

NATURE'S HEAD

Owner's Guide

Congratulations on your acquisition of a Nature's Head! Although the concept of a composting head (toilet) is not a new one, the unit which you have purchased is the freshest of the new generation of this kind of product. Nature's Head designers, both sailors with many years of boating experience, and their wives—one a research biologist and one an RN, have used earlier versions of composting toilets on their boats. The concept has been refined and reworked to provide you with a more user friendly product which is aesthetically pleasing, more space-efficient, and a more affordable alternative to previously offered models.

Your new Nature's Head will provide you with years of worry-free sanitation solutions without the inconvenience of holding tanks, frequent pump-outs, or smelly portable potties.

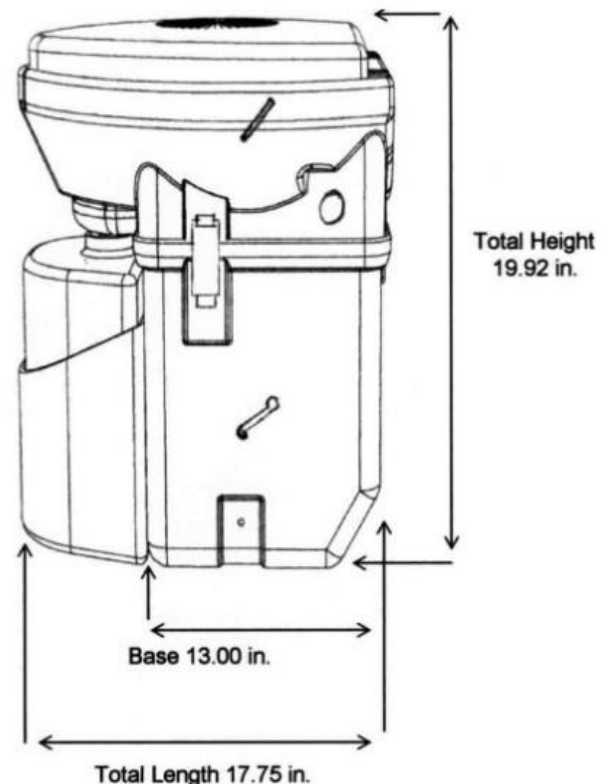
INSTALLATION

LOCATION When locating your new Nature's Head, be sure to allow enough room for the lid to open fully. Also, you must be sure the bowl has enough room to tilt rearward to allow for its removal and for the removal of the liquid tank. Remember that you have to allow enough room for the hose connection and for the handle for the composting agitator. Both of these can be re-located to either side of the unit for ease of installation.

MOUNTING The head will be secured to the floor of your boat, truck, or cabin by the two L-brackets which may be positioned to the inside or outside of the base of the unit as you desire. Mounting screws (or bolts) are not included as various options for mounting are possible. If you choose to mount your unit with the L brackets facing inward in the recesses provided in the base, be sure and use counter-sunk screws or bolts. The holes in the brackets are for a $\frac{1}{2}$ inch bolts or screws. **Do not over tighten the hold down knobs - as you will damage the threads in the base!**

VENTING The unit must be vented to the outside of your cabin whether it is a boat, RV, truck, or vacation property. This helps keep your bathroom smelling fresh, and allows for proper growth of beneficial bacteria which facilitates the composting process.

Solar vents, mushroom vents, or clamshell vents (which are not provided with your head) are commonly used for venting to the exterior. The unit may be vented horizontally or vertically. Hose adapters which connect directly to your head and the outside vent are provided. We will also offer a trim ring to help in installations where a pre-existing vent hole is bigger than the provided connector. The Venting hose provided with the unit will attach directly to the adapters. Clamping is not

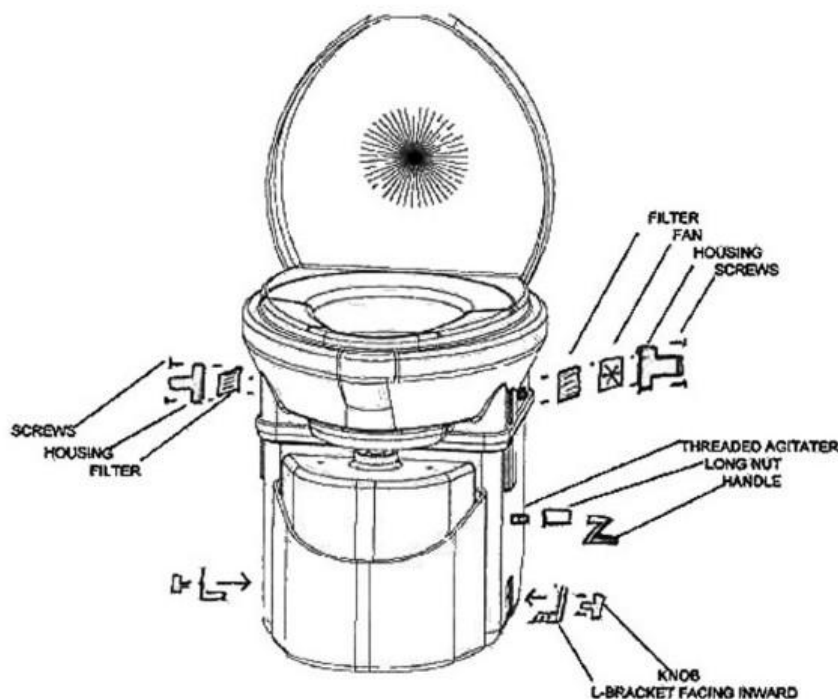


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necessary on the connection for the Head, and normally not necessary on the exterior connector. On an overhead connection, you may find it necessary to clamp this end depending on the amount support you provide for the vent hose. If the hose is supported properly, you will probably not need a clamp. Remember the vent hose must go on the housing that has the fan inside of it. The unit is designed to pull fresh air through the Head and ventilate it outside. If you disassemble the fan housing, always remember to check that the fan is blowing out of the vent before attaching the vent hose.

POWER CONNECTION A simple 12 volt computer style fan drawing less than 1 amp is the only power required for this unit. The power hookup, a single pin attachment with a wire length of 6 feet, is also included. It may be necessary to extend the length of the connecting wire. The fan may also be powered by a 110 volt source with an appropriate power adapter that reduces the power to 12

volts! These power adapters are available through many electronic supply houses and will be available through Nature's Head Inc. As with all electrical connections, be sure your Head is on a fused circuit. (The fuse should be no less than 2 amps and no more than 5 amps.) This unit can also be installed in a completely powerless installation by using a solar vent on the roof or cabin top and attaching the vent hose underneath. Be sure and use a solar vent with battery back-up so your Head will vent continuously. The fan can be left in the unit if you choose this option.



INSTALLATION TIPS If installation of the ventilating hose is better suited to placement on one side of the unit than the other, the fan/filter flange is interchangeable with the filter-only flange. This is accomplished by swapping sides with the components and their respective housings. The agitator handle must be attached to the pre-threaded agitator before use. In the event that the handle must be moved to the opposite site of the base, the agitator must be manually removed, reversed, and replaced. The extended nut must be re-attached before connecting the handle. It is recommended that you use a wrench to hold the extended nut while you tighten the nut to the agitator and then the handle to the nut. Both should be reasonably tight so that they do not become loose when the unit is in service. (While not required - you could use a thread locking compound on these parts if you have it.)

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USAGE

Before using your new Nature's Head toilet, place 1 ½ to 2 gallon bags of pre-moistened peat moss or coconut fiber into the base of the head. The peat moss should be damp and crumbly, never wet or soupy. If your peat moss or coconut fiber is dry - try adding some water to it.

The primary concept of the composting toilet is the separation of liquids and solid wastes!! Be sure to inform your guests as to the proper use of your Head.

Seated usage is recommended. While seated, you can use the unit with the trap door in the open or closed position. Male or female, the liquids and solids will be directed to the right locations from this position. Male stand-up usage is less acceptable as splatter may result. In the event that the unit is used in a standing position, the trapdoor must remain closed in order to prevent mingling of liquid and solid wastes. For solid usage, a coffee filter may be placed into the bowl; this will facilitate movement of the waste into the base of the unit and may allow ease of cleansing. Many people choose to use the unit with the trapdoor open (negating the need of coffee filters) allowing solids to be deposited directly into the composting medium. How you use it is a matter of preference, but remember, the more paper products placed in the compost, the sooner it will fill up. Also, paper products do not break down as fast as solid wastes, so typically you will see them long after the solid matter has broken down. We keep a small spray bottle filled with water near the Head to spray off the bowl. Some water in your peat moss will not hurt it, and it will help keep it moist. While everyone's urine has different smells (some stronger than others) - we have found that if we put some brown sugar in the liquid tank it will help to reduce this odor.

After solid waste addition, the peat moss or coconut fiber must be agitated 2-3 revolutions in order to mix the waste into the compost to promote the composting process. Contents of the solid waste container must be kept moist, not wet, and remain separated from the liquid waste.

The composted matter will have a soil-like odor and the visual appearance will be very similar to that of the original peat moss.

EMPTYING

The liquid waste vessel will contain approximately 2.2 gallons of urine. The translucent material of the container allows easy visualization of the liquid level.

To empty the container: 1) Release the latches located at both front sides of the unit which secure the bowl to the base. 2) Raise the bowl to an angle of approximately 45 degrees, install the cap, and remove the bottle. 3) Dispose of the contents in an appropriate manner. We carry ours to the marina restroom and empty into the marina toilets.

Should overflow of the liquid waste container occur - the liquid will remain confined to the container base so long as the overflow is not excessive.

Solid wastes should be removed from the storage base when the tank appears to be 3/4 full.

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As with any composting unit, the longer you let it sit before you empty it, the more the solids will have decomposed, and the more pleasant this job will be. If you empty it after a short waiting period, you will notice that the paper products are still mostly intact. It takes considerably longer for paper products to break down. One of the nicest things about composting toilets (unlike other toilet systems) is that the longer you wait - the better the job will be.

With the bottle assembly removed, lift the seat unit several inches and slide it to the left to disengage the slip hinge. (You may need to unhook your vent hose and power supply if you need to set the bowl off to the side) Remove the knobs from the mounting brackets at each side of the base and invert to empty. (Most 13 gallon tall kitchen garbage bags will fit over the base to allow for easy disposal.)

It is unnecessary to clean the interior of the solid waste container as composting will continue from the residual matter clinging to the sides. Peat moss is easily storable in one gallon zip-loc bags.

The recommended procedure for disposing of the contents of the solid waste tank is to place it in a composting bin to allow it to fully decompose. The contents of the solid waste tank may be safely placed into a conventional dumpster if it has been allowed to compost fully and is bagged and sealed. If stored for a period of three months or greater the contents may be used to fertilize non-ingestible plantings.

CLEANSING & MAINTENANCE

A quick spray of water from a squirt bottle is all that is needed to keep your Nature's Head fresh between uses. If necessary, a moistened paper towel (no synthetics) is excellent for cleansing the interior (as well as the exterior) of the head. After cleaning, add the towel to the contents of your solid waste container. If the towel is 100% paper - it will compost with the other solid wastes.

For more intensive cleansing or dried-on matter, a paper towel moistened with a 1:1 solution of vinegar and water may be used, and disposed of, in the same manner after cleaning.

Bleach, ammonia, and other commercial cleaning compounds should never be added to your composting head as they will interfere with the composting process and may lead to unpleasant odors.

Maintenance requirements for the head are very minimal. All metal parts (bolts, hinges, latches, knobs, agitator, and trapdoor components) are either stainless steel or brass.

Filters on each side of the base should be removed and cleansed yearly or when emptying the solid wastes. Each filter is secured to the housing with 2 Phillips-head bolts. Remove bolts, clean and replace.