

MAYTAG

Maytag

**Electric Cooking
Service Manual**

16000082
Issued 1990
Revised 4/95

Contents

| | |
|---|-----|
| SECTION 1. SAFETY | 1-1 |
| ELECTRICAL SAFETY | 1-1 |
| PROPER SERVICE PROCEDURE | 1-1 |
| SELF CLEAN MECHANICAL OVEN THERMOSTAT | 1-2 |
| | |
| SECTION 2. TESTING | 2-1 |
| ELECTRICAL TESTING | 2-1 |
| ELECTRICAL CONNECTIONS / VOLTAGE | 2-2 |
| | |
| SECTION 3. CLOCK FUNCTIONS | 3-1 |
| ELECTRONIC CLOCK | 3-1 |
| AUTOMATIC COOKING | 3-1 |
| TIMER CONTACTS | 3-1 |
| TRANSFORMER PRIMARY | 3-2 |
| | |
| SECTION 4. OVEN FUNCTIONS | 4-1 |
| OVEN CAVITY STYLES | 4-1 |
| BAKE | 4-1 |
| Quarter Top Heat | 4-1 |
| Quarter Top Heat Operation | 4-1 |
| Dual Section Broil Element | 4-1 |
| BROIL | 4-2 |
| CLEAN | 4-2 |
| | |
| SECTION 5. OVEN OPERATION COMPONENTS | 5-1 |
| BAKE ELEMENT | 5-1 |
| Bake Element Continuity | 5-1 |
| BROIL ELEMENT | 5-1 |
| Dual Section Broil Element Continuity | 5-1 |
| HIGH LIMIT SWITCH | 5-2 |
| FAN (BLOWER) SWITCH | 5-3 |
| Fan (Blower) | 5-3 |
| LOCK ASSEMBLY | 5-3 |
| SELECTOR SWITCH | 5-4 |
| LOW OVEN SWITCH | 5-4 |
| MECHANICAL THERMOSTAT | 5-4 |
| | |
| SECTION 6. OVEN TEMPERATURE | 6-1 |
| OVEN TEMPERATURE PRELIMINARY | 6-1 |
| Factors Affecting Oven Calibration | 6-1 |
| To Test the Oven Temperature | 6-2 |

| | |
|--|------|
| SECTION 7. CONTROL AREA ILLUSTRATIONS | 7-1 |
| SECTION 8. DOOR ILLUSTRATIONS | 8-1 |
| SECTION 9. DOOR | 9-1 |
| LIFT OFF DOOR | 9-1 |
| LIFT OFF DOOR - LOCK LATCH EQUIPPED | 9-1 |
| SECTION 10. CHASSIS ILLUSTRATIONS | 10-1 |
| SECTION 11. CHASSIS & COMPONENT SERVICE | 11-1 |
| COMPONENT ACCESS | 11-1 |
| SECTION 12. CIRCUIT DIAGRAMS | 12-1 |
| ELECTRICAL TROUBLESHOOTING | 12-1 |
| CONTROL CHART | 12-1 |
| CIRCUIT TRACING | 12-1 |
| CWE402 | 12-2 |
| CWE470, ECWE470 | 12-3 |
| CWE502 | 12-4 |
| CWE550, ECWE550 | 12-5 |

INTRODUCTION

The information in this manual applies to the electric cooking products mounted on a 24" single and double cavity wall oven chassis.

This manual is divided into sections, each of which describes a general group of components.

Models Numbers Covered in this Manual:

CWE402

CWE470
ECWE470

CWE502

CWE550
ECWE550

GENERAL SAFETY PRECAUTIONS

Information contained in this manual is intended for use by a qualified service technician, familiar with proper and safe procedures to be followed when repairing an electrical appliance. All tests and repairs should be performed by a qualified service technician equipped with proper tools and measuring devices. All component replacements should be made by a qualified service technician, using only MAYCOR replacement parts.

Improper assembly or adjustment may occur if service or repair is attempted by persons other than qualified service technicians or if parts other than MAYCOR replacement parts are used. Improper assembly or adjustment can cause hazardous conditions.

There can be risk of injury or electrical shock while performing services or repairs. Injury or electrical shock can be serious or even fatal.



SECTION 1. SAFETY

ELECTRICAL SAFETY

Whenever the appliance is being serviced, the electrical supply must be disconnected from the appliance to avoid contact with live terminals. The circuit breakers should be switched to the off position or the fuses removed from the branch electrical supply circuit which supplies electrical power (voltage) to the appliance. Prior to initial service, an electrical check (voltage check) for the absence of power (voltage) at the appliance should be done, either at the main terminal block or available electrical supply inlet on the unit, to insure that the correct circuit breakers have been thrown or the correct fuses removed and no power (voltage) is present at the appliance.

If electricity is required for a test to check for power or wattage at a component, the electricity should be turned off, the necessary connections or adjustments made and then the electricity restored for the test. As soon as the test is completed, the appliance should be disconnected from power before the electrical connections are removed or further service is performed.

- Disconnect the appliance from power before making or breaking electrical connections.
- Disconnect the appliance from power before making adjustments.

- Disconnect the appliance from power before replacing components or performing service.

PROPER SERVICE PROCEDURE

When testing, removing, replacing component or components or performing service:

1. Disconnect the appliance from power.
2. Note the location of electrical wiring attachments and disassembly order for ease in reassembly.
3. Reassemble in the reverse order of removal unless specified otherwise.
4. Be sure that electrical connections are attached and secure.
5. Be sure that wiring is secured away from sharp edges and moving parts.
6. Do not bypass or disconnect any part or device designed into the appliance.
7. Be sure that ground wiring is connected and secure.
8. Be sure that access panels and covers are installed.

SELF CLEAN MECHANICAL OVEN THERMOSTAT

NaK Caution

Bulb and capillary are filled with liquid metal fluid called NaK. Material is dan-

gerous to eyes, skin, clothing and combustibles. If the material comes in contact with skin, scrape from skin using a dry spatula or equivalent. **DO NOT RUB.** Then flush thoroughly with water.

In the event of a system rupture at room ambient, leaking will be quite slow as

there is no internal pressure in the system. Seal system by crimping shut with pliers on each side of break. Flush crimped ends thoroughly with water. Place crimped off units in a covered metal container, free of combustible materials, and dispose of properly.

SECTION 2. TESTING

ELECTRICAL TESTING

Most electrical testing consists of resistance and continuity checks of loads, controls and conductors. The appliance must be disconnected from power before performing and during a resistance or continuity check on any electrical load (electrical component which requires a voltage to perform an intended function), control (electrical switch which makes or breaks an electrical circuit) or conductors (appliance circuit wiring). The wiring to a component should be removed from the terminals of the component, with the location noted for ease in reattachment after the test, before the resistance or continuity check is performed. Remove the ohmmeter from the component or circuit under test before reattaching wiring. After wiring is reattached, restore power to the appliance.

When performing a resistance or continuity check, at least one end of the load, control, conductor or circuit under test must be removed from the appliance circuit (by disconnection at terminals, etc.) to prevent parallel circuits from producing a false indication. Both ends under test must be removed from the appliance circuit if branch circuits internal and common to the test exist. If in doubt, remove both ends from the appliance circuit and test.

In the event that a resistance or continuity check of an electrical load, control, conductor or appliance circuit is not sufficient and no other alternative is available, then and only then should a voltage or wattage check be per-

formed. To perform a voltage or wattage check, disconnect the appliance from power, make the necessary test equipment connections, connect the appliance to power, perform the test and then disconnect the appliance from power before removing test equipment connections or performing service. A voltage or wattage test should only be performed with the electrical load in the circuit.

If full power (voltage) is applied to an electrical load and the electrical load does not operate, then suspect the electrical load. If full power (voltage) is not applied to the electrical load then the remaining power (voltage) is dropped by a resistance in series in the electrical circuit when full power is available. If no power (voltage) is applied to an electrical load when it should be, then an open condition (no continuity) exists in the electrical circuit when full power is available.

Electrical components are normally voltage and wattage rated at 120 and 240 volts, although the appliance may be rated for 120/240 and 120/208 power. When the appliance is supplied by 120/208 power, expect wattage of 240 volt rated resistive electrical loads to be in a range of approximately 75% of the 240V wattage value for the component. For any voltage applied to the unit less than 240 and greater than 208 volts, expect a wattage somewhere between 75% and the full value. For an applied voltage less than 208 volts, expect wattage values below 75% of the rated wattage. A wattage check to a load requires a voltage check to the

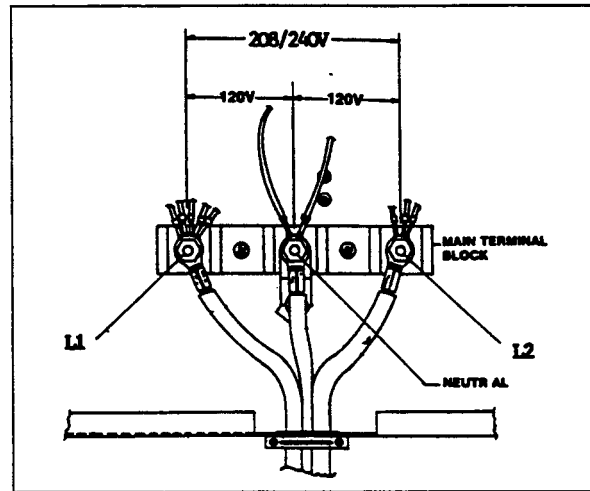
load at the same time to determine what voltage value is applied to the load.

TEST EQUIPMENT

Service test equipment should be equipped with insulated alligator clips or similar device to prevent personal body contact with the circuits under test. Test equipment leads should be of a sufficient voltage and heat rating capacity to prevent damage to the leads in the event of contact with excessive voltage or excessive heat.

SAFETY NOTE: An electrical test, adjustment, component replacement or service to the appliance should only be performed following all safety procedures and the procedures listed above.

ELECTRICAL CONNECTIONS / VOLTAGE



With the unit connected to power, voltage at the main terminal block from L1 to L2 should be approximately either 208 or 240 volts A.C. Voltage from L1 to Neutral or L2 to Neutral should be approximately 120 volts A.C.

SECTION 3. CLOCK FUNCTIONS

ELECTRONIC CLOCK

When power is first supplied to the unit or if there is a power failure, the display will blink 88:88. Refer to the instructions in the Use & Care manual supplied with the unit in order to set the clock.

AUTOMATIC COOKING

The automatic cooking feature is used to turn the oven on and off at a preset time of day. The automatic cooking feature will not operate unless the clock is functioning and is set at the correct time of day. The appropriate OVEN SET knob setting (selector switch) and OVEN TEMP knob (oven thermostat) setting is necessary. Refer to the Use & Care manual supplied with the unit.

TIMER CONTACTS

The electronic clock contains a set of contacts which are used to complete the circuit for automatic timed functions.

To Check Timer Contacts:

1. Disconnect the appliance from power.
2. Remove the wiring from terminals 13 and 14 of the electronic clock.
CAUTION:
Insulate the exposed portion of the terminal connector on the removed wires with insulating electrical tape to prevent the risk of accidental electrical shock or damage to components.
3. Connect an ohmmeter to terminals 13 and 14 of the electronic clock.
4. Connect the appliance to power.
5. Program the clock for the present time of day.
6. Follow the instructions in the Use & Care manual supplied with the unit to perform any of the automatic oven functions. The amount of time programmed into the electronic clock should be sufficient to check for proper operation of the clock.
7. No continuity (open) should initially be indicated. When the timer contacts close, continuity should be indicated. At the end of the automatic function, no continuity (open) should be indicated.
8. Follow the instructions supplied in the Use & Care manual supplied with the unit to end the oven operation.
9. Disconnect the appliance from power.
10. Remove electrical tape before attaching removed wires.

TRANSFORMER PRIMARY

Continuity of the transformer primary winding should be in the range of approximately 260 ohms.

SECTION 4. OVEN FUNCTIONS

OVEN CAVITY STYLES

Manual Clean: The manual clean oven cavity finish requires manual cleaning of the oven cavity by the customer. The oven cavity finish consists of a porcelain enamel. Should surface finish repair be necessary, the repair should be performed with a self-clean oven patch repair kit.

Self-Clean: The self-clean oven cavity finish uses temperatures above normal cooking temperatures to clean the oven. The clean cycle eliminates soil or reduces it to a gray ash which can be wiped up with a damp cloth when the oven is cool. Should surface finish repair be necessary, the repair should be performed with a self-clean oven patch repair kit.

BAKE

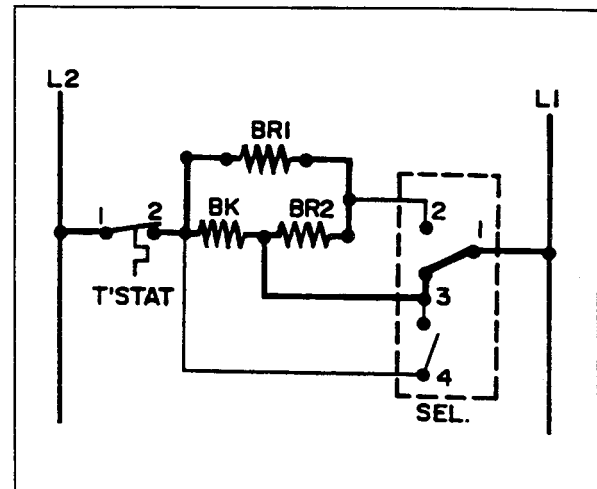
Bake occurs when 240 volts is applied to the bake and broil elements. Applying 240 volts to the bake element will cause the bake element to glow red. The broil element(s) will not glow red but will produce quarter top heat.

Quarter Top Heat

Quarter top heat is the process of operating the broil element(s) during bake at one-fourth (1/4) the normal wattage rating. Quarter top heat provides for

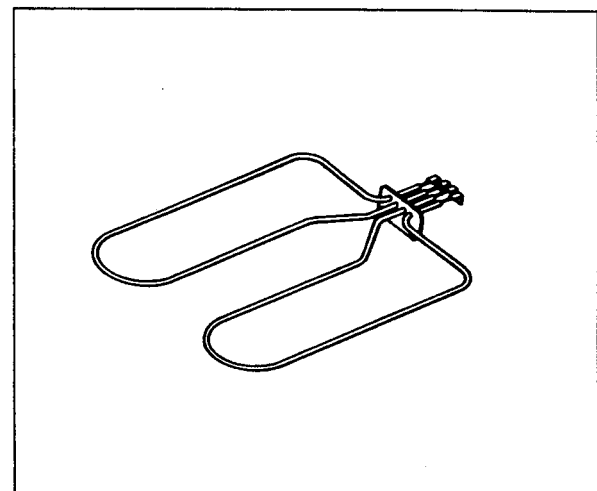
more consistent heat distribution and top browning of food.

Quarter Top Heat Operation



240 volts is applied to both elements of the dual section broil element. The broil-1 element drops a portion of the 240 volts applied to the broil-1/broil-2 circuit and the remaining voltage is dropped by the broil-2 element.

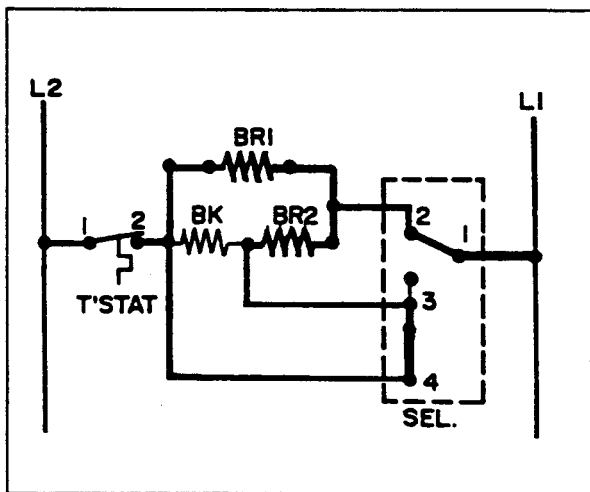
Dual Section Broil Element



The broil element is a dual section element consisting of broil element one (broil-1) and broil element two (broil-2). The broil-1 section is located beneath the oven vent tube. The broil-2 is located to the left of the broil-1 when viewed from the front.

BROIL

Broil occurs when 240 volts is applied to the broil element(s). 240 volts is applied to each element, connected in parallel to produce broil. 240 is applied to the broil-1 element (BR 1) and 240 volts is applied to the broil-2 element (BR 2).

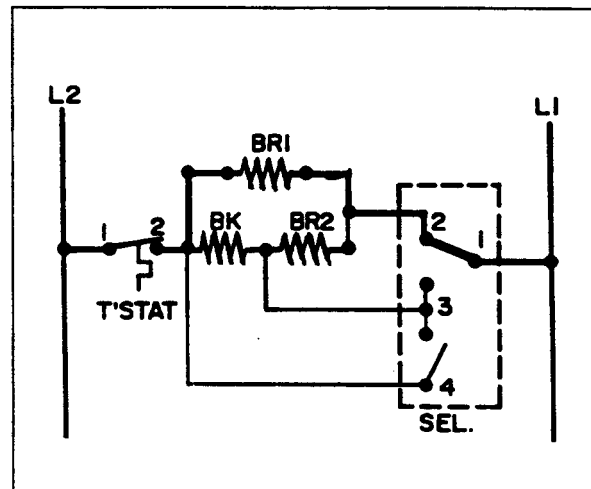


The bake element is in the circuit but does not operate. The bake element is shunted (parallel) by a conductor. The

conducting circuit consists of closed selector switch contacts connected across both sides of the bake element.

CLEAN

Clean occurs when 240 volts is applied to the bake and broil elements. 240 volts is applied to the broil-1 element (BR 1). 240 volts is applied to the bake and broil-2 element (BR 2) connected in series.



The bake element drops a portion of the 240 volts applied to the bake/broil-2 circuit and the remaining voltage is dropped by the broil-2 element. During clean, the broil-1 element located beneath the oven vent tube glows red and the broil-2 element does not.

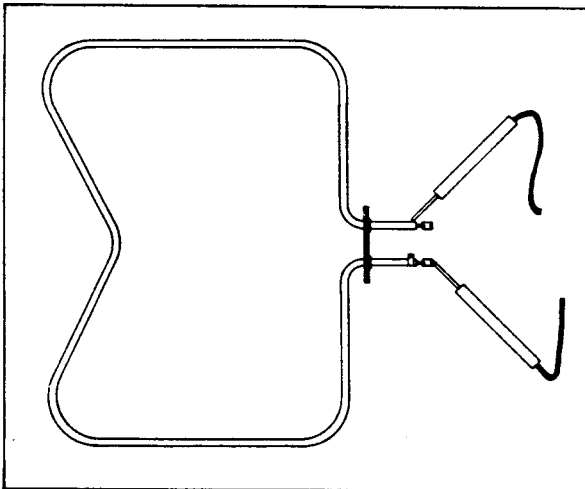
SECTION 5. OVEN OPERATION COMPONENTS

BAKE ELEMENT

Continuity of the bake element should be checked before performing an oven temperature test to make sure that a problem with continuity of the bake element does not affect the results of an oven temperature test.

Before, during or after an oven temperature test, the voltage applied to the element and amperage or wattage of the element should be checked to make sure that a problem with power (voltage applied to the element) or conductivity of the element (amperage or wattage) does not affect the oven temperature test.

Bake Element Continuity



1. Disconnect the appliance from power.
2. Remove the access cover at the rear of the unit.

3. Remove one of the wires from the bake element.
4. Connect an ohmmeter to the bake element terminals.
5. Continuity in the range of approximately 20 ohms should be indicated.

BROIL ELEMENT

Continuity of the broil element should be checked before performing an oven temperature test to make sure that a problem with continuity of the broil element does not affect the results of an oven temperature test.

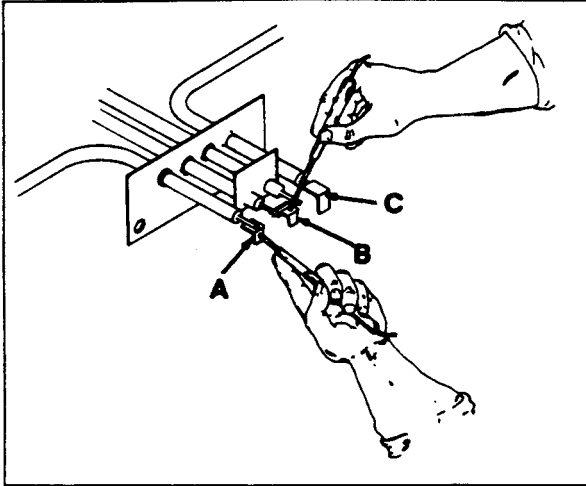
Before, during or after an oven temperature test, the voltage applied to the element and amperage or wattage of the element should be checked to make sure that a problem with power (voltage applied to the element) or conductivity of the element (amperage or wattage) does not affect the oven temperature test.

Manual clean lower cavities of double oven units are not equipped with a broil element.

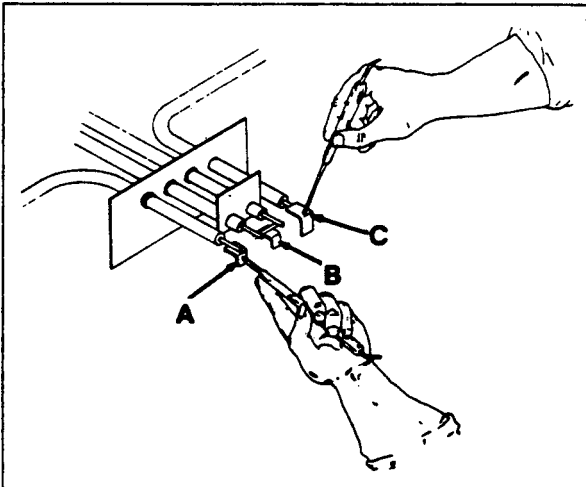
Dual Section Broil Element Continuity

1. Disconnect the appliance from power.
2. Remove the access cover at the rear of the unit.

3. Remove the wires from the broil element.

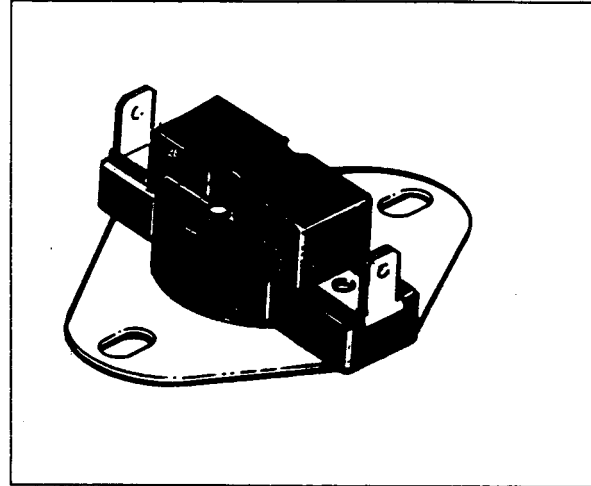


4. Connect an ohmmeter to one of the outside terminals and the center terminal.
5. Continuity in the range of approximately 35 ohms should be indicated.



6. Remove the ohmmeter lead from the center terminal and connect the lead to the remaining outside terminal.
7. Continuity in the range of approximately 70 ohms should be indicated.

HIGH LIMIT SWITCH

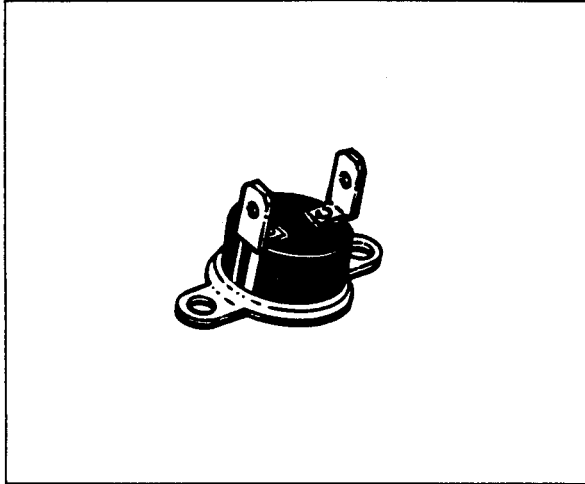


The unit may be equipped with a high limit switch. The switch is a normally closed single pole, single throw with an operating temperature in the range of approximately 260 degrees F. The switch is located on the thermo-disc support, located behind the lock mechanism.

The switch is in series with the bake and broil elements and oven signal light. When the operating temperature of the switch is reached, the switch opens and operation of the bake and broil elements and oven signal light is prevented. Power to operate the elements and oven signal light is restored when the switch cools to closing temperature and the contacts close.

Continuity should be indicated when the switch is below the operating temperature. When switch actuation at proper temperature is known to occur, then other sources for the switch actuation should be checked, such as proper oven thermostat operating temperature and blower fan operation.

FAN (BLOWER) SWITCH



The unit may be equipped with a fan switch (blower switch). The switch is a normally open single pole, single throw with an operating temperature in the range of approximately 225 degrees F. The switch is located next to the lock assembly and thermo-disc support, mounted to the top retainer.

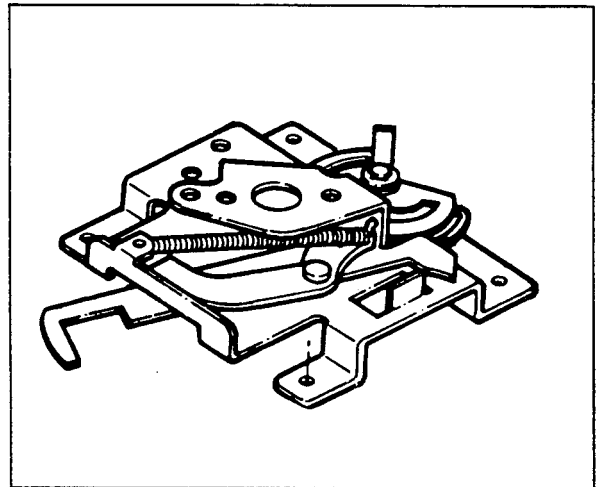
The switch is in series with the fan when the door lock lever is placed in the clean position and the door lock switch number two (2) contacts common (C) to normal open (NO) are closed. When the operating temperature of the fan switch is reached the fan switch contacts close and the fan operates. When the switch cools to opening temperature the contacts open and the fan no longer operates. Continuity should be indicated when the switch is above the operating temperature.

If the unit is not equipped with a fan switch, then circuit continuity exists from the point where the circuit enters and exits the fan switch.

Fan (Blower)

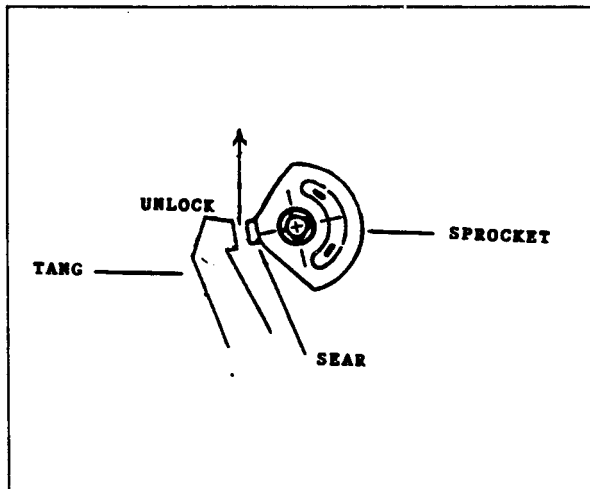
The fan is located at the top rear of the unit, mounted to the wire cover. Access is through the control panel area. The fan operates on 240 volts. Continuity of the fan motor is in the range of approximately 215 ohms.

LOCK ASSEMBLY



The lock assembly locks the oven door in the closed position for the clean cycle. When the door is closed and the door lock lever placed in the clean position the tang on the door lock is moved over to the clean position. The sprocket, connected to a spring coil, rotates counterclockwise when the spring coil is heated. The sear, the vertical post on the sprocket, is then in position to block the tang. Operation of the door lock lever is then prevented. When the spring coil cools, the sprocket and sear rotate clockwise. The tang is then free to clear the sear.

MANUAL UNLOCK

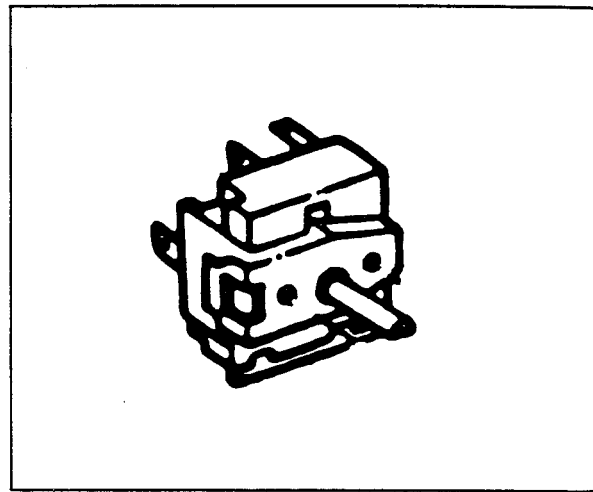


To manually unlock the door:

1. Disconnect the appliance from power.
2. Bend both ends of a stiff piece of wire over to a sharp 45 degree angle to form a jimmy for moving the sear.
3. Insert the jimmy into the door lock lever opening, over the lock mechanism and down to the sear. The top of the sear is approximately 3/4 inch below the top plate of the lock mechanism at the rear.
4. Push the sear to the rear approximately 1/2 inch or greater.

SELECTOR SWITCH

The selector switch is a control which allows the selection of a group of preselected electrical circuits. The switch consists of a number of individual switches which are ganged together and operate for each switch position. Each individual switch makes or breaks an electrical circuit depending upon selector switch position to provide continuity or no continuity to the electrical circuit.



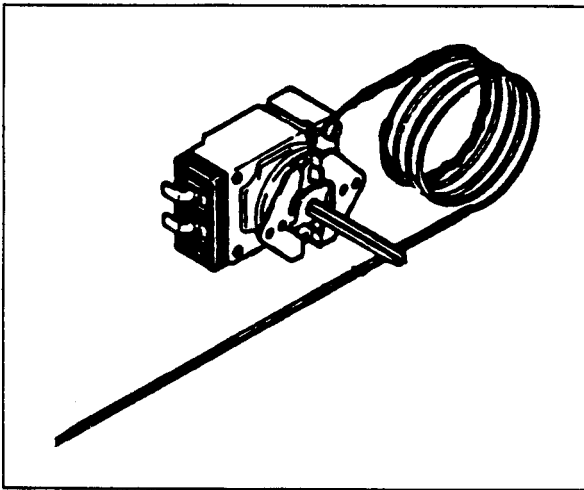
The selector switch can be checked for continuity with an ohmmeter by referring to the selector switch portion of the control chart on the ladder diagram. The chart indicates the state, open or closed, for each contact pair of terminals for each switch position.

LOW OVEN SWITCH

The low oven switch is an integral part of the lower oven thermostat.

MECHANICAL THERMOSTAT

A mechanical thermostat controls temperature in the oven cavity. The oven thermostat consists of the control body, capillary tube and capillary bulb. The control body is located in the control section on the unit. The capillary bulb is located in the oven cavity. The capillary tube connects the capillary bulb to the control.



The oven thermostat can be tested by checking the oven temperature.

Replacement of the oven thermostat requires removal of the unit from the installation. Carefully install the replacement to prevent unnecessary kinks or extreme bends in the capillary tube.

Note: For self clean mechanical thermostat, refer to the NaK caution in the Safety Section.

SECTION 6. OVEN TEMPERATURE

OVEN TEMPERATURE PRELIMINARY

INSTRUMENTS

A thermocouple type test instrument is recommended for checking the oven temperature. A mercury thermometer is not recommended because of inaccuracies which may exist with the thermometer and its use.

The instrument should be checked for accuracy before making an oven temperature check. This can be done by immersing the thermocouple probe in boiling water. The reading indicated should be within several degrees of 212 degrees F, depending upon altitude.

The thermocouple used should be "weighted". Weighting the thermocouple (adding mass to the tip) reduces the amount of temperature swing which occurs at the thermocouple. Reducing the amount of temperature swing enables the thermocouple to indicate values which, when calculated, more accurately represent the actual average oven temperature.

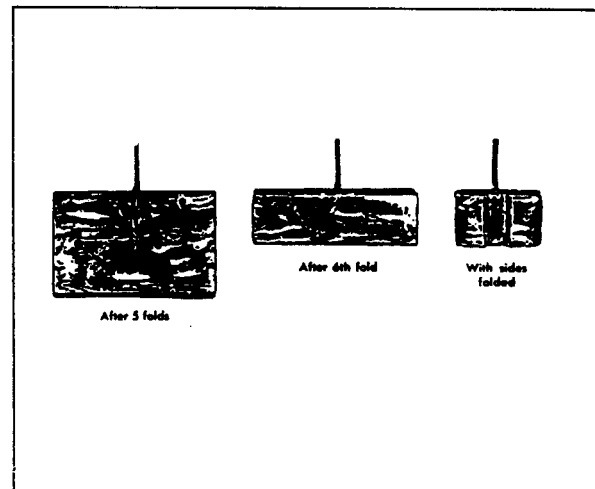
TO WEIGHT THE THERMOCOUPLE

A thermocouple can be weighted in one of two ways:

- Two (2) one-inch (1") squares of 1/16" thick aluminum can be clamped to the thermocouple tip.
- A 5" x 8" piece of aluminum foil can be attached to the thermocouple tip.

To Attach the Aluminum Foil:

1. Fold the foil five (5) times, doubling the thickness with each fold.
2. Place the thermocouple tip in the center of the aluminum piece and fold once more.
3. Fold the sides so that the foil clings to the thermocouple tip.



Factors Affecting Oven Calibration

Before performing an oven temperature test check for the following:

1. The capillary bulb should be properly mounted and located.
2. The capillary bulb or tube should not contact the oven cavity walls. Contact of the capillary tube at the entrance hole into the oven cavity is acceptable.
3. There should be no excessive build-up of foreign material deposited on the capillary bulb or tube.

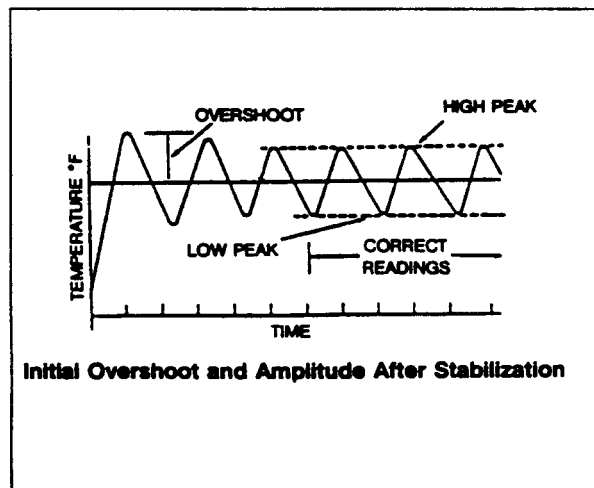
How the oven temperature knob is rotated to the desired setting can affect

the temperature setting, oven temperature and temperature check because of oven thermostat tolerances. When setting the oven temperature, turn the oven thermostat knob up to the desired dial setting only and not beyond. To change to a lower setting the control should be turned to the "OFF" position and then turned to the desired setting.

Overshooting of the oven temperature occurs on the first cycle of the control because components have not reached operating temperature. Two (2) or three (3) full cycles are required before beginning a check of the oven temperature.

To Test the Oven Temperature

1. Place the weighted thermocouple probe in the center of the oven cavity, centered from front to back, top to bottom, and side to side.
2. If the unit is equipped with an adjustable thermostat knob, then set the adjustment to "0" degrees.
3. Set the thermostat dial to a temperature setting of 350 degrees F.
4. Allow the oven to heat for at least 15 minutes or until the high and low temperature readings stabilize and become consistent.



5. Calculate the average oven temperature. Add the high and low temperature reading peaks together and then divide by two (2).

Example:

High peak = 375 degrees

Low peak = 325 degrees

375 plus 325 = 700

700 divided by 2 = 350

Average Oven Temperature = 350 degrees.

Several readings should be taken to provide an accurate indication.

If the average oven temperature is within the range of 325 to 375 degrees F. and the temperature test is correct, then the control is within acceptable limits of tolerance. No further service to the control should be performed. If the unit is equipped with an adjustable thermostat knob then restore the adjustment to the original position.

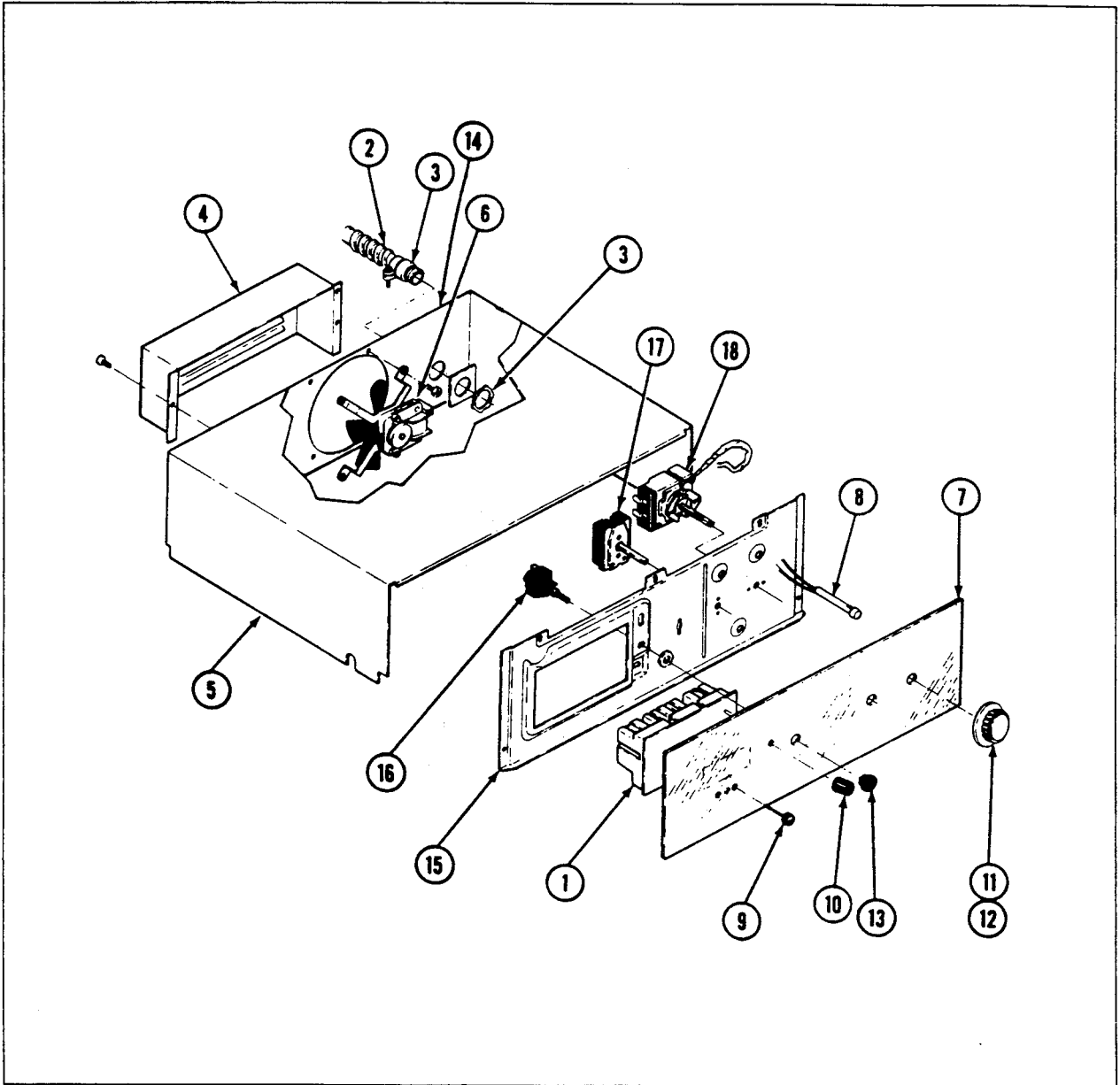
If the average oven temperature is less than 325 degrees F or greater than 375 degrees F and the temperature test is correct then suspect the oven thermostat if and only if the remaining components of the oven heat producing system are known to be in proper working order and condition. This includes bake and broil elements, circuit continuity to bake and broil elements and high limit switch, if equipped. If no fault can be found in the remaining components of the oven heat producing system then suspect the mechanical thermostat. Substitute a

replacement oven thermostat and check operation.

Note: No attempt should be made to recalibrate the control. If the control is sealed to prevent recalibration, then the seal should not be broken or disturbed.

SECTION 7. CONTROL AREA ILLUSTRATIONS

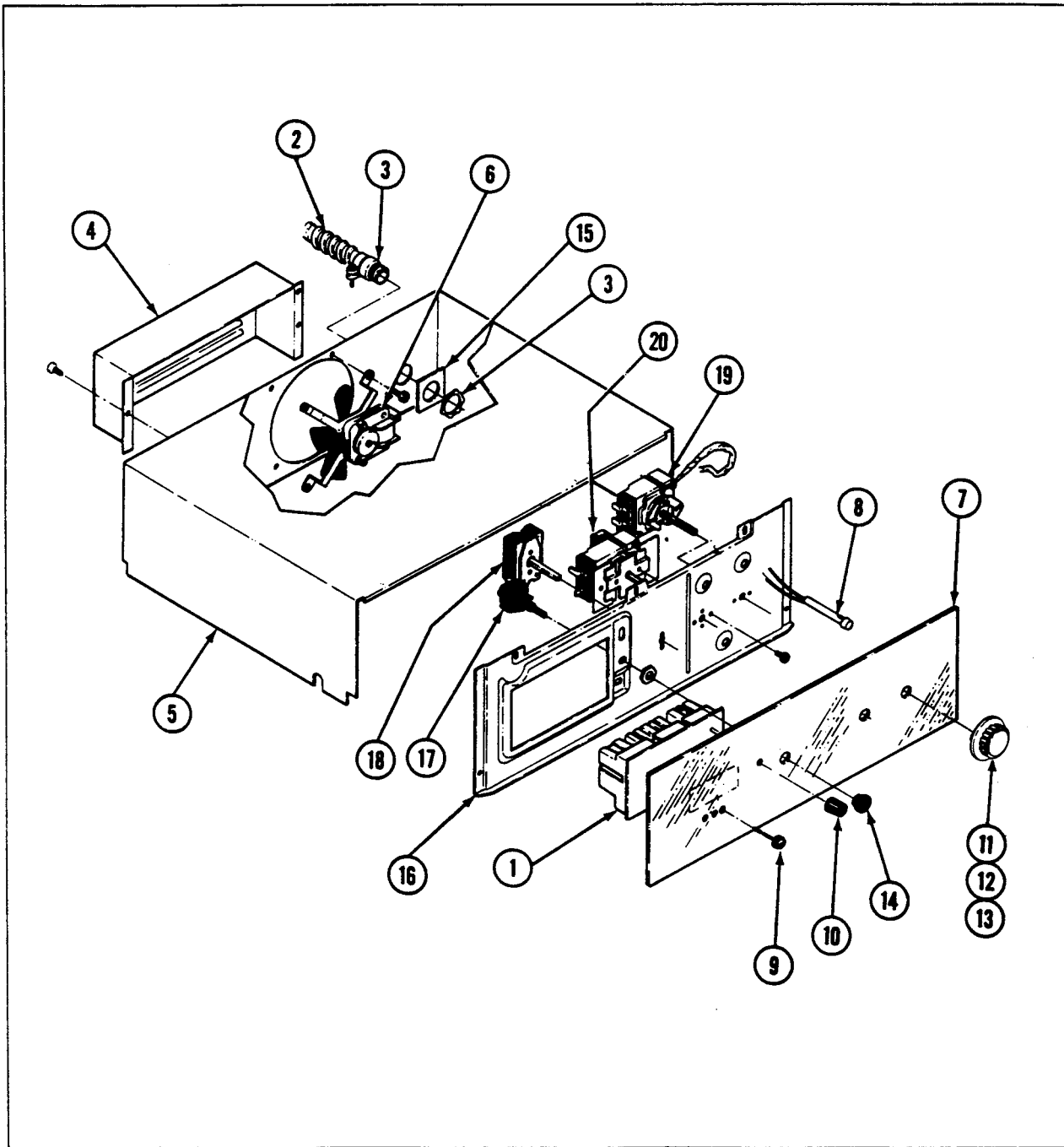
SINGLE CAVITY



- 1 Clock
- 2 Conduit, Flexible
- 3 Connector, Cable
- 4 Cover, Fan
- 5 Cover, Wire
- 6 Fan, Assembly
- 7 Glass, Control Panel
- 8 Light, Indicator
- 9 Knob, Clock (Button)

- 10 Knob, Clock
- 11 Knob, Selector
- 12 Knob, Thermostat
- 13 Nut, Switch
- 14 Plate, Reinforcement
- 15 Support, Clock
- 16 Switch, Oven Light
- 17 Switch, Selector
- 18 Thermostat

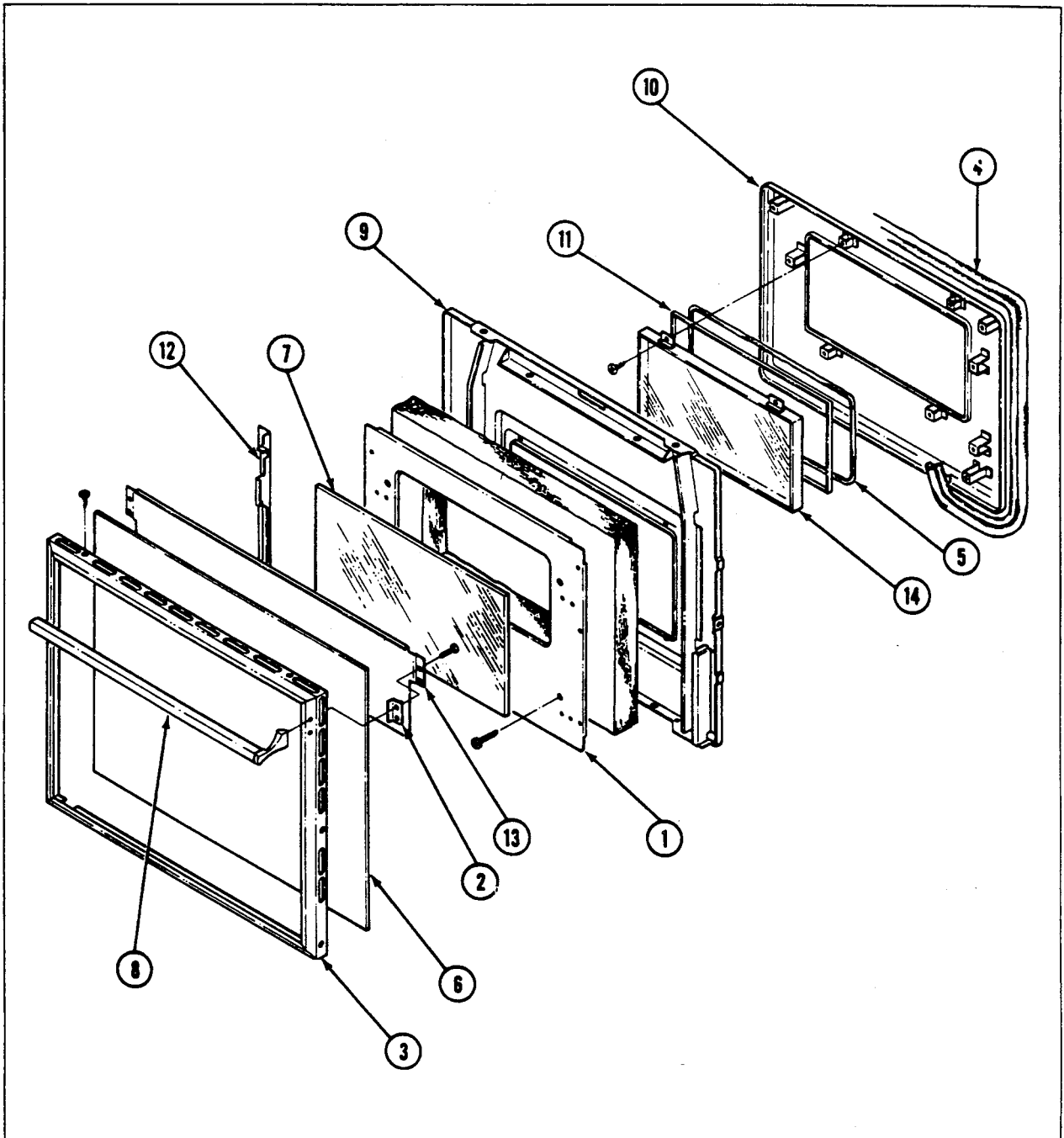
DOUBLE CAVITY



- | | | | |
|----|----------------------|----|--------------------------|
| 1 | Clock | 11 | Knob, Selector |
| 2 | Conduit, Flexible | 12 | Knob, Thermostat (Lower) |
| 3 | Connector, Cable | 13 | Knob, Thermostat (Upper) |
| 4 | Cover, Fan | 14 | Nut, Switch |
| 5 | Cover Wire | 15 | Plate, Reinforcement |
| 6 | Fan, Assembly | 16 | Support, Clock |
| 7 | Glass, Control Panel | 17 | Switch, Oven Light |
| 8 | Light, Indicator | 18 | Switch, Selector |
| 9 | Knob, Clock (Button) | 19 | Thermostat (Lower) |
| 10 | Knob, Clock | 20 | Thermostat (Upper) |

SECTION 8. DOOR ILLUSTRATIONS

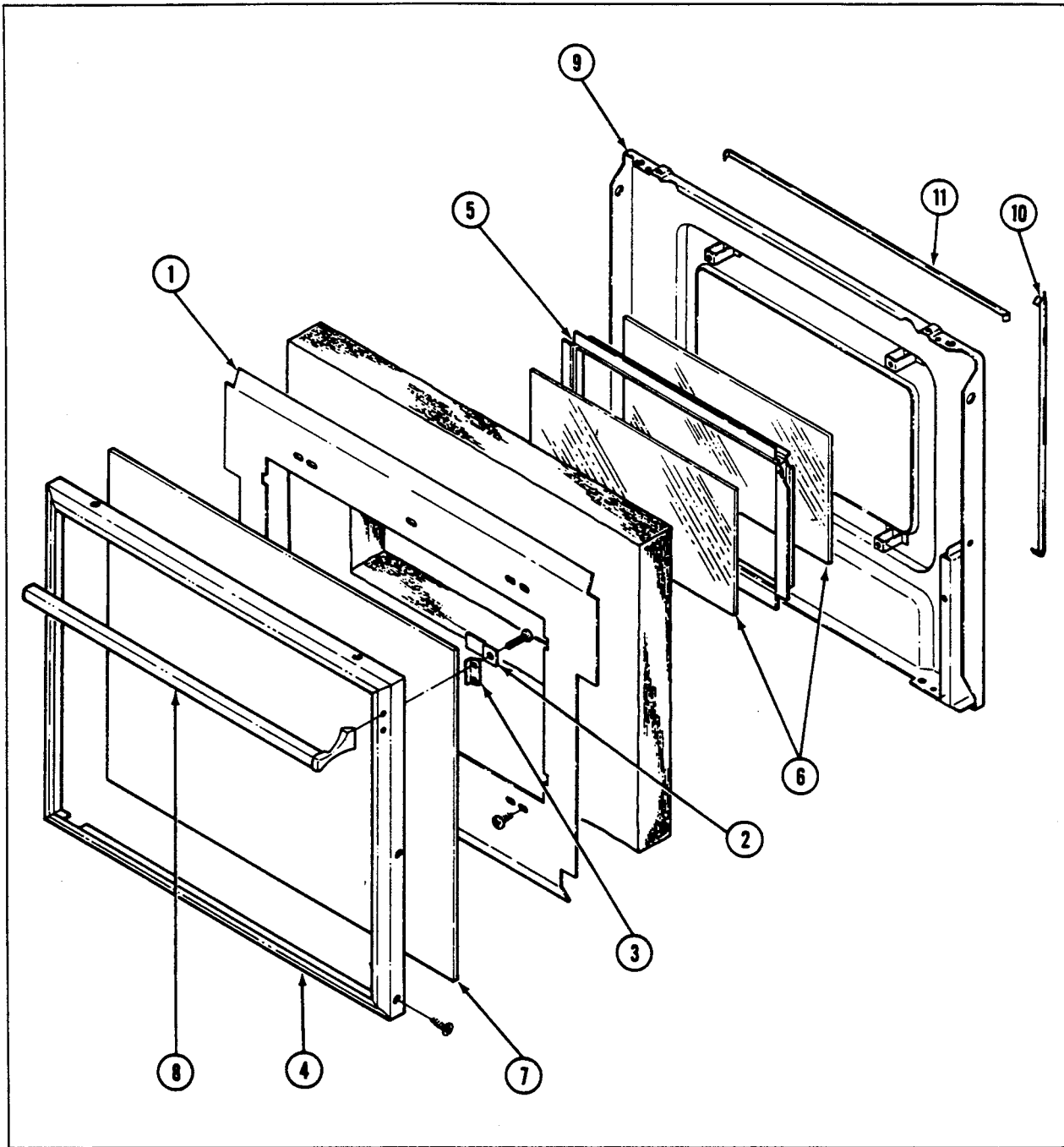
SINGLE CAVITY & UPPER DOOR



- 1 Baffle, Oven
- 2 Clip, Handle
- 3 Frame, Door
- 4 Gasket, Oven Door
- 5 Gasket, Window (Inner)
- 6 Glass, Door
- 7 Glass (Inner)

- 8 Handle, Door
- 9 Lining, Oven Door
- 10 Pad, Oven Door
- 11 Retainer, Gasket
- 12 Retainer, Glass (Inner)
- 13 Retainer, Glass (outer)
- 14 Window, Assembly

LOWER DOOR



- 1 Baffle, Oven
- 2 Clip, Glass
- 3 Clip, Handle
- 4 Frame, Door
- 5 Frame, Window
- 6 Glass, Inner (Door)

- 7 Glass, Outer (Door)
- 8 Handle, Door
- 9 Lining, Oven Door
- 10 Seal, Oven Door (Side)
- 11 Seal, Oven Door (Top)

SECTION 9. DOOR

LIFT OFF DOOR

To remove the door:

1. Open the door to the broil stop position.
2. Grasp both sides of the door and lift up until the door clears the hinges.

CAUTION:

The hinge arms are spring loaded and may slam shut. Do not place hand or fingers between the hinge and front frame of the oven. Injury may occur if hinge snaps back.

LIFT OFF DOOR - LOCK LATCH EQUIPPED

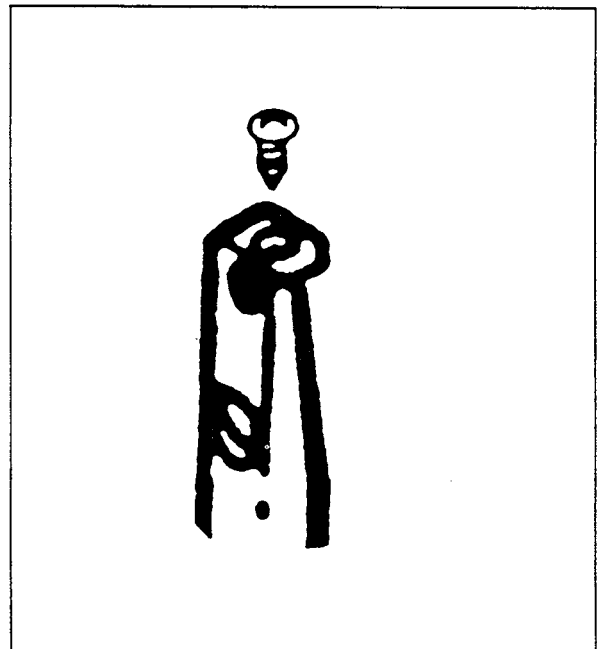
1. Open door to broil stop position.
2. Slowly lift door straight up.
3. Open door forward slightly.

Insure that latches swing down into notches on hinges arms.

TO INSTALL:

1. Align slots in door with hinge arms.
2. Open door forward slightly as door slides down onto hinge arms to disengage latches.
3. Allow door to bottom on hinge stops.

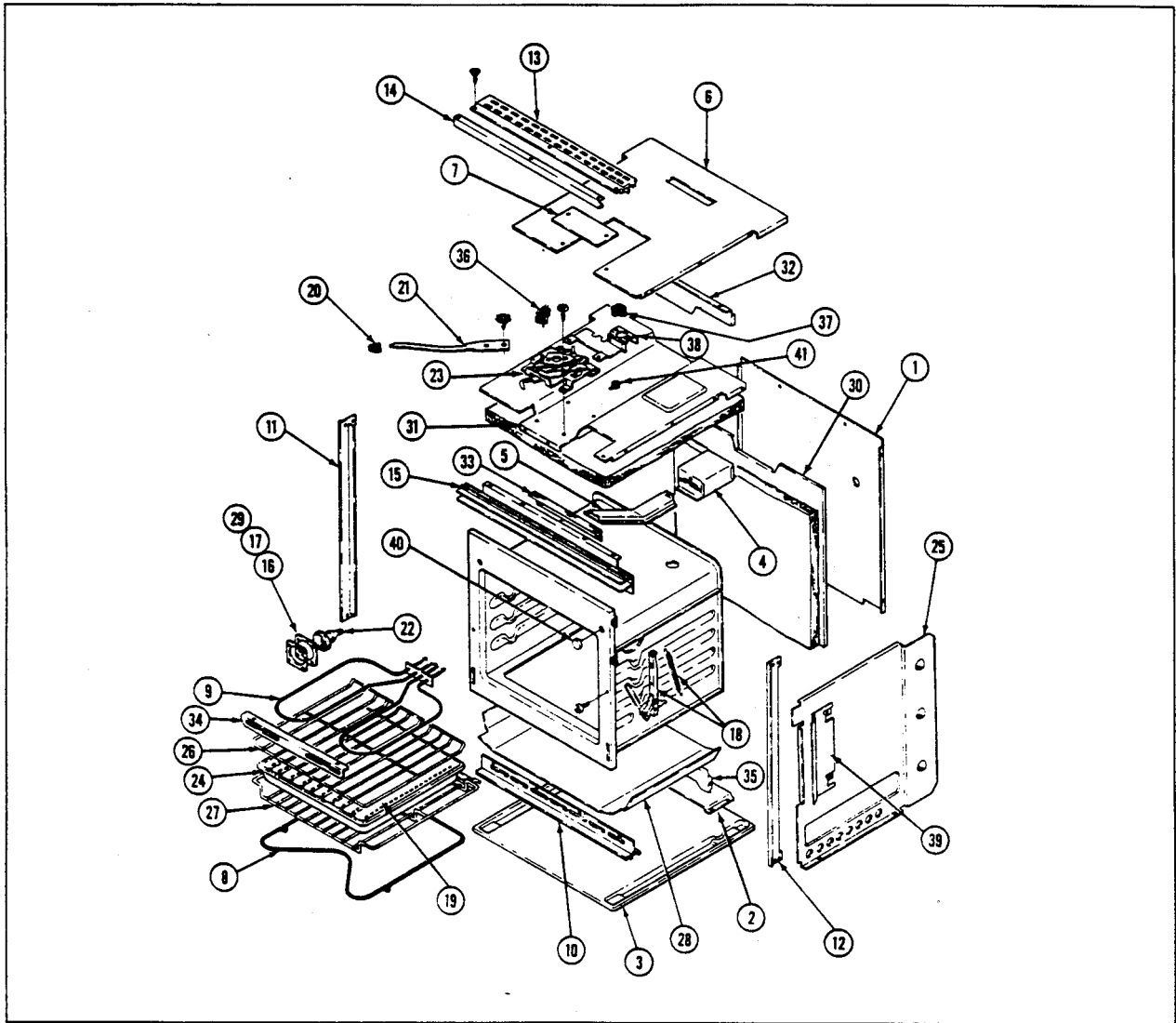
DOOR ADJUSTMENT



Each side of the door can be adjusted for vertical height by adjusting the screw located on top of the hinge arm.

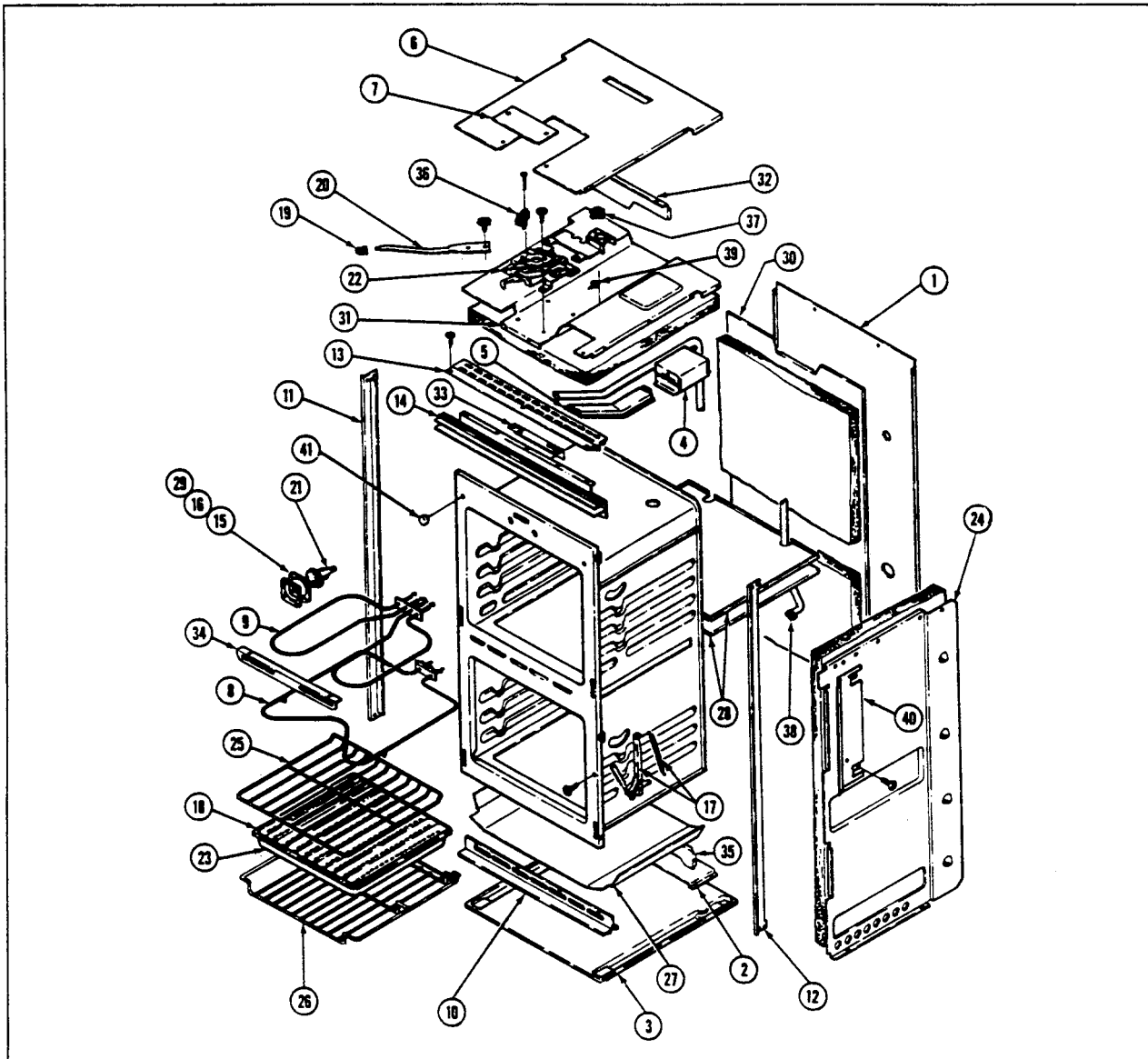
SECTION 10. CHASSIS ILLUSTRATIONS

SINGLE CAVITY



- | | | | | | |
|----|-------------------------|----|---------------------|----|--------------------------|
| 1 | Back, Main | 15 | Extrusion Vent | 28 | Retainer, Bottom |
| 2 | Baffle, Base | 16 | Gasket, Lampguard | 29 | Retainer, Lampguard |
| 3 | Base, Main | 17 | Glass, Lampguard | 30 | Retainer, Rear |
| 4 | Box, Vent | 18 | Hinge, Oven Door | 31 | Retainer, Top |
| 5 | Channel, Vent | 19 | Insert, Broiler Pan | 32 | Shield Air |
| 6 | Cover, Box | 20 | Knob, Door Lock | 33 | Shield, Terminal |
| 7 | Cover, Lock | 21 | Lever, Lock | 34 | Support, Broiler Unit |
| 8 | Element, Bake | 22 | Light, Oven | 35 | Support, Lower |
| 9 | Element, Broil | 23 | Lock, Assembly | 36 | Switch, Door Lock |
| 10 | Extrusion, Bottom | 24 | Panel, Broiler | 37 | Switch, Hi-Limit |
| 11 | Extrusion, Side (Left) | 25 | Panel, Side (Right) | 38 | Bracket, Hi-Limit Switch |
| 12 | Extrusion, Side (Right) | | Panel, Side (Left) | 39 | Baffle, Side |
| 13 | Extrusion, Top | 26 | Rack, Oven | 40 | Bumper, Door |
| 14 | Extrusion, Top Front | 27 | Rack, Oven | 41 | Disc, Fan |

DOUBLE CAVITY



- | | | | | | |
|----|-------------------------|----|---------------------------|----|--------------------------|
| 1 | Back, Main | 15 | Gasket, Lampguard | 28 | Retainer, Insulation |
| 2 | Baffle, Base | 16 | Glass, Lampguard | 29 | Retainer, Lampguard |
| 3 | Base, Main | 17 | Hinge, Lower | 30 | Retainer, Rear |
| 4 | Box, Vent | * | Hinge, Upper | 31 | Retainer, Top Insulation |
| 5 | Channel, Vent | 18 | Insert, Broiler Pan | 32 | Shield Air |
| 6 | Cover, Box | 19 | Knob, Door Lock | 33 | Shield, Terminal |
| 7 | Cover, Lock | 20 | Lever, Door Lock | 34 | Support, Broiler Unit |
| 8 | Element, Bake | 21 | Light, Oven | 35 | Support, Oven Lower |
| 9 | Element, Broil | 22 | Lock, Assembly Door | 36 | Switch, Door Lock |
| 10 | Extrusion, Bottom | 23 | Pan, Broiler | 37 | Switch, Hi-Limit |
| 11 | Extrusion, Side (Left) | * | Panel, Side (Left) | 38 | Tube, Oven Vent |
| 12 | Extrusion, Side (Right) | 24 | Panel, Side (Right) | 39 | Bracket, Hi-Limit Switch |
| 13 | Extrusion, Top | 25 | Rack, Oven | 40 | Baffle, Side |
| * | Extrusion, Top Front | 26 | Rack, Oven | 41 | Bumper, Door |
| 14 | Extrusion, Vent | 27 | Retainer, Insul. (Bottom) | * | ITEMS NOT ILLUSTRATED |

SECTION 11. CHASSIS & COMPONENT SERVICE

COMPONENT ACCESS

Components on and behind the control panel may be accessed by removing the screws on top of the top front extrusion, removing the extrusion, knobs, switch nut, control glass, and screws and each side and top of the clock support.

BAKE OR BROIL ELEMENT REPLACEMENT

The elements may be removed from the front of the unit with the following procedure:

1. Disconnect the appliance from power.
2. Remove the screws securing the element to the rear of the unit.
3. Pull the element forward a sufficient distance to allow access to the element terminals.

Note: Pull the element no farther than necessary to prevent damage to wire terminals or wiring. If the elements cannot be moved a sufficient distance, then removal of the unit from the installation is necessary. Disconnection should be done at the rear of the unit.

4. Insure that the connections are tight and secure.

SECTION 12. CIRCUIT DIAGRAMS

ELECTRICAL TROUBLESHOOTING

A thorough understanding of the information available on the ladder and wiring diagram, attached to each unit, is a prerequisite for quick and accurate electrical troubleshooting. The diagrams supply vital information needed to check out a circuit and pinpoint a malfunctioning electrical component.

CONTROL CHART

The control chart below the ladder diagram indicates the state (open, closed or cycling) of the control terminal contacts for each oven function. Controls are identified across the top of the chart. Beneath each control are shown the terminal contacts for that control. The list at the left side of the chart indicates the functions. The intersection of a pair of control terminal contacts to a particular function indicates the state (open, closed or cycling) for a set of contacts. "O" in the chart indicates open contacts and no continuity

between the contact pair should be indicated. "X" in the chart indicates closed contacts and continuity between the contact pair should be indicated.

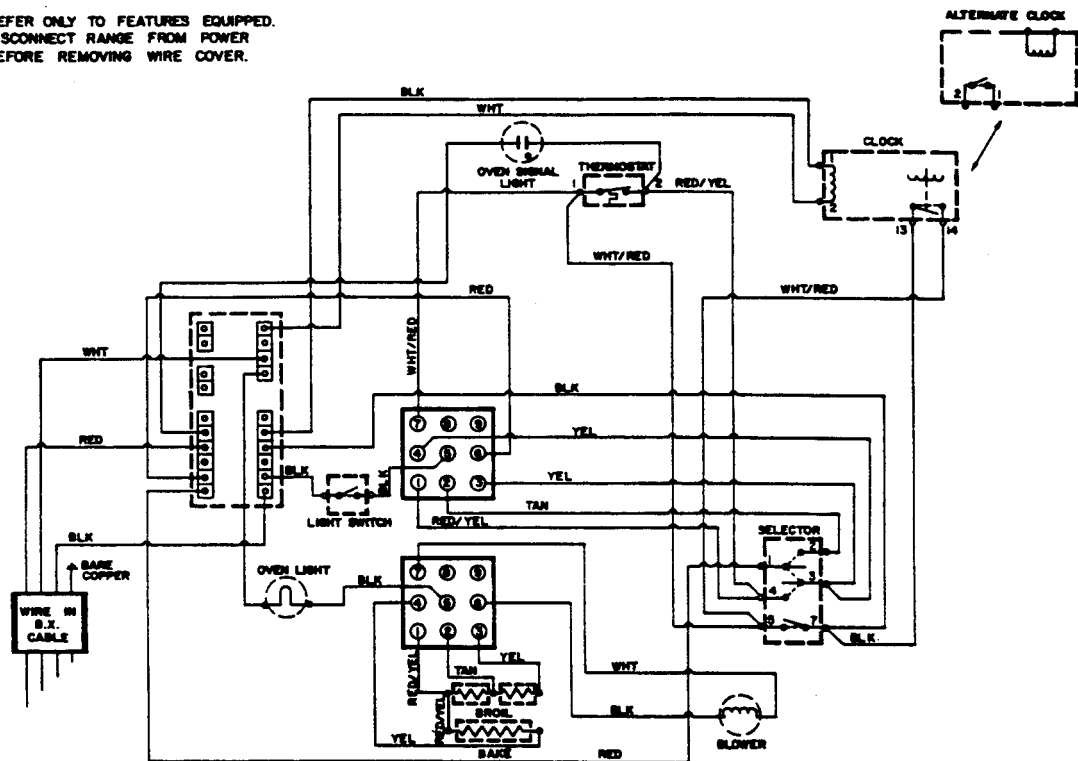
Cycling indicates that the contact pair may be either open or closed, depending upon temperature.

CIRCUIT TRACING

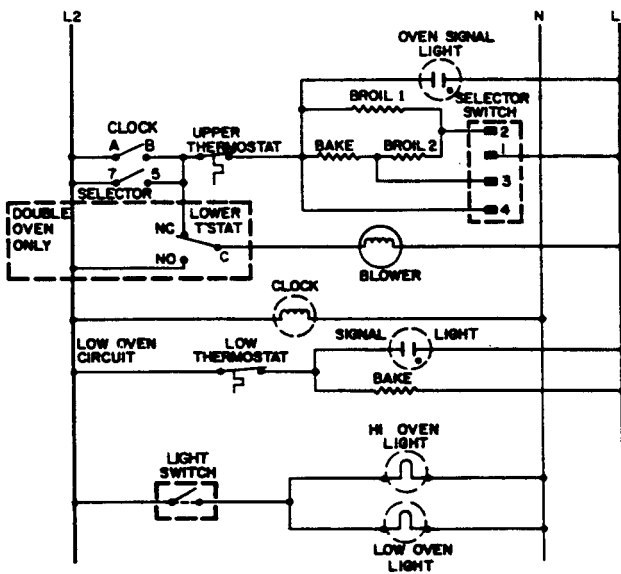
Both sides of the circuit from an electrical load can be traced, through conductors, controls and in some cases loads, back to the electrical supply (power). It will be necessary to determine from the ladder diagram what conductors, controls and loads are involved. The state of a pair of control terminal contacts can be determined from the control chart for a particular function.

The area on the ladder diagram inside the dotted lines refers only to units equipped with two oven cavities. For a single cavity unit, circuit continuity exists from the point where a circuit enters and exits the dotted line. Information inside the dotted lines does not apply.

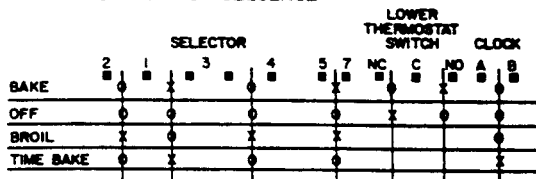
NOTE!
 1. REFER ONLY TO FEATURES EQUIPPED.
 2. DISCONNECT RANGE FROM POWER
 BEFORE REMOVING WIRE COVER.



00-008-207-99
DIAGRAM NO. : 8105P278-60



SWITCHING SEQUENCE



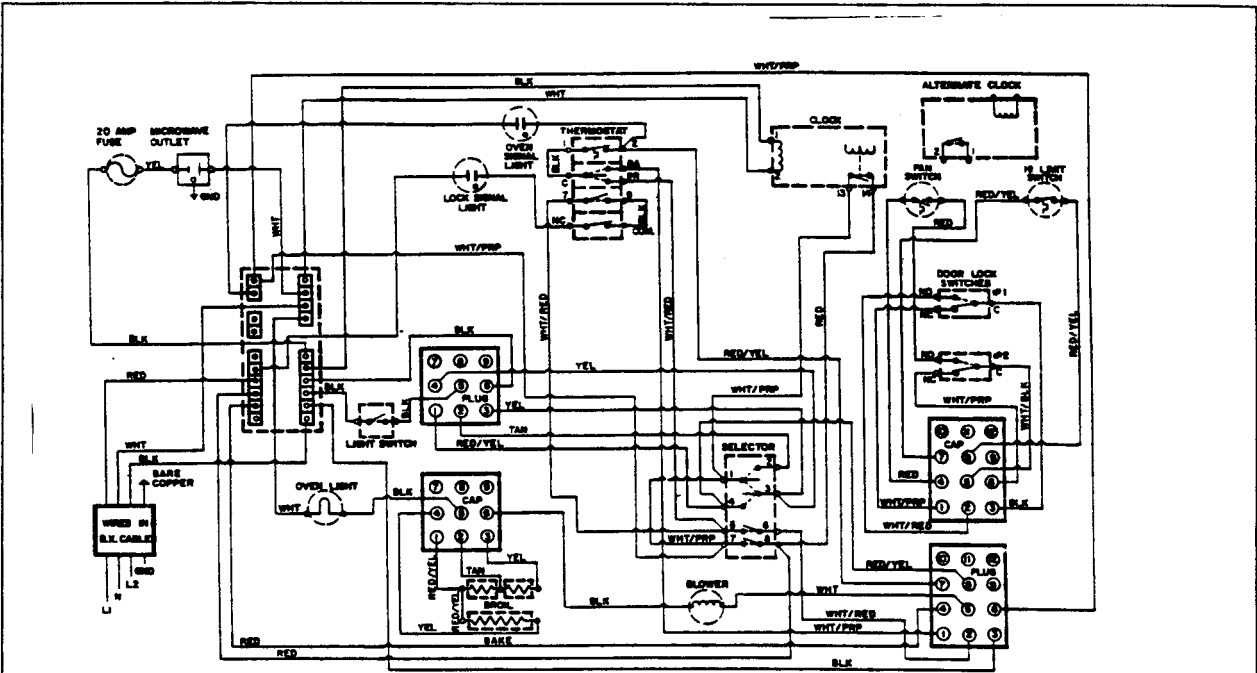
CLOCK CONTACTS

| | |
|----|----|
| A | B |
| 13 | 14 |
| 1 | 2 |

NOTE!
 1. REFER ONLY TO FEATURES EQUIPPED.
 2. DISCONNECT RANGE FROM POWER
 BEFORE REMOVING WIRE COVER.

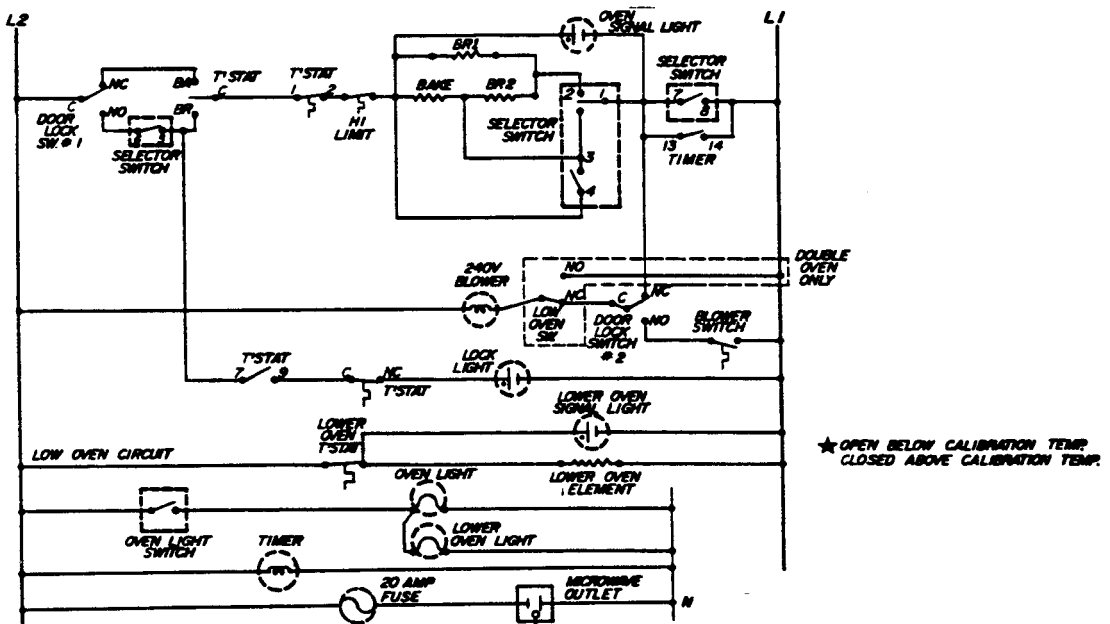
00-008-208-99
DIAGRAM NO. : 8105P276-60

CWE470, ECWE470



NOTE:
 1. REFER ONLY TO FEATURES EQUIPPED.
 2. DISCONNECT RANGE FROM POWER BEFORE REMOVING WIRE COVER.

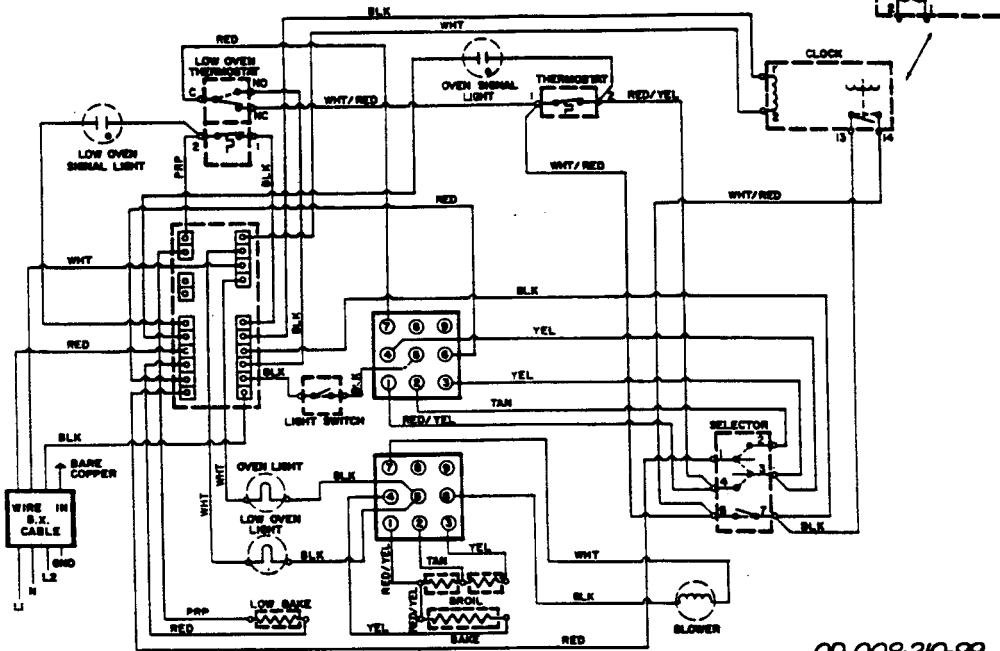
DIAGRAM NO. : 8105P266-60



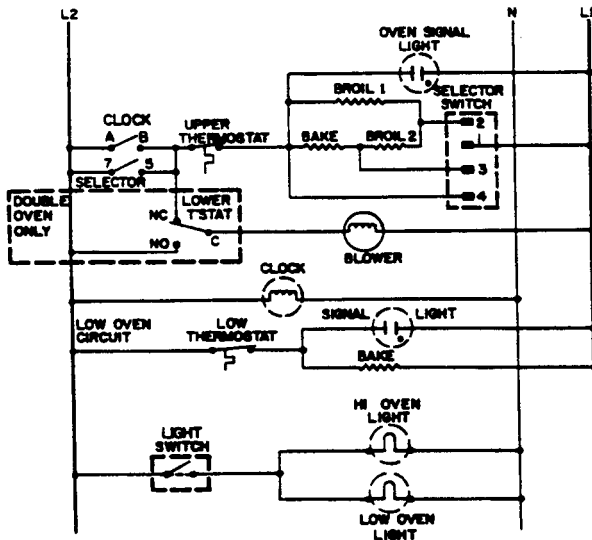
| | SELECTOR | | | | | | | | TIMER | | DOOR LOCK SWITCH#1 | | | DOOR LOCK SWITCH#2 | | | THERMOSTAT | | | | | LOW OVEN SWITCH | | | | | | |
|-----------|----------|---|---|---|---|---|---|---|-------|----|--------------------|---|----|--------------------|---|----|------------|---|---|---|----|-----------------|----|---|----|----|---|----|
| | 2 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 13 | 14 | NO | C | NC | NO | C | NC | 1 | 2 | 7 | 9 | BA | C | BR | C | NC | NC | C | NO |
| OFF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BAKE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLEAN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TIME BAKE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BRN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

DIAGRAM NO. 8105P266-60
 CD-008-206-39

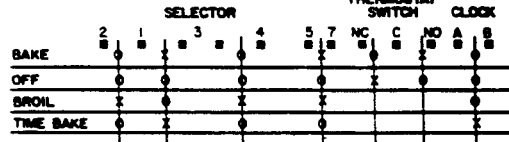
NOTE:
 1. REFER ONLY TO FEATURES EQUIPPED.
 2. DISCONNECT RANGE FROM POWER BEFORE REMOVING WIRE COVER.



OD-008-210-99
 DIAGRAM NO.: 8105P277-60



SWITCHING SEQUENCE

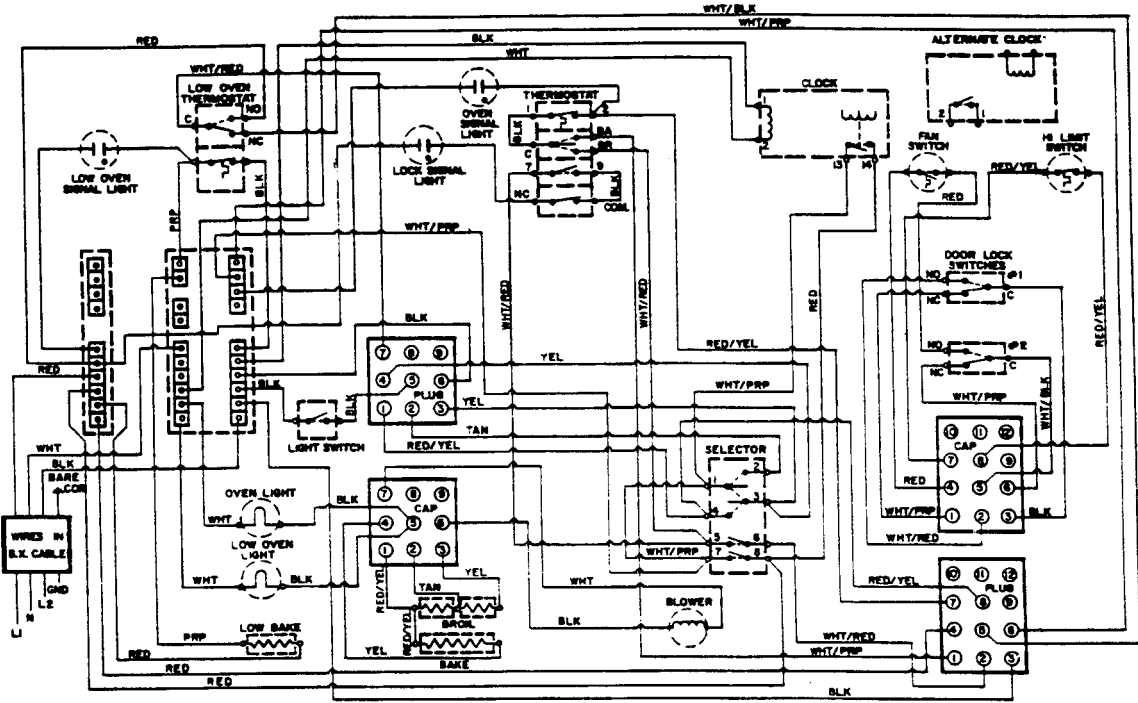


| | | |
|----------------|----|----|
| CLOCK CONTACTS | A | B |
| ELECTRONIC | 13 | 14 |
| MECHANICAL | 1 | 2 |

NOTE!
 1. REFER ONLY TO FEATURES EQUIPPED.
 2. DISCONNECT RANGE FROM POWER BEFORE REMOVING WIRE COVER.

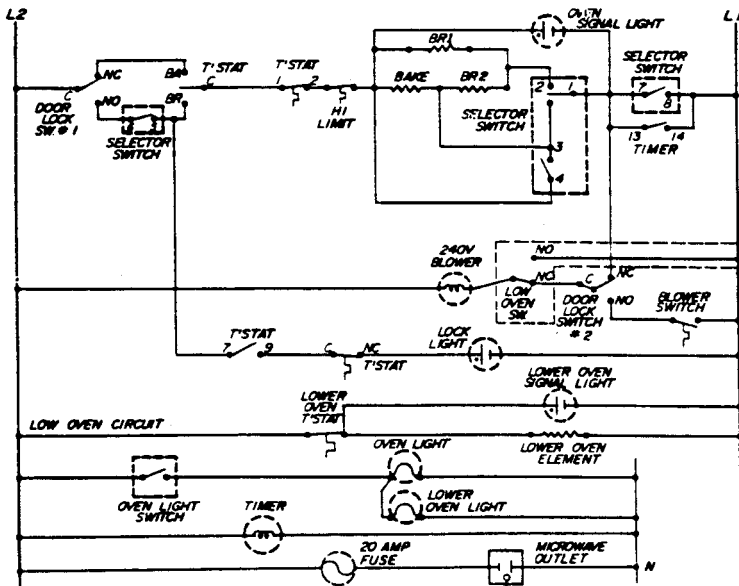
OD-008-208-99
 DIAGRAM NO.: 8105P276-60

CWE550, ECWE550



NOTE!
 1. REFER ONLY TO FEATURES EQUIPPED.
 2. DISCONNECT RANGE FROM POWER BEFORE REMOVING WIRE COVER.

DIAGRAM NO. : 8105P265-60
 00-008-204-99



| | SELECTOR | | TIMER | | DOOR LOCK SWITCH#1 | | DOOR LOCK SWITCH#2 | | THERMOSTAT | | | | LOW OVEN SWITCH | | | | | | | | | | | |
|-----------|----------|---|-------|---|--------------------|---|--------------------|---|------------|----|----|---|-----------------|---|---|---|---|-----|----|---|----|----|---|----|
| | 2 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 13 | 14 | NO | C | NC | 1 | 2 | 7 | 9 | BAC | BR | C | NC | NC | C | NO |
| OFF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BAKE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CLEAN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TIME BAKE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BROIL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

DIAGRAM NO. 8105P264-60
 00-008-206-99



MAYTAG

Maytag Appliances Sales Company

Customer Service
240 Edwards St.
Cleveland, TN 37311