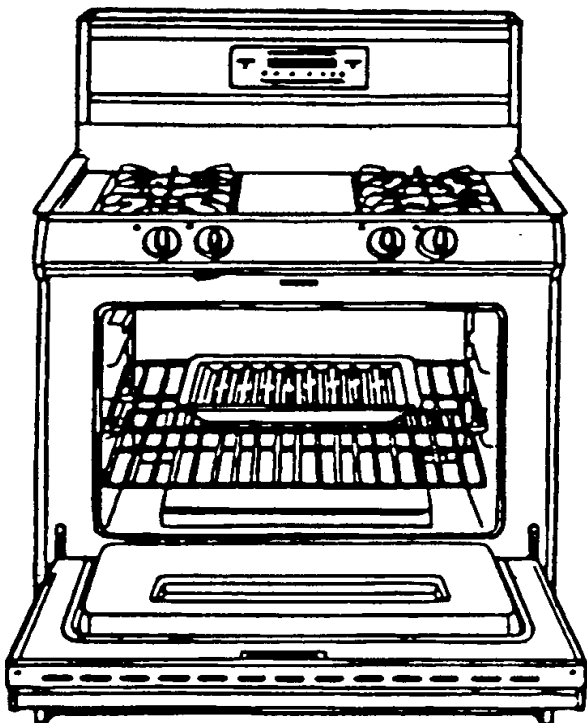


# Service

## Gas Ranges

This manual replaces RB231001 Rev. 3.



### Models and manufacturing numbers in this manual

AGS730	P1141258N
AGS730	P1141263N
AGS730	P1141268N
AGS730	P1143301N
AGS750	P1141236N
AGS751	P1141273N
AGS751	P1141288N
AGS751	P1142634N
AGS751*1	P1143303N
AGS760	P1141237N
AGS760	P1141238N
AGS760	P1141251N
AGS761	P1141274N
AGS761	P1141289N
AGS761	P1142635N
AGS761	P1143304N
AGS761*1	P1143305N
AGS780	P1141240N
AGS780	P1141252N
AGS780	P1168601N
AGS780	P1168601S
AGS780	P1168602N
AGS780	P1168602S
AGS781	P1141275N
AGS781	P1142636N
AGS781	P1143306N
RSF3200U	P1141255N
RSF3200U	P1141264U
RSF3200U	P1141271N
RSF3200U	P1143307N
RSF3300U	P1141256N
RSF3300U	P1141265U
RSF3300U	P1141272N
RSF3300U	P1143308N
RSF3400U	P1141222N
RSF3410U	P1141257N
RSF3410U	P1141269N
RSF3410U	P1143309N
RSK3700U	P1141223N
RSK3700U	P1141247N
RSK3700U	P1141253N
RSK3700U	P1141270N
RSK3700U	P1143310N

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

# **Amana**

RB231001  
Revision 4  
December 1997

# Introduction Information

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 manual. **REVIEW ALL SERVICE INFORMATION IN THE APPROPRIATE SERVICE MANUAL BEFORE BEGINNING REPAIRS.**

## Important Notices for Consumers and Servicers



### WARNING

To avoid risk of serious injury or death, repairs should not be attempted by an unauthorized personal, dangerous conditions (such as exposure to electrical shock) may result.



### CAUTION

Amana will not be responsible for any injury or property damage from improper service procedures. If performing service on your own product, assume responsibility for any personal injury or property damage which may result.

To locate an authorized servicer, consult your telephone book or the dealer from whom you purchased this product. For further assistance, contact: 1 (800) 628-5782 first, if no answer call number listed below.

CONSUMER AFFAIRS DEPT.  
AMANA REFRIGERATION, INC.  
AMANA, IOWA 52204

**OR  
CALL**

1 (800) 843-0304

If outside the United States contact:

AMANA  
ATTN: CONSUMER AFFAIRS DEPT  
AMANA, IOWA 52204, USA  
Telephone: (319) 622-5511  
Facsimile: (319) 622-2180  
TELEX: 4330076 AMANA  
CABLE: "AMANA", AMANA, IOWA, USA

## 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 or product or property damage.

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# Introduction

## General Information

This manual provides complete instructions and suggestions for handling, installing and servicing Amana and Caloric freestanding gas ranges.

The directions, information and warnings in this manual are developed from experience with, and careful testing, of the product. If the unit is installed according to the manual, it will operate properly and will require minimal servicing. A unit in proper operating order ensures the customer all the benefits provided by clean, modern gas cooking.

This manual contains all the information needed by authorized Amana service technicians to install and service Amana and Caloric free standing gas ranges. There may be, however, some parts which need further explanation. Amana maintains a toll-free technical support line to answer questions from authorized service technicians. The number is 1-800-AMANA99.

## Model Identification and Ordering Replacement Parts

A unit's model, serial, and manufacturing numbers are recorded on its rating label. The rating label is located on the lower door frame on either side of the storage drawer. It can be seen by opening the storage door. Before ordering parts, write down the correct model, serial, and manufacturing numbers from the rating label. This avoids incorrect shipments and delays. Please refer to the parts catalog when ordering replacement parts.

## History of Changes

Revision 1: Added AGS and RSF series to manual.

Revision 2: Added AGS series to manual.

Revision 3: Revised schematic on page 60, added new compression hinge, added new "P" numbers, and new venturi redesign.

Revision 4: Corrected manual information

## Burner Specifications

**NOTE: Not all models are listed below, for specific information on burner specifications refer to rating label located on unit.**

### RSF3200, RSF3300, AGS730

BTU Input	Natural Gas	LP Gas
Large Burner	9,100	8,000
Small Burner	7,000	6,000
Oven Burner	15,500	15,500
Waist Hi Broil	11,000	11,000
	Drill Size 54	Drill Size 61

### AGS751, AGS761, AGS781, RSF3410

BTU Input	Natural Gas	LP Gas
Large Burner	9,100	8,000
Small Burner	7,000	6,000
Oven Burner	15,500	15,500
Ultra-Ray or InstaBroil	14,000	13,000
	Drill Size 52	Drill Size 58

## Electrical Specifications

### All Models

120 VAC, 60hz, 3-wire, single phase, 15 amp

## General Features

Models	Insta-Broil Broil	Waist Hi Broil	ERC III Auto Latch	Radial Clock
AGS730		X		X
AGS750	X			X
AGS751	X			X
AGS760	X			
AGS761	X		X	
AGS780	X			
AGS781	X		X	
RSF3200		X		X
RSF3300		X		X
RSF3400	(Ultra-Ray)			X
RSF3410	(Ultra-Ray)			X
RSK3700	(Ultra-Ray)		X	

All models feature upswept cooktops, sealed burners and automatic ignition. Some models may have additional features. This chart reflects only models added for current revision.

# Introduction

## Amana Cooking Products Nomenclature

Amana	Product Group	Product Type	Features	Color	
A - Amana	G - Gas Range R - Electric Range K - Cooktop CO - Convection Wall Oven O - Wall Oven	DG1 - Downdraft Gas Cooktop, 1 pc Grate DH - Downdraft Electric Cooktop, Optional Halogen Cartridge DS - Gas or Electric Downdraft Slide-In Range G - Gas on Glass Cooktop, Sealed Burners H - Halogen Smoothtop Range, 1 Dual Element	2H - Halogen Smoothtop Cooktop, 2 R - Electric Range, Calrod Elements S - Gas Range, Sealed Burners T - Radiant Smoothtop Range 2T - Radiant Smoothtop Range or Cooktop, 1 Dual Element	Range Features - Variable Cooktop Width <ul style="list-style-type: none"> <li>• 30 = 30"</li> <li>• 35 = 35"</li> <li>• 300 = 30", reduced depth (20-1/4")</li> </ul> Wall Oven Width/Fuel <ul style="list-style-type: none"> <li>• 24SE2 = 24" Single Electric (2.9 cu. ft. oven), Soft Look Trim</li> <li>• 27SE = 27" Single Electric (3.3 cu. ft. oven)</li> <li>• 27DG = 27" Double Gas (Two 3.3 cu. ft. ovens)</li> </ul>	No Designator - Ebony K - Chrome Top L - Almond LG - Almond, Glass Door W(1*) - White WW - White on White E(1*) - Ebony  * Enhancements: Electric Variable Intensity System, Gas One Piece Grates

## Caloric Cooking Products Nomenclature

Product Line	Product Type	Series	Width on Top	Backguard	Features	Fuel	Color
E - Electric Range R - Gas Range H - Vent Hood	C - Convertible H - High Broil J - Hi-Broil w/Cont. Cleaning Panels K - Upper Oven Microwave Lower-Self Cleaning Low Broil L - Low Broil w/Cont. Cleaning Panels M - Gas Low Broil, Continuous Clean, Microwave Filler or Trim Kit S - Self-Clean T - Cooktop U - Under-Counter W - Wall Oven X - Wall Oven w/cont. Clean Panels	D S T N	0 - No Width Required 1 - 15-18 inches 2 - 20-18 inches 3 - 30-35 inches 4 - 40-42 inches 6 - 36 inches	0 - No Backguard 1 - Plain Rail/Laminated Top 2 - Plain Rail/Cutting Board 3 - 4-inch Backguard w/ Auto-Timer 4 - Special Designation 5 - Standard 6 - Deluxe 7 - Special Designation 8 - Deluxe Backguard 9 - Double Deck	Variable	N - Natural Gas Bottled Gas L - Universal U - Factory V - Preset for Bottled Gas X - Export 1 - 115 Volts 2 - 230 Volts 8 - 208 Volts	O - No Color W - White L - Almond B - Black K - Chrome Stainless Steel WW - White on White LL - Almond on Almond

# Introduction

## Safety Precautions

### General

1. The range must be installed and properly grounded by a qualified installer or service technician.
2. Never use the range for heating a room.
3. Do not store items on the rangetop. Items stored on the rangetop can become hot and melt.
4. Wear proper apparel. Loose-fitting garments should never be worn while using the range.
5. Gasoline, or other flammable vapors or liquids and combustible materials should not be stored near the range. They may ignite, causing a fire.
6. Use only dry potholders. Using damp potholders on hot surfaces may result in steam burns. Do not let a potholder touch an element. Do not use a towel or a bulky cloth as a potholder.
7. Do not leave children unattended in an area where the range is in use.
8. Never sit, stand or lean on any part of the range.

### Surface Cooking

1. Use utensils with flat bottoms large enough to cover the burner. Undersized utensils will expose the burner to direct contact with clothing.
2. Turn utensil handles inward. They must not extend over adjacent surface burners.
3. Do not touch areas near surface burners during or immediately after use. These areas can become hot enough to cause burns.
4. Do not store items of interest to children above the range.
5. Only certain types of glass, glass/ceramic, ceramic, earthenware, or other glazed utensils are suitable for rangetop use. Unsuitable utensils may break due to sudden temperature changes.
6. Never leave surface burner unattended at high heat settings. Boilovers can cause smoking and may ignite.
7. Clean the rangetop with caution. Some cleaners can produce noxious fumes if used on hot surfaces.
8. Do not place aluminum foil or foods packaged in aluminum foil directly on a burner.

### Oven

1. Use care when opening the oven door. Let hot air or steam escape before removing or replacing food.
2. Do not heat unopened food containers in the oven. Buildup of pressure may cause a container to burst.
3. Keep the oven vent ducts unobstructed.
4. Place oven racks in desired location while oven is cool. If a rack must be moved while the oven is hot, use a dry potholder.
5. Do not use aluminum foil to line the oven bottom. Aluminum foil can cause a fire and will seriously affect baking results.
6. Do not touch the interior surfaces of the oven during or immediately after use. Do not let clothing or other flammable materials contact bake or broil burners. Although these surfaces may be dark in color, they can still be hot enough to burn.
7. Other oven areas can become hot enough to cause burns, such as vent openings, window, oven door and oven racks.
8. Do not use oven cavities for storage space.
9. Do not drape towels or other materials on the oven door handle. These items may contact a burner or become too hot and ignite.
10. Do not use aluminum foil to cover the broiler grid. The foil can trap grease on top of the grid, causing it to ignite.
11. Do not attempt to clean the gasket located on the inside of the oven door. Cleaning the gasket may cause damage. This gasket is required to seal the oven.

### Safety Procedures

Due to the nature of cooking, fires can occur as a result of overcooking or excessive grease. Use the following procedures to extinguish a fire in the unlikely event one occurs:

#### Surface Fires

1. Do not turn on the vent hood. The fan can spread the flames.
2. If it is safe to do so, turn the surface burner to *OFF*.
3. Smother the fire with nonflammable lid or use a Class "ABC" or "BC" fire extinguisher. Do not use water on a grease fire.

#### Oven fires

1. Do not open the oven door.
2. Turn all controls to *OFF*.
3. As an added precaution turn off the electricity and gas at the main circuit breaker or fuse box.
4. Allow the food or grease to burn itself out in the oven.

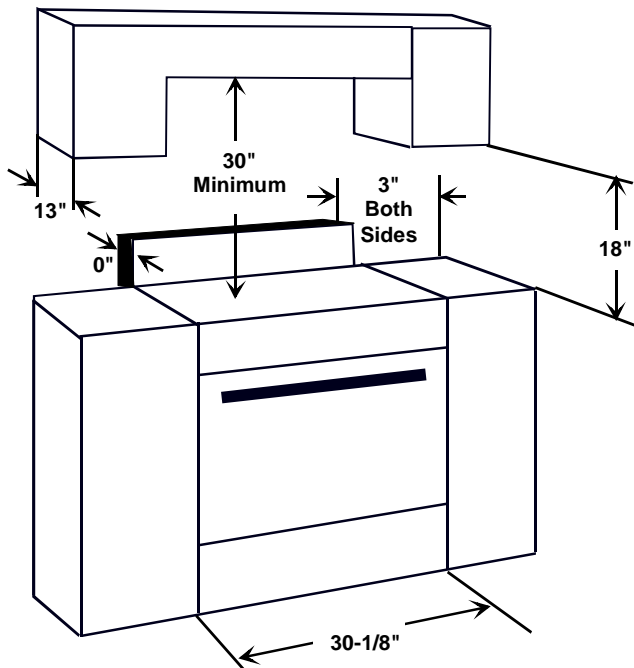


# Installation

## Cabinet Cutout and Clearances

Prepare the cutout as shown below.

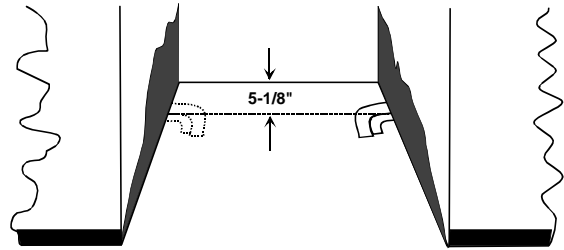
- The range must be installed flush to the rear wall. It can be installed flush with the side cabinets if desired.
- The space between the side wall and the range top must be a minimum of three inches.
- There must be at least 30 inches between the cooktop surface and the bottom of an unprotected wood or metal cabinet. The unprotected surface must also be at least equal to the width of the range.
- The maximum depth of the cabinets installed above the range is 13 inches.
- Seal any openings in the wall behind the range or on the floor under the range.



**Cabinet Cutout and Clearances**

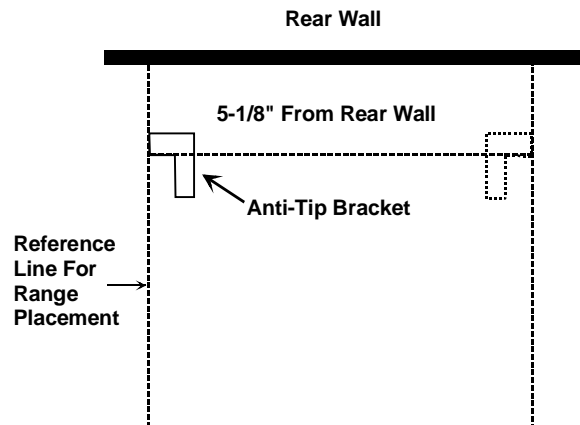
## Anti-Tip Bracket Installation

1. On the right side of the cutout or installation location, mark a point 5-1/8 inches from the back wall. Repeat on the left side. Draw a straight line between the points.
2. When installing the unit against cabinets, place the inside edge of the bracket(s) against the line. Place the end of the bracket(s) against the cabinet side. Mark hole locations.



**Anti-Tip Bracket Location With Cabinets**

- 2a. When installing the unit without cabinets, position the range as it would be installed. Draw a reference line on the floor from front to back along one side of the range. Place the inside edge of the bracket(s) flush with the line drawn in step one and the end of the bracket(s) flush with the line just drawn. Mark hole locations.



**Anti-Tip Bracket Location Without Cabinets**

3. If mounting into wood flooring, drill 3/32-inch holes as marked. If mounting into concrete, use a masonry drill bit and drill 3/16-inch holes. Insert plastic anchors into concrete holes. Position bracket and mount using screws supplied with the unit.
4. Level the range with leveling legs. The range must be level to assure uniform cooking and baking. A level should be placed on an oven rack or on top of the range to level the unit. Verify the leveling legs are extended at least one-quarter inch and engaged with the anti-tip bracket(s).

# Installation

## Make the Gas Connection

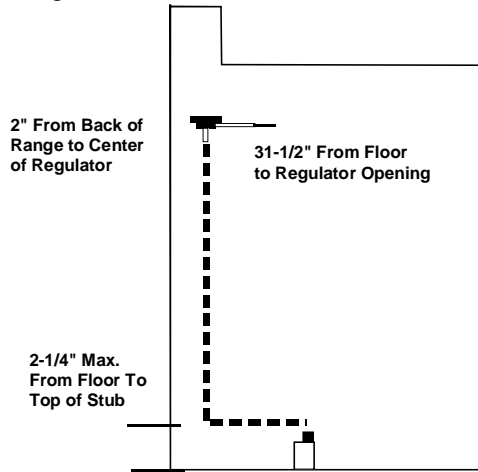
Before connecting this appliance to the gas supply system, the installation must conform with local codes or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-Latest Edition.

Units built for use in Canada must conform with the current natural Gas Installation Code, CAN/CGA-B149.1 or the current propane installation code, CAN CGA-BG149.2, and with local codes where applicable.

The installation of appliances designed for manufactured or mobile homes must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or when such standard is not applicable, the Standard for manufactured home Installations, ANSI A225.1/NFPA 501A, (In Canada CAN/CS-Z240 Mobile Homes) or with local codes if applicable.

## Pressure Regulator Location

The pressure regulator is located behind the removable panel on the back right side of the range. The following illustration shows the location of the pressure regulator.



Pressure Regulator Location

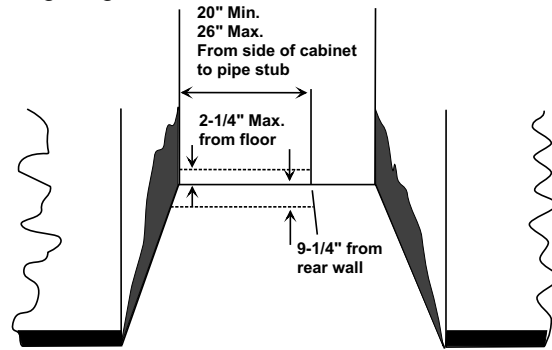


## WARNING

Do not overtighten the fitting on the pressure regulator. Overtightening may cause the regulator to crack.

## Location of the Gas Supply Stub

When using hard piping to connect the range to the supply gas, the stub must be located as shown in the following diagram.



Gas Supply Stub Location

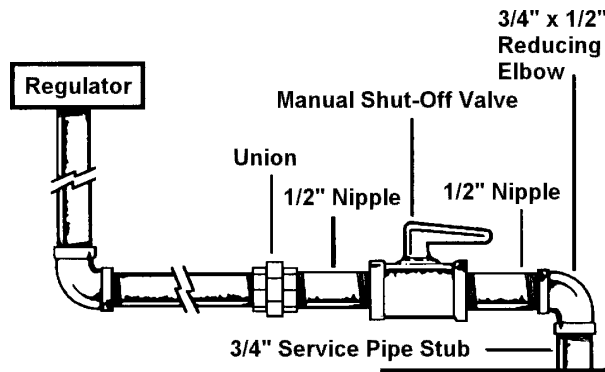
When using a flexible connector the supply stub may be located up to 26 inches from the side of the cabinet.

## Hard Piping

The gas connection can be made with a 1/2-inch black iron hard piping. The amount of piping needed will depend on the location of the service stub. The connection should be made using a union, two 1/2-inch nipples, a reducing elbow and a manual shut-off valve as illustrated below.

**Important Note:** Use a crescent wrench to support the pressure regulator when connecting it to the gas supply; otherwise it may be damaged.

Before making the final gas connection, verify that the range is properly grounded and the power supply cord is plugged in.



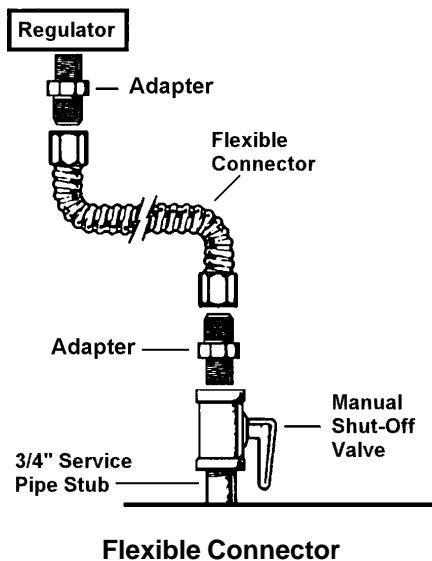
Hard Piping

# Installation

## Flexible Connector

The gas connection can also be made with an AGA or CGA design certified flexible connector, two adapters and a manual gas shut-off valve. See the illustration below.

**Important Note:** Use a crescent wrench to support the pressure regulator when connecting it to the gas supply; otherwise it may be damaged.



## WARNING

To avoid the risk of a gas leak or fire, use only a new flexible connector that is design certified by the AGA or CGA. Do not reuse an old connector. Do not reuse a connector if the appliance is moved.

## Manual Shut-Off Valve

A manual shut-off valve must be installed in an accessible location external to the range. The consumer must know how and where to turn off the gas. Seal pipe joints with a pipe joint compound resistant to the action of natural or LP gas.

## Pressure Testing the Gas Supply Line

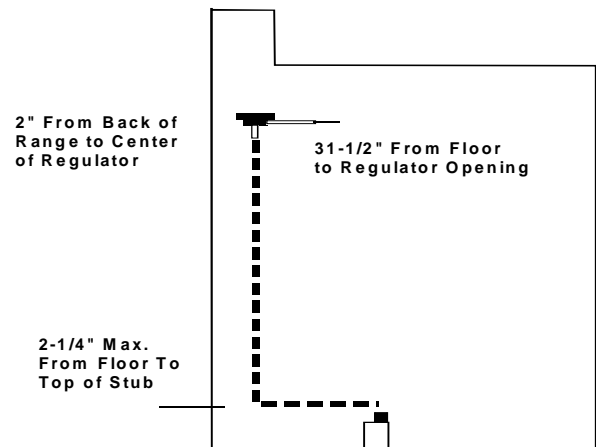
The appliance and its individual shut-off valve must be disconnected from the house gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 psig (3.5 kPa).

The appliance must be isolated from the house gas supply piping system by closing the individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa). The gas supply pressure for checking the regulator setting must be at least seven inches WCP for natural gas and 11 inches WCP for LP gas.

## Electrical Connection

The installation of this product must conform with local codes or in the absence of local codes, with the current Canadian Gas Installation Code, CAN/CGA-B149.2. If an external electrical source is utilized, when the appliance is installed it must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or in Canada with the current CSA Standard C22.1, Canadian Electric Code, Part 1.

The receptacle must be located in the shaded area illustrated below.



## Power Receptacle Location

The wiring diagram is located on the underside of the storage drawer.

The receptacle should be checked by a qualified electrician to make sure it is properly grounded and polarized. This must be a 120 volt, 60 hertz, properly grounded, three-prong receptacle protected by a 15 amp circuit breaker or time delay fuse.

Where a standard two-prong wall receptacle is encountered, it is the customer's personal responsibility and obligation to have it replaced with a properly grounded, three-prong wall receptacle. Do not cut or remove the grounding prong from this plug.

## WARNING

To avoid the risk of electrical shock, burn or serious personal injury this unit must be properly grounded and plugged into a properly grounded three-prong wall receptacle.

# Installation

## Final Gas Connection

Make the final gas connection as illustrated previously. When using hard piping, make the final connection at the union. When using flexible connector make the final connection at the adapter.

## Test for Gas Leaks

1. After making the gas connection, close all top burners valves and turn on the gas supply.
2. Use a soap solution on all connections in the gas supply line and in the range to test for leaks. Bubbles appear when a leak is present.
3. If bubbles appear, shut off the gas supply valve.
4. If a factory fitting is leaking gas, tighten the joint. If a connection in the supply line is leaking, unscrew it completely, apply additional pipe joint compound and retighten the joint.
5. After retightening the connections, open the gas supply valve and retest for leaks.
6. Any connections disturbed during testing must be retested.



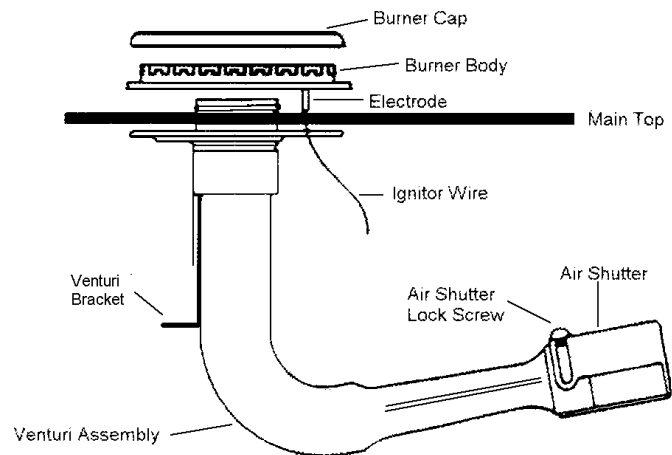
## WARNING

To avoid the risk of fire, never use a lighted match or flame when testing for gas leaks.

## Adjusting the Top Burner Flame Size and Shape

A burner flame should be a clean blue flame with a distinct inner cone approximately 1/4 to 1/2 inches long. If the flame is noisy or blowing, it is getting too much air. If the flame is soft and lazy, it is getting too much gas. If the flame needs adjustment, use the following steps.

1. Disconnect electrical supply. Remove burner grates and caps.
2. Remove burner body screws. Pull burner body upward far enough to disconnect ignition wire.
3. Remove venturi mounting bracket screw. Remove main top.
4. Loosen lock screw on air shutter.
5. Close the air shutter to decrease air to the flame. Open the air shutter to increase air to the flame.
6. After adjusting, tighten lock screw, reverse procedure to reassemble. Retest flame.



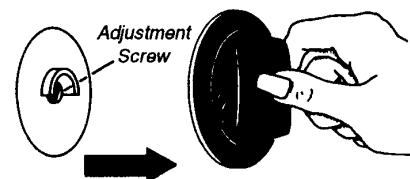
Large burner performance on AGS, RSF and RSK freestanding gas ranges can be improved by closing the air shutter on surface burner venturi tubes. On large burners only, air shutters should be closed as far as practical (before sooting occurs). The air shutter should be adjusted to within approximately 1/4-inch of being completely closed.

Access the air shutters as described previously. Reassemble and test surface burner operation after making this adjustment. This adjustment does not apply to the small burner.

## Adjusting the Height of Top Burner Flames (Some Models)

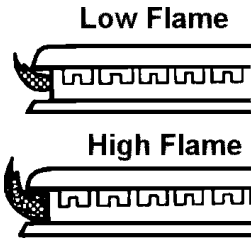
The *LOW* burner flame should be a steady blue flame approximately 1/4-inch high. The flame can be adjusted by using the adjustment screw in the center of the valve stem. If no adjustment screw is visible the valve is non-adjustable and has been factory preset. The valve stem is located directly behind the control knob. To adjust the flame height, follow the instructions below.

1. Remove control knob. (If no adjustment screw is present behind the knob, the flame height cannot be adjusted.)
2. Hold the knob stem with a crescent wrench or a pair of pliers. Use a flat head screwdriver to turn screw located in center of knob stem until flame is approximately 1/4-inches high.
3. Replace control knob.
4. Test flame by turning control from *LOW* to *HI*. Check flame at each setting.



Adjustment Screw Location

# Installation

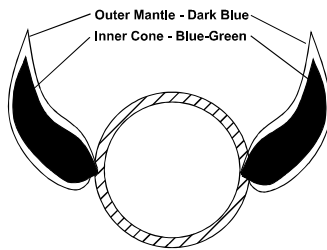


## Top Burner Flame Appearance

### Adjust Oven Burner Flame Shape

The flame should be 1/2-inch long with a dark blue inner cone and bluish-green outer cone. It should be clean and soft. Blowing or lifting of the flame should not occur. The flame can be adjusted using the air shutter. It is located on the lower part of the oven burner.

1. Loosen lock screw on air shutter.
2. Close the air shutter to decrease air to the flame. Open the air shutter to increase air to the flame.
3. Tighten lock screw after adjusting.

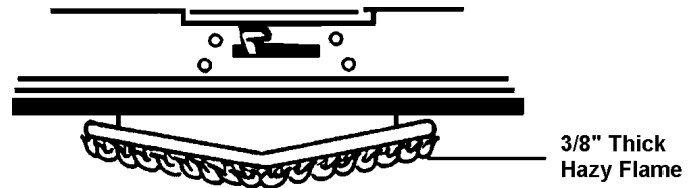


## Oven Burner Flame Appearance

### Ultra-Ray®, Insta-Broil® Flame

The broil burner flame will have a hazy or a fuzzy appearance when operating. This haze should be approximately 3/8-inches thick.

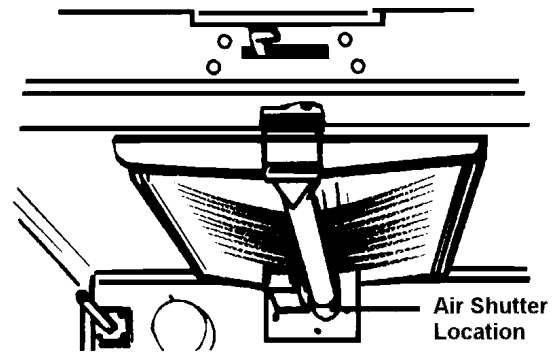
**Important Note:** The broil burner is not adjustable because it is equipped with a fixed orifice. The broil burner does not have an air shutter.



## Ultra-Ray®, Insta-Broil® Broiler Flame

### Adjusting the Shape of the Bar Broil Flame

1. The flame should be approximately 1/2-inches long with a dark blue inner cone and a bluish-green outer cone. There should be no lifting or blowing of the flame.
2. Loosen lock screw. Close the air shutter to decrease air to the flame. Open the air shutter to increase air to the flame.
3. Tighten lock screw after adjusting. Light burner, check flame appearance.



## Bar Broiler Burner Flame

# Installation

## Converting from Natural Gas to LP Gas

Amana and Caloric ranges are equipped to use either natural or LP gas. They are, however, set at the factory to use natural gas. Some components must be adjusted to use LP gas. The following procedures detail the conversion process.

### Pressure Regulator Conversion

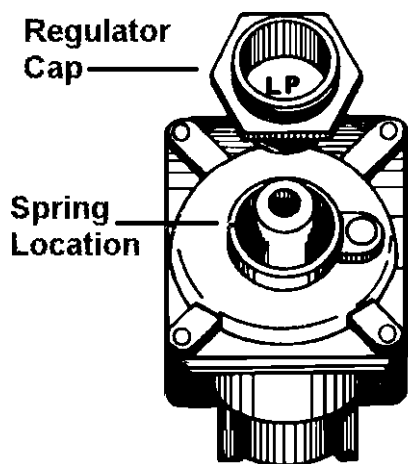
Several varieties of gas pressure regulators may equip Amana and Caloric gas cooking products. All gas pressure regulators perform the same function. In most instances, universal pressure regulators are used in gas cooking products. A universal regulator can be modified to use either natural gas or liquefied petroleum (LP) gas supplies.

Cooking products with universal pressure regulators are set for a natural gas supply at the factory. Gas cooking products can be connected to a natural gas supply without modifying the pressure regulator.

A universal pressure regulator, however, must be modified when connecting a gas cooking product to an LP gas supply. The procedure is described below in the following examples.

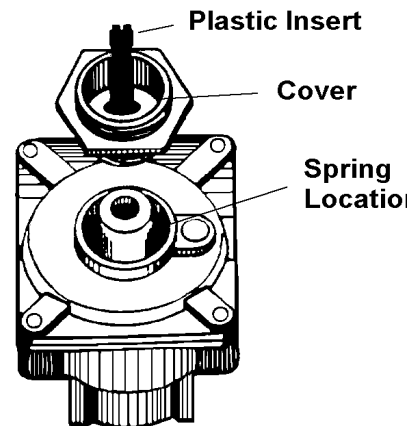
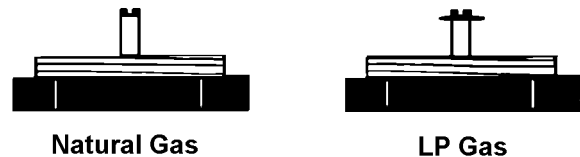
#### Example One

1. Use an adjustable wrench to remove the cap in the center of the pressure regulator.
2. Reverse the cap to read LP as shown below. Do not disturb or move the spring beneath the cap.
3. Use the wrench to tighten the cap. The LP marking should be visible on top of the cap.
4. Reverse these step to connect to a natural gas supply.



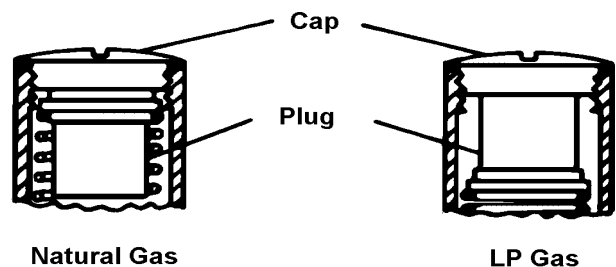
#### Example Two

1. Remove pressure regulator cap with an appropriate wrench.
2. Remove plastic insert from cap. Insert fits tightly in cap.
3. Reverse plastic insert. Push firmly into hole in the cap.
4. Verify insert fits tightly in hole. Do not disturb spring in regulator body.
5. Replace cap in regulator body.



#### Example Three

1. Remove cap with screwdriver slot.
2. Remove insert.
3. Reverse insert and replace. "LPG10" is visible. Do not disturb spring in regulator body.
4. Replace cap.

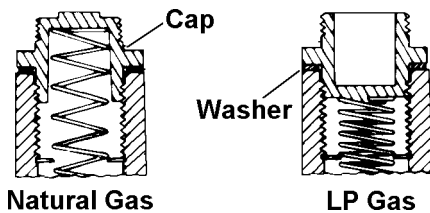


# Installation

## Example Four

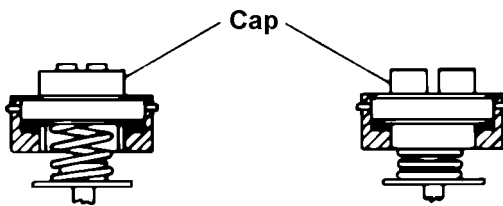
1. Remove cap marked "Nat."
2. Reverse cap. "LP" now appears on cap.
3. Reinsert cap. Do not disturb spring beneath the cap. Verify fiber washer is correctly placed between cap the regulator body.

**Important Note:** Some models may not have washers. If washer is not supplied, none is needed.



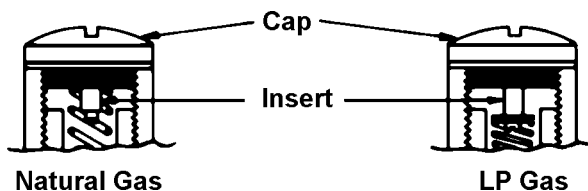
## Example Five

1. Remove cap with screwdriver slot.
2. Reverse and replace cap. Verify "LPG10" is visible. Do not disturb spring beneath cap.



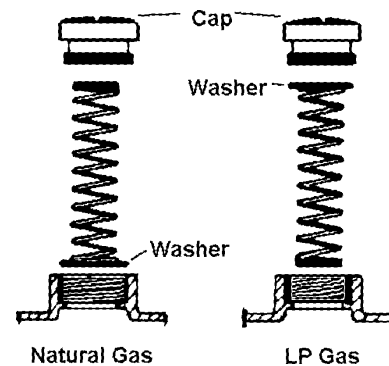
## Example Six

1. Remove cap with screwdriver slot.
2. Remove black insert marked "NAT" from cap. (Insert fits tightly in cap.)
3. Reverse insert.
4. Replace in hole. Verify "LP" is visible. Verify that insert is pressed firmly into shoulder. Do not disturb spring in regulator body.
5. Replace cap in regulator body and tighten.



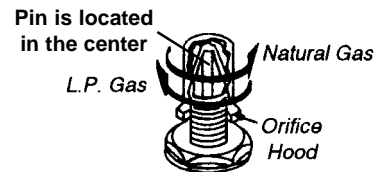
## Example Seven

1. Remove cap with screwdriver slot.
2. Remove spring and washer. Washer will be at bottom of spring as illustrated below.
3. Reverse to bring washer to the top.
4. Reinstall spring and washer.
5. Tighten cap.



## Converting Top Burners

1. Disconnect electrical supply.
2. Remove grates, caps, burner bodies and main top.
3. Remove screw from each venturi mounting bracket. Remove venturi assemblies. Orifice hoods are visible.
4. Turn all four orifice hoods clockwise onto the pins approximately 1-1/2 to 2 turns. The orifices should be turned snug onto the pins. Overtightening orifice hoods can damage the pin or distort the hole through the center of the pin.
5. Replace main top, burner bodies, caps and grates.
7. Check flame size and shape. Readjust if necessary.

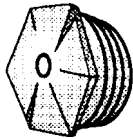


**Burner Orifice**

# Installation

## Converting the Insta-Broil and Ultra-Ray Broilers

1. The broiler burner orifice spud must be changed. The LP/propane gas spud is wired adjacent to the pressure regulator. The proper orifice spud for use on LP/propane gas is silver in color and has #58 stamped on it.
2. Remove oven door. Locate broiler burner. Remove two holding screws located on bracket in front of burner.
3. Remove burner carefully, avoid damaging the igniter to expose burner spud. Remove the #52 natural gas burner spud using a 5/16-inch socket wrench. Save #52 spud to reconvert if necessary in the future. It should take the place of the #58 LP/propane burner spud wired adjacent to the pressure regulator.
4. Install the #58 LP/propane spud.
5. Replace broiler burner and two holding screws.



Burner Spud: Natural Gas – #52  
LP Gas – #58 (Silver)

### Orifice Spud

## Converting the Bar Broil Burner (Models up to Date Code 9408)

1. Remove oven door. Locate bar broil burner in top of oven.
2. Remove two screws holding front of broil burner in place.
3. Remove burner. Do not pull the burner away from the glow bar igniter. Locate orifice.
4. Tighten the orifice onto the pin approximately 2 to 2-1/2 turns. The orifice should be turned to a snug fit onto the pin, but not tight enough to drive the pin into the valve or distort the hole in the center of the pin.
5. Replace broil burner.
6. Locate air shutter on base of the burner. Open it completely.
7. Check flame appearance and adjust if necessary.

## Converting the Bar Broil Burner (Models at and After Date Code 9409)

1. Remove oven door. Locate bar broil burner in top of oven.
2. Remove two screws holding front of broil burner in place.
3. Remove burner. Do not pull the burner away from the glow bar igniter. Locate orifice hood.
4. Remove orifice hood by turning it counterclockwise. Save orifice hood for future conversions.
5. Replace the brass #54 natural orifice hood with the silver-colored adjustable #61 LP/propane orifice hood. The #61 orifice hood can be found wired adjacent to the regulator. Wire the natural gas orifice hood in its place.
6. Locate air shutter on base of the burner. Open it completely.
7. Replace broiler burner using two screws removed in step one.
8. Check flame appearance and adjust if necessary.

## Converting the Bake Burner

1. Remove the bottom oven panel. Locate bake burner. Locate brass burner orifice at base of oven burner.
2. Turn down the orifice approximately 1-1/2 to 2 turns. The orifice should be turned snug onto the pin. Overtightening the orifice hood can damage the pin or distort the hole through the center of the pin.
3. Adjust the flame appearance if necessary.

## Removing Range

1. Turn gas off at gas supply shut-off valve.
2. Turn electricity off at main circuit breaker.
3. Disconnect gas connection at the union. Slide range away from wall.
4. Disconnect all other gas supply piping. If a flexible connector is in place, replace with a new one.
5. Remove anti-tip bracket(s). Install in new location.
6. Reinstall range according to directions in this section.



# General Use

## Using the Cooktop

- **Use the Proper Pan Size**  
Use cooking utensils with flat bottoms large enough to cover the flame. Correct-sized utensils improve cooking efficiency and promote safety. Undersized utensils expose clothing and spillovers to direct flame.
- **Never Leave Surface Units Unattended**  
At high heat settings, boilovers can cause smoking or fire.
- **Turn Utensil Handles Inward**  
A handle extending from the range invites accidents.

## Cooking Utensils

Utensils made of different materials react differently to cooking temperatures. The best results occur by matching cooking utensil and cooking style. The following list describes the cooking characteristics of various materials.

- Glass/Ceramic responds slowly to temperature changes. It responds best to long and slow heating of liquids.
- Aluminum responds quickly to temperature changes. It responds best for frying, braising and roasting.
- Cast iron responds slowly to temperature changes. It responds best for long low heat cooking and pan frying.
- Stainless steel combined with another metal such as copper, responds better to temperature changes. Use stainless steel for soups, sauces, vegetables and general cooking.
- Copper, tin-lined utensils respond quickly to temperature changes. It is excellent for gourmet cooking, wine sauces and egg dishes.
- Enamelware is stain resistant porcelain over metal. The cooking time varies according to the base metal. Lower temperatures are usually recommended.
- Utensil design is important. Select utensils with flat bottoms, straight sides, handle weight that does not tilt the pan, and pans that match the burner size. Do not use pans that overhang the grate by more than one inch.

## Clock and Timer

### Analog Clock

#### Setting Time of Day

1. Push in set knob.
2. Rotate knob to desired time of day. Release knob.

#### Setting Minute Timer

1. Rotate set knob to desired time. Timer can be set up to 60 minutes.
2. Buzzer sounds when time elapses.
3. Buzzer sounds until set knob is turned to *OFF* position.

### Electronic Range Control (ERC)

1. Press *CLOCK* button. "TIME" appears in display.
2. Rotate *TIME/TEMP. SET* knob to time of day.
3. Press *SET/CANCEL* button. "TIME" disappears from the display. If *SET/CANCEL* button is not pressed after setting time of day, the ERC automatically registers the time of day after a short delay.

## Operating Top Burners

### Burner Operation

1. Push in and turn control to *LITE*.
2. When burner lights, turn control to desired setting.
3. Turn all controls to *OFF* when finished.

### Using the Burners During a Power Outage

1. Turn control knob to *LITE*.
2. Hold lighted match to corresponding burner.
3. When burner lights, turn control to desired setting.
4. Turn all controls to *OFF* when finished.



**To avoid the risk of serious personal injury, property damage or fire, do not leave surface burners unattended while in operation. Grease and spillovers can ignite.**

**Do not attempt to light oven or broil burners during a power failure.**

# General Use

## Operating the Oven

Oven operation for baking, broiling, timed bake and self-cleaning can be found in the Clock Timer Operation section.

**Important Note:** Do not move the door lock lever to the lock position while baking or broiling on models with a manual, self-clean door lock. The oven door may lock at normal baking temperatures. If the door is accidentally locked, turn the oven off and wait for it to cool. Do not force the door lock lever open. Forcing the lock lever can damage the locking mechanism.



**To avoid risk of fire, do not line broiler grid with foil. Foil may trap grease on top of the grid close to the burner, causing a fire.**

**Never leave oven unattended while broiling. Overcooking could result in a fire.**

## Maintenance

### Removing Oven Door

Remove the oven door for easier access when cleaning.

1. Open door to first stop position.

**Note:** Inspect inner door panel to determine if door is secured to hinges. Remove screws prior to lifting door from hinges.

2. Grasp door firmly on each side. Lift door upward off hinges.

Replace the door by:

1. Align door with hinge arms.
2. Slide door down and into place. Door must be completely down on hinges.



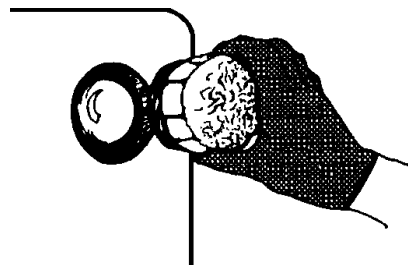
**To avoid personal injury or property damage, handle oven door with care. The door is heavy and can be damaged if dropped.**

**Do not place hands in hinge area when door is removed. Hinge can snap close and pinch hands.**

**The door contains tempered glass. If the glass is scratched, impacted, chipped or twisted it may break suddenly. If the door glass appears damaged, it should be replaced immediately.**

## Changing Oven Light

1. Wear gloves to protect hands when changing the bulb.
2. Disconnect power to range.
3. Remove oven door.
4. Unscrew (turn counterclockwise) bulb cover.
5. Unscrew counterclockwise light bulb.
6. Replace bulb with a 120-volt, 40-watt appliance bulb.
7. Replace light bulb cover. Do not overtighten bulb cover. An overtightened bulb cover can become difficult to remove.
8. Replace oven door.
9. Reconnect power.



**To avoid the risk of severe personal injury or electrical shock, turn the power off at the main circuit breaker before changing the bulb. Make sure the oven and light bulb are cool before replacing. Wear protective gloves. Do not operate oven without bulb cover in place.**

# General Use

## Thermostat Adjustment

### About Oven Temperature Performance

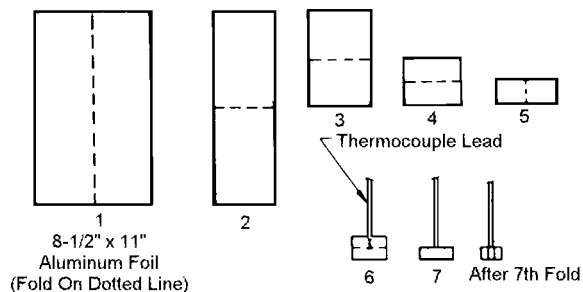
The factory designs ovens to maintain an average temperature in close tolerance to the oven setting. It is, however, normal for the average oven temperature to vary from the oven setting as much as 25 degrees. This difference does not affect cooking since recipes are written with this difference in mind. It is important to consider these aspects when comparing a new appliance to one previously used.

The following procedures should be used to verify oven temperature calibration on gas and electric ovens and ranges.

1. Verify oven door is adjusted and sealing properly.
2. Do not cover oven rack(s) or oven bottom with foil. Covering with foil can affect cooking performance by blocking air circulation.
3. Verify that oven bottom and flame spreader are intact and properly positioned.

### Loading a Thermocouple

A loaded thermocouple will provide stable temperature readings. An 8-1/2 x 11-inch piece of aluminum foil should be folded five times, doubling the thickness with each fold. After the fifth fold, place the thermocouple tip in the center of the aluminum piece as shown in the following illustration. Fold once more. Finally, fold the sides so the foil clings to the thermocouple.



### Thermocouple Loading

Position a loaded thermocouple of a reliable test instrument on the center of an oven rack. Place the rack in the center of the oven cavity.

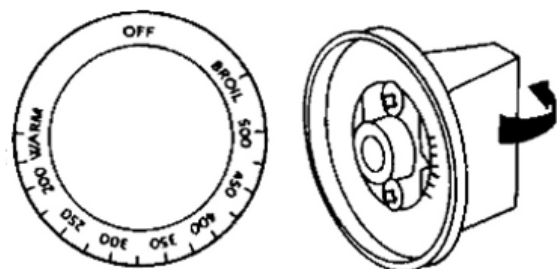
Set controls to bake. Turn oven thermostat control to 350 degrees F. Allow oven to cycle for 25 to 30 minutes. Note the temperature at which the oven cycles on and off. At a 350 degree F setting, the oven should cycle between approximately 330 degrees and 370 degrees F for satisfactory performance. This provides an average temperature of 350 degrees F, which is within the  $\pm 25$  degree tolerance.

**Important Note:** The oven indicator light may not simultaneously cycle with minimum and maximum temperatures. Do not record temperatures by observing the oven indicator light.

### Oven Temperature Adjustment – Non ERC Models

The oven may be adjusted if foods are consistently under or overdone. Some gas and electric ranges/ovens feature oven thermostat knobs that may be adjusted up to 30 degrees. The Use and Care guide provides the consumer with detailed instructions on how to adjust the knob. Those instructions are also included below.

1. Gently pull oven temperature control knob straight out from the control panel.
  2. Turn knob over. Use a Phillips head screwdriver to loosen, but not remove, two screws in the metal pointer plate. Each line above the plate represents a 10-degree temperature change. The plate is set at the factory to point at the middle line.
  3. Turn knob handle to move pointer plate to the appropriate line to increase or decrease oven temperature.
  4. Tighten screws with pointer at new line. Replace knob on control panel. Use oven for a period of time and repeat the above procedure if necessary.
- Important Note:** Move pointer plate only one line each.
5. If oven temperature is off more than 25 degrees, replace thermostat.



# General Use



3. Position set by factory



4. Loosen screws, adjust pointer, tighten screws, and replace knob.

## Adjusting Oven Temperature Control Knob

In the event an adjustable skirt is not on the thermostat knob or adjustment already made on the skirt does not satisfy the calibration requirement, then the calibration screw inside the thermostat shaft can be adjusted. This calibration screw is sealed by glyptol, usually red in color. This has to be broken and removed with a small screwdriver to access the calibration screw.

Rotating the calibration screw counterclockwise one-quarter turn lowers oven calibration by approximately 35 degrees F. Rotating the calibration screw clockwise one-quarter turn raises oven calibration by approximately 35 degrees F.

**Important Note:** Do not attempt to calibrate thermostat while under warranty. Attempting to adjust the thermostat nullifies the warranty.

## Self-Clean Temperature Calibration Clean Temperature Limits

An acceptable average clean temperature must fall between 850 degrees F and 910 degrees F (880 degrees  $\pm$ 30 degrees). After the problem is properly diagnosed, if the clean temperature doesn't fall within these limits, the thermostat must be replaced.

## Oven Temperature Adjustment – ERC Models

Ovens and ranges with the electronic range control (ERC) feature can be adjusted using the following procedure.

1. Press and release the *BAKE TEMP* function button.
2. Turn *TIME/TEMP SET* knob clockwise until the display shows a temperature between 500 and 550 degrees F. Quickly, before the ERC begins the bake function, press and hold the *BAKE/TEMP* function button. After approximately four seconds, the display shows "00" or the offset temperature previously programmed into the ERC.
3. Turn the *TIME/TEMP SET* knob to show the desired offset temperature in the display (up to  $\pm$ 35 degrees in five degree increments). A "+" indicates an increase in oven temperature while a "-" indicates a decrease in oven temperature.
4. Press the *CLOCK* function button to enter the offset temperature into the ERC. The calibration adjustment remains programmed into the ERC even if power is removed from the ERC or range.

**Important Note:** This calibration does not affect self-clean temperatures of models equipped with an electronic range control (ERC).

If oven temperature testing reveals that a calibration in excess of  $\pm$ 35 F is required, the oven temperature sensor, sensor wire harness and wire harness/sensor connections must be checked before replacing the ERC. A resistive connection within the sensor harness will affect oven temperature calibration.

## Summary

A thermostat performing outside of the bake or clean temperature limits must be replaced.

For ERC-equipped models, refer to the troubleshooting guide in the service manual to properly diagnose ERC components.

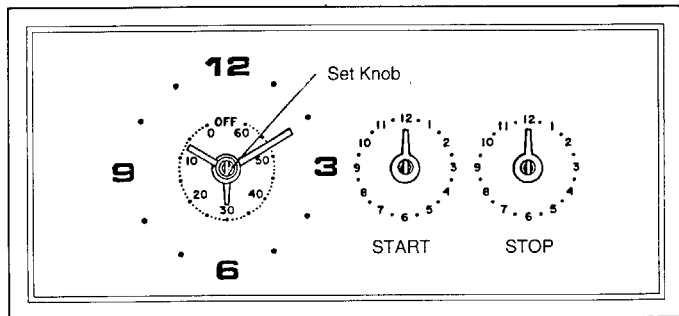
Record the overall average temperature obtained on the warranty claim form for reference and to assist the Amana warranty department.

# Clock Timer Operation



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



**Analog Clock**

## Operating Instructions for Analog Clock/Timer

### Setting Time of Day

1. Push in the set knob.
2. Rotate the knob to the desired time of day.

### Setting Minute Timer

1. Rotate set knob till pointer is set at desired time up to 60 minutes.
2. Buzzer will sound when time has elapsed. Rotate set knob for pointer to turn off buzzer at *OFF*.

### Setting Oven to Stop Automatically

1. Place the food in the oven.
2. Check the clock and make sure it is set at the correct time of day.
3. Set the selector to timed bake and temperature knob to the desired settings.
4. Push in and set the *STOP* knob to the desired stopping time. When the clock reaches the stopping time the *STOP* knob will pop out and the oven will automatically turn off.

### Setting Oven to Start and Stop Automatically

1. Place the food in the oven.
2. Check the clock and make sure it is set at the correct time of day.
3. Set the selector to timed bake and temperature knob to the desired setting.
4. Push in and turn the *START* knob to the desired start time.
5. Push in and turn the *STOP* knob to the desired start time.

When the clock reaches the starting time the *START* knob will pop out and the oven will automatically turn on. When the clock reaches the stopping time the *STOP* knob will pop out and the oven will automatically turn off.

Turn all controls to off after cooking is finished.

### Setting Self-Cleaning Cycle

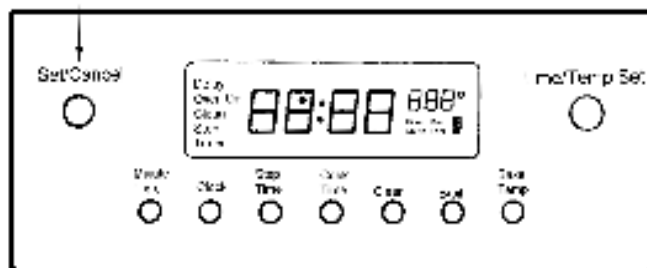
1. Turn the oven selector knob to *CLEAN*.
2. Make sure the clock is set at the correct time of day.
3. Set the start time by using the start time knob.
4. Set the stop time by using the stop time knob. Suggested length of self cleaning cycle is two hours minimum, four hours maximum.
5. Close and lock oven door by moving latch lever to the far right lock position.
6. When the clock reaches the stopping time, the *STOP* knob will pop out and the cleaning cycle will automatically turn off.
7. When the oven has cooled, unlock latch lever (by moving fully to the left) and open the door.

### Clock Switch Function Chart

TERMINALS	DELAY	COOK	OFF
1-2	OPEN	CLOSED	OPEN
3-4	OPEN	CLOSED	OPEN

### Electronic Range Control III

Refer to as Oven Control on some models.



The ERC III differs slightly from previously used ERC units in operation, failure codes, sensor resistance and appearance. The ERC III is housed in a black plastic enclosure for protection, mounting and retention of actuator buttons. Refer to the appropriate parts catalog or wiring diagram to determine which ERC is being used. The ERC III will have a label identifying the service part number, manufacturer's part number (i.e. 100-546-01 with the last two digits representing revision number), cooking temperature/clean temperature limits and the manufacturer's date of manufacture.

# Clock Timer Operation



To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

## ERC III Auto-Latch Features

Some models feature an ERC III with an auto latch system. The auto latch system is a motorized door lock mechanism. When the oven is set for a self-clean or delayed self-clean function, the auto latch system automatically locks the oven door.

A child lockout is another feature of an ERC III with Auto-Latch. This safety feature prevents children from accidentally programming the oven by disabling the electronic oven control buttons. Activate the lockout by pushing and holding the *BAKE* and *CLOCK* buttons for five seconds. "OFF" appears in the display where the temperature normally appears. Reactivate the buttons by pushing and holding the *BAKE* and *CLOCK* buttons for five seconds. The lockout feature must be reset after a power failure.

Another safety feature is a 12-hour automatic cancel. This prevents the oven from operating after being left on for over 12 hours. If a cooking function continues longer than 12 hours without any oven control buttons being pushed, the oven automatically turns off. Any time a button is pushed, the 12-hour automatic cancel is reset.

When equipped with a manual lock, the ERC III will cancel a cooking function in approximately 10 seconds if the oven door is inadvertently locked after beginning the function.

The ERC III does not have a display mode.

The ERC III uses a different sensor than previously used ERC units. Refer to the appropriate Parts Catalog for replacement information.

## Operation

The ERC III display is vacuum fluorescent with two color graphics. All timing functions are BLUE-GREEN in color and consist of four digits and "HR", "DELAY", "OVEN ON", "CLEAN", "STOP" and "TIMER". All temperature functions are ORANGE in color and consist of three digits and degree symbol (°), "BAKE", "BROIL", "CLEAN", "LOCK" and "ON".

## Power Up

The display blinks the time of day after the control has lost power, once per second. The alarm tone sounds when a function button is pressed. Time and temperature are entered with the *TIME/TEMP.SET*.

## Set Time of Day

1. Press *CLOCK* button. "TIME" will appear on left of display. Clock set is not allowed if a timed cooking or cleaning function is in progress.
2. Rotate *TIME/TEMP.SET* to desired time of day. The 12-hour format will show from 1:00 to 12:59 with no distinction between AM and PM. Each change will reset second digits to zero.

Clock time automatically begins 30 seconds after no set knob movement, or by pressing any button. "TIME" will go out on left side of display. The time of day increases once per minute while powered up. The clock time may be displayed at any time by pressing the *CLOCK* key. The colon (:) is on solid whenever the clock is being displayed.

## Set Minute Minder

1. Press *MINUTE TIMER* button. "TIMER" and ":00" are displayed. The timer can be used any time by pressing *MINUTE TIMER* button.
2. Rotate *TIME/TEMP.SET* clockwise. The timer time can be entered from five seconds to nine hours and 50 minutes. Turning the dial varies the displayed timer time as follows:

<u>RANGE</u>	<u>AMOUNT</u>
0-1 Minute 59 Seconds	5 Seconds
2 Minutes-9 Minutes 59 Seconds	10 Seconds
10 Minutes-59 Minutes	1 Minute
1 Hour-1 Hour 59 Minutes	5 Minutes
2 Hours-9 Hours 50 Minutes	10 Minutes

If time is less than one hour, display shows minutes and seconds in a XX:XX format. If time is for more than an hour, display shows the hours remaining, the symbol "HR" and minutes (:XX). Seconds are not displayed.

The ERC automatically starts timer countdown between two and five seconds after no *TIME/TEMP.SET* movement, or by pressing any button. The timer counts down in seconds if the entered time is less than one minute. The timer counts down in minutes and seconds if the entered time is one hour or less. If the entered time is more than one hour, the timer counts down in minutes until reaching one hour on the display. The time is then counted down in minutes and seconds. The display reverts to time of day if no time is entered after approximately 30 seconds.

# Clock Timer Operation



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

When timer times out and the timer was displayed, the ":00" display remains until cancelled. If the timer was not being displayed, ":00" and "TIMER" appear at the left of the display. The timer sounds three times to indicate end of cycle. It sounds once every 7-10 seconds until cancelled by pressing the *MINUTE TIMER* button.

The alarm sound can be cancelled by pressing any button. However, using the *SET/CANCEL* button to cancel the alarm also cancels any other function operating at the same time. Cancel the timer any time by pressing and holding the *MINUTE TIMER* button for two to three seconds, or by rotating the *TIME/TEMP.SET* to display ":00". The ERC automatically cancels the timer function and reverts to time of day display.

### Bake Function

1. Press *BAKE* function button. "BAKE" is displayed along with three horizontal segments and the (°) symbol in the temperature display. The bake mode can be accessed from any mode except broil and clean by pressing the *BAKE* button. If the door is locked, bake will not function and "DOOR" is displayed.
2. Rotate *TIME/TEMP.SET* clockwise to the desired temperature from 170 to 550 degrees F. The display increases in five degree increments starting from 170 degrees. If no temperature is entered, the ERC automatically cancels the function in 30 seconds. Bake function begins approximately five seconds after no *TIME/TEMP.SET* movement and when "ON" is displayed. "BAKE", "ON" and the degree (°) symbol are displayed constantly during bake mode. Oven temperature is displayed in five degree increments, starting at 100 degrees, during preheat. The oven temperature display tracks only upward oven temperatures to the set temperature. A pre-heat beep sounds once when the set temperature is reached. If oven temperature falls, the display stops at the last highest temperature shown. When oven temperature is less than 100 degrees, 100 degrees is displayed. The set temperature can be modified within 30 seconds of initiation. Or it can be modified at any time by pressing the *BAKE* button and rotating the *TIME/TEMP.SET* to the desired temperature. Press and hold the *BAKE* button to display the set temperature during preheat.

To cancel the bake function, press the *SET/CANCEL* button or rotate the *TIME/TEMP.SET* until the temperature display shows the three horizontal segments. The bake function cancels automatically after two or three seconds.

### Cook Time Function

1. Press *COOK TIME* button. "OVEN", "TIME" and "0 hr:00" are displayed. If door is locked, "DOOR" appears in the display until unlocked.
2. Rotate *TIME/TEMP.SET* clockwise to desired amount of cooking time. The time may be set from 10 minutes to 11 hours and 55 minutes. The display increases in five minute increments starting from 10 minutes.
3. Press *BAKE* button. If the *BAKE* button is not pressed within five seconds of setting cook time, the alarm sounds as a reminder to set bake temperature. The alarm continues to sound until a function button is pressed or temperature is set. If door is locked, "DOOR" appears in the display.
4. Rotate the *TIME/TEMP.SET* clockwise to desired temperature. The bake temperature will be shown as described in the Bake Function section.

To change cook time or bake temperature during a cook time function, press the appropriate button (*COOK TIME* or *BAKE*) and rotate the *TIME/TEMP.SET* to desired time or temperature.

To cancel a cook time function before it is completed, press *SET/CANCEL* button, or rotate "TIME/TEMP.SET" until cooking time displays "0hr:00" or the temperature displays three horizontal segments. The display returns to time of day or the minute timer if it is operating.

When the cook time function finishes, "0hr:00" is displayed. The alarm sounds three times and then once every seven to 10 seconds until a function button is pressed. The display reverts to time of day.

The minute timer may be used during a cook time function. However, pressing the *SET/CANCEL* button to end the minute timer function also cancels the cook time function. Use the *MINUTE TIMER* button to cancel the minute timer alarm. Return to the cook time function by pressing the *COOK TIME* button.

# Clock Timer Operation



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### Stop Time Function

1. Press *STOP TIME* button. "STOP TIME" is displayed to left of time of day.
2. Rotate *TIME/TEMP. SET* clockwise to set desired stop time. Stop time may be set up to 11 hours 55 minutes from the current time of day in the 12-hour format. The display increases in five minute increments.
3. Press *BAKE* button. "BAKE" is displayed along with three horizontal segments and the degree (°) symbol in the temperature display. If the *BAKE* button is not pressed within approximately five seconds of setting stop time, the alarm sounds as a reminder to do so. The alarm continues to sound until a temperature is set or a function button pressed. If the door is locked, "DOOR" appears in the display.
4. Rotate *TIME/TEMP. SET* clockwise to desired temperature. The bake temperature will be displayed as described in the Bake Function section. The oven operates at set temperature until reaching the stop time. At that point, the oven turns off, the alarm sounds three times and then once every seven to 10 seconds until cancelled or another function is selected. The stop time will continue to be displayed until cancelled or another function is selected.

A stop time function can be cancelled before completion in one of three ways: (1) press the *SET/CANCEL* button; (2) press the *STOP TIME* button and turn the *TIME/TEMP. SET* knob until the current time of day is displayed; (3) or press the *BAKE* button and turn the *TIME/TEMP. SET* knob until three horizontal segments appear in the temperature display.

To review or change stop time or bake temperature while the oven is operating in the stop time mode, press the appropriate function button (*STOP TIME* or *BAKE*) and rotate *TIME/TEMP. SET* to desired time or temperature.

To view time of day, press the *CLOCK* button. To view remaining cooking time, press the *COOK TIME* button. The stop time function continues to operate but will not be displayed.

The minute timer function may be used during a stop time function. Refer to the minute timer section for operation. Do not use the *SET/CANCEL* function button to clear the minute timer or the stop time function will also be cancelled. Press any other function button to clear the minute timer.

### Delay Bake Function

1. Press *STOP TIME* button. "STOP TIME" and time of day are displayed.
2. Rotate *TIME/TEMP. SET* clockwise to desired stop time. The display increases in five minute increments from time of day.
3. Press the *COOK TIME* button. "OVEN", "TIME", and the calculated cook time (stop time minus time of day) are displayed.
4. Rotate *TIME/TEMP. SET* counterclockwise to desired cooking time. The display decreases in five minute increments. "DELAY" is displayed to left of time.
5. Press the *BAKE* function button. "BAKE" is displayed along with three horizontal segments and the degree (°) symbol in temperature display. If the *BAKE* button is not pressed within approximately five seconds of setting the cook time, the alarm sounds as a reminder to do so.
6. Rotate *TIME/TEMP. SET* clockwise to desired temperature. The ERC automatically calculates start time. When reaching the start time, "DELAY" turns off and "ON" is displayed. The oven temperature display starts at 100 degrees or the current oven temperature, and increases to set temperature. The oven operates at set temperature until reaching stop time. The oven turns off, the alarm sounds three times and "0hr:00" is displayed. The alarm continues to sound once every seven to 10 seconds until cancelled.

To cancel a delay bake function, press *SET/CANCEL* button. The display switches to time of day or the minute timer if active.

The minute timer can be used during this function. However using the *SET/CANCEL* button to clear the minute timer also cancels this function. Use any other button to clear the minute timer.

Delayed bake is accessed by setting both a stop time and a cook time with a bake temperature with oven door unlocked. The stop time, cook time and bake temperature can be entered in any sequence as long as all are valid inputs. If the door is locked, cook time cannot be set and "DOOR" appears in the display.

When a valid stop time and cook time have been entered, "DELAY" and "OVEN" are displayed to the left of time digits. The time digits continue to show what was being displayed whether it was stop time or cook time. The bake temperature set will also be displayed to right of time digits. While in a delay mode and displaying the time of day or the minute timer, "DELAY" is also displayed.



# Clock Timer Operation



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### Broil Function

1. Press *BROIL* button. "BROIL" is displayed along with three horizontal segments in the temperature display. The broil mode can be accessed if no bake or timed function is active. If door is locked, "DOOR" appears in display until unlocked.
2. Rotate *TIME/TEMP. SET* clockwise to desired setting. The temperature display shows the broil set level as "HI." If the set level is not entered, the ERC automatically cancels the function in 30 seconds. Broil function begins approximately five seconds after no *TIME/TEMP. SET* movement, and "ON" is displayed. "BROIL," "ON," and the set level will be displayed constantly during the broil function. The set level can be modified within 30 seconds of initiation. It can also be modified at any time by pressing the *BROIL* button and rotating the *TIME/TEMP. SET* to desired set level.

When "HI" broil is selected, the broil burner is on 100 percent while calling for heat and the oven temperature is maintained at approximately 585 degrees.

To cancel the broil function, press *SET/CANCEL* button or rotate *TIME/TEMP. SET* (the *BROIL* button will need to be pressed after 30 seconds of operation) until the temperature display shows three horizontal segments. The broil function cancels automatically.

### Self-Clean Function ERC III with Auto Latch System

#### Self-Clean

1. Push *CLEAN* button once. "CLEAN TIME" and "- - - -" appear in display.
2. Turn *TIME/TEMP. SET* knob clockwise until "3:30" (meaning a clean time of 3-1/2 hours) appears in display.
3. Oven turns on after a short pause. The auto latch system automatically locks the oven door.
4. The cleaning time counts down and appears in the display. Press *STOP TIME* to see what time of day clean cycle will finish. Press *CLEAN* button to return display to cleaning time countdown.

#### Delayed Self-Clean

1. Verify correct time of day is displayed.
2. Push *STOP TIME* button once. "STOP TIME" and time of day appear in display.
3. Turn *TIME/TEMP. SET* knob clockwise to desired time of day that self-clean cycle should finish. This time must be at least 2 hours past current time of day. The oven control automatically calculates the start time for the cycle.

4. Push *CLEAN* button once. "CLEAN TIME" and "- - - -" appear in display.
5. Turn *TIME/TEMP. SET* knob clockwise until "3:30" (meaning a clean time of 3-1/2 hours) appears in display. After a short pause, the auto latch system automatically locks the oven door. The oven is now prepared for a delayed self-clean cycle. The oven turns on when the clock reaches calculated start time. "ON" appears in the display when the self-clean cycle starts. The remaining cleaning time counts down in the display.

#### Opening Oven Door After Self-Clean Cycle

At the end of the self-clean cycle, the oven temperature begins to drop. The oven door remains locked until oven temperature reaches approximately 500 degrees F. The auto latch system automatically unlocks the door and "LOCK" disappears from the display. Display returns to time of day.

#### Cancel Self-Clean Function

The self-clean function can be cancelled before the end of the normal cleaning cycle by pushing the *SET/CANCEL* button. The door, however remains locked until the oven cavity temperature drops below 500 degrees F.

### Self-Clean Function – ERC III with Manual Door Lock System

#### Self-Clean

1. Move door lock lever to the right. Do not force the lever or else the lock mechanism may be damaged. Allow oven to cool for approximately 1/2-hour and repeat procedure.
2. Press the *CLEAN* button. "CLEAN", "TIME" and "- - - -" are displayed. The self-clean mode can be accessed only when the oven is inactive.
3. Rotate *TIME/TEMP. SET* to desired cleaning time. The first detent in *TIME/TEMP. SET* movement will display "3hr:00" indicating a three-hour clean cycle. If no time is entered, the ERC cancels the clean function in approximately 30 seconds. The clean cycle may be set from two to four hours in five minute increments. The cycle begins approximately two to three seconds after the last *TIME/TEMP. SET* movement and no further modification may be made to the length of time unless the function is cancelled and reentered. If the door lock lever is not engaged, the alarm sounds and "DOOR" is displayed approximately six seconds after the time entry as a reminder to lock the door.

# Clock Timer Operation



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

When the clean cycle function begins, "CLEAN" and "ON" are displayed constantly in the temperature display, the clean time in hours and minutes and "CLEAN" and "TIME" to the left of the hours and minutes. The "LOCK" light appears in the temperature display when the oven reaches approximately 540 degrees and will remain on until the oven temperature drops below approximately 350 degrees after the clean cycle is finished. Do not attempt to unlock oven until the "CLEAN" and "LOCK" lights have turned off or the lock mechanism may be damaged. If, after the clean cycle, the lock lever will not move easily to the left, wait another 10 minutes before attempting to move the lever.

The clean cycle will begin with the broil burner on for 30 minutes, then switch to the bake burner to maintain a temperature of approximately 900 degrees for the remainder of the clean cycle.

The clean cycle may be cancelled at any time by pressing the *SET/CANCEL* button. If the oven temperature is above the lock temperature, the "LOCK" light is displayed and no attempt should be made to move the lock lever. Allow the oven to cool for approximately 1/2-hour before moving the lock lever.

The minute timer may be used at any time during the self-clean cycle. Refer to the minute timer section for operation. If the *SET/CANCEL* button is used to clear the alarm, however, the self-clean function will be cancelled also. Use any other button to silence the alarm.

### Delayed Self-Clean Function

1. Move the lock lever to the right. Do not force the lever or else the lock mechanism may be damaged.
2. Press *STOP TIME* button. "STOP TIME" and the time of day will be displayed.
3. Rotate *TIME/TEMP. SET* clockwise to the desired stop time. The display will increase in five minute increments. The stop time must be greater than the time of day plus the clean time.
4. Press the *CLEAN* button. "CLEAN", "TIME" and "- - -" are displayed.
5. Rotate *TIME/TEMP. SET* to desired clean time. With the first movement of the *TIME/TEMP. SET* the display shows "3hr:00". The clean time may be modified from two to four hours in five minute increments. The ERC begins the self-clean cycle two to three seconds after the last *TIME/TEMP. SET* movement. If the entered stop time is valid, the display shows "DELAY", "CLEAN" and

"TIME" to left of time digits and "CLEAN" in the temperature display. The ERC calculates the correct start time. The start time can be displayed by pressing and holding the *CLEAN* button for two to three seconds. The display shows "DELAY", "ON", "CLEAN" and "TIME" to the left of the time digits.

The amount of delay may be modified by pressing *STOP TIME* button and rotating the *TIME TEMP.SET* to the desired value. If the stop time is modified so that when the clean time subtracted from the stop time yields a time that is the time of day then the delay will no longer be required and the ERC starts the self-clean function in two to three seconds.

The self-clean function will be delayed until the calculated start time is the same as the time of day. At that point the self-clean function will start and operate as described in the self-clean function description.

### ERC III

The ERC incorporates  $\pm 35$  degrees calibration capabilities. Follow the procedures below to calibrate the ERC.

1. Press and release *BAKE TEMP* function button.
2. Turn *TIME/TEMP.SET* knob clockwise until a temperature between 500–550 degrees is displayed. Quickly, before the ERC starts bake function, press and hold the *BAKE TEMP* button. After approximately four seconds, display shows either "00" or offset temperature previously programmed into the ERC.
3. Turn *TIME/TEMP.SET* knob to show desired offset temperature in display (up to  $\pm 35$  degrees in degree increments). The "+" sets the oven temperature higher and the "-" sets the oven temperature lower.
4. Press *CLOCK* button to enter offset temperature into ERC. The calibration adjustment remains programmed into the ERC even if power is removed from the ERC or range. Self-clean temperatures are not affected by this calibration.

If oven temperature testing reveals that a calibration in excess of 35 degrees F. is required, the oven temperature sensor, wire harness and wire harness/sensor connections must be checked before replacing the ERC. A resistive connection within the sensor harness will affect oven temperature calibration.

# Clock Timer Operation



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### Service Information – ERC III with Auto Latch System

This ERC III is designed to monitor and control the cooking/cleaning temperatures and functions of a range utilizing input from a temperature sensor for operation. Circuitry is housed in a black plastic enclosure for protection, mounting, and retention of actuator buttons.

The attached relay/power supply circuit board consists of a step down transformer providing power for the display, three drive relays controlling bake, broil and clean functions, the audible alarm, and electrical connectors, and one relay for latch (total of three relays).

The oven temperature sensor is mounted in the oven cavity and is connected to the J2 connector on the rear of the ERC. As the oven temperature increases, the sensor resistance also increases. The ERC converts this resistance change to a corresponding temperature readout. The ERC then cycles the bake/broil relays to maintain the desired temperature setting.

The ERC is also capable of sensing certain failure conditions which can occur in the temperature sensor, the self-clean latch switch or the ERC itself. If the ERC senses a failure power will be removed from the bake/broil relays, an alarm will sound and a failure code will be displayed.

Each major component of the electric range control system (ERC temperature sensor) is serviced as a separate part. However, each component and related wire harness must be tested prior to replacing an individual component.

### ERC III Failure Codes

All failure modes will give a visual and audible alarm, as well as removing power from the bake/broil relays. Failure modes can be cancelled, but will return if the failure condition still exists.

F1 – A shorted key (button) for 32 seconds in a row. "-F1-" will be displayed in the time digits and the failure alarm will sound until *SET/CANCEL* is pushed. Verify the function buttons are not binding on the control panel glass. Reposition the glass and/or the ERC. Make sure the buttons spring outward after being depressed.

F2 – Excessive oven temperature, or sensor resistance too high. "-F2-" will be displayed and the alarm will sound until *SET/CANCEL* is pushed. Check sensor resistance, wiring harness, and connections.

F3 – An open circuit in the sensor wire harness, or sensor resistance too high. "-F3-" will be displayed and the alarm will sound until *SET/CANCEL* is pushed. Check sensor resistance, wiring harness, and connections.

F4 – A short circuit in the sensor wire harness, or sensor resistance too low. "-F4-" will be displayed and the alarm will sound until *SET/CANCEL* is pushed.

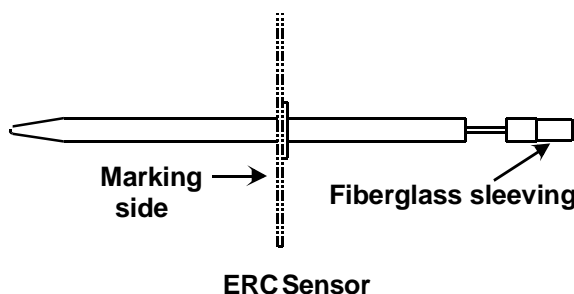
F5 – A failed component in the ERC. "-F5-" will be displayed and the alarm sounds until *SET/CANCEL* is pushed. Check all components and wiring prior to replacement of the ERC.

### ERC III Temperature Sensor

Sensor resistance may be checked by removing the sensor interconnect plug from the ERC J2 connector and inserting the ohmmeter leads into the harness connector plug (pin 1&2). Refer to the appropriate wiring diagram/schematic for exact pin placement and color coding. A resistance reading of approximately 1,110 ohms should be indicated at room temperature (75 degrees F). If a higher resistance is indicated, disconnect the wire harness from the sensor and recheck the sensor resistance to verify the failure is in the sensor and not in the wire harness or connections. The following list gives corresponding resistance for different oven temperatures:

Temperature	Sensor Resistance
75°F	approximately 1,100 ohms
350°F	approximately 1,654 ohms
550°F	approximately 2,052 ohms
880°	approximately 2,675 ohms

Replace the sensor if it does not meet these specifications.



# Clock Timer Operation



To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

## ERC Voltage Testing

The following information pertains to checking input voltage to the ERC and output voltage from the ERC to operate bake/broil functions.



To avoid the risk of electric shock, personal injury or death, care must be taken when voltage testing. Turn power off before attaching voltmeter leads. Use only well-insulated meter clips.

## ERC III Circuit Board Test

### VAC Test Points

1. J4-10 to J4-8 120 VAC, input to ERC
2. J4-10 to J5-4 120 VAC, input to K2 (bake) and K3 (broil) relay

Resolve any input voltage problems before continuing.

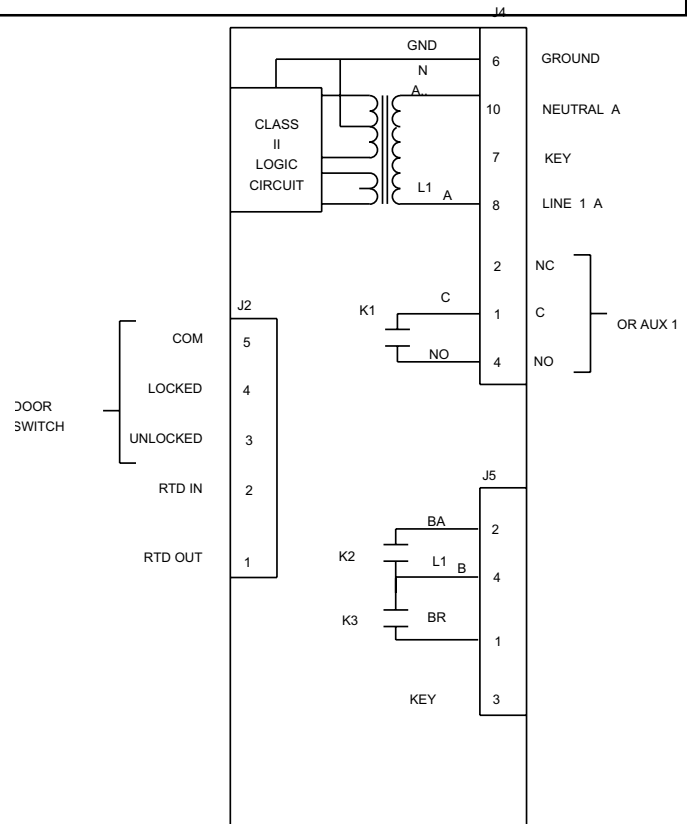
3. Program ERC for bake and select any temperature.  
J5-4 to J5-2 contacts closed if oven is calling for heat
4. Program ERC for HI Broil.  
J5-4 to J5-1 contacts closed
5. Program ERC for clean.  
J4-1 or J4-10 to J4-4 120 VAC, input to latch motor.

Replace ERC if input/output voltage cannot be obtained in Steps 1 through 5 on ERC circuit board test.

The door can be unlocked in emergency situations if the oven door lock mechanism fails.

1. Take a heavy-gauge wire and bend one end into a 1 inch hook.
2. Disconnect power to range.
3. Insert the wire between the oven's front frame and the door backer.
4. Hook the heavy gauge wire onto the latch lock arm.
5. Push in slightly on the door while pulling the latch lock arm to the left with the wire.

**Important Note:** This procedure may scratch the porcelain finish on the front frame.



**Typical Wiring Connections  
Motorized Door Lock System**

## Service Information – ERC with Manual Latch System

The electronic range control operates in conjunction with a relay/power supply circuit board and an oven temperature sensor to control all bake, timed bake, broil and self-clean functions.

The ERC's eight function buttons control minute timer, clock, stop time, bake, timed bake, broil, clean and set/cancel operations. A rotary dial is used to set time and temperature.

The ERC display consists of two digital readouts, which display time of day, cooking time, cleaning time, minute timer time, stop time, baking temperature, broil and failure codes, as well as several indicators to show which function the ERC is controlling.

The attached relay/power supply circuit board consists of two relays for bake and broil operations, which are controlled by the ERC, and a step down transformer with two secondary windings, which convert the 120 VAC input to 3.2 VAC filament voltage to power the ERC display and 20.3 VAC drive voltage which the ERC uses to turn on the bake and broil relays.

# Clock Timer Operation



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

The oven temperature sensor is mounted in the oven cavity and is connected to the J2 connector on the rear of the ERC. As the oven temperature increases, the sensor resistance also increases. The ERC converts this resistance change to a corresponding temperature readout. The ERC then cycles the bake/broil relays to maintain the desired temperature setting.

The ERC is also capable of sensing certain failure conditions that can occur in the temperature sensor, the self-clean latch switch or the ERC itself. If the ERC senses a failure power will be removed from the bake/broil relays, an alarm will sound and a failure code will be displayed.

Each major component of the electric range control system (ERC temperature sensor) is serviced as a separate part. However, each component and related wire harness must be tested prior to replacing an individual component.

### Testing Procedures

**Display Mode** – All display segments can be checked by using the following sequence. Verify clock shows correct time of day before testing.

1. Press and hold *CLOCK* button until "TIME" is displayed and until "TIME" turns off.
2. Momentarily press *SET/CANCEL* button until all display segments are lit. Following the lighting of all segments, the display will go through a "SALES DEMONSTRATION" mode displaying individual functions. The sales demonstration mode shows: (1) "BROIL", three horizontal segments and the degree (°) symbol, (2) "OVEN", "TIME", and ".00", (3) "CLEAN", "TIME", and "3:00", (4) "TIMER" and ":00", (5) time of day, (6) all segments and, (7) "BAKE", three (3) horizontal segments and the degree symbol. The program repeats until *CANCEL* button is pressed. Display returns to time of day.

### ERC Failure Codes and Warnings

The ERC is capable of detecting certain failures within itself, the oven temperature sensor and the self-clean latch switch.

The failure codes and warnings which may appear on the display include F1 through F9, "DOOR" or "LOCK". A brief description of the failure codes and warnings is listed below:

- F1 – A shorted key (button) for 32 seconds in a row. "-F1-" will be displayed in the time digits and the failure alarm will sound until *SET/CANCEL* is pushed. Verify the function buttons are not binding on the control panel glass. Reposition the glass and/or the ERC. Make sure the buttons spring outward after being depressed.
- F2 – Excessive oven temperature, or sensor resistance too high. "-F2-" will be displayed and the alarm will sound until *SET/CANCEL* is pushed. Check sensor resistance, wiring harness, and connections.
- F3 – An open circuit in the sensor wire harness, or sensor resistance too low. "-F3-" will be displayed and the alarm will sound until *SET/CANCEL* is pushed. Check sensor resistance, wiring harness, and connections.
- F4 – A short circuit in the sensor wire harness, or sensor resistance too low. "-F4-" will be displayed and the alarm will sound until *SET/CANCEL* is pushed.
- F5 – A failed component in the ERC. "-F5-" will be displayed and the alarm sounds until *SET/CANCEL* is pushed. Check all components and wiring prior to replacement of the ERC.

**"LOCK" LIGHT ON** – If "LOCK" appears in the display when the oven is not set in clean mode it indicates a defective latch switch or shorted wire lead from the ERC pin J2-4 and J2-5 or door is latched.

**"DOOR" appears in display in Bake or Broil mode** – This indicates a defective latch switch or a shorted wire lead from the ERC pin J2-4 and J2-5 to ground, or door is latched.

**"DOOR" appears at the beginning of Bake or Broil mode** - when started with door locked or at any time during the mode if door is locked - cooking mode will also be canceled.

**"DOOR" appears in display during Clean mode** – This is an indication of a defective latch switch or an open wire lead from the ERC pin J2-4 to ground, or the door latch has not been closed as required to initiate the clean cycle, or is simply as indication for user to lock the door.

# Clock Timer Operation



To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

## ERC Voltage Testing – ERC III Manual Latch

The following information pertains to checking input voltage to the ERC and output voltage from the ERC to operate bake/broil functions.



To avoid the risk of electric shock, personal injury or death, care must be taken when voltage testing. Turn power off before attaching voltmeter leads. Use only well-insulated meter clips.

### ERC III Circuit Board Test

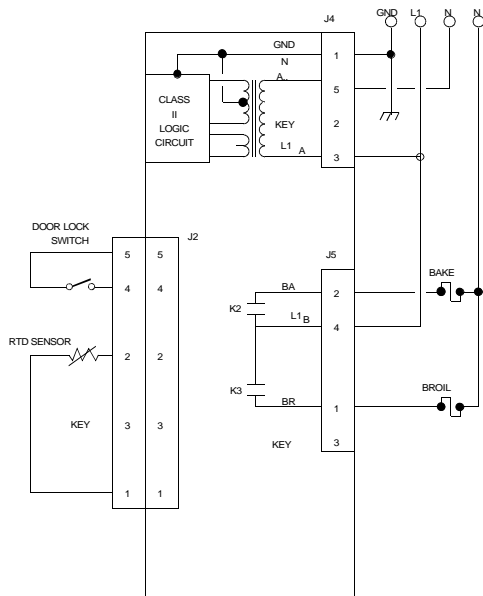
#### VAC Test Points

1. J4-5 to J4-3 120 VAC, input to ERC
2. J4-5 to J5-4 120 VAC, input to K2 (Bake) and K3 (Broil) relay

Resolve any input voltage problems before continuing.

3. Program ERC for bake and select any temperature. J5-4 to J5-2 contacts closed if oven is calling for heat
4. Program ERC for HI Broil. J5-4 to J5-1 contacts closed

Replace ERC if input/output voltage cannot be obtained in Steps 1 through 4 on ERC circuit board test.



Typical Wiring Connections  
Manual Door Lock System

## Electronic Range Control Before Date Code 9311

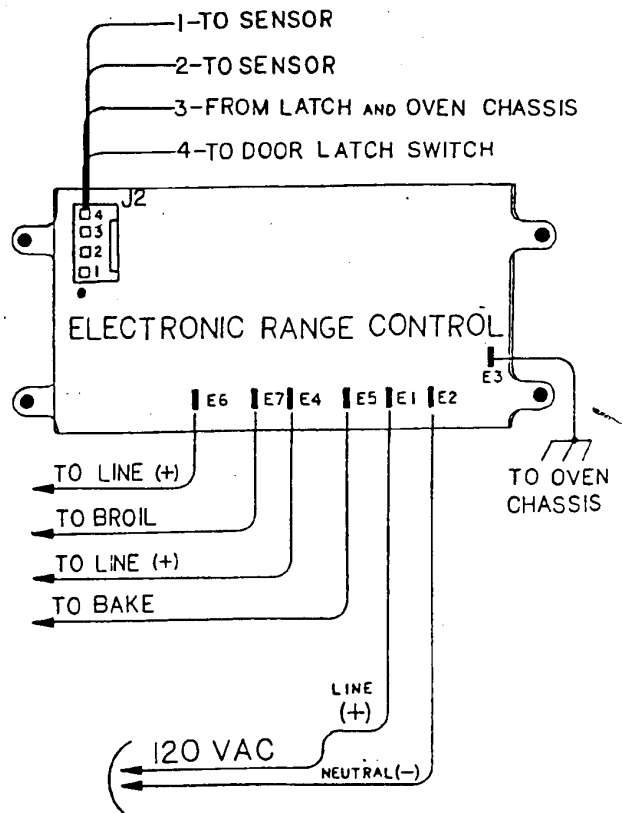
### Checking Input Voltage and Output Voltage

The following information pertains to checking input voltage to operate the ERC and output voltage from the ERC to operate bake or broil functions.

Access the ERC by removing rear cover of backguard or by removing backguard glass then laying control on an insulated surface for voltage testing.



To avoid the risk of electric shock, personal injury or death, care must be taken when voltage testing. Turn power off before attaching voltmeter leads. Use only well-insulated meter clips.



# Clock Timer Operation



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### VAC Test Points

1. E2 to E1 - 120 VAC input to ERC Circuit Board
2. E2 to E6 - 120 VAC input for K2 Broil Relay
3. E2 to E4 - 120 VAC input for K3 Bake Relay  
Resolve any voltage problem before continuing.
4. Disconnect wire from E5 on Circuit Board. Program ERC for bake and select any temperature. 120 VAC should be present (E2 - E5). Reconnect wire to E5.
5. Disconnect wire from E7 on Circuit Board. Program ERC to HI Broil. 120 VAC should be constantly present (E2 - E7).  
Reconnect wire to E7.

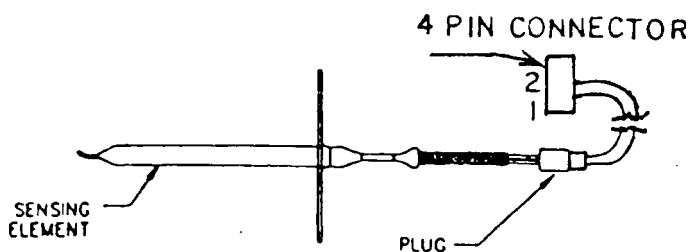
Replace Electronic Range control if Output 120 VAC cannot be obtained in Steps 4 and 5 on ERC Circuit Board Test.

### Door Latch Switch Circuitry Test Using

#### J2 Connector on ERC

1. Disconnect the four pin in-line connector from J2 on circuit board.
  - A. Continuity should be indicated J2 Pin 3 to range chassis.
  - B. Continuity should be indicated J2 Pin 3 to J2 Pin 4 with door latched. No continuity (open circuit) with door unlatched.

Check door latch switch and wiring integrity according to appropriate wiring diagram.



### Oven Temperature Sensor Using

#### J2 Connector on ERC

1. Disconnect the four pin in-line connector from J2 on circuit board.
2. Check for short to ground for Pin 1 to range chassis. Check for short to ground from Pin 2 to range chassis. If no short to ground, proceed to Step 3.  
If short to ground is indicated then repeat test on sensor plug – replace oven sensor or wire harness as required.
3. A resistance reading can be checked across Pin 1 to Pin 2 of 4 Pin connector. A resistance reading of approximately 1091 ohms should be indicated at ambient room temperature (75°F). If a higher or lower resistance is indicated, disconnect the sensor plug and recheck sensor resistance to assure that the problem is in the sensor and not in interconnect harness or due to a bad connection.

The following table shows the corresponding resistance for different oven temperatures.

SENSING ELEMENT TEMPERATURE	SENSING RESISTANCE
75°F	approximately 1091
350°F	approximately 1654
535°F	approximately 2018
875°F	approximately 2652

# Service Procedures



## WARNING

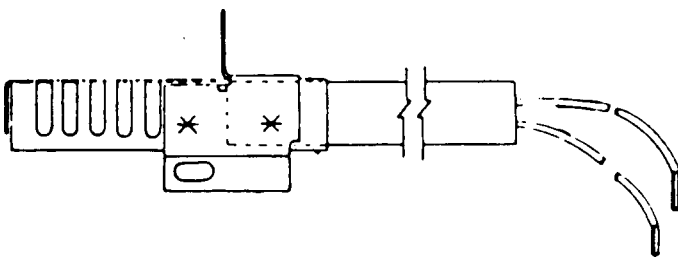
To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### Bake and Broil Ignitor

The bake and broil ignitors are mounted to the bake and broil burners. They ignite gas flowing into the burner. During a broil or manual bake operation, current flows through the ignitor, gas valve, selector switch and thermostat, or ERC Relay, to neutral. As the ignitor heats up, its internal resistance decreases. This increases the current flowing through the bake or broil circuit. When the circuit current reaches approximately 3.2 - 3.6 amps (very important voltage is decreased to 2-3 Vac), the bimetal arm in the gas valve flexes. This current (amperage) opens the valve against the gas pressure. Gas flows to the burner and is ignited by the glowing ignitor. The ignitor glow's anytime the bake or broil burner is in operation. The ignitors cycle on and off with the thermostat cycling contacts, or ERC relays reacting to sensor resistance variations.

An ohmmeter can be used to check electric ignitor operation. Make this check while ignitor is at room temperature.

1. Turn off power to range.
2. Set ohmmeter on the RX1 ohms scale (zero the meter).
3. Remove ignitor from burner.
4. Remove ignitor lead wire nuts. Disconnect ignitor leads from range wiring.
5. Connect ohmmeter leads to ignitor wire leads.
6. If meter indicates continuity, the ignitor is operational. The cold resistance measurement can vary several hundred ohms. However, this test is for continuity without a dead short (zero ohms).



It is still possible for the ignitor to be defective even though continuity is indicated and it glows when the oven is set for bake, broil or clean function. A more exact test can be made to measure the ignitor current with the oven operating. An ammeter should be inserted in series with one lead of the ignitor or an amprobe to check the amount of current flowing through the ignitor circuit. With the oven turned on and the ignitor glowing red, a current reading of approxi-

mately 3.2 - 3.6 amps should be indicated. The ignitor can also be removed and bench tested by using the current test method and an AC jumper or test cord connected to the ignitor leads.

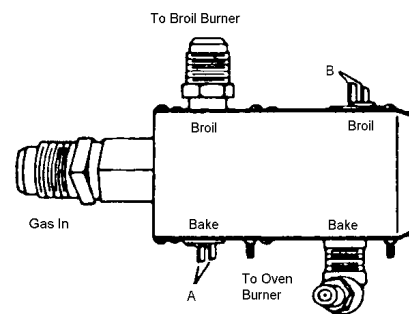
### Electric Gas Valve

The bake and broil dual gas valve supplies gas to the bake or broil burners. The valve contains bimetallic arms attached to valve seats which are wound with a small electric heater coil. When a current range of approximately 3.2 - 3.6 amps flows through the bake or broil circuit, the bimetallic arm is heated. This causes the bimetallic arm to flex or bend. This action allows gas to flow to the burner where it is ignited. The gas valve is located behind the storage drawer. The valve is sealed by incoming gas pressure.

### Electric Gas Valve Test with Ohmmeter

1. Turn off power to range.
2. Remove the two wire terminals from Point A for testing bake portion of gas valve or Point B for testing broil portion of gas valve.
3. Set ohmmeter on the RX1 ohms scale (zero the meter).
4. Attach a meter lead to each wire terminal on the portion of the valve to be tested.
5. If the meter does not show continuity, the gas valve is inoperative and must be replaced.
6. Reattach two wire terminals removed from Point A or Point B on the gas valve.

**Important Note:** Do not operate gas valve with line current (120 VAC). This will result in immediate failure.



Gas Valve Assembly



# Service Procedures



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

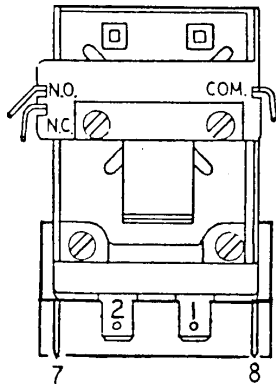
## Oven Thermostat

The oven thermostat operates in conjunction with the selector switch to control the operation of the bake, broil and self clean operations.

THERMOSTAT					
DIAL POSITION	7 - 8		C - NC	C - NO	1 - 2
OFF	0		N.S.	N.S.	N.S.
BAKE	X		N.S.	N.S.	CYCLES
BROIL	X		N.S.	N.S.	CYCLES
CLEAN	0		X ABOVE 700°	X BELOW 700°	CYCLES

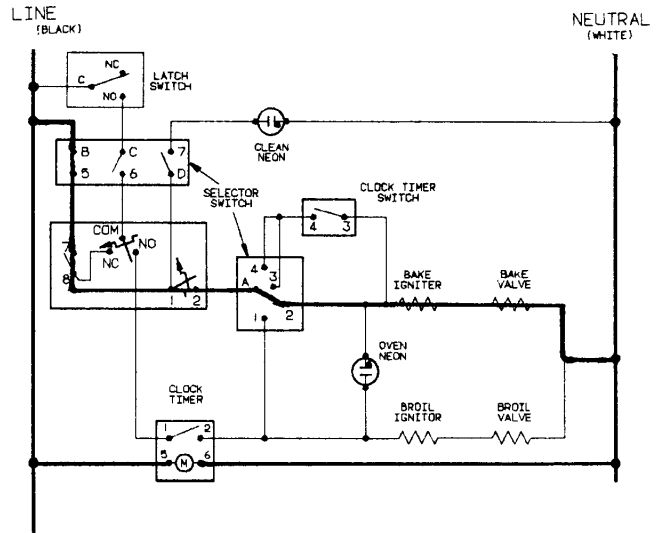
X = CLOSED N.S. = NOT SPECIFIED  
0 = OPEN

The thermostat contacts can be checked by using an ohmmeter set to the low ohms range or a continuity tester. Turn off power to range and disconnect thermostat wires before testing.



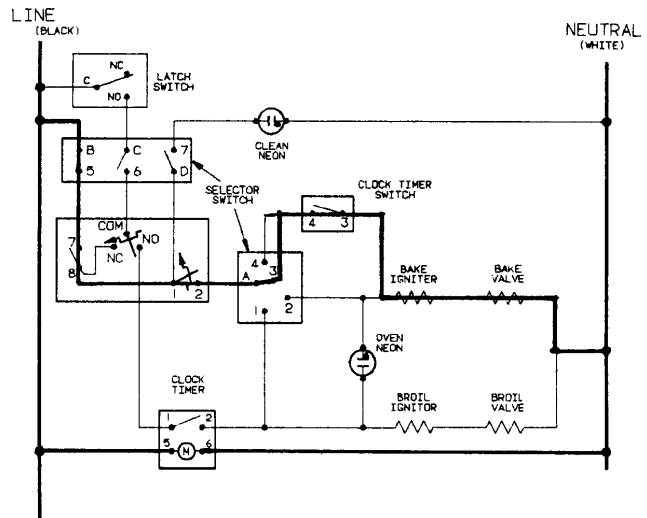
Thermostat – Rear View

In manual bake operation, thermostat contacts 7-8 and 1-2 close completing the bake circuit through Selector Switch Contacts A-2 and B-5, the bake ignitor and bake gas valve to neutral. Thermostat contacts 1-2 are the cycling contacts that maintain the correct oven temperatures.



Bake Circuit

In timed bake operations, thermostat contacts 7-8 and 1-2 close completing the timed bake circuit through the Selector Switch contacts A - 3 and B - 5, clock-timer contacts 4-3, the bake ignitor and the bake gas valve to neutral. Thermostat contacts 1-2 are the cycling contacts that maintain the correct oven temperature.



Timed Bake Circuit

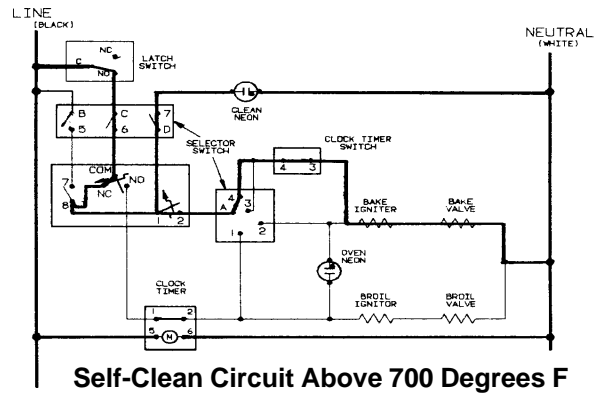
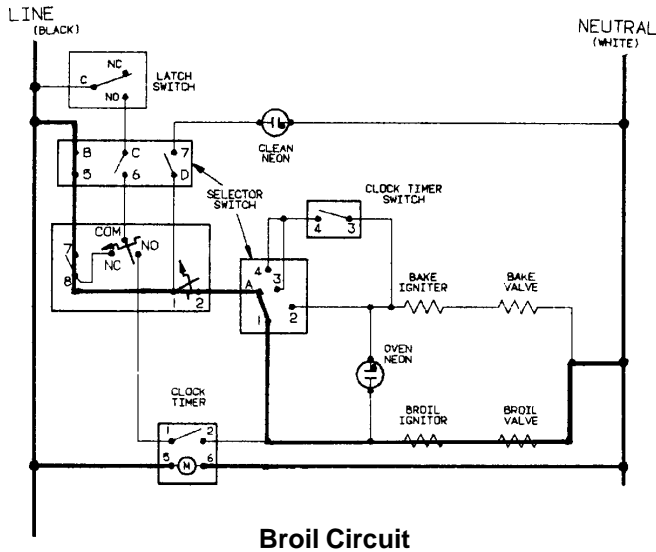
In a broil operation, the thermostat contacts 7-8 and 1-2 close completing the broil circuit through the selector switch contacts B-5 and A-1, broil ignitor and the broil gas valve to neutral. Thermostat contacts 1-2 are the cycling contacts that maintain correct broiling temperatures.

# Service Procedures



**WARNING**

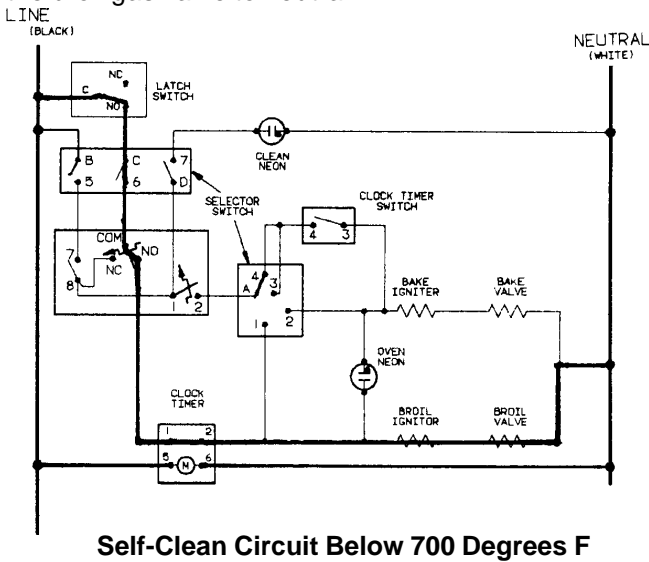
To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



## Selector Switch

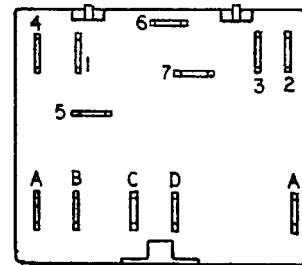
The selector switch operates in conjunction with the thermostat to allow the oven to operate in the bake, timed bake, broil and self clean functions. The selector switch contacts can be checked by using either an ohmmeter set to the low ohms range or continuity tester and following the contact chart. Power to the range should be turned off and all switch wiring, except the external jumper between the two (A) terminals, should be removed before performing the continuity tests.

In the self-clean operation, with the oven temperature below approximately 700 degrees F, the thermostat contacts COM-NO close completing the clean circuit through the latch switch, the selector switch contacts C-6, the clock/timer contacts 1-2, the broil ignitor and the broil gas valve to neutral.



SELECTOR SW SCHEDULE	
POSITION	CONTACTS
OFF	A, B, C & D OPEN
BAKE	A-2, B-5; C & D OPEN
TIMED BAKE	A-3, B-5; C & D OPEN
BROIL	A-1, B-5; C & D OPEN
CLEAN	A-4, C-6, D-7; B OPEN

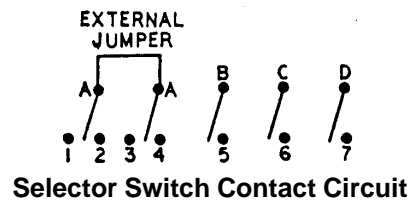
**Contact Chart**



**Selector Switch - Rear View**

After the oven temperature reaches approximately 700 degrees F, the thermostat contacts COM-NO open and contacts COM-NC close completing the circuit through the latch switch, the selector switch contacts C-6, D-7, A-4, the clock/timer contacts 3-4, the bake ignitor and the bake gas valve to neutral. Contacts 1-2 on the thermostat cycle to maintain correct self-clean temperatures.

**NOTE:** Contacts D-7 on the Selector complete the circuit for the clean indicator light.



# Service Procedures



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### Spark Module Testing

When properly operating, the spark module repeatedly produces a spark at the ignitor accompanied by a sharp snapping. The spark module is located under the burner box.

#### Test Procedure:

1. Turn off power to range. Turn off gas supply to range.
2. Check wiring against wiring diagram to verify all terminals and wire-connections are correct and tight.
3. Set ohmmeter to 120 VAC scale or higher.
4. Attach one meter lead to the "L" wire terminal on spark module.
5. Attach remaining meter lead to the "N" or "WHITE" wire terminal on spark module.
6. Reconnect power.
7. Turn all top burner knobs to the *LITE* positions.
8. No line voltage (115 VAC  $\pm$  10 VAC) at test meter indicates the electrical circuit is interrupted before spark module.
9. Line voltage at test meter – check ignitor.
10. If ignitors are OK; then replace ignition module.

### Top Burner Spark Ignitors

All units have an electrode for each burner. When any of the burner valves are turned to the *LITE* position, the spark switch on the valve closes supplying 120 VAC to the spark module. This activates the module that produces the spark at the ignitor electrode to light the burner.

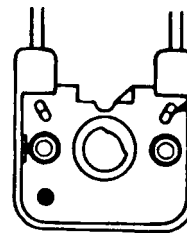
#### Test Procedure:

1. Turn off power to range.
2. Disconnect high voltage spark ignitor leads from terminals on the spark module.
3. Set ohmmeter on the RX1 ohm scale (zero ohms).
4. Attach one meter lead to a good ground (bare metal) on the range body.
5. Touch remaining meter lead to ignitor terminal. A continuity reading from the ignitor lead indicates the ignitor lead is shorted to ground. If no continuity is indicated, proceed to next step.
6. Attach one meter lead to the terminal of the ignitor lead. Touch remaining meter lead on the opposite end of the ignitor lead which is attached to the top burner mounting bracket. Repeat same procedure with the other ignitor lead. No continuity on the lead indicates an open circuit in the ignitor lead wire.

### Spark Switch Test

Each spark switch is connected in parallel in the spark ignition circuit. One terminal of each switch is connected to the 120 VAC line while the other terminal connects to the "L1" module terminal. Terminal "N" of the module connects to the common or neutral side of the AC line. The spark switch is located on the stem of the top burner valve. The following continuity test can be made to check for proper switch operation.

1. Turn off power to range. Remove switch wiring.
2. Set ohmmeter to RX1 scale.
3. Attach meter leads to switch terminals.
4. Turn switch to *LITE*. Meter should indicate zero ohms or closed contacts. Infinite ohms or open contacts should be indicated in all switch positions except *LITE*. Replace switch if it fails this test.



TO REMOVE WIRE: INSERT SMALL DIAMETER TOOL INTO OPENING (ADJACENT TO EACH WIRE CONNECTION) AND MOVE TAB, AS INDICATED BY ARROW WHILE PULLING ON WIRE.

### Spark Switch

### Indicator Light Testing (Non ERC Models)

If oven (bake, broil, clean) operates normally but indicator lights do not glow, check for voltage at indicator light terminals. If voltage is present at the indicator terminals and indicator does not glow, replace indicator light. If no voltage is present at indicator terminals, check for loose connectors, broken wiring or other inoperative components (thermostat, ignitor, etc.). The oven indicator light and the clean indicator light operate on 120 VAC. Use caution when checking for indicator light voltages.

# Service Procedures



## WARNING

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### Door Latch Mechanism - Manual Latch

The door latch mechanism is used to insure the oven door is sealed tightly against the chassis during the clean cycle.

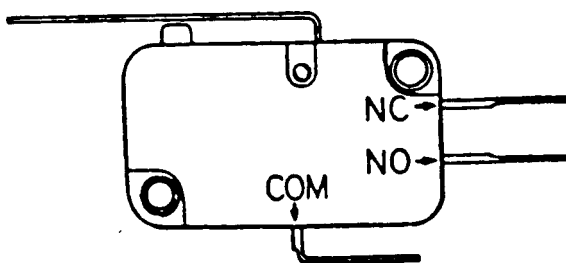
The latch cannot be moved to the clean position unless the door is closed. A thermal safety locks the mechanism during the clean cycle to prevent accidental opening of the door latch during cleaning. When the latch is locked it cannot be moved to the cook position. If accidentally engaged, the unit must be allowed to cool down before the lever can be moved to the left, unlocked position. Do not force the lever before unit is cooled or damage will occur.

After the cleaning is completed and the oven cools, the latch is released and can be moved again to the cook position.

### Latch Switch - Manual Latch

The door latch switch is a single pole, double throw switch. It is used to complete the self-clean cycle. It is mounted on the door latch mechanism. Use the following test procedure to check switch contacts.

1. Turn off power to range.
2. Disconnect switch wire leads and check the COM - N.O. and COM - N.C. contacts for continuity.
3. When door latch is in the left or unlocked position, the COM - N.O. contacts should be open and the COM - N.C. contacts should be closed.
4. Move door latch to the far right or locked position. The COM - N.O. contacts should be closed and the COM - N.C. contacts should be open.

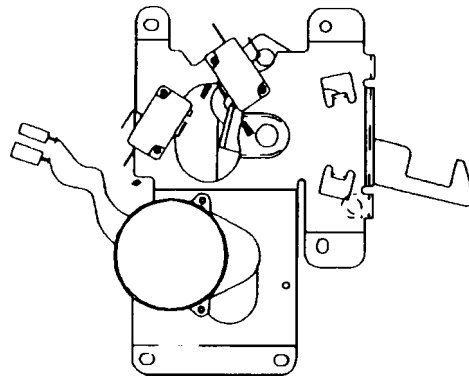


Latch Switch

### Auto Latch Motor

Do not remove latch motor from latch assembly. If latch motor has failed, replace latch assembly.

1. Turn off power to range.
2. Disconnect lead wires from latch motor.
3. Connect jumper cord leads to latch motor.
4. Connect jumper cord to 110 AC power source.
5. Reverse procedure to reconnect.

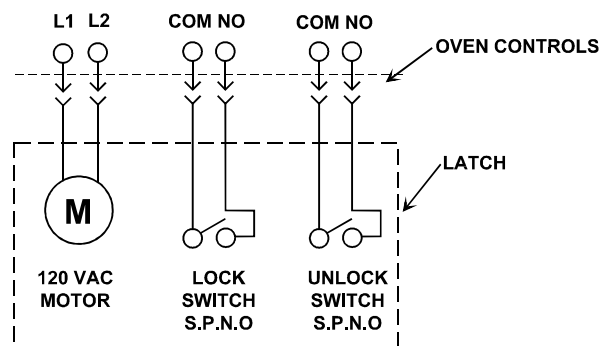


Motorized Door Latch Assembly

### Auto Latch Switches

Both unlock and lock door latch switches may be replaced.

1. Turn off power to range.
2. Disconnect lead wires from door latch switch (unlock).
3. Set ohmmeter to RX1 scale.
4. Attach meter leads to door latch switch (unlock).
5. Depress actuator arm. Meter should indicate continuity.
6. Reverse procedure to reconnect.
7. Use same procedure to test door latch switch (lock).



# Service Procedures



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### Fluorescent Light System

The fluorescent light system incorporates a light switch, fluorescent starter and ballast in conjunction with the fluorescent lamp. Momentarily depress the lamp switch. The lamp should light and remain lit until the switch is depressed a second time.

#### Testing Procedure – Fluorescent Light Switch

1. Turn off power to range.
2. Disconnect switch leads to wire nuts.
3. Attach ohmmeter leads (RX1 scale) to switch leads. With the switch in the off position, infinite ohms (open) should be indicated.
4. Momentarily depress switch. Continuity (low ohms) should be indicated.
5. Depress and release the switch. Infinite ohms (open) should be indicated.

#### Testing Procedure – Ballast

1. Turn off power to range.
2. Disconnect two wire leads to ballast.
3. Attach one lead of ohmmeter (RX1 scale) to each ballast terminal. A reading of approximately 22 ohms should be indicated. Attach one meter lead to one terminal of the ballast and the other lead to the metal cage on the ballast. Infinite ohms (open) should be indicated. Attach lead to the other terminal. Infinite ohms (open) should be indicated.

### Oven Light Switch (On Control Panel)

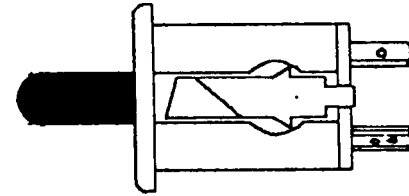
The oven light switch can be tested using the same procedure as the fluorescent light switch. The fluorescent light components, oven light switch and indicator lights are located behind the backguard glass mounted to the backguard control panel.

### Oven Door Light Switch

The plunger-type oven door light switch located on the range front frame can be checked using an ohmmeter set on the RX1 scale. Perform this test if depressing the control panel light switch turns the oven light on, but the oven light does not turn on and off when opening or closing oven door.

1. Turn off power to range.
2. Using a small flat screwdriver gently pry plunger switch away from front frame of range. Disconnect wires from switch.
3. Attach ohm meter leads to common and normally open contacts, depress plunger and open circuit (infinite ohms) should be indicated.

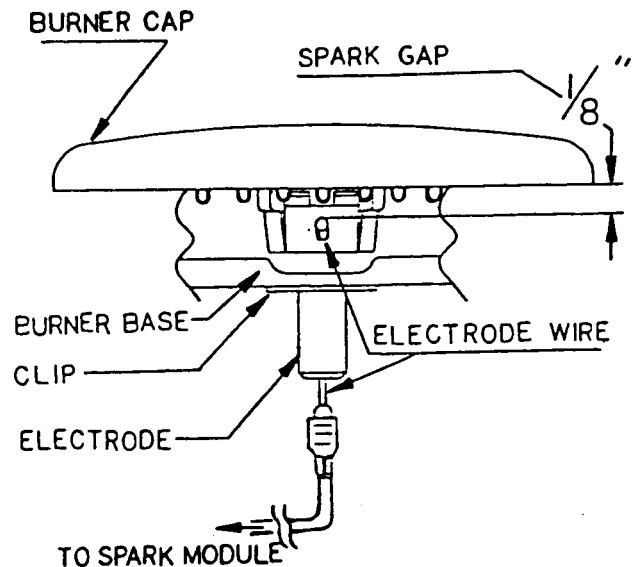
4. Release plunger and closed circuit (low ohms) should be indicated. On some models a similar switch is used in the self-clean circuit. Testing is the same. Refer to the appropriate wiring diagram.



Plunger Type Oven Door Light Switch

### Burner Caps

1. Turn off power to unit.
2. Remove cast cap from base.
3. Be certain underside of burner cap is clear of metal shavings, grease, cleansing powder, etc.
4. Be certain top side of burner base is clear of metal shavings, grease, cleansing powder, etc.
5. Spark gap should be checked and, if necessary, adjusted to dimension shown.
6. Spark should be visible between electrode wire tip and bottom side of burner cap. Spark jump to burner base (not between spark gap) could be due to cracked/broken ceramic portion of electrode assembly which requires replacement.



# Troubleshooting Procedures



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### Sealed Burner Troubleshooting

PROBLEMS	POSSIBLE CAUSE	CORRECTION
1 Burners will not ignite; no spark at top burner.	<p>A. Poor ground on burner cap.</p> <p>B. Weak or failed spark module.</p> <p>C. Low gas pressure.</p>	<p>A. Clean burner cap.</p> <p>B. Replace spark module.</p> <p>C. Check pressure (6" WCP for natural gas, 11" WCP for LP).</p>
2 Burner will not ignite. No spark to burner ignitors when burner knob pushed down and held in "LIGHT" position.	<p>A. No 120 VAC to range.</p> <p>B. Micro switch contacts not closing.</p> <p>C. Faulty wiring. Bad connection at burner cap electrode and electrode socket.</p> <p>D. Inoperative spark module.</p> <p>E. Electrode dirty. Burner cap dirty.</p> <p>F. Cracked or broken electrode, electrode wire or electrode socket.</p>	<p>A. Check for power at wall outlet.</p> <p>B. Check wiring against appropriate wiring diagram. Verify all terminals and connections are correct and tight. Check micro switch contacts.</p> <p>C. Check wiring against appropriate diagram. Verify all terminals and connections are correct and tight.</p> <p>D. Check module according to information. Replace module.</p> <p>E. Clean electrode or burner cap.</p> <p>F. Replace electrode wire or burner cap.</p>
3 No spark or only random spark at one ignitor.	<p>A. Check for cracked ignitor or pinched ignitor wire permitting current leakage.</p> <p>B. Bad ground connection or lack of continuity to ground or ignitor.</p> <p>C. Cracked or broken ignitor extension lead.</p>	<p>A. Replace ignitor lead or electrode.</p> <p>B. Tighten ground connection and correct any breaks in ground path from ignitor path to unit ground.</p> <p>C. Replace ignitor lead.</p>
4 Intermittent or occasional spark after unit is turned off.	<p>A. This condition is caused by crossed polarity. When polarity is correct, no voltage is present at neutral to ground. There will be no voltage to spark module with switch at "OFF."</p>	<p>A. With all spark switches at "OFF," check for voltage at the "N" terminal of the spark module to ground. If voltage is present, the polarity is reversed. Have qualified electrician check polarity at wall socket.</p>

# Troubleshooting Procedures



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

PROBLEMS	POSSIBLE CAUSE	CORRECTION
5 Unit continues to spark after it is turned off.	<p>A. Shorted valve switch.</p> <p>B. Switch has been pulled up and off of fixed position on valve so that it is not turned to off position with valve stem.</p>	<p>A. Replace switch. NOTE: If shorting is caused by excessive spillovers, customer should be advised of proper care.</p> <p>B. Carefully reposition switch on valve and rotate valve from off to high several times to be sure switch is not broken.</p>

## All Models – Top Burner, Bake and Broil Burner Troubleshooting

PROBLEMS	POSSIBLE CAUSE	CORRECTION
1 Yellow tipped burner flame.	<p>A. Too little primary air.</p> <p>B. Burner head bent.</p> <p>C. If using L.P. Gas, range may not be properly converted.</p>	<p>A. Open air shutter on burner.</p> <p>B. Level burner head.</p> <p>C. Check for proper L.P. conversion.</p>
2 Flame blows away from burner.	<p>A. Too much air.</p> <p>B. Gas pressure too high.</p> <p>C. Heavy draft around cooktop area.</p>	<p>A. Slightly close air shutter to burner.</p> <p>B. Check pressure at orifice.</p> <p>C. Eliminate source of draft. (Customer Education)</p>
3 Floating (lazy) flame.	<p>A. Blocked flue, blocked burner.</p>	<p>A. Check for possible blockage in flue or burner.</p>
4 Gas smell in kitchen.	<p>A. Leak in pipe joints.</p> <p>B. Valve leak.</p> <p>C. Regulator plug loose.</p>	<p>A. Check gas connections (soapy water) and tighten as needed.</p> <p>B. Check valve and replace if necessary.</p> <p>C. Check and tighten regulator plug.</p>

# Troubleshooting Procedures



## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

PROBLEMS	POSSIBLE CAUSE	CORRECTION
<p>5 Oven Burner/Broil Burner will not turn on. "SELECTOR" switch set on "BAKE" or "BROIL". Thermostat set at 350° or Broil with Door latch in cook position.</p> <p>NOTE: The flat type ignitor used in these models has an operating current range of 3.2 amps A.C. to 3.6 amps A.C. The gas valve is calibrated to open at slightly over 3.2 amps, since the ignitor will be hot enough to ignite any gas flowing from the burner. The current can be checked using an in-line ampmeter. If the current does not reach 3.2 amps, replace the ignitor.</p>	<p>A. No 120 VAC to range.</p> <p>B. Inoperative ignitor.</p> <p>C. Failed selector switch.</p> <p>D. Inoperative gas, valve.</p> <p>E. ERC, circuit board, probe or probe harness/connection.</p> <p>F. Inoperative thermostat.</p> <p>G. Faulty wiring.</p> <p>H. No gas to range.</p> <p>I. Low line voltage.</p> <p>J. High gas pressure (LP).</p>	<p>A. Check electric at wall outlet.</p> <p>B. Check ignitor according to instructions. Replace ignitor.</p> <p>C. Check selector switch according to instructions.</p> <p>D. Check gas valve according to instructions. Replace valve.</p> <p>E. Check E.R.C., circuit board, probe and probe (harness according to instructions).</p> <p>F. Check thermostat according to instructions. Replace thermostat.</p> <p>G Check wiring against appropriate wiring diagram and be sure all terminals and connections are correct and tight.</p> <p>H. Check main gas line shutoff valve and shutoff valve at inlet pipe.</p> <p>I. Check wall outlet voltage.</p> <p>J. Check gas pressure (11" WCP for LP).</p>
<p>6 Gas valve opens but Oven/Broiler burner does not ignite. Delayed ignition.</p>	<p>A. BAKE/BROIL ignitor positioned too far from burner.</p> <p>B. Incorrect adjustment or incorrect burner orifice on broil burner. (LP GAS).</p> <p>C. Low gas pressure.</p> <p>D. Low line voltage.</p> <p>E. Misalignment of orifice and burner.</p> <p>F. Partial blockage of orifice, burner or feed tube.</p> <p>G. Damage to broil burner.</p>	<p>A. Reposition BAKE/BROIL ignitor closer to the burner.</p> <p>B. Adjust universal/orifice (oven burner). Install correct orifice (broiler burner).</p> <p>C. Check gas pressure (6"WCP for Natural Gas and 11" WCP for LP).</p> <p>D. Check voltage at wall outlet.</p> <p>E. Check alignment of burner and orifice and correct alignment.</p> <p>F. Clear blockages.</p> <p>G Check for tears in screening on burner.</p>



# Troubleshooting Procedures



## WARNING

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PROBLEMS	POSSIBLE CAUSE	CORRECTION
7 Oven does not "AUTO BAKE."	<p>A. Controls not set correctly.</p> <p>Failed selector switch.</p> <p>B.</p> <p>Failed timer.</p> <p>C.</p> <p>Failed ERC.</p> <p>D.</p> <p>Faulty wiring.</p> <p>E.</p> <p>Failed thermostat.</p> <p>F.</p>	<p>A. Instruct customer on proper use of "AUTO BAKE" function.</p> <p>B. Check selector switch contacts. See test procedure on page 37.</p> <p>C. Check timer contacts. Replace timer if contacts do not close.</p> <p>D. See ERC test procedures in Clock Timer Operation section.</p> <p>E. Check for broken wires and loose or dirty connections.</p> <p>F. Check thermostat contacts. See test procedures on page 36.</p>
8 Oven does not operate in "DELAYED BAKE."	<p>A. Controls not set correctly.</p> <p>Failed selector switch.</p> <p>B.</p> <p>Failed timer.</p> <p>C.</p> <p>Failed ERC.</p> <p>D.</p> <p>Faulty wiring.</p> <p>E.</p>	<p>A. Instruct customer on proper use of "DELAYED BAKE" function.</p> <p>B. Check selector switch contacts. See test procedure on page 37.</p> <p>C. Check timer contacts. Replace timer if contacts do not close.</p> <p>D. See ERC test procedures in Clock Timer Operation section.</p> <p>E. Check for broken wires and loose or dirty connections.</p>
9. Oven does not operate in "SELF-CLEAN."	<p>A. Controls not set correctly.</p> <p>Failed latch switch.</p> <p>B.</p> <p>Failed timer.</p> <p>C.</p> <p>Failed selector switch.</p> <p>D.</p> <p>Failed ERC.</p> <p>E.</p> <p>Faulty wiring.</p> <p>F.</p>	<p>A. Instruct customer on proper use of "SELF-CLEAN" function.</p> <p>B. Check latch switch(es) contacts for continuity.</p> <p>C. Check timer contacts according to test procedures.</p> <p>D. See selector switch test procedures on page 37.</p> <p>E. See ERC test procedures in Clock Timer Operation section.</p> <p>F. Check for broken wires and loose or dirty connections.</p>

# Troubleshooting Procedures



## WARNING

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PROBLEMS	POSSIBLE CAUSE	CORRECTION
10 Oven does not "SELF-CLEAN."	G. Oven or broiler burner does not turn on.  H. Failed thermostat or ERC.	G Check unit in "BAKE" and "BROIL" function for normal operation. If both are okay, problem is in "CLEAN" circuit. If not, check appropriate troubleshooting procedure in preceding test.  H. Check thermostat contacts or ERC components. Refer to test procedures.
11 Oven light does not operate.	A. Failed oven lamp.  B. Failed light switch.  C. Faulty wiring.  D. Failed light socket.	A. Check lamp and replace if necessary.  Check switch contacts. B. Check for broken wires and loose or C. dirty connections.  Check light socket for continuity. D.
12 Fluorescent lamp does not operate.	A. Failed lamp.  B. Failed starter.  C. Failed ballast.  D. Faulty wiring.  E. Failed light switch.	A. Check lamp and replace if necessary.  Replace starter. B. Check ballast for possible damage. C. Replace if necessary.  Check for broken wires and loose or D. dirty connections.  Check switch contacts. E.

# Disassembly Procedures



## WARNING

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### Oven Burner Ignitor

1. Disconnect electricity at main disconnect plug.
2. Remove oven door, racks and oven bottom.
3. Remove lower storage drawer.
4. Locate two wire leads attached to oven burner ignitor assembly. The leads are located behind storage drawer area. Remove two wire nuts securing oven burner ignitor leads to violet wires. Note the position and configuration of ignitor assembly to the oven burner.
5. Remove the screw securing oven burner ignitor assembly mounting bracket to oven burner. Remove two screws securing ignitor bracket to rear oven wall.
6. Remove entire oven ignitor assembly. Slide ignitor to the left keeping ignitor assembly horizontal.

### Broil Burner Ignitor

1. Disconnect electricity at main disconnect plug.
2. Remove oven door and oven racks.
3. Remove screws securing broiler burner ignitor shield bracket to mounting bracket attached to cavity wall.
4. Pull ignitor slowly toward front of oven cavity until white wires connected to the ignitor are visible.
5. Grasp the white ignitor leads and gently pull until the wire nuts are inside the oven compartment.
6. Remove the tape and wire nut from each ignitor assembly lead wires.
7. Remove screws securing ignitor shield to broil reflector.
8. Reverse procedure to reinstall broiler burner ignitor assembly. Reconnect wires tightly and retape wire nuts. Be certain to insert wire nuts through oven back and combustion chamber.

Push two white ignitor leads through the hole until the broiler burner ignitor mounting bracket is in position to be reattached to the broiler burner. Check position of the ignitor to burner. Correct position is important for proper ignition.

**Important Note:** Care must be taken while handling the ignitor assembly to prevent breakage. Do not interchange a round ignitor for a flat type or vice versa. The current ratings for the two types are different.

### Oven Electric Gas Valve

1. Disconnect electricity at main disconnect plug.
2. Remove storage drawer.
3. Shut off main gas supply to range or shut off gas supply to gas valve at manifold pipe shut-off valve.
4. Disconnect four wires from gas valve assembly.
5. Disconnect main gas tubing.
6. Disconnect broiler supply gas outlet line. It is located on the right of the gas valve assembly. Be certain to double wrench the fitting to avoid damage. Similarly, disconnect the bake outlet line on the left of valve assembly.
7. Remove four nuts from the mounting studs securing gas valve assembly to gas valve mounting bracket.
8. Remove gas valve from range.
9. Reverse procedure to reinstall gas valve assembly.
10. Check all gas connections for leaks with a leak detector or a soap solution.
11. Refer to the wiring diagram on the range for correct wire termination. Be certain all insulator sleeves are reinstalled and insulating pads are on valve terminals.

### Broiler Burner

1. Disconnect electricity at main disconnect plug.
2. Remove oven door and oven racks.
3. Remove two screws securing broiler burner to top front of broiler cavity.  
Ignitor is not mounted to broiler, but to top of broiler cavity. Edge flange of broiler rests on top of the ignitor shield flange.
4. Lower front of broiler, twisting slightly to clear broiler flange from top of ignitor flange.
5. Pull down gently, then forward to remove broiler burner.  
Care must be taken to avoid damaging the ignitor or the burner screening.
6. Reverse procedure to reinstall broiler burner. Be sure burner flange rests on top of ignitor flange.

# Disassembly Procedures



## WARNING

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### Bar Broil Burner (AGS730 models)

1. Disconnect electricity at main disconnect plug.
2. Remove oven door and oven racks.
3. Remove screws securing broiler reflector, bar broil burner, and ignitor.
4. Pull ignitor slowly toward front of oven cavity until white wires connected to the ignitor are visible.
5. Grasp the white ignitor leads and gently pull until the wire nuts are inside the oven compartment.
6. Remove the tape and wire nut from each ignitor assembly lead wires.
7. Remove screws holding bar broiler burner to broiler reflector.
8. Reverse procedure to reinstall.

### Oven Burner

1. Disconnect electricity at main disconnect plug.
2. Remove oven door, oven racks and oven bottom.
3. Loosen oven burner ignitor and set aside.
4. Remove screw securing oven burner to mounting bracket at front of lower burner base.
5. Gently turn and pull oven burner to come out.
6. Reverse procedure to reinstall oven burner.

### Oven Bottom

1. Grasp both sides of oven bottom at the front.
2. Pull oven bottom forward then lift up to free rear mounting tabs.
3. Lift up oven bottom and pull out.
4. Replace oven bottom by fitting rear tabs into slots. Be sure rear tabs are properly positioned when reinstalling oven bottom. An improperly placed oven bottom will affect baking results.
5. Lower oven bottom onto burner box.
6. Slide oven bottom slightly forward until oven bottom slides over front flange of lower burner box.
7. Push oven bottom back slightly until oven bottom front tabs lock beneath front flange of lower burner box.

### Oven Lamp

1. Disconnect electricity at main disconnect plug.
2. Unscrew (counterclockwise) knurled glass dome from light socket assembly. Remove light bulb.



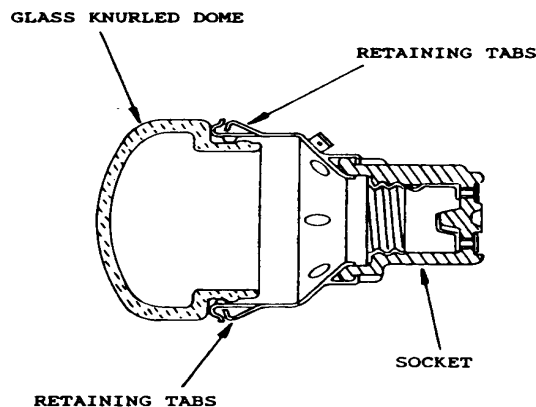
## WARNING

To avoid the risk of severe personal injury or electrical shock, turn the power off at the main circuit breaker before changing the bulb. Make sure the oven and light bulb are cool before replacing. Wear protective gloves. Do not operate oven without bulb cover in place.

3. Reverse procedure to reinstall oven lamp.

### Socket-Oven Lamp

1. Disconnect electricity at main disconnect plug.
2. Remove knurled glass dome – remove oven bulb.
3. Carefully move fiberglass insulation from rear of lamp socket.
4. Use a flashlight to locate four tabs securing lamp socket to oven liner. While pushing lamp socket towards front of range, depress the four tabs inward. Lamp socket will release into oven cavity.
5. Disconnect wires from lamp socket.
6. Reverse procedure to reinstall lamp socket. Be certain to reposition fiberglass insulation around lamp socket.



Oven Light Assembly

# Disassembly Procedures



## WARNING

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### Oven Sensor Probe

1. Turn off power to range.
2. Remove screws securing sensor to rear oven wall.
3. Pull sensor assembly forward until pin plug can be separated.
4. Reverse procedure to reinstall sensor.

### Lower Burner Box

1. Turn off power to range.
2. Remove oven door, oven racks and oven bottom.
3. Remove bake ignitor and bake burner.
4. Remove 24 screws securing lower burner box to oven tank and insulation retainer.

### Oven Liner

It is recommended that the oven be run through at least one self-clean cycle prior to replacing the oven liner.

1. Turn off power to range. Turn off gas at supply line shut-off valve. Disconnect gas line from range.
2. Pull range away from wall for access to rear of range.
3. Remove oven door, oven racks and oven bottom. Remove grates, burner bowls and main top.
4. Remove bake and broil ignitors. Remove bake and broil burners.
5. Remove lower burner box.
6. Remove oven light lens, light bulb and housing.
7. On ERC models, remove two screws to sensor probe, disconnect wire harness and remove sensor probe.  
On models without ERC, remove two screws to capillary tube shield and remove shield. Remove capillary tube through top of oven cavity.
8. Remove two screws to chip cover and two screws at top front of oven liner.
9. Remove storage drawer. Remove one screw from each storage drawer track. Remove track from range.
10. Remove eight screws to rear cover.
11. Remove screws securing rear insulation retainer. Remove two screws holding dilution flue to rear retainer.
12. Remove four screws securing backguard support to side panel (either side can be removed).
13. Push down on rear insulation retainer and push up and in on oven liner mounting bracket to free bracket from retainer.

14. Grasp lip of tank and gently maneuver tank forward to remove from range.
15. Remove two screws to each oven liner mounting bracket.
16. Reinstall brackets on replacement liner. Reverse procedure to reinstall replacement liner.
17. Reconnect electricity and gas supply. Check gas connections for possible leaks. Use a leak detector or soap solution.

### Backguard Assembly

1. Turn off power to range.
2. Pull off *TIME/TEMP. SET* knob from ERC.
3. Unscrew oven light and panel light knobs.
4. Remove two Phillips screws and two hex head screws securing trim to back panel.
5. Remove top four hex screws on each side of rear cover panel.
6. Lift backguard assembly off right and left backguard supports.
7. Remove gas regulator access plate from rear cover panel.
8. Disconnect oven sensor wiring.
9. Disconnect ERC wiring.

### Electronic Range Control Removal

1. Remove backguard assembly.
2. Remove top layer of insulation.
3. Remove screws securing front glass channel support to backguard assembly.
4. Lift control panel glass from backguard assembly.
5. Remove screws securing ERC board to control panel.
6. Slide ERC board out rear of control panel.
7. Remove connectors from ERC board. Insert connectors on replacement ERC board.
8. Reverse procedure to reassemble.

### Analog Clock

1. Turn off power to range.
2. Remove backguard glass.
3. Remove screws securing clock to mounting bracket.
4. Pull clock forward and disconnect wiring.
5. When reinstalling clock, refer to appropriate wiring diagram to assure correct wire termination.

# Disassembly Procedures



## WARNING

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### Fluorescent Lamp

1. Turn off power to range.
2. Lift up on front of top cover on backguard.
3. Fluorescent lamp is now accessible. Twist lamp to remove from sockets.

### Light Switch – Backguard Mounted

1. Turn off power to range.
2. Remove backguard glass.
3. Remove 1/2-inch nut securing switch to backguard control panel.
4. Remove four screws (two on each side) securing backguard control panel to end caps. Tilt control panel forward.  
A spacer bracket between the control panel and the top trim will be loose when moving control panel forward. Replace spacer bracket with angled edge toward back and facing downward.
5. Disconnect wire nuts to switch leads and remove switch.

### Starter – Fluorescent Light

1. Turn off power to range.
2. Remove backguard assembly and fluorescent light.
3. Remove screws securing top channel guard to backguard assembly.
4. Remove ballast cover.
5. Push in and turn starter counterclockwise to remove.
6. Replace starter.

### Starter Socket

1. Follow fluorescent light starter instructions, Steps 1-5.
2. Squeeze starter socket clips. Pull starter out of control panel.
3. Disconnect wires to start socket. Remove socket.

### Fluorescent Lamp Socket

1. Turn off power to range.
2. Lift up on front of top cover on backguard.
3. Remove fluorescent lamp.
4. Remove two screws securing lamp socket to bracket.
5. Cut wire leads at socket. Remove socket.

### Burner Caps

1. Remove burner grates.
2. Lift burner caps straight up from main top.

### Top Burner Base

1. Turn off power to unit.
2. Remove grates, burner caps.
3. Remove screw securing top burner base to main top/top burner venturi.
4. Disconnect ignitor connector from burner base.

### Main Top

1. Shut off power to the range.
2. Remove grates and burner caps.
3. Remove screws securing burner heads to main top.
4. Lift up burner heads. Disconnect electrode from each burner.
5. Remove screws securing main top to burner assembly.
6. Lift up front of main top to clear control panel to disengage studs. Pull front of top and remove from range.

### Top Burner Venturi

1. Turn off power to range.
2. Remove grates, burner caps and main top.
3. Remove screws securing venturi bracket on insulation retainer.
4. Lift top burner venturi off top burner valve orifice.

### Control Panel (AGS730 Models)

1. Turn off power to range.
2. Remove burner grates, burner bowls and main top.
3. Remove top burner knobs. On models without an ERC, the thermostat and selector switch knobs must also be removed. Remove oven door.
4. Remove screws securing control panel to front frame.
5. Remove screws securing panel to bracket on top left and right sides.
6. Remove two screws securing thermostat to control panel and two screws securing selector switch to control panel (except ERC models).

# Disassembly Procedures



## WARNING

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### Spark Module

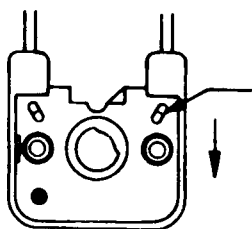
1. Turn off power to range.
2. Remove grates, burner caps, burner bases and main top.
3. Spark module is secured to a bracket attached to the front right side of burner box.
4. Disconnect wire leads to spark module.
5. Remove bracket from burner box. Remove spark module from bracket. Install replacement spark module on bracket.
6. Check wiring diagram for correct wiring connections when reinstalling spark module.

### Oven Door

1. Remove screws securing door to hinge assembly (new compression hinges only).
2. Oven door is removed by opening door to first stop and lifting door up and off hinges.

### Top Burner Actuator Switch

1. Turn off power to range.
2. Remove top burner knobs and main top.
3. Remove control panel.
4. Depress tab inside top burner actuating switch (small oblong hole – one for each wire). To remove wire, see figure below.
5. Lift top burner actuating switch off top burner valve. Bared wires are pushed into position and are self locking inside switch. Best results are obtained by baring a fresh strip of wire into switch.
6. Reverse procedure to reinstall switch. Switch must be seated properly on valve. Switch "snaps" onto valve stem.



TO REMOVE WIRE: INSERT SMALL DIAMETER TOOL INTO OPENING (ADJACENT TO EACH WIRE CONNECTION) AND MOVE TAB, AS INDICATED BY ARROW WHILE PULLING ON WIRE.

Top Burner Switch

### Top Burner Valve

1. Turn off power to range.
2. Turn off gas supply to range.
3. Remove main top and control panel.
4. Lift off top burner actuating switch from top burner valve to be replaced.
5. Remove top burner.
6. Using a 1/4-inch nut driver, remove nut securing top burner valve to manifold.
7. Reverse procedure to reinstall top burner valve. Check for leaks with a leak detector or soap solution.

### Manifold

1. Turn off power to range. Turn off gas supply to range.
2. Remove grates, burner bowls, main top and top burners.
3. Partially remove control panel. Follow control panel disassembly procedure.
4. Remove one screw to each top burner valve. Remove valve from manifold.
5. Disconnect gas feed tube from manifold.
6. Remove screws securing manifold to front frame and side panel.

When replacing manifold, remove feed tube fitting and reinstall fitting with new sealer in replacement manifold. Transfer pressure regulator to replacement manifold.

Be certain to check manifold, burner valve pressure regulator and feed tube connections for gas leaks with a leak detector or soap solution.

# Disassembly Procedures



## WARNING

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### Oven Thermostat

1. Turn off power to range.
2. Remove oven door and oven racks.
3. Remove burner grates and main top.
4. Remove control panel.
5. Remove thermostat capillary from shield on the side of the oven liner.
6. Gently pull capillary lead through the hole in top of oven liner.
7. Remove two screws holding thermostat in place on control panel.
8. Transfer wires to new thermostat – one for one (point to point). Be certain to check wiring diagram to assure proper wire termination to thermostat.
9. Reverse procedure to reinstall new thermostat. Check thermostat calibration according to instructions. If the thermostat is a warranty item, be careful not to damage or kink the capillary tube. Repack thermostat in original carton.

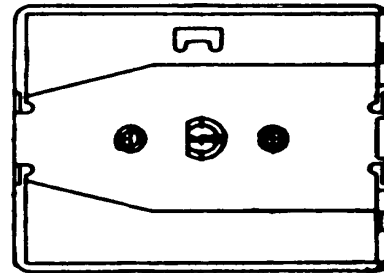


## CAUTION

The capillary tube or bulb of this thermostat, used in self-clean models, contains a caustic mixture. Do not cut or break capillary tube. If tube or bulb is broken, the mixture is combustible if it comes in contact with moisture and can be harmful if it comes in contact with eyes, skin or clothing. If broken, a crimp made with pliers on each side of the break will reseal the unit. If mixture comes in contact with skin, remove by scraping off with a knife, flush skin and knife with water.

### Selector Switch

1. Turn off power to range.
2. Remove top burner grates and main top.
3. Remove control panel.
4. Remove two screws securing selector switch to control panel.
5. Transfer wires to new selector switch – one for one (point to point).
6. Refer to wiring diagram to assure proper wire termination.
7. Reverse procedure to reinstall new selector switch.



Front Of Range

### Selector Switch Mounting Position

### Oven Latch Switch

1. Turn off power to range.
2. Remove burner grates and main top.
3. Remove two screws securing latch cover to burner box. Remove cover.
4. Disconnect wires to oven latch switch.
5. Remove screws holding switch to bracket.
6. Refer to wiring diagram for proper wire termination.
7. Reverse procedure to reinstall new switch.

### Door Latch Assembly

1. Turn off power to range.
2. Remove grates, burner bowls and main top.
3. Remove two screws securing latch handle to latch assembly.
4. Remove two screws securing latch switch mounting bracket to latch assembly.
5. Remove screw securing wire clip to insulation retainer.
6. Remove four screws securing latch assembly to mounting bracket.
7. Open oven door and remove four screws securing latch assembly to front frame. Remove latch assembly. Be sure there is no fiberglass insulation in latch hole.
8. Reverse procedure to reinstall door latch assembly.

### Automatic Door Latch Mechanism

1. Remove main top.
2. Remove four screws securing automatic door latch mechanism to latch mounting bracket.
3. All door latch components can be accessed for diagnosis or replacement.



# Disassembly Procedures

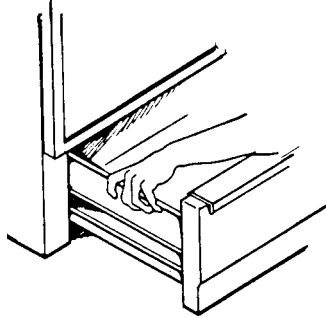


## WARNING

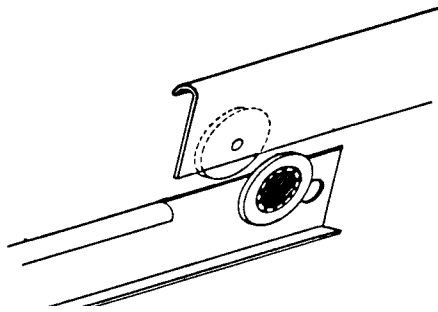
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### Storage Drawer – Storage Drawer Tracks

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



3. Remove fastener securing track to frame of range or remove fastener securing track to storage drawer assembly.
4. To reinstall storage drawer, place the set of rollers on the drawer behind the set of rollers on frame of oven.
5. Align the guides and push the storage drawer back into position.



### Pressure Regulator

1. Turn off power to range.
2. Turn off gas supply to range.
3. Remove grates, burner caps, burner bases and main top.
4. Turn off main gas supply. Disconnect supply line from range..
5. While holding the manifold with pipe wrench, unscrew pressure regulator. Transfer shut-off valve to new pressure regulator.
6. Reverse procedure to reinstall new pressure regulator.
7. Check for leaks with a leak detector or a soap solution.

### Supply Cord

1. Turn off power to range.
2. Remove storage drawer.
3. Remove screw securing wire clip to bottom shelf.
4. Disconnect supply cord from male plug on bottom shelf.

### Shut-Off Valve

1. Turn off power to range.
2. Turn off gas supply to range.
3. Remove grates, burner caps, burner bases and main top.
4. Disconnect supply tubing from shut-off valve.
5. Remove shut-off valve from pressure regulator.
6. Reverse procedure to replace shut-off valve.
7. Check replacement and gas connections for gas leaks with a leak detector or soap solution.

### Side Panel Replacement

Left or right side panels should be replaced one at a time. Do not attempt to remove both side panels as lack of support may cause subsequent damage/twist to range components.

1. Turn off power to range.
2. Shut off gas at main supply line. Disconnect range from gas supply line. Pull range forward.
3. Remove oven door assembly, storage drawer assembly, burner grates and burner caps/burner bases.
4. Remove main top and the one screw securing control panel to side panel (screws located top left or top right of control panel).
5. Support range off floor four to six inches. Remove four screws from bottom flange of side panel.
6. Remove rear backguard cover panel.
7. Remove four screws securing backguard support to side panel.
8. Remove five screws securing rear of side panel to insulation retainer.
9. Remove six screws securing front of side panel to front flame flange.
10. Move rear of side panel away from range, then move side panel forward to clear flange on front frame.
11. Reverse procedure to reinstall side panel.
12. Check gas connection with leak detector or soap solution.

# Disassembly Procedures



## WARNING

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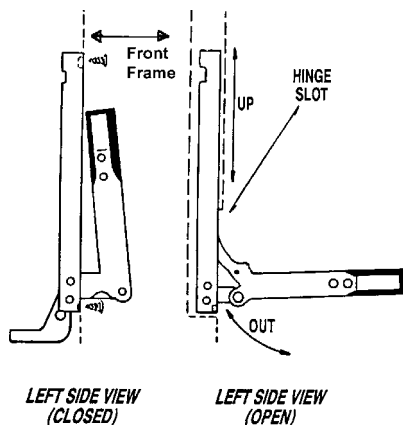
### Bottom Brace

1. Turn off power to range.
2. Turn off main gas supply. Disconnect supply line from range. Pull range forward.
3. Remove oven door assembly and storage drawer assembly. Remove top burner grates and burner bowls.
4. Support range four to six inches off of floor. Remove four screws securing bottom brace to side panel.
5. Remove two screws securing brace to front frame.
6. Reverse procedure to install new brace. Screw leveling legs into replacement brace.

Be sure to level range after installation. Check gas connections for leaks with leak detector or soap solution.

### Oven Door Hinge

1. Remove screws securing door to hinge assembly, if so equipped.
2. Remove oven door assembly from range.
3. Remove two screws securing hinge to front frame.
4. Carefully open the hinge fully. Insert an object the approximate thickness of a screw in slot under door lock to keep hinge open. Be careful not to allow the object to slip out, causing the hinge to snap back, possibly causing injury to fingers.



5. Slide hinge up into frame and then out, being sure to clear the hinge slot.
6. Slide hinge assembly out.
7. Reverse procedure to reinstall replacement hinge. The replacement hinge is received in a closed position.

### Oven Door Frame

1. Remove door from range and place face up on a protected surface.
2. Remove six screws securing door frame to oven door backer and lift frame off of door backer.
3. Reverse procedures to reinstall door frame.

### Black Glass Panel

1. Remove oven door from range and place face up on a protected surface.
2. Remove six screws securing door frame to door backer and lift frame off of door backer.
3. Lift black glass panel out of top door trim.

### Oven Door Handle

1. Remove oven door from range and lay door face up on a protected surface.
2. Remove six screws securing door frame to door backer.
3. Lift black glass panel out of top trim.
4. Remove three screws securing top trim to door backer.
5. Remove four screws securing door handle and spacers to top trim.
6. Reverse procedure to reassemble.

# Disassembly Procedures



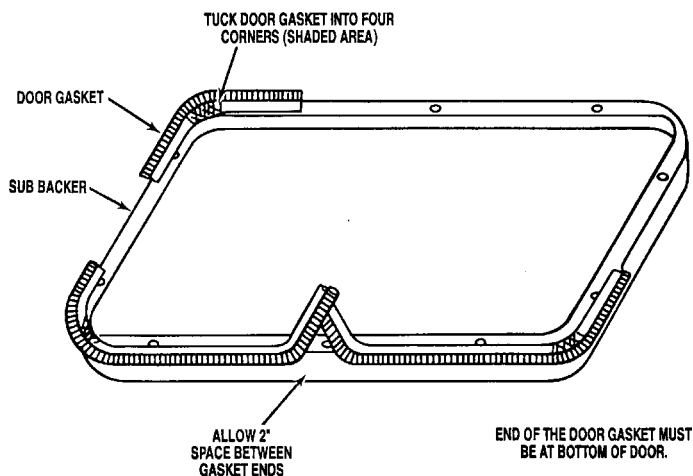
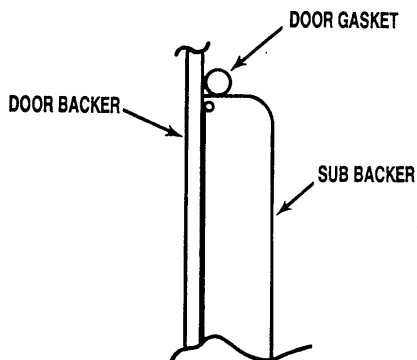
## WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

### Oven Door Gasket

1. Remove oven door assembly from range and place door on a protected surface.
2. Remove six screws securing oven door backer to oven door frame.
3. Remove door frame and oven door glass.
4. Remove two screws securing heat shield to backer.
5. Remove 14 screws securing door backer to subbacker. Note door gasket position for correct reassembly.
6. Carefully position new door gasket around perimeter of sub backer and cross over door gasket at bottom of sub backer. Tuck gasket in at corners.
7. Reinstall, but do not tighten, 14 screws on the door backer.
8. Position door gasket between door backer and sub backer as shown. Then tighten all screws to pinch gasket between door backer and sub backer.

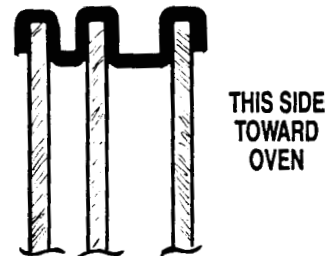
Be sure hinge pins and rubber bumpers are in place when reassembling.



### Door Glass – Inner

1. Remove oven door assembly from range and place door on a protected surface.
2. Remove six screws securing oven door backer to oven door frame.
3. Remove two screws securing heat shield to door backer.
4. Remove 14 screws securing door backer to sub backer. Gently remove door backer. Note door gasket position for correct reassembly.
5. Remove insulation and eight screws securing window assembly to door backer.
6. Gently remove window assembly.
7. Reverse procedure to reinstall.

When reassembling, be sure hinge pins and rubber bumpers are in place.



Oven Door Glass Assembly

### Frameless Door Disassembly

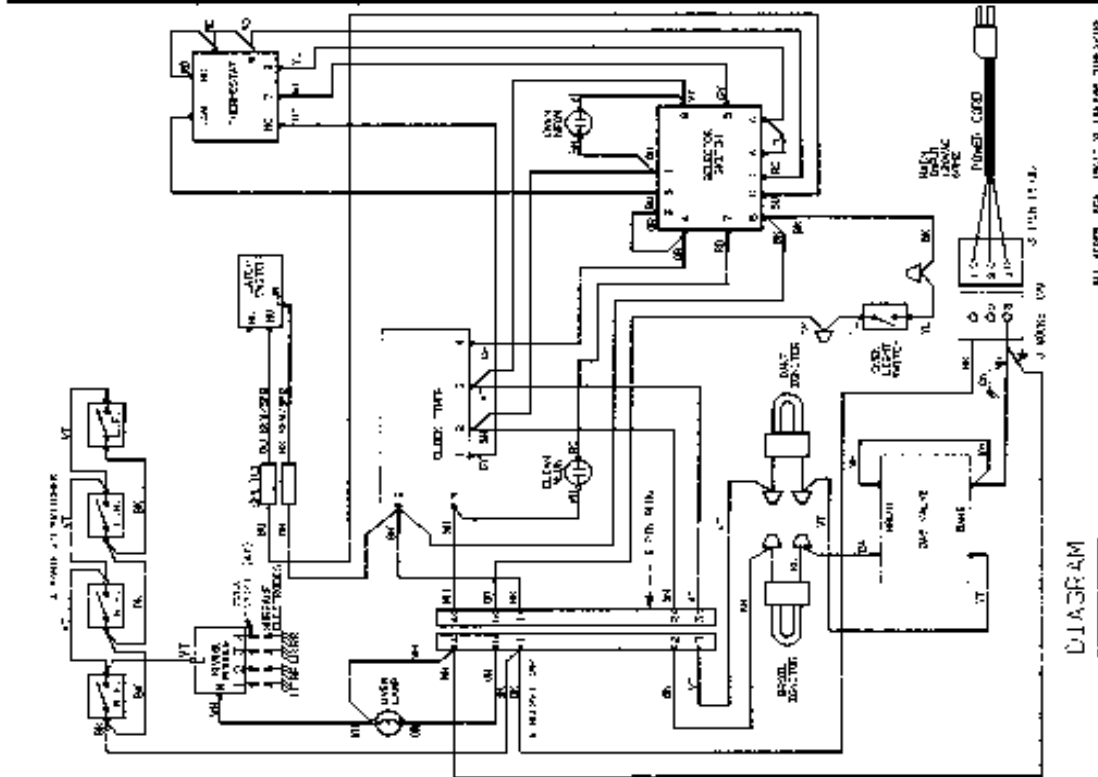
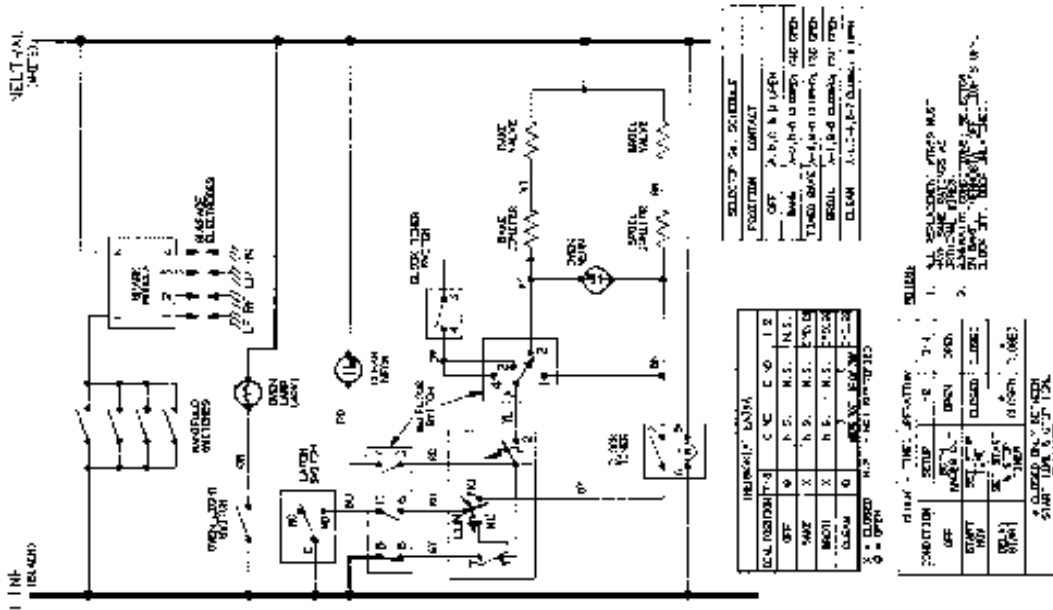
1. Open door. Pull off hinges.
2. Remove one screw each from right and left sides of oven door.
3. Remove five screws from oven door bottom. Detach right and left end caps and glass support angle.
3. Remove two side screws securing top door trim to oven backer. Separate glass outer door, trim and handle from door assembly.
4. Detach door handle by removing two door handle screws.
5. Detach heat shield from oven door backer by removing four hex screws.
6. Access remainder of door assembly by removing 18 hex screws from oven door backer.
7. Reverse procedure to reassemble.

# Wiring Diagrams and Schematics



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



DIAGRAM

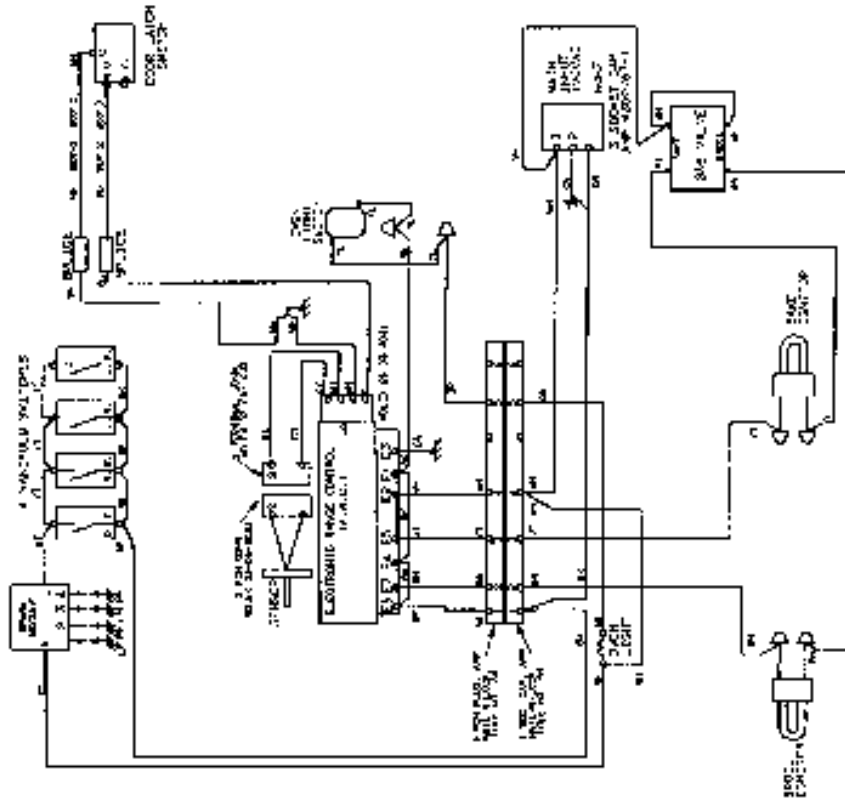
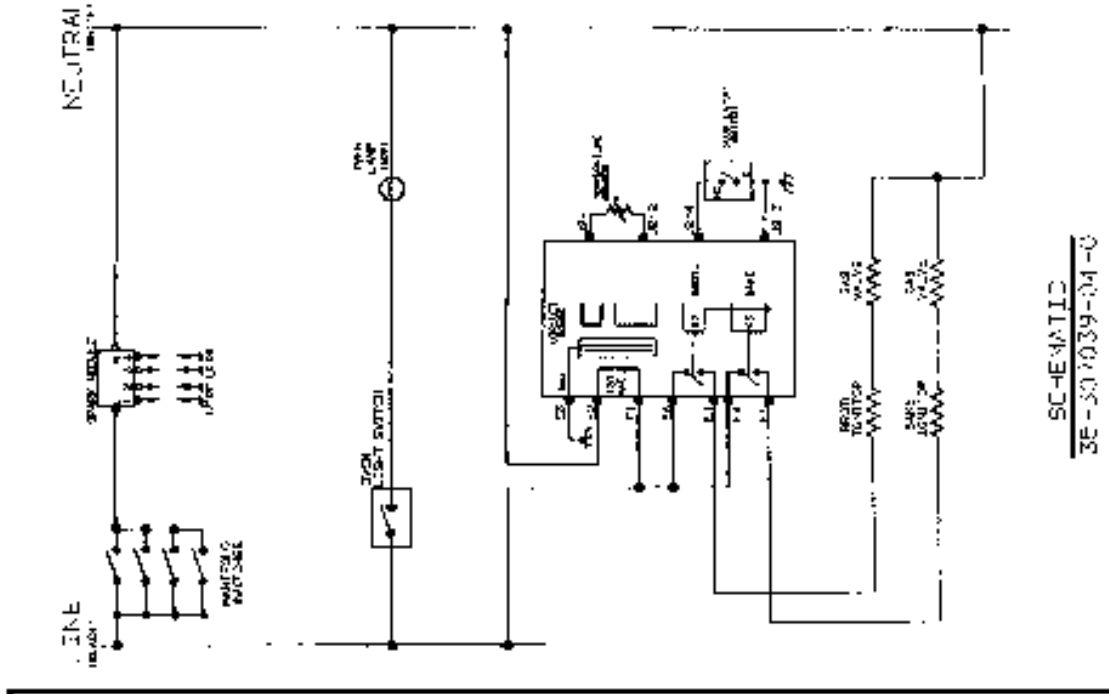
AGS750 P1141236N  
RSF3400 P1141222N

# Wiring Diagrams and Schematics



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



WIRE TO BE BLK (507039-01-0) - THE WIRE IS NOT TO BE USED.

AGS760  
RSK3700

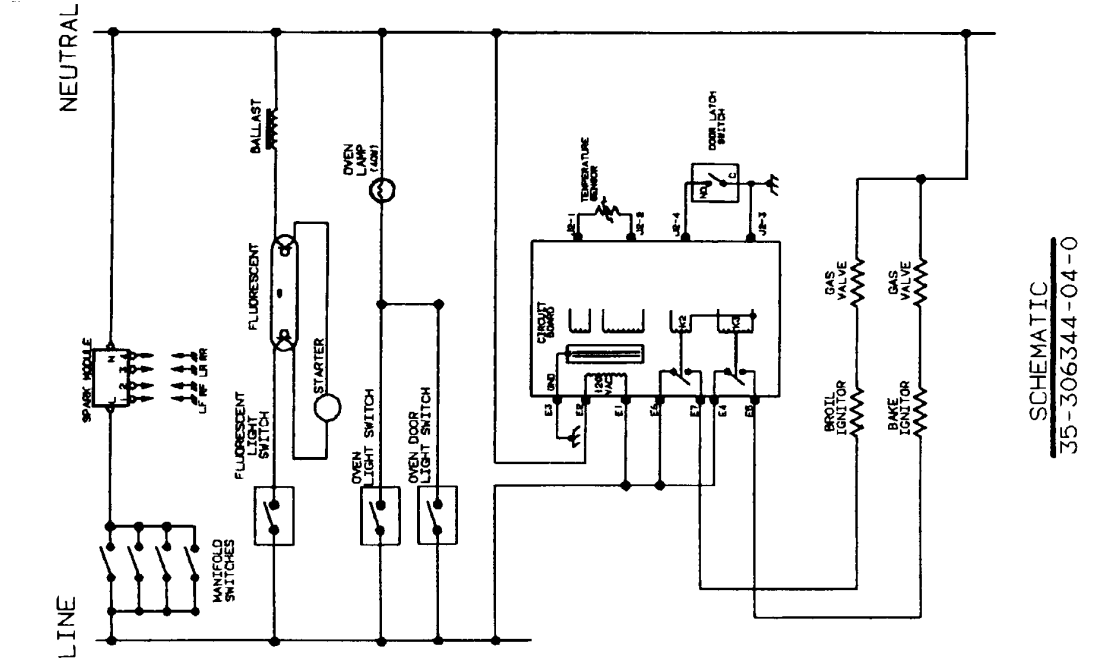
P1141237N, P1141238N  
P1141223N, P1141247N, P1141270N, P1143310N

# Wiring Diagrams and Schematics

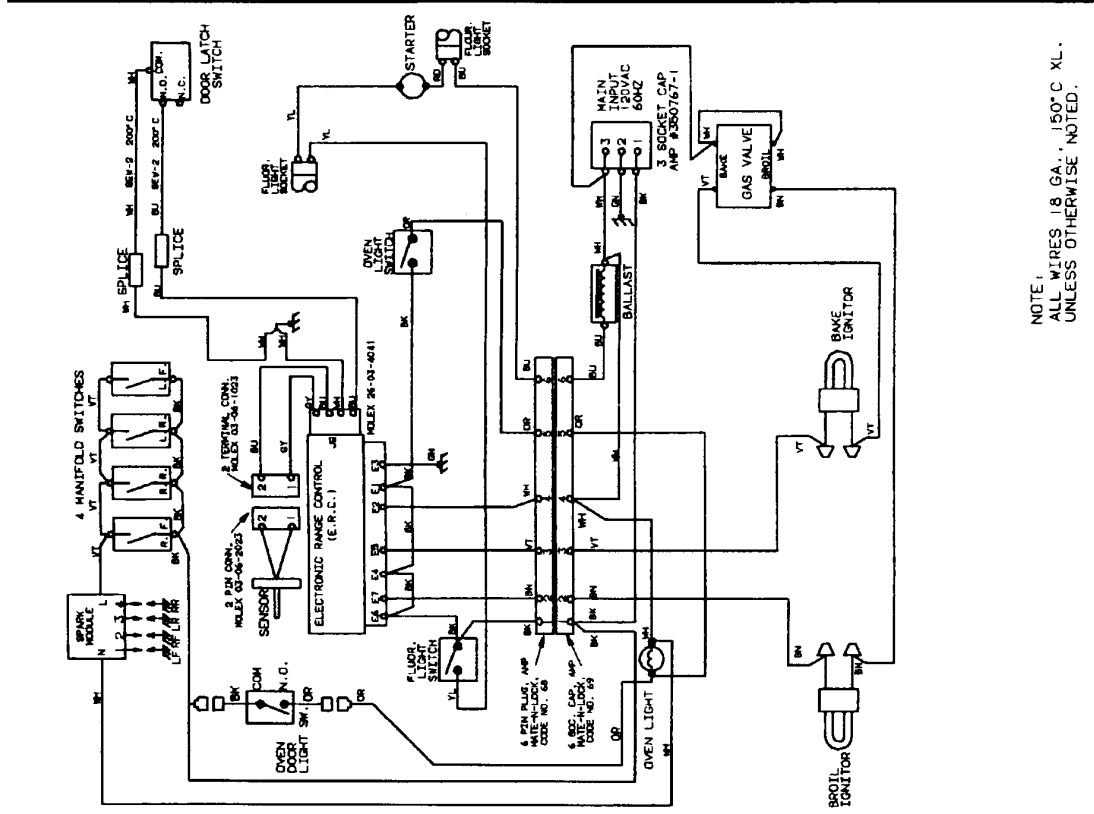


**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



**SCHEMATIC**  
35-306344-04-0



NOTE:  
ALL WIRES 18 GA., 150°C XL,  
UNLESS OTHERWISE NOTED.

AGS780

P1168601, P1168602, P1141240N

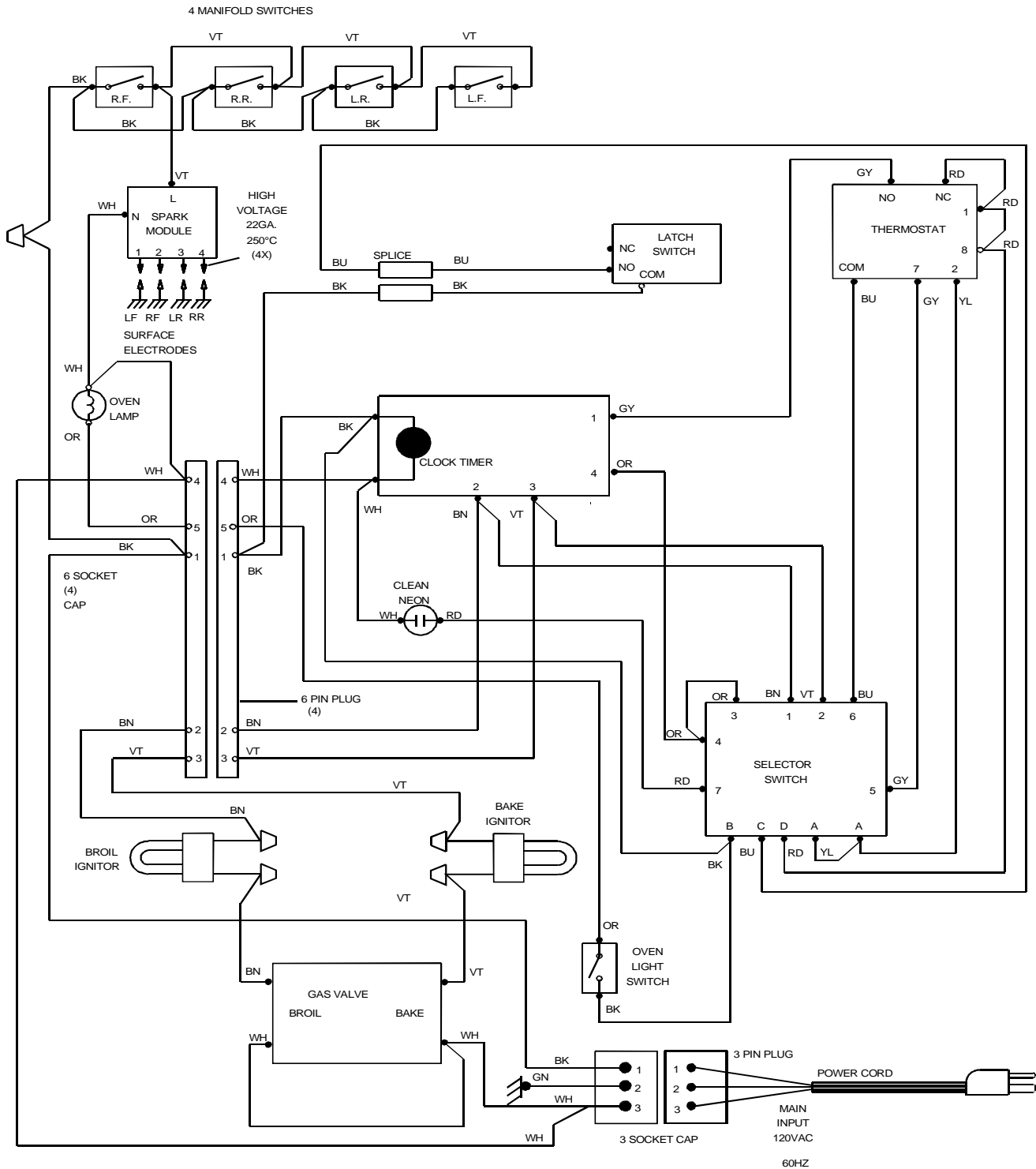


# Wiring Diagrams and Schematics



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



**Wiring Diagram**  
309566

NOTES:  
1. ALL WIRES 18GA. 150°C XL UNLESS OTHERWISE NOTED.

- |          |  |
|----------|--|
| AGS730   | P1141258N, P1141263N, P1141268N, P1143301N |
| RSSF3410 | P1141257N, P1141269N, P1143309N            |
| RSF3300  | P1141256N, P1141265N, P1141272N, P1143308N |
| RSF3200  | P1141255N, P1141264N, P1141271N, P1143307N |

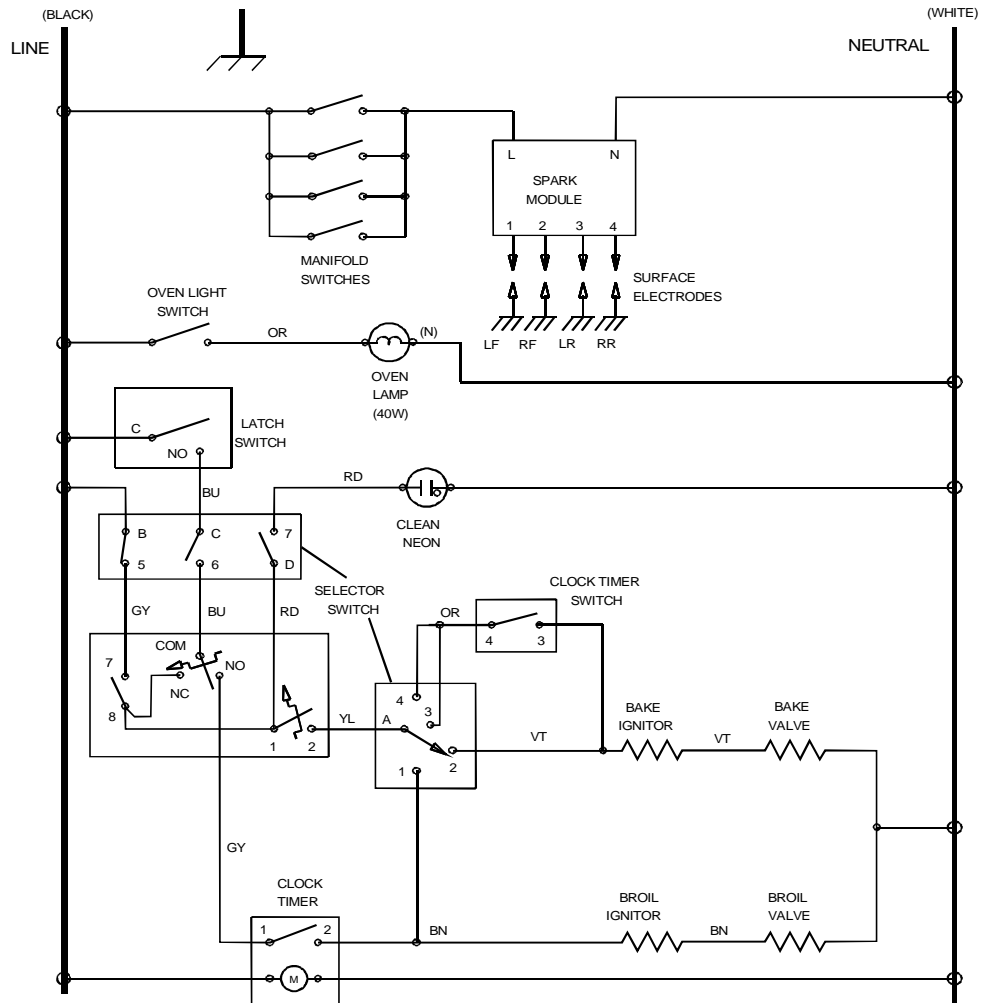


# Wiring Diagrams and Schematics



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



THERMOSTAT					
DIAL POSITION	7-8		C-NC	C-N0E 70	1-2.
OFF	○		N.S.	N.S.	N.S.
BAKE	X		N.S.	N.S.	CYCLES
BROIL	X		N.S.	N.S.	CYCLES
CLEAN	○		X ABOVE 700°	X BELOW 700°	CYCLES

X = CLOSED N.S. = NOT SPECIFIED  
○ = OPEN

CLOCK - TIMED OPERATION			
CONDITION	SETUP	1-2	3-4
OFF	BOTH KNOBS OUT	OPEN	OPEN
START NOW	SET STOP TIME	CLOSED	CLOSED
DELAY START	SET START & STOP TIMES	CLOSED	CLOSED

\* CLOSED ONLY BETWEEN START TIME & STOP TIME SETTINGS.

SELECTOR SW. SCHEDULE	
POSITION	CONTACT
OFF	A,B,C & D OPEN
BAKE	A-2,B-5 CLOSED; C&D OPEN
TIMED BAKE	A-3,B-5 CLOSED; C&D OPEN
BROIL	A-1,B-5 CLOSED; C&D OPEN
CLEAN	A-4,C-6,D-7 CLOSED; B OPEN

### Schematic 309566

NOTES:

- ALL REPLACEMENT WIRES MUST HAVE SAME RATINGS AS ORIGINAL WIRES.
- SCHEMATIC CONDITIONS: SELECTOR IN BAKE, THERMOSTAT OFF, LIGHTS OFF, CLOCK OFF, DOOR UNLATCHED.
- Ⓜ DENOTES OPTIONAL EQUIPMENT AND RELATED WIRING NOT SUPPLIED ON SOME MODELS.

AGS730  
RSSF3410  
RSF3300  
RSF3200

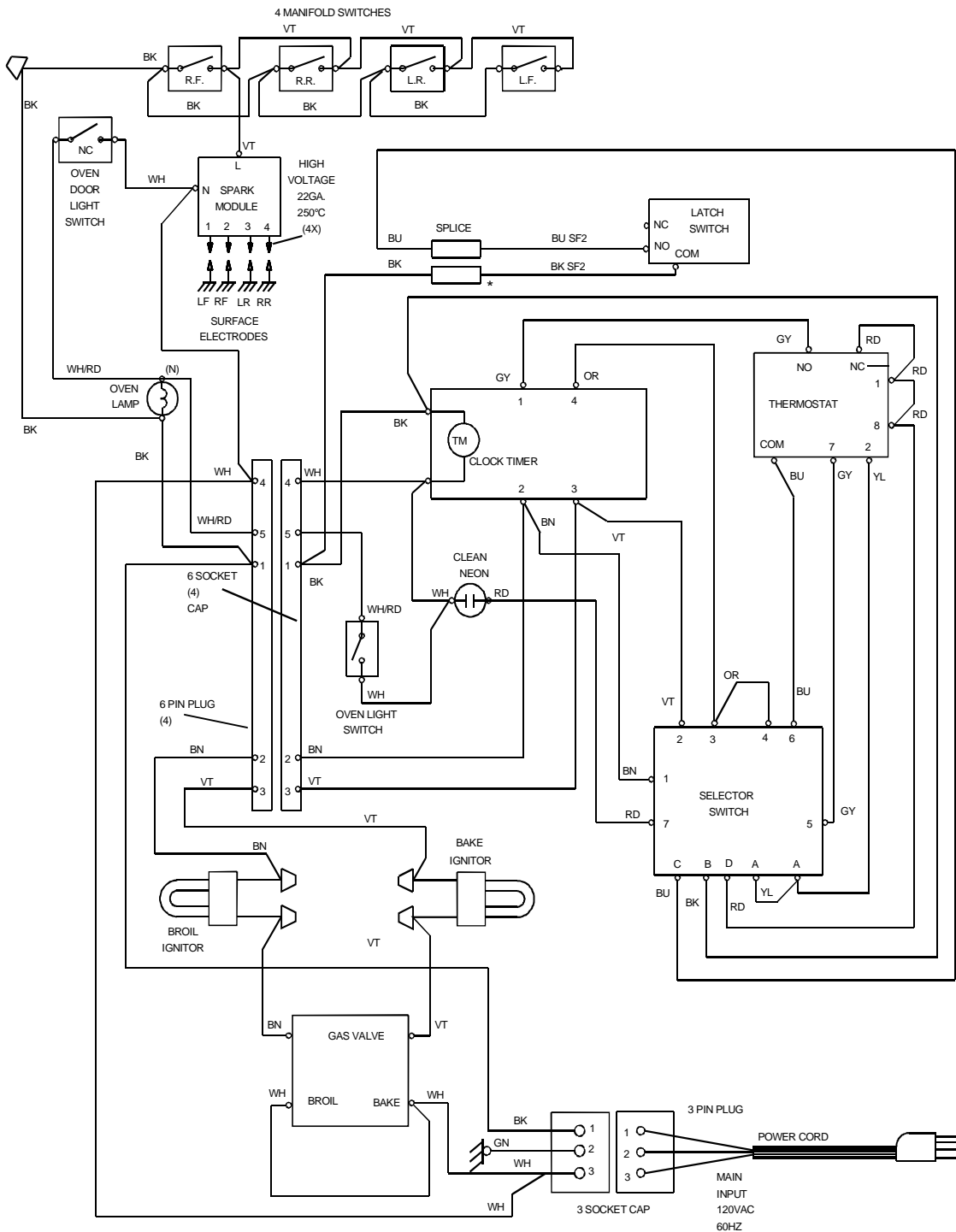
P1141258N, P1141263N, P1141268N, P1143301N  
P1141257N, P1141269N, P1143309N  
P1141256N, P1141265N, P1141272N, P1143308N  
P1141255N, P1141264N, P1141271N, P1143307N

# Wiring Diagrams and Schematics



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



**Notes:**

1. All wires 18GA 150°C XL unless otherwise noted, SF2 is SEW2/SF2 200°C rated.
2. All replacement wires must have same rating as original wires.
3. Denotes optional equipment and related wiring not supplied on same models.

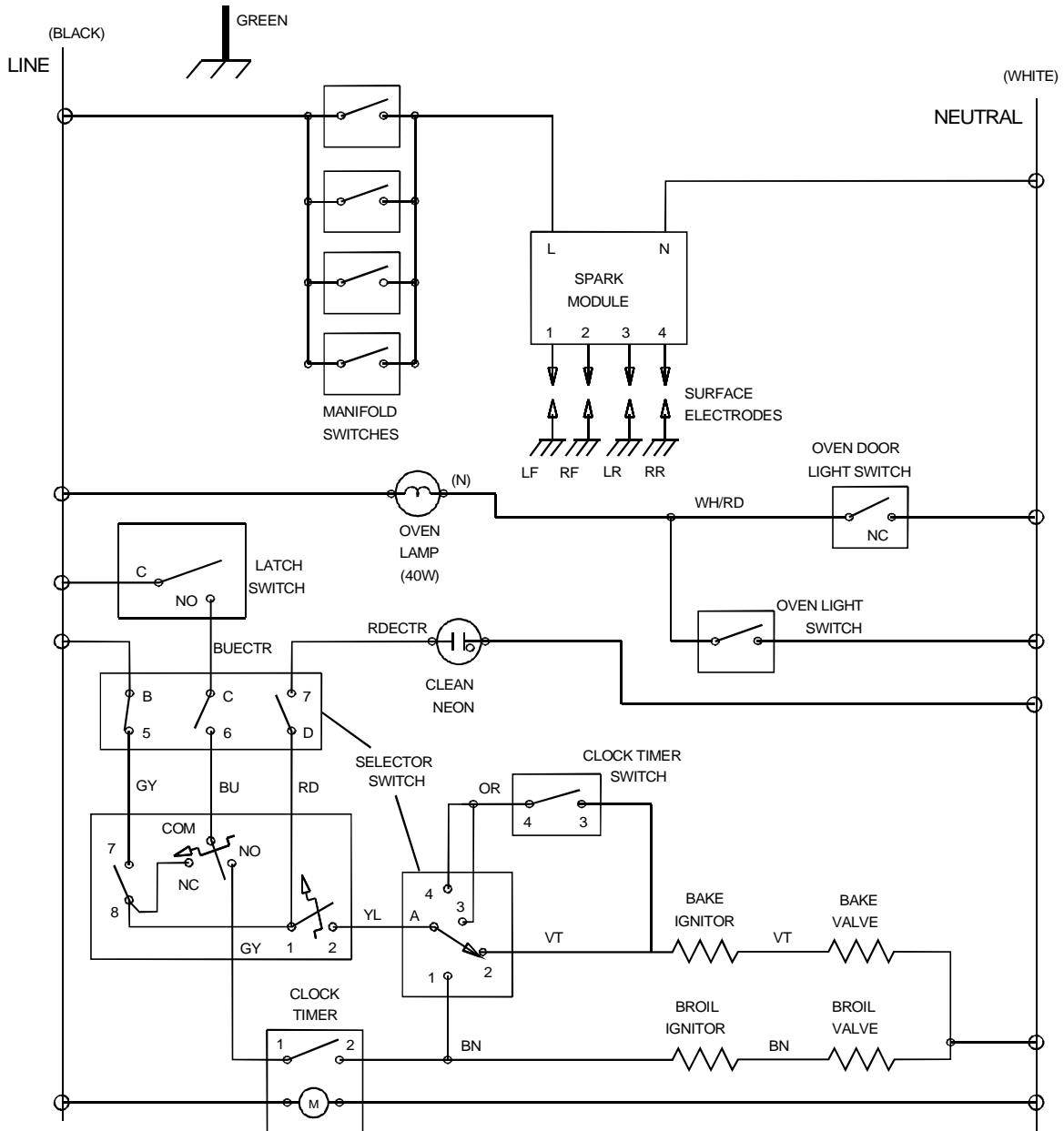
**DIAGRAM  
35-314447-04-0**

# Wiring Diagrams and Schematics



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



THERMOSTAT				
DIAL POSITION	7-8	C-NC	C-NO	1-2
OFF	○	N.S.	N.S.	N.S.
BAKE	X	N.S.	N.S.	CYCLES
BROIL	X	N.S.	N.S.	CYCLES
CLEAN	○	X ABOVE 700°	X BELOW 700°	CYCLES

X = CLOSED N.S. = NOT SPECIFIED  
○ = OPEN

POSITION	SWITCHING						
	A		A		B	C	D
	1	2	3	4	5	6	7
OFF							
BAKE							
TIMED BAKE							
BROIL							
CLEAN							

X - CLOSED

CLOCK - TIMED OPERATION			
CONDITION	SETUP	1-2	3-4
OFF	BOTH KNOBS OUT	OPEN	OPEN
START NOW	SET STOP TIME	CLOSED	CLOSED
DELAY START	SET START & STOP TIMES	CLOSED	CLOSED

\* CLOSED ONLY BETWEEN START TIME & STOP TIME SETTINGS.

**SCHEMATIC**

**35-314447-04-0**

NOTES:

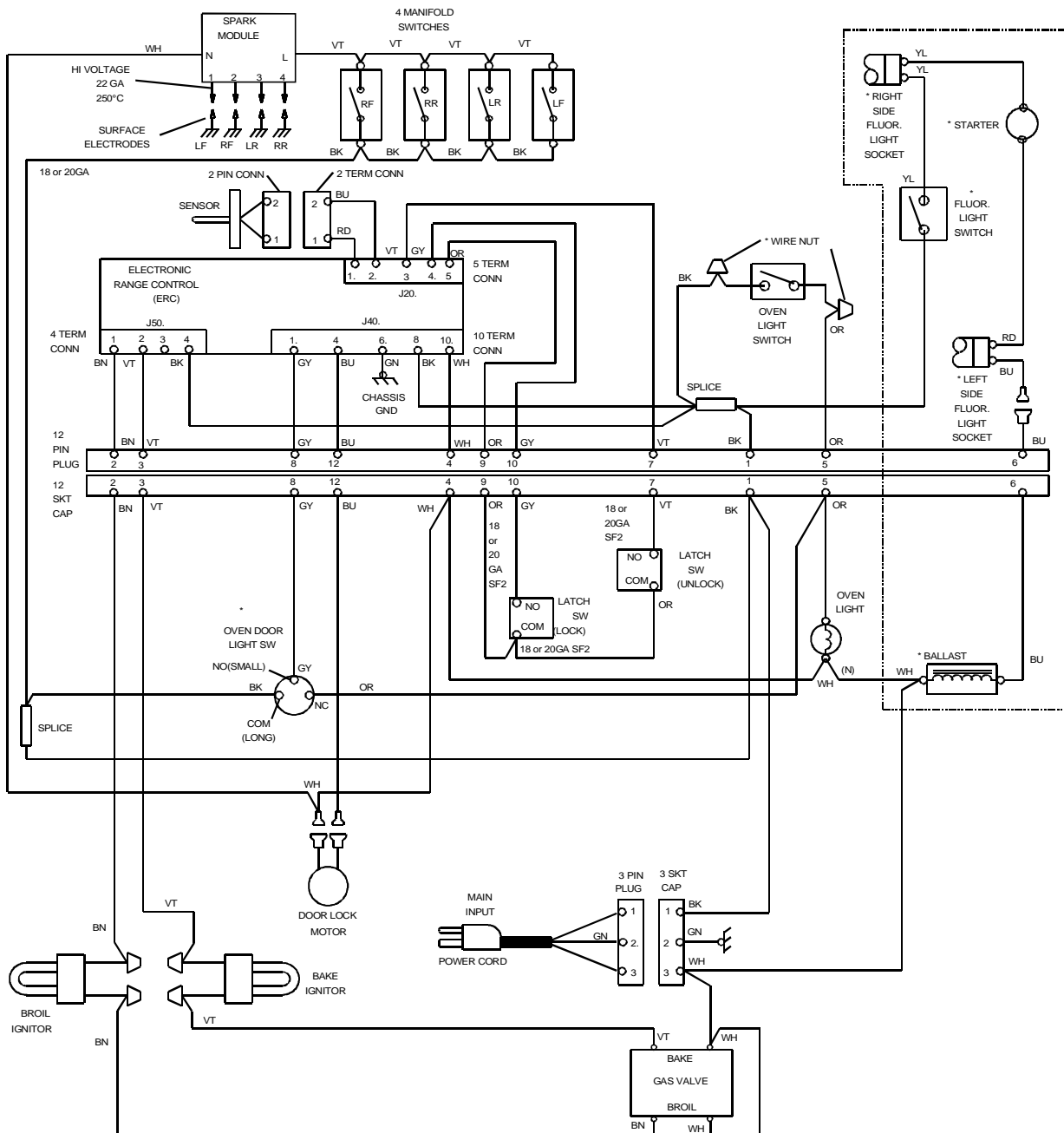
1. SCHEMATIC CONDITIONS: SELECTOR IN BAKE, THERMOSTAT OFF, DOOR UNLATCHED AND CLOSED.

# Wiring Diagrams and Schematics



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



## DIAGRAM

35-309539-04-0

### NOTES:

1. ALL WIRES ARE 18GA, 150°C XL UNLESS OTHERWISE NOTED. SF2 IS SEW-2/SF2 200°C RATED.
2. SEE SERIAL PLATE FOR INPUT RATINGS.
3. ALL REPLACEMENT WIRES MUST HAVE SAME RATINGS AS ORIGINAL WIRES.
4. \* DENOTES OPTIONAL EQUIPMENT AND RELATED WIRING NOT SUPPLIED ON SOME MODELS.

AGS761  
AGS781

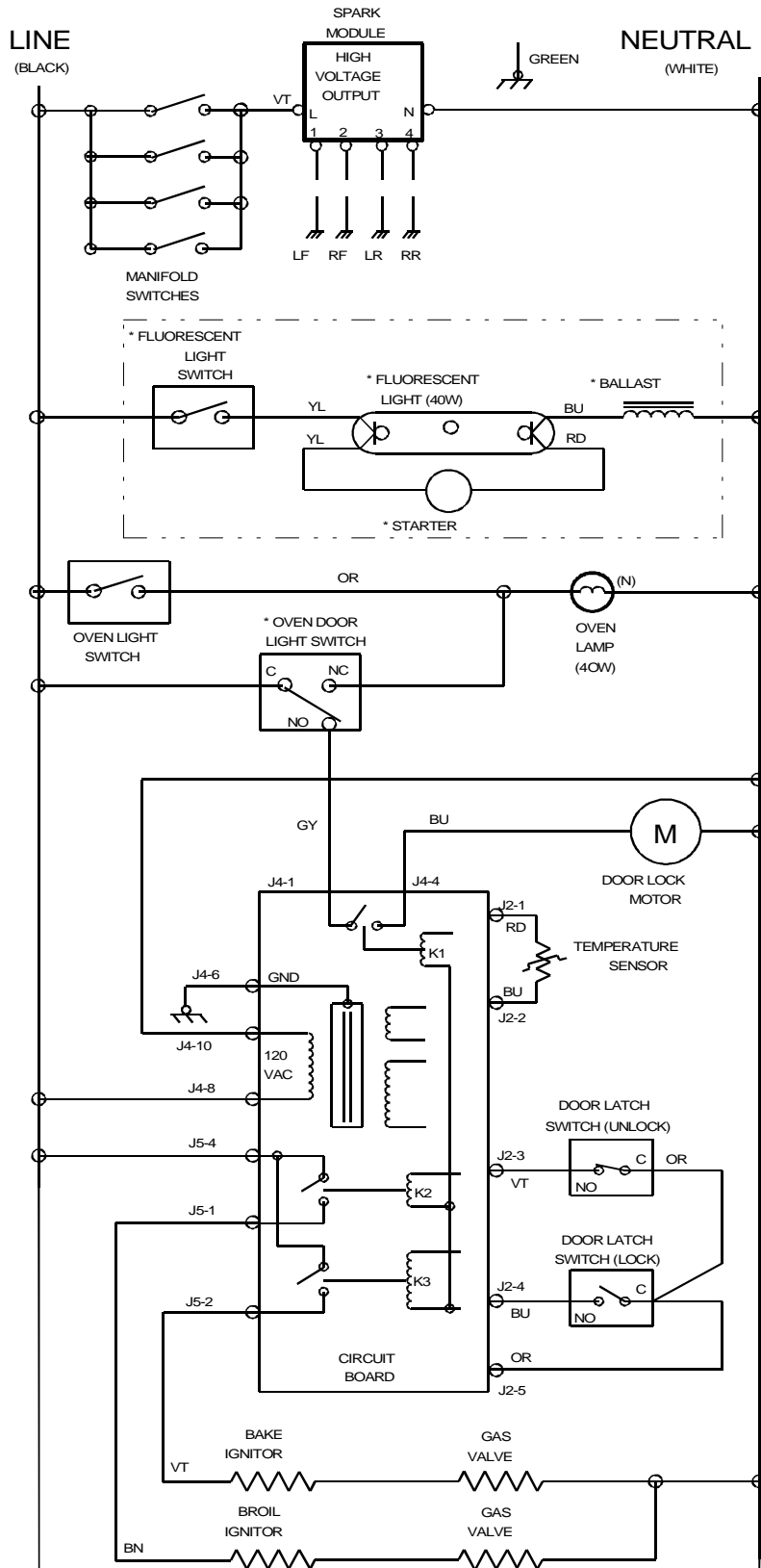
P1141274N, P1141289N, P1142635N, P1143304N, P1143305N  
P1141275N, P1142636N, P1143306N

# Wiring Diagrams and Schematics



**WARNING**

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.



Oven conditions: Burners Off,  
Door closed and unlocked

**SCHEMATIC**  
**35-309539-04-0**

AGS761  
AGS781

P1141274N, P1141289N, P1142635N, P1143304N, P1143305N  
P1141275N, P1142636N, P1143306N