



Operator's Manual  
 Part # 1090072  
 Revision: February 25, 2009

## 6.0 Cubic Foot C-Series Blast Pot with KwikFire 125 Remote Control System



**⚠ WARNING**

Before using this equipment, read, understand and follow all instructions in the Operator's Manual. If the user or assistants cannot read or understand the warnings and instructions, the employer of the user and assistants must provide adequate and necessary training to ensure proper operation and compliance with all safety procedures pertaining to this equipment. If Operator's Manuals have been lost, contact your distributor or call (563) 324-2519 for replacements. Failure to comply with the above warning could result in death or serious injury.

For more information call:

**800-BLAST-IT**

Phone: (800) 252-7848  
 Fax: (563) 324-6258  
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 www.marcouisa.com

### Vision Statement

To be the World’s First Choice for Abrasives, Blasting, Painting, and Safety Equipment & Supplies.

### Mission Statement

To provide leadership and innovation to the surface preparation industry. We will dedicate our efforts to the continuous improvement of our products, services, processes, people and most importantly the quality of our Customer’s experience.

### Quality Statement

Marco is committed to providing superior quality in the design, manufacturing, distribution and service of our products. As an ISO 9001:2000 registered company, Marco’s quality systems assure our products will meet or exceed our Customer’s expectations. Continuous Improvement in our processes and Supply Chain Integration comprise the core of our Business Strategy for delivering exceptional quality and value in every Marco product and service.

### Management Philosophy

We are a Company dedicated to the success of every Customer and Associate. We will discuss, debate, challenge, measure and test our ideas. We will be boundless and limitless in our passion to improve. Through sound leadership and dedicated associates, we will ensure a long term, profitable future for Marco, our Associates, Customers and Suppliers.

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## Definition of Terms

### DANGER

This is an example of danger. This indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

### WARNING

This is an example of a warning. This indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

### CAUTION

This is an example of a caution. This indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It can also be used to alert against unsafe practices.

### **NOTICE**

This is an example of a notice. This indicates policy or practice directly related to safety of personnel or protection of property.

**⚠ WARNING**

**Failure to comply with ANY WARNING listed below could result in death or serious injury.**

- ▶ Breathing dust containing silica could cause silicosis, a fatal lung disease. Breathing dust during blasting operations, post-blast cleaning operations, and/or servicing equipment within the blasting area may expose an individual to conditions that could cause asbestosis, lead poisoning and/or other serious or fatal diseases. Harmful dust containing toxic material from medias or surfaces being blasted can remain suspended in the air for long periods of time after blasting has ceased. A NIOSH-approved, well-maintained, respirator designed for the specific operation being performed must be used by anyone blasting, handling or using the media, and anyone in the area of the dust.
- ▶ Contact NIOSH and OSHA offices to determine the proper respirator for your specific application. The air supplied to the respirator must be at least Grade D quality as described in Compressed Gas Association Commodity Specification G-7.1 and as specified by OSHA Regulation 1910.134. Ensure air filter and respirator system hoses are not connected to non-air sources or in-plant lines that may contain nitrogen, oxygen, acetylene or other non-breathable gases. Before removing respirator, use an air monitoring instrument to determine if the atmosphere is safe to breathe.
- ▶ You must comply with all OSHA, local, City, State, Province, Country and jurisdiction regulations, ordinances and standards, related to your particular work area and environment. Keep unprotected individuals out of the work area.
- ▶ Blast operators must receive thorough training on the use of media resistant attire which includes: supplied-air respirator, blast suit, safety shoes, gloves, ear protection and eye protection. Protect the operator and bystanders by complying with NIOSH and OSHA Safety Standards.
- ▶ Inspect all equipment for wear or damage before and after each use. Failure to use Original Equipment Manufacturer repair parts and failure to immediately replace worn or damaged components could void warranties and cause malfunctions.
- ▶ Always depressurize the entire blasting system, disconnect all electrical power sources and lockout/tagout all components before any maintenance or troubleshooting is attempted. Failure to comply with the above warning could cause electrical shock and inadvertent activation of equipment resulting in death or serious injury.
- ▶ OSHA requires blast-cleaning nozzles be equipped with an operating valve, which shall be designed to be held open only by continuous hand pressure and shall close immediately upon release of hand pressure (i.e., a "deadman" control). The valve shall not be modified in any manner that would allow it to remain open without the application of continuous hand pressure by the operator. Failure to comply with the above warning could result in release of high speed media and compressed air resulting in death or serious injury. (OSHA 29 CFR 1910.244(b))
- ▶ Point the blast nozzle only at the surface being blasted. Never point the blast nozzle or media stream at yourself or others.
- ▶ Unless otherwise specified, maximum working pressure of Blast Pots and related components must not exceed 125 psi. Exceeding maximum working pressure of 125 psi could cause the Blast Pot and components to burst.
- ▶ Never weld, grind or drill on the Blast Pot (or any pressure vessel). Doing so will void ASME certification and manufacturer's warranty. Welding, grinding or drilling on the Blast Pot (or any pressure vessel) could weaken the vessel causing it to burst. (ASME Pressure Vessel Code, Section VIII, Division 1)
- ▶ This equipment is not intended for use in any area that might be considered a hazardous location, as described in the National Electric Code NFPA 70, Article 500. Use of this equipment in a hazardous location could cause an explosion or electrocution.
- ▶ This product is not for use in wet environments. Always use a Ground Fault Interrupter Circuit (GFI) for all electrical power source connections. Use of this product in wet environments could create a shock hazard.
- ▶ Frozen moisture could cause restrictions and obstructions in pneumatic control lines. Any restriction or obstruction in the pneumatic control lines could prevent the proper activation and deactivation of the remote control system, resulting in the release of high speed media and compressed air. In conditions where moisture may freeze in the control lines an antifreeze injection system approved for this application can be installed.
- ▶ Do not cut, obstruct, restrict or pinch pneumatic control lines. Doing so could prevent the proper activation and deactivation of the remote control system, resulting in the release of high speed media and compressed air.
- ▶ Never hang objects from the Blast Pot handle. Doing so may cause the Blast Pot to become unstable and tip over.

## **⚠ WARNING**

**Failure to comply with ANY WARNING listed below could result in death or serious injury.**

- ▶ Never attempt to move a blast pot containing media. Never attempt to manually move blast pots greater than 6.0 cubic foot capacity. Always use at least two capable people to manually move a blast pot on flat, smooth surfaces. A mechanical lifting device must be used if a blast pot is moved in any other manner.
- ▶ Use of Marco remote control switches with other manufacturer's remote control systems could cause unintended activation of remote control systems resulting in the release of high speed media and compressed air. Only Marco remote control switches should be used with Marco remote control systems.
- ▶ Always be certain to have secure footing when blasting. There is a recoil hazard when blasting starts that may cause user to fall and misdirect the media stream at operator or bystander.
- ▶ Never use a blast pot or attachments as a climbing device. The person could slip and fall. The blast pot could become unstable and tip over.
- ▶ The use of this product for any purpose other than originally intended or altered from its original design is prohibited.
- ▶ For equipment manufactured by entities other than Marco, you must consult the Original Equipment Manufacturer operator's manuals, information, training, instructions and warnings, for the proper and intended use of all equipment.

## **⚠ CAUTION**

**Failure to comply with ANY CAUTION listed below may result in minor or moderate injury.**

- ▶ Static electricity can be generated by media moving through the blast hose causing a shock hazard. Prior to use, ground the blast pot and blast nozzle to dissipate static electricity.
- ▶ High decibel noise levels are generated during the blasting process which may cause loss of hearing. Ensure appropriate Personal Protective Equipment and hearing protection is in use.

## **NOTICE**

**Failure to comply with ANY WARNING listed below could pose a hazard to personnel or property.**

- ▶ Always use media that is dry and properly screened. This will reduce the potential for obstructions to enter the remote control system, metering valve and blast nozzle.
- ▶ Moisture build-up occurs when air is compressed. Any moisture within the blast system will cause medias to clump, clogging metering valves, hoses and nozzles. Install an appropriately sized moisture separator at the inlet of the blast pot. Leave the moisture separator petcock slightly open to allow for constant release of water. If insufficient volume of air exists and petcock is unable to be left open (*at all times*) petcock should be opened frequently to release water.
- ▶ To reduce media intrusion in the air supply hose, depressurize the Blast pot before shutting off air supply from compressor.
- ▶ Inspect nozzle before placing in service. Damage to nozzle liner or jacket may occur during shipping. If you receive a damaged nozzle, contact your distributor immediately for replacement. Nozzles placed into service may not be returned. Nozzle liners are made of fragile materials and can be damaged by rough handling and striking against hard surfaces. Never use a damaged blast nozzle.
- ▶ Blasting at optimal pressure for the media used is critical to productivity. Example: For a media with an optimal blasting pressure of 100 psi at the nozzle, one pound per square inch of pressure loss will reduce blast efficiency by 1.5%. A 10 psi reduction in air pressure will cause a 15% loss of efficiency. Use a Needle Pressure Gauge to identify pressure drops in your system. Consult with your media supplier for the requirements of your media.
- ▶ Replace Blast Nozzle if liner or jacket is cracked or damaged. Replace nozzle if original orifice size has worn 1/16" or more. Determine nozzle wear by inserting a drill bit 1/16" larger than original size of nozzle orifice. If drill bit passes through nozzle, replacement is needed.
- ▶ When it comes to media & air mixtures, more is not necessarily better. Optimum blasting efficiency takes place when a lean media & air mixture is used. To correctly set the metering valve, begin with the valve fully closed and slowly increase the amount of media entering the airstream. As you increase the media flow, watch for a "blue flame" (*Figure 1*) at the exit of the nozzle. Faster cutting, reduced media consumption and lower clean-up costs, are benefits of the "blue flame".
- ▶ See Media Consumption Chart for consumption rates and required air flow (cubic feet per minute). The system must meet these minimum requirements to ensure proper function and performance.

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Inspect nozzle before placing in service. Damage to nozzle liner or jacket may occur during shipping. If you receive a damaged nozzle, contact your distributor immediately for replacement. Nozzles placed in to service may not be returned. Nozzle liners are made of fragile materials and can be damaged by rough handling and striking against hard surfaces. Never use a damaged blast nozzle.

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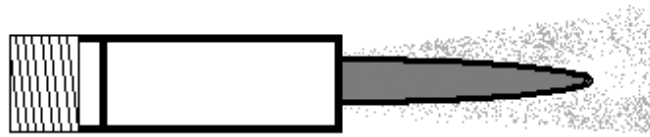


Figure 1

**NOTICE**

See Media Consumption Chart for consumption rates and required air flow (cubic feet per minute). The system must meet these minimum requirements to ensure proper function and performance.

**NOTICE**

Blasting at optimal pressure for the media used is critical to productivity. Example: for a media with an optimal blasting pressure of 100 psi at the nozzle, one pound per square inch of pressure loss will reduce blast efficiency by 1.5%. A 10 psi reduction in air pressure will cause a 15% loss of efficiency. Use a Needle Pressure Gauge to identify pressure drops in your system. Consult with your media supplier for the requirements of your media.

**NOTICE**

Replace Blast Nozzle if liner or jacket is cracked or damaged. Replace nozzle if original orifice size has worn 1/16" or more. Determine nozzle wear by inserting a drill bit 1/16" larger than original size of nozzle orifice. If drill bit passes through nozzle, replacement is needed.

**Media Consumption Chart\***

Nozzle Orifice	Pressure at the Nozzle (psi)								Air (in cfm), Media & Compressor Requirements
	50	60	70	80	90	100	125	140	
No. 2 (1/8")	11	13	15	17	18	20	25	28	Air (cfm)
	67	77	88	101	112	123	152	170	Media (lbs/hr)
	2.5	3	3.5	4	4.5	5	5.5	6.2	Compressor Horsepower
No. 3 (3/16")	26	30	33	38	41	45	55	62	Air (cfm)
	150	171	196	216	238	264	319	357	Media (lbs/hr)
	6	7	8	9	10	10	12	13	Compressor Horsepower
No. 4 (1/4")	47	54	61	68	74	81	98	110	Air (cfm)
	268	312	354	408	448	494	608	681	Media (lbs/hr)
	11	12	14	16	17	18	22	25	Compressor Horsepower
No. 5 (5/16")	77	89	101	113	126	137	168	188	Air (cfm)
	468	534	604	672	740	812	982	1100	Media (lbs/hr)
	18	20	23	26	28	31	37	41	Compressor Horsepower
No. 6 (3/8")	108	126	143	161	173	196	237	265	Air (cfm)
	668	764	864	960	1052	1152	1393	1560	Media (lbs/hr)
	24	28	32	36	39	44	52	58	Compressor Horsepower
No. 7 (7/16")	147	170	194	217	240	254	314	352	Air (cfm)
	896	1032	1176	1312	1448	1584	1931	2163	Media (lbs/hr)
	33	38	44	49	54	57	69	77	Compressor Horsepower
No. 8 (1/2")	195	224	252	280	309	338	409	458	Air (cfm)
	1160	1336	1512	1680	1856	2024	2459	2754	Media (lbs/hr)
	44	50	56	63	69	75	90	101	Compressor Horsepower
No. 10 (5/8")	308	356	404	452	504	548	663	742	Air (cfm)
	1875	2140	2422	2690	2973	3250	3932	4405	Media (lbs/hr)
	68.5	79.5	90	100.5	112	122	146	165	Compressor Horsepower
No. 12 (3/4")	432	504	572	644	692	784	948	1062	Air (cfm)
	2672	3056	3456	3840	4208	4608	5570	6238	Media (lbs/hr)
	96	112	127	143	154	174.5	209	236	Compressor Horsepower

\*Media consumption is based on media with a bulk density of 100 lbs per Cu. Ft..



**⚠ WARNING**

Inspect all equipment for wear or damage before and after each use. Failure to use Original Equipment Manufacturer repair parts and failure to immediately replace worn or damaged components could void warranties and cause malfunctions. Failure to comply with the above warning could result in death or serious injury.

**⚠ WARNING**

Never weld, grind or drill on the Blast Pot (or any pressure vessel). Doing so will void ASME certification and manufacturer's warranty. Welding, grinding or drilling on the Blast Pot (or any pressure vessel) could weaken the vessel causing it to burst. Failure to comply with the above warning could result in death or serious injury. (ASME Pressure Vessel Code, Section VIII, Division 1)

**⚠ WARNING**

OSHA requires blast-cleaning nozzles be equipped with an operating valve, which shall be designed to be held open only by continuous hand pressure and shall close immediately upon release of hand pressure (i.e., a "deadman" control). The valve shall not be modified in any manner that would allow it to remain open without the application of continuous hand pressure by the operator. Failure to comply with the above warning could result in release of high speed media and compressed air resulting in death or serious injury. OSHA 29CFR 1910.244(b)

## 6.0 Cubic Foot C-Series Blast Pot

### Description

Rugged, relentless and reliable is what you get with the Marco 6.0 Cubic Foot C-Series Blast Pot. The 60 degree Toriconical bottom allows for smooth flow of media to the reliable Regulator Metering Valve. The 6.0 C-Series Blast Pots is rated at 125 psi working pressure for use with most of today's compressors, providing proven productivity. Portability is made easy with Heavy-duty 16" Wheels or Lifting Lugs for use with mechanical lifting devices. The pneumatic or electric remote control system mounted on the side of the vessel provides easy access to the control valves and a width of only 35" allows for transport through most standard doorways. The C-Series Blast Pot features our most popular remote control; the KwikFire 125 System, the proven metering capability of the Regulator Metering Valve, making this blast pot reliable and easy to use!

### Features:

- Built in accordance with ASME Pressure Vessel Code
- 150 psi working pressure for increased productivity
- 90 degree Toriconical bottom allows smooth flow of media
- Overall width of 35" fits through standard doorways
- Heavy-duty 16" Wheels and Lifting Lugs for easy portability
- Powder coat finish to withstand harsh environments
- Dimensions: Overall Height: 54" Width: 35" Depth: 35" Weight: 390 pounds

### Operational Requirements

#### The following may cause safety hazards or reduced performance:

- Improper installation and/or maintenance of components
- Failure to place Blast Pot on a secure, flat surface
- Improper air supply pressure (minimum 50 psi, maximum 150 psi)
- Incorrect lifting/transporting of Blast Pot or incorrect or worn lifting devices

### Operating Instructions (Figure 2)

#### Before using:

- Inspect Pop Up Valve Seat (1) and Pop Up Valve (2) for damage. Replace damaged components before use.
- Inspect Muffler Assembly (3) as instructed in the device's Operator's Manual.
- Inspect Remote Control System components as instructed in the device's Operator's Manual.
- Inspect Pusher Line (6) for damage. Replace damaged components before use.
- Inspect Blast Pot for damage. Do not use Blast Pot if damaged.
- Locate Blast Pot on an even, flat surface that can withstand the weight of a full Blast Pot. Be aware of possible erosion of surface and load shifting.
- Connect air supply hose from compressor to inlet (4) of the Blast Pot. To provide best performance, an air supply hose with an inner diameter five to six times the size of blast nozzle orifice is recommended.
- Connect blast hose to coupling installed on Metering Valve (5).

## 6.0 Cubic Foot C-Series Blast Pot

Figure 2



**⚠ WARNING**

Crushing and pinching are normal functions of this component. Do not place body parts or foreign objects in any area where there are moving parts. Failure to comply with the above warning could result in death or serious injury.

**⚠ CAUTION**

High decibel noise levels are generated during the blasting process which may cause loss of hearing. Ensure appropriate Personal Protective Equipment and hearing protection is in use. Failure to comply with the above caution may result in minor or moderate injury.

**⚠ CAUTION**

Release of high speed media and compressed air occurs during depressurization of the Blast Pot. Ensure appropriate Personal Protective Equipment is in use. Failure to comply with the above caution may result in minor or moderate injury.

**⚠ WARNING**

Always depressurize the entire blasting system, disconnect all electrical power sources and lockout/tagout all components before any maintenance or troubleshooting is attempted. Failure to comply with the above warning could cause electrical shock and inadvertent activation of equipment resulting in death or serious injury.

**NOTICE**

To reduce media intrusion in the air supply hose, depressurize the Blast Pot before shutting off air supply from compressor.

# 6.0 Cubic Foot C-Series Blast Pot

## Operating Instructions (Figure 3)

### During use:

- Fill Blast Pot through hole (A) in top of Blast Pot. Do not overfill, the capacity of the Blast Pot is 6 cubic feet of media.
- To start/stop media blasting, follow instructions in the remote control system (1) operator’s manual.
- Monitor remote control system components per operator’s manual.

### After use:

- Empty media from Blast Pot when blasting is concluded for the day.
- To remove media, place Metering Valve (3) in the FULL OPEN position. Place Choke Valve (2) in the OFF (shut) position. Remove Blast Nozzle from nozzle holder on blast hose. Ensure blast hose is placed in a container suitable for catching the media. Ensure Operator is prepared for strong recoil, the blast hose will provide strong recoil as the media exits the blast hose. Activate Remote Control System per Operator’s Manual. When Blast Pot is empty, only air will exit the blast hose. Deactivate the Remote Control System to depressurize the Blast Pot. Place Metering Valve (3) in the CLOSED position.
- Inspect Blast Pot components for damage. Replace damaged components before use.
- Cover Blast Pot when not in use to reduce debris and water intrusion.

## Troubleshooting

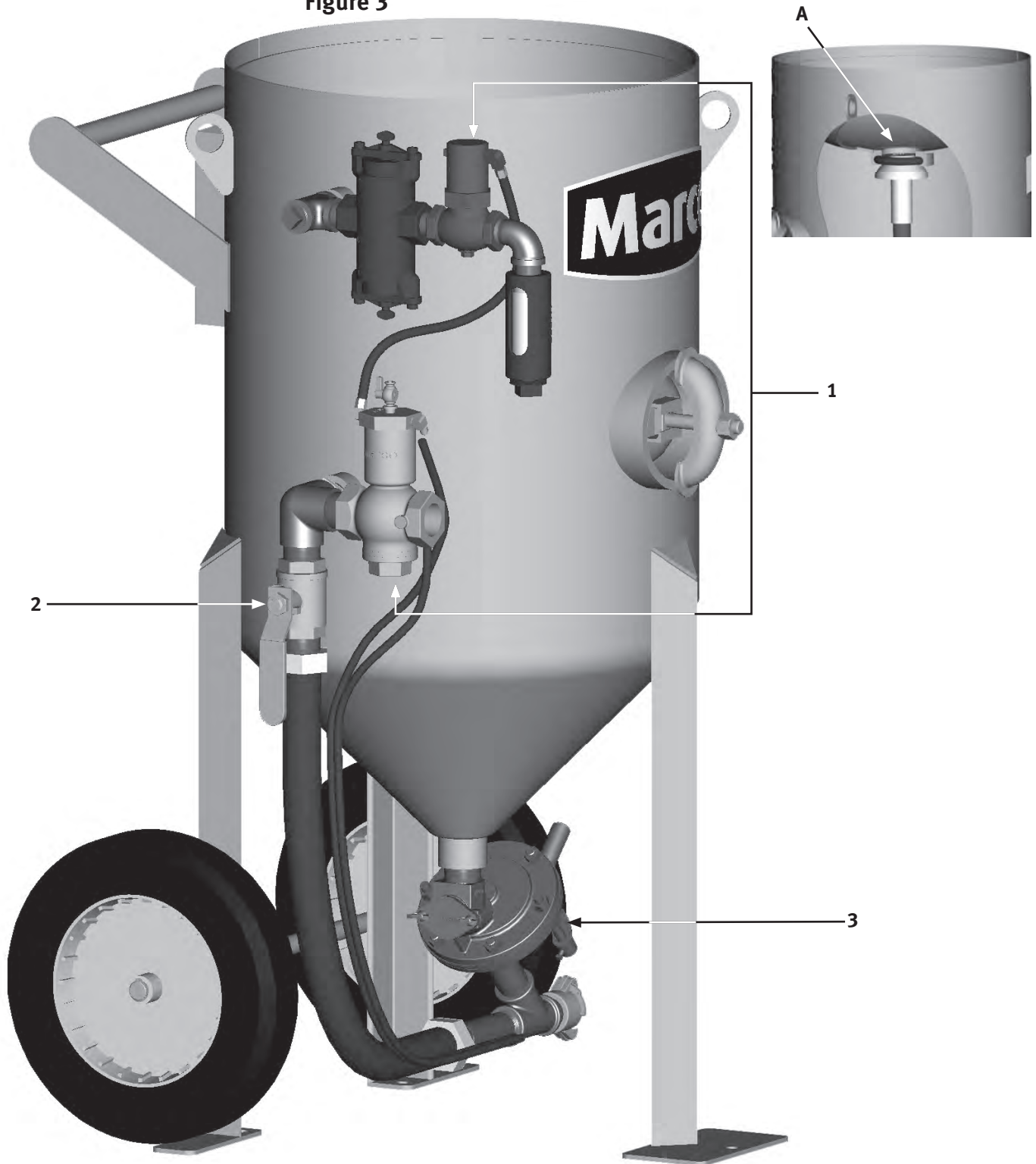
If the Blast Pot does not function properly, check the following:

<b>SYMPTOM (Cause)</b>	<b>ACTION</b>
<b>Blast Pot will not pressurize</b> (Damaged components, improper air supply, Remote Control System malfunctions)	Refer to Remote Control System Operator’s Manual.  Insufficient air supply. Ensure minimum of 50 psi is supplied to Blast Pot and sufficient air volume to support blast nozzle.  Ensure internal piping is aligned with Fill Hole.  Ensure Pop Up Valve and Pop Up Valve Seat are seating without air leaks. Replace damaged components.
<b>Blast Pot will not depressurize or depressurizes slowly</b> (Damaged components)	Refer to Remote Control System Operator’s Manual.  Refer to Muffler Operator’s Manual.
<b>No air and/or media exits the blast nozzle</b> (Blockages, Metering Valve)	Depressurize Blast Pot. Inspect nozzle and blast hose for blockage. Remove blockage or remove components from use.  Pressurize Blast Pot and open and close Choke Valve rapidly. If problem persists refer to Metering Valve Operator’s Manual.
<b>Intermittent media flow</b> (Wet media, Metering Valve, Blast Nozzle)	Damp or wet media. Remove media from Blast Pot by cleaning out the vessel. Ensure dry media is used.  Install a Moisture Separator at the inlet of the Blast Pot. Increase the inner diameter of Air Supply hose.  Blast Nozzle is worn or too large for compressor size. Replace Blast Nozzle.



# 6.0 Cubic Foot C-Series Blast Pot

Figure 3



**⚠ WARNING**

Always depressurize the entire blasting system, disconnect all electrical power sources and lockout/tagout all components before any maintenance or troubleshooting is attempted. Failure to comply with the above warning could cause electrical shock and inadvertent activation of equipment resulting in death or serious injury.

**⚠ WARNING**

Never weld, grind or drill on the Blast Pot (or any pressure vessel). Doing so will void ASME certification and manufacturer's warranty. Welding, grinding or drilling on the Blast Pot (or any pressure vessel) could weaken the vessel causing it to burst. Failure to comply with the above warning could result in death or serious injury. (ASME Pressure Vessel Code, Section VIII, Division 1)

**NOTICE**

Piping may loosen during transit. Ensure all internal and external piping is aligned and tightened before use. Ensure Pop-up Valve will seal properly with Pop-up Valve Seat at opening in top of Blast Pot.

## 6.0 Cubic Foot C-Series Blast Pot

### Maintenance

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Maintenance of the Blast Pot is limited to the daily cleaning and the immediate replacement of damaged or worn parts.

### 6.0 Cubic Foot C-Series Blast Pot

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#### Disassembly:

Inspection Door Assembly: Fig. 4

- 1) Unthread Nut (1) from Bolt (3).
- 2) Remove Yoke (2) from Bolt (3).
- 3) With Bolt (3) captured in slot in Door (5), grasp Bolt (3) and push on Door (5) towards the interior of Blast Pot to free the Door (5) and Gasket (4).
- 4) Remove Door (5) from Blast Pot interior.

Pop-Up Valve: Fig. 5

- 1) Remove Inspection Door Assembly (1).
- 2) Unthread Vertical Pipe (4) from Pipe Elbow (5). Remove Vertical Pipe (4) and Pop-Up Valve (3) from the Blast Pot through Inspection Door opening.
- 3) Remove Pop-Up Valve (3) from pipe.

Pop-Up Valve Seat: Fig. 5

- 1) Pry Pop-Up Valve Seat (2) from recess below the fill hole (A) in top of Blast Pot and remove through fill hole (A).

#### Assembly:

Pop-Up Valve Seat: Fig. 5

- 1) Insert the Pop-Up Valve Seat (2) in the recess below the fill hole (A). Ensure Pop-Up Valve Seat (2) is completely seated in recess.

Pop-Up Valve: Fig. 5

- 1) Inspect Horizontal Pipe (6) and Pipe Elbow (5) for damage. Replace if damaged.
- 2) Insert Pop-Up Valve (3) on non-threaded end of Vertical Pipe (4).
- 3) Place Pop-Up Valve (3) and Vertical Pipe (4) in Blast Pot and thread in to Pipe Elbow (5).
- 4) Ensure Vertical Pipe (4) is perpendicular to Horizontal Pipe (6). Slide Pop-Up Valve (3) up and down to ensure freedom of movement and properly seats against Pop-Up Valve Seat (2).
- 5) Tighten Vertical Pipe (4) 1/4 turn beyond hand tight.

Inspection Door Assembly: Fig. 4

- 1) Ensure Door (5) is free of debris. Place Gasket (4) on Door (5) and insert through opening in side of Blast Pot.
- 2) Place head of Bolt (3) in slot on Door (5). Grasp Bolt (3) and seat Door (5) and Gasket (4) on interior ring of opening. Ensure Gasket (4) creates positive seal.
- 3) Place Yoke (2) on Bolt (3) and tighten Nut (1). Ensure Yoke (2) is tight and an air-tight seal is produced.

# 6.0 Cubic Foot C-Series Blast Pot

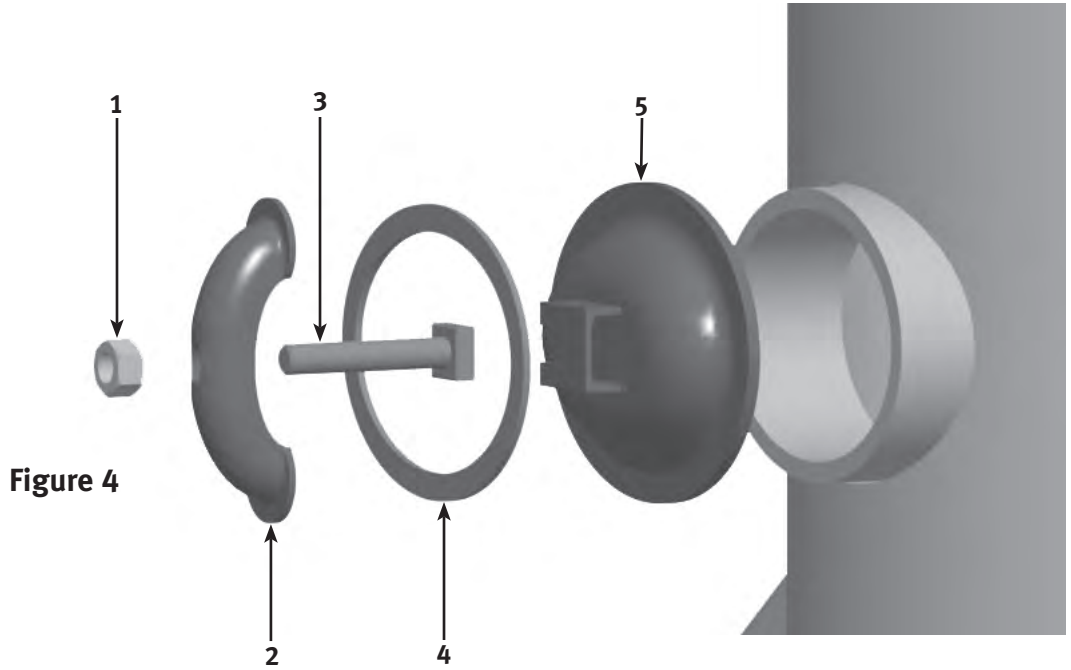


Figure 4

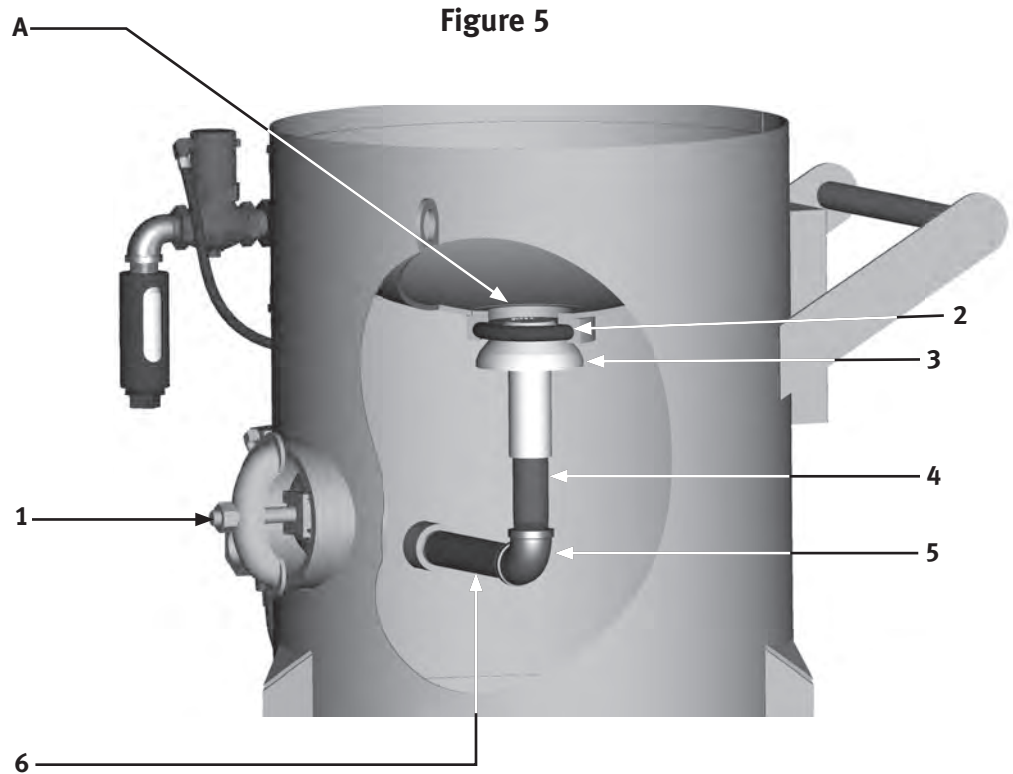
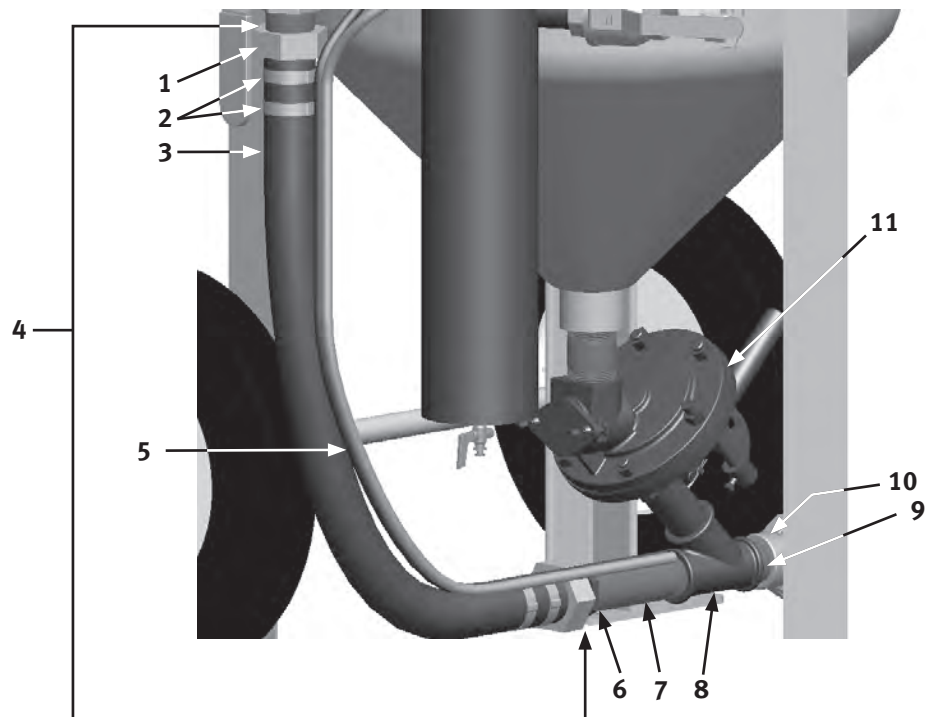


Figure 5

**6.0 Cubic Foot C-Series Blast Pot Schematic**

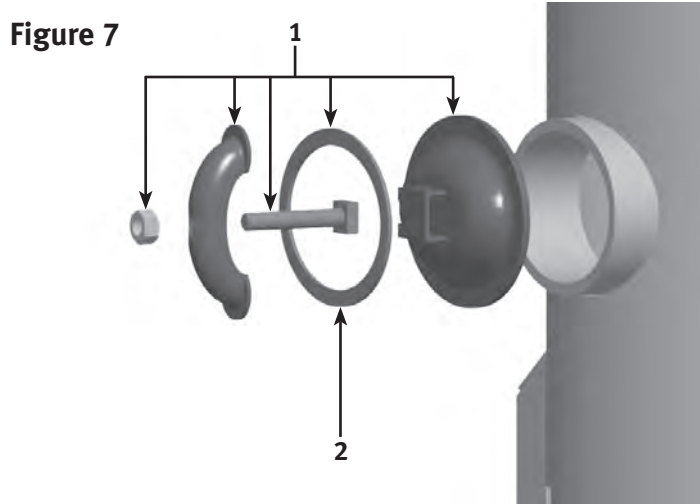
**Figure 6**



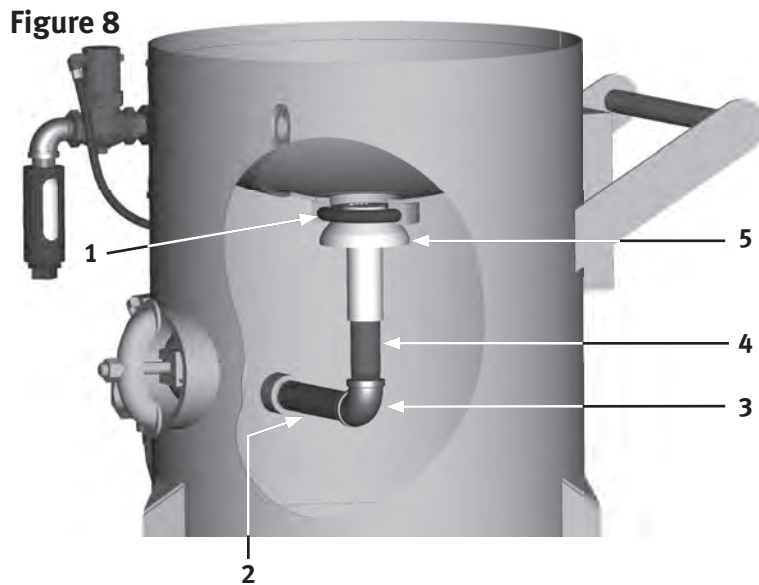
Item #	Part #	Description
<b>Fig. 6</b>		
1	10SFE4*	Swivel Air Hose End - 1-1/2" NPT (2 required)
2	1015503*	Screw Type Hose Clamp (4 required)
3	10AH112B*	Air Hose - 1-1/2" i.d. (per foot) - (three feet required)
4	1006312	1-1/2" i.d. Pusher Line Service Kit (Includes 1, 2, 3)
5	10TL5	5' of Coupled Twinline
6	1011501	1-1/2" x 1-1/4" Bushing
7	1011202	1-1/4" X 6" Nipple
8	1014024	1-1/4" "Y" Fitting
9	1011201	1-1/4" NPT Close Nipple
10	10SB1	1-1/4" NPT Brass Tank Coupling
11	1014000	Regulator Metering Valve - Complete

\* - Items included in Pusher Line Service Kit

## 6.0 Cubic Foot C-Series Blast Pot Schematic



Item #	Part #	Description
<b>Fig. 7</b>		
1	1006200	6" x 8" Inspection Door Assembly (Includes: Door, Bolt, Gasket, Yoke and Nut)
2	1006201	6" x 8" Inspection Door Gasket



Item #	Part #	Description
<b>Fig. 8</b>		
1	1006050	Pop-Up Valve Seat
2	1011214	1-1/4" NPT x 10" Pipe Nipple
3	1006204	1-1/4" 90 Degree Elbow
4	1006208	1-1/4" NPT x 5-1/2" Pipe Nipple
5	1006020	Pop-Up Valve - External Sleeve

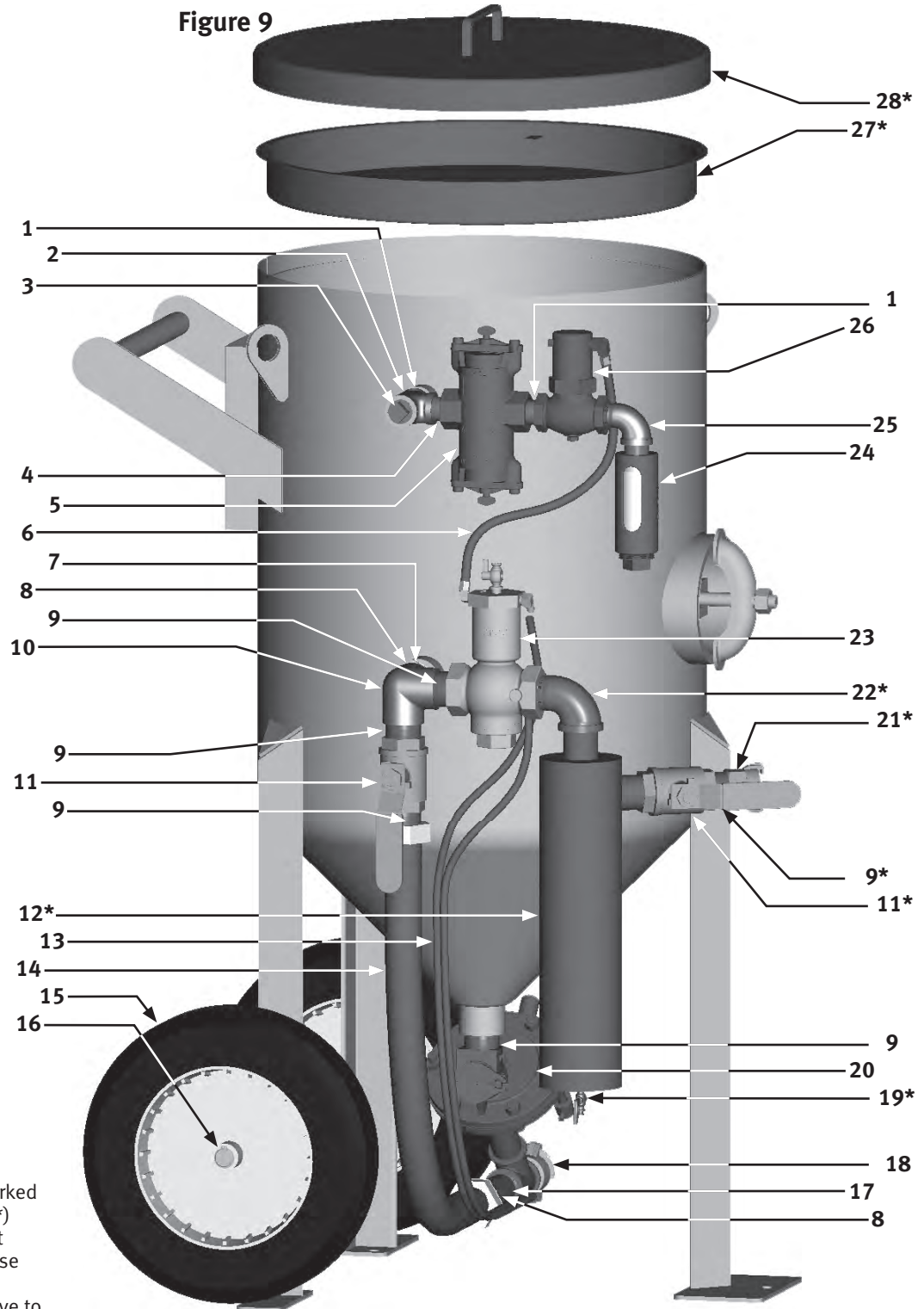


**6.0 Cubic Foot C-Series Blast Pot Schematic - Pneumatic Controls**

<b>Item #</b>	<b>Part #</b>	<b>Description</b>
<b>Fig. 9</b>		
-	1060303	6.0 Cu. Ft. C-Series Blast Pot w/Regulator Metering, KwikFire 125 Pneumatic Remote Control System, KwikFire 150 Control Handle and 50 feet of Pneumatic Control Line
-	1060303PKA	6.0 Cu. Ft. C-Series Blast Pot w/Regulator Metering, KwikFire 125 Pneumatic Remote Control System, KwikFire 150 Control Handle, 50 feet of Pneumatic Control Line, and The Extractor Moisture Separator.
1	1012151	1" NPT Close Pipe Nipple
2	1011816	1" NPT Pipe Tee
3	1011901	1" NPT Square Head Pipe Plug
4	1012151	1" NPT Close Nipple
5	1012000	1" Abrasive Trap - Complete
6	10CL18	18" Control Line
7	1011201	1-1/4" NPT Close Nipple
8	1011501	1-1/2" (M) x 1-1/4" (F) NPT Bushing
9	1014015	1-1/2" NPT Close Nipple
10	1011804	1-1/2" 90 Degree Elbow with Side-Out
11	1011603	1-1/2" Full Port Brass Ball Valve
12*	10101313	The Extractor Moisture Separator <i>(Includes 9, 11, 12, 19, 21, 22) (optional)</i>
13	10TL5	5' of Coupled Twinline
14	1006312	1-1/2" Pusher Line Service Kit <i>(see Fig. 6)</i>
15	1006064	Wheel <i>(2 required)</i>
16	1006205	Wheel Clip <i>(4 required)</i>
17	1011202	1-1/4" x 6" NPT Pipe Nipple
18	10SB1	1-1/4" Tank Coupling
19*	1012101	1/4" Brass Petcock <i>(optional)</i>
20	1014000	Regulator Valve - Complete
21*	10ME4	4-lug Air Hose Coupling - 1-1/2" NPT (F) <i>(optional)</i>
22*	1011839	1-1/2" NPT Street Elbow <i>(optional)</i>
23	1012200	1-1/2" Inlet Valve - Complete
24	1011100	Muffler Assembly <i>(includes 1" NPT Close Nipple)</i>
25	1011801	1" NPT Street Elbow
26	1012050	1" Outlet Valve - Complete
27*	1006102	Screen for 24" Diameter Blast Pot <i>(optional)</i>
28*	1006101	Lid for 24" Diameter Blast Pot <i>(optional)</i>
-	1090072	6.0 Cubic Foot C-Series Blast Pot with KwikFire 125 Remote Control System Operator's Manual
-	1090014	KwikFire 125 Pneumatic Remote Control System Operator's Manual
-	1091045	Warning Tag

NOTE: all items marked with an asterisks (\*) are optional or part of a package. Please consult with your Marco representative to confirm availability.

6.0 Cubic Foot C-Series Blast Pot Schematic - Pneumatic Controls



NOTE: all items marked with an asterisks (\*) are optional or part of a package. Please consult with your Marco representative to confirm availability.

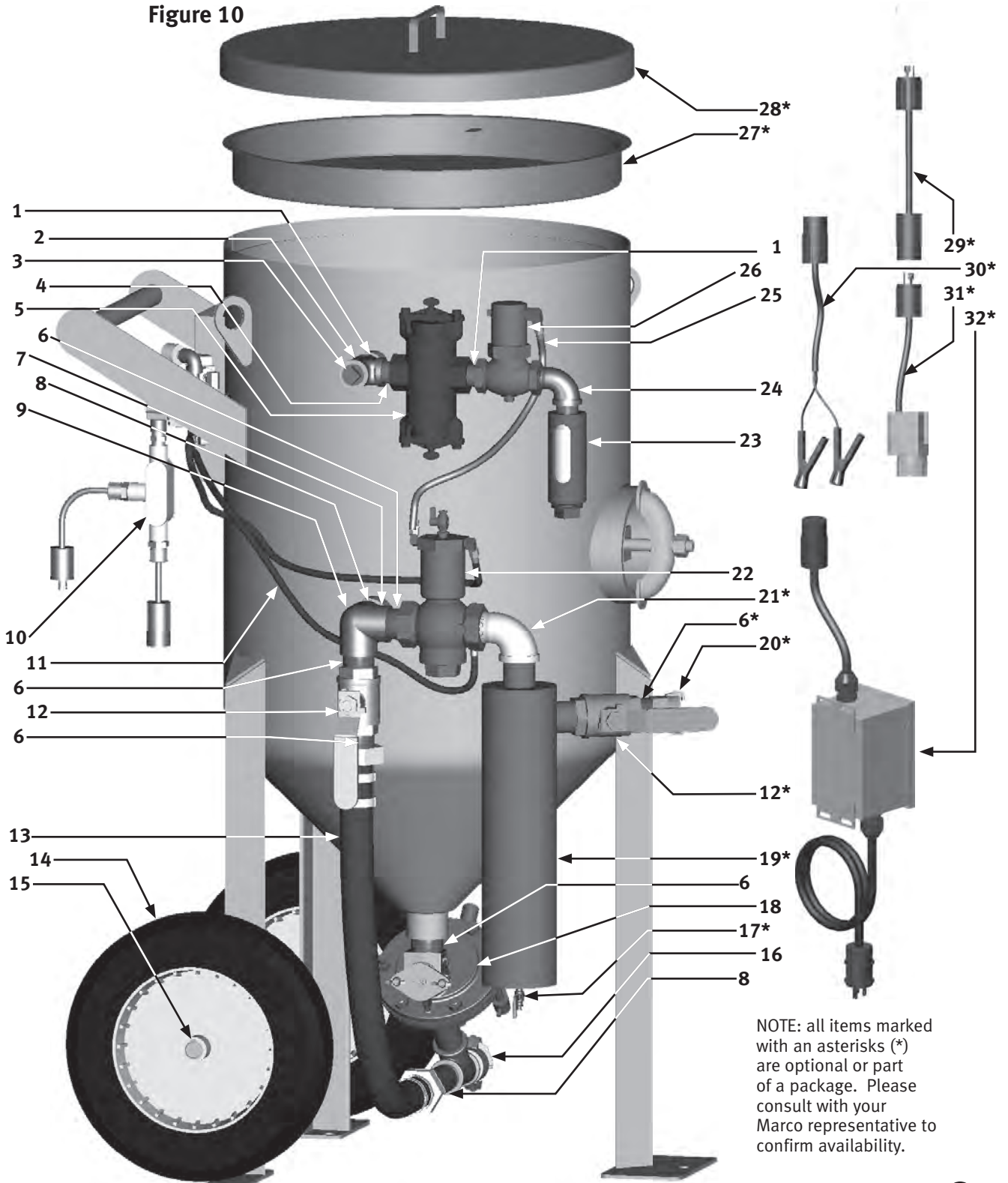
## 6.0 Cubic Foot C-Series Blast Pot Schematic - Electric Controls

Item #	Part #	Description
<b>Fig. 10</b>		
-	1060301	6.0 Cu. Ft. C-Series Blast Pot w/Regulator Metering Valve, KwikFire 125 Remote Control System, 12 VDC KwikFire 190 Electric Remote Control System, KwikFire 156 Control Handle and 50 feet of Electric Control Line
-	1060301PKA	6.0 Cu. Ft. C-Series Blast Pot w/Regulator Metering Valve, KwikFire 125 Remote Control System, 12 VDC KwikFire 190 Electric Remote Control System, KwikFire 156 Control Handle, 50 feet of Electric Control Line, and The Extractor Moisture Separator
-	1060302	6.0 Cu. Ft. C-Series Blast Pot w/Regulator Metering Valve, KwikFire 125 Remote Control System, 120 VAC KwikFire 190 Electric Remote Control System, KwikFire 156 Control Handle and 50 feet of Electric Control Line
-	1060302PKA	6.0 Cu. Ft. C-Series Blast Pot w/Regulator Metering Valve, KwikFire 125 Remote Control System, 120 VAC KwikFire 190 Electric Remote Control System, KwikFire 156 Control Handle, 50 feet of Electric Control Line, and The Extractor Moisture Separator
1	1012151	1" NPT Close Nipple
2	1011816	1" NPT Pipe Tee
3	1011901	1" NPT Square Head Pipe Plug
4	1012151	1" NPT Close Nipple
5	1012000	1" Abrasive Trap - Complete
6	1014015	1-1/2" NPT Close Nipple
7	1011201	1-1/4" NPT Close Nipple
8	1011501	1-1/2" X 1-1/4" NPT Bushing
9	1011804	1-1/2" 90 Degree Elbow with Side-Out
10	-	KwikFire 190 - Complete ( <i>see Operator's Manual 1090051 for options</i> )
11	10AH025	1/4" Push On Air Hose
12	1011603	1-1/2" Full Port Ball Valve
13	1006312	1-1/2" Pusher Line Service Kit ( <i>see Fig. 6</i> )
14	1006064	Wheel (2 required)
15	1006205	Wheel Clip (4 required)
16	10SB1	1-1/4" Tank Coupling
17*	1012101	1/4" NPT Brass Petcock ( <i>optional</i> )
18	1014000	Regulator Valve - Complete
19*	10101313	The Extractor Moisture Separator ( <i>Includes 6, 12, 17, 19, 20, 21</i> ) ( <i>optional</i> )
20*	10ME4	4-lug Air Hose Coupling - 1-1/2" NPT (F) ( <i>optional</i> )
21*	1011802	1-1/4" NPT Street Elbow ( <i>optional</i> )
22	1012200	1-1/2" Inlet Valve - Complete
23	1011100	Muffler Assembly ( <i>includes 1" NPT Close Nipple</i> )
24	1011801	1" NPT Street Elbow
25	10CL18	18" control Line
26	1012050	1" Outlet Valve - Complete
27*	1006102	Screen for 24" Diameter Blast Pot ( <i>optional</i> )
28*	1006101	Lid for 24" Diameter Blast Pot ( <i>optional</i> )
29*	-	16/2 Power Cord with Twist-Lock Plug ( <i>see Operator's Manual 1090051 for options</i> )
30*	1015546	KwikFire 190 12 VDC Power Supply Cord (used with 1065301 and 1065301PKA blast pot configurations)
31*	1015600	KwikFire 156 Electric Control Handle
32*	1030020	Galaxy 300 120 VAC to 12 VAC Power Convertor (used with 1065302 and 1065302PKA blast pot configurations)
-	1090072	6.0 Cubic Foot C-Series Blast Pot with KwikFire 125 Remote Control System Operator's Manual
-	1090051	KwikFire 190 Electric Remote control System Operator's Manual
-	1090014	KwikFire 125 Pneumatic Remote Control System Operator's Manual
-	1091045	Warning Tag

NOTE: all items marked with an asterisks (\*) are optional or part of a package. Please consult with your Marco representative to confirm availability.

6.0 Cubic Foot C-Series Blast Pot Schematic - Electric Controls

Figure 10



NOTE: all items marked with an asterisks (\*) are optional or part of a package. Please consult with your Marco representative to confirm availability.



## 6.0 Cubic Foot C-Series Blast Pot

### Maintenance Notes

DATE	TYPE OF SERVICE	PART NUMBER



## ADDITIONAL TECHNICAL DATA

The associations listed below offer information, materials and videos pertaining to media blasting and safe operating practices.

- **American Society for Testing and Materials (ASTM)**  
 100 Barr Harbor Drive  
 West Conshohocken, PA 19428-2959  
 Phone: (610) 832-9585  
 FAX: (610) 832-9555  
 www.astm.org
- **Occupational Safety & Health Administration (OSHA)**  
 United States  
 Department of Labor  
 200 Constitution Avenue  
 Washington, DC 20210  
 Phone: (800) 321-OSHA  
 (800) 321-6742  
 www.osha.gov
- **The National Board of Boiler & Pressure Vessel Inspectors**  
 1055 Crupper Avenue  
 Columbus, Ohio 43229  
 Phone: (614) 888-8320  
 FAX: (614) 888-0750  
 www.nationalboard.org
- **National Association of Corrosion Engineers (NACE)**  
 1440 South Creek Drive  
 Houston, TX 77084-4906  
 Phone: (281) 228-6200  
 FAX: (281) 228-6300  
 www.nace.org
- **The Society for Protective Coatings (SSPC)**  
 40-24th Street, 6th Floor  
 Pittsburgh, PA 15222-4656  
 Phone: (412) 281-2331  
 FAX: (412) 281-9992  
 www.sspc.org

## WARRANTY

Seller warrants to the original purchaser that the Product covered by this Warranty will remain free from defects in workmanship or material under normal commercial use and service for a period of one year from the date of shipment to the original Purchaser. This Warranty shall not apply to defects arising, in whole or in part, from any accident, negligence, alteration, misuse or abuse of the Product, operation not in accordance with applicable instructions or manuals or under conditions more severe than, or otherwise exceeding, those set forth in the written specifications for the Product, nor shall this Warranty extend to repairs or alterations of the Product by persons other than Seller or Seller's authorized representatives, or to maintenance parts.

## DISCLAIMER OF WARRANTY

The foregoing Warranty is exclusive and is in lieu of all other warranties of quality, whether oral or written and whether express or implied. All warranties of merchantability or fitness for a particular purpose are hereby excluded and are inapplicable to the Product. Seller makes no warranties or representations concerning respirators, or equipment made by other manufacturers.

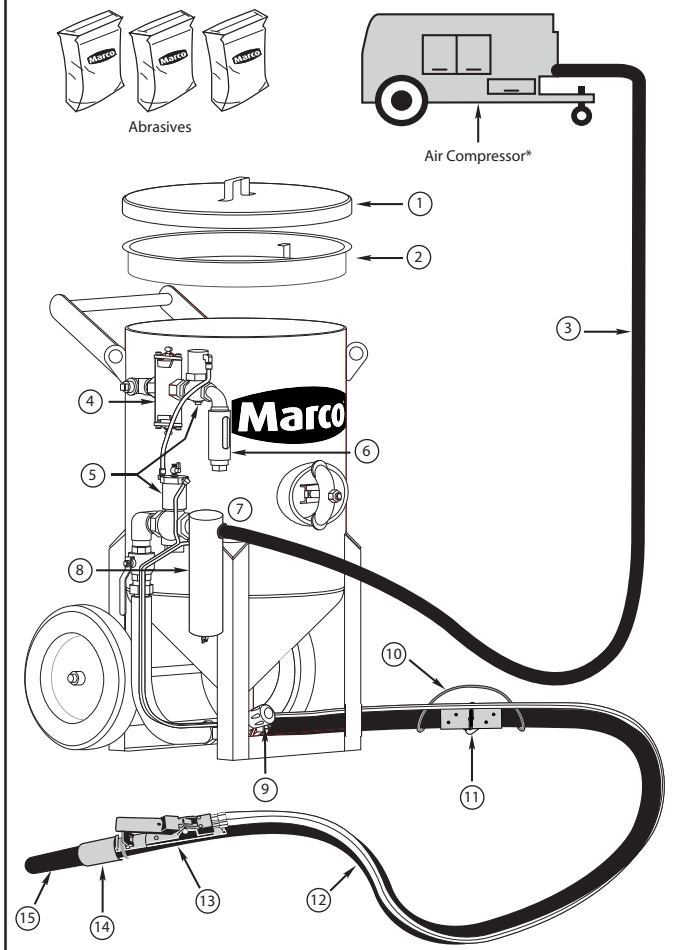
## EXCLUSIVE REMEDIES FOR WARRANTY CLAIMS

THE SOLE AND EXCLUSIVE REMEDIES OF PURCHASER FOR UNDER THE FOREGOING WARRANTY COVERING THIS PRODUCT SHALL BE REPAIR OR REPLACEMENT, FREE OF CHARGE, F.O.B. POINT OF MANUFACTURE, OF ANY DEFECTIVE PART OR PARTS OF THE PRODUCT THAT WERE MANUFACTURED BY SELLER, AND WHICH ARE RETURNED TO SELLER AT SELLER'S PRINCIPAL PLACE OF BUSINESS, POSTAGE PREPAID. THIS SOLE AND EXCLUSIVE REMEDY IS CONDITIONED UPON PURCHASER'S PROMPT WRITTEN NOTICE TO SELLER AT SELLER'S PLACE OF BUSINESS THAT A DEFECT HAS BEEN DISCOVERED, TOGETHER WITH A REASONABLY DETAILED DESCRIPTION OF THE DEFECT IN THE PRODUCT, WITHIN THIRTY (30) DAYS AFTER DISCOVERY OF THE DEFECT, OTHERWISE SUCH CLAIMS SHALL BE DEEMED WAIVED. NO ALLOWANCE WILL BE GRANTED FOR ANY REPAIRS OR ALTERATIONS MADE BY PURCHASER OR OTHERS WITHOUT SELLER'S PRIOR WRITTEN CONSENT. IF SUCH NOTICE IS TIMELY GIVEN, SELLER WILL HAVE THE OPTION TO EITHER MODIFY THE PRODUCT OR COMPONENT PART THEREOF TO CORRECT THE DEFECT, REPLACE THE PRODUCT OR PART WITH COMPLYING PRODUCTS OR PARTS, OR REFUND THE AMOUNT PAID FOR THE DEFECTIVE PRODUCT, ANY ONE OF WHICH WILL CONSTITUTE THE SOLE LIABILITY OF SELLER AND FULL SETTLEMENT OF ALL CLAIMS. PURCHASER SHALL AFFORD SELLER PROMPT AND REASONABLE OPPORTUNITY TO INSPECT THE PRODUCT FOR WHICH CLAIM IS MADE. THE SOLE PURPOSE OF THE FOREGOING STIPULATED EXCLUSIVE REMEDY SHALL BE TO REPAIR OR REPLACE DEFECTIVE PRODUCTS OR COMPONENTS THEREOF, OR TO REFUND PURCHASER THE PURCHASE PRICE THEREOF. THIS STIPULATED EXCLUSIVE REMEDY SHALL NOT BE DEEMED TO HAVE FAILED OF ITS ESSENTIAL PURPOSE SO LONG AS SELLER IS WILLING AND ABLE TO REPAIR OR REPLACE THE DEFECTIVE PARTS OR REFUND THE PURCHASE PRICE IN ACCORDANCE WITH THE TERMS HEREOF.

## LIMITATION OF REMEDIES

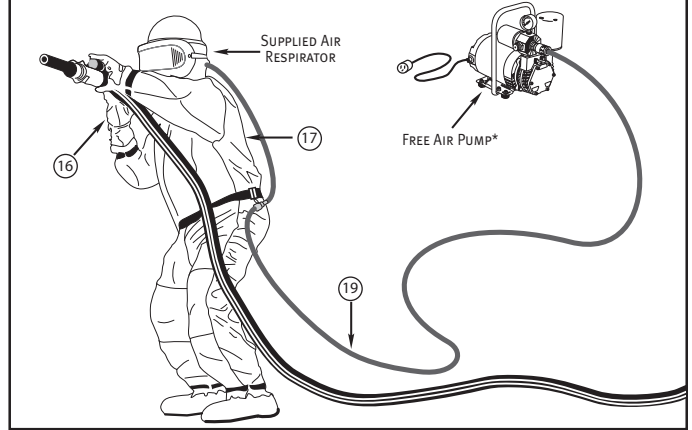
The foregoing stipulated exclusive remedies is in lieu of all other remedies for breach of contract, warranty and/or tort. Seller shall not be liable for the Purchaser's expenses for downtime or for making up downtime, damages for which the Purchaser may be liable to other persons and/or entities, damages to property, and injury to or death of any persons and/or any claims for incidental or consequential damages, including but not limited to loss of profits, regardless of whether Seller has been informed of the possibility of such damages. Seller neither assumes nor authorizes any person to assume for it any other liability in connection with the sale or use of any Products covered by the foregoing Warranty and Disclaimers, and there are no oral agreements relating to remedies which are collateral to or which affect this limitation.

## Marco Blast Machine – Hose Configuration



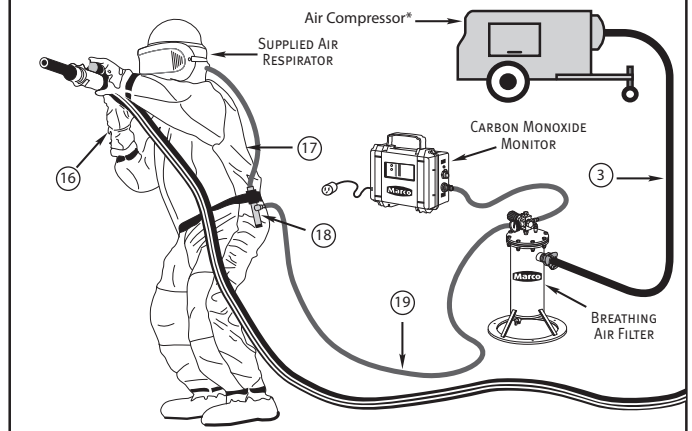
\* Grade D quality air in an atmosphere free of contaminants

## Ambient Air Pump Configuration



\* Grade D quality air in an atmosphere free of contaminants

## Air Compressor Breathing Air Configuration



\* Grade D quality air in an atmosphere free of contaminants

## DAILY PRE-OPERATION CHECKLIST

### Additional Components

- ① blast pot lid
- ② blast pot screen
- ③ air hose
- ④ abrasive trap
- ⑤ remote control system
- ⑥ exhaust muffler
- ⑦ air hose couplings & gaskets
- ⑧ moisture separator
- ⑨ metering valve
- ⑩ whip check cable
- ⑪ blast hose couplings & gaskets
- ⑫ remote control line
- ⑬ remote control handle
- ⑭ blasting nozzle holder
- ⑮ blasting nozzle
- ⑯ blasting gloves
- ⑰ media resistant blast suit
- ⑱ breathing line
- ⑲ climate control device

### MEDIAS:

- Review the Media MSDS (*Material Safety Data Sheet*) to ensure the material is free of toxic or harmful substances such as lead, silica, cyanide or arsenic. Use properly sized media to ensure required surface finish.

### BLAST POT:

- Inspect the Blast Pot for internal and external wear, abrasions and leaks.
- Ground the Blast Pot to dissipate static electricity created by the Media moving through the Blast Hose.
- Install a Moisture Separator at the Inlet Port of the Blast Pot. Removing moisture from the Air Supply will allow Media to flow smoothly from the Blast Pot to the work surface.
- Inspect abrasive trap filter and empty trap frequently
- Inspect exhaust muffler and filter element before starting blasting operations. Replace filter element if exhaust air flow is restricted by residual dust

### AIR SUPPLY: Respirator

- Inspect Respirator Assemblies for worn components and replace as needed.
- You MUST consult the Operator's Manual supplied with your Respirator for ALL applicable Warnings and Hazards.

### BLAST NOZZLES:

- Replace Blast Nozzles if liner or jacket is cracked, damaged or an orifice size 1/16" larger than the original size.  
– *Determine Nozzle wear by inserting a drill bit 1/16" larger than original size of the Nozzle orifice. If the drill bit passes, replacement is needed.*
- Blast Nozzles with 1/2" I.D. or 1" I.D. Entry require use of a Nozzle Washer. Wide Entry (1-1/4" I.D.) Blast nozzles do not require a Nozzle Washer. Inspect and replace damaged Nozzle Holder or Nozzle Washer before use.

### AIR SUPPLY: Blast Pot

- Use an Air Compressor that will provide sufficient CFM (*Cubic Feet Per Minute*) volume of air to the Blast Nozzle and all other pneumatic tools, with an additional 50% to allow for Nozzle wear.

### AIR & BLAST HOSE:

- Inspect all Hoses for internal and external wear, abrasions and leaks.
- Lay out Blast Hose and Blast Hose as straight as possible to remove restrictions which cause reduced performance and premature wear.
- Blast Hose I.D. should be 3-4 times the size of Nozzle orifice.
- Blast Hose and Air Hose Couplings are to mate securely using Gaskets to provide a positive seal without leaks. Inspect and replace any worn or damaged component before use.
- Install Safety Clips and Safety Cables at each connection.

### PROTECTIVE CLOTHING:

- Wear appropriate Protective Clothing and Equipment (*supplied-air respirator, blast suit, safety shoes, leather gloves, ear protection and eye protection*) appropriate for the work environment.



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