HAFCO
WOODMASTER

Edition : 1
Date: (08/26)

Instruction Manual

HELICAL HEAD THICKNESSER
T-380H

Order Code: (W825)

MACHINE DETAILS

MACHINE.	**Helical Head Thicknesser**
MODEL NO.	**T-380H**
SERIAL NO.	
DATE OF MANF.	

IMPORTED BY

AUSTRALIA

HARE&FORBES MACHINERYHOUSE

www.machineryhouse.com.au

NEW ZEALAND

MACHINERYHOUSE

www.machineryhouse.co.nz

NOTE:
This manual is only for your reference. At the time of the compiling of this manual every effort to be exact with the instructions, specifications, drawings, and photographs of the machine was taken. Owing to the continuous improvement of the HAFCO Woodmaster machine, 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 any electric machine.

SAFETY SYMBOLS:
The purpose of safety symbols is to attract your attention to possible hazardous conditions

⚠WARNING **Indicates a potentially hazardous situation causing injury or death**

⚠CAUTION **Indicates an alert against unsafe practices.**

Note: Used to alert the user to useful information

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

HAFCO METALMASTER

PRODUCT SPECIFICATIONS

Model: T-380H
Capacity: 381mm — Voltage: 240V/50Hz
Nett Weight: 80kg — Motor: 2.2kW
MFG Date: — FLC: 10.5A

SERIAL NO:

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CONTENTS:

WARNING!

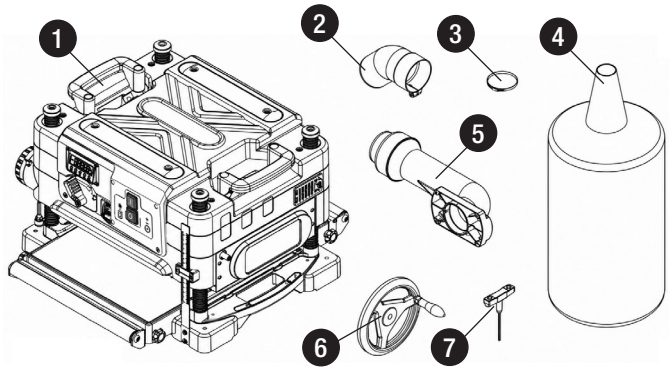
The machine is the sole responsibility of the owner for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training, proper inspection and maintenance, manual availability and comprehension. The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

1.1 SPECIFICATIONS

Order Code	W825
MODEL	**T-380H**
Material Width Capacity (mm)	381
Material Height Capacity (mm)	180
Minimum Material Length (mm)	190
Maximum Depth of Cut @ 380mm wide (mm)	0.8 (1/32”)
Cutter Type	Helical
Quantity of Cutters (No. x Type):	36 / Carbide
Cutter Block Diameter (mm)	60.5
Cutter Block Speed (rpm)	7600
Quantity of Spirals (No.)	3
Length of Table (mm)	560
Length Between Extensions/Rollers (mm)	1218
Feed Speed (m/min)	3 / 5
Dust Outlet Diameter (mm)	100
Motor Power (kW / hp)	2.2 / 3
Voltage / Amperage (V / amp)	240 / 15
Floor Space (W x D x H) (mm)	673 x 725 x 383
Nett Weight (kg)	80

1.2 PACKING LIST

1. Thickness planer x1
2. Adapter..... x1
3. Hose clamp x1
4. Filter bag x1
5. Dust port..... x1
6. Hand Wheel..... x1
7. T wrench x1
8. Hardware bag (Not shown)

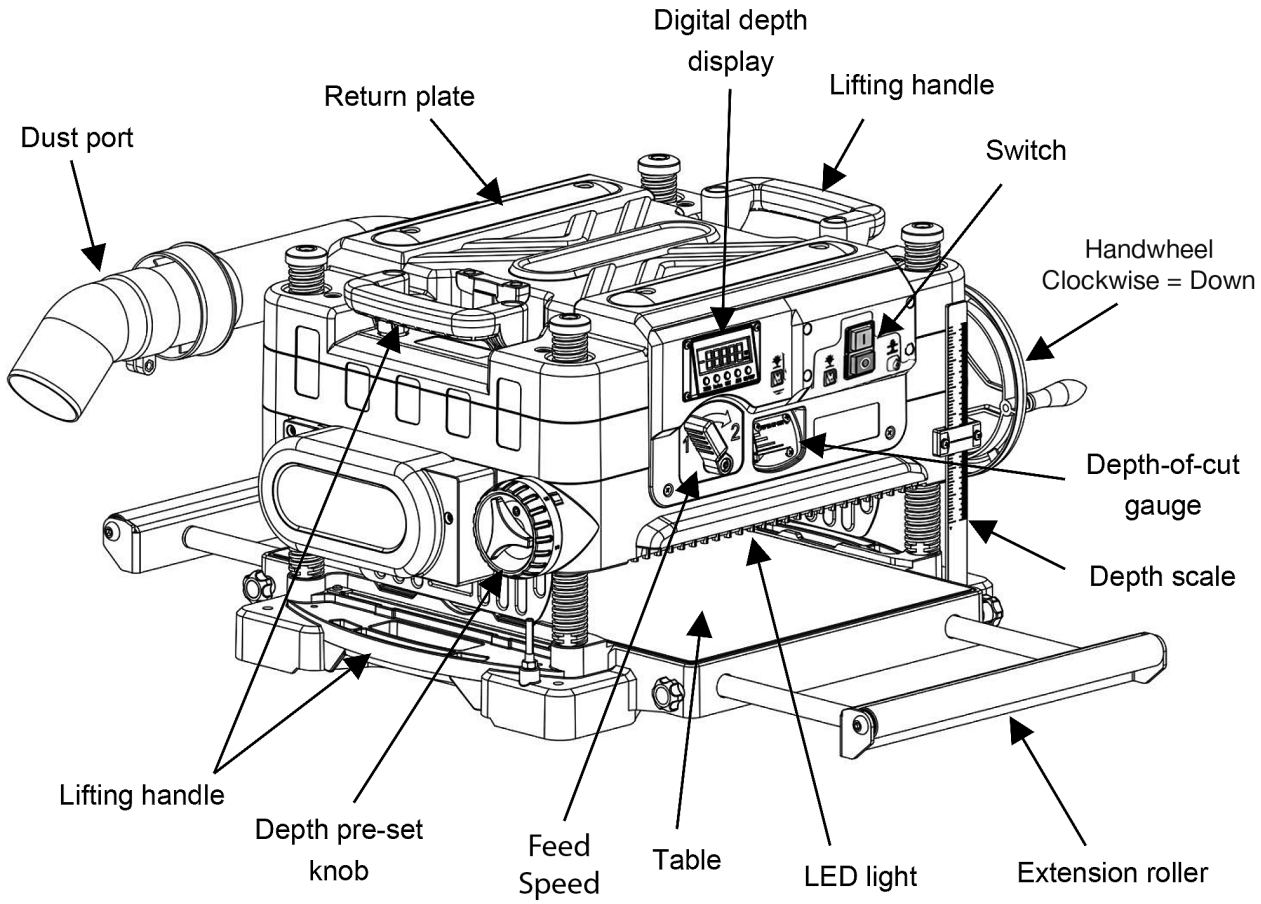


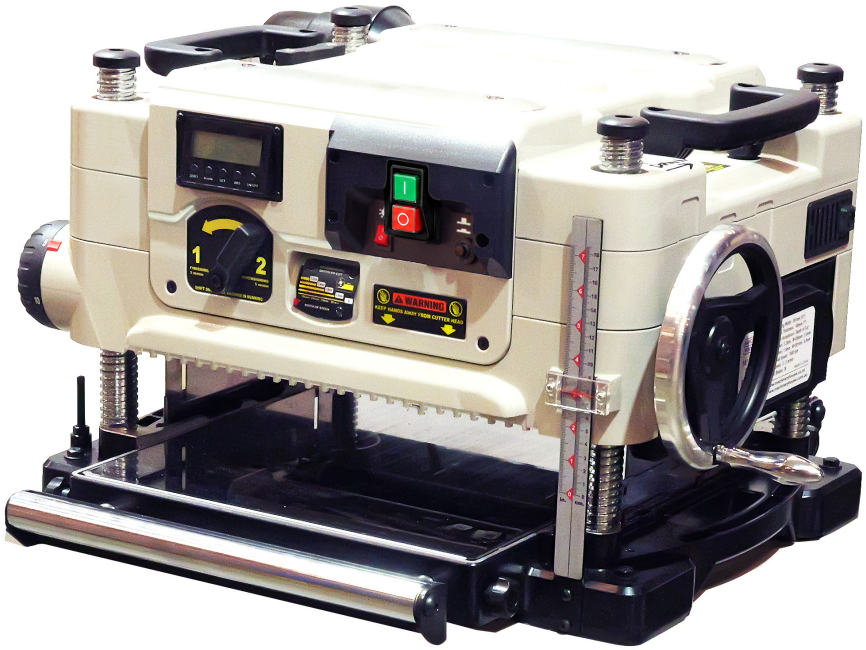
WARNING!

Read and understand the instructions in this manual, before operating this machine to reduce the risk of serious injury or even death. Save all warnings and instructions for future reference.

1.3 IDENTIFICATION

Become familiar with the names and locations of the controls and features shown below to better understand the instructions when mentioned later in this manual.





2. SAFETY INFORMATION

2.1 GENERAL WOODWORKING MACHINE SAFETY

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.

Safety glasses must be worn at all times in work areas. Earmuffs should be worn if the work area is noisy.

Sturdy footwear must be worn at all times in work areas.

Gloves should NOT be worn when operating machinery. Should only be worn when handling the material.

Long and loose hair must be contained with a net or under a hat.

2.1 GENERAL WOODWORKING MACHINE SAFETY Cont.

DISCONNECT POWER FIRST. If using power, always disconnect the machine from power supply before making adjustments, or servicing the machine. This prevents any risk of injury from unintended startup or contact with live wires.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave hex keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose. Do not force the machine or its attachments to do a job for which they were not designed. Never make unapproved modifications. Modifying the machine or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make operating control difficult. This could increase the risk of accidental injury.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged and working correctly.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

TRAINED OPERATORS ONLY. Only allow trained or supervised people to use this machine. When the machine is not being used, disconnect the power to the machine to prevent unauthorized use—especially around children. Make the workshop safe.

FORCING MACHINERY. Do not force the machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if the machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify the machine is stable and if using a mobile base it is locked in position.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn the machine OFF and ensure all moving parts have completely stopped before walking away. Never leave the machine running while unattended.

MAINTAIN WITH CARE. Follow all the maintenance instructions and lubrication schedules to keep the machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

CHECK DAMAGED PARTS. Regularly inspect the machine for any condition that may affect the safe operation. Immediately repair or replace damaged or parts that are incorrectly fitted before operating.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

WARNING!

Before operating any machine, take time to read and understand all safety signs and symbols. If not understood seek explanation from your supervisor or an experienced operator.

2.2 SPECIFIC SAFETY FOR THICKNESSERS

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

Safety glasses must be worn at all times in work areas to protect the eyes from flying shavings.

Appropriate footwear with substantial uppers must be worn. No open toe shoes should be worn.

Rings and jewellery must not be worn when operating this machine.

Long and loose hair must be contained while operating the machine.

Close fitting and protective clothing must be worn.

Hearing protection must be worn when using this machine.

PRE-OPERATIONAL SAFETY CHECKS

1. Check workspaces are clear and no slip/trip-hazards are present.
2. Check safety guards are adjusted and operate to give maximum protection.
3. Where a bridge guard is fitted adjust the guard to ensure a maximum of 2mm clearance between guard and the timber.
4. Do not plane stock with structural defects.
5. Locate and ensure you are familiar with the operation of the ON/OFF starter and E-Stop (if fitted).
6. Set depth of cut and lock table. Never make a single cut greater than 2mm.
7. Check and lock fence in position.
8. Start the dust extraction unit before using the machine.

OPERATIONAL SAFETY CHECKS

1. Hands must not be closer than 100mm from the cutter head when it is rotating.
2. Use push blocks wherever possible.
3. Never leave the machine while it is running.
4. Place cupped boards with the concave side against the table.
5. Plane with the grain. Hold the workpiece firmly and apply even feed rate.
6. Operator should stand to side of in-feed table to avoid possible kickbacks.
7. Before making any adjustments switch off and wait for the cutter head to completely stop.

HOUSEKEEPING

1. Switch off and reset all guards to a fully closed position after use.
2. Reset the depth of cut to zero after use.
3. Leave the machine in a safe, clean and tidy state.

DON'T

- Do not surface stock less than 300mm long x 20mm wide x 15mm thick
- Do not use faulty equipment. Immediately report suspect machinery.
- Never leave the machine running unattended.
- Do not plane timber with embedded nails or screws.
- Do not plane timber less than 300 mm in length.
- Never look through machine feed opening when the cutter block is revolving.

3. POWER SUPPLY

3.1 ELECTRICAL REQUIREMENTS

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 the power used by the machine.

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.....15 Amps
Full Load Current.....10.5 Amps

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

3.2 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 this machine is available on the machine spec plate.

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.

4 SET-UP

4.1 UNPACKING

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. If items are damaged, please contact your distributor.

NOTE: Save all the packaging materials until you are completely satisfied with the machine and have resolved any issues with the distributor, or the shipping agent.

When unpacking, check the packing list to make sure that all parts shown are included. If any parts are missing or broken, please contact your distributor.

4.2 CLEAN - UP

The unpainted surfaces of the machine have been coated with a waxy oil to protect them from corrosion during shipment. Remove the protective coating with a solvent cleaner or a citrus based degreaser.

Optimum performance from your machine will be achieved when you clean all moving parts or sliding contact surfaces that are coated with rust preventive products.

It is advised to avoid chlorine based solvents, such as acetone or brake parts cleaner, as they will damage painted surfaces and strip metal should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

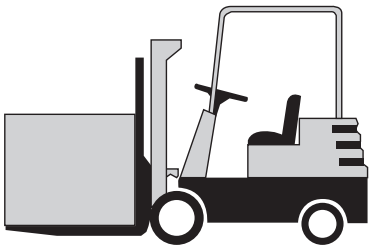
4.3 SITE PREPARATION

When selecting the site for the machine, consider the largest size of workpiece that will be processed through the machine and provide enough space around the machine for operating the machine safely. Consideration should be given to the installation of auxiliary equipment. Leave enough space around the machine to open or remove doors/covers as required for the maintenance and service as described in this manual.

It is recommended that the machine is anchored to the floor to prevent tipping or shifting. It also reduces vibration that may occur during operation.

4.4 LIFTING INSTRUCTIONS

⚠WARNING ***This machine is extremely heavy. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and power equipment when moving the shipping crate and removing the machine from the crate.***



On the day that the machine arrives, make sure that a forklift or lifting device, with sufficient capacity is available to unload the machine from the vehicle. Ensure access to the chosen site is clear and that doors and ceilings are sufficiently high and wide enough to receive the machine.

WARNING!

Make sure everyone is away from the load before hoisting. The load must be under control when lowering loads suspended. Rigging and crane operation must be carried out by persons with approved qualifications.

4.5 ASSEMBLY

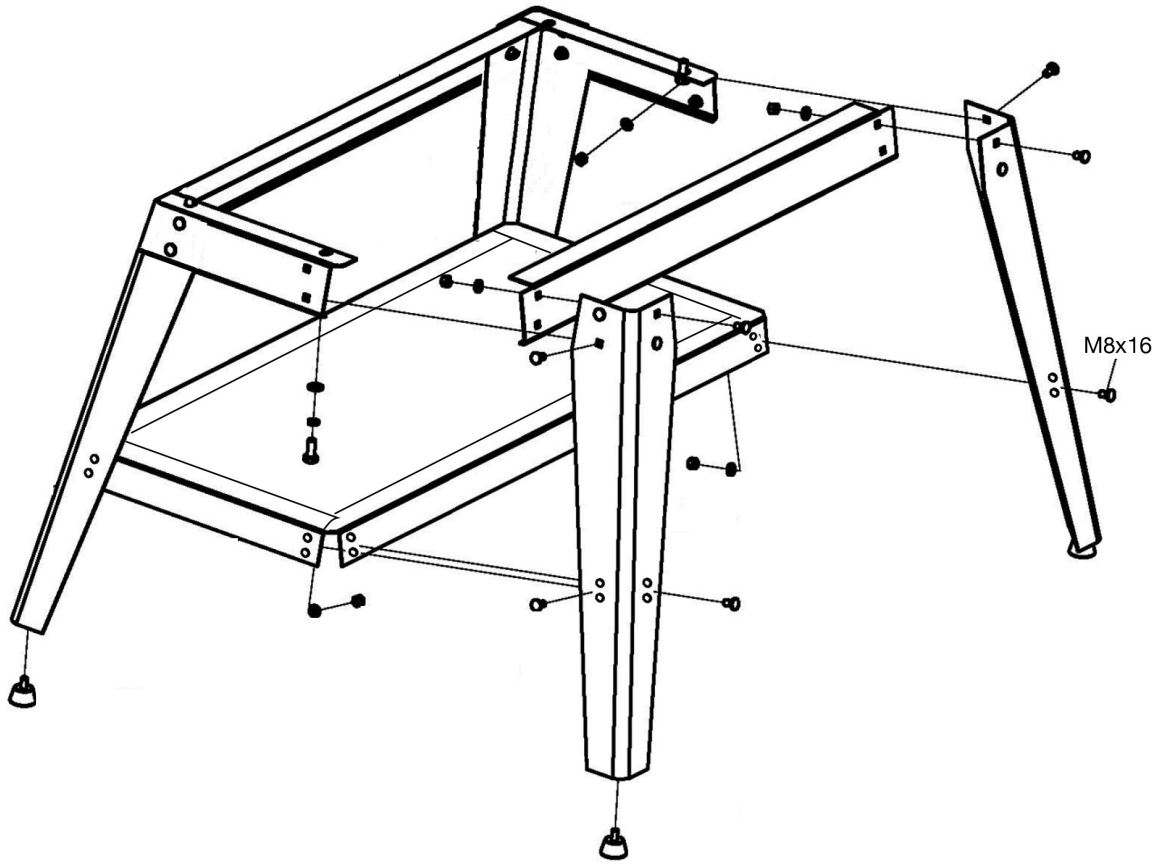
The machine must be fully assembled before it can be operated. First clean any parts that are coated in rust preventative to ensure the assembly process can proceed smoothly.

STAND ASSEMBLY:

1. **Attach the Legs:** Lay out the four legs and the top mounting brackets. Loosely bolt the legs to the top perimeter frame using the M8 x16 Bolts washers and M8 nuts, but do not fully tighten yet.
2. **Add Crossbars:** Install any middle or bottom stabilizing braces. Leaving the hardware slightly loose allows you to manoeuvre the pieces into alignment.
3. **Square the Stand:** Once all pieces are connected, place the stand on a flat surface and tighten all bolts securely to ensure the frame is rigid and does not wobble.

MOUNTING THE MACHINE

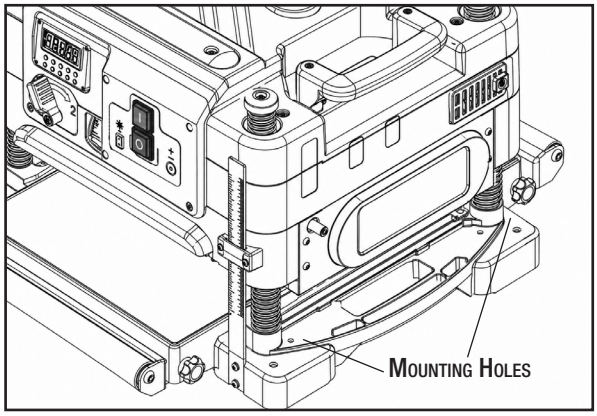
1. **Align the Machine:** Carefully lift the thicknesser onto the top of the stand, aligning the mounting holes on the base of the machine with the holes on the stand's top brackets.
2. **Secure the Base:** Insert the heavy-duty bolts with washers through the stand and into the machine base. Fasten with washers and lock nuts from underneath.
3. **Check for Level:** Use a machinist's level on the machine table or bed to ensure the machine sits perfectly level to prevent uneven process.



MOUNTING THE MACHINE

1. **Align the Machine:** Carefully lift the thicknesser onto the top of the stand, aligning the mounting holes on the base of the machine with the slots on the stand's top brackets.
2. **Secure the Base:** Insert the heavy-duty bolts with washers through the stand and into the machine base. Fasten with washers and lock nuts from underneath.
3. **Check for Level:** Use a machinist's level on the machine table or bed to ensure the machine sits perfectly level to prevent uneven process.

The thickness planer should be mounted level on the stand or bench before operation. Four holes are provided on the four corner of the base for mounting to a workbench or worktable.

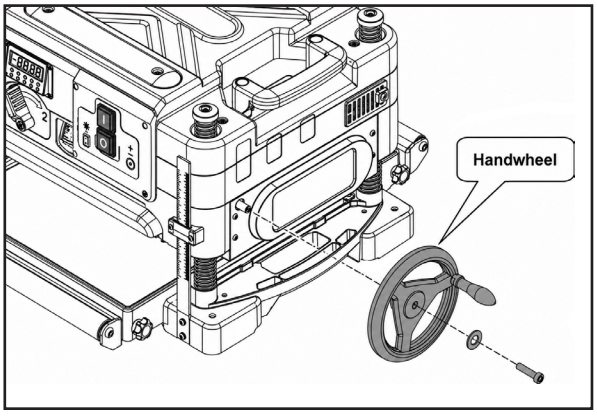


WARNING!

Parts of this machine are heavy. You must have assistance when moving or lifting these parts.

HAND WHEEL

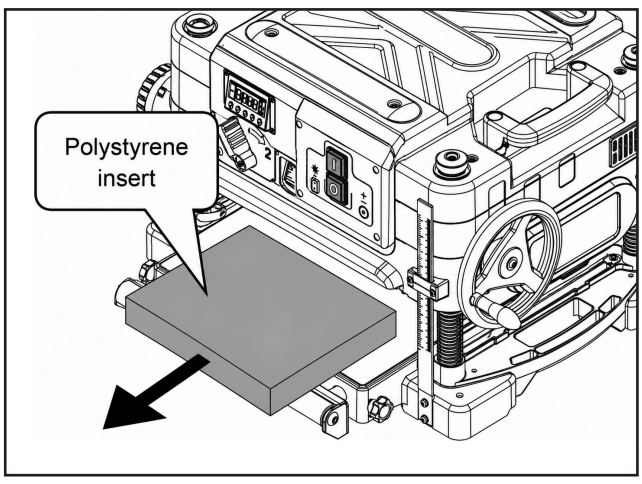
Attach the hand wheel onto the shaft, secure it in place by using the M6X25 socket pan head screw and 6mm flat washer.

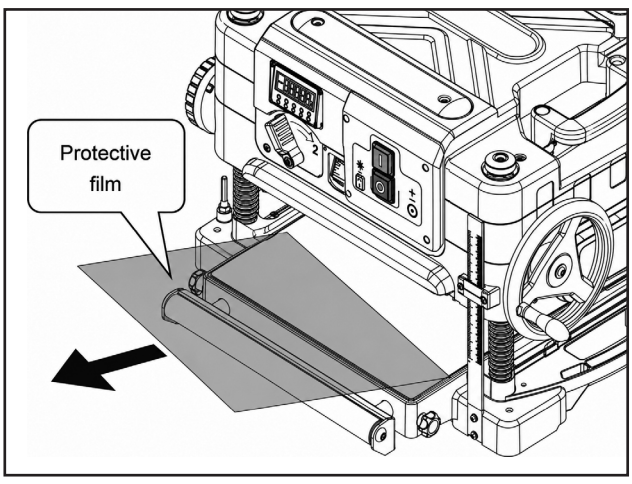


WARNING

DO NOT operate any machine before it is fully assembled and all the safety guards have been fitted and secured. Failure to do so may cause death or severe injury.

Turn the height adjustment hand wheel anti-clockwise to raise the headstock. Remove the polystyrene insert located between the main table and the headstock. This polystyrene insert is packing material, to protect the machine during shipping. If the table is covered with protective film, remove it before starting work.

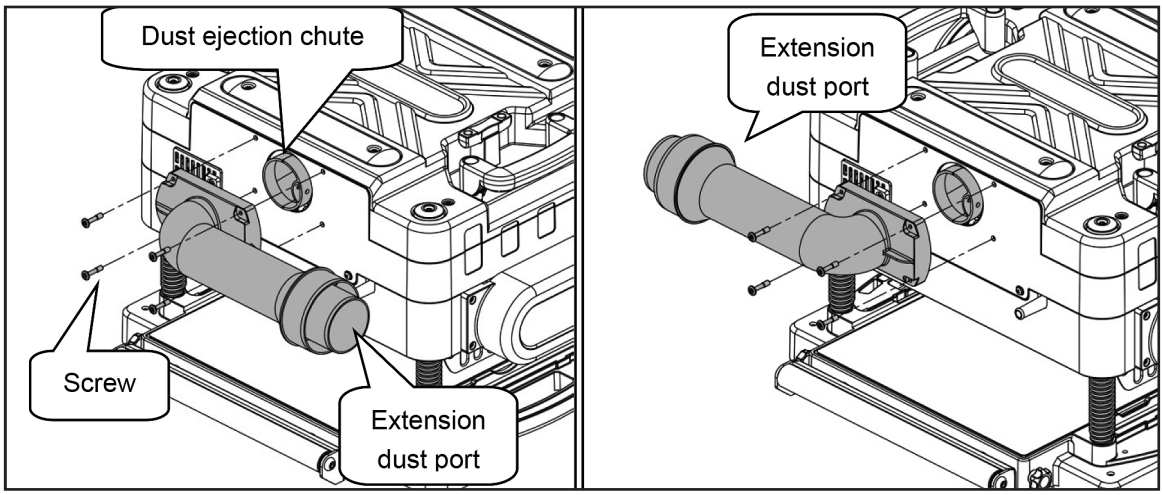




DUST PORT

Attach the extension dust port onto the dust ejection chute, fix the extension dust port by using four M6X27.5 socket pan head screws. The extension dust port can be mounted to direct chips to either side of thickness planer.

Now you can connect the dust port to a dust extraction system using a hose.

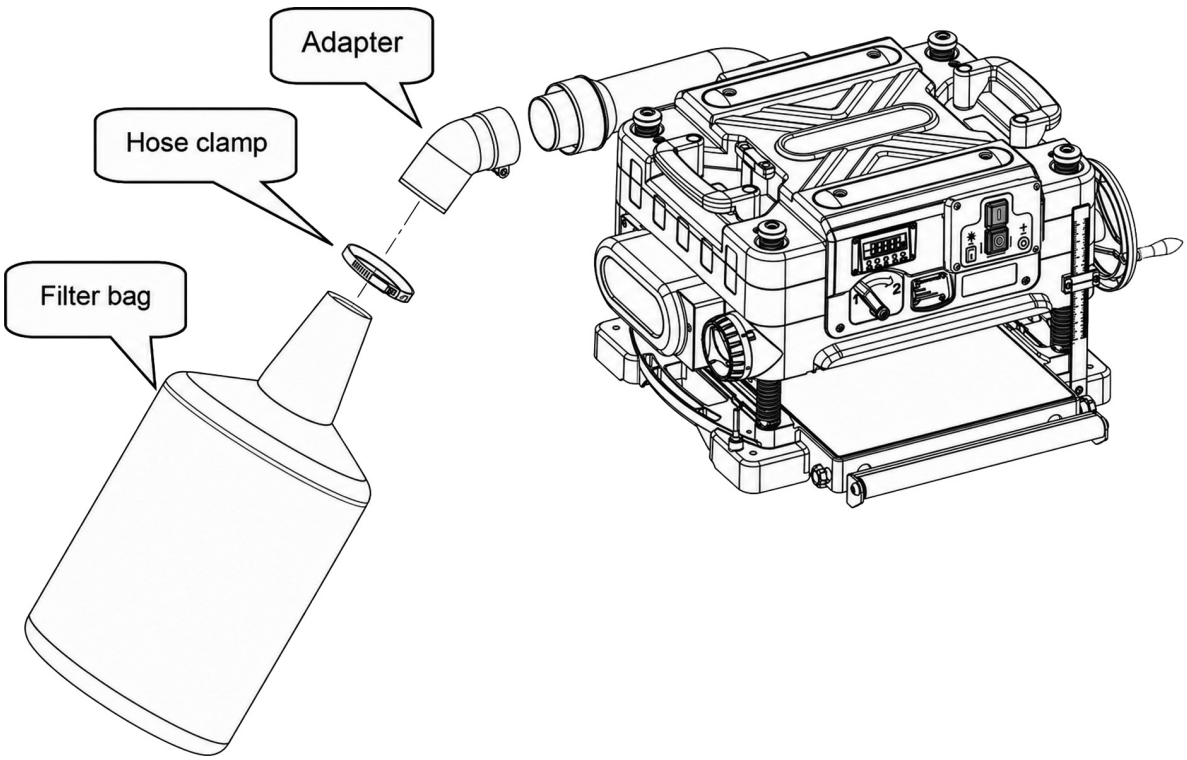


It is recommended that the thickness planer be used with a dust extraction system for a cleaner and safer working environment. Using a dust extraction system will also help prevent clogging of the dust chute.

If you cannot connect to a dust extraction system, you can also use the included filter bag to collect wood chips.

Slide the adapter onto the end of extension dust port. Tighten the pan head screw.

Fit the filter bag onto the adapter and fix it using the hose clamp.



5. OPERATION

5.1 OPERATION OVERVIEW

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine works during operation, so the machine controls and components discussed later in this manual may be easy to understand.

Due to the generic nature of this overview, it is not intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading “how-to” books, trade magazines, or websites.

In a typical operation, the operator does the following:

1. Examine the workpiece to make sure it is suitable for the thicknesser.
2. Put on safety glasses or face shield, a respirator and hearing protection.
3. Place the workpiece on the table with the flat side down and correctly adjust the table height for the workpiece thickness and depth of cut.

— If workpiece is bowed, plane the surface of the workpiece on a jointer until one side is flat. Doing so ensures that it sits flat on the thicknesser table during operation.

4. When all safety precautions have been taken, turn ON the planer.
5. Stand to one side of the thicknesser path to reduce risk of kickback injuries, then feed the workpiece into the planer until the in-feed roller grabs it.

Note: In-feed and out-feed rollers control feed rate of workpiece as it passes through planer. Operator should not push or pull on work piece.

— If the cut is too deep and bogs down immediately reduce the depth of cut.

6. Once the workpiece is clear of the out-feed roller and stops moving, remove the workpiece from the out-feed table and measure the workpiece thickness. If further planing is required, raise the table slightly (approximately 1⁄4 to 1⁄2 turn of table height hand wheel), then feed the work piece into the front of planer again.
7. Continue the process until the desired thickness is achieved, then turn the machine OFF.

5.2 INSPECTING THE WORK PIECE

Some materials are not safe to use or may require modification before they are safe to use. Before cutting, inspect all workpieces for the following:

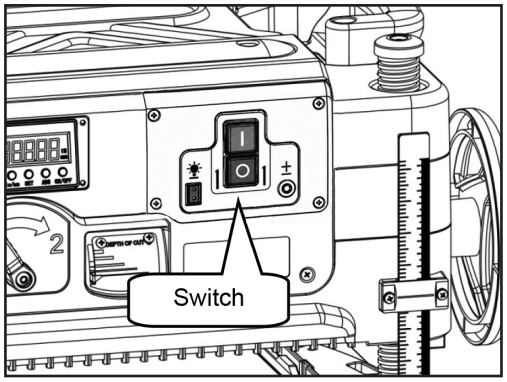
- **Material Type:** This machine is only intended for work pieces of natural wood fiber. Attempting to use work pieces of any other material that could break apart during operation could lead to serious personal injury and property damage.
- **Foreign Objects:** Inspect lumber for defects and foreign objects (nails, staples, embedded gravel, etc,). If you have any doubts about the quality of the timber, 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 operation. Large knots can cause kickback and machine damage. Always use workpieces that do not have large/loose knots.
- **Wet or “Green” Stock:** Avoid using 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 cut poorly and cause excessive wear to the machine. Excess moisture can also hasten rust and corrosion of the machine and/or individual components.

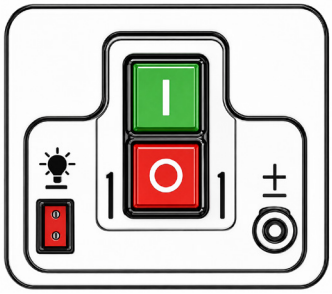
5.3 CONTROLS

Note: Observe the safety instructions and symbols on machine before operation.

A switch is installed on the machine to turn it ON and OFF.

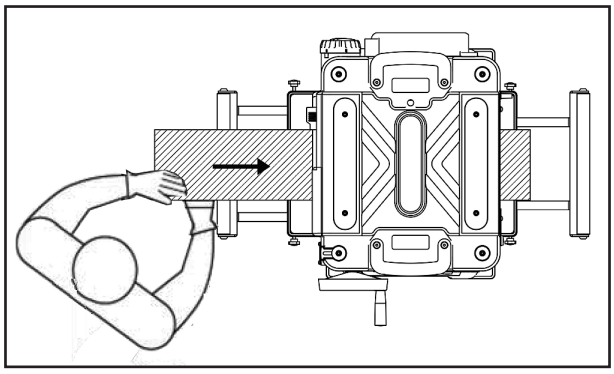
Press the GREEN button to turn ON the machine. Press the RED button to turn OFF the machine.

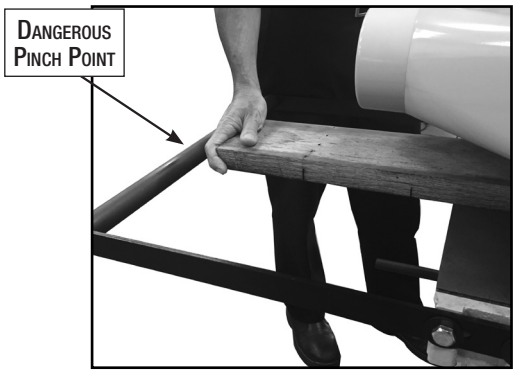




The correct operating position for the machine is shown in the figure below. Do not stand in the feed path of the workpiece to prevent the risk of kickback.

WARNING PINCH POINTS Beware of pinch points that can cause serious damage to fingers and hands especially around the support rollers on the out feed. It is best practice to wait for the workpiece to stop feeding before removing.



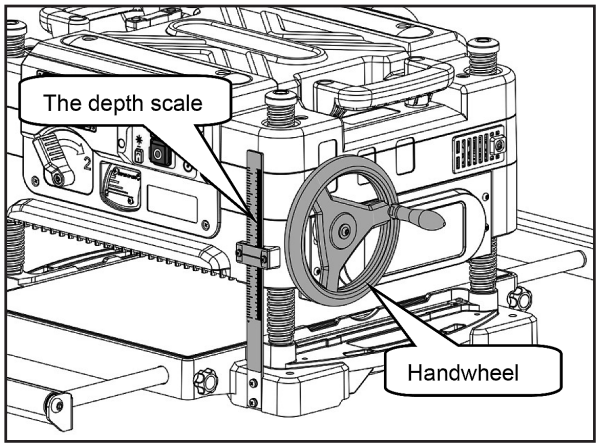


WARNING!

Take care when operating this machine. Crush Points can occur when operating this machine. Crush points can cause severe injury to the operator. All care must be taken.

Rotate the hand wheel to raise or lower the headstock.

The red mark on the indicator shows the finished thickness of the board after the process has finished.



5.4 DIGITAL DISPLAY

This digital display helps to accurately set the thickness of the workpiece to be removed and shows the thickness of the workpiece after the process.

BUTTON FUNCTION DESCRIPTION

1. ZERO button: Clean the digital display and set new zero point. Press the ZERO button and adjust the height of headstock, the digital display shows headstock moving distance from most recently set zero point.

2. In/mm Button: Toggles digital readout units between inches and millimeters.

3. SET Button: Used to set the value of the digital display to match the actual thickness of the workpiece after planing.

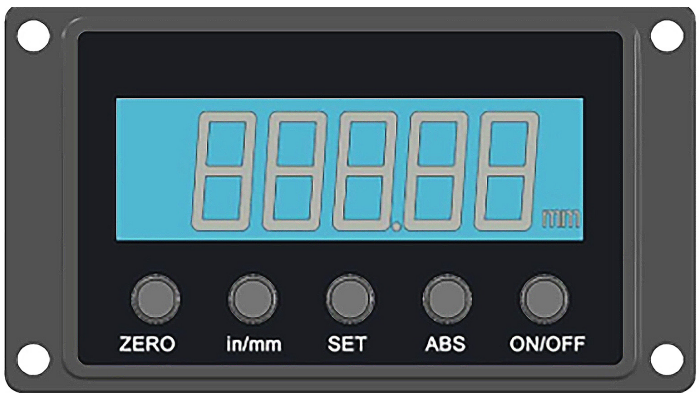
4. ABS Button: Displays the actual thickness of the workpiece after planing, i.e. the distance from the lowest point of the cutter to the table surface.

NOTE: Adjusting the height of the headstock while not connected to the power supply may cause the thickness value to be incorrect. It is recommended to check and confirm the thickness value each time the power is connected, and if it is incorrect, follow the instructions below for settings.

5. ON/OFF Button: Turns the display ON and OFF.

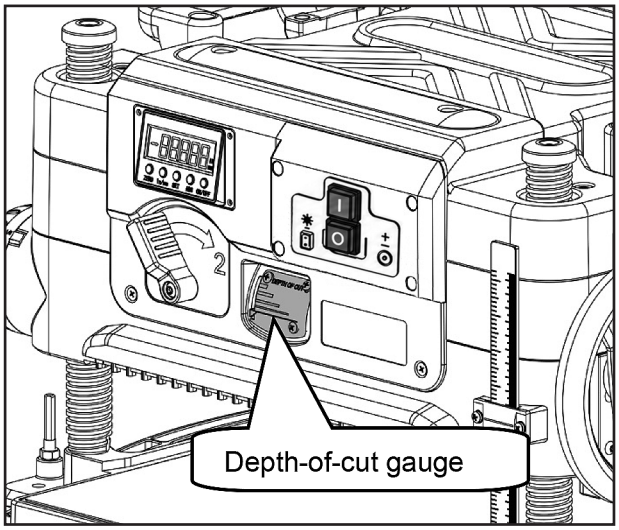
TO SET THICKNESS DISPLAY

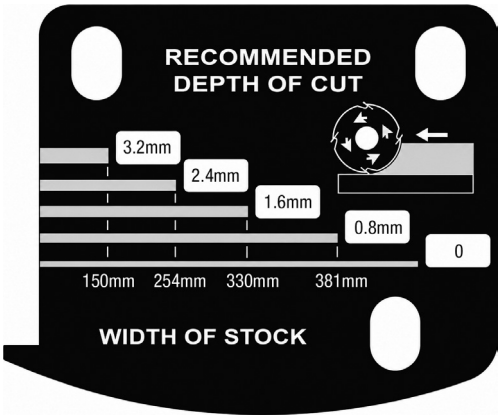
1. Connect the machine to the power supply.
2. Press the ABS button to display the current value.
3. Adjust the headstock down to take a cut, turn on the machine and feed a flat board through the thicknesser.
4. Measure the thickness of the planed board and check that it is the same as the value shown on the digital display.
5. If it does not match, press and hold the SET button until the display flashes, then press the SET button briefly to switch to the displayed value you need to modify, then press the ABS button to change the displayed value to the desired value.
6. After getting the desired value, press and hold the SET button to complete the setting.



5.5 DEPTH OF CUT GAUGE

The thickness is equipped with a depth-of-cut gauge. It is used to indicate the amount of wood that will be removed in one pass with the headstock set at its current height.

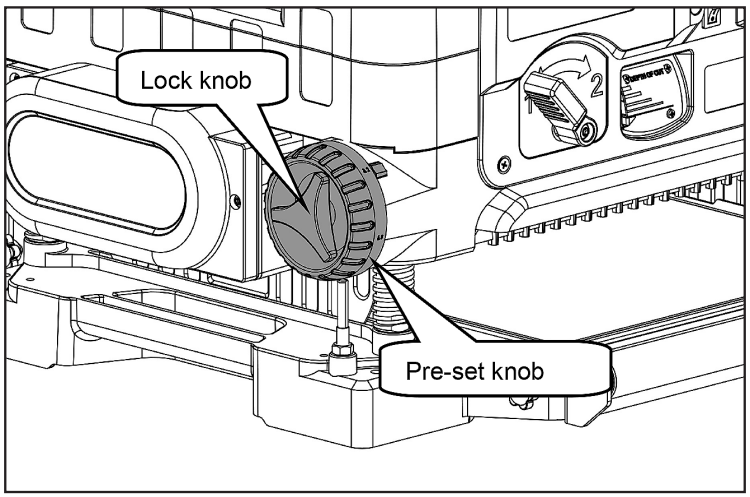




A workpiece thickness six position preset stop control knob is mounted on left side of the thicknesser. This knob allows you to pre-set the desired finished workpiece thickness that the planer will produce.

1. Be sure the carriage is set above 30mm before trying to set the pre-set stop.
2. Loosen the lock knob and turn the control knob until the desired thickness setting aligns with the red indicator, then lower the carriage.
3. Plane the workpiece at desired increments until the correct final thickness is achieved.

NOTE: To reset for a different depth stop, properly raise the carriage. Turn the knob to desired set-up. Do not use force to lower the carriage below the level that the pre-set stop indicates. This could result in permanent damage to the height adjustment system.



WARNING!

The fine dust particles produced by the woodworking machines can go inside your lungs and cause serious respiratory problems. Make sure to wear a dust mask and connect the machine to a proper dust collection system while operating.

5.6 SETTING THE FEED

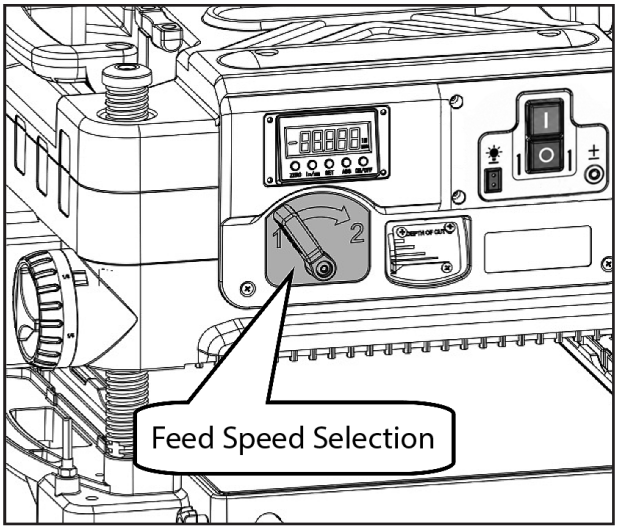
The planer has the ability to feed material at two different speeds.

To remove material thickness more quickly, set the unit at **Speed 2** = 5m/min.

For finishing, set the unit to **Speed 1** = 3m/min.

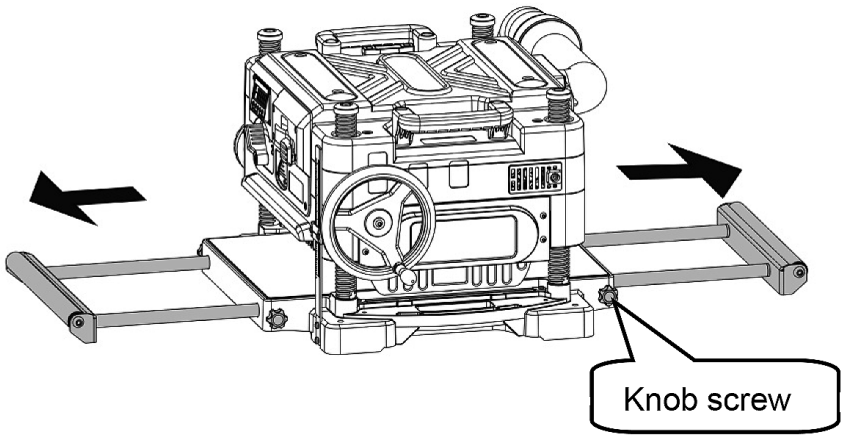
NOTE: Only switch speeds when the planer is running.

NOTE: When planing particularly hard or figured species of wood, speed "1" is recommended. The slower feed rate will reduce knife wear.



5.7 SUPPORT ROLLERS

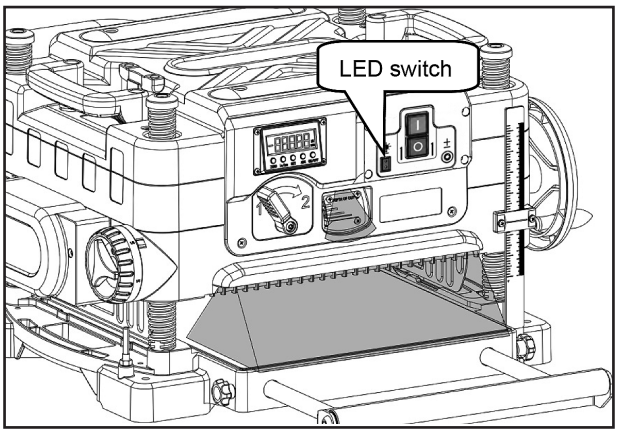
The extension roller can be extended for support of long workpiece. Loosen the knob screws beside the table, pull the extension roller out and tighten the knob screws. This extends the support to 1218mm from roller to roller.



5.8 LED LIGHT

The machine is equipped with two LED lights to provide additional illumination for the depth-of-cut gauge and in-feed table .

If needed, turn on the LED light switch.



WARNING!

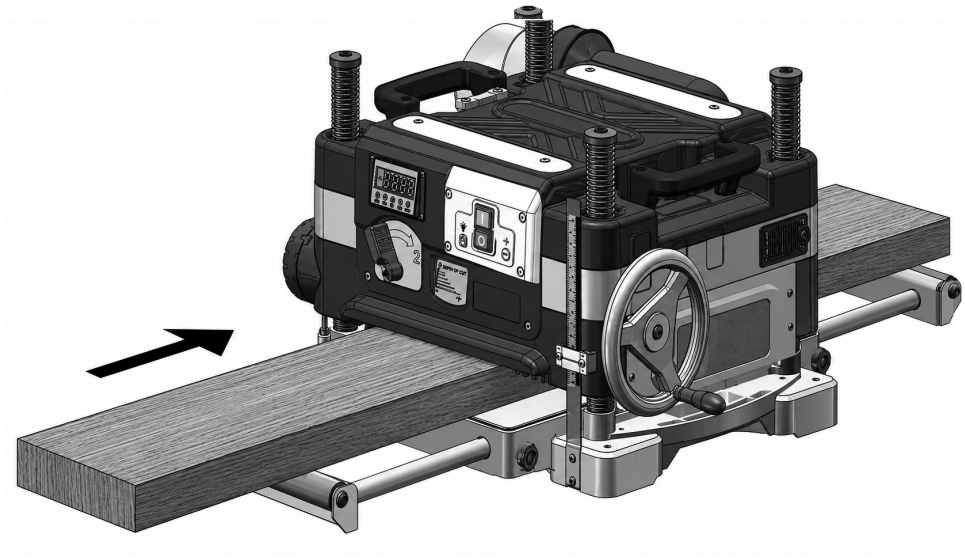
Blades are sharp. Keep fingers away from the cutter edge. Take care when handling saw blades. Blades can cause deep cuts and serious injury.

5.9 OPERATING TIPS

When operating adjust the depth of cut to make an initial light (0.5mm) cut.

Always switch on the machine and wait until the motor has reached full speed.

Press the board against the in-feed table and feed it into the machine. Release the board when the machine starts to cut and let the board feed into the machine automatically.



AVOIDING SNIPE

Snipe on a thickness planer is a defect where the machine cuts deeper into the first or last few inches of a wooden board. This leaves a shallow, unwanted dip at the ends, making the board thinner at the tips than in the middle.

1. Use scrap extensions: Tape or butt scrap pieces of identical thickness before and after your main board to catch the cutter head's dip.
2. Snipe will occur when boards are not supported properly or when only one feed roller is in contact with work at the beginning or end of the cut.
3. Lift the board ends: Gently and slightly lift the outer end of the board upward as it enters the in-feed and leaves the out-feed to counteract the downward pull of the rollers.
4. Move to the rear and receive planed board by gently pushing it up when the in-feed roller looses contact with the board
5. When planing more than one board of the same thickness, butt boards together to avoid snipe.
6. Snipe is more apparent when deeper cuts are taken.
7. Lighter passes: Restrict your final few passes to micro-adjustments under 0.8 mm (1/32 inch) to minimize the mechanical downward deflection of the cutter assembly

CAUTION!

It is impossible to cover all possible hazards. All workshop environments are different. These are designed as a guide to be used to compliment training and as a reminder to users prior to equipment use. Always consider safety first, as it applies to the individual working conditions.

6. MAINTENANCE

⚠ WARNING ***Before maintaining or cleaning the machine, turn off the circuit breaker, or disconnect the machine from the power supply.***

Post a sign to inform other workers that the machine is under maintenance.

For optimum performance from the machine, it is important that the machine is well cleaned and maintained. Follow the maintenance schedule listed in the following section and refer to any specific instructions given.

6.1 SCHEDULE

Daily Check

- Loose mounting bolts.
- Worn or damaged wires.
- Check/adjust lubrication.
- Any other unsafe condition

Cleaning

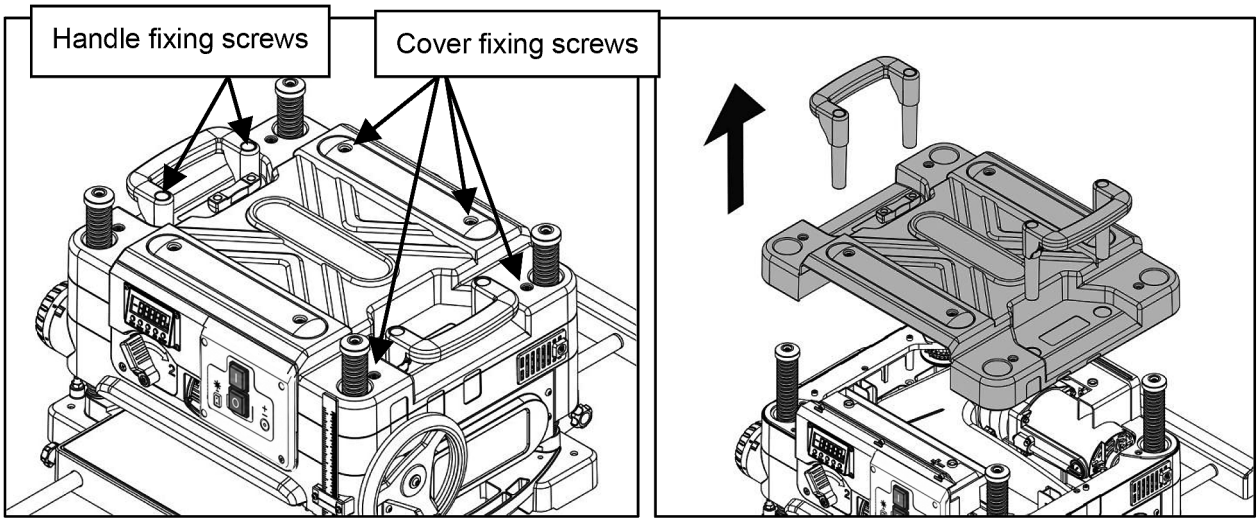
To clean a thickness planer safely and effectively, always unplug the machine first. Remove loose dust with a vacuum, wipe sap and pitch off the bed and feed rollers using a cleaner like Simple Green or mineral spirits, and protect the metal table with paste wax.

6.2 CHANGING THE BLADES

If the machine planes unevenly or tends to gouge, the blades must be changed.

To remove the blades, proceed as follows.

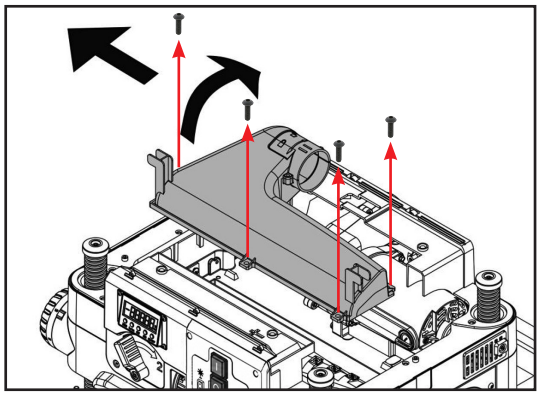
1. Fully loosen the lift handle fixing screws and remove the two lift handles from the machine
2. Fully loosen eight screws on top cover and remove the top cover.

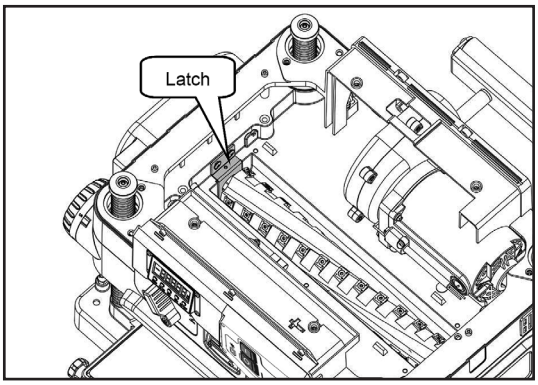


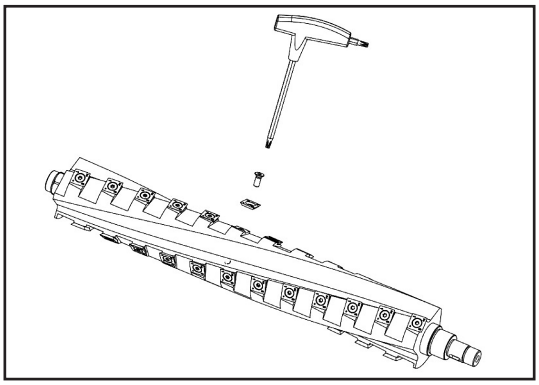
WARNING!

Disconnect all power from the machine before servicing. There may be multiple power sources present. Remove the plug from the power point or remove the fuse if hardwired. Failure to do so may cause death or injury.

3. Remove only the 4 off Button Head Allen key fixing screws. (4mm Allen key needed). Do not remove the phillips head screws. Rotate the dust Shroud up about 55mm so the round pipe connection that locks into the fan housing is in the open position. Push the dust shroud to the left so it disengages from the fan housing. Take the dust shroud out and set it aside.
4. Carefully turn the cutter head by hand towards you until it is stopped by the self-engaging latch
5. Use the torx wrench to remove the insert and screw.
6. Check the edges of the carbide cutter.





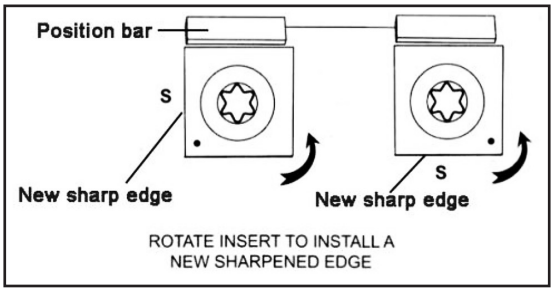


NOTE: The inserts are square and feature four usable cutting sides.

7. Rotate the insert 90 or 180 degrees to expose a fresh, unused edge.

NOTE: Mark the used edges with a permanent marker (like a Sharpie) so you can track which sides have already been used. Replace the insert entirely if all four sides show dullness or hairline cracks

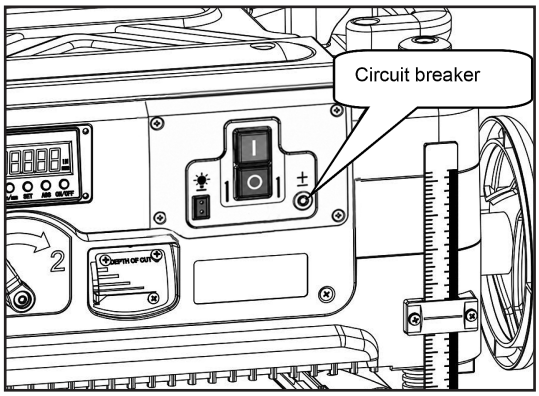
8. Reverse or replace insert and carefully secure it with insert screw.



6.3 CIRCUIT BREAKER

The thickness planer is equipped with a motor protection device-circuit breaker. The breaker will automatically shut the thickness planer off when excessive current is consumed. If the breaker is tripped, turn the planer off and reset the circuit by pressing the button.

CAUTION: Be sure to turn the planer off prior to resetting the circuit breaker to avoid unintentional start-up of the thickness planer.



CAUTION!

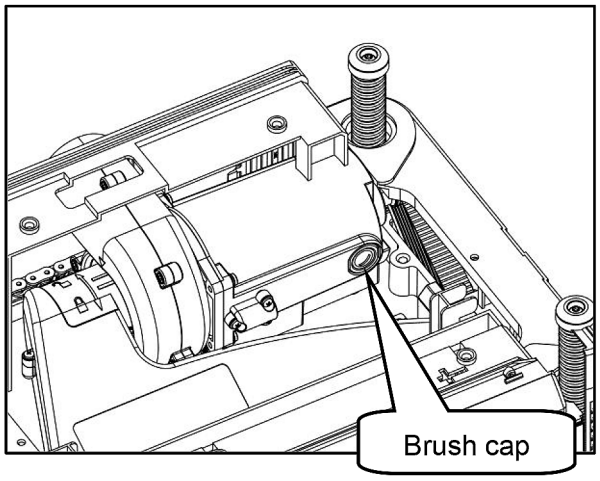
Before attempting this feature, disconnect the machine from the power supply to avoid injury to the operator from accidental startup or damage to the machine.

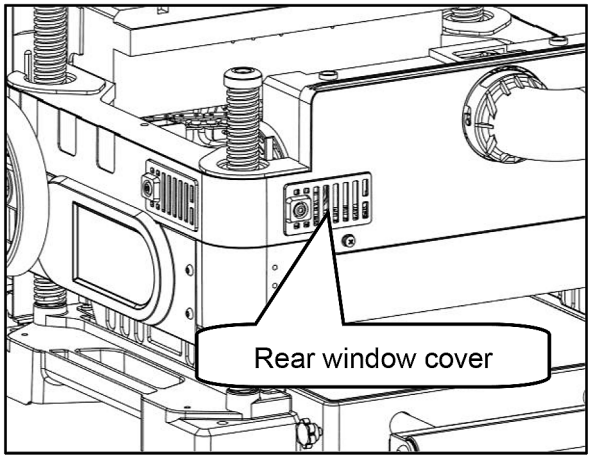
6.4 MOTOR BRUSH INSPECTION AND REPLACEMENT

WARNING: Turn planer off and disconnect from power source. Brush life depends on amount of load on motor.

Regularly inspect brushes after 50 hours of use. Brushes are located on either side of planer motor.

1. Remove the top cover and take off the rear window cover.
2. Loosen brush cap and carefully remove the brush from motor.
3. Replace brushes if carbon is worn.
4. Replace brushes and tighten brush caps.





6.5 TROUBLESHOOTING

If the machine develops a problem, review the trouble shooting section below to find a fix for the problem. If the problem cannot be solved then contact your dealer for help or to book a service engineer.

Symtoms	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	1. Plug/receptacle is at fault or wired incorrectly. 2. Power supply is at fault/switched OFF. 3. Motor brushes are at fault. 4. Motor ON/OFF switch is at fault. 5. Wiring is open/has high resistance. 6. Motor is at fault.	1. Test for good contacts; correct the wiring. 2. Ensure hot lines have correct voltage on all legs and main power supply is switched ON. 3. Remove/replace brushes (Page 22). 4. Replace faulty ON/OFF switch. 5. Check for broken wires or disconnected or corroded connections, and repair/replace as necessary 6. Test/repair/replace.
Machine stalls or is overloaded.	1. Wrong workpiece material. 2. Plug/receptacle is at fault. 3. Machine is undersized for the task. 4. Knives dull, feed rate is too fast, depth of cut too great. 5. Motor has overheated. 6. Motor is at fault.	1. Use wood with correct moisture content, without glues, and little pitch/resins 2. Test for good contacts; correct the wiring 3. Stop operation and ensure stock is properly sized for safe machine operation.. 4. Use sharp knives; reduce feed rate/depth of cut. 5. Clean off motor, let cool, and reduce workload. 6. Test/repair/replace.
Machine has vibration or noisy operation.	1. Motor or component is loose. 2. Knife blades, clamp or jack screws are faulty 3. Motor fan is rubbing on fan cover. 4. Loose mounting bolts. 5. Blade is at fault.	1. Inspect or replace damaged bolts/nuts, and tighten 2. Resharpen/replace knives as required. 3. Replace dented fan cover; replace loose or damaged fan. 4. Replace/tighten as required. 5. Replace warped, bent, or twisted blade; re-sharpen dull blade
Excessive snipe (gouge in the end of the board).	1. Out-feed table is out of alignment with the cutter head. 2. Operator is pushing down on trailing edge of the workpiece	1. Align cutter head with out-feed table 2. Reduce/eliminate downward pressure on that end of the workpiece.
Chipping.	1. Knots or conflicting grain direction in wood. 2. Nicked or chipped knives. 3. Feeding workpiece too fast. 4. Taking too deep of a cut.	1. Inspect workpiece for knots and grain. 2. Sharpen or replace blade 3. Slow down the feed rate. 4. Take a smaller depth of cut.
Uneven cutter marks, wavy surface,	1. Feeding workpiece too fast. 2. Knives not adjusted evenly with each other in the cutter head.	1. Slow down the feed rate. 2. Adjust the knives so they are set up evenly with the cutter head.
Overall, cut quality is poor; inconsistent snipe problems; .	1. Knives are out of alignment or cutter head height is not even with the out-feed table. 2. Fence stops are set incorrectly. 3. Fence bracket parts are loose or parts are misaligned.	1. Reset the knives to correct height and alignment with cutter head assembly 2. Recalibrate the fence stops. 3. Check/tighten the fence bracket fasteners
Board edge is concave or convex after jointing	1. Board not held with even pressure on in-feed and out-feed table during cut. 2. Board started too uneven. 3. Board has excessive bow or twist along its length. 4. Insufficient number of passes.	1. Hold board with even pressure as it moves over the cutter head. 2. Take partial cuts to remove the extreme high spots before doing a full pass. 3. Surface plane one face so there is a good surface to position against the fence 4. It may take 3 to 5 passes to achieve a perfect edge.

HELICAL HEAD THICKNESSER
T-380H

Order Code: (W825)

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 anytime 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.

NOTE: SOME PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

3. Go to www.machineryhouse.com.au/contactus and fill out the inquiry form attaching a copy of scanned parts list.

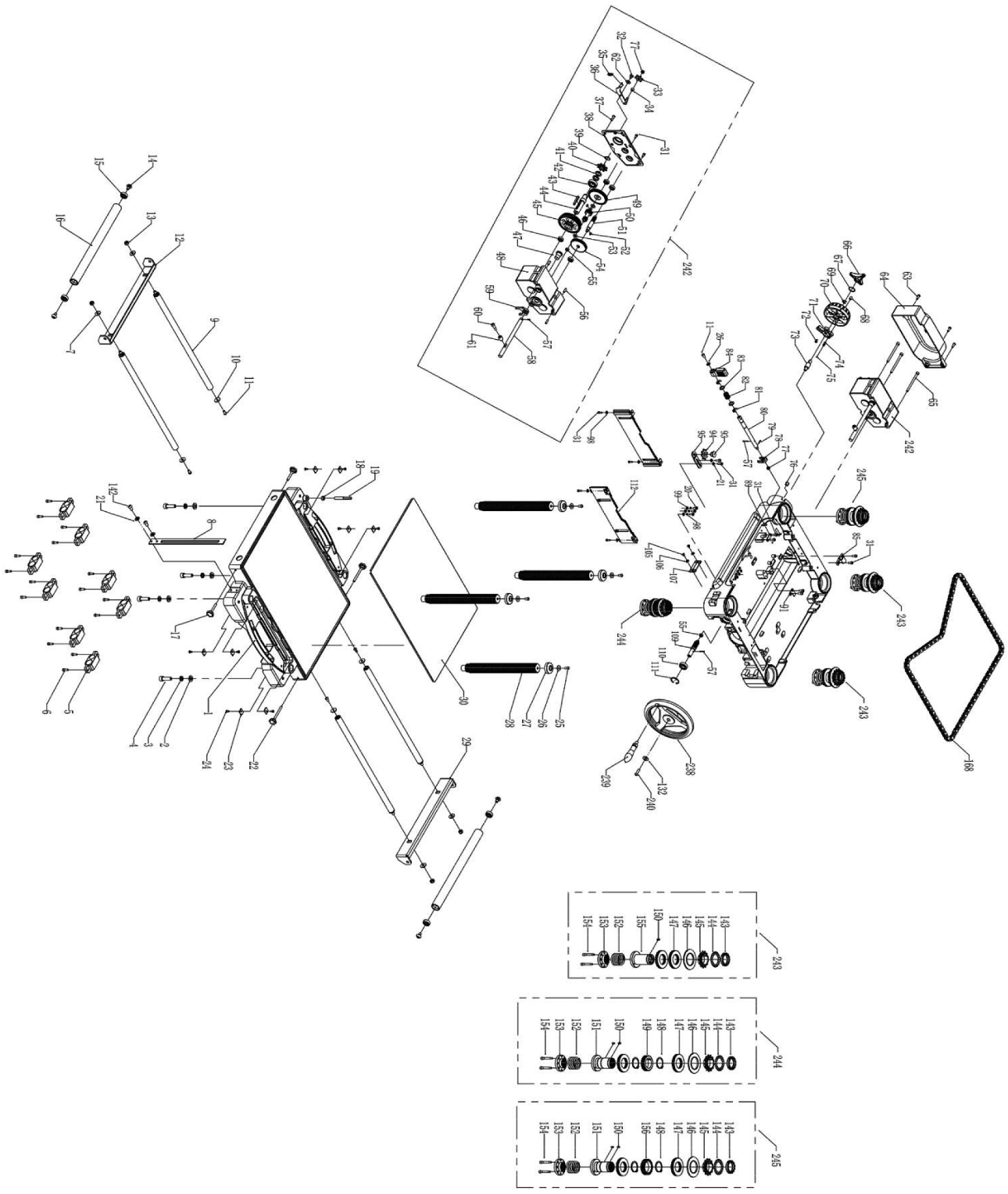
WARNING!

Electricity is dangerous and could cause death.
All electrical work must be carried out by a qualified electrician.

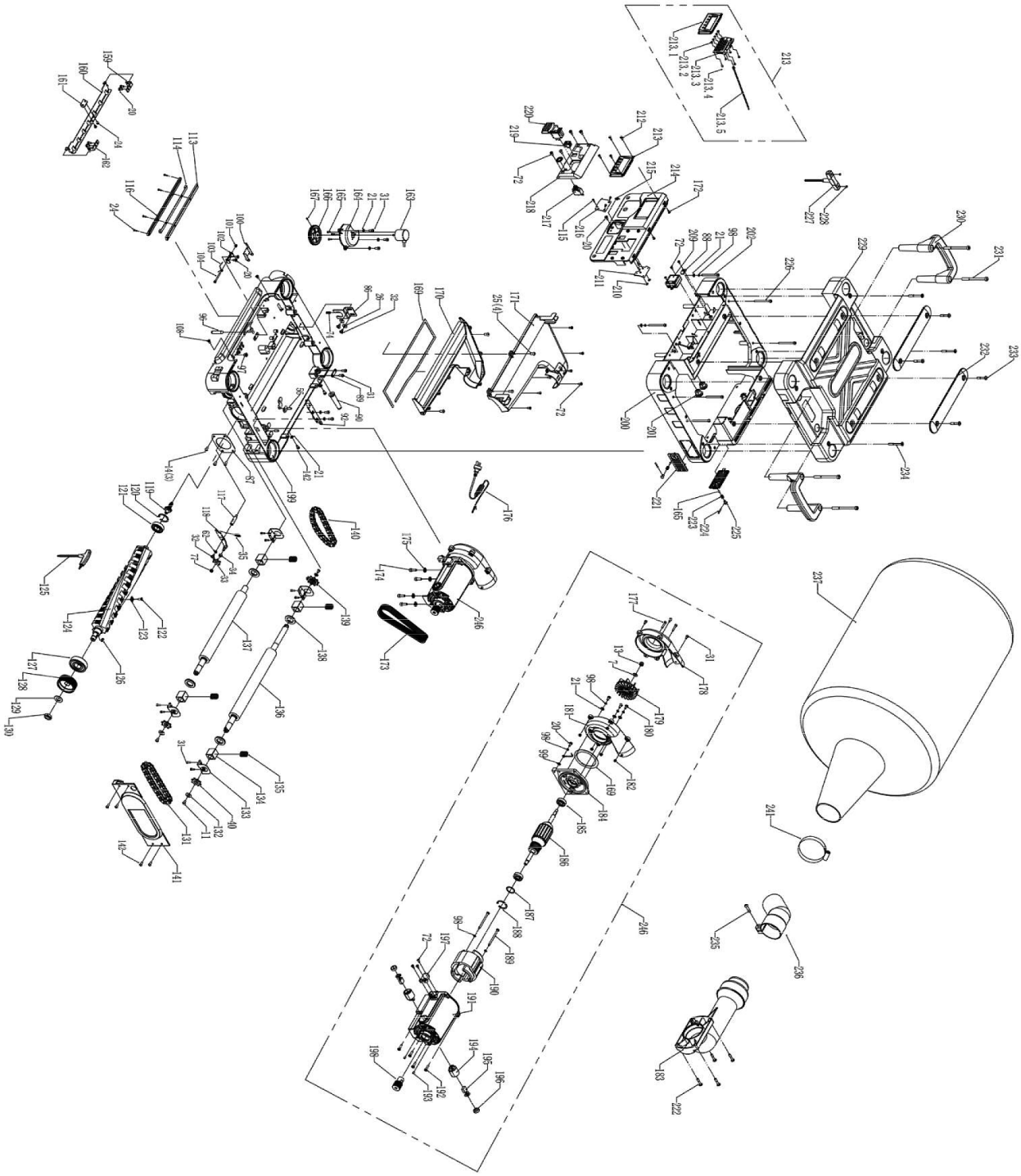
CAUTION!

It is impossible to cover all possible hazards Every workshop environment is different. These are designed as a guide to be used to compliment training and as a reminder to users prior to equipment use. Always consider safety first, as it applies to the individual working conditions.

PARTS DIAGRAM - 1



PARTS DIAGRAM - 2



PARTS LIST

ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY
1	Base	1	40	Sprocket	3
2	Flat washer 10mm	4	41	Flat washer	2
3	Lock washer 10mm	4	42	Ball bearing 6002-2RS	1
4	Socket head screw M10X35mm	4	43	Key 5X5X40mm	1
5	Guide bracket	8	44	Shaft	1
6	Socket head screw M5X16mm	16	45	Combined gear	1
7	Flat washer 8mm	5	46	Ball bearing 698-2RS	4
8	Scale plate	1	47	Bushing	1
9	Sliding rod	4	48	Gear box	1
10	Flat washer 6mm	4	49	Gear 67T	1
11	Socket pan head screw M6X12mm	8	50	Combined gear 22-14T	1
12	Front extension roller support	1	51	Gear shaft 9T	1
13	Lock nut M8	5	52	Key 4X4X8mm	2
14	Shoulder screw	4	53	Flat washer	2
15	Ball bearing 628-2RS	4	54	Gear 57T	1
16	Extension roller	2	55	Copper bushing	2
17	Knob screw M6X35mm	2	56	Pin 5X12mm	6
18	Hex nut M8	1	57	Spring pin 3X20mm	3
19	Stop rod	1	58	Pawl rod	1
20	Pan head screw	11	59	Pawl	1
21	Flat washer	14	60	Shoulder screw	1
22	Knob screw M6X60mm	2	61	Bushing	1
23	Limit plate	8	62	Flat washer 6mm	2
24	Pan head screw M4X8mm	12	63	Socket pan head screw M5X16mm	3
25	Socket pan head screw M6X14mm	8	64	Chain cover	1
26	Flat washer 6mm	7	65	Socket head screw M6X85	3
27	Screw top cover	4	66	Lock knob	1
28	Elevating screw	4	67	Wave washer	1
29	Rear extension roller support	1	68	Set screw M8X10mm	1
30	Table	1	69	E type retaining ring 8	1
31	Socket head screw M5X12mm	33	70	Depth stop adjusting knob	1
32	Shoulder screw	4	71	Depth stop block	1
33	Tension sprocket	2	72	Self threading screw 4.2-1.4X9.5mm	18
34	Bushing	2	73	Shaft	1
35	Spring	2	74	Spring	2
36	Support plate	1	75	Steel ball 6mm	1
37	Shoulder screw	1	76	Pointer	1
38	Gear box	1	77	Lock nut M6	3
39	External retaining ring 15mm	1	78	Pawl	1
			79	Spring pin 3X12mm	1

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

PARTS LIST

ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY
80	Shaft	1	122	Knife	36
81	E type retaining ring 9mm	2	123	Knife screw	36
82	Spring	1	124	Helical cutter head	1
83	Flat washer	2	125	Torx wrench	2
84	Feeding speed adjusting knob	1	126	Key 5X5X12mm	1
85	Bushing	1	127	Ball bearing 6305-2RS	1
86	Cutterhead locking plate	1	128	Spindle pulley	1
87	Bearing cover plate	1	129	Flat washer 16mm	1
88	Cord clamp	1	130	Hex nut M16-1.5mm	1
89	Rubber bushing clamp	2	131	Chain	1
90	Rubber bushing	1	132	Flat washer 6mm	4
91	Rod limiting plate	1	133	Retainer	4
92	Cord protecting plate	1	134	Bearing block	4
93	Rivet	1	135	Spring	4
94	Tension sprocket	1	136	Outfeed roller	1
95	Tension sprocket support	1	137	Infeed rouller	1
96	Round ending pin	1	138	Gasket washer	4
97	Rubber bushing	1	139	Sprocket	1
98	Lock washer 5mm	13	140	Chain	1
99	Serrated washer 5mm	4	141	Right chain cover	1
100	Cutting depth pointer	1	142	Socket pan head screw M5X10mm	8
101	Lock nut M4	1	143	Round nut	4
102	Pointer base	1	144	Tab washer	4
103	Spring	1	145	Sprocket	4
104	Socket head screw M4X40mm	1	146	Cover plate	4
105	Pan head screw M4X12	2	147	Thrust bearing	8
106	Flat washer 4mm	2	148	External retaining ring 40mm	4
107	Pointer	1	149	Helical gear 36T	1
108	Flat head screw M5X12mm	2	150	Key 3X3X10mm	6
109	Helical gear 9T	1	151	Elevating nut	2
110	Ball bearing 6001-2RS	1	152	Spring	4
111	Internal retaining ring 28mm	1	153	Adjusting nut	4
112	Side cover	2	154	Socket head screw	8
113	Light upper cover	1	155	Elevating nut	2
114	Led light	1	156	Plastic gear	1
115	Pan head screw M4X10	3	159	Left support plate	1
116	Light lower cover	1	160	Touch plate	1
117	Shaft	1	161	Link block	1
118	Support plate	1	162	Right support plate	1
119	Driving gear	1	163	Sensor	1
120	Internal retaining ring 42mm	1	164	Sensor support bracket	1
121	Ball bearing 6004-2RS	1	165	Pan head screw M3X6mm	5

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

PARTS LIST

ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY
166	Sensor gear	1	212	Self threading screw 3.5-1.3X9.5mm	4
167	Set screw M4X6mm	1	213	Digital depth display	1
168	Chain	1	213.1	PCB house	1
169	Gasket strip	1	213.2	Button	5
170	Lower dust shroud	1	213.3	Depth display PCB	1
171	Upper dust shroud	1	213.4	Self threading screw 2.9-1.1x6.5mm	5
172	Self threading screw 4.2-1.4X9.5mm	3	213.5	Internal wire	1
173	Belt	1	214	Front cover	1
174	Socket head screw M6×20mm	4	215	Scale light	1
175	Lock washer 6mm	4	216	Cutting depth scale	1
176	Power cord	1	217	Overload protector	1
177	Socket head screw M5X30mm	2	218	Switch mounting plate	1
178	Left fan housing	1	219	Led light switch	1
179	Fan	1	220	Switch	1
180	Pan head screw M5x16mm	3	221	Cover plate	2
181	Right fan housing	1	222	Socket pan head screw M6X27.5mm	4
182	Lock nut M5	5	223	Spring	2
183	Adapter	1	224	Pin 3X24mm	2
184	Front cover	1	225	Pin	2
185	Ball bearing 6201-2RS	2	226	Socket head screw M5X60mm	4
186	Rotor	1	227	T wrench	1
187	Wave spring washer	1	228	Magnet	2
188	Internal retaining ring 32mm	1	229	Top cover	1
189	Self threading screw 4.8-1.6X80mm	2	230	Lifting handle	2
190	Stator	1	231	Socket head screw M8X105mm	4
191	Motor case	1	232	Return plate	2
192	Hex head bolt M5X16	4	233	Socket pan head screw M6X35mm	4
193	Set screw M5X8mm	2	234	Socket pan head screw M6X56mm	4
194	Brush holder	2	235	Socket pan head screw M6X20mm	1
195	Carbon brush	2	236	Adapter	1
196	Brush cover	2	237	Filter bag	1
197	Cord clamp	1	238	Hand wheel	1
198	Motor pulley	1	239	Handle	1
199	Headstock	1	240	Socket pan head screw M6X25mm	1
200	Headstock cover	1	241	Hose clamp	1
201	Strain relief	2	242	Gear box assembly	1
202	Socket head screw M5X70mm	2	243	Elevating nut assembly A	2
209	LED driver	1	244	Elevating nut assembly B	1
210	Retaining ring	2	245	Elevating nut assembly C	1
211	Locking plate	1	246	Motor assembly	1
213.1	PCB house	1			

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

ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

IMPORTED BY

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