

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 Wall Ovens

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:

AEW3530DD*	JJW9530DD*
AEW3630DD*	JJW9627DD*
AEW4530DD*	JJW9630DD*
AEW4630DD*	JJW9827DD*
JJW7530DD*	JJW9830DD*
JJW8127DD*	MEW5527DD*
JJW8130DD*	MEW5530DD*
JJW8227DD*	MEW5627DD*
JJW8230DD*	MEW5630DD*
JJW8527DD*	MEW6527DD*
JJW8530DD*	MEW6530DD*
JJW8627DD*	MEW6627DD*
JJW8630DD*	MEW6630DD*
JJW9527DD*	



16022506
Revision 0
November 2003

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 RESPONSIBILITY TO REVIEW ALL APPROPRIATE SERVICE INFORMATION BEFORE BEGINNING REPAIRS.**



WARNING

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

CAIR Center

<u>Web Site</u>	<u>Telephone Number</u>
WWW.AMANA.COM	1-800-843-0304
WWW.JENNAIR.COM	1-800-536-6247
WWW.MAYTAG.COM	1-800-688-9900
CAIR Center in Canada	1-800-688-2002
Amana Canada Product	1-866-587-2002

Recognize Safety Symbols, Words, and Labels



DANGER

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

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

Table of Contents

Important Information	2	Disassembly Procedures	
Important Safety Information		Removing and Replacing Unit	26
ALL APPLIANCES	4	Control Panel Assembly	26
SELF-CLEANING OVEN	4	Control Board Assembly	26
OVEN	4	Touch Panel	26
In Case of Fire	4	Side Trim(s)	26
Precautions	4	Stepdown Transformer(s)	26
General Information		Upper, Lower, and Single Oven High Limits	27
Cooking Nomenclature	5	Oven Sensor (some models)	27
Rating Label	6	Oven Sensor (some models)	27
Functional Operation	6	Broil Element / Broil Element Reflector	27
Cooking Guide	6	Convection Fan Assembly	27
Specifications	7	Upper and Lower Oven Bake Element	28
Model Identification	7	Upper / Single Oven Door Latch /	
Service	7	Door Light Switch Assembly (some models)	28
Parts and Accessories	7	Lower Oven Door Latch /	
Extended Service Plan	7	Door Light Switch Assembly	28
Troubleshooting Procedures	8	Oven Light Assembly	28
Testing Procedures	9	Oven Door Removal	29
H1 Control	11	Upper Blower Motor	29
H2 Control	13	Lower Blower Motor	29
“Quick Test” mode for Electronic Range Control ..	17	Vent Assembly / Smoke Eliminator	30
Description of Error Codes	17	Oven Door Hinge	30
UH1 Control	20	Frameless Door Disassembly	30
UH2 Control	21	Appendix A	
Test Mode	22	Installation Instructions	A-2
Description of Error Codes	23		

Important Safety Information



CAUTION

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



WARNING

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



CAUTION

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.

ALL APPLIANCES

1. Proper Installation—Be sure your appliance is properly installed and grounded by a qualified technician.
2. Never Use 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 Proper 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 oven.
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 burners. Do not use a towel or other bulky cloth.

SELF-CLEANING OVEN

1. Do Not Clean Door Gasket—The door gasket is essential for a good seal. Care should be taken not to rub, damage, or move the gasket.
2. Do Not Use Oven Cleaners—No commercial oven cleaner or oven liner protective coating of any kind should be used in or around any part of the liner.
3. Clean Only Parts Listed in Manual. See *Cleaning* section.
4. Before Self-Cleaning the Oven—Remove broiler pan, oven racks, and other utensils.

OVEN

1. Use Care When Opening Door—Let hot air or steam escape before removing or replacing food.
2. Do Not Heat Unopened Food Containers—Build-up of pressure may cause container to burst and result in injury.
3. Keep Oven Vents 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 oven.

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:

Oven Fires

1. If you see smoke from 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.
6. If smoke and fire persist, call fire department.
7. If there is any damage to components, call repair service before using oven.

Precautions

- 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 use damp sponge or dishcloth to clean oven when oven is hot. Steam from sponge or dishcloth can burn.
- Do not leave fat heating unless you remain nearby. Fat can ignite if overheated by spilling onto hot surfaces.

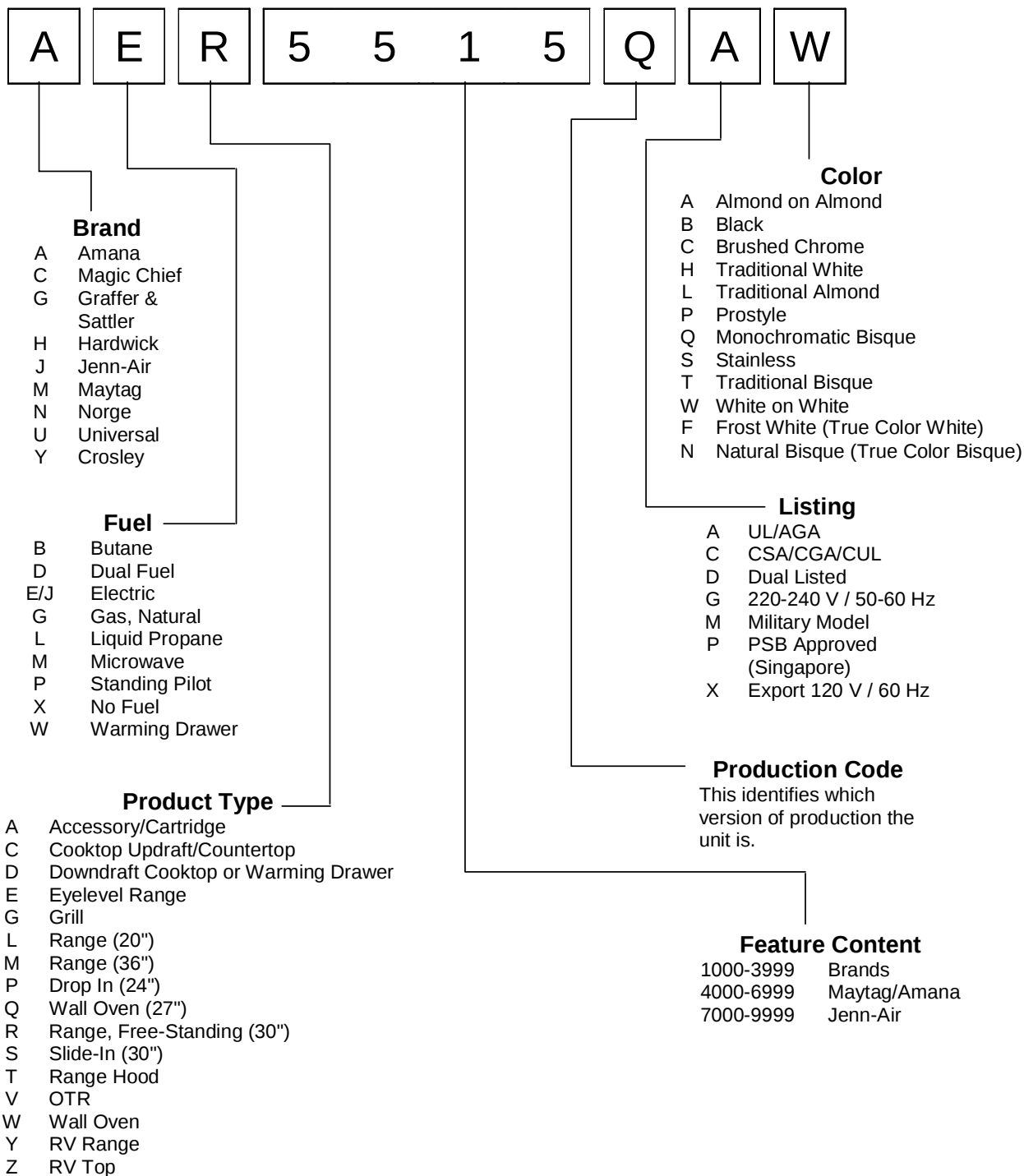
General Information

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

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 wallovens 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

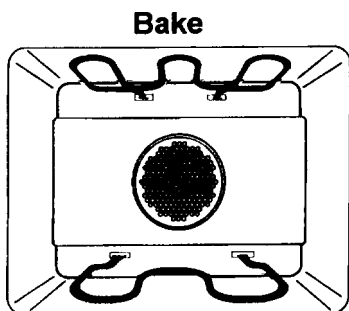
Rating Label

Model numbers are recorded on the rating label. Rating label is located on the lower front right corner of the oven frame. It can be seen by opening the oven door. 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

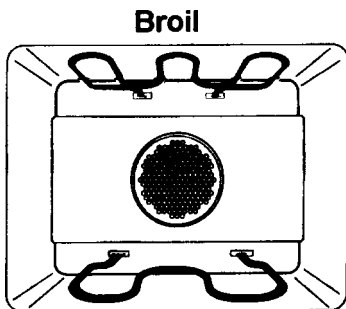
Bake

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



Broil

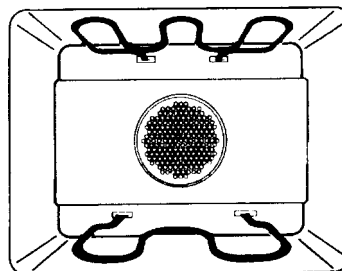
Top element operates during broil. Broil can be used to cook foods which are normally broiled. Preheating is not required when using broil. All foods should be turned at least once except fish, which does not need to be turned.



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.

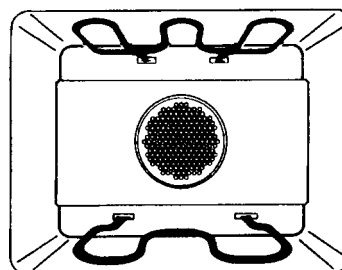
Convection Bake



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.

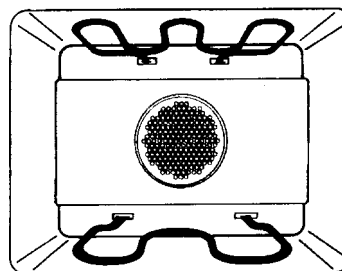
Convection Broil



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.

Convection



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 Technical 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™ 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 PlusSM 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.

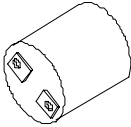
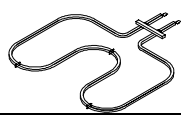
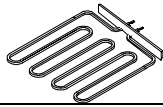
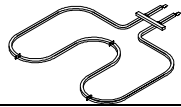
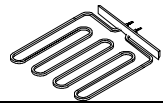
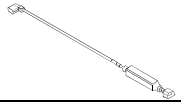
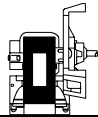
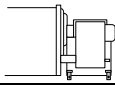
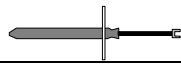
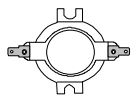
Problem	Possible Cause	Correction
No bake element operation	Open bake element Loose wire connection or broken wire.....	• Check element for continuity, replace if failed. • Verify all connections are clean and tight, replace broken wire.
No broil element operation	Open broil element Loose wire connection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

Testing Procedures



WARNING

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

Illustration	Component	Test Procedure	Results
	Oven light socket	Test continuity of receptacle terminals . Measure voltage at oven light	Indicates continuity with bulb screwed in. 120 VAC; see wiring diagram for terminal identification. If no voltage is present at oven light check wiring.
	Oven light housing	Disconnect connector and test resistance of terminals Measure voltage at oven light	Verify bulb is plugged in properly. Indicates continuity with bulb installed. 12 VAC, see wiring diagram for terminal identification. If no voltage is present at oven light, check wiring or light switches.
	Bake element	Test continuity of terminals Test voltage to terminals	2600 W - Approximately 21 Ω - cold 2800 W - Approximately 20 Ω - cold 240 / 208 VAC
	Bake element	Test continuity of terminals Test voltage to terminals	Approximately 20 Ω - cold 240 / 208 VAC
	Broil element	Test continuity of terminals Test voltage to terminals	Approximately 25 Ω - cold 240 / 208 VAC
	Broil element	Test continuity of terminals Test voltage to terminals	Approximately 15 Ω - cold 240 / 208 VAC
	Resistor assembly	Test continuity of resistor	Approximately 41 Ω
	Convection element	Test continuity of terminals Test voltage to terminals	Approximately 30 Ω - cold 240 / 208 VAC
	Convection motor fan	Verify supply voltage..... Check continuity of terminals, and verify terminals are not shorted to chassis.....	120 VAC Approximately 400 Ω
	Cooling fan motors	Verify supply voltage..... Check continuity of terminals, and verify terminals not shorted to chassis	120 VAC Continuity
	Temperature sensor	Measure resistance.....	Approximately 1080 Ω at room temperature (70°F).
	Controls	Verify proper operation.	Open at 260°F, Closes at 200°F Open at 225°F, Closes at 165°F Open at 215°F, Closes at 155°F

Testing Procedures



WARNING

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

Illustration	Component	Test Procedure	Results
Bottom View 	Rotary encoder SCHEMATIC 	Test continuity of terminals Pin 3 to Pin 4 Pin 1 to Pin 4 Pin 2 to pin 4	No continuity with switch at rest position. Continuity with switch depressed. No continuity with switch at rest position. Continuity with switch depressed and changes stat as switch is rotated. No continuity with switch at rest position. Continuity with switch depressed and changes stat as switch is rotated.
	Door plunger switch	Remove switch from unit and measure the following points: C-NO	Plunger in continuity, Plunger out infinite.
	Motorized door latch	Switch connection in following positions: Unlocked Locked	COM-NO=Open, COM-NC=Closed COM-NO=Closed, COM-NC=Open
	Door switch	Remove switch from unit and measure the following points: C-NO	Plunger in continuity, Plunger out infinite.
Primary Secondary 	Stepdown transformer	Verify input voltage Verify output voltage	Approximately 120 VAC Approximately 12 VDC

Testing Procedures



WARNING

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

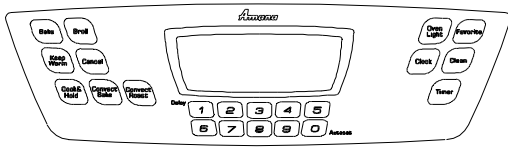
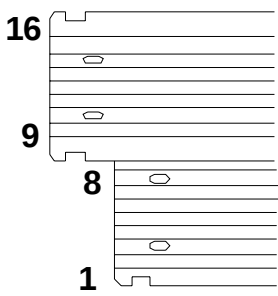
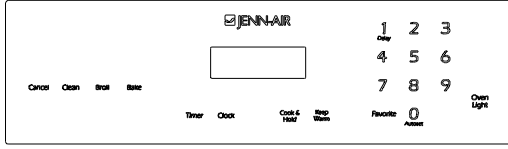
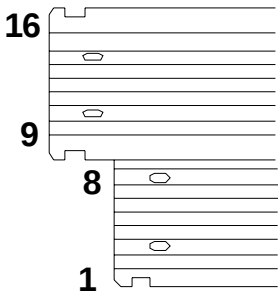
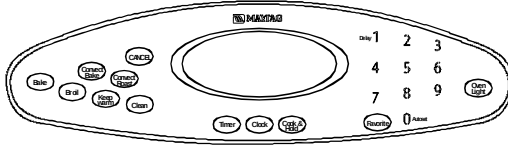
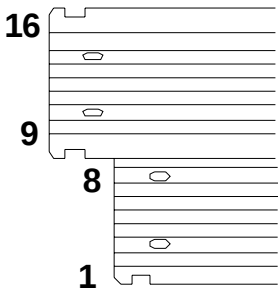
Illustration	Component	Test Procedure	Results
H1 Controlled	Oven temperature adjustment	Press BAKE pad. Enter 550 on the digit-pad. Immediately press and hold BAKE pad for 3 seconds. Oven can be adjusted from -35 to +35 degrees in 5-degree increments by pressing AUTOSET pad. To avoid over adjusting the 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.	While increasing or decreasing oven temperature, this does not affect self-cleaning temperature.
H1 Controlled	Temperature display	Press and hold Cancel and Bake pads for 3 seconds.	This mode enables the user to indicate °F or °C on the display.
H1 Controlled	Clock Display	Press and hold Cancel and Clock pads for 3 seconds.	Allows clock to be toggled On or OFF.
H1 Controlled	24 Hour Clock	Press and hold Cancel and Favorite 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 Cancel and Keep Warm 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 CLOCK pad for 3 seconds to activate Sabbath mode. Hold CLOCK 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 Cancel and Cook & Hold pads for 3 seconds. "OFF" will display where the temperature normally appears. "LOCK" will display flashing while door is locking. To reactivate the control, press and hold Cancel and Cook & Hold pads for 3 seconds.	This is a safety feature that can be used to prevent children from accidentally programming the oven. It disables the electronic oven control. 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 "Description of Error Codes" for explanation.

Testing Procedures



WARNING

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

Amana Matrix Control Panel Assembly 	Continuity is indicated as follows: 1000 – 6600 Ω for Cancel pad 1000 – 15000 Ω for All other pads 	Pad 1 2 3 4 5 6 7 8 9 0 Cancel Clock Cook & Hold Broil Bake Convect Clean Keep Warm Favorite Timer Oven Light Convect Roast	Trace 5 & 10 4 & 11 4 & 12 4 & 13 5 & 15 4 & 10 11 & 12 12 & 13 13 & 15 4 & 15 1 & 3 5 & 13 10 & 11 5 & 12 5 & 7 5 & 11 7 & 13 4 & 5 7 & 15 4 & 7 7 & 12 7 & 11	Measurement Continuity
Jenn-Air Matrix Control Panel Assembly 	Continuity is indicated as follows: 1000 – 6600 Ω for Cancel pad 1000 – 15000 Ω for All other pads 	Pad 1 2 3 4 5 6 7 8 9 0 Cancel Clock Cook & Hold Broil Bake Clean Keep Warm Favorite Timer Oven Light	Trace 13 & 15 12 & 15 10 & 15 7 & 13 12 & 13 10 & 12 4 & 13 4 & 12 5 & 10 5 & 12 1 & 2/3 4 & 14 5 & 14 13 & 14 7 & 15 5 & 7 14 & 15 5 & 13 4 & 5 4 & 10	Measurement Continuity
Maytag Matrix Control Panel Assembly 	Continuity is indicated as follows: 1000 – 6600 Ω for Cancel pad 1000 – 15000 Ω for All other pads 	Pad 1 2 3 4 5 6 7 8 9 0 Cancel Clock Cook & Hold Broil Bake Convect Bake Convect Roast Clean Keep Warm Favorite Timer Oven Light	Trace 13 & 15 12 & 13 12 & 15 4 & 11 4 & 12 4 & 10 5 & 11 5 & 13 5 & 10 5 & 12 1 & 3 7 & 13 11 & 13 11 & 12 10 & 11 11 & 15 5 & 7 4 & 13 7 & 11 4 & 5 4 & 7 10 & 12	Measurement Continuity

Testing Procedures



WARNING

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

Illustration	Component	Test Procedure	Results
H2 Controlled	Oven temperature adjustment	Press BAKE pad. Enter 550 on the digit-pad. Immediately press and hold BAKE pad for 3 seconds. Oven can be adjusted from -35 to +35 degrees in 5-degree increments by pressing AUTOSET 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.	While increasing or decreasing oven temperature, this does not affect self-cleaning temperature.
H2 Controlled	Temperature display	Press and hold Cancel and Bake pads for 3 seconds.	This mode enables the user to indicate °F or °C on the display.
H2 Controlled	Clock Display	Press and hold Cancel and Clock pads for 3 seconds.	Allows clock to be toggled On or OFF.
H2 Controlled	24 Hour Clock	Press and hold Cancel and Favorite pads for 3 seconds.	Allows the time on the clock to be toggled from 12 hour or 24 hour display.
H2 Controlled	Factory Default	Press and hold Cancel and Keep Warm pads for 3 seconds.	Allows the clock to be reset to factory settings.
H2 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.
H2 Controlled	Sabbath Mode	Hold CLOCK pad for 3 seconds to activate Sabbath mode. Hold CLOCK 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.
H2 Controlled	Child lock out	Press and hold Cancel and Cook & Hold pads for 3 seconds. "OFF" will display where the temperature normally appears. "LOCK" will display flashing while door is locking. To reactivate the control, press and hold Cancel and Cook & Hold pads for 3 seconds.	This is a safety feature that can be used to prevent children from accidentally programming the oven. It disables the electronic oven control. Child lockout features must be reset after a power failure.
H2 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 "Description of Error Codes" for explanation.

Testing Procedures



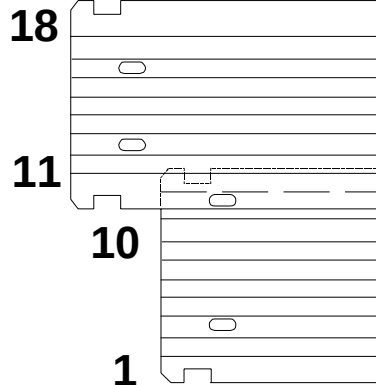
WARNING

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

Amana Matrix
Control Panel Assembly

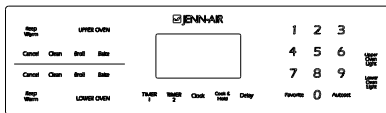


Continuity is indicated as follows:
1000 – 6600 Ω for Cancel pad
1000 – 15000 Ω for All other pads

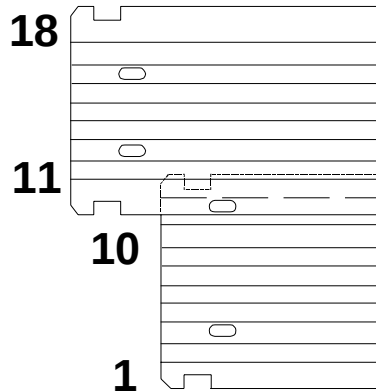


Pad	Trace	Measurement
1	4 & 15	Continuity
2	5 & 14	Continuity
3	6 & 14	Continuity
4	7 & 14	Continuity
5	8 & 15	Continuity
6	4 & 14	Continuity
7	5 & 6	Continuity
8	6 & 7	Continuity
9	7 & 8	Continuity
0	8 & 14	Continuity
Lower Cancel	1 & 2	Continuity
Lower Broil	4 & 17	Continuity
Lower Bake	4 & 5	Continuity
Delay	6 & 17	Continuity
Clock	6 & 16	Continuity
Favorite	8 & 16	Continuity
Lower Clean	5 & 15	Continuity
Upper Clean	4 & 16	Continuity
Upper Cancel	11 & 12	Continuity
Convect	5 & 17	Continuity
Lower Light	15 & 17	Continuity
Upper Keep Warm	5 & 16	Continuity
Upper Light	7 & 17	Continuity
Autoset	7 & 15	Continuity
Lower Keep Warm	6 & 15	Continuity
Convect Roast	14 & 17	Continuity
Upper Bake	15 & 16	Continuity
Timer 2	16 & 17	Continuity
Cook & Hold	7 & 16	Continuity
Upper Broil	14 & 15	Continuity
Timer 1	8 & 17	Continuity

Jenn-Air Matrix
Control Panel Assembly



Continuity is indicated as follows:
1000 – 6600 Ω for Cancel pad
1000 – 15000 Ω for All other pads



Pad	Trace	Measurement
1	15 & 16	Continuity
2	14 & 16	Continuity
3	16 & 17	Continuity
4	6 & 16	Continuity
5	6 & 7	Continuity
6	7 & 17	Continuity
7	5 & 6	Continuity
8	5 & 14	Continuity
9	6 & 14	Continuity
0	14 & 15	Continuity
Lower Cancel	1 & 2	Continuity
Upper Cancel	11 & 12	Continuity
Delay	5 & 7	Continuity
Clock	7 & 16	Continuity
Favorite	4 & 16	Continuity
Lower Clean	4 & 15	Continuity
Upper Clean	4 & 14	Continuity
Timer 2	7 & 8	Continuity
Lower Bake	7 & 15	Continuity
Lower Light	14 & 17	Continuity
Upper Keep Warm	4 & 5	Continuity
Upper Light	8 & 17	Continuity
Autoset	7 & 14	Continuity
Lower Keep Warm	4 & 8	Continuity
Timer 1	8 & 16	Continuity
Lower Broil	8 & 15	Continuity
Upper Bake	5 & 15	Continuity
Cook & Hold	5 & 16	Continuity
Upper Broil	8 & 14	Continuity

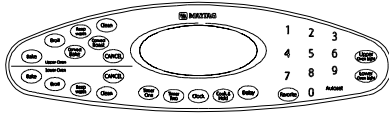
Testing Procedures



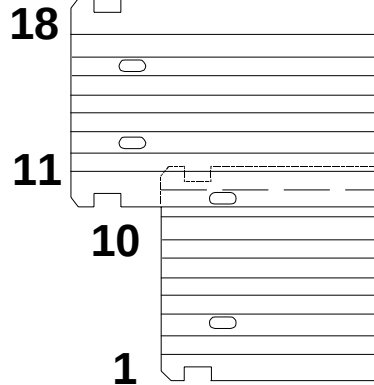
WARNING

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

Maytag Matrix
Control Panel Assembly



Continuity is indicated as follows:
1000 – 6600 Ω for Cancel pad
1000 – 15000 Ω for All other pads



<u>Pad</u>	<u>Trace</u>	<u>Measurement</u>
1	15 & 16	Continuity
2	14 & 16	Continuity
3	16 & 17	Continuity
4	7 & 15	Continuity
5	6 & 7	Continuity
6	6 & 17	Continuity
7	6 & 17	Continuity
8	5 & 14	Continuity
9	6 & 14	Continuity
0	8 & 14	Continuity
Lower Cancel	1 & 2	Continuity
Upper Cancel	11 & 12	Continuity
Conv Bake	4 & 5	Continuity
Delay	5 & 6	Continuity
Clock	4 & 7	Continuity
Favorite	5 & 7	Continuity
Lower Clean	4 & 8	Continuity
Upper Clean	7 & 8	Continuity
Lower Bake	4 & 14	Continuity
Lower Light	7 & 14	Continuity
Upper Keep Warm	7 & 17	Continuity
Upper Light	8 & 17	Continuity
Autoset	14 & 17	Continuity
Lower Keep Warm	4 & 15	Continuity
Conv Roast	5 & 15	Continuity
Lower Broil	8 & 15	Continuity
Upper Bake	14 & 15	Continuity
Timer 2	4 & 16	Continuity
Cook & Hold	5 & 16	Continuity
Upper Broil	7 & 16	Continuity
Timer 1	8 & 16	Continuity

Testing Procedures



WARNING

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

Relay Logic

Note that this chart was correct at time of printing; subsequent changes to cooking parameters may alter it.

COOKING MODE	BAKE	BROIL	CONVECT ELEMENT	CONVECT FAN	COOLING FAN	OVEN LIGHT
IDLE	X	X	X	X	⌚	◇
BAKE PREHEAT	■	■	X	X	⌚	◇
BAKE	■	■	X	X	⌚	◇
BROIL PREHEAT	X	■	X	X	⌚	◇
BROIL	X	■	X	X	⌚	◇
CLEAN PREHEAT	■	■	X	X	⌚	X
CLEAN	■	■	X	X	⌚	X
KEEP WARM	■	X	X	X	⌚	◇
CONVECT BAKE PREHEAT	■	■	■	■	⌚	◇
CONVECT BAKE	■	■	■	■	⌚	◇
CONVECT ROAST PREHEAT	■	■	■	■	⌚	◇
CONVECT ROAST	■	■	■	■	⌚	◇
PROOFING PREHEAT	■	X	X	X	⌚	◇
PROOFING	■	X	X	X	⌚	◇
DRYING PREHEAT	■	X	X	X	⌚	◇
DRYING	■	X	X	X	⌚	◇

KEY INDEX

- X - OFF
- - ON
- - CYCLING
- ◇ - ON OR OFF (DETERMINED BY USER INPUT)
- ⌚ - TEMPERATURE CONTROLLED

Testing Procedures



WARNING

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

“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 are 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	Cooling Fan activated
CLEAN	MDL relay activated
COOK & HOLD	Displays last diagnostic code
FAVORITE	Displays EEPROM version number
TIMER	Displays main code version number
CLOCK.....	All display segments illuminated
OVEN LIGHT.....	Oven light activated
CANCEL.....	Exit Quick Test mode
1.....	Even segments on
2.....	Odd segments on
3.....	Convection Ring activated; Convection Ring DLB activated
4.....	Bake relay activated
5.....	Broil relay activated
6.....	Convection relay activated
7.....	N/A
8.....	N/A
9.....	N/A
AUTOSET	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 st	Primary System: 1 – Local to the control circuit board 3 – Sensor or meat probe 4 – Control input 9 – Door lock
2 nd	Measurable: d – Diagnostic: measurable parameter c – Control related, replace control
3 rd	Secondary System: Sequential numbering
4 th	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.**

Testing Procedures



WARNING

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

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 ⁶
9d12	Latch will not lock	Latch should be locked	See Note ⁶
9d21	Latch will not unlock	Latch should be unlocked	See Note ⁶
9d22	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
9d32	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 ^{1,2} Disables lights and timers
1c2c	Keyboard loop improper value	Nothing	Disables audible for key depression Disables all outputs ¹ Disables lights and timers
1c31	Cancel key improper value	BAKE flashes ³	Disables all outputs for cavity ¹
1c32	Cancel key improper value	BAKE flashes ³	Disables all outputs for cavity ¹
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 Ω	BAKE flashes ³	Disables all cook function for cavity
1d12	Sensor resistance > 2237 Ω	BAKE flashes ³	Disables all cook function for cavity
1d21	Sensor resistance > 2787 Ω	BAKE flashes ³	Disables all cook function for cavity
1d22	Sensor resistance > 2787 Ω	BAKE flashes ³	Disables all cook function for cavity
3d11	Sensor resistance > Infinite Ω	BAKE flashes ³	Disables all cook function for cavity
3d12	Sensor resistance > Infinite Ω	BAKE flashes ³	Disables all cook function for cavity
3d21	Sensor resistance > 0 Ω	BAKE flashes ³	Disables all cook function for cavity
3d22	Sensor resistance > 0 Ω	BAKE flashes ³	Disables all cook function for cavity
4d11	Door switch not closed when door is locked	Nothing	Disables Clean and Lockout functions ⁵
4d12	Door switch not closed when door is locked	Nothing	Disables Clean and Lockout functions ⁵
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 ^{4,5} Turn off light and disable light from door switch
4d52	Door switch not open or closed	Nothing	Disables Convect, Clean, and Lockout functions ^{4,5} Turn off light and disable light from door switch
9d11	Lock switch not closed	LOCK flashes ³	Disables Clean and Lockout functions ⁴
9d12	Lock switch not closed	LOCK flashes ³	Disables Clean and Lockout functions ⁴
9d21	Unlock switch not closed	LOCK flashes ³	Disables Clean and Lockout functions ⁴
9d22	Unlock switch not closed	LOCK flashes ³	Disables Clean and Lockout functions ⁴
9d31	Latch both locked and unlocked	LOCK flashes ³	Disables Clean and Lockout functions ⁴
9d32	Latch both locked and unlocked	LOCK flashes ³	Disables Clean and Lockout functions ⁴

Testing Procedures



WARNING

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

NOTES:

- ¹ "Action Taken" applies as long as the condition exists. If the condition goes away, the control recovers.
- ² 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.
- ³ 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.
- ⁴ "Action Taken" applies until there is a POR (Power On Reset ["hard reset"]).
- ⁵ If the control believes the door is locked, it will attempt to unlock it when the function cancels and the cavity temperature cools.
- ⁶ 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 revolution). 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.

Testing Procedures



WARNING

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

Illustration	Component	Test Procedure	Results
UH1 Controlled	Oven temperature adjustment	Press SETUP pad. Press DOWN ARROW to scroll down to TEMP ADJUST . Select oven and enter desired temperature change. Press ENTER pad to accept the change. Oven can be adjusted from -35 to +35 degrees by pressing +/- 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.	While increasing or decreasing oven temperature, this does not affect broiling or self-cleaning temperature. The oven offset does not need to be readjusted if there is a power failure. Temperature adjustment will be retained even through a power failure.
UH1 Controlled	Temperature display	Press SETUP pad. Press DOWN ARROW to scroll down to TEMP ADJUST . Select temperature scale C/F, then select SET . Press SETUP pad to exit.	This mode enables the user to indicate °F or °C on the display.
UH1 Controlled	Clock Display	Press SETUP pad. Press CLOCK pad. Press TIME and enter numeric from key pad. Select AM or PM . Press SETUP to end. Press SETUP pad. Press CLOCK pad. Press DAY pad. Press back forward to select day of week. Press SETUP to end. Press SETUP pad. Press CLOCK pad. Scroll down to 12/24 HR . Scroll down to 12/24 HR format. Select SET to activate. Press SETUP pad to exit. Press DOWN ARROW pad to scroll to CLOCK .	Set clock, day of week, or 12/24 HR clock.
UH1 Controlled	12 Hour Shutoff	Press SETUP pad. Press DOWN ARROW pad to scroll to 12 HOUR SHUTOFF pad. Select ON or OFF . Select SET pad to activate. Press SETUP pad to exit.	Allows the time on the clock to be toggled from 12 hour or 24 hour display.
UH1 Controlled	Demo mode	Press SETUP pad. Press DOWN ARROW pad to scroll to DEMO pad. Select DEMO to activate. Press SETUP pad to exit.	Control will automatically cancel any cooking operation and remove all relay drives 12 hours after the last pad touch.
UH1 Controlled	Energy Saver	Press SETUP pad. Press DOWN ARROW pad to scroll to ENERGY SAVER pad. Select ON or OFF . Select SET pad to activate. Press SETUP pad to exit.	To save energy, the display will turn off after five minutes of no use in time of day mode only.
UH1 Controlled	208/240 V mode	Press SETUP pad. Press DOWN ARROW pad to scroll to 208/240 V pad. Select 208 or 240 . Select SET pad to activate.	For improved results when using Radiant Bake only, the oven can be set from 240 V to 208 V.
UH1 Controlled	Control Lockout	Press and hold BACK and ENTER pads for 5 seconds. To reactivate the control, press and hold BACK and ENTER pads for 5 seconds.	This is a safety feature that can be used to prevent accidentally programming the oven. It disables the electronic oven control and locks the cavity door(s). Control lockout features must be reset after a power failure.
UH1 Controlled	Sabbath Mode The time of day and day of week must be set correctly for this feature to be activated.	Press SETUP pad. Press DOWN ARROW pad. Press SABBATH pad to activate Sabbath mode. Select AUTO or MANUAL pad. If AUTO selected, press continue. If MANUAL selected, press ON or OFF . Select SET pad.	Auto-Sabbath mode will display a reminder at 2:00 PM on Friday. Manual-Sabbath mode will be instantly programmed for 72 hours. This mode disables the normal 12 hour energy saving mode.

Testing Procedures



WARNING

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

Illustration	Component	Test Procedure	Results
UH2 Controlled	Oven temperature adjustment	Press SETUP pad. Press DOWN ARROW to scroll down to TEMP ADJUST . Select oven and enter desired temperature change. Press ENTER pad to accept the change. Oven can be adjusted from -35 to +35 degrees inputting 5 or 35 degrees by pressing +/- 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.	While increasing or decreasing oven temperature, this does not affect broiling or self-cleaning temperature. The oven offset does not need to be readjusted if there is a power failure. Temperature adjustment will be retained even through a power failure.
UH2 Controlled	Temperature display	Press SETUP pad and use the arrow pad to scroll to the next screen. Select C/F, then select SET . Press SETUP pad to exit.	This mode enables the user to indicate °F or °C on the display.
UH2 Controlled	Clock Display	Press SETUP pad. Press CLOCK pad. Press TIME and enter numeric from key pad. Select AM or PM . Press SETUP to end. Press SETUP pad. Press CLOCK pad. Press DAY pad. Press back forward to select day of week. Press SETUP to end. Press SETUP pad. Press CLOCK pad. Scroll down to 12/24 HR . Scroll down to 12/24 HR format. Select SET to activate. Press SETUP pad to exit. Press DOWN ARROW pad to scroll to CLOCK .	Set clock, day of week, or 12/24 HR clock.
UH2 Controlled	12 Hour Shutoff	Press SETUP pad. Press DOWN ARROW pad to scroll to 12 HOUR SHUTOFF pad. Select ON or OFF . Select SET pad to activate. Press SETUP pad to exit.	Allows the time on the clock to be toggled from 12 hour or 24 hour display.
UH2 Controlled	Demo mode	Press SETUP pad. Press DOWN ARROW pad to scroll to DEMO pad. Select DEMO to activate. Press SETUP pad to exit.	Control will automatically cancel any cooking operation and remove all relay drives 12 hours after the last pad touch.
UH2 Controlled	Energy Saver	Press SETUP pad. Press DOWN ARROW pad to scroll to ENERGY SAVER pad. Select ON or OFF . Select SET pad to activate. Press SETUP pad to exit.	To save energy, the display will turn off after five minutes of no use in time of day mode only.
UH2 Controlled	208/240 V mode	Press SETUP pad. Press DOWN ARROW pad to scroll to 208/240 V pad. Select 208 or 240 . Select SET pad to activate.	For improved results when using Radiant Bake only, the oven can be set from 240 V to 208 V.
UH2 Controlled	Control Lockout	Press and hold BACK and ENTER pads for 5 seconds. To reactivate the control, press and hold BACK and ENTER pads for 5 seconds.	This is a safety feature that can be used to prevent accidentally programming the oven. It disables the electronic oven control and locks the cavity door(s). Control lockout features must be reset after a power failure.
UH2 Controlled	Sabbath Mode The time of day and day of week must be set correctly for this feature to be activated.	Press SETUP pad. Press DOWN ARROW pad. Press SABBATH pad to activate Sabbath mode. Select AUTO or MANUAL pad. If AUTO selected, press continue. If MANUAL selected, press ON or OFF . Select SET pad.	Auto-Sabbath mode will display a reminder at 2:00 PM on Friday. Manual-Sabbath mode will be instantly programmed for 72 hours. This mode disables the normal 12 hour energy saving mode.

Testing Procedures



WARNING

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

Test Mode

Follow procedure below to access the Test Mode.

1. Press **SETUP** pad.
2. Press **DOWN ARROW** pad three times until **SERVICE** is displayed.
3. Press **SERVICE** pad.
4. Press and hold **BACK** and **ENTER** pads for 5 seconds.
5. Press **TEST** pad.

NOTE: If the oven cavity temperature is greater than 400°F, the Test Mode cannot be activated or will abort the mode if activated.

NOTE: Once the Test Mode is activated and a function is selected the control will activate the relay until the pad is pressed again. Upon entering TEST Mode all relays are turned off except the DLB relays, which are turned on. All relays are turned off when the TEST Mode is exited.

<u>Pad Pressed</u>	<u>Relay or Action Activated</u>
Beep	1 Second Beep
Version	Version of software
Last Fault	Display last error code and oven configuration (single, double, convection, nonconvection)
DISP Test	Display segments
UBAKE	Upper Bake Element
UBROIL	Upper Broil Element
UCONV	Upper Convection Element
UCOOL	Upper Cooling Fan
UCONV-H	Upper High Speed Convection Fan
UCONV-L	Upper Low Speed Convection Fan
UMDL	Upper Motorized Door Lock
ULITE	Upper Oven Light
LBAKE	Lower Bake Element
LBROIL	Lower Broil Element
LCONV	Lower Convection Element
LCOOL	Lower Cooling Fan
LCONV-H	Lower High Speed Convection Fan
LCONV-L	Lower Low Speed Convection Fan
LMDL	Lower Motorized Door Lock
LLITE	Lower Oven Light

Testing Procedures



WARNING

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

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 st	Primary System: 1 – Local to the control circuit board 3 – Sensor or meat probe 4 – Control input 9 – Door lock
2 nd	Measurable: d – Diagnostic failure: measurable parameter c – Control related error, replace control
3 rd	Primary failure mechanism
4 th	Oven Cavity: 1 – Upper oven (or single cavity oven) 2 – Lower oven c – Control specific

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 sec
1c32	Cancel key circuit problem	Always	20 sec
1c4c	Power micro communication failure	Always	20 sec
1c6c	EEPROM error	When accessing EEPROM	3 tries
1c7c	Control not calibrated	Always	3 tries
1c81	Cook profile corrupted in EEPROM	Cook or clean programmed	3 tries
1c82	Cook profile corrupted in EEPROM	Cook or clean programmed	3 tries
1d11	Runaway temperature (650°F), door unlocked	Latch unlocked	1 minute
1d12	Runaway temperature (650°F), door unlocked	Latch unlocked	1 minute
1d21	Runaway temperature (950°F), door locked	Latch locked	1 minute
1d22	Runaway temperature (950°F), door locked	Latch locked	1 minute
3d11	Temperature sensor failure (open)	Cook or Clean active	20 sec
3d12	Temperature sensor failure (open)	Cook or Clean active	20 sec
3d21	Temperature sensor failure (short)	Cook or Clean active	20 sec
3d22	Temperature sensor failure (short)	Cook or Clean active	20 sec
3d41	Meat probe shorted	Probe cook programmed	20 sec
3d51	Meat probe not calibrated	Always	3 sec
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)	Cook or Clean programmed	1 minute
4d22	No Reverse Airflow Fan rotation (no/low RPM)	Cook or Clean programmed	1 minute
4d31	Reverse Airflow Fan state error (on when supposed to be off)	When supposed to be off	1 minute
4d32	Reverse Airflow Fan state error (on when supposed to be off)	When supposed to be off	1 minute
4d41	High Reverse Airflow Fan rotation, high RPM	Cook or Clean programmed	1 minute
4d42	High Reverse Airflow Fan rotation, high RPM	Cook or Clean programmed	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 ⁶	Latch should be locked	See note 6
9d12	Latch will not lock ⁶	Latch should be locked	See note 6
9d21	Latch will not unlock ⁶	Latch should be unlocked	See note 6
9d22	Latch will not unlock ⁶	Latch should be unlocked	See note 6
9d31	Latch both locked and unlocked ⁶	Latch should be locked or when lock attempted	See note 6
9d32	Latch both locked and unlocked ⁶	Latch should be locked or when lock attempted	See note 6

Testing Procedures



WARNING

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

Diagnostic Code Handling

Code	Measured	Display	Action Taken
1c1c	Keypress		Disable audible for affected key depression, Disable all outputs ^{1,2} Disable lights and timers
1c2c	Keyboard loop improper value		Disable audible for key depression, Disable all outputs ¹ Disable lights and timers
1c31	Cancel key improper value	mssg 1 (active) / mssg 2 (data)	Disable all outputs for cavity ¹
1c32	Cancel key improper value	mssg 1 (active) / mssg 2 (data)	Disable all outputs for cavity ¹
1c4c	CRC invalid	mssg 1 (active) / mssg 2 (data)	Disable all outputs ¹
1c6c	No response from EEPROM	mssg 1 (active) / mssg 2 (data)	Disable all outputs ¹
1c7c	Calibration value out of range	mssg 1 (active) / mssg 2 (data)	Completely disable oven ⁴
1c81	CRC invalid	mssg 1 (active) / mssg 2 (data)	Disable affected oven function ¹
1c82	CRC invalid	mssg 1 (active) / mssg 2 (data)	Disable affected oven function ¹
1d11	Sensor resistance >2237 Ω	mssg 1 (active) / mssg 3 (data)	Disable all cooking functions for cavity
1d12	Sensor resistance >2237 Ω	mssg 1 (active) / mssg 3 (data)	Disable all cooking functions for cavity
1d21	Sensor resistance >2787 Ω	mssg 1 (active) / mssg 3 (data)	Disable all cooking functions for cavity
1d22	Sensor resistance >2787 Ω	mssg 1 (active) / mssg 3 (data)	Disable all cooking functions for cavity
3d11	Sensor resistance > Infinite Ω	mssg 1 (active) / mssg 2 (data)	Disable all cooking functions for cavity
3d12	Sensor resistance > Infinite Ω	mssg 1 (active) / mssg 2 (data)	Disable all cooking functions for cavity
3d21	Sensor resistance < 0 Ω	mssg 1 (active) / mssg 2 (data)	Disable all cooking functions for cavity
3d22	Sensor resistance < 0 Ω	mssg 1 (active) / mssg 2 (data)	Disable all cooking functions for cavity
3d41	Probe resistance < 0 Ω	mssg 1 (active) / mssg 2 (data)	Disable all probe functions
3d51	Calibration value out of range	mssg 2	Disable all probe functions
4d11	Door switch not closed when door is locked	mssg 1	Disable Clean and lockout functions ⁵
4d12	Door switch not closed when door is locked	mssg 1	Disable Clean and lockout functions ⁵
4d21	Reverse Airflow Fan rotation (no/low RPM)	mssg 1 (active) / mssg 2 (data)	Disable all cooking functions for cavity
4d22	Reverse Airflow Fan rotation (no/low RPM)	mssg 1 (active) / mssg 2 (data)	Disable all cooking functions for cavity
4d31	Reverse Airflow Fan rotation (on when should be off)	No change	No action
4d32	Reverse Airflow Fan rotation (on when should be off)	No change	No action
4d41	Reverse Airflow Fan rotation (high RPM)	mssg 1 (active) / mssg 2 (data)	Disable all cooking functions for cavity
4d42	Reverse Airflow Fan rotation (high RPM)	mssg 1 (active) / mssg 2 (data)	Disable all cooking functions for cavity
4d51	Door switch not open or closed	mssg 1 (active) / mssg 2 (data)	Disable Convect, Clean, and lockout functions ^{4,5} Turn off light and disable light from door switch
4d52	Door switch not open or closed	mssg 1 (active) / mssg 2 (data)	Disable Convect, Clean, and lockout functions ^{4,5} Turn off light and disable light from door switch
9d11	Lock switch not closed	mssg 1 (active) / mssg 2 (data)	Disable Clean and lockout functions ⁴
9d12	Lock switch not closed	mssg 1 (active) / mssg 2 (data)	Disable Clean and lockout functions ⁴
9d21	Unlock switch not closed	mssg 1 (active) / mssg 2 (data)	Disable Clean and lockout functions ⁴
9d22	Unlock switch not closed	mssg 1 (active) / mssg 2 (data)	Disable Clean and lockout functions ⁴
9d31	Lock and unlock switches both closed	mssg 1 (active) / mssg 2 (data)	Disable Clean and lockout functions ⁴
9d32	Lock and unlock switches both closed	mssg 1 (active) / mssg 2 (data)	Disable Clean and lockout functions ⁴

Message 1:	Message 2:	Message 3:
FAULT DETECTED PRESS ENTER TO TRY AGAIN	FEATURE NOT AVAILABLE PRESS HELP	FAULT DETECTED DISABLE POWER TO CLEAR

Testing Procedures



WARNING

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

NOTES:

- ¹ "Action Taken" applies as long as the condition exists. If the condition goes away, the control recovers.
- ² 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.
- ³ 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.
- ⁴ "Action Taken" applies until there is a POR (Power On Reset ["hard reset"]).
- ⁵ If the control believes the door is locked, it will attempt to unlock it when the function cancels and the cavity temperature cools.
- ⁶ 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 revolution). 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.

Disassembly Procedures



WARNING

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



CAUTION

To avoid risk of personal injury or property damage this unit requires a two person lift when lifting unit in or out of cutout.

Removing and Replacing Unit

1. Turn off power to the oven at the circuit breaker.
2. Open oven door and remove screws securing unit to the cabinet opening.

NOTE: Place a protective covering on the floor, to avoid damage to the floor.

3. Pull unit forward out of the cabinet opening.
4. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
5. Replace the oven using the installation instructions.

Control Panel Assembly

1. Turn off power to unit.
2. Remove screws securing trim piece(s) to the cabinet.
3. Slide unit out of cutout approximately 6 to 8 inches.



CAUTION

To avoid risk of property damage and personal injury, place blocking material underneath the front edge of the wall oven to prevent unit from tipping forward.

4. Remove screws securing control panel assembly to unit chassis.
5. Label and disconnect wire terminal plugs from control board assembly.



CAUTION

While unplugging electrical connections, pins may be damaged, use extreme care when disconnecting.

6. Place control panel assembly on a protected surface.
7. Reverse procedure to reassemble.

Control Board Assembly

1. Remove control panel, see "Control Panel Assembly" procedure, steps 1 through 6.
2. Remove screws securing control board bracket to control panel assembly.
3. Label and disconnect ribbon terminal plug from control board assembly.
4. Replace control board assembly and reverse procedures to reassemble.

Touch Panel

1. Remove control panel, see "Control Panel Assembly" procedure, steps 1 through 3.
2. Remove screws securing touch panel to control panel assembly.

NOTE: Touch panel is loose, but the ribbon cable does not allow complete removal.

3. Disconnect ribbon cable from touch panel and remove touch panel.



CAUTION

While unplugging electrical connections, pins may be damaged, use extreme care when disconnecting.

4. Replace touch panel and reverse procedure to reassemble.

Side Trim(s)

1. Remove control panel, see "Control Panel Assembly" procedure, steps 1 through 3.
2. Remove screws securing trim piece to unit chassis.
3. Replace side trim and reverse procedure to reassemble.

Stepdown Transformer(s)

NOTE: Requires removal of unit from cabinet.

1. Turn off power to unit.
2. Remove screws securing trim piece(s) to the cabinet.
3. Remove unit from cutout.
4. Remove screws securing top cover to outer shell and remove top cover.
5. Label and disconnect wire terminals from transformer.
6. Remove screws securing transformer to control box.
7. Replace transformer and reverse procedure to reassemble.

Disassembly Procedures



WARNING

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

Upper, Lower, and Single Oven High Limits

NOTE: Requires removal of unit from cabinet.

1. Turn power off to unit.
2. See "Control Panel Assembly" for removal.
3. Remove screws securing top or bottom rear access cover, to gain access to limits switch.
4. Disconnect wire terminals from limit switch being replaced.
5. Remove screws securing limit switch needing to be placed.
6. Replace and reverse procedure to reassemble.

Oven Sensor (some models)

1. Turn off power to unit
2. Open oven door or remove oven door, see "Door Removal".
3. Remove screws securing sensor to center portion of broiler element in the rear of the oven cavity.

NOTE: Gently pull wiring through cavity wall.

4. Pull sensor forward, maneuver wires through insulation and broiler element bracket to disconnect wire plug connector.
5. Replace and reverse procedure to reassemble sensor.

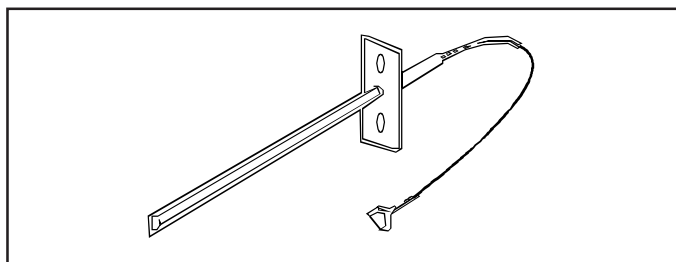
Oven Sensor (some models)

1. Disconnect power before servicing.
2. Open oven door or remove oven door, see "Door Removal".
3. Remove screws securing sensor to oven cavity.

NOTE: Gently pull wiring through cavity wall.

4. Disconnect oven sensor at the connector block and remove.
5. Replace and reverse procedure to reassemble sensor.

NOTE: Verify connection is pushed through the insulation.



Broil Element / Broil Element Reflector

1. Turn off power to unit.
2. Open oven door or remove oven door, see "Door Removal".
3. Remove screws securing broil element to top and rear of oven cavity.
4. Allow front of broil element to drop down, then pull forward to allow terminals to pass through oven cavity.
5. Disconnect wire terminals from element and sensor wire plug connector.
6. Remove screws securing oven sensor to broil element.
7. Replace and reverse procedure to reassemble 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.
6. Disconnect and label wires from convection fan motor.
7. Replace and reverse procedure to reassemble convection fan assembly.

Disassembly Procedures



WARNING

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

Upper and Lower Oven Bake Element

NOTE: Requires removal of unit from cabinet.

1. Turn off power to unit.
2. Open oven door or remove oven door, see "Door Removal".
3. Remove screws securing trim piece(s) to the cabinet.
4. Remove unit from cutout, see "Removing and Replacing Unit" procedure.
5. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
6. Remove screws securing rear top and bottom access panel.
7. Remove screws securing support bracket for access panels, running from top to bottom.

NOTE: Bottom oven requires removal of a second support bracket.

8. Disconnect wire terminals from bake element.
9. Disconnect wire terminals and connector from lower oven blower motor, for removal of upper oven element only.
10. Gently pull plastic wire clips from oven chassis securing wire harness.
11. Remove screws securing element panel to oven chassis.
12. Remove screws securing element support bracket.
13. Gently pull element and support bracket from oven chassis.
14. Replace and reverse procedure to reassemble bake element.

Upper / Single Oven Door Latch / Door Light Switch Assembly (some models)

1. Turn off power to unit.
2. See "Control Panel Assembly" for removal.
3. Remove screws securing top trim piece to oven chassis.
4. Remove screws securing latch assembly or door light switch to top trim piece.
5. Disconnect and label wire terminals.
6. Remove latch assembly or door light switch from chassis.
7. Replace and reverse procedure to reassemble.

Lower Oven Door Latch / Door Light Switch Assembly

1. Turn off power to unit.
2. Remove top oven door, see "Oven Door" procedure.
3. Remove screws securing middle trim piece between oven doors.
4. Remove screws securing latch assembly or door light switch to trim piece.

5. Disconnect and label wire terminals.
6. Remove latch assembly or door light switch from chassis.
7. Replace and reverse procedure to reassemble door latch assembly or door light switch.

Oven Light Assembly

Oven Light Bulb/Oven Light Socket (some models)

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.

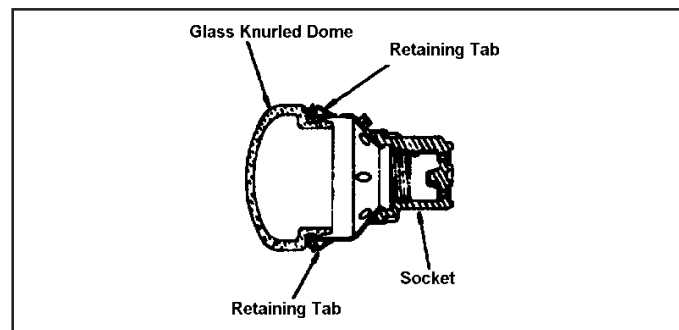
NOTE: To avoid damaging the new bulb and decreasing life of the bulb, do not touch new bulb with bare hands or fingers.

Hold with a cloth or paper towel.

NOTE: Proceed with the following steps for oven light socket removal.

5. Remove unit from cutout, see "Removing and Replacing Unit" procedure.
6. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
7. Remove screws securing outer wrapper 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.



Disassembly Procedures



WARNING

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

Oven Light Bulb/Oven Light Socket (some models)

NOTE: Requires removal of unit from cabinet to replace oven light socket.

The oven light used on the Gemini is a 12 volt 10 Watt Halogen bulb. The light automatically comes on when the door is opened or activation may occur via the light pad when the door is closed. The light will not operate during a clean cycle. The oven light will automatically come on one minute before the end of a clock controlled cooking operation.

1. Disconnect power before servicing.
2. Open oven door and locate oven light.
3. Grasp lens cover and pull outward on one side to gain access to bulb.
4. Carefully remove old bulb, by lifting bulb straight out of ceramic base.

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 cutout, see "Removing and Replacing Unit" procedure.
6. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
7. Remove screws securing side wrapper and remove.
8. Carefully displace fiberglass insulation away from rear of light socket.
9. Release metal tabs on light socket and push socket assembly away from the oven cavity.
10. Disconnect wires from light socket.
11. Reverse procedure to reinstall light socket. Reposition insulation around lamp socket.

NOTE: Reposition fiberglass insulation around oven light socket to eliminate possibility of heat related problems.

Oven Door Removal

1. Open oven door and place door hinge locking device in lock position.
2. Place oven door in first stop position, then grasp both sides and lift up off the hinges.
3. Reverse procedure to reassemble oven door.

Upper Blower Motor

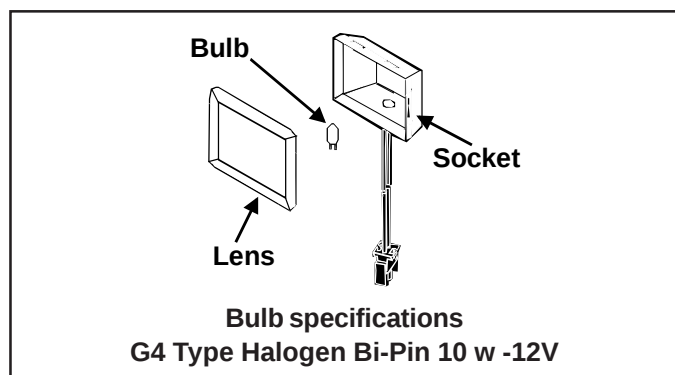
NOTE: Requires removal of unit from cabinet.

1. Remove unit from cutout, see "Removing and Replacing Unit" procedure.
2. Remove screws securing top access panel.
3. Disconnect and label wire terminals from blower motor.
4. Remove screws securing blower assembly to oven chassis.
5. Replace and reverse procedure to reassemble blower motor.

Lower Blower Motor

NOTE: Requires removal of unit from cabinet.

1. Remove unit from cutout, see "Removing and Replacing Unit" procedure.
2. Remove screws securing rear top and rear bottom outer wrapper from the chassis.
3. Disconnect and label wire terminals connected to blower motor.
4. Gently pull plastic wire harness ties from oven chassis, securing wire harness.
5. Remove back screws securing the back half of the upper oven chassis to the lower oven chassis.
6. Tip the back portion of the upper oven forward and place blocking material between the two oven chassis.
7. Remove screws securing blower motor assembly to vent assembly.
8. Replace and reverse procedure to reassemble blower motor.



Disassembly Procedures



WARNING

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

Vent Assembly/Smoke Eliminator

1. Turn power off to unit.
2. Open oven door and remove screws securing unit to the wall.
3. Remove oven from cutout opening.
4. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
5. Remove screws securing top and back outer wrapper from the unit.
6. Remove screws securing vent assembly to outer cabinet top wrapper.
7. Raise back of vent assembly and slowly maneuver vent assembly away from unit.
8. Remove screws securing smoke eliminator, located inside oven on top of oven cavity.
9. Reverse procedure to reinstall.

Oven Door Hinge

1. Turn off power to unit.
2. Remove oven door, see "Door Removal".
3. Remove control panel, see "Control Panel Assembly" procedure, steps 1 through 3.
4. Remove the top and bottom screws securing hinge assembly to the front frame.
5. Remove hinge from oven chassis.
6. Replace and reverse procedure to reassemble oven door hinge.

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.
 9. 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.

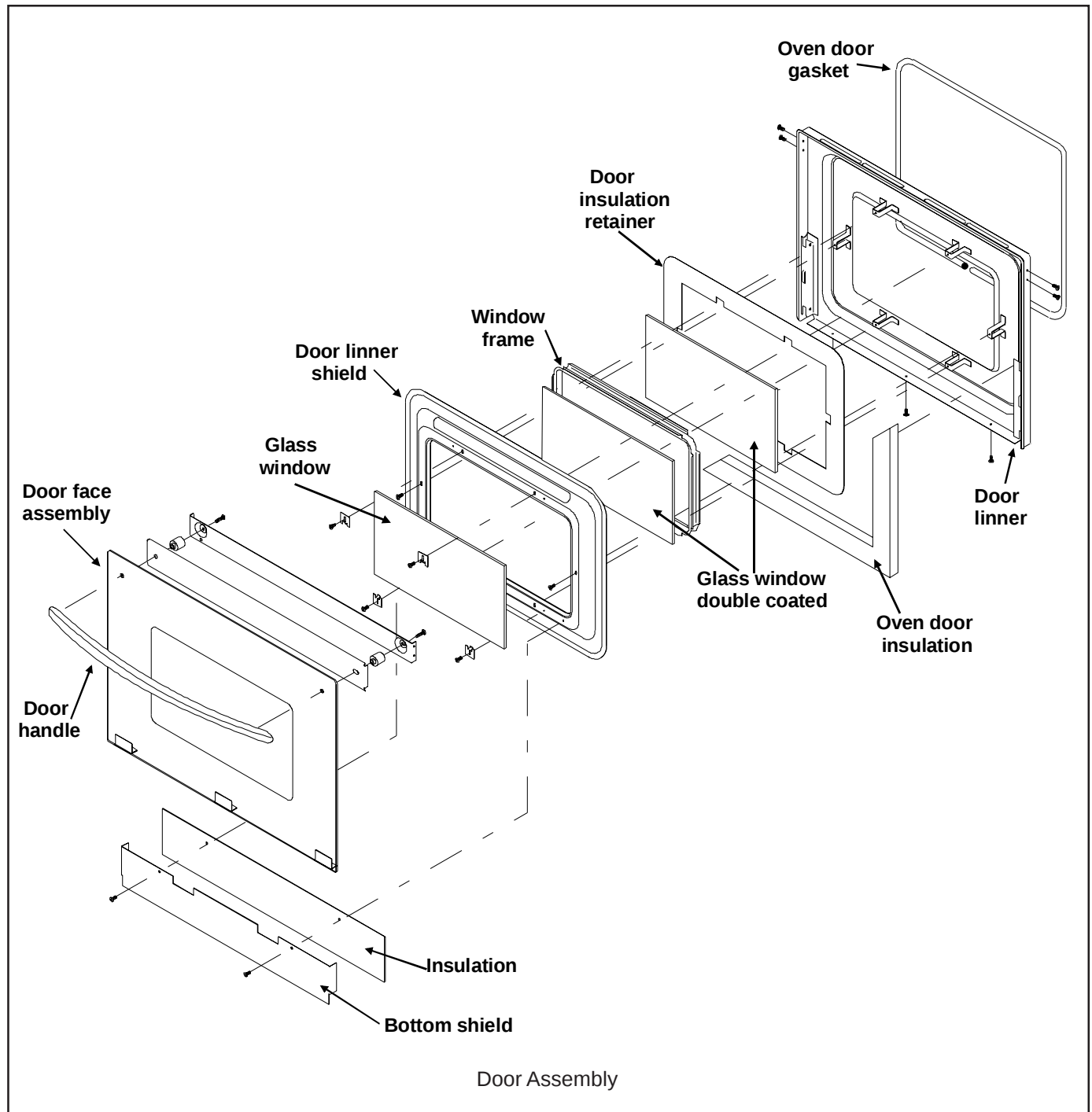
Disassembly Procedures



WARNING

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

Frameless Door



Appendix A

Installation Instructions

INSTALLATION INSTRUCTIONS

Built-In 27" & 30" Electric Wall Ovens

403 WEST FOURTH STREET, NORTH
NEWTON, IA 50208

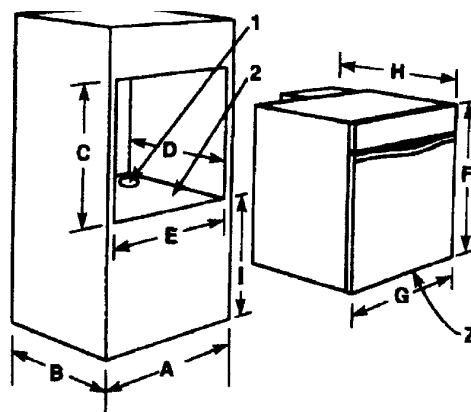
27" SINGLE WALL OVEN

1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 142 lbs.)	
DIMENSIONS		
	inches	cm
A	27 MIN	68.58
B	24 MIN	60.96
C	27 7/8 ± 1/16	70.80
D	24.0	60.96
E	25 1/2 ± 1/16	64.77
F	28 1/4	71.76
G	26 3/4	67.95
H	24 7/16	62.07
I	4 to 33	10.2 to 83.8

30" SINGLE WALL OVEN

1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 142 lbs.)	
DIMENSIONS		
	inches	cm
A	30 MIN	76.20
B	24 MIN	60.96
C	27 7/8 ± 1/16	70.80
D	24.0	60.96
E	28 1/2 ± 1/16	72.39
F	28 1/4	71.76
G	29 3/4	75.57
H	24 7/16	62.07
I	4 to 33	10.2 to 83.8

SINGLE WALL OVEN



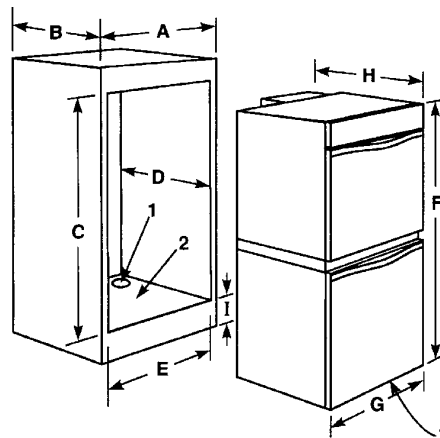
27" DOUBLE WALL OVEN

1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 250 lbs.)	
DIMENSIONS		
	inches	cm
A	27 MIN	68.58
B	24 MIN	60.96
C	50.0 ± 1/16	127.0
D	24.0	60.96
E	25 1/2 ± 1/16	64.77
F	50 1/4	127.64
G	26 3/4	67.95
H	24 7/16	62.07
I	4 to 12	10.2 to 30.5

30" DOUBLE WALL OVEN

1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 250 lbs.)	
DIMENSIONS		
	inches	cm
A	30 MIN	76.20
B	24 MIN	60.96
C	50.0 ± 1/16	127.0
D	24.0	60.96
E	28 1/2 ± 1/16	72.39
F	50 1/4	127.64
G	29 3/4	75.57
H	24 7/16	62.07
I	4 to 12	10.2 to 30.5

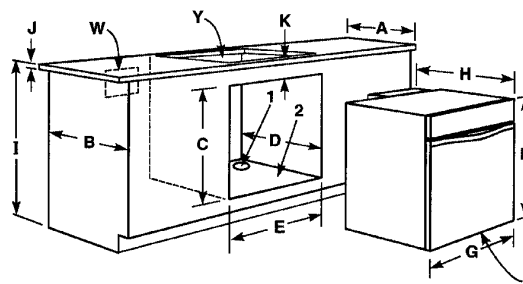
DOUBLE WALL OVEN



30" WALL OVEN UNDER COUNTER

1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 142 lbs.)	
DIMENSIONS		
	inches	cm
A	25	63.50
B	24 MIN	60.96
C	27 7/8 ± 1/16	70.80
D	24.0	60.96
E	28 1/2	72.39
F	28 1/4	71.76
G	29 3/4	75.57
H	24 7/16	62.07
I	36	91.44
J	1 1/2	3.81

UNDER COUNTER WALL OVEN



		30" WALL OVEN	
** COOKTOPS		inches	cm
K	4 Burner Gas Glass Top	2 1/8 MIN	5.4 MIN
K	Electric	3 1/8 MIN	7.9 MIN
K	Induction	3 1/8 MIN	7.9 MIN
K	4 Burner Gas Stamped Top	4 13/16 MIN	12.2 MIN

NOTES

Z	Do not block air intake slots along bottom of oven.
Y	Gas or electric cooktops may be installed over ovens. See cooktop installation instructions for cutout size.
W	Electrical connection for electric cooktop must be in adjacent accessible location. Cooktop and wall oven must be on separate 120/240 or 120/208 volt 60 Hz AC circuits.

NOTE: * Hole must be cut as close to corner of cabinet as possible.

** See dealer for approved cooktops.

8101P541-60
(02-03-00)

Installation Instructions

CAUTION

For European style cabinets (flush front) the required clearance for operation of the oven door is minimum spacing of 7/8" between the cutout and the door, hinge or drawer of the cabinet.

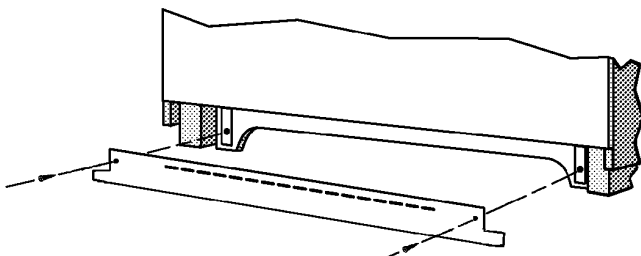
Some built-in cabinets may not be wide enough, due to their construction, to allow this installation.

1. Cut hole in cabinet to mount oven. Cutout in cabinet should be level and straight.

NOTE: There are no provisions to level the unit after it is installed. An oven that is not level could cause poor baking results.

2. Install plywood floor as shown.
3. Attach unit to the cabinet with four No. 8 x 1" screws supplied with unit inside of envelope containing these instructions. Pre-drill holes in cabinet for attachment screws using 1/8" drill. Oven mounting holes are provided in side trim.
4. See instructions at right for electrical hook-up.
5. See Use and Care Manual for operating instructions.

Installing Bottom Trim Piece



Electrical Connections

Unit to be properly circuit protected and wired according to local electrical code and National Electrical Code.

It is advisable that the electrical wiring and hookup be accomplished by a competent electrician.

120/240 VAC or 120/208 VAC 60 Hz. See serial plate on front of unit for power requirements.

The neutral of this unit is grounded to the frame through the green or solid grounding wire. (The green and the white wires are twisted together at the termination of the conduit.) If 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, untwist or disconnect the green wire and connect the green wire to ground in accordance with local code. Connect the white neutral to the service neutral. Connect all wires to the branch circuit with approved connectors. Use copper or aluminum wire. If aluminum wire is used, use connectors recognized for joining aluminum to copper.

The chart below recommends the minimum circuit protection and wire size if the appliance is the only unit on the circuit.

K.W. RATING ON SERIAL PLATE	RECOMMENDED MINIMUM CIRCUIT PROTECTION IN AMPERS	WIRE SIZE (AWG)
0 - 4.8	20	12
4.9 - 6.9	30	10
7.0 - 9.9	40	8
10.0 - 11.9	50	8
12.0 - 14.9	60	6

Service

Interrupt the source of electricity to the unit when attempting to repair or service the oven. Failure to do this could result in a dangerous or even fatal shock.

IMPORTANT - SAVE FOR LOCAL ELECTRICAL INSPECTOR'S USE

Installation Instructions

INSTALLATION INSTRUCTIONS

Built-In 27" & 30" Electric Wall Ovens



403 WEST FOURTH STREET, NORTH
NEWTON, IA 50208

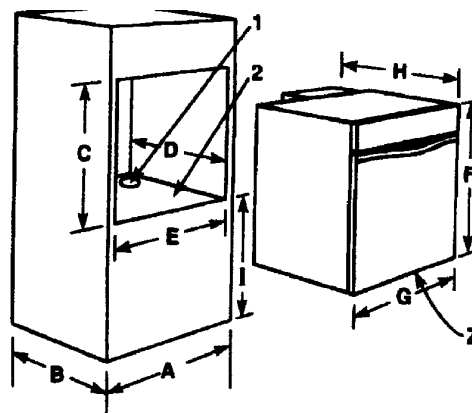
27" SINGLE WALL OVEN

1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 200 lbs.)	
DIMENSIONS		
	inches	cm
A	27 MIN	68.58
B	24 MIN	60.96
C	29 1/8 ± 1/16	73.98
D	24 MIN	60.96
E	25 1/2 ± 1/16	64.77
F	29 1/2	74.93
G	26 3/4	67.95
H	25 7/16	64.61
I	4 to 31	10.2 to 78.7

30" SINGLE WALL OVEN

1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 200 lbs.)	
DIMENSIONS		
	inches	cm
A	30 MIN	76.20
B	24 MIN	60.96
C	29 1/8 ± 1/16	73.98
D	24 MIN	60.96
E	28 1/2 ± 1/16	72.39
F	29 1/2	74.93
G	29 3/4	75.57
H	25 7/16	64.61
I	4 to 31	10.2 to 78.7

SINGLE WALL OVEN



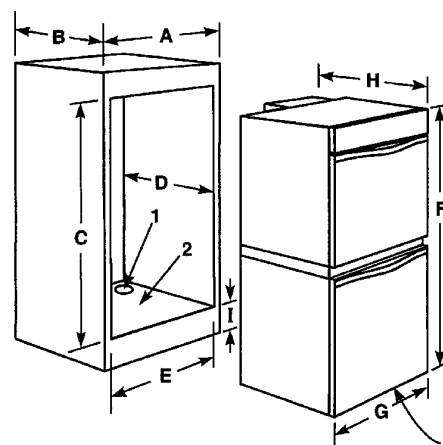
27" DOUBLE WALL OVEN

2" DOUBLE WALL OVER		
1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 310 lbs.)	
DIMENSIONS		
	inches	cm
A	27 MIN	68.58
B	24 MIN	60.96
C	51 7/8 ± 1/16	13.76
D	24 MIN	60.96
E	25 1/2 ± 1/16	64.77
F	52 1/4	132.72
G	26 3/4	67.95
H	25 1/2	64.77
I	4 to 10	10.2 to 25.4

30" DOUBLE WALL OVEN

30" DOUBLE WALL OVER		
1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 310 lbs.)	
DIMENSIONS		
	inches	cm
A	30 MIN	76.20
B	24 MIN	60.96
C	51 7/8 ± 1/16	131.76
D	24 MIN	60.96
E	28 1/2 ± 1/16	72.39
F	52 1/4	132.72
G	29 3/4	75.57
H	25 1/2	64.77
I	4 to 10	10.2 to 25.4

DOUBLE WALL OVEN



NOTES

Z	Do not block air exhaust slots along bottom of oven.
Y	Gas or electric cooktops may be installed over ovens. See cooktop installation instructions for cutout size.
W	Electrical connection for electric cooktop must in adjacent accessible location. Cook top and wall oven must be on separate 120/240 or 120/208 volt 60 Hz AC circuits.

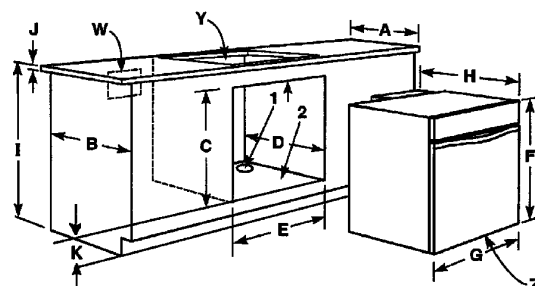
30" WALL OVEN UNDER COUNTER

1	1 1/4" Dia. Conduit Access Hole*	
2	5/8" Plywood Floor (Must Support 200 lbs.)	
DIMENSIONS		
	inches	cm
A	25	63.50
B	24 MIN	60.96
C	29 1/8 ± 1/16	73.98
D	24 MIN	60.96
E	28 1/2	72.39
F	29 1/2	74.93
G	29 3/4	75.57
H	25 7/16	64.61
I	36	91.44
J	1 1/2	3.81

30" WALL OVEN

	inches	cm
K	All JA Cooktops	3 MAX
		7.62 MAX

UNDER COUNTER WALL OVEN



NOTE: * Hole must be cut as close to corner of cabinet as possible.
** See dealer for approved cooktops.

8101P482-60
(05-03-00)

Installation Instructions

WARNING

Improper installation of the grounding circuit can result in a risk of electric shock.

Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, if doubt exists as whether the appliance is properly grounded.

CAUTION

For European style cabinets (flush front) the required clearance for operation of the oven door is minimum spacing of 7/8" between the cutout and the door, hinge or drawer of the cabinet.

Some built-in cabinets may not be wide enough, due to their construction, to allow this installation.

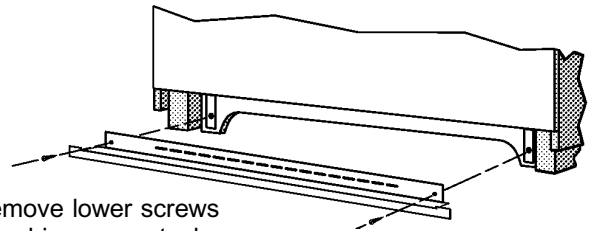
Installation

1. Cut hole in cabinet to mount oven. Cutout in cabinet should be level and straight.

NOTE: There are no provisions to level the unit after it is installed. An oven that is not level could cause poor baking results.

2. Install plywood floor as shown.
3. Remove oven door(s). See Oven Door Removal procedure.
4. Attach unit to the cabinet with four No. 8 x 1" screws supplied with unit inside of envelope containing these instructions. Pre-drill holes in cabinet for attachment screws using 1/8" drill. Oven mounting holes are provided in side trim.
5. Install bottom trim.
6. Replace oven door(s). See Oven Door Replacement procedure.
7. See instructions at right for electrical hook-up.
8. See Use and Care Manual for operating instructions.

Installing Bottom Trim Piece



Remove lower screws from hinge receptacle plates. Align lower trim and reinstall screws.

DO NOT INSTALL BOTTOM TRIM UNTIL UNIT IS ATTACHED TO THE CABINET.

Electrical Connections

Unit to be properly circuit protected and wired according to local electrical code and National Electrical Code.

It is advisable that the electrical wiring and hookup be accomplished by a competent electrician.

120/240 VAC or 120/208 VAC 60 Hz. See serial plate on front of unit for power requirements.

The neutral of this unit is grounded to the frame through the green or solid grounding wire. (The green and the white wires are twisted together at the termination of the conduit.) If 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, untwist or disconnect the green wire and connect the green wire to ground in accordance with local code. Connect the white neutral to the service neutral. Connect all wires to the branch circuit with approved connectors. Use copper or aluminum wire. If aluminum wire is used, use connectors recognized for joining aluminum to copper.

The chart below recommends the minimum circuit protection and wire size if the appliance is the only unit on the circuit.

K.W. RATING ON SERIAL PLATE	RECOMMENDED MINIMUM CIRCUIT PROTECTION IN AMPERS	WIRE SIZE (AWG)
0 - 4.8	20	12
4.9 - 6.9	30	10
7.0 - 9.9	40	8
10.0 - 11.9	50	8
12.0 - 14.9	60	6

Service

Interrupt the source of electricity to the unit when attempting to repair or service the oven. Failure to do this could result in a dangerous or even fatal shock.

IMPORTANT - SAVE FOR LOCAL ELECTRICAL INSPECTOR'S USE

Installation Instructions

Oven Door Removal

For ease of installation, remove oven door(s) before placing unit into cutout. This will reduce the weight of the unit by about 35 pounds per door. Remove oven door(s) as follows:

- Open oven door to the “Full Open” position (see Figure 1).
- Rotate hinge locking lever DOWN, to unlock hinge from the unit (see Figure 2).
- Close oven door to the “Removal” position (until it stops; see Figure 3).
- Grasp the door firmly on each side and lift the door straight up and off the unit.

NOTE: The oven door is heavy. Be sure you have a firm grip before lifting the oven door off the unit.

Do not lift the door by the handle!

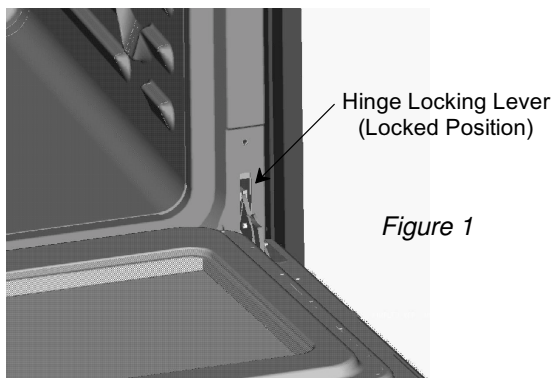


Figure 1

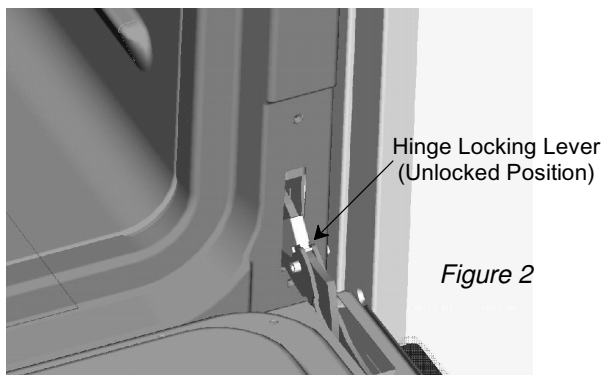


Figure 2

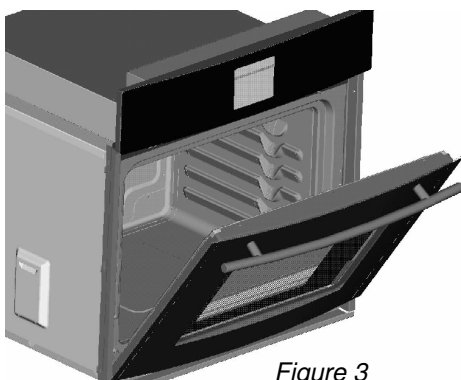


Figure 3

Oven Door Replacement

Replace oven door(s) after placing unit into cutout. Replace oven door(s) as follows:

- Grasp oven door firmly on each side, hold oven door at approximately a 30° angle and align oven door hinge arm (see Figure 4) with hinge receiver on unit (see Figure 5).
- Insert oven door hinge arm into hinge receiver until the hinge arm slots (see Figure 4) align with horizontal pins on the hinge receiver (see Figure 5) and place hinge arm onto the hinge receiver.
- Once the hinge arms are resting on the hinge receiver pins (see Figure 3) open oven door slowly to the “Full Open” position (see Figure 2).
- Rotate hinge locking lever UP to the locked position to secure the oven door to the unit (see Figure 1).

NOTE: Make sure that hinge locking lever is rotated fully UP to the locked position as shown (see Figure 1) before closing oven door.

CAUTION

Door will not close all the way and could fall off when opened if the hinge locking levers are not rotated fully UP to the locked position.

If hinge locking lever will not rotate fully UP to the locked position as shown (see Figure 1) then the hinge arm is not properly seated on the receiver. Rotate the hinge locking lever DOWN to the unlocked position (see Figure 2) and remove oven door as outlined in the Oven Door Removal procedure. Then replace the oven door as outlined in the Oven Door Replacement procedure, making sure that the hinge arm slots are fully seated on the horizontal pins in the hinge receiver.

- Once the hinge locking lever is rotated fully UP to the locked position (see Figure 1) close the oven door.

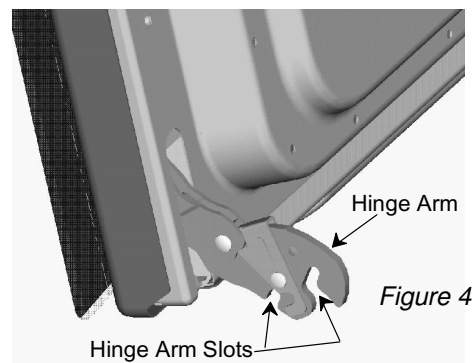


Figure 4

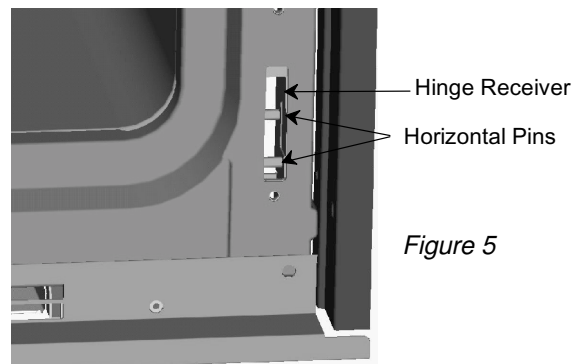


Figure 5