

GE Consumer & Industrial

TECHNICAL SERVICE GUIDE

Monogram 36-in. Chimney Vent Hood





IMPORTANT SAFETY NOTICE

The information in this service guide is intended for use by individuals possessing adequate backgrounds of electrical, electronic, and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

WARNING

To avoid personal injury, disconnect power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks.

RECONNECT ALL GROUNDING DEVICES

If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

GE Consumer & Industrial

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Introduction

The new Monogram 36-in. Chimney Vent Hood has the following features:

- Under-cabinet or stand-alone installation The chimney hood may be installed beneath a wallmounted cabinet, above most cooktops and ranges. For a more contemporary look, the system can be wall-mounted with matching 8-to-10-foot duct cover.
- Low-profile design and high-impact style The retractable glass canopy is sleekly styled with a streamlined design, seamless finished edges and front-mounted touch controls.
- Powerful ventilation A four-speed, 500-CFM fan blower with boost option captures the smoke and steam produced by high-performance cooking equipment.
- Multilevel halogen lighting Six levels of intensity, from accent to ambient settings, allow you to choose the lighting to match the cooking task or occasion.
- Removable grease filters Durable stainless steel filters can be easily removed for cleaning and maintenance.
- Recirculating kit Included for applications that do not allow outside venting.



Nomenclature

Model Number





The mini-manual is located behind the power supply housing cover. The nomenclature tag is located underneath on the right side and is visible when the right side filter is removed. This tag contains important information such as:

- Model/serial number
- Voltage rating
- Total amperage
- Lamp amperage
- Blower amperage

Serial Number

The first two characters of the serial number identify the month and year of manufacture. Example: **AH**123456 = January, 2005

	11		
A - JAN	2005 - H		
D - FEB	2004 - G	The letter designating the year repeats every	
F - MAR	2003 - F		
G - APR	2002 - D	12 uears.	
H - MAY	2001 - A	5	
L - JUN	2000 - Z	Example:	
M - JUL	1999 - V	Example.	
R - AUG	1998 - T	T - 1974	
S - SEP	1997 - S	T - 1986	
T - OCT	1996 - R	T - 1998	
V - NOV	1995 - M		
Z - DEC	1994 - L		

ZV800SJSS, ZV800BJBB

Electrical Specifications

This information is intended for use by persons possessing adequate backgrounds of electrical, electronic and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

WARNING: Disconnect power before servicing!

IMPORTANT: Disconnect ALL grounding devices.

All parts of this appliance capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

GROUNDING SPECIFICATIONS:

Ground Path Resistance 0.10Ω Max.

Insulation Resistance 250Ω Min.

INSTALLATION REQUIREMENTS:

Electrical Supply - The hood must be connected to an individual, properly grounded branch circuit of 120 V, 60 Hz., and protected by a 15- or 20-amp circuit breaker or time delay fuse. Wiring must be 2- wire with ground. Wire size must conform to the National Electrical Code or the prevailing local code. Refer to the rating plate located on the left side, visible when filters are removed.

WARNING: Improper connection of aluminum house wiring to copper leads can result in a serious problem. Use only connectors designed for joining copper to aluminum, and follow the manufacturer's recommended procedure closely.

Installation Information

The vent hood is heavy. Adequate structural support should be provided in all types of installations. The hood should be secured to vertical studs in the wall, or to a horizontal support.



Hood Dimension and Clearance

The vent hood should be installed 24-in. min. and 30-in. max. above the cooking surface. The telescopic duct cover conceals the duct work running from the top of the hood to the ceiling. The duct cover is sized to reach 8- to 10-ft. ceiling heights. The hood installation height, from the cooking surface to the bottom of the hood, depends upon ceiling height.

Wall Mounted Installations

The chimney vent hood may be installed on a wall and vented to the outdoors or recirculated indoors. Both venting options can be accomplished in a wall mounted installation.



Under-Cabinet Installations

The hood may be installed beneath a cabinet. The cabinet must measure at least 20-in. from the bottom frame to the inside top. Both venting options can be accomplished in an under-cabinet installation. (Custom cabinet modification is required for recirculating operation.)



*Depending on Cabinet Height

Note: Installation and removal of the hood will require removal of the cabinet as specified in the installation manual.

Duct Cover

Telescopic duct covers conceal the duct work, running to the ceiling. The upper duct section may be mounted in one of two ways depending on how the chimney hood is vented. If it is vented to the outside, the upper section will be attached to a duct bracket mounted to the ceiling and the duct cover will be installed with the vent holes at the bottom.

If the chimney vent hood is set up to recirculate the air indoors, the upper section will be attached to an air deflector mounted to the wall and the duct cover will be installed with the vent holes at the top.

Vented to the Outside

Indoor Recirculation





Control Features

Push-Button Controls

Glass Visor



The push-button assembly is located in the visor and selects the light and fan operations.

Hood Lights Selections:

- Light ON/OFF. Remembers the last light level used. (Six light levels.)
- 2 Dims the light.
- 3 Brightens the light.

Hood Fan Selections:

- **4** FAN ON/OFF. Remembers the last fan speed used. (Four speed fan.)
- 5 Decreases speed.
- 6 Increases speed.
- 7 BOOST The highest fan speed.

Note: The BOOST fan speed can only be selected with this control. BOOST is not accessible by cycling up to the highest fan speed using the increase fan button.

8 - Fan indicator light. The light glows when the fan is operating.



Grasp the visor and pull it out to remove steam more efficiently when cooking. Push it back when not in use. The vent fan and lights work with the visor in or out.

Cleaning

To preserve and protect the fine finish, regularly clean and polish the stainless steel exterior and visor with a commercially available stainless steel cleaner, such as Stainless Steel Magic™. Stainless Steel Magic™ is available through GE Parts and Accessories, 800.626.2002 or GE Appliances.com. Order part number WX10X15.

To avoid damaging the stainless steel, wipe in the same direction as the grain when polishing or cleaning any stainless steel surface. Do not use appliance wax or polish on the stainless steel. Warranty does not cover damage due to improper cleaning methods.

Component Locator View

Front View (Shown with





Power Supply Housing Components

- 1 Transformer
- 2 Triac
- 3 PTC Board
- 4 Capacitor
- 5 Power Control Board (PCB)



Components

Filters

The chimney vent hood comes supplied with 2 metal grease filters. (Also supplied is a single charcoal filter for installations not vented to the outside.) The metal filters trap grease released by foods on the cooktop. The filters also help prevent flames from damaging the inside of the hood. For this reason the grease filters must always be in place when the hood is in use.

The 2 vent hood grease filters are located on the underside of the canopy. It is necessary to remove the filters to gain access to the nomenclature, light shield, duct cover, and the fan motor. To remove the grease filters, pull out the visor, grasp the filter lock and pivot it open to release. Pull the filter down and out.





If the hood is not vented to the outside, the air will be recirculated through an additional single disposable charcoal filter that helps remove smoke and odors.

To remove the charcoal filter, first remove the 2 grease filters. Grasp the front of the charcoal filter and pull it down and out.

To reinstall the charcoal filter, insert the back edge into the rear (center). Push the front of the filter up and snap it in place in the hood. Replace the 2 metal filters.



Visor

The visor houses the push-button assembly and slides forward over the cooktop surface and retracts when not in use. The visor is attached to 2 movable tracks recessed in the canopy. The visor must be removed to replace the light shield and light receptacles.

To remove the visor:

- 1. Slide the visor forward until it stops. Remove the single Phillips-head screw from the 2 visor end caps. Remove the end caps.
- 2. Remove the 4 Phillips-head screws on the bottom of the visor.

Bottom View



- 3. Carefully slide the visor out until it is clear of the tracks.
- 4. Unplug the ribbon connector from the left visor track.



Visor Tracks

The visor tracks are mounted on each side of the canopy.

To remove the visor tracks:

- 1. Remove the visor. (See Visor.)
- 2. Remove the 2 Phillips-head screws and 7 mm hex nuts that attach the right track to the canopy.
- 3. Slide the right track inward to clear the canopy, then remove it.



- 4. Remove the 2 Phillips-head screws and 7 mm hex nuts that attach the left track to the canopy.
- 5. Slide the left track inward to clear the canopy.

- 6. Remove the 2 Phillips-head screws that attach the ribbon receptacle to the left track.
- 7. Remove the single Phillips-head screw that holds the black ribbon protector in place.



Push-Button Assembly

The push-button assembly is located in the front of the visor and is held in place by a bracket with 3 thumb screws. Access to the push-button assembly is located behind a cover on the underside of the visor.

To remove the push-button assembly:

- 1. Remove the 2 Phillips-head screws that hold the access cover in place.
- 2. Loosen the 3 thumb screws on the bracket that hold the push-button assembly in place. **Do not remove the thumb screws**.
- 3. Remove the 2 Phillips-head screws that attach the bracket to the visor. Remove the bracket.



Bracket Screws

4. Carefully lower the push-button assembly from the visor, then disconnect the ribbon.



To replace the push-button assembly:

- 1. Connect the ribbon. Insert the push-button assembly in the visor. Ensure that all the push buttons protrude through the holes.
- 2. Place the bracket in front of the push-button assembly. Install the 2 Phillips-head screws that attach the bracket to the visor.
- 3. Tighten the 3 thumbscrews evenly. Ensure that each of the 7 push buttons operates freely when selected.
- 4. Install the access cover.

To replace the push-button ribbon:

- 1. Remove the visor. (See Visor.)
- 2. Remove the push button. (See **To remove the** *push-button assembly.*)
- 3. Attach the end of the replacement ribbon to the push-button ribbon, using electrical tape.
- 4. Pull the ribbon from the opposite end until the replacement ribbon is visible.

Lights

Two push-in type halogen bulbs provide illumination to the cooking surface. There are 6 lighting levels that can be selected.

The lights are located on the underside of the canopy.

WARNING: Before replacing a bulb, disconnect electrical power to the hood at the main fuse or circuit breaker panel. For your safety, do not touch a hot bulb with bare hands or a damp cloth. The glass cover and light bulb should be allowed to cool completely.

Caution: Do not touch the new halogen bulb with bare fingers. Touching the bulb with bare fingers will significantly reduce the life of the bulb. Wearing latex gloves may offer a better grip.

Note: When replacement is necessary, use only a new 12-volt, 20-watt halogen bulb for a G-4 base (GE part #WB08X10045).

To remove a lightbulb, insert a small flat-bladed screwdriver to remove the glass cover from the receptacle, then carefully pull the bulb out of the socket.



ONLY use a new 12-volt, 20-watt Halogen bulb for a G-4 base.



Light Receptacles

The 2 light receptacles are recessed in the light shield and are located on the underside of the canopy. Each receptacle consists of a bulb, socket, and glass cover.

WARNING: Before replacing a receptacle, disconnect electrical power to the hood at the main fuse or circuit breaker panel. DO NOT touch a hot receptacle with bare hands or a damp cloth. The glass cover and lightbulb should be allowed to cool completely.

To remove a light receptacle:

- 1. Remove visor. (See Visor.)
- 2. Remove two Phillips-head screws from the rear of the light shield.



- 3. Lower the light shield and slide it toward the rear to clear the front tabs.
- 4. Disconnect the light receptacles on each side of the light shield.



5. Depress the receptacle retaining clips. Remove the receptacle from the light shield.



Duct Cover

The duct cover consists of two telescoping sections. The lower section is attached to the canopy. The upper section is attached to a duct bracket or air deflector (depending on installation).

To remove the duct cover:

1. Remove the grease filters. (See *Filters*.)

Caution: When removing the 2 upper mounting screws, DO NOT let the upper duct section fall into the lower duct section. Damage to the canopy can occur.

2. Remove the two Phillips-head screws (one on each side) that attach the upper section of the duct cover to the duct bracket or air deflector (depending on installation).



3. Carefully lower the upper duct section into the lower duct section.



4. Remove the two Phillips-head screws that attach the lower section of the duct cover to the canopy.



5. Grasp both sections of the duct cover, and lift it up to clear the canopy.

Power Supply Housing

WARNING: Components in the power supply housing are electrically **HOT** when voltage is connected to the hood.

The power supply housing is located above the fan housing behind the duct cover. To access the power supply housing, remove the duct cover, (see *Duct Cover*) then remove the 2 Phillips-head screws that hold the power supply cover in place.



The transformer is located in the power supply housing. The triac, fuse holder, motor capacitor, and power supply board are located in the power supply housing in separate upper and lower component boxes.





Transformer

The transformer supplies 12 VAC to the power control board (PCB) and the lighting circuit. It is held in place by two Phillips-head machine screws and 7 mm hex nuts.

Transformer Resistance:

Primary winding (black to white wires) - 7 Ω . Secondary winding (blue to brown wires) - 0.3 Ω .

Check for 120 VAC between the white and black wires. Check for 12 VAC between the blue and brown wires.

Triac

The triac controls the two hood lights. It is located inside the upper component box. It is held in place by 2 Phillips-head machine screws and 7 mm hexnuts.

If the hood lamps flicker, the triac wire connections are incorrect. The triac can be checked for an electrical short by removing the black lead wire and measuring the resistance between the two 1/4-in. terminals (black and brown wires). Resistance should be greater than 1M Ω .

PTC Board

The PTC board provides protection for the lighting circuit during momentary power surges. It is located inside the upper component box.

Motor Capacitor

The motor capacitor has a value of 25 $\mu fd.$ It is located inside the upper component box.

Power Control Board (PCB)

The power control board (PCB) has an AC to DC power converter, microprocessor, and fan relays. It is located inside the lower component box. The power control board operates the lights and fan motor.

The five green connectors are locking type connectors. Use a small flat-blade screwdriver to unlock as follows: Insert screwdriver in the center of the space between the plug and connector receptacle on the PCB. Push down on the screwdriver handle, pivot blade about 5 degrees, and pull out the plug at the same time.



- 2. Remove the left side track. (See Visor Tracks.)
- 3. Remove the light shield. (See Light Receptacles.)

To remove the power control board (PCB) ribbon:

4. Remove the 5 Phillip-head screws that hold the inner channel cover in place. Slide the inner channel cover to the rear, then remove it from the canopy.





- 1 CN2 Transformer (Primary)
- 2 CN1 Fan Motor
- 3 CN3 Capacitor Fan Motor
- 4 CN5 Push-Button Assembly Connector Ribbon
- 5 CN4A Triac
- 6 CN4B Transformer (Secondary)

Caution: Before reapplying power, ensure the wire harness at CN3 (white wires) is connected to the capacitor and the wire harness at CN4B (brown and blue wires) is connected to the transformer.



- 5. Disconnect the ribbon from the power control board.
- 6. Withdraw the extension ribbon from the fan duct and inner channel of the canopy.

Caution: Upon reassembly, ensure the PCB ribbon is fully recessed in the inner channel and remains clear of channel cover screws.

Fan Motor Assembly

The fan motor assembly is located inside the fan motor housing above the canopy. The fan motor has 4 speeds and utilizes a start/run capacitor. Fan speeds are selected at the push-button assembly located in the visor.

To remove the fan motor assembly:

Caution: This procedure requires that the cooking unit below the hood be protected from any possible damage.

- 1. Disconnect power to the vent hood.
- 2. Remove the visor. (See Visor.)
- 3. Remove the light shield. (See *Light Receptacle.*)
- 4. Remove the duct cover. (See *Duct Cover*.)
- 5. Remove the power supply housing cover. (See *Power Supply Housing.*)
- 6. Remove the 4 Phillips-head screws that hold the lower electrical component cover in place. Remove the cover.
- 7. Remove the bottom wire retention clamp.
- 8. Disconnect the push-button assembly ribbon connector from the power control board.
- 9. Unplug the fan motor wiring connector from the power control board. Remove the fan motor ground wire.





11. Remove light wiring and split-ring grommets from inner bracket.





12. Grasp the fan motor assembly from the bottom. Remove the 4 Phillips-head screws that hold the fan motor to the fan housing. **Note:** To make installation of the fan motor easier, tape the fan ground wire to the fan power cable. Insert the fan wiring through the power supply housing wire entry inlet.





13. Carefully lower the fan motor assembly until clear.



Troubleshooting



Note # 1: Check parts in the black boxes as follows: All connectors are locked in place and no leads are broken. Connector solder joints are not broken on PCB copper side. Capacitor (25uF 250V AC); Check that the capacitor is not open or shorted by using a VOM. **Note # 2:** Check for button protrusion through the hood holes and that he buttons have "movement".

PBC Location	Check	
CN1 Fan Motor	See Motor Test Chart	
CN2 Transformer (Primary)	120 VAC 7 Ω	
CN3 Capacitor Fan Motor	25µfd	
CN4A Triac	1.3 VAC Min. Gate Voltage	
CN4B Transformer (Secondary)	12 VAC .3 Ω	
CN5 Ribbon	See Ribbon Test	

FAN MOTOR TEST

The fan motor is a 2 pole induction capacitor motor. To test the resistance values of the fan motor windings:

1. Access the PCB, then disconnect the fan harness from CN1 (See *Power Supply Housing*).

Note: Jump, then test each speed individually.

- 2. Jump fan harness wires, indicated in motor test chart, using appropriate jumper wire.
- 3. Check for proper resistance at the fan harness test wires.

Speed	Test Wires	Wires Jumped	Resistance (ohms) +/- 5% at 68°F (20°C)
1	red-black	blue-orange	20.6
2	red-black	white-orange	14.4
3	red-white	white-orange	7.6
BOOST	red-black	black-oranae	7.6

MOTOR TEST CHART

RIBBON TEST

The ribbon is a 10-conductor connection between the push button and the PCB. To test the continuity of the ribbon from the push button through the ribbon receptacle (located at the left side track) to the PCB location:

- 1. Access the PCB, then disconnect the ribbon from CN5. (See *Power Supply Housing.*)
- 2. Remove the push button, then disconnect the ribbon. (See Push-Button Assembly.)
- 3. Check continuity of each individual ribbon conductor.

Note: Numbers in illustrations below represent and identify individual ribbon conductors.



Terminal End of Ribbon at PCB

Terminal End of Ribbon at Push Button



Schematics and Wiring Diagrams



Warranty

YOUR MONOGRAM HOOD WARRANTY

Staple sales slip or cancelled check here. Proof of original purchase date is needed to obtain service under warranty.

FULL ONE-YEAR WARRANTY

For one year from date of original purchase, we will provide, free of charge, parts and service labor in your home to repair or replace **any part of the hood** that fails because of a manufacturing defect.

•••••

This warranty is extended to the original purchaser and any succeeding owner for products purchased for ordinary home use in the 48 mainland states, Hawaii and Washington, D.C. In Alaska the warranty is the same except that it is LIMITED because you must pay to ship the product to the service shop or for the service technician's travel costs to your home.

All warranty service will be provided by our Factory Service Centers or by our authorized Customer Care[®] servicers during normal working hours.

Should your appliance need service, during warranty period or beyond, call 800.444.1845.

WHAT IS NOT COVERED

WHAT IS

COVERED

- Service trips to your home to teach you how to use the product.
- Replacement of house fuses or resetting of circuit breakers.
- Incidental or consequential damage caused by possible defects with this appliance.
- Replacement of the replaceable filters.
- Damage to the product caused by accident, fire, floods or acts of God.
- Failure of the product if it is used for other than its intended purpose or used commercially.

• Improper installation, delivery or maintenance.

If you have an installation problem, contact your dealer or installer. You are responsible for providing adequate electrical, gas, exhausting and other connecting facilities as described in the Installation Instructions provided with the product.

• Damage caused after delivery.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To know what your legal rights are in your state, consult your local or state consumer affairs office or your state's Attorney General.

Warrantor: General Electric Company. Louisville, KY 40225