

# SAFETY AND OPERATING MANUAL 170W Flexi Shaft Rotary Tool With 120 Accessories DRT170/120



# **ORIGINAL INSTRUCTIONS**



**DRT170/120** 

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WARNING Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your electric (corded) power tool or battery-operated (cordless) power tool.

# 1. Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

# 2. Electrical safety

- a) Power tool plugs must match the outlet.

  Never modify the plug in any way. Do not use any adapter plugs with grounded power tools.

  Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool.

  Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

# 3. Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.



- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

### 4. Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- **f) Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier
- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

# 5. Service

- a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- b) If the replacement of the supply cord is necessary, this has to be done by the manufacturer or its agent in order to avoid a safety hazard.
- 6. Safety Warnings Common For Grinding, Sanding, Wire Brushing, Polishing And Abrasive Cutting Operations
- a) This Power tool is intended to function as a grinder, sander, wire brush, polisher or cut-off tool. Make sure you read all safety and operation information provided with this power tool. Failure to follow all instructions may result in electric shock, fire and/or serious injury.



- b) Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because an accessory may attach to the tool does not assure safe operation.
- c) The rated speed of the accessory must be at least equal to the maximum speed of the power tool. When used outside of their rated speeds accessories can fly apart.
- d) The diameter and the thickness of your accessory must be within the capacity of your Power Tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- e) The arbour size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool. Accessories with arbour holes that do not match the mounting hardware of the power tool will run out of balance, vibrate and may cause loss of control.
- **f)** Do not use damaged accessories. Before each use inspect the accessory for chips, cracks, tears, excess wear and for loose or cracked wires.
- g) Wear personal protective equipment,
  Depending on the application, use face shield,
  safety goggle of safety glasses. As appropriate,
  wear dust mask, hearing protectors, gloves and
  shop apron.
- h) Keep bystanders a safe distance away from the work area. Anyone inside the work area must be wearing safety equipment. Fragments may fly away and cause injury beyond immediate area of operation.
- i) Hold Power tool by insulated gripping surface only.

- j) WAIT for the tool to come to a complete STOP before lying the tool down.
- k) Do not carry the tool at your side while it is running.
- I) Regularly clean the tool's air vents.
- m) Do not operate in environments near flammable materials
- n) DO NOT WORK MATERIALS CONTAING
  ASBESTOS
- O) BE AWARE OF DUST. During operation dusts can develop which are either harmful to your health, combustible and/or explosive.

# 7. Kickback

- a) Maintain a firm grip on the power, positioning your body and arm to resist kickback forces.
- b) Never place hand near the rotating accessory, Accessory may kick back over your hand.
- c) Do not position your body in the area where the power tool will move in the event of kick back.
- d) Kick back will propel the tool in the direction opposite to the wheels movement at the point of snagging.
- e) Special care is needed when working corners, sharp edges. As these have a tendency to snag and cause kick back.



- 8. Grinding and abrasive cutting off operations.
- a) Use only wheel types that are recommended for your power tool.
- b) Wheels must be used only for recommended applications. For example do not grind with side of cut-off wheel.
- c) Always make sure wheel flanges are undamaged and of the correct size and shape for your selected wheel.

# Abrasive and cutting off operations

- a) Do not "jam" the Cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth cut.
- b) Do not position your body in line and behind the rotating wheel. As this is the most likely direction the tool will be forced if it experiences kickback.
- c) When wheel is binding or when pausing a cut for any reason, switch of the tool and wait for it to come to a stop. NEVER attempt to remove the cut-off wheel from the cut wheilst the wheel is in motion otherwise kick back may occur
- d) Do not restart the cutting operation in the work piece. Allow wheel to reach full speed and carefully re-enter the cut.
- e) Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback
- f) Use caution when making blind cuts, consider what may be hidden.

- 9. Sanding operations.
- a) When sanding do not use excessively oversized sanding disc paper. Follow manufacturer's recommendations when selecting sanding paper.

# **10. Polishing Operations**

a) Do not allow any loose portion of the polishing bonnet or it's attachments to spin freely. Tuck away or trim any lose attachment strings.

# 11. Wire Brushing Operations

- a) Wire brushes are thrown by the brush even during ordinary operation. DO NOT overstress the wires by applying excessive load to the brush.
- b) If the use of a guard is recommended for wire brushing, do not allow any interference of the wire wheel or brush with the guard.

# 12. Using an Extension Cable.

- a) If an extension cable is required, use an approved triple core extension cable suitable for the power input of the tool.
- b) Grounded tools always require a three wire extension cable.
- c) As the distance from the supply outlet increases you must use a heavier gauge extension cable. Using extension cables with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage.
- d) The smaller the gauge number of the wire the greater the capacity of the cord.
- e) When using a cable reel, always unwind the cable completely.



# **Symbols and Cable Rating Chart**



Danger! – Read the operating instructions to reduce the risk of injury



Caution! Wear safety goggles.



Caution! Wear ear defenders. The impact of noise can cause damage to hearing



Caution! Risk of Injury! Do not reach into the running saw blade.



Caution! Wear a dust mask.

Amperes	7.5M	15M	25M	30M	45M	60M
0-2.0	6	6	6	6	6	6
2.1 – 3.4	6	6	6	6	6	6
3.5 - 5.0	6	6	6	6	10	15
5.1 – 7.1	10	10	10	10	15	15
7.1 – 12.0	15	15	15	15	20	20
12.1 – 20.0	20	20	20	20	25	-

# **Machine Details and Product Features**

# **Machine Details**

# **Specifications:**

Mains Voltage – 230V (50Hz)

Power Consumption – 170W

No-load stroke rate – 8-35,000rpm

Collet chuck capacity - 2.0-3.2mmØ

# **Package Contents:**

35 x Cut-Offs

40 x sanding discs

7 x Small diameter sanders

7 x Large Diameter sanders

2 x Small diameter buffers

2 x Large diameter buffers

1 x Sharpening stone

5 x Polishing tool attachments

2 x Sanding tool attachments

1 x Wire brush attachments

1 x Brush attachment

7 x Engraving attachments

2 x Drilling attachments

1 x Buffing attachment

1 x Disk attachment

4 x Collets

2 x Locking nuts

1 x Light attachment

1 x Flexidrive attachment tool

1 x Instruction manual



### **Features**

- 1) Flexi Light Attachment
- 2) Storage Hook
- 3) ON/OFF Switch
- 4) Guard
- 5) Locking Nut
- 6) Drive Locking Button
- 7) Speed Adjustment Wheel
- 8) Flexidrive Tool

# **Assembly Instructions**

# **Assembly**

Avoid Unintentional starting of the machine. During assembly and for all work on the machine, the power plug must not be connected to the mains supply.

Carefully remove all parts included in the delivery from their packaging.

Remove all packaging material from the machine and the accessories provided.

Before starting the operation of the machine for the first time, check if all parts listed in the box content section have been supplied.

**Note:** Check the power tool for possible damage before further use of the machine. Check that all protective devices are fully functional. Any lightly damaged parts must be carefully checked to ensure flawless operation of the tool. All parts must be properly mounted and all conditions fulfilled that ensure faultless operation.

Damaged protective Devices and parts must be immediately replaced by an authorised service centre.



NOTE: Before using the tool, read the instruction book carefully. Prior to assembly and adjustment always unplug the tool.



Prior to assembly and adjustment always unplug the tool.

# Placing accessories into the tool

- a) Make sure the tool is switched off.
- b) Hold the locking button at the front of the tool down and undo the collet chuck anti clockwise.
- c) Insert the collet that matches the shaft size of the accessory to be used.
- d) Place the collet nut over the collet and then insert the accessory shaft into the collet chuck. Ensure maximum shaft contact.
- e) Tighten up the collet nut (DO NOT USE PLIARS)

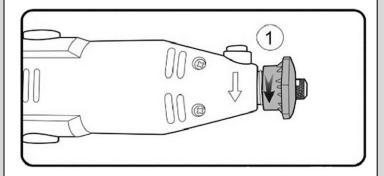
### Flexidrive Assembly

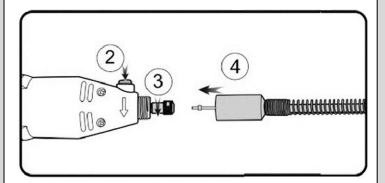
- a) Remove the front ring nut from the tool by turning it in a clockwise direction.
- b) Partially unscrew the blocking ring nut from the spindle.
- c) Partially extract the internal transmission cable from the flexidrive. Insert the flexidrive transmission cable through the nut and into the spindle of the tool pushing as far as possible.

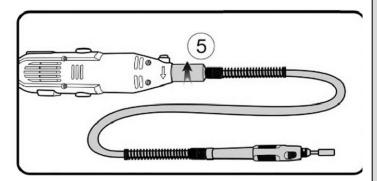


# **Operation**

- d) Keep the spindle block button pressed in and screw the locking nut, turning it in an anti-clockwise direction. Do not use pliers.
- e) Screw the threaded end of the flexidrive onto the body of the too and tighten screwing in a clockwise direction.







# Changing the insert and accessories on the flexidrive.

To change the insert or to install accessories on the flexidrive, follow the same general procedure for changing attachment on the main body except instead of using the locking nut. Turn the spindle until the hole in the shaft is in line with the hole on the handle of the flexidrive and insert a 1/8" drill bit to block the shaft.

# Flex Light

- a) The Flexi light uses lithium ion batteries (batteries included)
- b) Slides into slot at back of the tool

# Start up

- a) Never start up the tool with the accessory touching the work piece.
- b) Hold it firmly and press the ON/OFF switch.
- c) The tool will run continuously until the switch is turned to off position.

# **Speed Adjustment**

- a) Do not change the tools speed as it is actively being used.
- b) The speed switch is located at the rear of the tool.Turn to increase or reduce speed



# **Maintenance and Service**

# **Useful Hints and tips**

- a) Your rotary tool will become warm after prolonged use and so must be switched off and allowed to cool down.
- b) To ensure smooth running the spindle needs to be oiled periodically.
- c) Do not apply too much radial pressure to the accessory bits while polishing, cleaning, sanding or grinding. By doing this you will put a strain on the spindle and adversely affect the precision of the tool.
- d) Always work with a sensitive touch so as not to impede the efficiency of you multi tool.
- e) When Drilling metal, always mark the drilling point with a centre punch first, so that your rotary tool does not slip.
- f) Always ensure that you have maximum contact between the accessory shaft and the collect chuck.
- g) Vary the speed on the tool for the work in hand, eg. Low speed for polishing and cleaning and high speed for engraving

# Maintenance

Your Lumberjack power tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

# Cleaning

Keep the ventilation slots clear and regularly clean the housing with a soft cloth.

### Unwanted tools and the environment

Take your tool to an authorized Lumberjack repair agent where it will be disposed of in an environmentally safe way



# **Lumberjack Guarantee**

### 1. Guarantee

- 1.1.1 Lumberjack guarantees that for a period of 12 months from the date of purchase the components of qualifying products (see clauses 1.2.1 to 1.2.8) will be free from defects caused by faulty construction or manufacture
- 1.1.2During this period, Lumberjack, will repair or replace free of charge any parts which are proved to be faulty in accordance with paragraph 1.1 providing that:
- 1.2.1 You follow the claims procedure set out in clause 2.
- 1.2.2Lumberjack and its Authorised Dealers are given reasonable opportunity after receiving notice of the claim to examine the product.
- 1.2.3If asked to do so by lumberjack or its
  Authorised Dealer, you return the product at
  your own cost to Lumberjack's or the
  supplying Authorised Dealer's Premises -

For the examination to take place clearly stating the Returns Material Authorisation Number given.

- 1.2.4 The fault in question is not caused by industrial use, accidental damage, fair wear and tear, wilful damage, neglect, incorrect electrical connection, misuse, alteration or repair of the product without approval.
- 1.2.5 The product has been used in a domestic environment only.
- 1.2.6 The fault does not relate to consumable items such as blades, bearings, drive belts or other wearing parts which can reasonably be expected to wear at different rates depending on usage.
- 1.2.7 The product has not been used for hire purposes.
- 1.2.8 The product has been purchased by you, as the guarantee is not transferable from a private sale.



# **Lumberjack Guarantee**

### 2. Claims Procedure

- 2.1 In the first instance please contact the Authorised Dealer who supplied the product to you. In our experience many initial problems with machines that are thought to be fault due to faulty parts are actually solved by correct setting up or adjustment of the machine. A good Authorised Dealer should be able to resolve the majority of these issues much more quickly than processing a claim under the guarantee. If a return is requested by the Authorised Dealer or Lumberjack, you will be provided with a Returns Material Authorisation Number which must be clearly stated on the returned package, and any accompanying correspondence. Failure to provide a Returns Material Authorisation Number may result in item being refused delivery.
- 2.2 Any issues with the product resulting in a potential claim under the guarantee must be reported to the Authorised Dealer from which it was purchased within 48 hours of receipt.
- 2.3 If the authorised Dealer who supplied the product to you has been unable to satisfy your query, any claims made under this guarantee should be made directly to Lumberjack. The claim itself should be made in a letter setting out the date and place of purchase, giving a brief explanation of the problem which has led to the claim.

2.4 Please note that it is essential that the letter of claim reaches Lumberjack on the last day of this guarantee at the latest. Late claims will not be considered.

# 3. Limitation of Liability.

- 3.1 We only supply products for domestic and private use. You agree not to use the product for any commercial, business or resale purposes and we have no liability to you for any loss of profit, loss of business, business interruption or loss of business opportunity.
- 3.2 This guarantee does not confer any rights other than these expressly set out above and does not cover any claims for consequential loss or damage.

  This guarantee is offered as an extra benefit and does not affect your statutory rights as a consumer.

### 4. Notice

This guarantee applies to all product purchased from an Authorised Dealer of Lumberjack within the United Kingdom. Terms of guarantee may vary in other countries.

