

# OPERATING INSTRUCTIONS FOR THE MODEL 210B SRA



# SAFETY PRECAUTIONS FOR THE MODEL 210B SRA

-  **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 210B SRA (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, and attach to the lifting bale on the drill unit. Be sure carriage lock is in place.

# MOVING AND POSITIONING THE DRILL

- After connecting the air hose from the air compressor to the drill unit (see SET UP instructions), release the brake lever to the “OFF” position.



# MOVING AND POSITIONING THE DRILL

- Manually push to position the drill unit. Turn the unit by slightly lifting on one or the other handle bar. Position the drill unit to the edge of the slab so that the two wheels are parallel to the edge of the concrete slab.



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



# POSITIONING FOR HORIZONTAL DRILLING

- Unlock the Safety Latch and the Carriage Lock.



# POSITIONING FOR HORIZONTAL DRILLING

- Place the Raise & Lower valve into the “Lower” position.



*Activating this control will cause the drill system lower down to the horizontal position. Make sure everyone is clear of the drill unit before lowering the drill system.*





# POSITIONING FOR HORIZONTAL DRILLING

- At this point, the two guide plates/guide wheels should both be touching the face of the concrete. If one or both are not touching the concrete, the drill unit is too close to the edge of the slab, and you will need to reposition a little farther away from the edge.



# SETTING AND ADJUSTING THE FEED PRESSURE

- To make the feed pressure adjustment to the drill, place the Feed Control Valve into the “IN” position.



# SETTING AND ADJUSTING THE FEED PRESSURE

- Check the gauge on the control panel. It should be set up approximately 20 psi.



# SETTING AND ADJUSTING THE FEED PRESSURE

- To make an adjustment on the Regulator, lift up the regulator knob, and turn it clockwise to increase the feed pressure, and turn it counter-clockwise to decrease the feed pressure. After you finish, push the knob down until it clicks.



# SETTING AND ADJUSTING THE FEED PRESSURE

- Next, turn the power lever into the “On” position. The drill will start drilling. The drill should move forward into the concrete with a slight “quiver” as it drills. If it is “bouncing”, it means it does not have enough feed pressure. Lift up and slowly turn the regulator knob clockwise until the “bouncing” stops and you still have good rotation on the bit.



- ⚠️ **Flying Debris:** During boring, chips may be ejected. Stay behind control panel and wear safety glasses to prevent eye injury.
- ⚠️ **Loud Noise:** Wear ear protection to prevent eardrum damage from air compressor.
- ⚠️ **Dust:** Wear a dust protection mask to protect from concrete dust.

# SETTING AND ADJUSTING THE FEED PRESSURE

- If the bit is not turning freely, you will need to decrease the feed pressure by slowly turning the regulator knob counter-clockwise until the bit is turning freely.
- After setting the feed pressure at the appropriate level, push the regulator knob back down to lock it into place.



# SETTING AND ADJUSTING THE FEED PRESSURE

- **IMPORTANT:** If the drill unit is set up to drill vertical holes, the feed pressure will need to be reduced approximately 5-9 psi.

**▲ WARNING**

*With the drill system in the vertical position, feed pressure set too high can cause the drill unit to tip over.*

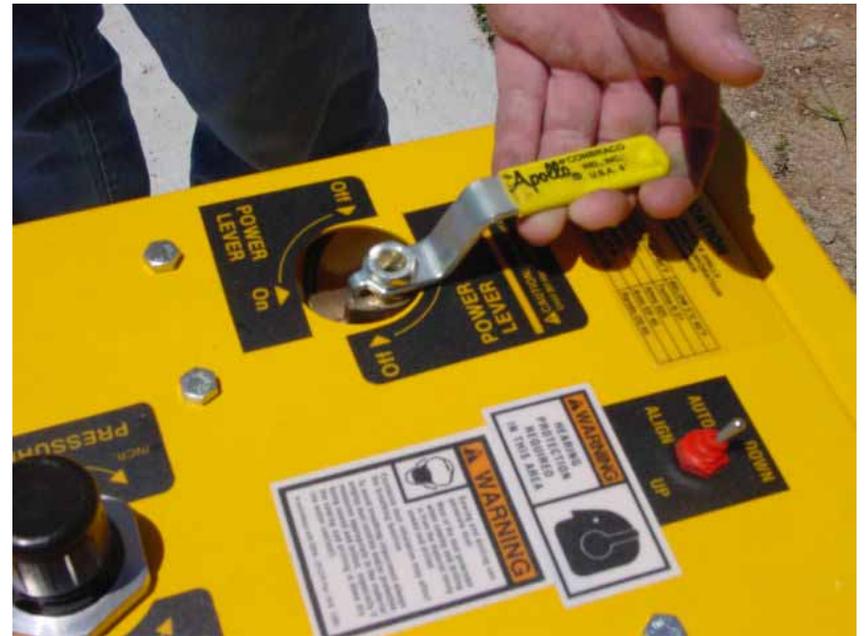
# DRILLING OPERATION

- After all adjustments have been made and you are now ready for production drilling, follow the next steps in proper order to insure maximum production and prevent unnecessary damage to the drill.
- Place the Feed Control Valve in the “IN” position.



# DRILLING OPERATION

- After the bit makes contact with the concrete, place the power lever into the “ON” position. The drill will start drilling.



# DRILLING OPERATION

- After the drill reaches its preset drill depth, it is imperative that you immediately turn the drill off. This prevents “dry-firing” (the drill is running with no pressure against the bit), which can cause extreme damage to the drill.



# DRILLING OPERATION

- After the drill has finished drilling and the power lever has been turned off, place the Feed Control Valve in the “OUT” position to retract the bit from the hole.
- NOTE: If the drill bit is stuck in the hole and won't retract, simply turn on the power lever to momentarily rotate the bit. As soon as it begins to retract, turn the lever “Off”.



# DRILLING OPERATION

- After the drill has been retracted from the drilled hole, place the Auto Align switch into the “UP” position. This will slightly raise the drill away from the concrete.

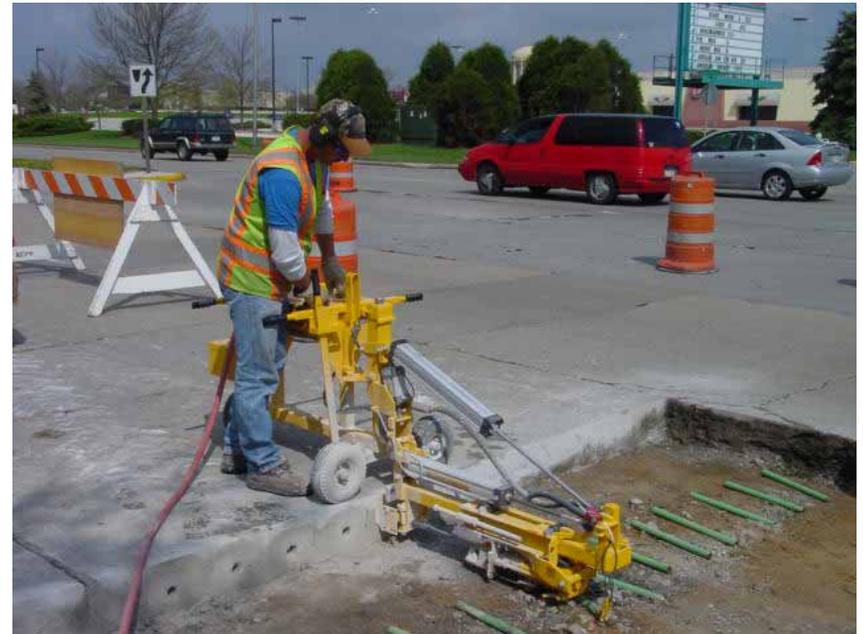


# DRILLING OPERATION



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

- Roll the drill unit to the next set of holes. If you are using the optional Hole Spacing Guide, roll the unit until the Hole Spacing Guide is pointing to the last drilled hole. Stop the unit, and this will automatically line the drill up with the proper spacing for the next set of holes. While rolling the unit, try to maintain the proper distance along the edge of the slab.





# DRILLING OPERATION

- When you are finished drilling for the day, and want to move the drill unit away from the edge of the slab, place the Raise and Lower Valve into the “RAISE” position.
- After the drill system raises up, place the lock pin into the red Safety Latch.



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



# DRILLING OPERATION

- Lock the Carriage Lock.

**⚠ WARNING** *Failure to place the lock in the proper place will cause the drill to drop when the air supply is disconnected.*

- Store in the raised position.



# ADJUSTMENTS FOR VERTICAL DRILLING

- To adjust the drill system for vertical drilling, place the feed lever in the “OUT” position, the Raise and Lower lever in the “RAISE” position, and the Auto Align Switch is in the “UP” position.
- Use a  $\frac{3}{4}$ ” wrench to loosen the two nuts on the vertical adjustment strap until it drops down on to the Auto Align arms.



# ADJUSTMENTS FOR VERTICAL DRILLING

- Push the drill system into the exact vertical position and make sure the strap is down on the arms.
- Re-tighten the two nuts on the strap to hold the drill vertical.



# ADJUSTMENTS FOR VERTICAL DRILLING

- You may have to adjust the nuts on the Auto Align cylinder to bring the drill system in the exact vertical position.



# ADJUSTMENTS FOR VERTICAL DRILLING

- To adjust the height of the drill bit from the drilling surface, you will need to loosen the bolts on the sides of the mast, then turn the nut on the top of the mast to raise or lower the drill system as needed.
- After reaching the desired height, re-tighten the bolts on the sides of the mast.



# ADJUSTMENTS FOR VERTICAL DRILLING

**⚠ WARNING** *Too much feed pressure will cause the machine to tip over when the feed lever is activated.*

IMPORTANT: THE FEED PRESSURE MUST BE REDUCED TO 5-9 LBS FOR VERTICAL DRILLING.

