MULTIBLAST
PERFORMANCE BLASTING
CALL 1800706620
www.multiblastpro.com.au

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WARNING – Do not operate this equipment without reading and understanding the contents of this manual.

Section 1.0 Technical Data

Technical Data	
Model:	PRO 390W
Assy No:	PRO 390W
Overall Dimensions	900mm Wide
	680mm Deep
	1850mm High
Working Area Dimensions	680mm Wide
	680mm Deep
	850mm High
Work Door Opening	680mm Wide
	860mm High
Power Supply	415V / 50Hz
Abrasive Capacity	5-6 kg
Air Connection Size	12.7mm (1/2")
Water Connection Size	12.7mm (1/2")
Compressed Air Req'd	560 l/m (20cfm) @ 7bar (100psi)
Blast Nozzle Size	6mm (1/4")
Air Jet Size	3mm (1/8")
Cabinet Light	240V 13Watt
Water Capacity	25 Litres
Cabinet Extraction Fan	38Watt x 2 off
Cabinet Window Size	500mm x 300mm









IMPORTANT – READ THIS INFORMATION CAREFULLY PRIOR TO OPERATING THE EQUIPMENT.

ALL ABRASIVE BLASTING OPERATIONS ARE DANGEROUS AND CREATE A HAZARDOUS ENVIRONMENT.

FAILURE TO COMPLY WITH THIS INFORMATION MAY CAUSE SERIOUS INJURY OR DEATH.

Section 2.0 Important Information

2.1 All products and equipment designed and manufactured byMultiBlast Australia are intended for use by experienced users of abrasive blasting equipment , and its' associated operations and abrasive blasting media.

2.2 It is the responsibility of the user/purchaser/distributor to:

2.2.1 Determine if the equipment and abrasive media is suitable for the users intended use and application.

2.2.2 Familiarize themselves with any appropriate laws, regulations and safe working practices which may apply within the users working area/environment.

2.2.3 Provide appropriate operator training and a safe working environment, including operator protective equipment such as, but not limited to, safety footwear, protective eyewear, hearing protection, and respiratory protection where applicable.

2.3 No representations are made or intended as to the useful life, maintenance cycles, efficiency or performance of the reference products or any combination of products.

2.4 Information contained herein must not be used for estimating purposes. Production rates, labour performance and surface finishes are the sole responsibility of the user.

2.5 Read all instructions carefully prior to operating this equipment, and do not allow it to be operated by inexperienced, untrained or unauthorised personnel.

2.6 Ensure that the equipment is correctly serviced and maintained as specified in this manual, and that only genuine MultiBlast Australia replacement parts are utilised. Failure to use genuine replacement parts may void your warranty.

12.7 All pressure vessels (where supplied) are designed, manufactured and certified in accordance with Australian Standard AS1210. A copy of this certification will be supplied with this manual if applicable. Do not weld, grind or drill any pressure vessel, as this will void the certification and warranty, and may weaken the vessel causing a catastrophic failure.

2.8 This equipment is not designed for use in areas designated as hazardous. Contact your local MultiBlast Australia office/representative prior to operating this equipment in a hazardous area.

2.9 All compressed air fittings, connections and hoses must be in good condition, fit for purpose, correctly sized and fitted, and carefully inspected prior to use.

2.10 Breathing airborne dust from any abrasive media may cause lung disease or other serious injury. Always wear suitably designed respiratory protection when handling any abrasive media, and when in the immediate area during any abrasive blasting operation.

2.11 Static electricity may be generated during any abrasive blasting operation. All equipment should be well grounded/earthed to prevent electric shock and reduce the risk of spark generation.

2.12 All Supplied Air Respirators (i.e.: blasting helmets) where used must comply with the requirements of AS/NZS 1716:2003, and must be supplied with breathing air as specified in AS/NZS 1715:2009 or higher, at a flow rate between 170l per minute (6cfm) and 425l per minute (15cfm) at all times.

Section 3.0 General Description

3.1 The MultiBlast PRO 930W Wet Blast Cabinet is designed to mix abrasive media and water for abrasive blasting applications within a stainless steel cabinet. A pump is provided to deliver the abrasive and water mix to the blast gun, where it is mixed with the incoming compressed air supply.

3.2 A pressure regulator is provided for the incoming compressed air supply, and a foot operated switch is included for the operator to turn the blasting system on/off.

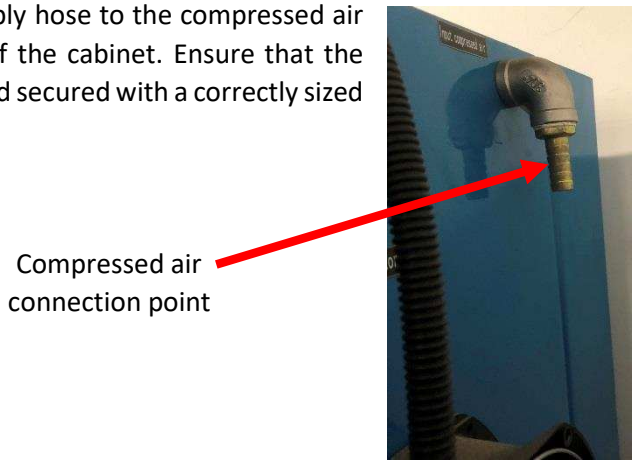
3.3 A pneumatically operated window wiper system is provided to keep the operators viewing window clear, and a wash down trigger gun is also included.

Section 4.0 Installation

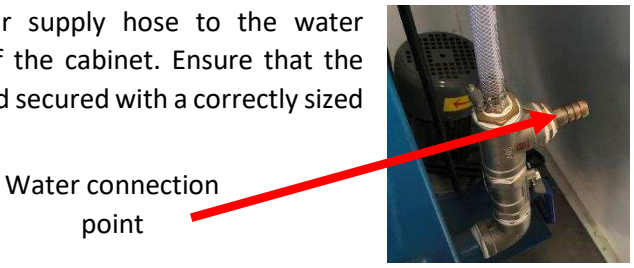
WARNING – ALL ELECTRICAL AND PLUMBING CONNECTIONS MUST BE CARRIED OUT BY SUITABLY QUALIFIED AND EXPERIENCED TRADESPERSONS. ALL CONNECTIONS MUST COMPLY WITH LOCAL SITE REQUIREMENTS AND/OR REGULATIONS.

4.1 The cabinet should be placed on a flat, level surface, and positioned considering space for loading/unloading access, as well as on going servicing and maintenance. It is recommended that there should be 1200mm clear area on both the work door side of the cabinet, and the rear of the cabinet.

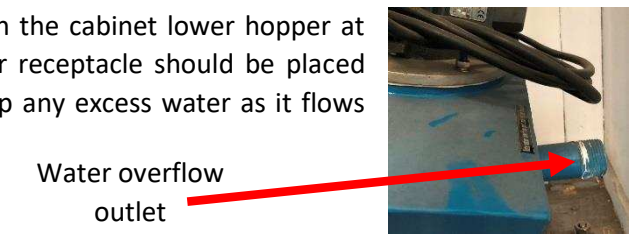
4.2 Connect a 12.7mm (½") air supply hose to the compressed air connection point on the rear of the cabinet. Ensure that the supply hose is correctly fitted and secured with a correctly sized hose clamp.



4.3 Connect a 12.7mm (½") water supply hose to the water connection point of the rear of the cabinet. Ensure that the supply hose is correctly fitted and secured with a correctly sized hose clamp.



4.4 An overflow outlet is located on the cabinet lower hopper at the rear if the cabinet. A water receptacle should be placed underneath the overflow to trap any excess water as it flows out.



4.5 Connect the cabinet power cable to a correctly sized power outlet, checking that the plug is fully connected and secured correctly.

4.6 Connect the operator foot switch rubber hose to the connection point in the control panel located directly above the operator viewing window. The switch hose simply pushes onto the panel fitting. Then place the foot switch on the floor directly in front of the cabinet.

Foot switch connection point





Foot switch

Section 5.0 System Operation

5.1 Check that the MultiBlast 390W cabinet has been correctly installed as per Section 4. 0 of this manual.

5.2 Turn on the main power supply.

5.3 Turn on the compressed air supply. The input pressure gauge on the control panel will display the incoming air pressure.



Incoming air pressure gauge

NOTE – The blasting air pressure will vary depending on the individual operating conditions and the desired end result. The recommended air pressure for most applications is between 0.35Mpa (50psi) and 0.55Mpa (80psi) – DO NOT EXCEED 0.68Mpa (100psi)

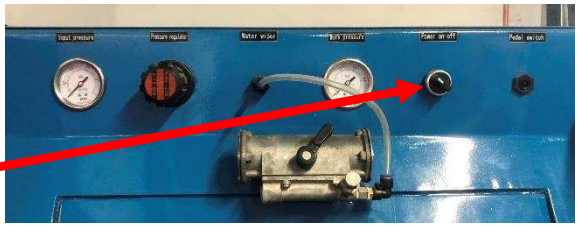
5.4 Set the air pressure to the desired blasting pressure, by adjusting the pressure regulator located on the control panel. Unlock the regulator by pulling the knob outwards. Increase the pressure by rotating the knob clockwise, and decrease the pressure by rotating the knob anti-clockwise. The set pressure will be displayed on the work pressure gauge in the control panel



Pressure Regulator

Work Pressure Gauge

5.5 Turn on the cabinet internal work light using the switch located in the control panel



Cabinet Light Switch

5.6 Turn on the water inlet valve located on the rear of the cabinet, allowing approximately 25 litres of water to flow into the cabinet hopper, then turn off the water inlet valve. Discharge of water from the cabinet overflow indicates that the water level is correct.

Water Inlet Valve



5.7 Unlatch and open the cabinet door, and load approximately 5-6kg of abrasive media (normally glass beads) into the cabinet hopper through the cabinet mesh floor.

5.8 Depressing the foot switch will now start both the air and water supply to the blast gun.

NOTE – If the system has just been filled, or has been idle for some time (say overnight) it is recommended that the water and air system be cycled for several minutes to ensure the abrasive and water are thoroughly mixed together before blasting operations commence.

5.9 Load the component to be blasted into the cabinet through the door opening, place it on the cabinet mesh floor, close the door and latch it shut using the two door latches.

Note – The cabinet is fitted with a safety door interlock which will prevent the system from operating with the door open.

Door Safety
Interlock Switch



WARNING – MAXIMUM COMPONENT LOAD IN THE CABINET IS 20KG

5.10 The operator now places their hands into the cabinet gloves, grasps the blast gun and then depresses the foot switch. Blasting operation will now commence.

5.11 The operator now moves the blast gun across the surface of the component until the desired surface finish is achieved.

5.12 The stop blasting, release the foot switch and both the compressed air supply and water pump will cease operating.

5.13 Periodically, during operation it will be necessary to operate the window wiper in order to clear the operator window. The window wiper may be operated either manually or automatically.

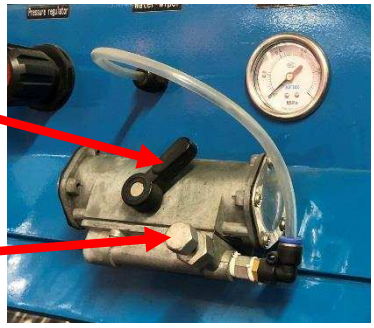
NOTE – Operating the window wiper while there is abrasive residue on the window will cause scratches/wear on the glass. It is recommended that the window be rinsed with clean water from the wash down gun prior to operating the window wiper.

5.14 To operate the window wiper automatically, rotate the flow control valve located of the window wiper drive assembly. Rotating the control know clockwise will slow the wiper speed, while rotating the control knob anti-clockwise will increase the wiper speed.

5.15 To operate the wiper manually, rotate the lever located on the wiper drive assembly through an arc left to right.

Window Wiper Manual Lever

Window Wiper Automatic Control Knob



5.16 It will be necessary to periodically check the abrasive to water mix ratio, which should normally be 10-15% abrasive to water. To check the ratio, follow this procedure –

5.16.1 Place a small bucket or similar container inside the cabinet, close the door, and blast into the container until you have collected approximately 1 litre of water and abrasive mix.

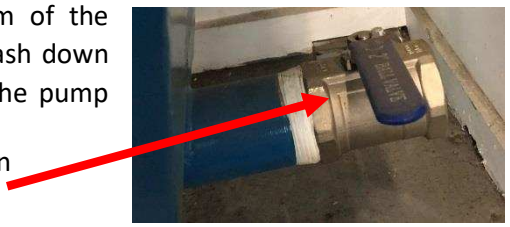
5.16.2 Pour 500ml of the container contents into a 1 litre graduated flask, and leave to stand for several minutes to allow the abrasive in the water to settle.

5.16.3 Check the level of the settled abrasive in the bottom of the flask. If the ratio is correct, the abrasive level should read between 50ml and 75ml (10% to 15% of 500ml)

5.17 Also over a period of time, the abrasive in the water will breakdown, reducing blasting efficiency. At this time, it will be necessary to drain the cabinet completely and refill with it with clean water and new abrasive media.

5.18 To drain the cabinet, place a suitable sized container beneath the drain valve located on the rear of the cabinet pump hopper. Open the drain valve, and allow the system to drain out.

5.19 Abrasive will have settled in the bottom of the hopper, so use the wash down gun to wash down the inside of the cabinet and flush out the pump hopper.



5.20 Once fully drain and cleaned, refill the system with water and abrasive media as per Section 5.6 and 5.7.

Section 6.0 Maintenance

6.1 On a daily basis –

6.1.1 Inspect the door seal and replace if damaged or worn

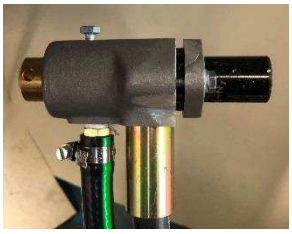
6.1.2 Inspect the operator gloves for wear, holes and/or cuts. Replace if necessary.

6.1.3 Check the condition of the operator viewing window, and replace if the operators view is obstructed due to wear/scratches.

6.1.4 Check that the door safety interlock is working correctly, and that the system will not operate with the door open.

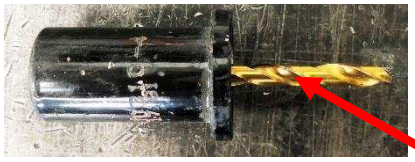
6.2 On a monthly basis –

6.2.1 Dismantle and inspect the blast gun assembly. Check the blast nozzle inside diameter for wear, grooves or cracks, and replace if required.





6.2.2 Check the blast nozzle inside diameter. Replace the nozzle if it has worn more than 1.5mm from its' original size. Use a 6mm diameter drill to check the nozzle for size.



Blast nozzle inside diameter

Use a 6mm drill to check for nozzle size



6.2.3 Check the air tip for wear and grooves. Replace the air tip if it has worn more than 3mm from its' original size.

Blast gun air tip

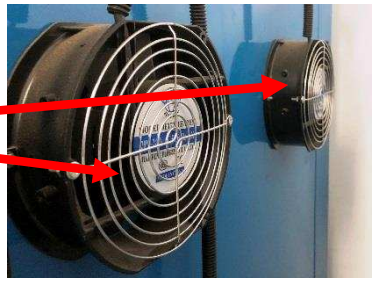


6.2.4 Feel along the length of the blast hose between the blast gun and the water pump. Check for any soft spots which will indicate hose wear. Replace the hose length as necessary.

6.3 On a yearly basis –

6.3.1 Inspect the cabinet ventilation fans for any build up on the fan impellers, and dismantle and clean as necessary.

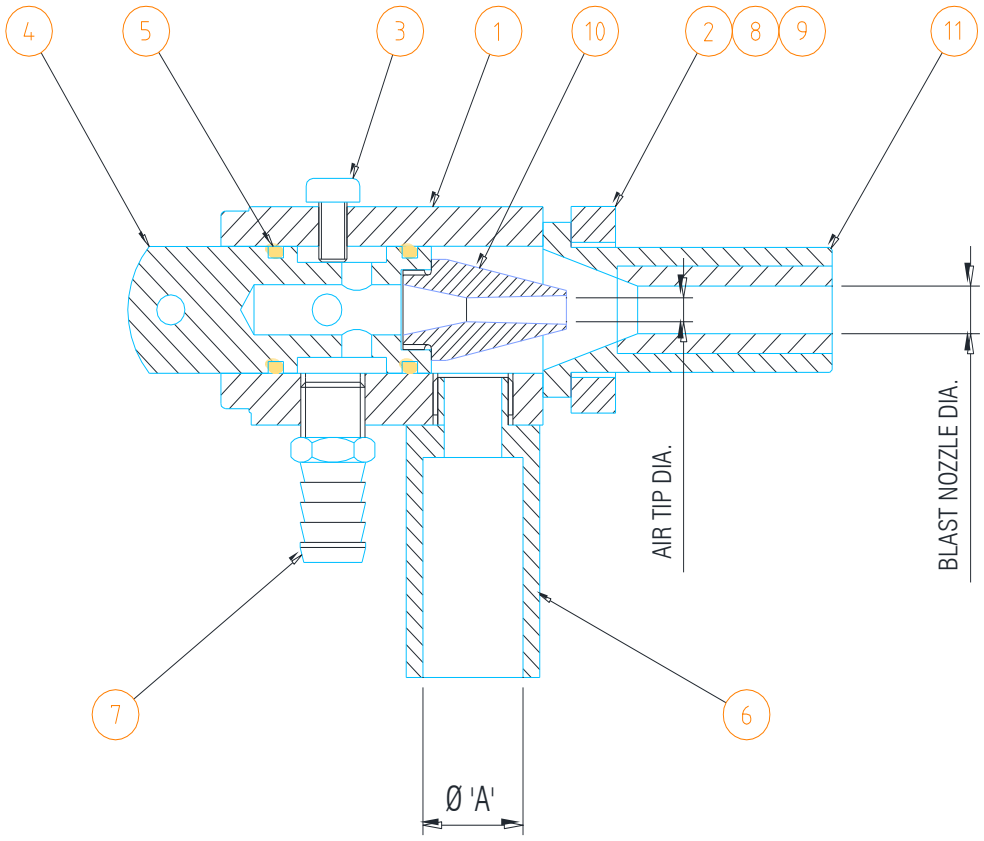
Cabinet ventilation fans



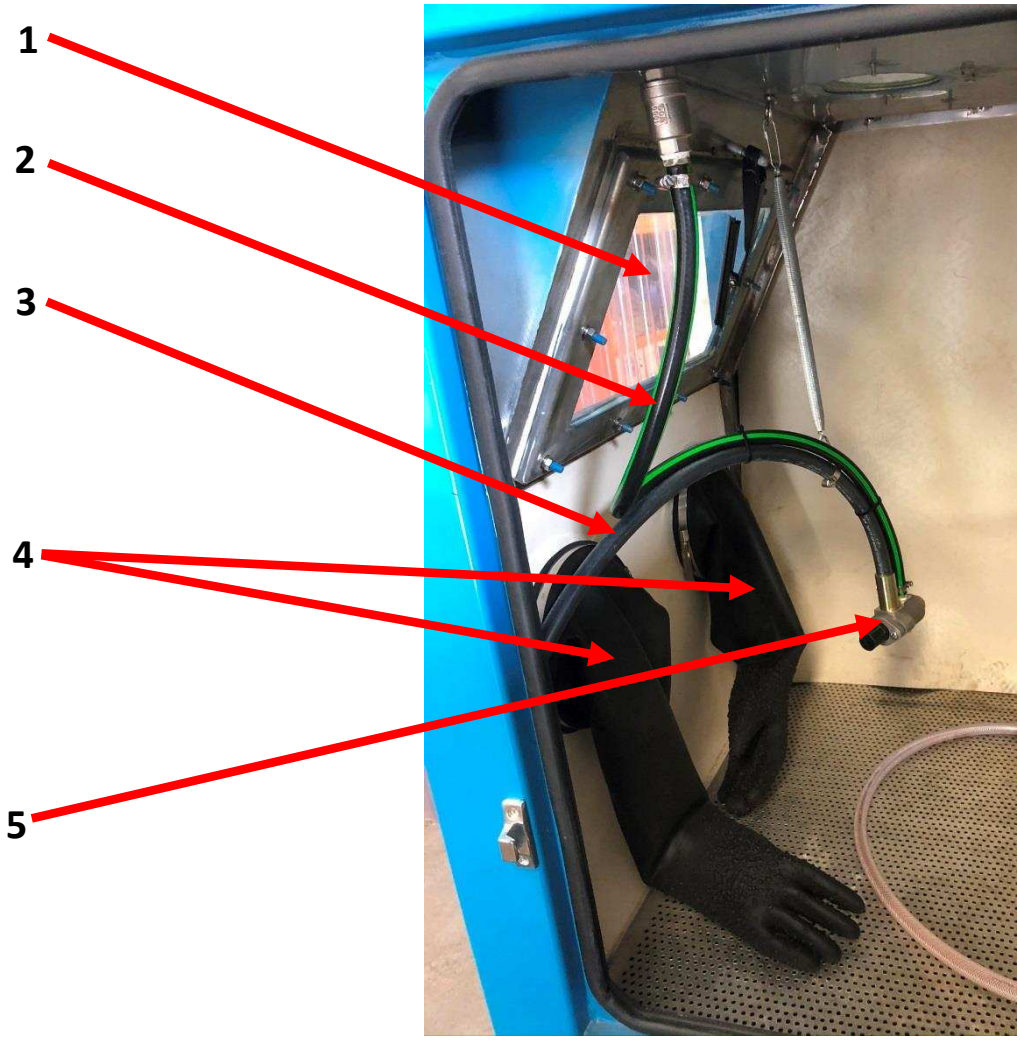
6.3.2 Remove and dismantle the water pump and check for wear on the pump impeller and housing. Replace items as required.

Section 7.0 Replacement Parts

7.1 Suction Blast Gun Assembly



MULTIBLAST WET BLAST SUCTION GUN		ASSY NO.	A900300-1
ITEM	DESCRIPTION	QTY	PART NO.
1	BODY-SUCTION GUN	1	B900306
2	HOLDER-BLAST NOZZLE	1	H900308
3	SCREW-HEX HEAD-6MM X 15MM LONG	1	N/A
4	HOLDER-AIR TIP	1	H900302-1
5	O RING-25MM OD X 2.5MM DIAMETER	2	N/A
6	ADAPTOR-HOSE	1	A900301-2
7	HOSE BARB-1/4" BSP X 1/2" BARB	1	P3-0804
8	BOLT-HEX HEAD-6MM X 15MM	2	N/A
9	WASHER-FLAT-6MM	2	N/A
10	AIR TIP-1/8"	1	T900309-4
11	BLAST NOZZLE-1/4"	1	N900310-14



MULTIBLAST WET BLAST CABINET		ASSY NO.	9090W
ITEM	DESCRIPTION	QTY	PART NO.
1	CABINET WINDOW - 500mm x 300mm	1	G900520-22
2	AIR HOSE - 13mm	1m	AHPVC13
3	SUCTION BLAST HOSE-13mm	2.2m	ABH13SUCT
4	CABINET GLOVES	1 PR	GLOVE27SBS-200
5	SUCTION BLAST GUN-COMPLETE ASSEMBLY	1	A900300-1