

# Service

This manual is to be used by qualified appliance technicians only. Maytag does not assume any responsibility for property damage or personal injury for improper service procedures done by an unqualified person.

## Electric Freestanding Range

This Base Manual covers general information Refer to individual Technical Sheet for information on specific models

This manual includes, but is not limited to the following:

AER5515QA\* AER5715QA\* AER5725QA\* AER5735QA\* AER5854QA\* JER8785QA\* JER8885QA\* MER55555QA\* MER5755QA\* MER5775QA\* MER5775QA\* PER5750QA\* PER5750LA\*



16025644 October 2004 Replaces 16022487

## **Important Information**

## **Important Notices for Servicers and Consumers**

Maytag will not be responsible for personal injury or property damage from improper service procedures. Pride and workmanship go into every product to provide our customers with quality products. It is possible, however, that during its lifetime a product may require service. Products should be serviced only by a qualified service technician who is familiar with the safety procedures required in the repair and who is equipped with the proper tools, parts, testing instruments and the appropriate service information. IT IS THE TECHNICIANS RESPONSIBLITY TO REVIEW ALL APPROPRIATE SERVICE INFORMATION BEFORE BEGINNING REPAIRS.



To avoid risk of severe personal injury or death, disconnect power before working/servicing on appliance to avoid electrical shock.

To locate an authorized servicer, please consult your telephone book or the dealer from whom you purchased this product. For further assistance, please contact:

#### **Customer Service Support Center**

CAIRCenter	
Web Site	<u>Telephone Number</u>
WWW.AMANA.COM	
WWW.JENNAIR.COM	
WWW.MAYTAG.COM	1-800-688-9900
CAIR Center in Canada Amana Canada Product	

#### **Recognize Safety Symbols, Words, and Labels**



DANGER—Immediate hazards which WILL result in severe personal injury or death.

## WARNING

WARNING—Hazards or unsafe practices which COULD result in severe personal injury or death.

## 

**CAUTION**—Hazards or unsafe practices which **COULD** result in minor personal injury, product or property damage.

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## **Important Safety Information**

## A WARNING

To reduce the risk of the appliance tipping, it must be secured by a properly installed anti-tip bracket(s). To make sure bracket has been installed properly, remove the storage drawer or decorative panel and look under the range with a flashlight. Bracket(s) must be engaged in the rear corner of the range.



- ALL RANGES CAN TIP
- INJURY TO PERSONS COULD RESULT
- INSTALLANTI-TIP BRACKET(S) PACKED WITH RANGE
- SEE INSTALLATION
   INSTRUCTIONS

## A WARNING

To avoid personal injury, do not sit, stand or lean on oven door or oven drawer.

## A WARNING

To avoid risk of electrical shock, personal injury, or death, make sure your range has been properly grounded and always disconnect it from main power supply before any servicing.

## A WARNING

This appliance contains or produces a chemical or chemicals which can cause death or serious illness and which are known to the state of California to cause cancer, birth defects or other reproductive harm. To reduce the risk from substances in the fuel or from fuel combustion make sure this appliance is installed, operated, and maintained according to the instructions in this booklet.

#### 

Do not store items of interest to children in cabinets above a range or behind the backguard of a range. Children climbing on the range to reach items could be seriously injured.

## A WARNING

To avoid risk of electrical shock, personal injury, death, or property damage, verify wiring is correct, if components were replaced. Verify proper complete operation of unit after servicing.

## CAUTION

DO NOT TOUCH SURFACE UNITS OR AREAS NEAR UNITS—Surface units may be hot though they are dark in color. Areas near surface units may become hot enough to cause burns. During and after use, do not touch, or let clothing touch or other flammable materials contact surface units or areas near surface units until they have had enough time to cool. These areas include the rangetop and backguard.

## CAUTION

DO NOT TOUCH HEATING ELEMENTS OR INTERIOR SURFACES OF OVEN—Oven heating elements may be hot though they are dark in color. Interior surfaces of an oven may become hot enough to cause burns. During and after use, do not touch, or let clothing or other flammable materials touch heating elements or interior surfaces of oven until they have had enough time to cool. Other range surfaces that may become hot enough to cause burns are the oven door and oven.

## **ALL APPLIANCES**

- 1. Proper Installation—Be sure your appliance is properly installed and grounded by a qualified technician.
- 2. Never Use Your Appliance for Warming or Heating the Room.
- 3. Do Not Leave Children Alone—Children should not be alone or unattended in the area where the appliance is in use. They should never be allowed to sit or stand on any part of the appliance.
- 4. Wear Appropriate Apparel—Loose fitting or hanging garments should never be worn while using appliance.
- 5. User Servicing—Do not repair or replace any part of the appliance unless specifically recommended in the manual. All other servicing should be referred to a qualified technician.
- 6. Storage in or on Appliance—Flammable materials should not be stored in an oven or near surface units.
- 7. Do Not Use Water on Grease Fires—Smother fire or flame, or use dry chemical or foam-type extinguisher.
- 8. Use Only Dry Potholders—Moist or damp potholders on hot surfaces may result in burns from steam. Do not let potholder touch elements. Do not use a towel or other bulky cloth.

## **Important Safety Information**

## SURFACE COOKING UNITS

- Use Proper Pan Size—This appliance is equipped with one or more surface units of different size. Select utensils having flat bottoms large enough to cover the surface unit heating element. The use of undersized utensils will expose a portion of the heating element to direct contact and may result in ignition of clothing. Proper relationship of utensil to burner will also improve efficiency.
- 2. Never Leave Surface Units Unattended—Boilover causes smoking and greasy spillovers that may ignite.
- 3. Make Sure Reflector Pans or Drip Bowls Are In Place—Absence of these pans or bowls during cooking may subject wiring or components underneath to damage.
- 4. Protective Liners—Do not use aluminum foil to line oven bottom. Improper installation of these liners may result in a risk of electrical shock or fire.
- 5. Glazed Cooking Utensils—Do not use glass, ceramic, earthware, or other glazed utensils. They can damage smoothtop and can break due to sudden change in temperature.
- 6. Utensil Handles Should be Turned Inward and Not Extend Over Adjacent Surface Units—To reduce the risk of burns, ignition of flammable materials, and spillage due to unintentional contact with the utensil, the handle of a utensil should be positioned so that it is turned inward, and does not extend over adjacent surface units.
- 7. Do Not Soak Removable Heating Elements—Heating elements should never be immersed in water.

## OVENS

- 1. Use Care When Opening Door—Let hot air or steam escape before removing or replacing food.
- Do Not Heat Unopened Food Containers—Buildup of pressure may cause container to burst and result in injury.
- 3. Keep Oven Vent Ducts Unobstructed.
- 4. Placement of Oven Racks—Always place oven racks in desired location while oven is cool. If rack is removed while oven is hot, do not let potholder contact hot heating element in oven.

## **VENTILATION HOODS**

- 1. Clean Ventilation Hoods Frequently—Grease should not be allowed to accumulate on hood or filter.
- 2. When flaming foods under hood, turn fan off. The fan, if operating, may spread the flame.

## In Case of Fire

Fires can occur as a result of over cooking or excessive grease. Though a fire is unlikely, if one occurs, proceed as follows:

## Surface Element Fire

- 1. Smother the fire with a nonflammable lid or baking soda, or use a Class ABC or BC extinguisher. Not water. Not salt. Not flour.
- 2. As soon as it is safe to do so, turn the surface controls to "OFF".

## **Oven Fires**

- 1. If you see smoke from your oven, do not open oven door.
- 2. Turn oven control to "OFF".
- 3. As an added precaution, turn off power at main circuit breaker or fuse box.
- 4. Turn on vent to remove smoke.
- 5. Allow food or grease to burn itself out in oven. Do not open oven door.
- 6. If smoke and fire persist, call fire department.
- 7. If there is any damage to components, call an authorized servicer before using range.

#### Precautions

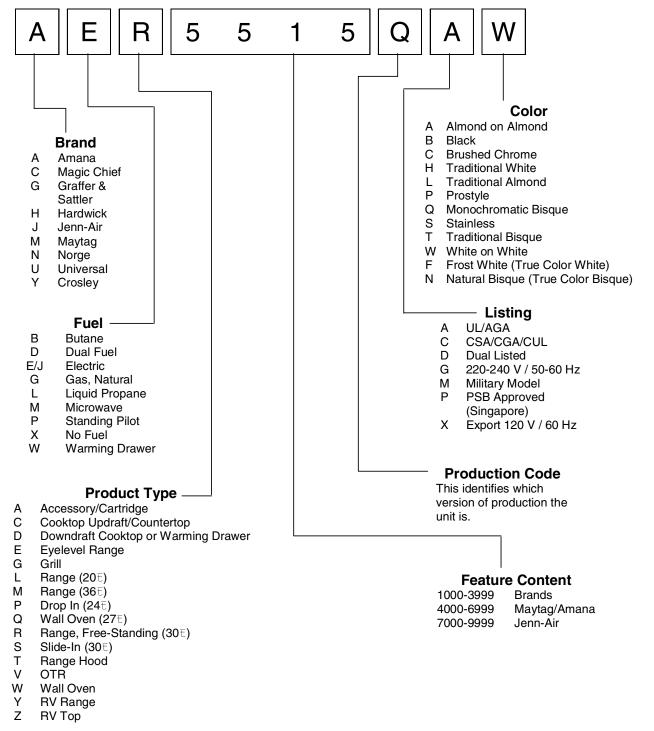
- Do not cook food directly on range top surface, always use cookware.
- Do not mix household cleaning products. Chemical mixtures may interact with objectionable or even hazardous results.
- Do not put plastic items on warm cooking areas. They may stick and melt.
- Do not slide rough objects across range top surface. Scratching or metal marking can result.
- Do not leave fat heating unless you remain nearby. Fat can ignite if overheated by spilling onto hot surfaces.
- Do not allow pots to boil dry as this can cause damage to cooking surface and pan.
- Do not use range top surface as a cutting board.
- Do not use range for storage or as a display counter.

## **General Information**

This manual provides basic instructions and suggestions for handling, installing , and servicing electric ranges.

The directions, information, and warnings in this manual are developed from experience with, and careful testing of the product. If the unit is installed according to the Installation Instructions, it will operate properly and will require minimal servicing. A unit in proper operating order ensures the consumer all the benefits provided by efficient electric cooking. This manual contains information needed by authorized service technicians to install and service electric ranges pertaining to this manual. There maybe, however some information which needs further explanation. Refer to individual Installation Instructions, Use and Care, Technical Sheets, or toll free technical support line to answer questions from authorized service technicians.

## **Cooking Nomenclature**



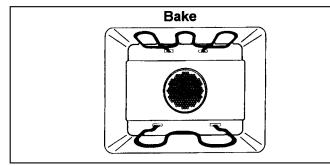
## **General Information**

#### **Rating Label**

Model numbers are recorded on the rating label. Rating label is located on the lower front left corner of the oven frame. It can be seen by opening the storage drawer or warming drawer. Before ordering parts, write down the correct model and serial number from rating label. This avoids incorrect shipments and delays. Please refer to parts reference material when ordering replacement parts.

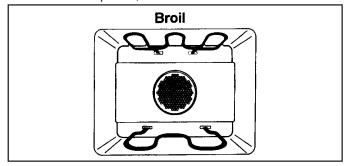
#### Functional Operation Bake

Top and bottom elements operate during bake. Bake can be used to cook foods which are normally baked. Oven must be preheated.



#### Broil

Top element operates during broil. Broil can be used to cook foods which are normally broiled. Preheating is not required when using broil. All foods should be turned at least once except fish, which does not need to be turned.



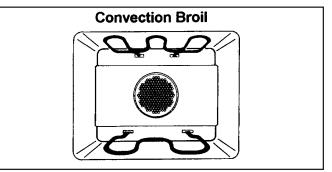
#### **Convection Bake**

Upper element, lower element, and fan operate during convection bake. Convection bake should be used for cooking casseroles and roasting meats. Oven should be preheated for best results when using convection bake. Pans do not need to be staggered. Cooks approximately 25% quicker than bake.



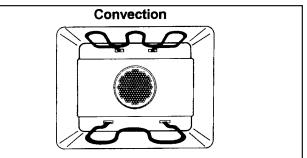
#### **Convection Broil**

Top element and fan operate when using convection broil. Convection broil can be used to cook foods that are normally broiled. Oven does not require preheating when using convection broil. Food does not need to be turned during cooking. Cooks approximately 25% quicker than broil.



#### Convection

Rear element and fan operate during convection. Convection should be used for cooking pastries, souffles, yeast bread, cakes and cookies. Oven should be preheated for best results when using convection. Pans do not need to be staggered. Cooks approximately 25% quicker than bake.



#### **Cooking Guide**

Refer to owners manual, for following recommendations only as a guide for times and temperature. Times, rack position, and temperatures may vary depending on conditions and food type. For best results, always check food at minimum time. When roasting, choose rack position based on size of food item.

## **General Information**

#### **Specifications**

Refer to individual Technial Sheet for information regarding specifications.

#### **Model Identification**

Complete registration card and promptly return. If registration card is missing:

- For Amana product call 1-800-843-0304 or visit the Web Site at www.amana.com
- For Maytag product call 1-800-688-9900 or visit the Web Site at www.maytag.com
- For Jenn-Air product call 1-800-536-6247 or visit the Web Site at www.jennair.com
- For product in Canada call 1-866-587-2002 or visit the Web Sites at www.amana.com or www.maytag.com or www.jennair.com

When contacting provide product information located on rating plate. Record the following:

Model Number:	
Manufacturing Number:	
Serial or S/N Number:	
Date of purchase:	
Dealer's name and address:	

## Service

Keep a copy of sales receipt for future reference or in case warranty service is required. To locate an authorized servicer:

- For Amana product call 1-800-628-5782 or visit the Web Site at www.amana.com
- For Maytag/Jenn-Air product call 1-800-462-9824 or visit the Web Site at www.maytag.com or www.jennair.com
- For product in Canada call 1-866-587-2002 or visit the Web Sites at www.amana.com or www.maytag.com or www.jennair.com

Warranty service must be performed by an authorized servicer. We also recommend contacting an authorized servicer, if service is required after warranty expires.

#### Parts and Accessories

Purchase replacement parts and accessories over the phone. To order accessories for your product call:

- For Amana product call 1-877-232-6771 or visit the Web Site at www.amana.com
- For Maytag/Jenn-Air product call 1-800-462-9824 or visit the Web Site at www.maytag.com or www.jennair.com
- For product in Canada call 1-866-587-2002 or visit the Web Sites at www.amana.com or www.maytag.com or www.jennair.com

#### **Extended Service Plan**

We offer long-term service protection for this new oven.

- Asure<sup>™</sup> Extended Service Plan is specially designed to supplement Amana's strong warranty. This plan covers parts, labor, and travel charges. Call 1-866-232-6244 for information.
- Dependability Plus<sup>SM</sup> Extended Service Plan is specially designed to supplement Maytag's and Jenn-Air's strong warranty. This plan covers parts, labor, and travel charges.

Call 1-800-925-2020 for information.

## **Troubleshooting Procedures**

## WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to oven before servicing, unless testing requires it.

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Problem	Possible Cause	Correction
	Open bake element	Check element for continuity, replace if failed.
No bake element operation	Loose wire connection or broken wire	<ul> <li>Verify all connections are clean and tight, replace broken wire.</li> </ul>
	Open broil element	Check element for continuity, replace if failed.
No broil element operation	Loose wire connection or broken wire	Verify all connections are clean and tight, replace broken wire.
	Programming error	<ul> <li>Shut off power to oven for five minutes by switching off ciruit breaker. Reset circuit breaker and try oven again.</li> </ul>
Oven not operating	Power outage	<ul> <li>Verify power is present at unit. Verify that the circuit breaker is not tripped.</li> </ul>
		<ul> <li>Replace household fuse, but do not fuse capacity.</li> </ul>
	Power outage	<ul> <li>Verify power is present at unit. Verify that the circuit breaker is not tripped.</li> </ul>
Clock and timer not working		<ul> <li>Replace household fuse, but do not fuse capacity.</li> </ul>
		Refer to Use and Care Manual "Operating Instructions", if continues contact service.
	Failed oven lamp	Check lamp and replace is necessary.
Oven light does not operate	Failed wiring	Check for broken, loose or dirty connections.
	Failed light socket	Check light socket for continuity.
	Failed light plunger	Check plunger for continuity.
Self-clean cycle not working	Programming error	<ul> <li>Shut off power to oven for five minutes by switching off ciruit breaker. Reset circuit breaker and try oven again.</li> </ul>
	Oven is self-cleaning	Allow cycle to complete.
Oven door will not unlock	Oven is still hot	<ul> <li>Will not unlock until unit has cooled to safe temperature. Do not force door open, this will void warranty. Blow cool air on door latch area to quicken process.</li> </ul>
Oven smokes/odor first few	Normal	• Minor smoking or order is normal the first few times of oven usage.
times of usage		<ul> <li>Ventilate area well and perform self-clean cycle.</li> </ul>
Failure Codes	Electronically Controlled	Refer to specific Technical Sheet for diagnostic checks.

## **Troubleshooting Procedures**

## **WARNING**

Problem	Possible Cause	Correction
	Open element	<ul> <li>Check element for continuity, replace if failed.</li> </ul>
Surface element does not heat	Loose wire connection or broken wire	<ul> <li>Verify all connections are clean and tight, replace broken wiring.</li> </ul>
	Failed infinite switch	<ul> <li>Check infinite switch, replace if failed.</li> </ul>
Frequent cycling of surface element or warming zone	Normal	<ul> <li>Element cycles to maintain proper heat and to prevent damage to smoothtop.</li> </ul>

**WARNING** 

Illustration	Component	Test Procedure	Results
	Oven light socket	Remove one wire from receptacle and	
		test resistance of terminals	Indicates continuity with bulb screwed in.
		Measure voltage at oven light	120 VAC, see wiring diagram for terminal identification.
			If no voltage is present at oven light, check wiring or light switches.
1500 W-4 turn	Coil elements	Remove element and measure	Continuity, if not replace.
2350 W–5 turn		resistance across terminals.	1500W: 35 to 39 $\Omega$ Approximately
			2350W: 22 to 25 $\Omega$ Approximately
100 W	Warming element	Remove one wire lead from element	Continuity, if not replace.
		and measure resistance of the	6" – 100W: 132.8 to 146.9 Ω
4000 \\	D'h h a a sa d'a at	element.	Approximately
1200 W 2500 W	Ribbon radiant elements	Remove one wire lead from element	Continuity, if not replace. 1200W: 44 to 49 $\Omega$ Approximately
2500 W	elements	and measure resistance of the element.	2500W: 21 to 24 $\Omega$ Approximately 2500W: 21 to 24 $\Omega$ Approximately
2400/1000 W		element.	
2700/1700 W		Dual element-1000 + 1400 = 2400 W	2700W: 20 to 22 $\Omega$ Approximately 2400W: 53 to 59 $\Omega$ Approximately inner
			$38 \text{ to } 42 \Omega \text{ Approximately inner}$
		Dual element-1700 + 1000 = 2700 W	2700W: 31to 34 $\Omega$ Approximately only inner
			53 to 59 $\Omega$ Approximately nine 53 to 59 $\Omega$
	Ribbon surface	Disconnect leads and measure	
$\sim$	thermal limiter/hot	resistance on the following:	240 VAC
	light switch	1a-2a room temperature-continuity	Electrovac Therm-O-Disc (TOD)
		1b–2b room temperature–infinite	
		The second	
		Turn surface element on and test for voltage. See wiring diagram and	2b b b Hot light circuit
		schematic.	2b 2a Circuit
		1a–2a 240 VAC	Hot light O Heater circuit Circuit
		1b-2b 120 VAC	1b 1a 2a 1a Heater circuit
	Snap Action Infinite	Connect Volt-ohms meter to	
	switch	H1 and H2.	Approximate Time On Time Off
	ownorr	TH and HE.	LO 5% 95%
			MED (4-5) 35% 65%
		Measure the following for voltages at	HI 100% 0%
		LO, MED, HI:	
•••		H1 to H2	240 VAC, if not replace switch.
п. тор	Dual Infinite switch	Connect Volt-ohms meter to	Approximate Time On Time Off
		H1 and H2.	Time On         Time Off           LO         8%         92%
			MED (4-5) 35% 65%
		Measure the following for voltages at	HI 100% 0%
		LO, MED, HI:	
		H1 to H2	240 VAC, if not replace switch.
	Infinite switch, low	Connect Volt-ohms meter to	Approximate
	heat	H1 and H2.	Time On Time Off
412			LO 3% 97%
		Measure the following for voltages at	MED (4-5) 35% 65% HI 100% 0%
		LO, MED, HI:	TH 100 /0 0 /0
		H1 to H2	240 VAC, if not replace switch.
	Convection motor fan	Verify supply voltage	120 VAC
		Manaura continuity at the following	
		Measure continuity at the following points:	
		Terminal to terminal	Continuity
		Terminal to ground	Infinite
	ļ		

## **WARNING**

Illustration	Component	Test Procedure	Results
	Warming element	Disconnect wire leads to element and	Approximately 25.4 $\Omega$ ,
Ħ		measure resistance of terminals	if not replace.
		Measure voltage at element	120 VAC, see wiring diagram for terminal identification. If no voltage is present at element check wiring.
	Convection element	Test continuity of terminals	Approximately 30 $\Omega$ - cold
		Test voltage to terminals	240 / 208 VAC
	Bake element	Disconnect wire leads to element and measure resistance of terminals	Approximately 18.6 $\Omega$ , if not replace.
		Measure voltage at bake element	240 VAC, see wiring diagram for terminal identification. If no voltage is present at bake element check wiring.
	Broil element	Disconnect wire leads to element and measure resistance of terminals	Approximately 15.5 $\Omega$ , if not replace.
		Measure voltage at broil element	240 VAC, see wiring diagram for terminal identification. If no voltage is present at broil element check wiring.
C	Oven temperature sensor	Measure resistance.	Approximately 1100 $\Omega$ at room temperature 80°F.
	Oven indicator light and Surface indicator light	Measure voltage at indicator light.	If voltage is present and light does not work replace light. If no voltage is present at indicator light check wiring.
	Rocker switch	Measure continuity of switch positions: Closed Open	Continuity Infinite
	Door plunger switch	Measure continuity at the following points: C-NO	Plunger in continuity, Plunger out infinite.
	Auto latch assembly with switch	Disconnect wires and test for continuity per wiring diagram.	Refer to wiring diagram for schematic layout.
X			Refer to Parts Manual for correct auto latch switch associated with the correct model number.
	Limiter	Normally Closed Verify proper operation. Open320°F Manual Reset- Closed	Infinite Continuity
	Hi-limit switch	Verify proper operation.	Open at 140°F Closes at 120°F

A WARNING

Illustration	Test Procedure		Results	
Matrix	Continuity is indicated as follows:	Pad	Trace	Measurement
Control Panel Assembly	1000 – 6600 $\Omega$ for Cancel pad	1	5 & 14	Continuity
	$1000 - 15000 \Omega$ for All other pads	2	4 & 14	Continuity
		3	4 & 13	Continuity
Baks Brail Duen Peworke		4	4 & 12	Continuity
		5	4 & 10	Continuity
Convert Cencel		6	13 & 14	Continuity
	16	7	4 & 5	Continuity
Boot Boot Territor Contraction	0	8	5 & 13	Continuity
		9	5 & 12	Continuity
		0	5 & 10	Continuity
	9	Cancel	1 & 2	Continuity
		Clock	13 & 15	Continuity
	8	Cook & Hold	12 & 11	Continuity
		Broil	7 & 15	Continuity
		Bake	7 & 14	Continuity
	$\bigcirc$	Convect	10 & 11	Continuity
		Clean	10 & 12	Continuity
	•	Keep Warm	4 & 7	Continuity
		Favorites	10 & 15	Continuity
		Timer	12 & 13	Continuity
		Light	12 & 15	Continuity
Matrix	Continuity is indicated as follows:	Pad	Trace	Measurement
Control Panel Assembly	1000 – 6600 $\Omega$ for Cancel pad	1	13 & 15	Continuity
	1000 – 15000 $\Omega$ for All other pads	2	12 & 15	Continuity
Keep Bake 1 2 3		3	10 & 15	Continuity
warm Detay		4	7 & 13	Continuity
Gian 2mil 4 5 6		5	12 & 13	Continuity
7 8 9		6	10 & 12	Continuity
Oven Ught Timer Clock Cock & Add Favorite (1) CANCEL	16	7	4 & 13	Continuity
Ugin: Timer Clock Cook & Favorite () CANCEL		8	4 & 12	Continuity
		9	4 & 10	Continuity
		0	5 & 12	Continuity
	9	Cancel	1 & 2 or 3	Continuity
		Clock	5 & 14	Continuity
	8	Cook & Hold	15 & 14	Continuity
		Broil	4 & 5	Continuity
		Bake	7 & 15	Continuity
	0	Clean	13 & 14	Continuity
		Keep Warm	7 & 14	Continuity
	-	Favorites	5 & 13	Continuity
		Timer	4 & 14	Continuity
		Light	12 & 11	Continuity

## A WARNING

Illustration	Test Procedure		Results	
Matrix	Continuity is indicated as follows:	Pad	Trace	Measurement
Control Panel Assembly	1000 – 6600 $\Omega$ for Cancel pad	1	13 & 15	Continuity
-	1000 – 15000 $\Omega$ for All other pads	2	12 & 15	Continuity
		3	10 & 15	Continuity
Keep Convect Bake in 2 3		4	7 & 13	Continuity
4 5 6		5	12 & 13	Continuity
Geen Roast Broll 7 8 9		6	10 & 12	Continuity
077	16	7	4 & 13	Continuity
Ught Drying Proviling Timer Clock Cook 5 Favorite () CANCEL		8	4 & 12	Continuity
		9	4 & 10	Continuity
		0	5 & 12	Continuity
	9	Cancel	1 & 2	Continuity
	9	Convect Bake	7 & 14	Continuity
	8	Convect Roast	13 & 14	Continuity
		Keep Warm	4 & 7	Continuity
		Bake	7 & 15	Continuity
	$\bigcirc$	Broil	4 & 5	Continuity
	1	Clean	5 & 7	Continuity
		Drying	11 & 12	Continuity
		Proofing	5 & 10	Continuity
		Timer	4 & 14	Continuity
		Clock	5 & 15	Continuity
		Cook & Hold	11 & 15	Continuity
		Favorite	5 & 13	Continuity
		Light	10 & 11	Continuity
Matrix	Continuity is indicated as follows:	Pad	Trace	Measurement
Control Panel Assembly	1000 – 6600 $\Omega$ for Cancel pad	1	13 & 15	Continuity
,	$1000 - 15000 \Omega$ for All other pads	2	12 & 13	Continuity
	1000 – 15000 22 101 All other paus	3	12 & 15	Continuity
		4	4 & 14	Continuity
		5	4 & 12	Continuity
		6	4 & 10	Continuity
Bake Keep Hold Imer Ught Autoe	16	7	5 & 13	Continuity
Warm Connect Rescrite Cock CANCE 7 8 9		8	5 & 12	Continuity
		9	5 & 10	Continuity
		0	10 & 12	Continuity
	9	Cancel	1 & 2 or 3	Continuity
	3	Clock	4 & 5	Continuity
	8	Cook & Hold	4 & 7	Continuity
	0	Broil	5 & 7	Continuity
		Bake	10 & 11	Continuity
	$\bigcirc$	CV Bake	4 & 13	Continuity
	1 5	CV Roast	7 & 14	Continuity
		Clean	7 & 15	Continuity
		Keep Warm	11 & 12	Continuity
		Favorites	13 & 14	Continuity
		Timer	5 & 14	Continuity

## A WARNING

Illustration	Component	Test Procedure	Results
H1 Controlled	Oven temperature adjustment	Press <b>BAKE</b> pad. Enter <b>550</b> on the digit-pad. Immediately press and hold <b>BAKE</b> pad for 3 seconds.	While increasing or decreasing oven temperature, this does not affect self- cleaning temperature.
		Oven can be adjusted from -35 to +35 degrees in 5-degree increments by pressing <b>AUTOSET</b> pad. To avoid over adjusting the oven, move temperature 5 degrees each time. Wait 4 seconds for the data entry timer to expire to accept the change. Temperature adjustment will be retained even through a power failure.	
H1 Controlled	Temperature display	Press and hold <i>Cancel</i> and <i>Bake</i> pads for 3 seconds.	This mode enables the user to indicate °F or °C on the display.
H1 Controlled	Clock Display	Press and hold <i>Cancel</i> and <i>Clock</i> pads for 3 seconds.	Allows clock to be toggled On or OFF.
H1 Controlled	24 Hour Clock	Press and hold <i>Cancel</i> and <i>Favorites</i> pads for 3 seconds.	Allows the time on the clock to be toggled from 12 hour or 24 hour display.
H1 Controlled	Factory Default	Press and hold <i>Cancel</i> and <i>Keep</i> <i>Warm</i> pads for 3 seconds.	Allows the clock to be reset to factory settings.
H1 Controlled	Twelve hour off	Control will automatically cancel any cooking operation and remove all relay drives 12 hours after the last pad touch.	See Sabbath mode to disable.
H1 Controlled	Sabbath Mode	Hold <i>CLOCK</i> pad for 3 seconds to activate Sabbath mode. Hold <i>CLOCK</i> pad for 3 seconds to disable Sabbath mode.	"SAb" will be displayed and flash for 5 seconds. Display will go back to time of day. All pad inputs are disabled except for CANCEL and CLOCK pads. This mode disables the normal 12 hour shutoff to allow operation of the bake mode for a maximum of 72 hours.
H1 Controlled	Child lock out	Press and hold <i>Cancel</i> and <i>Cook &amp;</i> <i>Hold</i> pads for 3 seconds. "OFF" will display where the temperature normally appears. "LOCK" will display flashing while door is locking.	This is a safety feature that can be used to prevent children from accidentally programming the oven. It disables the electronic oven control.
		To reactivate the control, press and hold <i>Cancel</i> and <i>Cook &amp; Hold</i> pads for 3 seconds.	Child lockout features must be reset after a power failure.
H1 Controlled	Diagnostic Code Display	See "Quick Test Mode". Cycle through the codes using the number pads 1 through 5.	The last 5 diagnostic codes will be stored in the non-volatile memory. See " <b>Description of Error Codes</b> " for explanation.

## 🔒 WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires power.

## "Quick Test" Mode for Electronic Range Control

Follow procedure below to use the quick test mode. Entries must be made within 32 seconds of each other or the control will exit the quick test mode.

- 1. **Press and hold** *CANCEL* and *BROIL* pads for 3 seconds.
- 2. Once the control has entered the "Quick Test" mode, release both pads.
- 3. Press each of the following pads indicated in the table below.
- **NOTE:** First time one of following pads is pressed it will activate the response. The second time the pad is pressed it will deactivate the response.

#### Display will indicate the following:

Pad	Response
BAKE	Bake DLB and Bake relay activated
BROIL	Broil DLB and Broil relay activated
KEEP WARM	Bake DLB and Broil DLB activated
CONVECT BAKE	Convection Fan on high speed
CONVECT ROAST	Convection Fan activated onlow speed (Jenn-Air models only)
CLEAN	
COOK & HOLD	Displays last diagnostic code
FAVORITE	Displays EEPROM version number
TIMER	Displays main code version number
	All display segments illuminated
OVEN LIGHT	
CANCEL	Exit Quick Test mode
1	Even segments on
2	Odd segments on
	Convection Ring activated; Convection Ring DLB activated
4	N/A
5	
6	N/A
7	
8	
9	N/A
	Steps through last 5 diagnostic codes

#### **Description of Error Codes**

Error diagnostic codes can only be viewed by entering the Diagnostic Code Display Mode. Each error code is four digits long and is created based on the following table.

Digit	Description		
1 <sup>st</sup>	Primary System: 1 – Local to the control circuit board		
		3 – Sensor or meat probe	
		4 – Control input	
		9 – Door lock	
2 <sup>nd</sup>	Measurable:	d – Diagnostic: measurable parameter	
		c – Control related, replace control	
3 <sup>rd</sup>	Secondary System: Sequential numbering		
4 <sup>th</sup>	Oven Cavity: 1 – Upper oven (or single cavity oven)		
		2 – Lower oven	
		c – Control specific	

Diagnostic Code Display Mode can be activated by **pressing and holding** the *AUTOSET* pad for 3 seconds at power-up. **Diagnostic Code Display Mode can only be started while powering up the control.** 

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires power.

WARNING

#### Diagnostic Code Checking

Code	Description	When Checked	Detection
1c1c	Shorted key	Always	1 minute
1c2c	Keyboard tail disconnected	Always	1 minute
1c31	Cancel key circuit problem	Always	20 seconds
1c32	Cancel key circuit problem	Always	20 seconds
1c6c	EEPROM error	When accessing EEPROM	3 tries
1c7c	Control not calibrated	Always	3 tries
1c8c	Cooking program error	Cook or clean programmed	3 tries
1d11	Runaway temp (650°F), door unlocked	Latch unlocked	1 minute
1d12	Runaway temp (650°F), door unlocked	Latch unlocked	1 minute
1d21	Runaway temp (950°F), door locked	Latch locked	1 minute
1d22	Runaway temp (950°F), door locked	Latch locked	1 minute
3d11	Sensor open	Cook or clean active	20 seconds
3d12	Sensor open	Cook or clean active	20 seconds
3d21	Sensor shorted	Cook or clean active	20 seconds
3d22	Sensor shorted	Cook or clean active	20 seconds
4d11	Door switch position failure	Clean or keyboard Lockout active	1 minute
4d12	Door switch position failure	Clean or keyboard Lockout active	1 minute
4d21	No reverse airflow fan rotation (no/low RPM)	Clean or Cook programmed	1 minute
4d31	Reverse airflow fan state (on when should be off)	Suppose to be OFF	1 minute
4d51	Door switch circuit failure	Convect, Clean or Keyboard Lockout programmed	1 minute
4d52	Door switch circuit failure	Convect, Clean or Keyboard Lockout programmed	1 minute
9d11	Latch will not lock	Latch should be locked	See Note <sup>6</sup>
9d12	Latch will not lock	Latch should be locked	See Note <sup>6</sup>
9d21	Latch will not unlock	Latch should be unlocked	See Note <sup>6</sup>
9d22	Latch will not unlock	Latch should be unlocked See Note	
9d31	Latch state unknown, both locked and unlocked	Latch should be locked or when lock attempted	See Note <sup>6</sup>
9d32	Latch state unknown, both locked and unlocked	Latch should be locked or when lock attempted	See Note <sup>6</sup>

#### **Diagnostic Code Handling**

Code	Measurable	What is Displayed	Action Taken By Control
1c1c	Keypress	Nothing	Disables audible for affected key depression Disables all outputs <sup>1, 2</sup> Disables lights and timers
1c2c	Keyboard loop improper value	Nothing	Disables audible for key depression Disables all outputs <sup>1</sup> Disables lights and timers
1c31	Cancel key improper value	BAKE flashes <sup>3</sup>	Disables all outputs for cavity 1
1c32	Cancel key improper value	BAKE flashes <sup>3</sup>	Disables all outputs for cavity <sup>1</sup>
1c6c	No response from EEPROM	Nothing	Disables all outputs 1
1c7c	Calibration value out of range	"CAL" in the time digits	Completely disables oven 4
1c8c	CRC invalid	Nothing	Cancels active cook function
1d11	Sensor resistance > 2237 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
1d12	Sensor resistance > 2237 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
1d21	Sensor resistance > 2787 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
1d22	Sensor resistance > 2787 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
3d11	Sensor resistance > Infinite Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
3d12	Sensor resistance > Infinite Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
3d21	Sensor resistance > 0 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
3d22	Sensor resistance > 0 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
4d11	Door switch not closed when door is locked	Nothing	Disables Clean and Lockout functions <sup>5</sup>
4d12	Door switch not closed when door is locked	Nothing	Disables Clean and Lockout functions <sup>5</sup>
4d21	No reverse airflow fan rotation (no/low RPM)	Nothing	Disables all cook function for cavity
4d31	Reverse airflow fan state (on when should be off)	Nothing	No action
4d51	Door switch not open or closed	Nothing	Disables Convect, Clean, and Lockout functions <sup>4, 5</sup> Turn off light and disable light from door switch
4d52	Door switch not open or closed	Nothing	Disables Convect, Clean, and Lockout functions <sup>4, 5</sup> Turn off light and disable light from door switch
9d11	Lock switch not closed	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>
9d12	Lock switch not closed	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>
9d21	Unlock switch not closed	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>
9d22	Unlock switch not closed	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>
9d31	Latch both locked and unlocked	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>
9d32	Latch both locked and unlocked	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>

## WARNING

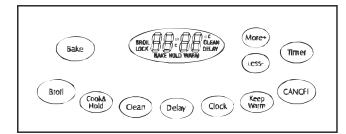
To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires power.

#### NOTES:

- <sup>1</sup> "Action Taken" applies as long as the condition exists. If the condition goes away, the control recovers.
- <sup>2</sup> If there is a cook function or timer active, the function continues. The user cannot edit the function, and [Cancel] will cancel the cook mode.
- <sup>3</sup> Flash rate: 0.2 seconds on, 0.1 second off. Pressing any key will clear the display until the fault clears and is re-triggered.
- <sup>4</sup> "Action Taken" applies until there is a POR (Power On Reset ["hard reset"]).
- <sup>5</sup> If the control believes the door is locked, it will attempt to unlock it when the function cancels and the cavity temperature cools.
- <sup>6</sup> Special conditions for latch faults (9dxx):
  - A known good unlock position is defined as when the unlock switch reads closed and lock switch reads open.
  - A known good lock position is defined as when the unlock switch reads open and lock switch reads closed.
  - A faulted switch means the switch input is reading an invalid state, neither open nor closed.
  - Once a latch fault occurs, latch movement is disabled until there is a POR. An error tone will sound if a function requiring a faulted latch is attempted.
  - If at POR, the latch is not at a known good unlock position:
    - If the latch is at a good lock position, it will attempt to unlock when the RTD (Resistance Temperature Device) temperature is below 400°F.
    - If the latch is not at a good lock position, the control will fault.
  - If a latch fault occurs while the RTD is above the lock temperature, the latch will not try to move, but the fault is still logged to EEPROM after the first stage of detection.
  - The Display column for latch faults applies 1) If the latch was moving when the fault occurred; 2) If the latch is already in a known locked state when the fault occurs.
    - LOCK flashes after a fault is detected and until the unlocked position is achieved. The unlock position may be identified by a successful unlock switch closure, or as the result of timing when the unlock switch is not functioning properly.
  - If the last known good position was unlock (e.g. baking, or idle) and a latch fault occurs, the motor is never moved. The fault is logged to EEPROM and is not seen by the user.
  - The detection for latch faults is in two stages. The first stage is to let the control recover without moving the latch. After this:
    - If the latch was previously at a known good unlock position, the latch will not move and the control will fault.
    - If the control was previously in a known good lock position:
      - If the RTD is below 400°F, the latch will attempt to recover to it's proper position (up to three revolutions). If it cannot, the control will fault and the latch will move to a calculated unlock position.
      - If the RTD is at or above 400°F, the control will fault. When the RTD cools to below 400°F, the control will attempt to recover to a good unlock position (up to three revolutions). If it cannot, the control will fault and the latch will move to a calculated unlock position.
      - **Note:** If the unlock position cannot be found, this may result in a second fault, the first fault occurring when the latch request was locked, and the second when the latch request is unlocked.
    - If the latch is moving when the fault occurs, the control will bypass the first stage of detection and immediately try
      to find it's proper position. If it cannot, the control will fault and the latch will move to a calculated unlock position.
  - Affected DLBs (Double Line Breaks) and loads are disabled during detection.
  - If the control is in a known good unlock position and the lock switch becomes faulted:
    - The control will not fault.
    - If a function requiring latch movement is attempted while the lock switch is faulted, the control will sound an error tone and the function will be disabled.
  - If the control is in a known good lock position and the unlock switch becomes faulted:
    - The control will not fault.
    - After the function is canceled and unlock is attempted, the control will attempt to unlock the latch according to the procedures in these notes.

## A WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires power.

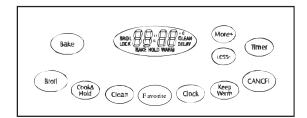


#### **Typical M1 Control**

Illustration	Component	Test Procedure	Results
M1 Controlled	Oven temperature adjustment	Press <b>BAKE</b> pad. Enter <b>550</b> using slew pads. Immediately press and hold <b>BAKE</b> pad for 3 seconds. Oven can be adjusted from -35 to +35	While increasing or decreasing oven temperature, this does not affect self- cleaning temperature.
		degrees in 5-degree increments by pressing <b>SLEW</b> pad. To avoid over adjusting the oven, move temperature 5 degrees each time. Wait 4 seconds for the data entry timer to expire to accept the change. Temperature adjustment will be retained even through a power failure.	
M1 Controlled	Temperature display	Press and hold <i>Cancel</i> and <i>Bake</i> pads for 3 seconds.	This mode enables the user to indicate °F or °C on the display.
M1 Controlled	Clock Display	Press and hold <i>Cancel</i> and <i>Clock</i> pads for 3 seconds.	Allows clock to be toggled On or OFF.
M1 Controlled	24 Hour Clock	Press and hold <i>Cancel</i> and <i>Delay</i> pads for 3 seconds.	Allows the time on the clock to be toggled from 12 hour or 24 hour display.
M1 Controlled	Factory Default	Press and hold <i>Cancel</i> and <i>Keep</i> <i>Warm</i> pads for 3 seconds.	Allows the clock to be reset to factory settings.
M1 Controlled	Twelve hour off	Control will automatically cancel any cooking operation and remove all relay drives 12 hours after the last pad touch.	See Sabbath mode to disable.
M1 Controlled	Sabbath Mode	<ul><li>Hold <i>CLOCK</i> pad for 3 seconds to activate Sabbath mode.</li><li>Hold <i>CLOCK</i> pad for 3 seconds to disable Sabbath mode.</li></ul>	"SAb" will be displayed and flash for 5 seconds. Display will go back to time of day. All pad inputs are disabled except for CANCEL and CLOCK pads. This mode disables the normal 12 hour shutoff to allow operation of the bake mode for a maximum of 72 hours.
M1 Controlled	Child lock out	Press and hold <i>Cancel</i> and <i>Cook &amp; Hold</i> pads for 3 seconds. "OFF" will display where the temperature normally appears. "LOCK" will display flashing while door is locking.	This is a safety feature that can be used to prevent children from accidentally programming the oven. It disables the electronic oven control.
		To reactivate the control, press and hold <i>Cancel</i> and <i>Cook &amp; Hold</i> pads for 3 seconds.	Child lockout features must be reset after a power failure.
M1 Controlled	Diagnostic Code Display	Press and hold <b>Up Arrow</b> pad and <b>Power Up</b> the unit.	The last 5 diagnostic codes will be stored in the non-volatile memory.
		Cycle through the codes using the number pads 1 through 5.	See "Description of Error Codes" for explanation.

## A WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires power.



#### **Typical M2 Control**

Illustration	Component	Test Procedure	Results
M2 Controlled	Oven temperature adjustment	Press <b>BAKE</b> pad. Enter <b>550</b> using slew pads. Immediately press and hold <b>BAKE</b> pad for 3 seconds. Oven can be adjusted from -35 to +35 degrees in 5-degree increments by	While increasing or decreasing oven temperature, this does not affect self- cleaning temperature.
		pressing <i>SLEW</i> pad. To avoid over adjusting the oven, move temperature 5 degrees each time. Wait 4 seconds for the data entry timer to expire to accept the change. Temperature adjustment will be retained even through a power failure.	
M2 Controlled	Temperature display	Press and hold <i>Cancel</i> and <i>Bake</i> pads for 3 seconds.	This mode enables the user to indicate °F or °C on the display.
M2 Controlled	Clock Display	Press and hold <i>Cancel</i> and <i>Clock</i> pads for 3 seconds.	Allows clock to be toggled On or OFF.
M2 Controlled	24 Hour Clock	Press and hold <i>Cancel</i> and <i>Favorite</i> pads for 3 seconds.	Allows the time on the clock to be toggled from 12 hour or 24 hour display.
M2 Controlled	Factory Default	Press and hold <i>Cancel</i> and <i>Keep</i> <i>Warm</i> pads for 3 seconds.	Allows the clock to be reset to factory settings.
M2 Controlled	Twelve hour off	Control will automatically cancel any cooking operation and remove all relay drives 12 hours after the last pad touch.	See Sabbath mode to disable.
M2 Controlled	Sabbath Mode	Hold <b>CLOCK</b> pad for 3 seconds to activate Sabbath mode. Hold <b>CLOCK</b> pad for 3 seconds to disable Sabbath mode.	"SAb" will be displayed and flash for 5 seconds. Display will go back to time of day. All pad inputs are disabled except for CANCEL and CLOCK pads. This mode disables the normal 12 hour shutoff to allow operation of the bake mode for a maximum of 72 hours.
M2 Controlled	Child lock out	Press and hold <i>Cancel</i> and <i>Cook &amp;</i> <i>Hold</i> pads for 3 seconds. "OFF" will display where the temperature normally appears. "LOCK" will display flashing while door is locking.	This is a safety feature that can be used to prevent children from accidentally programming the oven. It disables the electronic oven control.
		To reactivate the control, press and hold <i>Cancel</i> and <i>Cook &amp; Hold</i> pads for 3 seconds.	Child lockout features must be reset after a power failure.
M2 Controlled	Diagnostic Code Display	Press and hold <i>Up Arrow</i> pad and <i>Power Up</i> the unit.	The last 5 diagnostic codes will be stored in the non-volatile memory.
		Cycle through the codes using the number pads 1 through 5.	See " <b>Description of Error Codes</b> " for explanation.

## 🚹 WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires power.

## "Quick Test" Mode for Electronic Range Control

Follow procedure below to use the quick test mode. Entries must be made within 32 seconds of each other or the control will exit the quick test mode.

- 1. Press and hold CANCEL and BROIL pads for 3 seconds.
- 2. Once the control has entered the "Quick Test" mode, release both pads.
- 3. Press each of the following pads indicated in the table below.
- **NOTE:** First time one of following pads is pressed it will activate the response. The second time the pad is pressed it will deactivate the response.
- NOTE: This mode can only be entered within the first 5 minutes after power up.
- **NOTE:** If the temperature sensor is greater than 400F and the Quick Test mode will be disabled if the temperature sensor reaches 400F while under test.

#### Display will indicate the following:

Кеу	Operation
[Bake]	Bake relay activated, DLB relay activated
[Broil]	Broil relay activated, DLB relay activated
[Keep Warm]	DLB relay activated
[Cook&Hold]	Last Diagnostic Code displayed
[Clean]	MDL relay activated (lock and unlock)
[Delay] (M1)	EEPROM Version Number displayed
[Favorite] (M2)	EEPROM Version Number displayed
[Timer]	Main Code Version Number displayed
[Clock]	All Segments On
[More +]	Even Segments On
[Less –]	Odd Segments On
[Cancel]	End Factory Test Mode

#### **Description of Error Codes**

Error diagnostic codes can only be viewed by entering the Diagnostic Code Display Mode. Each error code is four digits long and is created based on the following table.

Digit	Description		
1 <sup>st</sup>	Primary System:	1 – Local to the control circuit board	
		3 – Sensor or meat probe	
		4 – Control input	
		9 – Door lock	
2 <sup>nd</sup>	Measurable:	d – Diagnostic: measurable parameter	
		<ul> <li>c – Control related, replace control</li> </ul>	
3 <sup>rd</sup>	Secondary System: Sequential numbering		
4 <sup>th</sup>	Oven Cavity:	1 – Upper oven (or single cavity oven)	
		2 – Lower oven	
		c – Control specific	

## A WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires power.

#### **Diagnostic Code Checking**

Code	Description	When Checked	Detection
1c1c	Shorted key	Always	1 minute
1c2c	Keyboard tail disconnected	Always	1 minute
1c31	Cancel key circuit problem	Always	20 seconds
1c6c	EEPROM error	When accessing EEPROM	3 tries
1c7c	Control not calibrated	Always	3 tries
1c8c	Cooking program error	Cook or clean programmed	3 tries
1d11	Runaway temp (650°F), door unlocked	Latch unlocked	1 minute
1d21	Runaway temp (950°F), door locked	Latch locked	1 minute
3d11	Sensor open	Cook or clean active	20 seconds
3d21	Sensor shorted	Cook or clean active	20 seconds
4d11	Door switch position failure	Clean or keyboard Lockout active	1 minute
4d51	Door switch circuit failure	Convect, Clean or Keyboard Lockout programmed	1 minute
9d11	Latch will not lock	Latch should be locked	See Note 6
9d21	Latch will not unlock	Latch should be unlocked	See Note 6
9d31	Latch state unknown, both locked and unlocked	Latch should be locked or when lock attempted	See Note 6

#### **Diagnostic Code Handling**

Code	Measurable	What is Displayed	Action Taken By Control
1c1c	Keypress	Nothing	Disables audible for affected key depression Disables all outputs <sup>1, 2</sup> Disables lights and timers
1c2c	Keyboard loop improper value	Nothing	Disables audible for key depression Disables all outputs <sup>1</sup> Disables lights and timers
1c31	Cancel key improper value	BAKE flashes <sup>3</sup>	Disables all outputs for cavity <sup>1</sup>
1c6c	No response from EEPROM	Nothing	Disables all outputs <sup>1</sup>
1c7c	Calibration value out of range	"CAL" in the time digits	Completely disables oven <sup>4</sup>
1c8c	CRC invalid	Nothing	Cancels active cook function
1d11	Sensor resistance > 2237 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
1d21	Sensor resistance > 2787 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
3d11	Sensor resistance > Infinite Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
3d21	Sensor resistance > 0 Ohms	BAKE flashes <sup>3</sup>	Disables all cook function for cavity
4d11	Door switch not closed when door is locked	Nothing	Disables Clean and Lockout functions <sup>5</sup>
4d51	Door switch not open or closed	Nothing	Disables Convect, Clean, and Lockout functions <sup>4, 5</sup> Turn off light and disable light from door switch
9d11	Lock switch not closed	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>
9d21	Unlock switch not closed	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>
9d31	Lock and unlock switches both closed	LOCK flashes <sup>3</sup>	Disables Clean and Lockout functions <sup>4</sup>

## WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires power.

#### NOTES:

- <sup>1</sup> "Action Taken" applies as long as the condition exists. If the condition goes away, the control recovers.
- <sup>2</sup> If there is a cook function or timer active, the function continues. The user cannot edit the function, and [Cancel] will cancel the cook mode.
- <sup>3</sup> Flash rate: 0.2 seconds on, 0.1 second off. Pressing any key will clear the display until the fault clears and is re-triggered.
- <sup>4</sup> "Action Taken" applies until there is a POR (Power On Reset ["hard reset"]).
- <sup>5</sup> If the control believes the door is locked, it will attempt to unlock it when the function cancels and the cavity temperature cools.
- <sup>6</sup> Special conditions for latch faults (9dxx):
  - A known good **unlock** position is defined as when the unlock switch reads closed and lock switch reads open.
  - A known good **lock** position is defined as when the unlock switch reads open and lock switch reads closed.
  - A faulted switch means the switch input is reading an invalid state, neither open nor closed.
  - Once a latch fault occurs, latch movement is disabled until there is a POR. An error tone will sound if a function requiring a faulted latch is attempted.
  - If at POR, the latch is not at a known good unlock position:
    - If the latch is at a good lock position, it will attempt to unlock when the RTD (Resistance Temperature Device) temperature is below 400°F.
      - If the latch is not at a good lock position, the control will fault.
  - If a latch fault occurs while the RTD is above the lock temperature, the latch will not try to move, but the fault is still logged to EEPROM after the first stage of detection.
  - The Display column for latch faults applies 1) If the latch was moving when the fault occurred; 2) If the latch is already in a known locked state when the fault occurs.
    - LOCK flashes after a fault is detected and until the unlocked position is achieved. The unlock position may be identified by a successful unlock switch closure, or as the result of timing when the unlock switch is not functioning properly.
  - If the last known good position was unlock (e.g. baking, or idle) and a latch fault occurs, the motor is never moved. The fault is logged to EEPROM and is not seen by the user.
  - The detection for latch faults is in two stages. The first stage is to let the control recover without moving the latch. After this:
    - If the latch was previously at a known good unlock position, the latch will not move and the control will fault.
    - If the control was previously in a known good lock position:
      - If the RTD is below 400°F, the latch will attempt to recover to it's proper position (up to three revolutions). If it cannot, the control will fault and the latch will move to a calculated unlock position.
      - If the RTD is at or above 400°F, the control will fault. When the RTD cools to below 400°F, the control
        will attempt to recover to a good unlock position (up to three revolutions). If it cannot, the control will
        fault and the latch will move to a calculated unlock position.
      - Note: If the unlock position cannot be found, this may result in a second fault, the first fault occurring when the latch request was locked, and the second when the latch request is unlocked.
    - If the latch is moving when the fault occurs, the control will bypass the first stage of detection and immediately try
      to find it's proper position. If it cannot, the control will fault and the latch will move to a calculated unlock position.
  - Affected DLBs (Double Line Breaks) and loads are disabled during detection.
  - If the control is in a known good unlock position and the lock switch becomes faulted:
    - The control will not fault.
    - If a function requiring latch movement is attempted while the lock switch is faulted, the control will sound an error tone and the function will be disabled.
  - If the control is in a known good lock position and the unlock switch becomes faulted:
    - The control will not fault.
    - After the function is canceled and unlock is attempted, the control will attempt to unlock the latch according to the procedures in these notes.

## **Removing and Replacing Oven**

- 1. Turn off power to the oven at the circuit breaker.
- 2. Pull the oven forward out of the cabinet opening.
- 3. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
- 4. Replace the oven using the installation instructions and anti-tip bracket(s).

#### **Maintop Assembly**

- 1. Turn power off to unit.
- 2. Open oven door and remove screws securing maintop to oven chassis, located on the out side edges of the maintop.
- 3. Raise the front edge of the maintop and pull forward approximately 6-inches.
- 4. Disconnect wire terminal plugs from the maintop assembly.
- 5. Lift maintop assembly from the oven chassis.
- 6. Reverse procedure to reinstall maintop assembly.

## **Control Panel**

- 1. Remove maintop assembly, see "Maintop Assembly" procedure,
  - steps 1 through 5.
- 2. Remove screws securing control panel heat sheild.
- 3. Remove screws securing bottom outside edges of the control panel.
- 4. Pull unit out from the wall far enough to allow the back outside screws to be loosened.
- 5. Loosen the back outside scews securing control panel to backguard.
- 6. Grasp front lower outside edges of the control panel and push inward on the outside edges of the backguard to release the control panel front.
- **NOTE:** Front edges of the control panel are difficult to release from backguard.
- 7. Once the control panel bottom edges are free, pull control panel forward and raise the control panel upward to release screws securing top back edges and allow control panel to tip forward.
- 8. Reverse procedure to reinstall control panel.

## **Control Board Assembly**

- 1. Remove control panel, see "Control Panel" procedure, steps 1 through 6.
- 2. Remove screws securing control board bracket to control panel.
- 3. Label and disconnect terminal plug from control board assembly.
- 4. Reverse procedure to reinstall control board assembly.

To avoid risk of electrical shock, personal injury or death; disconnect power to unit before servicing.

#### **Infinite Switch**

- 1. Remove control panel, see "Control Panel" procedure for removal.
- 2. Disconnect and label wire terminals from infinite switch.
- 3. Remove knob on infinite switch being replaced.
- 4. Remove screws in front securing infinite switch to control panel.
- 5. Reverse procedure to reinstall infinite switch.

## **Indicator Lights**

- 1. Remove control panel, see "Control Panel" procedure for removal.
- 2. Disconnect and label wire terminals from indicator light.
- 3. Slide indicator light while hold the lens from the front to release from control panel.
- 4. Reverse procedure to reinstall indicator light.

#### **Rocker Switch**

- 1. Remove control panel, see "Control Panel" procedure for removal.
- 2. Disconnect and label wire terminals from rocker switch.
- 3. Squeeze tabs on rocker switch and push outward to release from control panel.
- 4. Reverse procedure to reinstall indicator light.

## **Oven High Limit**

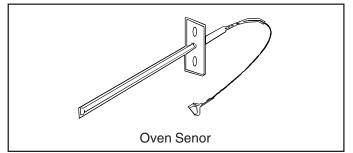
- **NOTE:** Requires removal of oven from installation position.
- 1. Turn off power to unit.
- 2. Remove lower rear access panel.
- 3. Disconnect and label wire terminals connected to limit switch.
- 4. Remove screws securing high limit switch.
- 5. Reverse procedure to reinstall switches.

#### **Oven Sensor**

- 1. Disconnect power before servicing.
- 2. Open oven door and remove screws securing sensor to oven cavity.

NOTE: Gently pull wiring through cavity wall.

- 3. Disconnect oven sensor at the connector terminal and remove.
- 4. Reverse procedure to reinstall sensor.
- **NOTE:** Verify connection is pushed through the insulation.



#### **Bake Element**

- 1. Turn off power to unit.
- 2. Remove screws securing oven bottom cover.
- 3. Raise the back of the bake element cover and slide cover back to release the front edge of cover and lift out of oven cavity.
- 4. Remove screws securing bake element to rear of oven wall.
- 3. Pull element forward to allow disconnection of terminals on each element leg.
- 4. Reverse procedure to reinstall bake element.

## **Broil Element**

- 1. Turn off power to unit.
- 2. Remove screws securing broil element to top and rear of oven cavity.
- 3. Pull broil element forward to allow disconnection of terminals on each element leg.
- 4. Reverse procedure to reinstall broil element.

#### **Convection Fan Assembly**

- 1. Turn off power to unit.
- 2. Open oven door or remove oven door, see "Door Removal".
- 3. Remove screws securing convection fan cover to convection fan assembly.
- 4. Remove screws securing convection fan assembly to rear of oven cavity.
- 5. Slide convection fan assembly down and tilt forward on the top portion to allow assembly to pass through rear oven cavity.

To avoid risk of electrical shock, personal injury or death; disconnect power to unit before servicing.

- 6. Disconnect and label wires from convection fan motor.
- 7. Reverse procedure to reinstall convection fan assembly.

#### **Ribbon and Halogen Elements**

- 1. Remove maintop assembly, see "Maintop Assembly" procedure, steps 1 through 5.
- 2. Remove screws securing element support bracket to maintop.
- 3. Label and disconnect wire terminals from element being replaced.
- 4. Release metal clips securing element to element support bracket.
- 5. Replace and reverse procedure to reinstall element.

#### Drip Baffle Removal ( if so equipped )

- 1. Remove surface elements and burner bowls.
- 2. Raise and secure maintop assembly.
- 3. Remove screws securing drip baffle to range front frame and side panels.
- 4. Reverse procedure to reinstall drip baffle.

#### Automatic Oven Door Latch Assembly

- Remove maintop assembly, see "Maintop Assembly" procedure, steps 1 through 5 and "Drip Baffle" procedures (if so equipped).
- 2. Remove screws securing latch assembly to the front of the oven cavity outer shell.
- 3. Disconnect and label wire terminals from latch assembly.
- 4. Remove screws securing latch assembly to the back of the unit chassis.
- 5. Reverse procedure to reinstall door latch assembly.

#### **Door Plunger Light Switch**

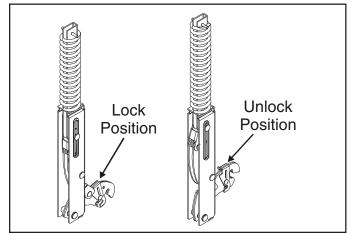
- 1. Remove maintop assembly, see "Maintop Assembly" procedure, steps 1 through 5, and "Drip Baffle" procedures (if so equipped).
- 2. Label and disconnect wire terminals from switch.
- 3. Slide metal sleve forward and flex wire to release from door plunger light switch.
- 4. Squeeze metal tab's and push switch inward to remove.
- 5. Reverse procedure to reinstall door plunger light switch.
- **NOTE:** Be sure to install door plunger light switch heat shield on new switch when replacing switch.

## Oven Door Removal

## WARNING

To avoid risk of personal injury or property damage, do not lift oven door by the handle.

- 1. Open oven door and place door hinge locking device into lock postion.
- 2. Place oven door in first stop position, then grasp both sides and lift up off the hinge receivers.



- 3. Reverse procedure to reinstall oven door.
- **NOTE:** Verify the door hinge locking device is in the lock postion before closing the oven door.

#### **Oven Door Hinge Receiver**

- 1. Turn off power to unit.
- 2. Remove oven door, see "Oven Door Removal" procedure.
- Remove maintop assembly, see "Maintop Assembly" procedure, steps 1 through 5, and "Drip Baffle" procedures (if so eqipped).
- 4. Remove side panel, see "Side Panel Removal" procedures.
- 5. Remove the top and bottom screws securing hinge receiver to the front frame.
- 6. Remove hinge receiver from oven chassis.
- 7. Reverse procedure to reinstall oven door hinge receiver.

## Side Panel Removal

- 1. Turn off power to unit.
- 2. Remove oven door, see "Oven Door Removal" procedure.
- Remove maintop assembly, see "Maintop Assembly" procedure, steps 1 through 5.
- 4. Remove screws securing lower rear galvanized cover from unit.

To avoid risk of electrical shock, personal injury or death; disconnect power to unit before servicing.

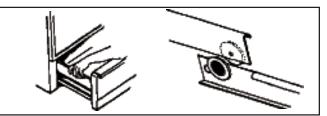
- 5. Remove screws securing top and back of side panel.
- 6. Pull rear of side panel away from range then slide side panel forward to release from side panel spacers.
- 7. Reverse procedure to reinstall side panel.

#### Backguard

- **NOTE:** Requires removal of oven from installation position.
- 1. Remove maintop assembly, see "Maintop Assembly" procedure, steps 1 through 5.
- 2. Remove screws securing upper back panel form unit.
- 3. Remove screws securing bottom outside edges of the backguard to unit chassis.
- 4. Reverse procedure to reinstall backguard.

## Storage Drawer Removal

- 1. Pull drawer straight out to first stop. Lift the front and pull out to second stop.
- 2. Let front of door rest on floor. Place hands toward back of drawer and lift it out.



- 3. To replace:
  - a. Place the set of rollers on the drawer behind the set of rollers on the oven. (As shown above.)
  - b. Align the guides and push the drawer back into position.

#### Storage Drawer Track Removal

- 1. Remove the storage drawer by pulling it out to the fully open or stop position, lifting the drawer at the rear to disengage the drawer track rollers from the drawer runners, and sliding the drawer out of the range.
- 2. The tracks are mounted to a rear support and the frame of the range. Remove the two track mounting screws and remove the track. If the track support is being replaced, remove the mounting screw securing it to the side frame and remove the support.

#### Warming Drawer Removal

- 1. Pull warming drawer out as far as it will go.
- 2. Located on each side of the track is a plastic lever inside the track location. Push the left side down and the right side up to release slide from track and pull forward.
- 3. When installing warming drawer, align slide with track and push warming drawer into place.

#### Warming Drawer Element

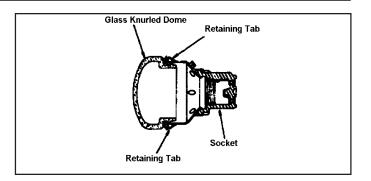
- 1. Remove warming drawer, See "Warming Drawer Removal" procedure.
- 2. Remove screws securing element to bottom and back of chassis.
- 3. Pull element forward until element end are through the back of the unit.
- 4. Disconnect wire terminal from element.
- 5. Reverse procedure to reinstall element.

#### **Oven Light Assembly**

#### **Oven Light Bulb/Oven Light Socket**

- **NOTE:** Requires removal of unit from cabinet to replace oven light socket.
- 1. Turn off power to unit.
- 2. Open oven door to gain access to oven light.
- 3. Unscrew (counterclockwise) glass knurled dome.
- 4. Unscrew (counterclockwise) oven light bulb.
- NOTE: To avoid damaging the new bulb and decreasing life of the bulb, do not touch new bulb with bare hands or fingers. Hold with a cloth or paper towel.
- **NOTE:** Proceed with the following steps for oven light socket removal.
- 5. Remove unit from installation position, see "Removing and Replacing Oven" procedure.
- 6. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
- 7. Remove screws securing back cover and remove.
- 8. Carefully displace fiberglass insulation away from rear of light socket.
- 9. Push inner assembly of light socket towards rear of range, or twist out, depending on style of base.
- 10. Disconnect wires from light socket.
- 11. Reverse procedure to reinstall light socket. Reposition insulation around lamp socket. Do not overtighten.
- **NOTE:** Reposition fiberglass insulation around oven light socket to eliminate possibility of heat related problems.

To avoid risk of electrical shock, personal injury or death; disconnect power to unit before servicing.

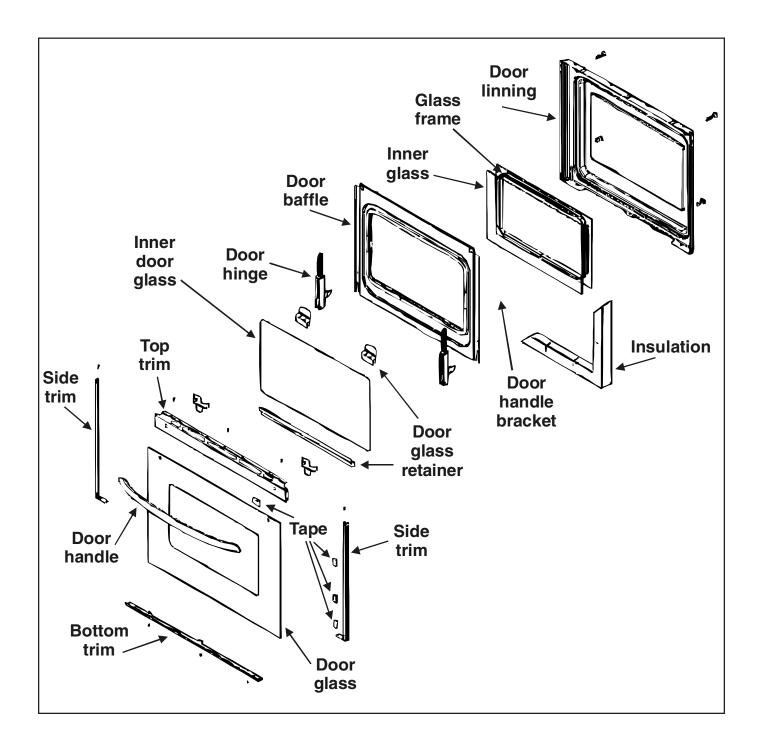


#### Frameless Door Disassembly

- 1. Remove oven door, see "Oven Door Removal" procedure.
- 2. Place door on a protected surface.
- 3. Remove screws securing bottom trim to oven door.
- 4. Slide outer oven door glass and trim towards the bottom of the oven door and remove.
- 5. Detach right and left trim pieces for outer door glass.
- **NOTE:** Proceed with the following steps for door hinge, door handle, and inner door disassembly.
- 6. Remove screws securing door hinge to oven door chassis.
- **NOTE:** Proceed with the following steps for door handle and inner door disassembly.
- 7. Remove screws securing top door handle trim to oven door chassis.
- 8. Remove screws securing door handle brackets to inner door panel.
- Lift upward on the lower side of the door handle to release side alignment screws and rotate towards the top of the oven door to release and remove.
- 10. Remove screws securing door handle to door handle brackets.
- **NOTE:** Proceed with the following steps for inner door disassembly.
- 11. Remove screws securing lower door glass retainer to door baffle and remove.
- 12. Slide inner door glass downward to release from upper door glass retainers and remove.
- 13. Remove screws securing door baffle to door lining and remove.
- 14. Remove insulation from oven door.
- 15. Lift inner glass and glass frame from oven door.
- 16. Reverse procedure to reassemble oven door.

To avoid risk of electrical shock, personal injury or death; disconnect power to unit before servicing.

## **Frameless Oven Door**



# Appendix A

**INSTALLER:** LEAVE THESE INSTRUCTIONS WITH THE APPLIANCE

## INSTALLATION MANUAL Electric 30-inch Wide Free-standing Range

## PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE

THE MANUAL IS INTENDED TO ASSIST IN THE INITIAL INSTALLATION AND ADJUSTMENTS OF THE RANGE.

## **SPECIAL WARNING**

Only qualified personnel should install or service this range.

Read "Safety Instructions" in Use & Care book before using range.

Improper installation, adjustment, alteration, service, maintenance or use of range can result in serious injury or property damage.

**CAUTION:** This range has been designed in accordance with the requirements of various safety agencies and complies with the maximum allowable wood cabinet temperatures of 194°F. If this range is installed with cabinets that have a lower working temperature than 194°F, discoloration, delamination or melting may occur.

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## **CLEARANCE DIMENSIONS**

For complete information in regard to installation of freestanding range, see figures 1 and 2 on page 2. For SAFETY CONSIDERATIONS do not install a range in any combustible cabinetry which is not in accord with the installation clearances shown in figure 1.

## MOBILE HOMES

The installation of a range designed for mobile home installation must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24 HUD, Part 280) or, when such standard is not applicable, the Standard for Manufactured Home Installations 1982 (Manufactured Home Sites, Communities and Set-Ups), ANSI A225.1-latest edition, or with local codes.

## LOCATING THE RANGE

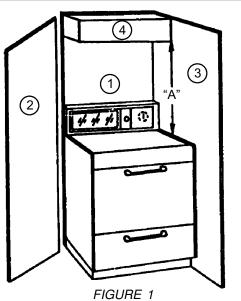
Place range in a well lit area. Do not set range over holes in the floor or other locations where it may be subject to strong drafts. Any opening in the wall behind the range and in the floor under the range should be sealed. Make sure the flow of cooling/ventilation air is not obstructed below the range.

Your range may not be equipped with some of the features referred to in this manual.

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## **INSTALLATION DRAWINGS**

IMPORTANT PLEASE KEEP FOR THE USE OF THE LOCAL ELECTRICAL INSPECTOR.



NOTE: Figure may not be representative of actual unit.

"A" = 30 inches (76.2 cm) minimum clearance between the top of the cooking surface and the bottom of an unprotected wood or metal cabinet, or "A" = 24 inches (61 cm) minimum when bottom of wood or metal cabinet is protected by not less than 1/4-inch (6.4 mm) thick flame-retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015-inch (0.381 mm) thick stainless steel, 0.024-inch (0.610 mm) thick aluminum, or 0.020-inch (0.508 mm) thick copper.

To eliminate the risk of burns or fire by reaching over heated surface units, cabinet storage space located above the surface units should be avoided. If cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5 inches (13 cm) beyond the bottom of the cabinets.

FIGURE 1

- 1, 2, 3 COMBUSTIBLE BUILDING WALLS.
  - 4 COMBUSTIBLE WALL CABINET.

A free-standing range may be installed adjacent to (0'' from) combustible walls 1, 2 & 3.

#### NOTE: FOR INSTALLATION IN CANADA, A FREE-STANDING RANGE IS NOT TO BE INSTALLED CLOSER THAN 12MM FROM ANY ADJACENT SURFACE.

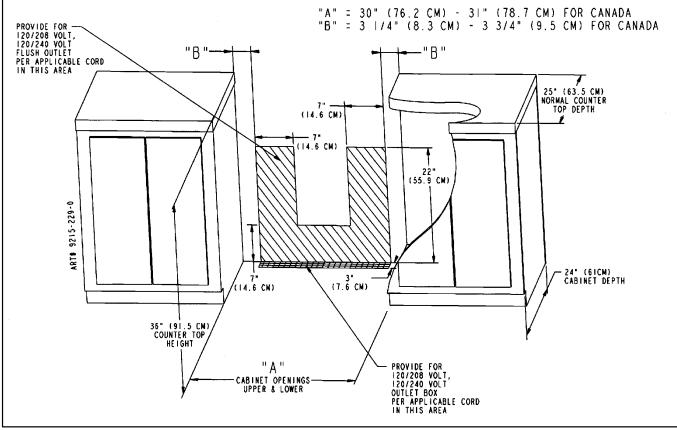


FIGURE 2

## ANTI-TIP DEVICE INSTALLATION INSTRUCTIONS

**WARNING:** A risk of range tip-over exists if the appliance is not installed in accordance with the provided installation instructions. The proper use of this device minimizes the risk of TIP-OVER. In using this device the consumer must still observe the safety precautions as stated in the USE and CARE MANUAL and avoid using the oven door and/or lower drawer as a step stool.

Installation instructions are provided for wood and cement in either floor or wall. Any other type of construction may require special installation techniques as deemed necessary to provide adequate fastening of the ANTI-TIP bracket to the floor or wall. The bracket may be installed to engage the left or right rear leveling foot.

#### STEP 1 - Locating The Bracket (See Figure 3)

- A. Determine where either the right or left "EDGE" of the range will be located and mark the floor or wall.
- B. Place the BRACKET 9/16" (14.5 mm) from the marked "EDGE" toward center of opening and against the back wall, as shown in figure 3, with orientation hole against wall.
- C. Use the bracket as a template and mark the required holes, as shown in figure 3 for the type of construction you will be using.
- D. Free-standing range may be secured to either floor or wall.

#### STEP 2 - Anti-Tip Bracket Installation Options

#### A. Wood Construction:

- 1. Floor: Locate the center of the two holes identified in figure 3 as "HOLES FOR FLOOR". Drill a 1/8" (3 mm) pilot hole in the center of each hole (a nail or awl may be used if a drill is not available). Secure the ANTI-TIP bracket to the floor with the two screws provided. Proceed to Step 3.
- 2. Wall: Locate the center of the two holes identified in figure 3 as "HOLES FOR WALL". Drill an angled 1/8" (3 mm) pilot hole in the center of each hole as shown in figure 4. (A nail or awl may be used if a drill is not available). Secure the ANTI-TIP bracket to the wall with the two screws provided as shown in figure 4. Proceed to STEP 3.
- B. Cement or Concrete Construction:
  - Suitable screws for concrete construction can be 1. obtained at the hardware store. Drill the required size hole for the hardware obtained into the concrete at the center of the holes identified in figure 3 as "HOLES FOR FLOOR". Secure the ANTI-TIP bracket to the floor. Proceed to STEP 3.

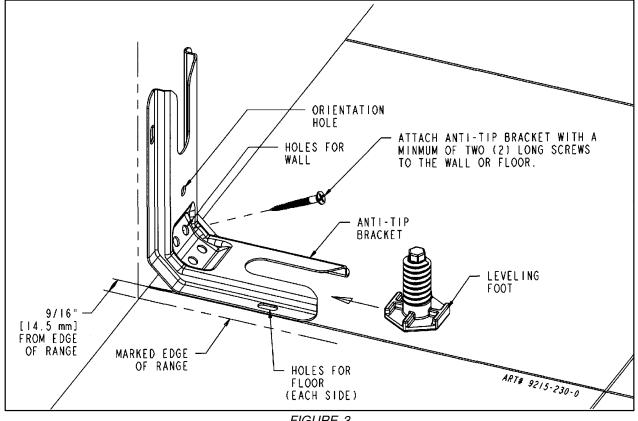


FIGURE 3

## ANTI-TIP DEVICE INSTALLATION INSTRUCTIONS

#### **STEP 3 - Range Installation**

A. For safety considerations as well as optimum performance, adjust the range so it is level and to desired height prior to installing in cabinet opening.

Levelness may be checked by placing a spirit level or a large pan of water on the cooktop or oven rack. Adjust the range by tipping it forward or back and rotate the leveling feet as required.

**Note:** A minimum clearance of 1/4" (6mm) is required between the range and the leveling foot that will engage the anti-tip bracket, (see figure 4).

**Caution:** Damage to the range may occur if range is moved or lifted by grasping the main top, backguard or

door handle. All free-standing ranges with a glass top have a non lift-up top. Coil tops are lift-up.

- B. Align the range to its designated location and prepare to slide it back into position. Connect power cord and plug into outlet following guidelines outlined in connecting the range.
- C. Slide range into place visually inspecting to verify that power cord is freely routed and contained behind range.
- D. To check the range for proper installation of the anti-tip bracket, use a flashlight and look underneath the bottom of the range to see that one of the rear leveling feet is engaged in the anti-tip bracket slot.

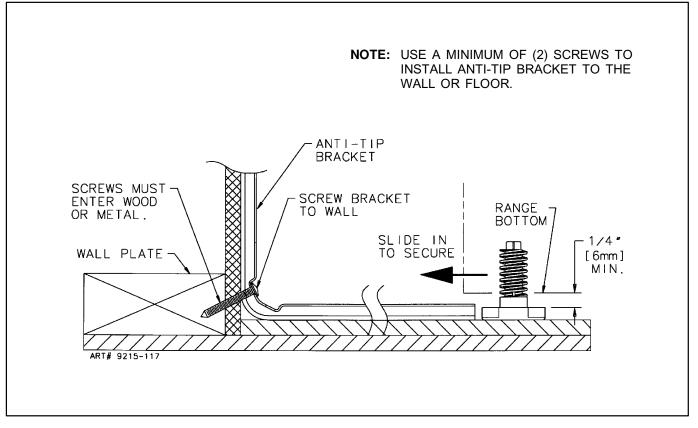


FIGURE 4

## **CONNECTING THE RANGE**

#### ELECTRIC SUPPLY

The range must be installed in accordance with Local and National Electric Code (NEC) ANSI/NFPA No. 70-latest edition. See rating plate for total connected KW rating.

#### **ELECTRIC SUPPLY (Canada)**

The range must be installed in accordance with Local and Canadian Electric Code CSA STD.C22.1 latest edition. See rating plate for total connected KW rating.

#### **OUTSIDE WIRING**

Your local utility company will tell you whether the present electric service to your home is adequate. It may be necessary to increase the size of the wiring to the house and service switch to take care of the electrical load demanded by the range. The kilowatt rating for the range is specified on the rating plate located on front of range.

#### HOUSE WIRING

Most local Building Regulations and Codes require that all electrical wiring be done by licensed electricians. All wiring should conform to Local and National Electrical Codes. This range requires a single phase three wire 120/240 or a 120/208 volt, 60 Hz, AC circuit. Wiring codes require a separate circuit be run from the main entrance panel to the range and that it be equipped with separate disconnect switch and fuses, either in the main entrance panel or in a separate switch and fuse box. In some communities, a solid or flexible continuous armored conduit must be used from main entrance panel to the terminal box on the rear of the range. Others will permit the termination of the range circuit at a polarized three or four wire plug-in outlet placed at a convenient point near the back of the range. The range is then connected to this outlet through an approved range connector (pigtail) fastened securely to the terminal block with proper strain relief at the range and a three or four pronged plug at the opposite end.

#### **RANGE CONNECTIONS**

Some models are shipped direct from the factory with service cords (pigtails) attached. There are no range connections necessary on these models. Just plug into the range outlet. On models not provided with a service cord, connection to the power supply is necessary. REMEMBER - only a 4-conductor cord is to be used on new branch-circuit installations (1996 NEC), mobile homes, recreational vehicles, or in an area where local codes prohibit grounding through the neutral conductor. Hence, 4-wire service MUST be provided for such installations. 3-wire service may be used when permitted by local code. USE COPPER OR ALUMINUM CONDUCTORS. Main terminal block is recognized for Copper or Aluminum conductors. If a flexible power cord is required, it is recommended a cord no longer than 4 ft. be used. Make connections as explained below and with reference to the appropriate illustration (see figures 6 and 7). After installation, insure tightness of all electrical connections and replace all covers.

Remove terminal block access cover from range back. (See figure 5).

#### **RANGE CONNECTIONS (Canada)**

This model was shipped direct from the factory with service cord (pigtail) attached. There are no range connections necessary. Just plug into the range outlet. See figure 2 on page 2 for outlet location.

**NOTE:** Cord replacement - **ONLY** a power supply cord rated at 240 volts minimum, 40 amperes or 50 amperes power supply cord that is marked for use with nominal 1 3/8" (34.93 mm) diameter connection opening, with closed loop terminals and marked for use with ranges shall be used.

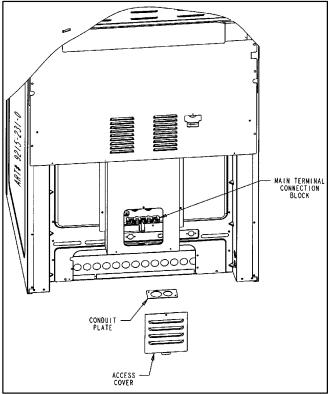


FIGURE 5

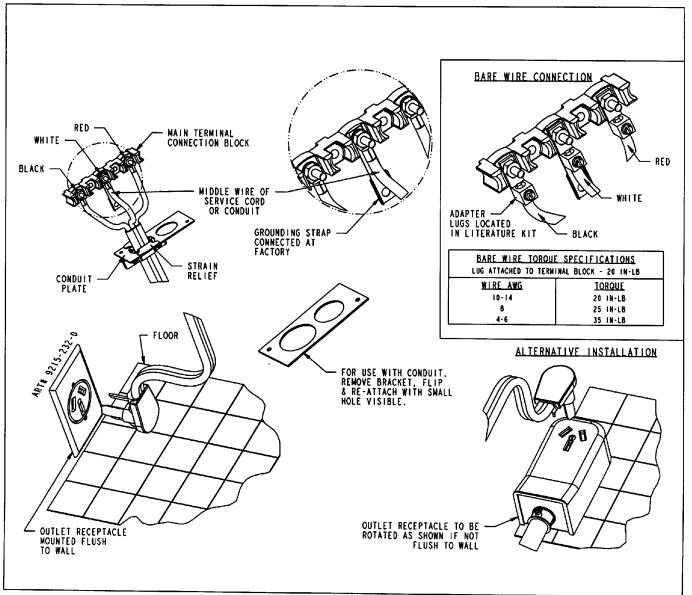
## **CONNECTING THE RANGE**

#### FIGURE 6 3-Wire Service Cord or Conduit Installation

- 1. Insure that the copper ground strap **IS CONNECTED** between the middle post of the main terminal connection block and the range chassis.
- If bare copper or aluminum wiring is used, attach adapter lugs as shown in figure 6. (See Bare Wire Connection). Torque specifications are shown below.
- 3. The middle wire of the service cord or ground lead of 3-wire conduit **MUST** connect to the neutral (middle)

post of the main terminal block. The other two wires of the service cord or conduit connect to the outside posts of the main terminal connection block. Polarity is unimportant. If using bare wire, attach wire to appropriate lug as shown. Torque specifications are shown below.

4. An appropriate strain relief for service cord or conduit **MUST** be attached to the conduit plate.



#### ACCEPTABLE - 3 WIRE PLUG INSTALLATION

FIGURE 6

## **CONNECTING THE RANGE**

#### FIGURE 7

#### 4-Wire Service Cord or Conduit Installation (Mobile Homes Or As Required By Codes)

- 1. The copper ground strap connected between the neutral (middle) post of the main terminal block and the chassis **MUST** be cut off as shown in figure 7. Save the green ground screw to attach the ground from the 4 wire cord. Only a 4 wire cord or conduit should be used.
- If bare copper or aluminum wiring is used, attach adapter lugs as shown in figure 7. (See Bare Wire Connection). Torque specifications are shown below.
- The ground wire from the service cord or conduit must connect to the range chassis using the green ground screw.
- 4. The white wire of the service cord or conduit must connect to the neutral (middle) post of the main terminal block. The other two wires of the service cord connect to the red and black posts of the main terminal block, respectively. If using bare wire, attach wire to

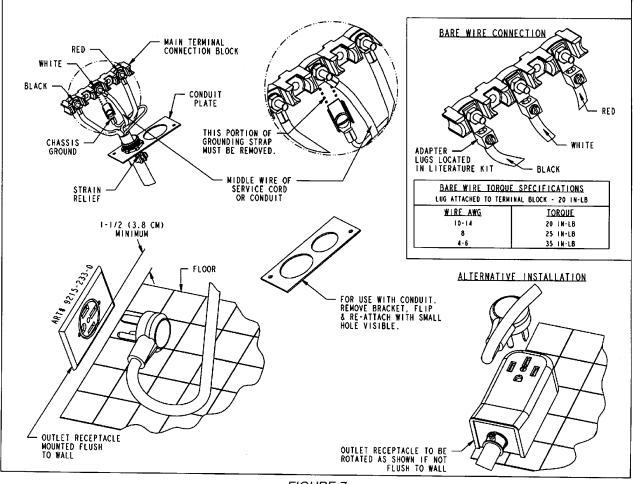
appropriate lug as shown. Torque specifications are shown below.

5. An appropriate strain relief for service cord or conduit **MUST** be attached to the conduit plate.

#### Conversion From 3-Wire To 4-Wire Service (Free-standing Model With 3-Wire Service Cord Attached).

Disconnect range from power. Remove the access cover on back of range and remove the 3-wire service cord from the main terminal block. Follow instructions as outlined in figure 7 to connect the 4-wire service cord.

**NOTE:** Cord replacement - **ONLY** a power supply cord rated at 240 volts minimum, 40 amperes or 50 amperes power supply cord that is marked for use with nominal 1 3/8" (34.93 mm) diameter connection opening, with closed loop terminals and marked for use with ranges shall be used.



#### ACCEPTABLE - 4 WIRE PLUG INSTALLATION

FIGURE 7