



Taylex
WASTEWATER

Owner's Manual

Taylex Advanced Blower System



Taylex

WASTEWATER

**Wastewater Recycling
Systems for Australian &
New Zealand homes that
protect your family and our
environment.**

Taylex Systems produce the
highest quality effluent for the
safest and best environmental
outcome.

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Trust Taylex

Welcome to Taylex, an Australian family-owned company founded in 1969. We have 80 plus employees and over 80 trained wastewater specialists who market, install and service our range nationally in Australia and New Zealand. Post installation, we have a network of over 300 trained Service Technicians to provide the ongoing care and maintenance for your system.

We manufacture a range of products for Wastewater, Rainwater and Stormwater applications, we also offer Servicing for our wastewater systems. Taylex was the first company to manufacture Home Sewage Treatment Systems in Australia and we continue to be leaders in our field.

Expertise

With over 50 years of experience building our reputation, Taylex is the trusted voice for the wastewater industry. We work closely with the national manufacturers association and governing bodies to lobby for more stringent wastewater regulations to ensure the highest level of treatment is met and to provide you with the best results possible.

Integrity

We honour warranties. We stand behind our products, for their lifetime, no questions, no fine print. We are an Australian owned and made family business. We are passionate about producing quality products that work. We take care of our staff. We value the environment and human health.

Flexibility

Taylex has a system that will work for you. In difficult terrain or soil, for the size of your house or the slope of your block, Taylex systems are adaptable. We are eager to work with you and become part of the solution.

Innovation

Taylex is at the cutting edge of environmentally sound wastewater treatment that is healthy and sustainable for your family and the environment. We are constantly testing and improving our systems to not only provide unparalleled quality and unmatched results, but to ensure the most stringent safety standards are met. We are constantly striving to improve and perfect.

Functionality

Our Systems work! Taylex use Monolithic, single piece moulds meaning no deteriorating seals or weak post-joined walls, which would expose your family to the risk of catastrophic failure of your system. There's no skimping on parts from the biggest pump down to the smallest seal. Our systems are designed and engineered to last as long as your home.

What is a Wastewater Treatment System?

Taylex Wastewater Treatment Systems are safe, environmentally sound, reliable, and cost-efficient. Our advanced systems use natural processes to turn your household wastewater into clear, odourless water.

Secondary treatment systems are the most commonly used systems in Australia. They treat your household wastewater to very high quality, allowing you to reuse your water in areas closer to your home and neighbouring properties, often above ground, with complete peace of mind.

Secondary Treatment Systems are designed to treat all the wastewater that is generated by your home. The wastewater includes the sewage (black water) that is discharged from the toilets and bidets and the sullage (grey water) that is discharged from sinks, washing machines, dishwashers, showers, and baths. Your Taylex ABS treats wastewater in an environmentally sustainable way by making use of the naturally occurring bacteria that are present in the wastewater. The system is designed to hold the polluted or degraded water in a series of compartments where various types of bacteria can flourish and in doing so, “treat” the water, naturally, without dangerous chemicals or additives.

Secondary Wastewater Treatment Systems are sometimes known by different names in different areas.

Here are some of the names you might have heard;

- Home Sewage Treatment Plant (HSTP)
- Secondary Treatment System (STS)
- On-site Sewage Facilities (OSSF)
- Aerated Wastewater Treatment Systems (AWTS)
- Aerobic Treatment Units (ATU)
- Aerobic Septic Systems
- Wastewater Treatment Systems

How does my Taylex Wastewater Treatment System work?

All household wastewater from your bathrooms, toilets, kitchen, and laundry naturally flows into your Taylex Wastewater Treatment System using gravity.

Step One

The first stop for your household wastewater is in the 'Primary Chamber'. Here solids will naturally sink to the bottom and fats and oils will naturally float to the top, leaving a clearer "Supernatant Zone" in the middle. This zone will transfer to the next stage of treatment.

Step Two

Next is the 'Secondary Chamber'. Further settling happens here. Again, water from the middle flows onto the next stage. In a traditional Septic System, this is where the journey would end and effluent would now be pumped onto your property and into our environment, relying on sand or soil to do the rest. With a Taylex Wastewater Treatment System, there are still four more steps to produce clean, clear, safe water for your yard. If you have an ABS-NR there is an additional Bio Block in this chamber, that encourages further separation of solids.

Step Three

The 'Aeration Chamber' is next up. This is where the magic happens. Your quiet, reliable, energy-efficient Nitto Blower sends oxygen into the chamber in the form of tiny bubbles. These bubbles pass through a specially designed structure called "Bio-Mass". Bio Mass is purpose designed to trap the air bubbles to feed naturally occurring 'Aerobic bacteria'. These microscopic Eco-Warriors are now hard at work, chomping through most of the remaining organic matter, polishing the water, and eliminating odour.

Step Four

Step four is in the 'Clarification Chamber'. More settling occurs here. Once settled to the bottom, this potent mix of Aerobic bacteria and fine particle solids are recirculated to the Primary Chamber to keep it healthy and working hard (not smelly).

Step Five

The final step in the treatment process is the 'Disinfection Chamber'. The water gets a 'kiss' goodbye from our Chlorinator which removes any harmful bacteria, viruses and pathogens. Using less chlorine per litre than your average swimming pool, the system removes any harmful bacteria, viruses and pathogens.

Step Six

Lastly, when the Disinfection Chamber fills up, your dependable irrigation pump automatically switches on to send your water out to do its job in your yard. Crystal clear water irrigates your designated area and returns safely to nature, continuing to a healthy water cycle.



What keeps my system healthy?

Food

Your household wastewater is rich with organic matter that nourishes the good bacteria in your Taylex ABS. 'Food' comes from toilets, hand basins, sink, showers, washing machines, in fact anything natural that we put down the sink or flush down the toilet.

Air

The Taylex system is fitted with a Nitto air blower that takes fresh air and introduces it to the water through an aerator diffuser. The oxygen in the air dissolves into the water as it bubbles up to the top. This gives the water a higher than normal dissolved oxygen content allowing the good bacteria to breathe, live and treat your wastewater.

Regular Servicing

For the Taylex system to work to the best of it's ability, it needs to be serviced every 3 months. Not only is this regulation, it guarantees your system is getting the adequate care it needs.

What upsets the balance in my system?

The greatest cause of problems for Wastewater Treatment Systems are harmful cleaning products and the washing machine. When using household cleaning products, please remember to:



Adhere to the cleaning product manufacturer's recommended measured dosage. Do not free pour.



Use cleaning products that are bio-degradable, low phosphorus and labelled 'Safe for onsite treatment systems'.

Antibiotics

Never pour antibiotics down the sink or flush down the toilet. This can cause problems throughout the system.

Cleaning Products

The good bacteria in your treatment system may class certain cleaning products as poisons if high levels are used. Please always use environmentally friendly products. Your treatment system relies on bacteria for it to work effectively, therefore any product labelled as anti-bacterial can be harmful to your system if used frequently or in large doses. Any bleaches or harsh chemicals should only be used once a week and in small doses, if required. The use of harsh chemicals in high levels can affect the function of your system.

Washing Machines

Try to evenly spread your washing over the course of the week. Avoid, where possible, washing everything in one day. It puts a large amount of water into your treatment system all at once, and puts unnecessary strain on your system. Liquid soaps breakdown more easily than powder. Only use the amounts as outlined on the label.

Suitable Products

Dishwashing Liquids

As a rule of thumb, it is always recommended to go for dishwashing liquids labeled as 'Environmentally Friendly' or 'Green'. In general, products that are non-toxic, non-chlorine based, and biodegradable are considered safe.

Surface Cleaners

Similar to above, it's suggested to look for environmentally friendly products. It is also important to look out for products which are non-antibacterial or harsh chemically.

Toilet Cleaners

The majority of cream cleaners are usually deemed suitable. Similarly, you want to look for products that are biodegradable, natural, and environmentally friendly. Toilet fresheners are not recommended.

Floor Cleaners

It is recommended to use hot soapy water to clean floors. Using floor cleaners is generally acceptable at controlled levels. It's advised to stay away from heavy chemical cleaners.

Laundry Powders, Liquids and Bath Salts

Select low phosphorus, sodium and sulphur products. Washing soda can occasionally be added (less than half a cup) to help reduce foaming if necessary. When using Epsom salts in your bath, use small amounts, less than 2 cups of Epsom salt per bath, no more than once per week.

Pet / Animal Washing In Basins

Pets are treated with products to maintain their health (especially fleas). If washed in a laundry, bath, or shower, the treatment used could flow through to the system and cause operational problems.

Personal Hygiene

When considering products to use for soaps and body wash we strongly advise looking for the following; organic ingredients, PH balanced, low-phosphorous or phosphorous-free, non-toxic, biodegradable products, low in sodium and sulphur.

A Note On 'Greywater and Septic Safe' / 'Biodegradable'

Whilst most of the time products labeled as 'greywater safe', 'septic safe', or 'biodegradable' are safe for use in your treatment system. Many plant-based cleaners are powerful antibacterials. Some products marketed as 'Green' or 'biodegradable' can be more damaging to our environment than more traditional cleaning products. When selecting cleaning products, if in doubt, always look for products that are phosphate-free or low phosphate.

Too Much Of Anything Is A Bad Thing

When using cleaning products in your home, always remember that too much of anything can harm the good bacteria in your system. Moderation is key.

Please Note

If your technician notices there is a problem, they may recommend that you limit the use of specific products (even if it is listed here as suitable).

Taylex promotes the use of low phosphorus, phosphorus free, low sodium & low sulphur products. This practice will reduce the phosphorus levels released to the environment and prolong the life of your phosphorus removal filter (if fitted).

Products to Avoid

Strong Antibacterials

Cleaning products which contain any of the following should only be used in small doses in your Taylex System; bleaches, disinfectants, whiteners, chlorine, anti-bacterials (Natural anti-bacterials such as Eucalyptus and Tea-tree oils included).

Caustic Oven or Drain Cleaners

Drain cleaners can do more harm than good for your system. If you want to safely clean your drains, we recommend the traditional method of vinegar and baking soda as a safe and effective alternative.

Sanitary Products

Products such as Nappy liners, sanitary pads, condoms, ANY wipes, non biodegradable sanitary products should never be flushed, as they will not break down in your system.

Kitchen Related Products

Avoid putting things such as dairy products, cooking oils, excess food scraps (especially from a garbage grinder) and anything from your home brew kit down the sink, drains or toilet.

Excess Water

Using too much water in one go can be bad for your system. It can cause the system to block or not flow as efficiently as it should. As a result, your system can shut down or smell. To avoid this, spread out activities which require high water usage, such as doing the laundry or dishes and taking baths or showers.

Other Things To Avoid

Never put, automotive oils, hair dyes, antibiotics, bandages, dead fish / small animals and hair down the sink, drain or toilet. Doing so can cause extensive damage to your system.

Servicing your Wastewater Treatment System

Taylex treatment systems are required to be serviced quarterly and may only be serviced by licensed wastewater service personnel. Not only is it a council requirement, Taylex servicing will also:

- ✓ Ensure that all council reporting requirements are met.
- ✓ Send your service reports to your local council on your behalf (where required).
- ✓ Send your reports and invoices to you electronically (when possible).
- ✓ Provide spare parts to current contract holders at a discounted rate.
- ✓ Offer an extended warranty of 3 years for electrical and mechanical parts if you hold a current service contract and the parts were installed by us. Standard warranty is 12 months.
- ✓ In the unlikely event of a breakdown or emergency, we prioritise call outs for our current customers and charge at a discounted rate.

HOW CAN YOU ASSIST IN SERVICING YOUR TAYLEX WASTEWATER TREATMENT SYSTEM?

- ✓ Do not cover the top of the tank with decking, earth, gravel, mulch, concrete, pavers, pot plants, barbecue, swing set, seats, etc.
- ✓ Provide clear, safe access to the system and the inspection openings. Ensure that plants, trees, and grass around the system are trimmed and cut.
- ✓ If you have a locked yard, provide your service person with a key.
- ✓ Make sure surface water does not pool and can never enter the tank, even during torrential rain events.

Operating Instructions

– ABS Eco Controller

Introduction

The Taylex ABS Eco Controller has a number of features that are explained in this section.

The Eco Control Panel monitors and controls the Treatment System's air blower, pump and registers an alarm when it detects a fault in the system.

The Taylex ECO Controller Assembly (complete with Controller, Control Panel Box, 3 x GPO Assembly and Blower Box) is classed as electrical equipment and has been certified to comply with AS/NZS3820 and AS/NZS 3100:2017, meeting the Electrical Safety requirements in Australia and New Zealand. Your Taylex ABS is designed to operate automatically and its operation will usually be event free. The Eco Control Panel provides visual and audible indicators of both normal operating conditions and fault conditions.

Normal Operation at Start-up

When the power is switched on to your Taylex ABS Eco Control Panel, the display (A) will flash twice. The audible alarm will sound in unison with the 2 flashes, this is a TEST MODE. At the completion of the Test Mode, the display will show a single green light in the 'Power' indicator to indicate that the system has tested correctly and is in normal operation.

**Flashing
-Fault detected**



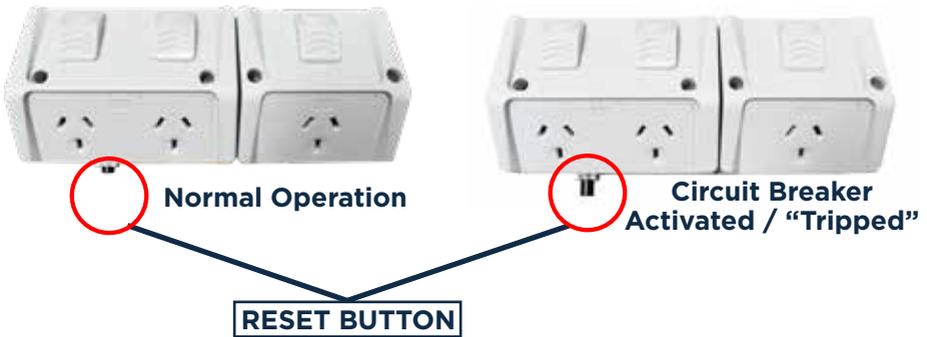
**Press to mute
alarm for 24
hours.**

**Solid green
-Power is on**



The Power Supply

The power outlets for the ECO Controller for your system are located inside the Blower Box. Each switch must be in the ON position at all times. If any or all switches are OFF, the treatment process and alarms may not function. The single GPO is for the 240V - 12V power supply for your controller and the double GPO is for your Pump and Blower. The double GPO contains a 7amp breaker underneath the GPO, which will activate in the case of a fault with the pump and/or blower. If the breaker is activated it will trigger the associated alarm on the Controller. You can reset the Breaker by pushing in the reset button (see page 15 for full instructions). If the breaker is activated again, please contact your Service Agent to rectify the issue.



Optional Extra

A 12volt In House Alarm Panel is available as an optional extra to the system. If required, the panel can be fitted during the installation of the system. The In House Alarm Panel is connected to the same circuit as the Alarm, situated on the system, and works in tandem with the same functions listed above. To mute the In House Alarm, press the red button, this will silence the alarm. The alarm at the system will still function, and needs to be muted separately. The LED light on the In House Alarm panel will continue to flash until the fault is rectified.

FIGURE (2)



Who to Contact for Help and Troubleshooting

Before you call for help, and to avoid unnecessary call-out fees, check these items:

1. Is the power turned ON at the system?
2. Are there lights ON in the panel face?
3. Has a Safety Switch tripped in your main switchboard or sub board?
4. Has the irrigation hose become kinked, preventing the system pumping out?
5. If you have removable "Turf Keys" on your sprinklers, make sure they are engaged properly, PUSH DOWN HARD (Surface irrigation only).
6. Is the irrigation outlet filter blocked? (If fitted)

Resetting your system

If you have identified an issue, once it is fixed you can try **resetting your system**:

1. Turn the system OFF, remove the 4 screws on the (Blue or Green) blower box cover and turn the single power point **ONLY** OFF. This will reset the program.
2. Turn the system ON again using the single power point switch.
3. If the system starts and operates correctly, observe the system over the next few days for another ALARM event and discuss it with your Service Agent.
4. If the system goes back into ALARM mode, call your Service Agent. Limit your water usage until the fault is rectified.

Contact your local wastewater specialist.

taylex.com.au
1300 TAYLEX

Alarm Codes (Trouble Shooting)

Alarm	Meaning	Action
1 Flash	Normal Operation	None required
3 Flashes	The water level is high	Please see below
5 Flashes	There is no airflow	Call your Service Agent
3 & 5 Flashes	Tripped Circuit Breaker	Reset Breaker or call your Service Agent

3 Flashes - High Water Alarm

A high water level may be self-correcting. It can be caused by multiple sources of water coming in, overloading the system. If you think this may have occurred, then wait for 15 minutes until the surge flow has stopped and see if the alarm stops. If sprinklers are still operating, recheck the alarm when they stop to see if the alarm has stopped. If it does not then check the following:

1. Is there a filter on the irrigation line before the effluent disposal area? Is it blocked?
2. Is the irrigation line kinked or broken?
3. Has the irrigation pump failed?
4. Surface irrigation - Are all the turf valves connected?

If you can rectify any of these problems yourself, then you will save the call-out cost of your Service Provider. However, they are experts in this field and will assist you whenever you need their help. Call them whenever you need their assistance or you are in doubt about what you need to do. They will happily assist you over the phone.

5 Flashes - No Air Flow

When your alarm has 5 flashes it means no air flow. This is usually an indication that the blower is not working properly. This can be caused by a range of things, for example, if your system short circuits.

If this alarm is activated for your system, we suggest you call your local wastewater specialist.

3 & 5 Flashes - Tripped Circuit Breaker

When your alarm has 3 and 5 flashes, this means you have a tripped circuit breaker. This can be caused by issues with the aerator or other electrical components. If this happens refer to the diagram on page 13 and reset the breaker.

Resetting the Breaker

1. Remove the 4 screws on the blower box.
2. Underneath the double power point locate the button as shown below.
3. Turn off both switches (1 = Pump & 2 = Blower)
4. Push in the reset button and wait 10 seconds.
5. Switch on switch 1 and wait 10 seconds.
6. Switch on switch 2 and wait 10 seconds.
7. If the circuit breaker "Trips" when either one of the switches are turned on, this would indicate there is a problem with the pump or blower. Leave the faulty switch in the off position and notify your service agent immediately.
8. If the system doesn't alarm, monitor for the next 3 days.
9. If the system continues to alarm, call your local wastewater specialist.



Warranty

Every Taylex ABS Wastewater Treatment System is covered by a full manufacturer's warranty. There is a 15 year warranty* on the pre-cast concrete tank. There is also a 3 year* warranty on all electrical and mechanical components, including the irrigation pump (a 12 month standard warranty and a further 24 months extended warranty is available when you purchase your 2nd and 3rd year of service calls with a Taylex Approved Service Agent). Warranties apply from the date of commissioning or 90 days from the date of purchase (whichever is sooner).

This guarantee does not cover damage caused by misuse, neglect, failure to keep the unit clean and functional, accident, use of incorrect power supply, or repair and / or attempts to repair by unauthorised personnel. The benefits conferred by this warranty are in addition to all other rights and remedies in respect of the product which the consumer has under the Trade Practices Act and other legislations.

TO ENSURE YOUR WARRANTY IS VALID, THE FOLLOWING SHOULD BE OBSERVED:

DO NOT use system or allow wastewater to enter tanks before power services are available to the System and a Taylex Authorised Distributor has been notified of pending occupancy of the property and has subsequently commissioned (activated) the system.

DO NOT cover lids with soil

DO NOT position decking, concrete paths or driveways over System

DO NOT allow surface water to enter the System by incorrect falls and landscaping around the system.

NEVER turn the power off unless instructed to do so by your Service Agent

* Terms and Conditions apply



RCM Compliance Certificate

Certificate No.: 20/RCM/13

Date of Issue: 31 July 2020

Certificate Holder: Taylex Industries Pty Ltd

Address: 56 Prairie Road, Ormeau, QLD 4208

Equipment: Controller for waste water treatment tank

Brands: "Taylex"

Model No's: ABS Controller; and ABS ECO Controller

QEC Global certifies that the above article meets the requirements for use of the RCM as follows:

Electrical Safety Standards: AS/NZS3820:2020 & AS/NZS 3100:2017 +A1 & A2

Evidenced by: CPC Test Report No. 90644-19-70-20-PP001 (for ABS Controller) to AS/NZS 3100:2017 +A1 & A2 (demonstrating compliance with essential safety requirements of AS/NZS3820)

'ABS ECO Controller' same as 'ABS Controller' except ELV supplied electronic circuitry via safety isolating PSU covered under approval certificate SAA132096EA

EMC Standard: AS/NZS61000.6.3:2012

Evidenced by: EMC Services Pty Ltd Test Report No. 80606 (for ABS Controller)

EMC Services Pty Ltd Test Report No. 191204 (for ABS ECO Controller)

EESS National Equipment Database Supplier Registration Number: E4296

RCM required to be marked on all stock sold:



A handwritten signature in black ink, appearing to read 'M. De'.

On behalf of QEC Global

P// +61 7 5429 6999 A// PO Box 552, Maleny QLD 4552





Taylex
WASTEWATER

Your local distributor:

**www.taylex.com.au
1300 TAYLEX**

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Taylex Australia Pty Ltd.



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