

# Operational Manual & Parts Listing

## Model 4040 Abrasive Blast System



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Safety alert signal words based on ANSI Z535.4-1998 are used to alert the user of a potentially hazardous situation that may be encountered during operation of this equipment.  
ANSI definitions are as follows:

**CAUTION**

Caution used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

 **CAUTION**

Caution indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate damage.

 **WARNING**

Warning indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death.

 **DANGER**

Danger indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.

**CAUTION**



- 1) Follow all electrical and safety codes as well as the National Electric Code (NEC) and the Occupational Safety & Health Act (OSHA).
- 2) Follow assembly instructions BEFORE plugging system in to electrical or air supply. Use caution even when installing a light bulb.

**CAUTION**



- 1) The unit is equipped with a 3 prong grounding plug for your protection against electrical shock. Use only adequate extension cords with 3 prong grounding type plugs which are appropriate for long periods of use. Replace damaged or worn extension cord(s) immediately. Use a 3 prong receptacle to plug system or extension cord into.
- 2) Make sure power source conforms to the requirements of your equipment.
- 3) This is a dry blast system. It is not made to accommodate use with anything liquid or metal.
- 4) Change blasting material regularly. Continued use of blast abrasives will result in poor performance and excess dust.
- 5) Do not exceed recommended maximum air pressure of 120 P.S.I.
- 6) Check and clean dust collection system and filters regularly. Do not wait until dust is escaping from dust collection housings and/or blast cabinet before cleaning the system.

**WARNING**



- 1) Keep any spilt blast abrasive clear from all paths around and near the blast cabinet. Many blast abrasives are powder fine and can be very slippery causing a person to slip and fall.
- 2) Silica sand should be avoided for use in blast systems for health hazards.

**DANGER**



- 1) DO NOT OPERATE CABINET WITH LID AND/OR DOOR OPEN!! This will result in skin damage, serious eye damage and/or blindness if the blast spray were to come into contact with unprotected parts of the body.
- 2) This system is assembled standard with a 1/4" thick clear acrylic view window. Replacement with tempered or single strength glass IS DANGEROUS. Replacing view window with material other than acrylic will result in dangerous glass breakage that can injure the operator or bystanders.
- 3) Never use any type of flammable or combustible material in this blast system.

# How To Assemble and Install Blast Cabinet

## For Starters:

- 1) Open cabinet side door and remove dust collection system and electrical package from the inside of cabinet.
- 2) Open electrical package. Remove all parts for easy identification.  
Electrical package includes: Light assembly, electrical assembly bag, manual, foot pedal assembly and quality control sheet

## Electrical Assembly Installation:

- 1) Remove electrical assembly and assembly bag. Follow instructions for installing the electrical assembly.
- 2) Make sure cabinet IS NOT PLUGGED INTO ELECTRIC SUPPLY WHEN INSTALLING OR REPLACING LIGHT BULBS!  
Open cabinet, reach in and screw in two max 70 watt rough service lamp into socket located just inside the cabinet.

## Foot Pedal Installation:

- 1) Remove foot pedal from electrical package. Thread the hose from the foot pedal into the 1/4" npt port on the safety valve mounted on the left hand side of cabinet. A thread sealant is suggested. Do not over tighten hose into valve as this will cause the valve to not function properly. Attach fitting from your air compressor to the open port on the foot pedal assembly. This is 1/4" NPT and thread sealant is suggested. Once assembled, place on floor under cabinet.

## Dust Collection System:

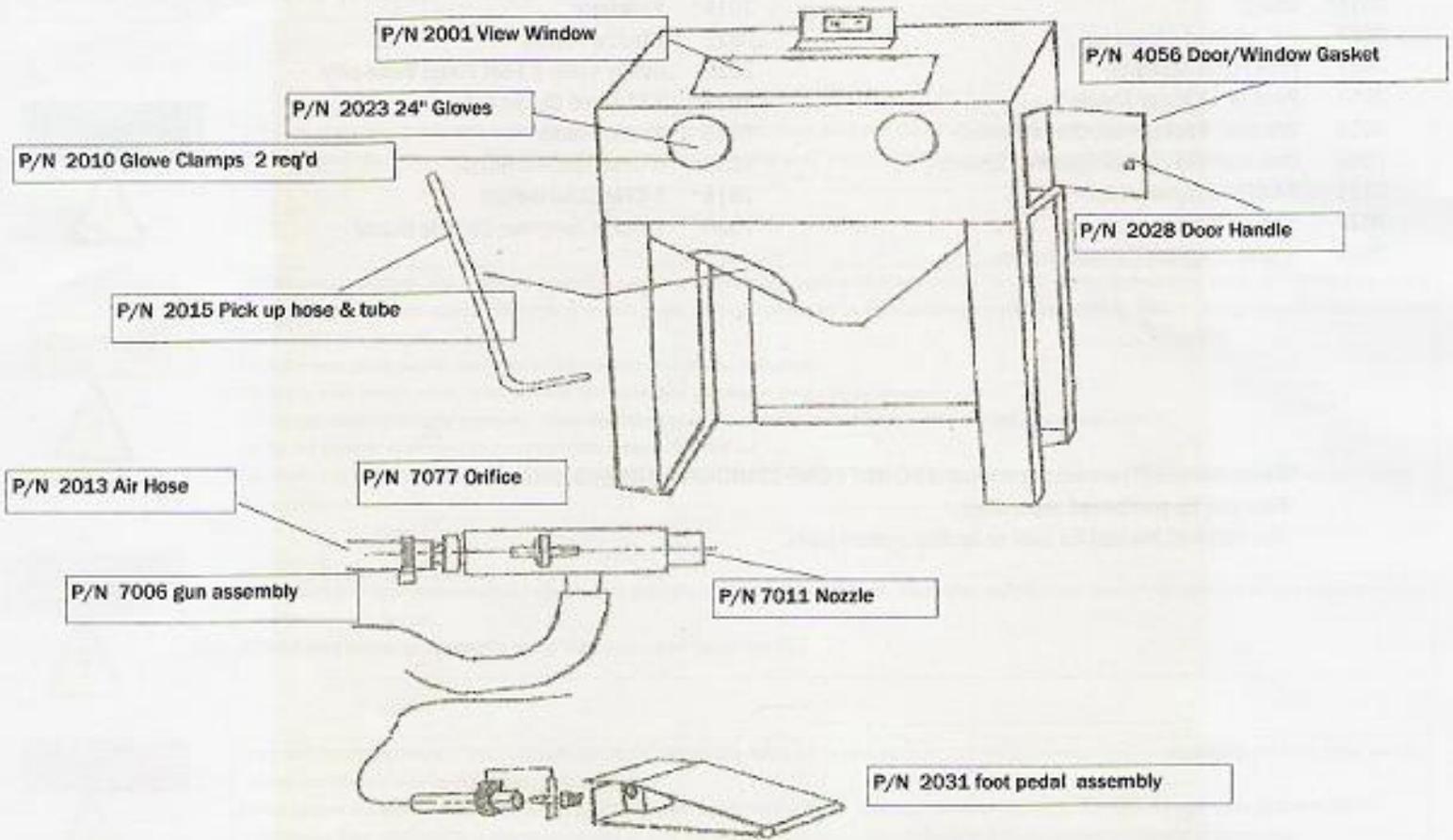
- 1) Assemble the dust collection system according to manufacturers directions. The dust system hose should fit into the 2 1/4" hole found on the upper left hand side of blast unit. It just slides in-no holding device. Plug cabinet into a grounded outlet. The blast cabinet has a 3 pronged grounded plug 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.

## Final Notes:

- 1) Pour dry blast media through the metal screen on the inside of cabinet into the blast hopper. We suggest 10-20 lbs. of blast material. Use of anything liquid or metal is not suggested. This system is not equipped to operate with soda blast material.
- 2) Place part to be blasted on work grate inside cabinet.
- 3) Close lid and latch. Make sure door is closed and latched as well.
- 4) Turn switch on, this will operate the light and the dust collection system.
- 5) Place hands into gloves. Hold onto the blast gun assembly.
- 6) Depress foot pedal. It may take several seconds until the blast media will come out the nozzle end.

## Trouble Shooting

<u>Problem</u>	<u>Cause</u>	<u>Remedy</u>
Excessive Dust	Dust collection system failing	Clean out canister and/or replace filters.
	Too much blasting material	Remove excess material
	Blasting material worn	Replace with new material
Surging	Too much blasting material	Remove excess material Cover hole in metal pick up tube with braided sleeve on tube.
Inadequate Blast	Blast material worn	Replace with new material
	Gun parts worn	Replace with new nozzle & orifice
	Too much air	Regulate air to 70-90 psi
	Too much blast material	Remove excess material. 10-20 lbs. max
Static	Change in humidity	Stand on cardboard/rubber mat. Install static electric band.
	Faulty ground wiring	Check electrical wiring Get lined gloves
Unit Won't Blast	Excessively worn gun parts.	Replace parts and be sure they are in the proper place.



**Warranty:**

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

- \* Warranty extends 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 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 its 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 OR SUPPLIER 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 OR THE FACTORY UPON INSPECTION OF ANY PROBLEM. A TECHNICAL PERSON CAN ASSIST YOU.

This warranty grants the user 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 or fitness of product for a particular purpose.

**Replacement Parts List and Accessory Listing 4040**

2001	View Window	2004	Lid Gasket (spec model)
2010	Glove Clamp	2011	Glove Insert
2013	3/8" ID Air Hose (Spec. Model)	2015	Pick Up Hose & Tube (spec model)
2018*	Gauge	2019*	Regulator
2023	24" Unlined Gloves (pr)	2027	Window frame
2031	Foot Pedal Assembly	2032	Safety Valve & Foot Pedal Valve only
2057	Pack of 12 Nylon Slitters*	2074*	32" Lined Gloves (pr)
4056	Window/Door Gasket (Spec. Model)	7005	Nozzle Holder
7000	Gun Assembly f/foot operated system	7009*	5 CFM Ceramic Nozzle
7011	14 CFM Ceramic Nozzle	7076*	5 CFM Steel Orifice
7077	14 CFM Steel Orifice	7080*	14 CFM Tungsten Carbide Nozzle
7084*	5 CFM Tungsten Carbide Nozzle		

\*Items marked (\*) are accessories and DO NOT COME STANDARD WITH THIS UNIT.

They may be purchased separately.

See DC1500 Manual for dust collection system parts.