



# SaniTEE® Wastewater Screens Installation & Service Manual

FOR USE WITH  
*SNT416, SNT418, SNT818, SNT 838, SNT1618, and SNT1638*



# INSTALLATION & SERVICE MANUAL

## FOR USE WITH

SNT416, SNT418, SNT818, SNT838, SNT1618, SNT1638

## GENERAL INFORMATION

If you have questions regarding any Bio-Microbics products, please contact us:

**800-753-FAST (3278) or (913) 422-0707**

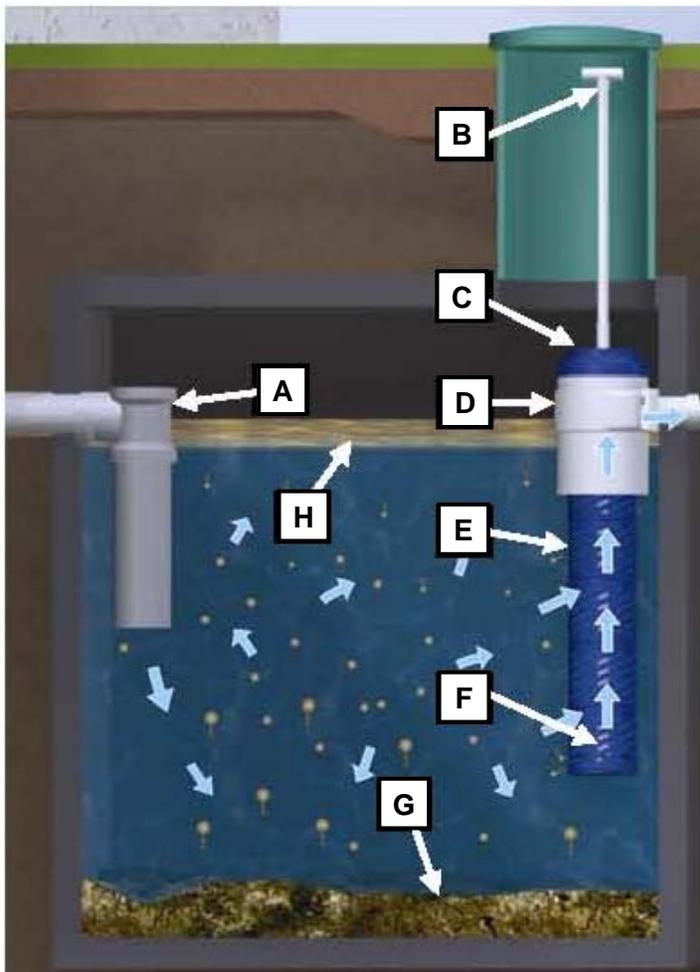
**e-mail: [onsite@biomicrobics.com](mailto:onsite@biomicrobics.com)**

## DELIVERY INSPECTION

SaniTEE® screens are carefully manufactured and inspected at the factory prior to shipment. Before and after uncrating the unit, check the packaging for signs of shipping damage. If there is evidence of damage or abuse, notify Bio-Microbics, Inc. at (800) 753-3278 or (913)422-0707.

## About SaniTEE® Wastewater Screens

SaniTEE® self-cleaning wastewater deflection screens (commonly known as septic tank effluent filters) are designed to reduce suspended solids discharged in septic tank effluent by promoting natural sedimentation and excluding gas-lifted particles from entering the outlet pipe. Additionally, SaniTEE®'s patented keyhole weir helps to attenuate surge flows, delivering a more consistent flow for further treatment or dispersal. These features help extend the life of a drain field, reduce orifice clogging in effluent disposal systems and allow flexibility in the use of different types of effluent pumps.



On!

## GENERAL LAYOUT

A.	Tank Inlet
B.	Swab Handle
C.	Cap
D.	Outlet Diverter (not included with SNT416 & 418)
E.	SaniTEE® Screen
F.	Interior Cleaning Swab (Exterior Swab included with SNT818, 838, 1618 & 1638)
G.	Settled Sludge
H.	Scum Layer

**WARNING**

*a septic tank. If any contact with wastewater, immediately wash and disinfect all exposed areas and contact personal physician. Failure to do so could result in severe sickness or death.*

## LOCATION

**WARNING**

*Hazards exist in confined spaces such as a septic tank. All confined space precautions must be followed if entering a tank. Always keep tank openings covered during storage and installation*

SaniTEE® screens are located on the outlet(s) or baffle walls of septic tanks and may be located in the same position relative to the house and water supply as any conventional septic system. However, some basic guidelines should be followed:

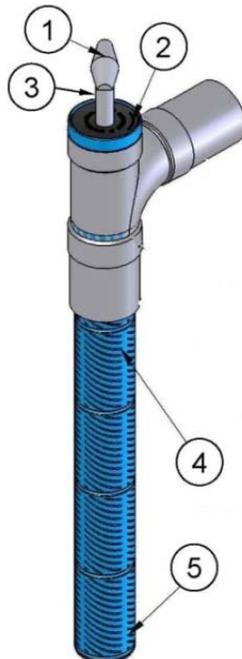
1. Avoid locating any septic tank in high groundwater areas where the tank could possibly float up and become dislodged.
2. The SaniTEE® device should be placed in the manhole as close as possible to the tank's outlet end. This manhole should have a minimum diameter of 18".
3. The SaniTEE® device should be placed in the center of this manhole.

## MATERIALS REQUIRED FOR INSTALLATION

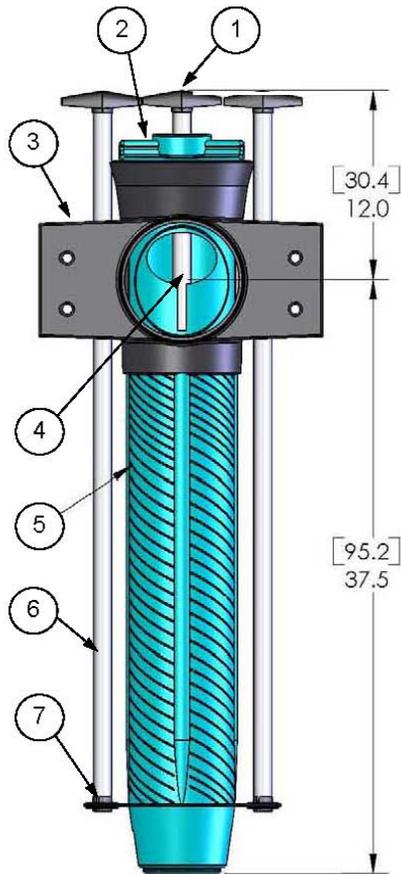
*Note:* other tools may be needed to complete installation.

1. Septic tank that meets all applicable requirements and standards
2. Optional ¾" [19 mm] schd 80 PVC pipe & fittings to extend swab handles.
3. PVC saw
4. PVC primer and glue (weather appropriate)
5. Outlet sealing material or gasket (may be included with septic tank)
6. FOR SaniTEE® SNT416 and SNT418 ONLY: Outlet tee or sweep (schd 35, 40 or 80)
7. FOR SaniTEE® SNT818, SNT838, SNT1618 and SNT1638 ONLY: Anchor bolts for securing SaniTEE® top diverter to the tank.
8. Hammer drill and masonry bits

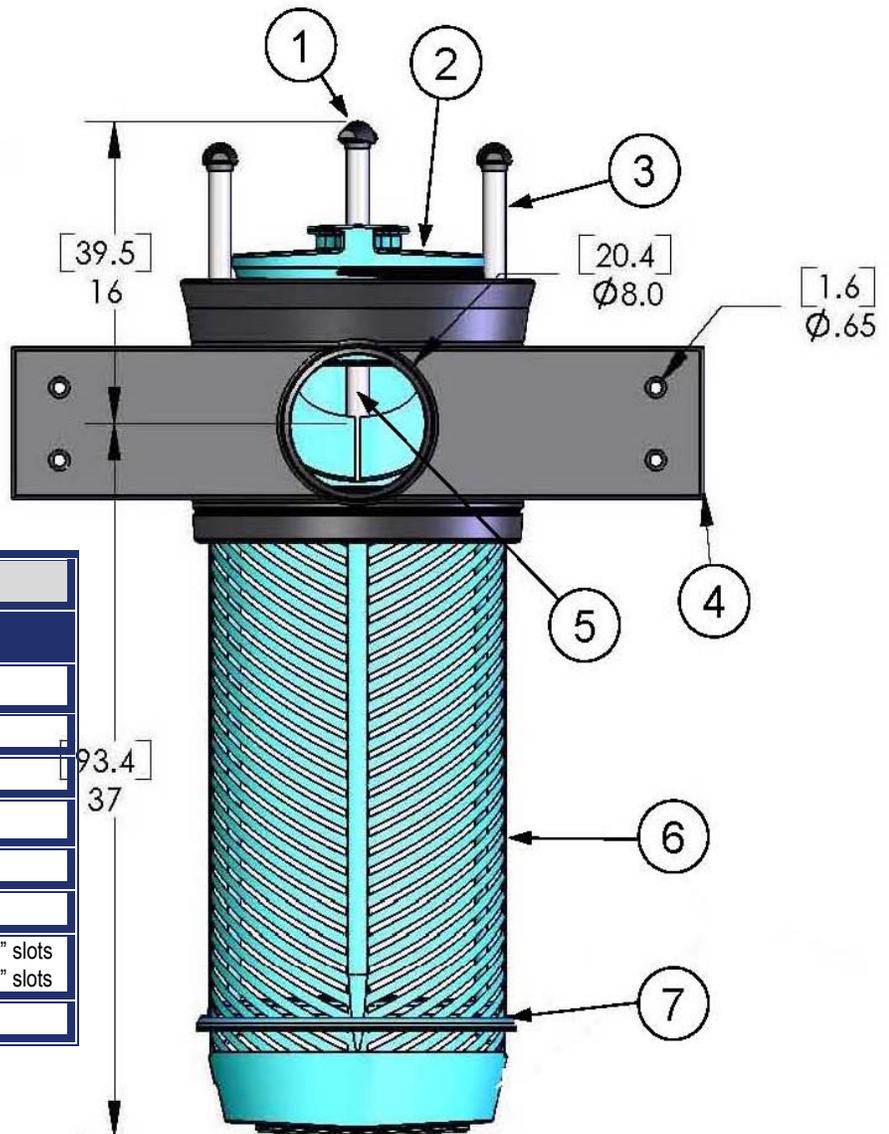
## SYSTEM COMPONENTS



SaniTEE® 416 & 418		
SUPPLIED EQUIPMENT		
	COMMON NAME	PART NUMBER
1	Handle	180-HAN3/4
2	Lid	180-TC
3	Swab Shaft	180-SPVC3/4
4	4" SaniTEE® Body	175-1/16FINSNTE (416) 1/16" slots 175-1/8FINSNTE (418) 1/8" slots
5	Internal Swab	180-4SWAB



SaniTEE® 818 & 838		
SUPPLIED EQUIPMENT		
	COMMON NAME	PART NUMBER
1	Handles	(3)180-HAN3/4
2	Top Cap	180-CAPSTPPH8
3	Top Diverter	180-DT8
4	Internal Swab	180-SWBINT8
5	8" SaniTEE® Body	180-SANSNMB818 (818) 1/8" slots 180-SANSNMB838 (838) 3/8" slots
6	External Swab Shafts	(2) 180-SPVC3/4
7	External Swab	180-SWBEXT8

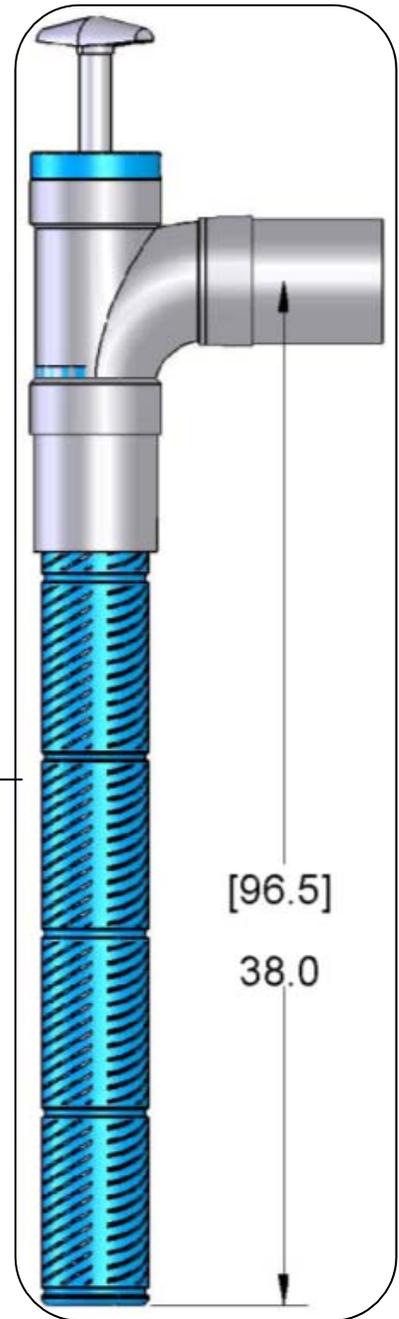
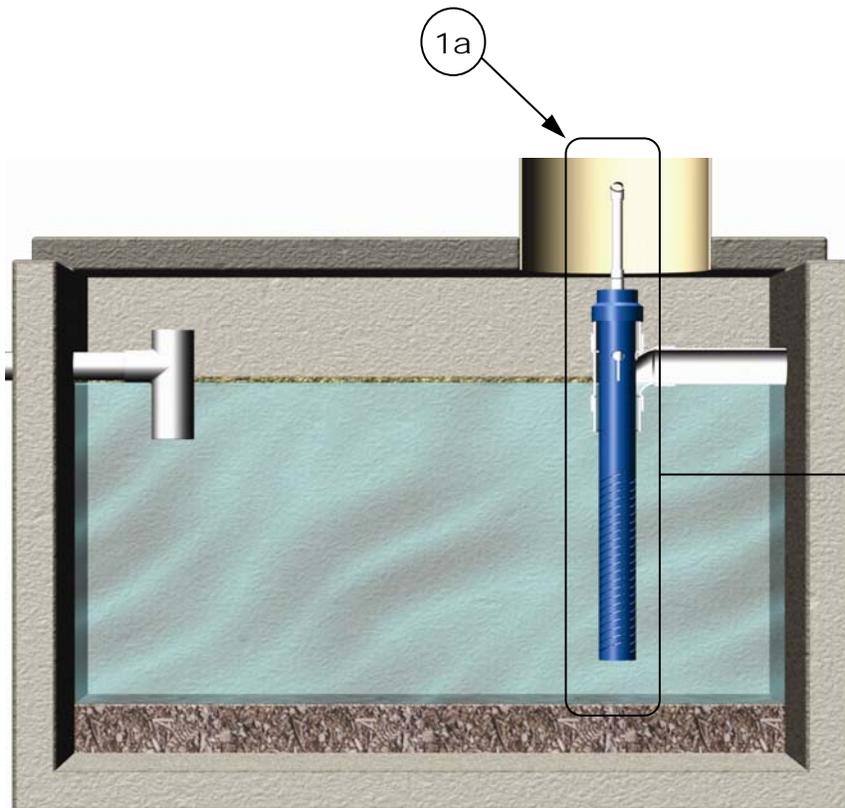


SaniTEE® SNT1618 & SNT1638		
SUPPLIED EQUIPMENT		
	COMMON NAME	PART NUMBER
1	Handles	(3) 180-HAN3/4
2	Top Cap	180-CAPSTPPH16
3	External Swab Shafts	(2) 180-SPVC3/4
4	Top Diverter	180-DT16
5	Internal Swab	180-SWBINT16
6	16" SaniTEE® Body	180-SANSNMB (1618) 1/8" slots 180-SANSNMB (1638) 3/8" slots
7	External Swab	180-SWBEXT16

## INSTALLATION PROCEDURE

### SNT416 & SNT418

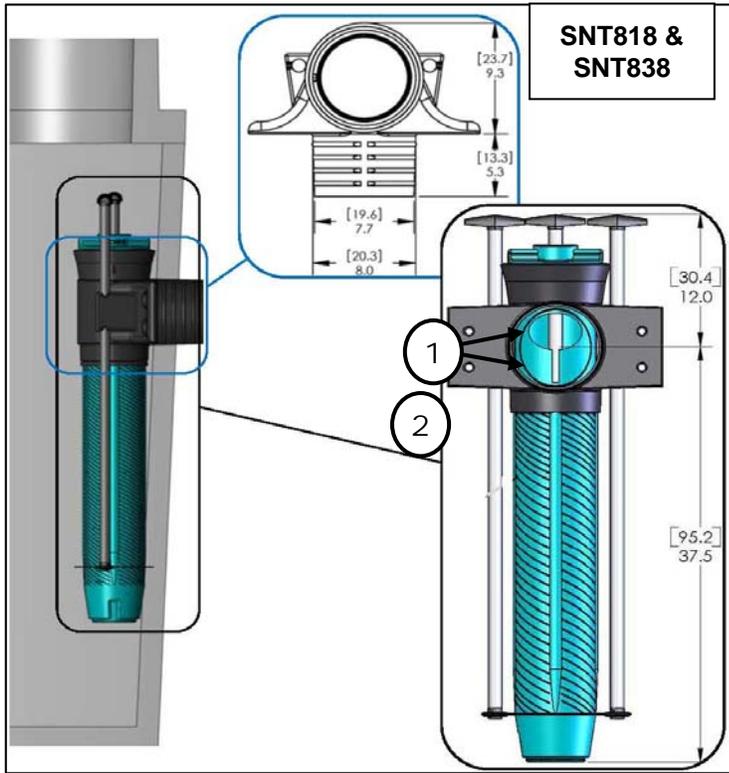
1. A 4" SaniTEE® fits a standard 4" septic tank outlet tee or sweep (Schd 35, 40 & 80). The center of the SaniTEE® MUST be at least 38 inches [96.5 cm] off the bottom of the tank.
  - a. A short section of pipe may be attached to the bottom of the outlet tee to retain floatables.
2. Place the SaniTEE® into the outlet tee. **DO NOT USE GLUE.** The SaniTEE should fit snugly into the outlet tee.



3. **OPTIONAL - EXTENDING SWAB HANDLES** – The exterior cleaning swab pipes may be easily extended using  $\frac{3}{4}$ " schd 80 pipe and matching couplings. Cut  $\frac{3}{4}$ " pipes to the desired length, glue and connect each extension pipe to the existing pipes using slip-to-slip couplings. When completed, glue the supplied swab handle to each pipe end.
4. Reattach the SaniTEE® handle with solvent welding to the  $\frac{3}{4}$ " Schd 80 swab shaft or added extension pipe.

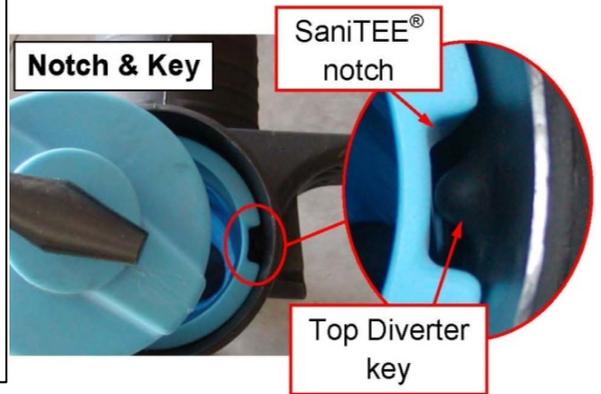
# INSTALLATION PROCEDURE

## SNT818, 838, 1618 & 1638

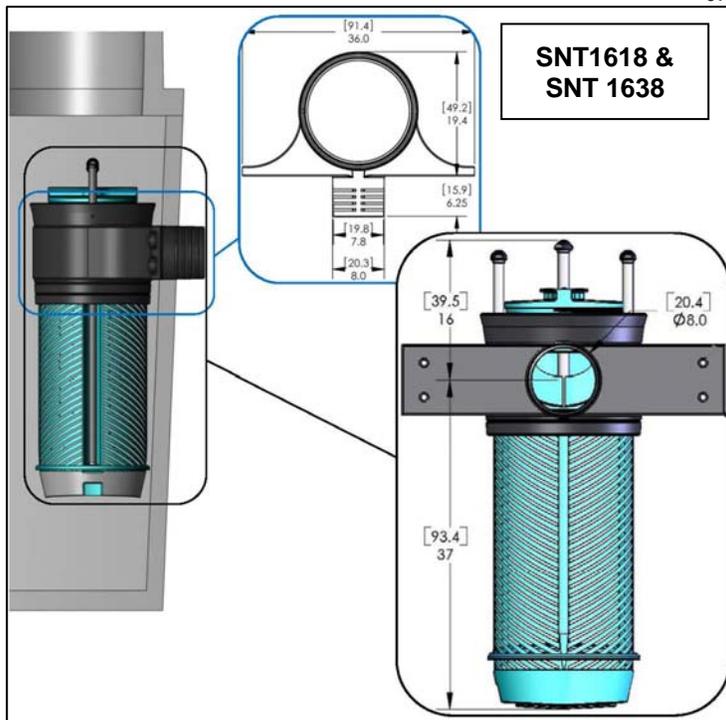


1. Install the Top Diverter using concrete anchor bolts (general rules for anchoring into concrete dictate bolt penetration  $\leq 50\%$  of wall). Assure that it is placed correctly with respect to the manhole and other features of the tank. See the drawings of each SaniTEE model for precise dimensions. Properly seal any areas to prevent leaking.

2. Place the SaniTEE® into the Top Diverter. The SaniTEE® should fit snugly into Top Diverter with the Top Diverter key fitting into the SaniTEE® notch.

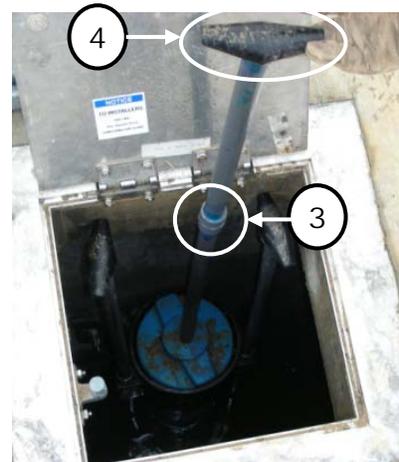


3.



3. **OPTIONAL EXTENDING SWAB HANDLES** – The exterior cleaning swab pipes may be easily extended using  $\frac{3}{4}$ " schd 80 pipe and matching couplings. Cut  $\frac{3}{4}$ " pipes to the desired length, glue and connect each extension pipe to the existing pipes using slip-to-slip couplings. When completed, glue the supplied swab handle to each pipe end.

4. Reattach the SaniTEE® handles by solvent welding them to the  $\frac{3}{4}$ " Schd 80 swab shafts.



## FINAL INSTALLATION INSPECTION & START UP

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It is the responsibility of the installer to ensure that the septic tank containing the SaniTEE® will not float due to hydraulic conditions at the site.

Your local Bio-Microbics distributor may provide installation inspection services. If you have questions, call Bio-Microbics at **800-753-FAST (3278) or (913) 422-0707**.



### WARNING

*Always secure all access covers in place so that people cannot enter the tank, without the use of proper tools. DO NOT use flame or spark near a septic tank's access points. Gases emanating from septic tanks can explode if ignited or deadly if inhaled.*

### BEFORE THE UNIT IS BACKFILLED:

- A. Fill the tank to the normal operating level.
- B. Check for leaks in all water-tight seals.
- C. Backfill the excavation.
- D. Lastly, record all pertinent information at the end of this manual (please note, SaniTEE®s do not have a serial number, but may be used in conjunction with a FAST® system that can be referenced with).

## OPERATION & MAINTENANCE

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**Simple maintenance** – The SaniTEE® should be swabbed annually or cleaned each time the septic tank is pumped. If sewage flow is noticeably slowed by the SaniTEE®, more frequent cleanings may be necessary. For installations other than single-family homes, more frequent cleaning may be necessary. Inspect the SaniTEE® as needed to make that determination.



### WARNING

*Always secure all access covers in place so that people cannot enter the tank, without the use of proper tools. DO NOT use flame or spark near a septic tank's access points. Gases emanating from septic tanks can explode if ignited or deadly if inhaled.*



### WARNING

*Only qualified service staff should open access ports and/or covers. Infectious organisms exist in a septic tank. If any contact with wastewater, immediately wash and disinfect all exposed areas and contact personal physician. Failure to do so could result in severe sickness or death.*

### CLEANING SaniTEE®:

1. Grasp the handle(s) of the cleaning swab and forcefully move up and down several times, extending the entire length of the screen. For the 8" & 16" models, MOVE THE SWAB HANDLES EVENLY. Be sure to clean with both swabs.

### Optional:

If a more thorough cleaning is desired, remove the SaniTEE® out of the outlet/top diverter and rinse the device off. If sludge builds up on the bottom of the SaniTEE® screen or if required cleaning becomes more frequent than usual, check the tank's sludge levels as it may need to be pumped. Good septic system maintenance includes regular removal of sludge. *Check with local officials for recommendations or requirements.*

## LIMITED WARRANTY

Bio-Microbics, Inc. warrants that the SaniTEE® product will be free from defects in material and workmanship for a period of one year from the date of purchase. During the warranty period, if any part is defective or fails to perform as specified when operating at design conditions, and if the equipment has been installed and is being operated and maintained in accordance with the written instructions provided by Bio-Microbics, Inc., Bio-Microbics, Inc. will repair or replace at its discretion such defective parts free of charge. Defective parts must be returned by owner to Bio-Microbics, Inc.'s factory shipping pre-paid, if so requested. The cost of labor and all other expenses resulting from replacement of the defective parts and from installation of parts furnished under this warranty shall be borne by the owner. This warranty applies only to the SaniTEE® screen and does not include any of the plumbing, drainage, septic tank or disposal system. Bio-Microbics, Inc. reserves the right to revise, change or modify the construction and/or design of the SaniTEE® screen, or any component part or parts thereof, without incurring any obligation to make such changes or modifications in present equipment. Bio-Microbics, Inc. is not responsible for consequential or incidental damages of any nature resulting from such things as, but not limited to, defect in design, material, or workmanship, or delays in delivery, replacements or repairs.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESSED WARRANTIES. ANY WARRANTY IMPLIED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS IN EFFECT ONLY FOR THE WARRANTY PERIOD SPECIFIED ABOVE. NO REPRESENTATIVE OR PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY OR TO ASSUME FOR BIO-MICROBICS, INC., ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS.

**Contact your local distributor for parts and service.**



Module System Serial Number: \_\_\_\_\_

System Designer Name: \_\_\_\_\_

Designer Phone: \_\_\_\_\_

Health Official Name: \_\_\_\_\_

Health Official Phone: \_\_\_\_\_

Manufacturer Name: Bio-Microbics, Inc.

Manufacturer Phone: 1-800-753-FAST (3278)

Installed By: \_\_\_\_\_

Installer Phone: \_\_\_\_\_

Maintenance Provider Name: \_\_\_\_\_

Maintenance Provider Phone: \_\_\_\_\_



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