



English

Installation, Operation and Maintenance Instructions

Householders Guide for
Eco 1-60 Package

Eco 1-60 Package

Introduction

A Mono Eco 1-60 Package has been installed on your property. With your co-operation, this unit will provide many years of safe, reliable operation. Your unit is an important part of the Pressure Sewer System that your local authority has put in place to handle your sewage and ensure a cleaner local environment. Please read the following to understand your package and know what you need to do to ensure optimum operation.

Purpose of the unit

To collect the waste water from your toilets (sewage), baths and sinks (grey water) and send it under pressure into a Pressure Sewer System. This is a network of sewage reticulation pipelines that transports it to a Sewage Pumping Station and eventually a Sewage Treatment Plant. Here the solids are removed and the water is disinfected to a degree that it can be safely released back into our environment.

How it works

Sewage flows by gravity (downward grade) into the wet well section of a polyethylene tank buried in your yard. As the sewage level increases in the tank it flows up a level control tube positioned within the tank. Air pressure within this tube increases as the sewage level rises and when it reaches a preset high level, a pressure switch sends a signal to a remote mounted controller to turn on the grinder pump unit located in the dry well section of the tank.

The pump action draws sewage up the suction pipe and into the grinder pump where the integral grinding wheel (bi-hammer macerator) turns the organic solids, paper and other soft material into a slurry of small particles.

This macerated sewage is pumped out through a discharge pipe into the pressure sewer system. It will continue pumping until the level falls to the preset low level. The pressure switch will then signal the controller to turn off the grinder pump. This is all fully automatic and requires no input from you, apart from ensuring that the controller is turned on.

If sewage rises to a higher level in the tank, another "high level" tube detects this, and an audible siren and "strobe" warning light warns that sewage has reached the preset high level in the tank. See "What to do if high level alarm is on" further on in this booklet.

NOTE

Never turn off the power to the controller (control panel) while your premises are occupied except in emergency situations.


Ensuring access to your tank

The tank is buried in a suitable position for receiving sewage from your premises, with the lid slightly above ground level. There is no need to remove this lid to access the pump unit in the dry well or the collection area in the wet well. However access must be ensured for the maintenance technician.


- Do not plant shrubs or trees within 2 metres of the tank lid.
- Do not place objects or structures on or over the lid.
- Do not allow grass or other coverings to obscure the lid and in particular, ensure that the one way air vent is free from debris.
- Do not drive or park vehicles on the lid.

Excavating adjacent to the tank

Danger

 Electrical power lines and alarm wires are buried underground between the tank and the remote Controller. If you need to dig in this area contact a technician to locate the lines. See contact details on back page.

Caution

 Contact with live power lines can cause death or serious injury. A power isolating switch on the side of the control box must be turned off before any excavation begins.

You also need to be aware of the inlet pipe running from your premises to the tank and discharge pipe running between your tank to the sewer line outside your property.

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Protecting your Grinder Pump Unit

The grinder pump will handle any waste water (sewage) that is normally discharged from your toilets, bathroom, laundry or kitchen.

Do not put any of the following into toilets, sinks or drains as it may damage or affect the operation of the package.

- Glass, metal, wood, seafood shells or other hard objects.
- Cloth or synthetic material.
- Any chemical other than standard cleansing or laundry products including toxic, caustic, acidic or poisonous substances.
- Degreasing solvents.
- Explosive or flammable material including hydrocarbon fuels, paint thinner or anti-freeze.
- Oils and grease.
- Hair clippings.
- Sanitary towels or condoms.

While the grinder/pump may handle some of these items, it is desirable to keep them out of the sewerage system.

What to do if high level alarm is on

Do not panic.

This alarm indicates that sewage has reached the high level point, but in the standard tank there is still 600 litres of emergency storage remaining.

Take the following steps.

- In the controller, set the audible alarm to mute to stop the siren.
- Discontinue water usage in your premises unless in an emergency.
- Wait 15 minutes to ascertain if the pump reduces the level in the tank.
- If warning light goes out - the situation has corrected and water usage can proceed as normal.
- If warning light remains on – contact technician. See contact details on back page. Do not open the tank lid or turn off the power.

In case of power outage (blackout)

Discontinue water usage, except in an emergency situation, until power is restored.

Emptying a pool or spa

(Greater than normal bath size)

If you have added a pool or spa to your system after installation of the Eco 1-60 PSS unit, you need to ensure that they are not emptied at a greater flow rate than the pump can handle. This is ensured by either putting flow restrictions in the pool/spa discharge line to control the flow rate or fitting a extra storage tank before the PSS unit. Please discuss this with your plumber or technician as per the contact details on back page.

If premises is being left unoccupied for a lengthy period

If the premises is being left unoccupied for a lengthy period, for example going on holidays for 5 days or more run a tap within your premises, stopping after the grinder pump turns on. The Grifter unit will then pump down to the low level ensuring the tank holds a minimum quantity of clean water and cleansing the pump of sewage. This ensures that sewage is not left in the tank to emit stagnating odours.

Shut off the water supply at the mains to avoid leaking taps overflowing the tank in your absence.

Turn the controller power off with the isolator on the side.

Do not forget to turn the controller on after your return and before any water usage.

If these guidelines are followed your Mono Grifter Package will provide you with many years of unobtrusive, “hassle free” operation.

For further details please refer to the “Installation, Operation and Maintenance Instructions” supplied with this unit.

If you have further concerns or queries please do not attempt to service the unit, contact the technician/help desk as per the contact details on back page.

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