OPERATING INSTRUCTIONS FOR THE MODEL 210-3, -4 , and -5 SRA

SAFETY PRECAUTIONS FOR THE MODEL 210-3, -4, -5 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 210-3, -4, -5 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.

DRIVING AND POSITIONING THE DRILL

- After connecting the air hose from the air compressor to the drill unit (see SET UP instructions), release the air brake by placing the toggle switch on the control panel to the “OFF” position.

DRIVING AND POSITIONING THE DRILL

- Standing on either side of the machine, push the Travel Lever to go forward, or pull it to go backwards. Use the steering wheel to guide the unit.

⚠WARNING *If you are towing the air compressor, be careful of turning too sharp and turning into the air compressor. This can cause injury to the operator and damage to the drill and air compressor.*

POSITIONING FOR HORIZONTAL DRILLING

- Drive the drill unit to the edge of the slab where the two wheels along the edge are parallel to the edge, and the edge of the slab is just under the black round Tool Bar.

POSITIONING FOR HORIZONTAL DRILLING

- Unlock the Safety Latch and all Carriage Locks.

Pinch point

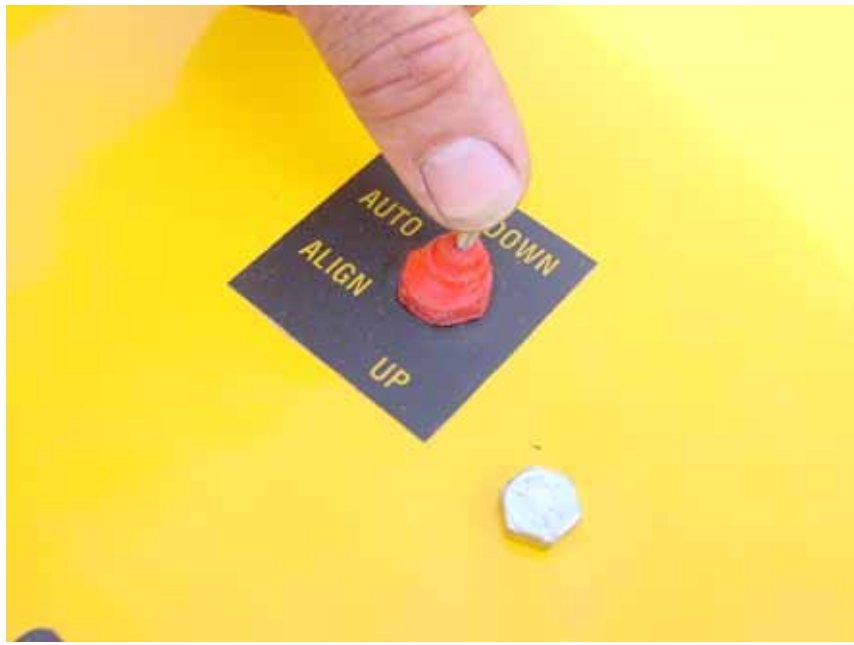
POSITIONING FOR HORIZONTAL DRILLING

- Place the “Raise and 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

- Place the “Auto Align” switch into the “down” position.



POSITIONING FOR HORIZONTAL DRILLING

- At this point, the Guide Plates (on the 210-3 SRA), or the Guide Wheels (on the 210-4 SRA and the 210-5 SRA) 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

NOTE: For the drills to drill properly, and at optimum drilling speed, you may have to make some adjustments to the feed pressure on each drill. To begin with, it easier to make this adjustment one drill at a time. After making the desired adjustments to all drills, you can then start running all drills simultaneously.

SETTING AND ADJUSTING THE FEED PRESSURE

- To make the feed pressure adjustment to the first drill, place the Feed Control Valve into the “In” position. All drills will move forward until the bits make contact the concrete.

SETTING AND ADJUSTING THE FEED PRESSURE

- Check all Gauges on the control panel. Set all gauges to about 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

- With all of the individual power switches in the “Off” position, place the Main Power Switch in the “On” position.

SETTING AND ADJUSTING THE FEED PRESSURE

- Turn the first drill on by placing the individual power switch into the “On” position. The corresponding 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

- Repeat this procedure with each drill. After all drills have been adjusted properly, you can now run all drills simultaneously by placing each drill switch in the “On” position, and using the Main Power Switch to turn them on and off. If the need arises, you can always run each drill individually.
- Note: if you to keep an individual drill from drilling, simply turn the corresponding power switch the “Off”. The drill will still feed up to the concrete, but it will not drill.

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.

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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 your 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 bits make contact with the concrete, place the Main Power Switch in the “On” position. All drills will start drilling.

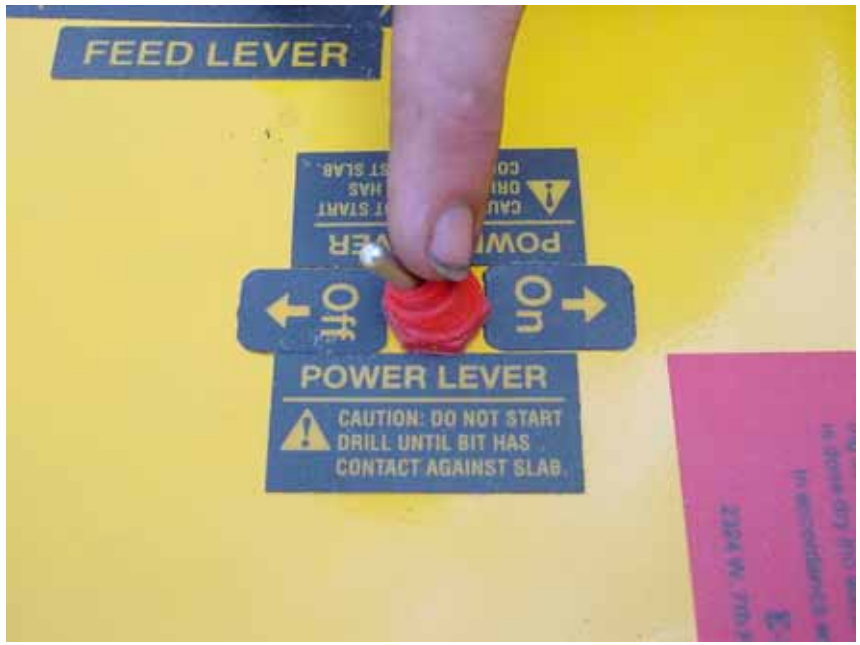
⚠ ***Flying Debris***: During boring, chips may be ejected. Stay behind control panel and wear safety glasses to prevent eye injury.

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

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

DRILLING OPERATION

- After each drill reaches its preset drill depth, it will shut off automatically. When all drills have shut off, place the Main Power Switch to the “Off” position.



DRILLING OPERATION

- Place the Feed Control Valve into the “Out” position.

DRILLING OPERATION

- After all drills have retracted from the drilled holes, place the Auto Align Switch into the “Up” position. This will slightly raise the drills away from the concrete.

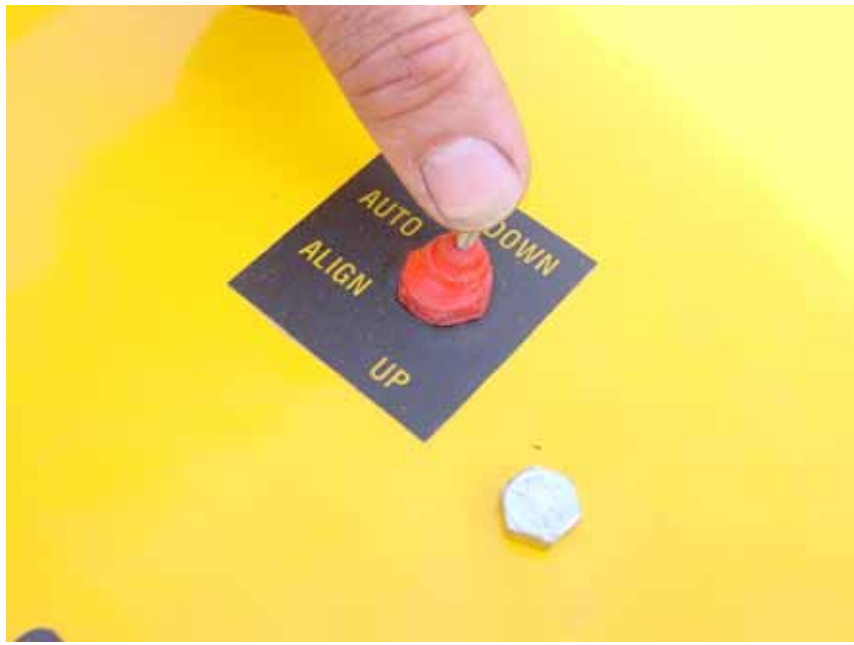
DRILLING OPERATION

- Use the Travel Lever to move the next set of holes. If you are using the Hole Spacing Guide, drive the unit until the Hole Spacing Guide is pointing to the last holed drilled. Stop the unit, and this will automatically line the drill up with the proper spacing for the next set of holes. While driving the unit, try to maintain the proper distance along the edge of the slab.

DRILLING OPERATION

- As soon as you are in position for the next set of holes, place the Auto Align Switch in the “Down” position and repeat the previous steps.

- IMPORTANT: DO NOT TURN THE DRILLS ON BEFORE THEY ARE IN CONTACT WITH THE CONCRETE, OR LEAVE THEM ON WHILE RETRACTING. THIS CAUSES “DRY-FIRING” (drills are running with no pressure against the bit). THIS WILL CAUSE EXTREME DAMAGE TO THE DRILL.



DRILLING OPERATION

- When you are finished drilling 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 systems raise up, place the red Safety Latch into the air cylinder bracket.

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 all Carriage Locks.

⚠WARNING *Failing to place all locks in the proper places will cause the drills to drop when the air supply is disconnected.*

- Store in the raised position.