial light (0.5mm) cut.

NOTE: One revolution of the height adjustment handle is equivalent to approximately 1.6mm depth of cut.



Return Rollers assist is sliding the workpiece back to the operator following the planing operation. (Fig. 4.5)





4.2 WORKPIECE INSPECTION

Some workpieces are not safe to plane or may require modification before they are safe to pass through the thicknesser. Before cutting, inspect all workpieces for the following:

- **Material Type:** This machine is only intended for planing workpieces of natural wood fiber. Attempting to plane workpieces of any other material could lead to serious personal injury and machine damage.
- **Foreign Objects:** Inspect lumber for defects and foreign objects (nails, staples, imbedded gravel, etc,). If you have any question about the quality of your lumber, do not use it. Remember, wood stacked on a concrete floor can have small pieces of stone or concrete pressed into the surface.
- Large/Loose Knots: Loose knots can become dislodged during the planing operation. Large knots can cause kickback and machine damage. Always choose workpieces that do not have large/loose knots when planing.
- **Wet or "Green" Stock:** Avoid planing wood with a high water content. Wood with more than 20% moisture content or wood exposed to excessive moisture (such as rain or snow), will plane poorly and cause excessive wear to the knives and motor. Excess moisture can also hasten rust and corrosion of the planer and/or individual components.
- Excessive Warping: Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being planed. DO NOT use workpieces with these characteristics!



4.3 BASIC OPERATION

This section gives you the basic process that happens during an operation with this machine. Familiarize yourself with this process to better understand the operation of this machine.

To complete a typical operation, the operator should do the following:

- 1. First check that the workpiece is clean and free of any defects or foreign materials that might cause kickback or damage the cutters.
- 2. Adjusts the height of the head for the correct depth of cut.
- 3. Start the dust collection system.
- 4. Connect the thicknesser to the power supply and turn the machine ON.
- 5. Move the workpiece in slowly until the "Height Adjustment Scale" registers
- 5. The operator should place their body to the side of the machine, then lay the workpiece on the in-feed table and feed it into the machine until the in-feed roller engages it and moves it past the cutterhead.
- 6. When the workpiece exits the thicknesser, return it to the in-feed table, using the return rollers and make as many passes as necessary.
- 7. When finished turn the machine OFF.

NOTE: Anytime you switch directions with the cutterhead elevation crank, there will be a small amount of backlash—the amount the crank moves before the cutterhead begins to move. However, as long as you move the handle in the same direction during operation, backlash will not be a factor

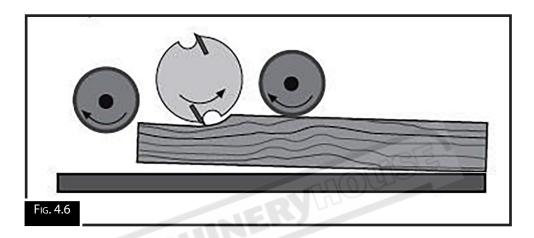
Operating Tips

_	where ever possible use the full width of the thicknesser cutters. If the width is smaller
	than the width of the cutters, alternate the cutting path between the left, the right and the
	middle of the table to evenly distribute the wear across the cutters.
	Scrape all glue off joined boards before putting the timber through the thicknesser
	ONLY machine natural wood. Do not machine wood composites or any other man-made material.
	Machine the workpiece with the grain. NEVER feed end-cut or end-grained lumber into your machine.
	Keep the work area clear.
	Always true up any cupped or warped stock on a jointer or bandsaw before placing it
	through the thicknesser.
	5
_	return rollers on top of the machine to move the material back to the infeed side.
	When possible, machine both faces of the workpiece so that they will be parallel with
	one another

AVOIDING SNIPE

Snipe, gouging or depression of the board at the ends, can occur when the board is not properly supported. (Fig. 4.6)

For workpieces longer than 1200mm, 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 off the end with the problem.



CHIP MARKS OR INDENTATIONS

Reason: Chip indentation or chip bruising is the result of wood chips not being removed from around the cutterhead. Instead, they are deposited on the planed surface and crushed into the workpiece by the outfeed roller. This condition can be caused by a number of reasons, some of which are:

- **a**. The type of lumber being planed. Certain species have a tendency to chip bruise.
- **b.** A high moisture content (20% or higher) and/or surface moisture. Typically found in air-dried lumber where the surface is dry but the interior of the stock needs more time to season.
- **c.** Dull knives or inserts
- **d.** Depth of cut too much.

Solution:

- **a.** Lumber must be completely dry, preferably kiln-dried (KD). Air-dried (AD) lumber must be seasoned properly and have no surface moisture. DO NOT plane partially air-dried (PAD) lumber.
- **b.** Make sure the planer knives or inserts are sharp.
- **c.** Reduce the depth of cut and make more passes.

5. MAINTENANCE

5.1 LUBRICATION

The Thicknesser should provide you with a long time of service provided the following maintenance operations are performed.

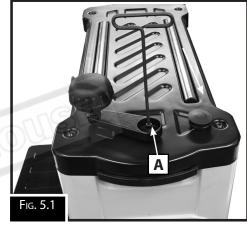
- 1. A quality paste wax should be applied to the table surface to ease the movement of the workpiece across it. Be sure to buff off all excess wax so that it does not get absorbed into the wood when planing.
- 2. Having clean feed rollers is essential for optimal results. After disconnecting the machine from the power supply, check the 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.

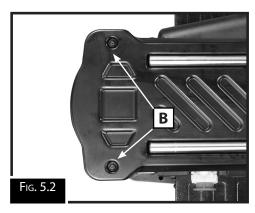
3. Any moving parts should be cleaned regularly with a penetrating oil and lubricated with a light coating of medium weight machine oil.

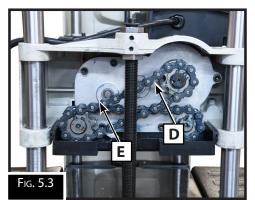
FEED CHAIN LUBRICATION

To lubricate feed roller chain drive:

- 1. DISCONNECT THE MACHINE FROM THE POWER!
- 2. Remove the height adjustment crank handle. (A in Fig.5.1)
- 2. Remove the (4) socket head cap screws that secure the top cover to the four columns. (B in Fig.5.2)
- 3. Remove the top and the side cover to expose sprockets and chains (Fig. 5.3)
- 4. Use mineral spirits, stiff brush, and shop rags to clean any dirt from the chains.
- 5. Apply a light grade of oil to the chain links and sprockets.
- 6. Re-install side cover, the top cover and the height adjusting crank handle







MAIN BEARINGS

The thicknesser is supplied with bearings that are lubricated and sealed at the factory. These bearing do not require any further attention unless they need to be replaced. If a bearing fails, the thicknesser will probably develop a noticeable rumble or vibration, which will increase when the machine is under load. The bearings are standard sizes and can be replaced.

5.2 ADJUSTMENT

MOTOR BRUSH REPLACEMENT

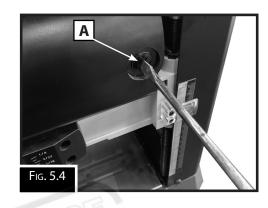
Brush life will vary depending on the load placed on the motor. The brushes should be inspected every 10-15 hours of use.

To inspect:



- 2. 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. (Fig. 5.4)
- 3. Once the brush has been removed, inspect the carbon (B), the spring (C), and the wire (D).
- 4. If the carbon of either brush is worn down to 4.5mm 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. (Fig.5.6)

NOTE: Contact your distributor for replacement brushes (Part No 77 in spare parts list)





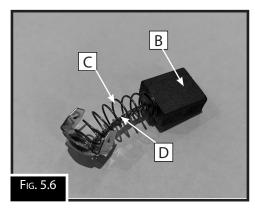
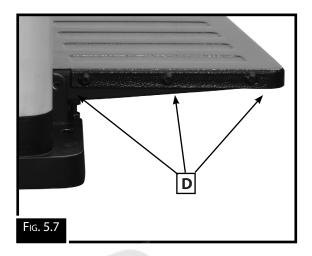


TABLE LEVEL ADJUSTMENT

The out-feed and in-feed tables of the thicknesser were set level before the machine left the factory. However after shipping or prolong use the tables may need to be adjusted. (Fig. 5.7)

To adjust the table:

- 1. DISCONNECT THE MACHINE FROM THE POWER
- 2. Place a straight edge across the tables.
- 3. If the table needs to be adjusted, loosen the three screws "D" on the side of the table and adjust as required.
- 4. Tighten the screws and recheck the level

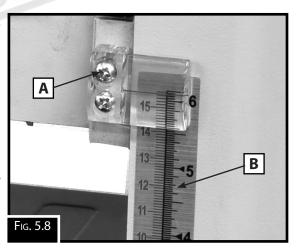


THICKNESS SCALE ADJUSTMENT

The scale, located on the right hand side of the thicknesser, shows the thickness of the finished workpiece. (Fig. 5.8)

To make sure the scale is set correctly, run a piece of timber through the thicknesser and measure the finished size of the timber. If the measurment on the scale is not the same as the timbers thickness, 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.

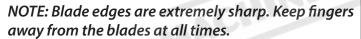


CHANGING THE CUTTER BLADES

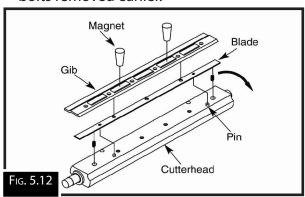
The cutter-head is equipped with 2 high speed steel cutting blades. If the machine planes unevenly or tends to gouge, the blades may need to be changed. To remove the blades, follow the procedure below.

To Change The Blades

- 1. DISCONNECT THE MACHINE FROM THE POWER!
- 2. Remove the top by removing the crank handle and 4 screws holding the top. Remove both sides
- 3. With a hex wrench, remove the 2 hex head screws that secures the dust chute to the machine and remove the Dust Chute.
- 4. Loosen and remove the four screws from the blade guard on the rear side of thicknesser, and remove the blade guard. (Fig. 5.9)
- 5. Carefully turn the cutter head by hand until the six gib screws are facing the top of the machine.
- 6. Loosen and remove six bolts from gib. (Fig. 5.10)
- 7. Remove the gib plate using the magnets provided. (Fig. 5.11)

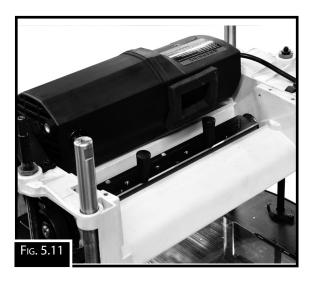


- 8. The blade is located in position by two pins. Gently lift the old blades from cutter head using magnets. Do not make contact with the blade using fingers. Use only the magnets.(Fig. 5.12)
- 9. Reverse or replace the blade and carefully position it on the two pins using magnets.
- 9. Replace gib and align the holes on the gib with holes on the blade using magnets.
- 10. Secure the gib to the cutter head using the six bolts removed earlier.











5.3 TROUBLESHOOTING

Should any problems arise review the troubleshooting procedures in this section to find the possible problem or fix and adjust your machine.

The spare parts view and the proceedure for ordering is layed out in the spare parts section.

SYMPTOM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Machine does not start or a breaker trips.	 Stop push-button engaged/faulty. Power switched OFF or at fault. Thermal overload relay has tripped. Wall circuit breaker tripped. Plug/receptacle at fault/wired incorrectly. 	 Check magnetic switch/replace it. Ensure power supply is switched ON Reset trip load dial if necessary; replace. Ensure circuit size is correct/replace. Test for good contacts; correct the wiring.
	6. Motor connection wired incorrectly. 7. Contactor not energized. 8. Wiring open/has high resistance. 9. ON/OFF switch at fault. 10. Start capacitor at fault. 11. Centrifugal switch at fault 12. Motor at fault.	6. Correct motor wiring connections 7. Test all legs for power/replace if faulty. 8. Check and fix broken, disconnected wires 9. Replace switch. 10. Test/replace if faulty. 11. Adjust/replace centrifugal switch. 12. Test/repair/replace.
Machine stalls or is underpowered	 Feed rate too fast. Workpiece material not suitable. Dust collection ducting problem. Motor overheated. V-belt(s) slipping. Run capacitor at fault. Pulley/sprocket slipping on shaft. Motor bearings at fault. Motor at fault. 	1. Decrease feed rate. 2. Ensure timber moisture is below 20%. 3. Clear blockages, use smooth wall duct, 4. Clean motor, let cool, and reduce load. 5. Tension/replace belt(s) ensure pulleys are aligned 6. Test/repair/replace. 7. Replace loose pulley/shaft. 8. Test/repair/replace. 9. Test/repair/replace.
Excessive step (snipe) (gouge at the end of the workpiece that is uneven with the rest of the cut).	 One or both of the bed rollers are set too high. Rear table extension slopes down or is not level with the table Chip breaker or pressure bar set too low Workpiece is not fully supported as it leaves the thicknesser. 	1. Lower the bed rollers 2. Adjust the rear extension wing set screws to make the extension level with the table 3. Raise the height of the chip breaker or pressure bar 4. Use a roller stands to properly support the workpiece as it leaves the thicknesser.
Workpiece stops/ slows in the middle of the cut.	 Depth of cut too deep. Pitch/glue build-up on thicknesser components. One or both of the bed rollers are set too low or too high. Chip breaker or pressure bar set too low Feed rollers set too low or too high. 	 Reduce the depth of cut. Clean planer components with a pitch/resin dissolving solvent. Lower/raise the bed rollers Raise the height of the chip breaker or pressure bar Adjust the feed rollers to the correct height



5.3 TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Machine has vibration or noisy operation.	 Belts slapping cover. V-belt(s) worn or loose. Pulley loose. Motor mount loose/broken. Motor fan rubbing on fan cover. Table rollers protruding unevenly. Motor bearings at fault. Cutterhead bearings at fault. Chip deflector hitting cutterhead. 	 Replace/realign belts with a matched set. Inspect/replace belts with a new matched set. Realign/replace shaft, pulley, setscrew, & key. Tighten/replace. Fix/replace fan cover; replace damaged fan. Adjust table rollers. Test by rotating shaft; & replace worn bearings Replace bearing(s)/realign cutterhead. Check/replace chip deflector and realign
Consistent chipping pattern.	 Knots or conflicting grain direction in workpiece. Nicked or chipped cutter or insert. Feed rate too fast. Depth of cut too deep. Bed rollers set too high or low; not even with each other. Misaligned chip breaker. 	 Inspect workpiece for knots and grain direction; use only clean stock. Rotate/replace cutters or insert. Reduce feed rate. Reduce the depth of cut. Properly adjust the bed roller height. Adjust sides of chip breaker until correct
Furry grain.	Workpiece has high moisture content or surface wetness. Dull cutter blades or inserts	Allow workpiece to dry if moisture content is over 20% or has surface wetness. Rotate/replace cutter blades or inserts
Lines or ridges runing the length of the workpiece	1. Nicked blades or chipped inserts.	Rotate or replace the inserts or replace the damaged blades.
Uneven cutting marks, wavy surface, or chatter marks on the workpiece.	 Feed rate too fast. Chip breaker or pressure bar set unevenly. Bed rollers not set correctly. Insert(s) or blades not properly installed. Worn cutterhead bearings. 	1. Reduce feed rate. 2. Adjust the height of the chip breaker or pressure bar 3. Properly adjust the bed roller height 4. Remove insert(s)or blades, then properly clean and install 5. Replace cutterhead bearings
Glassy surface	 Inserts are dull. Feed rate too slow. Depth of cut too shallow 	Rotate/replace inserts or replace blades Increase feed rate Increase depth of cut
Inconsistent chip marks.	Chips are not being removed from around the cutterhead	Use an adequate dust collection system; adjust the chip deflector in or out.



SPARE PARTS SECTION

THICKNESSER

Model T-13B

Order Code W812

Edition No : T-13B-1

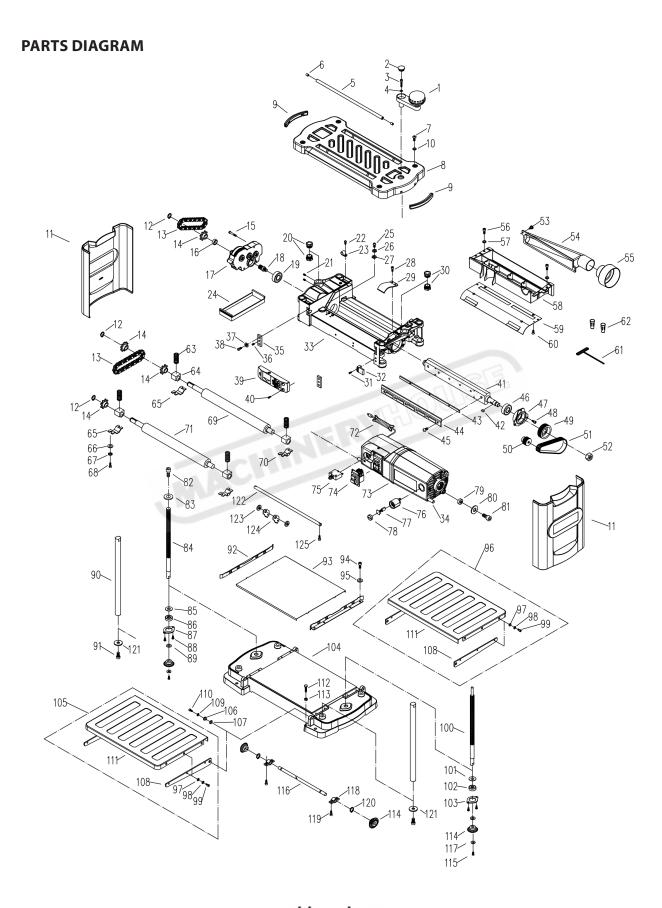
Date of Issue : 11/2020

The following section covers the spare parts diagrams and lists that were current at the time this manual was originally printed. Due to continuous improvements of the machine, changes may be made at any time without notification.

HOW TO ORDER SPARE PARTS

- 1. Have your machines **model number, serial number & date of manufacture** on hand, these can be found on the specification plate mounted on the machine
- 2. A scanned copy of your parts list/diagram with required spare part/s identified
- 3. Go to www.machineryhouse.com.au/contactus and fill out the enquiry form attaching a copy of scanned parts list.







SPARE PARTS LIST

No	FACTORY CODE	DESCRIPTION	Qty.
1		Handle assembly	1
2	SPL3047	Cap	
3	GB70.1-2000	Socket head screw M5X25	1
4		Flat washer 5MM	1 1
5	MB13-01	0	2
6	EP12028	Roller cap	4
7		Socket pan head screw M6X12	4
8	MB13-02X	Top cover	1 1
9	MB13-02X-02	Grip	2
10		Flat washer 6MM	4
11	MB13-04	Left cover	2
12	GB93-87	Retaining ring φ15	3
13	GB1243.1-83	Chain 410-26#	2
14	MB13-51	Sprocket	4
15	GB70.1-2000	Socket head screw M5X35	4
16	13102	Spacer	1
17		Gear box assembly	1
18	13113/SPL1047	Pinion	1
19	GB276-94	Ball bearing 6203-3Z	1
20	21758-048-01	Elevating nut(LH)	2
21	CH	Set screw M5X6	4
22		Cable clamp UC-1.5	1
23	GB70.1-2000	Socket head screw M5X10	1
24	MB13-05	Chain cover	1
25	GB818-2000	Pan head screw M5X8	2
26	GB93-87	Lock washer φ5	2
27	GB862.1-87	Serrated washer 5MM	2
28	GB70.1-2000	Socket head screw M5X10	2
29	MB13-07	Belt cover	1
30	21758-048	Elevating nut(RH)	2
31		Pan head screw M4X16	2
32	21758-42	Pointer	1
33	MB13-08	Rollercase	1
34	MB13-15-01	Motor pivot rod	1
35	MB13-16	Rod clamp	2
36		Set screw M5X6	2
37	GB93-87	Lock washer φ5	4
38	GB70.1-2000	Pan head screw M5X10	4
39		Depth-of-cut gauge	1
40		Pan head screw M4X12	3
41	MB13-12	Cutterhead	1
42	GB1096-1979	Key 5X5X10	1

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY



SPARE PARTS LIST

No.	FACTORY CODE	DESCRIPTION	Qty.
43	EP13202	Blade	2
44	EP13204	Blade clamp	2
45	22560115	Socket head screw M6X16	12
46	GB276-94	Ball bearing 6203-3Z	1
47	SPL1020	Bearing house	1
48	GB70.2-2000	Pan head screw M5X12	3
49	EP12039	Cutterhead pulley	1
50	EP12040	Motor pulley	1
51		Belt 135J6	1
52	GB6172-86	Hex nut M16X.5 LH	1
53	21758-071	Screw	2
54	21758-072	Dust exhaust port	1
55	MB13/3-06	Connecting port	1
56		Socket head screw M5X10	4
57		Flat washer 5MM	4
58	MB13/3-05	Dust chute	1
59	MB13/3-22	Chute plate	1
60		Flat head tap screw ST4.2X13	4
61		Hex wrench 4MM	1
62		Magnet	2
63	-11	Spring 4MM	4
64	EP125024	Bearing block	4
65	EP125004	Left retainer II	2
66	GB96-85	Flat washer φ5	8
67	GB93-87	Lock washer φ5	8
68	GB70.1-2000	Socket head screw M5X12	8
69	MB13-10	Outfeed roller	1
70	EP125006	Right retainer I	2
71	MB13-11	Infeed roller	1
72		Power cord	1
73	YB12A	Motor	1
74		Switch	1
75		Circuit breaker	1
76		Brush holder	2
77		Brush	2
78		Brush cap	2
79	MB13-35	Spacer	1
80	GB96-85	Flat washer φ8	1
81	GB70.1-2000	Socket head screw M8X25	1
82	GB70.1-2000	Socket head screw M5X16	1
83	GB5287-85	Flat washer φ6.6xφ22x2	1
84	21758-085	Elevating screw(LH)	1
85	21758-101	Flat washer	1
86		Ball bearing 6000ZZ	1

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY



SPARE PARTS LIST

No.	FACTORY CODE	DESCRIPTION	Qty.
87		Bearing clamp plate	1
88		Socket pan head screw M5X10	4
89	21758-105	Flat washer	2
90	21758-88	Column	4
91		Socket head screw M10X35	4
92	MB13-22	Guide	2
93	MB13-27	Table	1
94	GB70.1-2000	Socket head screw M5X8	8
95	GB96-85	Flat washer φ5	8
96		Outfeed extension table	1
97	GB96-85	Flat washer φ5	12
98	GB818-2000	Lock washer 12	12
99		Socket head screw M5X8	12
100	21758-085	Elevating screw(RH)	1
101	21758-101	Flat washer	1
102		Ball bearing 6000ZZ	1
103		Bearing clamp plate	1
104	MB13-30	Base	1
105		Infeed extension table	1
106	MB13-37	Bushing	4
107	CHI	Spring washer 8MM	4
108		Table support	2
109	GB93-87	Lock washer φ6	4
110	GB70.1-2000	Socket head screw M6X20	4
111		Extension table	2
112	GB5781-86	Hex head bolt M6X20	4
113	GB41-2000	Hex nut M6	4
114	MB125-006	Bevel gear	4
115		Socket head screw M5X12	2
116	21758-099	Shaft	1
117		Flat washer Ф5ХФ15Х1.2	2
118	MB13-32	Support	2
119	GB70.1-2000	Socket head screw M5X12	4
120	GB894.1-86	Retaining ring φ10	2
121		Flat washer φ10	4
122	MB13-13	Shaft	1
123		washer	34
124		Anti-kickback block	35
125		Socket head screw M5X20	2

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY



General Machinery Safety Instructions

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

- 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.
- 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.
- 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.
- Keep children and visitors away. Make sure children and visitors are at a safe distance for you work area.
- 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.
- 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 ellergic 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.





Planer Thicknesser Safety Instructions

Machinery House

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

- Maintenance. Make sure the Planer 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. Planer Thicknesser Condition. Planer Thicknesser must be maintained for a proper working condition. Never operate a Planer Thicknesser that has damaged or worn parts. Scheduled routine maintenance should performed on a scheduled basis.
- 3. Blade/Cutter Condition. Never operate a Planer Thicknesser with dropped, cracked or badly worn blades or cutters. Before using a Planer Thicknesser inspect all blades and cutters. A damaged blade or cutter can cause serious injury.
- Hand Hazard. Keep hands and fingers clear from the cutter-head, infeed & outfeed table supports. Serious injury can occur.
- 5. Leaving a Planer Thicknesser Unattended. Always turn the Planer Thicknesser off and make sure all moving parts have come to a complete stop before leaving the Planer Thicknesser. Do not leave Planer 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 Planer Thicknesser moving parts.
- Understand the machines controls. Make sure you understand the use and operation of all controls.
- Power outage. In the event of a power failure during use of the Planer Thicknesser, turn off all switches to avoid possible sudden start up once power is restored.
- 9. Work area hazards. Keep the area around the Planer 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 work-piece adequately with additional supports at all times while cutting. This is crucial for making safe cuts and avoiding injury. Never attempt to make a cut with an unstable workpiece. Ensure work piece has stopped feeding before handling.
- 11. Hearing protection and hazards. Always wear hearing protection as noise generated from cutter-head and workpiece vibration can cause permanent hearing loss over time
- 12. Thicknesser Infeed clearance safety. The infeed roller is designed to pull the work-piece into the cutter-head. 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 work-piece 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 manmade products. Thicknessing material not designed for this machine may cause serious injury.
- 16. Planer Cutter-head Alignment. The top edge of the out-feed 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 work-piece 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 cutter-head without a push stick.
- Blade guards. Always use blade guards except when rebating. Make sure you replace the guard after rebating.
- **21. Planer Cutting operation.** Always keep the work-piece moving toward the outfeed table until the work-piece has passed completely over the cutter-head. Never feed the work-piece toward the infeed table.
- 22. Stalled blade. In the case that the cutter-head stalls while in operation, turn the Planer Thicknesser off before freeing the stalled cutter-head.
- 23. Changing between Planer / Thicknesser mode.

 Once changed to the required mode either Planer or Thicknesser, always ensure all safety guards and dust chutes are re-fitted before starting machine.
- **24. Work-piece safety.** Inspect your work-piece carefully before feeding it over the cutter-head. Never thickness material 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 work-piece from the Planer Thicknesser table cutter-head. 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

Planer Thicknesser

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)

Plant Safety Program to be read in conjunction with manufactures instructions	Plant Safety Pr		
Must be connected to dust extraction		DUST.	
Wear hearing protection as required.	LOW	OTHER HAZARDS, NOISE,	0
Machine should be installed & checked by a Licensed Electrician.			
machine.			
All electrical enclosures should only be opened with a tool that is not to be kept with the	MEDIUM	ELECTRICAL	ェ
Ensure to use correct feed rates for material.			
A face mask must be worn at all times.			
Do not stand behind timber when feeding into machine.	MEDIUM	STRIKING	П
Make sure all guards are secured shut when machine is on.	MEDIUM	SHEARING	D
Make sure all guards are secured shut when machine is on.			
Care must be taken when handling knives.			
Keep hands clear of all blades and moving parts. Use a push stick where necessary.			
Do not open or clean inside until the machine has completely stopped.		PUNCTURING	
Isolate power to machine prior to any checks or maintenance.	MEDIUM	CUTTING, STABBING,	ဂ
Keep hands clear from infeed & outfeed support rollers during operation.			
clamping and pivoting area.			
Be sure that when rising and falling planner tables hands are well away from locating,			
Heavier timber must be supported	MEDIUM	CRUSHING	₩
Eliminate, avoid loose clothing / Long hair etc.	HIGH	ENTANGLEMENT	Α
nt (Recommended for Purchase / Buyer / User)	Assessment	Identification	No.
RISK Control Strategies	Hazard	Hazard	Item





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Authorised and signed by:
Safety officer:

Manager:

Revised Date: 29th June 2018