

DRAPER

EN

Original Instructions
Version 3:
May 2025

230V 150mm/200mm

HEAVY DUTY BENCH GRINDER

29620, 29621



**UK
CA** **CE**

1.1 Product Reference

User Manual for: 230V Heavy Duty Bench Grinder

Stock No: 29620, 29621

Part No: GHD150, GHD200

1.2 Revisions

Version 1: September 2001

First release

Version 2: July 2021

Revision

Version 3: May 2025

Revision

Please visit drapertools.com/manuals for the latest version of this manual.

1.3 Understanding the Safety Content of This Manual

 **WARNING!** – Situations or actions that may result in personal injury or death.

 **CAUTION!** – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

1.4 Copyright © Notice

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3.1 Intended Use

This bench grinder is designed to be used with abrasive wheels to grind masonry, metal and other material.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Read this manual in full before attempting to assemble, operate or maintain the product, and retain it for later use.

3.2 Specification

Stock No.	29620	29621
Part No.	GHD150	GHD200
Rated voltage:	230V/50Hz	230V/50Hz
Rated input:	370W	550W
Grinding Wheel Dimensions:		
Diameter:	150mm	200mm
Bore:	12.7mm	16mm
Width/face:	19mm	25mm
Speed (no load):	3000rpm	3000rpm
Noise emissions:		
Sound pressure level:	<70dB	<70dB
Net weight:	11kg	21kg

4. Health and Safety Information

4.1 General Safety Instructions for Power Tool Use

 **WARNING!** Read all safety warnings, instructions, illustrations and specifications provided with this power tool.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term “power tools” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work Area Safety

- **Keep work area clean and well lit.**
 - Cluttered or dark areas invite accidents.
- **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.
- **Keep children and bystanders away while operating a power tool.**
 - Distractions can cause you to lose control.

Electrical Safety

- **Power tool plugs must match the outlet. NEVER modify the plug in any way. DO NOT use any adapter plugs with earthed (grounded) power tools.**
 - Unmodified plugs and matching outlets will reduce the risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**
 - There is an increased risk of electric shock if your body is earthed or grounded.
- **DO NOT expose power tools to rain or wet conditions.**
 - Water entering a power tool will increase the risk of electric shock.
- **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.
- **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.
- **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.

Personal Safety

- **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.
- **Use personal protective equipment. Always wear eye protection.**
 - Using appropriate protective equipment, such as a dust mask, non-skid safety shoes, hard hat or hearing protection, will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off position before connecting to a 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.
- **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.
- **DO NOT overreach. Keep proper footing and balance at all times.**
 - This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.**
 - Loose clothes, jewellery or long hair can be caught in moving parts.
- **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.
- **DO NOT let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.**
 - A careless action can cause severe injury within a fraction of a second.

Power Tool Use and Care

- **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.
- **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.
- **Disconnect the plug from the power source and/or remove the battery pack, if detachable, 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.
- **Store idle power tools out of the reach of children and do not allow anyone unfamiliar with the power tool or these instructions to operate the power tool.**
 - Power tools are dangerous in the hands of untrained users.
- **Maintain power tools and accessories. 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.
- **Keep cutting tools sharp and clean.**
 - Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **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.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.**
 - Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

Service

- **Have your power tool serviced by a qualified repair person using only identical replacements parts.**
 - This will ensure that the safety of the power tool is maintained.

4.2 Specific Safety Instructions for Bench Grinders

- **DO NOT use a damaged accessory. Before each use, inspect the accessory such as abrasive wheels for chips and cracks. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute.**
 - Damaged accessories will normally break apart during this test time.
- **The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.**
 - Accessories running faster than their rated speed can break and fly apart.
- **Never grind on the sides of a grinding wheel.**
 - Grinding on the side can cause the wheel to break and fly apart.
- Ensure that the wheel dimensions are compatible with the grinder.
- Abrasive wheels shall be stored and handled with care, in accordance with manufacturer's instructions.
- Ensure that mounted wheels and points are fitted in accordance with the manufacturer's instructions.
- Ensure that blotters are used when they are provided with the bonded abrasive product and when they are required.
- Ensure the bench grinder is stable and secured before use.
- Only grinding operations for which the abrasive product is suitable shall be carried out.
- **NEVER** use the bench grinder without the guards or spark deflector fitted.
- **DO NOT** use separate reducing bushings or adaptors to adapt large hole abrasive wheels.
- For tools intended to be fitted with a threaded hole wheel, ensure that the thread in the wheel is long enough to accept the spindle length.
- Check that the workpiece is properly supported.
- Ensure that sparks resulting from use do not create a hazard. For example: make sure sparks do not hit anyone or ignite flammable substances.
- Ensure that ventilation openings are kept clear when working in dusty conditions. If it should become necessary to clear dust, first disconnect the tool from the mains supply, use non-metallic objects and avoid damaging internal parts.
- **ALWAYS** use eye and ear protection.
- Personal protective equipment such as a dust mask, gloves, helmet and apron should be worn.
- The wheel continues to rotate after the tool is switched off.
- Check for damaged parts before using the grinder.
 - Carefully check the guard or other part that is damaged to determine if it will operate properly and perform its intended function.
 - Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
 - A guard or other part that is damaged should be repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual.
 - Have defective switches replaced by an authorised service centre. **DO NOT** use the grinder if the switch does not turn it on and off.

4.3 Safety Recommendations for the correct use of Abrasive Products

- Bonded abrasive products are breakable and shall therefore be handled with utmost care. The use of damaged, improperly mounted or used abrasive products is dangerous and can cause serious injuries.
- Abrasive products must be handled and transported with care. Abrasive products must be stored in such a manner that they are not subjected to mechanical damages and harmful environmental influences.
- Information on the label of the abrasive product stating restrictions of use, safety indications or any other instructions must be followed. In case of doubt concerning the selection of abrasive products, the user shall request information from the manufacturer or supplier.
- **Visual inspection and ring test.** Abrasive products must be subjected to a visual inspection as received before mounting. In addition, a ring test shall be executed for vitrified wheels with a diameter over 80mm. Damaged abrasive products shall be destroyed.
- **Mounting before starting and information for grinding.** The mounting of abrasive products shall be carried out according to the instructions provided by the wheel and the machine manufacturers. Mounting of abrasive products must be carried out by a qualified trained person. After initial mounting, the wheel must be tested by running for a reasonable time. The specified maximum operating speed of the wheel shall not be exceeded.

4.4 Residual Risk

The safety instructions in this manual cannot account for all possible conditions and situations that may occur. Exercise common sense and caution when using this product and protect against any additional conceivable risks.

4.5 Connection to the Power Supply



CAUTION! Risk of electric shock. DO NOT open.

This appliance is supplied with an approved plug and cord for your safety. The product must be installed according to national wiring regulations.

If the power supply cord is damaged, it must be replaced by Draper Tools, an authorised service agent or similarly qualified personnel in order to avoid a hazard.

The damaged or incomplete plug, when cut from the cord, must be disabled to prevent connection to a live electrical outlet.

This product is Class I* and is designed for connection **ONLY** to a power supply matching that detailed on the rating label and compatible with the plug fitted.

The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, ensure the substitute is of the correct rating, approved to BS 1363/A and ASTA or BS Kite marked. This should only be performed by suitably qualified personnel.

ASTA



BSI



The fuse can be replaced by removing the cover using a small plain slot screwdriver and removing the broken fuse from its holder. This should only be performed by suitably qualified personnel.

If an extension lead is required, use an approved and compatible lead rated for this appliance.

Important: ALWAYS follow the extension lead instructions regarding maximum load while the cable is wound. If in doubt, unwind the entire cable. A coiled extension lead generates heat which could melt the lead and cause a fire.

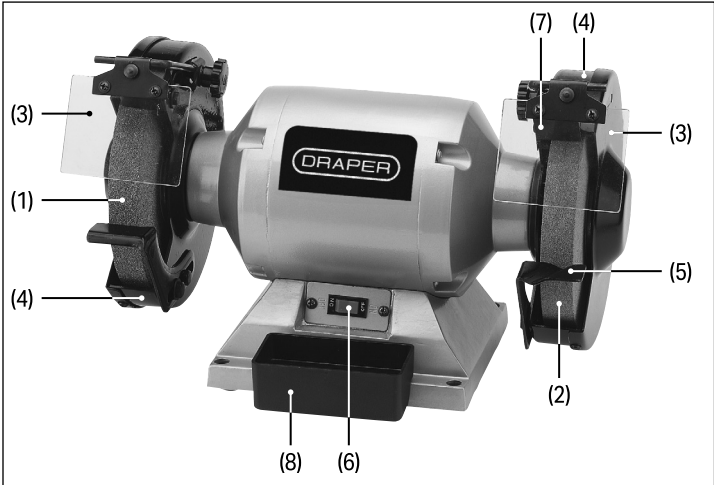
*Earthed ⚡: This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of a failure of the basic insulation.

5. Identification and Unpacking

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5.1 Product Overview

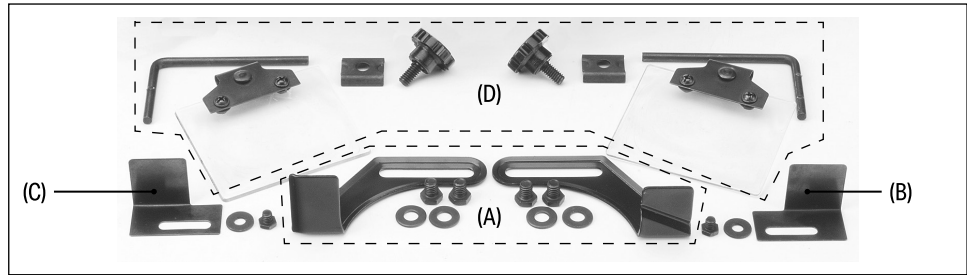
- (1) Coarse grinding wheel (Grit 30)
- (2) Fine grinding wheel (Grit 60)
- (3) Eye shields
- (4) Wheel guards
- (5) Adjustable tool rests
- (6) **ON/OFF** switch
- (7) Spark deflector
- (8) Cooling trough (29621 only)



5.2 What's in the Box?

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment.

Before assembling the product, lay the contents out and check them against the parts shown below. If any part is damaged or missing, do not attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.



- | | |
|-------------------------------------|-------------------------------------|
| A. 2 X Tool rests (5) and fittings | C. 1 X Spark deflector and fittings |
| B. 1 x Spark deflector and fittings | D. 2 X Eye shields and fittings |

5.3 Packaging

Keep the product packaging for the duration of the warranty period for reference should the product need to be returned for repair.

WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

6. Assembling Instructions

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Important: Before preparing or adjusting this product, read and understand all the safety instructions listed in this manual.

6.1 Installation

- Choose a location that is level, flat and with a lot of natural light.
- The bench grinder should be operated on a workbench that is high enough to prevent any injury caused by working in an uncomfortable position, but not too high that the workpiece cannot be safely viewed from above.



WARNING! Bending over or having your neck bent for too long (from looking down) can lead to fatigue injuries.

- The workbench should offer enough space around the bench grinder for all possible applications and to house any accessories.
- Although the bench grinder has been assembled in the factory, some final assembly and adjustments will be required before it can be used.

6.2 Bench Mounting the Grinder (Fig.1)

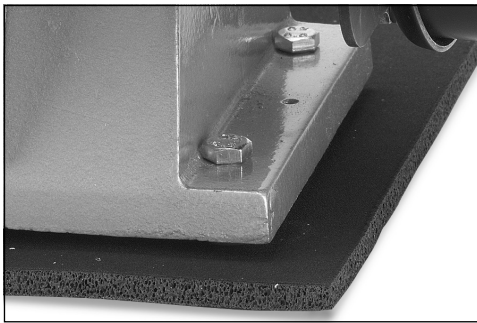


Fig. 1

- Securely bolt the bench grinder to a workbench or other secure surface through the various points in the base (fixings are not supplied).
- Ensure there is enough clear space around the grinder to accommodate large items which may be ground, for example garden tools. To reduce any vibration, mount the grinder on a vibration absorption mat.

6.3 Fitting the Tool Rests (Fig.2)

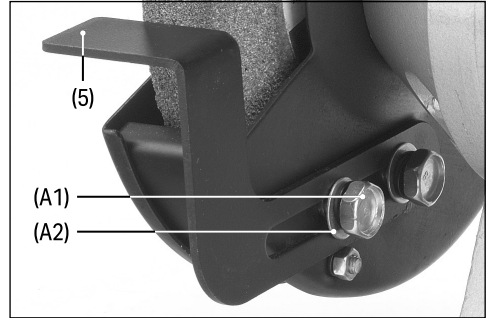


Fig. 2

1. Fit both hand tool rests (5) using the (A) fittings.
2. Fit to the inner edge of the wheel guards using the bolts (A1) and washers (A2) supplied.
3. Adjust so there is approximately 1.5mm (1/16") between the grinding wheel face and the tool rest.



CAUTION! Ensure both washers are fitted between the bolt and the tool rest. Installing the washers incorrectly may result in the tip of the bolt contacting the side of the abrasive wheel.

6.4 Fitting the Spark Deflectors (Fig.3)

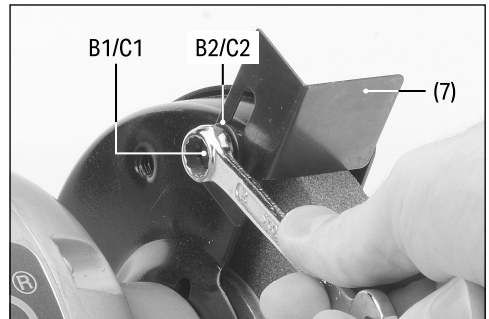


Fig. 3

1. Fit both spark deflectors (7) using the (B) and (C) fittings.
2. Fit the spark deflectors using the two bolts (B.1)/(C.1) and medium size washers (B.2)/(C2).

When fitted, adjust the spark deflectors so that there is approximately 1.5mm (1/16") between the surface of the grinding wheels and spark deflectors.

6.5 Fitting the Eye Shields (Fig.4 – Fig.5)

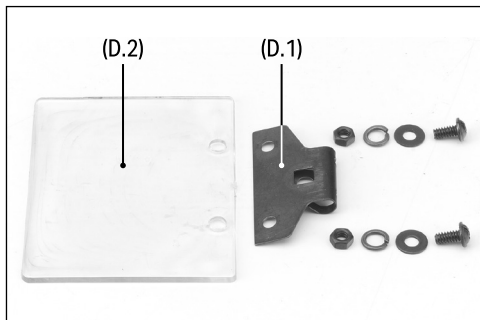


Fig. 4

1. Fit the eye shields (3) using the (D) fittings.
2. Place the eye shield frame (D.1) over the eye shield (D.2).
3. Fasten the two parts together using the long screws, washers and nuts, as shown in Fig.4.

Note: Do not overtighten as the eye shield may crack.

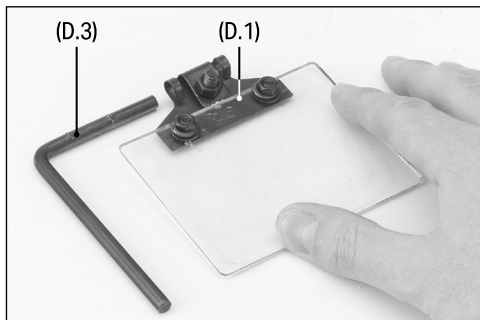


Fig. 5

4. Assemble the other eye shield in the same way. Insert the shortest end of the mounting rod (D.3) into the hole in the shield frame (D.1) as shown in Fig.5.
5. Tighten the nut and round-headed bolt, which are in the centre of each of the eye shield mounting frames.

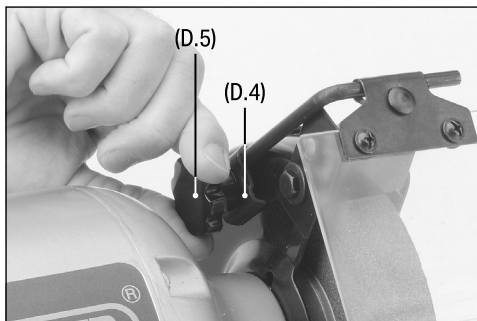


Fig. 6

6. Fit the eye shields to the bench grinder, by attaching clamp (D.4) to the wheel guard (4) using lock knob (D.5) as shown in Fig.6.
7. Insert the mounting rod into the clamp, position as required and tighten lock knob.
 - The eye shield is fully adjustable. It can be adjusted by either loosening the lock knob and moving the rod or by moving the eye shields.

6.6 Fitting the Cooling Trough (29621 only) (Fig.7)

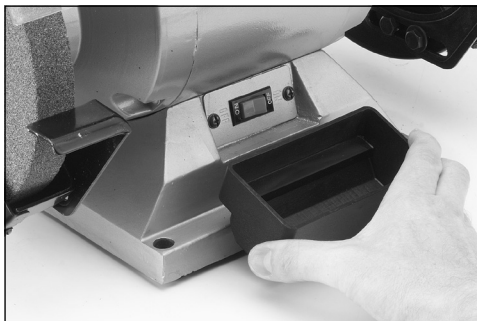


Fig. 7

- Fit the trough as shown in Fig.7.

Important: Before operating this product, read and understand all the safety instructions listed in this manual. Ensure that the product is fully assembled and correctly prepared for use.

- A bench grinder is designed for hand grinding operations only, such as sharpening drill bits, chisels and screwdrivers, or removing excess metal from workpieces.
- Use a coarse grit grinding wheel for grinding rough metals, to remove large amounts of metal or where a smooth finish is not important.
- Use a fine grit grinding wheel for sharpening tools or grinding close to size. A fine grit wheel removes metal more slowly to give a smooth finish and does not generate enough heat to anneal the cutting edges.
- Check the following before operating the grinder:
 - The clearance between the tool rests and the surface of the grinding wheels is 1.5mm (1/16"). Adjust as necessary.
 - The gap between the spark deflectors and the surface of the grinding wheels should also be 1.5mm (1/16"). Adjust as necessary.
 - Adjust the tool rests so that they are just below the centre line of the grinding wheels. This should help prevent accidental jamming of the workpiece between the tool rest and the wheel.
 - The eye shields are secured in the correct position and that the grinding wheel lock nuts are tight.
- Stand to one side of the bench grinder, switch on and let it build up to full speed.
- When grinding, always keep the workpiece moving across the face of the wheel.
 - Grinding against the same part of the wheel will cause uneven wear of the wheel face.
- When necessary, redress the grinding wheels using a wheel dressing tool. After redressing, adjust the tool rests and spark deflectors as necessary to maintain a 1.5mm (1/16") clearance from the wheel.

7.1 Grinding Tips

- Ensure that the item to be ground is comfortably and securely held. Adjust the tool rest to the correct angle. Present the workpiece smoothly onto the grinding wheel face with a light and even pressure. Grind against the edge of the workpiece to avoid burrs. Never grind on the sides of the wheels.

- Best results are achieved if the grinder is allowed to rotate at its maximum speed. Excess pressure from the workpiece can damage the wheel and overload the motor.
- Check grinding wheels regularly for wear or damage. Replace wheels that are worn more than 25%. Damaged wheels should be discarded immediately as they are dangerous and can cause the grinder to vibrate.
- After grinding fine-edged tools, they should be honed by hand on a fine slip stone.

8. Maintenance and Troubleshooting

Important: Always turn the grinder "OFF" and unplug from the power supply before carrying out any adjustment, servicing or maintenance.

8.1 Changing the Grinding Wheel

- Remove the screws which secure the grinding wheel side covers, then take off the covers.
- Either hold the opposite wheel firmly and remove the nut and flange or place a wedge between the grinding wheel and the wheel guard and then remove the nut and flange.

Note: The left-hand grinding wheel nut has a left thread.

- When fitting a new grinding wheel, always check that the stated maximum grinding wheel RPM exceeds the RPM of the bench grinder.
- Check the grinding wheel for damage such as flaws or cracks. If the wheel appears satisfactory, fit the new wheel to the grinder.
- Remove the old wheel and replace it with the new one.
- Place the flange on the spindle and tighten the spindle nut just enough to hold the wheel firmly. **DO NOT** over tighten the nut as the wheel may become damaged. Repeat the above to replace the opposite wheel.
- Reassemble the side covers.
- Stand to one side of the grinder and switch "ON". Let the grinder operate at full speed for approximately one minute so that any undetected cracks or flaws in the wheel will become apparent.

8.2 Troubleshooting

Problem	Possible Cause	Remedy
Grinder will not start.	Fuse blown.	Check fuse and replace
	Other.	Contact Draper Tools for advice.
Machine vibrates.	Wheel out of balance.	Dress wheel.
	Wheel loose.	Stop machine immediately and tighten wheel.
	Damaged/worn wheel.	Replace with new wheel.

9. Spares, Returns and Disposal

For spare parts, servicing, and repair and replacement options, please contact the Draper Tools Product Helpline for details of your nearest authorised agent.

Draper Tools will endeavour to hold any spare parts, if applicable, for seven years from the date that it sells the final matching stock item.

Any servicing or repairs carried out by unauthorised personnel or installation of spare parts not supplied by Draper Tools will invalidate your warranty.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.



10. Warranty

12 months from date of purchase -
Visit [drapertools.com/warranty](https://www.drapertools.com/warranty) for full details.

However, if the tools are hired out, the warranty period is 90 days from the date of purchase.



Read the instruction manual



Wear face mask and safety glasses



Wear ear defenders



Mandatory warning!



Keep out of the reach of children



Warning!



Rated wattage input.



No-load speed (revolutions per minute).



Wheel size.



Bore size.



Net product weight
(example shown).



Earthed



WEEE – Waste Electrical & Electronic Equipment
Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish.



Continuous A-weighted sound power level



European conformity



UK Conformity Assessed

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Please contact the Draper Tools Product Helpline for repair and servicing enquiries.