

**Turn the water supply on, then begin drilling** by bringing the core bit into contact with the material using the handwheel. **Do not use excessive force** as this will slow the motor and eventually cause the drill to cut out.

**Ensure the core bit has an adequate, constant supply of water** for cooling lubrication.

Set the water flow rate so that the drilling slurry is of a milky consistency. Too much water is indicated by a clear discharge, too little, and the slurry will be pasty.

A water collection system is available from your local HSS Hire Shop.

## BASIC TECHNIQUES

**Once the bit is cutting** around its entire circumference, **steadily increase the pressure**. Ensure the bit does not bounce to make progress.

Do keep a constant eye on the work. **If the bit encounters any reinforcing rods** – you will see the water slurry change colour – **reduce the pressure** until the bit has cut through them.

## EQUIPMENT CARE

**Never push the equipment beyond its design limits.** If it will not do what you want with reasonable ease, assume you have the wrong tool for the job.

**Keep the equipment clean**, paying special attention to the motor and switches. Clean up regularly rather than at end of the hire period.

**Treat core bits with care.** Avoid knocking them or allowing them to drop onto the work-surface.

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

## FINISHING OFF

**Withdraw the bit** from the hole and lock the motor drive unit at the top of its guide column.

**Switch OFF and unplug the motor and turn off the water supply. Leave the vacuum on.**

**If the core has come up with the bit, prying it free** taking care not to damage the bit – **watch your fingers and toes**; it could drop out without warning.

**Cores left in-situ can be** either **knocked through**, pulled out (using an anchor bolt as a handle) or broken up with suitable equipment.

**Remember to take care when removing/breaking cores in walls/floors** in case there is anything on the other side that could be damaged.

**Supporting the rig as necessary, now release it** from the surface – either by switching OFF and unplugging the vacuum unit, or by removing the anchor bolt.

**Finally**, if removed, **attach the vacuum skirt to the base plate** and neatly coil all flexes ready for return.



### ...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

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# HSS Hire Shops



## Wet Diamond Core Drill

A wet-cut, heavy duty machine for boring holes up to 200mm in diameter in masonry and reinforced concrete



Code 01621 & 01631

## GENERAL SAFETY

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

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

**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.**



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



**Wear sensible, protective clothing and footwear plus safety goggles, work gloves and a hard hat.** Avoid loose garments and jewellery that could catch in moving parts.



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

**Always switch equipment OFF before making any adjustments to it.** Never leave it switched ON and unattended. **Ensure work area is tidy, well lit and ventilated.**

**Do not drill near flammable gases or liquids. Never drill into walls/floors containing gas/water pipes or electrical cables.** If in doubt, check both sides using a metal detector or cable avoiding tool.

**Always seek expert advice before drilling through concrete reinforcing rods.** You could weaken the overall structure.

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

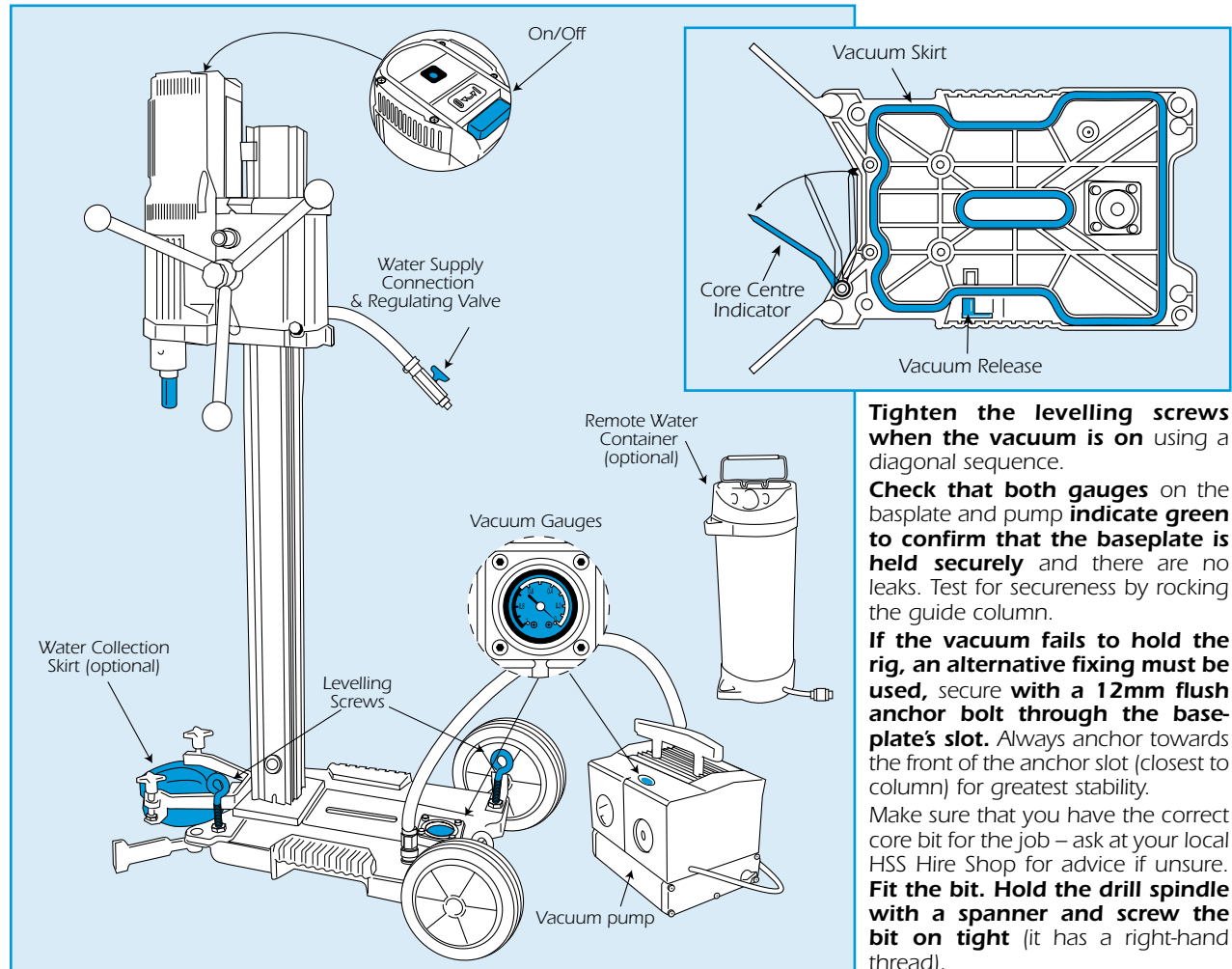
**Never use the vacuum pump to secure the rig to a vertical surface. If the power supply fails the rig could fall off. Use an anchor fixing only.**

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

## ELECTRICAL SAFETY

**If the equipment fails, or if its flex or plug is damaged, return it.** Do not attempt to repair it yourself.

**Ensure the rig and vacuum are powered only from a 110v generator or from the mains via a suitable transformer. The rig and vacuum require a minimum 2500 watt continuous 110v supply.**



**Tighten the levelling screws when the vacuum is on** using a diagonal sequence.

**Check that both gauges** on the baseplate and pump **indicate green to confirm that the baseplate is held securely** and there are no leaks. Test for secureness by rocking the guide column.

**If the vacuum fails to hold the rig, an alternative fixing must be used, secure with a 12mm flush anchor bolt through the baseplate's slot.** Always anchor towards the front of the anchor slot (closest to column) for greatest stability.

Make sure that you have the correct core bit for the job – ask at your local HSS Hire Shop for advice if unsure. **Fit the bit. Hold the drill spindle with a spanner and screw the bit on tight** (it has a right-hand thread).

**RCD** To reduce the risk of electric shock, use a suitable RCD (Residual Current-Operated Device) available from your local HSS Hire Shop.

**Keep flexes and leads out of harm's way.** Never run them through water, over sharp edges, or where they could trip someone.

## GETTING STARTED

**Ensure the work surface is clean and free from grease,** then mark out the hole.

**Connect the vacuum pump to the vacuum connection on the baseplate and plug in. Switch the vacuum pump on.**

The vacuum release mechanism on the base may be pulled out to assist in manoeuvring the whole rig. Use the core-centre indicator to locate the exact position of the hole to be drilled.

**Attach the water hose to the water regulating valve using the standard 'push-on' connector.** Where a mains water supply is not available, use a remote water container, for details contact your local HSS Hire Shop.

**Set the hole depth if required. With the Core Bit resting on the ground, set the stop on the column to the depth you wish to drill,** measuring from the bottom of the motor housing to the top of the stop.

## Diamond Drilling Speeds

| Spindle Speed | Core Bit Size |
|---------------|---------------|
| 3. 2000 rpm   | 25-52 mm      |
| 2. 1000 rpm   | 40-102 mm     |
| 1. 500 rpm    | 92-200 mm     |

Select desired drilling speed before switching on the motor (see table above).

**Plug the unit into its power supply and switch on.**