

Operator's Product HandBook

# **SuperReel**<sup>TM</sup>

Single/Twin Reel Spray Unit





"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 SuperReel™ Field Sprayer (SuperReel sprayer), which will provide many years of reliable service when operated and maintained in accordance with this manual.

TTi manufacture a range of SuperReel sprayer units, from 400 through to 1,000 litre tanks, all supplied with a petrol or optional diesel operated pump and one or two SuperReel hose reels. This manual describes the operation, driving stability and maintenance procedures applicable to all units, noting additional requirements to options where necessary.

All TTi SuperReel sprayer tanks are rotationally moulded from quality polyethylene, purpose designed and manufactured to high standards. The SuperReel sprayer is a slip-on unit for the back of a utility or trailer and designed for herbicide or pesticide spraying.

The SuperReel sprayer is supplied complete, tested and ready to mount to your vehicle. TTi warrants that the SuperReel sprayer has been designed and built for its intended purpose as a pesticide/herbicide spray unit.

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 SuperReel sprayer are the following documents:

- 1. Operator's Handbook (this manual, which includes the Warranty Registration Card)
- 2. Integral Honda Petrol or optional Yanmar diesel engine and Bertolini pump manufacturer's handbook.



### 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**

- This unit is designed and manufactured solely for the purpose of carrying and spraying herbicides and pesticides. Under no circumstances should it be used for any other purpose. It must never be used for transporting fuel.
- 2. Only authorised and trained personnel are to operate this equipment. Operators must have read and fully understood this manual before operating the SuperReel sprayer.
- 3. Do not operate the SuperReel sprayer anywhere near bystanders, livestock, watercourses or any non-targeted vegetation that may be in danger from spray drift contamination.
- 4. Wind direction and speed must be taken into account, as windy conditions may endanger the operator or damage to adjacent non-target vegetation. Avoid spraying on hot and sunny days or when wind speed exceeds 6.5km/h.
- 5. Do not operate this equipment while under the influence of alcohol or any drugs that could impair your capabilities in any way.
- 6. Personal Protection Equipment (PPE) must be worn when operating the petrol pump on the SuperReel sprayer. Exposure to excessive noise over an extended period can cause impairment or loss of hearing.
- 7. PPE appropriate to the chemicals being used must be worn at all times when operating the SuperReel sprayer. As a minimum, the PPE should include coveralls, gloves and boots. A face shield and PVC apron are recommended depending on the task. It is recommended that the following documents should be read and understood by the operator:
  - Australian Standard for Chemical protective clothing AS3765
  - Australian Standard for Respiratory protection devices AS1715
- 8. Ensure the capacity of the vehicle is suitable for the loaded mass of the SuperReel sprayer. Refer to the vehicle's operator manual for safe working loads, correct securing 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 400 litre SuperReel sprayer will weigh in excess of 450kg.
- 9. The unit must be securely restrained on the vehicle. Ensure all fasteners are tightened and secure before operation.
- 10. Care should be taken at all times, particularly when operating on rough or steep terrain. Drivers should be aware of fluid surge affecting the vehicle's centre of gravity.
- The SuperReel sprayer must never be left unattended while being filled with fluids.
- 12. Do not operate the pump when there is no fluid in the tank.
- 13. 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.
- 14. Ensure any electrical connections are properly configured, to prevent damage such as shorting or reverse polarity.
- 15. At completion of the operation, switch the pump off and relieve any residual pressure by squeezing the spray gun trigger.
- 16. At completion of the operation, decontaminate the SuperReel sprayer tank and hose lines. Drain any residue chemicals and store in a sealed container. Dispose of any unwanted chemicals and tank rinse residue in accordance with current environmental and workplace health and safety regulations.
- 17. The SuperReel sprayer has safety labels affixed to various locations on the unit. These labels should be kept clean and legible, and replaced if damaged.
- 18. 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, fully drainable – 400 to 1,000 litres
Standard Equipment	Honda GX200 petrol engine
1 1 1 1 1	Bertolini pump – 34L/min (single SuperReel sprayer) or 54L/min (twin SuperReel sprayer)
	Fabricated galvanised steel frame with forklift pockets
	Pressure regulator
	Remote control auto rewind SuperReel with 100m FrictionFree™ nylon hose and Turbo spray gun
Options	Yanmar 4.8hp diesel engine with electric start and emergency stop pushbutton
1	Battery isolator lockout switch
 	Remote control auto rewind SuperReel with 150m FrictionFree™ nylon hose and Turbo spray gun

#### **Description**

The TTi SuperReel sprayer is designed to carry and distribute herbicides, pesticides or water using a self-contained petrol driven pump, refer to Figure 1. The SuperReel sprayer is configured in two different styles:

- Single Auto Rewind SuperReel sprayer, fitted with a tank ranging from 400 to 1,000 litres
- Twin Auto Rewind SuperReel sprayer, fitted with a tank ranging from 400 to 1,000 litres.

Both configurations are suitable for fitting to a conventional utility tray or trailer.



Figure 1 - SuperReel Field Sprayer (Single SuperReel shown)



The SuperReel sprayer has the following features, refer to Figure 2.



Figure 2 – Component Identification – Twin Auto Rewind SuperReels

#### Tank

All TTi tanks are constructed from UV resistant, virgin material polyethylene. The tank is fully drainable and includes a level sight tube to provide an accurate level indication of fluid within the tank. The tank inlet is fitted with an internal basket strainer under the twist lock filling cap.

Tank size options for the SuperReel sprayers are:

- 400 litres (short)
- 500 litres
- 600 litres (short)
- 800 litres
- 1,000 litres

#### SuperReel and Spray Gun

The electrically operated SuperReel hose reel contains 100m of FrictionFreeTM hose connected to a trigger actuated Turbo spray gun with adjustable nozzle. The hose is pulled out manually from the SuperReel and electrically retracted using the supplied remote control. An Anderson plug is fitted to the rear of the SuperReel, ready for connection to a 12-volt power supply.

The spray gun nozzle adjusts from jet through to mist sprays by adjustment of the lever adjacent to the trigger. When the trigger is squeezed, the fluid is discharged; when the trigger is released, the fluid bypasses back into the tank.

Both the Single and Twin SuperReel sprayer units are available with a 150m hose option.





#### **Pump Options**

The SuperReel sprayer is fitted with a Honda GX200 petrol pump coupled to a Bertolini pump. The pump is rated for 34I/min for the Single SuperReel sprayer, and 54I/min for the Twin SuperReel sprayer unit.

Available as an option is a 4.8hp Yanmar diesel engine coupled to the 5.4l/min Bertolini pump. This option includes electric start, emergency stop pushbutton and an optionally fitted battery isolator switch.

If the spray gun is not in operation when the pump is running, the fluid bypasses back into the tank via the hose operation lever at the pressure regulator.

#### **Pressure Regulator**

A pressure regulator and pressure gauge are fitted to the pump discharge flange to control line pressure and prevent pump cavitation. The regulator is adjustable and can be set to approximately 5 bar for spot spraying.

#### **Suction Filter**

Adjacent to the pump a filter is installed on the suction line. The filter has a removeable filter element for easy cleaning.

#### **Hose Operation Lever**

A manually operated lever is fitted adjacent to the pressure regulator and has two positions:

- BYPASS directs the fluid back into the tank
- HOSE for operation of the hose.

The lever should always be set to the bypass position when starting the pump and switched to the HOSE position when starting spray operations.

#### **Manually Operated Valve**

Manually operated valve/s are fitted to the regulator to feed to the SuperReel hose reel/s.

#### **Frame**

The chassis frame of the SuperReel sprayer is an all steel, fully welded construction and hot dip galvanised for corrosion resistance. The frame incorporates forklift pockets for easy loading and unloading from the vehicle.

#### **Machine Limitations**

The SuperReel Field Sprayer 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 SuperReel sprayer is heavy when filled with fluid. To maintain stability while operating this unit:

- Ensure the vehicle 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 SuperReel sprayer tank is full, as the vehicle may have a higher centre of gravity.

### **SuperReel Operating Instructions**

#### **Before first use**

Your SuperReel Field Sprayer is delivered fully assembled and ready to be fitted onto the vehicle. 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 a safe and easily accessible place for future reference.



WARNING: The operator must fully understand all aspects of this handbook. Do not operate the SuperReel 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 SuperReel for the first time.
- 4. Check that all fittings, valves, hoses and electrical leads are secure following transit, and are not damaged in any way.
- 5. Inspect the tank for any damage or abrasions that may have occurred 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 SuperReel sprayer onto the vehicle and mount securely to the tray. If using tie-down straps, they must be rated to at least the total mass of the unit when filled with fluid. Alternatively, the integrated tank frame may be bolted to the vehicle.
- 7. Refer to the supplied pump unit's manual and prepare the engine for use, such as filling its tank with fuel.



CAUTION: Ensure any electrical connections are configured correctly to prevent shorting or reverse polarity. Warranty is conditional on the electrical systems being correctly connected.

8. Connect the supplied electrical cable to the Anderson plug/s at the base of the SuperReel/s and connect the other end to the vehicle's power supply (cigarette lighter socket) or battery (via alligator clips).





#### Filling the SuperReel Sprayer Tank



WARNING: Ensure the filling area is in an open, well ventilated space if filling with chemicals. Follow the instructions provided with the chemicals or the applicable Safety Data Sheet

Mixing and filling the SuperReel sprayer should be undertaken at a carefully chosen site, away from any risk of spillages draining into water courses or into environmentally sensitive areas. Children and animals must always be kept away from mixing and filling operations.

The unit's tank is filled as follows:

- 1. Open the tank filler by twisting and lifting the cap.
- 2. Withdraw the internal basket strainer and inspect it for any debris. Clean it if required and reinstall it into the top of the tank.
- 3. Follow the chemical manufacturer's instructions and safety precautions carefully, taking note of the order in which the products are added to the tank.
- 4. Measure the correct quantities of chemicals using clean measuring containers specifically for this purpose only, then add the chemicals to the tank.
- 5. Rinse out the measuring containers and any empty containers and pour all rinsing liquid into the SuperReel sprayer's tank.



CAUTION: Do not overfill the tank. This may result in chemical spillage.



CAUTION: The SuperReel sprayer must never be left unattended while being filled with fluid.

- 6. Top up the tank with water to the required level, ensuring it is not overfilled. A sight tube is located on the tank, providing a visual indication of the fluid level in the tank.
- 7. Thoroughly mix the contents by stirring with a suitable paddle or starting the pump with the hose operation lever set to the BYPASS position.
- 8. Upon completion of filling the SuperReel sprayer tank, replace the filler cap and twist to tighten.



- 9. Wash off any spillage from outside the tank.
- 10. Close the chemical supply containers and store appropriately. Any empty containers must be thoroughly rinsed and set aside for collection and disposal in compliance with environmental and work safety requirements.

#### **Operating Instructions**

The SuperReel sprayer is started and operated as follows:



WARNING: Suitable PPE must be worn by the operator when conducting hose spraying operations.



CAUTION: Do not spray in windy conditions, where spray drift contamination may occur.

- 1. Position the vehicle at a suitable point of the operations area.
- 2. Confirm the tank contains the required chemical quantity by observing the fluid level at the level sight tube.



CAUTION: Ensure the pressure regulator is set to the minimum position.

At the pump, check that the pressure regulator is set to the minimum position by turning the knob anticlockwise, refer to Figure 3.

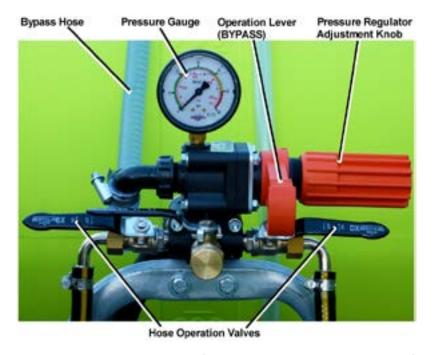


Figure 3 - Pressure Regulator (Twin SuperReel version shown)





- 4. Check that the hose operation lever is in the BYPASS position.
- 5. Start the pump, refer to Petrol Pump Operation or the Optional Diesel Pump Operation procedure below. The fluid will now be circulating through the system and returning to the tank via the bypass circuit.
- 6. With the pump running, turn the operating lever from BYPASS to the ON position.
- 7. Turn the pressure regulator knob clockwise to the required pressure approximately 5 bar for hose spraying operation is recommended, which can be fine-tuned as required.



CAUTION: Ensure not to over-run the hose when pulling it out from the reel, as this may damage the hose or the fittings.

- 8. Pull the hose to unwind it from the SuperReel. For the twin SuperReel sprayer, if both hoses are to be used, pull the hose to unwind it from the second SuperReel.
- 9. At the regulator, turn the hose operation lever to the HOSE position and open the hose valve (or both hose valves for the twin SuperReel sprayer). This will now pressurise the hose/s.
- 10. Aim the hose's spray gun in the required direction and squeeze the trigger. Adjust the spray pattern by operating the lever on the spray gun handle, refer to Figure 4.
- 11. Use a constant speed when spraying and release the trigger at the end of each swath or change of direction, to prevent overdosing. Work in parallel lines when spraying large areas, rather than swinging from side to side.
- 12. At the end of the task, release the spray gun trigger and turn the hose operation lever to the BYPASS position. The fluid will automatically recirculate through the system and return to the tank via the bypass circuit until the pump is switched OFF.
- 13. Referring to Petrol Pump Operation section, switch the pump OFF.
- 14. Aiming the spray gun/s in the required direction, squeeze the trigger to release the residual pressure in the hose, which will result in a small amount of fluid discharging.

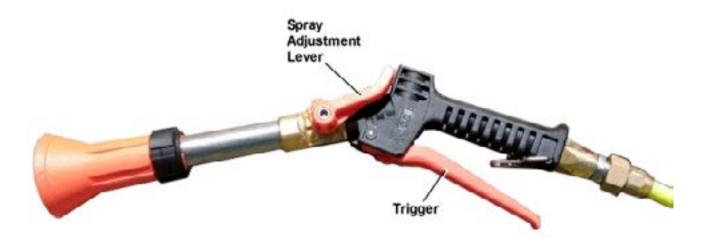


Figure 4 - Spray Gun (typical)





- 15. With the hose pressure released, the hose is ready to stow back onto the SuperReel.
- 16. To retract the hose, apply a little tension to the hose, to ensure the hose does not flip off the spool upon starting.
- 17. Press the button on the remote control supplied with the SuperReel to start retracting the hose, refer to Figure 5. The hose will wind on to the reel's spool, guided by the integrated fairlead.
- 18. Release the button when the hose is retracted, allowing enough slack in the hose to stow the spray gun in its holder beside the SuperReel.



Figure 5 - SuperReel

#### **Petrol Pump Operation**

The SuperReel's petrol pump engine is started as follows, refer to Figure 6:

- Turn the ignition switch to ON.
- 2. Turn the fuel tap to ON.
- 3. Set the choke lever to the closed position.



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

- 4. Check that the throttle is set to the idle position. If restarting a warm engine, the throttle can be left at normal engine operating speed.
- 5. Grasping the pull-start handle, firmly pull to start the engine. This may need to be repeated 2-3 times. If the engine fails to start, refer to the supplied Honda engine manual.





Figure 6 - Petrol Pump Details

- 6. When the engine starts, slowly move the choke lever to the open position.
- 7. Once the engine is warmed up, slowly increase the engine speed to a medium setting, which should result in the required performance while minimising the fuel consumption and excessive engine noise.
- 8. When the engine needs to be stopped, turn the ignition switch to the OFF position.

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

- 1. Set the engine throttle lever to the idle position.
- 2. Turn the fuel tap to OFF.

#### **Optional Diesel Pump Operation**

The SuperReel's optional diesel pump engine is started as follows, refer to Figure 7:

- 1. Turn the fuel tap to ON.
- 2. If fitted, unlock and switch the battery isolator to ON.
- 3. Check that the emergency stop pushbutton is released (sitting up).



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.
- 5. Insert the ignition key into the ignition switch and turn clockwise to start the engine. The engine should crank and start. Release the key as soon as it starts.



6. Once the engine is warmed up, slowly increase the engine speed to a medium setting, which should result in the required performance while minimising the fuel consumption and excessive engine noise.



WARNING: In an emergency situation, the emergency stop pushbutton can be pressed to immediately stop the pump's engine.

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

- 7. Set the engine throttle lever to the idle position.
- 8. Turn the fuel tap to OFF.

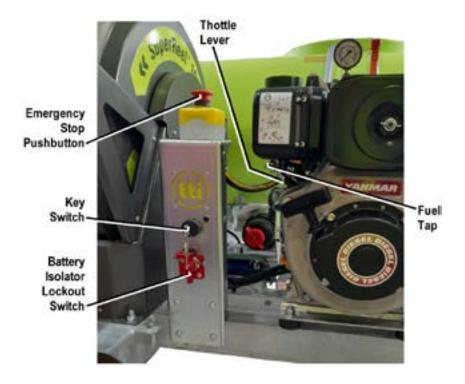


Figure 7 - Diesel Pump Details

### **Clean-up and Decontamination**

After use, the SuperReel sprayer unit must be thoroughly decontaminated inside and outside – including the pump, hoses and spray gun – to avoid damage to crops from any harmful spray residues. Decontamination also prevents sprayer corrosion and abrasion.

Cleaning the SuperReel sprayer should be undertaken at a carefully chosen site, away from any risk of spillages draining into watercourses or into environmentally sensitive areas.

The recommended decontamination procedure is as follows:



WARNING: Suitable PPE must be worn by the operator when cleaning and decontaminating the SuperReel sprayer. Follow the instructions provided with the chemicals or the applicable Safety Data Sheet.





WARNING: Ensure the cleaning area is in an open, well ventilated space, and any flushing water is captured to prevent runoff into watercourses or into environmentally sensitive areas.

- After spraying operations are complete, drain any residual fluid via the bung located at the bottom of the tank. Capture and dispose or store any fluid in accordance with environmental and work safety requirements.
- 2. Rinse out the tank with several changes of water, plus a recommended cleaning fluid. Where it can be reached internally, use a brush to scrub the inside of the tank.
- 3. Operate the SuperReel sprayer with clean water, using the SuperReel hose or hoses (as applicable), to ensure no chemical residue remains.
- 4. Unscrew the suction filter cover and remove the filter screen and gasket. Soak the filter screen in clean water, brushing carefully with a nozzle brush. When re-assembling, ensure the gasket is in position.
- 5. Ensure that the tank's basket strainer is free from chemical residue or debris.

If the SuperReel sprayer is to be stored for an extended period, thoroughly clean and decontaminate the unit as described above. Ensure it is allowed to dry, the tank and all lines are empty and not pressurised, then store it in a well ventilated area.

#### **Maintenance**

Your SuperReel Field Sprayer 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**

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 SuperReel sprayer.

- 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 gun nozzle. Rewind the hose onto the reel, ensuring it retracts all the way.
- 4. Check the pump's engine oil level weekly. Top up if required.
- 5. Check for any signs of fuel or oil leaks around the engine. If detected, investigate and rectify.
- 6. Check the engine fuel line filter, clean or replace as necessary.
- 7. Clean the engine's air filter regularly, especially if working in a dusty environment.
- 8. Check all electrical cables and fittings for any sign of damage.



9. If the SuperReel sprayer is to be stored for an extended period, thoroughly clean and decontaminate the unit as described above. Ensure it is allowed to dry, the tank and all lines are empty and not pressurised, then store it in a well ventilated area.

#### **Maintenance Tasks**

The following tasks must be undertaken on a periodic basis to ensure your SuperReel sprayer's ongoing reliability.



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 frequency of these activities will depend on the nature of the operating environment and the operational hours of the SuperReel sprayer unit but as a minimum, the following tasks should be undertaken annually.

#### **Pump System**

- 1. Refer to the supplied pump manual, drain and replace the engine oil in accordance with the manufacturer's recommendations.
- 2. Clean engine's air filter regularly, especially if working in a dusty environment.
- 3. Unscrew the suction filter cover (refer to Figure 8) and remove the filter screen and gasket. Soak the filter screen in clean water, brushing carefully with a nozzle brush. When re-assembling, ensure the gasket is in position.



Figure 8 – Pump and Suction Filter (Single SuperReel version shown)





#### **Maintenance Schedule**

The following tasks are 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 SuperReel sprayer 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 SuperReel™ sprayer.

#	Task	Notes
1	Inspect the SuperReel sprayer for any signs of damage or wear	Clean, repair or replace
2	Check Anderson plug connection	Test function
3	Check fuel	Top up as required
4	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.

#	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	 	
4	Check the SuperReel drive belt tension weekly, adjust as necessary	 	



#### **Monthly tasks**

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

#	Task	Date	Signed
1	All Daily and Weekly tasks	 	
2	Check hose and hose reel by unwinding fully, replace replacing seals and nozzles as required	 	
3	Check securing system used to fastener unit to vehicle	 	
4	Check guards and fairlead rollers on SuperReels	 	 
5	Check the SuperReel bearings for any noise or friction monthly.	 	
6	Check battery connections (diesel engine only)	 	
7	* 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.

#	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.

#	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.

#	Task	Date	Signed
1	All Daily, Weekly, Monthly, 3-Monthly & 6-Monthly tasks		
2	Check the battery condition (diesel option only)		 
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)		
7	Replace the remote control battery annually		 
8	Replace the drive belt annually		
9	Inspect the drive motor annually		

#### **Two-Yearly tasks**

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

#	Task	Date	Signed
1	All Daily, Weekly, Monthly, 3-Monthly, 6-Monthly and 12-Monthly tasks	1 1 1 1 1	

#### **SuperReel 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 SuperReel but the operator will need to pair the new remote control unit with the SuperReel. Pairing is the process to obtain a unique assignment between the remote control unit and the SuperReel.

The pairing process can be undertaken on site as follows, refer to Figure 9:



NOTE: Check that the battery in the remote control unit is in good condition.



- 1. Retract a few metres of hose from the SuperReel, to enable testing once the pairing process is completed.
- 2. Remove the back cover of the SuperReel by removing the six M6 screws.
- 3. Lay the back cover down beside the reel, the power supply will still be connected to the reel's motor.
- 4. Remove the four screws on the electrical box cover, then unscrew the receiver unit and check that all switches on the receiver's 12-way dip switch are set to OFF.
- 5. Press and hold the program button on the receiver.
- 6. Press the remote control unit's button for 2 seconds. The receiver's LED will flash and then turn GREEN.
- 7. Release the buttons on the receiver and the remote control unit.
- 8. Press the remote control unit's button to test the receiver's output. The hose should commence to wind in.
- 9. Reinstall the receiver unit, the electrical box cover and the back cover in reverse order to removal.
- 10. Fully retract the hose onto the SuperReel, allowing enough slack to place the spray gun into its holder.

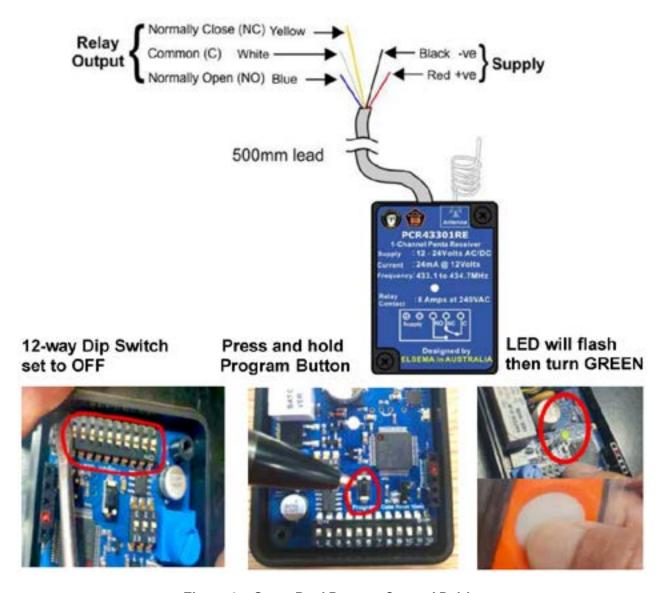


Figure 9 - SuperReel Remote Control Pairing



### **Trouble Shooting**

If a fault develops with your SuperReel sprayer, the following trouble shooting tables provides guidance to identify and rectify the problem.

#### **SuperReel Sprayer Pump**

Problem	Possible Cause	Remedy
Pump will not prime	Insufficient motor speed	Increase motor speed
	Air leak on suction line	Tighten or replace fittings
Pressure drops under load and pump is noisy	Insufficient motor speed to prevent clutch slippage	Increase motor speed
Pressure drops or	Suction line restriction	Remove restriction
fluctuates during operation	Pump sucks air	Tighten or replace fittings
 	Residue on valves	Disassemble and clean valves, replace any broken valve springs as necessary
No pressure	Residue on valves	Disassemble and clean valves, replace any broken valve springs as necessary
 	Broken regulator spring	Replace regulator spring

### **SuperReel Hose Reel**

Problem	Possible Cause	Remedy
SuperReel does not wind	ON/OFF switch not turned on	Checkswitch
	ON/OFF switch faulty	Check/replace ON/OFF switch
	Fuse blown	Check/replace fuse
	Loose electrical connections	Check battery and connections
	Manual switch faulty	Check manual switch
	Loose/broken drive belt	Adjust or replace drive belt
	Seized bearings on reel shaft	Replace bearings
Remote does not operate at	Damaged aerial or lead	Repair or replace aerial or lead
distance	Battery flat	Replace battery
Remote does not operate	Remote not paired with the receiver	Pairing required, refer to Pairing Instructions
	Battery flat	Battery replaced in remote
	Faulty transmitter/receiver	Return to TTi for repair or replacement



### **Risk Assessment**

Task	Hazard	Risk	Control Measure/Mitigation
Check weather conditions	Manual handling; slips, trips or falls	Low	<ul> <li>Wear PPE as per chemical requirements SDS – coveralls, gloves, safety footwear, glasses &amp; respirator</li> <li>Follow safe manual handling techniques: don't lift on your own if &gt;20kg, bend knees &amp; keep back straight.</li> </ul>
Mix chemicals (if applicable) and fill spray tank	As above, spray drift, chemical spillage, emission of vapours or flammability: weather, untrained visitors	Medium	<ul> <li>As above;</li> <li>User trained in relevant chemical mixing &amp; administration course, e.g, Chem Cert;</li> <li>Follow relevant Environmental Protection Authority requirements;</li> <li>Fire extinguisher nearby;</li> <li>Keep visitors away from job location unless wearing full PPE.</li> </ul>
Check the Spray Unit and carry vehicle is safe before use, i.e. where applicable: - wheel nuts, tire pressure, bearings, tow hitch, etc. Use spray unit as per instructions in manual	As above; loss of load; heat & cold; noise; exceed load limit of vehicle; hose entanglement; exhaust fumes; terrain & slopes;	High	<ul> <li>As above;</li> <li>Wear clothes to suit heat &amp; cold;</li> <li>Wear hearing protection if noise &gt;85 dBa;</li> <li>Follow the manufacturer 's safe operation instruction for the vehicle and the spray unit</li> <li>Don't overload - water weighs 1kg for every 1 litre</li> <li>Secure load to vehicle;</li> <li>Keep hose tidy;</li> <li>Put unit brakes on.</li> </ul>
Clean up, maintenance & storage	As above	Low	As above;  Continue to wear PPE for clean up;  Store unit in a dry, well ventilated area.



### **Warranty**

#### **Warranty Policy**

TTTI will, at its option, repair or replace without charge any part covered by this warranty which is found to be defective in material and/or workmanship within one (1) year after date of sale to the original retail purchaser. If the product is used for rental purposes, this warranty is limited to ninety (90) days.

Upon request, the customer will make the defective part available for inspection and/or return the defective part to TTi, transportation charges prepaid. All parts and components are covered by this warranty except the following, which are warranted separately by their respective manufacturers:

- engines
- gearboxes
- pumps
- regulators.

TTi does not assume any warranty obligation, liability or modification for these items, which are covered exclusively by the stated warranty of the respective manufacturers.

#### What this Warranty Does Not Cover?

This warranty does not cover:

- defects caused by depreciation or damage caused by incorrect mounting, normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations or failure to follow the instructions and warnings provided.
- Any charges for making service calls, clean up time and transport charges.
- 3. The use of non-genuine parts on equipment supplied by TTi. This will automatically negate any warranty.

#### **How to Obtain Service Under this Warranty?**

Warranty service can be arranged by contacting your dealer, or by contacting TTi directly on 1800 816 277.

Proof of warranty registration and date of purchase may be required to verify warranty coverage. Any defective parts returned to TTI must be accompanied by a Return Goods Note. This form can be obtained by contacting Product Support on 1800 816 277 or emailing ProductSupport@tti.com.au.

#### **Warranty Limitations**

Warranty limitations are as follows:

- There is no other express warranty. Any warranty that may be implied from this purchase including merchantability and fitness for purpose is hereby limited to the duration of this warranty and to the extent permitted by law. Any and all implied warranties are excluded.
- 2. TTI will not be liable for any incidental, consequential or special damages and/or expenses in connection with the purchase or use of this equipment, to the extent permitted by law.
- 3. Only the warranty expressed in this limited warranty shall apply and no dealer, distributor or individual is authorised to amend, modify, or extend this warranty in any way. Accordingly, additional statements, whether oral or written, do not constitute warranties by TTi, and should not be relied upon.





## 1800 816 277

sales@tti.com.au

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Proudly Built By:		Quality Checked By:	
Signature	Date	Signature	Date

www.tti.com.au