

S-Series - 8.0 Cu Ft Dual-Chamber 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-MAS006



Using This Manual

Thank you for your purchase of a Pirate Brand® SPH Series Dual-Chamber 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.

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

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

<u>Pressure Release System</u>: 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.

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

<u>Pressurize</u>: To fill the pressure vessel with compressed air.

<u>Properly Trained</u>: 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 1.5 - 20 cu. ft. capacity range. They must also have read and understood this manual in its entirety.

<u>Silica</u>: 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.



OF



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.



OR



DANGER: This symbol calls attention to a potentially hazardous situation that <u>WILL</u> 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.





- 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 Deadman controls) are required when using abrasive blasters. **Never** operate the Abrasive Blaster without remote controls. **Never** use bleeder type control handles, such as Clemco® or A-BEC® style handles, with SPH or SPR series blasters as they can cause a hazardous situation where the blaster will not shut off when the handle is released.
- 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.
- <u>Never</u> 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.
- <u>Do not</u> use abrasive blasters in areas that could be considered a hazardous location as described in the National Electric Code NFPA 70, Article 500. <u>Never</u> use the Abrasive Blaster in wet environments. <u>Always</u> connect electrically controlled abrasive blasters to a Ground Fault Circuit Interrupter (GFCI).



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Contact Info:

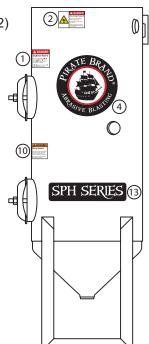
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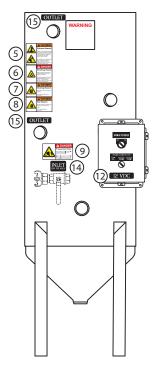
WWW.PIRATE-BRAND.COM

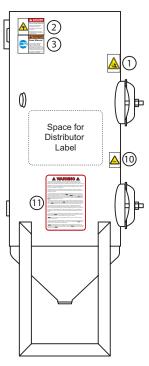


Warning Label Locations

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



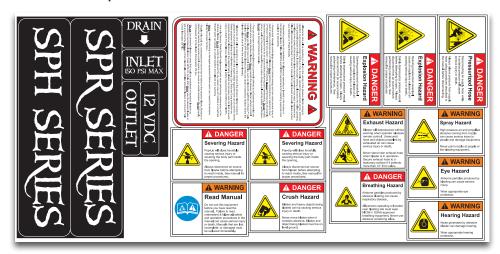






Labels must be replaced when they are no longer readable!

Replacement Label Pack P/N: PB-LPS001



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. Placement of "Inlet Label" and "Pressurized Hose" labels will vary based on which type of system. Place these labels as close to the inlet coupling as possible.
- 5. Choose correct Series Label (#13), **DO NOT** apply both series labels. "SPH Series" is the correct choice for Dual-Chamber systems, "SPR Series" labels are not used with Dual-Chamber systems.



How Dual-Chamber Systems Work (Pressure Hold)



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 upper chamber Pop-up and its seat are located. When abrasive is added, it flows down through the hole, around the Pop-up and into the upper chamber.

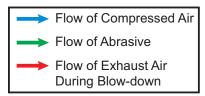
Abrasive will flow from the upper chamber into the lower chamber via the lower chamber Pop-up during the automatic cycle process or when the Abrasive Blaster is in its depressurized state.

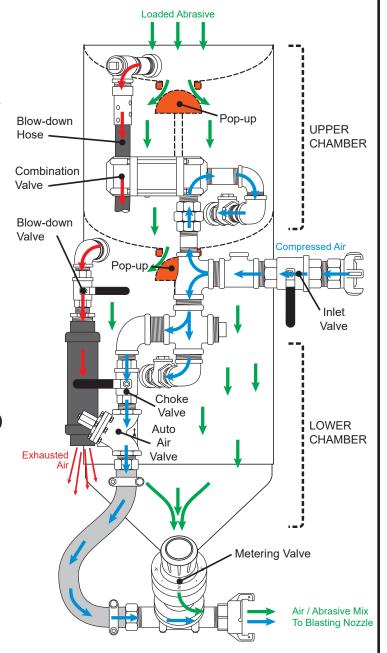
PRESSURIZATION

Before pressurization can take place in a pressure hold system, the Blow-down Valve must be closed. Then, when a compressed air source (such as an air-compressor) is connected to the inlet of the Abrasive Blaster and the Inlet Valve is opened, compressed air can flow into the pressure vessel causing the lower chamber Pop-up (located internally) to seal against its seat allowing the lower chamber to become pressurized. When the control handle is activated, the Auto Air Valve and Metering Valve open allowing compressed air & abrasive to flow and mix. The mixture of compressed air and abrasive will now exit the Abrasive Blaster through a blast hose and nozzle connected to the coupling on the Metering Valve and blasting begins. While in use, the Combination Valve will cycle the upper chamber between pressurized and depressurized states. exhausting air through the blow-down hose. This cycling is what allows a dual-chamber abrasive blaster to continuously refill itself from the upper chamber.

DEPRESSURIZATION (BLOW-DOWN)

When the control handle is released in a pressure hold (SPH) system, the pressure vessel remains filled with compressed air. The compressed air remaining in the pressure vessel is released when the control box power is turned off, the inlet valve is manually closed and the blow-down valve is manually opened.

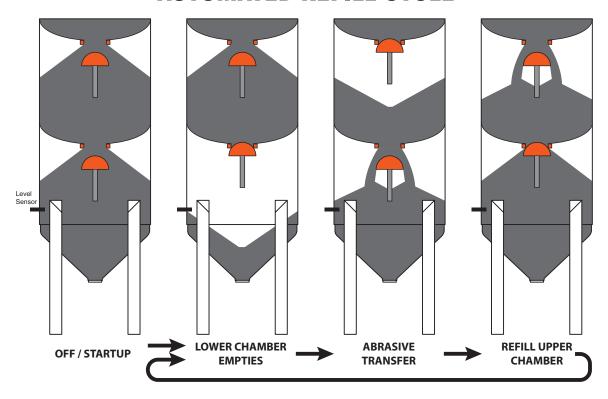






How Dual-Chamber Systems Work (Pressure Hold)

AUTOMATED REFILL CYCLE



OFF / STARTUP

When the abrasive blaster is off and in a fully depressurized state, both Pop-Ups are lowered and abrasive can flow freely into the upper and lower chambers, filling them completely.

LOWER CHAMBER EMPTIES

When the abrasive blaster is pressurized, the lower chamber Pop-Up seals and the lower and upper chambers are isolated from each other. When blasting begins, abrasive from the lower chamber is consumed and the level continues to drop until the Level Sensor is exposed.

ABRASIVE TRANSFER

When the Level Sensor is exposed, it sends a signal that triggers the automatic controls to pressurize the upper chamber causing the upper chamber Pop-Up to seal. Once the pressure in the upper chamber is the same as the pressure in the lower chamber, the lower chamber Pop-Up falls. Abrasive can now flow from the upper chamber to the lower chamber while pressurized allowing blasting to continue uninterrupted. When the level sensor becomes covered again, it signals a timer in the automatic controls to begin a countdown. The countdown is set to allow enough time for all of the abrasive in the upper chamber to flow into the lower chamber. When the countdown reaches 0, the automatic controls depressurize the upper chamber causing the lower chamber Pop-Up to seal and the upper chamber Pop-Up to fall.

REFILL UPPER CHAMBER

Once the upper chamber Pop-Up falls, abrasive will flow through the opening and into the upper chamber filling it. While the upper chamber is filling, abrasive is being consumed from the lower chamber starting the cycle over again.





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® SPH Series Dual-Chamber 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 Assemblies and check for foreign items that may have fallen into the Abrasive Blaster through the Pop-up openings. Remove any foreign materials and reinstall the Handway Assemblies.



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.

SECURE BLOW-DOWN HOSE

The longer Blow-down Hose used on stationary Abrasive Blasters must be secured to a stationary surface before using the Abrasive Blaster. If not secured the Blow-down Hose will whip around violently when exhausting. Choose an appropriate location to direct exhausted air that is not near personnel.



DANGER: Blow-down hoses that extend more than 12" from the Combination Valve must be secured to a stationary surface to prevent injury.

RE-TIGHTEN HANDWAY ASSEMBLIES

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



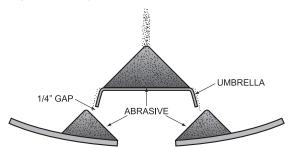
DANGER: Never perform any maintenance or attempt to open the Abrasive Blaster in any way while it is pressurized. The violent release of compressed air and propelled objects will cause serious injury or death.

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.

ADJUST UMBRELLAS

Adjust the Umbrellas so there is a 1/4" gap between the bottom of the Umbrella and the abrasive heaped around the Pop-up entry. Start with the umbrella at a height of about 2" and pour your abrasive of choice onto the center of the umbrella. Keep adding abrasive until a mound forms over the umbrella and around the opening and the abrasive starts falling into the pressure vessel. Measure the distance between the bottom of the umbrella and the mound forming around the Pop-up opening and lower the umbrella so a 1/4" gap is achieved. Different abrasives require different heights, so readjust as needed.





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

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.





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

Abrasive can be added to dual-chamber abrasive blasters at any time but be aware that while in use, the upper chamber will cycle between pressurized and depressurized states and the pop-up will open and close without warning. The typical method to ensure a continuous flow of abrasive to a dual-chamber abrasive blaster is an overhead feeding system. 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: 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. NOTE: A constant compressed air supply of at least 100PSI is recommended for proper operation of the remote control system.

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 control box male twist-lock connector.

Pneumatic: Connect the Remote Control twinline hose to the Abrasive Blaster using the supplied threaded or quick-disconnect fittings. The twinline hose is supplied with different size fittings on each of the 2 lines to prevent them from being connected to the Abrasive Blaster incorrectly. Do not modify or reverse these fittings. It is not recommended that Pneumatic Remote Control Systems are used when the Blast Hose length will be longer than 100 feet.



DANGER: For 2 outlet blasters, never reverse the control handle connections so that a handle on one outlet activates the blast hose connected to the other outlet. Also take special care when performing maintenance to not to reverse the wiring between outlets.



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



WARNING: Never use bleeder type Remote Control Handles such as Clemco® or A-BEC® style handles with Pirate-Brand® SPH/SPR Series equipment as they may cause the Abrasive Blaster to start without warning or to not stop the Abrasive Blaster when released.



WARNING: Never reverse or modify pneumatic Remote Control twinline hose fittings.



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 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 on the Metering Valve at the base of the Abrasive Blaster and secure with safety clips or mechanics/safety wire when using BIG GUN couplings.



WARNING: Always use safety devices like clips and whip-checks (safety cables) at hose connections. BIG GUN couplings require the use of safety/mechanics wire for proper securing.



See page 13 for diagram of blaster components



Dual-Chamber Special Notes

ABOUT THIS SECTION: Dual-chamber abrasive blasters have features that single chamber blasters do not have. This section details the additional considerations, requirements and settings that are necessary when using dual-chamber abrasive blasters.

COMPRESSED AIR REQUIREMENT

Dual-chamber abrasive blasters <u>require</u> a constant supply of compressed air. Failure to provide a consistent supply will cause back-flow and upper/lower chamber pressure equalization problems. For this reason, a dedicated air supply is recommended. We also recommend the use of a regulator on the abrasive blaster air inlet.



WARNING: Failure to provide a constant air supply of at least 100 PSI to the abrasive blaster can cause excessive wear to multiple components.

UNION ORIFICE PLATE

Dual-chamber abrasive blasters feature a restriction plate installed in the union below the combination valve. This restriction plate is crucial to the operation of the cycling of the abrasive blaster as it reduces compressed air demand during cycling of the upper chamber.



WARNING: Never operate a dual-chamber blaster without the union orifice plate. Operation with out the union orifice plate can cause excessive wear to multiple components and interrupted media flow.

CHECK VALVES

Dual-chamber abrasive blasters require the use of a check valve at both the upper and lower chamber inlets to reduce back-flow. The lower chamber check valve features a flapper with an orifice to aide in pressure equalization between the upper and lower chambers.



WARNING: Never operate a dual-chamber blaster without the proper check valves installed and check for proper operation per the maintenance schedule as required. Operation without the proper check valves can cause excessive wear to multiple components and malfunction.

PRESSURE EQUALIZATION

Dual-chamber abrasive blasters require that the upper and lower chamber pressures completely equalize during the automatic cycle. Incorrect check valves, leaking pop-ups, pop-up gaskets, and handway gaskets can cause a pressure differential between the upper and lower chambers causing the abrasive blaster to malfunction.

LEVEL SENSOR POSITION

Dual-chamber abrasive blasters come from the factory with the level sensor installed in the lowest of 3 positions. This is the proper position for most applications and will not require adjustment. If the abrasive blaster runs out of abrasive before the upper chamber can fill the lower chamber, first check for proper operation of the cycle controls, abrasive blaster components, and the proper timer setting. If the cycle controls, abrasive blaster components and timer are in proper working order, uninstall and re-install the level sensor in a higher position to start the transfer of abrasive from the upper chamber to the lower chamber sooner.

LEVEL SENSOR ADJUSTMENT

The level sensor's sensitivity is adjustable. Once set properly, it should not need readjustment unless switching to a significantly different abrasive. When necessary, adjust the level sensor using the following procedure

- 1. Fill the lower chamber with your abrasive of choice
- Decrease the sensitivity setting on the level sensor until the light comes on (Light on indicates no abrasive)
- Slowly increase the sensitivity setting on the level sensor until the light turns off (Light off indicates abrasive is present)

DOOR INTERLOCK

Dual-chamber abrasive blasters with pneumatic controls can continue to blast when power is turned OFF to the control box. For this reason, a door interlock system that only cuts the power to the control box must not be used on dual-chamber abrasive blasters with pneumatic controls. A door interlock system that uses a valve to interrupt compressed air flow to the pneumatic control valves must be used. Both 12VDC and 120VAC versions of such systems are available (ref. part numbers 999-8400-10021PB)

NOTE: Dual-Chamber blasters with electric controls are equipped to separate control box power from blast control power when used with interlocks.



WARNING: Interrupting the power to the control box will not disable pneumatic blasting controls on dual-chamber abrasive blasters. A control valve that interrupts air flow to the pneumatic controls must be installed when using a door interlock system.



WARNING: Disrupting power to the control box may cause blaster to malfunction by interrupting the normal cycle.



Dual-Chamber Special Notes

RESTORING NORMAL CYCLE AFTER RUNNING OUT OF ABRASIVE.

If the supply of abrasive is interrupted, the automatic cycling of the dual-chamber abrasive blaster will get "stuck" in the abrasive transfer stage where both the upper and lower chamber are pressurized. To restore the normal operating cycle, perform the following procedures.

- Restore abrasive flow (often debris build up on the area of the screen through which abrasive can flow is the culprit)
- 2. Turn the Abrasive Loading Selector switch on the control box to the "Manual Upper Chamber Depressurize" position. The upper chamber will depressurize and abrasive will now flow around the pop-up into the upper chamber.
- 3. After the upper chamber has finished filling, turn the Abrasive Loading Selector switch on the control box to "Automatic Cycle Control". The abrasive blaster will now continue in normal automatic operation.

ABRASIVE LOADING SELECTOR AUTHORIC CORTES C

Control Box

MAIN POWER

This is the overall power switch that controls all functions of the control box. The setting should be ON during blasting operations and OFF whenever the blaster is not in use or maintenance is being performed.

ABRASIVE LOADING SELECTOR

Sets the mode of operation. Generally speaking, during normal operation the "Automatic Cycle Control" setting should be used.

AUTOMATIC CYCLE CONTROL

In this mode the abrasive blaster automatically continues to replenish abrasive by filling the upper chamber and then transferring the abrasive to the lower chamber while pressurized.

MANUAL CONTROL UPPER CHAMBER DEPRESSURIZE

In this mode the abrasive blaster's upper chamber is forced into an unpressurized condition. This is mainly used to force the upper chamber to refill after the automatic cycle control gets "stuck" due to an interruption in the overhead abrasive supply.

MANUAL CONTROL UPPER CHAMBER PRESSURIZE

In this mode the abrasive blaster's upper chamber is forced into a pressurized condition. This mode can be used to force the abrasive blaster to run out of media or to inspect that the upper chamber pop-up is seating properly.

TIMER SETTING

The automatic control timer is set properly from the factory to [D 1 3 5 s]. This is the proper setting and should not be changed. Mode D is necessary for the proper operation of the automatic controls. 135 seconds is the proper setting to allow all abrasive in the upper chamber to flow into the lower chamber.

Proper Timer Settings



Blasting

PRESSURIZING THE ABRASIVE BLASTER

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

- <u>All</u> "BEFORE YOU BLAST" procedures have been followed.
- The Inlet Valve is closed.
- The Control Box Power Switch is OFF
- The Control Box Abrasive Loading Selector is set to Automatic Cycle Control
- The Blow-down Valve is closed
- The Remote Control Handles are released.
- All hose connections are secure and have a safety clip or safety/mechanics wire 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, open the Inlet Valve on the Abrasive Blaster and turn the Control Box Main Power Switch to ON. 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: Blast Hose may kick back when Remote Control Handle is activated. Be prepared and brace yourself for kick back.



WARNING: All those who will be in the area while blasting is to occur must be properly trained, read the manual, and be 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. (Label Pack PN: PB-LPS001)

USING THE ABRASIVE BLASTER

After pressurizing the Abrasive Blaster, it is ready to begin blasting. Press the safety button or push down the safety flap 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 turning the handle 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. Adjustments to the Metering Valve can only be made when Abrasive Blaster is not in operation.

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.



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.



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® SPH Series Dual-Chamber Abrasive Blasters.



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



WARNING: Never use the abrasive blaster without a nozzle securely installed in the blast hose nozzle holder.



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

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 Valve. Turn the Control Box power switch to OFF. To depressurize Pressure Hold (SPH) Abrasive Blasters, slowly open the Blow-down Valve to allow the compressed air stored in the Abrasive Blaster to escape.



WARNING: Never operate the Abrasive Blaster without a muffler on the Blow-down valve. Without the muffler, the sudden release of compressed air can cause severe injury.



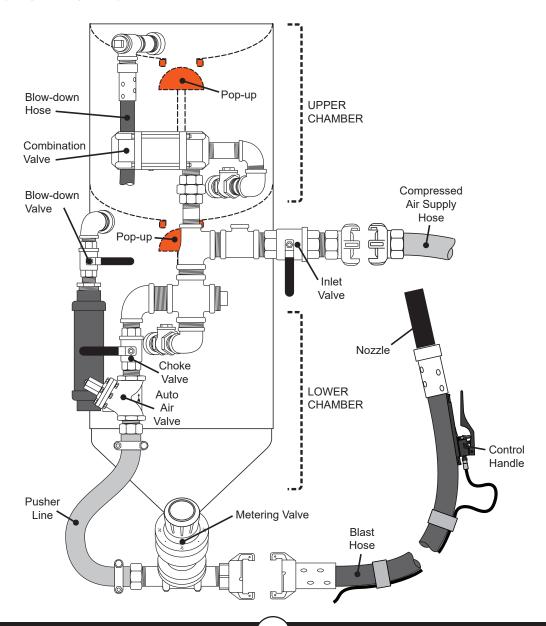
Operating Procedures Blasting

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 Blow-down valve. Slowly open the inlet valve on the Abrasive Blaster. The compressed air stored in the Compressed Air Supply Hose can now escape through the Blow-down Muffler. When you no longer hear air escaping, squeeze the Compressed Air Supply Hose to confirm the absence of compressed air. After confirming the absence of compressed air in the Compressed Air Supply Hose 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.





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 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	
2 - Inspect Remote Control Handles & Control Hose/Cord	Every 8 Hours Of Use	
3 - Inspect Blast Hose, Couplings & Gaskets Every 8 Hours Of Use		
4 - Inspect Blasting Nozzle	Every 8 Hours Of Use	
5 - Inspect Air Hose, Couplings & Gaskets	Every 8 Hours Of Use	
6 - Inspect & Clean Blow-Down Muffler	Every 40 Hours Of Use	
7 - Inspect Blow-Down Hose Assembly	Every 200 Hours Of Use	
8 - Inspect Pop-Ups & Pop-Up Gaskets	Every 200 Hours Of Use	
9 - Inspect Check Valves	Every 200 Hours Of Use	
10 - Service Metering Valve(s) Every 600 Hour		
11 - Service Automatic Air Valve(s) Every 600 Hours Of		
12 - Service Combination Valve Every 600 Hours Of Us		
13 - Service Control Valve(s)	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 Personal Protective Equipment (PPE)

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

2. Inspect Remote Control Handles and Control Hose/Cord

Pneumatic Remote Control Systems:

Inspect Control Handle for damage making sure the Safety Flap/Lever Lock/Button 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/Button 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.

3. 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. BIG GUN couplings require the use of safety/mechanics wire for proper securing.

4. 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"

5. 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.

6. Inspect & Clean Blow-down Muffler

Remove the Blow-down muffler, turn it upside-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.

7. Inspect Blow-down Hose Assembly

Remove & inspect the Blow-down Hose assembly. If leaks or soft spots are found, it must be replaced.

8. Inspect Pop-Up & Pop-Up Gaskets

Inspect the Pop-Up & Pop-Up Gaskets for wear and replace as necessary. To inspect the lower chamber Pop-Up, complete shut-down/ depressurization of both chambers is required and the upper chamber handway must be removed. Leaking Pop-Ups cause major problems with the operation of dual-chamber abrasive blasters. **DANGER**: Never reach into the Pop-up opening, it can close without warning causing severe injury or death.

9. Inspect Check Valves

Dual-chamber abrasive blasters require check valves as abrasive blasting air demand and the cycling of the upper chamber is likely to cause back-flow within the system. Open the check valve cap and check flappers for proper function and wear. Replace/repair to maintain proper function of the check valves. Failure to do so will cause damage to other components of the abrasive blaster. **NOTE: The check valve used on the lower chamber requires a flapper with a drilled hole to ensure proper pressure equalization between the upper and lower chamber.**

10. Service Metering Valve(s)

Disassemble, clean & inspect the Métering Valve for proper operation and worn components. Replace any worn components found. Lubricate APV & APVII valves with silicone paste before reassembling.

11. Service Auto Air Valve(s)

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

12. Service Combination Valve

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

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. 15. The control box power is not turned to ON and the Abrasive Loading Selector is not set to Automatic Cycle Control.
- 3. The Union-end Ball Valve above the Metering Valve is closed (if equipped).
- 4. Abrasive cut-off function is engaged halting the flow of abrasive (if equipped).
- 5. The abrasive level sensor is out of adjustment or malfunctioning.
- 6. The automatic cycle control box is malfunctioning.
- 7. A pop-up or handway gasket is leaking causing differential pressure between the upper and lower chambers.
- **8.** The Metering Valve is closed or has not been adjusted properly. If the Metering Valve is an APV or APVII and you are concerned the valve is not opening, the following test can be performed:

Close the Metering Valve fully by turning the knob clockwise until it stops, then turn the knob counter-clockwise about 9 full turns. Close the Union-end Ball Valve above the Metering Valve (if equipped). Close the Choke Valve, then depress the control handle and check to see if the knob is hard to turn or if it will not turn at all. If the knob is hard to turn or will not turn at all then the Metering Valve is opening properly. Lastly, release the control handle and open the Choke Valve and Union-end Ball Valve located above the Metering Valve if equipped.

9. There is an obstruction in the Metering Valve. To clear the obstruction for both APV series and MPV series Metering Valves, perform the following procedure:

Turn the knob on the Metering Valve clockwise until it stops and then turn the knob counter-clockwise 9 full turns to open it completely. 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 and your Abrasive Blaster is equipped with a Union-end Ball Valve above the Metering Valve, close the Union-end Ball Valve and depressurize the Abrasive Blaster. Remove the Metering Valve by loosening the union on the Union-end Ball Valve. With the Metering Valve removed and the Abrasive Blaster depressurized, open the Union-end Ball Valve slowly to see if a steady stream of abrasive falls out. If you do not see a steady stream of abrasive there is a large obstruction such as a large piece of paper from a bag of abrasive. If your Abrasive Blaster is not equipped with a Union-end Ball Valve, then you must depressurize the Abrasive Blaster, remove the pusher line, and remove the Metering Valve to check for a steady stream of abrasive. If abrasive flows, wait until the Abrasive Blaster is empty before reinstalling the Metering Valve.

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. 10. 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:

- 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. A Pop-up is not sealing properly.
- 6. A Handway Assembly is leaking.
- 7. Dirty or clogged Auto Air Valve Vent.
- **8. Diaphragm in Auto Air Valve is damaged, defective, or worn out.** To test, put your thumb over the vent. If any air is coming out with the control handle depressed, the diaphragm must be replaced.
- **9. 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.
- 10. Abrasive Metering Valve is open too far.
- 11. Obstruction in Nozzle.
- 12. Regulator needs adjustment (if equipped).

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. 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. Control hoses and/or fittings are leaking.
- 5. 90 micron strainer clogged (if equipped)
- 6. Obstruction in Nozzle.
- 7. Dirty or clogged Auto Air Valve Vent (if equipped).
- 8. The Pneumatic Control Handle is damaged, defective or worn out (if equipped).
- 9. The Electric Control Handle is damaged, defective or worn out (if equipped).
- 10. The Electric Control Coil(s) are defective (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. Control Valve stuck or in need of service due to lack of lubrication, or is damaged, defective or worn out (if equipped).
- **14.** Diaphragm in Auto Air Valve is damaged, defective, or worn out. To test, put your thumb over the vent. If any air is coming out with the control handle depressed, the diaphragm must be replaced.
- 15. The control box power is not turned to ON and the Abrasive Loading Selector is not set to Automatic Cycle Control.



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. A bleeder type control handle has been installed.



WARNING: Never use bleeder type Remote Control Handles such as Clemco® or A-BEC® style handles with Pirate-Brand® SPH/SPR as they may cause the Abrasive Blaster to start without warning or to not stop the Abrasive Blaster when released.

- 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. "O"-ring on the shaft of the Auto Air Valve is damaged, defective or worn out.

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

Possible Causes:

1. A bleeder type control handle has been installed.



WARNING: Never use bleeder type Remote Control Handles such as Clemco® or A-BEC® style handles with Pirate-Brand® SPH/SPR as they may cause the Abrasive Blaster to start without warning or to not stop the Abrasive Blaster when released.

- 2. The Pneumatic Control Handle is damaged, defective or worn out (if equipped).
- 3. The Electric Control Handle is damaged, defective or worn out (if equipped).
- 4. The Electric Control Cord is damaged, defective or worn out (if equipped).
- 5. The Control Valve is stuck or in need of service due to lack of lubrication, or is damaged, defective or worn out.
- 6. The Combination Valve Plug Assembly is not seating properly because it is damaged, defective or worn out.
- 7. The Combination Valve Spring is damaged or defective.

ABRASIVE BLASTER AIR BLAST STOPS BUT ABRASIVE KEEPS FLOWING WHEN CONTROL HANDLE IS RELEASED

Possible Causes:

- 1. The Urethane Seat in the Metering Valve is damaged, defective or worn out.
- 2. The Urethane Sleeve in the Metering Valve is damaged, defective, or worn out.
- 3. The Plunger (tungsten carbide) in the Metering Valve is damaged, defective, or worn out.
- 4. Foreign material is stuck between the Plunger and the Seat in the Metering Valve.
- 5. The Metering Valve Spring is damaged, defective, or worn out.

BLAST MACHINE ABRASIVE STOPS BUT AIR BLAST WILL NOT SHUT OFF WHEN CONTROL HANDLE IS RELEASED

Possible Causes:

- 1. Auto Air Valve Seat is damaged, defective, or worn out.
- 2. Auto Air Valve Disc is damaged, defective, or worn out.
- 3. "O"-ring on the Auto Air Valve Shaft is damaged, defective or worn out.
- 4. Auto Air Valve Spring is damaged, defective, or worn out.

UPPER CHAMBER PRESSURIZES RANDOMLY OR STAYS PRESSURIZED

Possible Causes:

- 1. Verify the Control Box / Level Sensor system is functioning properly and has the correct settings.
- 2. The Control Valve that activates the Combination Valve is stuck or in need of service due to lack of lubrication, or is damaged, defective or worn out.
- 3. The lower rod seal in the Combination Valve is damaged, defective, or worn out.

UPPER CHAMBER IS SLOW TO BLOW-DOWN OR WILL NOT BLOW-DOWN

Possible Causes:

- 1. Verify the Control Box / Level Sensor system is functioning properly and has the correct settings.
- 2. The Control Valve that activates the Combination Valve is stuck or in need of service due to lack of lubrication, or is damaged, defective or worn out.
- 3. The lower rod seal in the Combination Valve is damaged, defective, worn out, or has been installed backwards.
- 4. The lower rod guide in the Combination Valve has been installed backwards.
- 5. The lower rod guide "O"-ring in the Combination Valve is damaged, defective or missing.



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.

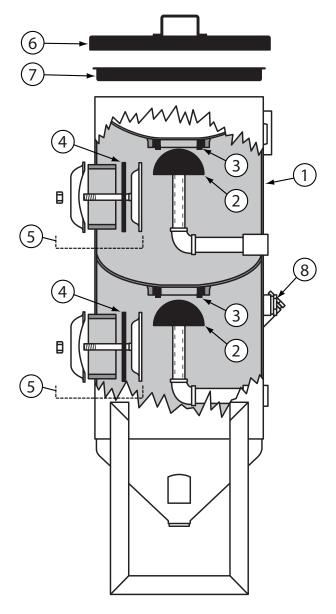
WARRANTY CLAIMS. Warranty claims must be submitted to the manufacturer within ten (10) days after failure of the product. Contact information for warranty claims:

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

Effective July 8, 2015



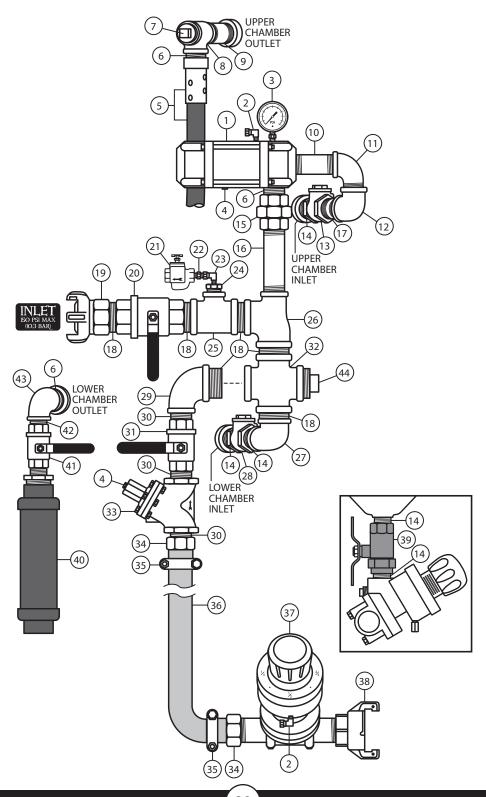
Pressure Vessel Parts Lists



		8 Cu. Ft. Dual-Chamber Vessel
1	888-1022-008PB	VESSEL, STATIONARY, 8 CU FT DUAL CHAMBER, 150 PSI, 2 OUTLET, 90° CONE BOTTOM, 13" CLEARANCE, 69" OAH, INCLUDES (2) 9" UMBRELLAS, (2) HANDWAY ASSEMBLIES, (2) POP-UPS & (2) SKIRTED POP-UP GASKETS
2	888-2100-010PB	POP-UP W/STEM URETHANE, LARGE
3	888-2100-01104PB	POP-UP GASKET, SKIRTED
4	888-7000-00106PB	GASKET, HANDWAY, 6" x 8"
5	888-7000-00111PB	HANDWAY CRAB ASSY 6" x 8"
6	888-5010-060PB	LID, 24" DIA, W/HANDLE, POWDER COATED BLACK
7	888-5011-060PB	SCREEN, LOW PROFILE, 24" (1/4" MESH), POWDER COATED BLACK
8	888-7064-009PB	SIGHT GLASS, 2", MNPT



DUAL-CHAMBER - 1-Outlet - Pipe String



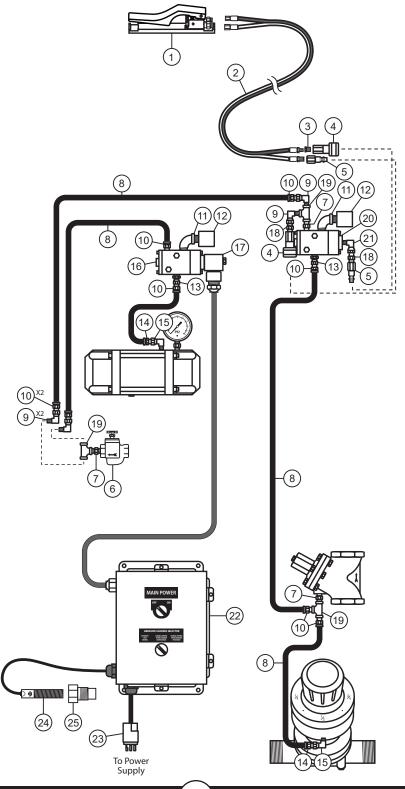


	n	UAL-CHAMBER - 1-Outlet - Pipe String - Parts List
1*		· · · · · · · · · · · · · · · · · · ·
	888-2223-000PB	VALVE, COMBINATION, 1-1/4", COMPLETE
2	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
3	888-2010-00901PB	GAUGE, PRESSURE, 0 - 160 PSI
4	888-2014-300PB	VENT, 1/8"
5	888-4115-005PB	BLOWDOWN HOSE ASSY, 3/4" x 18", SURVIVOR™, 4 PLY, WP 150 PSI
	888-4115-00503PB	BLOWDOWN HOSE ASSY, 3/4" x 3', SURVIVOR™, 4 PLY, WP 150 PSI
	888-4115-00510PB	BLOWDOWN HOSE ASSY, 3/4" x 10', SURVIVOR™, 4 PLY, WP 150 PSI
	888-4115-00515PB	BLOWDOWN HOSE ASSY, 3/4" x 15', SURVIVOR™, 4 PLY, WP 150 PSI (INCLUDED STANDARD)
6	888-3029-10799PB	NIPPLE, TBE, GALV, 1-1/4" x CLOSED
7	888-3014-107PB	PIPE PLUG, GALV, 1-1/4"
8	888-3011-107PB	TEE, GALV, 1-1/4"
9	888-3029-10717PB	NIPPLE, TBE, GALV, 1-1/4" x 7"
10	888-3029-10711PB	NIPPLE, TBE, GALV, 1-1/4" x 3"
11	888-3006-107PB	ELBOW, STREET, 90°, GALV, 1-1/4"
12	888-3000-107PB	ELBOW, GALV, 90°, 1-1/4"
13	VC-125	CHECK VALVE, SWING 1-1/4"
14	888-3028-10799PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x CLOSED
15	888-3024-107PB	UNION, GALV, 1-1/4"
40	888-3024-00701PB	ORIFICE DISC, DUAL CHAMBER, BRASS (FOR 1-1/4" UNION)
16	888-3029-10718PB	NIPPLE, TBE, GALV, 1-1/4" x 8"
17	888-3028-10711PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x 3"
18	888-3029-10999PB	NIPPLE, TBE, GALV, 2" x CLOSED
19	UF-200	AIR HOSE COUPLINGS, 4 LUG, 2" FEMALE NPT
20	VB200	BALL VALVE, FULL PORT, 2" NPT, CHROME PLATED BRASS
21	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
22	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST
23	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
24	888-3026-10602PB	BUSHING, GALV, 1" x 1/4"
25	888-3011-10906PB	TEE, GALV, 2" x 2" x 1"
26	888-3013-10907PB	TEE, GALV, 90°, 2" x 1-1/4" x 2"
27	888-3010-10907PB	ELBOW, REDUCING, GALV, 90°, 2" x 1-1/4"
28	888-2490-90701PB	CHECK VALVE, SWING 1-1/4", W/ 5/32" DIFFERENTIAL EQUALIZER HOLE
29	888-3010-10908PB	ELBOW, REDUCING, GALV, 2" x 1-1/2"
30	888-3029-10899PB	NIPPLE, TBE, GALV, 1-1/2" x CLOSED
31	VB150	BALL VALVE, FULL PORT, 1-1/2" NPT, CHROME PLATED BRASS
32	888-3016-109PB	CROSS TEE, GALV, 2"
33*	888-2123-108PB-L	VALVE, AUTO AIR, 1-1/2" FULL FLOW, BIG-GUN™ (NORMALLY CLOSED) (INCLUDED STANDARD)
	888-2123-108PB	VALVE, AUTO AIR, 1-1/2", (NORMALLY CLOSED)
34	888-4205-108PB	HOSE, INSERT SWIVEL, 1-1/2", INCLUDES GASKET
0.5	888-4205-10899PB	HOSE, SWIVEL GASKET, 1-1/2"
35	888-4235-008PB	HOSE, CLAMP, DOUBLE BOLT, 1-1/2"
36	112-0112	HOSE, AIR, RED, NOMINAL 1-1/2" ID x 2-3/32" OD, WP 250 PSI
	888-2148-008PB	APV II ABRASIVE METERING VALVE, 1-1/2", SOLID TUNGSTEN CARBIDE SLEEVE (INCLUDED STANDARD)
37*	888-2149-008PB	APV ABRASIVE METERING VALVE, 1-1/2", TUNGSTEN CARBIDE SLEEVE
	888-2149-108PB	APV ABRASIVE METERING VALVE, 1-1/2", URETHANE SLEEVE
		GRADED VALVES SUCH AS BIG-BORE™ / STRAIGHT-DOWN / SHOT-PEENER, SEE VALVE PARTS LIST SECTION
38	SB-3X-AL	THD QUICK COUPLING, ALUMINUM, 1-1/2", FULL PORT, 150 PSI MAX (INCLUDED STANDARD)
	SB-2-IR	THD QUICK COUPLING, IRON, 1-1/2"
39	888-2408-907PB	BALL VALVE, UNION END, 1-1/4", BIG-BORE™, W/ HALF HANDLE (INCLUDED STANDARD)
40	888-2408-907PB-SC	BALL VALVE W/ SANITARY CLAMP STYLE UNION, 1-1/4", BIG-BORE™, W/ HALF HANDLE
40	888-2011-006PB	MUFFLER, BLOWDOWN, 1" MNPT
41	VB100	BALL VALVE, FULL PORT, 1" NPT, CHROME PLATED BRASS
42	888-3029-10699PB	NIPPLE, TBE, GALV, 1" x CLOSED
43	888-3010-10706PB	ELBOW, REDUCING, GALV, 1-1/4" x 1"
44	888-3014-110PB	PIPE PLUG, GALV, 2"

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



DUAL-CHAMBER - 1-Outlet - Pneumatic Controls



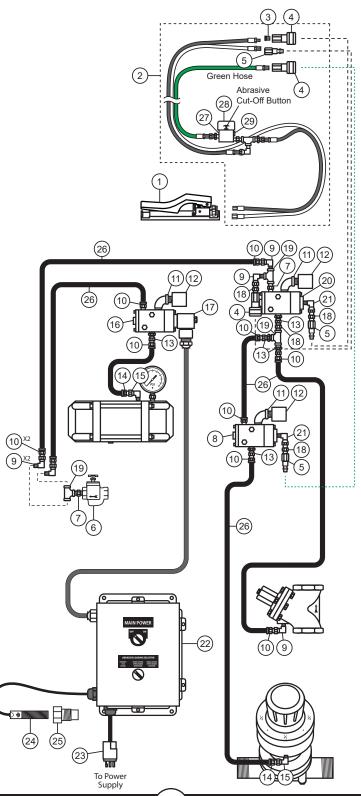


	DUAL-	CHAMBER - 1-Outlet - Pneumatic Controls - Parts List
	888-2263-000PB	HANDLE, CONTROL, PNEUMATIC
1**	888-2263-001PB	HANDLE, CONTROL, PNEUMATIC #2 (INCLUDED STANDARD)
Ì	888-2263-002PB	HANDLE, CONTROL, PNEUMATIC #3
	200-055	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 55'
2	200-110	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 110'
3	888-3026-50200PB	BUSHING, PLATED 1/4" x 1/8" NPT
4	888-4224-30102PB	BRASS SOCKET, 1/4"
5	888-4224-30002PB	PLUG, 1/4"
6	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
7	888-3031-31202PB	NIPPLE, HEX 1/4" MNPT x 1/4" MNPT
8	888-4101-002PB	HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI
9	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
10	888-4200-30202PB	HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT
11	888-3006-102PB	ELBOW, STREET, 90°, GALV, 1/4"
12	888-2013-402PB	DUST ELIMINATOR, 1/4" MNPT
13	888-4201-50202PB	STRAIGHT SWIVEL, 1/4"MNPT x 1/4"F
14	888-4200-30200PB	HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT
15	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
16	888-2229-100PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)
10	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
17	888-2229-10003PB	VALVE, CONTROL, COIL, 12VDC
18	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST
19	888-3011-102PB	TEE, GALV, 1/4"
20	888-2229-000PB	VALVE, CONTROL, PNEUMATIC (NORMALLY CLOSED)
	888-2229-00099PB	VALVE, CONTROL, PNEUMATIC, REPAIR KIT, HEAVY DUTY
21	888-4203-50002PB	SWIVEL 90°, 1/8" MNPT x 1/4" F
22	888-7066-001PB	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, PNEUMATIC BLAST CONTROLS
	888-7066-001PB-S	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, PNEUMATIC BLAST CONTROLS
22	888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG
23		
	888-7109-30102PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG
24	888-7109-30102PB 888-5013-80101PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED

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



DUAL-CHAMBER - 1-Outlet - Pneumatic ON HOSE Abrasive Cut-Off Controls





DUAL-CHAMBER - 1-Outlet - Pneumatic ON HOSE Abrasive Cut-Off Controls - Parts List HANDLE, CONTROL, PNEUMATIC HANDLE, CONTROL, PNEUMATIC #2 (INCLUDED STANDARD) 888-2263-001PB HANDLE, CONTROL, PNEUMATIC #3 888-2263-002PB HOSE, TWINLINE ASSY 55' ACO W/ABRASIVE CUTOFF SWITCH 888-4100-50102PB 888-4100-70102PB HOSE, TWINLINE ASSY 110' ACO W/ABRASIVE CUTOFF SWITCH 888-3026-50200PB BUSHING, PLATED 1/4" x 1/8" NPT 888-4224-30102PB BRASS SOCKET, 1/4" PLUG, 1/4" 888-4224-30002PB 888-2301-90290PB STRAINER, BRZ 1/4" 90 MICRON 7 888-3031-31202PB NIPPLE, HEX 1/4" MNPT x 1/4" MNPT VALVE, CONTROL, PNEUMATIC (NORMALLY OPEN) 888-2229-010PB 888-2229-00099PB VALVE, CONTROL, PNEUMATIC, REPAIR KIT, HEAVY DUTY 888-4203-50202PB SWIVEL 90°, 1/4"MNPT x 1/4"F 9 10 888-4200-30202PB HOSE. PUSH-ON INSERT 1/4" x 1/4" NPT 11 888-3006-102PB ELBOW, STREET, 90°, GALV, 1/4" 12 DUST ELIMINATOR, 1/4" MNPT 888-2013-402PB 13 888-4201-50202PB STRAIGHT SWIVEL, 1/4"MNPT x 1/4"F 888-4200-30200PB HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT 15 SWIVEL 90°, 1/8"MNPT X 1/8"F 888-4203-50000PB 888-2229-100PB VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED) 16 888-2229-10099PB VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY 17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC 888-3031-30202PB HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST 19 888-3011-102PB TEE, GALV, 1/4" 888-2229-000PB VALVE, CONTROL, PNEUMATIC (NORMALLY CLOSED) 888-2229-00099PB VALVE, CONTROL, PNEUMATIC, REPAIR KIT, HEAVY DUTY 21 888-4203-50002PB SWIVEL 90°, 1/8" MNPT x 1/4" F 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, PNEUMATIC BLAST 888-7066-001PB CONTROLS 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, PNEUMATIC 888-7066-001PB-S **BLAST CONTROLS** ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG 888-7109-301PB 23 ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG 888-7109-30102PB LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED 888-5013-80101PB 25 888-5013-30012PB MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT 26 888-4101-002PB HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI 27 888-2025-010PB VALVE, ABRASIVE CUTOFF (PNEU) TOGGLE SWITCH GUARD 888-2025-10001PB

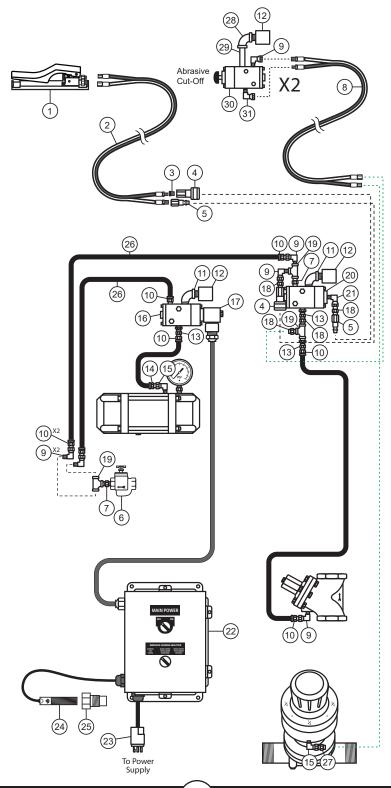
VENT, 1/8"

888-2014-300PB

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



DUAL-CHAMBER - 1-Outlet - Pneumatic REMOTE Abrasive Cut-Off Controls





DUAL-CHAMBER - 1-Outlet - Pneumatic REMOTE Abrasive Cut-Off Controls - Parts List HANDLE, CONTROL, PNEUMATIC HANDLE, CONTROL, PNEUMATIC #2 (INCLUDED STANDARD) 888-2263-001PB 888-2263-002PB HANDLE, CONTROL, PNEUMATIC #3 HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 55' 2 200-110 HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 110' 888-3026-50200PB BUSHING, PLATED 1/4" x 1/8" NPT 888-4224-30102PB BRASS SOCKET, 1/4" PLUG, 1/4" 888-4224-30002PB 888-2301-90290PB STRAINER, BRZ 1/4" 90 MICRON 7 888-3031-31202PB NIPPLE, HEX 1/4" MNPT x 1/4" MNPT 888-4100-301PB HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 25 888-4203-50202PB SWIVEL 90°, 1/4"MNPT x 1/4"F HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT 10 888-4200-30202PB 11 888-3006-102PB ELBOW, STREET, 90°, GALV, 1/4" 12 888-2013-402PB DUST ELIMINATOR, 1/4" MNPT 888-4201-50202PB STRAIGHT SWIVEL, 1/4"MNPT x 1/4"F 13 888-4200-30200PB HOSE. PUSH-ON INSERT 1/4" x 1/8" NPT 14 15 888-4203-50000PB SWIVEL 90°, 1/8"MNPT X 1/8"F VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED) 888-2229-100PB 888-2229-10099PB VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY 17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST 18 888-3031-30202PB 19 888-3011-102PB 888-2229-000PB VALVE, CONTROL, PNEUMATIC (NORMALLY CLOSED) VALVE, CONTROL, PNEUMATIC, REPAIR KIT, HEAVY DUTY 888-2229-00099PB 21 888-4203-50002PB SWIVEL 90°, 1/8" MNPT x 1/4" F 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, PNEUMATIC BLAST 888-7066-001PB CONTROLS 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, PNEUMATIC 888-7066-001PB-S BLAST CONTROLS 888-7109-301PB ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG 23 888-7109-30102PB ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED 888-5013-80101PB 888-5013-30012PB MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT 888-4101-002PB HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI 26 WH42-2 1/8" HOSE UNION 28 888-3000-102PB ELBOW, GALV, 90°, 1/4" 29 NIPPLE, TBE, GALV, 1/4" x 2" 888-3029-10209PB 888-2229-301PB VALVE, CONTROL, KNOB OPERATED 3W2P 30

SWIVEL 90°, 1/4" MNPT x 1/8" F

888-2229-30199PB

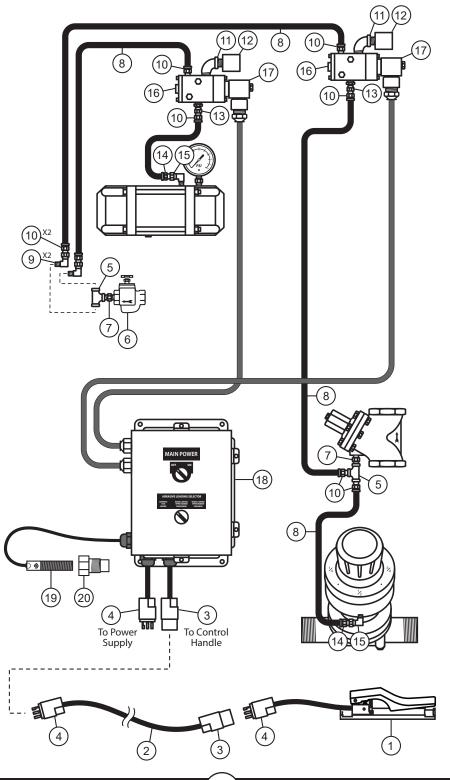
888-4203-50200PB

VALVE, CONTROL, KNOB OPERATED 3W2P, REPAIR KIT, HEAVY DUTY

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



DUAL-CHAMBER - 1-Outlet - Electric Controls



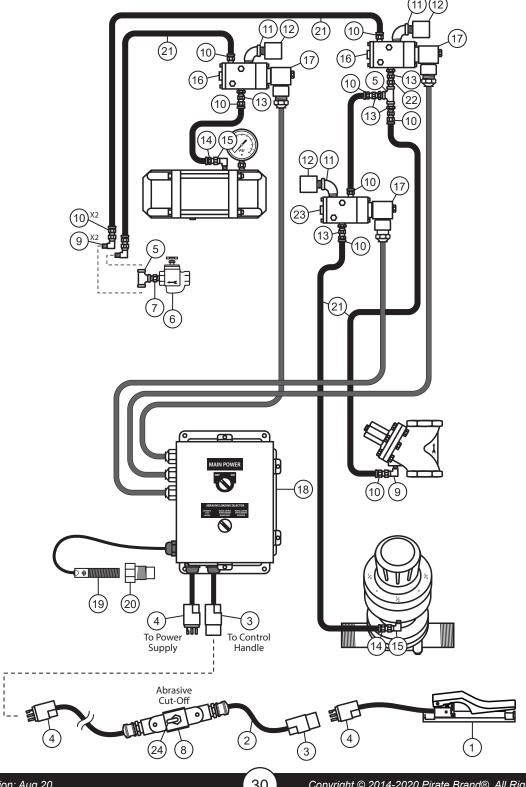


	DUA	L-CHAMBER - 1-Outlet - Electric Controls - Parts List
	888-2263-40001PB	HANDLE, CONTROL, ELECTRIC W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
	888-2263-40101PB	HANDLE, CONTROL, ELECTRIC #2 W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
1**	888-2263-40102PB	HANDLE, CONTROL, ELECTRIC #2 W/3 PART SEALED STRAIN RELIEF (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-2263-40104PB	HANDLE, CONTROL, ELECTRIC #2 W/SEALED WATERPROOF CONNECTOR (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-7073-055PB	EXTN CORD W/TWIST-LOCK CONNECTORS, 55', 3 PRONG, 2 WIRE, X-TREME DUTY™
ا ۾ ا	888-7073-110PB	EXTN CORD W/TWIST-LOCK CONNECTORS, 110′, 3 PRONG, 2 WIRE, X-TREME DUTY™
2	888-7074-05501PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55′, 3 PRONG, 3 WIRE, X-TREME DUTY™
ĺĺ	888-7074-11001PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110', 3 PRONG, 3 WIRE, X-TREME DUTY™
	888-7109-300PB	ELECTRIC CONNECTOR, FEMALE, TWIST-LOCK, 3 PRONG
3	888-7109-30002PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, FEMALE, 3 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG
4	888-7109-30102PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
5	888-3011-102PB	TEE, GALV, 1/4"
6	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
7	888-3031-31202PB	NIPPLE, HEX 1/4" MNPT x 1/4" MNPT
8	888-4101-002PB	HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI
9	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
10	888-4200-30202PB	HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT
11	888-3006-102PB	ELBOW, STREET, 90°, GALV, 1/4"
12	888-2013-402PB	DUST ELIMINATOR, 1/4" MNPT
13	888-4201-50202PB	STRAIGHT SWIVEL, 1/4" MNPT x 1/4" F
14	888-4200-30200PB	HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT
15	888-4203-50000PB	SWIVEL 90°, 1/8" MNPT X 1/8" F
16	888-2229-100PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)
16	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
17	888-2229-10003PB	VALVE, CONTROL, COIL, 12VDC
10	888-7066-002PB	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/ TWIST-LOCK CONNECTOR , ELECTRIC BLAST CONTROLS, (1) OUTLET W/O ABRASIVE CUTOFF
18	888-7066-002PB-S	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, ELECTRIC BLAST CONTROLS, (1) OUTLET W/O ABRASIVE CUTOFF
19	888-5013-80101PB	LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED
20	888-5013-30012PB	MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT

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



DUAL-CHAMBER - 1-Outlet - Electric ON CORD Abrasive Cut-Off Controls



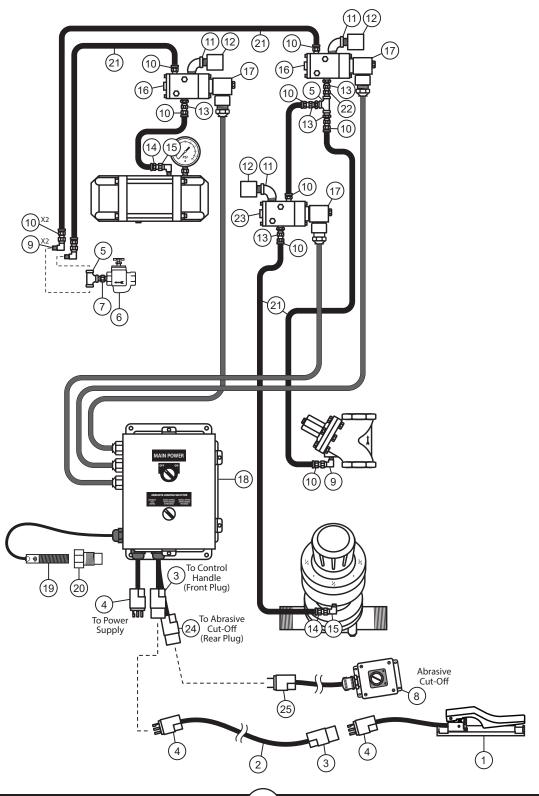


D	UAL-CHAMBE	R - 1-Outlet - Electric ON CORD Abrasive Cut-Off Controls - Parts List
	888-2263-40001PB	HANDLE, CONTROL, ELECTRIC W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
	888-2263-40101PB	HANDLE, CONTROL, ELECTRIC #2 W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
1**	888-2263-40102PB	HANDLE, CONTROL, ELECTRIC #2 W/3 PART SEALED STRAIN RELIEF (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-2263-40104PB	HANDLE, CONTROL, ELECTRIC #2 W/SEALED WATERPROOF CONNECTOR (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-7075-055PB	CORD W/ TWIST-LOCK CONNECTORS & ABRASIVE CUTOFF SWITCH ASSEMBLY, 55', 3-PRONG, 3-WIRE
	888-7075-110PB	CORD W/ TWIST-LOCK CONNECTORS & ABRASIVE CUTOFF SWITCH ASSEMBLY, 110', 3-PRONG, 3-WIRE
2	888-7075-05501PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS & ABRASIVE CUTOFF SWITCH ASSEMBLY, 55', 3 PRONG, 3 WIRE
	888-7075-11001PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS & ABRASIVE CUTOFF SWITCH ASSEMBLY, 110', 3 PRONG, 3 WIRE
	888-7109-300PB	ELECTRIC CONNECTOR, FEMALE, TWIST-LOCK, 3 PRONG
3	888-7109-30002PB	ELECTRIC CONNECTOR, SEALED WATERPROOF , FEMALE, 3 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG
4	888-7109-30102PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
5	888-3011-102PB	TEE, GALV, 1/4"
6	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
7	888-3031-31202PB	NIPPLE, HEX 1/4" MNPT x 1/4" MNPT
8	888-2025-10001PB	TOGGLE SWITCH GUARD
9	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
10	888-4200-30202PB	HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT
11	888-3006-102PB	ELBOW, STREET, 90°, GALV, 1/4"
12	888-2013-402PB	DUST ELIMINATOR, 1/4" MNPT
13	888-4201-50202PB	STRAIGHT SWIVEL, 1/4" MNPT x 1/4" F
14	888-4200-30200PB	HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT
15	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
16	888-2229-100PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)
10	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
17	888-2229-10003PB	VALVE, CONTROL, COIL, 12VDC
18	888-7066-003PB	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/ TWIST-LOCK CONNECTOR , ELECTRIC BLAST CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF ON CORD
10	888-7066-003PB-S	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, ELECTRIC BLAST CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF ON CORD
19	888-5013-80101PB	LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED
20	888-5013-30012PB	MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT
21	888-4101-002PB	HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI
22	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST
23	888-2229-600PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY OPEN)
23	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
24	888-2025-10002PB	ABRA CUTOFF SWITCH (ELEC)

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



DUAL-CHAMBER - 1-Outlet - Electric REMOTE Abrasive Cut-Off Controls



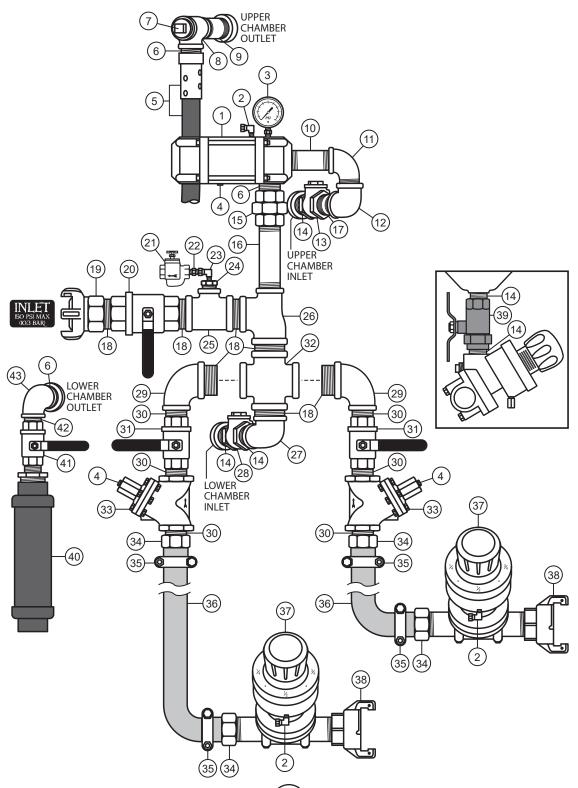


888-2263-40101PB HANDLE, CONTROL, ELECTRIC W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASS 888-2263-40101PB HANDLE, CONTROL, ELECTRIC #2 W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASS 888-2263-40102PB HANDLE, CONTROL, ELECTRIC #2 W/3 PART SEALED STRAIN RELIEF (APPROPRIATE FOR ABRASIVES) 888-2263-40104PB HANDLE, CONTROL, ELECTRIC #2 W/SEALED WATERPROOF CONNECTOR (APPROPRIATE STEEL ABRASIVES) 888-7073-055PB EXTN CORD W/TWIST-LOCK CONNECTORS, 55′, 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7073-110PB EXTN CORD W/TWIST-LOCK CONNECTORS, 110′, 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7074-05501PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™	RASIVES) R USE WITH STEEL FOR USE WITH
1*** 888-2263-40102PB HANDLE, CONTROL, ELECTRIC #2 W/3 PART SEALED STRAIN RELIEF (APPROPRIATE FOR ABRASIVES) 888-2263-40104PB HANDLE, CONTROL, ELECTRIC #2 W/SEALED WATERPROOF CONNECTOR (APPROPRIATE STEEL ABRASIVES) 888-7073-055PB EXTN CORD W/TWIST-LOCK CONNECTORS, 55′, 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7073-110PB EXTN CORD W/TWIST-LOCK CONNECTORS, 110′, 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7074-05501PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™	R USE WITH STEEL
ABRASIVES) 888-2263-40104PB HANDLE, CONTROL, ELECTRIC #2 W/SEALED WATERPROOF CONNECTOR (APPROPRIATE STEEL ABRASIVES) 888-7073-055PB EXTN CORD W/TWIST-LOCK CONNECTORS, 55′, 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7073-110PB EXTN CORD W/TWIST-LOCK CONNECTORS, 110′, 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7074-05501PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55′, 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110′, 3 PRONG, 3 WIRE, X-TREME DUTY™	FOR USE WITH
888-7073-055PB EXTN CORD W/TWIST-LOCK CONNECTORS, 55', 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7073-110PB EXTN CORD W/TWIST-LOCK CONNECTORS, 110', 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7074-05501PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55', 3 PRONG, 3 WIRE, X-TREME DUTY™ 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110', 3 PRONG, 3 WIRE, X-TREME DUTY™	
2 888-7073-110PB EXTN CORD W/TWIST-LOCK CONNECTORS, 110', 3 PRONG, 2 WIRE, X-TREME DUTY™ 888-7074-05501PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55', 3 PRONG, 3 WIRE, X-TREME D 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110', 3 PRONG, 3 WIRE, X-TREME D	
888-7074-05501PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55', 3 PRONG, 3 WIRE, X-TREME D 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110', 3 PRONG, 3 WIRE, X-TREME D	LITYTH
888-7074-05501PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55', 3 PRONG, 3 WIRE, X-TREME D 888-7074-11001PB EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110', 3 PRONG, 3 WIRE, X-TREME D	LITY (TH
	UIYIM
999 7400 200PD FLECTRIC CONNECTOR FEMALE TWIST LOCK 2 PRONC	DUTY™
888-7109-300PB ELECTRIC CONNECTOR, FEMALE, TWIST-LOCK, 3 PRONG	
3 888-7109-30002PB ELECTRIC CONNECTOR, SEALED WATERPROOF , FEMALE, 3 PRONG (APPROPRIATE FOF ABRASIVES)	USE WITH STEEL
888-7109-301PB ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG	
4 888-7109-30102PB ELECTRIC CONNECTOR, SEALED WATERPROOF , MALE, 3 PRONG (APPROPRIATE FOR U ABRASIVES)	SE WITH STEEL
5 888-3011-102PB TEE, GALV, 1/4"	
6 888-2301-90290PB STRAINER, BRZ 1/4" 90 MICRON	
7 888-3031-31202PB NIPPLE, HEX 1/4" MNPT x 1/4" MNPT	
999-8400-35104PB-02 SELECTOR SWITCH OPERATOR W/TWIST LOCK CONNECTOR, 25' CORD, 2 PRONG	
8 999-8400-35104PB-04 SELECTOR SWITCH OPERATOR W/SEALED WATERPROOF CONNECTOR, 25' CORD, 2 PRO (APPROPRIATE FOR USE WITH STEEL ABRASIVES)	ONG
9 888-4203-50202PB SWIVEL 90°, 1/4"MNPT x 1/4"F	
10 888-4200-30202PB HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT	
11 888-3006-102PB ELBOW, STREET, 90°, GALV, 1/4"	
12 888-2013-402PB DUST ELIMINATOR, 1/4" MNPT	
13 888-4201-50202PB STRAIGHT SWIVEL, 1/4" MNPT x 1/4" F	
14 888-4200-30200PB HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT	
15 888-4203-50000PB SWIVEL 90°, 1/8"MNPT X 1/8"F	
888-2229-100PB VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)	
888-2229-10099PB VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY	
000-2225-10055FB VALVE, CONTROL, REPAIR RIT, ELECTRIC, FILAVI DOTT	
17 888-2229-1003PB VALVE, CONTROL, COIL, 12VDC	
17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC 888-7066-004PB 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTRON CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT	RIC BLAST
17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC 888-7066-004PB 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTED	
17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC 888-7066-004PB 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTF CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT 18 888-7066-004PB-S 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR	
17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC 888-7066-004PB 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTF CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT 1888-7066-004PB-S 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR BLAST CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT	
17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC 888-7066-004PB 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTF CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT 888-7066-004PB-S BLAST CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT 19 888-5013-80101PB LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED	
17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC 888-7066-004PB 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTE CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT 18 888-7066-004PB-S 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR BLAST CONTROLS, (1) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT 19 888-5013-80101PB LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED 20 888-5013-30012PB MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT	
17 888-2229-10003PB	DR, ELECTRIC
17 888-2229-10003PB	DR, ELECTRIC

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



DUAL-CHAMBER - 2-Outlet - Pipe String



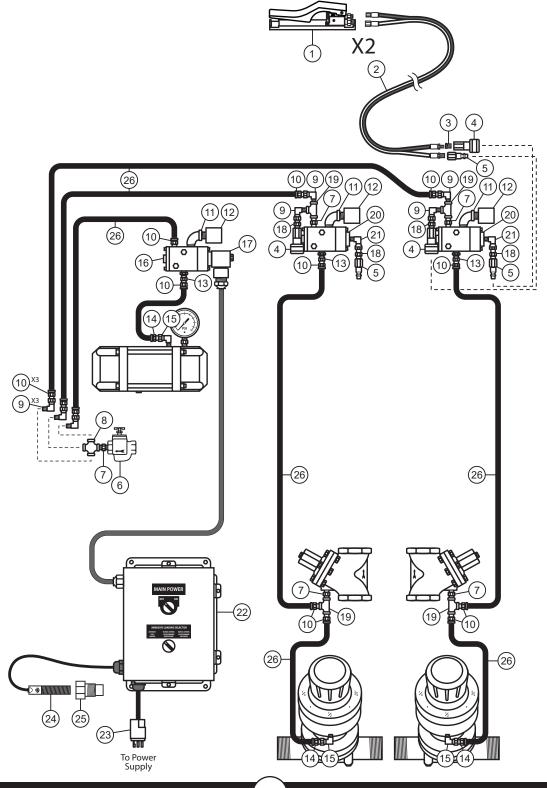


	n	UAL-CHAMBER - 2-Outlet - Pipe String - Parts List
		·
1*	888-2223-000PB	VALVE, COMBINATION, 1-1/4", COMPLETE
2	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
3	888-2010-00901PB	GAUGE, PRESSURE, 0 - 160 PSI
4	888-2014-300PB	VENT, 1/8"
	888-4115-005PB	BLOWDOWN HOSE ASSY, 3/4" x 18", SURVIVOR™, 4 PLY, WP 150 PSI
5	888-4115-00503PB	BLOWDOWN HOSE ASSY, 3/4" x 3', SURVIVOR™, 4 PLY, WP 150 PSI
	888-4115-00510PB	BLOWDOWN HOSE ASSY, 3/4" x 10', SURVIVOR™, 4 PLY, WP 150 PSI
	888-4115-00515PB	BLOWDOWN HOSE ASSY, 3/4" x 15', SURVIVOR™, 4 PLY, WP 150 PSI (INCLUDED STANDARD)
6	888-3029-10799PB	NIPPLE, TBE, GALV, 1-1/4" x CLOSED
7	888-3014-107PB	PIPE PLUG, GALV, 1-1/4"
8	888-3011-107PB	TEE, GALV, 1-1/4"
9	888-3029-10717PB	NIPPLE, TBE, GALV, 1-1/4" x 7"
10	888-3029-10711PB	NIPPLE, TBE, GALV, 1-1/4" x 3"
11	888-3006-107PB	ELBOW, STREET, 90°, GALV, 1-1/4"
12	888-3000-107PB	ELBOW, GALV, 90°, 1-1/4"
13	VC-125	CHECK VALVE, SWING 1-1/4"
14	888-3028-10799PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x CLOSED
15	888-3024-107PB	UNION, GALV, 1-1/4"
40	888-3024-00701PB	ORIFICE DISC, DUAL CHAMBER, BRASS (FOR 1-1/4" UNION)
16	888-3029-10718PB	NIPPLE, TBE, GALV, 1-1/4" x 8"
17	888-3028-10711PB	NIPPLE, TBE, SCHEDULE 80, GALV, 1-1/4" x 3"
18	888-3029-10999PB	NIPPLE, TBE, GALV, 2" x CLOSED
19	UF-200	AIR HOSE COUPLINGS, 4 LUG, 2" FEMALE NPT
20	VB200	BALL VALVE, FULL PORT, 2" NPT, CHROME PLATED BRASS
21	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
-	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST
23	888-4203-50202PB 888-3026-10602PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
25	888-3011-10906PB	BUSHING, GALV, 1" x 1/4" TEE, GALV, 2" x 2" x 1"
26		
27	888-3013-10907PB 888-3010-10907PB	TEE, GALV, 90°, 2" x 1-1/4" x 2" ELBOW, REDUCING, GALV, 90°, 2" x 1-1/4"
28	888-2490-90701PB	CHECK VALVE, SWING 1-1/4", W/ 5/32" DIFFERENTIAL EQUALIZER HOLE
29	888-3010-10908PB	ELBOW, REDUCING, GALV, 2" x 1-1/2"
30	888-3029-10899PB	NIPPLE, TBE, GALV, 1-1/2" x CLOSED
31	VB150	BALL VALVE, FULL PORT, 1-1/2" NPT, CHROME PLATED BRASS
32	888-3016-109PB	CROSS TEE. GALV. 2"
52	888-2123-108PB-L	VALVE, AUTO AIR, 1-1/2" FULL FLOW, BIG-GUN™ (NORMALLY CLOSED) (INCLUDED STANDARD)
33*	888-2123-108PB	VALVE, AUTO AIR, 1-1/2", (NORMALLY CLOSED)
	888-4205-108PB	HOSE, INSERT SWIVEL, 1-1/2", INCLUDES GASKET
34	888-4205-10899PB	HOSE, SWIVEL GASKET, 1-1/2"
35	888-4235-008PB	HOSE, CLAMP, DOUBLE BOLT, 1-1/2"
36	112-0112	HOSE, AIR, RED, NOMINAL 1-1/2" ID x 2-3/32" OD, WP 250 PSI
30	888-2148-008PB	APV II ABRASIVE METERING VALVE, 1-1/2", SOLID TUNGSTEN CARBIDE SLEEVE (INCLUDED STANDARD)
	888-2149-008PB	APV ABRASIVE METERING VALVE, 1-1/2", TUNGSTEN CARBIDE SLEEVE
37*	888-2149-108PB	APV ABRASIVE METERING VALVE, 1-1/2", URETHANE SLEEVE
		GRADED VALVES SUCH AS BIG-BORE™ / STRAIGHT-DOWN / SHOT-PEENER, SEE VALVE PARTS LIST SECTION
	SB-3X-AL	THD QUICK COUPLING, ALUMINUM, 1-1/2", FULL PORT, 150 PSI MAX (INCLUDED STANDARD)
38	SB-2-IR	THD QUICK COUPLING, IRON, 1-1/2"
	888-2408-907PB	BALL VALVE, UNION END, 1-1/4", BIG-BORE™, W/ HALF HANDLE (INCLUDED STANDARD)
39	888-2408-907PB-SC	BALL VALVE W/ SANITARY CLAMP STYLE UNION, 1-1/4", BIG-BORE™, W/ HALF HANDLE
40	888-2011-006PB	MUFFLER, BLOWDOWN, 1" MNPT
41	VB100	BALL VALVE, FULL PORT, 1" NPT, CHROME PLATED BRASS
42	888-3029-10699PB	NIPPLE, TBE, GALV, 1" x CLOSED
43	888-3010-10706PB	ELBOW, REDUCING, GALV, 1-1/4" x 1"
		- , (*) *(*) () () ()

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



DUAL-CHAMBER - 2-Outlet - Pneumatic Controls



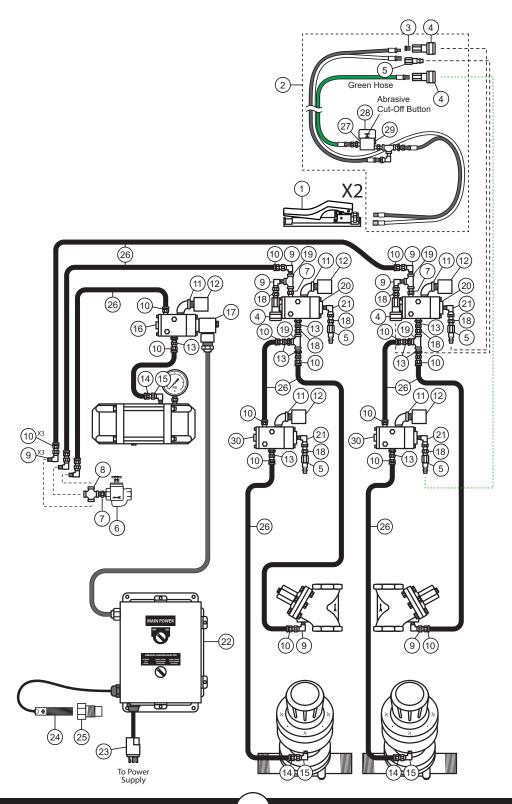


	DUAL-	CHAMBER - 2-Outlet - Pneumatic Controls - Parts List
	888-2263-000PB	HANDLE, CONTROL, PNEUMATIC
1**	888-2263-001PB	HANDLE, CONTROL, PNEUMATIC #2 (INCLUDED STANDARD)
	888-2263-002PB	HANDLE, CONTROL, PNEUMATIC #3
	200-055	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 55'
2	200-110	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 110'
3	888-3026-50200PB	BUSHING, PLATED 1/4" x 1/8" NPT
4	888-4224-30102PB	BRASS SOCKET, 1/4"
5	888-4224-30002PB	PLUG, 1/4"
6	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
7	888-3031-31202PB	NIPPLE, HEX 1/4" MNPT x 1/4" MNPT
8	888-3016-102PB	CROSS TEE, GALV, 1/4"
9	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
10	888-4200-30202PB	HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT
11	888-3006-102PB	ELBOW, STREET, 90°, GALV, 1/4"
12	888-2013-402PB	DUST ELIMINATOR, 1/4" MNPT
13	888-4201-50202PB	STRAIGHT SWIVEL, 1/4"MNPT x 1/4"F
14	888-4200-30200PB	HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT
15	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
16	888-2229-100PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)
Liu	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
17	888-2229-10003PB	VALVE, CONTROL, COIL, 12VDC
18	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST
19	888-3011-102PB	TEE, GALV, 1/4"
20	888-2229-000PB	VALVE, CONTROL, PNEUMATIC (NORMALLY CLOSED)
	888-2229-00099PB	VALVE, CONTROL, PNEUMATIC, REPAIR KIT, HEAVY DUTY
21	888-4203-50002PB	SWIVEL 90°, 1/8" MNPT x 1/4" F
22	888-7066-001PB	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/ TWIST-LOCK CONNECTOR , PNEUMATIC BLAST CONTROLS
22	888-7066-001PB-S	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, PNEUMATIC BLAST CONTROLS
22	888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG
23	888-7109-30102PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG
24	888-5013-80101PB	LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED
25	888-5013-30012PB	MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT
26	888-4101-002PB	HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI

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



DUAL-CHAMBER - 2-Outlet - Pneumatic ON HOSE Abrasive Cut-Off Controls





DUAL-CHAMBER - 2-Outlet - Pneumatic ON HOSE Abrasive Cut-Off Controls - Parts List HANDLE, CONTROL, PNEUMATIC HANDLE, CONTROL, PNEUMATIC #2 (INCLUDED STANDARD) 888-2263-001PB HANDLE, CONTROL, PNEUMATIC #3 888-2263-002PB HOSE. TWINLINE ASSY 55' ACO W/ABRASIVE CUTOFF SWITCH 888-4100-50102PB 888-4100-70102PB HOSE, TWINLINE ASSY 110' ACO W/ABRASIVE CUTOFF SWITCH 888-3026-50200PB BUSHING, PLATED 1/4" x 1/8" NPT 888-4224-30102PB BRASS SOCKET, 1/4" 888-4224-30002PB PLUG, 1/4" 888-2301-90290PB STRAINER, BRZ 1/4" 90 MICRON 7 888-3031-31202PB NIPPLE, HEX 1/4" MNPT x 1/4" MNPT 888-3016-102PB CROSS TEE, GALV, 1/4" 888-4203-50202PB SWIVEL 90°, 1/4"MNPT x 1/4"F HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT 10 888-4200-30202PB 11 888-3006-102PB ELBOW, STREET, 90°, GALV, 1/4" 12 888-2013-402PB DUST ELIMINATOR, 1/4" MNPT STRAIGHT SWIVEL, 1/4"MNPT x 1/4"F 13 888-4201-50202PB 14 888-4200-30200PB HOSE. PUSH-ON INSERT 1/4" x 1/8" NPT 15 888-4203-50000PB SWIVEL 90°, 1/8"MNPT X 1/8"F VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED) 888-2229-100PB 888-2229-10099PB VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY 17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST 18 888-3031-30202PB 19 888-3011-102PB 888-2229-000PB VALVE, CONTROL, PNEUMATIC (NORMALLY CLOSED) VALVE, CONTROL, PNEUMATIC, REPAIR KIT, HEAVY DUTY 888-2229-00099PB 21 888-4203-50002PB SWIVEL 90°, 1/8" MNPT x 1/4" F 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, PNEUMATIC BLAST 888-7066-001PB CONTROLS 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, PNEUMATIC 888-7066-001PB-S BLAST CONTROLS 888-7109-301PB ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG 23 888-7109-30102PB ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED 888-5013-80101PB 888-5013-30012PB MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT 888-4101-002PB HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI 888-2025-010PB VALVE, ABRASIVE CUTOFF (PNEU) 28 888-2025-10001PB TOGGLE SWITCH GUARD 29 888-2014-300PB VENT, 1/8" 888-2229-010PB VALVE, CONTROL, PNEUMATIC (NORMALLY OPEN)

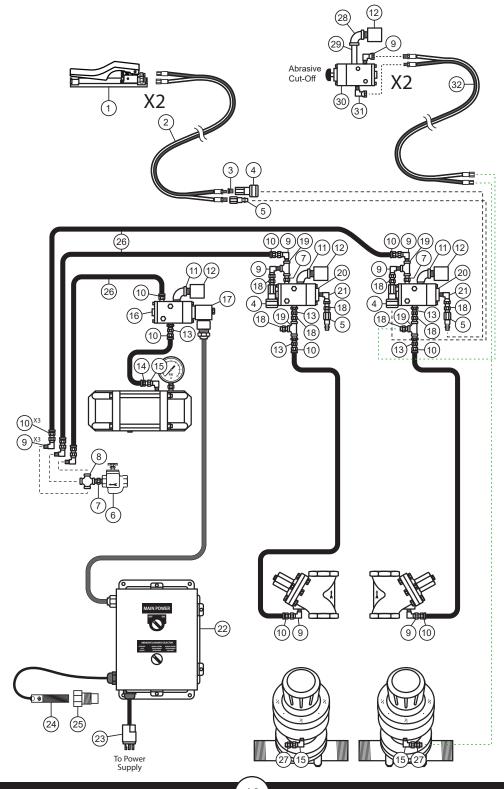
VALVE, CONTROL, PNEUMATIC, REPAIR KIT, HEAVY DUTY

888-2229-00099PB

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



DUAL-CHAMBER - 2-Outlet - Pneumatic REMOTE Abrasive Cut-Off Controls





DUAL-CHAMBER - 2-Outlet - Pneumatic REMOTE Abrasive Cut-Off Controls - Parts List HANDLE, CONTROL, PNEUMATIC HANDLE, CONTROL, PNEUMATIC #2 (INCLUDED STANDARD) 888-2263-001PB 888-2263-002PB HANDLE, CONTROL, PNEUMATIC #3 HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 55' 2 200-110 HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 110' 888-3026-50200PB BUSHING, PLATED 1/4" x 1/8" NPT 888-4224-30102PB BRASS SOCKET, 1/4" PLUG, 1/4" 888-4224-30002PB 888-2301-90290PB STRAINER, BRZ 1/4" 90 MICRON 7 888-3031-31202PB NIPPLE, HEX 1/4" MNPT x 1/4" MNPT 888-3016-102PB CROSS TEE, GALV, 1/4" 888-4203-50202PB SWIVEL 90°, 1/4"MNPT x 1/4"F HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT 10 888-4200-30202PB 11 888-3006-102PB ELBOW, STREET, 90°, GALV, 1/4" 12 888-2013-402PB DUST ELIMINATOR, 1/4" MNPT STRAIGHT SWIVEL, 1/4"MNPT x 1/4"F 13 888-4201-50202PB HOSE. PUSH-ON INSERT 1/4" x 1/8" NPT 14 888-4200-30200PB 15 888-4203-50000PB SWIVEL 90°, 1/8"MNPT X 1/8"F VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED) 888-2229-100PB 888-2229-10099PB VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY 17 888-2229-10003PB VALVE, CONTROL, COIL, 12VDC HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST 18 888-3031-30202PB 19 888-3011-102PB 888-2229-000PB VALVE, CONTROL, PNEUMATIC (NORMALLY CLOSED) VALVE, CONTROL, PNEUMATIC, REPAIR KIT, HEAVY DUTY 888-2229-00099PB 21 888-4203-50002PB SWIVEL 90°, 1/8" MNPT x 1/4" F 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, PNEUMATIC BLAST 888-7066-001PB CONTROLS 12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, PNEUMATIC 888-7066-001PB-S BLAST CONTROLS 888-7109-301PB ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG 23 ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG 888-7109-30102PB LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED 888-5013-80101PB 888-5013-30012PB MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT 888-4101-002PB HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI 26 WH42-2 1/8" HOSE UNION 28 888-3000-102PB ELBOW, GALV, 90°, 1/4" 29 NIPPLE, TBE, GALV, 1/4" x 2" 888-3029-10209PB 888-2229-301PB VALVE, CONTROL, KNOB OPERATED 3W2P 30 VALVE, CONTROL, KNOB OPERATED 3W2P, REPAIR KIT, HEAVY DUTY 888-2229-30199PB

SWIVEL 90°, 1/4" MNPT x 1/8" F

888-4203-50200PB

888-4100-301PB

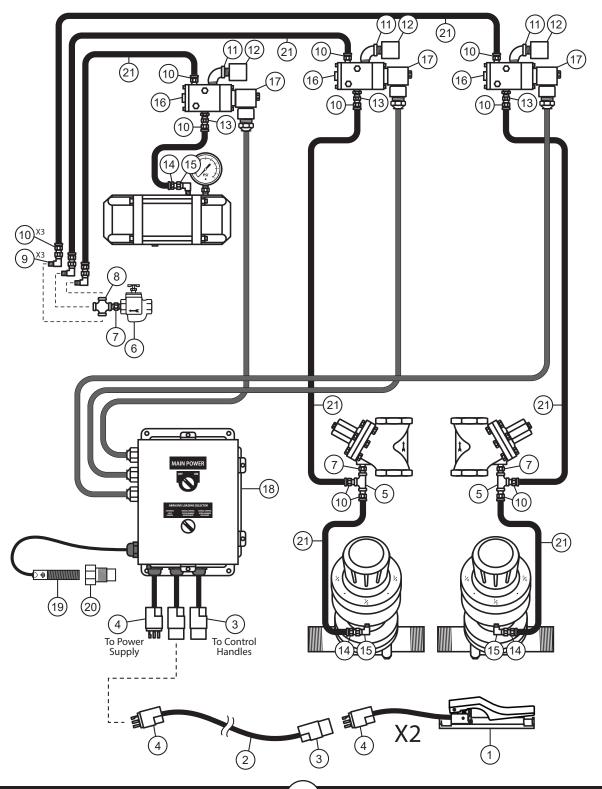
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HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/YEL W/BLACK STRIPE, NOMINAL 3/16" ID x 25'

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



DUAL-CHAMBER - 2-Outlet - Electric Controls



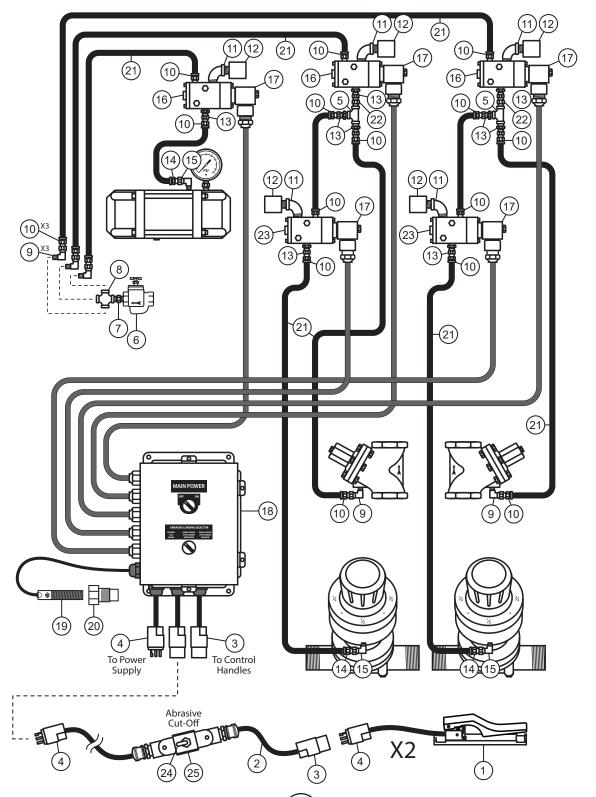


	DUA	L-CHAMBER - 2-Outlet - Electric Controls - Parts List
	888-2263-40001PB	HANDLE, CONTROL, ELECTRIC W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
Ì	888-2263-40101PB	HANDLE, CONTROL, ELECTRIC #2 W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
1**	888-2263-40102PB	HANDLE, CONTROL, ELECTRIC #2 W/3 PART SEALED STRAIN RELIEF (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-2263-40104PB	HANDLE, CONTROL, ELECTRIC #2 W/SEALED WATERPROOF CONNECTOR (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-7073-055PB	EXTN CORD W/TWIST-LOCK CONNECTORS, 55′, 3 PRONG, 2 WIRE, X-TREME DUTY™
2	888-7073-110PB	EXTN CORD W/TWIST-LOCK CONNECTORS, 110′, 3 PRONG, 2 WIRE, X-TREME DUTY™
	888-7074-05501PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55', 3 PRONG, 3 WIRE, X-TREME DUTY™
ĺ	888-7074-11001PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110', 3 PRONG, 3 WIRE, X-TREME DUTY™
	888-7109-300PB	ELECTRIC CONNECTOR, FEMALE, TWIST-LOCK, 3 PRONG
3	888-7109-30002PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, FEMALE, 3 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
T	888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG
4	888-7109-30102PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 3 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
5	888-3011-102PB	TEE, GALV, 1/4"
6	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
7	888-3031-31202PB	NIPPLE, HEX 1/4" MNPT x 1/4" MNPT
8 888-3016-102PB CROSS TEE, GALV, 1/4"		CROSS TEE, GALV, 1/4"
9	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
10	888-4200-30202PB	HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT
11	888-3006-102PB	ELBOW, STREET, 90°, GALV, 1/4"
12	888-2013-402PB	DUST ELIMINATOR, 1/4" MNPT
13	888-4201-50202PB	STRAIGHT SWIVEL, 1/4" MNPT x 1/4" F
14	888-4200-30200PB	HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT
15	888-4203-50000PB	SWIVEL 90°, 1/8" MNPT X 1/8" F
16	888-2229-100PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)
ا ۱۵	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
17	888-2229-10003PB	VALVE, CONTROL, COIL, 12VDC
18	888-7066-005PB	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTRIC BLAST CONTROLS, (2) OUTLET W/O ABRASIVE CUTOFF
10	888-7066-005PB-S	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, ELECTRIC BLAST CONTROLS, (2) OUTLET W/O ABRASIVE CUTOFF
19	888-5013-80101PB	LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED
20	888-5013-30012PB	MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT
21	888-4101-002PB	HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI

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



DUAL-CHAMBER - 2-Outlet - Electric ON CORD Abrasive Cut-Off Controls



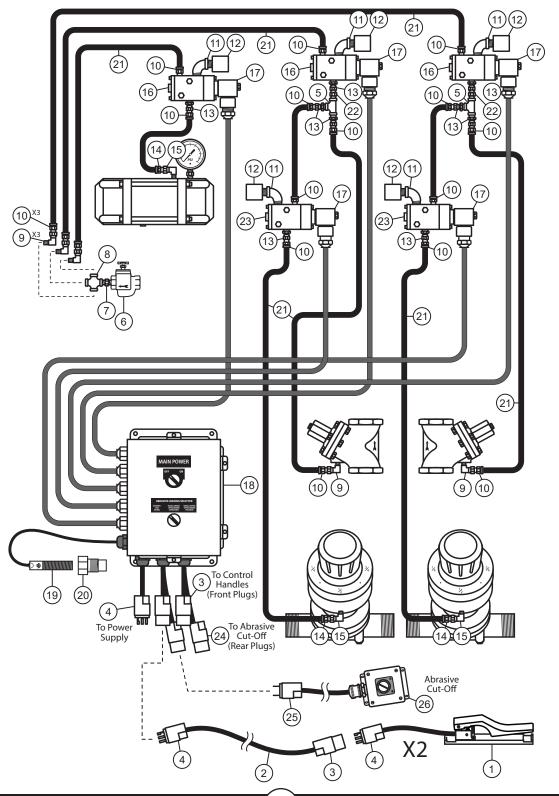


	888-2263-40001PB	HANDLE, CONTROL, ELECTRIC W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
ŀ	888-2263-40101PB	HANDLE, CONTROL, ELECTRIC #2 W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
**	888-2263-40102PB	HANDLE, CONTROL, ELECTRIC #2 W/3 PART SEALED STRAIN RELIEF (APPROPRIATE FOR USE WITH STEIL ABRASIVES)
Ī	888-2263-40104PB	HANDLE, CONTROL, ELECTRIC #2 W/SEALED WATERPROOF CONNECTOR (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
寸	888-7075-055PB	CORD W/ TWIST-LOCK CONNECTORS & ABRASIVE CUTOFF SWITCH ASSEMBLY, 55', 3-PRONG, 3-WIRE
Ī	888-7075-110PB	CORD W/ TWIST-LOCK CONNECTORS & ABRASIVE CUTOFF SWITCH ASSEMBLY, 110', 3-PRONG, 3-WIRE
2	888-7075-05501PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS & ABRASIVE CUTOFF SWITCH ASSEMBLY, 55', 3 PRONG, 3 WIRE
	888-7075-11001PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS & ABRASIVE CUTOFF SWITCH ASSEMBLY, 110', 3 PRONG, 3 WIRE
	888-7109-300PB	ELECTRIC CONNECTOR, FEMALE, TWIST-LOCK, 3 PRONG
3	888-7109-30002PB	ELECTRIC CONNECTOR, SEALED WATERPROOF , FEMALE, 3 PRONG (APPROPRIATE FOR USE WITH STE ABRASIVES)
寸	888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG
4	888-7109-30102PB	ELECTRIC CONNECTOR, SEALED WATERPROOF , MALE, 3 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
5	888-3011-102PB	TEE, GALV, 1/4"
6	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
7	888-3031-31202PB	NIPPLE, HEX 1/4" MNPT x 1/4" MNPT
8	888-3016-102PB	CROSS TEE, GALV, 1/4"
9	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
0	888-4200-30202PB	HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT
11	888-3006-102PB	ELBOW, STREET, 90°, GALV, 1/4"
12	888-2013-402PB	DUST ELIMINATOR, 1/4" MNPT
13	888-4201-50202PB	STRAIGHT SWIVEL, 1/4" MNPT x 1/4" F
4	888-4200-30200PB	HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT
15	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
16	888-2229-100PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)
	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
7	888-2229-10003PB	VALVE, CONTROL, COIL, 12VDC
18	888-7066-006PB	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTRIC BLAST CONTROLS, (2) OUTLET W/ ABRASIVE CUTOFF ON CORD
°	888-7066-006PB-S	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, ELECTRIC BLAST CONTROLS, (2) OUTLET W/ ABRASIVE CUTOFF ON CORD
19	888-5013-80101PB	LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED
20	888-5013-30012PB	MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT
21	888-4101-002PB	HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI
22	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST
,	888-2229-600PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY OPEN)
23	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
24	888-2025-10002PB	ABRA CUTOFF SWITCH (ELEC)
25	888-2025-10001PB	TOGGLE SWITCH GUARD

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



DUAL-CHAMBER - 2-Outlet - Electric REMOTE Abrasive Cut-Off Controls



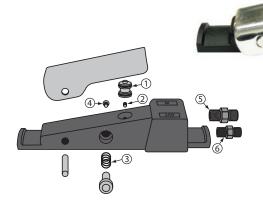


	DUAL-CHAMBE	R - 2-Outlet - Electric REMOTE Abrasive Cut-Off Controls - Parts List
	888-2263-40001PB	HANDLE, CONTROL, ELECTRIC W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
	888-2263-40101PB	HANDLE, CONTROL, ELECTRIC #2 W/TWIST-LOCK PLUG (NOT FOR USE WITH STEEL ABRASIVES)
1**	888-2263-40102PB	HANDLE, CONTROL, ELECTRIC #2 W/3 PART SEALED STRAIN RELIEF (APPROPRIATE FOR USE WITH STEE ABRASIVES)
	888-2263-40104PB	HANDLE, CONTROL, ELECTRIC #2 W/SEALED WATERPROOF CONNECTOR (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
	888-7073-055PB	EXTN CORD W/TWIST-LOCK CONNECTORS, 55', 3 PRONG, 2 WIRE, X-TREME DUTY™
2	888-7073-110PB	EXTN CORD W/TWIST-LOCK CONNECTORS, 110', 3 PRONG, 2 WIRE, X-TREME DUTY™
_	888-7074-05501PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS, 55', 3 PRONG, 3 WIRE, X-TREME DUTY™
	888-7074-11001PB	EXTN CORD W/SEALED WATERPROOF CONNECTORS, 110', 3 PRONG, 3 WIRE, X-TREME DUTY™
	888-7109-300PB	ELECTRIC CONNECTOR, FEMALE, TWIST-LOCK, 3 PRONG
3	888-7109-30002PB	ELECTRIC CONNECTOR, SEALED WATERPROOF , FEMALE, 3 PRONG (APPROPRIATE FOR USE WITH STEE ABRASIVES)
	888-7109-301PB	ELECTRIC CONNECTOR, MALE, TWIST-LOCK, 3 PRONG
4	888-7109-30102PB	ELECTRIC CONNECTOR, SEALED WATERPROOF , MALE, 3 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
5	888-3011-102PB	TEE, GALV, 1/4"
6	888-2301-90290PB	STRAINER, BRZ 1/4" 90 MICRON
7	888-3031-31202PB	NIPPLE, HEX 1/4" MNPT x 1/4" MNPT
8	888-3016-102PB	CROSS TEE, GALV, 1/4"
9	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F
10	888-4200-30202PB	HOSE, PUSH-ON INSERT 1/4" x 1/4" NPT
11	888-3006-102PB	ELBOW, STREET, 90°, GALV, 1/4"
12	888-2013-402PB	DUST ELIMINATOR, 1/4" MNPT
13	888-4201-50202PB	STRAIGHT SWIVEL, 1/4" MNPT x 1/4" F
14	888-4200-30200PB	HOSE, PUSH-ON INSERT 1/4" x 1/8" NPT
15	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
	888-2229-100PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY CLOSED)
16	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
17	888-2229-10003PB	VALVE, CONTROL, COIL, 12VDC
18	888-7066-007PB	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/TWIST-LOCK CONNECTOR, ELECTRIC BLAST CONTROLS, (2) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT
10	888-7066-007PB-S	12VDC DUAL CHAMBER CONTROL BOX ASSEMBLY W/SEALED WATERPROOF CONNECTOR, ELECTRIC BLAST CONTROLS, (2) OUTLET W/ ABRASIVE CUTOFF WALL MOUNT
19	888-5013-80101PB	LEVEL SENSOR, CAPACITIVE, 10-55 VDC, NORMALLY OPEN OR NORMALLY CLOSED
20	888-5013-30012PB	MOUNTING ADAPTOR, LEVEL SENSOR, 3/4" NPT
21	888-4101-002PB	HOSE, AIR, INSTA-GRIP, BLACK, NOMINAL 1/4" ID, 300 PSI
22	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST
23	888-2229-600PB	VALVE, CONTROL, ELECTRIC, 12VDC (NORMALLY OPEN)
	888-2229-10099PB	VALVE, CONTROL, REPAIR KIT, ELECTRIC, HEAVY DUTY
	10-352	FEMALE TWIST-LOCK CONNECTOR, 2 PRONG
24	888-7109-20002PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, FEMALE, 2 PRONG (APPROPRIATE FOR USE WITH STEE ABRASIVES)
	10-354	MALE TWIST-LOCK CONNECTOR, 2 PRONG
25	888-7109-20102PB	ELECTRIC CONNECTOR, SEALED WATERPROOF, MALE, 2 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)
26	999-8400-35104PB-02	SELECTOR SWITCH OPERATOR W/TWIST LOCK CONNECTOR, 25' CORD, 2 PRONG
	999-8400-35104PB-04	SELECTOR SWITCH OPERATOR W/SEALED WATERPROOF CONNECTOR, 25' CORD, 2 PRONG (APPROPRIATE FOR USE WITH STEEL ABRASIVES)

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

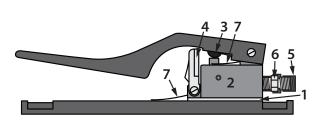


Control Handle Parts Lists (Pneumatic)



PREUMATIC CONTROL HANDLE NOT FOR USE WITH STEEL ABRASIVES 888-2263-000PB HANDLE, CONTROL, PNEUMATIC 888-2263-00099PB HANDLE, CONTROL, PNEUMATIC, RE-PAIR KIT, INCLUDES # 1, 2, 3 & 4 5 888-3031-30202PB HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST 6 888-3031-30000PB HEX NIPPLE 1/8" NPT x 1/8" W/BALL ST





Pneumatic Control Handle #2				
	888-2263-001PB	HANDLE, CONTROL, PNEUMATIC #2		
	888-2263-00199PB	HANDLE, CONTROL, PNEUMATIC #2, REPAIR KIT, INCLUDES # 1, 2 & 3		
4	888-2263-00108PB	HANDLE, CONTROL, SAFETY FLAP		
5	888-3031-30202PB	HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST		
6	888-3031-30000PB	HEX NIPPLE 1/8" NPT x 1/8" W/BALL ST		
7	888-2263-00111PB	HANDLE, CONTROL, SPRING		

Pneumatic Control Handle #3 NOT FOR USE WITH STEEL ABRASIVES 888-2263-002PB HANDLE, CONTROL, PNEUMATIC #3 888-2263-0029PB HANDLE, CONTROL, PNEUMATIC #3, REPAIR KIT 888-3031-30202PB HEX NIPPLE 1/4" NPT x 1/4" W/BALL ST 888-3031-30000PB HEX NIPPLE 1/8" NPT x 1/8" W/BALL ST

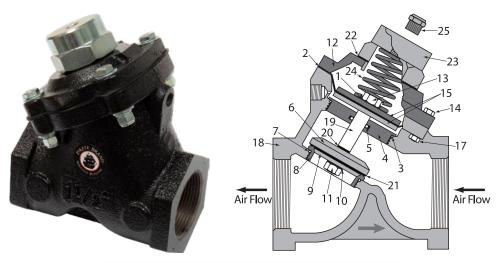


Control Handle Parts Lists (Electric)

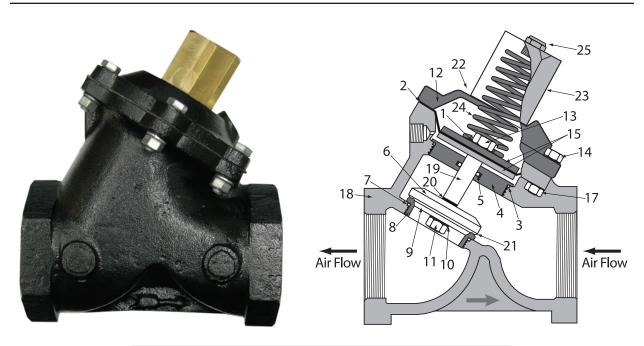








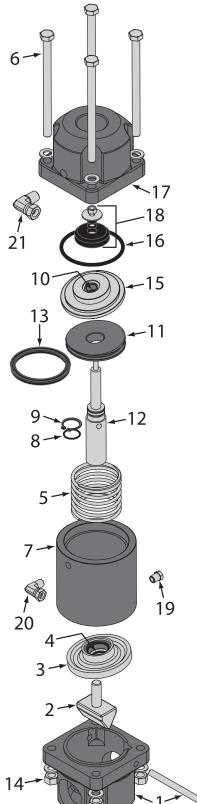
	1-1/2"	Auto Air Valve
	888-2123-108PB	VALVE, AUTO AIR, 1-1/2", (NORMALLY CLOSED)
	888-2123-00799PB	VALVE, AUTO AIR, 1-1/4 & 1-1/2, REPAIR KIT INCLUDES # 1, 2, 3, 5, 7, 11, 13, 20 & 21
24	888-2123-10724PB	VALVE, AUTO AIR, 1-1/4 & 1-1/2, SPRING
25	888-2014-300PB	VENT, 1/8"



	1-1/2" Auto Air Valve (<mark>BIG-GUN</mark> ™)		
	888-2123-108PB-L	VALVE, AUTO AIR, 1-1/2" FULL FLOW, (NORMALLY CLOSED)	
	888-2123-00999PB	VALVE, AUTO AIR, 1-1/2"L & 2" FULL FLOW,REPAIR KIT INCLUDES # 1, 2, 3, 5, 7, 11, 13, 20 & 21	
24	888-2123-10924PB	VALVE, AUTO AIR, 1-1/2"L & 2" FULL FLOW, SPRING	
25	888-2014-300PB	VENT, 1/8"	







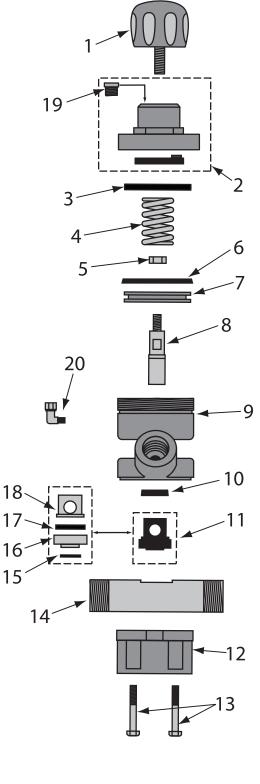
		Combination Valve
	888-2223-000PB	VALVE, COMBINATION, 1-1/4", COMPLETE
	888-2223-00099PB	VALVE, COMBINATION & COMBINATION II, REPAIR KIT, INCLUDES # 4, 8, 9, 10, 13, 16 & 18
1	888-2223-00001PB	VALVE, COMBINATION, CAP
2	888-2223-00002PB	VALVE, COMBINATION & COMBINATION II, PINCH RAM
3	888-2223-00003PB	VALVE, COMBINATION, UPPER ROD GUIDE, INCLUDES SEAL(#4), BUSHING & CIRCLIP
4	888-2223-00004PB	VALVE, COMBINATION & COMBINATION II, SEAL, UPPER ROD
5	888-2223-00005PB	VALVE, COMBINATION & COMBINATION II, SPRING
6	888-7010-50715PB	VALVE, COMBINATION, BOLT 3/8" x 6" W/WASHER
7	888-2223-00007PB	VALVE, COMBINATION, CYLINDER
8	888-2223-00008PB	VALVE, COMBINATION & COMBINATION II, O-RING, SHAFT
9	888-2223-00009PB	VALVE, COMBINATION & COMBINATION II, SNAP RING
10	888-2223-00010PB	VALVE, COMBINATION & COMBINATION II, SEAL, LOWER ROD
11	888-2223-00011PB	VALVE, COMBINATION & COMBINATION II, PISTON
12	888-2223-00012PB	VALVE, COMBINATION & COMBINATION II, SHAFT
13	888-2223-00013PB	VALVE, COMBINATION & COMBINATION II, SEAL, PISTON
14	888-7017-50701PB	VALVE, COMBINATION, NUT, 3/8"
15	888-2223-00015PB	VALVE, COMBINATION & COMBINATION II, LOWER ROD GUIDE, INCLUDES SEAL(#10), BUSHING & SNAP RING
16	888-2223-00016PB	VALVE, COMBINATION & COMBINATION II, O-RING, LOWER ROD GUIDE
17	888-2223-00017PB	VALVE, COMBINATION, BASE
18	888-2223-00018PB	VALVE, COMBINATION & COMBINATION II, PLUG ASSEMBLY
19	888-2014-300PB	VENT, 1/8"
20	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
21	888-4203-50202PB	SWIVEL 90°, 1/4"MNPT x 1/4"F





APV (Automatic	Plunger Valve) Metering Valve
888-2149-006PB	APV, 1", W/TC SLEEVE
000 0140 106DD	ADV 4" W//UDETLIANE OLEEVE

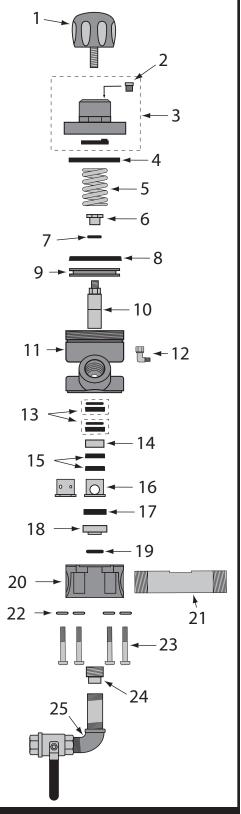
	888-2149-006PB	APV, 1", W/TC SLEEVE
	888-2149-106PB	APV, 1", W/URETHANE SLEEVE
	888-2149-007PB	APV, 1-1/4", W/TC SLEEVE
	888-2149-107PB	APV, 1-1/4", W/URETHANE SLEEVE
	888-2149-008PB	APV, 1-1/2", W/TC SLEEVE
	888-2149-108PB	APV, 1-1/2", W/URETHANE SLEEVE
	888-2149-00099PB	APV, REPAIR KIT W/TC SLEEVE, INCLUDES # 6, 8, 10, 15, 16, 17 & 18
	888-2149-00098PB	APV, SEAL KIT, SEALS ONLY W/URETHANE SEAT, INCLUDES # 6, 10, 15 & 17
	888-2149-10099PB	APV, REPAIR KIT W/URETHANE SLEEVE, INCLUDES # 6, 8, 10 & 11
	888-2149-10098PB	APV, SEAL KIT, SEALS ONLY W/URETHANE SLEEVE, INCLUDES 6, 10, & 11
1	888-2149-00001PB	APV, KNOB
2	888-2148-00002PB	APV & APV II, CAP ASSEMBLY
3	888-2149-00019PB	APV & APV II, BUMP RING
4	888-2149-00003PB	APV & APV II, SPRING
5	888-2149-00008PB	APV & TV2, NUT
6	888-2148-00004PB	APV, APV II, & T2V PISTON SEAL (GREEN URETHANE)
7	888-2149-00005PB	APV, PISTON
8	888-2149-00007PB	APV, TUNGSTEN CARBIDE, PLUNGER
9	888-2149-00009PB	APV, CYLINDER
10	888-2148-00006PB	APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING (CLEAR URETHANE)
11	888-2149-10013PB	APV, SLEEVE, URETHANE
12	888-2149-00011PB	APV, BASE
13	888-7010-50755PB	APV & APV II, BOLT (4 PACK)
	888-2149-00615PB	APV & APV II, PIPE NIPPLE 1" FEMALE x 1-1/2" MALE
14	888-2149-00715PB	APV & APV II, PIPE NIPPLE 1-1/4" MALE x 1-1/4" MALE
	888-2149-00815PB	APV & APV II, PIPE NIPPLE 1-1/2" MALE x 1-1/2" MALE
15	888-2149-00018PB	APV & APV II, O-RING
16	888-2149-00014PB	APV, INSERT
17	888-2149-00010PB	APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE)
10	888-2148-00013PB	APV II / APV, SOLID TUNGSTEN CARBIDE SLEEVE
18	888-2149-32020PB	APV & APV II, MULTI PORTED SLEEVE STAINLESS
19	888-2014-300PB	VENT, 1/8"
20	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F







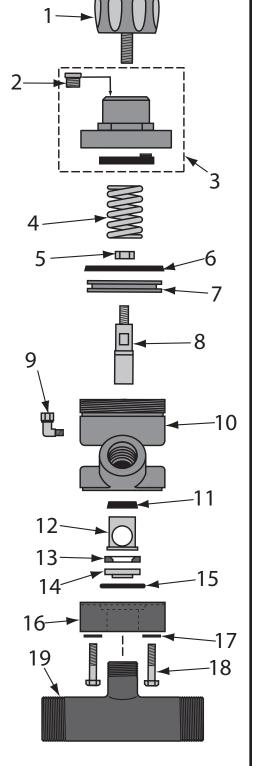
APVII™ (Automatic Plunger Valve II) Metering Valve			
	888-2148-006PB	APV II, 1" W/SOLID TUNGSTEN CARBIDE SLEEVE	
	888-2148-007PB	APV II, 1-1/4" W/SOLID TUNGSTEN CARBIDE SLEEVE	
	888-2148-008PB	APV II, 1-1/2" W/SOLID TUNGSTEN CARBIDE SLEEVE	
	888-2148-00020PB	APV TO APV II CONVERSION KIT	
	888-2148-00099PB	APV II, REPAIR KIT W/SOLID TUNGSTEN CARBIDE SLEEVE, INCLUDES # 8, 10, (2)13, (2)15, 16, 17, 18 & 19	
	888-2148-00098PB	APV II, SEAL KIT, SEALS ONLY, W/URETHANE SEAT, INCLUDES #8, (2)13, (2)15, 17 & 19	
1	888-2148-00001PB	APV II, KNOB (BLACK)	
2	888-2014-300PB	VENT, 1/8"	
3	888-2148-00002PB	APV & APV II, CAP ASSEMBLY	
4	888-2149-00019PB	APV & APV II, BUMP RING	
5	888-2149-00003PB	APV & APV II, SPRING	
6	888-2148-00015PB	APV II, PLUNGER STOP (STAINLESS)	
7	888-2148-00016PB	APV II, NYLON WASHER	
8	888-2148-00004PB	APV, APV II, & T2V PISTON SEAL (GREEN URETHANE)	
9	888-2148-00005PB	APV II, PISTON	
10	888-2148-00007PB	APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE)	
11	888-2148-00009PB	APV II, CYLINDER, W/1" NPT CLEANOUT	
12	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F	
13	888-2148-00006PB	APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING (CLEAR URETHANE)	
14	888-2148-00017PB	APV II, PLUNGER BUSHING (STAINLESS)	
15	888-2148-30006PB	APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE)	
40	888-2148-00013PB	APV II / APV, SOLID TUNGSTEN CARBIDE SLEEVE	
16	888-2149-32020PB	APV & APV II, MULTI PORTED SLEEVE STAINLESS STEEL	
17	888-2149-00010PB	APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE)	
18	888-2148-00014PB	APV II, INSERT (STAINLESS)	
19	888-2149-00018PB	APV & APV II, O-RING	
20	888-2148-30011PB	APV II, BASE W/CLEANOUT	
	888-2149-00615PB	APV & APV II, PIPE NIPPLE 1" FEMALE x 1-1/2" MALE	
21	888-2149-00715PB	APV & APV II, PIPE NIPPLE 1-1/4" MALE x 1-1/4" MALE	
	888-2149-00815PB	APV & APV II, PIPE NIPPLE 1-1/2" MALE x 1-1/2" MALE	
22	888-7027-50302PB	APV, APV II & T2V, FLAT WASHER 3/8" SAE (10 PACK)	
23	888-7010-50755PB	APV & APV II, BOLT (4 PACK)	
24	888-3014-206PB	APV II & MPV II, PLUG, PIPE STAINLESS 1"	
25	999-8403-00054PB	APV II & T2V CLEANOUT BALL VALVE ASSY	







	APV BI	G-BORE™ Metering Valve
	888-2149-500PB	APV BIG-BORE™ METERING VALVE W/TUNGSTEN CARBIDE SLEEVE (PIPE NIPPLE NOT INCLUDED)
	888-2149-508PB	APV BIG-BORE™ METERING VALVE, 1-1/2", W/TUNGSTEN CARBIDE SLEEVE
	888-2149-509PB	APV BIG-BORE™ METERING VALVE, 2", W/TUNGSTEN CARBIDE SLEEVE
	888-2149-50099PB	APV BIG-BORE™, REPAIR KIT W/TC SLEEVE, INCLUDES # 6, 8, 11, 12, 13, 14 & 15
	888-2149-50098PB	APV BIG-BORE™, SEAL KIT W/TC SLEEVE, INCLUDES # 6, 11, 13, & 15
1	888-2149-00001PB	APV, KNOB
2	888-2014-300PB	VENT, 1/8"
3	888-2148-00002PB	APV & APV II, CAP ASSEMBLY
4	888-2149-50003PB	APV, SPRING, BIG-BORE™ (GRAY/BLUE)
5	888-2149-00008PB	APV & TV2, NUT
6	888-2148-00004PB	APV, APV II, & T2V PISTON SEAL (GREEN URETHANE)
7	888-2149-50005PB	APV, PISTON, BIG-BORE™
8	888-2149-50007PB	APV, TUNGSTEN CARBIDE, PLUNGER, BIG-BORE™
9	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
10	888-2149-50009PB	APV, CYLINDER, BIG-BORE™
11	888-2149-50006PB	APV, PLUNGER SEAL W/ O-RING, BIG-BORE™
12	888-2149-50013PB	APV, TUNGSTEN CARBIDE SLEEVE, BIG-BORE™
13	888-2149-50015PB	APV, URETHANE SEAT, BIG-BORE™ (HEAVY DUTY BLUE)
14	888-2149-50014PB	APV, STAINLESS STEEL INSERT, BIG-BORE™
15	888-2149-50018PB	APV, O-RING FOR METERING VALVE INSERT, BIG-BORE™
16	888-2149-50011PB	APV, BASE, BIG-BORE™
17	888-7027-50302PB	APV, APV II & T2V, FLAT WASHER 3/8" SAE (10 PACK)
18	888-7010-50754PB	BOLT, 3/8" UNC x 2-1/4"
10	888-2149-50816PB	APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES
19	888-2149-00915PB	APV & APV II, PIPE NIPPLE, 2" MALE x 2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES

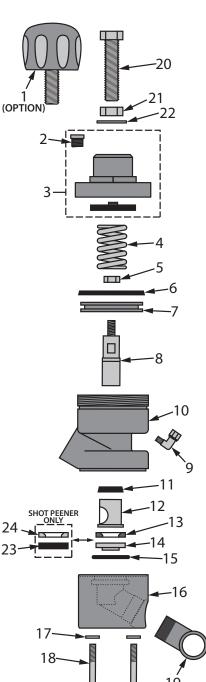








	888-2151-200PB	APV BIG-BORE™ STRAIGHT-DOWN METERING VALVE W/ TUNGSTEN CARBIDE SLEEVE (PIPE NIPPLE NOT INCLUDED)
	888-2149-50099PB	APV BIG-BORE ™, REPAIR KIT W/TC SLEEVE, INCLUDES # 6, 8, 11 12, 13, 14 & 15
	888-2149-50098PB	APV BIG-BORE ™, SEAL KIT W/TC SLEEVE, INCLUDES # 6, 11, 13, & 15
	888-2151-220PB	APV BIG-BORE™, SHOT-PEENER-100#, STRAIGHT-DOWN METERING VALVE W/TUNGSTEN CARBIDE SLEEVE & SEAT (PIPE NIPPLE NOT INCLUDED) FOR STEEL SHOT & CONDITIONED CUT WIRE APPLICATIONS ONLY
	888-2151-22099PB	APV, BIG-BORE™, SHOT-PEENER-100#, REPAIR KIT W/TC SLEEVE & SEAT, INCLUDES # 6, 8, 11, 12, 15, 23 & 24
	888-2151-22098PB	APV, BIG-BORE™, SHOT-PEENER-100#, SEAL KIT, SEALS ONLY, INCLUDES # 6, 11, 15 & 23
1	888-2149-00001PB	APV, KNOB
2	888-2014-300PB	VENT, 1/8"
3	888-2148-00002PB	APV & APV II, CAP ASSEMBLY
4	888-2149-50003PB	APV, SPRING, BIG-BORE™ (GRAY/BLUE)
5	888-2149-00008PB	APV & TV2, NUT
6	888-2148-00004PB	APV, APV II, & T2V PISTON SEAL (GREEN URETHANE)
7	888-2149-50005PB	APV, PISTON, BIG-BORE™
8	888-2149-50007PB	APV, TUNGSTEN CARBIDE, PLUNGER, BIG-BORE™
9	888-4203-50000PB	SWIVEL 90°, 1/8"MNPT X 1/8"F
10	888-2149-50009PB	APV, CYLINDER, BIG-BORE™
11	888-2149-50006PB	APV, PLUNGER SEAL W/ O-RING, BIG-BORE™
12	888-2149-50013PB	APV, TUNGSTEN CARBIDE SLEEVE, BIG-BORE™
13	888-2149-50015PB	APV, URETHANE SEAT, BIG-BORE™ (HEAVY DUTY BLUE)
14	888-2149-50014PB	APV, STAINLESS STEEL INSERT, BIG-BORE™
15	888-2149-50018PB	APV, O-RING FOR METERING VALVE INSERT, BIG-BORE™
16	888-2149-50711PB	APV, BIG-BORE™, BASE FOR STRAIGHT-DOWN METERING VALVES
17	888-7027-50302PB	FLAT WASHER 3/8" SAE (10 PACK)
18	888-7010-50714PB	BOLT, 3/8" UNC x 3-3/4"
40	888-2149-50816PB	APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES
19	888-2149-00915PB	APV & APV II, PIPE NIPPLE, 2" MALE x 2" MALE FOR STRAIGHT- DOWN & BIG-BORE™ METERING VALVES
20	888-7010-51512PB	HEX BOLT, 5/8" UNC x 3-1/2"
21	888-7017-515PB	NUT, 5/8" UNC
22	888-7027-55202PB	FLAT WASHER, 5/8" UNC
23	888-2149-50714PB	APV, BIG-BORE™, SHOT-PEENER-100#, URETHANE INSERT (AVAILABLE IN REPAIR KIT / SEAL KIT ONLY)
24	888-2149-50715PB	APV, BIG-BORE™, SHOT-PEENER-100#, TUNGSTEN CARBIDE SEAT, (AVAILABLE IN REPAIR KIT ONLY)







() () () () () () () () () ()	PIRATE BUE	(OPTION)
APV Straight Down & APV	/ Shot Peener 30# Metering \	Valves

AP	V Straight Dow	n & APV Shot Peener 30# Metering Valves
	888-2151-000PB	APV STRAIGHT-DOWN METERING VALVE W/TUNGSTEN CARBIDE SLEEVE (PIPE NIPPLE NOT INCLUDED)
	888-2151-00099PB	APV STRAIGHT-DOWN , REPAIR KIT W/TC SLEEVE, INCLUDES # 6, 8, 10, 12, 16, 17 & 18
	888-2151-00098PB	APV STRAIGHT-DOWN , SEAL KIT, SEALS ONLY W/URETHANE SEAT, INCLUDES # 6, 10, 12 & 17
	888-2151-020PB	APV, SHOT-PEENER-30#, STRAIGHT-DOWN METERING VALVE W/TUNGSTEN CARBIDE SLEEVE & SEAT (PIPE NIPPLE NOT INCLUDED) FOR STEEL SHOT & CONDITIONED CUT WIRE APPLICATIONS ONLY
	888-2151-02099PB	APV, SHOT-PEENER-30# , REPAIR KIT W/TC SLEEVE & SEAT, INCLUDES # 6, 8, 10, 12, 16, 17 & 18
	888-2151-02098PB	APV, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 6, 10, & 12
1	888-2149-00001PB	APV, KNOB
2	888-2148-00002PB	APV & APV II, CAP ASSEMBLY
3	888-2149-00019PB	APV & APV II, BUMP RING
4	888-2149-00003PB	APV & APV II, SPRING
5	888-2149-00008PB	APV & TV2, NUT
6	888-2148-00004PB	APV, APV II, & T2V PISTON SEAL (GREEN URETHANE)
7	888-2149-00005PB	APV, PISTON
8	888-2149-00007PB	APV, TUNGSTEN CARBIDE, PLUNGER
9	888-2149-00009PB	APV, CYLINDER
10	888-2148-00006PB	APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING
12	888-2149-00935PB	APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE
13	888-2149-40711PB	APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES
	888-2149-50616PB	APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES
14	888-2149-50716PB	APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES
	888-2149-50816PB	APV &APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES
16	888-2149-00014PB	APV, INSERT
17	888-2149-00010PB	APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE)
18	888-2148-00013PB	APV II / APV, SOLID TUNGSTEN CARBIDE SLEEVE
19	888-2014-300PB	VENT, 1/8"

SWIVEL 90°, 1/8"MNPT X 1/8"F

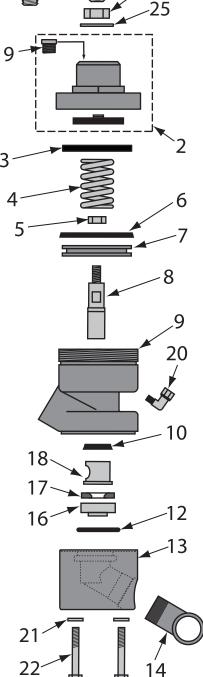
HEX BOLT, 5/8" UNC x 3-1/2"

FLAT WASHER, 5/8" UNC

BOLT, 3/8" UNC x 3-3/4"

NUT, 5/8" UNC

FLAT WASHER 3/8" SAE (10 PACK)



21

23

24

888-4203-50000PB

888-7027-50302PB

888-7010-50714PB

888-7010-51512PB

888-7017-515PB

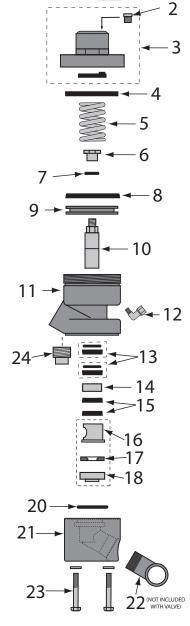
888-7027-55202PB





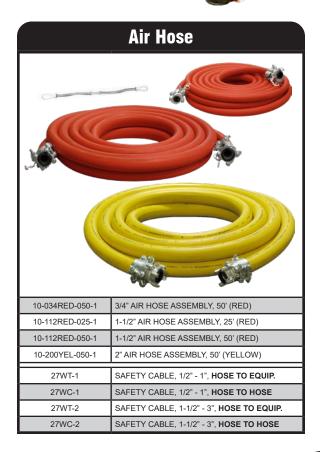
APVII™ Straight Down & APVII™ Shot Peener 30# Metering Valves

888-2148-307PB APV II STRAIGHT-DOWN, REPRING VALVE W/TUNGSTEN CARBIDE SLEEVE (PIPE NIPPLE NOT INCLUDED) 888-2148-30098PB APV II STRAIGHT-DOWN, REPAIR KIT W/TC SLEEVE, INCLUDES # 8, 10, (2)13, (2)15, 16, 17, 18 & 20 APV II, STRAIGHT-DOWN, SEAL KIT, SEALS ONLY, W/URETHANE SEAT, INCLUDES # 8, (2)13, (2)15, 17 & 20 APV II, STRAIGHT-DOWN, SEAL KIT, SEALS ONLY, W/URETHANE SEAT, INCLUDES # 8, (2)13, (2)15, 17 & 20 APV II, STRAIGHT-DOWN, SEAL KIT, SEALS ONLY, W/URETHANE SEAT, INCLUDES # 8, (2)13, (2)15, 17 & 20 APV II, STRAIGHT-DOWN, SEAL KIT, SEALS ONLY, W/URETHANE SEAT, INCLUDES # 8, 10, (2)13, (2)15, 16, 17, 18 & 20 APV II, SHOT-PEENER-30F, REPAIR KIT W/TC SLEEVE & SEAT, INCLUDES # 8, 10, (2)13, (2)15, 16, 17, 18 & 20 APV II, SHOT-PEENER-30F, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15 & 20, 12, 12, 12, 12, 12, 12, 12, 12, 12, 12			
888-2148-30098PB APV II STRAIGHT-DOWN, SEAL KIT, SEALS ONLY, W/URETHANE SEAT, INCLUDES # 8, (2)13, (2)15, 17 ± 20 888-2148-327PB APV II STRAIGHT-DOWN, SEAL KIT, SEALS ONLY, W/URETHANE SEAT, INCLUDES # 8, (2)13, (2)15, 17 ± 20 888-2148-3279PB APV II, SHOT-PEENER-30#, SEPAIR KIT W/TC SLEEVE & SEAT, INCLUDED FOR STEEL SHOT & CONDITIONED CUTT WIRE APPLICATIONS ONLY. 888-2148-32798PB APV II, SHOT-PEENER-30#, SEPAIR KIT W/TC SLEEVE & SEAT, INCLUDES # 8, 10, (2)13, (2)15, 16, 17, 18 ± 20 APV II, SHOT-PEENER-30#, SEPAIR KIT W/TC SLEEVE & SEAT, INCLUDES # 8, 10, (2)13, (2)15, 16, 17, 18 ± 20 APV II, SHOT-PEENER-30#, SEPAIR KIT W/TC SLEEVE & SEAT, INCLUDES # 8, 10, (2)15, 20 APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15, 16, 17, 18 ± 20 APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15, 16, 17, 18 ± 20 APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15, 16, 17, 18 ± 20 APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15, 16, 17, 18 ± 20 APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15, 16, 17, 18 ± 20 APV II, PLUNGER STOP (STAINLESS) APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15, 16, 17, 18 ± 20 APV II, PLUNGER STOP (STAINLESS) APV II, PLUNGER STOP (STAINLESS) APV II, PLUNGER STOP (STAINLESS) APV II, PLUNGER STAINLESS/SOLID TUNGSTEN CARBIDE) APV II, PLUNGER SEAL W/O CARNO (CLEAR URETHANE) APV II, APV, SOLID TUNGSTEN CARBIDE SLEEVE APV II, PLUNGER SEAL W/O CARNO (CLEAR URETHANE) APV II, PLUNGER SEAL W/O CARNO (CLEAR URETHANE) APV II		888-2148-307PB	(PIPE NIPPLE NOT INCLUDED)
		888-2148-30099PB	
888-2148-3279B 888-2148-3279PB APV II, SHOT-PEENER-30#, REPAIR KIT WTC SLEEVE & SEAT, INCLUDES # 8, 10, (2)13, (2)15, 16, 17, 18 & 20 888-2148-32799PB APV II, SHOT-PEENER-30#, SEPAIR KIT WTC SLEEVE & SEAT, INCLUDES # 8, 10, (2)13, (2)15, 16, 17, 18 & 20 APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15 & 20 1 888-2148-00001PB APV, II KNOB 2 888-2148-00002PB APV & APV II, CAP ASSEMBLY 4 888-2149-00019PB APV & APV II, BUMP RING 5 888-2149-0003PB APV & APV II, SPRING 6 888-2148-00015PB APV & APV II, SPRING 6 888-2148-00016PB APV II, PLUNGER STOP (STAINLESS) 7 888-2148-00005PB APV II, PLUNGER STOP (STAINLESS) 9 888-2148-00005PB APV II, PISTON 10 888-2148-00005PB APV II, PUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, PUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 12 888-2148-00009PB APV II, PUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 13 888-2148-00006PB APV II, PUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 14 888-2148-00006PB APV II, PUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 15 888-2148-00006PB APV II, PUNGER SEAL W/O O-RING (CLEAR URETHANE) APV II, PUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II, PUNGER SEAL W/O O-RING (CLEAR URETHANE) 17 888-2148-00013PB APV II, PUNGER SEAL W/O O-RING (CLEAR URETHANE) 18 888-2148-00013PB APV II, INSERT (STAINLESS) 20 888-2149-00014PB APV II, NESERT (STAINLESS) 21 888-2149-00015PB APV & APV II, INSERT (STAINLESS) 22 888-2149-00015PB APV & APV II, INSERT (STAINLESS) 23 888-710-5016PB BOLT, 3/8' UNC X 3-3/4' 888-2149-50616PB BOLT, 3/8' UNC X 3-3/4' BOLT, 3/8' UNC X 3-3/4' BOLT, 3/8' UNC X 3-3/4' BOLT, 1/2' MALE FOR STRAIGHT-DOWN & BIG-BORR™ METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/2' MALE X 1-1/2' MALE FOR STRAIGHT-DOWN & BIG-BORR™ METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/12' MALE X 1-1/2' MALE FOR STRAIGHT-DOWN & BIG-BORR™ METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/12' MALE Y 1-1/12' MALE FOR STRAIGHT		888-2148-30098PB	
888-2148-0001PB APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15, 20 APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15 & 20 APV II, SHOT-PEENER-30#, SEAL KIT, SEALS ONLY, INCLUDES # 8, (2)13, (2)15 & 20 APV II SA8-2148-0001PB APV, II KNOB 1 888-2148-0001PB APV & APV II, CAP ASSEMBLY 4 888-2149-00019PB APV & APV II, BUMP RING 5 888-2149-00019PB APV & APV II, BUMP RING 6 888-2148-00015PB APV II, PLINGER STOP (STAINLESS) 7 888-2148-00015PB APV II, PLINGER STOP (STAINLESS) 8 888-2148-00015PB APV II, PLINGER (STAINLESS) 9 888-2148-00004PB APV II, PLINGER (STAINLESS)SOLID TUNGSTEN CARBIDE) 10 888-2148-00004PB APV II, PLINGER (STAINLESS)SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, PLINGER (STAINLESS)SOLID TUNGSTEN CARBIDE) 12 888-2009PB APV II, PLINGER BUSHING (STAINLESS) 13 888-2148-00005PB APV II, PLINGER BUSHING (STAINLESS) 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 16 888-2148-00019PB APV II, PLUNGER BUSHING (STAINLESS) 17 888-2148-00019PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 18 888-2148-00019PB APV II, INDER (STAINLESS) 20 888-2149-00019PB APV II, INDER (STAINLESS) 21 888-2149-00019PB APV II, INDER (STAINLESS) 22 888-2149-00019PB APV II, INDER (STAINLESS) 23 888-2149-00019PB APV II, INDER (STAINLESS) 24 888-2149-50816PB APV II, PIPE NIPPLE, 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB APV II, PIPE NIPPLE, 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 25 888-3014-206PB APV II, BPP NIPPLE, 1-1/2" MALE X 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 26 888-3016-166PB BOLT, 3/8" UNC X 3-3/4" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOUT, 5/8" UNC X 3-1/2" 29 888-7010-51512PB HEX BOUT, 5/8" UNC X 3-1/2" 29 888-7010-51512PB NUT, 5/8" UNC		888-2148-327PB	TUNGSTEN CARBIDE SLEEVE & SEAT (PIPE NIPPLE NOT INCLUDED) FOR
1		888-2148-32799PB	
2 888-2014-300PB VENT, 1/8" 3 888-2148-00002PB APV & APV II, CAP ASSEMBLY 4 888-2149-00019PB APV & APV II, BUMP RING 5 888-2149-00019PB APV & APV II, BUMP RING 6 888-2149-00015PB APV II, PLUNGER STOP (STAINLESS) 7 888-2148-00016PB APV II, PLUNGER STOP (STAINLESS) 8 888-2148-00016PB APV II, NYLON WASHER 8 888-2148-0000PB APV II, NYLON WASHER 9 888-2148-0000PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 10 888-2148-0000PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-0000PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 12 888-203-50000PB SWIVEL 90", 1/8"MNPT X 1/8"F 13 888-2148-00006PB APV II, PLUNGER BUSHING (STAINLESS) 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 16 888-2148-00017PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 17 888-2148-00017PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 18 888-2148-00017PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 19 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00010PB APV & APV II, INSERT (STAINLESS) 21 888-2149-00010PB APV & APV II, INSERT (STAINLESS) 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1" 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB APV II & MPV II, PIPE NIPPLE, 1" 1" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 25 888-3014-206PB APV II & MPV II, PIPE NIPPLE, 1" 1" STAINLESS 1" 26 888-3014-206PB APV II & MPV II, PIPE NIPPLE, 1" 1" STAINLESS 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7010-51512PB NUT, 5/8" UNC x 3-1/2" 29 888-7010-51512PB NUT, 5/8" UNC x 3-1/2" 29 888-7010-51512PB NUT, 5/8" UNC x 3-1/2"		888-2148-32798PB	
3 888-2148-00002PB APV & APV II, CAP ASSEMBLY 4 888-2149-00019PB APV & APV II, BUMP RING 5 888-2149-0003PB APV & APV II, SPRING 6 888-2148-00015PB APV II, PLINGER STOP (STAINLESS) 7 888-2148-00016PB APV II, PLINGER STOP (STAINLESS) 8 888-2148-00016PB APV II, NYLON WASHER 8 888-2148-00005PB APV II, PISTON 10 888-2148-00005PB APV II, PISTON 11 888-2148-00007PB APV II, PLINGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00007PB APV II, PLINGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00006PB APV II, PLINGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 12 888-2148-00006PB APV II, PLINGER BUSHING (STAINLESS) 13 888-2148-00006PB APV II, PLINGER BUSHING (STAINLESS) 14 888-2148-00017PB APV II, PLINGER SEAL W/ O-RING (CLEAR URETHANE) 15 888-2148-00010PB APV II, PLINGER SEAL W/ O-RING (CLEAR URETHANE) 16 888-2148-00010PB APV II, PLINGER SEAL W/ O-RING (CLEAR URETHANE) 17 888-2149-00010PB APV & APV II, UNGETHANE SEAT (HEAVY DUTY BLUE) 18 888-2149-00010PB APV & APV II, UNETHANE SEAT (HEAVY DUTY BLUE) 18 888-2149-0010PB APV & APV II, INSERT (STAINLESS) 20 888-2149-00135PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVES 21 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50716PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB APV II & MPV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3010-50714PB BOLT, 3/8" UNC x 3-3/4" 25 888-3001-506PB ELBOW, STREET, 90°, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90°, GALV, 1" x 5" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7015-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7015-51512PB HEX BOLT, 5/8" UNC x 3-1/2"	1	888-2148-00001PB	APV, II KNOB
4 888-2149-00019PB APV & APV II, BUMP RING 5 888-2149-0003PB APV & APV II, SPRING 6 888-2148-00015PB APV II, PLUNGER STOP (STAINLESS) 7 888-2148-00016PB APV II, PLUNGER STOP (STAINLESS) 8 888-2148-00005PB APV II, NYLON WASHER 8 888-2148-00005PB APV II, PLUNGER (STAINLESS) 10 888-2148-00005PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 12 888-2403-50000PB SWIVEL 90°, 1/8°MNPT X 1/8°F 13 888-2148-00006PB APV II, PUNGER BUSHING (STAINLESS) 14 888-2148-00007PB APV II, PUNGER BUSHING (STAINLESS) 15 888-2148-00006PB APV II, PUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II, PUNGER SEAL W/O O-RING (CLEAR URETHANE) 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2149-00013PB APV II, PIPE NIPPLE, 1*FEMALE X 1-1/2* MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 20 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1*1/4* MALE X 1-1/2* MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50716PB BOLT, 3/8* UNC X 3-3/4* 24 888-3014-206PB APV & APV II, PIPE NIPPLE, 1-1/2* MALE X 1-1/2* MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8* UNC X 3-3/4* 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1* 25 888-3006-106PB BLDW, STREET, 90°, GALV, 1** S* 26 888-3006-106PB BLDW, STREET, 90°, GALV, 1** DESTAINLESS 1* VB100 BALL VALVE, FULL PORT, 1*NPT 28 888-7010-51512PB HEX BOLT, 5/8* UNC X 3-1/2* PV & BBCLT, 5/8* UNC X 3-1/2*	2	888-2014-300PB	VENT, 1/8"
5 888-2149-0003PB APV & APV II, SPRING 6 888-2148-00015PB APV III, PLUNGER STOP (STAINLESS) 7 888-2148-00016PB APV II, NYLON WASHER 8 888-2148-00004PB APV, APV II, & T2V PISTON SEAL (GREEN URETHANE) 9 888-2148-00005PB APV II, PISTON 10 888-2148-00007PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, CYLINDER, W/1" NPT CLEANOUT 12 888-2148-00009PB APV III, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING 14 888-2148-00006PB APV III, PLUNGER BUSHING (STAINLESS) 15 888-2148-00017PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II, INSERT (STAINLESS) 17 888-2148-00013PB APV II, INSERT (STAINLESS) 20 888-2149-00010PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-0035PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVES 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" APV MALE X 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50716PB <td>3</td> <td>888-2148-00002PB</td> <td>APV & APV II, CAP ASSEMBLY</td>	3	888-2148-00002PB	APV & APV II, CAP ASSEMBLY
6 888-2148-00015PB APV II, PLUNGER STOP (STAINLESS) 7 888-2148-00016PB APV II, NYLON WASHER 8 888-2148-00004PB APV, APV II, & T2V PISTON SEAL (GREEN URETHANE) 9 888-2148-00005PB APV II, PISTON 10 888-2148-00005PB APV II, PUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, PUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 12 888-4203-50000PB SWIVEL 90*, 1/8* MNPT X 1/8* F 13 888-2148-00006PB APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-30006PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II / APV, SOLID TUNGSTEN CARBIDE SLEEVE 17 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00010PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVES 21 888-2149-40711PB APV & APV II, IPLE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-3014-206PB APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-51512PB HEX BOLT, 5/8" UNC x 3-1/2"	4	888-2149-00019PB	APV & APV II, BUMP RING
7 888-2148-00016PB APV II, NYLON WASHER 8 888-2148-00004PB APV, APV II, & T2V PISTON SEAL (GREEN URETHANE) 9 888-2148-00005PB APV II, PISTON 10 888-2148-00005PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, CYLINDER, W/1" NPT CLEANOUT 12 888-4203-50000PB SWIVEL 90*, 1/8"MNPT X 1/8"F 13 888-2148-00006PB APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-00017PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II/ APV, SOLID TUNGSTEN CARBIDE SLEEVE 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2148-00010PB APV II, VETHANE SEAT (HEAVY DUTY BLUE) 19 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-0935PB APV & APV II, D-RING FOR STRAIGHT-DOWN METERING VALVES 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB APV II & MPV II, PIPE NIPPLE, 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 25 888-3014-206PB APV II & MPV II, PIPE NIPPLE, 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 26 888-3014-206PB APV II & MPV II, PIPE STAINLESS 1" 27 VB100 BALL VALVE, FUIL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC x 3-1/2"	5	888-2149-00003PB	APV & APV II, SPRING
8 888-2148-0004PB APV, APV II, & T2V PISTON SEAL (GREEN URETHANE) 9 888-2148-0005PB APV II, PISTON 10 888-2148-00007PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, CYLINDER, W/I" NPT CLEANOUT 12 888-4203-50000PB SWIVEL 90", 1/8"MNPT X 1/8"F 13 888-2148-00006PB APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/"O"-RING 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-00018PB APV II, PLUNGER BUSHING (STAINLESS) 16 888-2148-00013PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 17 888-2148-00013PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 18 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2149-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" S" 26 888-3004-206PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC x 3-1/2"	6	888-2148-00015PB	APV II, PLUNGER STOP (STAINLESS)
9 888-2148-00005PB APV II, PISTON 10 888-2148-00007PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, CYLINDER, W/1" NPT CLEANOUT 12 888-4203-50000PB SWIVEL 90", 1/8"MNPT X 1/8"F 13 888-2148-00006PB APV II, PLUNGER BUSHING (STAINLESS) 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-30006PB APV II, PLUNGER BUSHING (STAINLESS) 16 888-2148-30006PB APV II, PLUNGER SEAL W/O-RING (CLEAR URETHANE) 17 888-2148-00013PB APV II, APV, SOLID TUNGSTEN CARBIDE SLEEVE 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2149-00014PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 19 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVES 20 888-2149-00935PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 21 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & BOLT, 3/8" UNC x 3-3/4" 25 888-3009-10615PB NIPPLE, TBE, GALV, 1" SE 26 888-3009-10615PB NIPPLE, TBE, GALV, 1" SE 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7017-515PB HEX BOLT, 5/8" UNC x 3-1/2"	7	888-2148-00016PB	APV II, NYLON WASHER
10 888-2148-00007PB APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE) 11 888-2148-00009PB APV II, CYLINDER, W/1" NPT CLEANOUT 12 888-4203-50000PB SWIVEL 90", 1/8"MNPT X 1/8"F 13 888-2148-00006PB APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-30006PB APV II, PLUNGER BUSHING (STAINLESS) 16 888-2148-00013PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 17 888-2149-00013PB APV II, APV, SOLID TUNGSTEN CARBIDE SLEEVE 17 888-2149-00014PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2149-00035PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 20 888-2149-00935PB APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 25 888-3014-206PB APV II & MPV II, PIPE STAINLESS 1" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	8	888-2148-00004PB	APV, APV II, & T2V PISTON SEAL (GREEN URETHANE)
11 888-2148-0009PB APV II, CYLINDER, W/1" NPT CLEANOUT 12 888-4203-50000PB SWIVEL 90*, 1/8"MNPT X 1/8"F 13 888-2148-0006PB APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/"O"-RING 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-30006PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2149-00014PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 20 888-2149-00935PB APV & APV II, ORING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-00935PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3006-106PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB BILBOW, STREET, 90",	9	888-2148-00005PB	APV II, PISTON
12 888-4203-50000PB SWIVEL 90*, 1/8"MNPT X 1/8"F 13 888-2148-00006PB APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-30006PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB BOLT, 3/8" UNC x 3-3/4" 25 888-3014-206PB APV II, BPLIG, PIPE STAINLESS 1" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" x 5" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7017-515PB NUT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC x 3-1/2"	10	888-2148-00007PB	APV II, PLUNGER (STAINLESS/SOLID TUNGSTEN CARBIDE)
13 888-2148-0006PB APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING 14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-30006PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II, APV, SOLID TUNGSTEN CARBIDE SLEEVE 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB BOLT, 3/8" UNC x 3-3/4" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" <t< td=""><td>11</td><td>888-2148-00009PB</td><td>· ·</td></t<>	11	888-2148-00009PB	· ·
14 888-2148-00017PB APV II, PLUNGER BUSHING (STAINLESS) 15 888-2148-30006PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II, APV, SOLID TUNGSTEN CARBIDE SLEEVE 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90*, GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010	12	888-4203-50000PB	SWIVEL 90*, 1/8"MNPT X 1/8"F
15 888-2148-30006PB APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE) 16 888-2148-00013PB APV II / APV, SOLID TUNGSTEN CARBIDE SLEEVE 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, PBE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	13	888-2148-00006PB	APV, APV II, MPV, MPV II & MPV MINI, PLUNGER SEAL W/ "O"-RING
16 888-2148-00013PB APV II / APV, SOLID TUNGSTEN CARBIDE SLEEVE 17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	14	888-2148-00017PB	APV II, PLUNGER BUSHING (STAINLESS)
17 888-2149-00010PB APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE) 18 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 22 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3019-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	15	888-2148-30006PB	APV II, PLUNGER SEAL W/O O-RING (CLEAR URETHANE)
18 888-2148-00014PB APV II, INSERT (STAINLESS) 20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90*, GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	16	888-2148-00013PB	APV II / APV, SOLID TUNGSTEN CARBIDE SLEEVE
20 888-2149-00935PB APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT 21 888-2149-40711PB APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3004-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	17	888-2149-00010PB	APV & APV II, URETHANE SEAT (HEAVY DUTY BLUE)
21 888-2149-40711PB APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	18	888-2148-00014PB	APV II, INSERT (STAINLESS)
22 888-2149-50616PB APV & APV II, PIPE NIPPLE, 1" FEMALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 888-2149-50816PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3019-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	20	888-2149-00935PB	APV & APV II, O-RING FOR STRAIGHT-DOWN METERING VALVE INSERT
22 888-2149-50716PB & BIG-BORE™ METERING VALVES 888-2149-50716PB APV & APV II, PIPE NIPPLE, 1-1/4" MALE x 1-1/4" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB APV & APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 24 888-3014-206PB BOLT, 3/8" UNC x 3-3/4" 25 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 26 888-3006-106PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90", GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	21	888-2149-40711PB	APV & APV II, BASE FOR STRAIGHT-DOWN METERING VALVES
22 888-2149-50716PB & BIG-BORE™ METERING VALVES 888-2149-50816PB APV &APV II, PIPE NIPPLE, 1-1/2" MALE x 1-1/2" MALE FOR STRAIGHT-DOWN & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90*, GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC		888-2149-50616PB	
888-2149-50816PB & BIG-BORE™ METERING VALVES 23 888-7010-50714PB BOLT, 3/8" UNC x 3-3/4" 24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90*, GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	22	888-2149-50716PB	
24 888-3014-206PB APV II & MPV II, PLUG, PIPE STAINLESS 1" 25 888-3029-10615PB NIPPLE, TBE, GALV, 1" x 5" 26 888-3006-106PB ELBOW, STREET, 90*, GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC		888-2149-50816PB	
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26 888-3006-106PB ELBOW, STREET, 90*, GALV, 1" 27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	24	888-3014-206PB	APV II & MPV II, PLUG, PIPE STAINLESS 1"
27 VB100 BALL VALVE, FULL PORT, 1" NPT 28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	25	888-3029-10615PB	NIPPLE, TBE, GALV, 1" x 5"
28 888-7010-51512PB HEX BOLT, 5/8" UNC x 3-1/2" 29 888-7017-515PB NUT, 5/8" UNC	26	888-3006-106PB	ELBOW, STREET, 90*, GALV, 1"
29 888-7017-515PB NUT, 5/8" UNC	27	VB100	BALL VALVE, FULL PORT, 1" NPT
20 200 1011 2101 2 1101 2110	28	888-7010-51512PB	HEX BOLT, 5/8" UNC x 3-1/2"
30 888-7027-55202PB FLAT WASHER, 5/8" UNC	29	888-7017-515PB	NUT, 5/8" UNC
	30	888-7027-55202PB	FLAT WASHER, 5/8" UNC









Blast Hose	Twinline & Control Cord
10-114BLK-050-3XAL	1-1/4" BIG GUN™ BLAST HOSE ASSEMBLY, 50', INCLUDES NOZZLE HOLDER
10-112BLK-050-3XAL	1-1/2" BIG GUN™ BLAST HOSE ASSEMBLY, 50', INCLUDES NOZZLE HOLDER
10-114BLK050-4XAL	1-1/4" BIG GUN™ EXTENSION BLAST HOSE ASSEMBLY, 50'
10-112BLK050-4XAL	1-1/2" BIG GUN™ EXTENSION BLAST HOSE ASSEMBLY, 50'
200-055	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/ YEL W/BLACK STRIPE, NOMINAL, 3/16" ID X 55'
200-110	HOSE, TWINLINE CONTROL, ASSEMBLY, YEL/ YEL W/BLACK STRIPE, NOMINAL, 3/16" ID X 110'
888-7073-055PB	ELECTRICAL EXTENSION CONTROL CORD W/ TWIST-LOCK CONNECTORS, 55', 3 PRONG
888-7073-055PB	ELECTRICAL EXTENSION CONTROL CORD W/ TWIST-LOCK CONNECTORS, 110', 3 PRONG
888-7074-05501PB	ELECTRICAL EXTENSION CONTROL CORD W/ SEALED WATERPROOF CONNECTORS, 55'
888-7074-11001PB	ELECTRICAL EXTENSION CONTROL CORD W/ SEALED WATERPROOF CONNECTORS, 110'
27WC-15	SAFETY CABLE, 1" - 2-1/2", 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



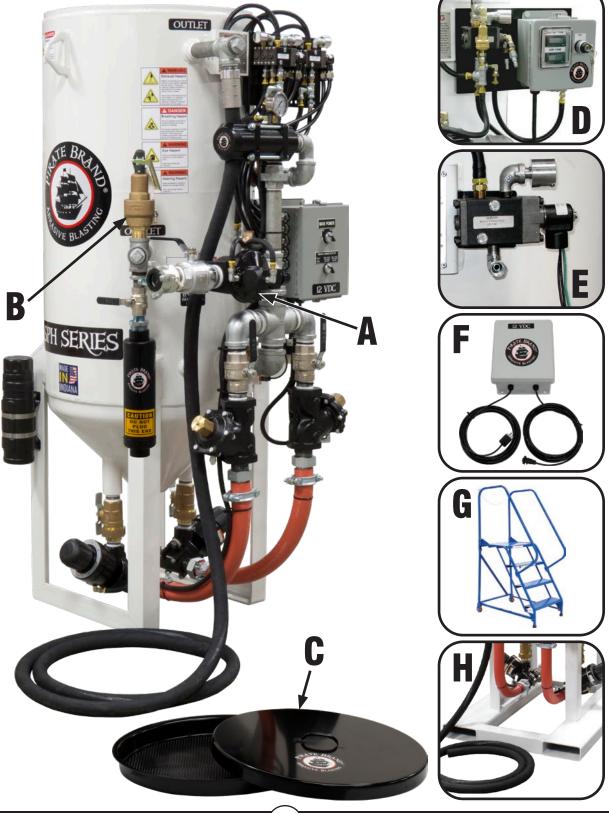








Available Accessories





Available Accessories

A Regulator Kits

! IMPORTANT INFORMATION ABOUT REGULATING YOUR AIR SUPPLY.

Adding a regulator kit to your abrasive blaster solves many of the problems that result from a fluctuating air supply. All dual-chamber abrasive blasters are sensitive to these fluctuation because both chambers must completely equalize during the refilling process.



Since air compressors naturally fluctuate as they "kick up" and "unload," an inconstant pressure is typical. Adding a pressure regulator and setting it below the minimum PSI that your compressed air source can maintain results in a consistent supplied PSI allowing your blast equipment to function properly and run smoothly.

888-2000-008PB-CI	2" BIG GUN™ REGULATOR KIT FOR 8 CU FT DUAL-CHAMBER BLASTERS
888-2001-00199PB	REGULATOR, 1/4", REPAIR KIT
888-2000-00399PB	REGULATOR, 1-1/2" & 2" BIG GUN™, REPAIR KIT

B Relief Valve Kit

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

888-2470-00702PB 150 PSI RELIEF VALVE KIT FOR SMALL S-SERIES ABRASIVE BLASTERS

C Lid & Screen

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.

888-5010-060PB	24" LID FOR 8 CU FT ABRASIVE BLASTERS
888-5011-060PB	24" SCREEN, LOW PROFILE, (1/4" MESH) FOR 8 CU FT ABRASIVE BLASTERS

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.

	DUAL TIMER CONTROL BOX W/KEY RESET & MOUNTING BRACKET (1-OUTLET BLASTERS)
PB-9805023P-02	DUAL TIMER CONTROL BOX W/KEY RESET & MOUNTING BRACKET (2-OUTLET BLASTERS)

E Door Interlock Kit

Cutting power to the control box on dual-chamber abrasive blasters will not disable pneumatic controls. To connect a dual-chamber abrasive blaster with pneumatic controls to a door interlock system, an interlock kit is necessary

999-8400-00021PB	120VAC BLAST ROOM DOOR INTERLOCK KIT FOR USE WITH PNEUMATIC AND ELECTRIC BLAST POTS (FACTORY INSTALL)
999-8400-10021PB	12VDC BLAST ROOM DOOR INTERLOCK KIT FOR USE WITH PNEUMATIC BLAST POTS (FACTORY OR CUSTOMER INSTALL)

Power Supply

Add a power supply to run any 12VDC electric blaster on common 120VAC outlet power

common 120VAC outlet power.					
PB-SMP3WP	POWER SUPPLY 120VAC INPUT / 12VDC @ 2.5 AMPS (UP TO 4 CONTROL VALVES) (STANDARD TWIST-LOCK CONNECTORS)				
PB-SMP7WP	POWER SUPPLY 120VAC INPUT / 12VDC @ 6 AMPS (UP TO 8 CONTROL VALVES) (STANDARD TWIST-LOCK CONNECTORS) - REQUIRED FOR DUAL-CHAMBER 2 OUTLET ELECTRIC CONTROLS WITH ABRASIVE CUT-OFF				
PB-SMP3WP-S	POWER SUPPLY 120VAC INPUT / 12VDC @ 2.5 AMPS (UP TO 4 CONTROL VALVES) (SEALED WATERPROOF CONNECTORS)				
PB-SMP7WP-S	POWER SUPPLY 120VAC INPUT / 12VDC @ 6 AMPS (UP TO 8 CONTROL VALVES) (SEALED WATERPROOF CONNECTORS) - REQUIRED FOR DUAL-CHAMBER 2 OUTLET ELECTRIC CONTROLS WITH ABRASIVE CULTOFF				

Loading Ladder

Use this 4 step loading ladder to provide access to the top of the blaster for convenient loading of abrasive.

PB-LAD-MM-4-P 4-STEP LOADING LADDER FOR TOP ACCESS TO 10 & 20 CU FT BLASTERS

Fork Pockets

Adding fork pockets to your blaster will allow for easier mobility. (Factory installed only)

PB-FP10CUFT FORK POCKETS UPGRADE FOR 8 & 10 CU FT S-SERIES BLASTERS



Blasting Charts

Compressed Air, Power, & Abrasive Requirements

		NOZZLE PRESSURE								
NOZZLE#	NOZZLE AIR, F		50 PSI	60 PSI	70 PSI	80 PSI	90 PSI	100 PSI	125 PSI	140 PSI
RIFICE SIZE	ABRASIVE REQUIREMENTS		(3.45 BAR)	(4.14 BAR)	(4.83 BAR)	(5.52 BAR)	(6.21 BAR)	(6.89 BAR)	(8.62 BAR)	(9.65 BAR
	AID	(cu ft/min)	12	13	15	18	19	21	26	
40	AIR	(cu m/min)	0.34	.037	0.42	0.51	0.54	0.59	0.74	
#2	HODGEDOWED	(hp)	1.75	2	2.5	3	3.5	4	6	
1/8 inch	HORSEPOWER	(kW)	1.30	1.49	1.86	2.24	2.61	2.98	4.47	
(3.2 mm)	ADDACIVE	(lb/hr)	70	80	90	100	110	120	135	
	ABRASIVE	(kg/hr)	32	36	41	45	50	54	61	
	AIR	(cu ft/min)	25	30	35	40	43	45	60	
4 2	AIR	(cu m/min)	0.71	0.85	0.99	1.13	1.22	1.27	1.70	
#3	HORSEPOWER	(hp)	5	8	9	9.5	10	10.5	16	
3/16 inch	HORSEPOWER	(kW)	3.75	5.97	6.71	7.08	7.46	7.86	11.93	
(4.8 mm)	ABRASIVE	(lb/hr)	150	170	200	215	240	260	320	
	ABRASIVE	(kg/hr)	68	77	91	98	109	118	145	
	AIR	(cu ft/min)	50	55	60	70	75	80	95	
44.4	AIN	(cu m/min)	1.42	1.56	1.70	1.98	2.12	2.27	2,69	
#4	HORSEPOWER	(hp)	10	12	13	16	17	18	25	
1/4 inch		(kW)	7.46	8.95	9.69	11.93	12.68	13.42	18.64	
(6.35 mm)	ABRASIVE	(lb/hr)	270	300	350	400	450	500	675	
	ABIOTOTE	(kg/hr)	122	136	159	181	204	227	306	
	AIR	(cu ft/min)	80	90	100	115	125	140	190	230
#5		(cu m/min)	2.27	2.55	2.83	3.26	3.54	3.96	5.38	6.51
#5	HORSEPOWER	(hp)	17	20	25	27	28	30	36	60
5/16 inch		(kW)	12.68	14.91	18.64	20.13	20.88	22.37	26.85	44.85
(8 mm)	ABRASIVE	(lb/hr)	470	530	600	675	750	825	1000	1125
		(kg/hr)	213	240	272	306	340	374	454	510
	AIR	(cu ft/min)	110	125	145	160	175	200	275	315
#6		(cu m/min)	3.12	3.54	4.11	4.53	4.96	5.66	7.79	8.91
#0	HORSEPOWER	(hp)	25	29	32	35	40	45	57	65
3/8 inch		(kW)	18.64	21.63	23.86	26.10	29.83	33.56	42.50	48.59
(9.5 mm)	ABRASIVE	(lb/hr)	675	775	875	975	1060	1100	1350	1840
		(kg/hr)	306	352	397	442	481	499	612	835
	AIR	(cu ft/min)	150	170	200	215	240	255	315	405
#7		(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
7/16 inch		(kW)	26.10	29.83	33.56	37.28	41.01	44.74	52.20	67.28
(11.1 mm)	ABRASIVE	(lb/hr)	900	1000	1200	1300	1400	1510	1800	2540
		(kg/hr)	408	454	544	590	635	703	816	1152
	AIR	(cu ft/min)	200	225	250	275	300	340	430	540
#8		(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
1/2 inch		(kW)	33.56	37.28	41.01	46.98	52.20	55.93	70.84	89.70
(12.7 mm)	ABRASIVE	(lb/hr)	1200	1350	1500	1700	1850	2025	2525	3240
		(kg/hr)	544	612	680	771	839	919	1145	1470
	AIR	(cu ft/min)	300	350	400	450	500	550	700	880
#10		(cu m/min)	8.50	9.91	11.33	12.74	14.16	15.58	19.82	24.90
	HORSEPOWER	(hp)	70	50.00	90	100	110	120	150	190
5/8 inch		(kW)	52.20	59.66	67.11	74.57	82.03	89.48	111.85	142.02
(16 mm)	ABRASIVE	(lb/hr)	1900	2200	2400	2700	3000	3300	4000	5200
		(kg/hr)	862 430	998	1089	1225	1361	1497	1814	2359
	AIR	(cu ft/min)		500	575 16.39	10.41	700	800	1100	1255
#12		(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
3/4 inch		(kW)	74.57	85.76	96.94	108.13	119.31	130.50	160.33	183.13
(19 mm)	ABRASIVE -	(lb/hr)	2700	3100	3500	3900	4300	4700	5700	7375
		(kg/hr)	1225	1406	1588 sive medium use	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.