

HealthWay®

S U P E R



W H O L E   H O U S E   A I R   C L E A N E R

The Super V Whole-House Air Cleaner  
with Patented DFS Technology



**Model3400**  
DFS Filtration System



# Table of Contents

Exploded View and Major Features.....	5
Exploded View .....	5
Features.....	5
System Overview .....	6
Safety Precautions.....	6
Performance Data.....	6
Unit Description.....	7
Component Description.....	7
Receiving and Unpacking.....	8
Receiving.....	8
Storage.....	8
Unpacking and Inspection.....	8
Installation Procedures.....	8
Location Determination .....	8
Power Requirement .....	9
Super V System Applications.....	9
Furnace Installation.....	10
System Operation .....	11
To Connect Unit to Power.....	11
To Turn on the Unit .....	11
To Turn off the Unit .....	11
Maintenance.....	11
Filter Replacement.....	11
Cleaning the Unit.....	12
Parts List.....	13
Testing Steps .....	13
DFS Troubleshooting Guide.....	13
Limited Warranty .....	15



---

Part Number: #10077  
Address: HealthWay, Inc.  
3420 Maple Ave.  
Pulaski, NY 13142  
Phone No: 315-298-2904  
1-800-843-3860  
Fax No: 315-298-6992  
Email: info@healthway.com



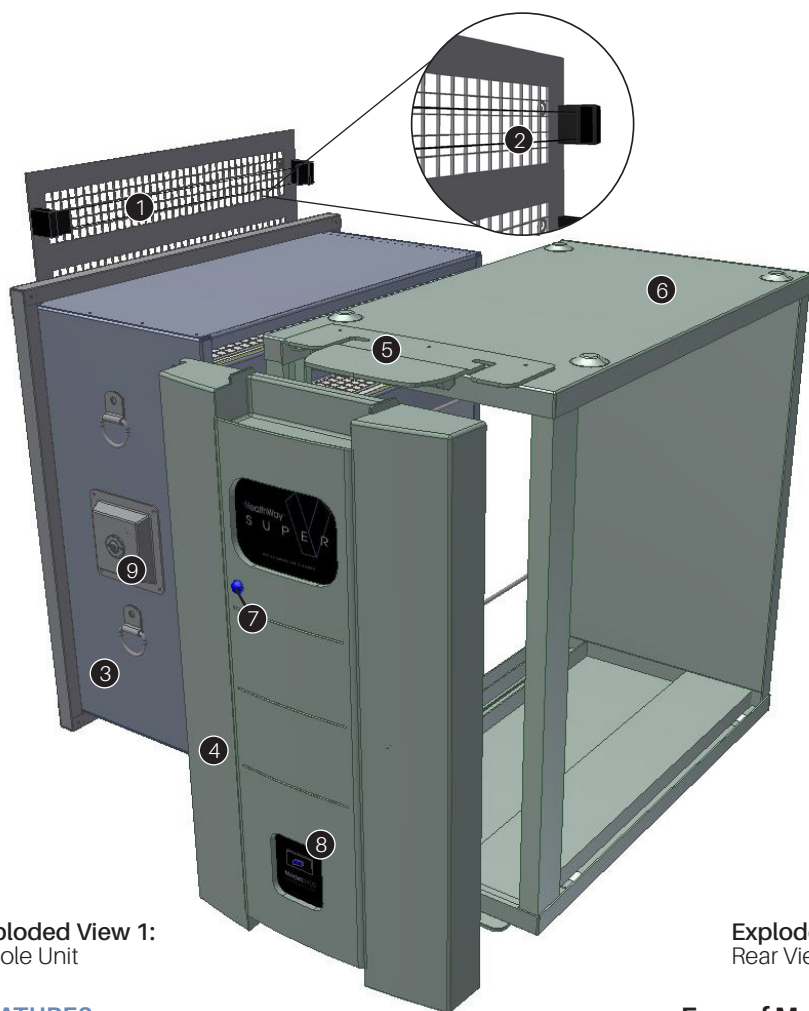


## EXPLODED VIEW

1	High Energy Grid	5	Snap Latch	9	High Energy Contact Pad	13	Fuse & Fuse Holder**
2	High Energy Wire	6	Main Housing	10	High Energy Contact Spring	14	Mounting Screw
3	Main Filter	7	DFS Light	11	Air Flow Monitor*		
4	Filter Access Door	8	DFS On / Off Switch	12	Ground Spring		

\* Auto DFS switch to turn on DFS. Air flow must be on with furnace/AC. Refer to Page 6 for detailed instructions.

\*\* Fuse and fuse holder locates inside the filter access door compartment and is only accessible by unscrewing part-14 to open up the metal board.



Exploded View 1:  
Whole Unit



Exploded View 2:  
Rear View of Filter Access Door

## FEATURES

- **High Air Flow Capacity** – delivers high CFM with low energy consumption
- **Whole House Design** – designed to deliver clean air for the whole house
- **Up to 99% Efficient on All Ultrafine Particles** – down to a size of 0.007 microns
- **Versatile & Symmetrical Design** – can be installed on either supply or return side of the furnace
- **Patented V-Bank Filter** – increases surface area and provides higher dust loading capacity
- **Up to three times longer filter span** – compared to conventional HEPA Filtration – Lower Maintenance Cost
- **Ease of Maintenance** – quick access to filter in a few steps
- **Smart Air Flow Monitor** – Auto-flow detection to turn on DFS power
- **Designed to Last** – durable powder coated galvanized steel housing
- **Hassle-free Installation** – pre-drilled standing flanges to accommodate attachments to other system components and quick plug in for power to the system
- **100% Sealed System** – high memory sponge neoprene door gaskets to ensure door to filter seal and gaskets on main filter eliminate air bypass

## SAFETY PRECAUTIONS

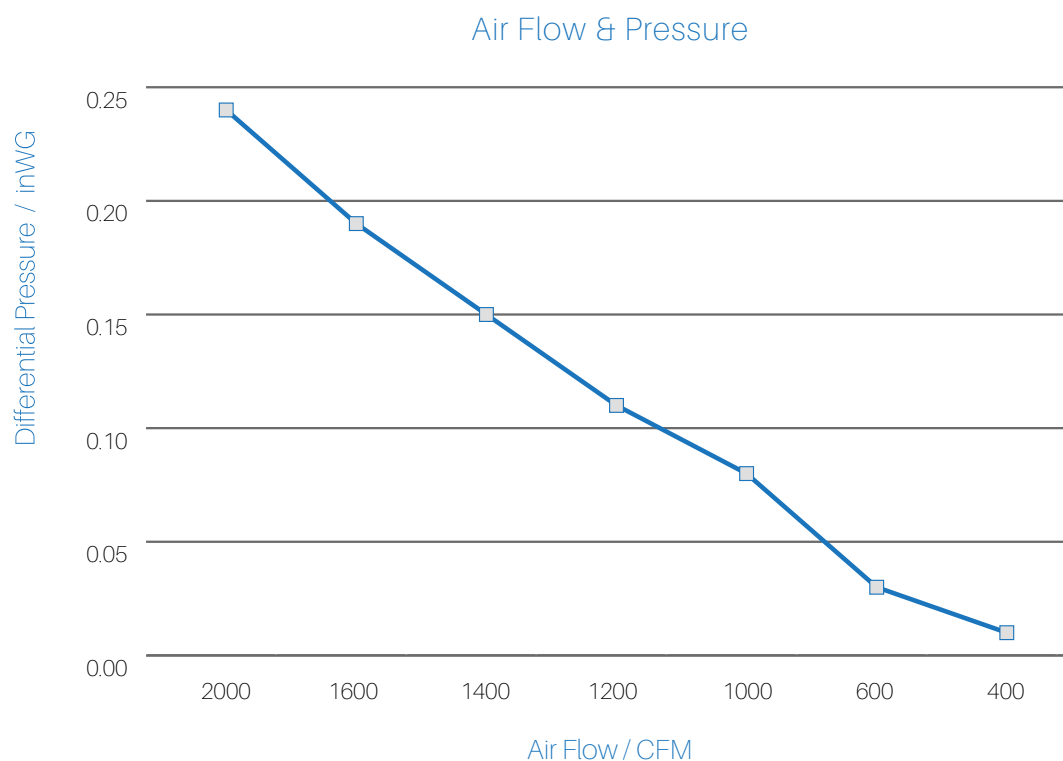
Personnel who will operate this system or those who will perform maintenance thereon, must be given all manuals and other instructions regarding safe operation of the filtration system.

This manual contains general recommendations, but specific requirements may apply to individual installations. Such requirements are outlined in federal, state, and local codes. Compliance with applicable codes and strict adherence to these installation instructions are the sole responsibility of the user.



**This symbol will be used throughout this manual to indicate safety checkpoints. Failure to heed these warnings and notices may result in damage to the unit and/or injury or death to personnel.**

## PERFORMANCE DATA



Air Flow Rate (CFM)	Differential Pressure (inWG)
2000	0.24
1600	0.19
1400	0.15
1200	0.11
1000	0.08
600	0.03
400	0.01

Efficiency Data	
Removing PM 5.0	Up to 100%
Removing PM 2.5	Up to 99.99%
Removing PM 0.5	Up to 99.87%
Removing PM 0.3	Up to 99.61%
Removing PM 0.007	Up to 99%

Performance data subject to change without notice.

## UNIT DESCRIPTION

The Super V 3400 Whole House DFS Air Cleaning System is a high performance system that utilizes patented award winning Disinfecting Filtration System technology. DFS technology electrically enhances a low efficiency, high flow, low pressure drop (0.24" @ 2000cfm) filter to high efficiency while retaining the low pressure drop and longer life advantages of the base filter material. This technology has also been shown to inhibit bacteria growth on the filter by microbiostasis.

The Electrical Components are located inside the filter access door.

The Super V System is available in the following model:

Model	Power Requirement		
	V	Hz	Phase
<b>SuperV 3400</b>	100-250	50/60	1

	Height		Width		Depth		Weight	
<b>SuperV 3400</b>	24in	670mm	14in	356mm	27in	686mm	48lb	22kg



**The electrical power requirements for each individual unit are on the data plate label adjacent to the electrical connections. These requirements supersede all other inferences to power requirements.**

## COMPONENT DESCRIPTION

The Super V System integrates the system components into a symmetrical system that work with any furnace set-ups. All electronic components are located inside the filter access door. Change of filter is a breeze. It works in conjunction with the furnace to optimize the performance.

Components	Efficiency	Replacement/ Maintenance frequency*
DFS V-Bank Main Filter**	DFS V-Bank Main Filter** up to 99% Efficient (down to .007 microns)	Every 3 years at 50% duty cycle
High Energy Grid ***		

\*Replacement period depends on the level of pollution in the environment

\*\* Replace Main Filter more often if pollution level is high

\*\*\*Clean the High Energy Grid once a year or as needed

Components	Description
Filter Access Door	Where the control panel , pressure switch and electrical components located

## RECEIVING

Equipment is prepared for shipment in accordance with the Uniform Freight Classification. It is thoroughly inspected at the factory and barring damage in transit, should be received in good condition.

When a freight carrier signs the HealthWay bill of lading, the carrier accepts the responsibility for any subsequent shortages or damage evident or concealed. Inspection by the carrier of damage evident or concealed must be requested. Evident shortage or damage should be noted on the carrier's delivery document before signature of acceptance. Claims must be made against the carrier by the purchaser.

Filtration systems are shipped as fully assembled filter units with field installation necessary. These filter units must be handled and moved using proper rigging techniques, avoiding concentrated stresses that will distort the parts.

## STORAGE

If the unit is not to be installed promptly, store it in a dry place protected against moisture, dust, physical damage, weather, corrosion and excessive heat.

## UNPACKING AND INSPECTION

**The unboxing procedure may require more than one person to handle.**

Unit is packaged in a heavy duty carton with foam pieces inside for protection. Place unit on a flat, clean and dry surface. Carefully unbox the carton, remove the foam pieces on top and slowly pull out the unit covered with a plastic protection bag. Remove the plastic bag.

Inspect physical damage on the unit surface as well as the power cord. Contact Healthway's Customer Service Department if damage is found.

Phone No: 315-298-2904 • 1-800-843-3860 • Fax No: 315-298-6992 • Email: info@healthway.com

# Installation Procedures

## LOCATION DETERMINATION

The filtration system location should be carefully planned with consideration given to ease of access for filter replacement or repair of electronics located inside the filter access door.

Enough room (min 25 inches or 635 mm) must be available next to the filter access door for maintenance and filter replacement.

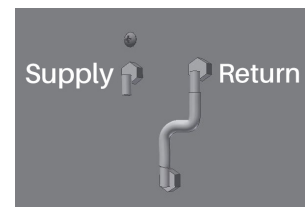
***The inlet duct also must have at least 8" of straight duct before any bends are made.***

There should be no use or spillage of powdered products, aerosols, sprays, or mists near the inlet connection to the filter.

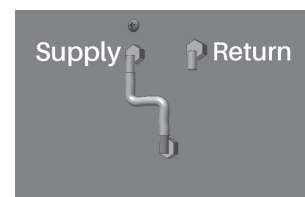
Do not install the filtration system in an exterior environment, unless it is specifically made for exterior installations. Standard units are for indoor use only.

### Before the Installation:

1. For your safety, please read the rules and instructions in this user manual carefully. Failure to follow them could result in serious damage in the air cleaner or cause hazardous condition.
2. Check the information shown on the nameplate to make sure rating is appropriate to your local application.
3. Clean the furnace blower and ductwork because the Super V System cannot remove existing mud, dust etc. from the furnace blower and ductwork.
4. Check air flow direction. When the Super V System is installed on return side of the furnace, the auto flow monitor should be connected to the return barbed connector at the up-right corner-factory default setting. (Fig.A - Return Connection)
5. When the Super V System is installed on supply side of the furnace, the auto flow monitor should be connected to the supply barbed connector at the up-left corner (Fig.B - Supply Connection)



(Fig. A - Return Connection)



(Fig. B - Supply Connection)



## POWER REQUIREMENT

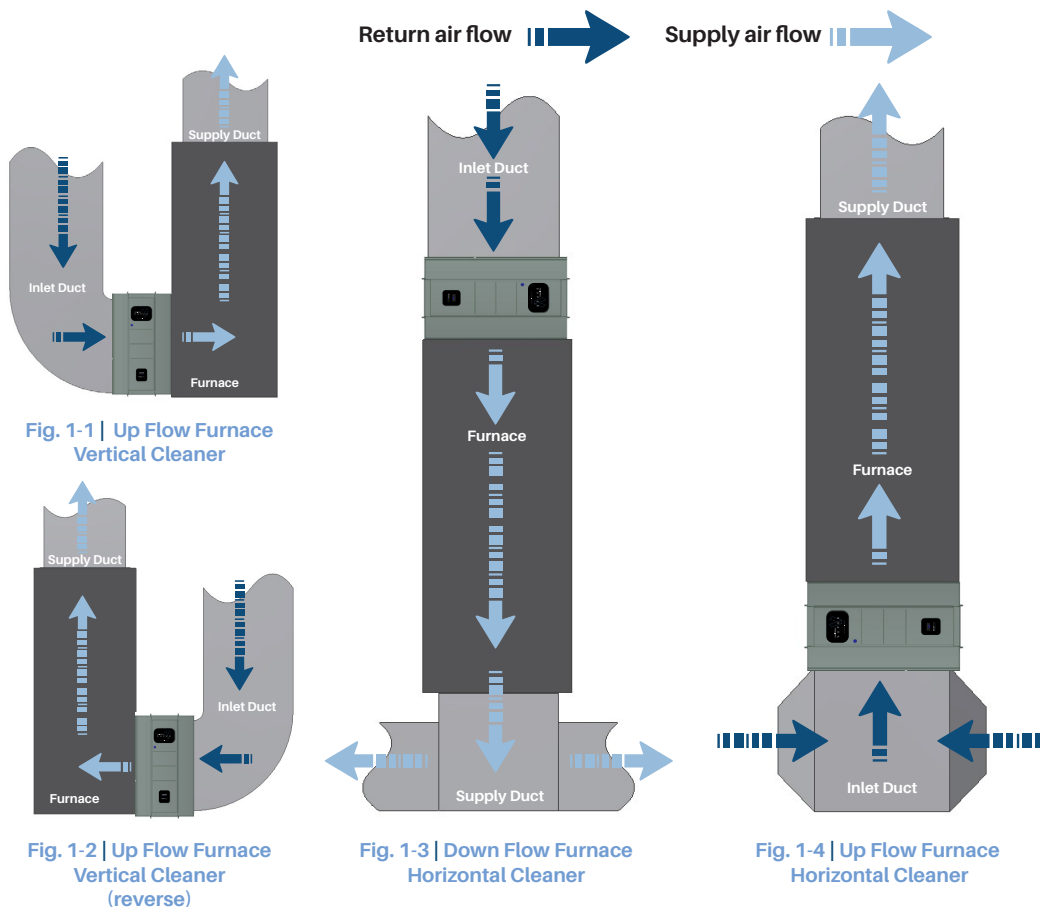
The power requirements are as follows:

\*Electrical disconnects may also be required - check local electrical codes

Model	Power Requirement			FLA	Power Usage
	V	Hz	Phase	AMPS	WATTS
SuperV 3400	100-250	50 / 60	1	0.08A - 110V	7W - 110V
				0.07A - 220V	9W - 220V

## SUPER V SYSTEM APPLICATIONS

Select a mounting position according to the application. Place the unit between the main inlet duct and furnace, in a location which is accessible for checking and replacing the filter. The unit is capable to be installed either left side or right side of the furnace credit to its symmetrical feature and flippable housing-filter complex.



The Super V System can also be installed on the supply side of the air handler, making sure the air flow direction through the air cleaner is correct. In this case, the auto flow monitor must be connected to the supply barbed connector as described on #5 under "Before the Installation" on Page 6 (refer to Fig. B - Supply Connection).



**All electrical connections must be done by a certified electrician, following the directions listed in this manual.**



**Do not connect power to the unit until the High Energy Grid wires have been checked for proper connection.**



**Check the serial number label for all the electrical requirements for this unit.**

## FURNACE INSTALLATION

Determine the correct air flow direction. The inlet air is marked with an air flow label, the filter header and high-energy grid should be placed on the inlet side (Fig. 2-1 & 2-2)

- a. If the furnace has a left-side opening, place the air cleaner unit (default filter direction) on the left side of the furnace
- b. If the furnace has a right-side opening, pull off the filter access door, flip the unit up-side down, put the door back, and then place the unit on the right side of the furnace

Pull up the snap latch, pull out the filter access door, turn the quarter-turn clockwise to unlock the filter and slide the main filter out (Fig. 2-3 & 2-4)

Locate the mounting holes from the unit and connect the unit to the furnace opening (Fig. 2-5). If the furnace and air cleaner openings are different, use a transition plenum (Fig. 2-6).

The opening on the Super V System is 21" x 22".

Mount return ductwork to the air cleaner system (Fig. 2-7)

Slide the main filter into the housing from the front (Fig. 2-8)

Turn the quarter-turn counter-clockwise to lock the filter (Fig. 2-4)

Seat the Filter access door on the bottom snap latch, pull up the top snap latch and push close the door towards the housing. (Fig. 2-8)



Fig. 2-1



Fig. 2-2

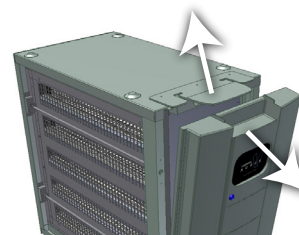


Fig. 2-3

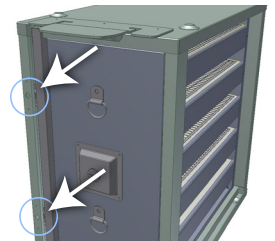


Fig. 2-4

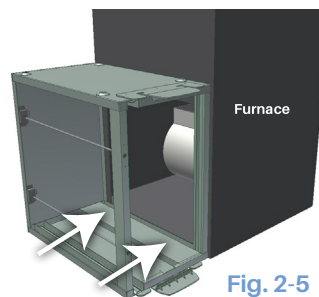


Fig. 2-5

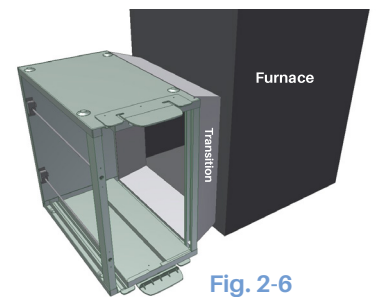


Fig. 2-6

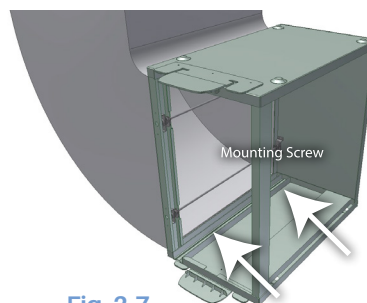


Fig. 2-7



Fig. 2-8

## TO CONNECT UNIT TO POWER

Thoroughly inspect the power cord comes with the unit. Contact HW customer service if it is damaged. If the power cord is in good working condition, plug it in an appropriate power outlet. The unit should be ready for operation once connected to power and furnace blower is on.

## TO TURN ON THE UNIT

Turn on the Main Switch located on the bottom of the filter access door. When the blower of the furnace is on and the indicating light is illuminated blue, DFS is functioning properly.

## TO TURN OFF THE UNIT

To turn off the DFS of the unit, simply turn off the main switch located on the bottom of the filter access door.



# Maintenance



**When replacing filters use only HealthWay certified filters. HealthWay filters are designed for high voltage operation. Use of non-HealthWay filters can be hazardous to personnel and equipment voiding the warranty.**



**Always unplug the unit and turn off the electrical switches and circuit breakers/disconnects before maintenance on the unit. Wait a minimum of 30 seconds before touching the unit.**

## FILTER REPLACEMENT

Pull the latch up and pull the filter access door off (Fig. 3-1 & 3-2)

Turn the quarter-turn clockwise to unlock the filter (Fig. 3-3)

Slide out the filter (Fig. 3-4)

Place filter on a flat and dry surface with the filter header side up (Fig. 3-5)

Unlock the trim locker and lift the high energy grid up (Fig. 3-6)

Slide the high energy grid out from the offset tabs on the main filter (Fig. 3-7)

Carefully lift up the high energy grid and flip it over. The high energy grid is connected to the main filter through a red wire with a connector. Unscrew the connector to disconnect the wiring (Fig. 3-8)

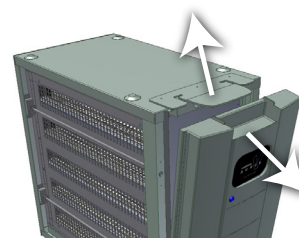


Fig. 3-1

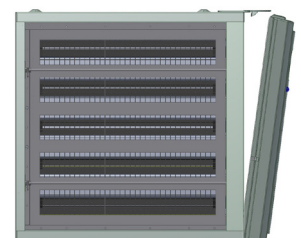


Fig. 3-2

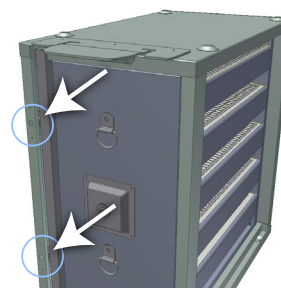


Fig. 3-3



Fig. 3-4

Place high energy grid on a flat, clean and dry surface with high energy wires facing up (Fig. 3-5)

Connect the contact red wire from the high energy grid to the new filter by securely screwing in the connector (Fig. 3-8)

Flip the high energy grid that is already connected to the filter and slide into the offset tabs on the new main filter (Fig. 3-7)

Lock the high energy grid with trim lock located on the opposite side of the offset tabs to secure the high energy grid (Fig. 3-6)

Slide the filter into housing (Fig. 3-10)

Turn the quarter-turn counter clockwise to lock the filter (Fig. 3-3)

Pull the latch up and push securely reinstall the filter access door

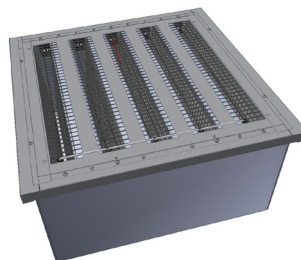


Fig. 3-5

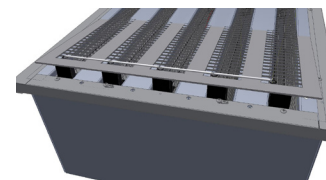


Fig. 3-6

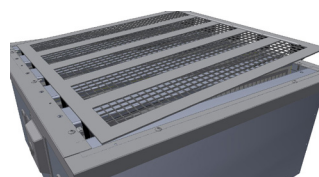


Fig. 3-7

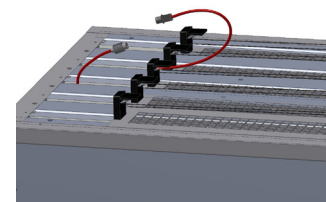


Fig. 3-8

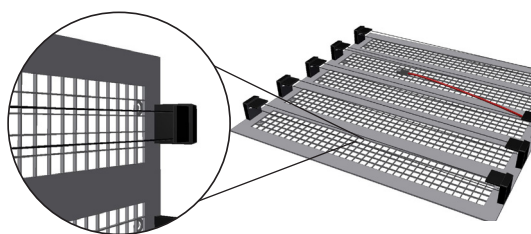


Fig. 3-9



Fig. 3-10

## CLEANING THE UNIT

Depending on contamination level, this procedure should be conducted about once a year or during each filter change or if an electrical problem occurs.



**Do not use alcohol or cleaners that may damage acrylics, plastics or aluminum.**

Remove the V-Bank Main Filter and High Energy Grid Assembly

**Refer to page 8 for proper instructions.**

To clean the High Energy Wires, use a lint-free cloth, either dry or moistened with distilled or deionized water, clean along the length of each wire, extension spring, and acrylic standoff.

Clean the inner surfaces of the High Energy Grid material using a lint-free cloth moistened with distilled or deionized water.

Clean the High Energy Grid surface by vacuuming between the wires using a small vacuum attachment or by using a lint free cloth, either dry or moistened with distilled or deionized water. Take care to avoid leaving large fibers snagged on the wires, control grid, or other components of the High Energy Grid.

Make sure that any contaminant that falls to the bottom of the filter unit is removed.

In extreme cases, it may be necessary to remove the wires from the springs attached at each end to the power distribution bars, thus allowing complete access to the inside of the High Energy Grid assembly for cleaning as previously described. It is recommended that the manufacturer be contacted for detailed instructions should this step appear necessary.

Reinstall the High Energy Grid, V-Bank Main Filter and filter access door as previously instructed.

## PARTS LIST

HealthWay recommends that the following spare parts be available on-site at all times.

Order all parts by contacting:

Phone No: 315-298-2904  
1-800-843-3860  
Fax No: 315-298-6992  
Email: info@healthway.com

Description	Part Number
Main Filter & Header	SSV3400_MainFilter
Unit Housing	SSV3400_Frame
Filter Access Door	SSV3400_Door
High Energy Grid	SSV3400_HEGrid

## TESTING STEPS

### Testing Step 1

Make sure the Super V System is plugged in and the power switch on the filter access door is in the "On" position.

### Testing Step 2

The Super V System has been installed so that it only functions when the furnace blower is providing air flow. Turn on the furnace by adjusting the thermostat so the furnace receives a run command or place thermostat in ventilation mode (if equipped).

### Testing Step 3

At this point the Blue LED on the filter access door should be lit indicating proper function of the DFS system.

For additional troubleshooting assistance refer to the DFS Troubleshooting Guide or contact HealthWay; Monday-Friday, 8am-5pm EST:

Phone No: 315-298-2904  
1-800-843-3860  
Fax No: 315-298-6992  
Email: info@healthway.com

## DFS TROUBLESHOOTING GUIDE

**Refer to page 3 to view the exploded view for location of the components.**

**Symptom #1:** Blue LED turns on initially but then turns off.

**Probable Cause #1:** Excessive amount of debris or possible metal or conductive debris in main filter area, High Energy Grid and High Energy Wires.

### Solution:

**Step 1:** Disconnect the electrical power to the furnace.

**Step 2:** Unplug the Super V System.

**Step 3:** Remove the filter access door by lifting up on the top door latch and gently pulling the top of the door towards you.

- Step 4:** Locate the filter locks and using a Flat Head screwdriver to turn the filter locks ¼ turn clockwise to unlatch the filter.
- Step 5:** Remove the main filter from the main housing and gently lay the filter down with the high energy grid facing up.
- Step 6:** Looking through the high energy grid and observe if there is any large debris lodged in the filter and high energy grid area. If this is the case, proceed to the high energy grid removal instructions and gently, carefully remove any debris from the high energy grid area.
- Step 7:** Reinstall the high energy grid. Main Filter and the Filter Access Door. Plug in the Super V System and return electrical power to the furnace. Repeat testing steps 1 – 3.

***If the Blue LED stays lit, the problem has been solved.***

**Probable Cause #2:** Filter Access Door is not completely shut.

**Solution:**

**Step 1:** Turn off the electrical power to the furnace.

**Step 2:** Unplug the Super V System.

**Step 3:** Remove the Filter Access Door by lifting up on the top door latch and gently pulling the top of the door towards you, after pulling the top of the door far enough to clear the top door latch, gently pull door up, fully releasing the door from the unit.

**Step 4:** Re-attach the Filter Access Door to the Super V System. The bottom of the door has an alignment bracket to ensure the door is centered. Start by sliding the alignment bracket into the slot at the bottom of the unit then firmly push the top of the door in until the top door latch snaps into place. Repeat testing steps 1 – 3.

***If the Blue LED lights and stays lit, the problem has been solved.***

**Symptom #2:** Blue LED Never turns on.

**Probable Cause #1:** Filter Access Door not completely shut.

**Solution:**

Same as Symptom #1, Probable Cause #2.

**Probable Cause #2:** Blown Fuse.

**Solution:**

**Step 1:** Turn off the electrical power to the furnace.

**Step 2:** Unplug the Super V System.

**Step 3:** Remove the Filter Access Door by lifting up on the top door latch and gently pulling the top of the door towards you, after pulling the top of the door far enough to clear the top door latch, gently pull door up, fully releasing the door from the unit.

**Step 4:** Locate the fuse holder on the inside of the Filter Access Door. middle

**Step 5:** Remove the fuse using a Phillips head or Flat tipped screwdriver.

**Step 6:** Replace fuse with 250V 2A and tighten fuse holder cap with Flat or Phillips head screwdriver. Reinstall the Filter Access Door, Plug in the Super V and return power to the furnace. Repeat testing steps 1 – 3.

***If the Blue LED stays lit the problem has been solved.***

If these steps do not resolve any issues with the Healthway Super V System, please contact an HVAC professional for further troubleshooting and repair as any further action requires repair or replacement of non-user serviceable parts.



## LIMITED WARRANTY

This one-year Limited Warranty applies only to the repair and replacement of any manufactured or supplied part of this product which, upon inspection by HealthWay authorized personnel, proves to have failed in normal use due to defects in material or workmanship. A return authorization must be obtained before any part is shipped to the manufacturer for warranty repair. All transportation charges must be prepaid and all work must be performed by a HealthWay authorized technician. The sole responsibility of HealthWay under this Limited Warranty is, at its sole discretion, to either repair or replace a duly registered product (or defective part thereof) with the same comparable model within a reasonable period of time, subject to the following exclusions, limitations, statutory rights, and warranty claim procedures. This Limited Warranty is exclusive, and HealthWay expressly disclaims all other or additional warranties, whether written or oral, expressed or implied, including, but not limited to, warranties of merchantability, workmanship, or fitness for a particular purpose.

### Exclusions:

A. This Limited Warranty does not apply, or is void, as to any product or part damaged by (1) accident, misuse, abuse, or lack of reasonable care or normal maintenance; (2) installation or operation under conditions other than those recommended by HealthWay; (3) subsection of the product to any but the specified voltage; (4) servicing or disassembly by unauthorized personnel; (5) defacing the serial number; or (6) modifying the original factory assembled unit in any way.

B. THIS LIMITED WARRANTY DOES NOT APPLY TO SHIPPING CHARGES FOR PRODUCT SHIPPED TO OR FROM THE FACTORY OR DESIGNATED SERVICE CENTER IN CONNECTION WITH WARRANTY CLAIMS NOR DOES IT APPLY TO ANY DAMAGES OCCURRING DURING SUCH SHIPMENT.

C. This Limited Warranty does not cover labor for any installation of the unit or replacement of parts, technician travel or shipping and related expenses.

**This Limited Warranty does not apply to replaceable filter(s).**

### Limitations:

This information is provided as a guide regarding warranty claim procedures for HealthWay air purification systems.

1. Determine model number from the label on the unit.

2. For technical support, warranty information, warranty parts or replacement parts, call HealthWay from 8:00 AM-5:00 PM EST. A HealthWay representative will help you troubleshoot and diagnose the problem. Warranty matters involving products sold through a manufacturer representative should be directed to the appropriate representative.

3. Important: Do NOT return anything without a Return Authorization.

4. All returned parts are quality tested. If the returned part is found not to be defective, you may be invoiced for the new part.



3420 Maple Ave.  
Pulaski, New York 13142 USA  
Toll Free: 1-800-843-3860  
Int'l: 1-315-298-2904

[healthway.com](http://healthway.com)