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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

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

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
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<tbody>
<tr>
<td>Unit won’t turn on</td>
<td>Ensure air supply is maintaining an average of 7bar (100psi). <strong>Note:</strong> Pressures higher than recommended can reduce vacuum performance.</td>
</tr>
<tr>
<td>Unit won’t vacuum</td>
<td>Check for obstructions in Vacuum Hose and remove.</td>
</tr>
<tr>
<td></td>
<td>Check filter:</td>
</tr>
<tr>
<td></td>
<td>1. Remove excessive dust or debris</td>
</tr>
<tr>
<td></td>
<td>2. Inspect for physical damage</td>
</tr>
<tr>
<td></td>
<td>3. Inspect for moisture damage</td>
</tr>
<tr>
<td></td>
<td>Replace if necessary</td>
</tr>
<tr>
<td>Reduced Vacuum Pressure;</td>
<td>Check Differential Pressure gauge does not read above 0.2Bar.</td>
</tr>
<tr>
<td>Vacuum Pressure is weak</td>
<td>If Differential Pressure gauge does read above 0.2Bar, clean and/or replace filter.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Image of Differential Pressure gauge" /></td>
</tr>
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>0.2bar