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Operation Manual & Part List Model DP-38 & DP-48 Direct Pressure Blast Cabinets

WARNING!! Abrasive blast cabinets produce a powerful flow of abrasive particles. To avoid personal injury and/or property damage, read this manual thoroughly before operating the blast cabinet. It is suggested this manual is kept for reference of blaster model number and replacement parts listing.

This blast cabinet is set up for use with DRY Abrasive Materials ONLY! DO NOT MIX FLUIDS WITH BLAST MATERIAL!

Introduction

Cyclone abrasive blast cabinets are designed for cleaning and finishing with dry blast materials such as glass beads, aluminum oxide, blasting garnet, silicon carbide and sands. The system is sealed at all openings, such as the door, window, pressure pot and lever arm. The blast system will produce several different finishes, depending on the type of blasting material used.

Precautionary Check List

- * Always close cabinet door(s) before blasting.
- * Make sure all air connections are secure.
- * Follow shut down instructions.
- * Always clean any spilt blasting material from work area. It can cause floors to become slippery.
- * Use lower air pressure to clean soft metals and delicate parts.
- * Always keep the blast stream moving in a circular or horizontal motion. Any blast concentrated in one area will result in pitting and uneven blast surface.
- * **DO NOT USE STEEL SHOT IN THIS BLAST CABINET!** This cabinet is not designed for or set up for still shot. Use of steel shot in this blast unit will void the warranty and possible injury the operator!
- * **DO NOT USE LIQUID OF ANY KIND IN THIS BLAST CABINET!** Liquids will cause the blast media to clump up and not flow out of pressure pot properly. Use of any liquids will void the warranty and could cause damage to the cabinet

How To Assemble and Install Blast Cabinet

- 1) Open side door, reach into cabinet and screw a max 70 watt rough service lamp into socket located just inside the door opening.
- 2) Take spring form bag and attach to tab on rear of cabinet. The chain should be connected to each floor leg extension of the cabinet. Open cabinet so that the spring hangs away from the cabinet. Put ' S ' hook from the button of the spring assembly through the middle of the chain assembly (that was attached to the skid). This will help assist you in ' easing ' the lid back to open it, rather than allowing it to slam or fall back abruptly.
- 3) Take the dust collection system out of the cabinet and assemble according to manufactures directions. The dust system hose will fit into the 1 1/4" hole found on the upper left hand side of blast unit. It just slides in- no holding device. Plug dust system and cabinet into a grounded outlet. Both the dust system and blast cabinet have 3 pronged grounded plugs to guard against electric shock. If only 2 pronged receptacle is available, a ground adapter can be used. Make sure the green lead from the adapter is properly attached to a grounded wire system. If any extension cords are used, be sure they are in good condition. Note: The Canadian Electrical Code prohibits the use of 3 pronged adapters.
- 4) Make sure all ball valves are in the ' closed ' position. (See picture).
- 5) Pour blast media through the metal screen on the inside of cabinet into the blast hopper. We suggest 25 - 35 lbs. of blast material. Overfilling will not allow the tank to close & seal properly.
- 6) Pull on the handle on the outside front of cabinet. Holding this handle open will allow the blast material to fall into the pot. Let the handle ' slap ' closed several times to ensure not blast material is blocking the tank seal.
- 7) Check again that all ball valves are in the ' closed ' position.
- 8) Place work piece inside the cabinet onto the seal screen. Close all doors.
- 9) Connect air supply to ball valve ' A '. Open valve ' A ' to fully open position.
- 10) Open valve ' B ' to 1/4 - 1/2 open position. **NEVER OPEN ANY FURTHER!** This will cause hoses to plug up.
- 11) Place hands into gloves in the cabinet. Hold onto the blast gun assembly.
- 12) Depress foot pedal. It will take several seconds until the media will come out of nozzle end.
- 13) Adjust valve ' B ' to get an even flow of blast material.

AIR LINE PRESSURE INFORMATION!!!! VERY IMPORTANT!!!

This unit features a unique system for controlling air flow to the blast nozzle. Air that enters ball valve ' A ' enters at "LINE PRESSURE".

Then it flows into the air regulator (Item ' D ') and enters the tanks at a lower pressure than "LINE PRESSURE". We have turned the regulator down. You may need to adjust for your particular application.

If the pressure in the tank equals the line pressure, the diaphragm valve on the button of the tank will not function, allowing air and blast material to flow uncontrolled out of the blast nozzle inside your cabinet. This can cause damage to your work piece.

THE REGULATOR SHOULD BE SET 10-20 PSI LOWER THAN YOUR LINE PRESSURE IN ORDER FOR THE SYSTEM TO FUNCTION PROPERLY!!

SHUT DOWN INSTRUCTIONS:

- 1) CLOSE THE AIR INLET VALVE ' A '.
- 2) DISCONNECT AIR SUPPLY FROM THIS VALVE.
- 3) DEPRESS FOOT PEDAL AND ALLOW ALL AIR PRESSURE TO LEAVE THE SYSTEM THRU THE NOZZLE END.
- 4) AFTER ALL AIR PRESSURE IS RELEASED, YOU CAN PUSH THE LEVER HANDLE DOWN TO OPEN TANK SEAL TO ADD BLAST MATERIAL IF NECESSARY.

Warranty:

Cyclone abrasive blast cabinets are warranted against defects in workmanship or materials in accord with the following terms:

- * Warranty extend to the original owner only.
- * Warranty does not cover blast cabinets used in commercial rentals.
- * Warranty is valid for one year (1) following the date of purchase.
- * Warranty does not cover standard wear items such as the nozzle, orifice, blasting material, window glass and gaskets.
- * Warranty does not cover misuse of blast cabinet. This includes failure to follow instructions.
- * Warranty does not cover blast unit if altered or otherwise changed from original state from the factory.
- * WARRANTY DOES NOT COVER DAMAGES IN TRANSIT. IN SUCH CASES, THE RECEIVER SHOULD CONTACT THE FREIGHT CARRIER WITHIN 15 DAYS OF DELIVERY TO FILE A CLAIM. IT IS NOT THE RESPONSIBILITY OF THE MANUFACTURER TO FILE THE CLAIM. IF ANY PARTS SHOULD BE REQUIRED TO FIX A FREIGHT DAMAGED UNIT, THE RECEIVER WILL BE BILLED ACCORDINGLY. THIS BILL CAN THEN BE TURNED OVER TO THE FREIGHT CARRIER.

USERS SHOULD CALL THEIR DISTRIBUTOR OF THE FACTORY UPON INSPECTION OF ANY PROBLEM. A TECHNICAL PERSON CAN ASSIST YOU.

This warranty grants the users certain legal rights. Users and purchasers may also be protected by other rights that vary with location.

Note: Except for the warranties set forth above, Cyclone makes no other warranties of any kind-express or implied. Including warranties of merchantability of fitness of product for a particular purpose.

Trouble Shooting

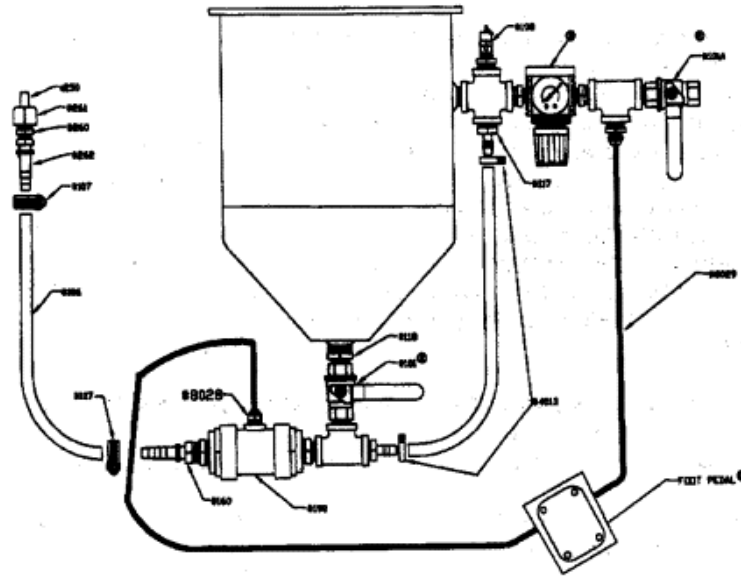
Problem	Cause	Remedy
Excessive Dust	Dust collection system failing Too much blasting material Blasting material worn	Clean out canister and/or replace filters Remove excess material Replace with new material
Surging	Too much blasting material	Remove excess material
Inadequate Blast	Blast material worn Gun parts worn Blaster material worn Too much air	Replace with new material Replace with new nozzle & orifice Replace with new material Regulate air to 80-100 psi
Static	Change in humidity Faulty ground wiring	Stand on cardboard/rubber mat Install static electric band/ground Check electrical wiring Get lined gloves

Suggestions

- * Obey all applicable electrical and safety codes including the National Electric Code (NEC) and the Occupation Safety & Health Act (OSHA).
- * Always read manual before operating equipment. Keep manual as a reference.
- * Always unplug the blast cabinet BEFORE any maintenance is done. This includes changing light bulb.
- * Note wear on nozzle, orifice and blast material. All of these items can make blast cabinet seem inefficient.
- * Call the factory or your distributor if you have any questions regarding this blast cabinet.

Maintenance

- * Always disconnect blast cabinet and dust collection system before any maintenance.
- * Periodically clean inside of blast cabinet. With dust collection system on, detach black abrasive hose from the under side of the blast gun. Close the side door and pull trigger as if to blast. The air coming through the gun will dislodge any deposits of debris in the cabinet. Unhatched the dust collector hose to get any areas missed by the air stream.
- * Empty dust collection system frequently. The more the cabinet is used, the more often the dust system should be cleaned out. Also check the cartridge filter for any wear. This filter can be blown off with an air supply to clean.
- * Check door, lid and/or window gasket for wear or damage. If necessary, call your distributor for replacement. Be sure to have model number of blaster handy for faster service.



WARNING

TO AVOID COMMON PROBLEMS

NEVER OPEN VALVE AT BOTTOM OF TANK FULLY OPEN. FULL OPEN WILL CLOG HOSES. OPEN SLOWLY TO ALLOW SMALL AMOUNTS OF SAND.

DO INSTALL A MOISTURE TRAP IF AIR LINES HAVE WATER. WATER AND MOISTURE PLUG THE HOSES AND KEEP THE MEDIA FROM FLOWING.

DO USE DRY BLASTING MATERIALS. DO NOT ALLOW BLASTING MATERIAL TO SIT IN BLAST POT UNUSED FOR LONG PERIODS OF TIME. THE MATERIAL WILL PICK UP HUMIDITY AND NOT FLOW.

NEVER LET ANY DEBRIS FALL INTO BLAST POT AS CLOGGING WILL OCCUR.

DON'T USE WALNUT SHELLS, PLASTIC GRANULES OR METAL ABRASIVE IN THIS SYSTEM.

Replacement Parts List and Accessory Listing

4056	Door Gasket (Spec. Model)	2001	Window Glass
2010	Glove Clamp	2018	Gauge
2019	Regulator	2027	Window Frame
2028	Door Handle Assembly	2057	Pack of 12 Mylar Sheets*
101	Brass Ball Valve-Media	101A	Brass Ball Valve-Air
106	3/8" ID Blast Hose	107	Hose Clamp for 3/8" Blast Hose
160	1/2" x 3/8" Steel Hose Barb	190	Diaphragm Valve Only
175	Diaphragm Valve W/Foot Pedal		
250	1/8" Ceramic Nozzle	250TC	1/8" Tungsten Carbide Nozzle*
251	3/32" Ceramic Nozzle*	251TC	3/32" Tungsten Carbide Nozzle*
252	5/32" Ceramic Nozzle*	253	7/64" Ceramic Nozzle*
260	3/8" x 1/4" Nozzle Holder	261	3/8" Nozzle Cap
262	1/4" x 3/8" Steel Hose Barb	264	Nozzle Gasket
265DP	Nozzle End Assembly	8025	Complete Foot Valve Assembly
8026	Valve Only For Pedal	8029	Tubing For Foot Pedal
2023	24" Gloves	2011	Plastic Glove Insert

See DC1500 Manual For Replacement Parts.

Items marked () are accessories and DO NOT COME STANDARD WITH THIS UNIT. They may be purchased separately.