

NEWS THIS MONTH

YOUR SOURCE FOR ALL THINGS ROCK-BREAKING



HOW TO KEEP YOUR ROCK DRILL RUNNING

At best a rock drill has a rough life. It is designed to take air pressure and turn that energy into a rotational pounding force transferred through drill steel and a carbide drill bit, to drill rock. The guts of the drill are designed to work in extremely tight tolerances where every movement is the result of a component's movement before it. The components of a rock drill all have different life expectancies, some parts like the rifle nut are made of brass and are designed to be worn during normal operation, protecting parts further down from catastrophic failure. The piston is made of a hardened steel which actually impacts the drill steel and although extremely strong, it will also distort in shape over time. The conclusion is relatively simple, a rock drill that is drilling is in the process of breaking. How you accept and deal with that fact makes all the difference in the world.

Rock drill oil is the simplest and cheapest form of maintenance that you can do. It lubricates all the components offering a film to act as a buffer between parts. It also helps to dissipate heat allowing the components of your drill to run at their best. The key with rock drill oil is to ensure you're using the correct viscosity. Ambient temperatures outside will determine the proper fluid, thick in hotter temperatures and thinner in the cold. Typical rock drill oil is actually described as a semi-fluid grease, designed to be used in a football style oiler like that found on the MacLean MDA drills. It is designed for the mist applications of underground environments where air quality is of the utmost importance. The secret is in using enough lubrication to protect the





components of the drill without excess. Running a pneumatic rock drill without oil will cause hotspots, scoring and galling resulting in damage to the front head and chuck driver. Pawl springs can break and corrode causing the pawls themselves to fail hampering the rotation of the drill steel. Under normal wear the pawls will lose their edge and round and although they can be flipped, a simple replacement as they wear will keep you running at peak performance. The chuck assembly will also wear over time and is crucial to ensuring the drill steel shank is in proper alignment with the water tube and piston, damage to both is almost a given when the shank not snug. Although the piston itself has a long life it should also be checked for cracks, chips and distortion as these can all affect drill performance and life. The

balance of the wear parts to manage are the brass parts, the rifle nut and chuck driver nut both transfer force through the components and will wear, over-time the spline will gain more and more play resulting in a loss of drilling performance. With regular maintenance, proper lubrication and a small inventory of replacement parts your rock drill can pay for itself hundreds of times over, and be the reliable equipment you need it to be.



MACLEAN MDA PNEUMATIC DRILLS

No one likes to hang on to the end of a rock drill. With the availability of labour now, it's difficult to find good people to work and even the best and most dedicated employees will only drill rock by hand for so long. You may be able to drill your first 1.5" hole at 2 minutes per foot first thing Monday morning but come Friday afternoon your production is a far cry slower. What you need is a reliable drill that is easy to maintain and able to achieve significant products improvements over hand work. Available in 5 different models, the MacLean MDA family of pneumatic rock drills can make all the difference to your projects. If you are extracting limestone in the Orillia area, preparing windmill foundations in the Yukon, or working in a remote fly-in construction project north of the arctic circle MacLean drills have been there. The drills have been installed on excavators as small as three tons right up to 15 ton machines. We have seen them installed on small cranes for unmatched versatility. We are happy to introduce you to the drills and help you decide which model suits your needs best. With drills on the ground we are ready to supply you with a drilling solution from 1.25" to 4" diameter holes.

