SUPERIOR PERFORMANCE
And Quality In Blast Cleaning Equipment

WARNING

Read Manual
Failure to read, understand & follow all safety and operation procedures in this manual can cause injury or death. Manuals that are lost, incomplete, or damaged, must be replaced immediately.

Manual #RPDC1811
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Important Notice

TO DISTRIBUTORS, PURCHASERS AND END USERS OF MOD-U-BLAST PRODUCTS

The information provided described and illustrated in this material is intended for experienced, knowledgeable users of abrasive blasting equipment and supplies (products). The products described in this material may be combined as determined solely by the user in a variety of ways and purposes. However no representations are made as to intended use, performance standards, engineering suitability, safe practices or compliance with government regulations and laws that apply to these products, products of others, or a combination of various products chosen by the user or others. It is the responsibility of the users of these products, products of third parties, and a combination of various products, to exercise caution and familiarize themselves with all applicable laws, government regulations and safety requirements.

Nor are representations made or intended as to the useful life, maintenance cycles, efficiency or performance of the referenced products of any combination of products. This material must not be used for estimating purposes. Production rates, labour performance or surface finishes are the sole responsibility of the user based on the user’s expertise, experience and knowledge of industry variables.

It is the responsibility of the user to insure that proper and comprehensive training of operators has been performed and all environmental and safety precautions observed.

Mod-U-Blast Inc. provides a variety of excellent products to the surface preparation industry, and we are confident that all proficient users, operators and contractors in this industry will continue to use our products in a safe and knowledgeable manner.

Before using this product, read all instructions, literature, labels, specifications and warnings sent with and affixed to the unit.

If operation of the unit is unclear after reading this manual, contact your supervisor for instructions. It is the responsibility of the employer to read the following instructions to users of this equipment. Periodic inspection at the work site should be made by supervisory personnel to ensure the blast machine is being properly used and maintained. A copy of this owner’s manual must be kept with the blast machine and readily accessible to the blast machine operators at all times.

It is the responsibility of the user to insure that proper and comprehensive training of operators has been performed and all environmental and safety precautions observed.
Warnings

**WARNING:** Over time, exposure to any dust could result in lung medical issues or death. Use a reverse pulse dust collector with HEPA filters if lead or other toxic materials are removed from items during the blasting process.

**WARNING:** Do not disconnect air hoses while the system is under pressure, this could cause serious injury or death.

**WARNING:** Use proper respirator and eye protection when servicing the dust collector.

**WARNING:** When servicing the dust collector, disconnect and lock out the electrical supply and disconnect the air line from the compressor.

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**WARNING**

Mod-U-Blast Dust Collection Systems are not designed for filtration/extraction of combustible or explosive materials. If you are unsure of your dust particulate, please contact a Mod-U-Blast representative for more information.
Important Safety Items

Read all instructions before using this equipment. For efficient and safe production reference the OSHA requirements.

1.1 Dust Collector Manual

This manual contains important instructions for the safe operation of this dust collector. Before attempting to operate this dust collector all personnel intending on using this equipment must read all of the complete manuals and familiarize themselves with the operation and parts.

1.2 Safety Considerations

- Dust collectors require high pressure air to pulse the filters.
- Dust collected by a reverse pulse collector must not be allowed to become concentrated in areas where workers are exposed. This requires proper maintenance of the dust collection & hepa components. (If equipped)
- When selecting a location for the dust collector take into consideration wind, seismic zone and all load conditions.
- Electrical installation, service and maintenance must be performed by a qualified electrician.

1.3 Operator’s Responsibilities Before Starting

- Inspect fittings, valves and hoses for damage and wear. Repair any air leaks before operating.
- Clean the dust collector filters as needed and empty the dust collector hopper daily.

IMPORTANT NOTE: When using this dust collector the filters need to be seasoned before pulsing. Do not turn on the auto pulse until 4-5 hours of blasting and/or one cycle of reclaiming media has occurred.

1.4 Cautions

- The compressed air supply to the pressure system needs to be oil and moisture free.
- Working air pressure of the dust collector pulse system must not exceed 80 P.S.I.

1.5 Maintenance

- Disconnect the power and air supply from the dust collector before servicing.
- Keep all components in good repair. Use Mod-U-Blast parts only and do not substitute or modify.

For Service Call:
1-800-661-3842
Dust Collector Start-Up and Operation

Dust Collector Set-up

1. Remove the banding securing the dust collector to the shipping pallet.
2. Remove any loose items shipped on the pallet.
3. Install straps or chains to the lifting eyes.
4. Using a forklift or crane lift the dust collector carefully and place near the equipment its being used with. Connect the inlet flex hose to the dust collector from the cabinet and be sure it is not kinked and is as free flowing as possible.
5. Install dust pail and flex hose and tighten clamps.
6. If your dust collector is 110 volt, single phase, 1hp then connect it to the female connector attached to the top of the blast cabinet. (For 2hp or higher a motor controller will need to be installed by a qualified electrician)
7. Plug auto pulse box into a 110v outlet.

Initial Start-Up Check

1. Turn dust collector fan motor ON.
2. Check for proper fan rotation - looking down from the top rotation is clockwise.
3. All access doors should be sealed and secure.
4. Check that the dust hopper is properly sealed.
5. Remove any loose items in or near the inlet or outlet of the dust collector.
6. Set the air pressure on the regulator to 80 psi. (Do not turn on the auto pulse box - see below)

Operation Checklist

NOTE: DO NOT TURN THE FILTER AUTO PULSE ON UNTIL AFTER 4-5 HOURS OF RUNNING THE DUST COLLECTOR TO REMOVE DUST FROM THE CABINET WHILE BLASTING. THIS IS TO SEASON THE FILTERS & TO PREVENT ANY PERFORATIONS IN THE FILTER MATERIAL.

1. Monitor the physical condition of the dust collector and repair or replace any damaged components.
2. Check the compressed air components for leaks.
3. Monitor pressure drop across filters. Changes in pressure drop may indicate a change in operating conditions. (See Magnehelic Gauge below)
4. Check the exhaust
5. Check the dust disposal.

Magnehelic Gauge Operation: Model 2015 (If installed)

The Magnehelic gauge measures differential pressure between the clean air and dirty air plenums of the dust collector and provides timely information of filter change requirements.

When the Magnehelic reading is between 5-6 on the gauge the filters need pulsing.
To check the condition of the filters using the Magnehelic reading, pulse the filters with the blower fan off for 4 hours and then start the dust collector blower fan. If the reading continually stays between 5-6 on the Magnehelic gauge it is time to change the filters. (see filter removal and installation)

NOTE: AFTER THE FILTERS ARE SEASONED THE AUTO PULSE CAN BE TURNED ON AND STAY ON. THE FILTERS CLEAN BETTER WHEN PULSED WHILE THE BLOWER FAN IS OFF.
Dust Disposal

1. Empty the dust container as required to minimize the amount of dust in the hopper.
2. Care should be given to make sure the dust pail does not overfill - empty the container when it is about 2/3 full or less.
3. Reinstall the dust container.

NOTE: If the 6” slide gate is left open during operation of the dust collector it must be sealed to the waste container.

Dust Collector Maintenance

When servicing the dust collector disconnect and lock out the electrical supply and disconnect the air supply from the compressor.

Maintenance Schedule For Reverse Pulse Dust Collectors

Daily Maintenance

• Report and / or fix any operational problems
• Correct and repair any safety issues
• Pulse dust filters (only after seasoning)
• Empty dust collector hopper

Six Month Maintenance

• Check dust collector filters - if the magnehelic gauge on the DC reads 5-6 inches even after pulsing then the filters need replacing (see filter removal and installation)
• If no Magnehelic gauge is installed then check the filters about every six months and Mod-U-Blast suggests replacing the filters annually.
• Check for leaks in dust hoses

NOTE: The auto pulse control panel uses a Zelio timer internally. Should the pulse time between filter banks need to be adjusted for any reason please contact the Mod-U-Blast service departments for directions.
Filter Removal and Installation

Be sure to use proper safety and protective equipment when removing the dust contaminants and dirty filters.

Turn off electrical power source and lock out before performing service or maintenance. Turn off Auto Pulse.

Turn off compressed air supply and bleed the dust collector storage tank before performing service or maintenance.

Do not operate the dust collector with missing or damaged filters.

NOTE: Dirty filters may be heavier than they appear. Safe measures should be taken when removing

**Removal**

1. Open filter door by removing the wing nuts.
2. Clean the dust off the threaded rod below the first filter plate with a brush and loosen the nut by turning CCW until the filter cartridge has enough clearance to slide out vertically.
3. After the filter is out, remove the entire plate by lifting it straight up until the threaded rod clears the support bar. Make sure the threads are cleaned before reinstalling.
4. Repeat this process to remove the second filter.

**Install**

1. To install the new filters place the filter plate back on the support bracket.
2. Place the new filter on the filter plate (rubber seal on filter towards the top of the dust collector).
3. Tighten the nut on the filter plate CW until the filter doesn’t turn using both hands while being careful not to overtighten. If the cage starts buckle then it has been over tightened.
Horizontal Filter Requirements

<table>
<thead>
<tr>
<th>DUST COLLECTOR</th>
<th>NO. OF FILTERS</th>
<th>STOCK NUMBER</th>
<th>FILTER TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>M600-2C</td>
<td>2</td>
<td>11507</td>
<td>Cartridge</td>
</tr>
<tr>
<td>M900-2C</td>
<td>2</td>
<td>11507</td>
<td>Cartridge</td>
</tr>
<tr>
<td>M1200-2C</td>
<td>2</td>
<td>11506</td>
<td>Cartridge</td>
</tr>
<tr>
<td>M1200-2CN</td>
<td>2</td>
<td>11506VM</td>
<td>Cartridge</td>
</tr>
</tbody>
</table>

HEPA Filters (if installed)

<table>
<thead>
<tr>
<th>STOCK NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>11516HF</td>
<td>Filter, Hepa, Large</td>
</tr>
<tr>
<td>11516PF</td>
<td>Pre-Filter, Hepa, 24&quot; x 24&quot; x 1&quot;</td>
</tr>
</tbody>
</table>

Dust Collector Parts

<table>
<thead>
<tr>
<th>STOCK NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>50350</td>
<td>Regulator</td>
</tr>
<tr>
<td>51202-125</td>
<td>125 PSI Relief Valve</td>
</tr>
<tr>
<td>16424</td>
<td>Magnehelic Gauge</td>
</tr>
<tr>
<td>SP-RCAC25DD</td>
<td>Goyen Valve</td>
</tr>
<tr>
<td>16440</td>
<td>Electric Coil for Goyen Valve</td>
</tr>
<tr>
<td>SP-RCAC25</td>
<td>Goyen Valve Repair Kit</td>
</tr>
</tbody>
</table>

Replacement Auto Pulse Control Box Complete

<table>
<thead>
<tr>
<th>STOCK NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>16990</td>
<td></td>
</tr>
</tbody>
</table>

For Supplies and Parts Call - 1-800-661-3842
<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan blower and motor don’t start</td>
<td>Not wired correctly</td>
<td>Check and correct the motor wiring.</td>
</tr>
<tr>
<td></td>
<td>Electrical supply circuit down</td>
<td>Check power supply circuit. Check for fuse or circuit breaker fault</td>
</tr>
<tr>
<td>Fan blower and motor start - do not stay running</td>
<td>Incorrect motor controller installed</td>
<td>Check for proper motor controller and replace if required</td>
</tr>
<tr>
<td></td>
<td>Electrical circuit overload</td>
<td>Check that the power supply circuit has sufficient power to run the dust collector</td>
</tr>
<tr>
<td>Clean air outlet discharging dust</td>
<td>Filters not installed properly</td>
<td>See filter installation</td>
</tr>
<tr>
<td></td>
<td>Filter damage, gasket damage or holes in filters</td>
<td>Replace filters if necessary - See filter installation</td>
</tr>
<tr>
<td>Suction too low</td>
<td>Blower fan rotation backwards</td>
<td>Proper fan rotation is clockwise when looking down at the motor top - Electrician will have to change wiring in the motor controller</td>
</tr>
<tr>
<td></td>
<td>Cabinet intake holes closed</td>
<td>Open the cabinet intakes or remove items blocking the holes</td>
</tr>
<tr>
<td></td>
<td>Exhaust area restricted</td>
<td>Check all exhaust areas for obstructions. Adjust where available. Adjust any damper flow controls if available</td>
</tr>
<tr>
<td></td>
<td>Filters need replacing</td>
<td>Remove and replace filters. See filter removal and installation</td>
</tr>
<tr>
<td></td>
<td>Lack of compressed air for filter pulsing</td>
<td>Check the dust collector regulator is set to 80 psi and for any air leaks and repair</td>
</tr>
<tr>
<td></td>
<td>Pulse valves not working</td>
<td>Check to see if the auto pulse box is plugged into a 110 volt receptacle and that the switch is turned to the ON position.</td>
</tr>
</tbody>
</table>
Warranty Coverage

Mod-U-Blast equipment is covered by a one (1) year warranty against defects in material and workmanship starting from the purchase date. This covers the equipment as well as all major components.

This warranty does not apply to abnormal use of the equipment or parts. Parts considered consumables are not covered by warranty.

Claims will be honored only if the warranty card is returned within a period of two (2) months from the factory shipping date.

The card can be returned to your Mod-U-Blast salesperson or mailed to the address below.

In the event of failure of this equipment please contact a Mod-U-Blast service centre or call (780) 425-5510.

MOD-U-BLAST

403 - 69 Avenue NW
Edmonton, Alberta
Canada
T6P 0C2
PH: (780) 425-5510    FAX: (780) 425-5540