

ClearLine®



DRILL BIT SHARPENER

MODEL NO: CBS43

PART NO: 6480232

OPERATION & MAINTENANCE INSTRUCTIONS



LS0710

INTRODUCTION

Thank you for purchasing this CLARKE drill bit sharpener.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

IMPORTANT

Please read all of the safety and operating instructions carefully before using this product. Please pay particular attention to all sections of these instructions that display warning symbols and notices.



WARNING! This is a Warning symbol. This symbol is used throughout the user guide whenever there is a risk of personal injury. Ensure that these warnings are read and understood at all times.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

Please note that this drill bit sharpener is not suitable for sharpening masonry bits

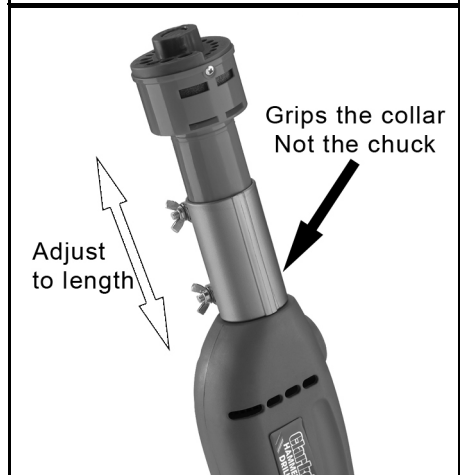
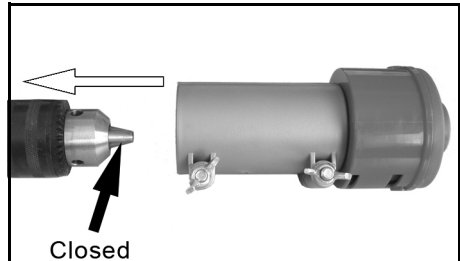
GENERAL SAFETY RULES

1. **KEEP WORK AREA CLEAN.** Cluttered areas invite injuries. Keep work area well lit.
2. **NEVER** use power tools in damp, wet, or poorly lit locations. Don't expose to rain. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **KEEP CHILDREN AWAY.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cables.
4. **STORE IDLE EQUIPMENT.** When not in use, tools must be locked up in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **DO NOT FORCE THE TOOL.** It will do the job better and more safely at the rate for which it was intended.
6. **DRESS PROPERLY.** Do not wear loose clothing or jewellery which could be caught in moving parts.
7. **USE EYE AND HAND PROTECTION.** Always wear approved impact safety goggles.
8. **STAY ALERT.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
9. **CHECK DAMAGED PARTS.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function.
10. **REPLACEMENT PARTS AND ACCESSORIES.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool.
11. **DO NOT OPERATE TOOL IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** If there is any doubt, do not operate the tool.
12. **KEEP AWAY FROM LIQUIDS.** Tool is designed for dry sharpening operations only.
13. **HEAT PRODUCED WHEN SHARPENING.** The sharpening head and any bits being sharpened will become hot. Be careful when handling; allow the drill bit tips to cool before storing.

OPERATIONS

CONNECTING TO A DRILL

1. Make sure the jaws on the drill chuck are fully closed.
 - The drill used must have a 43 mm collar and a 13mm ($\frac{1}{2}$ inch) chuck.
2. Push the drill bit sharpener onto the drill as shown.
3. If required loosen the wing nuts to slide the outer tube over the chuck.
4. When in place, the outer tube should grip the collar of the drill and not the chuck and onto the collar of the drill.
 - The drill is connected to the drill bit sharpener by friction only



PROPERLY SHARPENED BITS

Your bit is properly sharpened when it has the following characteristics.

- A sharp point in the center of the bit.
- Two sharp and equal cutting edges
- Two trailing edges that are slightly lower than the cutting edges.

SHARPENING PROCEDURE

1. Connect the drill to the drill bit sharpener and clamp the drill into a vice to hold the sharpener upright.
2. Connect the drill to the mains supply.
3. Put a single drill bit (HSS only) into the appropriate hole.
 - Please note that this drill bit sharpener is not suitable for sharpening masonry bits
4. Pull the trigger on your drill.
 - Exert a slight downward pressure onto the bit and rotate the bit back and forth about 20 degrees while sharpening.
 - The bit must be kept in motion whilst in the drill bit sharpener.
5. Remove the drill bit after approximately 5-10 seconds of sharpening.



SHARPENING HINTS

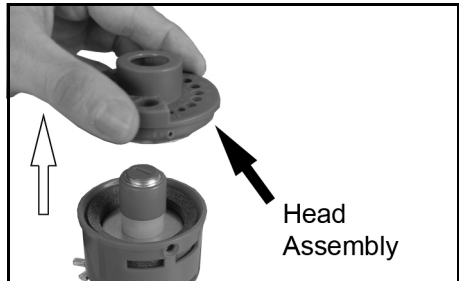
- If the tip of bit starts to turn blue, it is overheating. Reduce the amount of pressure and sharpening time. Cool the bit in water between sharpening cycles.
 - If one edge is longer than the other, sharpen the longer side a little more.
 - If you are sharpening a broken (rather than blunt) bit and the time required to restore the shape is too long, rough the bit into shape first using a bench grinder.
 - Ensure both sides of the drill bit are sharpened using the same amount of time and pressure.
6. Repeat the above steps as necessary.

MAINTENANCE

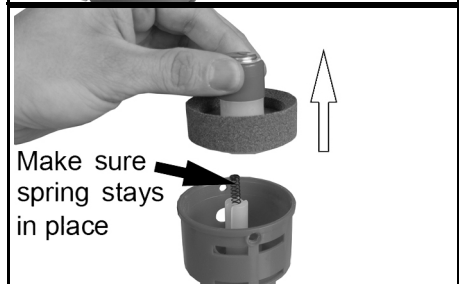
CHANGING THE GRINDING WHEEL

- Replacement grinding stones are available from the Clarke Spares department. Part number: CBS4301

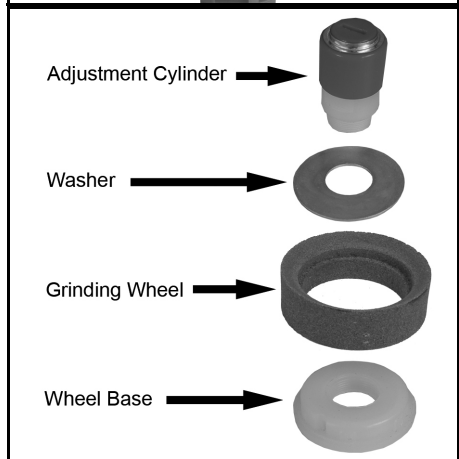
1. Remove the drill bit sharpener from the drill.
2. Remove the two screws that hold the head assembly in place and remove the head assembly.



3. Remove the wheel assembly.
 - Make sure the spring underneath stays in place.
4. Unscrew the adjustment cylinder from the wheel base by turning clockwise.



5. Prise out the washer.
6. Pop out the wheel base and remove the worn grinding wheel.
7. Press new grinding wheel onto the wheel base, replace the washer, and screw the adjustment cylinder back in.
8. Replace wheel assembly onto the drill bit sharpener.
 - Make sure that the inner flats of the adjustment cylinder line up with the outer flats of the drive spindle.
9. Replace the head assembly and screws.



CLEANING

Keep the surface of your drill bit sharpener free of grit, dirt, and grease. Use soapy water or non-toxic solvents. Do not use petroleum based solvents.

TROUBLESHOOTING

If the drill motor runs but the grinding wheel does not rotate, make sure the adjustment cylinder's inner flats line up with the outer flats of the spindle as described in "Changing The grinding Wheel" on page 6.

SPECIFICATION

Model Number	CBS43
Drill Bit Sizes And Type	3.5 mm to 10 mm HSS
Dimensions (W x H x D)	71 x 146 x 74 mm
Weight	264 g

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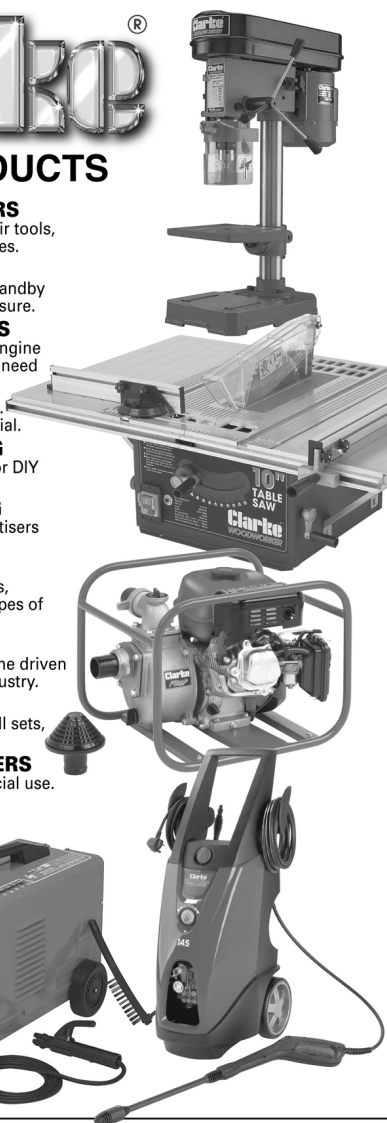
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