OPERATING INSTRUCTIONS

Core Drilling Machine

47-6175

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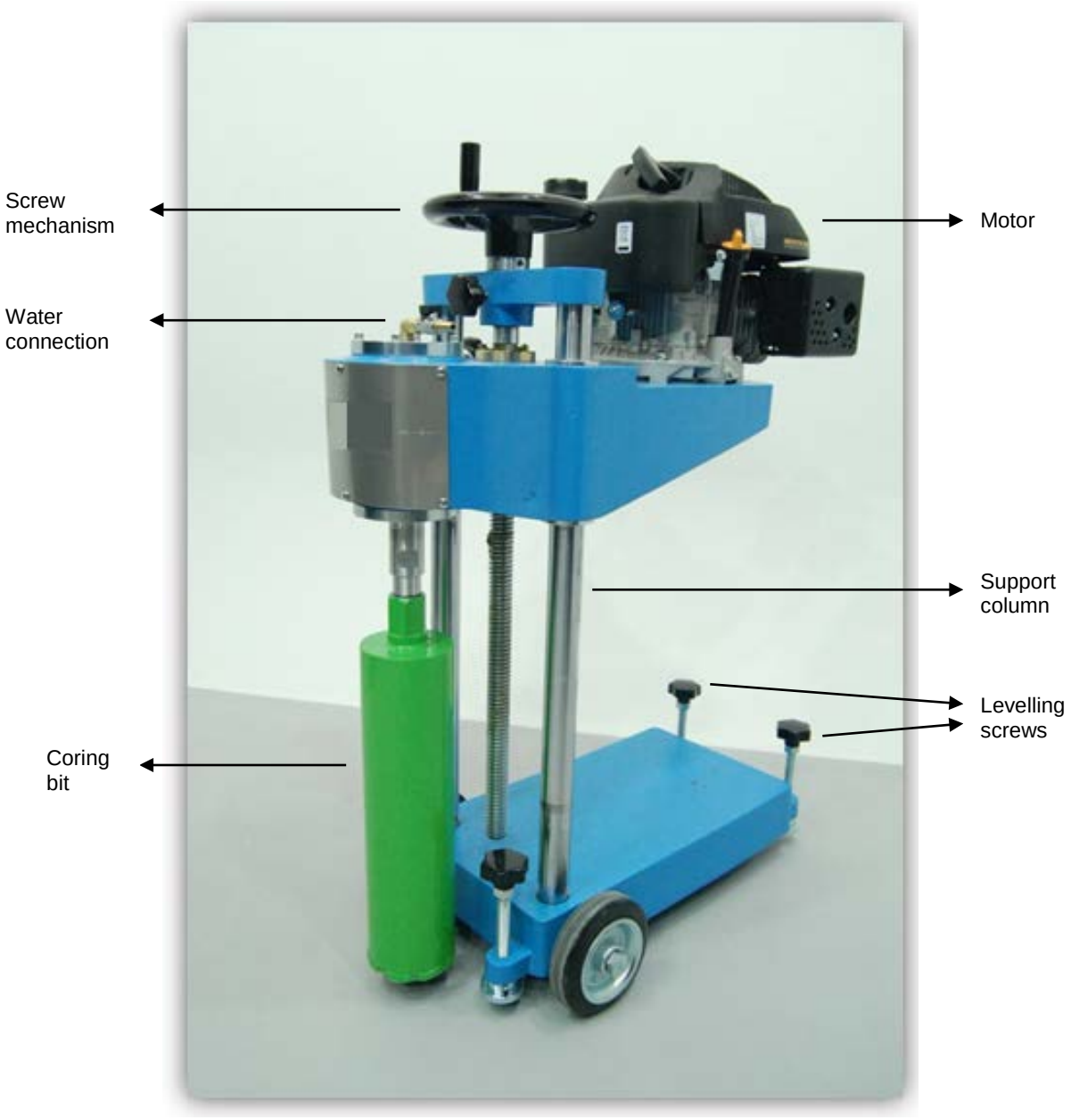
Screw mechanism
Water connection
Coring bit
Motor
Support column
Levelling screws

1 Description

The compact and portable core drilling machine is designed to cut cores up to 150mm diameter from concrete, asphalt and similar hard construction materials. The machine comprises a vertical support column which carries the drill head/motor assembly. The motor assembly comprises a 6,5 HP petrol engine. A ball screw mechanism enables close control over drilling pressure and rapid return when drilling is completed. A water spraying assembly is mounted on the machine. The complete assembly is supplied on a rigid wheel mounted metal base frame with a leveling and fixing facility during the operation. Core bits should be ordered separately.

1) 47-6175/12 Coring Bit for Asphalt 100mm dia x 400mm length
2) 47-6175/11 Coring Bit for Asphalt 75mm dia x 400mm length
3) 47-6175/10 Coring Bit for Asphalt 50mm dia x 400mm length

2 Technical Specifications

Technical Specifications Table	
General Dimensions (w x l x h) (mm)	500 x 900 x 1100
Weight (kg)	95
Temperature	5˚C - 40˚C
Power	6.5 HP

3 Operation

Wheel the machine to the working position, then use the screw feet to raise the wheels off the ground. Adjust until completely steady and lock the feet (see figure 1).

Figure 1 : Preparation

- If bits larger than about 2” dia. (50 mm) are used, use sandbags, rag-bolts etc. to hold the machine down when cutting starts. If bits are smaller than 2”, operator pressure is usually sufficient.

- Fix the diamond coring section onto its shaft. Bits 2” to 6” (50 mm to 150 mm) need an expander set. For less than 2” dia. bits, screw the diamond bit directly onto the shaft. Hand tighten firmly (see figure 2).

Grease the threaded spindle for easier removal of the coring bit.

Figure 2 : Operating

Check the fuel and oil, then start the motor briefly to check that the bit is running properly.

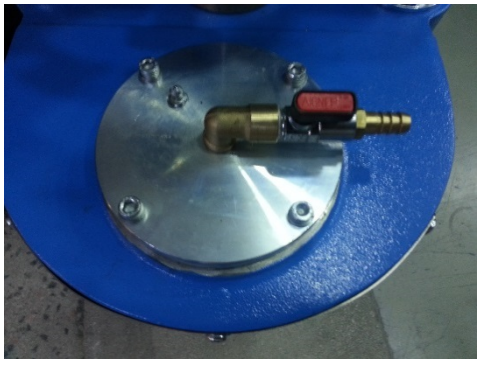

Figure 3 : Water Connection

- Connect the water inlet onto the pipe supply and apply enough pressure to keep a constant and steady flow of water (see figure 3). Start the motor again.

- Engage the height control handle.

- Turn the handle until the coring bit almost reaches the surface to be cut. Turn on the water and start drilling, keeping steady pressure to keep cutting continuously. If chattering occurs, either:

  a) Increase pressure on the bit until chattering stops, or

  b) Raise the bit and check its alignment on the shaft. Adjust if necessary. When the required depth is reached raise the bit, switch off the motor, and then turn off the water. Snap off the core, if necessary, using a wedge. Use lifting grips to remove the core from the hole.

- To remove the bit use the strap wrench.

If the core section lodges in the bit, push it out from behind; do not try to get it out from the diamond end.

4 Maintenance

For efficient operation of the machine, check the bit for any damage and check the fuel/oil level on a daily basis.

Cleaning and greasing the screw thread on a weekly basis will ensure smooth operation.