Technipump Limited
Hamilton East,
ph 021-114-8676
www.technipump.co.nz
email: technipumpnz@gmail.com

320Litre sewage tank & grinder pump,

Installation Instructions

Thank you for purchasing a Technipump 320L sewage tank and pump unit. These units are designed for tiny houses, baches, and basement level bathrooms built below the sewer line.

Unpacking

The tank is made of polypropylene, and is usually transported with the top half wrapped with cling-film. Inside wrapped in bubble-wrap is the discharge isolating valve, and the non-return valve and riser assembly.

The pump is supplied loose packed in a seperate carton, and lifting chain is attached to the pump.

General dimensions

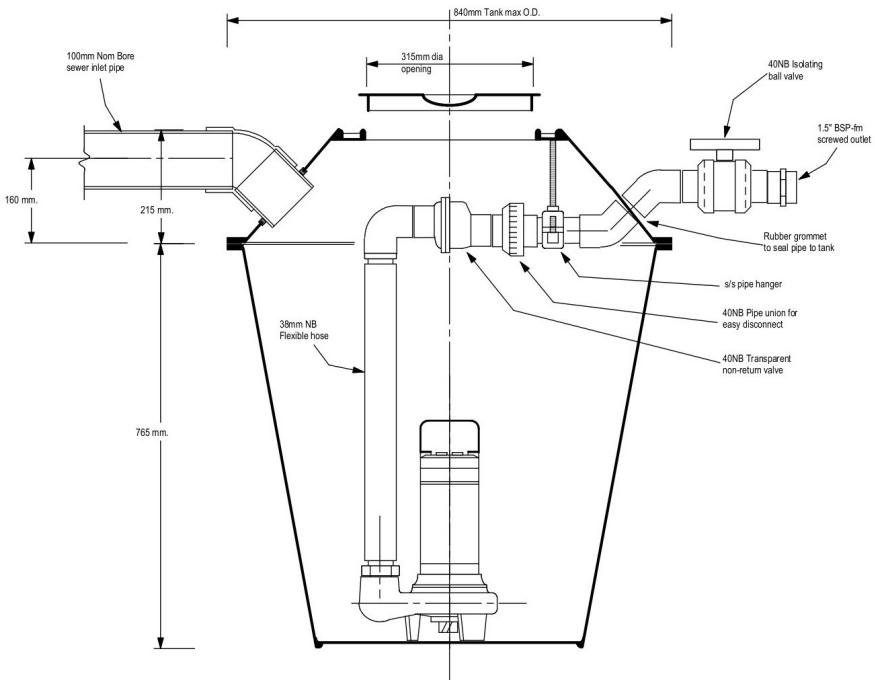
The tank is 840mm diameter at it's widest point.

The base is 500mm dia.

Overal height is 980mm.

The manhole on the top is 315mm i.d.

A 230mm high manhole extension can be supplied for fully underground installations.



Outlet connection

The outlet is a 1 1/2" BSP-fm screwed socket, located directly opposite the inlet connection.

Inlet Connection

The Inlet connection has a 110mm i.d. rubber sealing ring to suit NZ standard 110mm dia PVC sewer pipe.
The pipe will slide inside the rubber ring for a tight fit.

There are two secondary connections supplied loose with the tank:

1. 40mm DWV fitting, for secondary waste pipe connection,
2. 50mm DWV fitting, for 50mm vent pipe connection and to act as a cable conduit for teh pump (see comments below)

These connections are supplied loose so that they can be positioned anywhere on the top half of the tank to suit site conditions.

Assembly

Please refer to the sectional drawings within this manual so that you can see how the unit appears when fully assembled.

When fitting the 110mm o.d. sewer pipe into the sealing ring, it is best to apply soapy water to the ring, to ease insertion of the pipe.

Screw the discharge pipe and non-return valve assembly into the pump outlet.

Lower the pump into the tank using the chain, and then Hang the chain on the hook provided.

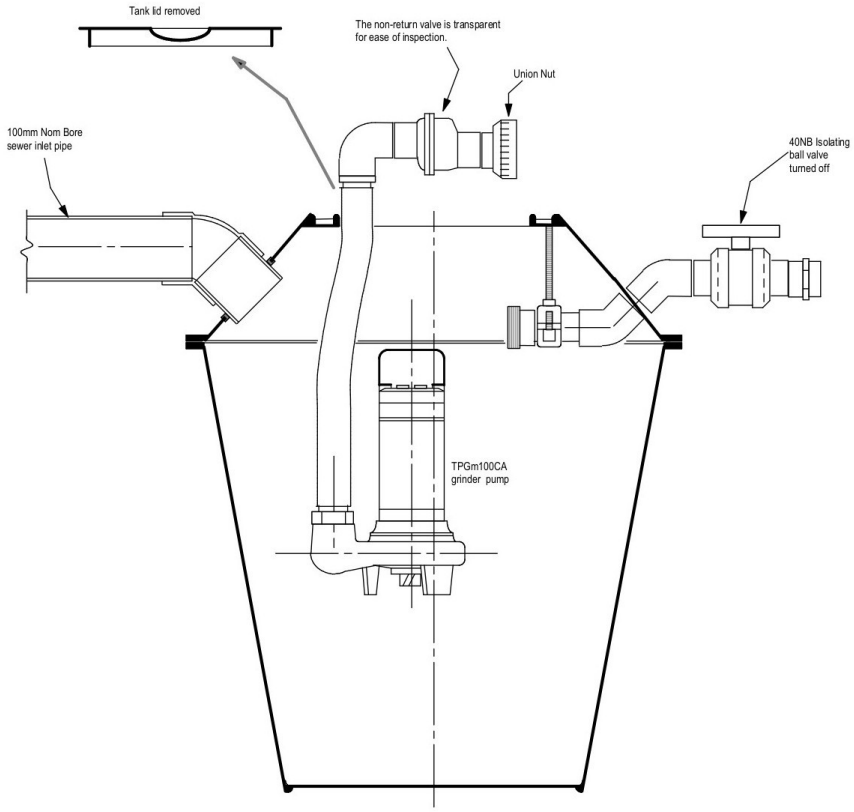
Do not use the power cable to lift the pump.

After placing the pump and pipe in the tank, connect the Pipe union to the outlet pipe.

Connect the isolating ball valve to the outlet pipe outside the tank.

When connecting the pipe union and the valve, check that the sealing O-ring is in place, and is not loose in the bottom of the tank.

Ensure that the pump is centred in the tank, and that the float switch is free to move up and down without obstruction.



***Read the pump instruction manual supplied with the pump*.**

The tank lid is polypropylene, made with reinforcing ribs. For safety reasons, It is strong enought to carry the weight of a normal adult, but it is not designed to be walked on or used as part of a path. If you do want to install it in a pathway, then bury it fully in the ground and install a concrete path above containing a cast iron frame and manhole cover.

The tank and lid is not designed to take the weight of vehicular traffic, so do not install in driveways or vehicle parking places.

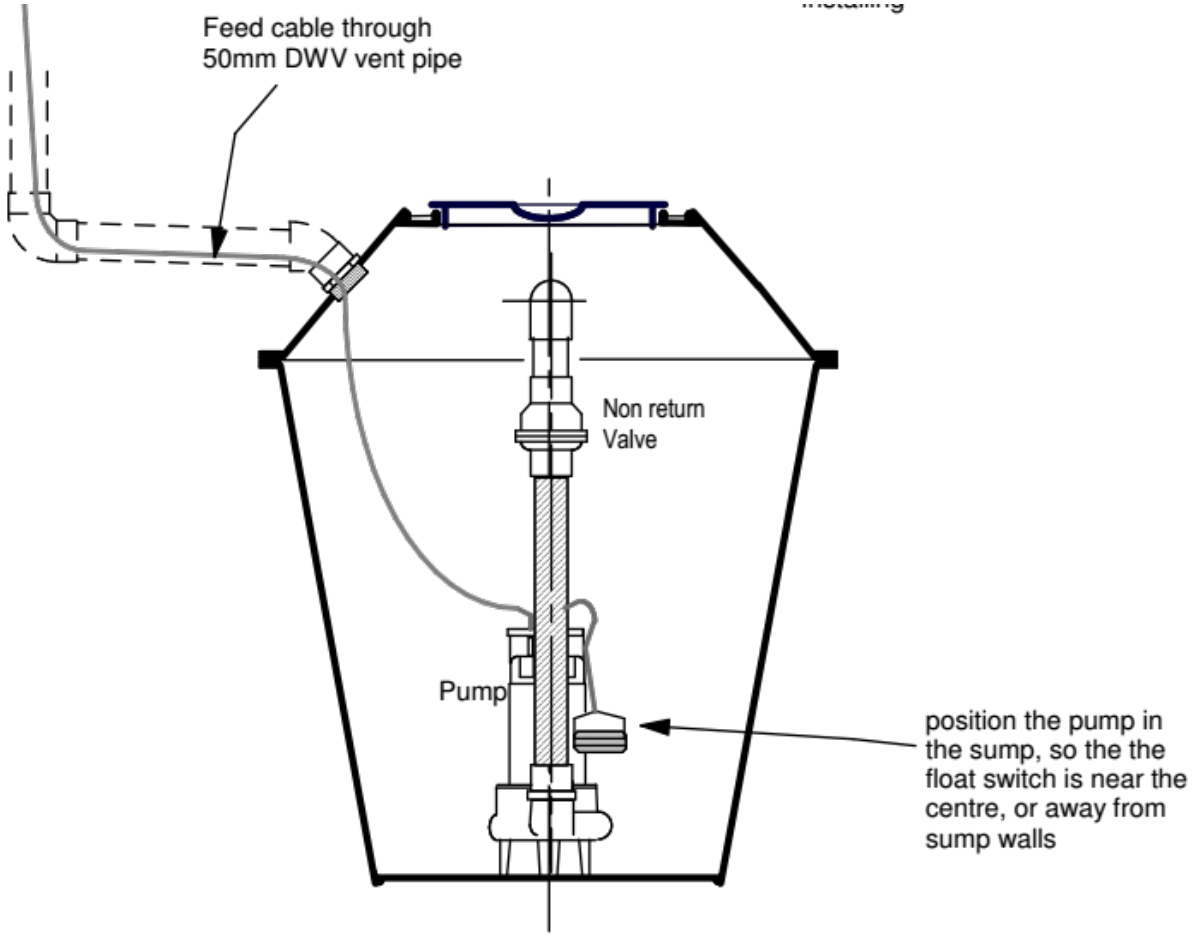
The lid sits into the opening in the top of the tank, and is retained with two Tek screws.

When digging a hole in the ground to install the tank in ground, we recommend a minimum of 50mm of wet concrete be placed in the bottom of the hole and the tank nestled into that, in order to anchor it in place.

Cable Installation.

Supplied loose with the tank is a 50mm DWV waste water pipe socket set. This unscrews into two halves.

The purpose of this fitting is to provide connection for a 50mm vent pipe. This is because the tank needs venting as levels can change suddenly within the tank, such as when a toilet is flushed or a sink drained, and levels can also change rapidly when the pump switches on.



The vent pipe is required also to act as a conduit for the pump power cable, as any cable installed in-ground requires installation in a conduit. A 50mm DWV pipe will pass a 3-pin plug, and this enables installation without cutting the power cable, and so this eliminates the need for an electrician.

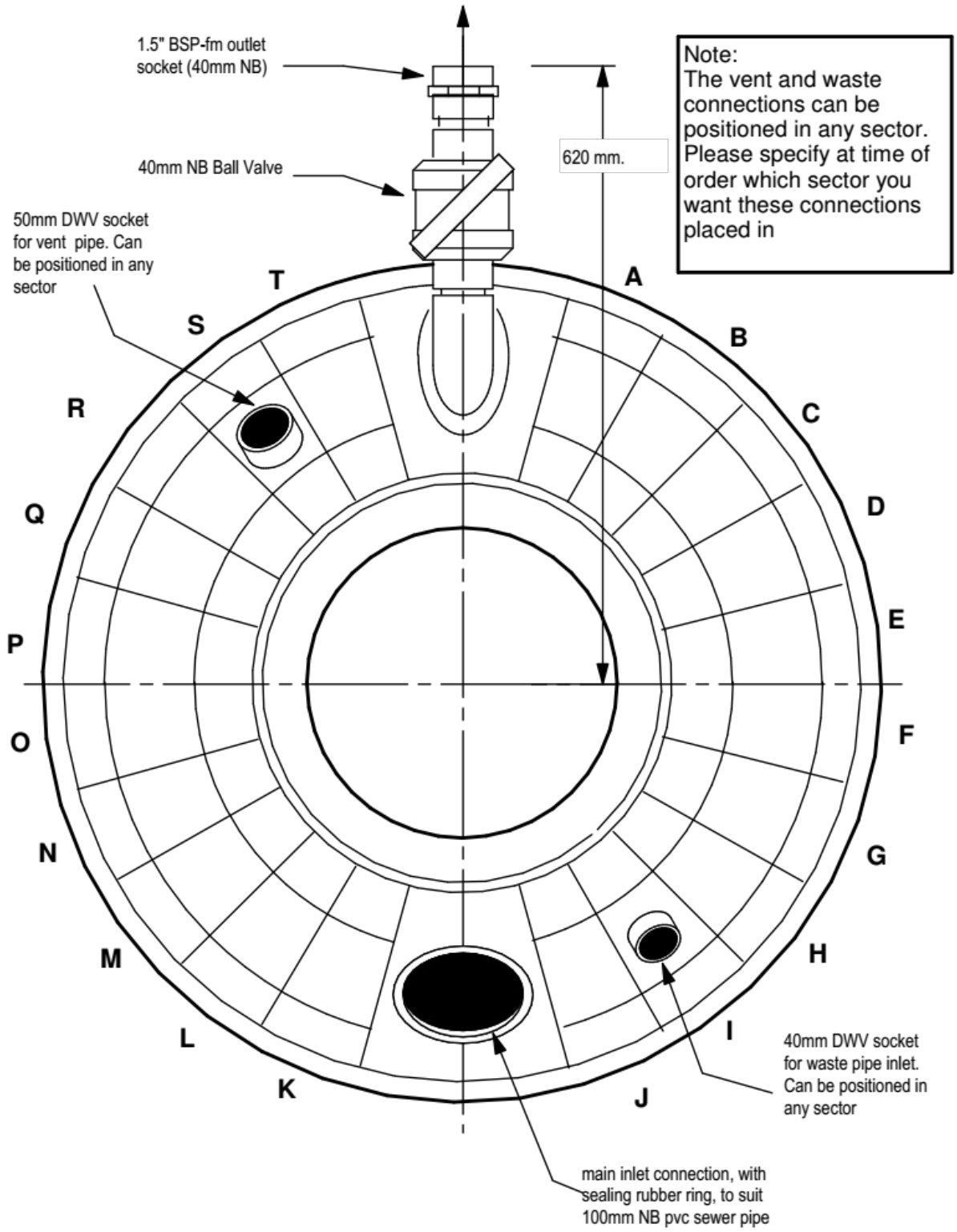
The vent pipe connection fitting is supplied loose so that you can install it in the best position to suit site conditions for venting and for cable. To install use a holesaw to cut a hole 60mm diameter, then fit the male part within the tank inserting the threaded portion through the hole, and then screw the female part on to it outside the tank and tighten.

Tip: *if you ever withdraw the pump from the tank and need to remove the cable, tie a piece of string to the plug so that you can pull it back through the vent pipe later.*

When installing, draw as much cable out through the vent pipe as possiple, rather than let it coil up inside the tank.

>> *Never lift the pump by the cable, as that will damage the pump. Always lift using the handle and/or chain on top of the pump.*

Read the pump instruction manual supplied with the pump.



Maintenance

Your sewage tank is basically a big plastic hole in the ground. In this hole, you will find a special pump that will collect all of the waste from the plumbing fixtures. The water that is used will then pump into a drain that will ship it out of your plumbing system. This, of course, can add an odor if it is not cleaned properly or regularly. As long as you know the right steps to take, you will find that keeping your sewage pump station clean is an easy task.

Step 1 - Use the Trash

A lot of people will flush things down the toilet because they believe that it will not hurt it. This is not always the case. You should always keep a trash can near your toilet to prevent you from even being tempted to do this. Things such as feminine products as well as condoms are a couple of the most common products that are flushed down the toilet. However, these will quickly cause your system to back up as they are not meant to be flushed under any circumstances. Once that happens, there is no way to clean it out, and the pump will need to be removed and often replaced.

Step 2 - Maintain Your Grinder Pump

Keeping your grinder pump clean will help to keep your entire system running smoothly. This is a task that is actually quite easy and does not take much time or money. You will probably not even need to go out and buy any additional supplies. If you simply flush lemon juice down your toilet, it will help to break up any clogs and keep your grinder pump clean and running properly. It will also cut back on odors caused by materials that are in the grinder between flushes.

Step 3 - Conduct Yearly Maintenance

It is usually a good idea to go ahead and have a plumber come by once a year to do some maintenance on your system. This way you will not have to worry about possibly paying extra for them to come out when it is an emergency. They will be able to get down deep into your system and clean out all of the things that you would not be able to on your own.

Step 4 - Be Aware of Problems

It is important to be able to know when trouble is brewing. An unmistakable sewage odor will usually be your first clue. Of course, it is always a good idea to call a plumber to fix the problems since they're equipped to handle multiple situations. But if you feel like it is something you want to handle, then it is doable.

Step 5 - Check the Vent

There will be a local vent that is installed with all sewage ejector pumps. This connects to the pit that is outside and there is nothing that is attached to it. This is the first place that you should check when there are problems.

Be sure that the pit’s lid is secured tight.

Also, check the condition of the seals around the inlet, discharge and the vent line.

Technipump Ltd,

Tank and submersible pump Warranty

Installation of a Technipump pump station will be taken as agreement of the warranty terms below. If you have any questions about the installation or operation of your pump station, please contact us and we will be happy to assist you.

Technipump Ltd products are designed to be fit for their intended purpose, made with quality and as we describe them to be.

We stand by our products and our customers have the right to be refunded if there is a defect, or to have their purchase repaired or replaced at our discretion. The warranty below is standard with any Technipump Ltd product and gives a twelve month guarantee from date of purchase against defects and incorrect assembly. Consumers have the right to a five day cooling off period on any warranty we may offer above and beyond what is detailed below.

Technipump Ltd warranty does not in any way alter the rights our customers have under the Consumer Guarantees Act or Fair Trading Act.

Terms and Conditions of Warranty

1.1 This warranty covers manufacturer defects, part defects and incorrect labor for a period of 12 months from the date of purchase.

1.2 All warranty claims must include photographs of product installation and photographs or videos of the defect.

1.3 Please inspect your Technipump Ltd product within seven days of delivery or purchase to ensure that it is in acceptable condition.

1.4 All warranty claims shall be accompanied by Technipump Ltd warranty documentation.

1.5 Product must be returned to place of purchase.

1.6 Technipump Ltd warranty program contingent liability claims are capped at $250 including GST (EDIT: OR ‘cost of replacing the product and installation costs of up to $250)

1.7 Please include an itemized breakdown of costs as part of any warranty claim.

1.8 Please note that the following will invalidate the warranty

- Incorrect maintenance of the unit (please see our maintenance guide supplied with each unit)
- Willful misuse or negligence
- Modifications or any other changes to specification carried out without Technipump Ltd written consent.
- Introducing wet wipes, fats and oils into the unit or it’s outlet.

- The use of a unit for a purpose it is not specified to function in (please contact us for full unit specifications).
- Reducing the outlet bore size without prior written approval.
- Unit not being installed level.
- No vent pipe installed as per unit specifications.
- Failure to follow installation and use instructions by Technipump Ltd.
- Incorrect power supply to the unit.
- Manufacturer's sealed power plug being removed.
- Incorrect electrical ducting size for plug.
- Float function impaired by surface oils and fats.

1.9 Technipump Ltd cannot be held liable for any damage or loss as a consequence of failing to follow the above conditions.

1.10 Technipump Ltd and the purchaser both agree that the Consumer Guarantees Act shall not apply if a product is purchased for business use. However,

1.11 Nothing in the above warranty shall invalidate any duty Technipump Ltd has under New Zealand law.

1.12 This product is not warranted against force majeure events (such as a destructive earthquake or volcanic eruption) which exceed it's specifications. Technipump cannot be held liable for lack of delivery as a result of force majeure.

Governing Law

Technipump Ltd is a New Zealand Registered Company, and this Warranty is to be read under New Zealand law.

Maintenance for Storm-water Systems

Check regularly for leaves, twigs and any other matter in pumps and pit boxes

During summer months run clean water into pump box and activate pump and thus flush out the chamber.

Maintenance for Sewage Systems

Check regularly for build up of solids or any other matter in pump chambers.

Periodically wash down the inner walls of the chamber with a high pressure hose to activate pump and thus flush out the chamber.