

Plug the unit into a suitable power supply. Then place the unit in the correct position for drilling and activate the magnet by moving the magnet ON/OFF switch to ON.

This model has a fixed base and must be positioned exactly.

Attach the safety chain by looping it through the handle of the unit and around the workpiece (or other suitable anchor point). Take up any slack in the chain and clip the karabiner hook through a convenient link in the free end of the chain.

This machine will automatically drill the required hole and retract the cutter, but you may also operate it manually.

BASIC TECHNIQUES

The power unit is fitted with a No Volt Return (NVR) switch, which switches to the OFF position if the power supply is interrupted. Push the green button to start and the red to stop. NOTE: the magnet will remain in the ON position.

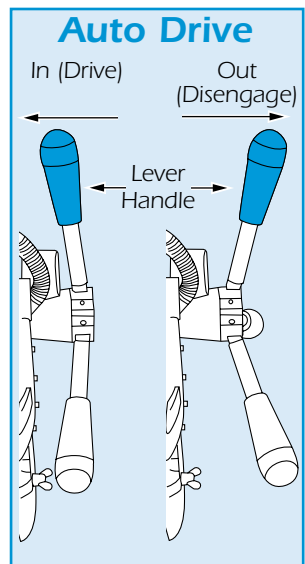
Slide the safety guard into position and secure the wing nuts. Switch the unit ON.

Manually Cutting...

Apply light pressure to the cutter by turning the lever handles until the cut is established, then increase the pressure slightly to progress.

Applying too much pressure will not increase the speed of the cut but will damage the cutter.

When the cut is completed, raise the cutter clear of the hole before switching the power unit OFF.



Automatic Cutting...

Firstly, do not use cutters which are greater than 30mm in diameter, and always use long reach cutters. The maximum material thickness must not exceed 50mm.

Always start the cut manually, applying light pressure to the cutter by turning the lever handles until the cut is established.

Once established, move the lever handles in (see illustration) and wait until the drive engages. Once engaged the unit will drill the hole, retract fully then switch itself OFF.

Note that the magnet will remain ON.

Should the cut not be completed, the cutter may be blunt and require replacing. It is also possible that there may be a hard spot within the material, in this instance clear the swarf and complete the cut manually.

EQUIPMENT CARE

Never push the equipment beyond its design limits. If it will not do what you want with reasonable ease and speed, assume you have the wrong tool for the job. Contact your local HSS Hire Shop for advice.

Always use the correct cutting oil and refill the reservoir as soon as it becomes empty. Never use the broacher without cutting oil (or paste where required).

After each cut, clear the plug from inside the cutter and the work area of swarf.

Keep the equipment clean - you will find this less of a chore if you clean it regularly, rather than wait until the end of the hire period.

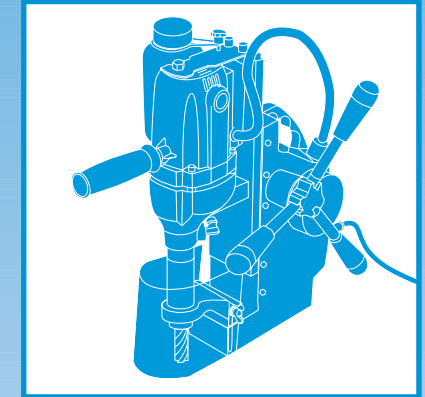
When not in use, store the equipment somewhere clean, dry and safe from thieves.

FINISHING OFF

Switch OFF the power unit, support the broacher, remove the safety chain then switch OFF the magnet.

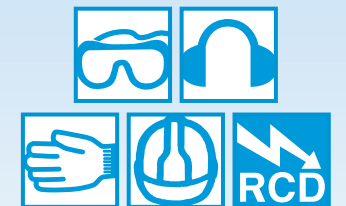
Remove any cutter and pilot, neatly coil the power supply cable and give the unit a final clean up ready for return, to your local HSS Hire Shop.

HSS Hire Shops



Auto Drilling Magnetic Broacher

A drilling unit with automatic feed and return system



...any comments?

If you have any suggestions to enable us to improve the information within this guide please fax your comments or write to the Product Manager at the address below
Fax: 020 8687 5001

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GENERAL SAFETY

For advice on the safety and suitability of this equipment contact your local HSS Hire Shop.



There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

The hirer has a responsibility to ensure that all necessary risk assessments have been completed prior to the use of this equipment.


This equipment should only be used by an operator who has been deemed competent to do so by his/her employer.



This equipment should be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability, should seek expert advice before using it.

Keep children, animals and bystanders away from the work area. Cordon off a NO GO area using either cones, barriers or tape, available for hire from your local HSS Hire Shop.

  Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

 Safety goggles MUST be worn by everyone in the work area.

 This equipment generates potentially harmful noise levels. To comply with health and safety at work regulations, ear defenders must be worn by everyone in the vicinity.

  Wear practical, protective clothing, gloves, footwear and a hard hat. Avoid loose garments and jewellery that could catch in moving parts, tie back long hair.

Never lift or move this equipment by its power supply cable.

Always switch OFF and unplug the equipment when not in use.

Ensure the work area is well lit and ventilated, if in doubt, ask about lighting and ventilation equipment at your local HSS Hire Shop.

Do not work near flammable gases or liquids, petrol or paint thinner fumes for example. Keep combustible materials at a safe distance - at least 5m.

Make sure you know how to switch this machine OFF before you switch it ON in case you get into difficulty.

Never leave the unit running and unattended.

Always disconnect the machine from its power supply before making adjustments to it. Check that you have removed all spanners before restarting.

Having switched OFF, always wait for moving parts to come to rest.

Never operate this machine with people working below and always stand to the side of the machine when in use, to safeguard the operator against falling debris.

If working above ground-level, work from a suitable, stable platform, an access tower for example. Never work from ladders or steps.

Watch your footing. Take special care if working other than on firm, level ground.

To avoid injury due to magnetic failure always secure the unit to the work piece using the chain and karabiner hook supplied.

Make sure that everyone is warned of what you are doing.

Check the condition of the equipment before use. If it shows signs of damage or excessive wear, return it to your local HSS Hire Shop.

Ensure the guard is correctly fitted and secure before starting work.

COSHH information sheets are available from your local HSS Hire Shop.

ELECTRICAL SAFETY

Most HSS Auto-Drilling Magnetic Broachers plug into a standard 230V 13amp earthed power socket. However, 110V models (with a round yellow plug) must be provided with a suitable 110V 16amp generated supply, or powered from the mains via a suitable 110V transformer.

If the equipment fails, or if its power supply cable or plug becomes damaged, return it. Never try to repair it yourself.

Only use suitable three core earthed extension leads to power this equipment.

Keep cables out of harm's way, and clear of the work area.

Extension leads should be fully unwound and loosely coiled, away from the equipment. Never run them through water, over sharp edges or where they could trip someone.

Keep the equipment dry, using electrical equipment in very damp or wet conditions can be dangerous.

To reduce the risk of electric shock, always use a suitable RCD (Residual Current-Operated Device) available from your local HSS Hire Shop. Or power the equipment from a mains circuit with a built in RCD.

There are two switch systems fitted to this unit, one for the magnet and one for the drilling power.

The magnet is activated by a simple ON/OFF switch which remains in the On position until manually moved to OFF.

The drilling power is operated via an NVR (No Volt Return) switch. The switch will only stay in the ON position if there is a power supply. If the power supply is interrupted, for whatever reason, the switch will move to the OFF position. This safe guards the user so that when the power is restored, the broacher will not start without warning.

Ensure the machine and power socket are switched OFF before plugging into the power supply.

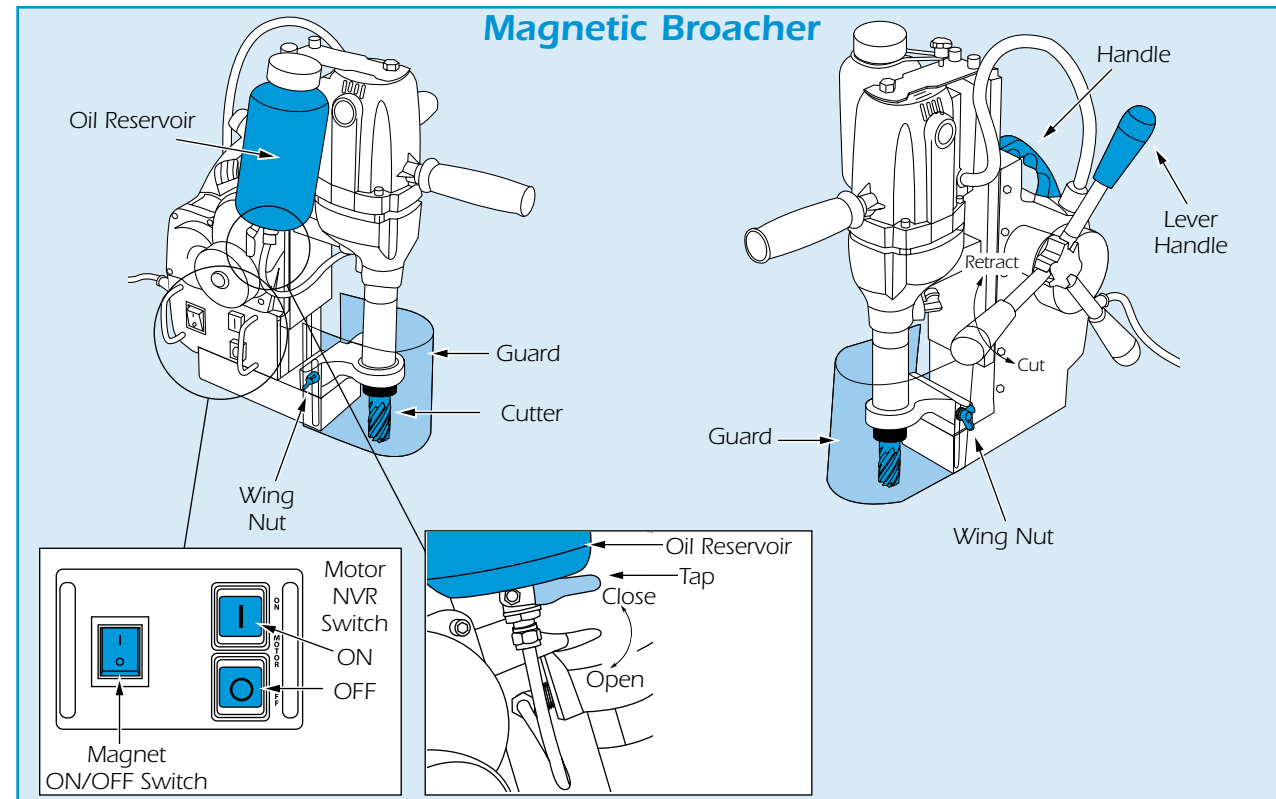
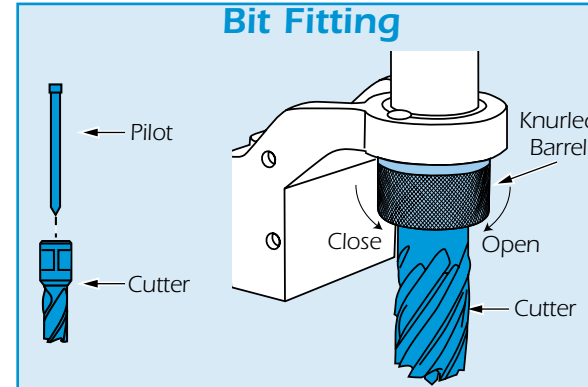
GETTING STARTED

It is essential to familiarise yourself with all the controls before starting.

Fit the broacher with the appropriate cutter and pilot.

With the machine switched OFF and isolated from the power supply, remove the guard. Simply unscrew the two securing wing nuts.

Insert the Pilot, point down, into the cutter from the top. (see diagram)



With the machine positioned facing the operator and the magnet downwards, rotate the knurled barrel clockwise and hold to fully open the chuck.

Wearing protective gloves, insert the cutter complete with pilot fully into the chuck.

Release the knurled barrel so that it returns to its original position.

Carefully rotate the cutter until you feel it lock into position. Finally make sure that the knurled barrel is fully closed and that the cutter is held firm.

To remove the cutter, rotate the knurled barrel clockwise and wearing protective gloves, carefully rotate the cutter as you remove it, complete with pilot.

Finally, release the knurled barrel so that it returns to its original position.

Next re-fit the guard.

If cutting downward fill the oil reservoir with clean fresh cutting oil and open the tap, as the pilot is depressed the oil will be fed automatically to the cutter.

If cutting horizontally or overhead you MUST empty the oil reservoir of any oil and apply suitable cutting paste to the cutter before attempting to cut a hole.

Wearing gloves, clear any dirt or swarf from the base of the magnet and the surface of the work.