



Instruction Manual

MANSQD-7 REV A 16/02/24

**DIESELCUBE 180, 250 & 450L
SQDC180-8, SQDC250-8, SQDC450-8**



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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 read and fully understand the contents of this instruction manual as well as any other manuals supplied including the safety decals 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 securing points and relevant safety instructions.

Warning! Avoid diesel contact with skin and eyes and avoid breathing vapours or mists. Refer to the Safety Data Sheet (SDS) 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.

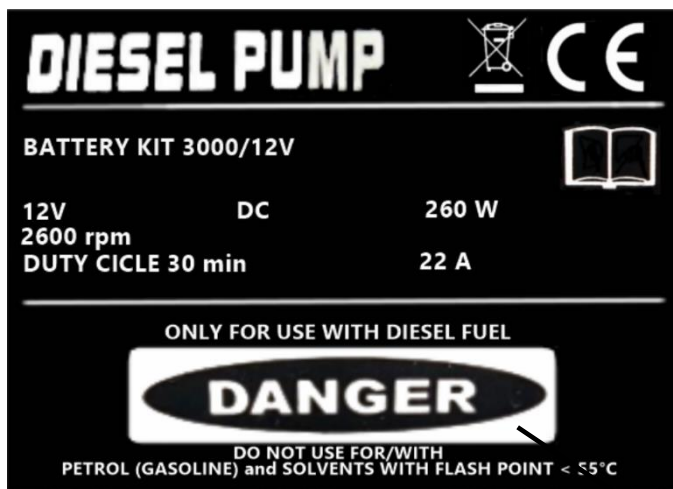
Warning! Ensure that the electrical lead(s) are always in good condition and the wire is not exposed through the plastic coating. Do not allow the lead to become tightly knotted, crushed or pinched.

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 be kept clean and legible at all times. 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: DEC90.



Specifications



GENERAL:

All transfer units come standard with an Auto shut-off gun and all pumps feature a duty cycle for 30 minutes of continuous 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 filling nozzle shuts off without damaging the pump or motor.

SPECIFICATIONS:

TANKS:

Made from impact resistant polyethylene, UV stabilized, coloured grey and fitted with lid and breather with a **180L**, **250L** or **450L** capacity. Depending on the model of diesel transfer unit, tank styles will vary as well as some features.

- Forklifting points for tanks when empty, tank fill gauge, large pump cover suitable for neatly containing hose and gun and lock to secure all contents of diesel transfer unit, water filter.

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

DELIVERY HOSE: 4m x 3/4" Diesel Delivery hose supplied.

FILTRATION: Suction foot screen filter.

In line water filter.

PUMPS:

Power Output	Volts	Amps	Open Flow	Motor Duty Cycle	Internal Bypass	Power Cord	RPM	Internal Fuse
280W	12V DC	22 amp	50L/min	30 minutes	Yes	4m with alligator clips	2600	35 amp

IMPORTANT OPERATIONAL NOTE- The internal Bypass fitted 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.

This is enough time for the operator to switch off the pump or recommence pumping. When the nozzle is off and the pump is running the pump pressure increases and the electric motor load increased using more power (amps) which in turn generates more heat within both the pump and motor, risking increased wear or possible if the pump is not switched off.

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.

Product Code	Tank Capacity	Length	Width	Height	Mass	Hose Length
SQDC180-8	180L	620mm	820mm	670mm	29kg	4m
SQDC250-8	250L	750mm	930mm	770mm	37kg	4m
SQDC450-8	450L	820mm	1130mm	830mm	47kg	4m

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.

CONNECTING TO A POWER SUPPLY:

All the diesel transfer units are fitted with DC electric motors that are supplied with alligator clips that can be connected directly to a 12-volt DC battery. Connect the Red alligator clip to the positive terminal and the black alligator clip to the negative terminal. If the pump runs backwards, simply swap the clips on the battery. If you intend to extend the cable or add a plug, make sure it is of sufficient capacity 35Amps.

FILLING THE DIESEL UNIT:

Ensure that the tank is supported on 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 bleed 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 which operates when fluid contacts the outer nozzle. Once the auto shut off operates turn off the pump within 2 or 3 minutes so as not to allow 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 and can be checked by removing the gun from the swivel.

Replacement cartridge
Silvan part number:
382-177



TROUBLE SHOOTING GUIDE	
Problem	Solution
Pump does not operate	<ul style="list-style-type: none"> • Ensure battery wires are connected to battery properly. Red Clip to +ve • Check Fuse (35A) under plastic pump switch cover is intact.
To Test & Repair if Pump does not operate	<ul style="list-style-type: none"> • Remove pump end cover, connect power to White & Black wires to test. • If motor still does not operate, remove 3 x head cover bolts & check for rust or obstruction, do not over tighten the screws when replacing the cover as this will jam the rotor against the cover and also prevent the electric motor from turning and blow the fuse.
Pump Wiring Overheating	<ul style="list-style-type: none"> • 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. • The wiring loom has been extended using wire of insufficient gauge. 35A wire is required and a matching connector
Pump makes a squealing/scratching sound while running.	<ul style="list-style-type: none"> • 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. <u>Do not over-tighten head screws when reassembling.</u>
Pump stalls when Transfer Gun trigger is released, and pump is running.	<ul style="list-style-type: none"> • 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 the Pump is running but low or nil flow from nozzle	<ul style="list-style-type: none"> • Remove gun from hose & re-test, Run the hose into the tank filling neck while checking. • If flow improves, check hole in the end of the nozzle for blockage • Replace gun as required
Pump runs but does not pump	<ul style="list-style-type: none"> • Check red alligator clip fitted to positive terminal, black to negative. If it is the wrong way around the pump runs backwards. • Check suction hose and foot filter are immersed in diesel. The suction hose may be bent up out of the diesel. • 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