# Installation Instructions

# Gas Downdraft Cooktop

PGP9830

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"If you have questions, call 800.GE.CARES or visit our website at: GEAppliances.com"

### IN THE COMMONWEALTH OF MASSACHUSETTS:

- This product must be installed by a licensed plumber or gas fitter.
- When using ball-type gas shut-off valves, they shall be the T-handle type.
- A flexible gas connector, when used, must not exceed 3 feet.

### **BEFORE YOU BEGIN**

### Read these instructions completely and carefully.

- **IMPORTANT** Save these instructions for local inspector's use.
- **IMPORTANT** Observe all governing codes and ordinances.
- Note to Installer Be sure to leave these instructions with the Consumer.
- Note to Consumer Keep these instructions for future reference.
- Unless very knowledgeable in the installation of this product, engage a professional installer.
- Proper installation is the responsibility of the installer.
- Product failure due to improper installation is not covered under the Warranty.

### FOR YOUR SAFETY

### If You Smell Gas:

- 1. Open windows.
- 2. Don't touch any electrical switches.
- 3. Extinguish any open flame.
- 4. Immediately call your gas supplier.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

**A WARNING** – Before beginning the installation, switch power off at the 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.

### TOOLS AND MATERIALS YOU WILL NEED

- Saw
- Duct tape
- Measuring tape or scale
- Carpenter's square
- Adjustable wrench or socket set (7/16" socket and ratchet)
- Drill and drill bit
- 1/4" nut driver
- Sheet metal screws
- Pipe wrench
- Manual gas line shut-off valve
- Pipe joint sealant that resists action of LP gas
- Ductwork to suit the installation

### For rigid connection:

- Shut-off valve
- Union
- Pipe fittings as required

### For flexible connection where local codes permit:

• Flexible metal tubing (same 3/4" or 1/2" I.D. as gas supply line)

### HIGH ALTITUDE ORIFICE CONVERSION KIT

Use for cooktop operation at elevations above 5000 ft. (1500m).

# IMPORTANT SAFETY INSTRUCTIONS

### IMPORTANT SAFETY INSTRUCTIONS

The cooktop has been design certified by Underwriters Laboratories (UL). As with any appliance using gas and generating heat, there are certain safety precautions you should follow. You'll find these precautions in the *Important Safety Information* section in the front of this Owner's Manual. Read them carefully.

- Be sure your cooktop is installed properly by a qualified installer or service technician.
- The cooktop must be electrically grounded in accordance with local codes, or in their absence, with the National Electrical Code ANSI/NFPA No. 70 Latest Edition.
- Installation of this cooktop must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1/NFPA 54 Latest Edition.
- Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer, service agency, manufacturer (dealer) or the gas supplier.
- Disconnect electrical supply before servicing.
- Never reuse old flexible connectors. The use of old flexible connectors can cause gas leaks and personal injury. Always use NEW flexible connectors when installing a gas appliance.

- Make sure the wall coverings around the cooktop can withstand heat generated by the cooktop up to 200°F.
- Avoid placing cabinets above the cooktop.
- If cabinets are placed above the cooktop, allow a minimum clearance of 30" between the cooking surface and the bottom of unprotected cabinets.
- If cabinets are placed above the cooktop, use cabinets no more than 13" deep.
- If a 30" clearance between cooking surface and overhead combustible material or metal cabinets cannot be maintained, protect the underside of the cabinets above the cooktop with not less than 1/4" insulating millboard or gypsum board at least 3/16" thick covered with 28 gauge sheet steel or 0.020" thick copper.
- Clearance between the cooking surface and protected cabinets MUST NEVER BE LESS THAN 24" The vertical distance from the plane of the cooking surface to the bottom of adjacent overhead cabinets extending closer than 1" to the plane of the cooktop sides must not be less than 18".

# EXHAUST BLOWER RATINGS

### EXHAUST BLOWER SAFETY WARNING

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 guide lines and safety standards, such as those published by the National Fire Protection Association (NFPA), the American Society for Heating, Refrigeration and Air Conditioning (ASHRAE) and the local code authorities. when applicable, install any make up (replacement) air system in accordance with local building code requirements. Visit GEAppliances.com for available makeup air solutions.

# Installation Instructions



washers attached)



# CABINET PREPARATION

### **PREPARING FOR INSTALLATION** Positioning the cooktop

The cooktop is designed to look best when centered in a cabinet at least 30" wide.

The exhaust vent beneath the cooktop must be located between wall studs or floor joists so that the ductwork may be installed properly.



The downdraft system with blower, motor and ductwork will occupy the cabinet below the cooktop. Drawers cannot be installed below this cooktop.

Avoid placing cabinets above the cooktop unit, if possible, in order to reduce the hazards caused by reaching over heated surface units.

If the cabinetry is used above the cooktop, allow a minimum 30" clearance between the cooking surface and the bottom of the unprotected cabinet.

If the clearance between the cooktop and the cabinetry is less than 30", the cabinet bottom must be protected with a flame retardant millboard at least 1/4" thick, or gypsum board at least 3/16" thick, covered with 28 gauge sheet steel or 0.020" thick copper. Clearance between the cooktop and the protected cabinetry **MUST NEVER BE LESS THAN 24**".

**EXCEPTION:** Installation of a listed microwave oven or cooking appliance over the cooktop shall conform to the installation instructions packed with that appliance.

Working areas adjacent to the cooktop should have an 18" minimum clearance between the countertop and the bottom of the cabinet. If the clearance is less than 18", the adjacent cabinets should be at least 5" from the side edge of the cooktop.

### **PREPARING THE BASE CABINET**

This cooktop is designed to fit easily into a variety of cabinets. However, the combined installation of a downdraft vent and a cooktop require careful consideration.

Some cabinets may require modifications.

This installation requires a 24" min. deep cabinet base. The cabinet must be at least 30" wide.

### Preparing a cabinet that is against a wall

In some cabinets, the sides may need to be scooped or cut down 5%'' as shown, and the corner braces removed in order to accommodate the unit.

In 75 cm and 90 cm frameless European cabinets, the back panel may need to be cut down  $5\frac{3}{4}$ " to accommodate the unit.

### Preparing a peninsula or island-type cabinet

In a peninsula or island type cabinet, the sides may need to be scooped or cut down, and the corner braces removed in order to accommodate the unit.



# CABINET PREPARATION CUTOUTS

### **3** PREPARING THE COUNTERTOP

The countertop must have a deep flat surface to accommodate the cooktop and the vent. Countertops with a rolled front edge and backsplash may not provide the flat surface area required.



Clearance between inside front of cabinet and rear of countertop cutout must be 20%" in order to accommodate cooktop depth.



A  $1/2^{"}$  wide flat area is required around the edge of opening for support of the unit. The cooktop unit must be level and sit squarely into countertop opening.

Carefully cut countertop opening according to the dimensions shown in the illustration. Be sure that opening is cut squarely, with sides parallel to each other and rear exactly perpendicular to sides.



For island installation, maintain  $1^{7/8}$ " minimum from cutout to front edge;  $2^{3/8}$ " minimum from cutout to back edge; and 5" minimum from cutout to side edges of countertop.

### 4 PREPARING FOR DUCTWORK

**NOTE:** Ductwork MUST be vented to outside. DO NOT vent into a wall, ceiling, crawlspace, attic or any concealed space.

Cut hole in cabinet wall or floor as appropriate for your installation. Make sure exhaust duct is located between wall studs or floor joists.

**NOTE:** When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities. Make sure that any opening/cutout in the wall behind the appliance and in the floor under the appliance are sealed properly.



## **5** BLOWER TO DUCTWORK ALIGNMENT

In general, the use of flexible ducting is discouraged because it can cause severely restricted airflow. However, if the blower outlet and the floor or wall duct location do NOT align well, then flexible METAL ducting can be used to adapt to an offset. Good alignment without use of flexible ducting is best.

### NOTE:

- Do not exceed the maximum recommended offset of 6".
- Do not allow the flexible ducting to kink or collapse.
- Do stretch the flexible ducting as much as possible to eliminate as much of the corrugation as possible.



A 3¼" × 10" rectangle to 6" round transition duct is available at your local building supply store. NOTE: Illustrations are for planning purposes only.

# **Installation Instructions**

nside wall cabinet

Up inside wall to roof or

overhang

Peninsula or island

# **DESIGN INFORMATION**

### 6 PREPARE FOR DUCTWORK

Determine the best route for ductwork; it can be routed in a variety of ways depending on the kitchen layout. **IMPORTANT:** The downdraft air discharge outlet for this unit is 31/4" × 10" rectangular. Plan ducting accordingly. Typical duct arrangement countertop series.

To maximize the ventilation performance of the vent system:

- 1. Minimize the duct run length and number of transitions and elbows.
- 2. Maintain a constant duct size.
- 3. Seal all joints with duct tape to prevent any leaks.
- 4. Do not use any type of flexible ducting.

If needed, install any make up (replacement) air system in accordance with local building code requirements. Visit GEAppliances.com for available makeup air solutions.



Outside wall

cabinet

Directly to outside

Peninsula

# POWER SUPPLY LOCATIONS

## **GAS SUPPLY:**

These cooktops are designed to operate on natural gas at 4" of water column pressure or on LP gas at 10" of water column pressure.

- These cooktops are shipped from the factory set for natural gas. If you decide to use this cooktop with LP gas, conversion adjustments must be made by a service technician or other qualified person.
- The pressure regulator must be connected in series with the manifold of the cooktop and must remain in series with the supply line regardless of type of gas being used. For proper operation, the maximum inlet pressure to the regulator must be no more than 10" water column pressure for natural gas and 14" water column pressure for LP gas.
- When checking the regulator, the inlet pressure must be at least 1" greater than the regulator output setting. If the regulator is set for 4" of water column pressure, the inlet pressure must be at least 5". If the regulator is set for 10" of water column pressure, the inlet pressure must be at least 11". For ease of installation, and if local codes permit, the gas supply line into the cooktop should be 1/2" or 3/4" ID flexible metal appliance connector, three to five feet long.

NOTE: Purchase a new flexible line. DO NOT USE AN OLD PREVIOUSLY USED LINE.

• Make gas connection through rear wall, or on cabinet floor at rear, as illustrated.



The built-in gas downdraft cooktop features pilotless electric ignition for energy savings and reliability. It operates on a 120-volt, 60-Hz power supply. A separate circuit, protected by a 15-amp time-delay fuse or circuit breaker, is required.

• A properly grounded 3-prong receptacle should be located within reach of cooktop's four foot power cord.

IMPORTANT: (Please read carefully.) FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED.

The power cord of this appliance is equipped with a three-prong (grounding) plug which mates with a standard three-prong grounding wall receptacle to minimize the possibility of electric shock hazard from this appliance. The customer should have the wall receptacle and circuit checked by a qualified electrician to make sure the receptacle is properly grounded and has correct polarity. Where a standard two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to have it replaced with a properly grounded three-prong wall receptacle.

Do Not, Under Any Circumstances, Cut Or Remove The Third (ground) Prong From The Power Cord. Do not use an extension cord.

# UNPACKING THE COOKTOP/INSTALLING THE GASKET

### INSTALLING THE FOAM GASKET AND REFLECTIVE TAPE

# **A** CAUTION: Potential risk of fire – reflective tape must be secured around countertop opening as shown.

Do not install the cooktop into the countertop without installing the foam gasket as shown. It protects the bottom edge of the glass from the countertop and seals the cooktop against spills.

Remove the cooktop along with its shipping pad from the shipping box. Remove the shipping block from the downdraft vent opening and place it under the shipping pad to provide level support.



Center vent shipping block – place under the shipping pad to provide level support

### **A** CAUTION: GLASS IS FRAGILE. DO NOT BUMP EDGE OF GLASS DURING INSTALLATION.

Locate the reflective tape and foam gasket tape included with your cooktop.



Smooth rough edges of the cutout. Install reflective tape to the opening, along the inside and 3/8" to 1/2" of the opening edge.



### Foam Gasket Installation Notes:

 $\bullet$  The foam gasket tape should be installed within  $^{1/8^{\prime\prime}}$  of the edge of the glass. Do not stretch or twist the foam gasket tape.

**A** CAUTION: Failure to install foam gasket tape greatly increases the potential of breaking the cooktop glass when installing, especially in Corian<sup>®</sup> or granite countertops.

- Use care not to stretch the foam gasket tape while it is installed or it will not stay in place.
- Do not place foam gasket tape over the metal flanges.
- But the foam gasket tape ends together at each corner without overlapping.
- Trim the foam gasket tape to length without stretching.
- Mitre cut outside corners of foam gasket tape slightly if necessary for appearance.



• Do not scratch the glass while cutting the foam gasket tape.

### **10** INSTALLING THE COOKTOP:



**CAUTION:** DO NOT LIFT FROM VENT OPENING.

Lift the cooktop by the glass side edges as shown. **NOTE:** Do not use the glass top vent opening to lift or move the cooktop into position.



Lower the cooktop into the countertop opening, guiding it into position. Glass is fragile—do not allow it to drop onto the countertop. Support from the underside and lower slowly. Carefully remove your fingers one corner at a time to lower the cooktop into position.

**NOTE:** Do not use Silicone RTV or caulk to bond cooktop glass to countertop.

Once the unit is placed in countertop; visually inspect the cooktop and counter, appearance or alignment concerns.

### II INSTALLING THE OPTIONAL INSTALLATION BRACKETS

**NOTE:** Check for glass flatness in Step 9 before installing optional installation brackets.



To order optional installation brackets/thumb screws, call the National Parts Center at 800.626.2002. Order two of each part: WB02X11331 Bracket WB01X10353 Screw

To install optional installation brackets:

Remove 2 screws on both sides under cooktop.

Align optional installation bracket under cooktop and reinstall screws through the slot in the bracket. Do this on both sides of the cooktop.

Thread the thumb screw through the hole in the bracket and tighten to secure the cooktop to the countertop. Repeat on the other side.

**IMPORTANT:** Turn thumb screw until it touches the bottom of the countertop. Do not overtighten.

# INSTALLATION INSTRUCTIONS

# **INSTALLING THE COOKTOP**

### 12 INSTALLING THE BLOWER PLENUM TO THE COOKTOP

Slide the plenum, with the blower opening on the left, into the opening in the bottom of the cooktop. Push up on the plenum until the stops on the plenum contact the bottom of the cooktop, and snap the plenum into place. (You may have to move the plenum back and forth to work it into place.)



Secure the plenum to the bottom of the cooktop, on each side, using the four (4) screws provided. Further secure the plenum to the cooktop, from the top side, using the two screws (2) provided.

### 13 INSTALLING THE BLOWER TO THE PLENUM

Orient the blower discharge opening to match the ductwork in Steps 5 and 6. Slide the four threaded studs on the side of the blower housing into the four holes on the side of the plenum.

**NOTE:** See Step 13 for installing the transition duct to the blower. It may be easier to install the transition duct to the blower before installing the blower to the plenum.



From the vent opening in the top of the cooktop, fasten the blower assembly securely to the plenum with four (4) nuts.



### 14 ATTACHING A BLOWER TRANSITION DUCT

Use a blower transition duct for all downward duct installations to connect to 6" round standard ductwork. This  $3\frac{1}{4}$ "  $\times$  10" rectangle to 6" round transition duct is available at your local building supply store.



joints with duct tape to assure an airtight seal.

### **15** BLOWER ELECTRICAL CONNECTIONS

• Loosen the two screws and remove and discard the sheet metal strap covering the 5-pin connector on the cooktop bottom. Save the screws for reinstallation later.



• Connect the 5-pin plug on the blower assembly to the matching 5-pin receptacle on the bottom of the cooktop.



• Fold all wires into the electrical enclosure. Secure the enclosure with the screws removed earlier, making sure that no wires are trapped.



### **16** CONNECTING THE DUCTWORK

Connect the ductwork prepared in Steps 5 and 6 to the blower.

### 17 INSTALL THE PRESSURE REGULATOR



- For all connections, use a pipe sealant approved by local codes and resistant to the activity of LP gas.
- Install the pressure regulator in the gas line as close to the cooktop inlet as possible to allow clearance for ventilation ducting.
- Make sure the arrow on the body of the regulator is pointing straight up and toward the cooktop. Any other position will affect the output pressure of the regulator. This arrow indicates correct flow of gas.
- Install a manual gas line shut-off valve in an easily accessible location.

**NOTE:** Instead of using solid piping to connect to pressure regulator, an approved flexible metal appliance connector may be used between the shut-off valve and the pressure regulator, if local codes permit.

Appropriate flare nuts and adapters are required at each end of the flexible connector.

### TEST FOR LEAKS

### A WARNING: DO NOT USE A FLAME TO CHECK FOR GAS LEAKS! Do not use the cooktop until all connections have been leak tested.

### Perform leak test per the following instructions:

- 1. Purchase a liquid leak detector or prepare a soap solution of one part water, one part liquid detergent.
- 2. When all connections have been made, make sure all cooktop controls are turned to **OFF** and turn the gas supply valve to **ON**.
- 3. Apply the liquid leak detector or the soap solution around all connections from the shut-off valve to the cooktop.
- 4. A leak is identified by a flow of bubbles from the area of the leak.
- 5. If a leak is detected, turn the gas supply **off**. Tighten the fitting. Turn the gas on and test again.

If the leak persists, turn the gas supply **off** and contact your dealer for assistance. Do not attempt to operate the cooktop if a leak is present.

**IMPORTANT:** Disconnect the cooktop and the individual shut-off valve from the gas supply piping system during any pressure testing of that system at test pressures greater than 1/2 psig. Isolate the cooktop from the gas supply piping system by closing the individual manual shut-off valve to the cooktop during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig.

### **18** ELECTRICAL REQUIREMENTS

120-volt, 60-Hertz, properly grounded branch circuit protected by a 15-amp or 20-amp circuit breaker or time-delay fuse.

### EXTENSION CORD CAUTIONS

Because of potential safety hazards associated with certain conditions, we strongly recommend against the use of an extension cord. However, if you still elect to use an extension cord, it is absolutely necessary that it be a UL-listed, 3-wire grounding-type appliance extension cord and that the current carrying rating of the cord in amperes be equivalent to, or greater than, the branch circuit rating.

### GROUNDING IMPORTANT — (Please read carefully.) FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED.

Preferred Method



The power cord of this appliance is equipped with a three-prong (grounding) plug which mates with a standard three-prong grounding wall receptacle to minimize the possibility of electric shock hazard from this appliance. The customer should have the wall receptacle and circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

Where a standard two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to have it replaced with a properly grounded three-prong wall receptacle.

### DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE THIRD (GROUND) PRONG FROM THE POWER CORD.

An adapter may be used only on a 15-amp circuit. Do not use an adapter on a 20-amp circuit. Where local codes permit, a **TEMPORARY CONNECTION** may be made to a properly grounded two-prong wall receptacle by the use of a UL-listed adapter, available at most hardware stores. The larger slot in the adapter must be aligned with the larger slot in the wall receptacle to provide proper polarity in the connection of the power cord.

### **Temporary Method**

(Adapter plugs not permitted in Canada)



**A CAUTION:** Attaching the adapter ground terminal to the wall receptacle cover screw does not ground the appliance unless the cover screw is metal, not insulated, and the wall receptacle is grounded through the house wiring. The customer should have the circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

When disconnecting the power cord from the adapter, always hold the adapter with one hand. If this is not done, the adapter ground terminal is very likely to break with repeated use. Should this happen, DO NOT USE the appliance until a proper ground has again been established.

# FINAL ASSEMBLY

### 19 ASSEMBLE BURNERS, CHECK IGNITION Assemble burner as shown.



**A** CAUTION: Do not operate the burner without all burner parts in place.



Place the burner heads on the burner bases matching the letters. Place the caps on the heads. Make sure that the heads and caps are placed on the correct size burner. The burner heads and burner

burner heads and burner bases are labeled A, B and C to aid reassembly. There is one small (A), two medium (B) and one large (C) head and cap.

Make sure the notch in the burner head is positioned toward the electrode. Rotate

the burner head around the burner base until it is level and securely seated.

Place the grates over the burners.

### Check for proper ignition:

- Push in one control knob and turn to **LITE** position.
- The igniter will spark and the burner will light; the igniter will cease sparking when the burner is lit.
- First test may require some time, while air is flushed out of the gas line.

• Check to determine if your burner flames are normal. If your burner flames look like **A**, turn off the burner and make sure all parts are assembled correctly. Reassemble and check. Normal burner flames should look like **B** or **C** depending on the type of gas you use. With LP gas, some yellow tipping on the outer cones is normal.

A-Yellow flames Call for service B-Yellow tips on outer cones Normal for LP gas

C–Soft blue flames Normal for natural gas

- Turn knob to OFF.
- Repeat the procedure for each burner.

# FINAL ASSEMBLY

### 20 INSTALL DOWNDRAFT FILTER, VENT GASKET AND VENT GRILLE

Do not operate the vent without the filter in place.

• Place the filter diagonally through the vent opening.



• Make sure it rests, at an angle, on the supports in the vent opening.



- Fit the vent grille gasket around the edge of the downdraft vent opening. Make sure the front of the gasket is installed toward the front of the cooktop.
- Carefully place the vent grille onto the gasket on the downdraft opening.



• Turn the vent fan speed control to **HI**, **MED** and **LO** to make sure all speeds operate correctly.