# SETTING UP THE MODEL 85B

# SAFETY PRECAUTIONS FOR THE MODEL 85B

***System Under Pressure***: Shut off air supply and disconnect air hose 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 85B (continued)

 ***Loud Noise***: Wear ear protection to prevent eardrum damage from air compressor.

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

 ***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. Be sure 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.

- IMPORTANT: The chuck size of the drill bits must match the chuck size of the drill. All E-Z Drill Model 85B drill units have a 7/8” x 3 1/4” chuck size.

- The Model 85B requires an 12” UC bit, which will give up to 9” of drill depth. The Model 85B can drill up to 12” deep if a 15” UC bit is available.

# INSTALLING THE DRILL BIT

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

  For drilling a:

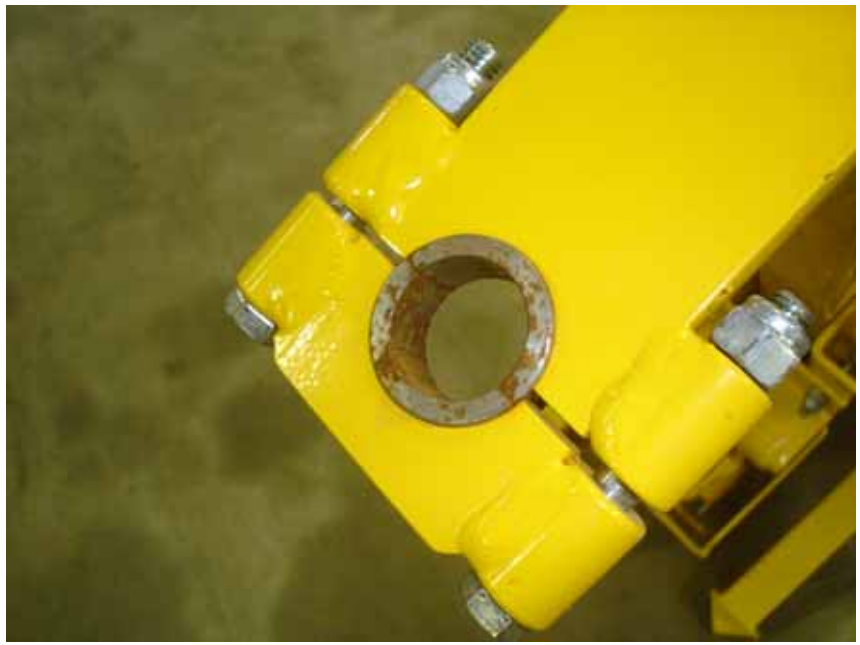
  5/8” diameter hole, use 1095 MCP

  3/4” diameter hole, use 1096 MCP

  7/8” diameter hole, use 1097 MCP

  1” diameter hole, use 1098 MCP

  1 1/8” or larger diameter hole, use 1099 MCP



# INSTALLING THE DRILL BIT

- Lay the machine back on the control panel as seen in the picture.  This gives easier access to the drill motor and bit guide.

# INSTALLING THE DRILL BIT

- Open the latch on the rock drill

*Pinch point*

# INSTALLING THE DRILL BIT

- To install a drill bit, loosen the bolts on the lower bit guide using 9/16” wrenches until you can slide the end of the bit through the bit guide.

# INSTALLING THE DRILL BIT

- Place the bit into the chuck and close the retainer latch.

*Pinch Point.  Keep fingers away from latch when closing.*

# INSTALLING THE DRILL BIT

- Tighten the two bolts on the bit guide.  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 re-tighten the nuts.

# INSTALLING THE DRILL BIT

- Adjust the return stop rod so that the bit will not retract so far that the bit wedges in the bit guide, but far enough that it will retract the end of the bit out of the drilled hole.

# ADJUSTING THE HEIGHT OF THE DRILL

- Adjusting the height of the drill is done by loosening the bolt on the front stabilizer bar. This allows it to slide up or down on the vertical post of the frame. Move it until the bit becomes located to the desired drilling position, then re-tighten the bolt.

*Pinch Point. Frame will move when bolts are loosened.*

# ADJUSTING THE HEIGHT OF THE DRILL

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

*Pinch Point. Frame will move when bolts are loosened.*

# 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.

# SETTING THE DRILL DEPTH

- Remove the carriage lock from the return stop rod.
- 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 proper depth.  Then re-tighten the stop rod nuts.

# CHECKING THE IN-LINE OILER

- Remove the oiler cap from the oiler (wrench is not provided).

**⚠WARNING** **DO NOT REMOVE CAP UNDER PRESSURE**

- 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: factory setting will be close to “4”.
- Replace and tighten oiler cap.