



TECHNICAL EDUCATION

IKEA, Jenn-Air, KitchenAid, Maytag & Whirlpool Gas and Electric Slide-In Ranges

IEL730C	JES1450D	KSEB900E	MES8880D	WEC530H0D
IGL730C	JES1750E	KSEG700E	MGS8880D	WEE730H0D
	JGS1450D	KSEG950E		WEE760H0D
	JIS1450D	KSGB900E		WEG730H0D
	JDS1750E	KSGG700E		WEG760H0D
	JDS1450D	KSIB900E		
		KSDB900E		
		KSDG950ES		



FORWARD

This Job Aid, “30” Slide-In Gas and Electric Range,” (Part No. W10748358), provides the technician with information on the operation and service of the Self-Cleaning Slide-In Range. It is to be used as a training Job Aid and Service Manual. For specific information on the model being serviced, refer to the “Use and Care Guide,” or “Tech Sheet” provided with the range.

The Wiring Diagrams and Strip Circuits used in this Job Aid are typical and should be used for training purposes only. Always use the Wiring Diagram supplied with the product when servicing the unit.

GOALS AND OBJECTIVES

The goal of this Job Aid is to provide detailed information that will enable the service technician to properly diagnose malfunctions and repair the Slide-In Self-Cleaning Range.

The objectives of this Job Aid are to:

- Understand and follow proper safety precautions.
- Successfully troubleshoot and diagnose malfunctions.
- Successfully perform necessary repairs.
- Successfully return the range to its proper operational status.

WHIRLPOOL CORPORATION assumes no responsibility for any repairs made on our products by anyone other than authorized In-Home Service Professionals.

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Section 1: General Information

This section provides general safety, parts, and information for the “IKEA, Jenn-Air, KitchenAid, Maytag and Whirlpool Gas and Electric Slide-In Ranges.”

- Range Safety
- Important Safety Instructions
- Model & Serial Number Label Location
- Tech Sheet Locations
- Model & Serial Number Nomenclature
- Product Specifications
- Utility Requirements
- Anti-Tip Bracket
- Notes

Range Safety

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word “DANGER” or “WARNING.”

These words mean:

⚠ DANGER

You can be killed or seriously injured if you don't immediately follow instructions.

⚠ WARNING

You can be killed or seriously injured if you don't follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS:**
 - Do not try to light any appliance.
 - Do not touch any electrical switch.
 - Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING: Gas leaks cannot always be detected by smell.

Gas suppliers recommend that you use a gas detector approved by UL or CSA.

For more information, contact your gas supplier.

If a gas leak is detected, follow the “What to do if you smell gas” instructions.


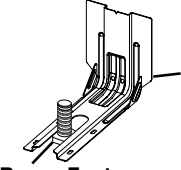
State of California Proposition 65 Warnings:

WARNING: This product contains one or more chemicals known to the State of California to cause cancer.

WARNING: This product contains one or more chemicals known to the State of California to cause birth defects or other reproductive harm.

The Anti-Tip Bracket

The range will not tip during normal use. However, the range can tip if you apply too much force or weight to the open door without the anti-tip bracket fastened down properly.

	<h3 style="text-align: center;">⚠ WARNING</h3> <p style="text-align: center;">Tip Over Hazard</p> <p>A child or adult can tip the range and be killed.</p> <p>Verify the anti-tip bracket has been properly installed and engaged per installation instructions.</p> <p>Re-engage anti-tip bracket if range is moved.</p> <p>Do not operate range without anti-tip bracket installed and engaged.</p> <p>Failure to follow these instructions can result in death or serious burns to children and adults.</p>
 <p>Anti-Tip Bracket</p> <p>Range Foot</p>	<p>To verify the anti-tip bracket is installed and engaged:</p> <ul style="list-style-type: none"> • Slide range forward. • Look for the anti-tip bracket securely attached to floor or wall. • Slide range back so rear range foot is under anti-tip bracket. • See installation instructions for details.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: To reduce the risk of fire, electrical shock, injury to persons, or damage when using the range, follow basic precautions, including the following:

- **WARNING:** TO REDUCE THE RISK OF TIPPING OF THE RANGE, THE RANGE MUST BE SECURED BY PROPERLY INSTALLED ANTI-TIP DEVICES. TO CHECK IF THE DEVICES ARE INSTALLED PROPERLY, SLIDE RANGE FORWARD, LOOK FOR ANTI-TIP BRACKET SECURELY ATTACHED TO FLOOR OR WALL, AND SLIDE RANGE BACK SO REAR RANGE FOOT IS UNDER ANTI-TIP BRACKET.
- **WARNING:** NEVER use this appliance as a space heater to heat or warm the room. Doing so may result in carbon monoxide poisoning and overheating of the oven.
- **WARNING:** NEVER cover any slots, holes or passages in the oven bottom or cover an entire rack with materials such as aluminum foil. Doing so blocks air flow through the oven and may cause carbon monoxide poisoning. Aluminum foil linings may also trap heat, causing a fire hazard.
- **CAUTION:** Do not store items of interest to children in cabinets above a range or on the backguard of a range – children climbing on the range to reach items could be seriously injured.
- Proper Installation – The range, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*. In Canada, the range must be electrically grounded in accordance with Canadian Electrical Code. Be sure the range is properly installed and grounded by a qualified technician.
- This range is equipped with a three-prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded receptacle. Do not cut or remove the grounding prong from this plug.
- Disconnect power before servicing.
- Injuries may result from the misuse of appliance doors or drawers such as stepping, leaning, or sitting on the doors or drawers.
- Maintenance – Keep range area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.
- Storage in or on the Range – Flammable materials should not be stored in an oven or near surface units.
- Top burner flame size should be adjusted so it does not extend beyond the edge of the cooking utensil.

For self-cleaning ranges –

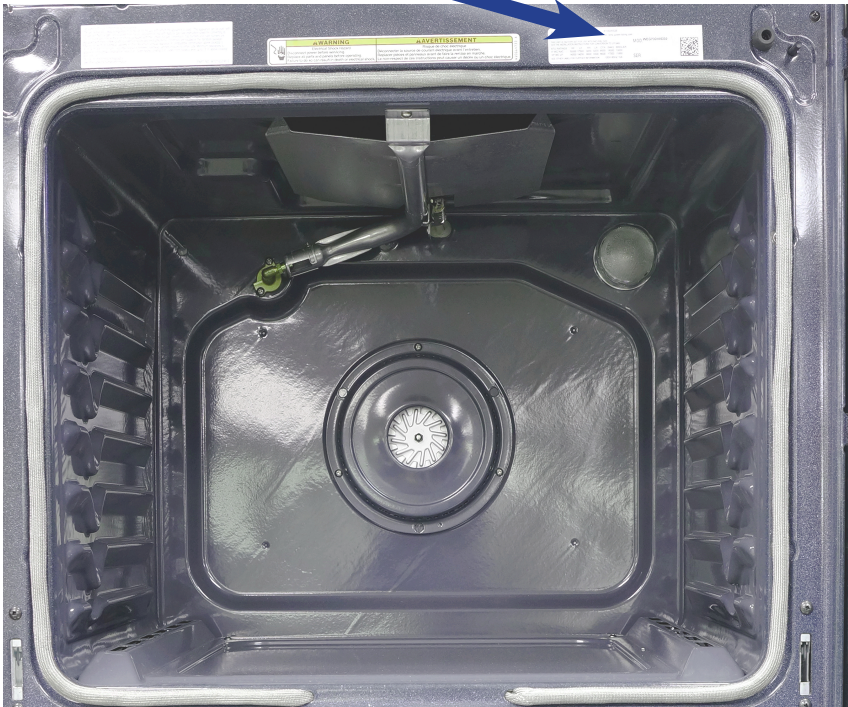
- Before Self-Cleaning the Oven – Remove broiler pan and other utensils. Wipe off all excessive spillage before initiating the cleaning cycle.

SAVE THESE INSTRUCTIONS

GENERAL INFORMATION

Model & Serial Number Label

Model & Serial Number Label Location



Tech Sheet Location

Tech Sheet Location (Back of Range)



Model & Serial Number Nomenclature

WHIRLPOOL

Position

1	2	3	4	5	6	7	8	9	10
Brand	Platform	Sub-Platform/ Fuel	Series	Feature		Key Feature	Size	Year	Color
W WHR	E Slide-In L Double Oven Slide-In	C Coil D Dual Fuel E Electric (Ceran) G Gas I Induction	1 OPP 3 LOW LINE 5 MID LINE 7 HIGH (GOLD) 9 HERO (GOLD)	0-9	0-9	C SELF CLEAN & STEAM CLEAN H AQUA LIFT - SELF CLEAN M STANDARD CLEAN S PYRO - SELF CLEAN W STEAM CLEAN	0 30" 2 42" 4 24" 6 36" 8 48"	D 2014 E 2015 F 2016	B BLACK M MONO STAINLESS S BLACK ON STAINLESS T BISQUE/BISCUIT W WHITE
W	E	G	7	3	0	H	0	D	B

KITCHENAID

Position

1	2	3	4	5	6	7	8	9	10
Brand	Category	Configuration/Fuel	Product detail	Feature pack		Width	Year	Color	
K	S Slide-in range	D Dual Fuel E Electric G Gas I Induction	B Bake drawer C Commercial style D Double oven G Storage drawer S Slowcook drawer W Warming drawer	10 Thermal cooking 30 Time Saver 50 Time Saver Plus 55 Time Saver Plus + Mini Oven 60 Time Saver Plus + Steam 65 Time Saver Plus + Steam Mini Oven 70 Even-heat Time Saver Plus		0 30 in 6 36 in 8 48 in	E 2015 F 2016 G 2017	BL Black SS Stainless WH White	
K	S	E	B	70		0	E	SS	

Serial Number Breakdown

SERIAL NUMBER:	R	4	49	15556
Manufacturing Site	D=Cleveland, R=Tulsa			
Year of Introduction:	4=2014, 5=2015, 6=2016			
Week	49 = 49th week			
Sequence Code:	15556			

GENERAL INFORMATION

WHIRLPOOL & KITCHENAID GAS SLIDE-IN SPECIFICATIONS

	Whirlpool	Whirlpool	KitchenAid	KitchenAid	KitchenAid	Kitchenaid
Model #	WEG730H0D	WEG760H0D	KSGG700E	KSGB900E	KSDB900E	KSDG950ES
Colors Avail	B,W,S	E,H,S	WH, BL,SS	BL,WH,SS	SS	SS
Fuel Type	Gas	Gas	Gas	Gas	Dual-Fuel	Dual Fuel
Cu Ft.	5.8	5.8	5.8	5.8	6.2	6.2
Downdraft	No	No	No	No	No	Ship ducted, option of Duct-free
Cooktop material	B, W, S - Porcelain	B, W, S - Porcelain	SS - Black Porcelain	BL, WH - Porcelain SS - Stainless	SS - Stainless	SS - Stainless
Grates (Full Width)	2 piece - Cast Iron	2 piece - Cast Iron	2 piece - Cast Iron	2 piece - Cast Iron	2 piece - Cast Iron	3 piece - Cast Iron
# of Burners	5	5	5	5	5	4
LF BTU	17k UR	17k UR	17k Flex	19k Flex	19k Flex	17k UR
LR BTU	5k Aux	5k Aux	5k Aux	5k Aux	5k Aux	5k Aux
RF BTU	15k UR	15k UR	15k UR	15k UR	15k UR	15k UR
RR BTU	9.2k SR LO	9.2k SR LO	9.2k SR LO	9.2k SR LO	9.2k SR LO	9.2k SR LO
Center BTU	8k round	8k round	8k round	8k round	8k round	----
Griddle	Accessory	Accessory	Accessory	Black Aluminum Die Cast	Black Aluminum Die Cast	Black Aluminum Die Cast
Self Clean	Aqualift	Aqualift	Aqualift	Aqualift	Aqualift	Aqualift
Convection	Yes - Fan	900 W Convection	900 W Bow Tie	900 W Bow Tie	3,200W Bow Tie	3,200W Bow Tie
Bake Element	AccuBake 18,000 BTU	AccuBake 18,000 BTU	18,000 BTU	18,000 BTU	3600W	3600W
Broil Element	13,000 BTU recessed	13,000 BTU recessed	13,000 BTU Halo / CU Leader	13,000 BTU Halo / CU Leader	4,000 watts / CU Leader	4,000 watts / CU Leader
Lighting	1- 40 watt incandescent	1- 40 watt incandescent	2- 40 watt incandescent	2- 40 watt incandescent	2- 40 watt incandescent	2- 40 watt incandescent
Cavity Color	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray
Drawer	Storage w/ 2 rail premium glides and pocket handle	Storage w/ 2 rail premium glides and pocket handle	Storage w/ 2 rail premium glides and a KAD VBL Handle	0.8 cu ft Baking Drawer w/ 2 rail Premium Glides and handle	0.8 cu ft Baking Drawer w/ 2 rail Premium Glides and handle	---
Controls	Membrane Switch KAD Vesta VFD (blue colorw/ global font) MRC2	Membrane Switch KAD Vesta VFD (blue colorw/ global font) MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2

WHIRLPOOL & KITCHENAID ELECTRIC SLIDE-IN SPECS

	Whirlpool	Whirlpool	Whirlpool	KitchenAid	KitchenAid	KitchenAid	KitchenAid
Model #	WEC530H0D	WEE730H0D	WEE760H0D	KSEG700E	KSEB900E	KSIB900E	KSEG950E
Colors	B,W,S	B,W,S	E,H,S	BL, WH, SS	BL,WH,SS	SS	SS
Fuel	Electric	Electric	Electric	Electric	Electric	Electric	Electric
Cu Ft.	6.2	6.2	6.2	6.2	6.2	6.2	5.8
Down- Draft	No	No	No	No	No	No	Ship ducted, option of Duct-free
Cooktop Color	Black/White Porcelain w/ Chrome Bowls	Potted with Black Ceran B, W, S - Porcelain	Potted with Black Ceran B, W, S - Porcelain	Potted with Black Ceran B, W, S - Porcelain	Potted with Black Ceran B, W - Porcelain SS - SS	Potted with Black Ceran	S - Black Ceran Potted
# of Elements	4	4	5	4	5	4	4
LF	6" coil - 1250W	9/6" 2500W Dual	9/6" 2500W Dual	12/9/6" 3000W (maximize wattage)	12/9/6" 3000W (maximize wattage)	7" 2500W with square bridge outline	10/6" 3000W
LR	8" coil - 2150W	6" 700W Melt	6" 700W Melt	6" 1300W Hyper Melt	6" 1300W Hyper Melt	7" 2500W with square bridge outline	6" 1300W Hyper Melt
RF	8" coil - 2150W	10" 2500W	10" 3200W Hyper	10" 3200W Hyper	10" 3200W Hyper	11" 3600W	10" 3200W Hyper
RR	6" coil - 1250W	6" 1200W	6" 1200W	6" 1200 W	6" 1200 W	6" 1800W	6" 1200 W
Center	No	6" 100W WZ	6" 100W WZ	6" 100W WZ	6" 100W WZ	--	--
Cleaning	Aqualift	Aqualift	Aqualift	Aqualift	Aqualift	Aqualift	Aqualift
Convect	No	Yes - Fan	900 W Convection	3200W Bow Tie	3,200W Bow Tie	3,200W Bow Tie	3,200W Bow Tie
Bake Element	AccuBake 3600W	AccuBake 3600W	AccuBake 3600W	3600W	3600W	3600W	3600W
Broil Element	*4000 W*	*4000 W*	*4000 W*	4,000 watts / CU Leader	4,000 watts / CU Leader	4,000 watts / CU Leader	4,000 watts / CU Leader
Lighting	1- 40 watt incandescent	1- 40 watt incandescent	1- 40 watt incandescent	2- 40 watt incandescent	2- 40 watt incandescent	2- 40 watt incandescent	2- 40 watt incandescent
Cavity	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray
Drawer	Storage w/ 2 rail premium glides	Storage w/ 2 rail premium glides	Storage w/ 2 rail premium glides	Storage w/ 2 rail premium glides	0.8 cu ft Baking Drawer Premium Glides	0.8 cu ft Baking Drawer Premium Glides	
Oven Controls	Membrane Switch KAD Vesta MRC2	Membrane Switch KAD Vesta MRC2	Membrane Switch KAD Vesta MRC2	Glass Touch KAD Vesta MRC2	Glass Touch KAD Vesta MRC2	Glass Touch KAD Vesta MRC2	Glass Touch KAD Vesta MRC2

GENERAL INFORMATION

IKEA, MAYTAG & JENN-AIR GAS SLIDE-IN SPECIFICATIONS

	IKEA	Maytag	Jenn-Air	Jenn-Air	Jenn-Air
Model #	IGL730C	MGS8880D	JGS1450D	JDS1450D	JDS1750E
Colors Avail	S	E,H,S	B,S, P	S, P	B,S, P
Fuel Type	Gas	Gas	Gas	Dual Fuel	Dual Fuel
Cu Ft.	5.8	5.8	5.8	6.2	6.2
Downdraft	No	No	No	No	Ship ducted, option of Duct-free
Cooktop material	S - Porcelain	B, W, S - Porcelain	B - Black Porcelain S, P - CC2	S, P - CC2	B - Black Porcelain S,P - CC2
Grates (Full Width)	2 piece - Full Width Cast Iron	2 piece - Cast Iron	3 piece - Cast Iron	3 piece - Cast Iron	3 piece -Cast Iron
# of Burners	5	5	5 - brass	5 - brass	4 - brass
LF BTU	17k UR	17k UR	19k Flex	19k Flex	17k UR
LR BTU	5k Aux	5k Aux	5k Aux	5k Aux	5k Aux
RF BTU	15k UR	15k UR	15k UR	15k UR	15k UR
RR BTU	9.2k SR LO	9.2k SR LO	9.2k SR LO	9.2k SR LO	9.2k SR LO
Center BTU	8k round	8k round	8k oval	8k oval	----
Griddle	Accessory	Accessory	Black Aluminum Die Cast	Black Aluminum Die Cast)	Black Aluminum Die Cast
Self Clean	Aqualift	Aqualift	Aqualift	Aqualift	Aqualift
Convection	No	900 W Convection	900 W Jenn-Air Convection Cover	3200 W Jenn-Air Convection Cover	3200 W Jenn-Air Convection Cover
Bake Element	18,000 BTU	18,000 BTU	18,000 BTU	3600W	3600W
Broil Element	13,000 BTU recessed	13,000 BTU recessed	13,000 BTU Halo / CU Leader	4,000 watts / CU Leader	4,000 watts / CU Leader
Lighting	1- 40 watt incandescent	1- 40 watt incandescent	2 incandescent w/ ramp up	2 incandescent w/ ramp up	2 incandescent w/ ramp up
Cavity Color	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray
Drawer	Storage w/ 2 rail premium glides and pocket handle	Warming Drawer w/ 2 rail premium glides	0.8 cu ft Baking Drawer w/ 2 rail Premium Glides and handle	0.8 cu ft Baking Drawer w/ 2 rail Premium Glides and handle	---
Controls	Membrane Switch KAD Vesta VFD (white color w/ global font) MRC2	Membrane Switch KAD Vesta VFD (blue colorw/ global font) MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2

IKEA, MAYTAG & JENN-AIR ELECTRIC SLIDE-IN SPECS

	IKEA	Maytag	Jenn-Air	Jenn-Air	Jenn-Air
Model #	IEL730C	MES8880D	JES1450D	JES1750E	JIS1450D
Colors Avail	S	E,H,S	B,S	B,S	S, P
Fuel Type	Electric	Electric	Electric	Electric	Electric
Cu Ft.	6.2	6.2	6.2	5.8	6.2
Downdraft	No	No	No	Ship ducted, option of Duct-free	No
Cooktop Color	Potted with Black Ceran S - Porcelain	Potted with Black Ceran B, W, S - Porcelain	B - Black Ceran Potted with Porcelain S - Black Ceran Potted	B - Black Ceran Potted with Porcelain S - Black Ceran Potted	Potted with Black Ceran S, P - SS
# of Elements	4	5	5	4	4
LF Element	9/6" 2500W Dual	9/6" 2500W Dual	12/9/6" 3000W (maximize wattage)	10/6" 3000W	7" 2500W with round bridge
LR Element	6" 700W Melt	6" 700W Melt	6" 1300W Hyper Melt	6" 1300W Hyper Melt	7" 2500W with round bridge
RF Element	10" 2500W	10" 3200W Hyper	10" 3200W Hyper	10" 3200W Hyper	11" 3600W
RR Element	6" 1200W	6" 1200W	6" 1200 W	6" 1200 W	6" 1800W
Center Element	No	6" 100W WZ	6" 100W WZ	--	--
Self Clean	Aqualift	Aqualift	Aqualift	Aqualift	Aqualift
Convection	No	900 W Convection	3200 W Jenn-Air Convection Cover	3200 W Jenn-Air Convection Cover	3200 W Jenn-Air Convection Cover
Bake Element	3600W	3600W	3600W	3600W	3600W
Broil Element	*4000 W*	*4000 W*	4,000 watts / CU Leader	4,000 watts / CU Leader	4,000 watts / CU Leader
Lighting	1- 40 watt incandescent	1- 40 watt incandescent	2 incandescent w/ ramp up	2 incandescent w/ ramp up	2 incandescent w/ ramp up
Cavity Color	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray	Aqualift Gray
Drawer	Storage w/ 2 rail premium glides	Warming Drawer w/ 2 rail premium glides	0.8 cu ft Baking Drawer w/ 2 rail Premium Glides	-	0.8 cu ft Baking Drawer w/ 2 rail Premium Glides
Cooktop Controls	4 Chrome Plastic Barrel Knobs	4 MTG VBL knobs w/no bezel	Odin Style Non-Lighted Knobs and Bezel	Odin Style Non-Lighted Knobs and Bezel	G8 in cooktop - in middle preferred, right is acceptable
Oven Controls	Membrane Switch KAD Vesta VFD (white color w/ global font) MRC2	Membrane Switch KAD Vesta VFD (blue colorw/ global font) MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2	Glass Touch KAD Vesta White/Red (w/ global font) VFD / MRC2


GENERAL INFORMATION

GAS RANGES

Electrical Requirements

Gas Supply Requirements


⚠ WARNING



Electrical Shock Hazard

Plug into a grounded 3 prong outlet.
 Do not remove ground prong.
 Do not use an adapter.
 Do not use an extension cord.
 Failure to follow these instructions can result in death, fire, or electrical shock.

⚠ WARNING



Explosion Hazard

Use a new CSA International approved gas supply line.
 Install a shut-off valve.
 Securely tighten all gas connections.
 If connected to LP, have a qualified person make sure gas pressure does not exceed 14" (36 cm) water column.
 Examples of a qualified person include:
 licensed heating personnel,
 authorized gas company personnel, and
 authorized service personnel.
 Failure to do so can result in death, explosion, or fire.

IMPORTANT: The range must be electrically grounded in accordance with local codes and ordinances, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 or Canadian Electrical Code, CSA C22.1.

This range is equipped with an electronic ignition system that will not operate properly if plugged into an outlet that is not properly polarized.

If codes permit and a separate ground wire is used, it is recommended that a qualified electrical installer determine that the ground path is adequate.

A copy of the above code standards can be obtained from:

National Fire Protection Association
 1 Batterymarch Park
 Quincy, MA 02169-7471
 CSA International
 8501 East Pleasant Valley Road
 Cleveland, OH 44131-5575

- A 120 volt, 60 Hz., AC only, 15-amp fused, ground and polarized electrical circuit is required. A time-delay fuse or circuit breaker is also recommended. It is recommended that a separate circuit serving only this range be provided.
- Electronic ignition systems operate within wide voltage limits, but proper grounding and polarity are necessary. Check that the outlet provides 120-volt power and is correctly grounded.
- This gas range is not required to be plugged into a GFCI (Ground-Fault Circuit Interrupter) outlet. It is recommended that you not plug an electric spark ignition gas range or any other major appliance into a GFCI wall outlet as it may cause the GFCI to trip during normal cycling.
- Performance of this range will not be affected if operated on a GFCI-protected circuit. However, occasional nuisance tripping of the GFCI breaker is possible due to the normal operating nature of electronic gas ranges.
- The tech sheet and wiring diagram are located on the back of the range in a plastic bag.

NOTE: The metal chassis of the range must be grounded in order for the control panel to work. If the metal chassis of the range is not grounded, no keypads will operate. Check with a qualified electrician if you are in doubt as to whether the metal chassis of the range is grounded.

Observe all governing codes and ordinances.

IMPORTANT: This installation must conform with all local codes and ordinances. In the absence of local codes, installation must conform with American National Standard, National Fuel Gas Code ANSI Z223.1 - latest edition or CAN/CGA B149 - latest edition.

IMPORTANT: Leak testing of the range must be conducted according to the manufacturer's instructions.

Type of Gas

Natural gas:

This range is design-certified by CSA International for use with Natural gas or, after proper conversion, for use with LP gas.

- This range is factory set for use with Natural gas. See "Gas Conversions" section. The model/serial rating plate located on the oven frame behind the top right side of the oven door has information on the types of gas that can be used. If the types of gas listed do not include the type of gas available, check with the local gas supplier.

LP gas conversion:

Conversion must be done by a qualified service technician.

No attempt shall be made to convert the appliance from the gas specified on the model/serial rating plate for use with a different gas without consulting the serving gas supplier. See "Gas Conversions" section.

ELECTRIC RANGES

Electrical Requirements - U.S.A. Only

If codes permit and a separate ground wire is used, it is recommended that a qualified electrical installer determine that the ground path and wire gauge are in accordance with local codes.

Do not use an extension cord.

Be sure that the electrical connection and wire size are adequate and in conformance with the National Electrical Code, ANSI/NFPA 70-latest edition and all local codes and ordinances.

A copy of the above code standards can be obtained from:

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

WARNING: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service technician if you are in doubt as to whether the appliance is properly grounded. Do not modify the power supply cord plug. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Electrical Connection

To properly install your range, you must determine the type of electrical connection you will be using and follow the instructions provided for it here.

- Range must be connected to the proper electrical voltage and frequency as specified on the model/serial number rating plate. The model/serial rating plate is located behind the oven door on the top right-hand side of the oven frame.
- This range is manufactured with the neutral terminal connected to the cabinet. Use a 3-wire, UL listed, 40- or 50-amp power supply cord (pigtail) (see the following Range Rating chart). If local codes do not permit ground through the neutral, use a 4-wire power supply cord rated at 250 volts, 40- or 50-amps and investigated for use with ranges.

Range Rating*		Specified Rating of Power Supply Cord Kit and Circuit Protection
120/240 Volts	120/208 Volts	Amps
8.8 - 16.5 KW	7.8 - 12.5 KW	40 or 50**
16.6 - 22.5 KW	12.6 - 18.5 KW	50

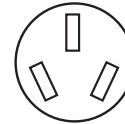
*The NEC calculated load is less than the total connected load listed on the model/serial rating plate.

**If connecting to a 50-amp circuit, use a 50-amp rated cord with kit. For 50-amp rated cord kits, use kits that specify use with a nominal 1 $\frac{1}{8}$ " (34.9 mm) diameter connection opening.

- A circuit breaker is recommended.
- The range can be connected directly to the circuit breaker box (or fused disconnect) through flexible or nonmetallic sheathed, copper or aluminum cable. See the "Electrical Connection - U.S.A. Only" section.
- Allow at least 6 ft (1.8 m) of slack in the line so that the range can be moved if servicing is ever necessary.
- A UL listed conduit connector must be provided at each end of the power supply cable (at the range and at the junction box).
- Wire sizes and connections must conform with the rating of the range.
- The tech sheet and wiring diagram are located on the back of the range in a plastic bag.

If connecting to a 3-wire system:

Local codes may permit the use of a UL listed, 3-wire, 250-volt, 40- or 50-amp range power supply cord (pigtail). This cord contains 3 copper conductors with ring terminals or open-end spade terminals with upturned ends, terminating in a NEMA Type 10-50P plug on the supply end. Connectors on the appliance end must be provided at the point the power supply cord enters the appliance. This uses a 3-wire receptacle of NEMA Type 10-50R.



3-wire receptacle (10-50R)

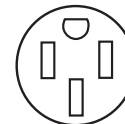
If connecting to a 4-wire system:

This range is manufactured with the ground connected to the neutral by a link. The ground must be revised so the green ground wire of the 4-wire power supply cord is connected to the cabinet. See "Electrical Connection - U.S.A. Only" section.

Grounding through the neutral conductor is prohibited for new branch-circuit installations (1996 NEC); mobile homes; and recreational vehicles, or an area where local codes prohibit grounding through the neutral conductor.

When a 4-wire receptacle of NEMA Type 14-50R is used, a matching UL listed, 4-wire, 250-volt, 40- or 50-amp, range power supply cord (pigtail) must be used. This cord contains 4 copper conductors with ring terminals or open-end spade terminals with upturned ends, terminating in a NEMA Type 14-50P plug on the supply end.

The fourth (grounding) conductor must be identified by a green or green/yellow cover and the neutral conductor by a white cover. Cord should be Type SRD or SRDT with a UL listed strain relief and be at least 4 ft (1.22 m) long.



4-wire receptacle (14-50R)

The minimum conductor sized for the copper 4-wire power cord are:


- 40-amp circuit
- 2 No.-8 conductors
- 1 No.-10 white neutral
- 1 No.-10 green grounding

GENERAL INFORMATION

ELECTRIC RANGES

Electrical Requirements - Canada Only

⚠ WARNING



Electrical Shock Hazard

Electrically ground range.
Failure to do so can result in death, fire, or electrical shock.

If codes permit and a separate ground wire is used, it is recommended that a qualified electrical installer determine that the ground path is adequate and wire gauge are in accordance with local codes.

Be sure that the electrical connection and wire size are adequate and in conformance with CSA Standard C22.1, Canadian Electrical Code, Part 1 - latest edition, and all local codes and ordinances.

A copy of the above code standards can be obtained from:

Canadian Standards Association
 178 Rexdale Blvd.
 Toronto, ON M9W 1R3 CANADA

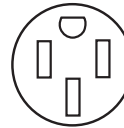
- Check with a qualified electrical installer if you are not sure the range is properly grounded.

Range Rating*			Specified Rating of Power Supply Cord Kit and Circuit Protection
120/240 Volts	120/208 Volts	Amps	
8.8 - 16.5 KW	7.8 - 12.5 KW	40 or 50**	
16.6 - 22.5 KW	12.6 - 18.5 KW	50	

*The NEC calculated load is less than the total connected load listed on the model/serial rating plate.

**If connecting to a 50-amp circuit, use a 50-amp rated cord with kit. For 50-amp rated cord kits, use kits that specify use with a nominal 1 3/8" (34.9 mm) diameter connection opening.

- A circuit breaker is recommended.
- This range is equipped with a CSA International Certified Power Cord intended to be plugged into a standard 14-50R wall receptacle. Be sure the wall receptacle is within reach of range's final location.



- Do not use an extension cord.
- The tech sheet and wiring diagram are located on the back of the range in a plastic bag.

Install Anti-Tip Bracket

! WARNING



Tip Over Hazard

A child or adult can tip the range and be killed.

Install anti-tip bracket to floor or wall per installation instructions.

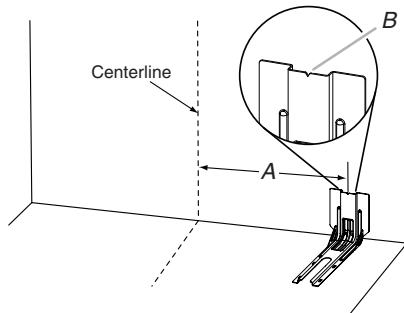
Slide range back so rear range foot is engaged in the slot of the anti-tip bracket.

Re-engage anti-tip bracket if range is moved.

Do not operate range without anti-tip bracket installed and engaged.

Failure to follow these instructions can result in death or serious burns to children and adults.

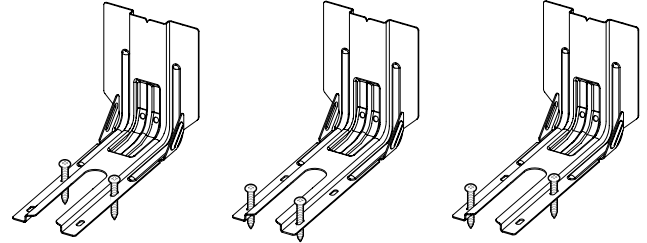
1. Remove the anti-tip bracket from the inside of the oven.
2. Determine which mounting method to use: floor or wall.
If you have a stone or masonry floor, you can use the wall mounting method. If you are installing the range in a mobile home, you must secure the range to the floor.
This anti-tip bracket and screws can be used with wood or metal studs.
3. Determine and mark centerline of the cutout space. The mounting can be installed on either the left side or right side of the cutout. Position mounting bracket against the wall in the cutout so that the V-notch of the bracket is 12½" (31.8 cm) from centerline as shown.



A. 12½" (31.8 cm)
B. Bracket V-notch

4. Drill two ⅛" (3 mm) holes that correspond to the bracket holes of the determined mounting method. See the following illustrations.

Floor Mounting

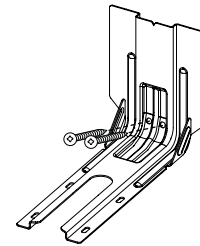


Rear position

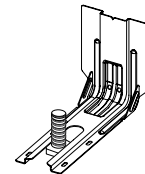
Front position

Diagonal (2 options)

Wall Mounting



5. Using the Phillips screwdriver, mount anti-tip bracket to the wall or floor with the two #10 x 1½" (4.1 cm) screws provided.
6. Move range close enough to opening to allow for final electrical connections. Remove shipping base, cardboard or hardboard from under range.
7. Move range into its final location, making sure rear leveling leg slides into anti-tip bracket.



8. Move range forward onto shipping base, cardboard or hardboard to continue installing the range using the following installation instructions.

NOTES

Section 2: Operation

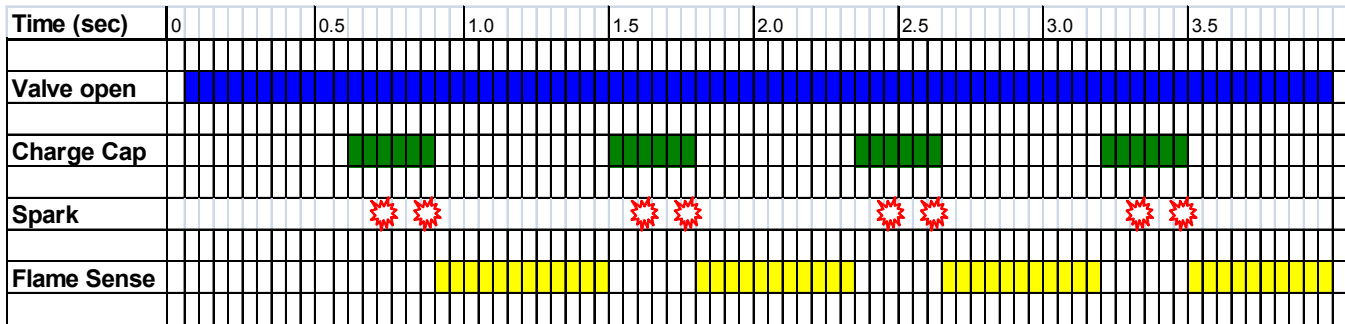
This section provides operational use and care information for the “Gas and Electric Slide-In Ranges”

- Gas Oven Direct Spark Ignition (DSI) Operation
- AquaLift Technology
- Control Panel Operation
- Problems & Solutions (Use & Care Guide)
- Accessories
- Notes

OPERATION

DIRECT SPARK IGNITION (DSI)

DSI OVEN IGNITION AND MONITORING SYSTEM



The DSI monitoring system is used for the OVEN operation only. It performs a self test that checks to verify that the gas distribution valve is electrically wired correctly. It also provides a Flame safety check that monitors the flame in the oven anytime a flame is present.

The monitoring system is NOT required for the cooktop burners - that is an operator monitored system because the operator turns the sparking ON and OFF as required.

Shown above is a chart that shows how the DSI system works. The chart is a 4 second time span showing the operation of the oven system.

As the operator selects a bake operation by programming the Oven Control User Interface, the bake valve solenoid (the blue line) is open to provide gas to the oven burner. The spark capacitor charges, shown by the green line and 2 sparks will occur (red "spark" circles) if the burner lights, the flame sensing check (the yellow line) will verify that a flame is present and the oven lighting sequence is stopped.

IMPORANT! IF the flame check fails and a flame is not detected, the ignition system will shut down for 40 seconds to dissipate the gas that was released into the oven because the valve was open and releasing gas for the full 4 seconds.

After the 40 seconds shutdown, a second attempt to light the oven will automatically begin. The sparking will start again for the full 4 seconds, just like the first attempt; again a flame sense check verifies a flame. If, again a flame has not been established, the system will shut down for another 40 seconds to dissipate the gas that was released into the oven.

At the end of 40 seconds one more attempt will automatically start. The oven will attempt to light again. If no flame is established at this time, the system will go into LOCKOUT.

LOCKOUT can be cancelled by pressing the OFF/CANCEL keypad. No indication of a LOCKOUT will be shown on the electronic oven control.

DSI OVEN IGNITION AND MONITORING SYSTEM continued:***OVEN LOCKOUT***

Shut down of the oven ignition system - no spark, no gas

All lockouts can be reset by pressing OFF/Cancel on the Oven Control.

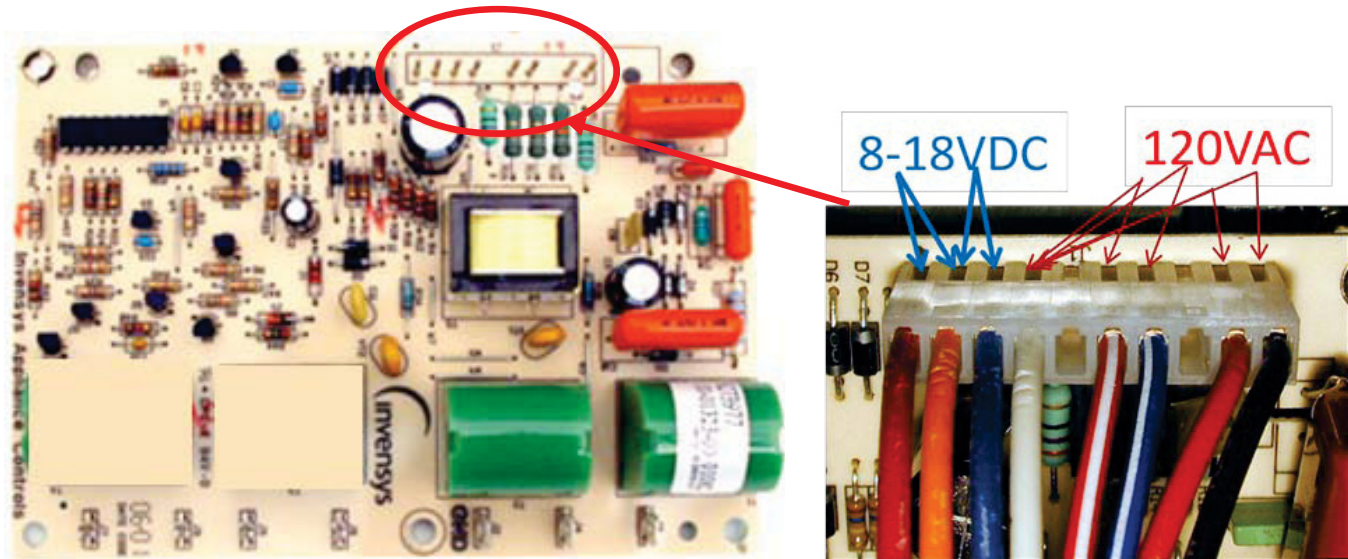
The Direct Spark Ignition board will perform a lockout for any of the 4 scenarios listed below:

- a). Any of the self-test checks fail.**
- b). The oven fails to ignite after three ignition attempts.**
- c). A flame is present in the oven for more than 10 seconds after the gas valve has turned off.**
- d). The flame is unexpectedly lost for any reason after being established.**

NOTE: If a flame is lost, a lockout condition will occur within 30 seconds with no attempt to reignite.

OPERATION

Direct Spark Ignition electrical input and output



The Direct Spark Ignition system is a solid-state device that is used to provide necessary voltage to open the Bake and Broil valves and also provide the spark to ignite the gas. There is constant voltage to the DSI board at the J1-10 to J1-4 circuit because the DSI board is always being analyzed to verify it is working correctly.

The board provides 8-18 VDC to operate the 2 solenoid valves. One valve is operated from terminals J1-1 and J1-2. The DC voltage for the other valve is provided between terminals J1-3 and J1-2. Only one valve will operate at a time.

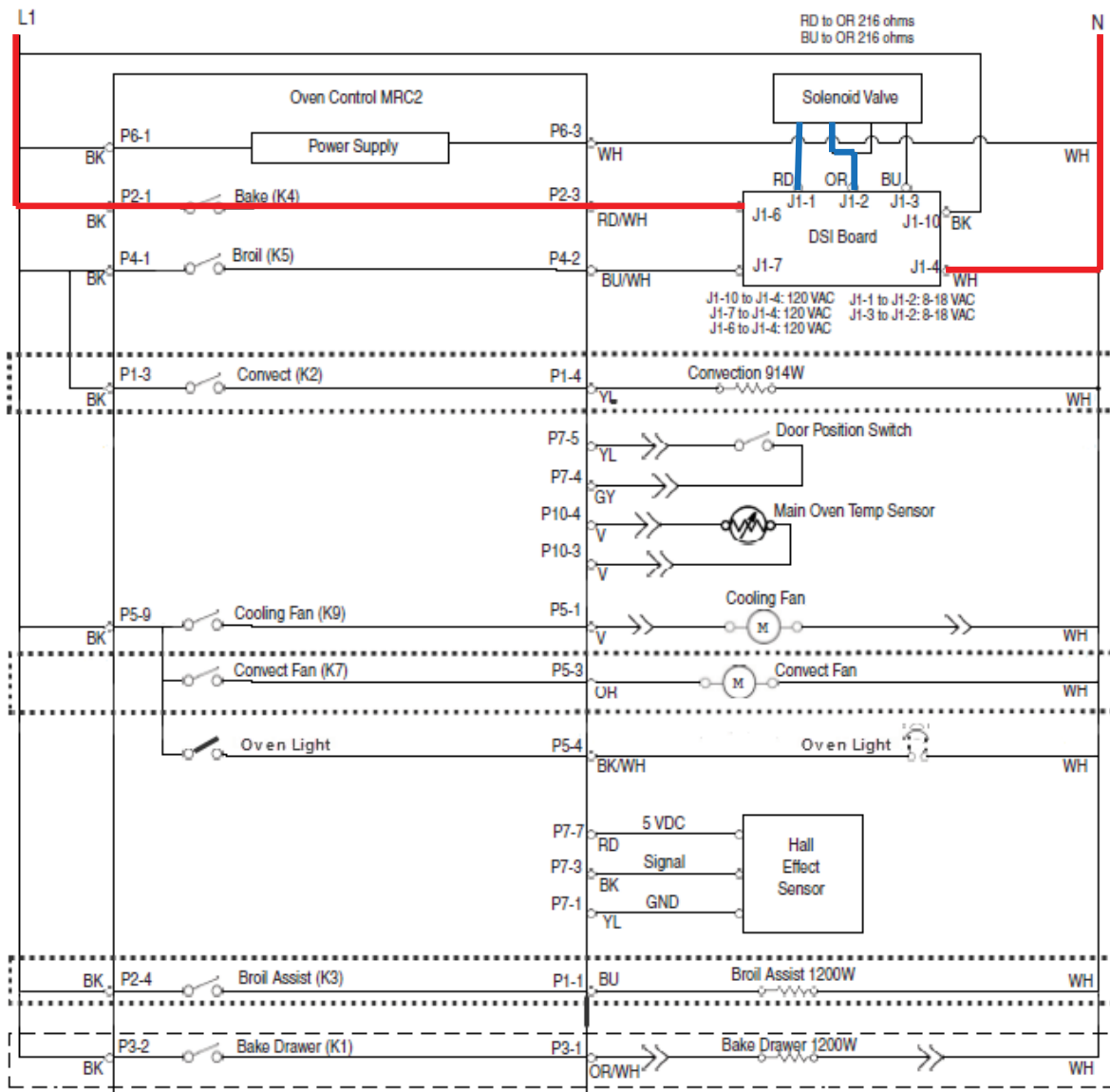
There are no adjustments that can be made to the electronic board and it is serviced only as an assembly. The system operates at very low amperage (4 milliamps) so that the high voltage pulses, or sparks, present no severe shock hazard. The board receives 120 VAC from either the Bake Relay, Broil Relay.

Operating a broil cycle, 120 VAC is supplied to the board through J1-7. This 120 volts provides voltage to open the broil valve (8-18 VDC) and also creates the igniter sparking.

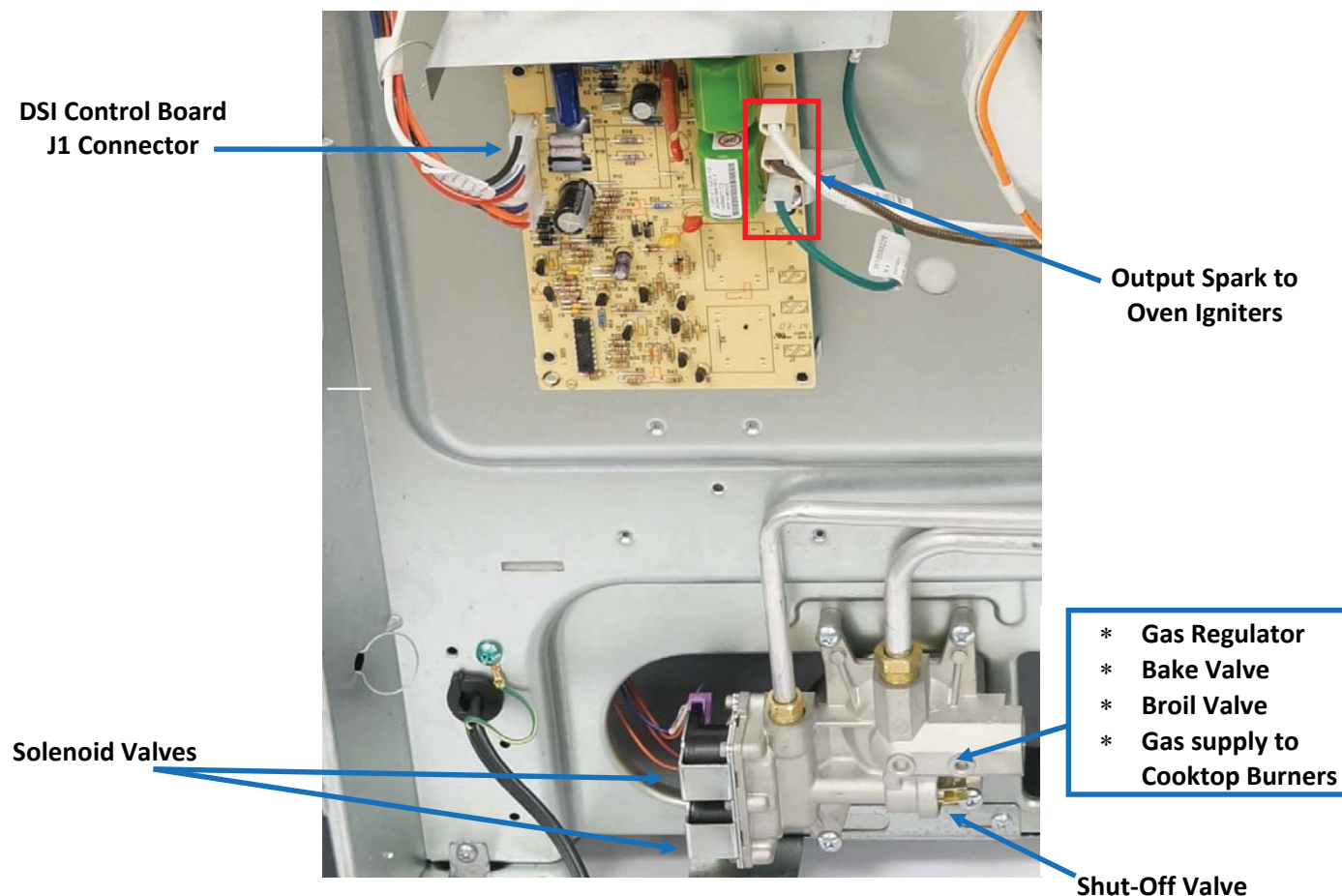
Same operation for the bake cycle

Bake Cycle

This is the wiring diagram for the Bake circuit on a Direct Spark Ignition (DSI) Oven. This 120 VAC circuit is activated when a bake cycle is started. 120 Volts from the L1 side of the line goes through the bake relay on the control board over to the DSI control (J1-6) and then to the Neutral side (J1-4) of the circuit. As 120V enters the DSI control through J1-6 (Bake Input) 8-18 VDC is provided at the BAKE Valve from the DSI J1-1 and J1-2 terminals to the solenoid valve terminals. The DC voltage opens the BAKE valve solenoid for gas to flow into the oven. At the same time the DSI board provides voltage to the Bake igniter which provides the spark to ignite the gas.



OPERATION

View from Back of Range

The component shown at the bottom of the picture is a combination gas regulator to regulate incoming gas, a Bake Valve, a Broil Valve and a supply port to the cooktop burners.

Notice the small lever at the lower right hand corner of the valve – that lever when closed will shut off gas supply to the oven. This lever is always shipped from manufacturing in the open position.

When checking the solenoids, you should be looking for 216 ohms resistance. It takes anywhere from 8-18 VDC from the Direct Spark Ignition Control board to activate the solenoids (only one solenoid can open at a time). The electrical connections or terminals are sized differently to help eliminate incorrect wiring.

NOTE: When servicing the Regulator, always check both solenoids. If one of the solenoids is defective, neither one will operate.

AquaLift® Self-Cleaning Technology

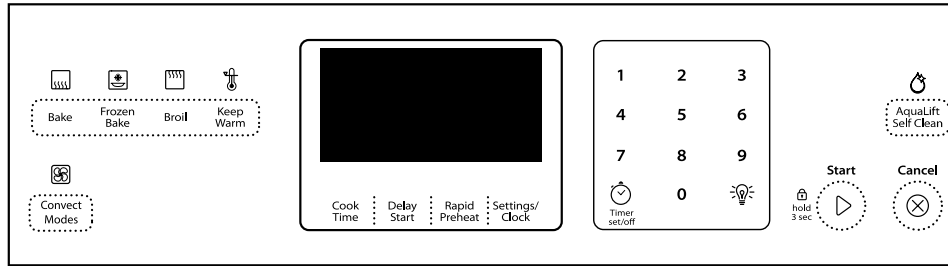



AquaLift® Self-Cleaning Technology is a first-of-its-kind cleaning solution designed to minimize the time, temperature, and odors that ordinarily come with traditional self-cleaning methods. With AquaLift® Self-Cleaning Technology, an innovative coating on the interior of the oven is activated with heat and water to release baked-on soil. To use AquaLift® Self-Cleaning Technology, simply wipe out loose debris, pour water into the oven bottom, and run the AquaLift® Self-Cleaning cycle. When the cycle finishes in under 1 hour at a lower temperature than traditional self-cleaning methods, just wipe out the remaining water and loose debris. See the “Clean Cycle” section for more detailed instructions. For additional information, frequently asked questions and videos on using AquaLift® Self-Cleaning Technology, visit our website at <http://whr.pl.com/aqualift>

AquaLift® Technology is an innovative cleaning solution that utilizes heat and water to release baked-on spills from the oven in less than 1 hour. This new cleaning technology is a low-heat, odor-free alternative to traditional self-cleaning options.

Allow the oven to cool to room temperature before using the Clean cycle. If your oven cavity is above 200°F (93°C), “Oven Cooling” will appear in the display, and the Clean cycle will not be activated until the oven cavity cools down.

User Interface Key Pad Functions



KEYPAD	FEATURE	INSTRUCTIONS
SETTINGS/ CLOCK	Clock	<p>The Clock can use a 12- or 24-hour cycle. See the “Electronic Oven Control” section.</p> <ol style="list-style-type: none"> 1. Press SETTINGS/CLOCK until “CLOCK” is displayed. 2. Press START to change the time. 3. Press “3” for AM or “6” for PM. 4. Use the number keypad to set the time of day. 5. Press SETTINGS/CLOCK or START to save the setting.
SETTINGS/ CLOCK	Settings	<p>Enables you to personalize the audible tones and oven operation to suit your needs. See the “Electronic Oven Control” section.</p>
OVEN LIGHT 	Oven cavity light	<p>The oven light is controlled by a keypad on the oven control panel. While the oven door is closed, press the oven light keypad to turn the light on and off. When the oven door is opened, the oven light will automatically come on.</p>
TIMER (Set/Off)	Oven timer	<p>The Timer can be set in hours or minutes up to 9 hours and 59 minutes.</p> <ol style="list-style-type: none"> 1. Press TIMER SET/OFF. 2. Press the number keypads to set the length of time in hr-min-min. Leading zeroes do not have to be entered. For example, for 2 minutes, enter “2.” 3. Press TIMER SET/OFF to begin the countdown. If enabled, one tone will sound at end of countdown. 4. Press TIMER SET/OFF again to cancel the Timer and return to the time of day. Do not press the Cancel keypad because the oven will turn off. 5. If the Timer is running, but not in the display, press TIMER SET/OFF to display the countdown for 5 seconds.
START	Cooking start	<p>The Start keypad begins any oven function. If Start is not pressed within 2 minutes after pressing a keypad, the function is canceled and the time of day is displayed.</p>
CANCEL	Range function	<p>The Cancel keypad stops any function except the Clock and Timer.</p>
BAKE	Baking and roasting	<ol style="list-style-type: none"> 1. Press BAKE. 2. Press the number keypads to set the desired temperature. 3. Press START. 4. To change the temperature, repeat steps 2 and 3. 5. Press CANCEL when finished.

KEYPAD	FEATURE	INSTRUCTIONS
FROZEN BAKE	Prepackaged food	<ol style="list-style-type: none"> 1. Position the food on a flat rack in the oven on rack position 4. See the “Positioning Racks and Bakeware” section. NOTE: Cook only 1 package of frozen food at a time when using FrozenBake™ Technology. 2. Press FROZEN BAKE. 3. Press the number keypad to select the desired food option. 4. Press the number keypads to set the temperature as recommended on the food packaging. 5. Press COOK TIME. 6. Press the number keypads to set the max cook time as recommended on the food packaging. 7. Press START. The range will calculate the best cook time based on the current oven temperature. NOTE: The cook time that appears in the display is the estimated required cook time as calculated by the oven control. It may be different than the time you entered. A beep will alert you to check the food’s doneness with at least 2 minutes remaining on the timer. Follow the prompts on the display to select more time if desired. 8. At the end of the cook time, a beep will alert you to check the food’s doneness. Follow the prompts on the display to select more time if desired. Unless more time is selected, the bake element turns off. 9. Press CANCEL when finished.
BROIL	Broiling	<ol style="list-style-type: none"> 1. Press BROIL. 2. Select the broiling temperature by pressing 1 - High or 2 - Low. 3. Press START and allow the oven to preheat for 2 minutes. 4. To change the temperature, repeat steps 2 and 3. 5. Position the cookware in the oven and close the door. 6. Press CANCEL when finished.
CONVECT MODES	Convection cooking	<ol style="list-style-type: none"> 1. Press CONVECT MODES until the desired convection mode appears in the display. 2. Press START. 3. Press the number keypads to set the desired temperature. 4. Press START. 5. To change the temperature, repeat steps 3 and 4. Press START or wait for the change to take effect. 6. Press CANCEL when finished.
KEEP WARM	Hold warm	<p>Food must be at serving temperature before placing it in the warmed oven.</p> <ol style="list-style-type: none"> 1. Press KEEP WARM. 2. Set the desired temperature between 145°F (63°C) and 190°F (88°C) using the number keypads. The default temperature is 170°F (75°C). 3. Press START. 4. To change the temperature, repeat steps 2 and 3. 5. Press CANCEL when finished.
DELAY START	Delayed start	<p>The DELAY START keypad is used to enter the starting time for an oven function with a delayed start. Delay Start should not be used for foods such as breads and cakes because they may not bake properly.</p> <p>To set a Timed Cook or a Delayed Timed Cook, see “Cook Time” section.</p>
COOK TIME	Timed cooking	<p>Timed Cooking allows the oven to be set to turn on at a certain time of day, cook for a set length of time, and/or shut off automatically.</p> <p>To set a Timed Cook or a Delayed Timed Cook, see “Cook Time” section.</p>

OPERATION

KEYPAD	FEATURE	INSTRUCTIONS
AQUALIFT SELF CLEAN	Clean cycle	See the “Clean Cycle” section.
START (hold 3 sec to lock)	Oven control lockout	<ol style="list-style-type: none"> 1. Check that the oven is off. 2. Press and hold START (hold 3 sec to lock) for 3 seconds. 3. A tone will sound, and “Control Locked” will scroll, then “Locked” will be displayed. 4. Repeat to unlock. No keypads will function with the controls locked. The cooktop functions are not affected by the oven control lockout.
ENERGY SAVE	Puts the range into sleep mode to reduce energy usage	<ol style="list-style-type: none"> 1. Press and hold SETTINGS/CLOCK for 3 seconds to change status. The display will scroll “Energy saver on” or “Energy saver off.” <p>If Energy Save is on, the range will go into sleep mode after 5 minutes of inactivity. Any key press will activate the display. If Energy Save is off, the display will be on at all times.</p>
RAPID PREHEAT	Rapid oven preheating	<p>Provides the fastest preheat time for the Bake function. Rapid Preheat is preset for Off, but it can be changed to On.</p> <ol style="list-style-type: none"> 1. Press RAPID PREHEAT. 2. The current setting will be displayed. 3. Press the “1” keypad to adjust the setting. 4. Press START or CANCEL to exit and display the time of day. <p>IMPORTANT: This feature should only be used for one-rack baking. Unused racks should be removed prior to Rapid Preheat. A standard rack should be used for Rapid Preheat.</p> <p>If preheating for the Bake cycle has already started, Rapid Preheat may be started directly by pressing RAPID PREHEAT.</p>

Problems and Solutions (Use & Care Guide)

PROBLEM	POSSIBLE CAUSES AND/OR SOLUTIONS
Nothing will operate	<p>Power supply cord is unplugged - Plug into a grounded 3 prong outlet.</p> <p>ENERGY SAVE is active, and the display is blank - Press any key on the control to display the Time of Day. See the "Electronic Oven Controls" section for more information.</p> <p>Household fuse is blown or a circuit breaker is tripped - Replace the fuse or reset the circuit breaker. If the problem continues, call an electrician.</p> <p>Main or regulator gas shutoff valve is in the off position - See the Installation Instructions.</p> <p>The range is improperly connected to the gas supply - Contact a trained repair specialist or see Installation Instructions.</p>
Surface burners will not operate	<p>The control knob is not set correctly - Push in knob before turning to a setting.</p> <p>Air in the gas lines - If this is the first time the surface burners have been used, turn on any one of the surface burner knobs to release air from the gas lines.</p> <p>Clogged burner ports - See "Sealed Surface Burners" section.</p>
Surface burner flames are uneven, yellow and/or noisy	<p>Clogged burner ports - See "Sealed Surface Burners" section.</p> <p>Burner caps positioned improperly - See "Sealed Surface Burners" section.</p> <p>Range converted improperly - If propane gas is being used, contact a service technician or see cover for contact information.</p>
Excessive heat around cookware on cooktop	<p>Cookware and flame are not matched - The cookware should be centered above the burner with the bottom sitting level on the grate. The flame should be adjusted so that it does not extend up the sides of the pan.</p>
Cooktop cooking results not what expected	<p>Improper cookware - Ideal cookware should have a flat bottom, straight sides and a well fitting lid, and the material should be of a medium to heavy thickness.</p> <p>Control knob set to incorrect heat level - See "Cooktop Use" section.</p> <p>Range is not level - Level the range. See the Installation Instructions.</p>
Oven cooking results not what expected	<p>Range is not level - Level the range. See the Installation Instructions.</p> <p>The temperature set was incorrect - Double-check the recipe in a reliable cookbook.</p> <p>Oven temperature needs adjustment - See "Oven Temperature Control" in the "Electronic Oven Controls" section.</p> <p>Oven was not preheated - See "Baking and Roasting" section.</p> <p>Racks were positioned improperly - See "Positioning Racks and Bakeware" section.</p> <p>Not enough air circulation around bakeware - See "Positioning Racks and Bakeware" section.</p> <p>Darker browning of food caused by dull or dark bakeware - Lower oven temperature 25°F (15°C) or move rack to a higher position in the oven.</p> <p>Lighter browning of food caused by shiny or light colored bakeware - Move rack to a lower position in the oven.</p> <p>Batter distributed unevenly in pan - Check that batter is level in the pan.</p> <p>Incorrect length of cooking time was used - Adjust cooking time.</p> <p>Oven door was not closed - Be sure that the bakeware does not keep the door from closing.</p> <p>Oven door was opened during cooking - Oven peeking releases oven heat and can result in longer cooking times.</p> <p>Rack is too close to bake burner, making baked items too brown on bottom - Move rack to higher position in the oven.</p> <p>Pie crusts browning too quickly - Use aluminum foil to cover the edge of the crust and/or reduce baking temperature.</p>

OPERATION

PROBLEM	POSSIBLE CAUSES AND/OR SOLUTIONS
Oven will not operate	<p>Air in the gas lines - If this is the first time the oven has been used, turn on any one of the surface burner knobs to release air from the gas lines.</p> <p>Control is locked - Press and hold START for 3 seconds to unlock.</p> <p>Control is in Demo Mode - Press and hold START TIME for 10 seconds to exit Demo Mode. Demo Mode is used for display models in a showroom.</p> <p>Electronic oven control set incorrectly - See “Electronic Oven Controls” section.</p>
Oven burner flames are yellow or noisy	Range converted improperly - If propane gas is being used, contact a service technician or see cover for contact information.
Oven temperature too high or too low	Oven temperature needs adjustment - See “Oven Temperature Control” in the “Electronic Oven Controls” section.
Convection fan not working	<p>The convection cycle is in the first 5 minutes of operation - This is normal. The convection fan will start running approximately 5 minutes into the cycle.</p> <p>Oven door is open - If the oven door is opened during convection cooking, the fan will turn off immediately. It will come back on when the oven door is closed.</p>
Display shows messages	<p>Power failure (display shows flashing time) - Clear the display. On some models, reset the clock, if needed. See “Clock” keypad feature in the “Feature Guide” section.</p> <p>Error code (display shows letter followed by number) - Depending on your model, press CANCEL to clear the display. See “Control Display” in the “Electronic Oven Controls” section. If it reappears, call for service. See cover for contact information.</p> <p>Start needs to be pressed so a cycle can begin (display shows “PUSH” or “PSH”) - See the “Start” keypad feature in the “Feature Guide” section.</p> <p>Range is in Sabbath Mode (display shows “SAB”) - Press CANCEL to exit Sabbath Mode.</p>
Clean cycle did not work on all spills	Several cooking cycles between Clean cycles or spills on oven walls and doors - Run additional Clean cycles. Use the AquaLift® Technology Cleaning Kit. affresh® Kitchen and Appliance Cleaner or affresh® Cooktop Cleaner can be used for stubborn soils. See the “Accessories” and “Clean Cycle” sections for more information.
Mineral deposits are left on the oven bottom after the Clean cycle	<p>Tap water was used in the Clean cycle - Use distilled or filtered water in the Clean cycle.</p> <p>To remove deposits, use a cloth soaked with vinegar. Then use a cloth dampened with water to thoroughly remove any vinegar residue.</p> <p>Range is not level - Mineral deposits will collect on dry areas of the oven bottom during the Clean cycle. Level the range. See the Installation Instructions.</p> <p>To remove deposits, use a cloth soaked with vinegar. Then use a cloth dampened with water to thoroughly remove any vinegar residue.</p>

Noises

PROBLEM	POSSIBLE CAUSES AND/OR SOLUTIONS
Surface burner making popping noises	Wet burner - Allow it to dry.
Gas range noises during Bake and Broil operations The following are some normal sounds with the explanations.	These sounds are normal operational noises that can be heard each time the Bake or Broil burners ignite during the cycle
Pop	Gas valve is opening or cycling on and will make a single pop when it snaps open from the solenoid. It sounds similar to a suction cup being pulled off of a piece of glass - This is normal.
Click	<p>The igniters will click several times until the flame is detected. These are short clicking sounds like tapping a nail onto a piece of glass - This is normal.</p> <p>Convection fan relay is cycling on and off (on some models) - This is normal.</p>
Woosh or poof	Bake or Broil burner is igniting - This is normal.
Oven burner flames are yellow or noisy	Range converted improperly - If propane gas is being used, contact a service technician or see cover for contact information.

Accessories

For accessories in the U.S.A., you can visit our website at www.whirlpool.com or call us at **1-800-253-1301**.
In Canada, visit our website at www.whirlpool.ca or call us at **1-800-807-6777**.

Complete Cooktop Cleaner Kit

(ceramic glass models)
(includes cleaner, protectant, protectant applicator, scraper, and cleaner pads)
Order Part Number 31605

Cooktop Protectant

(ceramic glass models)
Order Part Number 31463A

affresh® Stainless Steel Cleaning Wipes

(stainless steel models)
Order Part Number W10355049

affresh® Cooktop Cleaner

(ceramic glass models)
Order Part Number W10355051

Cooktop Cleaning Pads

(ceramic glass models)
Order Part Number W10391473

affresh® Stainless Steel Cleaner

(stainless steel models)
Order Part Number W10355016

affresh® Kitchen and Appliance Cleaner

Order Part Number W10355010

AquaLift® Oven Cleaning Kit

Order Part Number W10423113RP

Cooktop Scraper

(ceramic glass models)
Order Part Number WA906B

Granite Cleaner and Polish

Order Part Number W10275756

Gas Grate and Drip Pan Cleaner

Order Part Number 31617A

Canning Unit Kit

(coil models)
Order Part Number 242905

Gourmet Griddle

Order Part Number W10432539

Standard Flat Oven Rack

Order Part Number W10551060

Split Oven Rack

Order Part Number 4396927

Max Capacity Oven Rack

Order Part Number W10289145

Porcelain Broiler Pan and Grid

Order Part Number 4396923

Premium Broiler Pan and Roasting Rack

Order Part Number W10123240

Trim Assembly

White - Order Part Number W10675027
Black - Order Part Number W10675026
Stainless Steel - Order Part Number W10675028

Backsplash Assembly

White - Order Part Number W10655448
Black - Order Part Number W10655449
Stainless Steel - Order Part Number W10655450

Grill Kit

Order Part Number W10432545

NOTES

Section 3:

Component Access

This section covers the disassembly and replacement of parts for both the Gas and Electric Slide-In Ranges

Gas and Electric Common Parts Access

Control Panel
Cooktop
Microcomputer Range Control (MRC) Board
User Interface & Display Assembly

Gas Range Parts Access

- Igniter Switches
- Cooktop Burner
- Spark Igniter
- Spark Module
- Oven Sensor
- Direct Spark Ignition (DSI) Board
- Gas Regulator/Safety Valve
- Broil Burner Tube and Broil Igniter
- Bake Burner Tube and Bake Igniter
- Convection Fan Motor & Convection Element Assembly
- Cooling Fan Motor & Hall Sensor Assembly


Electric Range Parts Access

- Infinite Switches
- Cooktop Element and Limiter Assembly
- Oven Sensor
- Oven Thermofuse
- Terminal Block
- Door Switch
- Broil Element
- Bake Element
- Convection Fan Motor & Convection Element Assembly
- Cooling Fan Motor & Hall Sensor Assembly

COMPONENT ACCESS

GAS RANGE

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

Removing the Control Panel

1. Remove all control knobs.
2. Open oven door and remove 3 screws from the bottom of the control panel assembly.
3. Snap out the plastic lower control panel cover.

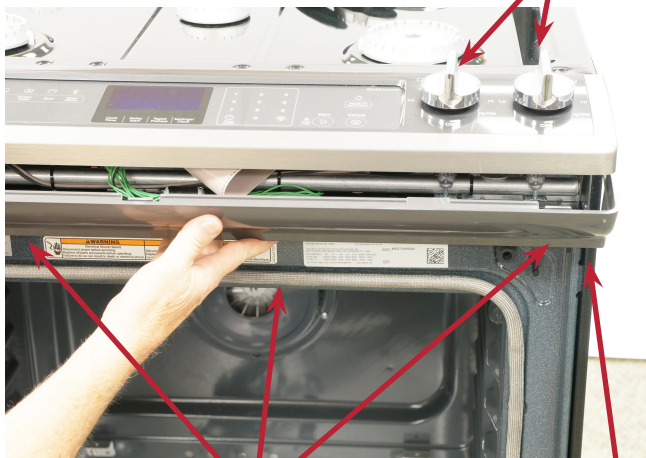


Figure 1

4. Remove 2 screws from the control panel mounting bracket (1 on each side).
5. Disconnect the ribbon connector.
6. Disconnect the multi-wire harness.
7. Lift Control Panel out.



Figure 2

Removing the Cooktop



1. Remove all grates, burner caps and burner bases from the cooktop.
2. Remove 2 burner mounting screws from each of the 5 burners.



Figure 3

3. Open oven door and remove 3 screws from the bottom of the control panel assembly.

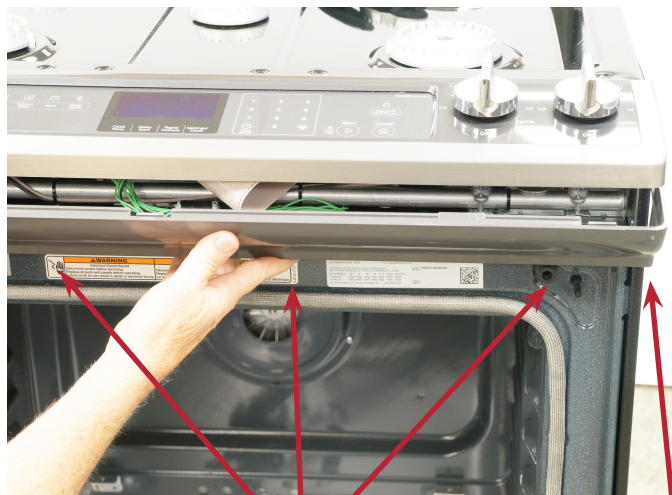


Figure 4

4. Snap out the plastic lower control panel cover.

- Remove 2 screw from each of the cooktop mounting brackets (2).

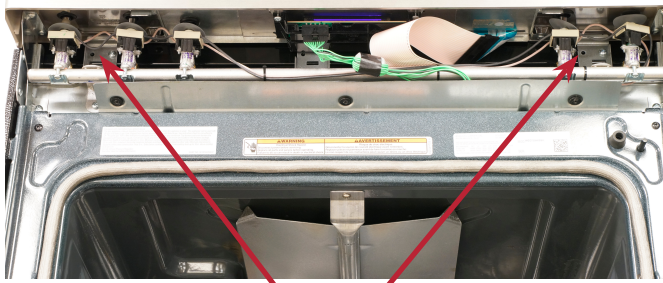


Figure 5

- From behind the range, remove 1 screw from each of the cooktop mounting brackets (underside 2).



Figure 6

- Lift the cooktop from the back and remove

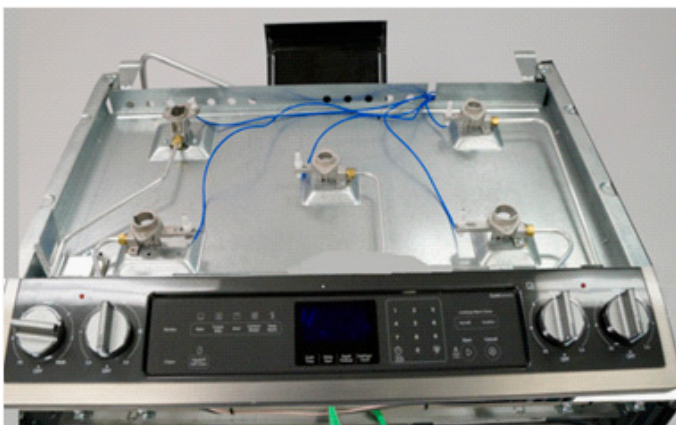


Figure 7

Removing the MRC Control Board

- Remove the control panel (see “Removing the Control Panel” section).
- Remove the cooktop (see “Removing the Cooktop” section).
- Locate the MRC board in the center of the console.
- Remove all wire harness connectors from the board.
- Locate the control board mounting bracket mounting screws (2) and remove.
- Lift up and pull the MRC board assembly out.

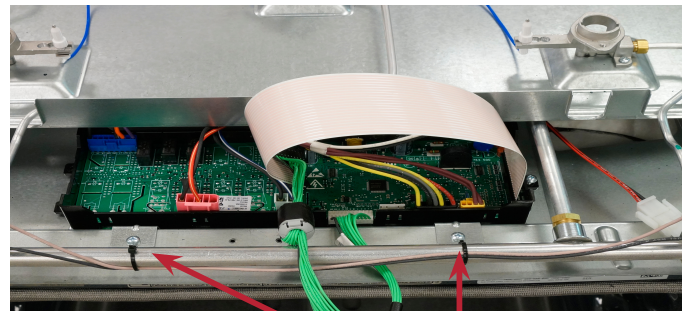


Figure 8

Removing the User Interface and Display Assembly

- Remove the control panel (see “Removing the Control Panel” section).
- Turn the control panel over to expose the display assembly.
- Remove the electrical connections to the display assembly and user interface.
- Remove the 4 mounting screws securing the display assembly.
- Remove the 5 mounting screws securing the user interface.
- Remove the user interface.

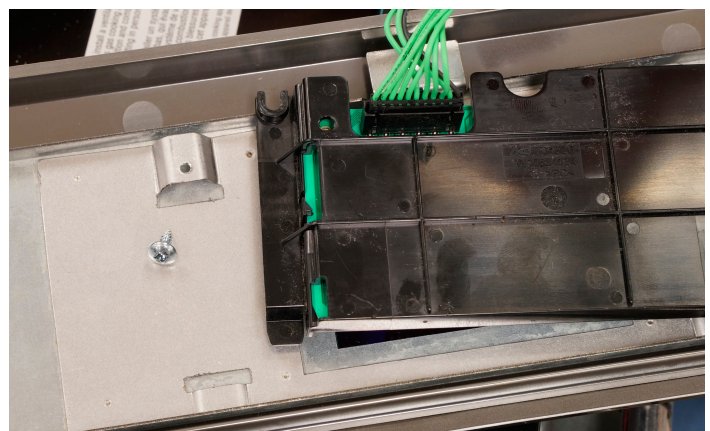


Figure 9

COMPONENT ACCESS

⚠ WARNING

Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

Removing the Igniter Switches

1. Remove the control panel (see “Removing the Control Panel” section).
2. Remove the rubber protection covers from all the gas valves.
3. Remove (unsnap) the igniter switches from all gas valves.
4. On the right side of the burner box, locate and disconnect the spark igniter’s quick disconnect connection.
5. Remove the igniter switch assembly (all switches are serviced as one piece). Figure 10

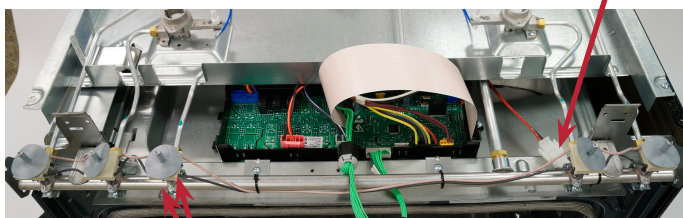


Figure 10

Removing a cooktop burner

1. Remove the cooktop (see “Removing the Cooktop” section).
2. Use a ½” open end wrench and remove the gas line from the burner.
3. Remove the spark igniter from the burner by squeezing and removing the igniter clip.
4. Remove the mounting screw and remove the burner

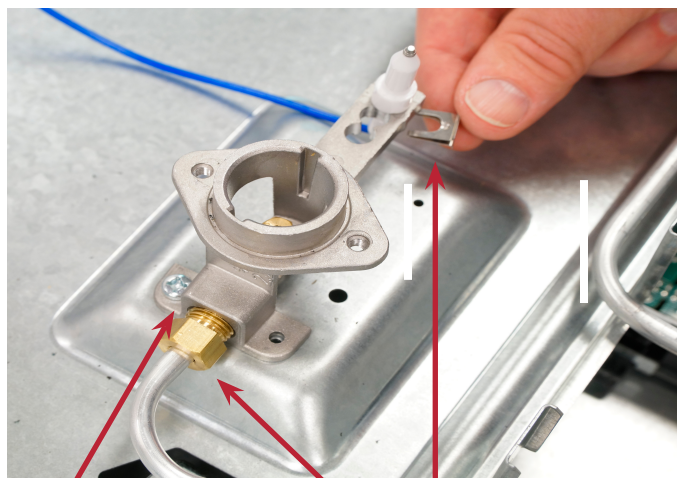


Figure 11

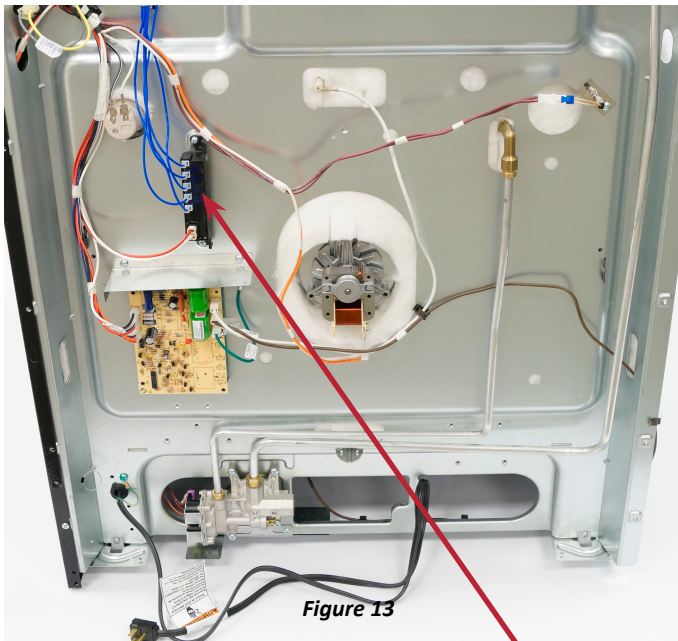
Removing a spark igniter

1. Remove the cooktop (see “Removing the Cooktop” section).
2. Remove the spark igniter from the burner by squeezing and removing the igniter clip.



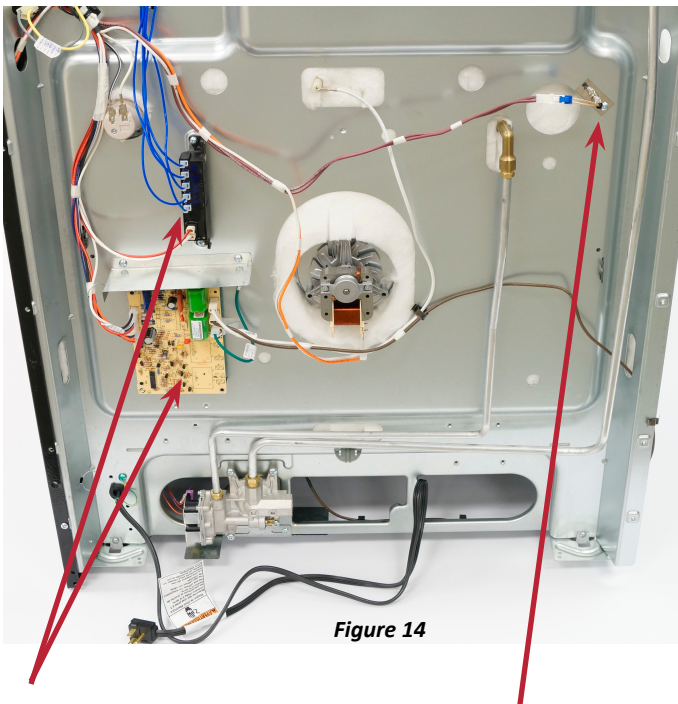
Figure 12

3. From behind the range, remove the access cover.
4. Locate the spark module at the back of the range.
5. Remove the spark igniter wire connection from the spark module.



Removing the Spark Module

1. From behind the range, remove the upper and lower access covers.
2. Locate the Spark Module and remove all electrical connections.
3. Remove 2 spark module mounting screws.



Removing the Oven Sensor

1. From behind the range, remove the upper access cover.
2. Locate the oven sensor (SEE FIGURE 14) and remove the 2 wire disconnect plug.
3. Remove 2 sensor mounting screws.
4. Pull the oven sensor out the back of the oven

Removing the Direct Spark Ignition board

1. From behind the range, remove the upper and lower access covers.
2. Locate the DSI board (SEE FIGURE 14) and remove all electrical connections.
3. Remove 1 screw from the DSI mounting bracket.
4. Lift the DSI board up to clear the feet from the mounting panel.

Removing the Gas Regulator/Safety Valve

1. Disconnect the electrical supply to the range.
2. Turn off the gas supply to the range.
3. Pull the range out of the installation and away from the anti-tip bracket.



4. Disconnect the 2 quick disconnect plugs from the regulator
5. Disconnect the house gas supply line from the regulator.
6. Disconnect the two remaining gas tubes from the regulator (Broil and Cooktop gas tubes)
7. Remove the mounting screws from the regulator mounting bracket.
8. Lower the regulator to release the bake burner tube from the bake orifice.
9. During re-assembly make sure the pressure regulator bake orifice is inserted into the bake burner tube.

COMPONENT ACCESS

⚠ WARNING

Electrical Shock Hazard
 Disconnect power before servicing.
 Replace all parts and panels before operating.
 Failure to do so can result in death or electrical shock.

Removing the Broil burner tube and Broil Igniter

1. This should be easier if the oven door is removed.
2. Remove the mounting screws from the flame spreader, burner tube and igniter assembly (front of oven)
3. Lift the burner tube off of the burner orifice.
4. Disconnect the wire connection from the igniter.
5. Remove the entire assembly from the oven.
6. Remove the two mounting screws from the igniter bracket with a 5/16" nut driver.
7. Separate the burner tube and igniter

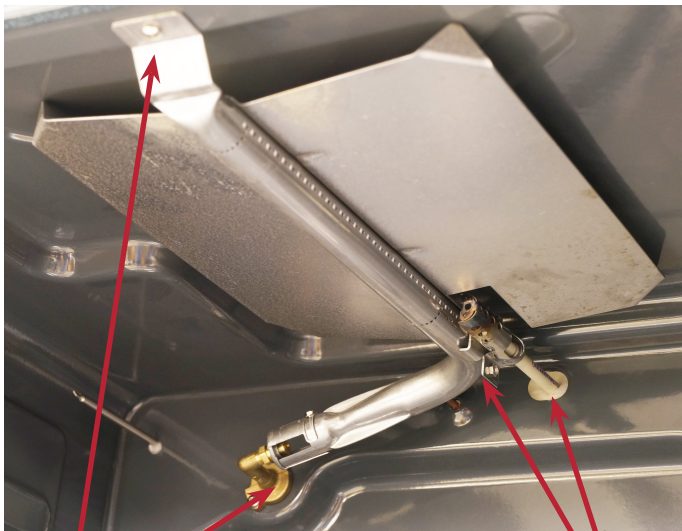


Figure 16

Removing the Bake burner tube and Bake Igniter

1. This should be easier if the oven door is removed.
2. Remove two mounting screws from the oven bottom/floor at the back corners of the oven.



Figure 17

3. Lift the oven bottom and flame spreader assembly out of the oven.
4. Remove 2 burner tube mounting screws (one in front and one at back of oven).

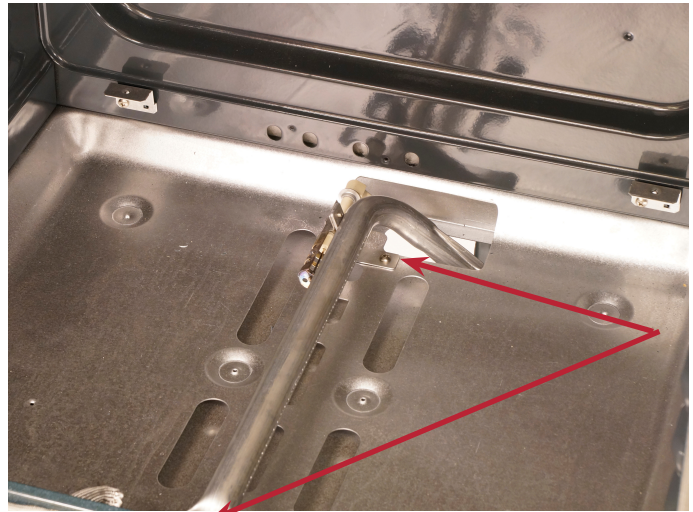


Figure 18

5. Pull the bake burner tube up to expose the wire connection.
6. Remove the igniter wire.
7. Pull the burner tube out of the oven.
8. Remove igniter bracket mounting screws.
9. Remove igniter.
10. During re-assembly make sure the burner tube air shutter is mounted onto the pressure regulator bake orifice.

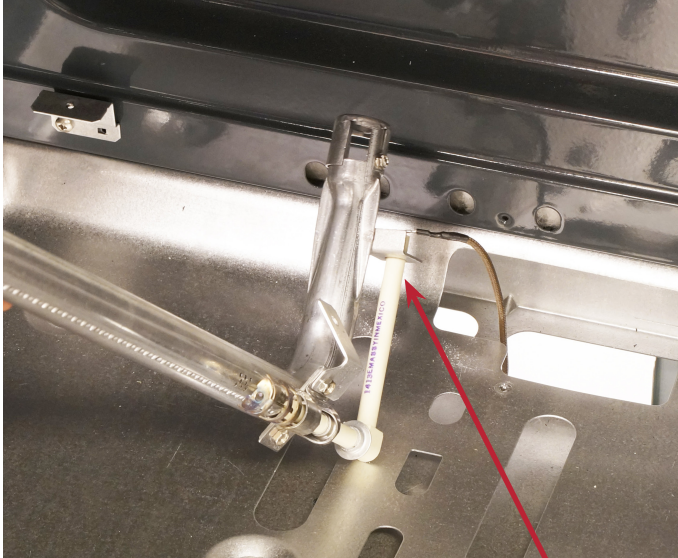


Figure 19

Removing the convection fan motor and element assembly

1. This should be easier if the oven door is removed.
2. Remove 3 mounting screws from the convection baffle cover on the back wall of the oven and remove the cover.

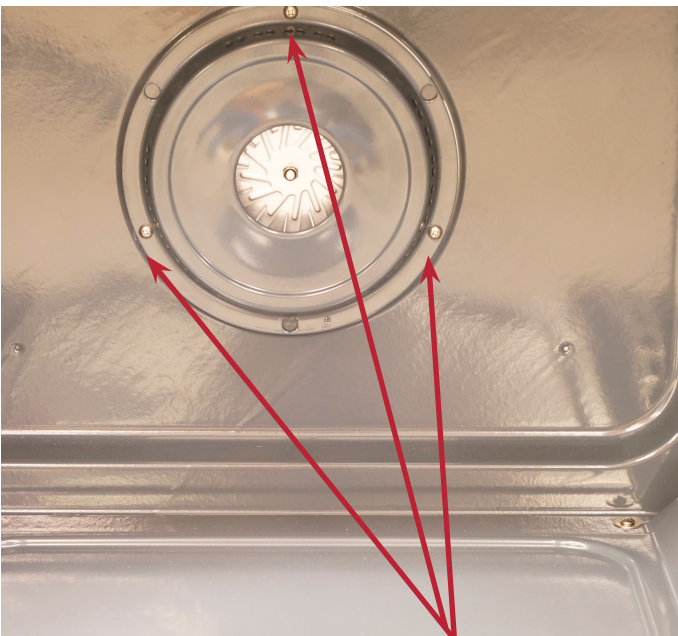


Figure 20

3. Pull the convection fan motor mounting bracket into the oven.
4. Remove the electrical connections to the fan motor.
5. Remove the fan motor and fan blade assembly from the oven.

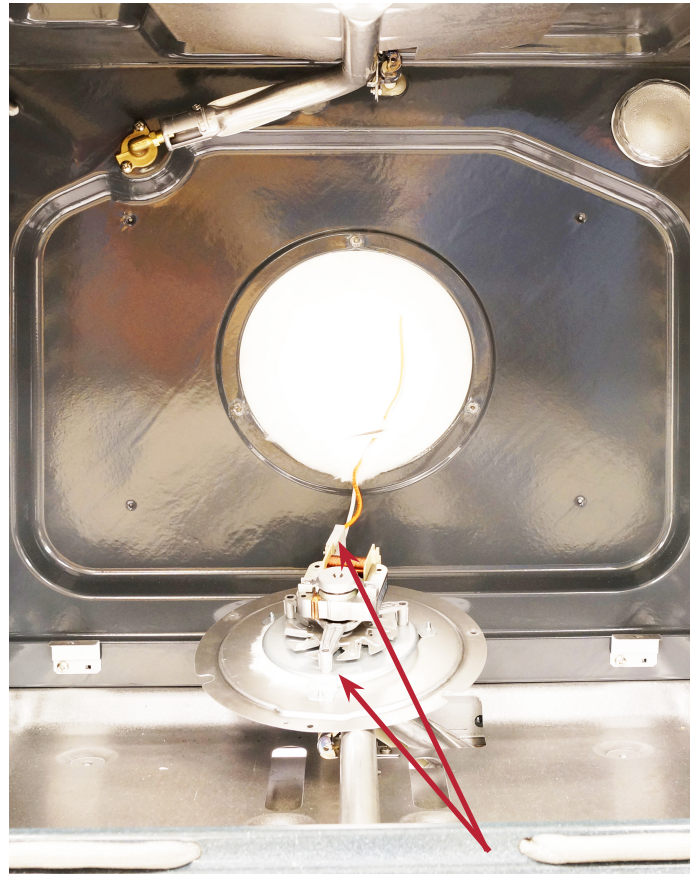



Figure 21

COMPONENT ACCESS

⚠ **WARNING**

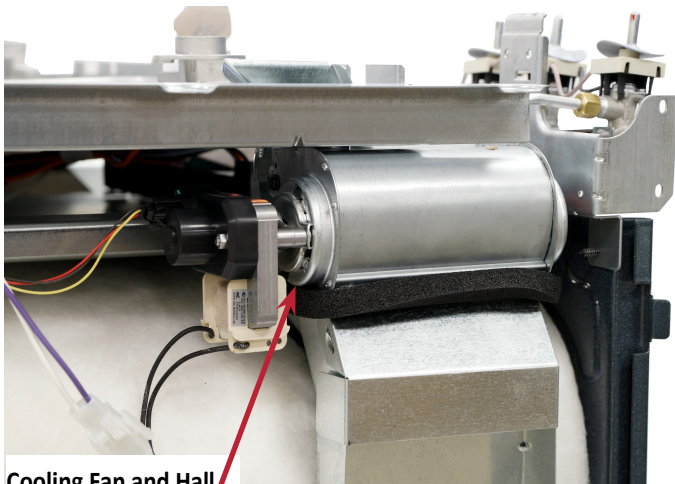


Electrical Shock Hazard

Disconnect power before servicing.
 Replace all parts and panels before operating.
 Failure to do so can result in death or electrical shock.

1. Remove the control panel (see “Removing the Control Panel” section).
2. Remove the cooktop (see “Removing the Cooktop” section).
3. Remove 3 burner box screws securing the burner box to the side panel

Removing the Cooling Fan and Hall Sensor assembly



Cooling Fan and Hall Sensor Assembly
(Left Side Panel Removed)

Figure 22

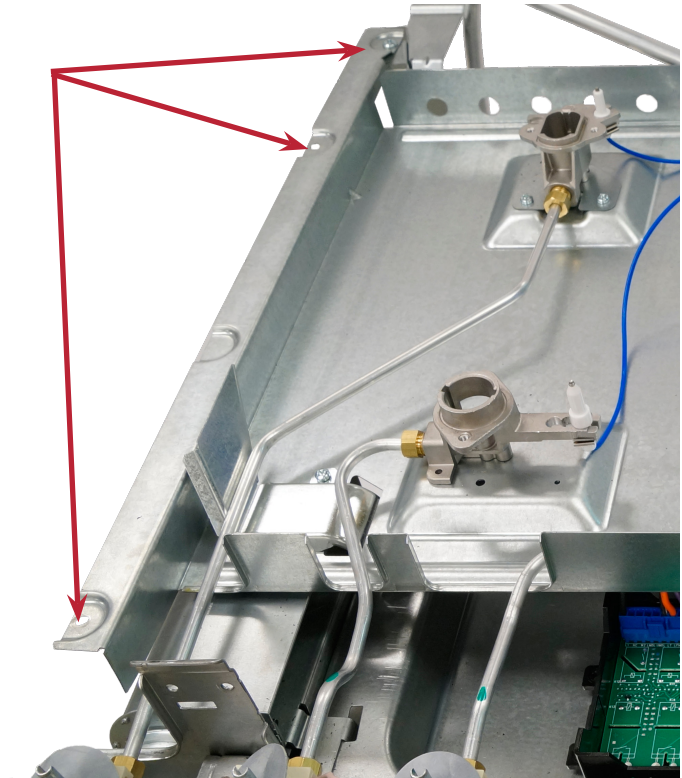
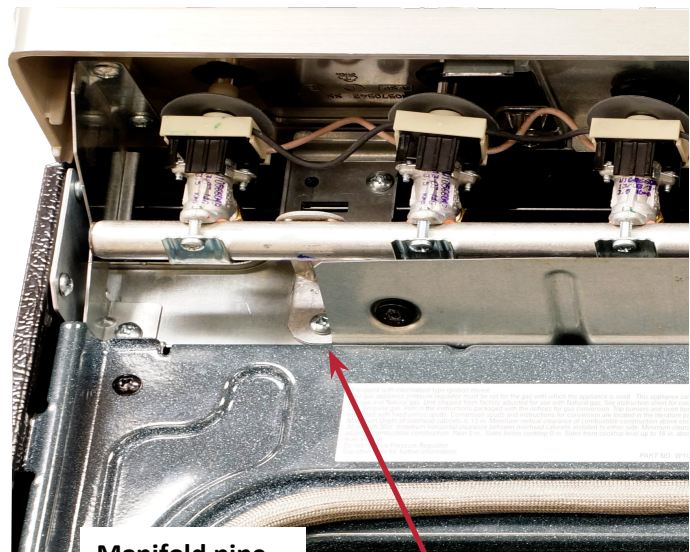


Figure 23

4. Remove 1 screw from the gas manifold pipe mounting bracket (front).



Manifold pipe mounting screw

Figure 24

5. Remove 1 fan motor anchor screw and slide the motor backwards to disengage from the 2 mounting slots.
6. Lift the motor out of the slots and pull out from the front (under the manifold pipe).

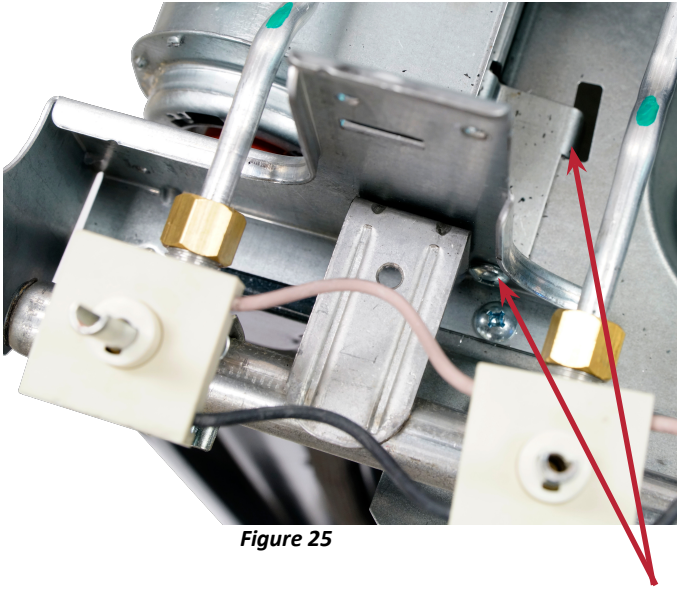



Figure 25

COMPONENT ACCESS

ELECTRIC SLIDE-IN RANGE - COMPONENT ACCESS

⚠ WARNING

<p style="text-align: center;">Electrical Shock Hazard</p> <p>Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

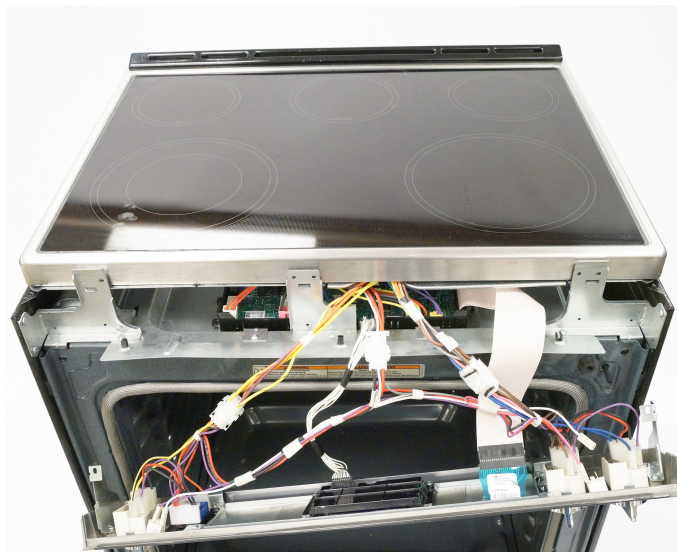
Removing the:

- Control Panel,
- Cooktop,
- MRC Control Board
- User Interface and Display Assembly

are identical procedures to the Gas Range. The following (starting with the Infinite Switeches) procedures are common to the electric range only.



Figure 26



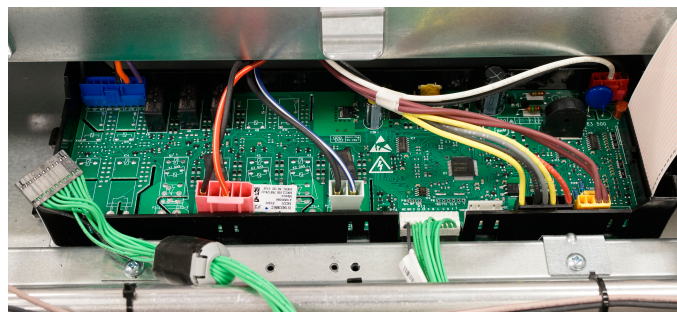
Control Panel Removed

Figure 27



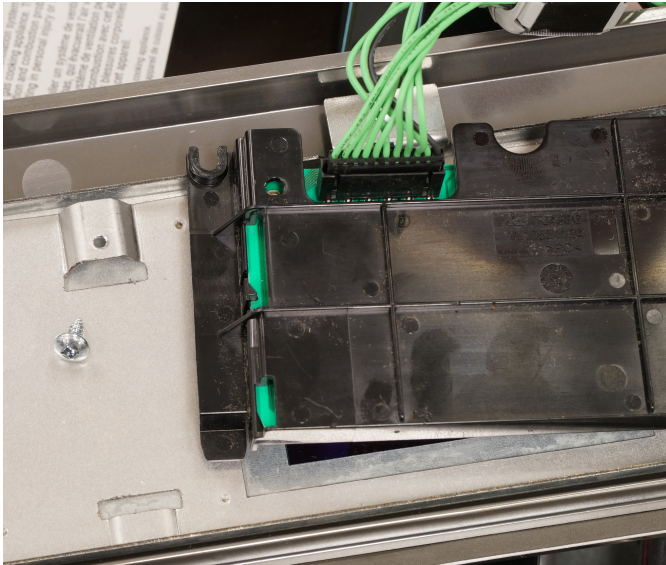
Cooktop Removed

Figure 28



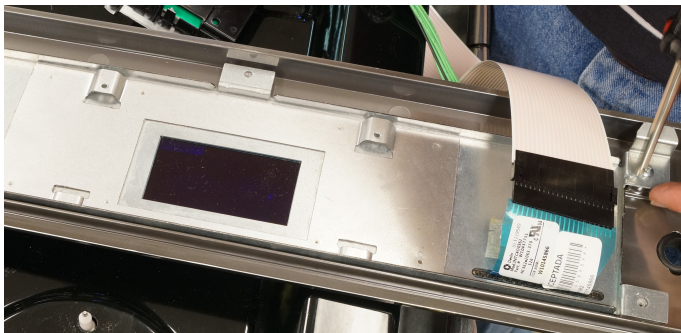
MRC Control Board mounting

Figure 29



Display Board Mounting

Figure 30



User Interface Mounting


Figure 31



User Interface Removed

Figure 32

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

Removing the Infinite Switches

1. Remove the Control Panel (see “Removing the Control Panel” section)
2. From the back of the control panel remove the infinite switch electrical connections

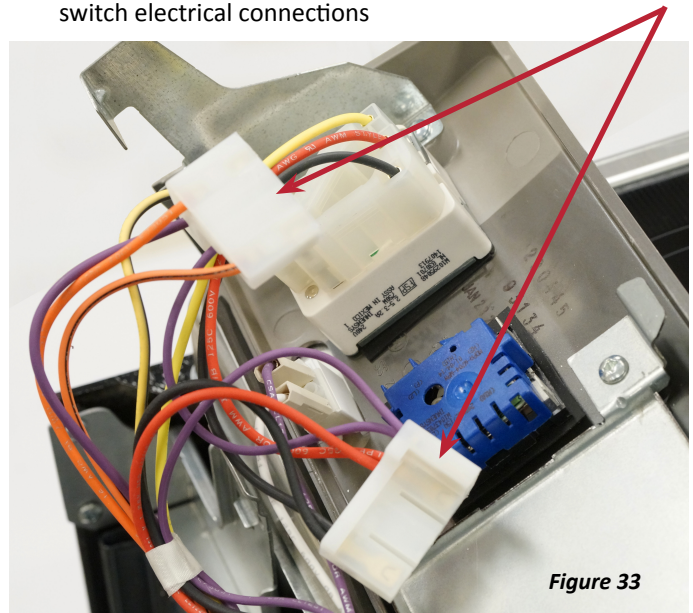


Figure 33


3. Remove the Control Knob from the infinite switch
4. Locate and remove two mounting screws under the control knob
5. Pull infinite switch out from the back of the control panel



Figure 34

COMPONENT ACCESS

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

Removing a Cooktop Element and Limiter Assembly

1. Remove the cooktop (see "Removing the Cooktop" section)
2. Disconnect the electrical connections to the element
3. Lift the element up off the spring supports

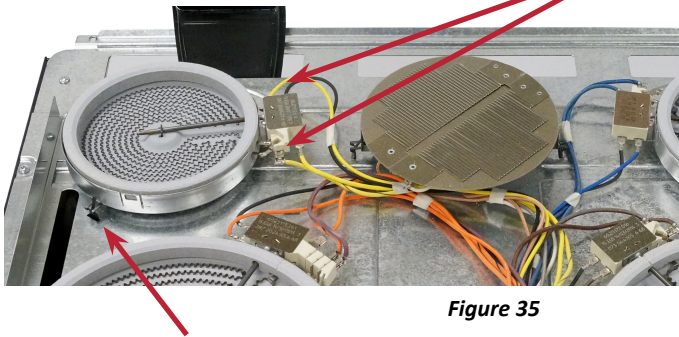


Figure 35

Removing the Broil Element

1. Open oven door. (this may be easier to do if the door is removed)
2. Locate the broil element at the top of the oven cavity.
3. Locate and remove 3 mounting screws (2 in ceiling and 1 on back wall).

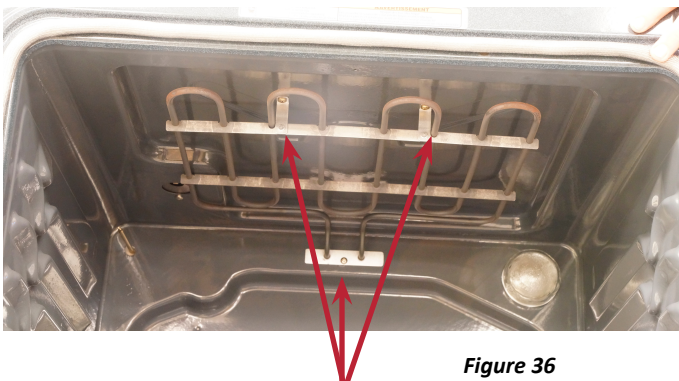


Figure 36

4. Pull broil element toward front of oven until electrical connections are visible through back wall of oven
5. Remove electrical connections (do not let wires slip out rear wall).
6. Pull element out.

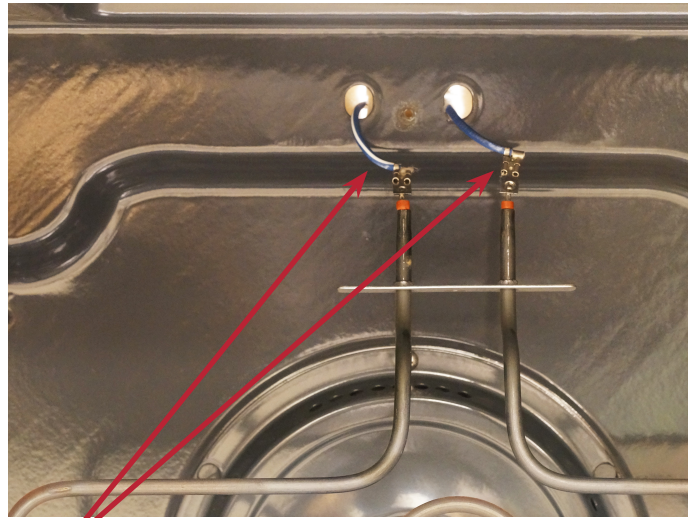
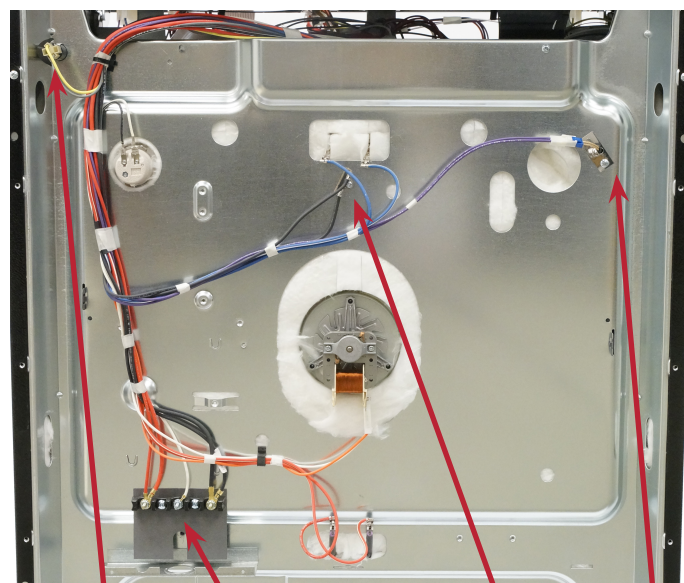


Figure 37

Removing the Oven Sensor, Thermofuse, Terminal Block & Door Switch

1. From behind the range, remove the upper access cover.
2. Locate the desired component and remove the wires/disconnect plug.
3. Remove mounting screws.
4. Pull the component out the back of the oven.



Door Switch Terminal Block Thermofuse Opens 363° Oven Sensor

Figure 38

Removing the Bake Element

1. This should be easier if the oven door is removed.
2. Remove two mounting screws from the oven bottom/floor at the back corners of the oven.



Figure 39

3. Remove oven floor
4. Locate and remove 3 Bake element mounting screws

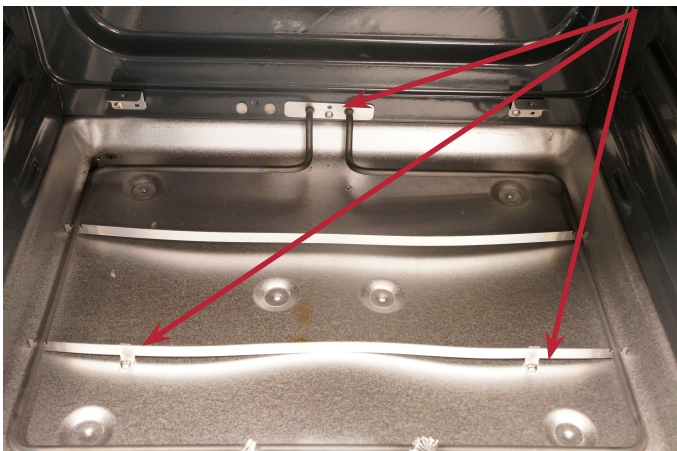


Figure 40

5. Pull bake element toward front of oven until electrical connections are visible through back wall of oven
6. Remove electrical connections (do not let wires slip out rear wall)
7. Pull element out

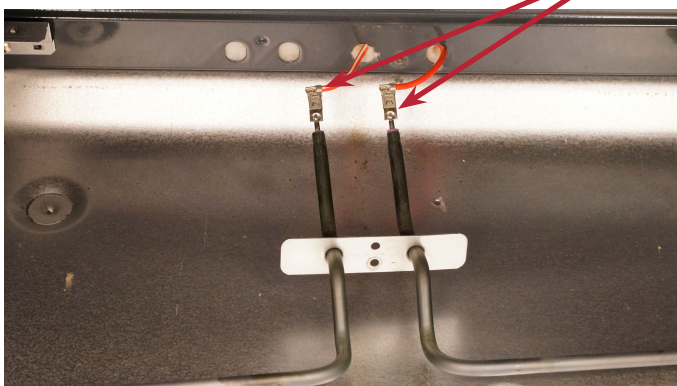


Figure 41

Removing the convection fan motor and element assembly

1. This should be easier if the oven door is removed.
2. Remove 3 mounting screws from the convection baffle cover on the back wall of the oven and remove the cover.

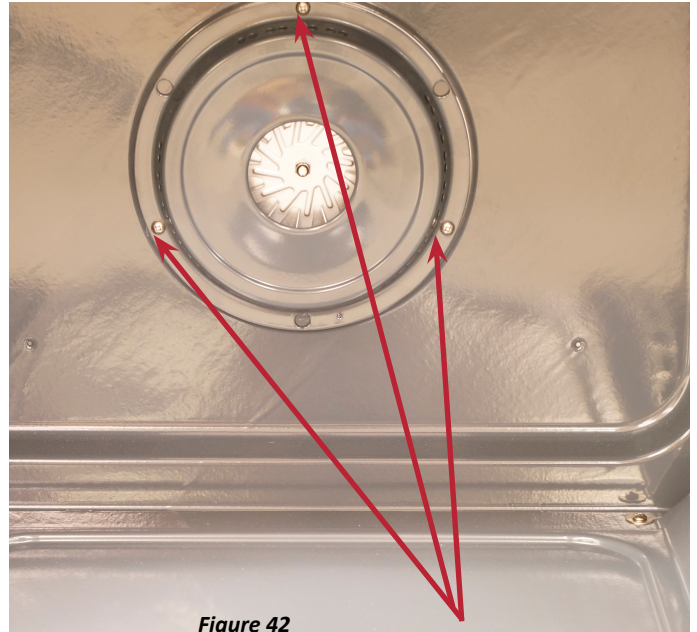


Figure 42

3. Pull the convection fan motor mounting bracket into the oven.
4. Remove the electrical connections to the fan motor.
5. Remove the fan motor and fan blade assembly from the oven.

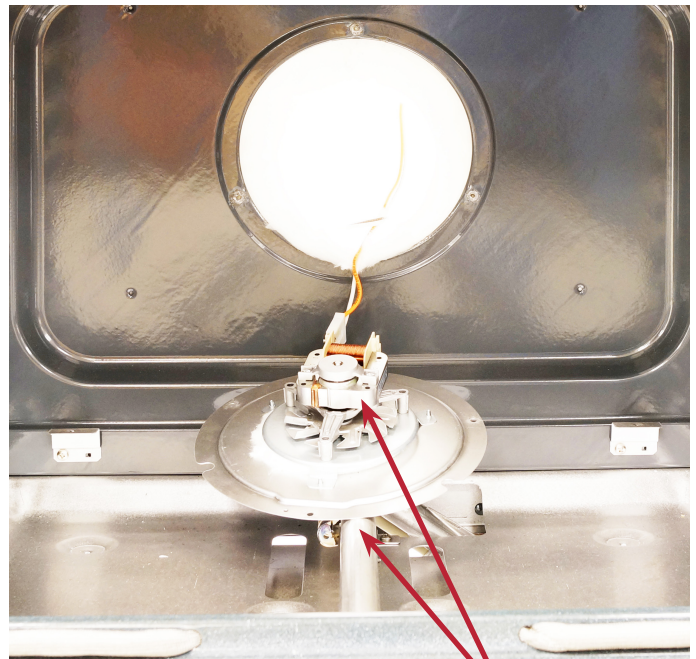



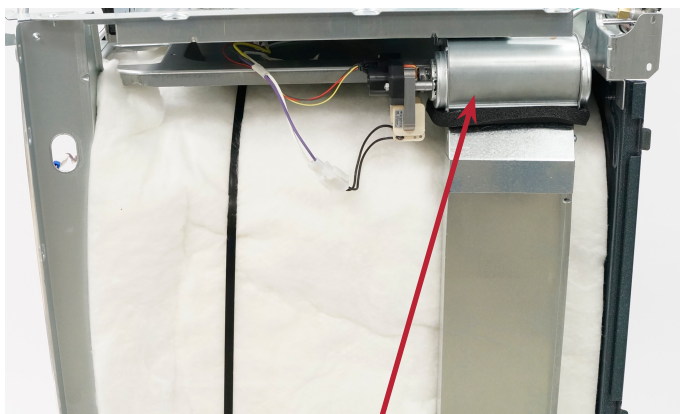
Figure 43

COMPONENT ACCESS

⚠ WARNING

<p style="text-align: center;">Electrical Shock Hazard</p> <p>Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the control panel (see “Removing the Control Panel” section).
2. Remove the cooktop (see “Removing the Cooktop” section).
3. Remove 2 burner box screws securing the burner box to the side panel.

Removing the Cooling Fan and Hall Sensor assembly



Cooling Fan and Hall Sensor Assembly (Left Side Panel Removed) *Figure 44*

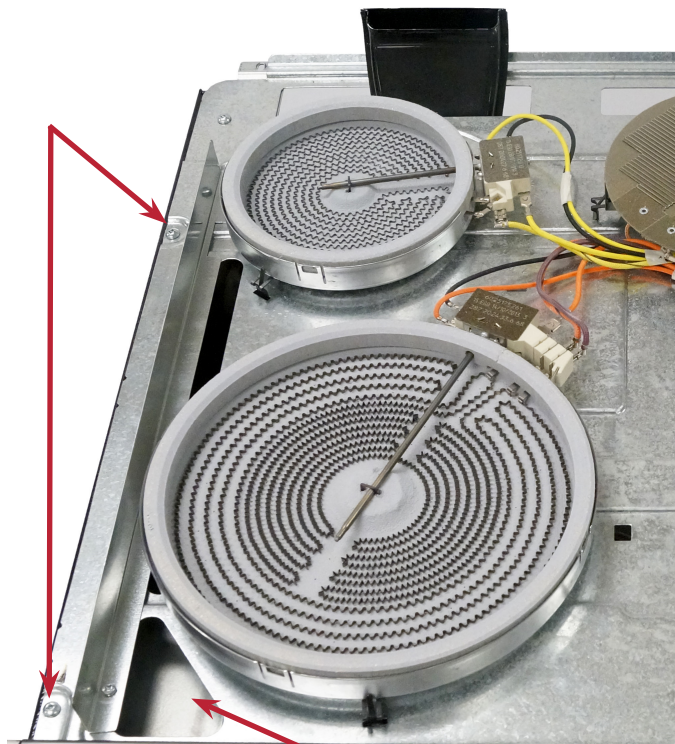


Figure 45
Cooling Fan Motor location from front of range

4. Remove 1 fan motor mounting screw and slide the fan assembly to disengage from the 2 mounting slots.
5. Lift the motor out of the slots and remove from the range.

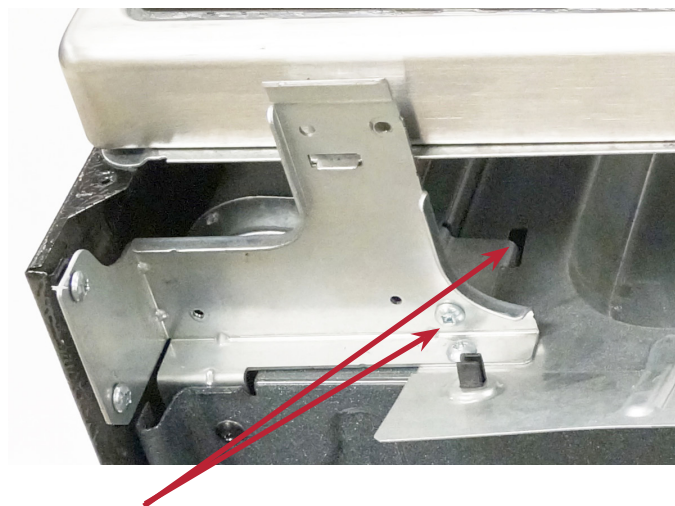



Figure 46


Section 4: Diagnostics & Troubleshooting

This section provides diagnostic, fault codes, and troubleshooting information for the “Gas and Electric Slide-In Ranges”

- Safety First
- Diagnostic Tests for Electronic Oven Control
- Electronic Control Failure Codes
- Oven Control Relay Logic Chart
- Component Testing Chart
- Induction Cooking Testing
- Typical Wiring Diagrams
 - Gas Range (Oven)
 - Electric/Dual Fuel Range (Oven)
 - Gas/Dual Fuel Cooktop
 - Electric Cooktop
 - Induction Cooktop
- Notes

For Service Technician Use Only

⚠ DANGER

Electrical Shock Hazard Only authorized technicians should perform diagnostic voltage measurements. After performing voltage measurements, disconnect power before servicing. Failure to follow these instructions can result in death or electrical shock.

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

Voltage Measurement Safety Information

When performing live voltage measurements, you must do the following:

- Verify the controls are in the off position so that the appliance does not start when energized.
- Allow enough space to perform the voltage measurements without obstructions.
- Keep other people a safe distance away from the appliance to prevent potential injury.
- Always use the proper testing equipment.
- After voltage measurements, always disconnect power before servicing.

IMPORTANT: Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an antistatic wrist strap. Connect wrist strap to green ground connection point or unpainted metal in the appliance.

-OR-

Touch your finger repeatedly to a green ground connection point or unpainted metal in the appliance.

- Before removing the part from its package, touch the antistatic bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic control assembly by edges only.
- When repackaging failed electronic control assembly in antistatic bag, observe above instructions.

IMPORTANT SAFETY NOTICE — “For Technicians only”

This service data sheet is intended for use by persons having electrical, electronic, and mechanical experience and knowledge at a level generally considered acceptable in the appliance repair trade. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible, nor assume any liability for injury or damage of any kind arising from the use of this data sheet.

For Service Technician Use Only

Diagnostics Tests for Oven Electronic Control

- Unplug range or disconnect power before performing the following checks:
- A potential cause of a control not functioning is corrosion on connections. Observe connections and check for continuity with an ohmmeter.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms per volt DC or greater.
- Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connections far enough. Damaged harness must be entirely replaced. Do not rework a harness.
- Resistance checks must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.

General Procedure: Diagnostics Tests

1. Plug in range or connect power.

IMPORTANT: Within the Diagnostic Test Mode are numerous features for the service technician to work with.

The two areas you should be concerned with are the “Faults” screen (see steps 14-15) and the “Semi Automatic Test mode” screen (see steps 16-20).

The Semi Automatic Test is a self diagnostic function built into the oven control that will provide you with all the information you need to properly diagnose and repair the oven.

Follow the information on the display to walk through the entire test identify the fault code and the components that require attention.

2. Enter Diagnostics Mode by pressing CANCEL>CANCEL>START within 5 seconds.

3. Press the number 3 or 6 keypads to read the following:

Control Reset
Usage
Engineering mode
Test mode
Faults
Version
Display
Semi Automatic Test mode

4. Press the number 3 or 6 keypads until “Test Mode” is displayed, then press the Start keypad.
5. To activate the relays manually in the test mode, press the following keypads

- **For safety, the door needs to be closed during cooking/broiling :**

GAS Ranges: If the door is open during the bake or broil cooking cycle then the bake burner and broil burner will shut off after 25 seconds (power from the control board will be shut off).

Electric Ranges: For Broiling we have open door broiling option, but during a baking cycle the burner will shut off after 60 seconds (power from the control board will be shut off).

DIAGNOSTICS & TROUBLESHOOTING

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Key Pressed	Relay Activated
Bake (Main)	K4 (bake igniter or element) On/Off
Broil	K5 (broil igniter or element) On/Off and K3 (broil assist element) On/Off (for gas models only)
Keep Warm	K7 (convection fan) On/off
Bake (Drawer)	K1 (drawer element) On/Off
Convect	K2 (convection element) On/Off
Downdraft High	K11 (downdraft fan high) On/Off
Downdraft Low	K8 (downdraft fan low) On/Off
Warming Zone	K12 (warming zone) On/Off
Oven Light	K6 (oven light) On/Off

6. Press the number 3 or 6 keypads until "Usage" is displayed, then press the Start keypad.
7. Select the "On" time for the different modes (all time in hours).
8. Press the number 3 or 6 keypads until "Version" is displayed, then press the Start keypad.
9. Verify the software version.
10. Press the number 3 or 6 keypads until "Display" is displayed, then press the Start keypad.
11. Verify that all the segments of the display are lit.
12. Press the number 3 or 6 keypads until "Control Reset" is displayed, then press the Start keypad.
13. Reset the control for soft control reset.
14. Press the number 3 or 6 keypads until "Faults" is displayed, then press the Start keypad.
15. Press the number 3 or 6 keypads to navigate through the errors and see all the recorded faults.
16. Press the number 3 or 6 keypads until "Semi Auto Test" is displayed, then press the Start keypad.
 - Semi Automatic Test is the enhanced diagnostic procedure where the control tests all the relay loads and Input/Output on the control automatically and reports the failures and faults.
17. Open and close the oven door when directed.

When a relay is activated the appropriate letter as shown in the chart will be displayed.

Relay Activated	Display
Bake	b
Broil	r
Convect	c
Convect Fan	H
Cooling Fan	C
Door Open	I
Door Closed	0
Drawer	D
Oven Light	%
Cooktop Lockout Solenoid Valve (for gas models only)	Cooktop icon is lit

18. Press the appropriate keypad to indicate Yes or No for the component relay for desired testing. The control will display the appropriate component fault code(s) in the format "F#E#" (the description of the component fault is also displayed).
19. If no faults are detected, the control screen will read "Control good - No Fault Found."
20. Do not replace the control unless the display screen indicates the control is not working or you are directed to do so.

NOTES:

- The Cancel keypad can be pressed at any time when the control is in the Diagnostic Mode or any of the submenus. Pressing the Cancel keypad will return the control to the time of day screen.
- Entering Diagnostic Mode will cancel any active oven operation.
- Enter the Diagnostic Mode only after the oven is cool.
- Semi Automatic test is a self diagnostic function built into the oven control.
- Diagnostic Mode automatically times out and returns to the time of day screen after 5 minutes.
- To erase all error codes: Enter Diagnostic Mode by pressing CANCEL>CANCEL>START within 5 seconds. Press the number 3 or 6 keypads until "Faults" appears. Press START TIME or DELAY START to clear all error codes.



For Service Technician Use Only

Failure/Error Display Code Repair Procedures

CODE	WHAT IS IT?	WHEN CAN IT OCCUR?	RECOMMENDED CORRECTIVE ACTION PROCEDURE
	<p>Feature Not Available This message will scroll across the display when a fault is detected while you are programming a cook cycle.</p>	Anytime.	<ol style="list-style-type: none"> 1. Cycle power to the range (wait 30 seconds before reapplying power). If the error message reappears, go to Step 2. If the error message does not reappear after 120 seconds, go to Step 6. 2. Unplug range or disconnect power. 3. Replace main control board. 4. Replace all parts and panels before operating. 5. Plug in range or reconnect power. 6. Verify operation is normal. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).
F1E0	<p>EEPROM Communication Error The main control is locked up due to an unexpected communication event. This is often corrected by cycling power.</p>	Immediately after the main control sees an unexpected event.	<ol style="list-style-type: none"> 1. Cycle power to the range (wait 30 seconds before reapplying power). If the error code reappears, go to Step 2. If the error code does not reappear after 120 seconds, go to Step 6. 2. Unplug range or disconnect power. 3. Replace main control board. 4. Replace all parts and panels before operating. 5. Plug in range or reconnect power. 6. Verify operation is normal. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).
F2E0	<p>Keypad Disconnected The main control no longer sees the keypad.</p>	Within 60 seconds of the keypad being disconnected.	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Inspect keypad connection to main control (connector P12). If connection loose/unplugged, reconnect. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power. Allow 60 seconds for main control to identify keypad. If error code reappears, go to Step 5. If the error code does not reappear, go to Step 9. 5. Unplug range or disconnect power. Inspect keypad connector, keypad cable, and main control connector P12 for signs of damage (cracked locking tab, bent pins, etc.). If damage found, go to Step 8. 6. Replace all parts and panels before operating. 7. Plug in range or reconnect power. Allow 60 seconds for main control to identify keypad. If error code reappears, go to Step 8. If the error code does not reappear, go to Step 9. 8. Replace components in the following order of likelihood of failure <ol style="list-style-type: none"> a. Keypad cable b. Keypad c. Main control 9. Replace all parts and panels before operating. 10. Plug in range or reconnect power 11. Verify operation is normal. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).
F2E1	<p>Stuck Keypad A keypad has been pressed for an extended period of time. This could be the result of the user pressing a keypad for too long.</p>	Within 120 seconds of a keypad being pressed and held.	<ol style="list-style-type: none"> 1. Disconnect power to the range (wait 30 seconds before reapplying power). If the error code reappears, go to Step 2. If the error code does not reappear after 120 seconds, go to Step 6. 2. Unplug range or disconnect power. 3. Replace the keypad. 4. Replace all parts and panels before operating. 5. Plug in range or reconnect power 6. Verify operation is normal. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).

DIAGNOSTICS & TROUBLESHOOTING

For Service Technician Use Only

CODE	WHAT IS IT?	WHEN CAN IT OCCUR?	RECOMMENDED CORRECTIVE ACTION PROCEDURE
F3E0	<p>Main Oven Sensor Open or Shorted</p> <p>Main oven temperature reading greater than 995°F (535°C) or less than 0°F (-18°C).</p>  <p>The diagram shows an 'Oven Control MRC2' box with terminals P10-3 and P10-4. P10-3 is connected to WH/BU, and P10-4 is connected to WH. These two lines meet at a junction with a resistor symbol. From this junction, a line goes to WH, which then connects to the 'Main Temp Sensor'. The sensor's other terminal is connected to WH/BU.</p>	<p>Within 20 seconds of activating a cook or clean function.</p>	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Inspect control board connector P10 for a backed out terminal or loose connection. If found, reconnect or replace harness and go to Step 10. If not, go to Step 3. 3. Disconnect control board connector P10. Measure resistance across P10-3 and P10-4. At room temperature, the thermal sensor should read between 1000Ω and 1200Ω . Reconnect P10. If test results are good, go to Step 4. If test results are not correct, go to Step 9. 4. Replace all parts and panels before operating. 5. Plug in range or reconnect power 6. Enter a cook function (i.e., Bake). If the error code doesn't reappear after 20 seconds, go to Step 13. If the error code reappears, go to Step 7. 7. Unplug range or disconnect power. 8. Replace main control and go to Step 10. 9. Inspect connection at main oven thermal sensor. Disconnect and measure resistance across thermal sensor terminals. At room temperature, the thermal sensor should read between 1000Ω and 1200Ω . If resistance measured out of range, replace thermal sensor. If resistance measured within range, replace harness. 10. Replace all parts and panels before operating. 11. Plug in range or reconnect power 12. Enter a cook function (i.e., Bake) and verify the error code doesn't reappear after 20 seconds. 13. Verify operation is normal. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).
F3E2	<p>Drawer Sensor Open or Shorted</p> <p>Drawer temperature reading greater than 995°F (535°C) or less than 0°F (-18°C).</p>  <p>The diagram shows an 'Oven Control MRC2' box with terminals P10-1 and P10-2. P10-1 is connected to WH/BU, and P10-2 is connected to WH. These two lines meet at a junction with a resistor symbol. From this junction, a line goes to WH, which then connects to the 'Drawer Temp Sensor'. The sensor's other terminal is connected to WH.</p>	<p>Within 20 seconds of activating a cook or clean function.</p>	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Inspect control board connector P10 for a backed out terminal or loose connection. If found, reconnect or replace harness and go to Step 10. If not, go to Step 3. 3. Disconnect control board connector P10. Measure resistance across P10-1 and P10-2. At room temperature, the thermal sensor should read between 1000Ω and 1200Ω . Reconnect P10. If test results are good, go to Step 4. If test results are not correct, go to Step 9. 4. Replace all parts and panels before operating. 5. Plug in range or reconnect power 6. Enter a cook function (i.e., Bake). If the error code doesn't reappear after 20 seconds, go to Step 13. If the error code reappears, go to Step 7. 7. Unplug range or disconnect power. 8. Replace main control and go to Step 10. 9. Inspect connection at drawer thermal sensor. Disconnect and measure resistance across thermal sensor terminals. At room temperature, the thermal sensor should read between 1000Ω and 1200Ω . If resistance measured out of range, replace thermal sensor. If resistance measured within range, replace harness. 10. Replace all parts and panels before operating. 11. Plug in range or reconnect power 12. Enter a cook function (i.e., Bake) and verify the error code doesn't reappear after 20 seconds. 13. Verify operation is normal. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).

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CODE	WHAT IS IT?	WHEN CAN IT OCCUR?	RECOMMENDED CORRECTIVE ACTION PROCEDURE												
F6E1	Over Temp Oven temperature greater than 601°F (316°C). The affected oven will be locked out until the control detects an oven temperature less than 601°F (316°C).	Within 60 seconds of the control detecting an over temperature condition.	1. Enter Diagnostics Mode by pressing CANCEL>CANCEL>START within 5 seconds. Oven temperature is displayed on the screen. Manually check oven for heat.												
			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">If oven is</th> <th style="text-align: left;">and temperature reading is</th> <th style="text-align: left;">go to</th> </tr> </thead> <tbody> <tr> <td>Warm</td> <td>Near 600°F (316°C)</td> <td>Step 2</td> </tr> <tr> <td>Warm</td> <td>Room Temperature</td> <td>Step 4</td> </tr> <tr> <td>Room Temperature</td> <td>Near 600°F (316°C)</td> <td>Step 4</td> </tr> <tr> <td>Room Temperature</td> <td>Room Temperature</td> <td>Step 5</td> </tr> </tbody> </table>	If oven is	and temperature reading is	go to	Warm	Near 600°F (316°C)	Step 2	Warm	Room Temperature	Step 4	Room Temperature	Near 600°F (316°C)	Step 4
If oven is	and temperature reading is	go to													
Warm	Near 600°F (316°C)	Step 2													
Warm	Room Temperature	Step 4													
Room Temperature	Near 600°F (316°C)	Step 4													
Room Temperature	Room Temperature	Step 5													
			2. Unplug range or disconnect power. Inspect control board connector P10 for a backed out terminal or loose connection. If found, reconnect or replace harness and go to Step 5. If not, go to Step 3. 3. Disconnect control board connector P10. Measure resistance across P10-3 and P10-4 (main oven) and P10-1 and P10-2 (drawer). At room temperature, the thermal sensor should read between 1000Ω and 1200Ω . Reconnect P10. If test results are good, replace the control board, and go to Step 5. If results are not correct, go to Step 4. 4. Disconnect the oven sensor from the wiring harness and measure resistance across the sensor terminals. Resistance reading should be between 1000Ω and 1200Ω. If test results are good, replace the wiring harness between the sensor and the control board, go to Step 5. If test results are not correct, replace the sensor and go to Step 5. 5. Replace all parts and panels before operating. 6. Plug in range or reconnect power. 7. Verify operation is normal. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).												
F8E0	Cooling Fan Speed Too Low Fan speed below 500 rpm, either because the fan is spinning too slowly or because there is a problem with the Hall Effect sensor.	Within 20 seconds of a fault condition when cavity temperature is above 170°F (77°C).	1. Unplug range or disconnect power. 2. Pull the range forward and remove the top access cover. 3. Verify there are no obstructions in the blower. If there is an obstruction, remove it and go to Step 6. If no obstructions, go to Step 4. 4. Disconnect control board connector P5 and check the fan motor for 25Ω resistance between P5-1 and P6-3. If the motor test is not good, replace motor and go to Step 6. If motor tests good, go to Step 5. 5. Check the Hall Sensor by removing the control board P7 connector and testing for 5 VDC between P7-7 and P7-1. If test is good, go to Step 6. If test results are not correct, replace the Hall Sensor. 6. Replace all parts and panels before operating. 7. Plug in range or reconnect power. 8. Start a cook cycle and check for proper operation. 9. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).												
F8E2	Cooling Fan Speed Too High Fan speed above 5,000 rpm, either because the fan is spinning too quickly or because there is a problem with the Hall Effect sensor.	Within 20 seconds of a fault condition when cavity temperature is above 170°F (77°C).	1. Unplug range or disconnect power. 2. Pull the range forward and remove the top access cover. 3. Disconnect control board connector P5 and check the fan motor for 25Ω resistance between P5-1 and P6-3. If the motor test is not good, replace motor and go to Step 5. If motor tests good, go to Step 4. 4. Check the Hall Sensor by removing the control board P7 connector and testing for 5 VDC between P7-7 and P7-1. If test is good, go to Step 5. If test results are not correct, replace the Hall Sensor. 5. Replace all parts and panels before operating. 6. Plug in range or reconnect power. 7. Start a self-clean cycle and check for proper operation. 8. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).												

DIAGNOSTICS & TROUBLESHOOTING

For Service Technician Use Only

CODE	WHAT IS IT?	WHEN CAN IT OCCUR?	RECOMMENDED CORRECTIVE ACTION PROCEDURE
F9E0	Miswired Product is miswired.	Anytime a miswired product condition is detected.	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check wires and connectors between main control (P6) and power cord. 3. Check that the L1-L2-N wiring (pigtail) from the power outlet is correctly connected to the range terminal block. 4. Replace all parts and panels before operating. 5. Plug in range or reconnect power. 6. Start a self-clean cycle and observe for 1 minute to ensure that operation is normal. Enter the diagnostic mode to view the "Faults" screen. Press START TIME or DELAY START to clear each Fault code(s).

Relay Logic

Main Oven

Modes	Relays			
	Bake	Broil	Convect Element	Convect Fan
Bake (Rapid Preheat) Preheat	Ⓞ	Ⓞ	Ⓞ	Ⓞ
Bake (Rapid Preheat) Steady State	Ⓞ	Ⓞ	O	X
Bake (Standard Preheat) Preheat	Ⓞ	Ⓞ	Ⓞ	X
Bake (Standard Preheat) Steady State	Ⓞ	Ⓞ	O	X
Broil Preheat	O	X	O	O
Broil Steady State	O	Ⓞ	O	O
Keep Warm Preheat	Ⓞ	Ⓞ	O	O
Keep Warm Steady State	Ⓞ	Ⓞ	O	O
Self Clean	Ⓞ	Ⓞ	O	O
Bread Proof Preheat	Ⓞ	Ⓞ	O	O
Bread Proof Steady State	Ⓞ	O	O	O
Cvt Bake Preheat (True Convect)	Ⓞ	Ⓞ	Ⓞ	X
Cvt Bake Steady State (True Convect)	Ⓞ	Ⓞ	Ⓞ	X
Cvt Broil Preheat (True Convect)	O	Ⓞ	O	X
Cvt Broil Steady State (True Convect)	O	Ⓞ	O	X
Cvt Roast Preheat (True Convect)	Ⓞ	Ⓞ	Ⓞ	X
Cvt Roast Steady State (True Convect)	Ⓞ	O	Ⓞ	X
Cvt Bake Preheat (Fan Convect)	Ⓞ	Ⓞ	O	X

Modes	Relays			
	Bake	Broil	Convect Element	Convect Fan
Cvt Bake Steady State (Fan Convect)	Ⓞ	Ⓞ	O	X
Cvt Broil Preheat (Fan Convect)	O	Ⓞ	O	X
Cvt Broil Steady State (Fan Convect)	O	Ⓞ	O	X
Cvt Roast Preheat (Fan Convect)	Ⓞ	Ⓞ	O	X
Cvt Roast Steady State (Fan Convect)	Ⓞ	O	O	X

Legend

On	Off	On or Off
X	O	Ⓞ

NOTE: Pre A/B represents two stages of preheat. SS represents steady state (after reaching preheat temperature).

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Component Testing Chart

To check for proper voltage, complete the following steps:

1. Unplug range or disconnect power.
2. Connect voltage measurement equipment.
3. Plug in range or reconnect power and confirm voltage reading.
4. Unplug range or disconnect power after performing voltage measurements.

	FROM	TO	RESISTANCE: MEASURE WITHOUT POWER APPLIED	NOTES	NOMINAL VOLTAGE
Door switch	P7-4	P7-5	Door open = open circuit Door closed = closed circuit		5 VDC
Main cavity oven temp sensor	P10-4	P10-3	1000 - 1200Ω at room temperature. Measure only resistance, not voltage. The operating temperature range is from -40°F (-40°C) to 1100°F (593°C).	Disconnect connector P10 from control before measuring RTD.	NA
Drawer oven temp sensor	P10-1	P10-2	1000 - 1200Ω at room temperature. Measure only resistance, not voltage. The operating temperature range is from -40°F (-40°C) to 1100°F (593°C).	Disconnect connector P10 from control before measuring RTD.	NA
Oven light	P5-4	W (Neutral) P6-3	0 - 40Ω nominal		120 VAC
Thermofuse (TOD)	P4-2	P6-1	Closed circuit 0Ω nominal The switch closed at 170°F ± 11°F (76 °C ± 6°C) and opens at 280°F ± 8°F (138°C ± 4°C). Current = 25 Amp Voltage = 240 Volt	Hi Limit switch will open if temperature exceeded.	240 VAC
Bake igniter (gas)	P2-3	W (Neutral) P6-3	40 - 400Ω nominal at room temperature.	Disconnect bake igniter pigtail connection	120/240 VAC
Broil igniter (gas)	P4-2	W (Neutral) P6-3	40 - 400Ω nominal at room temperature.	Disconnect broil igniter pigtail connection	120 VAC
Main cavity bake element	P2-3	P15-1	10 - 40Ω nominal.	For voltage measure in Bake mode; will cycle between Bake and Broil elements on when heating.	240 VAC
Broil element	P4-2	P15-1	10 - 40Ω nominal.	For voltage, measure in Broil mode. Only broil element on when heating.	240 VAC
Drawer element	P3-1	W (Neutral) P6-3	10 - 40Ω nominal.	For voltage measure in Bake mode; will cycle between Bake and Broil elements on when heating.	240 VAC
Convection fan motor	P5-3	W (Neutral) P6-3	80 - 95Ω	Convection fan runs in all convection cycles and during Bake preheat.	120 VAC
Cooktop element (single)	H1	H2	23-83Ω nominal		240 VAC
Single, dual, and triple burner elements	Term H1(Single only) Term 4, 4A (double only)	Term 4, 4A	Thermal switch closes/opens at 150°F (66°C) to turn on/off hot surface indicator light.	Infinite switch cycles On/Off when hot.	120 VAC
	Term 1, 4, 4A (triple only)	Term 2 A	Thermal limiter 0Ω opens at 1100°F (593°C).	Cooktop On indicator light is on when any burner is turned on.	240 VAC

NOTES:

- In gas models, the convection fan comes on only after a 5-minute delay in any applicable cooking modes.
- In electric models, the convection fan comes on immediately in any applicable cooking modes.

DIAGNOSTICS & TROUBLESHOOTING

For Service Technician Use Only

INDUCTION COOKTOPS ONLY

Acronyms and Abbreviations

- IPC: Induction Power Control Board
- IPS: Induction Power System
- NTC: Negative Temperature Coefficient
- UI: User Interface Board
- EMI: Filter Board (Electromagnetic Interference)

Failure/Error Codes

A	B
<p>If all the lights on the User Interface are Off and there is no response from the cooktop, complete the following steps:</p> <ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check the continuity of the fuses on the EMI board. If one or more of the fuses is blown, replace with a new fuse. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power. 5. Check that it is working. If it is not, go to Step 6. 6. Unplug range or disconnect power. 7. Change the Induction Power System (IPS). 8. Replace all parts and panels before operating. 9. Plug in range or reconnect power. 10. Check that it is working. If it is not, go to Step 11. 11. Unplug range or disconnect power. 12. Change the User Interface. 13. Replace all parts and panels before operating. 14. Plug in range or reconnect power. 	<p>If all lights on the User Interface are Off and the User Interface is making a beeping noise, this indicates there is a stuck key on the User Interface. Complete the following steps:</p> <ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Open the cooktop and inspect User Interface for any damage. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power. 5. If the issue is still there, disconnect power and continue to Step 6. 6. Replace User Interface. 7. Replace all parts and panels before operating. 8. Plug in range or reconnect power.

There are 3 types of failures associated with the cooktop. The description of these failures and the impact they will have on the rest of the cooktop are listed in the following.

Failure – Type 1

Failure type 1 comes from the Induction Power Control (IPC). This failure will affect only one burner. The user may continue to use the other burners.

Failure – Type 2

Failure type 2 usually comes from the Induction Power Control (IPC) (there could be some exceptions). These failures affect all burners associated with that Induction Power Control (IPC); the user may continue to use the burners that belong to the other Induction Power Control (IPC).

Failure – Type 3

Failure type 3 comes from the User Interface. This failure disables the entire cooktop. When this type of failure occurs, all the burners are switched Off by the User Interface.

Service Code Shown on Display	Failure Description	Type of Failure	Repair Suggestions
F-12	Coil under current	Type 1	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check for the correct connections at T2A - T2B or T3A - T3B on the Induction Power Control (IPC) (whichever connection the burner is plugged into). If connections are correct, go to Step 3. 3. Replace the burner coil. 4. Replace all parts and panels before operating. 5. Plug in range or reconnect power. 6. Check for proper operation. 7. If everything operates, end service. If error code still appears, disconnect power and go to Step 8. 8. Replace the Induction Power System (IPS). 9. Replace all parts and panels before operating. 10. Plug in range or reconnect power.
F-21	Supply power frequency	Type 2	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Replace the Induction Power System (IPS). 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power. 5. If the issue is not fixed, contact a qualified electrician to verify the frequency of the home power supply is 60 Hz.

For Service Technician Use Only

Service Code Shown on Display	Failure Description	Type of Failure	Repair Suggestions
F-25	Stuck fan on Induction Power System (IPS) (Right or left side fan, depending on which side of the display the failure is on.)	Type 2	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check that the cooling fan connector is firmly plugged in. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power. 5. If the issue is not fixed, disconnect power. 6. Replace the cooling fan. 7. Replace all parts and panels before operating. 8. Reconnect the power. 9. If the issue is not fixed, disconnect power. 10. Replace the Induction Power System (IPS). 11. Replace all parts and panels before operating. 12. Plug in range or reconnect power.
F-36, F-37	Temperature sensor is not working	Type 1	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check that the temperature sensor is between 184kΩ and 292kΩ at room temperature and is firmly plugged in. If the sensor is not between 184kΩ and 292kΩ, replace the coil and go to Step 5. If the sensor is between 184kΩ and 292kΩ and the electrical connection is good, go to Step 3. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power and check that the coil is working. If it is not working, disconnect power and replace the non-working coil and the Induction Power System (IPS). 5. Replace all parts and panels before operating. 6. Plug in range or reconnect power.
F-40	Induction Power System (IPS) failure	Type 1 or Type 2	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check that the cable between the User Interface and the Induction Power Control (IPC) is not damaged and is firmly plugged in. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power. 5. Verify if error is still present. If yes, disconnect power. 6. Replace the Induction Power System (IPS). 7. Replace all parts and panels before operating. 8. Plug in range or reconnect power.
F-42	Power supply	Type 2	<ol style="list-style-type: none"> 1. Check for 240 volts AC at the main incoming power supply connection by completing the following steps. 2. Unplug range or disconnect power. 3. Connect voltage measurement equipment. 4. Plug in range or reconnect power and check for 240 volts at J1 L to N, and then J2 L to N at the EMI filter board, and then J1 L to N at both Induction Power Controls (IPCs). If voltage is correct, disconnect power, replace the Induction Power System (IPS), and go to Step 5. If voltage is not correct, disconnect power and check for an open fuse on the EMI filter board. If there is not an open fuse, have a qualified electrician check the home power supply. 5. Replace all parts and panels before operating. 6. Plug in range or reconnect power.
F-43	Under voltage	Type 2	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check the AC voltage with a multimeter. 3. Is the voltage above 196 volts? If the AC voltage is below 196 volts, then this failure is caused by abnormal supply voltage. 4. If the voltage is above 196 volts, then replace the Induction Power System (IPS). 5. Replace all parts and panels before operating. 6. Plug in range or reconnect power.

DIAGNOSTICS & TROUBLESHOOTING

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Service Code Shown on Display	Failure Description	Type of Failure	Repair Suggestions
F-47	Power supply from Induction Power Control (IPC) to User Interface is missing or WIDE communication error between UI and Induction Power Control (IPC) or an open fuse on the filter board	Type 2	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check that the cables between the User Interface and the Induction Power Control (IPC) are not damaged and are firmly plugged in. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power and check that it is working. If it is not working, disconnect power and replace the cables between the User Interface and the Induction Power Control (IPC). 5. Replace all parts and panels before operating. 6. Plug in range or reconnect power and check that it is working. If it is not working, go to Step 7. 7. Unplug range or disconnect power. 8. Check the continuity of the fuses on the EMI board. If either of the fuses is blown, replace with a new one. 9. Replace all parts and panels before operating. 10. Plug in range or reconnect power and check that it is working. If it is not working, go to Step 11. 11. Unplug range or disconnect power. 12. Change the Induction Power System (IPS). 13. Replace all parts and panels before operating. 14. Plug in range or reconnect power. Check that it is working. If it is not working, go to Step 15. 15. Unplug range or disconnect power. 16. Change the User Interface. 17. Replace all parts and panels before operating. 18. Plug in range or reconnect power.
F-56	Wrong or invalid configuration	Type 3	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Replace the User Interface. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power.
F-58	Wrong or invalid configuration	Type 2	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Replace the Induction Power System (IPS). 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power.
F-60	UI does not work	Type 3	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check for loose connections between the User Interface and both Induction Power Controls (IPCs). 3. Replace the User Interface. 4. Replace all parts and panels before operating. 5. Reconnect the power.
C-81, C-82	Over temperature	Type 2	Not enough ventilation: Check the installation according to the Installation Instructions. In particular, check the blower intakes.
C-83	Temperature sensor stuck	Type 2	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Check to see if the temperature sensor that is causing the failure is firmly plugged into the proper connector. 3. Replace all parts and panels before operating. 4. Plug in range or reconnect power and check to see if the coil is working. If it is not working, unplug range or disconnect power and replace the coil that is causing the failure with a new coil. 5. Replace all parts and panels before operating. 6. Plug in range or reconnect power and check to see if the coil is fixed. If it is not working, disconnect power and replace the Induction Power System (IPS). 7. Replace all parts and panels before operating. 8. Plug in range or reconnect power.

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Component Testing Chart

To check for proper voltage, complete the following steps:

1. Unplug range or disconnect power.
2. Connect voltage measurement equipment.
3. Plug in range or reconnect power and confirm voltage reading.
4. Unplug range or disconnect power after performing voltage measurements.

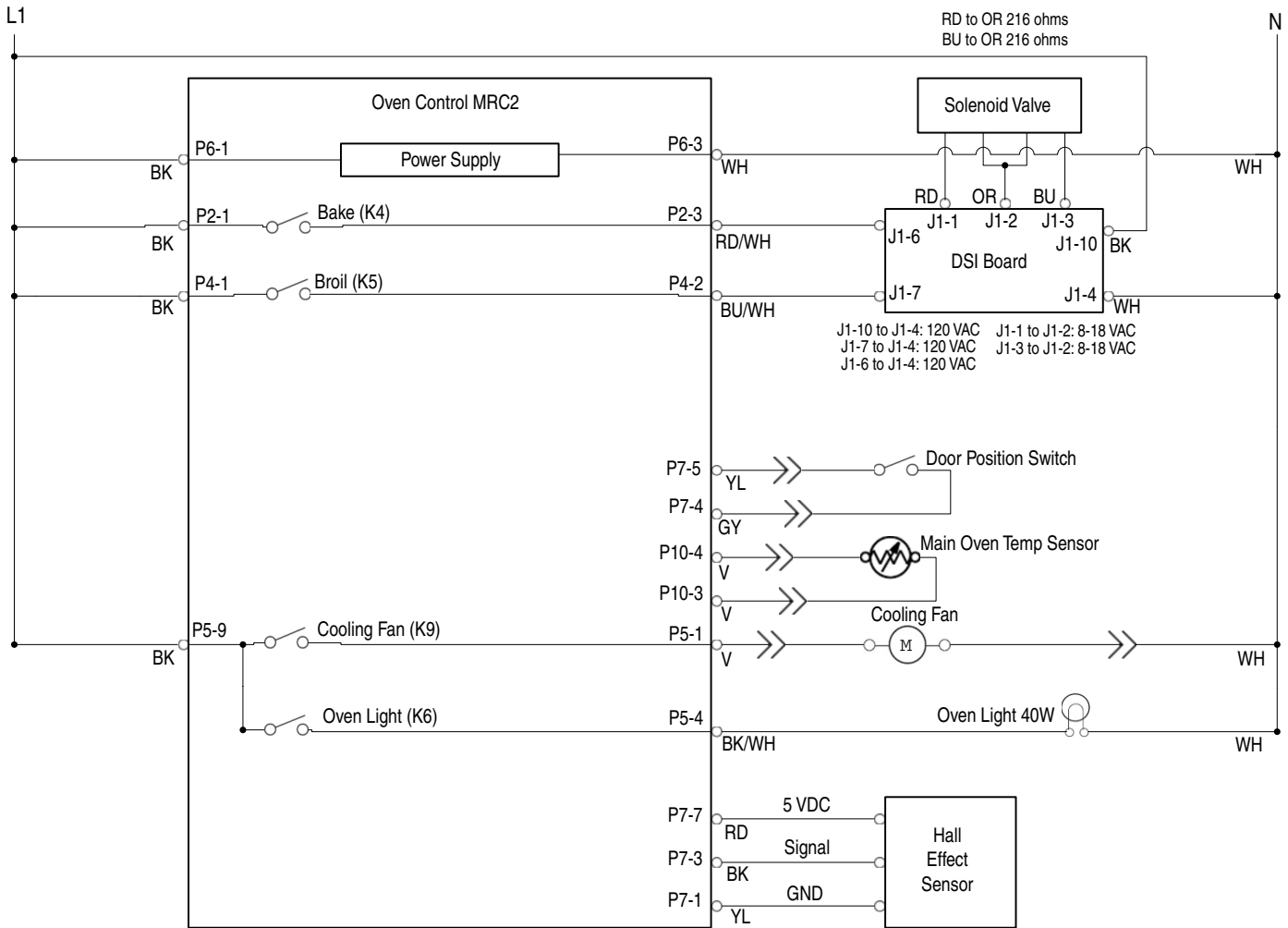
Location On the Cooktop	Checkpoints	Results Voltage
EMI filter board	J1 - BR - BU	From 208VAC to 240 VAC - 60Hz
Induction Power Control (IPC): Left and right	J1 - BR - BU	From 208VAC to 240 VAC - 60Hz
Induction Power Control (IPC) to blower fan: Left and right	J205 - (BK) - (R) J205 - (BK) - (BU)	From 0VDC to 12VDC
Induction Power Control (IPC) to the element sensor: Left and right	J604 - (1) - (2) J605 - (1) - (2)	+5VDC 0V +10.5V
Induction Power Control (IPC) to the User Interface	J806 - BK - 1	+5VDC
	J806 - LT BU - 2	WIDE_DATA
	J806 - W - 3	Ground
	J806 - R - 4	Standby
	J806 - Y - 5	+10VDC

DIAGNOSTICS & TROUBLESHOOTING

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Wiring Diagram - Typical Gas Oven Control

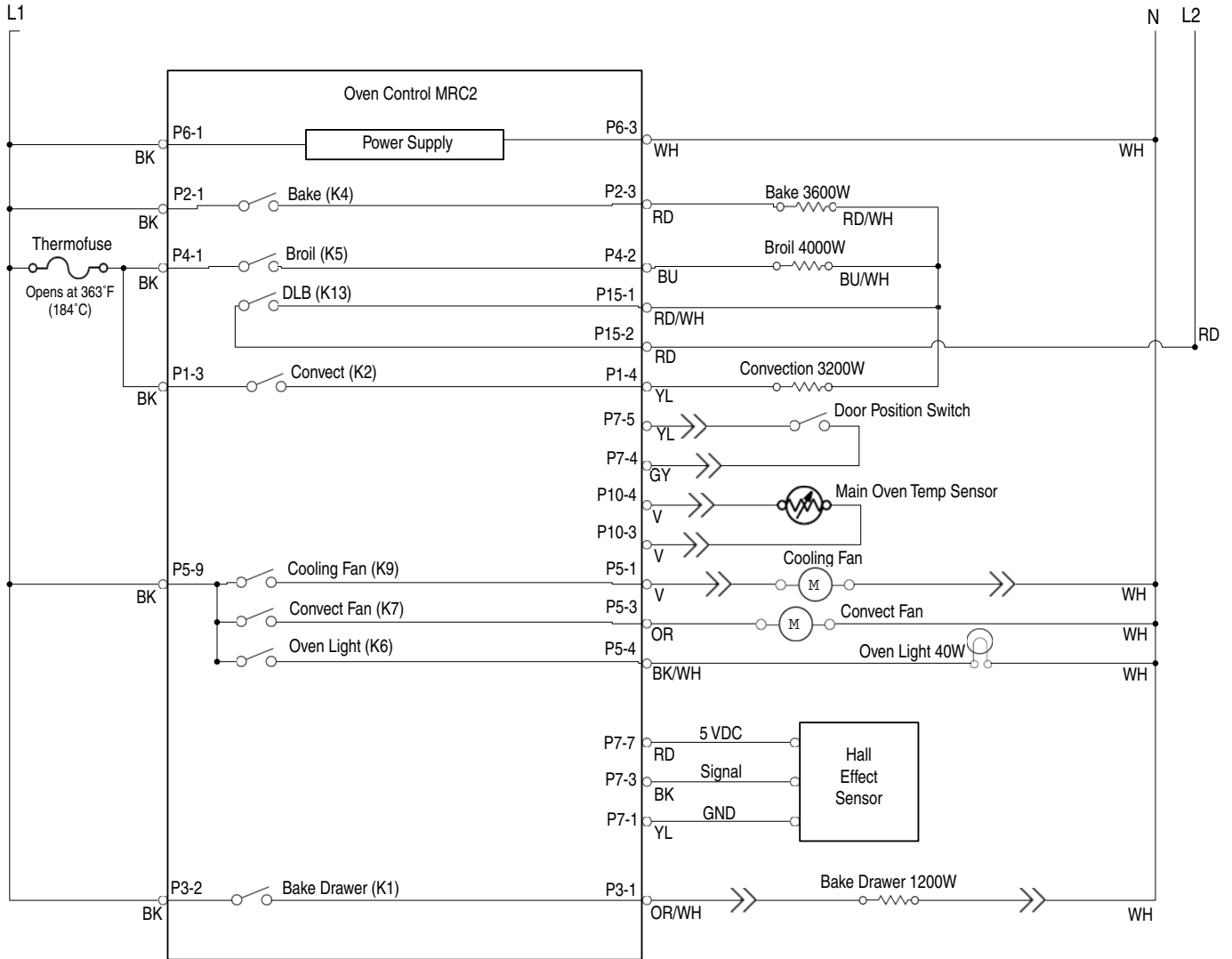
NOTE: Schematic shows oven door open and elements off.



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Wiring Diagram - Typical Electric Oven/Dual Fuel Oven Control

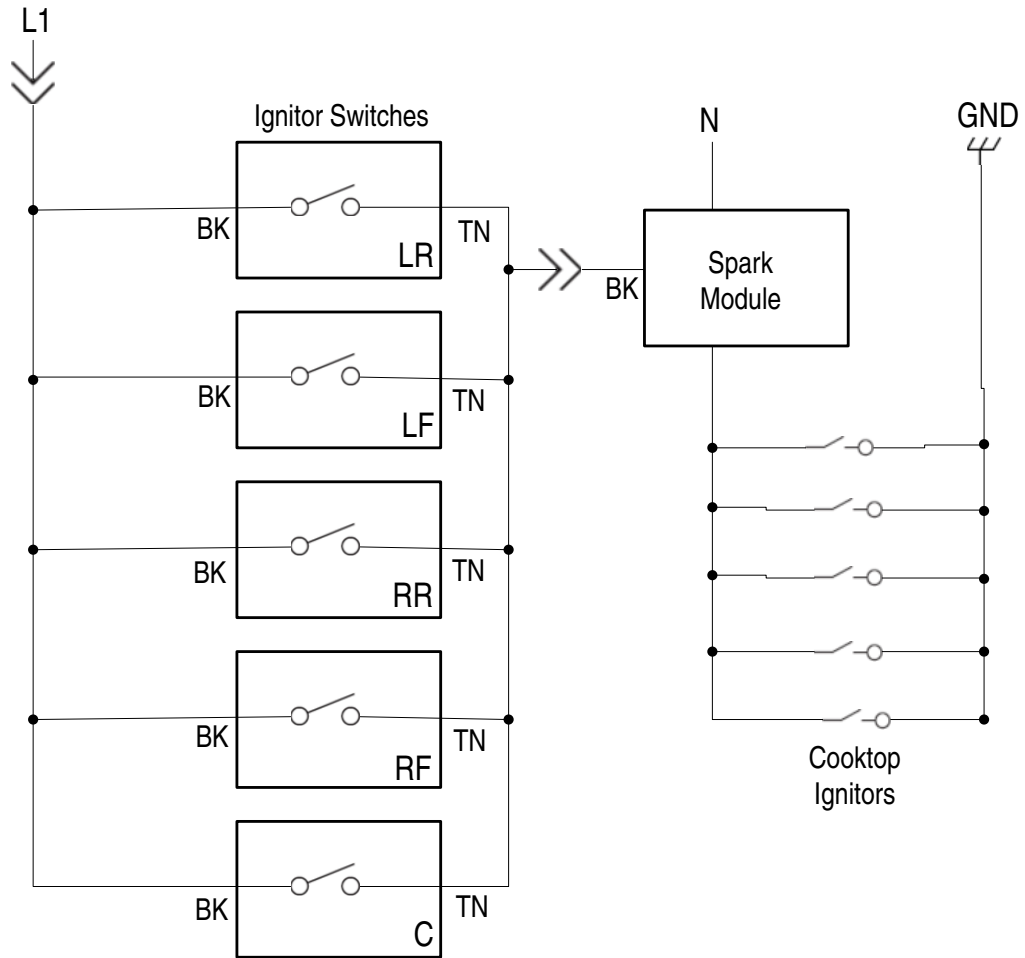
NOTE: Schematic shows oven door open and elements off.



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Wiring Diagram

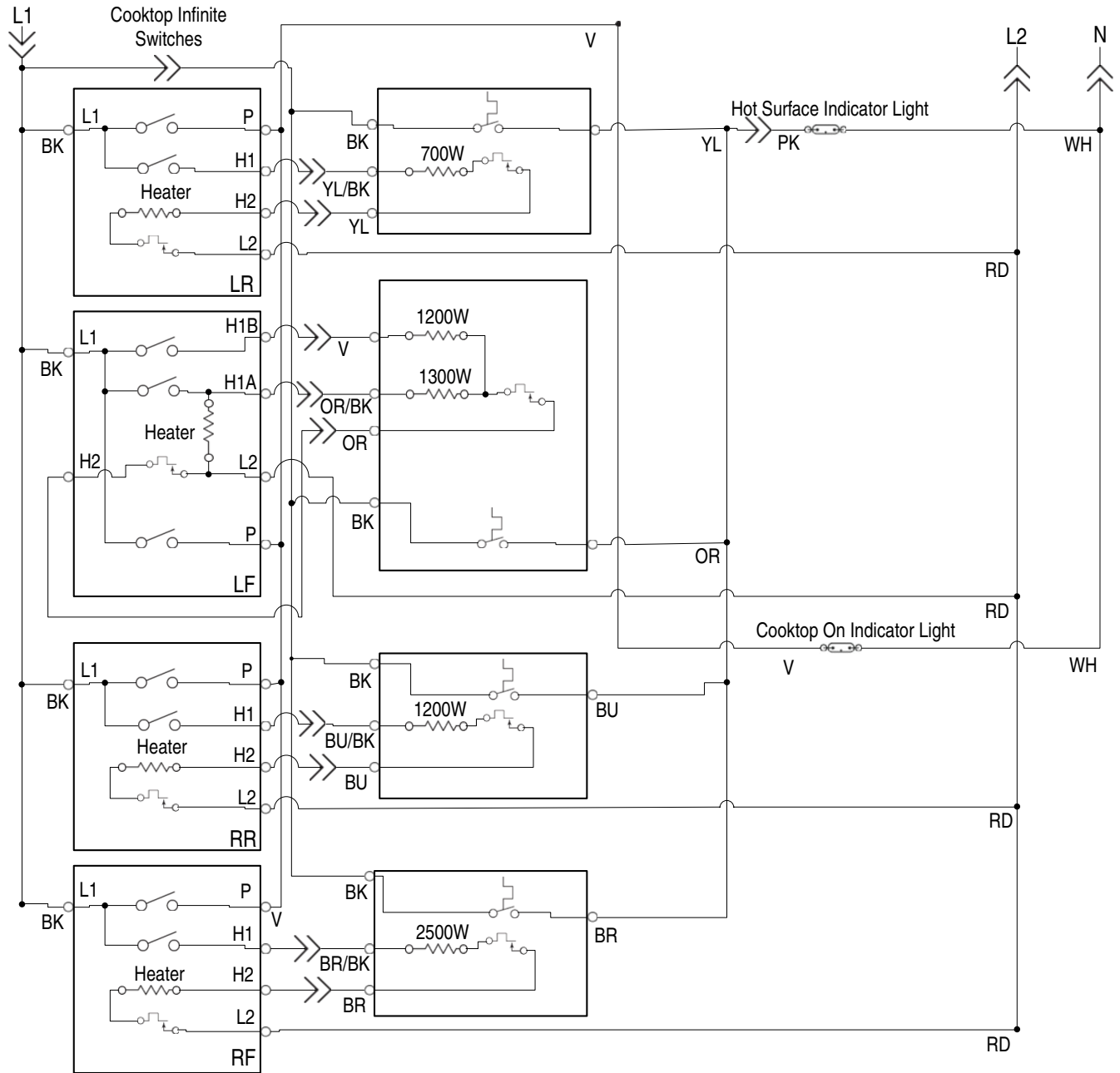
Typical Gas Cooktop



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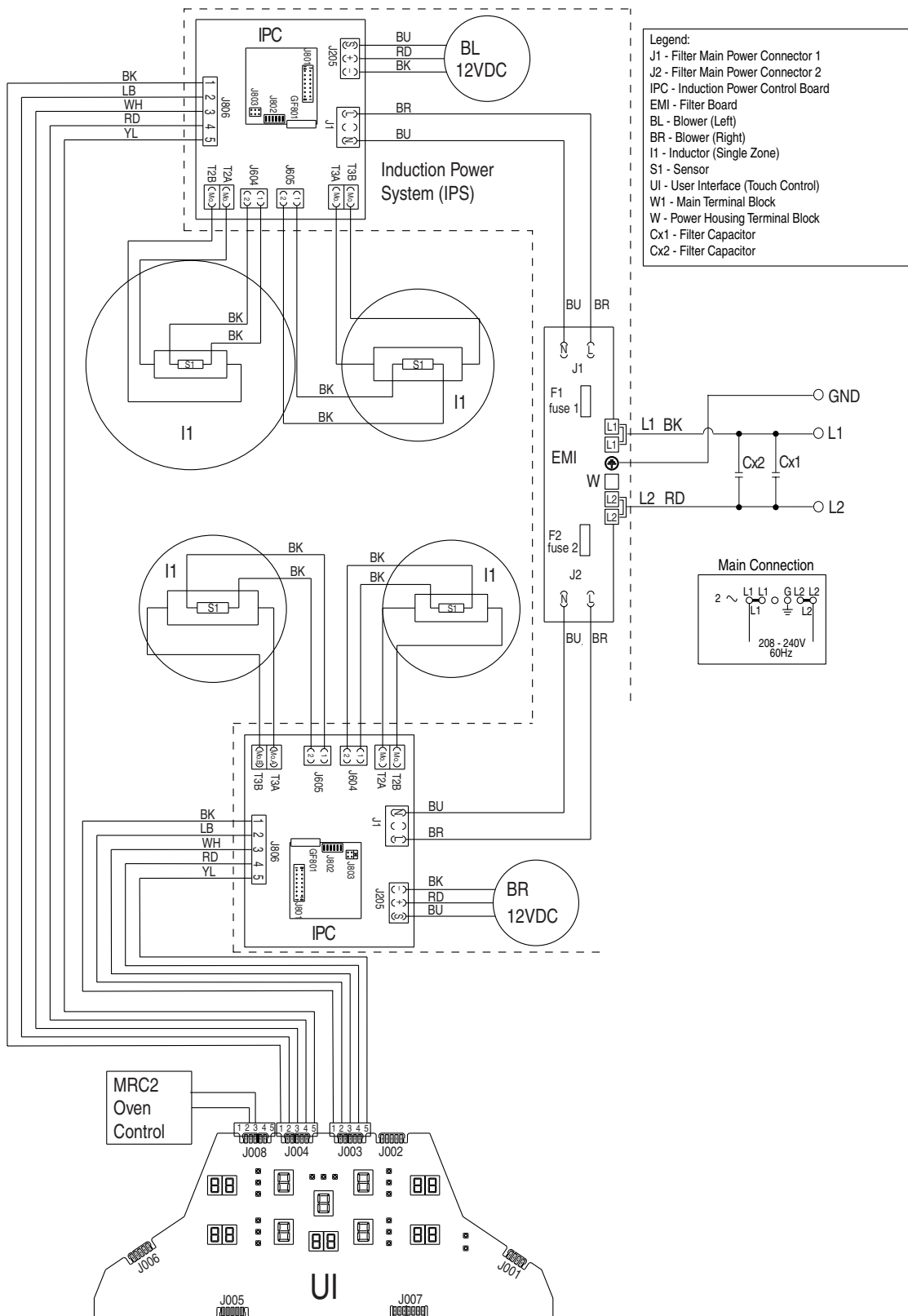
Wiring Diagram

Typical Electric Cooktop



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Wiring Diagram Induction Cooktop



PRODUCT SPECIFICATIONS & WARRANTY INFORMATION SOURCES

IN THE UNITED STATES:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

FOR WHIRLPOOL PRODUCTS:	1-800-253-1301
FOR KITCHENAID PRODUCTS:	1-800-422-1230

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-832-7174

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN
AUTHORIZED IN-HOME SERVICE PROFESSIONAL**

FOR LITERATURE ORDERS (CUSTOMER EXPERIENCE CENTER):

PHONE: 1-800-253-1301

FOR TECHNICAL INFORMATION AND SERVICE POINTERS:

www.servicematters.com

IN CANADA:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL

1-800-461-5681

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-488-4791

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