



TranTank[®]
INTERNATIONAL

Operator's Product HandBook

FloodRite[™]

Slip-On Water Cart



“HELPING TO DEVELOP AND PROTECT THE LAND”

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Disclaimer

All information, illustrations, and specifications contained in this manual are based on the latest product information available at the time of this publication's printing. TransTank International (TTi) reserves the right to alter and substitute specifications and methods at any time, in line with our commitment to continuous improvement.

No patent liability is assumed with respect to the use of information contained within this manual. While every precaution has been taken in the preparation of this manual, TTi assumes no responsibility for errors or omissions.

Thank you for purchasing a TTi FloodRite Dust Suppression Unit (FloodRite), which will provide many years of reliable service when operated and maintained in accordance with this manual.

TTi manufacture a range of FloodRite units, from 6,000 through to 17,000 litre tanks, supplied with petrol or diesel pump options. This manual describes the operation, driving stability and maintenance procedures applicable to all units, noting additional requirements to options where necessary.

All TTi FloodRite tanks are rotationally moulded from quality polyethylene, purpose designed and manufactured to high standards. The FloodRite is a truck-mounted tank or slip-on unit water dispensing system designed to suppress dust on unmade roads, construction sites, etc.

The FloodRite unit is supplied complete, tested and ready to mount to your vehicle. TTi recommends that only water be used in the FloodRite unit. TTi warrants that the FloodRite has been designed and built for its intended purpose as a dust suppression system dispensing water.

The owner is responsible to ensure that the equipment is operated in accordance with this manual, with Australian WorkSafe requirements, applicable road rules and local council regulations. TTi is not liable for any loss, injury or death resulting from the failure to observe all safe working regulations as required by law.

Included with your FloodRite unit is the following documents:

1. Operator's Handbook (this manual, which includes the Warranty Registration Card)
2. Integral Honda Petrol or Yanmar Diesel engine pump manufacturer's handbook
3. Tank Quality Check Form. This is your verification that the unit has been quality checked, and verifies the serial number affixed to the unit.

Safety

This manual is intended for use by personnel experienced in the use of this and similar equipment. Read and understand this manual before attempting to operate or perform routine maintenance on this equipment. Your safety is of prime priority.



A WARNING highlights an essential operating or maintenance procedure, practice, condition or statement, which, if not strictly observed, could result in injury or death of personnel, or long-term health hazards.



A CAUTION highlights an essential operating or maintenance procedure, practice, condition or statement, which, if not observed, could result in damage or destruction of equipment.



A NOTE highlights or clarifies an essential systems description, operating or maintenance procedure, condition or statement.

General Safety Instructions

1. This unit is designed and manufactured solely for the purpose of carrying and pumping water for dust suppression. Under no circumstances should it be used for any other purpose. It must never be used for transporting fuel or chemicals.
2. Only authorised and trained personnel are to operate this equipment. Operators must have read and fully understood this manual before operating the FloodRite unit.
3. Do not operate this equipment while under the influence of alcohol or any drugs that could impair your capabilities in any way.
4. Personal Protection Equipment (PPE) must be worn when refuelling the or operating the pump on the FloodRite unit. Exposure to excessive noise over an extended period can cause impairment or loss of hearing.
5. Avoid diesel or unleaded petrol contact with skin and eyes, and avoid breathing vapours or mists. Refer to the relevant Safety Data Sheet (SDS).
6. Any spillage of fuel while refilling the pump engine's tank should be immediately cleaned up and the materials used in the clean-up disposed of safely and in accordance with relevant regulations applying to the safe use, storage and disposal of fuel.
7. Ensure the capacity of the vehicle is suitable for the loaded mass of the FloodRite. Refer to the vehicle's operator manual for safe working loads, correct secure points and relevant safety instructions. Do not exceed the carrying and braking capacity as specified by the vehicle manufacturer. As a guide, one litre of water weights one kilogram (kg), therefore a full 6,000 litre FloodRite unit will weigh in excess of 7,200kg.
8. The unit must be securely restrained when being transported on a vehicle. Ensure all bolts and fasteners are tightened and secure before operation.
9. Be aware of the height of the unit when mounted on a vehicle. Keep clear of overhead obstructions, such as bridges, low hanging tree limbs and power lines.
10. This FloodRite unit must not be lifted when partially or completely filled. The tank must be empty prior to lifting.
11. The FloodRite must never be left unattended while being filled with water.
12. Do not operate the pump when there is no water in the tank.
13. Do not use the FloodRite in ambient temperatures exceeding 40 degrees Celsius.
14. Do not disconnect any hoses, nozzles or filters while the equipment is operating. Disconnecting any components while under pressure may result in uncontrolled fluid discharge which may be hazardous.
15. Care should be taken at all times, particularly when operating on rough or steep terrain. Drivers should be aware of fluid surge affecting the centre of gravity.
16. The FloodRite has safety labels affixed to various locations on the unit. These labels should be kept clean and legible, and replaced if damaged.
17. Any unauthorised modifications to this equipment may affect its function and create a serious safety risk. Any unauthorised modifications will void any warranty on the unit.

General Information

Specifications

Tank	UV resistant polyethylene tank complete with LiquidLocker Baffle system
Standard Equipment	LiquidLocker Safety System
	20m 1" firefighting hose on poly spring rewind hose reel
	Rotating beacon
	Pressure regulator
	6m bottom fill kit
	Sight level tube
	Wireless remote control
	Honda Petrol or Yanmar Diesel engine pump
	Open mesh funnel for stand pipe use
Options	3" solenoid operated Dribble bar
	1.5" and 3" solenoid operated Mega spray heads

Description

The TTI FloodRite Dust Suppression Unit is designed to carry and distribute water using a self-contained motorised pump and various water dispensing systems. The FloodRite has the following features, refer to Figure

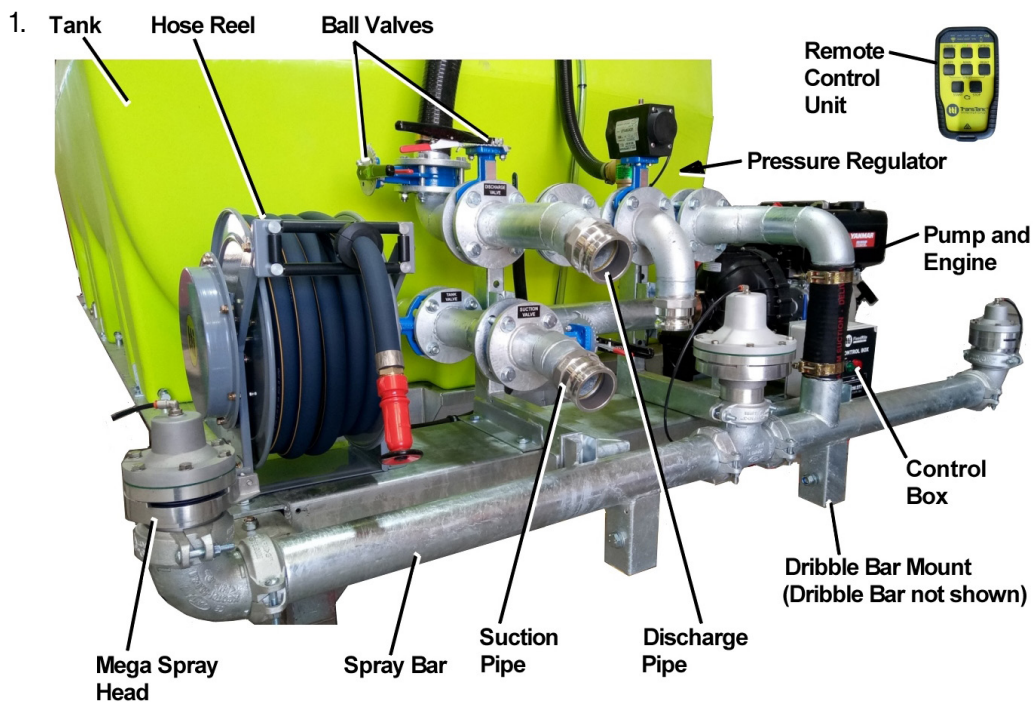


Figure 1 – Component Identification

Pump Unit

The FloodRite is supplied with either the Honda GX200, GX390 or Yanmar diesel engine directly coupled to a 3" 1,000L/min or 1,600L/min pump options.

Remote Control Unit

A remote control unit enables the operator to start the petrol or diesel pump and select the various water dispensing systems while either in or out of the vehicle's cab. When the pump is started, the rear high-mounted amber flashing beacon operates. The remote control unit's receiver is mounted on the back of the control box, located adjacent to the pump.

Pressure Regulator

A pressure regulator is fitted to the pump discharge flange to control line pressure and prevent pump cavitation. The factory-set regulator feeds excess water back to the tank and is set to relieve at 50 – 60 psi.

Spray Bar

Fabricated from hot dip galvanised steel, the spray bar is mounted across the end of the frame and fed directly from the pump via a manually actuated control valve. Mounted at each end and centrally are the solenoid-operated Mega spray heads (if fitted). Where Mega spray heads are not fitted, a blanking cap is installed.

Dribble Bar

A dribble bar is optionally fitted below the spray bar and has a direct connection via a manually actuated control valve from the pump outlet. The dribble bar sprays water directly downwards via spray nozzles.

Hose Reel

A hose reel has 20 m of 1" hose fitted with an adjustable nozzle. The nozzle adjusts from closed through to jet and mist sprays, depending on requirement.

Ball Control Valves

The FloodRite has several manually operated ball control valves, used to open or close water flow from the pump to the discharge points (spray bar, dribble bar and hose reel). Ball control valves are also fitted on the suction line and the discharge side of the tank prior to entering the pump.

Solenoid Valves

Pneumatically operated solenoid valves are fitted to each of the Mega spray heads to enable individual control. The solenoid valves receive their air supply from the vehicle's air supply system via the included air hose. The solenoid valves are controlled via the FloodRite's remote control unit.

LiquidLocker Baffle System

The LiquidLocker baffle system within the tank demonstrates measurable improvements in braking performance and dynamic stability and controllability. The system has been independently tested, with the report available upon request.

Frame

The chassis frame of the FloodRite unit is all steel, fully welded construction and hot dip galvanised for corrosion resistance. The frame incorporates fork lift slots for lifting when necessary. Ensure all water is drained from the tank prior to lifting the unit.

Tank

All TTI tanks are constructed from UV resistant, virgin material polyethylene. Due to the rotational moulding process, there may be a small variance in the overall dimensions of the tank, therefore, calibration markings should be used as a guide only. A sight level tube is fitted to the rear of the tank, providing an accurate level indication of water within the tank.

Machine Limitations

The FloodRite is subject to operating limitations. It is the operator's responsibility to ensure that this equipment is being operated safely and within these limitations.

Driving Stability

The FloodRite unit is heavy when filled with water. To maintain stability while operating this unit:

- Ensure the truck tyres are inflated to their correct pressure at all times. Underinflated tyres can cause excessive lateral motion of the tyre, which may cause a rollover.
- Allow extra room for braking and turning when the tank is full.
- Ensure any side gradient (slope) is accounted for, especially when the FloodRite tank is full, as the unit will have a higher centre of gravity.

Operating Instructions

Before first use

Your FloodRite Dust Suppression Unit is delivered fully assembled. Before use, it needs to be set up using the following instructions:

1. Complete the warranty registration online at www.tti.com.au/warranty-registration, or use the Warranty Registration Card at the back of this handbook.
2. Store this handbook, along with the Tank Quality Check Form and pump unit's manual in the provided leather pouch, in a safe and easily accessible place for future reference.



WARNING! The operator must fully understand all aspects of this handbook. Do not operate the FloodRite if you are unfamiliar with its operation until you have read this handbook.

3. Read and thoroughly understand this handbook, paying particular attention to all safety requirements, before using the FloodRite for the first time.
4. Check that all fittings, valves, hoses, electrical leads and pneumatic hoses are secure following transit, and are not damaged in any way.
5. Inspect the tank for any damage or abrasions that may occur during transit.



CAUTION! The unit must be securely mounted to the vehicle. Failure to do so may result in the unit moving or falling off the moving vehicle. Warranty is conditional on the unit being correctly mounted.

6. Position your FloodRite[™] onto the vehicle and mount securely, refer to the FloodRite[™] Loading Procedure.



CAUTION! When connecting into the vehicle's air system, follow all instructions in the vehicle manufacturer's handbook or consult the dealer.

Install a pressure protection valve to prevent accidental pressure loss, which may compromise the vehicle's operating systems.



NOTE! TTI recommend using quick connect fittings to facilitate easy disconnection if the unit is to be removed from vehicle.

7. Where your FloodRite unit is fitted with solenoid valves, use the supplied pneumatic hose (refer to Figure 2) to connect into the vehicle's air system. The correct connection point is usually after the main reservoir and the primary air circuit / main brake system. Refer to the vehicle manufacturer's handbook or consult the dealer.



Figure 2 – Pneumatic Hose and Tee Piece

8. Ensure the 12 volt battery is fully charged and correctly connected to the pump unit's engine, refer to **Error! Reference source not found.** Refer to the supplied pump unit's manual and prepare the engine for use, such as filling its tank with fuel.



Figure 3 – Pump Engine and Battery (Diesel unit shown)

9. Check the batteries of the remote control unit, refer to Figure 4, which can be accessed by removing the belt clip (if fitted) and removing the battery cover. The remote control requires three AAA batteries, already included and installed in the unit. If the FloodRite is not to be used for some time (e.g. more than three months), remove the batteries from the remote control unit. The unit will automatically switch off after 40 minutes if not used.



Figure 4 – Remote Control Unit

With the FloodRite installed on the vehicle and the air lines are connected, the unit is now ready for operation.

Remote Control Unit Functions

The functions of the remote control unit must be fully understood before operating the FloodRite. Figure 5 identifies all controls and indicators on the remote control unit, with their descriptions in the following table.

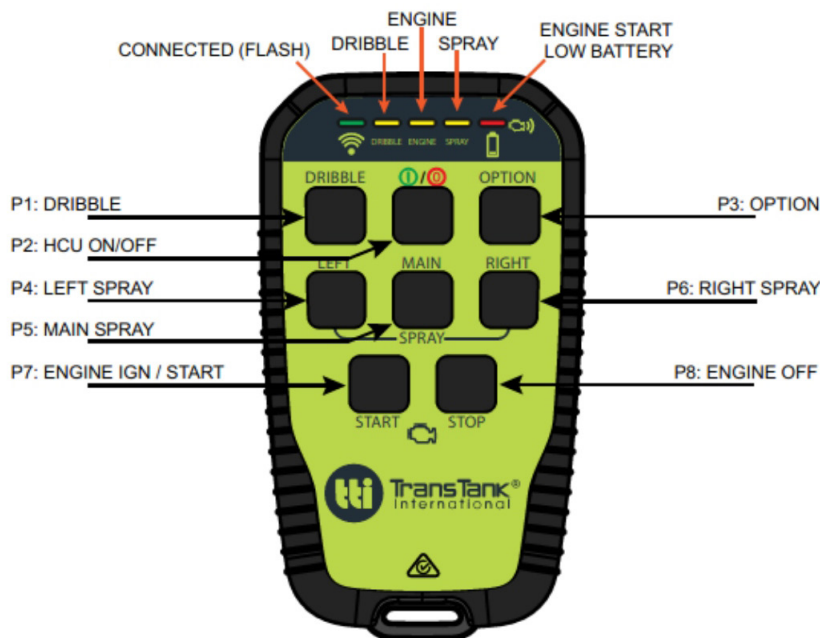


Figure 5 – Remote Control Unit – detailed description

LEDs	1. Transmitter range
	2. Dribble Bar activated when illuminated
	3. Pump Engine on when illuminated
	4. Spray Bar activated when illuminated
	5. Remote Control Battery condition
Push Buttons	DRIBBLE – turns the Dribble Bar ON or OFF
	ON/OFF – turns the power system ON or OFF
	OPTION – turns the beacon light ON or OFF
	LEFT – turns the left Mega spray head ON or OFF
	MAIN – turns the centre Mega spray head ON or OFF
	Right – turns the right Mega spray head ON or OFF
	START – press and hold for 3 seconds to start the pump engine
STOP – press to stop the pump engine	

Start the Pump – Diesel Engine

The FloodRite's diesel pump engine is started as follows, refer to Figure 6:

1. Turn the fuel tap to ON.
2. Switch the battery isolator to ON.

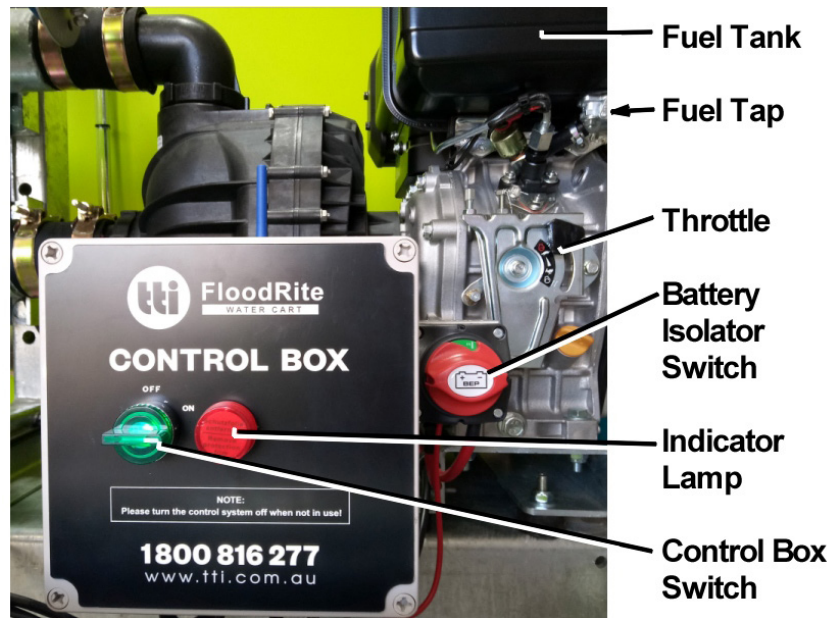


Figure 6 – Engine Start-up (Typical for both Diesel and Petrol Engines)

3. Switch ON the control box on-off switch – the red indicator lamp will illuminate.



CAUTION! Ensure the engine's throttle is set to idle or just above if the engine is cold. Do not adjust the throttle to maximum speed until the engine has warmed up.

4. If starting cold, set the engine's throttle to idle (low revs). If restarting a warm engine, the throttle can be set at normal engine operating speed.



NOTE! The remote control unit must be within range of the FloodRite unit. Typically, it would be kept in the vehicle's cab, handy to the operator.

5. Turn ON the remote control unit by pressing the ON/OFF button (refer to Figure 5).
6. Press and hold the START button for about 3 seconds. The engine should crank and start. Release the button as soon as it starts.
7. When the engine needs to be stopped, press the STOP button.

If the FloodRite is not going to be used within the next few hours, shut the system down as follows:

1. Turn the control box on-off switch to OFF.
2. Switch the battery isolator to OFF.
3. Turn the fuel tap to OFF.

Start the Pump – Petrol Engine

The FloodRite's petrol pump engine is started as follows, refer to Figure 6 (note that the diesel engine is shown):

1. Turn the fuel tap to ON.
2. Switch the battery isolator to ON.
3. Switch ON the control box on-off switch – the red indicator lamp will illuminate..



CAUTION! Ensure the engine's throttle is set to idle or just above if the engine is cold. Do not adjust the throttle to maximum speed until the engine has warmed up.

4. If starting cold, set the engine's throttle to idle (low revs) and use the choke. If restarting a warm engine, the choke is not required and the throttle can be set at normal engine operating speed.



NOTE! The remote control unit must be within range of the FloodRite unit. Typically, it would be kept in the vehicle's cab, handy to the operator.

5. Turn ON the remote control unit by pressing the ON/OFF button (refer to Figure 5).
6. Press and hold the START button for about 3 seconds. The engine should crank and start. Release the button as soon as it starts. Ease back the choke as the engine warms up.
7. When the engine needs to be stopped, press the STOP button.

If the FloodRite is not going to be used within the next few hours, shut the system down as follows:

1. Turn the control box on-off switch to OFF.
2. Switch the battery isolator to OFF.
3. Turn the fuel tap to OFF.

Filling the Tank

The FloodRite tank can be filled in either of the following three ways:

1. Hydrant filling method drawing water directly from a hydrant via filling hose.
2. Bottom filling method using the pump to draw water from a dam or other source.
3. Standpipe filling method using a standpipe to fill directly into the top of the tank via the open mesh funnel.

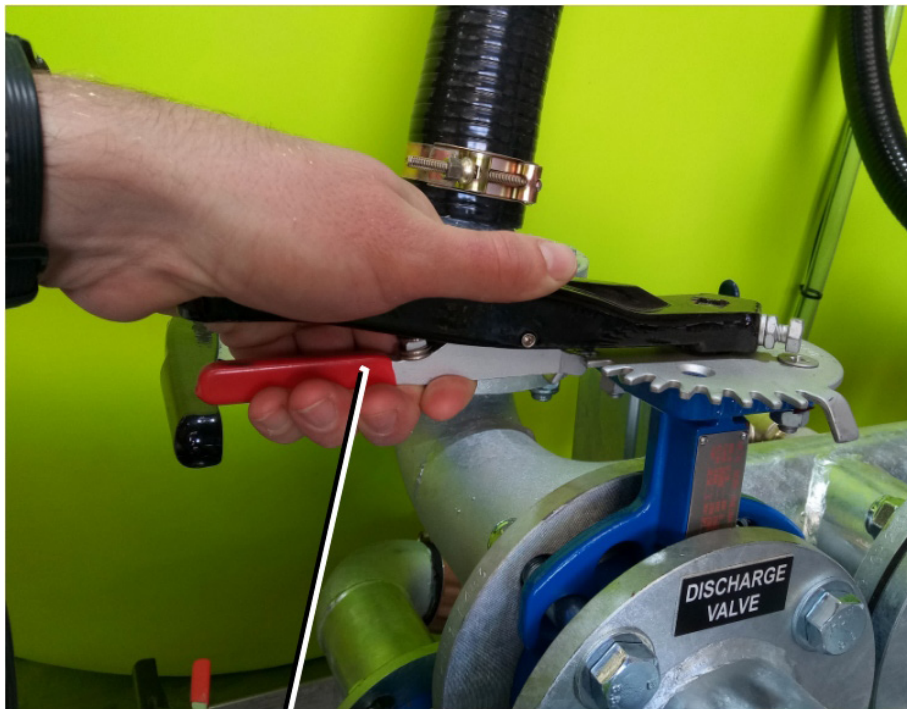
Hydrant Filling Operation

The FloodRite tank is filled from a hydrant as follows, referring to Figure 7 and Figure 8:



CAUTION! Ensure all ball valves have been correctly set prior to commencing the filling operation.

1. Close the tank outlet valve. Figure 7 shows a typical ball valve in the closed position – when open, the handle of the valve is parallel to the pipe. To open or close a valve, grasp the handle, squeeze it and rotate it 90°. The tank outlet valve should be set as shown, with the handle perpendicular (at right-angles) to the pipe.



Spring-loaded Ball Valve Handle

Figure 7 – Typical Ball Valve – Closed Position Shown

2. Attach the hydrant supply hose to the discharge pipe, refer to Figure 8.

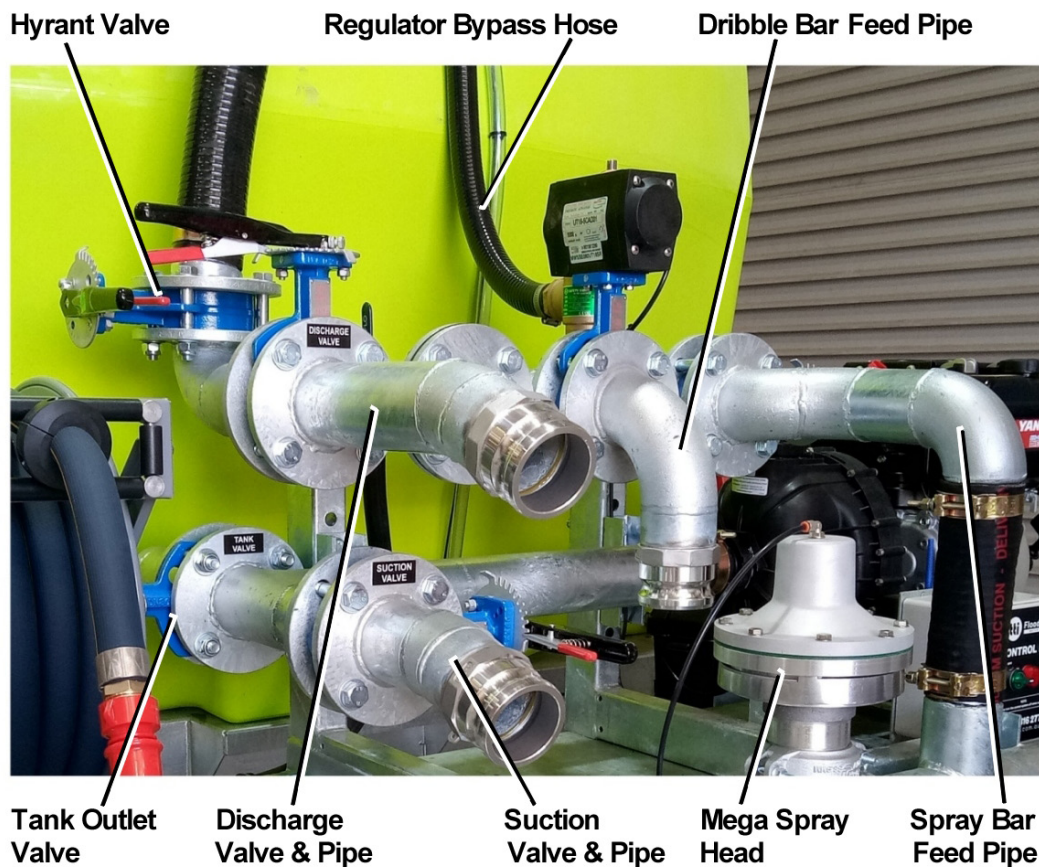


Figure 8 – Pipework Configuration

3. Close all other ball valves.
4. Open the hydrant fill valve on the FloodRite unit.
5. Open the supply hydrant's valve slowly; water will flow under pressure through the FloodRite's pipe system into the top of the tank.



CAUTION! To prevent overflow, do not leave the filling operation unattended.

6. When the tank is filled, close the supply hydrant's valve.
7. Close the discharge pipe valve.
8. Disconnect the hydrant supply hose and stow it.

Bottom Filling Operation

The FloodRite tank is filled by drawing water using the FloodRite's pump as follows, referring to Figure 7 and Figure 8:



NOTE! Ensure all ball valves have been correctly set prior to commencing the filling operation.

1. Close the tank outlet valve.
2. Place the filter end of the bottom fill hose into the water source. Ensure the filter is deep enough in the water to prevent it sucking air.
3. Attach the other end of the hose to the Suction Valve with the camlock fittings, and open the suction valve.
4. Open the hydrant fill valve on the FloodRite unit.
5. Ensure discharge valve is closed.
6. Referring to Start the Pump procedures (diesel or petrol engine), start the pump engine. Once warmed up, adjust the engine speed to achieve the required flow.
7. Ensure the pump is drawing water discharging it into the FloodRite tank.



CAUTION! To prevent overflow, do not leave the filling operation unattended.

8. When the tank is filled, stop the pump engine.
9. Close the suction valve and disconnect the the hose from the suction pipe.
10. Open the tank suction valve outlet.
11. Close the hydrant fill valve to ensure water does not circulate back through hydrant line.
12. Clean and pack away the bottom fill hose.

Standpipe Filling Operation

The FloodRite tank is filled by gravity from an overhead standpipe as follows, referring to Figure 7 and Figure 8:

1. Position the FloodRite unit's top-mounted open mesh funnel under the standpipe.
2. Open the standpipe's valve and allow water to flow into the tank.



CAUTION! To prevent overflow, do not leave the filling operation unattended.

3. When the tank is filled, close the standpipe's valve.

Dust Suppression Operation

Spray Bar Operation

The spray bar is mounted across the end of the frame and fed directly from the pump via a manually actuated control valve. Mounted at each end and centrally are the solenoid-operated Mega spray heads. The spray bar is operated as follows, refer to Figure 9:

1. Open the manually operated ball valve for the spray bar.
2. Referring to Start the Pump procedures (diesel or petrol engine), start the pump engine. Once warmed up, adjust the engine speed. Until the Mega spray head(s) are open, the factory set pressure regulator will divert the pumped water back into the tank.
3. Using the remote control unit (refer to Remote Control Unit Functions), select one, two or all three (if fitted) Mega spray heads pushbuttons. The pneumatically operated solenoid valve for each spray head will open, allowing the water to be sprayed. If not moving, commence driving along the required road or pathway.
4. At completion of the operation, shut down the spray bar operation in the reverse order to starting.

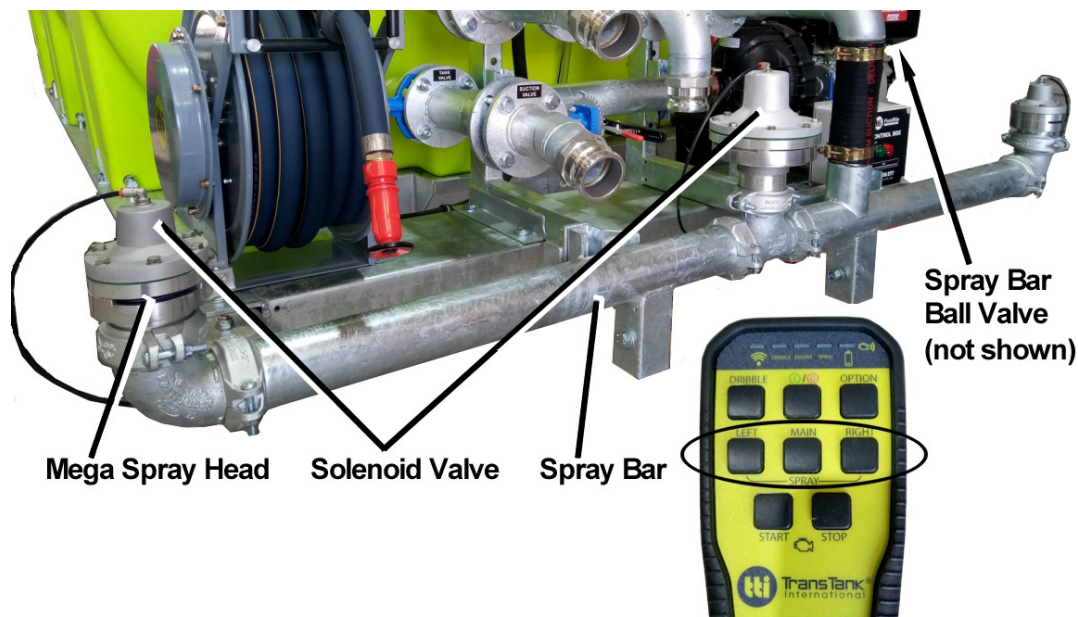


Figure 9 – Spray Bar

Dribble Bar Operation (if fitted)

The dribble bar is mounted across the end of the frame and fed directly from the pump via a pneumatically operated solenoid valve. Mounted along the length of the dribble bar are down-jet nozzles. The dribble bar is connected to the pump via a manually operated ball valve and solenoid-operated valve. The dribble bar is operated as follows, refer to Figure 10:

5. Referring to Start the Pump procedures (diesel or petrol engine), start the pump engine. Once warmed up, adjust the engine speed. Until the dribble bar solenoid valve is opened, the factory set pressure regulator will divert the pumped water back into the tank.
6. Using the remote control unit (refer to Remote Control Unit Functions), select the dribble bar pushbutton. The pneumatically operated solenoid valve will open, allowing the water to be sprayed out of the dribble bar. If not moving, commence driving along the required road or pathway.

7. At completion of the operation, shut down the dribble bar operation in the reverse order to starting.



Figure 10 – Dribble Bar (Typical)

Hose Reel Operation

The hose reel has 20 m of 1" hose fitted with an adjustable nozzle, which can be used for tree watering, firefighting or washdown purposes. The nozzle adjusts from closed through to jet and mist sprays, depending on requirements. The hose reel is operated as follows, refer to Figure 11:

1. Open the manually operated ball valve for the hose reel.
2. Referring to Start the Pump procedures (diesel or petrol engine), start the pump engine. Once warmed up, adjust the engine speed. Until the hose nozzle is opened, the factory set pressure regulator will divert the pumped water back into the tank.
3. Pull the hose nozzle to feed the hose out of the reel. At the required length, it will retract slightly and lock into place.
4. Twist the nozzle to the desired spray pattern and direct the spray as required. Pressure can be reduced by adjusting the pump's engine to a lower speed.
5. At completion of the operation, shut down the hose operation in the reverse order to starting. Retract the hose by tugging it, then allow the spring-loaded action to wind the hose back on to the reel.

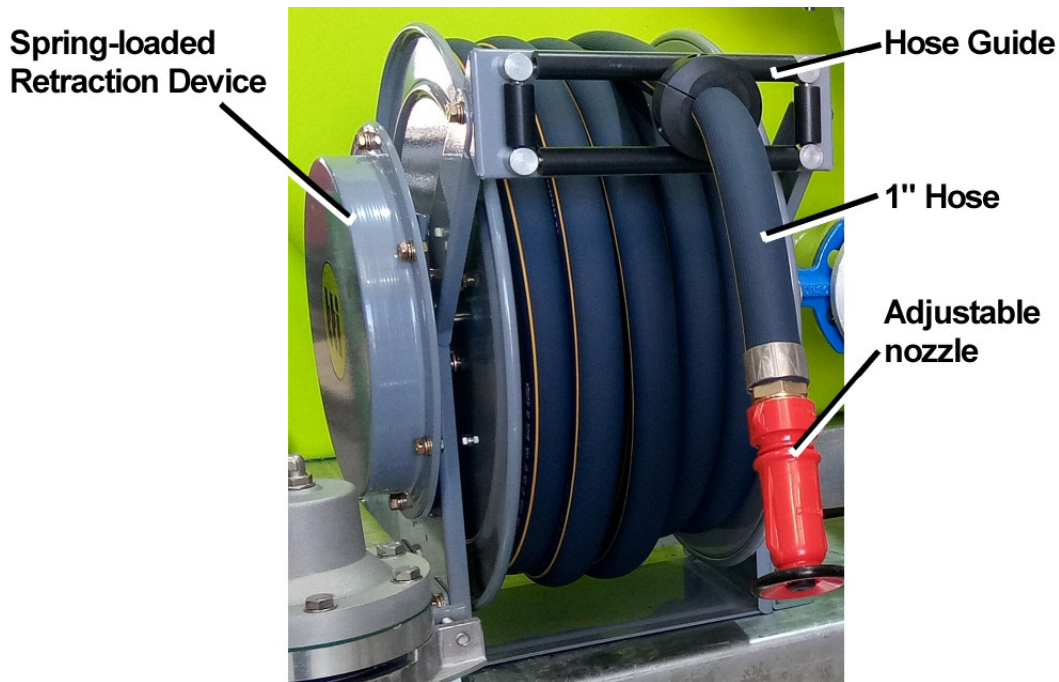


Figure 11 – Hose Reel

FloodRite Loading Procedure

Loading

The FloodRite Dust Suppression Unit is designed to slip into a tipper tray, and when not required, can be easily removed using the integrated TTI Loading Leg System. The FloodRite unit is loaded as follows, referring to the included illustrations:



WARNING! The FloodRite unit is heavy and must be loaded or unloaded correctly. Ensure this procedure is followed exactly to avoid injury or death to personnel or damage to the unit.

The FloodRite unit must never be loaded or unloaded with water in the tanks. Ensure the tank has been completely emptied prior to remove from the tipper tray.

1. The FloodRite unit has lifting points at each corner of the steel frame, and two forklift slots across the width of the frame. Lift the unit up from the ground using a suitable capacity forklift or crane to a sufficient height to allow the insertion of the front and rear legs at full extension. This will be approximately the height of the tipper tray.
2. At the front of the unit (driver's cab end), mount the front legs with the lugs facing towards the rear. Use the pins provided to lock the legs in place vertically.



NOTE! Ensure the rear legs are inserted such that they slope away from the back of the unit.

3. At the rear of the unit (pipework and pump end), slide the rear legs into the box cross-section of the frame. With the legs fully extended, lock with the pins provided.



CAUTION! Ensure that there is an observer to direct the driver when manoeuvring the tipper tray to load the FloodRite unit.

4. Using an observer, carefully reverse the tipper to the front of the FloodRite unit, ensuring it aligns accurately with the centre of the tipper tray.
5. Carefully raise the tipper tray slightly such that the small wheels mounted at the front of the FloodRite frame are just above the tipper tray. Slowly start reversing the tipper under the unit.
6. Carefully keep reversing the tipper until the tipper tray reaches the pair of front legs. Lower the tipper tray slightly (which will raise the back edge of it) until the weight of the front of the FloodRite unit rests on the tipper tray floor.
7. Remove the pin from the top of the front legs, then swing each leg up into the slot on the main frame and lock with the pins.
8. Continue reversing while gradually lowering the tipper tray. The tipper tray should still be raised sufficiently such that the FloodRite's front wheels can roll along the tray floor. Stop the vehicle when the unit reaches the tipper's hoist well or reaches the rear legs, depending on the tipper tray length. Lower the tipper tray completely, which will lift the rear legs off the ground.
9. Remove the the pin on each of the rear legs. Slide the lower leg section up into the upper section until the lowest hole is reached, then re-insert the pin.
10. Secure the FloodRite to the floor of the tipper tray. If using airlocks, bolt 50mm x 50mm angle underneath the unit using the pre-drilled holes.

Securing the FloodRite

With the FloodRite correctly positioned in the tipper body, it must be securely fastened using at least two, but preferably more, of the following methods.



WARNING! The FloodRite is heavy when filled with water. The operator must ensure that the securing systems used are strong enough to restrain the FloodRite to the vehicle in all situations.

Tailgate Airlock Angle Mount Option

If the tipper body is fitted with tailgate airlocks, an optionally available steel angle can be bolted to the underside of the FloodRite's steel frame as follows, refer to Figure 12:

1. With the FloodRite correctly located, position the length of heavy duty angle to the underside of the frame. Using G-clamps or similar, secure the angle firmly against the underside of the FloodRite frame and the edge of the tipper body.
2. Using high tensile bolts and nuts, mount the bolts through the pre-drilled holes in the FloodRite frame and the angle. Fit and tighten the nuts firmly.



CAUTION! The airlocks can cause serious injury if fingers are trapped between the angle and the tipper tray. Take extreme care when positioning the angle.

- Using the vehicle's air system, close the airlocks such that the angle is clamped against the rear of the tipper tray body.



Figure 12 – Tailgate Airlock Option

Rear Chains Mounting Option

The use of rated dog chains is recommended at each rear corner of the FloodRite, attached to suitable points on the vehicle's body as follows, refer to Figure 13:

- If not fitted, install rated eye-bolts at each rear corner of the the FloodRite's steel frame.
- Drill if necessary and install rated eye-bolts to the rear of the vehicle's body.
- Using rated D-shackles, fit a suitable length of chain between the eye-bolts.

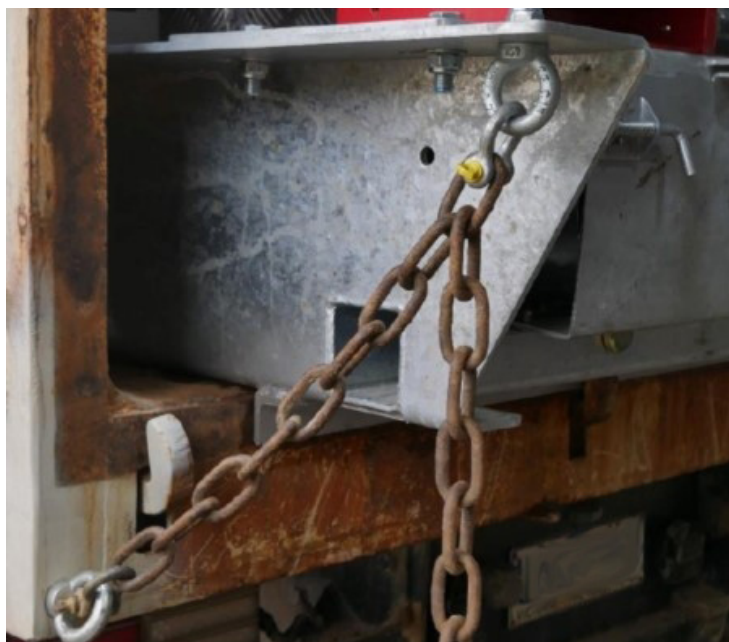


Figure 13 – Rear Chains Option

Front Chains Mounting Option

Where there are no suitable securing points at the front of the tipper body, one option is to use dog chains to secure to purpose-built lugs as follows, refer to Figure 14:

1. Where no securing points exist, steel lugs can be welded inside the tipper body, either side of the hoist well.
2. If not fitted, install rated eye-bolts at each front corner of the the FloodRite's steel frame.
3. Using rated D-shackles, fit a dog chain with a tensioner device between the eye-bolts. Tension each chain sufficiently to prevent the FloodRite moving.



Figure 14 – Front Chains Option (viewed from above)

Forklift Pocket Mounting

Where there are suitably located mounting points on the vehicle's tray, dog chains with tensioners can be feed through the the forklift pockets of the FloodRite's steel frame. Ensure the dog chains are tensioned sufficiently to prevent the FloodRite moving.

Over Tank Strap Option

This method is only recommended for transporting an empty FloodRite. A minimum of two heavy-duty ratchet straps should be used over the top of the tank and secured to the vehicle's body or tray, refer to Figure 15.



Figure 15 – Over Tank Strap Option (Typical)

Risk Assessment

Task	Hazard	Risk	Control Measure/Mitigation
Partially fill the tank with water, start the motor & test the spray unit	Manual handling; slips, trips or falls; petrol; fumes; fingers jammed	Medium	Concentrate on task; follow safe manual handling techniques: <ul style="list-style-type: none"> • Don't lift on your own if > 20kg, bend knees & keep back straight; Keep fingers clear; • Keep unit at least 8m away from overhead powerlines; • Fire extinguisher nearby; • Follow warning stickers on tanks; Wear PPE for petrol & diesel fumes- mask & gloves.
Check weather conditions	Manual handling; slips, trips or falls	Low	<ul style="list-style-type: none"> • Follow safe manual handling techniques: don't lift on your own if >20kg, bend knees & keep back straight.
Use spray or fire fighter units.	As above; loss of load; heat & cold; noise; exceed load limit of vehicle; hose entanglement; exhaust fumes; terrain & slopes; run over by unit	High	<ul style="list-style-type: none"> • As above • Wear clothes to suit heat & cold; • Wear hearing protection if noise >85 dBa; • Follow the manufacturer 's safe operation instruction for the vehicle and the spray unit • Don't overload - water weighs 1kg for every 1 litre • Secure load to vehicle; • Keep hose tidy; • Put unit brakes on.
Clean up, maintenance & storage	As above	Low	<ul style="list-style-type: none"> • As above; • Continue to wear PPE for clean up; • Store unit in a dry, well ventilated area.

Maintenance

Your FloodRite Dust Suppression Unit requires minimal maintenance but regular cleaning and checks will ensure safe and reliable service over its lifetime. Periodic checks and inspections will identify any potential issues, enabling timely rectification and minimising downtime.

Periodic Checks



CAUTION! In dusty, dirty or smoky environments, cleaning, inspection and servicing of the unit on a regular basis is essential. The cleaning, inspection and servicing must be undertaken more frequently in harsh conditions to avoid damage or destruction of equipment.

The following checks and cleaning operations should be undertaken on a regular basis (at least annually). The frequency of these activities will depend on the nature of the operating environment and the operational hours of the FloodRite unit.

1. Clean the unit and inspect it for any signs of damage or wear. Replace any safety labels if they are damaged or illegible.
2. Check all fittings are firmly secured, tighten if necessary.
3. Unwind the hose from the reel fully to check that hose is in good order. Pressurise the line and check operation of spray nozzle. Rewind the hose onto the reel, ensuring it retracts all the way.
4. Check the condition of the batteries in the remote control unit. If the battery power display indicates low power, replace them with 3 new AAA batteries.
5. Check the pump engine's oil level weekly.
6. Check the condition of the pump engine's 12 volt battery, replace it or charge it as necessary.
7. If the FloodRite is to be stored for an extended period, ensure the tank and all pipelines are empty and are not pressurised. Store the unit in a clean, dry and well-ventilated area.

Maintenance Schedule

The following tasks are to be conducted in accordance with each of the schedules. All scheduled tasks are to be undertaken concurrently. For example, at the three month maintenance interval, all task listed are to be undertaken, in addition to the daily, weekly and monthly tasks.



NOTE! Maintenance is important. Keep a record of all maintenance tasks conducted on the FloodRite unit.

TTi recommends photocopying these schedules in order to keep a detailed log of all maintenance tasks. A copy of these schedules will be required to support any warranty claim.

Daily Tasks

The following tasks are to be undertaken daily, or prior to each use, of the FloodRite unit.

No.	Task	Notes
1	Inspect the FloodRite for any signs of damage or wear	Clean, repair or replace
2	Check fuel	Top up as required
3	Inspect engine's air filter and housing for dust	Clean, replace as necessary

Weekly Tasks

The following tasks are to be undertaken each week or 10 operating hours, whichever occurs first.

No.	Task	Date	Signed
1	All Daily tasks		
2	Remove and clean the engine's air filter		
3	Check engine oil level, top up as required		

Monthly Tasks

The following tasks are to be undertaken each month or 20 operating hours, whichever occurs first.

No.	Task	Date	Signed
1	All Daily and Weekly tasks		
2	Check hose and hose reel by unwinding fully		
3	Check securing system used to fastener unit to vehicle		
4	* Change pump engine oil (and filter, if fitted) (first change, thereafter every six months or 100 operating hours)		

Three Monthly Tasks

The following tasks are to be undertaken every three months or 50 operating hours, whichever occurs first.

No.	Task	Date	Signed
1	All Daily, Weekly and Monthly tasks		
2	Inspect the air filter, replace if clogged or damaged		
3	Check all hoses, fasteners, nozzles and fittings		

Six Monthly Tasks

The following tasks are to be undertaken every six months or 100 operating hours, whichever occurs first.

No.	Task	Date	Signed
1	All Daily, Weekly, Monthly and 3-Monthly tasks		
2	Change engine oil (and filter, if fitted)		
3	Inspect spark plug (petrol engine only)		

Twelve Monthly tasks

The following tasks are to be undertaken every twelve months or 200 operating hours, whichever occurs first.

No.	Task	Date	Signed
1	All Daily, Weekly, Monthly, 3-Monthly & 6-Monthly tasks		
2	Check the battery condition		
3	Replace the engine's air filter		
4	Drain and flush the fuel tank		
5	Replace the engine's fuel filter		
6	Replace the spark plug (petrol engine only)		

Two Yearly Tasks

The following tasks are to be undertaken every 24 months or 500 operating hours, whichever occurs first.

No.	Task	Date	Signed
1	All Daily, Weekly, Monthly, 3-Monthly, 6-Monthly and 12-Monthly tasks		

Maintenance Tasks

The FloodRite has been designed and built for minimal maintenance requirements, however to ensure a long and reliable unit life, the following tasks must be undertaken on a periodic basis. The frequency of these activities will depend on the nature of the operating environment and the operational hours of the FloodRite.

1. Referring to the pump manual supplied, drain and replace the engine oil in accordance with the manufacturer's recommendations.

Remote Control Pairing

In the event that the remote control unit is lost or damaged, a replacement can be ordered by contacting TTI on 1800 816 277. The replacement unit will be configured for the FloodRite but the operator will need to pair the new remote control unit with the FloodRite control box. Pairing is the process to get a unique assignment between the remote control unit and the transmitter at the rear of the control box.

The pairing process can be undertaken on site as follows, referring to the included figures:



NOTE! Check that the batteries in the remote control unit are in good condition. Pairing with low batteries may indicate that pairing was successful but may not work, in which case the pairing process will need to be repeated.

1. On the control box, turn the on-off switch to OFF as shown below.

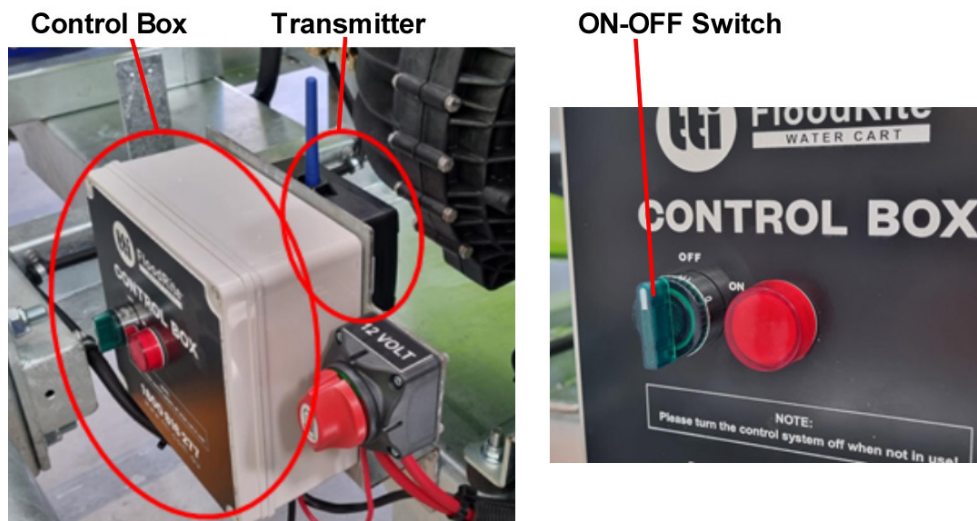


Figure 16 – Control Box and Transmitter

2. Remove the cover from the transmitter located at the rear of the control box.



Figure 17 – Transmitter Cover

3. The pairing jumpers are located in the storage position as shown below.

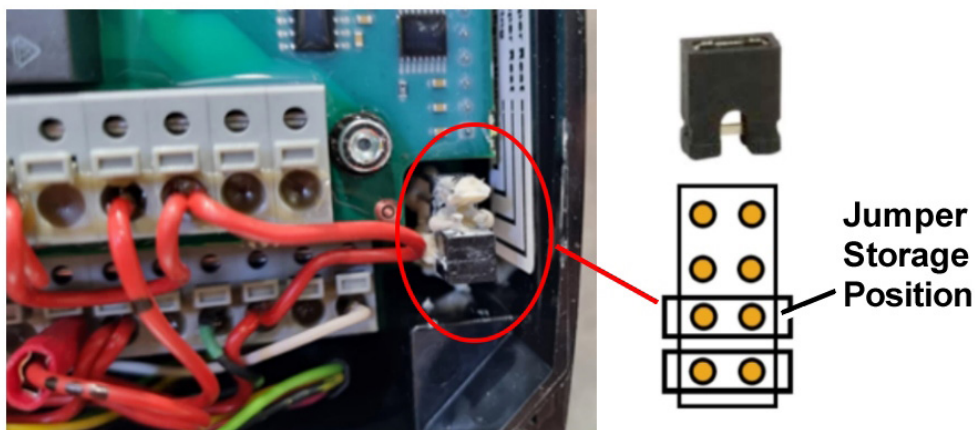


Figure 18 – Transmitter's Jumper in Storage Position

- Lift the pairing jumper out of its storage position and insert it into the pairing position as shown below.

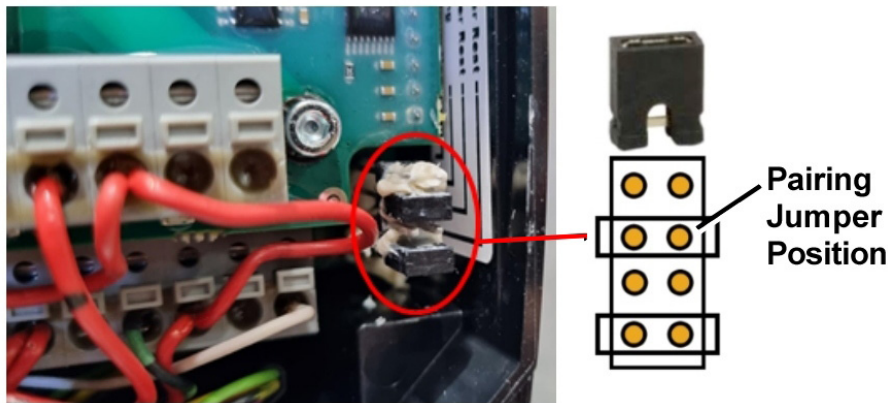


Figure 19 – Transmitter's Jumper in Pairing Position

- On the remote control unit, simultaneously press the DRIBBLE button and the OPTION button. The centre LED will illuminate, indicating the remote control unit is now ready for pairing with the transmitter.



Figure 20 – Remote Control Unit

- Within 10 seconds of the LED illuminating, turn the on-off switch on the control box to ON as shown below.



Figure 21 – Control Box ON-OFF Switch to ON

- The remote control unit will confirm the download of data is complete when the centre LED flashes eight times. The transmitter's LED display will flash Po-Id.

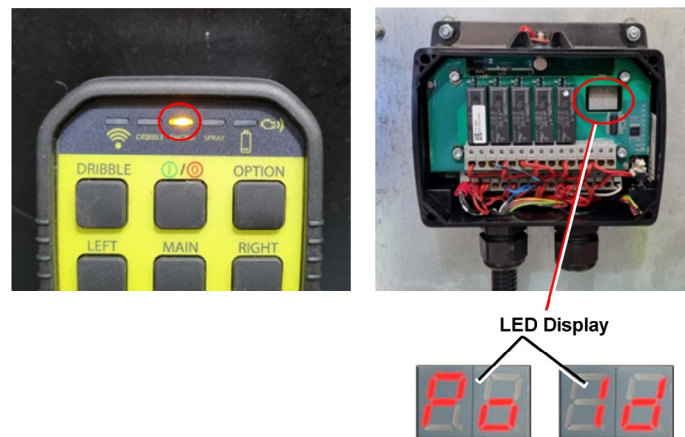


Figure 22 – Remote Control Unit and Transmitter Indication

- Turn the control box switch to OFF as shown below.

Turn ON-OFF Switch to OFF



Figure 23 – Control Box ON-OFF Switch to OFF

- At the remote transmitter, remove the pairing jumper and return it to its storage position as shown below.

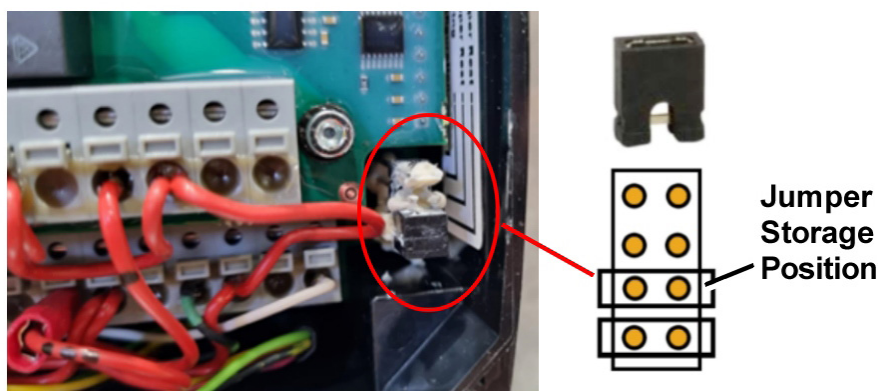


Figure 24 – Transmitter's Jumper in Storage Position

- The pairing process is now complete.
- Reinstall the cover of the transmitter.

Troubleshooting

If a fault develops with the FloodRite, the following trouble shooting table provides guidance to identify and rectify the problem.

Problem	Possible	Remedy
Engine will not crank	Dead battery	Check battery state-of-charge
	Melted Fusible Link	Replace fusible link
	Loose Connections	Clean and tighten connections
	Faulty Ignition Switch	Check switch operation, replace as needed
	Faulty magnetic, relay, neutral start or clutch switches	Check and replace as needed
	Mechanical problem in engine	Check Engine
	Problem in theft deterrent system	Check service manual for system tests
Engine cranks too slowly to start	Weak Battery	Check battery and charge as needed
	Loose or corroded connections	Clean and tighten connections
	Faulty starter motor	Test Starter
	Mechanical problems with engine or starter	Check engine and starter, replace worn out parts
Starter keeps running	Damaged pinion or ring gear	Check gears for wear or damage
	Faulty plunger in magnetic switch	Test starter pull-in and hold-in coils
	Faulty ignition switch or control circuit	Check switch and circuit components
	Binding ignition key	Check key for damage
Starter spins, but engine will not crank	Faulty over-running clutch	Check over-running clutch for proper operation
	Damaged or worn pinion gear or ring gear	Check gears for damage and wear; replace as needed
Starter does not engage/disengage properly	Faulty magnetic switch	Bench test starter
	Damaged or worn pinion gear or ring gear	Check gears for damage and wear; replace as needed

Warranty

Your rights under the law

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law.

You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

About this document

This document sets out the terms of the defects warranty that we offer to retail purchasers of our goods, including components, parts, and accessories (referred to as “products” in this document). We offer this defects warranty in addition to the consumer guarantees referred to above. Nothing in this document excludes or reduces your rights under those consumer guarantees.

What this warranty covers

This warranty covers defects in materials or workmanship (or both) which are found to be present in our products, other than the defects in the parts and components listed below.

What this warranty does not cover

This warranty does not cover defects or damage caused by your negligence, your failure to follow instructions (including incorrect assembly or mounting by you), or the improper use, maintenance, or abuse of the products.

This warranty does not cover engines, gearboxes, pumps, or regulators. These come with separate warranties from their manufacturers. By offering this defects warranty, we do not assume any additional obligations or liability on behalf of those manufacturers beyond what we must do to comply with the consumer guarantees referred to above.

How long this warranty lasts for

Except in the case of products used for rental purposes, the period of our defects warranty is as follows for our various products:

Tanks (non-diesel), excluding frames	25 Years
Steel frames	5 Years
Other TTi Manufactured Components	1 Year

This warranty lasts for one year from the date of your retail purchase of the products, unless it is used for rental purposes, in which case this warranty is limited to 90 days.

What we will do if you make a claim under this warranty

If you make a claim under this warranty, we will consider it in good faith. If we agree that the products are covered by this warranty and are defective, we will either (at our option) repair or replace them without charge to you.

What you must do (and not do) to entitle you to a claim under this warranty

You must be able to provide proof of purchase, either by providing details of your warranty registration or a purchase receipt.

You must not repair or modify (or allow the repair or modification of) the products without prior authorisation from us. Further, you must not use any non-genuine parts with the products. Doing any of these things will void this defects warranty.

How to make a claim under this warranty

If you believe that you have a claim under this warranty, please contact your reseller, or contact us using the following details:

Name:	Trans Tank International
Postal Address:	PO Box 137 Nathalia, VIC, 3683
Physical Address:	Murray Valley Highway, Nathalia, VIC, 3638
Phone:	1800 816 277
Email:	ProductSupport@tti.com.au

You must make the defective products available for inspection by returning them to us, and (if requested to do so) by making them available for inspection by us on site beforehand. You must ensure that the products are made safe for transportation and inspection, including by cleaning them thoroughly to remove any chemical residues. All returned products must be accompanied by a completed Return Goods Note. Please contact us using the details displayed above for a copy of this document.

Who is responsible for expenses for claims made under this warranty

You are responsible for any expenses associated with the warranty claim, including transportation, charges made for service calls, and clean-up time.



TranTank[®]
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Scan to view our PDF
Handbook online

1800 816 277

sales@tti.com.au

PO Box 137, Nathalia, VIC, 3638

Murray Valley Hwy, Nathalia, VIC 3638

Proudly Built By:

Signature

Date

Quality Checked By:

Signature

Date

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