#### SETTING UP THE MODEL 110B



### SAFETY PRECAUTIONS FOR THE MODEL 110B



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



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



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



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

**Heavy Load:** Use handles to reposition the drill unit. 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 rom air compressor.

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

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High Pressure: High 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. Be sure carriage lock is in place.



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

- IMPORTANT: The chuck size of the drill bits must match the chuck size of the drill. All E-Z Drill Model 110B drill units have a 7/8" x 3 1/4" chuck size.
- The Model 110B requires an 18" UC bit, which will give up to 12" of drill depth.



• 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





**Heavy Load**: Use handles to reposition the drill unit. 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.



- 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.







• Flip up the retainer latch on the drill motor.



• Place the bit into the chuck and close the bit guide and tighten the swivel bolt.

![](_page_8_Picture_2.jpeg)

• Close the latch on the rock drill by flipping it down back in place.

![](_page_9_Picture_2.jpeg)

![](_page_9_Picture_3.jpeg)

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

![](_page_10_Picture_2.jpeg)

 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.

![](_page_11_Picture_2.jpeg)

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

![](_page_12_Picture_2.jpeg)

#### **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 re-tighten the four bolts and nuts.

![](_page_13_Picture_2.jpeg)

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

![](_page_13_Picture_4.jpeg)

#### **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 re-tighten the bolts.

![](_page_14_Picture_2.jpeg)

Pinch point. Keep hands clear

![](_page_14_Picture_4.jpeg)

#### **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**

 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.

![](_page_16_Picture_2.jpeg)

Heavy load. Use lifting handles

![](_page_16_Picture_4.jpeg)

## **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.

![](_page_17_Picture_5.jpeg)

![](_page_17_Picture_6.jpeg)

#### **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 re-tighten the stop rod nuts.

![](_page_18_Picture_2.jpeg)

## **CHECKING THE IN-LINE OILER**

- Using the wrench provided on the back of the control panel, remove the oiler cap from the oiler.
- AWARNING DO NOT REMOVE CAP UNDER PRESSURE
  - Oiler must be filled with proper rock drill oil (see "Recommended Specifications for Rock Drill Lubricant")

![](_page_19_Picture_4.jpeg)

![](_page_19_Picture_5.jpeg)

#### 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	

(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: factory setting will be close to "4".
- Replace and tighten oiler cap.

![](_page_21_Picture_5.jpeg)

## ADJUSTING FRONT LIFTING HANDLES

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

![](_page_22_Picture_2.jpeg)

![](_page_22_Picture_3.jpeg)

![](_page_22_Picture_4.jpeg)

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

# ADJUSTING THE FRONT LIFTING HANDLES

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

![](_page_23_Picture_2.jpeg)

![](_page_23_Picture_3.jpeg)