It’s simple, more psi = more productivity. To give you the best possible productivity, CPR pressure vessels are ASME certified and Canadian Registered for all provinces for everyday use at 150 PSI (10.3 BAR).

In addition to their larger 3.0 & 6.0 cousins, these smaller CPR blasters are available in 0.5 & 1.0 cu ft abrasive capacities.

Choose between pneumatic or 12VDC electric controls. Electric controls are recommended for blast hose lengths longer than 100’, feature faster starts/stops, and are less prone to freezing in cold climates.

AMV JR
Abrasive Metering Valve Jr. standard on all models for precise abrasive adjustments.

Adding Abrasive
Abrasive is added through the hole in the top of the Abrasive Blaster where the Pop-up and its seat are located. When abrasive is added, it flows down through the hole, around the Pop-up, and down to the bottom of the pressure vessel where it will exit through the Metering Valve when blasting is started.

Pressurization
When a compressed air source (such as an air-compressor) is connected to the inlet of the Abrasive Blaster and the Inlet Shut-Off Valve is opened, compressed air flows to the Inlet Valve where it is stopped. When the control handle is activated, the Inlet Valve opens and air flows into the Pressure Vessel causing the Pop-up (located internally) to seal against its seat. Simultaneously, the Diaphragm Valve closes and seals the Pressure Vessel allowing it to hold pressure. Air will also continue past the Choke Valve, through the Pusher Line, and finally to the “tee” under the Metering Valve where it is mixed with abrasive. The mixture of compressed air and abrasive will now exit the Abrasive Blaster through a blast hose and nozzle connected to the coupling under the Metering Valve and blasting begins. It is important to note that, some abrasive will collect at the base of the Metering Valve causing the blast hose to pulsate and spray abrasive erratically for a short time while pressure builds up in the pressure vessel. This is normal and will not damage the Abrasive Blaster.

Depressurization (Blow-Down)
When the control handle is released in a pressure release (CPR) system, the Inlet Valve automatically closes stopping the flow of compressed air into the Pressure Vessel. Simultaneously, the Diaphragm Valve opens allowing the compressed air in the pressure vessel to exit the Abrasive Blaster through the Diaphragm Valve. When all the pressure in the Pressure Vessel is released, blasting stops.

(Pressure Release)
**PNEUMATIC**

Pirate Brand® CPR Blasters with pneumatic controls start and stop the blasting process using a bleeder type control handle and twinline control hoses connected to the inlet and outlet diaphragm valves on the blast pot.

**ADVANTAGE:**
- Does not require a 12V power source.

**ELECTRIC**

Pirate Brand® CPR Blasters with 12VDC electric controls start and stop the blasting process using an electric control handle and control cord that activates a control valve connected to the inlet and outlet diaphragm valves on the blast pot.

**ADVANTAGES:**
- Faster starts and stops
- Recommended for blast hose runs longer than 100’
- Less likely to freeze up in cold conditions.

**LP RESPIRATOR**

High pressure respirators require an additional 15 CFM @ 100 PSI to work properly. For those with an air compressor that can produce enough CFM to run the blast equipment but not enough extra for a high pressure respirator we have created Low-Pressure Silver & Gold Packages. These packages feature a 3/4 hp ambient air pump which feeds a low-pressure version of the RPB® ASTRO™ respirator.

**ADVANTAGE:**
- Reduced CFM requirement for your compressor by eliminating the 15 CFM used by the respirator.
**Blasting Set-Up**

**STANDARD STRAIGHT BORE TUNGSTEN CARBIDE NOZZLES**

- 10-034BLK-050-4AL 3/4" EXTENSION HOSE ASSEMBLY, 50'
- 10-034BLK-025-4AL 3/4" EXTENSION HOSE ASSEMBLY, 25'
- 10-050BLK-050-4AL 1/2" EXTENSION HOSE ASSEMBLY, 50'
- 10-050BLK-025-4AL 1/2" EXTENSION HOSE ASSEMBLY, 25'
- 10-050BLK-050-3AL 1/2" BLAST HOSE ASSEMBLY, 50',
- 10-050BLK-025-3AL 1/2" BLAST HOSE ASSEMBLY, 25',

**LONG LIFE SHORT VENTURI BORON CARBIDE NOZZLES**

- 888-7073-055PB ELECTRICAL EXTENSION CORD
- 888-1310-021PB AIR DRYER ADBP-250 CFM @ 100 PSIG

**HIGH PERFORMANCE MEDIUM VENTURI TUNGSTEN CARBIDE NOZZLES**

- 1348-1155 #5 BORON CARBIDE NOZZLE
- 1348-1144 #4 BORON CARBIDE NOZZLE
- 1348-617 #5 TUNGSTEN CARBIDE NOZZLE
- 1348-616 #4 TUNGSTEN CARBIDE NOZZLE
- 1348-614 #3 TUNGSTEN CARBIDE NOZZLE
- 1348-781 #5 TUNGSTEN CARBIDE NOZZLE
- 1348-780 #4 TUNGSTEN CARBIDE NOZZLE
- 1348-430 #3 TUNGSTEN CARBIDE NOZZLE

**AVAILABLE ACCESSORIES**

**A** **LID AND SCREEN**

- Lids are important for keeping moisture from falling into the abrasive blaster in outdoor applications. Moisture in the abrasive blaster can cause obstructions in the metering valve leading to costly down-time.
- Screens are important for keeping foreign objects from falling into the abrasive blaster. Foreign objects in the abrasive blaster can cause obstructions in the metering valve leading to costly down-time.

**B** **MOISTURE SEPARATOR**

- Moisture separators reduce the moisture content of the supplied air to the blaster. Moisture in the air can lead to clogs and premature wear on blaster component.

**C** **REGULATOR KIT**

- Adding a regulator kit to your abrasive blaster will allow you to blast at lower pressures to achieve custom finishes or help control profile.

**D** **MUFFLER**

- Adding a muffler to the blow-down diaphragm valve to reduce noise during depressurization.

**E** **JOB TIMER**

- Keep track of time spent on a job and total hours on your abrasive blaster. Know your cost, control your cost & set up a preventative maintenance program for your blast equipment. Power up with C-Series electro-control systems only.

**F** **POWER SUPPLY**

- Adds a power supply to run any 12SC electric blaster on common 120AC outlet power. Powers up to control valves at one time.

**G** **MPV MINI UPGRADE**

- If you prefer a manual plunger style metering valve, we can swap out the AMV Jr. for the MPV Mini. Factory installed MPV Mini Upgrade: 888-2124-005PB
Pirate Brand®

About Pirate Brand®

At Pirate Brand®, we know abrasive blasting. We have fused our 100+ years of combined experience in the blasting industry with feedback from distributors and end-users to produce abrasive blast equipment and replacement parts that are second to none. In addition to our extensive line of blasting equipment, we produce a full line of aftermarket parts that are 100% compatible replacements for other blast equipment manufacturers. We believe in quality, reliability and productivity so we subject all our products to strict quality control testing to ensure the best possible performance is achieved.

In the tough world of abrasive blasting, quality is crucial, ...and Pirate Brand® delivers.

OTHER AVAILABLE PRODUCTS

S-Series Blasters
C-Series Blasters
Bulk Blasters
Conversion Kits
Air Dryers & Moisture Separators
E & K-Series Blasters

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