

# **Instruction Manual**

MANSQD-4 REV I 14/04/20

DIESEL TANKS 200, 300, 400, 800, 1000, 2200 LITRE FREE-STANDING TKD200-7, SQD300-7, SQD400-X1 SQD800-X1, SQD1000-5, SQD1000-X1 SQD2200-5



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Hamilton, New Zealand Telephone: +64 (07) 8496 033 Fax: +64 (07) 8496070 www.silvannz.co.nz No liability can be accepted for any inaccuracies or omissions in this publication, although due care has been taken to make it as complete and accurate as possible.

The information, illustrations and technical data were considered to be correct at the time of preparation.

In accordance with our policy of continuous development Silvan Australia Pty. Ltd. reserves the right to make changes at any time without notice.

YOUR DIESEL TRANSFER UNIT DETAILS		
Record the details here for future reference when discussing service with your Silvan dealer, ordering service parts or making a warranty claim.		
DATE OF DELIVERY		
SELLING DEALER		
ADDRESS		
TELEPHONE NO.		
INSTALLED BY		
Attached to all Diesel Trans	fer units a serial number sticker; from the sticker record the following details below.	
MODEL NUMBER		
SERIAL NUMBER		



# **Silvan Warranty**

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 for 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.

We warrant our goods to be free from defects in materials and workmanship for the warranty period of 12 months from the date the product is delivered to the consumer.

Silvan warrants its authorised Dealer, who in turn warrants the original purchaser (consumer) of each new Silvan product that it will repair or replace the product, or, pay the cost of repair or replacement, as determined by Silvan without charge for labour or any defective or malfunctioning parts in accordance with the warranty limitations below.

This Warranty is in addition to any other rights and remedies available to consumers under the law.

### **This Warranty Covers**

Only conditions resulting directly from defects in workmanship or material under normal use and service.

## **Warranty Exclusions**

The Warranty does <u>not</u> cover:

- Conditions resulting from misuse, use of incompatible chemicals, exceeding machine specifications including overloading, impact damage, negligence, accidental damage, or failure to perform recommended maintenance services as specified in the Owner/Operator Manual applicable to the product.
- Damage caused by continued use of a product after initial failure
- Any product which has been repaired by other than an authorised Silvan service outlet in a way which, in the sole and absolute judgment of Silvan, adversely affect its performance or reliability.
- The replacement of maintenance items such as diaphragms, batteries, V belts and ground engaging components, etc.

#### **How To Claim Warranty**

Return the goods to the place of purchase at your cost and within the warranty period along with evidence of the purchase date. If the original supplier cannot be contacted, then contact Silvan as below and we can direct you on how to proceed with your warranty claim.

#### **How Your Claim Will Be Managed**

The repair of a defective product qualifying under this warranty will be performed by any authorised Silvan service outlet within a reasonable time following the delivery of the product, at the cost of the owner, to the service outlet's place of business. The product will be repaired or replaced depending on the extent of the problem at the discretion of Silvan and the Silvan dealer.

## **Safety Instructions**





Before attempting to operate or install the diesel unit carefully read and take note of the following safety warnings.

Failure to comply with these warnings may result in serious injury or death.

**Warning!** 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 purposes.

**Warning!** 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 and the safety decal fitted to the Diesel unit.

Warning! Never allow an inadequately trained person to install or operate the Diesel unit.

**Warning!** 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.

**Warning!** Avoid diesel contact with skin and eyes and avoid breathing vapours or mists. Refer to the Material Data Safety sheet from your Diesel supplier for recommended safety precautions and any required protective equipment for use when handling. Ensure that all operators and associated personnel are familiar with the legal regulations and codes of practice that apply to the safe use, storage and disposal of Diesel.

Warning! This diesel unit should be securely restrained or tied down when being transported on a vehicle

**Warning!** This Diesel unit should not be lifted when partially or completely full unless supported by an appropriate frame or pallet.

Warning! This unit should never be left unattended while dispensing or being filled.

**Warning!** Before attempting to fill the tank at a service station consult the operator for the correct procedure.

Warning! Do not store the diesel unit within or next to a dwelling or garage attached to a dwelling.

Warning! Always store the diesel unit in well ventilated open areas.

Warning! Storage of the diesel unit must not be in the proximity of any heating or ignition sources.

**Warning!** No combustible waste material or residues shall be permitted to remain in or around areas in which diesel is stored or decanted

**Warning!** Any spillage shall be cleaned up immediately and the materials used in the clean-up shall be 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.

**Warning!** 800L, 1000L and 2200L units must only be stored on open land and not within 3 meters of a dwelling, boundary, or structure. (Open land is an area exceeding 2 hectares and is used or intended to be used for agriculture, horticulture, floriculture and pastoral purposes including golf courses and national parks).

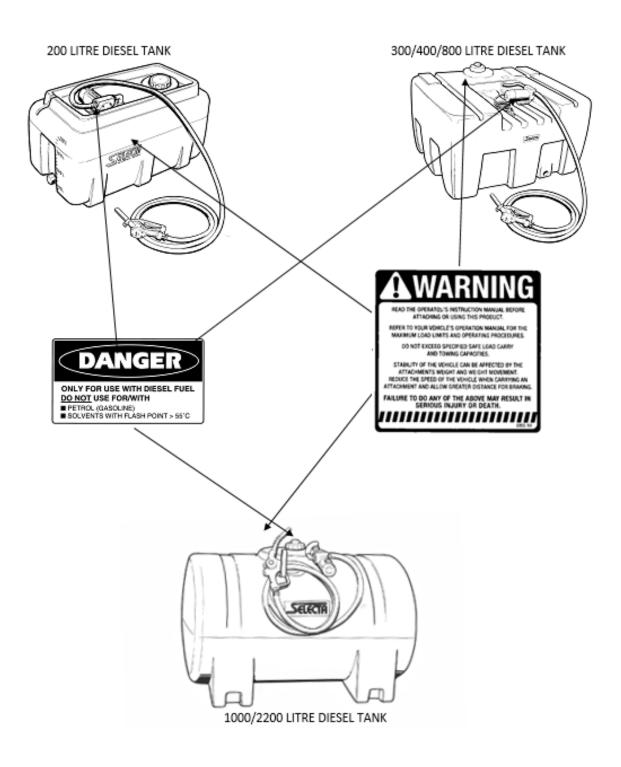
**Warning!** Ensure that the electrical lead(s) are always in good condition: do not allow the lead to lie in water! Or on damp surfaces. Do not allow the lead to become tightly knotted, crushed or pinched or you risk creating an electrical hazard!

# Safety Instructions (cont.)



The location and wording of the safety decal fitted to your Silvan Diesel tank is shown below. It is important that all operators read and follow the information on all safety decals before operating the unit. Failure to comply with these warnings could result in serious injury or death. Safety decals should always be kept clean and legible. If any decals are missing or unreadable, they should be replaced by ordering new decals from your Silvan dealer using the part numbers shown.

Warning decal part number: **DEC48**.



# **Specifications**



#### **GENERAL**:

The Selecta range of Diesel transfer units features an expansive selection of Diesel tanks from 200L to 2200L fitted with varying options of diesel pumps. All transfer units come standard with an Auto shut-off gun and all pumps feature a duty cycle for 30 minutes of continues dispensing, all pumps also contain an internal bypass that allows for the pump to operate for up to a maximum of three minutes when the dispensing gun is closed without Damaging the Pump or motor.

#### **SPECIFICATIONS:**

**TANKS:** Made from impact resistant polyethylene, UV stabilized, coloured grey and fitted with lid and breather. Capacities of 200, 300, 400, 800, 1000 and 2200 Litres Free standing. (300, 400 and 800L tanks are internally baffled).

**GUN:** Trigger filling nozzle with automatic shut-off and hose swivel.

FILTRATION: Suction foot screen filter.

<u>PUMPS AND DELIVERY HOSE:</u> All Selecta Diesel transfer units are fitted with an electric self-priming vane pump details are provided below.

Pump Name	Volts	Amps	Open Flow	Motor Duty Cycle	Internal Bypass	Delivery Hose
Diesel Power	12V DC	22 amp	40L/min	30 minutes	Yes	4 M (20mm I.D.)
BP3000	12V DC	22 amp	45L/min	30 minutes	Yes	5 M (20mm I.D.)
Hi-Flow (Bi-pump)	12V DC	35 amp	80L/min	30 minutes	Yes	4 M (25mm I.D.)

This table is a guide to identifying what pump is fitted to your diesel unit			
Pumps	Diesel Power (382-009)	BP3000	Hi-Flow (Bi-pump)
Appearance		Ties of the second	

#### **IMPORTANT OPERATIONAL NOTE:**

The internal Bypass found in all diesel pump models is designed to protect the pump and motor from

damage when the trigger is shut off for a time no greater the 2-3 minutes which will allow the operator to switch off the pump or recommence pumping. The internal bypass engages from increased 'back pressure' from a shut off trigger, closed tap or over extended delivery line; when this happens the motor will be creating more work and utilizing more amps which is why it important not to keep the bypass engaged for more that 2-3 minutes.

Tank Capacity	Length	Width	Height	Mass
200L	1030	580	535	21
300L	1060	900	590	32
400L	1060	900	770	36
800L	1800	940	850	84
1000L	1500	1180	1090	64
2200L	1900	1380	1150	95

#### **DIMENSIONS AND WEIGHTS:**

Mass is specified with tank empty. To roughly calculate gross mass, add 1 kg/liter capacity. (e.g. 200L =200Kg). All dimensions are in mm, Mass in Kg, the mass of each tank may vary according to the type of pump fitted and other accessories. The given mass and dimensions quoted are the largest values from each tank (and pump combination available) as to over specify and avoid underestimating overall weights and dimensions.

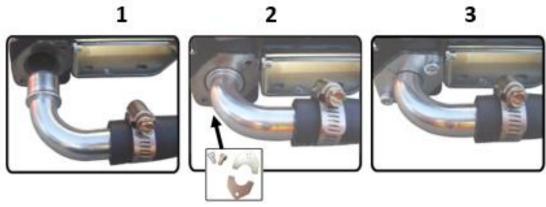
# **Specifications (cont.)**



#### PREPARING THE TRANSFER UNIT FOR OPERATION:

For transport purposes some transfer units will be supplied with the Delivery hose and Automatic Shut-off gun disconnected from the pump. Before attempting to pump any Diesel ensure that the delivery hose is securely fitted to the pump's outlet, and that the Automatic Shut-off gun (with swivel) is fitted to the other end of the delivery hose. If you have a Diesel unit featuring the BP3000 pump (that was not factory fitted with a litre meter) you may need to connect the hose using special "Half Clamp" connectors that will be included with this operators manual (as per the diagram below).

- 1. Push the Fitting from the Delivery hose into the outlet
- 2. Tightly fit the 'Half Clamps' and 5mm Allen head screws (as per the diagram).
- 3. Note: Once connected the outlet fittings should not be able to swivel.



#### **CONNECTING TO A POWER SUPPLY:**

All the diesel transfer units fitted with DC electric motors are supplied with alligator clips that can be connected directly to a 12-volt DC battery. Connect the brown wire to the positive terminal and the blue wire to the negative terminal. If the pump runs backwards, simply swap the clips on the battery (only the Dual Voltage panther Pump may be attached to either a 12 or 24volt DC power supply).

**Warning!** If an extension lead must be used, it should always be a good quality heavy duty lead that is frequently inspected and protected from damage.

**Warning!** Ensure that the electrical lead(s) are always in good condition: do not allow the lead to lie in water or on damp surfaces! Do not allow the lead to become tightly knotted, crushed, or pinched or you risk creating an electrical hazard!

**Warning!** Failure to complywith these warning may result in damage to equipment, risk of fire, serious injury or death.

#### **FILLING THE DIESEL UNIT:**

Ensure that the tank is supported by an even base capable of taking the weight. No Special equipment is required for filling the tank, however when the lid has been removed from the tank take care not to introduce contaminants into the tank via the filler neck and ensure that the lid is kept free of contaminating particles while filling.

#### TRANSFERING DIESEL:

The pump will need to prime itself upon first use. Turn the pump on and depress the trigger to allow air to be bled from the hoses; after a short time, the pump will have primed and delivery will commence. We recommend for this first priming that the lid is removed from the tank and the nozzle is directed back into the tank while pumping to avoid spillage or loss of Diesel; with this done the unit is now ready to operate.

To dispense the pump must be turned on and the nozzles trigger depressed; the nozzle features an automatic shut-off for when fluid contacts the outer nozzle end which can be noted by a "Click" sound from the nozzle followed by a change in tone from the pumps motor as the back pressure causes the by-pass to open. Once the pump has stopped delivery turn off the pump or immediately start dispensing into another container (without allowing the bypass to operate for longer than 2-3 minutes) and not allowing the motor to run for longer than its specified duty cycle.

## **Maintenance**



The pumps have been designed and built to require minimal maintenance however it is still important that you Always remove the pump from the power source before any inspection.

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 of contaminants. If a reduced flow rate is noticeable, or a screeching sound is heard from the pump, dirt or debris may have entered the pumps and requires immediate cleaning before parts are permanently damaged. Periodically check the suction foot filter to ensure that is clean and free of debris. This should be done if there is a noticeable decrease in diesel flow rate. There is also a coarse screen mesh at the inlet of the red "Selecta" Auto shut-off gun supplied with the diesel power 382-009 and BP3000, that can be checked by removing the gun from the swivel.

TROUBLE SHOOTING GUIDE			
Problem	Solution		
Pump does not operate	<ul> <li>Ensure battery wires are connected to battery properly.</li> <li>Check Fuse and Fuse Holder under pump end cover.</li> </ul>		
To Test & Repair if Pump does not operate	<ul> <li>Remove pump end cover, connect power to White &amp; Black wires to test</li> <li>If motor runs, replace loom kit, PN: R09789000 (4m), PF0225-14 (2m)</li> <li>If motor still does not operate, remove 2 x 8mm head motor bolts &amp; check for rust or calcification, &amp; replace motor if required.</li> </ul>		
Pump Wiring Overheating	This can happen when pump is operated in bypass mode for longer than 3 minutes or if low voltage/amps. Ensure that pump is not left running for longer than 3 minutes without depressing Transfer Gun trigger.		
Pump makes a squealing/scratching sound while running.	This can be caused by dirt or debris entering the pump and becoming caught in the working parts. Remove the end cover of the pump by first unscrewing the three Socket Head screws and lifting off the cover. Clean the impeller vanes ensuring you remove any dirt particles caught between the ends of the vanes and the impeller housing. Do not overtighten head screws when reassembling.		
Pump stalls when Transfer Gun trigger is released, and pump is running.	The non-return valve in the outlet of the pump may be jammed shut. Remove the outlet hose from the pump. Operate the white plastic valve in the outlet port of the pump manually (by pushing it in and out), to ensure it moves freely.		
To Test & Repair if Pump is running, but low or nil flow from nozzle	<ul> <li>Remove gun from hose &amp; re-test</li> <li>If flow improves, check hole in the end of the nozzle for blockage</li> <li>Replace gun as required</li> </ul>		
Pump runs but does not pump	<ul> <li>Check red alligator clip fitted to positive terminal, black to negative. If it is the wrong way around the pump runs backwards.</li> <li>Check suction hose and foot filter are immersed in diesel. The suction hose may be bent up out of the diesel.</li> <li>If pump is brand new or has not been used in a long period of time unscrew automatic gun from hose and put hose in filler neck to prime pump</li> </ul>		