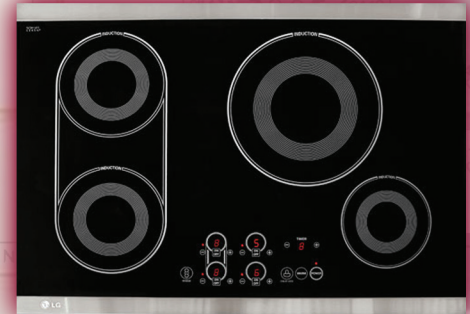


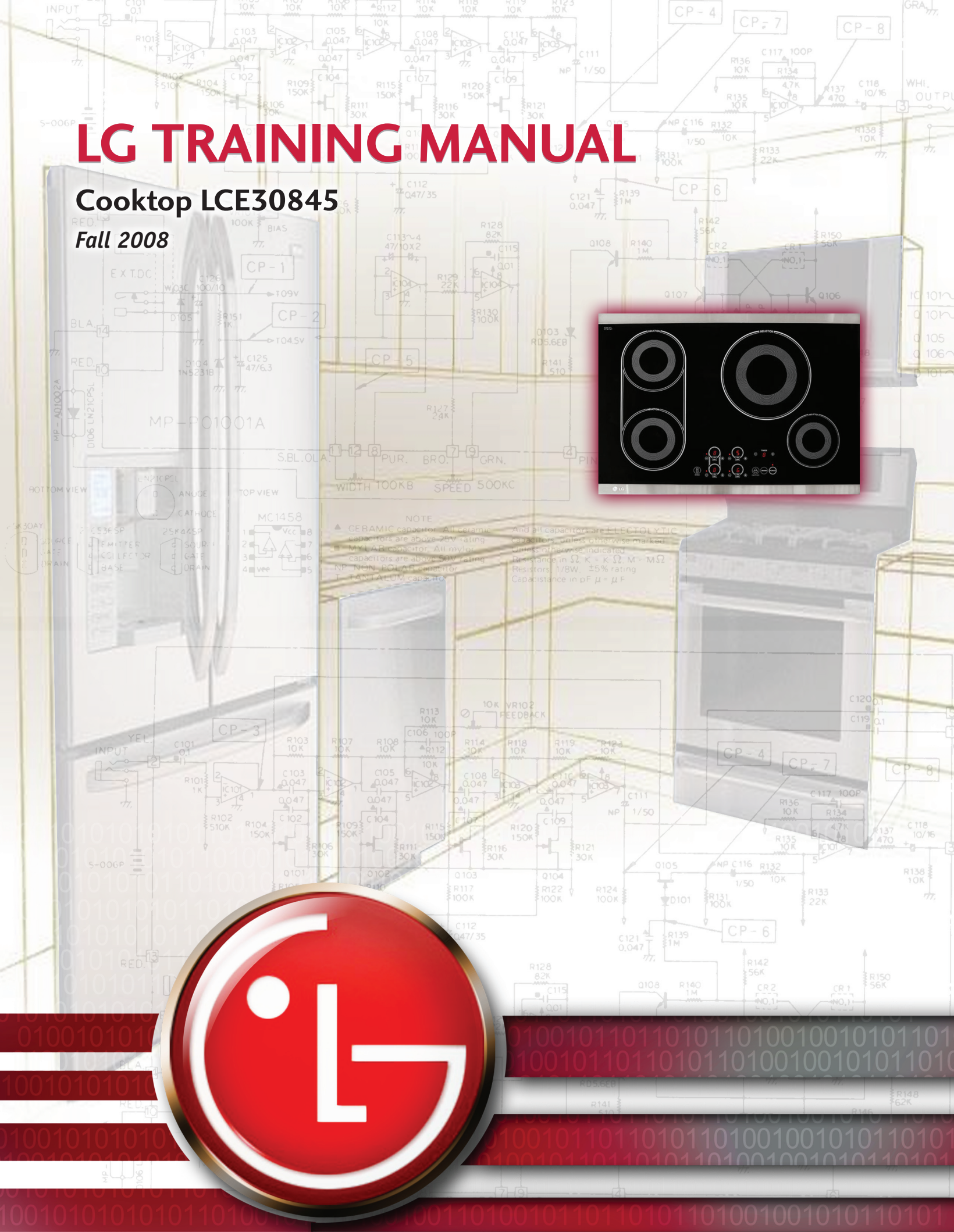
LG TRAINING MANUAL

Cooktop LCE30845

Fall 2008



NOTE
▲ CERAMIC capacitor. All ceramic capacitors are above 25V rating.
■ MYLAR capacitor. All mylar capacitors are above 50V rating.
NP: NON-POLAR capacitor.
T: TANTALUM capacitor.
And all capacitors are ELECTROLYTIC capacitors, unless otherwise marked.
Resistors in Ω , K = K Ω , M = M Ω .
Resistors: 1/8W, $\pm 5\%$ rating.
Capacitance in pF = μF .



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PHONE CONTACTS:

| Contact | Number | Hours of Operation |
|-------------------|----------------|-------------------------------|
| Customer Service | (800) 243-0000 | 24/7 - 365 days a year |
| Technical Support | (800) 847-7597 | 7am-7pm Mon-Fri / Sat 8-2 CST |
| Parts Sales | (888) 393-6484 | 7am-7pm Mon-Sat CST |
| Training Center | (256) 774-4051 | 8am-5pm Mon-Fri CST |

WEB CONTACTS:

| Web Site | Address | Description |
|--------------------------|--|------------------------|
| LG USA | www.lgusa.com | USA sales site |
| Customer Service | us.lgservice.com | Customer support |
| GCSC | aic.lgservice.com | Service center support |
| Customer Service Academy | www.LGCSAcademy.com | Technical training |

PACEMAKER WARNING!

Persons with pacemakers or similar medical devices should exercise caution using or standing near an induction unit while it is in operation, as the electromagnetic field may affect its operation. Patients should consult their doctors or healthcare professionals concerning their individual cases.

IMPORTANT SAFETY NOTICE

The information in this training manual is intended for use by persons possessing an adequate background in electrical equipment, electronic devices, and mechanical systems. In any attempt to repair a major appliance, personal injury and property damage can result. The manufacturer or seller maintains no liability for the interpretation of this information, nor can it assume any liability in conjunction with its use. When servicing this product, under no circumstances should the original design be modified or altered without permission from LG Electronics. Unauthorized modifications will not only void the warranty, but may lead to property damage or user injury. If wires, screws, clips, straps, nuts, or washers used to complete a ground path are removed for service, they must be returned to their original positions and properly fastened.

CAUTION

To avoid personal injury, disconnect the power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks. Also be aware that many household appliances present a weight hazard. At least two people should be involved in the installation or servicing of such devices. Failure to consider the weight of an appliance could result in physical injury.

ESD NOTICE

Some of the electronics in appliances are electrostatic discharge (ESD) sensitive. ESD can weaken or damage the electronics in these appliances in a manner that renders them inoperative or reduces the time until their next failure. Connect an ESD wrist strap to a ground connection point or unpainted metal in the appliance. Alternatively, you can touch your finger repeatedly to a ground connection point or unpainted metal in the appliance. Before removing a replacement part from its package, touch the anti-static bag to a ground connection point or unpainted metal in the appliance. Handle the electronic control assembly by its edges only. When repackaging a failed electronic control assembly in an anti-static bag, observe these same precautions.

REGULATORY INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna; Increase the separation between the equipment and the receiver; Connect the equipment to an outlet on a different circuit than that to which the receiver is connected; or consult the dealer or an experienced radio/TV technician for help.

DISCLAIMER

The information in this training manual was accurate at the time of publication. Every effort has been made to ensure accuracy. Updates, changes, etc. are available via GCSC and LGCSacademy. The information in this manual is intended for persons with adequate backgrounds in electronics, mechanical, and electronic servicing. The manufacturer and seller are not to be held responsible for any liability incurred from its use.

COMPLIANCE

The responsible party for this device's compliance is LG Electronics Alabama, Inc.; 201 James Record Road, Huntsville, AL, 35813.

LCE30845

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SPECIFICATIONS

| ITEM | DESCRIPTION |
|---------------------------|--|
| Model | LCE30845 |
| Power Requirement | 240 / 204 V _{AC} 60Ø |
| Maximum Power | 7.4 kW / 6.8 kW |
| INDUCTION* | |
| Left Front | 1,800 W (2,400 W Boost) |
| Right Front | 1,400 W (1,800 W Boost) |
| Left Rear | 1,800 W (2,400 W Boost) |
| Right Rear | 2,400 W (3,300 W Boost) |
| Cooling Fan Motor Control | 12 VDC 5.5 W (per fan) Glass touch control (capacitance method) |
| Timer | 1 ~ 99 minutes |
| Cooktop Dimensions | 30 ¹³ / ₁₆ X 2 ³ / ₁₆ X 20 ¹ / ₄ (W x H x D, in inches) 783 X 56 X 546 (W x H x D, in mm) |
| Countertop Cutout | 29 ⁵ / ₈ X 20 ¹ / ₄ (W x D, in inches) minimum 29 ¹ / ₂ X 20 ³ / ₈ (W x D, in inches) maximum 746 X 515 (W x D, in mm) minimum 749 X 518 (W x D, in mm) maximum |
| Shipping Weight | Approximately 52.3 lbs. (23.7 kg) |

* The rated power consumption may vary according to pan size and type.



WARRANTY

LG INDUCTION HEATING COOKTOP LIMITED WARRANTY – USA

LG Electronics Inc. will repair or replace your product, at LG's option, if it proves to be defective in material or workmanship under normal use, during the warranty period set forth below, effective from the date of original consumer purchase of the product. This limited warranty is good only to the original purchaser of the product and effective only when used in U.S.A.

| WARRANTY PERIOD: | HOW SERVICE IS HANDLED: |
|---|--|
| Please refer to the warranty statement provided with product. | Any part of the range which fails due to a defect in materials or workmanship. During this full warranty, LG will also provide, free of charge , all labor and in-home service to replace the defective part. |
| Please refer to the warranty statement provided with product. | A replacement glass cooktop if it should crack due to thermal shock and crack at the rubber seal between the glass cooktop and the porcelain edge. A replacement radiant surface unit if it should burn out. During this limited additional warranty, you will be responsible for any labor or in-home service. |

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD ABOVE. LG WILL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST REVENUES OR PROFITS, IN CONNECTION WITH THE PRODUCT. SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY DOES NOT APPLY TO:

1. Service calls to correct the installation of your appliance, to instruct you how to use your appliance, to replace house fuses or correct house wiring, or to replace owner-accessible light bulbs.
2. Repairs when your appliance is used in other than normal, single-family household use.
3. Pickup and delivery. Your appliance is designed to be repairable in the home.
4. Damage resulting from accident, alteration, misuse, abuse, fire, flood, improper installation, acts of God, or use of products not approved by LG Corporation.
5. Repairs to ceramic glass cooktop or other surfaces if they have not been cared for as recommended in the **Owner's manual**.
6. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.
7. Replacement parts or repair labor costs for units operated outside the united states.
8. Any labor costs during the limited warranty period.

This warranty is extended to the original purchaser and any subsequent owner for products purchased for home use within the USA. In Alaska, the warranty excludes the cost of shipping or service calls to your home.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from states to states. To know what your legal rights are, consult your local or state consumer affairs or your state's Attorney General.

CUSTOMER ASSISTANCE INFORMATION:

| | |
|---|---|
| To Prove Warranty Coverage | Retain your Sales Receipt to prove date of purchase. A copy of your Sales Receipt must be submitted at the time warranty service is provided. |
| To Obtain Nearest Authorized Service Center or Sales Dealer, or to Obtain Product, Customer, or Service Assistance | Call 1-800-243-0000 (Phone answered 24 hours - 365 days a year) and choose the appropriate prompt from the menu; or visit our website at: http://us.lgservice.com . |

INTRODUCTION

INDUCTION COOKING

The induction cooktop is different from other types of cooktops. Each cooking zone on the cooktop has an induction coil below it. The coil induces a magnetic field in the pan, generating heat and performing the cooking. The cooking zone itself does not become hot; instead, it may absorb some heat from the pan. If there is no pan on the cooking zone, the sensor detects this and the induction coil is not energized.

IMPORTANT NOTES

- Remove all tape and packaging material before using the induction cooktop. Destroy the plastic bags and carton after installing the appliance. Never allow children to play with packing materials.
- The induction cooktop can induce strong magnetic fields that can affect electronic circuits and interfere with portable radios and cordless telephones.
- Do not place magnetically active objects (credit cards, computer diskettes, cassettes, et al.) on or near the ceramic cooktop while it is in use.
- Persons with pacemakers or similar medical devices should exercise caution using or standing near an induction unit while it is in operation, as the electromagnetic field may affect its operation. Patients should consult their doctors or healthcare professionals concerning their individual cases.

SELECTING COOKWARE

The induction cooktop requires the use of cookware with magnetic bases. These include steel, enameled steel, and cast iron. When purchasing, look for cookware especially labeled by the manufacturer as being suitable for use with induction cooktops.

- In principle, all cookware with a magnetic base is suitable for use with the induction cooktop.
- Certain high-grade cookware made with multi-layered construction (including T-Fal®, Revereware®, copper-clad, and others) are suitable for induction cooktop use if they are so designated by the manufacturer.
- To use specialty cookware (pressure cookers, woks, simmering pans, etc.) follow the manufacturer's instructions and avoid using very thin pans.
- Some cookware produces unusual noises when used with the induction cooktop. This is not a fault in the cooktop and will not impair the function of cooktop or cookware in any way.

COOKWARE SUITABILITY TEST

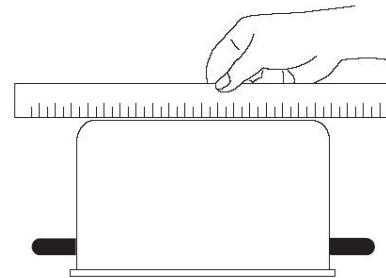
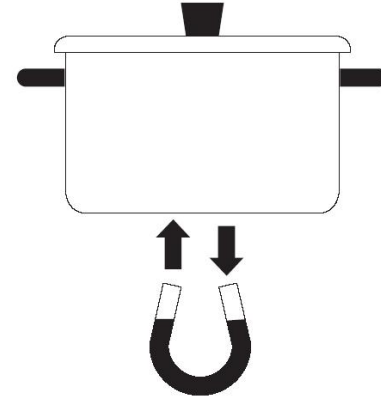
Use these simple tests to determine if your cookware is suitable for use with the induction cooktop.

Place a magnet on the base of the pan. If the magnet sticks to the pan, the pan will be suitable for use with the induction cooktop.

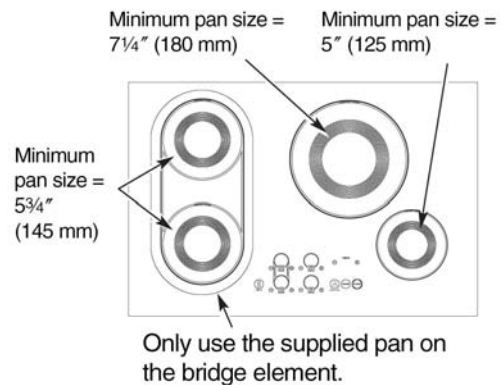
Place $\frac{1}{4}$ " of water into the pan and place it on a cooking zone. Turn the cooking zone on to **FULL POWER** (Power Level 9.) The water should boil rapidly.

Either test will tell you whether the pan is suitable for induction cooktop

Use flat-bottomed cookware heavy gauge cookware to avoid scratching or damaging the surface of the cooktop. Keep the surface of the cooktop clean and free of dirt and grit. Avoid using pans with a heavy grease buildup.



Match the size of the pan to the cooking zone. The pan must be properly sized and centered on the cooking zone. If the pan is too small, the cooking zone's LED will blink and the pan will not heat.



INSTALLATION INSTRUCTIONS

Brief installation instructions are provided in this training manual to aid the servicer in removing and replacing the product correctly and to rectify the situation in the event of an incorrect installation.

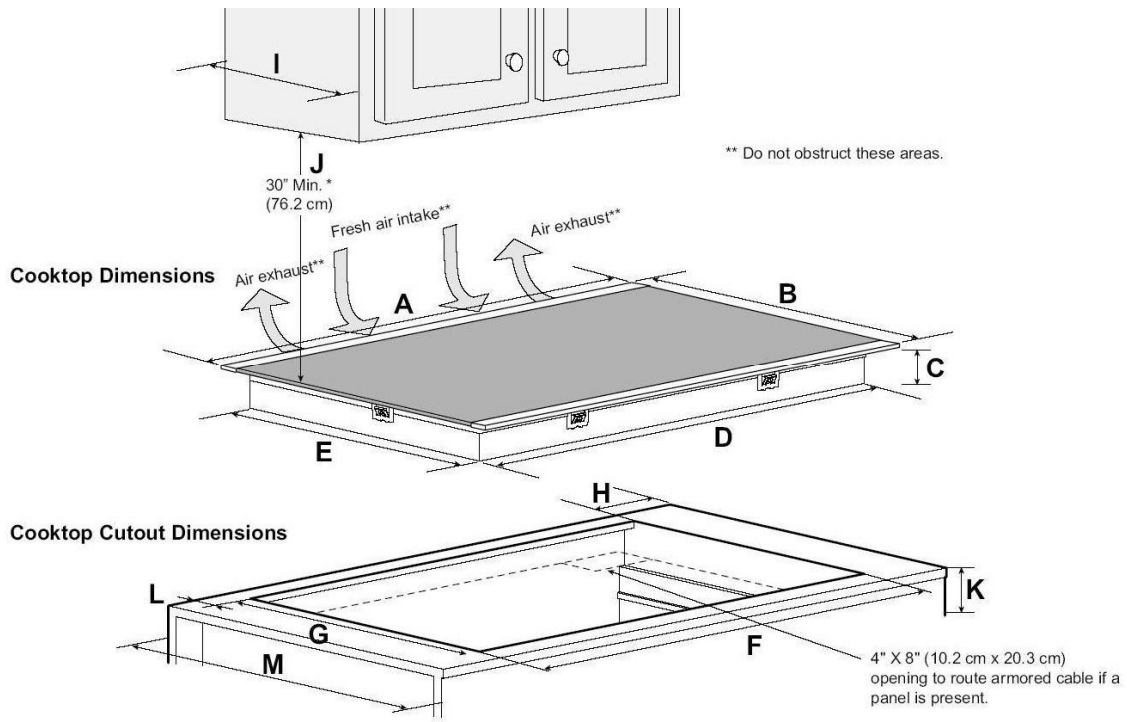
- Before installing the product, read and understand all installation instructions.
- Remove all packing material before connecting the cooktop to the electrical supply.
- Observe all local codes and ordinances, including the latest edition of the National Electrical Code.
- Only certain models can be installed over certain built-in ovens.
- Be sure to leave all documentation with the owner after installation.

UNPACKING THE COOKTOP

- Visually inspect the cooktop for damage and missing components upon unpacking.
- Be sure to leave the cleaning kit and all documentation for the customer. It is important that the ceramic cooktop be cleaned and pretreated before use.
- The cooktop can consume up to 7,400 watts at 240 V_{AC}.
- The cooktop requires its own 40-amp, 240 V_{AC} circuit using 8-gauge wire (8-2 w/ G). No neutral is required.
- The minimum distance between the overhead cabinetry and the cooktop is 30 inches (76 cm).

INSTALLATION

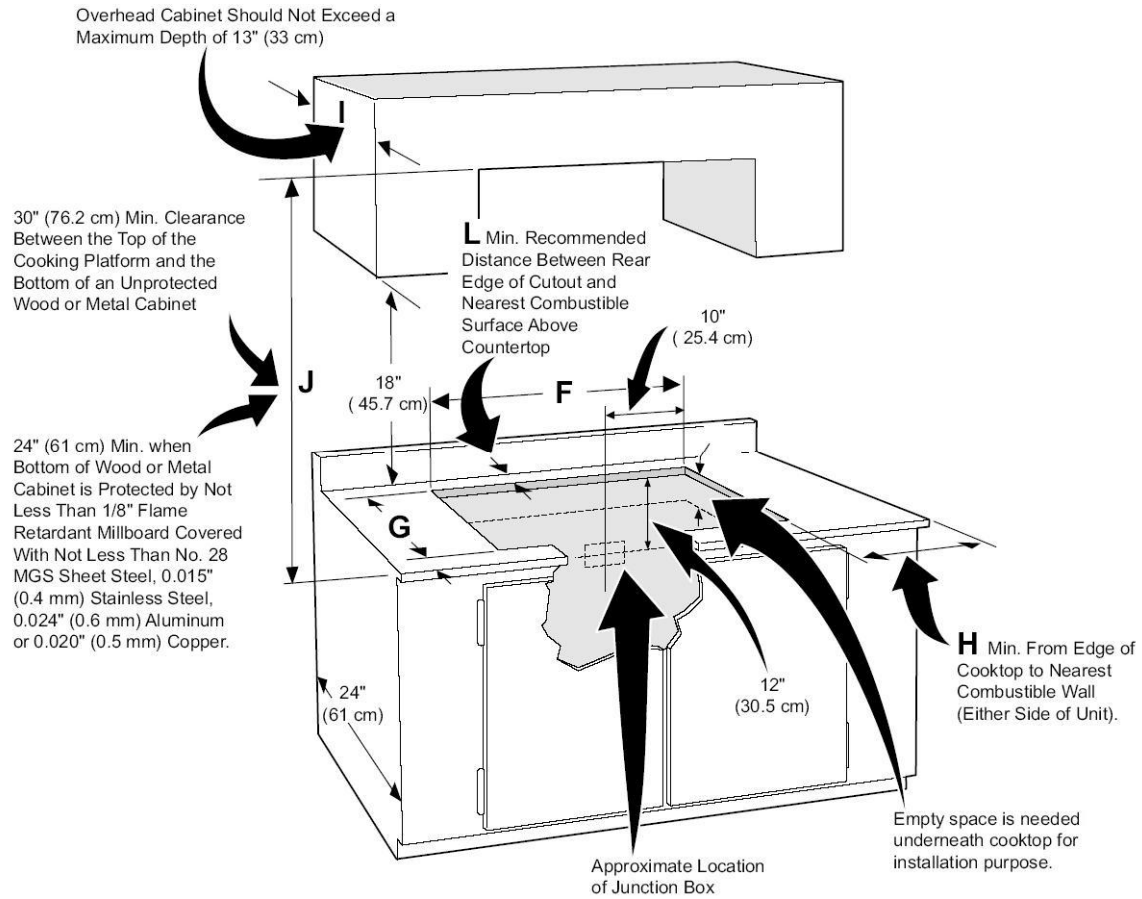
The drawings show dimensions for the installation area and the countertop cutout.



| Unit | A | B | C | D | E | F | | G | | H | I | J | | K | L | M |
|------|----------------------------------|--------------------------------|--------------------------------|----------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----|-----|--------------------------------|--------------------------------|-----|
| | | | | | | Min | Max | Min | Max | | | Min | Max | | | |
| Inch | 30 ¹³ / ₁₆ | 21 ¹ / ₂ | 2 ³ / ₁₆ | 28 ¹³ / ₁₆ | 19 ⁵ / ₈ | 29 ³ / ₈ | 29 ¹ / ₂ | 20 ¹ / ₄ | 20 ³ / ₈ | 1 ³ / ₁₆ | 1 ⁵ / ₁₆ | 24 | 30 | 4 ³ / ₁₆ | 11 ¹ / ₂ | 24 |
| mm | 783 | 546 | 56 | 732.2 | 498 | 746 | 749 | 515 | 518 | 20 | 33 | 610 | 762 | 106 | 38 | 610 |

- All LCE30845 cooktops require a single phase, 3-wire supply cable, on a circuit providing 40 amps via an 8-2 w/ ground cable. (No neutral is required.)
- Minimum distance between the cooktop and the overhead cabinetry is 30 inches (76 cm).
- All dimensions are stated in inches and millimeters on the chart.
- Allow 2 inches (5 cm) of space to clear the incoming electrical conduit and give room for the junction box to be mounted on the wall at the back of the cooktop.
- Be certain there are openings and sufficient space for the incoming and exiting air, which is critical for the cooling of the cooktop.

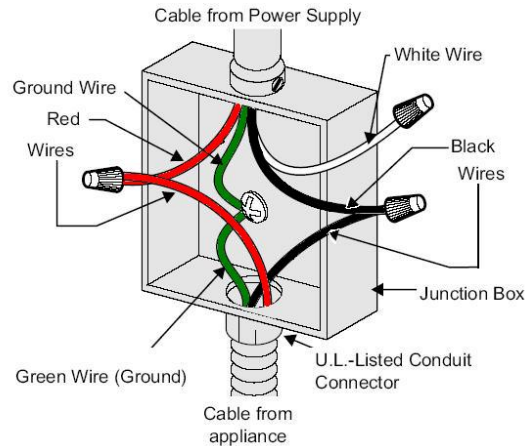
INSTALLATION, continued



ELECTRICAL CONNECTION

The power should be supplied to the cooktop via an 8-2 w/ ground cable single phase, 3-wire supply cable, on a circuit providing 40 amps.

There is NO NEUTRAL. The white wire, if present, should not be connected.



INSTALLATION, continued

Visually inspect the cooktop for damage and missing parts.

Make certain the screws around the perimeter of the cooktop are tightened and all retaining clips are in place.

Do not remove the nylon spacers. These center the cooktop in the opening. The cooktop must be centered to allow proper ventilation and to prevent heat buildup that may result in product failure, damage, or fire.

Measure the cutout in the countertop. Adjust the opening to fit if required.

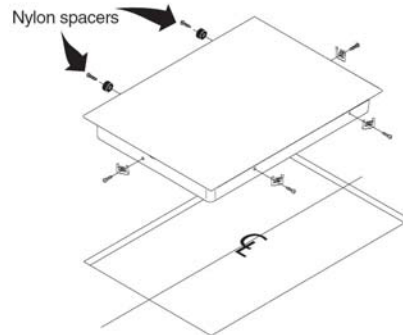
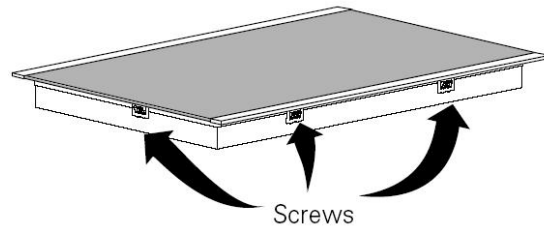
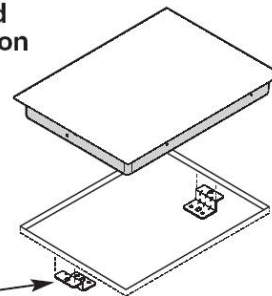
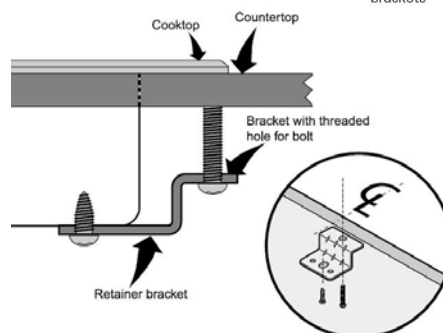
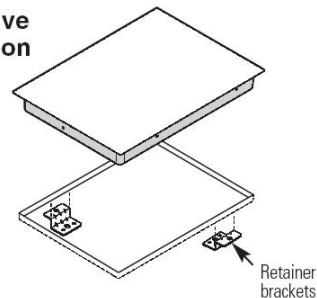
Lower the cooktop into the opening, being careful to avoid trapping any wires.

Do not use caulking compound. The cooktop must be removable for service.

Attach the retainer brackets to the bottom of the cooktop using the screws provided.

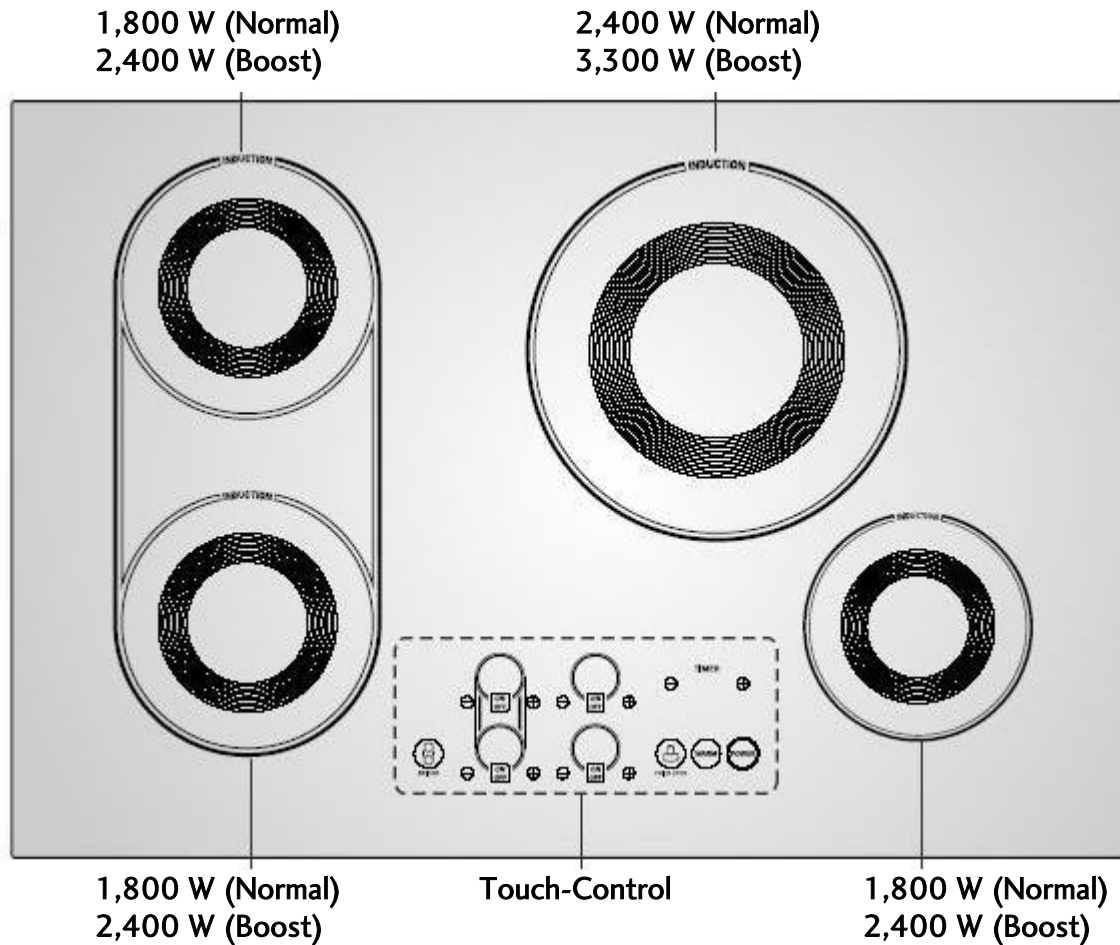
If the preferred position is difficult to use, try the alternate position for the retained brackets.

Insert the retaining bolts through the threaded holes in the brackets. Tighten the bolts snugly under the countertop to hold the cooktop in place.

**Preferred installation****Alternative installation**

PARTS and FEATURES

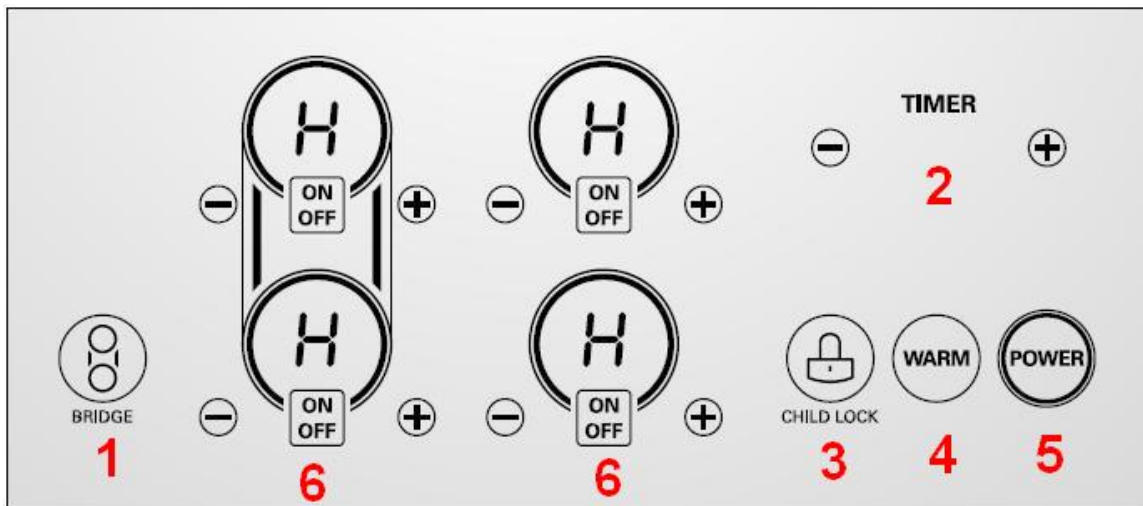
LG's new ceramic cooktop remains cooler than other conventional cooktops whether it is **OFF** or **ON**. Be cautious, because the cooking zones may appear to be cool whether **OFF** or **ON**. The induction coil will not heat the glass, but it may absorb heat from the cookware.



| | |
|---------------------|--|
| Magnetic Detector | The coil sensor automatically detects suitable cookware and prevents accidental activation. |
| Pan Size Detector | The pan recognition sensor automatically detects the pan size and adapts the cooking zone to the size of the pan being used. |
| Improved Efficiency | Induction cooking heats faster while using less energy. It brings liquids to a boil quickly yet allows steady simmering. |

PARTS and FEATURES, continued

| | |
|-------------------------|--|
| Induction Cooking Zones | The induction cooking zones under the glass cooktop heat the base of the pan immediately without heating the glass. |
| Touch Controls | Easy-to-use touch controls provide precise operation. |
| Easy Cleaning | The glass cooktop and touch control panel makes cleanup easy and eliminates gaps where grease can accumulate. |
| Controls and Displays | The digital display shows current settings and warns of hot surfaces where cooking as recently occurred. |
| Safety Shut-off | All cooking zones feature a safety shutoff that turns the zone off if no power level was selected after turning the zone ON . |

TOUCH CONTROL FEATURES

- 1 BRIDGE** – Activates the two left cooking zones and operates as a single zone.
- 2 TIMER** – The time shown in the display is the remaining time on the timer.
Use the + and – keys to adjust the time setting.
- 3 CHILD LOCK** – Press and hold for 3 seconds to activate and deactivate the child lockout function.
- 4 WARM** – Automatically adjusts the last selected active cooking zone to the lowest power level.
- 5 POWER** – Turns the entire cooktop **ON** or **OFF**. When the power is **ON**, the cooktop is in the standby mode until a cooking zone is activated.
- 6 COOKING ZONE CONTROLS** – Each cooking zone has its own control and can be activated individually. Press **ON/OFF** to turn the zone **ON** or **OFF**. Use + and – to adjust the power level between 0 and 9. An H will be displayed to indicate a hot surface.

CLEANING and CARE

General cleaning of the induction cooktop is simpler than for cooking surfaces with radiant heat. To prevent accidental activation of the controls, we recommend setting the CHILD LOCK before cleaning.

- Clean the cooktop before the first use.
- Do not clean the cooktop while it is hot. Wait until it cools.
- Do not use aggressive cleaners, grill or oven sprays, coarse scouring cleansers, abrasive pan cleaners, steel wool, or similar products.
- Clean the surface as soon as it cools after cooking. Remove water marks with a glass scraper and ceramic glass cleaner, available at local hardware stores.

GENERAL CLEANING

- Wipe the surface with a damp cloth, using ceramic glass cleaner when necessary.
- Wipe the surface dry with a lean cloth.
- Once a week, clean the entire glass surface with ceramic glass cleaner, wipe it with a dry cloth, and polish it with a clean, lint-free cloth.

HEAVY SOILS

- Use a glass scraper to remove stubborn and built-up spills and stains. Hold the blade at a 45° angle to the glass.
- Remove the soil by sliding the blade across the area.
- Follow by cleaning with ceramic glass cleaner, as described above.

PROBLEM SOILS

- Remove problem soils, like melted sugar, aluminum foil, or other meltable materials should be removed with a glass scraper while still hot. Failure to do this may cause permanent damage to the cooktop surface. If the cooking surface has already cooled, warm it up again by placing a pan with water in it to boil.
- Use CAUTION! You can be burned while trying to clean a hot cooktop. Use an oven mitt to protect your hand.
- Clean the surface as described above after it cools.
- Scratches and dark marks caused by a pan cannot be removed. They will not impair the function of the cooktop.

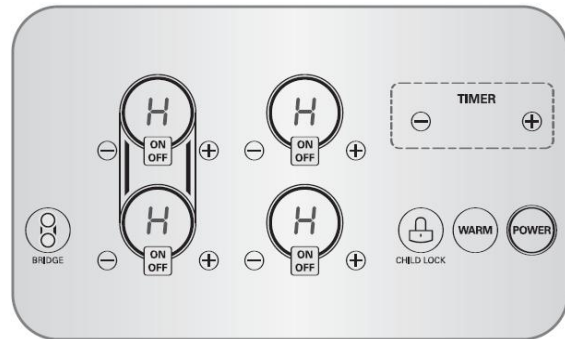
OPERATING INSTRUCTIONS

BEFORE USING THE COOKTOP

Clean the cooktop before the first use. Never use scrub pads, abrasive cleaners, or steel wool. These can cause permanent damage to the cooktop surface.

SETTING THE CONTROLS

To operate the touch control pads, touch the firmly with the fleshy part of your fingertip. There are no moving parts, so pressing harder will not make it work faster or better. The first time the range is powered up, **H** will flash in the cooking zone indicators for **60** seconds or until the **POWER** pad is touched and held for **3** seconds. The **H** will also flash after a power outage.

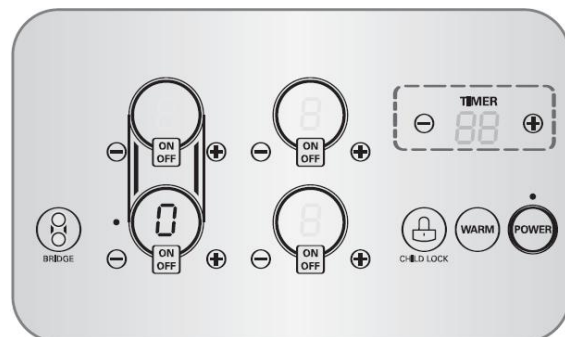


ACTIVATING THE COOKTOP

To turn on the cooktop, touch and hold the **POWER** pad for approximately **2** seconds. The indicator above the pad will light. After turning the cooktop ON, you must select a cooking zone and activate it within 20 seconds using the its **ON/OFF** pad. If no selection is made, the cooktop will turn **OFF** for safety.

SELECTING THE COOKING ZONE

To activate a cooking zone, touch its **ON/OFF** pad. The display will show **0** and the indicator will light to show that no power level has been set. If no power level is set within 5 seconds, the cooking zone will turn off for safety.

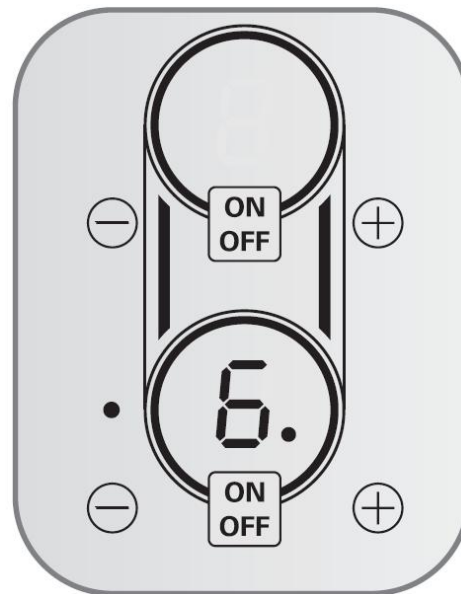


SETTING THE POWER LEVEL

The cooking level can be set between **0** and **9**, or **P** (Power Boost).

To adjust the power level, touch the **+** or **-** pads of the selected cooking zone. Touch **-** to set the power level to 3. Touch **+** to set the power level to 9. After the initial setting, touching the **+** or **-** keys will adjust the power level up or down incrementally.

Normal power level settings can be adjusted in 1/2-step increments. A dot beside the number indicates a 1/2-step setting.



TURNING THE COOKING ZONE ON / OFF

Touch ON/OFF to turn the cooking zone off. If you touch POWER, the entire cooktop will be turned off.

If the cooking zone **+** or **-** pads are held for more than 10 seconds, the timer display will flash the error code **IE**. To clear this error code, press and hold the **ON/OFF** pad for the cooking zone you were setting. This error code does **NOT** apply to the **TIMER** pad.

- If the pan is removed from the center of the cooking zone, the sensor will detect it and the cooking zone will no longer heat the pan. The display for that zone will flash the last power setting for that cooking zone for approximately 90 seconds. If the pan has not been replaced in that time, the cooking zone will turn off.
- The cooktop has a residual heat indicator (**H**) for each cooking zone. This indicator warns that the cooking zone may still be hot enough to cause burns. It will go off when the cooktop cools.

POWER BOOST

Boost is the highest power level available, designed for quickly heating or boiling large quantities. It will operate for a maximum of **12** minutes and will then revert to **POWER LEVEL 9**.

POWER LEVEL GUIDE

| Heat setting | | suitable for |
|--------------|-----------------------------------|--|
| 9 or Boost | Heating Up | Bringing liquid to a boil. |
| 7-9 | Heavy Browning Deep fat frying | Browning meat, heat oil for deep fat frying or sautéing Maintaining fast boil for large amounts of liquids. |
| 6-7 | Baking Frying | Frying meat, chops, pancakes, fried sausages, eggs. |
| 4-5 | Boil | Cooking larger quantities of food, stews and soups, steaming potatoes, cooking meat stock or bouillon |
| 3-4 | Steaming | Steaming vegetables or braising meat |
| 2-3 | Simmering | Simmering rice or milk-based dishes, steaming smaller quantities of potatoes or vegetables, heating up ready-to-serve meals. |
| 1-2 L | Melting | Fluffy omelettes, keeping dishes warm, melting butter, chocolate, |
| 0 | | Off setting |

CHILD LOCK

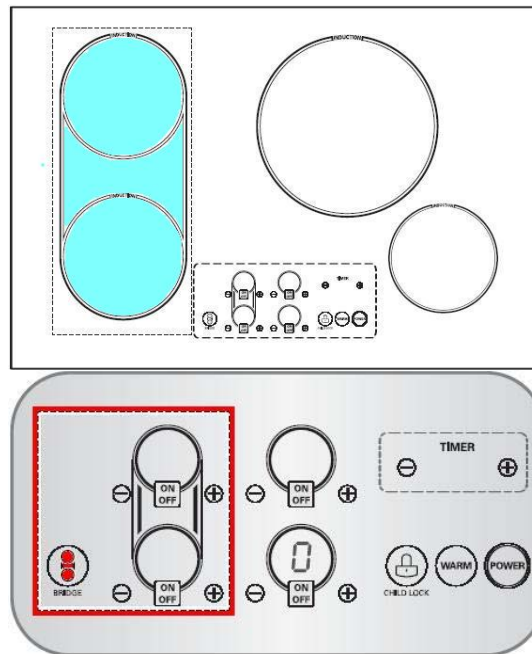
You can lock the entire cooktop when it is not in use. Locking the controls prevents cooking zones from being turned on accidentally. The cooktop must be **OFF** to activate the CHILD LOCK. Touch and hold **CHILD LOCK** for **3** seconds. The CHILD LOCK indicator will turn on to indicate the controls are locked.

BRIDGE COOKING ZONES

The two left cooking zones can be coupled to function as one. To use the bridge zone, you must use the bridge pan supplied with the cooktop. Do not use other pans.

The bridge pan should be rubbed with oil (on the cooking surface only) and heated briefly to season it.

When the bridge function is activated, you can adjust the power level for both zones simultaneously using the + and – keys for either zone.



TIMER

The timer is available to count down from as many as 99 minutes to time a cooking event. It times the cooking only; it does not turn the cooking zone off at the end of the time.

- Touch **TIMER**.
- TOUCH the + or – pads to adjust the time.
- When the time is set, it will begin counting down
- When the set time has expired, the cooktop sounds a long beep.
- To cancel a **TIMER** function, touch and hold both the + and – keys simultaneously until the display shows **00**. The timer will turn off.

AUTOMATIC SHUTOFF

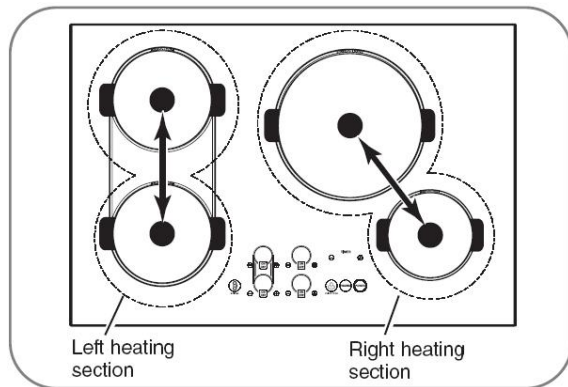
If a cooking zone remains activated for more than 17 hours without a change in control setting, it will be turned off automatically.

AUTOMATIC POWER LEVEL ADJUSTMENT

The power level displayed may differ from the actual power level. To prevent cooktop overheating, the power level is controlled automatically.

POWER SHARING

The cooktop is equipped with four induction cooking zones within two heating sections. The left and right sections are powered by separate induction inverters. The two cooking zones in a section share the power of one inverter. This is called **power sharing**. For example, if you are cooking on the two zones on the right, the last zone activated will maintain its set power while the zone already in use may experience a slight reduction in power level.

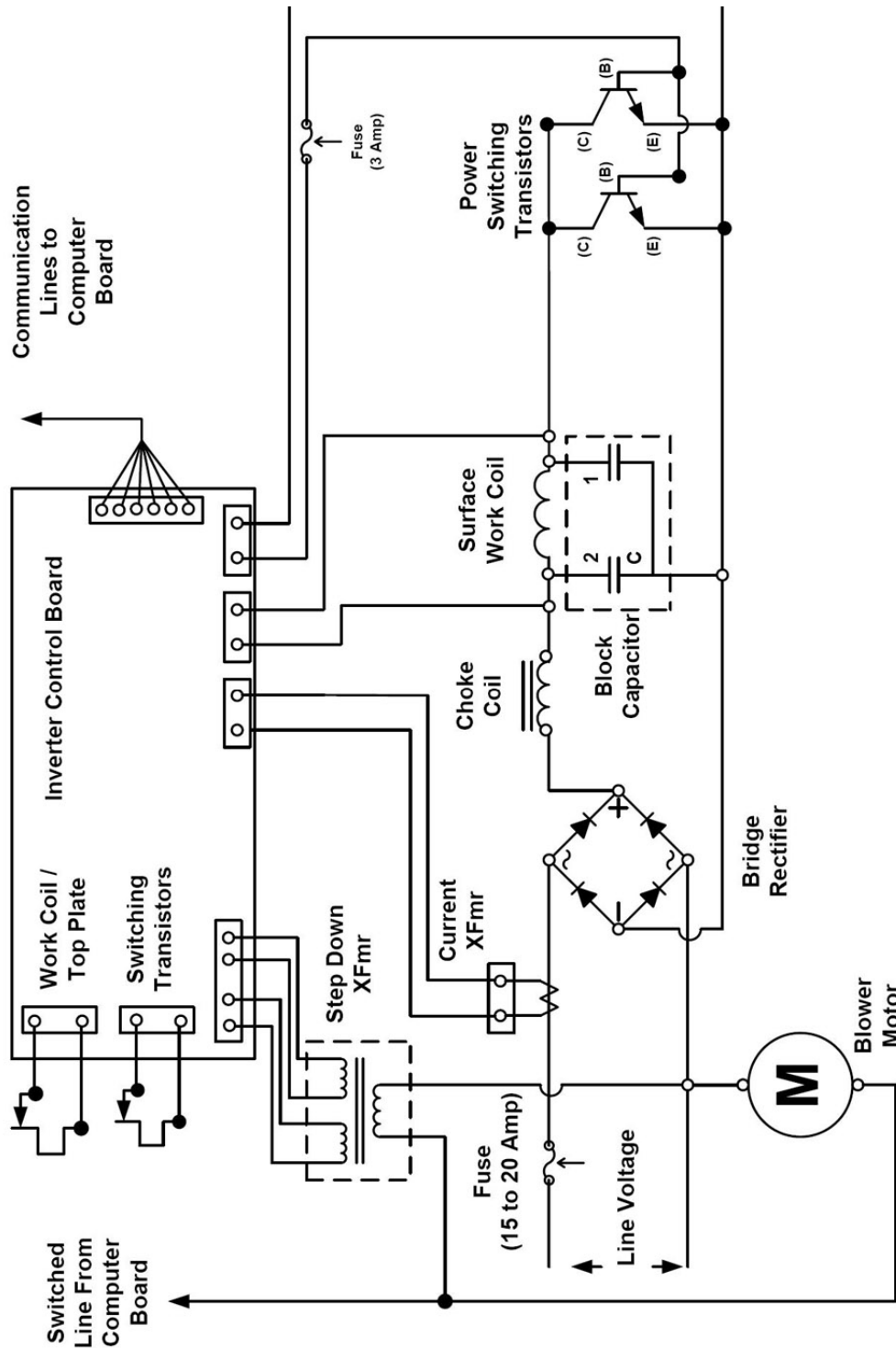


POWER SHARING TIPS

- When using both cooking zones on a single side, set the power level for the food you wish to keep constant last.
- You can keep two pans constant by using a cooking zone on each side.

COMPONENTS

Generic Induction Block Diagram



(See schematic, page 42.)

DISASSEMBLY

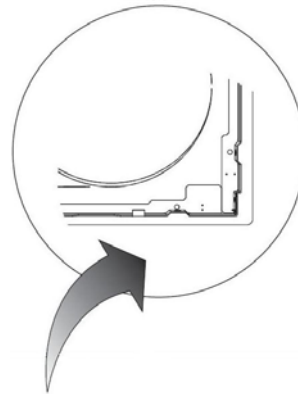
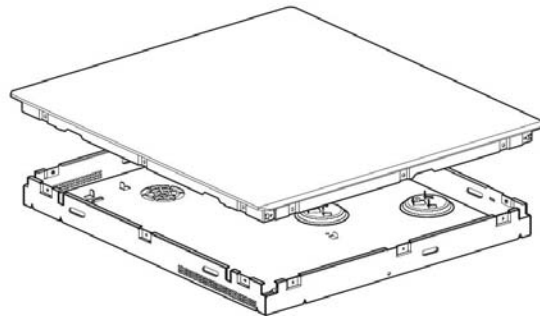
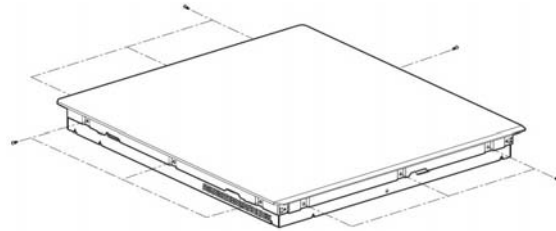
CERAMIC GLASS COOKTOP

Turn off the power to the cooktop.

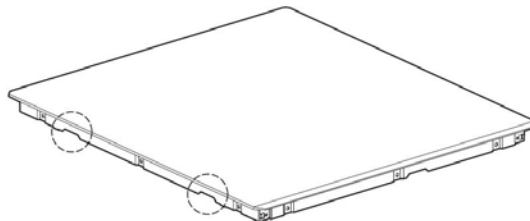
Lift the cooktop out of the countertop.

Remove the ten screws around the perimeter of the cooktop.

Lift the glass part away from the cooktop.

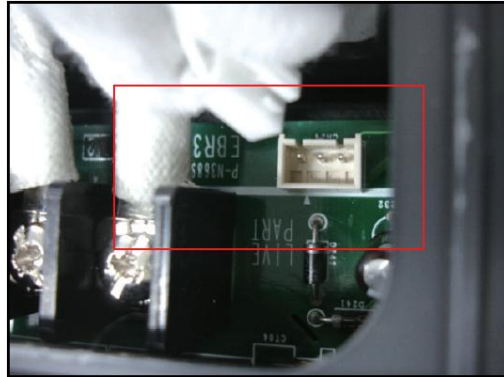


Be careful to avoid breaking the plastic tabs that position the glass at the front and back of the cooktop.



COOKING ZONE ASSEMBLY

Disconnect the top temperature sensor.



Loosen the coil assembly.

Lift out the front of the coil assembly and pull it out of the cooktop.

Both left and right coil assemblies can be removed in the same manner.

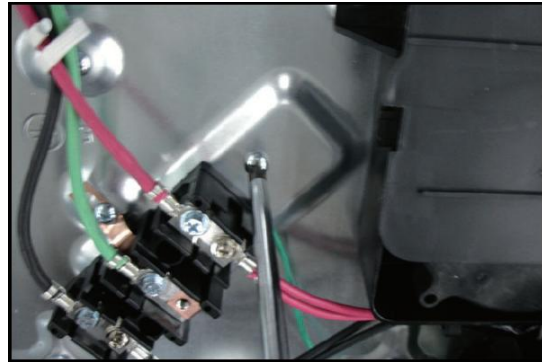


CONTROLLER ASSEMBLY

Disconnect three connectors from the control board.



Remove the ground wire at the incoming power connector. (left side)



Remove the ground wire on the right side.



IH (INDUCTION HEAT) MODULE ASSEMBLY

Disconnect the power harness with needle nose pliers.



Remove the ground wires on the left and right sides.



Loosen the four screws that attach the module to the base of the cooktop.



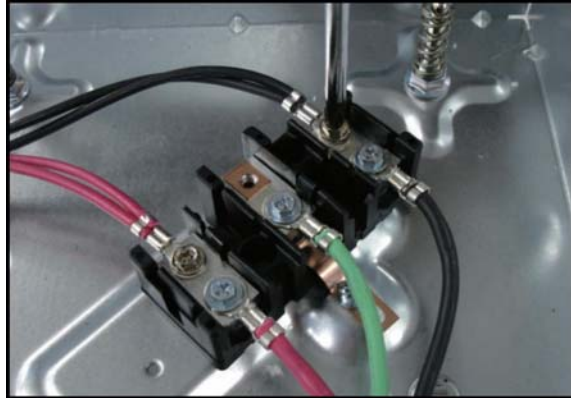
Lift the front edge of the IH module and pull the entire module out of the cooktop.



Both the left and right modules can be removed in the same manner.

POWER HARNESS ASSEMBLY

Remove the screws on the terminal block.
(Not the ones on the incoming power cable but the ones that connect to the induction modules)



Replace the screws in the terminal block
for safekeeping while service is performed.

NOTE: When replacing these terminal
screws, remember they must be tight, but
do not overtorque them and strip the
threads.



TERMINAL BLOCK and INPUT CONDUIT

Loosen the three screws that attach the input cables. Lift the wires away and remove the screws from the ring terminals.

Replace the screws in the terminal block for safekeeping.

Remove the two screws that attach the terminal block to the base of the cooktop.

Remove the ground clip screws.

Lift the terminal block away from the base of the cooktop and replace the ground clip screw.

Remove the ring that attaches the conduit to the base of the cooktop.

Pull the conduit out from outside the cooktop and replace the retaining ring on the conduit connector.



IH SENSOR REMOVAL (LEFT)

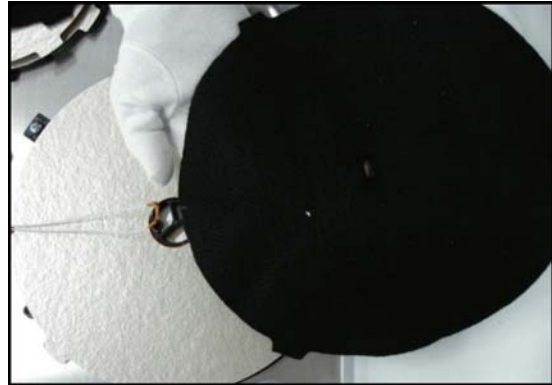
Clip the staple(s) with a nipper.



Pull the temperature sensor through the felt to release the retainer. Then pull the sensor back through the felt.



Remove the black insulating felt.



Remove the three screws securing the coil base.



IH SENSOR REMOVAL (RIGHT)

Clip the staple(s) with a nipper.

Pull the temperature sensor through the felt to release the retainer. Then pull the sensor back through the felt.

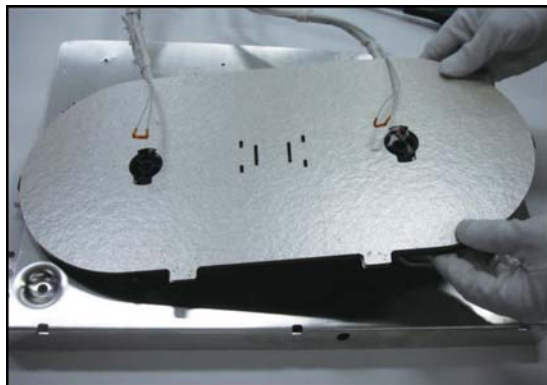
Remove the black insulating felt.

Remove the two screws in the centers of the IH coils.



Lift the insulating material from the work coil.

Pull the coil forward and lift the front of it to release the hook from the base.



SERVICING THE INVERTER ASSEMBLY

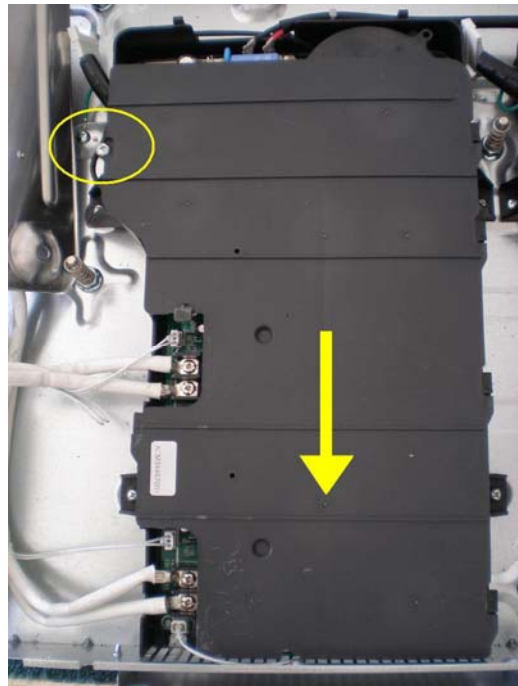
Disconnect the cooktop from the power supply and remove glass cooktop.

- 1) Lift the cooking zone assembly (right or left on the side of the cooktop you are servicing) from the 4 mounting studs supported with springs.
- 2) Position the cooking zone assembly to the side safely supported by the heavy work coil wires.



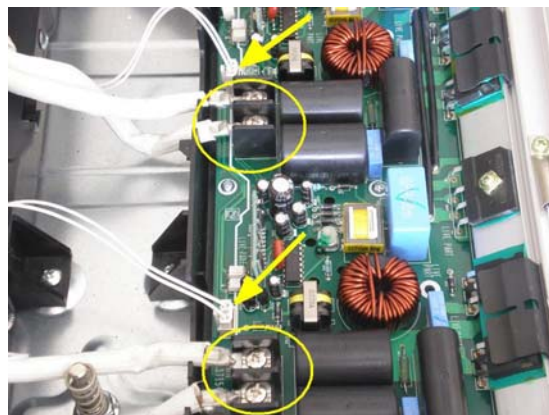
Remove the Inverter Cover

- 1) Remove the retaining screw
- 2) Slide the cover rearward and lift from the inverter assembly. (5 slide catches)



Remove the work coil leads from the inverter board. (Circles)

Disconnect the top plate sensor leads quick connects. (Arrows)



SERVICING THE INVERTER ASSEMBLY, continued

Remove the RED & BLACK electrical lead female spade connectors attaching the inverter board to the L1 and L2 power supplies. (Circle)

Remove the ground wire(s) held by screws.

Disconnect the low voltage connectors connecting the inverter board to the main board. (Circle, L.V.)

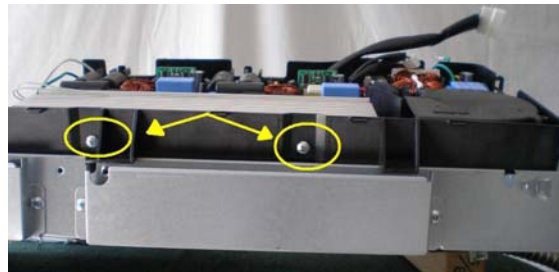
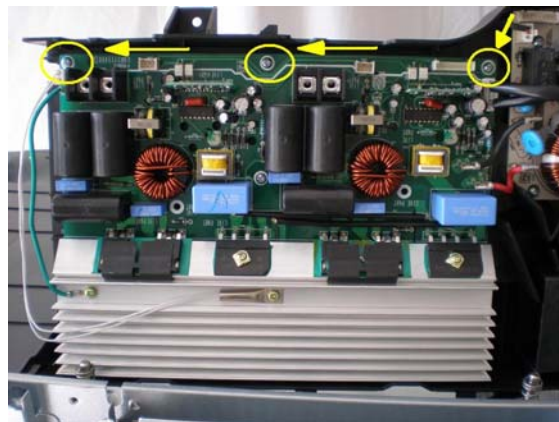
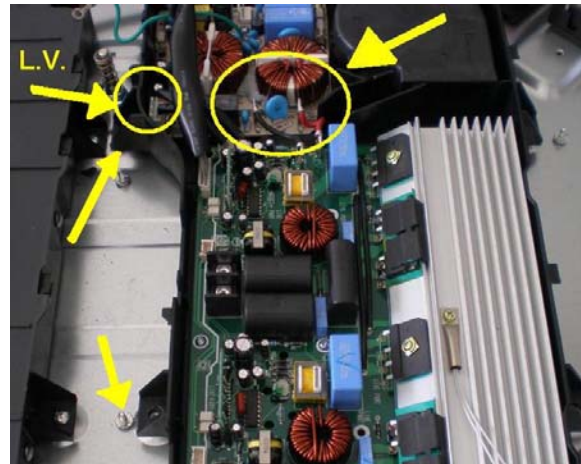
Remove the 4 mounting screws (two shown) and lift the inverter board assembly out of the cooktop. (Arrows)

Remove the 3 mounting screws (shown top of board in circles) from the inverter board.

Remove the 2 screws holding the side of the inverter board to the black plastic case.

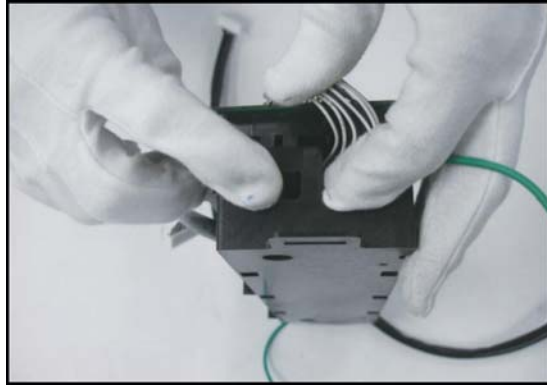
Lift the board and remove it.

Reassembly is the reverse of these removal procedures.

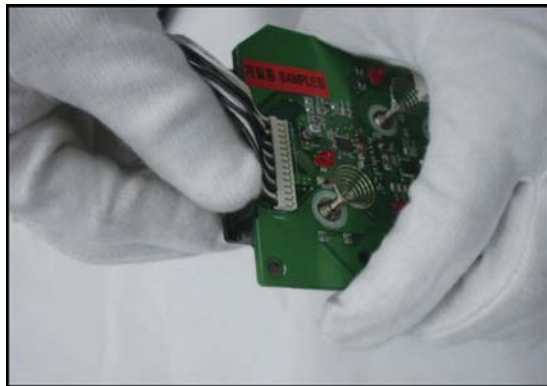


CONTROLLER ASSEMBLY (TouchPad PCB)

Remove the control board by flexing it slightly to release the plastic tabs that hold it in place.



Pull the keypad control board out of the holder.

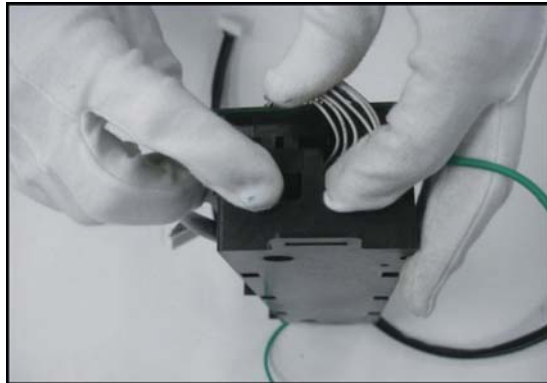


Upon disassembly, the control board is completely removed from the frame.



CONTROL ASSEMBLY (Main PCB)

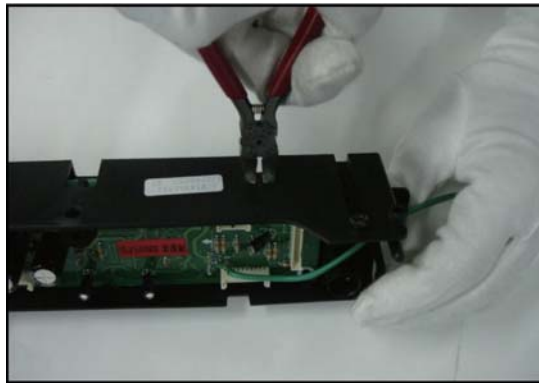
Remove the control board by flexing it slightly to release the plastic tabs that hold it in place. This allows the cover to be removed from the base can be removed.



Separate the three connectors attached to the board.



Cut out the plastic retaining clip, as shown. (This will not be a problem for reassembly.)



Lift the bottom edge of the board out of the holder past the place where you cut off the plastic retaining clip.



IH MODULE FILTER BOARD

Separate the connectors at the PCB.

Remove the three screws that attach the board to the base.

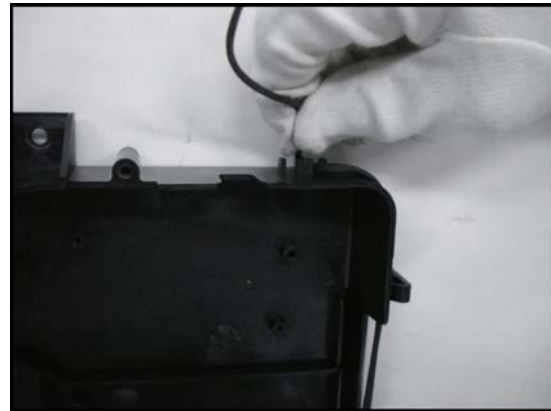


IH MODULE FAN (12 V_{DC} Motors)

Disconnect the fan motor lead **CN 003** on the filter board. (See photo, above.)

Ohm test the fan motor; the reading should be approximately 4.1 M Ω .

Test the fan operation using a 9-volt battery.

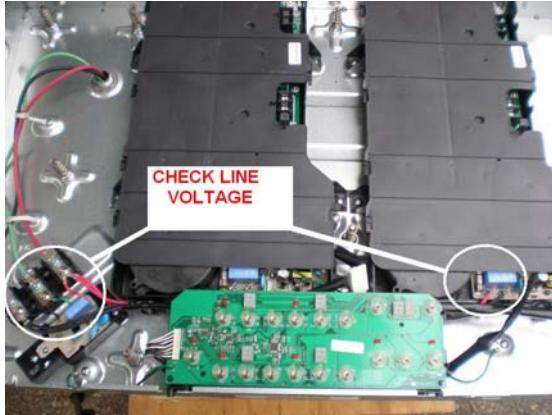


Remove the two screws that secure the fan to the base.



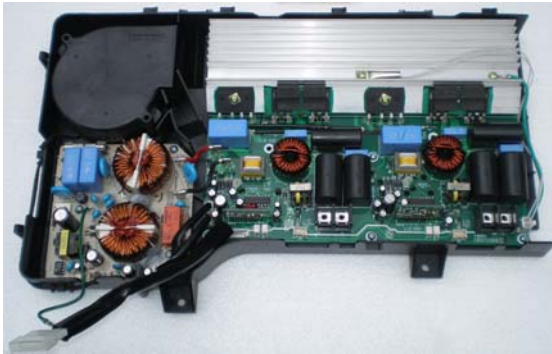
TROUBLESHOOTING

No Power / No Operation

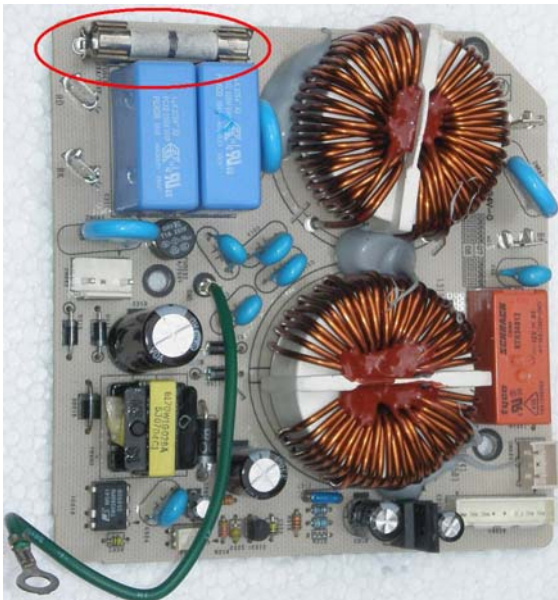


- 1) Check 208 ~ 240 V_{AC} L1 to L2
- 2) Check 208 ~ 240 V_{AC} L1 to L2 right side filter board

(See photos on next page for steps 3 and 4.)
- 3) Check fuse right side filter board (replace and re-test if open)
IF fuse is OK, go to Steps 4 and 5;
IF fuse opens, go to Steps 6 and 7.
- 4) Check 208 ~ 240 V_{AC} L1 to L2 main control board input
- 5) Replace main board IF 208 ~ 240 V_{AC} on main board
- 6) If fuse opens a 2nd time, then disconnect and test right side work coils to ground. If OK, replace right side inverter board and right side filter board.
- 7) If either work coil is grounded, replace failed the work coil, right side inverter board, and right side filter board.
- 8) Replace the main board if Step 7 fails to regain operation.

RIGHT SIDE INVERTER BOARD

Check the fuse on the filter board.
(See close up, below.)

FILTER BOARD (Close Up)

Close up view of the filter board, showing
position of fuse.

MAIN CONTROL BOARD

Check the line voltage at this connector on
the main control board.

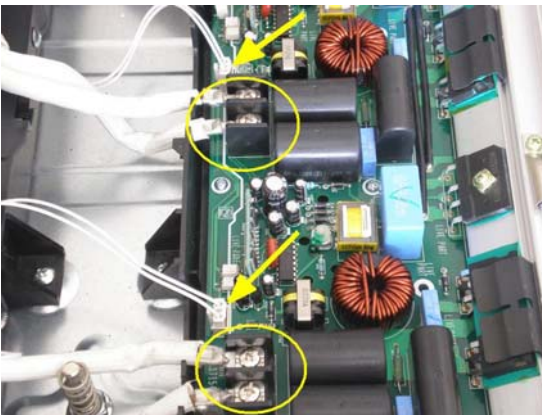
COOKING ZONE NOT HEATING



CN 1 and CN 2 are shown reversed, as described in Step 2.

- 1) Is pan ferrous metal? (Does a magnet stick to the pan?) Test pan on known working induction unit.
- 2) Reverse **CN 1** & **CN 2** on main control board **EBR37028201**.
- 3) If cooking zone works after reversing **CN1** & **CN2**, replace the main control board.
- 4) If cooking zone does not work, test suspect work coil for shorts to ground.
- 5) If the work coil is not shorted to ground, replace the inverter board and filter board for that side of the cooktop.
- 6) If the work coil is shorted to ground, replace the shorted work coil, inverter board, and filter board for that side of the cooktop.

NOTE: Reversing **CN1** and **CN2** will allow right side controls to control left side induction elements and visa versa. Ex. Rte front control will operate Left rear cooking zone. Switching **CN1** and **CN2** crisscrosses controls and cooking zones.



Disconnect the work coils to test between the coil and ground.

ONE SIDE FAILS**BOTH LEFT SIDE ZONES FAIL TO HEAT****- or -****BOTH RIGHT SIDE ZONES FAIL TO HEAT****- but -****THE OPPOSITE SIDE WORKS!**

- 1) Check 208 ~ 240 V_{AC} to the filter board of the side that does not heat.
- 2) Check the fuse on filter board;
if OK, go to Steps 3 and 4.
If Open go to Steps 5, 6, and 7.
- 3) Reverse **CN1** and **CN2** on the main control board.
- 4) If suspect cooking zones heat and working side cooking zones do not heat, test CN1 or CN2 connectors for continuity;
IF OK, replace main control board.
IF either CN1 or CN2 harnesses are open, replace the open harness.
- 5) If fuse is open replace and retest.
- 6) If fuse fails again, test both work coils for shorts to ground.
IF OK, replace inverter board for that side of the cooktop and filter board **EBR37186501**.
- 7) If work coil shorted to ground, replace the shorted work coil, inverter board for that side of cook top, and filter board for that side of the cook top.
- 8) Re-test the operation.

E1 DISPLAY

- 1) Check for foreign object in main control board touch pad area (contact springs to oven top)
- 2) Touchpad may have been held too long (more than 9 seconds)
- 3) To reset E1, press **ON / OFF** and then retest.
- 4) Reset the circuit breaker to reset the microprocessor.

E2 DISPLAY

Low Line Voltage Detected
Check incoming **L1** to **L2** / 208 ~ 240 V_{AC}

ERROR CODES (F1 ~ FF DISPLAY)

| Message | Case | Check |
|---------|--|-----------------------------|
| F1 | Front Left Top Thermistor ¹ | CN 03 (Left Module) |
| F2 | Left Inverter Heat Sink Thermistor ² | CN 02 (Left Module) |
| F3 | Front Left No Feedback | CN10 (Left Module) |
| F4 | Right Front Top Thermistor ¹ | CN 04 (Right Module) |
| F5 | Front Right No Feedback | CN10 (Right Module) |
| F6 | Rear Right Top Thermistor ¹ | CN 03 (Right Module) |
| F7 | Rear Right No Feedback | CN10 (Left Module) |
| F8 | Rear Left Top Thermistor ¹ | CN 04 (Left Module) |
| F9 | Right Inverter Heat Sink Thermistor ² | CN 02 (Right Module) |
| FA | Rear Left No Feedback | CN10 (Rear Module) |
| FE | Left Cooling Fan ³ | CN 003 Filter Board (Left) |
| FF | Right Cooling Fan ³ | CN 003 Filter Board (Right) |

¹ 500~550 K Ω @ room temperature

² 45~55 K Ω @ room temperature

³ Test the fan motors. See page 33 – IH Module Fan.

Flashing H

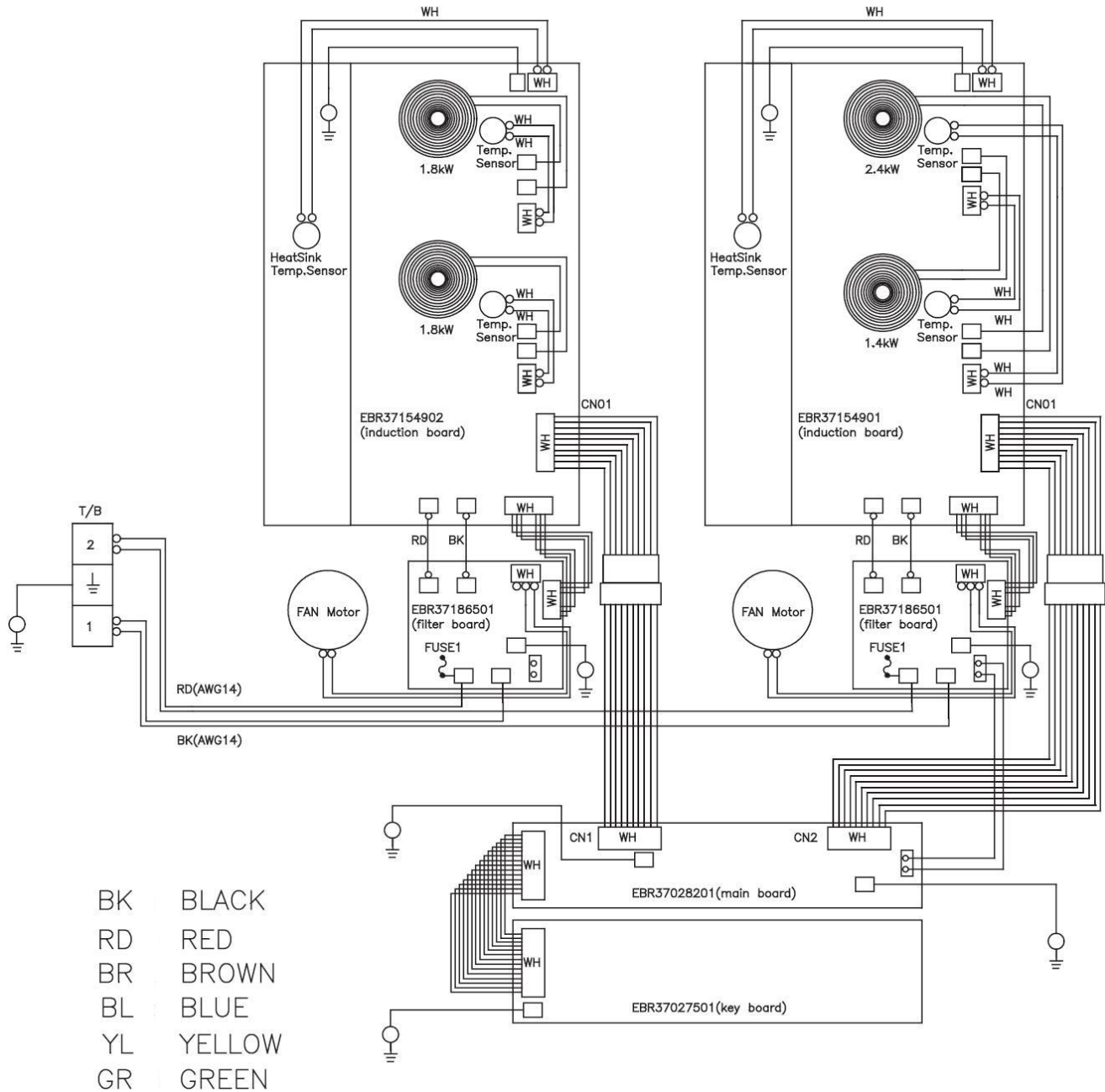
Normal message following initial power-up or following a power outage.

To reset, press the **ON/OFF** key one time and then operate the cooktop as usual.

Cooking Zone does not work properly.

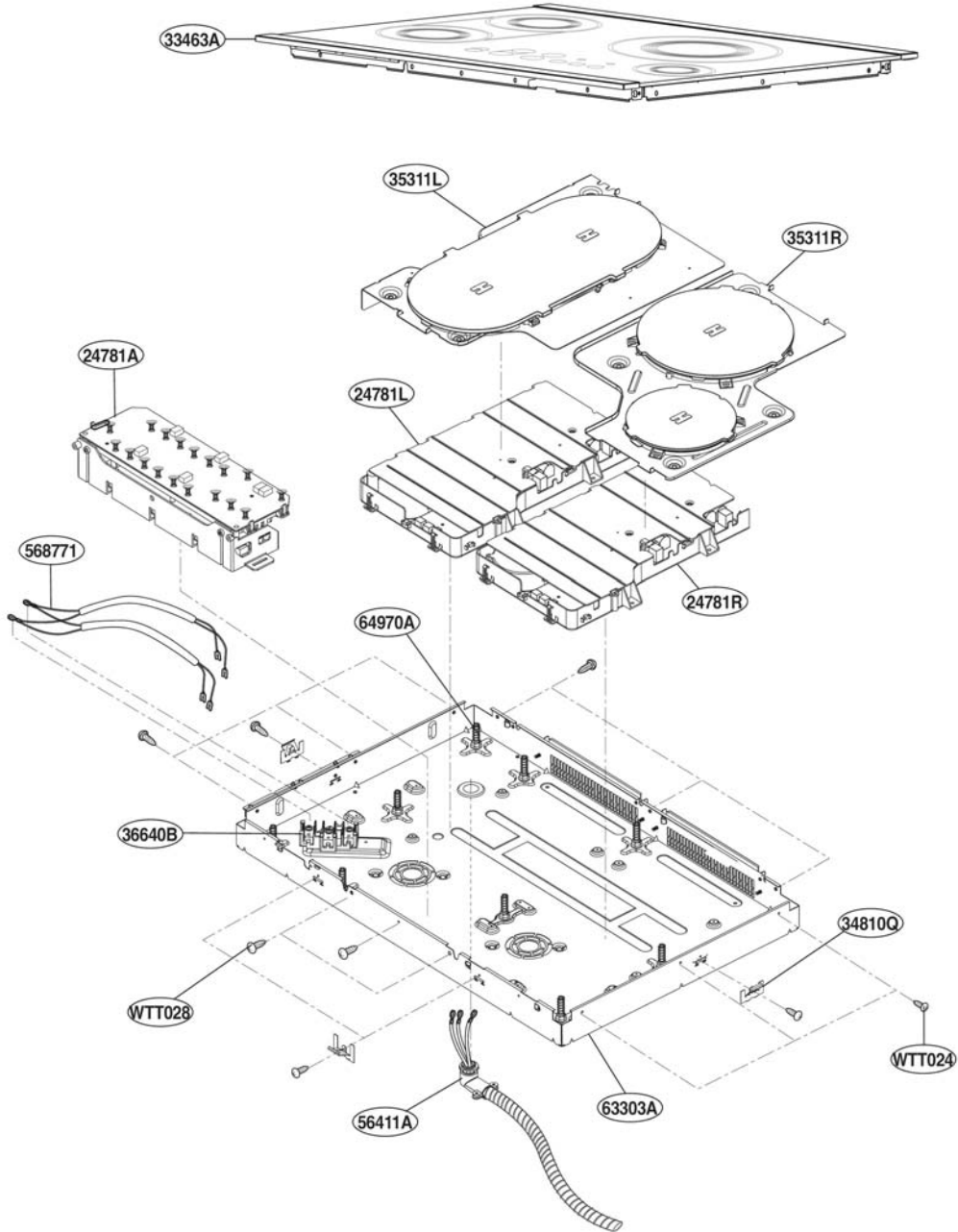
- 1) Check the pot or pan for proper size in relation to cooking zone on the cooktop.
- 2) Check the installation air gap at the rear of the cooktop. Make sure the installer has not covered the vent openings. Refer to the installation section and pictures.

SCHMATIC

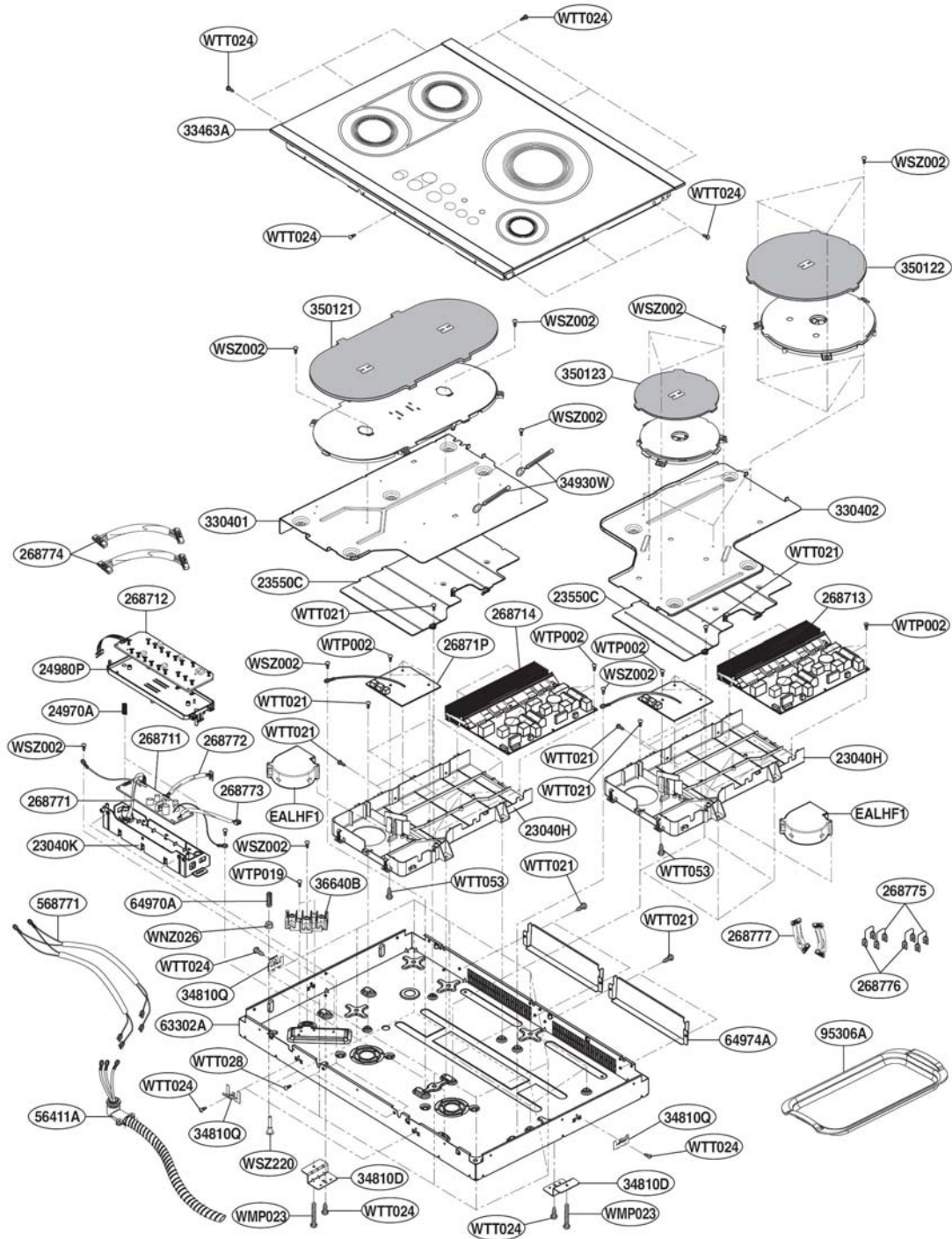


EXPLODED VIEWS

MODEL: LCE30845



EXPLODED VIEWS, continued



PARTS LIST

| Loc # | Part No | Description |
|--------|-------------|--|
| *01 | MFL41494801 | Owner's Manual |
| *07 | MBM41405701 | Technical Sheet |
| *10 | MAY40939801 | Box |
| 23040H | MAM37884301 | Base, PCB |
| 23040K | MAM37991401 | Base, PCB |
| 23550C | MCK39513901 | Cover, Base |
| 24781A | ACM34466901 | Controller Assembly, all boards and case |
| 24781L | ACM34467002 | Controller Assembly, Mechanical |
| 24781R | ACM34467001 | Controller Assembly, Mechanical |
| 24970A | 4970W1N006A | Spring |
| 24980P | MJH38349301 | Supporter, PCB |
| 268711 | EBR37028201 | PCB Assembly, Main |
| 268712 | EBR37027501 | PCB Assembly, Keypad |
| 268713 | EBR37154901 | PCB Assembly, Inverter |
| 268714 | EBR37154902 | PCB Assembly, Inverter |
| 26871P | EBR37186501 | PCB Assembly, Power |
| 268771 | EAD39990303 | Harness, Single |
| 268772 | EAD39990304 | Harness, Single |
| 268773 | EAD39990301 | Harness, Single |
| 268774 | EAD39990302 | Harness, Single |
| 268775 | 6877W1N009G | Harness, Single |
| 268776 | 6877W1N009C | Harness, Single |
| 268777 | EAD39990306 | Harness, Single |
| 330401 | MAM37882401 | Base, Work Coil |
| 330402 | MAM37882301 | Base, Work Coil |
| 33463A | AGU34462501 | Plate Assembly, Upper (Glass top) |
| 34810D | MAZ39918701 | Bracket, Idle |
| 34810Q | MAZ39601701 | Bracket, Mount |
| 34930W | 4B72510F | Holder, Wire |
| 350121 | MEV39947601 | Insulator |
| 350122 | MEV39947701 | Insulator |
| 350123 | MEV39947702 | Insulator |
| 35311L | ABF34513801 | Burner Assembly (Left, bridge element) |
| 35311R | ABF34513601 | Burner Assembly (Right) |
| 36640B | EAG32629301 | Connector, Terminal Block |

| Loc # | Part No | Description |
|--------|-------------|------------------------------------|
| 56411A | EAD39575701 | Power Cord Assembly |
| 568771 | EAD39990101 | Harness, Single |
| 63302A | MAM37918601 | Base |
| 63303A | AAN34466701 | Base Assembly |
| 64970A | 4970W1N003A | Spring |
| 64974A | MEA37844301 | Guide, Air |
| 95306A | MFY39912001 | Oven |
| EALHF1 | EAL39335501 | Fan Module |
| WMP023 | 1MPC0504718 | Screw, Machine |
| WNZ026 | 4H00947C | Nut, Common |
| WSZ002 | 1SBF0402418 | Screw, Taptite |
| WSZ220 | 1SZZW1N001A | Screw, Customized |
| WTP002 | 1TPL0302018 | Screw, Tapping |
| WTP019 | 1TPL0403118 | Screw, Tapping |
| WTT021 | 1TTL0402418 | Screw, Tapping |
| WTT024 | 1TTL0402618 | Screw, Tapping |
| WTT028 | 1TTL0402818 | Screw, Tapping |
| WTT053 | 1TTL0502618 | Screw, Tapping |
| | 3B74133J | Fuse, 250 V / 20 A Slow Blow Glass |

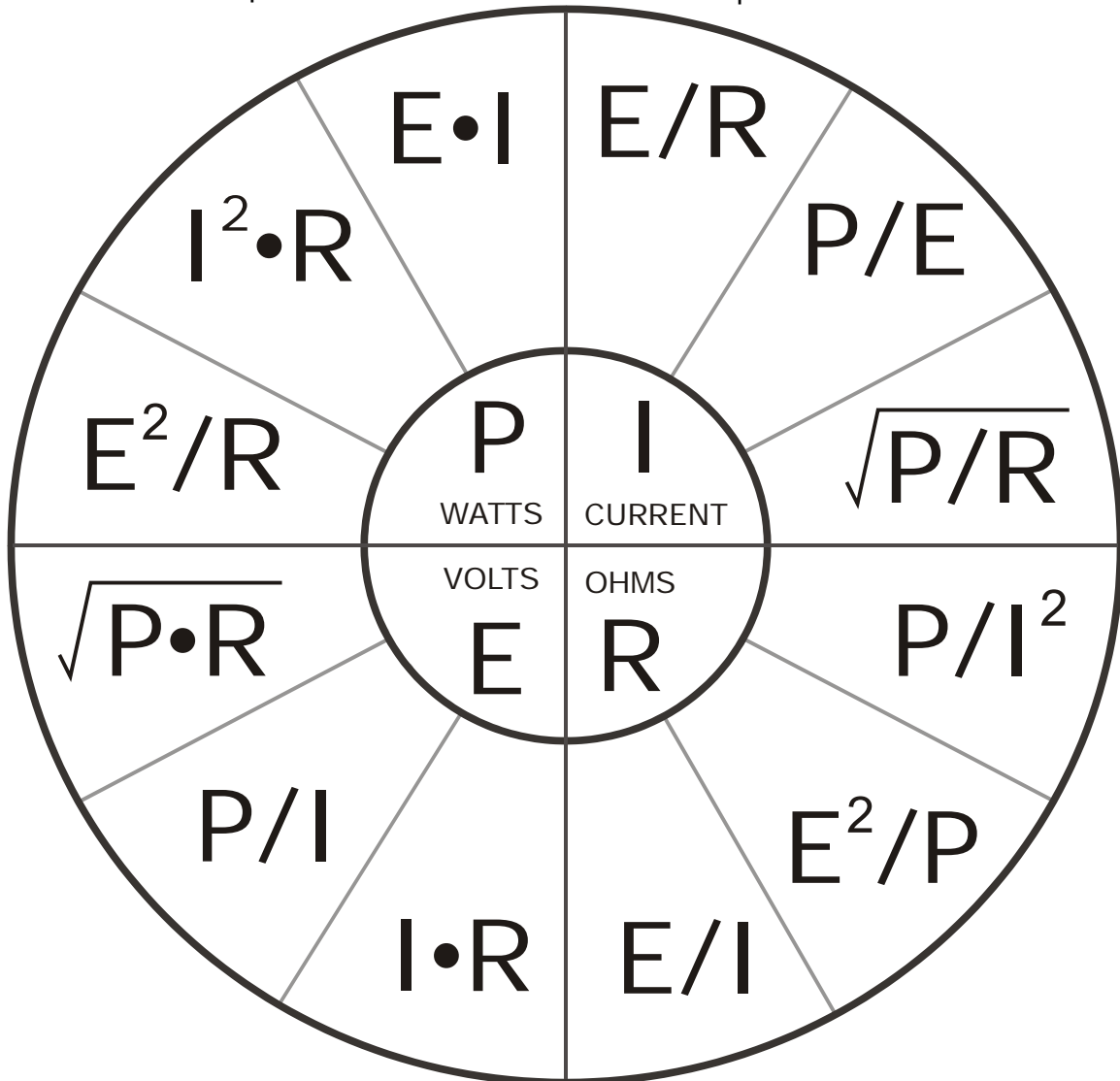
OHM'S LAW and WATT'S LAW

P = WATTS

Watts = Volts² x Ohms
 Watts = Amperes² x Ohms
 Watts = Volts x Amperes

I = AMPERES

Amperes = Volts / Ohms
 Amperes = Watts / Volts
 Amperes = $\sqrt{\text{Watts} / \text{Ohms}}$

**E = VOLTS**

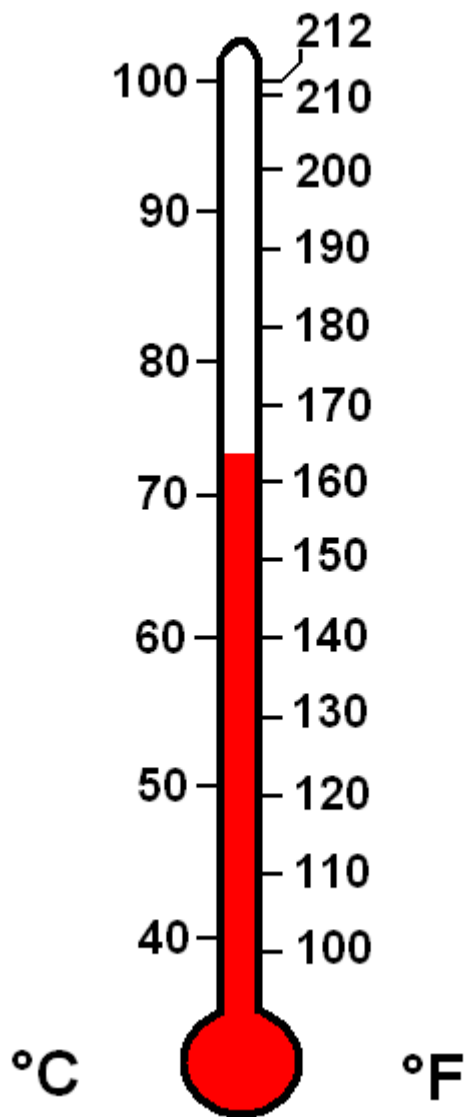
Volts = $\sqrt{\text{Watts} \times \text{Ohms}}$
 Volts = Watts / Amperes
 Volts = Amperes x Ohms

R = OHMS

Ohms = Volts / Amperes
 Ohms = Volts² / Watts
 Ohms = Watts / Amperes²

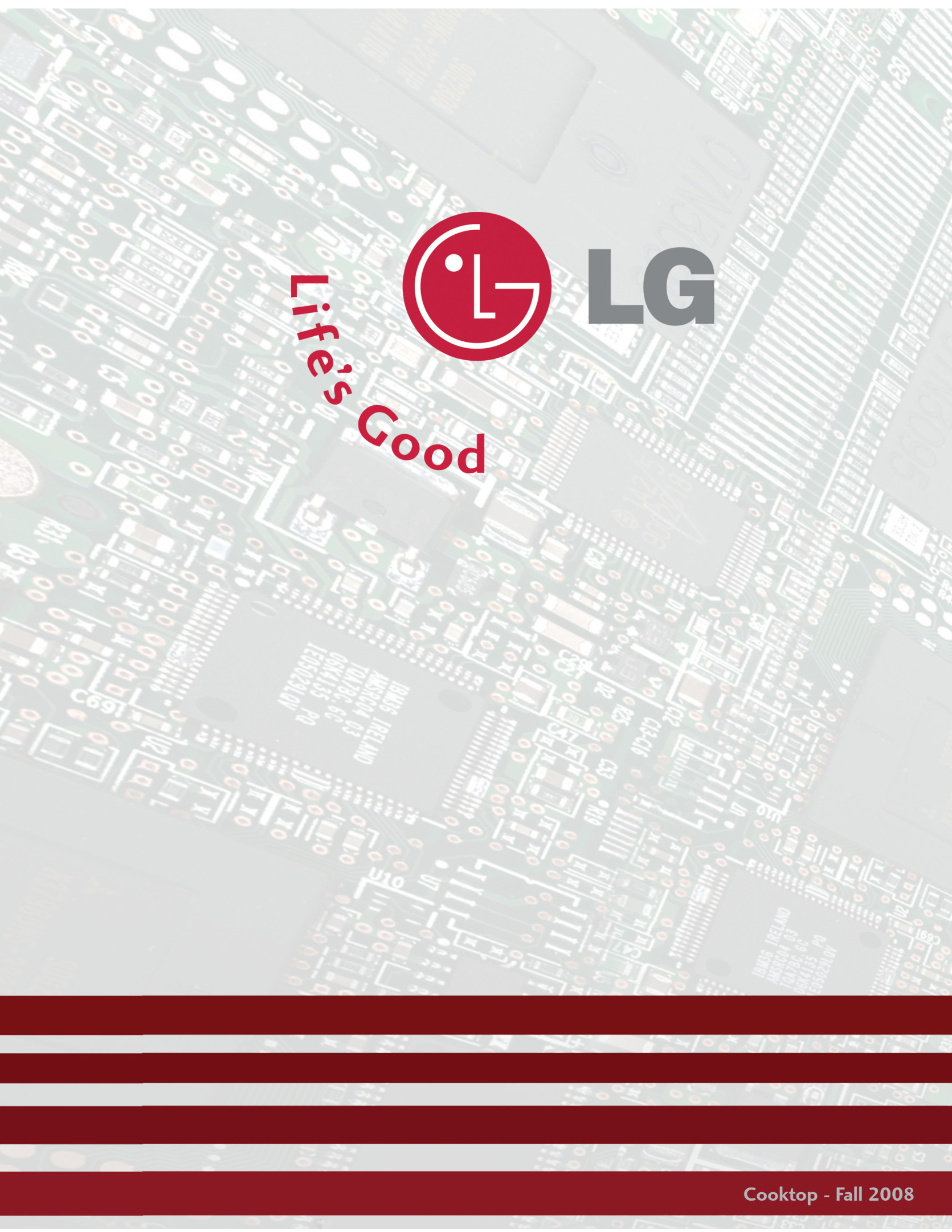
CONVERSION INFORMATION

FORMULAE

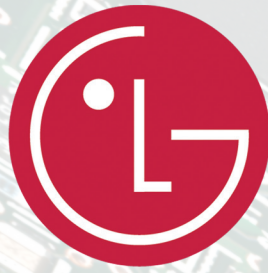


$$^{\circ}\text{F} = (9/5) ^{\circ}\text{C} + 32$$

$$^{\circ}\text{C} = (5/9) \times (^{\circ}\text{F} - 32)$$



Lifé's
Good



LG