

Fashionista Industries Presents:

PERIWINKLE B2E

BACK2EARTH

Owners Manual

FASHIONISTA INDUSTRIES:

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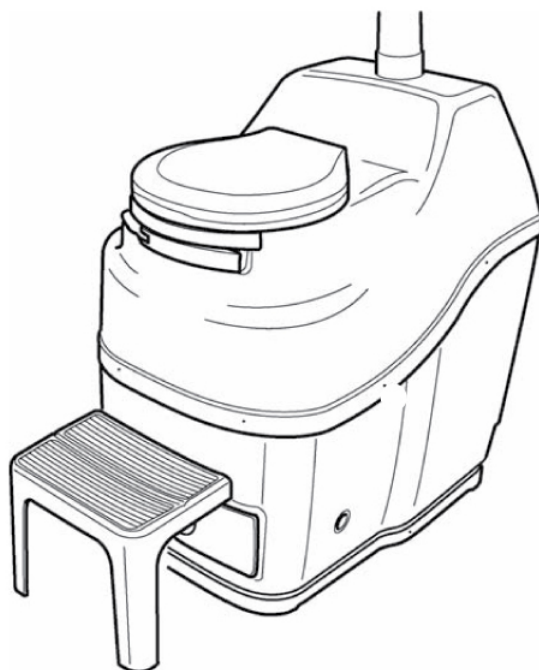
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WELCOME

As a new owner of the Periwinkle B2E, you have joined the thousands of consumers that share Fashionista Industries' vision of eco-attentive cottage living and our dream of wide-spread composting. Our state-of-the-art composting toilet is designed for light to moderate use conditions and can be used seasonally or all year round. Thank you for choosing Fashionista Industries!

CONGRATULATIONS!

Every living organism on Earth creates waste continuously. Drawing inspiration from nature, the Periwinkle B2E reclaims nutrients from this waste using decomposition and evaporation. The Periwinkle B2E is custom-designed to aid in this process using cutting-edge technology and non-toxic materials. Our waste management technology is designed with eco-friendliness at its core and helps us give back to our planet for future generations to enjoy.

WHAT IS THE PERIWINKLE B2E?

The Periwinkle B2E is a toilet system that minimizes excessive water usage and transforms and recycles human waste into usable nutrients. Our specially designed composting toilet system collects waste products such as fecal matter or soiled paper in a well-ventilated chamber to create odor-free environments and prevent excessive build-up of liquids via evaporation.

The Periwinkle B2E's chamber system has three main parts:

- Evaporation Chamber
- Bio-Drum
- Finishing Drawer

The three-stage process is crucial in ensuring that the transformed compost matter is safe to handle and use as fertilizer.



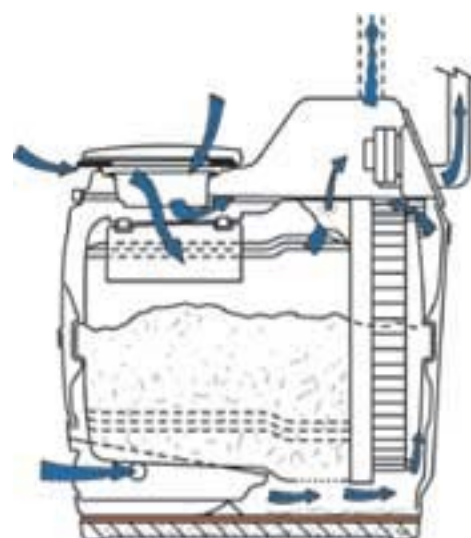
HOW THE PERIWINKLE B2E COMPOSTS WASTE

The Periwinkle B2E composts human waste by employing an aerobic processing system. This system transforms hazardous bacteria, viruses, and bio-waste into a nutrient-rich soil called humanure or humus. This chemical-free system protects local bodies of water, lowers cottage maintenance costs, and can be used in locations that lack access to sewage systems or septic tanks. The composting process (thermophilic decomposition) occurs when heat, oxygen, microbes, and organic material combine to process bio-waste into carbon, nitrogen, phosphorus, potassium, calcium and sulfur.

Thermophilic decomposition begins when bio-waste enters the Periwinkle B2E's composting chamber and excess liquid is separated into the evaporating chamber. After several weeks of aerobic processing, bio-waste in the composting chamber is transferred to the finishing drawer where it completes the composting process, and completes its transformation into humus.

THE COMPOSTING CHAMBER

Thermophilic decomposition begins in the Periwinkle B2E's composting chamber when microbial and moisture levels in the bio-drum create optimal conditions for aerobic processing. The bio-drum functions as a mixer removing excess liquid and blending bio-waste with organic material (bacteria, enzymes, coarse peat moss, non-cedar wood shavings, and chopped hemp stalk). The bio-drum receives bio-waste and organic material through the drum door that is held open in the top center position by the drum locker. The drum locker release button (behind the footrest) unlocks the bio-drum so it can be rotated with the drum handle located beneath the seat. Adding one cup of Compost-Sure after each use and rotating the bio-drum twice a week maintains the composts nitrogen/carbon balance, absorbs liquid, and promotes aerobic processing. When the bio-drum is 1/2 - 2/3 full (or 2-3 inches below the open drum door), excess compost can be deposited into the compost finishing drawer. This is done by pushing the drum locker release button, and turning the drum handle in a counter-clockwise direction.



Adapted from "Excel NE Owner's Manual", 2003.
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THE FINISHING DRAWER

The final stage of thermophilic decomposition that transforms bio-waste into humanure/humus occurs in the Periwinkle B2E's finishing drawer. Here, partially-processed compost deposited from the bio-drum is separated from the mixing process and given 3-4 weeks to cure. Sitting below the step stool, the finishing drawer is a removable bin that can be used to transport humus from the Periwinkle B2E to a flowerbed or garden environment. After several weeks in the finishing drawer, humus will be black or dark brown in color, odorless, and be rich in plant nutrients including carbon (60%), nitrogen (6%), phosphorus and sulfur. When used as a fertilizer, humus can increase plant fertility, suppress disease, support microorganisms, and improve soil structure by increasing aeration and retaining moisture.

THE EVAPORATION CHAMBER

The evaporating chamber on the floor of the Periwinkle B2E supports the aerobic processing in the composting chamber and finishing drawer by removing excess liquid. The chamber consists of a liquid collection tray, air intakes, a ventilation stack, a fan, and two overflow drains. Liquid is collected in the evaporation tray and is dispersed through the vent, or drained through two over-flow holes at the rear of the unit. Evaporation on the chamber's floor is aided by air intakes on the left side of the chamber, and by a partial vacuum that is created by a fan in the venting system. Liquid not evaporated in the chamber is removed through overflow drains that can be connected to temporary holding containers, gravel pits, septic tanks or sewer systems.

THE PERIWINKLE B2E IS NATURE'S CHOICE

The Periwinkle B2E's aerobic processing system applies nature's own composting principles to transform human waste from a dangerous biohazard into a nutrient rich fertilizer with numerous environmental benefits. The three-chamber design drains excess liquid and mixes bio-waste with organic material to destroy harmful bacteria and viruses through thermophilic decomposition. Thermophilic decomposition occurs when heat, oxygen, bacteria, enzymes, and organic material oxidize bio-waste into carbon, nitrogen, phosphorus, potassium, calcium and sulfur. When these elements are present in humus they create a potent natural fertilizer that can increase plant fertility, suppress disease, support microorganisms, and improve soil structure by increasing aeration and moisture retention

BEFORE YOU BEGIN

Discover how the Periwinkle B2E is the leading choice for eco-attentive waste management. Upon receiving your composting unit, inspect the unit for damage. Before installing the unit, please be sure to check the location requirements and specifications of the unit.

PACKAGE CONTENTS

Ensure that the shipping carton contains everything on the packing list.

Your Periwinkle B2E package will include:

- The Periwinkle B2E Owners Manual
- One starter bag of Compost-Sure (30 litre)
- One cleaning rake
- One bottle of Compost-Quick enzyme (16oz.)
- One jar of Fashionista Microbe-Mix bacteria (16 oz.)
- Complete vent kit (all piping, fittings, and vent intake assembly)
- 4 inch by 13 foot vent pipe
- Evaporating tray
- 1 inch by 10 foot drain hose with stainless steel hose clamp
- Warranty Card
- Parts Description Card
- One Fashionista Industries Business Card
- Three You-Tube Stickers
- Accessories Postcard

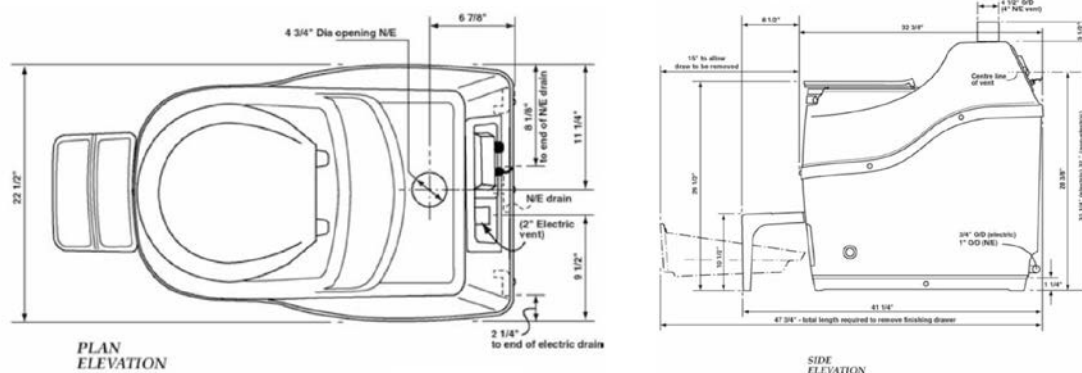
LOCATION REQUIREMENTS

The innovative three-chamber design of the Periwinkle B2E caters specifically to areas where a constant source of 110 volt supply is not available. For a successful installation of the Periwinkle B2E in a residential area, ensure that there is adequate room of an extra 15 inches in order to remove the finishing drawer.

The toilet must remain either level from the front to the back or slope slightly backwards. To prevent contained liquids from leaking, the toilet should never tip forward. The Periwinkle B2E promises odorless operation by the 4 inch vent that is mounted at the top rear of the composting unit. The vent should be installed vertically 2 to 3 feet above the peak of the housing space in order to guarantee excellent air circulation.

If the unit is to be used in an environment prone to downdraft, an optional 12 volt fan may be installed in the vent stack. The 1 inch drain at the rear of the product must be connected to an appropriate container or a drain pit in accordance with local regulations.

SPECIFICATIONS



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Capacity

Listed capacities refer to the amount of people, on average, using the unit per day. Do not pick a unit that is below your capacity.

Residential/Continuous (Adults/Families)	2 adults or families of 3
Seasonal/Vacation (Adults/Families)	5 adults or families of 7

Electricals

Maximum Amps (With Heater On)	N/A
Fan Watts (Required or Optional Hookup)	1.4 (12 volt optional)
Heater Watts (When Thermostat switches it on)	N/A
Average Power Use in Watts (Heater on 1/2 time)	N/A

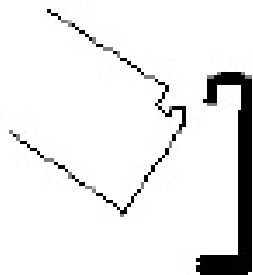
Vent & Drains

Vent Pipe	4" PVC Thinwall
Drains (Required or Optional Hookup)	1" Drain, Required Use

Weights (Lbs.) & Dimensions

Product Weight/Shipping Weight	50-95
Shipping Carton Dimensions (W by L by H)	28" by 35 1/2" by 36"
Depth Required to Remove Drawer	46"
Vent outlet center distance from right side	11 1/4"
Height to center of vent	N/A
Unit Height/Width/Depth	31 1/2" by 22 1/2" by 33 1/2"

ASSEMBLY



While your Periwinkle B2E does come pre-assembled for your convenience, the footrest at the bottom of the unit is the only assembly required.

Attach the footrest to the composting unit via the slot above the drawer. Incline the footrest at a 45 degree angle to the floor and place the rounded top edge of the footrest track into the edge of the track on the unit. Lower the footrest to the floor. The footrest may be removed by lifting the footrest at a 45 degree angle and withdrawing it outwards from the edge of the track. Do not stand on the footrest until it is correctly locked into position along the unit track.

SUN-MAR (2003, DECEMBER). SUN-MAR EXCEL NE: OWNER'S MANUAL.
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INSTALLATION

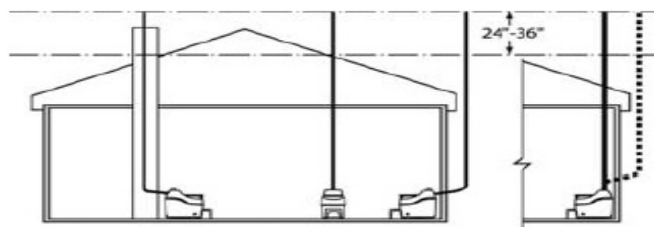
INSTALLING AND CONNECTING PIPING

The only major installation task required by the periwinkle B2E is the vent stack. The vent stack installation kit included in your package will ensure convenient installation in most housing spaces.

INSTALLING THE VENT PIPING:

1. Place the vent stack as close to vertically as possible. Piping can be installed either up the inner wall of the housing space or through the wall at a slight angle and up an outer wall. The second configuration would require an additional 12 volt fan and insulation of exposed piping during winter use.
2. Use silicone caulking while connecting the vent stack to the toilet for possible unit relocation or additional fan installation in the future.
3. Seal all connectors in the vent pipe.
4. Lead the vent through the roof by installing the vent stack approximately 20 inches above the peak of the housing space. Appropriate roof flashing may be required to seal the installation.
5. Glue the diffuser to the topmost portion of the vent stack in order to encourage updraft and prevent weather from entering the vent.

NOTE: If the above instructions are beyond your ability, please contact a professional contractor to complete this phase of the installation.



The vent on the right is a 4" non-electric vent. All others show possible 2" EXCEL vent configurations.

INSTALLING AND CONNECTING THE SAFETY DRAIN

The Periwinkle B2E is designed to evaporate all liquids at various most levels of use or climate. It is recommended that an overflow drain be connected to the composting unit if being used residentially or heavily for short periods of time. The drain acts as a security measure that will sustain the usability of your product.

ATTACHING THE SAFETY DRAIN:

1. Remove the plug on either the right or left side of the rear portion of the composting unit (whichever is more convenient).
2. Then, attach the 1 inch hose and secure the connection with the stainless steel hose clamp ensuring that there are no kinks or upward bends in the drain hose.
3. Effluent may be collected in a recycling bed (a closed loop system). Contact a professional contractor to install an appropriate closed loop system in accordance with local regulations.



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STARTING UP THE UNIT

After installing the unit, you will need to follow the start-up procedure to begin using the Periwinkle B2E. If you are only using the unit seasonally, only follow the start-up procedure at the beginning of the season. You will also need to follow special considerations if you will be using the unit through the winter.

INITIAL SYSTEM START-UP

Please follow the instructions below to start up your Periwinkle B2E for the first time. You may also need to follow this procedure if you have had complications with your compost (see troubleshooting section).

STARTING YOUR PERIWINKLE B2E FOR FIRST USE:

1. Add 3 to 4 gallons of Compost-Sure to the drum of the unit to establish a carbon base and initial mass for composting.
2. Add ½ of the Fashionista Microbe-Mix packet. The other ½ is to be used 14 days after the initial system start up.
3. Sprinkle approximately ½ gallon of warm water into the drum to moisten the carbon base.
4. Coat the evaporation unit with Compost-Mix. Then, spray the drum with Compost-Mix before and after mixing. Doing this acts as a catalyst to the bacteria within the compost and also eliminates start-up odor in the evaporating chamber.
5. Rake the loose peat moss from the evaporating chamber until the compost is established and active.

NOTE: After initial use, further instructions can be found in the Ongoing Toilet Maintenance section. The first compost will take approximately two months to form properly.

ANNUAL START-UP (SEASONAL UNITS ONLY)

Please follow the instructions below to start up your Periwinkle B2E at the beginning of the cottage season.

STARTING YOUR PERIWINKLE B2E AT THE BEGINNING OF A SEASON:

1. Empty the compost accumulated in the finishing drawer.
2. Use the rake to clean out the evaporation chamber to remove peat debris.
3. Free space in the composting chamber by releasing the drum lock (the white button under foot stool) and rotating the drum clockwise. This will extract the finished compost into the drawer.
4. Repeat this extraction process until there is approximately 6 inches left in the drum.
5. Then, add ½ gallon of warm water to raise the level of moisture.
6. You may add Microbe-Mix or Compost-Quick to enhance the action of the microbes within the compost.

Note: Toilet paper is a good source of carbon and may be added after using the unit.

WINTER USE

The Periwinkle B2E is constructed with high-quality fiberglass and marine-grade stainless steel which will keep your investment long lasting and protected from extreme climates. Freezing temperatures will not harm your unit, however, best composting action occurs at room temperature. An additional heat source may be required to maintain the levels of composting during the winter season.

Should the Periwinkle B2E be used only occasionally throughout the winter (a few weekends every month at most), the unit may act as a holding tank. This will not cause damage to the unit or the collected compost. In this case, extra space should be made within in the drum.

If used frequently (every weekend or for residential use), the Periwinkle B2E should be kept at a temperature of at least 55 to 60 degrees Fahrenheit (15 degrees Celsius) or more to ensure the composting action continues. Make sure all piping is well insulated if not heated to avoid ice build-up. In climates of extreme cold, you may consider installing extra piping, heat tape or self-regulated heat cable along the vent to prevent ice blockage.

NOTE: The drum should not be rotated if containing frozen compost. Installing a 12 volt fan will increase proper airflow during the winter months.

OPERATION AND MAINTENANCE

While your Periwinkle B2E is designed to require little service, you will need to perform periodic maintenance on the unit aside from the general operation.

GENERAL OPERATION

In order to create a successful batch of compost, the following this procedure after each use will keep the compost moist, well aerated, and an optimal environment for aerobic bacteria.

USING YOUR PERIWINKLE B2E:

1. Add 1 cupful (2 handfuls) of Compost-Sure to the bio-drum after each bowel movement. This maintains the necessary nitrogen-carbon balance and readies the waste for aerobic composting.
2. Turn the handle to rotate the drum 5 full revolutions two times every week if regularly in use. If the toilet is used only on weekends, complete this step upon departure.
3. Extract compost from the finishing drawer when the levels in the drum reach $\frac{1}{2}$ to $\frac{2}{3}$ full. The drum is $\frac{2}{3}$ full when the compost level is 2 to 3 inches below the drum door when opened. To empty compost into the drawer, pull the drum lock button and rotate the handle counter-clockwise. If there is not enough compost, turn the handle clockwise for 1 rotation.

Note: If your unit is only used seasonally, follow the "Annual Start Up" procedure section at the beginning of the season.

PERIODIC CHECK-UP

In addition to initial and annual start-ups, we recommend a system of periodic check-ups to ensure the continued performance of your composting unit.

Rake the peat moss debris from the evaporation chamber. Make sure to rake the back two corners of the unit as well. This should be completed on a yearly basis (during the annual start-ups) for cottage usage and bi-monthly for continuous users. Doing so will prevent plugging in the drains.

Check the compost moisture level each visit for cottage users and once every two weeks for continuous users. Shine a light source into the bio-drum. The compost material should exhibit a gloss or shine.

MAINTAINING HEALTHY COMPOST

The Periwinkle B2E helps convert waste into nutrients by making oxygen available to aerobic (oxygen-breathing) bacteria. The bio-drum provides this oxygen supply to the compost so the aerobic bacteria inside can consume the waste quickly and without odour. The by-products of this process are water vapour, carbon dioxide, and a small amount of basic minerals. The final compost should be a mix of valuable minerals and bulking material that has not been broken down. The aerobic bacteria require the following to break down waste efficiently:

MOISTURE

The moisture for the decomposition process is found in the waste material and retained by the bulking material. Too much moisture creates an ideal environment for anaerobic bacteria (bacteria that do not require oxygen to decompose waste). Anaerobic bacteria work very slowly and produce various undesirable gases as by-products.

A lack of moisture in the bio-drum will cause aerobic decomposition to slow. A moisture content of about 50% is ideal for decomposition. The mixture in the bio-drum should have a slight sheen if you shine a flashlight onto it after mixing.

OXYGEN

Oxygen is fed to the aerobic bacterial by the periodic rotation of the drum. Aerobic bacteria will use up this oxygen when breaking down waste which is why it must be periodically replaced. During continuous use, a good rule of thumb is to rotate the drum five rotations no more than three times a week. If you are staying at your cottage for two



to three days, give the drum five rotations once before departure.

It is important to note that too much moisture will remove free airspace. A lack of bulking material will cause the compost to pack together more tightly and also eliminate airspace within the compost mixture.

WARMTH

Aerobic bacteria thrive in warmer temperatures. The Periwinkle B2E should be placed in a room with an ambient temperature maintained above 13°-15° Celcius. If the environment is too cold, the aerobic bacteria will slow decomposition and eventually stop altogether. Higher ambient temperatures will increase decomposition dramatically.



WARNING!

- Do NOT add or clean the Periwinkle B2E with chemicals as they will kill the bacteria needed for composting. INSTEAD, clean the bowl with Compost-Quick or hot water mixed with baking soda.
- Do NOT add kitchen or garden waste.
- Do NOT add topsoil from the ground
- Do NOT add plastic, glass, and/or metal products.
- Do NOT add foreign material other than approved compost mixture or compost accelerators

***Note:** If desired, you may determine levels by using a moisture meter. The range should read 4 to 6 which represents 40% to 60% moisture (a good balance)*

TROUBLESHOOTING

While the Periwinkle B2E is designed to minimize composting problems, issues may arise. The following sections will describe ways to identify problems and how to solve them.

COMPOST WARNING SIGNS

If you remain vigilant with your compost, you can make sure it remains healthy. Below are some possible characteristics of problems with your compost:

- Large lumpy masses are present
- Flies or other insects are present
- Compost has a strong and unpleasant smell of sewage
- Toilet paper is found in the finishing drawer
- Compost has a wet mud or clay-like texture
- Extraction is required more frequently than every 4 weeks

APPLYING PESTICIDES

You can get rid of flies by adding certain pesticides to your compost. These are the two most common pesticides that can be used in your Periwinkle B2E without harming aerobic bacteria:

- **Pyrethrin:** an organic pesticide that breaks down very quickly. You will need to apply pyrethrin to your compost several times a day for several days until flies disappear.
- **Malathion:** is a manufactured pesticide. It is best used in liquid form. This pesticide is more effective as it take up to thirty days to break down and can be left unattended. For best results, do not dilute to more than 1 part Malation to 10 parts water. You will need to apply malathion to your compost 2-3 times for a light infestation and 5-6 times for a heavy one. Resmethrin can be used as a substitute for malathion.

Please see our enclosed accessories card for pricing and ordering information. Or visit www.fashionistaindutries.com/accessories/ to order online.

TO APPLY PESTICIDE:

1. Make sure the room is well ventilated while applying pesticide to toilet. Keep children and pets away for a few hours after you apply the pesticide.
2. Use a spray bottle to apply to finish drawer, evaporation chamber, and both the inside and outside of the drum.
3. Sprinkle ½ cup of the pesticide solution over the compost.
4. Re-apply pesticide to the above areas if you see flies after the initial application.

FREQUENTLY ASKED QUESTIONS

WHY ARE THERE FLIES AROUND MY TOILET?

Flies are not normally attracted to the healthy and moist aerobic compost. If flies are present, this can be an indication of problems with your compost. Flies are attracted to compost that is either too dry, has been overtaken by anaerobic bacteria, or has had foreign waste/material added to the mixture. Follow the “Applying Pesticides” procedure above until the flies are no longer present.

WHY IS MY COMPOST NOT BREAKING DOWN?

Composting may slow or stop for a variety of reasons:

- Composting may slow or stop due to cold temperatures. Please ensure the unit is in a room with an ambient temperature maintained above 13°-15° Celcius.
- Composting may slow if the compost mixture becomes too dry. Add up to 4 liters of warm water to mixture to bring it to a shiny moist consistency.
- If a user of the Periwinkle B2E is taking antibiotics continuously for a long period of time, these can be present in waste material. Antibiotics in waste slow composting. You can mitigate damage to the compost by urinating elsewhere while taking antibiotics and by adding 1 cup of Fashionista Microbe-Mix to the compost daily while taking antibiotics. Emptying and hosing out the drum after taking antibiotics and restarting the compost process per the initial startup instructions may be necessary in extreme cases.

CONTACT US!

We appreciate and share your enthusiasm! Please contact us through one of the methods below and we will be happy to answer any composting questions:

- **Telephone:** 604COMPOST (604-266-7678)
- **Email:** compostsupport@fashionistaindustries.com
- **Web:** www.fashionistaindustries.com/compostsupport