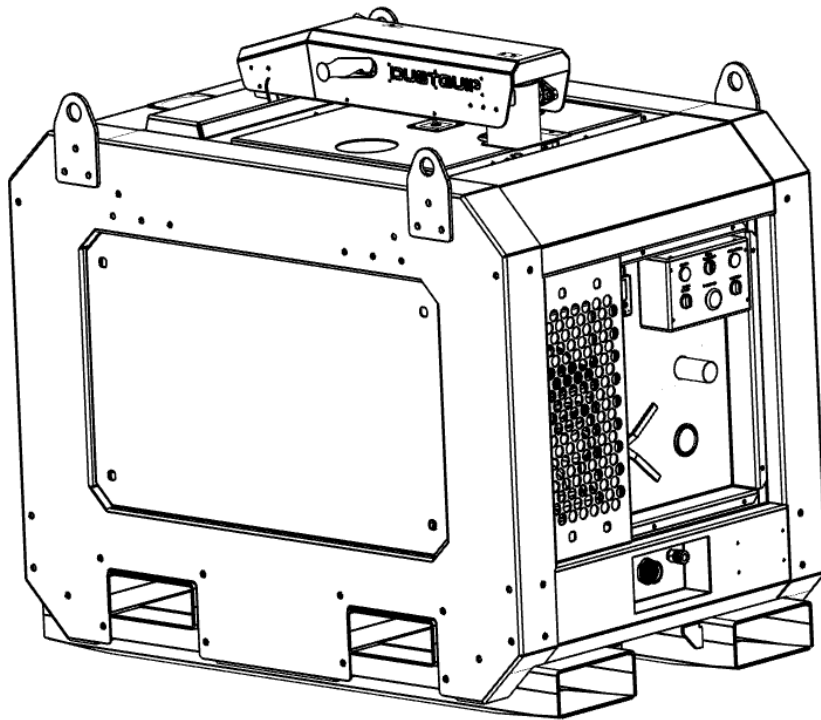




JETMISTER

OPERATION & MAINTENANCE MANUAL



JM40-D | JM40-D-PRO | JM70-D Diesel Powered 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

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DUSTQUIP

INTRODUCTION & GENERAL INFORMATION

INTRODUCTION

Thank you for choosing a JetMister manufactured by Terracore Ltd

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 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. Terracore Ltd / Dustquip cannot and will not accept any liability for any inaccuracy or incorrectly stated legal requirements

Terracore Ltd 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.

Replacement handbooks can be obtained by contacting Dustquip.

WARRANTY CONDITIONS

1. WARRANTY COVERAGE

- All machines manufactured by Terracore Ltd / Dustquip are covered by a warranty for a period of one (1) year or 500 operational hours, whichever comes first, from the date of purchase.
- The warranty covers defects in materials and workmanship under normal use and service
- The warranty does not cover misuse, abuse or neglect.

2. WARRANTY SERVICE

- Warranty service must be performed by authorized Terracore Technicians.
- Customers are responsible for shipping the machine to the factory for warranty service at their own expense
- Dustquip Ltd will cover the cost of repairs or replacements for components covered under warranty

3. EXCLUSIONS

This warranty does not cover damage resulting from

- Misuse, abuse, or neglect
- Unauthorized modifications or repairs
- Failure to follow operating instructions
- Acts of nature, such as floods, fires or frost damage
- Normal wear and tear
- This list is not exhaustive

4. CLAIM PROCESS

- To initiate a warranty claim, customers must:
- Contact Dustquip Ltd to obtain an ISS Number
- Ship the machine to the designated Dustquip factory, along with the ISS number clearly marked on the machine
- Dustquip will inspect the machine upon receipt to determine warranty coverage
- If the issue is covered under warranty, repairs will be carried out in a timely manner
- If the issue is deemed to be not covered by warranty a quotation for the repairs will be provided to the customer
- In the case of a Dustquip Technician is required to attend site, an order number will be required from the customer to cover the site call out charge. If the issue is deemed to be covered by warranty, the call out will not be charged.

5. LIMITATION OF LIABILITY

- Terracore Ltd / Dustquip shall not be liable for any incidental or consequential damages arising from the use or inability to use the machine, including but not limited to loss of profits, loss of business or interruption of operations

6. TRANSFERABILITY

- This warranty is not transferable and applies only to the original purchaser of the machine

7. GOVERNING LAW

- This warranty policy shall be governed by and construed in accordance with the laws of your region, without regard to its conflict of law principles

8. MODIFICATION OF TERMS

- Terracore Ltd / Dustquip reserves the right to modify or amend this warranty policy at any time, without notice

9. CONTACT INFORMATION

- For warranty enquiries or assistance please contact Dustquip in your local region. Contact details can be found on page 2 of this document.

10. EXCLUSIVE WARRANTY SERVICE

- Warranty repairs of service will exclusively be carried out at the Dustquip factory in your location. No warranty repairs or service will be provided elsewhere.

By purchasing a machine from Terracore Ltd / Dustquip, you acknowledge that you have read, understood, and agreed to the terms and conditions of this warranty.



SAFE OPERATION

Careful operation is the best insurance against an accident. Read and understand this section fully before attempting to operate this machine. All operators regardless of how much experience they may have should read this manual prior to operating the machine. Terracore Ltd / Dustquip operate a continuous development process, specifications may change without prior warning. It is the owners duty to provide all operators with this information and to instruct them on safe operation.

Please observe the following information.

1. OBSERVE SAFETY INSTRUCTIONS

- Read and understand carefully this “Operators Manual” and “Machine Decals” before attempting to operate the machine
- Learn how to operate and work safely. Know the machine and its limitations, always keep the machine in good working order
- Before allowing others to operate the machine, take the time to explain the operating methods and allow them to read this manual
- DO NOT modify the machine and its engine. Unauthorized modifications to the machine, engine or emissions control systems will impair the function and safety of the machine.

2. WEAR THE CORRECT PERSONAL PROTECTIVE EQUIPMENT (PPE)

- DO NOT wear loose items of jewellery or clothing that could catch in the controls or be drawn into the machine air vents, causing personal injury
- Use additional items of PPE, as required & deemed appropriate
- NEVER use the machine while under the influence of alcohol, drugs (prescribed & recreational) or while fatigued

3. PRE START CHECK & MACHINE OPERATION

- Be sure to inspect the machine before operation. DO NOT operate the machine if there is anything wrong, take the machine out of service until it has been repaired and is fully operational.
- Ensure all cover plates & guards are in place before starting the engine. Replace any missing or damaged covers or guards
- Ensure you and others are at a safe distance from the machine before starting. Ensure the mist target area is clear of personnel - high pressure water jets can cause serious injury
- Ensure the machine has at least 1 meter clearance on all sides, this is for sufficient cooling air flow & service access
- Do not allow anyone or livestock to approach the machine while in operation.
- Do not attempt to bypass any safety devices to start the engine

4. KEEP THE MACHINE AND SURROUNDINGS CLEAN

- Shut down the machine before cleaning
- Do not use high pressure jets for cleaning. Use a brush to clean the machine followed by low pressure water and detergent where required
- Ensure the air vents are clear from debris, ensure the radiator is checked and cleared of any dust and debris build up regularly. Ensure any waste & rubbish is kept clear of the machine to minimise any fire risk
- Store any flammable fluids in approved containers and well clear of the machine
- Check and repair leaks immediately

SAFE OPERATION

5. SAFE HANDLING OF LUBRICANTS AND FUELS

- Never refuel the machine with the engine running
- Shut down the engine before checking the oil levels in the engine or pump
- DO NOT smoke or allow flames or sparks near the machine - fuel is extremely flammable and explosive under certain circumstances
- Only refuel in well ventilated areas. Clean up any spilt fuel/oils immediately - do not operate the machine until spills have been cleaned up.
- Allow the machine to cool before refuelling
- Do not mix any other types of fuel with the Diesel. Ensure the Diesel fuel conforms to the standards set out in the Fuel Specifications table on the Specifications Page.
- Only store fuel and oils in approved containers

6. EXHAUST GASSES & FIRE PREVENTION

- Engine exhaust fumes can be very harmful if allowed to accumulate. Only run the machine in well ventilated areas.
- Exhaust gasses emitted from the muffler are very hot. To prevent a fire ensure the exhaust is not exposed to any flammable materials, such as waste materials
- To avoid a fire, be sure to check for leaks of flammable liquids from hoses & lines.
- To avoid a fire, do not short power cables & batteries. Ensure all wiring & leads are in good condition & connectors are clean and free from dirt. Bare or frayed cables could short and cause a fire.

7. ESCAPING FLUID

- Relieve all pressure in the oil, water & coolant systems before disconnecting any lines, fittings or related items
- Be aware of any possible and unintended pressure release when disconnecting any lines or fittings from a pressurized system. Do not use your hand to check for leaks, high pressure oil, water or fuel can cause personal injury.
- High pressure escaping fluid has sufficient force to penetrate skin causing serious personal injury
- Fluids escaping from pinholes may not be visible to the naked eye, use suitable leak detection methods to trace and identify the leak.
- If an injury from escaping fluid occurs, seek immediate medical attention.

8. CAUTIONS AGAINST BATTERY, BURNS & EXPLOSIONS

- To avoid burns be aware of any hot components such as the muffler, radiator hoses, turbo-charger and fluids etc. Some components will remain very hot even after the engine has been shut down.
- DO NOT remove the radiator cap while the engine is running or immediately after shutting down the engine. Scalding water and steam could be ejected from the cap causing serious burns. Only remove the cap once the engine has completely cooled down
- Be sure to close the coolant drain valve, secure the pressure cap and fasten the pipe band before operating. If these parts are taken off or loosened, it could cause a serious personal injury
- The batteries present a explosion hazard. When the batteries are being charged a explosive gas can be given off.
- Do not operate the machine if the battery fluid level is low. Operation with low battery fluid levels could shorten its life span or cause an explosion. If the fluid is low add battery water as required



SAFE OPERATION

- Keep sparks and open flames away from the battery while charging
- Only use appropriate battery testing equipment, do not short the terminals across.
- Do not charge a frozen battery. A frozen battery could explode if charged. Thaw out and warm it up to at least 16 degrees C before attempting to charge it

9. KEEP HANDS AND BODY CLEAR OF ROTATING PARTS

- Ensure the engine is stopped and the battery disconnected before checking the tension of any drive belts, accessory drive belt & cooling fan
- Never run the machine with the covers removed, serious injury could be caused.
- Ensure all covers and guards are in place and secure before starting the machine

10. ANTI-FREEZE & CORRECT DISPOSAL OF FLUIDS

- Anti-freeze contains chemicals which can cause harm to the environment, animals & humans. Always wear the correct PPE while handling Anti-Freeze. In the event of contact with skin immediately wash it off with clean water
- Do not mix different brands of Anti-Freeze, a potential chemical reaction could damage the engine. Only use Anti-Freeze approved for the installed engine (check the engine owners manual - supplied with the machine)
- Dispose of any fluids (oils, Anti-Freeze & fuels) in accordance with your local environmental regulations. Do not dispose of them into any drains or watercourses. Ensure any filters (oil & fuel) are disposed of in the correct manner.
- When draining any fluids, ensure the collection receptacle is adequate for the task to prevent spills.

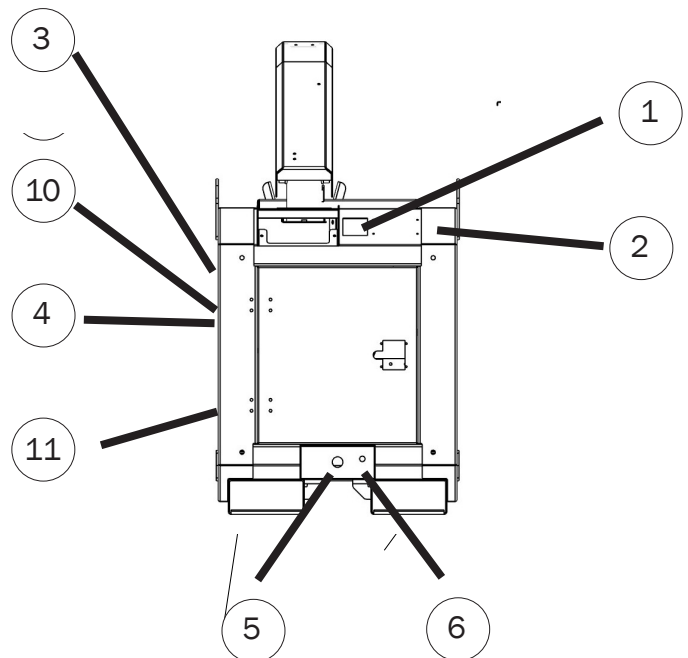
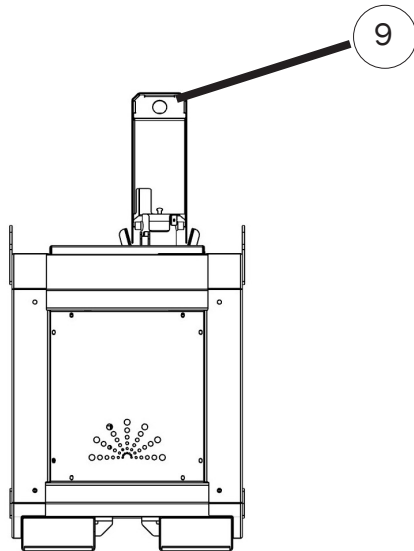
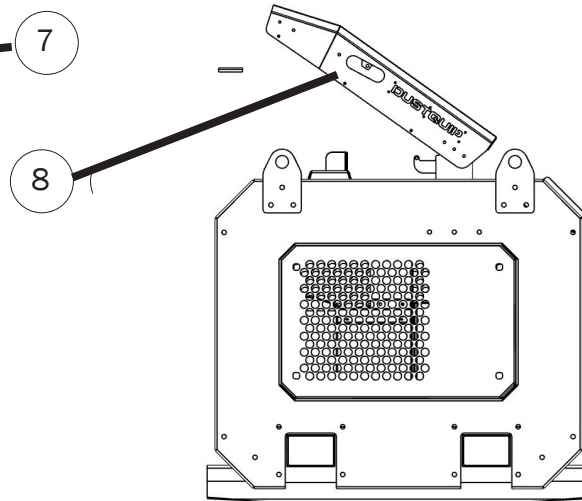
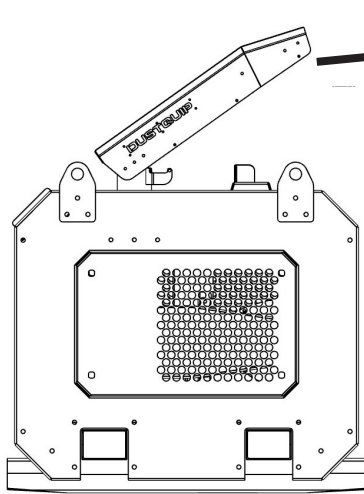
11. SAFETY CHECKS & MAINTENANCE

- When inspecting the machine or carrying out routine maintenance, ensure it is located on level and stable ground
- Always disconnect the battery to prevent accidental starting. Disconnect the ground cable first (Black cable connected to the (-) terminal on the battery)
- Always carry out the pre-start checks with the engine stopped
- Before starting any servicing or maintenance ensure the engine has cooled completely.
- Always use the correct tools for the job and only use genuine parts - this will ensure many years of satisfactory performance
- Do not use the accessory drive belt or fan blades to turn over the engine - damage can be caused to the engine.
- Replace all coolant hoses & fuel lines every 2 years, regardless of operating hours. Rubber degrades and could fail with little warning.
- Ensure a first aid kit and fire extinguisher are near by when carrying out servicing and maintenance

12. WARNING LABELS & DECALS

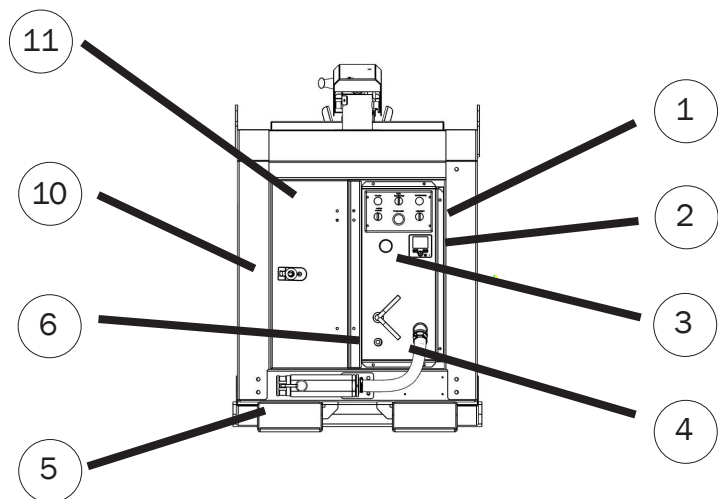
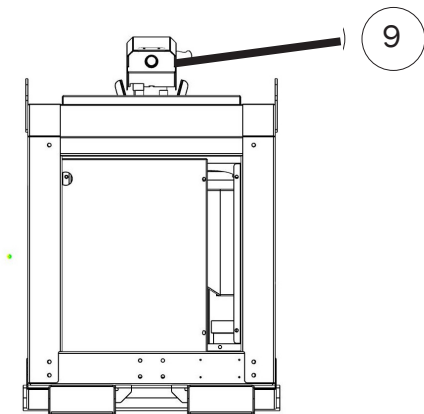
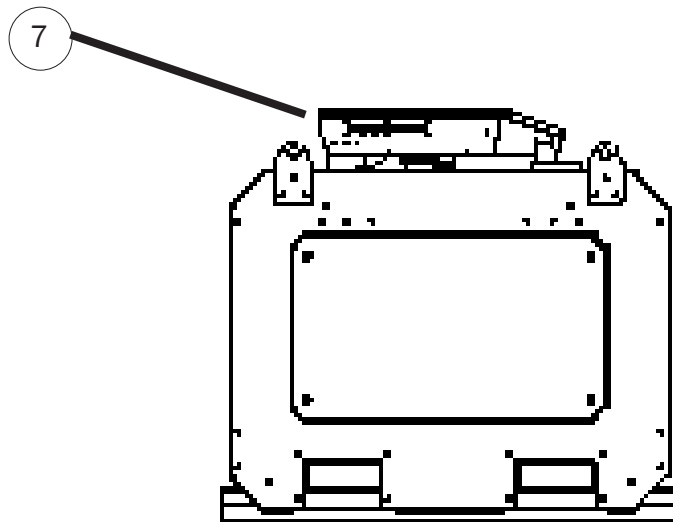
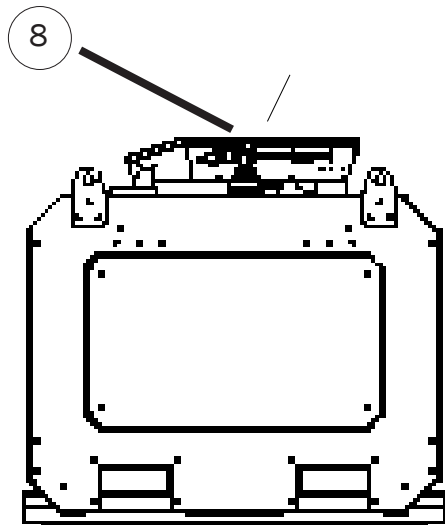
- Never remove or deliberately deface any warning labels, decals or serial plates.
- Replace any missing labels or decals - replacements can be obtained from Terracore Ltd / Dustquip or agent in your region.
- Ensure all safety labels & decals are kept clean

LEGEND JM40-D

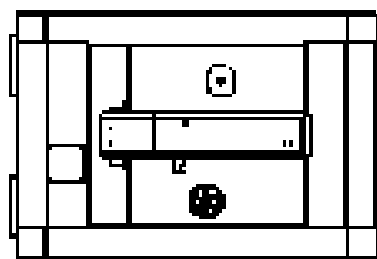


1. Machine Controls
2. Digital Display
3. Pressure control valve
4. Dust Suppression/Pressure Washer mode selector valve
5. Water Inlet
6. Pressure Washer Connector
7. Mast
8. Spray mode selector lever
9. Jet Nozzle
10. Oil & Coolant access cover
11. Fuel Tank

LEGEND JM40-PRO | JM70-D



1. Machine Controls
2. Digital Display
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4. Dust Suppression/Pressure Washer mode selector valve
5. Water Inlet
6. Pressure Washer Connector
7. Mast
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CONTROLS JM40-D



Pressure Valve & Gauge

(Remove side panel
to access)



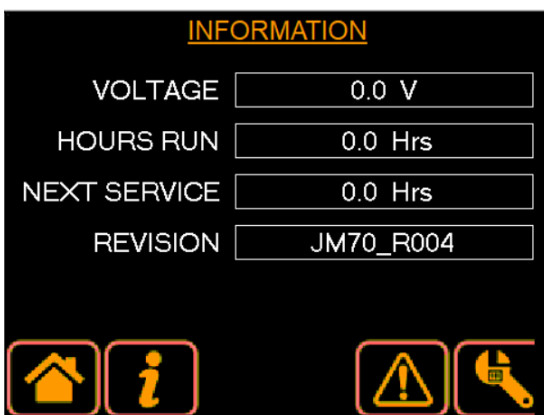
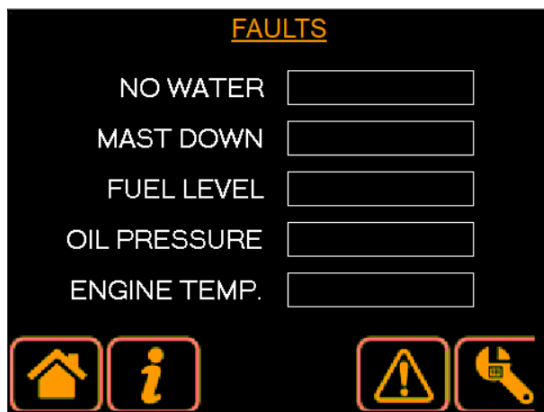
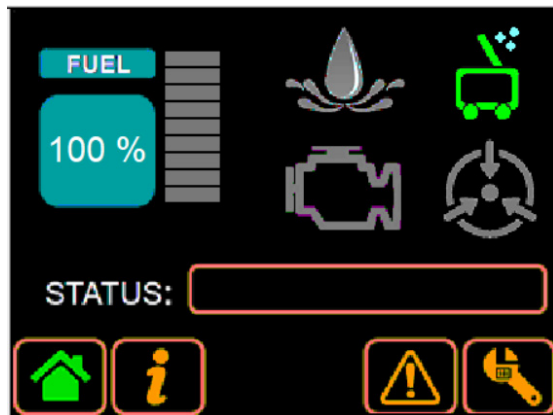
Selector Valve

Down for Pressure Washer,
and up for Jet Mister
(Open end door to access)

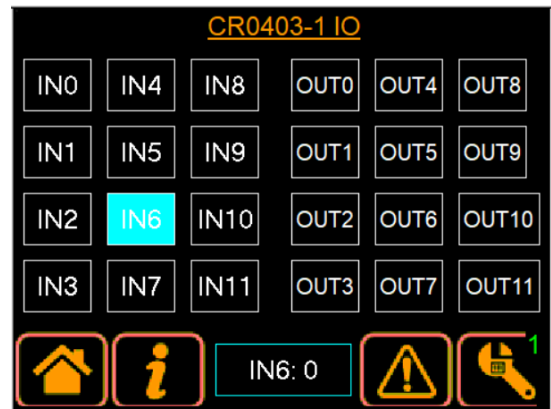
CONTROLS JM40-D-PRO | JM70-D



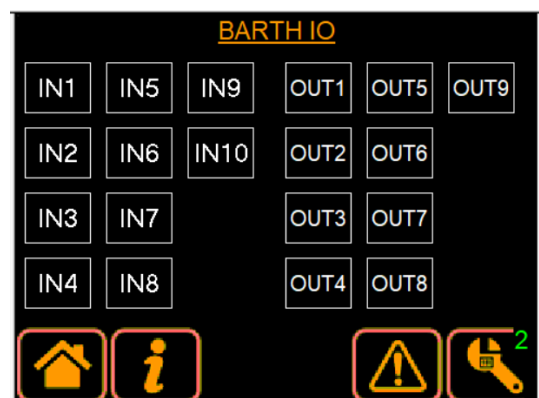
CONTROLS - Panel & Remote



1



2



Display views 1 & 2 are machine diagnostic codes

CONTROLS - Panel & Remote



PRE - OPERATION INSPECTION



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.

PRE - OPERATION INSPECTION

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 manufacturer's specifications.

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. 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.

MAINTENANCE SYMBOLS LEGEND



TOOLS

Indicates tools will be required to carry out this operation



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.



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

MAINTENANCE

- 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.

MAINTENANCE

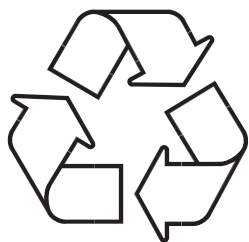
ENGINE SERVICE INTERVALS:

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

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

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

MAINTAINANCE SCHEDULE			
	50 Hour (1st only)	200 Hours	400 Hours
Grease Slew Ring Assembly	✓	✓	✓
Change Engine Oil	✓	✓	✓
Change Oil Filter	✓	✓	✓
Change Air Filter		✓	✓
Change Pump Oil		✓	✓
Renew Pump Gasket		✓	✓
Renew Fan Belt			✓
Renew Pump Drive Belts (2)			✓

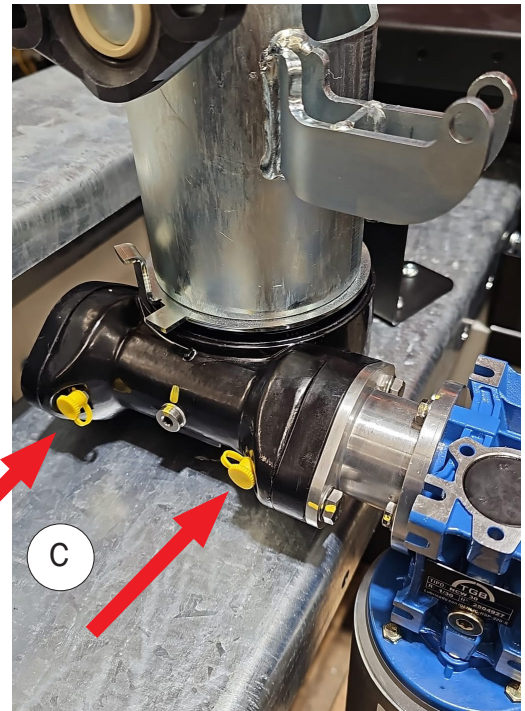
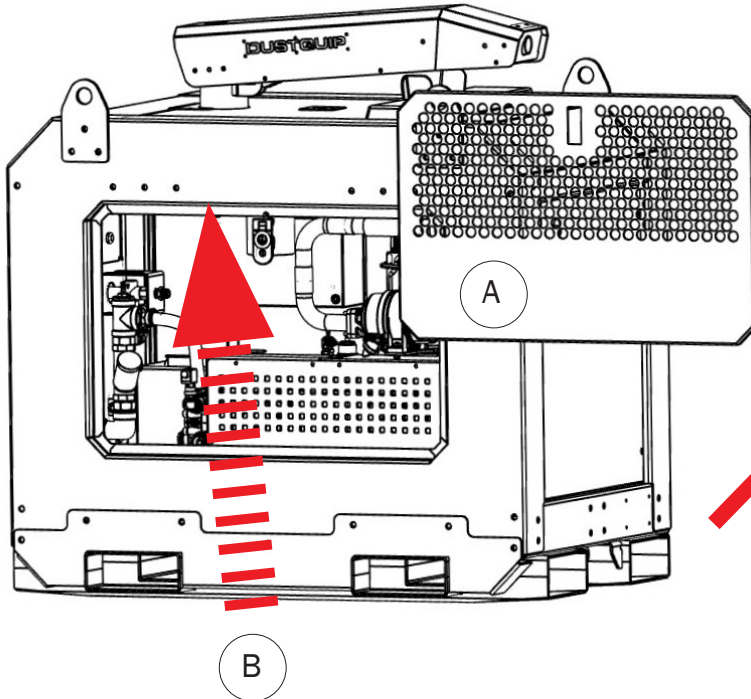


ENVIRONMENTAL RESPONSIBILITY:

- 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 guidelines 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

MAINTENANCE

SLEW MAST MAINTENANCE

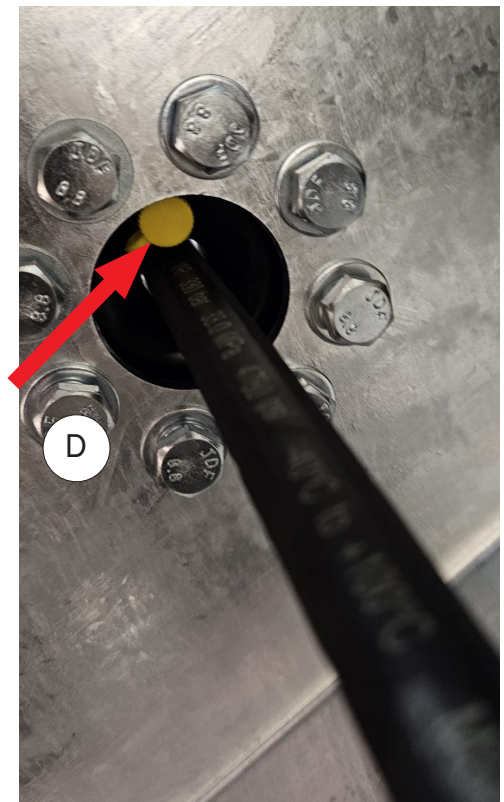


NOTICE

Due to working in a dust environment, regular maintenance of moving parts is essential. Follow the procedure below to ensure your machine is kept in good working order.

Procedure

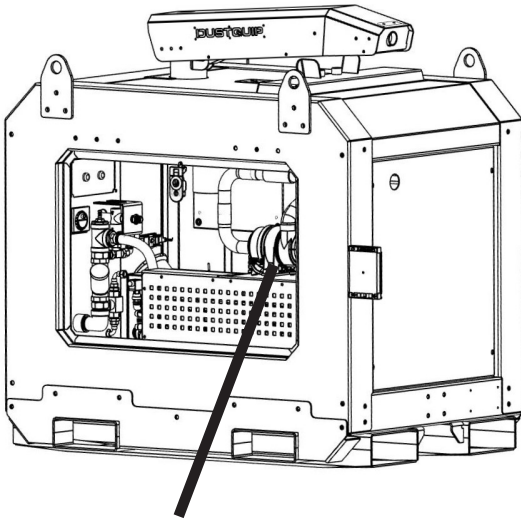
1	Ensure machine is switched off and not running..
2	Remove side panel A
3	Locate the oscillation gearbox via direction B
4	Grease both nipples (C) and the third location D on the underside of the plate.
5	Refit Panel A



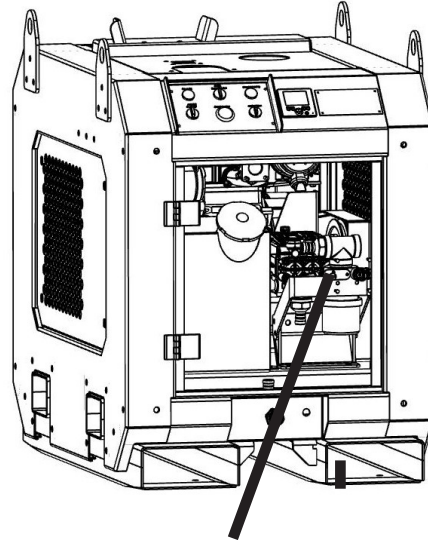
MAINTENANCE



INLET FILTER CHECKING & CLEANING



JM40 PRO / JM70-D



JM40-D

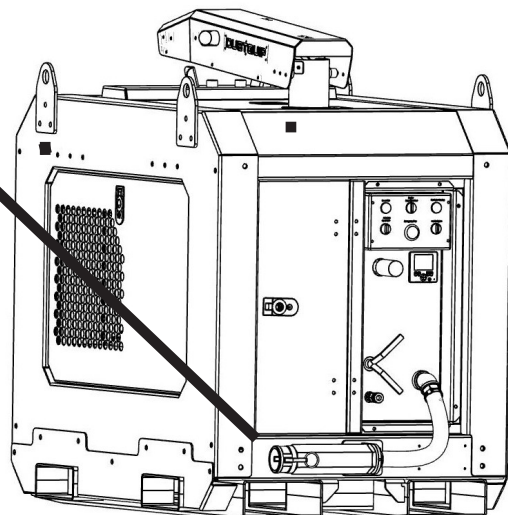
NOTE

Additional filter - Standard on JM40-D-PRO
– Or added as an accessory on JM40-D & JM70-D

Maintaining a clean inlet 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.

CHECK FILTER WITH WATER SUPPLY TURNED OFF AND DISCONNECTED & 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
1. Clean gauze with clean water
2. Insert the gauze back into the filter body, screw in the access plug ensuring the gasket is in place and in good condition
3. Tighten access plug

MAINTENANCE

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. The level can be topped up via the oil port.

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 DISCONNECTED & ENGINE OFF

Tools Required:

- None
- Check oil level and condition via the sight glass .
- If oil is required, remove the vent plug by twisting anti-clockwise until it is free of the pump housing
- Pour the correct grade oil into the pump until the level reaches approx. Halfway up the sight glass
- 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 discoloration will occur during normal operation - this is to be expected

The oil should have a bright clear golden appearance

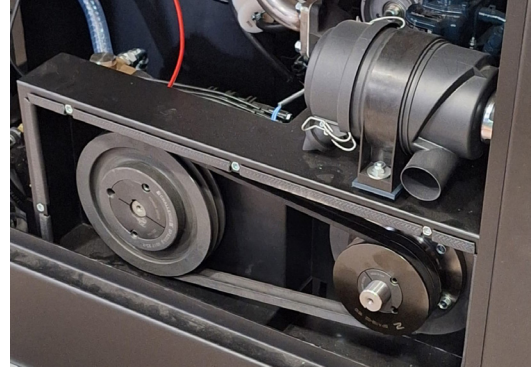
MAINTENANCE

BELT DRIVE TENSION AND REPLACEMENT



The **JETMISTER** range features a belt drive on all machines

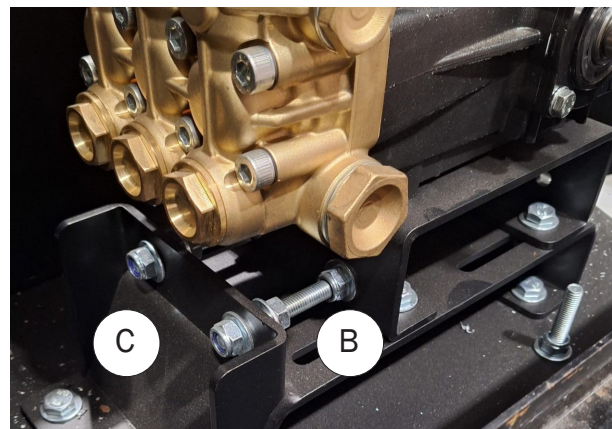
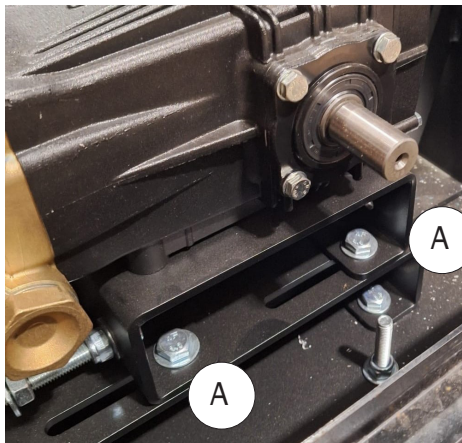
- 2 Belts on the JM40-D & JM40-D-PRO
- 4 Belts on the JM70-D



NOTICE

Switch off power before checking or attempting to change drive belts

1. Remove side panel and drive belt covers.
2. Loosen 4 x bolts (A) , but do not remove.
3. Unlock nuts (B)
4. Using an open ended spanner adjust plate position (C)
5. Remove old belts and replace with a 'matched' set.
6. Reverse to order to tension bolts.
7. Use the same procedure to adjust belts to the required tension



MAINTENANCE

CHECK OIL LEVEL - Engine



Recommended Engine Oil

Above 25°C (77°F)	10W-30 or 10W-40 or 15W-40
-10 to 25°C (14° to 77°F)	10W-30 or 10W-40 or 15W-40
Below -10°C (14°F)	10W-30 or 10W-40

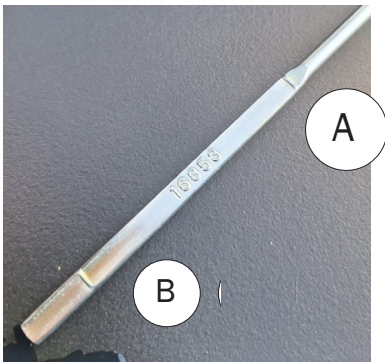
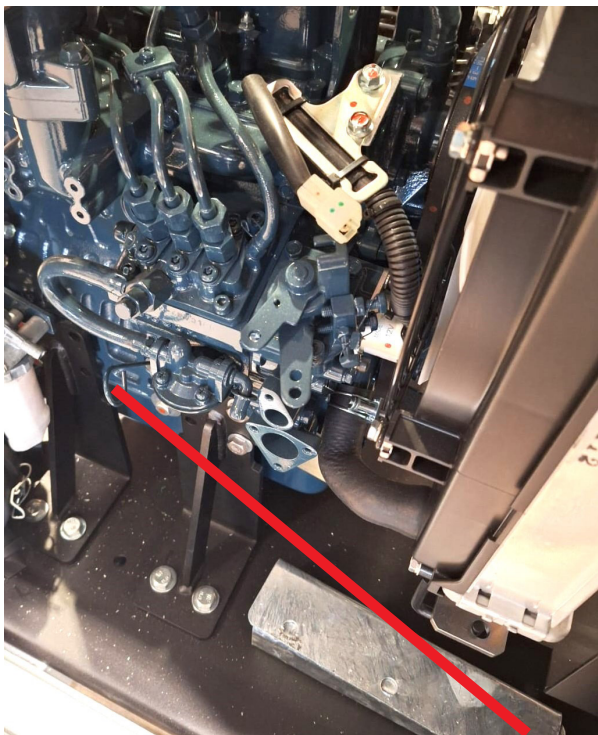
Ensuring the engine has the correct oil level is essential to prevent possible engine damage.

The correct oil grade can be found in the table at the top of this page.

IMPORTANT

When you use the engine oil of a brand or viscosity different from the previous, drain the remaining oil. Do not mix 2 different types of the engine oil.

1. Make sure that the engine horizontal.
2. To check the engine oil level, draw out the dipstick, wipe it clean, then reinsert it, and draw it out again.
3. Make sure that the engine oil level is between the upper line (a) and lower line (b).



MAINTENANCE

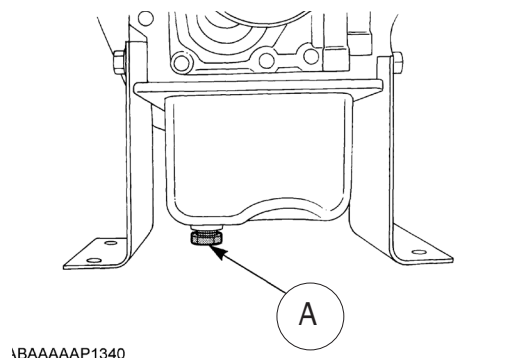
DRAIN OIL



NOTICE

CHANGE OIL WITH THE ENGINE OFF. ENGINE WILL BE HOT

1. Drain the engine oil as follows:
2. Make sure the engine is level
3. Start and warm-up the engine for approximately 5 minutes.
4. Put an oil pan below the engine.
5. Remove the drain plug (A) at the bottom of the engine and drain the engine oil completely.
6. Dispose of oil properly



REPLACE ENGINE OIL FILTER



Tools Required - Filter wrench

1. Replace the engine oil filter as follows:
2. Remove the oil filter cartridge (B) with the filter wrench.
3. Apply a thin layer of oil on the new cartridge gasket.
4. Install the new cartridge by hand.

NOTE

- Do not tighten too much because it can cause deformation of the rubber gasket.
- Make sure that the engine oil does not flow through the seal and read the oil level on the dipstick.
- Fill the engine oil until the specified level.
- After you replace the cartridge, the engine oil usually decreases by a small level.

MAINTENANCE

CHECKING COOLANT LEVEL

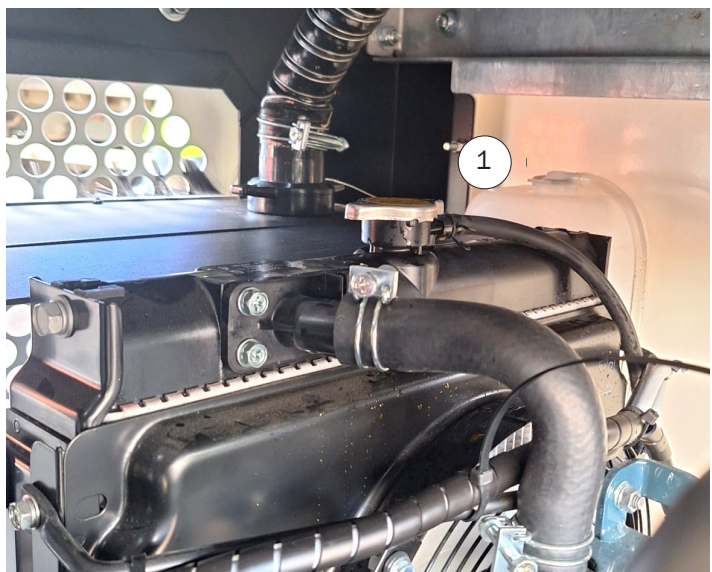
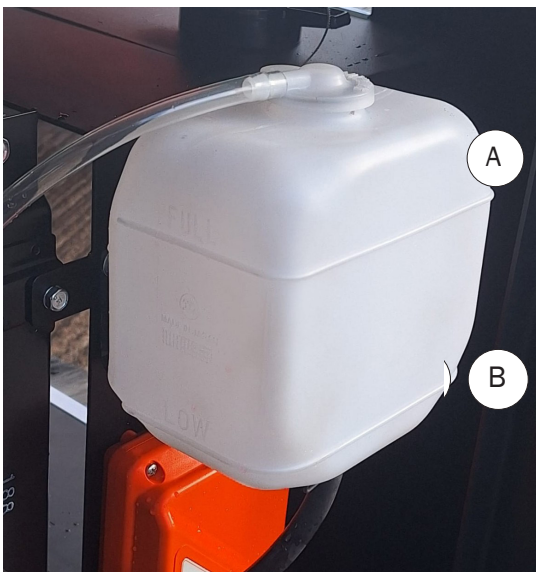


Caution

Do not remove the radiator cap when the engine is hot.

Wait until engine has cooled down, then loosen the cap slightly to release unwanted pressure before you remove the cap fully.

1. Remove the radiator CAP (1)
2. Make sure the coolant level is between (FULL) A and (LOW) B.



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" position, 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. Set the right switch back to "0"
6. Turn the power switch to "Crank" - the engine will not try and start.
7. Ensure fuel is turned on, lift the mast and start the engine.
8. With the water turned off, the engine will run for approx. 10 seconds and shut down
9. Check the appropriate warning is displayed on the screen.
10. Turn on water supply
11. Turn the power switch to "Off" and then back to "On" to reset the controller
12. Ensure the area where water will be discharged is clear
13. Turn the power switch to "Crank" and start the engine
14. Check the nozzle is discharging correctly & no leaks from pipe work
15. Turn engine off, check for pipe work leaks, oil leaks & fuel leaks.
16. 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



DO NOT USE UNLESS;

- 1. You learn and practice the principles of safe machine operation contained in this operator's manual.**
- 2. Avoid hazardous situations**
- 3. Always perform function tests prior to operation**
- 4. Inspect the workplace. Know and understand the function tests before going on to the next stage**
- 5. Only use the machine as it was intended**

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 operator's responsibility to read and remember the workplace hazards, then watch for and avoid them while moving, setting up and operating the machine.

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 un-authorized 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 THE MACHINE



WARNING

To avoid personal injury or death observe the following:

- Ensure no one approaches the machine while the engine is running - the mast moves automatically and could direct a water jet at someone with no notice
- Ensure the machine is installed on a flat, stable and firm surface
- Never run the machine in enclosed areas - exhaust gasses can be deadly
- Ensure all guards and covers are installed before running the machine
- NEVER use the machine while under the influence of alcohol, drugs (prescribed & recreational) or while fatigued
- DO NOT wear loose items of jewellery or clothing that could catch in the controls or be drawn into the machine air vents, causing personal injury
- Use additional items of PPE, as required & deemed appropriate
- Check that its safe to operate the machine before starting the engine

IMPORTANT

- NEVER use starting fluid such as easy start for starting the engine - serious internal damage will be caused

OPERATING THE MACHINE



STARTING THE ENGINE

1. Connect the water supply to the inlet of the machine (1)
2. Ensure the Mode Control lever is in the UP position (2)
3. Turn on the water supply (its normal for water to start flowing out of the mast)
4. Turn the Master Control switch to ON (3)
5. Wait for a few seconds for the Digital Display to start up.
6. Turn the Mast Control (4) switch to the Raise position - release when the mast is at the desired angle. NOTE - the engine will not start with the mast lowered. The Mast Up indicator on the screen will illuminate Green
7. When ready to start the engine - turn the Master Control (3) switch to CRANK for 1 second, then release the switch
8. The machine will now commence its automatic start sequence.

OPERATING THE MACHINE

IMPORTANT

WATER FEED TO THE MACHINE MUST NOT EXCEED 3 Bar /44 P.S.I.

When a 'header tank' supply is not available, the unit can be supplied with a mains supply. However, Using excess pressure will result in the blow off of internal pipe work and possible pump failure.

RUNNING THE MACHINE

1. Ensure there is a constant water supply to the machine. (Max 3 Bar /44 P.S.I.)
2. If there is an interruption to the water supply, the machine will automatically shut down
3. Use either the remote or the control panel to control the direction of spray
4. The spray can be also be switched from 'Jet' to 'Fan' as per the illustration below.



Lever in raised position for Jet



Lever in lowered position for Fan

STOPPING THE ENGINE

1. Turn the Oscillation Switch to the 0 (5) position (if in 45 or 90)
2. Turn the Master Control switch to the 'Crank' position and hold it for 5 seconds - the engine will shut down - then release the switch back to the 'On' position.
3. Using the Mast Manual switch (6) bring the mast back to its park position
4. Use the Mast Control switch (4) to lower the mast into its park bracket
5. Turn the Master Control switch to the 'Off' position
6. Turn off the water supply

TRANSPORT & LIFTING



MACHINE	WEIGHT Kg (lbs)	DIMENSIONS
JM40-D	435 Kg (960 lbs)	1200 x 800 x 1250 (48" x 32" x 50")
JM40-D-PRO	610 Kg (1344 lbs)	1500 x 1000 x 1340 (59" x 39.5" x 53")
JM70-PRO	685 (1510 lbs)	1500 x 1000 x 1340 (59" x 39.5" x 53")

LIFTING

1. When lifting the machine, ensure that there is adequate lifting capacity to lift the units safely
2. The units are fitted with twin access fork points to enable the machine to be lifted from either end, or from either side.
3. There is also lifting eyes provided should a suspend lift be required.

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

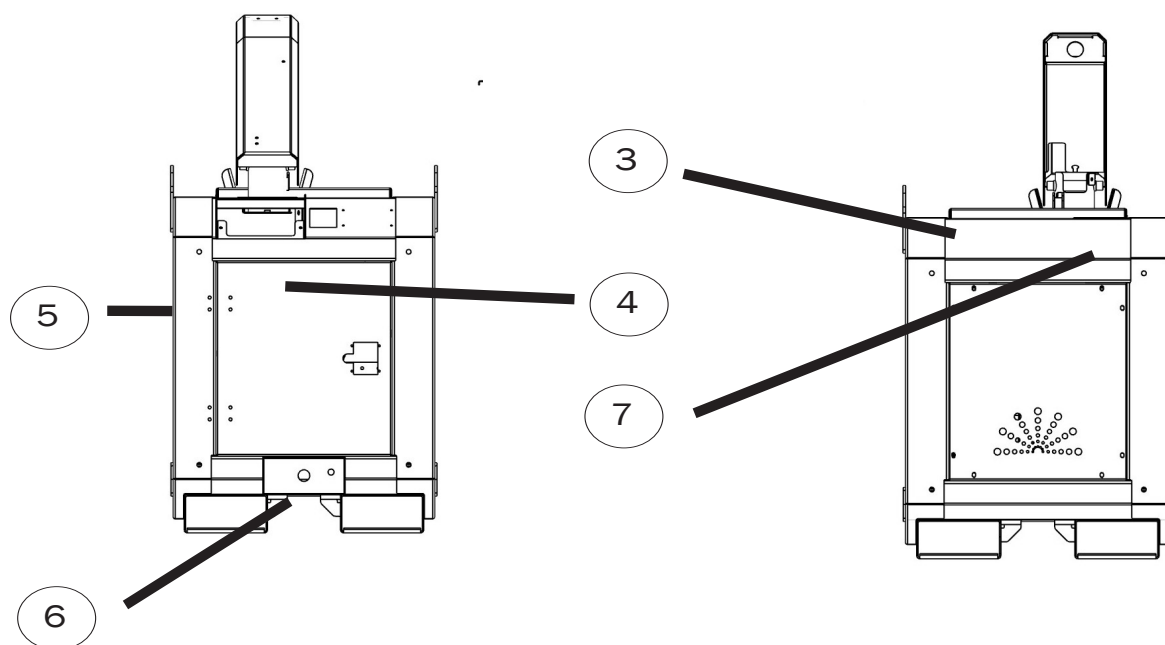
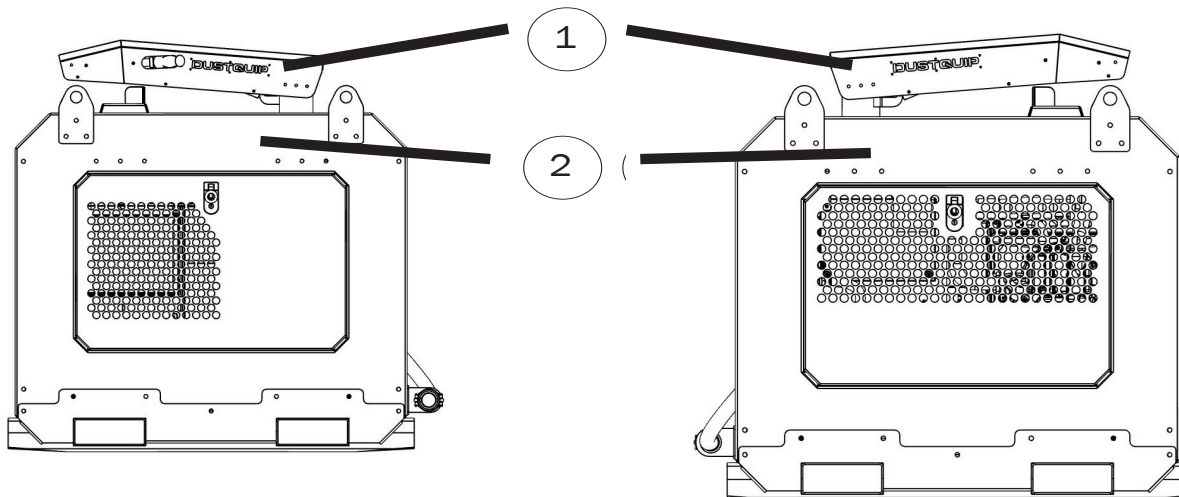
TIE DOWN & STRAPPING:

Only use the lifting eyes for strapping.

DO NOT OVER TIGHTEN STRAPS:

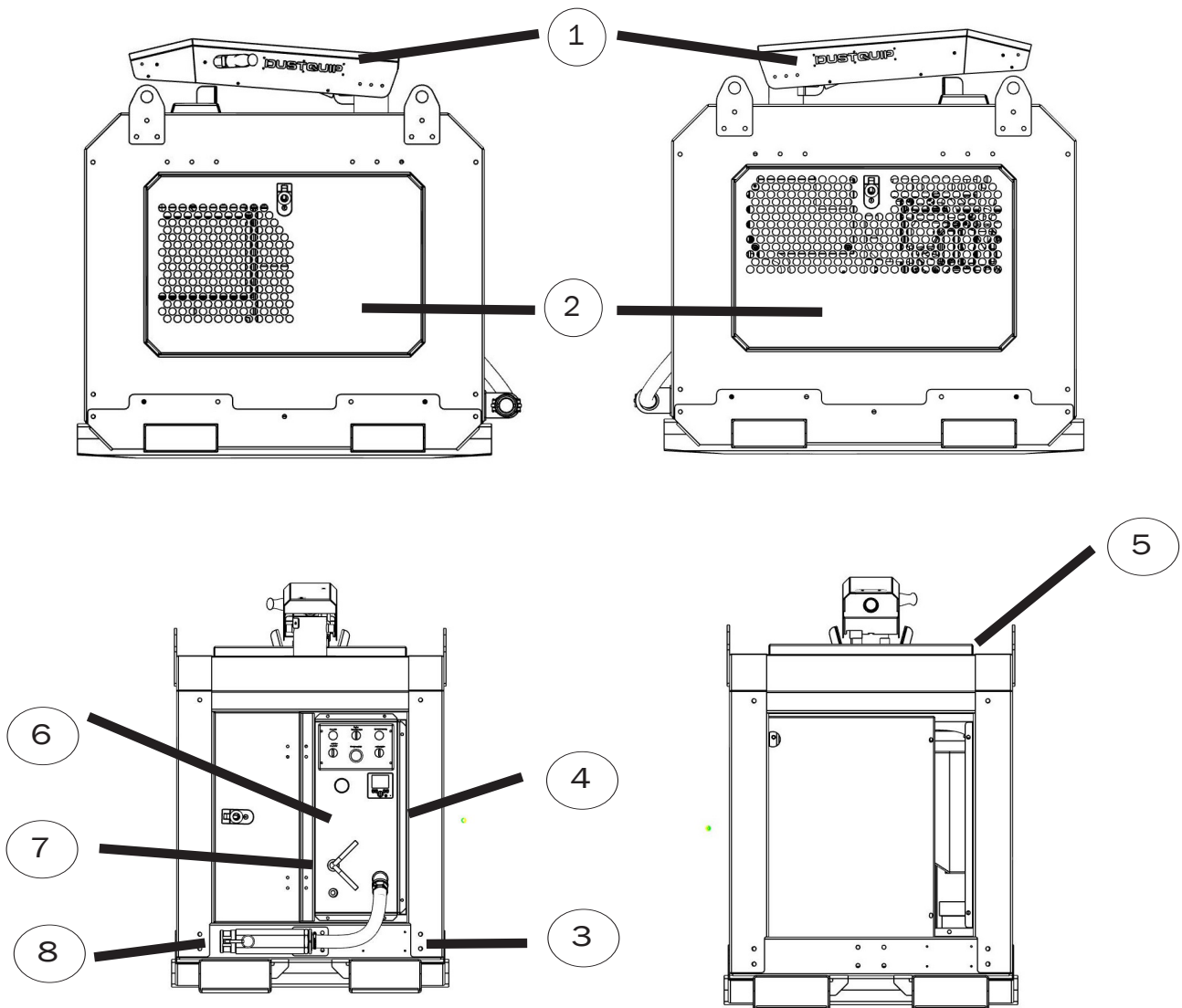
Excessive tension of the straps will cause damage to the machine

DECALS | JM40-D



1. Dustquip Decal
2. JetMister Decal
3. Serial Plate
4. Safe Use Decal
5. Hot Exhaust
6. Water Inlet Decal
7. Operation Decal

DECALS | JM40-D-PRO & JM70-D



1. Dustquip Decal
2. JetMister Decal
3. Serial Plate
4. Safe Use Decal
5. Hot Exhaust
6. Operation Decal
7. Mode selection Decal
8. Water Inlet Decal

SPECIFICATIONS

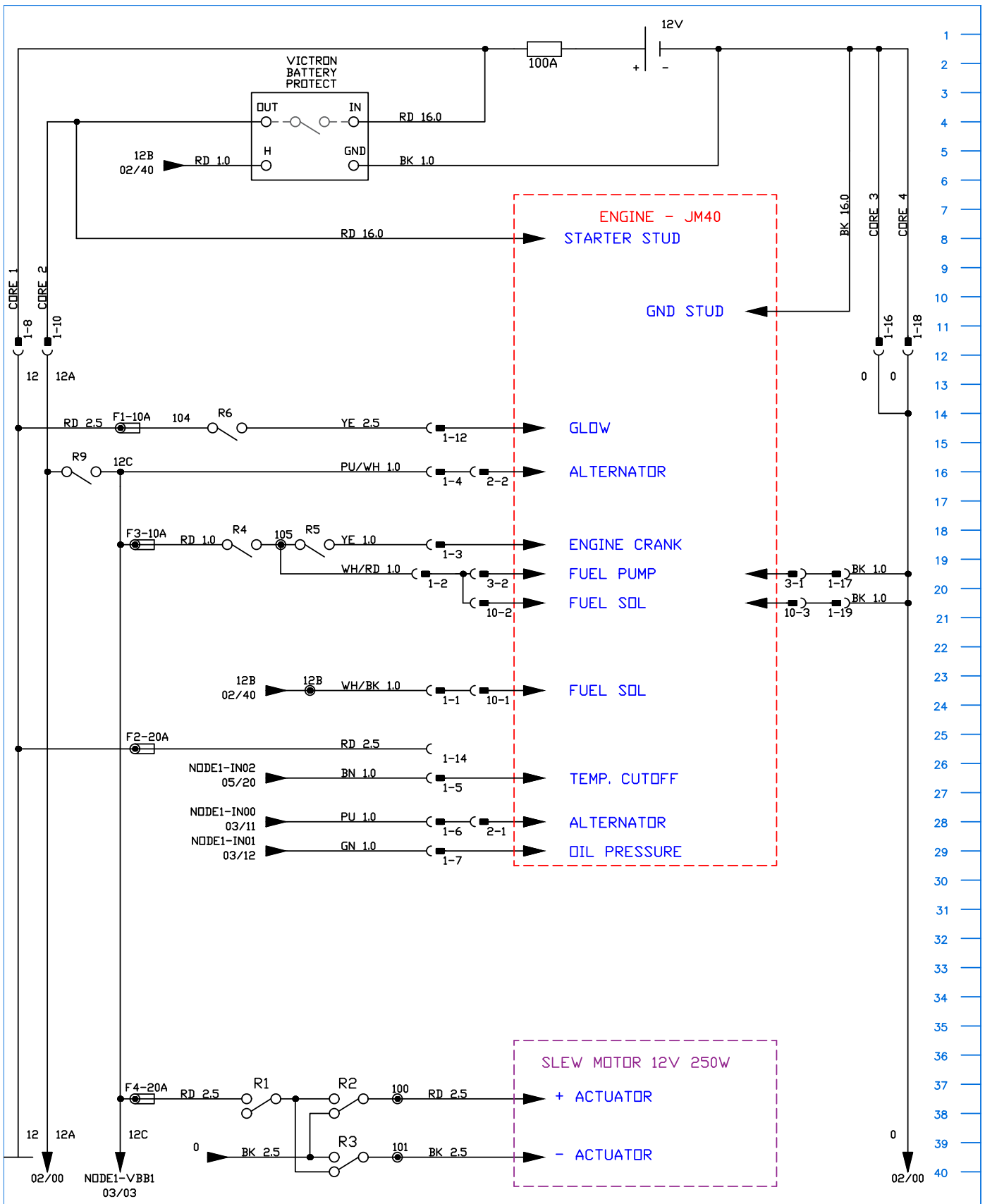
	JM40-D	JM40-D-PRO	JM70-D
Diesel Engine	Kubota Z482 WC	Kubota Z482 WC	Kubota D903-TE3 WC
Fuel Type	Diesel (HVO)		
Fuel Tank Size -Ltr (USG)	30 (8)	30 (8)	32 (8.5)
Consumption Ltr/Hr (USG/Hr)	1.6Ltr (0.43G)/Hr	1.6Ltr (0.43G)/Hr	
Emissions Standard	Stage V	Stage V	Stage V
Power Kw (HP)	9.9 (13)	9.9 (13)	18.5 (24)
Pressure - Bar (PSI)	60 (870)		
Flow Rate - LPM (USGPM)	40 (10)	40 (10)	70 (18.5)
Average Mist Water Droplet Size	200-250 µm		
Mist Distance (With Breeze M(Ft)	20-40M/65-130ft		35-55M/115-180ft
Horizontal Oscillation	350° with 45° & 90° Auto Oscillation		
Vertical Tilt	0°- 60°	0°- 60°	0°- 60°
Std Mist Hose Length -60M (195Ft)	1M (3Ft) Spacing	N/A	N/A
Std Mist Hose Length -120M (290Ft)	2M (6Ft) Spacing	2M (6Ft) Spacing	N/A
Max Water Feed Pressure-Bar (PSI)	3 Bar (43)	3 Bar (43)	3 Bar (43)
Water Input Filter	Standard	Std + US Version	Standard
Water Quality	Drinking Water Only		

DIESEL FUEL INFORMATION

- Diesel Fuel Specification Type and Sulphur Content % (ppm) used, must be compliant with all applicable emission regulations for the area in which the engine is operated.
- Use of diesel fuel with sulphur content less than 0.10 % (1000 ppm) is strongly recommended.
- If high-sulphur fuel (sulphur content 0.50 % (5000 ppm) to 1.0 % (10000 ppm)) is used as a diesel fuel, change the engine oil and oil filter at shorter intervals. (approximately half).
- DO NOT USE Fuels that have sulphur content greater than 1.0 % (10000 ppm).
- Since KUBOTA diesel engines of less than 56 kW (75 hp) utilize EPA Tier 4 and Interim Tier 4 standards, the use of ultra-low sulphur fuel is mandatory for these engines, when operated in US EPA regulated areas. Therefore, please use No.2-D S15 diesel fuel as an alternative to No.2-D and use No.1-D S15 diesel fuel as an alternative to No.1-D for ambient temperatures below -10 C (14 F). No.1-D or No.2-D, S15: Ultra Low Sulphur Diesel (ULSD) 15 ppm or 0.0015 wt. %
- If the engine is to be operated within the European Union on diesel or non-road gasoil, a fuel with sulphur content not greater than 10 mg/kg (20 mg/kg at point of final distribution), a cetane number not less than 45 and a fatty acid methyl ester (FAME) content not greater than 7 % volume per volume (v/v) shall be used.



WIRING DIAGRAM



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 Lochgoilhead 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


CE & UKCA

MANUFACTURERS IDENTIFICATION DATA	
Manufacturer	Terracore Group Ltd
Brand	Dustquip Jetmister
Head Office	Quercus Court, Armstrong Way, BS37 5NG
Telephone	44 (0) 1454 513 000
Email	info@dustquip.co.uk

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

**DUSTQUIP**

Manufactured By:
Terracore Group Ltd
Armstrong Way, Yate
Bristol, BS37 5NG

 Bristol UK
+44 (0)1454 513 000

Mfg. Date:

Serial No:

Model:

Power:

Weight:

SP001

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

UKCA DECLARATION



Terracore Group Ltd Declaration of Conformity

In accordance with UK Government Guidance

1. Product Model
 - a. Product: Skid Mounted Jetmister
 - b. Model: JM40-D/JM40-PRO/JM70-D
 - c. Serial: 1000/8888
 - d. Specification: Skid mounted diesel powered high Pressure, high flow jet misting unit.
2. Manufacturer
 - a. Name: Terracore Group 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:	Terracore Group Ltd TA Dustquip
Address:	Quercus Court, Armstrong Way, Yate, BS37 5NG
Signed for & behalf of:	Dustquip Ltd
Place of issue:	Yate, United Kingdom
Name:	
Position:	Director
Signature:	<i>Neal Davies</i>



CE DECLARATION



Terracore Group Ltd EC Declaration of Conformity

In accordance with EU Government Guidance

1. Product Model
 - a. Product: Skid Mounted JetMister Trolley
 - b. Model: JM40-D, JM40 PRO, JM70-D
 - c. Serial: 1000/8888
 - d. Specification: Skid Mounted diesel/electric powered high pressure, high flow jet misting unit.

2. Manufacturer
 - a. Name: Terracore Group 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:	Terracore Group Ltd T/A Dustquip
Address:	Quercus Court, Armstrong Way, Yate, BS37 5NG
Signed for & behalf of:	Interquip International Ltd
Place of issue:	Yate, United Kingdom
Name:	
Position:	Director
Signature:	<i>Neal Davies</i>

SERVICE RECORD

SERVICE DATE	CARRIED OUT BY	COMPANY	NAME

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 a warranty claim being declined or voided.



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**TERRACORE GROUP LTD
DUSTQUIP DIVISION**

Quercus Court | Yate | Bristol | BS37 5NG
44 1454 513000 | www.dustquip.co.uk

Service & Parts service@dustquip.co.uk

