

## MILLENNIA<sup>TM</sup> WALL MOUNT RANGE

### Hoods

For use with models:

DHW301 DHW361

DHW421

DHW482

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# Before You Begin...

#### **IMPORTANT:**

- **INSTALLER**: In the interest of safety and to minimize problems, read these installation instructions completely and carefully before you begin the installation process. Leave these installation instructions with the customer.
- **CUSTOMER**: Keep these installation instructions for future reference and the local electrical inspector's use.

If you have questions or problems with installation, contact your Dacor dealer or the Dacor Customer Service Team.

#### **Dacor Customer Service Team**

Phone:	(800) 793-0093
Web site:	www.Dacor.com

All specifications are subject to change without notice. Dacor assumes no liability for changes to specifications.

# Important Safety Instructions

# Important Information About Safety Instructions

The *Important Safety Instructions* and warnings in these instructions are not meant to cover all possible problems and conditions that can occur. Use common sense and caution when installing, maintaining or operating this or any other appliance.

Always contact the Dacor Customer Service Team about problems and conditions that you do not understand.

### Safety Symbols and Labels

#### **DANGER**

Immediate hazards which **WILL** result in severe personal injury or death.

#### WARNING

Hazards or unsafe practices which **COULD** result in severe personal injury or death.

#### **A** CAUTION

Hazards or unsafe practices which **COULD** result in minor personal injury or property damage.

#### 

**IMPORTANT:** If you smell gas:

- Do not use or light any appliance.
- Do not touch any electrical switch or use any electrical devices, including the telephone, in your building.
- From a neighbor's phone, immediately call the gas supplier. Follow the gas supplier's instructions.
- If you cannot contact the gas supplier, call the fire department.

**IMPORTANT:** Do not store or use combustible, flammable or explosive vapors and liquids (such as gasoline) on or in the vicinity of this or any other appliance. Also keep items that could explode, such as aerosol cans, away from the cooktop. Do not store flammable or explosive materials in adjacent cabinets or areas (including above and below the cooktop).

#### 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, contact 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.

## READ AND SAVE THESE INSTRUCTIONS

## IMPORTANT SAFETY INSTRUCTIONS

## To reduce the risk of fire, electric shock, serious injury or death when using your range hood, follow basic safety precautions, including the following:

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- 1. <u>Do not</u> install or operate this hood if it has been damaged, dropped, has damaged electrical conduit or wires or is not working properly. If the product is damaged when received, immediately contact the dealer or builder.
- 2. Use this range hood only for its intended purpose as outlined in the use and care manual. <u>Do not</u> use this range hood to vent hazardous or explosive materials or vapors. If you have questions, contact the manufacturer.
- 3. The customer should not install, repair or replace any part of the range hood unless specifically recommended in the literature accompanying it. A qualified service technician should perform all other service. Contact the nearest Dacor authorized service representative at (800) 793-0093, or at www.Dacor.com for examination, repair or adjustment.
- 4. Keep all packaging materials away from children. Plastic bags can cause suffocation.
- 5. This range hood must be installed and grounded by a qualified installer according to these installation instructions. All installation work and electrical wiring must be performed in accordance with all applicable codes and standards, including fire-rated construction.
- 6. Install or locate this appliance only in accordance with these installation instructions and the requirements specified by the manufacturer of the cooktop or range. Improper installation, adjustment, alteration, service or maintenance can cause serious personal injury or property damage.
- 7. Do not use an extension cord or adapter plug with this appliance.
- 8. 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 guidelines 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.
- 9. When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.
- 10. The installer must show the customer the location of the fuse or junction box so that the customer knows where and how to turn the power off.
- 11. Before installing or servicing the range hood, switch power off at the fuse or junction box and lock the electrical panel door to prevent power from being switched on accidentally. When the electrical panel cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- 12. Read the use and care manual completely before using the appliance.
- 13. Do not tamper with the controls.
- 14. Never allow the filter(s) to become blocked or clogged. Do not allow foreign objects, such as cigarettes or napkins, to be sucked into the hood.
- 15. Clean the filter(s) and all grease-laden surfaces often to prevent grease fires and maintain performance.
- 16. If the cooktop and range hood are near a window, use an appropriate window treatment. Avoid long drapes or other window coverings that could blow over the cooktop and hood, resulting in a fire hazard.
- 17. Always run the blower(s) whenever the cooktop is operating.
- 18. Never leave the range or cooktop unattended when a burner (or element) is in use. Boil-overs and greasy spills may smoke and/or ignite.
- 19. Do not leave children alone or unattended in the area where the cooktop and range hood are in use. Never allow children to sit or stand on an appliance. Do not let children play with a range, cooktop or range hood. Do not store items of interest to children above or around the cooktop, range or range hood.
- 20. The minimum vertical distance between the cooktop surface and the exterior part of the hood must be no less than 30" (762 mm). The vertical distance may be longer for the range or cooktop being used. Consult the range or cooktop installation instructions for the minimum and maximum vertical distance from the appliance being used.
- 21. A minimum of two people are required to safely install this appliance.

# IMPORTANT SAFETY INSTRUCTIONS

#### **WARNING**

#### 22. TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE:

- 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 may result.
- d. Use a fire extinguisher ONLY if:
  - You have a Class ABC extinguisher, and you already know how to operate it.
  - The fire is small and contained in the area where it started.
  - The fire department is being called.
  - You can fight the fire with your back to an exit.

# PRODUCT SPECIFICATIONS

### **GENERAL SPECIFICATIONS**

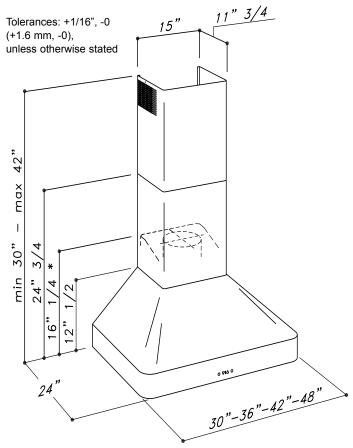
#### ALL MODELS

Blower	600 CFM (1200 for units with 2 blowers) with electronic speed control	
Blower Speeds	4	
Lights	12 Vac, 20W halogen	
Filters	Baffle type, dishwasher safe	
Exhaust	8-inch	
Finish	430 stainless steel	
Voltage	120 Vac, 60 Hz (see below for current rating)	
Circuit Requirement	120 Vac, 15 Amp grounded, dedicated circuit, minimum	

#### MODEL SPECIFIC

	MODEL NUMBER			
	DHW301	DHW361	DHW421	DHW482
Blowers	1	1	1	2
Lights	2	2	3	4
Filters	1	1	1	2
Maximum Current Draw	3.38 A	3.38 A	3.55 A	6.75 A

#### **DIMENSIONS**



\* 18" 1/4 on 48-inch model (DHW482) with exhaust cowling

**IMPORTANT:** The minimum installed distance from the hood to the cooktop surface <u>must</u> be no less than 30 inches. The minimum specified distance may be higher for the particular range or cooktop in use. Check the manufacturers specifications for the cooktop or range.

# Preparing for Installation

#### WARNING

- The electrical service to the range hood should be installed only by a licensed electrician.
- Observe all governing codes and ordinances during planning and installation. Contact your local building department for further information.
- A qualified technician must complete the installation of this built-in appliance. The owner is responsible to make sure the hood is properly installed.

Carefully check the location where the hood is to be installed. The hood should be placed for convenient access. Make certain that electrical power can be provided in the selected location.

Plan the installation so that all minimum dimensions are met or exceeded (see page 3). Dimensions shown provide minimum clearances, unless otherwise noted.

All contact surfaces between the hood and any cabinets or walls must be solid and at right angles.

Install the range hood and cooking appliance(s) so that they can be removed if service is required.

### ELECTRICAL POWER SUPPLY

### INSTALLATION

#### **Electrical Specifications**

It is the owner's responsibility to ensure that the electrical connection of this appliance is performed by a qualified electrician. The electrical installation, including minimum supply wire size and grounding, must be in accordance with the National Electric code ANSI/NFPA\* (or latest revision) and local codes and ordinances.

\*A copy of this standard may be obtained from:

National Fire Protection Association 1 Batterymarch Park Quincy, Massachusetts 02269-9101

#### Installing the Electrical Connection

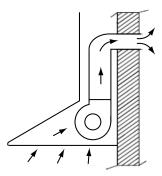
#### The electrical connection box must be:

- Connected to a 120 Vac, 60 Hz dedicated, grounded, circuit protected by a 15 Amp circuit breaker or time delay fuse.
- Located a minimum of 17" (43 cm) above the bottom of the range hood.

### PLAN AND INSTALL THE DUCT WORK

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- To reduce the risk of fire and to properly exhaust air, be sure to duct air outside the house or building. Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces or garages.
- Tape all duct joints securely to prevent combustion by-products, smoke or odors from entering the home. Doing so will also improve system efficiency.
- Do not exhaust more than one vent into a single duct run.
- Use only duct work constructed of materials deemed acceptable by state, municipal and local codes.
- Range hoods may interrupt the proper flow of smoke and combustion gases from furnaces, gas water heaters and fireplaces. To avoid drawing lethal gases into the home, follow the manufactures recommendation for these devices and consult NFPA and ASHRAE recommendations.
- **DO NOT** install an additional in-line or external blower to increase the length of the duct run. Even small differences between blower air flow rates can greatly reduce the air draw by the hood.
- All duct work materials (including screws and duct tape) must be purchased separately by the customer. When planning new duct work, always look for the shortest, most direct route to the outside. Venting can be done through the roof or directly through the back wall to the outside.



- The hood exhaust connects to an 8-inch round duct. You can increase the duct size over the duct run if desired. To prevent a back draft, never decrease the duct size over the run.
- Do not rely on duct tape alone to seal duct joints. Fasten all connections with sheet metal screws and tape all joints with certified silver tape or duct tape. Use sheet metal screws as require to support the duct weight.
- To prevent back-drafts, a damper at the duct outlet may also be required.
- Make sure duct work does not interfere with floor joists or wall studs.

## PREPARING FOR INSTALLATION

#### Calculating the Maximum Duct Run Length

The maximum straight duct length for the hood is 50 feet. For each elbow and transition added to the duct work, a certain number of feet must be subtracted from the maximum straight length to compensate for wind resistance. To determine the length the duct work cannot exceed, subtract all of the equivalent lengths of the elbows and transitions listed below from 50 feet.

#### **Duct Work Equivalent Lengths**

DUCT PIECE	SUBTRACT
90° elbow (8" Dia.)	7 feet
45° elbow (8" Dia.)	3 feet
3 1/4" x 10" to 8" round	4 foot
Wall cap with damper	30 feet
Roof cap	30 feet

#### **Duct Work Design Tips**

- Wherever possible, reduce the number of transitions and turns to as few sharp angles as possible. Two staggered 45° angles are better than one 90°.
- Keep turns as far away from the hood exhaust as possible, with as much space between each bend as possible.
- For best performance, use round duct instead of rectangular, especially when elbows are required.
- If multiple elbows are used, try to keep a minimum of 24" of straight duct between them.
- Avoid "S" or "back to back" configurations of adjacent elbows.

- In regions where the weather gets extremely cold, thermal breaks, such as a short section of non-metallic duct, should be used to avoid indoor heat loss. The break should be located as close to the pass through point to the outside as possible.
- Do not use flexible metal duct.
- <u>Do not</u> use duct work that is smaller in cross-sectional area than the recommended size duct (8" round).

#### **Duct Work Installation**

## Install all of the duct work, except for the portion that will be located inside the hood chimney:

- 1. Determine the vertical center line for the range hood. The center line for the hood is usually the same as the center line of the range or cooktop.
- 2. Using a pencil, mark the vertical center line on the wall from where the bottom of hood will be located to where the top of the chimney will be located.
- Draw a horizontal line 24 inches long at 90° to the vertical center line where the bottom of the hood will be located. The minimum allowable distance from the top of the cooktop to the bottom of the hood is 30".
- 4. Install the duct work so that the connection to the hood will be centered on the hood's center line. Also allow for a 1" clearance between the duct work and the wall where the hood will be mounted. The 1" clearance will allow room for the chimney mounting bracket on the ceiling.

# INSTALLATION INSTRUCTIONS

### VERIFY THE PACKAGE CONTENTS

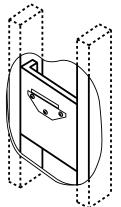
Unpack the parts box and verify that all required components have been provided. If any item is missing or damaged, please contact the dealer immediately. Do not install a damaged or incomplete appliance.

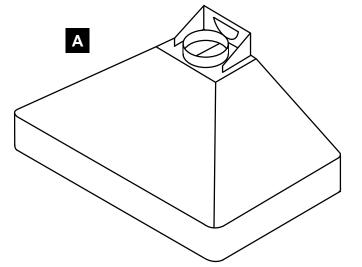
- Hood assembly with filter(s)
- Chimney assembly (2 piece)
- Chimney mounting bracket
- Mounting bracket\*
- Blower exhaust cowling (2 blower units only)
- Mounting and assembly hardware
- Use and care manual

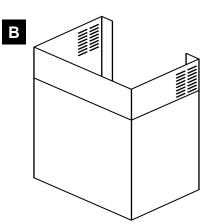
\* NOTE: The mounting hardware included with the hardware packet is suitable for mounting to brick and masonry only. If mounting the range hood to drywall,

Dacor strongly recommends the using a sturdy anchoring system designed for use with drywall. In addition, Dacor strongly recommends that you install a reinforced mounting block between the studs behind all hood mounting locations.

Make sure you have everything necessary for proper installation before proceeding.

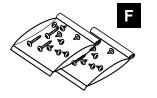












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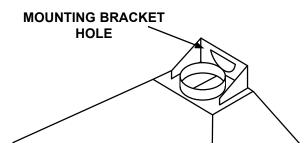
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#### **WARNING**

- The electrical service to the range hood should be installed only by a licensed electrician.
- Do not install the range hood unless the electrical service provided meets the range hood specifications.
- Observe all governing codes and ordinances during planning and installation. Contact your local building department for further information.
- A qualified technician must complete the installation of this built-in appliance. The owner is responsible to make sure the hood is properly installed.
- To avoid an electric shock hazard and property damage, locate electric wires and water pipes and avoid drilling in the vicinity.

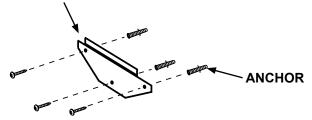
### MOUNTING BRACKET INSTALLATION

1. Measure the distance between the bottom of the hood and the mounting bracket hole on the hood being installed. Using a pencil, draw a short line on the wall the same distance above the horizontal line previously drawn on the wall.



2. Find the mounting bracket in the shipping box. Put the bracket against the wall and line up the top of the bracket with the short line just drawn.

#### **MOUNTING BRACKET**



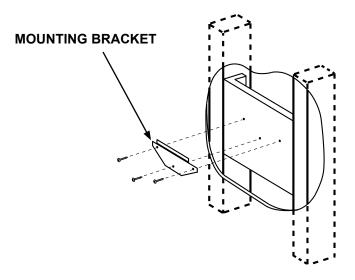
- 3. Line up the vertical line drawn on the wall with the center hole on the bracket.
- 4. Mark the three mounting hole positions through the holes in the bracket. Make sure they are level.
- 5. Drill the mounting holes...

#### If mounting the hood to brick or masonry:

- Drill three 5/16" X 1 1/2" holes in the locations marked.
- Insert three of the provided wall anchors into the holes. The anchors provided are for attaching the hood to masonry or brick only.

#### If mounting the hood to drywall:

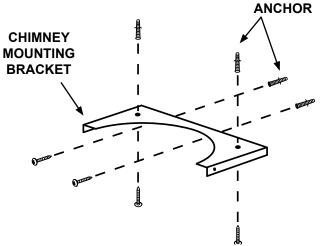
 Drill three appropriate sized pilot holes for the mounting hardware being used. The drywall mounting hardware must be purchased separately.



6. Attach the mounting bracket securely to the wall (3 places).

# CHIMNEY MOUNTING BRACKET

- 1. Locate the chimney mounting bracket and position it against the ceiling as shown. Center it on the center line drawn on the wall.
- 2. Mark the ceiling and the wall in two places each, through the holes in the bracket. Remove the bracket from the ceiling.
- 3. Drill four 5/16" holes through the four spots marked on the ceiling and wall.
- 4. Insert the four of the provided wall anchors into the four holes on the ceiling and wall.

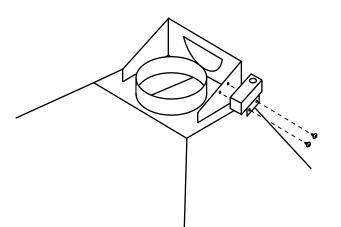


5. Place the chimney mounting bracket against the ceiling and attach it using four included 1 1/2" screws.

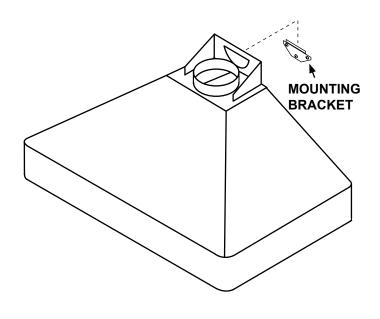
### HANGING THE RANGE HOOD

#### WARNING

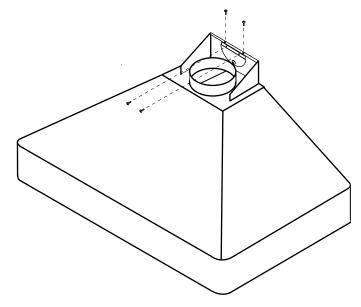
- Hanging the range hood requires two people. Do not attempt to lift the hood without assistance.
- 1. Attach the hood junction box to the top of the hood using two machine screws as shown.



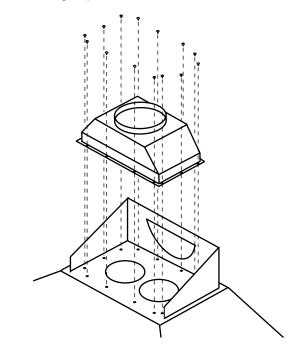
- 2. Remove the filter(s) to reduce weight and avoid damage.
- 3. Lift the hood up on both sides and put the mounting hole on the top of the hood over the lip of the mounting bracket. Gently lower it into place.



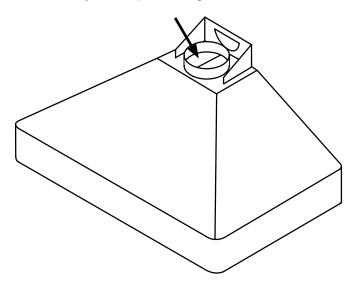
- 4. Insert two provided machine screws into the two holes <u>above</u> the mounting bracket on the range hood. Tighten the screws until they make contact with the bracket, then tighten them as necessary to make minor leveling adjustments to the hood.
- 5. Insert two machine screws through the front of the mounting bracket and tighten them into place.



6. On models with two blowers: Put the exhaust cowling over the blower outlets on the top of the hood. Fasten the cowling in place with 14 machine screws.



 Inside the exhaust outlet(s) there are metal or plastic damper flaps. The flaps close to help prevent backdrafts when the blower is turned off. Remove the shipping tape and make sure all the flaps open and close freely before proceeding.



### FINAL INSTALLATION

#### **Connecting to the Duct Work**

#### WARNING

- Do not use screws to attach the duct work to the hood exhaust outlet. Use duct tape only. Screws may prevent the damper flaps on the top of the hood from opening.
- Install the last of the duct work between the hood exhaust and the previously installed duct work. Attach the duct to the hood exhaust with duct tape alone. Use sheet metal screws (not provided) and duct tape on the remaining joints.

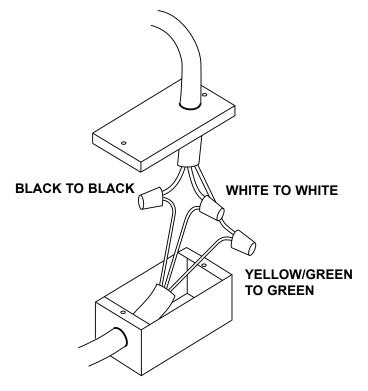
#### **Final Electrical Installation**

#### **WARNINGS**

- To avoid electrical shock or fire hazard, make sure the power supply at the fuse or junction box is turned off before proceeding with final installation.
- Improper connection of the hood electrical wiring may create an electric shock or fire hazard and may result in damage to the hoods electrical system.
- Do not ground the hood to the neutral (white) power supply wire. Connect the hood ground wire to a separate, properly grounded wire installed by a licensed electrician.

## Connect the house power supply wires to the wires coming out of the top of the hood junction box:

- 1. Connect the white wire from the hood to the neutral (white) power supply wire.
- 2. Connect the black wire from the hood to the hot (black) power supply wire.
- 3. Connect the green and yellow wire from the hood to the house ground (green) wire from the junction box.

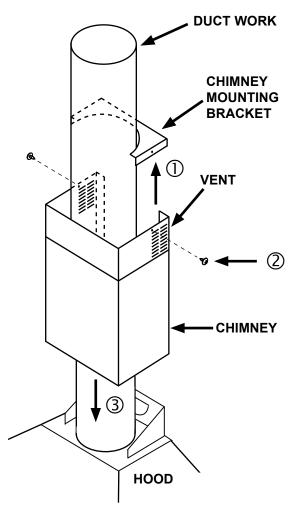


## INSTALLATION INSTRUCTIONS

#### Installing the Chimney

**IMPORTANT:** Be careful not to pinch the electrical wires while installing the chimney.

- Remove the protective plastic covering from both pieces of the chimney assembly. <u>Do not</u> remove the protective tape strips from the inside of the chimney. They protect the telescoping pieces from scratching during installation.
- 2. Carefully slide both sections together so that only the vents on the top section show.
- 3. Hold the chimney vertically with the vents up.
- 4. Carefully put the chimney over the top of the duct work extending out of the top of the hood, taking care not to scratch the surfaces. Make sure the wiring is tucked in behind the chimney.



- 5. Move the chimney up toward the ceiling. Line up the holes on the side of the chimney, above the vents, with the holes on the side of the chimney mounting bracket.
- 6. Attach the sides of the chimney to the bracket using two sheet metal screws, one on each side.
- 7. Carefully, slide the bottom portion of the chimney down until it rests on the top of the range hood.

Reinstall the range hood filter(s) before operation.

### VERIFYING PROPER OPERATION

- 1. Turn on power at the junction or fuse box.
- 2. If the control panel is not lit, remove the filter(s) and turn on the main power switch located behind the filters on the bottom of the hood. Replace the filter(s).
- 3. Touch the light key. Verify that all the lights come on.
- 4. Touch the light key again to turn the lights off.
- 5. Touch the blower "+" key once and release. Verify that one light is showing on the blower speed indicator and that the blower is on at low speed.
- 6. Touch and release the blower "+" repeatedly, three times. Verify that with each touch of the key the number of lights on the blower speed indicator increases and that the blower speed increases.
- 7. Touch and hold the blower "-" key until the blower turns off.

#### If the hood fails to operate properly:

- Verify that power is supplied to the hood.
- Check the electrical connections to ensure that the installation has been completed correctly.
- Repeat the above test.
- If the appliance still does not work, contact an authorized Dacor service company at (800) 793-0093.

Do not attempt to repair the appliance yourself. Dacor is not responsible for service required to correct a faulty installation.

### INSTALLATION CHECKLIST

#### **WARNING**

- To ensure a safe and proper installation, the following checklist should be completed by the installer to ensure that no part of the installation has been overlooked.
- Proper installation is the responsibility of the homeowner. The importance of proper installation of your Dacor range hood cannot be overemphasized.
- □ Is the mounting bracket properly attached to the wall according to the instructions on page 7?
- □ Is the hood properly tightly secured to the mounting bracket with the machine screws (see page 8)?
- □ Is the duct work completely installed? Are all joints attached with sheet metal screws and wrapped with duct tape (see pages 4 and 9)?
- □ Is the range hood wired and grounded according to these instructions and in accordance with all applicable electrical codes (see page 9)?
- □ Are the filters properly installed according to the use and care manual?
- □ Has proper operation been verified (see page 10)?
- □ Have any problems been noted on the warranty card or during the on-line warranty activation? Has the warranty been activated on-line or the warranty card filled out completely and mailed?

# Notes

