SETTING UP 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.

INSTALLING THE DRILL BIT

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

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

- IMPORTANT: The chuck size of the drill bits must match the chuck size of the drill. Look for the decal on the side of the drill motor to confirm the chuck size. All E-Z Drill Model 110B drill units come standard with 7/8" x 3 ¼" chuck. However, a 7/8" x 4 ¼" chuck is available upon request.

- All E-Z Drill model 110B's use 6" of the usable length of the bit (i.e., an 18" bits will drill up to 12" deep).

INSTALLING THE DRILL BIT

- IMPORTANT: You must have the correct bit guide bushing to match the bit you will be using:

For drilling a:

5/8” diameter hole, use 1108 MCP

3/4” diameter hole, use 1109 MCP

7/8” diameter hole, use 1110 MCP

1” diameter hole, use 1111 MCP

1 1/8” or larger diameter hole, use 1112 MCP

- Part numbers above will fit bits with either 7/8” x 3 ¼” or 7/8” x 4 ¼” chucks.

INSTALLING THE DRILL BIT

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

- Lay the machine on one side. This gives easier access to the drill motor and bit guide.

INSTALLING THE DRILL BIT

- To install a drill bit, loosen the swivel bolt until you can swing it out away from the lower bit guide.

- NOTE: You can use the wrench provided on the back of the control panel.

INSTALLING THE DRILL BIT

- Flip up the retainer latch on the drill motor.

INSTALLING THE DRILL BIT

- Place the bit into the chuck, close the retainer latch, close the bit guide and tighten the swivel bolt.

Pinch Point

INSTALLING THE DRILL BIT

- You may have to adjust the return stop rod so that the end of the bit clears the bit guide.

INSTALLING THE DRILL BIT

- To adjust the return stop rod, loosen the stop rod nuts. Move the stop rod in the direction needed to the required location and retighten the nuts.

INSTALLING THE DRILL BIT

- If you are using a 2-piece H-thread bit, you may also have to adjust the guide wheels by loosening the guide wheel bolt and sliding the guide wheel forward.

ADJUSTING THE HEIGHT OF THE DRILL

- Adjusting the height of the drill is done by loosening the four ½" bolts and nuts. This allows the front assembly to be adjusted up or down to get the drill bit at the desired drilling location. Then retighten the four bolts and nuts.

Pinch Points: *Keep hands clear of front wheel assembly. Loosening of the bolts will allow the stabilizers to slide on the frame.*

ADJUSTING THE HEIGHT OF THE DRILL

- Next, you can level the drill unit by loosening the two ½” bolts on each of the rear legs. Level the rear of the machine and retighten the bolts.

Pinch Points: Keep hands clear. *Loosening of the bolts will allow the rear legs to slide on the frame.*

LEVELING THE DRILL SYSTEMS

IMPORTANT: BEFORE LEVELING THE DRILL UNIT, NOTE THAT MANY TIMES THE DRILL UNIT IS NOT TO BE “LEVEL WITH THE WORLD”, IT SHOULD BE SET TO DRILL PARALLEL WITH THE TOP OF THE CONCRETE SLAB INTO WHICH YOU ARE DRILLING.

SETTING THE DRILL DEPTH

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

- To adjust the drill unit to drill to the desired depth, make sure all other adjustments have been made. Maneuver the drill to the edge of the concrete slab.

SETTING THE DRILL DEPTH

- Remove the carriage lock from the return stop rod.
- Make sure both guide wheels are touching the concrete. This ensures the hole will be perpendicular to the concrete and will maintain the desired drill depth.
- Manually push the carriage in until the drill bit is in contact with the concrete.
- Use wrenches to loosen the stop rod nuts.

SETTING THE DRILL DEPTH

- Adjust the stop rod so that the head of the stop rod is the desired distance from the stop pad. Use a tape measure to ensure the proper depth. Then retighten the stop rod nuts.

CHECKING THE IN-LINE OILER

⚠WARNING DO NOT REMOVE 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)

- Using the wrench provided on the back of the control panel, remove the oiler cap from the oiler.

- Oiler must be filled with proper rock drill oil (see "Recommended Specifications for Rock Drill Lubricant")

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.

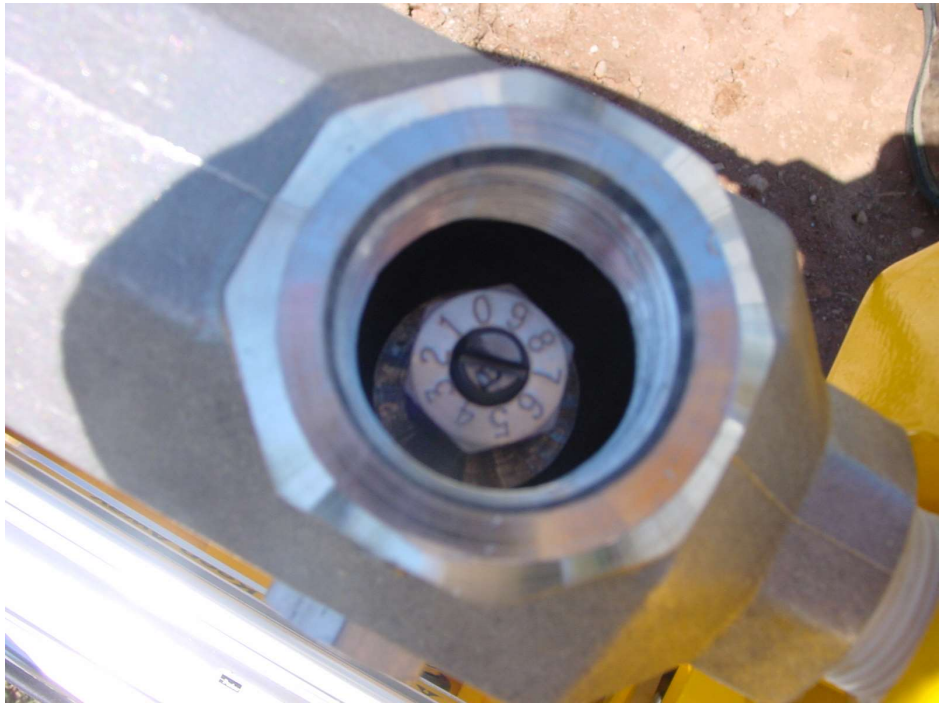
(b) 1200+ desired where moisture is a major factor. Operator must compensate for foaming when filling the lubricator.

(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.

CHECKING THE IN-LINE OILER

- Fill the oiler to the top of the adjustment screw. The oiler should run approximately four hours before needing refilled.
- If you need to make an adjustment to the flow, use a screwdriver to turn the screw to a higher number for more flow, or to a lower number for less flow.
- Note: The factory setting will be close to “4”.
- Replace and tighten the oiler cap.



ADJUSTING FRONT LIFTING HANDLES

- If you need to drill close to a corner and the guide wheel is in the way, or if you are “skew” drilling, you can raise the guide wheel/front handlebar by removing the lock pin on the handlebar, loosen the handle set screw, then raise the front handlebar.

Pinch Points: *Keep hands clear. Loosening of the bolts will allow the handles to slide on the frame.*

ADJUSTING THE FRONT LIFTING HANDLES

- Replace the lock pins and retighten the handle set screws.

DRILL MOTOR LEVER

- Always ensure the drill motor lever in the position as shown in the picture at right. The lever should always be parallel to the drill motor to ensure proper operation. Rotating the lever will shut off the air to the motor.