

Habitat
Professional Cleaning Supplies



#A-11003

Pressure washer-220V 2.5Kw



<https://www.cleaninghub.co.za/collections/cleaning-machines/products/mini-pressure-washer-220v-2-5kw>

Table of Contents

1. Specifications	1
2. Caution	1
3. Instructions	2
4. Troubleshooting	5
5. Maintenance	6
6. Diagrams	7
7. Warranty	8

7. Warranty

High-pressure cleaners (electrical)

Days valid: 180

- The machine must be used with the CSC101 (Pty) Ltd T/A Cleaning Hub Electrical Box as it is specifically designed to electrically protect the machine
- Ensure that the CSC101 (Pty) Ltd T/A Cleaning Hub High-Pressure Machine has a dedicated power supply that is not shared with any other appliances
- Do not use an extension cable to power the machine
- The voltage may not drop below 215V when under load
- The aforementioned must be tested when the machine is physically spraying
- Warranty will not be adhered to in the case of burned windings unless the motor bearings or motor rotor is faulty
- Ensure that the machine does not get wet
- Ensure that all nuts are tightly screwed into the connecting terminals
- Make sure the motor is free of vibrations and is properly balanced
- The machine must spray water at least every 30 seconds to prevent the internal components of the pump to be damaged
- The gun must not be pressed in rapid succession as the machine entering the unloading state continuously can cause enhanced wear and tear
- Only 15w40 oil must be used with the pump and appropriate oil levels must be maintained

1. Specifications

Property	Value	Unit
Power	2.5	kW
Voltage	230	V
Rated Pressure	110	BAR
Max Pressure	160	BAR
Rated Flow	10	l/min
Max Flow	11	l/min
Max Pressure Supply	1200	kPa
Max Water Temp	50	celsius

2. Caution

MUST DO

- All electrical parts must be protected against water, sealed off or shielded
- The machine must be correctly earthed through the power supply, this must run through an earth leakage
- Failure of the aforementioned is deadly as this is an electrical appliance in wet working conditions with no way to save someone's life in the event of electrical shock
- The high-pressure jet may cause loose particles to be propelled at high speed, therefore protective clothing and safety glasses must be worn
- Before performing any work or maintenance, unplug the machine from its power supply
- Always grip the gun firmly to prevent unguided discharge in a direction from recoil
- Maintenance and repair must be done by a qualified electrician or CSC101 (Pty) Ltd T/A Cleaning Hub staff
- When leaving the machine after use, discharge the pressure in the hose with the gun after switching off the machine
- Before disconnecting the high-pressure hose, discharge the pressure in the hose with the gun after switching off the machine
- Before using the machine, ensure all bolts are tightened and no parts are damaged or worn out
- If chemicals are used through the chemical injector, ensure the chemical is not corrosive or damaging to brass or other parts of the machine

- The appliance creates pressures and velocities great enough to penetrate human flesh. Seek medical help immediately if injured
- The water inlet temperature must be room temperature. No heated water or water below 4 degrees Celsius

MUST NOT DO

- Do not use the appliance with any flammable or toxic chemicals, or any liquids that are not compatible with this machine
- Do not use the machine within range of people not wearing protective clothing
- Do not use the machine if any part of the machine is damaged
- Do not use the machine if the power cable is damaged
- Do not use the machine outdoors when its raining
- Do not allow children or untrained people to use the machine
- Do not touch the plug or electrical parts of the machine with wet hands
- Do not use the machine if the high pressure hose is damaged
- Do not alter the unloader kit if the calibration is set correctly
- Do not use nozzles that do not have 06 orifices
- Do not leave the machine unattended
- Do not move the machine by pulling on the electrical cord
- Do not use hot water with this machine, only use cold water
- NEVER Plug the machine into an extension cord

3. Instructions

Changing the oil inlet plug

- The red plug on the pump is specifically designed for transportation of the machine
- Before use, unscrew the red plug and replace it with the yellow 'breather' plug that can be found in the spare parts package

Pressure intensity during usage

- For less pressure on the surface to be cleaned, simply back away from the surface and there will be less pressure per square centimeter on the surface being cleaned

- Once finished draining, put back the drain plug nut
- During draining you may also remove the yellow breather plug at the top of the pump
- After the drain plug is put back, pour in new oil at the oil inlet where the breather plug is located
- Ensure to pour oil until the fish-eye level is reached

Hoses

- Inspect the inlet and outlet hoses for wear and tear
- Replace the high-pressure hose whenever signs appear of compromise of the integrity of the hose

6. Diagrams



- | | | |
|----|--------|----------------------------|
| 1. | 11139W | HP - NOZZLE 40deg (WHITE) |
| 2. | 11139G | HP - NOZZLE 25deg (GREEN) |
| 3. | 11139Y | HP - NOZZLE 15deg (YELLOW) |
| 4. | 11139R | HP - NOZZLE 0deg (RED) |

Water dripping from under the pump

- Piston seals are damaged or worn out, check and replace

Oil is leaking

- Oil seal is worn out, replace oil seal

The motor does not start when switched on

- The cable is damaged, check cable and plug and try again
- The motor might have burnt out from previous faulty operations and is now dead
- The switching circuit is faulty, check the trip switch, overload and contactor for faults and try again

The motor makes a low-frequency noise but does not turn

- The pump is faulty with a stuck axle and the motor cannot turn the axle
- The power supply to the machine is not sufficient to start turning the axle

The motor suddenly stops after working for a while

- The overload to the motor has tripped and switched off the motor. This is usually due to an electrical fault and must be first investigated before try to continue use of the machine

5. Maintenance

Oil

- The oil level must be checked before every use to ensure it is within the fish-eye tolerance level
- Oil must be changed after the first 50 hours of work
- Oil must be changed every 100 hours after the first oil change
- If the working time is less than the standard use, another guideline is to change the oil at least once a year
- The oil used must be 15W40
- The pump has a drain plug nut on the side at the bottom, unscrew this with a small reservoir to collect the used oil

- A less aggressive nozzle can also be used to reduce the intensity of the water being sprayed, the white nozzle is the mildest
- Adjusting the pressure regulator on the pump can also reduce intensity. By turning the regulator knob anti-clockwise the pressure can be lowered
- Adjusting the pressure regulator must be used as a last resort as it is preset in the factory and must never be turned past the built-in stop line

Nozzle types

- The machine comes with different colour-coded nozzles, each having different intensities of focusing the beam of water
- The red nozzle has a 0 degree opening. It allows a straight beam and is very aggressive. Uses could be for hardened concrete on other surfaces or tyre rims
- The yellow nozzle has a 15 degree opening. It allows a very narrow beam and is used for all heavy operations that does not fit the red nozzle
- The green nozzle has a 25 degree opening. It allows a broader beam and is used for medium operations that still requires some higher pressure, but not as high as the yellow nozzle
- The white nozzle has a 40 degree opening. It allows a very broam beam and is used for very mild operations
- The black nozzle is a straight pass-through and should be used when using the chemical injector on the pump

Changing nozzles

- DO NOT attempt to change the nozzle while water is flowing
- For safety, even if the gun is not pressed the machine must be switched off
- Pull the quick-releases brass coupling on the tip of the gin back
- Gently press the nozzle's inlet into the brass coupling
- Ensure it is secured well, and then release the quick-release
- Ensure the nozzle is attached in the coupler, otherwise when the machine is switched on and water flows it will jettison the nozzle as a projectile and possibly injure personnel or damage property

Electrical supply

- Ensure the power supply is according to the rating label on the machine
- DO NOT plug the machine into an extension cord
- The machine must have its own plug not shared with other appliances
- The machine must have a plug that comes straight from the DB-board with wiring that is thick enough to carry the current
- Ensure the machine is properly earthed

Starting the machine

- Open the water supply to the machine and press the gun trigger
- Allow any air in the pipes to escape until the water flows freely through the gun
- Switch on the machine by pressing the green button on the electrical box
- Do not let the tip of the gun be too close to the work surface
- The gun may be released when intermittently the pressurized water is not required, but not for more than 30 seconds
- During operation it is often normal for small amounts of water to drip from the pump
- When the gun is released the water is circulated through the unloader and the pump re-uses the pressurized water
- This will cause damage after 30 seconds as the water will heat up and reach boiling point eventually damaging internal parts
- Another reason for damage is cold water flooding the chamber when the gun is pressed again causing the very hot pistons to cool down rapidly significantly reducing integrity of the metal structure of the pistons

Stopping the machine

- When not in use, switch the machine off
- After the machine is switched off, press the gun to discharge built-up pressure in the pump
- If this pressure is not discharged it will slowly dissipate while still exerting force on the sealing rings causing extensive wear and tear even after the machine has been switched off

Usage of machine

- This machine is a domestic product
- It is not intended to be used for medium- to large-scale commercial applications
- For carwash and truckwash use cases, use a larger industrial machine

4. Troubleshooting

The pump is running normally but does not product sufficient pressure

- The pump is sucking in air, check that hoses and fittings are air tight
- Check Valves are worn or dirty, check them and then clean or replace
- Worn out unloader kit, check and replace the unloader kit
- Worn out piston seals, check and replace the piston seals
- Dirty inlet filter, check and clean or replace

The output pressure fluctuates

- Check Valves are worn, dirty or stuck, check and replace
- The pump is intermittently sucking air, check that hoses and fittings are air tight
- Damaged or dirty Check Valves, check and replace
- Dirty inlet filter, check and clean

Pressure drops after period of normal use

- Worn out nozzle, check and replace
- Check Valve is worn, dirty or stuck, check and replace
- Worn out Unloader Kit, check and replace
- Worn out piston seals, check and replace
- Dirty inlet filter, check and replace

Pump generates excessive noise

- Pump is sucking air, check that hoses and fittings are air tight
- Check Valve is worn, dirty or stuck, check and replace
- Worn out bearings, check and replace if necessary
- Dirty inlet filter, check and clean

Pump oil is white, water in oil

- High humidity in working conditions, check and change oil twice as prescribed
- Piston seal or oil seal is worn out, replace piston seals