

INSTALLATION INSTRUCTIONS for TURBOJET 2000

Protect your investment with correct preparation & installation

TOOLS REQUIRED

Special Screed (2.5m long x 150mm with 50mm taper cut along length)
Digger – 12ton recommended, to lift tanks and place (good 10ton digger can place)
1.3ton Swiftlifts x 4
Chain 4-legged (or 2 x 2-leg)
Level
Shovel
Rake | PVC Saw or Cutter
Hammer | Screwdriver

MATERIALS REQUIRED - Not Supplied

1.3m² Sand (for base)
PVC Glue
Epoxy Mortar 0.5m x 100mm
Sewer Pipe (may or may not be used)
Extra 100mm bends, etc. - if not a straight line configuration
Bark for Effluent Field

IMPORTANT

- 1 Location of tanks and effluent field to be as per original Building Consent approved by the Local Authority
- 2 If changes made with consultation, as built, site plan should be sent in to the Local Authority
- 3 Installation and connections to be made by Septech Installer or Registered Plumber/Drainlayer and Certified Electrician
- 4 Tanks to be positioned:
 - (a) 3.0m away from any building
 - (b) 0.5m away from any boundary
 - (c) 20m away from wells, bores and waterways
- 5 Connection of the sewage system from the house to the primary tank is the customers responsibility.
The plumber is to ensure that there is adequate fall from the house to the system.
This is usually a minimum of 1:100

EXCAVATION SIZES

The hole sizing is crucial if the unit is placed after the digger has left the site.

All sizing refers to the **bottom of the hole not the top**. Ensure adequate protection is undertaken to prevent collapse of excavation. If in sand the side **must** be battered at a 45° angle to safeguard both your own and others lives.

Physical Size		Excavation Sizes	
2 x Septech Tanks (each)		LENGTH	6.5m
Length	2.275m		
Width	1.60m	WIDTH	2.0m
Height to invert	1.40m		
Overall Height	2.0m	BASE DEPTH	2.0 - 2.05m
PUMP CHAMBER SIZING			
Diameter	950mm		
Height to invert	2.0m		

EXCAVATION PREPARATION

Hole should be even in depth and free of large rocks and loose soil.

Place 100mm of sand in base of hole. Screed using special screed so that the sand has a corresponding angle to the tank to give slope away from the inlet. Top of screed will be level but this will put 50mm taper over length of base. Place tank in hole using hiab truck or digger and **ensure inlet height matches house drain**.

Ensure pipework is complete before filling in the holes.

LIFTING OF TANKS

Tanks are equipped with 4 x 1.3ton Swiftlifts

These are certified lifting points approved by OSH

Each tank weighs 3.12ton, so, **USE ALL FOUR LIFTING POINTS**

Do not short chain as swiftlifts may fail if angle of pull is more than 30° off- centre

PLEASE NOTE that the **TOP of ALL TANKS SHOULD BE LEVEL WHEN INSTALLED - USE a LEVEL**

INSTALLATION CONFIGURATION

In our experience the straight-line configuration gives far fewer problems with PVC pipe breakage as ground re-compacts after installation. However, installations are subject to site constraints and owner requirements and the other configurations are suitable as long as adequate compaction is undertaken underneath the pipes.

Concrete risers are available, at extra cost, if the contour of the land causes depth of tanks to be greater than 2.0 metres.

PRIMARY SEWAGE TANK

This is a dual-chambered 3400litre sewage tank.

Base depth 2.0metre. Bottom of inlet pipe is to be inline with the house connection if this is already in place, or at a level to give adequate fall from the house.

Return hose will run from the second tank back to the fitting in the cap over the inlet T.

Backfill sufficiently to hold steady.

SECOND TANK (SCA)

This is a dual chambered tank of identical size and dimensions as the Primary Sewage Tank, comprising of an Aeration Chamber (volume 2400L), and a Humus or Clarification Tank of 1000L capacity. This tank should be installed at a depth of 2.050M so that there is fall through the system to the pump well. This means the inlet is on level or below the outlet of the primary tank. Note that there is 5-65mm fall from inlet to outlet in each tank. Outlet of primary connects to inlet of secondary with provided slip couplers and small length of 100mm sewer.

Maximum distance between Primary and Secondary is suggested at 600mm but if fall is available there can be any distance between them as long as return pipe is connected. This can be helpful in retrofit situations that have difficult access.

Backfill sufficiently to hold steady.

PUMP CHAMBER

Base depth 2.080m to be level with top of SCA saddle or make level with top of Primary tank. Use slip coupling on SCA tank outlet, bring the pump chamber up close to the coupling then mark and break through soft spot at correct place. Insert piece of pipe through wall from inside the tank and epoxy around where broken to prevent ground water ingress.

Backfill sufficiently to hold steady.

FINISHING TANK INSTALLATION

Thread the coiled return hose through the saddle riser hole and pipe back to the primary tank. Cut off excess length if any and place on the RX fitting into the cap. Check joints and join to house drain if laid. Check interior of units to ensure all tanks are clear of soil, tools, people etc.

Fill units with water to prevent flotation and to protect pumps in case electrician wires up and starts pumps without water. Connect 25mm Gun Tube to outlet fitting with provided RX threaded elbow and bring pipe clear of excavation. It is helpful to dig trench to field area whilst digger is quiet before backfilling and laying pipe to effluent field.

Backfill carefully with packing sand or clean fill - compacting every 300mm - with lids on to stop soil dropping in to units. Clear excess soil from around tank.

Lids should be 50mm clear of surrounding ground to prevent surface water ingress in periods of heavy rain.

Excess soil removal and disposal is owner's responsibility but discuss their wishes with him/her.

EFFLUENT DISPOSAL FIELD

Base depth 2.080m to be level with top of SCA saddle or make level with top of Primary tank. Use slip coupling on SCA tank outlet, bring the pump chamber up close to the coupling then mark and break through soft spot at correct place. Insert piece of pipe through wall from inside the tank and epoxy around where broken to prevent ground water ingress. Backfill as above.

PLEASE NOTE

- 1| A permit from the responsible Local Authority will be required before installing a Turbojet 2000
- 2| The permit will require a licensed drainlayer to install your Turbojet 2000
- 3| Drainlayer does not have to be in attendance of delivery **BUT** will have to take responsibility for installation

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