

Clemas & Co Ltd

Industrial Cleaning Equipment
Sales - Hire - Service

STORM TWIN CABINET 4 PRESSURE WASHER OPERATOR MANUAL



Clemas & Co. Unit 5 Ashchurch Business Centre, Alexandra Way, Tewkesbury,
Gloucestershire, GL20 8NB.

Tel: 01684 850777

Fax: 01684 850707

Email: info@clemas.co.uk

Web: www.clemas.co.uk

Storm Free Standing 1

Pump	XT 11.14		Motor	MTR00100
Pump pressure	100bar	1500psi	Motor Output	P1 2.2W
Flow rate	11 lpm	2.45gpm	Motor Input	P2 3.0KW
Max by pass setting	120 bar		Max current	12.5amps
H.P. Nozzle	25045		Voltage	230V + or - 10V
Pump Oil	10W/40		Insulation	Class F
Unloader valve	ARMM4B/CTSS		Duty Cycle	100%
Noise			Protection	IP54

Storm Free Standing 4

Pump	RK15.20		Motor	MTR00220
Pump pressure	200bar	2900psi	Motor Output	P1 5.5W
Flow rate	15 lpm	3.3gpm	Motor Input	P2 6.6KW
Max by pass setting	210 bar		Max current	12.6 amps phase
H.P. Nozzle	2505		Voltage	415V + or - 10V
Pump Oil	10W/40		Insulation	Class F
Unloader valve	ARMM4B/CTSS		Duty Cycle	100%
Noise			Protection	IP54

Storm Twin Cabinet ST1

Pump	ARXT 11.14		Motor	MTR00100
Pump pressure	100 bar	1500psi	Motor output	P1 2.2KW
Flow rate	11 lpm	2.45gpm	Motor input	P2 3.0KW
Max by pass setting	120 bar	1750psi	Max current	12.5 amps
H.P Nozzle	25045		Voltage	230V + or - 10V
Pump oil	10W40		Insulation	Class F
Unloader valve	ARMM4B/CTSS		Duty cycle	100%
Noise			Protection	IP54

	Valve Kit	Piston Kit	Oil Seal Kit	Water Seal Kit
STORM 1	1864	2629	1872	1874
STORM 2	1864	2629	1872	1874
WM 1	1864	2629	1872	1857
WM4	1828	2757	1856	1857
FS 1	1864	2629	1872	1857
FS 4	1828	2757	1856	1857
Storm Twin Cabinet Washer	1864	2629	1872	1874

Common Part Numbers

Chemical Filter	MTM86010
Inlet QR Coupling	MTM73001 (To Tap) 3/4 Female (Nito)
Inlet QR Coupling	MTM73020 (To Tap) 3/4 Male (Nito)
Electrical Box on Storm	DEM101111

PREPARATION

Water Supply:

- a. Ensure there is an adequate water supply either from the mains or a reservoir.
- b. Attach water supply hoses to suitable tap or immerse end of hose into reservoir.

NOTE: ONLY CLEAN FILTERED WATER SHOULD BE USED.

Hoses:

- a. Attach the high pressure hose to the pump connection.
- b. Attach the spray gun to opposite end of the high pressure hose.
- c. Ensure that the regulator nozzle on the end of the spray lance is **CLOSED**.

OPERATION

(Check that electric motor is switched '**OFF**')

- a. Plug into a suitable electrical source. (Not an extension lead)
- b. Turn on water supply.
- c. Ensure that the trigger is '**OPEN**' to vent air from the pump.
- d. Switch '**ON**' electric motor.
- e. Open regulator nozzle slightly and direct lance on surface to be cleaned. Press operating trigger.
- f. Adjust pressure regulator as required to obtain working pressure.
- g. **NOTE:** The high pressure water will cause the gun to 'kick'. Make sure you have a firm grip of the gun and lance.
- h. On completion of the operation switch '**OFF**' electric motor and unplug from power supply.
- i. Turn '**OFF**' water supply.
- j. Release residual pressure in gun and lance by operating trigger.

OPERATING HINTS

- a. During very cold weather it is most important to protect the machine against freezing. DO NOT operate machine should it become frozen. Move it to a warm area and allow to thaw naturally.
- b. Check all hoses and couplings for leaks, tighten where necessary.

WHEN USING CLEANING AGENTS

- a. Set machine up for water only.
- b. Connect detergent hose to machine and place filter end into detergent reservoir. Unscrew the adjustable nozzle on the end of the lance to reduce the pressure to 500psi. The chemical will now be automatically injected into the water.
- c. On completion of work, flush through hose and gun with clean water to remove any residual detergent.

SERVICING

The Storm range require little maintenance apart from checking the oil level at least every week and changing the oil should it turn white or it is six months old. If the oil turns white it is due only to water entering the pump via the dipstick, which has a breather hole drilled through. The design of the pump does not allow water from the pump to gain access to the gearbox drive.

Should the performance be reduced to a level where the jet is ineffective contact the service department to ascertain the correct remedial repair work.

OPERATING INSTRUCTIONS

SAFETY

- i. **A Residual Current Device (R.C.D.) or Earth Leakage Trip** must be used with this machine.
- ii. **Water at high pressure is dangerous and can cause serious injury. This machine is to be used with great caution.**
 - a. **NEVER** point the high pressure spray jet at any person, animal, glass or any other material which may shatter.
 - b. **PREVENT** any over-spray from injuring other people or damaging property.
 - c. **DO NOT** even try to use a pressure washer on machinery or electrical equipment that is connected in any way to the mains supply. (all switches in the off position, pull out all plugs and if possible remove fuses). Cover or seal electric motors and fittings to prevent entry of water.
 - d. **ALWAYS** when using machine:-
 - wear safety goggles and helmet or helmet with a visor.
 - wear waterproof clothing and gloves.
 - take particular care with detergents and chemicals.
 - e. **NEVER** attempt to disconnect any hose with pressure in it or allow the hose to be flattened or kinked.
 - f. **DO NOT** use a high pressure hose from a ladder. Use a platform tower or proper scaffolding.
 - g. **CHECK** that your supply voltage agrees with that shown on the machine.
 - h. If an extension lead is used unwind all cable off the drum to stop overheating. The right size of extension lead must be used, failure to do so will result in switch failure or motor damage. Demon strongly recommend the use of extension hoses opposed to extension leads. Warranty claims for damaged switches and motors used on extension leads will not be allowed. Ask the service department if in doubt.
 - i. **DO ALL** you can to keep plugs and sockets in a dry place or covered to prevent entry of water.
 - j. Where a cable is found to be damaged, the power must be switched off and the plug removed before attempting to remove the equipment.

FAULT FINDER

FAULT	CAUSE	REMEDY
Machine stops suddenly Or will not start.	Blown fuse.	Check mains power supply, re- place fuse. Wait until unit cools down before resetting switch.
Sudden pressure loss.	Water supply failed.	Check water supply.
Low pressure	HP nozzle worn or unloader set Incorrectly.	Replace HP nozzle. Set unloader to correct setting.
Low pressure with noise and vibration.	Valves worn or blocked. Piston seals worn. Pump sucking air.	Clean/replace as required. Replace. Check water supply pipe and un- ions.
Pump will not by-pass.	Non return valve dirty or jammed.	Clean or replace.
Water drips from pump box.	Pump seals worn.	Replace.
Oil drips from pump bottom.	Oil seal worn.	Replace.
Oil is milky in colour.	Water ingress through oil filter plug.	Rinse pump out and replace oil.

IF IN DOUBT ASK—OUR ADVICE IS FREE AND CAN SAVE YOU MONEY

Demon Storm Twin Cabinet Washer



Demon Storm Twin Cabinet Washer



N.B. If there is no water in the machine a light will still indicate power but will not be operational. CHECK WATER

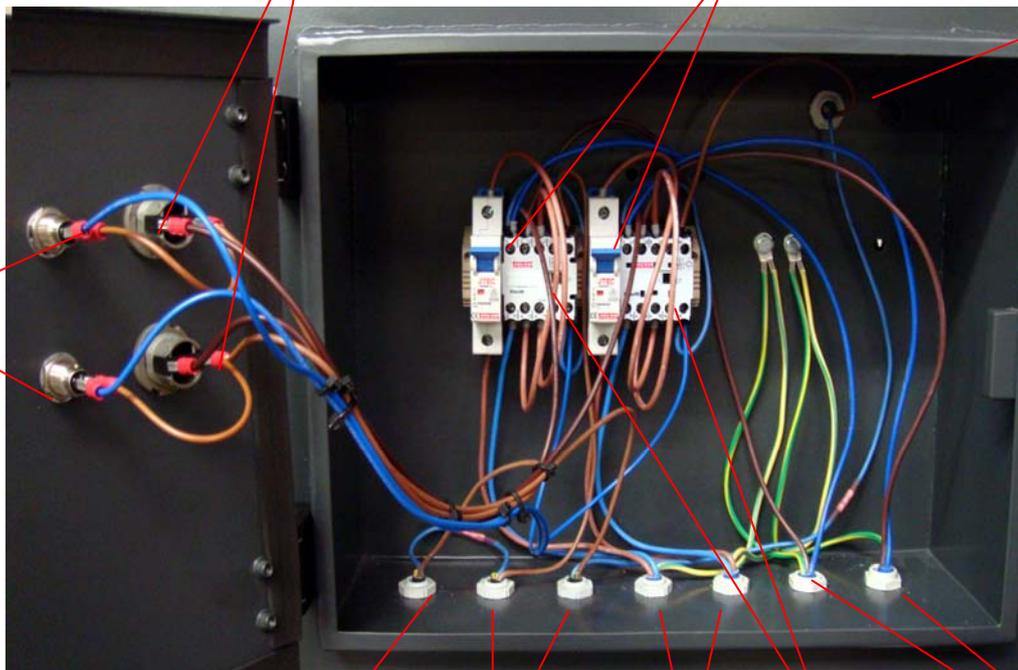
LED To indicate power in the machine

Rotary Switch

13 Amp MCB

Hi Float Low Water Sensor

LED'S



H Float Low water sensor

TSS Unloader Valve Supply

Motor Supply

240V Mini Contactor

Mains Supply