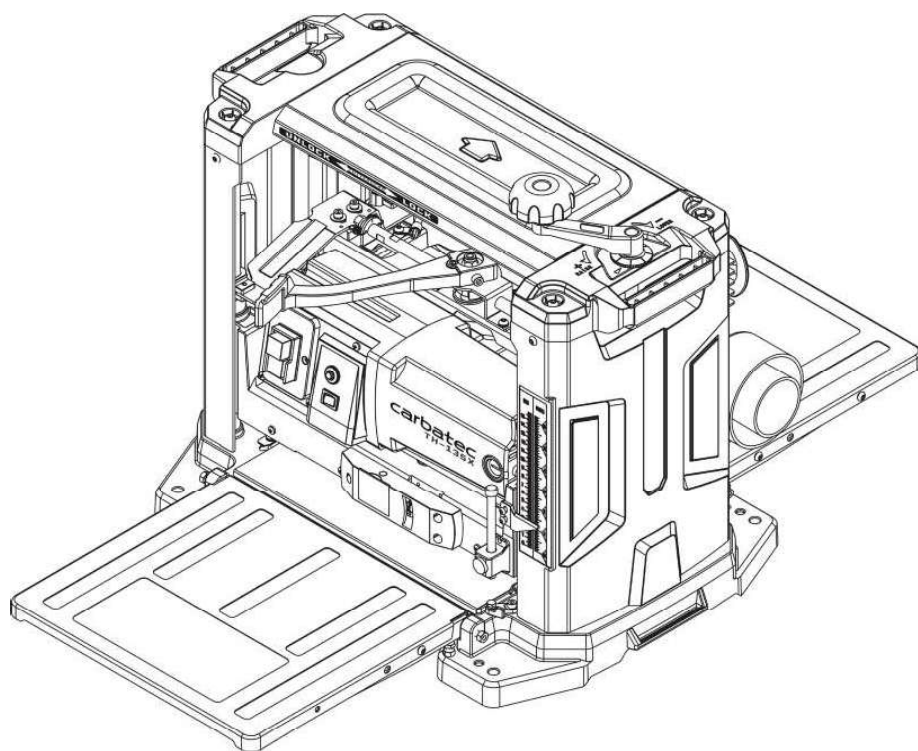




# **TH-135X** **13" (330MM) BENCHTOP** **HELICAL HEAD THICKNESSER** INSTRUCTION MANUAL

[carbatec.com.au](http://carbatec.com.au)

V1

**carbatec®**

**2** YEAR  
WARRANTY

# THANK YOU FOR CHOOSING carbatec®

Carbatec has been a trusted brand for woodworking enthusiasts and professionals across Australia and New Zealand, since 1987.

Our quality woodworking products are designed and built to offer value and performance, making the latest features and technological advancements more accessible to Aussie woodworkers.

Backed by our no-fuss after-sales care and warranty support, you can trust Carbatec to keep you woodworking, as promised.

## **We look forward to sharing in your woodworking journey!**

If you have any questions about our products or service, please call us on **1800 658 111** or email us at [info@carbatec.com.au](mailto:info@carbatec.com.au)

## **Find us on social media**

-  [facebook.com/Carbatec](https://facebook.com/Carbatec)
-  [instagram.com/Carbatec](https://instagram.com/Carbatec)
-  [youtube.com/@CarbatecTheHomeOfWoodworking](https://youtube.com/@CarbatecTheHomeOfWoodworking)

# IMPORTANT

Key information can be found on the inspection panel, found on the rear of the machine.



**QUALITY INSPECTED**

|             |
|-------------|
| Model:      |
| Voltage     |
| Freq:       |
| Phase:      |
| Amp:        |
| kW:         |
| Speed:      |
| Lot No.:    |
| Serial No.: |
| Date:       |

Made in  
**CARBATEC PTY LTD**  
Brisbane - Australia



2

**YEAR**  
WARRANTY

Record the serial number and date of purchase in your manual for future reference.

SERIAL NUMBER:

-----

DATE OF PURCHASE:

-----

# CONTENTS

|                                         |              |
|-----------------------------------------|--------------|
| <b>Introduction</b>                     | <b>2</b>     |
| <b>Safety instructions - General</b>    | <b>5-9</b>   |
| <b>Safety instructions - Electrical</b> | <b>10</b>    |
| <b>Overview</b>                         | <b>11-12</b> |
| <b>Specifications</b>                   | <b>13</b>    |
| <b>Parts diagrams Wiring diagram</b>    | <b>24-29</b> |
| <b>Wiring diagram</b>                   | <b>30</b>    |
| <b>Warranty</b>                         | <b>31</b>    |

**NOTE:** The specifications, photographs, drawings and information in this manual represent the current machine model when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Carbatec to modify previously delivered units. Reasonable care has been taken to ensure that the information in this manual is correct, to provide you with the guidelines for the proper safety, assembly and operation of this machine.

# SAFETY INSTRUCTIONS

**IMPORTANT!** Safety is the single most important consideration in the operation of this equipment. The following instructions must be followed at all times. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

There are certain applications for which this tool was designed. We strongly recommend that this tool not be modified and/or used for any other application other than that for which it was designed. If you have any questions about its application, do not use the tool until you have contacted us and we have advised you.

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding.

The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.



Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as **"DANGER," "WARNING,"** and **"CAUTION"** before using this tool. Failure to following all instructions listed below may result in electric shock, fire, and/or serious personal injury.

## SYMBOL MEANING



A safety alert symbol Indicates DANGER, WARNING, or CAUTION. May be used in conjunction with other symbols or pictographs.



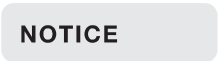
Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.



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



Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.



(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

Carbatec products bearing the Regulatory Compliance Mark (RCM) have been tested in accordance with applicable Australian/New Zealand Standards to ensure their compliance with all mandatory standards and regulations (applicable at time of original sale). Carbatec Pty Ltd are registered as a responsible supplier with relevant Australian government departments and our products are registered on the EESS & ACMA database.

## GENERAL SAFETY

Operating a power tool can be dangerous if safety and common sense are ignored. The operator must be familiar with the operation of this machine. Read this manual to understand this machine. **DO NOT OPERATE** this machine **IF YOU DO NOT FULLY UNDERSTAND** the limitations of this tool. **DO NOT MODIFY** this machine in any way.

### BEFORE USING THIS MACHINE



#### WARNING

To avoid serious injury and damage to the tool, read and follow all of the Safety and Operating Instructions before operating the machine.



#### WARNING

1. **SOME DUST CREATED BY USING POWER TOOLS CONTAINS CHEMICALS** known to cause cancer, birth defects, or other reproductive harm.

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 lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

2. **READ** this entire manual. **LEARN** how to use the tool for its intended applications.
3. **GROUND ALL TOOLS.** If the tool is supplied with a 3-prong plug, it must be plugged into a 3-contact electrical receptacle. The third prong is used to ground the tool and provide protection against accidental electric shock.
4. **AVOID A DANGEROUS WORKING ENVIRONMENT.** Do not use electrical tools in a damp environment or expose them to rain.
5. **DO NOT USE** electrical tools in the presence of **FLAMMABLE** liquids or gases.
6. **ALWAYS KEEP THE AREA CLEAN,** well lit, and organized. Do not work in an environment with floor surfaces that are slippery from debris, grease, and wax.
7. **KEEP VISITORS AND CHILDREN AWAY.** Do not permit people to be in the immediate work area, especially when the electrical tool is operating.
8. **DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.

**9. WEAR PROPER CLOTHING.**

Do not wear loose clothing, gloves, neckties, or jewellery. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if hair is long, to prevent it from contacting any moving parts.

**10. CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.**11. ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.**12. KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.****13. AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.**14. REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning "ON" the machine.**15. USE ONLY RECOMMENDED ACCESSORIES.** Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.**16. NEVER LEAVE A RUNNING TOOL**

**UNATTENDED.** Turn the power switch to the "OFF" position. Do not leave the tool until it has come to a complete stop.

**17. DO NOT STAND ON A TOOL.** Serious injury could result if the tool tips over, or you accidentally contact the tool.**18. DO NOT STORE ANYTHING ABOVE OR NEAR** the tool where anyone might try to stand on the tool to reach it.**19. MAINTAIN YOUR BALANCE.** Do not extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.**20. MAINTAIN TOOLS WITH CARE.** Always keep tools clean and in good working order. Keep all blades and tool bits sharp, dress grinding wheels and change other abrasive accessories when worn.**21. EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL.** Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.**22. DO NOT OPERATE TOOL WHILE TIRED, OR UNDER THE INFLUENCE OF DRUGS, MEDICATION OR ALCOHOL.**

- 23. SECURE ALL WORK.** Use clamps or jigs to secure the work piece. This is safer than attempting to hold the work piece with your hands.
- 24. STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL.** A moment of inattention while operating power tools may result in serious personal injury.
- 25. ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES,** including wood dust, crystalline silica dust and asbestos dust. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting AS/NZS approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.
- 26. USE A PROPER EXTENSION CORD IN GOOD CONDITION.** Use of extension cords should be avoided where possible. When using an extension cord, be sure to have a cord heavy enough to carry the current your product will draw, and with compatible pin configuration and connections (NEVER use an extension cord rated at less than your machine). Longer run extensions will need heavier duty extension cords. Only connect your extension cord or machine to a receptacle that accepts your plug and never modify your plug to suit a receptacle.

**NOTE: According to the applicable product liability law the manufacturer of this device is not liable for damages which arise on or in connection with this device in case of:**

- Improper handling
- Non-compliance with the instructions for use
- Repairs by third party, non authorised skilled workers
- Installation and replacement of non-genuine spare parts
- Improper use

## RECOMMENDATIONS:

- Read the entire text of the operating instructions prior to the assembly and operation of the device. These operating instructions are intended to make it easier for you to get familiar with your device and utilise its intended possibilities of use.
- The operating instructions contain important notes on how to work safely with your machine and how to avoid dangers, and increase the reliability and working life of the machine.
- Retain and store these instructions near the machine. The instructions must be read and carefully observed by each operator prior to starting the work.
- In addition to the safety notes contained in the present operating instructions and the special regulations of your country, the generally recognised technical rules for the operation of wood working machines must be observed.

**The device and packaging materials are not toys! Children must not be allowed to play with plastic bags, film and small parts! There is a risk of swallowing and suffocation!**



## WARNING

## INTENDED USE

- The machine must **only** be used in technically perfect condition in accordance with its designated use and the instructions set out in the operating manual, and **only** by safety-conscious persons who are fully aware of the risks involved in operating the machine. Any functional disorders, especially those affecting the safety of the machine, should therefore be rectified immediately. The safety, work and maintenance instructions of the manufacturer as well as the technical data given in the calibrations and dimensions must be adhered to.
- Relevant accident prevention regulations and other, generally recognised safety-technical rules must **also** be adhered to.
- The machine may **only** be used, maintained, and operated by persons familiar with it and instructed in its operation and procedures. Arbitrary alterations to the machine release the manufacturer from all responsibility for any resulting damages.
- The machine may **only** be used with original accessories and tools made by or recommended by the manufacturer.
- Any other use exceeds authorisation. The manufacturer is not responsible for any damages resulting from unauthorized use; risk is the sole responsibility of the operator.

## ELECTRICAL SAFETY



### WARNING

**This tool must be grounded while in use to protect the operator from electric shock. IN THE EVENT OF A MALFUNCTION OR BREAKDOWN,** grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool may be equipped with an electric cord that has an equipment grounding conductor and a grounding plug. **The plug MUST Be plugged** into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

### DO NOT MODIFY THE PLUG PROVIDED.

If it will not fit the electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

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

### CHECK WITH A QUALIFIED ELECTRICIAN

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

**Use only a 3-wire extension cord that has a 3-prong grounding plug and a 3-pole receptacle that accepts the tool's plug. Replace a damaged or worn cord immediately.**

Power tools and machinery are intended for use on a circuit that has an electrical receptacle as shown in **FIGURE A** that shows a 10 Amp 3-wire electrical plug and corresponding electrical receptacle that has a grounding conductor.

If this particular tool has been designed and fitted with a two prong electrical plug, ensure it displays the 'Double Insulated' logo shown in **FIGURE B**, before connecting to a 3-wire receptacle.



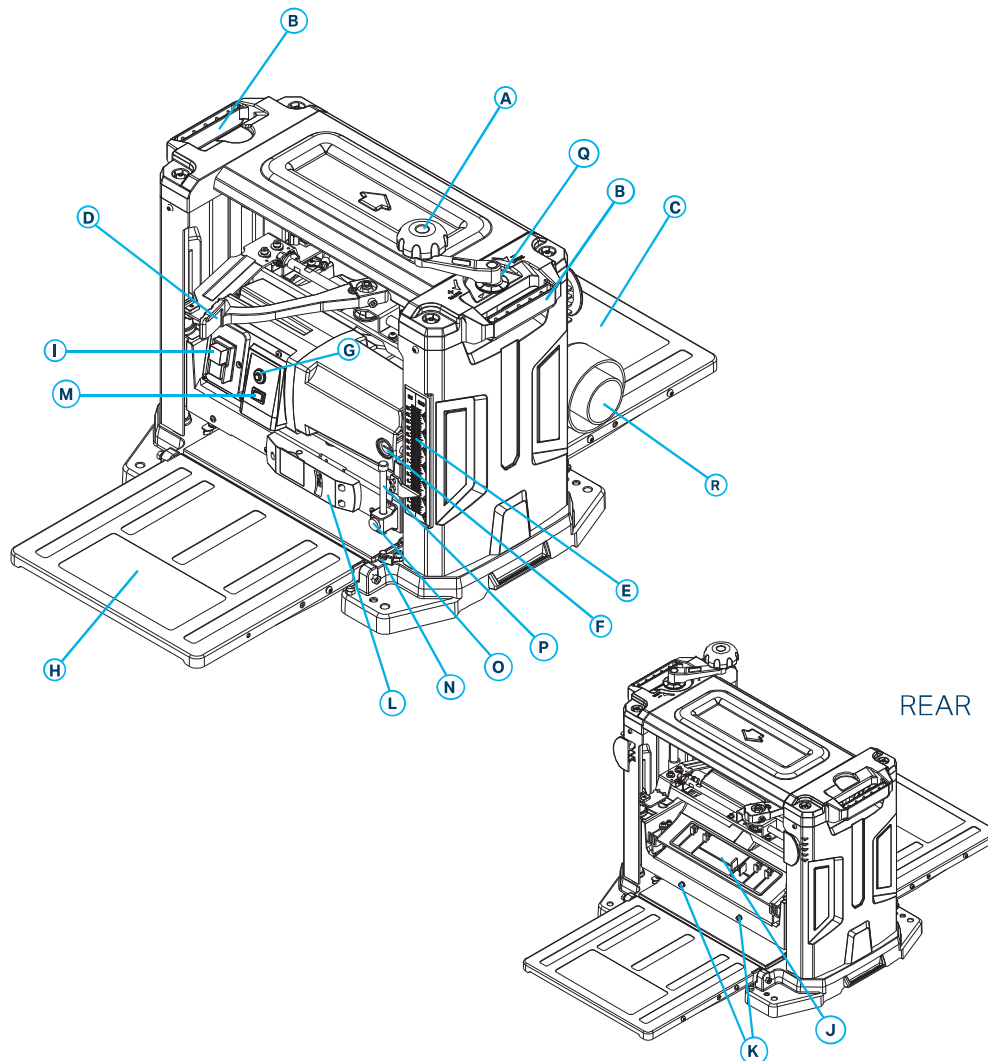
### WARNING

**Never modify the standard fitted electrical plugs to fit your receptacle.**



FOR TECHNICAL SUPPORT CALL 1800 658 111

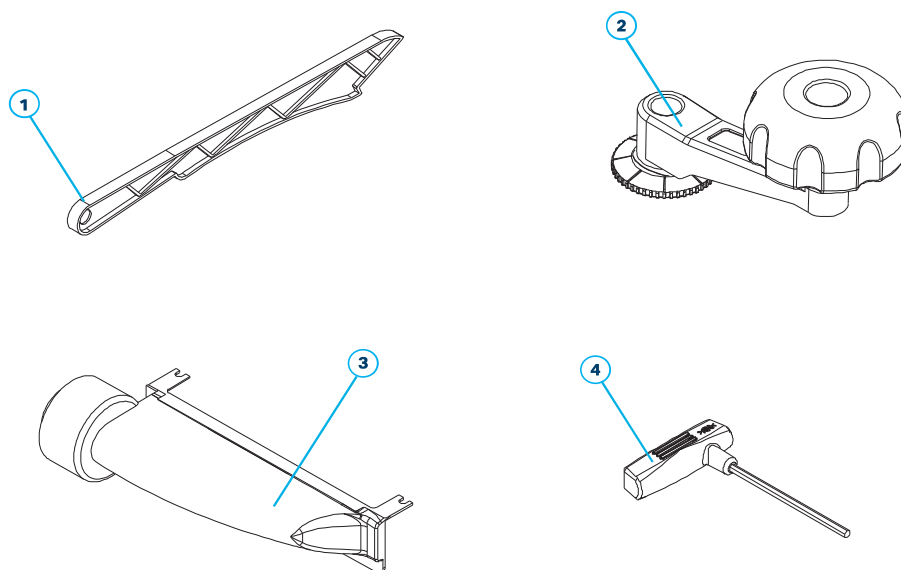
# OVERVIEW



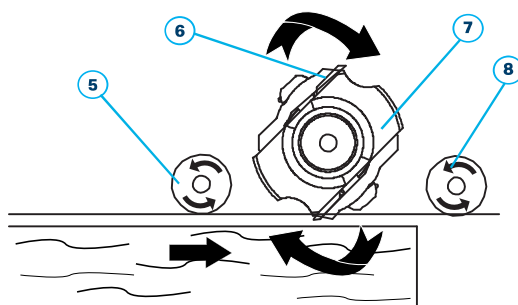
## 13" (330MM) BENCHTOP HELICAL HEAD THICKNESSER OVERVIEW

- |                                            |                                  |
|--------------------------------------------|----------------------------------|
| <b>A.</b> Crank for height adjustment      | <b>J.</b> Cutterhead             |
| <b>B.</b> Carrying handles                 | <b>K.</b> Dust Guard Mounting    |
| <b>C.</b> Outfeed table                    | <b>L.</b> Depth of cut indicator |
| <b>D.</b> Lock lever for height adjustment | <b>M.</b> LED light switch       |
| <b>E.</b> Planing thickness indicator      | <b>N.</b> Adjustable stop        |
| <b>F.</b> Plug for carbonbrush holder      | <b>O.</b> Limit block            |
| <b>G.</b> Thermal reset button             | <b>P.</b> Height limit bar       |
| <b>H.</b> Infeed table                     | <b>Q.</b> Dial Indicator         |
| <b>I.</b> ON/OFF switch                    | <b>R.</b> Dust guard             |

CARBATEC.COM.AU



### Working principle of a thickening machine



#### Standard delivery parts and tools

- 1. Push Stick
- 2. Crank for height adjustment
- 3. Dust guard
- 4. Allen Wrench

#### Components inside the thickening machine

- 5. Infeed roller
- 6. Planer knife
- 7. Cutterblock
- 8. Outfeed roller

FOR TECHNICAL SUPPORT CALL 1800 658 111

TH-135X

## SPECIFICATIONS

|                                       |                                               |
|---------------------------------------|-----------------------------------------------|
| <b>CODE</b>                           | TH-135X                                       |
| <b>BRAND</b>                          | Carbatec                                      |
| <b>MODEL</b>                          | 13" (330mm) Helical Head Benchtop Thicknesser |
| <b>MOTOR</b>                          | 230V / 1800 W                                 |
| <b>WORKSHOP FOOTPRINT<br/>(DxWxH)</b> | 920 × 630 × 520 mm                            |
| <b>CUTTERHEAD SPEED</b>               | 9500 RPM                                      |
| <b>WORKING TABLE SIZE</b>             | 333 x 304 mm                                  |
| <b>MAXIMUM STOCK HEIGHT</b>           | 152 mm                                        |
| <b>MAXIMUM STOCK WIDTH</b>            | 330 mm                                        |
| <b>STOCK REMOVAL MAX.</b>             | 3 mm / Per pass                               |
| <b>FEED SPEED</b>                     | 7.5m/ min                                     |
| <b>CARTON SIZE</b>                    | 640 × 470 × 540 mm                            |
| <b>WEIGHT (N.W./ G.W.)</b>            | 33.8/ 36.6 kg                                 |

## 2. Please Read First!

These instructions have been written to make it easier for you, the operator, to learn how to operate the machine and to do so safely. These instructions should be used as follows:

- Read these instructions before use. Pay special attention to and always follow all safety instructions.
- These operating instructions are intended for people with basic technical knowledge regarding the operation of a machine like the machine described herein. Inexperienced persons are strongly advised to seek competent advice and guidance from an experienced person before operating this machine.
- Keep all documents supplied with this machine for future reference. Retain proof of purchase in case of warranty claims.
- If you lend or sell this machine be sure to have these instructions go with it.
- The manufacturer is not liable for any damage resulting from neglect of these operating instructions.

Information in these instructions is denoted as under:



**Danger!**  
Risk of personal injury or environmental damage.



**Risk of electric shock!**  
Risk of personal injury by electric shock.



**Drawing-in/trapping hazard!**  
Risk of personal injury by body parts or clothing being caught.



**Caution!**  
Risk of material damage.



**Note:**  
Additional information.

- At times numbers are used in illustrations (1, 2, 3, ...). These numbers
  - indicate component parts;
  - are consecutively numbered;
  - correspond to the number(s) in brackets (1), (2), (3) ... in the neighbouring text.

- Numbered steps must be carried out in sequence.
- Instructions which can be carried out in any order are indicated by a bullet (•).
- Lists are indicated by a dash (–).

## 3. Safety

### 3.1 Specified Conditions of Use

Use this machine only for thickness planing of solid wood. Any other use is not as specified.

The permissible work piece dimensions must be observed (see "Technical Specifications").

Any other use is not as specified. Use not as specified, modification of the machine or use of parts not tested and approved by the manufacturer can cause unforeseen damage.

### 3.2 General Safety Instructions

A thicknessing machine is a dangerous tool which can, due to operator carelessness, cause severe injury.

- When using this machine follow the following safety instructions, to exclude the risk of personal injury or material damage.
- Please also follow the special safety instructions in the respective chapters.
- Where applicable, follow the legal directives or regulations for the prevention of accidents pertaining to the use of thicknessing machines.



#### General hazards!

- Keep your work area tidy – a messy work area invites accidents.
- Be alert. Know what you are doing. Set out to work with reason. Do not operate the machine when you are lacking concentration.
- Do not operate the machine while under the influence of alcohol, drugs or medication.
- Consider environmental conditions. Keep work area well lighted.
- Prevent adverse body positions. Ensure firm footing and keep your balance at all times.
- Use suitable work piece supports when cutting long stock.
- Do not operate the machine near inflammable liquids or gases.

- This thicknessing machine shall only be started and operated by persons familiar with thicknessing machines and the dangers associated with the operation of thicknessing machines. Persons under 18 years of age shall use this machine only in the course of their vocational training, under the supervision of an instructor.

- Keep bystanders, particularly children, out of the danger zone. Do not permit other persons to touch the machine or power cable while it is running.
- Do not overload the machine– use it only within the performance range it was designed for (see "Technical specifications").
- Never set the depth of cut to more than 1/8" (3 mm).
- Turn power off if the machine is not used.



#### Danger! Risk of electric shock!

- Do not expose the machine to rain. Do not operate the machine in damp or wet environment.
- Prevent body contact with earthed objects such as radiators, pipes, cooking stoves, refrigerators when operating this machine.
- Do not use the power cable for any purpose it is not intended for.
- Ensure the machine is disconnected from power before servicing.



#### Cutting hazard when touching the rotating cutterblock!

- Always keep your hands well clear of the cutterblock.
  - Use suitable feeding aids, if necessary.
  - Keep sufficient distance to driven components when operating the electric machine.
  - When in operation, do not reach into the dust collector or the cutterblock cover.
- To prevent accidental starting, always turn the machine OFF:
  - after a power failure,
  - before unplugging or plugging in.
- Do not operate the machine without all guards installed.
- Wait until the cutterblock has come to a complete stop, before removing jammed parts or small cutoffs, chips, etc. from the work area.



#### Cutting hazard, even with the cutterblock at standstill!

- Wear gloves when changing planer knives.

- Store the planer knives in a safe place and in such a manner that nobody can get hurt.



#### **Drawing-in/trapping hazard!**

During thicknessing the work piece is automatically drawn into and transported through the thicknessing machine.

- Always make sure that no body parts or objects can be drawn into the machine together with the work piece. **Do not** wear neckties and also **no** gloves and **no** garments having wide sleeves. Contain long hair with a hairnet.
- Never attempt to thickness any work pieces which contain
  - ropes,
  - strings,
  - cords,
  - cables or
  - wires, or work pieces to which any of the above are attached.



#### **Risk of injury by work piece kickback (work piece is caught by the rotating cutterblock and thrown back against the operator!)**

- Always use sharp planer knives. Blunt planer knives may get caught in the surface of the work piece.
- Do not jam work pieces.
- Do not work work pieces which are shorter than 14 inch (356 mm).
- If in doubt, check work piece for inclusion of objects (e.g. nails or screws).
- Never thickness several work pieces at the same time. Risk of personal injury if individual pieces are uncontrolled caught by the cutterblock.
- Remove small cutoffs, scrap, etc. from the work area – when doing so, the cutterblock must be at standstill and the power cable unplugged.
- Ensure that when turning ON (e.g. after servicing) no tools or loose parts are left on or in the machine.



#### **Hazard generated by insufficient personal protection gear!**

- Wear hearing protection.
- Wear safety glasses.
- Wear dust mask.
- Wear suitable work clothes.
- When working outdoors wearing of non-slip shoes is recommended.



#### **Risk of injury by inhaled wood dust!**

- Some types of wood dust (e.g. beech, oak, ash) may cause cancer when inhaled. Whenever possible, use a dust collector attached to the thicknessing machine. The dust collector has to comply with the specifications contained in "Technical Specifications".
- When working, minimize the amount of wood dust escaping from the machine into the environs:
  - remove wood dust deposits in the work area (do not blow away!);
  - fix any leakages on the dust collector;
  - ensure good ventilation.



#### **Hazard generated by modification of the machine, or use of parts not tested and approved by the manufacturer!**

- Assemble machine in strict accordance with these instructions.
- Use only parts tested and approved by the manufacturer. This applies especially to all safety devices (see spare parts list for stock numbers).
- Do not change any parts.



#### **Hazard generated by machine defects!**

- Keep machine and accessories in good repair. Observe the maintenance instructions.
- Before any use check the machine for possible damage: before operating the machine all safety devices, protective guards or slightly damaged parts need to be checked for proper function as specified. Check to see that all moving parts work properly and do not jam. All parts must be correctly installed and meet all conditions necessary for the proper operation of the machine.
- Never use the machine when the power supply cable is damaged. Risk of personal injury by electric shock. Have a damaged power supply cable replaced by a qualified electrician immediately.
- Damaged protection devices or parts must be repaired or replaced by a qualified specialist. Have damaged switches replaced by a service centre. Do not operate the machine if the switch cannot be turned ON or OFF.



#### **Danger from blocking work - pieces or workpiece parts!**

If blockage occurs:

1. Switch machine OFF.
2. Unplug mains cable.
3. Wear gloves.
4. Clear the blockage using a suitable tool.

### **3.3 Symbols on the Machine**



**Danger!**  
Disregard of the following warning could lead to severe personal injury or material damage.



Read instructions.



Always keep your hands well clear of the cutterblock. Keep sufficient distance to driven components when operating the electric machine.



Wear safety goggles and hearing protection.



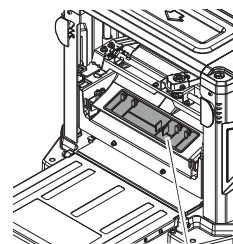
Do not operate the machine in damp or wet environment.

### **3.4 Safety Devices**

#### **Cutterblock cover**

The cutterblock cover (26) prevents that the rotating cutterblock can be touched from the top.

The cutterblock cover must be in place, until the cutterblock has come to a complete stop and the power cable is unplugged.



26

### **4. Special Product Features**

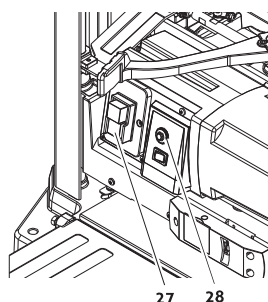
- Up-to-date technology, designed for continuous duty and accurate planing results.

- Robust construction, with handles on housing for complete mobility.
- Infeed and outfeed table for simple and safe handling of long work pieces.

## 5. Operating Controls

### ON/OFF switch

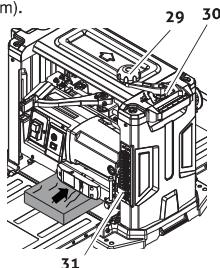
- Switch (27)
- Reset button (28)



### Height adjustment

With the height adjustment the planing thickness (= work piece thickness after planing) is set.

- Per pass a maximum of 3 mm material can be removed.
- Work pieces of max. 152 mm thickness can be planed.
- The height adjustment is made by means of a crank (29). Each full turn of the crank raises or lowers the cutterblock head by 1/16" (1.6 mm).
- Make fine adjustments through the dial (30). Moving each small grid of the dial, the cutterhead rises or falls by 1/128" (0.2 mm).



The set planing thickness is indicated on the scale by the pointer (31).

### Note:

Anti-kickback device: Serrated inside to prevent the wood from returning when feeding the material.

### Lock lever for height adjustment

To lock the height adjustment:

- Set lock lever (32) fully to the right, to the position marked **G**.

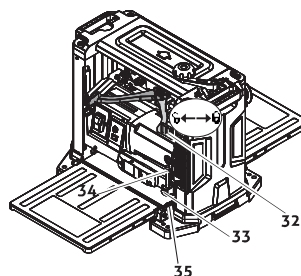
To unlock the height adjustment:

- Set lock lever (32) fully to the left, to the position marked **H**. By means of the height adjustment the planing thickness can be reset.

Fixed depth function:

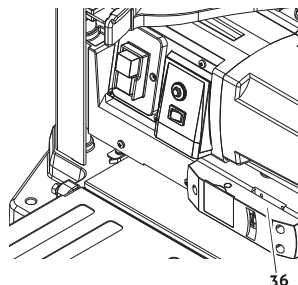
- Press and hold the limit block (33) to adjust the height limit bar (34), and release the limit block to lock it.

When the planing height is below set height, move the height positioning block (35) to the right to remove.



### Depth of cut indicator

The indicator (36) indicates the depth of cut, i.e. the amount of material to be removed from the work piece. The depth of cut can be set from 0 mm to 3 mm.



## 6. Initial Operation

### 6.1 Machine Installation

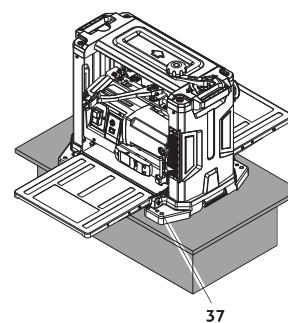
To keep the machine from "wandering" caused by vibrations or to prevent tipping over, the machine must be bolted to a work bench, work stand or similar firm support.

### Note:

When installing the machine sta-

tionary, keep in mind that there must be sufficient space in front and behind the machine to work long work pieces.

1. Drill holes into supporting surface, where necessary.
2. Put bolts (37) through from the top and secure from below with nuts.



### 6.2 Aligning the Infeed and Outfeed Tables

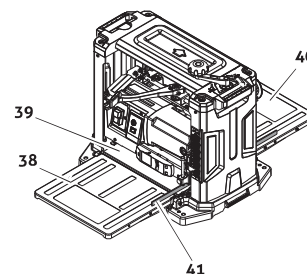
To achieve an optimal planing result, all bearing surface must be level with each other.

### Note:

Before starting work, always check to see that the bearing surfaces of the centre table, infeed table and outfeed table are level with each other.

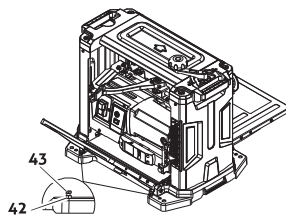
**Warning:** Cutting hazard when touching the rotating cutterblock! Accidental starting of the machine may cause serious injury. Always unplug before making any adjustments to the machine!

1. Fold down both infeed (38) and outfeed table (40).
2. Put a straight board (41), try square, straight edge or similar across the infeed and outfeed table.



If readjustment is necessary:

3. Fold both infeed and outfeed table up.
4. Loosen lock nut (42) on both stop screws (43).
5. Adjust both stop screws (42) until the infeed table (or outfeed table) is on a level with the centre table (39) of the thicknessing machine.



6. Fold down the infeed table (or outfeed table) and recheck, if the bearing surfaces are now on a level with each other.
7. When infeed and outfeed table are properly aligned, secure all stop screws (43) with the lock nuts (42).

### 6.3 Dust Collector

**Danger!**  
Some types of wood dust (e.g. beech, oak, ash) can cause cancer when inhaled. To minimize the adverse effect of wood dust, you are strongly advised to connect a suitable dust collector to the machine when working indoors. The dust collector must comply with the following:

- fitting the diameter of the dust extraction connector:
  - 2 1/2" (64mm), or
  - 4" (102 mm);
- air flow volume  $\geq 460 \text{ m}^3/\text{h}$ ;
- vacuum at the dust extraction connector  $\geq 530 \text{ Pa}$ ;
- air speed at dust extraction connector  $\geq 20 \text{ m/s}$ .

Follow the operating instructions supplied with the dust collector as well!

Operation without a dust collector is only advisable:

- outdoors;
- for short-term operation (up to a maximum of 30 minutes);
- when wearing a dust respirator.

If no dust collector is used chips will built up inside the machine housing, and on the planer knives in particular. These built-up chips cause the planed surface

to become rough. Therefore the chips need to be removed periodically.

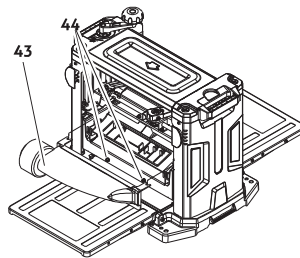
**Danger!**  
The rotation of the cutterblock causes the chips to be blown through the slot in the cutterblock cover.

**Caution!**  
The slot of the cutterblock cover or an installed dust extraction connector must not be blocked by objects placed in the path of ejected chips.

Installing the dust extraction connector

**Caution!**  
Cutting hazard when touching the rotating cutterblock! Accidental starting of the machine may cause serious injury. Unplug power supply cable before installing the dust extraction connector!

1. Set lock lever fully to the left, into the position marked .
2. Install the dust cover (43) on the machine through the tethering screw (44).



### 6.4 Mains Connection

- Danger! High voltage**
- Operate this machine in dry surroundings only.
  - Operate the machine only on a power source meeting the following requirements (see also "Technical specifications"):
    - outlets properly installed, earthed, and tested.
    - mains voltage and system frequency conforming to the voltage and frequency shown on the machine's rating label;
    - fuse protection by a residual current operated device (RCD) of 30 mA sensitivity;
    - System impedance  $Z_{\text{max}}$  at the interconnection point (house service connection) 0.35 Ohm maximum.

**Note:**  
Check with your local Electricity Board or electrician if in doubt whether your house service connection meets these requirements.

- Position power supply cable so it does not interfere with the work and is not damaged.
- Protect power supply cable from heat, aggressive liquids and sharp edges.
- Use only rubber-jacketed extension cables of sufficient lead cross-section (see "Technical specifications").
- Do not pull on power supply cable to unplug.

### 7. Operation

- Danger!**
- This machine may only be operated by one person at a time. Other persons shall stay only at a distance to the machine for the purpose of feeding or removing stock.
  - Use personal protection gear:
    - dust respirator;
    - hearing protection;
    - safety goggles.
  - Before starting work, check to see that the following are in proper working order:
    - power cable and plug;
    - ON/OFF switch
    - cutterblock cover
    - push stick.
  - Assume proper operating position when thicknessing:
    - at the front of the machine;
    - to the side of the infeed table;
    - when working with two persons, the second person must stay at a sufficient distance to the thicknessing machine and stand to the side of the infeed or outfeed table, respectively.
  - If the type of work requires, use the following:
    - work piece support (e.g. roller support) - to keep the machine from tipping over when working long work pieces;
    - push stick (feeding aid) - for short work pieces;
    - dust collector;
    - sliding wax - to enhance gliding of the work pieces through the machine, apply a light coat of sliding wax to the surfaces of infeed and outfeed table.

- **Avoid typical operator mistakes:**
  - Do not exceed the specified work piece dimensions.
  - Do not jam the work piece.

#### Before planing a work piece

Test the machine when idling:

1. Fold down both infeed and outfeed table.
2. Make sure the planer knives can turn freely.
3. Set lock lever fully to the left, into the position marked **6**.
4. Raise cutterblock head to at least 1 inch (25 mm) planing thickness.
5. Set lock lever fully to the right, to the position marked **6**.
6. Plug in the power supply cable's plug and start the motor (press green switch button).
7. Once the machine has reached full speed, pay attention to:
  - noise
  - vibrations

#### **Danger!**

If noise and/or vibrations appear to be unusually high: **turn OFF the machine immediately and unplug!**

8. Check machine for parts that may have worked loose; fasten any loose parts properly, where necessary.

#### 7.1 Planing Work Pieces

The thickness planer can remove a maximum of 1/8" (3 mm) in a single pass. However, this depth of cut may be used only:

- with very sharp planer knives;
- when planing soft wood;
- when the maximum work piece width is not used.

Otherwise there is a risk of overloading the machine.

- It is strongly recommended that you make several passes at a moderate depth of cut, to achieve the desired work piece thickness.

#### **Note:**

The ideal depth of cut to be used depends on a number of factors, such as type of wood, work piece width or the state of dryness of the wood.

If you are planing mainly very wide (13 inch (330 mm)) work pieces, the motor is subjected to heavy loads.

- Plane narrow work pieces in-between, or take a break to relieve the motor.

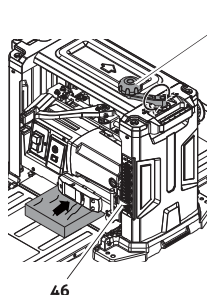
#### Work piece dimensions

- Do not work work pieces which are

shorter than 14 inch (356 mm). With shorter work pieces there is a risk of kickback!

- Do not work work pieces which are shorter than 3/16 " (5 mm). The cutterblock head cannot be set lower.
  - Work only work pieces which are wider than 3/4 " (19 mm).
  - Use extra work piece supports for work pieces which are longer than 5 feet (1500 mm).
  - Never thickness several work pieces at the same time. Risk of personal injury if individual pieces are uncontrolled caught by the cutterblock.
1. Fold down both infeed and outfeed table.
  2. Set the planing thickness with the crank **(45)**. The planing thickness is indicated by the scale **(46)**.

**! Risk of kickback!**  
Adjust the planing thickness only when the cutterblock is at standstill!



3. Start motor (press green switch button).

#### **! Risk of injury!**

- **Never reach with your hands into the machine when guiding the workpiece!**
  - **Guide a work piece on the out-feed side if it has been fed so far into the thicknesser that it can no longer be safely guided from the infeed side.**
  - **Never force the work piece into the machine by pushing or shoving. The machine will draw the work piece in automatically with the infeed roller.**
4. Slide work piece slowly over the infeed table. It will then be automatically fed through the thicknesser.
  5. Guide work piece straight through the thicknesser.
  6. Switch machine off if no further planing is to be done immediately afterwards.

## 8. Care and Maintenance

Prior to all servicing:

1. switch machine OFF;
2. Wait until the cutterblock has come to a complete stop.
3. Unplug power cable.

**! Cutting hazard when touching the rotating cutterblock!**  
**Accidental starting of the machine may cause serious injury.**

**! Burning hazard!**  
**Right after planing the planer knives may be hot – let the machine cool down before servicing.**

The checks and procedures described here are meant to help operate the machine safely! Should there be faults evident on any of these components, the machine must not be used until these faults have been remedied in a workmanlike manner.

- Repair and maintenance work other than described in this section should only be carried out by qualified specialists.
- Check power supply cable for damages.  
Never use the machine when the power supply cable is damaged. Risk of personal injury by electric shock. Have a damaged power supply cable replaced by a qualified electrician immediately.
- Replace defective parts, especially of safety devices, only with genuine replacement parts. Parts not tested and approved by the manufacturer can cause unforeseen damage.

After all servicing:

- Check to see that all safety devices are operational.
- Make sure that no tools or other parts remain on or in the machine.

#### 8.1 Machine Cleaning and Lubrication

**! Danger!**  
Some types of wood dust (e.g. beech, oak, ash) can cause cancer when inhaled.  
When cleaning the machine wear dust respirator and safety goggles, to protect yourself from wood dust or splinters.

#### **! Caution!**

- For cleaning, do not use solvents or cleaning agents containing solvents. The machine's plastic parts may be affected and damaged by the use of solvents.

- Never let petrol, petroleum-based products, or similar substances get in contact with the plastic parts of the machine. These substances contain chemicals which may damage, weaken, or destroy plastics.
- Remove dirt and wood dust with a clean cloth.

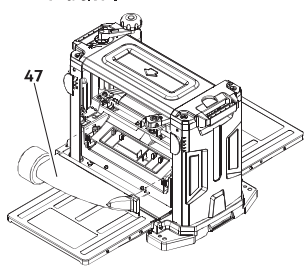
#### After each use

- Remove planing chips and wood dust from all accessible areas, incl. the dust extraction connector and/or the slot in the cutterblock cover (e.g. with a vacuum cleaner).
- Clean both infeed and outfeed roller. Any deposit, which may have formed on the rollers, can be removed with a non-flammable cleaning agent for rubber rollers.

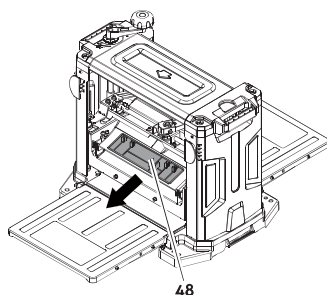
#### Periodic cleaning

Soiling of the machine by wood dust or dirt may be the reason for poorly planed work pieces. For perfect planing results the machine should be periodically cleaned and the bearing surfaces of the tables waxed.

1. Unplug power cable.
2. Fold down both infeed and outfeed table.
3. Unscrew and remove the dust extraction connector (47) and clean with a cloth.



4. Unscrew and remove the cutterblock cover (48) and clean with a cloth.



5. Remove planing chips (e.g. with a vacuum cleaner) from:
  - height adjustment;
  - cutterblock;
  - motor ventilation slots.
6. Clean guide bars and spindles of the height adjustment with spray oil (e.g. WD40), then apply a light film of medium viscosity machine oil.
7. Replace and fasten the cutterblock cover (48).
8. Replace and fasten the dust extraction connector (47).
9. Apply a light coat of wax for better gliding of the work piece on:
  - Infeed table
  - centre table
  - outfeed table



**Note:**  
Apply only a thin coat of wax. Too much wax may be absorbed by the wood, causing discolouration.

#### Tips for lubrication

- Periodically check that guide bars and spindles of the height adjustment are clean and lightly oiled. Use a machine oil of medium viscosity.
- The planer knives should also be given a light coat of oil, to inhibit rust.
- All bearings in this machine are lubricated with a high-grade grease. Under normal operating conditions this does provide sufficient lubrication for the entire service life of the machine. Additional lubrication is not required.

#### Cleaning the motor

As long as it is kept clean, the motor does not require any maintenance.

- Make sure that on or in the motor no deposits of water, oil or wooddust build up.
- The motor bearings do not require any lubrication.

## 8.2 Changing the Planer Knives



**Note:**  
Dull planer knives are recognizable by:

- reduced planing performance;
- increased risk of kickback;
- motor overloads.

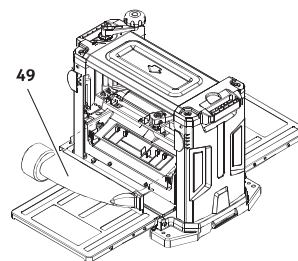


**Danger!**  
Risk of personal injury by cuts from the planer knives!

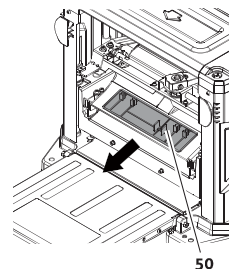
- Wear gloves when changing planer knives.
- Never turn the cutterblock directly by hand. When changing the planer knives, only turn the cutterblock by the drive belt (50).

#### Preparations

1. Unplug power cable.
2. Fold down both infeed and outfeed table.
3. Unscrew and remove the dust extraction connector (49).

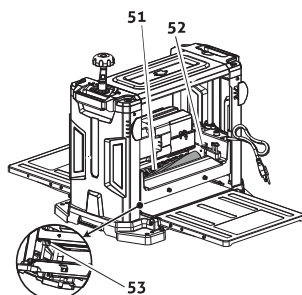


4. Unscrew and remove the cutterblock cover (50).



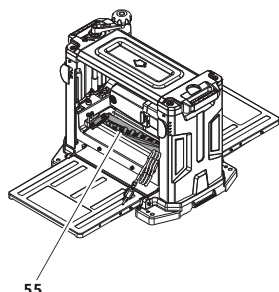
#### Turning the cutterblock into the correct position

- Turn cutterblock (51) with the drive belt (53), until the cutterblock is arrested.  
To access the drive belt from below, raise the cutterblock head until the drive belt is accessible.
- To have access to the second planer knife, the cutterblock must be rotated by 180°.
  - Press lock lever (52) and turn cutterblock with the drive belt (53).
  - Release lock lever (49) and keep turning the cutterblock, until it is arrested in the new position.



#### Removing the planer knives

1. Loosen all screws (55) of the planer with the wrench and remove them (wear gloves!).



2. Clean all surfaces of cutterblock and planer knife lockbar with a suitable solvent.

**Danger!**  
Do not use any cleaning agents (e.g. to remove resin residue) that could corrode the light metal components of the machine; the stability of the light metal components would be compromised.

#### Installing the planer knives

- Danger!**
- Use only suitable planer knives conforming to EN 847-1, unsuitable, incorrectly mounted, blunt or damaged planer knives can work loose or increase the risk of kickback considerably.
  - Always replace or reverse both planer knives.
  - Install planer knives using only genuine replacement parts.

1. Fit both springs into the holes in the cutterblock.
2. Apply a light coat of oil to the planer knife.
3. Position the planer knife with the special knife changing tool on the cutterblock. The two guide pins in the cutterblock ensure the planer knife is in the proper position.

**Note:**  
The planer knife has a cutting edge on both front and rear side. If the edge on the rear is sufficiently sharp, it will suffice to turn the knife.

4. Tighten the planer knife lockbar:  
To avoid distortion of the planer knife lockbar start with the screws in the centre, then tighten the screws closer to the edges step by step.

**Danger!**  
Do not extend to oil when tightening the bolts.  
Do not tighten bolts by striking the wrench.

5. Replace and fasten the cutterblock cover.
6. Make sure that no assembly tools or loose parts are remaining in the machine.

#### Test the machine when idling:

1. Fold down both infeed and outfeed table.
2. Make sure the planer knives can turn freely.
3. Set lock lever fully to the left, into the position marked **L**.
4. Raise cutterblock head to at least 1 inch (25 mm) planing thickness.
5. Set lock lever fully to the right, to the position marked **R**.
6. Plug in the power supply cable's plug and start the motor (press green switch button).
7. Once the machine has reached full speed, pay attention to:
  - noise
  - vibrations

**Danger!**  
If noise and/or vibrations appear to be unusually high: **turn OFF the machine immediately and unplug!**

8. Check machine for parts that may have worked loose; fasten any loose parts properly, where necessary.

### 8.3 Checking and Replacing the Carbon Brushes

Both front and rear carbon brushes should be checked every 10 to 15 operating hours.

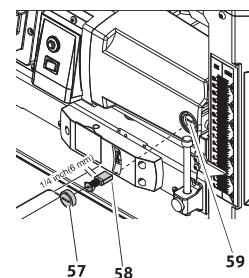
Worn carbon brushes are recognizable by:

- intermittent operation of motor;
- Interference in radio and TV reception while the motor is running;
- motor stalling.

#### To check or replace carbon brushes:

1. Unplug power cable.
2. Fold down both infeed and outfeed table.
3. Remove the carbon brush on the infeed side of the machine: unscrew the plug (57) from the motor housing with a suitable screwdriver.

**Note:**  
The rear carbon brush is located on the opposite (outfeed) side. To remove the rear carbon brush, the dust extraction adaptor and the cutterblock cover need to be removed first.



4. Pull carbon brush (58) out and check. Each carbon brush should be at least 1/4" (6 mm) long.
5. Fit intact or new carbon brush (58) into the carbon holder (59). The two lugs on the sides of the small metal plate must fit into the grooves in the brush holder.
6. Replace the plug (57).

**Note:**

After replacement of the rear carbon brush, both the cutterblock cover and the dust extraction connector must be reinstalled and securely fastened.

7. Check the functioning of the machine.

**8.4 Storage**

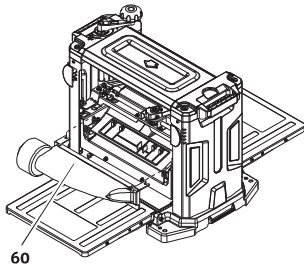
1. Unplug and stow away the power supply cable in the pocket on the underside of the outfeed table.
2. Swing both infeed and outfeed table up.
3. Store machine in a way that
  - it cannot be used or tampered with by unauthorized persons, and
  - nobody can get hurt by the stored machine.



**Caution!**  
Do not store machine unprotected outdoors or in damp environment.

**8.5 Transport**

1. Unplug power supply cable.
2. Unscrew and remove the dust extraction connector (60).



3. Swing both infeed and outfeed table up.
4. Stow away the power supply cable in the pocket on the underside of the outfeed table.
5. Transport machine holding it by the carrying handles on its sides.



**Caution!**  
Never store the machine outdoors, in unprotected areas or in damp or wet locations.

**9. Troubleshooting**

**Danger!**  
Before carrying out any fault service or maintenance work, always:

1. switch machine OFF;
2. Wait until the cutterblock has come to a complete stop.

**3. Unplug power cable.**

**Cutting hazard when touching the rotating cutterblock!**  
Accidental starting of the machine may cause serious injury.



**Burning hazard!**  
Right after planing the planer knives may be hot – let the machine cool down before troubleshooting.



**Danger!**  
After each service, enable all safety devices and check to see that they are fully operational.

**Motor does not run**

No supply voltage.

- Check cables, plug, outlet and mains fuse.

Undervoltage relay tripped by temporary voltage failure.

- Start again.

Motor has overheated, e.g. due to blunt planer knives, overloading or chips jammed inside the cutterblock cover.

- Remove cause for overheating, let cool down for approx. 10 minutes, then press the reset button and restart the machine.

Carbon brushes worn down.

- Replace carbon brushes.

**Performance lessens**

Planer knives blunt.

- Install sharp knives.

**Planed surface not smooth**

Planer knives blunt.

- Install sharp knives.

Planer knives blocked by chips.

- Remove chips.

Moisture contents of work piece too high.

- Dry work piece.

**Planed surface cracked**

Planer knives blunt.

- Install sharp knives.

Planer knives blocked by chips.

- Remove chips.

Work piece was planed against the grain.

- Plane work piece in opposite direction.

Too much material removed in one pass.

- Make several passes at less depth of cut.

**Worked surface uneven:**

Planer knives are installed uneven.

- Adjust planer knives with setting gauge.

**Feed rate too little**

Resin built-up on bearing surfaces of centre table, infeed table or outfeed table.

- Clean bearing surfaces and apply a light coat of sliding wax.

**Work piece jammed**

Too much material removed in one pass.

- Make several passes at less depth of cut.

**11. Repairs****Danger!**

Repairs to power tools must only be carried out by qualified electricians!

Electric tools in need of repair can be sent to the service centre of your country. Refer to the spare parts list for the address.

Please attach a description of the fault to the machine.

# TROUBLESHOOTING

**TO PREVENT INJURY TO YOURSELF** or damage to the machine, turn the switch to the **"OFF"** position and unplug the power cord from the electrical receptacle before making any adjustments.

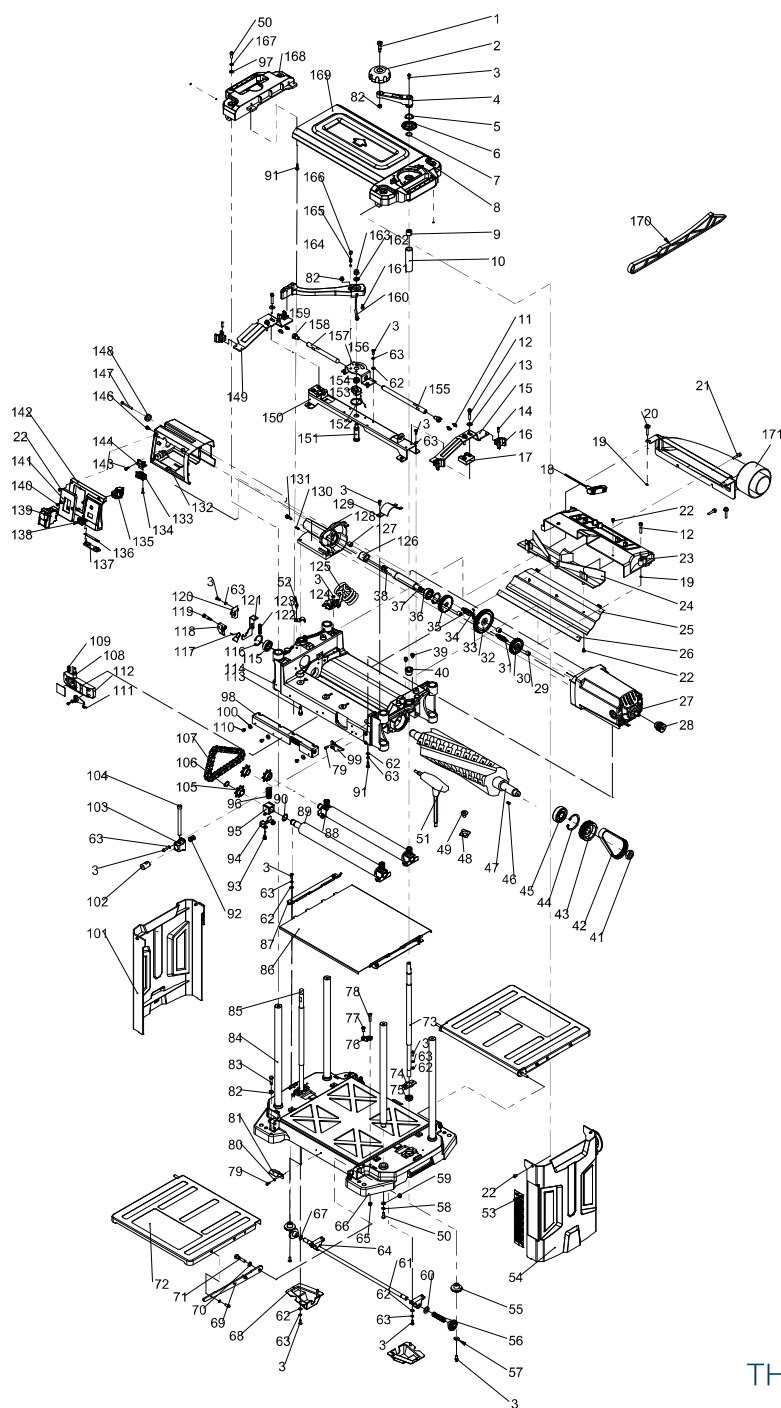
| PROBLEM                                                      | LIKELY CAUSE(S)                                                                                                                                                                             | SOLUTION(S)                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Snipe (depressions at ends of workpiece).</b>             | <ol style="list-style-type: none"> <li>1. Dull cutter blades.</li> <li>2. Incorrect butted stock.</li> <li>3. Unit not securely mounted.</li> <li>4. Cutter head not locked.</li> </ol>     | <ol style="list-style-type: none"> <li>1. Replace, turn or sharpen cutter blades.</li> <li>2. Butt pieces end-to-end as they are fed into planer.</li> <li>3. Securely tighten mounting hardware.</li> <li>4. Lock Cutter Head.</li> </ol>                                                                |
| <b>Torn grain.</b>                                           | <ol style="list-style-type: none"> <li>1. Too deep a blade setting.</li> <li>2. Workpiece being fed against grain.</li> <li>3. Dull cutter blades.</li> </ol>                               | <ol style="list-style-type: none"> <li>1. Reduce depth of cut.</li> <li>2. Feed other end of board first.</li> <li>3. Replace, turn or sharpen cutter blades.</li> </ol>                                                                                                                                  |
| <b>Fuzzy/ Rough grain.</b>                                   | <ol style="list-style-type: none"> <li>1. High wood moisture content.</li> <li>2. Dull cutter blades.</li> <li>3. Too deep a blade setting.</li> <li>4. Incorrect feeding speed.</li> </ol> | <ol style="list-style-type: none"> <li>1. Dry wood before planing.</li> <li>2. Replace, turn or sharpen cutter blades.</li> <li>3. Reduce depth of cut.</li> <li>4. Check for adequate power supply.</li> <li>5. Check cord and plug for damage.</li> <li>6. Check condition of motor brushes.</li> </ol> |
| <b>Uneven depth of cut.</b>                                  | <ol style="list-style-type: none"> <li>1. Cutter head assembly not level with planer.</li> <li>2. Unstable roller spring pressure.</li> <li>3. Feed roller worn unevenly.</li> </ol>        | <ol style="list-style-type: none"> <li>1. Adjust elevation screws.</li> <li>2. Have service performed by an Authorised Service Centre.</li> <li>3. Have service performed by an Authorised Service Centre.</li> </ol>                                                                                     |
| <b>Board thickness does not match depth scale indicator.</b> | <ol style="list-style-type: none"> <li>1. Depth scale incorrectly set.</li> <li>2. Dirty planing table.</li> </ol>                                                                          | <ol style="list-style-type: none"> <li>1. Adjust depth scale.</li> <li>2. Clean and wax planing table.</li> </ol>                                                                                                                                                                                         |
| <b>Cutter head height difficult to adjust.</b>               | <ol style="list-style-type: none"> <li>1. Dirty spindle.</li> <li>2. Worn chain.</li> </ol>                                                                                                 | <ol style="list-style-type: none"> <li>1. Clean and lubricate.</li> <li>2. Have service performed by an Authorised Service Centre.</li> </ol>                                                                                                                                                             |

FOR TECHNICAL SUPPORT CALL 1800 658 111

## TROUBLESHOOTING

|                               |                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Will not start.</b>        | <ol style="list-style-type: none"><li>1. Not plugged in.</li><li>2. No power at outlet.</li><li>3. Motor failure.</li><li>4. Loose wire.</li><li>5. ON/ OFF Switch malfunction.</li></ol> | <ol style="list-style-type: none"><li>1. Check power source.</li><li>2. Replace fuse, reset breaker or call Electrician.</li><li>3. Have service performed by an Authorised Service Centre.</li><li>4. Have service performed by an Authorised Service Centre.</li><li>5. Have service performed by an Authorised Service Centre.</li></ol> |
| <b>Interrupted operation.</b> | <ol style="list-style-type: none"><li>1. Unit overloaded.</li><li>2. Circuit overloaded.</li></ol>                                                                                        | <ol style="list-style-type: none"><li>1. Reduce load.</li><li>2. Operate on circuit separate from other appliances or motors or connect to circuit with adequate amp rating.</li></ol>                                                                                                                                                      |

## PARTS DIAGRAM



TH-135X

FOR TECHNICAL SUPPORT CALL 1800 658 111

## PARTS LIST

| PART REF | PART #      | DESCRIPTION                                                                         | QTY |
|----------|-------------|-------------------------------------------------------------------------------------|-----|
| 1        | TH-135X-001 | Hexagon socket cheese head shoulder screw M8x16                                     | 1   |
| 2        | TH-135X-002 | Lifting handle                                                                      | 1   |
| 3        | TH-135X-003 | Hexagon socket head cap screws M5X12                                                | 44  |
| 4        | TH-135X-004 | Lifting handle                                                                      | 1   |
| 5        | TH-135X-005 | Wave spring washers                                                                 | 1   |
| 6        | TH-135X-006 | Graduated dial                                                                      | 1   |
| 7        | TH-135X-007 | Steel wire retaining ring for shaft                                                 | 1   |
| 8        | TH-135X-008 | Right upper cover                                                                   | 1   |
| 9        | TH-135X-009 | Needle roller bearings                                                              | 2   |
| 10       | TH-135X-010 | Limit sleeve                                                                        | 1   |
| 11       | TH-135X-011 | Eccentric extension springs                                                         | 4   |
| 12       | TH-135X-012 | Hexagon socket head cap screws and spring washer assembly                           | 6   |
| 13       | TH-135X-013 | Large washers, D5                                                                   | 4   |
| 14       | TH-135X-014 | Flexible cylindrical pin Straight groove Lightweight-M4x16                          | 4   |
| 15       | TH-135X-015 | Tensioning right bracket                                                            | 1   |
| 16       | TH-135X-016 | Locking block                                                                       | 4   |
| 17       | TH-135X-017 | sliding block                                                                       | 2   |
| 18       | TH-135X-018 | L-shaped Iron absorbing hexagonal wrench                                            | 1   |
| 19       | TH-135X-019 | O-type rubber seal ring M6x1.5                                                      | 4   |
| 20       | TH-135X-020 | Large flat washer assembly- Hexagon socket cheese head screw M5X30                  | 2   |
| 21       | TH-135X-021 | Hexagon socket cheese head screws with spring washer and flat washer assembly M5X25 | 2   |
| 22       | TH-135X-022 | Cross recessed pan head tapping screws ST4.2x10                                     | 11  |
| 23       | TH-135X-023 | Chip guide                                                                          | 1   |
| 24       | TH-135X-024 | Chip conveyor                                                                       | 1   |
| 25       | TH-135X-025 | Scraper                                                                             | 1   |
| 26       | TH-135X-026 | Spongestrips                                                                        | 1   |
| 27       | TH-135X-027 | Series excitation motor                                                             | 1   |
| 28       | TH-135X-028 | Motor sprocket pulley                                                               | 1   |
| 29       | TH-135X-029 | Copper-based powder bearings1                                                       | 2   |
| 30       | TH-135X-030 | 1-stage shaft helical gear                                                          | 1   |
| 31       | TH-135X-031 | 1-stage gear shaft                                                                  | 1   |
| 32       | TH-135X-032 | 2-stage shaft gears                                                                 | 1   |
| 33       | TH-135X-033 | Flatkey-3X3X8                                                                       | 2   |
| 34       | TH-135X-034 | 2.stage gear shaft                                                                  | 1   |
| 35       | TH-135X-035 | Output shaft gear                                                                   | 1   |
| 36       | TH-135X-036 | Powder bearing 1                                                                    | 1   |
| 37       | TH-135X-037 | Ordinary flat key C-type key                                                        | 1   |
| 38       | TH-135X-038 | Gearbox output shaft                                                                | 1   |

## PARTS LIST

| PART REF | PART #        | DESCRIPTION                                                                  | QTY |
|----------|---------------|------------------------------------------------------------------------------|-----|
| 39       | TH-135X-039   | Hexagon socket head cap screws and spring washer as assembly                 | 4   |
| 40       | TH-135X-040   | Screw nuts                                                                   | 2   |
| 41       | TH-135X-041   | Hexagon thin nuts-M16x1.5-L                                                  | 1   |
| 42       | TH-135X-042   | pj multi-couplings                                                           | 1   |
| 43       | TH-135X-043   | Slave spragpulleys                                                           | 1   |
| 44       | TH-135X-044   | Flexible retaining rings for holes-D47                                       | 1   |
| 45       | TH-135X-045   | Deep groove ball bearing-6303ZZCM-NSK                                        | 1   |
| 46       | TH-135X-046   | Flat key-4x4x12                                                              | 1   |
| 47       | TH-135X-047   | 2-flute,3-hole planer shaft                                                  | 1   |
| 48       | CTI-1525-R150 | Insert Blade (Pk10)                                                          | 3   |
| 49       | TH-135X-049   | Hex screw M5x10                                                              | 30  |
| 50       | TH-135X-050   | Hexagon socket head cap screws, spring washer and flat washer assembly-M6x15 | 8   |
| 51       | TH-135X-051   | Wrench                                                                       | 2   |
| 52       | TH-135X-052   | Hexagon socket cheese head screws M5x8                                       | 5   |
| 53       | TH-135X-053   | Lifting scale                                                                | 1   |
| 54       | TH-135X-054   | Right side cover                                                             | 1   |
| 55       | TH-135X-055   | Bevel gear                                                                   | 4   |
| 56       | TH-135X-056   | Gear shaft compression spring                                                | 1   |
| 57       | TH-135X-057   | Large washers D5                                                             | 2   |
| 58       | TH-135X-058   | Spring washers D6                                                            | 5   |
| 59       | TH-135X-059   | Flat Washers Grade D6                                                        | 4   |
| 60       | TH-135X-060   | Flat washers Class D10                                                       | 1   |
| 61       | TH-135X-061   | Bevel gear coupling shaft                                                    | 1   |
| 62       | TH-135X-062   | Flat washers class D5                                                        | 22  |
| 63       | TH-135X-063   | Spring washers D5                                                            | 50  |
| 64       | TH-135X-064   | Bevel gear holder                                                            | 2   |
| 65       | TH-135X-065   | Type I non-metallic insert hexagonal locking nut M5                          | 3   |
| 66       | TH-135X-066   | Base                                                                         | 1   |
| 67       | TH-135X-067   | Flexible retaining ring for shaft D10                                        | 1   |
| 68       | TH-135X-068   | Gear cover                                                                   | 2   |
| 69       | TH-135X-069   | Extension Bracket                                                            | 4   |
| 70       | TH-135X-070   | Saddle spring washers D8                                                     | 4   |
| 71       | TH-135X-071   | Hexagon socket head hex head shoulder eccentric screws nut                   | 4   |
| 72       | TH-135X-072   | Audiary table                                                                | 2   |
| 73       | TH-135X-073   | Lifting screw                                                                | 1   |
| 74       | TH-135X-074   | Bearing Plate                                                                | 2   |
| 75       | TH-135X-075   | Deep groove ball bearings-61900-2RZ                                          | 2   |
| 76       | TH-135X-076   | Height positioning blocks                                                    | 1   |

FOR TECHNICAL SUPPORT CALL 1800 658 111

## PARTS LIST

| PART REF | PART #      | DESCRIPTION                                                                       | QTY |
|----------|-------------|-----------------------------------------------------------------------------------|-----|
| 77       | TH-135X-077 | Hexagon head bolts-M5X8                                                           | 1   |
| 78       | TH-135X-078 | Hexagon socket cheese head screws-M5x20                                           | 1   |
| 79       | TH-135X-079 | Hexagon socket cheese head screws M4X10                                           | 6   |
| 80       | TH-135X-080 | Spring washers D4                                                                 | 4   |
| 81       | TH-135X-081 | Spring Steel Tabs                                                                 | 2   |
| 82       | TH-135X-082 | Hexagon nuts type 1 M6                                                            | 10  |
| 83       | TH-135X-083 | Hexagon head bolt M6x20                                                           | 4   |
| 84       | TH-135X-084 | Guide pillar                                                                      | 4   |
| 85       | TH-135X-085 | Left lifting screw                                                                | 1   |
| 86       | TH-135X-086 | Table pads                                                                        | 1   |
| 87       | TH-135X-087 | Platen clamps                                                                     | 2   |
| 88       | TH-135X-088 | Roller compression spring                                                         | 1   |
| 89       | TH-135X-089 | Roller                                                                            | 2   |
| 90       | TH-135X-090 | Roller spacer                                                                     | 4   |
| 91       | TH-135X-091 | Cross recessed heagon head flange face tapping screws ST5.5X16                    | 4   |
| 92       | TH-135X-092 | Scale compression spring                                                          | 1   |
| 93       | TH-135X-093 | Cross recessed pan head screws with spring washers and flat washer assembly M5X10 | 8   |
| 94       | TH-135X-094 | Roller platen                                                                     | 4   |
| 95       | TH-135X-095 | Roller bearings                                                                   | 4   |
| 96       | TH-135X-096 | Roller compression spring                                                         | 3   |
| 97       | TH-135X-097 | Flat washers D6                                                                   | 7   |
| 98       | TH-135X-098 | Anti-Reverse Kick Assembly                                                        | 1   |
| 99       | TH-135X-099 | Pointer                                                                           | 1   |
| 100      | TH-135X-100 | Adjustment pads                                                                   | 1   |
| 101      | TH-135X-101 | Left side cover                                                                   | 1   |
| 102      | TH-135X-102 | Limit block                                                                       | 1   |
| 103      | TH-135X-103 | Height positioner                                                                 | 1   |
| 104      | TH-135X-104 | Height Limit Lever                                                                | 1   |
| 105      | TH-135X-105 | Reduction sprocket                                                                | 3   |
| 106      | TH-135X-106 | Flexible retaining rings for shafts D15                                           | 3   |
| 107      | TH-135X-107 | Reduction Chain                                                                   | 1   |
| 108      | TH-135X-108 | Depth probe                                                                       | 1   |
| 109      | TH-135X-109 | Probe compression spring                                                          | 1   |
| 110      | TH-135X-110 | Phillips pan head combination screws M5X12                                        | 1   |
| 111      | TH-135X-111 | Depth of cut pointer                                                              | 1   |
| 112      | TH-135X-112 | Depth probe holder                                                                | 1   |
| 113      | TH-135X-113 | Hexagon socket head cap screws and spring washer M6x20                            | 2   |
| 114      | TH-135X-114 | Lifting seat                                                                      | 1   |

## PARTS LIST

| PART REF | PART #      | DESCRIPTION                                                               | QTY |
|----------|-------------|---------------------------------------------------------------------------|-----|
| 115      | TH-135X-115 | Deep groove ball bearings-6002-2RZ                                        | 1   |
| 116      | TH-135X-116 | External circlip D32                                                      | 2   |
| 117      | TH-135X-117 | Chain wheel tensioning torsion spring                                     | 1   |
| 118      | TH-135X-118 | Chain wheel tensioning plate                                              | 1   |
| 119      | TH-135X-119 | Hexagon socket cheese head shoulder screw 6.5×16                          | 1   |
| 120      | TH-135X-120 | Cutter shaft positioning plate                                            | 1   |
| 121      | TH-135X-121 | Cutter shaft positioning plate                                            | 1   |
| 122      | TH-135X-122 | Compression spring for tool spindle                                       | 1   |
| 123      | TH-135X-123 | Cord retaining tabs                                                       | 1   |
| 124      | TH-135X-124 | Wire Retainer Knob-UL-1/4                                                 | 1   |
| 125      | TH-135X-125 | Power cord with Plug                                                      | 1   |
| 126      | TH-135X-126 | Powder bearings 2                                                         | 1   |
| 127      | TH-135X-127 | Copper-based powder bearings 2                                            | 2   |
| 128      | TH-135X-128 | Gearbox body                                                              | 1   |
| 129      | TH-135X-129 | Belt cover                                                                | 1   |
| 130      | TH-135X-130 | Cylindrical pin-4×12                                                      | 2   |
| 131      | TH-135X-131 | Cross recessed pan head screws, with spring and flat washer M4X12         | 3   |
| 132      | TH-135X-132 | Electrical box                                                            | 1   |
| 133      | TH-135X-133 | Safety switches-HY50-Long Handle                                          | 1   |
| 134      | TH-135X-134 | Cross recessed pan head tapping screws ST2.9×16                           | 1   |
| 135      | TH-135X-135 | Over current protector                                                    | 1   |
| 136      | TH-135X-136 | Light bar                                                                 | 1   |
| 137      | TH-135X-137 | Lamp shade                                                                | 1   |
| 138      | TH-135X-138 | Arc Switch-HY17-2P                                                        | 1   |
| 139      | TH-135X-139 | NVR Switch-KD20-2                                                         | 1   |
| 140      | TH-135X-140 | Cross recessed pan head tapping screws ST3.5x9.5                          | 2   |
| 141      | TH-135X-141 | switch panel                                                              | 1   |
| 142      | TH-135X-142 | Electrical box panels                                                     | 1   |
| 143      | TH-135X-143 | Cross recessed pan head tapping screws ST4.2x12.7                         | 2   |
| 144      | TH-135X-144 | Limit switch block                                                        | 1   |
| 146      | TH-135X-146 | Cross recessed pan head screws with spring and flat washer assembly M4X12 | 1   |
| 147      | TH-135X-147 | Cross recessed pan head screws-M4x40                                      | 1   |
| 148      | TH-135X-148 | Lead wire sheath                                                          | 1   |
| 149      | TH-135X-149 | Tensioning left bracket                                                   | 1   |
| 150      | TH-135X-150 | Tensioning bracket                                                        | 1   |
| 151      | TH-135X-151 | Eccentric shaft                                                           | 1   |
| 152      | TH-135X-152 | Eccentric wheel torsion spring                                            | 1   |
| 153      | TH-135X-153 | Eccentric wheel                                                           | 1   |

FOR TECHNICAL SUPPORT CALL 1800 658 111

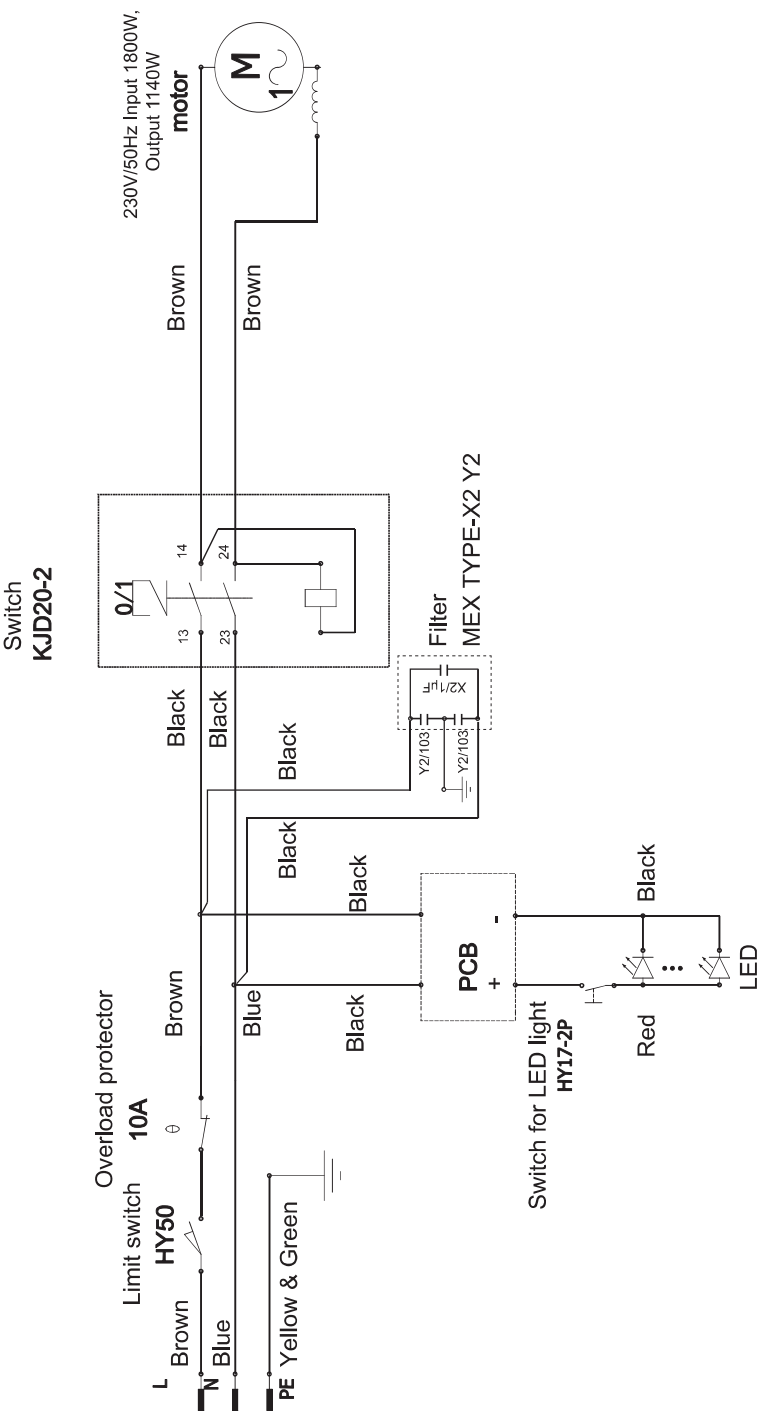
TH-135X

## PARTS LIST

| PART REF | PART #      | DESCRIPTION                                  | QTY |
|----------|-------------|----------------------------------------------|-----|
| 154      | TH-135X-154 | Eccentric compression spring                 | 1   |
| 155      | TH-135X-155 | Long tensioning rod                          | 1   |
| 156      | TH-135X-156 | Eccentric wheel bracket                      | 1   |
| 157      | TH-135X-157 | Short tensioning rod                         | 1   |
| 158      | TH-135X-158 | Slotted hexagon bolts M8x12                  | 2   |
| 159      | TH-135X-159 | Locking handle                               | 1   |
| 160      | TH-135X-160 | Hexagon socket cheese head screws M6X40      | 1   |
| 161      | TH-135X-161 | Hexagon socket cheese head screws M5x8       | 1   |
| 162      | TH-135X-162 | Flat washers D8                              | 1   |
| 163      | TH-135X-163 | Non-metallic Insert Hexagonal Locking nut M8 | 1   |
| 164      | TH-135X-164 | Ball-D5                                      | 1   |
| 165      | TH-135X-165 | Compression spring for tensioning handle     | 1   |
| 166      | TH-135X-166 | Hexagon socket set screws M8X8               | 1   |
| 167      | TH-135X-167 | Spring washers f6                            | 4   |
| 168      | TH-135X-168 | Upper left cover                             | 1   |
| 169      | TH-135X-169 | Uppercover                                   | 1   |
| 170      | TH-135X-170 | Push Handle(long)                            | 1   |
| 171      | TH-135X-171 | Chip discharge port                          | 1   |

# WIRING DIAGRAM

30



FOR TECHNICAL SUPPORT CALL 1800 658 111

## 2 YEAR WARRANTY

### WARRANTY

- A. We warrant that this Carbatec product will be free from defects caused by faulty workmanship or faulty materials for a period of 2 years from date of sale.
- B. This warranty is in addition to other rights and remedies you may have under a law in relation to the goods.
- C. This warranty does not apply in any of the following cases:
- i. Defects arising from:
    1. fair wear and tear;
    2. corrosive atmosphere;
    3. damage or injury caused by deliberate act, lack of care or failure to comply with the recommended care and maintenance for the goods;
    4. improper use of the goods;
    5. alterations or repairs (not made by us) to the goods;
  - ii. defects arising from an event outside of our control such as fire, flood, earthquake or other natural calamity, motor vehicle or other accident, strike, civil unrest, terrorism or war;
  - iii. to accessory items such as after-market jigs, accessories or other items which are not sold or serviced by us and which are not sold with or were not included with the main unit purchased; or
  - iv. to wearable parts such as drive belts/shafts, bearings, bandsaw tyres, motor brushes, blades or abrasive belts/discs or other cutting or machining implements.
  - v. damage caused to any electrical component, where connected to a power supply outside the country for which it was designed (namely Australia or New Zealand).
- D. If this warranty applies and you have complied with the procedure below for making a claim, we will, at our election, either repair the goods (or those parts of the goods recognised as defective) or will provide a replacement within a reasonable time at our expense.
- E. If this warranty applies, the procedure for making a claim is:
- i. you must contact us by email;
  - ii. you must include in the email the following

information:

1. a copy of the order or receipt for the goods;
  2. the serial or batch number printed on the machinery manufacturing plate; and
  3. a detailed description of the fault and how and when it arose; and
  4. If the fault is a type covered by this warranty, we will then make arrangements with you for the return of the goods to us (for repair or replacement) at our cost using our transport providers or we may decide to attend at your premises to repair or replace the goods.
- F. Our liability (and that of our resellers) under this warranty is wholly limited to repair or replacement of the goods (or those parts of the goods recognised as defective) in accordance with the procedure above and you have no right to other compensation, costs or damages under this warranty. But this does not mean that you may not have other rights under a law in relation to the goods.
- G. If following our inspection of goods returned by you under this warranty it is found that this warranty does not apply and you are not otherwise entitled to repair or replacement by us, you must, if requested by us, reimburse our costs including parts, labour and freight.
- H. This warranty is not transferable and only the person who purchased the goods may make a claim.

Where the goods have been exported outside Australia or New Zealand, the Company may not require the Purchaser to return any allegedly faulty or defective Product for evaluation. However, the Company has the right to request the return for evaluation at purchasers cost.

### STATUTORY NOTICE

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.



# carbatec<sup>®</sup>

Carbatec Pty Ltd  
E [info@carbatec.com.au](mailto:info@carbatec.com.au)  
AU: 1800 658 111  
NZ: 0800 444 329  
1/364 New Cleveland Rd,  
Tingalpa QLD 4173,  
Australia  
ABN 84 010 706 242

**[carbatec.com.au](http://carbatec.com.au)**

