



Owner and Maintenance Guide for Models Equipped with Magic Lung[®] Blower

Thank You For Choosing Vent-A-Hood[®]

We know you will be pleased with your purchase decision. Since 1933, our company has earned an outstanding reputation because of our commitment to performance, quality, and reliability.

The Importance of Cooking Ventilation

The main purpose of cooking ventilation is to capture the by-products of cooking. These by-products are heat, steam, smoke, odor, hazardous gases, and grease. Without proper cooking ventilation, these by-products can cause a great deal of harm to the home. Vent-A-Hood[®] range hoods exhaust all cooking by-products to the outside with the exception of GREASE, which is collected by the patented Magic Lung[®] blower system.

The Magic Lung Blower[®] - How It Works

The Magic Lung[®] internal blower system was originally patented in 1937. The Magic Lung[®] pressurizes grease-laden air as it passes through the blower wheel and cools the grease from a vapor into a liquid. The centrifugal action of the Magic Lung[®] traps 99% of cooking grease without the use of messy and inefficient wire mesh or baffle filters. The constant speed centrifugal blower is also designed to create a pressure barrier, lowering the risk of an attic or wall fire.

Safety

READ AND SAVE THESE INSTRUCTIONS

WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- A. Use this unit only in the manner intended by the manufacturer. If you have questions, call the manufacturer.
- B. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- C. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-related construction.
- D. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) and the local code authorities.
- E. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- F. Ducted fans must always be vented to the outdoors. Do not vent exhaust air into spaces within walls or ceilings, crawl spaces, attics, or garages.

WARNING - TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:

- A. Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- B. Always turn hood ON when cooking at high heat or when flambeing food (i.e. Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambe).

Safety (Continued)

- C. Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or in blower housing.
- D. Use proper pan size. Always use cookware appropriate for the size of the surface heating element.

WARNING - TO REDUCE THE RISK OF INJURY TO PERSONS, IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOWING:

- A. SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. If the flames do not go out immediately, EVACUATE AND CALL THE FIRE DEPARTMENT.
- B. NEVER PICK UP A FLAMING PAN - You may be burned.
- C. DO NOT USE WATER, including wet dish cloths or towels - a violent steam explosion will result.
- D. Use an extinguisher ONLY IF:
 - 1) You know you have a Class ABC fire extinguisher and you already know how to operate it.
 - 2) The fire is small and contained in the area where it started.
 - 3) The fire department is being called.
 - 4) You can fight the fire with your back to an exit.

CAUTION

TO REDUCE THE RISK OF FIRE, AND TO PROPERLY EXHAUST AIR, BE SURE TO DUCT EXHAUST AIR OUTSIDE. DO NOT VENT EXHAUST AIR INTO SPACES WITHIN WALLS OR CEILINGS, OR INTO ATTICS, CRAWL SPACES, OR GARAGES.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT USE THIS FAN WITH ANY SOLID-STATE SPEED CONTROL DEVICE.

Safety (Continued)

**CAUTION
FOR GENERAL VENTILATION USE ONLY. DO NOT USE TO
EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND
VAPORS.**

**WARNING
TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK.**

**THIS MANUAL SHOULD REMAIN WITH THE HOOD
FOR FUTURE REFERENCE**

Operating Instructions (Continued)

A. Models with Dial Controls

On hood models with dial controls, blower assemblies are switched independent from one-another. The user should generally start with the hood on the lowest setting, and then increase speed and/or turn on additional blowers as required.

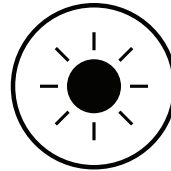
Blower Control Dial - This switch operates a single or dual blower. To operate the blower(s), rotate the dial through the fan speed settings by turning it clockwise (facing the knob). Rotate the dial counter-clockwise to turn the blower(s) off.

Light Control Dial - This switch operates the lights. To operate the lights, rotate the dial through the light intensity settings by turning it clockwise (facing the knob). Rotate the dial counter-clockwise to turn the lights off.

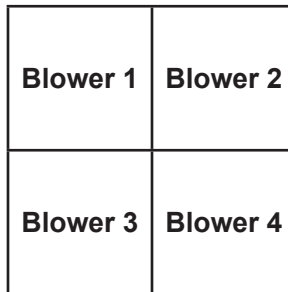
Blower Control Dial



Light Control Dial



T400 Island Cluster Blower Configuration (Top View)



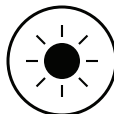
Front Side

Blower Control Dial



Blower 1 & 2

Light Control Dial



Lighting

Blower Control Dial



Blower 3 & 4

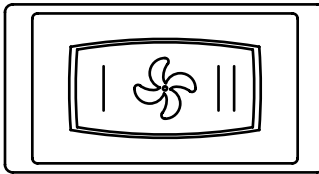
Operating Instructions

B. Models with Rocker Switch Controls

On models with rocker switches, blowers are switched independent from one-another. The user should generally start with the hood on the lowest setting, and then increase speed and/or turn on additional blowers as required.

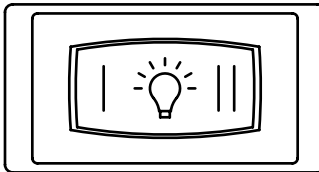
Red Switch - This switch operates a two-speed blower. This two-speed blower allows the user to switch the hood to “LOW” (position I) for quieter operation during light cooking, while the “HIGH” (position II) setting delivers the full power of the Magic Lung® blower unit. If the two-speed blower is turned to “LOW”, the heat sensor (SensaSource®) monitors cooking activity. If the heat reaches an unacceptable level inside the hood, or a range fire occurs, the two-speed blower will switch from “LOW” to full power automatically. The sensor will return the blower to the “LOW” level when the heat subsides or the hood may be turned off manually (middle position).

Red Switch



White Switch - This switch controls the lights. This switch can be set for “LOW” level lighting (position I), “HIGH” level lighting (position II), or “OFF” which is in the middle position.

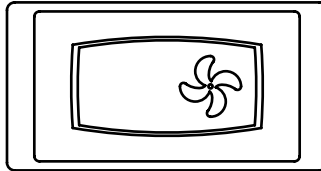
White Switch



Operating Instructions (Continued)

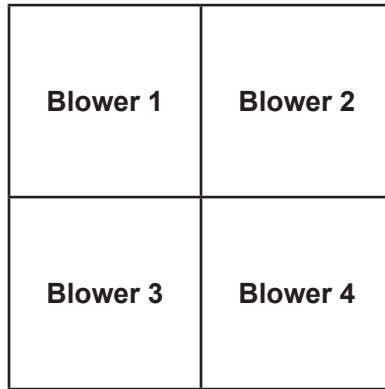
Black Switch - This switch operates an additional single-speed blower. The single-speed blower is either off or on, and is not controlled by the SensaSource® heat sensor or the red switch. This blower should be engaged if the heat level exceeds the capacity of the two-speed blower.

Black Switch



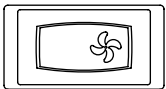
Note: The location of the switches on the hood corresponds to the location of the blowers in the hood (i.e. left switch operates left blower, etc.) except for a T400H Island 1100 CFM Cluster Blower, which is diagrammed below.

T400 Island Cluster Blower Configuration (Top View)



Front Side

Black Switch



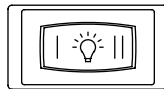
Blower 1

Red Switch



Blower 2

White Switch



Lighting

Red Switch



Blower 3

Black Switch



Blower 4

Hood Cleaning

A. Hood Canopy

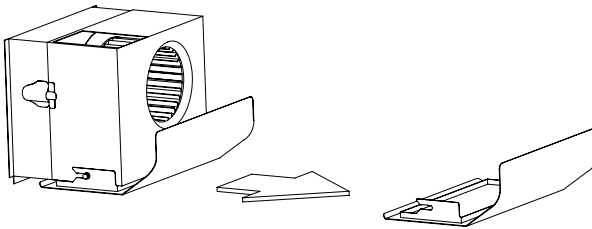
Wipe down the interior and exterior of the hood as needed with a soft cloth and warm soapy water (liquid dish detergent is acceptable). Do not use acids, abrasives, strong detergents, solvents, or scouring pads. Stainless steel should be treated with a quality stainless steel cleaner such as Stainless Steel Magic® (Vent-A-Hood part number SS64®). Follow all label instructions. Do not polish across the grain or in circles.

Real brass, real copper, and hammered copper hoods will oxidize and/or tarnish over time. Use a quality copper or brass cleaner such as Red Bear Copper Polish® (Vent-A-Hood® part number CP101). Follow all label instructions. Do not polish across the grain or in circles. Do not use acids, abrasives, strong detergents, degreasers, solvents, or scouring pads.

B. Blower Unit

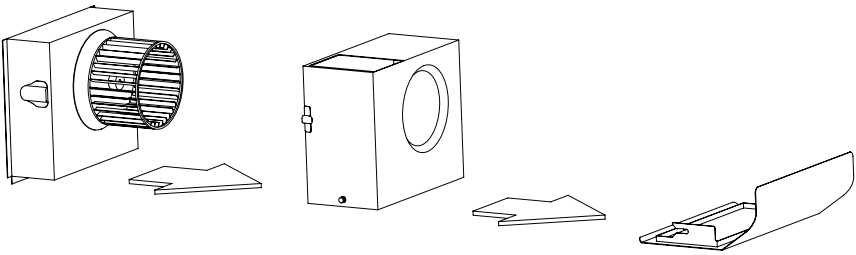
WARNING: To reduce the risk of personal injury, be sure the power is turned off in the hood before removing the shield(s) and blower housing(s).

The Vent-A-Hood® Magic Lung® blower captures grease by-products in the blower housing(s) and E-Z Clean blower shield(s). E-Z Clean blower shields require more frequent cleaning than the blower housing but individual cooking habits determine how often each item will need to be cleaned.



E-Z Clean blower shields are easily removed for cleaning by pulling the E-Z Clean blower shield(s) toward the front of the hood being careful to keep the tray level if the hood has been recently used.

Hood Cleaning (Continued)



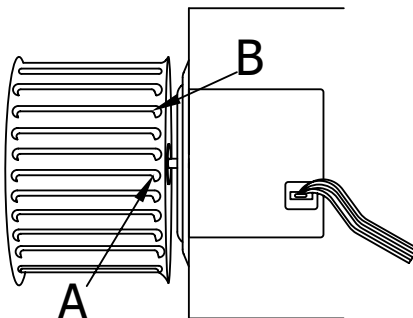
To remove the blower housing(s) and damper(s), first remove the E-Z Clean blower shield. The blower housing is removed for cleaning by unsnapping the suitcase latches (one on each side of the housing). Then, pull the housing forward and gently “tip” it downward to clear the blower wheel(s). The blower wheel(s) can be removed (if necessary) by using a 1/8" hex wrench. See part C of this section for details on how to clean the blower wheel(s).

Clean the shield(s), damper(s), and/or blower housing(s) in a sink of warm soapy water (liquid dish detergent) and let soak for a few minutes. Wash with a sponge or dishcloth, rinse and let drain before reinstalling. Alternatively, the blower housing(s) and E-Z Clean blower shield(s) may be placed into a dishwasher.

C. Blower Wheel

WARNING: To reduce the risk of personal injury, be sure the power is turned off in the hood before removing the shield(s) and blower housing(s).

Regular cleaning of the blower housing should prevent grease accumulation on the blower wheel. If grease build-up should occur, the blower wheel may easily be cleaned in place using a soft bristle toothbrush and a common degreaser such as Formula 409®. Take care not to move or lose the metal balancing clips that may be affixed to the wheel (B).



Hood Cleaning (Continued)

For instances where the blower wheel may need to be removed, follow the instructions below.

Removing the blower wheel requires a 1/8" hex wrench. A 1/8" hex wrench may be obtained from your local hardware store or directly from Vent-A-Hood®. There is a small set screw on the side of the hub of the wheel (A) that tightens up against a "flat" spot on the motor shaft. The set screw must be turned 1/2 turn counterclockwise to remove the blower wheel. Insert wrench through the blades of the blower wheel and into the set screw. If the wheel is difficult to remove, the area where the motor shaft makes contact with the blower wheel hub may need to be sprayed with a common penetrating oil such as WD-40®.

After allowing the penetrating oil to soak for a few minutes, push the blower wheel forward slightly, then gently pull the blower wheel off the motor shaft. Use caution to avoid bending or distorting the blower wheel and take care not to move or lose the metal balancing clips that may be affixed to the wheel (B).

A soft bristle toothbrush with warm soapy water may be used to clean the blades, or soak the blower wheel in warm soapy water. When reinstalling the wheel onto the motor shaft, make sure the set screw makes direct contact with the "flat spot" on the motor shaft. Slide the blower wheel onto the motor shaft as far as it will go, making sure the back of the blower wheel does not touch the motor mount screws protruding from the motor.

If the motor is too far back, it will rub the motor mount screws, and if it is too far forward, it will rub the inside of the blower housing. Adjust the blower wheel slightly to find the correct front-to-rear location. Tighten the set screw (clockwise) to lock the blower wheel in the correct position.

NOTE: For hoods that have more than one blower wheel, make sure that white blower wheels are matched up with white motor rings, and black blower wheels are matched up with black motor rings. The hood will not perform properly if blower wheels and motors are mismatched.

Maintenance/Troubleshooting

A. Light Bulb Replacement

WARNING: To reduce the risk of personal injury, turn off power and allow lights to cool before proceeding.

LED Bulbs

LED bulbs are integrated into the hood and are not interchangeable. Attempting to remove and/or replace these bulbs may result in damage to the hood.

Halogen Bulbs

To remove the bulb, turn it 1/4 turn counterclockwise. If the light is difficult to remove, obtain a light bulb suction cup from a lighting/hardware store or directly from Vent-A-Hood®.

Replace the bulb with a 120 volt, 50 watt **maximum**, GU10 halogen bulb (Vent-A-Hood P/N: P1110).

Infrared Heat Lamps

To remove the bulb, turn it counterclockwise. Take care not to put too much force on the glass as it may easily be broken. If the light is difficult to remove, obtain a light bulb suction cup from a lighting or hardware store.

Replace the bulb with an R40, 120 volt, 250 watt **maximum** infrared bulb.

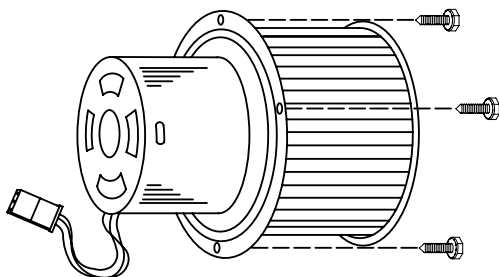
Maintenance/Troubleshooting (Continued)

B Motor Replacement

WARNING: To reduce the risk of personal injury, be sure the blower(s) are turned off in the hood before removing the shield(s) and blower housing(s).

Remove the shield and blower housing as described in Hood Cleaning on page 8, Section B.

Use a ¼" nut driver to remove the three motor mount screws that attach the motor to the hood and gently pull the motor forward and down. Disconnect the wiring harness, remove the old motor and replace it with the new motor. Be sure to fully engage the electrical connections and tighten the motor mount screws. If necessary, adjust the blower wheel as described in Hood Cleaning on page 9, Section C.



C What To Do If...

Smoke is in the kitchen. Check the following:

Is the hood sized appropriately for the type of cooking equipment it is ventilating?

The purpose of a hood is to collect cooking contaminants and hold them until the blower unit can exhaust them to the outside. Therefore, it is necessary to size the hood based on the type of cooking equipment that is being used. Whenever possible, hoods should overlap the cooking equipment by at least three inches on each side. For island applications, this is mandatory. The hood should also project out to the front edge of the front burners. Finally, the height of the hood can affect its performance. Generally speaking, taller hoods are more suitable for professional style ranges, whereas under cabinet hoods are recommended for standard cooking equipment.

Maintenance/Troubleshooting (Continued)

Does the blower capacity of the hood match the cooking equipment it is over?

B100 Single Blower (300 CFM) - Under cabinet or wall mount hoods for standard electric and 4-burner gas or equivalent cooking equipment.

B200 Dual Blower (600 CFM) - Under cabinet or wall mount hoods for standard cooking equipment, gas or electric, and professional style ranges.

B200 Dual and B100 Single Blowers (900 CFM) - Wall mount hoods for larger professional style ranges.

Two B200 Dual Blowers (1200 CFM) - Wall mount hoods for larger professional style ranges.

T200 Island Dual Blower (600 CFM) - Island hoods for standard cooking equipment, gas or electric, and professional style ranges.

Two T200 Island Dual Blowers (1200 CFM) - Island hoods for larger professional style ranges.

T400 Island Cluster Blower (1200 CFM) - Island hoods for larger professional style ranges.

Is the hood ducted properly?

The duct should be smooth walled. Corrugated or “flex” type duct must not be used as it restricts airflow. The duct work should be the same square inch area (or larger) as the hood discharge for the entire length of the duct run. Run the duct as short and straight as possible. Enlarge the duct for longer duct runs. Maintain 4 to 5 foot spacing between turns. Turns should be smooth and gradual, not sharp and angled. Roof jack and wall louver openings must be free of obstacles, at least as large as the duct size, and open freely.

Maintenance/Troubleshooting (Continued)

Is the hood mounted at the appropriate height off of the cooking surface?

The height of the hood off the cooking surface is very important. The higher the hood is mounted, the less effective it will be. Hoods only collect cooking vapors; they will not pull cooking contaminants back into the hood if they escape unto the kitchen. Generally speaking, the deeper the hood, the higher the hood can hang and still be effective. The following recommended maximum mounting heights are for optimum performance.

Under Cabinet 6" tall	21-24"
Under Cabinet 9" tall	24-27"
Euroline - PDH14/SLDH14	24"
TLH	23-3/4"
Wall Mount	30"
Island	30"
Standard Liner - BHSLD	24-27"
Pro Liner - BHPSLD, BHPSLB	27-30"
Island Liner - THSLE, THPSLE	30"

Are the blower wheels paired with the correct motors, and are they oriented in the hood properly?

Remove the blower housing as described in Hood Cleaning on Page 8, Section B. White blower wheels should be paired with white motor rings and turn clockwise. Black blower wheels should be paired with black motor rings and turn counterclockwise. If the blower wheels and motors are incorrectly paired and positioned, the hood will not function properly.

Maintenance/Troubleshooting (Continued)

Do the dampers open and close freely?

With the blower housing off (see Hood Cleaning on Page 8, Section B), locate the damper (flap) and ensure that it opens and closes freely. If it does not, identify and remove any obstructions that are preventing the damper from opening. Screws protruding through the duct work are the most common obstruction. During installation, only duct tape should be used to connect duct work to the top of the hood. Screws that are used to connect duct work and transitions extend inside the duct work and may obstruct the damper from opening.

Is the hood making a rubbing or scraping noise?

This may be caused by the blower wheel coming in contact with the front edge of the blower housing or rubbing the motor mount screws. Unsnap the suitcase latches on the blower housing (see Hood Cleaning on Page 8, Section B) and make sure the housing is properly seated on the face of the motor housing. If the blower wheel is rubbing on the motor mount screws, the blower wheel will need to be repositioned on the motor shaft (see Hood Cleaning on Page 9, Section C).

Is the hood making a knocking or rattling noise?

This may be caused by a loose blower wheel. Remove the blower housing (see Hood Cleaning on Page 8, Section B) and make sure the blower wheel is properly attached to the motor shaft (see Hood Cleaning on Page 9, Section C).

NOTE: If smoke still enters the kitchen after following these suggestions, contact your dealer for additional service and/or suggestions.

Limited Warranty

Vent-A-Hood® warrants to the original consumer-purchaser its Magic Lung® products to be free of defects in material and workmanship for a period of five years on parts and one year on labor from the date of purchase with the following limitations:

- A. Freight damage
- B. Blower wheel damage
- C. Light bulbs
- D. Damage or malfunction caused by faulty installation
- E. Incidental or consequential damage
- F. Commercial application
- G. Misapplication or modification of or to any part of the Vent-A-Hood® product

Service

To make a warranty claim, contact the dealer where the hood was purchased. They will contact the appropriate service agents. It is not necessary to register the product directly with Vent-A-Hood®.

Model No.: _____
(Eg. B100MSC, B200MSC, T200MSC, T400MSC, etc.)

Serial No.: _____
(Eg. NAZ12345, +MB12345, NB12345, etc.)

Purchase Date: _____

Hood Style: _____
(Eg. BH234PSLD SS, PRH18-348 BL, JDH466/C1 OL, TH236SLE WH, etc.)

VentAhood®

(972) 235-5201
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