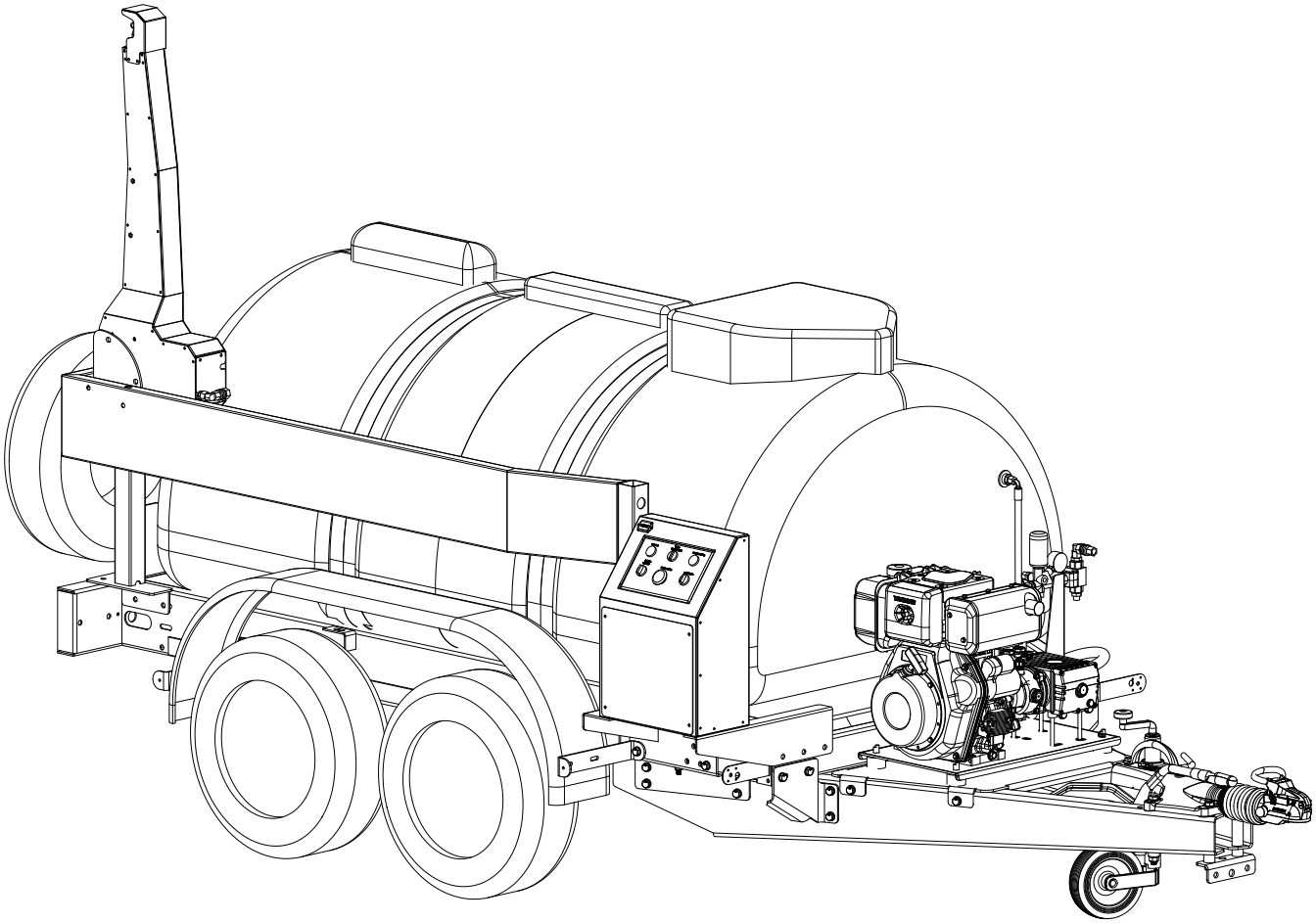
OPERATION & MAINTENANCE MANUAL



JetMister Series JMRT35-440 Road Tow Portable Dust Suppression Machines

10/22
Manufactured by Dustquip Ltd
Part No: O&M-JMRT-440-01

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

Contents

HOW TO CONTACT US

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INTRODUCTION & GENERAL INFORMATION

INTRODUCTION

Thank you for choosing a Dustquip JetMister

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

By following, understanding and practicing the information and procedures in this manual, your Dustquip JetMister 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 un-authorised 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 misfuelling & incorrect voltage supply

*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.

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.

SAFETY RULES

JetMister Series JMRT35 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 work site 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

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. Pump damage will occur if allowed to run dry

Do not use the machine as a ground for welding

DAMAGED MACHINE HAZARDS

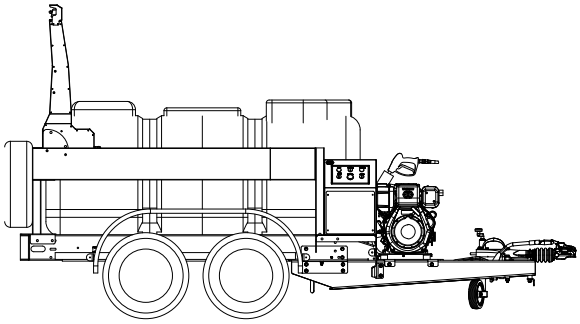
Do not use a damaged or malfunctioning machine

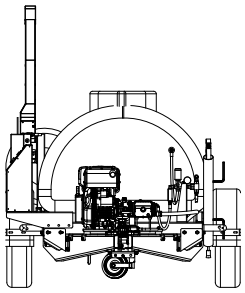
Conduct a thorough pre-operation inspection of the machine and test all functions before work shift. Immediately remove from service a damaged or malfunctioning machine & report it to your company manager/hire provider.

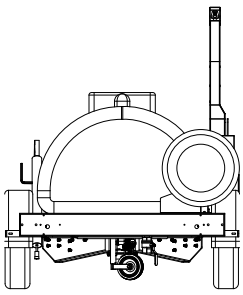
Ensure all maintenance has been carried out as specified in this manual.

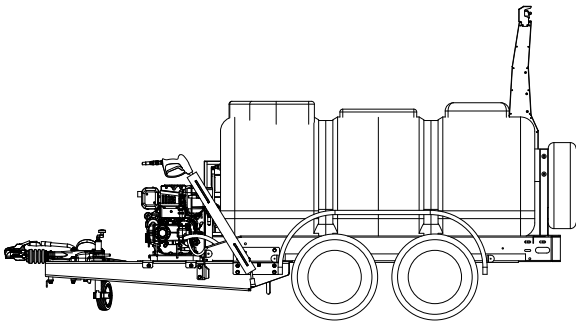
Be sure all decals are in place and legible.

LEGEND



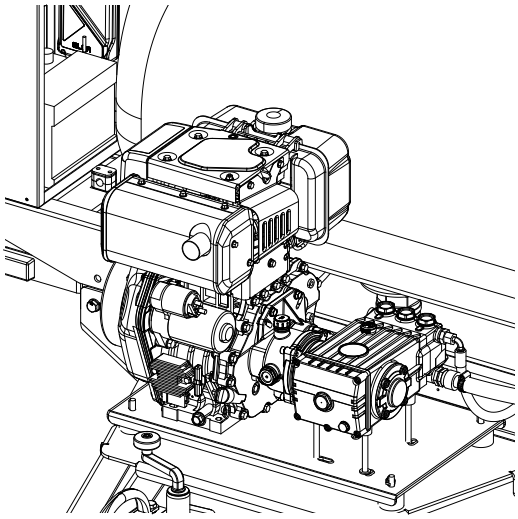


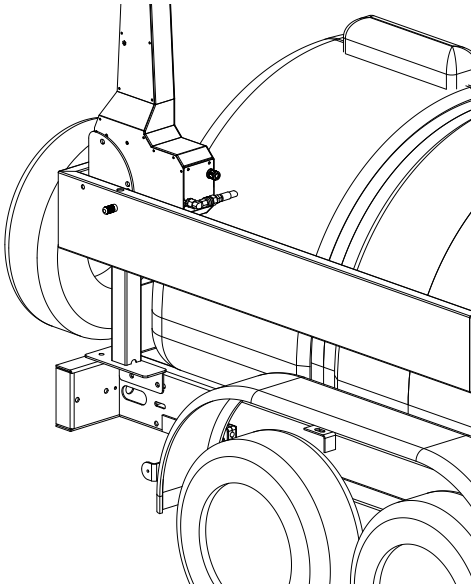


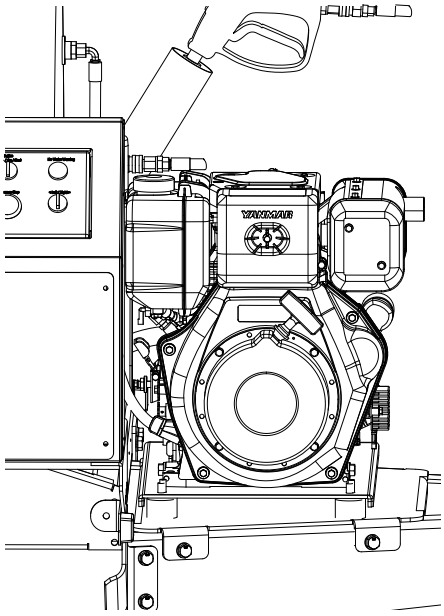


1. Machine Controls
2. Mast & Jet Nozzle
3. Wheels
4. Lifting Eyes
5. Water Inlet
6. Machine Handle

LEGEND (Cont)

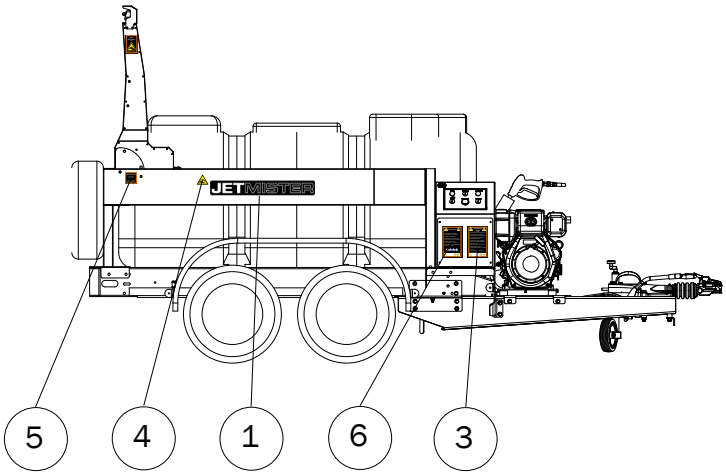


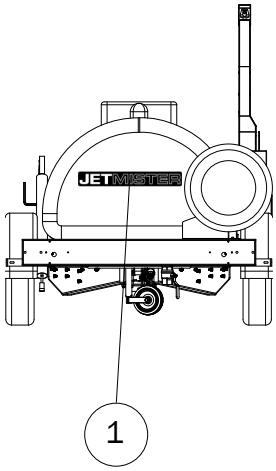


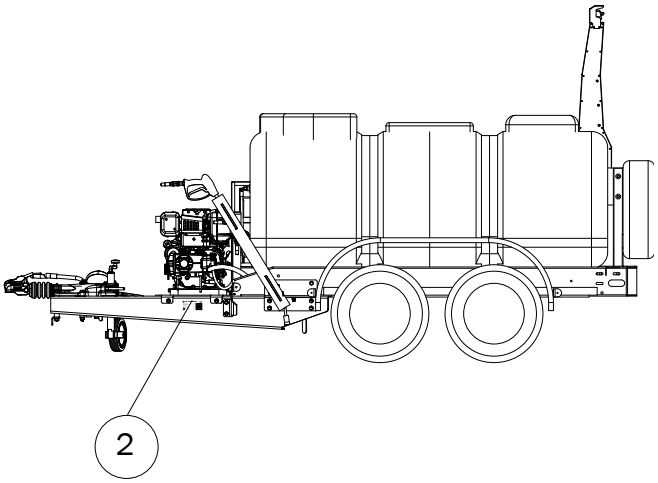


1. Fuel Tank
2. Mast Locking Pin
3. Engine Oil Plug
4. Gearbox Oil Level
5. Pump Oil Level
6. Throttle Lever
7. Recoil Start Handle
8. Fuel Switch

DECALS

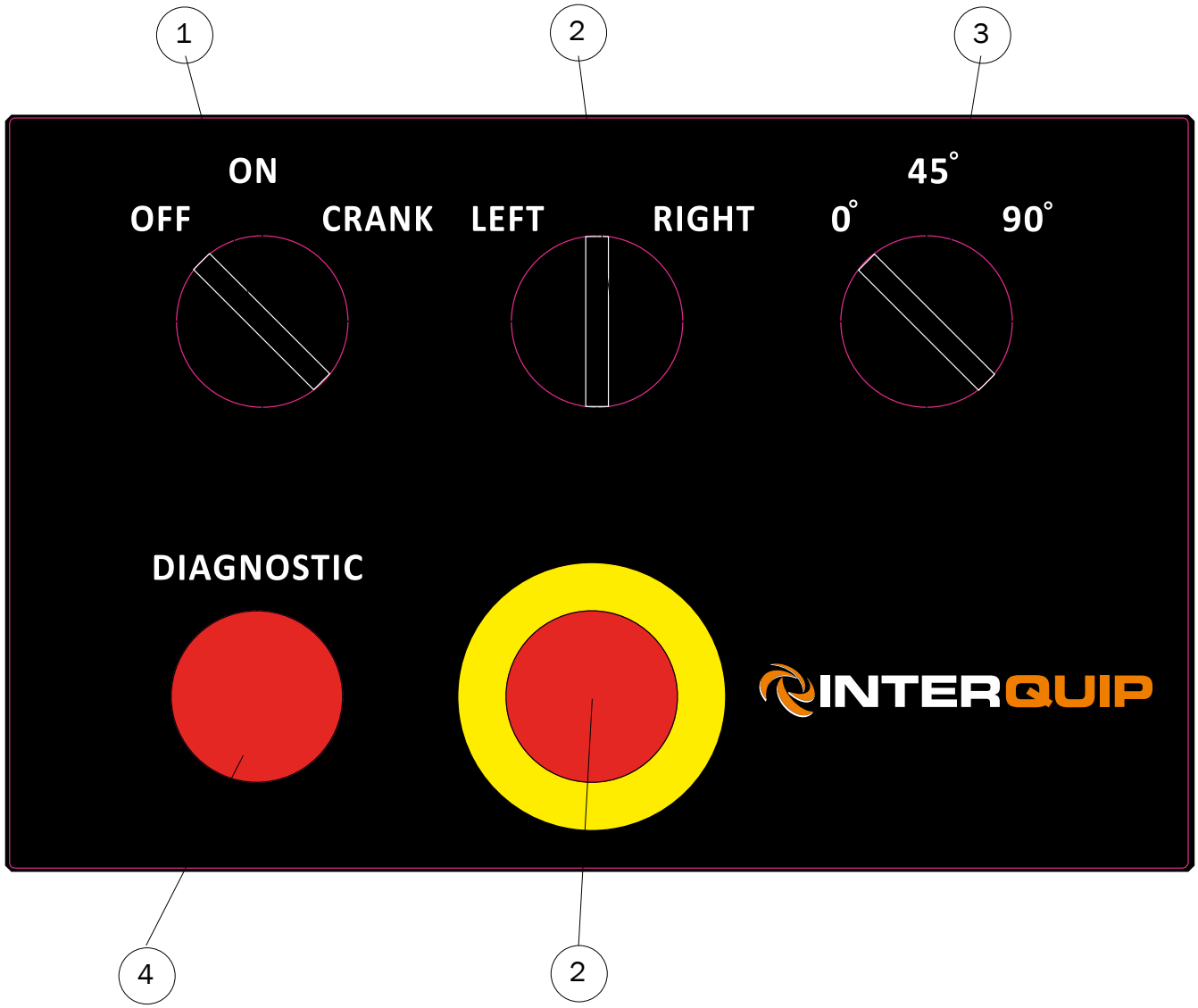






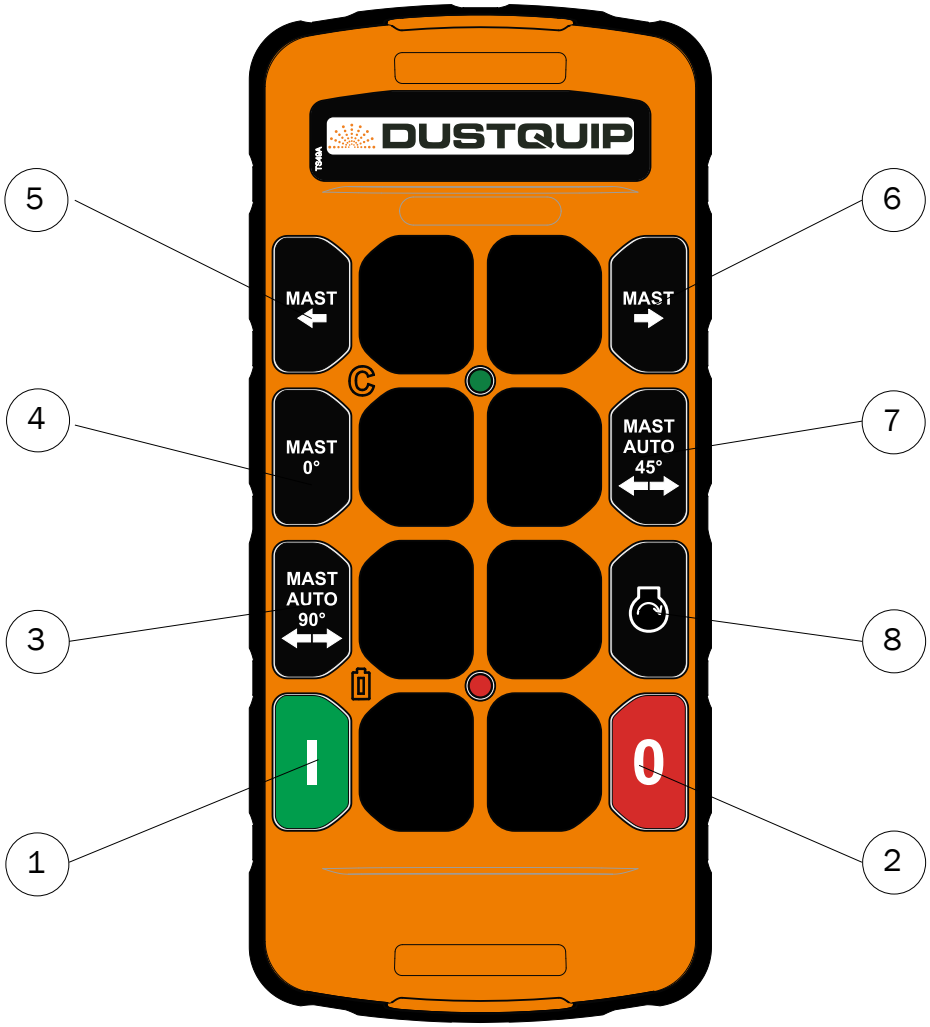
1. JetMister Decal
2. Serial Plate
3. Safe Use Decal
4. Pinch Point
5. Locking Pin Decal
6. Operation Decal

CONTROLS (Local)



1. Ignition Switch
2. Mast Manual Left/Right Position Switch
3. Auto Oscillate Angle Switch
4. Diagnostic Lamp
5. Emergency Stop Switch

CONTROLS (Remote)



1. Power on Remote
2. Turn off Remote & Machine
3. Mast Oscilate 90° Auto
4. Mast Stop Oscilate
5. Rotate Mast Left (manual)
6. Rotate Mast Right (manual)
7. Mast Oscilate 45° Auto
8. Start Engine

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 maintance procedures are required. Only routine maintnance 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 fuel tank is full of fuel, oil levels are correct and the mast locking pin secures the mast in place

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. Battery, terminals tight & not damaged
4. Engine oil level
5. Gear box oil level
6. Pump oil level
7. Fluid leaks
8. Fuel level
9. Fuel leaks
10. Wheels & tyres
11. Park brake
12. Safety interlocks

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

BURN HAZARD:

Keep your hands and other body parts away from hot engine surfaces such as the muffler, exhaust pipe and engine block during operation and shortly after you shut the engine down. These surfaces are extremely hot while the engine is operating and could seriously burn you

Failure to comply could result in death or serious injury.

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.

FIRE AND EXPLOSION HAZARD:

- Diesel fuel is extremely flammable and explosive under certain circumstances.
- Only fill the fuel tank with diesel fuel. Filling the fuel tank with petrol or gasoline may result in a fire

FIRE AND EXPLOSION HAZARD (Cont):

- Never refuel with the engine running.
- Wipe up all spills immediately
- Keep sparks, open flames or any other form of ignition (match, cigarette, static electricity source) away when fuelling/refuelling
- Never overfill the fuel tank
- Fill the fuel tank and store fuel in well ventilated place only
- Be sure to place the diesel fuel container on the ground when transferring the diesel fuel from the pump to container. Hold the hose nozzle firmly against the side of the container while filling it. This prevents static electricity build-up which could cause sparks and ignite fuel vapours
- Never place diesel fuel or other flammable material such as oil, hay or dried grass close to the engine during engine operation or shortly after operation.
- Before you operate the engine, check for fuel leaks. Replace rubberized fuel hoses every 2 years or every 2000 hours of engine operation, whichever comes first.
- Do not let fuel level exceed the fuel level mark on the fuel filter (inlet) of the fuel tank filler port. The fuel may expand when the ambient temperature is high, and overflowing the fuel cap
- Failure to comply will result in death or serious injury.

HIGH-PRESSURE HAZARD:

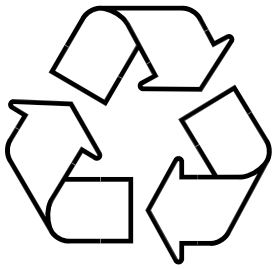
- Avoid skin contact with high pressure diesel fuel spray caused by a fuel system leak such as a broken fuel injection line. High pressure fuel can penetrate your skin and result in serious injury. If you are exposed to high pressure fuel spray, obtain prompt medical treatment.
- Never check for a fuel leak with your hands. Always use a piece of wood or cardboard. Have your authorized dealer or manufacturer repair the damage
- Failure to comply could result in death or serious injury.

ENGINE SERVICE INTERVALS:

Please refer to the Yanmar Engine Manual for service intervals & detailed maintenance instructions. A copy of the Yanmar Engine Manual is supplied with the machine

Basic points are covered in this manual. Please use this manual in conjunction with the Yanmar Engine Manual

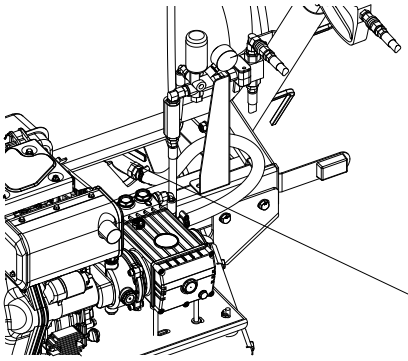
Statuary regulations and requirements are also contained in the Yanmar Engine Manual



ENVIRONMENTAL RESPONSIBILITY:

- Be environmentally responsible. Follow these procedures along with your environmental policy for hazardous waste disposal. Failure to follow these procedures may seriously harm the environment.
- Follow the guide lines of the relevant environmental department in your country (EPA in USA and EA in UK etc) for the proper disposal of hazardous materials such as engine oil, diesel fuel and engine coolant. This includes used filters. Consult the local authorities or reclamation facility
- Never dispose of hazardous materials irresponsibly by dumping them into a sewer, on the ground or into ground water or waterways

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 SUPPLY TURNED OFF AND ENGINE OFF

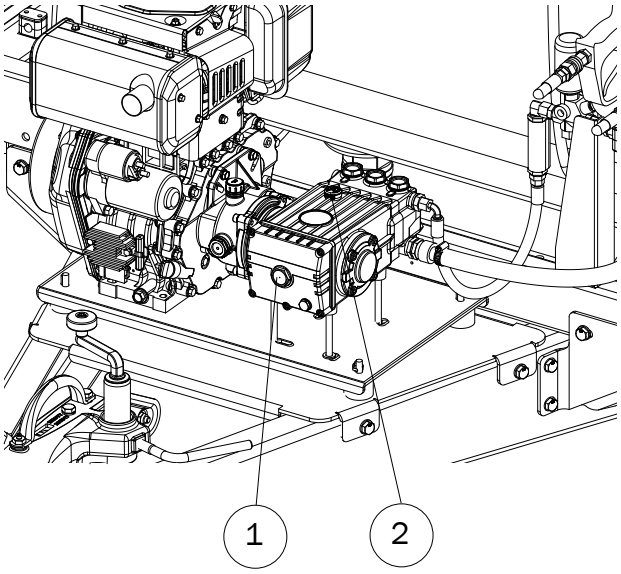
Tools Required:

- Adjustable spanner

1. Loosen the Y strainer access plug using a suitable spanner
2. Carefully unwind the plug and withdraw the filter gauze from filter body
3. Clean gauze with clean water
4. Insert the gauze back into the filter body, screw in the access plug ensuring the gasket is in place and in good condition
5. Tighten access plug

CHECK OIL LEVEL

Pump



Ensuring the pump has the correct oil level is essential to prevent possible pump damage. The oil level can be observed through the sight glass (1). The level can be topped up via the oil port (2).

The correct oil level is approx halfway up the sight glass.

The correct oil grade can be found in the specifications section of this manual

NOTICE

CHECK OIL WITH WATER TURNED OFF AND ENGINE OFF

Tools Required:

- None

CHECK OIL LEVEL (Cont)

Pump

1. Check oil level and condition via the sight glass (1).
2. If oil is required, remove the vent plug by twisting anti-clockwise until it is free of the pump housing
3. Pour the correct grade oil into the pump until the level reaches approx half way up the sight glass
4. Refit vent plug & tighten

OIL APPEARANCE

Should the oil take on a milky appearance please contact your Dustquip repair centre. This could indicate internal pump seal failure & water contamination. The machine must be taken out of service until the pump has been inspected & repaired if necessary.

If the oil has taken on a dark brown/black appearance an oil change is recommended. Oil discolouration will occur during normal operation - this is to be expected

The oil should have a bright clear golden appearance.

CHECK OIL LEVEL

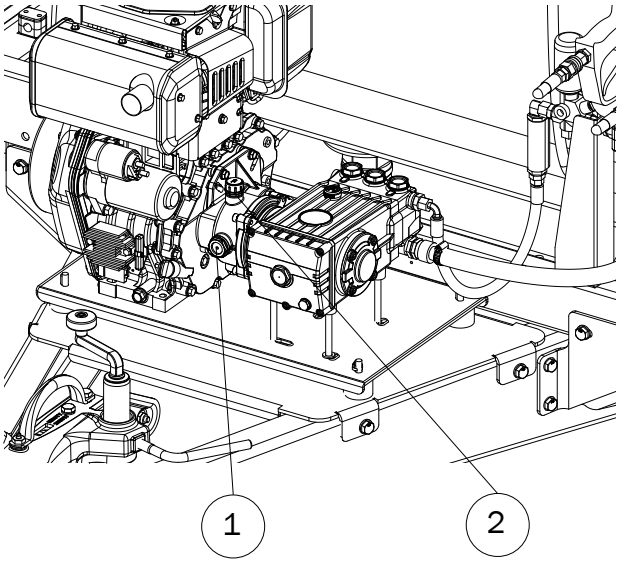
Gearbox

NOTICE

CHECK OIL WITH WATER TURNED OFF AND DISCONNECTED & ENGINE OFF

Tools Required:

- None



Ensuring the gearbox has the correct oil level is essential to prevent possible gearbox damage. The oil level can be observed through the sight glass (1). The level can be topped up via the oil port (2).

The correct oil level is approx half way up the sight glass.

The correct oil grade can be found in the specifications section of this manual

1. Check oil level and condition via the sight glass (1).
2. If oil is required, remove the vent plug by twisting anti-clockwise until it is free of the pump housing
3. Pour the correct grade oil into the pump until the level reaches approx half way up the sight glass
4. Refit vent plug & tighten

CHECK OIL LEVEL (Cont)

Gearbox

OIL APPEARANCE

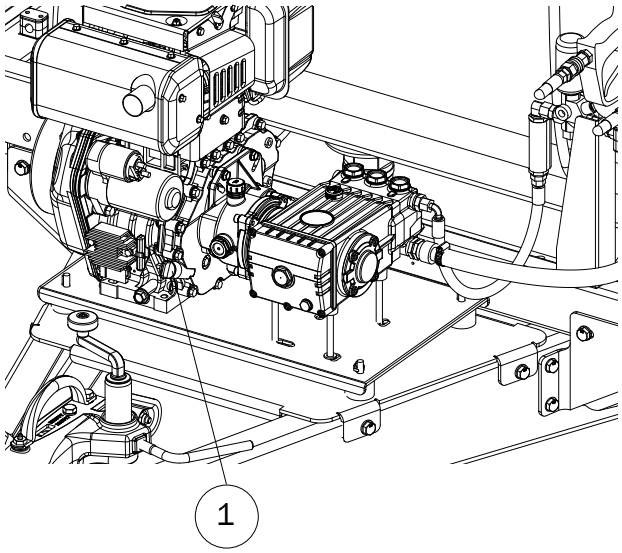
Should the oil take on a milky appearance please contact your Dustquip repair centre. This could indicate internal seal failure & water contamination. The machine must be taken out of service until the machine has been inspected & repaired if necessary.

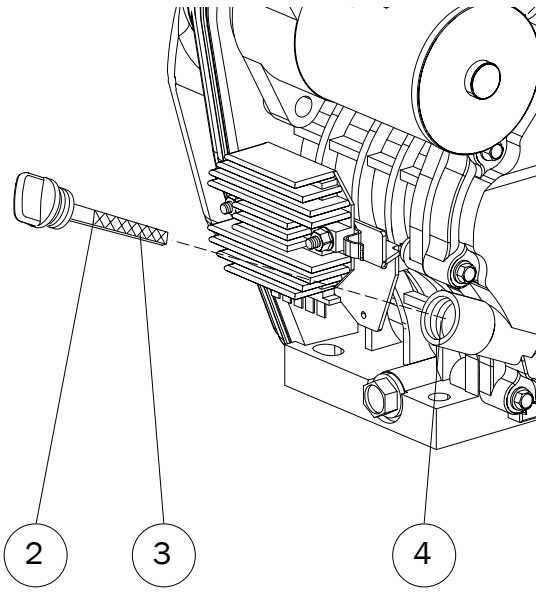
If the oil has taken on a dark brown/black appearance an oil change is recommended. Oil discolouration will occur during normal operation - this is to be expected

The oil should have a bright clear golden appearance.

CHECK OIL LEVEL

Engine





Ensuring the engine has the correct oil level is essential to prevent possible engine damage. The oil level can be observed by removing the oil cap.

The correct oil grade can be found in the specifications section of this manual

Checking Engine Oil

1. Ensure the engine is level
2. Remove oil cap/dipstick (1) from either location and wipe with a clean cloth
3. Fully reinsert the oil/cap (*Do not screw in*)
4. Remove oil cap/dipstick. The oil level should be between upper (2) and lower (3) lines on the oil cap/dipstick
5. Fully reinsert the oil cap/dipstick and hand tighten. Over-tightening the oil cap/dipstick will damage it

Adding Engine Oil

1. Ensure the engine is level
2. Remove oil cap/dipstick (1)
3. Add indicated amount of engine oil at either one of the engine oil filler ports (4)
4. Wait one minute and check oil level
5. Add more oil if necessary
6. Fully reinsert the oil cap/dipstick (1) and hand tighten. Over-tightening the oil cap/dipstick will damage it

CHECK OIL LEVEL (Cont)

Engine

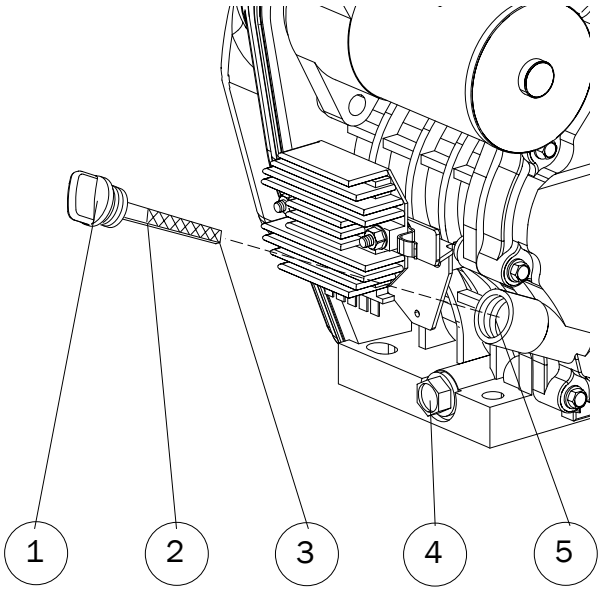
NOTE

- Only use the engine oil grade specified. Other grades may cause internal engine damage
- Prevent dirt and debris from contaminating the engine oil
- Never mix different types of engine oil. This could cause internal engine damage
- Never overfill. Overfilling may result in white exhaust smoke, engine over-speed or internal damage

DRAIN OIL

NOTICE

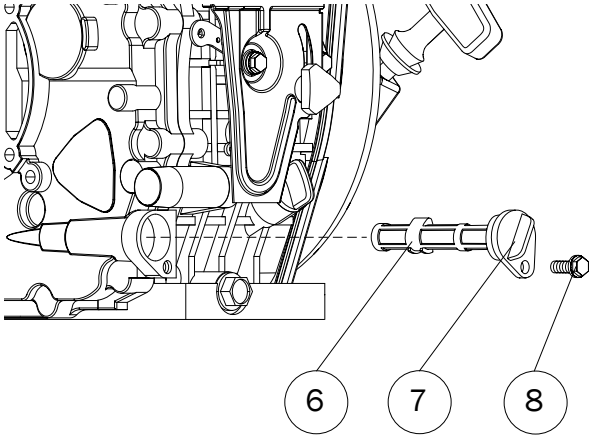
CHANGE OIL WITH THE ENGINE OFF. ENGINE WILL BE HOT



Drain the engine oil as follows:

1. Make sure the engine is level
2. Start the engine and bring it up to operating temperature
3. Stop the engine
4. Remove the oil cap/dipstick (1) to allow the engine oil to drain more easily
5. Position a container under the engine to collect waste oil
6. Remove the drain plug located on the bottom of the cylinder block (4). Allow oil to drain
7. After all oil has been drained from the engine, install the drain plug (4) and tighten to 19.6 - 23.5 NM)
8. Dispose of oil properly

REPLACE ENGINE OIL FILTER



Replace the engine oil filter as follows:

1. Remove the oil filter retaining bolt (8)
2. Pull the oil filter cap (7) out and remove the oil filter (6).
3. Install the new oil filter (7)
4. Make sure the oil filter cap is fully seated (2)
5. Install and tighten the oil filter retaining bolt (8)
6. Add new engine oil as specified in *Adding Engine Oil* on page 19

REPLACE ENGINE OIL FILTER (Cont)

NOTE

- Never overfill the engine with engine oil
- Always keep the oil level between the upper and lower lines on the oil cap/dipstick

7. Warm up the engine by running it for 5 minutes and check for any engine oil leaks
8. After engine is warm, shut it off and let it sit for 10 minutes.
9. Re-check oil level & top up if required

FUNCTION TESTS

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

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

FUNCTION TESTS:

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

1. Ensure a water supply is connected to the inlet and turned off
2. Check the fuel tank is full of fuel

AT THE CONTROLS:

1. Ensure the e-stop button is not pressed in and the mast is stowed
2. Turn the power switch to the “ON” possession, the Diagnostic lamp should rapidly flash
3. Turn the centre switch to the “Left” and hold, the nozzle will turn to the left. Release the switch and the nozzle will stop. Ensure the nozzle moves all the way to the left
4. Turn the centre switch to the “Right”, the nozzle will then turn to the right. Release the switch and the nozzle will stop. Ensure the nozzle moves all the way to the right
5. Turn the right switch to “45” the nozzle will cycle left to right through 45 degrees.
6. Turn the right switch to “90” the nozzle will cycle left to right through 90 degrees.
7. Set the right switch back to “0”
8. Turn the power switch to “Crank” - the engine will not try and start.
9. Ensure fuel is turned on, lift the mast and start the engine.
10. With the water turned off, the engine will run for aprox 10 seconds and shut down
11. Check the “Diagnostic” lamp flashes slowley
12. Turn on water supply
13. Turn the power switch to “Off” and then back to “On” to reset the controller
14. Ensure the area where water will be discharged is clear
15. Turn the power switch to “Crank” and start the engine
16. Check the nozzle is discharging correctly & no leaks from pipe work
17. Turn engine off, check for pipe work leaks, oil leaks & fuel leaks.
18. Check all fixings are tight & secure

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

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

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

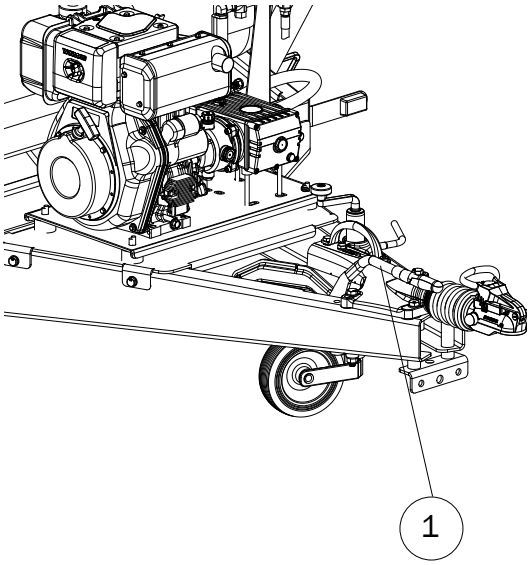
This JetMister is designed to provide water assisted dust suppression for a wide range of dust types. Only clean tap water must be used - please refer to the Legionella section for further information.

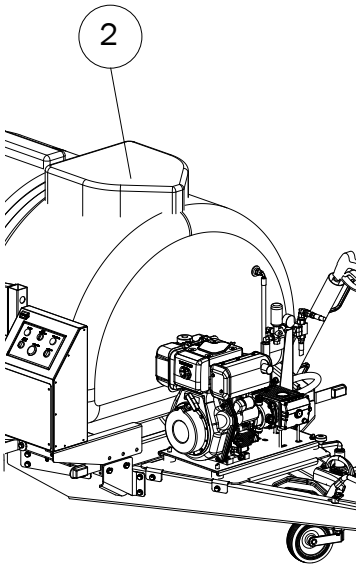
Care must be taken when positioning the machine that the water mist generated by the machine does not cause any unintended damage. Dustquip cannot be held responsible for any damage caused.

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.

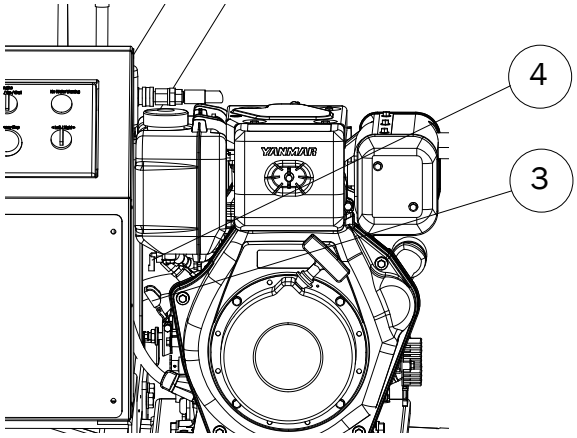
OPERATING INSTRUCTIONS (Positioning & Set up):

1. Before moving the machine, plan your route. Ensure there are not obstacles on your route. Ensure you have adequate resources to complete the set tasks.
2. Only manoeuvre the machine using a suitable road towing vehicle. Use of other plant and machinery (such as dumper trucks & telehandlers etc) for moving the machine will result in serious trailer damage
3. Ensure you handle the trailer in accordance with your B + E Trailer licence training.
4. The park brake must be engaged when de coupled from the towing vehicle

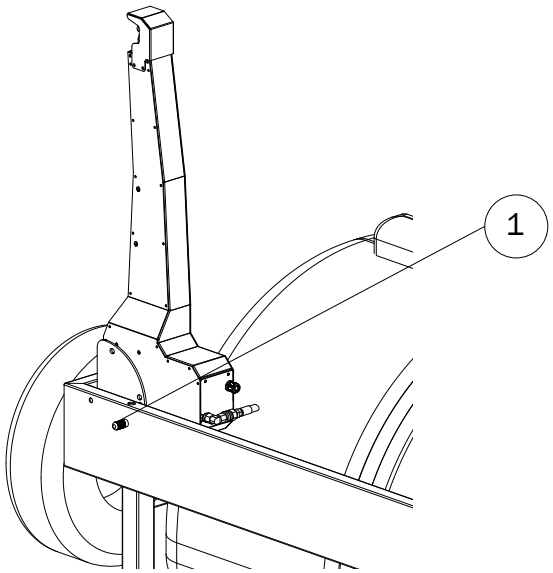




1. Fill the tank fully with water (2) and ensure the supply valve is open (located under the front right corner of the tank)
2. Ensure the throttle (3) is set to half and the fuel tap is open (4)



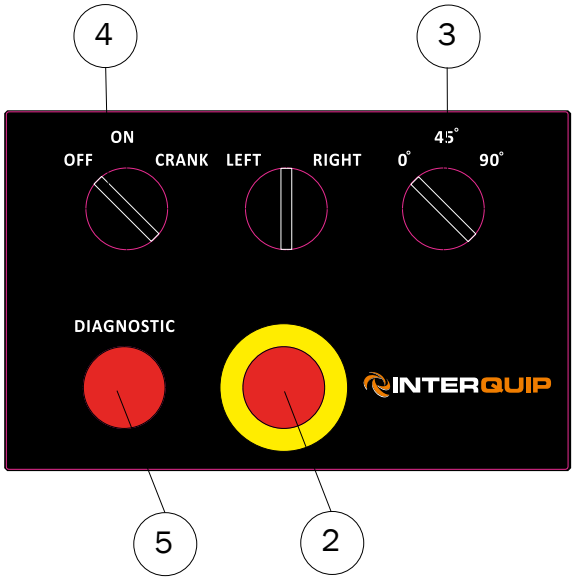
OPERATING INSTRUCTIONS (Starting the engine):



To lift the mast to the required discharge angle:

1. Pull out the Mast Locking Pin and at the same time lift the mast into the upright position, once at the required angle release the locking pin, carefully move the mast forwards until the pin "Clicks" into place. The mast is now locked in the upright position
2. To adjust the angle, pull out the pin and re-locate the mast & release the pin to lock (as above)

NOTE, never adjust the mast while the engine is running - serious injury/death could occur



To Start the machine (From the control panel)

1. Ensure the e-stop button is not depressed (2), the mast is up, throttle is set to half, tank is full of fuel, fuel tap is on and auto oscillation is set to "0" (3)
2. Turn the power switch (4) to the "ON" position
3. The diagnostic lamp (5) will flash rapidly for a few seconds then go solid red. This indicates the engine is ready to be started
4. Turn the power switch (4) to crank and hold in position until the engine has started.

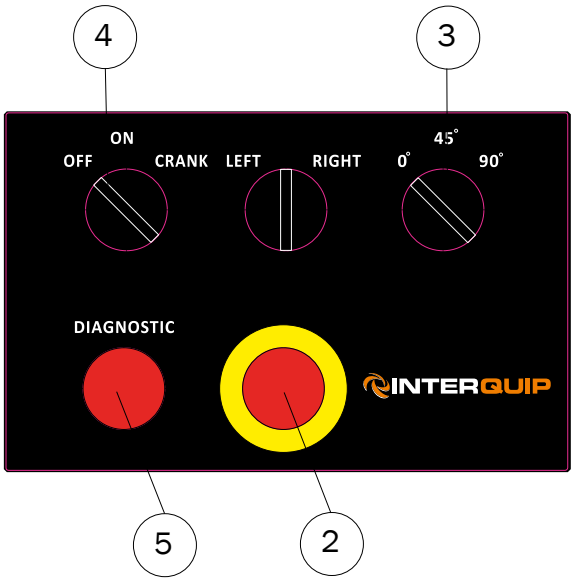
NOTE, never try to crank the engine for more than 15 seconds at a time

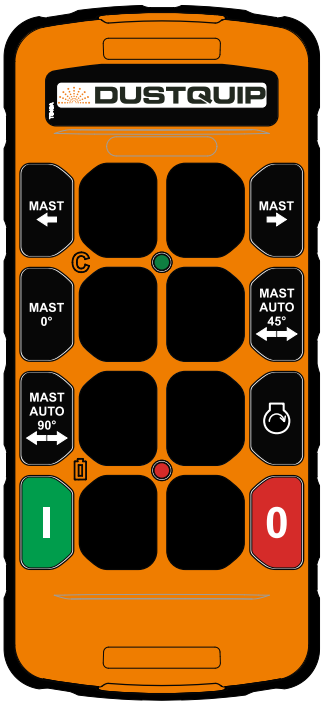
Low water shutdown:

The machine is equipped with a low water shut down feature, if the machine shuts down on first start follow the below procedure:

1. Set power switch (4) to off and back to on
2. Crank engine to restart & release switch
3. Should the engine shut down again repeat steps 1-2.
4. If the engine repeatedly shuts down check water supply has sufficient pressure & flow rate

OPERATING INSTRUCTIONS
(Starting the engine):





To Start the machine (From the Remote Control)

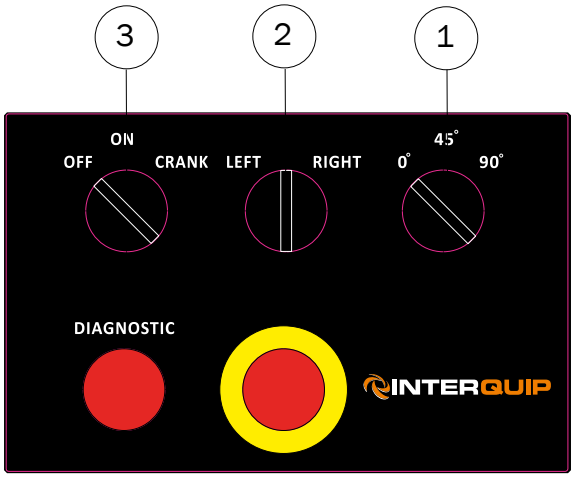
1. Ensure the e-stop button is not depressed (2), the mast is up, throttle is set to half, tank is full of fuel, fuel tap is on and auto oscillation is set to “0” (3)
2. Turn the power switch (4) to the “ON” position
3. The diagnostic lamp (5) will flash rapidly for a few seconds then go solid red. This indicates the engine is ready to be started
4. Press the green power button on the remote control handset (6). The green connected indicator will now rapidly flash (8).
5. Press and hold the Crank button (9), release once the engine has started

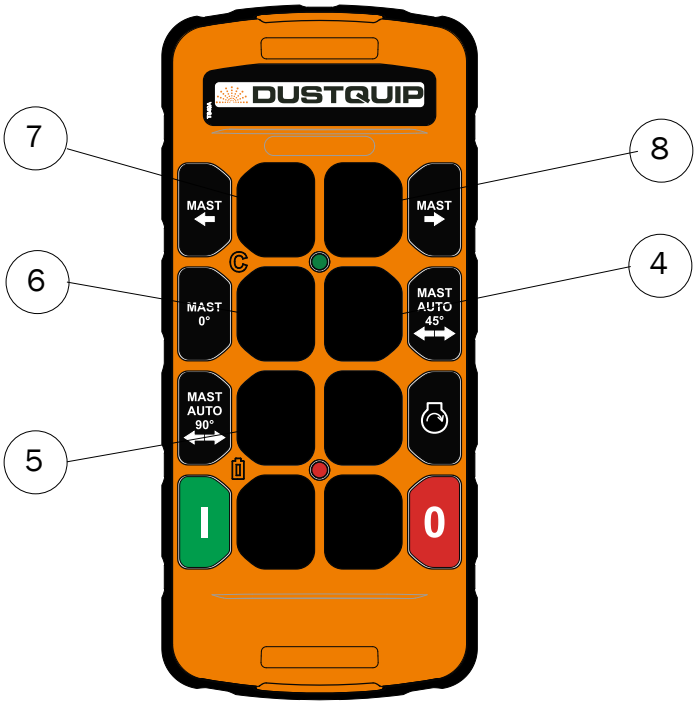
NOTE, never try to crank the engine for more than 15 seconds at a time

Stopping the machine.

1. Turn switch (3) to off, engine will stop (on the control panel)
2. Press the red stop button (10) on the remote control, engine will stop. (NOTE - control panel remains on - ensure power switch is set to the off position. Failure to do so will cause a depleted battery)
3. Turn off fuel switch
4. Turn off water & disconnect supply
5. Stow mast away

OPERATING INSTRUCTIONS (Mast Control):





Setting the Auto Oscillation. (On the control panel)

1. Ensure the engine is running
2. For 45 degree cycle, set switch (1) to 45. The nozzle will cycle from left to right in a 45 degree arc
3. For 90 degree cycle, set switch (1) to 90. The nozzle will cycle from left to right in a 90 degree arc

For Manual nozzle control.

4. Ensure the engine is running & oscillation switch (1) is set to “0”
5. To move the nozzle to the left, hold switch (2) to the left, release switch when nozzle is in the desired location
6. To move the nozzle to the right, hold switch (2) to the right, release switch when nozzle is in the desired location

Setting the Auto Oscillation. (On the remote handset)

1. Ensure the engine is running
2. For 45 degree cycle, press switch (4) to 45. The nozzle will cycle from left to right in a 45 degree arc
3. For 90 degree cycle, press switch (5) to 90. The nozzle will cycle from left to right in a 90 degree arc

For Manual nozzle control.

4. Ensure the engine is running & 0 oscillation button (6) has been pressed
5. To move the nozzle to the left, hold button (7) to the left, release switch when nozzle is in the desired location
6. To move the nozzle to the right, hold button (8) to the right, release switch when nozzle is in the desired location

COLD WEATHER PRECAUTIONS.

NOTE, exposure to low temperatures will cause serious internal damage, the following steps must be carried out to prevent damage

1. Disconnect water supply & drain pipe work of residual water
2. Fill pipe work & pump with suitable anti-freeze
3. Ensure power is turned off

TRANSPORT INSTRUCTIONS

OBSERVE AND OBEY:

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

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 all wheels and are in contact with the surface

Inspect the entire machine for loose or unsecured items

Ensure hoses and lances are secured and placed within the machine

TIE DOWN & STRAPPING:

Only use the lifting eyes for strapping. (If fitted)

DO NOT OVER TIGHTEN STRAPS:

Excessive tension of the straps will cause damage to the machine

SPECIFICATIONS

JM35	
Mist Distance M (Ft) (no wind)	25-30 M (80-100 Ft)
Suface coverage M^2 (ft^2)	500 M^2 (5300 ft^2)
Water Consumption Lpm (gpm)	25-40 Lpm (110 - 178 gpm)
Applications Indoor	Wood chip wetting and stone ballast dust suppression
Applications Outdoor	Demolition, stone ballast dust suppression
Average Water Droplet Size µ	180 micron

	JM35-D
Engine / Voltage / Frequency	Diesel Yamar
Current Consumption	N/A
Power Connection	N/A
Pump Motor Kw	10
Dimensions mm (inch)	3500L x 1560W x 2150H (122”x 61”x 84”)
Weight Kg (Lbs)	Empty 400 KG (880 Lbs)
Number of Nozzles	2
Pump Motor Kw	10Kw
Vertical Tilt Angle	0°- +45°
Oscillation	45° - 90°
Water Supply Connection	3/4” Claw Coupling
Required Water Pressure / min flow	2-5 bar / 40 Lpm
Water quality	Potable / Filtered
Operating Temperture	+2°C - 50°C

Required Oils		
Component	**Specification**	**Volume Required**
Gear Box (if fitted)	SAE90 Gear Oil	0.35l
Pump	SAE 10W40	1.2l
Engine (Yanmar)	SAE 15W40	1.6l

Fuel Specifications (Diesel)*	
Location	
USA	No. 2-D, No. 1-D, ASTM D975
EU	EN590 (2009)
International	ISO 8217 DMX
UK	ISO 8217-A1 or A2

* See following page for Bio-Fuel & HVO specifications

BIO-DIESEL FUELS

BIO-DIESEL FUELS:

In Europe and in the United States, as well as some other countries, non-mineral oil based fuel resources such as RME (Rapeseed Methyl Ester) and SOME (Soybean Methyl Ester), collectively known as FAME (Fatty Acid Methyl Esters), are being used as extenders for mineral oil derived diesel fuels.

Yanmar approves the use of bio-diesel fuels that do not exceed a blend of 7% (by volume) of FAME with 93% (by volume) of approved mineral oil derived diesel fuel. Such bio-diesel fuels are known in the marketplace as B7 diesel fuels.

B7 DIESEL FUELS MUST MEET CERTAIN REQUIREMENTS:

The Bio-fuels must meet the minimum specifications for the country in which they are used

- In Europe & UK, bio-diesel fuels must comply with the European Standard EN14214
- In the USA, bio-diesel fuels must comply with the American Standard ASTM D-6751.

RENEWABLE FUEL OR ALTERNATIVE FUELS:

Any renewable or alternative diesel fuel such as HVO (hydrotreated vegetable oil), BTL (biomass to liquid) or GTL (gas to liquid) are permitted.

Alternative fuels must confirm to UK & EU standard EN15940 or USA ASTM D975.

NOTE, engine performance due to fuel properties is not covered by the warranty

MORE INFORMATION:

Please refer to the engine specific handbook supplied with this manual.

Alternatively please contact Dustquip or local Dustquip dealer

LEGIONELLA HEALTH RISK

DANGER

WATER MISTING CAN CAUSE LEGIONELLA DIESEASE:

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:

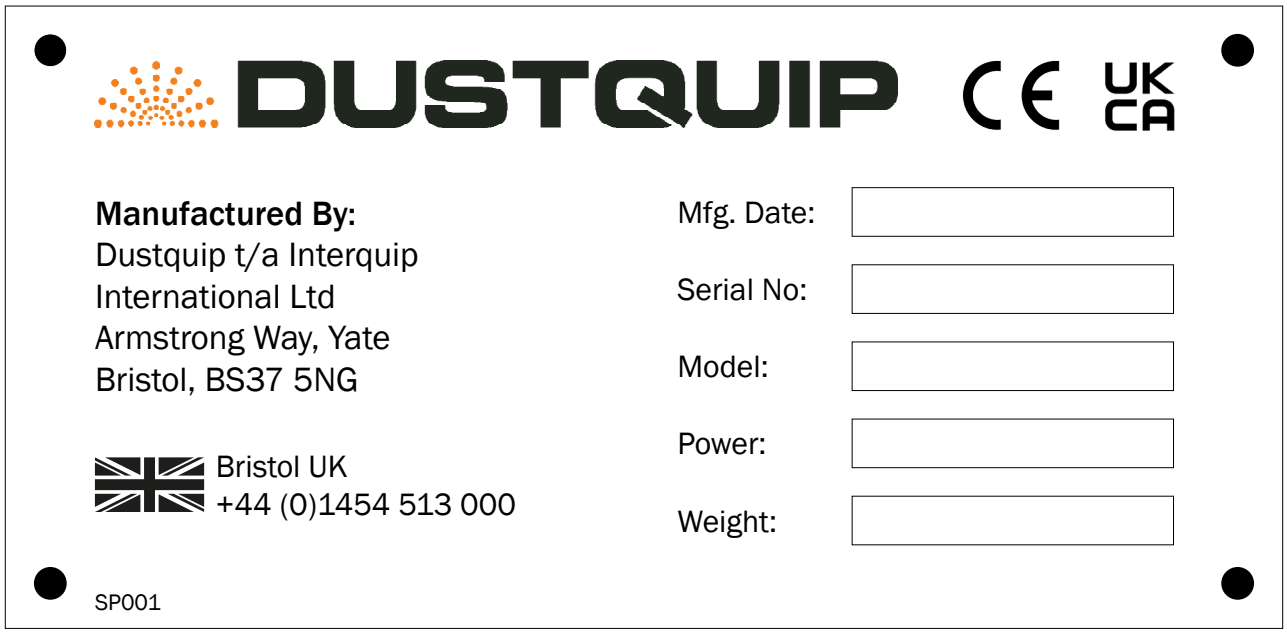
- Drain system and supply tanks when not in use
- Only use drinking water supply
- Follow a Legionella risk assessment that meets the requirements of the local water authority regulations
- Follow regular tank/system cleaning procedures using disinfectant and/or steam.

MANUFACTURERS IDENTIFICATION DATA

Manufacturer	DustquipLtd
Brand	JetMister JMRT35-440
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



Some machines may 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 JetMister Trolley
    b. Model: JM35
    c. Serial: 1000-99999
    d. Specification: Trolley mounted or static diesel/electric powered high Pressure, high flow jet 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

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:

    Position: Director

    Signature: *Neal Davies*

CE DECLARATION OF CONFORMITY

Dustquip Ltd
EC Declaration of Conformity

In accordance with EU Government Guidance

1. Product Model
    a. Product: Mobile JetMister Trolley
    b. Model: JM35
    c. Serial: 1000-99999
    d. Specification: Trolley mounted or static diesel/electric powered high pressure, high flow jet 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

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

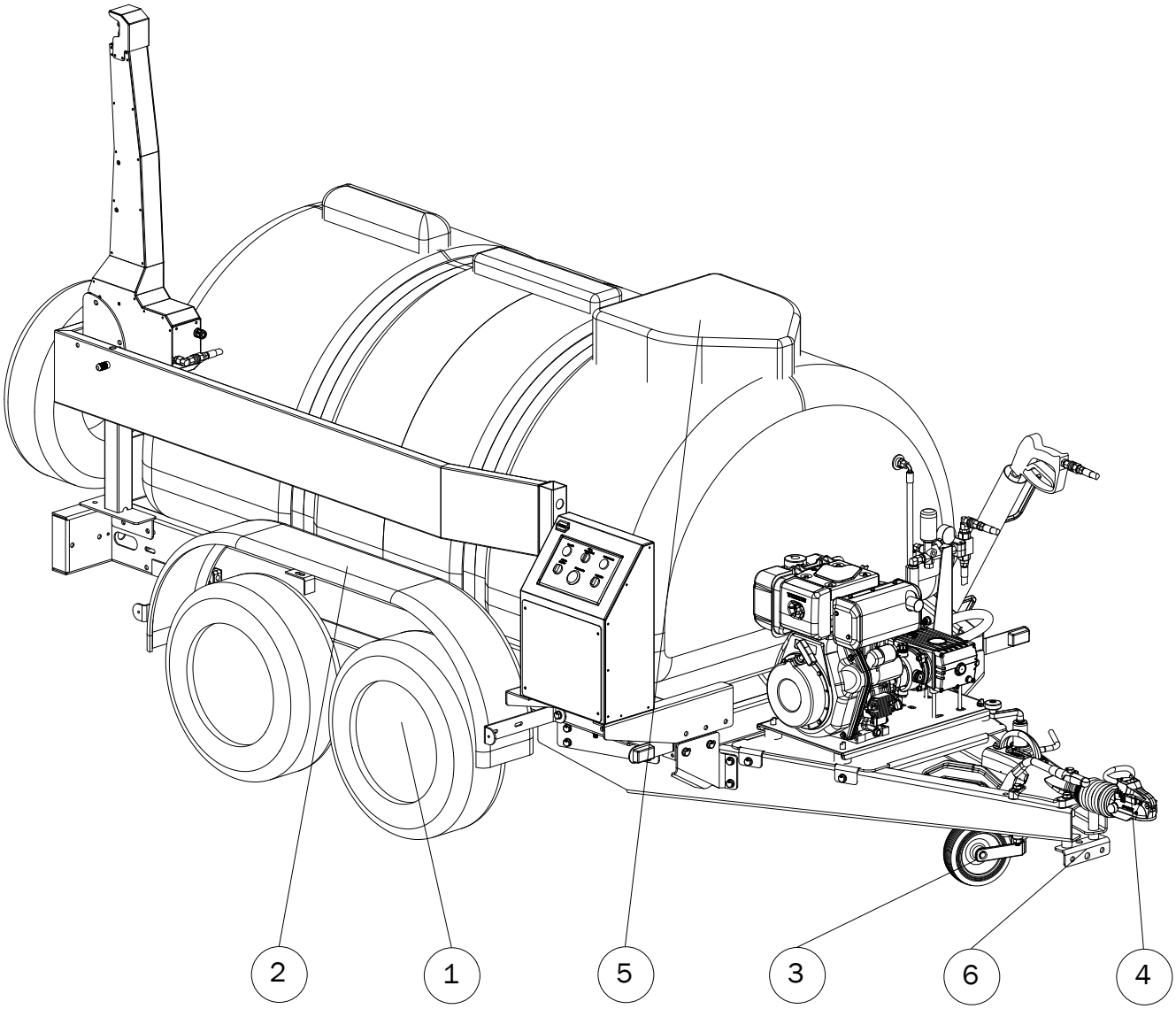
    Name: Dustquip Ltd
    Address: Quercus Court, Armstrong Way, Yate, BS37 5NG
    Signed for & behalf of: Dustquip Ltd
    Place of issue: Yate, United Kingdom
    Name:

    Position: Director

    Signature: *Neal Davies*

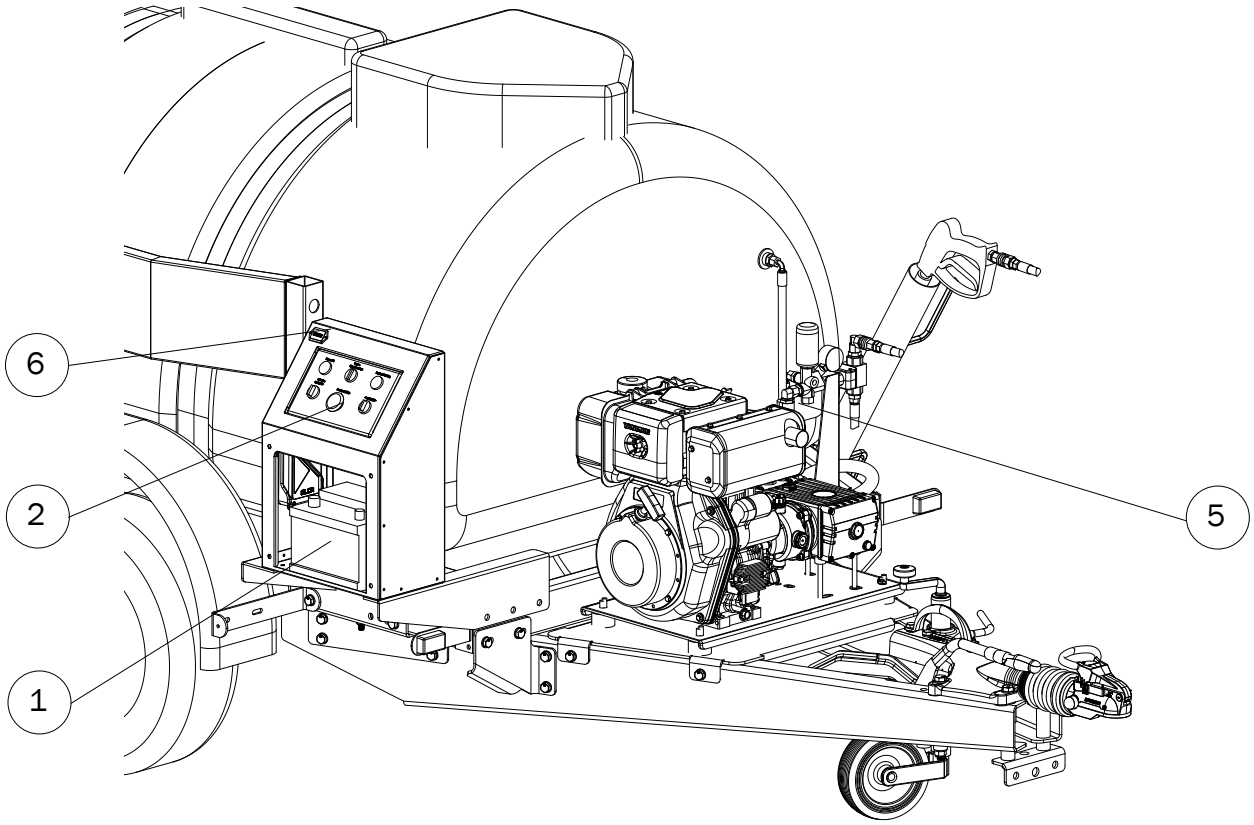
PARTS LISTS

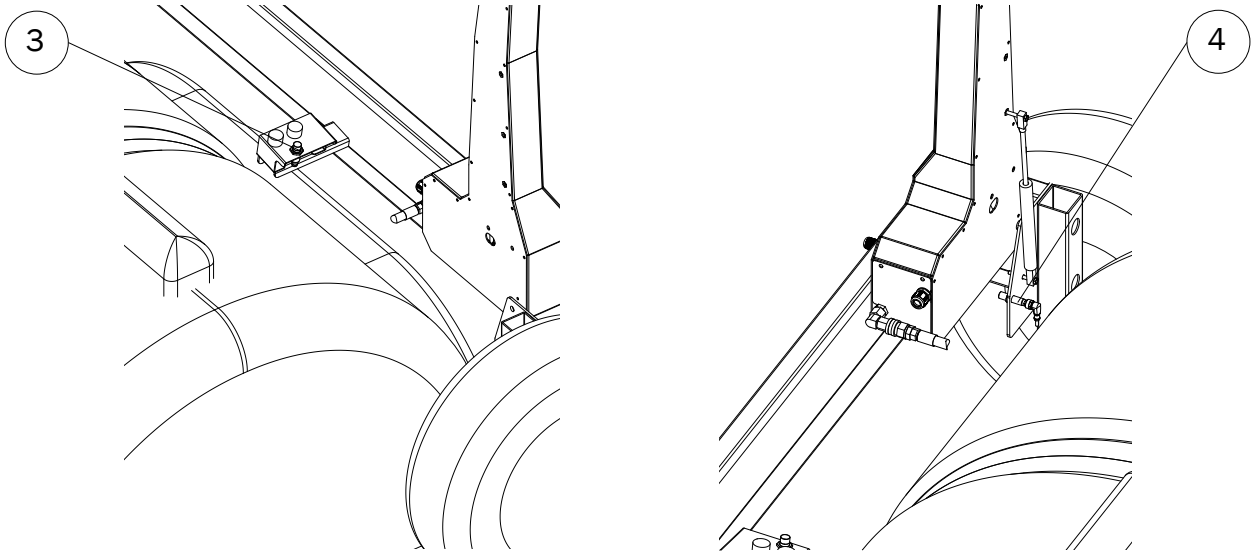
GENERAL (Chassis)



Number	Description	Part Number	Qty
1	Wheel & Tyre Assembly	RGC022	5
2	Mudguard (Pair)	RGC025	1
3	Jockey Wheel	RCG004	1
4	Knott Eye Coupling	RGC023	1
5	Tank lid & Vent	T009	1
6	Breakaway Cable	RGC20	1

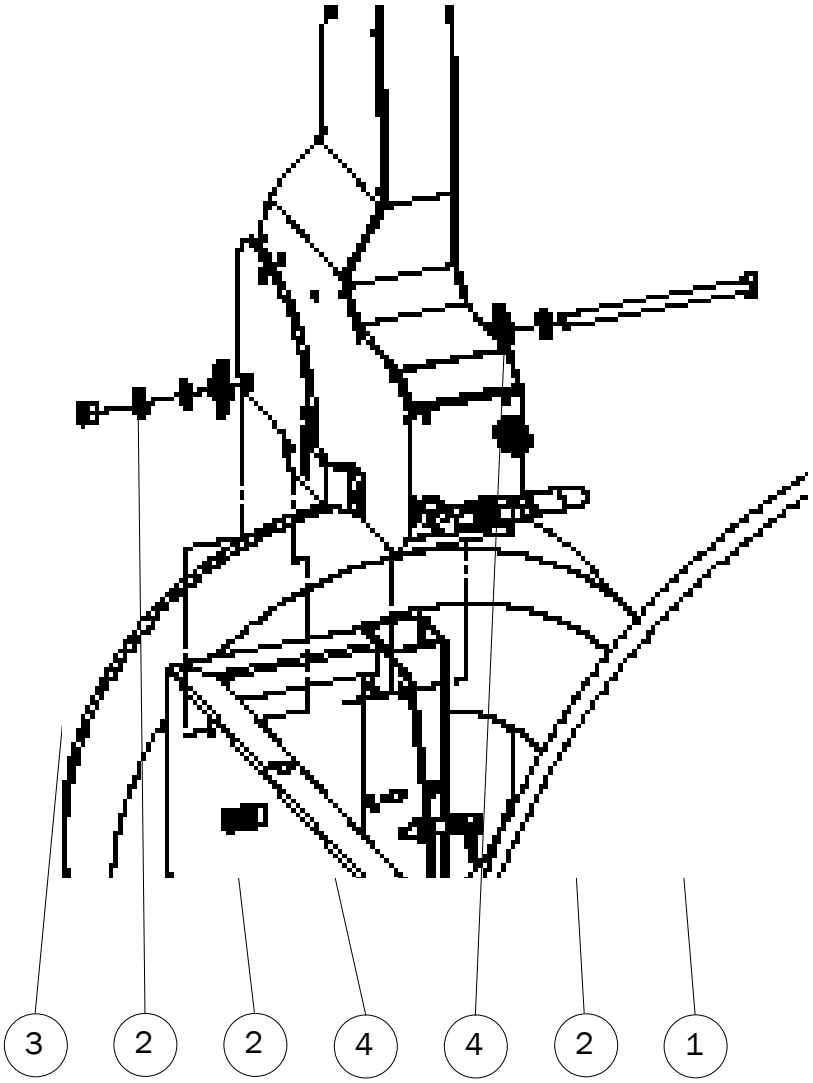
ELECTRICAL





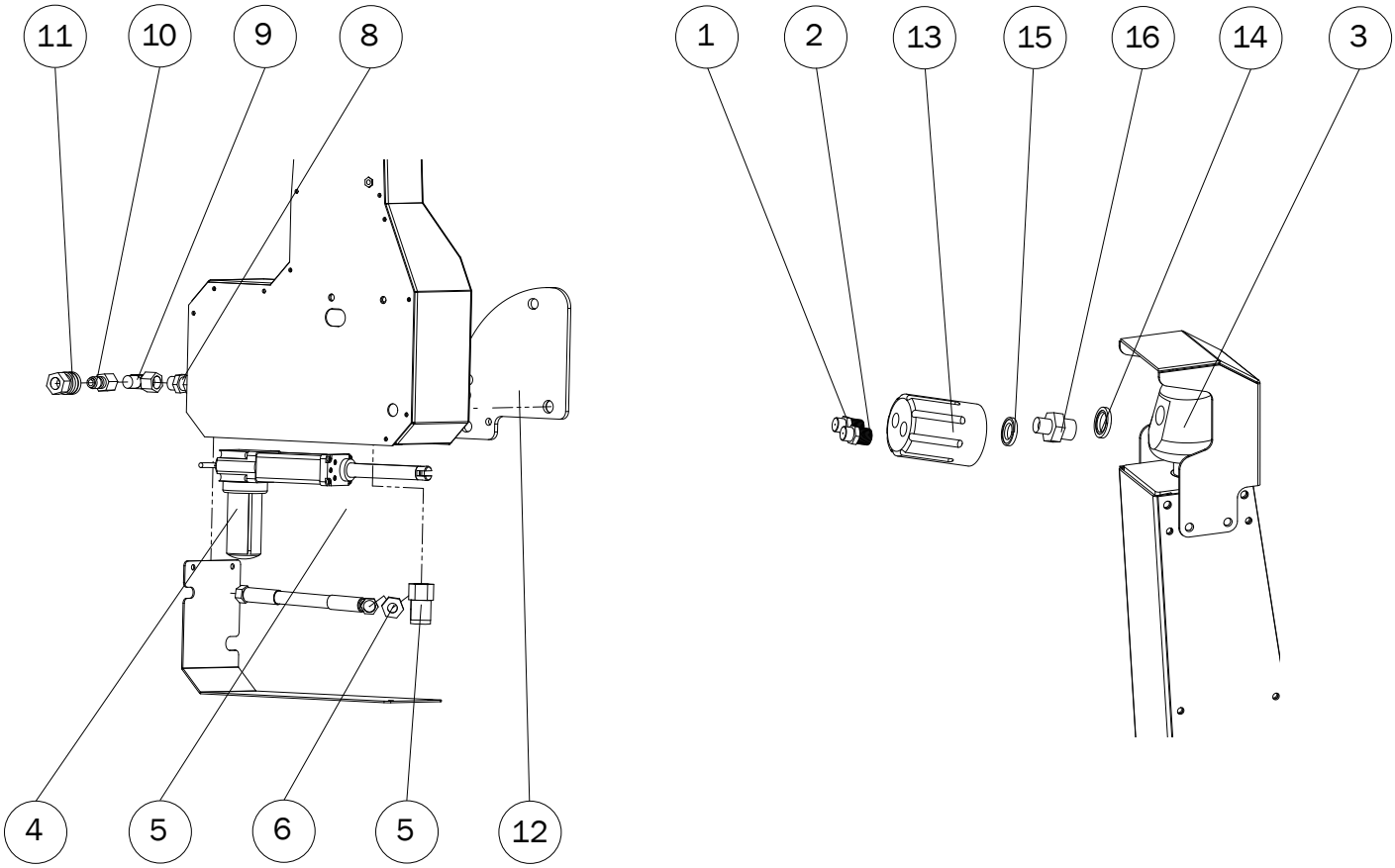
Number	Description	Part Number	Qty
1	12v Battery	EC020	1
2	Control Panel	EA002	1
3	Mast Safety Switch (Version 1)	EC032	1
4	Mast Safety Switch (Version 2)	EC019	1
5	Water Detector Switch	HF-FSWITCH-MV60	1
6	Hour Meter	EC030	1
7	Connecting Cable for item 4	EC018	1

Mast (Mounting)



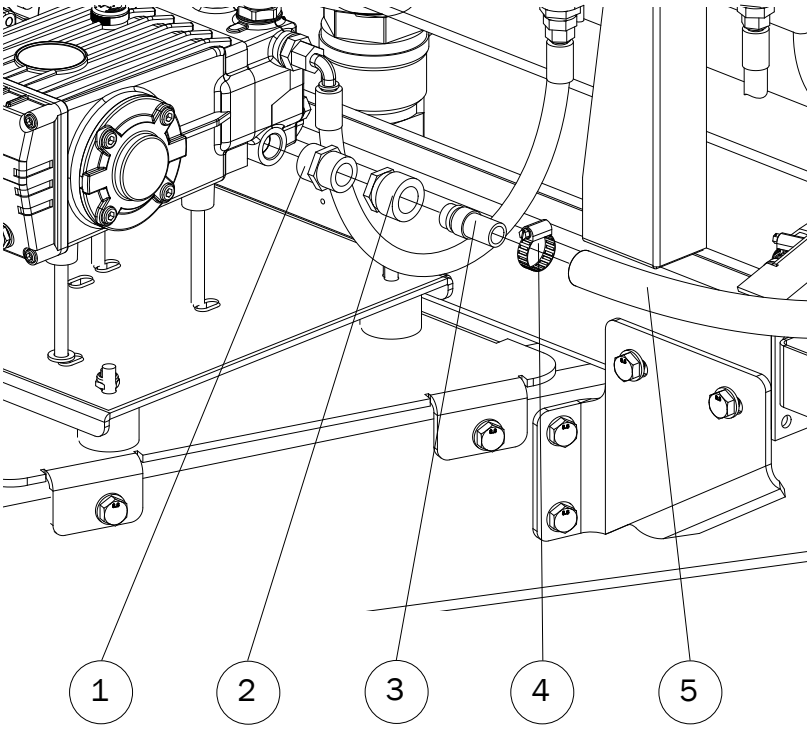
Number	Description	Part Number	Qty
1	Mast Pivot Bolt	FX-HBOLT-M12x200	1
2	Washer	FX-WASHER-C-M12	3
3	Locking Nut	FX-LNUT-M12	1
4	Mast Bearing	BR008	2

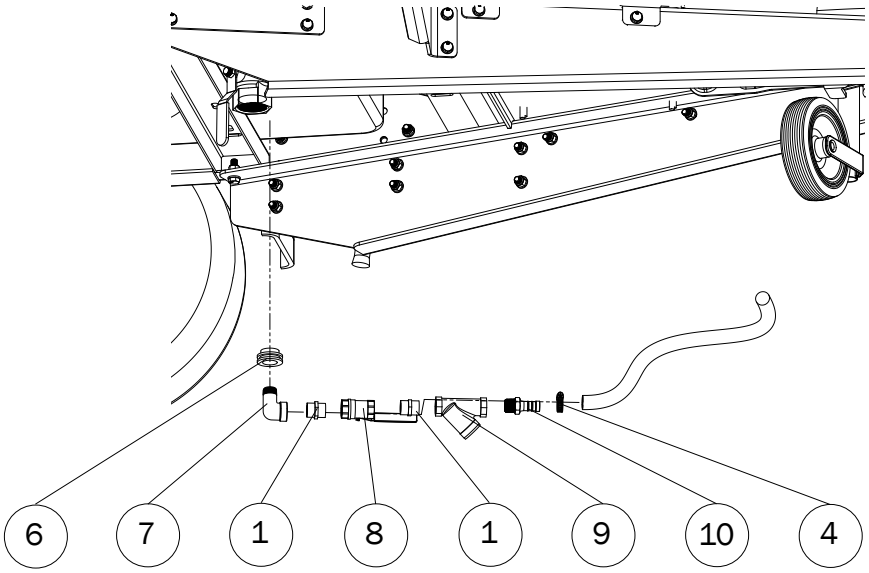
Mast (Main)



Number	Description	Part Number	Qty
1	Jet Nozzle (Low flow)	WG-NOZZLE-0015	1
2	Jet Nozzle (High flow)	WG-NOZZLE-0025	1
3	Nozzle Holder	JM-M-08	1
4	Actuator	EC012	1
5	Mast Hose	HA016	1
6	Adaptor	HF-ADAPTOR-1.2F-3.8M	1
7	Swivel	HF-SWIVEL-1.2F-1.2M	1
8	Coupling	HF-BHEAD-3.8Mx3.8M	1
9	Elbow	HF-ELBOW-3.8-MF-SWIVEL	1
10	QR Coupling (Male)	HF-QRC-M-MIDI-PROBE-3.8F	1
11	QR Coupling (Female)	HF-QRC-F-MIDI-COUPLER-3.8F	1
12	Locking Plate	JM-M-10	1
13	Nozzle Selector	HF-VALVE-2-WAY-NOZZLE	1
14	3.8 Seal	HF-DOWTY-3.8	1
15	1.4 Seal	HF-DOWTY-1.4	1
16	Nipple	HF-NIPPLE-1.4x3.8	1

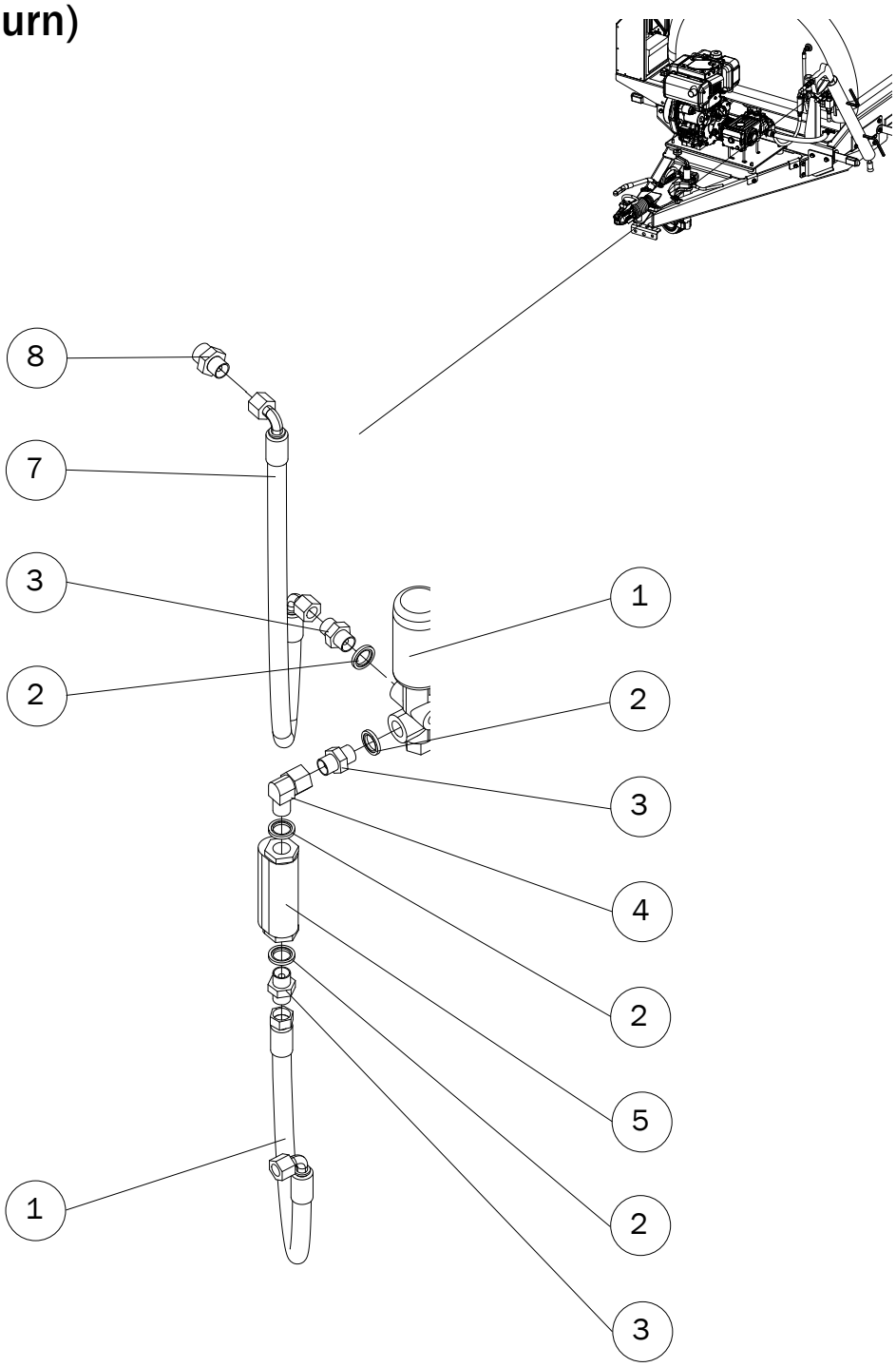
INLET & PUMP





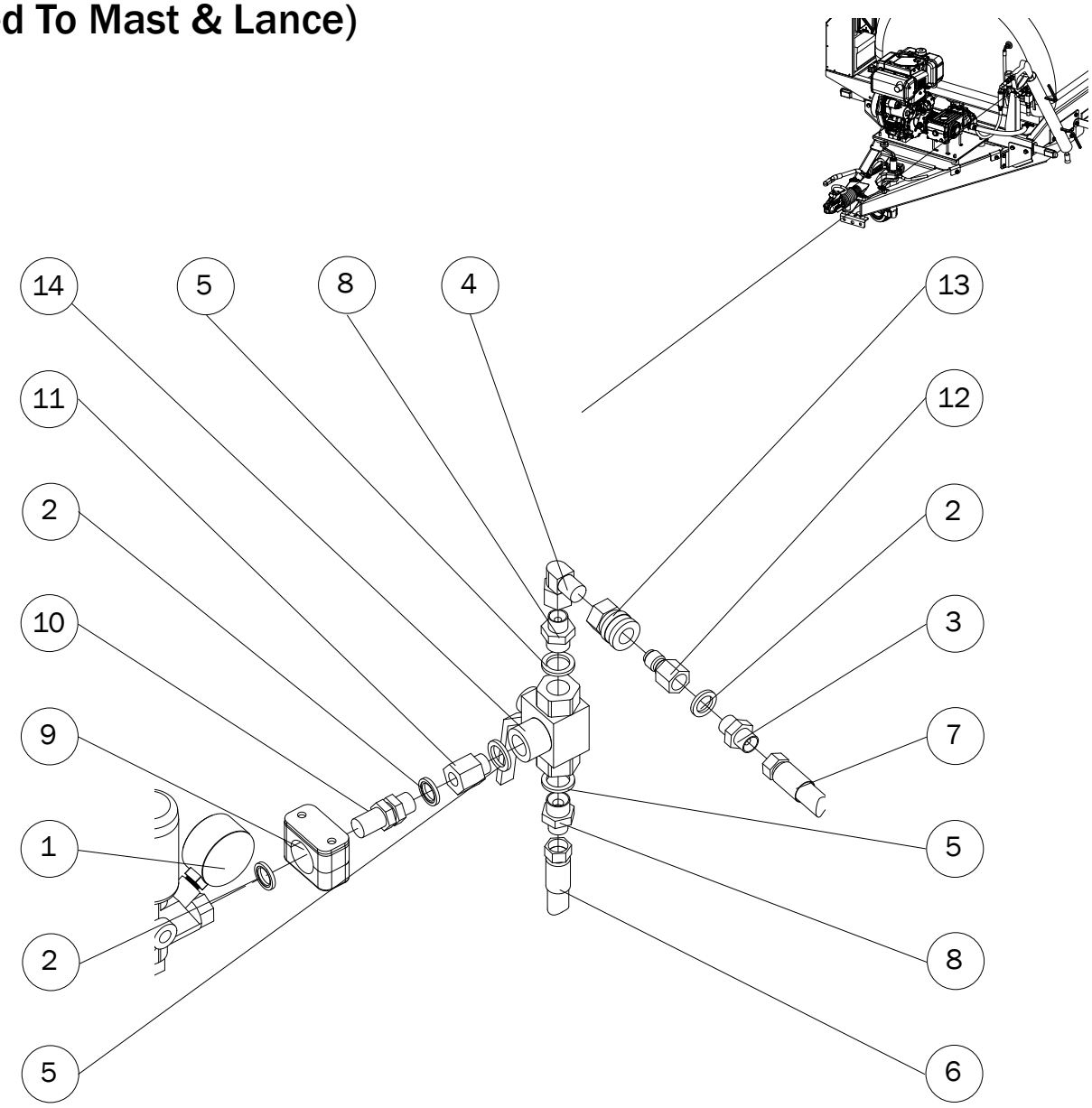
Number	Description	Part Number	Qty
1	Nipple	PW-NIPPLE-HEX-3.4x3.4	3
2	Coupling (Female)	PW-QRC-NITO-COUPLER-3/4X3/4F	1
3	Coupling (Male	PW-QRC-NITO-PROBE-3/4X3/4 HT	1
4	Hose Clip	PW-HOSE-CLIP-25-40	2
5	Feed Hose	H002	1
6	Flange Coupling	PW-FLANGE-3.4	1
7	M/F Elbow	PW-ELBOW-3/4	1
8	F/F Ball Valve	PW-VALVE-FF-3/4	1
9	Strainer	PW-YSTRAINER-3.4	1
10	Hose Tail	PW-BR-HT-3.4BARD-3.4M	1

PRESSURE CONTROLLER
(Feed & Tank Return)



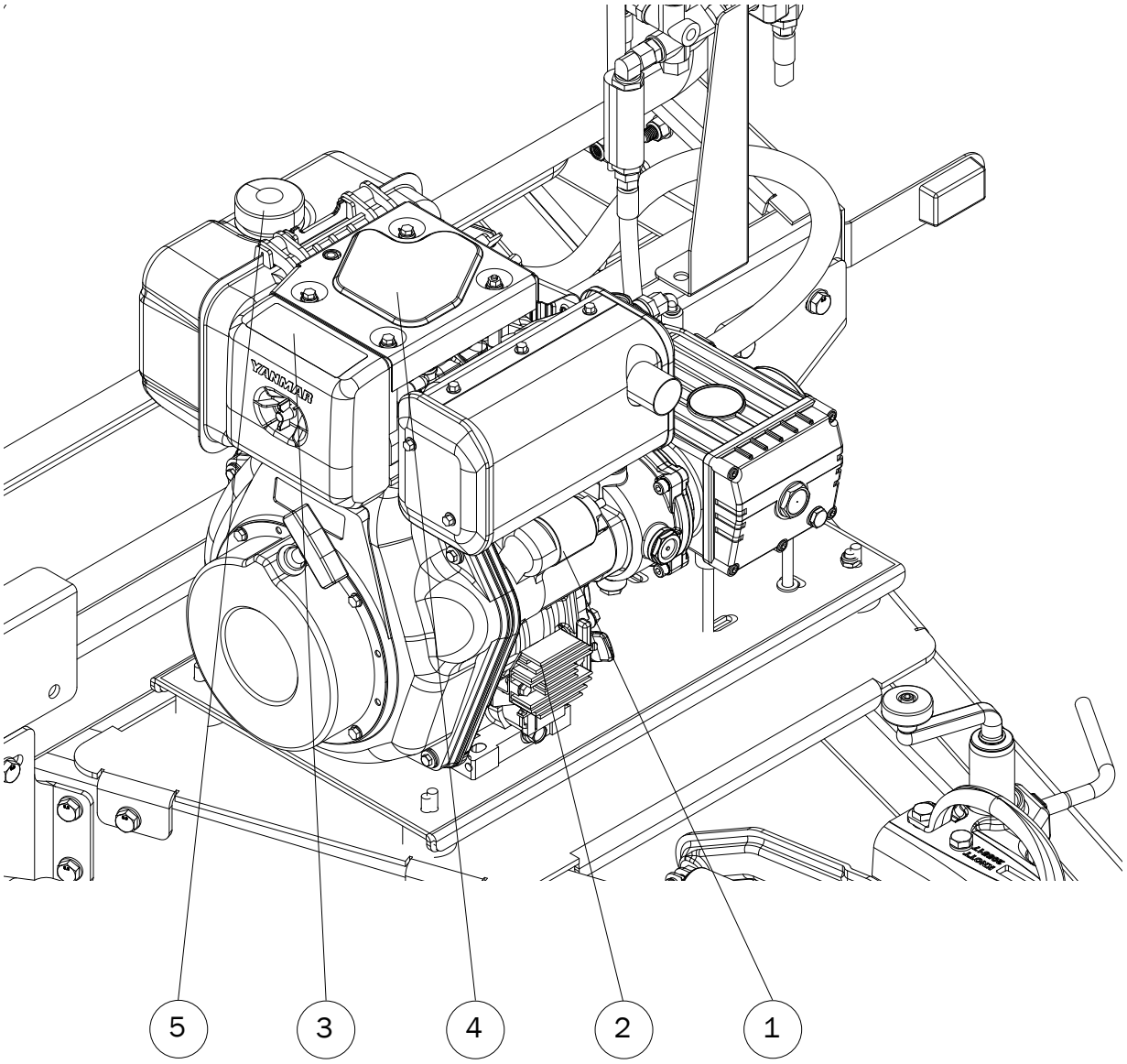
Number	Description	Part Number	Qty
1	Unloader Valve	HF-UNLOADER-VRT3	1
2	Seal	HF-DOWTY-3.8	4
3	Nipple	HF-NIPPLE-3.8	3
4	Elbow	HF-ELBOW-3.8-MF-SWIVEL	1
5	Flow Switch	HF-FSWITCH-MV60	1
6	Feed Hose	HA004	1
7	Return Hose	HA003	1
8	Reducing Nipple	HF-NIPPLE-3.8-1.2	1

PRESSURE CONTROLLER
(Feed To Mast & Lance)



Number	Description	Part Number	Qty
1	Pressure Gauge	HF-GAUGE-250BAR	1
2	Seal	HF-DOWTY-3.8	4
3	Nipple	HF-NIPPLE-3.8	3
4	Elbow	HF-ELBOW-3.8-MF-SWIVEL	1
5	Seal	HF-DOWTY-1.2	2
6	Mast Feed Hose	HA023	1
7	Pressure Washer Feed Hose	HA007	1
8	Reducing Nipple	HF-NIPPLE-3.8-1.2	2
9	Support Clamp	IM058	1
10	Through Fitting	HF-BHEAD-3.8Mx3.8M	1
11	Adaptor	HF-ADAPTOR-3.8FX1/2M	1
12	QR Coupling (Male)	HF-QRC-M-MIDI-PROBE-3.8F	1
13	QR Coupling (Female)	HF-QRC-F-MIDI-COUPLER-3.8F	1
14	3 Way Valve	HF-VALVE-1/2”F-3WAY	1

ENGINE



Number	Description	Part Number	Qty
1	Starter Motor	MPC010	1
2	Voltage Regulator	MPC011	1
3	Fuel Pump	MPC012	1
4	Fuel Injector	MPC013	1
5	Fuel Cap	MPC014	1
-	Service Kit (Includes all oils)	MPC009	1

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

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