

Sponge-Jet® Sponge Blasting System™

Sponge-Jet Continuous VAC- Recovery System™ User Manual

Model
CVR-P110



Headquarters/Manufactured By:

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IMPORTANT NOTE: While parts, systems, components, operational procedures may be the same between equipment models, the images provided in this manual may vary from model to model.

This manual represents the following model: CVR-P110

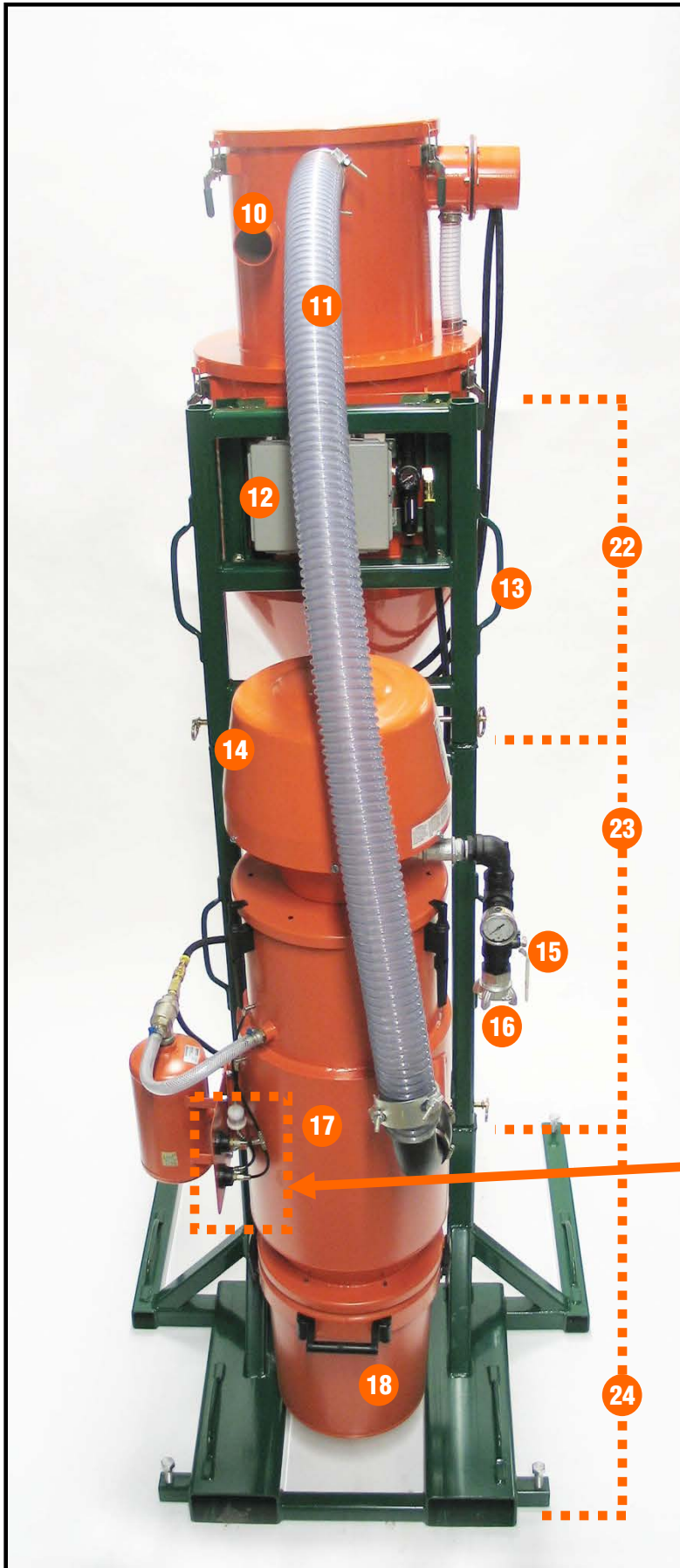
English Language is Original Instructions.

1.0 Introduction



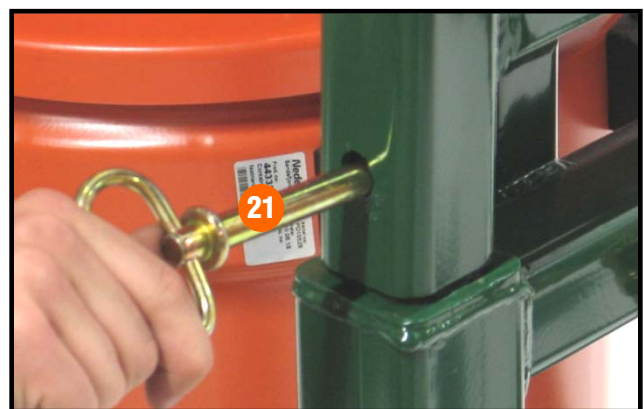
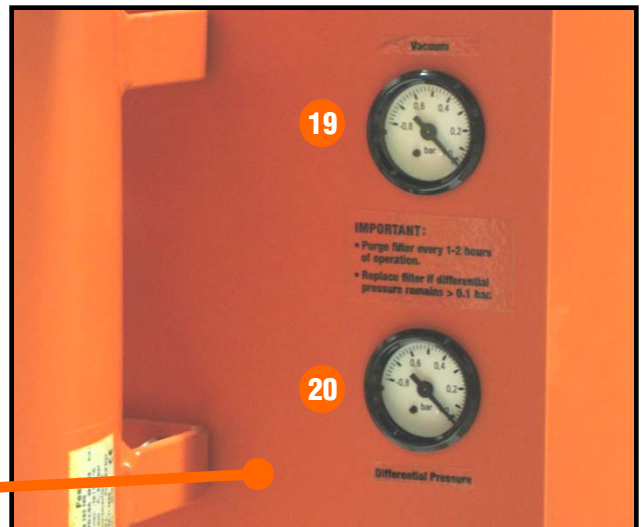
Basic Components

- 1: Vacuum Pressure Transfer
- 2: Clamp
- 3: Cyclone Hopper
- 4: Recovery Cyclone Hopper
- 5: Automatic Purging System
- 6: Media Drop-Out Valve
- 7: Frame Locking Pin
- 8: Frame
- 9: Leveling Bolt



Basic Components *(continued)*

- 10: Vacuum Hose Connection
- 11: Internal Vacuum Source Hose
- 12: Timer-Control Panel
- 13: Frame Handle
- 14: Vacuum Ejector
- 15: Main Air Ball Valve
- 16: Supply Line Connection
- 17: Vacuum Filter Silo
- 18: Vacuum Dust Bin
- 19: Vacuum Pressure Gauge
- 20: Differential Pressure Gauge
- 21: Frame Locking Pin
- 22: Recovery Cyclone Hopper Frame
- 23: Intermediate Extension Frame
- 24: Bottom Frame



2.0 Safety Checklist

- This Unit is a pressurized system. Only trained operators should adjust, maintain and repair this equipment.
- Inbound pressure should never exceed 8bar (115psi) regardless of model.
- To prevent electrostatic buildup and possible electric discharge, the unit must be properly grounded / bonded.
- Operators and people in proximity to blasting should always wear eye and hearing protection with the appropriate respiratory equipment and clothing, which may depend on the type of coating or contaminant being removed.
- All pneumatic lines should be inspected for holes, wear and proper fit.
- Safety pins and restraints should be fitted at all Supply Air Hose couplings to prevent accidental disconnection.
- Verify the unit is stable, secure and on a flat surface.
- Before all activities (other than normal operation), ensure the entire system is depressurized.
- **Never** perform maintenance or repairs when the unit is pressurized.
- **Never** operate the machine with any worn or malfunctioning component.
- Do not move/transport with Sponge Media in unit or when Frame is fully assembled. Moving unit while fully loaded or when Frame extends the Cyclone Hopper above 1.88m (74in) may result in property damage or serious injury.

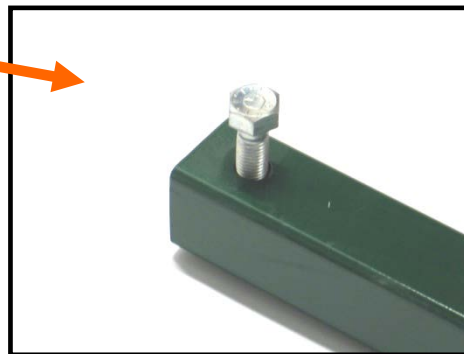
IMPORTANT: Under **NO** circumstances should any inspection, adjustment or lubrication be conducted while running or connected to an air supply.

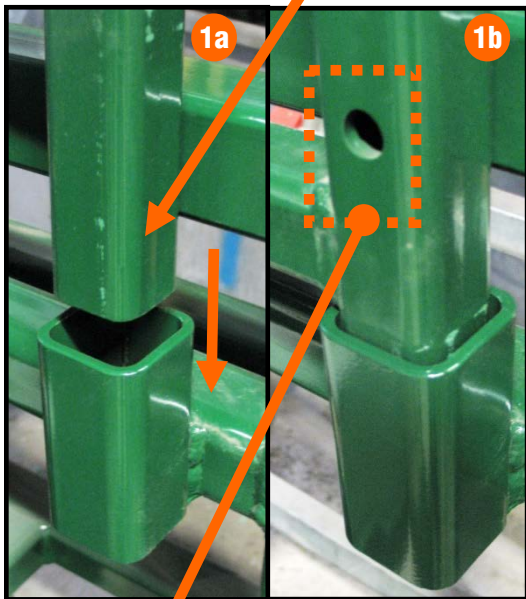
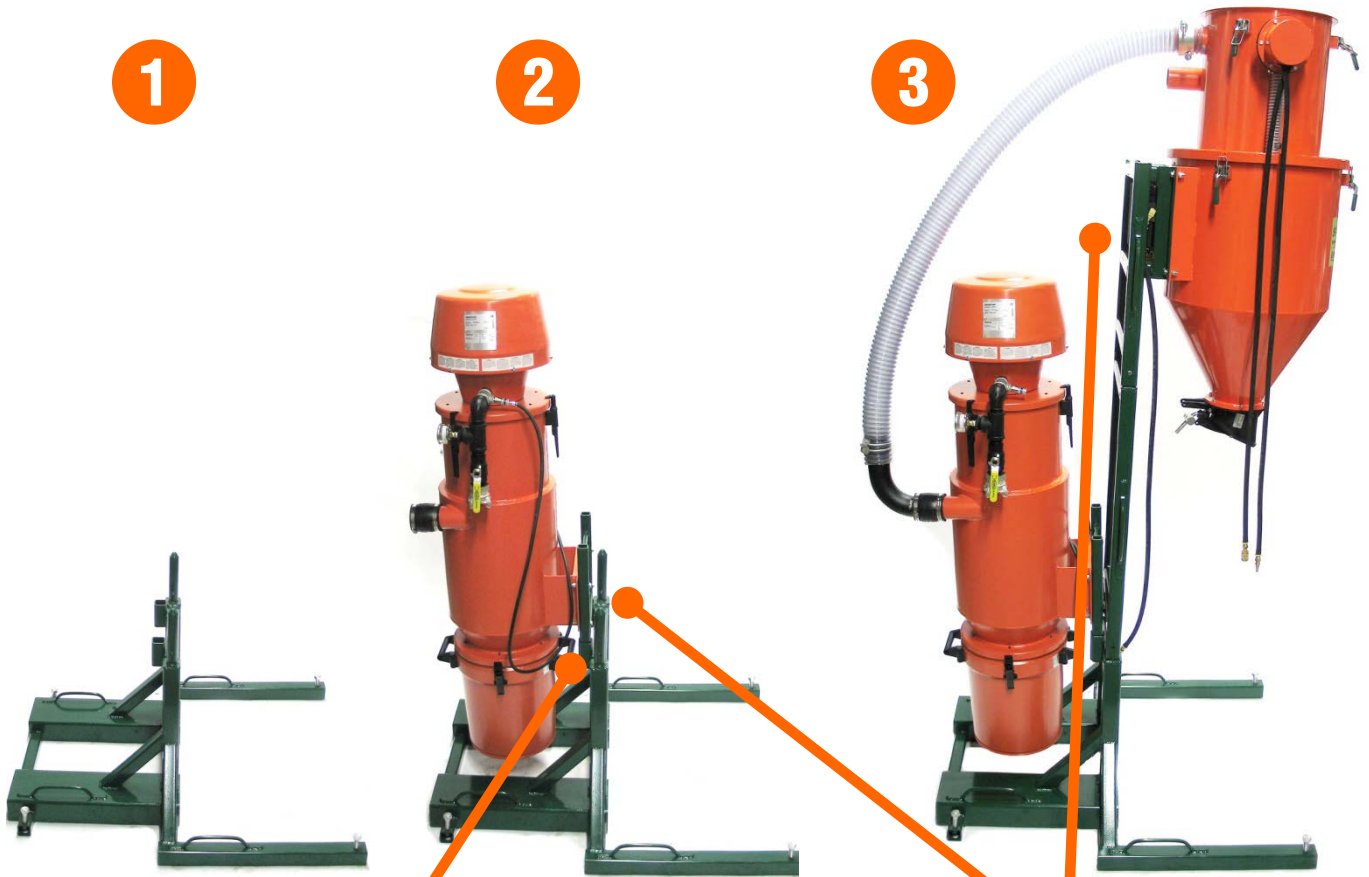
3.0 Assembly



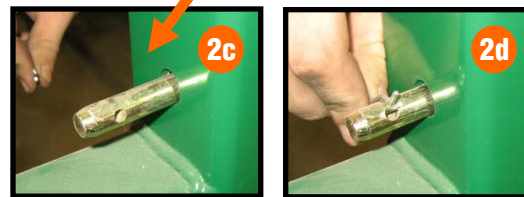
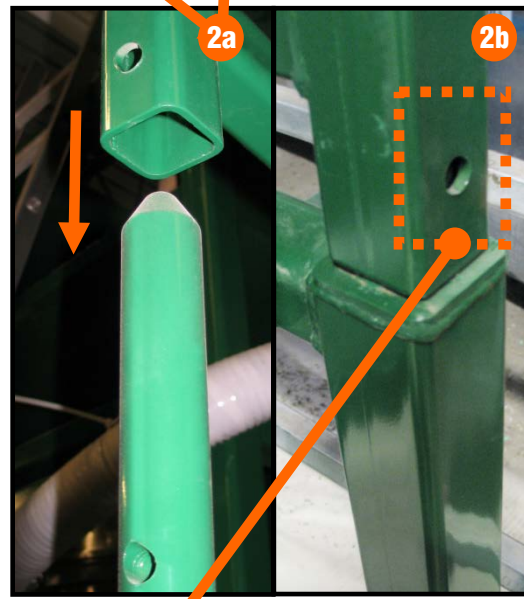
Representative images

Verify the unit is stable, secure and on a flat surface. Use the four provided leveling bolts to balance and/or stop the unit from rocking.



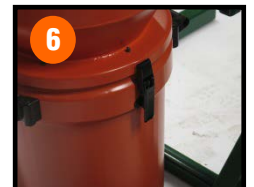
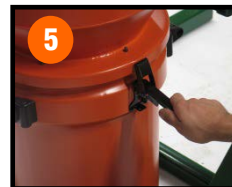
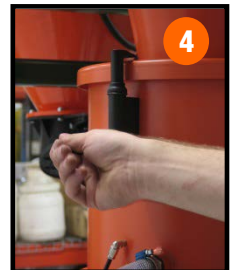
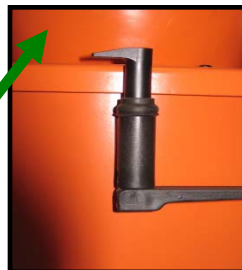
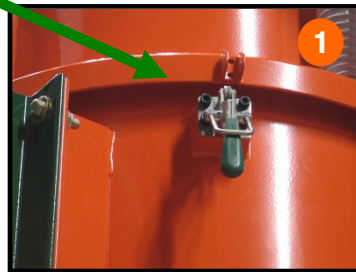
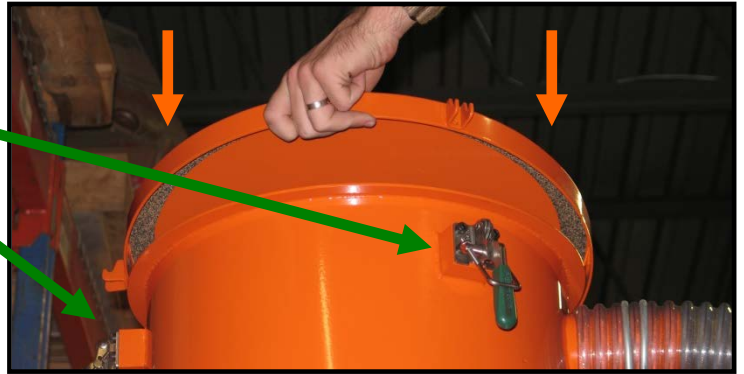
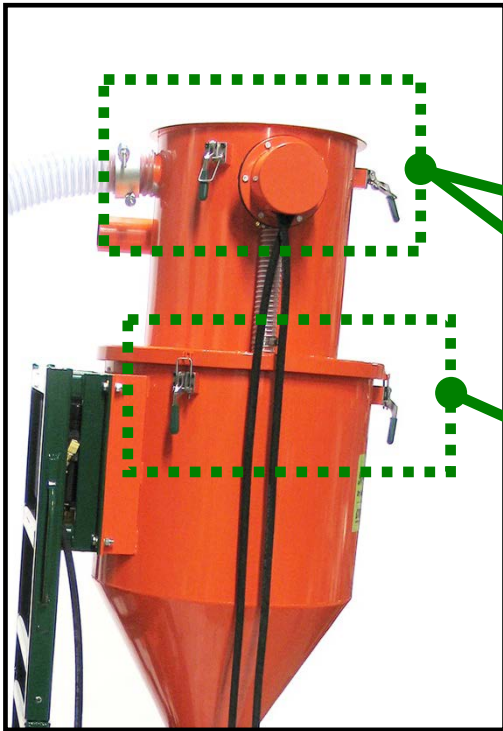


Insert the **Frame Locking Pin**,
secure with clevis pin



Insert the **Frame Locking Pin**,
secure with clevis pin

Check all **Clamps** are engaged

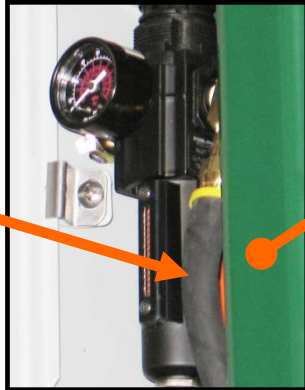


NOTE: This clamp style may also have been used.

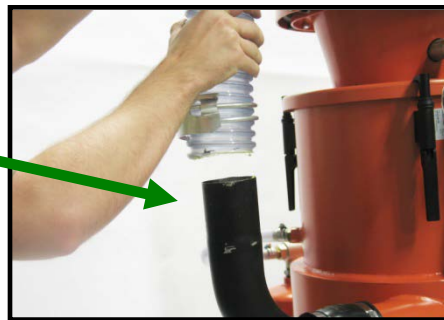
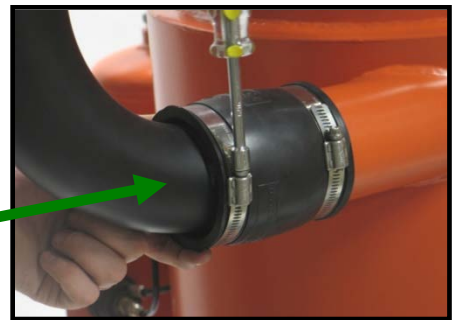
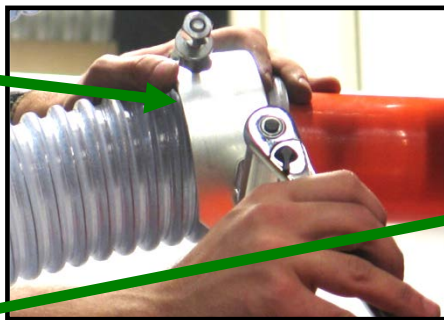




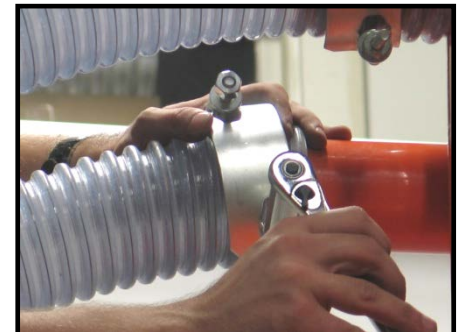
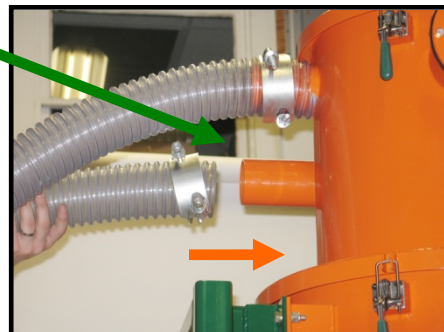
Connect **Timer Control Panel Pressure Line** to **Automatic Purge System**



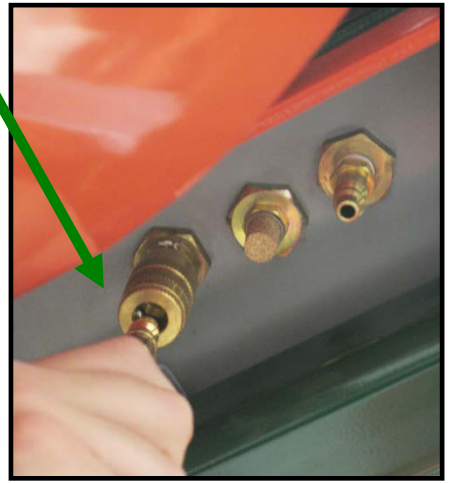
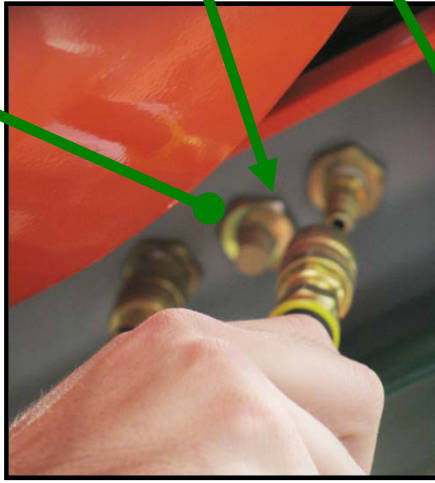
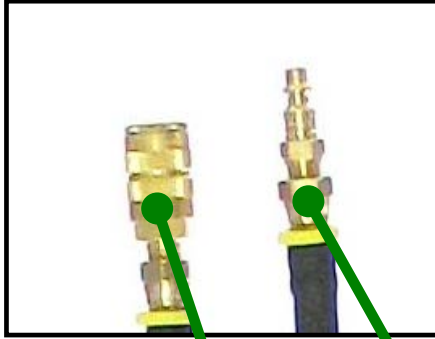
Connect **Internal Vacuum Source Hose**



Connect **Vacuum Hose**



Connect pneumatic **Vacuum Pressure Transfer** lines



4.0 Requirements

4.1 Air Supply/Compressor

Clean, dry compressed air must be supplied. For optimal performance the air supply should be **4.1nm³/min (145cfm) at 7bar(100psi)**.

**4.1nm³/min
(145cfm) at
7bar(100psi)**



4.2 Air Supply Connection

This unit is supplied with a 32mm (1.25in) National Pipe Thread (NPT) nipple fitted with a 32mm (1.25in) universal 4 lug coupling. The air supply hose should be fitted with a mating connector or replace both connectors as desired.



Connect a minimum 32mm (1.25in) supply hose to **Supply Line Connection**. **Note:** High-humidity environments require additional moisture separators (note: no included).

5.0 Operation

Before Pressurization and Operation:

- Verify the unit is stable, secure and on a flat surface.
- All pneumatic lines should be inspected for holes, wear and proper fit.
- Safety pins and restraints should be fitted at all Supply Air Hose couplings to prevent accidental disconnection.
- Before all activities (other than normal operation), ensure the entire system is depressurized.
- Do not move/transport with Sponge Media in unit or when Frame is fully assembled. Moving unit while fully loaded or when Frame extends the Cyclone Hopper above 1.88m (74in) may result in property damage or serious injury.

NOTE: DO NOT VACUUM WATER; MOISTURE WILL DAMAGE FILTER

1. Check that all **Clamps** are engaged.



2. Connect air supply hose to **Supply Line Connection** and secure with safety pins and restraints



3. Open **Main Air Ball Valve**



4. Vacuum **Sponge Media™**



6.0 Troubleshooting

<p>Unit won't turn on</p>	<p>Ensure air supply is maintaining an average of 7bar(100psi). Note: pressures higher than recommended can reduce vacuum performance.</p>
<p>Unit won't vacuum</p>	<p>Check for obstructions in Vacuum Hose and remove.</p> <p>Check filter:</p> <ol style="list-style-type: none"> 1. Remove excessive dust or debris 2. Inspect for physical damage 3. Inspect for moisture damage <p>Replace if necessary</p> <div data-bbox="852 531 1494 1083"> </div>
<p>Reduced Vacuum Pressure; Vacuum Pressure is weak</p>	<p>Check Differential Pressure gauge does not read above 0.2Bar. If Differential Pressure gauge does read above 0.2Bar, clean and/or replace filter.</p> <div data-bbox="565 1224 1494 1732"> <p>>0.2bar</p> </div>

