MAINTENANCE FOR THE MODEL 110B

SAFETY PRECAUTIONS FOR THE MODEL 110B

System Under Pressure: Shut off air supply and disconnect the air hose before disassembling or disconnecting any parts.

Flying Debris: During boring, chips may be ejected. Remain behind control panel and wear safety glasses to prevent eye injury.

Pinch Points: Keep hands clear of carriage assembly. Hands or fingers caught between carriage and frame may be seriously injured.

Moving Parts: When moving the drill unit, use the carriage lock to prevent the carriage assembly from sliding onto hands or fingers.

Heavy Load: Use handles to reposition the drill unit. The weight of the drill unit may cause back strain if improperly lifted.

SAFETY PRECAUTIONS FOR THE MODEL 110B (continued)

Loud Noise: Wear ear protection to prevent eardrum damage potentially caused from the air compressor.

Dust: Wear a dust protection mask to protect from concrete dust.

High Pressure: High air pressure from the air compressor can damage the drill and can void the warranty.

Lifting The Drill Unit: When using a lifting device to pick up the drill unit, use a strap or chain which is rated for the proper weight, and attach to the lifting bale on the drill unit. Ensure the carriage lock is in place.

MAINTENANCE FOR THE MODEL 110B

- Check bolts daily for tightness. Due to the extreme amount of vibration, bolts will loosen. It is important keep nuts and bolts tight.

  EXCEPTION: The two bolts that connect the front of the upper drill bracket and the lower drill bracket can be too tight. There should be a gap between the two brackets. When tightening these bolts, put a drill bit in the chuck and turn it as you tighten the nuts. At some point, it will “catch” or “drag” while turning the bit. This means the bracket is too tight. Loosen the nuts until you can turn the bit freely, the tighten the lock nuts.

MAINTENANCE FOR THE MODEL 110B

- Check all nuts and bolts around the carriage assembly daily, and especially the stop rods. Tighten as needed.

Allowing bolts or connections to work loose may disqualify any warranty on these parts.

MAINTENANCE FOR THE MODEL 110B

⚠WARNING DO NOT REMOVE OILER CAP UNDER PRESSURE!

(to remove pressure from system, have air supply disconnected from the drill unit, and turn the Power lever to the "On" position)

- Fill the oil reservoir daily with the recommended rock drill oil (do not use oil that is too light, such as Marvel Mystery Oil, automatic transmission fluid, air tool oil, etc.) (see "Recommended Specifications for Rock Drill Lubricant").
- Running the oiler dry can cause damage to the drill motor.

RECOMMENDED SPECIFICATIONS FOR ROCK DRILL LUBRICANT

The use of synthetic oils is NOT RECOMMENDED due to possible damage to seals, “O” rings, hoses, blades, and polycarbonate oiler/filter bowls. Use only a non-detergent, Class 2, pneumatic lubricating oil (viscosity 100-200 S.S.U. @ 100° F and minimum aniline point of 200°F); which contains no synthetic additives; and which is compatible with Buna-N, Neoprene, Urethane, Silicone, and Hytrel components.

Consistency shall be such that the oil will adhere readily to metallic surfaces under extreme pressure conditions that exist in a rock drill.

Flash, Cleveland open cup……..380°F Min. (a)
Carbon Residue……0-30% Max.
Viscosity at Atmospheric Temperature
Below 20°F…… SAE #10
20° to 40°F…… SAE #20
40° to 80°F…… SAE #30
80° to 110°F…….. SAE #40
Above 100°F…… SAE #50
Mineral Activity…… None
Free Fatty Acid (as Oleic %)…… 0.40% Max.
ASTM Steam Emulsion No…….. 600 Max. (b)
Metallic Soaps…… None
Pour Point F…… +10 Max. (c)
Film Strength PSI
Almen Test…….. 12,000 (d)
Weeks Test……. 8,000 (d)

(a) Where lower than normal viscosity oil is used at extreme low temperature, 350°F flash point permissible.

(b) 1200+ desired where moisture is a major factor. Operator must compensate for foaming when filling the lubricator.

(c) For below normal atmospheric temperature operation, lower pour test product may be required.

(d) Desired values, not minimum. Rock drill oils must have appreciably greater load carrying ability than straight mineral oils of like viscosity. High film strength is required by the heavy rotational loads present in drilling conditions. Additives which impart extreme pressure characteristics to the oil must be non-corrosive to the drill mechanism.

MAINTENANCE FOR THE MODEL 110B

Grease both axle bolts on the guide wheels daily:

MAINTENANCE FOR THE MODEL 110B

- It is highly recommended that the concrete dust on the drill unit be cleaned off daily to prevent it from getting wet and hardening.

- For longer storage periods, flush the drill motor with a substance that will prevent rust from forming due to moisture in the drill. Any amount of rust can cause the cycling valve to seize. If this happens, the drill motor generally must be taken apart and cleaned thoroughly before it will operate. Substances such as rock drill oil, Marvel Mystery Oil, or even diesel fuel can be used to flush the drill motors.