

V-TUF

D10-15200

Diesel driven high pressure washer



User Operators Manual

English
Operators
Manual



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CE

UK
CA

Congratulations! on your Purchase of your V-TUF pressure washer

This manual and any other literature supplied with your machine should be read thoroughly before attempting to operate your V-TUF Pressure Washer. Pay particular attention to any instructions relating to safety, and the starting, stopping and maintenance of petrol and diesel engines.

PLEASE KEEP THESE INSTRUCTIONS WITH THE MACHINE AT ALL TIMES.

This manual has been designed to give you all of the necessary information to operate your V-TUF pressure washers safely and effectively. It is recommended the manual and its accompanying literature be read and understood before attempting to assemble or operate the equipment. Following these simple instructions will ensure operator safety and prolong the life of your pressure washer.

V-TUF are committed to continuous improvement, and we therefore reserve the right to discontinue or change specifications, models or designs without notice or obligation.

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Important Safety Instructions

This book has important information for the use and safe operation of this machine.

Read and understand all warnings before you start working.

IDENTIFICATION LABEL

Before using this machine, make sure that it is provided with the identification Label. In case the identification Label is missing, do not use the machine and consult your dealer immediately.

The Identification Label with the technical specifications is fixed to the Chassis on the rear of the enclosure inside the unit.

WHEN USING THIS MACHINE, PLEASE FOLLOW THESE BASIC PRECAUTIONS

1. Read and understand all the instructions before using the machine.
2. Know how to stop the machine and release pressure quickly, be familiar with all the controls.
3. The jet must not be directed at persons, animals, live electrical equipment or the appliance itself.
4. Do not direct the jet against yourself or others in order to clean clothes or foot-wear.
5. Switch off machine before carrying out user maintenance.
6. High pressure cleaners must not be used by children or untrained personnel.
7. High pressure hoses, fittings and couplings are important for the safety of the appliance. Use only hoses, fittings and couplings recommended by V-TUF.
8. Always wear suitable eye, face and body protection.
9. Do not operate the machine when fatigued or under the influence of alcohol or drugs.
10. Keep operating area clear of all persons.
11. Do not overreach or stand on any unstable ground, keep good footing and balance at all times.
12. Follow the maintenance instructions specified in the manual.
13. Do not use in an enclosed or unventilated area.
14. To prevent fire hazard, do not use with or near inflammable substances such as: petrol, solvents or thinners.



This manual should be considered a permanent part of the machine and should remain with it if ownership is transferred.

Keep These Instructions in a Safe Place

General Points

Instruction Manual

Please check that the manual is in good condition and that each of the pages are clearly legible. Should the manual be damaged, or missing any pages, please return it immediately to your re-seller who will provide you with a replacement copy. Alternatively, you can download this document as a pdf from the website at www.v-tuf.co.uk and search for this VTUF D10 Industrial Pressure Washer.

Trial before shipment

The machine has been tested at the manufacturer's factory by a V-TUF technician to check that all of the components are functioning correctly according to the machine's specifications.

Guarantee Terms

The machine is under guarantee according to agreed contractual terms which constitute an integral part of the order or the rules in force, in all cases, for a maximum period equivalent to twelve (12) months from the date of dispatch from the factory. The guarantee covers exclusively breakages which could be due to defective mechanics or assembly. The guarantee does not cover parts subject to wear and tear. The guarantee is considered forfeit in the following cases:

1. Improper use of the machine, failure to observe the rules of use,
2. Use of non-original parts, those not sold directly by the manufacturer or an authorised re-seller,
3. Modifications made to the machine, or repairs made to the machine by anyone not specifically authorised by the manufacturer or by the re-seller.

Packaging

The packing materials and any parts replaced during maintenance should be collected and sent to a specialist waste disposal firm (wood, plastic, metal etc.) and not left within the reach of children or animals.

Delivery

The transport will be carried out by qualified companies, in respect to regulations in force and legislation relative to weight and length. The merchandise travels under the full responsibility of the transporter and the user; in the event of an accident, or late delivery, the manufacturer accepts no liability.

Checks

Upon receipt of the goods, check the condition that they are in. Should they appear damaged, avoid any type of installation and immediately advise the transporter and the supplier.

To ascertain the condition of the parcel, proceed to unpack the goods and check that the delivery is complete (check the correspondence with the delivery note), ascertain whether the machine has arrived in generally good condition, free of breakages or dents. In the event of missing or damaged items, immediately advise the re-seller and / or the manufacturer after having reported these when signing the transporter's delivery note.

Personal identifying data

An exact description of the model, serial number and installed accessories will aid a quick and efficient response on the part of the manufacturer or help centre. Always provide the type, model of machine and its serial number each time you contact the help centre.

To help you remember, we suggest that you place the relevant machine details in the panel below:

Model	Serial N°
Year of manufacture	Type of pump
Type of Engine	

Prior to use, please carefully read the instructions, paying particular attention to

"IMPORTANT RECOMMENDATIONS", "SECURITY NORMS" and "PRECAUTIONS".

It is forbidden to remove or tamper with the protective parts of the machine.

It is forbidden to use inflammable, explosive or toxic substances.

It is obligatory to use appropriate protective equipment.

It is obligatory to keep the machine clean and in good working order, in particular the controls, the connections and the technical data panel.

For your safety, and that of those around you, and for the continued working of the machine, do not use parts other than those prescribed by the constructor.

Before using the high pressure cleaner, always try to ensure that any potential hazardous conditions have been removed or eliminated from the area of usage.

The high pressure cleaner should be used with clean water. Unfiltered water and/or corrosive chemicals will cause damage to the machine.

IMPORTANT RECOMMENDATIONS

The ordinary use of this machine does not require particularly specialised training, as long as the user has sufficient competence and training to carry it out, knowledge of this manual and is aware of general safety procedures.

Follow the instructions with great care for your safety and that of others, to safeguard your machine and protect the environment.

SECURITY NORMS

FOUR SYMBOLS TO REMEMBER



General danger



Ranger of severe damage to the machine



Danger to people



Safeguarding the environment

Your machine is supplied with electronic apparatus, the use of which requires the observation of the following safety criteria.



Take care not to spray the machine with the water jet as this could lead to short-circuit



Keep the machine out of reach of children or unauthorised personnel.



It is strictly forbidden for the user to operate the machine in any way in bare feet.



Do not use the machine if any of its components are defective.



Do not use the machine if there are people in your way.



Do not direct the water flow near sources of electricity.



Do not place your hands ahead of the lance; high pressure nozzles can be extremely dangerous when used inappropriately.



If the machine should be used in service stations, supply stations or other potentially dangerous locations, please ensure that the appropriate safety procedures are observed.



Do not touch the engine or other internal parts when the machine is on, or immediately after it has been turned off as you may risk burning or scalding.



Should you need to clean the unit, this procedure should be carried out in places where, to safeguard the environment, an adequate oil separator is installed.



Re-filling of petrol should only be undertaken when the machine is turned off



Do not use combustible materials other than those advised by the constructor.



Once you have finished working, and after the machine has stopped, release the residual pressure in the tube and pump by squeezing the pistol lever.



It is strongly forbidden to carry out any operation with the machine if you are not wearing the appropriate safety equipment (protective glasses, gloves, overalls etc) as per established safety norms.



During winter, and in the event of frost, it is advisable to use anti-freeze or to empty out the water from the internal circuits by closing the tap from the water supply and activating the machine until all of the water is expelled.



Should the machine remain inactive for extended periods of time, it is possible that calcium deposits can form in the valves which can then cause problems when trying to re-start the machine. Should this happen, pay particular attention to any strange or unexpected noises emanating from the machine, in which case you should consult your local technical services.

IMPROPER USE

By improper use, we mean using the machine for uses which it was not specifically designed for, such as:

- Washing of objects or vehicles which have come into contact with inflammable or noxious dust, gas or liquids, or substances which can cause dangerous reactions when in contact with water.
- Use of the machine in places where there is a danger of explosions, or a significant risk of fire.
- Use of the machine for the cleaning of animals, of any size.
- Use of the machine by anyone under the age of 16 years.
- Use of the machine in the rain or during thunderstorms.
- Use of the machine for the washing of any equipment supplied by an electric current.
- Use of the machine by anyone unauthorised personnel, or anyone untrained to do so.

ERRONEOUS USE

By erroneous use, we mean the use of our machine without respect for the guidelines contained in the instruction and maintenance manual. Lack of respect for these guidelines can represent a risk of injury to both the operator and those persons nearby as well as a risk of serious damage to the machine itself.

Erroneous use, therefore, can constitute unsecured connections (including those of accessories supplied as optional extras), not using original spare parts, repairs undertaken by unauthorised or unqualified personnel, use of the machine for purposes it was not designed for (see improper use), lack of proper maintenance and the high pressure tube to drag or haul the machine around.

PRECAUTIONS

Before activating the high-pressure cleaner, make certain that the water supply is correct (min. 1 Bar – Max 8 Bar); dry use can provoke serious damage to the machine's waterproofing systems.

To safeguard the security of the operator and of the machine, avoid making modifications to the machine without the written consent of the manufacturer.

If you notice any damage to the machine, refrain from any and all work with the machine, and immediately inform the re-seller or an authorised technician.

During use, avoid covering the machine: if you consider it necessary to protect the machine, do it in such a way as to allow air to circulate freely in order to cool the engine.

In the event of a long pause / break during work / using the machine (more than 15 minutes), turn off the machine and release the residual pressure.

The maintenance of this machine requires the use of a qualified person who, as well as having knowledge of this instruction manual, should be equally familiar with general safety guidelines as well as those measures specific to this machine.

For matters of repair, maintenance and tuning, we always recommend that you refer to a re-seller or authorised technician.

SAFETY

Power washers should only be used by fully trained, competent persons. They should not be used by untrained or inexperienced users.

Care should be taken when handling the pressure washers as they have uneven centres of gravity and may topple over when lifted.

3.1 Suitable Persons

Operators should be physically fit and free from the influences of drugs or alcohol. Prolonged periods of operation are strenuous, and operators should be encouraged to take regular breaks. If you have any doubts about your fitness to operate this equipment, seek professional advice before proceeding.

3.2 Protective Clothing

Operators and assistants should wear the following Personal Protective clothing and equipment: -

Waterproof boots with good non-slip soles

Waterproof overalls

Waterproof gloves

*Goggles or full-face protection to at least BS EN166

**Ear Muffs or Ear Plugs to give protection to at least EN352-1. EN352-2

3.3 Use in confined spaces

Diesel engines produce fumes and toxic gases, use only in well ventilated spaces.

To prevent the build-up of flammable vapours the filling diesel tanks should not be done in confined spaces. Any spillages should be cleaned up and any absorbent material used should be disposed of in a proper manner.

3.4 General Safety

Check all hoses and couplings for tightness and damage, loose connections should be tightened, and damaged hoses replaced.

Ensure the workspace is clear and free from obstructions; consideration should be given to the erection of fences or sheeting to prevent injury to others.

High-pressure lances react 'Kick Back' when the operating trigger is pulled.

Ensure you have a good firm footing and anticipate this reaction.

Extra care should be taken when working at heights, scaffolding should be in good condition, secure and properly fenced, working from ladders is not recommended.

The high-pressure stream can be dangerous, do not point the stream directly at others or submit them to the fine over-spray.

3.5 Control of Vibration at Work Regulations 2005

This machine in its standard form does not exceed the 2.5 m/s² vibration action value and should not require any daily limitations to its use. Periodic equipment checks and servicing will maintain the characteristics and efficiency of this machine.

Warning:

Any modifications or accessories added or use with this machine may affect the vibration levels. Under the Control of Vibration at Work Regulations it is the employers duty to manage the exposure to vibration and implement training and health surveillance for employees.

Under the Supply of Machinery (Safety) Regulations 1992 (SMSR), you should ensure equipment is in good condition and maintained in accordance with the manufacturer's instructions, any modifications or accessories added to this machine should be assessed for safe operation and vibration, then implement appropriate measures.

* Note: Goggles or Full-Face Protection.

The wearing of eye and face protection in hazardous areas is a requirement under regulation 4 of the personal protective equipment at work regulations 1992.

Regulation 4 requires employers to provide suitable personal protective equipment to employees who may be exposed to risks affecting their health and safety.

Full Face Protection.

High speed flying particles or chemical splashes are rarely aimed directly at the eyes. A full face visor offers the maximum protection in extreme conditions. Full face shields offer a wide area of protection and because of the all round ventilation, remain mist free even in wide temperature swings.

Chemical Splash.

Chemical splashes and vapours can hit you from all sides. It's important that full eye enclosure is selected, e.g. Unvented goggles. Full face shields will also protect the whole face from liquid splashes. Those with chin guards should be selected where there is a danger of splash deflecting up from work surfaces.

Impact.

Impact hazards are caused by fast moving particles from the cleaning operation. The potential impact speed must be assessed before selecting the most appropriate protection.

Safety glasses could be dislodged by high velocity impacts, in which case goggles or face shield should be selected.

** Note: Earmuffs or Ear Plugs.

The noise at work regulations requires that from February 2006 persons working in noise levels between 80dBA and 85dBA must be provided with suitable hearing protection on request. If noise levels are above 85dBA then hearing protection must be supplied and worn.

ATTENTION:

Never under-estimate these warnings, use of the machine in an inappropriate manner, can lead to serious damage and injury to the operator and any surrounding personal. Don't take risks!

ATTENTION:

The manufacturer cannot be held responsible for any eventual damage or injury to people, animals or property resulting from improper or unreasonable use, or usage in any way not conforming to the instructions contained in this manual.

TECHNICAL DATA:**Industrial Specification ~ D10-20015**

Pressure	200Bar
Flow	15L/MIN
Pump	XHDM400SS
Gearbox	XHDG500
UNLOADER	C0.081
INLET FILTER	YES
THERMAL PROTECTION VALVE	YES
OIL SIGHTGLASS	YES
CHEMICAL INJECTION	YES
ENGINE BRAND	YANMAR
DISPLACEMENT(CC)	441 (10HP)
STARTING SYSTEM	RECOIL STARTER & ELECTRIC STARTER
FRAME FINISH	BLACK POWDER COATING
WHEEL	13" PNEUMATIC
HIGH PRESSURE HOSE	10M MSQ QUICK RELEASE DURAKLIX HOSE SYSTEM
GUN AND LANCE KIT	YES
NOZZLE	5QR NOZZLES(0 ,25 ,40 AND CHEMICAL)
DIMENSION(CM)	104*68*90
Noise Level (dB)	110

IDENTIFICATION DATA

The position of the identification data of the machine

1) Identification of the machine according to EU directives.



ATTENTION:

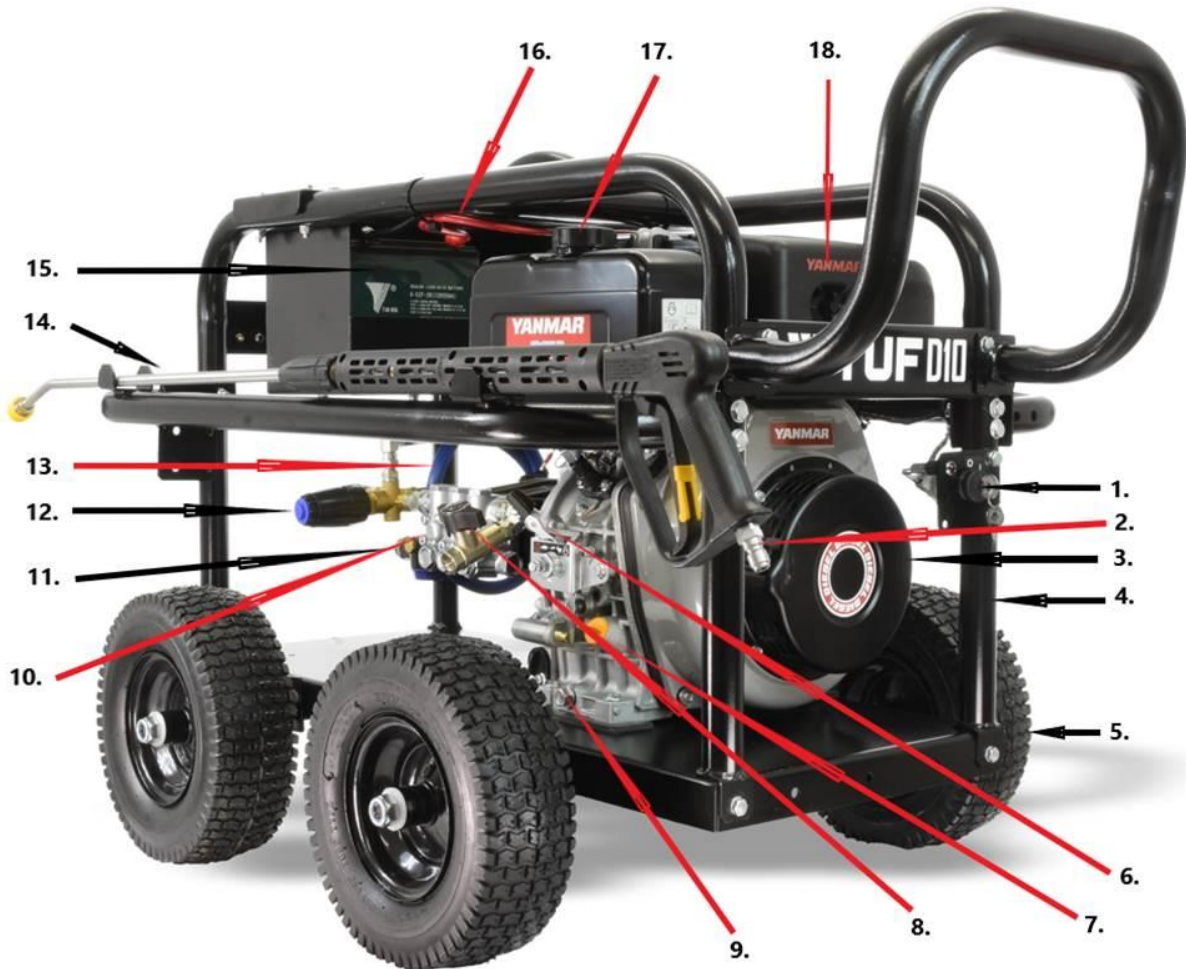
Check that your high-pressure washer has been provided with these identification details, if they have not been provided, please inform your local dealer immediately.

Machines which have not been provided with these details **MUST NOT BE USED** and should be considered anonymous and potentially dangerous.

It is obligatory that you ensure that the data label is always attached to the machine and clearly legible.

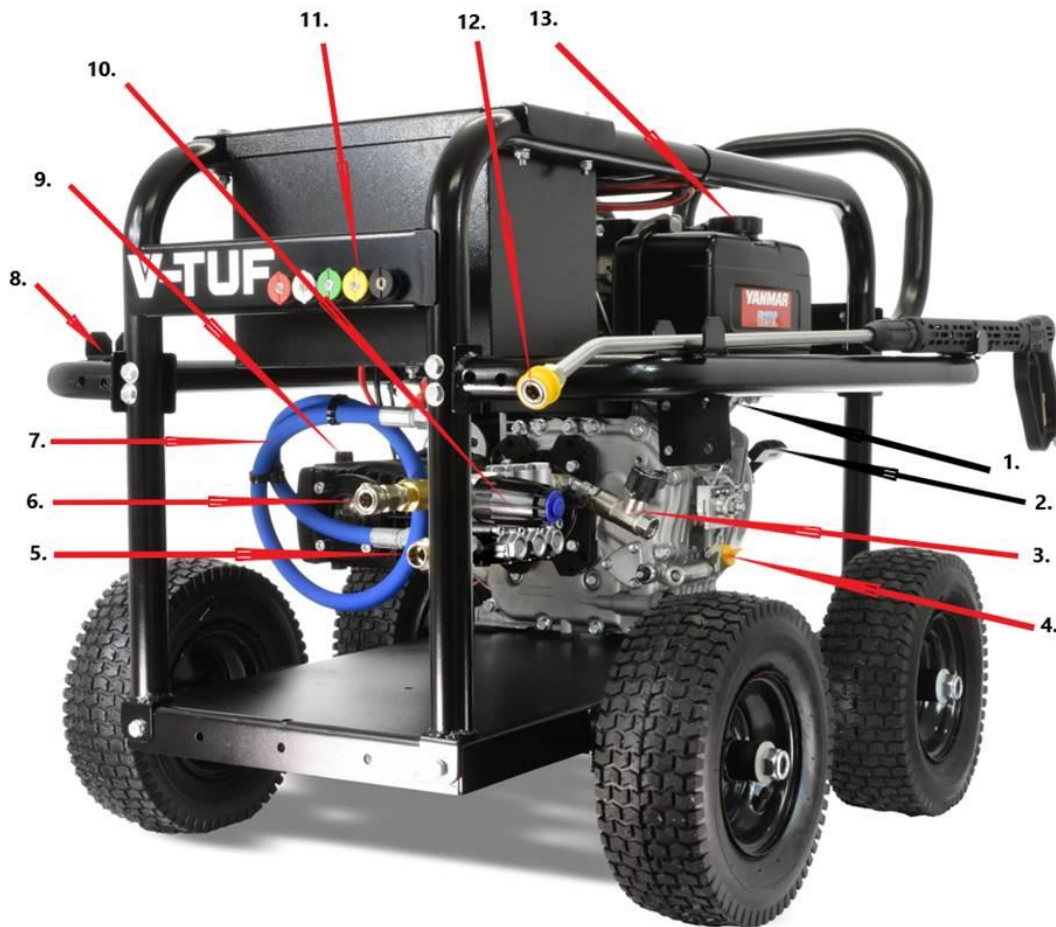
In case of damage, loss or illegibility, you should submit a written request to the manufacturer who will then provide you with a new one.

IMPORTANT COMPONENTS of your machine (Fig.1):



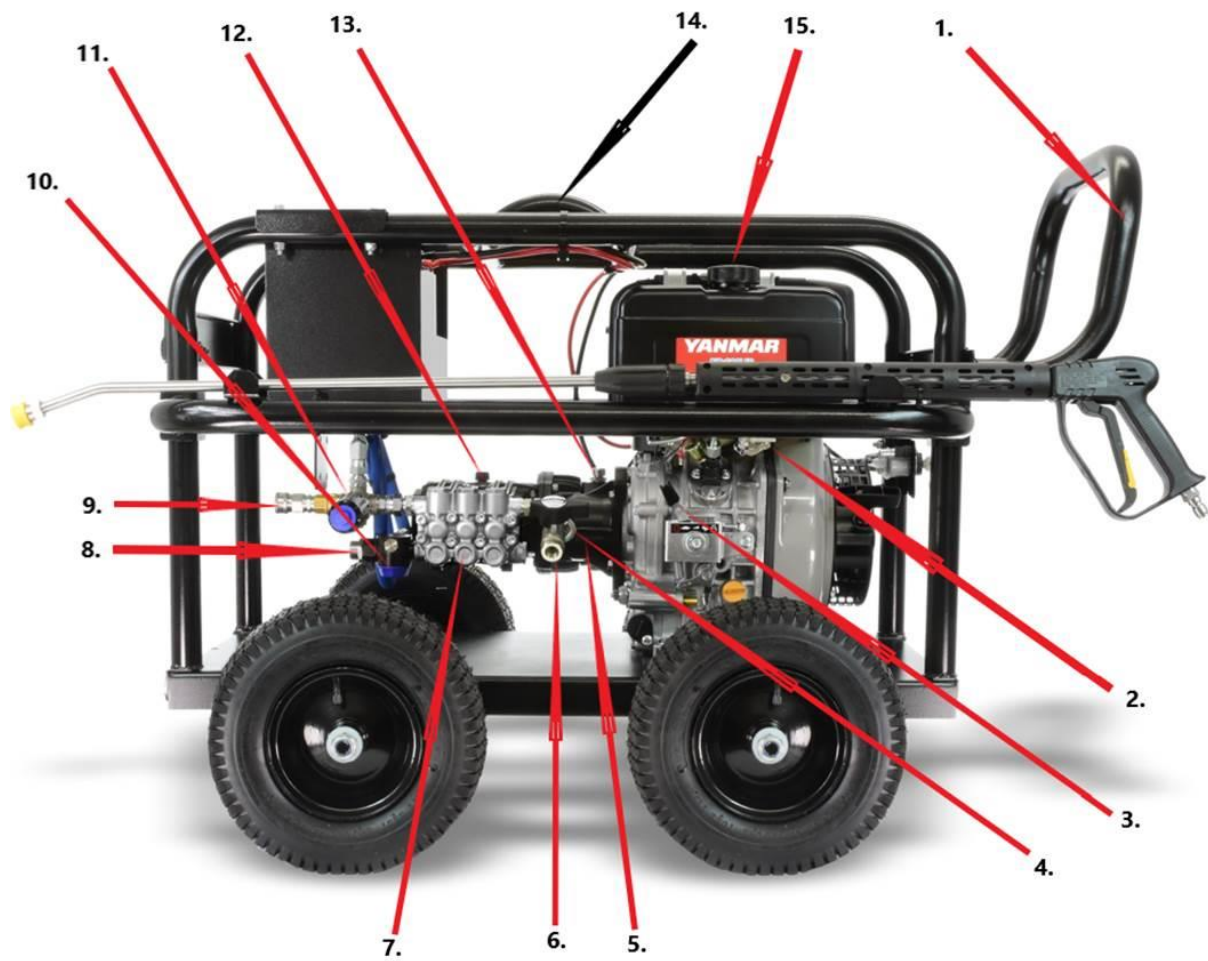
1. Key Switch [VDKEYSWITCH](#)
2. High pressure hose connection MSQ [B14.9191M](#)
3. Yanmar Diesel engine [VD10L100](#)
4. FRAME3
5. Wheel [WHEEL10HP](#)
6. Throttle control
7. Engine oil filler and oil level (Recommended oil [PL500](#) Qty: 3)
8. Priming valve [C7.038BPKIT](#)
9. Engine oil drain plug
10. Pump [XHDM400SS](#) & Gearbox [XHMG500SS](#)
11. Water inlet coupling [B2.3434](#), fitting [MB8/MB12/NP](#) and inlet filter [P13.6511AL](#)
12. Pressure & flow adjustment – unloader [C0.081-KIT1](#)
13. Bypass pipe [VTK23801FFN](#) and fittings [MB6+W6](#) and [MB4/MB6+W4](#)
14. Spray gun [ORG2LKIT](#)
15. 12V battery [VTES002](#)
16. Battery leads [VTES003](#)
17. Diesel or HVO fuel filler (never use petrol)
18. Engine air filter cover

IMPORTANT COMPONENTS of your machine (Fig.2):



1. Fuel tap
2. Pull Start
3. Priming valve [C7.038BPKIT](#)
4. Engine Oil filler and oil level Recommended oil: [PL500](#) (aprox. 1.25 litres)
5. Water inlet coupling [B2.3434](#), fitting [MB8/MB12/NP](#) and inlet filter [P13.6511AL](#)
6. High pressure pump outlet [B14.9190HD](#) and MSQ SEAL [B14.80PT](#)
7. Bypass pipe [VTK23801FFN](#) and fittings [MB6+W6](#) and [MB4/MB6+W4](#)
8. Spray lance holder
9. Pump oil filler [VTPSBR01](#) Recommended oil: [PL500](#) (aprox. 0.7 litres)
10. Pressure & flow adjustment – unloader [C0.081-KIT1](#)
11. SSQ high pressure jet selection [B14.5050](#)
12. SSQ quick release jet end [B14.9180SS](#)
13. Diesel / HVO fuel filler

IMPORTANT COMPONENTS of your machine (Fig.3):



1. Detachable push handle
2. Fuel tap
3. Throttle lever
4. Gearbox oil level site glass
5. Gearbox [XHDG500SS](#)
6. Priming valve [C7.038BPKIT](#)
7. Pump [XHDM400SS](#)
8. Water inlet coupling [B2.3434](#), fitting [MB8/MB12/NP](#) and inlet filter [P13.6511AL](#)
9. High pressure pump outlet [B14.9190HD](#) and MSQ SEAL [B14.80PT](#)
10. Inlet filter [P13.6511AL](#)
11. Pressure & flow adjustment – unloader [C0.081-KIT1](#)
12. Pump oil filler [VTPSBR01](#) Recommended oil: [PL500](#) (aprox. 0.7 litres)
13. Gearbox oil filler Recommended oil: [PL500](#) (aprox. 0.3 litres)
14. Lifting point
15. Diesel / HVO filler

Starting your machine:

1. Connect water supply
2. Connect high pressure line & trigger (ensure all couplings are properly connected)
3. Move throttle lever (Page 15 - fig 3 pos.13) to maximum
4. Ensure your fuel tap is on (Page 15 - fig 3 pos.2)
5. Open pump priming/decompression valve (Page 15 - fig 3 pos.2) & (Page 17)
6. Starting with pull cord: Gently pull the pull cord until you feel resistance. Then switch the engine decompression lever (1) below in the direction of the arrow. Then pull the pull cord right out with a strong pull. Then engine should then start.
7. Starting with key start: Switch the engine decompression lever (1) below in the direction of the arrow. Then turn the key clockwise and the engine should start. Then release key
8. Run the machine until a strong contact stream of water emerges from the priming/decompression valve (Page 15 - fig 3 pos.2) & (Page 17) and then close it.
9. Spray the high-pressure lance and ensure there is a strong smooth high-pressure jet of water. If the flow is not smooth, adjust the pressure & flow adjustment knob (Page 14 - fig 2 pos.10) anticlockwise until the flow becomes smoothest.

AIR COOLED ENGINE

The LV engine is air-cooled by means of a cooling fan. The cooling system consists of a fan attached to the flywheel.

CONTROLS - RECOIL STARTER

The LV Series engines are equipped with a recoil or electric starter. This section explains the controls available with the recoil starter.

Recoil Starter

A recoil starter allows you to manually start an engine by pulling on the recoil starter handle (Figure 3, (1)). When you pull on the handle you set the flywheel and crankshaft in motion. The recoil starter is spring loaded so the handle and attached cable automatically return to the recoil starter assembly.

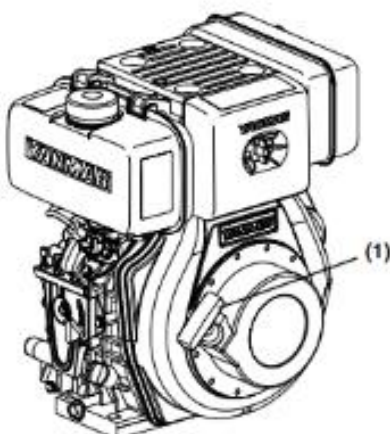


Figure 3

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Decompression Lever

The decompression lever (Figure 4, (1)) helps you start the engine by reducing the effort needed to pull the recoil starter handle. The decompression lever will automatically return to the original position when the engine starts. Some LV model engines have an automatic, internal compression release mechanism and do not have the external compression release lever. Refer to the specific instructions for your driven machine.

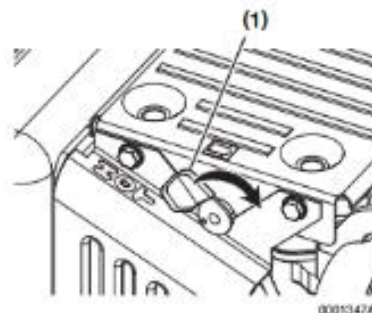


Figure 4

INDICATORS AND CONTROLS – ELECTRIC STARTER

If an LV series engine is ordered with an electric starter it will include a key switch and may also have indicators to monitor engine functions.

CAUTION

The illustrations and descriptions of optional equipment in this manual, such as the operator's console, are for a typical engine installation. Refer to the documentation supplied by the optional equipment manufacturer for specific operation and maintenance instructions.

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Priming / Decompression valve starting positions



Fig. 1



Fig.2



Fig.3

1. Start the engine with priming / decompression lever in position Fig.1
2. When the engine starts let the water run through for 30 seconds Fig.2
3. While the engine is running close the lever to position in Fig.3

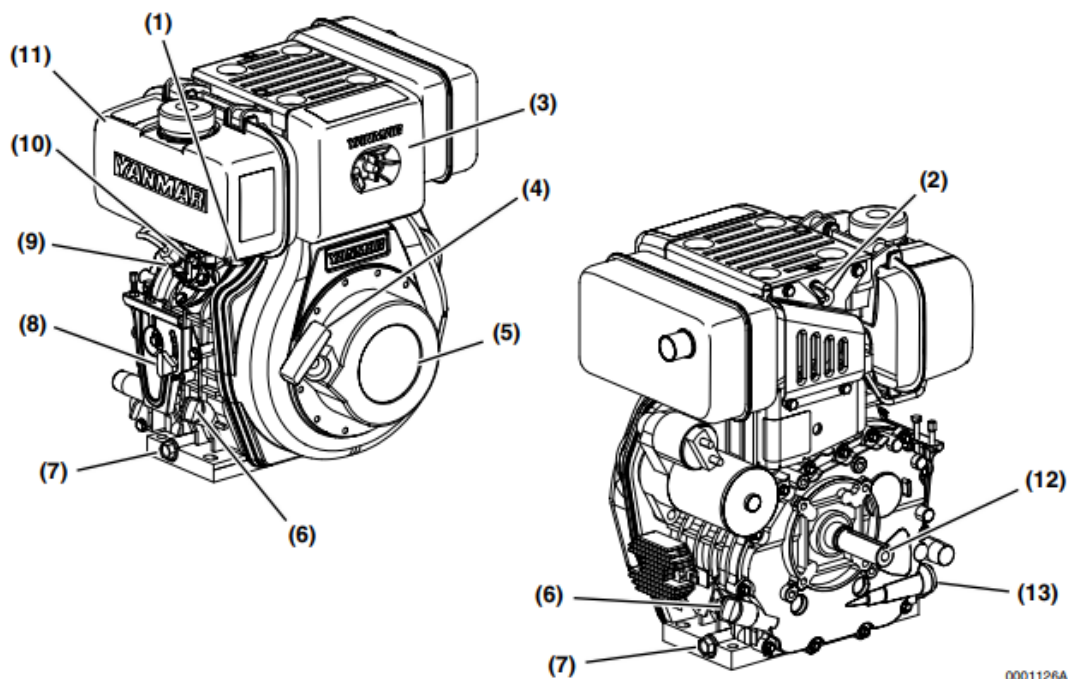


Figure 1

- | | |
|--------------------------|-------------------------------|
| 1. Fuel Drain Plug | 8. Engine Speed Control Lever |
| 2. Decompression Lever | 9. Fuel Injection Pump |
| 3. Air Cleaner | 10. Fuel Cock |
| 4. Recoil Starter Handle | 11. Fuel Tank |
| 5. Recoil Starter | 12. PTO Shaft |
| 6. Oil Cap / Dipstick | 13. Oil Filter |
| 7. Oil Drain Plug | |



Fig1 pos 12: **Pressure adjustment knob** (these may differ in looks)

When the engine has started turn the pressure adjuster clockwise to increase pressure & flow or anti-clockwise to lower pressure & flow to suit the task you are undertaking.



Fig3 pos.9: **High pressure outlet**: This is where the high-pressure hose connects.

The image shows the high-pressure hose disconnected and a jet of water jetting out. This is normally done when priming (getting the air out and water in) the pump when the machine is used on suction. Run the engine until you get a strong stream of water jetting out, then stop the engine and connect the high-pressure hose, then restart with the pressure adjustment knob set on low pressure.

Stopping your machine:

1. Move the throttle lever (Page 15 - fig 3 pos.13) to minimum and the engine will slow down and stop.
2. Close the engine fuel tap (Page 15 - fig 3 pos.2)
3. Pull the spray gun trigger whilst directing the spray in a safe direction to release the pressure out the system to make it safe to disconnect couplings etc.
4. Be careful to avoid touching hot areas of the machine when handling.

USE WITH CHEMICAL PRODUCTS

With the machine shut down, act the device (adjustable head) placed on the lance end to obtain the suction and the distribution of the product; pull the gun trigger to obtain the detergent distribution and start the work.



ATTENTION

During operation of the machine, it is obligatory to use the appropriate personal safety equipment.

During operation, please pay close attention to the information quoted on the chemical product labels regarding safety and the proper percentages to be used when diluting chemicals.

Fill the detergent tank (5) with the product you intend to use for your work and insert the detergent hose suction.



Repeat actions 1, 2 and 3 as per cold water use.

During operation, the detergent will be sucked up and automatically mixed with the water.

Practical Advice

Avoid soaking with water the surface you then wish to treat with detergent because, in doing so, you can place a film of water over the area you wish to treat, resulting in poor cleaning results. Instead, whilst holding the nozzle pointing towards the ground, wait until the detergent exits the nozzle. When the detergent exits the nozzle, approach the surface you wish to treat, start from the bottom with overlapping strips until you reach the top of the area, sprinkling the whole area with detergent. This system is known to avoid dripping of detergent onto dry surfaces, the residue of which could remain even after rinsing.

In order to avoid the formation of deposits or crusts, at the end of operation it is advisable to pass clean water through the pump for a few seconds.

Important Advice

To safeguard the environment, we advise that only authorised detergents are used, that the recommendations of use and dosage are observed on the product labels, that detergent is used sparingly and remember that use of inappropriate detergent, as well as damaging the environment can damage the hot water cleaner as well as the objects being cleaned.

USE DETERGENTS WHICH ARE OVER 70% BIODEGRADABLE.

Before sprinkling detergent over varnished areas with delicate colours, make sure that the surfaces to be treated are not hot, that the detergent has not dried and that the concentration of water / detergent is correct.

USE DETERGENTS WHICH ARE OVER 70% BIODEGRADABLE.

Before sprinkling detergent over varnished areas with delicate colours, make sure that the surfaces to be treated are not hot, that the detergent has not dried and that the concentration of water / detergent is correct.

IMPORTANT: Rinse well.

Upon completion of operation, shut down the machine then squeeze the pistol lever until the residual water pressure has been expelled.

Detergent Suitable to use through pressure washers:



VTC120, VTC620, VTC320: Apply and then rinse well (do not allow to dry on surface). A good method is applying from the bottom up and rinse from the top down.

VDG (D-GREEN): Rinse off heavy soiling then apply and leave to dry (do not rinse off)

Detergent NOT suitable to be applied through pressure washers:

VTC520: This must not be used on painted surfaces and can only be pre-sprayed through a hand sprayer or painted on whilst wearing with hand protection and then can be rinsed off with a pressure washer.



LUBRICATION OF THE PUMP

For the Pump we recommend:

V-TUF Pressure Lube **PL500** – OIL CAPACITY 0.5 litres

You should change the oil after the first 50 hours of use, and after each subsequent 500 hours of operation.



TRANSPORT – LIFTING – SHIFTING

ATTENTION:

Whenever the machine needs to be transported, it should be securely fixed with straps, cables or other suitable equipment in order to avoid accidental movement which could cause damage to people or property as well as to the machine itself.

ATTENTION:

Should the machine need to be lifted, it should be hooked or coupled by means of strips, or suitable lifting equipment which will safeguard the machine’s integrity. Make certain that the lifting equipment used has superior capacity to the weight and volume of the machine; the use of equipment conforming to current applicable safety standards is recommended.

ATTENTION:

It is strictly forbidden to remain under or in the immediate vicinity of the machine while it is being lifted or elevated.

Do not trust crushed or bent chains or straps, always use thick working gloves.

Chain or strap fixtures should always be welded in place.

Check that the attachment is sufficiently robust to sustain the weight.

ATTENTION:

Should the machine need to be shifted manually from one place to another, you should ensure that the engine has been turned off, then using the appropriate grip and taking care not to make any sudden movements which could compromise your safety, or that of the integrity of the machine itself, proceed with the moving.

Remember that you must not drag or haul / move the machine over electrical power supply cable or by the high pressure hose. Use the handles built on the machine.

N. B.

For all further things which have not been specified, please abide by general norms for the prevention of injuries.

STORAGE

Park the machine on a flat surface. If the machine is not going to be used for an extended period of time, empty the water circuits and the fuel tank then cover the machine and store it in a place protected from atmospheric extremes.

SCRAP AND DISPOSAL

Should you decide to scrap the machine, we recommend that you render it inoperative using the following procedure: remove from the machine the water supply tubes; cut any power supply cable and tubes; remove the lance and pistol, cut all of the electrical cables, break the pump and the engine, destroy the identification data label of the machine and also those of the pump and engine group.

Please remember that the chemical products contained inside the machines tubing should be removed in advance; if necessary any containers used for this purpose should be recycled or disposed of as per current laws in force.

PACKAGING

The packaging materials should be gathered together and sent to a company specialising in the disposal of refuse (wood, plastic, metal etc.) and not left within reach of children or animals.

ATTENTION

Do not use products containing solvents, methanol or hydrocarbons.

Cleaning Applications

MARKET SECTOR	APPLICATIONS
Automotive	Cleaning Services, such as car washes, and vehicle cleaning in yards like courier's fleet of trucks and vans.
Public Sector	Cleaning outside of hotels and other public eating areas, including car parks, and entrance steps to buildings.
Construction Industry	Cleaning the outside of buildings, concrete & ready-mix centres. Also for cleaning surfaces with hard residue on.
Railway Industry	Cleaning trains & trams. Cleaning railway stations.
Manufacturing Plants	Cleaning up of oil and dirt, and scale that can be known to build up on equipment, floor surfaces; in workshops and mouldings and castings.
Food Industry	Cleaning of food manufacturing plants and equipment on production lines. Built with a stainless steel cover to comply with regulations in these industries.
Fuel & Oil Industry	Cleaning of drilling platforms, cleaning of oil rigs, cleaning of oil trucks, and cleaning of production equipment in oil production facilities.
Airplanes/Ships/Vehicles	Cleaning up of vehicles for public use, and also airstrips and runways and highways that vehicles use.
Logistics / Storage	Cleaning of vehicles, warehouses and transport related industry.
Metallurgy Industry	Cleaning of dirt on equipment that would be used for making products with iron and steel. Can also be used with sand blasting kits to clean hard surfaces such as paints and rusty dirt on steel castings.
Mining Industry	Cleaning of mine vehicles, transportation belts & underground working lines.
National Defence Industry	Cleaning of residue and dirt on and in ammunition depots and vehicles.

Troubleshooting

PROBLEMS	CAUSES	SOLUTIONS
The pump turns but does not reach the required pressure	<p>The pump is sucking in air.</p> <p>Worn out valves</p> <p>Worn out valve seat</p> <p>Worn out or inadequate water nozzle</p> <p>Worn out gaskets</p> <p>Dirty water filter</p>	<p>Check that the piping is watertight</p> <p>Replace the valves</p> <p>Replace the valve seat</p> <p>Replace the water nozzle</p> <p>Replace the gaskets</p> <p>Clean the water filter</p>
Irregular fluctuations in pressure	<p>Worn out suction and/or delivery valves</p> <p>Presence of foreign bodies in the valves which can affect their performance</p> <p>Air being sucked in</p> <p>Worn out gaskets</p>	<p>Replace the valves</p> <p>Check and clean</p> <p>Check the piping</p> <p>Replace the gaskets</p>
Drop on pressure	<p>Worn out suction and/or delivery valves</p> <p>Presence of foreign bodies in the valves which can affect their performance</p> <p>Air being sucked in</p> <p>Worn out gaskets</p>	<p>Replace the valves</p> <p>Check and clean</p> <p>Check the piping</p> <p>Replace the gaskets</p>

<p>Presence of water in the pump oil</p>	<p>Worn out oil seal.</p> <p>High percentage of humidity on the air.</p> <p>Gaskets are completely worn out.</p>	<p>Replace the oil seal.</p> <p>Change the oil twice as often as is normally prescribed.</p> <p>Replace the gaskets.</p>
<p>Excessive noise</p>	<p>Air is being sucked in.</p> <p>Dirty water filter</p> <p>Insufficient water supply.</p> <p>The springs on the suction and/or delivery valves are worn out or broken.</p> <p>Foreign bodies in the suction and/or delivery valves.</p> <p>Worn out ball bearings.</p> <p>The temperature of the water being pumped is excessive.</p>	<p>Check the seals in the tubing.</p> <p>Clean the water filter.</p> <p>Check that the machine has a water supply superior to the flow rate of the pump.</p> <p>Replace the valves.</p> <p>Check and clean the valves.</p> <p>Replace the ball bearings.</p> <p>Lower the temperature of the water being pumped.</p>
<p>Water discharge from between the pump body and the pump head.</p>	<p>Worn out gaskets.</p> <p>Worn out pistons.</p> <p>OR piston plug is worn out.</p>	<p>Replace the gaskets.</p> <p>Replace the pistons.</p> <p>Replace the OR piston plug.</p>

Oil discharge from between the pump body and the pump head.	Worn out oil seals.	Replace the oil seals.
Excessive vibrations.	Worn out or dirty valves.	Replace the valves.
The engine does not start.	There is no fuel in the tank.	Ensure the fuel tank has the correct fuel.

ACCESSORIES PARTS & LIST



ITEM	CODE	DESCRIPTION	QTY
1	TG350SEXTMSQ	V-TUF tufGUN350 SWIVEL GUN WITH EXTENSION MSQ MALE INLET x M22F OUT	1
2	H4.000	500mm LANCE (M22M ~ QUICK RELEASE)	1
3	B14.5050	QUICK RELEASE JET NOZZLES 0, 15, 25, 40 Degree	1
4	VTK23810UVYK-HD	10m HIGH PRESSURE QR HOSE	1



[276 BAR 4000 PSI 100c 05 RED HD TURBO NOZZLE x SSQM - T3.2605SSQ](#)

Spare couplings & seals:



[MSQ DURAKLIX H.P. QR FEMALE COUPLING 3/8" F - HEAVY DUTY - B14.9190HD](#)

3/8" F
Inlet



[MSQ DURAKLIX H.P QR MALE PLUG 3/8" F - B14.9191](#)



[MSQ & KWS DURAKLIX SPARE OPTISEALS \(x10\) - B14.80PT10](#)



[SSQ F COUPLING x1/4F \(STAINLESS\) YELLOW - B14.9180SS](#)



[SSQ M PLUG x 1/4M - B14.5730](#)



[SSQ M PLUG x1/4F - B14.5731](#)



[SSQ DURAKLIX SPARE OPTISEAL \(x10\) - B14.50T10](#)

Water supply kits:



IBC CONNECTION CRUSH RESISTANT PUMP SUCTION FEED HOSE KIT (3m) IBCF x 3/4F - B2.P023403KIT



V-TUF HEAVY DUTY CRUSH RESISTANT PUMP SUCTION FEED HOSE KIT (3m) 3/4F AND 3/4M ADAPTER



V-TUF 'WATER RESERVE' TYPE PRESSURE WASHER SUPPLY HOSE
"Makes pressure washers run smoother with more power and lower running costs"

[WASHFLEX PRO 'WATER RESERVE' 25m PRESSURE WASHER WATER SUPPLY HOSE KIT c/w KCQ & 3/4 FITTINGS - BF3425-B1234](#)



[BOWSER - 120 Litre water supply to PRESSURE WASHERS - V-TANK120](#)

High pressure hose Extension kits:



[TROLLEY MANUAL WIND V-TUF HOSE REEL with 50M 400 BAR HIGH PRESSURE HOSE - MSQ FITTINGS - V5.1453TR-KIT1](#)

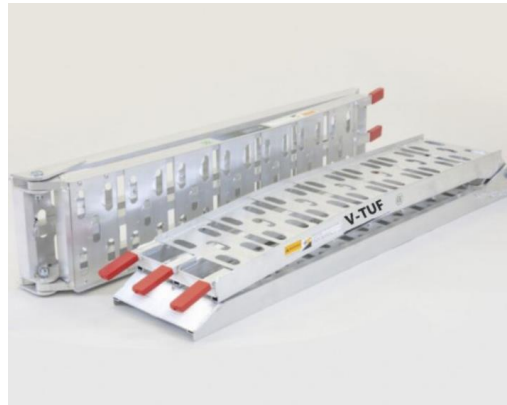


[MANUAL WIND SR1 PORTABLE HOSE REEL SUPER SERIES MSQM with 30m 400BAR HOSE x MSQF - V5.132SSC- KIT1MSQ](#)

Vehicle ramps:

The ideal foldable light weight ramp with a maximum combined load capacity of 600kg (300kg per ramp)

For loading wheeled equipment onto vehicles.



[FOLDING V-TUF RAMP SET - V-RAMP](#)



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