

Operational Manual & Parts Listing Model BT20 Abrasive Blast System



P.O. Box 815 Dowagiac, MI 49047 USA
Ph 269-782-9670 Fx 269-782-9623 on the web: cycloneblasters.com
email cyclonemfr@frontier.com

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 nazardous 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.



- 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.



- 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) immediatly. 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 accomodate 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.



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.



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 unrprotected 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 flamable or combustable material in this blast system.

How To Assemble & Install Blast Cabinet

Install Blast Cabinet...

For Starters:

- 1) Open carton and remove the cabinet. Unwrap foot pedal.
- 2) Cabinet is completely assembled, once you have put your cabinet in its place, you can then install the foot pedal on the floor under your work table.

Electrical Assembly Installation:

 Electrical assembly is already installed on the top of the cabinet. 1 each 70 watt max bulb are required. Screw in fluourescent or rough service bulbs work best

Air Connection:

1) Attach hose fittings & hose FROM YOUR COMPRESSOR to the 1/4" NPT port located on the valve of the side of the foot pedal. Then attach the hose from the foot pedal (hose already installed in pedal) to the valve on the right side of the cabinet. A thread sealant is suggested. Do not over tighten hose into valve. 70-90 PSI is required.

Dust Collection System:

**Dust Collection system does not come with this unit.

It is strongly suggested one is used in conjunction with cabinet operation.

1) Assembly the dust collection system according to manufacturers directions.

The dust system hose will slide right into the 2 1/4" hole on the upper left hand side of the cabinet. It slides right in-no holding device required. Insert plug from the dust collector into the receptacle on the cabinet electrical assembly previously installed. The cabinet has a 3 pronged grounded plug to guard against electrical shock. If only 2 pronged receptacle is available, a ground adapter can be used. Make sure the green lead 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:

- Pour dry blast media through the metal screen on the inside of the cabinet into the cabinet hopper. We suggest 10-15 lbs. of blast material. Use of anything liquid or metal is no suggested. This system is not equipped for use with soda blast material.
- 2) Place part to be blasted on work grate inside cabinet.
- 3) Close door.
- 4) Turn switch on, this will operate the light & dust collection system.
- 5) Place hands into gloves. Hold onto the blast gun.
- 6) Depress foot pedal and keep your spray pattern moving across your part. Do not concentrate in one area too long, as it can remove more than you desire. Also, DO NOT POINT TRIGGER GUN AT THE VIEW WINDOW! This will cause the site window to become frosted-thus making it difficult to see and possibly cause damage to or break window; resulting in personal injury!

Problem

Trouble Shooting Cause

Remedy

Excessive Dust

Dust collection system failing

Blasting material worn

Too much blasting material Remove excess material Replace with new material

Surging

Too much blasting material

Remove excess material

Inadequate Blast

Blast material worn Gun parts worn Too much air Replace with new material Replace with new nozzle & orifice Regulate air to 70-90 psi

Static

Too much blast material Change in humidity Remove excess material. 10-20 lbs max Stand on cardboard/rubber mat.

Faulty ground wiring

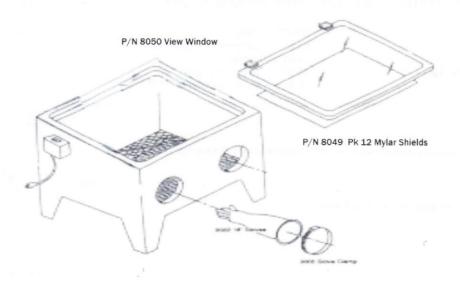
Install static electric band Check electrical wiring Get lined gloves

Unit Won't Blast

Excessively worn gun parts.

Replace parts and be sure they are in the proper

place.



P/N 8038 Nozzle Holder & Tip

P/N 8039 Complete Nozzle End & Tubings

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 RE 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 & Accessories Model BT20

2005	Glove Clamp	2018*	Gauge
2019*	Regulator	2022	18" Unlined Gloves (pr)
2031	Foot Pedal Assembly	2032	Safety Valve
4056	Window Gasket (Spec. Model)	8038	Nozzle & Holder
8039	Wand Assembly	8049*	Pack 12 Mylar Shields
8050	Lid Assembly		

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

See Manual for dust collection system for related parts.