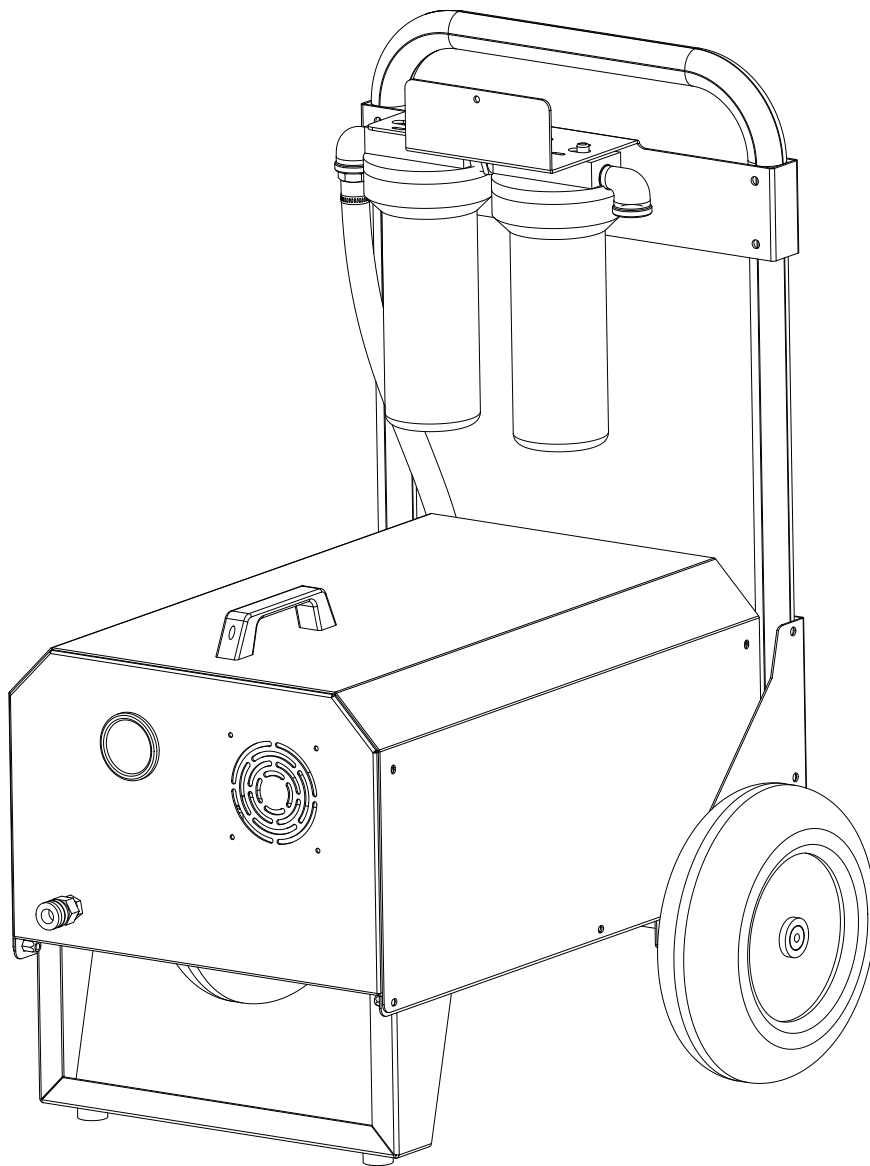


OPERATION & MAINTENANCE MANUAL



MultiMister Series MMW Portable Dust Suppression Machines

IMPORTANT

Read, understand and obey these safety rules and operating instructions before operating or maintaining this machine

Only trained and authorized personnel shall be permitted to operate this machine. This manual should be considered a permanent part of your machine and should remain with the machine at all times. If you have any questions, please contact Dustquip LTD

Contents

INTRODUCTION
GENERAL INFORMATION
WARRANTY
SAFETY
LEGEND
CONTROLS
PRE-OPERATION INSPECTION
MAINTENANCE
FUNCTION TESTS
WORKPLACE INSPECTION
OPERATING INSTRUCTIONS
TRANSPORT INSTRUCTIONS
DECALS
SPECIFICATIONS
LEGIONELLA APPENDIX a, b & c
FLUSHING GUIDE
DRAIN DOWN GUIDE
SERVICE RECORD

HOW TO CONTACT US

Dustquip Ltd

+44(0) 1454 513 000

Quercus Court
Armstrong Way
Yate
BS37 5NG

www.dustquip.co.uk
info@dustquip.co.uk

INTRODUCTION & GENERAL INFORMATION

INTRODUCTION

Thank you for choosing a Dustquip MultiMister

Please take time to carefully read the contents of this manual before you commence using the MultiMister. Ensure everyone responsible for its use is fully conversant with the procedures for preparing for use, operating and maintaining the MultiMister

By following, understanding and practicing the information and procedures in this manual, your Dustquip MultiMister will give you many years of reliable and safe use.

Certain information contained in this manual is governed by law and is subject to review and change without prior notice. Great care however, has been taken to ensure that the information in this manual is correct at time of publication. However, it is the owners/users sole responsibility to ensure that they fully comply with all legal requirements. Dustquip cannot and will not accept any liability for any inaccuracy or incorrectly stated legal requirements

Dustquip maintains a policy of continuous product improvement. We reserve the right to alter pump, engine, motor & performance specifications without prior notice.

GENERAL INFORMATION

The information contained in the Handbook is correct at the time of publication, and can be altered by the manufacturers without prior notice.

The Operator must read this handbook and the motor/engine & pump operators handbook (appended to this document) and be familiar with all controls before operating the equipment.

The contents of this handbook are a guide to the machines control, operation, operating scope and maintenance. It is not a training manual.

These are the original Instructions in the English Language issued by Dustquip.

The Operation Handbook must be stored near the machine in an environment protected against humidity and heat. The handbook must be attached to the machine in the event it is hired or sold. Damaging, modifying or removing part of the manual is prohibited.

WARRANTY CONDITIONS

The product is covered by a 12* month or 500 hour (whichever is soonest) warranty. Dustquip undertakes to replace or repair, free of charge, any defect which Dustquip considers to be due to faulty workmanship or material within 12 months of sale date, except for:

1. Defects arising from neglect, misuse or unauthorised modifications.
2. Damage caused by abuse, misuse, dropping or other similar damage caused by or because of failure to follow transportation, storage, loading or operation instructions.
3. Alterations, additions or repairs carried out by persons other than the Manufacturer or their recognised distributors.
4. Transportation or shipment costs to and from the Manufacturer or their recognised agents, for repair or assessment against a warranty claim, on any product or component.
5. Materials and/or labour costs to renew, repair or replace components due to fair wear and tear.
6. Faults arising from the use of non-standard or additional parts, or any consequential damage or wear caused by the fitting or use of such parts.
7. Failure to maintain the equipment according to the maintenance schedule
8. Damage caused by miss-fuelling & incorrect voltage supply

Dustquip International and/or their recognised agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in connection with, or by reason of, or due to the inability to use their product for any purpose.

It is the customers/user responsibility to report any warranty issues to Dustquip in a timely manner. Back dated warranty issues reported outside of the warranty period will not be accepted.

All warranty work will be carried out at an Dustquip authorised repair centre, goods must be returned at the customers expense.

SAFETY RULES

MultiMister Series MMT Portable Dust Suppression Machines



DANGER

Failure to obey the instructions and safety rules in this manual will result in death or serious injury.

Do Not Operate Unless:

You learn and practice the principles of safe machine operation contained in this operators manual.

You read, understand and obey the manufacturer's instructions and safety rules - safety and operators manuals and machine decals, employers safety rules and worksite regulations & applicable governmental regulations

You are properly trained to safely operate the machine

1. Avoid hazardous situations. Know and understand the safety rules before going on to the next section
2. Always perform a pre-operation inspection
3. Always perform function tests prior to use
4. Inspect the workplace
5. Only use the machine as it was intended

ELECTROCUTION HAZARDS

This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current

Do not operate the machine during lightning or storms

Do not use the machine as a ground for welding

Ensure safe routing of power cable to minimise risk of electrocution



EXPLOSION AND FIRE HAZARDS

Do not operate the machine in hazardous locations, or locations where potentially flammable or explosive gases or particles may be present



SETUP HAZARDS

Check work area for obstructions and other possible hazards. The machine discharges water which could cause slip hazards, your RA&MS will need to take this into account

Do not use the machine whilst under the influence of alcohol or drugs (prescription or recreational)

Ensure machine is sited properly on level stable ground

Do not alter or disable machine components that in any way affect the safety and stability

Be aware of ground surface prior to installation

Do not use the machine on a moving or mobile surface or vehicle

Ensure tyres are in good condition

Do not ride on machine

Do not alter or disable any safety switches or guards

Do not operate the machine in strong or gusty winds

Protect machine from frost and low temperatures

BODILY INJURY HAZARDS

Use common sense and planning when positioning and using the machine

Keep hands & limbs away from rotating parts and pinch points

Always wear the correct PPE



COMPONENT DAMAGE HAZARDS

When using a generator, ensure it is fitted with a voltage regulator before use & is adequately grounded

Ensure constant water supply to pump, damage will occur if allowed to run dry

Do not use the machine as a ground for welding

DAMAGED MACHINE HAZARDS

Do not use a damaged or malfunctioning machine

Conduct a thorough pre-operation inspection of the machine and test all functions before work shift. Immediately remove from service a damaged or malfunctioning machine & report it to your company manager/hire provider.

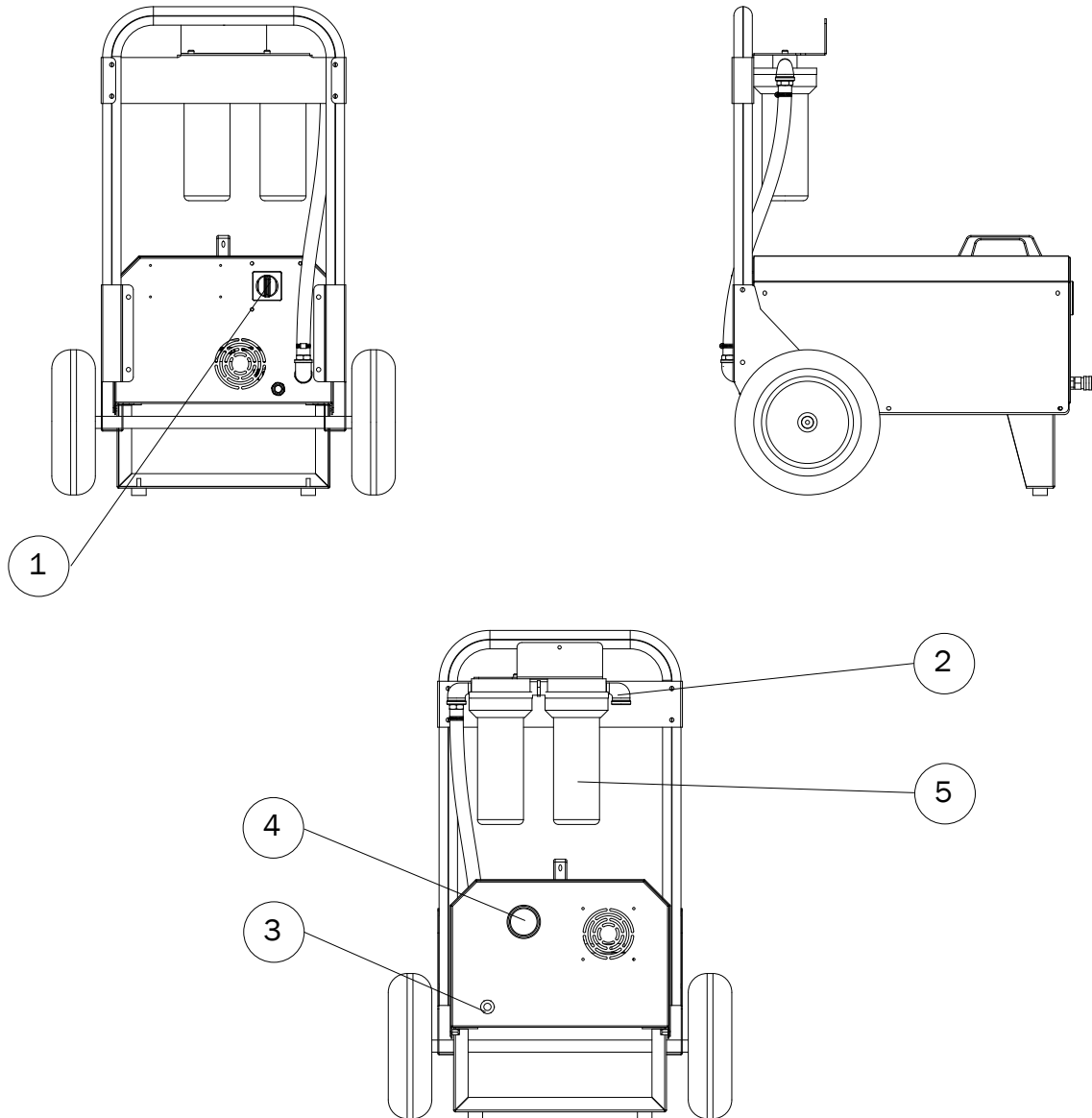
Ensure all maintenance has been carried out as specified in this manual.

Be sure all decals are in place and legible.

MOVING BELTS HAZARDS

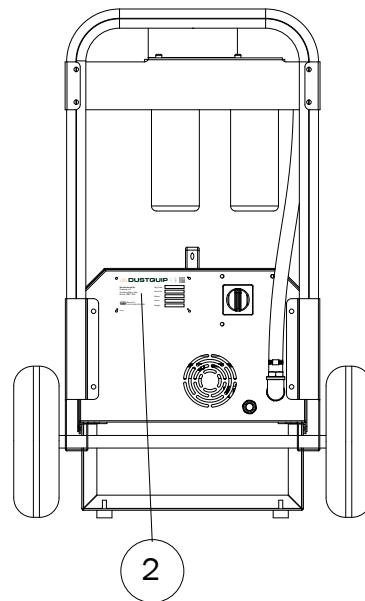
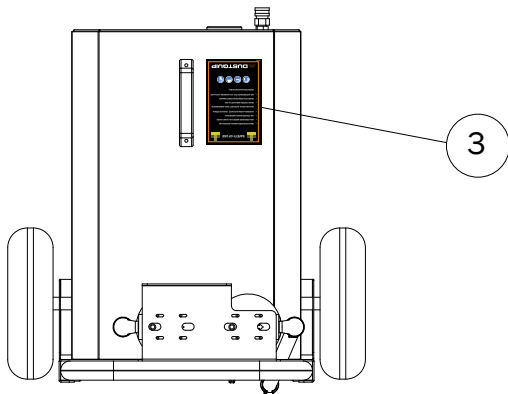
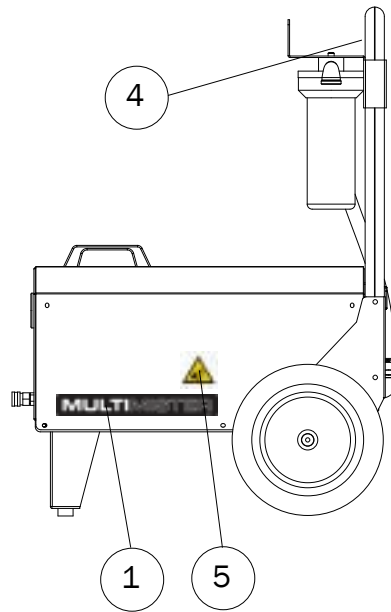
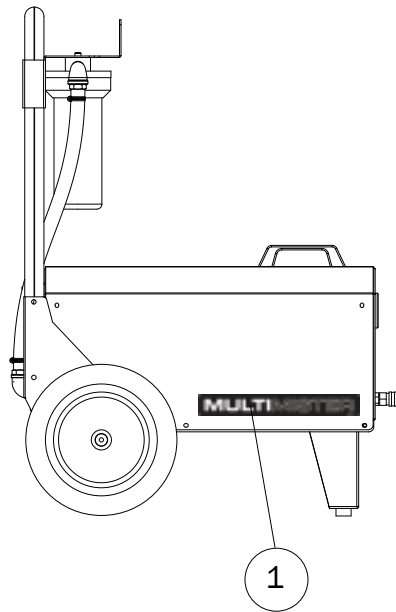
Do not operate the machine with the main cover removed. Moving belts within the machine could cause serious injury

LEGEND



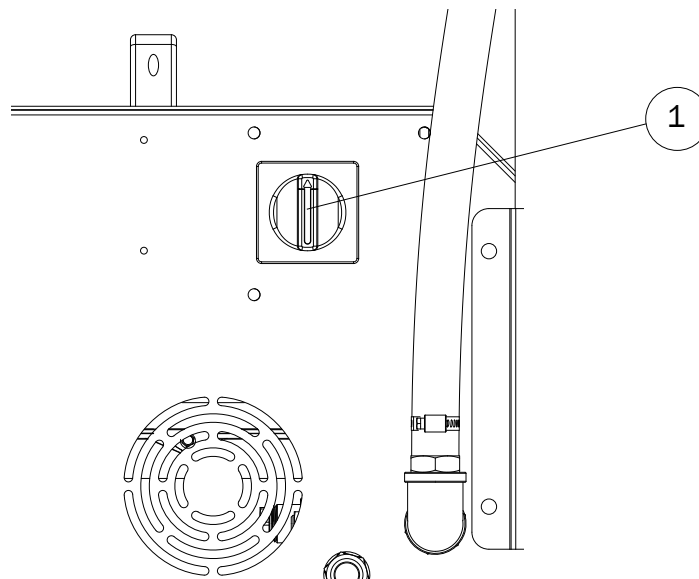
1. Main Power Switch
2. Water Inlet
3. Mist Line Connector
4. Pressure Gauge
5. Filters

DECALS



1. MultiMister Decal
2. Serial Plate
3. Safe Use Decal
4. Inlet Decal
5. Trap Hazard Decal

CONTROLS



1. On/Off rotary switch

PRE-OPERATION INSPECTION



DANGER

DO NOT OPERATE UNLESS:

You learn and practice the principles of safe machine operation contained in this operators manual.

1. Avoid hazardous situations
2. Always perform a pre-operation inspection. Know and understand the pre-operation inspection before going on to the next section
3. Always perform function tests prior to use
4. Inspect the workplace
5. Only use the machine as it was intended

FUNDAMENTALS

It is the responsibility of the operator to perform a pre-operation inspection and routine maintenance

The pre-operation inspection is a visual inspection performed by the operator prior to each work shift

The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests

The pre-operation inspection also serves to determine if routine maintenance procedures are required. Only routine maintenance items specified in this manual may be performed by the operator.

Refer to the list on the next page and check each of the items and locations for modifications, damage or loose/missing parts.

A damaged or modified machine must never be used. If damage or variation from factory delivered condition is discovered, the machine must be tagged and removed from service

Repairs to the machine may only be made by a qualified service technician according to the manufacturers specifications. After repairs are completed, the operator must perform a pre-operation inspection again before going on to the function tests

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturers specifications.

PRE OPERATION INSPECTION:

Be sure that all decals are legible and in place.
See *“Decals” section*

Be sure the power cable is in good condition and not damaged

Ensure all guards are in place

Be sure the correct accessories & manual is present. See parts list

Check the following components or areas for damage, modifications and improperly installed or missing parts

1. Electrical components
2. Wiring
3. Power Plugs
4. Fan & Guards
5. Pipe work & Inlet filter
6. Wheels & Tyres
7. Nuts, bolts & other fasteners

Check entire machine for:

1. Cracks in welds or structural components
2. Dents or damage to the machine
3. Be sure that all structural and other critical components are present and all associated fasteners are in place and properly tightened

MAINTENANCE



OBSERVE AND OBEY:

Only routine maintenance items specified in this manual shall be performed by the operator.

Scheduled maintenance inspections shall be completed by qualified service technicians, according to the manufacturers specifications and the requirements specified in the responsibilities manual

MAINTENANCE SYMBOLS LEGEND:

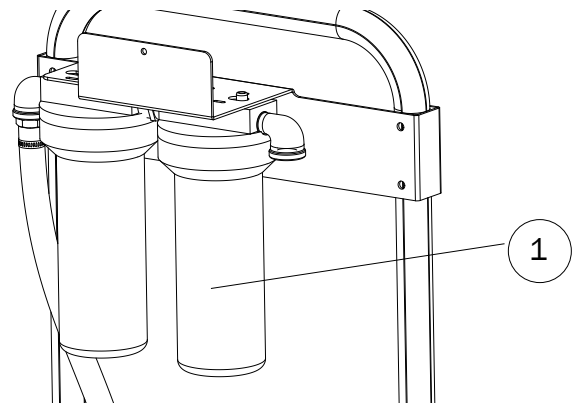
NOTICE

The following symbols have been used in this manual to help communicate the intent of the instructions. When one or more of the symbols appear at the beginning of a maintenance procedure, it conveys the meaning below



Indicates tools will be needed to carry out this operation

INLET FILTER CHECKING & CLEANING



Maintaining a clean inlet (1) filter is essential to good machine performance. Operating the machine with a clogged inlet filter will result in degraded performance and could damage the pump

NOTICE

**CHECK FILTER WITH WATER AND POWER
SUPPLY TURNED OFF AND DISCONNECTED**

Tools Required:

- Adjustable spanner
1. Loosen the housing using the supplied spanner
 2. Carefully unwind the housing and withdraw the filter element from filter body
 3. Replace filter element
 4. Insert the new filter element into the filter body, screw housing into the holder ensuring the gasket is in place and in good condition
 5. Tighten with the supplied spanner

FUNCTION TESTS



FUNDAMENTALS:

The function tests are designed to discover any malfunctions before the machine is put into service

The operator must follow the step by step instructions to test all machine functions

A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service

Repairs to the machine may only be made by a qualified service technician, according to the manufacturers specifications

After repairs are completed, the operator must perform a pre-operation inspection and function tests again before putting the machine into service

DO NOT USE UNLESS:

You learn and practice the principles of safe machine operation contained in this operators manual.

1. Avoid hazardous situations
2. Always perform function tests prior to operation. Know and understand the function tests before going on to the next section
3. Always perform function tests prior to use
4. Inspect the workplace
5. Only use the machine as it was intended

FUNCTION TESTS:

Select an area that is firm, level and free of obstructions

1. Plug the power plug into a suitably sized power socket and turn the power on. (ensure the main switch on the machine is set to the off position)

TEST THE MIST FUNCTION:

1. Ensure water is connected to the inlet and water supply is turned on
2. Rotate the power switch to the on position
3. Check misting line is operating correctly with no leaks
4. Rotate the power switch to the off position - pump will stop

VISUAL CHECK:

1. Check all water hoses for signs of wear, cracks & leaks
2. Check power cable for damage to insulation
3. Check all buttons are present & not damaged
4. Check all guards are in place
5. Check all nozzles are atomising correctly with no uneven spray pattern (Nozzles should produce an even cone of mist)

If the machine fails any of these function tests, it should be removed from service and repaired

WORKPLACE INSPECTION



FUNDAMENTALS:

The workplace inspection helps the operator determine if the workplace is suitable for safe machine operation. It should be performed by the operator prior to moving the machine to the workplace

It is the operators responsibility to read and remember the workplace hazards, then watch for and avoid them while moving, setting up and operating the machine.

DO NOT USE UNLESS:

You learn and practice the principles of safe machine operation contained in this operators manual.

1. Avoid hazardous situations
2. Always perform function tests prior to operation
3. Inspect the workplace. Know and understand the function tests before going on to the next stage
4. Only use the machine as it was intended

WORKPLACE INSPECTION:

Be aware of and avoid the following hazardous situations

1. Bumps, floor obstructions or debris
2. Slopes
3. Unstable or slippery surfaces
4. Overhead obstructions
5. Hazardous locations
6. Inadequate surface support to withstand all load forces imposed by the machine
7. Wind and weather conditions
8. The presence of unauthorised personnel
9. Low temperature & freezing conditions
10. Other possible unsafe conditions
11. Ensure any equipment or objects that could be damaged by water are removed from the area

OPERATING INSTRUCTIONS



FUNDAMENTALS:

The Operating Instructions section provides instructions for each aspect of machine operation. It is the operators responsibility to follow all the safety rules and instructions in the operators, safety and responsibilities manuals

This MultiMister is designed to provide a water mist dust suppression for a wide range of dust types. Only clean tap water must be used - please refer to the Legionella section for further information.

Care must be taken when positioning the machine that the water mist generated by the machine does not cause any unintended damage. Dustquip cannot be held responsible for any damage caused.

Only trained and authorized personnel should be permitted to operate a machine. If more than one operator is expected to use a machine at different times in the same work shift, they must be qualified operators and are all expected to follow all safety rules and instructions in the operators safety and responsibilities manuals. This means every new operator should perform a pre-operation inspection, function tests , and a workplace inspection before using the machine.

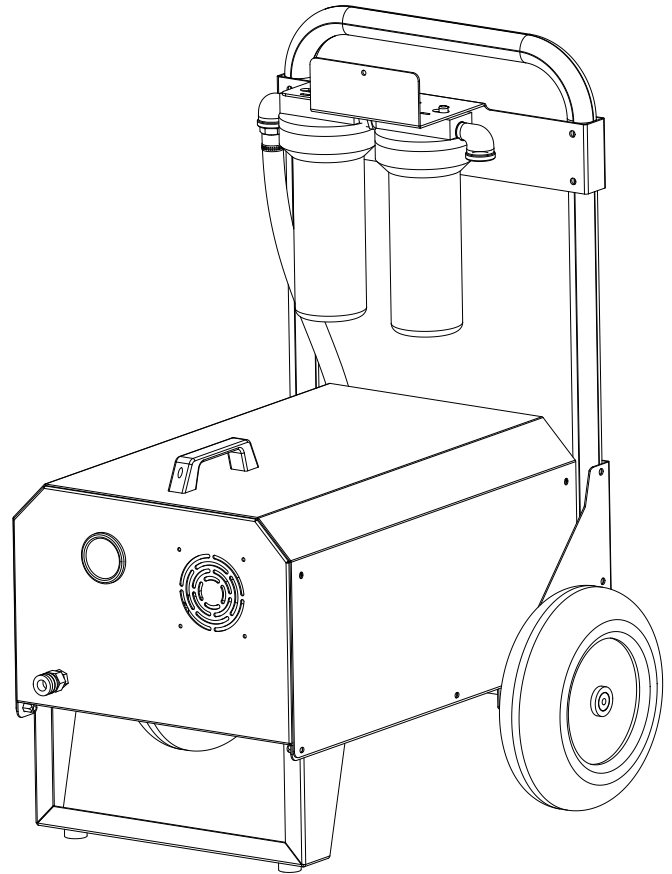
DO NOT USE UNLESS:

You learn and practice the principles of safe machine operation contained in this operators manual.

1. Avoid hazardous situations
2. Always perform function tests prior to operation
3. Inspect the workplace. Know and understand the function tests before going on to the next stage
4. Only use the machine as it was intended

OPERATING INSTRUCTIONS:

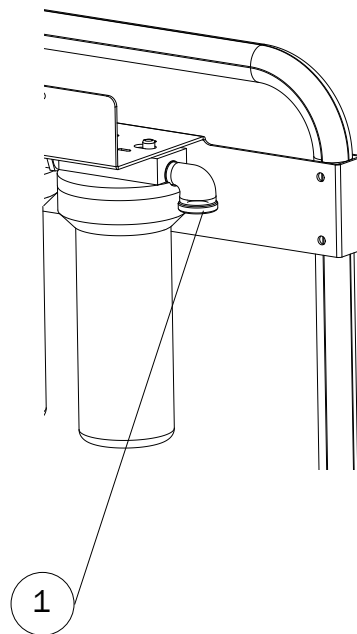
1. Before moving the machine, plan your route. Ensure there are not obstacles on your route. Ensure you have adequate man power to complete the set tasks.
 2. To move the unit, place one foot to the lower rear of the machine, then pull back on the handles to lift the front of the machine off the ground
 3. Once the machine is in the desired location, ensure the front of the machine is pointing in the desired location, carefully lower the front of the machine back to the ground
-



1. Connect the water to the inlet connection (1)
2. Connect power plug to suitable power socket and turn on supply.
3. Connect the mist lines to the outlet (2) and position them in the intended area
4. Turn on the machine
5. Once work is complete - turn off the machine

If the machine is not to be used for a period of time ensure the following steps are carried out:

1. Disconnect the water supply
2. Run the pump for a few seconds to discharge any residual water out of the pipework & pump
3. Disconnect the power supply
4. Store machine & misting hose in a cool dry place out of direct sunlight



TRANSPORT INSTRUCTIONS



TIE DOWN & STRAPPING:

Only strap over the metal housing or handles.

DO NOT OVER TIGHTEN STRAPS:

Excessive tension of the straps will cause damage to the machine

OBSERVE AND OBEY:

Common sense and planning must be applied to control the movement of the machine when moving it with a forklift

The transport vehicle must be parked on a level surface

SECURING TO TRUCK OR TRAILER FOR TRANSIT:

Always check the machine is on a level surface with both wheels and both feet are in contact with the surface

Inspect the entire machine for loose or unsecured items

Ensure power cable is secured and placed within the machine

SPECIFICATIONS

MMT	
Applications Indoor	Demolition strip out dust suppression
Applications Outdoor	Odour control and stone drilling or cutting dust
Average Water Droplet Size μ	50 micron

	MMW-HP2-110-60	MMT-HP4-110-60
Engine / Voltage / Frequency	110V 60Hz	110V 60Hz
Current Consumption	8 Amps	13 Amps
Power Connection	NEMA	NEMA
Pump Motor HP	.5	1
Dimensions mm (inch)	720 L x 720 W x 1050 H	
Weight Kg (Lbs)	Empty 45 KG (100 Lbs)	
Number of Nozzles	30	60
Water Supply Connection	1/2 Hose Tail	
Required Water Pressure / min flow	2-5 bar / 5 Lpm	
Water quality	Potable / Filtered	
Operating Temperature	+2°C - 50°C	

Required Oils		
Component	Specification	Volume Required
Gear Box (if fitted)	SAE90 Gear Oil	0.35l
Pump	SAE 10W40 (0.25L)	0.25l

LEGIONELLA HEALTH RISK



DANGER

WATER MISTING CAN CAUSE LEGIONELLA DISEASE:

One of the main health risks from contamination in engineering water systems is the bacterial infection Legionella.

This bacterium can be transmitted through water vapour or mist and inhaled, hence leading to respiratory infections.

The more severe cases are from Legionnaires' disease, which can lead to symptoms of pneumonia and other secondary infections, in its worst case can lead to death.

The milder forms are Pontiac Fever and Lochgilhead fever.

***If you develop symptoms of Flu/
Pneumonia after operating this
machine seek urgent medical
attention.***

Legionella Microorganisms flourish in water temperatures of between 22°C and 45°C (71.6 - 113F), particularly, if an abundance of nutrients such as sludge, sediment or rust reside in the water system.

YOU MUST ENSURE:

- Drain system and supply tanks when not in use
- Only use drinking water supply
- Follow a Legionella risk assessment that meets the requirements of the local water authority regulations
- Follow regular tank/system cleaning procedures using disinfectant and/or steam.





See appendix 1 for Legionella risk assessment

MANUFACTURERS IDENTIFICATION DATA

Manufacturer	Dustquip Ltd
Brand	MultiMister MMW
Head Office	Quercus Court, Armstrong Way, BS37 5NG
Telephone	01454 513 000
Email	info@dustquip.co.uk
Website	www.dustquip.co.uk

CE & UKCA MARKING

All machines are identified with a Model & Serial ID plate which includes the CE & UKCA marking

 DUSTQUIP  	
Manufactured By: Dustquip Ltd Armstrong Way, Yate Bristol, BS37 5NG	Mfg. Date: <input type="text"/>
	Serial No: <input type="text"/>
	Model: <input type="text"/>
	Power: <input type="text"/>
	Weight: <input type="text"/>
 Bristol UK +44 (0)1454 513 000	
SP001	

Some machines will have a UKCA label affixed to the machine adjacent to the Serial Number plate.

UKCA DECLARATION OF CONFORMITY



Dustquip Ltd Declaration of Conformity

In accordance with UK Government Guidance

1. Product Model
 - a. Product: Mobile MultiMister Wheeled Dust Suppression Machine
 - b. Model: MultiMister MMW
 - c. Serial: 1000-99999
 - d. Specification: Trolley mounted electric powered high Pressure, low flow dust suppression misting unit.
2. Manufacturer
 - a. Name: Dustquip Ltd
 - b. Address: Quercus Court, Armstrong Way, Yate, BS37 5NG (UK)
3. This declaration is issued under the responsibility of the above mentioned manufacturer.
4. The object of the declaration described above is in conformity with the relevant UK Statutory Instruments and their amendments:

Supply of Machinery (Safety) Regulations 2008

Noise Emission in the Environment by Equipment for use Outdoors
Regulations 2001

Electromagnetic Compatibility Regulations 2016

Radio Equipment Regulations 2017 (where remote control fitted)

The Restrictions of the Use of Certain Hazardous Substances in Electrical and
Electronic Equipment Regulations 2012

Electrical Equipment (Safety) Regulations 2016

5. Additional information:
The technical documentation for the machinery is available from:

Name:	Dustquip Ltd
Address:	Quercus Court, Armstrong Way, Yate, BS37 5NG
Signed for & behalf of:	Dustquip Ltd
Place of issue:	Yate, United Kingdom
Name:	Neal Davies
Position:	Director
Signature:	<i>Neal Davies</i>

CE DECLARATION OF CONFORMITY



Dustquip Ltd EC Declaration of Conformity

In accordance with EU Government Guidance

1. Product Model
 - a. Product: Mobile MultiMister Wheeled Dust Suppression Machine
 - b. Model: MultiMister MMW
 - c. Serial: 1000-99999
 - d. Specification: Trolley mounted electric powered high Pressure, low flow dust suppression misting unit.
2. Manufacturer
 - a. Name: Dustquip Ltd
 - b. Address: Quercus Court, Armstrong Way, Yate, BS37 5NG (UK)
3. This declaration is issued under the responsibility of the above mentioned manufacturer.
4. The object of the declaration described above is in conformity with the relevant EU Statutory Instruments and their amendments:

Machinery Directive 2006/42/EC

Outdoor Noise Directive 2000/14/EC

Electromagnetic Compatibility - Directive 2014/30/EU

Radio equipment - Directive 2014/53/EU

Restriction of the Use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) - Directive 2002/95/EC

Low Voltage Directive 2014/35

5. Additional information:
The technical documentation for the machinery is available from:

Name:	Dustquip Ltd
Address:	Quercus Court, Armstrong Way, Yate, BS37 5NG
Signed for & behalf of:	Dustquip Ltd
Place of issue:	Yate, United Kingdom
Name:	Neal Davies
Position:	Director
Signature:	<i>Neal Davies</i>

FAULT FINDING

Fault	Cause	Remedy
Pump running normally but pressure low on installation	<ul style="list-style-type: none"> • Inlet filter blocked or dirty. • Pump sucking air • Valve sticking • Unloader valve seat faulty • Jet tip wrong size • Worn piston packing 	<ul style="list-style-type: none"> • Check & clean inlet filters • Check water supply & possibility of air ingress • Check & clean or replace • Check & replace if needed • Check & replace if needed • Check & replace if needed
Fluctuating pressure	<ul style="list-style-type: none"> • Inlet filter blocked • Valves worn • Blockage in Valve • Pump sucking air • Worn piston packing 	<ul style="list-style-type: none"> • Check & clean inlet filters • Check & replace if needed • Check & replace if needed • Check water supply & air ingress at joints in suction line • Check & replace if needed
Pressure low after periods of normal use	<ul style="list-style-type: none"> • Inlet filter blocked or dirty • Tips worn • Tips blocked • Suction or delivery valves worn or blocked • Worn piston packing 	<ul style="list-style-type: none"> • Check & clean Inlet filters • Check & replace if necessary • Check & clean or replace • Check & replace if necessary • Check & replace if necessary
Pump Noisy	<ul style="list-style-type: none"> • Inlet filter blocked • Air in suction lines • Broken or weak suction or delivery valve springs • Foreign matter in the valves • Worn bearings • Excessive temperatures of water 	<ul style="list-style-type: none"> • Check & Clean Inlet filters • Check water supply & connections in suction line • Check & replace if required • Check & clean if required • Check & replace if required • Reduce below 75 centigrade
Presence of oil in the water	<ul style="list-style-type: none"> • Oil seals worn • High humidity in the air • Piston packing worn 	<ul style="list-style-type: none"> • Check & replace if required • Check & reduce oil change intervals. • Check & replace if required
Water dripping from below pump	<ul style="list-style-type: none"> • Piston packing worn • Plunger retainer O ring worn • Leaking connections 	<ul style="list-style-type: none"> • Check & replace if required • Check & replace if required • Check & tighten or reseal
Oil dripping	<ul style="list-style-type: none"> • Oil seal warn 	<ul style="list-style-type: none"> • Check & replace if needed
Excessive vibration in the delivery line	<ul style="list-style-type: none"> • Inlet filter blocked or dirty • Valves probably blocked 	<ul style="list-style-type: none"> • Check & clean inlet filter • Check and replace if necessary
Engine will not start	<ul style="list-style-type: none"> • Switch in correct position • Fuel line is switched off • Oil alert activated 	<ul style="list-style-type: none"> • Check & correct • Check & correct • Check oil level
No water from nozzle	<ul style="list-style-type: none"> • Inlet filter blocked or dirty • Unloader valve in constant by-pass • Blocked tips 	<ul style="list-style-type: none"> • Check & Clean inlet filter • Check & turn knob to pressure • Check & clean if necessary

APPENDIX 1a

Users Guide to Legionnaires' Disease

What is Legionella?

Legionella is a bacteria that is naturally occurring in water sources such as lakes, reservoirs and ponds. It can enter the water systems within buildings through the mains water supply and given the right conditions, can begin to proliferate and potentially pose a threat

Is it harmful?

Although naturally occurring and present in low levels in a lot of water sources, the bacteria is usually not harmful if ingested, but if the bacteria is spread through an aerosol (such as a dust suppression machine) and comes into contact with a susceptible person, it is possible that they could contract Legionnaires' disease.

What is Legionnaires' disease?

Legionnaires' disease is a potential fatal form of pneumonia caused by the inhalation of small droplets of contaminated water containing Legionella. Legionnaires' disease is often mistaken for other disease that affect the lungs, like pneumonia and the only way to get a definite diagnosis is through tests like blood and urine

Where is Legionella found?

Hot and cold water systems in buildings are a potential source for Legionella bacteria growth. The main areas of risk are where the bacteria can multiply and increase to dangerous levels and then spread, e.g in spray from showers and taps

Conditions ripe for colonisation are where the water of between 20°C and 45°C stagnates, and where there is sludge, rust and scale present for the bacteria to feed upon and multiply

Who is at risk?

Legionnaires' disease most commonly affects the elderly, or people with chest or lung problems. Not everyone exposed to Legionella bacteria becomes ill

Legionnaires' disease is not contagious and you cannot get it from drinking water

What precautions can I take?

- Frequently check the cold water temperature is below 20°C
- Flush through system for at least 5 minutes per week when machine is not in use (care must be taken to prevent water splashing and releasing droplets into the air)
- Clean, disinfect and de scale nozzles and system at least once every 6 months
- Ensure any windows and doors in the vicinity of the dust suppression use are closed
- Fully drain misting lines & system when not in use, including the extreme ends of the pipe lines

What should I do if I think I may have contracted Legionnaires' disease?

If you suspect that you or someone has contracted Legionnaires' disease, contact your doctor immediately.

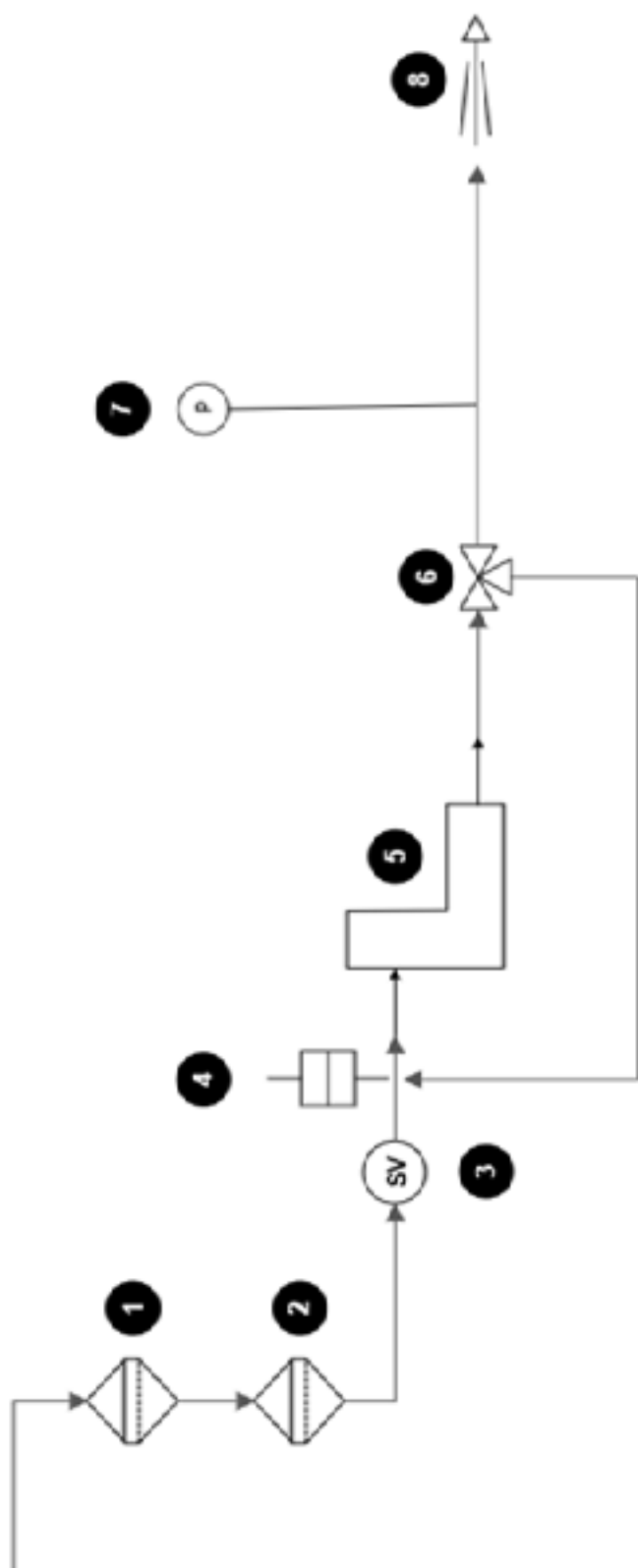
The user of this machine also needs to carry out their own Legionnaires' risk assessment in line with company and local authority policies

APPENDIX 1b

Legionnaires' Disease Risk Assessment

Machine Model Number:	MultiMister MMW
Date of assessment:	05/04/2023
Assessment carried out by:	Alex Lyon
Machine Type:	Portable high pressure water misting dust suppression machine
Persons at risk	Dustquip LTD have no control where the machines are used. Dustquip LTD recommend ensuring any persons at risk are sufficiently shielded from any mist the machine generates.
System Description:	Mains cold water fed dust suppression machine. Consisting of a high pressure water pump & water mist generating nozzles. P&ID Diagram appended at the bottom of this document
1, Water Outlet Temperature:	The MultiMister MMW machines are intended to use cold water only from a suitable mains outlet. The water temperature must be below 20°C. Discontinue the use of the machine if the water outlet temperature is above 20°C. Follow your water flushing procedures to reduce the water temperature.
2, Cold water storage tanks:	The MultiMister MMW does not contain a water tank
3, Hot water:	The MultiMister MMW does not generate or require hot water
4, Little used outlets:	The MultiMister MMW must be used with the full length of hoses supplied to ensure all outlets are all used.
5, Misting Nozzles:	The MultiMister MMW utilises misting nozzles to create the mist required for dust suppression. They must be cleaned, disinfected and de scaled at least once every 6 months. Aerosol production should be minimised during this process
6, Dead legs and redundant pipework:	Dustquip have taken every precaution to eliminate dead legs and redundant pipe work during the design process. All pipe work & fittings have been selected to minimise the risk of corrosion to prevent any bacteria buildup.
7, Periods of storage:	The MultiMister MMW should be flushed through frequently for at least 5 minutes when not in use and prior to operating the machine again. Aerosol production should be minimised during this process. If not used for long term - consider draining down the system

APPENDIX 1c

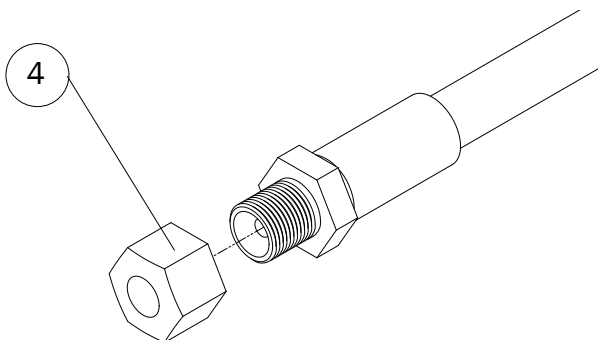
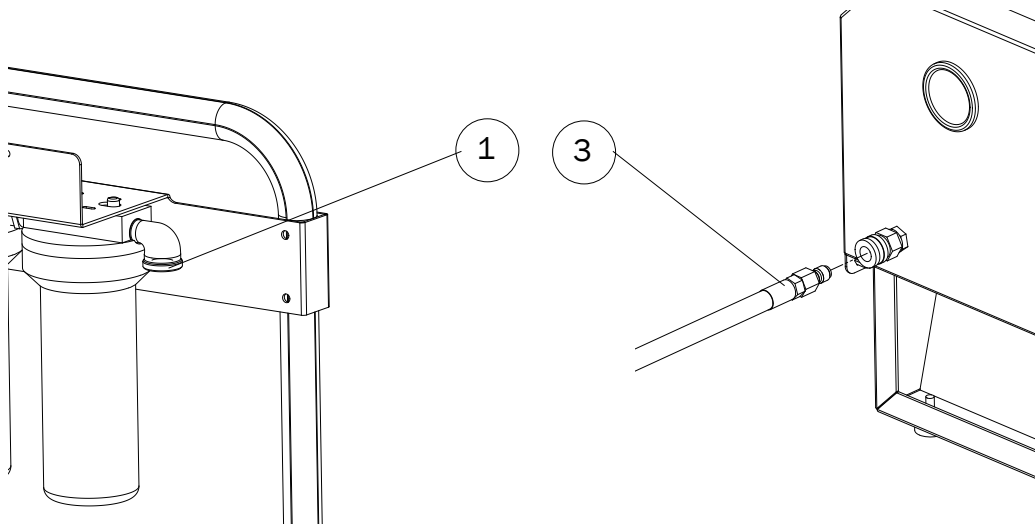


Item	Description
1	Primary inlet filter
2	Secondary inlet filter
3	Inlet solenoid valve
4	Thermal burst disk
5	Piston high pressure pump
6	Unloader valve
7	Remote pressure gauge
8	Misting nozzle(s)

FLUSHING GUIDE

When the machine is not to be used for more than a week or used in hot climates or, the machine is to be use for the first time after storage, a full system flush will be required.

1. Connect the machine to a mains cold water supply.
2. Connect the machine to a power supply.
3. Connect the misting hose to the outlet.
4. Remove the blanking cap from then end of the misting line
5. Remove the machine cover
6. Disconnect the feed line from the rear of the pressure gauge
7. Turn on the machine from the power switch and allow water to flush through the pump, hose & lines for at least 5 minutes. Ensure all water is safely discharged to a suitable waste - care must be taken to ensure aerosol is not produced during this process.
8. Once flushing is complete - reverse the above points to re-assemble machine.

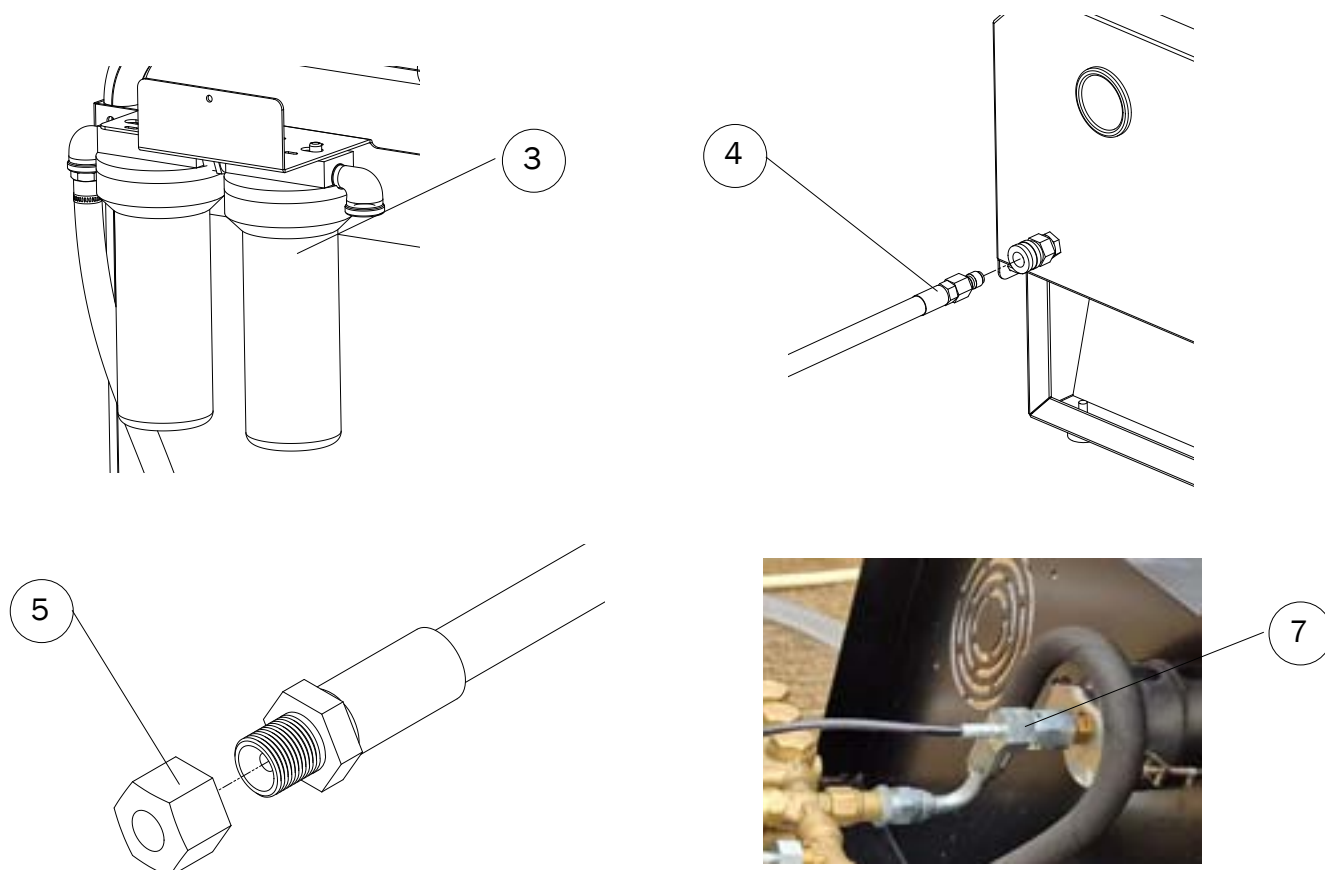


DRAINING DOWN GUIDE

If the machine is not going to be used or put into storage the residual water must be removed from the system. This is to prevent the buildup of any bacteria & biofilms which could lead Legionella

1. Disconnect the water supply
2. Connect the machine to a power supply
3. Remove the filter housings, drain the water from the filter housings and allow the filter elements to air dry.
4. Connect the misting hose to the outlet
5. Remove the blanking cap from then end of the misting line
6. Remove the machine cover
7. Disconnect the feed line from the rear of the pressure gauge
8. Turn on the machine to pump out the residual water from the pump head & inlet pipework. Run for a maximum of 1 minute.
9. Turn off the pump & disconnect the power supply.
10. Disconnect the misting hose from the machine. Raise the end of the hose and start to coil up the hose - this will ensure any residual water is drained from the misting hose.
11. Re attach the misting hose cap and tighten.
12. Re attach the Gauge hose and tighten
13. Re-fit the machine cover
14. Re-fit the filter elements & housings. Ensure the O ring seal is in place and tighten with the tool supplied.

Please follow the flushing guidelines when using the machine for the first time after storage.



SERVICE RECORD

Service Date	Carried out by	Company	Notes

NOTE:

This service record will need to be provided in the event of a warranty claim

A missing or incomplete service record may result in warranty claim being declined or voided

Revision	Date	Notes	Initials
1	03/23	Initial release	AGL

Dustquip Ltd

+44(0) 1454 513 000

Quercus Court
Armstrong Way
Yate
BS37 5NG

www.dustquip.co.uk
info@dustquip.co.uk