



Auto Valet Self Serve Car Wash Manual

Auto Valet Car Wash

Please find in this manual a run down on the operation of your Auto Valet Car Wash System as well as fault finding, general maintenance and parts breakdown

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1. MACHINE INSTALLATION/SET UP:

ARRIVAL OF EQUIPMENT:

Upon arrival of the equipment unwrap the machine and remove all of the hoses, lances and accessories that will be wrapped up with the machine. **Conditional:** Also remove the boom that will be secured to the back of the unit on the same pallet.

SECURING MACHINE:

Locate the area you are going to install the unit in and place the unit in that location. Mark out the hole dimensions so that the cabinet can be fastened down to the concrete. (Drill and then bolt down) Note: The holes are accessible from inside the bottom cabinet. Fasten down the cabinet before fitting the boom.

MOUNTING OF BOOM:

Once the unit has been fastened down fit the first section of the boom to the top of the cabinet using the six bolts supplied. Then fit the top section of the boom and fasten in using the bolts supplied.

NOTE: If the boom is exposed to freezing temperatures make sure that the boom is completely emptied of water after use to prevent freezing up.

Improper use of high pressure jets can be very dangerous. Never point jets towards people or electrical appliances.

High pressure pipes, joints and connections are very important for safety of the equipment. Be sure to use only components that are correctly sized and guaranteed by the manufacturer.

RUNNING OF HOSES:

Run the high pressure hose and foam hose through the boom and connect them up to the unit. Ensure that the foam is to the foam boom and the pressure hose is to the pressure lance (as marked).

AIR LINE AND WATER LINE:

At the back of the machine there will be a port for the Air Line to be connected to. Please connect your air line from the air compressor to this connection. (This is for the foaming application.) The air control is inside the top box at the rear and has been set to 30psi per the gauge. This is the setting it will operate on. This can be checked when operating the foam section and can be lowered to 30 psi if by chance it is over that pressure.

At the back of the unit you will also find a connection for the inlet water. Please connect your water line up to the connection marked "water" at the back of the unit.

CHEMICAL:

Inside the bottom cabinet there will be 2 or 3 empty containers depending on the model machine you bought. These containers are for the 2 or 3 different types of chemicals that your machine will be using. Each container is marked with the chemical that will need to be put into each one. Behind these containers will be 2 or 3 smaller containers that will have dema float valves in them. This is for the automatic mixing of each chemical. Each of the back tanks will have a chemical hose with a filter at the end, which will need to be placed inside each of the front plastic containers sitting in front of them. Please make sure that these chemical lines and filters are inside each of the front tanks if not already done.

Fill up each container with the chemical that it corresponds too. Fill up to almost the top of the container leaving approx 2cm to 5cm as to not to create an overflow of chemical.

In the top cabinet there will be 2 or 3 chemical controls on the right hand side of the machine. Turn each of these on 1 ½ turns. This is the standard chemical dosage for a car wash unit. These can be altered to suit usage and requirements either by opening or closing the dial.

POWER:

PRIOR: - Prior to connecting the machine to power, please make sure that all of the above has been done and that the selection dial is in the OFF position.

Once all of the above has been completed and the machine has been closed and each door locked you can then connect the power to the machine. The machine will be supplied with a 32amp 5 Pin plug (Yes the neutral line is needed) with 3 phase cable. Plug this into your socket on the wall and turn the power on.

BLEEDING THE SYSTEM:

Now we need to bleed the system. This is done by going through each of the operations on the control switch. (This bleeds the system of air and on the points where chemical is part of the operation, it will take the air out of the chemical line and then the operation will be smooth. This can take a couple of minutes per operation.) Start on the rinse cycle and run this with the gun open until it runs smooth. Then let go of the trigger and re-pull the trigger. The pressure should be smooth this then completes the first one.

Go through each cycle on the selection switch as per the first one above, but leave the foam brush section till last.

Once you have gone through every operation / selection and all are running smoothly, then this point has been completed and you can lock up the cabinet.

2. OPERATION:

2.1 - SAFETY

SAFETY INSTRUCTIONS FOR OPERATION OF MACHINE:

Before operating a pressure cleaner please make sure that you read the enclosed manual / instructions that will be supplied with every unit and make sure that you understand everything that has been read. If you are unsure please re-read the manual / instructions until you understand the entire contents. If anything is not understood please contact the supplier of the unit with any questions that you may have.

- 1) Read Manual Completely and Understand it
- 2) Make sure that the power point that you are plugging the machines plug into is safe and not faulty – If by chance it is faulty please get a qualified electrician to repair prior to using it.

DO'S AND DON'TS:

- 1) Never point the lance of a high pressure water blaster at a person while in use
- 2) Never point the lance of a high pressure water blaster at an animal while in use
- 3) Never wash the machine down with the high pressure water
- 4) Never wash the electrics of the machine or any other electrics with the high pressure water blaster
- 5) Always have a qualified technician repair faults with the pressure cleaner
- 6) Always read the operations manual of the machine prior to the first time using the pressure cleaner
- 7) Always abide by warning labels on the machine
- 8) Always get a qualified electrician to repair or replace the electrical cable of the pressure cleaner

2.2 – MACHINE REQUIREMENTS:

- 9) Your machine will require the following for the machine to operate: -
- 10)
- 11) 415volt, 3 phase, 30amp, 4 pin power supply
- 12) Water Supply – ½” mains water minimum 15 litres per minute at 15 psi

2.3 – SET UP AND OPERATION OF MACHINE:

1. Connect machine to power supply
2. Ensure control lever is in the OFF position then turn on the power switch
3. To operate the machine without any money, open the front door and turn the switch on the electric control box as shown on the coin timer instructions. Select wash, rinse or wax as required by turning the handle on the control panel.
4. Coin Operation: - Turn the switch on the electric control box to OFF position, shut and lock the door. Position the selector in the OFF position if not already in the OFF position. Hold spray gun in hand and insert coins as required. Turn knob to first selection and pull the trigger.
(All of the information regarding the coin acceptor and it's operation is on the last page.)

3. MAINTENANCE:

3.1 – SAFETY:

Prior to starting ANY maintenance on the unit please make sure that the machine has been disconnected from the mains water and the turned off and unplugged from the power point. This will ensure that the machine isn't started while maintenance is being done on the unit.

For all maintenance to the unit please follow the maintenance instructions for each component as listed out in the appendices.

3.2 – LUBRICATION:

The lubrication for the system is for the high pressure pump. The oil for the pump is High Quality Engine Oil SAE15/40W. The oil for the pump should be checked every week. NOTE: If there is an indication of heavy oil lose get the unit checked out by a qualified service technician.

3.3 – PREVENTATIVE MAINTENANCE STRATEGY RECOMMENDATIONS:

IMPORTANT NOTE: It is recommended that this machine should be serviced every 2 to 4 months depending upon usage. The higher the usage the more frequent the servicing should be.

To prevent any major problems occurring with the unit please do the following: -

- 1) Check oil in the pump every week. This can be done by looking at the site glass on the side of the pump. If the oil is below the half way point then top up the oil to the half way line. If the oil is milky or dark in colour then the oil will need to be drained and then refilled.
- 2) Check the inlet water filter weekly. This will ensure that the inlet water filter is clear of debris, which will stop particles of dirt going through the pump and wearing out the seals and valves.
- 3) Stop using the machine if any problems do arise. This will prevent further damage occurring to the machine.
- 4) Check the levels of the chemicals daily to make sure that they are not running low or are empty.
- 5) Check inside cabinet for any leaks and get repaired.
- 6) Check guns, lances, hose and brush for any leaks and get repaired if required.

3.4 – FAULT FINDING: FAULT FINDING FOR MACHINE

SYMPTOM	CHECK FOLLOWING
NO CHEMICAL PRE-WASH These points ALSO apply to ALL other chemical points on the unit.	<ol style="list-style-type: none"> 1) Chemical too weak; increase chemical 2) Valve not open; open up valve 3) Solenoid not operating; check wires connected and fuses not blown 4) Solenoid clogged with chemical; clean out chemical lines through solenoid. 5) Filter clogged; clean filter
PRESSURE FLUCTUATING	<ol style="list-style-type: none"> 1) Nozzle blocked; take off nozzle and clean out, then start unit and run fresh water through the system to ensure any loose particles are blown out. 2) Blockage in the gun or lines; check lines for blockage, working backwards from nozzle to gun, to hose, to swivels, etc. 3) Check inlet water filter to ensure there is no blockage or that it is clogged. Clean out as needed.
PRESSURE VIBRATING	<ol style="list-style-type: none"> 1) Blockage in the inlet water line from the header tank; clear line. Check inlet filter first 2) Dirt caught in one of the valves.
PRESSURE VARYING ALL THE TIME	Air is possibly being sucked into the pump. Check the following: <ol style="list-style-type: none"> 1) Ensure all chemical lines are clamped tight and not sucking air. 2) Enough chemical in the tanks. 3) Check if the inlet fitting or hose is sucking air. 4) Seals could be worn and need replacing in the pump head.
PRESSURE IS LOW/ OR NOT WATER COMING THROUGH	<ol style="list-style-type: none"> 1) Air lock; bleed pump of air and ensure all chemical containers are full. 2) Worn nozzle; replace nozzle. 3) Pump belt worn out; replace belt 4) Pump needs service; call for service on seals or valves. 5) Bypass needs servicing; call service for bypass repair.
WON'T START	<ol style="list-style-type: none"> 1) Ensure water is on 2) Ensure power is on 3) Check power supply 4) Check fuses in main box as per circuit diagram
WHOLE UNIT SWITCHES OFF, ON, OFF, ON, ETC	<ol style="list-style-type: none"> 1) The low level water switch could be activating; ensure water supply is fully on. Arm in header tank may need adjusting.

3.5 – SERVICING FOR DEMA FLOAT VALVE

CAUTION: TURN OFF WATER SUPPLY BEFORE SERVICING.

- A. Proportioner fails to draw chemical:
 - 1) Proportioner outlet tubing cut too short for priming or not attached. Pinch outlet tube to create back pressure, which will cause the unit to prime. The foot valve will keep the inlet tube primed thereafter.
 - 2) Insufficient water supply pressure. 15psi is the minimum allowable.
- B. Proportioner stops drawing chemical:
 - 1) Inspect foot valve for dried chemical or dirt. Soak in hot water to clean.
 - 2) Proportioner nozzle tip clogged with dried chemical. Remove tip and clean in hot water. Put the nozzle back on. If there is still no suction, remove the bottom of the proportioner and soak in hot water to clear interior passages.
 - 3) If there is a buildup of calcium carbonate (lime) inside the proportioner then soaking it in a de-liming solution or vinegar will restore it to working order.
- C. Proportioner continues to draw chemical after water valve closes.
 - 1) Chemical supply is higher at the bottom of the discharge tube creating a natural siphon. Lower the supply container or hang up outlet tube after use.
- D. Valve Malfunction.
 - 1) Check that the wire moves freely up and down and that a “click” can be heard when the wire is pulled and released, indicating that the magnet is activating the plunger properly. To inspect internal parts, remove magnet housing and carefully pull off the enclosing tube as not to drop the plunger, kick off spring and spacer. Check for dirt or damage impeding plunger and kick off spring movement. Inspect the diaphragm, making sure the two small pin holes (bleed holes) in the diaphragm are clear to allow the valve to close.
 - 2) Valve will not operate if pressure exceeds 150 psi.

4. MAJOR COMPONENT BREAKDOWNS AND DATA SHEETS

INTERPUMP W130

2.2KW NICOLINI MOTOR

K7 BYPASS

DEMA FLOAT VALVE

MSDS FOR GOLD WASH

COIN ACCEPTOR