GE Consumer & Industrial

Technical Service Guide

30- and 36-in. Monogram Stainless Steel Gas Cooktops

> ZGU384L ZGU384N ZGU385L ZGU385N





31-9144



GE Appliances General Electric Company Louisville, Kentucky 40225



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

If the information in this manual is not followed exactly, fire or explosion may result causing property damage, personal injury or death. If you smell gas:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in the building.
- Immediately call the gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire department.

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.

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Introduction



The GE Monogram 30- and 36-in. Stainless Steel Gas Cooktops have the following features:

- Stainless steel cooktop surface
- Continuous interlocking porcelainized cast-iron grates
- Stainless steel tactile grip control knobs with "burner on" indicator lights
- Dual flame sealed cooktop burners with 140°F simmer selection
- Electronic pilotless ignition
- Automatic re-ignition
- Factory set fuel type with conversion kit included



Installation

Note: The complete installation instructions are inclosed with the Use and Care Manual. Carefully read and follow these instructions.

WARNING: Before beginning the installation, switch power off at the service panel and lock the service disconnecting means. When the service disconnecting means cannot be locked, securely fasten a warning tag to the service panel.

Model ZGU384





Gas Supply

Cooktops are shipped from the factory set for either natural or LP gas, and are reversible with the included required parts. For operation above 5,000 feet, order Conversion Kit (Part # WB28T10185).

GAS SUPPLY REQUIREMENTS				
GAS TYPE	INCOMING PRESSURE TO REGULATOR	PRESSURE REGULATOR OUTPUT SUPPLIES		
Natural	6.0" to 14.0" W.C.P.	5.0″ W.C.P.		
L.P.	11" to 14" W.C.P.	10.0″ W.C.P.		

Gas Supply Shutoff Valve

The cooktop itself is not equipped with a gas shutoff valve. If installed correctly, a shutoff valve will be in the main gas supply line "upstream" of the appliance pressure regulator.



Measuring the Gas Pressure Supplied to the Burners

A pressure tap hole is located on the side of the regulator to allow checking of the manifold pressure. Remove the regulator plug and install a WB02X10820 tap (or 1/8 in. NPT nipple) for test with a manometer. Turn on the gas and light at least one burner to serve as a load. Reinstall the regular plug and check for leaks.

Electric Supply

This cooktop features pilotless electronic 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 the cooktop's four-foot power cord.

Gas and Power Supply Locations

- Make gas connection through rear wall, or on cabinet floor at rear, as illustrated.
- Install the house gas supply at least 1-in. from the back wall.
- Locate the electrical outlet 12-in. below the countertop.



Optional Combination Installations

This cooktop may be installed in combination with a ZVB30 Monogram Downdraft Vent, a ZET1, ZEK938 or ZET938 Single Oven or a ZTD910 or ZKD910 Warming Drawer. The gas and electrical supply must be located where it will not interfere with vent housing, the oven or the warming drawer. Review Installation Instructions for additional installation requirements.

Nomenclature

Model Number





The nomenclature plate is located on the bottom of the burner box. In addition to the model and serial numbers, it contains the ratings of the burners, the type of fuel, and the pressure the cooktop was adjusted for when it left the factory. Also included are minimum wall clearance requirements.

The mini-manual is located under the control panel.

Serial Number

The first two characters of the serial number identify the month and year of manufacture. Example: **AL**123456S = January, 2006

A - JAN	2006 - L	
D - FEB	2005 - H	The letter designating
F - MAR	2004 - G	the year repeats every
G - APR	2003 - F	12 years.
H - MAY	2002 - D	
L - JUN	2001 - A	
M - JUL	2000 - Z	Example:
R - AUG	1999 - V	T - 1974
S - SEP	1998 - T	T - 1986
T - OCT	1997 - S	T - 1998
V - NOV	1996 - R	1 1990
Z - DEC	1995 - M	

Orifice/Jet DMS Natural Gas

Natural @ 5" WCP	Rear	Front	Large Center	Large Front
Rate, HI	10K	12K	18K	18K
Rate, LOW	2.4K	2.4K	2.4K	2.4K
Rate, SIM	1.1K	1.1K	1.2K	1.2K
Main Orifice	1.38mm	1.48 mm	1.9 mm	1.9mm
Sim. Orifice	0.51 mm	0.51 mm	0.51 mm	0.51 mm
Main Orifice #	138XN	148XN	190XN	190XN
Sim. Orifice #	51SN	51SN	51SN	51SN

LP Gas

LPG @ 10" WCP	Rear	Front	Large Center	Large Front
Rate, HI	9.1K	9.1K	15K	15K
Rate, LOW	2.4K	2.4K	2.4K	2.4K
Rate, SIM	1.1K	1.1K	1.2K	1.2K
Main Orifice	0.84mm	0.84mm	1.08 mm	1.08 mm
Sim. Orifice	0.31mm	0.31mm	0.34mm	0.34mm
Main Orifice #	84XL	84XL	108XL	108XL
Sim. Orifice #	31SL	31SL	34SL	34SL

Features

ZGU384L and ZGU384N



ZGU384 - 30" Gas Cooktop

- 1 Dual-Flame Spillproof Burners—HighOutput
- 2 Dual-Flame Spillproof Burners—X-High Output
- 3 Tactile-touch Control Knobs (One For Each Surface Burner)
- 4 Burner "ON" Indicator Lights (One On Each Control Knob)
- 5 Burner Grates



ZGU385 - 36 Gas Cooktop

- 1 Dual-Flame Spillproof Burners—HighOutput
- 2 Dual-Flame Spillproof Burners—X-HighOutput
- 3 Tactile-touch Control Knobs (One For Each Surface Burner)
- 4 Burner "ON" Indicator Lights (One On Each Control Knob)
- 5 Burner Grates

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Electronic ignition & relight	The surface burners are lit by electronic ignition. All burner igniters make clicking sounds and spark even when only a single burner is being turned on. Do not touch any of the burners when the igniters are clicking. The burners on this cooktop relight automatically if the flame goes out. This helps prevent the inconvenience of having to manually relight a burner. Occasionally, the burners may spark if excess wind or draft blows the flame away from the burner's flame sensor.	In case of a power outage, you can light the surface burners on your cooktop with a match. Hold a lighted match to the burner; then turn the knob to the HIGH position. Use extreme caution when lighting burners this way.
- To light a burner	 Push the control knob down and turn it counterclockwise to the desired position from HI to LO or simmer (SIM). After the burner ignites, turn the knob in either direction to adjust the flame size. To turn a burner off, turn the knob clockwise, as far as it will go, to the OFF position. All of the burners can be used for both general cooking and simmering. The X-High setting is intended for use with 10" or larger cookware. Do not operate a burner for an extended period of time without cookware on the grate. The finish on the grate may chip without cookware to absorb the heat. 	 Be sure the burners and grates are cool before you place your hand, a pot holder, cleaning cloth or other materials on them. The indicator light on each knob verifies the burner is "ON"; however, it should not be a substitute for visually checking the flame at the burner. Be sure you turn the control knob to "OFF" when cooking is complete.
- select flame size	Watch the flame, not the knob, as you reduce heat. The flame size on a gas burner should match the cookware you are using. FOR SAFE HANDLING OF COOKWARE, NEVER LET THE FLAME EXTEND UP THE SIDES OF THE COOKWARE. Any flame larger than the bottom of the cookware is wasted and only serves to heat the handle.	NOTE: The X-High setting produces an extra large flame. Use 10" or larger diameter cookware when using high heat settings.
Cookware	 Aluminum: Medium-weight cookware is recommended because it heats quickly and evenly. Most foods brown evenly in aluminum cookware. Use saucepans with tight-fitting lids for cooking with minimum amounts of water. Cast Iron: If heated slowly, most cookware will give satisfactory results. Enamelware: Under some conditions, the enamel of some cookware may melt. Follow cookware manufacturer's recommendations for cooking methods. Glass: There are two types of glass cookware—those for oven use only and those for surface cooking (saucepans, coffee and teapots). Glass conducts heat very slowly. 	 Heatproof Glass-Ceramic: Can be used for either surface or oven cooking. It conducts heat very slowly and cools very slowly. Check cookware manufacturer's directions to be sure it can be used on gas cooktops. Stainless Steel: This metal alone has poor heating properties, and is usually combined with copper, aluminum or other metals for improved heat distribution. Combination metal cookware generally works satisfactorily if it is used at medium heat as the manufacturer recommends.

Dual-flame spill-proof burners All burners on your cooktop have two rows of flames. These dual-flame burners have a simmer (lower) flame and a main (upper) flame.

When a burner is turned on, the simmer flame will always light and stay on.

Simmering: The simmer (SIM) setting will use only the lower flames. Use simmer (SIM) to melt chocolate, hold delicate sauces or for other foods requiring low simmer heat.

Primary Cooking: Settings from LO to HI will use both rows of flames. Use LO to HI for all purpose cooking.



Care and Cleaning

General information	Proper care and cleaning are important so your cooktop will give you efficient and satisfactory service. Follow these directions carefully in caring for it. Some cooktop models are provided with cleaners. Follow the instructions on the containers.	Before cleaning any part of your cooktop, be sure all burners are off and cool.
Stainless steel surfaces	Do not use a steel wool pad; it will scratch the surface. To clean the stainless steel surface, use warm sudsy water, a stainless steel cleaner or an all-purpose liquid or spray cleaner. Always scrub in the direction of the grain. Rinse thoroughly with a sponge or cloth and clean water. Dry with a soft, clean cloth. After cleaning, use a stainless steel polish, such as Stainless Steel Magic [®] , Revere Copper and Stainless Steel Cleaner [®] or Wenol All Purpose Metal Polish [®] . Follow the product instructions for cleaning the stainless steel surface.	Use a stainless steel brightener when stainless steel is exposed to high heat and has a yellow appearance. Stainless steel cleaner is for other cleaning. Follow the product instructions for proper cleaning methods. If you need an additional supply, you can purchase them by calling 800.626.2002 .
Control knobs	The control knobs may be removed for cleaning. To remove knob , pull it straight up. The knobs have a tactile grip surface, but no special cleaning is required. Wash the knobs in soap and water but do not soak. Avoid getting water down into the knob stem holes. Replace the knobs after drying. DO NOT attempt to clean your knobs in a dishwasher.	NOTE: The knob stem is " D " shaped. Replace the flat side of the knob onto the flat side of the stem.

Burner grates

Cast-iron burner grates should be washed regularly and especially after spillovers. Wash them in hot, soapy water and rinse with clean water. Dry grates with a clean cloth. The grates may also be cleaned in a dishwasher.

When replacing grates, be sure that they are positioned securely over the burners.



Model ZGU384: Replace the two side grates so that a continuous "arc" is formed with the center ribs of both grates. Make sure both grates are stable and level.



Model ZGU385: Replace the two side grates with their locking rails toward the center grate so that a continuous "arc" is formed with the center ribs of all three grates. Make sure the center grate is locked into position over the rails on the side grates and that all grates are stable and level.

Dual-flame spill-proof burners

The burner consists of three parts: the burner base, burner head and burner cap. The burner head and burner cap can be lifted off, making them easy to clean.

CAUTION: DO NOT OPERATE THE BURNER WITHOUT ALL BURNER PARTS IN PLACE.

You should clean the surface burners routinely, especially after bad spillovers, which could clog the slots and holes in the burner heads. A sewing needle or wire twist-tie works well to unclog these openings.

All slots and holes in the burner head must be kept clean at all times for proper ignition and an uneven, unhampered flame.

The electrode is located on one side of each burner. When one burner is "ON", all burners will spark. Do not attempt to disassemble



or clean around any burner while another burner is on. An electric shock may result, which could cause you to knock over hot cookware. **To get rid of burned-on food,** place the grates in a covered container or plastic bag. Add 1/4 cup of ammonia and let them soak for 30 minutes. Wash, rinse well and dry.

Although they are durable, the grates will gradually lose their shine, regardless of the best care you can give them. This is due to their continual exposure to high temperatures.

Do not operate a burner for an extended period of time without cookware on the grate. The finish on the grate may chip without cookware to absorb the heat.

Rubber Grate Feet

For stability, the base of your grates has rubber feet. If any of these feet should become damaged or lost, replace them immediately.

To order replacement rubber grate feet, please call our toll-free number:

National Parts Center	
Rubber Grate Feet Part No.	#WB02T10101

Cleaning

Lift off burner parts only when cool (see next page). Wash in hot, soapy water. You may use a plastic scouring pad to remove burned-on food particles.

To remove burned-on food, soak the burner heads in a solution of mild liquid detergent and hot water for 20–30 minutes. For more stubborn stains, use a plastic scouring pad or toothbrush.

If the spill goes inside the burner head assembly, wash it under running water and shake to remove excess water.

After Cleaning

Before replacing the burner parts, shake out excess water and then dry them thoroughly.

To remove the burner parts:

Dual-flame spill-proof burners (cont.)

NOTE: Before removing the burner parts, remember their size and location. Replace them in the same location after cleaning for proper burner operation.

- **1.** Turn all controls **OFF** before removing any burner parts.
- When cool, you may lift off the burner grates, burner caps and burner heads for easier cleaning. Do not remove the burner bases.

To replace the burner parts:

Make sure that the burner parts are replaced in the correct location.







On model ZGU385, there is one large burner head and burner cap and four sets of medium burner heads and burner caps.

These burner parts are not interchangeable.

Electronic ignition & relight electrodes The electrode of the electronic ignition system is positioned above the surface of the burner base. When cleaning the cooktop, be careful not to snag the igniter with your cleaning cloth. Damage to the igniter could occur.

Be careful not to push in a control knob while cleaning. It could cause the igniter to spark.

Make sure that the white ceramic igniters on the cooktop are dry and clean. Clean the metal portion of the electrode with a soft cloth. 1. Replace the burner head on top of the burner base, making sure that the hole in the burner head is properly aligned with the electrode in the burner base. A small gap between the base and head is normal.



2. Place the burner cap on top of the burner head. Make sure that the burner cap is properly seated on the burner head.

6	<u>)</u>	T	V	V	V	V	V	٦.	T
	Bu	ne	r ci	ap p	orop	perl	y se	eat	ed



Burner cap not properly seated

Burner Cap Alignment



Component Locator Views

Model ZGU384



Model ZGU384 (maintop and top heat barrier removed)



(Continued next page)



Model ZGU385 (maintop and top heat barrier removed)



WARNING: Disconnect electrical power to the cooktop and turn OFF gas at the main valve before performing any removal procedures.

Note:

- The cooktop itself is not equipped with a gas shutoff valve. If installed correctly, a shutoff valve will be in the main gas supply line "upstream" of the appliance pressure regulator.
- Components described are for model ZGU385. Components for model ZGU384 are similar, except where noted.

Burner Base

Note: The following describes the procedure to remove a single burner base. The procedure to remove the remaining burner bases is identical.

To remove the burner base:

1. Lift off the burner grates, cap, and burner head.

Note: The 3 T-15 Torx screws in the maintop do not tighten to the maintop surface. They are inserted in the burner base to assist in alignment of burner base to maintop.

2. Remove the three T-15 Torx screws from the maintop and the two T-15 Torx screws that attach the burner base to the maintop.

Caution: When removing the wire from the igniter, make sure you do not damage the heat shrink insulation on the wire. If damaged, repair the wire insulation with fiberglass tape.

3. Lift each burner base, note the color of the ignitor wire, then disconnect the ignitor wire.



Note: When assembling, check the integrity of the heat shrink on the igniter leads going to the electrodes. If damaged, proper ignition may not occur. Repair the wire insulation with fiberglass tape (part # WB06X10551).



Ignitor

Note: The following describes the procedure to remove a single ignitor. The procedure to remove the remaining ignitors is identical.

To remove the ignitor:

- 1. Remove the burner base. (See *Burner Base*.)
- 2. Use a small needle-nose pliers and remove the clip and spring from the ignitor.



3. Pull out the ignitor from the burner base.

Maintop

Note: Maintop removal is required to access:

- Indicator light assembly
- Ignitor and light switch assembly
- Burner valves
- Burners
- Spark module
- Transformer
- Manifold
- Gas piping
- Wiring
- Mini-manual

Note: The cooktop does **not** need to be removed from the countertop.

To remove the maintop:

- 1. Remove the valve knobs.
- 2. Remove each burner base. (See Burner Base.)
- 3. Lift the maintop from the burner box.



Note: For added accessibility of components, after removing the maintop, it may be helpful to remove the top heat barrier by lifting it out of the burner box.



Indicator Light Assembly

Each burner utilizes an indicator light consisting of an insulator and circuit board with an attached Light Emitting Diode (LED). When a burner knob is turned on, the circuit board activates the LED and light is directed to the clear shaft of that burner knob. The light is reflected up to the indicator on top of the knob.

The circuit boards are wired to an indicator light harness and are replaced as one unit. This light harness is enclosed in a housing located under the maintop, above the burner valves, and can be removed as an indicator light assembly. It is necessary to remove the indicator light assembly to access the ignitor and light switch assembly, burner valves, and manifold.

To remove the indicator light assembly:

- 1. Remove the maintop. (See Maintop.)
- 2. On model ZGU384, remove the top heat barrier by lifting it out of the burner box.
- 3. Remove the two ¼-in. hex-head screws that attach the indicator light assembly to the manifold brackets.
- 4. Lift the indicator light assembly and disconnect the wire harness.



Note: It is **not** necessary to remove the indicator light assembly from the cooktop to remove the indicator light harness.

To remove the indicator light harness:

- 1. Remove the maintop. (See Maintop.)
- 2. On model ZGU384, remove the top heat barrier by lifting it out of the burner box.
- 3. Remove the two ¼-in. hex-head screws and the cover from the light harness bracket



4. Remove the 2 Phillips-head screws that attach each circuit board and insulator to the light harness bracket.



 Slide the wire guide out of the bracket, disconnect the wire harness and the strain relief, and remove the indicator light harness (part# WB18T10383 for model ZGU384 or part # WB18T10384 for model # ZGU385).



Note:

- When replacing the indicator light harness, ensure each insulator is placed directly between each circuit board and the light harness bracket.
- The indicator light harness has a numbered label at each LED. Each label number matches the number on the metal housing under the insulator.

Ignitor and Light Switch Assembly

Each burner utilizes an ignitor switch and a light switch combined in a single unit. The ignitor and light switches are all wired to a single harness. When a burner knob is turned to the ON position, the ignitor switch closes and activates the spark module. The light switch also closes and activates the indicator light assembly. The ignitor and light switches and harness are replaced as one assembly (part # WB18T10382 for model # ZGU384 or part # WB18T10381 for model # ZGU385).

To remove the ignitor and light switch assembly:

- 1. Remove the maintop. (See Maintop.)
- 2. On model ZGU384, remove the top heat barrier by lifting it out of the burner box.
- 3. Remove the indicator light assembly. (See *Indicator Light Assembly*.)



- 4. Disconnect the spark module wire harness.
- 5. Disconnect the transformer wire harness and the ¼-in. hex-head screw that attaches the transformer ground wire to the burner box.

Model ZGU385



Model ZGU384



Note: Before removing the ignitor and light switch assembly from the burner valves and the burner box, note the switch and wire locations.

- 6. Release the ignitor and light switch assembly wiring from the wire retainers (if utilized) in the bottom of the burner box.
- 7. Lift each ignitor switch from the burner valve stem and remove the ignitor and light switch assembly from the burner box.



Note:

- When replacing the ignitor and light switch assembly, place the switches onto the valves with wire colors and harness in original position.
- The bottom of each switch is molded to conform to the top of the valve for a locked-in fit. For proper ignitor operation, each switch must be locked-in to the top of the valve. When installing the ignitor and light switch assembly, align each switch to the valve stem and body. Push the switch down firmly until an audible "snap" is detected.

Burner Valves

Note: The following describes the procedure to remove a single burner valve. The procedure to remove the remaining valves is identical.

To remove the burner valve on model ZGU385:

- 1. Remove the maintop. (See Maintop.)
- 2. Remove the indicator light assembly. (See *Indicator Light Assembly*.)
- 3. Lift the ignitor switch from the burner valve stem. (See *Ignitor and Light Switch Assembly*.)
- 4. Remove the \Re_{6} -in. nut and separate the Hi-Lo gas tube from the burner valve.
- 5. Remove the ⁷/₁₆-in. nut and separate the Simmer gas tube from the burner valve.



6. Remove the two ¼-in. hex-head screws that attach the right side of the bottom heat shield to the burner box.



7. Remove the four ¼-in. hex-head screws that attach the valve access plate to the bottom of the burner box.



8. Separate the right side of the bottom heat shield from the burner box and remove the valve access plate.



9. Remove the ¼-in. hex-head screw that attaches the valve to the manifold.



Caution: Ensure the valve seal and the screw seal are in place BEFORE installing the valve.



To remove the burner valve on model ZGU384:

- 1. Remove the maintop. (See Maintop.)
- 2. Remove the indicator light assembly. (See *Indicator Light Assembly*.)
- 3. Lift the ignitor switch from the burner valve stem. (See *Ignitor and Light Switch Assembly*.)
- 4. Remove the $\frac{1}{16}$ -in. nut and separate the Hi-Lo gas tube from the burner valve.
- 5. Remove the γ_{16} -in. nut and separate the Simmer gas tube from the burner valve.



6. Remove the four ¼-in. hex-head screws that attach the valve access plate to the bottom of the burner box.



7. Remove the ¼-in. hex-head screw that attaches the valve to the manifold.



Caution: Ensure the screw seal and the valve seal are in place BEFORE installing the valve.

Burners

Note: The following describes the procedure to remove the X-High Output burner.

To remove the X-High Output burner:

Note: Because the X-High Output burner has a larger maintop opening, it is not necessary to remove the maintop to replace this burner.

- 1. Remove the X-High Output burner cap and burner head.
- 2. Remove three T-15 Torx screws and the two T-15 Torx screws that attach the X -High Output burner base to the maintop.



- 3. Lift the burner base, then disconnect the ignitor wire.
- 4. Remove the $\frac{1}{16}$ -in. nut and separate the Hi-Lo gas tube from the burner.
- 5. Remove the γ_{16} -in. nut and separate the Simmer gas tube from the burner.
- 6. Remove the two ¼-in. hex-head screws that attach the burner to the burner box.



(Continued next page)

Note: Excluding the X-High Output burner the following describes the procedure to remove a single burner. The procedure to remove the remaining burners is identical.

To remove the burner:

- 1. Remove the maintop. (See Maintop.)
- 2. Remove the top heat barrier by lifting it out of the burner box.
- 3. Remove the $\frac{1}{16}$ -in. nut and separate the Hi-Lo gas tube from the burner.
- 4. Remove the $\frac{1}{16}$ -in. nut and separate the Simmer gas tube from the burner.
- 5. Remove the two ¼-in. hex-head screws that attach the burner to the burner box.



Spark Module

To remove the spark module:

- 1. Remove the regulator.
- 2. Remove the maintop. (See Maintop.)
- 3. Remove the top heat barrier by lifting it out of the burner box.
- 4. Remove the two ¼-in. hex-head screws and the module cover.



- 5. Disconnect the wire harness from the spark module.
- 6. Mark and disconnect the ignitor wires from the spark module.
- 7. Remove the two ¼-in. hex-head screws that attach the spark module to the burner box.



Transformer

To remove the transformer:

- 1. Remove the maintop. (See Maintop.)
- 2. Remove the top heat barrier by lifting it out of the burner box.
- 3. Disconnect the transformer wire harness.
- 4. Disconnect the 2 power supply wires.
- 5. Remove the two ¼-in. hex-head screws that attach the transformer to the burner box.

Model ZGU385



Model ZGU384



Manifold

To remove the manifold from Model ZGU385:

- 1. Remove the regulator.
- 2. Remove the maintop. (See Maintop.)
- 3. Remove the top heat barrier by lifting it out of the burner box.
- 4. Remove the indicator light assembly. (See *Indicator Light Assembly*.)
- 5. Remove the ignitor and light switch assembly. (See *Ignitor and Light Switch Assembly*.)
- 6. Remove the **%**-in. nut and the Hi-Lo gas tube from the right front and the right rear burners and burner valves.
- 7. Remove the 7/16-in. nut and the Simmer gas tube from the right front and the right rear burners and burner valves.



- 8. Remove the **%**-in. nut and separate the Hi-Lo gas tube from the center, left front, and left rear burner valves.
- 9. Remove the 7/16-in. nut and separate the Simmer gas tube from the center, left front, and left rear burner valves.



- 10. Remove the seven ¼-in. hex-head screws that attach the manifold to the burner box.
- 11. Carefully lift the manifold from the burner box.



To remove the manifold from Model ZGU384:

- 1. Remove the regulator.
- 2. Remove the maintop. (See Maintop.)
- 3. Remove the top heat barrier by lifting it out of the burner box.
- 4. Remove the indicator light assembly. (See *Indicator Light Assembly*.)
- 5. Remove the ignitor and light switch assembly. (See *Ignitor and Light Switch Assembly*.)
- 6. Remove the \Re_{6} -in. nut and the Hi-Lo gas tube from each of the 4 burner valves.
- 7. Remove the γ_{16} -in. nut and the Simmer gas tube from each of the 4 burner valves.
- 8. Remove the seven ¼-in. hex-head screws that attach the manifold to the burner box.
- 9. Carefully lift the manifold from the burner box.





Gas Type Conversion

Models ZGU384N and ZGU385N are shipped from the factory set for natural gas operation. Models ZGU384L and ZGU385L are shipped from the factory set for liquefied petroleum (LP) gas operation. If you have received the wrong type gas model for your installation situation, the regulator and burner orifices must be converted. Conversion orifices and complete instructions are packed with each model.

WARNING: The following adjustments must be made before turning on the burner. Failure to do so could result in serious injury. Be sure pressure regulator has been converted as described in Step 1.

1 ADJUST THE REGULATOR

- A. Disconnect all electrical power, at the main circuit breaker or fuse box.
- **B.** Shut off the gas supply to the cooktop by closing the manual shut-off valve.
- **C.** Adjust the pressure regulator by the following instructions:
 - Unscrew the cap.
 - Place your thumb against the flat side of the spring retainer and press down to remove the retainer.
 - Carefully look at the spring retainer to locate the NAT or LP position.



- Turn the spring retainer over so that the desired gas is showing on the bottom.
- Snap the retainer back into position.
- Screw the cap back onto the regulator.

2 CHANGE BURNER ORIFICES

INSTALLATION TIP: First remove all orifices and then start replacing them. This will help to prevent the possibility that some may not be replaced.

- A. Remove the burner grates, burner caps and burner heads. Burner
- **B.** Using a 7mm nut driver, remove the top burner orifices. There are two orifices per burner.

The main orifice is located low in the center of the burner, while the simmer orifice is located higher beside the center of the burner.

emove the are two Spark igniter Simmer orifice

Burner cap



IMPORTANT: Orifices must be located exactly as shown. Carefully read and observe each orifice label for correct location.

Model ZGU384



Model ZGU385



MAIN ORIFICES



3 ADJUST BURNER FLAMES

- A. Turn all burners on highest setting and check the flames. They should be blue (no yellow tipping) when using natural gas. Foreign particles in the gas line may cause an orange flame at first, but this will soon disappear.
- **B.** Turn the cooktop burner knob to "LO" while observing the flame.

Adjust the setting of the upper row of flames using the valve bypass screw as follows:

Adjustments must be made with two other burners in operation on a medium setting. This prevents the upper row of flames from being set too low, resulting in the flame being extinguished when other burners are turned on.

C. To adjust the flame, remove the knobs. Insert a screwdriver through the access hole in valve shaft as shown.

Model ZGU384



Model ZGU385



- If the flames were too small or fluttered, open the valve more than the original setting.
- If the flames blew away from the burner, close the valve more than the original setting.
- **D.** Make the adjustment by slowly turning the screw until flame appearance is correct.

E. Testing Flame Stability:

- **Test 1 –** Turn the knob from "HI" to "LO" quickly. If the upper row of flames goes out at this setting, increase the flame size and test again.
- **Test 2 –** With the burner on "LO", open and close the cabinet door under the cooktop. If the flame is extinguished by the air currents created by the door movement, increase the flame height and test again.

NOTE: When the burner is on the "SIM" setting, the upper row of flames will go out.

F. Flame Recheck:

After the adjustment is made, turn all burners off. Ignite each burner individually. Observe the flame at the "HI" position. Rotate the knob to the lowest setting and be sure that the flame size decreases as the knob is rotated counterclockwise.

Once the conversion is complete and checked ok, fill out the conversion sticker and include your name, organization and date conversion was made. Apply the sticker near the cooktop gas inlet opening to alert others in the future that this appliance has been converted. If converting back to the original gas, please remove the sticker so others know the appliance is set to use its original gas.

High Altitude Conversion

1 GAS SUPPLY

Measure the incoming gas pressure to the regulator. With the installation of this conversion kit, the cooktop should operate on LP gas at 10" of water column pressure and on natural gas at 5" of water column pressure.

- The pressure regulator must be connected in series with the manifold of the cooktop and must remain in series with the supply line.
- When checking the regulator, the inlet pressure must be at least 1" greater than the regulator output setting.
- If the regulator is set for 10" of water column pressure, the inlet pressure must be at least 11".
- If the regulator is set for 5" of water column pressure, the inlet pressure must be at least 6".

For proper operation, the maximum inlet pressure to the regulator must be no more than 14" of water column pressure.

2 REPLACE ALL BURNER ORIFICES

A. TO REMOVE THE BURNER PARTS:

Remove the burner caps and main burner head (brass). NOTE: Do not remove the burner base.

B. TO REPLACE BURNER ORIFICES:

- Remove the orifice using a 7 mm nut driver. There are 2 orifices on each burner.
- Use a piece of sticky tape in the socket to prevent the loose orifice from falling out.
- Verify that the orifices in the kit match the chart sizes below and replace the orifices. See chart below for correct orifice sizes.

C. TO REPLACE BURNER PARTS:

- Align the hole in the burner head with the electrode on the burner base. Seat in place.
- Replace the burner caps.

ORIFICE SIZES (see orifice locations in Section 4)



Connection: 1/2" N.P.T.-minimum 5/8" dia. metal flex line.

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 shutoff 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.



NATURAL-Above 5,000 Feet:

(MM) NATURAL			BTU RATES			
BURNER	MAIN	SIM	HI LO		SIM	
Rear	1.26	0.43	10K	2400	1100	
Front	1.38	0.43	12K	2400	1100	
Large Ctr.	1.78	0.47	18K	2400	1200	
Large Front	1.78	0.47	18K	2400	1200	

LP-Above 5,000 Feet:

BUBNEB	(MM) LP-	5,000 FEET	BTU RATES		
BURNER	MAIN	SIM	н	LO	SIM
Rear	0.77	0.31*	9.1K	2400	1100
Front	0.77	0.31*	9.1K	2400	1100
Large Ctr.	0.99	0.31	15K	2400	1200
Large Front	0.99	0.31	15K	2400	1200

* No orifice change required.

Troubleshooting

Problem	Possible Causes	What to Do			
Burner flames are very	Incorrect gas being used.	Check for correct gas supply.			
tipped	The combustion quality of burner flames needs to be determined visually.	 Use the illustrations below to determine if the burner flames are normal. If the burner flames look like A, check for dirty burners and orifices. Clean or replace. Normal burner flames should look like B or C, depending on the type of gas you use. With LP gas, some yellow tipping on outer cones is normal. Image: A value of the content of the burner flames on the type of gas you use. 			
		Call for service Outer cones: Normal for natural gas			
	Regulator malfunction.	• Check output gas supply.			
Burners do not light	Plug on cooktop is not com- pletely inserted in the electri- cal outlet.	Make sure electrical plug is plugged into a live, prop- erly grounded outlet.			
	Gas supply is not connected or turned ON .	• See the Installation Instructions that came with the cooktop.			
	A fuse may be blown or a circuit breaker tripped.	• Replace the fuse or reset the circuit breaker.			
	Burner parts not replaced correctly.	• Make sure pins in the burner head are properly located in the burner base holes.			
	Holes or slits in burners clogged.	• Clean or replace as necessary. Make sure all compo- nents are dry before reassembly.			
	Liquid in burner base due to spillage.	• Remove burner ring to check. Clean and dry thorough- ly before reassembly.			
	Orifices plugged or dirty.	Clean or replace as necessary.			
	Igniter switch defective.	• Replace igniter switches.			
	Igniter wire defective.	Connect igniter wire.			
	Spark module defective.	Replace spark module.			
Burner control knob will not turn	Knob is in the OFF position.	• The knob must be pushed in before it can be turned; it can only be turned in a counterclockwise direction.			
Ticking sound of spark igniter persists after burner lights	Improper flame sensing.	Check for wrong igniter wiring.Replace the igniter.			
Ticking sound persists after burner is turned OFF	Be sure the knob is in the OFF position.	• Remove knob and check the bottom of knob for build- up of soil. If ticking persists, replace igniter switches.			

Transformer Check

- 1. Disconnect the 2 power supply wires and the transformer wire harness.
- 2. Check the primary winding for approximate resistance value of 32.8 Ω between the 2 brown (input) wires.
- 3. Check the secondary windings for approximate resistance value between:
 - White to red 2.2 Ω
 - Brown to red 196 Ω
 - Brown to white 198.2 Ω

Indicator Light Switch Test

- 1. Disconnect power to the cooktop.
- 2. Disconnect the indicator light wire harness.
- 3. Turn on each burner separately and check for 0 resistance on the light wire harness.

Burner Location	Wire Colors
Center	Red to Gray
Left Rear	Red to Orange
Left Front	Red to Yellow
Right Rear	Red to Brown
Right Front	Red to Blue



Light Wire Harness

Note:

- If a single light does not work, replace the indicator light harness (part # WB18T10382 for model # ZGU384 or part # WB18T10381 for model # ZGU385.)
- If all lights are inoperative, and the transformer and indicator light switches test OK, replace the indicator light harness.

Ignitor Switch Test

- 1. Disconnect power to the cooktop.
- 2. Turn on each burner separately and check for 0 resistance between the red wire on the transformer wire harness and the corresponding SW terminal on the spark module wire harness.

Burner Location	Wire Colors
Center	Transformer Red to Module SW5/Gray
Left Rear	Transformer Red to Module SW3/Orange
Left Front	Transformer Red to Module SW2/Yellow
Right Rear	Transformer Red to Module SW4/Brown
Right Front	Transformer Red to Module SW1/Blue



Note:

- If a single ignitor does not work, the switch tests OK, and the ignitor appears good, replace the spark module (part # WB18T10382 for model # ZGU384 or part # WB18T10381 for model # ZGU385.)
- If all the ignitors do not work, and the transformer and switches test OK, replace the spark module.

WARNING: Disconnect electrical power before servicing.

Caution: Label all wires prior to disconnection. Wiring errors can cause improper and dangerous operation. Verify operation after servicing.

ZGU384 Schematic



PT.NO. 229C5530P001-0







Warranty

WHAT IS COVERED

From the Date of the Original Purchase

LIMITED 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 cooktop** 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, Washington, D.C. or Canada. If the product is located in an area where service by a GE Authorized Servicer is not available, you may be responsible for a trip charge or you may be required to bring the product to an Authorized GE Service location for service. 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, in the USA call 800.444.1845. In Canada: 888.880.3030. Please have your serial number and model number available when calling for service.

WHAT IS NOT COVERED

- Service trips to your home to teach you how to use the product.
- Improper installation, delivery or maintenance.

circuit breakers.

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.

Replacement of house fuses or resetting of

- Damage to the product due to misuse or abuse.
- Failure of the product if it is used for other than its intended purpose or used commercially.
- Damage to product caused by accident, fire, floods or acts of God.
- Incidental or consequential damage caused by possible defects with this appliance.
- Damage caused after delivery.
- Product not accessible to provide required service.

EXCLUSION OF IMPLIED WARRANTIES—Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to one year or the shortest period allowed by law.

Some states/provinces 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/province to province. To know what your legal rights are in your state/province, consult your local or state/provincial consumer affairs office or your state's Attorney General.

Warrantor in USA: General Electric Company, Louisville, KY 40225

Warrantor in Canada: Mabe Canada Inc.



GE Consumer & Industrial Appliances General Electric Company Louisville, KY 40225 monogram.com