

Operator's Product HandBook

SumpTrans[™]

Liquid Transport Tanks





"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 SumpTrans™ Fully Drainable Chemical Tank, which will provide many years of reliable service when operated and maintained in accordance with this manual.





TTi manufacture a range of SumpTrans™ units, from 100 through to 13,000 litre tanks. This manual describes the operation, driving stability, and maintenance procedures applicable to all units, noting additional requirements to options where necessary.

All TTi SumpTrans[™] tanks are rotationally moulded from quality polyethylene, purpose-designed and manufactured to high standards. The SumpTrans[™] is a ute, truck, or trailer-mounted tank transportation system.

The SumpTrans™ unit is supplied complete, tested, and ready to go. The SumpTrans™ is suitable not only for transporting potable water but other fluids such as molasses – almost any liquid except fuel. Ask for a copy of the TTi Compatibility Chart to confirm suitability of the SumpTrans™ for your needs.

TTi recommends that if fluids other than water are to use used in the SumpTrans™, the unit should be designated solely to that fluid, to avoid any risk of cross-contamination from different products.

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 SumpTrans™ unit are the following documents:

- Operator's Handbook (this manual, which includes the Warranty Registration Card)
- Tank Quality Check Form. This is your verification that the unit has been quality checked, and verifies
 the serial number affixed to the unit.

Schematic drawings of the range of SumpTrans[™] and skid frames are available upon request by emailing sales@tti.com.au, specifying the particular size.

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 to carry water or other fluids. Under no circumstances should it be used for any other purpose. It must never be used for transporting fuel. Confirm suitability with the TTi Compatibility Chart.
- 2. Only authorised and trained personnel are to operate this equipment. Operators must have read and fully understood this manual before operating the SumpTrans™ 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. The SumpTrans[™] must be correctly supported, ensuring the sump does not take any weight. The unit must be secured on a flat surface, as specified in this manual.
- 5. Personal Protection Equipment (PPE) must be worn when refuelling or operating a pump associated with transferring fluid to or from your SumpTrans™. Exposure to excessive noise over an extended period can cause impairment or loss of hearing.
- 6. Avoid diesel or unleaded petrol contact with skin and eyes, and avoid breathing vapours or mists. Refer to the relevant Safety Data Sheet (SDS).
- 7. Ensure the capacity of the vehicle is suitable for the loaded mass of the SumpTrans™. Refer to the vehicle's operator manual for safe working loads and relevant safety instructions. Do not exceed the carrying and braking capacity as specified by the vehicle manufacturer.
- 8. The SumpTrans[™] tank is a confined space. Ensure compliance with OH&S requirements if entering the tank.
- 9. Be aware of the height of the SumpTrans™ when mounted on a vehicle. Keep clear of overhead obstructions, such as bridges, low-hanging tree limbs and power lines.
- 10. Appropriate working at heights OH&S requirements must be followed if accessing the top of the tank is required.
- 11. TTi recommends the LiquidLocker[™] baffle system be used in SumpTrans[™] tanks of 2,000 litres and above. This is dependent on the viscosity of the fluid being transported. It is essential the LiquidLocker system be used in tanks of 10,000 litres and above.
- 12. All hoses and pipes attached to the SumpTrans[™] tanks must be flexible, to prevent damage due to vibration from pumps and motors. Rigid pipes must not be coupled directly to the tank.
- 13. For SumpTrans™ tanks fitted with optional 3" and larger outlets, additional venting is required to prevent internal negative pressure. This can be achieved by loosening or opening the tank lid.
- 14. The SumpTrans™ must never be left unattended while being filled.
- 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 SumpTrans[™] 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.
- 18. Failure to observe the above safety precautions could void your warranty.



General Information

Specifications

Tank	Heavy duty UV stabilised chemical resistant polyethylene tank (100 to 13,000 litre capacity),		
Standard Equipment	150mm lid assembly (100 litre tanks)		
	255mm lid assembly and filter basket (200 to 600 litre tanks)		
	455mm lid, rim and seal assembly, filter basket (600 to 13,000 litre tanks)		
	1" MBSP fitting – poly (100 litre tanks)		
	1½" MBSP fitting – poly (200 to 1,500 litre standard tanks)		
	34" MBSP fitting – poly (200 and 400 litre low profile tanks)		
	2" MBSP fitting – poly (2,000 to 13,000 litre tanks)		
	Mounting straps (pair) (100 to 400, 600 litre standard tanks)		
	Galvanised mounting pins (500 to 13,000 litre tanks)		
	Pump compartment and cover (200 & 400 litre low profile tanks)		
Options	Galvanised skid frame (100 to 13,000 litre tanks)		
	LiquidLocker™ Baffle Safety System (600 litres and above)		
	Water level sight tube (from 200 litres and above)		
	3" hydrant fill lid		
	80mm hydrant funnel lid		
	Optional flanged poly tank outlet fittings		
	Optional flanged brass tank outlet fittings		
	Optional lids, basket and breather valves		



Description

The TTi SumpTrans™ is designed to carry water and other fluids safely and effectively. Refer to the TTi Compatibility Chart for suitability of fluids to be carried or stored. The SumpTrans™ has the following features, refer to Figure 1.



Figure 1 - Component Identification

Tank

All TTi tanks are constructed from UV stabilised, chemical 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 specific design feature is our tank feet, enabling easy and quick mounting to any tray surface. Some of the SumpTrans[™] tanks are designed to be retained onto the tanks frame via galvanised mounting straps.

The SumpTrans™ comes in our standard opaque Safety Green, with a range of translucent and opaque colours available as an option. Each tank incorporates an integral sump at the base of the tank. It is important that the tank is never allowed to rest on the sump, even when empty – the tank must always be supported to prevent damage to the tank.

LiquidLocker Safety Baffle System

The LiquidLocker baffle system within the tank demonstrates measurable improvements in braking performance and dynamic stability and controllability. LiquidLocker baffles are recommended for tanks from 600 litres and above. The system has been independently tested, with the report available upon request.

Tank Level Indicator

An optional level sight tube is fitted to the rear of the tank and provides an accurate level indication of water within the tank. It is available for fitting to 200 litre tanks and above.



Steel Frames

All SumpTrans[™] tanks are available with optional skid frames, fully welded steel and hot-dip galvanised for long-lasting protection. The frames provide full support for each SumpTrans[™] tank with clearance to the integral sump.

Machine Limitations

The SumpTrans[™] tanks are subject to operating limitations. It is the operators' responsibility to ensure that this equipment is being operated safely and within these limitations.

Driving Stability

The SumpTrans™ tanks are 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 SumpTrans™ tank is full, as the unit will have a higher centre of gravity.

Operating Instructions

Before First Use

Your SumpTrans[™] tank is delivered fully assembled. Before use, it needs to be set up using the following instructions:

- Complete the warranty registration online at www.tti.com.au/warranty-registration, or use the Warranty Registration Card at the back of this handbook.
- 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 use the SumpTrans™ tank until you have read this handbook.

- Read and thoroughly understand this handbook, paying particular attention to all safety requirements, before using the SumpTrans™ for the first time.
- Check that all fittings are secure following transit and are not damaged in any way.
- Inspect the tank for any damage or abrasions.



CAUTION: The sump of the SumpTrans™ must never be allowed to rest on the ground.



- For tanks supplied without the skid frame, it is the owner's responsibility to ensure the tank is mounted in such a manner as to prevent the sump from bearing any weight, even when empty. Failure to comply with this may lead to structural damage to the sump, which will void any warranty.
- Mount the SumpTrans[™] tank with the optional skid frame onto the vehicle, ensuring it is fully supported
 on a flat surface. Tanks without the optional skid frame must be mounted in such a way as to ensure
 the sump does not bear any weight. Secure the tank and/or skid frame to the vehicle using suitable
 mounting devices that will take the weight of a full SumpTrans[™].
- Ensure all feet (where applicable) are secured correctly with the supplied mounting pins, refer to Figure 2.
- For SumpTrans™ tanks of 2,000 litres and above, TTi recommend installing the LiquidLocker baffle system to minimise fluid surge during transportation. It is essential the LiquidLocker system be used in tanks of 10,000 litres and above.



Figure 2 - SumpTrans™ Mounting System (typical)

Filling the Tank



CAUTION: The SumpTrans™ unit is designed for water and other fluids only. It must not be used for fuel.

The SumpTrans[™] tank is filled by gravity from a supply, such as an overhead standpipe or supply hose as follows:

- Remove the filling lid from the tank's top opening.
- If fitted, check the filter basket, clean if necessary.
- Position the SumpTrans™ unit's top-mounted fill point under the standpipe or lift up and suitably secure a supply hose.
- Open the standpipe or supply hose valve and allow water to flow into the tank.







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

- An optional sight level tube is fitted to the tank, providing a visual indicator of the level of water in the tank. If a sight level tube is not fitted, observe the water level directly in the tank. When the tank is filled, close the supply's valve.
- Upon completion of filling, replace the tank's filling lid.

Schematic drawings of the range of SumpTrans[™] and skid frames are available upon request by emailing sales@tti.com.au, specifying the particular size.

SumpTrans™ Operation

The SumpTrans[™] is supplied with an MBSP fitting at the base of the tank to connect to your discharge system. When so connected, the control of flow may be regulated by the discharge system.

For the larger tanks (2,000 litres and above) fitted with a 2" MBSP fitting, the tank's filling lid must be loosened and opened to provide adequate venting when discharging the tank's fluid.

Maintenance

Your SumpTrans™ 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. The frequency of these activities will depend on the nature of the operating environment and the operational hours of the SumpTrans™ unit. Refer to the maintenance schedule tables below for details of maintenance intervals.

- Clean the unit and inspect it for any signs of damage or wear. Replace any safety labels if they are damaged or illegible.
- Check all hoses, fasteners and fittings are firmly secured, tighten if necessary.
- If the SumpTrans[™] 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.



Risk Assessment

Task	Hazard	Risk	Control Measure/Mitigation
Ensure tank is mounted correctly on vehicle and do not overload vehicle. Partially fill the tank with water & test the tank or pumping system, if necessary, before use	Load not secured; overloaded vehicle; manual handling; slips, trips or falls; fingers jammed; overhead powerlines - electricity; leaks; tank in a confined space	Medium	 Read/follow decals on the tank Follow safe manual handling techniques; Don't lift on your own if > 20kg, bend knees & keep back straight; Keep fingers clear Keep tank at least 8m away from overhead powerlines Keep water away from electrical sources Make sure tank mounted securely to comply with relevant codes of practice and transport authority requirements; Don't exceed vehicle load limit; follow state legislation & AS 2865: 2001 confined space Chassis mount frame to be designed by licensed Truck Body Engineer if used on public roads
Check weather and ground conditions for stability	Manual handling; ground instability	Low	 Follow safe manual handling techniques as above. Drive cautiously to suit ground and weather conditions.
Fill the tank with water/ other fluids using a pump, hydrant, hose or similar apparatus	Manual handling; slips, trips or falls; ground instability; weather conditions; falling from height; use of chemicals	Medium	 As above 1 & 2; Ensure fall prevention strategy exists if on the tank; Whilst on the back of a vehicle filling the tank - work platform or handrails in place &/ or the person filling the tank is secured with a safety line or harness fall arrest system in place. Follow MSDS.
Check that transport vehicle is safe before use, i.e. where applicable: wheel nuts, tyre pressure and condition, bearings, tow hitch, have been serviced, etc. Driving and using the water tank from a vehicle - take into account the sway of water in the tank when driving.	As above; loss of load; heat & cold; noise; exceed load limit of vehicle; hose entanglement; exhaust fumes; terrain & slopes	High	 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 pump/spray unit; Don't overload - water weighs 1kg for every 1 litre; Secure unit to vehicle; Keep hose attachments tidy; TTi recommends LiquidLocker Baffle System to control liquid surge.
Clean up, maintenance & storage	As above	Low	As above; Store unit in a dry, well ventilated area





Warranty

Warranty Policy

TTI will, at its option, repair or replace without charge any part covered by this warranty that is found to be defective in material and/or workmanship within twenty (20) years after the date of sale to the original retail purchaser.

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.

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.
- 2. 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:

- 1. 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.





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

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