C-Series - 3.0 / 6.0 Cu Ft Abrasive Blasters

User's Manual

⚠ WARNING

Abrasive blasting can create dust that may contain toxic materials from abrasive material and the surface being blasted. NEVER use abrasives containing high amounts of crystalline silica including silica sand/beach sand for abrasive blasting. Airborne crystalline silica causes silicosis, a fatal respiratory disease. Abrasive blasting can create high levels of noise that may cause hearing damage. Always use proper safety equipment including respiratory protection, hearing protection, and comply with local, regional and national safety codes. Ensure all operators of the equipment are properly trained and everyone in the area including bystanders are protected from the hazards of abrasive blasting. The manufacturer, wholesaler and distributor assume no responsibility arising from the failure to comply with this warning.

⚠ WARNING

Read Manual

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

Manual P/N: PB-MAC001

Manual Revision: Feb 18

Using This Manual

Thank you for your purchase of a Pirate Brand® CPR Series Blaster. It is important to note that all Pirate Brand® blasting equipment is designed to be safe when used properly, however, misuse of any abrasive blasting equipment is dangerous and can result in the severe injury or death of the operator and others in the vicinity of the blasting equipment. In order to protect yourself and those around you, read and follow all sections of this manual & warning labels located on the blasting equipment.

Definition Of Terms Used In This Manual

Abrasive: A granular material used for blasting the surface of an object. Also referred to as "Media."

Blow-down: The automatic or manual release of air from a pressurized vessel. Also referred to as "Depressurize."

Control Handle: A required device that allows the blaster to be remotely started and stopped. Also referred to as "Deadman."

Depressurize: The automatic or manual release of air from a pressurized vessel. Also known as "Blow-down".

Pressure Hold System: Any blasting system in which the Pressure Vessel remains pressurized when the control handle is released. Also known as a Manual Blow-down System.

Pressure Release System: Any blasting system in which the Pressure Vessel is automatically depressurized when the control handle is released. Also known as an Automatic Blow-down System.

Pressure Vessel: The enclosed area of the blaster in which abrasive is contained and filled with pressurized air when blasting.

Pressurize: To fill the pressure vessel with compressed air.

Properly Trained: A person who can be considered "properly trained" must have successfully completed a sandblasting training course that focuses on the safe operation of stationary or portable abrasive blasters in the 0.5 - 6.0 cu ft capacity range. They must also have read and understood this manual in its entirety.

Silica: A hazardous substance which is contained in many naturally occurring abrasives. Dust produced by blasting with abrasives containing silica can cause respiratory disease. Do not use abrasive containing silica under any circumstance, even when respiratory protective equipment is being used.

Safety Symbols

The safety symbols shown below exist for the safety and protection of the operator and those in the vicinity of the Abrasive Blaster. The descriptions below explain how they are used in relation to the blasting equipment.

WARNING: This symbol calls attention to a potentially hazardous situation that could result in serious injury or death if the instructions associated with the symbol are not followed. The warning triangle will be displayed throughout the manual to denote instructions to which special attention should be paid.

DANGER: This symbol calls attention to a potentially hazardous situation that **WILL** result in serious injury or death if the instructions associated with the symbol are not followed. The warning triangle will be displayed throughout the manual to denote instructions to which special attention should be paid.

⚠ WARNING

• All persons who will be operating or will be in the vicinity of the Abrasive Blaster during its operation must receive proper training on how to safely operate the equipment and be informed of the potential hazards involved. In addition to proper training, all persons who will be operating or will be in the vicinity of the Abrasive Blaster during its operation must read, understand and follow all procedures described in the user's manual. For replacement manuals, please contact your distributor or visit www.pirate-brand.com.

• Respiratory protection is mandatory for all persons operating or located in the vicinity of the Abrasive Blaster. Follow all OSHA and NIOSH requirements for breathing equipment and supplied air standards.

• Pressurized Vessels contain large amounts of stored energy and can cause severe injury or death if safety procedures are not followed. **Never** perform maintenance or attempt to open a Pressure Vessel for any reason while it is Pressurized. **Always** Depressurize and properly disconnect equipment from its air source before performing any maintenance. **Do not** modify, grind or weld on the pressure vessel for any reason. Doing so will void the ASME certification. **Do not** use damaged pressure vessels.

• The use of proper remote control systems (commonly referred to as Dead-man controls) are required when using abrasive blasters. **Never** operate the Abrasive Blaster without remote controls.

• All persons who will be operating or will be in the vicinity of the Abrasive Blaster during its operation must protect themselves with the proper safety equipment and use of common sense. Safety equipment including but not limited to Hearing, Eye, Body and Lung protection are required. Abrasive blasters and the objects being blasted can be heavy and can lead to severe injury or death if they fall over. Always follow all safety requirements of OSHA and NIOSH.

• Use only Genuine Pirate Brand® replacement parts when performing maintenance on the Abrasive Blaster. **Do not** modify the equipment for any reason. Use of modified or non-Pirate Brand® parts can cause an unsafe situation and will void your warranty.

• **Never** use malfunctioning or damaged equipment. Before each use, inspect the Abrasive Blaster for proper function.

• Supply only cool, dry, compressed air that is free of debris to the Abrasive Blaster. Moisture or debris that reaches the remote control system can cause an unsafe situation. **Do not** supply compressed air to the blaster that exceeds 150 psi.

• **Do not** use abrasive blasters in areas that could be considered a hazardous location as described in the National Electric Code NFPA 70, Article 500. **Never** use the Abrasive Blaster in wet environments. **Always** connect electrically controlled abrasive blasters to a Ground Fault Circuit Interrupter (GFCI).

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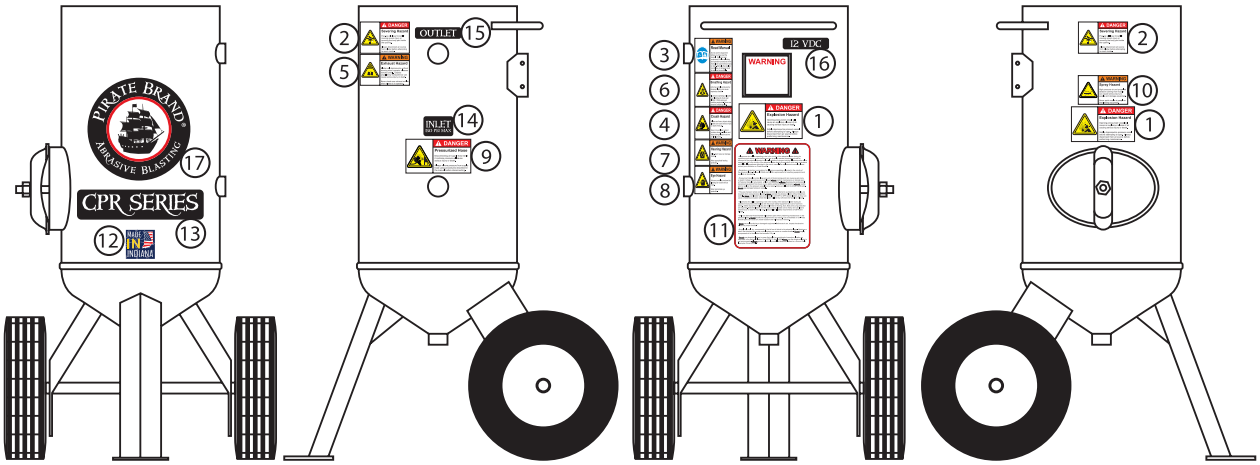
Distributed By:

Contact Info:
For manual updates visit the Pirate Brand® website at:

WWW.PIRATE-BRAND.COM

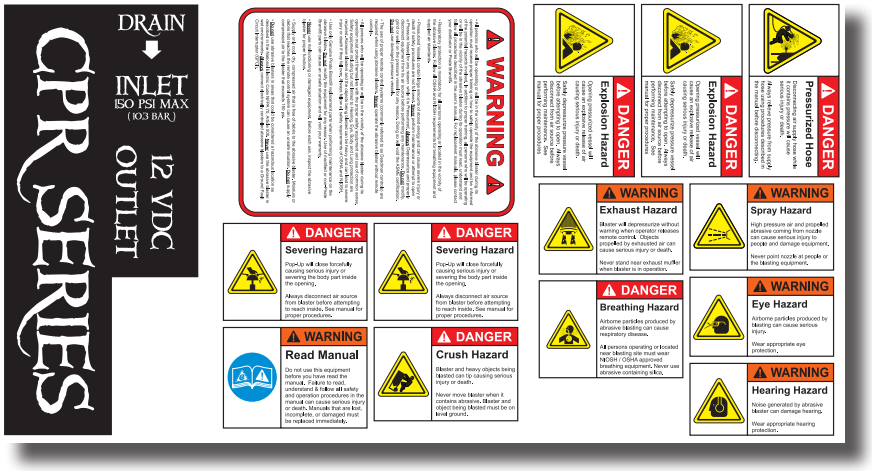
Warning Label Locations

Labels must be replaced when they are no longer readable!



1 - Explosion Hazard (X2)
2 - Severing Hazard (X2)
3 - Read Manual
4 - Crush Hazard
5 - Exhaust Hazard
6 - Breathing Hazard
7 - Hearing Hazard
8 - Eye Hazard
9 - Pressurized Hose
10 - Spray Hazard
11 - WARNING Label
12 - Made In Indiana
13 - CPR Series Label
14 - Inlet Label
15 - Outlet Label
16 - 12VDC Label
17 - Pirate Brand® Label

Replacement Label Pack P/N: PB-LPC001



Instructions For Installing Replacement Label Pack

1. Completely remove old label and clean area thoroughly before applying new label.

2. Apply replacement labels in locations as described above or as close as possible if area is obstructed

3. 12 VDC Label (#16) is only to be used on electric remote controlled systems. **DO NOT** apply label to systems with pneumatic remote controls.

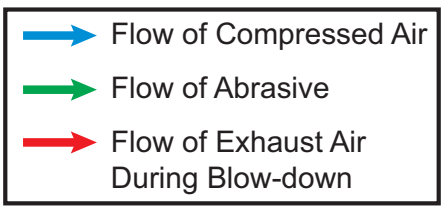
How CPR Systems Work
(Pressure Release)

WARNING: This section of the manual is designed to give you a general understanding of how the Abrasive Blaster functions. **All** sections of this manual must be read and understood before operating the equipment.

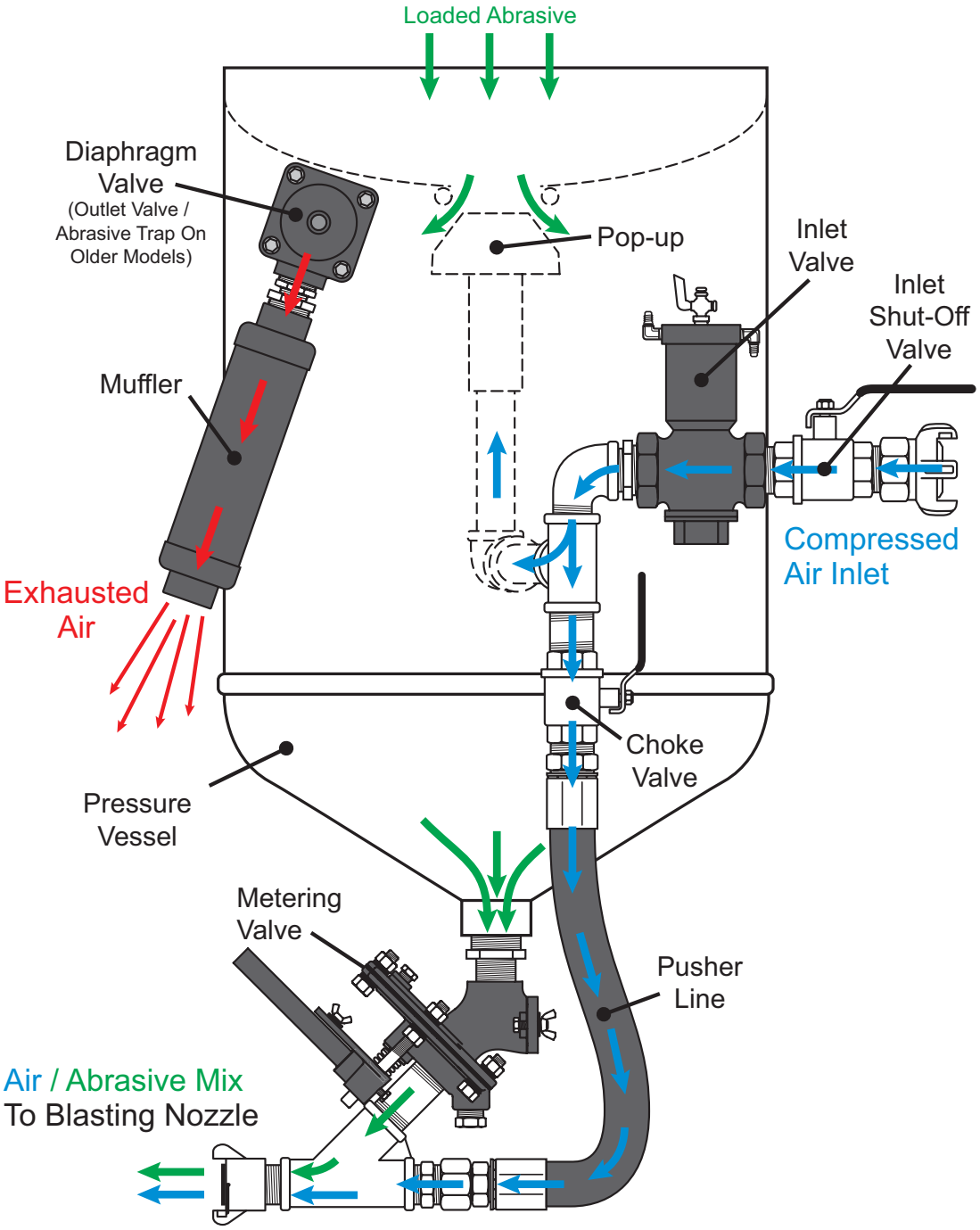
ADDING ABRASIVE
Abrasive is added through the hole in the top of the Abrasive Blaster where the Pop-up and its seat are located. When abrasive is added, it flows down through the hole, around the Pop-up, and down to the bottom of the pressure vessel where it will exit through the Metering Valve when 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 (Outlet Valve on older models) closes sealing the Pressure Vessel allowing it to hold pressure. Air will also continue past the Choke Valve, through the Pusher Line, and finally to the "Y" 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 (Outlet Valve on older models) opens allowing the compressed air in the pressure vessel to exit the Abrasive Blaster through the Diaphragm Valve (Abrasive Trap & Outlet Valve on older models), and finally through the Muffler. When all the pressure in the Pressure Vessel is released, blasting stops.



How CPR Systems Work
(Pressure Release)



Some items moved or rotated for clarity.

Operating Procedures

WARNING: The Procedures provided in the Operating Procedures section of the manual are designed to provide basic information on how to safely operate the features of Pirate Brand® CPR Series Abrasive Blasters. Only personnel thoroughly trained in abrasive blasting should operate the Abrasive Blaster.

Setting-Up The Blaster

INSPECT PRESSURE VESSEL

When you receive your Abrasive Blaster, remove the Handway Assembly and check for foreign items that may have fallen into the Abrasive Blaster through the Pop-up opening. Remove any foreign materials and reinstall the Handway Assembly.

DANGER: Never perform any maintenance or attempt to open the Abrasive Blaster in any way while it is pressurized. The violent release of compressed air and propelled objects will cause serious injury or death.

RE-TIGHTEN HANDWAY ASSEMBLY

After the Abrasive Blaster has been pressurized for the first time, tighten the nut on the Handway Assembly. Tightening the nut on the Handway Assembly should also be done any time after the handway has been removed for maintenance before and after the next pressurization.

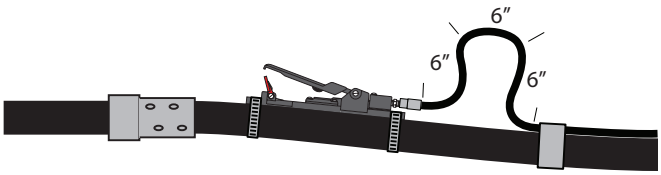
DANGER: Never perform any maintenance or attempt to open the Abrasive Blaster in any way while it is pressurized. The violent release of compressed air and propelled objects will cause serious injury or death.

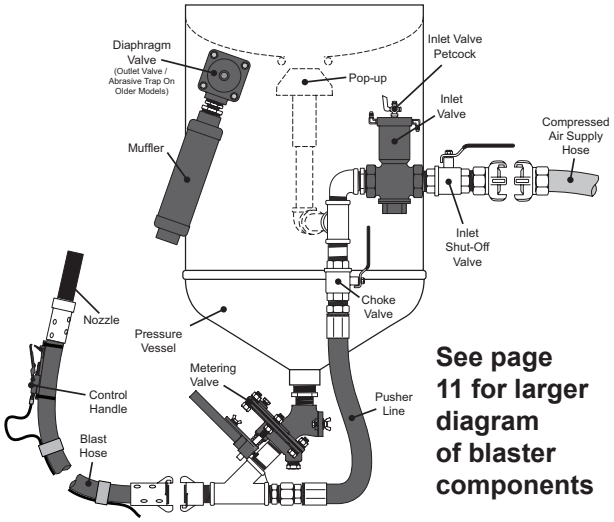
PURGE AIR SUPPLY HOSE

Before connecting the Air Supply Hose to the Abrasive Blaster, purge the hose of any moisture or foreign debris. Standing water or moisture in the air line will cause degraded performance of the Abrasive Blaster. Air supplied to the Abrasive Blaster must be clean, dry and cool.

ATTACH REMOTE CONTROL HANDLE

Attach the Remote Control Handle to the Blast Hose near the Nozzle with hose clamps or heavy wire ties. Form a loop of Twinline/Control Cord that comes 6" away from the Blast Hose, runs 6" parallel to the Blast Hose, and comes 6" back to the Blast Hose. Using duct tape, attach the Twinline/Control Cord to the Blast Hose where the loop ends by wrapping the tape around the Twinline/Control Cord twice and then around the Blast Hose. This creates a strain-relief attachment and is only necessary on the first connection near the Control Handle. Starting from the Nozzle end of the Blast Hose, attach the Twinline/Control Cord to the blast hose by wrapping duct tape around both every 3 feet.





See page 11 for larger diagram of blaster components

Operating Procedures

Before You Blast

PRE-BLAST CHECK

Before each use of the Abrasive Blaster, it must be checked to ensure it is in a safe condition to be used. Closely examine all components of the Abrasive Blaster for signs of excessive wear, worn out seals and hoses, or damaged components. If any component of the Abrasive Blaster is found to be damaged or worn, it must be replaced before blasting.

WARNING: Never use an Abrasive Blaster if any components are damaged or worn. Damaged or worn parts must be replaced before use.

ADDING ABRASIVE

Before filling the Abrasive Blaster, make sure the Inlet Shut-Off Valve is closed, the Inlet Valve Petcock is open, and the pressure vessel is in a depressurized state. Abrasive is added by pouring it into the top of the Abrasive Blaster where it can flow around the Pop-up and into the pressure vessel. Do not overfill the Abrasive Blaster. Do not allow foreign materials to enter the Abrasive Blaster. It is recommended that a screen be used to prevent foreign objects from entering the Abrasive Blaster.

DANGER: Never reach into the Pop-up opening while filling the Abrasive Blaster. It can close without warning causing severe injury or death.

WARNING: Pirate Brand® Abrasive Blasters may not be used with abrasives containing silica. Never use abrasives containing silica.

WARNING: Never fill the abrasive blaster with the Inlet Shut-Off Valve in the open position. Always close the Inlet Shut-Off Valve before filling.

WARNING: Electrically conductive abrasives may not be used with the abrasive blasters using Electric Remote Control Systems without changing to sealed strain relief connectors.

WARNING: Never attempt to move or transport the Abrasive Blaster when it contains Abrasive.

REMOTE CONTROL SYSTEM

Abrasive Blasters must use a Remote Control System (commonly known as a deadman) to start and stop abrasive blasting. Remote Control Systems can be electric or pneumatic.

Electric: Connect the Remote Control Handle to the Abrasive Blaster's female twist-lock connector. Connect a 12 VDC power source (12V Battery or Optional 120 VAC to 12 VDC converter) to the Abrasive Blaster's male twist-lock connector.

Pneumatic: Connect the Remote Control twinline hose to the Abrasive Blaster using the supplied threaded fittings. It is not recommended that Pneumatic Remote Control Systems are used when the Blast Hose length will be longer than 100 feet.

WARNING: Never operate the Abrasive Blaster without a Remote Control System.

DANGER: Always use caution around electric sources to avoid electric shock. Do not operate electrical remote controlled Abrasive Blasters in wet or other hazardous environments

CONNECTING HOSES

Before connecting hoses to the Abrasive Blaster, make sure the Inlet Shut-Off Valve is closed and the compressed air supply is shut off. Connect the hose coming from the compressed air supply to the inlet on the Abrasive Blaster and secure with safety clips. Connect the blast hose to the coupling by the Metering Valve at the base of the Abrasive Blaster and secure with safety clips.

WARNING: Always use safety devices like clips and whip-checks (safety cables) at hose connections.

Operating Procedures

Blasting

PRESSURIZING THE ABRASIVE BLASTER

Before pressurizing the Abrasive Blaster make sure the following conditions occur:

- All "BEFORE YOU BLAST" procedures have been followed.
- The Inlet Shut-Off Valve is closed.
- The Inlet Valve Petcock is closed.
- The Remote Control Handle is released.
- All hose connections are secure and have a safety clip installed.
- The Abrasive Blaster is set up in a safe and level location where all people in the vicinity are aware of its presence.
- All necessary safety equipment is present and being worn by all people in the vicinity of the Abrasive Blaster.
- Only personnel who have been thoroughly trained and have read and understand the manual are in the vicinity of the Abrasive Blaster

When these conditions are met, turn on the compressed air source and open the Inlet Shut-Off Valve on the Abrasive Blaster. The Abrasive Blaster is now ready to begin blasting.

DANGER: Never perform any maintenance or attempt to open the Abrasive Blaster in any way while it is pressurized. The violent release of compressed air and propelled objects will cause serious injury or death.

DANGER: Never supply compressed air exceeding 150 PSI (10.3 BAR) to the Abrasive Blaster.

WARNING: The Blast Hose may kick back when Remote Control Handle is activated. Be prepared and brace yourself for kick back. Blast Hoses will normally kick back erratically for a short time when the Abrasive Blaster is started.

WARNING: All those who will be in the area while blasting is to occur must be properly trained, read the manual, and wearing safety equipment to protect from the hazards described by the WARNING and DANGER labels located on the Abrasive Blaster. If any labels are worn or missing they must be replaced.

WARNING: 100 PSI Minimum. Failure to provide a constant air supply of at least 100 PSI can cause excessive wear to multiple components and the control system to operate improperly.

USING THE ABRASIVE BLASTER

After pressurizing the Abrasive Blaster, it is ready to begin blasting. Fold down safety flap lever lock and squeeze the Remote Control Handle to start the flow of abrasive and compressed air. Adjustments to the air/abrasive mixture can be made by swinging the handle/turning the knob on the Metering Valve. There will be a delay between a change made at the Metering Valve and what comes out of the Nozzle depending on the length of Blast Hose being used.

To stop the flow of compressed air and abrasive, release the Remote Control Handle and blasting will stop after a short time. How long it takes for blasting to stop will depend on the length of Blast Hose being used. The pressure vessel will automatically exhaust through the Exhaust Muffler causing a rush of compressed air that can propel any loose objects, debris or spilled abrasive at nearby personnel. For this reason, personnel must not be located near the Abrasive Blaster when blasting is taking place.

DANGER: Airborne particles produced by abrasive blasting can cause respiratory disease. All persons operating or located near the blasting site must wear approved NIOSH / OSHA approved breathing equipment. Never use abrasive containing silica.

DANGER: Never stand near an Abrasive Blaster when it is in operation. The release of the Remote Control handle will cause a sudden release of compressed air from the Exhaust Muffler without warning. Only Adjust the Metering Valve after the Abrasive Blaster has completely depressurized.

WARNING: Only personnel thoroughly trained in abrasive blasting should operate the Abrasive Blaster. This manual only provides basic information on how to safely operate the features of Pirate Brand® CPR Series Abrasive Blasters.

WARNING: Never point the blast Nozzle at yourself, other people, or the Abrasive Blaster.

WARNING: The Choke Valve must be completely open when blasting or damage to equipment will occur.

Operating Procedures

Blasting

DRAINING THE MOISTURE SEPARATOR (if equipped)

During blasting, the Moisture Separator must be periodically drained. The best way to accomplish this is to leave the drain valve slightly open all the time so it constantly leaks air and forces moisture out.

WARNING: The Abrasive Blaster must be supplied with clean, cool, dry compressed air in order to function properly.

SHUTTING DOWN THE ABRASIVE BLASTER

When blasting is complete, the Abrasive Blaster will need to be shut down. Make sure the Remote Control Handle is released then close the Inlet Shut-Off Valve and open the Inlet Valve Petcock.

WARNING: Never operate the Abrasive Blaster without an Exhaust Muffler. Without the muffler, the sudden release of compressed air can cause severe injury.

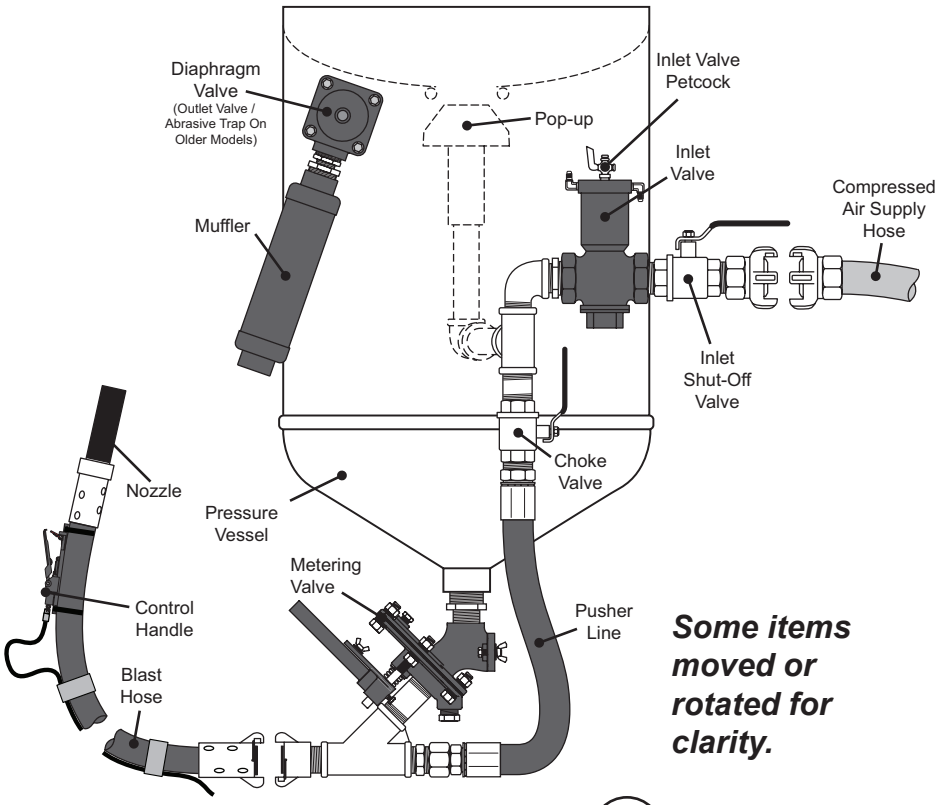
DISCONNECTING AIR SUPPLY HOSE

After the Abrasive Blaster has been depressurized and the Inlet Valve has been closed, the Compressed Air Supply Hose may still contain pressure which must be released before disconnecting the hose. To do this shut off the compressed air at its source and open the Inlet Shut-Off Valve on the Abrasive Blaster.

Next, open the petcock at the top of the Inlet Valve. For systems with electric remote controls, you must be connected to a power source and hold down the Remote Control Handle to allow air to bleed out through the Inlet Valve Petcock.

When you no longer hear air escaping through the Inlet Valve Petcock, squeeze the Compressed Air Supply Hose to confirm it is soft and does not contain compressed air. After confirming the absence of compressed air in the Compressed Air Supply Hos,e it is ready to be disconnected.

DANGER: Never disconnect any compressed air supply hose without first performing the "DISCONNECTING AIR SUPPLY HOSE" procedure described above. Failure to do so can cause the hose to blow off violently injuring or killing nearby people.



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Maintenance Procedures

DANGER: Never perform any maintenance or attempt to open the Abrasive Blaster in any way while it is pressurized. The violent release of compressed air and propelled objects will cause serious injury or death.

WARNING: Maintenance procedures are to be performed by experienced qualified personnel only. Failure to perform maintenance procedures correctly at the intervals specified below can lead to performance problems and equipment failure, and will void the equipment warranty.

Maintenance Schedule

Procedure To Be Performed	Maintenance Interval
1 - Inspect & Empty Abrasive Trap (If Equipped)	**Every 4 Hours Of Use**
2 - Inspect Personal Protective Equipment (PPE) Including but not limited to: Respirators, Airline Filters, Carbon-Monoxide Monitors, Hearing Protection, Eye Protection, Foot Protection, Protective Clothing & Gloves Reference www.osha.gov 29 CFR 1910.132 - General Requirements (PPE) 29 CFR 1910.133 - Eye (PPE) 29 CFR 1910.134 - Respiratory (PPE) 29 CFR 1910.136 - Feet (PPE) 29 CFR 1910.138 - Protective Clothing & Gloves (PPE) 29 CFR 1926.101 - Hearing (PPE)	**Every 8 Hours Of Use**
3 - Inspect Remote Control Handles & Control Hose/Cord	**Every 8 Hours Of Use**
4 - Inspect Blast Hose, Couplings & Gaskets	**Every 8 Hours Of Use**
5 - Inspect Blasting Nozzle	**Every 8 Hours Of Use**
6 - Inspect Air Hose, Couplings & Gaskets	**Every 8 Hours Of Use**
7 - Inspect & Clean Blow-Down Muffler	**Every 40 Hours Of Use**
8 - Lubricate Inlet Valve	**Every 40 Hours Of Use**
9 - Inspect Pop-Up & Pop-Up Gasket	**Every 200 Hours Of Use**
10 - Service Inlet Valve	**Every 200 Hours Of Use**
11 - Service Diaphragm Valve / Outlet Valve	**Every 200 Hours Of Use**
12 - Service Metering Valve	**Every 600 Hours Of Use**
13 - Service Control Valve(s) (If Equipped)	**Every 600 Hours Of Use**

Descriptions of maintenance procedures referenced in this table are located on the next page.

Maintenance Procedures

Procedure Details

1. Inspect & Empty Abrasive Trap (If Equipped - Standard On Older Models)

Disassemble, clean out any abrasive & inspect the Abrasive Trap. Replace any worn components and reassemble.
IMPORTANT: Replace screens that can not be cleaned to open up all holes, never reuse clogged screens.

2. Inspect Personal Protective Equipment (PPE)

Inspect **ALL** Personal Protective Equipment (PPE) for proper fit, condition & operation as designed. Replace, repair, or be fitted as needed.

3. Inspect Remote Control Handles and Control Hose/Cord

Pneumatic Remote Control Systems:
Inspect Control Handle for damage making sure the Safety Flap/Lever Lock is in good working order and replace or repair as needed. Inspect twinline hoses and replace if leaks, areas that show abrasion, or soft spots are found.
Electric Remote Control Systems:
Inspect Control Handle for damage making sure the Safety Flap/Lever Lock is in good working order and replace or repair as needed. Inspect control cord and replace if damaged plug ends, areas that show abrasion, exposed wires, or cracks are found.

4. Inspect Blast Hose, Couplings & Gaskets

Inspect Blast Hose for leaks, abrasion & soft spots, and replace as needed. Inspect couplings for damage, leaks & wear, and replace as needed. Inspect coupling gaskets for leaks & wear, and replace as needed. Always use safety clips & whip checks (safety cables) at Blast Hose connections.

5. Inspect Blasting Nozzle

Inspect the Blasting Nozzle for wear and proper bore diameter. Replace the Blasting Nozzle when the bore diameter has worn to 1/16" wider than its original diameter. Example: replace a #5 nozzle (5/16" bore) when the bore reaches 3/8".

6. Inspect Air Hose, Couplings & Gaskets

Inspect Air Hose for leaks, abrasion & soft spots, and replace as needed. Inspect couplings for damage, leaks & wear, and replace as needed. Inspect coupling gaskets for leaks & wear, and replace as needed. Always use safety clips & whip checks (safety cables) at Air Hose connections.

7. Inspect & Clean Blow-down Muffler

Remove the Blow-down muffler, turn it with the open end down and tap on a hard surface to free trapped debris. If muffler is clogged and can't be cleaned out sufficiently, it must be replaced.

8. Lubricate Inlet Valve

Add 2 drops of light machine oil through the Inlet Valve Petcock while open to lubricate the Inlet/Outlet Valve system.

9. Inspect Pop-Up & Pop-Up Gasket

Inspect the Pop-Up & Pop-Up Gasket for wear and replace as necessary.

10. Service Inlet Valve

Disassemble, clean & inspect for proper operation and worn components. Replace any worn components found. Lubricate the piston and cylinder with silicone paste before reassembling.

11. Service Diaphragm Valve / Outlet Valve

DIAPHRAGM VALVE (If Equipped) - Remove cover and inspect diaphragm disk and other components. Replace any worn components found.
OUTLET VALVE (If Equipped - Standard On Older Models) - Disassemble, clean & inspect for proper operation and worn components. Replace any worn components found. Lubricate the piston and cylinder with silicone paste before reassembling.

12. Service Metering Valve

Disassemble, clean & inspect the Metering Valve for proper operation and worn components. Replace any worn components found.

13. Service Control Valve(s)

Disassemble, clean & inspect for proper operation and worn components. Replace any worn components found. Lubricate with silicone paste before reassembling.

Troubleshooting

Performance Related Issues

DANGER: Never attempt to open the Abrasive Blaster in any way while it is pressurized. Use extreme caution when performing troubleshooting procedures that involve pressurizing the Abrasive Blaster. Troubleshooting procedures are to be performed by experienced qualified personnel only.

NO ABRASIVE FLOW WHEN BLASTING (AIR ONLY)

Possible Causes:

1. **The Abrasive Blaster is empty or has no Abrasive in it.**
2. **The Metering Valve is closed or has not been adjusted properly.**
3. **There is an obstruction in the Metering Valve.** To clear the obstruction, perform the following procedure:

Open the Metering Valve to its fully open position. Depress the control handle and have a second qualified person close the choke valve for 2 seconds, and then open it again immediately. This will push minor obstructions such as a small amount of wet abrasive, a piece of paper from a bag, or bridged paint chips through the Metering Valve and out the Nozzle. Readjust the Metering Valve back to the desired setting for blasting, and check to see if the obstruction has been cleared.

If there is still an obstruction, depressurize the Abrasive Blaster. For blasters equipped with the Abrasive Metering Valve II (AMVII), remove the inspection plate. For blasters equipped with the Manual Plunger Valve (MPV), completely remove the MPV Valve. The remaining abrasive in the pressure vessel should pour out in a steady stream. If you do not see a steady stream of abrasive, then there is a large obstruction such as a large piece of paper from a bag of abrasive.

If you have determined there is a large obstruction, then the obstruction must be removed from inside the Pressure Vessel. To do this, make sure the Abrasive Blaster is depressurized and remove the Handway Assembly. Scoop or vacuum out all the abrasive from inside the pressure vessel and remove the obstruction. Reinstall the Handway Assembly and Metering Valve and tighten them securely, then Refill the Abrasive Blaster.

It is recommended that a screen be used to prevent foreign objects from entering the Abrasive Blaster and causing an obstruction.

4. **The Abrasive Blaster has wet abrasive in it.** The wet abrasive must be removed by depressurizing the Abrasive Blaster, removing the Handway Assembly, and scooping or vacuuming it out.

Dry abrasive must always be used. Clean, cool, dry air must be supplied to the Abrasive Blaster in order to prevent the abrasive from getting wet. For Abrasive Blasters being used outside, it is recommended that a lid be used to keep water from entering the Abrasive Blaster.

ABRASIVE STREAM IS TOO HEAVY OR THROBBING WHEN BLASTING

Possible Causes:

Note: CPR Systems may throb temporarily when starting up if abrasive has collected in blast hose from previous use. This is normal and requires no action to correct.

1. **Choke Valve is partially closed**. Never run the Abrasive Blaster with the Choke Valve in any other position except fully open or damage to the Abrasive Blaster will occur.
2. **The Metering Valve needs to be adjusted.**

LOW PRESSURE AT THE NOZZLE

Possible Causes:

1. **Air compressor is the wrong size (too small) or the load button has not been pushed or turned on. (100 PSI Minimum)**
2. **Nozzle is worn out and the compressor cannot keep up with the increased demand.**
3. **Air supply hose to the blast machine is too small.**
4. **There is a hole in the blast hose.**
5. **Control hoses and/or fittings are leaking.**
6. **Pop-up is not sealing properly.**
7. **Handway Assembly is leaking.**
8. **Choke Valve is partially closed.** Never run the Abrasive Blaster with the Choke Valve in any other position except fully open or damage to the Abrasive Blaster will occur.
9. **Abrasive Metering Valve is open too far.**
10. **Obstruction in Nozzle.**
11. **Regulator needs adjustment (if equipped).**
12. **Inlet Valve / Diaphragm Valve / Outlet Valve is not opening/ closing fully due to inadequate control pressure. (100 PSI Minimum)**
13. **Inlet Valve is damaged, defective, worn out, or not lubricated properly causing it to not open fully.**
14. **Diaphragm Valve / Outlet Valve is damaged, defective, worn out, or not lubricated properly causing it to not close fully.**

ABRASIVE BLASTER WILL NOT TURN ON OR IS SLOW TO TURN ON

Possible Causes:

1. **Air compressor is the wrong size (too small) or the load button has not been pushed or turned on. (100 PSI Minimum)**
2. **Inlet Valve Petcock is open.**
3. **Nozzle is worn out and the compressor cannot keep up with the increased demand.**
4. **Air supply hose to the blast machine is too small.**
5. **Inlet Valve is damaged, defective, worn out, or not lubricated properly causing it to not open fully.**
6. **Diaphragm Valve / Outlet Valve is damaged, defective, worn out, or not lubricated properly causing it to not close fully.**
7. **Control hoses and/or fittings are leaking.**
8. **Obstruction in Nozzle.**
9. **The Pneumatic Control Handle is damaged, defective or worn out (if equipped).**
10. **The Electric Control Handle is damaged, defective or worn out (if equipped).**
11. **Power Source (battery or AC-DC converter) is not providing sufficient power to open electric control valves (if equipped).**
12. **The Electric Control Cord is damaged, defective or worn out (if equipped).**
13. **The Electric Control Valve is damaged, defective or worn out (if equipped).**
14. **There is an obstruction in the 1/16" orifice (See Inlet Valve Parts Lists - PN 101-9450)**

Troubleshooting

Operational Related Issues

DANGER: Never attempt to open the Abrasive Blaster in any way while it is pressurized. Use extreme caution when performing troubleshooting procedures that involve pressurizing the Abrasive Blaster. Troubleshooting procedures are to be performed by experienced qualified personnel only.

BLAST MACHINE TURNS ON ACCIDENTALLY OR WITHOUT WARNING

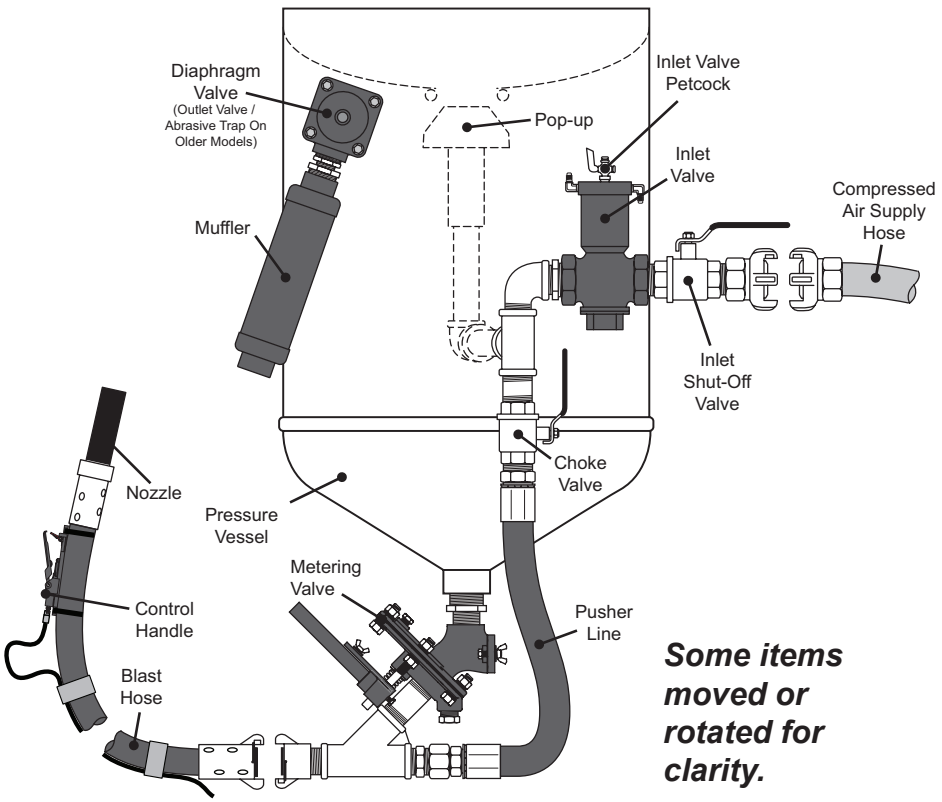
Possible Causes:

1. **The safety flap, lever or lock button on the Control Handle is damaged or missing.**
2. **The Pneumatic Control Handle is damaged, defective or worn out (if equipped).**
3. **The 1/16" orifice (See Inlet Valve Parts Lists - PN 101-9450) fitting is missing from the Inlet Valve's outlet port (pneumatic controls only.)**
4. **The Electric Control Handle is damaged, defective or worn out (if equipped).**
5. **The Electric Control Cord is damaged, defective or worn out (if equipped).**
6. **The Electric Control Valve is damaged, defective or worn out (if equipped).**

BLAST MACHINE IS SLOW TO TURN OFF OR WILL NOT TURN OFF WHEN CONTROL HANDLE IS RELEASED

Possible Causes:

1. **The screen in the Abrasive Trap (if equipped) is clogged and needs to be cleaned or replaced.**
2. **The Abrasive Trap (if equipped) is full and needs to be emptied. Abrasive traps must be emptied every 4 hours of use.**
3. **The Inlet Valve is damaged, defective, worn out, or not lubricated properly causing it to not close fully.**
4. **The Diaphragm Valve / Outlet Valve is damaged, defective, worn out, or not lubricated properly causing it to not open fully.**
5. **The Pneumatic Control Handle is damaged, defective or worn out (if equipped).**
6. **The Electric Control Handle is damaged, defective or worn out (if equipped).**
7. **The Electric Control Cord is damaged, defective or worn out (if equipped).**
8. **The Electric Control Valve is damaged, defective or worn out (if equipped)**
9. **Blow-down Muffler is clogged slowing the release of air.**



Some items moved or rotated for clarity.

Warranty

PIRATE BRAND® ABRASIVE BLAST POT EQUIPMENT 5 YEAR / 10 YEAR LIMITED WARRANTY

5 YEAR LIMITED ABRASIVE BLAST POT WARRANTY. Manufacturer warrants the complete abrasive blast pot it manufactures to be free of defects in material and workmanship for a period of five (5) years from the date of invoice.

10 YEAR LIMITED PRESSURE VESSEL WARRANTY. Manufacturer warrants the abrasive blast pot pressure vessel it manufactures to be free of defects in material and workmanship for a period of ten (10) years from the date of invoice.

LIMITATION OF WARRANTIES AND REMEDIES. THIS WARRANTY IS EXTENDED ONLY TO THE BUYER WHO PURCHASES THE ABRASIVE BLAST POT DIRECTLY FROM THE MANUFACTURER OR ITS AUTHORIZED DISTRIBUTORS AND IS NON-TRANSFERABLE. THE PURCHASER'S EXCLUSIVE REMEDY ARISING FROM ITS PURCHASE OR USE OF THE PRODUCT SHALL BE STRICTLY LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCTS, AT THE DISCRETION OF THE MANUFACTURER, AND ALL WARRANTY CLAIMS OR REQUESTS MUST BE MADE IN WRITING TO THE MANUFACTURER WITHIN TEN (10) DAYS AFTER FAILURE OF THE PRODUCT. ALL OBLIGATIONS OR LIABILITIES OF MANUFACTURER OR SELLER FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE PRODUCT AND USE OR PERFORMANCE OF THE PRODUCTS, EXCEPT AS EXPRESSLY PROVIDED HEREIN, ARE FULLY DISCLAIMED AND EXCLUDED, AND NO SELLER OR DISTRIBUTOR HAS ANY AUTHORITY TO MAKE ANY WARRANTY OR ASSUME ANY LIABILITY ON BEHALF OF THE MANUFACTURER IN CONNECTION WITH THE SALE OF THE PRODUCT EXCEPT AS STATED HEREIN.

AS A CONDITION OF THE PURCHASE, PURCHASER AGREES THAT MANUFACTURER AND SELLER SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR ANY COST OF FREIGHT, SHIPPING OR TRANSPORTATION, LABOR, SPECIAL CHARGES, NORMAL MAINTENANCE SERVICES, LOST OPERATING TIME, LOSS OF USE, LOST PROFITS, LOSS OF GOODWILL, CONSEQUENTIAL DAMAGES, PUNITIVE OR EXEMPLARY DAMAGES, OR OTHER DAMAGES OR LOSS. OTHER THAN AS DESCRIBED HEREIN, MANUFACTURER AND SELLER MAKE NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCTS, AND SPECIFICALLY DISCLAIM ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHER WARRANTY. PURCHASER ASSUMES ALL RISK AND LIABILITY RESULTING FROM THE USE OF THE PRODUCTS. PURCHASER FURTHER AGREES AS A CONDITION OF THE SALE AND THE USE OF THE PRODUCT, THAT ANY DAMAGES OR RISK OF LOSS OTHER THAN AS DESCRIBED HEREIN ABOVE, SHALL BE THE EXCLUSIVE RESPONSIBILITY OF THE PURCHASER AND NOT THE MANUFACTURER OR SELLER. MANUFACTURER AND SELLER SHALL NOT BE LIABLE FOR ANY DAMAGES INCURRED BY ANY PERSON AS A RESULT OF MISUSE, IMPROPER INSTALLATION, IMPROPER APPLICATION, IMPROPER OPERATION OF THE PRODUCTS, NORMAL WEAR AND TEAR, ALTERATIONS OR MODIFICATIONS MADE TO THE PRODUCTS, OR ACCIDENT. THE USE OF REPLACEMENT PARTS NOT PROVIDED OR AUTHORIZED BY THE MANUFACTURER VOIDS ALL WARRANTIES.

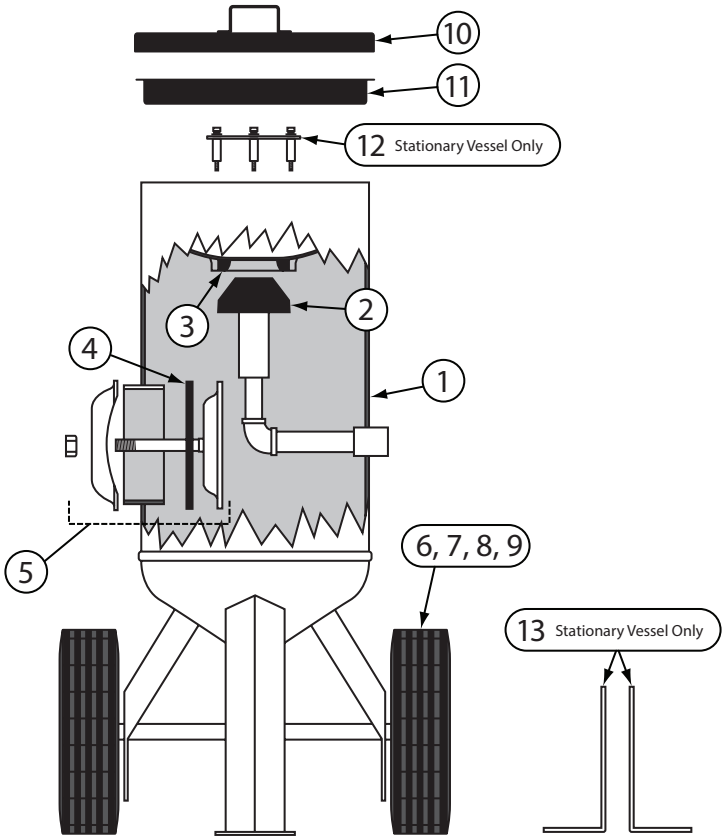
A COMPLETELY FILLED OUT WARRANTY CARD MUST BE RETURNED TO THE MANUFACTURER WITHIN THIRTY (30) DAYS OF PURCHASE OF THE PRODUCT OR ALL WARRANTIES ARE VOID. PRODUCT MUST BE MAINTAINED IN ACCORDANCE TO THE MAINTENANCE SCHEDULE PROVIDED IN THE PRODUCT MANUAL, FAILURE TO MAINTAIN THE PRODUCT IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE VOIDS ALL WARRANTIES. THIS WARRANTY DOES NOT COVER FACTORY INSTALLED OR CUSTOMER INSTALLED ACCESSORIES.

WARRANTY CLAIMS. Warranty claims must be submitted to the manufacturer within ten (10) days after failure of the product. Contact information for warranty claims:

Forecast Sales, Inc.
2719 Tobey Dr.
Indianapolis, IN 46219
317-829-0147

Effective July 8, 2015

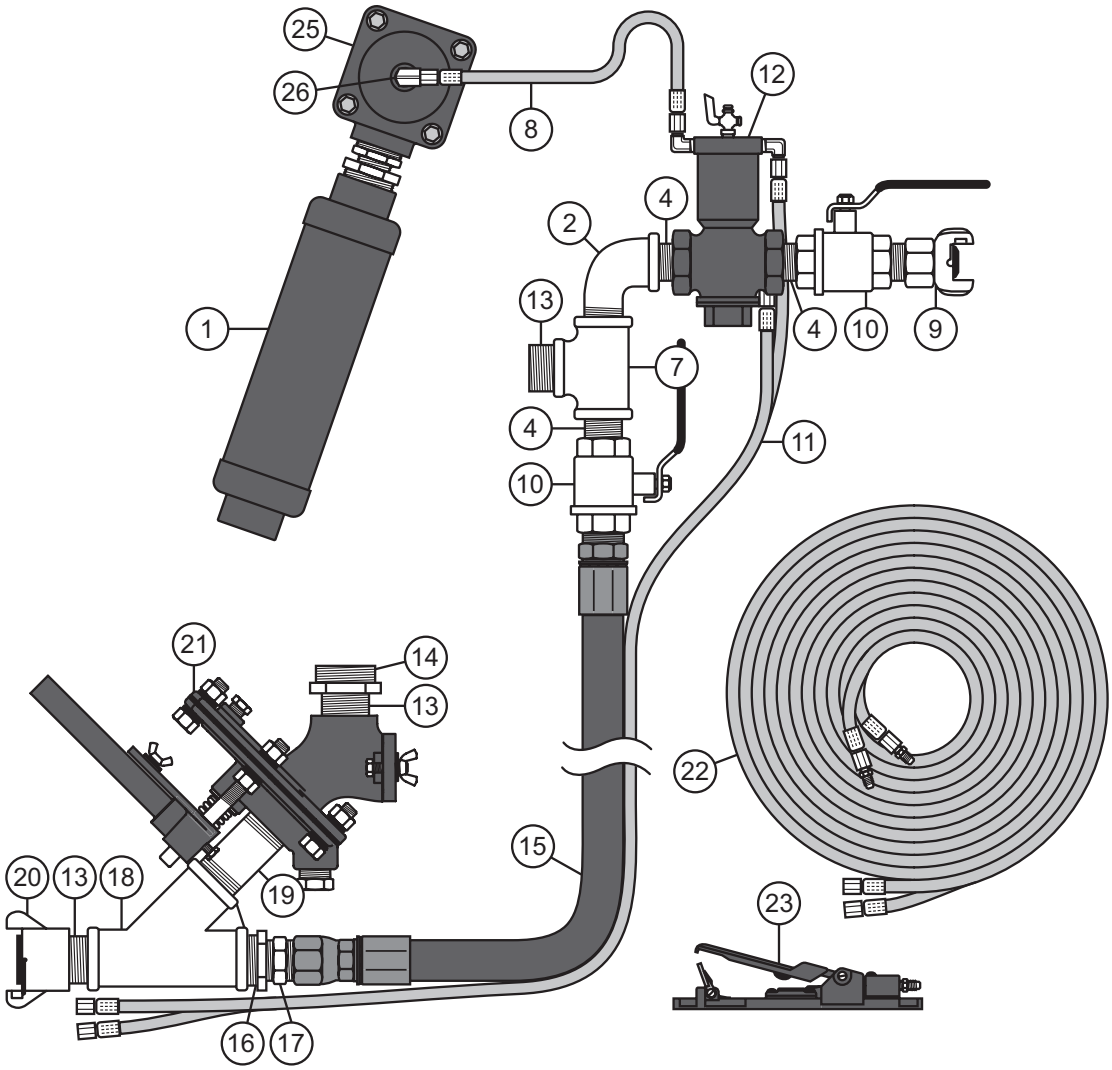
Pressure Vessel Parts Lists

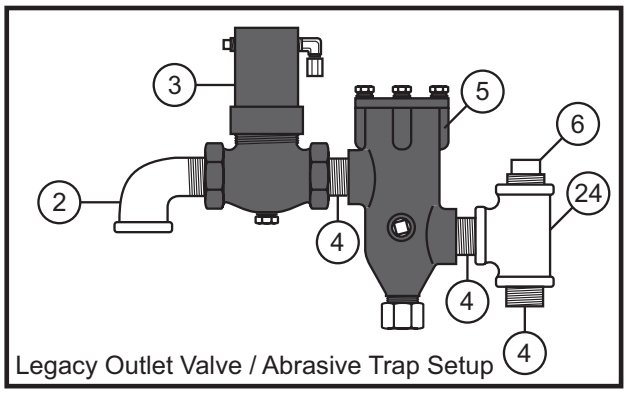


	3.0 Cu Ft CPR Abrasive Blasters		6.0 Cu Ft CPR Abrasive Blasters	
1	109-9100	VESSEL, **PORTABLE**, 3.0 CU. FT. (85 LITERS), 150 PSI (10.3 BAR), 13-1/2" CLEARANCE, 16" DIA, INCLUDES HANDWAY ASSEMBLY, WHEELS, POP-UP & POP-UP GASKET	109-9110	VESSEL, **PORTABLE**, 6.0 CU. FT. (170 LITERS), 150 PSI (10.3 BAR), 13-1/2" CLEARANCE, 24" DIA, INCLUDES HANDWAY ASSEMBLY, WHEELS, POP-UP & POP-UP GASKET
	109-9090	VESSEL, **STATIONARY**, 3.0 CU. FT. (85 LITERS), 150 PSI (10.3 BAR), 13-1/2" CLEARANCE, 16" DIA, W/4" UMBRELLA, INCLUDES HANDWAY ASSEMBLY, POP-UP & POP-UP GASKET	109-9120	VESSEL, **STATIONARY**, 6.0 CU. FT. (170 LITERS), 150 PSI (10.3 BAR), 13-1/2" CLEARANCE, 24" DIA, W/4" UMBRELLA, INCLUDES HANDWAY ASSEMBLY, POP-UP & POP-UP GASKET
2	103-6990	POP-UP VALVE, 4" FEMALE		
3	102-3250	POP-UP VALVE, SEAT		
4	888-7000-00106PB	GASKET, HANDWAY, 6" x 8"		
5	888-7000-00111PB	HANDWAY CRAB ASSY 6" x 8"		
6	120-4270	WHEEL AND TIRE, 16" x 4" BLACK		
7	103-8250	WASHER, 1" THRUST		
8	103-8240	RETAINING RING, 1"		
9	102-4020	AXLE, 16" DIA BLAST MACHINE	888-5010-060PB	AXLE, 24" DIA BLAST MACHINE
10	102-3350	LID, 16" DIA, W/HANDLE, POWDER COATED BLACK	888-5011-060PB	LID, 24" DIA, W/HANDLE, POWDER COATED BLACK
11	103-0990	SCREEN, LOW PROFILE, 16" (1/4" MESH), POWDER COATED BLACK	102-3180	SCREEN, LOW PROFILE, 24" (1/4" MESH), POWDER COATED BLACK
12	102-3180	4" POP UP VALVE UMBRELLA		
13	102-4160	LEG PADS (2)		

Pipe String Parts Lists

CPR SERIES - 3.0 Cu Ft Pneumatic Controls





Legacy Outlet Valve / Abrasive Trap Setup

Pipe String Parts Lists

CPR SERIES - 3.0 Cu Ft Pneumatic Controls

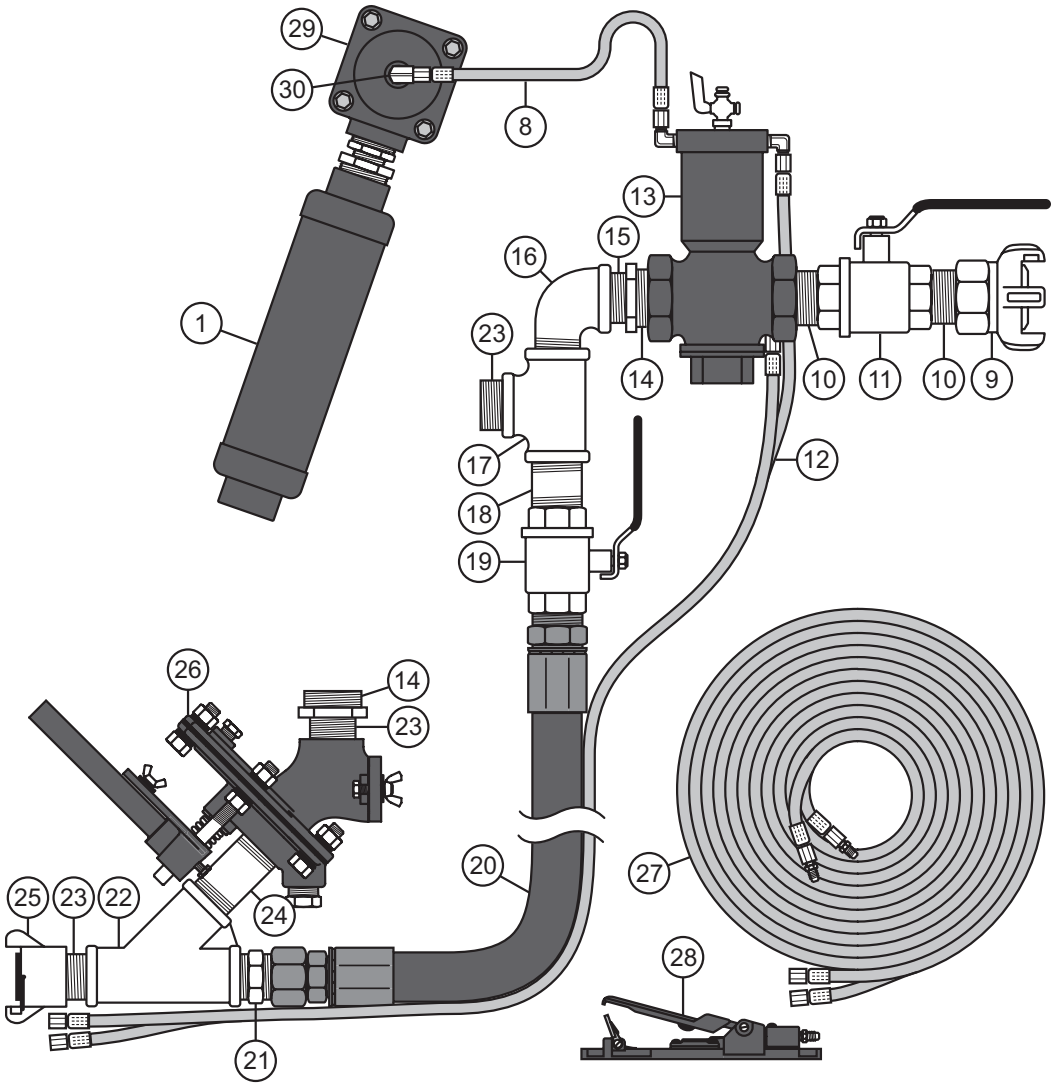
3.0 Cu Ft CPR Abrasive Blasters - Pneumatic Controls - Parts List

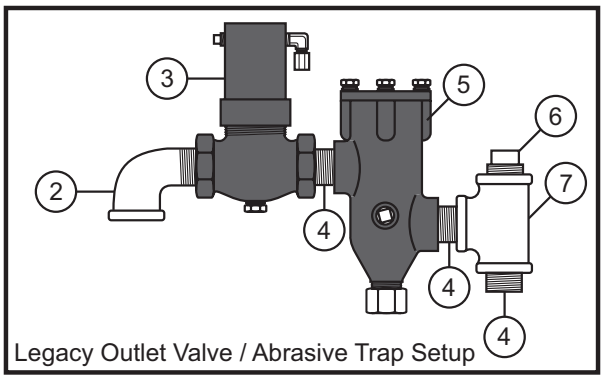
1	888-2011-006PB	MUFFLER, BLOWDOWN, 1" MNPT (SHOWN)
	888-2011-006SPB	MUFFLER, BLOWDOWN, SHORT, 1" MNPT
2	888-3006-106PB	ELBOW, STREET, 90°, GALV, 1"
3*	101-9670	VALVE, OUTLET, 1", COMPLETE
4	888-3029-10699PB	NIPPLE, TBE, GALV, 1" x CLOSED
5*	100-3530	ABRASIVE TRAP II, 1" COMPLETE, X-TREME DUTY
6	888-3014-106PB	PIPE PLUG, GALV, 1"
7	888-3011-10607PB	TEE, GALV, 1" x 1" x 1-1/4"
8	200-002	HOSE, AIR, COUPLED, NOMINAL 3/16" ID x 2'
9	UM100	AIR HOSE COUPLINGS, 2 LUG, 1" MALE NPT
10	VB100	BALL VALVE, FULL PORT, 1" NPT
11	200-005	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIP, NOMINAL 3/16" ID x 5', W/UNIONS
12*	101-9800	VALVE, INLET, 1", COMPLETE
13	888-3028-10799PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x CLOSE
14	888-3026-10807PB	BUSHING, GALV, 1-1/2" x 1-1/4"
15	123-6730	PUSHER LINE (FLEX) REPLACEMENT 1" x 28", OAL 33"
16	888-3026-10706PB	BUSHING, GALV, 1-1/4" x 1"
17	111-7200	FITTING, 1" MNPT x 1" M-FLARE
18	888-3012-107PB	WYE, GALV, 1-1/4"
19	888-3028-10714PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x 4"
20	SB-1S-IR	THREADED COUPLING, STD NPS, IRON, 1-1/4"
21*	102-4350	AMVII, COMPLETE VALVE, X-TREME DUTY, 1-1/4" NPT (DB1000)
22	200-050	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIP, NOMINAL 3/16" ID x 50', W/UNIONS
23**	354-4289	PNEUMATIC CONTROL HANDLE
24	888-3011-106PB	TEE, GALV, 1"
25*	103-3710	VALVE, OUTLET, 1", DIAPHRAGM, COMPLETE
26	102-5130	ELBOW, BRASS, 1/4" x 3/16"

* See "***Valve Parts Lists***" Section for detailed parts list.
** See "***Control Handle Parts Lists***" Section for detailed parts list.

Pipe String Parts Lists

CPR SERIES - 6.0 Cu Ft Pneumatic Controls





Legacy Outlet Valve / Abrasive Trap Setup

Pipe String Parts Lists

CPR SERIES - 6.0 Cu Ft Pneumatic Controls

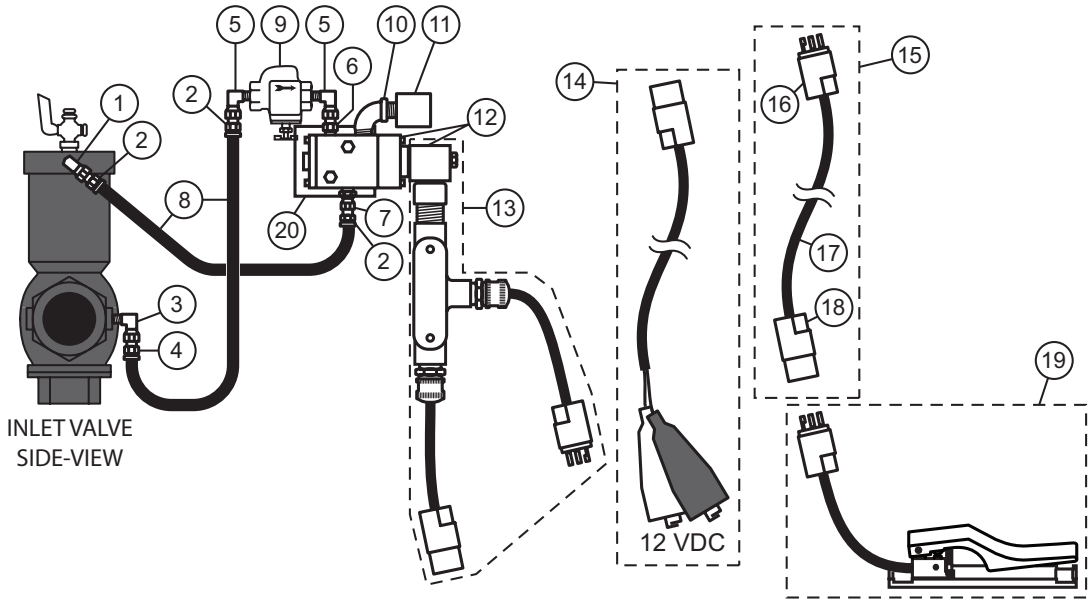
6.0 Cu Ft CPR Abrasive Blasters - Pneumatic Controls - Parts List

1	888-2011-006PB	MUFFLER, BLOWDOWN, 1" MNPT (SHOWN)
	888-2011-006SPB	MUFFLER, BLOWDOWN, SHORT, 1" MNPT
2	888-3006-106PB	ELBOW, STREET, 90°, GALV, 1"
3*	101-9670	VALVE, OUTLET, 1", COMPLETE
4	888-3029-10699PB	NIPPLE, TBE, GALV, 1" x CLOSED
5*	100-3530	ABRASIVE TRAP II, 1" COMPLETE, X-TREME DUTY
6	888-3014-106PB	PIPE PLUG, GALV, 1"
7	888-3011-106PB	TEE, GALV, 1"
8	200-002	HOSE, AIR, COUPLED, NOMINAL 3/16" ID x 2'
9	UF-150	AIR HOSE COUPLINGS, 4 LUG, 1-1/2" FEMALE NPT
10	888-3029-10899PB	NIPPLE, TBE, GALV, 1-1/2" x CLOSED
11	VB150	BALL VALVE, FULL PORT, 1-1/2" NPT
12	200-005	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIP, NOMINAL 3/16" ID x 5', W/UNIONS
13*	101-9950	VALVE, INLET, 1-1/2", COMPLETE
14	888-3026-10807PB	BUSHING, GALV, 1-1/2" x 1-1/4"
15	888-3029-10799PB	NIPPLE, TBE, GALV, 1-1/4" x CLOSED
16	888-3006-107PB	ELBOW, STREET, 90°, GALV, 1-1/4"
17	888-3011-107PB	TEE, GALV, 1-1/4"
18	888-3029-10711PB	NIPPLE, TBE, GALV, 1-1/4" x 3"
19	VB125	BALL VALVE, FULL PORT, 1-1/4" NPT
20	123-6740	PUSHER LINE (FLEX) REPLACEMENT 1-1/4" x 28", OAL 33"
21	122-5290	FITTING, 1-1/4" MNPT x 1-1/4" M-FLARE
22	888-3012-107PB	WYE, GALV, 1-1/4"
23	888-3028-10799PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x CLOSE
24	888-3028-10714PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x 4"
25	SB-1S-IR	THREADED COUPLING, STD NPS, IRON, 1-1/4"
26*	102-4350	AMVII, COMPLETE VALVE, X-TREME DUTY, 1-1/4" NPT (DB1000)
27	200-050	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIP, NOMINAL 3/16" ID x 50', W/UNIONS
28**	354-4289	PNEUMATIC CONTROL HANDLE
29*	103-3710	VALVE, OUTLET, 1", DIAPHRAGM, COMPLETE
30	102-5130	ELBOW, BRASS, 1/4" x 3/16"

* See "***Valve Parts Lists***" Section for detailed parts list.
** See "***Control Handle Parts Lists***" Section for detailed parts list.

Pipe String Parts Lists

CPR SERIES - Electric Controls

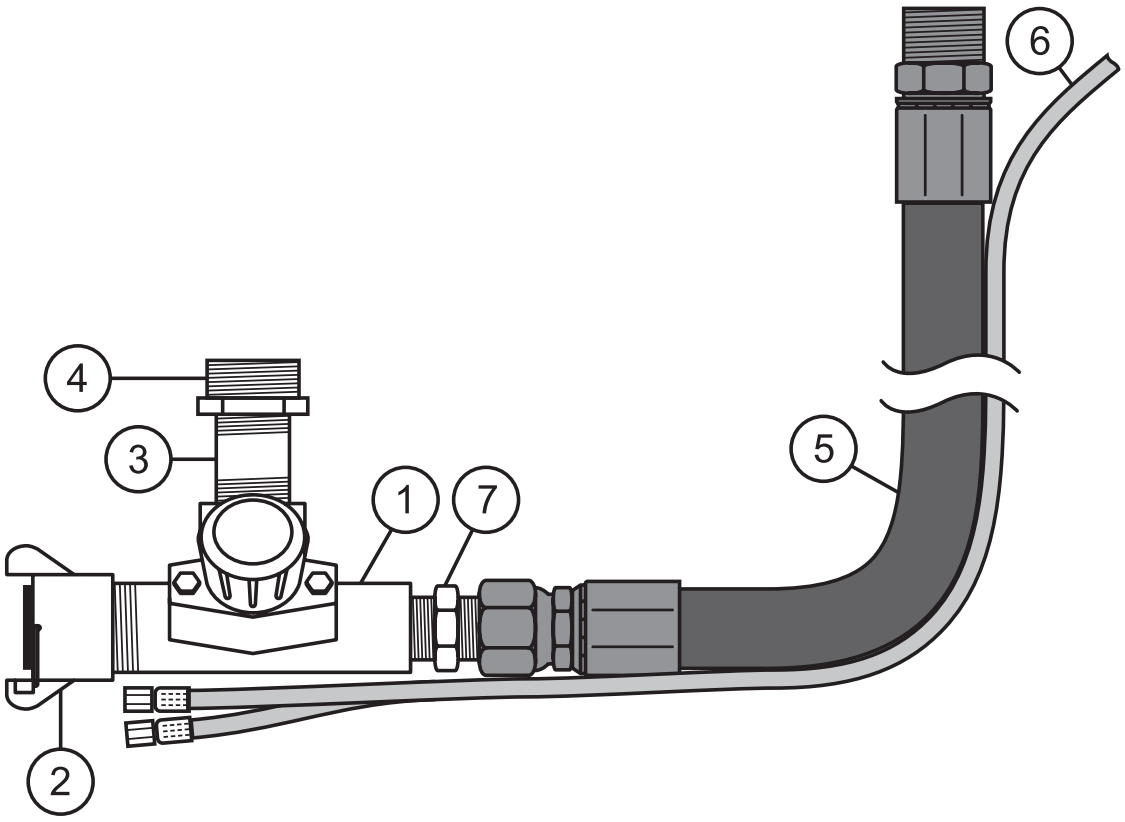


	3.0 Cu Ft CPR Abrasive Blasters		6.0 Cu Ft CPR Abrasive Blasters	
1	888-4203-50002PB	SWIVEL 90°, 1/8" MNPT x 1/4" F	888-4203-50202PB	SWIVEL 90°, 1/4" MNPT x 1/4" F
2	888-4200-30202PB	HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT		
3	888-4203-50000PB	SWIVEL 90°, 1/8" MNPT X 1/8" F		
4	888-4200-30200PB	HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT		
5	888-4203-50202PB	SWIVEL 90°, 1/4" MNPT x 1/4" F		
6	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST		
7	888-4201-50202PB	STRAIGHT SWIVEL, 1/4" MNPT x 1/4" F		
8	888-4101-002PB	HOSE, PUSH-ON, 1/4"		
9	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON		
10	888-3006-102PB	ELBOW, STREET, 90°, GALV, 1/4"		
11	888-2013-402PB	DUST ELIMINATOR, 1/4" MNPT		
12	888-2229-100PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)		
	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY		
13	888-7112-000PB	JUNCTION TEE ASSEMBLY, SMALL & BULK BLASTERS 12VDC (1) OUTLET		
14	888-7072-012PB	POWER CORD, 25' 12VDC, 3-LUG		
15	888-7073-055PB	EXTN CORD W/CONNECTOR, 55', 3 PRONG, 2 WIRE		
16	888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG		
17	888-7106-183PB	CONTROL CORD, URETHANE, 18.3, 3 WIRE, X-TREME DUTY (PER FT)		
18	888-7109-300PB	ELECTRIC CONNECTOR, FEMALE, TWIST-LOCK, 3 PRONG		
19**	888-2263-40101PB	HANDLE, CONTROL, ELECTRIC #2 W/PLUG		
	888-2263-40102PB	HANDLE, CONTROL, ELECTRIC #2 W/SEALED CONNECTOR (REQUIRED WHEN USING STEEL ABRASIVES)		
20	888-7033-002PB	BRACKET, CONTROL VALVE		

** See "***Control Handle Parts Lists***" Section for detailed parts list.

Pipe String Parts Lists

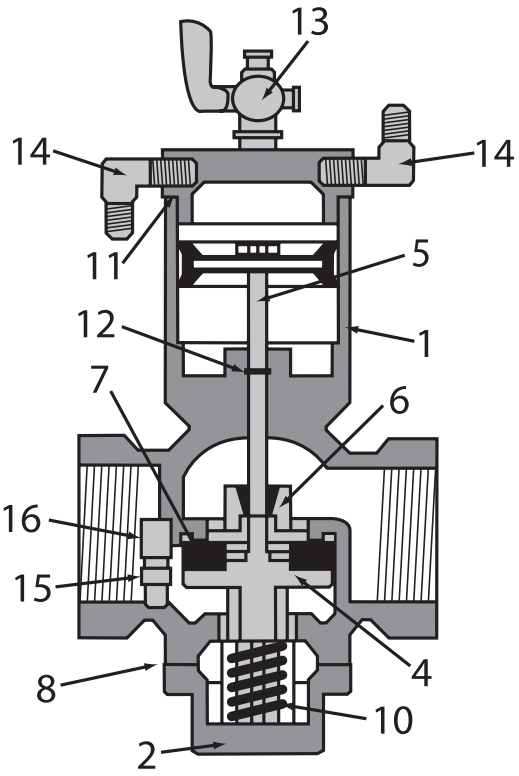
CPR SERIES - MPV / MPV II™ Metering Valve Option



	3.0 Cu Ft CPR Abrasive Blasters		6.0 Cu Ft CPR Abrasive Blasters	
1*	888-2125-106PB	**MPV**, MANUAL PLUNGER VALVE, 1", W/ URETHANE SLEEVE	888-2125-107PB	**MPV**, MANUAL PLUNGER VALVE, 1-1/4", W/ URETHANE SLEEVE
	888-2126-106PB	**MPV II™**, MANUAL PLUNGER VALVE II, 1", W/URETHANE SLEEVE	888-2126-107PB	**MPV II™**, MANUAL PLUNGER VALVE II, 1-1/4", W/URETHANE SLEEVE
2	SB-2S-IR	THRD CPLG, STD NPS, IRON, 1-1/2"		
3	888-3028-10711PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x 3"		
4	888-3026-10807PB	BUSHING, GALV, 1-1/2" x 1-1/4"		
5	124-1670	PUSHER LINE KIT (FLEX) 1" x 20", OAL 24"	124-1680	PUSHER LINE KIT (FLEX) 1-1/4" x 20", OAL 24"
6	200-005	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIP, NOMINAL 3/16" ID x 5', W/UNIONS		
7	111-7200	FITTING, 1" MNPT x 1" M-FLARE	JCM20-NPF20	FITTING, 1-1/4" FNPT x 1-1/4" M-FLARE

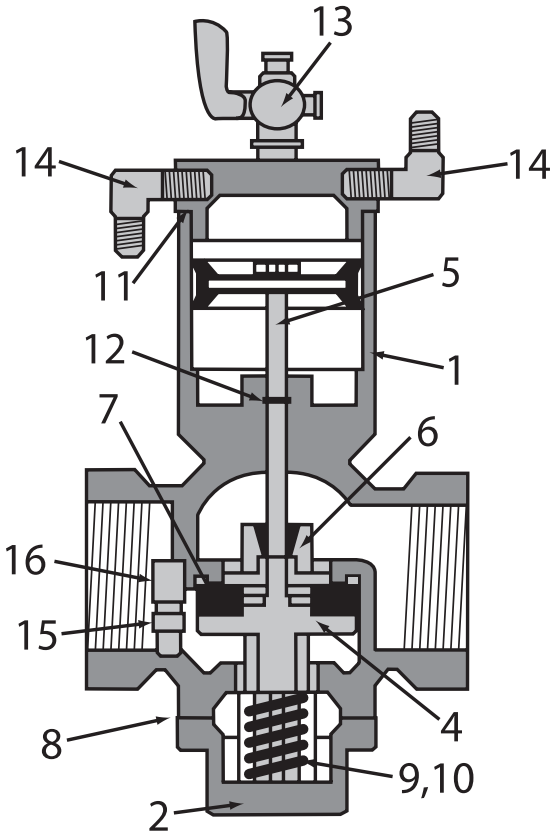
* See "***Valve Parts Lists***" Section for detailed parts list.

Valve Parts Lists



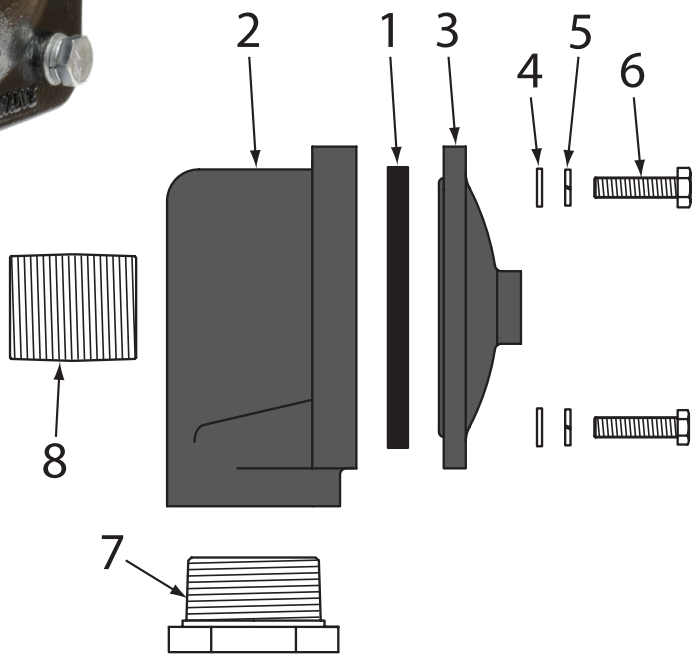
1" Inlet Valve		
	101-9800	VALVE, INLET, 1", COMPLETE
	101-9290	VALVE, INLET, 1", SERVICE KIT, INCLUDES #6, 7, 8, 10, 11 & 12
1	101-9810	VALVE, INLET, 1", BODY
2	101-9850	VALVE, INLET, 1", BOTTOM CAP
3	101-9830	VALVE, INLET, 1", CAP
4	101-9840	VALVE, INLET, 1", PLUG
5	101-9870	VALVE, INLET, 1", PISTON/ROD ASSEMBLY
6	101-9860	VALVE, INLET, 1", PLUG WASHER RETAINER
7	101-9690	VALVE, INLET, 1", PLUG WASHER
8	101-9890	VALVE, INLET, 1", BOTTOM CAP SEAL
10	101-9820	VALVE, INLET, 1", SPRING, 7/8" x 3/32" x 1-1/2"
11	101-9900	VALVE, INLET, 1", O-RING
12	101-9920	VALVE, INLET, 1", O-RING
13	101-9930	VALVE, INLET, 1", PETCOCK, 1/4" NPT
14	102-8270	VALVE, INLET, 1", ELBOW, BRASS, 1/8" NPT
15	101-9450	VALVE, INLET, 1", ADAPTOR 1/8" NPT W/1/16" ORIFICE
16	103-9930	VALVE, INLET, 1", ELBOW, 1/8" BRASS STREET

Valve Parts Lists



1-1/2" Inlet Valve		
	101-9950	VALVE, INLET, 1-1/2", COMPLETE
	101-9270	VALVE, INLET, 1-1/2", SERVICE KIT, INCLUDES #6, 7, 8, 9, 10, 11 & 12
1	101-9960	VALVE, INLET, 1-1/2", BODY
2	102-0010	VALVE, INLET, 1-1/2", BOTTOM CAP
3	101-9970	VALVE, INLET, 1-1/2", CAP
4	101-9990	VALVE, INLET, 1-1/2", PLUG
5	102-0030	VALVE, INLET, 1-1/2", PISTON/ROD ASSEMBLY
6	102-0020	VALVE, INLET, 1-1/2", PLUG WASHER RETAINER
7	101-9980	VALVE, INLET, 1-1/2", PLUG WASHER
8	102-0060	VALVE, INLET, 1-1/2", SEAL, BOTTOM CAP
9	102-0000	VALVE, INLET, 1-1/2", SPRING, 1-1/8" x 1/8" x 2"
10	101-9820	VALVE, INLET, 1-1/2", SPRING, 7/8" x 3/32" x 1-1/2"
11	102-0070	VALVE, INLET, 1-1/2", O-RING, 2" x 2-1/4" x 1/8"
12	102-0080	VALVE, INLET, 1-1/2", O-RING, 5/16" x 7/16" x 1/16"
13	101-9930	VALVE, INLET, 1-1/2", PETCOCK, 1/4" NPT
14	102-5130	VALVE, INLET, 1-1/2", ELBOW, BRASS, 1/4" x 3/16"
15	101-9450	VALVE, INLET, 1-1/2", ADAPTOR 1/8" NPT W/ 1/16" ORIFICE
16	103-9930	VALVE, INLET, 1-1/2", ELBOW, 1/8" BRASS STREET

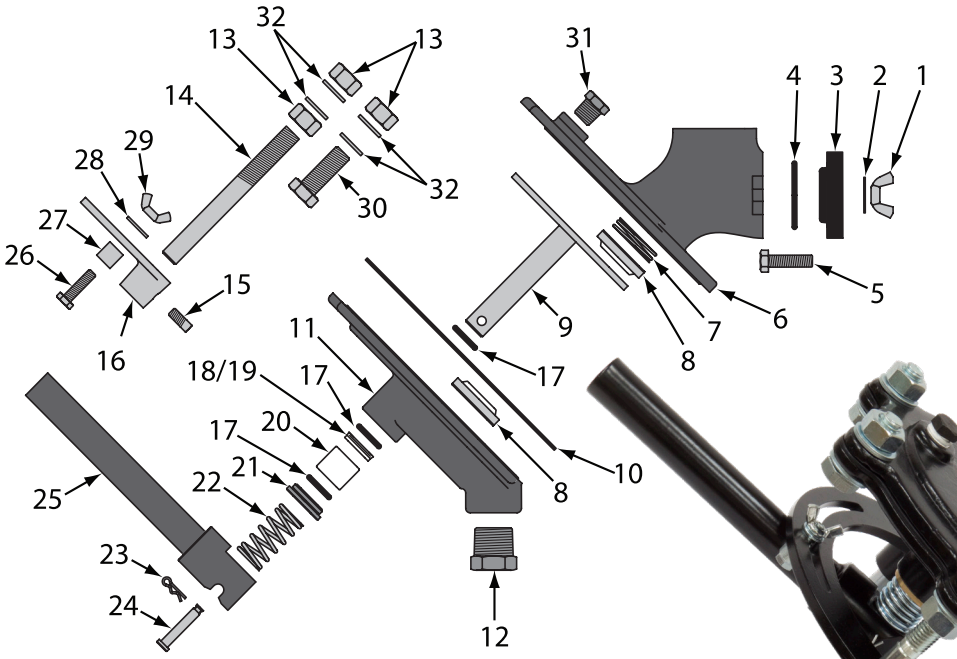
Valve Parts Lists



1" Diaphragm Outlet Valve		
	103-3710	VALVE, OUTLET, 1", DIAPHRAGM, COMPLETE
1	1174-190	VALVE, OUTLET, 1", DIAPHRAGM
4	402-0700	FLAT WASHER
5	552-752	LOCK WASHER, 1/4"
6	103-1530	HEX HEAD CAP SCREW, 1/4"-20 X 1"
7	888-3026-10706PB	BUSHING, GALV, 1-1/4" x 1"
8	888-3029-10699PB	NIPPLE, TBE, GALV, 1" x CLOSED

Replaces Outlet Valve / Abrasive Trap From Legacy Design

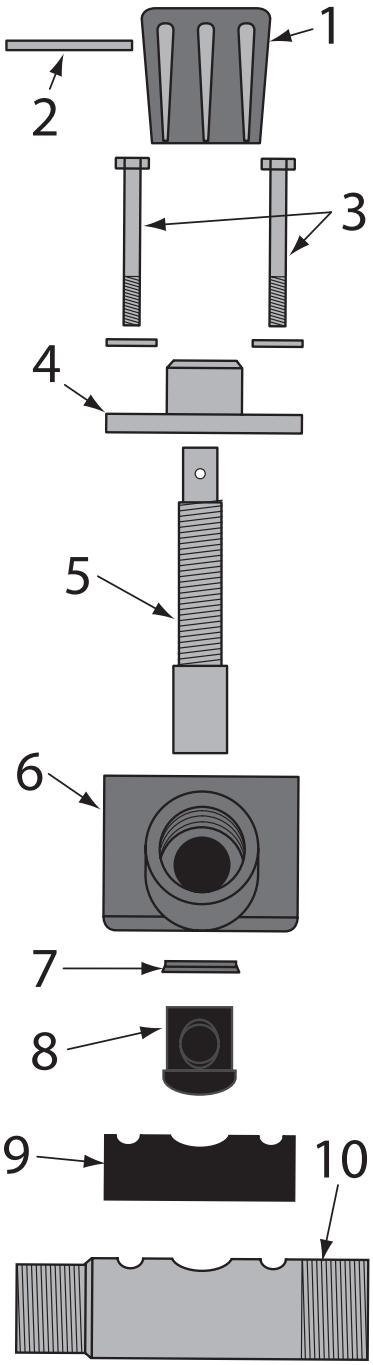
Valve Parts Lists



1-1/4" AMV II™ (Abrasive Metering Valve II)

	102-4350	AMVII, COMPLETE VALVE, X-TREME DUTY, 1-1/4" NPT (DB1000)			
	102-4800	AMVII, SERVICE KIT, INCLUDES #9, 10, (3)17, 18, 19, 20, 21 & 22			
	102-4810	AMVII, WIPER SEAL KIT, INCLUDES #7 & (2)8			
1	102-4410	AMVII, WING NUT	17	102-4580	AMVII, O RING
2	102-4420	AMVII, FLAT WASHER	18	102-4590	AMVII, O RING (FITS SHAFT U-SEAL)
3	102-4430	AMVII, INSPECTION PLATE	19	102-4600	AMVII, SHAFT U-SEAL
4	102-4440	AMVII, O RING (INSPECTION PLATE)	20	102-4610	AMVII, PACKING GLAND
5	102-4450	AMVII, HEX HEAD BOLT	21	102-4620	AMVII, BUSH
6	102-4460	AMVII, VALVE UPPER BODY, NPT	22	102-4630	AMVII, SPRING
7	102-4470	AMVII, SEAL SPRING	23	102-4640	AMVII, R-SPLIT PIN
8	102-4480	AMVII, METERING PLATE WIPER SEAL	24	102-4650	AMVII, HANDLE PIN
9	102-4490	AMVII, METERING PLATE	25	102-4660	AMVII, HANDLE
10	102-4500	AMVII, RUBBER GASKET	26	102-4670	AMVII, HEX HEAD MACHINE SCREW
11	102-4510	AMVII, VALVE LOWER BODY, NPT	27	102-4680	AMVII, GAUGE UNIT SPACER
12	102-4520	AMVII, HEX PLUG	28	102-4690	AMVII, FLAT WASHER
13	102-4530	AMVII, NUT	29	102-4700	AMVII, WING NUT
14	102-4550	AMVII, STUD	30	102-4710	AMVII, HEX HEAD BOLT
15	102-4560	AMVII, MACHINE HEAD SCREW	31	102-4720	AMVII, HEX PLUG
16	102-4570	AMVII, GAUGE UNIT	32	102-4730	AMVII, FLAT WASHER

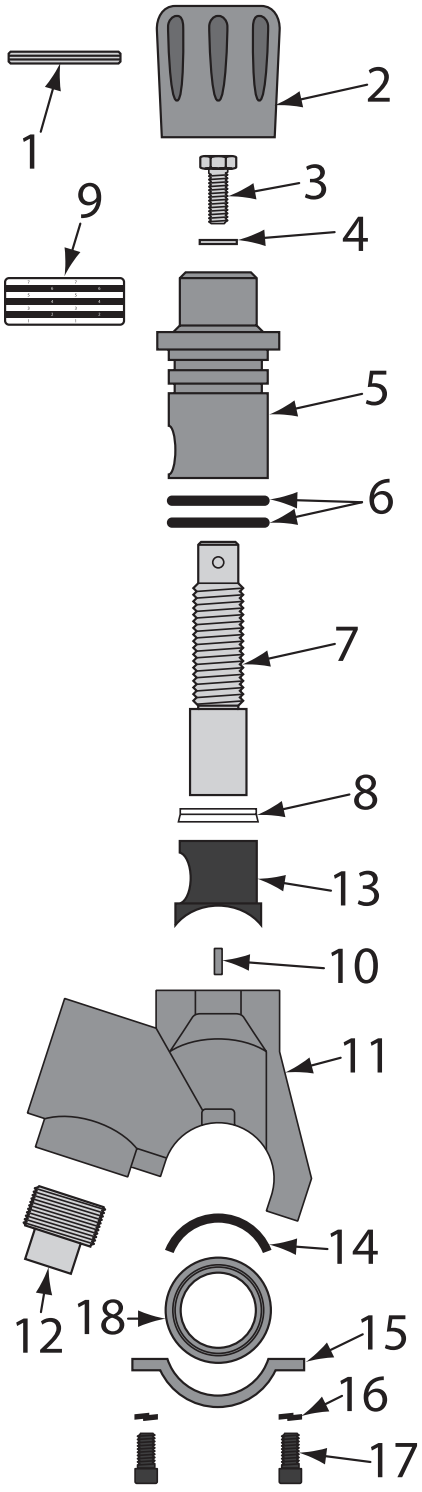
Valve Parts Lists



MPV (Manual Plunger Valve)

	888-2125-106PB	MPV, 1", W/URETHANE SLEEVE
	888-2125-107PB	MPV, 1-1/4", W/URETHANE SLEEVE
	888-2125-108PB	MPV, 1-1/2", W/URETHANE SLEEVE
	888-2125-10099PB	MPV, REPAIR KIT W/URETHANE SLEEVE, INCLUDES #2, 5, 7, 8 & 9
	888-2125-10098PB	MPV, SEAL KIT, W/URETHANE SLEEVE, INCLUDES #7, 8 & 9
1	888-2125-00001PB	MPV & MPV MINI, KNOB
2	888-2125-00004PB	MPV, MPV II & MPV MINI, ROLL PIN
3	888-7010-50556PB	MPV, BOLT W/WASHER
4	888-2125-00002PB	MPV & MPV MINI, CAP
5	888-2125-00005PB	MPV, MPV II & MPV MINI, PLUNGER
6	888-2125-00006PB	MPV, BODY
7	888-2148-00006PB	PLUNGER SEAL W/ "O"-RING (CLEAR URETHANE)
8	888-2125-10008PB	MPV & MPV II, SLEEVE, URETHANE
9	888-2125-00009PB	MPV, GASKET
10	888-2125-00610PB	MPV, PIPE NIPPLE 1" FEMALE x 1-1/2" MALE
	888-2125-00710PB	MPV, PIPE NIPPLE 1-1/4" MALE x 1-1/2" MALE
	888-2125-00810PB	MPV, PIPE NIPPLE 1-1/2" MALE x 1-1/2" MALE

Valve Parts Lists

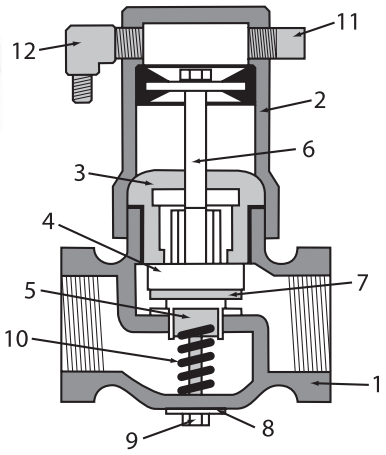


MPV II™ (Manual Plunger Valve II)		
	888-2126-106PB	MPV II, 1" W/ URETHANE SLEEVE
	888-2126-107PB	MPV II, 1-1/4" W/ URETHANE SLEEVE
	888-2126-108PB	MPV II, 1-1/2" W/ URETHANE SLEEVE
	888-2126-10099PB	MPV II, REPAIR KIT W/URETHANE SLEEVE, INCLUDES # 1, (2)6, 7, 8, 13 & 14
	888-2126-10098PB	MPV II, SEAL KIT W/URETHANE SLEEVE, INCLUDES # (2)6, 8, 13 & 14
1	888-2125-00004PB	MPV, MPV II & MPV MINI, ROLL PIN
2	888-2126-04700PB	MPV II, KNOB (BLACK)
3	888-2126-22500PB	MPV II, BOLT (2 REQ.)
4	102-4420	AMV II & MPV II, FLAT WASHER
5	888-2126-29100PB	MPV II, TOP BODY W/ABRASIVE INDICATOR
6	888-2126-06600PB	MPV II, "O"-RING (2 REQ.)
7	888-2125-00005PB	MPV, MPV II & MPV MINI, PLUNGER
8	888-2148-00006PB	PLUNGER SEAL W/ "O"-RING (CLEAR URETHANE)
9	888-2126-07800PB	MPV II, ABRASIVE ADJUSTMENT INDICATOR
10	888-2126-30800PB	MPV II, ROLL PIN (3 REQ.)
11	888-2126-28900PB	MPV II, BODY
12	888-3014-206PB	APV II & MPV II, PLUG, PIPE STAINLESS 1"
13	888-2125-10008PB	MPV & MPV II, SLEEVE, URETHANE
14	888-2126-31300PB	MPV II, GASKET
15	888-2126-29300PB	MPV II, HALF RING CLAMP
16	888-2126-11800PB	MPV II, LOCK WASHER (2 REQ.
17	888-2126-22600PB	MPV II, BOLT, HALF RING CLAMP (2 REQ.)
18	888-2126-00610PB	PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE
	888-2126-00710PB	PIPE NIPPLE, 1-1/4" MALE x 1-1/2" MALE
	888-2126-00810PB	PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE

Valve Parts Lists

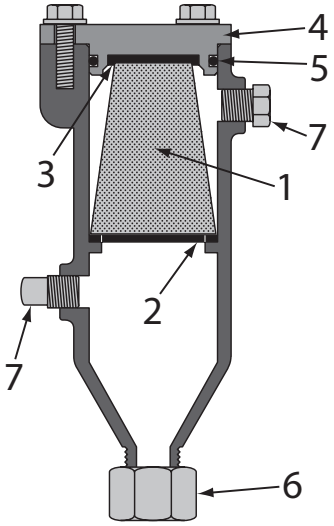
Legacy Outlet Design Replaced By Diaphragm Valve

(See pg 26)



1" Outlet Valve

	101-9670	VALVE, OUTLET, 1", COMPLETE
	101-9280	VALVE, OUTLET, 1", SERVICE KIT, INCLUDES #4, 5, 7 & 10
1	101-9680	VALVE, OUTLET, 1", BODY
2	101-9700	VALVE, OUTLET, 1", BONNET
3	101-9710	VALVE, OUTLET, 1", PLUG & SPINDLE GUIDE
4	101-9720	VALVE, OUTLET, 1", PLUG
5	101-9860	VALVE, OUTLET, 1", PLUG WASHER RETAINER
6	101-9760	VALVE, OUTLET, 1", PISTON/ROD ASSEMBLY
7	101-9690	VALVE, OUTLET, 1", PLUG WASHER
8	101-9790	VALVE, OUTLET, 1", WASHER, NYLON
9	103-3310	HEX HEAD, CAP SCREW, 3/8"-16 x 3/4"
10	101-9740	VALVE, OUTLET, 1", SPRING, 5/8" x 1/16" x 1-3/4"
11	101-9500	VALVE, OUTLET, 1", PIPE PLUG, 1/4"
12	102-5130	VALVE, OUTLET, 1", ELBOW, BRASS, 1/4" x 3/16"



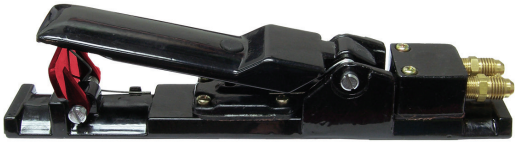
1" Abrasive Trap II

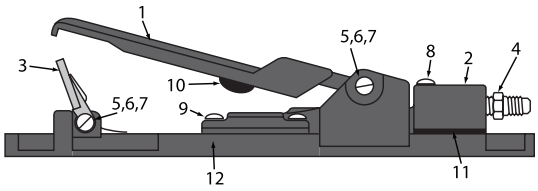
	100-3530	ABRASIVE TRAP II, 1", COMPLETE, X-TREME DUTY
1	102-0120	ABRASIVE TRAP & ABRASIVE TRAP II, 1", SCREEN
2	100-3740	ABRASIVE TRAP II, 1", GASKET, SCREEN, LOWER
3	102-4340	ABRASIVE TRAP & ABRASIVE TRAP II, 1", GASKET, SCREEN
4	100-3730	ABRASIVE TRAP II, 1", TOP CAP
5	100-0290	ABRASIVE TRAP II, 1", O-RING, TOP CAP
6	100-3150	ABRASIVE TRAP II, 1", CLEAN OUT CAP, THREADED
7	888-3014-102PB	PIPE PLUG, GALV, 1/4"

Control Handle Parts Lists

Pneumatic Control Handle (Bleeder Type)

	354-4289	PNEUMATIC CONTROL HANDLE (BLEEDER TYPE DEADMAN CONTROL HANDLE)
	354-4290	REPAIR KIT, PNEU SWITCH, INCLUDES #3, (2)4, (2)5, (2)6, (2)7 ,(2)8, (4)9, & 10
1	367-4291	HANDLE
2	367-4292	BODY
3	367-4293	SAFETY LEVER LOCK
4	460-0719	1/8" NPT ADAPTOR
5	410-4294	TORSION SPRING
6	400-4295	SHOULDER SCREW
7	402-4296	LOCK NUT
8	400-4297	LONG PHILLIPS HEAD SCREW
9	400-4298	SHORT PHILLIPS HEAD SCREW
10	367-4299	RUBBER BUMPER
11	367-4300	GASKET, PNEUMATIC ADAPTOR
12	354-5428	BASE PLATE



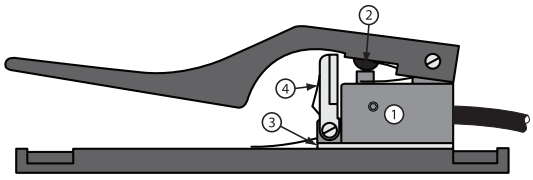


Pneumatic Ball & Strap Control Handle (Bleeder Type)

023602	BALL & STRAP PNEUMATIC CONTROL HANDLE W/ BALL & STRAP (BLEEDER TYPE DEADMAN CONTROL HANDLE)
0270B&S	REPLACEMENT BALL & STRAP
PC3/16	DOUBLE EAR CLAMPS, PINCH-ON, FOR 3/16" ID TWINLINE HOSE (25 PACK)

Electric Control Handle #2

	888-2263-401PB	HANDLE, CONTROL, ELECTRIC #2 (DEADMAN CONTROL HANDLE)
	888-2263-40101PB	HANDLE, CONTROL, ELECTRIC #2 w/PLUG (DEADMAN CONTROL HANDLE)
	888-2263-40102PB	HANDLE, CONTROL, ELECTRIC #2 w/SEALED CONNECTOR (DEADMAN CONTROL HANDLE)
3	888-2263-00111PB	HANDLE, CONTROL, SPRING
4	888-2263-00108PB	HANDLE, CONTROL, SAFETY FLAP
5	PB-31131	1/2" 3 PART SEALED CONTROL CORD CONNECTOR



Electric Ball & Strap Control Handle

002160	BALL & STRAP ELECTRIC CONTROL HANDLE W/ BALL & STRAP
0270B&S	REPLACEMENT BALL & STRAP
888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG
888-7106-183PB	CONTROL CORD, URETHANE, 18.3, 3 WIRE, X-TREME DUTY (PER FT)
PB-31131	1/2" 3 PART SEALED CONTROL CORD CONNECTOR (SEE ABOVE)

Blasting Set-Up

Blast Hose, Twinline & Control Cord

10-034BLK-050-3AL	3/4" BLAST HOSE ASSEMBLY, 50' INCLUDES NOZZLE HOLDER
10-100BLK-050-3AL	1" BLAST HOSE ASSEMBLY, 50', INCLUDES NOZZLE HOLDER
10-114BLK-050-3AL	1-1/4" BLAST HOSE ASSEMBLY, 50', INCLUDES NOZZLE HOLDER
10-114 BLK-050-3XAL	1-1/4" **BIG GUN** BLAST HOSE ASSEMBLY, 50', INCLUDES NOZZLE HOLDER
10-034BLK-050-4AL	3/4" EXTENSION HOSE ASSEMBLY, 50'
10-100BLK-050-4AL	1" EXTENSION HOSE ASSEMBLY, 50'
10-114BLK-050-4AL	1-1/4" EXTENSION HOSE ASSEMBLY, 50'
10-114BLK-050-4XAL	1-1/4" **BIG GUN** EXTENSION HOSE ASSEMBLY, 50'
200-050	HOSE, **TWINLINE** CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIP, NOMINAL, 3/16" ID X 50' W/UNIONS
888-7073-055PB	ELECTRICAL EXTENSION CORD W/ CONNECTORS, 55', 3 PRONG
27WT-1	SAFETY CABLE, 1/2" - 1", **HOSE TO EQUIP.**
27WC-1	SAFETY CABLE, 1/2" - 1", **HOSE TO HOSE**
27WC-15	SAFETY CABLE, 1-1/4", **HOSE TO HOSE**
27WT-2	SAFETY CABLE, 1-1/2" - 3", **HOSE TO EQUIP.**
27WC-2	SAFETY CABLE, 1-1/2" - 3", **HOSE TO HOSE**

Air Hose

10-034RED-050-1	3/4" AIR HOSE ASSEMBLY, 50'
10-100RED-025-1	1" AIR HOSE ASSEMBLY, 25'
10-100RED-050-1	1" AIR HOSE ASSEMBLY, 50'
10-112RED-025-1	1-1/2" AIR HOSE ASSEMBLY, 25'
10-112RED-050-1	1-1/2" AIR HOSE ASSEMBLY, 50'
27WT-1	SAFETY CABLE, 1/2" - 1", **HOSE TO EQUIP.**
27WC-1	SAFETY CABLE, 1/2" - 1", **HOSE TO HOSE**
27WT-2	SAFETY CABLE, 1-1/2" - 3", **HOSE TO EQUIP.**
27WC-2	SAFETY CABLE, 1-1/2" - 3", **HOSE TO HOSE**

Blasting Set-Up

Nozzles

1" ENTRY NOZZLES FOR USE WITH 3/4" BLAST HOSE	
1201-1172	#3 TUNGSTEN CARBIDE NOZZLE
1201-1173	#4 TUNGSTEN CARBIDE NOZZLE
1" ENTRY NOZZLES FOR USE WITH 1" BLAST HOSE	
1201-1173	#4 TUNGSTEN CARBIDE NOZZLE
1201-1174	#5 TUNGSTEN CARBIDE NOZZLE
1201-1175	#6 TUNGSTEN CARBIDE NOZZLE
1-1/4" ENTRY NOZZLES FOR USE WITH 1-1/4" BLAST HOSE	
1348-555	#5 TUNGSTEN CARBIDE NOZZLE
1348-556	#6 TUNGSTEN CARBIDE NOZZLE
1348-557	#7 TUNGSTEN CARBIDE NOZZLE
1348-558	#8 TUNGSTEN CARBIDE NOZZLE

Breathing Equipment

NV3-702-50-PFC	RPB® NOVA 3® RESPIRATOR PACKAGE
407000-PFC	RPB® NOVA 2000™ RESPIRATOR PACKAGE
407800-PFC	RPB® ASTRO™ RESPIRATOR PACKAGE
03-501	RPB® C40 HOT/COLD CLIMATE CONTROL DEV.
407001	RPB® COOL TUBE W/BELT
407024	RPB® HOT TUBE W/BELT
08-400-01	RPB® GX4 CO / GAS MONITOR (120 VAC)
08-401-01	RPB® GX4 CO / GAS MONITOR (12 VDC)

GENVX-PKG-STD	BULLARD® GENVX® RESPIRATOR PACKAGE
88VX-PKG-STD	BULLARD® 88VX RESPIRATOR PACKAGE
CT30	BULLARD® CT30 COOL TUBE W/BELT
HCT30	BULLARD® HCT30 HOT/COLD TUBE W/BELT
COHP	BULLARD® CAB CO MONITOR

RESPIRATOR PACKAGES INCLUDE RESPIRATOR HELMET, 50' BREATHING AIR SUPPLY HOSE, AND AIRLINE FILTER

Air Dryers / After Coolers

DLAD-250-360	PORTABLE AIR DRYER, 250 CFM @ 100 PSIG, 360 CFM @ 150 PSIG
DLAD-450-575	PORTABLE AIR DRYER, 450 CFM @ 100 PSIG, 575 CFM @ 150 PSIG
DLAD-750-1130	PORTABLE AIR DRYER, 750 CFM @ 100 PSIG, 1130 CFM @ 150 PSIG
DLAD-900-1160	PORTABLE AIR DRYER, 900 CFM @ 100 PSIG, 1160 CFM @ 150 PSIG
DLAD-1600-2300	PORTABLE AIR DRYER, 1600 CFM @ 100 PSIG, 2300 CFM @ 150 PSIG
DLAC-250-360	PORTABLE AFTER COOLER, 250 CFM @ 100 PSIG, 360 CFM @ 150 PSIG
DLAC-450-575	PORTABLE AFTER COOLER, 450 CFM @ 100 PSIG, 575 CFM @ 150 PSIG
DLAC-750-1130	PORTABLE AFTER COOLER, 750 CFM @ 100 PSIG, 1130 CFM @ 150 PSIG
DLAC-900-1160	PORTABLE AFTER COOLER, 900 CFM @ 100 PSIG, 1160 CFM @ 150 PSIG
DLAC-1600-2300	PORTABLE AFTER COOLER, 1600 CFM @ 100 PSIG, 2300 CFM @ 150 PSIG

Blast Suits / Gloves

122-9140	BLAST SUIT, LIGHTWEIGHT, MEDIUM
122-9150	BLAST SUIT, LIGHTWEIGHT, LARGE
122-9160	BLAST SUIT, LIGHTWEIGHT, XL
122-9170	BLAST SUIT, LIGHTWEIGHT, XXL
122-9180	BLAST SUIT, LIGHTWEIGHT, XXXL
407701	DOUBLE PALMED LEATHER BLASTING GLOVES

Available Accessories

A Lids and Screens

Lids are important for preventing 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 preventing 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.

102-3530	LID FOR 3.0 CU FT C-SERIES BLASTERS
103-0990	SCREEN FOR 3.0 CU FT C-SERIES BLASTERS
888-5010-060PB	LID FOR 6.0 CU FT C-SERIES BLASTERS
888-5011-060PB	SCREEN FOR 6.0 CU FT C-SERIES BLASTERS

B Moisture Separator

Moisture separators reduce the moisture content of the supplied air to the abrasive blaster. Moisture in the air can lead to clogs and premature wear of blaster components.

175-3101-30CI	MOISTURE SEPARATOR KIT FOR 3.0 CU FT C-SERIES BLASTERS
175-3101-60CI	MOISTURE SEPARATOR KIT FOR 6.0 CU FT C-SERIES BLASTERS

C Regulator Kits

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

888-2003-006PB-CI	1" REGULATOR KIT FOR 3.0 CU FT C-SERIES BLASTERS
888-2003-008PB-CI	1-1/2" REGULATOR KIT FOR 6.0 CU FT C-SERIES BLASTERS
888-2003-00799PB	REPAIR KIT FOR 1", 1-1/4" & 1-1/2" REGULATORS

D Job Timer

Keep track of the 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. **For use with C-Series blasters with electric controls only.**

PB-9805023P-01	DUAL TIMER CONTROL BOX W/KEY RESET & MOUNTING BRACKET

E Relief Valve Kit

Adding this ASME relief valve kit to your blaster can prevent dangerous over-pressurization. Local codes may require a different valve.

888-2470-00704PB	RELIEF VALVE KIT FOR C-SERIES 3.0 / 6.0 CU FT BLASTERS

F Power Supply

Add a power supply to run any 12VDC electric blaster on common 120VAC outlet power. Powers up to 4 control valves at one time.

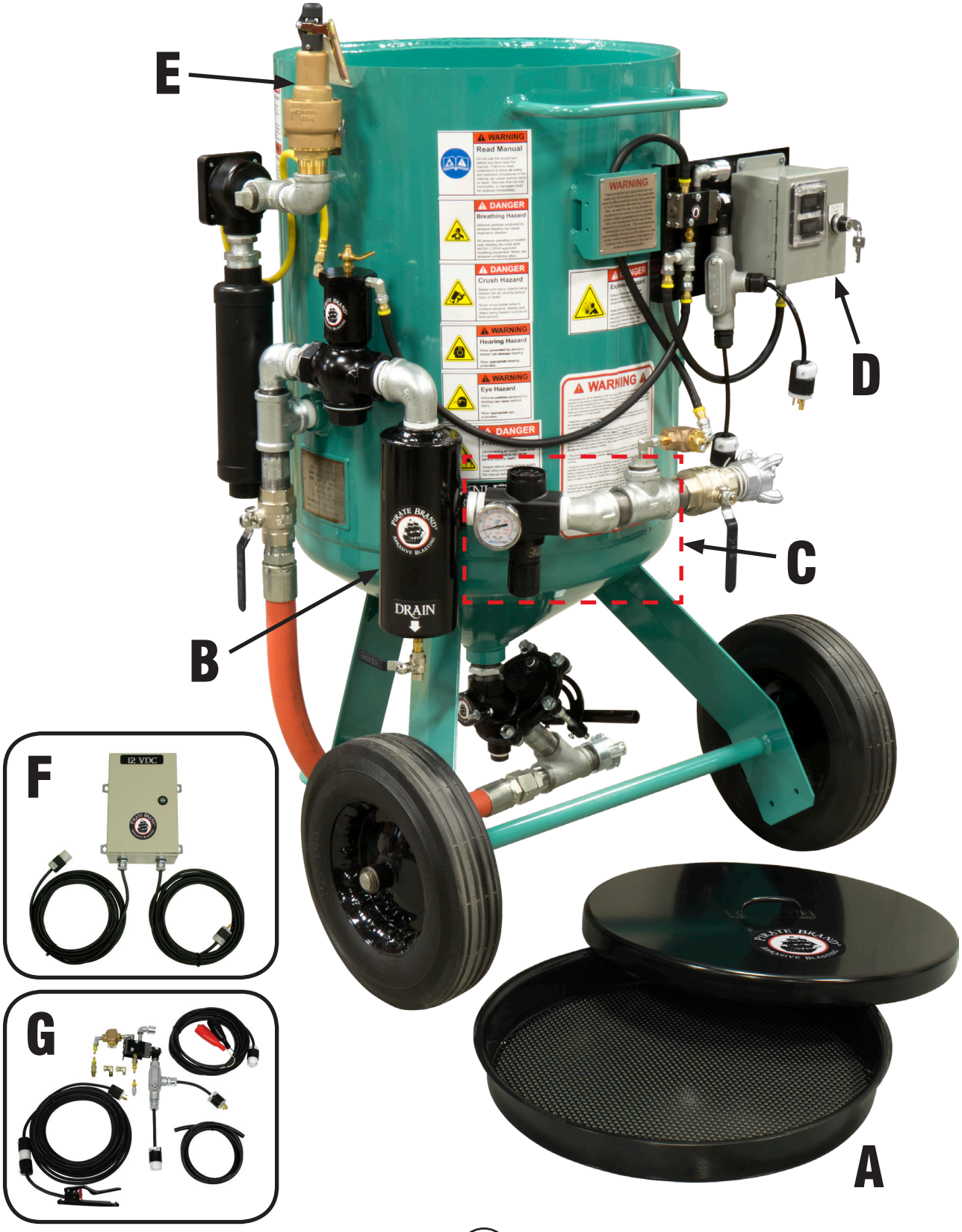
PB-SMP3WP	POWER SUPPLY 120VAC INPUT / 12VDC @ 2.5 AMP OUTPUT

G Electric Conversion Kit

Convert your existing pneumatically controlled C-Series abrasive blaster to electric controls. Electric remote controls are recommended if you run over 100 ft. of blast hose or when blasting in cold weather

800-0005-410PB	PNEUMATIC TO ELECTRIC CONVERSION KIT FOR CPR SERIES ABRASIVE BLASTERS

Available Accessories



Blasting Charts

Compressed Air, Power, & Abrasive Requirements

NOZZLE # ORIFICE SIZE	NOZZLE AIR, POWER & ABRASIVE REQUIREMENTS		NOZZLE PRESSURE							
			50 PSI (3.45 BAR)	60 PSI (4.14 BAR)	70 PSI (4.83 BAR)	80 PSI (5.52 BAR)	90 PSI (6.21 BAR)	100 PSI (6.89 BAR)	125 PSI (8.62 BAR)	140 PSI (9.65 BAR)
#2 1/8 inch (3.2 mm)	AIR	(cu ft/min)	12	13	15	18	19	21	26	
		(cu m/min)	0.34	.037	0.42	0.51	0.54	0.59	0.74	
	HORSEPOWER	(hp)	1.75	2	2.5	3	3.5	4	6	
		(kW)	1.30	1.49	1.86	2.24	2.61	2.98	4.47	
	ABRASIVE	(lb/hr)	70	80	90	100	110	120	135	
		(kg/hr)	32	36	41	45	50	54	61	
#3 3/16 inch (4.8 mm)	AIR	(cu ft/min)	25	30	35	40	43	45	60	
		(cu m/min)	0.71	0.85	0.99	1.13	1.22	1.27	1.70	
	HORSEPOWER	(hp)	5	8	9	9.5	10	10.5	16	
		(kW)	3.75	5.97	6.71	7.08	7.46	7.86	11.93	
	ABRASIVE	(lb/hr)	150	170	200	215	240	260	320	
		(kg/hr)	68	77	91	98	109	118	145	
#4 1/4 inch (6.35 mm)	AIR	(cu ft/min)	50	55	60	70	75	80	95	
		(cu m/min)	1.42	1.56	1.70	1.98	2.12	2.27	2.69	
	HORSEPOWER	(hp)	10	12	13	16	17	18	25	
		(kW)	7.46	8.95	9.69	11.93	12.68	13.42	18.64	
	ABRASIVE	(lb/hr)	270	300	350	400	450	500	675	
		(kg/hr)	122	136	159	181	204	227	306	
#5 5/16 inch (8 mm)	AIR	(cu ft/min)	80	90	100	115	125	140	190	230
		(cu m/min)	2.27	2.55	2.83	3.26	3.54	3.96	5.38	6.51
	HORSEPOWER	(hp)	17	20	25	27	28	30	36	60
		(kW)	12.68	14.91	18.64	20.13	20.88	22.37	26.85	44.85
	ABRASIVE	(lb/hr)	470	530	600	675	750	825	1000	1125
		(kg/hr)	213	240	272	306	340	374	454	510
#6 3/8 inch (9.5 mm)	AIR	(cu ft/min)	110	125	145	160	175	200	275	315
		(cu m/min)	3.12	3.54	4.11	4.53	4.96	5.66	7.79	8.91
	HORSEPOWER	(hp)	25	29	32	35	40	45	57	65
		(kW)	18.64	21.63	23.86	26.10	29.83	33.56	42.50	48.59
	ABRASIVE	(lb/hr)	675	775	875	975	1060	1100	1350	1840
		(kg/hr)	306	352	397	442	481	499	612	835
#7 7/16 inch (9.5 mm)	AIR	(cu ft/min)	150	170	200	215	240	255	315	405
		(cu m/min)	4.25	4.81	5.66	6.09	6.80	7.22	8.92	11.46
	HORSEPOWER	(hp)	35	40	45	50	55	60	70	90
		(kW)	26.10	29.83	33.56	37.28	41.01	44.74	52.20	67.28
	ABRASIVE	(lb/hr)	900	1000	1200	1300	1400	1510	1800	2540
		(kg/hr)	408	454	544	590	635	703	816	1152
#8 1/2 inch (12.7 mm)	AIR	(cu ft/min)	200	225	250	275	300	340	430	540
		(cu m/min)	5.66	6.37	7.08	7.79	8.50	9.63	12.18	15.28
	HORSEPOWER	(hp)	45	50	55	63	70	75	95	120
		(kW)	33.56	37.28	41.01	46.98	52.20	55.93	70.84	89.70
	ABRASIVE	(lb/hr)	1200	1350	1500	1700	1850	2025	2525	3240
		(kg/hr)	544	612	680	771	839	919	1145	1470
#10 5/8 inch (16 mm)	AIR	(cu ft/min)	300	350	400	450	500	550	700	880
		(cu m/min)	8.50	9.91	11.33	12.74	14.16	15.58	19.82	24.90
	HORSEPOWER	(hp)	70	80	90	100	110	120	150	190
		(kW)	52.20	59.66	67.11	74.57	82.03	89.48	111.85	142.02
	ABRASIVE	(lb/hr)	1900	2200	2400	2700	3000	3300	4000	5200
		(kg/hr)	862	998	1089	1225	1361	1497	1814	2359
#12 3/4 inch (19 mm)	AIR	(cu ft/min)	430	500	575	650	700	800	1100	1255
		(cu m/min)	12.18	14.16	16.28	18.41	19.82	22.66	31.15	35.52
	HORSEPOWER	(hp)	100	115	130	145	160	175	215	245
		(kW)	74.57	85.76	96.94	108.13	119.31	130.50	160.33	183.13
	ABRASIVE	(lb/hr)	2700	3100	3500	3900	4300	4700	5700	7375
		(kg/hr)	1225	1406	1588	1769	1950	2132	2586	3345

This table is to be used as reference only. Actual results may vary depending on specific abrasive medium used. This table is based on abrasive with a bulk density of 100 pounds per cubic foot.