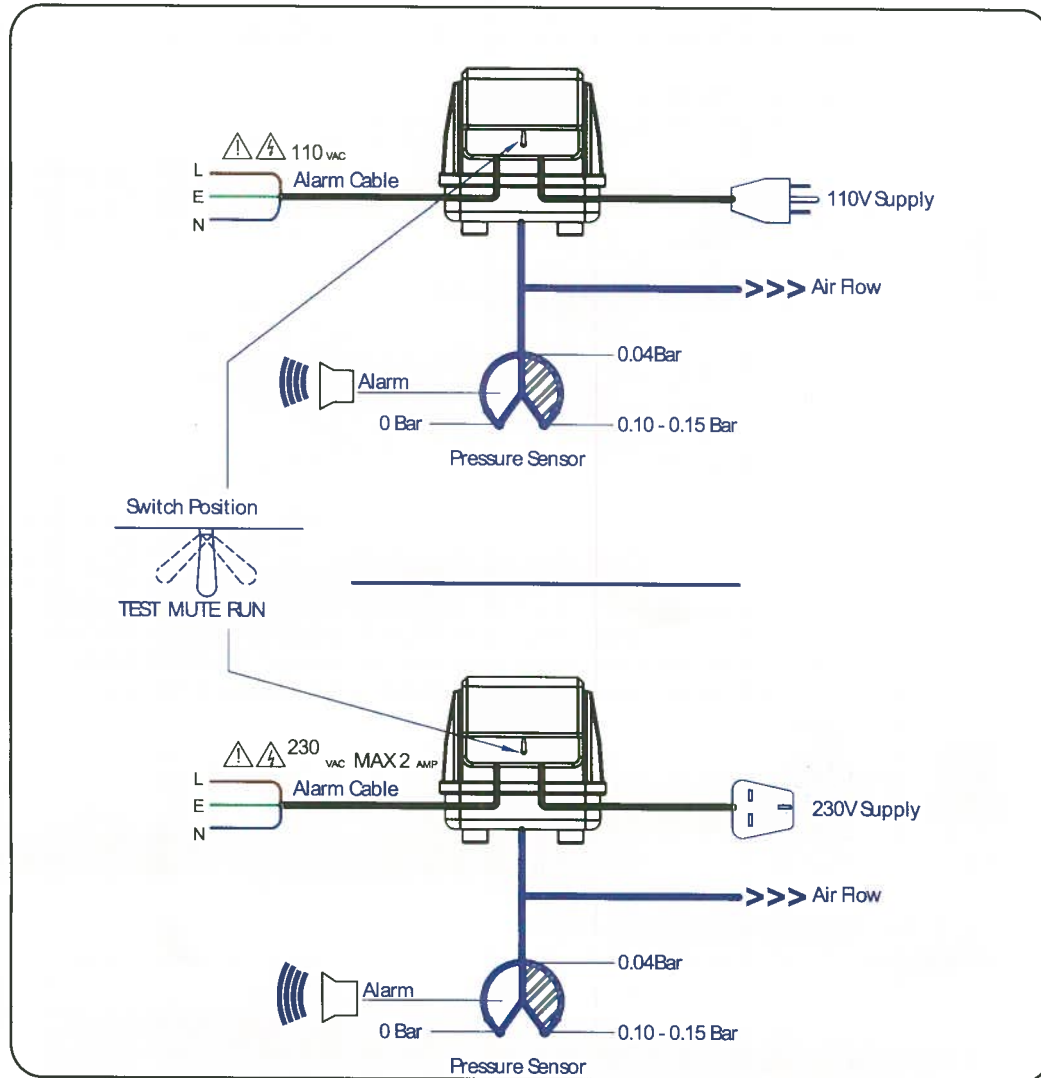


## 12) ET AO Wiring Diagram



**WARNING!** The ET AO version must be installed and serviced by a qualified electrician or serviceman. The pump must remain disconnected from any power supply until it is installed.



# Operating and Maintenance Instructions

Enviro Series ET40, ET60, ET80, ET100, ET120

Thank you for purchasing one of our ET range of blowers. To ensure the product operates correctly follow all safety instructions and read information carefully. An authorised service facility should undertake any servicing required which is not outlined in this manual.

## 1) Prior to operation

These pumps are precision instruments which give many years of service provided that instructions on installation and operation are followed. Whilst the company may offer advice as to the model they recommend, it is the sole responsibility of the user to ensure the pump is suited to the application for which it is to be used. The user must also ensure the materials offered for the pumps and motor components are suitable for the performance, environmental limitations and chemical resistance requirements of their application.



**WARNING!** The Enviro series is designed for air only. Do not pump flammable gas, liquid or hazardous dust for risk of ignition, electric shock or short circuit. To avoid circuit, only connect the product to the specified power supply voltage.

## 2) Storage and Transfer



**WARNING!** Always carry the product with both hands. Do not carry the product holding the filter cover or power supply cord to avoid injury and/or damage to yourself product may get very hot during operation, do not touch it until it has cooled down. This product is not designed to be stored in temperatures below -8°C. Please store indoors to avoid rubber parts deteriorating.

## 3) Grounding Instructions

This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.



**WARNING!** Improper installation of the grounding plug is able to result in a risk of electric shock. When repair or replacement of the cord or plug is required, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire. Check with a qualified electrician or serviceman when the grounding instructions are not completely understood, or when in doubt as to whether the product is properly grounded. Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a qualified electrician.

## 4) Installation

On receiving the pump, check that it is the model ordered and has not been damaged in the pump outlet, otherwise the pump will heat up and may be damaged. To avoid any transit. Ensure that the voltage at which the pump operates is the same as the rating label. One or more aerators can be connected to the pump with piping and T pieces. Choose fittings and pipe sizes that suit your installation requirements, ensure all pipes are secured with clips. Using larger bore pipe, and avoiding sharp bends will improve performance. Use new and sufficiently large aerators with enough discharge capacity. Bends in the air pipe, aerators placed too deep, or old or dirty ones, will all reduce capacity and make the pump

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work harder. Ensure the pump can discharge sufficient air at all times, never close off backflow of water into the pump, install the pump above water level. If this is not possible, a non-return or check valve must be used in the outlet pipe. Any additional fittings or equipment attached to the pump airline must be safely installed without risk of harm to others.

### 5) Locating The Blower

**⚠ WARNING!** Do not place the pump where it might come into contact with liquids, or near flammable or other dangerous materials or objects. Never immerse the pump in water. Sunlight heat may shorten diaphragm and valve life, therefore place in a shaded area where possible. Dust may block the filter which will cause overheating and result in shortening diaphragm and valve life. The electricity supply must be grounded to protect the operator from electric shock. If the pump falls into the water, unplug from the electricity supply before attempting to retrieve it. Let qualified technicians check the pump before reconnecting it. Before installation, and periodically, examine the power cord. If it is damaged it must be replaced by the supplier or service agent or similarly qualified person in order to avoid a hazard.

### 6) High Temperature Use

If the temperature may reach over 120°F, a cooling fan with ventilation is recommended. During high temperatures the pump will turn off via the thermal cutout. The pump will automatically restart when cooled. If your septic system has been without air for a few days, a build up of solid around the airstone/diffuser can cause a build up of back pressure which will overheat the pump, causing the thermal cutout to stop the pump. The pump will restart after it cools down and blockages are often cleared after a couple of goes.

### 7) Connection

The exhaust port should be connected with the L-joint hose supplied. If using a smaller diameter pipe, excess pressure and overheating may occur, shortening the diaphragm and valve life. A hose clip should be used to secure place of connection. Plumbing should be as short and straight as possible, if over 33ft / 10m please consult your distributor.

### 8) Periodical Maintenance

Any dust or foreign matter entering the air inlet may cause abnormal noise, or result in failure of the pump. Therefore, clean the filter element at least once every six months, frequency will depend on environment. Product must always be disconnected from power before servicing. Failure to do so could result in electrical shock, personal injury or death.

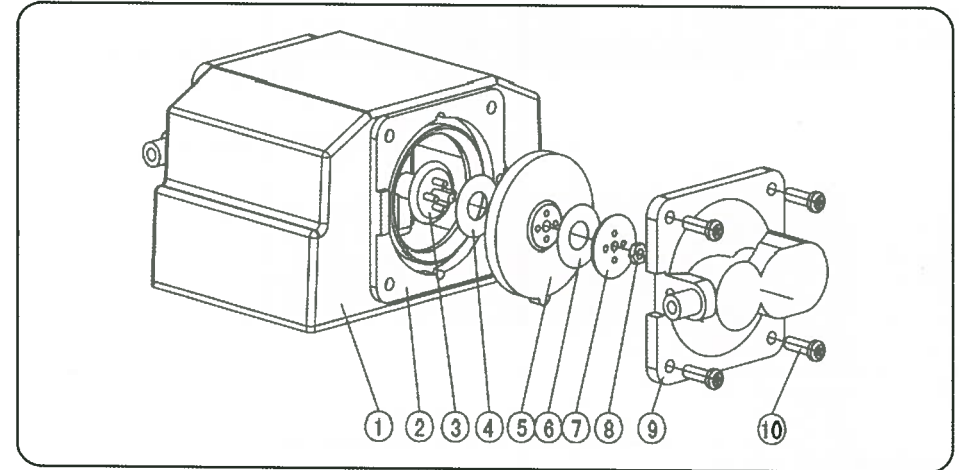
### 9) Filter Element Cleaning

- With a screwdriver, lever the plastic filter cover off.
- Take filter out and clean the air inlet, filter cover, and sponge mounting surface, washing with clean water before drying thoroughly out of direct sunlight.
- Put filter back in and replace cover.

### 10) Diaphragm Replacement

**⚠ WARNING!** Ensure pump is disconnected from mains supply before servicing.

- Loosen the four screws around the aluminium upper housing and take housing off.
- Locate pump inside housing.
- Loosen the four screws either side and remove the air chamber cover.
- Loosen the nut and remove the chamber block, antistatic membrane and the diaphragm.
- Replace diaphragm making sure the diaphragm fits exactly to the slot of the air chamber.
- Install all parts by counter steps.
- Put aluminium cover on and secure the four screws firmly.



The most common cause of premature diaphragm failure is excessive back pressure or overheating. This can be caused if the pump is producing too much air for your diffusers, or if the tank is too deep for your pump. The depth of the tank should be as follows:

ET40	47"	1.2m
ET60	62"	1.5m
ET80	69"	1.75m
ET100	75"	1.9m
ET120	80"	2.0m

If the depth is higher, please contact your distributor.

### 11) ETA - Blower with Built In Alarm

The ETA blower range have a built in alarm which will activate when the pump has lost pressure.

Once installed, place the alarm switch to the on setting. The alarm can be tested using the test setting or silenced via the mute button. If the blower also has an output wire this is for the connection to an external beacon or alarm kiosk.

**⚠ WARNING!** Do not attempt to open the alarm module. If the unit is connected to electricity, opening of the alarm module can result in a risk of electric shock. If the outside of the alarm module or light lens becomes cracked or damaged, unplug or shut-off the electric power immediately and contact a qualified electrician or serviceman. Do not carry the unit by the alarm module or electrical cord. It could damage the alarm module.