Operating Instructions

Boa HP Portable Unit





Proudly Australian Made



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MODEL
DATE OF PURCHASE
SERIAL NUMBER
SALES REPRESENTATIVE

PLACE OF PURCHASE:		
NAME:		
ADDRESS:		
PHONE NUMBER:		

Welcome, and congratulations on the purchase of your new Australian Made portable extractor.

Please read this manual completely before operating your unit.

With proper and regular maintenance, your new equipment will provide many years of reliable and trouble-free operation. As you will find, our portables are simple to operate and maintain.

All of the ProchemTM portable range has been designed with simplicity in mind, however we recommend you read this manual carefully so as to familiarise yourself with the operating procedures, recommended servicing and maintenance advice.

This operation and service manual is written specifically for your BOA HP Unit which is manufactured by:

PROCHEM AUSTRALIA PTY LTD 12 KEITH CAMPBELL COURT SCORESBY, VICTORIA 3179.

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Precautions

Although simple to operate, some precautions should be observed when operating this equipment.

1. Your portable cleaning unit should be serviced by an approved agent annually or every 350 hours. Use the hour meter on the machine for servicing intervals. Never attempt to open the machine or repair it yourself as there are high voltage electrical components internally.



- 2. Check extension leads regularly for faults or any damage and replace if damaged.
- 3. Always use 10 amp heavy duty extension leads
- 4. Never operate the machine with lead coiled up
- 5. Do not exceed pre-set solution pressure on machine 6890kpa or 1000 psi. Overloading of the pump drive motor may occur.



- 6. Powdered detergents must be fully dissolved before entering the machine to prevent blocking of filters and accumulation on the suction filter. We highly recommend Prochem Liquid Slurry S876 which has corrosion inhibitors and has been specifically designed to be used in our portable machines. See section "Recommended Chemical Use" for further information.
- 7. Using acid based chemicals through the machine may void the warranty as they may damage the pump if not thoroughly flushed out.

- 8. <u>Never</u> open the dump valve whilst the vacuum motors are running. This may allow water to be drawn into the vacuum motors.
- 9. Turn the heater <u>off</u> prior to turning the vacuum motors and the pump on as overloading of safety switches may occur.
- 10. Do not lay the machine on its side or back during transport as oil may leak from the pump filler.
- 11. Always clean your filters after every operation. Keeping your machine clean will prolong any future service needs.
- 12. Your Waste Tank filters MUST be checked for obstructions and cleaned after every use.



13. When transporting your unit, ensure to lock in the castors at the front of the machine. This will help prevent movement during travel.



Operating Instructions Carpet Cleaning - Boa HP Unit:

- 1. Fill solution tank with clean, hot water and add the recommended emulsifier Liquid Slurry (S876) to the solution tank. Use only as directed as this is a very concentrated product.
- 2. Plug machine into any convenient electrical outlet (10amp fuse). *Ensure the dump valve at the front of the machine is closed.*
- 3. Turn heater on whilst setting up to maintain water temperature. Prior to turning on the pump and vacuum motors, turn the heater off. You may turn back on again when machine fully operational.
- 4. Connect the vacuum hose and solution hose to the front of the machine, and to the wand
- 5. Turn the pump on. The pump should prime automatically. Set the pressure to no greater than 2300 kpa or 350 psi for Carpet Cleaning.
- 6. Turn vacuum motors on. If there is no vacuum, refer to the Fault Finding Section.
- 7. Suggested method for use of the wand One backward pass with wand trigger open, one pass over the same area with wand trigger closed to obtain maximum moisture recovery. Or you may overlap the previous stroke with another backward stroke by 50% of the wand width.
- 8. When the recovery tank is full. The ball in the recovery tank filter will rise and vacuum will be lost. This ball prevents water entering the vacuum motor. You will note a rise in the pitch of the vacuum motors.



- 9. Turn the vacuum and pump switches off. Empty the recovery tank. This is done by opening the dump valve at the front of the machine. Be sure to close the dump valve before proceeding to clean again. Dispose of the waste water into an approved sewerage drain or toilet.
- 10. Optional to remove surplus water from the solution tank on completion of the job, use the vacuum hose to suck any solution in the solution tank into the recovery tank. This will also flush out the vacuum hose.
- 11. The results achieved from your machine should leave the carpet looking uniform in colour and texture without shading. The carpet pile should be damp to touch but NOT WET. You should expect drying times of 1-2 hours in normal conditions.
- 12. You may replace the furniture after completion of the job however it is recommended that Foil or plastic Protectors be placed under furniture legs and that Foam Blocks be placed under furniture without legs such as speaker boxes etc. This will enable air to flow underneath and allow for quick drying. Please ask for details.
- 13. Clean up your equipment on completion of each job wash the sediment from the recovery tank take a damp cloth and quickly wipe all tools and the outside of your machine. Good presentation promotes good business. Do not use any hard abrasives on the fibreglass body. A damp cloth will suffice in cleaning the machine.

Operating Instructions Hard Surface Cleaning - Boa HP:

- 1. Connect the White fill hose to the Fill coupling on the front of the machine. Connect the other end of the hose to a tap and turn on the tap. The solution tank will fill with clean water.
- 3. Connect the waste hose to the machine and place open end in an approved disposal area or toilet (refer to local Government regulations).
- 4. Plug machine into two separately fused power outlets. *Ensure the dump valve at the front of the machine is closed.*
- 5. Do Not Switch the Heater On Leave heater off.
- 6. Connect the vacuum hose and solution hose to the front of the machine, and to the Hard Surface Tool.
- 7. Turn the pump on. The pump should prime automatically. Set the pressure to no greater than 6890 kpa or 1000 psi for Hard Surface Cleaning.
 - 8. Turn vacuum motors on. If there is no vacuum, refer to the Fault Finding Section.
 - 9. When the recovery tank is nearly full the Automatic Waste Pump transfer system will automatically switch on and pump the waste out of the waste tank. If for some reason the waste filter becomes blocked. The ball in the recovery tank filter will rise and vacuum will be lost. This ball prevents water entering the vacuum motors. You will note a rise in the pitch of the vacuum motors.



- 10. If operating the machine in manual mode, turn the vacuum and pump switches off. Empty the recovery tank by opening the dump valve at the front of the machine. Be sure to close the dump valve before proceeding to clean again. Dispose of the waste water into an approved sewerage drain or toilet and clean the waste filter.
- 11. Optional to remove surplus water from the solution tank on completion of the job, use the vacuum hose to suck any solution in the solution tank into the recovery tank. This will also flush out the vacuum hose.
- 12. Clean up your equipment on completion of each job wash the sediment from the recovery tank and clean the waste filter.
- 13. Take a damp cloth and quickly wipe all tools and the outside of your machine. Good presentation promotes good business. Do not use any hard abrasives on the fibreglass body. A damp cloth will suffice in cleaning the machine.

How to use the automatic fill hose and automatic waste hoses supplied with your new machine:

- 1. Connect hot fill hose to the fill coupling on the front of the machine. Connect the other end of the hose to a hot water tap and turn on the tap.
- 2. Connect the waste hose to the machine and place open end in an approved disposal area or toilet (refer to local Government regulations).

Tap Sets are available which contain various fittings to fill various tap sizes and shapes.

Booster Box

The booster box is designed to increase the vacuum and airflow on portable equipment. It contains two additional vacuum motors so when connected it not only enables the operator to increase the length of hoses being used, but also achieves better drying results on the carpet.

The booster box also can be used as a back-up unit in the event of vacuum motor failure in the main machine. The booster box can be adapted to suit virtually any type of carpet cleaning equipment.

To connect the booster box, simply connect the short piece of vacuum hose (supplied) from the booster box to the inlet located on the top right hand side of the Boa HP.



Connect a Heavy Duty 10 amp extension cord to a separately fused 10 amp outlet.

SERVICING THE BOOSTER BOX:

The vacuum motors in the booster box should be serviced every 350 working hours by an approved Prochem Australia Pty Ltd service agent.



SERVICE AND MAINTENANCE INSTRUCTIONS:

We recommend that the servicing of your equipment be carried out by the Prochem Service Department or an authorised service agent.

VACUUM MOTORS:

The Vacuum motors in all machines including the booster box <u>do</u> need servicing. The service should be done each 350 working hours to ensure longevity and good working condition.

PUMP:

The CAT pump oil level should be checked weekly to ensure adequate oil for operation life. The oil level can be seen by removing the rear wheel on the left hand side of the machine. The oil should be replaced each 500 hours of working life. Use Cat Pump Oil only which is available from all Prochem outlets.

FILTERS:

All filters should be removed and cleaned daily. This includes the solution tank filter located at the bottom of the solution tank, waste tank filter screen, and the waste filter basket in the recovery tank. This will protect your machine components and give longer life.

COUPLERS:

The quick connect couplers should be kept lubricated with silicon lubricant.

THE WAND:

The only servicing required on your wand (if supplied) is the removal of the check filters (if fitted) and regularly and running them under clean water.

To remove the check filter, undo the cap which holds the jet in, remove the cap and jet and pull the check filter out. When replacing it, make sure each jet is offset slightly so it doesn't hit the jet next to it. The sprays should overlap each other. If water should leak from the trigger shaft, tighten the gland nut till the leak stops. Some wand filters are located in the trigger as well.

THE DUMP VALVE:

The Dump Valve should be kept free of debris, grit and pins. To service the Dump Valve, remove the 4 retaining bolts, take apart and clean or replace the rubber seals as necessary. These are available at all Prochem outlets.



VACUUM HOSES:

To ensure maximum hose life, we recommend that the hoses be washed out with clean water at the end of each working day. An easy way to do this is to extract the clean water from your solution tank at the end of each day.

SOLUTION HOSES:

Inspect your high pressure hoses for wear after the **first 100 hours** of use. Inspect **every 25 hours thereafter**. If hoses show any signs of damage or impending rupture, **replace the hose**.

DOME:

Always ensure the Dome is removed from the machine before lifting or tilting. **The Dome is very Fragile** and should be treated in a safe manner. Make sure you use the dome latch at all times. If dropped it can split and therefore require replacement. Do not use abrasives to clean the dome.



DOME SEAL:

Check the Dome Seal every 25 hours for air leaks. Should an air leak be detected then the Dome Seal will need to be replaced.

CONDITIONAL WARRANTY:

Prochem Australia Pty Ltd warrant equipment against defects and faulty workmanship for the periods set out below. Conditions do apply:

- 1. Warrants the fibreglass body for a period of 10 years from the purchase date
- 2. Warrants the pumping system for a period of 5 years with the exception of machines fitted with diaphragm pumps.
- 3. Warrants vacuum motors for a period of 1 year, or 400 working hours, whichever occurs first.
- 4. Warrants all assemblies and individual components that form part or all of the hot water extraction unit for 1 year from the date of purchase.

In the event of a defect being disclosed in the prescribed period, Prochem Australia Pty Ltd must be notified immediately and if on examination are satisfied that the failure was due to defective material or workmanship will replace or repair the defective item.

CONDITIONS:

- 1. No warranty claim shall be deemed where misuse or abused equipment has been determined.
- 2. Approved extraction chemicals should be used in the equipment at all times for example, Prochem's Liquid Slurry (S876). Some chemicals can void warranty.
- 3. This warranty does not cover any item that has been altered, abused, or used in any way to affect adversely the operation of equipment.
- 4. Warranty claims do not cover labour or freight charges.
- 5. The foregoing warranty is in lieu of, and excludes all other warranties and conditions expressed or implied, whether under common law, statute or otherwise, and every form of liability for loss or damage, direct or consequential, or for any accident resulting from defective material, faulty workmanship or otherwise is expressly excluded.

Items excluded by the warranty shall be normal service items that will need to be replaced from time to time. These items include:

- Vacuum Motor Brushes
- Motor Bearings
- Pump Seals and filters
- Couplers
- Seals wand and upholstery tool
- Pressure relief valves

This warranty is subject to the laws and regulations of the individual States and Commonwealth territories of Australia.

Warranty Registration Form

The original purchaser should complete all details below and retain this information for presentation when making a claim:

Model:	Serial Number
Purchased From:	Date:
Original Purchaser	
Address:	

FAULT FINDING:

SYMPTOM	CAUSE	<u>ACTION</u>
Low/no pump pressure	Pumps need to be bled	Attach wand/tool and hold trigger open to expel air
	Solution tank filter blocked	Clean or replace
	Worn relief Valve	Replace
	No Water in solution tank	Fill solution tank
Low Pressure on Jets	Blocked jets or check filters	Clean or replace
Pump motor won't run	Power surge or Over Temperature	Push Reset Button
No Vacuum	Dump Valve Open	Close Valve
	Dome not correctly sealed	Seal correctly
	Vac intake ball stuck in up position	Remove and clean
	Vacuum hose blockage	Flush with water
	O	
	Booster Inlet Open	Close Booster Inlet

Specifications - Boa HP Model:

Length – 850mm

Height – 1050mm

Width – 570mm

Weight – 55kg

Solution Tank Capacity – 64 Litres

Recovery Tank Capacity – 26 Litres

Pump – Cat 2SFX

Waste Pump Metal Impellor Type – TF30

Vacuum Motors – 2 x 2 Stage Lamb 1100 Watt

Drive Motor – Lafert Electric 1.1

Additional Hard Surface Cleaning Tools Compatible with the Boa HP:

Turbo Hybrid Mini Turbo **Cobra Hand Tool Raptor Classic**

The Carpet Cleaning Process

For the best possible cleaning results, use the following system

Lightly Soiled Carpet:

- 1. Prespray traffic areas with Performance Plus (E214) or Ultrapac Trafficlean (S711)
- 2. Extract with Liquid Slurry (S789). 26mls only required in solution tank.

Heavily Soiled Carpets:

- 1. Prespray entire area with Performance Plus (E214) or Ultrapac Trafficlean (S711)
- 2. Extract with Liquid Slurry (S7789). 26mls only required in solution tank.

The Tile Cleaning Process

- 1. Mop on Tile and Grout Cleaner (D456). Spraying the product may get onto door fronts and kickboards which is not recommended.
- 2. Agitate heavily soiled areas such as in front of sinks etc. with grout brush
- 3. Extract with Turbo Hybrid at 1000 psi.

For very old installations or bathrooms that do not respond to Tile and Grout Cleaner, an acid may have to be used. This must be used with extreme caution however as etching and side effects may occur. Please speak to our friendly staff for more details.

Call 03 9764 1273 or 07 3890 1544 for assistance.

Prochem Stain Removal Listing

Stain Type	Recommended Products
Blood	Protein & Stain Spotter, Pro Spotter, Zoop Enzyme Spotter
Butter & Margarine	Citrus Gel, Solvent Spotter, Protein Stain Spotter, Pro Spotter, Fiberbuff
Browning (cellulose)	Yellow Rx, Fine Fabric Rinse
Candle Wax	Power Solvent, Citrus Gel
Tomato Sauce	Protein Stain Spotter, Pro Spotter, Zoop Enzyme Spotter, Oxy- Plus
Chewing Gum	Citrus Gel
Chocolate	Protein Stain Spotter, Pro Spotter, Fine Fabric Rinse Zoop Enzyme Spotter
Coffee	Coffee & Tannin Spotter
Cough Syrup	Pro Spotter, Zoop Enzyme Spotter, Fine Fabric Rinse
Crayons	Power Solvent, Citrus Gel
Eggs (Raw)	Protein Stain Spotter, Zoop Enzyme Spotter, Pro Spotter
Food Coloring	Pro Spotter, Red Rescue
Fruit Juice	Pro Spotter, Zoop Enzyme Spotter, Oxy-Plus
Furniture Stain	Power Solvent, Citrus Gel, Protein Stain Spotter
Glue (School)	Pro Spotter, Protein Stain Spotter
Grass	Citrus Gel, Zoop Enzyme Spotter
Gravy	Protein Stain Spotter, Fine Fabric Rinse, Pro Spotter
Greases & Oil	Solvent Spotter, Power Solvent, Citrus Gel

Ice Cream	Protein & Stain Spotter, Fine Fabric Rinse, Rinse, Zoop Enzyme Spotter
Ink (Ball Point)	Ink Spot Remover, Citrus Gel, Oxy-Plus
Jam & Jelly	Pro Spotter, Fine Fabric Rinse, Protein Stain Spotter
Lipstick	Power Solvent, Citrus Gel, Oxy-Plus, Fine Fabric Rinse
Mildew	Pro Spotter, Zoop Enzyme Spotter, Oxy-Plus
Milk	Protein Stain Spotter, Fine Fabric Rinse, Zoop Enzyme Spotter
Mustard	Protein Stain Spotter, Fine Fabric Rinse, Pro Spotter, Zoop Enzyme Spotter
Nail Polish	Power Solvent, Citrus Gel, Fine Fabric Rinse
Oils	Power Solvent, Citrus Gel, Pro Spotter, Fine Fabric Rinse
Paint (Oil)	Power Solvent, Citrus Gel, Pro Spotter
Paint (Water, Latex base)	Pro Spotter, Solvent Spotter, Citrus Gel
Rust	Prochem Rust Remover
Shoe Polish	Power Solvent, Citrus Gel
Soft Drinks	Pro Spotter, Fine Fabric Rinse
Tar & Asphalt	Power Solvent or Solvent Spotter, Citrus Gel
Toothpaste	Pro Spotter, Fine Fabric Rinse
Urine	Pet Spotter & Deodorizer, Fine Fabric Rinse
Vomit	Pro Spotter, Zoop Enzyme Spotter, Fine Fabric Rinse
Wine	Pro Spotter, Fine Fabric Rinse