

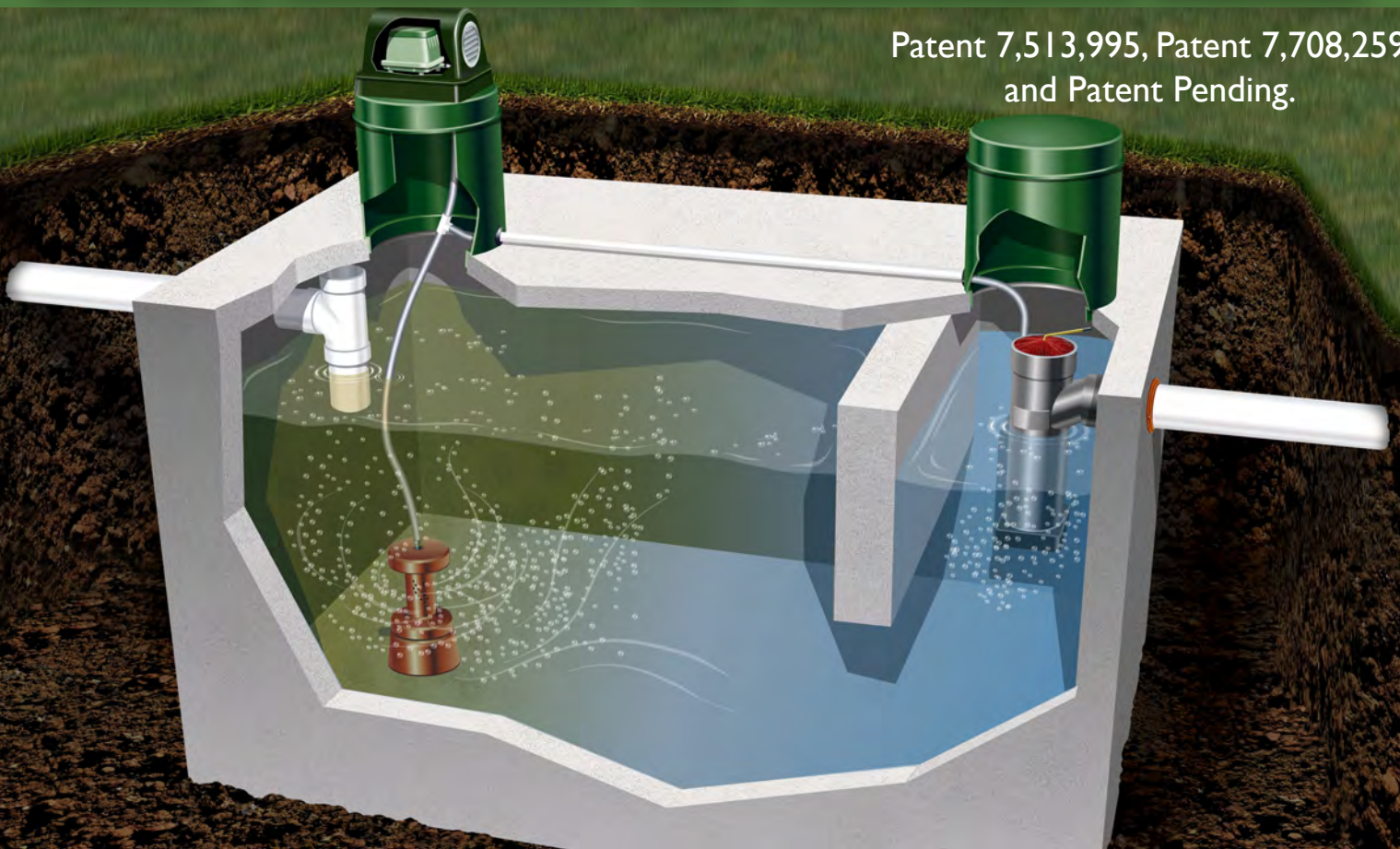
# SepAerator™

## The Septic Tank Aerator

Developed By Septic Solutions, Inc.

### Owner's Installation and Maintenance Manual

Patent 7,513,995, Patent 7,708,259  
and Patent Pending.



Innovative! Inexpensive! Incredible Results! Environmentally Friendly!



314 W Center St  
Dieterich, IL 62424

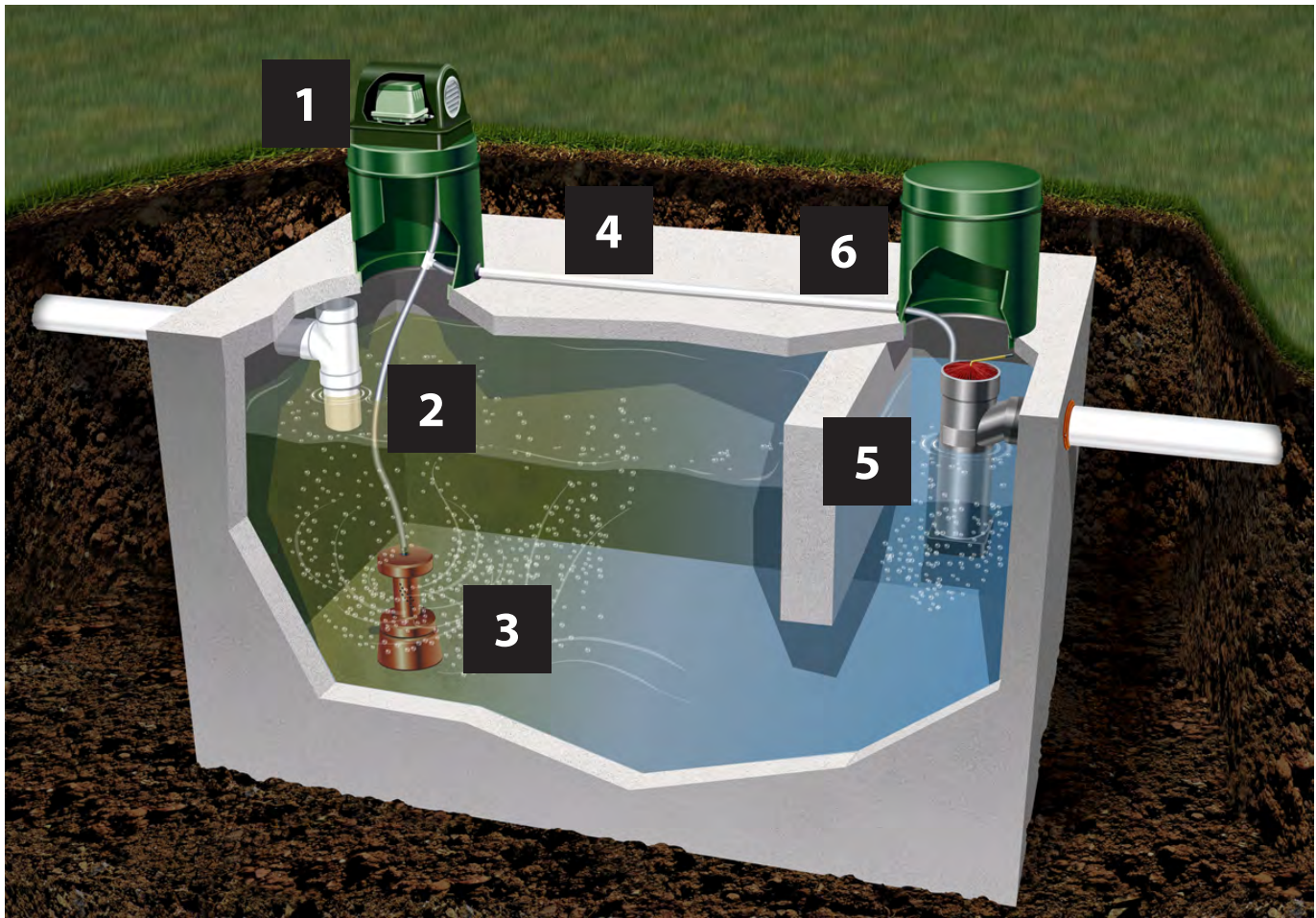
*Copyright Notice: No part of this publication may be reproduced, stored in any retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of Septic Solutions, Inc.*

Toll Free: 1-877-925-5132

[www.septicaerator.com](http://www.septicaerator.com)



# SepAerator® Component List



## 1. Air Pump and Housing

Hiblow Air Pump and Pump Protector Housing & Platform (if included in package)

## 2. Spa-Flex Flexible Airline

Spa-Flex 1/2" Flexible Airline that connects the air pump to the Wonderfuser

## 3. Wonderfuser™ Diffuser Assembly

Patented Wonderfuser™ Air Diffuser Assembly with Weight

## 4. 1/4" Airline for Air Particle Recirculator

1/4" Airline to connect the Air Particle Recirculator to the Air Pump

## 5. Air Particle Recirculator

Air Particle Recirculator filtering device (Premium Package Only)

## 6. Optional Risers

Optional risers can be installed for easier access

**Warning! Service to electrical devices by non-qualified persons may result in an electrical shock hazard resulting in serious injury or death. If service is required to electrical components please contact a qualified electrician. Any and all safety requirements such as the electrical wiring, blower operation or plant discharge concerning the owner, their families, friends, or guests are the sole liability of the owner.**

# SepAerator® Installation Instructions

## STEP 1: Locate Your Existing Septic Tank.

*NOTE: We highly recommend having your tank pumped out prior to installation. Pumping is necessary to remove all the solids and sludge that has built up in your tank, which will allow the SepAerator® to circulate the wastewater properly and allow the Diffuser assembly to set solidly on the bottom of the tank.*

Once you have located your septic tank it will be necessary to find two locations on the tank:

1. The inlet side lid that exposes the pipe coming in from the home.
2. The outlet lid or lid over the discharge pipe or baffle.

Dig down to the tank at these locations and remove existing lids.

**Skip Steps 2 and 3 if you did not purchase the Premium Package with the Air Particle Recirculator**

## STEP 2: (Premium Package Only) On the Outlet/Discharge End of the Tank Install the Air Particle Recirculator.



You should already see a 4-inch pipe (the outlet line) sticking into the tank. Remove any existing PVC or Concrete baffle. Clean the pipe and glue the Air Particle Recirculator to the outlet.

*NOTE: Make sure the Air Particle Recirculator is level running up and down. This can be checked with a small level.*

clean cut when removing the exiting baffle, you may use the Polylok Extend-N-Lok adapter by driving it inside the existing pipe and then gluing the Air Particle Recirculator directly to the adapter. The filter tee will fit either schedule 35 or 40 pipe or the Extend-N-Lok adapter.



**Make sure your filter can be removed through the septic tank access hole after installation of Air Particle Recirculator.**

*Note: The septic tank filter should be removed and washed with water every 3 to 6 months. If you have purchased the Premium package attach the small 1/4 inch airline included to the adapter fitting at the top of the Air Particle Recirculator. The other end will later attach to a fitting on the air pump.*

## STEP 3: (Premium Package Only) Run the 1/4" Airline from the barb fitting on the Air Particle Recirculator over to the air pump location.

The Air Particle Recirculator uses airflow from the air pump to create circulation that helps keep solids away from the filter and prevents them from entering it.

Take the included 1/4" clear airline tubing and attach one end to the barb fitting on the Air Particle Recirculator.

(The other end of the tubing will connect to the air pump in a later step.)

*Note: You'll need to drill a small hole (just large enough for the airline to pass through) in either the riser or the existing lid of your septic tank. Once the airline is routed through the hole, seal it properly to maintain a secure, watertight installation.*

#### **STEP 4: Assemble and Install the Wonderfuser™ Diffuser Assembly on the Inlet Side of the tank.**



Take the top portion of the diffuser assembly and attach to the base securely with 2 bolts and washers provided. **DO NOT OVER TIGHTEN!**

Attach the ½” Spa-Flex airline to the fitting on top of the diffuser assembly by screwing the male brass fitting on the airline into the female brass fitting on the top of the diffuser (teflon tape is not required for this connection).

Since the diffuser is weighted, it is important that the connections are installed on the top of the diffuser properly to allow for lowering the diffuser assembly into the septic tank.

Lower the diffuser assembly through opening above the inlet in the septic tank until it sits solidly on the bottom of the tank.

Drill a small hole just large enough for the ½ airline to pass through in the riser or lid of your tank. Place the air line through this hole and seal properly.

*Note: Take all precautions necessary to keep your septic tank watertight after installation of any components.*

#### **STEP 5: Install the Air Pump.**



The Hiblow Air Pump included with your SepAerator system can be installed in any location within 100 feet of your septic tank. The air pump requires a 115V outlet and then the airline connections coming from the septic tank.

Once you have chosen a location to place the air pump, it is time to make the airline connections.

The air pump comes with a fitting that has a rubber side on one end and a PVC side on the other.

Slide the rubber end of this fitting securely onto the outlet port of the air pump, then tighten it in place using the included hose clamp for a snug, leak-free connection.

Next, take the ½" flexible Spa-Flex airline tubing that runs from your diffuser assembly. Route it up through the bottom opening of the Pump Protector™ base (if your package includes this protective housing/platform for the air pump).

Attach the end of the Spa-Flex tubing firmly onto the PVC elbow coming off the air pump. For a permanent, airtight seal, apply the included PVC glue to this connection and allow it to cure fully according to the glue instructions.

The air pump fitting included with the Premium Package will have an additional ¼” barb fitting in line which will connect the ¼” airline coming from the Air Particle Recirculator.

*Note: Do not exceed 100 feet from tank. Place platform high enough that air pump will not flood. Air must circulate between housing and platform. Keep dirt away from bottom of housing.*

## **STEP 6: Power up the system and check all connections.**



The Air Pump has an attached cord and will simply plug into any existing 115 V receptacle. When 115 volt electrical connections have been made turn on power. The air pump does not have an On/Off switch and should run as soon as power is applied.

Check all of your airline connections to make sure they are secured properly. You should see water boiling on the inlet side of the tank and fine bubbles around the filtering device on the outlet side of the tank (Premium Package Only)

Backfill all risers and electric line carefully.

*NOTE: Make sure your septic tank is full of water after installation. This is necessary to eliminate the possibility of tank floatation, as well as proper operation of the pump and diffuser assembly. Fill the tank with a garden hose or by turning on the faucet in your bathtub.*

## **SYSTEM NOTES:**

The Air Pump is designed to run continuously. It provides quiet and energy efficient operation. Most pumps use less than 2 amps. For proper operation air pump should not be turned off or placed on a timer.

The small filter on the top of the air pump must be cleaned by air or water every 6 months and should be replaced every 12 months.

Begin using your system normally. It is normal to get an odor from the tank for the first 24-48 hours. As the aerobic bacteria begin to thrive, this odor will go away.

It may take 4 to 12 weeks for a significant amount of bacteria to develop. It is these aerobic bacteria that will make the system produce a clear and odorless discharge.

Please check with your local authorities as requirements vary from County to County and State to State. Local regulations may require that a licensed septic system installation contractor install the SepAerator®. Installations vary in each individual State. It is the sole responsibility of the end user (homeowner/purchaser) to see that the products are installed in accordance with all applicable county/state/federal laws, regulations and guidelines in effect.

# OWNER MAINTENANCE CARE AND OPERATION INSTRUCTIONS

The SepAerator® has been designed and built by the owners of Septic Solutions, Inc. to provide long term, reliable and cost efficient service. The SepAerator® will operate with a minimal amount of attention.

The following procedures should be performed on a routine basis to ensure proper plant operation.

**Daily:** Check warning light and audible alarm (if applicable) for air supply malfunction. First check the electrical circuit providing power to the system to ensure the circuit is closed. Check the aerator compressor to be sure it is operating. Check for overheating, excessive vibrations, and unusual noises. If aerator compressor failure is observed, call your local service representative for service. After a power outage, an alarm may exist. Should an alarm remain for more than thirty (30) minutes after power is restored, you should call your local service provider to report the alarm.

**Weekly:** Check the tank for offensive odor.

**Periodically:** Check and clean air filter on air pump. Rinse with warm water to clean if necessary. Make sure filter is dry and re-install on aerator compressor. Check and clean septic tank filter every 3 to 6 months if necessary or as needed.

**Recommended:** Frequency of solids removal is no more often than every three (3) to five (5) years. Pump the existing tank when the settled solids make up more than twenty (20) percent of the total volume of the tank. Warning: Hydraulic displacement and tank flotation may occur whenever tanks are pumped. Tank should be immediately refilled with water after pumping occurs.

## OWNER'S RESPONSIBILITY

It is the owner's responsibility to operate the SepAerator® wastewater treatment components and their existing tank to the best of their ability. To keep maintenance to a minimum and ensure high effluent quality, the following items should not enter into the tank.

1. Disposable diapers, coffee grounds, chemical wastes, paint or paint thinners, oils or grease (such as discarded cooking grease), pet shampoo, pesticides, herbicides, automotive fluids or any other toxins.
2. Backwash discharge from any type of water softeners.
3. Strong disinfectants or bleaches, other than small amounts used in day-to-day house cleaning and laundries. Recommended detergents are low-sudsing, low phosphates and biodegradable. Recommended cleaning products are non-chlorine, non-toxin, non-corrosive and biodegradable. Anti-bacteria soaps should be avoided.
4. Waste material from a garbage disposal is not recommended. Food wastes represents additional loading the tank must digest, increasing the pump out intervals.
5. The SepAerator® is designed to treat domestic wastewater and nothing else should go into the tank.



The SepAerator® will not perform to its fullest capabilities if subject to hydraulic overloading. This condition exists whenever excessive water, above the designed treatment capacity is allowed in the system. Leaking plumbing fixtures or excessive water use may cause this condition. Hydraulic overload may also occur on washdays, when multiple loads of laundry are washed in succession.

## **SEPAERATOR® MONEY BACK GUARANTEE**

### **The SEPAERATOR® Premium Package comes with a 6 Month 100% Money Back Guarantee**

We guarantee that the SepAerator® Premium Package will improve the quality of the effluent being discharged from an existing septic tank and prolong the life of the secondary treatment system or Septic Solutions, Inc. will refund to the homeowner 100% of their original purchase price of the SepAerator® Premium Package. Septic Solutions, Inc. is very confident that the SepAerator® process will improve the performance of your septic system, however, we understand that every system is distinctive and there should be considerations for those systems given. Consequently, if after 6 months from original purchase date, the SepAerator® Premium Package does not perform as advertised, and you worked with our free technical support staff, you may return it to us for a full refund.

As a requirement of this guarantee the purchaser must contact Septic Solutions, Inc., and speak with our technical staff concerning the operation and installation of their SepAerator®, as well as the remediation progress of your septic system, within 90 days of purchase date. We will, at that time, confirm the proper installation and/or make recommendations as to changes that must be made concerning proper installation. If the SepAerator® Premium Package does not perform as advertised at the end of the 6 months from the purchase date, we will initiate the refund process at the customer's option. This guarantee only applies when you purchase the complete SepAerator® Premium Package and does not apply to other packages or individual components.

The SepAerator® Premium Package 100% Guarantee was developed to provide those homeowners with the confidence they need to purchase the product and to display the confidence that Septic Solutions has in the product. There is however some restrictions that can and must apply to this guarantee that would be extraordinary and out of control of the design elements of this system. Those elements that would cause this Guarantee to become null and void would include:

1. Adding any toxic materials and/ or harsh chemicals to the septic system that would be detrimental to the natural growth of aerobic bacteria. These could include paint and paint thinners, acids, heavy extended use of antibiotics, some form of pesticide, large amounts of chlorine, etc.
2. The actual septic system where the SepAerator® would be installed doesn't allow excessive ground water infiltration, leaking stools or other faulty plumbing devices, have high seasonal water tables, or located in an area subject to flooding.
3. The septic system is not being overloaded by excessive water usage that is beyond what the original size and design of the system was at time of the septic system's actual installation.

The SepAerator® is an amazing piece of equipment and will greatly enhance any septic system; however no aerobic process can overcome the obstacles as stated above. Those obstacles, if present, should be

remedied at or before installation of this equipment in an effort to ensure the 100% Money Back Guarantee can apply. We will be fully supportive of your SepAerator® installation and want our products to succeed for your application. We feel that by providing you with these restrictions it will only enhance your knowledge of this product and thereby greatly increase your success in using it.

The purchaser's responsibility would be to return the air pump, housing and platform, and provide proof that the other SepAerator® components inside the tank are no longer functional. This guarantee does not cover optional equipment purchased such as risers, lids, and other miscellaneous items. Simply leave those optional pieces and the diffuser assembly in the tank.

Lifetime warranties are available when SepAerator's® are purchased through Septic Solutions, Inc. approved Licensed Septic System Installation Contractors and a continuous yearly maintenance agreement is in effect. This warranty applies to all SepAerator® systems installed in accordance with the Operation and Maintenance Manual. The following Limited warranty does apply.

### **SEPAERATOR® LIMITED WARRANTY**

Septic Solutions, Inc. limited warranty is that of the manufacturers of those products sold and does not cover any damages incurred by improper installation. To repair or exchange components, F.O.B. factory, that in the manufacturer's judgment is defective, provided that said component part has been paid for and is returned through Septic Solutions, Inc. prepaid. The limited warranty makes no provision for any informal dispute settlement agreement.

The limited warranty does not cover any products that have not been properly installed, damaged due to altered or improper wiring or overload protection, flooded by any external means, disassembled by any unauthorized person, or damaged by an act of nature. The limited warranty does not cover damages or defects caused by ants, insects, or rodents to any component part of the products.

Septic Solutions, Inc. through the manufacturer reserves the right to replace any component part covered under this limited warranty with a component part, which in the manufacturer's judgment, is equivalent to the part replaced. Septic Solutions, Inc. and the manufacturer claims no responsibility for any delays or damages caused by defective components or materials which cause losses incurred by interruption of service or for repairs or replacements of component parts covered by the limited warranty.

Septic Solutions, Inc. is not responsible for the infield operation of our products. The proper operation of the Separator™ depends upon proper organic and hydraulic loading. We cannot control the loading of substances that may upset the biological balance. Septic Solutions, Inc. recommends that you check with your local regulatory agencies to ensure that you are in compliance with all local regulations and state laws.

Septic Solutions, Inc. warrants this product to be free from defects in material workmanship for 1 year from date of purchase. Our warranty will not apply to any product that has been subject to negligence, misapplication, improper installation or maintenance. Buyer's only remedy and Septic Solutions, Inc. only duty is to repair or replace defective products (at Septic Solutions, Inc. choice). Septic Solutions, Inc. shall not be liable for any consequential, incidental, or contingent damages whatsoever.