



60MM MAGNETIC DRILLING MACHINE HEAVY- DUTY 230V

MODEL NO: **MAG60230VHD**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instruction manual



Wear eye protection



Wear protective gloves



Wear protective footwear



Wear ear protection



Wear a mask

1. SAFETY

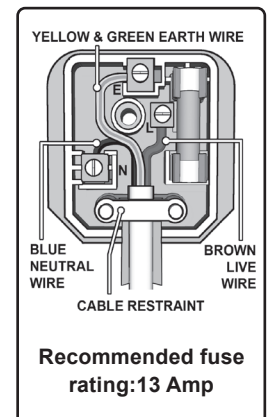
1.1. ELECTRICAL SAFETY

- WARNING!** It is the user's responsibility to check the following:
Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products. You may obtain an RCD by contacting your local Sealey stockist.

If the product is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Appliance Test) tested.

Electrical safety information, it is important that the following information is read and understood.

- 1.1.1. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
- 1.1.2. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.
- 1.1.3. **Important:** Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating in these instructions.
 - × **DO NOT** pull or carry the appliance by the power cable.
 - × **DO NOT** pull the plug from the socket by the cable.
 - × **DO NOT** use worn or damaged cables, plugs or connectors. Ensure that any faulty item is repaired or is replaced immediately by a qualified electrician.
- 1.1.4. This product is fitted with a BS1363/A 13 Amp 3 pin plug.
If the cable or plug is damaged during use, switch the electricity supply and remove from use.
Ensure that repairs are carried out by a qualified electrician.
Replace a damaged plug with a BS1363/A 13 Amp 3 pin plug. If in doubt contact a qualified electrician.
 - a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
 - b) Connect the BROWN live wire to the live terminal 'L'.
 - c) Connect the BLUE neutral wire to the neutral terminal 'N'.Ensure that the cable outer sheath extends inside the cable restraint and that the restraint is tight.
Sealey recommend that repairs are carried out by a qualified electrician.
- 1.1.5. When a cable extension reel is used it should be fully unwound before connection A cable reel with an RCD fitted is recommended since any product which is plugged into the cable reel will be protected. The cross-section of the cable on the cable reel must be suitable for the unit and never lower than the cross-section of the mains cable supplied with the unit.



1.2. GENERAL SAFETY

- ✓ Enlist help to place and remove the drill from its working position.
- × **DO NOT** allow non-essential persons, children or animals into the working area. Establish a cordon below.
- × **DO NOT** allow the use of this machine except by those who have received suitable training and have read these instructions.
- ✓ If operating above ground level, use suitable staging to provide a safe working platform.
- × **DO NOT** work from ladders or steps.
- ✓ Use non-original parts; use of such parts may be dangerous will affect the warranty.
- WARNING:** Always wear approved eye or face protection when operating this drill. Use a face or dust mask if dust is generated.
- × **DO NOT** use near flammable gas or liquid, use only in a well lit and ventilated areas.
- ✓ Remove ill fitting clothing, remove ties, watches, rings, and other loose jewellery, and contain long hair.
- × **DO NOT** operate whilst under the influence of drugs, alcohol or intoxicating medication, or if tired.

1.3. OPERATIONAL SAFETY

- ✓ **ALWAYS** attach the drill to the work by means of the nylon security strap and buckle, in case of an electrical supply failure releasing the electro-magnet.
- ✓ Ensure that the machine is electrically isolated before installing in its working position and switched off before connecting to supply.
- ✓ Ensure drill is switched off and isolated from mains supply before changing bit, or moving its position.
- ✓ Check that the drill and its electric lead is not damaged before use. **DO NOT** use if any damage is evident.
- ✓ Use non-original parts; use of such parts may be dangerous will affect the warranty.
- ✓ Ensure magnetic switch is in the off position before connecting to mains supply.
- ✓ Only use water as coolant NOT antifreeze.
- ✓ Keep drill dry.
- ✓ If cut-out switch operates follow these steps: turn off power switch, wait for a few minutes, disconnect from mains.

- x **DO NOT** force the drill with excessive force.
- x **DO NOT** use on non magnetic materials.
- x **DO NOT** use on the same steel work as electric welders are being used.

2. INTRODUCTION

Manufactured using high quality components for performance and reliability. Made from heavy-duty die cast magnesium alloy with a variable speed gearbox for greater accuracy. Fitted with a powerful magnet to ensure unit stays adhered at any angle and a double dovetail groove to increase the stroke length. Includes safety fixing strap and integrated coolant system to extend the life of cutters and increase the quality of the cut. Can be used with a 16mm twist drill chuck and M8 to M20 Tapping chucks. Designed for use in fabrication, construction and other applications when drilling/tapping ferrous metal.

3. SPECIFICATION

Model No.....	MAG60230VHD
Magnet.....	17000N
Maximum Annular Cutter Capacity.....	60mm
Maximum Cutter Depth.....	50mm
Core drill diameter.....	60mm
Tapping drill diameter.....	M8 - M20
Twist drill diameter.....	23mm
Motor Power.....	1880W
No Load Speed.....	220/380rpm
Stroke length.....	220mm
Morse taper.....	MT3
Supply.....	230V ~ 50Hz
Electrical plug type.....	3-Pin
Consumables (not included)	
Pilot Pin.....	MAGC.P
Neat Cutting Oil.....	NCO/5L
Soluble Cutting Oil.....	SCO/5L

4. ASSEMBLY

- ❑ **WARNING!** Disconnect from mains supply before performing any adjustments.
- 4.1. **FIT COOLANT BOTTLE** (fig.1)
- 4.2. Slacken the 2 thumbscrews and slide bottle cage over the thumbscrews. Tighten thumbscrews.
- 4.2.1. Connect coolant pipe to the valve on the lubrication ring (fig.1). Pipe can be released by pushing in the blue valve.
- 4.2.2. Make sure the coolant tap is closed, fill the bottle with appropriate lubricant.
- 4.2.3. Screw rotation stop pin (not shown fig.1) to lubrication ring to limit rotation of hose.
- 4.3. **FIT CUTTING BIT**
- 4.3.1. Wind drill head up to maximum height.
- 4.3.2. Loosen the two grub screws in tool holder, insert the cutting bit aligning the flats with the grub screw locations and tighten.
- 4.4. **ADJUSTING THE SLIDES** (fig.2)
- 4.4.1. To adjust the friction on the drill slide mechanism, remove the drill.
- 4.4.2. Tighten / Loosen the 5 slide grub screws until the required amount of friction on the slides has been achieved.
- 4.5. **REPLACING THE FUSE** (fig.2)
- 4.5.1. Undo the fuse cover and replace fuse with one of same rating.

5. OPERATION

- 5.1. **FIT THE SAFETY STRAP**
- 5.1.1. Securely fix the safety strap through the handle of the drill and around the steelwork. Adjust the length of the strap so that if the drill should fall the drill should not be allowed to swing too far and be damaged.
- 5.2. **ADJUST DRILL CARRIAGE LOCATION**
- 5.2.1. Loosen clamps (fig.2) and slide drill body to required height on the carriage. Re-tighten when drill body is in position.
- 5.3. Mark the position of the hole to be drilled on the workpiece.
- 5.4. **SELECTING GEAR** (fig.2)
- 5.4.1. The drill has 2 gear selection options L(ow) or H(igh).
- 5.4.2. Use knob (fig.2) to select required gear setting for the operation to be carried out. Rotate the spindle by hand to help line up of gears.
- 5.5. **POSITION THE DRILL**
- 5.5.1. Connect to the mains supply. Offer drill to workpiece and line up with the previously marked hole.
 - ❑ **WARNING!** Make sure there is nothing between the magnet and the workpiece **BEFORE** turning the magnet on.
- 5.5.2. Ensure the drill head is wound back away from the workpiece before turning the magnet on.
- 5.6. **ATTACH DRILL TO WORKPIECE**
- 5.6.1. Turn the magnet on, fig.2.2. Wind the drill head down to the workpiece and align the cutting head pin (not supplied) with hole centre marking.

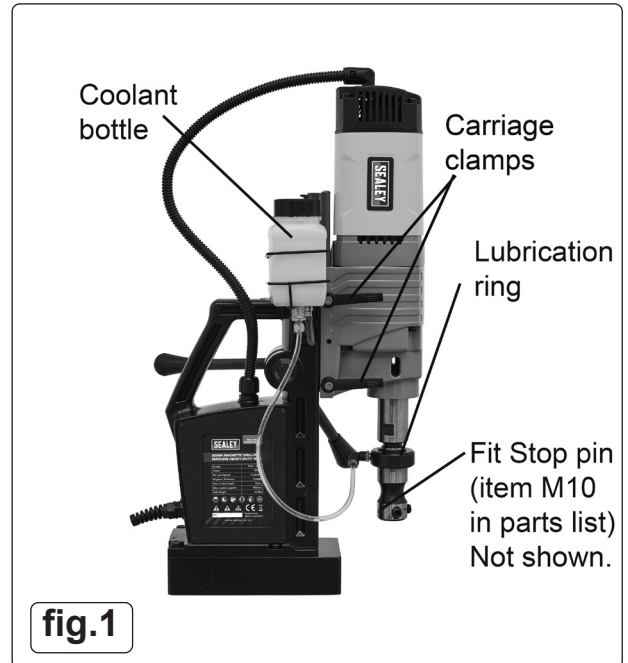


fig.1

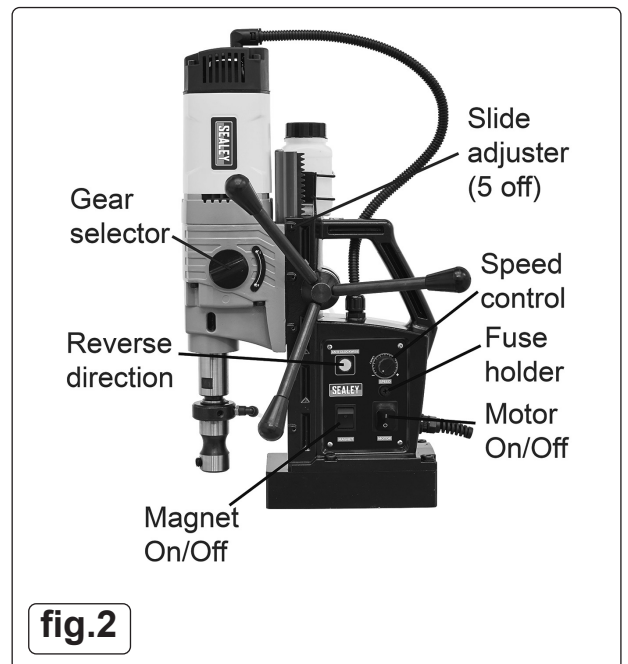


fig.2

NOTE: In order to ensure sufficient magnetic attraction and thus grip to securely hold the drill in place, the workpiece must be at least 10mm thick.

5.7. FILL COOLANT BOTTLE

5.7.1. Always use the correct cutting oil, refer to Section 3 and refill once it empties. Never use without coolant.

5.8. CUTTING THE HOLE

5.8.1. Turn on the cooling tank tap (fig.1).

5.8.2. Back the cutting head away from the workpiece, turn the drill motor on (fig.2). Check the drill sounds and is operating normally.

5.8.3. Turn the handle (fig.2) anticlockwise to move the cutting bit towards the workpiece.

5.8.4. Start feeding slowly, with minimal required force to prevent overloading the drill.

CAUTION! Prepare for the cutter bursting through the workpiece.

5.8.5. If the drill suddenly stops, you must turn off the motor switch immediately.

5.8.6. Once the hole has been cut, back the cutting head back out of the hole and switch off the motor. Reverse motor direction can be engaged using relevant control (fig.2) if required.

5.8.7. Turn off the coolant tap.

5.8.8. Remove the debris and swarf from the cutting head.

5.8.9. Support the weight of the drill and turn off the magnet. Remove the cutting bit, undo the safety strap and replace drill in its case.

6. MAINTENANCE

WARNING! Disconnect from mains supply before performing any maintenance.

6.1. Remove the cut 'plug' from the cutter each time it is used.

6.2. Keep the tool clean.

6.3. Store in a dry, childproof location in its case.



WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



ENVIRONMENT PROTECTION

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

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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