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Accredited Suppliers and Service
Providers of Quality Tools & Equipment
to the Autobody Repair Industry

Reg.No:87/012833/23

Vat No:4470103096

Installation & Maintenance Manual for SewerGuard™ Oil Separators

Manual issued to: _____
(Site owner's representative)

Site owner: _____

Installation site address: _____

Summary of equipment supplied: _____

Date of issue of manual: _____

N.B:-A Separator will not work properly for dissolved (soluble or emulsified) oils or if detergents or degreasers are present, their usage should be avoided.

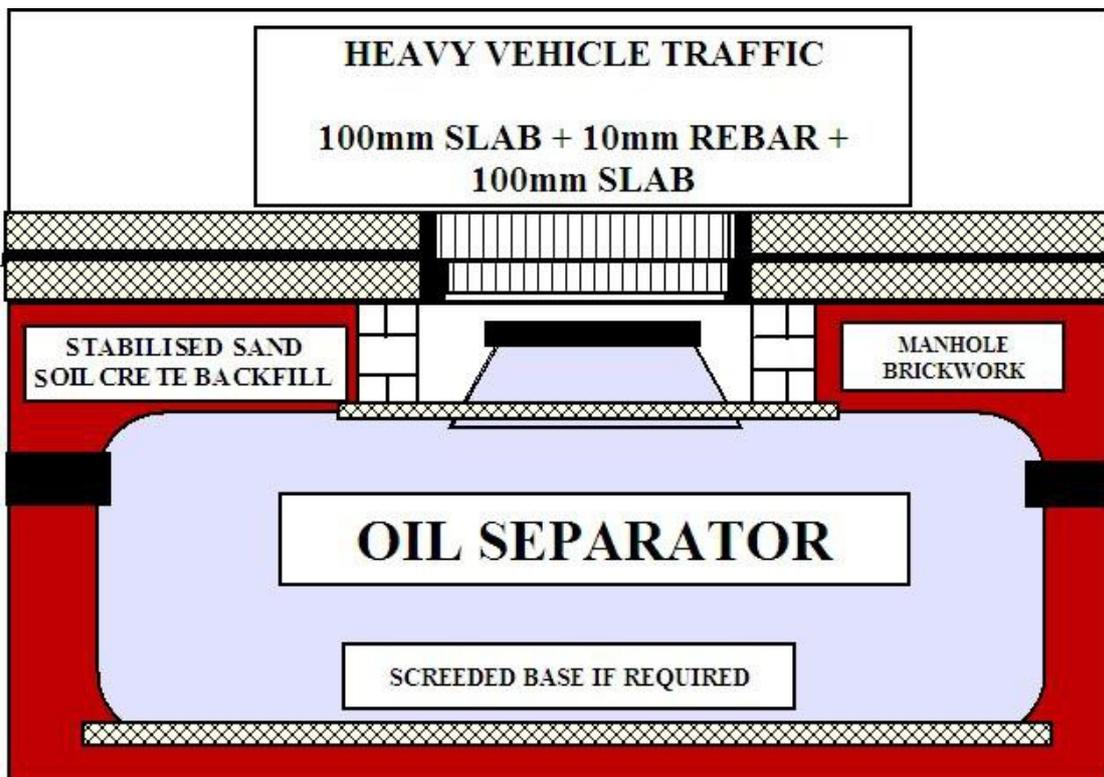
THIS IS FOR UNDERGROUND USAGE ONLY
FOR ABOVE GROUND CONSULT P.S.A.cc

APPENDIX 1

Installation of Underground Tanks

1. General

- 1.1 *This procedure applies particularly to Oil Separator tanks, with their drain boxes, and sludge/silt collector tanks: it may also apply to all other SewerGuard™ tanks that require underground installation.*
- 1.2 *This procedure incorporates engineering standards that Arrow Trading has adopted in order to meet the requirements of all users, particularly those who insist on an installation of durable quality.*
- 1.3 *This procedure covers installations under paving, both with and without surface traffic, and under landscaped areas.*
- 1.4 *Cross-sectional drawings of typical tank installations are shown in Figure 1 which also serves as a reference for Sections 2 through 4 below.*
- 1.5 *Documented quality control of the procedure is essential.*



SLABS SHALL BE SIZED SO THEY ARE SUPPORTED BY THE BACKFILL AND NOT THE TANKS

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System Layout

- 1.6 *It is recommended that a professional person (engineer or architect) be engaged to design an effective system layout to assure system operability: it is within the capabilities of a competent plumber but many plumbers falsely claim competence!*
- 1.7 *The location of the tanks is defined by availability of space, accessibility of tank access covers, physical arrangement of floor drains and connections to sewers, and any architectural constraints.*
- 1.8 *If at all possible the tanks should be located in an area of light traffic, preferably no traffic at all, thereby reducing the need for protection of the tanks and providing easy access to tank covers.*
- 1.9 *Layout of piping, and consequently tank location, shall comply with the requirements of the body of the Installation & Maintenance Manual. It must be noted that layout is facilitated by the alternative outlets to drain box provided on each side of Separator tanks.*

2. Preparation of Installation Pit

- 2.1 *The pit shall be located strictly in accordance with the designed layout and be shaped in accordance with the selected tank layout: the tanks may be side-by-side or inline.*
- 2.2 *Excavation of the pit shall be of dimensions to accommodate the tanks, to permit preparation of the supporting ground under the tanks, and to provide adequate access to manhandle and level the tanks (See Figure 2).*



FIG 2



FIG 3

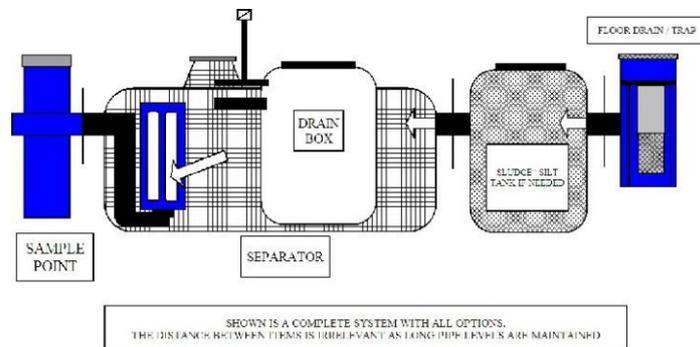
APPENDIX I

- 2.3 *The bottom of the pit shall be flat and completed with a minimum of a 75mm concrete screed, unless specified otherwise (See Figure 3).*
- 2.4 *On sites with a high water table the bottom of the pit shall be completed in accordance with an engineer's instructions which may specify a larger excavation in order to build a massive, reinforced concrete, raft-style mounting pad for the tank.*
- 2.5 *Concrete screeds and slabs are to be left to cure for a minimum of 3 days.*

3. Tank Installation

Installation of tanks shall be sequenced as follows:

- 3.1 *Tanks shall be lifted into the completed pit using the lifting points as indicated on the tanks: **the pipe nozzles shall not be used for lifting.***
- 3.2 *Care must be taken to ensure that the Separator is orientated correctly relative to inlet and outlet: the outlet to sewer is recognisable as the nozzle with a 90° bend.*
- 3.3 *Tanks shall be aligned, then positioned to the correct level and finally levelled using a spirit level along the top of the tank. Levelling is achieved using packers and then grouting.*



- 3.4 *Interconnecting piping between the tanks is installed preferably using Cascade Clamps or rubber seal connectors: **glue is not to be used.***
- 3.5 *Inlet and outlet piping (from drains and to sewers) are rodded through to ensure that they are free of construction debris.*
- 3.6 *The transport packing of the Separator float valve assembly is removed and the float left suspended on the toggle provided.*
- 3.7 *Blanks are removed from all piping nozzles to be connected; unused nozzles (alternative connections) are left with blanks in place.*

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- 3.8 Separator inlet and outlet connections are then connected to the drains and sewer respectively, again using Cascade Clamps or rubber seal connectors, and breather connections (vents) are to be piped to above ground (If not piped to its final termination this pipe must be temporarily plugged to).
- 3.9 The pit is back-filled with 150mm layers of stone-free soil or sand stabilised with a 10% addition of cement: each layer is thoroughly wetted with water to complete the stabilisation (See Figure 4).
- 3.10 As each layer is added the tank is filled with water such that the levels of water and backfill are roughly the same, to give the tank adequate mass for stability. Please ensure that the float is free and floats on the water surface whilst filling the tank.
- 3.11 The pit is filled to cover the tanks and reinforced concrete slabs are constructed to support the manhole structures (See Figures 4 & 5). The concrete slabs shall be designed to cater for the surface traffic (if any) to which the installation is exposed, but a minimum thickness of 100mm + rebar + 100mm is recommended. The slabs shall be sized so that they are supported by the surrounding backfill and NOT the tanks.
- 3.12 Manholes are constructed in accordance with engineering or architectural design such that the tank access covers are accessible through the manhole cover (See Figures 6 & 7). Eventual surface finishes, and the various depths required, dictate manhole dimensions, e.g. a landscaped finish requires only a low height manhole (Fig 8)



FIG 4



FIG 5



FIG 6

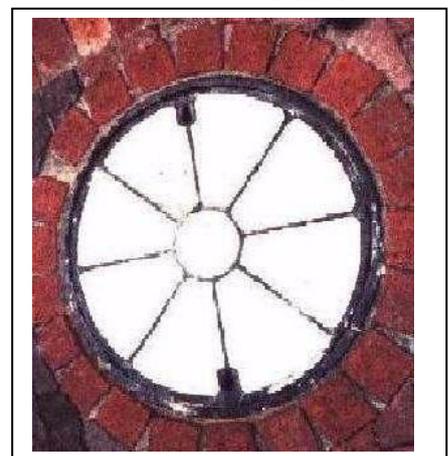
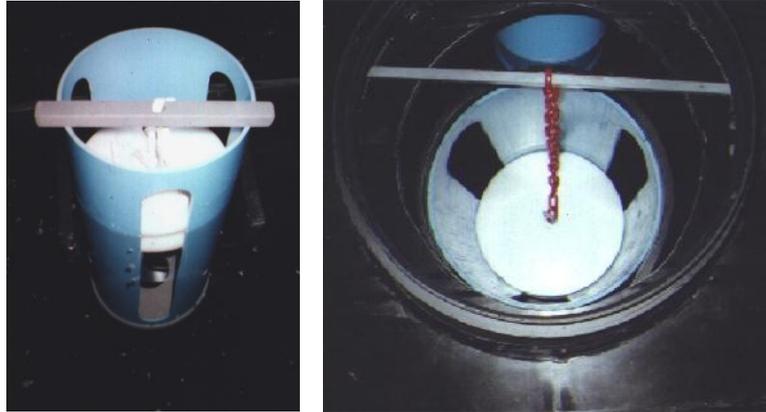


FIG 7

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- 3.13 *Water in drain boxes is pumped out while sludge/silt collector and separator tanks are left with their water fill.*
- 3.14 *The toggle of the float valve is released and the float checked for freedom of movement, ensuring that it is not fouled by construction debris.*



- 3.15 *Piping from the drains to the tanks is flushed through with water and construction debris is removed from sludge/silt collectors.*
- 3.16 *Tank access covers shall be screwed onto the tanks at all times during construction work to prevent ingress of construction debris.*
- 3.17 *Breather pipes are completed to their elevated vent points after removal of any temporary plugs.*



FIG 8