DM1000/DM2000/DMBASE Necessary Accessories

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CATALOG NO.</th>
<th>ITEM CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>** Drill Adapter 3/4&quot;</td>
<td>DA75</td>
<td>98461</td>
</tr>
<tr>
<td>** Drill Adapter 1&quot;</td>
<td>DA100</td>
<td>98462</td>
</tr>
<tr>
<td>*** Hole Saw Adapter</td>
<td>DMHSA</td>
<td>08413</td>
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<tr>
<td>Drill Adapter - PVC</td>
<td>DMAPVC</td>
<td>94150</td>
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</table>

Drills/Hole Saws

11/16" Drill D688 04380
7/8" Drill D875 04381
15/16" Drill D938 04382
1-7/16" Hole Saw HS1438 04370
1-3/4" Hole Saw HS1750 04371
1-7/8" Hole Saw HS1875 04372
1/4" Pilot Drill PD25 04373
11/16" Shell Cutter PL688 04385
7/8" Shell Cutter PL875 04386
1-7/16" Shell Cutter PL1438 04387
1-3/4" Shell Cutter PL1750 04392

Corp Stop Adapters

** 3/4" AWWA Corp Adapter DMCA75 08423
** 1" AWWA Corp Adapter DMCA100 08424
*** 1-1/2" AWWA Corp Adapter DMCA150 08425
*** 2" AWWA Corp Adapter DMCA75 08426
1-1/2" NPT Corp Adapter DMCA75 08428
2" NPT Corp Adapter DMCA75 08429

Miscellaneous

3/4" NPT to AWWA Converter DM75CONV 98472
1" NPT to AWWA Converter DM100CONV 98472
* Ratchet Handle 13/16" Sq. RWR1316 40383
Power Drive Adapter TMPDA 08430

Attention:
Read and fully understand instructions before operating the DM1000 or DM2000 drilling machine. It is essential to properly train and review with operating personnel to prevent possible bodily injury and property damage. It is advantageous to practice drilling a piece of pipe to acquaint personnel with the machine.

Contents:
- Basic Product Information
- Necessary Accessories
- DM1000/DM2000 Operating and Maintenance Instructions
- Parts Illustration & List
- New Drilling Applications Sheet
**Basic Product Information**

The DM1000 and DM2000 drilling machines drill through the pipe wall via the corporation stop inserted into the service saddle while under pressure. It utilizes Reed D series drills, or hole saws with the aid of a hole saw adapter. The customer will need to purchase necessary drills, hole saws, and drill adapter and shell cutters for PVC.

The DMBASE machine consists of the base unit which allows the customer to purchase individual corp adapters, drill or hole saw adapters, along with necessary drills or hole saws.

With shell cutters and necessary adapters, these units can also be used on C-900 PVC pipe.

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Item Code</th>
<th>Size</th>
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<th>Shipping Wt</th>
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<td>DM1000</td>
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<td>3/4&quot; - 1&quot;</td>
<td>N/A</td>
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<td>DM2000</td>
<td>08412</td>
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<td>DMBASE</td>
<td>08401</td>
<td>N/A</td>
<td>N/A</td>
<td>35 lbs/15.9 kg</td>
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**Specifications**

- Overall weight of the drilling machine with accessories (43 lbs) is 30% less than Mueller® E-5 and D-5 drilling machines.
- Tool Box over all outside dimensions, DM machines - 23 x 10 1/2 x 11 3/8
- Machine Clearance radius DM1000/DM2000 = 27 1/2"
- Pressure Rating: Design pressure rating = 300 psi.
- Operating Pressure Rating - 90 psi - ie - Drilling or Tapping into pressurized mains.

**WARNING:**

Drilling into highly pressurized mains is not recommended; however, is permissible at pressure up to 250 psi if utilizing special precautions and incorporating high pressure attachments such as the Mueller Power Clevis #H-10800®. (See DM1000/DM2000 Owner’s Manual.)

**Do not drill into petroleum or natural gas pipes.**

- Flushing/blow by port: 1/2-14 NPT plugged port is provided.
- All machines come complete with tool box, wrenches and Tapping Compound (#98425).
- Manual or power drive operation through 13/16" square shaft. Power drive adapter optional.
- Materials and finish:
  - A. Hard anodized and powder epoxy painted aluminum frames
  - B. Alloy steel boring bar
  - C. Bronze and zinc aluminum parts
  - D. Anodized aluminum corp adapters
  - E. Nitrile “O” rings
  - F. Plated steel parts for corrosion resistance

**DM1000/DM2000 DRILLING MACHINES**

**Operating Instructions**

1. **Select proper tools necessary to perform drilling operation.**
   A. Service saddle
   B. Corporation stop
   C. Drill size and drill adapter to match corporation stop bore
   D. Corp adapter with flush valve
   E. Any other necessary accessories to meet operating requirements

2. **Assemble saddle to the pipe.**
   A. Clean area of pipe where tap is to be performed. REED DS12 (#08000) or DS36 (#08006) may be used.
   B. Assemble service saddle on the pipe where desired and tighten securely

3. **Insert corporation stop into saddle threads.**
   A. Thread sealant may be used
   B. Tighten corporation stop with an adjustable wrench
   **Note:** Make sure corporation stop valve is open

4. **Screw threaded body into the corp adapter.**

5. **Assemble drill adapter and appropriate drill into boring bar.**
   A. If you are using the unit for drilling 1 1/2" or 2", the hole saw adapter and hole saws with pilot drills are needed. Screw the hole saw onto the arbor body and line up holes after hand tightening. Assemble the driver into the body and hole saw. Insert the pilot drill into the arbor body. Allow a maximum of 1/4" of the drill tip to protrude from the hole saw. Line up the slot in the drill with the set screw and tighten with the hex key wrench provided. (When using on PVC, a pilot drill is not necessary.) See Fig. 1 below.

   **Do not use pilot when drilling PVC pipe**

   **Note:** Do not use pilot when drilling PVC pipe

   **Figure 1.**

   ![Diagram of DM1000/DM2000 Drilling Machines](image)

7. Drilling
   A. Run drill bit down until it touches the pipe.
   B. Swing cam handle and tighten.
   C. Attach ratchet wrench on square drive and turn drill clockwise while turning
      the feed housing to feed the drill. NOTE: Do not attempt to overfeed and
      force the drill.
   D. Open the ball valve on the side of the corp adapter to allow the flushing of
      chips.
   E. Once the drill is completely through the pipe, release the cam handle to
      allow the boring bar to return to its uppermost position.

   NOTE: Put downward pressure on the boring bar to keep it from traveling too fast
   upward and potentially damaging the machine.

8. Close off the corporation stop using an adjustable wrench.

9. Disassemble machine from corporation stop.

10. Assemble tubing to corporation stop per tubing and fitting manufacturer’s
     specs.

DM1000/DM2000 Maintenance Instructions

Before Using

1. Clean and oil all bearing and wear surfaces and threads.
   A. Inspect and clean drill bits, and remove any chips or scale which might prevent
      proper function of the tool.
   B. The boring bar, drill adapters, drills, and corp adapters’ threaded ends should
      be inspected to remove any scale or chips which may interfere with thread
      engagement.

After Using

1. Clean the machine and oil the machined surfaces. Tapping Compound
   (#98425) is useful in this application for the tool holding area of the boring
   bar.

2. If necessary, flush the corp adapters with a water hose to remove any chips
   that may have accumulated.
   NOTE: Do not hammer parts to remove chips or debris - Handle Carefully!
   Protect threaded pieces by assembling them with their mating parts. Clean,
   dry and lubricate all parts.

3. Periodically inspect the boring bar’s o-ring seals and replace if worn.

Reed Drilling Machine - New Applications

Standard DM1000 drill through 3/4” and 1” AWWA corporation stops and saddles. The
DM2000 will be for use with 3/4” - 2” If you are inquiring about the need for other drilling
applications, the following information is necessary.

Pipe Material

Pipe Diameter/Thickness or Rating

Pipe Media (steam, nat. gas etc.)

Service pressure

Corporation/Valve Size (See sketch)

Corporation/Valve Style and Brand

Other

From:
Name:
Address:
Phone:
Fax:

Direct inquiries to the Product Development Department
Reed Manufacturing Co.
P.O. Box 1321
1425 West 8th St.
Erie, PA. 16502
Phone: 800-666-3691 or 814-452-3691
Fax: 800-456-1697 or 814-455-1697
Parts List

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<th>Description</th>
<th>REED Item Code</th>
<th>Cat No.</th>
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<tr>
<td>1</td>
<td>Boring Bar</td>
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<td>DMBB</td>
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<td>2</td>
<td>O-Ring</td>
<td>40377</td>
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<td>3</td>
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<td>Thrust Bearing</td>
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* Included but not shown