Hydraulic Core Drill
Model:
2 1317 0010

- Safety Instructions
- Operating Instructions
- Maintenance and Mounting Instructions
- Spare Parts Catalogue
Hydraulic Core Drill

- **Safety Instructions**
  Define the safety markers used in the operating instructions and draw attention to the warning labels on the machine.

- **Operating Instructions**
  Explain how to handle the device and how to change drilling tools.

- **Maintenance and Mounting Instructions**
  Deal with the basics of hydraulic tools, technical data, maintenance instructions, wear, and mounting and dismounting procedures.

- **Spare Parts Catalogue**
  Consists of parts lists, sectional drawings and exploded views.
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Safety Instructions

Read Operating Instructions carefully. Familiarize yourself with the following safety markers used in the operating instructions to draw your attention to potential risks when handling or operating the tool:

WARNING! – indicates risk of severe personal injury or accidents.

CAUTION! – indicates risk of material damage.

IMPORTANT! – indicates risk of malfunction.

Before you proceed to operate the tool, make sure that all warning labels are attached to the device. Notify the manufacturer immediately in case that any of the warning labels shown in the illustration below is missing.
Operating Instructions

General

The tool comes along with a set of accessories which may be customized for each specific purchaser, so as to facilitate performance of all works occurring within the scope of his specific application situation. The full scope of supplies includes also tools needed for mounting and dismounting, including

- single-head wrench SW 24
- single-head wrench SW 32
- single-head wrench SW 41
- hex head socket wrench SW 5

Basically, we differentiate between "freehand drilling" and "stand-aided drilling". The operating procedures to be adhered to for the two different operating modes are described below.

Drill Bit Change

**WARNING!** Before you start changing the drill bit, make sure that the tool is disconnected from hydraulic oil supply in order to avoid unintentional operation of the tool and injury.

Use a single-head wrench SW 24 (small drill bit) or SW 41 (large drill bits) and a single-head wrench SW 32 to manually unscrew the drill bit to be removed and to screw on the new one. There is no need to use any additional tools.

Dimension of Drill Bit

Drill head thread: male 1 ¼“ UNC and female R ½“

Which drill bit at which speed?

<table>
<thead>
<tr>
<th>speed [1/min]</th>
<th>gear #1</th>
<th>gear #2</th>
<th>gear #3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>380</td>
<td>900</td>
<td>1800</td>
</tr>
<tr>
<td>drill bit diameter [mm]</td>
<td>100 - 162</td>
<td>40 - 100</td>
<td>20 - 40</td>
</tr>
<tr>
<td>cutting speed [m/s]</td>
<td>2 - 3,5</td>
<td>2 - 4,5</td>
<td>2 - 4</td>
</tr>
</tbody>
</table>
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Freehand Drilling

- Mount the spot-drilling aid onto the centering collar to ensure precise pointing.
- Screw on the desired drill bit (up to max. Ø 80 mm – approx. 3 inches). Manual tightening is sufficient because the drill bit will automatically fasten further during drilling.
- Connect the tool to water supply. For this purpose the device comes with a 10 liter pump barrel, which has to be pressurized first. You may alternatively connect the device to a water tap, using "Gardena" hose couplings.
- Finally connect the tool to hydraulic oil supply.
- With the so prepared drill, you may now proceed to carry out your work.

**CAUTION!** Never switch into gear #1 in freehand drilling operation (great torque)!

- To operate the drill, regulate check valve to adjust the water supply flow as desired.
- Put the drill in drilling position and actuate valve trigger to switch on the motor.

**WARNING!** To avoid injury, do not use the valve trigger fixing key in freehand drilling operation!
Use valve trigger fixing key in stand-aided drilling operation only!

The handle and the spot-drilling aid enable controlled manual operation of the drill without any problems.

**IMPORTANT!** Monitor continuously the water supply to ensure that sufficient water is supplied to the cut surface to avoid unnecessary wear of drilling equipment.

- To change drill bits, proceed as described above. Adhere to safety instructions!
- For dismounting the drill upon completion of drilling work, follow the mounting instructions in reverse order.
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Stand-Aided Drilling

- First, fix the stand at the point where you wish to drill the opening or hole. To do so, drill a hole matching the size of the corresponding plug and screw the stand onto the surface. Align the stand such that the drill bit will make contact with the surface precisely at the point where you want to drill the opening or hole.
- Insert the drill from above into the corresponding seat and fasten the core drill by means of the hex head socket wrench SW 5.
- Now, manually screw the corresponding drill bit from below onto the drill bit adaptor. Manual tightening is sufficient because the drill bit will automatically fasten further during drilling operation.
- If necessary to attain an angled drill hole, adjust the stand position by swivelling the arm of the stand.
- Connect the tool to water supply. For this purpose the device comes with a 10 liter pump barrel, which has to be pressurized first. You may alternatively connect the device to a water tap, using "Gardena" hose couplings.
- Finally connect the tool to hydraulic oil supply.
- With the so prepared drill, you may now proceed to carry out your work.
- To operate the drill, regulate check valve to adjust the water supply flow as desired.
- Actuate air valve trigger to switch on the motor and press valve trigger fixing key to ensure comfortable working.

**IMPORTANT!** Monitor continuously the water supply to ensure that sufficient water is supplied to the cut surface to avoid unnecessary wear of drilling equipment.

- You may continuously control the advance motion of the drill by adjusting the star knob at the side of the drilling stand.
- To switch off the machine, unlock the valve trigger fixing key. Then, shut off the water supply.
- To change drill bits, proceed as described above. Adhere to safety instructions!
- For dismounting the drill upon completion of drilling work, follow the mounting instructions in reverse order.
## HYDRAULIC CORE DRILL

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>3.6 hp (2.8 kW)</td>
</tr>
<tr>
<td>Free speed 1&lt;sup&gt;st&lt;/sup&gt; gear</td>
<td>380 rpm</td>
</tr>
<tr>
<td>Free speed 2&lt;sup&gt;nd&lt;/sup&gt; gear</td>
<td>900 rpm</td>
</tr>
<tr>
<td>Free speed 3&lt;sup&gt;rd&lt;/sup&gt; gear</td>
<td>1800 rpm</td>
</tr>
<tr>
<td>Nominal pressure</td>
<td>2000 psi (140 bar)</td>
</tr>
<tr>
<td>Motor flow</td>
<td>5.8 gpm (22 lpm)</td>
</tr>
<tr>
<td>Max. input flow</td>
<td>13.2 gpm (50 lpm)</td>
</tr>
<tr>
<td>Hydraulic connection</td>
<td>Quick couplings ½&quot;</td>
</tr>
<tr>
<td>Hose diameter</td>
<td>DN 12</td>
</tr>
<tr>
<td>Drill bit connection</td>
<td>1 ¾&quot; UNC male / R ½&quot; female</td>
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<tr>
<td>Water connection</td>
<td>Gardena system</td>
</tr>
<tr>
<td>Unit length</td>
<td>490 mm</td>
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<tr>
<td>Outer centering diameter</td>
<td>60 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>16 lbs (7.3 kg)</td>
</tr>
</tbody>
</table>