

Australia's Safest Tanks and Trailers

# OPERATORS **HANDBOOK**



Call our friendly team today to discuss our product range and complete sales catalogue.

# TABLE OF **CONTENTS**

Introduction	3
Your <b>Safety</b>	4
Statement of <b>Suitability</b>	5
Risk <b>Assesment</b>	6
Operating Instructions	7
Setting up Your DieselCaptain	8
Warning <b>Notice</b>	9
Operation	10
Maintenance	11
Trouble Shooting <b>Guide</b>	12
Warranty	13
Warranty	14
Warranty <b>Registration Card</b>	15



### **INTRO**DUCTION

#### THANK YOU FOR YOUR PURCHASE OF A TTI DIESELCAPTAIN.

- » Please read all instructions and precautions in this handbook carefully.
- » Keep your handbook in a safe place

All TTi DieselCaptain Tanks are rotationally moulded from quality, diesel grade polyethylene and have been purpose designed & manufactured to high standards. When properly mounted and operated, provided all precautions and instructions are followed they will provide many years of useful service. All TTi DieselCaptain Tanks have a lockable filler cap with strainer and an innovative breather system fitted as standard.

All TTi Diesel transfer units come standard with an auto shut-off gun and pumps feature a duty cycle for 40 minutes of continuous dispensing. All pumps also contain an internal bypass that allows the pump to operate for short periods with the dispensing gun closed.

See the Statement of Suitability – Diesel tanks on page 5.

### YOUR SAFETY

- 1. Prior to installing or using the diesel unit all operators must have read and fully understand the contents of this instruction manual as well as all other manuals supplied with unit.
- 2. This diesel unit is designed and manufactured solely for the purpose of carrying and pumping diesel fuel. Under no circumstances may it be used for any other purpose
- 3. Never allow an inadequately trained person or a minor to install or operate the Diesel unit.
- 4. You must be in good mental health to operate this tank and not be under the influence of alcohol or any drugs that could impair your vision, physical strength, dexterity, judgment or other mental capacity.
- 5. Ensure the capacity of the vehicle is suitable for the loaded mass of the diesel unit. Refer to the vehicle operator's manual for safe working loads, correct secure points and relevant safety instructions.
- 6. Avoid diesel contact with skin and eyes, and avoid breathing vapours or mists. Refer to the Relevant Material Safety Data Sheet MSDS
- 7. Personal Protection Equipment must be worn at all times.
- 8. This diesel unit should be securely restrained or tied down when being transported on a vehicle
- 9. This diesel unit should not be lifted when partially or completely full unless supported by an appropriate frame or pallet.
- 10. Before attempting to fill the tank at a service station consult the operator for the correct procedure
- 11. The diesel unit should never be left unattended while dispensing or being filled
- 12. Do not store the diesel unit within or next to a dwelling or in a garage attached to a dwelling
- 13. Always store the diesel unit in a well ventilated area, and way from any heating or ignition sources
- 14. Any spillage should be cleaned up immediately and the materials used in the clean-up disposed of safely and in accordance with any legal regulations and codes of practice that apply to the safe use, storage and disposal of diesel.
- 15. When filling the tank, attach the earthing strap to the utility tray or earthed object
- 16. This unit is unsuitable for stacking
- 17. Care should be taken at all times, particularly when operating on rough or steep terrain. Drivers should be aware of fluid surge at all times.
- 18. Tank is a confined space. Ensure compliance with OH & S requirements if entering tank.

### STATEMENT OF **SUITABILITY**

All diesel tanks manufactured by TTi in Nathalia VIC, are suitable for the transport of Diesel Fuel within Australia.

TTi diesel tanks are made from a material specifically designed for use in rotationally moulded diesel tanks.

This material has been tested to ensure it meets the mechanical and chemical resistance requirements of International Regulations ECE R34.01 Annex 5 Section 5.0 and European Directive 2000/8/EC.

The anti-static lead supplied on all **TTi diesel tanks exceeds the requirements of AS1940-2004 and AS2809.2-2008**.

Filler caps and vents supplied on TTi diesel tanks comply with AS 1940-2004.

**Diesel fuel is NOT classified as a Dangerous Good** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (As stated by fuel company MSDS).

**Diesel fuel is NOT classified as a Flammable Liquid in Australia**; it has the lower classification of 'Combustible Liquid C1' (As stated by fuel company MSDS).

TTi Diesel Tanks are NOT subject to the requirements of AS NZS 2906-2001 as they are all designed to contain a volume greater than 25 Litres.

TTi Diesel tanks meet the requirements of VSB6 National code of practice for Heavy vehicle modifications section M fuel systems. TTi Diesel tanks are classed as permanent mounted fuel tanks and do not require removal for re-fuelling.

TTi Diesel Tanks do not require a dangerous goods license when transporting diesel fuel.

TTi Diesel Tanks do not require any danger goods signs when transporting diesel fuel.

# RISK **ASSESMENT**

#### **Product Information Risk Assessment Sheet** TTi - Diesel Tanks

TASK	HAZARDS	RISK	CONTROL MEASURES
Partially fill the tank with diesel, connect the 12 volt transfer kit battery (if applicable for fuel transfer) & test the unit	Manual handling; slips, trips or falls; fingers jammed; electric shock or Electricity	Medium	Concentrate on task; follow safe manual handling techniques:  • 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;  • Keep substances away from electrical sources;  • Tank mounting to comply with relevant codes of practice and transport authority requirements.
Check weather conditions & select the appropriate PPE to suit the refueling being carried out	Manual handling; slips, trips or falls; diesel & fumes	Low	<ul> <li>Put on PPE as per the chemical requirements in the Material Safety Data Sheet- gloves, safety footwear, mask, glasses, etc;</li> <li>Follow safe manual handling techniques as above</li> </ul>
Fill <b>diesel tank</b>	As above; diesel fume drift, diesel spillage, emission of vapors or flammability; weather; untrained visitors; tank not secured; tank used for non diesel products	Medium	<ul> <li>As above; user trained in the state's chemical mixing &amp; administration course eg Chem Cert;</li> <li>Follow the relevant Environment Protection Authority requirements;</li> <li>Fire extinguisher present – CO2 or powder;</li> <li>Keep visitors away from the job unless wearing full PPE;</li> <li>Check load secure; "DIESEL ONLY" sticker on.</li> </ul>
Check that transport vehicle is safe before use, i.e. where applicable:- wheel nuts, tyre pressure, bearings, toe hitch, has been serviced, etc.  Use diesel unit	As above; loss of load; heat & cold; noise; exceed load limit of vehicle; hose entanglement; exhaust fumes; terrain & slopes	High	<ul> <li>As above; 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 12 volt transfer unit;</li> <li>Don't overload – diesel weighs 0.85kg for every 1 litre;</li> <li>Secure load to vehicle;</li> <li>Check earth straps;</li> <li>Hoses tidy.</li> </ul>
Clean up, <b>maintenance</b> & storage	As above.	Low	<ul> <li>As above;</li> <li>continue to wear PPE for clean up: follow state legislation &amp; AS 2865: 2001 Safe Working in a Confined Space GUIDELINES;</li> <li>Store tank in a dry, well ventilated area.</li> </ul>

# **OPERATING INSTRUCTIONS**

#### BEFORE FIRST USE

- 1. Your DieselCaptain comes fully assembled and ready for use, however it is important to read and follow the information below prior to operation.
- 2. Ensure you have read and understood the pump manual included with your unit before first use
- 3. Check that all fittings, hoses and electrical leads are secure & not damaged.
- 4. Check tank, including base for damage or severe abrasion.
- 5. Unit must be securely fastened down when mounted on a vehicle. Use tiedown straps in recesses.
- 6. provided on tank or secure to purpose built frame



# SETTING UP YOUR DIESELCAPTAIN



Padlockable, Non-vented diesel filler lid with strainer and anti loss chain

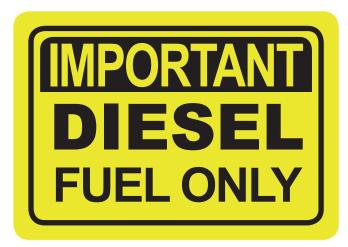


**Splash Resistant Breather** 

#### WARNING NOTICE

The following notices are located on the underside of the pump cover.

Safety decals should be kept legible at all times and be replaced if they are damaged. Please ensure that these instructions are followed.



# ACAUTIONA

- Do not exceed vehicle manufacturers loading, towing or lifting specification and regulations.
- Ensure tank is firmly secured in an appropriate manner.
- Use caution at all times, particularly when driving on rough or steep terrain.
- Comply with chemical manufacturers safety requirements and all relevant legislation.

On the following page is a recommended frame design for mounting our tanks.

Warranty is conditional on tank being correctly mounted.

#### LIQUID SURGE

TTi strongly recommends the use of the **safety ball baffle system** to control liquid surge when in transit. Call **1800 816 277** for details.

# **OPERATION**

#### Connecting to a Power Supply

All diesel transfer units fitted with DC electric motors are supplied with alligator clips to enable direct connection to a 12 volt DC battery. Connect the red wire to the positive terminal and the blue wire to the negative terminal. If mounting unit to a vehicle permanently it is recommended that installation is done by a qualified electrician. Ensure installation is properly fused in accordance with pump manufacturers instructions

#### Filling the Diesel Unit

Tank must only be filled in adequately ventilated area. Ensure that the tank is supported by an even base capable of taking the weight. Attach static lead to suitable earth point. Remove the lid ensuring filter is in place and intact, take care not to introduce contaminants into the tank via the filler neck. When filling is complete replace cap and disconnect static lead.

#### **Transferring Diesel**

Before first use the pump will need to be primed. Remove cap and direct the nozzle back into the tank while pumping to avoid spillage or loss of diesel. Turn the pump on and depress the trigger to allow air to bleed from the hoses; after a short time the pump will have primed and delivery will commence.

Dispense fuel in a well ventilated area only. Attach static lead to tank being refueled. Turn the pump on and operate the nozzle. The nozzle features an automatic shut-off. When auto shut off operates it will be noted by a 'click' sound from the nozzle, followed by a change in tone from the pump motor.

Once the pump has stopped delivery, turn off the pump, or begin dispensing into another container. Note: It is NOT recommended that pump be allowed to bypass for more than 3min. Doing so can irreparably damage the pump and will void warranty. Remove nozzle, replace tank filler cap and disconnect static lead

Upon completion of refueling operations pack nozzle & hose away carefully to prevent hose kinking or tangles. If any spillage has occurred during refueling operations, ensure this is cleaned up in accordance with local environmental and safety regulations.

**Note:** Store Diesel unit in a dry well ventilated area, away from any sources of ignition or fuel.

### **MAINTENANCE**

Your **DieselCaptain** requires minimal maintenance and regular cleaning and checks will extend its life & highlight any problems

- » Periodically check nozzle, hoses and fittings and tighten if necessary to prevent leaks.
- » If any hoses have cuts, bulges or other signs of damage they must be replaced.
- » External filters, if fitted, must be regularly checked & replaced as necessary.

The pump has been designed and built to require minimal maintenance.

**Note:** Always remove the pump from the power source before any inspection.

- » Periodically inspect the pumps integrated strainer as a clogged strainer will reduce fuel flow and affect the life of the pump.
- » Unscrew the plug in head of pump, remove the gauze mesh strainer, clean and check thoroughly before replacing.
- » Ensure filter is clean and free of debris. In particular this should be done if there is a noticeable decrease in diesel flow rate.

The vanes in the head of the pump will wear over time and require replacement. To extend the life of the vanes, ensure that the filters are kept clean and the tank free on contaminants. If a reduced flow rate is noticeable, or a screeching sound is heard, the pump will require immediate attention to prevent parts from being permanently damaged.

# TROUBLE SHOOTING GUIDE

#### TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	REMEDY
<b>Motor</b> does not run	No electrical power to pump	<ul> <li>Ensure battery wires are connected to battery properly</li> <li>Check fuse and fuse holder</li> </ul>
<b>Motor</b> runs slowly with Low fuel flow	Low voltage supply	<ul> <li>Test power supply and ensure adequate voltage</li> </ul>
<b>Motor</b> runs, but no fuel delivery	Tank level too Low Clogged suction line or filter Air leak in suction line	<ul> <li>Add fuel to tank</li> <li>Clean suction line and filters</li> <li>Check all joints for leaks</li> </ul>
Pump makes a squealing or scratching sound while running	Dirt or debris entering pump chamber	<ul> <li>Remove end cover by first undoing the three socket head screws and lifting off cover.</li> <li>Clean impellor and vanes taking care to remove any particles caught between the ends of the vanes and the housing.</li> <li>Take care not to over tighten screws when reassembling.</li> </ul>
Low or no flow from <b>nozzle</b>	Air lock in fuel nozzle Blockage in nozzle	<ul> <li>Undo nozzle, return delivery hose back into tank, run pump.</li> <li>Check end of nozzle &amp; remove any</li> <li>foreign objects</li> </ul>



#### WARRANTY POLICY

TTI 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 unless the product is used for rental purposes, in which case 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?

- **a)** 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.
- **b)** The customer shall pay any charges for making service calls, clean up time and transport charges.
- c) The use of non-genuine parts on equipment supplied by TTi will automatically negate any warranty.

#### HOW TO OPTAIN SERVICE UNDER THIS WARRANTY?

Warranty service can be arranged by contacting your dealer or by contacting Trans Tank International, Call **03 5866 3266**. Proof of warranty registration and date of purchase may be required to verify warranty coverage. Any efective parts returned to us must be accompanied by a Return Goods Note. This form can be obtained by contacting Product support on **1800 816 277** or email **ProductSupport@tti.com.au** 

### WARRANTY LIMITATIONS

- a) There is no other express warranty. Any warranty that may be implied from this purchase including merchantibility and finess for a particular purpose is hereby limited to the duration of this warranty and to the extent permitted by law. Any and all implied warranties are excluded.
- b) 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.
- c) Only the warranty expressed in this limited warranty shall apply and no dealer, distributor, or individual is authorized 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.



#### Manufactured by:

Trans Tank® International
Murray Valley Highway
Nathalia 3638
Australia

FreeCall **1800 816 277** 

Whilst every care has been taken in the preparation of these instructions, no liabilities can be accepted with regard to errors or omissions. Product specifications are subject to change in line with our commitment to continuous improvement.

### WARRANTY REGISTRATION CARD

To validate your warranty, please complete registration on-line at:

www.tti.com.au/warranty-registration

Model:

Alternatively if you are unable to register on-line fill in all the details below, copy and email to warranty@tti.com.au or post to the address on the back cover.

<b>&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;</b>	or of	<b>*************************************</b>				
I have read and understood the instructions in this booklet.						
Date Purchased						

Serial Number: (located on side of tank)

Purchaser's Name: \_\_\_\_\_ Purchaser's Address: \_\_\_\_\_

Post code:

Phone #: \_\_\_\_\_ Mobile #: \_\_\_\_\_

Email Address: \_\_\_\_\_

Purchaser's Signature:











Q www.tti.com.au

PO Box 137, Nathalia, VIC, 3638

Murray Valley Hwy, Nathalia, VIC, 3638