



CB150 & CB150HV



OPERATIONS MANUAL

ECLIPSE
surface technologies

CONTENTS

SAFETY WARNINGS	2
SAFETY PROCEDURES	3
CONTROLS AND HOOK-UPS	4
ITEMS NEEDED FOR OPERATION	5
OPERATING INSTRUCTIONS.....	6
INITIAL SETUP	6
BLASTING OPTIONS.....	6
RELOADING MEDIA	7
SHUTTING DOWN.....	7
TIPS AND HELP GUIDE	8
GENERAL MACHINE TIPS	8
MEDIA SELECTION TIPS	9
LOW PRESSURE BLASTING TIPS	9
APPLICATION/MEDIA SELECTION.....	10
MACHINE SETTING SUGGESTIONS.....	11
GENERAL MAINTENANCE.....	12
PUMP & PUMP AIR TREATMENT	12
WATER FILTER	13
SLURRY DIAPHRAGM VALVE	14
MICRO AIR FILTERS	15
WINTERIZING INSTRUCTIONS	16
BLASTING AT ELEVATION	20
LIST OF COMPONENTS	21
AIR MAP	26
WATER MAP.....	28
ACCESSORIES.....	30
PARTS SCHEMATICS & REPAIR KITS	31
RECOMMENDED SPARE PARTS KIT.....	31
WIWA WATER PUMP (AIR END)	32
WIWA WATER PUMP (WATER END)	33
DIAPHRAGM VALVE (SPRING CLOSED).....	34
MAIN AIR REGULATOR	35
MICRO FILTERS	36
MAINTENANCE KITS.....	37
TROUBLESHOOTING.....	38
WARRANTY	42

SAFETY WARNINGS

ADHERE TO THE FOLLOWING AT ALL TIMES

WARNING:

Only point nozzle at intended surface being blasted or safe open space. Never point nozzle at self, any persons or unintended surfaces. Not adhering to these guidelines may result in injury or damage.

Always contact the Site Manager before starting the job.

Always wear proper PPE including but not limited to ear protection, eye protection, face covering and dust mask. Long sleeves, pants and gloves recommended.

Always make sure the site is a safe place to work.

Always erect a safety barrier (as required).

Always erect warning signs.

Always use scaffolding where and when necessary.

Always protect surrounding work area and environment.

ALL WORK SHOULD STOP IF YOU DISCOVER HAZARDOUS MATERIALS!

SEEK GUIDANCE FROM THE SITE MANAGER.

SAFETY PROCEDURES

PRIOR TO INITIAL START-UP, READ AND UNDERSTAND THIS MANUAL.

MAKE SURE EYE, EAR AND DUST PROTECTION IS WORN AT ALL TIMES

COMPRESSED AIR NOISE EXPOSURE CAN CAUSE INJURY!



WARNING:

RESPIRATORY PROTECTION IS MANDATORY

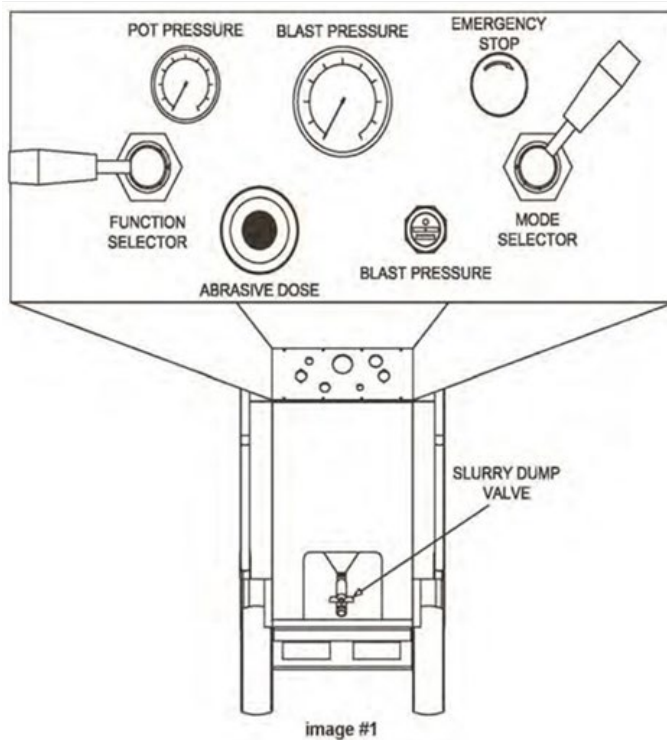
NIOSH STATES THAT POSITIVE PRESSURE TYPE CE SUPPLIED AIR RESPIRATORS (SAR'S) ARE THE ONLY RESPIRATORS SUITABLE FOR USE IN ABRASIVE BLASTING OPERATIONS, AND THAT A PRESSURE DEMAND RESPIRATOR CONTAINING A TIGHT-FITTING FACE PIECE WITH PROTECTION FACTOR OF 2000 IS REQUIRED. NIOSH RECOMMENDS THAT CONTINUOUS FLOW TYPE CE ABRASIVE BLAST SAR'S BE OPERATED NEAR THE UPPER LIMIT OF THE NIOSH APPROVED OPERATING PRESSURE RANGE TO

ENSURE MAXIMUM PROTECTION TO THE USER. LUNG INJURY AND CANCER HAZARD DO NOT BREATHE DUST MAY CAUSE DELAYED LUNG INJURY INTERNATIONAL AGENCY ON RESEARCH ON CANCER AND THE NATIONAL TOXICOLOGICAL PROGRAM HAS DETERMINED THAT NICKEL COMPOUNDS CAN CAUSE CANCER IN HUMANS. CONSIDER ALL ADDITIONAL HAZARDS FROM DUST FROM SUBSTRATE MATERIAL OR PAINT/ COATINGS BEING BLASTED. THE RISK OF INJURY IS DEPENDENT ON THE DURATION AND LEVEL OF EXPOSURE.

CONTROLS AND HOOK-UPS

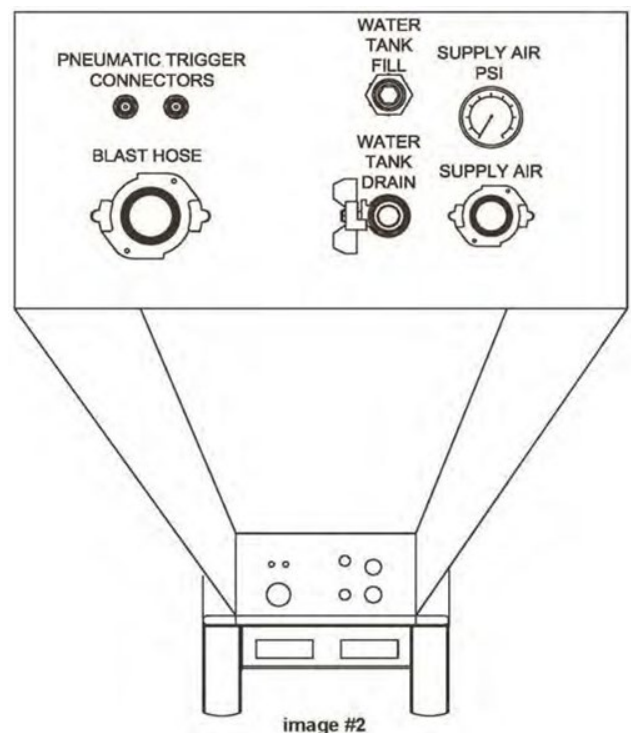
BACK CONTROL PANEL & SLURRY DUMP

The back control panel is where all adjustments to the blast pressure, media dosage, and the selection of each pot function and blast mode are made. the slurry dump is used when flushing the pot of media and water.



FRONT CONTROL PANEL

Here is where all the external hose connections are made. This includes the blast hose and trigger lines (Deadman), air supply hose, and water hose. In addition, you have a supply air gauge and the water tank drain



ITEMS NEEDED FOR OPERATION

Blast Hose with Nozzle

- Supplied standard with 1" I.D. blast hose and #6 nozzle
- Nozzle sizes may vary between #5, #6, #7 as well as XL versions*

Air Supply*

- Recommend 185+ CFM/100 psi.
- Can run on as little as 90 CFM (100 psi) or as much as 300 CFM+ (150 psi).
- Max 150 psi Inlet supply pressure. **WARNING: DO NOT EXCEED PSI!**

Air Hose*

- Recommend min. 1" air hose w/ 1" quick coupler (Chicago style)
- Can run with 3/4" air hose but may limit performance.

Water Hose and Supply*

- Standard garden hose screw connection
- Water pressure supply not to exceed 75 psi or auto stop may malfunction causing water holding tank to overflow.

Media*

- Recommend Crushed Recycled Glass or equivalent product (40/70 mesh—80/100)
- Do not use material finer than 100 mesh or valves & blast flow may malfunction or clog.
- For a list of other known products used, ask your Eclipse Sales Rep.

ADDITIONAL ITEMS MAY INCLUDE

Extension Blast Hose*

Can use up to one additional 50' length or 100' total of blast hose.

Nozzle Extension*

Extends Nozzle 24" from Deadman handle bettering reachability.

Rust Inhibitor*

Used to prevent flash rusting on steel surfaces

**Items not included with machine purchase*

OPERATING INSTRUCTIONS

Connect water tank fill supply hose and fill water tank.

Connect blast hose and pneumatic trigger lines.

Connect supply air hose.

Use safety clips and whip checks at all connections.

Start compressor and open supply valve.

Make sure compressor is in "RUN MODE" if applicable and supply pressure is between 100-150 psi.

INITIAL SETUP

1. Press EMERGENCY STOP BUTTON
2. Turn FUNCTION SELECTOR to "PRESSURIZE" and allow the pump to cycle for 30 seconds
3. Remain in "PRESSURIZE" mode & ADD MEDIA, using the pot fill to rinse excess into the pot
4. ALLOW POT TO FINISH PRESSURIZING. Will fill, vent and pressurize to 130 psi automatically while in "PRESSURIZE" mode
5. Turn FUNCTION SELECTOR to "BLAST"



starting position



step 2



step 5
see 'blasting options'

BLASTING OPTIONS

Water and Media	Turn MODE SELECTOR to "SLURRY"
Water Only	Turn MODE SELECTOR to "WATER ONLY"
Air Only	Turn MODE SELECTOR to "AIR ONLY"

RELOADING MEDIA

1. Press EMERGENCY STOP BUTTON
2. Turn FUNCTION SELECTOR to "DEPRESSURIZE" and let pot drain excess water in pot.
3. Repeat "INITIAL SETUP"



step 2



step 3a



step 3b

SHUTTING DOWN

1. Run in Water Only mode for 15 seconds
2. Run in Air Only mode for 15 seconds
3. Press EMERGENCY STOP BUTTON
4. Open SLURRY DUMP VALVE to empty pot.

CAUTION: Media will spray slightly when initially opening valve.



step 1



step 2

TIPS AND HELP GUIDE

Simple preventative measures and tips for all new users of the ClearBlast CB150

DO NOT ADJUST ANYTHING INSIDE THE MACHINE WITHOUT PROPER TRAINING OR CALLING TECH SUPPORT FIRST! (888) 99-BLAST

Suggested settings to get you started (*see chart on page 13 for more detailed info*):

- 45 psi blast pressure: abrasive dose = 1/2 turn open
- 65 psi blast pressure: abrasive dose = 1 turn open
- 80+ psi blast pressure: abrasive dose = 2 turns open

GENERAL MACHINE TIPS

- Pneumatic trigger (Deadman trigger) will not be live until the system is in Blast Mode and the pot is pressurized.
- Never load dry media into the blast pot without at least putting one-two gallons of water in first. This equates to running the Wash Hose or Pressurize mode for about 30 seconds prior to adding media.
- Do not place or allow any foreign material in the blast pot.
- Be sure to use your blast pot lid when the machine is not being used to prevent objects such as leaves, sticks and rocks from getting in and causing the system to clog. Also be cautious when pouring media into the pot so that portions of the bag do not rip and fall inside.
- When blasting vertically higher than 10 ft. above the machine, be sure to leave 10%-20% of the total length of hose on the ground in front of machine before running hose vertically. For more information see "Blasting at Elevation" (page 23).
- Never pull blast hose at a 90-degree angle around corners and especially at the connection to the panel! This will cause the blast hose to wear quickly and burn a hole through the hose wall at the bend.
- If you have any questions or troubleshooting needs, call your local tech support for help.

MEDIA SELECTION TIPS

This information, as well as the charts/graphics on the following pages are intended to be guidelines only. Please use them as a suggested starting point, but keep in mind your application may warrant settings outside the guidelines provided. It is the operator's responsibility to find the optimum setting/ media combination for quick & safe removal rates.

Understand that there are many variables for coating removal and/or surface preparation projects (i.e.—age/integrity of substrate, number of layers of coating, type of coating, media used, air compressor used, etc.). Each project is different and may require different settings and provide you with different removal rates. As a rule, always begin a project on the lowest suggested pressure and increase the pressure as needed, to increase removal rate. If possible, test pressure setting in an inconspicuous spot or disposable sample. This testing will also help to calculate general removal rates for the project and will assist with your quoting efforts.

MEDIA GRADES

This machine is designed to handle media mesh sizes: 20 through 100.

Medias outside of this range may flow poorly and/or inconsistently.

Coarse material tends to run more wet.

Media grade will determine surface profile and blast pressure requirements.

The coarser the material, the deeper the profile & the higher the pressure required.

Example:

80/100 Glass	1-2 mill profile	blast pressure = 30-90 psi
40/70 Glass	2-2.5 mill profile	blast pressure = 30-90 psi
20/40 Glass	2-3 mill profile	blast pressure = 90+ psi

LOW PRESSURE BLASTING TIPS

Begin with the lowest pressure setting and gradually increase it, observing how the substrate responds as you go.

For delicate surfaces: hold nozzle further away from surface (12+ inches) and at an angle (45 degrees) to temper the impact.

APPLICATION/MEDIA SELECTION

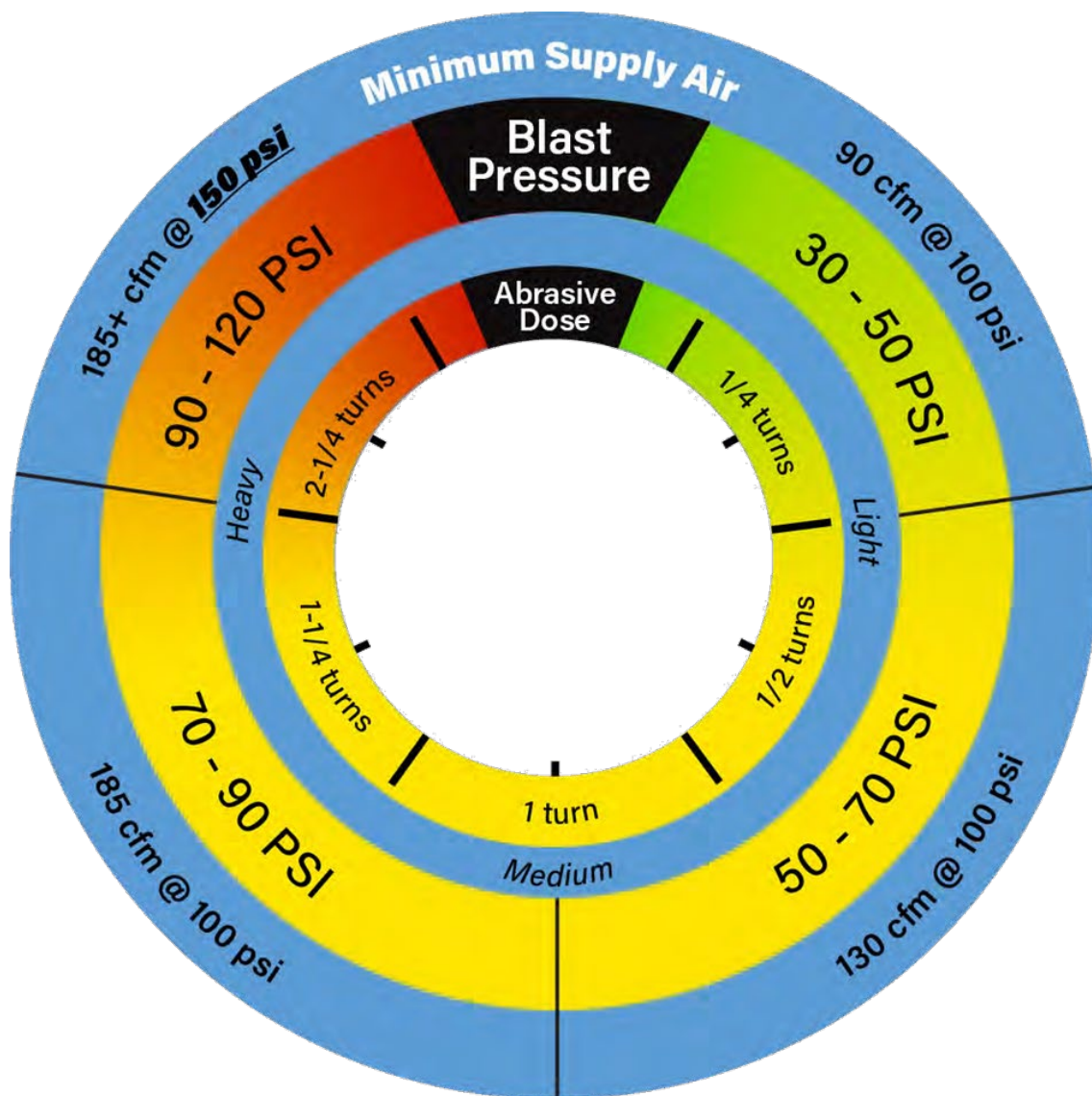
NOTE: The ClearBlast CB150 is not intended to use silica sand!

The chart below shows suggested blast pressure ranges and media options for various substrates. These suggestions are guidelines only and may vary depending on the specifics of your particular project. (i.e.– age of substrate, layers of coating, type of coating, etc.) It is at the user’s discretion to find the optimum setting/media combination for their application. Furthermore, the “media” suggestions are common examples, however other media options may also be available.

	Substrate	Blast Pressure (PSI)	Media
<i>Light</i>	Wood	30 - 40	Crushed Glass (40/70 or 80/100)
	Historic Restoration	30 - 60	Armex
	Fiberglass (boats, etc)	40 - 70	Maintenance Formula Soda
	Stucco	40 - 70	Bio Media*
<i>Medium</i>	Brick	40 - 70	Crushed Glass (40/70) Garnet size: 80
	Thin Metal (automotive, etc)	40 - 70	
	Concrete	40 - 80	
	Pavers	50 - 85	
<i>Heavy</i>	Block	60 - 85	Crushed Glass (20/40 or 40/70) Coal Slag Garnet
	Asphalt	60 - 85	
	Steel: Rust	80 - 120	
	Steel: Heavy Coatings	100 - 120	

MACHINE SETTING SUGGESTIONS

The graphic below shows the relationship between the “blast pressure” and “abrasive dose;” as well as the air compressor requirements for each pressure range. These are suggested guidelines and may need to be adjusted, depending on the age of your machine and/or the requirements of your particular application.

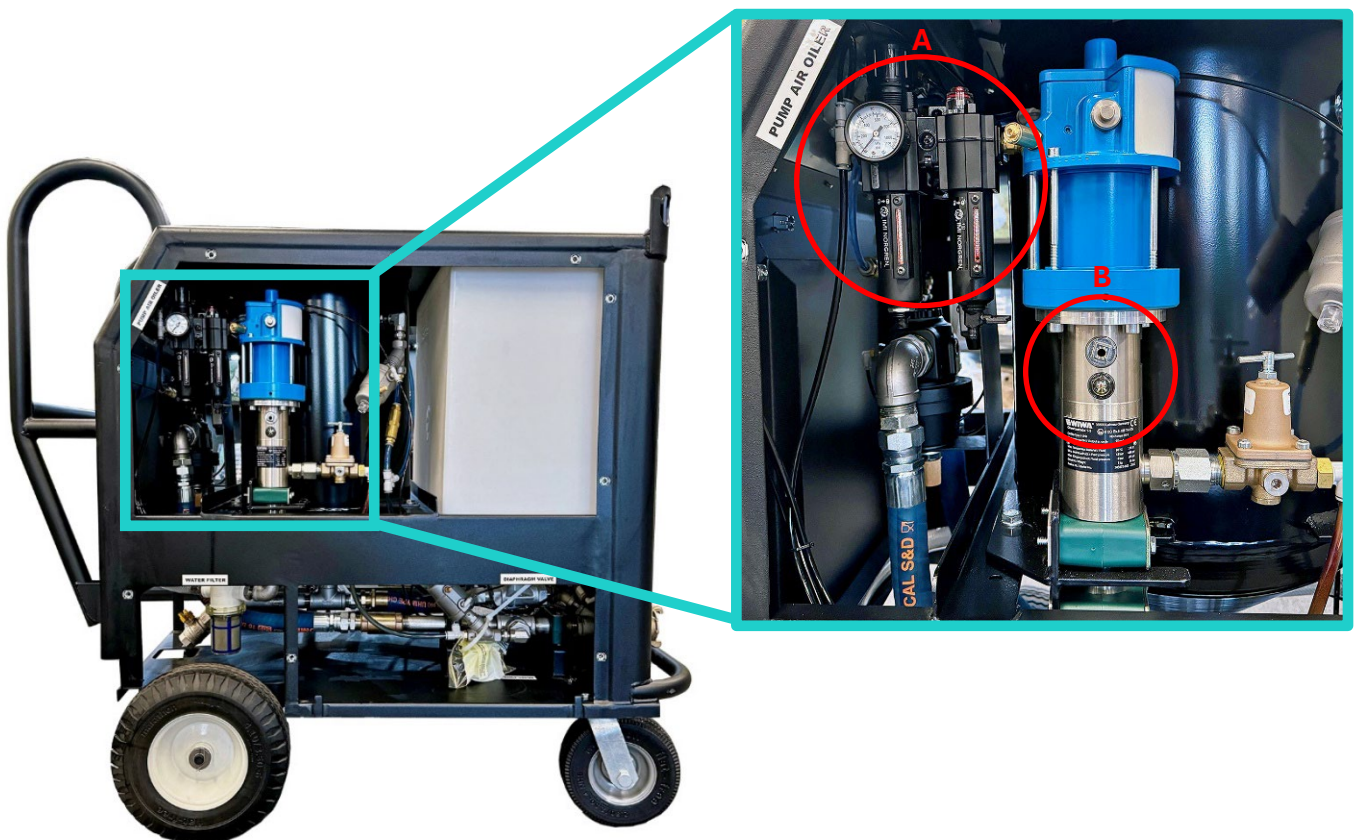


GENERAL MAINTENANCE

PUMP & PUMP AIR TREATMENT

Your pump is pneumatically driven, as such, air treatment components (item “A”) are used to ensure supply air is properly filtered/lubricated for long pump life. The filter and lubricator require periodic inspection and occasional refill of the lubricator bowl (light air tool oil will suffice, see fill line on bowl for amount). The air regulator is factory set to 30 psi.

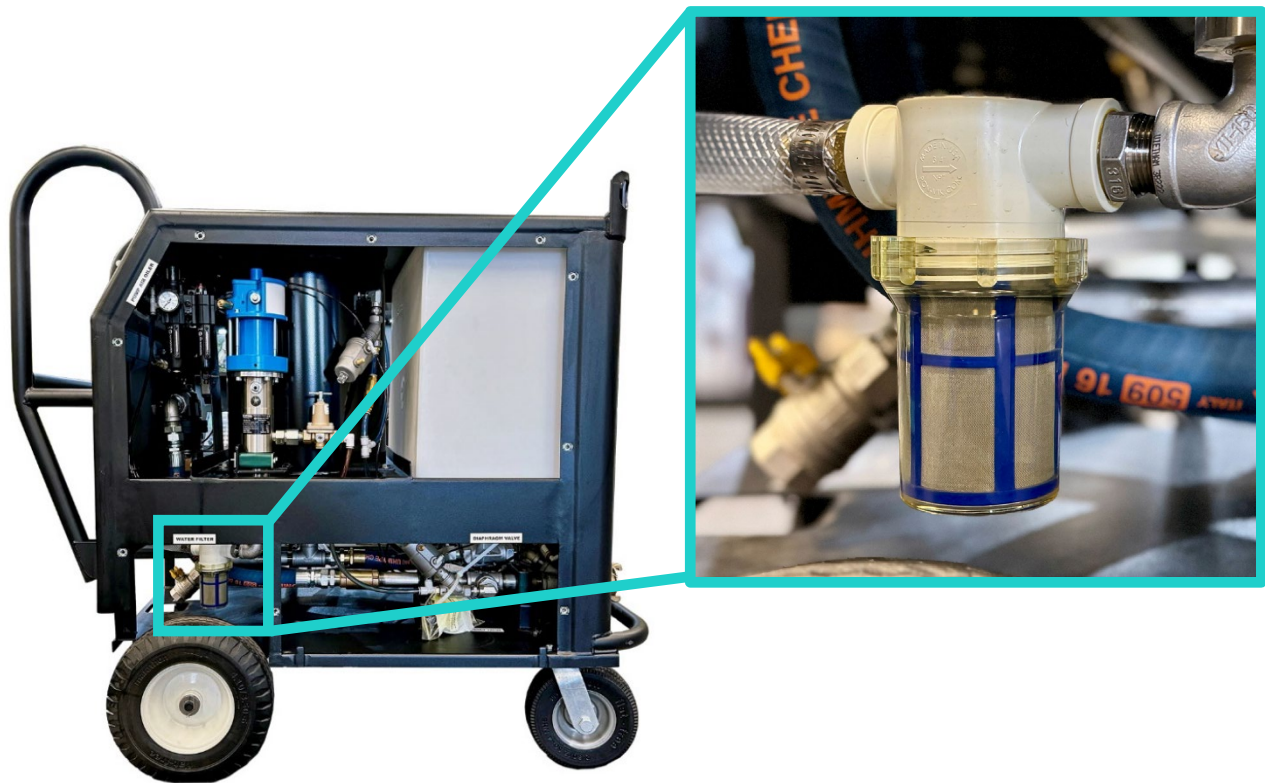
The barrel of your pump also has a small oil port just above a sight glass (item “B”). The oil used will help with longevity of the water seals, particularly when unit is stored for periods of disuse. This oil is not integral to the operation of the pump and does not require refill between each use, but it is suggested to inspect and refill every 30 hours of use, or especially when prepping the unit for storage. WIWA pump oil or a light air tool oil can be used.



WATER FILTER

Most water-end pump wear is caused by poor quality water. To help prevent premature seal wear, the CB150 is equipped with a water strainer that captures solids that may be present in the onboard water vessel, or external water supply. This strainer cup should be monitored and cleaned as needed. This component can be seen, accessed and cleaned by reaching/looking in from the rear opening of the machine (without removing any side panels).

NOTE: Blue liquid pictured is a result of “Winterizing” with blue windshield washer fluid. See page 17 for more information on wintering.



SLURRY DIAPHRAGM VALVE

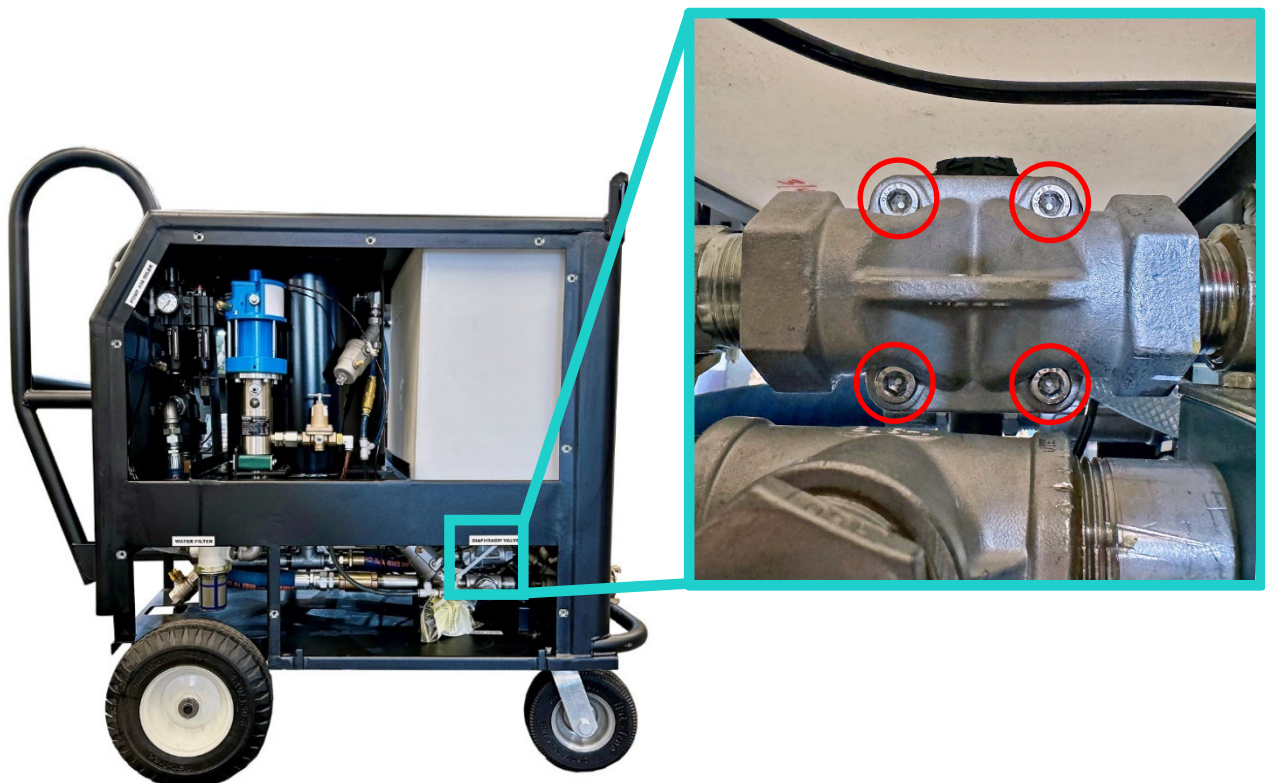
This valve acts as a “gate” and allows or prohibits slurry to flow into the airstream. It is actuated by your trigger and the diaphragm itself requires regular replacement. Depending on the media being used, you can expect a diaphragm to last between 100 and 300 hours of blast time.

Diaphragm replacement requires removal of the four bolts marked below, unthreading the compromised diaphragm from the piston and rethreading on a new diaphragm and then properly re-mounting the valve and diaphragm assembly.

For detailed video instructions, please visit our YouTube channel and/or follow the link below:

YouTube Channel: <https://www.youtube.com/channel/UC9TTJupfRgG0dEw8Xc8YEbw>

Diaphragm Change Video: <https://www.youtube.com/watch?v=fMPk6LD1jfo&t=9s>



MICRO AIR FILTERS

The ClearBlast CB150 unit is equipped with micro air filters to help ensure your incoming secondary air supply is clean and oil free. This branch of your supply air runs all of the small components and switches. The filters are accessed by removing the left (driver side) panel as you are standing at the controls. These filters require periodic inspection and cleaning/replacing of the filter elements.

For additional assistance please visit our YouTube channel or follow the link below:

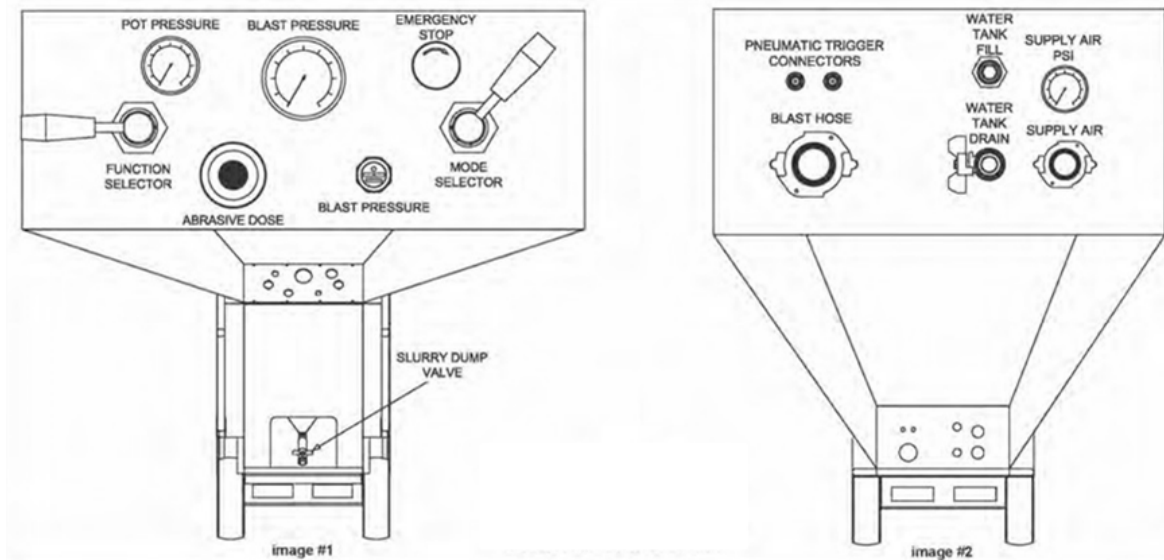
YouTube Channel: <https://www.youtube.com/channel/UC9TTJupfRgG0dEw8Xc8YEbw>

Micro Filter Service Video: <https://www.youtube.com/watch?v=RgFvgNyo56I>

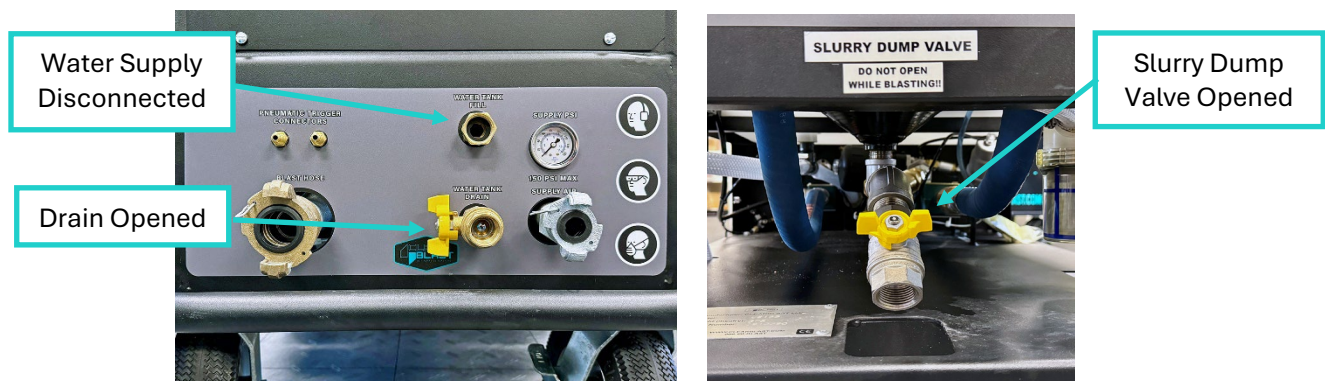


WINTERIZING INSTRUCTIONS

This procedure must be done whenever the system is being stored or transported in temperatures below freezing, to prevent water in the piston pump and water lines from freezing causing them to crack, expand and/or break. Use the step-by-step instructions and instructional decal pictured here to guide you through the process.



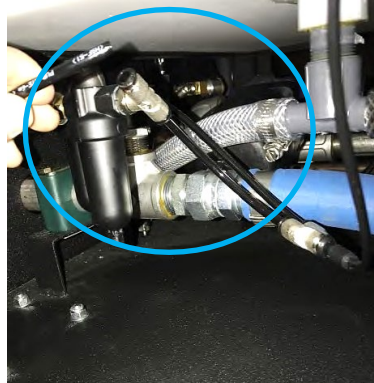
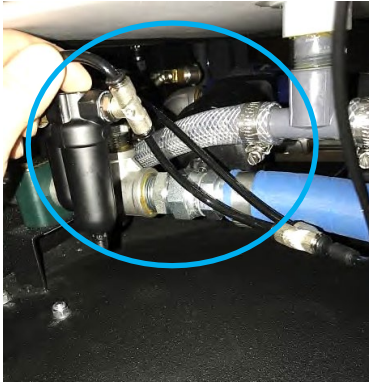
1. Disconnect the water inlet hose and drain all water from the holding tank and pressure vessel by opening the 'Water Tank Drain' as well as the 'Slurry Dump Valve'.



2. Hook your CB150 to an air supply:

Use the standard compressor supply air hookup on front panel.

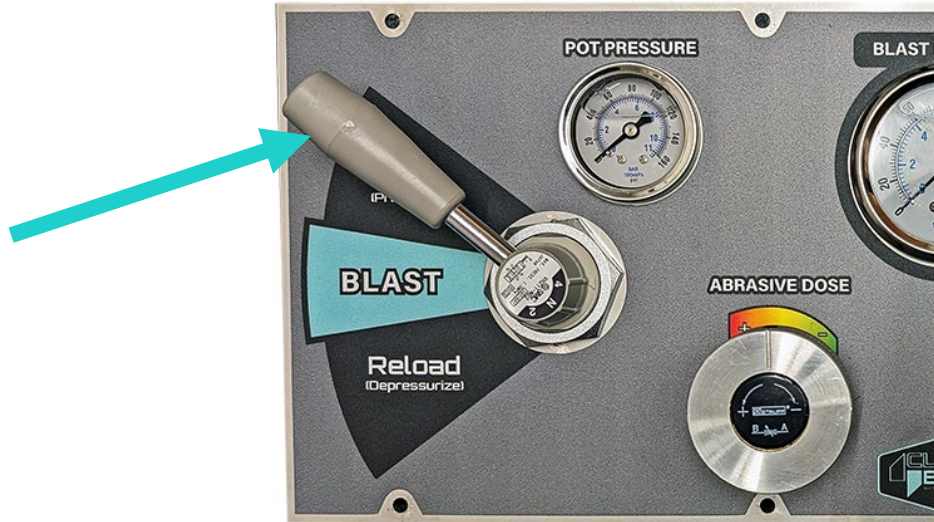
Use a small shop compressor (max 150psi). Remove left side panel. This gives access to the internal air line going to the CB150's pump and controls. Be sure not to use the 'PSI Supply Gauge' line coming off the same T fitting. (Picture below shows a push fitting on a shop air trigger gun with a 1/8" female port Farrow (part# 18.6.m.svel)



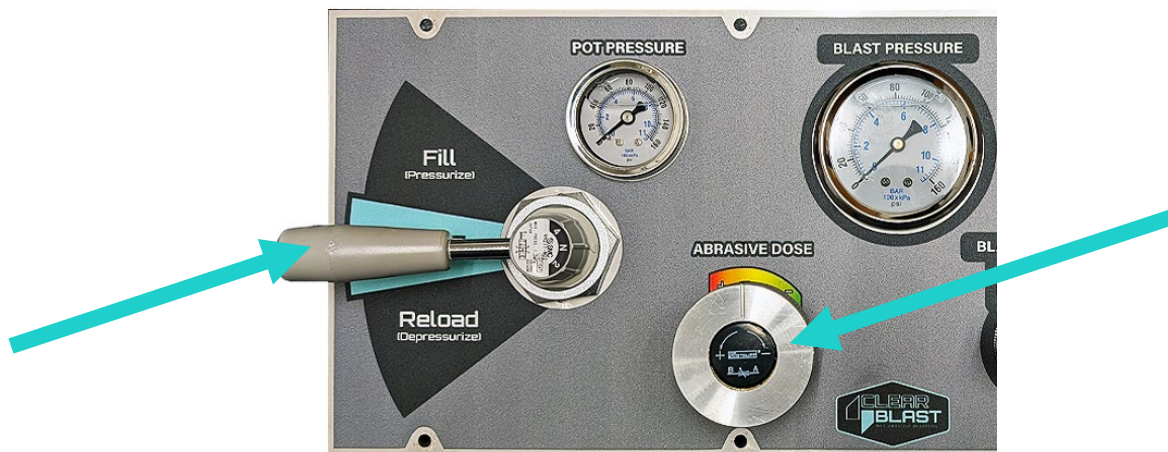
3. Disconnect the pumps "winterizing" line from the water supply tank line. The quick connection is behind the back panel. Take the portion leading to the water pump (right) and place it into a gallon of windshield washer fluid/deicer. (Do not use extremely corrosive materials as this can affect and/or damage your water pump and other components on the machine—i.e. auto anti-freeze)



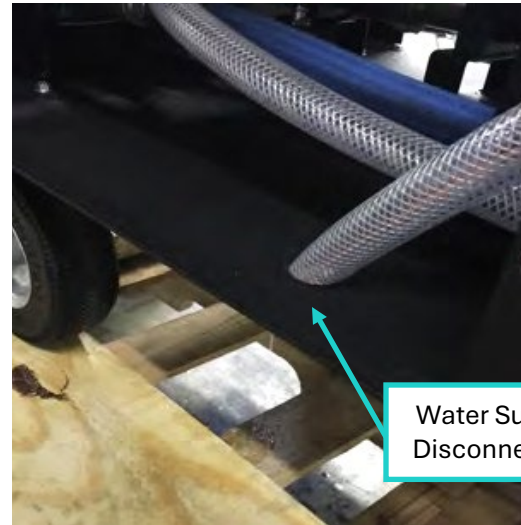
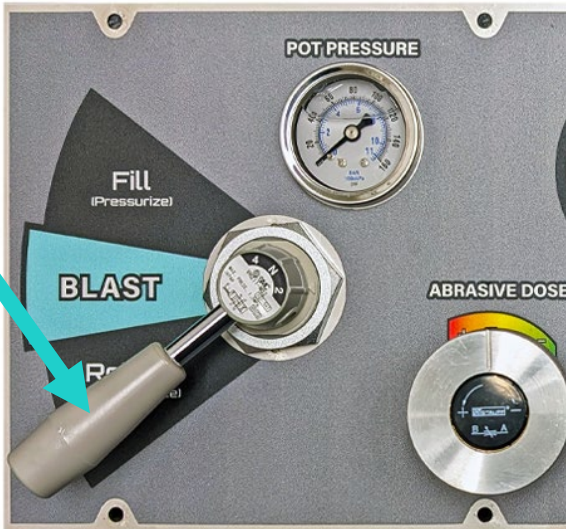
4. Next, please the system into 'Pressurize' mode. With the winterizing line submerged in the deicer fluid, put air to system and allow pump to run for 8-10 seconds.



5. Turn function selector to 'Blast' mode and open the 'Abrasive Dose' one full turn. Put air into the system and allow pump to run for 5 seconds.



6. Turn function selector to 'Depressurize' mode. Put air into system for minimum 8-10 seconds, allowing any water to drain from the 'Depressurize Valve' and piping.



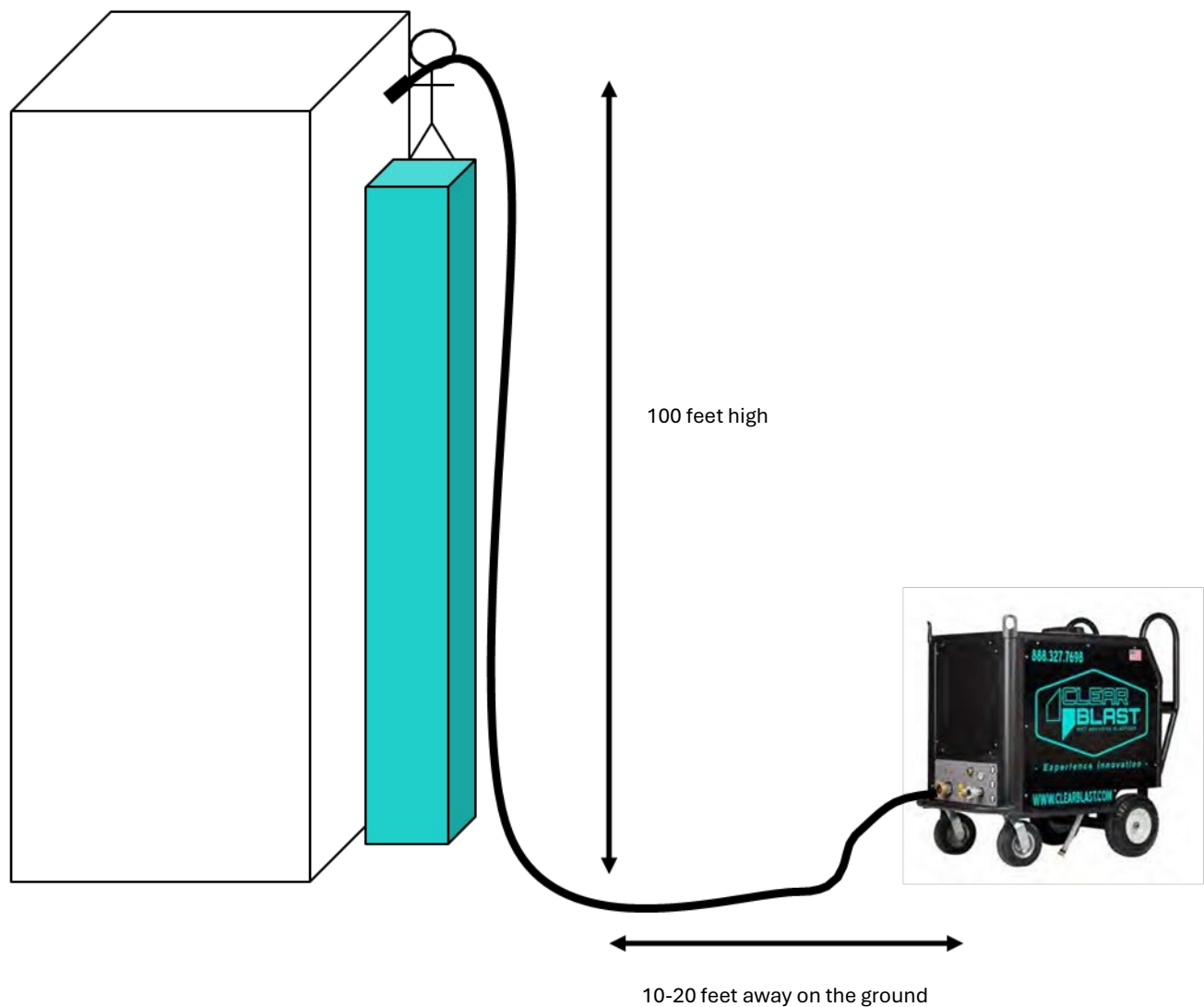
7. Turn on the 'Wash Hose/Rinse Hose' until all the water drains, and deicer liquid emerges from the nozzle end.



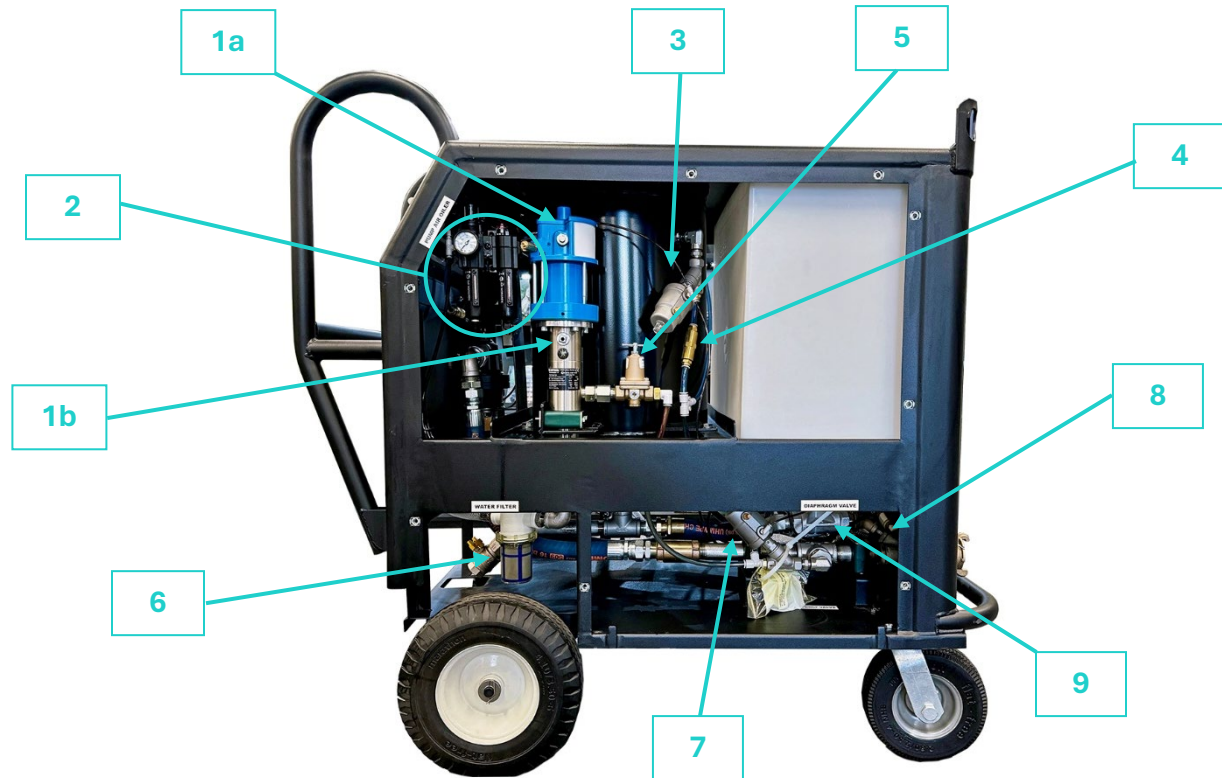
8. Lastly, be sure to check that the 'Slurry Dump Valve' and 'Water Tank Drain' are left open while the machine is being stowed or transported.

BLASTING AT ELEVATION

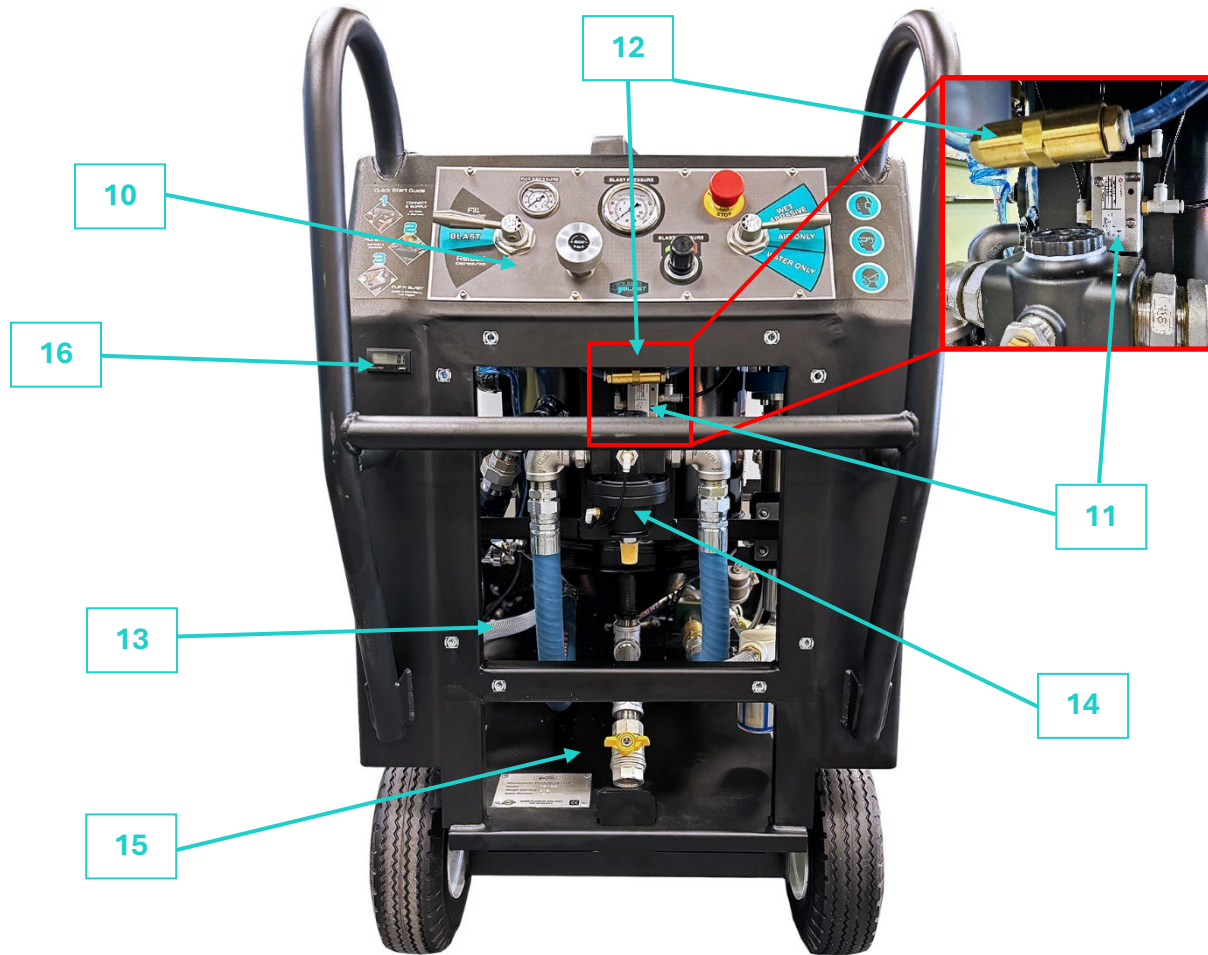
If you are using the ClearBlast CB150 to blast at heights higher than 10 feet, ensure you are leaving 10-20% of your intended blast height on the ground leading to the machine. For example, if your blast height is 100 feet, leave 10-20 feet on the ground. This hose acts as a relief point and trap to stop media from reverting back into the panel once the trigger is released, possibly causing clogging.



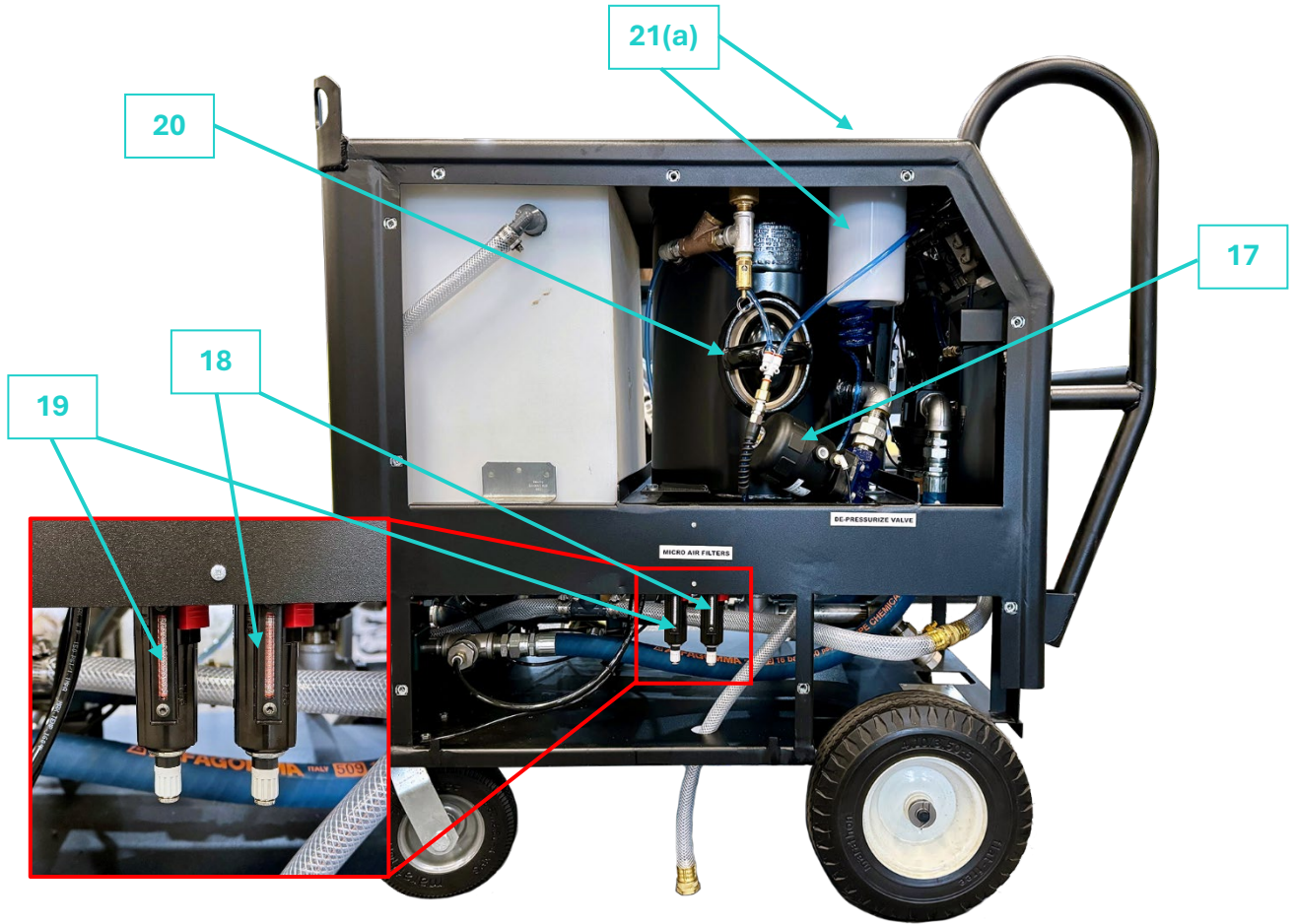
LIST OF COMPONENTS



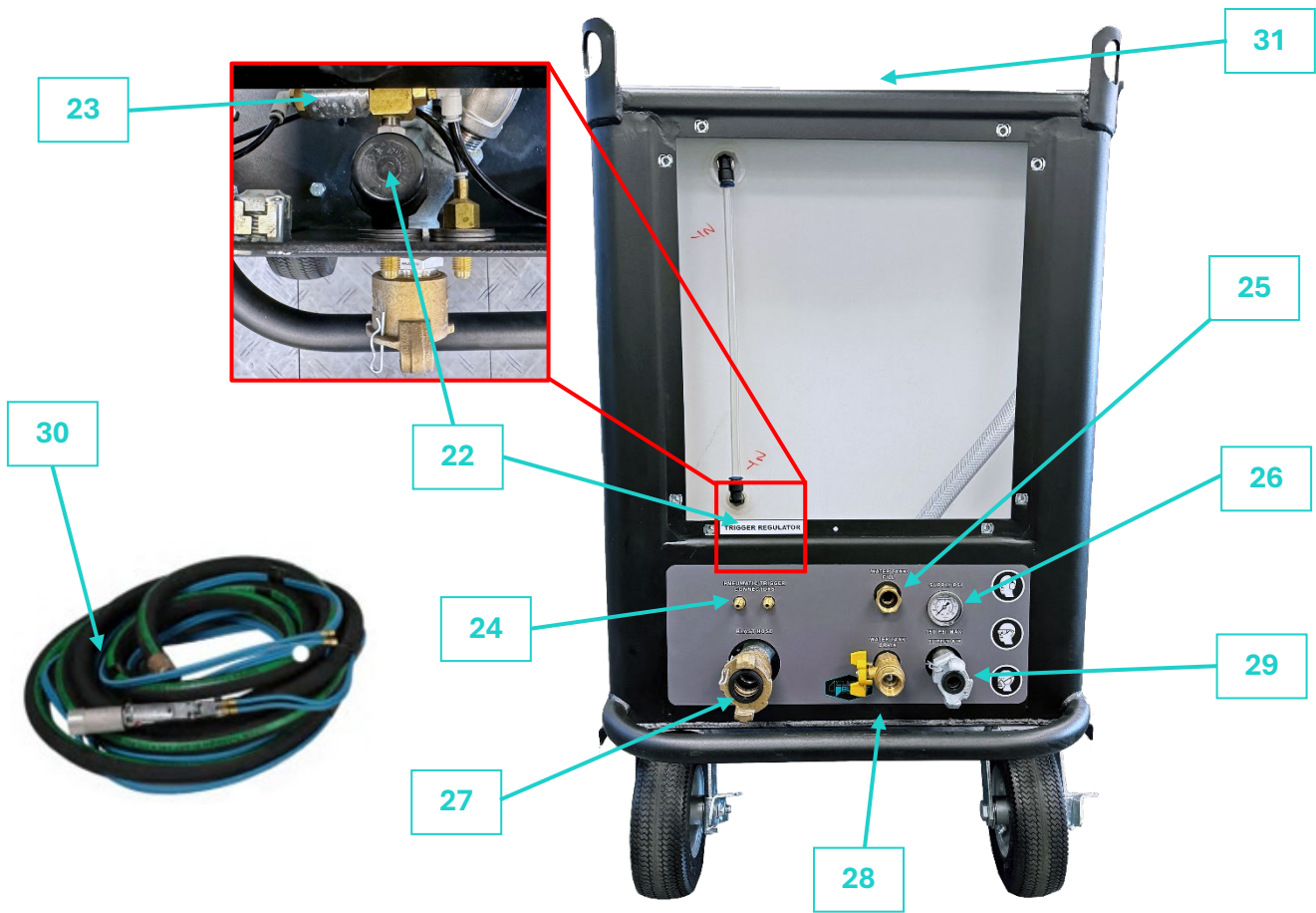
PICTURE	PART NUMBER	FUNCTION	DESCRIPTION
1a	PMP.WIWA.6/1	Pump	WIWA Piston Pump – 6.1
1b	N/A	Pump Oil Fill Port	N/A
2	FIL.FRL.ASSY	Pump Regulator/Oiler	Air Source Treatment – ¼"
3	V.38.ASV	Pressurize Valve	3/8" NPT, Angle Seat Valve
4	V.38.F.CV	3/8" Check Valve	3/8" Check Valve
5	REG.12.WPR.175	Water Pressure Regulator	½" Water Pressure Regulator (50-175 psi)
6	34.STRAINER.100	Water Filter	¾" Strainer (80 micro element)
7	V.38.ASV	Washdown Valve	3/8" NPT, Angle Seat Valve
8	18.PA.5	Safety Switch	1/8" Pilot Actuator – 5 psi
9	V.1.DV.SS	Diaphragm Valve	1" Diaphragm Valve



PICTURE	PART NUMBER	FUNCTION	DESCRIPTION
10	N/A	Control Panel	N/A
11	V.14.AB.HP	A/B Switch	Pilot op, directional control valve
12	V.38.F.CV	Abrasive Dose Check Valve	3/8" female check valve
13	N/A	Winterizing Disconnect	N/A
14	REG.300.BR.SS	Main Air Regulator	1" blast regulator
15	V.1.F.F.TH.BV	Slurry Dump Valve	1" T-handle ball valve
16	HM.KIT	Hour Meter	Hour meter assembly



PICTURE	PART NUMBER	FUNCTION	DESCRIPTION
17	V.1.DV	Depressurize Valve	1" diaphragm valve
18	FIL.38.GP.FILTER	General Purpose Micro Air Filter	¼" general purpose filter
19	FIL.38.C.FILTER	Coalescing Micro Air Filter	¼" coalescing filter
20	INSPPLT.GASKET.2	Pot Cleanout Gasket	Inspection plate gasket
21	WH.8COIL	Wash Hose	8" coil hose with fittings
21a	WH.CANISTER.LID	Lid for Wash Hose Canister	Lid for wash hose canister



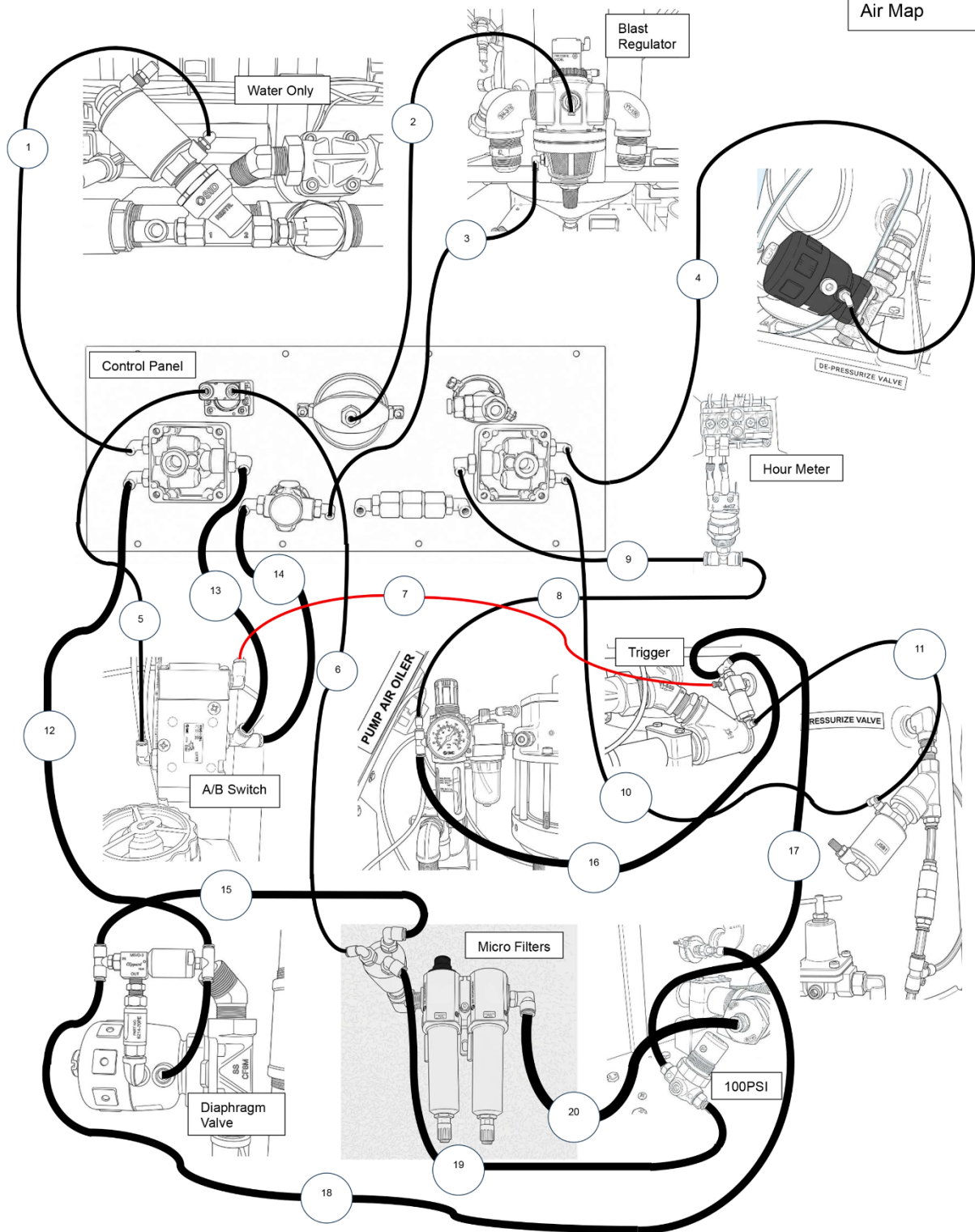
PICTURE	PART NUMBER	FUNCTION	DESCRIPTION
22	REG.14.VR.125	Trigger Air Regulator	1/4" vented regulator, 5-125 psi
23	18.PA.5	Safety Switch	1/8" pilot actuator – 5 psi
24	PF.14.SAE.HN	Pneumatic Line Connections	1/4" X SAE hex nipple
25	GH.F.34.M	Water Hose Connection	Female garden hose x 3/4" male npt
26	PG.112	Inlet Air Pressure Gauge	1-1/2" panel gauge
27	H.114.F.QC	Blast Hose Connection	1-1/4" fnpt 2-prong quick coupler
28	V.34.F.F.TH.BV	Water Tank Drain	3/4" T-handle ball valve
29	H.1.F.QC	Air Hose Connection	1" fnpt 2-prong quick coupler
30	H.1X50.BH.CB	Blast Hose	50' blast hose assembly
31	150.POT.LID	Lid for Pressure Pot	Lid for pressure pot



PICTURE	PART NUMBER	FUNCTION	DESCRIPTION
32	V.14.HV	Function Selector Valve	1/4" vented regulator, 5-125 psi
33	PG.112	Pot Pressure Gauge	1-1/2" panel gauge
34	V.38.NV	Abrasive Dose Valve	3/8" flow control needle valve
35	PG.212	Blast Pressure Gauge	2-1/2" panel gauge
36	REG.14.VR.125	Blast Pressure Regulator	1/4" vented regulator, 5-125 psi
37	4.ESB	Emergency Stop Button	E-stop button
38	V.14.HV	Mode Selector Valve	1/4" hand selector valve

AIR MAP

CB150 & HV
Air Map

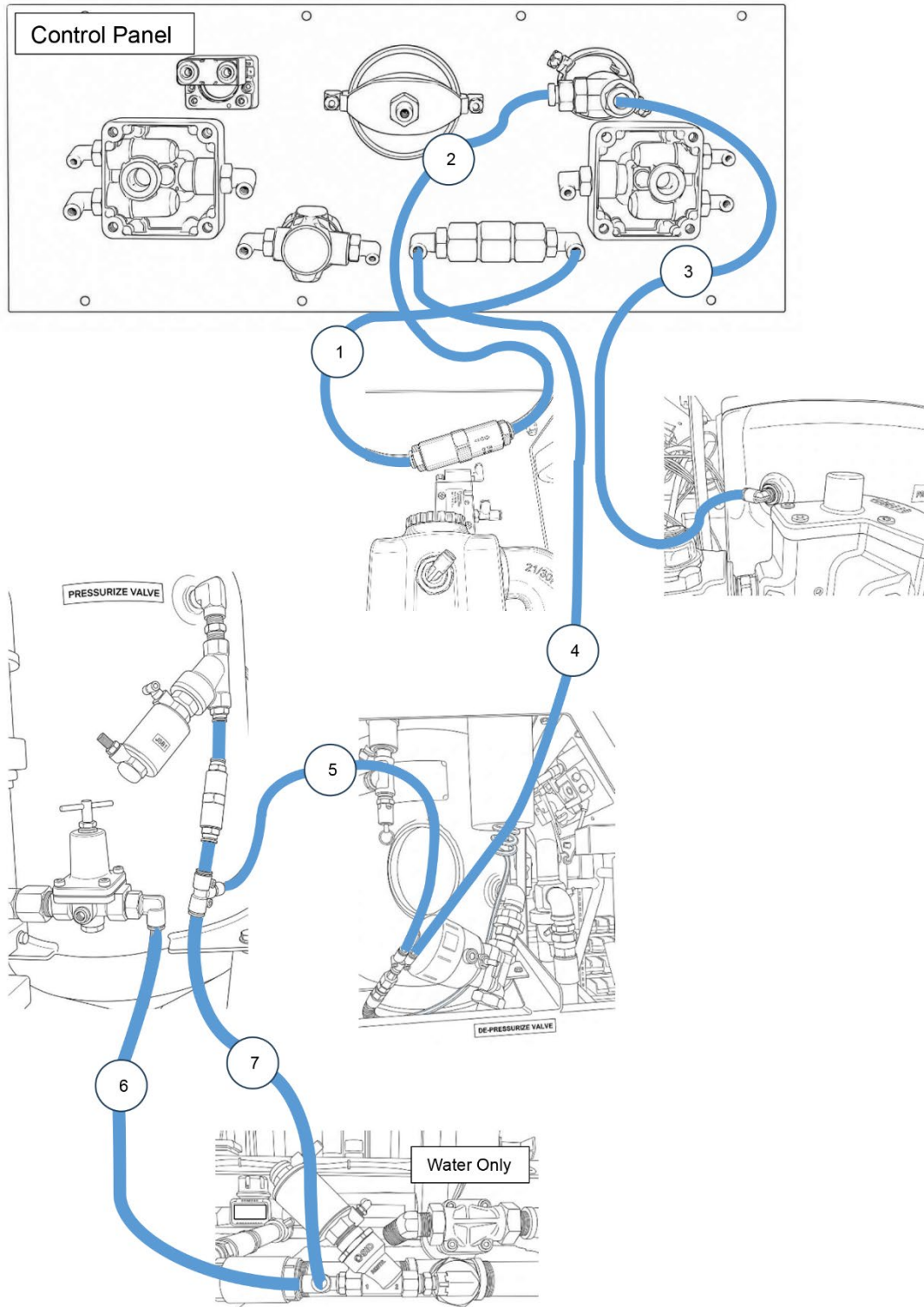


AIR MAP LEGEND

#	Polyurethane Tubing Size	CB150 & HV Air Map Legend Description:
1	4mm	Water Only Angle Seat Valve (Bottom Port) to Water Only Selector Handle Valve (Top Left)
2	4mm	Blast Pressure Gauge to FRONT of Blast Regulator
3	4mm	Blast Regulator (Bottom) to Blast Pressure Vented Regulator (Right Side)
4	4mm	De-Pressurize Valve (Bottom Port) to Fill, Blast, Reload Selector Handle Valve (Top Right)
5	4mm	A/B Switch [Left top Port (1P)] to Emergency Stop Button (Left)
6	4mm	Micro air Filters/Manifold to Emergency Stop Button (Right)
7	4mm (RED)	Deadman (left) to A/B Switch [Top port (N12)]
8	4mm	FRL Air Oiler (Top) to Hour Meter (Right Branch Tee)
9	4mm	Hour Meter (Left Branch Tee) to Fill, Blast, Reload Selector Handle Valve (Left Single Port)
10	4mm	Pressurize/Angle Seat Valve (Bottom Port, Left Branch Tee) to Fill, Blast, Reload Selector Handle Valve (Bottom Right Port)
11	4mm	Deadman Cut Off/Pilot Actuator (Bottom) to Pressurize/Angle Seat Valve (Bottom Port, Right Branch Tee)
12	6mm	Pilot Actuator on Daiphragm valve (Right Branch Tee) to Wet Abrasive Selector Handle Valve (Bottom Left)
	6mm	Diaphragm Valve (Bottom Port) to Pilot Actuator on Daiphragm valve (Left Branch Tee)
13	6mm	A/B Switch (Right, TOP Run Tee) to Air Only Selector Handle Valve (Right Single Port)
14	6mm	A/B Switch (Right, Right side Run Tee) to Blast Pressure Vented Regulator (Left Side)
15	6mm	Micro Filters/Manifold to Pilot Switch Branch Tee on Diaphragm Valve
16	6mm	FRL Air Oiler (Bottom) to Trigger Pilot Switch (Right Branch Tee)
17	6mm	Preset 100 Psi Vented Regulator (Out) to Trigger Pilot Switch (Left Branch Tee)
18	6mm	Pilot Switch Branch Tee on Diaphragm Valve to Supply Air Gauge
19	6mm	Micro Filters/Manifold to Preset 100 Psi Vented Regulator (In)
20	10mm	Main Air In (Port on Equal Tee) to Micro Filters (Right)

WATER MAP

CB 150 & HV
Water Map



WATER MAP LEGEND

#	Polyurethane Tubing/Size (Clear Blue)	CB150 & HV Water Map Legend
		Description:
1	8mm	Abrasive Dose Needle Valve (Right Side) to 3/8" check valve
2	8mm	3/8" Check Valve to Pot Pressure Gauge (Left Side of Tee)
3	8mm	Pot Pressure Gauge to Pressure Vessel (3/8" Elbow Located Behind Water Pump)
4	8mm	Abrasive Dose Needle Valve (Left Side) to 8mm "Y"
5	8mm	8mm "Y" to 8mm Reducer (10mm Branch Tee)
6	10mm	Water Pressure Regulator (175 Psi) to Water Only: Angle Seat Valve
7	10mm	Pressurize: Angle Seat Valve to 3/8" Check Valve to 10mm Branch Tee to Water Only: Angle Seat Valve

ACCESSORIES



EXTENSION HOSE

Sold in 50' lengths and fitted with Deadman lines as well as hose ends. You may use up to 100 additional feet of extension hose paired with the supplied 50' blast hose.

Part Number: 1ID.50EXT



NOZZLE EXTENSION 24"

Get your nozzle closer without breaking your back. Great for line removal or any long-term blasting on the ground.

Part Number: NZL.EXT.WAND

Part Number: NZL.EXT.WAND.HANDLE (not pictured)



NOZZLES

Equip your machine with the right nozzle for the job allowing you to get the needed spray pattern and power you need. Typical nozzle options include: #6, #6XL. Call for additional options.

Part Numbers: NZL.CT.6 & NZL.CT.6XL



RUST INHIBITOR

Flash rust can be a huge burden to your project. Add ClearBlast rust inhibitor and salt remover to the mix and avoid having to work twice as hard removing flash rust prior to coating steel.

Part Number: MR.RI.5GAL (5-gal jug)

ALTERNATE MEDIA OPTIONS

Though we recommend the use of recycled glass media due to its effective removal capabilities and its safe qualities, there are alternatives to match the more specialized jobs. These include Garnet and JetMag for the tougher coatings as well as baking soda for a softer touch. These may cause additional wear on your components. Call us for more details and blasting tips.

PARTS SCHEMATICS & REPAIR KITS

RECOMMENDED SPARE PARTS KIT

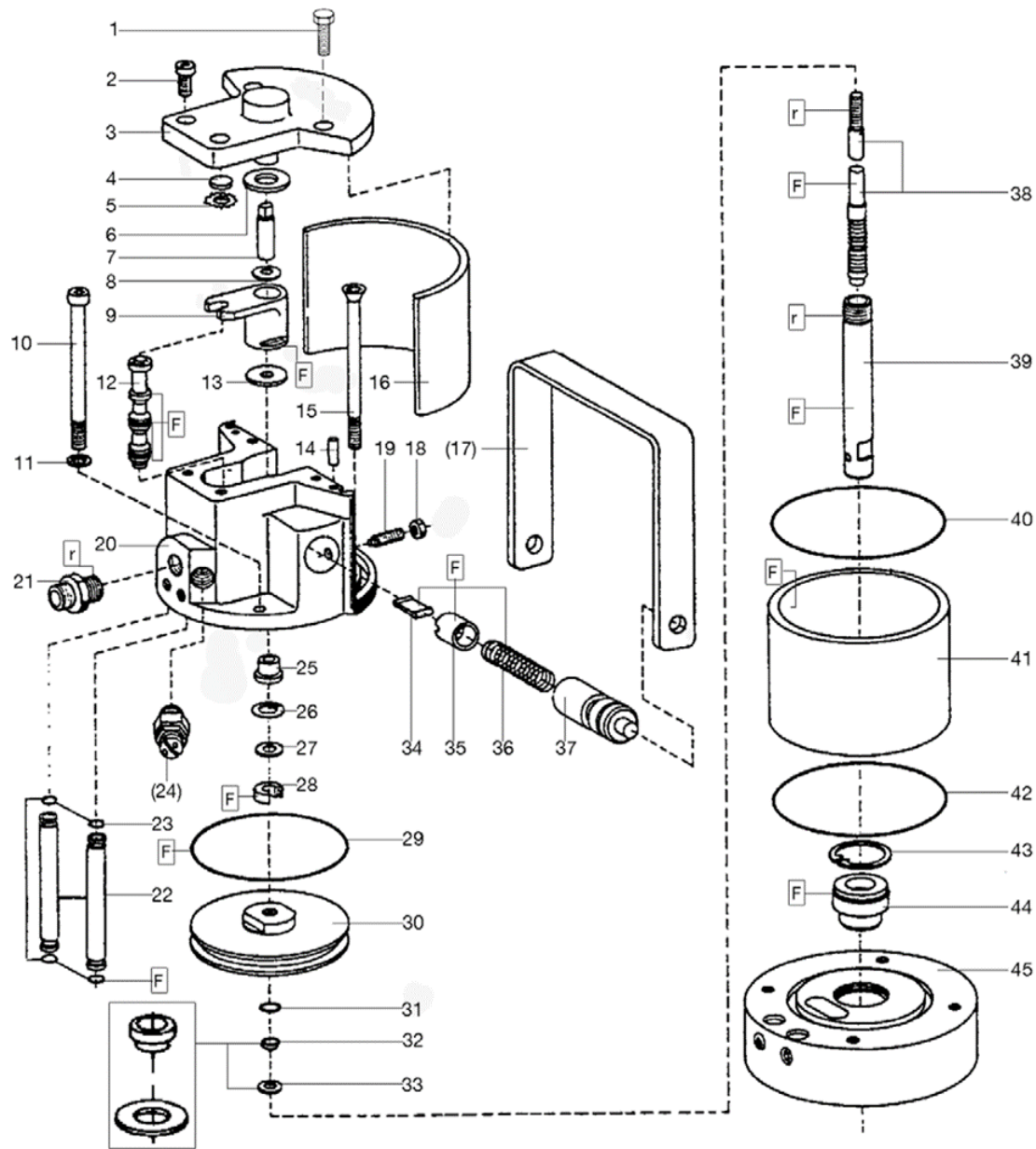


REPAIR KIT

Includes: Tubing, Gauges, Blast Trigger, Regulator, E-Stop Button, Slurry Dump Valve, Pump Seals, Micro Air Filter Cartridges, Replacement Slurry Diaphragm, Check Valves, Various Gaskets and Push Fittings

Part #: *KIT.PARTS.CB150*

WIWA WATER PUMP (AIR END)



REPAIR KIT

Includes: 4, 5, 6, 12, 13, 23, 26, 28, 29, 31, 32, 33, 38, 40, 42, 43, 44

Part #: WIW.REPAIR.KIT.AIR

WIWA WATER PUMP (WATER END)

REPAIR KIT

Includes: 2, 4, 6, 7, 11, 16, 17, 20, 22, 23

Part #: WIW.REPAIR.KIT.W2

SEAL KIT

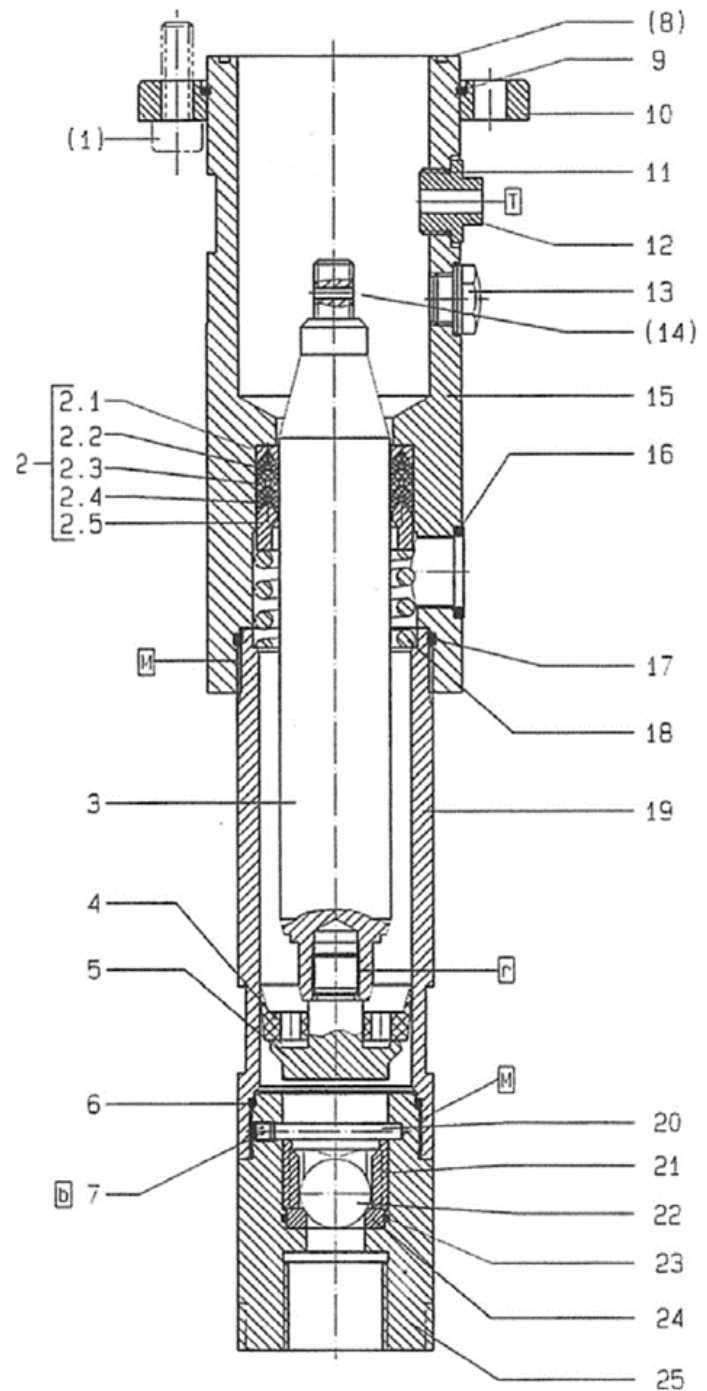
Includes: 4, 6, 11, 16, 17, 23

Part #: WIW.SEAL.KIT.W2

CUSTOM KIT

Includes: 2, 4

Part #: WIW.CUSTOM.W2



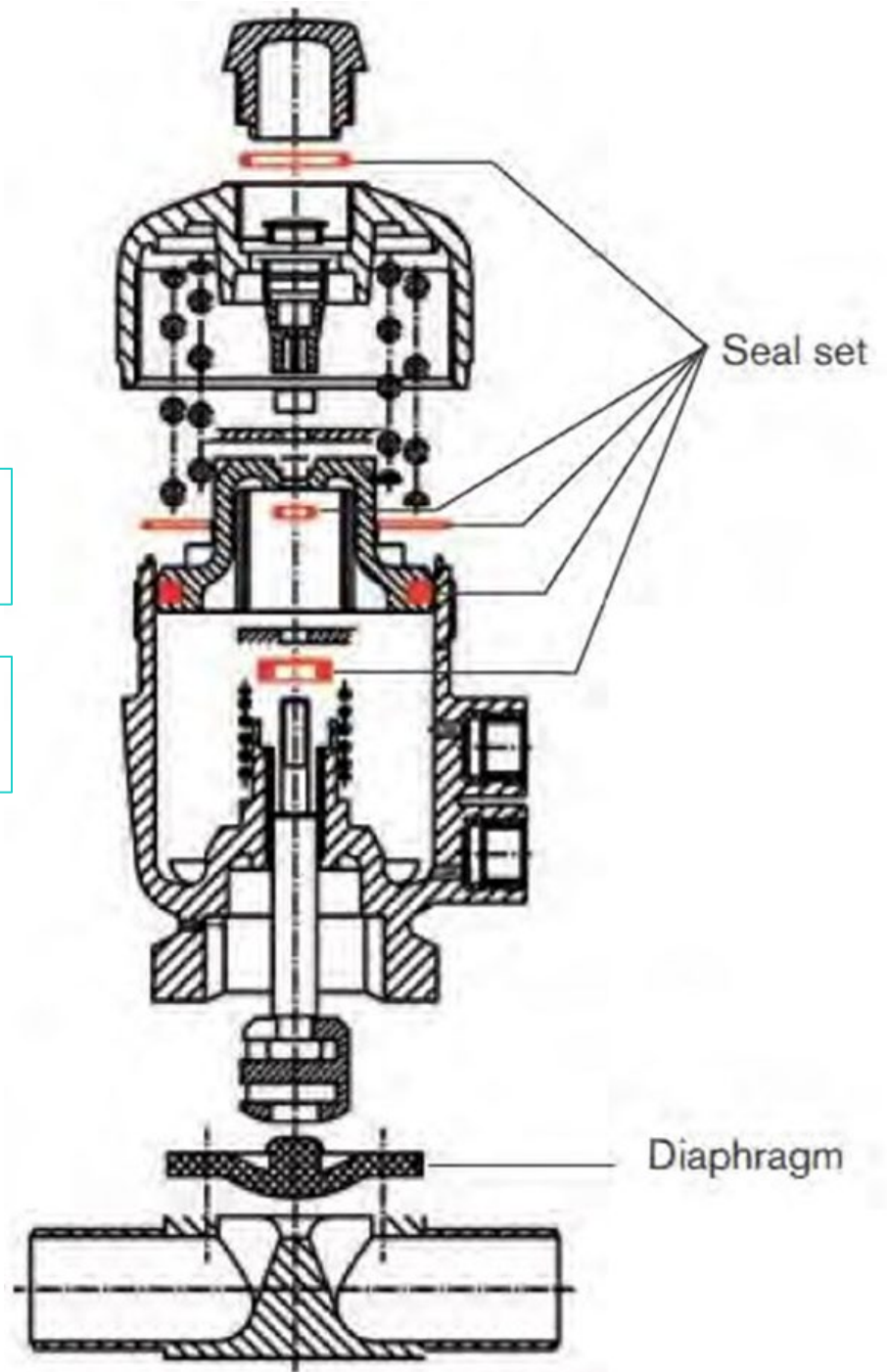
DIAPHRAGM VALVE (SPRING CLOSED)

SEAL KIT

Part #: 1.DV.SK

REPLACEMENT DIAPHRAGM

Part #: V.1.Q.D



MAIN AIR REGULATOR

REPAIR KIT

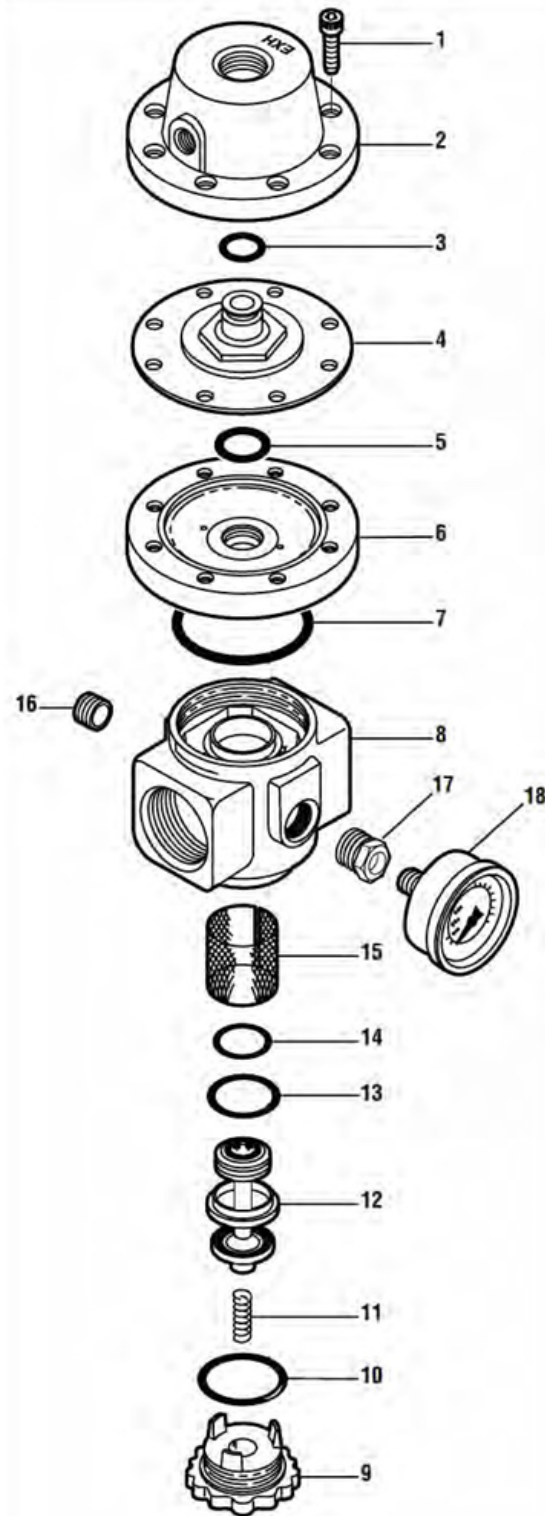
Includes: 3, 4, 5, 7, 10, 12, 13, 14, 15

Part #: REG.300.BR.SS.REPAIR.KIT

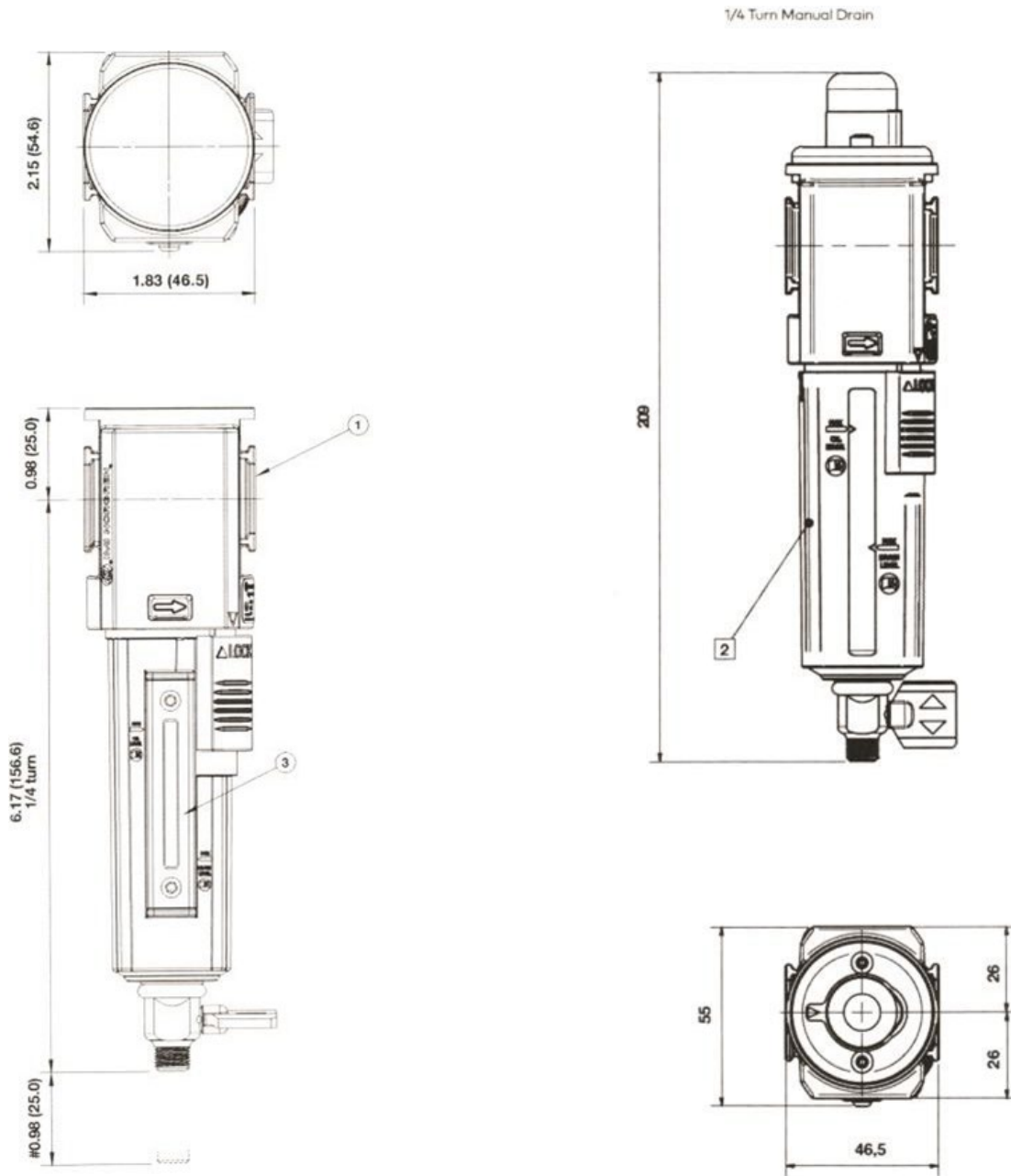
SEAL KIT

Includes: 3, 5, 7, 10, 13, 14, 15

Part #: REG.300.BR.SS.SEAL.KIT



MICRO FILTERS



3/8" GENERAL PURPOSE FILTER REPAIR KIT

Part #: FIL.38.GP.FILTER.RK

3/8" COALESCING FILTER REPAIR KIT

Part #: FIL.38.C.FILTER.RK

MAINTENANCE KITS

By Service Hour Increments



200 HOUR MAINTENANCE KIT

Includes: V.1.Q.D

Part #: KIT.150HR.150/450



400 HOUR MAINTENANCE KIT

Includes: V.1.Q.D & WIW.CUSTOM.W2

Part #: KIT.300HR.150/450



800 HOUR MAINTENANCE KIT

Includes: V.1.Q.D, WIW.CUSTOM.W2, FIL.38.GP.FILTER.RK, FIL.38.C.FILTER.RK, QC.A.G, H.QC.B.G, NZL.W

Part #: KIT.600HR.150(HV)

TROUBLESHOOTING

Prior to any issue/solution be sure the following is met for standard operating procedures:

- Air supply – Make sure air is hooked up to machine and compressor is in “Run Mode”. Ball valve for air in is open and gauge above the supply hose gives an inlet pressure reading of 100psi or more.
- Water supply – Make sure water supply is connected and on. Make sure there is water in the tank (CB150/HV)
- Pump Regulator (Oiler) – Gauge on the oiler should be set to 40 psi. Be sure to check and fill oiler.
- Pump – Observe sight glass to assure there is WIWA® release agent in pump.
- Pot pressure – Pot pressure should be 130 psi.
- Dump ball valves – All dump valves should be closed when operating
- Listen for any air leaks and look for any water leaks

IF ANY MAINTENANCE IS REQUIRED, BE SURE THE MACHINE IS NOT UNDER PRESSURE AND AIR IS OFF! SUPPLY GAUGE MUST READ “0 PSI” **IF YOU ARE NOT COMFORTABLE WORKING ON MACHINE, PLEASE CALL OUR OFFICE AT (888) 99-BLAST**

Issue	Cause	Solution
Pump not pumping	Abrasive dose closed	Turn abrasive dose knob 1-1 ½ turns open
	Pump regulator set too low	FRL regulator oil should be set to 40 psi
	Water supply line leak	Replace any hose or push fitting that is defective
	Piston rod in up position	Pump reset (see video on how to reset pump)
	Guide axle disconnected	Disassemble air end to inspect guide axle (see video on how to disassemble/assemble), replace if needed
	Piston rod bent	Disassemble bottom end to inspect piston rod (see video to disassemble/re-assemble), replace if needed
Issue	Cause	Solution

Water leaking from pump	Bottom seals bad	Replace both bottom seals of wiwa pump
Pot not pressurizing	Dump valve open	Close dump valve
	Pump	Pump not pumping, refer to 'pump not pumping' in issues
	Bung seal not sealed	Steel floating ball not sealed to bung seal. Inspect gasket for any debris, replace if needed.
	Handway gasket not sealed	Tighten nut on handway gasket, if leaking may need to replace.
	Auto air vent valve water leak	Clean out float, check pot pressure and set to 130 psi (auto air vent max pressure = 150 psi)
	Water regulator leak	Replace water regulator
	Pressure relief valve leak	May be defective. If leaking, need to replace and reset pot pressure back to 130 psi (relief valve max pressure – 150 psi)
	Y strainer clogged	Clean all media out with water. May have been caused by a back feed.
Won't blast in blast mode	E-stop engaged	Disengage
	Twin lines not connected	Connect twin lines
	Blast pressure set too low	Turn blast regulator clockwise (+) – 40 psi min
	Deadman plug defective	Check Deadman plug/button, replace if needed
	Deadman handle leak	Tighten screws or replace defective Deadman
	Deadman regulator too low	Remove front panel and adjust regulator to desired pressure
	Hose leak	Check poly lines behind hand selector valve for any leaks or disconnection. Connect or replace if needed.
Issue	Cause	Solution
No media while blasting	No media in pot	Refill with media

	Abrasive dose closed	Turn abrasive dose knob 1-1 ½ turns open, more if needed
	Blast pressure set too low	Replace if not regulating + or – (40 psi minimum)
	Debris in pot	Open handway gasket, check for any obstruction at bottom of pot. Clean out pot if needed.
	Diaphragm worn	Need to replace rubber diaphragm. Recommended replacement every 150 hrs. (40 hrs. if using angular media)
	Slurry line clogged	Loosen slurry flex hose and check for any hard media in line, clean out if needed.
Blast pressure low while blasting	Blast pressure set too low	Turn regulator knob clockwise to increase, check for leaks (40 psi minimum)
	Compressor ‘start mode’	Put compressor in ‘run mode’
	Micro filter leak	Replace or fix with rebuild kit
	Micro filter relief open	Manually close filter bottoms right
	Dropping inlet pressure	Compressor may need to be serviced
	Blast regulator clogged	Clean out and check lines for any debris or obstructions
	Nozzle size	If using a larger nozzle, switch to a smaller one
	Compressor CFM	Low cfm (185) may not be sufficient, may need higher cfm (375+)
No water while blasting	Hose not connected	Connect garden hose and turn on
	Water tank empty	Refill water tank (pump will run fast and violently if tank is empty)
	Strainer bowl defective	Check for any leaks, cracks or clogs in housing and bowl, replace if needed
	Pump	Pump not pumping, refer to ‘pump not pumping’ in issues
Issue	Cause	Solution
Pot won’t depressurize	Steel float ball stuck	Pushing down on black ball knob at top of pot
	Air supply too low	Need 70 psi inlet pressure for valves to function

		open dump ball valve
Signs diaphragm is worn	Over 150 hrs. since last replacement. Recommended replacement every 150 hrs. (40 hrs. if using angular media)	
	Water dripping out of blast hose coupler when pot is pressurized, and black hose is not connected.	
	Still getting media coming out of blast hose while in 'air only' or 'water only' blasting	

YOUTUBE VIDEOS

Diaphragm Change:

https://www.youtube.com/watch?v=5wYuO2FwF_I

Pump Removal:

<https://www.youtube.com/watch?v=7YkZvVs2ha0&t=2s>

Pump 6:1 Lower Seals/bottom end service:

<https://www.youtube.com/watch?v=55ewDZbG4wk>

Pump 6:1 air end/top end service:

https://www.youtube.com/watch?v=DNU1mb9-e_4&t=2s

How to adjust pot pressure:

<https://www.youtube.com/watch?v=G0BtxH2iGio>

How to winterize:

<https://www.youtube.com/watch?v=B-N9Saybfl4>

WARRANTY

Your ClearBlast unit is covered by a one (1) year bumper-to-bumper warranty, excluding expendables such as diaphragms, pump seals, blast hoses, and nozzles. All warranty is predicated on documented adherence to all manufacturers' recommended service requirements being done according to schedule. Any manufacturer's warranty on OEM parts that extends longer than our bumper-to-bumper warranty will be accepted as well.

The warranty will not cover damage done to the ClearBlast unit by misuse, by lack of maintenance, by the unit being used for anything other than its intended purpose, or as a result of an accident.

The warranty will be null and void if any modifications have been made without prior written approval by the manufacturer.

Additional information or assistance is available at (888) 99-BLAST.