SERVICE PAGE

Routine Maintenance

Check all bolt connections daily for proper tightness. Constant vibration of the machine during operation will cause bolt connections to loosen. Proper inspection is required to keep the unit in working order. Some of the more critical connections are:

1) *5/8" x 8" bolt*. This holds the back of the rock drill to the carriage and needs to be kept AS TIGHT AS POSSIBLE.
2) *Lower Drill Bracket*. This should be just tight enough to allow the bit to turn freely in the chuck. OVER-TIGHTENING WILL LOCK THE BIT IN THE DRILL AND RESTRICT ROTATION.
3) *Thru-bolts and trunnion bolts*. These bolts on the rock drill should be checked often. If one bolt loosens, it may cause the other to break.
4) All other carriage bolts should be checked frequently.

Grease all grease fittings and guide wheels (if applicable) daily.

Check fluid level in oiler daily. Proper lubrication of the rock drill is critical! Use rock drill oil specified in "Rock Drill" section below.

Winter Maintenance

If you plan on storing your E-Z Drill unit for any period of time, following are suggestions for "winterizing" your unit:

1) Pressure wash – to remove all concrete dust, etc
2) Disconnect the hose to the rock drill motor, pour directly into the motor a small amount of rock drill oil, or other lubricant, run at half throttle for a few seconds to thoroughly coat the interior parts of the rock drill. This will prevent any rust from forming on the metal parts.
3) Drain all condensation filters
4) If storing outside, cover with a tarp.

Rock Drill Oil

E-Z Drill offers rock drill oil that is appropriate for all E-Z Drill units in handy 1-gallon (p/n 09020 OIL) and 5-gallon (p/n 09025 OIL) containers. Other recommended oils are shown in your parts book, and on a decal next to the oil reservoir on your E-Z Drill unit.

DO NOT USE: Pneumatic tool oil
Automatic transmission fluid
Marvel Mystery oil
(the above oils are too "light")

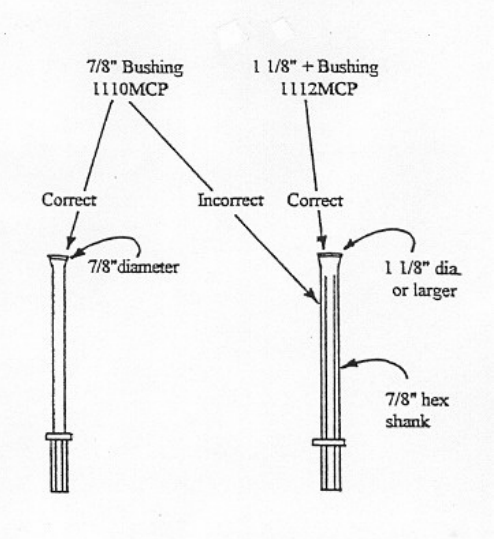
Recommended Hose Sizes

Single Drill Units	¾" ID Minimum
2-G Drill Units	1 ¼" ID Minimum
3-Gang Drill Units	1 ½" ID Minimum
4, 5-Gang Drill Units	2" ID Minimum

Bushing Sizes for Drill Bits

On any drill model page, click on "Drill Bits and Drill Steel". The chart will show the proper bushing required for each bit size.

There can be some confusion when ordering the 7/8" bushing (1110 MCP). E-Z Drill names the bushings based on the diameter of the hole to be drilled. Therefore, the 7/8" bushing (1110 MCP) will fit a bit that drills a 7/8" diameter hole. However, some will order that same bushing because they are using *"7/8" steel"* or a *"7/8" hex shank"*. In this case, they are referring to the shank size and not the hole diameter. For the *"7/8" steel"* or the *"7/8" hex shank"*, order the 1112 MCP.



Troubleshooting

PROBLEM	CAUSE	REMEDY
Drill motor runs, but will not drill hole effectively	Drill may be starved for air	Check air compressor for cfm output; check hose size form air compressor; check air inlet screen in rock drill for obstructions
	Too high or low feed pressure	Check for proper feed pressure: horizontal drilling (18-28 psi); vertical drilling (5-9 psi)
	Defective or bent drill bit	Check for bit damage
Drill retracts slowly from drilled hole or not at all	In-line flow control valve adjusted improperly (see air-line schematic)	Adjust in-line flow control valve
	Piston seal is leaking on feed cylinder	Replace with seal kit
Drill will not feed properly, or not at all	Feed pressure is too low	Increase feed pressure using regulator control knob: horizontal drilling (18-28 psi); vertical drilling (5-9 psi)
Air bleeding through regulator housing	Dirt on seat	Check for dirt on the seat in the diaphragm assembly
	Regulator plumbed backwards	Check for proper plumbing (see air-line schematic)
Drill motor will not run (or just barely runs with no power	Lever on back of drill motor may be in wrong position	Check the on/off lever to be sure it is set parallel with the drill motor
Can hear air blowing through the drill	Drill bit may be stuck either in the bit guide, or the lower drill bracket too tight	Make sure the bit turns freely in the bit guide; loosen the lower drill bracket until the bit turns freely
	Cycling valve may be stuck	Cover the exhaust with a rag or some other material (DO NOT USE FINGER TO COVER EXHAUST) – turn the drill motor on; back pressure may free the valve, or Disassemble the cycling valve and clean (see Figure 1 below)
Oiler is not oiling properly	Low fluid level	Refill oiler as needed
	Oil flow is too low or too high	Adjust oiler
Drill bit is binding in hole	Feed pressure is too high	Lower feed pressure with regulator knob; horizontal drilling (18-28 psi); vertical drilling (5-9 psi)
	Damage to drill bit	Check for damage and replace if needed
	Steel or rebar in concrete	Check for steel in concrete
Dirt not being cleaned out of drilled hole	Drill bit is clogged	Check drill bit for obstructions
	Air tube in rock is pinched or damaged	Check for damage to air tube in rock drill
Unit is not drilling parallel to concrete or at an angle	Angle adjustment is properly set	Adjust as per parts book
Unit will not adjust up or down	Setscrews are too tight	Loosen setscrews as per set up in parts book
Drill bit(s) not retracting all the way out	Return stop rod on carriage is not	Adjust return stop rod; ensure bit is

of the drilled hole(s)	properly adjusted Guide plates are not properly adjusted	retracted ample distance inside the dust deflector Adjust guide plates, particularly when using screw-on bits
Drill bit sticks in guide bushing when retracting	Return stop rod on carriage is not properly adjusted	Adjust return stop rod