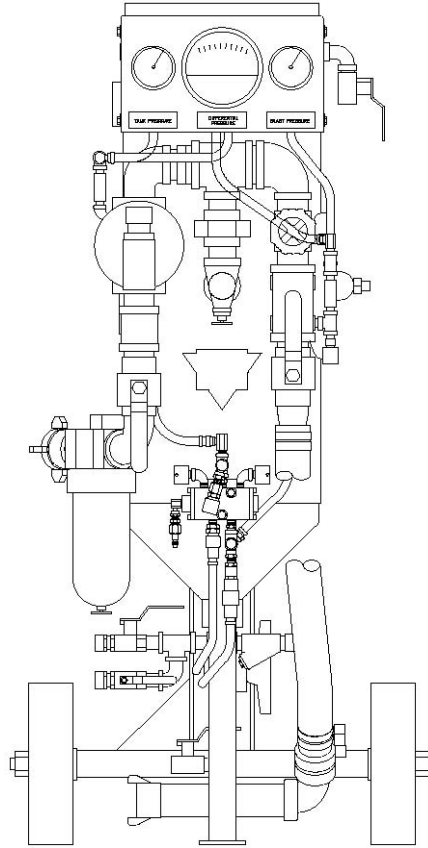


ACCUSTRIP SYSTEM

OPERATION AND MAINTENANCE MANUAL

JULY 2008



SAVE THIS MANUAL AND MAKE AVAILABLE
TO ALL USERS OF THIS EQUIPMENT!

Manual Part Number 7200-210



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WARNINGS

The ACCUSTRIP SYSETM[®] Delivery Device
is only to be used with Compressed Air

DE-PRESSURIZE UNIT BEFORE ANY MAINTENANCE OR
LOADING OF MEDIA IS PERFORMED.

READ RULES FOR SAFER OPERATION AND OPERATING INSTRUCTIONS BEFORE ATTEMPTING TO USE THIS EQUIPMENT

1. DO NOT OPERATE WITHOUT USING PROPER SAFETY EQUIPMENT. ALL PERSONNEL IN THE WORKING AREA MUST BE FURNISHED WITH THE APPROPRIATE CERTIFIED SAFETY EQUIPMENT, PARTICULARLY FOR PROTECTION OF EYES, HEARING AND BREATHING. THE TOXICITY OF THE COATINGS TO BE REMOVED MUST BE CONSIDERED TO DETERMINE THE PROPER SELECTION OF SAFETY EQUIPMENT.
2. DO NOT MODIFY OR ALTER ANY ACCUSTRIP SYSTEM[®], BLAST EQUIPMENT OR CONTROLS WITOUT WRITTEN CONSENT FROM AXXIOM MANUFACTURING, INC. THE UNAUTHORIZED MODIFICATION OR SUBSTITUTION OF THE ORIGINAL EQUIPMENT ON THE ACCUSTRIP SYSTEM[®] DELIVERY DEVICE MAY CAUSE THE STATED WARRANTY TO BE VOIDED AT THE DISCRETION OF AXXIOM MANUFACTURING, INC. AND RELEASES THE EQUIPMENT MANUFACTURER OF ALL LIABILITY, INCLUDING BUT NOT LIMITED TO LOSS OF PROFIT, DAMAGE TO EQUIPMENT OR OTHER PROPERTY, OR LOSS OF LIFE
3. DO NOT OPERATE ANY ACCUSTRIP SYSTEM[®] WITHOUT FOLLOWING THE “RULES FOR SAFER OPERATION”, “OPERATING INSTRUCTIONS”, “PREVENTATIVE MAINTENANCE” AND WARNING SIGNS ON THE ACCUSTRIP SYSTEM[®]. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.
4. DO NOT OPERATE ANY ACCUSTRIP SYSTEM[®] WITOUT FIRST PROPERLY GROUNDING THE EQUIPMENT. POTENTIAL STATIC ELECTRICITY ACCUMULATION, ESPECIALLY DURING DRY ABRASIVE BLASTING OPERATIONS, MAY PRESENT A FIRE OR EXPLOSION HAZARD IN AREAS WHERE FLAMMABLE OR COMBUSTIBLE DUSTS, GASES, MISTS AND/OR VAPORS EXIST. PREVENT ELECTROSTATIC BUILDUP AND POSSIBLE STATIC SPARK DISCHARGE BY PROPERLY BONDING AND GROUNDING THE NOZZLE, BLAST CART, AND WORK PIECE. **DO NOT USE SODIUM BICARBONATE BLAST MEDIA IN POTENTIALLY EXPLOSIVE OR FLAMMABLE AREAS AS IT MAY GENERATE THERMAL SPARKS WHEN STRIKING THE WORK PIECE. DO NOT USE ELECTRIC DEADMAN IN EXPLOSIVE OR FLAMMABLE AREAS.**
5. DO NOT EXCEED THE SAFE WORKING PRESSURE BY CONNECTING THE SYSTEM TO A COMPRESSED AIR SOURCE EXCEEDING 125 PSI (8.6 BAR).THE MAXIMUM INLET PRESSURE IS 125 PSI (8.6 BAR). EXCEEDING MAXIMUM INLET PRESSURE OF 125 PSI WILL CAUSE SYSTEM DAMAGE AND UNSAFE WORKING CONDITIONS. A MINIMUM INLET PRESSURE OF 60 PSI (4.1 BAR) IS RECOMMENDED TO ASSURE OPTIMAL PERFORMANCE.
6. DO NOT REMOVE, REPAIR OR REPLACE ANY ITEM ON THE VESSEL WHILE IT IS UNDER PRESSURE. DO NOT WELD, GRIND OR SAND VESSEL AS IT WILL BE UNSAFE TO OPERATE. ANY DAMAGE TO THE VESSEL CAN MAKE IT UNSAFE. MAKE SURE TO INSPECT THE INSIDE AND OUTSIDE OF VESSEL REGULARLY FOR CORROSION OR DAMAGE. OPERATE THE DEVICE ON A LEVEL SURFACE TO PREVENT ACCIDENTAL TIPPING. LIFT ONLY FROM THE LIFTING LUG(S).

7. DO NOT LOOSEN OR REMOVE THE CLAMP SECURING THE ORIFICE SLEEVE TO THE MEDIA VALVE BEFORE TURNING THE MEDIA SHUTOFF VALVE UNDER THE MEDIA HOPPER TO THE OFF POSITION. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.
8. DO NOT USE ABRASIVES CONTAINING FREE SILICA. SILICA CAN CAUSE SILICOSIS OR OTHER RELATED RESPIRATORY DAMAGE. YOU MUST WEAR PERSONAL PROTECTIVE EQUIPMENT FOR ALL ABRASIVE BLASTING OPERATIONS. OBSERVE ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS IN CONJUNCTION WITH AIRLINE FILTERS AND RESPIRATORY PROTECTION. (REFERENCE OSHA 29CFR1910.134, 1910.1000 AND ALL SUBSEQUENT ADDITIONS OR MODIFICATIONS.)
9. DO NOT ENTER AREAS DURING ABRASIVE BLASTING OPERATIONS WITHOUT BREATHING PROTECTION. ALL PERSONNEL IN THE VICINITY OF ABRASIVE BLASTING OPERATIONS SHOULD WEAR NIOSH APPROVED AIR FED RESPIRATORS, HOODS OR HELMETS.
10. DO NOT USE BLEEDER TYPE DEADMAN ON ANY ACCUSTRIP SYSTEM®. THE USE OF A-BEC, CLEMCO OR A SIMILAR BLEEDER TYPE DEADMAN CAN CAUSE UNINTENTIONAL START-UP WITHOUT WARNING, WHICH CAN RESULT IN SERIOUS PERSONAL INJURY.
11. DO NOT SELL, RENT, OR ACCUSTRIP SYSTEM® WITHOUT REMOTE CONTROLS. OSHA REGULATIONS REQUIRE REMOTE CONTROLS ON ALL BLAST MACHINES. FAILURE TO USE REMOTE CONTROLS CAN CAUSE SERIOUS INJURY OR DEATH TO THE OPERATOR(S) OR OTHER PERSONNEL IN THE BLASTING AREA. (REFERENCE OSHA SPECIFICATIONS 29CFR1910.244(B) AND ALL SUBSEQUENT ADDITIONS OR MODIFICATIONS.)

RULES FOR SAFER OPERATION

1. DO NOT OPERATE ANY ACCUSTRIP SYSTEM® OR BLAST EQUIPMENT WITHOUT FOLLOWING THE RULES FOR SAFER OPERATION AND THE OPERATING INSTRUCTIONS. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.
2. DO NOT OPERATE ANY ACCUSTRIP SYSTEM® OR BLAST EQUIPMENT BEFORE READING ALL THE RULES FOR SAFER OPERATION.
3. DO NOT PERFORM ANY MAINTENANCE WHILE ANY ACCUSTRIP SYSTEM® OR BLAST EQUIPMENT IS PRESSURIZED. ALWAYS DEPRESSURIZE ANY VESSEL BEFORE LOADING MEDIA OR PERFORMING ANY MAINTENANCE.
4. DO NOT USE ABRASIVES CONTAINING FREE SILICA. SILICA CAN CAUSE SILICOSIS OR OTHER RELATED RESPIRATORY DAMAGE. YOU MUST WEAR PERSONAL PROTECTIVE EQUIPMENT FOR ALL ABRASIVE BLASTING OPERATIONS. OBSERVE ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS IN CONJUNCTION WITH AIRLINE FILTERS AND RESPIRATORY PROTECTION. (REFERENCE OSHA 29CFR1910.134, 1910.1000 AND ALL SUBSEQUENT ADDITIONS OR MODIFICATIONS.)
5. DO NOT ENTER AREAS DURING ABRASIVE BLASTING OPERATIONS WITHOUT BREATHING PROTECTION. ALL PERSONNEL IN THE VICINITY OF ABRASIVE BLASTING OPERATIONS SHOULD WEAR NIOSH APPROVED AIR FED RESPIRATORS, HOODS OR HELMETS.
6. DO NOT MODIFY OR ALTER ANY ACCUSTRIP SYSTEM®, BLAST EQUIPMENT OR CONTROLS THEREOF WITHOUT WRITTEN CONSENT FROM AXXIOM MANUFACTURING, INC.
7. DO NOT USE BLEEDER TYPE DEADMAN ON ANY ACCUSTRIP SYSTEM®. THE USE OF A-BEC, CLEMCO OR A SIMILAR BLEEDER TYPE DEADMAN CAN CAUSE UNINTENTIONAL START-UP WITHOUT WARNING, WHICH CAN RESULT IN SERIOUS PERSONAL INJURY.
8. DO NOT SELL, RENT, OR OPERATE ACCUSTRIP SYSTEM® WITHOUT REMOTE CONTROLS. OSHA REGULATIONS REQUIRE REMOTE CONTROLS ON ALL BLAST MACHINES. FAILURE TO USE REMOTE CONTROLS CAN CAUSE SERIOUS INJURY OR DEATH TO THE OPERATOR(S) OR OTHER PERSONNEL IN THE BLASTING AREA. (REFERENCE OSHA SPECIFICATIONS 29CFR1910.244(B) AND ALL SUBSEQUENT ADDITIONS OR MODIFICATIONS.)
9. DO NOT REMOVE, REPAIR OR REPLACE ANY ITEM ON VESSEL WHILE IT IS UNDER PRESSURE.
10. DO NOT OPERATE IF THERE IS A LEAK IN THE VESSEL. IMMEDIATELY TAKE VESSEL OUT OF SERVICE AND CALL YOUR CERTIFYING AUTHORITY.
11. DO NOT OPERATE ABOVE MAXIMUM ALLOWABLE WORKING PRESSURE (MAWP) AT MAXIMUM OPERATING TEMPERATURE (°F) SHOWN ON ASME NAMEPLATE.
12. DO NOT WELD, GRIND OR SAND VESSEL. IT WILL NOT BE SAFE TO OPERATE.
13. DO NOT OPERATE IF THE VESSEL HAS BEEN DAMAGED BY FIRE. TAKE OUT OF SERVICE IMMEDIATELY AND NOTIFY YOUR CERTIFYING AUTHORITY.

14. ANY DAMAGE TO VESSEL CAN MAKE IT UNSAFE. INSPECT OUTSIDE AND INSIDE OF VESSEL REGULARLY FOR CORROSION OR DAMAGE (I.E. DENTS, GOUGES OR BULGES). IF DAMAGED TAKE OUT OF SERVICE IMMEDIATELY AND NOTIFY YOUR CERTIFYING AUTHORITY.
15. DO NOT CONNECT THE AIR DISCHARGE ON THIS UNIT ONTO A COMMON HEADER WITH ANY OTHER UNIT OF ANY DESCRIPTION, OR ANY OTHER SOURCE OF COMPRESSED AIR, WITHOUT FIRST MAKING SURE A CHECK VALVE IS USED BETWEEN THE HEADER AND THIS UNIT. IF THIS UNIT IS CONNECTED IN PARALLEL WITH ANOTHER UNIT OF HIGHER DISCHARGE PRESSURE AND CAPACITY, A SAFETY HAZARD COULD OCCUR IN A BACK-FLOW CONDITION.
16. NEVER ATTEMPT TO PERFORM MAINTENANCE WHILE THE UNIT IS UNDER PRESSURE OR IS EVEN CAPABLE OF BEING PRESSURIZED. THIS MEANS AT A MINIMUM THE INLET BALL VALVE SHOULD BE CLOSED AND IDEALLY THE AIR SOURCE BE SHUT OFF OR DISCONNECTED. ANYTIME THE MANUAL BLOW-DOWN VALVE IS CLOSED IT SHOULD BE ASSUMED THAT THE UNIT IS UNDER PRESSURE.
17. THIS MACHINE CONTAINS HIGH PRESSURE AIR WHICH CAN CAUSE SEVERE INJURY OR DEATH FROM FLYING PARTS. ALWAYS RELIEVE PRESSURE BEFORE REMOVING COVERS, PLUGS, CAPS OR OTHER PARTS FROM THE PRESSURIZED AIR SYSTEM. FOLLOW THESE RULES FOR SAFE OPERATION.
 - DO NOT REMOVE ACCESS COVER UNTIL ALL AIR PRESSURE IS OUT OF VESSEL.
 - DO NOT TRY TO TIGHTEN COVER IF YOU HEAR OR FEEL A LEAK. IMMEDIATELY SHUT OFF AIR SUPPLY TO VESSEL AND REDUCE PRESSURE TO ZERO. INSTALL A NEW COVER AND GASKET.
 - DO NOT USE POWER TOOLS OR CHEATER BARS TO TIGHTEN NUT ON COVER. TOO MUCH FORCE CAN DISTORT COVER AND/OR GASKET. IF DAMAGED BY OVER TIGHTENING, THE COVER CAN BLOW OUT AND CAUSE SERIOUS INJURY.
 - INSPECT COVER AND SEALING SURFACE EVERY TIME COVER IS REMOVED OR AT LEAST ONCE A YEAR FOR DAMAGE SUCH AS CORROSION, CRACKS OR DISTORTION. IF THERE IS ANY DAMAGE, INSTALL A NEW COVER AND/OR GASKET.
18. WEAR SUITABLE EYE PROTECTION WHEN FILLING THE UNIT. THERE IS A POSSIBILITY THAT SOME ABRASIVE MAY BE BLOWN BACK AS THE POP-UP VALVE SEATS.
19. ALWAYS KEEP HANDS WELL CLEAR OF THE WORKING AREA OF THE POP-UP VALVE.
20. PERIODICALLY CHECK ALL HOSES TO SEE THAT THEY ARE IN GOOD CONDITION. REPAIR ANY VALVES OR HOSES THAT SHOW ANY SIGNS OF WEAR OR LEAKAGE.
21. ALL BLAST HOSE COUPLINGS AND AIR HOSE COUPLINGS ARE PROVIDED WITH HOLES WHICH MUST BE SAFETY PINNED OR WIRED TO PREVENT ACCIDENTAL DISCONNECTIONS.
22. THE INTERIOR CONDITION OF THE VESSEL SHOULD BE INSPECTED REGULARLY FOR CORROSION.
23. ALL BLAST EQUIPMENT OPERATORS MUST USE RESPIRATORY PROTECTIVE EQUIPMENT APPROVED BY THE BUREAU OF MINES AND NIOSH SO THAT THEY WILL MEET OSHA REGULATIONS.
24. ALL BLAST SYSTEMS MUST BE EQUIPPED WITH AUTOMATIC (DEADMAN) TYPE REMOTE CONTROLS. (SEE OSHA SPECIFICATIONS 29CFR1910.244(B).)
25. DO NOT AIM BLAST NOZZLE TOWARDS YOURSELF OR ANY PERSON. SYSTEM MALFUNCTION CAN CAUSE ACCIDENTAL START UP AND RESULT IN INJURY TO PERSONNEL.
26. DO NOT USE ABRASIVES THAT ARE NOT INTENDED TO BE USED WITH THIS BLAST EQUIPMENT.
27. DO NOT USE ABRASIVES THAT CONTAIN TRASH OR OTHER FOREIGN OBJECTS. TRASH OR FOREIGN OBJECTS CAN CREATE A BLOCKAGE AND CAUSE EQUIPMENT MALFUNCTION.

IMPORTANT NOTES

1. If freezing temperatures are anticipated, remove the system to a warm area to prevent freezing.
2. The water system is designed for use with clean, fresh water only. Check water filters weekly. Greater frequency may be required if water supply is not clean.
3. No warranty is given or implied as to the use of the ACCUSTRIP SYSTEM® Delivery Device and sodium bicarbonate blast media for any particular application or for use on a particular substrate. **Always** check suitability of the system on a small test area prior to use.
4. After use always wash down surface with sufficient water to remove all traces of sodium bicarbonate blast media. Sodium bicarbonate blast media may cause some coatings to blister, especially at high temperatures and may harm plants, bushes or shrubs.
5. The air filter drain cock should be left partially open during operation to allow fluids to escape. (An open air drain can consume 10 to 20 cfm of air). Avoid leaving the pot piping drain cock continually open as this may foul the regulator. Crack the piping drain cock periodically to release trapped moisture.
6. To maintain consistent media flow in conditions of high humidity or with poor quality compressed air. Additional moisture separators or air dryers may be required upstream of the ACCUSTRIP SYSTEM® Delivery Device machine. Inspect and clean inside of media tank if media flow becomes intermittent.
7. Avoid high pressure air blast. It should be general practice that compressed air never be used for cleaning clothes or anything near a person's body. Compressed air can enter the circulatory system through cuts in the skin which could lead to injury or death.

WARNING LABEL IDENTIFICATION AND LOCATION

Listed below are the warning labels and the corresponding hazards encountered with this equipment. Refer to figure 1.1 for images of the warning labels. Refer to figure 1.2 for the locations of these warning labels.

No.	Qty	Part no.	Description	Hazard
1.	1	8710-98307	"Armex® Triangle SX"	Not Applicable
2.	1	7031-008	"Warning-Grounding"	Static electricity accumulation may present fire or explosion hazard. Make sure unit is properly grounded.
3.	1	7031-054	"Warning" Load noise and particle hazard	Airborne particles and loud noise from blast nozzle and blowdown can cause injury and loss of hearing. Wear approved eye and ear
4.	1	7031-007A	"Warning" Pressurized vessel.	Propelled objects can cause serious injury or death. Depressurize vessel prior to performing any maintenance.



1) 8710-98307



2) 7031-008

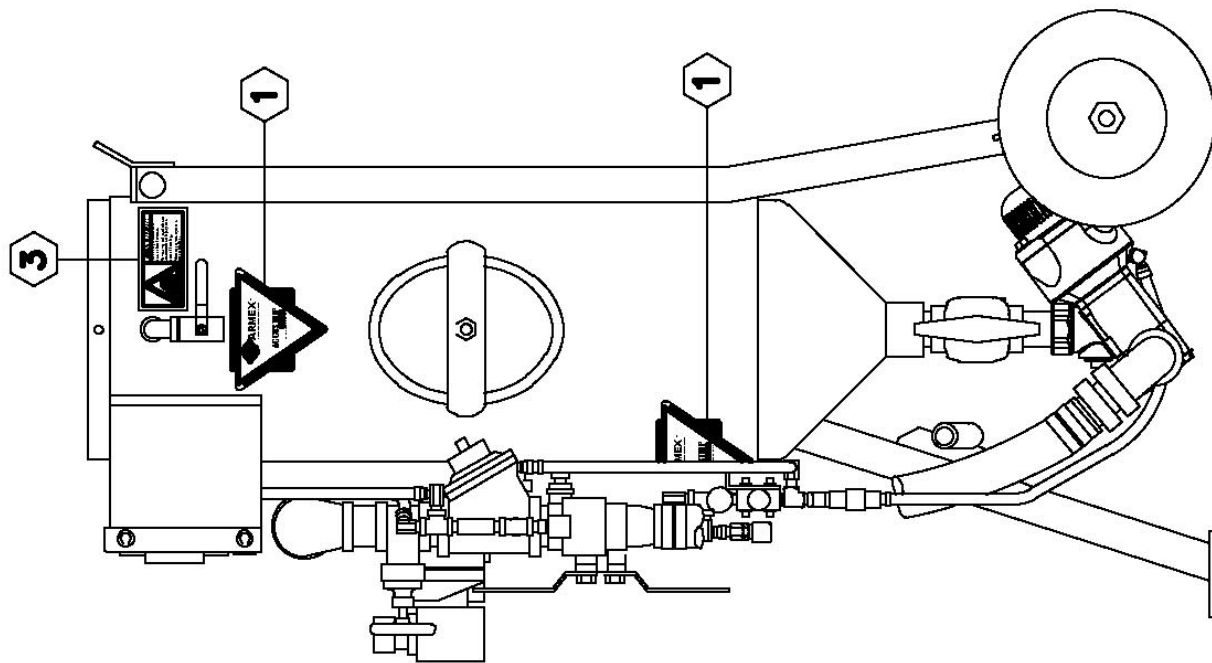


3) 7031-054

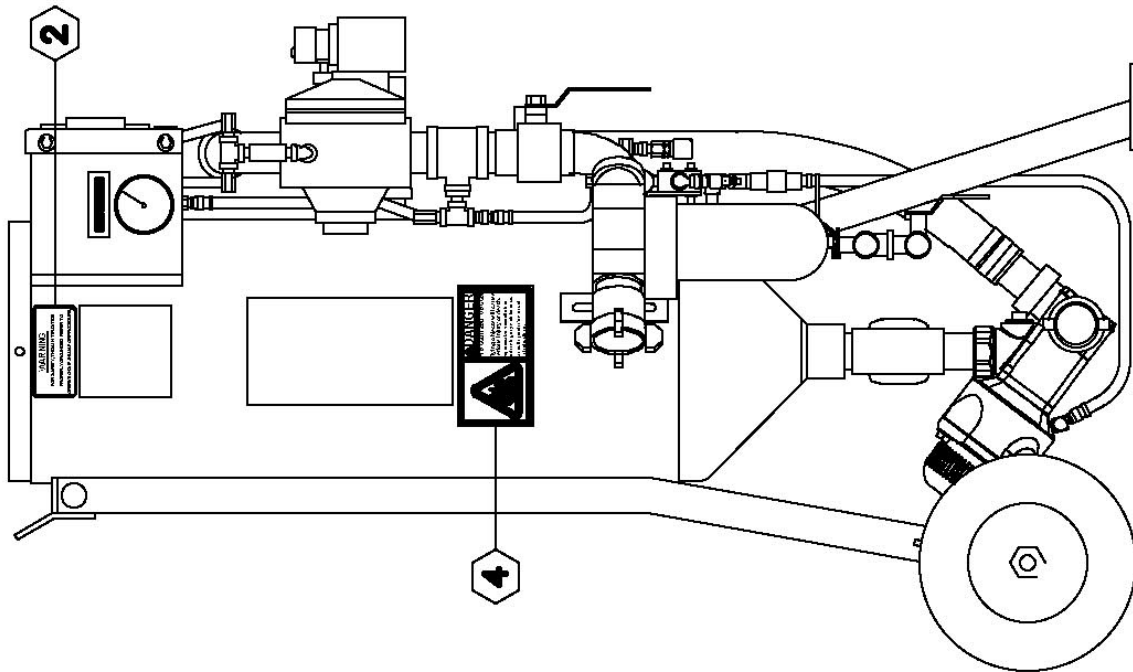


4) 7031-007

Figure 1.1 - Warning label (decals) summary



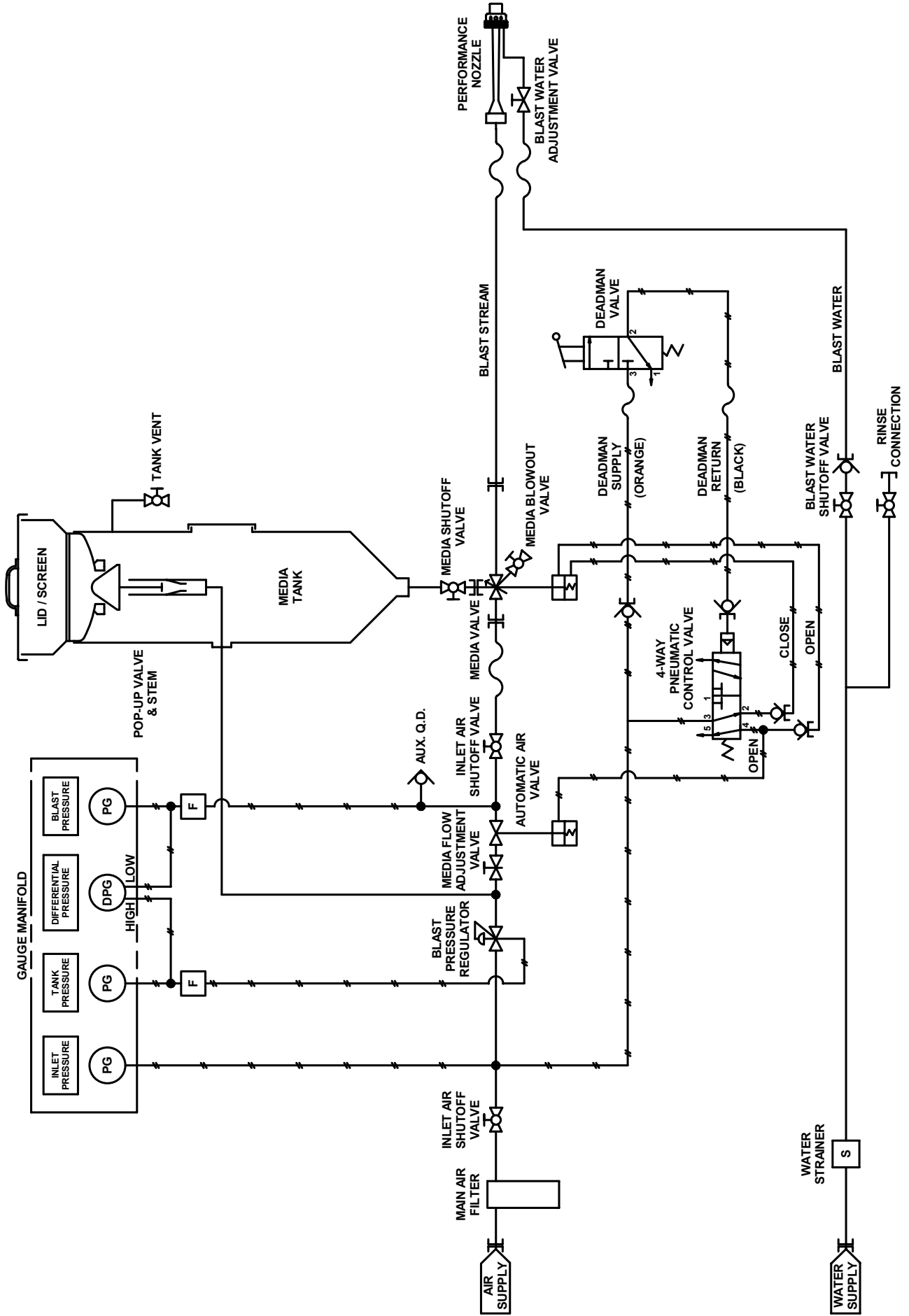
RIGHT SIDE VIEW



LEFT SIDE VIEW

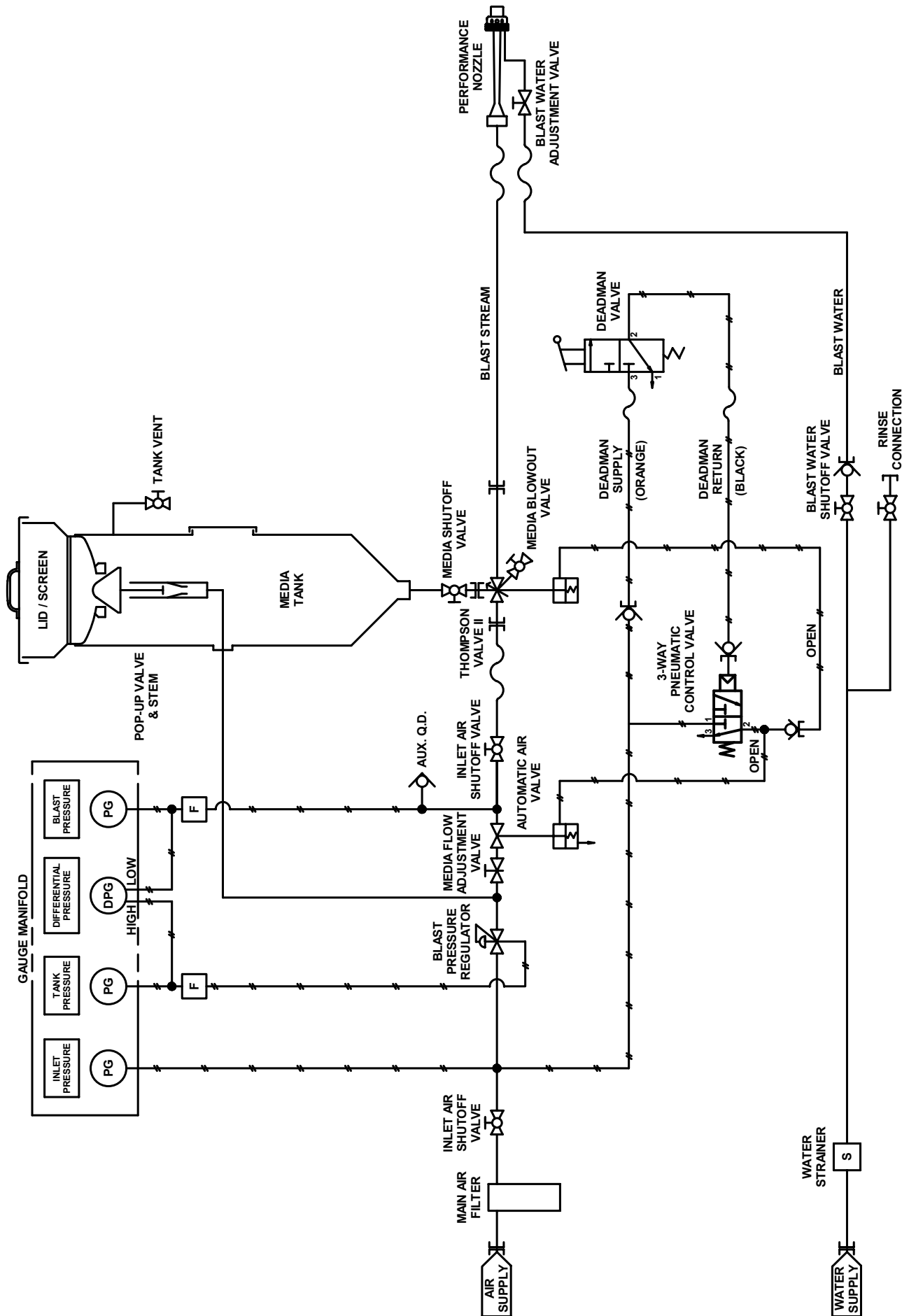
Figure 1.2 –Warning label (decals) location

SYSTEM DESCRIPTION



PROCESS SCHEMATIC SX WITH MEDIA VALVE

SYSTEM DESCRIPTION



PROCESS SCHEMATIC SX WITH THOMPSON VALVE II

SX SYSTEM DESCRIPTION

The SX model ACCUSTRIP refers to a line of air driven abrasive blasting machines specifically designed for delivery of sodium bicarbonate blast media. Size or capacity of the unit in cubic feet is indicated by the number immediately preceding the SX designation.

The SX line of ACCUSTRIPS are designed for multi-purpose use and have specific features which differentiate them from other ACCUSTRIP lines. The primary difference is a single regulator control system, (as opposed to dual regulator units) large piping, and Media Valve, features which enhance reliability, performance and ergonomics.

PROCESS DESCRIPTION

Air enters the SX System through the inlet air filter. Opening the inlet air valve allows air to pass through the blast pressure regulator and enter the media tank. As the tank pressurizes, the pop-up valve is lifted to seal the media loading area containing air within the tank causing it to pressurize. Resulting tank pressure is set by the blast pressure regulator. Once the deadman valve is pressed, control air activates the automatic air valve and media valve causing them to open allowing blast air and media to mix at the media valve and exit the system through the blast nozzle. Releasing the deadman valve returns the media valve and automatic air valve to the closed position stopping the blasting action.

PROCESS CONTROLS

Blast pressure is controlled by the blast pressure regulator with operating pressures ranging from 10 psi to approximately 120 psi. Ideal blast pressure is determined by application requirements or available air volume.

Media flow is controlled by a coarse adjustment media orifice contained within the media valve and a fine adjustment media flow control valve. Once an orifice size has been selected, the media flow control valve can be adjusted to deliver media at a rate of ¼ to approximately 8 lbs./min. Media flow is increased by closing the media flow control valve slightly to create an air flow restriction in the blast air piping resulting in a head pressure within the tank. Head pressure (differential pressure) assists media flow from the tank through the orifice in the media valve where it is mixed with the blast air stream. An optional differential pressure indicator gauge is available to allow repeatable and consistent media flow adjustment.

DEADMAN CONTROL CIRCUIT

Air pressure exists in the deadman supply hose (yellow or orange hose) whenever the inlet air valve is open and the blast hose harness is connected. When the deadman valve is pressed and maintained, air travels from the deadman supply hose (yellow or orange hose) through the deadman valve and back through the deadman return hose (black hose) to the actuator side of the control valve causing the internal control valve spool to slide (turn on). Air pressure existing at port 1 of the control valve is then allowed to exit the control valve at port 4. Air pressure from port 4 pressurizes the diaphragm in the automatic air valve causing it to open and also opens the piston actuator on the media valve. Simultaneously, air pressure in the return (close) side of the media valve actuator is allowed to vent from the control valve at port 2 through port 3 allowing the media valve to open.

When the deadman valve is released, air pressure in the deadman return hose (black hose) is vented through the deadman valve relieving pressure on the control valve actuator causing the internal control valve spool to slide closed (off). With the control valve in the off position, air pressure at port 4 holding the automatic air valve and media valves open is vented through port 5 causing the automatic air valve to spring return closed (turn off). Simultaneously, air pressure existing at port 1 is allowed to pressurize the media valve piston actuator on the closed side from port 2 causing the media valve to turn off (spring assisted).

MEDIA CUTOFF CONTROL CIRCUIT

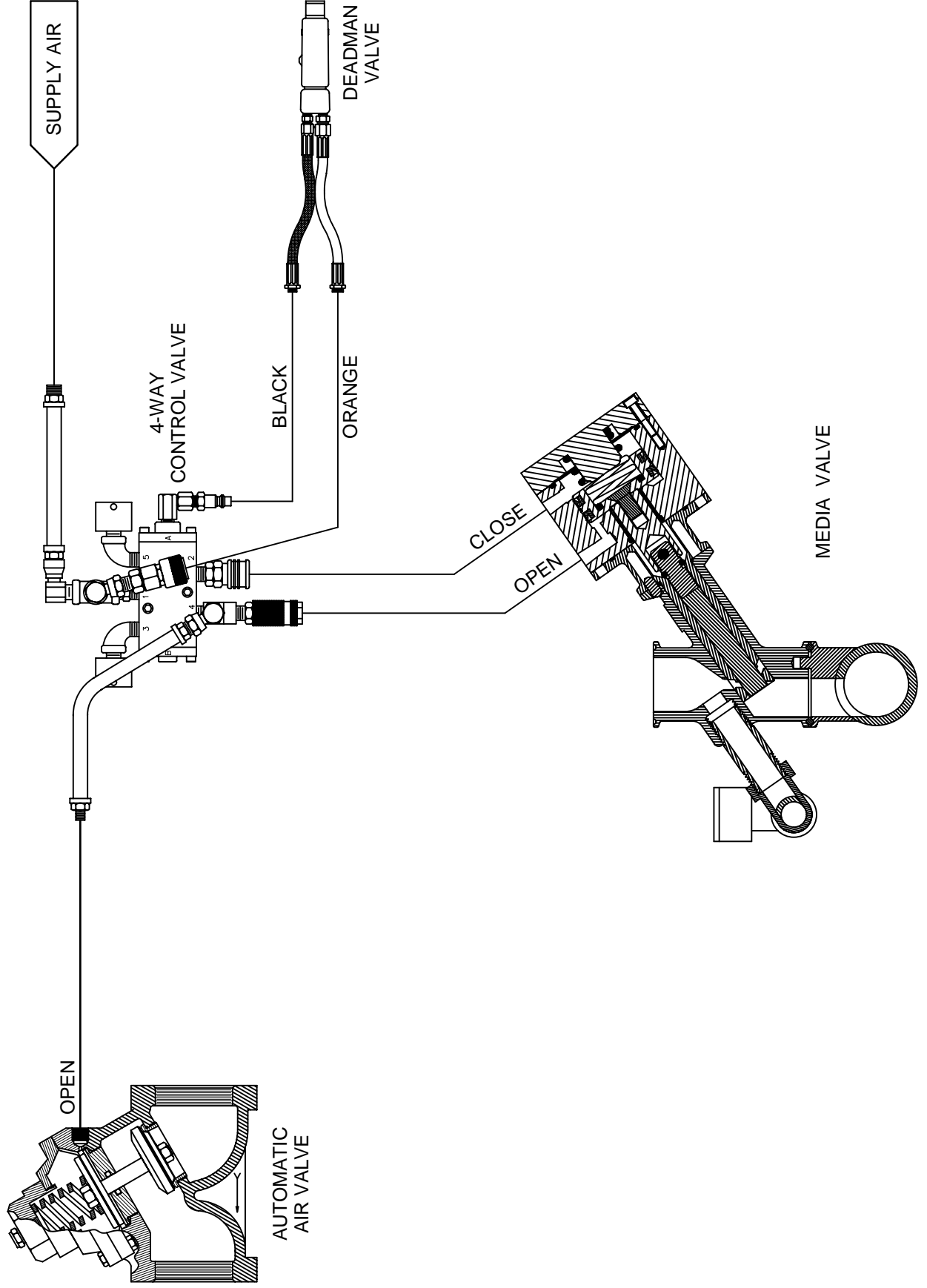
The media cutoff option separates control of the automatic air valve and media valve requiring a separate switch and control valve to operate each function.

The deadman valve operates only the automatic air valve turning blast air on or off. A separate media cutoff switch and control valve operate the media valve turning it on or off. The media cutoff switch is interlocked to operate the media valve only when the deadman valve is actuated.

Note: Optional electric deadman/media cutoff controls are available which function identically to the standard pneumatic controls except the deadman and media cutoff electric switches operate electrically actuated control valve.

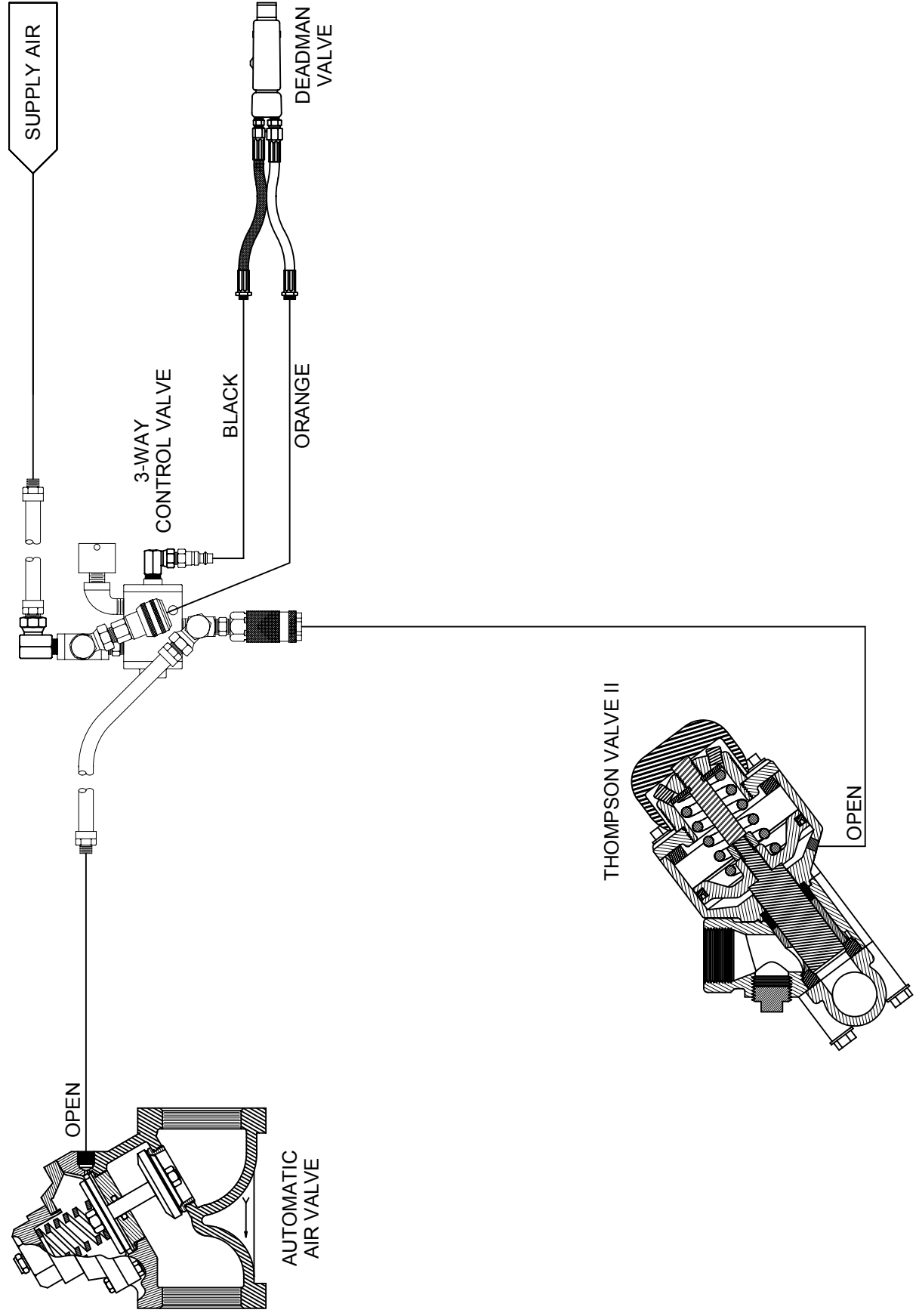
PNEUMATIC CONTROLS WITH MEDIA VALVE

DEADMAN CONTROL DIAGRAM

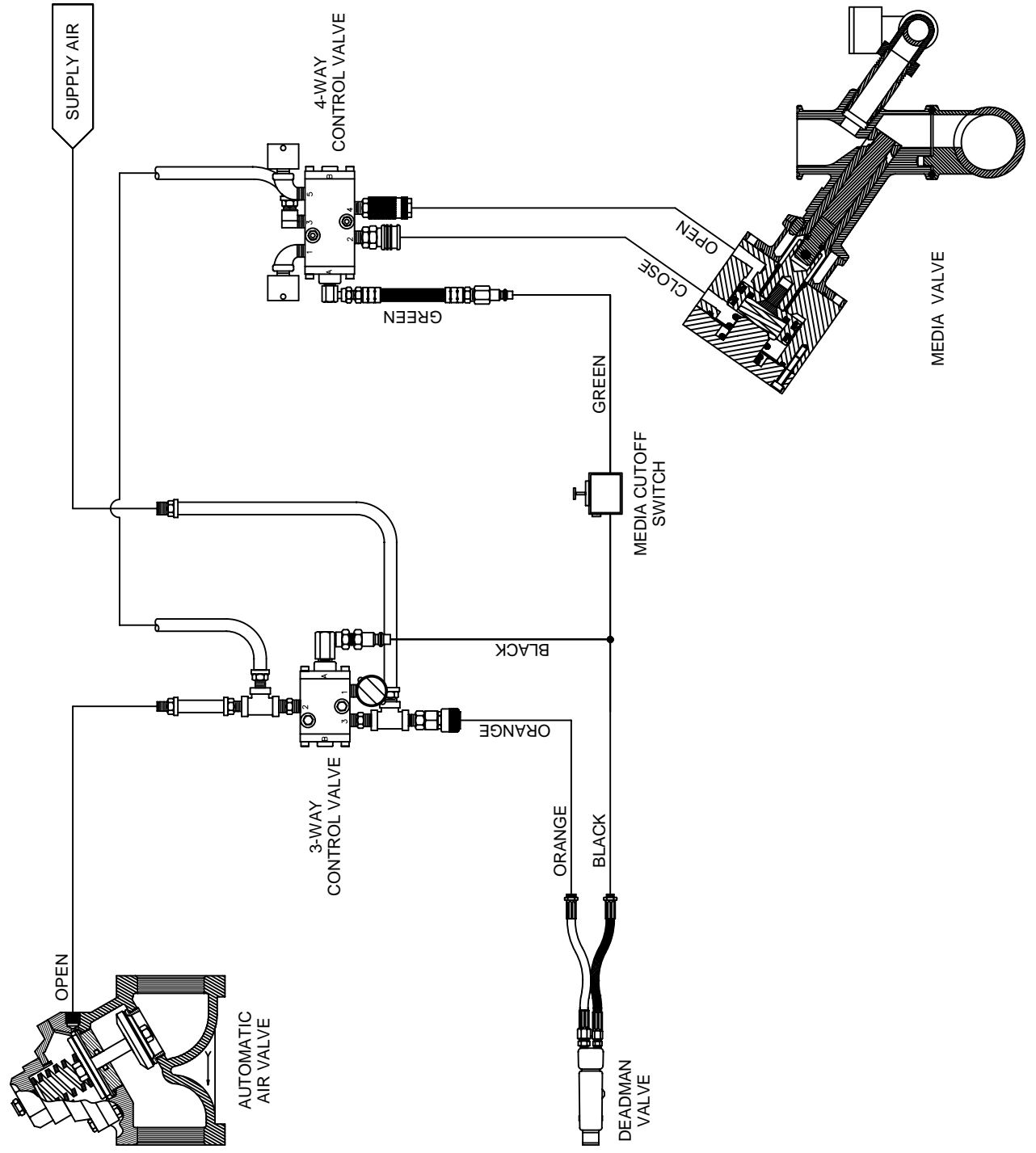


PNEUMATIC CONTROLS WITH THOMPSON VALVE II

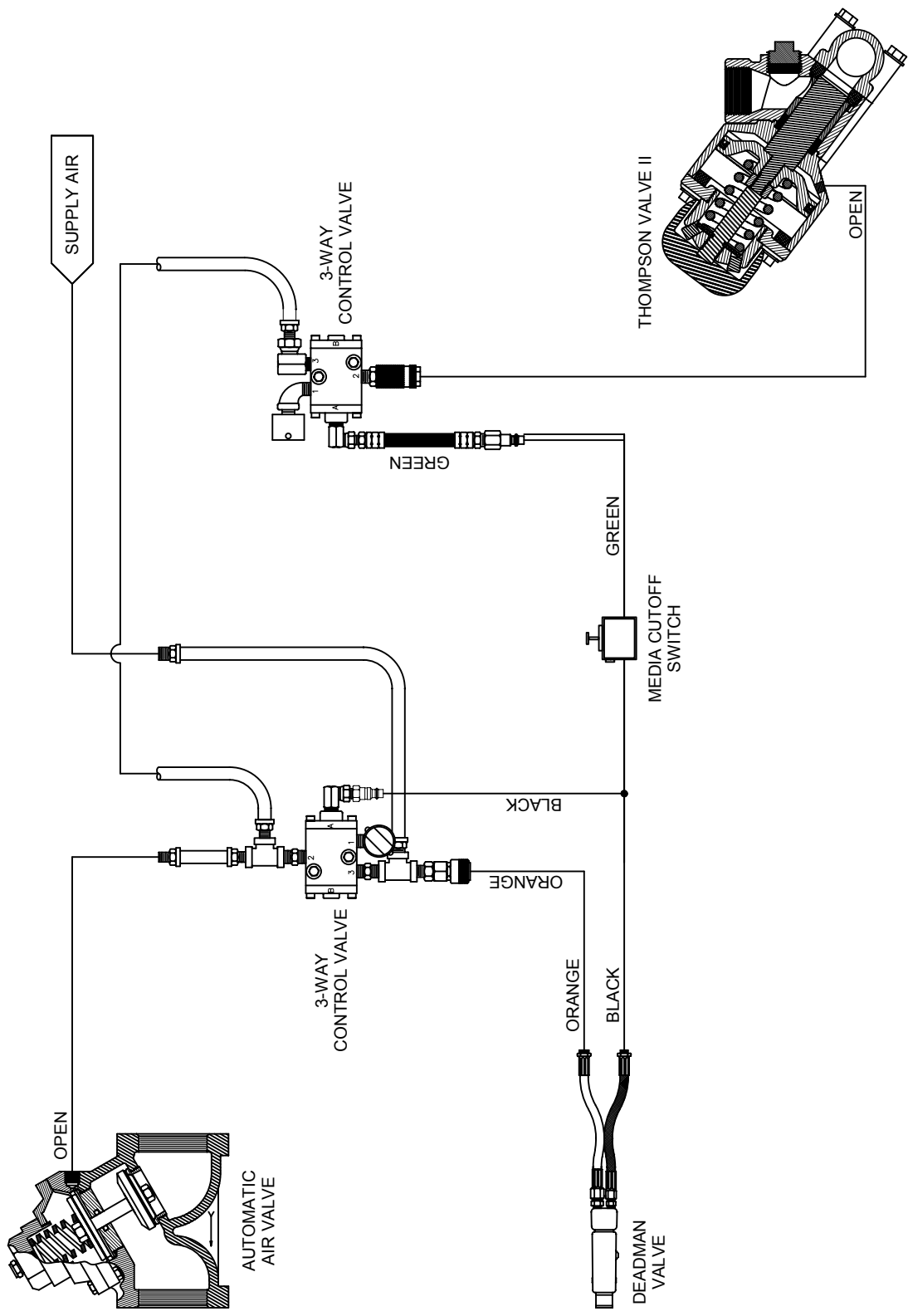
DEADMAN CONTROL DIAGRAM



PNEUMATIC ABRASIVE CUTOFF CONTROLS WITH MEDIA VALVE DEADMAN CONTROL DIAGRAM



PNEUMATIC ABRASIVE CUTOFF CONTROLS WITH THOMPSON VALVE II DEADMAN CONTROL DIAGRAM



DUST SUPPRESSION SYSTEM

Water can be added at the nozzle to suppress dust generated from blasting. The unit does not provide a water pump, so only nozzles utilizing utility pressure water supplies (30 to 100psi) for dust suppression can be used. Water supply to the dust suppression device can be throttled using a petcock valve near the nozzle.

SX OPTIONAL EQUIPMENT

1. Media Capacity

<u>Model</u>	<u>Capacity Cubic Ft.</u>	<u>50# Bags</u>	<u>Approx. Run Capacity</u>	<u>Dry Weight</u>
11SX	1	1	30 min.	135 lbs.
12SX	2	2	1 hr.	220 lbs.
13SX	2	4	2 hr.	540 lbs.

2. Media Cutoff Switch

Media flow (on/off) control separate from deadman control allowing media to be cutoff and cleared from the blast hose prior to shutdown. Useful when elevated blasting is required, also extends blast hose life.

3. Electric Deadman/Media Cutoff Switch

Electric controls available in 12V DC, 24 VAC, 115 VAC improves deadman response time. Useful when blast hoses in excess length of 50' are required, or when elevated blasting. Also a good safety feature. **ELECTRICAL CONTROLS ARE NOT FOR USE IN EXPLOSION HAZARD ENVIRONMENTS.**

4. Blast Hose Harness

Standard Hose is 1-1/4" diameter x 50' 50mm nozzle holder. 1" diameter hose is also available. Extension hose is available in 25' increments.

SX OPTIONAL EQUIPMENT

5. Stainless Steel Nozzle

Although slightly heavier than standard nylon nozzle holders, a stainless steel nozzle holder improves electrostatic bonding and reduces wear adding an important safety benefit. Available in 1" and 1-1/4" diameter 50mm thread.

6. Nozzle Extension Tubes

Lightweight rigid blast hose extension fitting between the nozzle holder and nozzle are used for extending operator reach. Available in 2', 3', and 4' lengths with 50mm threads.

7. Specialty Nozzles

Refer to Equipment Selection Section 5 or HTC Applications Update Volume 8, No. 27.

EQUIPMENT SELECTION

<u>Section</u>	<u>Page</u>
4.1 Nozzle Selection	2-5
<ul style="list-style-type: none">• Air Requirement• Physical Limitations of Substrate• Environmental Limitations• Aggressiveness• Dust Control• Nozzle Performance Summary• Media Compatibility	
4.2 Media Selection	5-6
4.3 Blast Hose Harness Selection	6

EQUIPMENT SELECTION

The abrasive blasting process is controlled by selecting the proper nozzle, selecting the proper type of media and adjusting the ACCUSTRIP SYSTEM® Delivery Device controls. Proper equipment selection and operation of the ACCUSTRIP SYSTEM® Delivery Device allows the operator to control aggressiveness, dust control, visibility and other factors to optimize productivity.

4.1 Nozzle Selection

Selection of the proper nozzle may largely be a matter of trial. However, consideration of the following factors will be useful. Also refer to HTC Applications Update Vol. 8, No. 27.

Air Requirement

Nozzle size, or throat diameter determines the amount of air (SCFM) required to operate the ACCUSTRIP SYSTEM® Delivery Device at a specific blast pressure. Most nozzles are available, ranging in sizes from #3 to #8. Consult the Air Requirements Section 11 of the manual to determine maximum nozzle size based on available compressed air supply.

For example, the operator wants to use a #6 (3/8" orifice) nozzle with a blast pressure of 70 psi. A sample calculation for the total air supply requirement is provided below:

Nozzle Blast Air	170 CFM	(from Air Consumption Chart)
Breathing Air Hood	12 CFM	Section 11
External Moisture Separator Bleed	10 CFM	
ACCUSTRIP Moisture Separator Bleed	<u>10 CFM</u>	
	202 CFM	

For this application, a 250 CFM air compressor would be more than adequate. Note that the CFM given above is actually SCFM (standard cubic feet per minute) or suction air flow at the compressed inlet. Operating at high altitudes, with fouled inlet filters, or older compressors will cause this figure to be de-rated. Example: Air compressors at 5000' above sea level are de-rated by 20%.

EQUIPMENT SELECTION

The optimum combination of nozzle size and pressure is a matter of trial and depends on the coating to be removed, the type of substrate, and other factors.

Often a smaller nozzle operating at higher pressure is better at removing thick coatings because the abrasive is traveling at higher velocity making it more aggressive. On thin coatings or cleaning applications, a larger nozzle operating at a lower pressure is often the better choice.

Physical Limitations of the Substrate

Physical limitations of the substrate to be cleaned such as small size, intricate structures, available space, reach etc. may require short nozzles to be used. Generally, long venturi nozzles are more productive and are typically used on tough coatings if ergonomically feasible. Ergonomic aids such as handles, extensions, pistol grip deadmen, swivels, etc. are available. Consult the Optional Equipment Section 3 of this manual.

Environmental Limitations

Use of the ACCUSTRIP SYSTEM® Delivery Device in Explosion Hazard environments requires specific nozzles and equipment for bonding and grounding. Refer to HTC Application Update #15, Vol. 6.

Environmental regulations governing air emissions, the types of waste generated and means of disposal may affect wet or dry blasting and nozzle selection.

Aggressiveness

Various nozzle types and the means of introducing water into the nozzle greatly affect nozzle aggressiveness. Refer to Nozzle Performance Summary Section 4 to estimate aggressiveness.

Dust Control

Various nozzle types and the means on introducing water into the nozzle greatly affect dust control. Refer to Nozzle Performance Summary Section 4 to estimate dust control.

EQUIPMENT SELECTION

Nozzle Performance Summary				
Nozzle	Sizes	Aggressiveness		Dust Level
		Dry	Wet	
Profile Performance*	6,8	10	8.5	5
Performance	4,6,8	10	8.0	2
Standard UBI*	3,4,5,6,7,8,10	6.8	-	10
Hi-Pro	5,6,7,8	6.5	6	9
WIN™ Nozzle*	4,5,6,7,8	5.3	4	2
Short UBI*	3,4,5,6,7,8,10	5	-	10
Fan	6,8	3.5	3.3	7

1 (lowest) through 10 (highest)

*Denotes Profile Media capability

Productivity comparison generated using 10 mil epoxy on steel test panels. Dust comparison is estimated. Use Performance summary for relative comparison only. Actual results will vary.

EQUIPMENT SELECTION

Although specific nozzles are sometimes needed for specific jobs, the following nozzles are recommended as applicable for most requirements.

- **Performance Nozzle:** Best combination of dust control and aggressiveness, soft abrasive.
- **Fan Nozzle:** Fast area coverage, light blasting or cleaning. Soft abrasive.
- **PROFILE Performance Nozzle:** Most aggressive blasting, hard or soft abrasive.

Media Compatibility

Profile media and other media containing hard abrasives are not compatible with some Schmidt® Blast Nozzles. Refer to the Nozzle Performance Summary Chart for nozzles compatible with Profile Media. Use of Profile Media or other hard abrasives in incompatible nozzles will cause destructive wear.

4.2 Media Selection

- **Aviation (Turbine) Formula** – Recommended for use in the aviation industry such as for the stripping of aircraft aluminum. It is also recommended for projects requiring the utmost in media flow control.
- **Composite Formula** – Recommended for use on sensitive substrates such as plastics, rubber and composite materials. Also recommended for cleaning substrates with small cavities.
- **Electronics Formula** – Recommended for use on the most sensitive substrates such as electronic components. It is also recommended for use with microblasters.
- **Maintenance Formula*** – This media combines productivity and cost effectiveness. It is recommended for general maintenance applications and can be used on a wide variety of substrates.
- **Maintenance Formula XL*** – This media is more aggressive on tough coatings than Maintenance Formula. It is recommended for projects where increased productivity is desired.
- **Maintenance Formula with SupraKleen™ Rinse Accelerator*** – This is a cost effective media with a special rinse aids in the rinsing of spent sodium bicarbonate blast media as well as process residues from the surface.

EQUIPMENT SELECTION

- **Maintenance Formula XL with SupraKleen™ Rinse Accelerator*** – This media combines increased productivity with superior rinsing aid in the rinsing of spent sodium bicarbonate blast media as well as process residues from the surface.
- **Profile Formula XL with SupraKleen™ Rinse Accelerator*** – This media is the most aggressive and has the highest productivity. It can be used to remove rust, mill scale, and any hard to remove coatings. It can also be used to achieve a white metal surface with about 2 mils profile. This media also contains a special rinse additive to aid in the rinsing of spent sodium bicarbonate blast media as well as process residues from the surface. Note: This media should be used with wear resistant nozzle (e.g., ceramic or tungsten carbide).
- **HydroFlex Formula XL*** – This media is recommended for high pressure water applications. It also has significantly improved grease and oil removal properties.

*** Denotes media approved by USDA and A1 Cleaner and acceptable for use in FDA regulated facilities.**

4.3 Blast Hose Harness Selection

Blast hose harnesses are available in 1” and 1-¼” diameters. Standard hose length is 50’ (25’ increments optional), with 50mm nozzle holder.

Applications using in excess of 150 SCFM (#6 nozzle @ 60 psi) should use 1-¼” diameter blast hose harness.

Installation details are shown in SX Set-up Instructions Section 5.

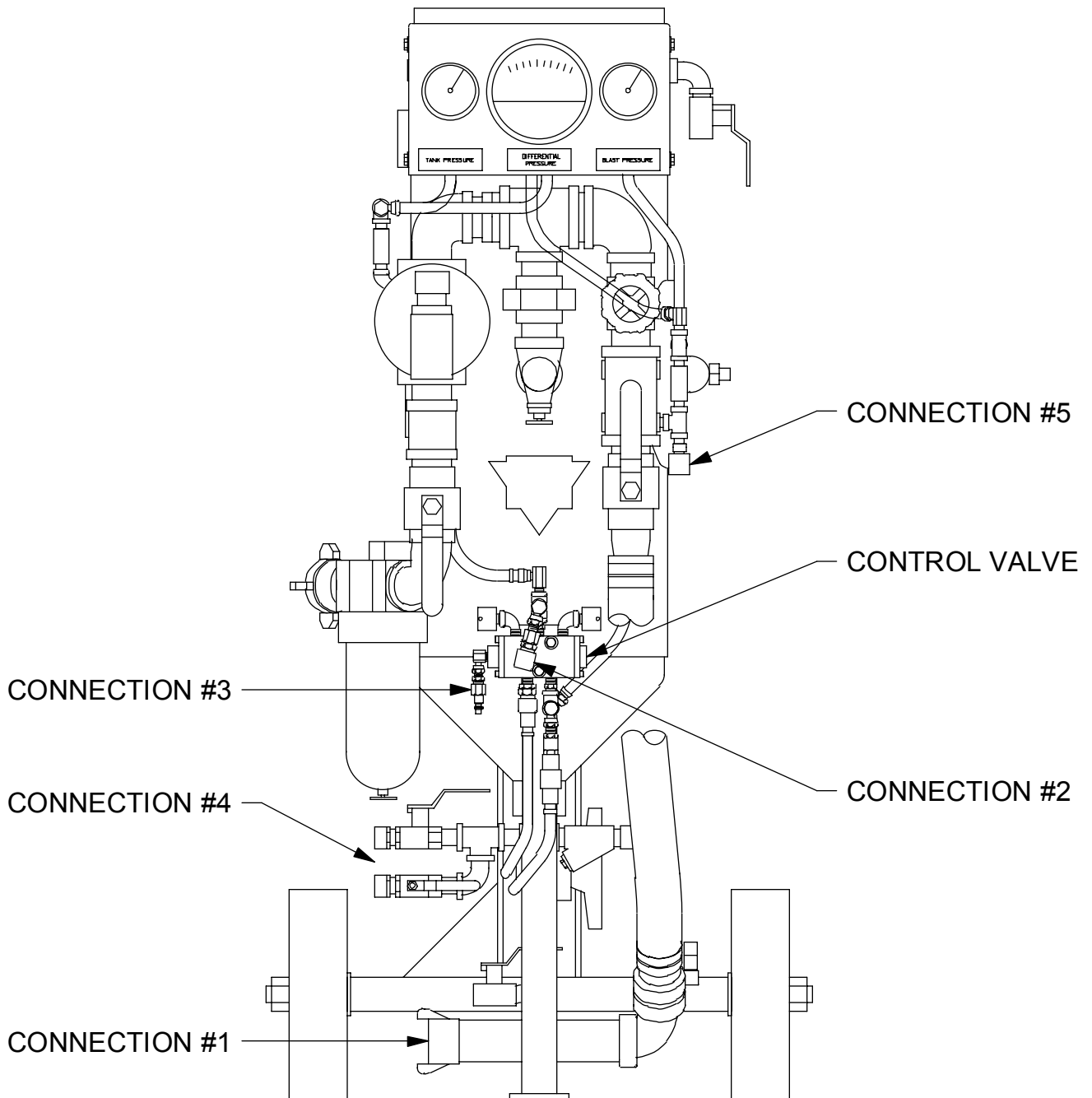
Note: SX models utilize utility pressure water supply (30 to 100 psi).

SX SET-UP INSTRUCTIONS

<u>Section</u>	<u>Page</u>
5.0 Connect Blast Hose Harness	2-4
5.1 Set-Up Machine	5-6
5.2 Selecting a Media Orifice	7
5.3 Filling the Tank with Media	8-9

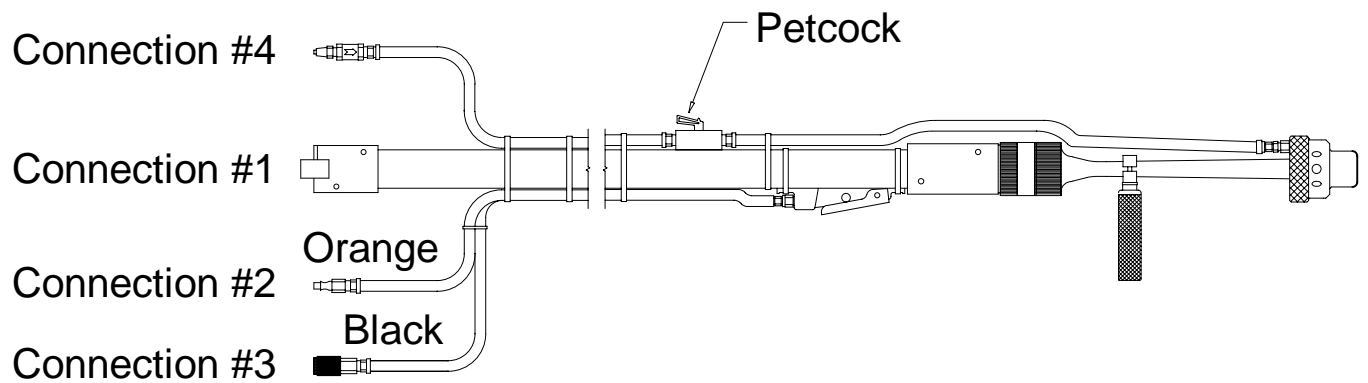
SET-UP INSTRUCTIONS

SX Blast Hose Harness Connection Diagram



5.0 Connecting Blast Hose Harness

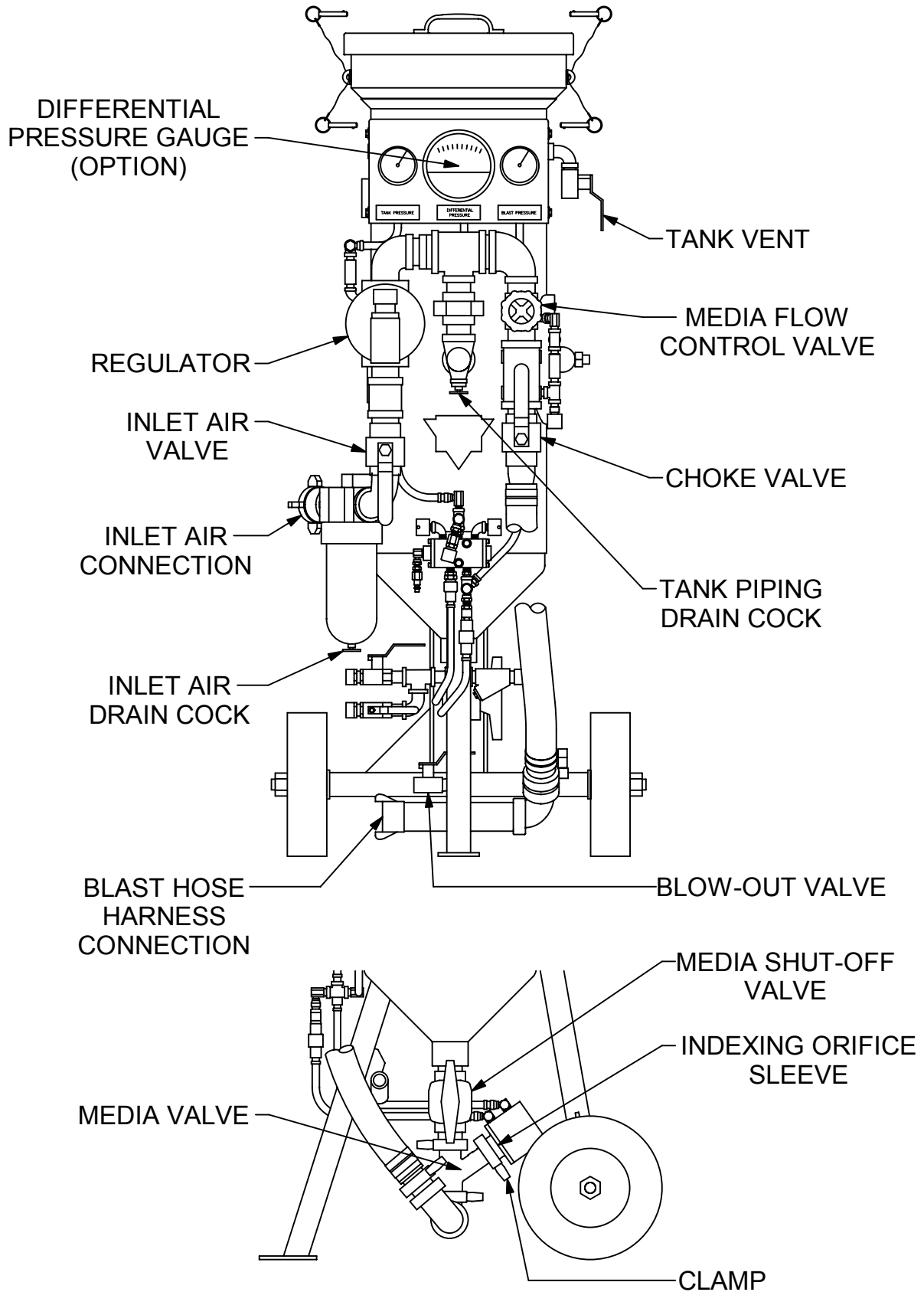
Connect corresponding hose connections to connections as shown on the SX blast hose harness connection diagram (opposite page).



Connection #5 CAN BE USED TO OPERATE A VIBRATOR OR PNEUMATIC DIAPHRAM PUMP. PRESSURE TO CONNECTION #5 IS ONLY AVAILABLE AT BLAST PRESSURE AND WHEN THE DEADMAN VALVE IS PRESSED.

For use with all UBI Nozzles, Hi-Pro, Fan, Performance Nozzles

MACHINE SET-UP

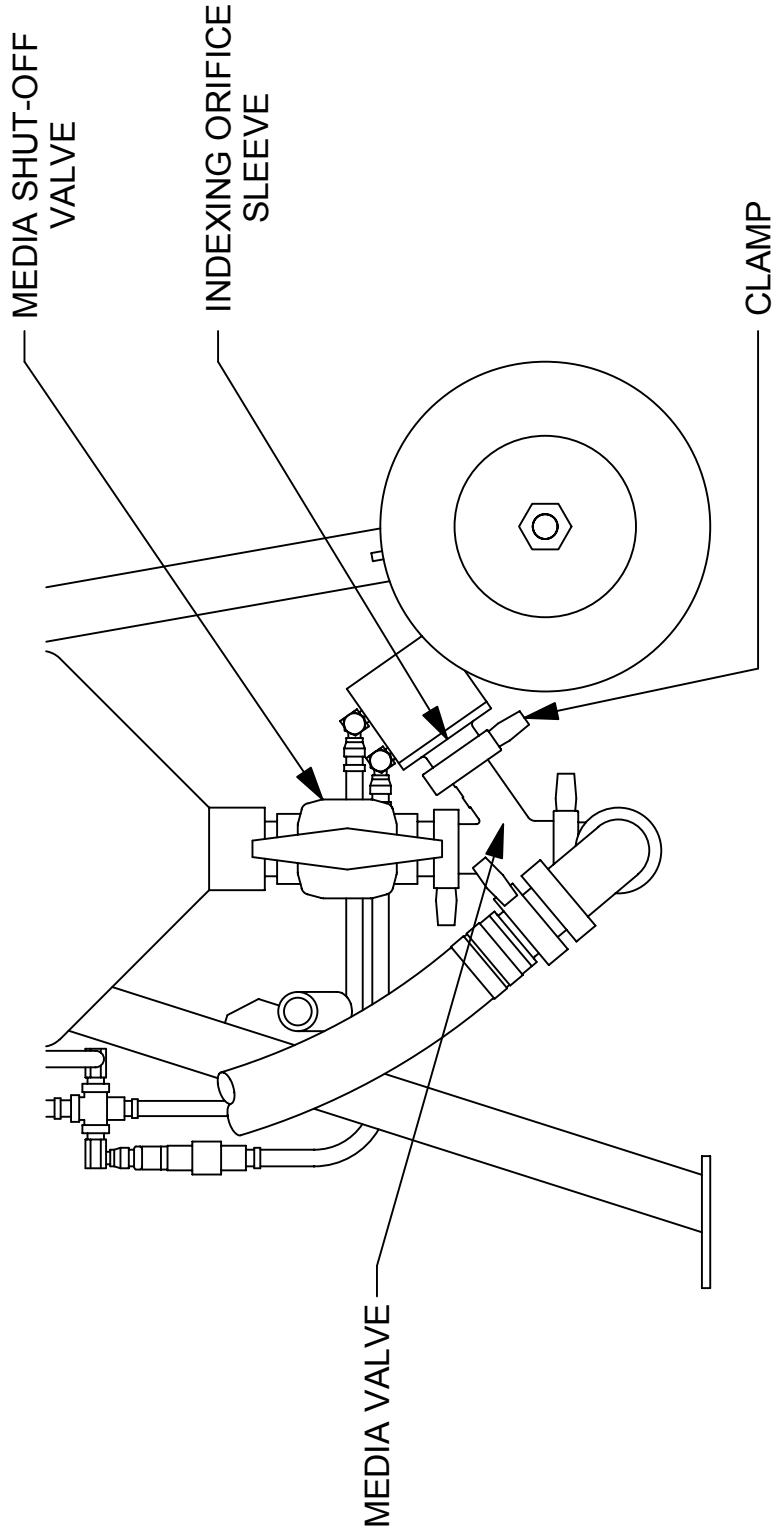


SX SET-UP INSTRUCTIONS

5.1 Setup Machine

1. Close inlet air valve
2. Connect inlet air hose from air supply (compressor). Connect water supply hose for dust control.
3. Connect blast hose harness. See Section 5.0
4. Open choke valve.
5. Open tank vent valve.
6. Slightly open inlet air drain cock.
7. Close tank piping drain cock.
8. Set correct media orifice setting by closing the media shutoff valve and taking the clamp off and turning the orifice sleeve to the desired setting. Reinstall clamp. See Section 5.2 for proper orifice size setting.
9. Open media shutoff valve.
10. Close blowout valve on media valve.
11. Zero the differential pressure gauge. (Option on some systems)
12. Completely open media flow control valve.

MACHINE SET-UP



SX SET-UP INSTRUCTIONS

5.2 Selecting a Media Orifice

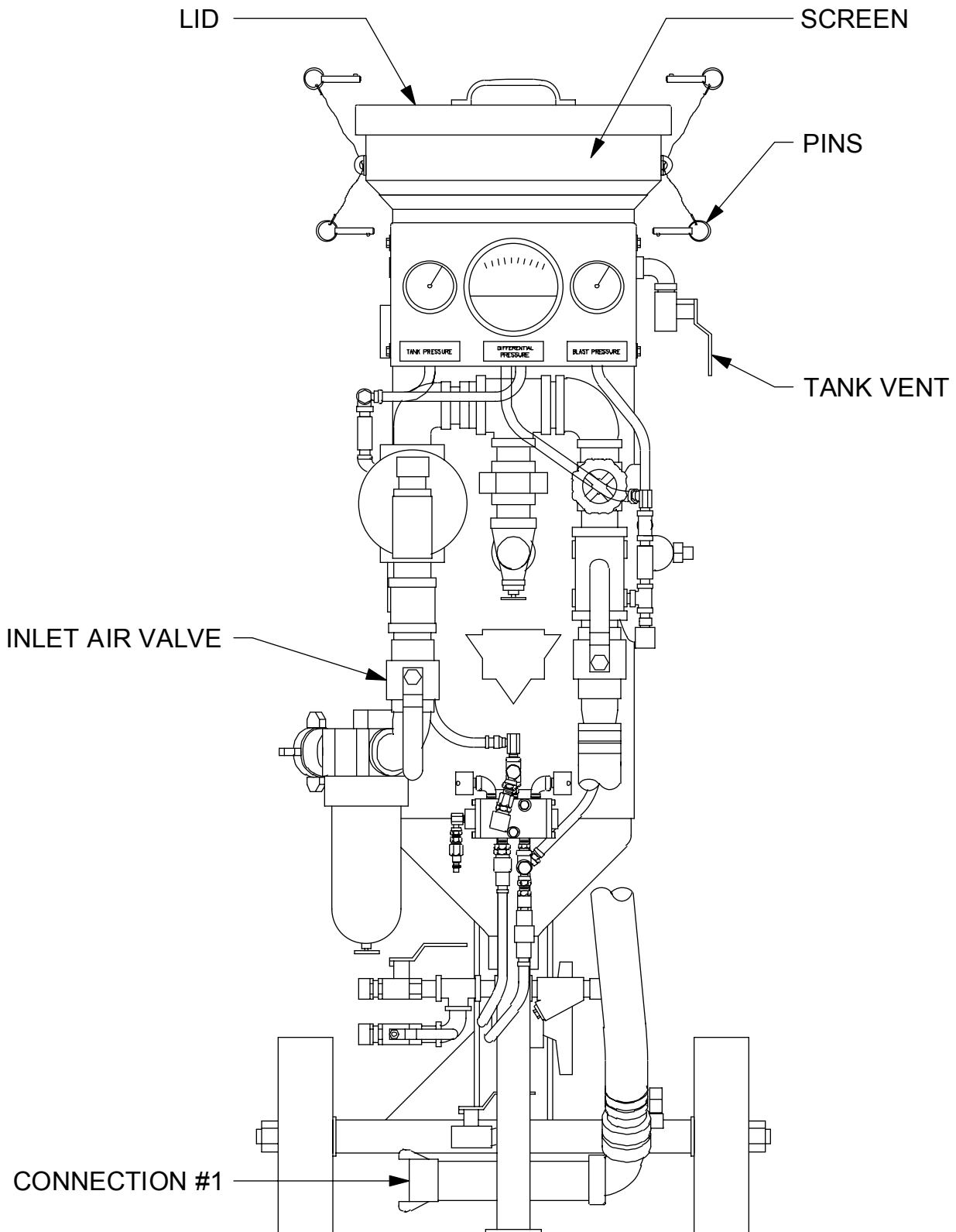
Always stop blasting & shut off media shutoff valve (horizontal position) before adjusting orifice size.

Select a suitable orifice size in the media valve that is appropriate for the application. Standard orifice sizes of .110", .125", .156" (standard) and .180" are all contained within the media valve and can be selected by closing media valve (horizontal position), remove the clamp and indexing the orifice sleeve. The arrow located on the top side of the media valve must be aligned with the stamped orifice size on the orifice sleeve. Replace the clamp once the orifice size has been selected and indexed.

Note: Smaller orifices sizes (.110", .125") are suitable when lower media flow rates are required, when smaller blast nozzles are being used or when blasting with sodium bicarbonate composite blast media. Larger orifice sizes (.156", .180") are suitable when blasting at higher media flow rates with larger blast nozzles using coarser grades of sodium bicarbonate blast media. Typical orifice setting is .156" for Maintenance and Maintenance XL media, .125" for Composite Grade.

Consult the Media Flow Calibration Curves Section 12 for approximate media flow rates through specific orifices at various differential pressures.

FILLING THE TANK WITH MEDIA



SX SET-UP INSTRUCTIONS

5.3 Filling the Tank with Media

1. Stop blasting.
2. Close inlet air valve
3. Open tank vent valve.
4. Install screen.
5. Remove lid.

Note: If an unknown type or amount of media is already in the tank, the tank should be emptied by removing the media valve and allowing any residual media to drain out. Reinstall media valve.

6. Fill tank with desired media

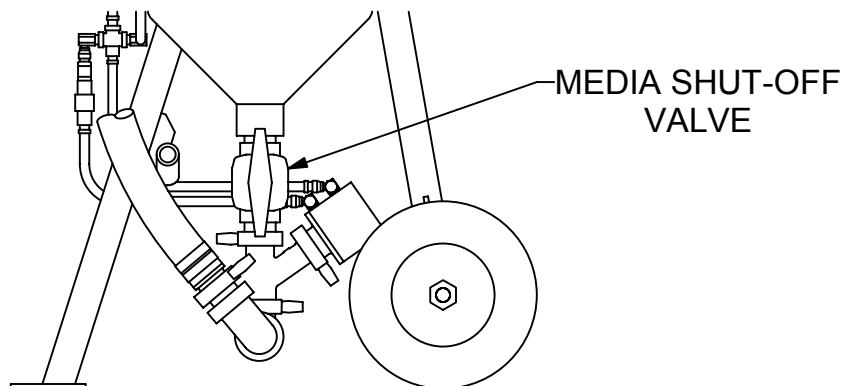
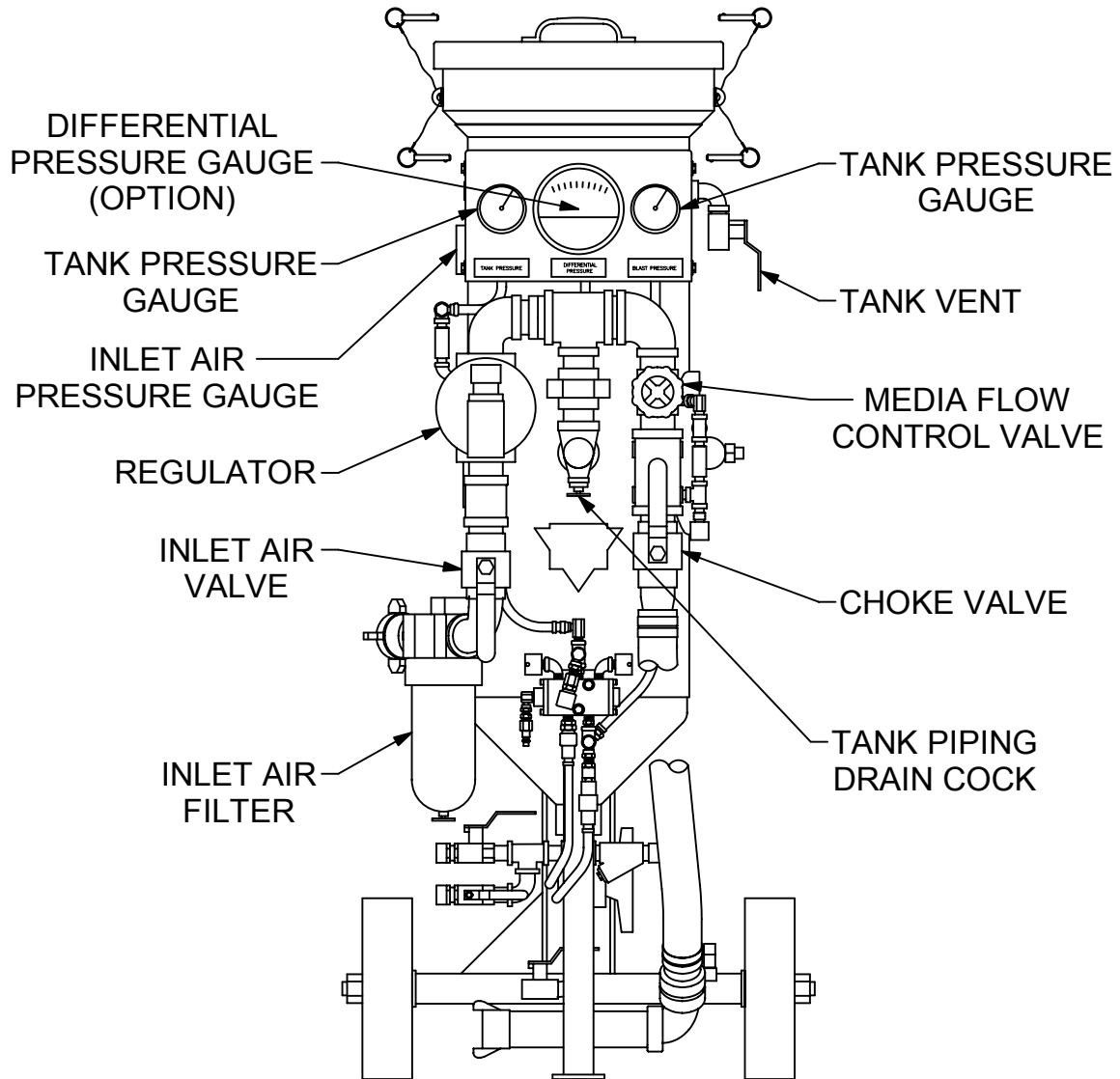
Note: 11SX capacity is 1 50# bag.
12SX capacity is 2 50# bags.
13SX capacity is 4 50# bags.
Do not exceed tank capacity or damage could occur to regulator.

7. Remove screen and lid and push any excess media into tank.
8. Reinstall screen and lid.
9. Close tank vent valve.

SX OPERATING INSTRUCTIONS

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6.0 Operating the Machine	3
6.1 Adjusting Media Flow	4
• Setting Media Flow	
• Changing Media Flow	
6.2 Blasting	5
6.3 Shutdown and Storage	6

OPERATING INSTRUCTIONS



SX OPERATING INSTRUCTIONS

6.0 Operating the Machine

1. Close tank vent valve. Turn on air supply (compressor).
2. Open inlet air valve
 - a. Open choke valve.
 - b. Completely open media flow control valve.
 - c. Open media shutoff valve.
 - d. Close blow out valve.
3. Verify inlet air pressure (side gauge) is above 60 psi.
4. Observe tank pressure (left gauge).

If tank pressure is higher than desired blast pressure.

- a. Turn regulator down (CCW).
- b. Vent tank pressure below desired blast pressure (use tank vent valve).
- c. Turn regulator up (CW) to desired blast pressure.

If tank pressure is lower than desired blast pressure, turn regulator up to desired blast pressure:

Note: Differential pressure gauge will indicate above full scale until blasting begins.

5. Push deadman to begin blasting.

Note: Differential pressure gauge will indicate above full scale until blasting begins.

6. While blasting, close (CW) the media flow control valve gradually to obtain the desired differential pressure setting indicating the desired media flow.

Note: Consult Media Flow Calibration Curves Section 12 for approximate media flow at various differential pressures for given orifices sizes.

7. Periodically open the tank piping drain cock to release trapped moisture.

SX OPERATING INSTRUCTIONS

6.1 Adjusting Media Flow

1. Setting media flow.
 - a. Verify media grade in tank.
 - b. Consult Section 5.2 to select appropriate orifice size. Typically .156 for Maintenance and Maintenance XL media, .125 for Composite Media.
 - c. Open media shutoff valve.
 - d. Activate media cutoff switch (option).
 - e. Completely open media flow control valve (CCW rotation).
 - f. Begin blasting and set desired blast pressure.
 - g. Consult Media Flow Calibration Curves Section 12 to determine differential pressure setting for desired media flow at selected orifice setting, and minimum differential pressure expected at the specific blasting conditions.
 - h. While blasting, begin to close media flow control valve (CW rotation) until differential pressure reads correct setting for desired media flow per Calibration Chart. Read differential pressure as the difference between the blast pressure gauge and tank pressure gauge while blasting, or read directly from the differential pressure indicator gauge.

2. Changing Media Flow

To change sodium bicarbonate blast media flow, turn the media flow control Clockwise to increase media flow and Counterclockwise to decrease media flow. Media usage rate can be approximated by bag usage per hour or second (Pitch) changes in the nozzle. Louder more “shrill” sound indicates light media flow and a slugging or pulsating sound at the blast nozzle indicates media flow that is too rich. Check Media Flow Calibration Curves Section 12 for flow rates at specific differential pressure settings for given orifices sizes.

Note: The media flow control valve acts to restrict blast air creating a differential pressure across the orifice in the media valve. Increasing differential pressure increases media flow. Differential pressure is a function of blast air pressure and volume. Blasting at lower blast pressures (below 60 psi) will require that the media flow control valve be closed (turn clockwise) further, to produce differential pressure and increase media flow. At higher blast pressures, slight adjustments to the media flow will result in more significant changes in differential pressure and media flow. Orifice sizes in the media valve can be changed to obtain different ranges of media flow.

ALWAYS STOP BLASTING AND CLOSE MEDIA SHUTOFF VALVE BEFORE CHANGING ORIFICE SIZE.

SX OPERATING INSTRUCTIONS

6.2 Blasting

- a. Proper safety equipment should be worn by the operator and anyone in the affected area.
 - Ear Plugs.
 - Safety glasses.
 - Respiratory protection.
 - Appropriate clothing.
 - Gloves
- b. Point nozzle away from all personnel.
- c. Depress deadman valve to begin blasting.
- d. If wet blasting, open dust control water and/or air petcocks to begin dust suppression.
- e. Release deadman and shutoff dust suppression petcocks to stop the process.

The operator can adjust several variables to optimize productivity and ergonomics.

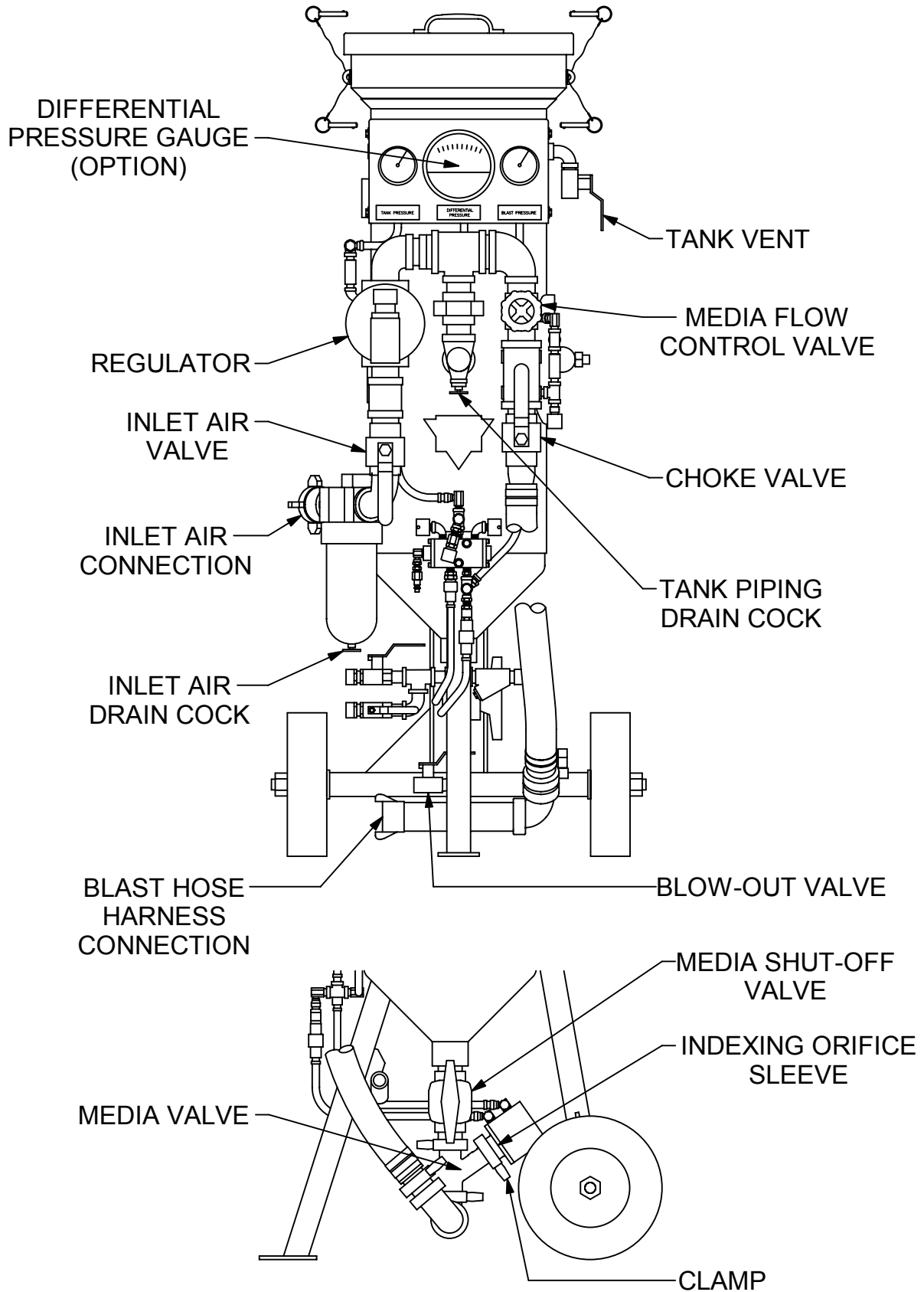
- **Blast Pressure:** Higher blast pressure performs more work and increases the aggressiveness of the abrasive cutting action.
- **Media Grade:** Sodium bicarbonate blast media is available in several grades formulated for various applications. Differences in particle size, flow additives, abrasive additives, rinse accelerators etc. increase the effectiveness of the process. Consult Section 4.2 or media sales literature to determine the most effective media for a specific application.
- **Media Flow:** adjust the media flow for optimum performance for the substrate being cleaned or decoated. Too little media flow will waste time and compressed air; too much media will cause slugging in the nozzle and caking on the substrate.
- **Stand-Off distance:** The distance between the blast nozzle and the work surface adjusts the aggressiveness of the media and the size of the blast pattern. Optimum stand-off distance is typically 6-14”.
- **Dwell Time:** The faster the operator moves the nozzle, the more surface the operator covers. It is inefficient to overblast an area or move too quickly and have to go back and re-blast.
- **Blast Angle:** For most applications, an angle of 45° to 60° to the work surface is recommended. For removal of thick layers of coatings, an angle of 70° to 80° into the coating will often cut under and lift off the coating without abrading away the full thickness.
- **Deadman Position** on the blast harness can be adjusted, or pistol grip deadman handle can be used.
- Use of a smaller “whip” hose extension attached to the end of the blast hose harness near the nozzle can relieve hose pressure and ease nozzle movement. Typical “whip” hose is 1” diameter x 10’ long.

SX OPERATING INSTRUCTIONS

6.3 Shutdown & Storage

1. Stop blasting.
2. If the media cutoff option is installed, switch off media flow and activate the deadman to clear media from the blast hose.
3. Shut off inlet air valve.
4. Open tank vent valve.
5. Close media shutoff valve.
6. Remove media valve and shake excess media from within the valve (open bypass valve).
7. Drain excess media from tank by opening media shutoff valve and allowing media to drain into a container. This media can be reused if stored in an air tight container.
8. Reinstall media valve.
9. Close blow out valve.
10. Disconnect air supply hose, blast hose harness and water supply hose.
11. Install and pin in place screen and lid.
12. Store unit with tank vent valve open and inlet air valve closed to ensure unit is depressurized and vent condensation.
13. Store unit under cover and above freezing temperatures.

PREVENTATIVE MAINTENANCE



PREVENTATIVE MAINTENANCE

The key to minimizing equipment failures in the ACCUSTRIP SYSTEM® Delivery Device is Preventative Maintenance. Preventative Maintenance is maintenance done to the equipment before it breaks down (fails), designed to keep the equipment functioning properly. While the equipment is designed for trouble-free operation, failure to perform preventative maintenance will eventually lead to equipment failure.

Refer to Diagram (opposite page) for locations of valves and components.

7.1 When to Perform Preventive Maintenance

1. Prior to any important demonstration.
2. When a system is received with unknown service history.
3. Every 100 hours of operation
4. After any use in particularly harsh environments.

For equipment requiring immediate service refer to the Trouble Shooting Section of this manual.

7.2 Preventative Maintenance Checklist

Perform all items on the checklist and replace any worn or damaged components. If equipment failures or defects are uncovered while executing the checklist, refer to the Trouble Shooting Section of this manual for instruction.

1. Visually inspect the tank for dents, weldments, rust, etc. **Do not operate any machine with apparent damage to the pressure vessel.** Consult the manufacturer if the machine appears to have been damaged or modified.
2. Remove all supply lines and depressurize the system.
3. Unclamp and remove media from tank.
4. Drain all residual media from tank.
5. Remove handway cover.
6. Scrape all residue from internal tank walls using a wire brush. If tank internals appear oily, use a solvent wipe to remove oily residue. **Never use water to clean the inside of the tank.**

PREVENTATIVE MAINTENANCE

7. Blow all residue from the pot using compressed air.
8. Check the condition of the handway gasket.
9. Check the pop up valve alignment by manually pushing the pop up head against the gasket seat checking for alignment and solid seal. Reinstall handway cover.
10. Remove piping drain cock bushing and clean all residue from tank supply piping using a bottle brush and compressed air. Replace drain bushing.
11. Remove inlet air filter bowl. Clean air residue from inside bowl and filter screen element. Check condition of bowl o-ring seal. Reinstall element and bowl.
12. Verify media flow adjustment valve turns approximately 8½ rotations full closed to full open. Set media flow control valve completely open (CCW position).
13. Remove control valve end cap (either side) and spring. Remove and clean old lubricant from shuttle spool and valve body. Inspect o-ring condition. Re-lubricate shuttle spool with silicone based lubricant. **Do not apply petroleum based lubricant as this will swell o-rings causing failure of the control valve.** Reassemble control valve.
14. Remove automatic air valve cap (4 bolts). Clean residue from above and below diaphragm. Inspect diaphragm and vent plug condition. Reassemble.
15. Check and refill glycerin in gauges.
16. Inspect screen lower rim for dents. Check the screen fit on tank rim.
17. Lubricate all quick disconnect fittings using WD-40 or equivalent.
18. Check condition of all hoses and hose connections
19. Disassemble and clean media valve.
 - a. Unclamp and remove orifice sleeve and lower air pipe.
 - b. Clean residue from air pipe and media valve body using bottle brush and compressed air.

PREVENTATIVE MAINTENANCE

- c. Remove actuator from orifice sleeve (2 bolts).
 - d. Remove and inspect 3 o-rings.
 - e. Clear orifice holes using a thin wire.
 - f. Clean all residue from inner and outer orifice sleeve diameters and piston using acetone, Scotch Brite™ pad and bottle brush.
 - g. Wipe orifice sleeve and piston thoroughly using a clean rag.
 - h. Inspect orifice sleeve and piston for gauling, dents, chips or excessive war.
 - i. Reinstall 3 o-rings.
 - j. Reassemble piston, actuator and orifice sleeve.
Assemble dry. Use NO lubricants. Use of any lubricants will cause failure.
 - k. Reconnect media valve control hoses. Leave media valve removed from the tank until actuation is tested (Step 21).
20. Test pop up valve operation.
- a. Close media shutoff valve and tank vent valve. Replace handway and tank piping drain bushing.
 - b. Close choke valve.
 - c. Apply air pressure to the ACCUSTRIP SYSTEM® Delivery Device machine (60 psi minimum).
 - d. Open inlet air valve and verify that pop up valve seats and pressure builds in tank (adjust regulator to set tank pressure).
21. Test media valve actuation.
- a. Close choke valve. Connect media valve control hoses.
 - b. Connect deadman supply and return lines to the control valve.

PREVENTATIVE MAINTENANCE

- c. While air pressure is supplied to the machine, activate the deadman valve and verify that the media valve piston travels up (retracts) into the orifice sleeve to clear the orifice holes.
 - d. Release deadman valve and verify that the media valve piston returns to its original sleeve to clear the orifice holes.
 - e. Key the deadman several times repeating steps c and d.
22. Select desired orifice size and clamp orifice sleeve into media valve body. Reinstall media valve onto the machine. Close the blow out valve.
23. If the machine has the differential pressure indicator option:
- a. Re-zero the needle using the center screw.
 - b. Remove and clean high and low side filter/strainer elements. Clean using hot water and dry using compressed air.
24. Remove and clean any dust suppressions spray tips on blast nozzles.
25. Disassemble and clean any dust suppression spray tips on blast nozzles.
26. Check condition of nozzle holder and end connections on blast hose. Cut hose and re-attach end fittings if necessary. Check blast hose for wear (thin spots). Replace if necessary.

The ACCUSTRIP SYSTEM® Delivery Device machine is now ready for operation. It is recommended to operate the machine briefly prior to any demonstration.

TROUBLESHOOTING

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TROUBLESHOOTING

8.0 Troubleshooting

The Troubleshooting Guide is meant to help isolate and correct the more frequently occurring ACCUSTRIP SYSTEM® Delivery Device equipment malfunctions.

8.1 How to Use the Troubleshooting Guide

1. Locate the symptom description from the table or contents which most accurately describes the problem.
2. Listed in each subsection are the most probable causes of the malfunction in most likely occurring order.
3. Verify the probable causes in order listed and perform as many of the bulletized steps as necessary to correct the malfunction.
4. Refer to the Diagrams Section for location of components and details.
5. If the Troubleshooting Guide is not helpful, contact your local distributor or Axxiom Manufacturing, Inc. at 800 231-2085 for assistance.

8.2 Unit Will Not Turn On

Close choke valve and media shutoff valve when troubleshooting the control circuit.

1. Inlet air supply is insufficient or off.

Verify inlet pressure gauge reads above 60 psi. Unit requires 60 psi minimum to activate the pneumatic control circuit (control valve, media valve actuator, automatic air valve).

- Turn on air supply (compressor).
 - Open inlet air valve.
 - Open any upstream air supply valves (remote moisture separator, etc.).
2. Media flow control valve is closed.
 - Fully open (CCW) the media flow control valve.
 3. Choke valve is closed.

TROUBLESHOOTING

4. Deadman circuit is incomplete.
 - a. Verify the deadman supply and return hoses are connected correctly as outlined in Section 5.0.
 - b. Verify that supply pressure reaches the deadman valve.
 - Loosen the deadman supply hose (orange hose) at the deadman valve and verify that air leaks from the fitting when inlet air is on.
 - If not, there is a blockage in the deadman supply hose (orange hose). Remove the orange hose and clear it. Check orange hose for leaks.
 - c. Verify that the deadman valve is functioning.
 - Loosen the deadman return hose (black hose) at the deadman valve and verify that air leaks from the fitting when inlet air is on and deadman is pressed.
 - If not, the deadman valve is blocked. Remove and clean the deadman valve using warm water dry using compressed air.
 - d. Verify that deadman return air reaches the control valve.
 - Disconnect the deadman return hose (black hose) quick disconnect from the control valve and insert a male quick disconnect stem into the female quick disconnect body on the black hose. Verify that air vents rapidly from the black hose when the inlet air valve is open and the deadman is pressed.
 - If not, there is a blockage in the black hose. Remove the black hose and clear it. Check black hose for leaks.
5. The Control Valve is malfunctioning.
 - Disconnect the media valve “Open” supply hose (larger of the 2 quick disconnects supplying air to the base of the media valve actuator nearest the orifice flange) from the control valve.

TROUBLESHOOTING

Insert a male quick disconnect stem into the female quick disconnect body on the control valve. Verify that air vents rapidly from the media valve “Open” quick disconnect on the control valve when the inlet air is on and the deadman is pressed.

- If not the control valve shuttle spool is stuck or one of the ports is blocked.
 - a. Remove the control valve end cap (either).
 - b. Remove the shuttle spool and return spring.
 - c. Inspect the o-rings.
 - d. Clean old lubrication residue from the spool and valve body.
 - e. Blow out all valve ports by removing an upstream fitting and applying compressed air.
 - f. Re-lubricate using non petroleum based lubricant (silicone).
 - g. Reassemble control valve.

- 6. The automatic air valve is malfunctioning.
 - Verify previous Step 5 assuring air supply to the automatic air valve when the deadman is pressed.
 - Verify automatic air valve vent is clear. Remove vent plug and clean with warm water and dry using compressed air.
 - Verify automatic air valve diaphragm is in good condition.
 - a. Remove automatic air valve cap (4 bolts).
 - b. Clean residue from above and below diaphragm.
 - c. Verify that automatic air valve shaft travels freely.
 - d. Verify that supply hose to automatic air valve is clear and not leaking.

TROUBLESHOOTING

- e. Inspect diaphragm for tears. Replace if necessary.
- Rebuild automatic air valve.

8.3 Unit Will Not Turn Off

Close choke valve and media shutoff valve when trouble shooting the control circuit.

1. The deadman valve vent is blocked.

Press the deadman to activate the control circuit. Release the deadman and listen for the deadman return hose (black hose) to vent back through the deadman valve.

- If not, vent is heard
 - a. Remove the deadman valve and clean with warm water and dry using compressed air to clear the vent.
 - b. Verify that the black hose is clear.
2. The control valve is malfunctioning
 - Disconnect the media valve “Close” supply hose (smaller of the 2 quick disconnects supplying air to the rear of the media valve actuator farthest from the orifice sleeve flange) from the control valve. Insert a male quick disconnect stem into the female quick disconnect body on the control valve. Verify that air vents rapidly from the media valve “Close” quick disconnect on the control valve when the inlet air is on and the deadman is released.
 - If not, the control valve shuttle spool is stuck. Perform Step 5 in Section 8.2
 3. The automatic air valve is malfunctioning.
 - Rebuild the automatic air valve including replacement of the return spring and valve seat seal.

TROUBLESHOOTING

8.4 Unit is Slow to Start/Stop

Note: Normal deadman response time is 2 to 3 seconds. Extended blast hose lengths over 50' will cause a delay in the deadman action (start/stop time). Use of an optional electric deadman is recommended when using blast hoses over 50' length to quicken deadman response.

Close choke valve and media shutoff valve when trouble shooting the control circuit.

1. Deadman supply hoses are damaged or leaking.
 - Check or replace deadman supply and return hoses or end connections.
2. Deadman valve vent is blocked.
 - Perform Step 1 in Section 8.3.
3. Control valve is malfunctioning.
 - Perform Step 2 in Section 8.3.

8.5 Unit “Slugging” Media When Starting Up

Note: Elevated operation of the blast nozzle above the ACCUSTRIP SYSTEM® Delivery Device machine (more than 20') will cause media to remain in the hose when the deadman is released. This media may cause a slug when the deadman is reactivated. Use of an optional media cutoff switch is recommended when elevated blasting is required. This feature allows the media to be shutoff and cleared from the blast hose prior to releasing the deadman eliminating a slug upon reactivation.

Use of an optional electric deadman will also minimize slugging problems by quickening deadman response.

1. The media flow adjustment valve is closed excessively causing excess media flow.
 - Readjust the media flow control valve.

TROUBLESHOOTING

- a. Completely open (CCW) the media flow control valve.
 - b. Begin blasting.
 - c. While blasting, gradually close (CW) the media flow control valve until the nozzle pitch (sound) changes or, set desired differential pressure using the blast and tank pressure gauges (or optional differential pressure indicator gauge).
2. Incorrect media valve orifice size has been selected.
 - Verify that the correct media valve orifice size has been selected for the media grade and desired media flow rate. Consult Media Flow Calibration Curves in Section 12.
 3. The media valve piston is stuck.
 - Close the choke valve. Unclamp and remove the lower air tube from the media valve. Open the media shutoff valve. Pressurize the tank (approximately 60psi) and verify that media leaks from the media valve to the ground when the deadman is off.
- Note: Depending upon tank pressure, it is normal for a small amount of air (approximately 5-10 cfm) to leak from the tank through the media valve lower section.
- Refer to Section 8.12.

8.6 No Media Flow

1. Differential pressure is set too low/wrong orifice size.
 - Adjust the media flow control valve beginning full open (CCW) closing gradually (CW) causing differential pressure to increase until desired media flow is obtained. Consult Media Flow Calibration Curves Section 12.
 - Verify correct orifice size is selected for desired media grade and flow range.

TROUBLESHOOTING

2. Tank is empty.
 - Shake tank. Open blow out valve and verify that no media vents.
 - Refill tank.
3. Media valve actuator control hoses are disconnected or damaged.
 - Reconnect actuator control hoses.
4. Media cutoff switch (optional) is off.
5. Orifice hole is blocked.
 - Crack blow out valve several times attempting to blow out blockage.
 - Close media shutoff valve and choke valve. Remove orifice sleeve leaving actuator control hoses connected. With inlet air on, activate deadman to retract piston. Clear orifice holes using a thin wire. If piston will not retract, perform all steps outlined in Section 8.12 Step 1. Reinstall orifice sleeve.
 - If problem persists:
 - a. Depressurize machine.
 - b. Drain all remaining media from tank by removing media valve.
 - c. Remove handway cover and scrape tank internals using wire brush.
 - d. Blow out all residuals using compressed air.
 - e. If tank internals appear oily, clean using a solvent wipe. **Never use water to clean tank internals.**
 - f. Check inlet air supply for excessive moisture.
 - g. Reassemble machine. Use media screen and fill with clean, dry media. Always use machine lid.
6. Media valve piston is stuck.
 - Perform all steps outlined in Section 8.12 Step 1.

TROUBLESHOOTING

8.7 Too Much Media

1. Differential pressure is set too high/wrong orifice size.
 - Adjust the media flow control valve beginning full open (CCW) closing gradually (CW) causing differential pressure to increase until desired media flow is obtained. Consult Media Flow Calibration Curves Section 12.

Note: Small blast nozzles should be run leaner (less media) than large nozzles ie. typically a #8 nozzle should be run at approximately 2-3 lbs./min. A #4 nozzle should be run at approximately ½-1 lb./min.

Finer grades of media should be run leaner than coarse grades ie. a given nozzle will begin slugging sooner (lower lb./min. flow rate) using Composite Formula media than the same nozzle using XL Grade media.

8.8 Media Flow Erratic

1. Tank is nearly empty.
2. Media is wet.
 - Drain tank. Blow out all residue. Reload with fresh media. Check inlet air for excessive moisture.
3. Media flow control is worn/damaged.
 - Replace media flow control valve packing/internals.
4. Tank is leaking.
 - Close tank vent valve.
 - Check handway gasket for defects.
 - Check pop up valve for defects. Refer to Section 8.9 Step 7.

8.9 Tank won't Pressurize/Maintain Pressure

1. Blast pressure regulator set too low.
 - Turn regulator (CW) to increase tank pressure.

TROUBLESHOOTING

2. Inlet pressure too low (60 psi minimum required).
3. Close tank vent valve, open inlet air valve.
4. Tank has been overfilled. Do not exceed tank capacity.
5. Handway gasket is defective.
6. Media valve clamp is improperly assembled or missing a gasket.
7. Pop-up valve is defective or blocked.
 - a. Verify pop-up head is properly aligned with seat.
 - Remove handway cover and adjust pop-up valve supplying piping to properly align with valve seat.
 - b. Verify pop-up stem is attached to pop-up head.
 - If not, remove pop-up tube assembly. Reattached pop-up stem to pop-up head using Loctite 271.

8.10 Tank Will Not Depressurize

1. Inlet air valve is open.

Inlet air valve must be closed to vent the tank.
2. Pop-up valve is fouled (stuck).
 - Remove tank piping drain cock bushing and clean media from pop-up valve supply piping using compressed air.
 - Remove pop-up valve assembly and clear caked media from pop-up tube and stem.

8.11 Blast Pressure Too Low/Fluctuates

1. Insufficient air supply (volume) for the size nozzle selected.

Refer to Section 11 – Air Requirements to determine air volume required to operate a specific size nozzle at desired blast pressure.

TROUBLESHOOTING

2. Check compressor for malfunction.
3. Media flow control valve excessively closed causing excess differential pressure.
 - Adjust the media flow control valve beginning full open (CCW) closing gradually (CW) causing differential pressure to increase until desired media flow is obtained. Consult Media Flow Calibration Curves Section 12.
4. Inlet air filter element is fouled.
 - Remove and clean inlet air filter element.
5. Lead in blast hose harness.
 - Check blast hose for holes or loose end connections
 - Verify blast hose connection gaskets are in good condition.
6. Leak in inlet air supply hose.
 - Check inlet air connection gasket.
 - Check condition of air supply hose and end connections.
7. Defective blast pressure regulator.
 - Disassemble main regulator body. Clean and re-lubricate slider mechanism.
 - Rebuild regulator (pilot and slave).
8. Additional demand has been added to the available air supply. Check air requirements.
 - If possible, add a large air reservoir tank upstream of the ACCUSTRIP SYSTEM® Delivery Device machine to dampen fluctuations in air supply volume.

TROUBLESHOOTING

8.12 Media Valve Malfunction

1. Piston is stuck.
 - Disassemble and clean the media valve.
 - a. Close media shutoff valve and choke valve.
 - b. Remove the media valve from the machine.
 - c. Remove the orifice sleeve.
 - d. Remove the actuator from the orifice sleeve (2 bolts). If disassembly is difficult:
 - Apply 100+ psi air supply to the “open” actuator port closest to the orifice sleeve flange.
 - Use the piston removal tool or a ½” diameter wooden dowel to tap the piston from the orifice hole end toward the actuator.
 - Once the piston has retracted full travel (½”), release air pressure allowing the actuator to separate from the orifice sleeve.
 - Remove wrist pin securing the piston to the actuator (orange actuators unscrew piston from actuator after removing wrist pin).
 - Place orifice sleeve on wooden blocks and use piston removal tool or ½” diameter wooded dowel to tap piston out of orifice sleeve.
 - e. Remove 3 o-rings from piston and orifice sleeve.
 - f. Clear all orifice holes using a thin wire.
 - g. Thoroughly clean all residue from piston and orifice sleeve base using acetone, Scotch Brite™ pad and bottle brush.

TROUBLESHOOTING

- h. Wipe piston and orifice sleeve using clean rag.
 - i. Inspect orifice sleeve bore. Reject if gauling, dents, or wear are apparent.
 - j. Inspect piston. Reject if excessive chipping or wear is apparent.
 - k. Reinstall 3 o-rings. Reassemble orifice sleeve. **Assemble dry. Use no lubricants. Use of lubricants will cause failure.**
 - l. Connect media valve actuator control hoses to the control valve. Close choke valve and media shutoff valve.
 - m. Activate deadman valve with inlet air supply on and verify that the piston retracts to open position clearing the orifice holes. Release deadman and verify piston returns to closed position blocking orifice holes. Key deadman several times to verify action.
 - n. Reassembly media valve. Select desired orifice setting. Install media valve and lower air tube onto ACCUSTRIP SYSTEM® Delivery Device.
 - If problem persists, lubricate actuator.
 - Disassemble orifice sleeve assembly.
 - Remove rear actuator cover (10 screws).
 - Clean old lubrication residue from inside of actuator.
 - Inspect lip seals and o-rings.
 - Re-lubricate using non-petroleum based lubricant (silicone).
 - Reassemble.
2. Orifice sleeve is tight in valve body.
- Clean valve body bore.

TROUBLESHOOTING

- a. Remove media valve from unit.
- b. Remove orifice sleeve.
- c. Remove o-ring from orifice sleeve and unclamp lower air tube.
- d. Clean all residue from body bore and orifice sleeve using acetone, Scotch Brite™ pad and bottle brush.
- e. Wipe thoroughly with clean rag.
- f. Inspect valve body bore for gauling, rust or excessive wear.
- g. Inspect orifice sleeve for dents, rust or excessive wear.
- h. Check alignment pin for deformation. Round alignment pin as necessary using a file.
- i. Clean alignment pin holes in the orifice sleeve.
- j. Reassemble media valve. Assemble dry. **Use no lubricants. Use of lubricants will cause the orifice sleeve to seize in the valve body.**

8.13 Differential Pressure Gauge (optional) Malfunction

1. Gauge does not read zero

Gauge will ready full scale when tank is pressurized and deadman is off. Gauge reads differential pressure only when deadman is pressed.

- To zero the gauge:
 - a. Close inlet air valve.
 - b. Open tank vent valve to depressurize tank.
 - c. Use center screw (silver) to set needle to zero.
2. Needle sticks full scale when blasting.

Especially at high blast pressures, the gauge has a tendency to stick on full scale when the deadman is pressed.

TROUBLESHOOTING

- Fully open the media flow control valve (CCW). While blasting, tap the gauge face to jar the needle. Continue blasting and gradually close the media flow control valve to desired differential pressure setting.
3. Gauge accuracy relative to tank pressure and blast pressure gauges is off
- Remove “High” and “Low” gauge filters. Rinse filter elements with warm water and dry with compressed air. Reinstall elements.
 - Check control lines for leaks or loose connections.

8.14 Electric Deadman (Optional) Malfunction

1. Deadman will not activate machine.
- Check fuse.
 - Check control valve voltage. Apply correct voltage (12 VDC, 24 VDC, or 115 VAC) to control circuit.
 - Check blast hose harness electrical plug.
 - Check for loose or corroded electrical connections or damaged control wires.
 - Refer to Section 8.2.

RECOMMENDED SPARE PARTS

11SX

<u>Rebuild Kits</u>		Qty.
98820	Air Filter Replacement Part Kit 11SX	1
31100	Media Valve Replacement Part Kit	1
22116	Automatic Air Valve Replacement Part Kit 11SX	1
80188	Media Valve Actuator Replacement Part Kit	1
80197	Media Valve Tool Kit	1
98551	Control Valve Replacement Part Kit 4-Way	1
2003-007-99	Regulator Replacement Part Kit 11SX, 12SX	1

<u>Gaskets</u>		Qty.
4209-999	Air Inlet Coupling Gasket 11SX	5
7000-001-06	Handway Gasket 11SX	1
4227-305-99	Garden Hose Gasket	5
4214-999	Blast Hose Coupling Gasket	5
98503	Tri-Clamp Gasket	5

<u>Misc. Parts</u>		Qty.
40007	Pressure Gauge	-
80145	QD ¼ MNPT Body	1
92301	Tri-Clamp	2
95317	Blast Water Filter Element (140 m)	1
7119-002	Blast Hose Safety Clips	10
96000	QD ¼ FNPT Plug (Deadman Lines)	1
96001	QD ¼ MNPT Plug (Deadman Lines)	1
4224-301-02	QD ¼ FNPT Body (Deadman Lines)	1
96100	QD ¼ MNPT Body (Pot 4 Open MV)	1
96101	QD ¼ FNPT Plug (Open MV)	1
96102	QD ¼ FNPT Plug (Close MV)	1
96103	QD ¼ MNPT Body (Pot 2 Close MV)	1
80140	Deadman Valve (Western Tech Style)	1

<u>Other</u>		Qty.
7200-210	SX Line Manual	-

RECOMMENDED SPARE PARTS

12SX / 13SX

<u>Rebuild Kits</u>		Qty.
44101	Pilot Regulator Replacement Part Kit 12SX/13SX	1
2000-004	Slave Regulator Diaphragm Kit 12SX/13SX	1
31100	Media Valve Replacement Part Kit	1
2123-007-99	Automatic Air Valve Replacement Part Kit 12SX/13SX	1
2000-003-99	Slave Regulator Replacement Part Kit 12SX/13SX	1
50102	Air Filter Replacement Part Kit 12SX/13SX	1
80188	Media Valve Actuator Replacement Part Kit	1
80197	Media Valve Tool Kit	1
98551	Control Valve Replacement Part Kit 4-Way	1
50104	Air Filter Element 12SX/13SX	1

<u>Gaskets</u>		Qty.
4227-305-99	Garden Hose Gasket	5
4211-999	Air Inlet Coupling Gasket 12SX/13SX	5
4214-999	Blast Hose Coupling Gasket	5
7000-001-06	Handway Gasket 12SX/13SX	1
98503	Tri-Clamp Gasket	5

<u>Misc. Parts</u>		Qty.
2010-013	Differential Pressure Gauge	-
80260	Differential Pressure Gauge Filter Element	2
40007	Pressure Gauge 0-160 psi	-
50105	H2O Strainer Element	1
80145	QD ¼ MNPT Body (Deadman Lines)	1
92301	Tri-Clamp	2
95317	Filter Element Blast Water (140 m)	1
7119-002	Blast Hose Safety Clips.	10
96000	QD ¼ FNPT Plug (Deadman Lines)	1
96001	QD ¼ MNPT Plug (Deadman Lines)	1
4224-301-02	QD ¼ FNPT Body (Deadman Lines)	1

RECOMMENDED SPARE PARTS

12SX / 13SX

<u>Misc. Parts</u>		Qty.
96100	QD ¼ MNPT Body (Pot 4 Open MV)	1
96101	QD ¼ FNPT Plug (Open MV)	1
96102	QD ¼ FNPT Plug (Close MV)	1
96103	QD ¼ MNPT Body (Pot 2 Close MV)	1
80140	Deadman Valve (Western Tech Style)	1

<u>Other</u>		Qty.
7200-210	SX Line Manual	-

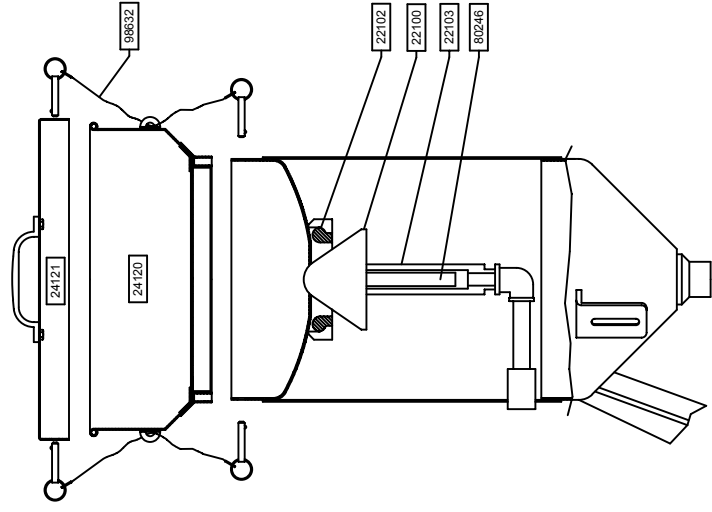
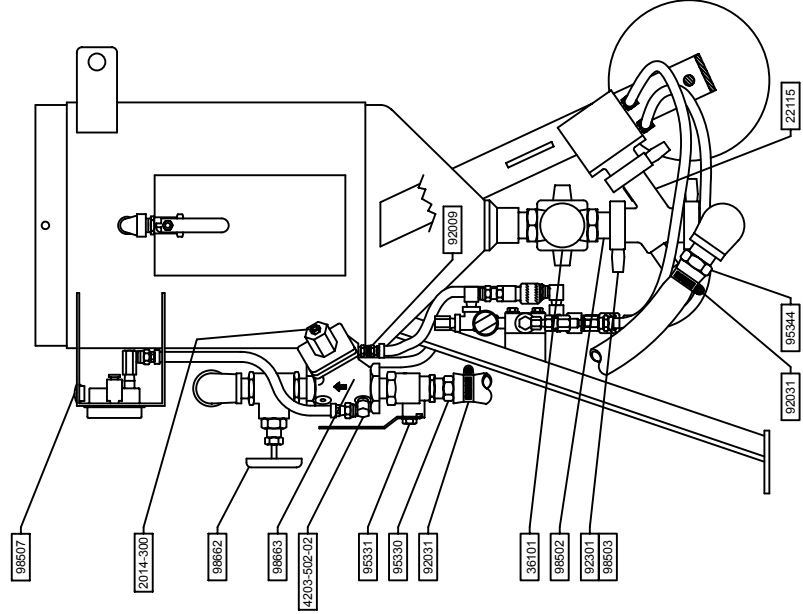
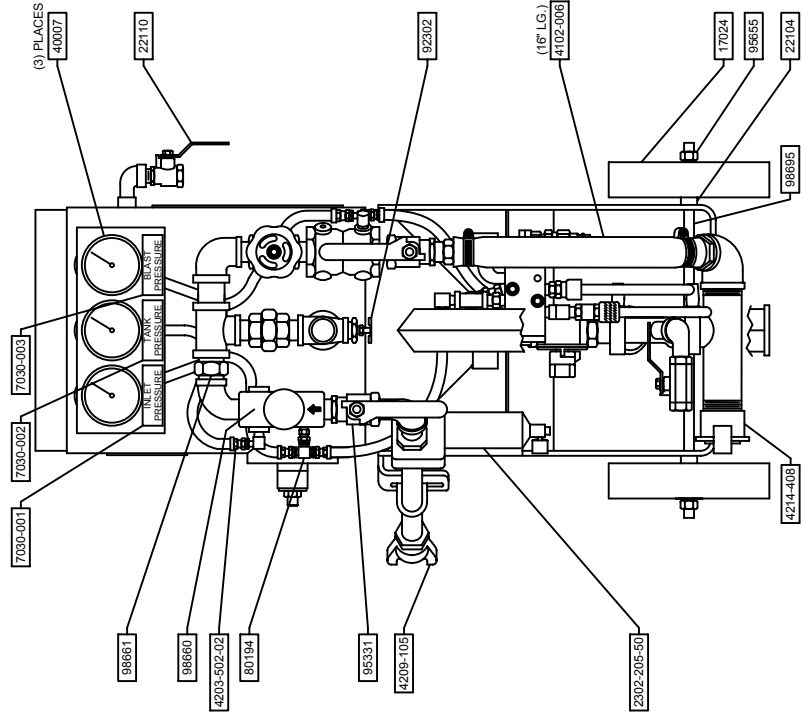
DIAGRAMS

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PART LIST	
DESCRIPTION	P/N
WHEEL 11SX	17024
VENT 1/8	2014-300
POP-UP HEAD 11SX, 12SX, 13SX	22100
POP-UP GASKET 11SX, 12SX, 13SX	22102
POP-UP GUIDE, 11SX	22103
AXLE SPACER, 11SX	22104
TANK VENT VALVE 11SX	22110
MEDIA VALVE 11SX	22115
AIR FILTER 11SX	2302-205-50
SCREEN 11SX, 12SX	24120
LID 11SX, 12SX	24121
MEDIA SHUT-OFF VALVE 1 1/4" BSP T, 12SX	36101
PRESSURE GAUGE 0-160 PSI	40007

PART LIST	
DESCRIPTION	P/N
HOSE 1" RED	4102-006
FITTING 1/4" MNPT x 1/4" FLARE 90°	4203-502-02
HOSE COUPLING 3/4" FNPT	4209-105
HOSE COUPLING 1 1/2" FNPT	4214-408
LABEL TAG INLET PRESSURE	7030-001
LABEL TAG TANK PRESSURE	7030-002
LABEL TAG BLAST PRESSURE	7030-003
TEE BRANCH 1/4" FNPT x 1/4" FLARE	80194
POP-UP STEM 11SX, 12SX, 13SX	80246
FITTING 1/8" MNPT x 1/8" FLARE STRAIGHT	92009
CLAMP 1" HOSE	92031
CLAMP	92301
DRAIN COCK 1/8"	92302

PART LIST	
DESCRIPTION	P/N
HOSE BARB 3/4" MNPT x 1" HOSE	95330
INLET AIR VALVE / CHOKE VALVE 11SX	95331
HOSE BARB 1" MNPT x 1" HOSE	95344
NUT 1/2-13 NYLON INSERT	95655
CLAMP FITTING 1 1/4" MBSPT	95602
CLAMP O-RING	95603
GAUGE CAP	95607
SCREEN HARDWARE	95632
BLAST PRESSURE REGULATOR 11SX	95660
MOISTURE ELIMINATOR 11SX	95661
MEDIA FLOW CONTROL VALVE 11SX	95662
AUTOMATIC AIR VALVE 3/4" 11SX	95663
AXLE 11SX	95695

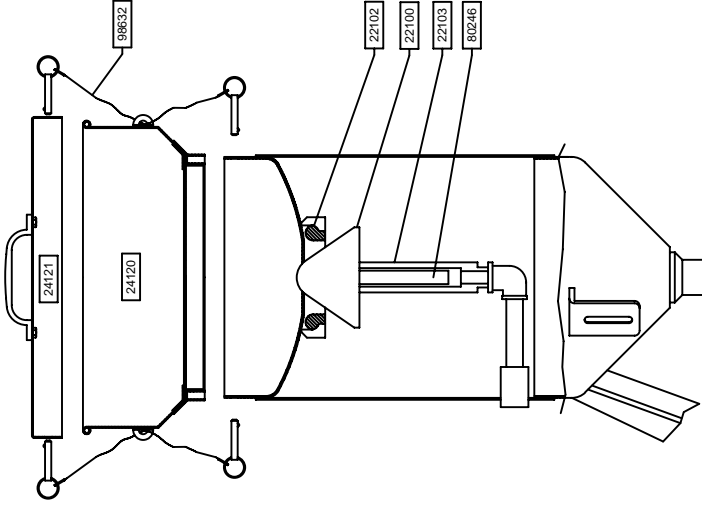
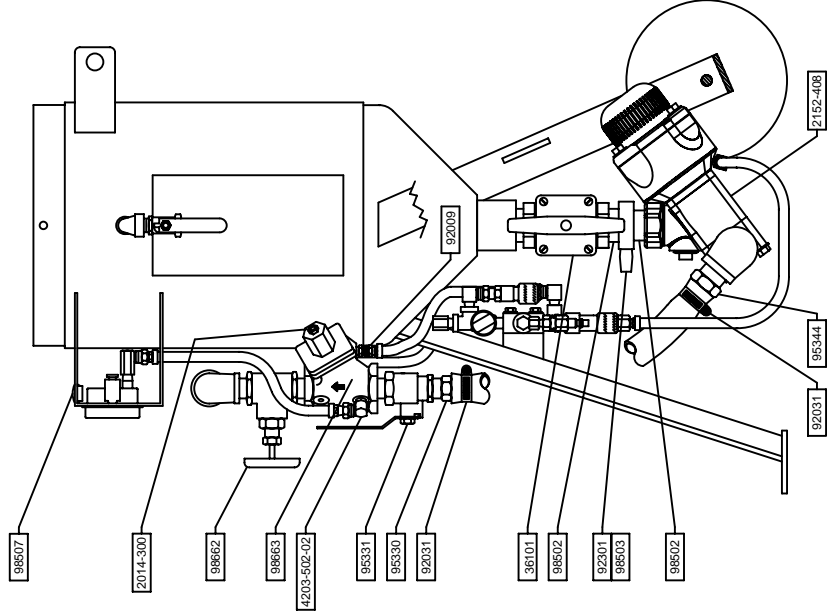
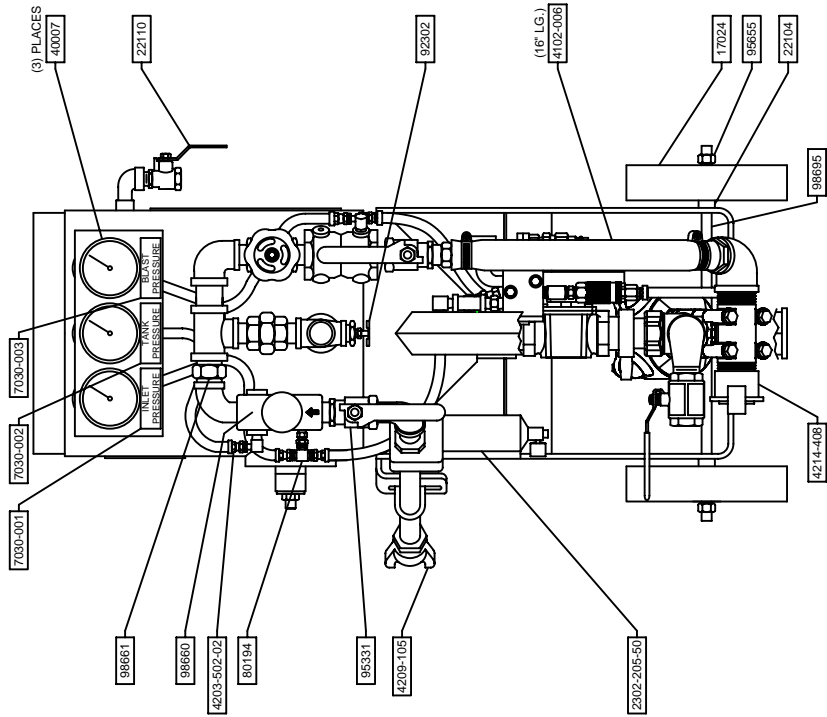


ACCUSTRIP MODEL 11SX WITH MEDIA VALVE

PART LIST	
DESCRIPTION	P/N
WHEEL 11SX	17024
VENT 1/8	2014-300
THOMPSON VALVE II, MULTIPORT 1 1/2"	2152-408
POP-UP HEAD 11SX, 12SX, 13SX	22100
POP-UP GASKET 11SX, 12SX, 13SX	22102
POP-UP GUIDE, 11SX	22103
AXLE SPACER 11SX	22104
TANK VENT VALVE 11SX	22110
AIR FILTER 11SX	2302-205-50
SCREEN 11SX, 12SX	24120
LID 11SX, 12SX	24121
MEDIA SHUT-OFF VALVE 1 1/4" BSP T, 12SX	36101
PRESSURE GAUGE 0-160 PSI	40007

PART LIST	
DESCRIPTION	P/N
HOSE 1" RED	4102-006
FITTING 1/4" MNPT x 1/4" FLARE 90°	4203-502-02
HOSE COUPLING 3/4" FNPT	4209-105
HOSE COUPLING 1 1/2" FNPT	4214-408
LABEL TAG INLET PRESSURE	7030-001
LABEL TAG TANK PRESSURE	7030-002
LABEL TAG BLAST PRESSURE	7030-003
TEE BRANCH 1/4" FNPT x 1/4" FLARE	80194
POP-UP STEM 11SX, 12SX, 13SX	80246
FITTING 1/8" MNPT x 1/8" FLARE STRAIGHT	92009
CLAMP 1" HOSE	92031
CLAMP	92301
DRAIN COCK 1/8"	92302

PART LIST	
DESCRIPTION	P/N
HOSE BARB 3/4" MNPT x 1" HOSE	95330
INLET AIR VALVE / CHOKE VALVE 11SX	95331
HOSE BARB 1" MNPT x 1" HOSE	95344
NUT 1/2-13 NYLON INSERT	95655
CLAMP FITTING 1 1/4" MBSPT	95602
CLAMP O-RING	95603
GAUGE CAP	95607
SCREEN HARDWARE	95632
BLAST PRESSURE REGULATOR 11SX	95660
MOISTURE ELIMINATOR 11SX	95661
MEDIA FLOW CONTROL VALVE 11SX	95662
AUTOMATIC AIR VALVE 3/4" 11SX	95663
AXLE 11SX	95695

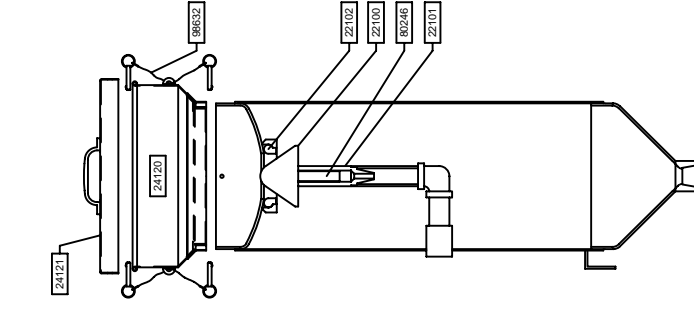
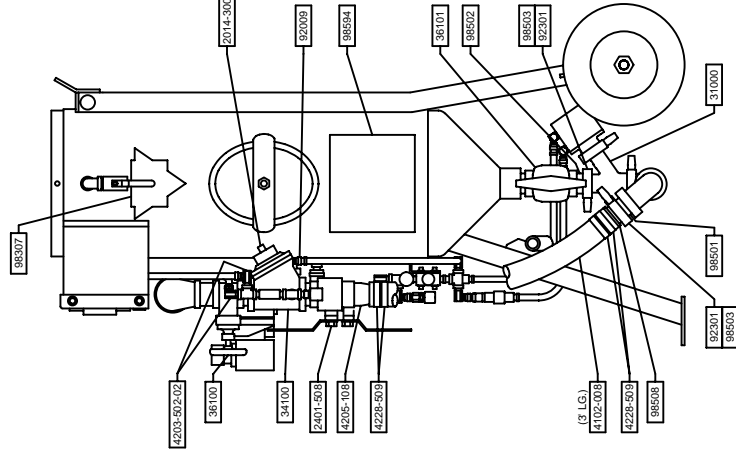
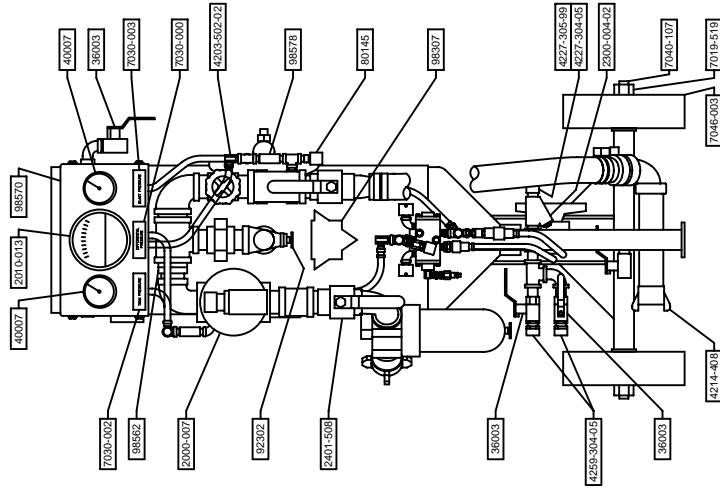
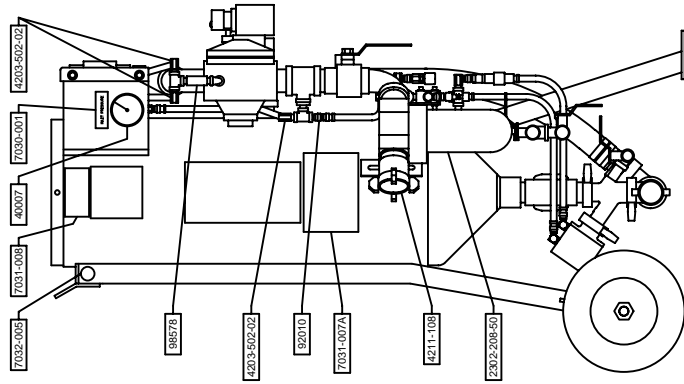


ACCUSTRIP MODEL 11SX WITH THOMPSON VALVE II

DESCRIPTION	P/N
REGULATOR ASSEMBLY 12SX, 13SX	2000-007
DIFFERENTIAL PRESSURE GAUGE	2010-013
VENT 1/8"	2014-300
POP-UP HEAD 11SX, 12SX, 13SX	22100
POP-UP GUIDE ASSEMBLY	22101
POP-UP GASKET 11SX, 12SX, 13SX	22102
Y-STRAINER	2300-004-02
AIR FILTER 12SX, 13SX	2302-208-50
INLET AIR VALVE	2401-508
SCREEN 11SX, 12SX	24120
LID 11SX, 12SX	24121
MEDIA VALVE 12SX, 13SX	31000
AUTOMATIC AIR VALVE 1 1/2"	34100
BYPASS/VENT/WATER VALVE	36003
CHOKE VALVE	36100
MEDIA FLOW CONTROL VALVE	36101
MEDIA SHUT-OFF VALVE	36101
PRESSURE GAUGE 0 - 160 PSI	40007

DESCRIPTION	P/N
HOSE 1 1/2" RED (PER FOOT)	4102-008
FITTING 1/4" MNPT x 1/4" FLARE 90°	4203-502-02
HOSE BARB 1 1/2" FNPT x 1 1/2" HOSE	4205-108
HOSE COUPLING 1 1/2" FNPT	4211-108
HOSE COUPLING 1 1/2" FNPT	4214-408
FEMALE GARDEN HOSE CONNECTION	4227-304-05
GARDEN HOSE WASHER	4227-305-99
BAND CLAMPS	4228-509
MALE GARDEN HOSE CONNECTION	4259-304-05
NUT 3/4-10 NYLON INSERT	7019-519
LABEL "DIFFERENTIAL PRESSURE"	7030-000
LABEL TAG INLET PRESSURE	7030-001
LABEL TAG TANK PRESSURE	7030-002
LABEL TAG BLAST PRESSURE	7030-003
DECAL DEPRESSURIZE WARNING	7031-007A
DECAL GROUNDING WARNING	7031-008
HANDLE GRIPS	7032-005
AXLE, 12SX	7040-107

DESCRIPTION	P/N
WHEEL, 12SX	7046-003
QUICK DISCONNECT 1/4" MNPT BODY	80145
POP-UP STEM 11SX, 12SX, 13SX	80246
FITTING 1/8" MNPT x 1/8" FLARE STRAIGHT	92009
FITTING 1/4" MNPT x 1/4" FLARE STRAIGHT	92010
CLAMP	92301
DRAIN COCK 1/8"	92302
DECAL SMALL ARMEX TRADEMARK	98307
CLAMP FITTING 1 1/2" FNPT	98501
CLAMP FITTING 1 1/4" MNPT	98502
CLAMP O-RING	98503
CLAMP FITTING 1 1/2" HOSE	98508
MOISTURE ELIMINATOR 12SX	98562
PRESSURE GAUGE CONSOLE	98570
FILTER 2 MICRON 1/4" MNPT	98578
DECAL PATENT NOTICE	98594
SCREEN HARDWARE	98632



ACCUSTRIP MODEL 12SX WITH MEDIA VALVE

PART LIST

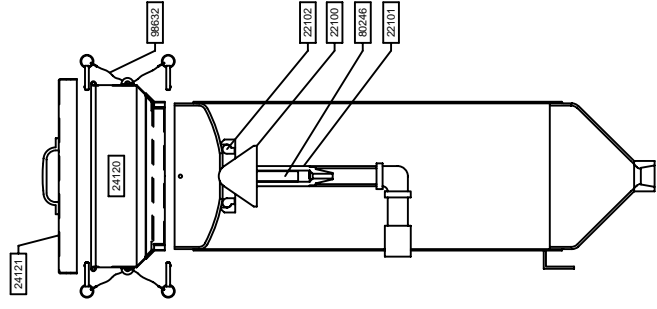
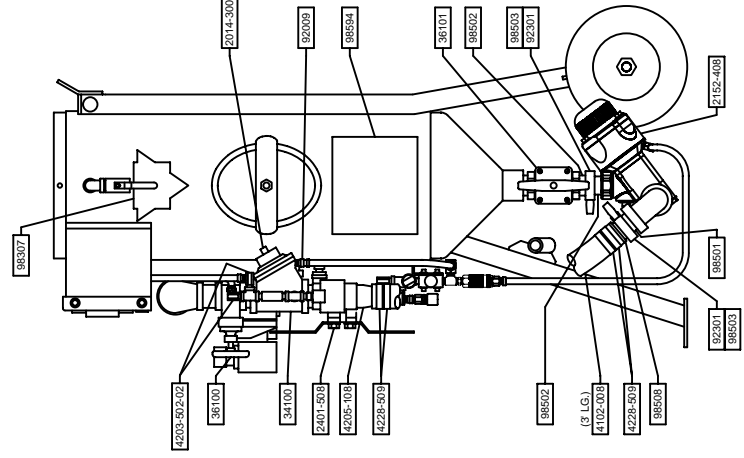
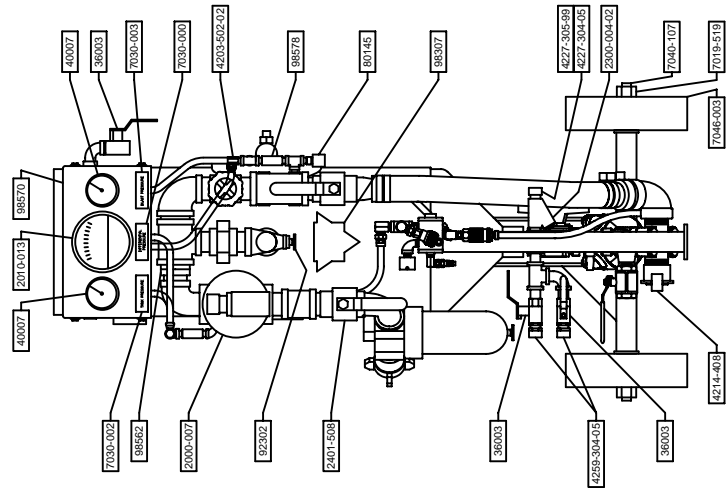
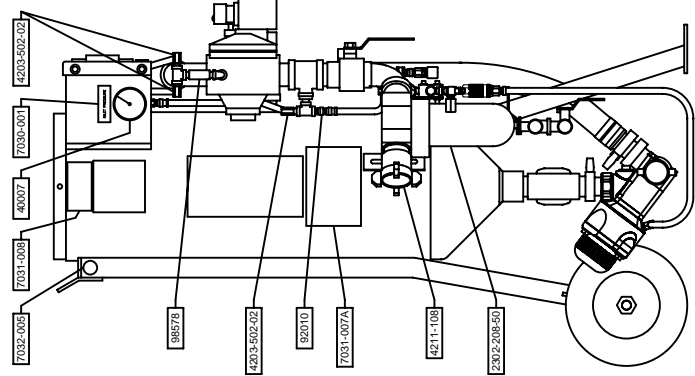
DESCRIPTION	P/N
REGULATOR ASSEMBLY 12SX, 13SX	2000-007
DIFFERENTIAL PRESSURE GAUGE	2010-013
VENT 1/8"	2014-300
THOMPSON VALVE II, MULTIPORT 1 1/2"	2152-408
POP-UP HEAD 11SX, 12SX, 13SX	22100
POP-UP GUIDE ASSEMBLY	22101
POP-UP GASKET 11SX, 12SX, 13SX	22102
Y-STRAINER	2300-004-02
AIR FILTER 12SX, 13SX	2302-208-50
INLET AIR VALVE	2401-508
SCREEN 11SX, 12SX	24121
LID 11SX, 12SX	24121
AUTOMATIC AIR VALVE 1 1/2"	34100
BYPASS/VENT/WATER VALVE	36003
CHOKE VALVE	36100
MEDIA FLOW CONTROL VALVE	36101
MEDIA SHUT-OFF VALVE	
PRESSURE GAUGE 0 - 160 PSI	40007

PART LIST

DESCRIPTION	P/N
HOSE 1 1/2" RED (PER FOOT)	4102-008
FITTING 1/4" MNPT x 1/4" FLARE 90°	4203-502-02
HOSE BARB 1 1/2" FNPT x 1 1/2" HOSE	4205-108
HOSE COUPLING 1 1/2" FNPT	4211-108
HOSE COUPLING 1 1/2" FNPT	4214-408
FEMALE GARDEN HOSE CONNECTION	4227-304-05
GARDEN HOSE WASHER	4227-305-99
BAND CLAMPS	4228-509
MALE GARDEN HOSE CONNECTION	4259-304-05
NUT 3/4-10 NYLON INSERT	7019-519
LABEL "DIFFERENTIAL PRESSURE"	7030-000
LABEL TAG INLET PRESSURE	7030-001
LABEL TAG TANK PRESSURE	7030-002
LABEL TAG BLAST PRESSURE	7030-003
LABEL TAG DEPRESSURIZE WARNING	7031-007A
DECAL GROUNDING WARNING	7031-008
HANDLE GRIPS	7032-005
AXLE, 12SX	7040-107

PART LIST

DESCRIPTION	P/N
WHEEL, 12SX	7046-003
QUICK DISCONNECT 1/4" MNPT BODY	80145
POP-UP STEM 11SX, 12SX, 13SX	80246
FITTING 1/8" MNPT x 1/8" FLARE STRAIGHT	92009
FITTING 1/4" MNPT x 1/4" FLARE STRAIGHT	92010
CLAMP	92301
DRAIN COCK 1/8"	92302
DECAL SMALL ARMEX TRADEMARK	98307
CLAMP FITTING 1 1/2" FNPT	98501
CLAMP FITTING 1 1/4" MNPT	98502
CLAMP O-RING	98503
CLAMP FITTING 1 1/2" HOSE	98508
MOISTURE ELIMINATOR 12SX	98562
PRESSURE GAUGE CONSOLE	98570
FILTER 2 MICRON 1/4" MNPT	98578
DECAL PATENT NOTICE	98594
SCREEN HARDWARE	98632

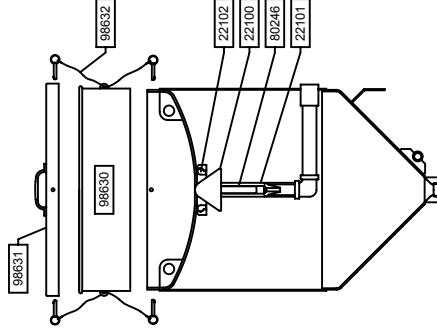
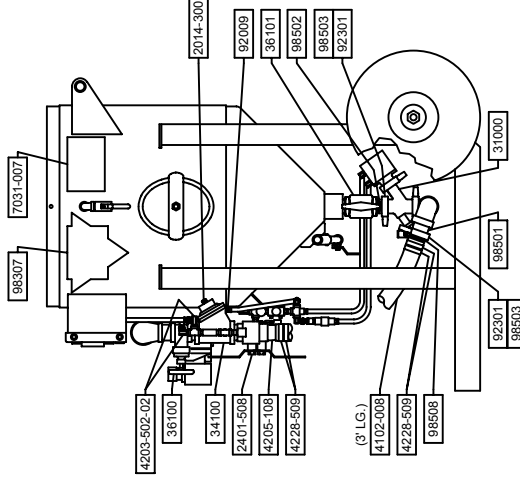
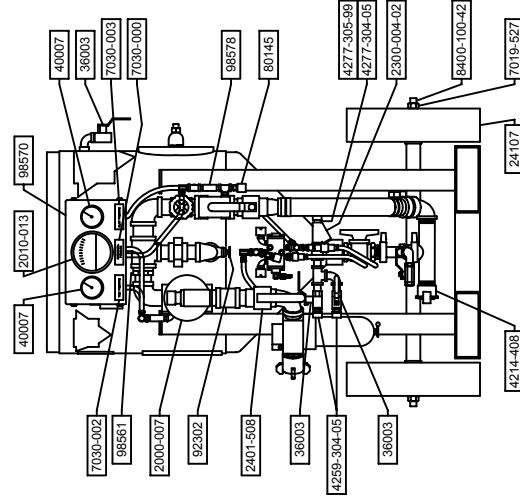
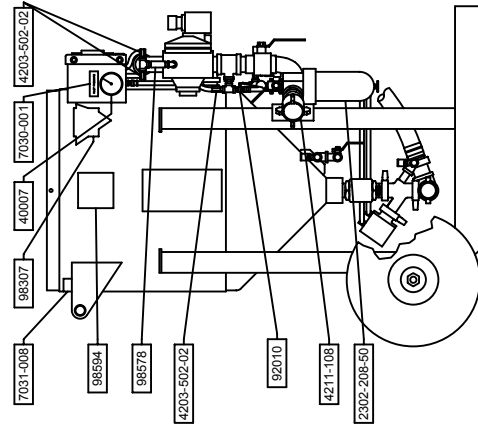


ACCUSTRIP MODEL 12SX WITH THOMPSON VALVE II

DESCRIPTION	P/N
REGULATOR ASSEMBLY 12SX, 13SX	2000-007
DIFFERENTIAL PRESSURE GAUGE	2010-013
VENT 1/8"	2014-300
POP-UP HEAD 11SX, 12SX, 13SX	22100
POP-UP GUIDE ASSEMBLY	22101
POP-UP GASKET 11SX, 12SX, 13SX	22102
Y-STRAINER	2300-004-02
AIR FILTER 12SX, 13SX	2302-208-50
INLET AIR VALVE 12SX, 13SX	2401-508
CHOKE VALVE 12SX, 13SX	24107
WHEEL, 13SX	31000
MEDIA VALVE 12SX, 13SX	34100
AUTOMATIC AIR VALVE 1/2", 12SX, 13SX	36003
BYPASS/WATER VALVE	36100
MEDIA FLOW CONTROL VALVE 12SX, 13SX	36101
MEDIA SHUT-OFF VALVE 12SX, 13SX	40007
PRESSURE GAUGE 0 - 160 PSI	4102-008
HOSE 1 1/2" RED (PER FOOT)	

DESCRIPTION	P/N
FITTING 1/4" MNPT x 1/4" FLARE 90°	4203-502-02
HOSE BARB 1 1/2" FNPT x 1 1/2" HOSE	4205-108
HOSE COUPLING 1 1/2" FNPT	4211-108
HOSE COUPLING 1 1/2" FNPT	4211-408
MALE GARDEN HOSE CONNECTION	4259-304-05
FEMALE GARDEN HOSE CONNECTION	4277-304-05
GARDEN HOSE WASHER	4277-305-99
BAND CLAMPS	4228-509
NUT 1"-8 NYLON INSERT	7019-527
LABEL "DIFFERENTIAL PRESSURE"	7030-000
LABEL TAG INLET PRESSURE	7030-001
LABEL TAG TANK PRESSURE	7030-002
LABEL TAG BLAST PRESSURE	7030-003
DECAL DEPRESSURIZE WARNING	7031-007
DECAL GROUNDING WARNING	7031-008
QUICK DISCONNECT 1/4" MNPT BODY	80145
POP-UP STEM 11SX, 12SX, 13SX	80246
AXLE, 13SX	8400-100-42

DESCRIPTION	P/N
FITTING 1/8" MNPT x 1/8" FLARE STRAIGHT	92009
FITTING 1/4 MNPT x 1/4 FLARE STRAIGHT	92010
CLAMP	92301
DRAIN COCK 1/8"	92302
DECAL SMALL ARMEX TRADEMARK	98307
CLAMP FITTING 1 1/2" FNPT	98501
CLAMP FITTING 1 1/4" MNPT	98502
CLAMP O-RING	98503
CLAMP FITTING 1 1/2" HOSE	98508
MOISTURE ELIMINATOR 13SX	98561
PRESSURE GAUGE CONSOLE	98570
FILTER 2 MICRON 1/4" MNPT	98578
DECAL PATENT NOTICE	98594
SCREEN 13SX	98630
LID 13SX	98631
SCREEN HARDWARE	98632

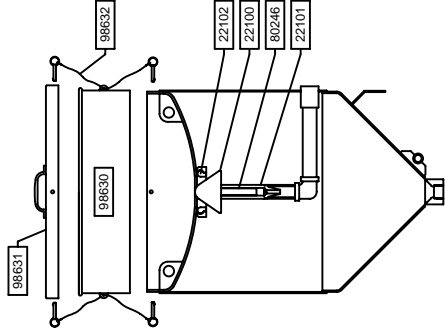
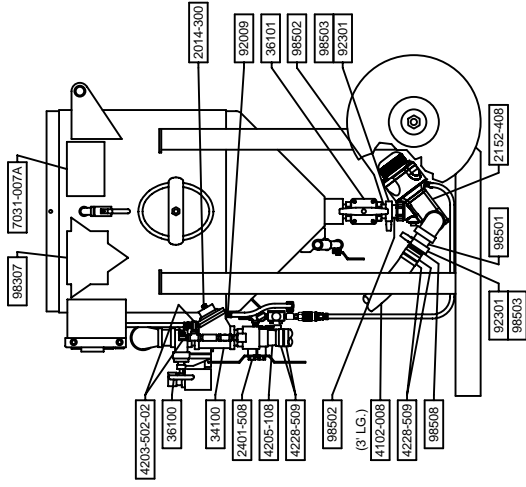
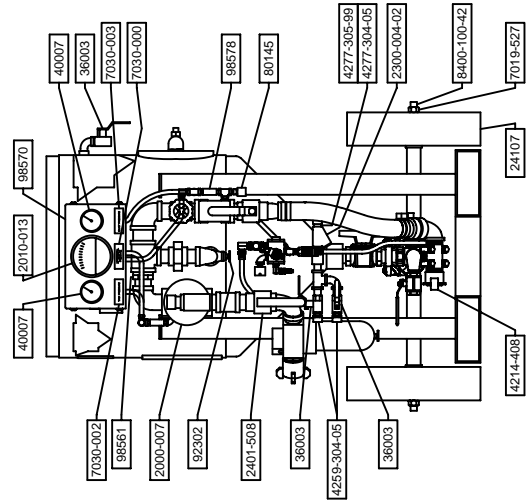
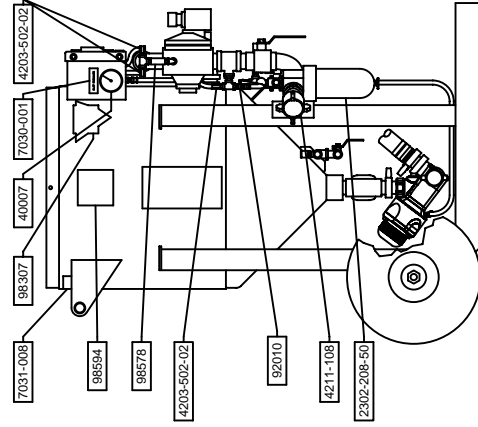


ACCUSTRIP MODEL 13SX WITH MEDIA VALVE

PART LIST	
DESCRIPTION	P/N
REGULATOR ASSEMBLY 12SX, 13SX	2000-007
DIFFERENTIAL PRESSURE GAUGE	2010-013
VENT 1/8"	2014-300
THOMPSON VALVE II, MULTIPORT 1 1/2"	2152-408
POP-UP HEAD 11SX, 12SX, 13SX	22100
POP-UP GUIDE ASSEMBLY	22101
POP-UP GASKET 11SX, 12SX, 13SX	22102
Y-STRAINER	2300-004-02
AIR FILTER 12SX, 13SX	2302-208-50
INLET AIR VALVE 12SX, 13SX	2401-508
CHOKE VALVE 12SX, 13SX	24107
WHEEL, 13SX	34100
AUTOMATIC AIR VALVE 1/12", 12SX, 13SX	36003
BYPASS/VENT/WATER VALVE	36100
MEDIA FLOW CONTROL VALVE 12SX, 13SX	36101
MEDIA SHUT-OFF VALVE 12SX, 13SX	40007
PRESSURE GAUGE 0 - 160 PSI	4102-008
HOSE 1 1/2" RED (PER FOOT)	

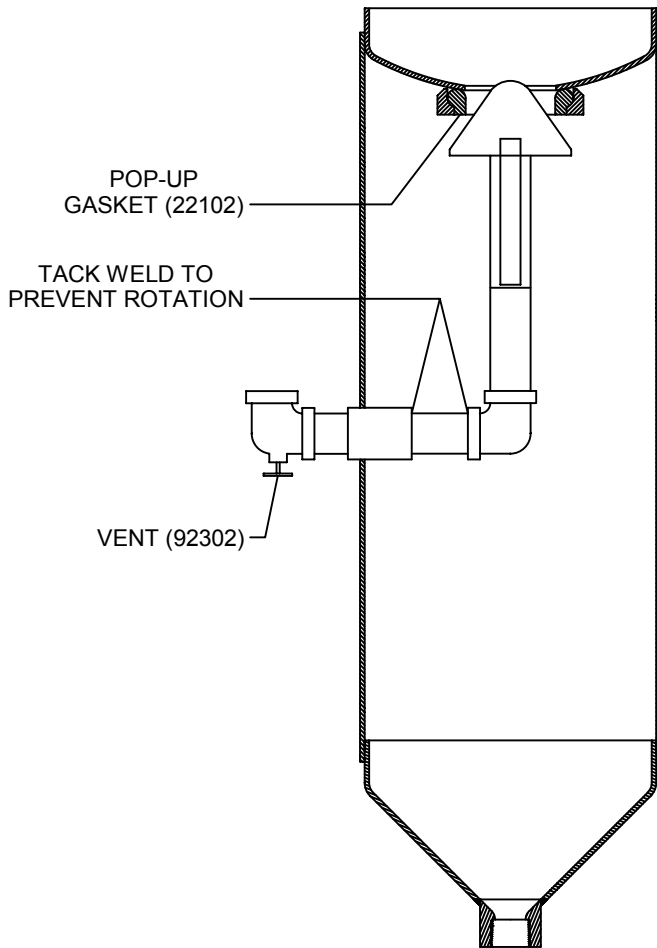
PART LIST	
DESCRIPTION	P/N
FITTING 1/4" MNPT x 1/4" FLARE 90°	4203-502-02
HOSE BARB 1 1/2" FNPT x 1 1/2" HOSE	4205-108
HOSE COUPLING 1 1/2" FNPT	4211-108
HOSE COUPLING 1 1/2" FNPT	4214-408
MALE GARDEN HOSE CONNECTION	4259-304-05
FEMALE GARDEN HOSE CONNECTION	4277-304-05
GARDEN HOSE WASHER	4277-305-99
BAND CLAMPS	4228-509
NUT 1"-8 NYLON INSERT	7019-527
LABEL "DIFFERENTIAL PRESSURE"	7030-000
LABEL TAG INLET PRESSURE	7030-001
LABEL TAG TANK PRESSURE	7030-002
LABEL TAG BLAST PRESSURE	7030-003
DECAL DEPRESSURIZE WARNING	7031-007A
DECAL GROUNDING WARNING	7031-008
QUICK DISCONNECT 1/4" MNPT BODY	80145
POP-UP STEM 11SX, 12SX, 13SX	80246
AXLE, 13SX	8400-100-42

PART LIST	
DESCRIPTION	P/N
FITTING 1/8" MNPT x 1/8" FLARE STRAIGHT	92009
FITTING 1/4 MNPT x 1/4 FLARE STRAIGHT	92010
CLAMP	92301
DRAIN COCK 1/8"	92302
DECAL SMALL ARMEKX TRADEMARK	98307
CLAMP FITTING 1 1/2" FNPT	98501
CLAMP FITTING 1 1/4" MNPT	98502
CLAMP O-RING	98503
CLAMP FITTING 1 1/2" HOSE	98508
MOISTURE ELIMINATOR 13SX	98561
PRESSURE GAUGE CONSOLE	98570
FILTER 2 MICRON 1/4" MNPT	98578
DECAL PATENT NOTICE	98594
SCREEN 13SX	98630
LID 13SX	98631
SCREEN HARDWARE	98632

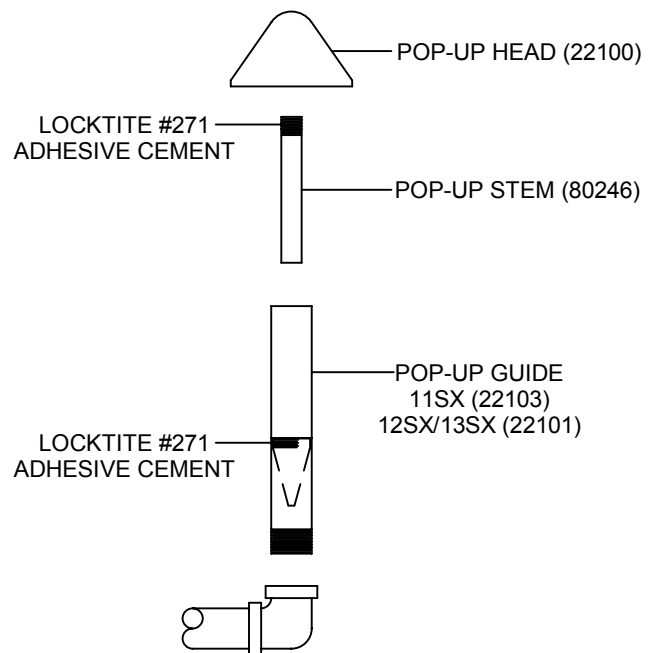


ACCUSTRIP MODEL 13SX WITH THOMPSON VALVE II

POP-UP VALVE ASSEMBLY



INTERNAL VIEW



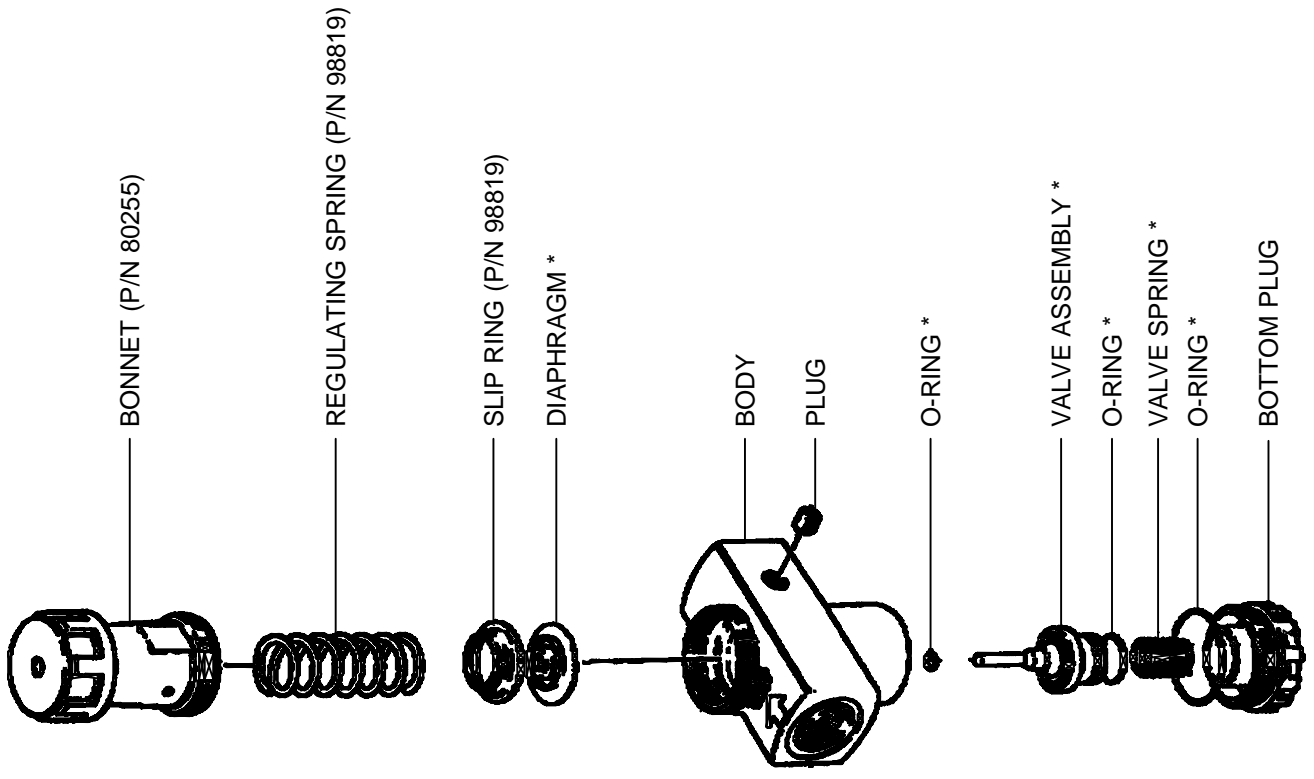
VALVE ASSEMBLY

POP-UP VALVE ASSEMBLY
MUST BE ALIGNED WITH
POP-UP GASKET FOR
PROPER SEATING

11SX REGULATOR

DESCRIPTION	P/N
11SX REGULATOR (3/4" PORTS)	98660
12SX REGULATOR (1 1/4" PORTS)	2001-005
REGULATOR REPLACEMENT PART KIT (11SX)	2003-007-99

* INCLUDED IN REPLACEMENT PART KIT



12SX/13SX REGULATOR

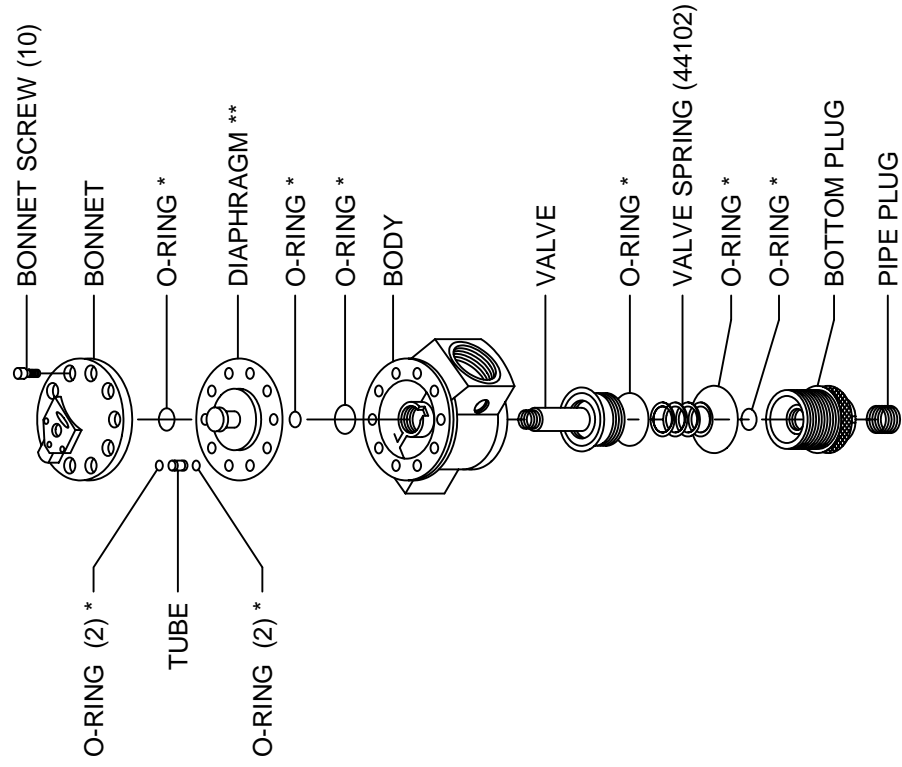
P/N 2000-007

SLAVE REGULATOR

P/N 2000-003

* INCLUDED IN REPLACEMENT PART KIT P/N 2000-003-99

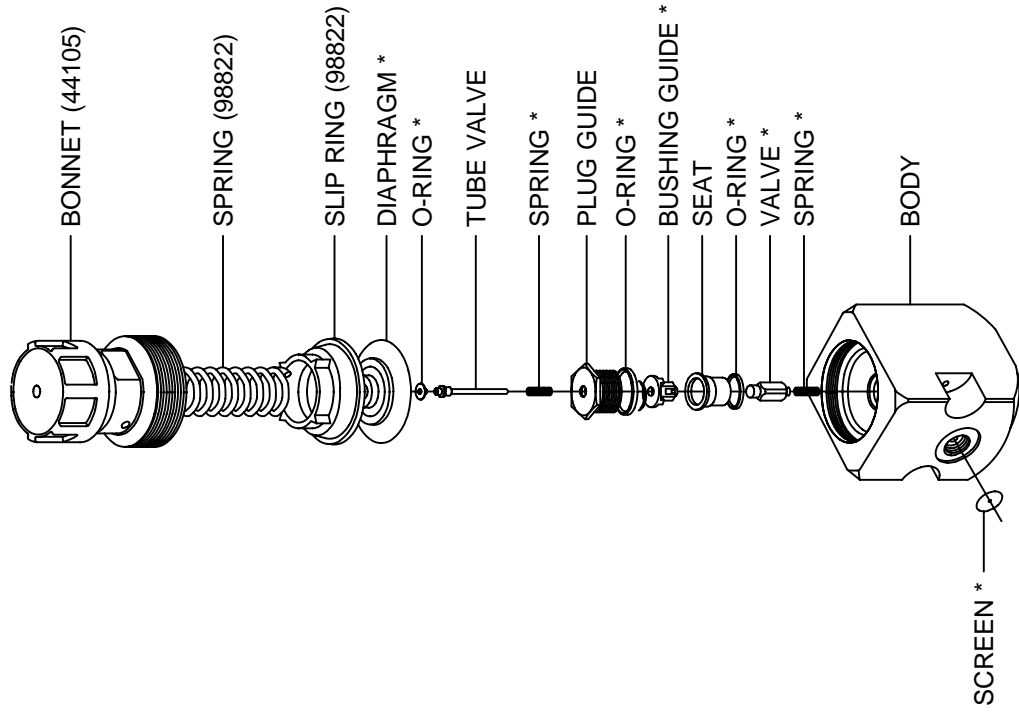
** INCLUDED IN REPLACEMENT PART KIT P/N 2000-004



PILOT REGULATOR

P/N 2001-011

* INCLUDED IN REPLACEMENT PART KIT P/N 44101



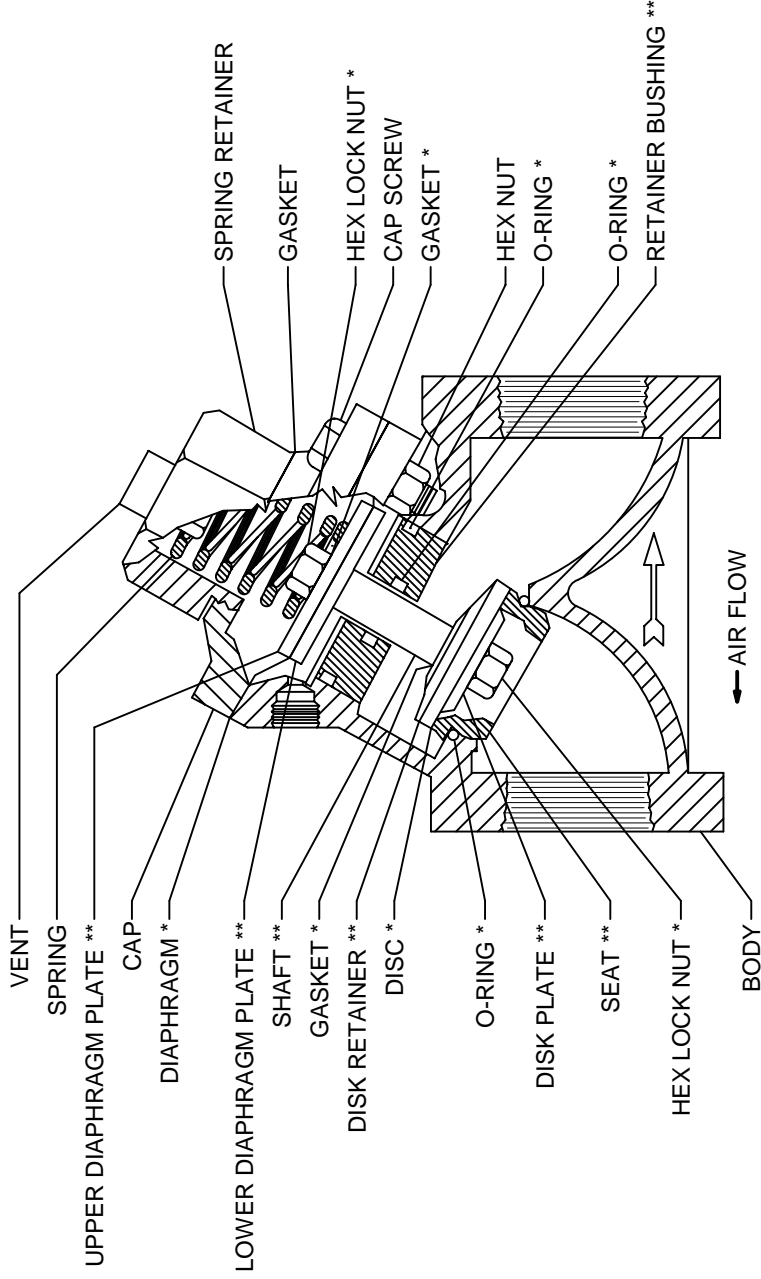
11SX AUTOMATIC AIR VALVE

PART LIST	P/N
11SX (3/4") AUTOMATIC AIR VALVE	98663
11 (1") AUTOMATIC AIR VALVE	2123-106

REBUILD KITS	P/N
COMPLETE REPLACEMENT PART KIT	22116
DIAPHRAGM / DISK REPLACEMENT PART KIT	2123-006-99
PLATE / SEAT REPLACEMENT PART KIT	98824
SPRING REPLACEMENT PART KIT	98825
VENT	2014-300

AUTOMATIC AIR VALVE TOOL KIT		P/N
11SX	3/4", 1" PORTS	80271

NOTE:
 TOOL KIT USED TO EASILY REMOVE &
 INSTALL RETAINER BUSHING & SEAT



* INCLUDED IN DIAPHRAGM / DISK REPLACEMENT PART KIT
 ** INCLUDED IN PLATE / SEAT REPLACEMENT PART KIT

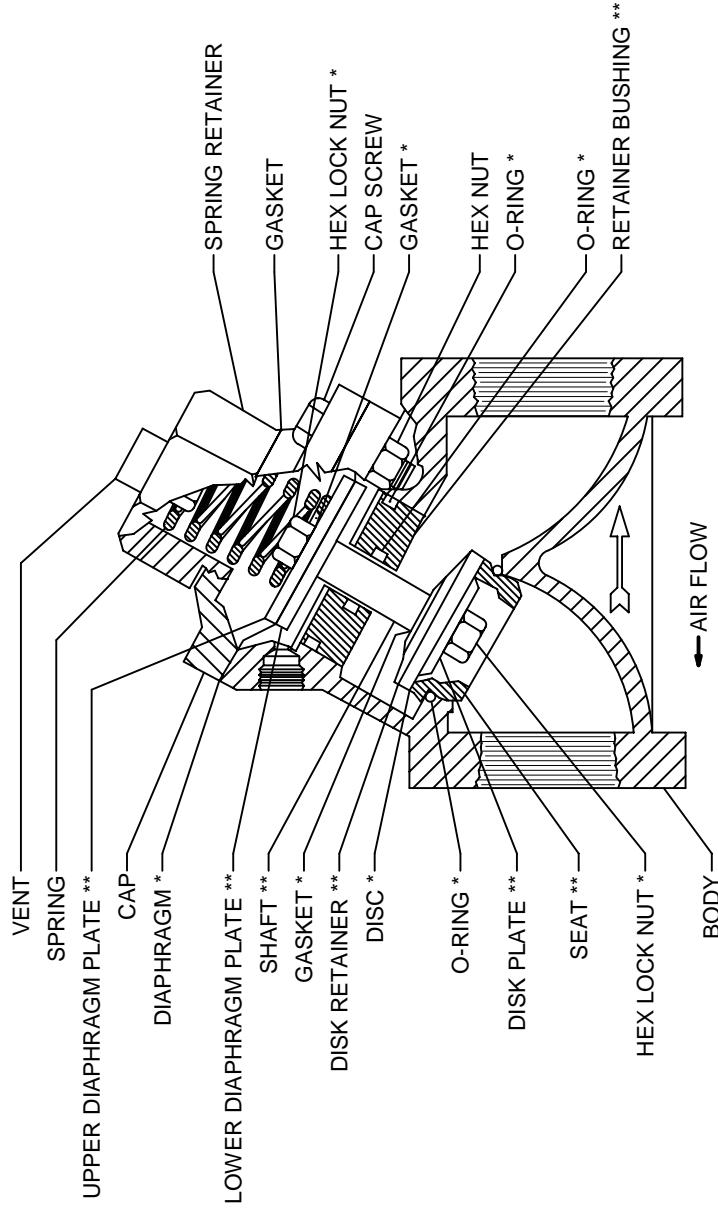
12SX / 13SX AUTOMATIC AIR VALVE

PART LIST	P/N
12SX / 13SX (1 1/2") AUTOMATIC AIR VALVE	34100
12 (1 1/4") AUTOMATIC AIR VALVE	2123-107

REBUILD KITS	P/N
COMPLETE REPLACEMENT PART KIT	80274
DIAPHRAGM / DISK REPLACEMENT PART KIT	2123-007-99
PLATE / SEAT REPLACEMENT PART KIT	80275
SPRING	2123-107-24
SPRING RETAINER	34025
VENT	2014-300

AUTOMATIC AIR VALVE TOOL KIT		P/N
12SX / 13SX	1 1/4", 1 1/2" PORTS	80272

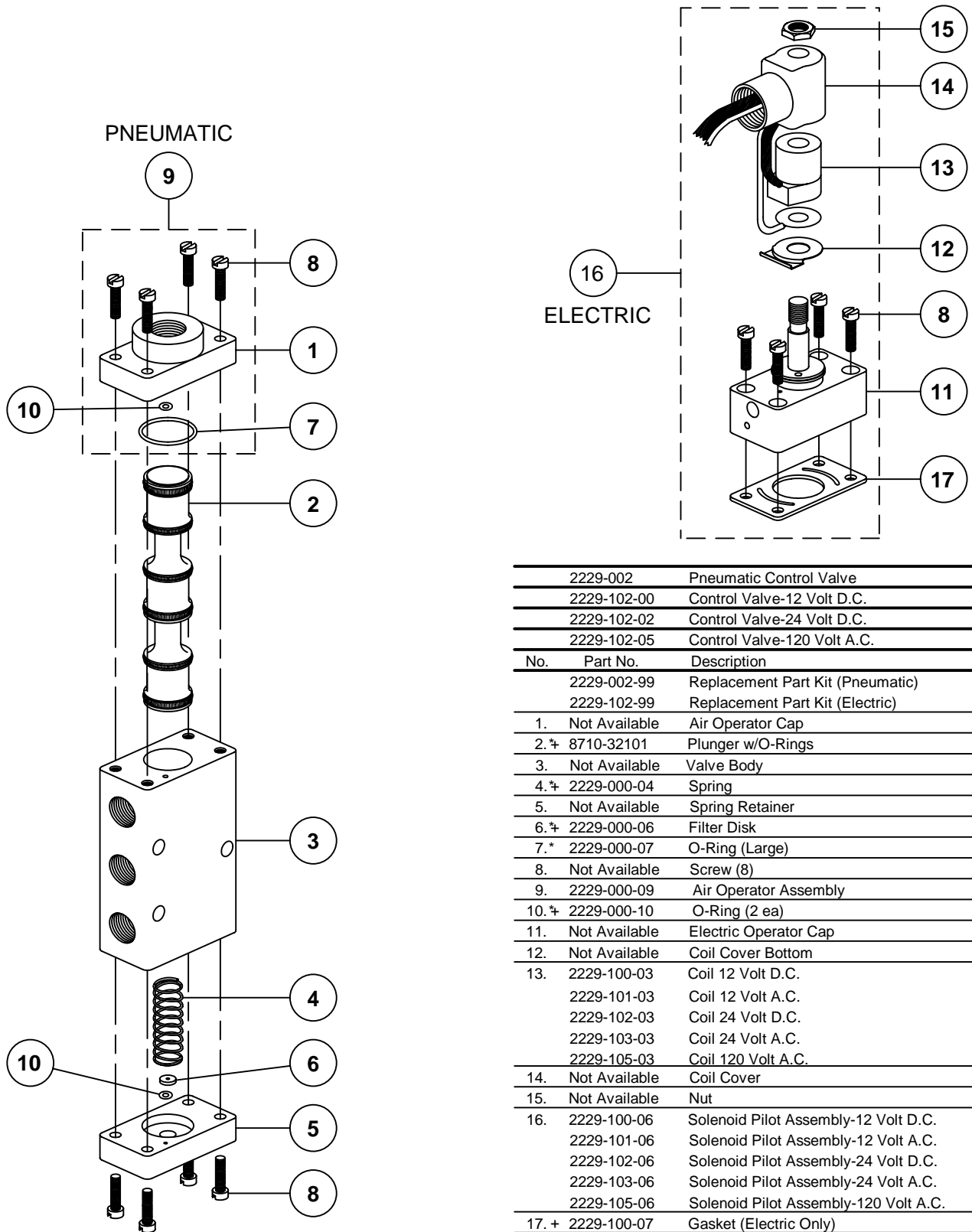
NOTE:
 TOOL KIT USED TO EASILY REMOVE &
 INSTALL RETAINER BUSHING & SEAT



* INCLUDED IN DIAPHRAGM / DISK REPLACEMENT PART KIT

** INCLUDED IN PLATE / SEAT REPLACEMENT PART KIT

4-WAY CONTROL VALVE

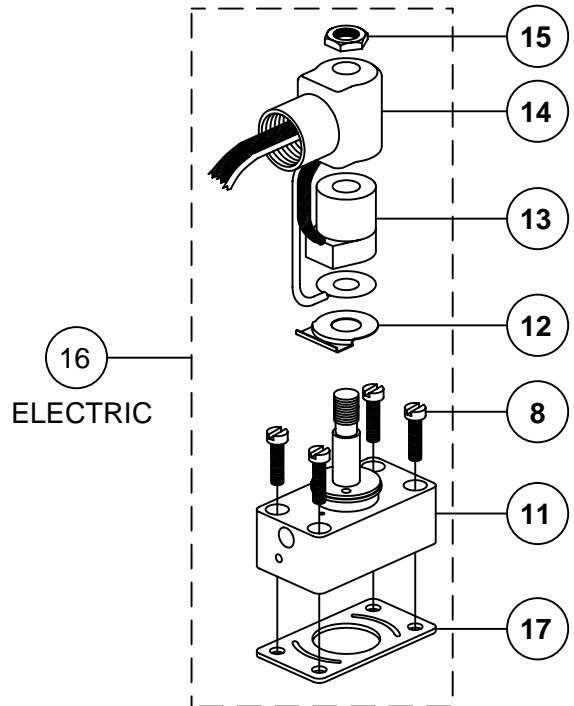
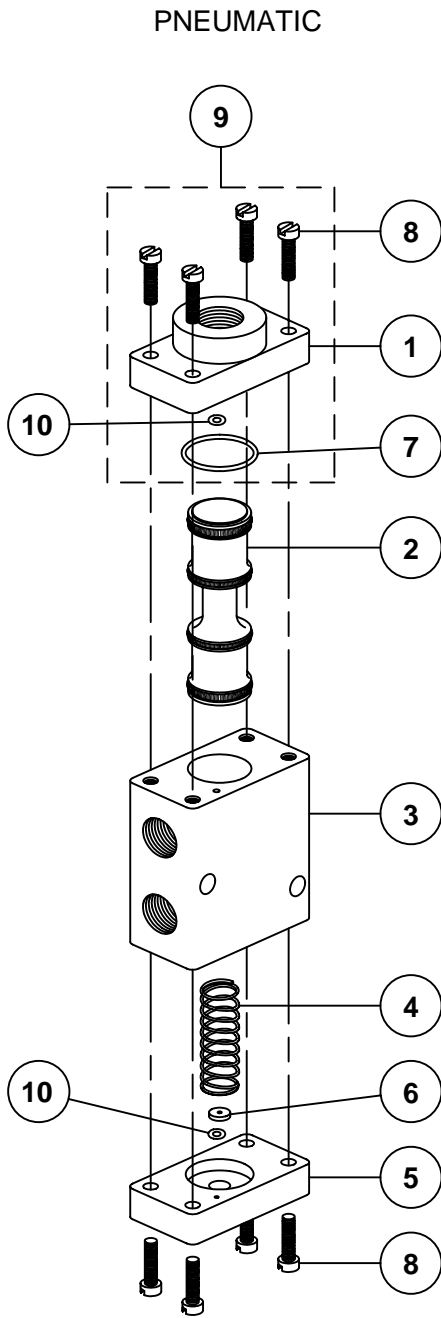


	2229-002	Pneumatic Control Valve
	2229-102-00	Control Valve-12 Volt D.C.
	2229-102-02	Control Valve-24 Volt D.C.
	2229-102-05	Control Valve-120 Volt A.C.
No.	Part No.	Description
	2229-002-99	Replacement Part Kit (Pneumatic)
	2229-102-99	Replacement Part Kit (Electric)
1.	Not Available	Air Operator Cap
2. †	8710-32101	Plunger w/O-Rings
3.	Not Available	Valve Body
4. †	2229-000-04	Spring
5.	Not Available	Spring Retainer
6. †	2229-000-06	Filter Disk
7.*	2229-000-07	O-Ring (Large)
8.	Not Available	Screw (8)
9.	2229-000-09	Air Operator Assembly
10. †	2229-000-10	O-Ring (2 ea)
11.	Not Available	Electric Operator Cap
12.	Not Available	Coil Cover Bottom
13.	2229-100-03	Coil 12 Volt D.C.
	2229-101-03	Coil 12 Volt A.C.
	2229-102-03	Coil 24 Volt D.C.
	2229-103-03	Coil 24 Volt A.C.
	2229-105-03	Coil 120 Volt A.C.
14.	Not Available	Coil Cover
15.	Not Available	Nut
16.	2229-100-06	Solenoid Pilot Assembly-12 Volt D.C.
	2229-101-06	Solenoid Pilot Assembly-12 Volt A.C.
	2229-102-06	Solenoid Pilot Assembly-24 Volt D.C.
	2229-103-06	Solenoid Pilot Assembly-24 Volt A.C.
	2229-105-06	Solenoid Pilot Assembly-120 Volt A.C.
17. +	2229-100-07	Gasket (Electric Only)

* Included In replacement part kit-pneumatic

+ Included In replacement part kit-electric

3-WAY CONTROL VALVE



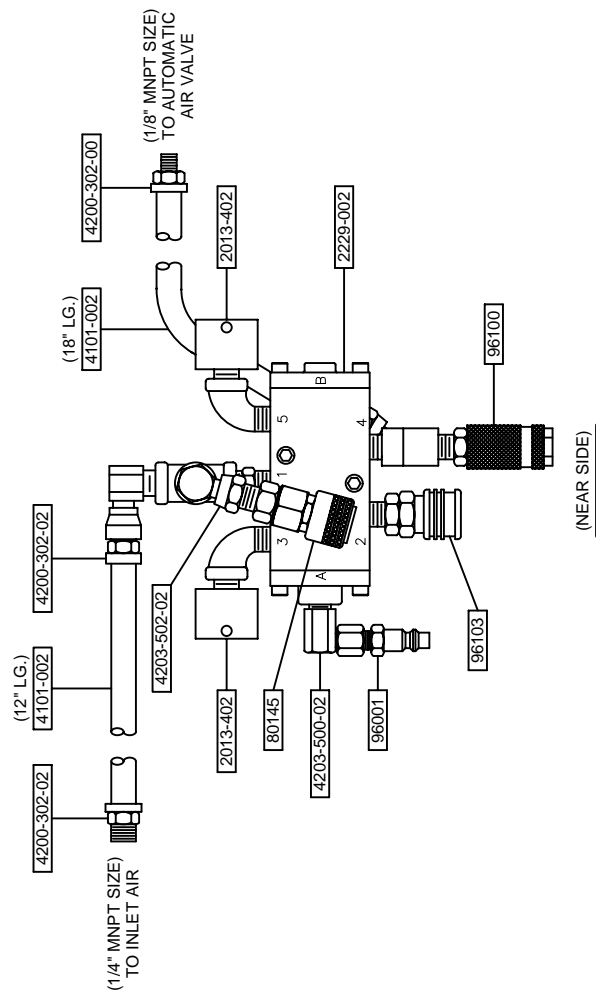
	2229-000	Pneumatic Control Valve
	2229-100	Control Valve-12 Volt D.C.
	2229-101	Control Valve-12 Volt A.C.
	2229-102	Control Valve-24 Volt D.C.
	2229-103	Control Valve-24 Volt A.C.
	2229-105	Control Valve-120 Volt A.C.
No.	Part No.	Description
	2229-000-99	Replacement Part Kit (Pneumatic)
	2229-100-99	Replacement Part Kit (Electric)
1.	Not Available	Air Operator Cap
2.*+	2229-000-02	Plunger w/O-Rings
3.	Not Available	Valve Body
4.*+	2229-000-04	Spring
5.	Not Available	Spring Retainer
6.*+	2229-000-06	Filter Disk
7.*	2229-007-07	O-Ring (Large)
8.	Not Available	Screw (8)
9.	2229-000-09	Air Operator Assembly
10.*+	2229-000-10	O-Ring (2 ea)
11.	Not Available	Electric Operator Cap
12.	Not Available	Coil Cover Bottom
13.	2229-100-03	Coil 12 Volt D.C.
	2229-101-03	Coil 12 Volt A.C.
	2229-102-03	Coil 24 Volt D.C.
	2229-103-03	Coil 24 Volt A.C.
	2229-105-03	Coil 120 Volt A.C.
14.	Not Available	Coil Cover
15.	Not Available	Nut
16.	2229-100-06	Solenoid Pilot Assembly-12 Volt D.C.
	2229-101-06	Solenoid Pilot Assembly-12 Volt A.C.
	2229-102-06	Solenoid Pilot Assembly-24 Volt D.C.
	2229-103-06	Solenoid Pilot Assembly-24 Volt A.C.
	2229-105-06	Solenoid Pilot Assembly-120 Volt A.C.
17. +	2229-100-07	Gasket (Electric Only)

* Included In replacement part kit-pneumatic

+ Included In replacement part kit-electric

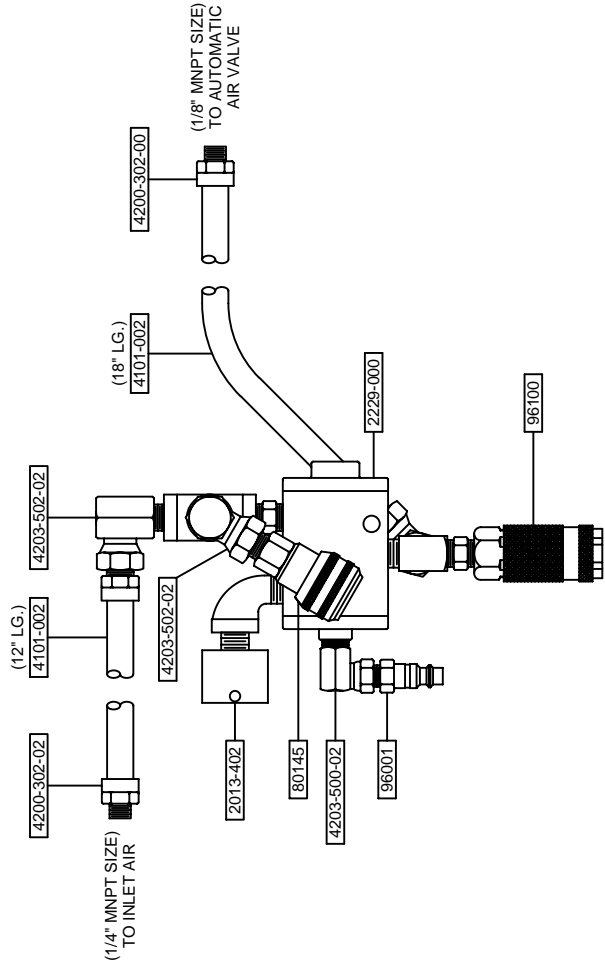
4-WAY PNEUMATIC CONTROL VALVE ASSEMBLY MEDIA VALVE CONTROLS

P/N 80157



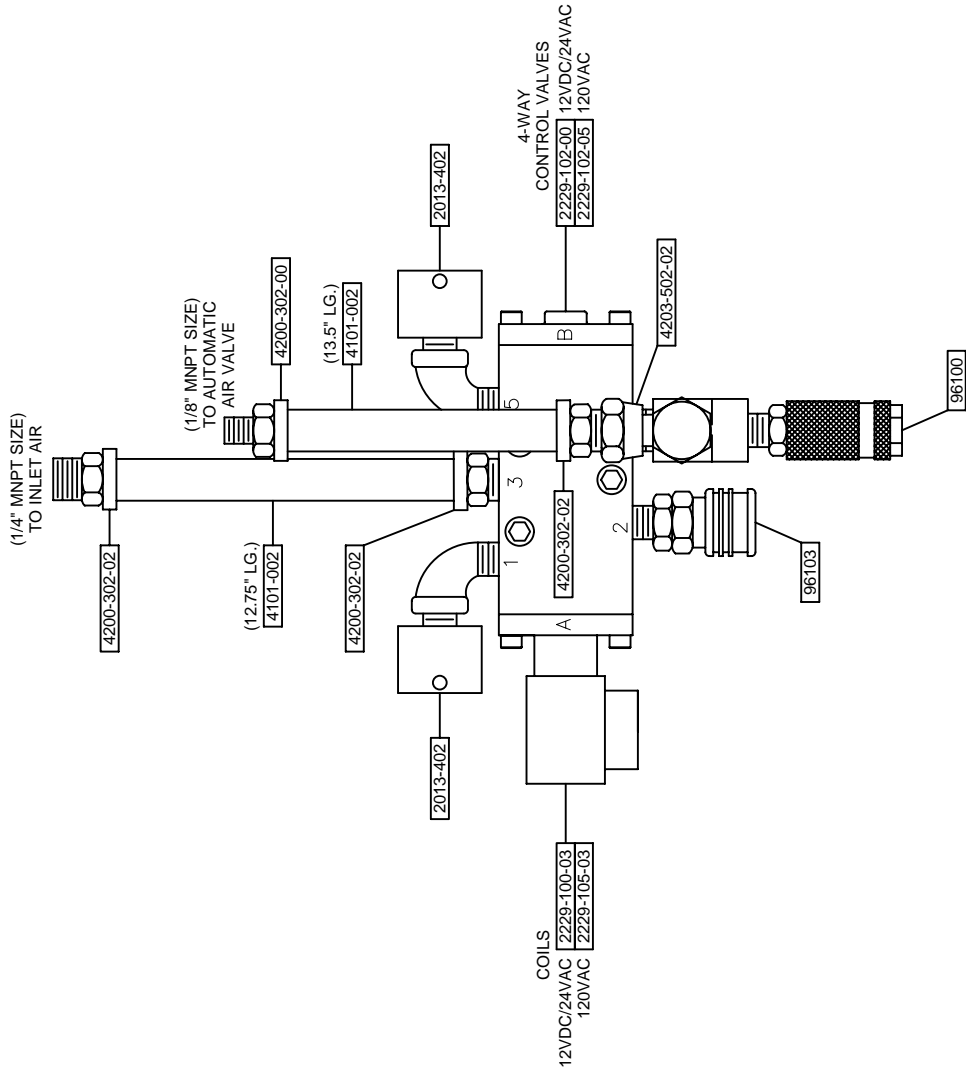
SHOWN AS 11SX/12SX/13SX

3-WAY PNEUMATIC CONTROL VALVE ASSEMBLY THOMPSON VALVE II CONTROLS



SHOWN AS 11SX/12SX/13SX

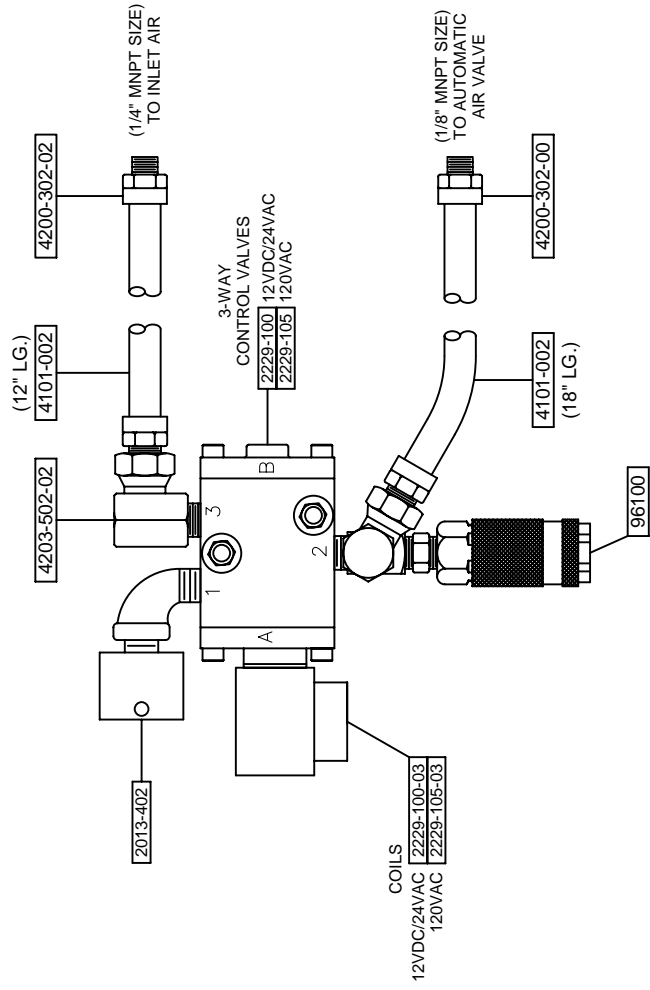
4-WAY ELECTRIC CONTROL VALVE ASSEMBLY MEDIA VALVE CONTROLS



ELECTRICAL CONTROL VALVE ASSEMBLY 12VDC/24VAC **80154**

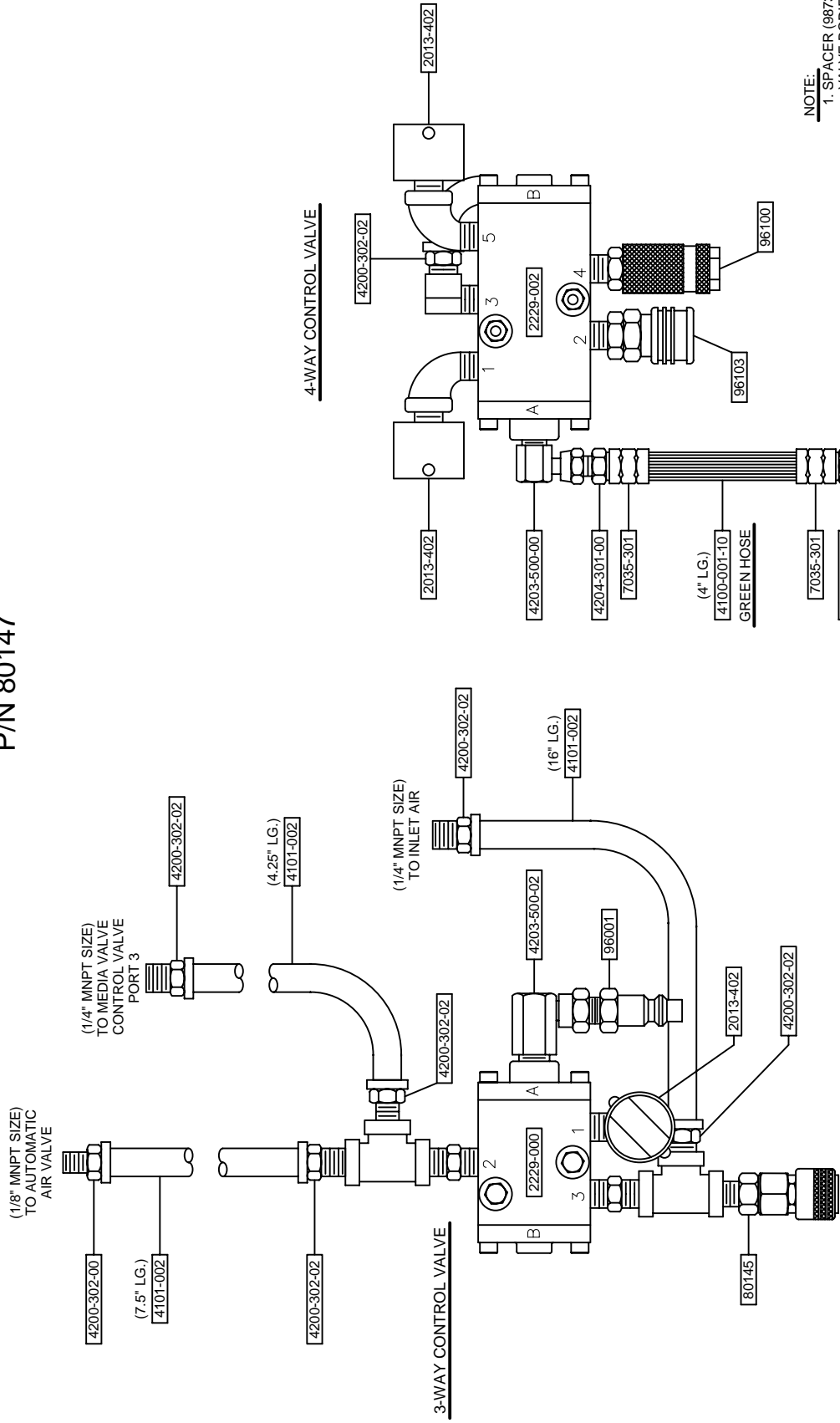
ELECTRICAL CONTROL VALVE ASSEMBLY 120VAC **80156**

3-WAY ELECTRIC CONTROL VALVE ASSEMBLY THOMPSON VALVE II CONTROLS



PNEUMATIC ABRASIVE CUTOFF CONTROL VALVE ASSEMBLY MEDIA VALVE CONTROLS

P/N 80147

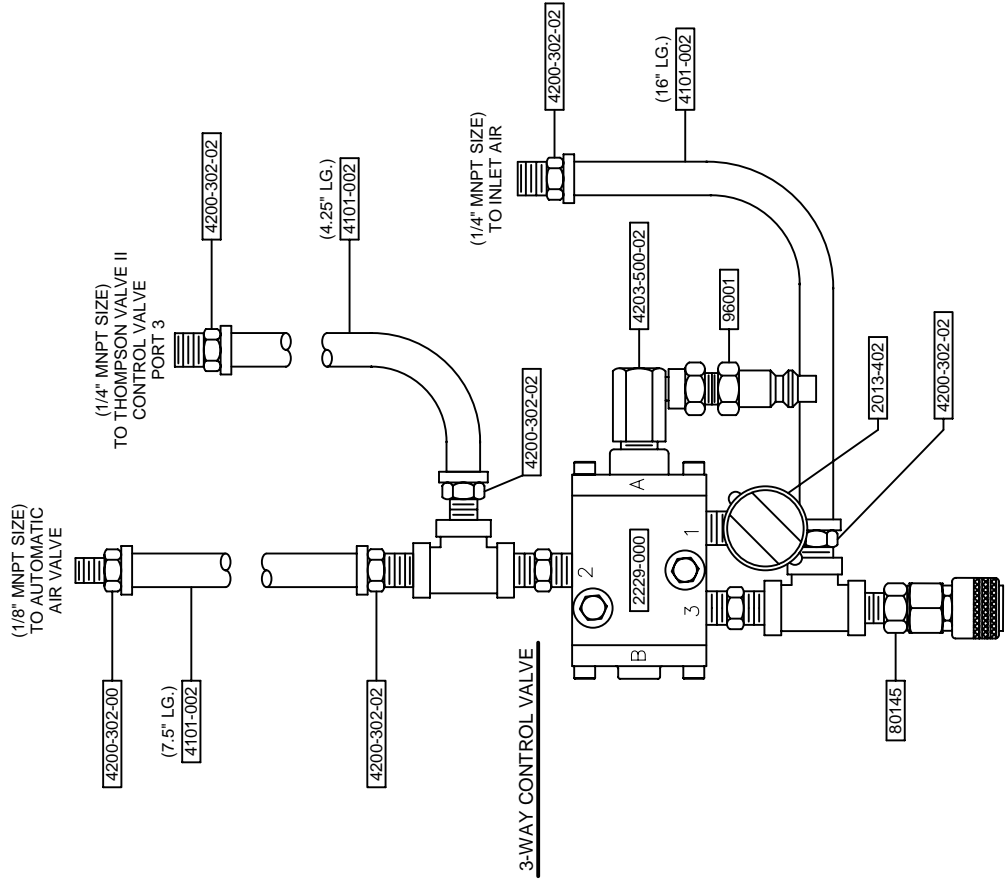


NOTE:
1. SPACER (96730) BETWEEN VALVE BODIES.

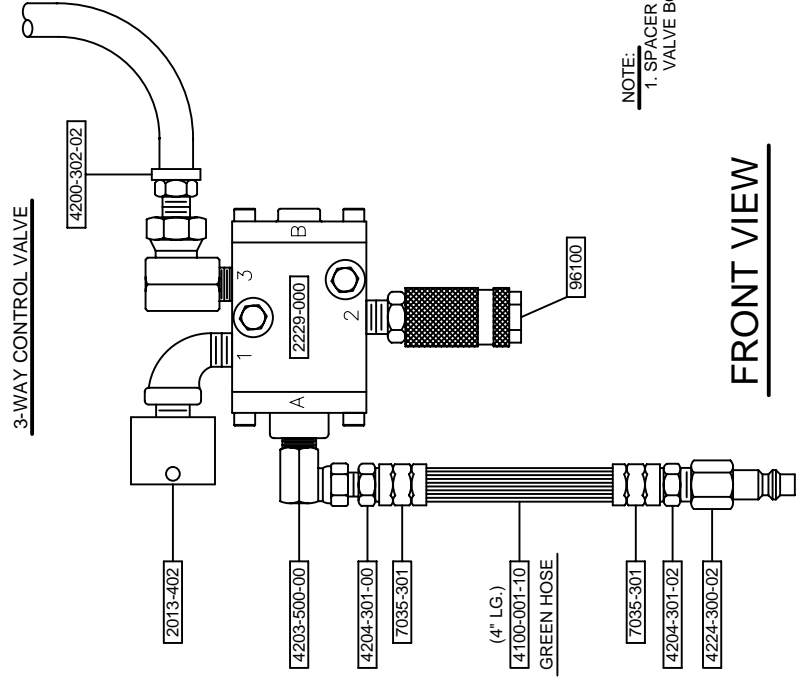
FRONT VIEW

REAR VIEW

PNEUMATIC ABRASIVE CUTOFF CONTROL VALVE ASSEMBLY THOMPSON VALVE II CONTROLS



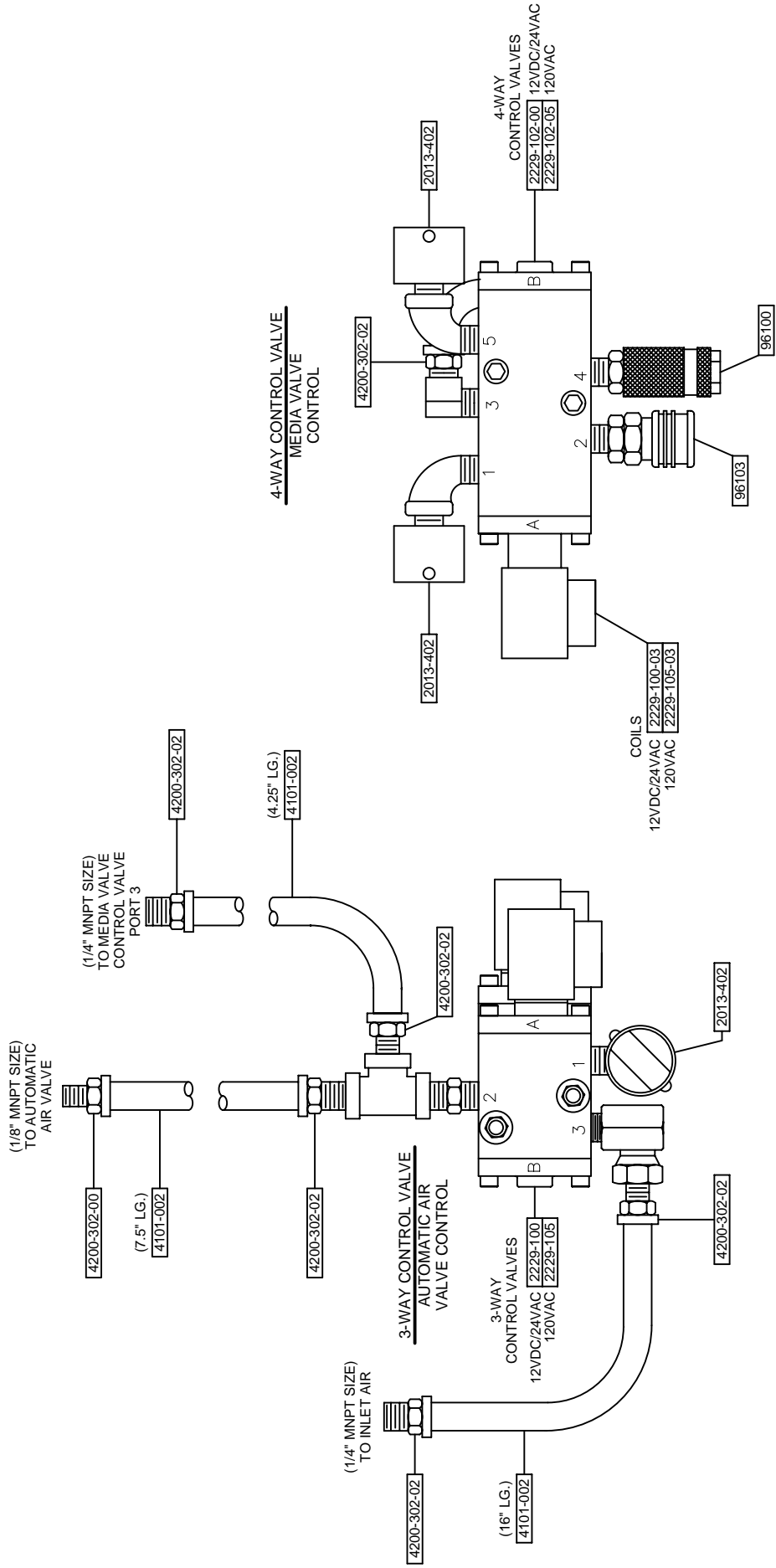
REAR VIEW



FRONT VIEW

NOTE:
1. SPACER (98730) BETWEEN VALVE BODIES.

ELECTRIC ABRASIVE CUTOFF CONTROL VALVE ASSEMBLY MEDIA VALVE CONTROLS



REAR VIEW

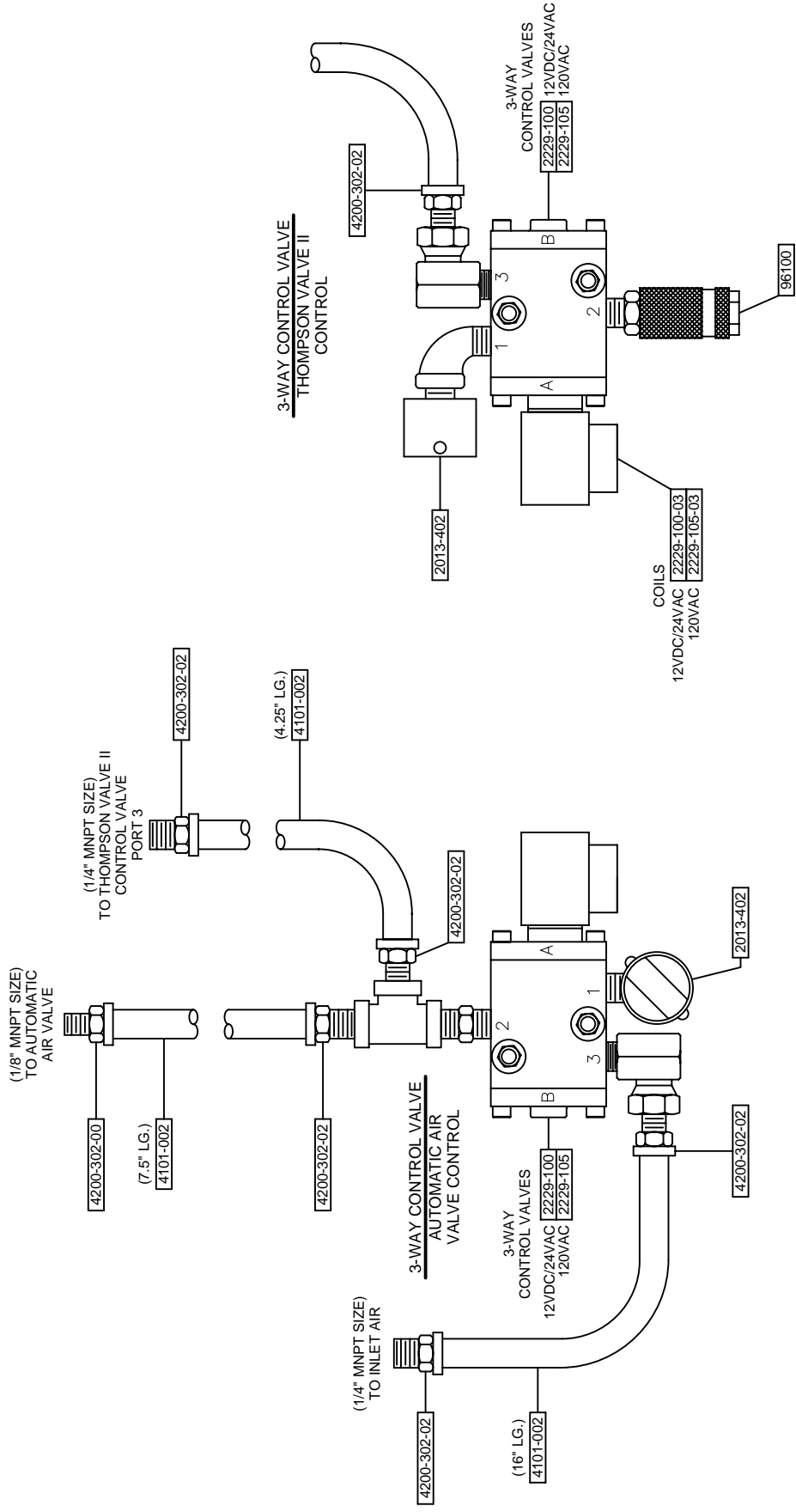
FRONT VIEW

NOTE:
1. SPACER (98730) BETWEEN VALVE BODIES.

ELECTRICAL ABRASIVE CUTOFF CONTROL VALVE ASSEMBLY 12VDC/24VAC **80151**

ELECTRICAL ABRASIVE CUTOFF CONTROL VALVE ASSEMBLY 120VAC **80153**

ELECTRIC ABRASIVE CUTOFF CONTROL VALVE ASSEMBLY THOMPSON VALVE II CONTROLS



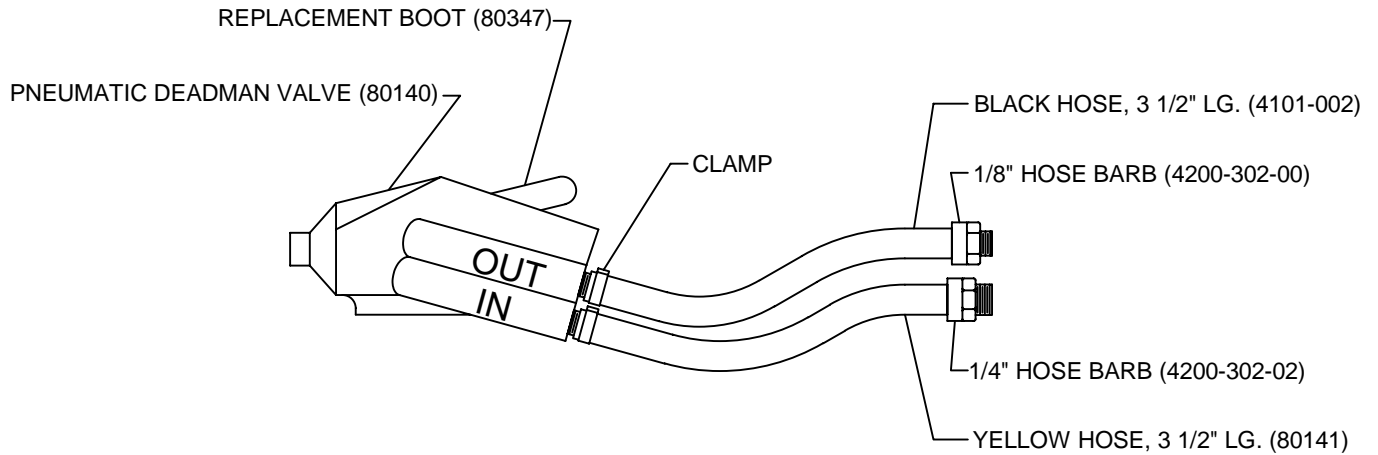
FRONT VIEW

REAR VIEW

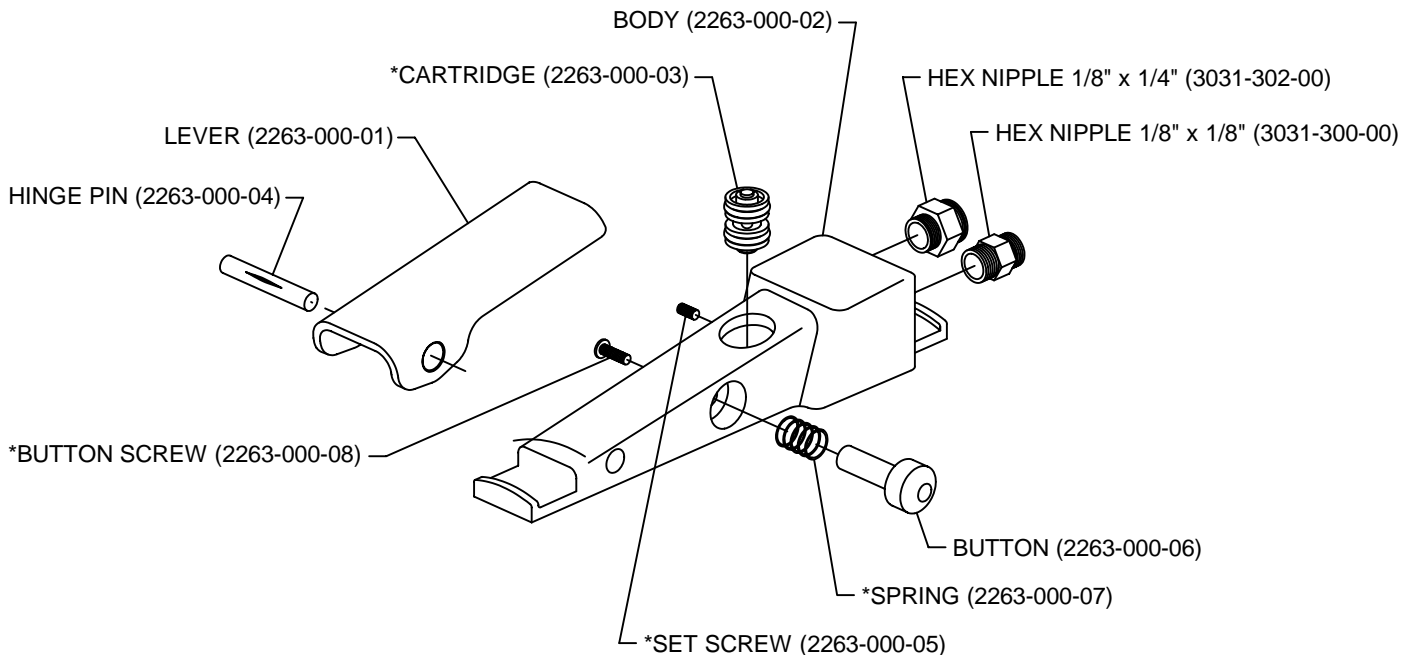
NOTE:
1. SPACER (98730) BETWEEN VALVE BODIES.

PNEUMATIC DEADMAN VALVES

WESTERN TECH STYLE
PNEUMATIC DEADMAN VALVE ASSEMBLY (80140)
REPLACEMENT BALL AND CHAIN (80348)



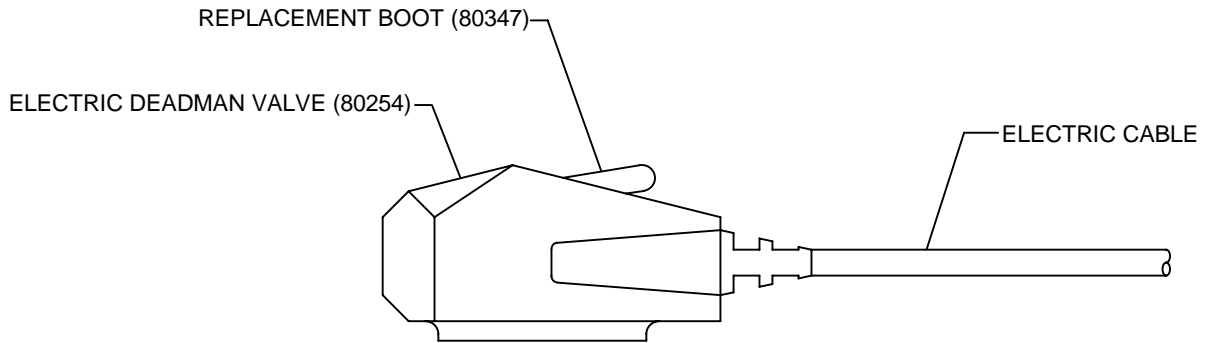
SCHMIDT STYLE
PNEUMATIC DEADMAN VALVE (2263-000)



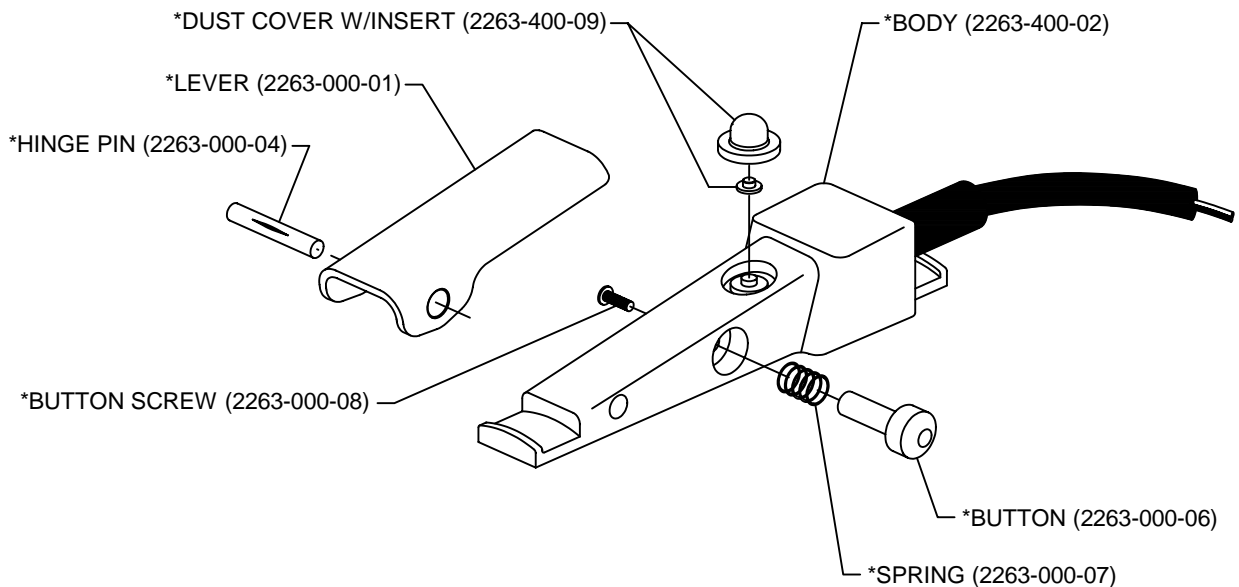
* INCLUDED IN REPLACEMENT PART KIT (2263-000-99)

ELECTRIC DEADMAN VALVES

WESTERN TECH STYLE
ELECTRIC DEADMAN VALVE (80254)
REPLACEMENT BALL AND CHAIN (80348)



SCHMIDT STYLE
ELECTRIC DEADMAN VALVE (2263-400-01)

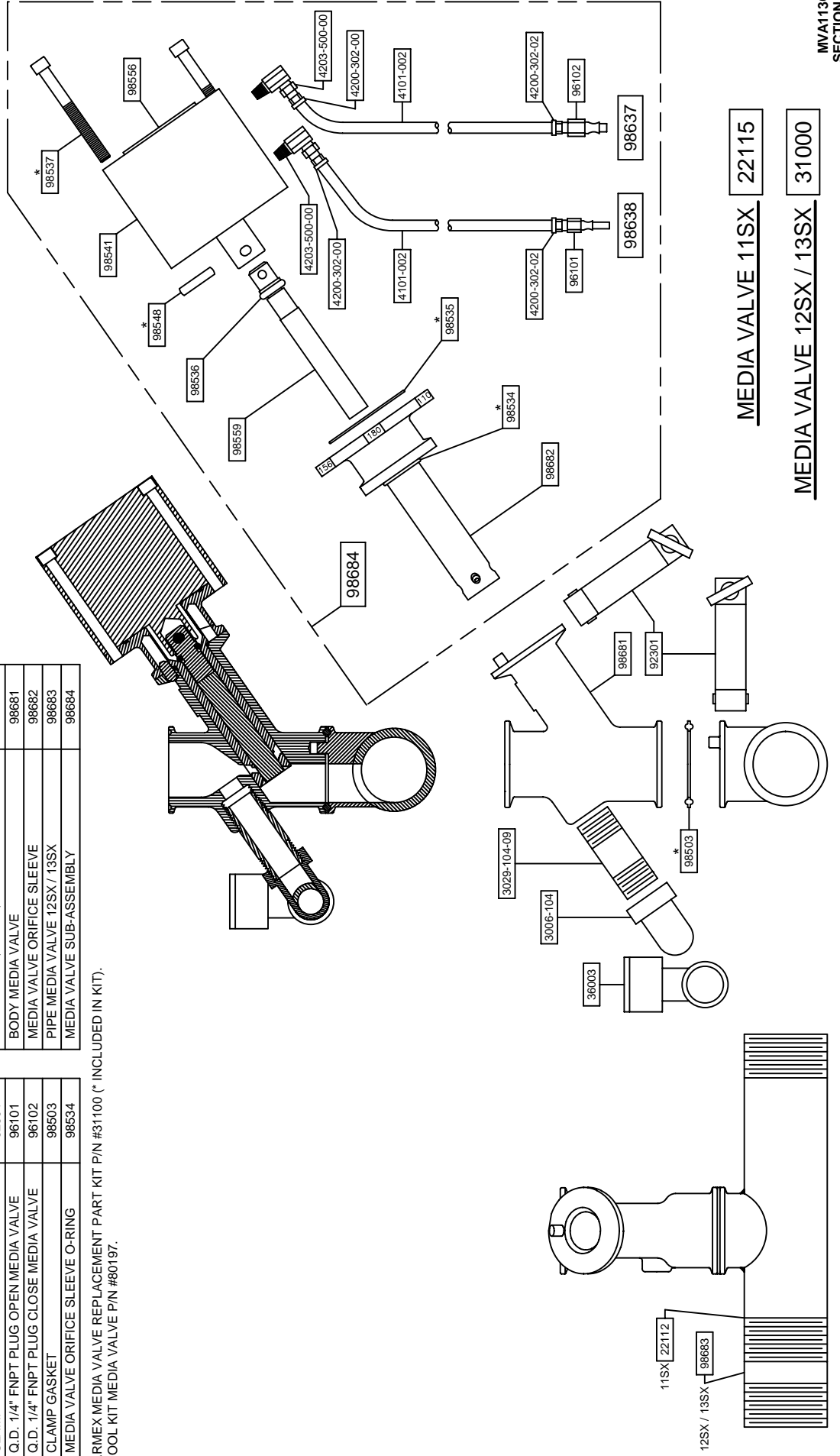


* INCLUDED IN REPLACEMENT PART KIT (2263-400)

DESCRIPTION	P/N
11SX MEDIA VALVE PIPE	22112
11SX MEDIA VALVE ASSEMBLY	22115
STREET ELBOW 1/2" GALV.	3006-104
NIPPLE 1/2" x 2" GALV.	3029-104-09
12SX / 13SX MEDIA VALVE ASSEMBLY	31000
BYPASS VALVE	36003
HOSE 1/4" BLACK PUSH-ON	4101-002
HOSE BARB 1/8" MNPT x 1/4" PUSH-ON HOSE	4200-302-00
HOSE BARB 1/4" MNPT x 1/4" PUSH-ON HOSE	4200-302-02
FITTING 1/8" MNPT x 1/8" FLARE 90° CLAMP	4203-500-00
CLAMP	92301
Q.D. 1/4" FNPT PLUG OPEN MEDIA VALVE	96101
Q.D. 1/4" FNPT PLUG CLOSE MEDIA VALVE	96102
CLAMP GASKET	98503
MEDIA VALVE ORIFICE SLEEVE O-RING	98534

DESCRIPTION	P/N
MEDIA VALVE ACTUATOR O-RING	98535
MEDIA VALVE PISTON O-RING	98536
MEDIA VALVE ACTUATOR BOLTS	98537
MEDIA VALVE ACTUATOR	98541
MEDIA VALVE WRIST PIN	98548
WARNING LABEL MEDIA VALVE ACTUATOR	98556
PISTON MEDIA VALVE	98559
MEDIA VALVE "CLOSE" HOSE ASSEMBLY - (PORT 2)	98637
MEDIA VALVE "OPEN" HOSE ASSEMBLY - (PORT 4)	98638
BODY MEDIA VALVE	98681
MEDIA VALVE ORIFICE SLEEVE	98682
PIPE MEDIA VALVE 12SX / 13SX	98683
MEDIA VALVE SUB-ASSEMBLY	98684

ARMEX MEDIA VALVE REPLACEMENT PART KIT P/N #31100 (* INCLUDED IN KIT).
 TOOL KIT MEDIA VALVE P/N #80197.

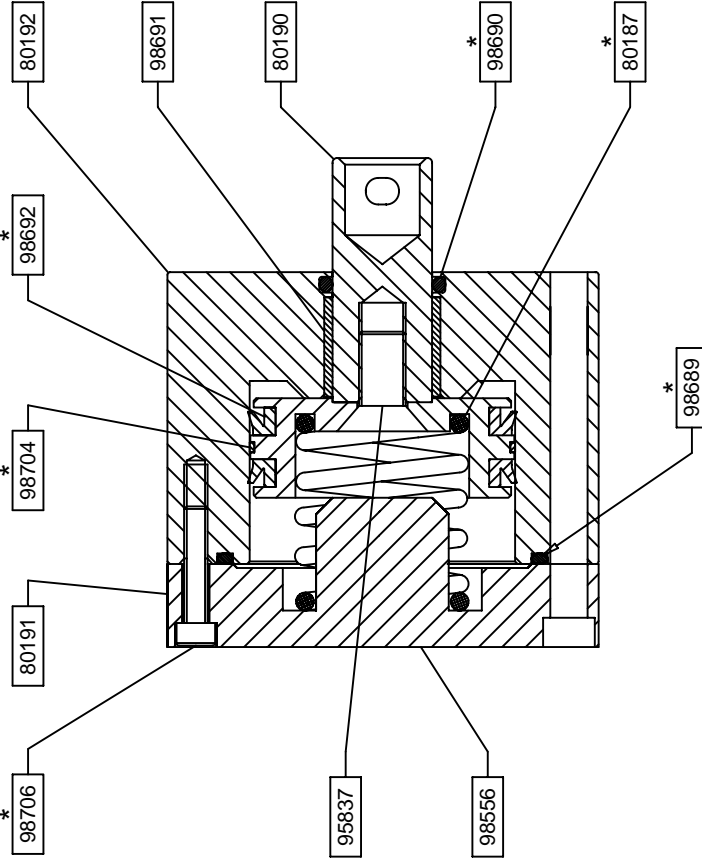


MEDIA VALVE 11SX 22115

MEDIA VALVE 12SX / 13SX 31000

PART LIST

DESCRIPTION	P/N
ACTUATOR SPRING	80187
ARMEX MEDIA VALVE ACTUATOR REPLACEMENT PART KIT	80188
PLUNGER ASSEMBLY MEDIA VALVE ACTUATOR	80190
CAP MEDIA VALVE ACTUATOR	80191
BODY MEDIA VALVE ACTUATOR	80192
MEDIA VALVE ACTUATOR BOLTS	98537
MEDIA VALVE ACTUATOR	98541
WARNING LABEL MEDIA VALVE ACTUATOR	98556
ACTUATOR CAP O-RING	98689
PLUNGER SHAFT O-RING	98690
BUSHING MEDIA VALVE ACTUATOR	98691
PLUNGER U-CUP SEALS	98692
PLUNGER WEAR RING	98704
ACTUATOR CAP BOLTS	98706



MEDIA VALVE ACTUATOR 98541

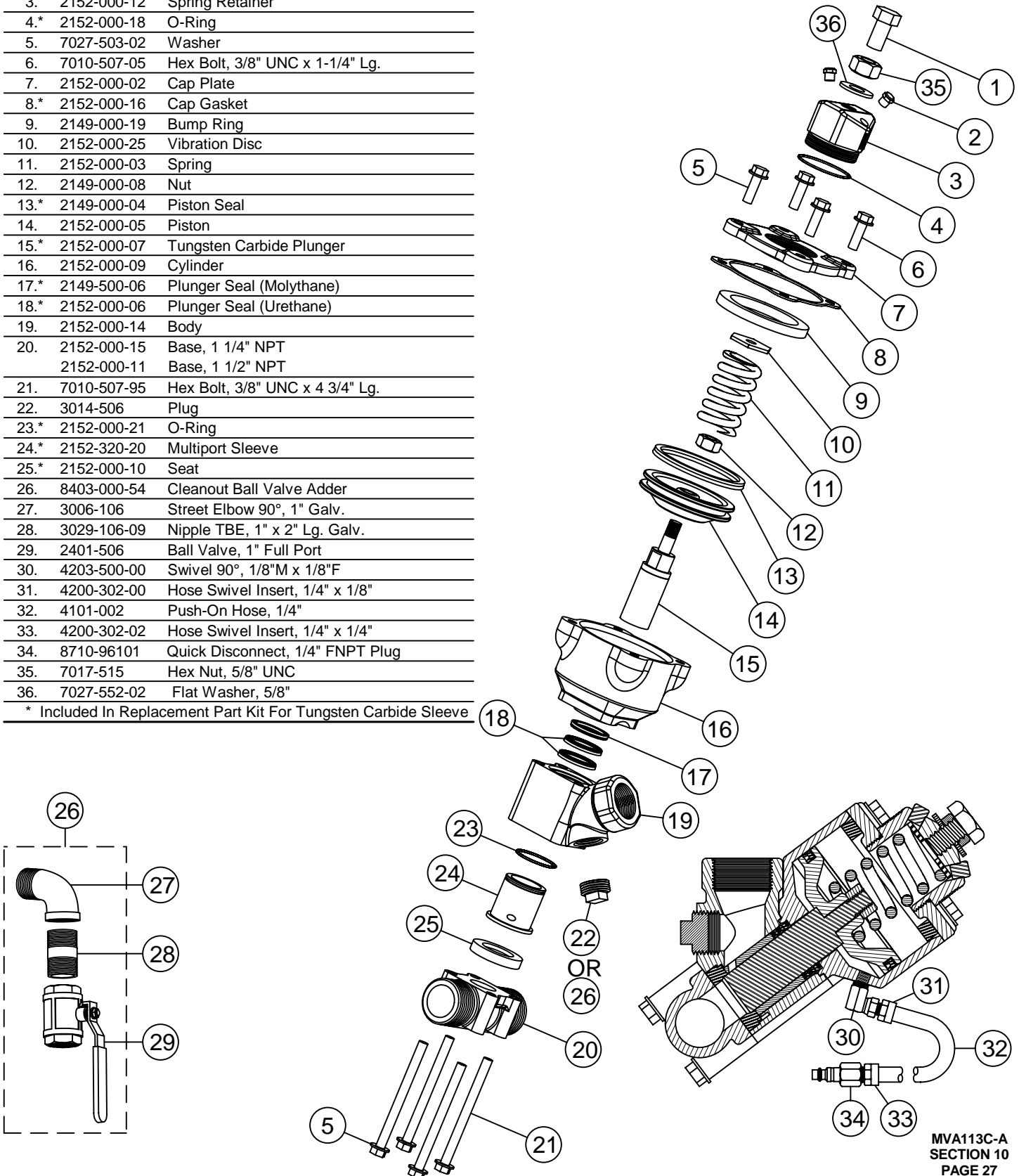
MEDIA VALVE ACTUATOR REPLACEMENT PART KIT 80188

(* INCLUDED IN REPLACEMENT PART KIT)

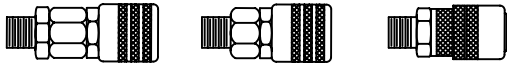
Thompson Valve II Multiport Sleeve

	2152-406	1" Valve With Multiport Sleeve
	2152-407	1 1/4" Valve With Multiport Sleeve
	2152-408	1 1/2" Valve With Multiport Sleeve
No.	Part No.	Description
	2152-400-99	Replacement Part Kit With Multiport Sleeve
1.	7010-515-06	Hex Bolt, 5/8" UNC x 1" Lg.
2.	2152-000-17	Breather Vent
3.	2152-000-12	Spring Retainer
4.*	2152-000-18	O-Ring
5.	7027-503-02	Washer
6.	7010-507-05	Hex Bolt, 3/8" UNC x 1-1/4" Lg.
7.	2152-000-02	Cap Plate
8.*	2152-000-16	Cap Gasket
9.	2149-000-19	Bump Ring
10.	2152-000-25	Vibration Disc
11.	2152-000-03	Spring
12.	2149-000-08	Nut
13.*	2149-000-04	Piston Seal
14.	2152-000-05	Piston
15.*	2152-000-07	Tungsten Carbide Plunger
16.	2152-000-09	Cylinder
17.*	2149-500-06	Plunger Seal (Molythane)
18.*	2152-000-06	Plunger Seal (Urethane)
19.	2152-000-14	Body
20.	2152-000-15	Base, 1 1/4" NPT
	2152-000-11	Base, 1 1/2" NPT
21.	7010-507-95	Hex Bolt, 3/8" UNC x 4 3/4" Lg.
22.	3014-506	Plug
23.*	2152-000-21	O-Ring
24.*	2152-320-20	Multiport Sleeve
25.*	2152-000-10	Seat
26.	8403-000-54	Cleanout Ball Valve Adder
27.	3006-106	Street Elbow 90°, 1" Galv.
28.	3029-106-09	Nipple TBE, 1" x 2" Lg. Galv.
29.	2401-506	Ball Valve, 1" Full Port
30.	4203-500-00	Swivel 90°, 1/8" M x 1/8" F
31.	4200-302-00	Hose Swivel Insert, 1/4" x 1/8"
32.	4101-002	Push-On Hose, 1/4"
33.	4200-302-02	Hose Swivel Insert, 1/4" x 1/4"
34.	8710-96101	Quick Disconnect, 1/4" FNPT Plug
35.	7017-515	Hex Nut, 5/8" UNC
36.	7027-552-02	Flat Washer, 5/8"

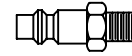
* Included In Replacement Part Kit For Tungsten Carbide Sleeve



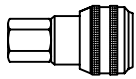
QUICK DISCONNECTS



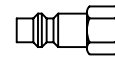
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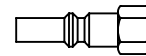
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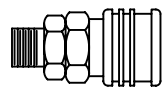
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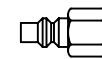
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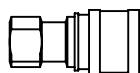
96101



96103



96102



4224-711-02
(WATER)



4224-710-02
(WATER)

COMPRESSED AIR REQUIREMENTS

The compressed air requirement for the ACCUSTRIP SYSTEM® Delivery Device is determined by the nozzle size and the operating pressure at the blast nozzle. The following size air hose is generally recommended when blasting at a nozzle pressure of 50 psig or greater.

<u>Nozzle Size</u>	<u>Air Hose Size (Inside Dia.)</u>
1/2"	1-1/4"
3/8" and smaller	1"

The table below gives the air consumption for a range of nozzle sizes over a region of operating pressures. For example; a 7/16" nozzle (#7), to operate at 90 psig, will require 285 SCFM of air at temperature and atmosphere pressure @ Sea Level. In general practice, the following recommendations for blast hoses are as follows:

AIR CONSUMPTION GUIDELINES, CFM

SIZE	NOZZLE AIR PRESSURE, PSIG								
	20	30	40	50	60	70	80	90	100
3/16"	17	22	27	32	37	42	47	52	58
1/4"	31	40	48	57	66	75	84	93	103
5/16"	48	62	76	89	103	117	131	145	161
3/8"	69	89	109	129	149	169	189	209	232
7/16"	94	122	149	176	203	230	258	285	315
1/2"	123	159	194	229	265	300	336	371	412

The air compressor has to have sufficient capacity to supply the following requirements:

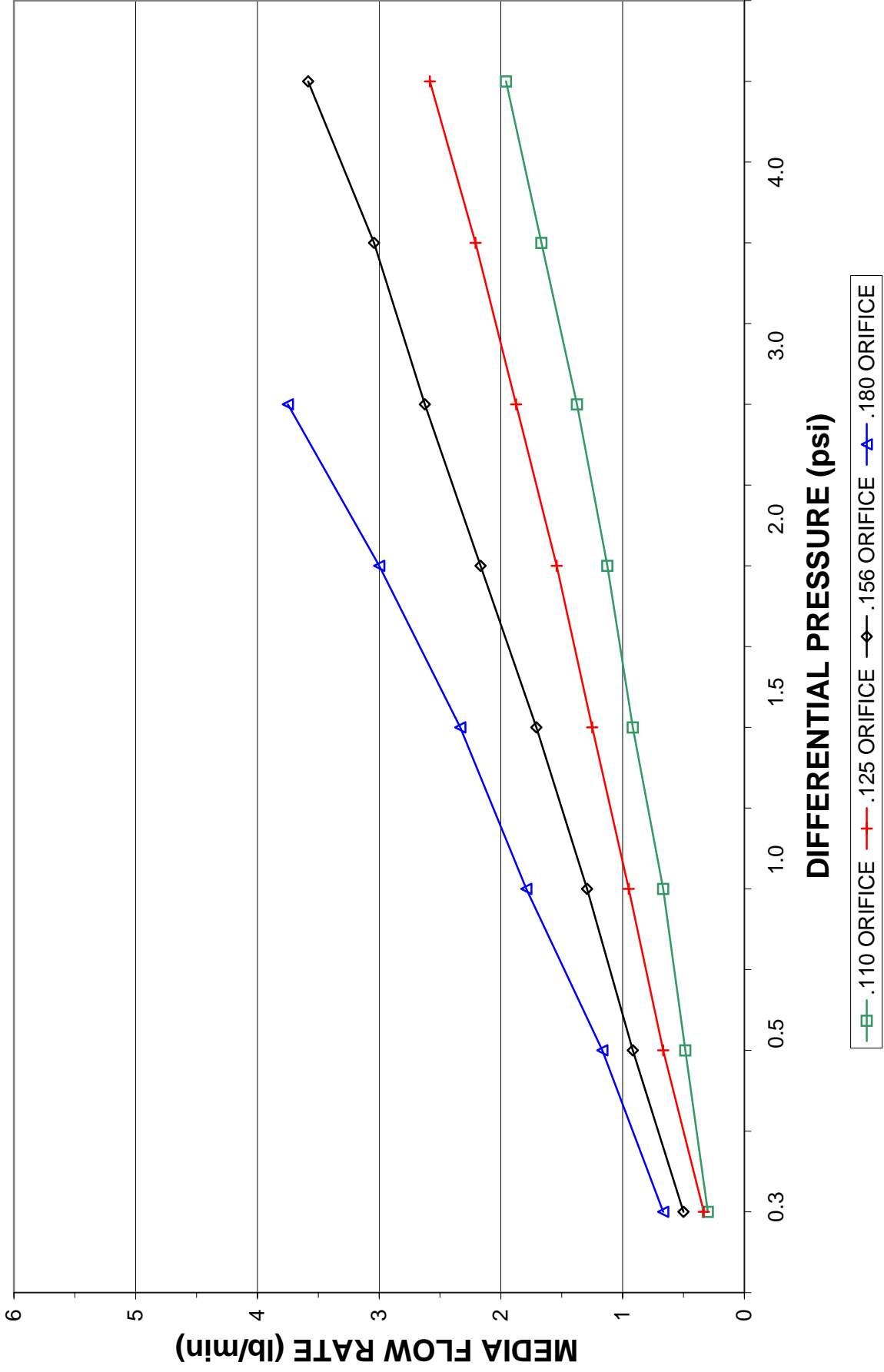
1. Blast air for the largest nozzle and the highest pressure that will be used (see above table).
2. Auxiliary pneumatic driven equipment on the ACCUSTRIP SYSTEM® Delivery Device.
3. Moisture Sep. – 10CFM
4. Breathing air for the optional blast hood – 12CFM
(Separate Air Pump Required)

A rule of thumb for the Hp required by diesel driven compressors is 3.0 CFM per 1.0 Hp and 4.0 CFM per 1.0 Hp for electrically driven compressors.

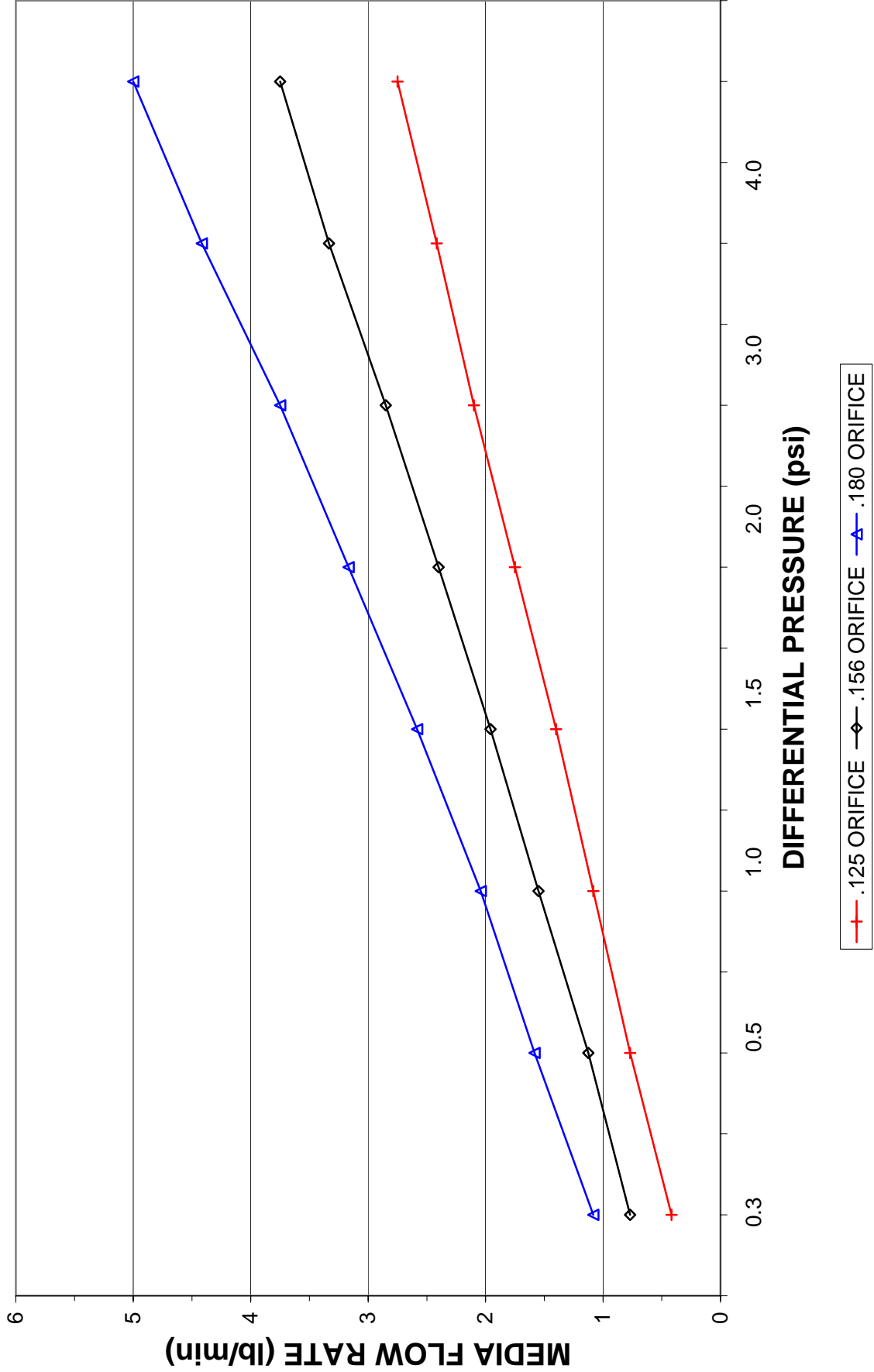
Example: 300 CFM requires a minimum 75 Hp electric driver. It is good practice to allow excess capacity of 20% in most operations, so the requirement should be restricted to 240 CFM of air.

MEDIA FLOW CALIBRATION CURVES

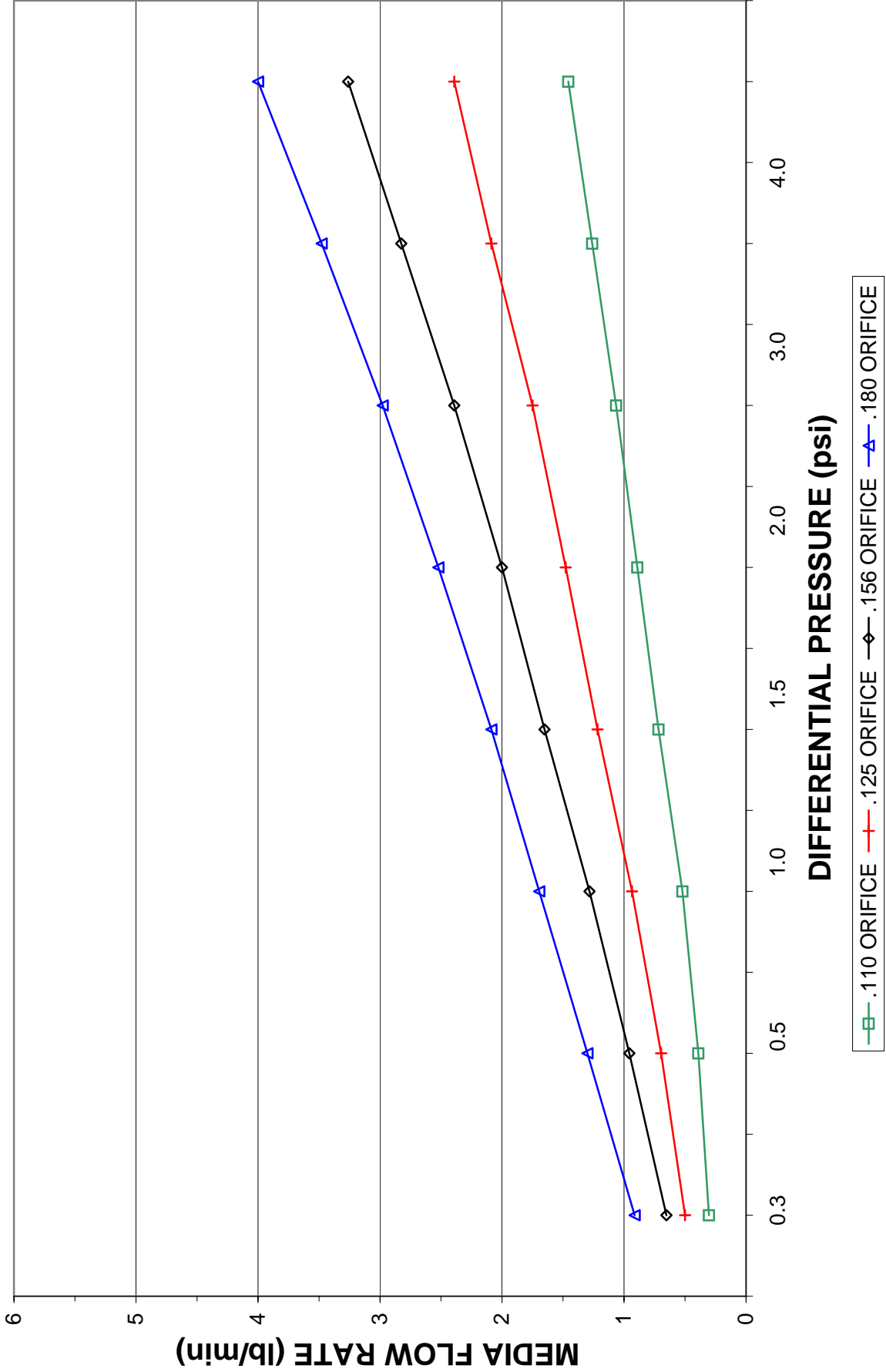
COMPOSITE GRADE MEDIA #6 NOZZLE, 60 psi



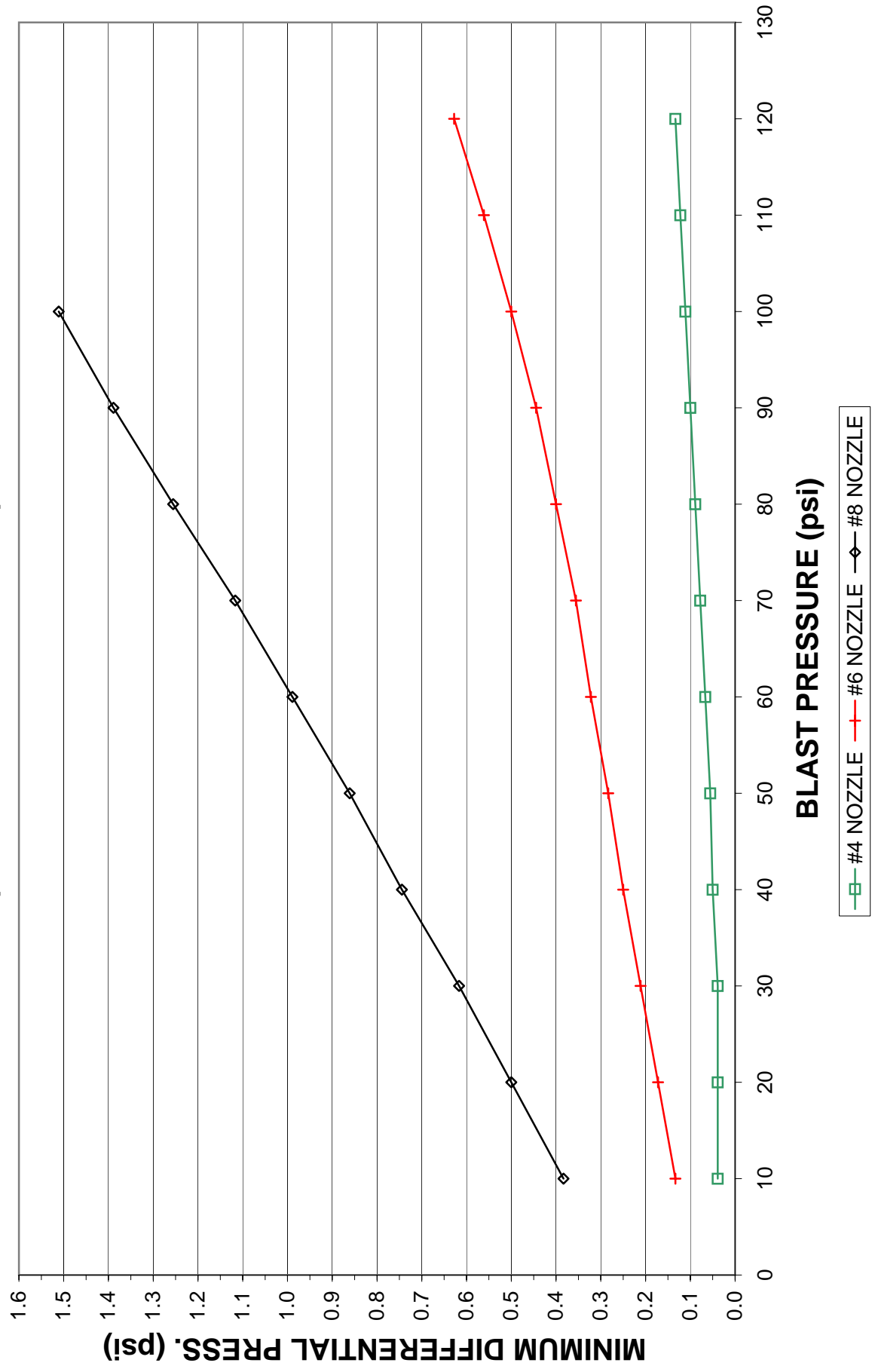
MAINTENANCE GRADE MEDIA #6 NOZZLE, 60 psi



MAINTENANCE XL GRADE MEDIA #6 NOZZLE, 60 psi



MINIMUM DIFFERENTIAL PRESSURE (Built in Pressure Loss)



OPERATOR PROTECTION

Use of the ACCUSTRIP SYSTEM® Delivery Device is subject to the OSHA regulations (29 cfr 1901), and specifically to (29 cfr 1010.94) which pertain to abrasive blasting operations. Proper personal protective equipment must be worn by workers using sodium bicarbonate blast media and the ACCUSTRIP SYSTEM® Delivery Device as follows:

Respiratory protections: Abrasive blasting respirators must be worn by operators in strict compliance with applicable (OSHA) and (NIOSH) regulations and standard hazwopr practice. In those application not specified or regulated by these agencies, the residual dust from sodium bicarbonate blast media is considered a nuisance dust requiring minimal respiratory protection for operator safety and comfort.

Eye protection: Suitable eye and face protection are required when the respirator design does not provide such protection. Other personnel working in the vicinity of abrasive blasting operations must also be supplied such protection.

Protective clothing: Operators must wear heavy canvas or leather gloves, aprons or equivalent (Tyvex suit, for example) for protection from impact with abrasive particles and blasted coating materials.

Training: Operators must have basic knowledge of the safe use of pneumatically operated equipment. Although compressed air is one of the safest means of conveying power, it can be physically dangerous if proper precautions are not taken.

OPERATOR PROTECTION

Ear Protection: The **ACCUSTRIP SYSTEM®** Delivery Device generates noise levels which significantly exceed accepted (OSHA) sound level limits and pose immediate danger to the hearing of all personnel in the area. Noise level monitoring is recommended in any questionable application. As a minimum, ear plugs and ear covers should be worn by all personnel in the vicinity of blasting operations. For blasters or other personnel with high level exposure, both ear plugs and ear covers are recommended. The operator should be aware that:

- Ear covers can provide adequate protection, but also the potential to become dislodged during movement. For this reason, ear cover alone are not recommended for high level exposure.
- Confined spaces have the potential to significantly increase noise levels due to unhampered reverberation of the sound waves. Maximum care should be taken in these circumstances.
- It is further suggested that “High Noise Area” warning signs be replaced in the immediate area to advise of the danger to hearing.

Other safety precautions: The listing provided in this section is considered a minimum safety level for the specific hazards posed by the **ACCUSTRIP SYSTEM®** Delivery Device. All other typical safety precautions related to the industrial maintenance work being performed by the worker be maintained in addition to those listed above.

OPERATOR PROTECTION

Noise exposure: When blast operators are subjected to noise levels exceeding the permissible exposure (see table below) and feasible administrative or engineering controls fail to reduce sound to within permissible levels, ear protection (snug fitting ear plugs and ear covers) must be provided. Other personnel working in the vicinity of abrasive blasting operations must also be supplied such protection.

Permissible noise exposures	
Duration per day (hours)	Sound level (D.B.A.)
8	90
6	92
4	95
3	97
2	100
1	102
1/2	105
1/2	110
1/4 or less	115

ENVIRONMENTAL EFFECTS

- 1) Care should be taken to avoid contact of sodium bicarbonate blast media with grass, green foliage, and plants in general. Prolonged contact with sodium bicarbonate blast media may turn some foliage brown, and high concentrations of sodium bicarbonate blast media in soil may have other detrimental effects on plant life due to the effects of alkalinity and/or sodium ion concentration on root system. Contact areas should be flushed immediately with water and the effluent directed away from vegetation. If contact with vegetation is unavoidable, wet the vegetation and surrounding soil thoroughly before blasting, keep wetted during blasting operations, and flush thoroughly with water after blasting.
- 2) It should be noted that the ACCUSTRIP SYSTEM® Delivery Device process may be regulated by both federal and state regulations with respect to waste emissions and disposal. Individual state air, water and soil quality standards may apply where no specific state regulations exist for abrasive blasting operations. State regulations will be equal to federal at minimum, and they may be more restrictive.
- 3) Wastes generated from abrasive blasting operations must be accumulated, sampled, and tested prior to disposal in accordance with federal (RCRA) and/or state and local regulations. To determine if a hazardous waste has been generated, a waste sample is generally tested according to the toxicity characteristic leaching procedure (TCLP). This test will determine levels of leachable toxic metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) and establish the waste as hazardous or non-hazardous. Additionally, test other than the TCLP may be required by individual states abrasive blasting wastes may also be classified as hazardous if they exhibit acute toxicity hazards or are reactive, ignitable or corrosive. It is the responsibility of the waste generator to determine the regulatory statues of the waste and to arrange for proper disposal. The operator should try to determine to the utmost extent the nature of the material to be blasted so proper sampling, treatment and disposal may be planned. The operator should also be aware that state and local regulations and requirements may also apply to blast residue disposal and may be equal to or more restrictive than federal requirements.

WARRANTY

ACCUSTRIP SYSTEM® Delivery Devices are guaranteed to be free of defects in material and workmanship at time of shipment. Axxiom Manufacturing, Inc. will replace any products or component parts which prove defective under proper use within three months of the date sold, provided that prompt notice has been given. However, Axxiom Manufacturing, Inc. liability is limited to replacement of such defective products or components and Axxiom Manufacturing, Inc. shall have no liability for labor, consequential damages or special charges. This guarantee is in lieu of all other representations. Notwithstanding the above, Axxiom Manufacturing, Inc. at its option, may elect to repair, at its expense, defective equipment or parts in lieu of replacement.