

WATER TRUCKS

OPERATORS

MANUAL



Issue: I

Rev: A

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Foreword and Reporting a Safety Defect

Foreword

This manual is an important part of all Water Trucks.

It provides safety information and operation instructions to help you use and maintain your STG Global Water Truck.

Read this manual before using your equipment. Always keep this manual with the equipment for future reference.

If you sell your Water Truck, ensure this manual is given to the new owner.

If you require a replacement copy, please contact your STG Global dealer. If you need assistance in locating a dealer, visit our website at **stgglobal.net** or on the **STG App** which you can find on the **Apple store or Android store**.

Reporting a Safety Defect

If you believe that your vehicle has a defect you should **stop operating the machine immediately** and inform the Service department at STG Global Contact on **1300 998 784**

Overview

- Foreword
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- Safety signs
- Unit Components
- Operational procedures
- SOP'S

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Foreword

publication date of this manual and factory contact information

Foreword: Page

Part numbers, revision level, publication date of this manual and factory contact information

Safety

Machine safety alerts and emergency procedures

Controls & Operation Overview

SOP'S

Service & parts:

Service intervals and instructions for this machine including lubrication, replacement of wear items and basic maintenance

Support: Page

The warranty policy for this machine and procedures for obtaining warranty consideration and training

Safety

DISCLAIMER

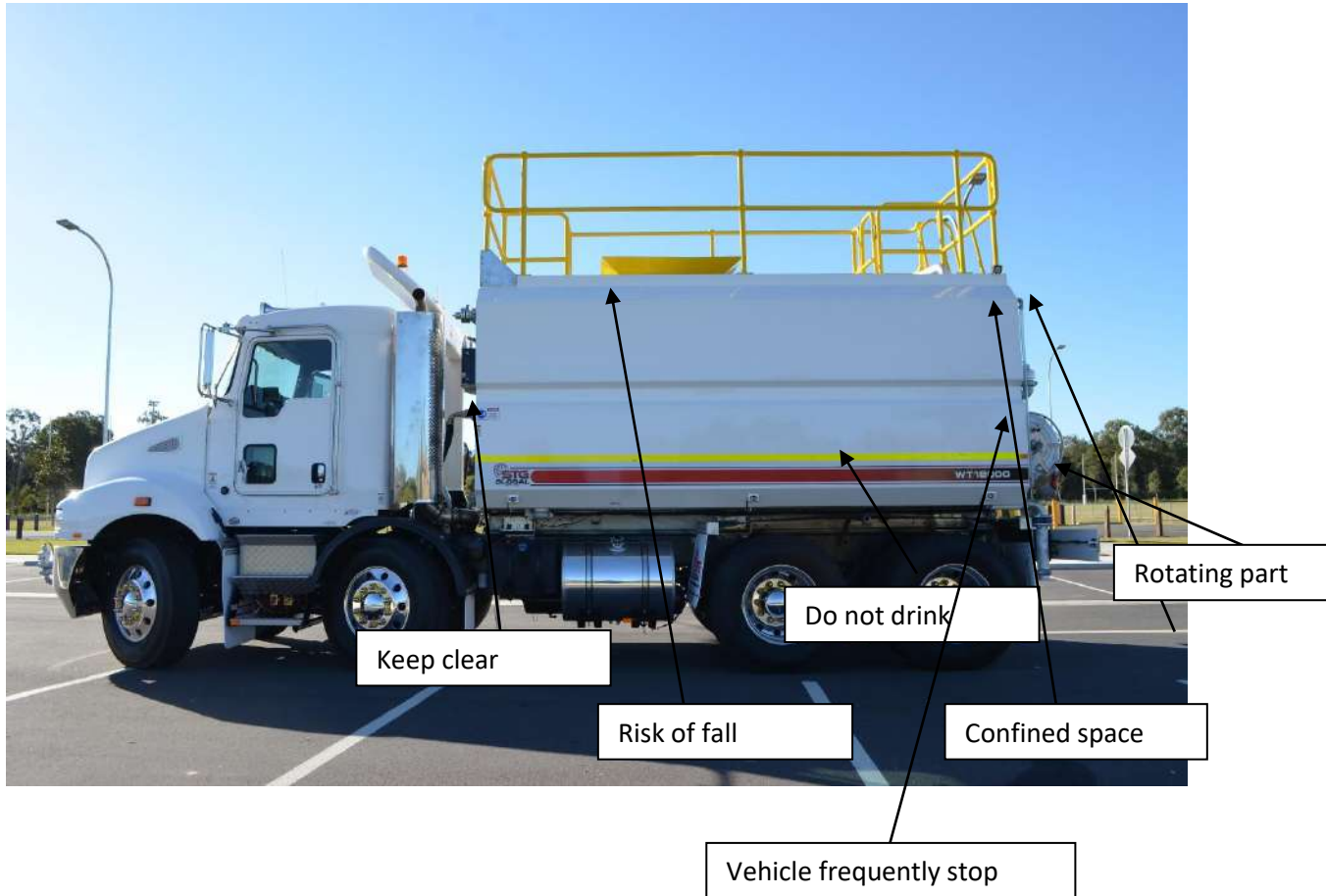
The STG Global Team take safety very seriously and expect our customers to ensure the same level of safety is used whilst operating all STG Global products.

STG Global is not responsible for how customers choose to use our products, the safety standards are suggested guidelines only.

PLEASE NOTE

Incorrect and unsafe use of STG Global products can result in **SERIOUS INJURY OR DEATH.**

Safety signs



Safety signs



Vehicle frequently reversing



Risk of fall



Rotating parts



Keep clear



Do not drink



Confined space

Recommended PPE for Operating Water trucks

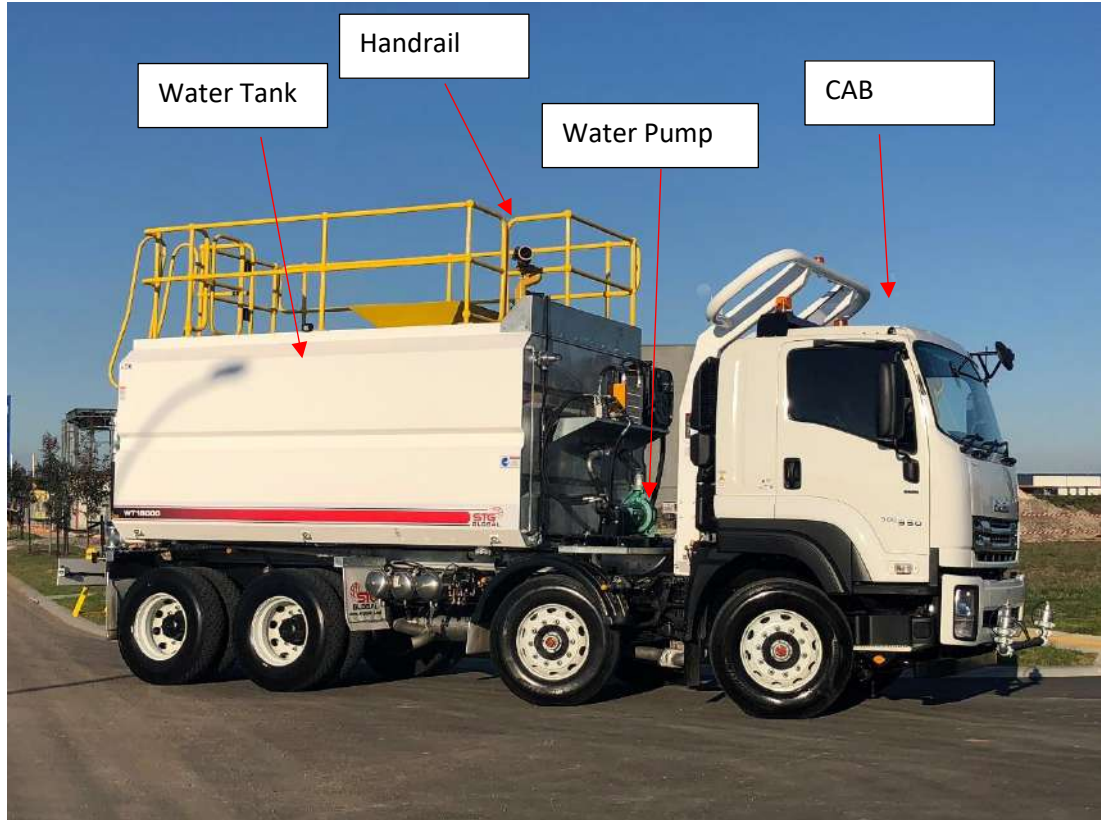


- Steel cap boots
- Safety glasses
- Work appropriate gloves
- Hard hat
- Hearing protection (Ear plugs, Earmuffs ect.)

General Safety Precautions

- **Do not operate a Water truck in a confined, non-ventilated space**
- **Do not operate a Water truck on an unstable / slippery surface**
- **Do not allow any children or untrained personnel operate a Water truck**
- **Do not enter the Spoil Tank without a spotter and required ventilation equipment**
- **Do not enter the module without a spotter**
- **Do not Access the roof of a Water truck without a safety harness**
- **Do not put any body part including hands or feet near any moving part**
- **Do not release any hydraulic or engine oil while in operation as this can result in injury or even death**
- **Do not remove any shields unless servicing a Water truck, ensure shields are out back into place and tightened before operating**
- **Do not allow anyone to ride outside of the cab of the vehicle**
- **Do not be in close proximity to the module while starting and running the engine**
- **Do not reverse without inspecting your surroundings**
- **Do not contact any moving or running part inside of the module while operating**
- **Do not operate a Water truck under the influence of any drugs or alcohol**
- **Do not come into contact with the rear door while the door is opening or closing**

COMPONENT BREAKDOWN



Operation Set Up



- Ensure that the Water truck is on a flat harden surface as it can become highly dangerous if parked on an unstable surface
- Ensure that there is no power lines / any structure above your work area **LOOK UP AND LIVE**
- Ensure that only trained personnel operate STG Water trucks
- If equipment has been damaged, STG Global advise you do not continue using the faulty equipment.
- Wear all advised PPE
- Ensure that your fuel level isn't critically low

Before use of STG Water Trucks

Please ensure that the E-Stops have been disengaged to will find the E-Stops on the front right hand side of the tank , to disengage the E-Stops simply pull and twist to the left.



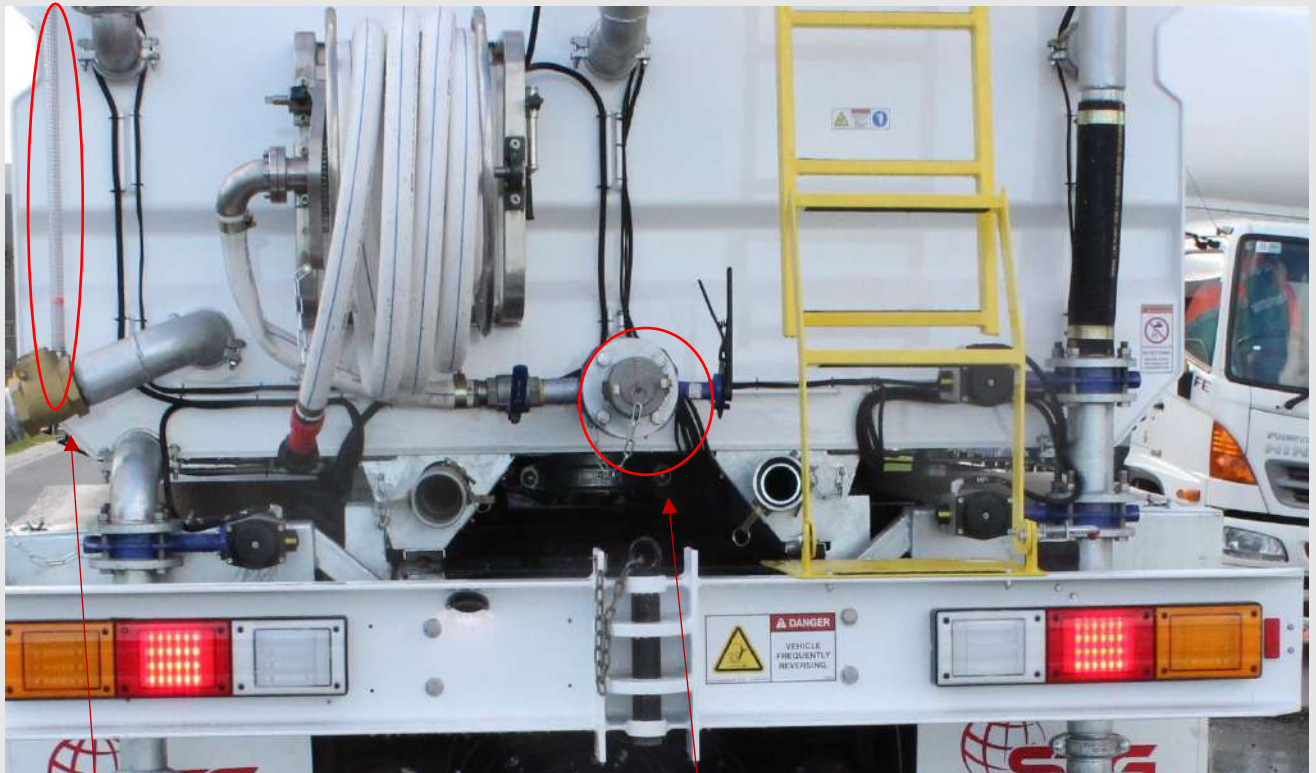
Daily pre-start checks

Checks	Pass	Fail
Check the tyre pressures daily - Refer to the tyre manufacturers specifications on the wall of the tyre (max cold 120psi is normal)		
Check fluid levels - engine oil, transmission oil, coolant		
Grease all moving parts daily - drive shaft, suspension etc. – make sure you have located all grease nipples for your individual truck as positions may vary from truck to truck		
Check water level in water tank		
Look for leaks under the truck - oil, water, coolant		
Check for worn or rubbing hoses on the water tank		
If the water pump is operated by hydraulics, check hydraulic oil level		
Check that the hydraulic oil cooler fan is working, the fan will come on when the PTO is engaged, and you will hear it working. (If it is not working DO NOT operate the water pump and report immediately to the service department, failure to fix will result in serious hydraulic component failure which is very Costly)		
Grease PTO Shaft daily - the shaft from the PTO to the water pump / hydraulic pump. (The PTO is mounted on the side of the transmission)		

HOW TO FILL YOUR WATER TRUCK

(HYDRANT FILL)

The port for hydrant fill is located at the rear of the tank on the passenger side, it is visible by the brass valve. Remove the cap and connect the fill hose to the camlock and connect the other end of the hose to the hydrant. Turn hydrant on and allow the tank to fill, using the water level indicator on the side of the located at the front and rear the tank.



Water level indicator

Hydrant fill point

HOW TO FILL YOUR TANK

(OVERHEAD FILL)

Overhead fill can be carried out via funnelling water through the opening on the top of the water tank.



HOW TO FILL YOUR TANK

(SELF FILL)

STEP 1: With the PTO disengaged, flick the toggle switch down,



which will close off suction from the tank. Remove the camlock cap from the suction port on the front driver's side of the tank.



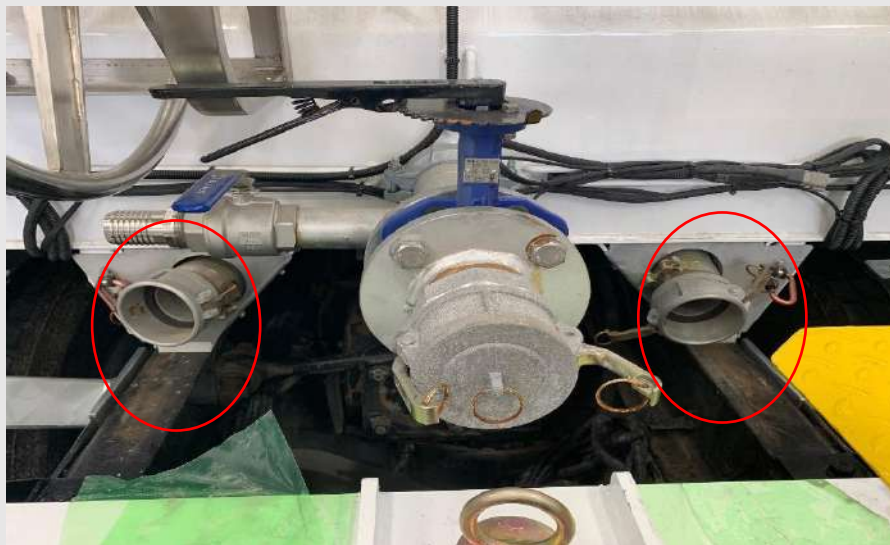
Connect the hose onto the camlock at the front of the tank on the driver's side and place the other end of the hose into the water source.

STEP 2: Flick the toggle switch up to open the suction port,



this primes the suction hose (leave it in the open position for about 5 seconds). After 5 seconds, engage the PTO and then flick the toggle switch down again to close the suction port. The tank will start filling. Once the tank is full, disengage the PTO, disconnect the hoses, refit the camlock cap and then flick the toggle switch back up which will open the suction port and the truck is ready for use.

Use the two 5M long self-fill hoses that come standard with the water truck. (located at the rear of the vehicle



WARNING. WHEN YOU ARE FILLING THE TANK USING THIS METHOD, IT IS IMPORTANT THAT THE TANK IS NOT COMPLETELY EMPTIED PRIOR TO RE-FILLING. WATER IS REQUIRED TO BE LEFT IN THE TANK FOR PRIMING THE SUCTION HOSE. FAILURE TO DO THIS WILL RESULT IN AIR LOCKS IN THE PUMPING SYSTEM

How to connect the fill hoses

Step 1: With both tabs open on the tab side of the hose place the hose over the fill point



Step 2: Push in the both tabs to lock the hose in place (repeat this sequence to any additional hose).



IN CAB CONTROL PANEL

Located inside the cab of the truck, the control panel is the switch board that controls your water truck functions.



The switch controls the different waterspouts on the vehicle.

This includes:

Left side front

Right side front

Left side

Cannon

Right side

Left rear

Centre rear

Right rear

Left side drop bar

Right side drop bar

Features also included:

Beacon light and self-fill function

Important PTO information

The water trucks water pump is driven via a PTO system here's what you need to know about your PTO system.

To engage the PTO, (it is important that this be done at a very low truck speed i.e. no more than 10kph) locate the PTO switch, which will be found on the dash to the left hand side (should be clearly labelled) and switch it to the ON position.



***NOTE:** Prior to engaging the PTO, be sure that the water tank has enough water, if the PTO is engaged while tank is empty this could result in costly damages. Check your water level via the sight levels which are positioned at the front driver's side of the water.



***NOTE:** Truck should not be revved at more than 1800-2000rpm, as this is not required. Best performance for the water pump fitted to this truck is between those ranges.

How to Operate the Water truck

Step 1: Ensure that your truck has enough water to get the job done, This can be checked via the sight tubes on the front and rear of the water tank. To fill the tanks please read pages 13-15

Step 2: Ensure that the truck has enough fuel for the job

Step 3: Turn the truck on, the PTO can be engaged either in natural or drive just ensure that the truck doesn't go over 2000 RPM.

Depended on the way you'd like to use the truck in neutral or drive once one is selected, you can then turn on the PTO by flicking the PTO switch to on inside of the cab.



Step 4: You will hear the PTO running, at this point you can control where you'd like your water to be distributed from.

From the in-cab control panel. If you are using the cannon you can control the cannon via the control stick inside the cab. Keep checking your water level via the sight glasses that are visible in your side mirrors

Step 5: Once the job is completed or you water has run out flick the PTO switch to off and power down your vehicle if you wish.

Spouts and locations

Front left and right-side spout



Right and left side



Cannon



The water cannon can be controlled by the corded control stick, this is found inside of the cab, Connect via 3 pin plug.



Handrail and ladder operation

Always use 3 points of contact while climbing the ladder, to access the ladder release the pin on the right side and slowly push the ladder down into place.



Completing the Job

*DISCLAIMER

(STG Global highly recommend that all equipment is washed down daily)

Handy tools to keep in the Water truck

- A adjustable shifter 300mm



- A socket set (¾ inch rachet with sockets from 7mm-32mm)



- A shovel



- Zip ties (4.8 mm by 400mm)



- A hammer



- A spanner set (with spanners ranging from 8mm -24mm)



- Allen keys set (ranging from 1.5mm – 10mm)



- safety glasses



- Safety boots



- Ear muffs



High pressure cleaner SOP

Personal Protective Equipment (PPE)

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Rubber steel-toed boots



Metatarsal Guard



Rough wet grip gloves



Face Shield



Rain Suite



Hearing Protection



Head Protection



- Rings, watches, jewellery that may become entangled in machines must not be worn.
- Long and loose hair must be tied back.
- Only snug fitting clothes to be worn.

- *At operating pressures over 5,000 psi and above, employees are required to wear protective suits made of Kevlar.*

Hazards - What can cause harm?

- Exposure to ultra high pressure water - amputation
- Slip, trip and falls on uneven or slippery surface
- Slip, trip and falls on objects on ground
- Exposure to harmful substances - petrol
- Exposure to compressed air
- Struck by ejected object / flying debris
- Exposure to harmful environments
- Overexertion and bodily reaction:
 - Awkward, twisting, bending positions
 - Pushing, pulling, throwing, pressing objects
 - Repetitious movements

Precautions

Operator training should include:

- ✓ Workplace induction
- ✓ Safe operating procedures
- ✓ Manufacturer's instructions (read and understand)
- ✓ Controls on the machine
- ✓ Cutting action
- ✓ Hoses
- ✓ Use of hazardous chemicals/substances
- ✓ Use a safety observer/spotter
- ✓ Material/Safety Data Sheets (M/SDS) are available on site e.g. compressed air, lead (if stripping) etc.
- ✓ Manual handling
- ✓ Hazards involved with direct contact with high-pressure water
- ✓ Fitting of personal protective equipment
- ✓ Housekeeping
- ✓ First Aid
- ✓ Effective communication system

Restrict access to work area. Ensure:

- ✓ Exclusion zone surrounding work area using barricades and signage is in place
- ✓ Any other workers within the exclusion zone are wearing appropriate PPE
- ✓ Traffic control is in place
- ✓ A standby person (or spotter) should be allocated and used if required.

Pre-Operational Inspection: [Follow the Pre-operational checklist in the manufacturer's operational manual.](#)

- ✓ Fittings, hoses, guns and foot pedals are the correct pressure rating and undamaged
- ✓ Hoses and lines are protected from accidental damage
- ✓ Nozzles free from blockages
- ✓ Pump filter is clean and undamaged
- ✓ The hose run is flushed and air removed from the system
- ✓ Hook-up including pipes, hoses and connections is pressure tested with water at the maximum operating pressure
- ✓ Control systems are operating correctly
- ✓ Test emergency stops / Water supply is cool and clean

Operation



Horseplay with this equipment is strictly forbidden.

- High-pressure water operation is usually performed using jet streams that can have a velocity greater than that of a 45-caliber bullet, and do as much damage
 - Exercise extreme caution and strict compliance with procedures must be used to prevent the jet stream from striking the operator, other employees or delicate equipment
 - No part of the body must ever be placed in front of the water jet. The jets of water can easily puncture and tear the skin, penetrate deeper causing infection or serious internal damage and amputation
 - **NEVER use on asbestos or asbestos containing material**
1. Set up a safety zone using a physical barrier and signs displayed where they are clearly visible:
 - a. "ENTRY BY AUTHORISED PERSONS ONLY"
 - b. "DANGER – HIGH PRESSURE WATER JETTING EQUIPMENT IN USE"
 2. Set up of the Water Jet Cleaner within the safety zone, ensure:
 - a. Place pump unit as close as possible to the work area, without being contaminated by debris from operations, to reduce the amount of hose used and the area covered by the operator
 - b. Arrange hoses:
 - i. To reduce tripping hazards
 - ii. Suitably protected to prevent crushing or puncture damage
 - iii. Not running across walkways, roadways or stairways
 - iv. Restrained to restrict their movement in the event of a hose end failure
 - v. Flushed with sufficient water to remove and contaminants before installing the nozzle
 - vi. Nozzles checked and cleared of debris that could cause obstructions
 - vii. Use a "Whip Check" if possible to reduce chance of hose whipping
 - viii. Attachments should be fitted as per the manufacturer's recommendations
 - c. Sufficient lighting and visibility
 - d. No electrical hazards
 - e. Safe access and egress
 - f. Remove all objects such as rocks, broken glass, nails, wire, debris, toys, or anything that may become a hazard during Water Jet Cleaner operation
 - g. Complete visibility of work area for Water Jet Cleaner operators
 - h. Access to clean water supply for use with the Water Jet Cleaner. *USE SEDIMENT FREE WATER*
 - i. Away from any ignition sources
 3. Connect the water hose and check that it is secure
 4. Connect the water supply hose to a mains water supply outlet
 5. Connect the high-pressure hose and gun
 6. Check the operation of the gun safety switch and trigger
 7. ONLY turn on the Water Jet Cleaner once set up is completed and checked
 8. Cleaning objects:
 - a. Any objects to be cleaned must be secured against movement
 - b. Small objects must be secured to a vice or similar tool
 - c. Objects should never be held manually by a person
 - d. Reaction forces should be considered and regulated based on the ability of the worker to maintain control of the jetting gun
 9. Pipe cleaning:
 - a. Check pipe cleaning jobs are set up so the nozzle cannot physically come out of the pipe when it is under pressure
 - b. Use A foot control hold-to-activate device e.g. a foot pedal
 - c. Use an anti-withdrawal device
 - d. Hoses should be clearly marked at a suitable distance from the nozzle to indicate the location of the nozzle as it is withdrawn from the pipe or tube.



NEVER point the jet stream at a person or animal.

Maintenance is to be conducted as per manufacturer's instructions and by qualified persons only.

Truck Loading SOP

Personal Protective Equipment (PPE)

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**Foot
Protection**



**Hand
Protection**



**Sun
Protection**



Protective Clothing



- Rings, watches, jewellery that may become entangled in machines must not be worn.
- Long and loose hair must be tied back.
- Only snug fitting clothes to be worn.

Hazards - What can cause harm?

- Operation of powered mobile plant/vehicles
- Load – materials being handled/moved
- Falling objects
- Work at height (truck)

Awkward, twisting, bending positions, lifting, carrying, or putting down objects, pushing, pulling, throwing, pressing objects, repetitious movements.

Precautions

- Before delivery/pickup, the following information should be provided to the driver:
 - The restrictions on the types of vehicles that can be accepted
 - Presence of any overhead services / power lines
 - Delivery times
 - Site information, including loading/unloading area, parking facilities, reception, rest rooms etc.
 - Reporting procedures on arrival and departure
 - Safety procedures on site, such as wearing high-visibility clothing, using mobile phones etc.
 - Availability and use of equipment
 - Person in charge of loading/unloading
 - Emergency contact details.
- Where required provide adequate traffic management. Include:
 - Witches hats/barricades/line markings
 - Caution signs/convex mirrors/alarms etc.
 - Exclusion zone for pedestrians
 - Driver waiting area (visible to forklift operator)
- Ensure transport documentation completed:
 - Labels
 - Number of packages
 - Weight/volume
 - Signatures are obtained as required
 - Load is as documentation describes.

Pre-Operational Inspection: [Follow the Pre-operational checklist in the manufacturer's operational manual.](#)

- Check transport vehicle before use. Ensure:
 - Fluid levels ok (oil, coolant, brake, hydraulic, transmission etc.) and no leaks
 - Brake, indicator and emergency lighting functional
 - No wear or damage of tyres and pressure ok
 - Windscreen clear, undamaged
 - Cabin and dashboard clear of debris/ stored items
 - Brakes functional (including hand/park brake)
 - Seatbelt present and fully functional
 - Other items as specified in manufacturer's operating manual (such as tailgates, temperature controls, etc.)
- Inspect load restraint equipment
- Ensure headboards, side gates, loading racks are strong enough for load and in good working order.

Ensure vehicle suitable for load. Check: Road worthy, Sufficient space for load, Gross Vehicle Mass (GVM), tyre and load capacity will not be exceeded, Correct design for type of load (long loads, correct load distribution)

Parts and Service

To book a service please go to the **STG Global app** or call **1300 998 784**

Please visit the Parts Store on the **STG Global app** or www.stgparts.net

Warranty

When purchasing a new Water truck the unit comes with a one year or 1000-hour Warranty whichever comes first on STG Global installed components.

If you have any questions regarding your factory warranty, please call **1300 998 784**