



Vacuum Flush Composting Toilet System

The revolutionary new micro-flush composting toilet system from Sancor and Dometic that can be installed virtually anywhere.



Owner's Manual

Please read this manual carefully before using your Envirolet VF Vacuum Flush Composting Toilet System.

DOMETIC ENVIROLET VF
Model: ENVLWRSVF230 • SCANDINAVIA
Rated Capacity: 8 full-time/10 vacation

**T**

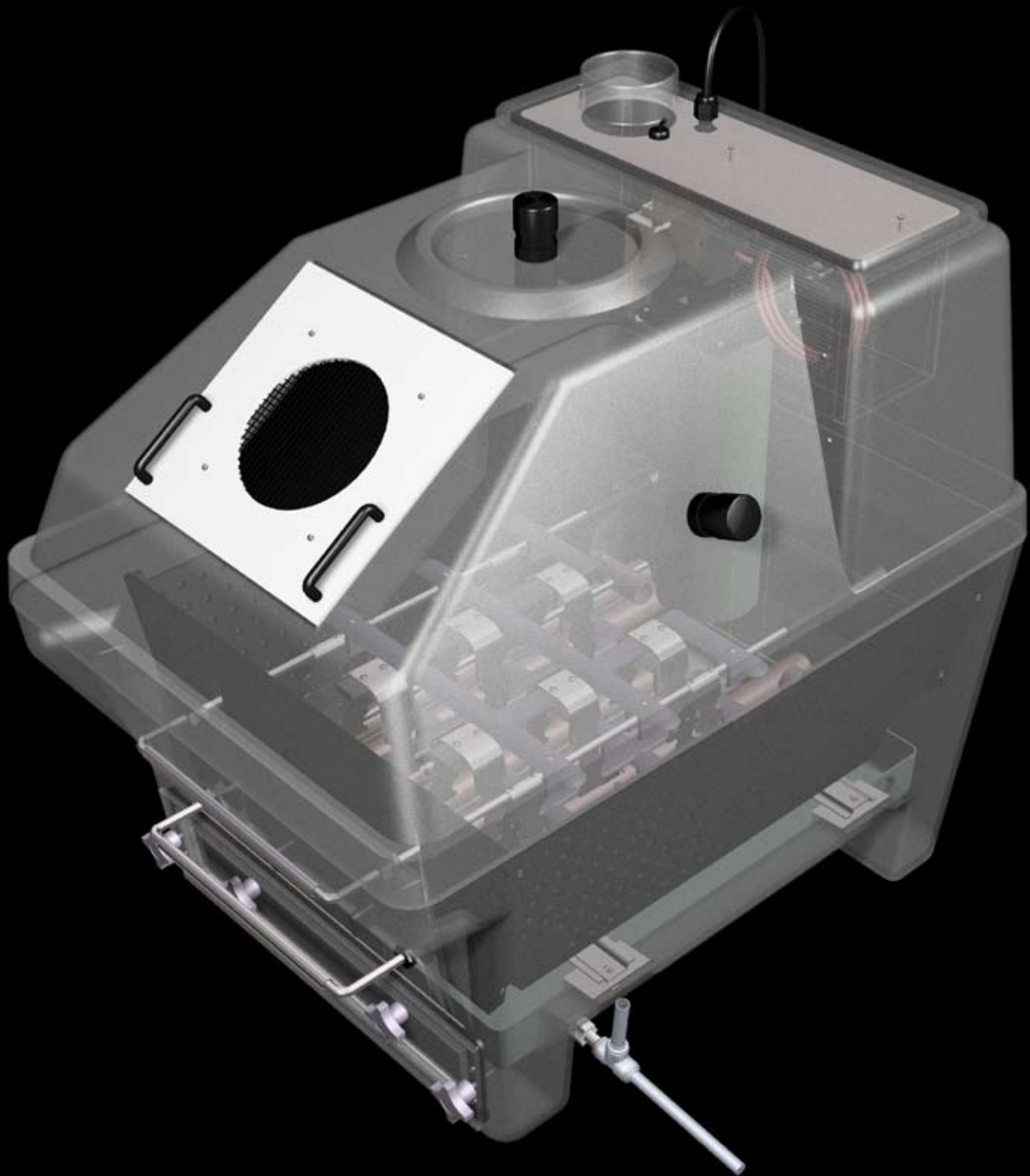
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**VF**

This Owner's Manual refers to the complete Dometic Envirolet VF Vacuum Flush Composting Toilet System but has a focus on the Composting Unit component. For detailed VacuFlush Toilet and Vacuum Generator installation information and instruction please refer to the included manuals and/or speak to your local dealer.

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▶ **WHAT'S INSIDE**



IMPORTANT SAFETY INFORMATION



VF

Safety information. Please read this section carefully.



SAFETY WARNING

For your safety, please follow all safety guidelines before beginning the installation process.



FIRE HAZARD WARNING

Do not add glowing or burning materials to system. Adhere important fire safety warning label in a location near bathroom toilet to advise users. **See Figure 1.**



POWER CORD

The AC power cord on your Envirolet VF is approximately 3m/9 feet long. Plug the power cord to a certified and grounded 3-prong plug wall outlet or receptacle.



230VAC ELECTRIC MODELS

The receptacle should be connected to a 230VAC, 50hz, 10-amp fuse service in your main electrical box. No extension cords should be used. Do not cut or hard wire.



ELECTRIC COMPONENTS

Do not alter electric components. Only an authorized service technician can replace or change the power cord. Failure to comply could result in an unsafe electrical or fire hazard.

MORE IMPORTANT SAFETY GUIDELINES



Be sure to read and follow safety warnings on page 4 in addition to safety information below.

1. Use only as directed.
2. All Dometic Envirolet VF products and accessories (except for outside vent and drain fixtures) must be installed in a covered structure (i.e., cottage, shed, garage, etc.) to safely operate and to help protect system from rain, snow, water, dust, animals and any other possible elements, damage or electrical hazards.
3. Do not modify or alter system without first speaking to authorized technician.
4. Do not place anything over the mesh (louvered) opening on the Service Panel on the Envirolet Compost Unit as this will restrict air flow, affect composting process and may damage fans.
5. Keep children and pets away from Vacuum Generator, Compost Unit and any other electric components.
6. Do not use a damaged cord or plug. Replace immediately.
7. Only an authorized service technician can replace or change the power cord.
8. Use only Dometic or Sancor replacement parts or components.
9. Do not use harsh chemicals to clean system. This will hurt the composting process.
10. Do not add anti-freeze to system to prevent freezing. This will hurt the composting process.

Figure 1: Adhere to bathroom wall



WARNING!

Do not add glowing or burning materials to composting toilet system (cigarettes, matches, ashes, etc.) as this is a fire hazard.

VARNING!

Kasta ej glödande eller brinnande material såsom cigaretter och aska i komposttoalett-systemet. Detta kan utgöra en brandfara.

ADVARSEL!

Kast ikke glødende eller brennende materiale som f.eks sigaretter i kompostsystemet, da dette kan utgjøre en brannfare.

VAROITUS!

Älä heitä palavaa tai hehkuvaa materiaalia (tuhkaa, tupakantumpeja, yms.) kompostointijärjestelmään, koska tämä voi aiheuttaa palovaaran.



Save this Owner's Manual for future reference.

C
CERTIFICATION & RATING



Certified for use.

Certified in Europe

Your Dometic Envirolet VF Vacuum Composting Toilet System (model: ENVLWRSVF230) is CE certified to meet European standards. VF was certified in Sweden by Semko by Dometic AB to meet CE requirements for electric and product safety. Contact your local dealer, Dometic AB or Sancor Industries Ltd. for more certification information.



Envirolet/Dometic Low Water Remote
VF Composting Toilet System

Model: ENVLWRSVF230

230-240V, 50Hz, 2.2A, IPX4



Manufactured by Sancor Industries Ltd.
+1 416 299 4818 (Canada)
sancorindustries.com
sancor.se • envirolet.se

Distributed by Dometic and Sancor.



Certified in North America

In North America, VF has been certified by CSA (Canadian Standards Association) to meet various certifications including CSA ANSI/NSF Standard-41. ANSI/NSF Standard-41 is a performance standard required by most of North America for composting toilet systems. This test includes a system capacity rating. VF is also CSA Plumbing and Electric certified in North America.



Rated Capacity

VF is rated for up to **10 users per day for vacation type use** and up to **8 users per day for full-time use**, at 3 uses each per day. Please refer to chart below.

	<i>USERS</i>	<i>USES</i>		<i>TOTAL USES</i>
<i>Full-Time Use</i>	8	3	=	24
<i>Vacation Use</i>	10	3	=	30

VF Power Specifications

Dometic VacuFlush Toilet: N/A (or 12VDC in push-button electronic flush operated versions)

Vacuum Generator Unit: 12VDC

Envirolet Compost Unit: 230VAC Electric, 2.2A

Tank Size: 84cm/33" L x 64cm/25" W x 76cm/30" H • 51cm/20" from ground to Side Drain Entry (+ or - 13mm/1/2")

Warranty

Your Dometic Envirolet VF comes with a comprehensive warranty. Please refer to warranty cards for each individual component for complete warranty information.



FUSION OF TECHNOLOGY

VF

1

DOMETIC



Revolutionary System

Congratulations on your decision to go green!

Envirolet VF is a fusion of proven technology from Dometic and Sancor to create a sanitation system that is attractive & modern, installs almost anywhere *and* is eco-friendly.

VF combines a vacuum flush toilet with a composting toilet system. The first of its kind. A revolution in not only the composting toilet industry but in the sanitation industry.

A B C of **VF**

Reasons to go with Envirolet VF where sanitation is needed.

A. ATTRACTIVE & MODERN

The clean, modern ceramic bowl looks great in any bathroom. Being green never looked so good.

B. INSTALLS VIRTUALLY ANYWHERE

A sanitation solution for many applications because it installs easily on any grade. Above, below or level.

C. ECO-FRIENDLY

Nice to the environment. Micro-flush action flushes with 0.5 litres or less of water saving tens of thousands of litres of water per year while converting waste to compost.

C VACUFLUSH TOILET

2

DOMETIC VACUUM
GENERATOR UNIT

3

ENVIROLET COMPOSTING
SYSTEM

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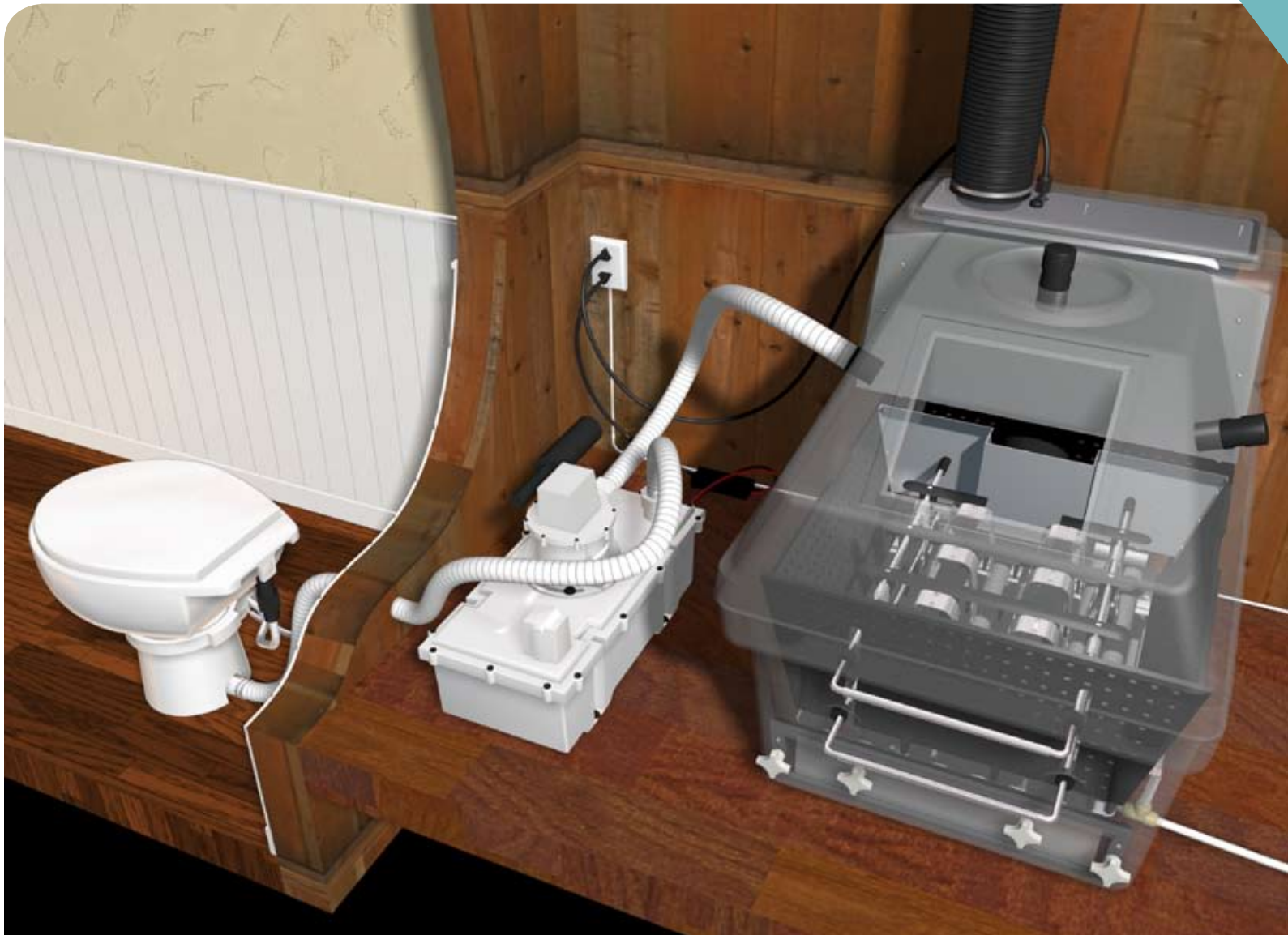
DOMETIC ENVIROLET VF

ADVANCED TECHNOLOGY

The Dometic Envirolet VF is the most advanced environmental toilet system available.

The powerful vacuum assisted micro-flush toilet allows for easy **“up,” “down,” or “level” flush** action. Vacuum Generator pulverizes and aerates waste for improved composting efficiency.

A



**C****COMPOSTING PROCESS****VF**

Automatic Six-Way Aeration™ is Key

Understanding the composting process is important for proper maintenance and system care.

1

OUTSIDE AIR ENTERS

Air enters the Envirolet Compost Unit through louvered Service Panel because of negative pressure present in the unit created by dual fans.

2

AIR IS HEATED

The outside air is drawn by the Blower Fan towards back of unit and is forced through the thermostatically controlled Heater.

3

HEATED AIR FORCED DOWN

The heated air is then forced down Blower Pipe by the powerful Blower Fan to the Tray area in the bottom of the unit.

4

AUTOMATIC SIX-WAY AERATION™

The heated air is then forced back up by the powerful Vent Fan. This creates the patented Automatic Six-Way Aeration™ process as the heated air travels through all six sides of the waste/compost material (bottom, top and four sides) of the specially designed Aeration Basket. This process allows for maximum aeration for rapid evaporation and compost-action.

5

EVAPORATION

Rapid evaporation of liquids occurs as the result of a powerful dual-fan system that exhausts the evaporated liquids up the Venting System until it exits the VF System completely through the Wind Turbine Ventilator.

6

COMPOSTING

The remaining solid material (85-90%) is left in a warm and well-aerated environment, ideal for composting. Additives (peat moss, Compost Accelerator) help the natural microbe-action further to speed up the composting process.



BEFORE INSTALLATION

VF

1

CHECK C

Read this before installation.



IMPORTANT

Check contents of box before beginning installation and report any missing parts or damage immediately.

There are a few important things to do before you begin the installation process of your new Dometic Envirolet VF Vacuum Flush Composting Toilet System.

1. Check Contents of Box

It is important to check the contents of your shipping carton(s) to make sure that you have received all components. Ensure any optional items purchased are included. Empty all cartons and remove any packing material. A list of the included components is found in In the Box. Please report any missing components as soon as possible.

2. Do Not Remove Paper Mat

Do not remove the Paper Mat located in Envirolet Compost Unit component. This is not packing material. It is an important component to proper system start-up. If you accidentally remove the Paper Mat, please refer to Initial System Start-Up section for replacement tips before using system.

3. Check For Damage

Report any shipping damage or missing accessories to your point of purchase (i.e., your local dealer, Dometic or Sancor) within 24 hours of delivery. For up-to-date contact information visit enviroletvf.com. We are not responsible and may not be able to process a shipping damage claim after 24 hours.

CONTENTS OF BOX

2

DO NOT REMOVE PAPER MAT THAT IS IN SYSTEM

3

CHECK FOR DAMAGE

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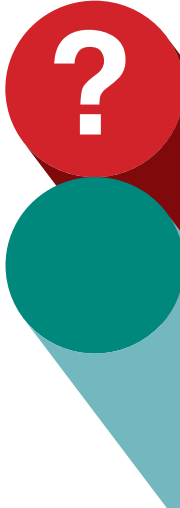
YOU ARE READY TO BEGIN SYSTEM INSTALLATION

CONTACT POINT OF PURCHASE FOR HELP WITH INSTALLATION

Components*

- 1 Dometic VacuFlush Toilet** with instructions, mounting kit & accessories***
- 2 38mm/1.5" Drain Hose Clamps
- 1 Dometic VG4 Vacuum Generator Unit with instructions
- 1 38mm/1.5" VG4/Toilet Connecting Hose****
- 1 38mm/1.5" VG4/Envirolet Compost Unit Connecting Hose****
- 1 230VAC/12V (10A or >) Power Supply Unit
- 1 Envirolet Compost Unit 230VAC Electric
- 1 Wind Turbine Ventilator
- 1 100mm/4" Vent Hose x 122cm/4' with 100mm/4" Coupling
- 1 100mm/4" Vent Gear Clamp
- 1 13mm/1/2" Drain Line x 152cm/5'
- 1 Shock Soil (bag)
- 1 Premix Starter Kit (bag)
- 1 236mL/8oz Compost Accelerator
- 1 Silicone Sealant Tube (small)

GOT EVERYTHING?



Be sure to check the contents of the box to make sure you have everything.

IF SOMETHING IS MISSING, PLEASE BE SURE TO CONTACT YOUR POINT OF PURCHASE IMMEDIATELY.

* DEPENDING ON LOCATION, SOME ITEMS MAY NOT BE INCLUDED STANDARD IN SYSTEM KIT.

** THIS OWNER'S MANUAL DESCRIBES A VACUFLUSH 5000 SERIES TOILET. OTHER TOILET MODELS & STYLES MAY BE AVAILABLE FROM LOCAL DEALER.

*** FLUSH WATER SUPPLY IS PROVIDED BY CUSTOMER: MINIMUM 13mm/1/2" ID.

**** CONNECTING HOSE MAY BE SUPPLIED IN ONE LENGTH SO END-USER CAN CUT AND FIT TO SPECIFIC INSTALLATION REQUIREMENTS.

T

Tools Required

Suggested tools to have on hand for easy installation.

1. Drill
2. Jig Saw
3. Screwdrivers

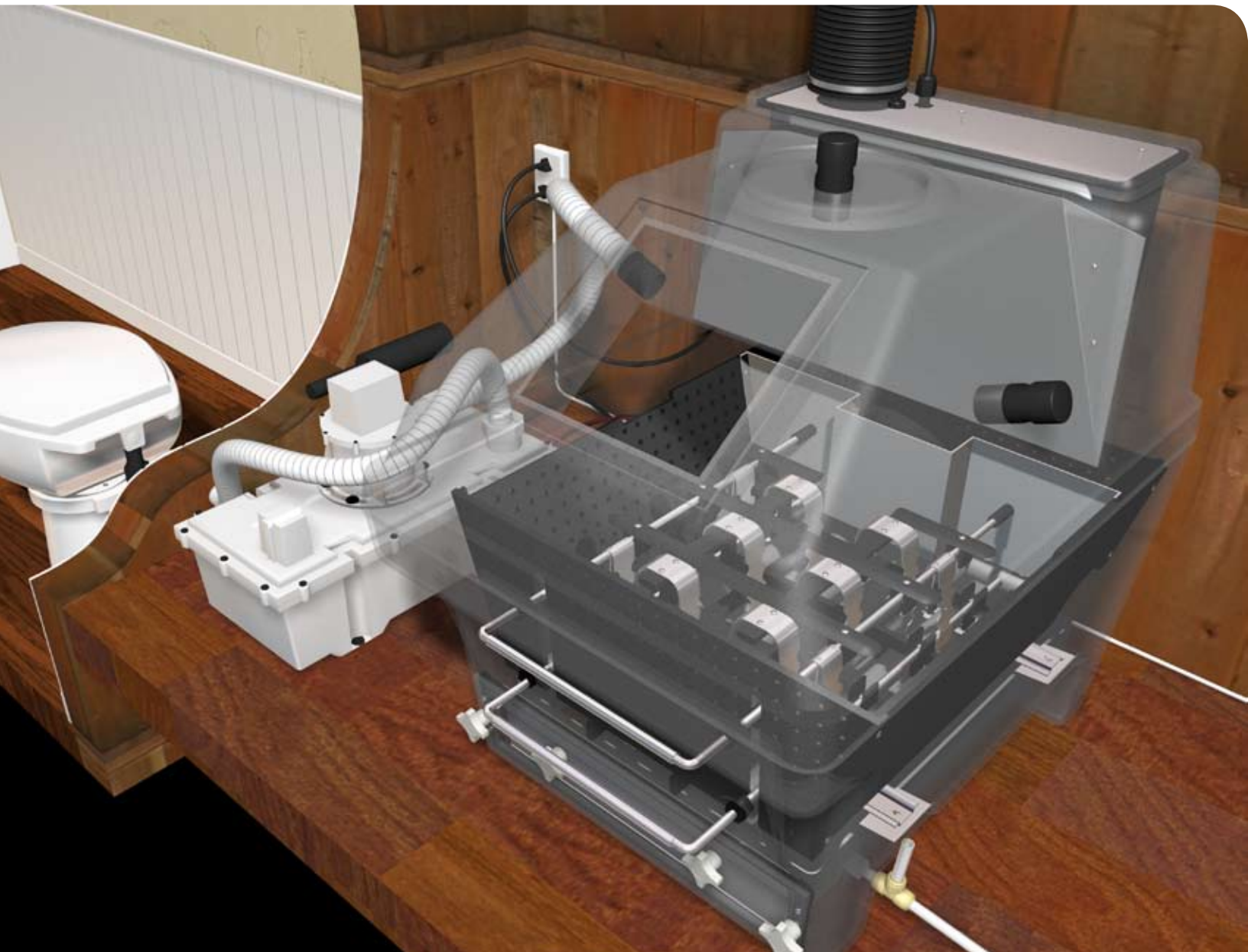
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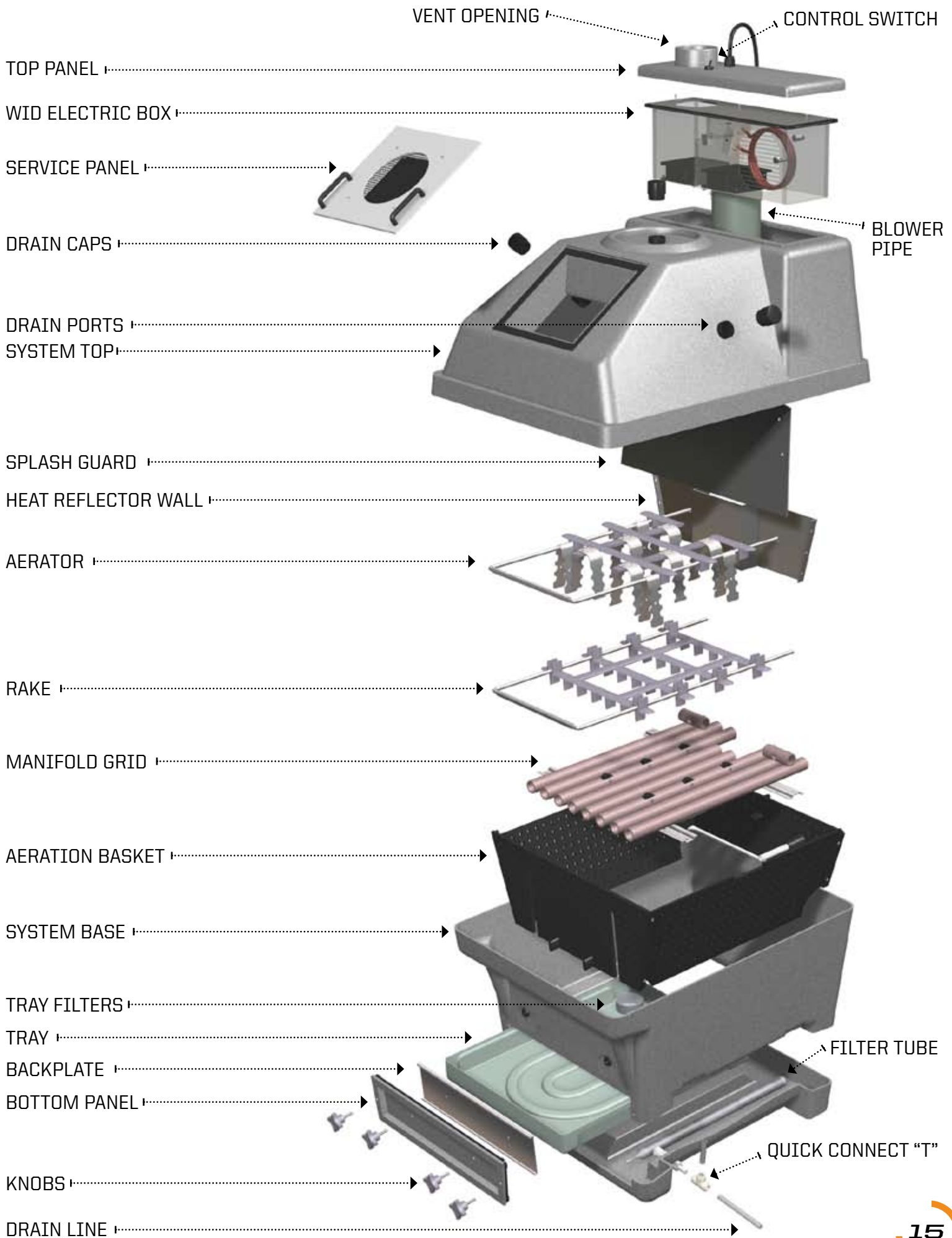
ENVIROLET COMPOST UNIT COMPONENTS

VF

VF Exploding View

Use this exploding view to see some of the inner workings of the Envirolet Compost Unit component of your VF System. There's more than meets the eye...







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INSTALLATION INTRODUCTION



VF

Read this before installing



IMPORTANT

It is advised to completely read your Owner's Manual instructions carefully before beginning installation.

Start Here

It is important that your Dometic Envirolet VF Composting Toilet System be installed correctly for proper operation and performance.

In a typical installation, the VacuFlush Toilet component connects to the Vacuum Generator through the bathroom floor or wall (back or side wall). The Vacuum Generator then connects the toilet to the Envirolet Compost Unit component.

Below are some things to consider **before** beginning the installation process.

Position the System

Position the VacuFlush toilet, Vacuum Generator and Envirolet Compost Unit in an area that is free of obstructions (pipes, electric boxes, wires, etc.). Try to keep Compost Unit in area with an ambient temperature above 12°C (55°F) for optimum composting.

Protect from the Elements

For safety and performance, the Envirolet Compost Unit, Vacuum Generator and 12V Power Supply Unit (and any other electric components) **must sit horizontally on a flat dry surface and must be installed in a vented covered structure** (work shop, shed, box, etc.) to protect from the elements (water, rain, snow, etc.) and to protect from electrical damage or hazard.

Three Main Components

Your new Dometic Envirolet VF is comprised of three main components to create a complete system. Each plays an integral role in system operation.



- 1** *Dometic VacuFlush Toilet*
- 2** *Dometic Vacuum Generator Unit*
- 3** *Envirolet Compost Unit*



I

VACUFLUSH TOILET & VACUUM GENERATOR



Please refer to manufacturer instructions.



IMPORTANT

Please follow manufacturer (Dometic) directions for safety and installation of Dometic VacuFlush Toilet and Dometic Vacuum Generator.

VacuFlush Toilet and the Vacuum Generator

The VacuFlush Toilet and the Vacuum Generator should be installed according to the instructions provided by Dometic for installation.

Installation will vary depending on VacuFlush Toilet drain exit configuration (rear, bottom or side discharge) and grade of installation.

The VacuFlush Toilet can be 1.8m/6' below the Vacuum Generator. Try and keep distance from VacuFlush Toilet to Vacuum Generator and from Vacuum Generator to Envirolet Compost Unit less than 3-6m/10-20' away from each other.

Install in place, but do not connect to other system components until directed.



IMPORTANT

Do not connect VacuFlush Toilet or Vacuum Generator to Envirolet Compost Unit tank until instructed (after all components have been individually installed).



IMPORTANT

If you plan to test VacuFlush Toilet and Vacuum Generator with repeated flushing to see if proper flush is occurring, please connect outlet hose to pail/container. Excessive water added to Compost Tank is not advised as it may liquefy initial Starter Kit material and Paper Mat.



DOMETIC VACUFLUSH TOILET
Check with dealer for other
VacuFlush Toilet models.

DOMETIC VACUUM GENERATOR UNIT





I

ENVIROLET COMPOST UNIT INSTALLATION



VF

Please read this section carefully.



IMPORTANT

Do not connect Envirolet Compost Unit (tank) to Vacuum Generator Unit or VacuFlush toilet until instructed (after all components have been individually installed).



WARNING

The Vent system must always be securely attached to your Envirolet Compost Unit before any operation. Failure to comply could result in an unsafe electrical hazard.



IMPORTANT

Do not remove the Paper Mat located in Envirolet Compost Unit. This is not packing material. It is an important component to proper system start-up. If you accidentally remove the Paper Mat, please refer to Initial System Start-Up section for replacement tips before using system.



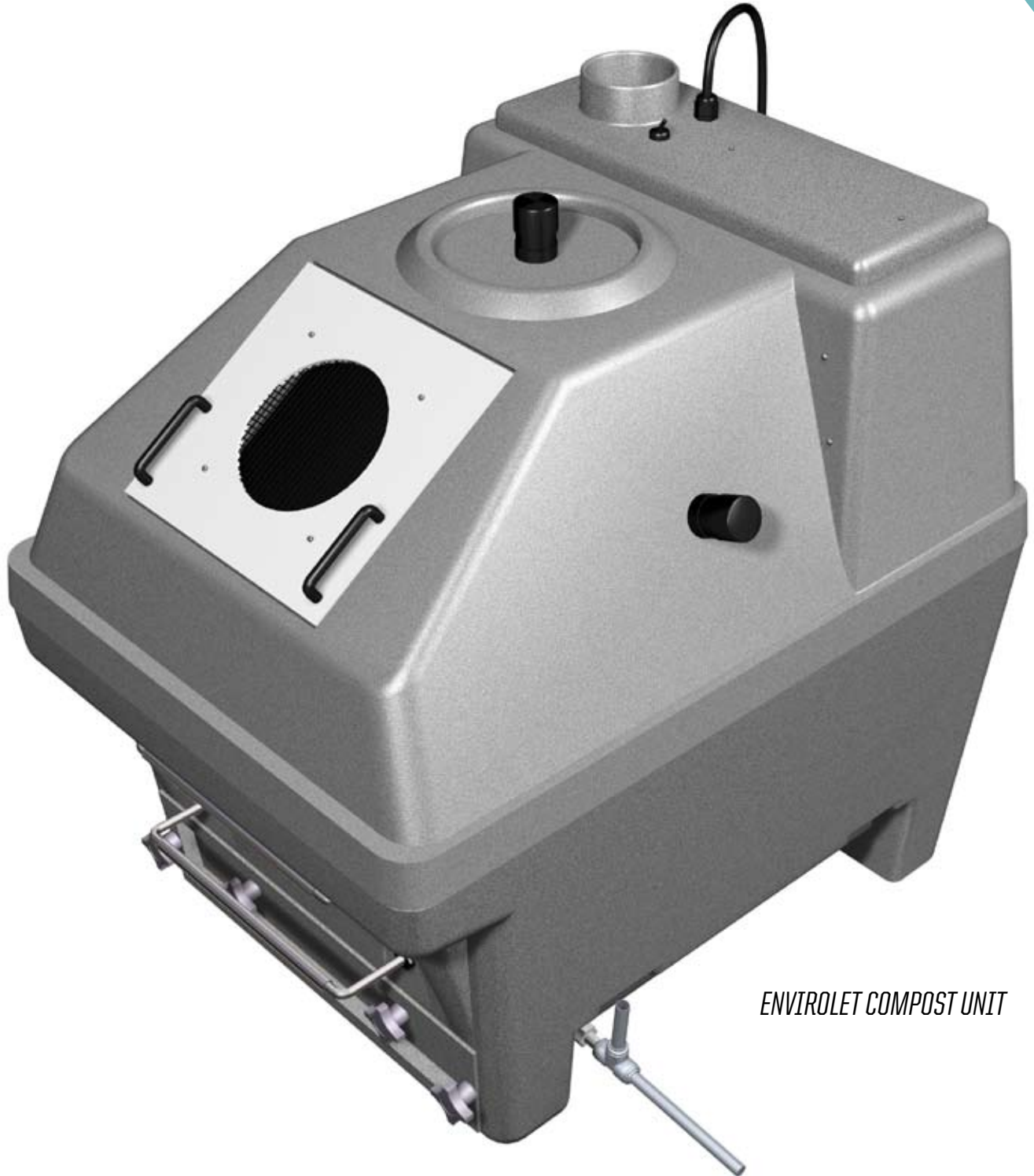
IMPORTANT

It is recommended that the 100mm/4" vent pipe be installed straight up, with **little or no angles/bends** in the venting system. This will ensure proper vent draft and evaporation, and prevent any inside odour. **Do not install any 90° bends in your vent installation.**

Ready to Go!

It's time to begin installation of the Envirolet Compost Unit component of your VF System. Here are the main steps:

1. Position Envirolet Compost Unit
2. Connect Flex Vent to Compost Unit
3. Install Rigid Vent Pipe
4. Connect Flexible Vent and Rigid Pipe
5. Attach Wind Turbine Ventilator
6. Seal All Vent Connections
7. Install Drain
8. Connect Three Components of System



ENVIROLET COMPOST UNIT

1. Position Envirolet Compost Unit System

- a. Place the Envirolet Compost Unit adjacent to the Vacuum Generator Unit.
- b. **Do not secure** Envirolet Compost Unit or Vacuum Generator Unit to ground until vent installation is complete. This will allow for any placement modifications, if required.

2. Connect Flex Vent to Compost Unit

- a. Connect 100mm/4" Flex Vent pipe section to the vent opening on the Top Panel of Envirolet Compost Unit (tank) using the supplied 100mm/4" stainless steel Gear Clamp. Tighten Gear Clamp over plastic opening to ensure seal.

Based on your individual installation requirements, you may wish to increase or decrease the length of the 100mm/4" Flex Vent pipe (4' is provided standard). Additional 100mm/4" flex vent pipe can be ordered from your dealer.



IMPORTANT

Seal vent connection on Top Panel securely with 100mm/4" Gear Clamp and Silicone Sealant provided to prevent odours.



IMPORTANT

Install minimum of 30cm/12" of 100mm/4" Flexible Vent Pipe that connects Compost Unit to 4" rigid pipe section(s). This will prevent rigid pipe breakage due to possible ground shifting caused by freezing temperatures or other movement.

VENT OPENING



3. Install Rigid Vent Pipe (not supplied)

Not included, due to transportation costs, is 3m/10' to 6m/20' (for a typical installation) of rigid ABS or PVC Pipe that is required for vent installation.

This rigid pipe travels up along the wall (see image at right) of your structure above the roof line (minimum 0.6m/2') and is fitted with the included Wind Turbine Ventilator.

The rigid pipe connects to the 100mm/4" Flex Vent Pipe via an attached 100mm/4" coupling provided. This low-cost rigid pipe can be easily acquired from your local dealer or at your local hardware, plumbing or home center.

a. Determine length of 100mm/4" rigid vent pipe required for your installation. To properly determine length of rigid vent pipe required be sure to allow a minimum of 0.6m/2' – 0.9m/3' rigid vent pipe to extend above the structure roof line to ensure proper vent draft and maximum performance of the 100mm/4" Wind Turbine Ventilator.

b. Position rigid pipe as close as possible to the vent exit on the Envirolet Compost Unit. **Again, it is very important to avoid any 90° bends in your vent installation.**

c. Attach rigid pipe securely to wall from just above Envirolet Compost Unit entire way up wall to above roof line. Each installation will vary significantly, depending on location requirements. **For added performance insulate all rigid vent pipe.**

4. Connect Flexible Vent and Rigid Pipe

a. Connect the flexible vent with supplied (Scandinavia only) 110mm Coupling to rigid pipe.

5. Attach Wind Turbine Ventilator

a. Attach the 4"/100mm Wind Turbine Ventilator to the top of the rigid vent pipe using straight coupling (not supplied).

b. Secure the Wind Turbine with silicone sealant and at least 3-4 tapping screws (not supplied).



TYPICAL VENT UP SIDE WALL



IMPORTANT

Extend the 100mm/4" rigid vent pipe higher than 0.9m/3' minimum for any installation surrounded by high trees, hills, other structures and/or with a high roof peak and/or located in a valley.

6. Seal All Vent Connections

a. Seal all vent connections with silicone sealant. This is an important step because it will help prevent any odour leakage. Even a small hole can lead to odour escape, so please double check.

7. Install Drain

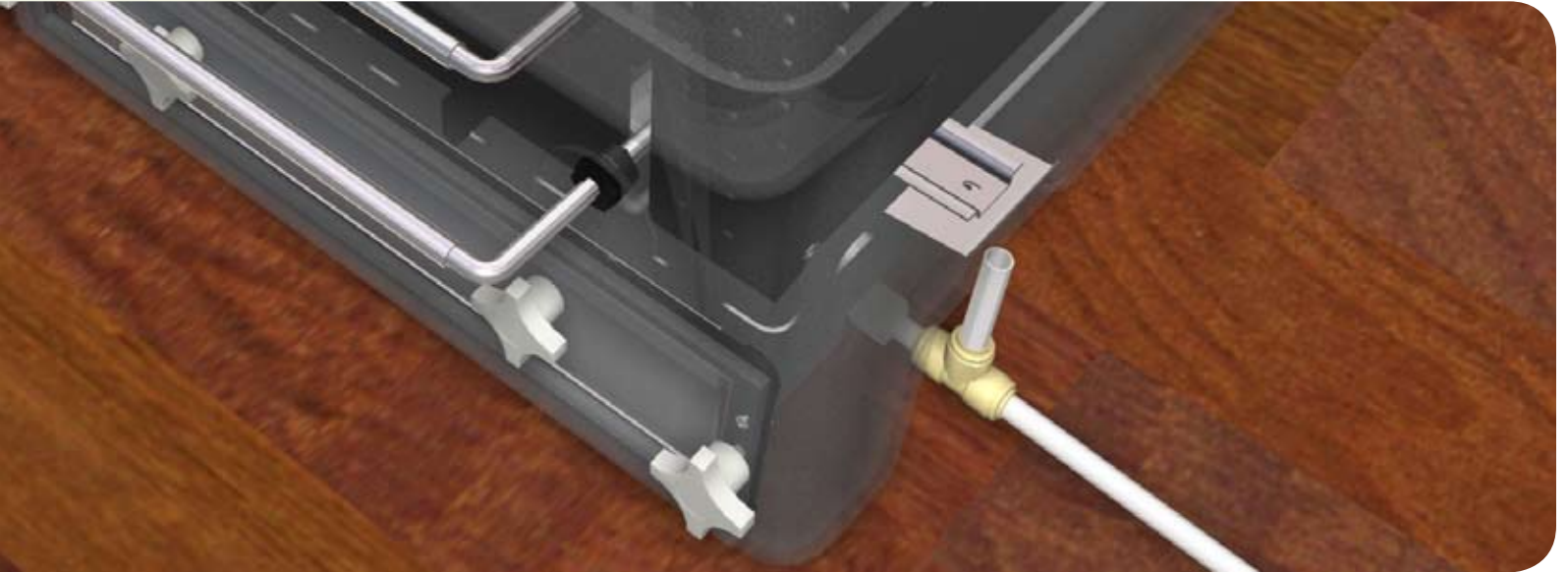
- Connect one side of “T” portion of quick connect breather “T” to 13mm/1/2” drain (152cm/5’ included standard) line that exits compost tank (right-hand side when facing tank).
- Important: Make sure open part of “T” (middle) is facing up to prevent air-lock.** See Figure 1 (this page) and Figure 2 (next page).
- Connect other side of “T” to length of 13mm/1/2” drain line.
- Place end of drain line to acceptable drain site (leach field, holding tank, etc.). Make sure there is a gravity drop the entire path from composting tank drain exit to drain site.
- Insulate drain line if there is a chance of freezing.



IMPORTANT

Please be sure to connect excess fluid drain to an acceptable drain site, according to local regulations.

FIGURE 1



8. Connect Three Components of System

Once all three components (VacuFlush Toilet, Vacuum Generator, Compost Unit) are in place, you are ready to connect them! **Please continue to next section to read about connecting the components.**



IMPORTANT

Do not attach Envirolet Compost Unit to floor/ground until completing system set-up (in next section).



FIGURE 2

**C**

CONNECTION & SET-UP

**VF**

Please read this section carefully.



IMPORTANT

Follow all safety guidelines before connecting and starting your Envirolet VF system.

Installation is almost complete! Now you have to connect the three system components to create the complete VF System. Please follow these steps carefully.

1. Connect VacuFlush Toilet to Vacuum Generator

- Connect one end of 1.5" drain hose to discharge (rear, bottom or side depending on model) on VacuFlush Toilet. Follow VacuFlush instruction manual.
- Use 2 x Gear Clamps for tight fit.
- Put 1.5" drain hose through bathroom floor or wall, depending on your installation.
- Connect other end of 1.5" drain hose to Vacuum Generator Unit drain inlet.
- Use 2 x Gear Clamps for tight fit.

Make sure all connections are sealed tight. VacuFlush Toilet and Vacuum Generator should ideally not be more than 10-20' apart maximum.

2. Connect Vacuum Generator to Composting System

- Insert small end of 38mm/1.5" white plastic reducer coupling inside 38mm/1.5" drain hose.
- Use 2 x Gear Clamps to seal tightly.
- Select left, right or top drain entry on Envirolet Compost Unit. This is where the drain hose will enter composting unit.
- Connect white plastic coupling end of 38mm/1.5" drain hose to selected drain inlet on Envirolet Compost Unit.
- Secure coupling with silicone or PVC solvent to ensure proper seal (and prevent liquid or odour leak).
- Ensure drain cap covers are secured tightly on unused drain inlets on Envirolet Compost Unit.**
- Connect other end of drain hose to Vacuum Generator Unit drain inlet.
- Use 2 x Gear Clamps for tight fit.

Make sure all connections are sealed tight. Vacuum Generator and Envirolet Compost Unit should ideally not be more than 10' apart maximum.

3. Fasten Vacuum Generator Unit and Compost Unit to Floor

- a. Fasten Vacuum Generator Unit to floor/ground to prevent movement with floor mounting brackets found on unit.
- b. Fasten Envirolet Compost Unit to floor/ground to prevent movement with floor mounting brackets found on unit.

4. Connect Vacuum Generator to 12v Power Supply

- a. Connect Vacuum Generator Unit to 12V Power Supply Unit (not included in all areas). Refer to included installation directions with power supply unit.

5. Connect Composting System to AC Electric Power Supply

- a. Connect Envirolet Compost Unit to approved and certified 230VAC power receptacle.

Be sure to follow all safety instructions.



**S**

VF START-UP & OPERATION

**VF**

Read this before using.



WARNING

Please follow all safety guidelines when using your VF system.



DO NOT ADD!

The following should not be added to your VF system for safety, operation and performance:

1. Flammable materials (cigarettes, matches, gasoline, hot ashes, etc.)
2. Harsh chemicals (bleach, toilet bowl cleaner, detergents, septic tank chemicals, anti-freeze, etc.)
3. Oils or Greases (cooking oil, motor oil, grease, cooking fats, etc.)
4. Meat bi-products
5. Female sanitary products
6. Grey water (sink water, shower water, dishwasher water, etc.)

Only add black water (waste water) or other additives if directed.



RATED CAPACITY

Your Dometic Envirolet VF 230VAC Electric System has a rated capacity of 8 users/day for full-time use and 10 users/day for vacation type use. Do not use above this rated capacity.

Operation is Easy

Your Dometic Envirolet VF Vacuum Composting Toilet System is easy to operate. Please follow all directions for proper performance.

Be sure to follow all safety precautions listed in this manual. Complete installation before beginning Initial System Start-Up.

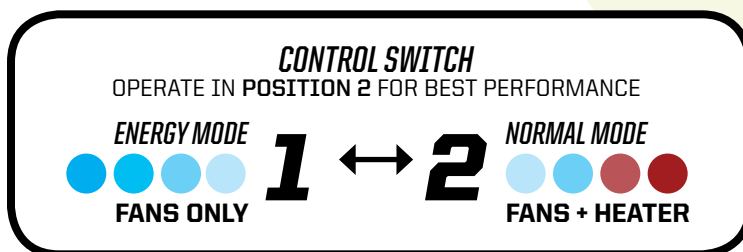
1. Initial System Start-Up

- a. Add Premix Starter Kit to Envirolet Compost Unit (tank). Remove Service Panel to add. Spread contents as evenly as possible over Paper Mat in system. (If Paper Mat was accidentally removed, please spread single-ply toilet paper over Manifold Grid. Be careful to avoid Mulcherator cutting blades.
- b. Next add Shock Soil. Place on top of Starter Kit.
- c. Replace Service Panel.
- d. Turn Control Switch to Normal Mode in Position 2. System should be left in Position 2 for best performance. More about operation modes in **Daily Operation**.
- e. If system is not plugged in, plug it in now. Fans will start to turn. Turn power on to Vacuum Generator as well.

Your Envirolet VF System is now ready to use! **Please follow all operation guidelines for proper system performance.**

2. Power Control

Your Envirolet VF 230VAC Electric system is equipped with a 2-Position toggle power Control Switch that controls the electric components in the Envirolet WID (Works-in-a-Drawer) Box. The switch is located on the Top Panel of the Compost Unit.



POSITION 2 - NORMAL OPERATING MODE

Position 2 operates both fans (2) and a thermostatically controlled heater.

Keep the control toggle switch to Position 2 for normal everyday use. The heater is thermostatically controlled and will turn on and off automatically as required.

POSITION 1 - ENERGY MODE

When leaving the system (e.g., from weekend-to-weekend) you can move the Control Switch to Position 1 when the toilet will not be in use. This will conserve energy while maintaining keeping the Automatic Six-Way Aeration™.

Position 1 operates the dual fans (2) only. Heater does not operate in this mode. This mode helps maximize performance (aeration & evaporation) when you are absent and is highly recommended (when you are not using your system for short periods of time 1 to 4 weeks. **It is important to remember that your system should be left in Position 2 all or most of the time for best performance.**

OFF

For extended periods of non-use (more than 4 weeks) turn system off by disconnecting the power plug.

It is not advised to use the system with the power off. Even though the Wind Turbine Ventilator will continue to draw air from the system, the static fans can create an impedance in the vent line.



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VF OPERATION CONT... DAILY & ONGOING



VF

Operate and maintain system.

3. Daily Operation

There are a few daily operating requirements to maintain a properly running system. Be sure to follow these directions carefully. Refer to handy Operation & Maintenance Chart on page 33 for quick reference.

a. USE WITHIN RATED CAPACITY

For proper performance, be sure to use system within rated capacity. The 230VAC Dometic Envirolet VF System can handle up to 8 people/day for full-time use and 10 people/day vacation type use.

	USERS	USES		TOTAL USES
Full-Time Use	8	3	=	24
Vacation Use	10	3	=	30

b. USING THE VACUFLUSH TOILET

Use toilet and flush using foot flush (as directed in instructions included with VacuFlush Toilet). Try to use minimal water when possible. Vacuum Generator requires approximately one minute to recharge between flushes.

c. ADD 1/2 CUP PEAT MOSS (OR SIMILAR ADDITIVE)

When the system is in use, **add 1/2 cup of peat moss* per person per day** to your Envirolet VF Compost Unit. Be sure to add through the Service Panel on the Compost Unit and not through the toilet to keep peat moss dry. Peat moss keeps waste in the system from becoming too hard, absorbs water and helps visually cover any exposed waste in the system. Most importantly, it also adds natural microbes that help convert the waste to compost.

****NOTE ABOUT PEAT MOSS ALTERNATIVES***

Other similar additives including cocoa shells, wood shavings (not cedar), coconut husks, etc. can be added instead of or in addition to peat moss if peat moss is not readily available locally.

d. USING TOILET PAPER

Regular single-ply white, toilet paper can be used with your Envirolet VF and will break down during the composting process. If toilet paper appears dry (rare in a low flush system) or “bunches up,” then just spray the toilet paper with water to help break it up.

Biodegradable rapid-dissolving toilet paper will offer even better results in



4. Every 2 Weeks

There are a few important things to add to your system periodically (every 2 weeks).

a. ADD COMPOST ACCELERATOR

Every two weeks, **add 1 tablespoon of Compost Accelerator** with a warm glass of water to the Compost Unit. Add through the Service Panel on the front of the Compost Unit. **Compost Accelerator will accelerate the composting process and is an important maintenance requirement.**



b. USE AERATOR BAR

You can use the Aerator Bar (more details below) often, but please try and use at least every two weeks. Read more about the Aerator Bar in section 5.

c. ADD DARK, RICH BLACK SOIL

Add small amounts of rich, black soil (or other additives if rich black potting soil is unavailable such as sawdust, wood shavings (not cedar), etc.) to your system for improved composting action. Add through the Service Panel on the front of the Envirolet Compost Unit.

TIP: WET OR DRY

If compost appears too wet (“soupy”) then add and mix more additives until compost is dry. If compost appears too dry (clay-like) then spray water evenly over compost to moisten. Refer to Troubleshooting for more tips.

5. Using the Aerator & Rake Bars

The Envirolet Compost Unit of your VF System is equipped with an **Aerator Bar** (top) and a **Rake Bar** (bottom).

These two handles located on the front of your system operate the Aerator and the Rake inside the system.

The Aerator is a series of blade-like and serrated cutters (see image below) that will help break up & mix the compost in the system.



The Aerator helps to aerate the compost as well as assist in the distribution of the waste evenly across the system. Simply pull the Aerator Bar “in & out” several times to operate. You can move the Aerator back and forth as many times as you wish.

The Rake Bar is a series of cutters with tiny rakes attached. The Rake Bar (bottom) is used to rake composted material down into the soil collecting tray when emptying. See Emptying section for more details.

6. Notes on Winter Operation

Your Dometic Envirolet VF system uses water to flush and therefore care must be taken before using in winter due to concerns with freezing.

If you do intend to use your system in the winter or at temperatures below freezing (-0°C/32°F) or close to below freezing, please ensure that all components are well insulated, kept dry and heated to prevent freezing for performance and safety. This includes VacuFlush Toilet, Vacuum Generator, Envirolet Compost Unit, venting system and all drain lines/connections. Refer to VacuFlush and Vacuum Generator manuals for more specific info on winterizing these components.

Note: Envirolet Compost Unit will not be damaged if left unheated over winter during non-use. It is made from durable polyethylene plastic and will not crack or break.

Please contact authorized technician for more help regarding winter use.



WARNING

Do not add anti-freeze or other chemicals to prevent freezing. This will harm the composting process and require complete system clean-out and re-start.

**E****EMPTYING YOUR VF****VF**

How to empty your system.



IMPORTANT

Do not use your Envirolet VF system for **at least 48 hours** before emptying to allow system to dry as much as possible.

Emptying the Envirolet VF is a fast and easy process. Emptying involves using the Rake Bar to empty the composted material down into the soil collection tray.

1. Typical Emptying Times

Emptying of your Envirolet VF can be as little as once per year, depending on type and frequency of use. However, heavy use may require emptying more often. Typical use and emptying periods:

Vacation Type Use (cottage, cabin): 1-2 times per year
Full-Time Use (home, year-round cottage): 2-3 times per year
Commercial Use (construction site, golf course): 2-4 times per year

2. Typical Emptying Times

If the mass in the Compost Unit is not doing down or if it appears to be full, then it is time to empty.

3. Before you Empty

- a. Please read emptying instructions carefully before you begin emptying process.
- b. **Do not use Dometic Envirolet VF Composting System for at least 48 hours before emptying.** This is to allow for liquid waste and water recently added to system to have a chance to evaporate and/or drain from system. **If possible, leave the system for at least 72 hours without use before emptying. This is recommended.**
- c. During 48-72 hour wait period, please leave system running in **Position 2/Normal Mode** (Fans + Heater Operation) to speed up drying and evaporation process.

Systems used in residential homes (all-year round) will have to empty the system about once every 3-6 months.

The need and time to empty your system will be indirect relation to the frequency. An indication that you need to empty your system is when the compost in the toilet system no longer reduces in height (from removal of water by evaporation and microbe-action).



IMPORTANT

Please use common sense and all normal sanitary precautions when emptying system. Wash hands thoroughly after emptying.

4. How to Empty

CHECK SYSTEM

a. Before emptying, check inside Compost Unit through Service Panel for wetness. Please follow empty wait time recommendations before emptying (in previous section).

If the mass inside your Envirolet Compost Unit still appears very wet, add as much peat moss as needed to absorb the excess moisture and allow more time for evaporation prior to emptying the compost.

REMOVE BOTTOM PANEL

b. To empty your Envirolet VF it is necessary to remove the Bottom Panel for access to the soil collecting tray. (*You may also need to remove the Bottom Panel to clean or inspect your 2-Stage pre-sediment filter.*)

OUTER KNOBS

c. Turn the 2 **outer knobs** on the Bottom Panel counter-clockwise until they are **completely removed**.

INNER KNOBS

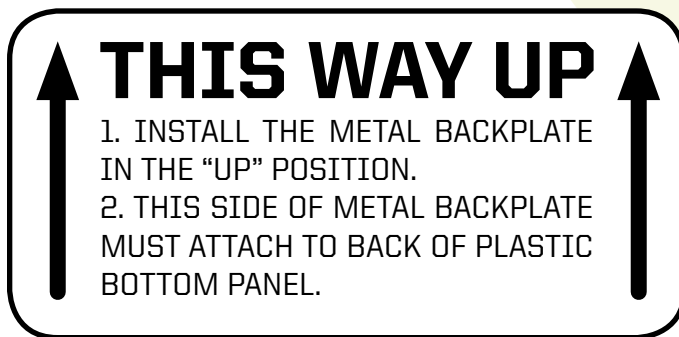
d. **Loosen** the 2 **inner knobs** on the Bottom Panel counter-clockwise. It is best not to remove the inner knobs completely.

e. With the 2 inner knobs still attached, but loose, push with your thumbs on the inner knobs to bring the plastic Bottom Panel towards yourself until it rests flush with knobs. Lower the panel downward slightly to bring the metal Backplate through the opening in the system. Your Bottom Panel should now be removed. *Take note of label on Metal Backplate (Figure 1) and re-install in same position when re-attaching.*

PULL OUT SOIL COLLECTING TRAY

f. Ensure that the soil collecting tray is empty by pulling it out. If Envirolet has been use recently, liquid may be evident.

FIGURE 1



PUT SOIL COLLECTING TRAY BACK IN SYSTEM

g. Push empty Tray back into position.

USE RAKE BAR

h. Begin emptying compost by agitating the Rake Bar (bottom) on system front. This will release the composted soil into the empty tray. Check the Tray often to alert you when it is full. Depending on volume, you may have to empty the Tray more than once.

Rake Bar Note

The Rake Bar is a series of blade-like cutters with tiny rakes attached. It only pulls “in and out” approximately 5-8cm (2-3”).

REMOVE TRAY AND DISPOSE OF COMPOST

i. Dispose of the emptied compost properly, according to local guidelines. In most cases it can be disposed of in your flower garden, buried, sprinkled or in the forest. In some areas or jurisdictions you may be required to dispose of compost with your regular trash.

TRAY





FILTER TUBE

CLEAN TRAY AND FILTERS

j. Emptying is a good time to clean the tray and the 2-Stage Pre-Sediment Filters (standard on all Envirolet VF models). These should be cleaned with a warm soapy water and rinsed prior to putting it back inside your system. Harsh chemicals are not recommended. Filters cloths are located in your tray (back corners) and the Filter Tube is located under your tray.

CHECK GASKET AND REPLACE TRAY

k. Before re-attaching the Bottom Panel, inspect your Bottom Panel Rubber Gasket to ensure it does not have any rips or tears that could cause a leak from your system. **Also, be sure to replace soil collecting Tray for next time.** This is important!

RE-ATTACH BOTTOM PANEL

l. With the 2 inner Knobs **still attached**, but loose, push with your thumbs on the Knobs to bring the plastic Bottom Panel until it comes flush with the Knobs.

m. Place the metal Backplate downward through the opening in the System. Be sure that the “L” edge of the metal Backplate is on the top and the “C” edge is on the bottom. These edges point towards you when they are on correctly.

n. Line up the panel evenly and turn the 2 inner Knobs clockwise to tighten. Before completely tightening the inner Knobs, insert the 2 outer Knobs and turn clockwise to tighten.

o. Tighten all 4 Knobs. Make sure they are firmly attached. Do not over-tighten.

p. Check to make sure Bottom Panel is completely attached and that there are no air or liquid gaps.

Your Systems is now ready to use again!

T

TROUBLESHOOTING

VF

Something not right?

Please use this chart to help remedy some possible service issues. If you cannot find what you are looking for or require further clarification, please contact us right away. Most issues are better solved right away.

Outside Odour

Noticeable odour outside (near or around vent or roof).

Possible Causes	Remedy
Poor evaporation	Poor evaporation could be occurring due to a liquid build-up issue. Refer to liquid build-up section.
Overhanging trees	Overhanging trees may affect vent exit air flow. Trim or cut away overhanging trees.
High peak roof causing poor evaporation	A high roof peak may be inhibiting air flow (wind) to the top of the vent. Raise vent higher.

You may also want to try, in combination with above remedies, a Sancor Air Quality Control (AQC) cartridge.

Inside Odour

Noticeable odour inside location of Compost Unit (not inside bathroom where toilet is).

Possible Causes	Remedy
Vent fan not functioning	If the vent fan fails, the blower fan may exhaust air/odour out of unit. Replace vent fan. Refer to liquid build-up section.
Improper sealing of vent connection, Top Panel, Bottom Panel, drain exits, etc.	Check and re-seal vent connections, Top Panel, Bottom Panel, drain exits. Even a small “pin-hole” sized opening or leak can cause odour.
Another exhaust fan competing with system	Another exhaust fan or vent may be drawing air away from toilet area such as a wood-stove, open window, ceiling fan, heater etc. Keep Compost Unit room door and window shut.

Liquid Build-Up

An unusual accumulation of liquid in the system. Keep in mind that the VF system uses water to flush so there will almost always be some liquid in the system.

Possible Causes	Remedy
Electrical problem	Inspect electric WID Box for electric issues or failure. Failed fans or heater can cause liquid to build-up.
Improper venting	An angled vent can create liquid build-up by not allowing for proper evaporation. A straight vent is best. Never install a 90° bend in the vent.
Vent obstruction	If anything is in the vent (cob webs, twigs, animals, etc.) it can block it and reduce evaporation. Check and clear vent
Wind turbine ventilator not turning	Check turbine to see if anything is preventing it from spinning. Check that the turbine is getting air (wind) to it and that it is not in a “dead air spot because of the roof or overhanging trees.
Improper operation	Are too many people using the system? Stay within rated capacity.
Drain line blockage or drain is not gravity fed	Check that drain line is not blocked or pinched. Check that air lock vent on Quick Connect “T” is facing up and is not blocked. Check inside system to determine if filter is blocked. See Filter and Drain Blockage. Ensure drain is gravity fed to drain site its entire path.
Heavy use (no drain line used)	All VF systems must have drain installed and in use.
Cold installation room location or floor temperature	Is the floor really cold? Try warming room and/or raising system off ground to allow for less cold floor heat loss.
Too much additional liquid added.	Do not add any extra liquid (sink, shower, etc.) to system.
Composting unit not insulated (if used during cold weather or winter)	It is not recommended to use VF system in winter unless location of Compost Unit plus all drains, vent, etc. are heated or very well insulated.
Another exhaust fan competing with system	Another exhaust fan or vent may be drawing air away from toilet area such as a wood-stove, open window, ceiling fan, heater etc. Keep Compost Unit room door and window shut.

Fan Failure

Your Envirolet VF has 2 Fans that are essential for proper aeration, evaporation and performance. If one fails, it should be replaced immediately. Fans are mechanical moving parts so they can fail. Signs that a Fan has failed include inside odour, low evaporation, and a “whizzing” sound or no sound from Fan. The Fans are located in the electric WID (Works-in-a-Drawer) Box below. **Contact an authorized technician and completely shut off power before opening Top Panel. For your safety, do not make any modifications or changes without first contacting an authorized technician.**

Possible Causes	Remedy
Vent Fan (left side) failure	If you have inside (where Compost Unit is housed) odour, this is an indication that the Vent Fan has failed. Contact dealer or contact customer service help line for replacement instruction.
Blower Fan (right side) failure	Low evaporation rate is a sign that the Blower Fan has failed. Contact dealer or contact customer service help line for replacement instruction.

Bottom Panel Leak

The Bottom Panel on the VF is sealed. Any leakage from it is not normal. If you do have a leak, do not open the Bottom Panel until you figure out the cause of the leak to avoid liquid spill.

Possible Causes	Remedy
Knobs on Bottom Panel are not fastened on tightly enough.	Tighten Knobs on Bottom Panel.
Bottom panel is on upside down	To check if the Bottom Panel is on upside down: there is a metal plate attached to the backside of the Bottom Panel. Each end of the metal plate (top and bottom) has a “curve.” One is shaped like an “L” and one is shaped like a “C.” Make sure that the “L” shaped edge is on top. Also, use the arrows on the sticker found on the back of the metal plate: <div data-bbox="727 575 1406 905" data-label="Image"> </div>
Bottom panel gasket needs to be replaced	If the Bottom Panel Rubber Gasket is ripped or has a tear it should be replaced.
Rubber washers need to be replaced	Replace rubber washers if they are ripped or damaged.
Heavy use with no overflow drain connected or a clogged drain line	Follow rated capacity (user) guidelines. Make sure drain line is not clogged or blocked. Refer to Liquid Build-Up section. Note, to determine if your drain line is being blocked by debris, you will need to open the Bottom Panel. Please do not do this unless it is a last resort for troubleshooting if you have a leaking panel.
Excess liquid being flushed	Flush with the most minimal amount of water as possible.

Aerator or Rake Bar Issues

Aerator Bar is difficult to move. This can be caused if the material in the system becomes too dry. Some of the remedies can also be used for Rake Bar issues.

Possible Causes	Remedy
Low system use	Material may be dry because of low use. Move Aerator Bar (top) back and forth to help break apart the material. Add water (or use toilet) to add moisture.
Infrequent use of Aerator Bar	Add water (or use toilet) to add moisture. Use Aerator Bar more often.
Infrequent addition of peat moss or Compost Accelerator (microbes)	Material may be “clumping.” Use a garden tool or poking device to break up material from Service Panel.

Drain or Filter Blockage

Your Envirolet VF is fitted with a 2-Stage Pre-Sediment Filter. There are 2 filters in the Tray and a Filter Tube located in the bottom of the system. These filters prevent most solids from exiting system via 1/2" Drain Line. Filters, by design, may clog at some point as they prevent solids from exiting system.

Possible Causes	Remedy
Filters or drain blocked	If 1/2" Drain Line or Filters are blocked then either rinse, replace or use a bicycle air pump to blow air down through "T" breather tube Connection located on Drain Line to discharge blockage.

Composting Issues

Composting is a natural process. Your Envirolet VF works to create an ideal environment for composting to occur. If the composting process is not happening properly, there are usually some easy remedies. Indications of improper composting are wet or mud-like mass, clay-like mass, insects present in mass, strong odour from mass or clumping. Composting needs air, heat and moisture. Treat your system like a garden!

Possible Causes	Remedy
Compost too dry	Spray water in system.
Not enough additive or bulking material being added	Add more peat moss, Compost Accelerator or other suggested additives.
Fan failure	Fan failure will reduce aeration. See Fan Failure section.
Chemicals or other harmful substance introduced to system	Stop adding harmful material immediately. Complete system emptying and re-start may be required in extreme cases.
Lack of heat	Heat is needed for composting and evaporation. Check Heater (and thermostats), insulate or heat room and floor where Compost Unit is housed. Keep ambient temperature above 12°C (55°F).
Lack of evaporation	Check electric components (fans, heater, etc.), venting system and ensure Service Panel air flow is well-secured to unit and is not blocked. Make sure room/shed where Compost Unit is properly vented.
Over use	Use within rated system capacity.
Clumping	Use poker or garden tool to break-up material. Add more additives.

Insects

As composting is a natural process involving natural tiny bacteria, heat and moisture it only makes sense that insects arrive too, right? Well, yes and no! If insects appear and are bothering you or disturbing, it is easy to get rid of them! Luckily, if they do appear it is rare for them to be anywhere near the inside bathroom toilet.

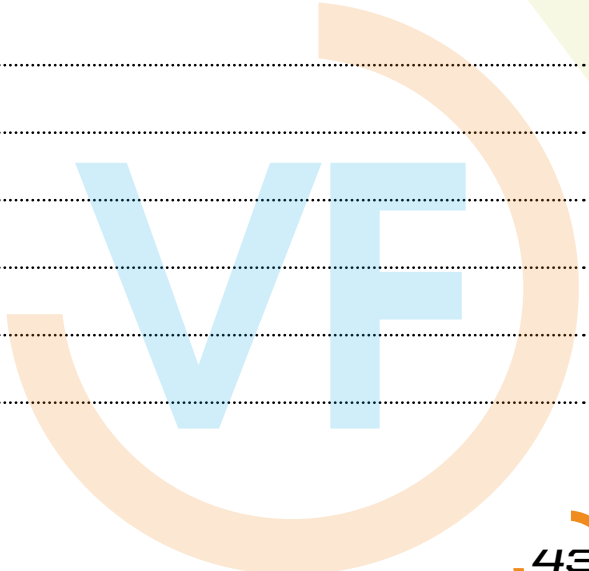
Possible Causes	Remedy
Insects normally enter the system through accidental entry into your home or cottage (through a window, un-screened area, or door). They can be present in organic products (peat moss) or kitchen waste added to your system. One insect entering your toilet can multiply rapidly. Insects or eggs can be present in peat moss.	Add Diatomaceous Earth or any other organic pesticide to the system, which can be purchased from most pool supply stores and garden centres. It is a yellowish-white powder. To add, sprinkle a generous amount of Diatomaceous Earth on top of the solid waste in your composting unit for 3-5 days in a row. The insects should disappear by day 2 or 3. House and Garden Raid or any other indoor/outdoor spray pesticide may be more effective in killing fly insects. Spraying a small amount of insecticide will not harm your system, but do not add too much as it may disrupt the composting process.

NOTES

Use these pages for notes and to keep track of any service.

A series of horizontal dotted lines for writing notes, spanning the width of the page.





BUZZ!

Envirolet Buzz is the Envirolet Composting Toilet Blog.
Send installation photos to buzz@enviroletbuzz.com!

CONTACT US

Contact your local dealer for service, parts and accessories



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