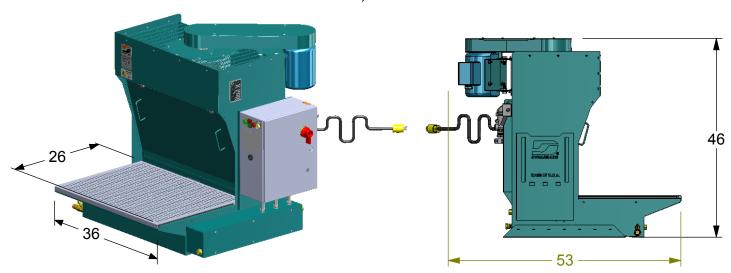
Tool Manual - Safety, Operation and Maintenance

SAVE THIS DOCUMENT, EDUCATE ALL PERSONNEL



Model Number	Motor hp	Voltage	Frequency	FLA	Phase	Air Flow	Sound Level	Working Area Depth	Working Area Length	Shipping Weight
64300	1	230	60 Hz	3.05	3	1000 CFM	85 dB(A)	18"	36"	330 lbs
64304	1	460	60 Hz	1.52	3	1000 CFM	85 dB(A)	18"	36"	330 lbs
64350	1	230	60 Hz	3.05	3	1000 CFM	85 dB(A)	26"	36"	335 lbs
64354	1	460	60 Hz	1.52	3	1000 CFM	85 dB(A)	26"	36"	335 lbs

SAFETY LEGEND



▲ WARNING

Read and understand tool manual before work starts to reduce risk of injury to operator, visitors and tool.

A WARNING

Practice safety requirements. Work alert. have proper attire and do not operate tools under the influence of alcohol or drugs





▲ WARNING

Eye protection must be worn at all times, eye protection to conform to ANSI Z87.1

🛕 WARNING

Ear protection to be worn when exposure to sound, exceeds the limits of applicable Federal, State or Local statues, ordinances and/or regulations





▲ WARNING

Respiratory protection to be used when exposed to contaminants that exceed the applicable threshold limit values required by law

🛕 WARNING

Electric shock hazard. Avoid bodily contact with grounded objects, bodies of water.

Do not damage cord set.



IMPORTANT SAFETY INSTRUCTIONS

When operating this equipment, basic precautions should always be strictly followed including the instructions listed below:

METAL CAPTURE STATION SAFETY INSTRUCTIONS

- Always use a grounded power supply. There is an increased risk of electric shock with an ungrounded power supply.
- 2. Don't expose to rain or wet conditions. There is an increased risk of electric shock if the switch, cord or motor are wet.
- Do not abuse the power cord. Never use the cord to move the station. Never use the cord to pull the plug out of the outlet. A damaged cord increases the risk of electric shock.
- 4. Do not block more than 25% of work surface inlet holes

- 5. Use caution when opening or closing guards, screens, etc. Switch power off and unplug cord before opening. Remove all work pieces and tools before opening to avoid injury. Keep fingers and hands clear when closing to avoid injury
- 6. Never use to exhaust chemical vapors
- 7. Vibration may occur if unit is not level.
- 8. Unplug power cord when accessing blower compartment area
- 9. Power lockout disconnect switch must be off when servicing station

Machine Setup

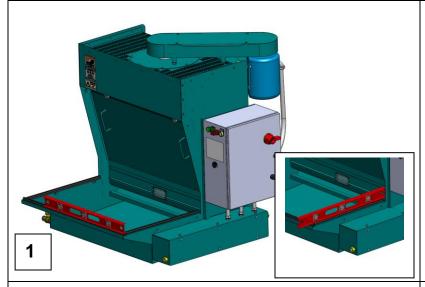
The 64300, 64304, 64350 and 64354- 60hz Metal Capture Stations will be pallet shipped to their destination. The following details will describe the steps required for initial machine setup before operation. Read through the entire setup procedure to understand its requirements before trying to run machine.

Warning:

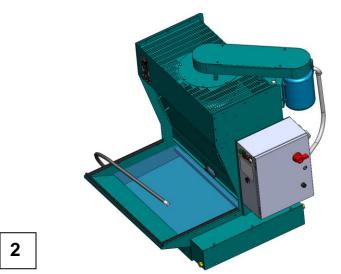
Failure to follow the required steps for machine setup may result in damage to machine or personal injury.

*Model 64350 shown throughout this user guide



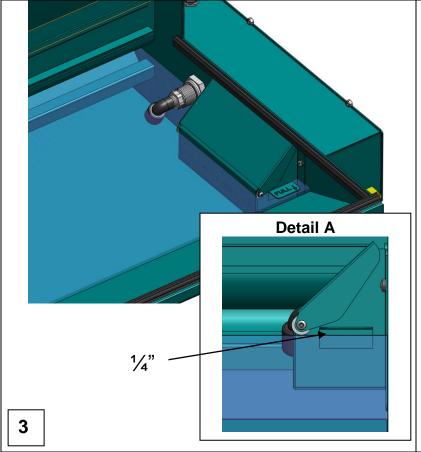


The first step is to level the machine. Having the machine level is crucial for the auto-fill sensor to operate properly, maintaining critical water level for proper filtration. After determining machine location and with work surface removed, utilize a level off the rigid top edges of the machine. Shim where required to provide a level machine on all four sides. Machine to be no more than 1/16" out of level over any 1-foot span.



You must now fill your tank to the proper start up water level. For initial setup, manually filling the tank is suggested. Use a garden hose from your water source and drop to the bottom of the tank before beginning to fill.

Machine Setup

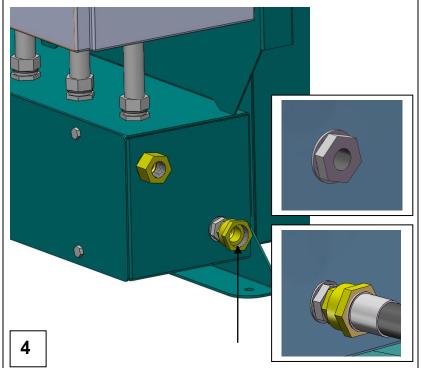


There is a "Full" tab located on the isolation chamber, which indicates the proper fill level for the machine in the "OFF" position. Continue filling the machine until the water is approximately 1/4" short from the bottom surface of the fill tab as shown in Detail A.

Do not allow the water to fill higher than this full tab. If level is greater than height of tab, proceed to remove water from machine until desired height is reached as indicated above. CAUTION: If machine is overfilled past the fill tab more than 1", water will begin to overflow on to the shop floor.

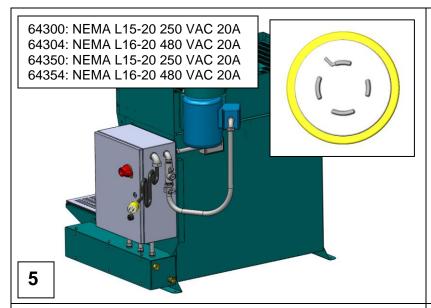
Once the desired has been reached, remove hose from tank and place your work surfaces into position.

Note: The machines auto-fill system will bring the water level up to exact run height (Full), after the machines disconnect is turned to the "On" position as described in Step 8 of the **Machine Setup**. Ensure that the water in main collection tank is at the proper height before beginning operation of machine.



The machine is equipped with a self-filling water level system, which requires a constant water supply. The machine comes with a ¾" female garden hose swivel connect located at the rear of the machine or you can remove the brass garden hose swivel connect and use the ¼" NPT female bulkhead fitting for providing a water source.

Machine Setup



Next you will need to provide a power source for your machine. Refer to the parts page, as the model number will be used for determining the voltage rating for your specific machine.

Warning:

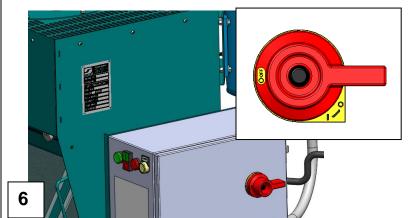
DO NOT attempt to wire the machine for any other voltage other than that stated for your model. There are internal components to the control box that are voltage specific and failure to provide proper voltage can cause damage to your machine and could cause personal injury.

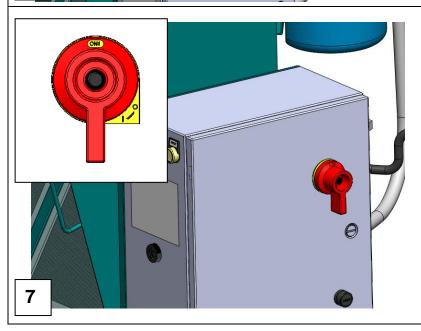
Model: 64350, NEMA L15-20 shown

Before plugging in your machine, be sure that the lockout disconnect is in the "Off" position.

Note:

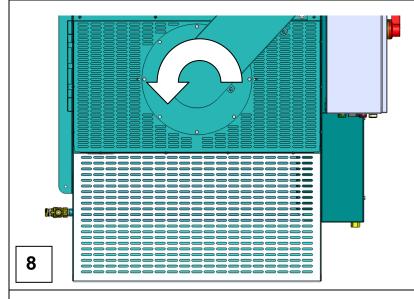
The disconnect is used as a lockout mechanism. For any maintenance required inside the control box, the disconnect will need to be in the off position to open the access door. If the disconnect is in the on position, the access door will remain locked.



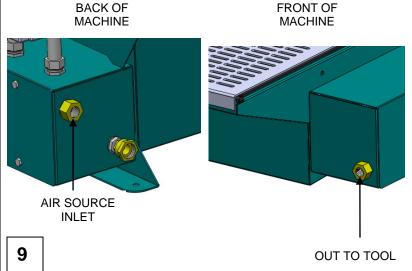


After plugging your machine in, proceed to move the lockout disconnect to the "On" position, providing power to the machine and sensory controls. Once power has been provided, the green pilot light will start a flashing sequence for a 25 second set-up stage. The auto-fill system will take over after the set-up stage is complete and bring the machines water level to the correct height before allowing the operator to turn on the machine. At the time the green pilot light glows solid, the machine is then ready to start.

Machine Setup



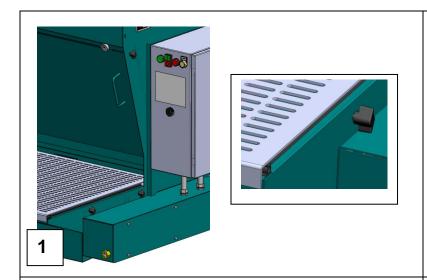
It is also important to recognize when wiring your machine, proper rotation of the impeller is essential for operation. From the top of the machine you can gain viewing access to the blower assembly. Blower should rotate in a counterclockwise direction from this view of the machine as shown. If blower is rotating clockwise, interchange any two of the main power leads from the 3-phase supply.



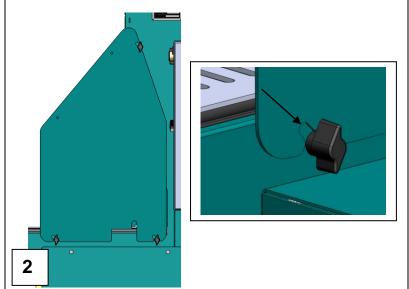
The machine is provided with a pneumatic interlock. The interlock will only provide air to the working tool after the machine has reached optimal run speed.

Maximum airflow: 95 SCFM

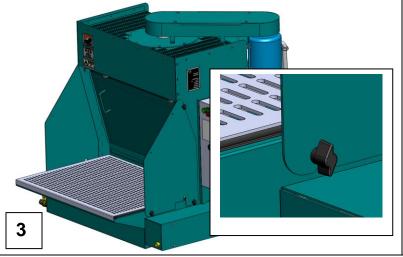
Optional Shield Installation



To begin installing the machines shielding assembly, screw qty 6 locking knobs into the threaded holes located around the perimeter of the main tank. Leave a 1/8" gap as shown at all 6 locations, to allow for the installing of the panels.

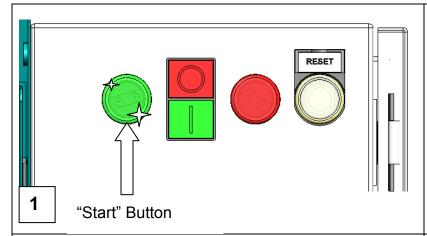


Slide the each panel into place, consistent With the angle of the slots in shield.



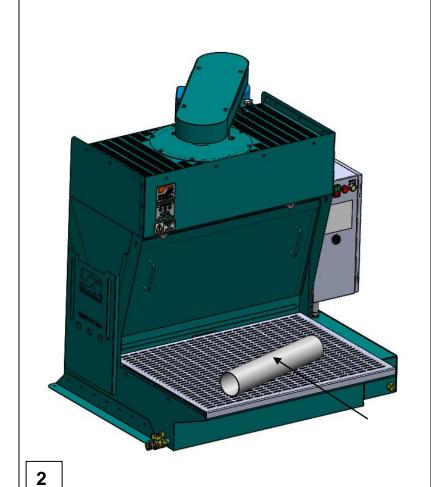
Complete installation by tightening down all 6 locking knobs hand tight.

Machine Operation



Once the green pilot light glows constant, you can then turn on the machine.

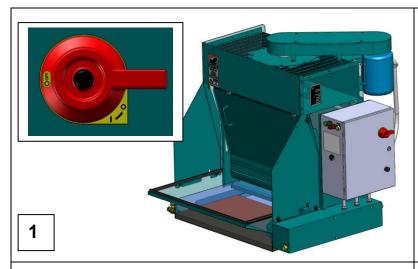
Press and release the "Start" button. The machines impeller will reach its optimal operating speed in approximately 10 seconds and air filtration will begin. You can now begin to grind your work piece.



Direction of grind is very important when speaking to maximum dust collection. Be sure to manipulate both your work piece and tool to insure that the table is capturing the highest percentage of both metal fillings and small metal particles or dust.

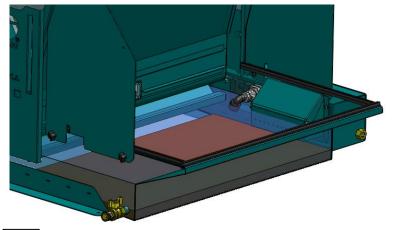
Direct grind towards shielding for maximum capture rate.

Maintenance Guide



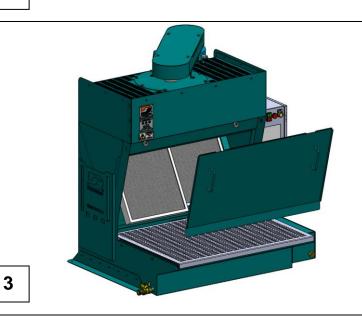
Before beginning any maintenance to your machine, first make sure the lockout disconnect is in the off position.

Remove work surface to gain access to the interior of the tank.



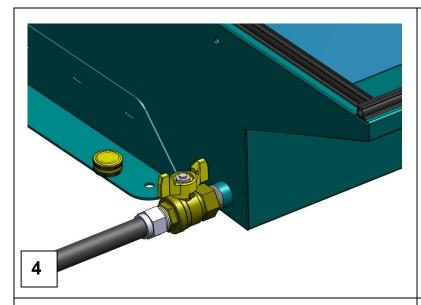
After machine use, sludge will collect at the bottom of the tank. It is required that sludge be removed daily. Remove sludge with a non-sparking scoop. Adhere to local codes to properly dispose of contaminated liquids/sludge.

2



Continue by removing access panel and mist traps. This will allow you to clean the back of the machine.

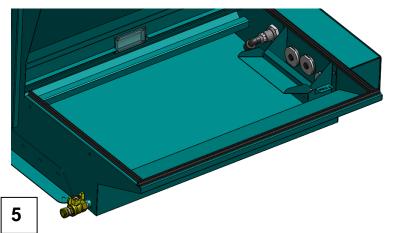
Maintenance Guide



To change water:

Remove cap from drain valve and connect a garden hose, open valve and remove all water from tank.

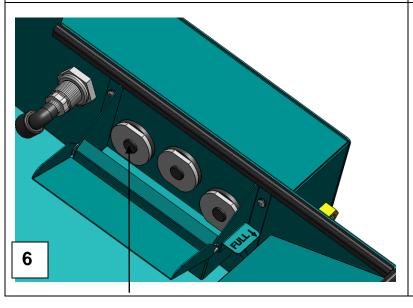
When tank is completely empty of water, remove garden hose, re-install cap on drain valve and lock valve in the closed position.



After draining all water, remove the sludge with a non-sparking scoop.

Adhere to local codes to properly dispose contaminated liquids/sludge.

Hose clean and re-install mist traps back into machine and lock down access panel.



Keeping the liquid level sensors clean from sludge and debris is very important in maintaining the machines proper water level both in "On" and "Off" mode. Located in the wall of the tank as shown, gently clean the black sensor faces with water of any grind build-up or foreign debris.

These sensors should be monitored and kept clean through the usage of the machine on a daily basis.

Follow the **Machine Setup** for Re-filling your machine and start-up.

Metal Capture Downdraft Table

Maintenance

Maintenance Schedule	Daily	Every 30 Days of use	Every 180 Days of use
Check Water Level	✓		
Remove sludge from collection tank	✓		
Remove any accumulated dust	✓		
Rinse mist traps with clean water	✓		
Replace water in collection tank		✓	
Inspect mist traps		✓	
Inspect V-Belt			✓
Clean Sensor Faces	✓		

Check Water Level:

Insure that water in main collection tank is at the proper height before beginning operation of machine.

Remove sludge from Collection Tank:

Sludge should be transported in a covered, vented steel container for storage or disposal in accordance with federal, state and local regulations- sludge containing aluminum should be mixed with inert material (dry clay) in the ratio 5 parts inert material to 1 part sludge.

Remove any accumulated dust:

Inspect the Metal Capture Station or Table exhaust vent, internal and external surfaces and surrounding work area for any fugitive dust accumulation exceeding 1/32" thickness- remove with non-sparking, conductive dustpans and natural bristle brushes.

Rinse Mist traps with clean water:

Remove mist traps from Metal Capture Station or Table and rinse with clean water to remove any trapped sludge or debris. Once clean re-install mist traps before operation of machine.

Replace water in collection tank:

Replace the water in the collection tank with clean water-Dispose of used water in accordance with federal, state and local regulations.

Inspect Mist Traps:

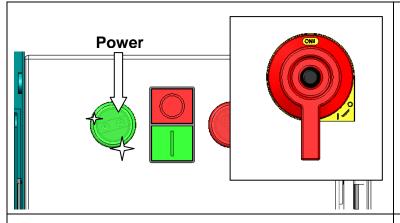
Inspect mist traps for signs of corrosion or damage. Replace if any corrosion or damage is found.

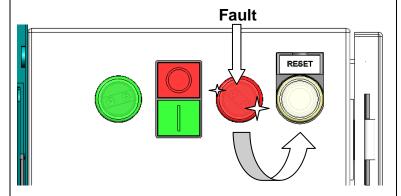
Inspect V-Belt:

Inspect V-Belt and replace if worn or damaged

Clean Sensor Faces:

Located in the isolation chamber, open lid and use a damp cloth to clean the face of each sensor, removing any grind build-up or foreign debris that has accumulated.





A WARNING

If reset is required, proper water height is not being sensed. Check to make sure that water source is providing sufficient supply. Water level sensors may also require cleaning. Refer to manual on proper care and maintenance of machine. If machine continues to shut down, consult factory for further assistance.

Dynabrade: 1-800-828-7333

Ready to Start:

After plugging your machine in, proceed to move the lockout disconnect lever to the on position, providing power to the machine and sensory controls. Once power has been provided, the green pilot light will start a flashing sequence for a 25 second setup stage. Be aware, you will not be able to power up the machine during this flashing stage. Once the green pilot light illuminates solid, you can then power up the machine.

*Note: Clean sensors are critical for the proper operation of this machines auto-fill system. Be sure to monitor and wash down sensors as required. Refer to Maintenance section for proper machine care.

The red pilot light is used to signal different fault messages, depending upon its flash pattern.

A) Solid illumination:

Indicates that the water level is not sufficient for the Start-up of the machine. With proper water source connected, the machine e will auto-fill to the correct sensory height. Once sensor is met, the solid red pilot light will dismiss and the green pilot light will illuminate solid, indicating it is back to the *Ready to Start* mode as indicated above.

B) Flash Pattern 1: "ON" 3 seconds, "Off" 3 second:

During the above *Ready to Start* mode, the machine will allow the solenoid valve to open and fill the machine for a maximum of 10-minutes. If the *Ready to Start* sensor is not met in this 10-minute window, the machine will go into lockdown and will require a reset. Press the reset button briefly until it illuminates and then release. At this time, the machine will go back to the *Ready to Start* mode as indicated above.

C) Flash Pattern 2: "ON" 1 second; "Off" 1 second:

Indicates that the machine has shut down. The water level is not sufficient in the run mode and the auto-fill has attempted to reach proper water level but has failed.

The machine will now require a reset. Press the reset button briefly and then release. At this time, the machine will go back to the **Ready to Start** mode as indicated above.

D) Flash Pattern 3: "ON" 5 second, "Off" 1 second:

A motor overload will shut down the system and trigger this flashing sequence. At this time, a qualified electrician should determine why the motor overload was tripped and use of the machine should be stopped until the cause of overload is determined.

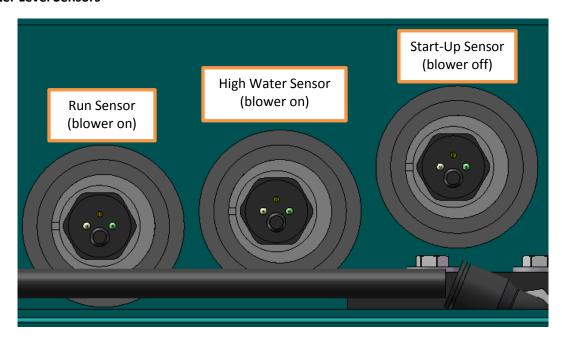
E) Flash Pattern 4: "ON" ½ second. "Off" ½ second:

Indicates that the machine has shut down. The water level is too high during run mode. The machines water level should be manually emptied back down to the proper depth indicated by the full tab. Clean off all liquid level sensors to ensure proper read of water level.

The machine will now require a reset. Press the reset button briefly and then release. At this time, the machine will go back to the **Ready to Start** mode as indicated above.

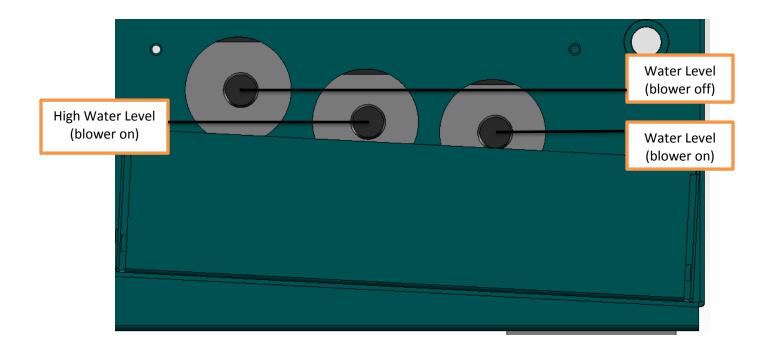
Metal Capture System Water Level Sensor Function and Adjustment

1. Water Level Sensors



2. Sensor Function

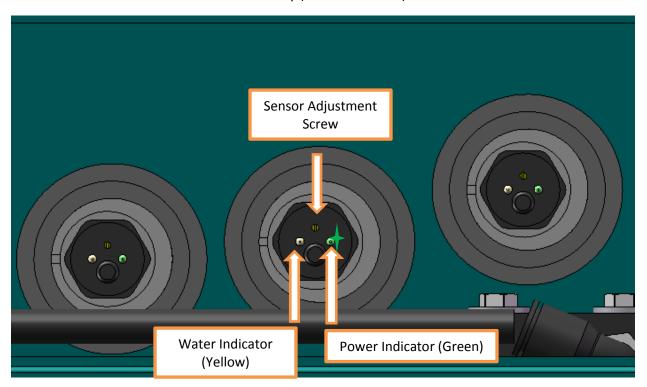
Water level with the blower off should be in the center of the Start-Up Sensor. Water level with the blower on should be in the center of the Run Sensor. Excessive water level is indicated by the High Water Sensor. Sensors will signal the control system to add water or to shut down the Metal Capture system and indicate a fault.



3. Sensor Adjustment

The water level sensors' sensitivity is adjusted to signal the presence of water.

- Whenever power is connected to the system, the green LEDs on all the sensors will be illuminated.
- Yellow LED on indicates water is sensed.
- Turn 1/16" slotted brass adjustment screw clockwise to increase sensitivity (lower water level) and counter clockwise to decrease sensitivity (raise water level).



• Adjustment screw driver (1/16").



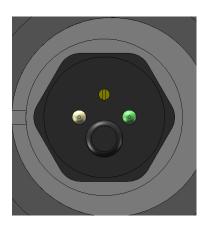
• If the Water Indicator is illuminated (A), adjust the sensitivity screw counter-clockwise until the Water Indicator LED turns off (B). Continue by turning the Sensor Adjustment Screw one full rotation in the clockwise direction (C). Water Indicator LED will now be illuminated.





• If the Water Indicator is not illuminated (A), adjust the Sensor Adjustment Screw clockwise until the Water Indicator LED turns on(B). Continue by turning the Sensor Adjustment Screw one full rotation in the clockwise direction (C). Water Indicator LED will remain illuminated.

A B C







4. Sensor Height Adjustment

- Sensor height can be adjusted 1/8" by rotating the sensor bulkhead.
- Locator slot indicates mid-height when horizontal.

• With power disconnected and water drained below bulkhead level, loosen bulkhead nut and rotate bulkhead to increase or decrease sensor height. Re-tighten nut, add water and check for leaks before reconnecting power.

