



Surface Finishing
Equipment Group

Blast & Vac System with HF Blast Pot



WARNING



READ AND FOLLOW ALL INSTRUCTIONS AND SAFETY PRECAUTIONS BEFORE
INSTALLING OR OPERATING THIS EQUIPMENT.
KEEP THIS MANUAL READILY AVAILABLE FOR FUTURE REFERENCE.

It is the responsibility of the employer to place this manual in the hands of the operator. This manual must be kept in a place available to those using and affected by this equipment at all times during the life of this equipment. Failure to comply with these instructions can result in serious injury or death to the operator or those in the vicinity of the equipment.

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SAFETY PRECAUTIONS

FAILURE TO USE THIS MACHINE IN ACCORDANCE WITH THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH. READ THE FOLLOWING CAREFULLY BEFORE YOU ATTEMPT TO OPERATE THE MACHINE.

- This equipment must be only used by competent operators who are properly skilled, duly trained, and have read and understood the operating and safety instructions.
- Never attempt to perform any maintenance or refilling while the Machine is under pressure or capable of being pressurised. This means the air source should be isolated by closing the inlet ball valve and disconnecting the air supply line. The Safety Stop Valve on the deadman valve should be opened to release any residual pressure in the system.
- Keep This Operators Manual Available To Users At All Times.
- This equipment should not be used in a hazardous area or potentially explosive environment. Static electricity can be generated by the friction of abrasive particles passing through hose or nozzles, and the impact of the abrasives on the surfaces being blasted. Static electricity can shock employees and cause fires and explosions by igniting flammable / combustible atmospheres or materials.
- Ground all parts of the Equipment, and the item being blasted.
- This equipment should be used in a well lit area.
- Make sure that the unit is situated on a flat sturdy surface.
- Warning - for hoisting, the lifting lugs providing on the machine must be used. Do not connect slings to other parts of the machine. Always disconnect ancillary hoses etc. From the machine and ensure the machine is empty prior to moving.
- Use only original equipment replacement components.
- All airlines and couplings should be fitted with whip-check safety devices.
- Do not use abrasives containing free silica which can result to serious respiratory disease. If in doubt ask for an MSDS (material safety data sheet).
- Furnish all personnel in the area with approved respiratory equipment, eye and ear protection and ensure that these are worn.
- Do not modify or substitute any equipment or controls supplied on or with the equipment without our prior written assessment and consent.
- Never point the blast nozzle at any person. Always keep the nozzle pointed at the work piece.
- Never connect the pot to a compressed air supply in excess of the Safe Working Pressure as stamped on the machine. If in doubt, or this is obscured, check with the manufacturer.
- DANGER When using mobile diesel air compressors, always site the compressor away from the blast area and outside in a well ventilated area, to avoid any exhaust fumes being drawn into the compressor air intake. All standard breathing air filters DO NOT remove carbon monoxide from the air supply.
- The operation of this equipment can generate noise levels which can be damaging to the ears. It is essential that the operator, pot tender and all other personnel in the vicinity be made aware of this and that suitable ear defenders are worn.
- Media ricochet generated from the blast cleaning operation can be dangerous and all personnel within the area must wear adequate protection.
- Signs warning of these dangers must be positioned around the perimeter of the blasting operation and measures must be taken to ensure that no one enters the area of the blasting operation without permission and adequate safety protection equipment. Should anyone enter the area, the pot tender must immediately close down the blasting operation by depressing the emergency button on the control panel and / or the blaster must release the lever of the deadman handle.
- If the Blast Pot is dismantled / decommissioned, ensure it complies with local environmental laws.
- Communication - it may be necessary that the blaster and pot tender operate some form of signalling or communication system. Under operating conditions where the blaster is not in constant view of the pot tender it is strongly recommended that a wired / radio communication system be used.



➤ Only use in accordance with the operating instructions

➤ Do not use Abrasives containing free silica e.g sand

➤ Do not exceed the maximum working pressure

➤ Do not point the nozzle at the face or body

➤ Isolate from air supply and depressurise before attempting any maintenance

Hand, Eye, Ear and Respiratory protection must be worn when using this equipment

FOR FURTHER INFORMATION CALL :-
Abraclean Ltd Hogg Blasting & Finishing Equipment Ltd
TEL: 0161 480 8087 TEL: 0191 415 3030

SAFE PRACTICES

- Never attempt to perform any maintenance while the unit is under pressure or is even capable of being pressurised. This means at a minimum the inlet ball valve should be closed and the air source be shut off or disconnected. The emergency stop on the deadman valve should be opened to release any residual pressure.
- Do not use the Machine for extended periods of time.
- 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.
- Always keep fingers well clear of the working area of the pop-up valve.
- Periodically check all hoses to see that they are in good condition. Repair any valves or hoses that show signs of wear or leakage.
- Check daily the blast nozzle. Replace immediately if any cracks however slight have appeared to avoid any possible disintegration of the nozzle.
- All blast hose couplings and some air hose couplings are provided with holes through which a wire or a pin should be inserted to prevent accidental disconnections.
- A back thrust is created by the action of compressed air passing through the nozzle, therefore the operator must ensure he has adopted a safe stance and position and must maintain a firm hold of the nozzle holder / blast hose.
- The interior condition of the vessel should be inspected regularly for corrosion.
- All blast operators should be supplied with and use approved respiratory equipment, protective clothing, helmet, ear protection and gloves.
- Whilst wearing standard blast cleaning helmets always ensure that:
 - a. A Filtered Air Supply is used.
 - b. A correctly fitted inner shatterproof visor is used to ensure operator eye protection.
 - c. A disposable external visor is fitted to protect the inner visor.
 - d. Ear plugs or ear defenders are worn for additional ear protection.
- This information relates only to the noise level generated internally as a result of the introduction of breathing air. Additional ear protection may also be necessary if noise levels generated externally are above permitted levels.
- Whip checks must be used on all airlines / airline connections.



INSPECTION REQUIREMENTS

- A blast pot is a pressure vessel and is subject to inspection as required by legislation.
- The owner is obliged to observe regulations governing pressure vessels of this type.
- You should advise your insurers of your purchase and ensure that this equipment is included in a written scheme of examination prepared by a qualified competent person.
- Visual inspections should be carried out internally and externally by a competent qualified person. We recommend hydraulic pressure testing should be carried out at least once of every 12 months, or in accordance with your local / company / insurance regulations, whichever is sooner. This can be done at our facility. Please see contact details on the last page.
- Your insurers will advise on current legal requirements.
- Should any damage occur to the vessel then it should be taken out of service immediately and the manufacturer contacted for advice.

SET UP

1. A 375cfm @ 100psi or larger compressor will be required to operate the blast & vac system. Approx 200cfm is used by the AbraVac vacuum generator and 175cfm by the blast pot.
2. Connect 3/4" Airline from compressor to the inlet of the Floor mounted Water Separator. (Arrow on one side of the unit shows the direction of the airflow)
3. Connect the short 3/4 whip hose from the VAM5A to the inlet of the Blast Pot.
4. Connect a 1" Airline from the compressor to the AbraVac Vacuum Eductor.
5. Fit whip-check straps to all airline couplings.
6. Fit a centre tube over the end of the blast nozzle or into the work head depending on which work head is in use.
7. Screw the relevant nozzle into the blast hose nozzle holder ensuring it is screwed until it meets the blast hose then screw the blast hose nozzle holder into the back of the Blast & Vac work-head.
8. Fit the 75mm ID Vacuum hose to the vacuum port on the side of the work-head and secure with tape ensuring a seal between the two.
9. Connect the other end of the vacuum hose to the inlet on top of the material recovery hopper.
10. Connect the 51mm ID Vacuum hose from the material recovery hopper to the top centre of the dust filter unit.
11. Connect the 51mm ID hose from the side outlet on the lid of the filter unit to the vacuum inlet port on the AbraVac unit.
12. Connect the silencer to the exhaust port on the AbraVac unit.
13. Ensure that the coalescing filter pad, is fitted in the dust filter unit (level with the upper ring of the drum) and that the water is to the correct level. (to the lower ring of the drum)



14. Fit inner and outer brush to the Blast & Vac work-head. A choice is available, either straight brushes for flat and curved surfaces or shaped brushes for inside or outside corners.
15. Be sure that the lever on the deadman handle is NOT depressed. Connect the remote hoses to the base of the pot. Red to red. Yellow to yellow. N.B. Colour coding on remote lines may vary, always check before connecting remote lines. In these instructions, RED is the air supply TO the handle and YELLOW is the signal return FROM the handle to the valves.
16. Connect the blast hose coupling to the pot coupling at the outlet of the abrasive metering valve on the bottom of the blast machine, and ensure a safety clip is through the locking holes.

GENERAL OPERATIONS

When the deadman valve is operated, it provides air pressure to open the normally closed air valve and Thompson abrasive valve. This will allow the abrasive to fall into the air stream. The large orange knob on top of the Thompson abrasive valve controls the volume of grit.

The abrasive/air mix travels down the blast hose, out through the nozzle and onto the work- piece.

The Blast & Vac head must be held onto the surface being cleaned at all times.

When the deadman valve is released the air supply to the valves stops, and vents the control pressure in the valves, this allows both of them to spring to their "normally closed" position. The blast pot remains under pressure when the air and abrasive valves are turned off and only de- pressurise when the manual exhaust valve is opened.

The AbraVac pulls a vacuum through the filter unit and material recovery hopper and onto the work-head. This vacuums the spent media, paint, rust and debris back into the material recovery drum, where it is cyclone separated, and stored for disposal. The dust then enters the filter unit and is percolated through the water entrapping all dust particles; the coalescing filters then ensure the air pulled through the system and discharged to atmosphere are free from excessive water.

To avoid the danger of the drums imploding never use the vacuum hose on its own. Always use the work-head, a brush head or special vacuum tool.

OPERATION PROCEDURE

- 1 Ensure all hoses and couplings are connected and secure.
- 2 Ensure the material drum lid is seated correctly.
- 3 Ensure the water bath filter unit has the coalescing filter fitted correctly, water is at the correct level (to the bottom ring of the drum) and its lid is seating properly.
- 4 Start the compressor and put "on load".
- 5 Ensure that the air inlet ball valve on the blast pot is closed.
- 6 Ensure that the safety ball valve on the remote control valve is 'open'.
- 7 Ensure that the choke valve on the blast pot is in the open position. (Vertical in line with the pipe-work).



- 8 Ensure that the air inlet valve on the AbraVac is closed.
- 9 Turn on the air supplies on the compressor to both blast pot and AbraVac.
- 10 Ensure the bleed off on the bottom of the VAM5A and the moisture separator on the blast pot are both slightly open to permit moisture to drain off. Once each day open them fully to completely blow out any dirt that might have accumulated.
- 11 Load one bag of abrasive into the loading dish in the top of the blast pot. (Always load using the filter head sieve)
- 12 ENSURE FINGERS ARE CLEAR OF THE POP-UP VALVE.
- 13 Set the air pressure regulator valve to desired blasting pressure. (This will depend on the type of work being carried out, always start at low pressure and increase slowly) this will have to be finally adjusted when blasting starts.
- 14 Adjust the abrasive control valve by closing fully (clockwise) and the opening four full turns (anticlockwise). This is an approximate setting, the setting can only be finalised once full operation has commenced and is adjusted as per the next section.
- 15 The abrasive flow can be adjusted by turning the control knob clockwise for less abrasive and anticlockwise for more abrasive. There will be a slight delay in the control of the abrasive due to the length of the blast hose, so allow a few seconds before adjusting further. Adjust gradually, and only to ensure the minimum amount of abrasive is introduced into the air stream to suit the work requirement.
- 16 Open the air supply ball valve on the AbraVac.
- 17 Close the safety ball valve on the remote control valve.
- 18 Hold the Blast & Vac work-head on the surface to be cleaned and operate the safety deadman handle. This will start the blasting process. Move the BNV work-head on the surface of the work-piece ensuring the brushes are in contact with the work surface at all time. Different shaped brushes are available for internal and external angles as well as for flat/curved surfaces.
- 19 Avoid putting too much pressure on the brushes, causing them to bend into the blast area as you move the work-head. Always use both Inner & Outer Brush (Except on BNV6 head where only one brush is required.)
- 20 Adjustment to the grit flow may be required as per point 17.
21. **To stop the blast process release the Deadman's handle.** Keep the work-head on the surface for a short time after to ensure the blast process has fully stopped.
- 21 Replace brushes when abrasive loss or wear is noted. Check centre tube for wear each time brushes are replaced and change it when the end begins to flare. **Prolonged blasting with a deteriorated Centre Tube will DESTROY critical parts of the work-head.**

RE-FILLING THE BLAST POT

- 1 Open the safety valve on the remote control valve. This prevents the blast pot from pressurizing in the event that the deadman handle is closed accidentally.
- 2 Refill the blast machine with the required amount of abrasive
- 3 Close the safety valve and start blasting.



SERVICE AND MAINTENANCE

DAILY

- Always empty pot completely when not in use. Abrasive left in the pot can become damp and may cause blockages.
- Make regular checks to all connections. I.e. air line and blast hose replace gaskets or couplings if wear is evident.
- Replace pop-up valve and sealing ring if there is any evidence of wear.
- Check wear on nozzle. Replace if necessary.
- Check brushes and centre tube in BNV work-head. Replace as required.
- Check water level in the water bath filter unit; change if very dirty or top up if required.

WEEKLY

1. Check for wear or deterioration of blast hose by squeezing firmly by hand.
2. Empty water bath dust filter, and refill

REGULARLY

1. Remove inspection door and clean out machine. Check and if necessary replace door gasket.

EVERY MONTH or sooner if required.

1. Replace coalescing filter in the water filter drum.

IMPORTANT

A blast pot is a pressure vessel and is subject to inspection as required by legislation. You should advise your insurers of your purchase and ensure that a qualified person carries out, inspections at specified intervals. Your insurers will advise on current legal requirements.



BLAST & VAC TROUBLESHOOTING

There are two types of problems you may encounter when using a Blast & Vac, one being a lack of sufficient vacuum recovery, the other being problems with abrasive flow through the blast nozzle. Some typical causes for these problems follow.

Please use this as a check sheet:

Vacuum Recovery Insufficient

1. Abrasive flow too heavy - cut back at abrasive meter valve on the blast pot.
2. Not enough air – the gauge on AbraVac should read a minimum of 90psi.
3. Vacuum leak in system - check lid gaskets, hose connections, drums and hose body for breaks or holes.
4. Improper use of work-head - brushes should be in direct contact with the work surface.
5. Brushes worn out - replace.
6. Centre tube worn out - replace.
7. Too small air supply hose to AbraVac - 1" ID minimum required.
8. Obstruction in hoses.
9. Obstruction in AbraVac - check for goods exhaust airflow.
10. Damp abrasive.
11. Material recovery hopper full.
12. Blast nozzle worn out - letting too much abrasive through.
13. Blast pot pressure too high .
14. Hoses not laid straight - bends in the hose reduce flow capability.

TROUBLE SHOOTING

A - Air Blast but No Abrasive

1. The pot is empty.
2. The abrasive in the pot is wet. Try closing the choke valve on the vertical pipe on the side of the pot for one or two seconds whilst trying to blast until some abrasive is pumped out. Operating the unit in the "choked" condition greatly accelerates wear in the metering valve. Continuous running in the "choked" position also reduces productivity and therefore should be avoided if possible.
3. Foreign matter is plugging the abrasive metering valve. Try closing the choke valve and fully opening the abrasive metering valve momentarily to see if that will blow the obstruction out. If that does not work then it will be necessary to disconnect the pot from the air supply, remove the abrasive metering valve, clean out the obstruction and re-fill the pot. .



B - Reduced Pressure at the Nozzle (with or without abrasive flow)

1. Insufficient air supply – minimum compressor size is 375 cfm.
2. Air hose too small.
3. Abrasive adjustment open too far.
4. Pop-up valve not seating properly.
5. Choke valve partially closed.
6. Worn out nozzle

C - Unit is Slow to turn on or Will Not Turn On

1. Air hose too small.
2. Insufficient air supply – minimum compressor size is 375 cfm.
3. Couplings on remote hoses loose or leaking.
4. Remote hoses are plugged. If the return hose is disconnected from the pot, there should be air pressure whenever the deadman valve is depressed.
5. Deadman valve is plugged. Only a weak air signal, or none at all, comes from the deadman valve when the return hose is disconnected at the Deadman's handle.
6. Defective diaphragm in the automatic air valve.
7. Defective diaphragm in the Thompson abrasive metering valve.

We estimate that 90% of any problems will occur in four areas;

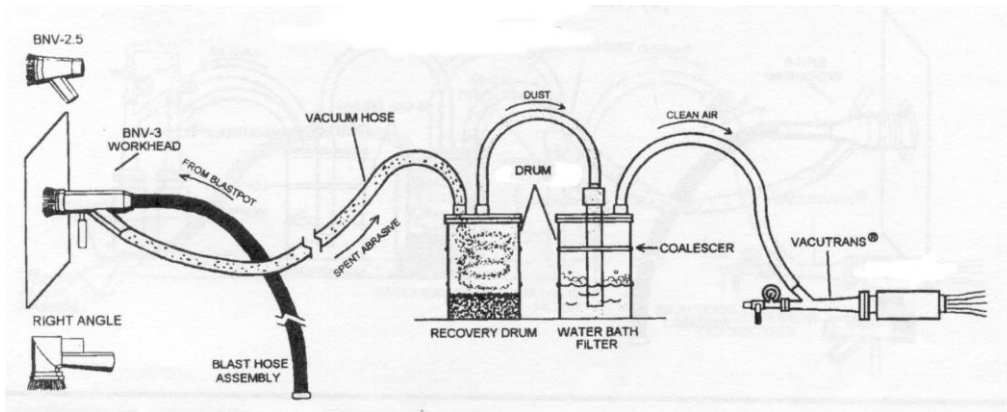
1. Insufficient air supply – minimum compressor size is 375 cfm.
2. Too small air supply hoses.
3. Moisture in the abrasive.
4. Worn out or improperly adjusted abrasive flow metering valve

Consider these first. We also stress that it is essential to keep an eye on the major wear items in the blast head such as the brushes, centre tubes and wear sleeves. Use of the tool with these components not replaced when deteriorated **will result in performance problems and eventually in destruction of more expensive components.**



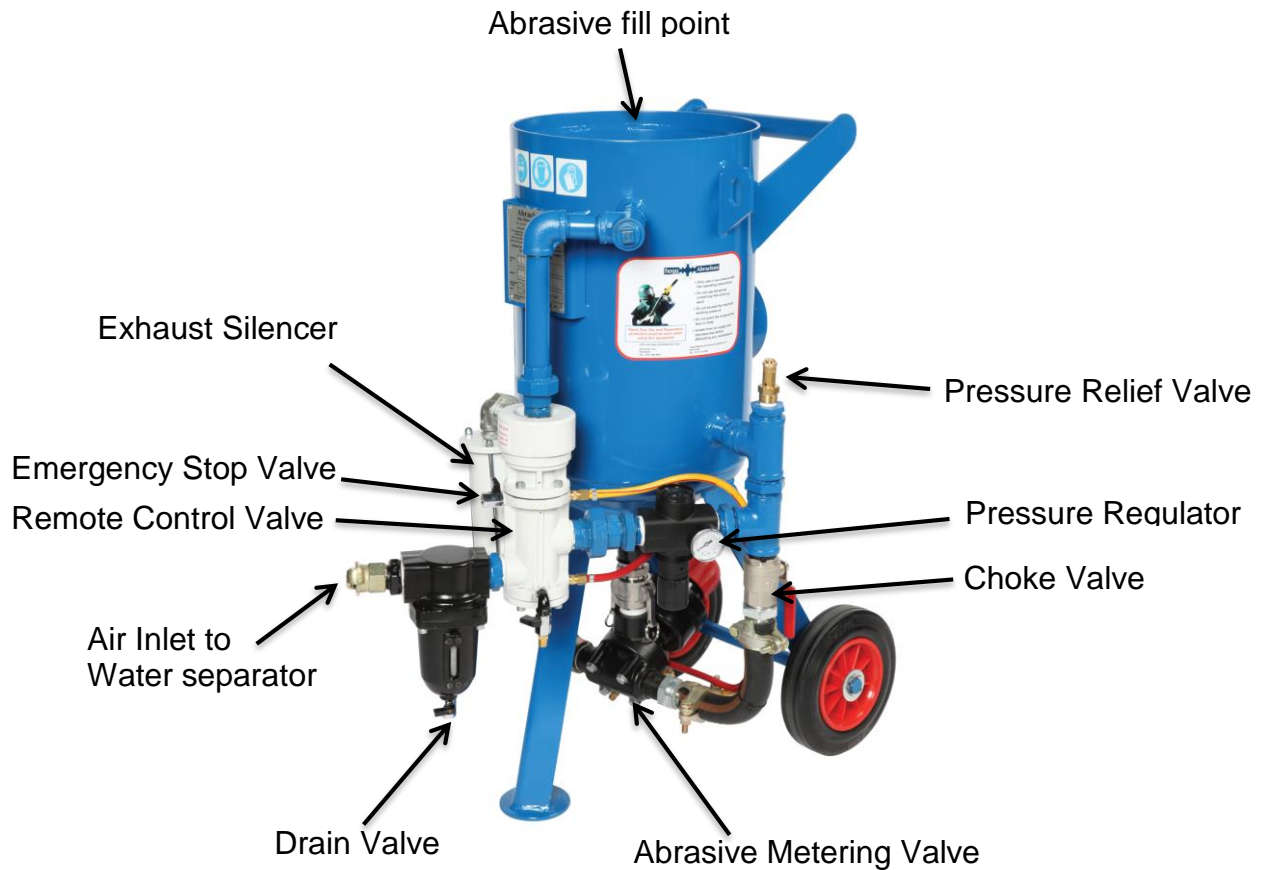
**GENERAL
LAYOUT
VACUUM
SYSTEM**

OF



GENERAL LAYOUT – BLAST POT

The Blast & Vac System uses an HF style blast pot fitted with a remote control valve, pressure regulator, air operated abrasive metering valve, water separator and choke valve.





WORKHEADS

There are five work heads available for the blast & vac system. These cover a range of sizes and include a 90 deg work head for tight spaces:-

Head Size	Brush Diameter	Brush Configuration	Blast Pattern – approx	Nozzle Part No.	Centre Tube Part No.
No 2 Head	75mm	Single brush	25mm dia		
No 3 Head	75mm	Inner & Outer brushes	25mm dia		
No 5 Head	125mm	Single brush	25mm dia		
No 6 Head	150mm	Single brush	40mm dia		
90° Angled Head	75mm	Single brush	50mm dia		

Head Size	Brush part No.	
No 2 Head		
No 3 Head		
No 5 Head		
No 6 Head		
90° Angled Head		

2.5 HEAD FOR SMALL AREAS WITH DIFFICULT ACCESS

3 HEAD THE MOST POPULAR OF ALL THE HEADS

5 HEAD FOR LARGER AREAS

6 ROLLER HEAD FOR LARGER FLAT AREAS

ANGLE HEAD FOR CONFINED SPACES

B- 104 BLAST NOZZLE

B-201

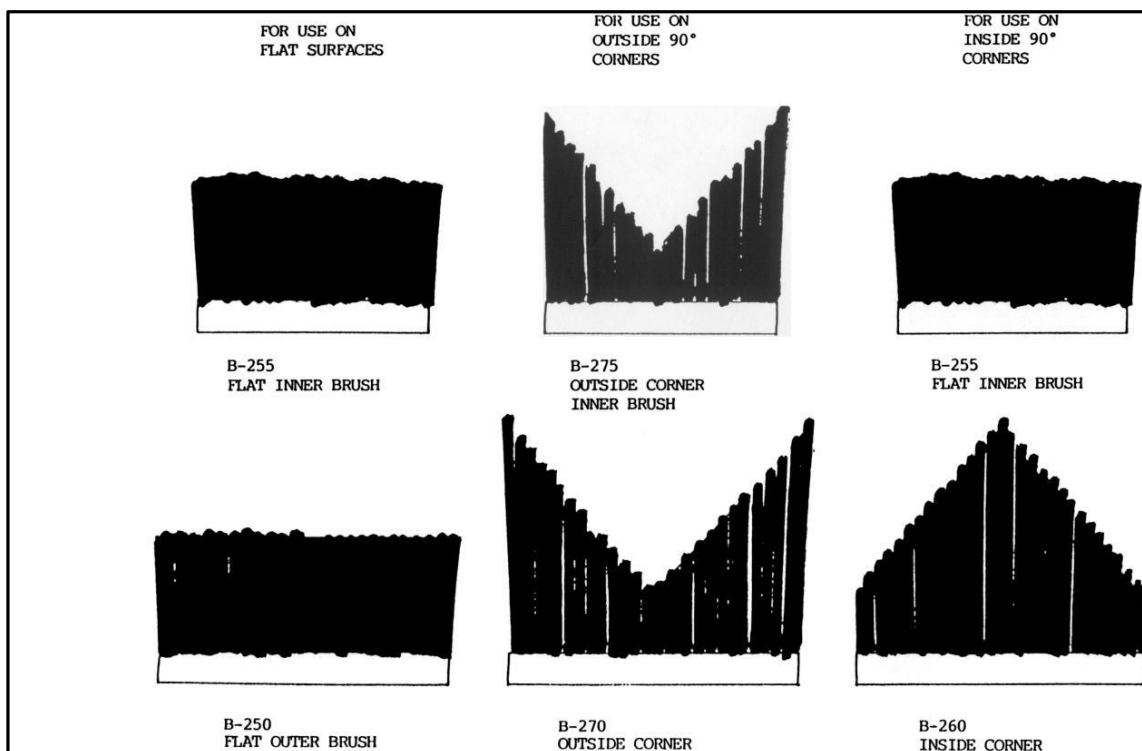
NOZZLE HOLDER

B-040 BLAST NOZZLE HOLDER BUSHING

REFER TO ATTACHED SHEET FOR BRUSH SETS

CONSUMABLE PARTS FOR THIS WORKHEAD INCLUDE THE BRUSHES OUTLINED ON THE FOLLOWING SHEET AND THE B-023 CENTRE TUBE. AN INNER BRUSH SHOULD LAST 2-3 HOURS OF BLAST TIME AND THE CENTRE TUBE SHOULD LAST 4-6 HOURS. OUTER BRUSH USAGE WILL BE AT A FRACTION OF INNER BRUSH RATES DEPENDING ON OPERATOR.

3 HEAD BRUSHES

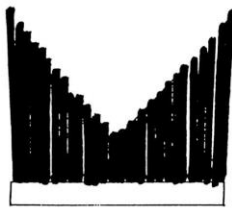




FLAT OUTER BRUSH
B-256



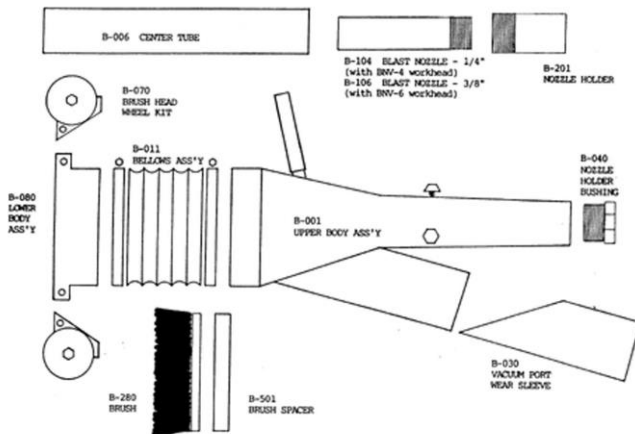
FLAT INNER BRUSH
B-257



OUTSIDE CORNER
BRUSH B2707



INSIDE CORNER
BRUSH B2607



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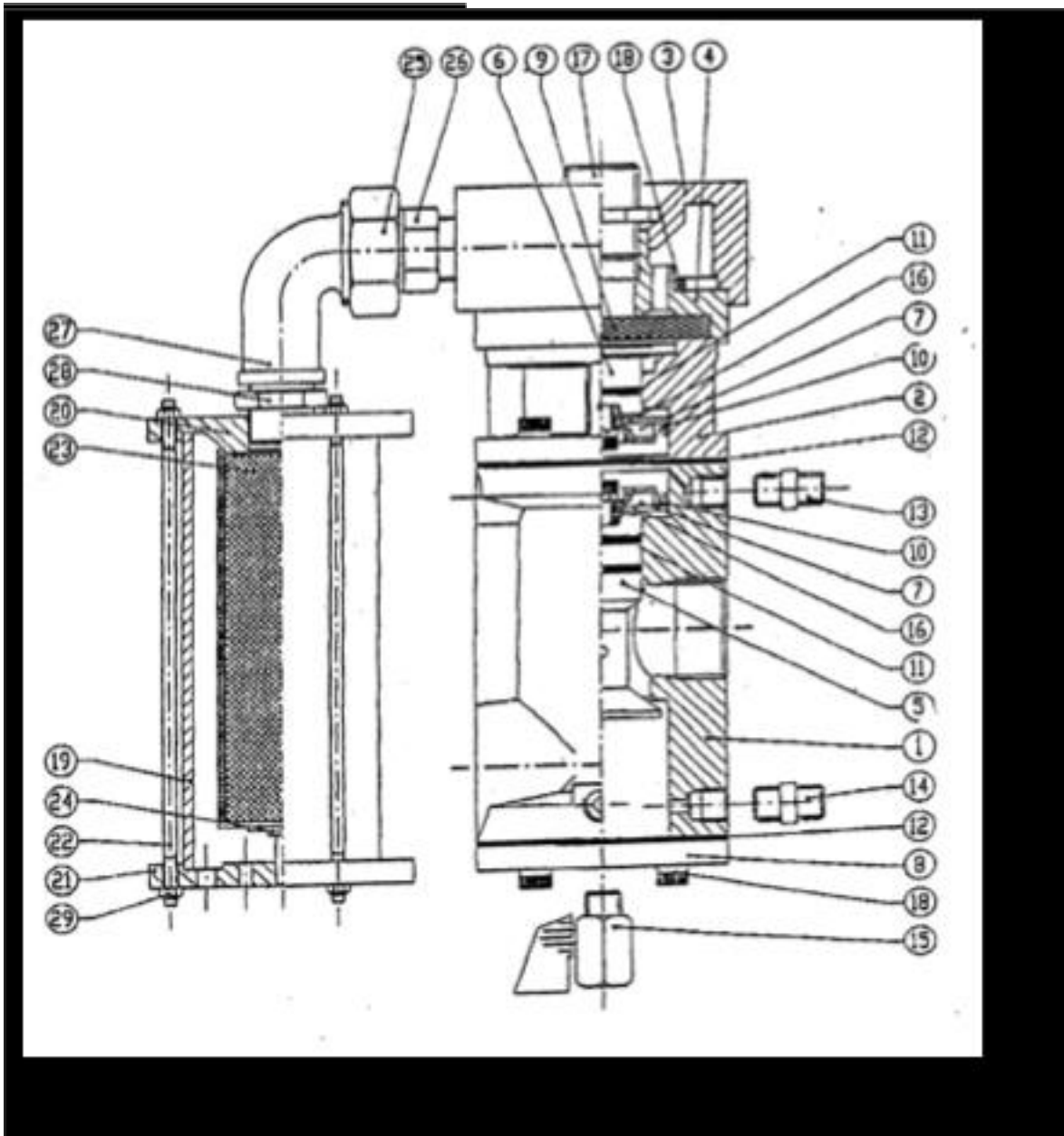


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REMOTE CONTROL VALVE

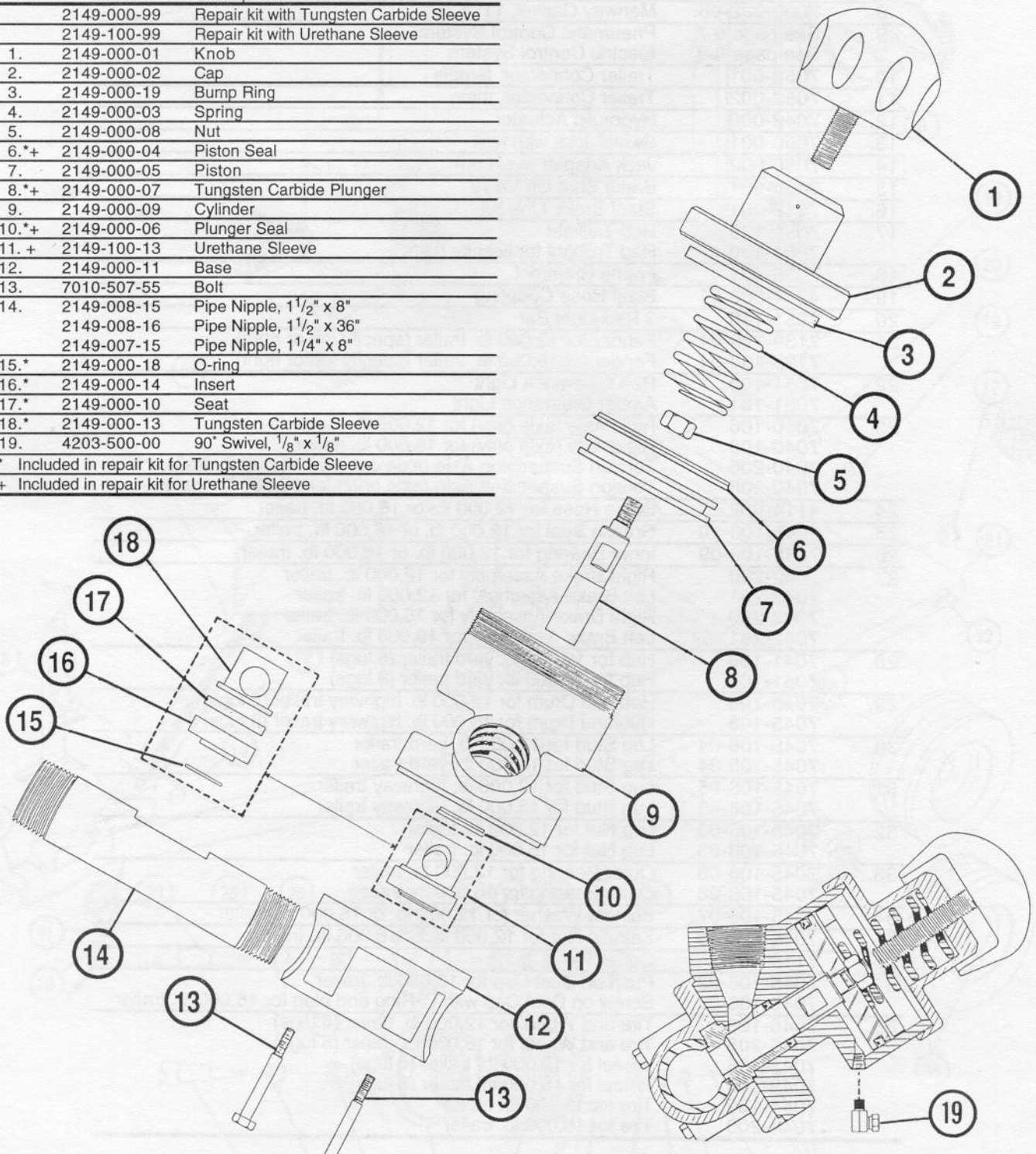


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THOMPSON VALVE

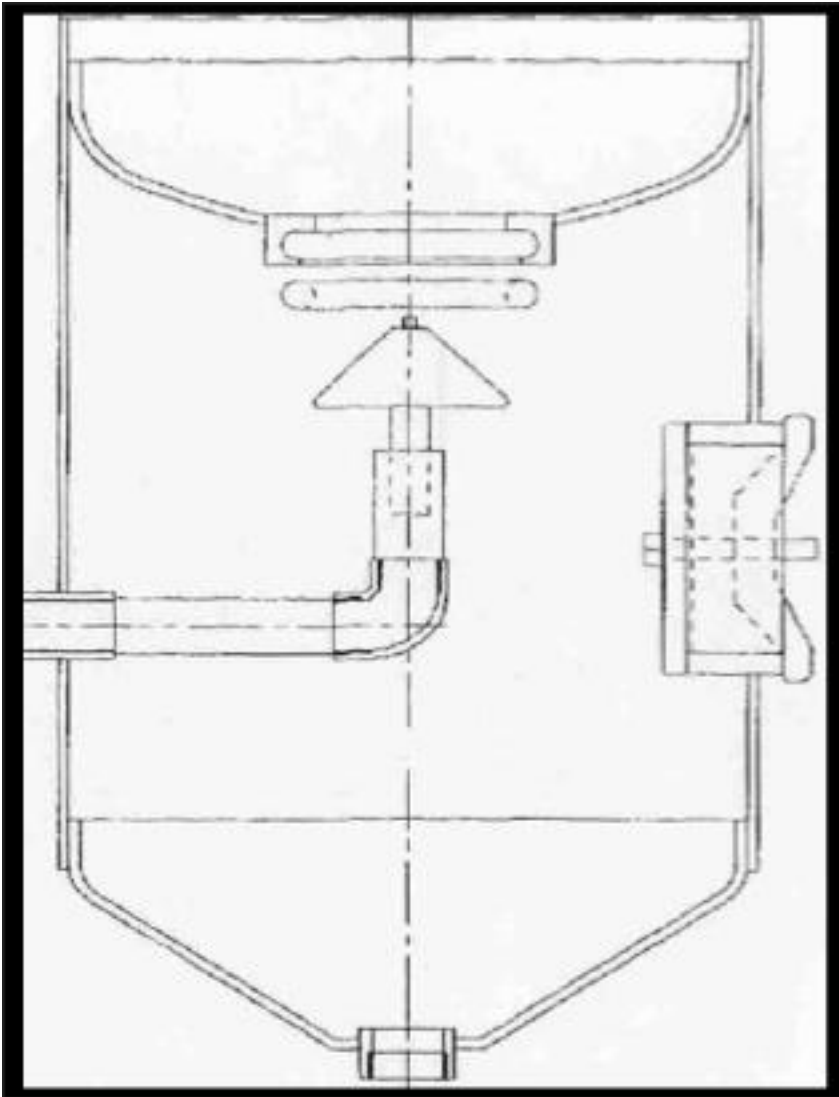


	2149-007	1 ¹ / ₄ " Valve with Tungsten Carbide Sleeve
	2149-107	1 ¹ / ₄ " Valve with Urethane Sleeve
	2149-008	1 ¹ / ₂ " Valve with Tungsten Carbide Sleeve
	2149-108	1 ¹ / ₂ " Valve with Urethane Sleeve
No.	Part No.	Description
	2149-000-99	Repair kit with Tungsten Carbide Sleeve
	2149-100-99	Repair kit with Urethane Sleeve
1.	2149-000-01	Knob
2.	2149-000-02	Cap
3.	2149-000-19	Bump Ring
4.	2149-000-03	Spring
5.	2149-000-08	Nut
6.*+	2149-000-04	Piston Seal
7.	2149-000-05	Piston
8.*+	2149-000-07	Tungsten Carbide Plunger
9.	2149-000-09	Cylinder
10.*+	2149-000-06	Plunger Seal
11. +	2149-100-13	Urethane Sleeve
12.	2149-000-11	Base
13.	7010-507-55	Bolt
14.	2149-008-15	Pipe Nipple, 1 ¹ / ₂ " x 8"
	2149-008-16	Pipe Nipple, 1 ¹ / ₂ " x 36"
	2149-007-15	Pipe Nipple, 1 ¹ / ₄ " x 8"
15.*	2149-000-18	O-ring
16.*	2149-000-14	Insert
17.*	2149-000-10	Seat
18.*	2149-000-13	Tungsten Carbide Sleeve
19.	4203-500-00	90° Swivel, 1 ¹ / ₈ " x 1 ¹ / ₈ "
* Included in repair kit for Tungsten Carbide Sleeve		
+ Included in repair kit for Urethane Sleeve		





BLAST MACHINE (INTERNAL)



AIR CONSUMPTION CHART
COMPRESSOR REQUIREMENTS



Air Consumption Guide for Blasting Nozzles

AIR CONSUMPTION (CFM) PER BLAST NOZZLE								
NOZZLE SIZE	NOZZLE PRESSURE							
	50psi	60psi	70psi	80psi	90psi	100psi	120psi*	140psi*
No. 4 (1/4")	57	66	75	84	93	103	119	136
No. 5 (5/16")	89	103	117	131	145	158	186	214
No. 6 (3/8")	129	149	169	189	209	229	269	309
No. 7 (7/16")	176	203	230	258	285	312	367	422
No. 8 (1/2")	229	265	300	336	371	407	478	549
Relative Efficiency	47%	55%	64%	74%	86%	100%	130%	165%

ABRASIVE

Our blast pots are designed to use a wide range of dry abrasives including the commonly used ones outlined below.

Expendable Abrasives

'J' BLAST SUPA
'J' BLAST STANDARD
STONEGRIT / ABRABLAST®-M/25
JBLAST SC / ABRABLAST®-F/25

Medium Grit for steel
Coarse Grit for very rusty steel
Medium Grit for Concrete
Fine Grit for Stone & Brick

Re-Usable Abrasives

Chilled Iron
Steel Shot
Aluminium Oxide
Glass bead

Various grades for steel
Various grades for steel
Aluminium or steel
Various grades for stainless steel and aluminium

ROUTINE INSPECTION AND MAINTENANCE

ENSURE THAT THE COMPRESSED AIR SUPPLY IS TURNED OFF AND DISCONNECTED. ALL AIR LINES PURGED OF PRESSURE AND SAFETY STOP IS OPENED BEFORE ANY MAINTENANCE WORK.

All blast cleaning equipment is subject to wear, therefore for safety and efficiency, it is ESSENTIAL to operate a preventative maintenance programme. The degree of wear is variable, and is dependent upon many factors: - type and grade of media, blasting pressure, nozzle size, operator expertise, etc. and these factors should be taken into consideration when planning regular maintenance schedules. The following checklists are a basic guide to assist in planning maintenance schedules.

Note:

Maintenance should only be carried out by trained competent persons. This maintenance can be done on site or at our facility. Please see contact details on the last page if this service is required.



INITIAL SET-UP AND ROUTINE CHECKS

1. Always empty pot completely when not in use. Abrasive left in the pot can become damp and may cause blockages.
2. Make regular checks to the condition of all Lines and Connections. Look for wear, splits, or leaks and replace if necessary.
3. Blast Hose – Check the blast hose to be used is in good condition along the entire length. Squeeze by hand to check for wear. Ensure that the blast hose ends are cut square and are located fully into the coupling and nozzle holder and up to the retaining shoulders within and that all the required hose retaining screws are in good condition and firmly secured in position. Lay out the blast hose from the machine to the work surface area, ensuring that no tight curves or kink occur and ensure that the hose is protected from possible damage.
4. Couplings and Gaskets - check that the coupling gaskets on the claw couplings are in good condition and correctly seated in the coupling. Ensure that the couplings are securely locked and that each latching wire is located through the appropriate hole in the marrying coupling. If no integral means of wiring latching is provided, use split pins through the corresponding holes to ensure no accidental parting of the couplings can occur.
5. Deadman (Remote Control) Hoses and Handle – ensure the remote control air hoses have no splits or leaks. Ensuring that the rubber insert is in position and that the blade opens freely by the action of the spring and closes freely. The hoses should be secured the remote control air hoses to the blast hose at short, regular intervals using hose ties. Take care not to compress the hoses by over-tightening.
6. Check the condition of the nozzle holder for wear and replace with new one if necessary.
7. Check that the nozzle holder gasket is in good condition and ensure that it is in position. Renew if showing sign of wear.
8. Ensure nozzle is securely located in to nozzle holder onto the gasket.
9. Check that the inspection door assembly is correctly and securely fitted, the gasket is in position and that no leaks occur.
10. Check that the sealing ring (P-5) and pop up valve mushroom in the abrasive-filling orifice of the machine are in good condition and correctly positioned. This will involve unscrewing the 3 screws securing the safety cover. Remember to re-fix the safety cover after the inspection.
11. Remove exhaust air muffler (if fitted) and clean out.
12. Check and replace if necessary breathing air filter elements. (Where Used)
13. Check internals of the abrasive metering valve for wear or leaks. Replace liner or diaphragm or wear plate if they show signs of wear.
14. Check drain on the water separator is clear; adjust until it is blowing slightly to remove moisture for the supply to the switches.

WEEKLY

1. Remove inspection door and clean out machine.
2. Check and if necessary replace door gasket.

EVERY 3 MONTHS MAXIMUM

1. Replace breathing air filter elements.

EVERY 6 MONTHS MAXIMUM

1. Strip, clean and lubricate all operating valves.



TROUBLE SHOOTING / FAULT ANALYSIS

ENSURE THAT THE COMPRESSED AIR SUPPLY IS TURNED OFF AND DISCONNECTED. ALL AIR LINES PURGED OF PRESSURE AND SAFETY STOP IS OPENED BEFORE ANY MAINTENANCE WORK.

FAULT	POSSIBLE CAUSE	REMEDY
Air Blast BUT No or Intermittent Abrasive flow	Pot is empty	Re-fill Pot
	Abrasive Metering Valve is blocked with foreign body or damp abrasive	Close Choke Valve for 1-2 seconds and open Abrasive Metering Valve momentarily only to see if obstruction is blown out. If this fails depressurise pot and remove obstruction by hand.
	Abrasive Metering Valve is closed or not correctly adjusted	Adjust Valve
	Exhaust not sealing	
	Pop-up valve is not seating.	Check for obstructions on valve / O Ring wear.
No air and no abrasive	Compressor not turned on	Turn on compressor
Reduced Pressure at nozzle	Insufficient Air Supply	Use larger compressor Use larger diameter air supply hose
	Abrasive Metering Valve is opened too far.	Adjust Valve
	Pop-up valve not seating	Check for obstructions on Valve Check for sufficient volume of air
	Exhaust not sealing	
Unit will not turn on or slow to turn on	Insufficient Main Air Supply	Use larger compressor Use larger diameter air supply hose
	Insufficient Air Supply to Remote Control Valve	Remote Hoses (Twin hoses) to deadman handle to RC Valve are leaking / split. Remote Hoses (Twin hoses) to deadman handle to RC Valve are blocked. Disconnect the return hose from the pot to check there is air pressure whenever the deadman handle is depressed.
	Remote Control Valve not functioning	May require service of valve for sticking or worn seals. Valve may be blocked.
Machine will not depressurise		
Unit turns on accidentally.	Lever on Deadman Handle worn	Replace Handle
	Deadman handle lines wrong way wrong	Swap lines (only occurs on certain types of handle)
Pop-up valve will not drop after depressurisation	Worn pop-up valve and / or sealing ring	Remove inspection door assembly and pop-up valve then clean out.



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