-Owners Manual-

CLEARBLAST 450

Wet Abrasive Blaster

- Experience Innovation -

Read manual fully before operating system. Not approved for use in hazardous locations or explosive atmospheres.

150psi (10.3 bar, 1.03 MPa)

Maximum Input Air

120psi (8.27 bar, 0.83 MPa)

Maximum Working Output

For Additional Information and Instructional/Setup Videos

Please Visit: WWW.CLEARBLAST.COM

CE

Table Of Contents

Table Of Contents

Safety Procedures

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 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 MATERIAL – SEEK GUIDANCE FROM SITE MANAGER.

Safety Procedures

PRIOR TO INITIAL START-UP

READ AND UNDERSTAND THIS MANUAL!

MAKE SURE EYE, EAR, AND DUST PROTECTION IS WORN AT ALLTIMES

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. RISK OF INJURY IS DEPENDENT ON THE DURATION AND LEVEL OF EXPOSURE.

Controls and Hook-ups

Back Control Panel and 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.

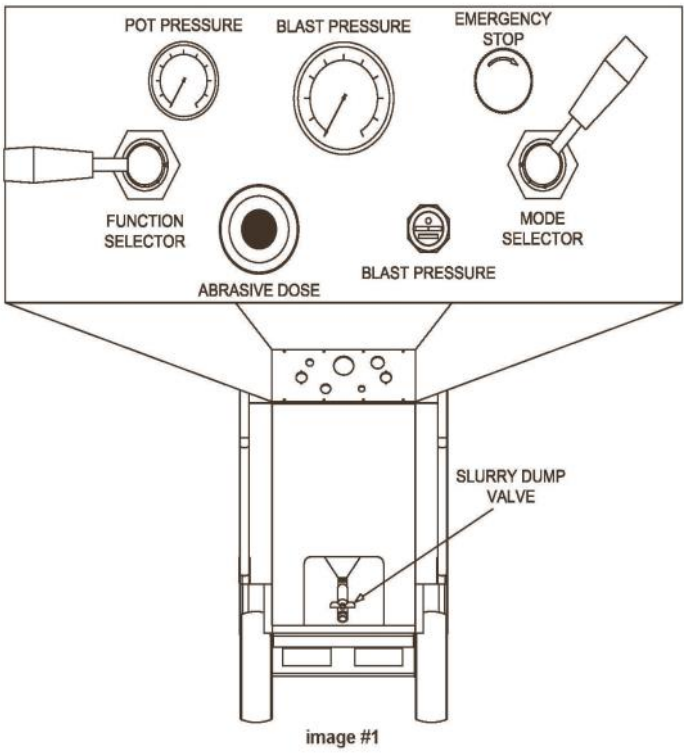


image #1

Front Control Panel

Here is where all of 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.**

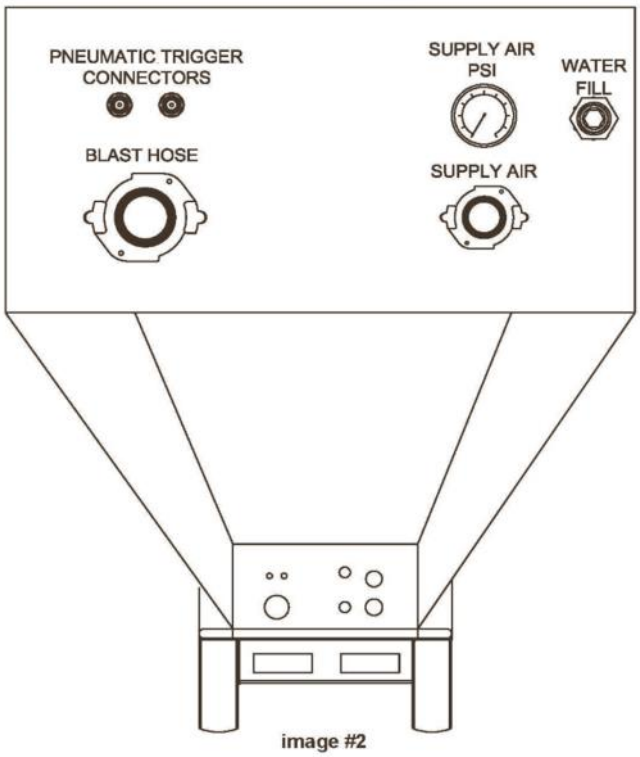


image #2

Items Needed for Operation

Blast Hose with Nozzle

Supplied standard with 1-1/4" I.D. blast hose and #8 standard nozzle.
Nozzle sizes may vary between #5, #6, #7, #8 as well as XL Versions*

Air Supply*

Recommend 375+CFM/100psi. Can run on as little as 185CFM/100psi or as much as 600CFM+/150psi
Max 150psi Inlet supply pressure. **WARNING: DO NOT EXCEED!**

Air Hose*

Recommend minimum. 1-1/2" air hose w/ 4-prong quick coupler (Chicago style) or spud connection.
Can run with smaller air hose with limited maximum performance.

Water Hose and Supply*

Standard garden hose screw connection
Water pressure supply not to exceed 80psi. Minimum water supply hose 3/4" I.D. @ 30psi, when using a dosing pump.

Media*

Recommend Crushed Recycled Glass or equivalent product graded between (40/70 mesh—80/100). Do not use material finer than 100 mesh or valves and blast flow may malfunction or clog. Do not use material courser than 20 mesh or premature wear or clog may occur.
For a list of other known abrasives used, ask your CLEARBLAST Rep.

ADDITIONAL ITEMS MAY INCLUDE

Extension Blast Hose*

Can use up to 3x additional 50' lengths or 200 total feet of Blast.

Nozzle Extension*

Extends Nozzle 24" from deadman handle bettering reachability.

XL Nozzle*

Used to increase velocity and concentrate blast stream.

Dosing Pump*

Adds rust inhibitor to water supply at set ratio.

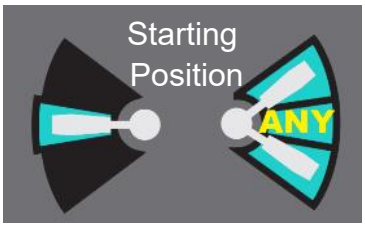
Rust Inhibitor*

Used to prevent flash rusting on steel surfaces

*Items not included with machine purchase

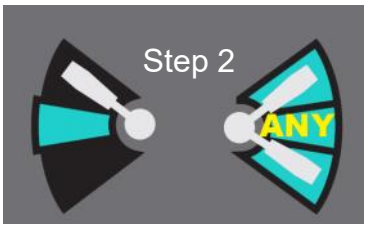
Set Up and Operating Instructions

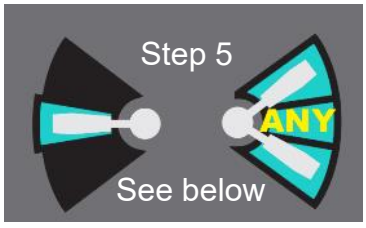
Connect WATER FILL supply hose and turn on water **FIRST**● Connect BLAST HOSE and PNEUMATIC TRIGGER lines ● Connect SUPPLY AIR hose ● Use safety clips and whip checks at all connections ● Start compressor and open supply valve ● Make sure compressor is in "Run Mode" if applicable, and SUPPLY PRESSURE is 100-150psi



Initial Setup

1. Press EMERGENCY STOP BUTTON
2. Turn FUNCTION SELECTOR to "FILL" and allow the pump to cycle for 10 Seconds
3. Remain in "FILL" mode and ADD MEDIA, using the pot fill to rinse excess media into the pot
4. ALLOW POT TO FINISH PRESSURIZING. Will fill, vent and pressurize to 130psi automatically while in "FILL" mode
5. Turn FUNCTION SELECTOR to "BLAST"
6. Twist to release EMERGENCY STOP BUTTON





Blasting Options

Wet Abrasive Blasting: Turn MODE SELECTOR to "WET ABRASIVE"

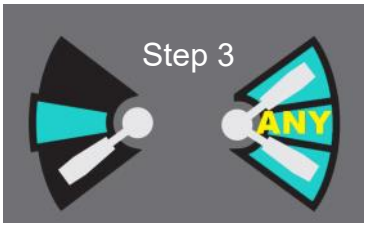
Rinse Mode: Turn MODE SELECTOR to "WATER ONLY"

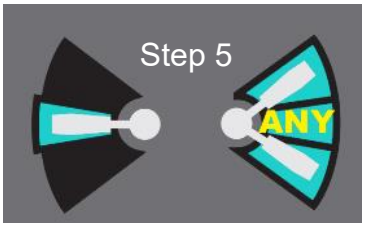
Compressed Air: Turn MODE SELECTOR to "AIR ONLY"

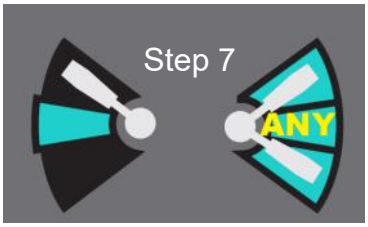
Set Up and Operating Instructions

Reloading Media

1. Press EMERGENCY STOP BUTTON
2. Close ABRASIVE DOSE VALVE
3. Turn FUNCTION SELECTOR to "RELOAD/DEPRESSURIZE" and allow pot drain excess water.
4. Add Up To 300lbs Abrasive (For half fill go directly to step 7)
5. Turn FUNCTION SELECTOR to "BLAST"
6. Add Additional 300-350lbs Abrasive (MAX FILL is 650lbs garnet)
7. Repeat "INITIAL SETUP" steps 2-6.

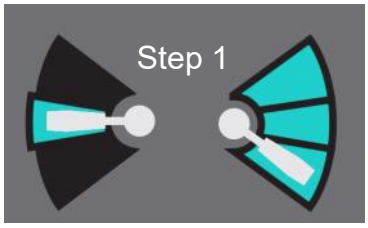


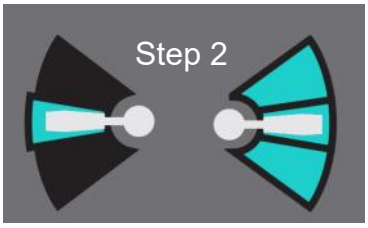




Shutting Down

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.





Tips and Help Guide

(Simple preventative measures and tips for all new users of the CLEARBLAST 450)

DO NOT ADJUST ANYTHING INSIDE THE MACHINE WITHOUT PROPER TRAINING OR CALLING TECH SUPPORT FIRST!

1-888-99-BLAST or info@clearblast.com

Suggested settings to get you started (see charts on page 12 and 13 for more detailed info):

45psi blast pressure—abrasive dose: 1/8 turn open

80psi blast pressure—abrasive dose 3/4 turn open

110psi 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 10 seconds prior to adding media.

Do not place or allow any foreign material in the blast pot. Be cautious when pouring media into the pot that portions of the bag do not rip and fall inside.

When blasting vertically higher than 10ft. 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.

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.

Tips and Help Guide

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 particular application may warrant settings outside the of guidelines provided. It is the operators 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 mil profile; Blast Pressure = 90+ psi

Low Pressure Blasting Tips:

Start at lowest pressure and increase as you see how the substrate reacts (holds up). For delicate surfaces: hold nozzle further away from surface (12+ inches) and at an angle (45 degrees) to temper the impact.

Application/Media Suggestions

Note: The CLEARBLAST 450 is not intended to use silica sand!

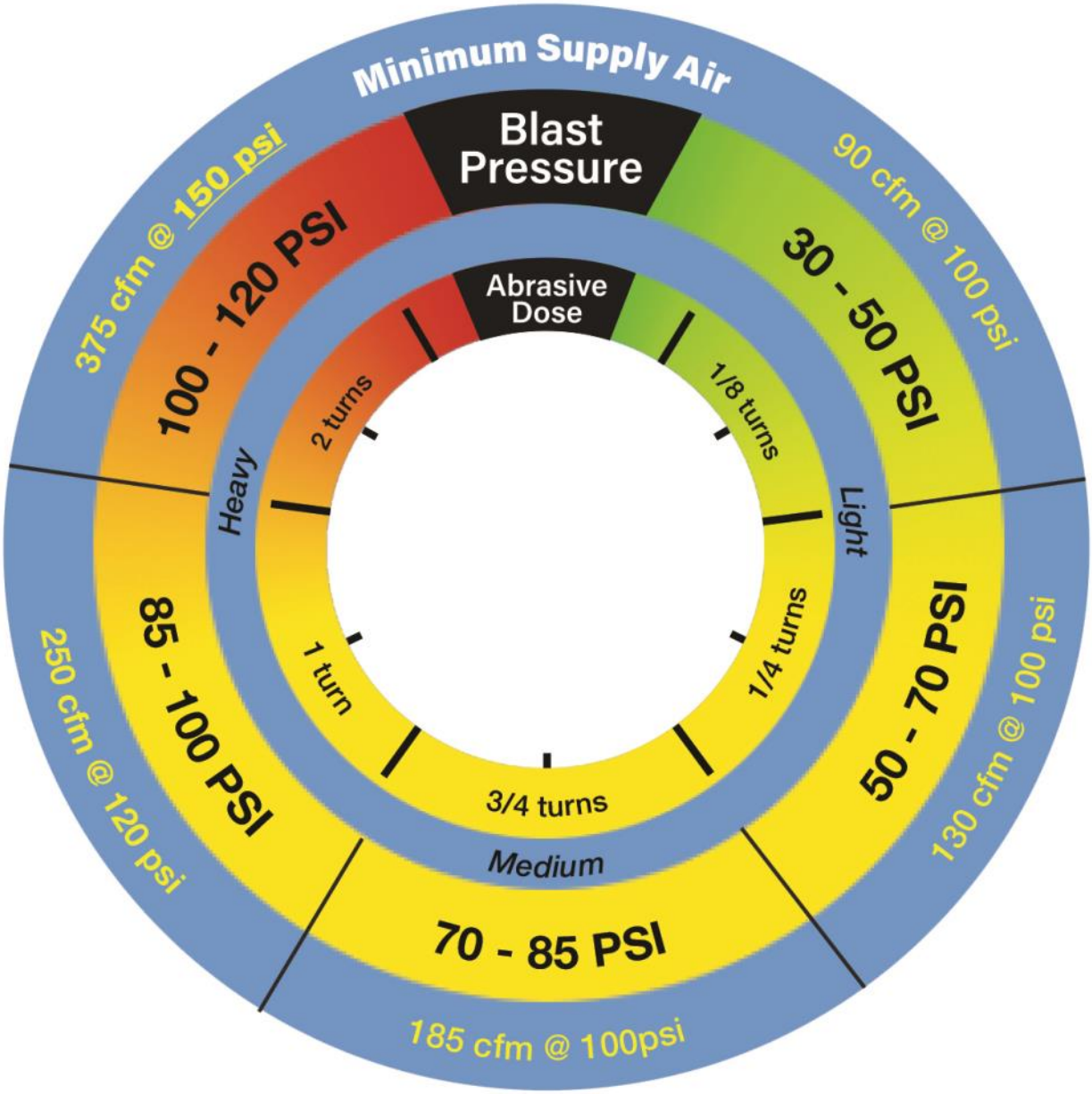
The chart below shows suggested blast pressure ranges and media options for various substrates. These suggestions are guide lines only and may vary depending on the specifics of your particular project. (ie– age of substrate, layers of coating, type of coating, etc.) It is at the users discretion to 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
Light	Wood	30 - 40	Crushed Glass (40/70 or 80/100)
Light	Historic Restoration	30 - 60	Armex Maintenance Formula Soda
Light	Fiberglass (boats, etc)	40 - 70	Bio Media*
Light	Stucco	40 - 70	
Medium	Brick	40 - 70	Crushed Glass (40/70)
Medium	Thin Metal (automotive, etc)	40 - 70	Garnet size: 80
Medium	Concrete	40 - 80	
Medium	Pavers	50 - 85	
Medium	Block	60 - 85	
Medium	Asphalt	60 - 85	
Heavy	Industrial Steel: Rust	80 - 120	Crushed Glass (20/40 or 40/70)
Heavy	Heavy Coatings & Mill Scale	100 - 120	Coal Slag Garnet

* Biological medias require 8+ hours of soaking prior to use, as they will float when dry.

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 Info

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 required 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.

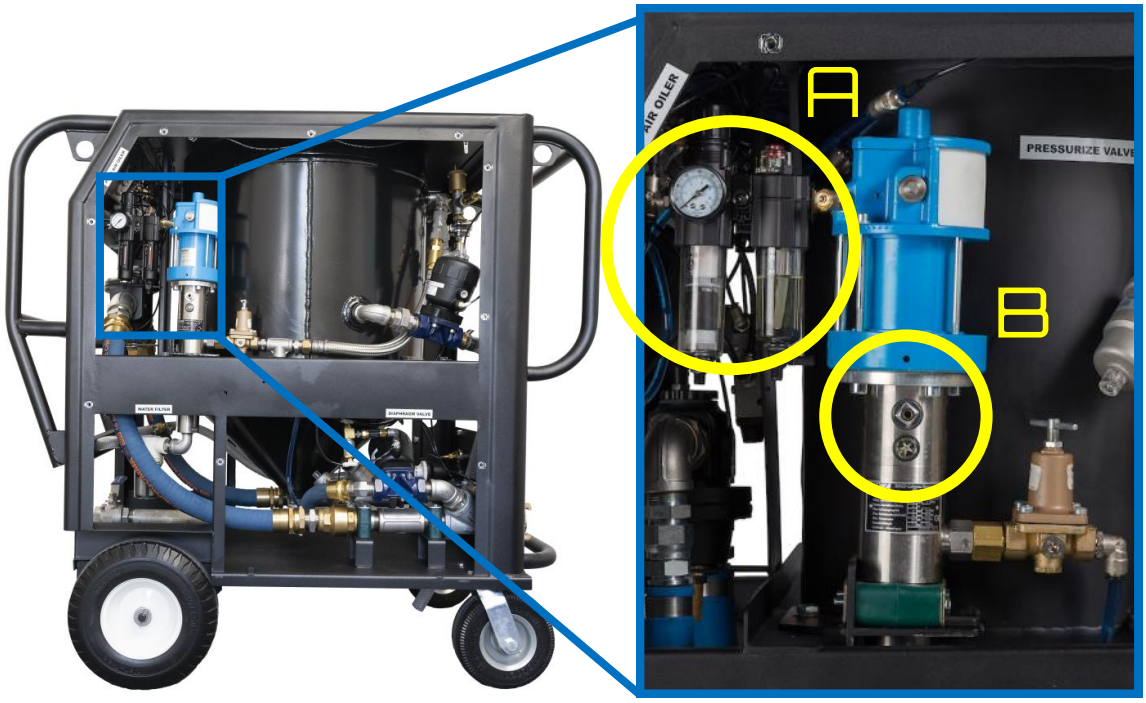
For detailed video instructions, please visit our Youtube channel and/or follow the link below:

Youtube Channel:

https://www.youtube.com/channel/UC9TTJupfRgG0dEw8Xc8YEbw

Oil Pump Video:

https://youtu.be/KmP28uYNsew



General Maintenance Info

Water Filter:

Most water-end pump wear is caused by poor quality water. To help prevent premature seal wear, the CB450 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 #18 for more information on winterizing.

General Maintenance Info

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.

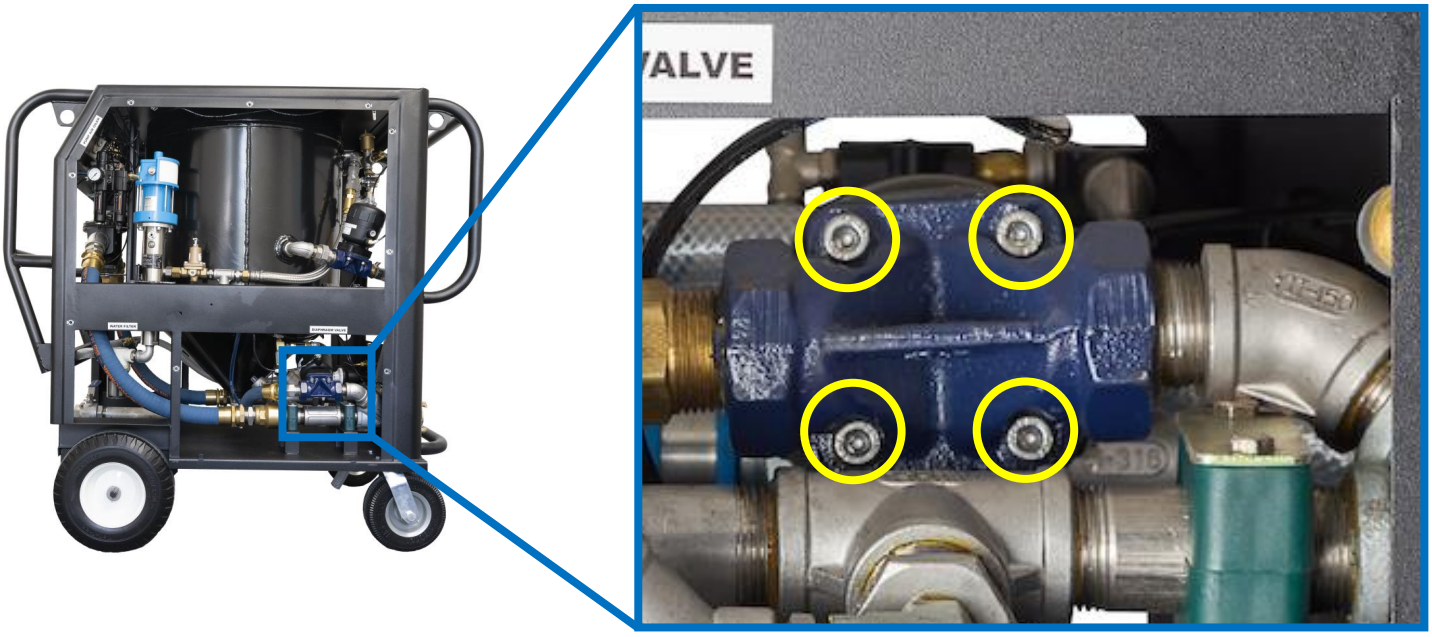
Diaphragm replacement requires removal of the four bolts marked below, unthreading the compromised diaphragm from the piston and rethreading on a new diaphragm and then properly re-mounting the valve and diaphragm assembly . For detailed video instructions, please visit our Youtube channel and/or follow the link below:

Youtube Channel:

https://www.youtube.com/channel/UC9TTJupfRgG0dEw8Xc8YEbw

Diaphragm Change Video:

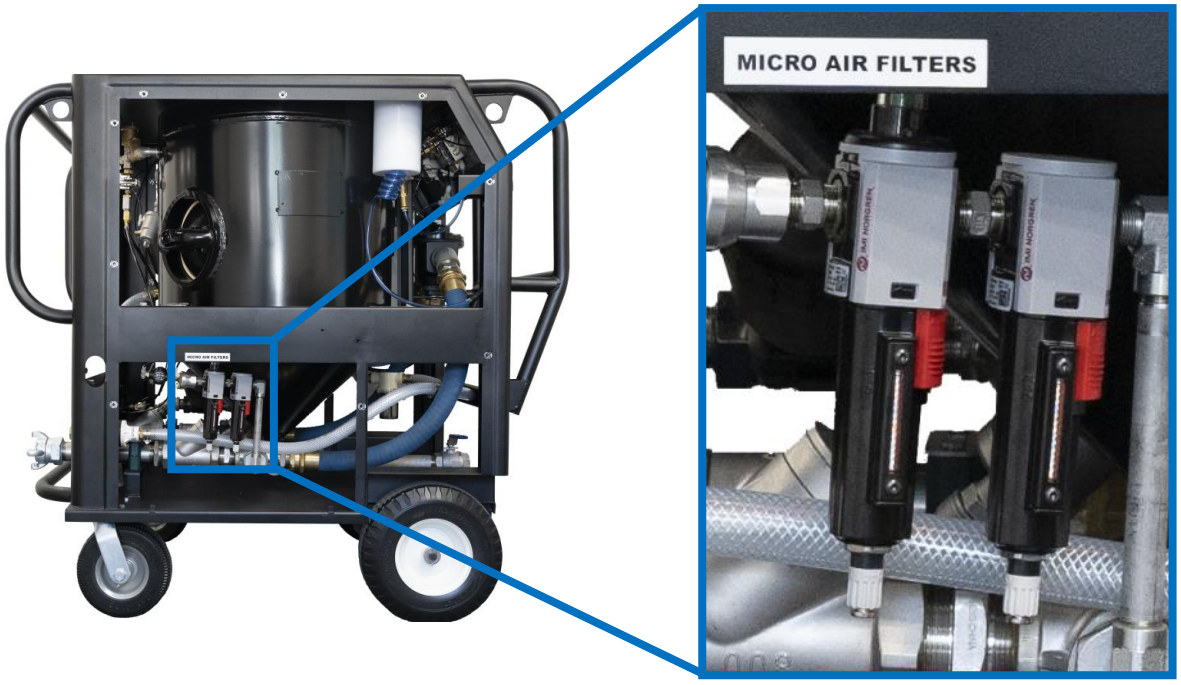
https://youtu.be/5wYu02FwF_I



General Maintenance Info

Micro Air Filters:

The CLEARBLAST 450 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.



“Winterizing” Instructions

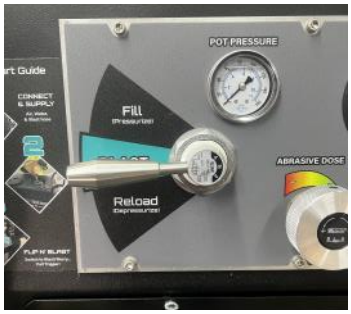
This procedure **must** be done whenever the system is being stored or transported in temperatures below freezing, in order to prevent water in the piston pump and water lines from freezing causing them to crack, expand and/or break. Use these step by step instructions to guide you through the process.

1) Turn off and disconnect all supply lines (water & air supply).

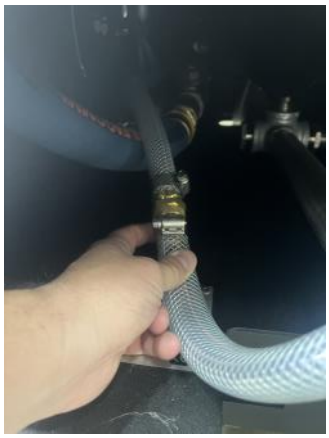
Water Supply

Air Supply

2) Turn left hand function selector switch to “Blast” mode and fully close the Abrasive Dose (turning to the right).



3) Disconnect the pumps "winterizing"/feed line. The quick connection is located in the opening below the rear panel (below main controls). Take the portion leading to the water pump (right) and place it into a gallon of windshield washer fluid with sub-zero rating. (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)

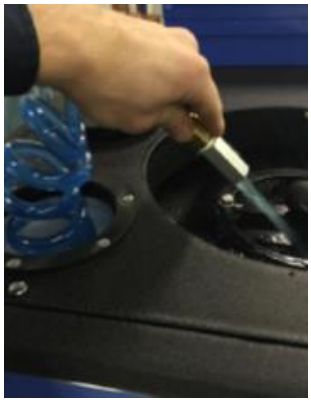


4) With pump line submerged in fluid, hook your CB450 to an air supply:

a. Use the standard compressor supply air hookup on front panel.

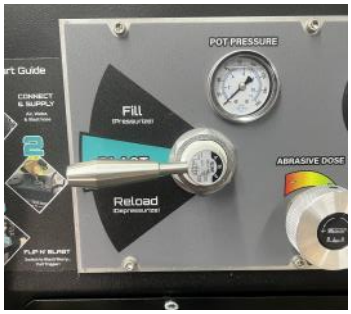
b. Use a small shop compressor (max 150psi) with adapter to air supply (this process does not require a large volume of air)

5) With the winterizing line submerged in the washer fluid, put air to system, turn on the "Wash Hose"/"Rinse Hose" until all water drains and windshield washer fluid emerges from nozzle end.



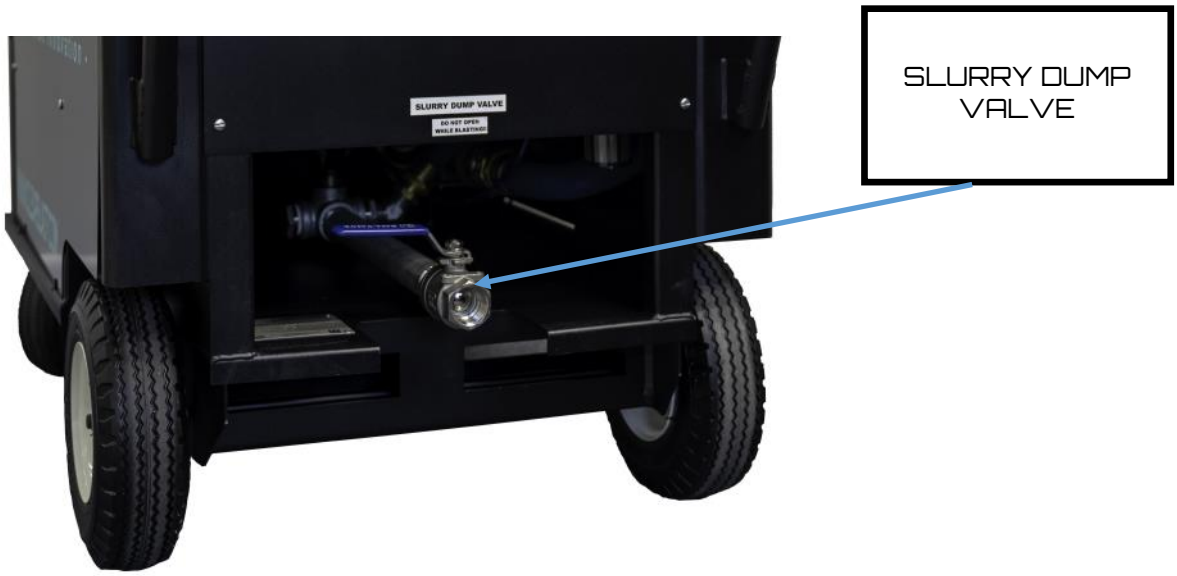
6) Next place the system into "Fill/Pressurize" mode and allow pump to run for 1-3 seconds, then turn function selector to "Blast" mode.

7) Open the "Abrasive Dose" one full turn and allow pump to run for 3 seconds, then fully close "Abrasive Dose."



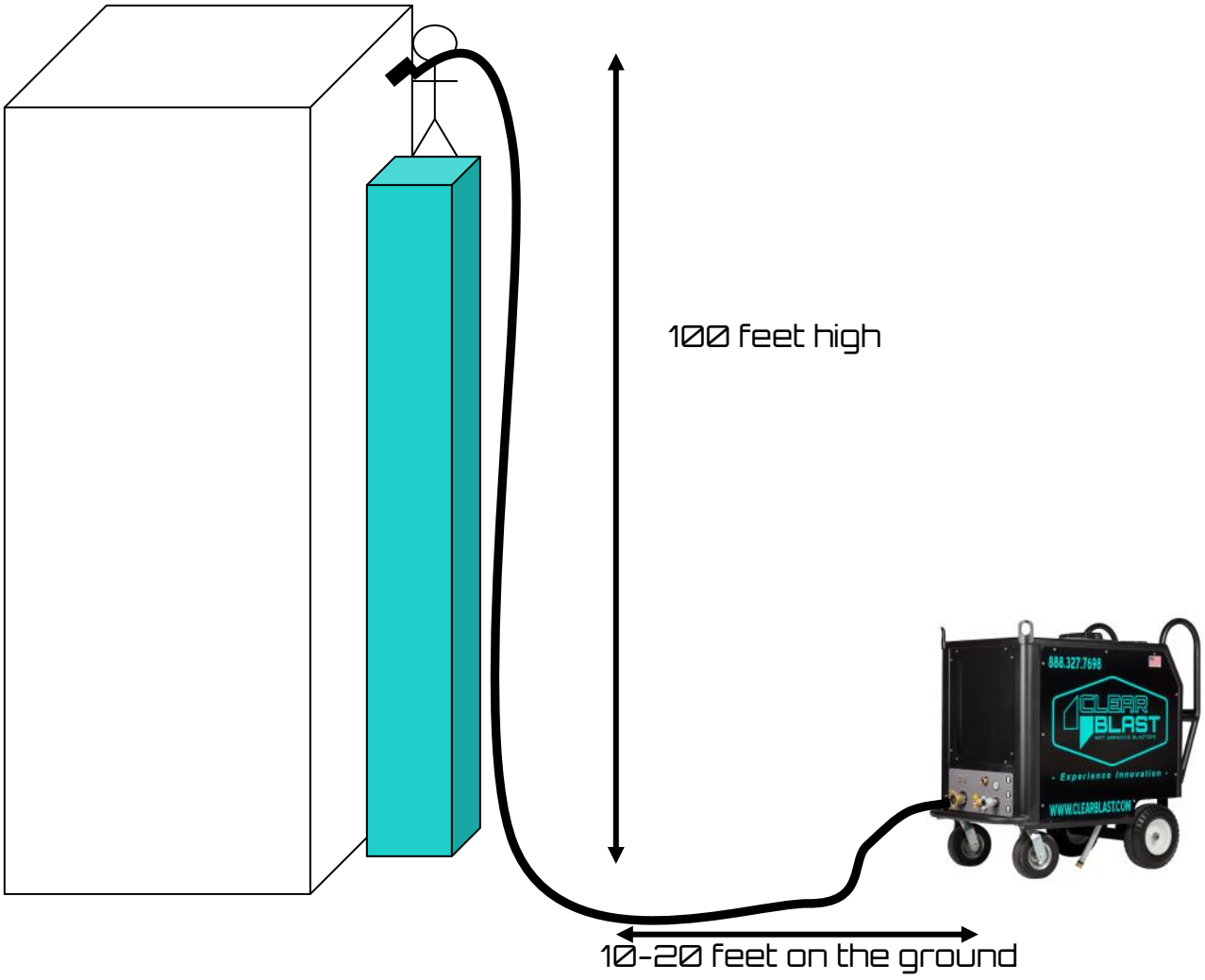
8) Turn function selector to "Reload/Depressurize" mode and allow any water to drain from the "Depressurize Valve" and piping.

9) Last, be sure to check that the "Slurry Dump Valve" is left open while the machine is being stowed or transported.



Blasting at Elevation

If you are using the CLEARBLAST unit 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, causing possible clogging.



List of Components

Pg 27: Image 1

COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
1a	Pump	PMP.WIWA	WIWA PISTON PUMP - 6:1
1b	Pump Oil Fill Port	N/A	N/A
2	Pump Regulator/Oiler	PMP.FRL	AIR SOURCE TREATMENT - 1/4"
3	Water Press. Regulator	12.WPR.175	1/2" WATER PRESSURE REG. (50-175 PSI)
4	Water Filter	34.STRAINER	3/4" STRAINER (80 MICRON ELEMENT)
5	Washdown Valve	38.ASV	3/8" NPT, ANGLE SEAT VALVE
6	Slurry Diaphragm Valve	1.DV	1" DIAPHRAGM VALVE
7	Depressurize Valve	1.DV	1" DIAPHRAGM VALVE

Pg 28: Image 2

COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
8	Control Panel	N/A	N/A
9	A/B Switch	AB.AR.HP.2	PILOT OP. DIRECTIONAL CONTROL VLV
10	Abrasive Dose Check Vlv	PMP.FRL	3/8" FEMALE CHECK VALVE
11	Winterizing Disconnect	N/A	N/A
12	Main Air Regulator	300.BR.SS	1" BLAST REGULATOR
13	Slurry Dump Valve	114.F.F.BV	1-1/4" BALL VALVE
14	Hour Meter	HM.KIT	HOUR METER ASSEMBLY

Pg 29: Image 3

COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
15	Gen. Purpose Micro Air Filter	38.GP.FILTER	3/8" GEN PURPOSE FLTR
16	Coalescing Micro Air Filter	38.C.FILTER	3/8" COALESCING FLTR
17	Pot Cleanout Gasket	INSPPLT.GASKET.1	INSPECTION PLATE GASKET
18	Wash Hose	WH.8COIL	8' COIL HOSE WITH FITTINGS
18a	Wash Hose Canister Lid	WH.CANISTER.LID	LID FOR WASH HOSE CANISTER

List of Components

Pg 30: Image 4

COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
19	Pressurize Valve	38.ASV	3/8" ANGLE SEAT VALVE
20	Check Valve	38.F.CV	3/8" CHECK VALVE
21	Safety Switch	18.PA.5	1/8" PILOT ACTUATOR - 5PSI
22	Trigger Air Regulator	14.VR.125	1/4" VENTED REGULATOR 5-125PSI
23	Trigger Line Connections	14.SAE.HN	1/4" X SAE HEX NIPPLE
24	Water Hose Connection	GH.F.34.M	FEMALE GARDEN HOSE X 3/4" MALE NPT
25	Inlet Air PSI Gauge	112.PG	1-1/2" PANEL GAUGE
26	Blast Hose Connection	114.F.QC	1-1/4" FNPT 2-PRONG QUICK COUPLER
27	Air Hose Connection	1.F.QC	1" FNPT 2-PRONG QUICK COUPLER
28	Blast Hose	114ID.BH	1-1/4" I.D. x 50' BLAST HOSE ASSY

Pg 31: Image 5

COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
29	Function Selector Valve	14.HV	1/4" VENTED REGULATOR 5-125PSI
30	Pot Pressure Gauge	112.PG	1-1/2" PANEL GAUGE
31	Abrasive Dose Valve	38.NV	3/8" FLOW CONTROL NEEDLE VALVE
32	Blast Pressure Gauge	212.PG	2-1/2" PANEL GAUGE
33	Blast Pressure Regulator	14.VR.125	1/4" VENTED REGULATOR 5-125PSI
34	Emergency Stop Button	4.ESB	E-STOP BUTTON
35	Mode Selector Valve	14.HV	1/4" HAND SELECTOR VALVE

Pg 32

FUNCTION	PART NUMBER	PART DESCRIPTION
Extension Hose	114ID.50EXT	1-1/4" I.D. x 50' EXTENSION HOSE
Nozzle Extension	NZL.EXT.WAND	NOZZLE EXTENSION WAND WITH HANDLE
Nozzle	NZL.CT.6	STANDARD NOZZLE: #6 BORE
Nozzle: XL	NZL.CT.6XL	XL PERFORMANCE NOZZLE: #6
Nozzle	NZL.CT.8	STANDARD NOZZLE: #8 BORE
Nozzle: XL	NZL.CT.8XL	XL PERFORMANCE NOZZLE: #8
Rust Inhibitor	RI,5GAL	CLEARBLAST RUST INHINITOR

List of Components

Pg 33

FUNCTION	PART NUMBER	PART DESCRIPTION
Complete Parts Kits	PART.KIT.CB450	RECOMMENDED SPARE PARTS KIT

Pg 34

FUNCTION	PART NUMBER	PART DESCRIPTION
Maintenance Kit	250HR.MK.150/450	250 HOUR MAINTENANCE KIT
Maintenance Kit	500HR.MK.150/450	500 HOUR MAINTENANCE KIT
Maintenance Kit	1000HR.MK.450	1000 HOUR MAINTENANCE KIT

Pg 35

FUNCTION	PART NUMBER	PART DESCRIPTION
Pump Repair Kit: Air	WIW.REPAIR.KIT.AIR	WIWA PUMP AIR END REPAIR KIT

Pg 36

FUNCTION	PART NUMBER	PART DESCRIPTION
Pump Repair Kit: Water	WIW.REPAIR.KIT.W2	WIWA PUMP WATER END REPAIR KIT
Pump Seal Kit: Water	WIW.SEAL.KIT.W2	WIWA PUMP WATER END SEAL KIT
Pump Custom Seal Kit: Water	WIW.CUSTOM.W2	WIWA PMP WATER CUSTOM SEAL KIT

Pg 37

FUNCTION	PART NUMBER	PART DESCRIPTION
Diaphragm Valve Seal Kit	1.DV.SK	1" DIAPHRAGM VALVE SEAL KIT
Replacement Diaphragm	1.E.D	1" DIAPHRAGM

List of Components

Pg 38

FUNCTION	PART NUMBER	PART DESCRIPTION
Air Regulator Repair Kit	400.BR.SS.REPAIR.KIT	MAIN AIR REG REPAIR KIT

Pg 39

FUNCTION	PART NUMBER	PART DESCRIPTION
Filter Element—Gen Purp	38.GP.FILTER.RK	3/8" Micro Filter Element—Gen. Purpose
Filter Element—Coalescing	38.C.FILTER.RK	3/8" Micro Filter Element—Coalescing

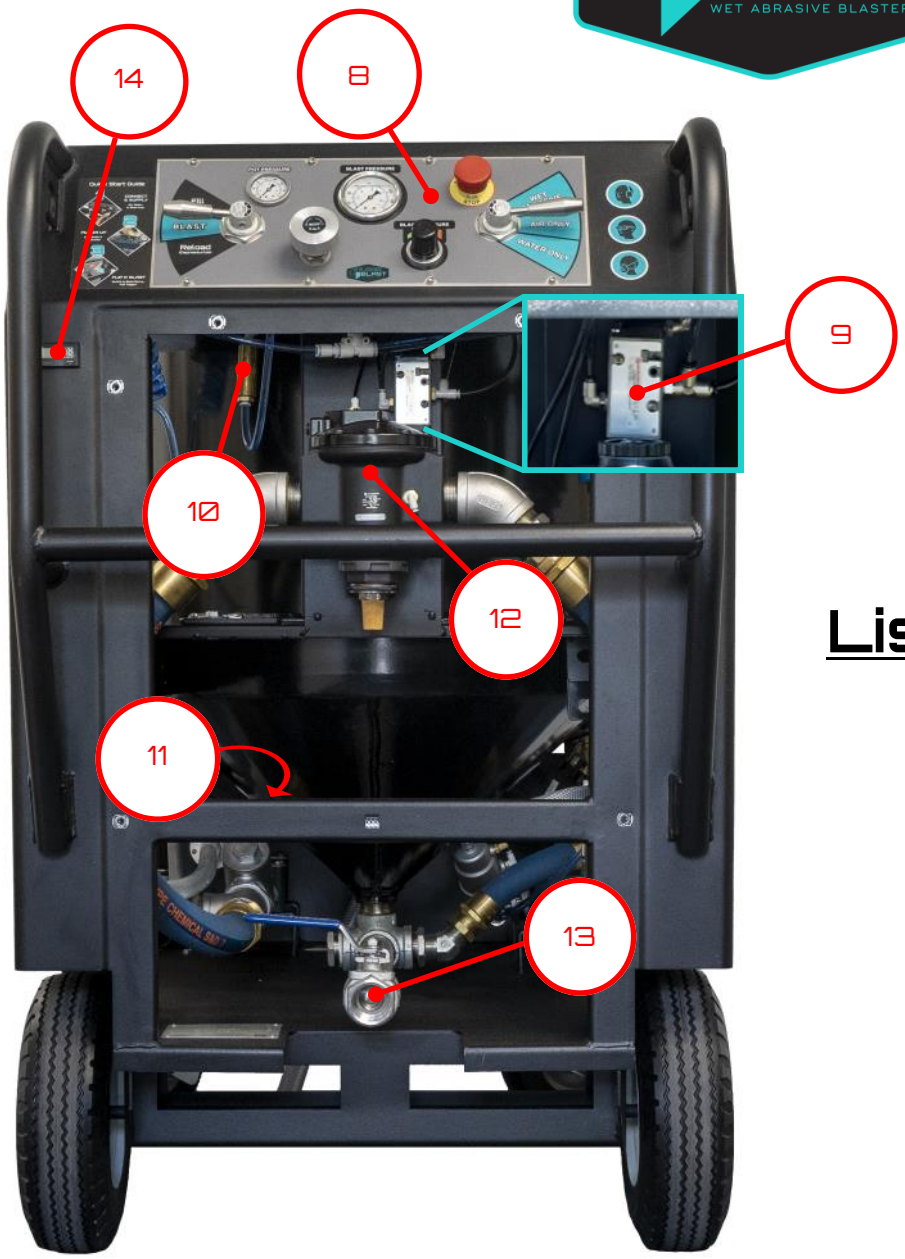
Not Pictured

FUNCTION	PART NUMBER	PART DESCRIPTION
Tubing	4MMTUBING-BLACK	4MM POLY TUBING—BLACK (AIR)
Tubing	6MMTUBING-BLACK	6MM POLY TUBING—BLACK (AIR)
Tubing	8MMTUBING-BLACK	8MM POLY TUBING—BLACK (AIR)
Tubing	8MMTUBING-BLUE	8MM POLY TUBING—BLACK (WATER)
Tubing	10MMTUBING-BLUE	10MM POLY TUBING—BLACK (WATER)
Labels	LABEL.KIT.150/450	REPLACEMENT MACHINE LABELS (INSTRUCTIONS, TIPS/SETTINGS, SAFETY, ETC)
Pump Oil	WIWA.PMP.OIL	1QT OIL FOR USE IN WIWA 6:1 PUMP

List of Components

Image 1

COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
1a	Pump	PMP.WIWA	WIWA PISTON PUMP - 6:1
1b	Pump Oil Fill Port	N/A	N/A
2	Pump Regulator/Oiler	PMP.FRL	AIR SOURCE TREATMENT - 1/4"
3	Water Press. Regulator	12.WPR.175	1/2" WATER PRESSURE REG. (50-175 PSI)
4	Water Filter	34.STRAINER	3/4" STRAINER (80 MICRON ELEMENT)
5	Washdown Valve	38.ASV	3/8" NPT, ANGLE SEAT VALVE
6	Slurry Diaphragm Valve	1.DV	1" DIAPHRAGM VALVE
7	Depressurize Valve	1.DV	1" DIAPHRAGM VALVE

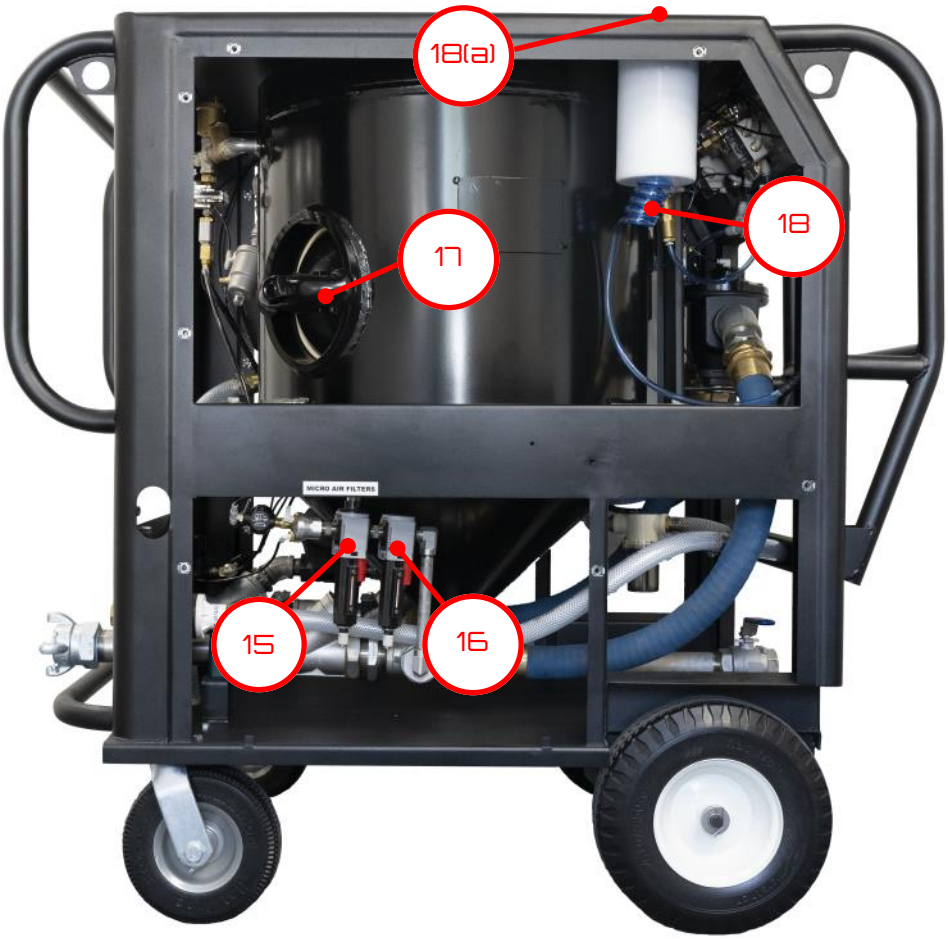


List of Components
Image 2

COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
8	Control Panel	N/A	N/A
9	A/B Switch	AB.AR.HP.2	PILOT OP. DIRECTIONAL CONTROL VLV
10	Abrasive Dose Check Vlv	PMP.FRL	3/8" FEMALE CHECK VALVE
11	Winterizing Disconnect	N/A	N/A
12	Main Air Regulator	300.BR.SS	1" BLAST REGULATOR
13	Slurry Dump Valve	114.F.F.BV	1-1/4" BALL VALVE
14	Hour Meter	HM.KIT	HOUR METER ASSEMBLY

List of Components

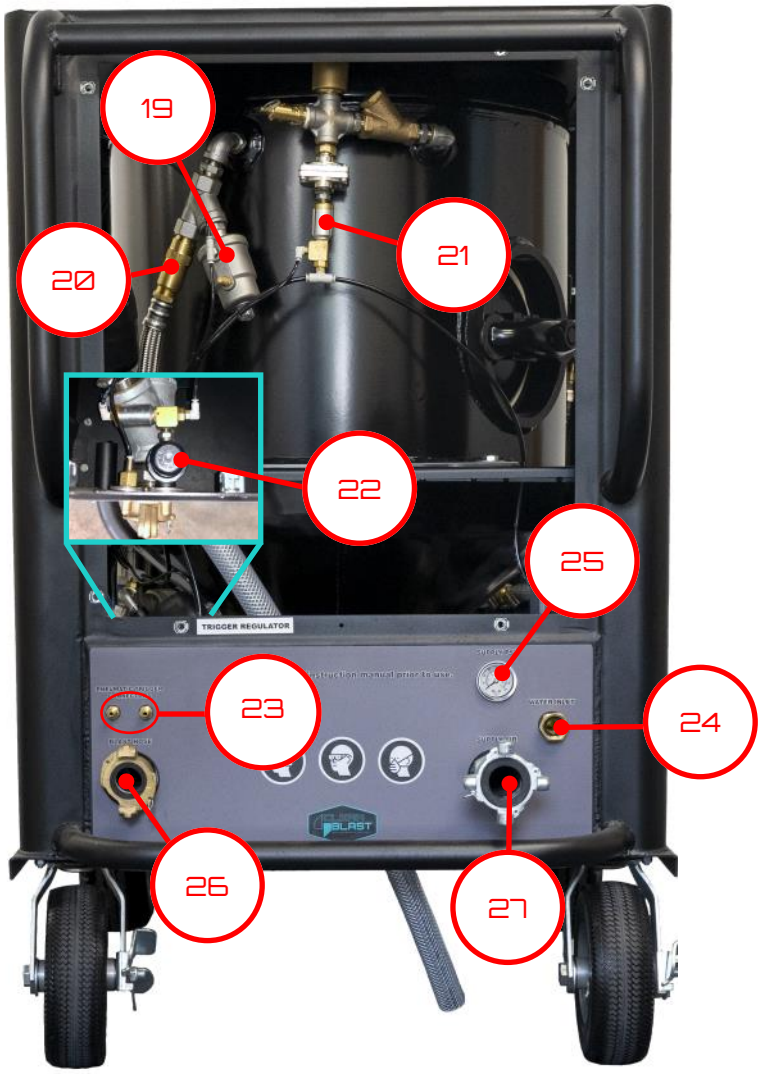
Image 3



COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
15	General Purpose Micro Air Filter	38.GP.FILTER	3/8" GEN PURPOSE FLTR
16	Coalescing Micro Air Filter	38.C.FILTER	3/8" COALESCING FLTR
17	Pot Cleanout Gasket	INSPPLT.GASKET.1	INSPECTION PLATE GASKET
18	Wash Hose	WH.8COIL	8' COIL HOSE WITH FITTINGS
18a	Wash Hose Canister Lid	WH.CANISTER.LID	LID FOR WASH HOSE CANISTER

List of Components

Image 4



COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
19	Pressurize Valve	38.ASV	3/8" ANGLE SEAT VALVE
20	Check Valve	38.F.CV	3/8" CHECK VALVE
21	Safety Switch	18.PA.5	1/8" PILOT ACTUATOR - 5PSI
22	Trigger Air Regulator	14.VR.125	1/4" VENTED REGULATOR 5-125PSI
23	Trigger Line Connections	14.SAE.HN	1/4" X SAE HEX NIPPLE
24	Water Hose Connection	GH.F.34.M	FEMALE GARDEN HOSE X 3/4" MALE NPT
25	Inlet Air PSI Gauge	112.PG	1-1/2" PANEL GAUGE
26	Blast Hose Connection	114.F.QC	1-1/4" FNPT 2-PRONG QUICK COUPLER
27	Air Hose Connection	1.F.QC	1" FNPT 2-PRONG QUICK COUPLER
28	Blast Hose	114ID.BH	1-1/4" I.D. x 50' BLAST HOSE ASSY

List of Components

Image 5

COMP #	FUNCTION	PART NUMBER	PART DESCRIPTION
29	Function Selector Valve	14.HV	1/4" VENTED REGULATOR 5-125PSI
30	Pot Pressure Gauge	112.PG	1-1/2" PANEL GAUGE
31	Abrasive Dose Valve	38.NV	3/8" FLOW CONTROL NEEDLE VALVE
32	Blast Pressure Gauge	212.PG	2-1/2" PANEL GAUGE
33	Blast Pressure Regulator	14.VR.125	1/4" VENTED REGULATOR 5-125PSI
34	Emergency Stop Button	4.ESB	E-STOP BUTTON
35	Mode Selector Valve	14.HV	1/4" HAND SELECTOR VALVE

Accessories

EXTENSION HOSE—Sold in 50' lengths and fitted with deadman lines as well as hose ends. You may use up to 150 additional feet of extension hose paired with the supplied 50' blast hose.

NOZZLE EXTENSION 24" - Get your nozzle closer without breaking your back. Great for doing line removal or any long-term blasting on the ground.

NOZZLES—Equip your machine with the right nozzle for the job allowing you to get the needed spray pattern and power you need. Nozzle options include: #5, #6, #6XL, #6 FAN, #7, #8, #8XL

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

ALTERNATE MEDIA OPTIONS (picture not shown)—Though we at CLEARBLAST LLC recommend the use of recycled glass media due to its effective removal capabilities and its safe qualities for the users health, there are alternatives to match the more specialized jobs. These include garnet and coal slag for the tougher coatings and grime as well as plastic media for a softer touch. Alternate medias may cause additional wear on your CLEARBLAST components. Talk to your CLEARBLAST expert for more details and blasting tips.

Part Schematics & Repair Kits

Recommended Spare Parts Kit

Repair Kit -

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

Part #: PARTS.KIT.CB450

Maintenance Kits

Service Hour Increments

200 Hour Maintenance Kit -

Includes: 1.E.D

Part #: KIT.200HR.150/450

400 Hour Maintenance Kit -

Includes: 1.E.D & WIW.CUSTOM.W2

Part #: KIT.400HR.150/450

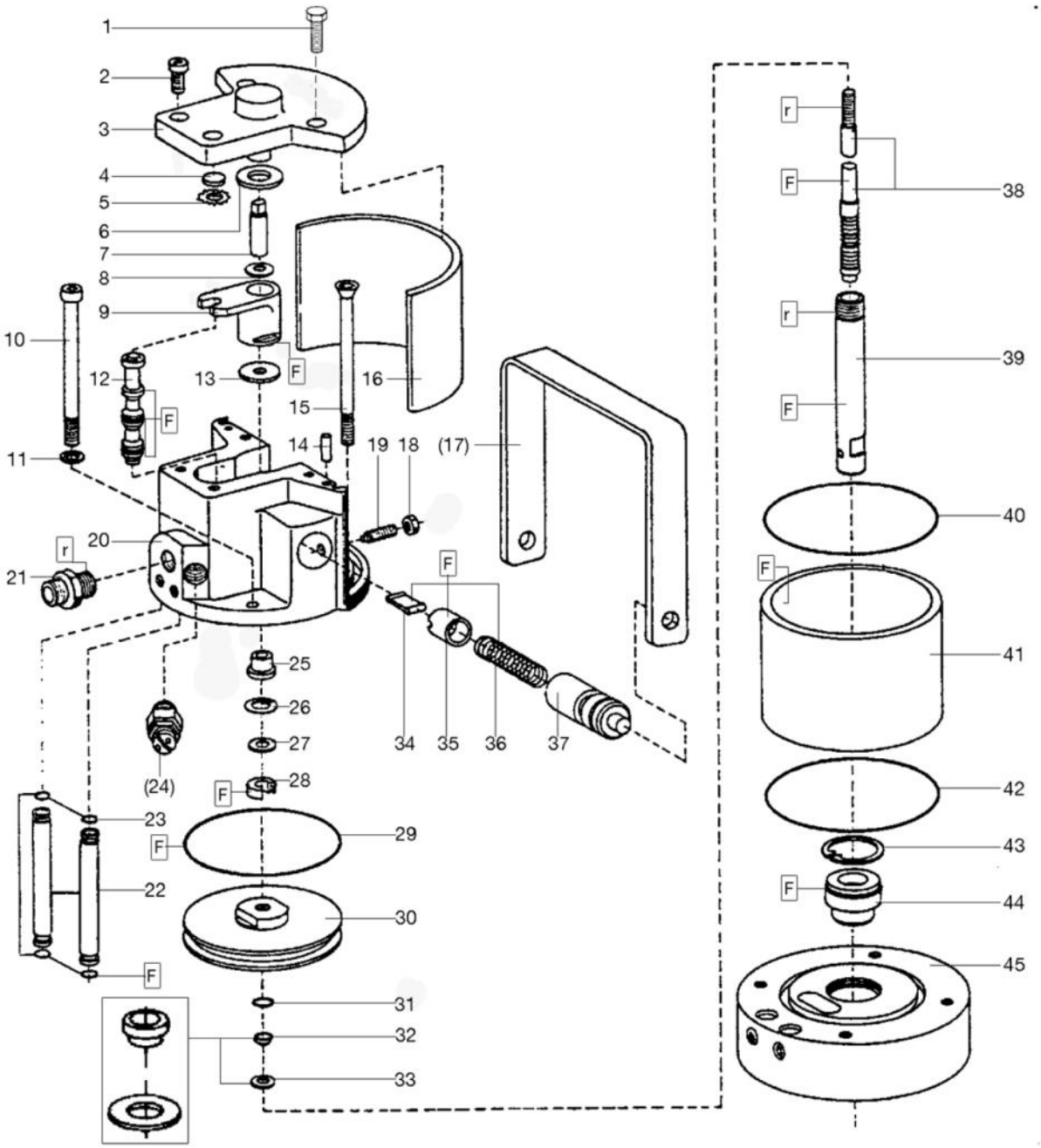
800 Hour Maintenance Kit -

Includes (1 EA): 1.E.D, WIW.CUSTOM.W2, 38.GP.FILTER.RK, 38.C.FILTER.RK, QC.B.G, NZL.W, INSPPLT.GASKET.1, BUNG.SEAL.1

Part #: KIT.800HR.450

Part Schematics & Repair Kits

WIWA Water Pump—Air End



Repair Kit -

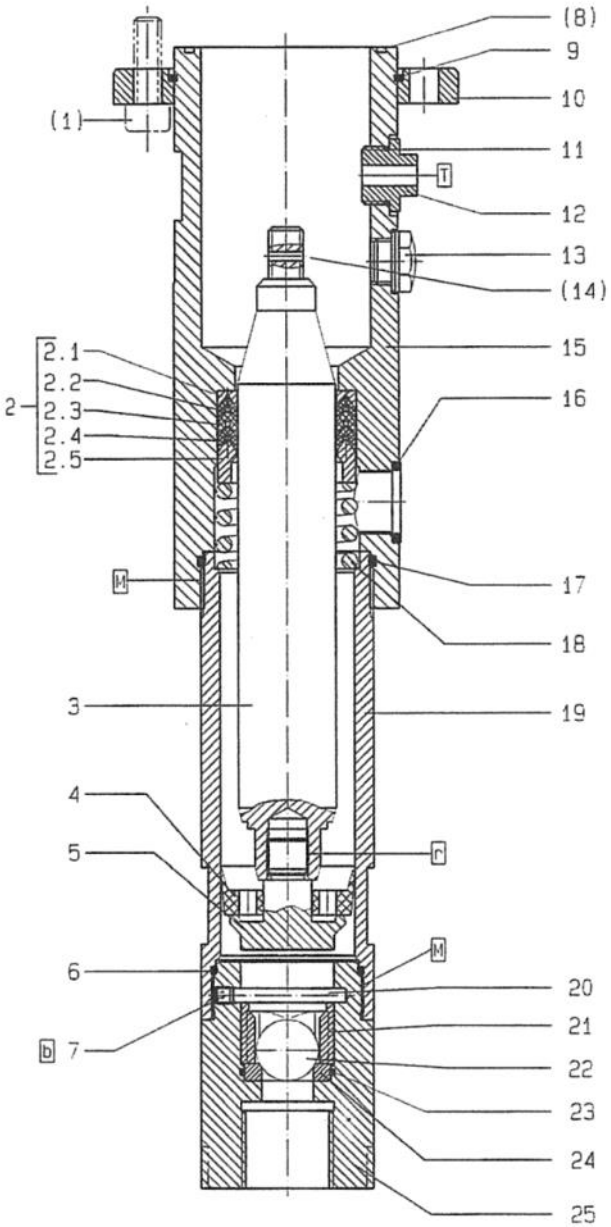
Includes: 4, 5, 6, 12, 13, 23, 26, 28, 29, 31, 32, 33, 38, 40, 42, 43, 44

Part #: WIW.REPAIR.KIT.AIR

Part Schematics & Repair Kits

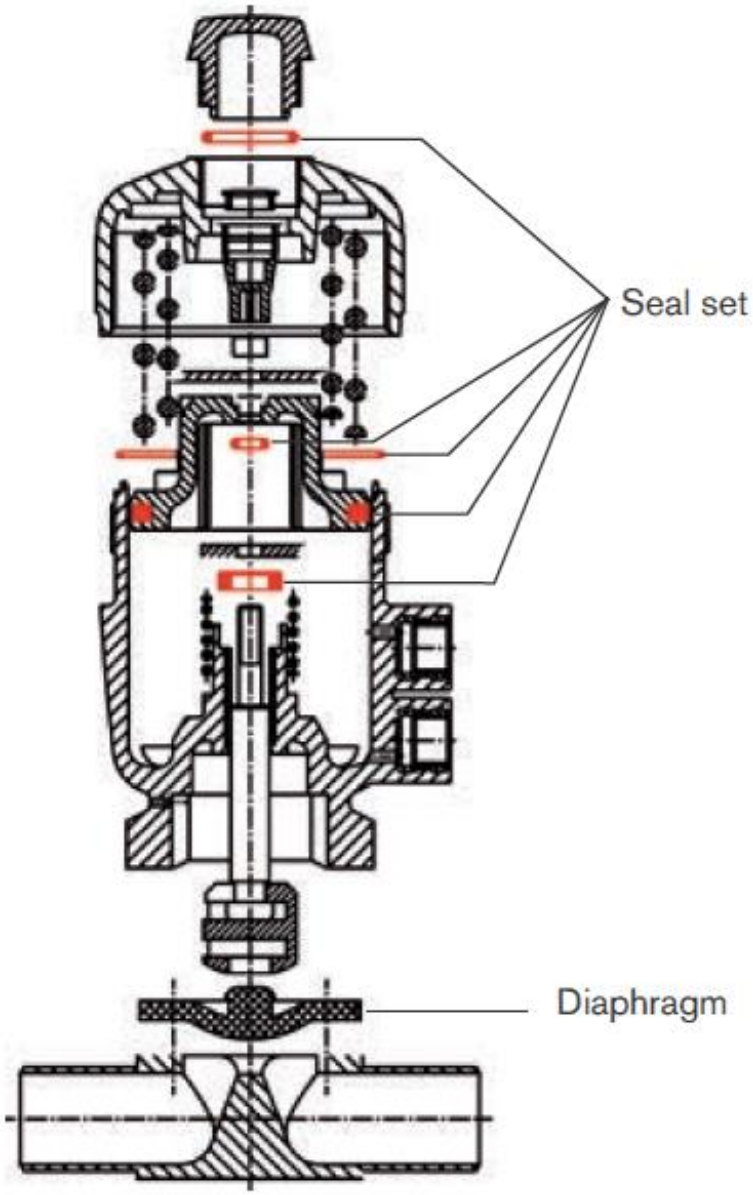
WIWA Water Pump—Water End

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



Part Schematics & Repair Kits

Diaphragm Valve (Spring Closed)



Seal Kit - Part #: 1.DV.SK
Replacement Diaphragm - Part #: 1.D.D

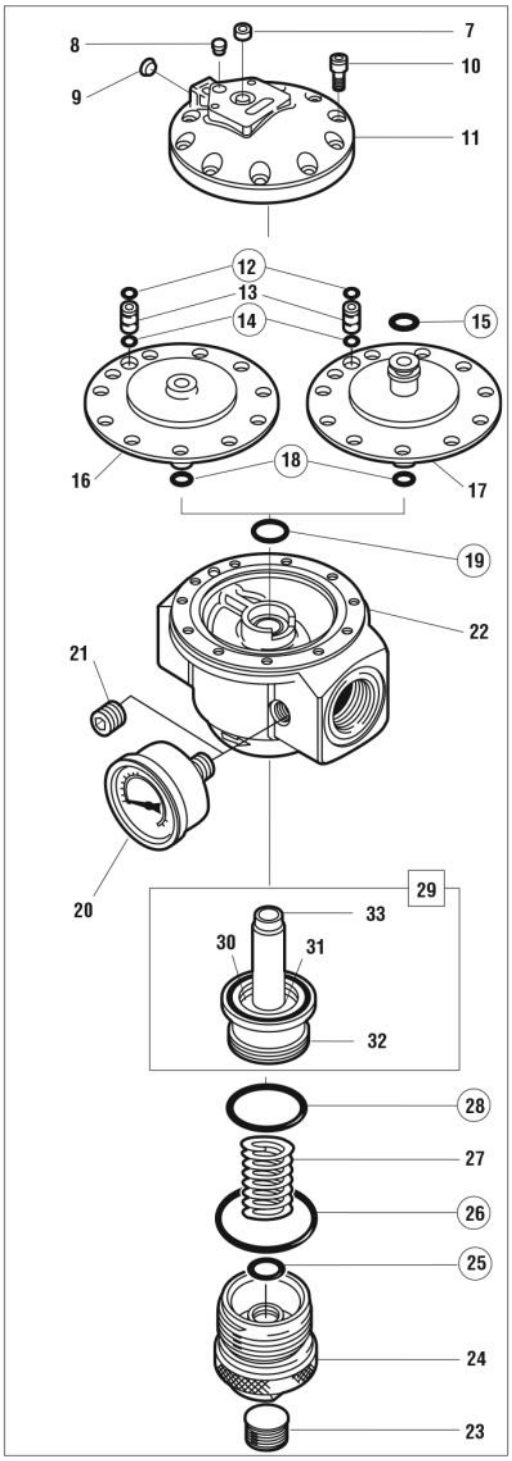
Part Schematics & Repair Kits

Main Air Regulator

Repair Kit -

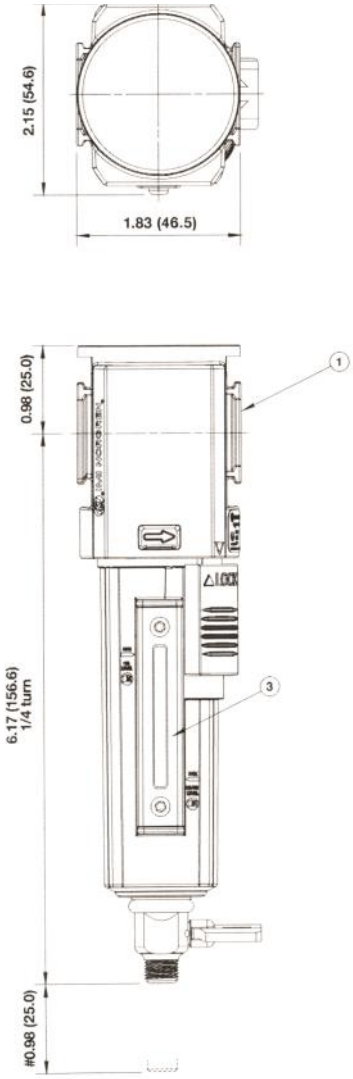
Includes: 12, 14, 15, 18, 19, 25, 26, 28

Part #: 400.BR.SS.REPAIR.KIT



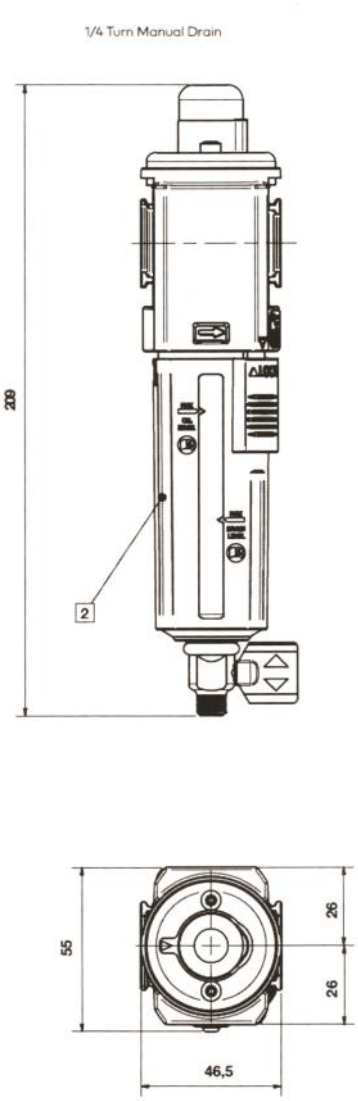
Part Schematics & Repair Kits

Micro Filters



3/8" General Purpose Filter Repair Kit -

Part #: 38.GP.FILTER.RK



3/8" Coalescing Filter Repair Kit -

Part #: 38.C.FILTER.RK

Warranty Summary

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.

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

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:

askanexpert@clearblast.com