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**WINDSTER™**  
www.windsterhood.com

WALL HOOD

## OPERATION MANUAL

RA-1490C  
RA-2390C



Please read and save this guide through before using your range hood  
Store the guide away in a safe place so that you will know where it is  
when you want to refer to it

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### **WARNING**

**Due to sharp edge, please wear  
"Safety Workman Gloves"  
for installation, cleaning, light bulb changing and  
dismantling to reduce the risk of any bodily injuries.**

Safety Workman Gloves



# WINDSTER™

### **Defective Products:**

All products will be inspected, tested, and carefully packed by the manufacturer before shipping to customers. Products that are damaged during transit can only be exchanged for the same product, under the condition that the customer must get a RMA (Return Merchandise Authorization) from Windster. When products are received defective, you must notify us within the 3 business days of receiving the package. Replacement products are only shipped when the RMA is issued. **NO EXCEPTIONS.**

### **Return Policy**

Windster offers only the best and highest quality products. If you are not satisfied with your purchase, please contact us within 3 business days of product arrival to obtain a Return Merchandise Authorization (RMA). Returns sent without a RMA will not be accepted. There will be a 25% re-stocking fee for every returned items. Shipping fee will also be deducted from the original purchase price. When returning a package, please include a copy of your purchase receipt. Use the original shipping box and packing materials and completely remove or cover the original shipping label. Make sure that products are in brand new condition, uninstalled, un-drilled, and contain everything that came with the package as when you first received it. If any parts or manuals are missing, we have the right not to accept the return.

We suggest that you use a traceable and reputable carrier of your choice to ship your return. Your credit or refund will be processed within 10-14 business days from the date we receive your return.

# WINDSTER™

## Limited Warranty

Windster Hoods Inc. warrants this product against defects in material or workmanship as follows:

- 1) **Labor:** For a period of one (1) year from the date of purchase, if this product is determined to be defective, Windster will repair or replace the product, at its option, at no charge. After the warranty period, you must pay for all labor charges. During the labor warranty period there will be no charge for labor.
- 2) **Parts:** In addition, Windster will supply, at no charge, new or rebuilt replacements in exchange for defective parts for a period of two (2) years. After the warranty period, you must pay for all parts costs. During the parts warranty period, there will be no charge for parts

You must carry-in or mail-in your product during the warranty period. This warranty only applies to products purchased and serviced in the United States or Canada.

### What Is Not Covered By These Warranties:

- 1) Conditions and damages resulting from any of the following:
  - Improper installation, delivery, or maintenance.
  - Any repair, modification, alteration or adjustment not authorized by the manufacturer or an authorized service dealers.
  - Misuse, abuse, accidents, or unreasonable use.
  - Incorrect electric current, voltage or supply.
  - Improper setting of any control.
  - Improper chemical cleaning.
- 2) Light Bulbs
- 3) Products purchased for commercial or industrial use (such as in a hotel, office, restaurant, or other business)
- 4) Damage due to earthquake, flood, storm, etc.

## A. Important safety Instructions

### Read and Save These Instructions

1. Make sure the power is off before installing, wiring or maintenance.
2. Please keep the range hood clean.
3. To get the best performance, the vertical clearance between the cook - top and the range hood should range from 28" to 32". (Fig.1)

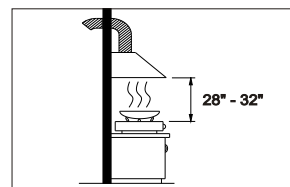
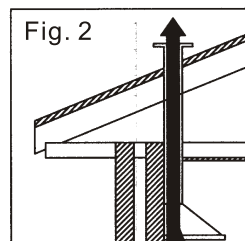


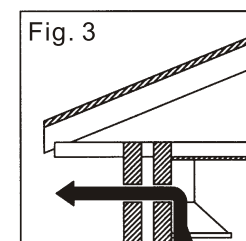
Fig.1 : Optimum range hood height

### Ducting method

- A. This range hood must be flued to external air space either through the roof (fig.2 ) or through the wall (fig.3)



Ducting through the roof



Ducting through the wall

- B. Obstruction of exhaust will cause
- a. Uneven fan speed.
  - b. Could cause possible vibration.

**CAUTION** - To reduce the risk of fire and to properly exhaust air, be sure to duct air outside. Do not vent exhaust air into spaces within walls, ceilings, attics, crawl spaces or garages.

**WARNING** - To reduce the risk of fire or electric shock, do not use this fan with any solid- state speed control device.

**WARNING** - To reduce the risk of fire, electric shock, or injury, observe the following:

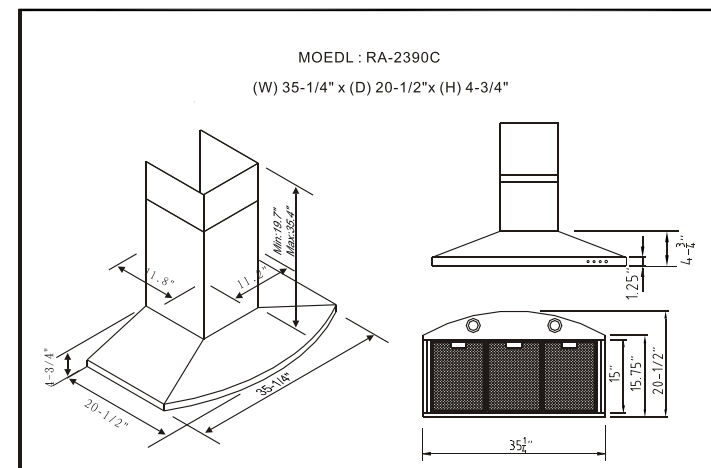
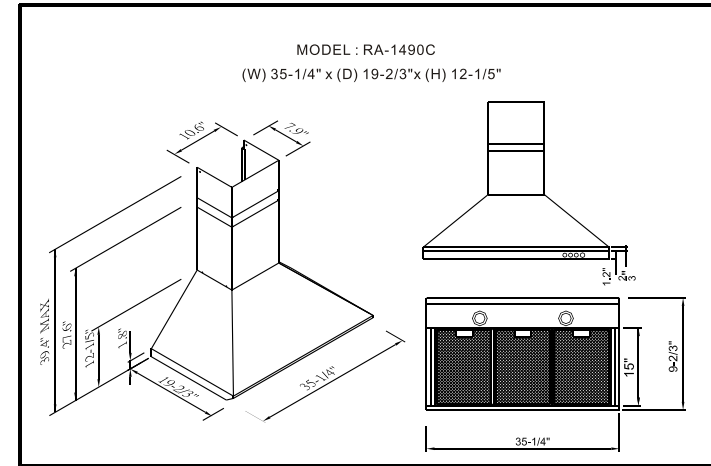
- A. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- B. Before servicing or cleaning the unit, switch the power for service panel and lock panel, to prevent power from being switched on accidentally. When the service is disconnecting, it cannot be locked, fasten a prominent warning device, such as a tag, to the service panel.
- C. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable and standard codes, including fire-rated 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), 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.

**CAUTION** - For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapours.

**WARNING** - To reduce the risk of a range top grease fire:

- A- Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filters.
- B- Always turn hood on when cooking at high heat or when cooking flaming foods.
- C- Never leave surface units unattended at high settings. Boilovers cause smoke and greasy spillovers, that may ignite and spread if hood is used. Heat oils slowly on low or medium settings.
- D- Don't leave your range unattended when cooking.
- E- Use proper pan size. Always use cookware appropriate for the size of the surface element.

## M. Diagrams



## L. Specifications

Specifications	RA-1490C 36"
Body Dimension (WxDxH)	35-1/4" x 19-2/3" x 12-1/5"
Revolutions	Low- 630 ±50 R.P.M. High- 1670±50 R.P.M.
Consumption - Motor	180W
Consumption - Lamp	20W 12V Halogen Light x 2
Rotation	Squirrel Cage
Diameter Exhausting Duct	6" / 7" Round Outlets
Voltage	120V / 60 Hz
Appearance Treatment	Brushed Stainless Steel

Specifications	RA-2390C 36"
Body Dimension (WxDxH)	35-1/4" x 20-1/2" x 4-3/4"
Revolutions	Low- 630 ±50 R.P.M. High- 1670±50 R.P.M.
Consumption - Motor	180W
Consumption - Lamp	20W 12V Halogen Light x 2
Rotation	Squirrel Cage
Diameter Exhausting Duct	6" / 7" Round Outlets
Voltage	120V / 60 Hz
Appearance Treatment	Brushed Stainless Steel

**WARNING-** To reduce the risk of injury 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 dishcloths or towels- a violent steam explosion will result.

D- **USE AN EXTINGUISHER ONLY IF:**

1. You know you have a **CLASS ABC** 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 against the exit.

**WARNING -** To reduce the risk of fire, use only metal duct work.

## B. Safety Notes

1. All electrical work must be done in accordance with local and/or national electrical code as applicable for safety. This product must be grounded, if your are unfamiliar with methods of installing electrical wiring, secure the services of a qualified electrician.

2. Turn off power at service entrance before installing, wiring, or servicing this product. (120 volt for range hood. 220 volt for electric range if any)
3. Turn off power to avoid risk of fire, electric shock, or injury for cleaning or maintenance such as lubrication.
4. Fireplaces, gas furnaces, water heaters, require proper flow of combustion air and exhaust. Make sure this flow is not altered when using any exhaust fan.
5. Please read specification label on product for further information and requirements.
6. Please wear "Safety Gloves" for installation, cleaning, light bulb changing and dismantling to reduce the risk of any injuries.

**Note:**

Exhaust air should not be discharged into any chimney or flue, which may carry combustible products from other sources. In addition, exhaust air should not be discharged into a wall cavity or into the roof space.

**K. Circuit diagram**

Fig.8 Details the internal electrical circuit of this range hood unit. Any faults with this unit should only be attended to by a qualified technician.

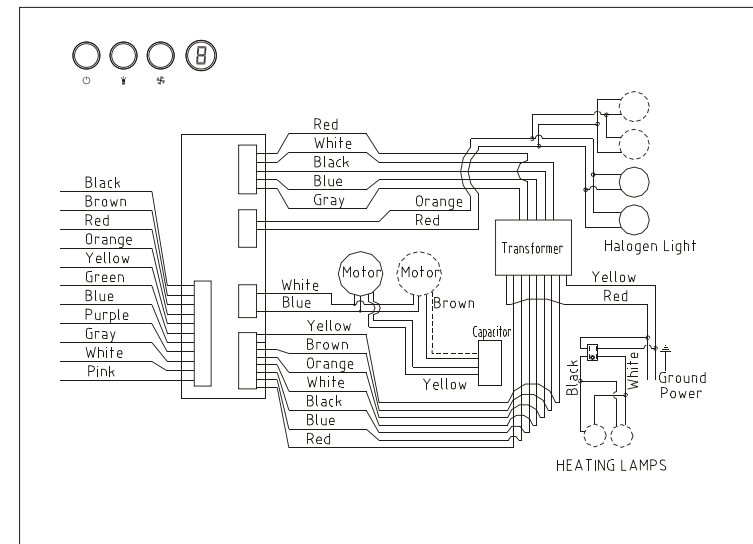
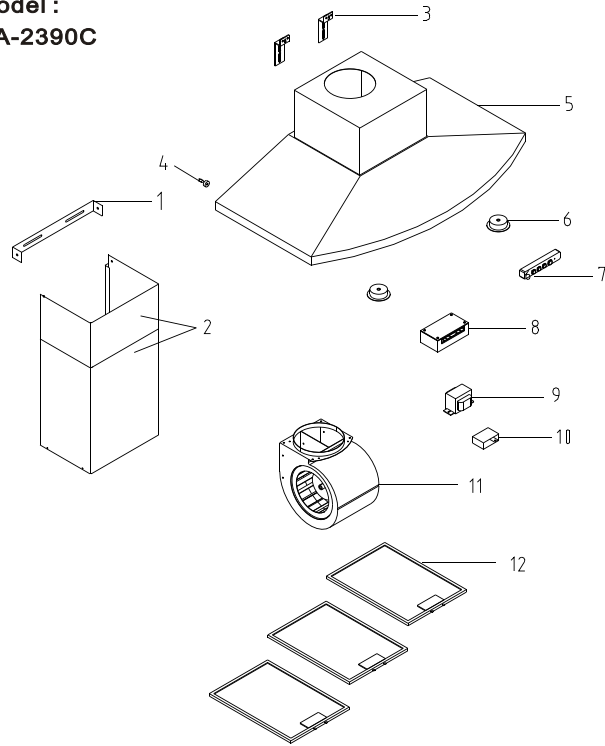


Fig.8 R-36 .R-37 Series Electrical Schematic Diagram

**Model :  
RA-2390C**



1	Duct Cover - Mounting Bracket	8	Processor Board
2	Duct Cover	9	Transformer
3	Hood-Mountin Bracket	10	Capacitor
4	Rubber Stand	11	Squirrel Cage
5	Hood Casing	12	Aluminum Filter
6	Halogen Light		
7	Control Board		

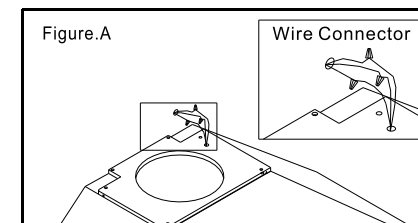
### Wiring to Power Supply

#### **⚠ SAFETY WARNING**

RISK OF ELECTRICAL SHOCK. THIS RANGE HOOD MUST BE PROPERLY GROUNDED. MAKE SURE THIS IS DONE BY SPECIALIZED ELECTRICIAN IN ACCORDANCE WITH ALL APPLICABLE NATIONAL AND LOCAL ELECTRICAL CODES. BEFORE CONNECTING WIRES, SWITCH POWER OFF AT SERVICE PANEL AND LOCK SERVICE PANEL TO PREVENT POWER FROM BEING SWITCHED ON ACCIDENTALLY.

Connect the electrical wires.

- Connect three wires (black, white and green) to house wires and cap with wire connectors. Connect according to color : black to black, white to white, and green to green as shown on Figure A.
- If necessary to hide the electrical wire connections, push wires back into the wiring box. Access the wire connections underneath the hood. Make sure wires do not slip between motor or any moving parts to prevent any damage.



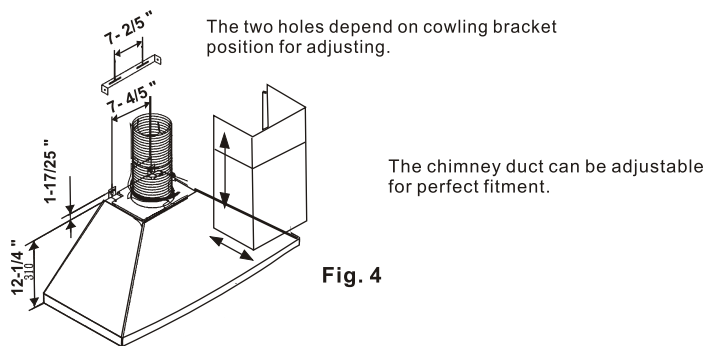
**Installation and Maintenance must be carried out by qualified person only.**

**Body Mounting**

Fit the range hood body at the correct height via, the brackets to the mounting surface. (Refer Fig. 4 for mounting screw measurements). Locate the hanging screw allowing a distance of 0.2 inch of the screw head to the wall.

**Chimney Ducting**

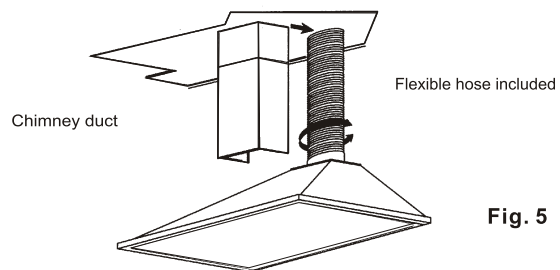
A. Use the Upper Mounting Bracket to adjust the duct to the required height (maximum 27 1/6").



**Fig. 4**

B. To fit the duct to the top of the chimney, slide the bottom lip under the black mounting and then lock in to place with the 4 screws provided. (Fig. 4)

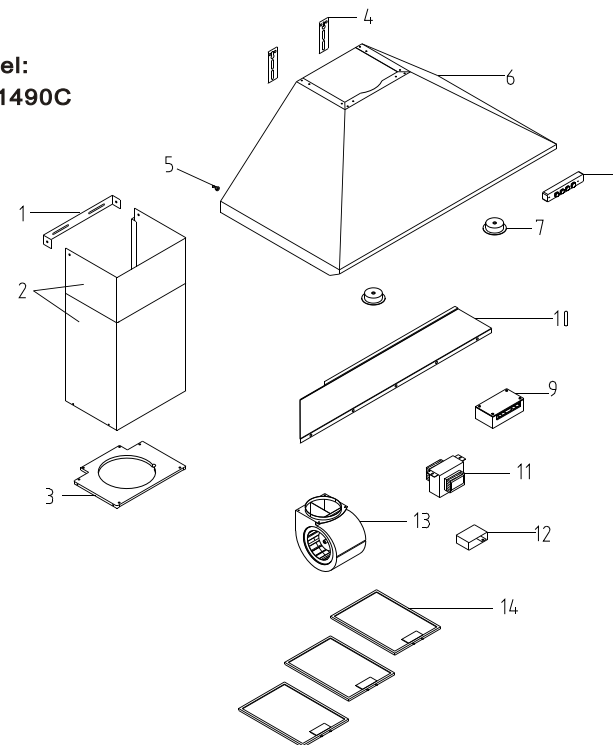
C. Ensure the mounted range hood is level when installed for optimum performance. (Fig. 5)



**Fig. 5**

**J. Parts layout diagram**

**Model:  
RA-1490C**



1	Duct Cover - Mounting Bracket	8	Control Board
2	Duct Cover	9	Processor Board
3	Plastic Plate	10	Capacitor Support
4	Hood-Mountin Bracket	11	Transformer
5	Rubber Stand	12	Capacitor
6	Hood Casing	13	Squirrel Cage
7	Halogen Light	14	Aluminum Filter



## H. Maintenance and cleaning

Regular maintenance and cleaning will ensure good performance and reliability, while extending the working-life of the Rangehood.

## I. Maintenance Instruction

A. Maintenance should be important than repair. Please take care of the needed maintenance in order to secure and extend the excellent functions and using life.

### Note:

Before repairing the range hood. Disconnect the power source.

B. After using the machine, wipe the machine by neutral detergent in order to keep it clean and maintain the appearance with brightness and sanitation.

## C. Tools and materials required

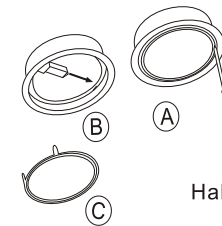
- One common screwdriver.
- Plier (for opening electrical knockout).
- Electrical wire and supplies to comply with local cords.
- Electrical power drill.

## D. Halogen light replacement

### Note:

The halogen light will be very hot when it is working Never touch it with bare hand.

Before changing halogen lights, ensure the unit is switched off and the halogen light is cool.









Halogen light spec. : 12V / 20W

Fig. 6 Lamp assembly

**Note** : Ensure the unit is switched off. Before changing lamp.

- A. Using suitable tool (Small screw driver) gently pry off the Lamp cover len.
- B. Never touch the glass lamp surface with bare hand, please always wear working gloves or use a suitable cloth to remove the unserviceable halogen light and replace a new one.
- C. Replace the len cap and reconnect the power and test lamp.

## E. Accessories

Spare Parts Contents					Spare Parts Contents				
Item	Part	Description	Spec.	Q'ty	Item	Part	Description	Spec.	Q'ty
1		Manual		1	4		Screws	Ø4x32	6
2		Round Collar	6" → 7"	1			Screws	Ø4x8	8
3		Duct Cover-Mounting Bracket		1			Plastic Screws	1/4"	6

## F. Troubleshootings

Symptom	Correction
Fan are not operatable.	A. Check power source to see if it is normal. B. Check power inlet plug to see if it is plugged firmly into it's socket.
Illuminating indicator lamp burned out light.	A. Disconnect the power source. B. Check lamp bulb, replace it with a new one if it is burned out.
Hood vibrates.	A. Check for damaged vanes. B. Check if exhaust duct is secured.

## G. Use and care

**Note:** Operate switches (Fig.7)

Switch 1 : LED Speed Indicator.

Ⓟ - Low speed Ⓡ - High speed

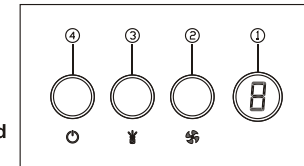


Fig.7

Switch 2 : Speed switch (Six speed fan)

Switch 3 : Light switch (Three light levels)

Switch 4 : Power switch and delay switch.

Push once : Delayed shut off.

Push twice : Immediate shut off.

### **Note:**

Range hood should be turn on either before or the same time when cooking begins. After cooking, range hood should be kept on for about 3 more minutes for complete ventilation of cooking odor.

### **Care Instuction :**

Please always pull the plug out before cleaning or dismantling, wear 'Safety gloves' to reduce the risk of any injuries.

Exterior: Can be clean with any type of non-abrasive detergent and a clean cloth. "Green Pad" or any metal type cleaning pad is not recommended for exterior.