

Air-CareTM
INDOOR AIR QUALITY SPECIALISTS

USER GUIDE
ZEPHYR
Air Duct Cleaning Machine





Division of D.P.L. Enterprises Inc.

3868 East Post Road, Las Vegas, Nevada 89120, (702) 454-5515, FAX (702) 454-5225

Website: www.air-care.com; E-mail: cs@Air-Care.com

TABLE OF CONTENTS

CHAPTER	PAGE
Unpacking Instructions	4
Safety Precautions	4
Duct Cleaning Procedures	5
Dryer Vent Cleaning (Optional)	6
Troubleshooting Guide	8
Maintenance	9
Parts and Accessories	9
Specifications	10
Limited Warranty	11

Note: All specifications, instructions, and materials may change without notice.

UNPACKING

Remove the outer box and inspect for damage. Report all damage immediately to your carrier. If special set-up instructions are required, they will be taped to the outside of the equipment or in the "Operating" section of this manual. Inspect all of the packing material for small parts before discarding packaging material. Report all damage to Air-Care immediately. Any attempt at repairing damages may void warranty.

Check that all parts are present

Zephyr Main Assembly, with Wheels, Motor and Blower. Turn the front latch and open the front door of to check for filters.

- o Third stage, 9 1/4" x 9 1/4" x 1" Disposable Pad Filter
- o Forth stage, 9 1/2" x 9 1/2" x 2.75" Certified HEPA Filter
- o 25' Grounded Extension Power Cord.

SAFETY

Always use safe and common sense precautions when working with Air-Care equipment.

Do not block walkways with equipment, and remove delicate and breakable articles from the immediate work area. The following are precautions that should be reviewed by all persons who will be involved in the cleaning activity:

- Other than the 2 filters, there are no user serviceable components in Air-Care's Zephyr. Only trained technicians should attempt to make internal repairs on this equipment.
- Always turn off the main power switch on the Zephyr, and disconnect the power before opening or removing the door or filters.
- Inspect AC power plug to be sure the ground pin is in place.
- Never allow anyone but a properly trained technician to use the equipment or cleaning products.
- All Air-Care equipment is designed for US standard 115 volt, 60 Hz AC. Most Air-Care equipment can be special ordered to meet other worldwide standards for a reasonable price and delivery schedule. Always check the specifications on the equipment before connecting electrical power to Air-Care equipment.

If you have questions about the safe use of any Air-Care product, call 702-454-5515

DUCT CLEANING PROCEDURES

Important: Turn OFF air system before cleaning air ducts.

How to insert the Vacuum Hose (Red 1.5") and Drill Powered Cable (Cordless)

First Place sheets or other material over furniture and remove the vent covers.

These vents should be cleaned outside with Dynamite, heavy duty degreaser, rinsed and dried then reinstalled after the ducts are cleaned.

1. Floor Vents and Mobile homes

- a. Remove the vent from the duct and take them outdoors to be washed.
- b. Insert drill powered cable first.
- c. Then Insert vacuum hose, turn on Zephyr.
- d. Run drill powered cable.
- e. Push both hose and cable into duct as far as they go. Keep the brush in front of the hose.
- f. If resistance felt, pull them back, reverse rotation and insert again.
- g. If the vac hose, brush, and cable resists insertion, pull it back and reinsert again.
- h. The duct can now be fogged with a disinfectant after the brush and vacuum are removed.
- i. Odor Kill can now be fogged into the duct for a fresh scent in the system.

2. Ceiling ducts.

- a. Remove the vent from the duct and take them outdoors to be washed.
- b. First, insert the drill powered cable into the duct BEFORE turning on the Drill.
- c. Insert the vacuum hose. When the vacuum the hose is secure into the duct and turn on the Zephyr.
- d. When both Drill Powered Cable and Vacuum Hose are in the duct. Push them as far as possible into the duct with the brush running and the vacuum on.
- e. When the Hose and brush have reached maximum depth, pull them back slowing with the brush and vacuum running. Turn off brush BEFORE removing the brush from the duct.
- f. The ducts can be fogged with Envirocon after cleaning.
- g. Odor Kill can now be fogged into the duct for a fresh scent in the system.

3. Vertical Ducts.

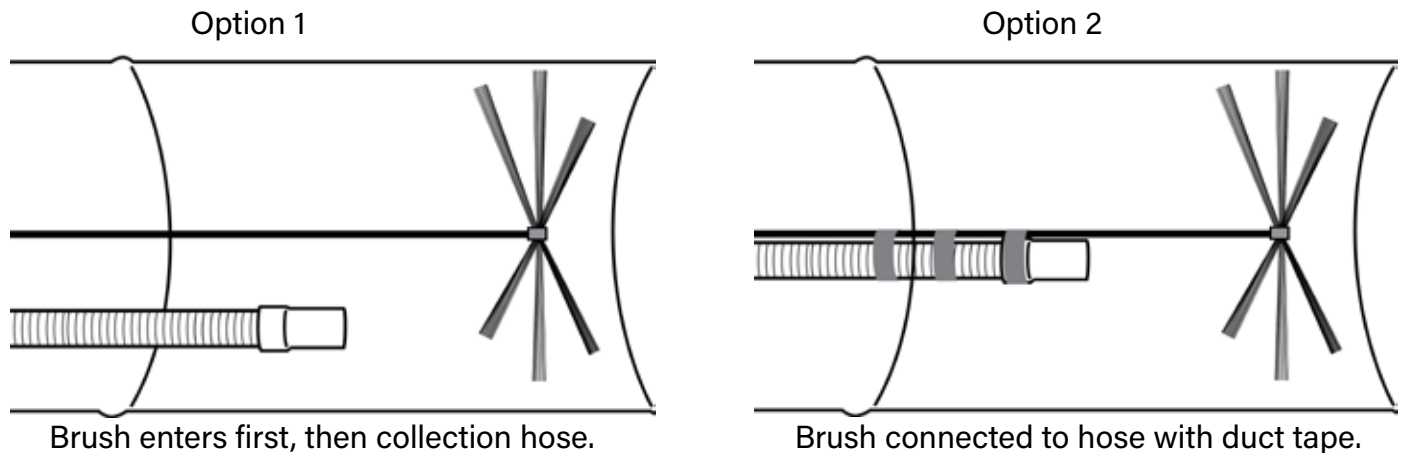
- a. Remove the vent from the duct and take them outdoors to be washed.
- b. Vertical ducts should be cleaned from the TOP if possible. Cleaning from the bottom is also effective but is much more difficult because the hose and drill powered cable must be push up from the bottom.
- c. With the brush OFF, insert the drill powered cable and brush into the duct and turn on the drill.
- d. In either set up, insert the vacuum hose and turn on the Zephyr.
- e. Push the tools down (or up) as far as possible, then pull them back. Be sure to STOP the drill powered Ccable before removing it from the duct.

4. ALWAYS TEST AIR SYTEM AFTER CLEANING AND REINSTALLING THE VENTS AND FILTER

DUCT CLEANING PROCEDURES (CONT.)

Optional Hose/Brush Set-up

It may be cumbersome to have the brush line and hose separated. Another approach you can use is to attach the brush to the hose. We recommend using duct tape in several locations to keep the brush line stable.



DRYER VENT CLEANING (OPTIONAL)

The Zephyr is an incredibly powerful and versatile tool. The 3" vacuum hose excels at collecting debris without clogging and can be inserted directly into a 4" air or dryer duct.

This hose can also be used in conjunction with the "Y" adapter, coupled with an agitation tool, such as the Drill Powered Cable or optional Air Whisk. When connecting to a dryer duct, remember to clip the outside flap open to enable proper cleaning.

When cleaning a basement duct system, it's advisable to attach the 3" hose to the trunk line and push the duct debris downwards from the vents using an air tool or power brush. The smallest particles, those most harmful to the lungs (under 10 Microns), will be carried in the airflow and captured by the Zephyr filters. Larger debris may necessitate additional agitation for complete removal.

With its high volume and high static "water lift," the Zephyr is exceptionally effective at removing debris from smaller diameter air ducts, surpassing many standard duct vacuums.

Dryer exhaust ducts vary in construction, materials and configuration from city to city. The general procedure for using the drill powered dryer duct cable described here may need to be modified to safely and effectively clean these ducts in your area. An alternate tool to the drill powered cable is the Forward and Reverse Air Whisk, which requires an air compressor.

CAUTION: Cleaning the exhaust duct on a clothes dryer will improve performance and reduce future lint build up, but the inside of the dryer itself must also be cleaned and lint removed from its fan, heating area and other interior components to reduce the risk of fire.

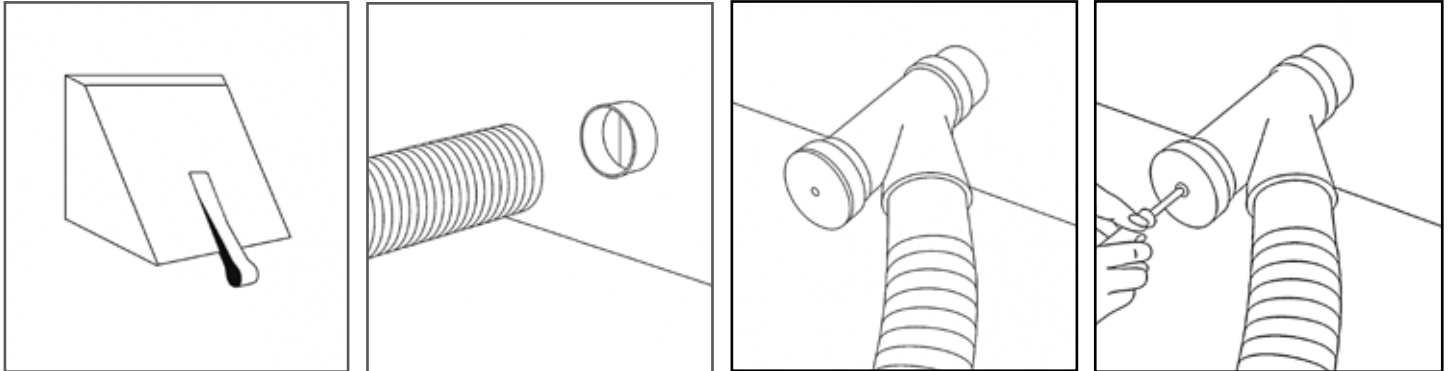
(Continued)

DRYER VENT CLEANING

Dryer exhaust ducts vary in construction, materials and configuration from city to city. The general procedure for using the drill powered dryer duct cable described here may need to be modified to safely and effectively clean these ducts in your area.

Note: A drill is not included with the Zephyr.

CAUTION: Cleaning the exhaust duct on a clothes dryer will improve performance and reduce future lint build up, but the inside of the dryer itself must also be cleaned and lint removed from its fan, heating area and other interior components to reduce the risk of fire.



Clip the exhaust vent open

Remove the dryer hose

Attach "Y" adapter & 3" hose

Insert Brush

- 1) With the dryer running, clip the outside flap "OPEN".
- 2) Turn off the dryer, remove power, then move it away from the wall and disconnect the exhaust tubing. If it is a gas dryer, be careful to not damage or break the gas line
- 3) Apply the vacuum to the end of the exhaust duct (inside or outside, depending on configuration). The "Y" adapter can be used with the 3" diameter hose. The adapter has an entry hold for the dryer brush and cable.
- 4) Use the drill powered cable and 4" brush with the 5/16" flexible dryer duct cable.
- 5) Insert the brush into the exhaust duct. Run the drill at moderate speed.
- 6) Push the brush into the duct with the cable.
- 7) If resistance is met, try reversing.
- 8) If the cable cannot be pushed all the way to the end of the duct, it may be necessary to insert the cable and brush from the other end of the duct (at the exhaust port). The Zephyr vacuum hose should remain connected and running at the other end of the duct.
- 9) If there is a visible lint clog or bird nest, a nest claw (optional sku: FG0089) may be needed.

CAUTION: The nest claw can be very aggressive and may damage flexible ducts.

(Continued)

DRYER VENT CLEANING (CONT.)

- 10) If you have access to only one end of the exhaust duct, the Air-Care Zephyr "Y" adapter (Included in Dryer Duct Cleaning Kit) allows the vacuum and the cable to be inserted from the same end of the exhaust duct.
- 11) Before cleaning the dryer, remove the back cover of the dryer and clean out the lint on internal components. Usually 4-8 screws are used to mount the back cover. Access to the interior of the dryer will vary with model, be careful not to damage it.
- 12) Once the duct and dryer are clean, connect the dryer to the wall opening with the aluminum hose. (The Consumer Product Safety Commission does NOT recommend plastic connector hoses, nor does any major dryer manufacturer.)
- 13). Turn the dryer on and again check the airflow outside. If the flow has increased substantially over the original flow rate, you have been successful. Now remove the exhaust clip so the flap can close.
- 14) Clean up any lint around the outside of the dryer, clean the exterior of the dryer and if you have a sticker or magnet, date it for a follow-up cleaning in 12 months.

TROUBLESHOOTING GUIDE

- Prior to troubleshooting, check the following:
1. Be sure the power cord is plugged into a dedicated power sources and verify that the wall outlet where the power cord is plugged into is working. (Plug in a lamp or other device and be sure it works properly).
 2. Check that the dual stage, 15-gallon vacuum bag is not more than half full, and that the 3rd stage polyester pre-filter and 4th stage HEPA filters are not clogged.

Symptom	Check	Corrective Action
Low or no vacuum suction.	1. Filters are clogged 2. Gasket is leaking. 3. Motor is not running. 4. The hose is clogged	▪ Replace the dual stage, 15-gallon vacuum bag filter. ▪ Clean the 3rd stage pre-filter. ▪ Clean or replace the 4th stage HEPA filter. ▪ Inspect the gaskets on the door and under the HEPA, then Call Air Care for repair parts. ▪ Remove the hose and check for vacuum then reverse the hose to suck out clogged debris if vacuum is ok. If there is still no vacuum, call Air Care.
Excessive noise.	Motor is bad	Call Air-Care for a new motor..

MAINTENANCE

The Zephyr requires a minimum amount of maintenance, normally limited to cleaning or replacing filters as they become filled with dirt and debris. It is always beneficial to keep the exterior and interior of the machine clean. A qualified technician should perform all electrical or mechanical repairs.

Filter Removal & Replacement

1. Turn off the VAC motor, and unplug the Zephyr.
2. Open the front door and remove the bag from its 3" tube on the back side of the door.
3. Carefully remove the 2-stage bag filter and dispose of it properly in accordance with any local state or federal regulations applicable.
4. If there is noticeable debris build up on the 3rd stage pre-filter in the top of the HEPA, replace it
5. To remove the 4th stage HEPA, open the front access door, then lift it slightly at the front and pull it out.
6. Lift the HEPA out and inspect it for damage or clogging.
7. Install a new HEPA filter, by placing it into the base with the "flow" arrow pointing down.
Note: There is no way to clean the HEPA filter without damaging it.
8. Install a new dual stage bag filter following the instructions on the bag. It collects heavy debris in the bottom section of the bag and lighter debris in the top section.

PARTS AND ACCESSORIES

Description	Part Number
Zephyr	120v model FG0285, 230v model FG60286
Dual Stage 15 Gallon Bag	F0051
Hose, 3" x 8'	SAO0611
Cuff, Hose 3"	13 Amps
Hose, 1.5" x 25' w/o Cuffs	COM0757
Cuff, Vac Hose 1-1/2" to 2"	COM0007
Y-Adapter 3x3x3	SADM0055
Nest Claw Complete Assembly	FG0089
3" Adapter, 3" to 2" cuff for 1 1/2" Hose	COM0170
5/16" 20' Drill Powered Cable w/o Brush	SAO0115
Exhaust Hood Clip	COM0196

SPECIFICATIONS

Specification	Description
Air Flow	200 cfm
Static Pressure	75" H2O
Motor Voltage*	110 Volt AC, 50/60 Hz (220 Option Available)
Motor Amps	13 Amps
Vacuum Hose	Hose Cuff fitting for 3" or 2" x 25 ft Hose (Hose adapter included)
Filtration	4 Stage HEPA
Collector Bag	15 Gal, dual layer bag, dual layer
Prefilter	Polyester 9.5" x 9.5" x1" with disposable media
HEPA Filter	9.5" x 9.5"x 2.75" 99.97% @ 0.3 Micron
Cabinet Construction	Rotation molding
Filter Access	Latched front door
Controls	ON/OFF power switch
Power Cord	14 ga. Grounded, 25 Ft detachable
Size	26" L x 26" W x 37" H
Weight	61 Lbs w/o Hose
Wheels	12" diameter non marking rear wheels, 4" front caster wheels

*All specifications and prices are subject to change and improvement without notice.

LIMITED WARRANTY

Zephyr

Air-Care warrants this product to be free from defects in materials and workmanship to the original purchaser for a period of Three (3) years from the date of purchase. Components listed below are excluded from this Three year period and are covered for periods described below:

Blower Motors

1 Year

Wheels & Filters

No Warranty

Warranty covers both parts and labor (labor is to be performed at Air-Care's facility located at 3868 E. Post Road; Las Vegas, Nevada).

Warranty is extended to the original purchaser and is not transferrable.

This warranty does not extend to any damage to a product caused by or attributable to freight damage, abuse, misuse, improper or abnormal usage. Warranty is also void if the product has been modified or altered in any way.

The purchaser is responsible for the cost of shipping the equipment to Air-Care's facility for evaluation. If found to be defective and covered by the terms of this warranty, Air-Care will pay FedEx ground shipping charges on the repaired or replaced item back to the purchaser's location. Any additional expedited service charges for quicker shipping shall be born by the purchaser. If the product or component is not found to be a warranty issue, the purchaser will be responsible for return shipping charges.

Air-Care is not responsible or liable for indirect, special, or consequential damages arising out of or in connection with the use of performance of the product; damages with respect to any economic loss, loss of property, loss of revenues or profits, loss of use, or other incidental or consequential damages of whatsoever nature.

The warranty extended hereunder is in lieu of any and all other warranties, and any implied warranties of any type.

This warranty gives you specific rights. These rights and others vary from state to state.

Division of D.P.L. Enterprises Inc.
3868 East Post Road, Las Vegas, Nevada 89120, (702) 454-5515, FAX (702) 454-5225
Website: www.air-care.com • E-mail: cs@Air-Care.com