SERVICE NOTE BOOK

PRODUCT WIRING DIAGRAMS

VIKING®
Preferred Service

WARNING: ELECTRICAL GROUNDING INSTRUCTIONS

THIS APPLIANCE IS EQUPPED WITH A THREE PRONG ROUNDING PLUG FOR YOUR PROTECTION AGAINST SHOCK HAZARD AND SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED THREE PRONG RECEPT-ACLE DO NOT CUT OR REMOVE THE GROUNDED PRONG FROM THIS PLUG

VIKING RANGE CORPORATION, P.O. DRAWER 956, GREENWOOD, MS. 38930-USA

JUNE ‘02

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General Information

Gas freestanding ranges

Dual fuel ranges

Electric ranges

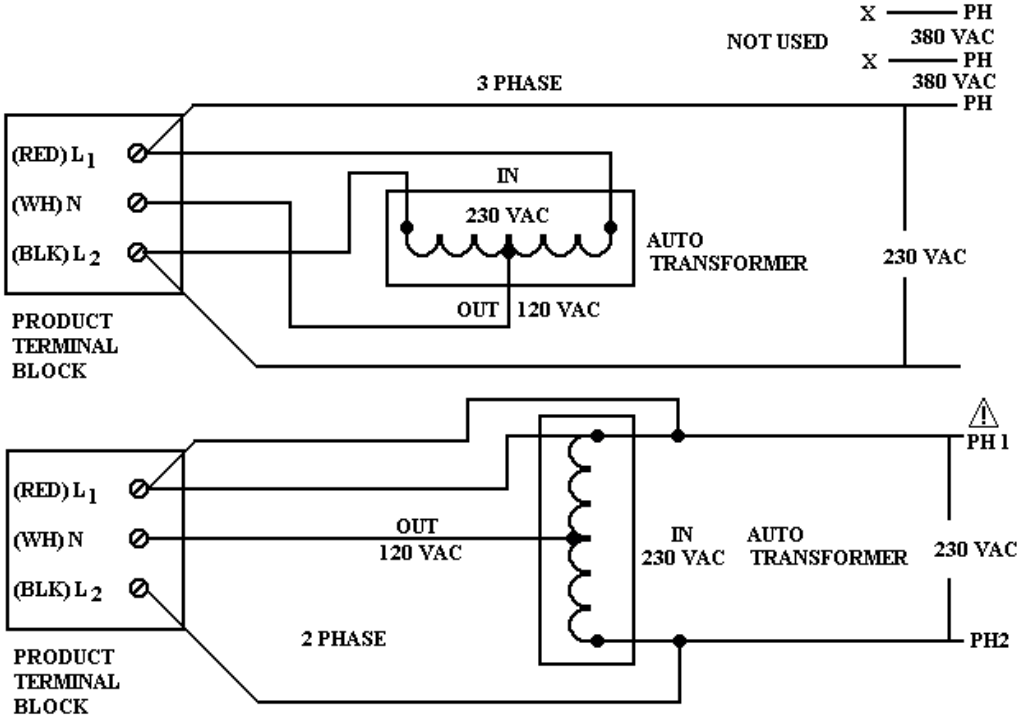
Range tops / cook tops

Built-in Gas Wall Ovens

Built-in Electric Wall Ovens

	A.L.W. Cats.	Cord Type	Length	Rating
RANGETOP	3071	2/8, 1/10 SRDT	4'	40A 125/250V
	3072	2/8 1/10 SRDT	5'	40A 125/250V
	3073	2/8 1/10 SRDT	6'	40A 125/250V
NEMA 10-50	3 - WIRE RANGE CORD --40A 125/250V Right Angle Plug, Spade Terminals, UL Listed			
RANGE	3081	2/6 1/8 SRDT	4'	50A 125/250V
	3082	2/6 1/8 SRDT	5'	50A 125/250V
	3083	2/6 1/8 SRDT	6'	50A 125/250V
NEMA 10-50	3-WIRE RANGE CORD -- 50A 125/250V Right Angle Plug, Spade Terminals, UL Listed			
RANGE	3096	2/6 2/8 SRDT	4'	50A 125/250V
	3097	2/6 2/8 SRDT	5'	50A 125/250V
	3098	2/6 2/8 SRDT	6'	50A 125/250V
NEMA 14-50P 50A-125/250V	4-WIRE RANGE CORD -- 50A 125/250V Right Angle Plug, Ring Terminals, UL Listed			

230 / 120 VAC /50 HZ TRANSFORMER CONNECTION

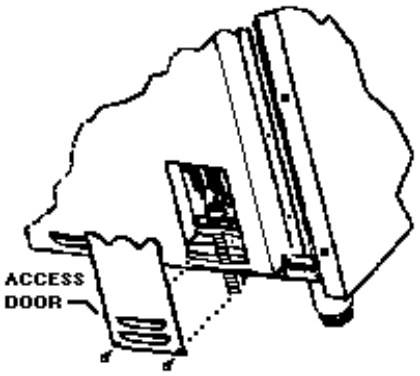


NOTE: THE GROUND STRAP ON THE PRODUCT BLOCK MUST BE REMOVED FROM THE NEUTRAL TERMINAL AND THE CHASSIS GROUNDED SEPERATELY.

THE COMMON WIRE FROM THE IN SIDE TO THE OUT SIDE OF THE TRANSFORMER MUST BE CONNECTED TO THE SAME PHASE AS THE DIRECT 230 WIRING TO THE PRODUCT TERMINAL BLOCK.

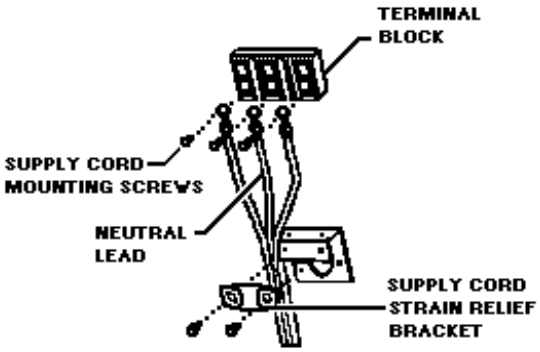
ELECTRICAL CONNECTIONS

Use a 3-wire power supply cord kit rated for 30 amps – 125/250 volts for Models VDSC and VERT or 50 amps – 240 volts for model VESC with closed loop terminals and marked for use with ranges. Where local codes do not permit grounding through neutral, use a 4 – wire power supply cord. The cord or conduit must be secured to the range with the strain relief bracket. The electrical connection is made at the terminal block, which is located behind the access door on the back of the range.



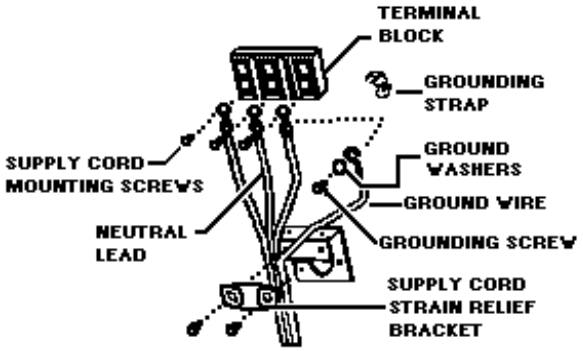
3-WIRE POWER SUPPLY CORD

1. Remove the access door.
2. Remove supply cord strain relief bracket and 3 supply cord mounting screws on the terminal block.
3. Feed supply cord up through the hole in the bottom of the range back.
4. Attach the line #1(red) and line #2 (black) leads to the outside terminals and the neutral wire (white) to the center terminal on the terminal block.
5. Reattach supply cord strain relief bracket over supply cord, pushing supply cord up toward terminal block to relieve strain before tightening.
6. Reattach access door.



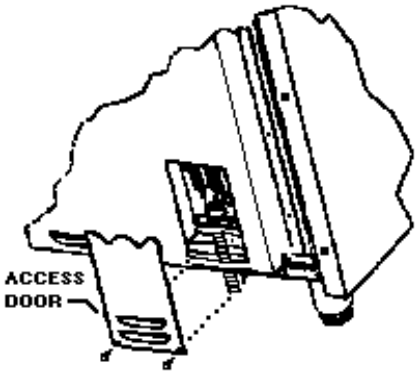
4-WIRE POWER SUPPLY CORD

1. Remove access door.
2. Remove supply cord strain relief bracket and 3 supply cord mounting screws on the terminal block.
3. Remove grounding screws; cut-off and discard ground strap.
4. Feed supply cord up through hole in the bottom of the range back.
5. Attach the ground lead (green) with the ground screw that was removed in step #3.
6. Attach the line #1 (red) and line #2 (black) leads to the outside terminals and neutral wire (white) to the center terminals on the terminal block.
7. Reattach supply cord strain relief bracket over supply cord, pushing cord up towards terminal block to relieve strain before tightening.
8. Reattach access door.



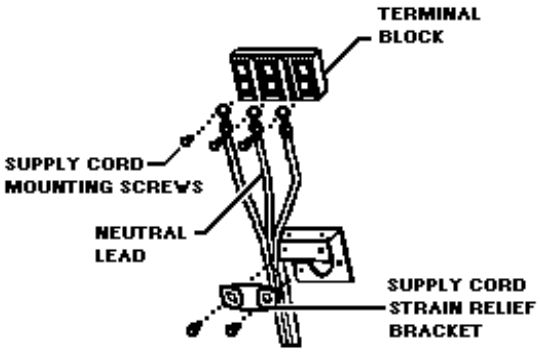
ELECTRICAL CONNECTIONS WITH CONDUIT

Use ½" trade size conduit with a conduit clamp, 12 AWG /600 volt copper conductor colored red for line #1 and black for line #2 and 14 AWG /600 volt copper conductor colored white for neutral with closed loop terminals marked for use with ranges. Where local codes do not permit grounding through neutral, use a green 12 AWG copper conductor as directed in the 4-wire connector directions. The conduit must be secured to the range with the strain relief bracket. The electrical connection is made at the terminal block which is located behind the access door on the back of the range.



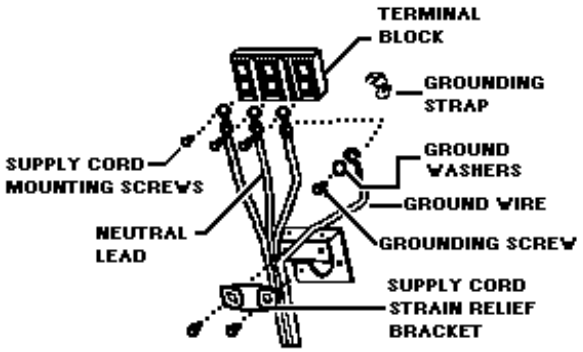
3-WIRE POWER CONNECTION

1. Remove access door.
2. Remove strain relief mounting angle and reattach as shown.
3. Feed ½" trade size conduit through the hole in the bottom of the range back and secure to the strain relief bracket with a conduit clamp.
4. Feed ling #1 (red 12 AWG / 600v copper conductor), line #2 (black 12 AWG / 600v copper conductor), and neutral (white 14 AWG / 600v copper conductor) through conduit and attach closed loop terminals marked for use with ranges.
5. Remove 3 mounting screws and attach line #1 (red) to left terminal, line#2 (black) to the right terminal, and the neutral wire (white) to the center terminal.
6. Reattach the access door.



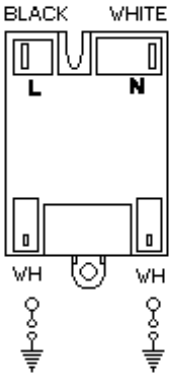
4-wire power connector

1. Remove access door.
2. Remove strain relief mounting angle and reattach as shown.
3. Reed 1 ½" trade size conduit through the hole in the bottom of the range back and secure to the strain relief bracket with a conduit clamp.
4. Feed line #1 (red 12 AWG / 600v copper conductor), line #2 (black 12 AWG / 600v copper conductor) neutral (white 14 AWG 600v copper conductor), and a grounding wire (green 12 AWG copper conductor) through conduit and attach closed loop terminals marked for use with ranges. (Terminal is not required on grounding wire if used with ground washer).
5. Remove 3 mounting screws and green grounding screw. Cut-off and discard ground strap. Attach line #1(red) to the left terminal, line #2 (black) to the right terminal, the neutral wire (white) to the center terminal and the copper ground wire to the green grounding screw using the ground washer.
6. Reattach the access door.



SPARK MODULES

VGIS/VGSS

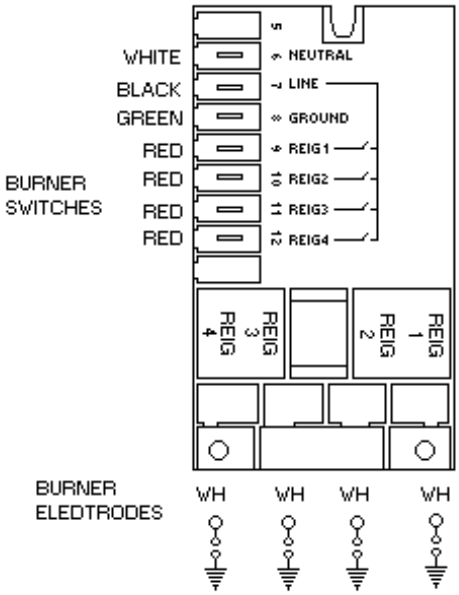


GROUND

PA020008

VGRC/VGRT/VGSC

RE-IGNITION MODULE

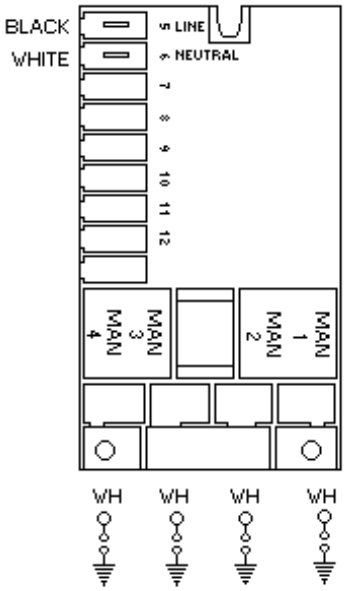


GROUND

PA020013

VGIS/VGSS

NON-REIGNITION MODULE



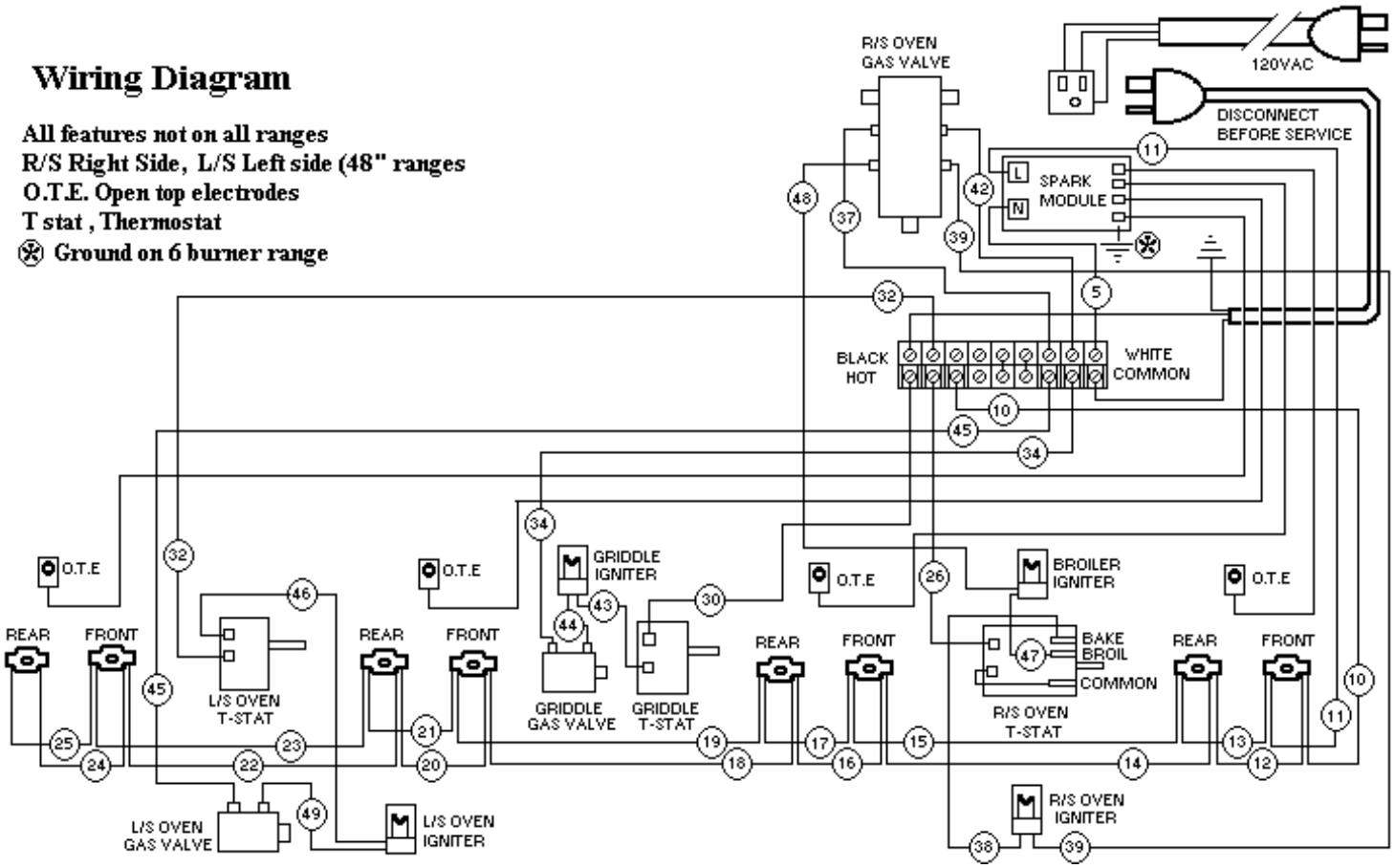
GROUND

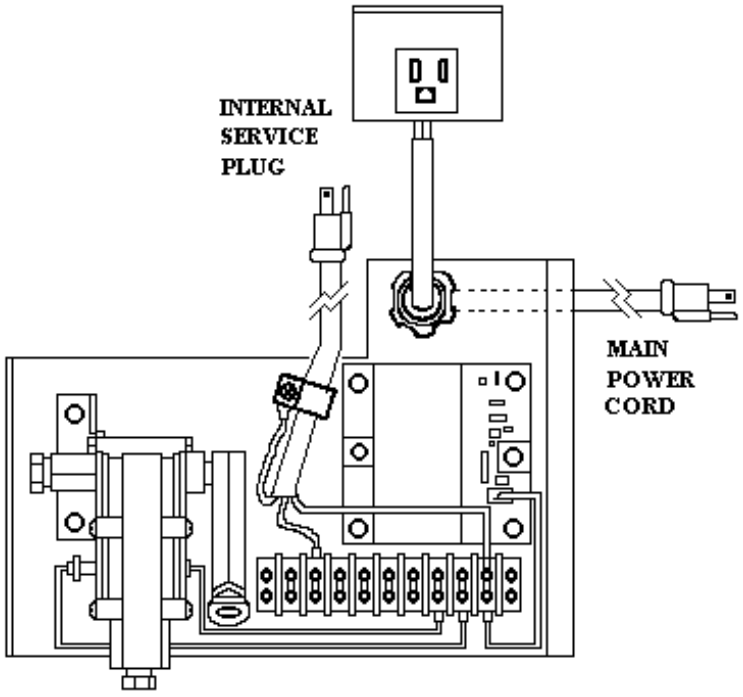
PA020016

VGR /VCM

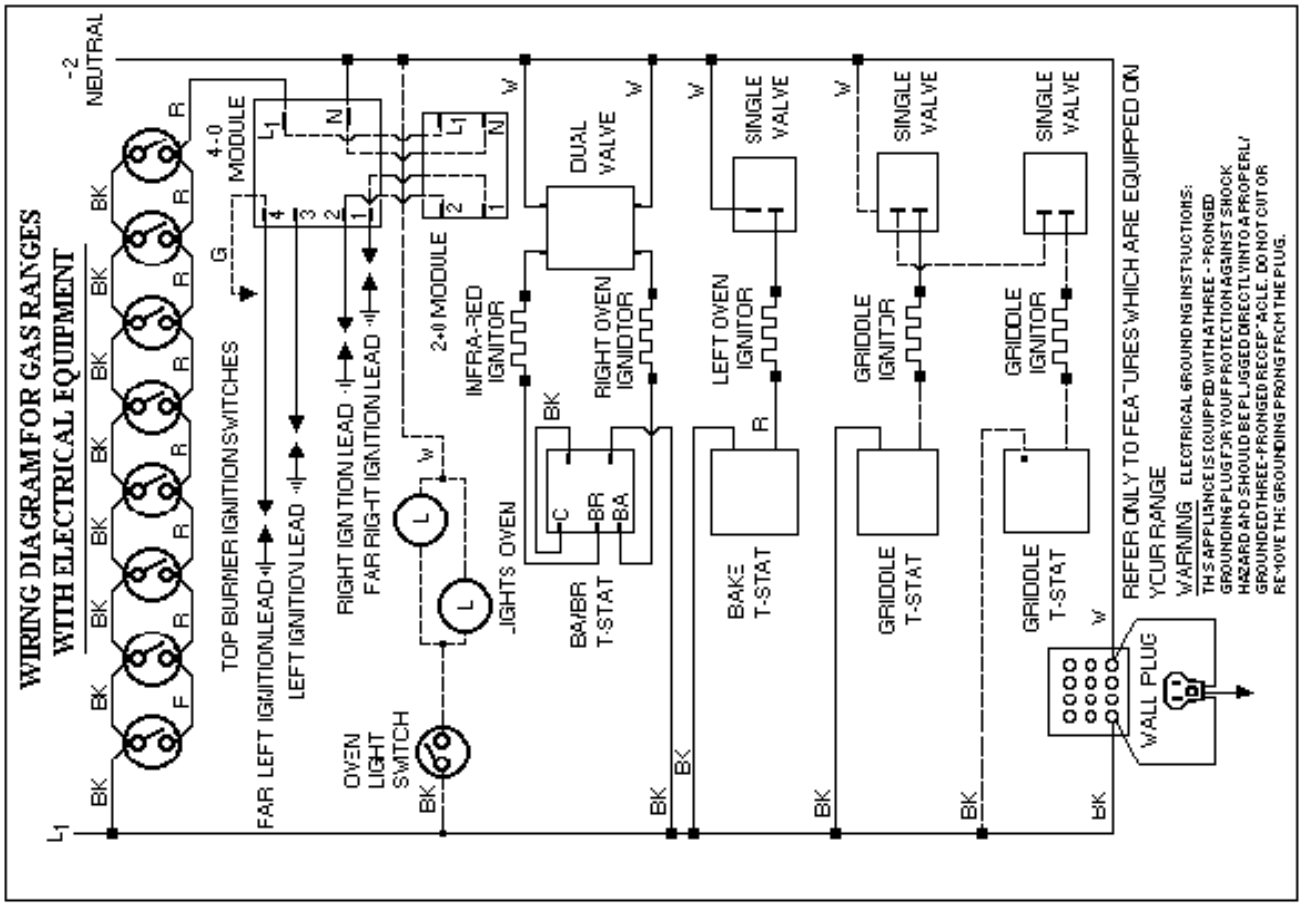
Wiring Diagram

All features not on all ranges
R/S Right Side, L/S Left side (48" ranges
O.T.E. Open top electrodes
T stat , Thermostat
Ground on 6 burner range

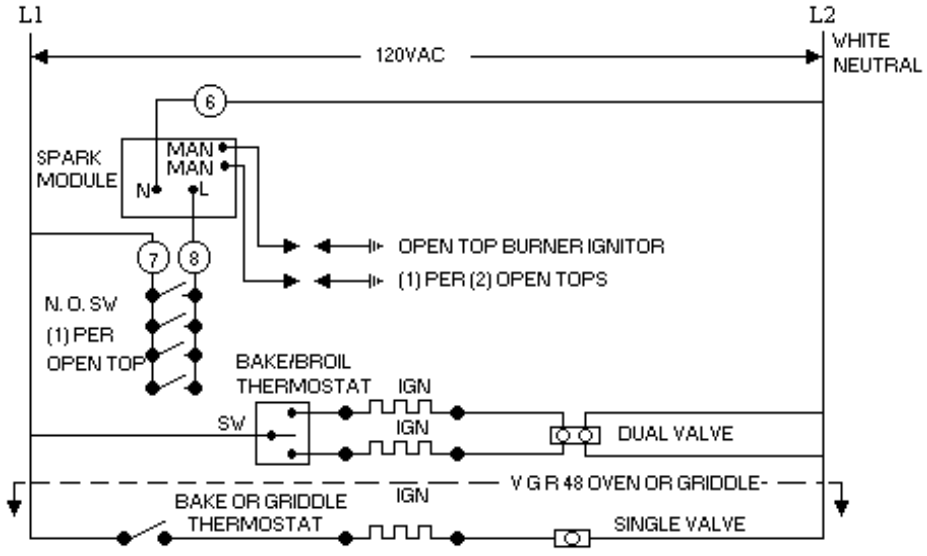




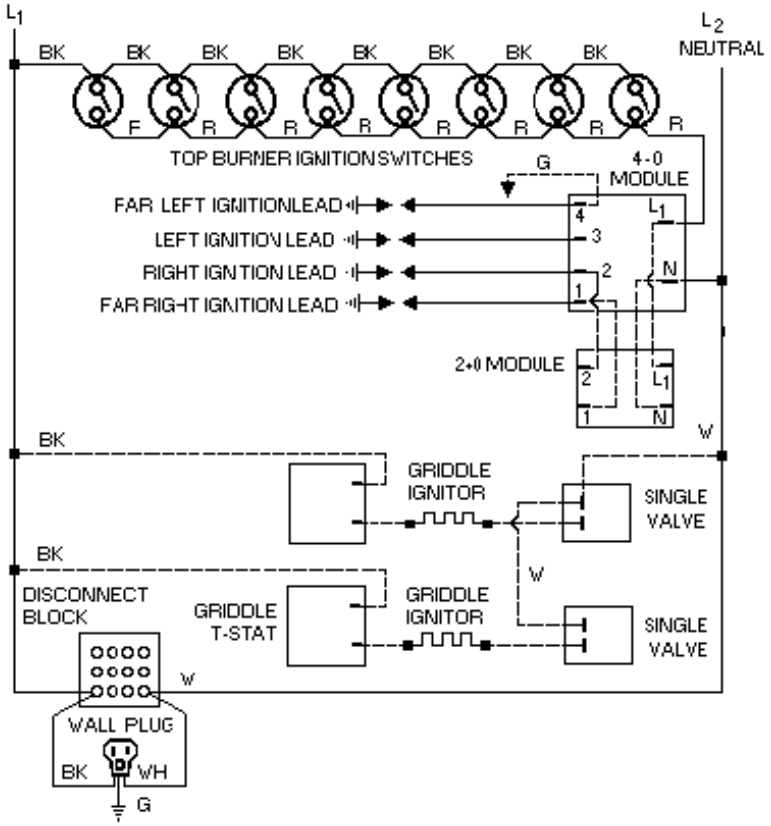
WIRING DIAGRAM FOR GAS RANGES WITH ELECTRICAL EQUIPMENT



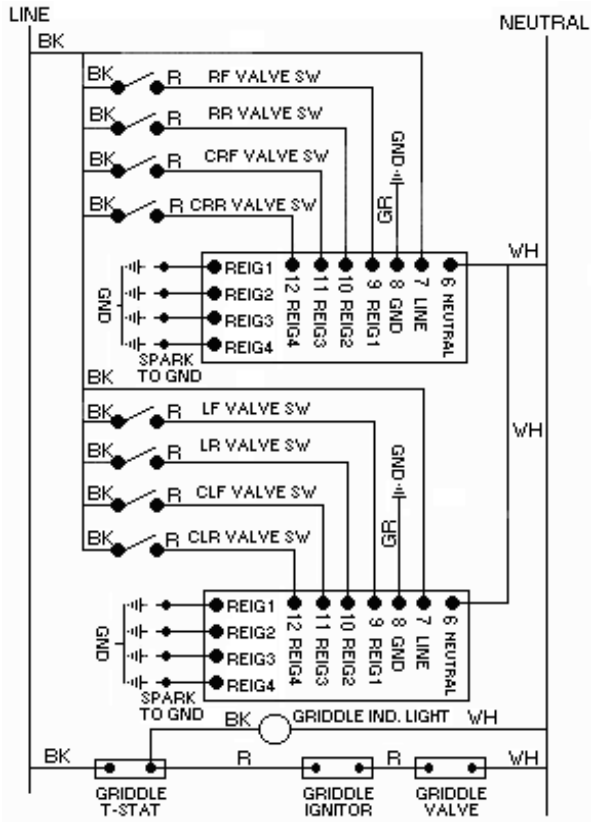
VGR (1st GENERATION) 36" / 48" RANGES
ONE (1) SPARK ELECTRODE FOR TWO (2) BURNERS



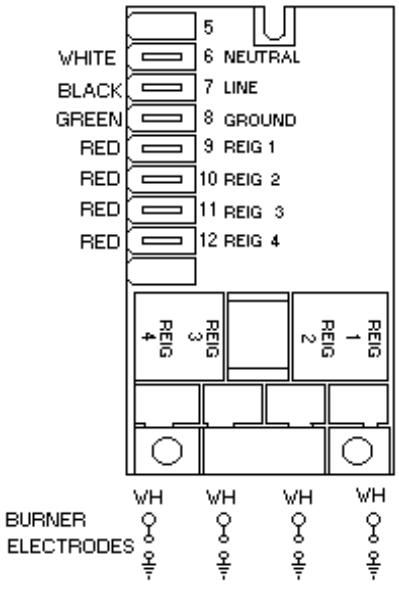
VRT / VRT-R RANGETOP WIRING DIAGRAM
(NO AUTO REIGNITION)



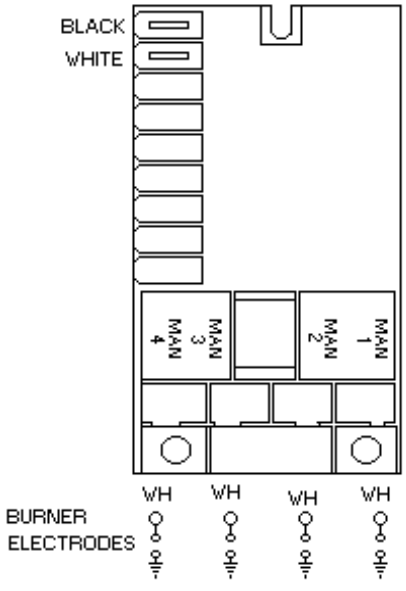
VGRT RANGETOP WIRING DIAGRAM
(WITH AUTO REIGNITION)



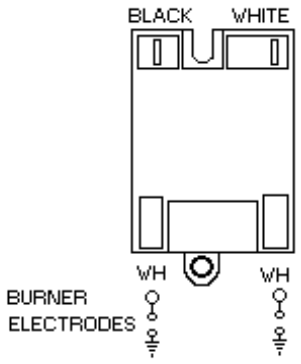
VGRC / VGRT / VGSC
RE-IGNITION MODULE



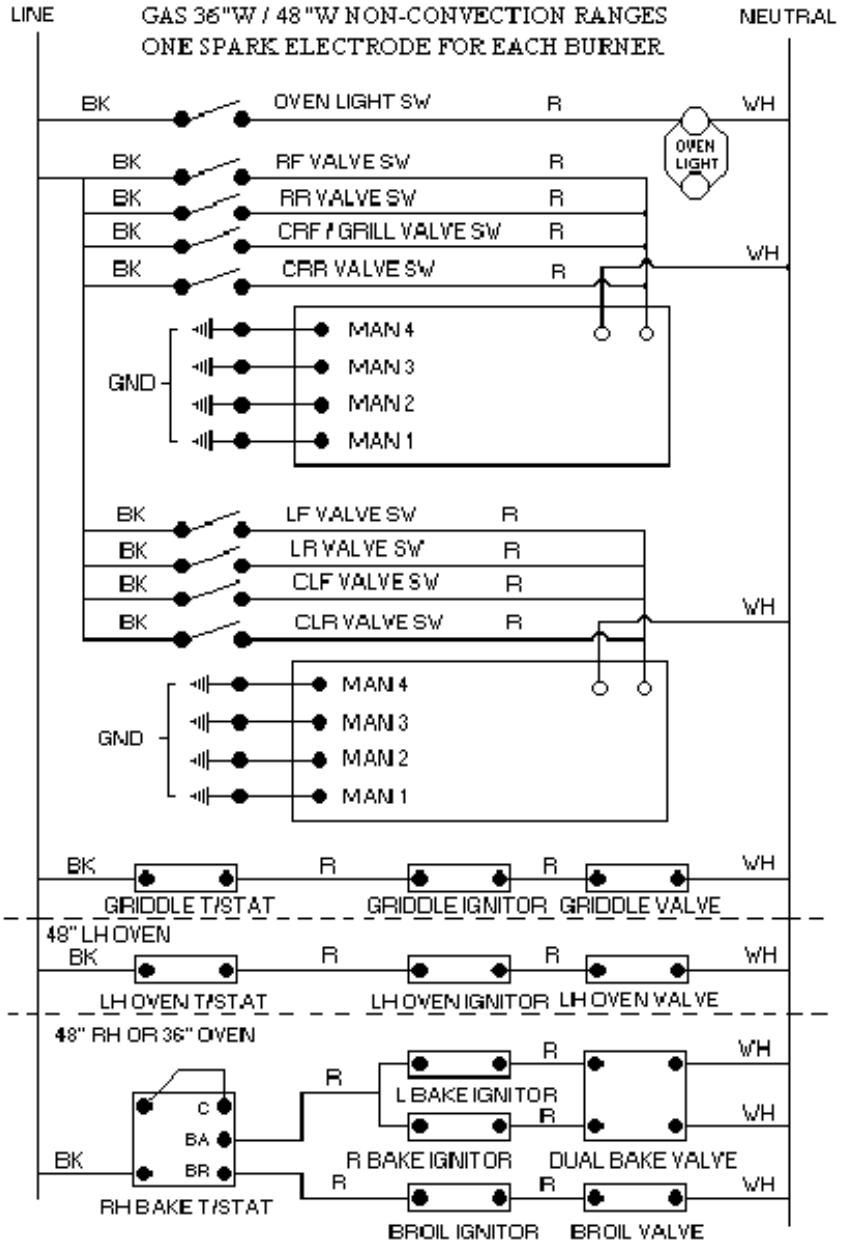
VGIS / VGSS
NON RE-IGNITION MODULE



VGIS / VGSS

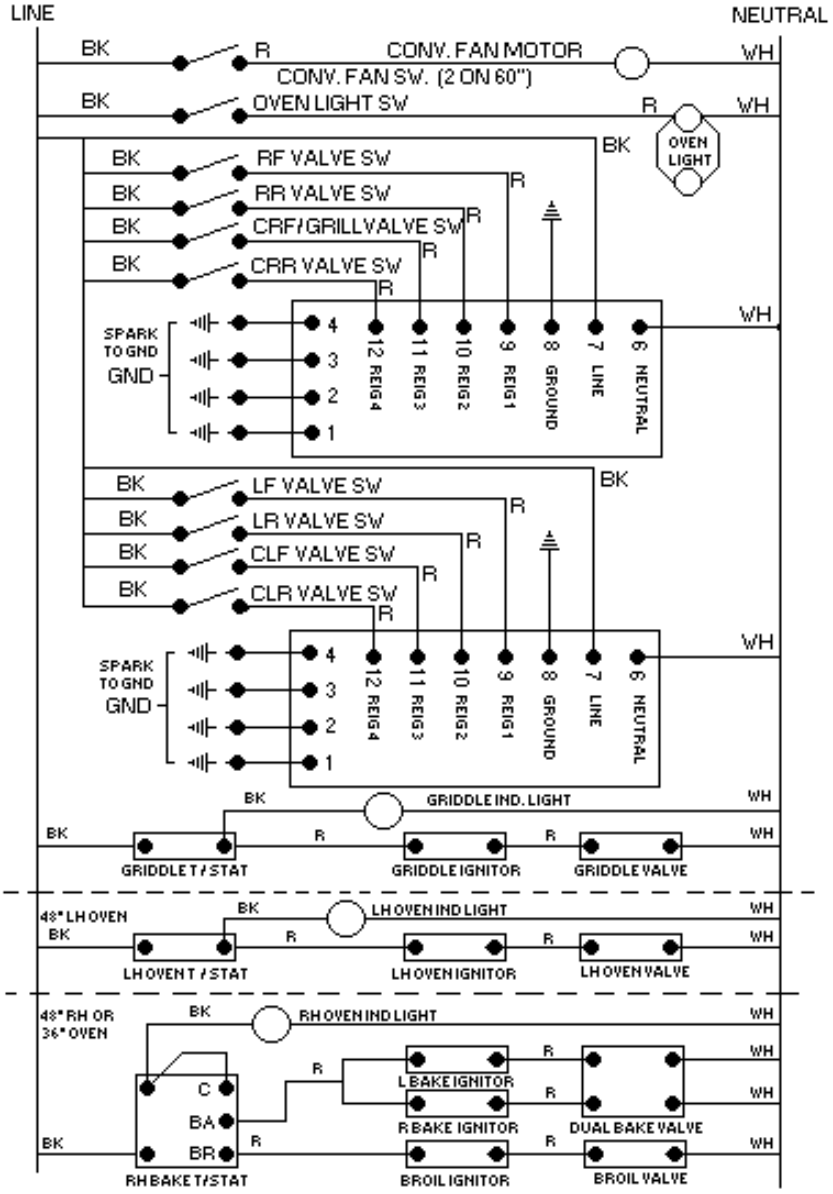


WIRING DIAGRAM



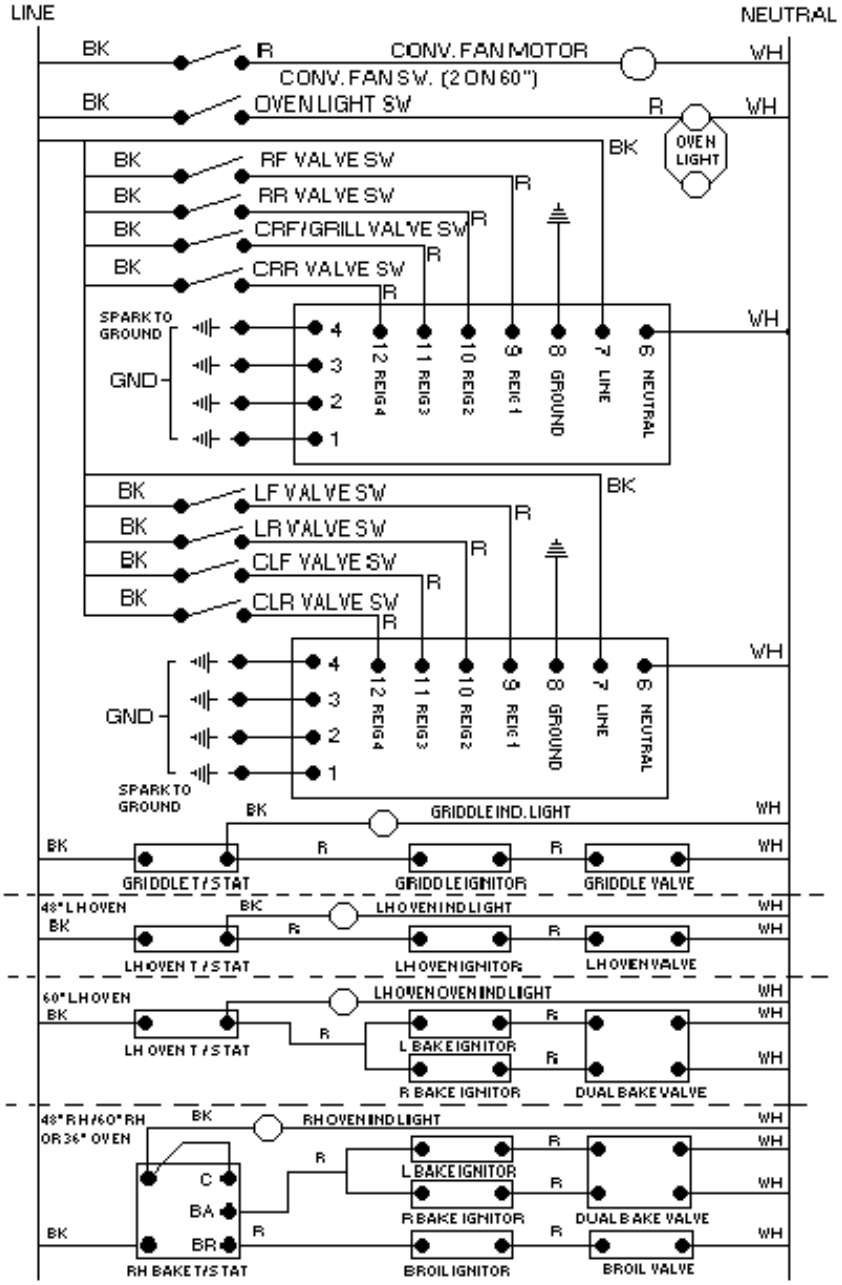
WIRING DIAGRAM

GAS 36"W / 48"W CONVECTION RANGES



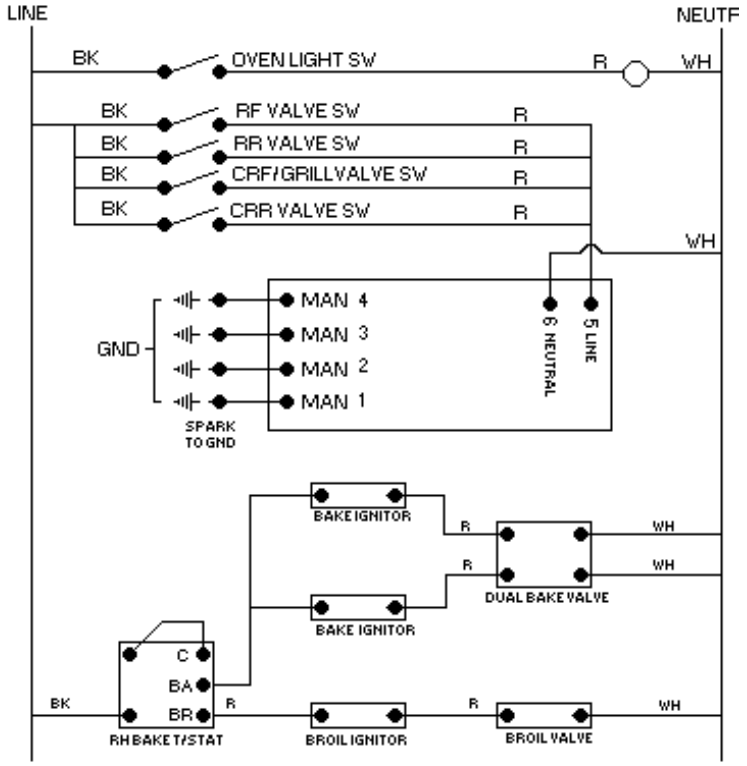
WIRING DIAGRAM

GAS 36"W / 48"W / 60"W CONVECTION RANGES



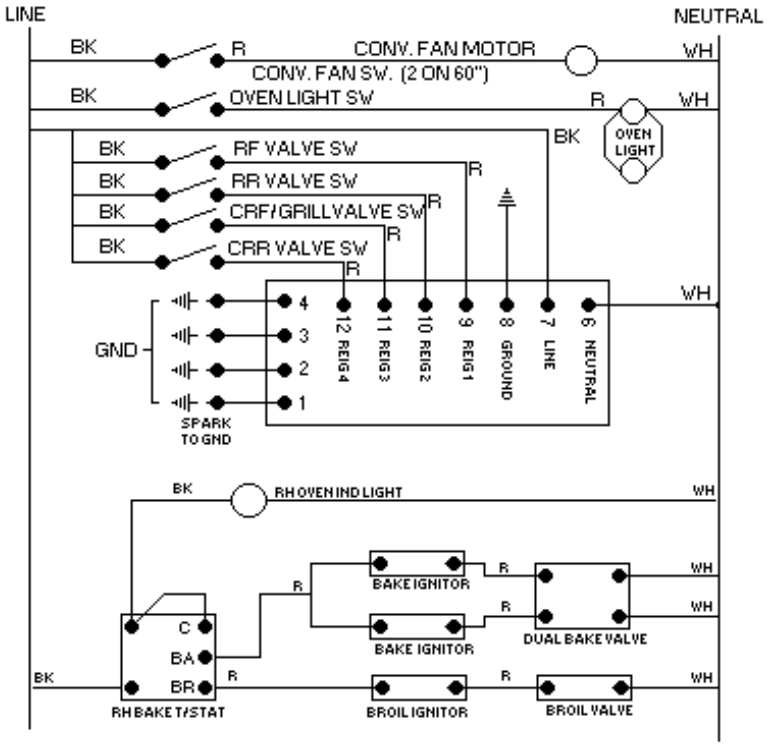
WIRING DIAGRAM

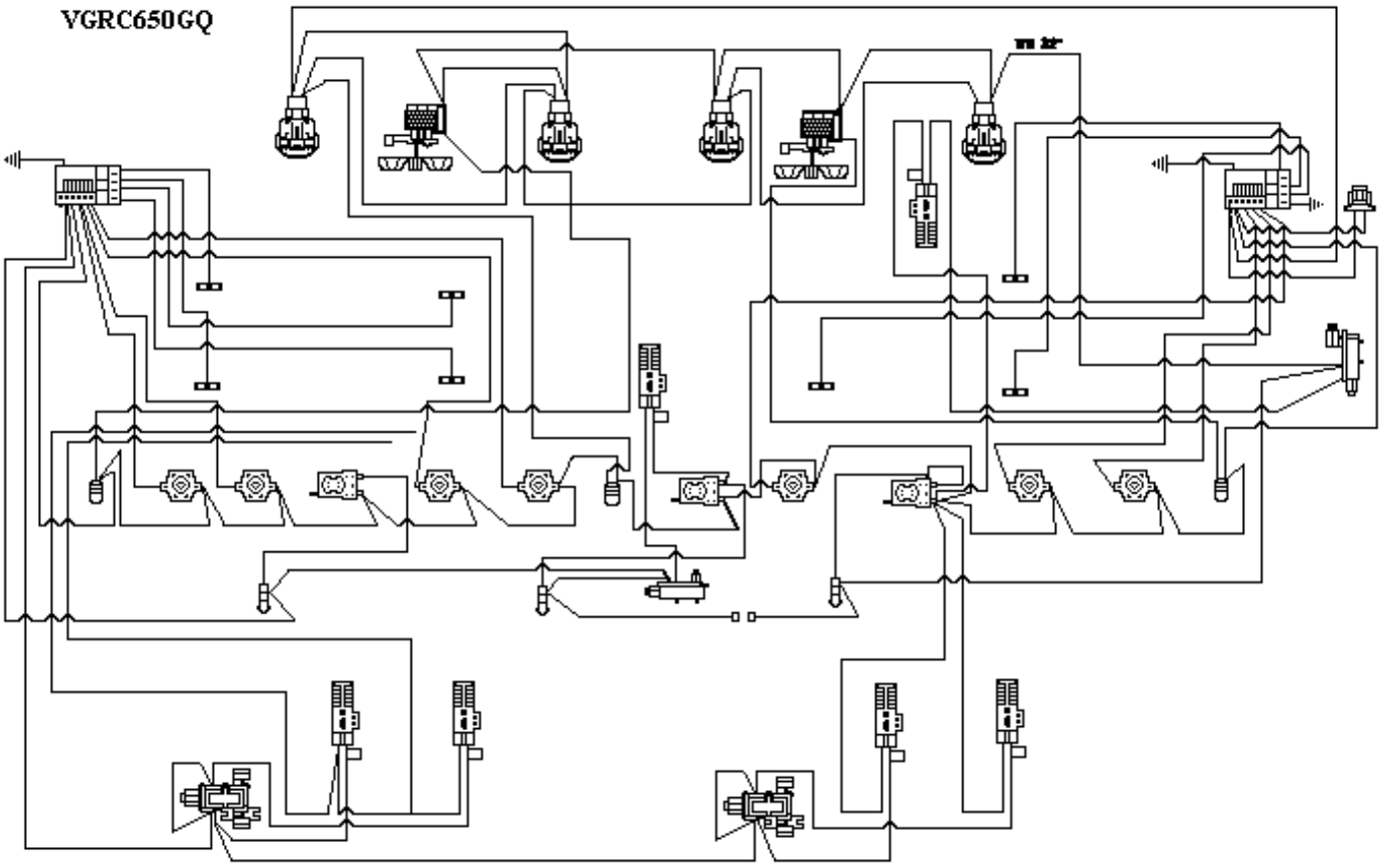
GAS 30"W NON-CONVECTION RANGES



WIRING DIAGRAM

GAS 30"W CONVECTION RANGES



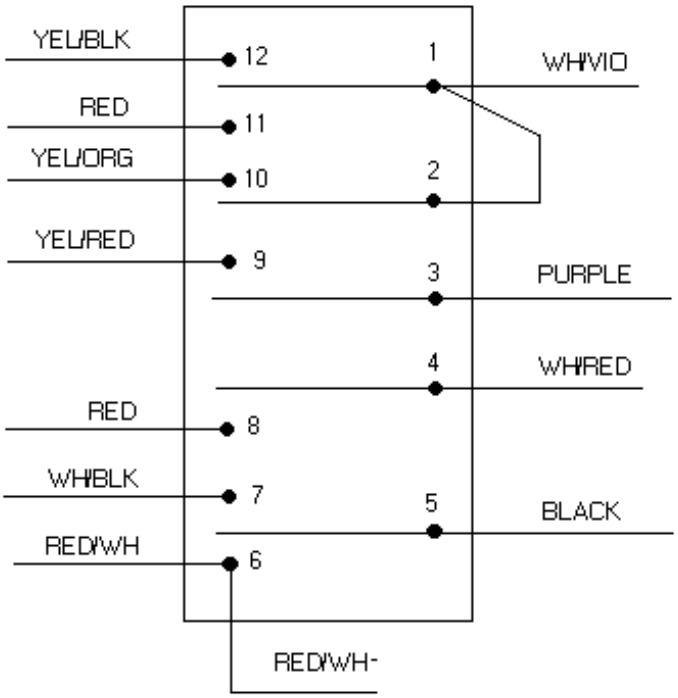

VGRC650GQ

VGSC FREESTANDING SELF-CLEAN GAS RANGE COMPONENT DIAGRAMS

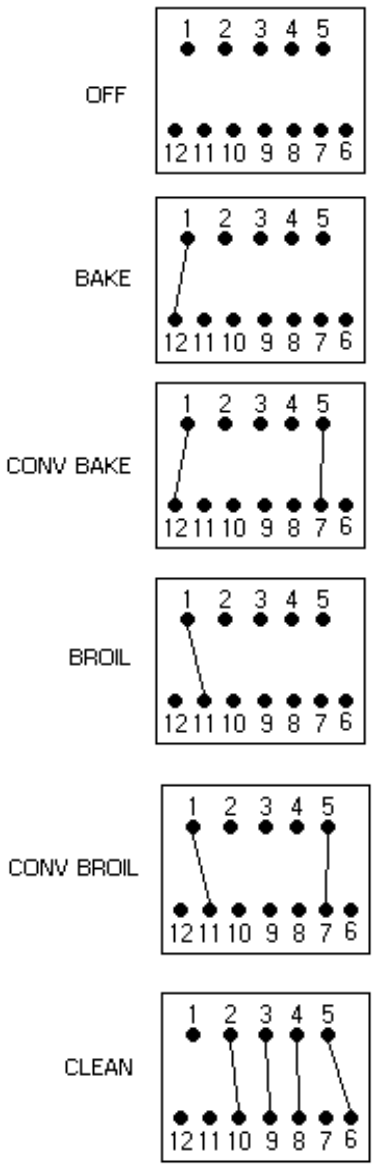
SELECTOR SWITCH

POSITION		1-11	1-12	2-10	3-9	4-8	5-6	5-7
OFF	1	0	0	0	0	0	0	0
BAKE	2	0	X	0	0	0	0	0
CONV BAKE	3	0	X	0	0	0	0	X
BROIL	4	X	0	0	0	0	0	0
CONV BROIL	5	X	0	0	0	0	0	X
CLEAN	6	0	0	X	X	X	X	0

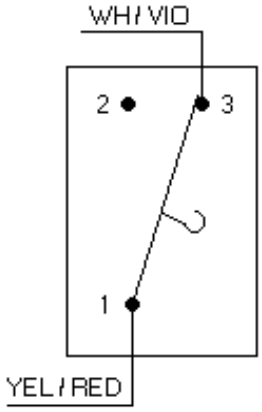
O OPEN X CLOSED



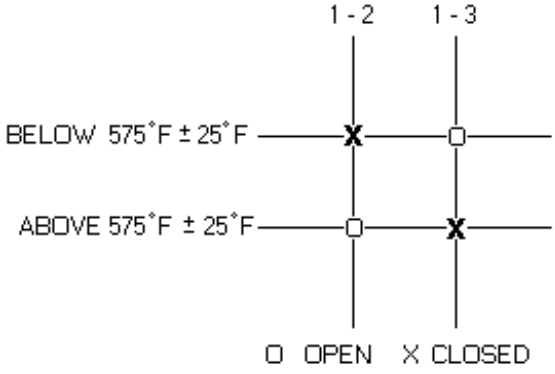
SELECTOR SWITCH



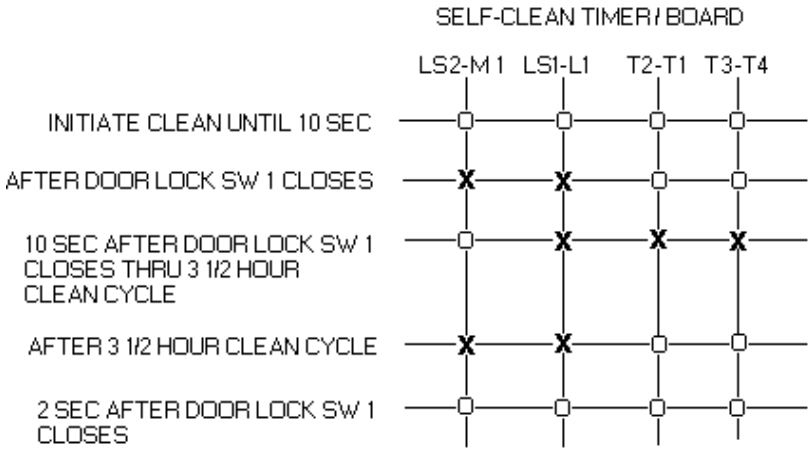
AUTO RESET

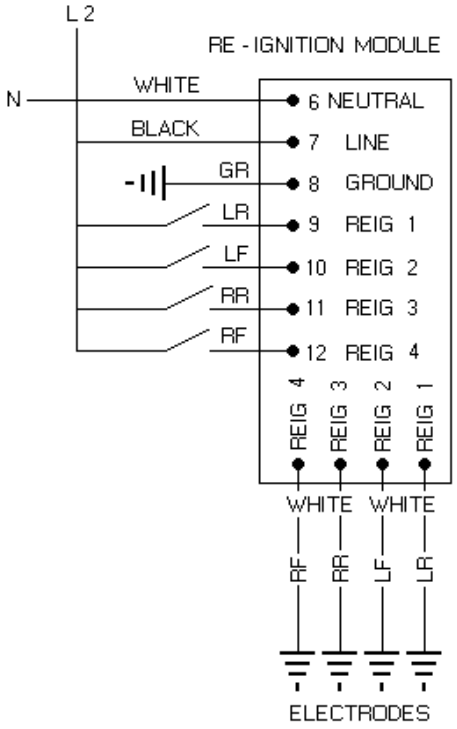


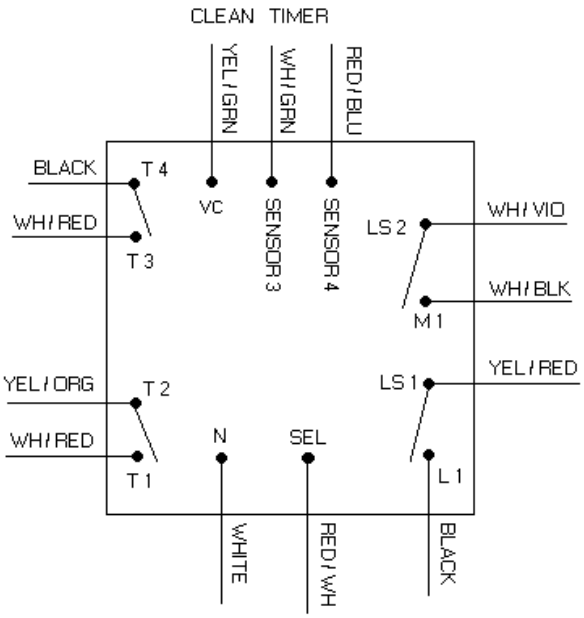
AUTO RESET

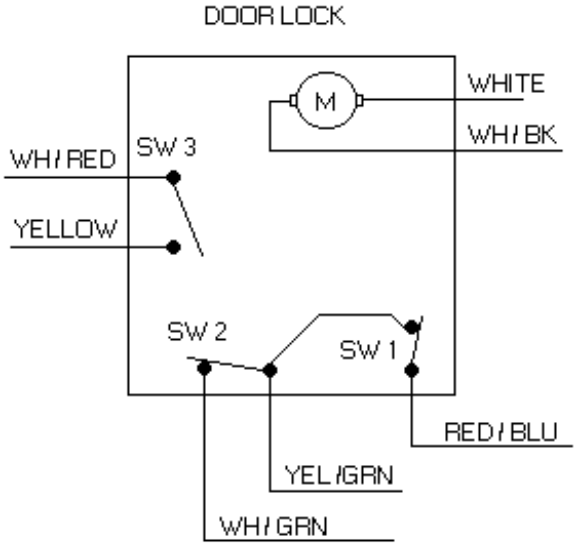


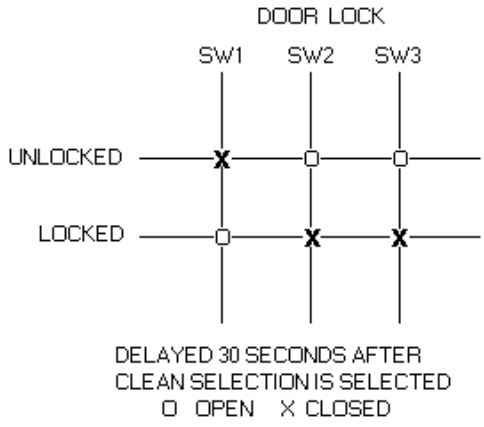
VGSC FREESTANDING SELF-CLEAN GAS RANGE COMPONENT DIAGRAM (Con't)



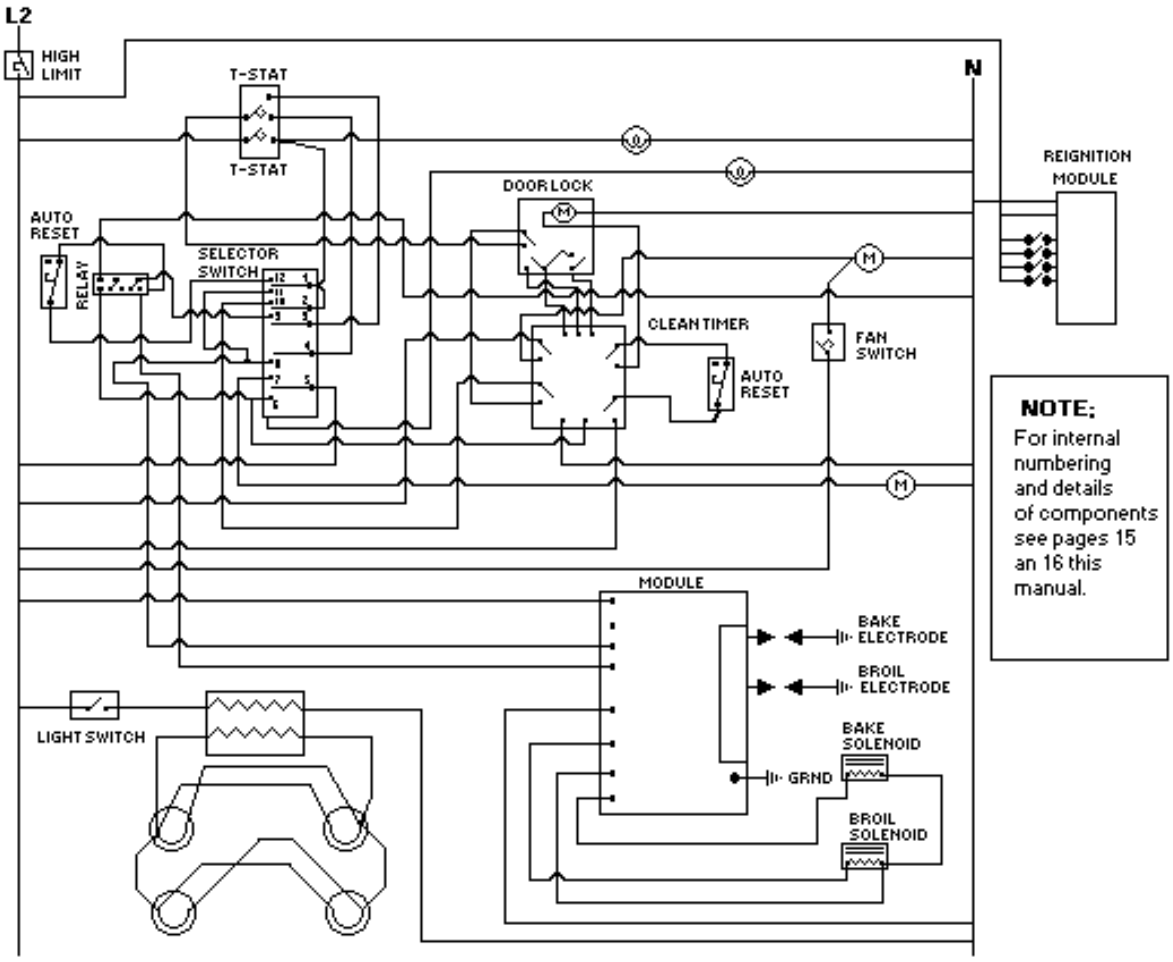




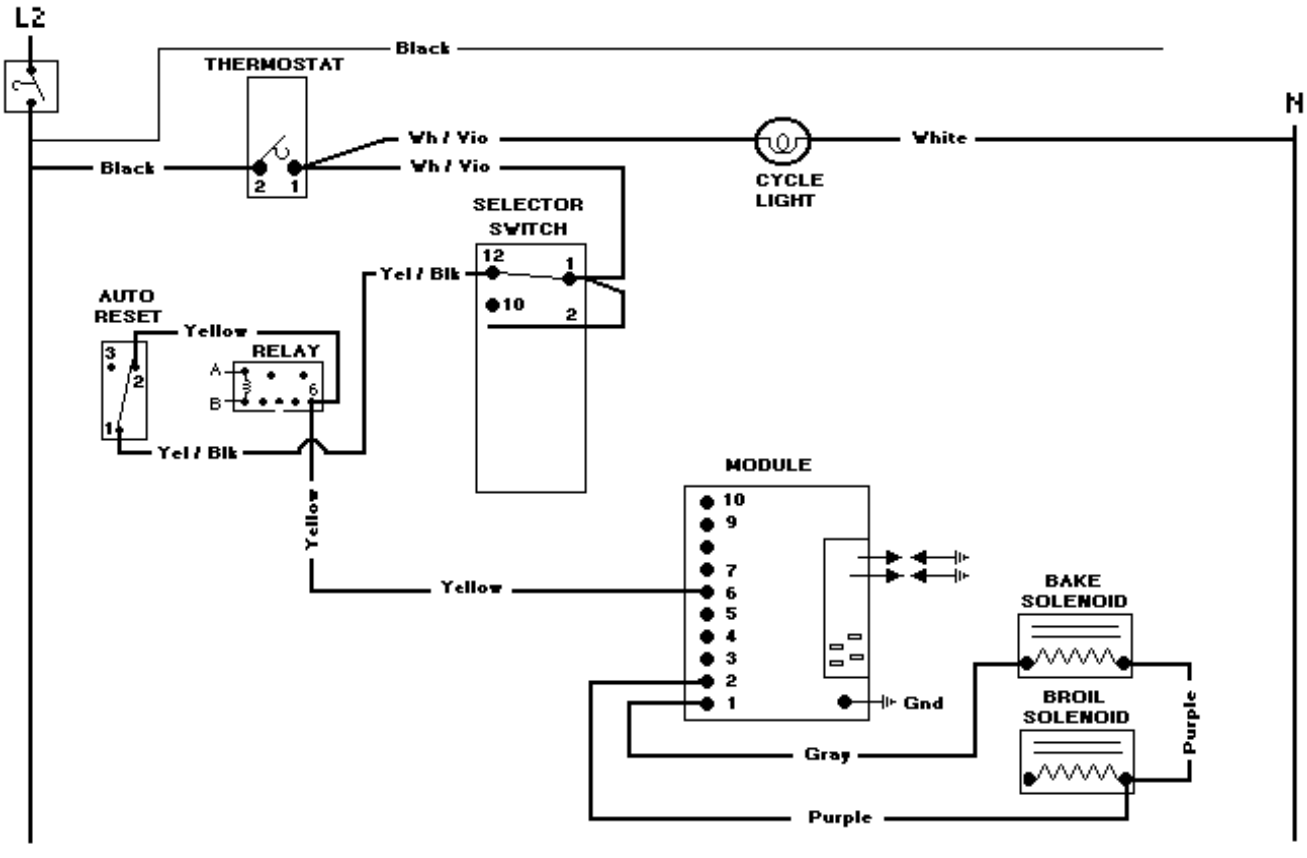




WIRING DIAGRAM
FREESTANDING GAS SELF-CLEAN RANGES

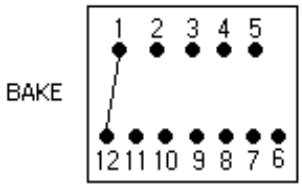


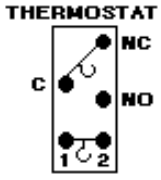
WIRING DIAGRAM
VGSC SELF-CLEAN
BAKE



SELECTOR SWITCH

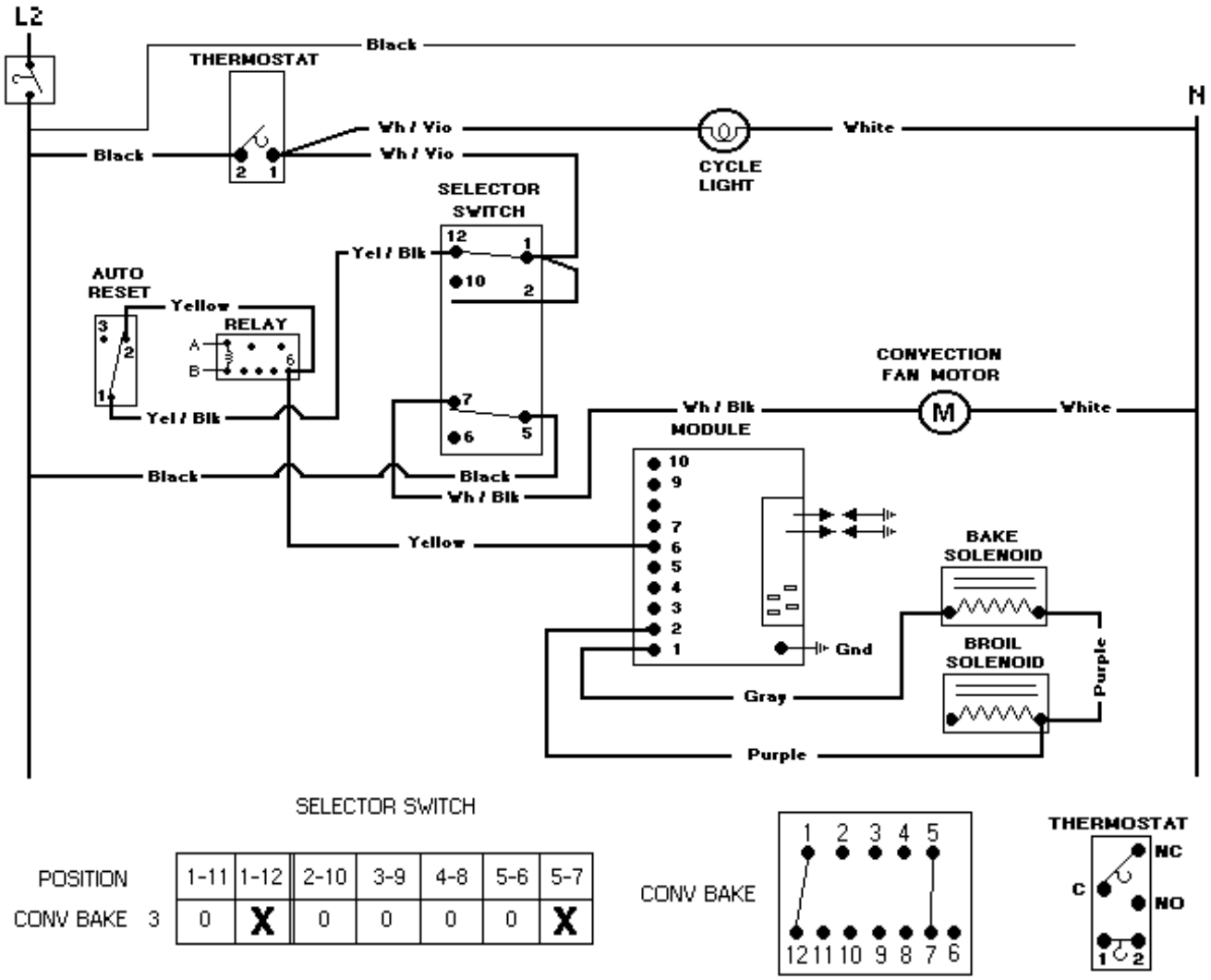
POSITION	1-11	1-12	2-10	3-9	4-8	5-6	5-7
BAKE 2	0	X	0	0	0	0	0





WIRING DIAGRAM BAKE MODE: Turn the selector switch to the BAKE POSITION, closing SELECTOR SWITCH contacts 1 & 12.Turning the temperature control to the desired temperature will close THERMOSTAT contacts 1 & 2. The CYCLE LIGHT will come on and cycle with the THERMOSTAT when the desired temperature is reached and will go off and on with the cycle of the thermostat to maintain the desired temperature. The contacts 1 & 2 will remain closed on the AUTO RESET until the temperature raises beyond 600 F. L1 voltage is applied to BAKE input (pin 6) on the module. The BAKE input is detected by the micro, which operates the BAKE VALVE and SPARK IGNITION sequence. (See pages 12 and 13 for a full description of operation and page 14 for the timing sequence.)

WIRING DIAGRAM
VGSC SELF-CLEAN
CONVECTION BAKE

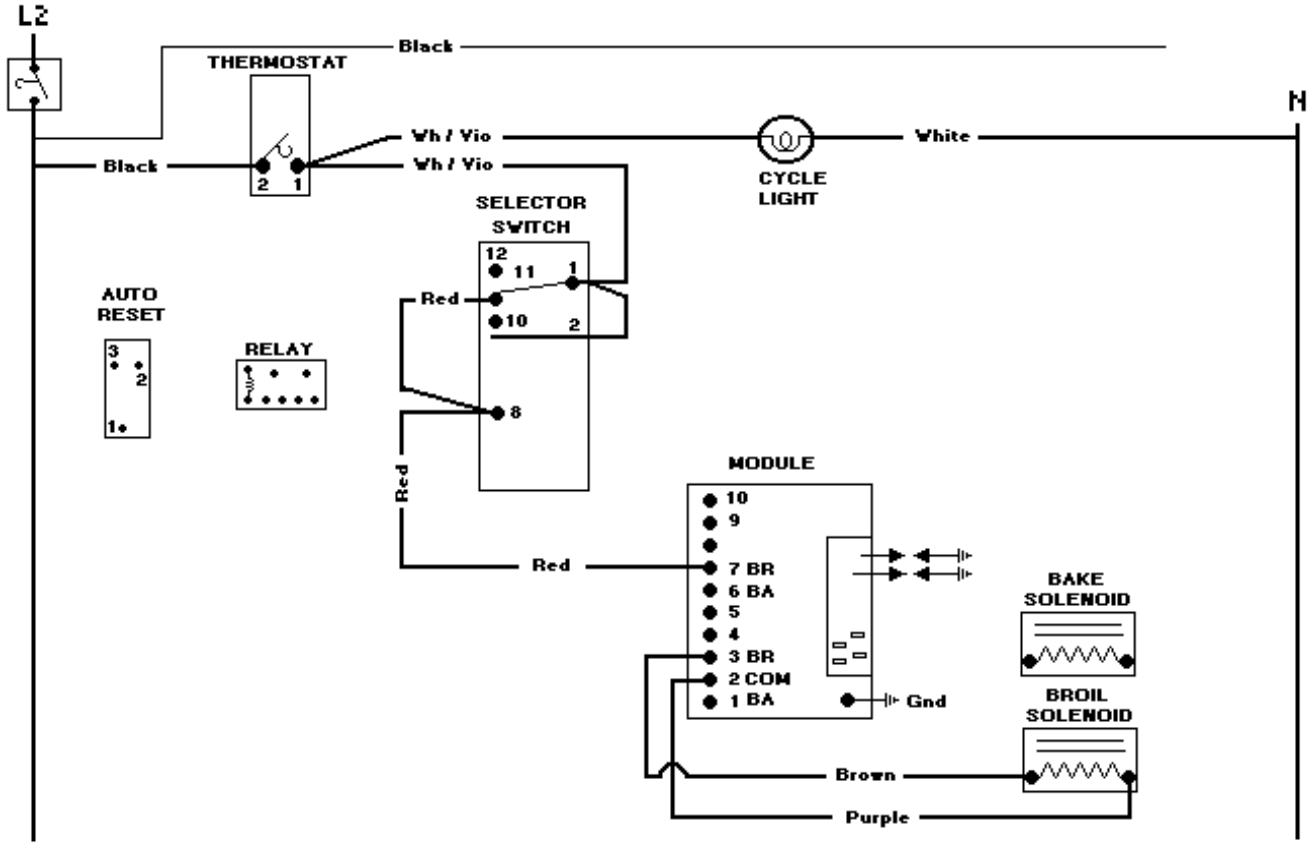


SELECTOR SWITCH

POSITION	1-11	1-12	2-10	3-9	4-8	5-6	5-7
CONV BAKE 3	0	X	0	0	0	0	X

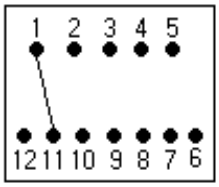
CONVECTION BAKE MODE: Turn the selector switch to the CONV. BAKE POSITION, closing SELECTOR SWITCH contacts 1 & 12 and 5 &7. Contacts 1 & 12 supplies L1 voltage to the MODULE. Contacts 5 & 7 supplies L1 voltage to the CONVECTION FAN MOTOR. Turning the temperature control to the desired temperature will close THERMOSTAT contacts 1 & 2. The CYCLE LIGHT will come on and cycle with the THERMOSTAT when the desired temperature is reached and will go off and on with the cycle of the thermostat to maintain the desired temperature. Contact 1 & 2 will remain closed on the AUTO RESET until the temperature raises beyond 600 F. L1 voltage is applied to BAKE input (pin 6) on the module. The BAKE input is detected by the micro, which operates the BAKE VALVE and SPARK IGNITION sequence. (See pages 12 and 13 for a full description of operation and page 14 for the timing sequence.)

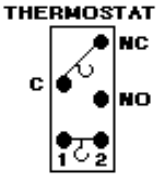
WIRING DIAGRAM
VGSC SELF-CLEAN
BROIL



SELECTOR SWITCH

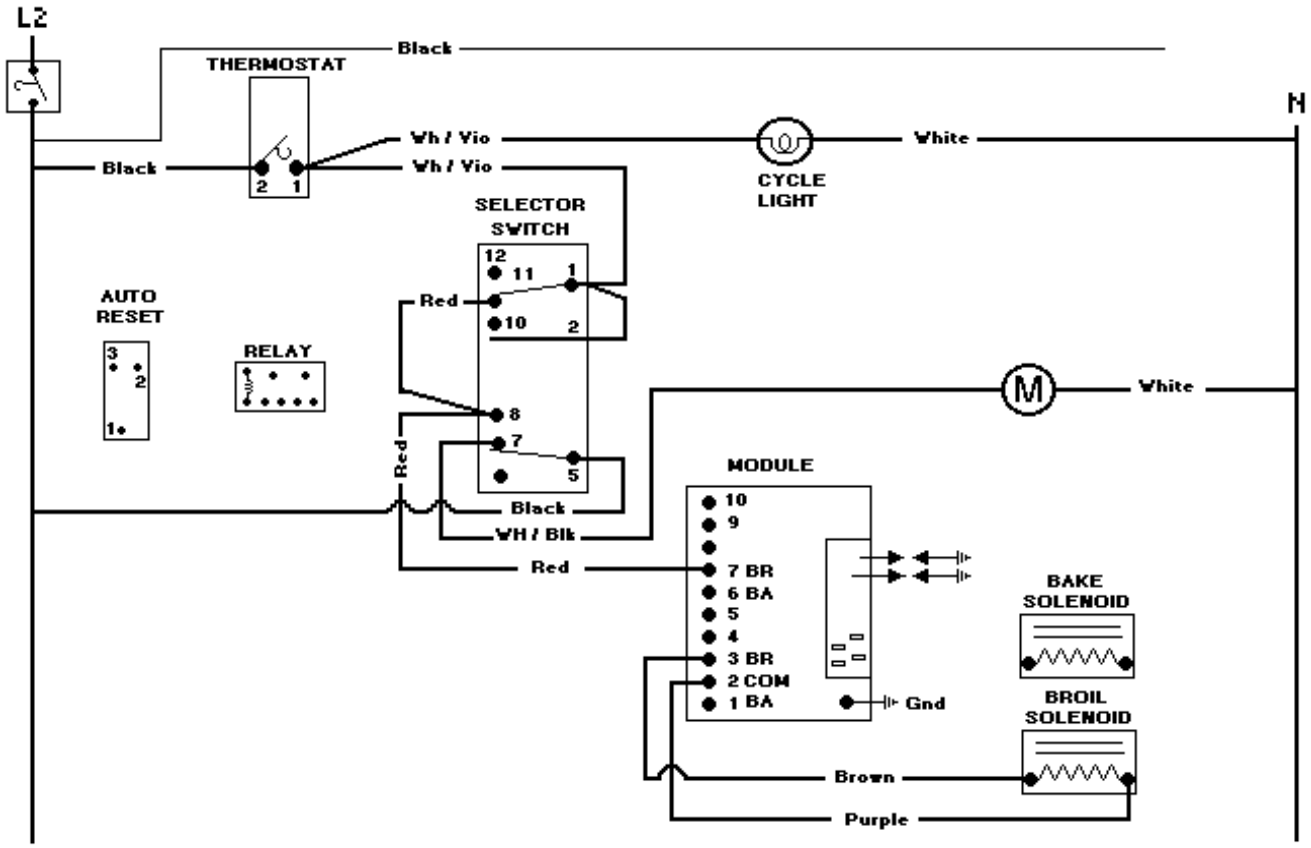
POSITION	1-11	1-12	2-10	3-9	4-8	5-6	5-7
BROIL 4	X	0	0	0	0	0	0





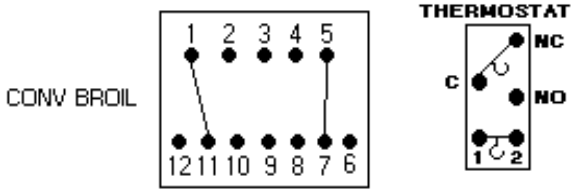
BROIL MODE: Turn the selector switch to the BROIL POSITION, closing SELECTOR SWITCH contacts 1 & 11. Turning the temperature control to BROIL will close THERMOSTAT contacts 1 & 2. The CYCLE LIGHT will come on and will cycle off and on with the cycling of the THERMOSTAT. L1 voltage is applied to BROIL input (pin 7) on the module. The BROIL input is detected by the micro, which operates the BROIL VALVE and SPARK IGNITION sequence. (See pages 12 and 13 for a full description of operation and page 14 for the timing sequence.)

WIRING DIAGRAM
VGSC SELF-CLEAN
CONVECTION BROIL



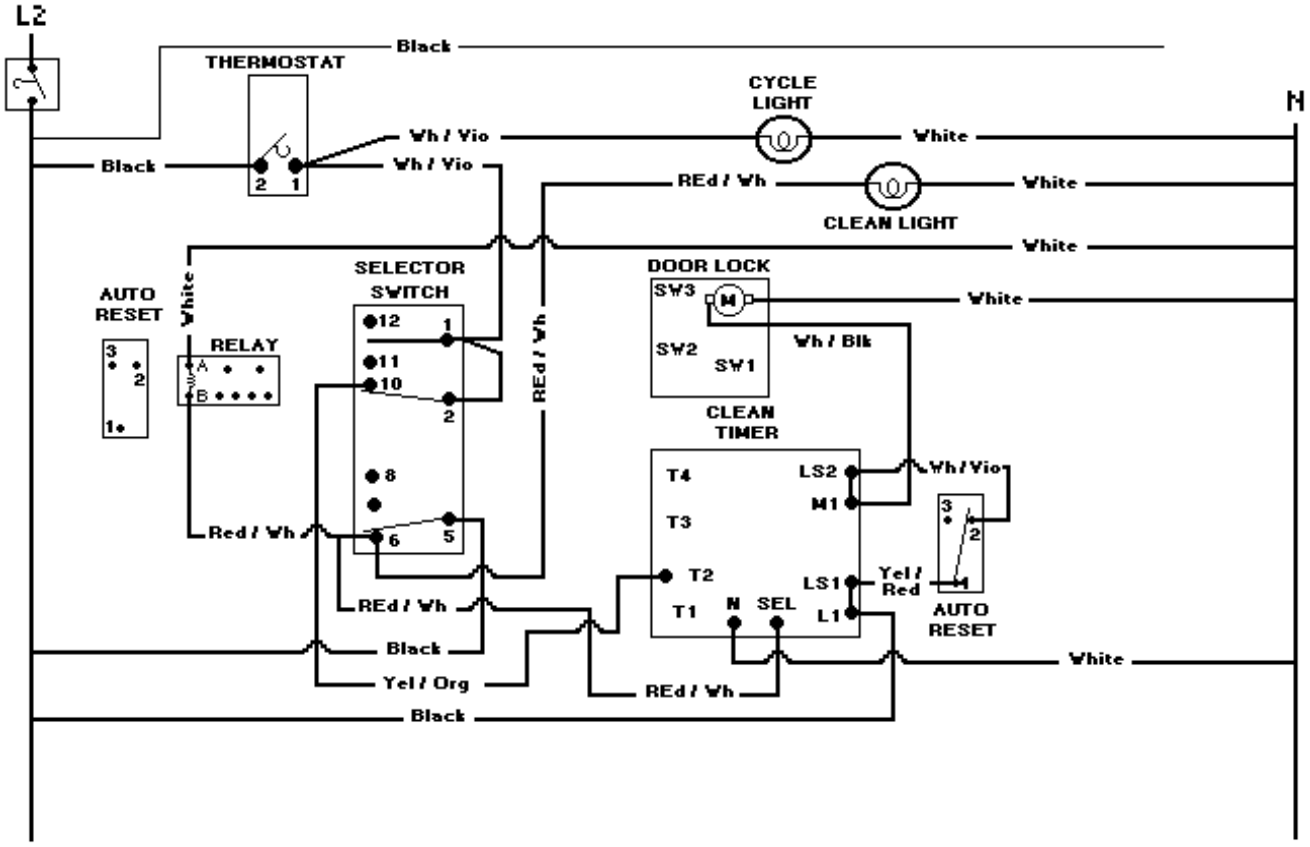
SELECTOR SWITCH

POSITION	1-11	1-12	2-10	3-9	4-8	5-6	5-7
CONV BROIL 5	X	0	0	0	0	0	X



CONVECTION BROIL MODE: Turn the selector switch to the CONV. BROIL POSITION, closing SELECTOR SWITCH contacts 1 & 11 and 5 & 7. Contacts 1 & 11 supplies L1 voltage to the MODULE. Contacts 5 & 7 supplies L1 voltage to the CONVECTION FAN MOTOR. Turning the temperature control to CONV. BROIL will close THERMOSTAT contacts 1 & 2. The CYCLE LIGHT will come on and will cycle off and on with the cycling of the THERMOSTAT . L1 voltage is applied to BROIL input (pin 7) on the module. The BROIL input is detected by the micro, which operates the BROIL VALVE and SPARK IGNITION sequence. (See pages 12 and 13 for a full description of operation and page 14 for the timing sequence.)

WIRING DIAGRAM
VGSC SELF-CLEAN
CLEAN BEFORE DOOR LOCK

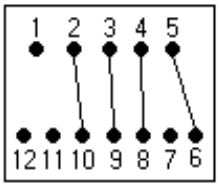


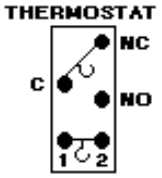
SELECTOR SWITCH

CLEAN (BEFORE DOOR LOCK)

POSITION	1-11	1-12	2-10	3-9	4-8	5-6	5-7
CLEAN 6	0	0	X	X	X	X	0

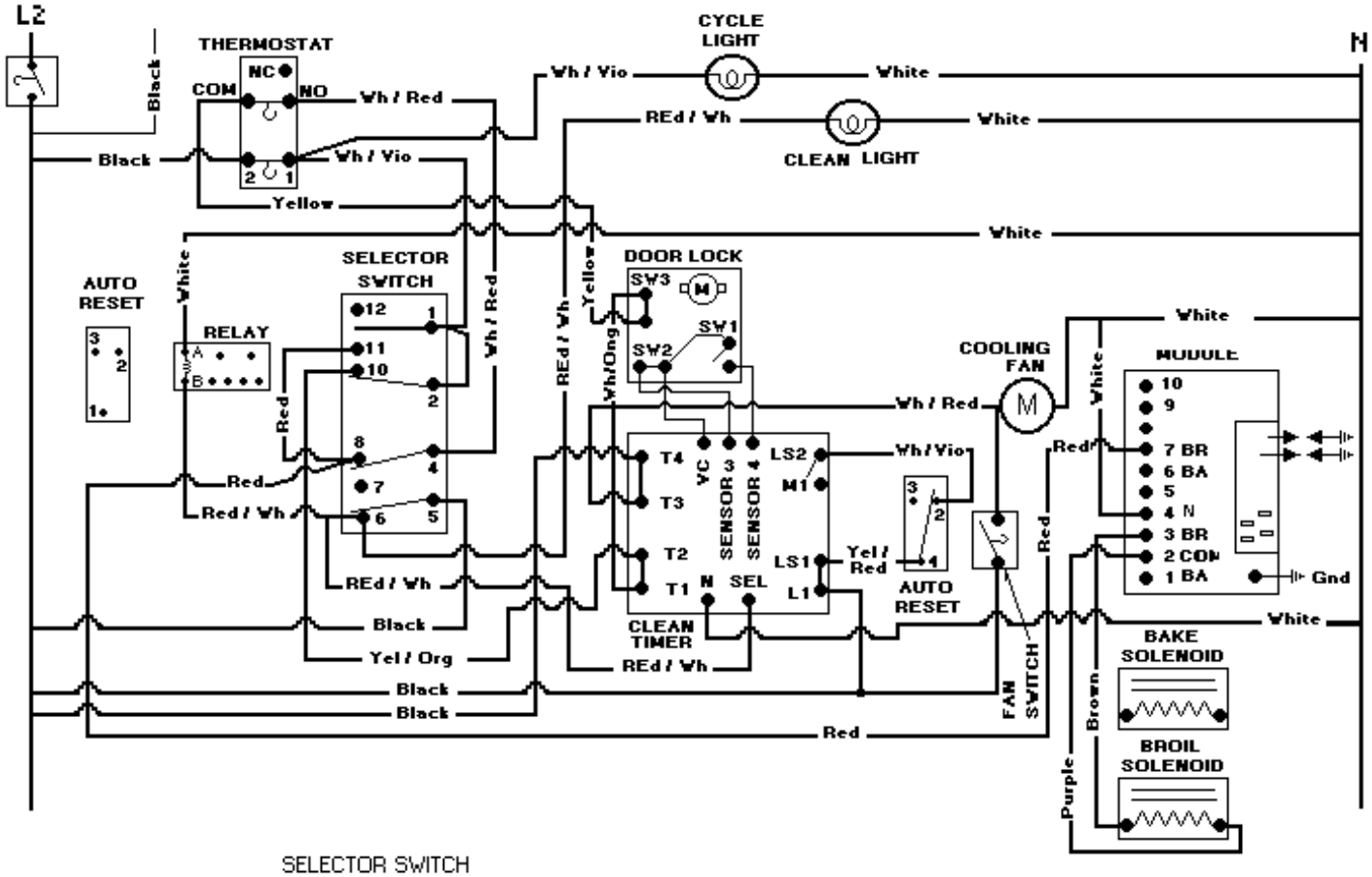
O OPEN X CLOSED





SELF-CLEAN MODE (Before the door locks): Turn the SELECTOR SWITCH to the SELF-CLEAN MODE. Turn the TEMPERATURE control past the clean setting until the knob stops. THERMOSTAT contacts 1 & 2 will close supplying L1 voltage to the SELECTOR SWITCH contacts 1 & 2. SELECTOR SWITCH contacts 2 & 10 will close supplying voltage to CLEAN/TIMER contact T2. SELECTOR SWITCH contacts 5 & 6 will close supplying voltage to CLEAN/TIMER contact SEL. and will power the relay coil. Power to SEL on the CLEAN/TIMER board will close contacts L1 & LS1 completing the circuit for the DOOR LOCK MOTOR through the AUTO RESET contacts 1 & 2 and LS2 & M1 on the CLEAN/TIMER board. This powers the DOOR LOCK MOTOR until 10 seconds after SENSOR 3 is signaled by VC that the DOOR LOCK SWITCH SW2 has been closed mechanically (along with SW3) by the DOOR LOCK BOLT.

WIRING DIGRAM
VGSC SELF-CLEAN
CLEAN BEFORE 600° F. AFTER DOOR LOCK



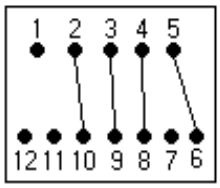
SELECTOR SWITCH

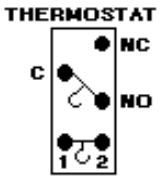
CLEAN (BEFORE 600°F AFTER DOOR LOCK)

POSITION	1-11	1-12	2-10	3-9	4-8	5-6	5-7
CLEAN 6	0	0	X	X	X	X	0

O OPEN X CLOSED

CLEAN

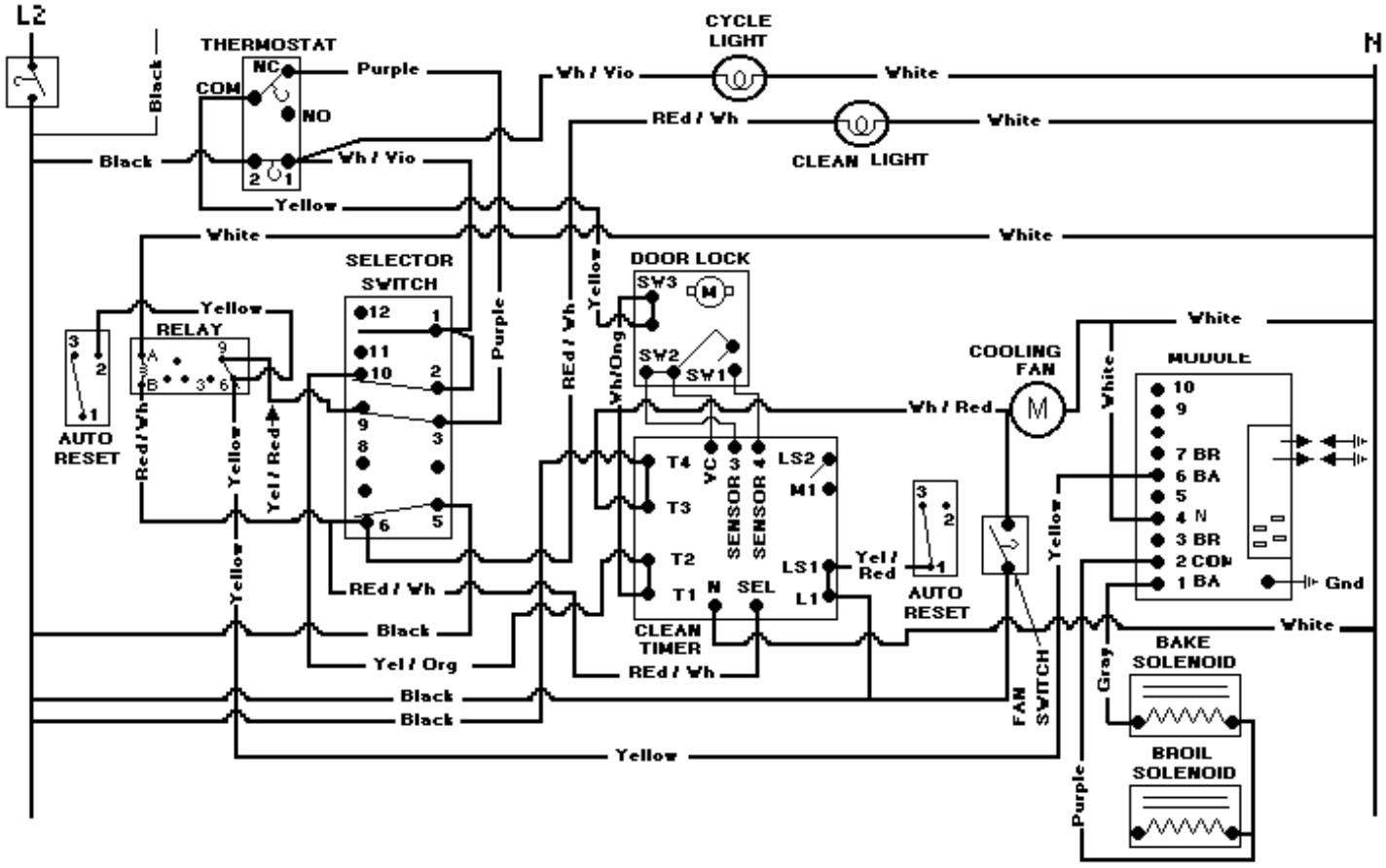




SELF-CLEAN MODE (Before 600 F after door lock): **10** seconds after the signal to SENSOR 4, SWITCH LS2 & M1 is opened, stopping the DOOR LOCK motion. T1 &T2 closes applying voltage to BROIL input Pin 7 on the MODULE. (L2 - T-STAT contacts 1 & 2 - SEL. SW. Contacts 2 & 10 - CLEAN TIMER contacts T2 & T1 - DOOR LOCK SW3 - T-stat COM & NO - SEL. SW. 4 & 8 - MODULE PIN 7 BROIL). The BROIL input is detected by the micro, which operates the BROIL VALVE and SPARK IGNITION sequence. The Broil Burner is energized for the step in the Clean Cycle.

T3 & T4 close powering the COOLING FAN MOTOR (L2 - CLEAN TIMER T4-T3 to COOLING FAN MOTOR - Neutral.)

WIRING DIAGRAM
VGSC SELF-CLEAN
CLEAN AFTER 600° F. AFTER DOOR LOCKS

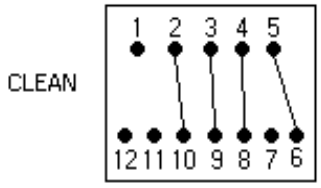


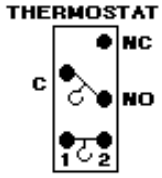
SELECTOR SWITCH

CLEAN (AFTER 600°F AFTER DOOR LOCK)

POSITION	1-11	1-12	2-10	3-9	4-8	5-6	5-7
CLEAN 6	0	0	X	X	X	X	0

O OPEN X CLOSED





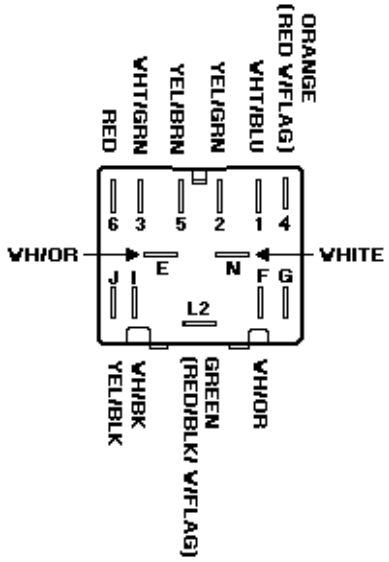
SELF-CLEAN MODE (After 600 F after door lock): L2 to THERMOSTAT, contacts 2&1, - SEL. SW. contacts 2 &10 to CLEAN TIMER contacts T2-T1 and to DOOR LOCK switch SW3 to THERMOSTAT contacts COM & NC to SEL. SW. contacts 3 & 9 to BAKE RELAY to MODULE pin 6 (Bake). The BAKE input is detected by the micro which operates the BAKE VALVE and SPARK IGNITION sequence.

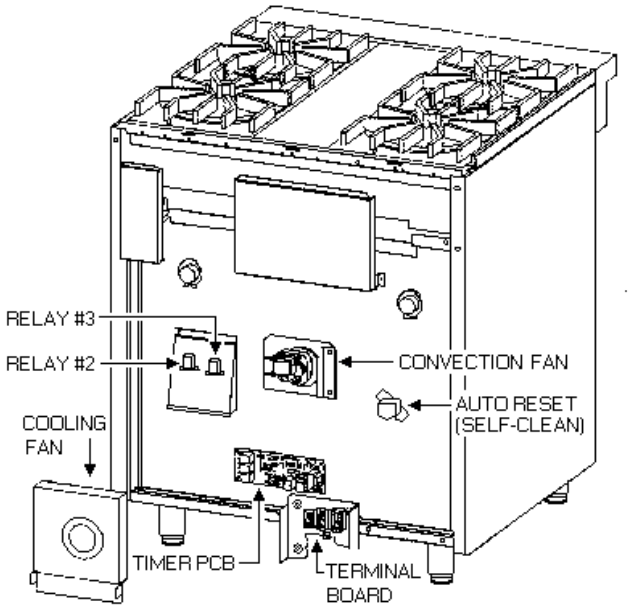
After approximately 3 ½ hours the CLEAN TIMER board will time out and will terminate the cycle. The temperature and the selector switch is to be turned OFF. 30 minutes will be required for the oven to cool enough for the door latch to disengage. `

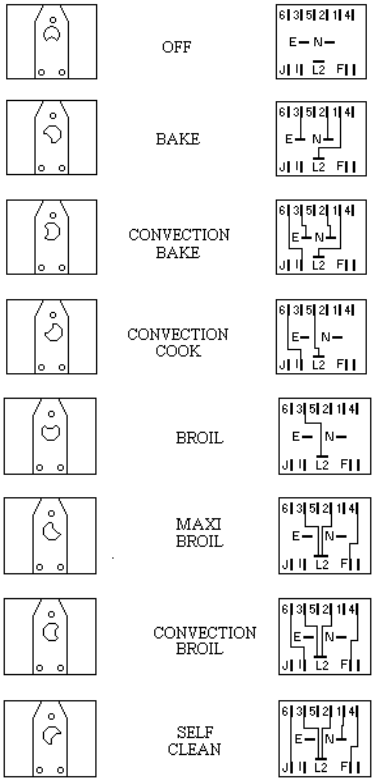
(BEFORE JUNE 2001)

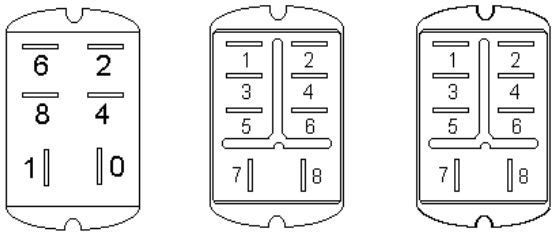
VDSC305 / 365 DUAL FUEL SELF-CLEAN

8 POSITION SELECTOR SWITCH





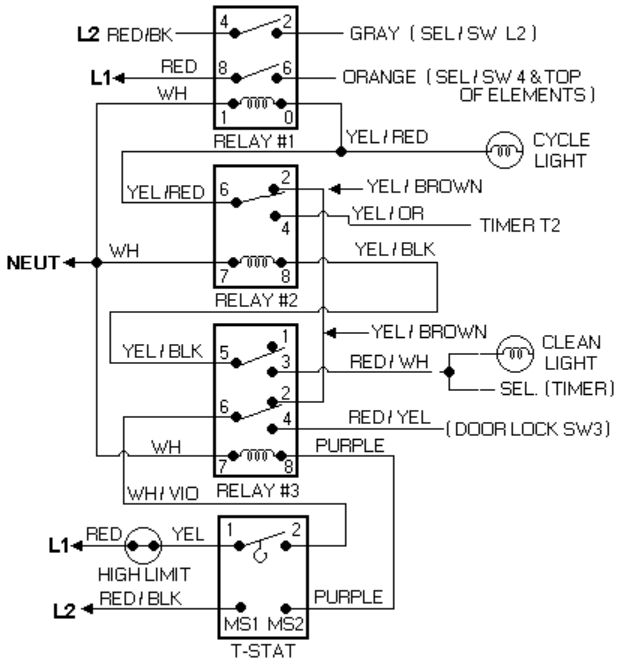




RELAY #1 Terminal Layout

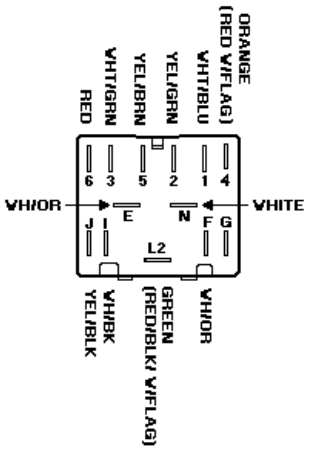
RELAY #2 Terminal Layout

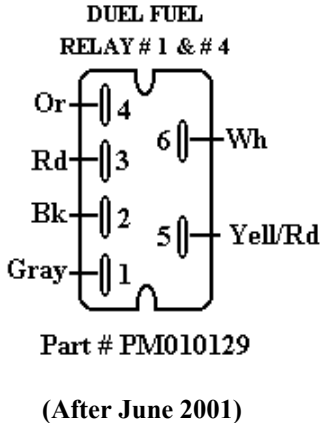
RELAY #3 Terminal Layout



Viking Preferred Service
Tech - Notes

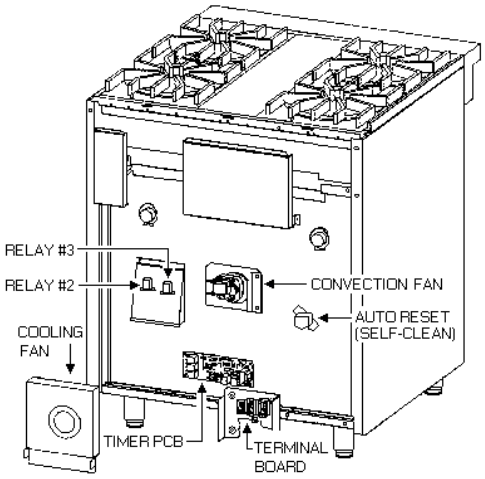
VDSC305 / 365 DUAL FUEL
Relay location and wiring connections

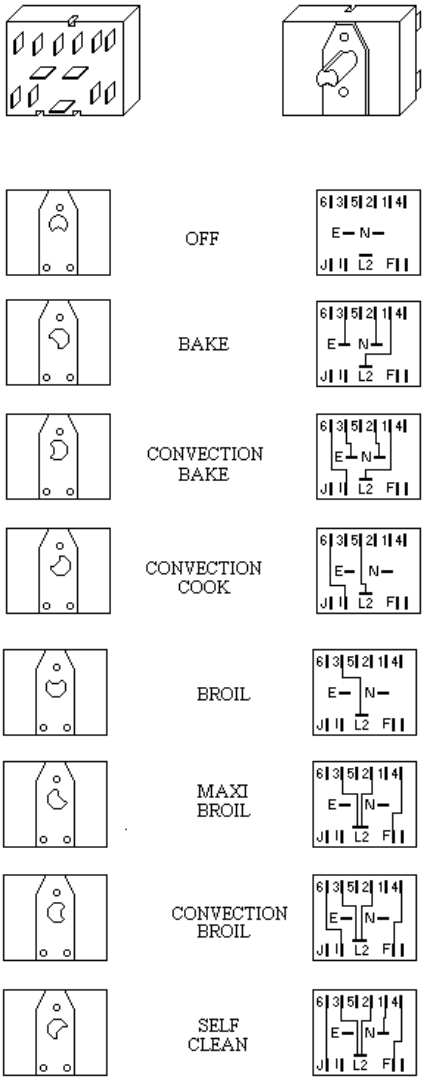


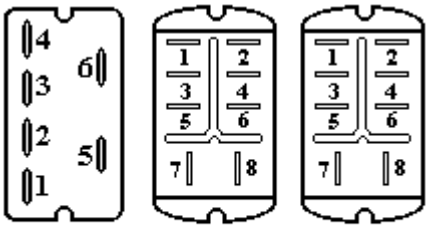


Part # PM010129

(After June 2001)



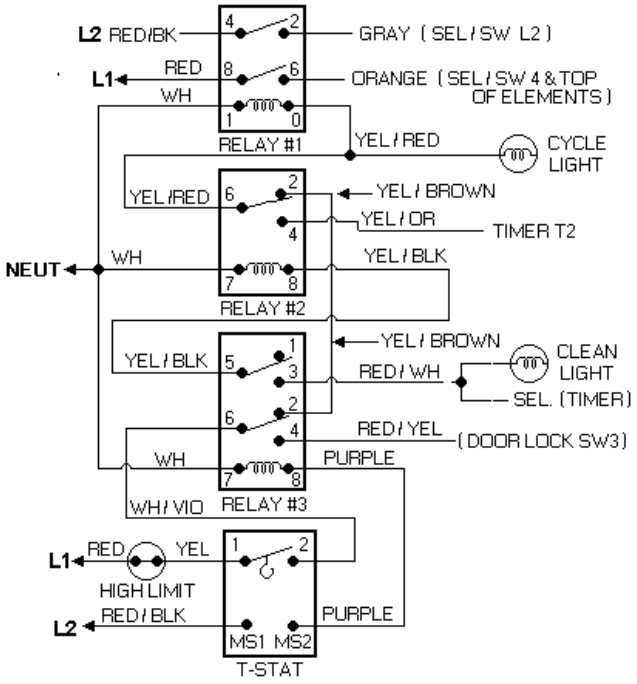




RELAY #1 Terminal Layout

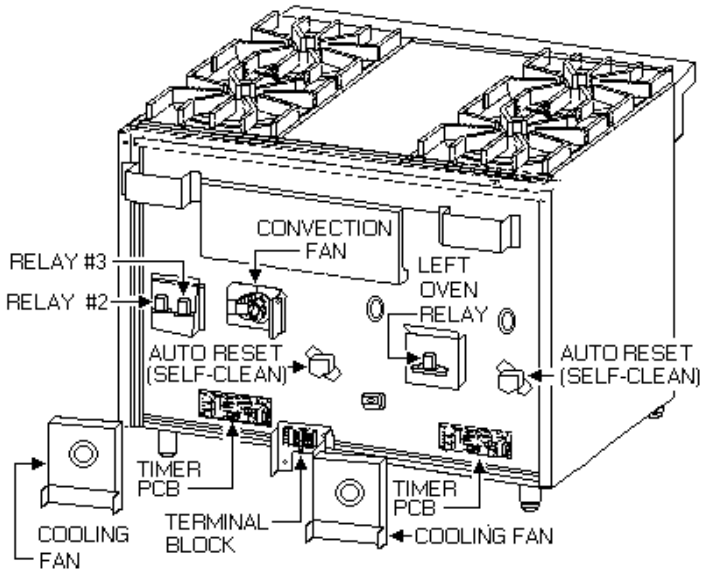
RELAY #2 Terminal Layout

RELAY #3 Terminal Layout



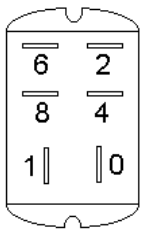
BEFORE JUNE 2001

VDSC485 DUAL FUEL SELF-CLEAN

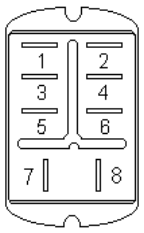


VDSC485 DUEL FUEL
Relay location and wiring connection

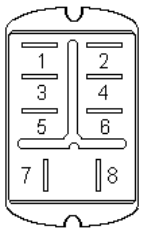
RIGHT HAND OVEN



RELAY # 1
Terminal Layout

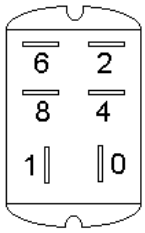


RELAY # 2
Terminal Layout

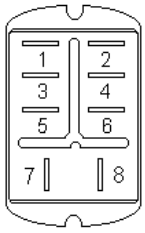


RELAY # 3
Terminal Layout

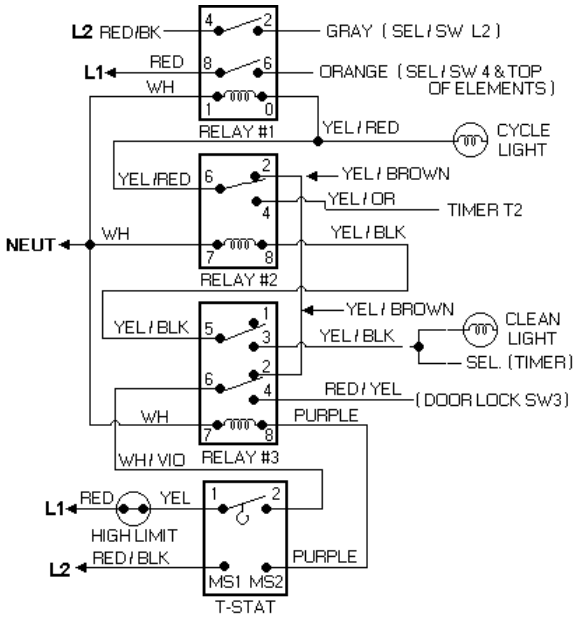
LEFT HAND OVEN

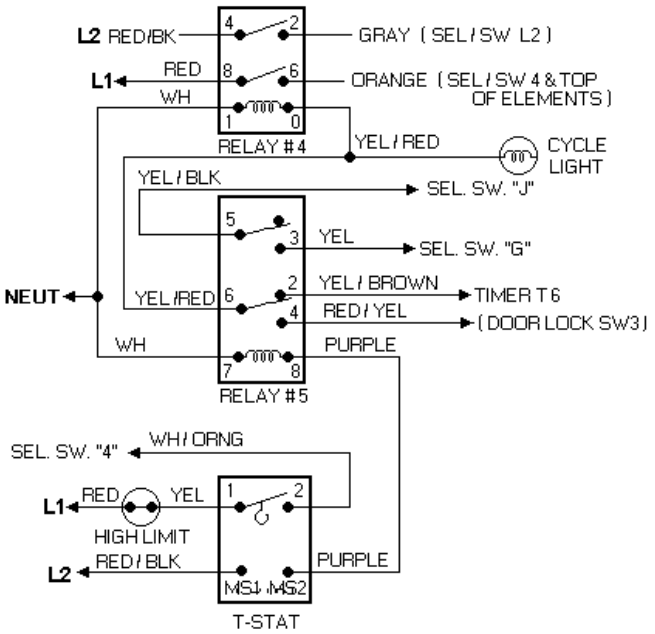


RELAY # 4
Terminal Layout



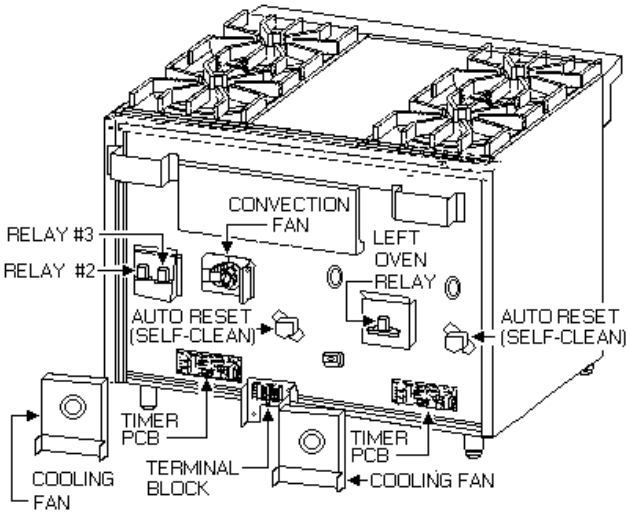
RELAY # 5
Terminal Layout

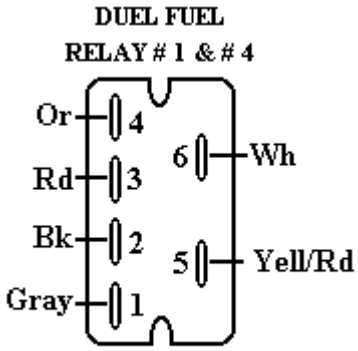




Viking Preferred Service
Tech - Notes

VDSC485 DUAL FUEL SELF-CLEAN



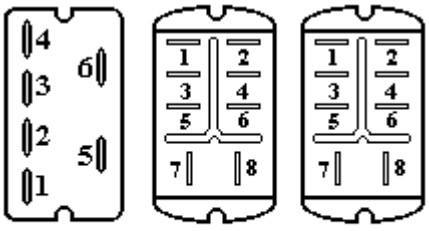


Part # PM010129

(After June 2001)

Relay location and wiring connections

RIGHT HAND OVEN

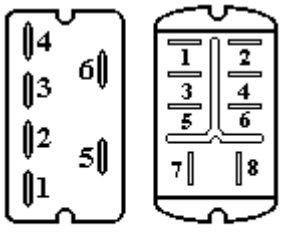


RELAY #1 Terminal Layout

RELAY #2 Terminal Layout

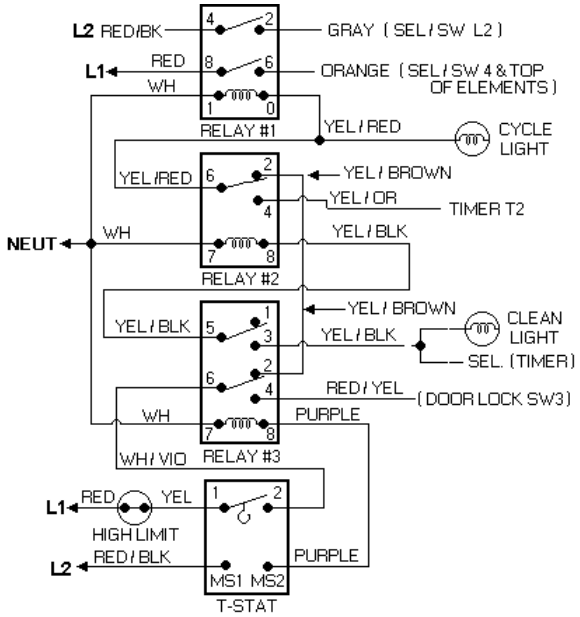
RELAY #3 Terminal Layout

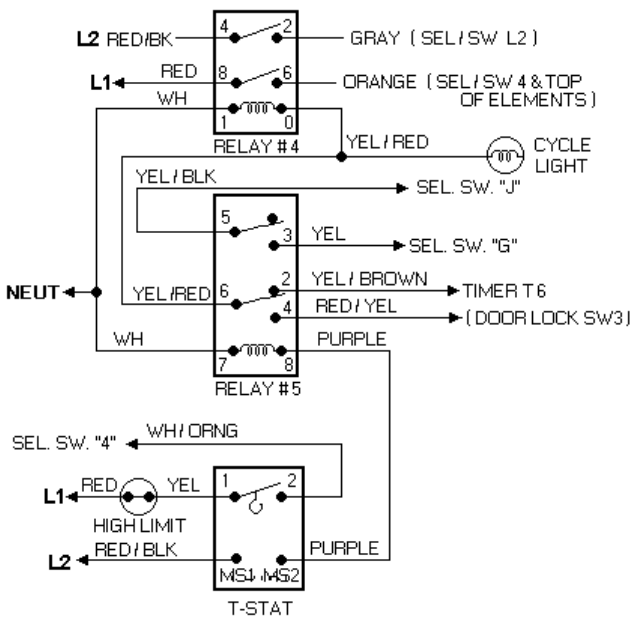
LEFT HAND OVEN



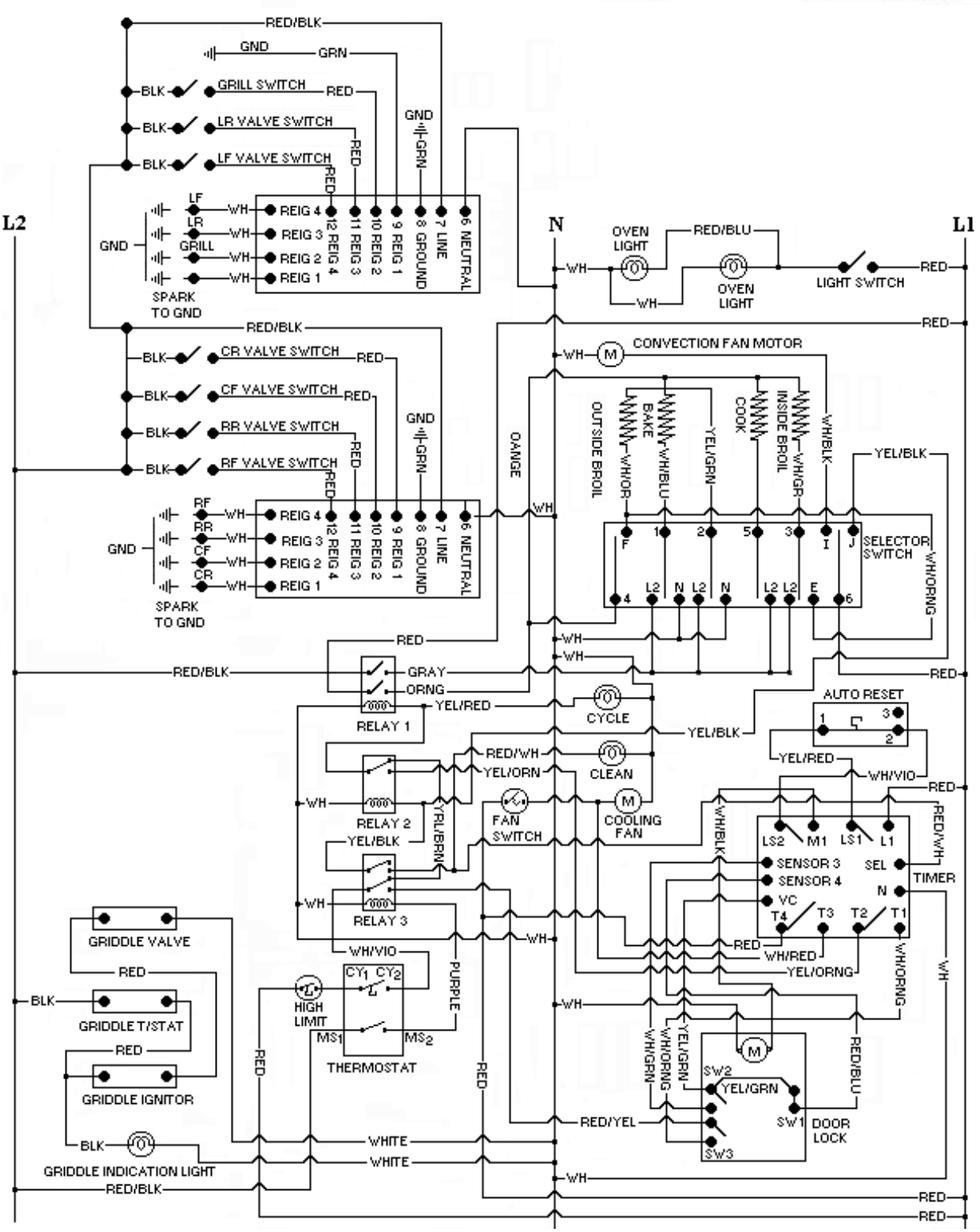
RELAY #4 Terminal Layout

RELAY #5 Terminal Layout

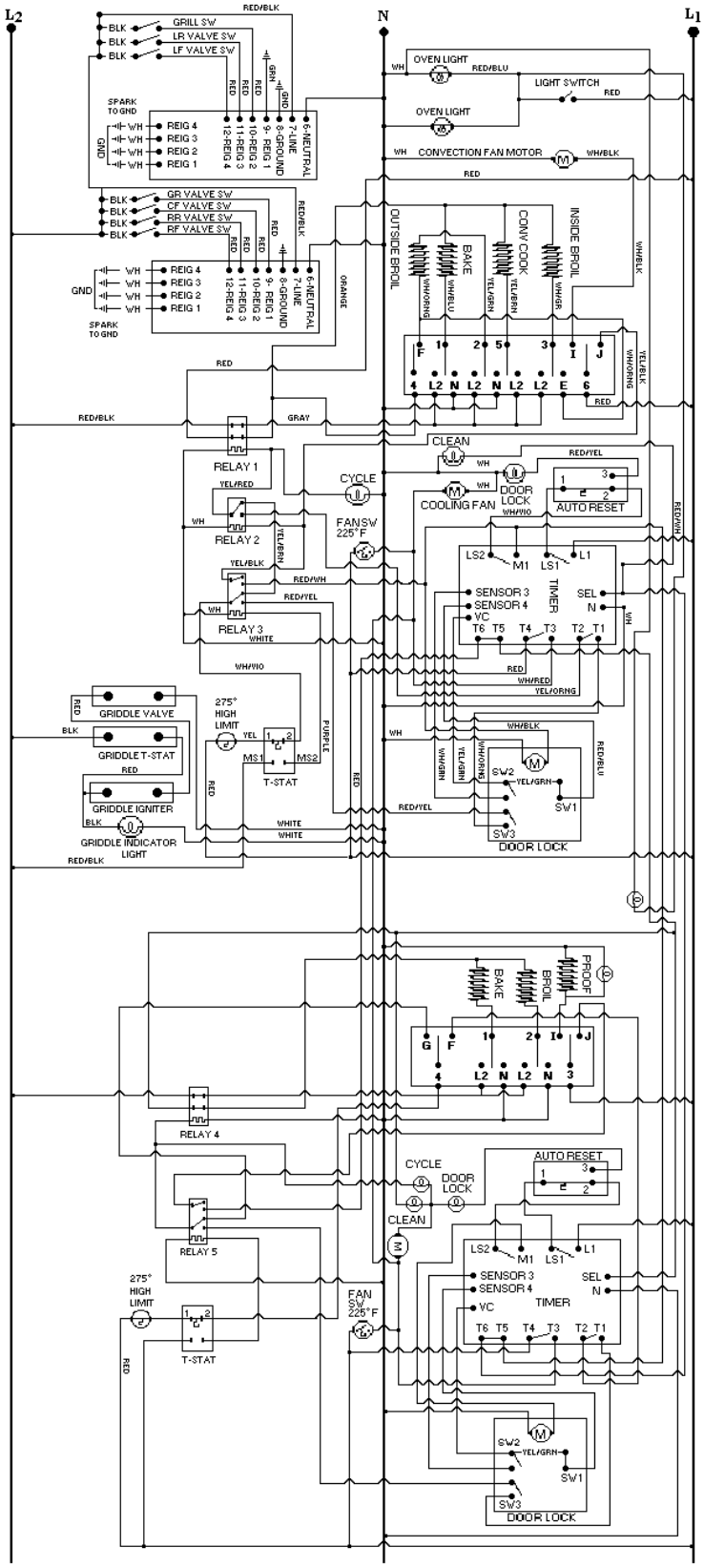




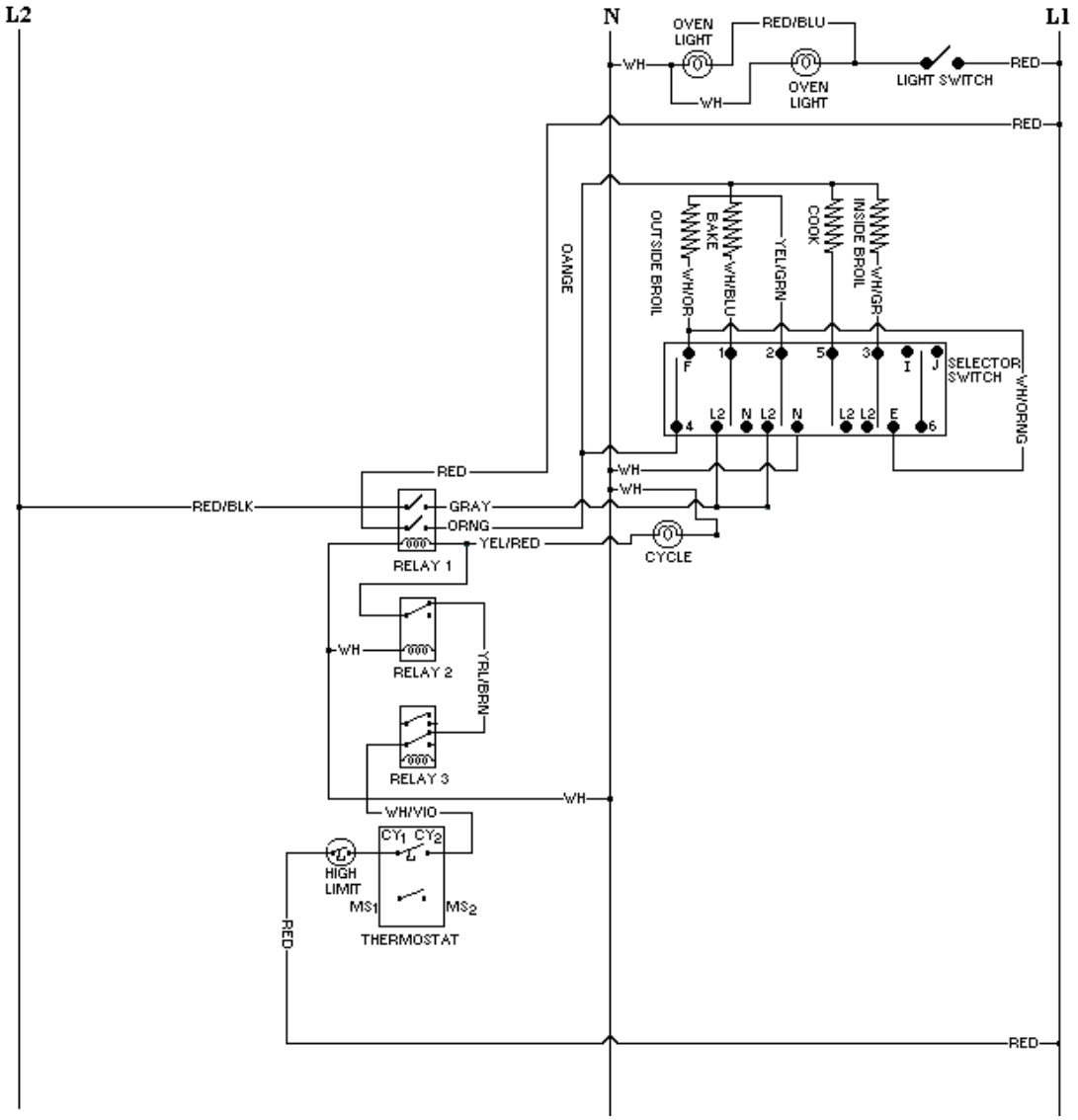
WIRING DIAGRAM
DUAL FUEL 30" W & 36" W CONVECTION RANGES



WIRING DIAGRAM
DUAL FUEL 48" W. CONVECTION RANGES

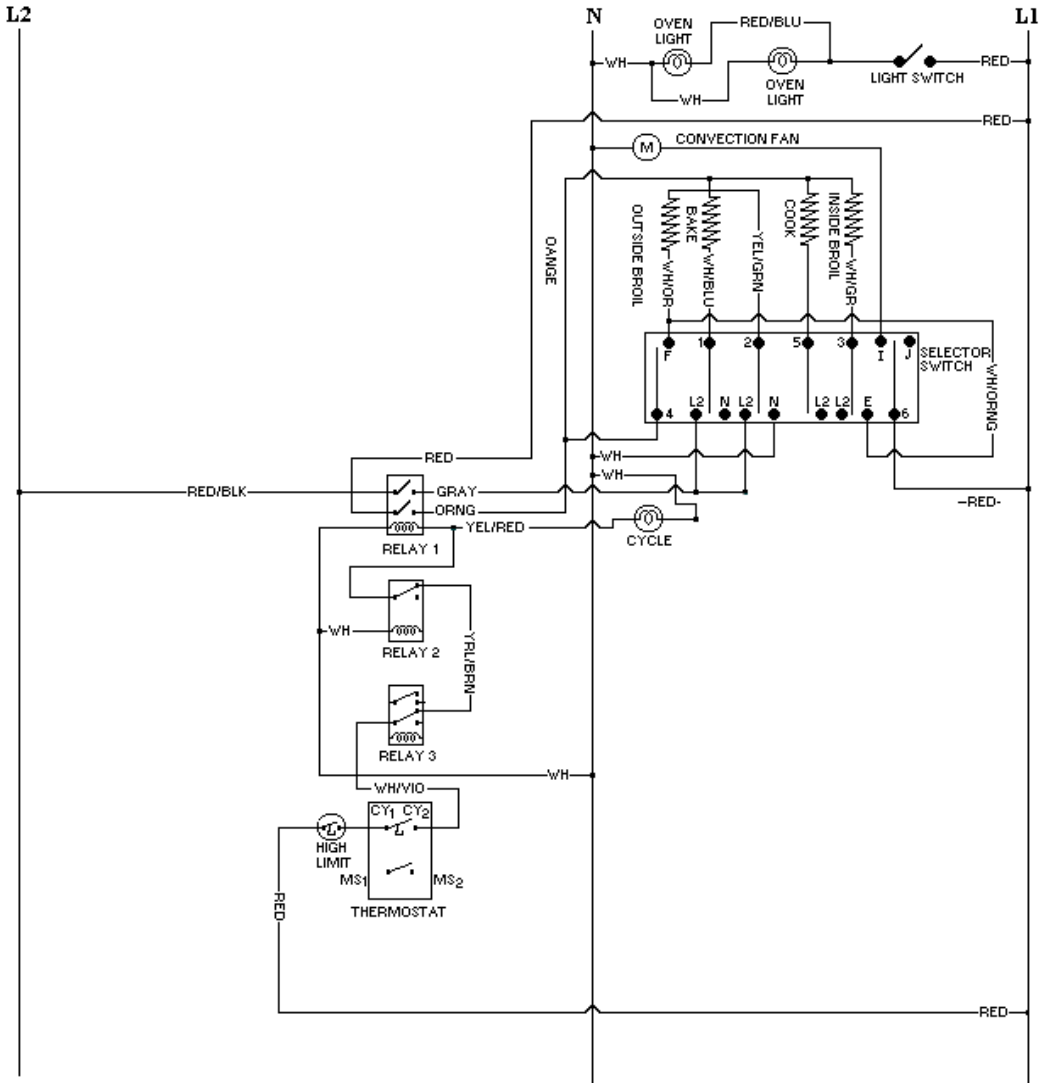


WIRING DIAGRAM
DUAL FUEL BAKE



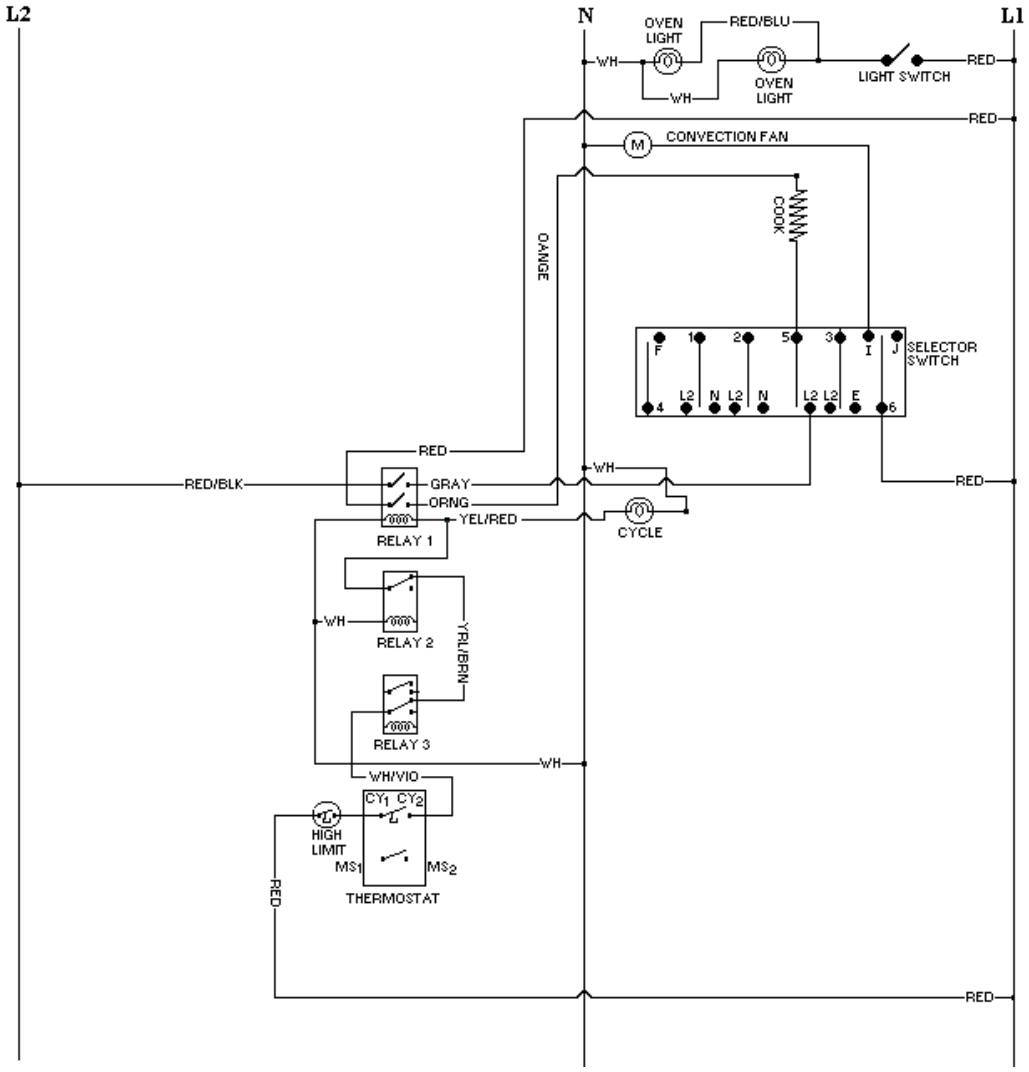
Selector Bake position closes Switches 1 – L2, 2 – N, and 3 – E. The thermostat closes Switches Cy1 – Cy2, which cycles with the oven temperature powering Relay 1 and the Oven Cycle Light. When Relay 1 closes, it powers the Bake Element at 208 / 240V, and with the Broil Element in series across a 120V circuit, powers the inside Broil Element at 70V and the Outside Broil Element at 50V.

WIRING DIAGRAM
DUAL FUEL CONVECTION BAKE



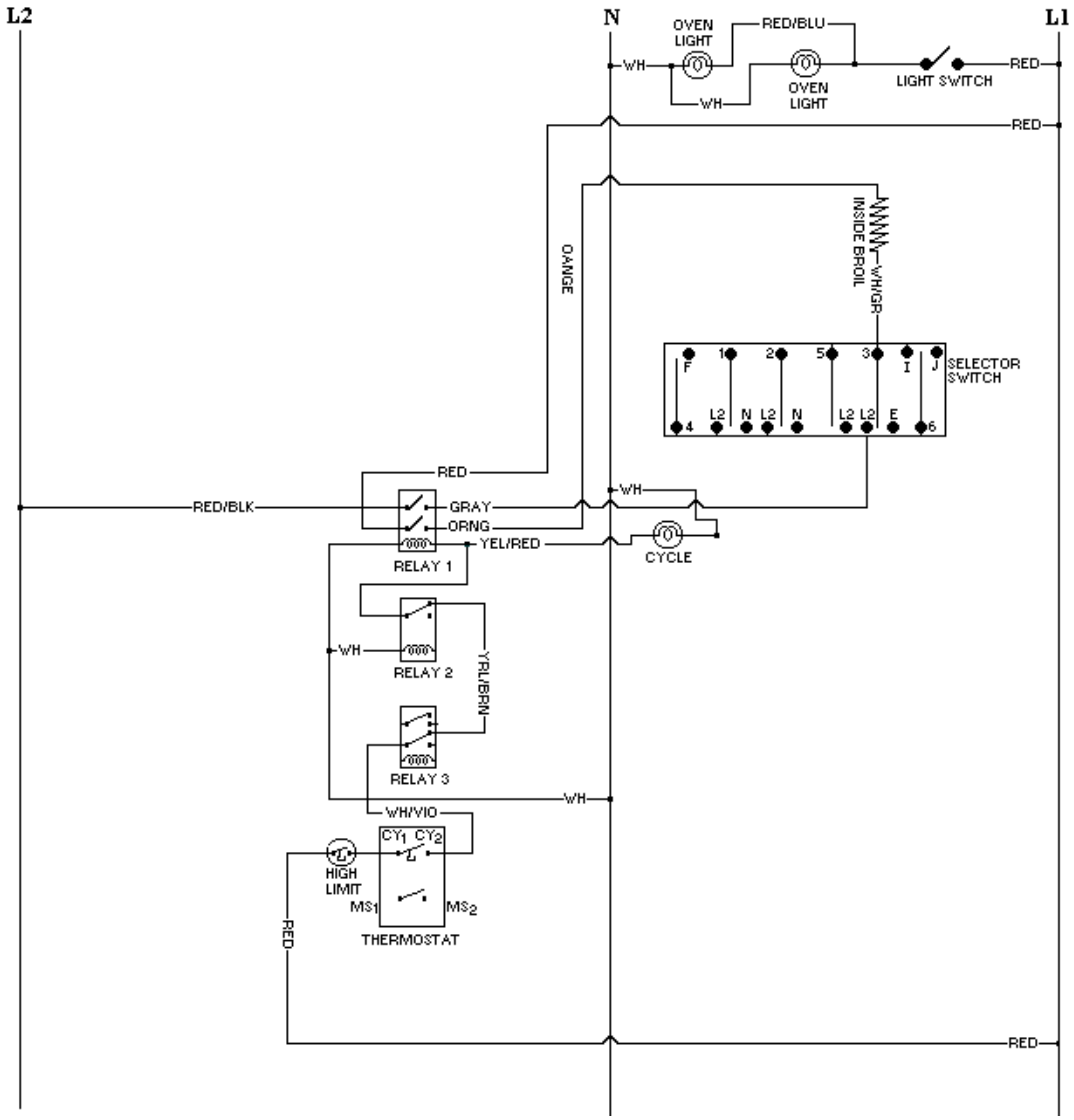
Selector Convection Bake position closes Switches 1 – L2, 2 – N, 3 – E, and 6 – I, 6 – I powers the Convection Fan through L1 at 120V. The Thermostat closes Switches Cy1 – Cy2, which cycles with the oven temperature powering Relay1 and the Oven Cycle Light. When Relay 1 closes, it powers the Bake Element at 208 / 240V, and with the Broil Elements in series across a 120V circuit, it powers the Inside Broil Element at 70V and the Outside Broil Element at 50V.

WIRING DIAGRAM
DUAL FUEL CONVECTION COOK



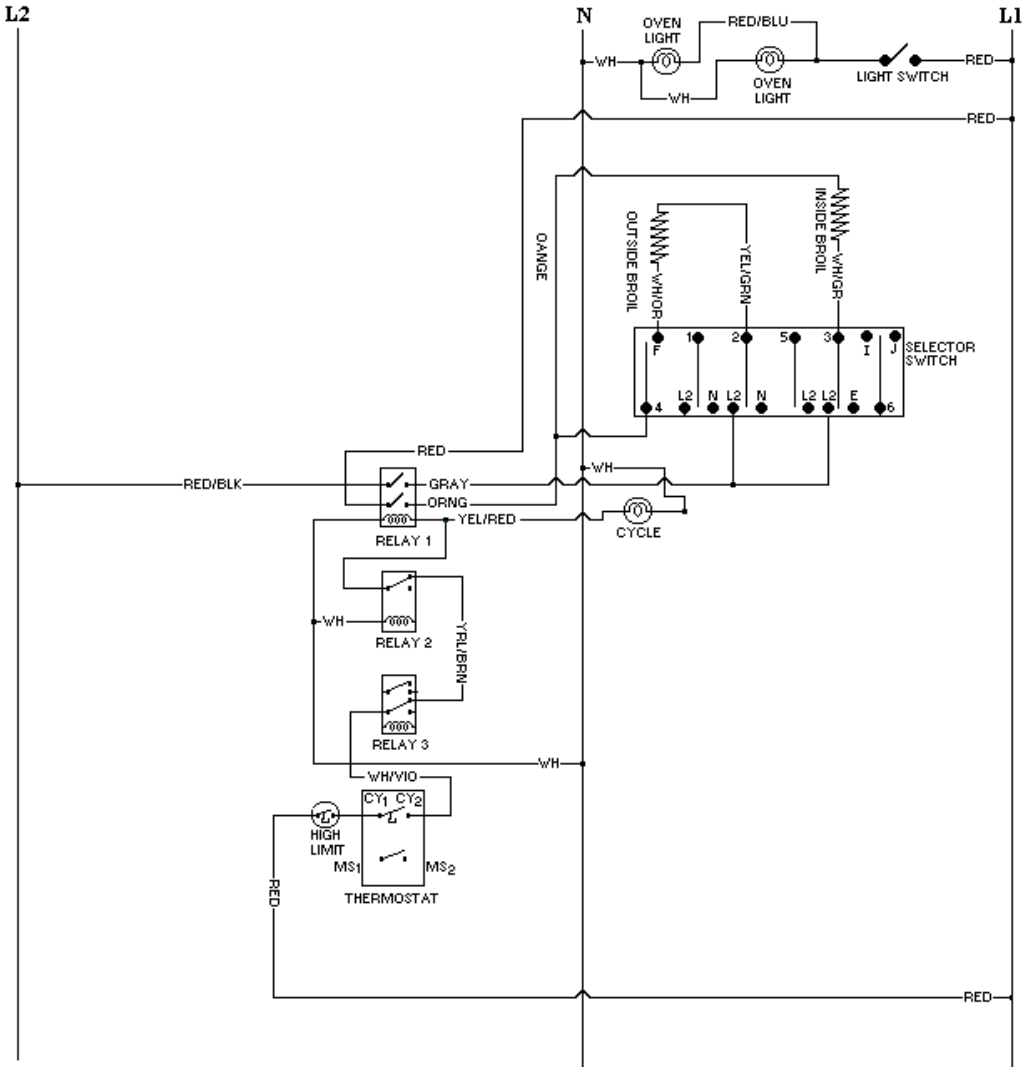
Selector Convection Cook position closes Switches 5 – L2, and 6 – 1, 6 – 1 powers the Convection Fan through L1 at 120V. The Thermostat closes Switch Cy1 – Cy2, which cycles with the Oven Temperature, powering Relay1 and the Oven Cycle Light. When Relay 1 closes, it powers the Convection Element at 208 / 240V.

WIRING DIAGRAM
DUAL FUEL MINI BROIL



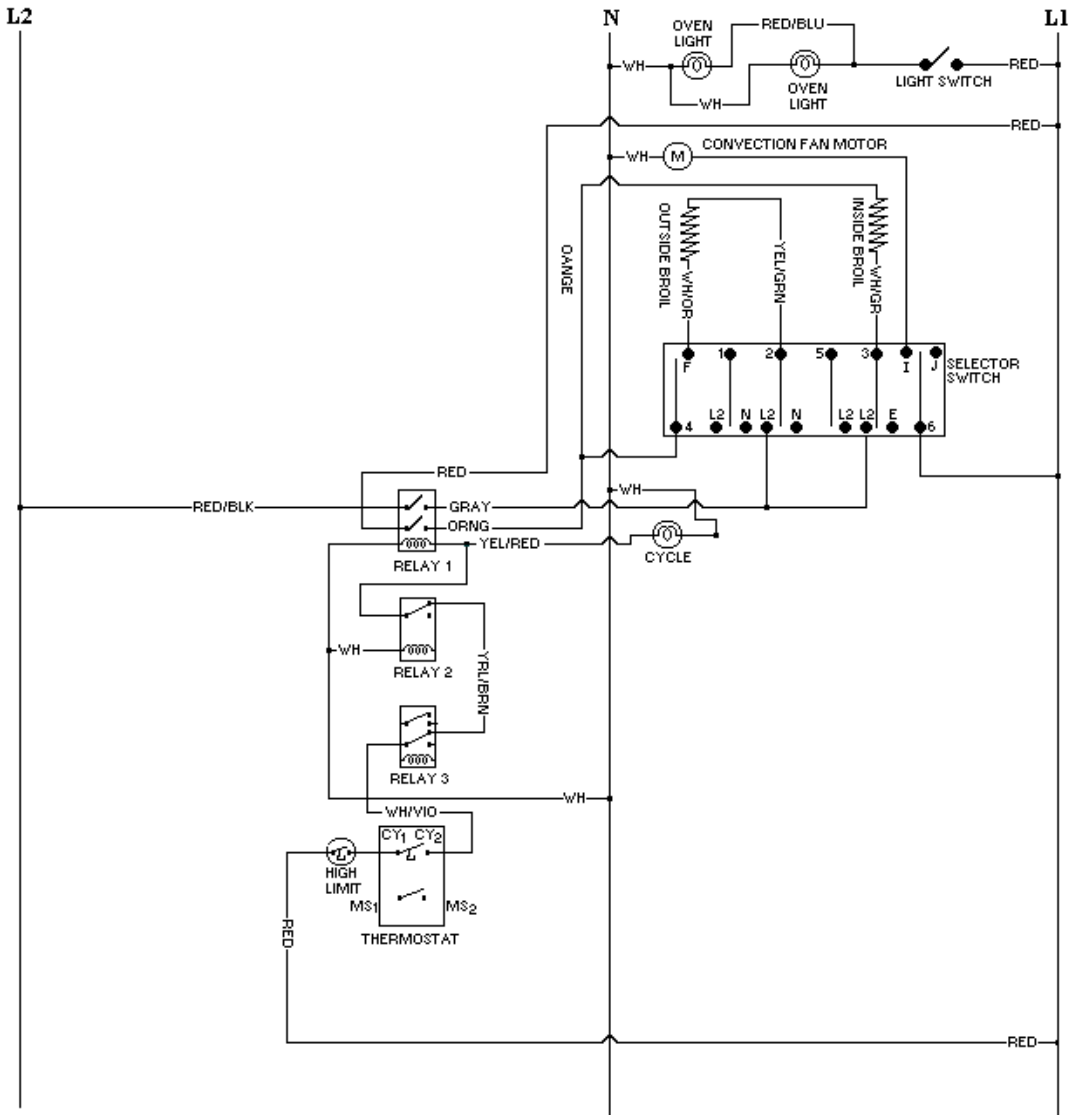
Selector Mini Broil position closes Switches 3 – L2. The Thermostat closes Switch Cy1 – Cy2, powering Relay 1 and the Oven Cycle Light. When Relay 1 closes, it powers the Inside Broil Element at 208 / 240V.

WIRING DIAGRAM
DUAL FUEL MAXI BROIL



Selector Maxi Broil position closes Switches 4 – F, 2 – L2, and 3 – L2. The Thermostat closes Switch Cy1 – Cy2, which cycles with the Oven Temperature, powering Relay 1 and the Oven Cycle Light. When Relay 1 closes, it powers the Inside Broil Element at 208 / 240V and the Outside Broil Element at 208 / 240V.

WIRING DIAGRAM
DUAL FUEL CONVECTION BROIL



Selector Convection Broil position closes Switches 4 – F, 2 – L2, 3 – L2, and 6 – I. 6 – I powers the Convection Fan through L1 at 120V. The Thermostat closes Switches Cy1 – Cy2, which cycles with the Oven Temperature, powering Relay 1 and the Oven Cycle Light. When Relay 2 closes it powers the Inside Broil Element at 209 / 240V and the Outside Broil Element at 208 / 240V.

WIRING DIAGRAM
DUAL FUEL SELF-CLEAN

CLEAN DOOR LOCK BELOW 575°F ± 25°F

SELECTOR SWITCH closes Heating Element contacts 4 – F, 1 – N, 2 – L2, 3 – L2 and Door Lock Module / Timer contacts J – 6 energizing Relay #2.

THERMOSTAT CLEAN POSITION closes Thermostat cycling contacts 1 – 2 and normally open (N) – common © energizing Relay #3.

RELAY #3 turns on the clean indicator Light and energizes Door Lock Module / Timer (PC board) Relays LS1 – L1 and LS2 – M1, also supplying 120VAC to SEL on the PC board.

RELAYS LS1 and LS2 turns the door Lock Motor on through the Auto Reset Thermostat contacts 2 – 1.

DOOR LOCK MOTOR rotates opening SW1 and closing SW3.

DOOR LOCK SWITCH #2 completes the circuit to sensor #3 on the PC board. After 10 seconds LS1 – M1 opens, stopping the Door Lock motion.

DOOR LOCK SWITCH #3 closes T1 – T2 and T3 – T4 energizing Power Relay #1 and the cooling Fan. Closing Power Relay #1's contacts supplies 240VAC to both Broil Elements and 120vac to the Bake Element.

CLEAN DOOR LOCK ABOVE 575°F ± 25°F

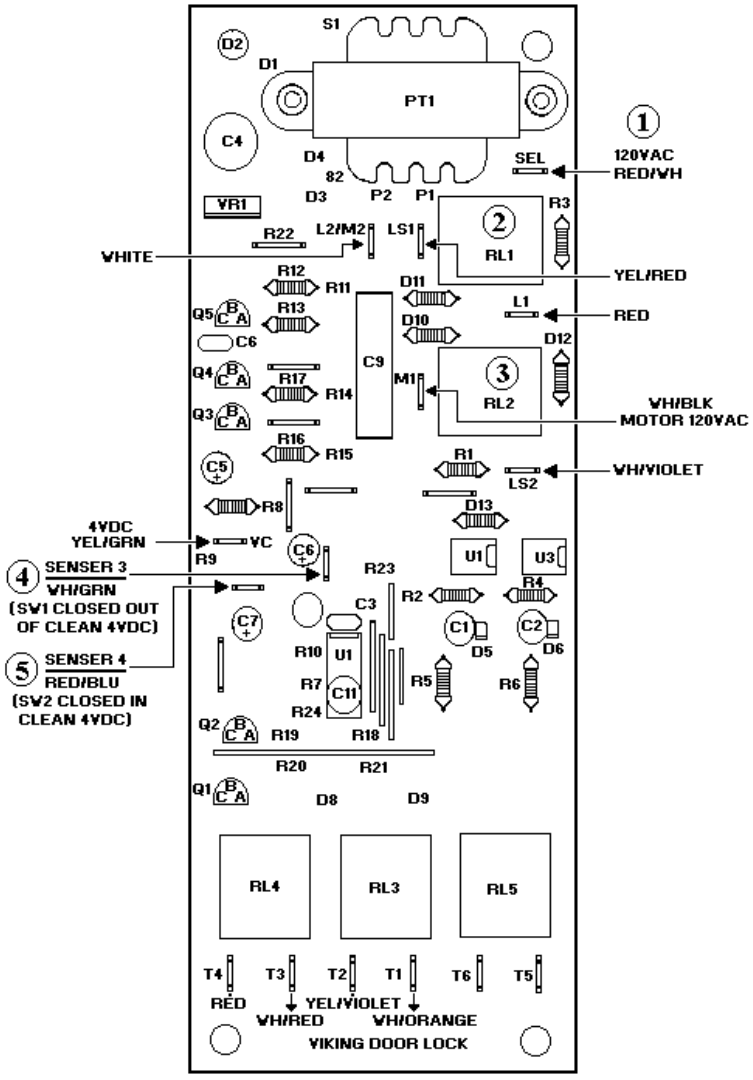
AUTO RESET THERMOSTAT switches to contacts 1 – 3 turning on the Door Lock indicator Light and disables the Door Lock Motor circuit.

CLEAN TEMPERATURE (875°F) REACHED

DOOR LOCK MODULE / TIMER opens T3 – T4 and T1 – T2 turning off the cooling Fan, now powered by the Fan Limit Switch when needed, and opens the circuit to the Power Relay #1 disabling the Heating Elements.

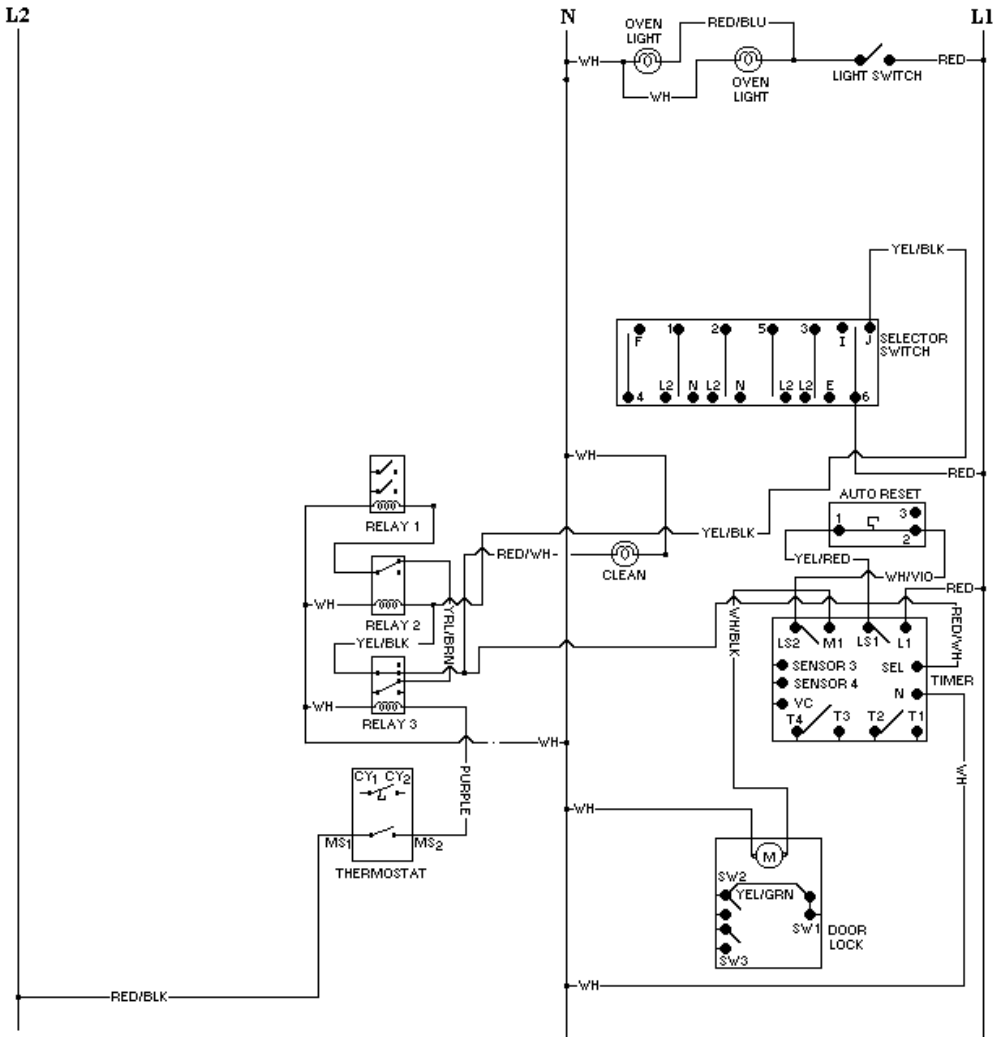
FINAL BELOW 575°F ± 25°F

AUTO RESET THERMOSTAT switches to contacts 1 – 2, turning off the Door Lock Motor circuit through Door Lock Motor / Time Relay LS2 – M1. Door Lock Motor operates until 2 seconds after sensor 4 is signaled be VC that the Door Lock switch SW1 has been closed mechanically by the Door Lock Bolt. The Door Lock / Timer switches LS2 – M1 and LS2 – L1 open and the timer resets.



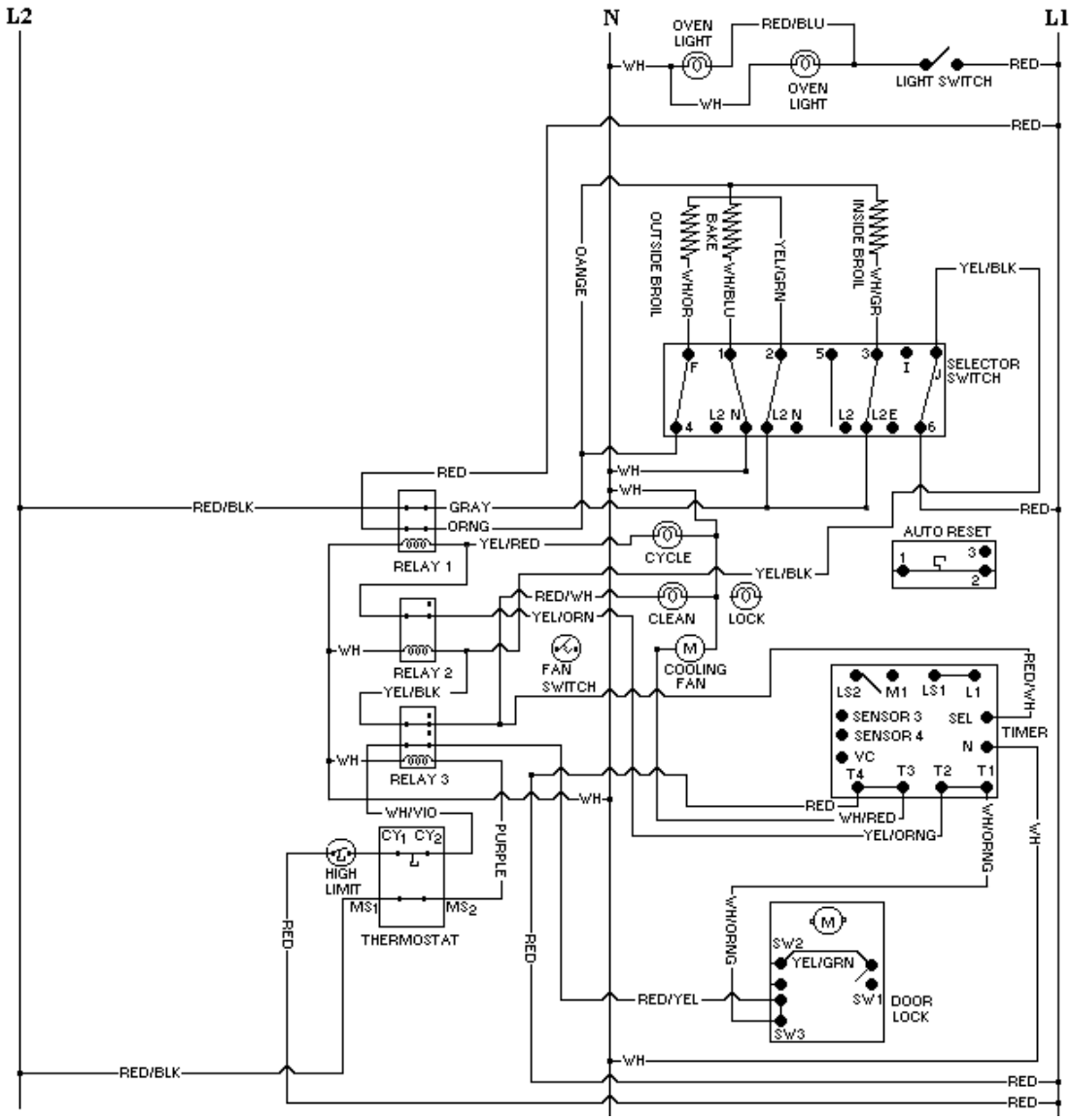
CONTROL CIRCUIT BOARD

WIRING DIAGRAM
DUAL FUEL CLEAN INITIATE UNTIL DOOR LOCK



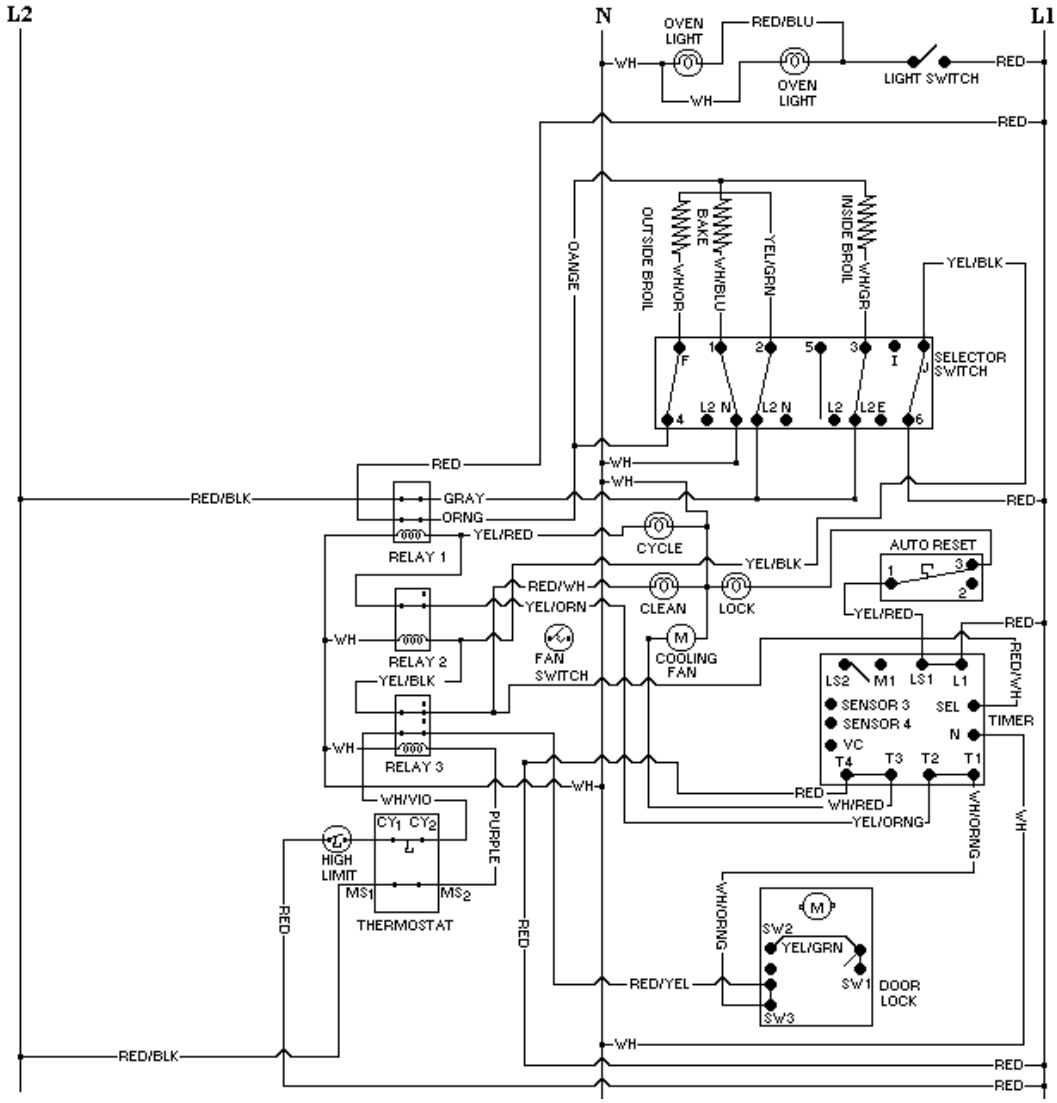
Selector Clean position closes Heating Elements circuits 4 – F, 1 – N, 2 – L2, 3 – L2 and Door Lock Module / Timer circuit J – 6 switches Relay #2. Thermostat clean position closes the Cycle Switch and Thermostat Clean Switch, which switches Relay #3. Switching Relay #3 allows circuit J – 6 to turn on the Clean Indicator Light and enable the Door Lock Module / Timer which closes Relays LS1 – L1 and LS2 – M1. This powers the Door Lock Motor until 10 seconds after Sensor 3 is signaled be VC that Door Lock Switch SW2 has been closed mechanically (along with SW3) by the Door Lock Bolt.

WIRING DIAGRAM
DUAL FUEL CLEAN DOOR LOCK BELOW 575°F ± 25°F



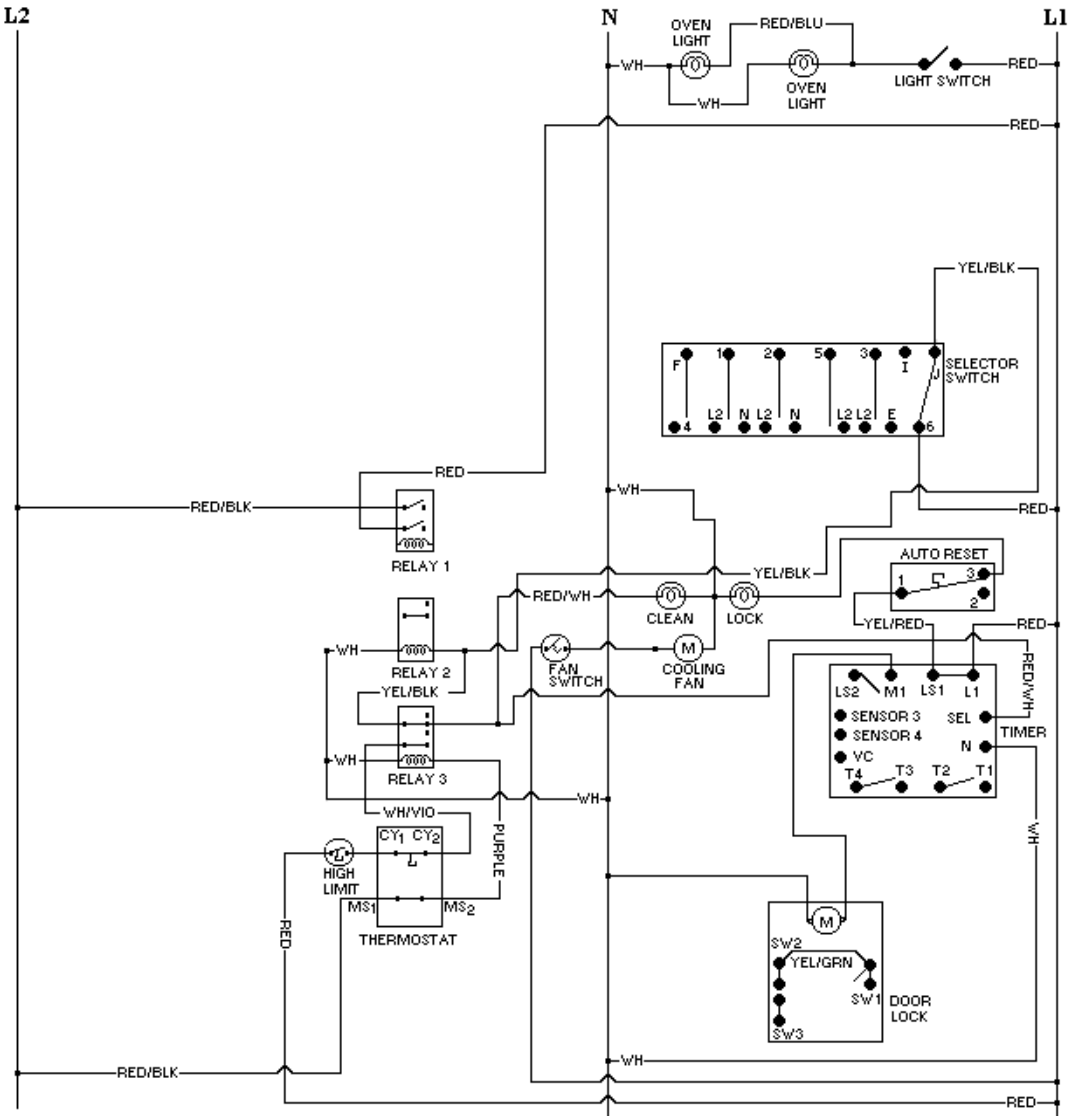
10 seconds after the signal to Sensor 3, Switch LS2 – M1 is opened, stopping the door lock motion and switches T1 – T2, and T3 – T4 which switches Relay #1, powering the Cooling Fan, which closes Relay #1 powering the Inside and Outside Broil Elements to 208V / 240V and the Bake Element to 120V.

WIRING DIAGRAM
DUAL FUEL CLEAN DOOR LOCK ABOVE 575°F ± 25°F



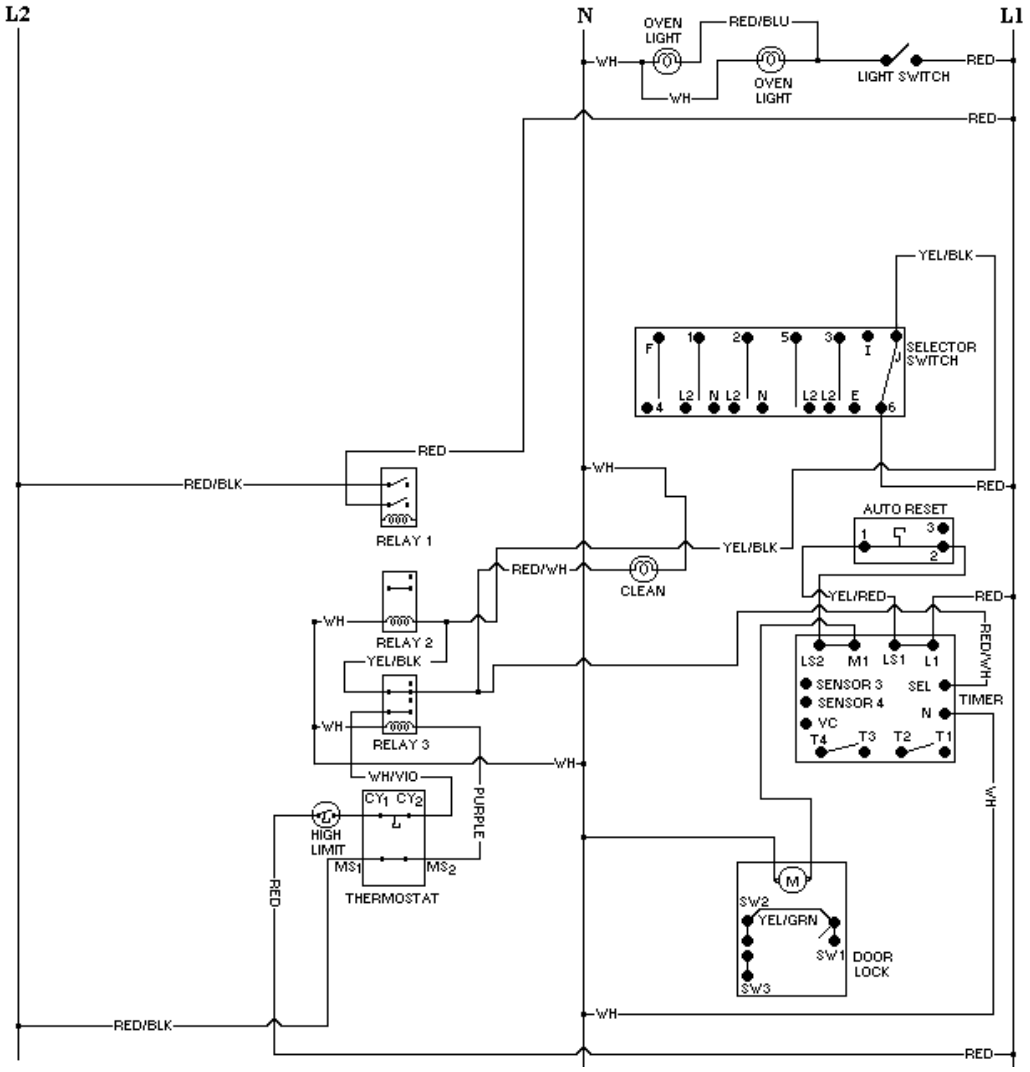
Auto Reset switches to 1 – 3 which turns Door Lock Indicator on and disables Door Lock Motor circuit.

WIRING DIAGRAM
DUAL FUEL CLEAN FINISH DOOR LOCK ABOVE 575°F ± 25°F



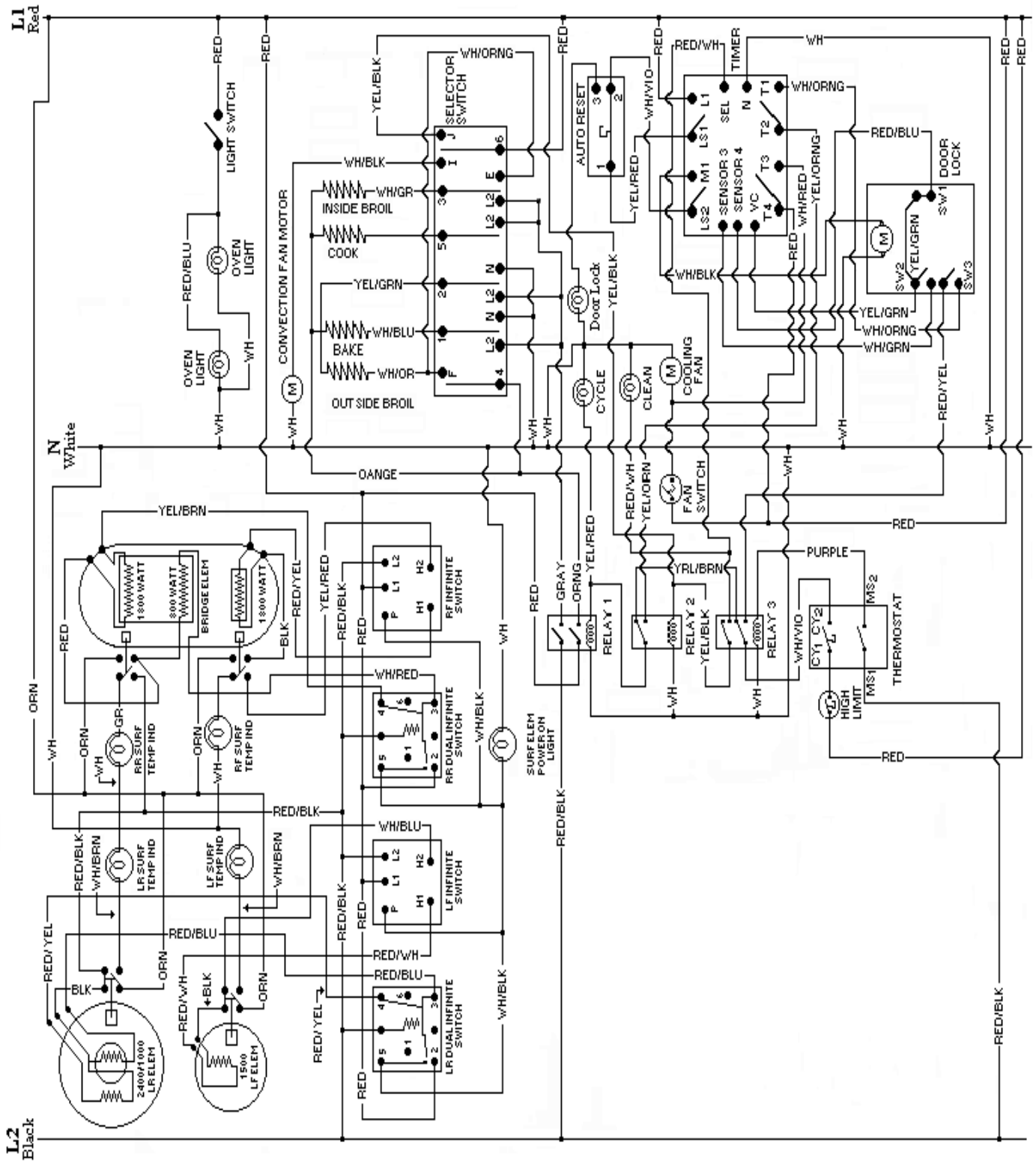
Timer Switches T3 – T4, T1 – T2, open, turning off the Cooling Fan, which will then be powered at 120V by the Fan Limit Switch when needed, and opening the circuit to Relay #1 which disables the Heating Elements. Switch LS2 – M1 closes to power the Door Lock Motor.

WIRING DIAGRAM
DUAL FUEL CLEAN FINISHED DOOR LOCK BELOW 575°F ± 25°F

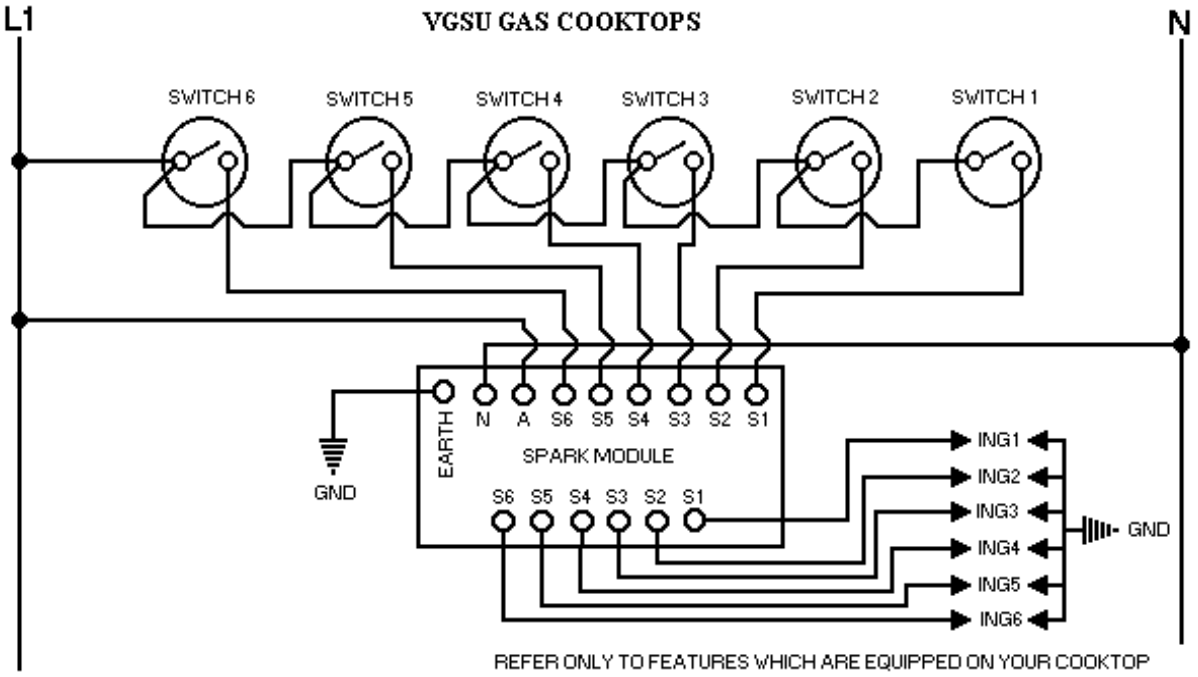


Auto Reset Switches 1 – 2 closed allowing the door Lock Motor to operate and turn the Door Lock Light off. The Door Lock Motor operates until 2 seconds after Sensor 4 is signaled by VC that the Door Lock / Timer switches LS2 – M1 and LS1 – L1 open and the Timer resets.

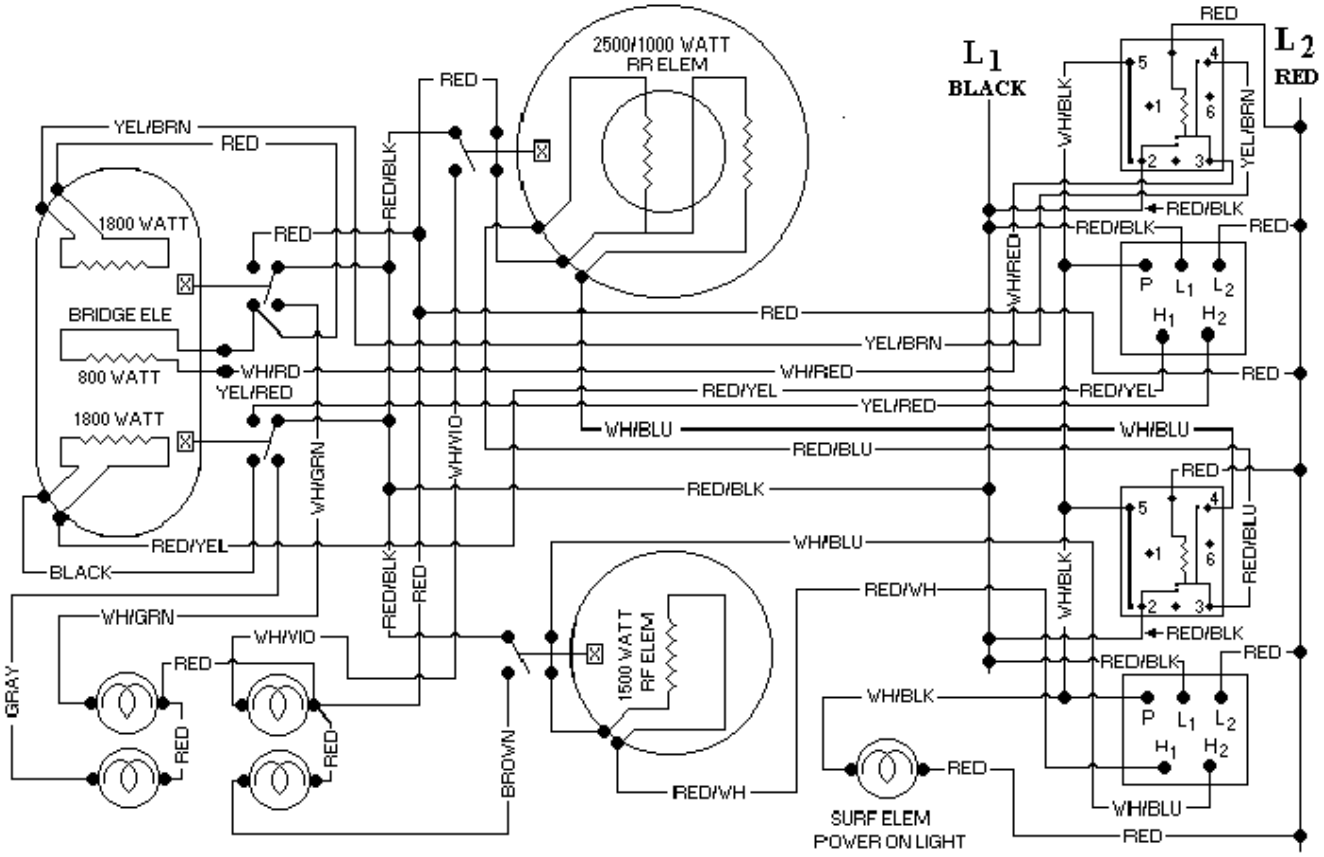
VESC305
WIRING DIAGRAM

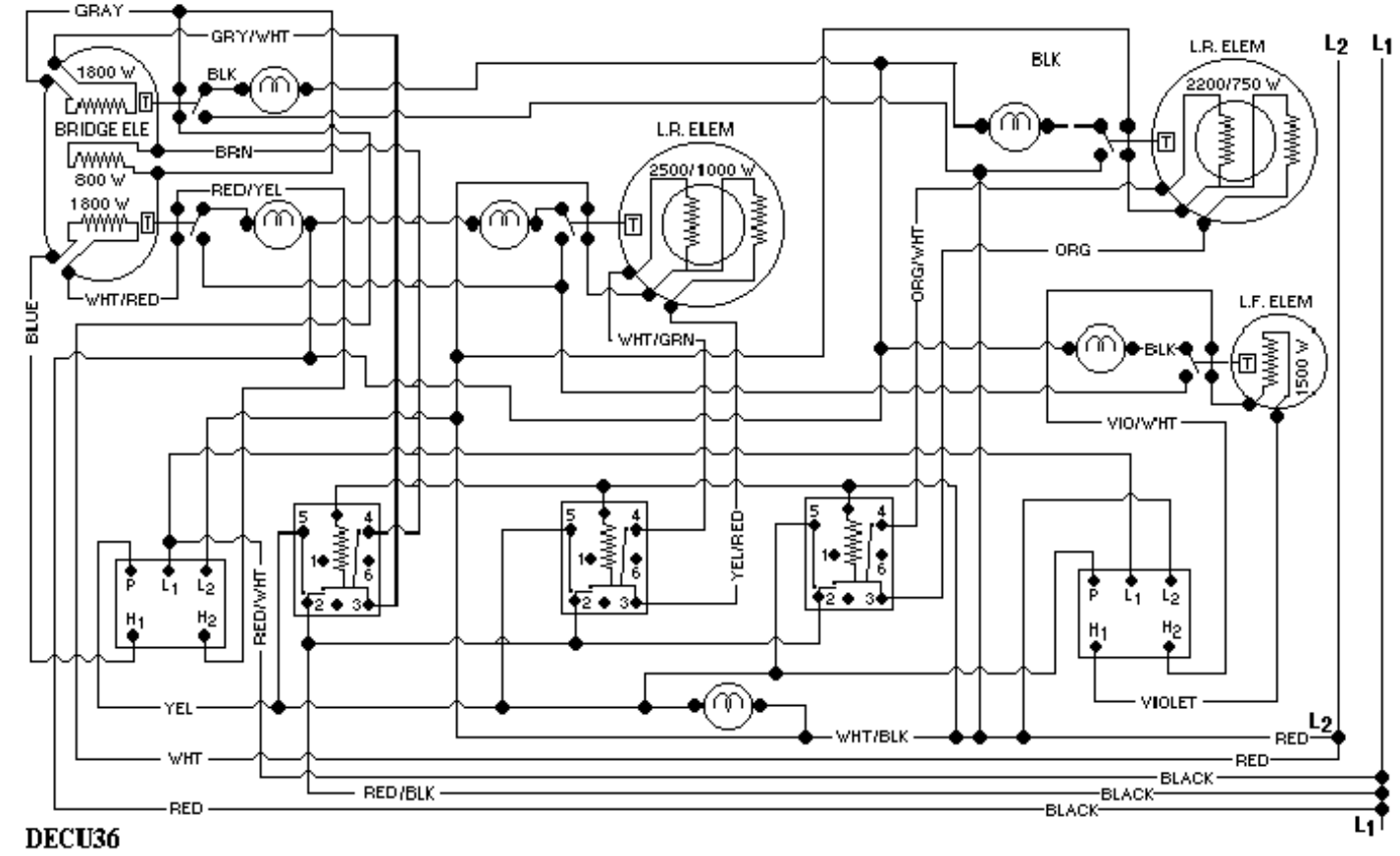


WIRING DIAGRAM
VGSU GAS COOKTOPS

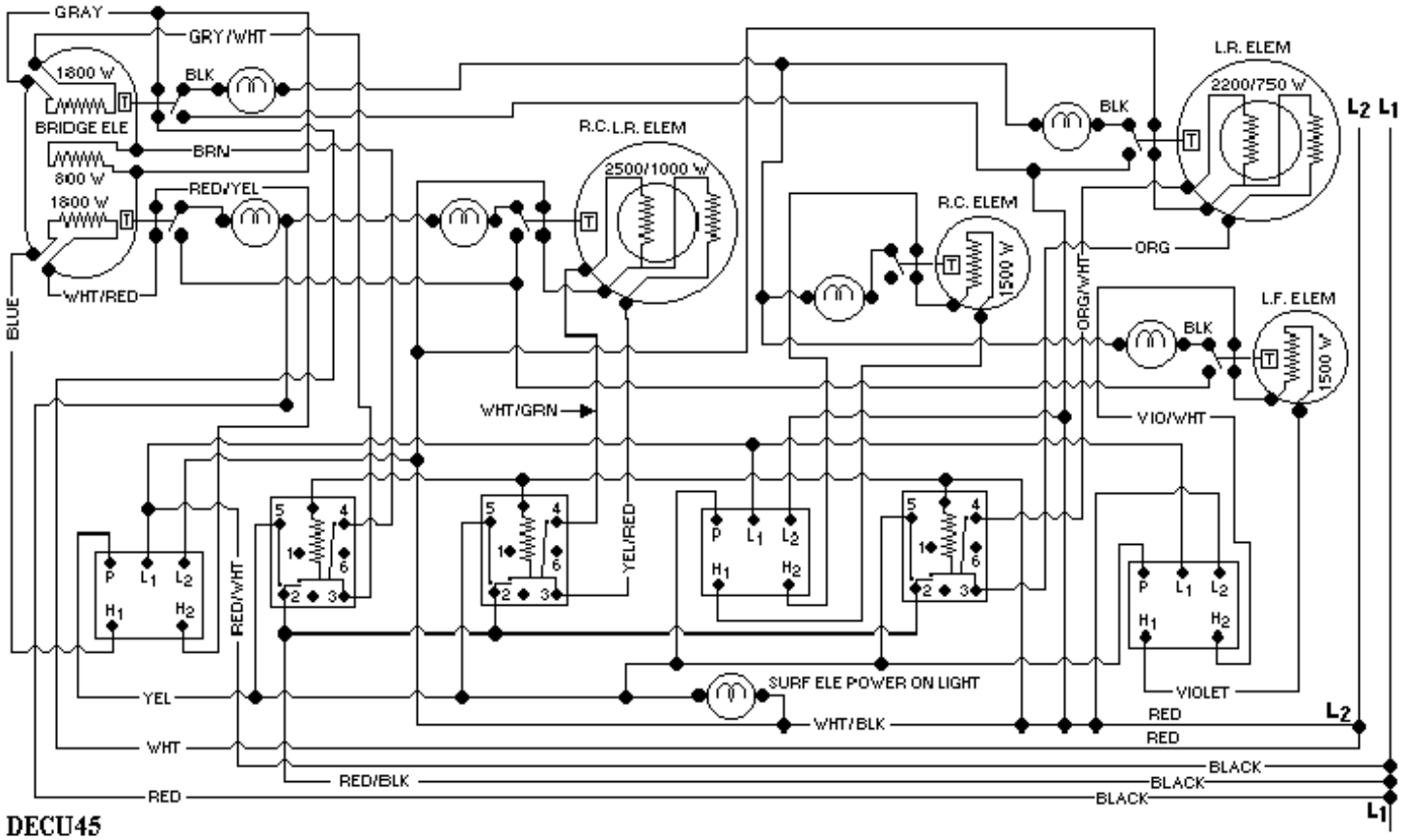


WIRING DIAGRAM
30" ELECTRIC RANGE TOP



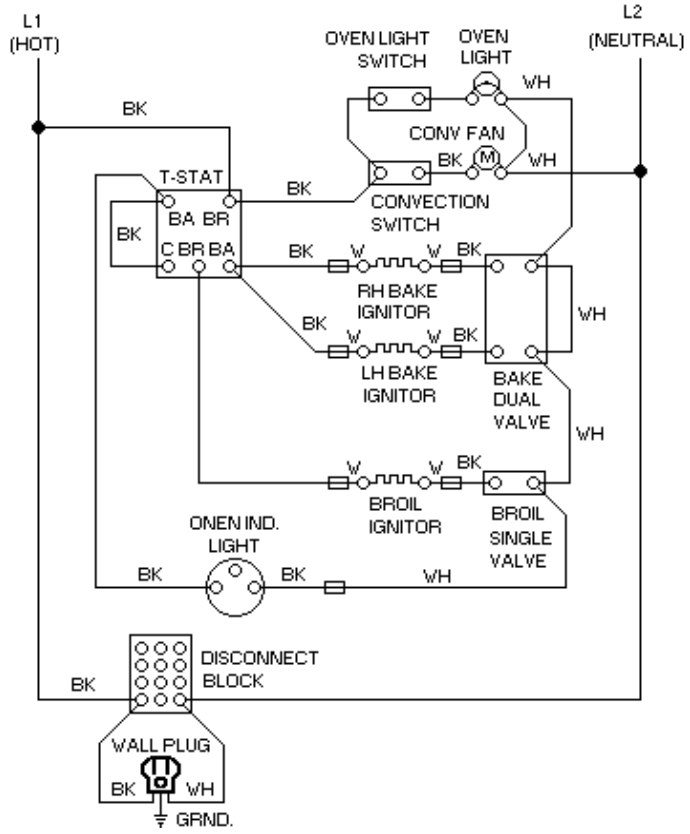


DECU36

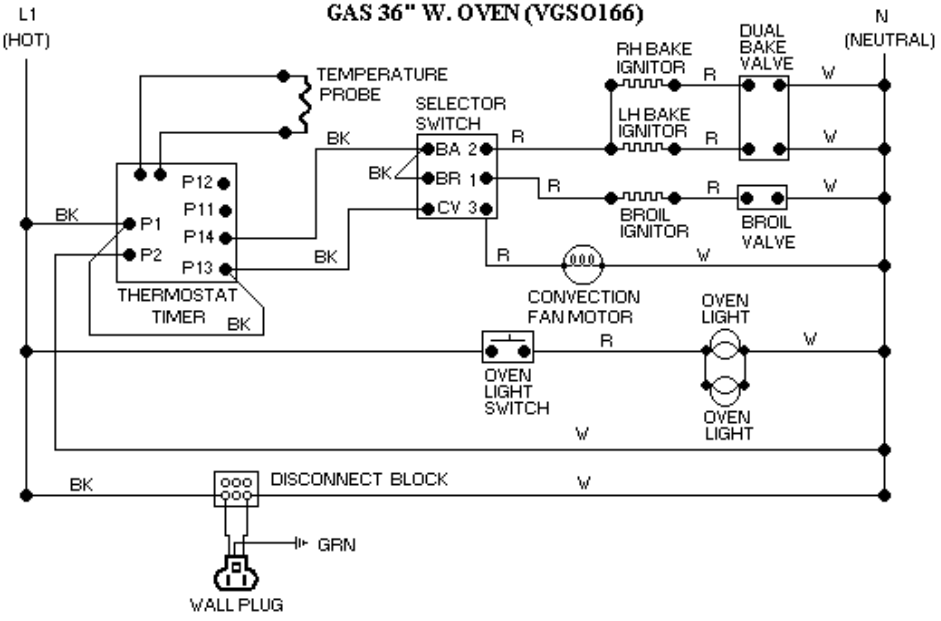


DECU45

WIRING DIAGRAM FOR BUILT-IN GAS 36" W. OVEN

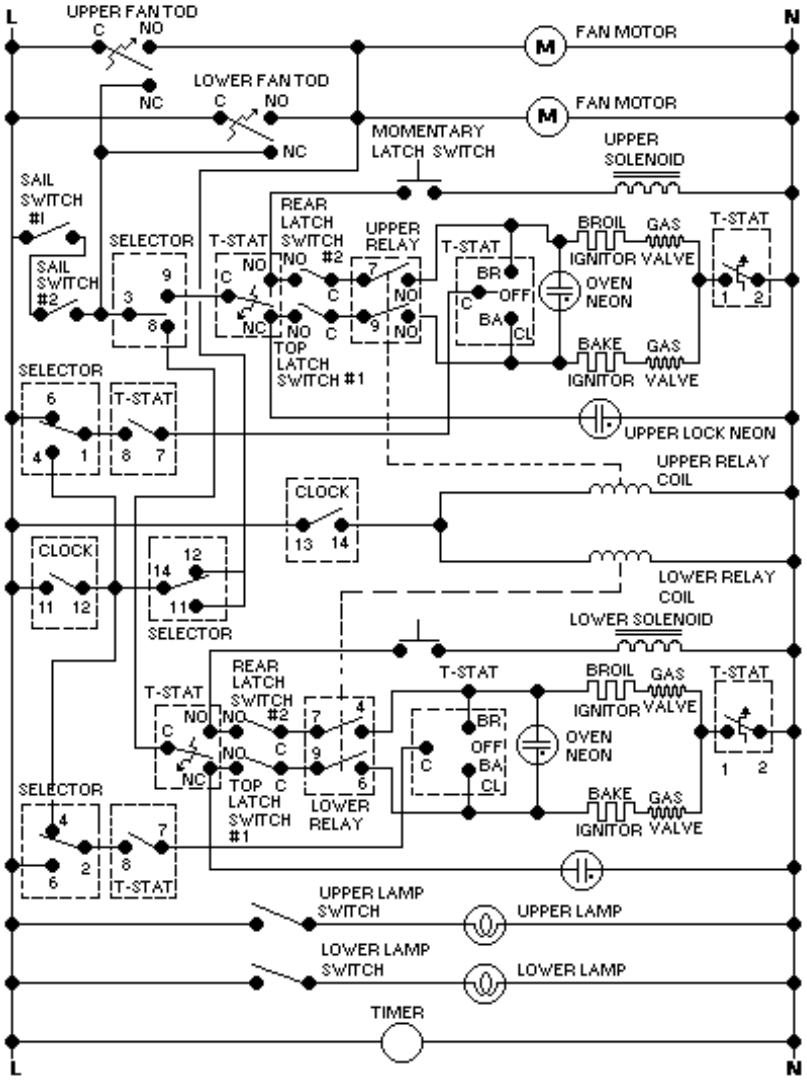


WIRING DIAGRAM GAS 36" W. OVEN (VGSO166)

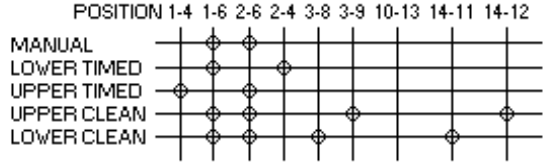


WARNING: ELECTRICAL GROUNDING INSTRUCTIONS: THIS APPLIANCE IS EQUIPPED WITH A THREE PRONG GROUNDING PLUG FOR YOUR PROTECTION AGAINST SHOCK HAZARD AND SHOULD BE POUGGED INTO A PROPERLY GROUNDED THREE PRONG RECEPTICAL. DO NOT REMOVE THE GROUNDING PRONG FROM THE PLUG.

VGDO WIRING DIAGRAM



SELECTOR SWITCH POSITION TABLE

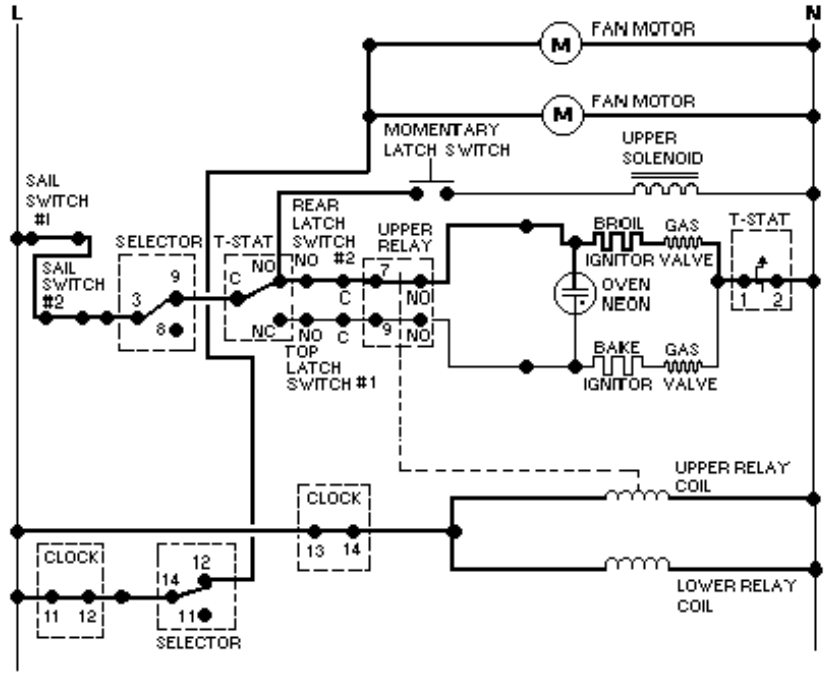


O - CLOSED CIRCUIT

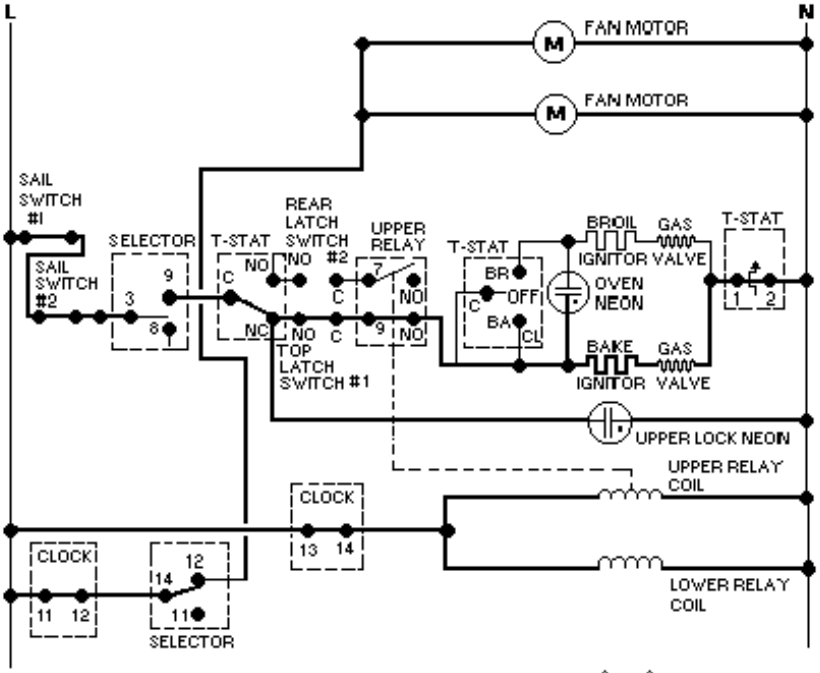
DIAL	THERMOSTAT CONTACTS					
	1--2	COM NO	COM NC	C--BR	C--BA	7--8
OFF	N S	O	X	O	O	O
BAKE	CYCLES	N S	N S	O	X	X
BROIL	CYCLES	X	O	X	O	X
CLEAN	CYCLES	BELOW 700°	ABOVE 700°	O	X	O

O - CLOSED CIRCUIT
X - CLOSED CIRCUIT
N S - NOT SPECIFIED

VGDO WIRING DIAGRAMS

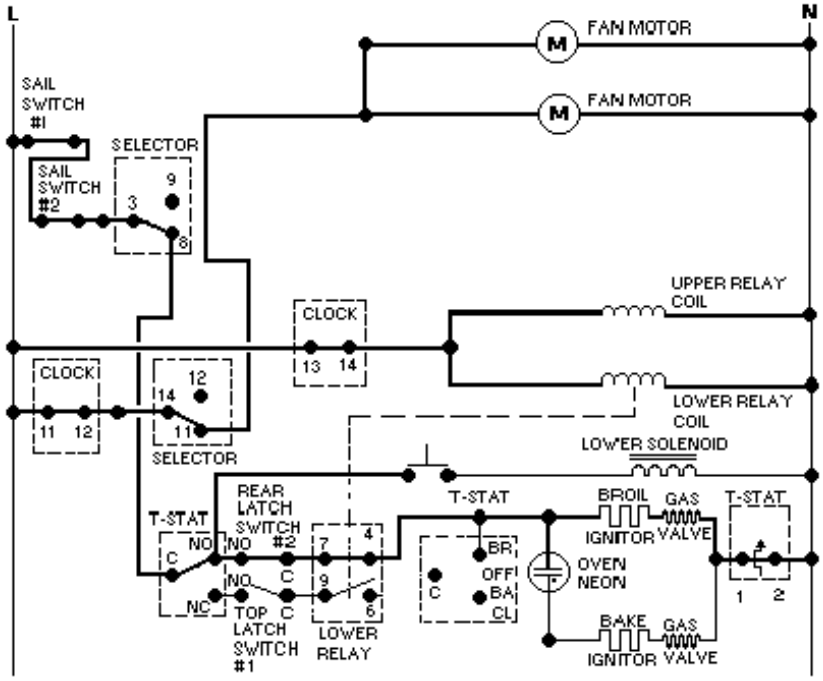


UPPER OVEN SELF-CLEAN CIRCUIT - BELOW 650 -700 F.
CLOSED THERMOSTAT CONTACTS CPM - NO, 1 -2 CYCLING,
CLOSED SELECTOR SWITCH CONTACTS 1 - 6, 2 - 6, 3 - 9, 14 - 12
CLOSED CLOCK CONTACTS 12 - 11, 13 - 14, CLEAN RELAY
CONTACTS, LATCH SWITCH CONTACTS, AND SAIL SWITCH
CONTACTS ARE ALL CLOSED.

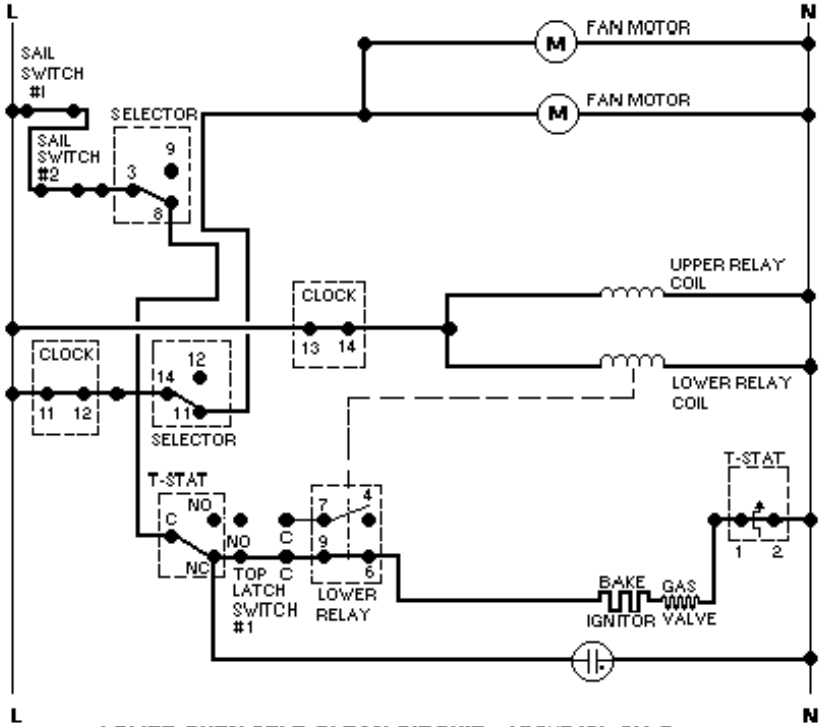


UPPER OVEN SELF-CLEAN CIRCUIT - ABOVE 650°-700°F.
CLOSED THERMOSTAT CONTACTS CPM - NC, 1-2 CYCLING
CLOSED SELECTOR SWITCH CONTACTS 1-6, 2-6, 3-9 14-12
CLOSED CLOCK CONTACTS 12 - 11, 13 - 14, CLEAN RELAY
CONTACTS, LATCH SWITCH CONTACTS, AND SAIL SWITCH
CONTACTS ARE ALL CLOSED.

VGDO WIRING DIAGRAMS

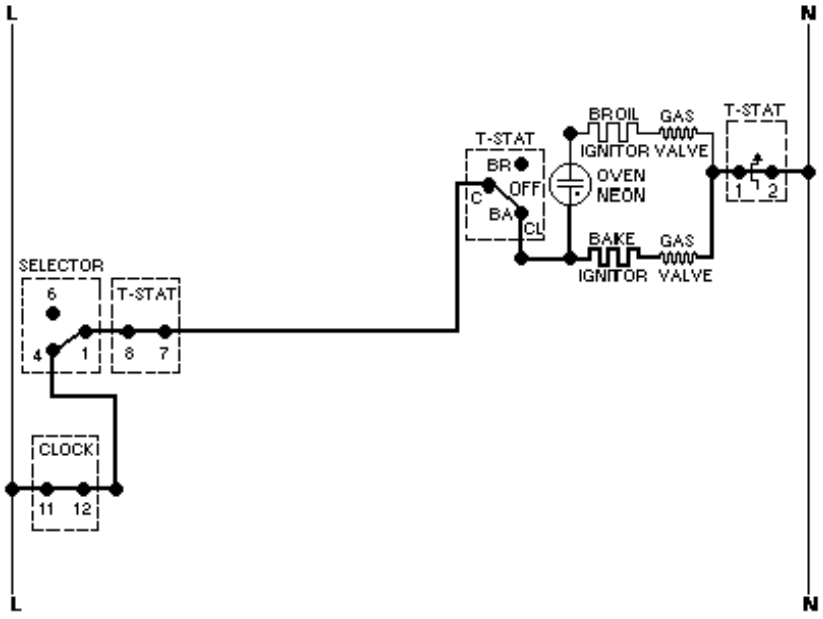


LOVER OVEN SELF-CLEAN CIRCUIT - BELOW 650°-700°F.
CLOSED THERMOSTAT CONTACTS CPM - NO, 1 - 2, CYCLING
CLOSED SELECTOR SWITCHS 1 - 6, 2 - 6, 3 - 8, 14 - 11, CLOSED
CLOCK CONTACTS 12 - 11, 13 - 14, CLEAN RELAY CONTACTS,
LATCH SWITCH CONTACTS, AND SAIL SWITCH CONTACTS
ARE ALL CLOSED

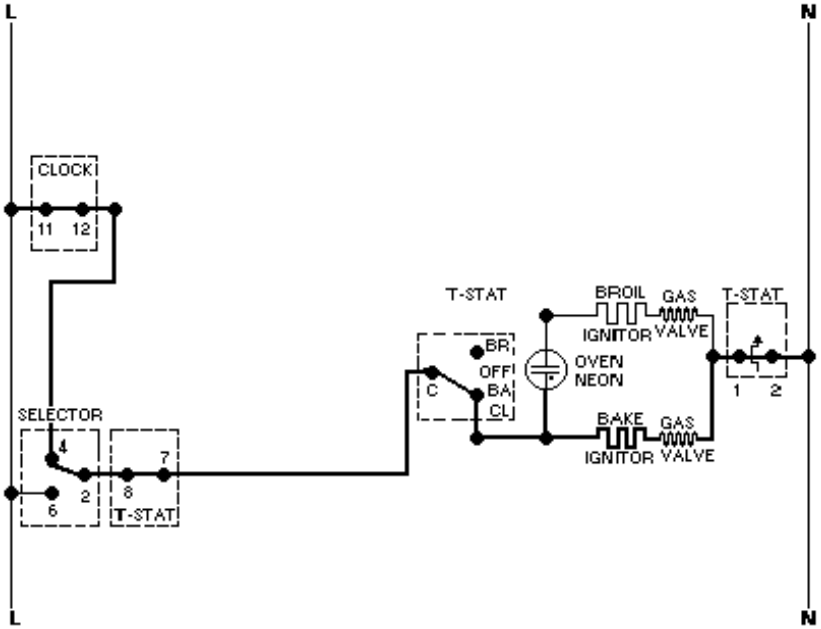


LOVER OVEN SELF-CLEAN CIRCUIT - ABOVE 650 -700 F.
CLOSED THERMOSTAT CONTACTS CPM - NC, 1-3 CYCLING,
CLOSED SELECTOR SWITCH CONTACTS 1-6, 2-6, 3-8, 14-11,
CLOSED CLOCK CONTACTS 12-11, 13-14, CLEAN RELAY CONTACTS,
LATCH SWITCHE CONTACTS, AND SAIL SWITCH CONTACTS ARE
ALL CLOSED.

VGDO WIRING DIAGRAM

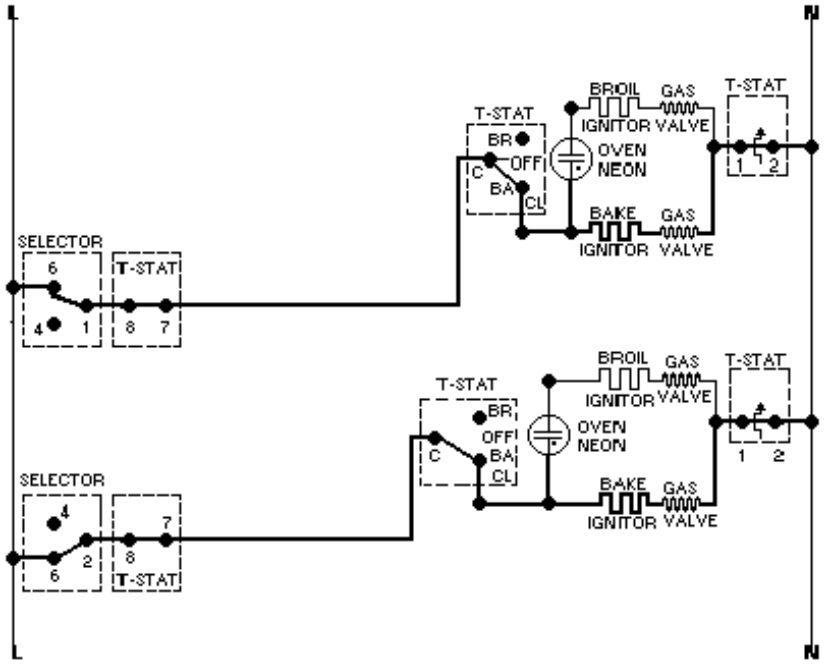


UPPER OVEN TIMED BAKE CIRCUIT - CLOSED THERMOSTAT CONTACTS C - BA, 7 - 8, 1 - 2 CYCLING, CLOSED SELECTOR SWITCH CONTACTS 1 - 4, 2 - 6, CLOSED CLOCK CONTACTS 11 - 12



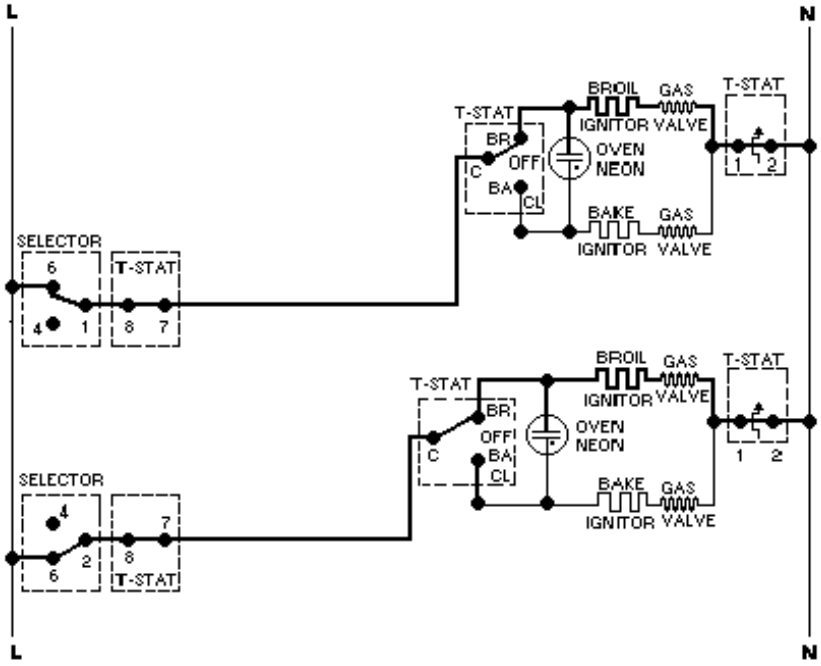
LOWER OVEN TIMED BAKE CIRCUIT- CLOSED THERMOSTAT CONTACTS C - BR, 7 - 8, 1 - 2 CYCLING , CLOSED SELECTOR SWITCH CONTACTS 1 -6, 2 - 4, CLOSED CLOCK CONTACTS 11 - 12.

VGDO WIRING DIAGRAM



MANUAL BAKE CIRCUITS - UPPER & LOVER OVENS

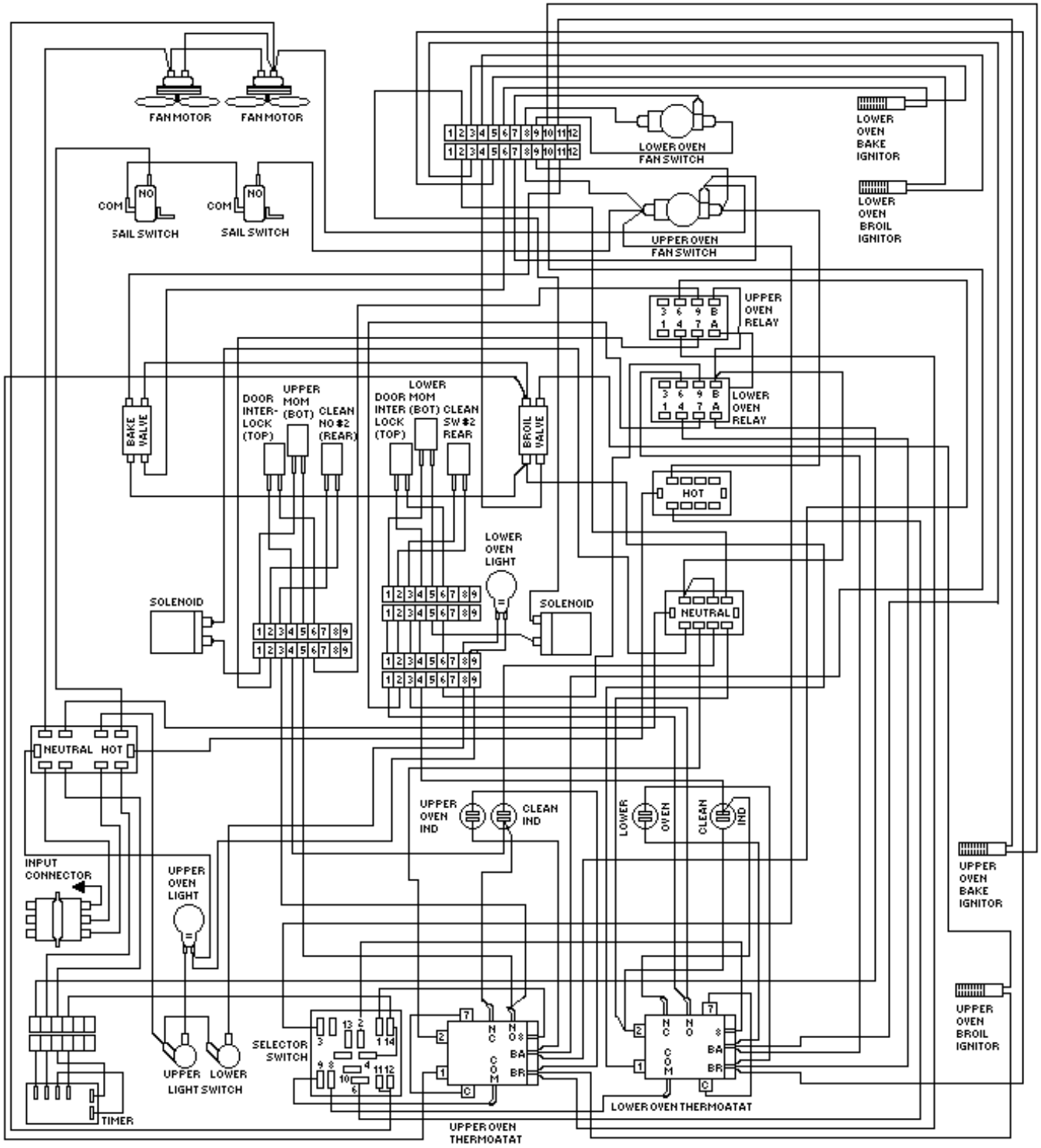
CLOSED THERMOSTAT CONTACTS C - BA, 7 - 8, 1 - 2 CYCLING,
CLOSED SELECTOR SWITCH CONTACTS 1 - 6, 2 - 6.



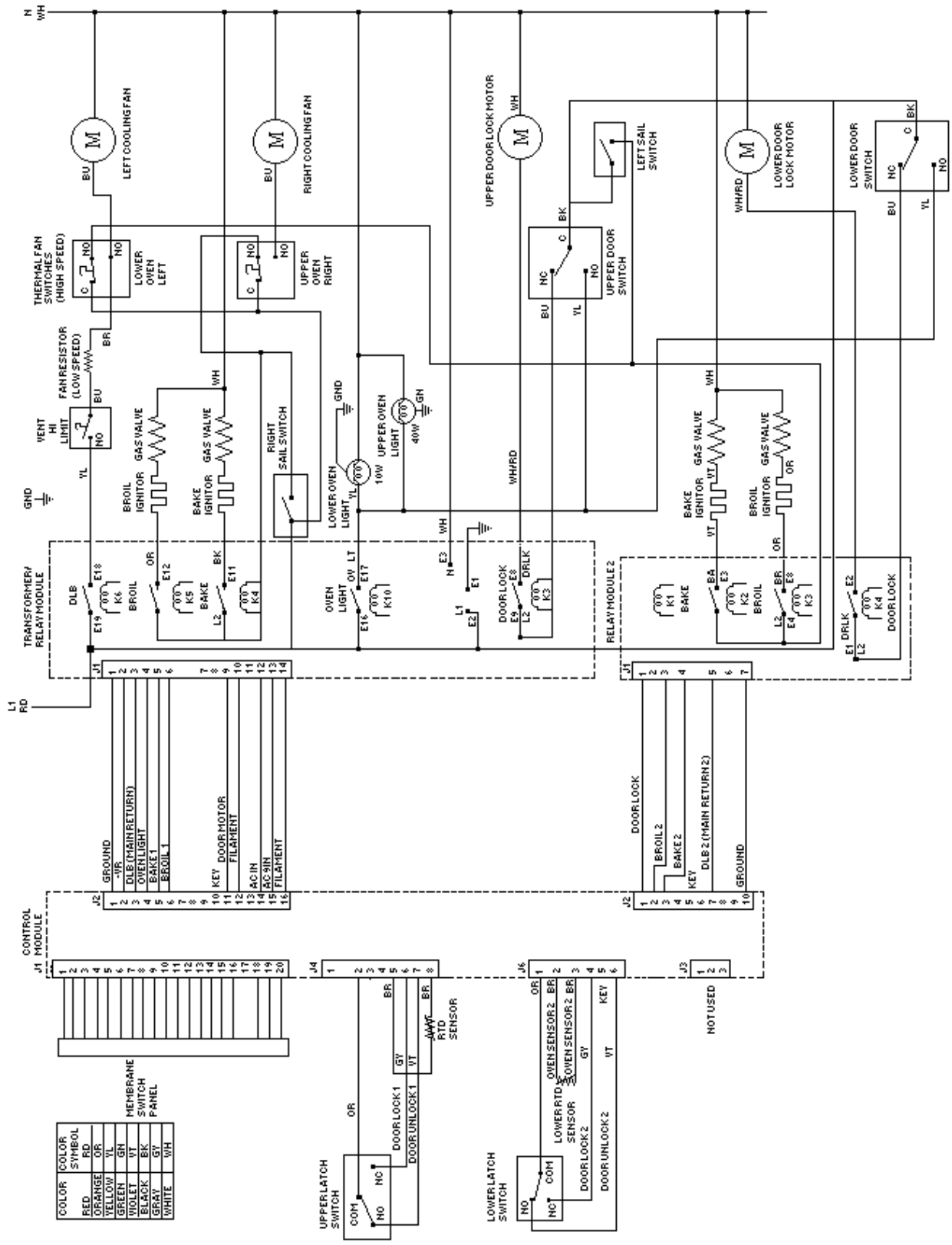
MANUAL BROIL CIRCUITS - UPPER & LOVER OVENS

CLOSED THERMOSTAT CONTACTS C - BR, 7 - 8, 1 - 2 CYCLING.
CLOSED SELECTOR SWITCH CONTACTS 1 - 6, 2 - 6.

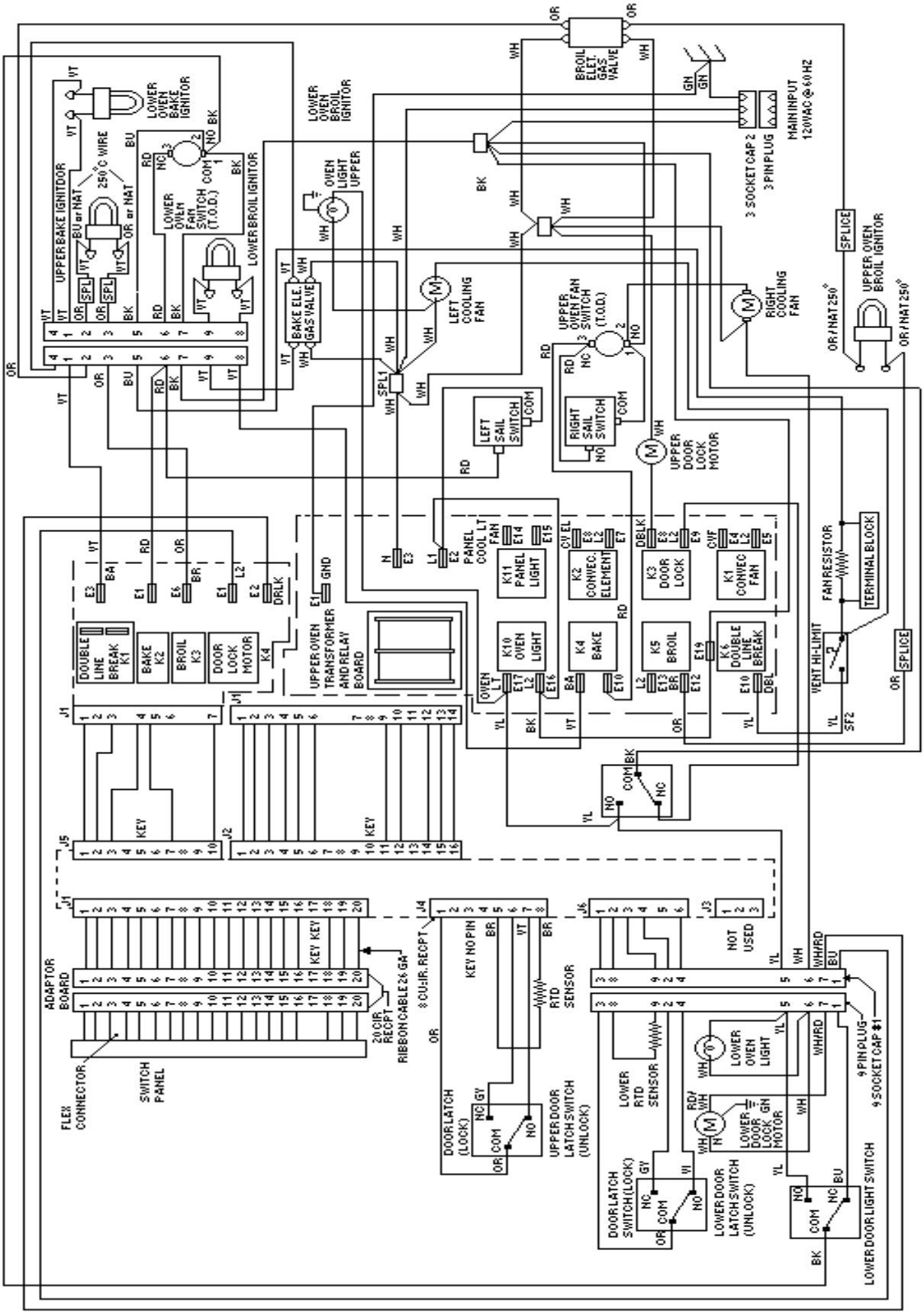
VGDO WIRING DIAGRAM



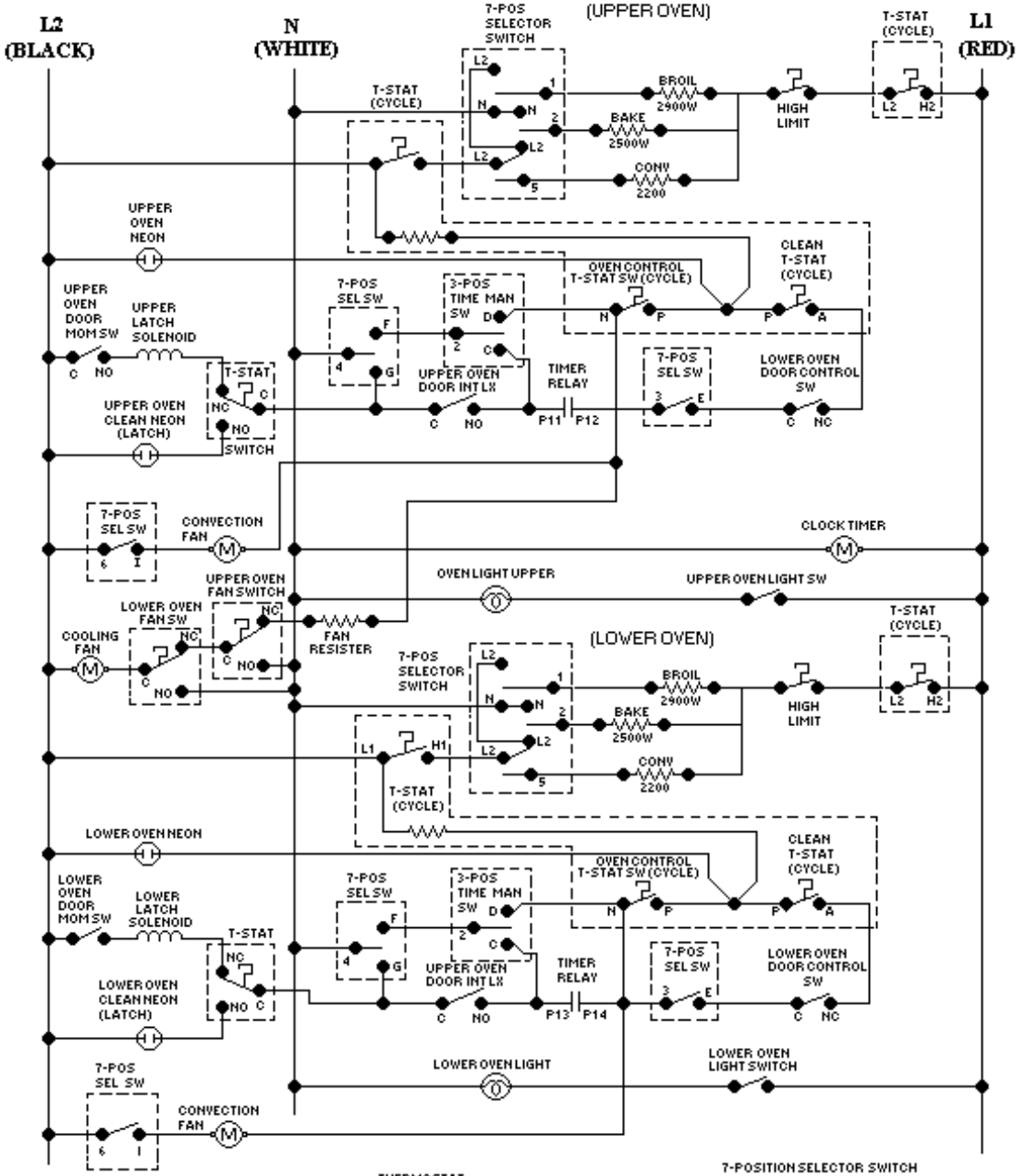
SCHEMATIC WIRING DIAGRAM
VGDO 271 BUILT-IN GAS 27" W. DOUBLE WALL OVEN



VGDO271 WIRING DIAGRAM BUILT-IN GAS 27" W. DOUBLE OVEN



VEDO WIRING SCHEMATIC



3-POSITION TIME/MANUAL SELECTOR SWITCH

POSITION	SWITCHING 1		2	
	A	B	C	D
LOWER TIME	X	O	O	X
MANUAL	O	X	O	X
UPPER TIME	O	X	X	O

X-CLOSED
O-OPEN
180° ROTATION

THERMOSTAT

POSITION		SWITCHING A-P	N-P	C NO	C NC	H1-L1 H2-L2
OFF		X	O	O	X	O
150 F BROIL		X	CYC	O	X	CYCLE *
CLEAN	ABOVE 550	X	CYC	X	O	CYCLE *
CLEAN	BELOW 575	X	CYC	X	O	CYCLE *
CLEAN	ABOVE 575	CYC	CYC	X	O	CYCLE *

X-CLOSED
O-OPEN
** CLEAN OPERATES IN ANY POSITION

*DELAYED UP TO 60 SECONDS AFTER N-P OR A-P CYCLE POINT

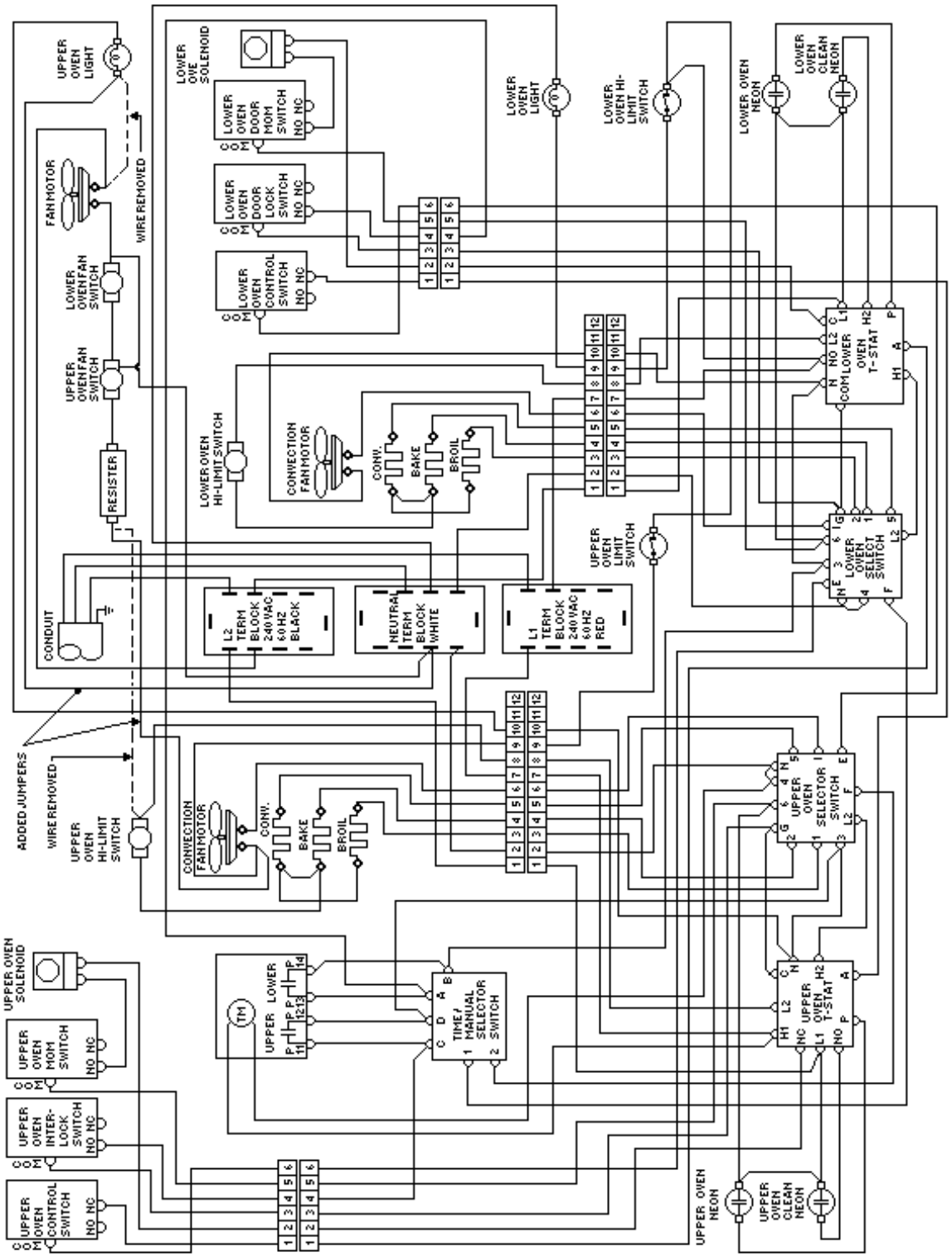
7-POSITION SELECTOR SWITCH

POSITION	SWITCHING 1		2		3	4		5	6
	L2	N	N	L2	E	F	G	L2	I
OFF	O	O	O	O	O	O	O	O	O
CONV. BAKE	O	X	O	X	O	X	O	O	X
BAKE	O	X	O	X	O	X	O	O	O
CONV. COOK	O	O	O	O	O	X	O	X	X
CLEAN	X	O	X	O	X	O	X	O	O
BROIL	X	O	O	O	O	X	O	O	O
CONV. BROIL	X	O	O	O	O	X	O	O	X

X- CLOSED
O-OPEN
360° CONTINUOUS ROTATION

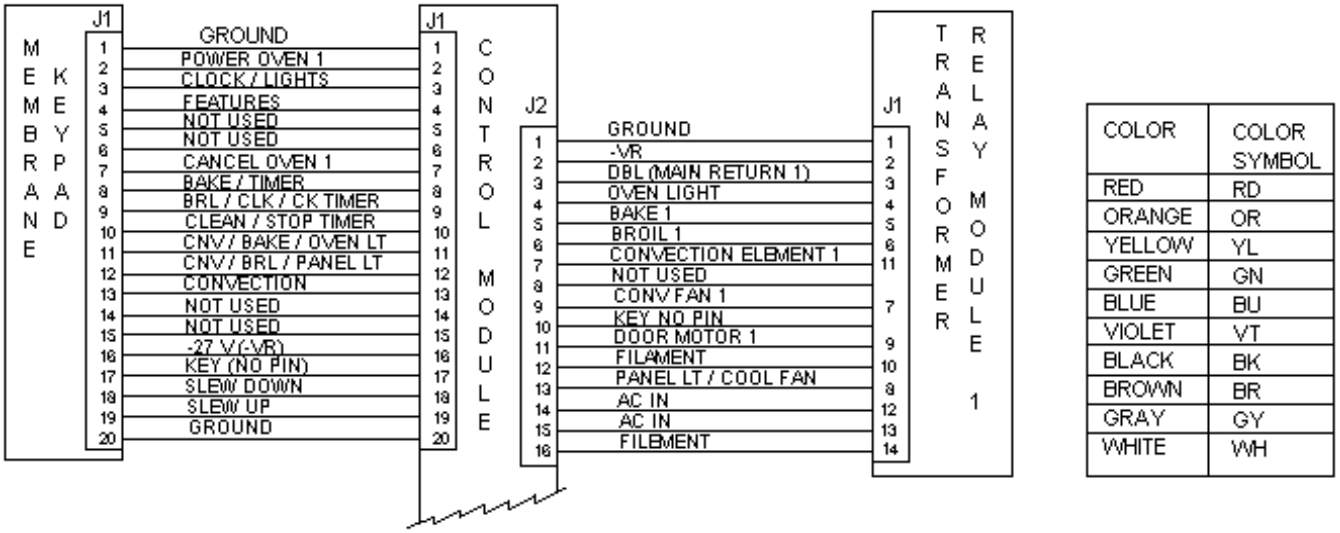
WARNING ELECTRICAL SHOCK HAZARD - DISCONNECT POWER AT MAIN FUSE OR CIRCUIT BREAKER BEFORE SERVICING. FAILURE TODO SO COULD RESULT IN SERIOUS INJURY OR DEATH.

VEDO WIRING SCHEMATIC

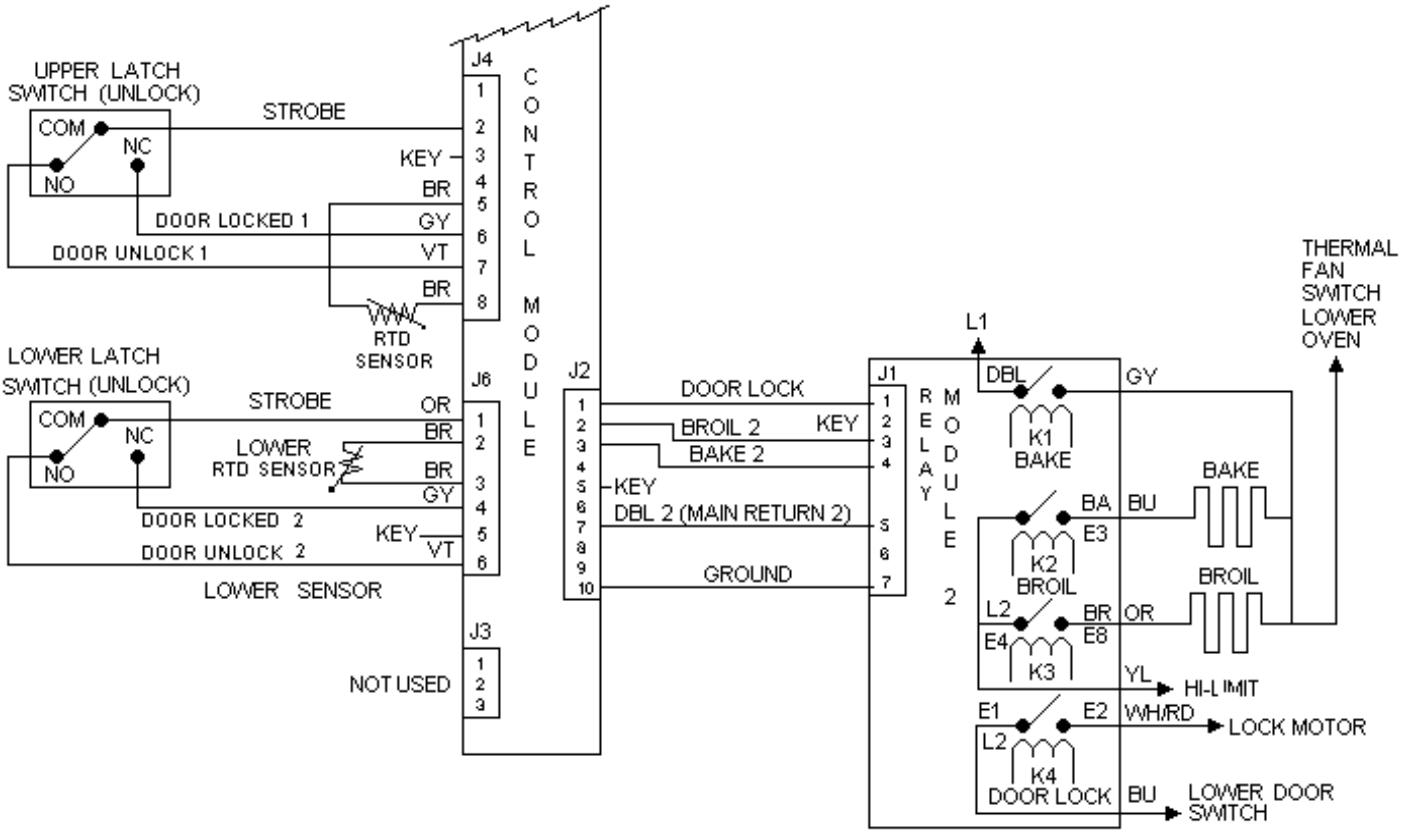


WARNING To avoid risk of electrical shock, personal injury or death, disconnect power before servicing, unless testing requires it.

COMPONENT TESTING INFORMATION (BLOCK DIAGRAM)
VEDO273



COLOR	COLOR SYMBOL
RED	RD
ORANGE	OR
YELLOW	YL
GREEN	GN
BLUE	BU
VIOLET	VT
BLACK	BK
BROWN	BR
GRAY	GY
WHITE	WH

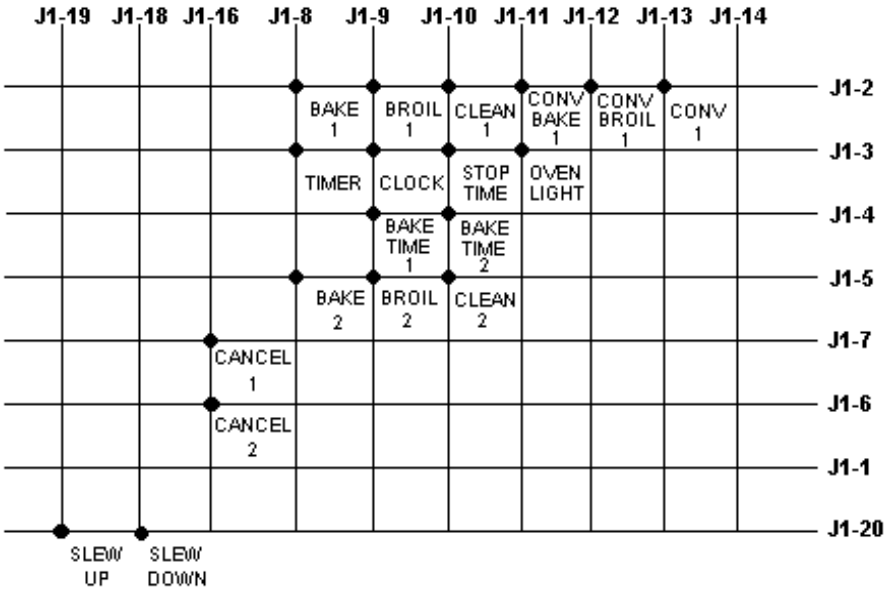


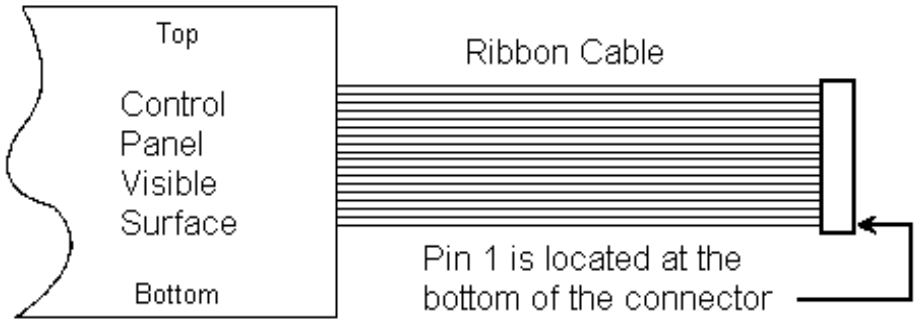
WARNING To avoid risk of electrical shock, personal injury or death, disconnect power before servicing, unless testing requires it.

VEDO273

COMPONENT TESTING INFORMATION

Continuity is indicated as 100 and below. Each pad must be press to perform the following test.





Element Cycle

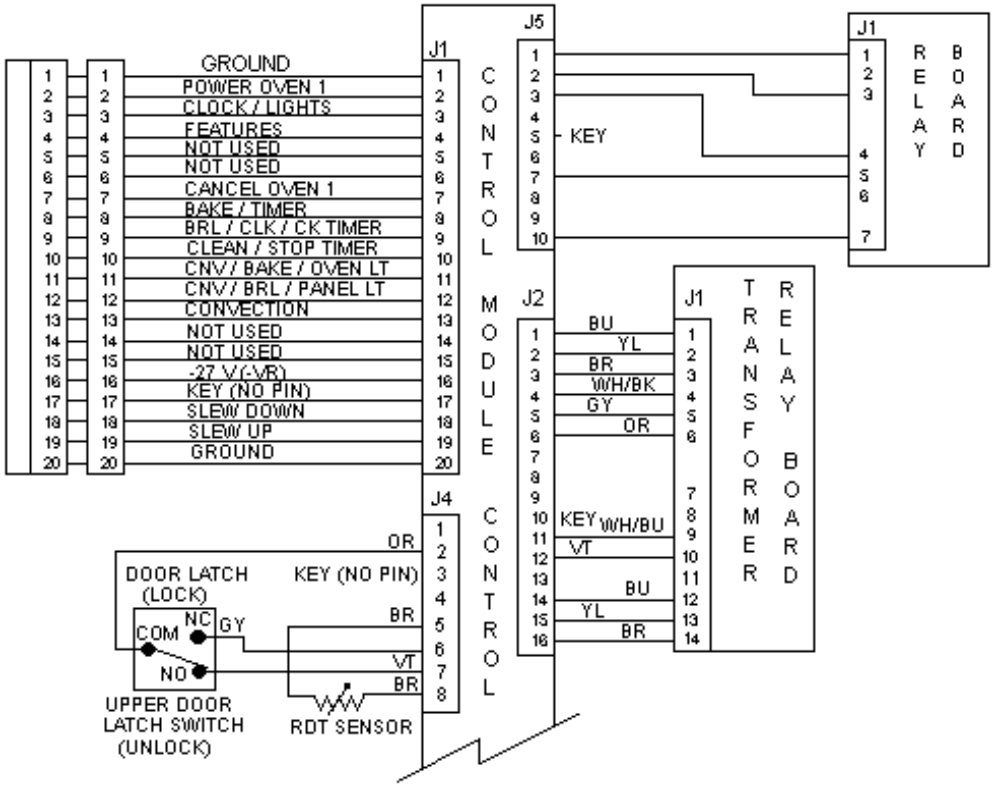
Relay drive requirements are as a percentage of on time based on a 60 second cycle.

Bake	First rise = 100% bake, 50% broil, then 100% bake, 25% broil.
Broil	0% bake, 100% broil
Clean	Stage 1 - 100% broil, 0% bake, for 15 minutes. Stage 2 - 25% broil, 100% bake.
Convection	First rise = 100% bake, 50% broil, then 100% convection element and 100% convection fan*.
Convection bake	Same as bake plus 100% convection fan*.
Convection broil	Same as broil plus 100% convection fan*.

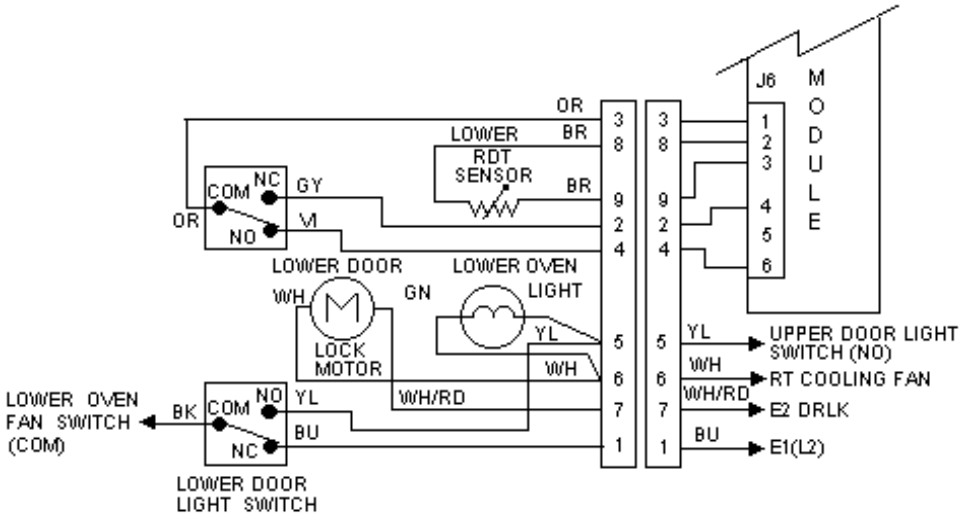
*- Convection fan is de-energized when the oven door is opened.

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

VEDO273
COMPONENT TESTING INFORMATION



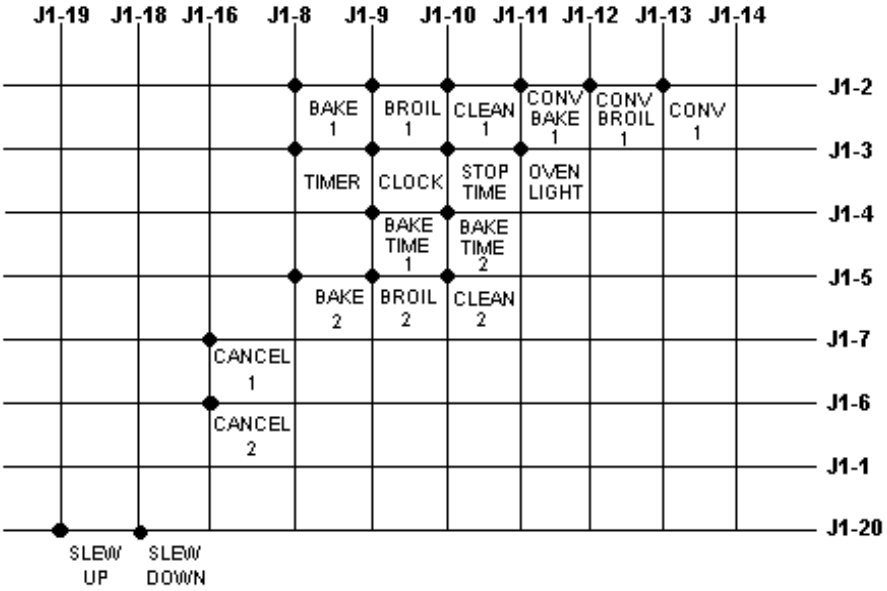
COLOR	COLOR SYMBOL
RED	RD
ORANGE	OR
YELLOW	YL
GREEN	GN
BLUE	BU
VIOLET	VT
BLACK	BK
BROWN	BR
GRAY	GY
WHITE	WH

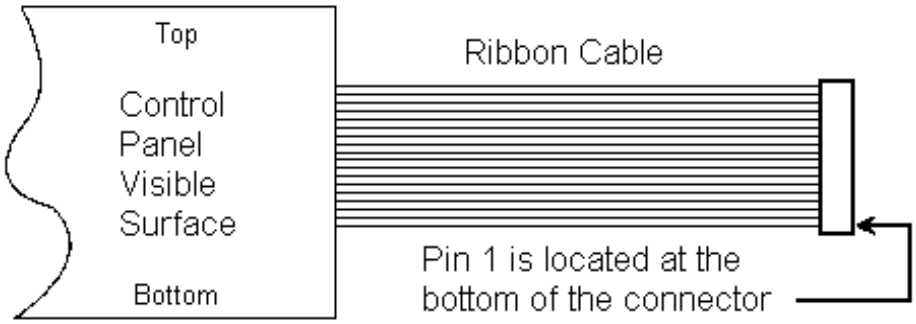


WARNING To avoid risk of electrical shock, personal injury, or death, disconnect power to unit before servicing.

VEDO273
COMPONENT TESTING INFORMATION

Continuity is indicated as 100 and below. Each pad must be pressed to perform the following test.



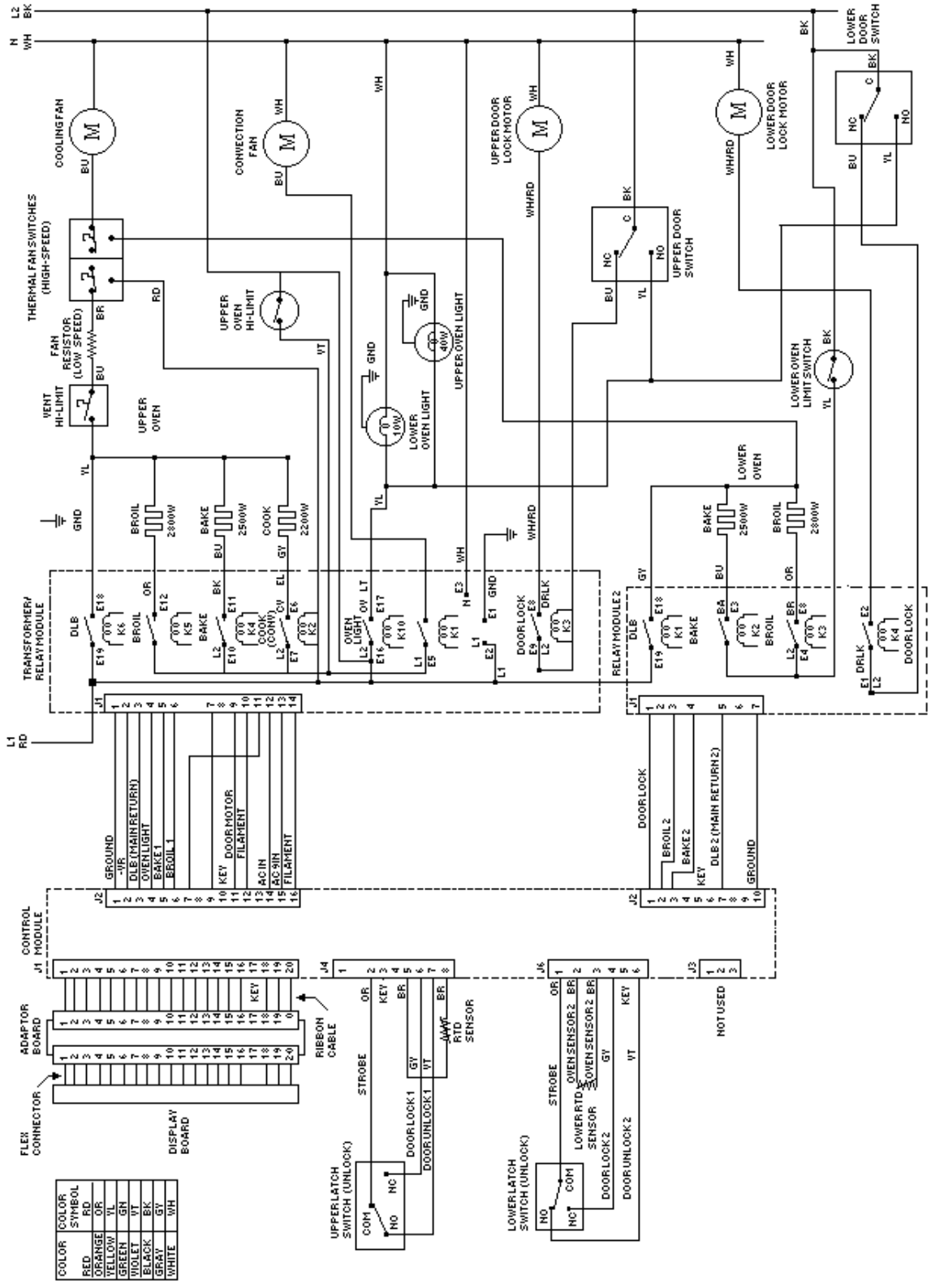


Requirements

Relay drive requirements are defined as a percentage of on time based on a 60 second cycle.

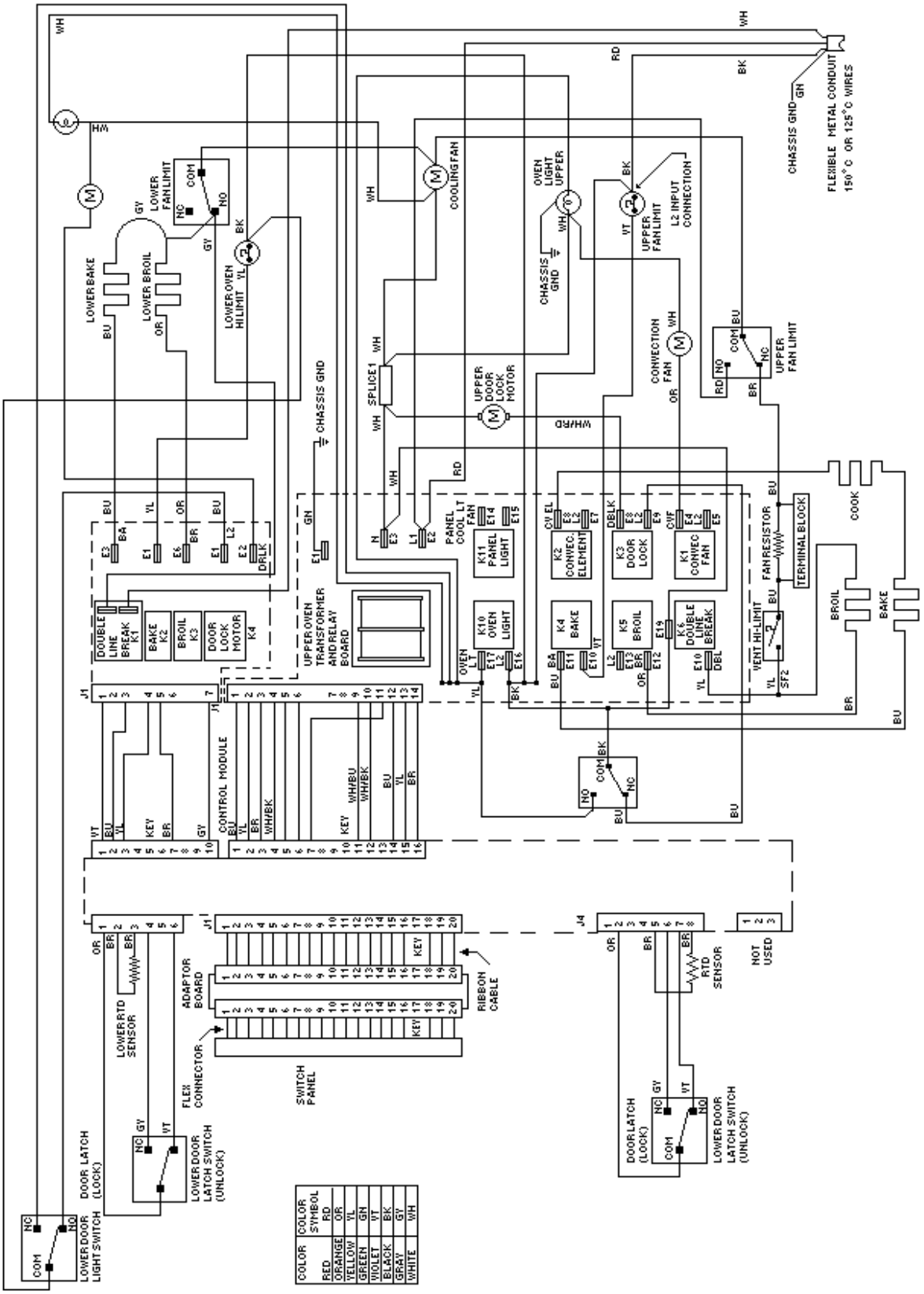
Bake	100% bake
Broil	100% broil
Clean	Stage 1 - 100% broil, 0% bake, for 30 minutes
	Stage 2 - 0% broil, 100% bake

WIRING DIAGRAM (SCHEMATIC) BUILT-IN ELECTRIC 27” DOUBLE OVEN
VEDO273

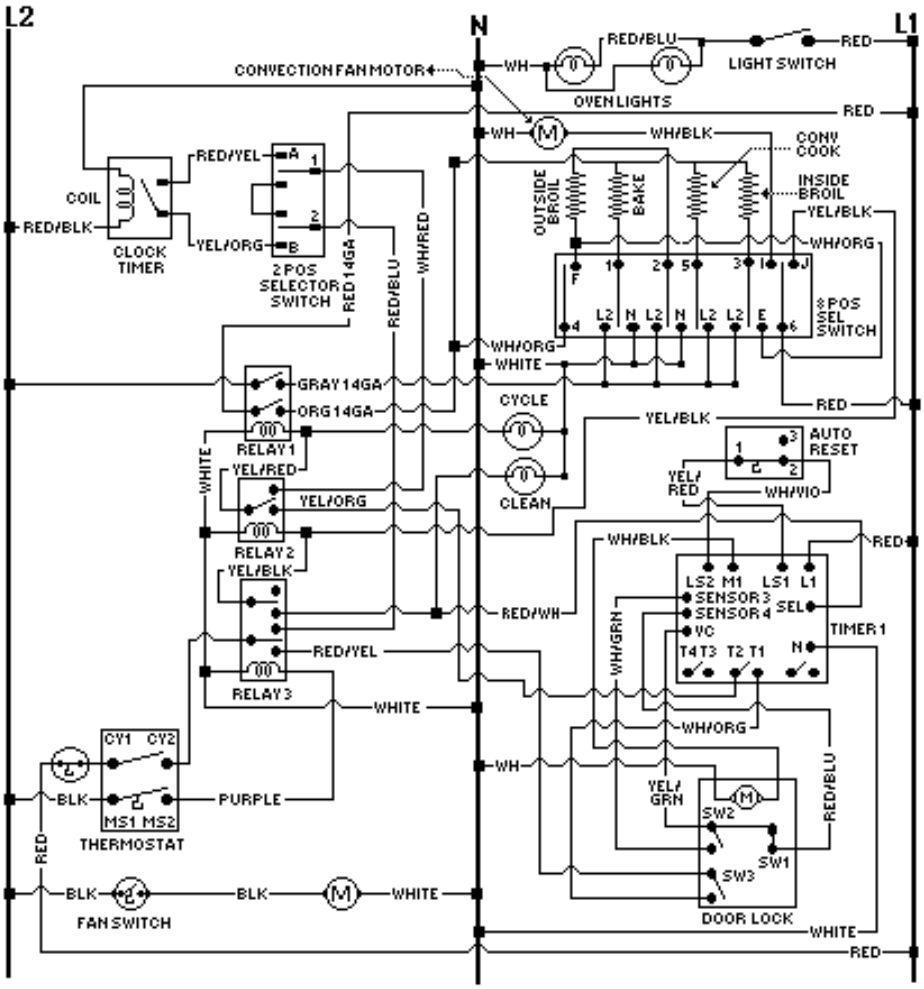


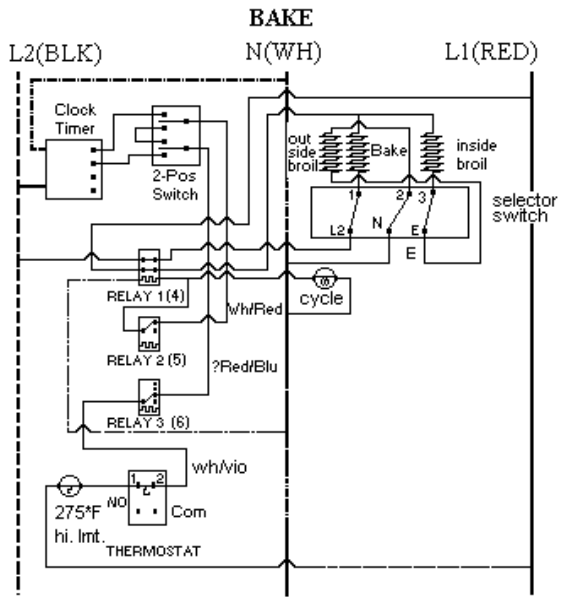
WIRING DIAGRAM BUILT-IN ELECTRIC 27" W. DOUBLE OVEN

VEDO273

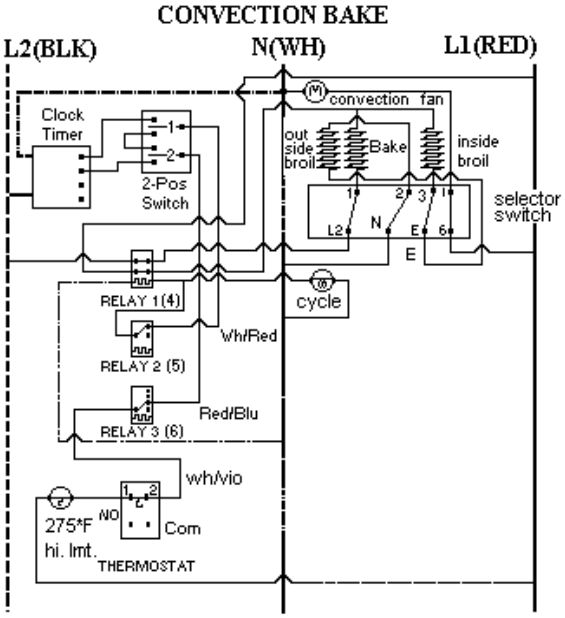


WIRING DIAGRAM
BUILT-IN ELECTRIC OVEN (VESO105 / DESO100)

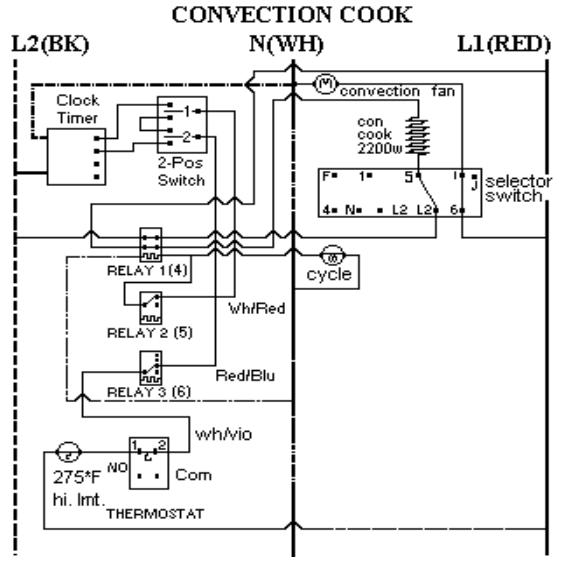




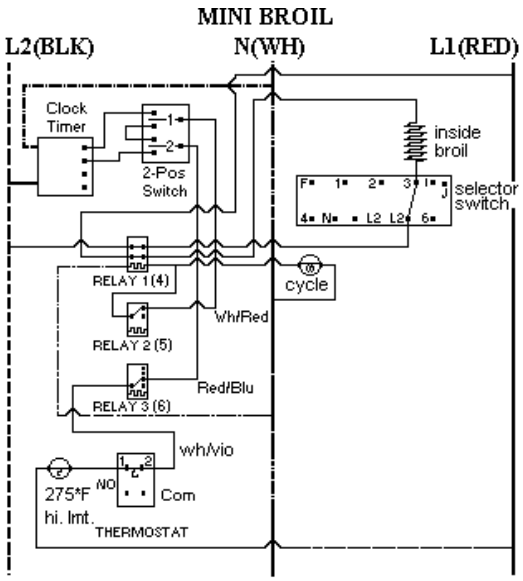
SELECT BAKE position closes switches 1-L2, 2-N, and 3-E. The thermostat closes switches Cy1-Cy2, which cycles with oven temperature powering relay 1 and the oven cycle light. When relay 1 closes, it powers the bake element at 208/240 VAC, and with the broil element in series across a 120VAC circuit, it powers the inside broil element at 70VAC and the outside broil element at 50VAC.



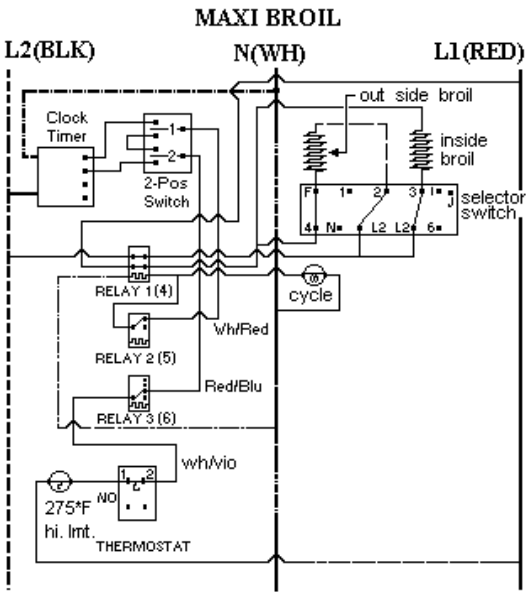
SELECT CONVECTION BAKE position closes switches 1-L2, 2-N, 3-E, and 6-1. 6-1 powers the convection fan through L1 at 120VAC. The thermostat closes switch Cy1-Cy2, which cycles with oven temperature powering relay1 and the oven light. When relay 1 closes, it powers the bake element at 208/240VAC, and with the broil element in series across a 120VAC circuit, it powers the inside broil element at 70VAC and the outside broil element at 50VAC.
at 208/240VAC.



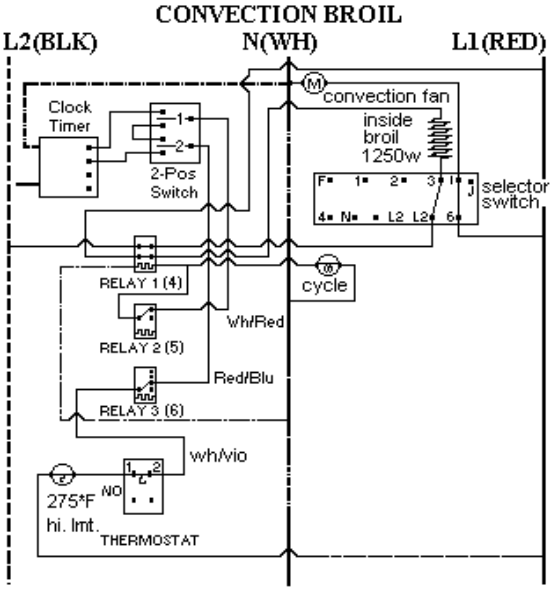
SELECT CONVECTION COOK position closes switches 5-L2 and 6-1. 6-1 powers the convection fan through L1 at 120VAC. The thermostat closes switches Cy1 – Cy2, which cycles with oven temperature, powering relay 1 and the oven light. When relay 1 closes, it powers the convection element



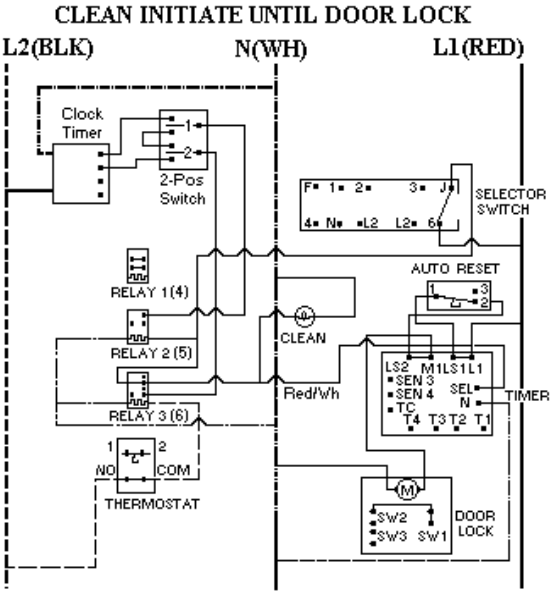
SELECT MINI BROIL position closes switches 3-L2. The thermostat closes switch Cy1-Cy2, powering relay 1 and the oven cycle light. When relay 1 closes, it powers the inside broil element at 208/240VAC.



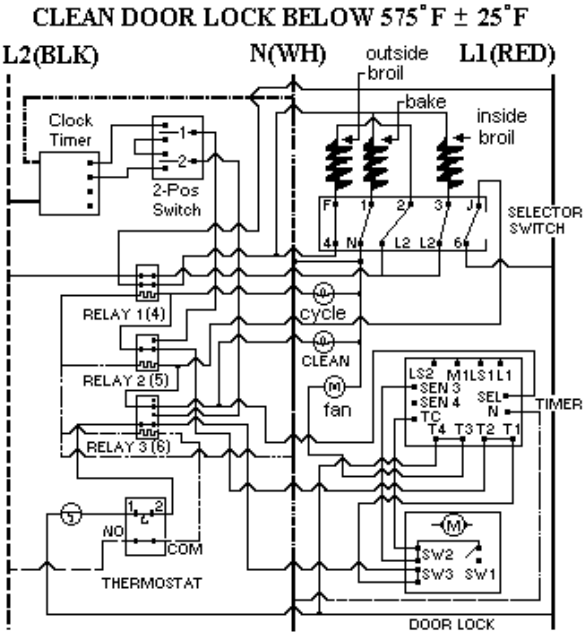
SELECT MAXI-BROIL position closes switches 4-F, 2-L2, and 3-L2. The thermostat closes switch Cy1-Cy2, which cycles with oven temperature, powering relay 1 and the oven cycle light.. when relay 1 closes, it powers the inside broil element at 208/240VAC and the outside broil element at 208/240VAC.



SELECT CONVECTION BROIL position closes switches 4 – F, 2 –L2, 3 – L2 and 6 – 1. 6 –1 powers the convection fan through L1 at 120VAC. The thermostat closes switch Cy1 – Cy2, which cycles the oven temperature, powering relay 1 and the oven cycle light. When relay 2 closes it powers the inside broil element at 208/240VAC and the outside broil element at 208/240VAC.

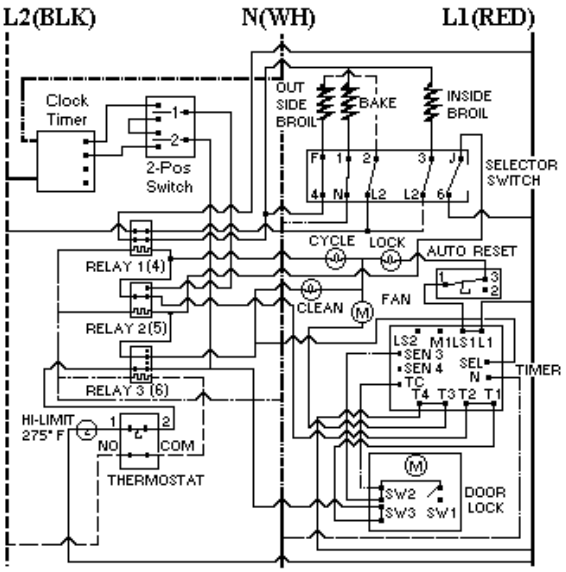


SELECT CLEAN position closes heating element circuits 4-F, 1-N, 2-L2, 3-L2 and door lock module / timer circuit J6 switches relay2. Thermostat clean position closes the cycle switch and thermostat clean switch, which switches relay 3. Switching relay 3 allows circuit J-6 to turn on the clean indicator light and enable the door lock module / timer which closes relay LS-L1and LS2-M1. This powers the door lock motor until 10 seconds after sensor #3 is signaled by VC that the door lock switch SW2 has been closed mechanically (along with SW3) by the door lock bolt.



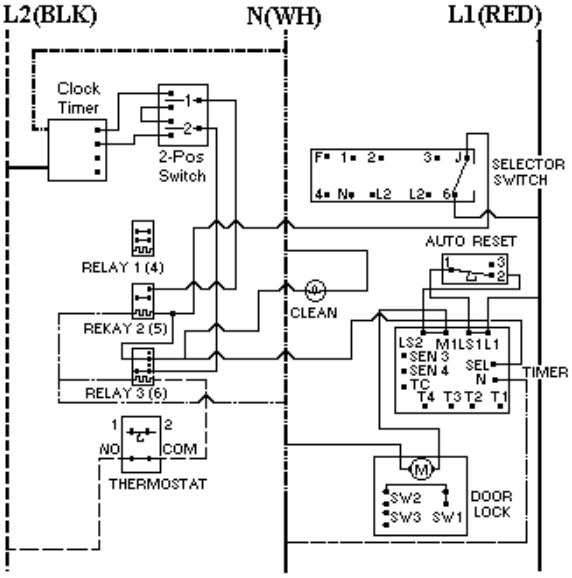
10 seconds after the signal to sensor #3, switch LS2 – M1 is opened, stopping the door lock motion and switches T1 – T2 and T3 – T4 which switches relay 1, powering the cooling fan, which closes relay 1 powering the inside and outside broil elements at 208/240VAC and the bake element to 120VAC.

CLEAN DOOR LOCK ABOVE 575° F ± 25° F



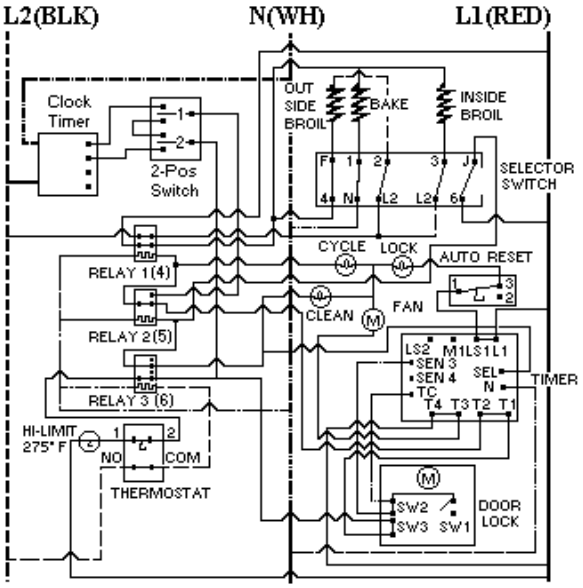
AUTO RESET switches to 1 – 3 which turns door lock indicator light on and disables door lock motor circuit.

CLEAN FINISH DOOR LOCK BELOW 575° F 25° F



AUTO reset switches 1 – 2 closed allowing the door lock motor to operate and turning the door lock light off. The door lock motor operates until 2 seconds after sensor 4 is signaled be VC that the door lock SW1 has been closed mechanically by the door lock bolt. The door lock / timer switches LS2 – M1 and LS1 –L1 open and the timer resets.

CLEAN DOOR LOCK ABOVE 575° F ± 25° F

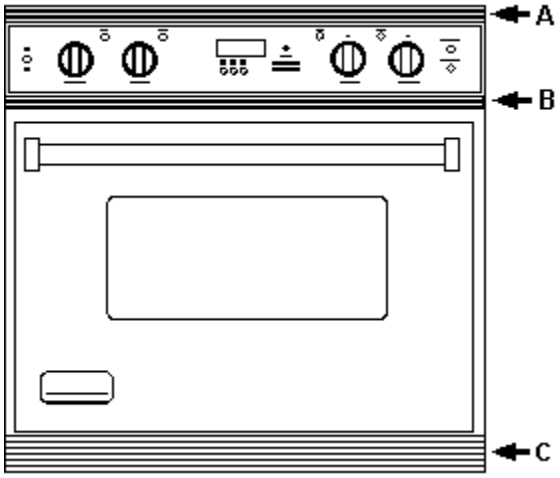


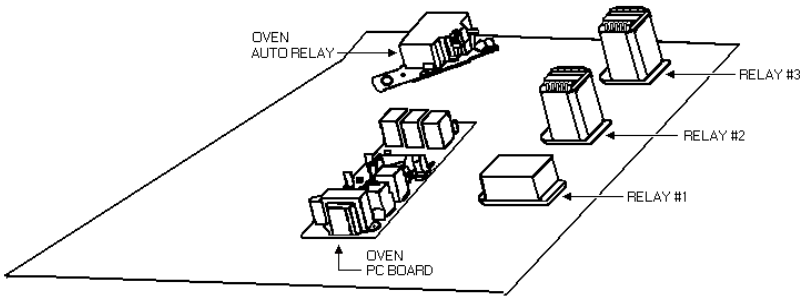
TIMER switches T3 – T4, T1 – T2 open, turning off the cooling fan, which will then be powered at 120VAC by the fan limit switch when needed, and opening the circuit to relay 1 which disables the heating elements. Switch LS2 - M1 closes to power the door lock Motor.

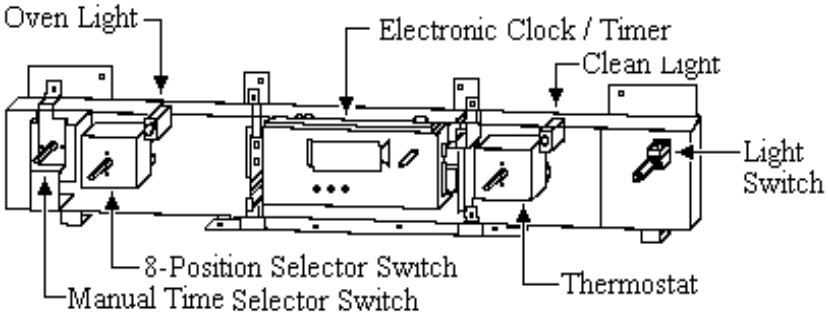
(BEFORE JUNE 2001)

VESO105 SINGLE SELF-CLEAN WALL OVEN

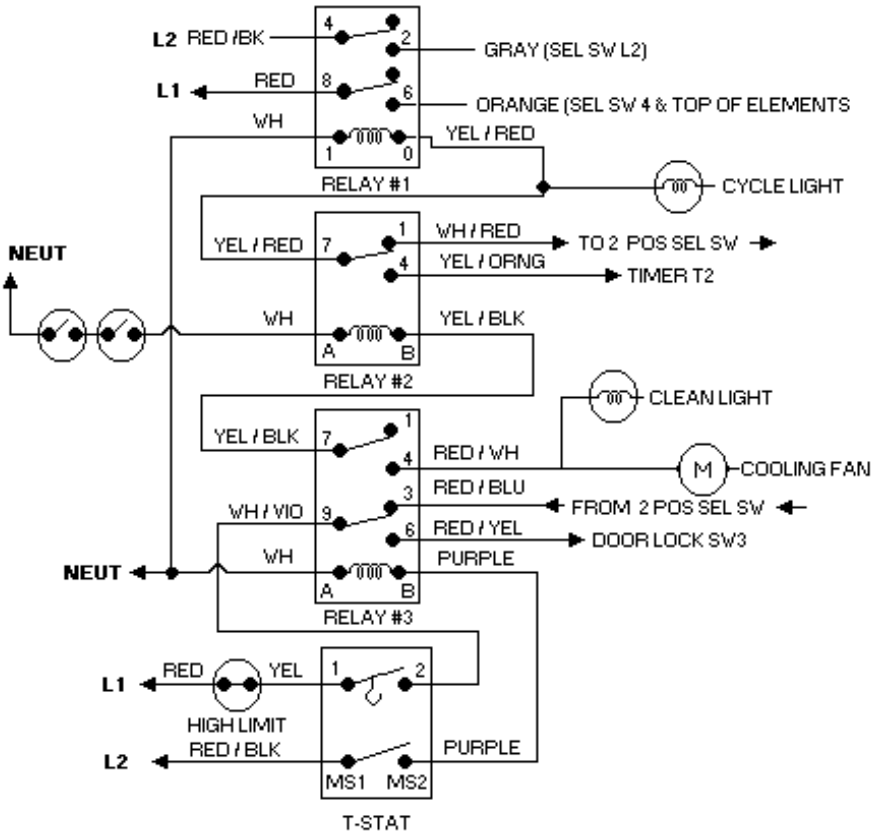
Relay location and wiring connections

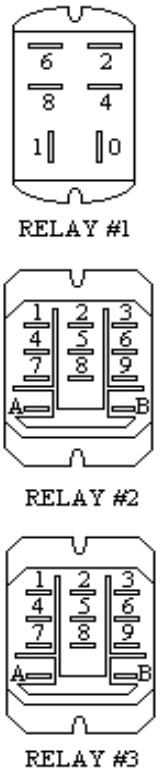






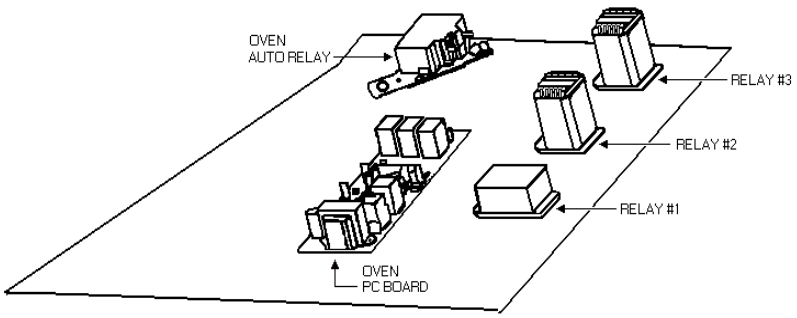
VESO 105 / VEDO 205 TOP OVEN

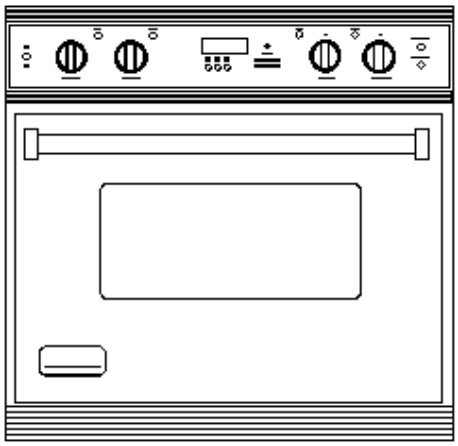


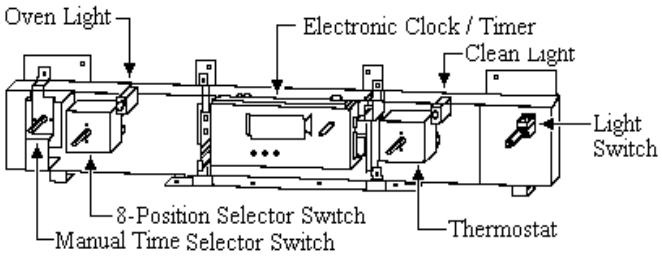


VESO105 SELF-CLEAN WALL OVEN **(After June 2001)**

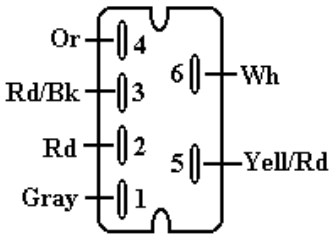
Relay location and wiring connections





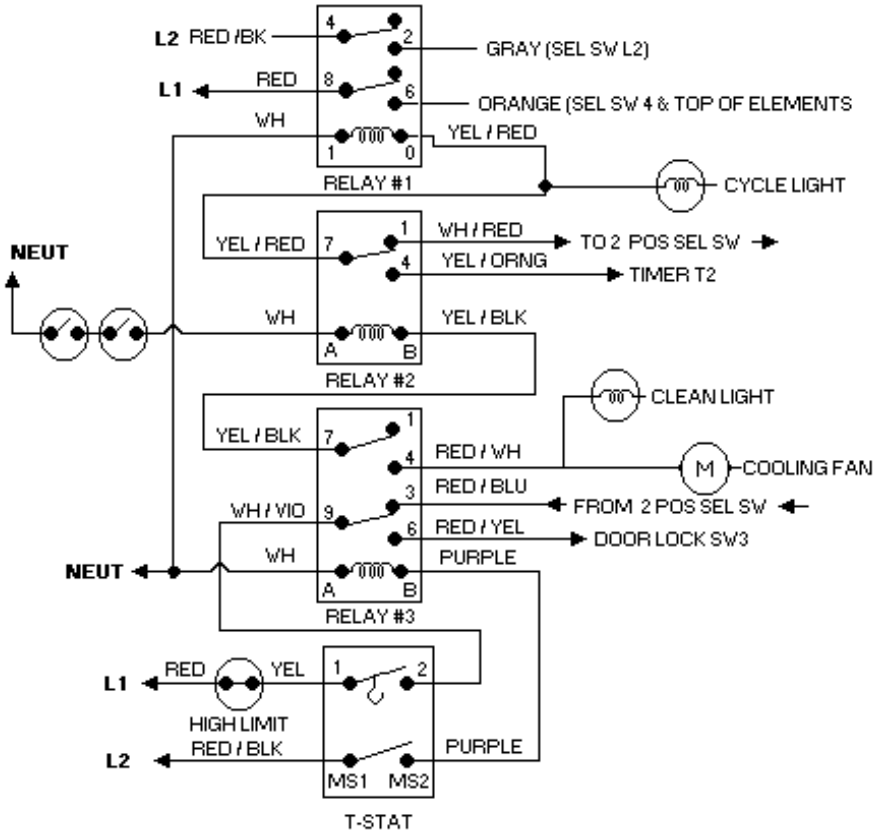


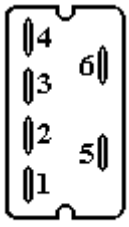
VGSO105
RELAY # 1



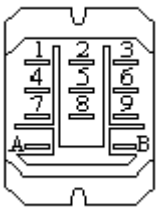
Part # PM010129

VESO 105 / VEDO 205 TOP OVEN

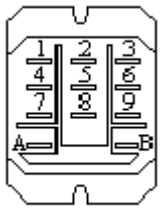




RELAY #1
Terminal
Layout

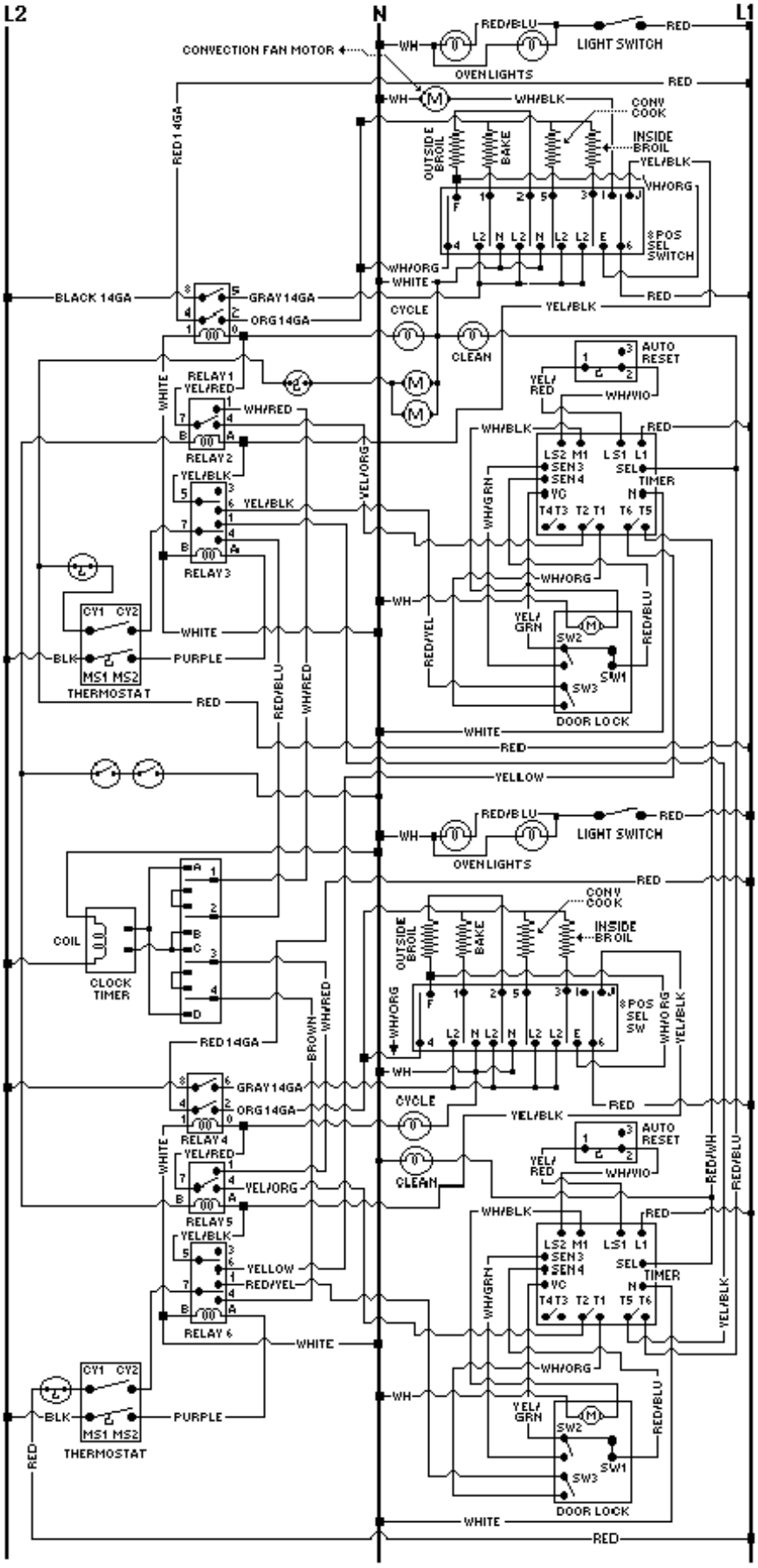


RELAY #2

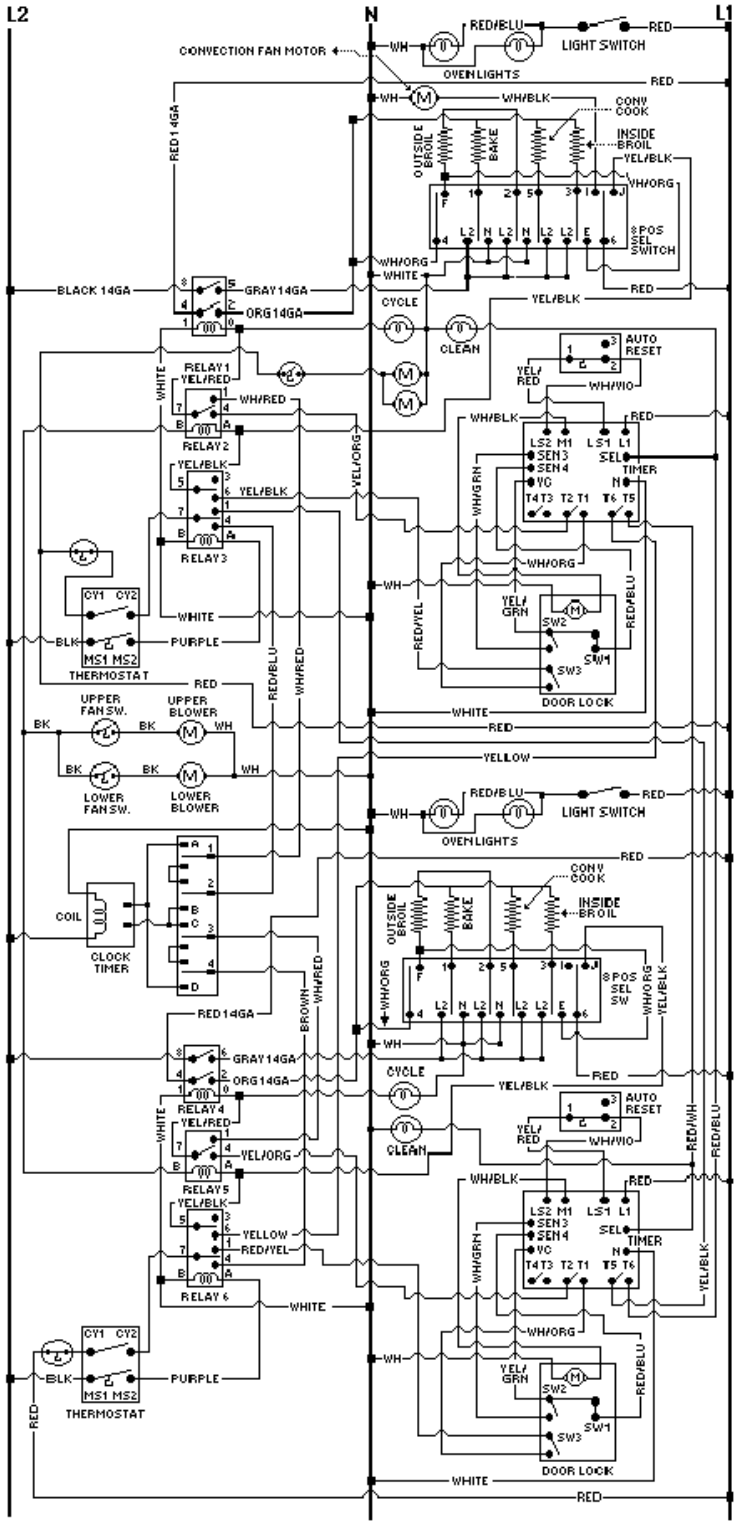


RELAY #3

WIRING DIAGRAM
BUILT-ELECTRIC DOUBLE OVEN (VEDO205)

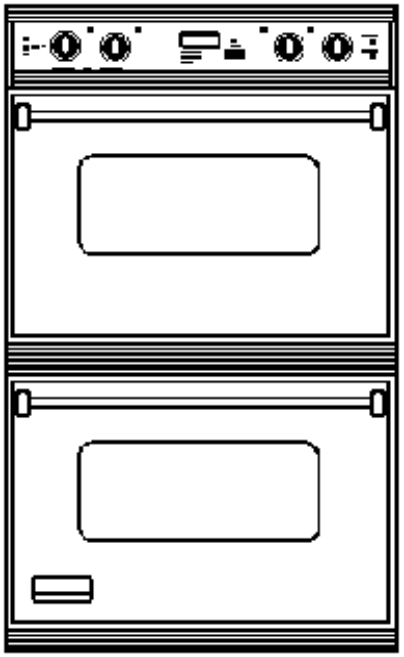


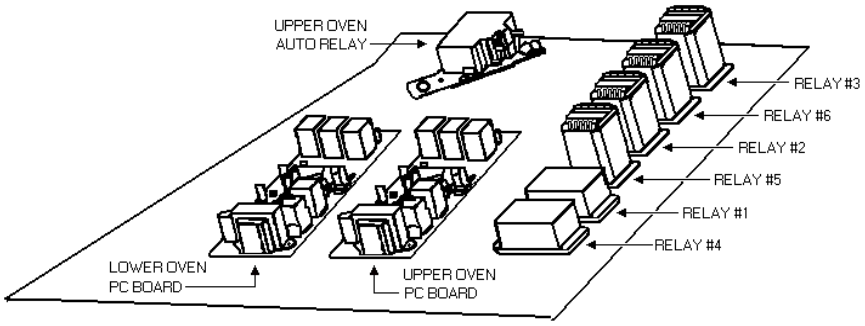
WIRING DIAGRAM
BUILT-IN ELECTRIC DOUBLE OVEN (DEDO200)
{For individual circuits see Gwir015. The only difference will be the upper and lower fan switches and fan motors}

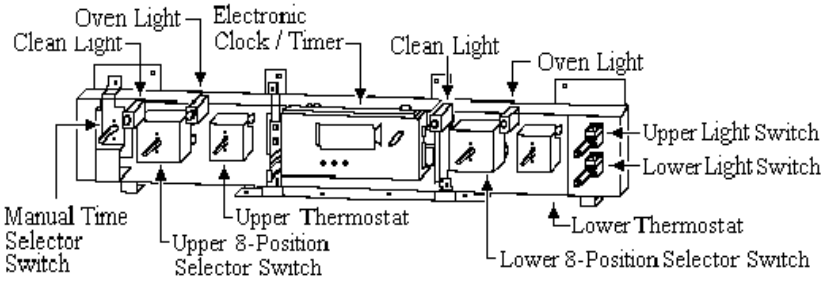


VEDO DOUBLE SELF-CLEAN WALL OVEN

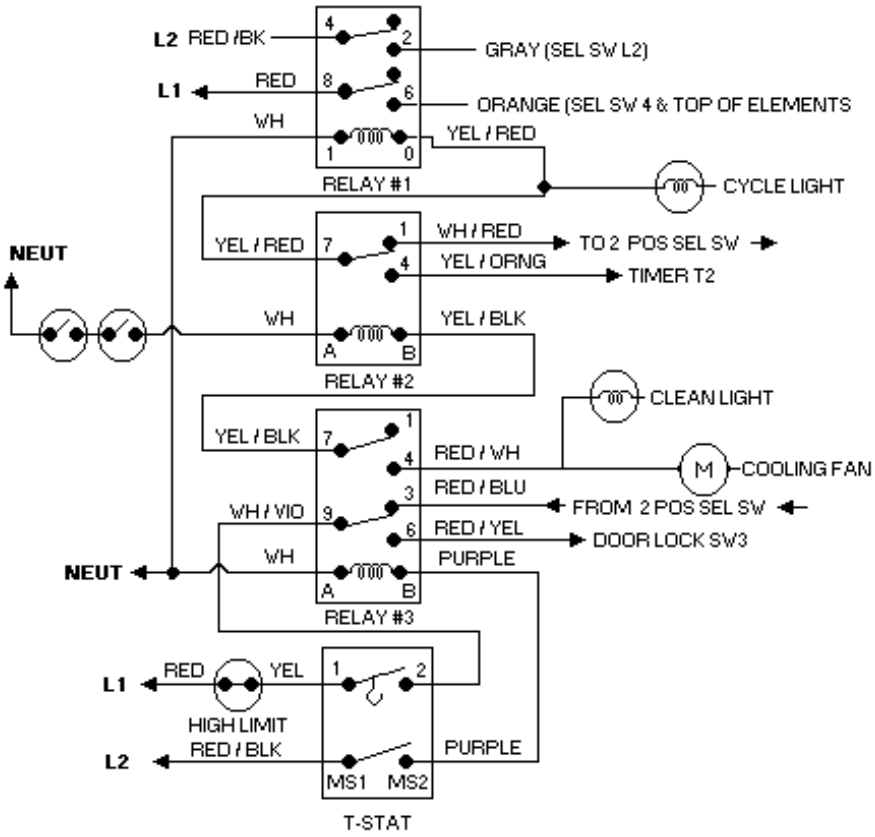
Relay location and wiring connections

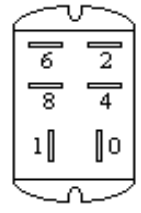


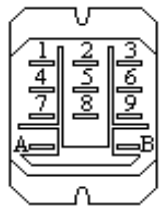


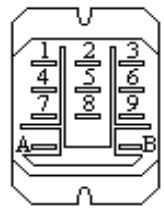


VESO 105 / VEDO 205 TOP OVEN



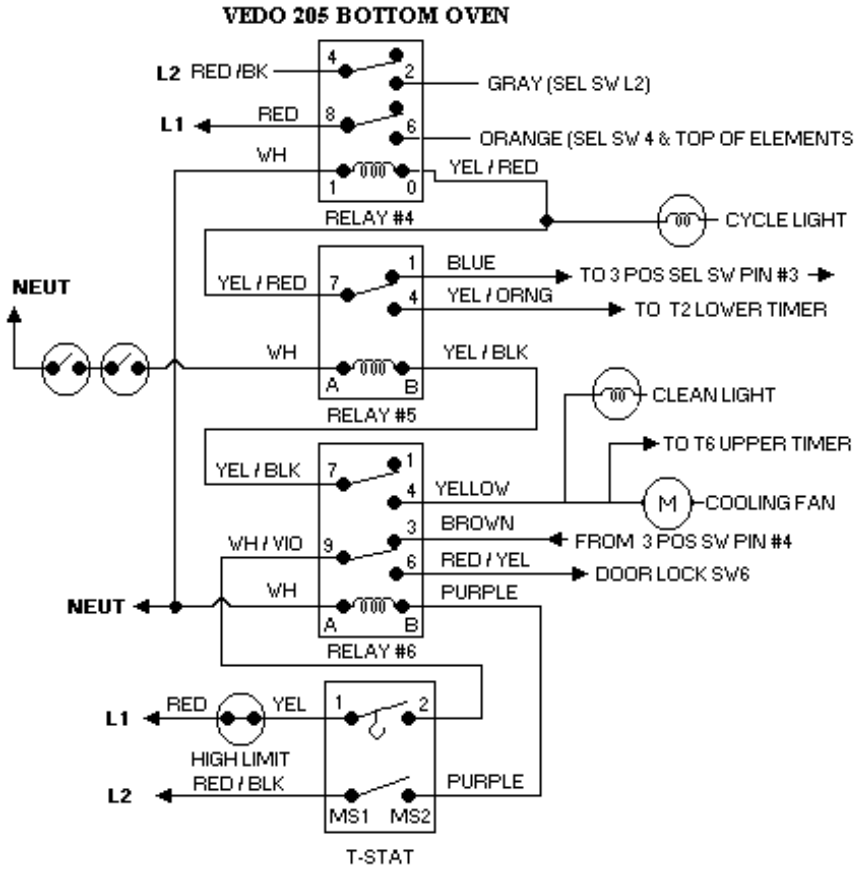


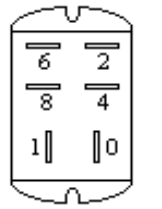


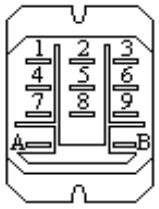


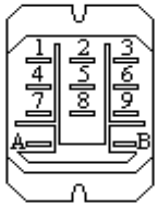
VEDO DOUBLE SELF-CLEAN WALL OVEN
Relay location and wiring connections

VEDO 205 BOTTOM OVEN

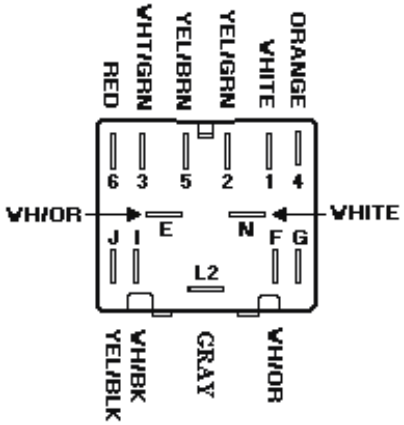


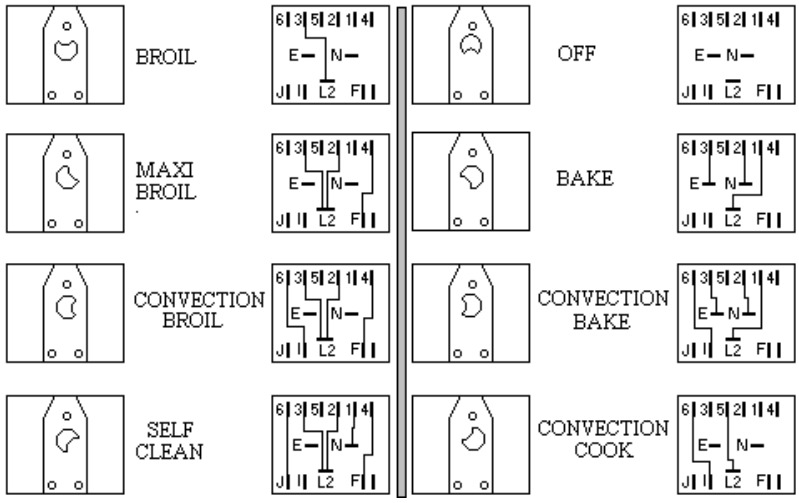






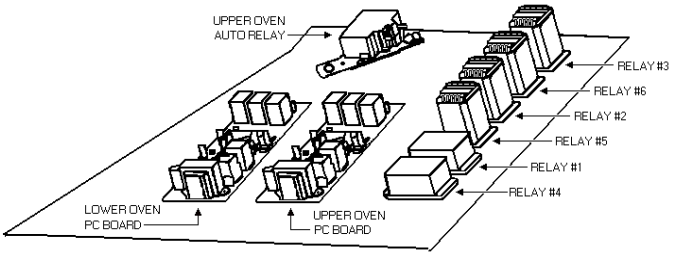
8 Position Selector Switch

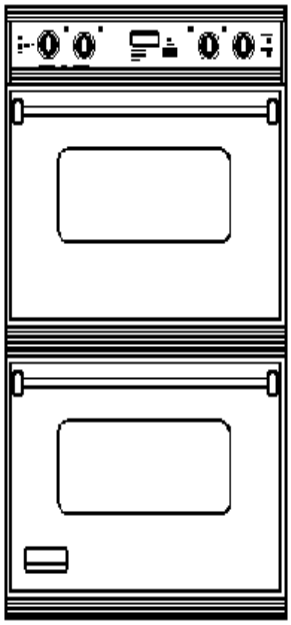


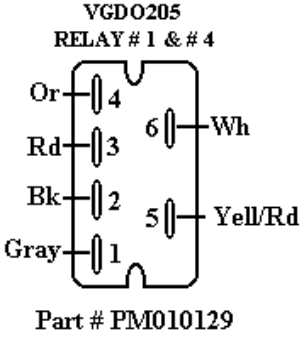


VEDO205 DOUBLE SELF-CLEAN WALL OVEN (Relay location and wiring connection.)

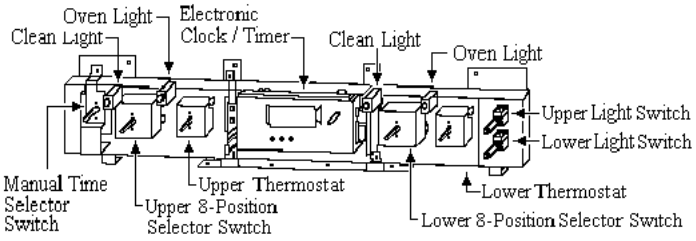
UPDATE AFTER JUNE 2001



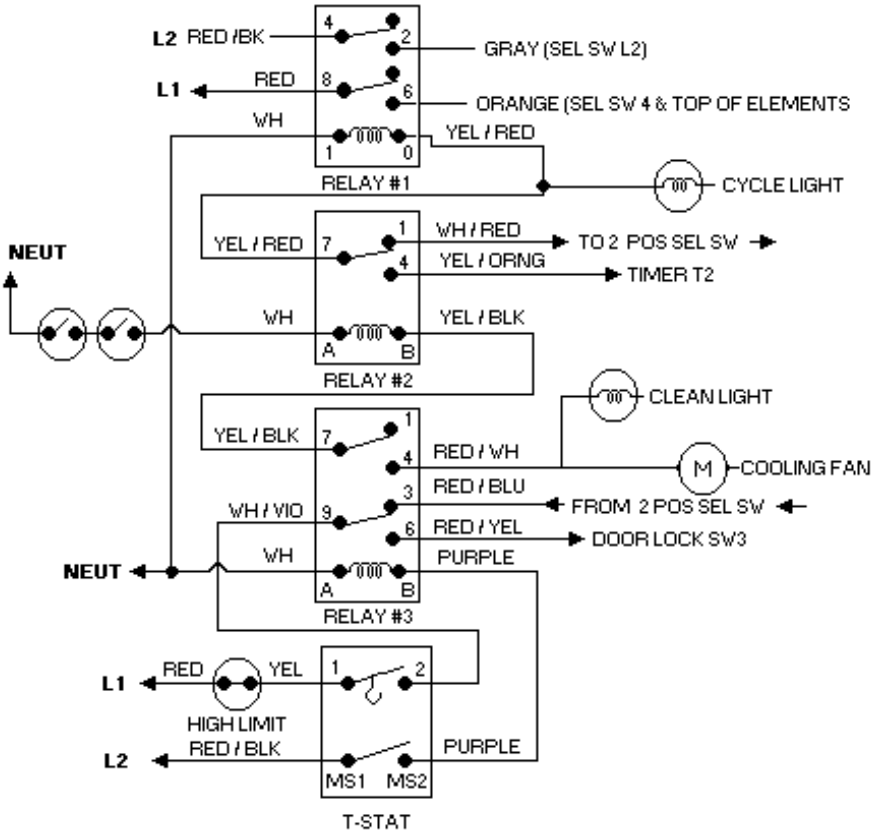


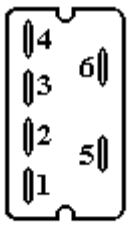


Part # PM010129

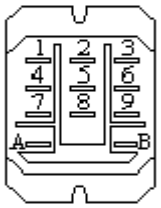


VESO 105 / VEDO 205 TOP OVEN

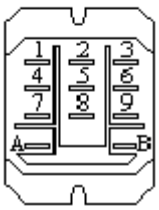




RELAY #1
Terminal
Layout



RELAY #2



RELAY #3

VIKING PREFERRED SERVICE

TECH -- NOTES

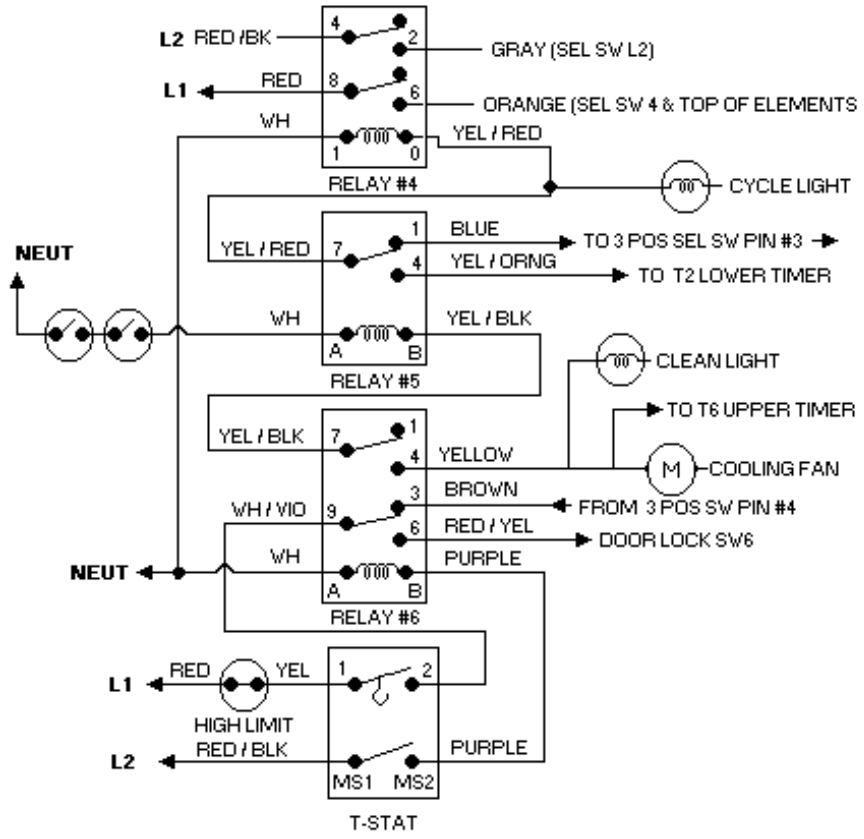
VEDO205 DOUBLE SELF-CLEAN WALL OVEN

(Relay location and wiring connections)

UPDATE JUNE 2001

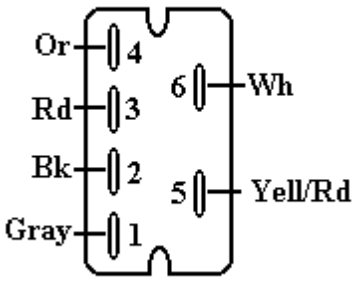
-------BOTTOM OVEN------

VEDO 205 BOTTOM OVEN

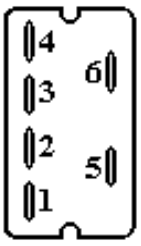


VGDO205

RELAY # 1 & # 4

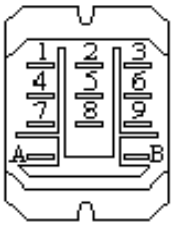


Part # PM010129

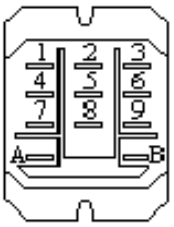


RELAY #4

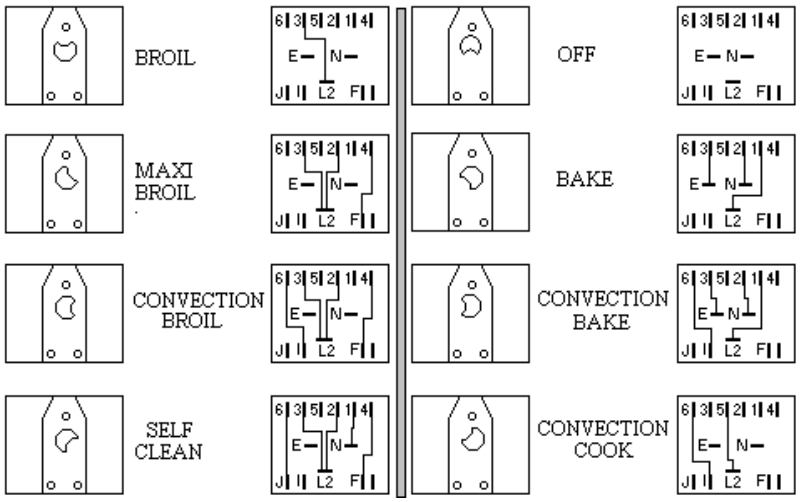
Terminal Layout

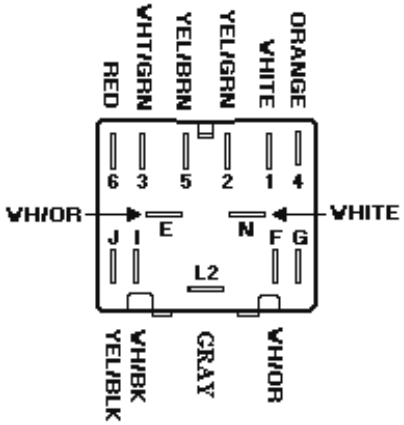


RELAY #5

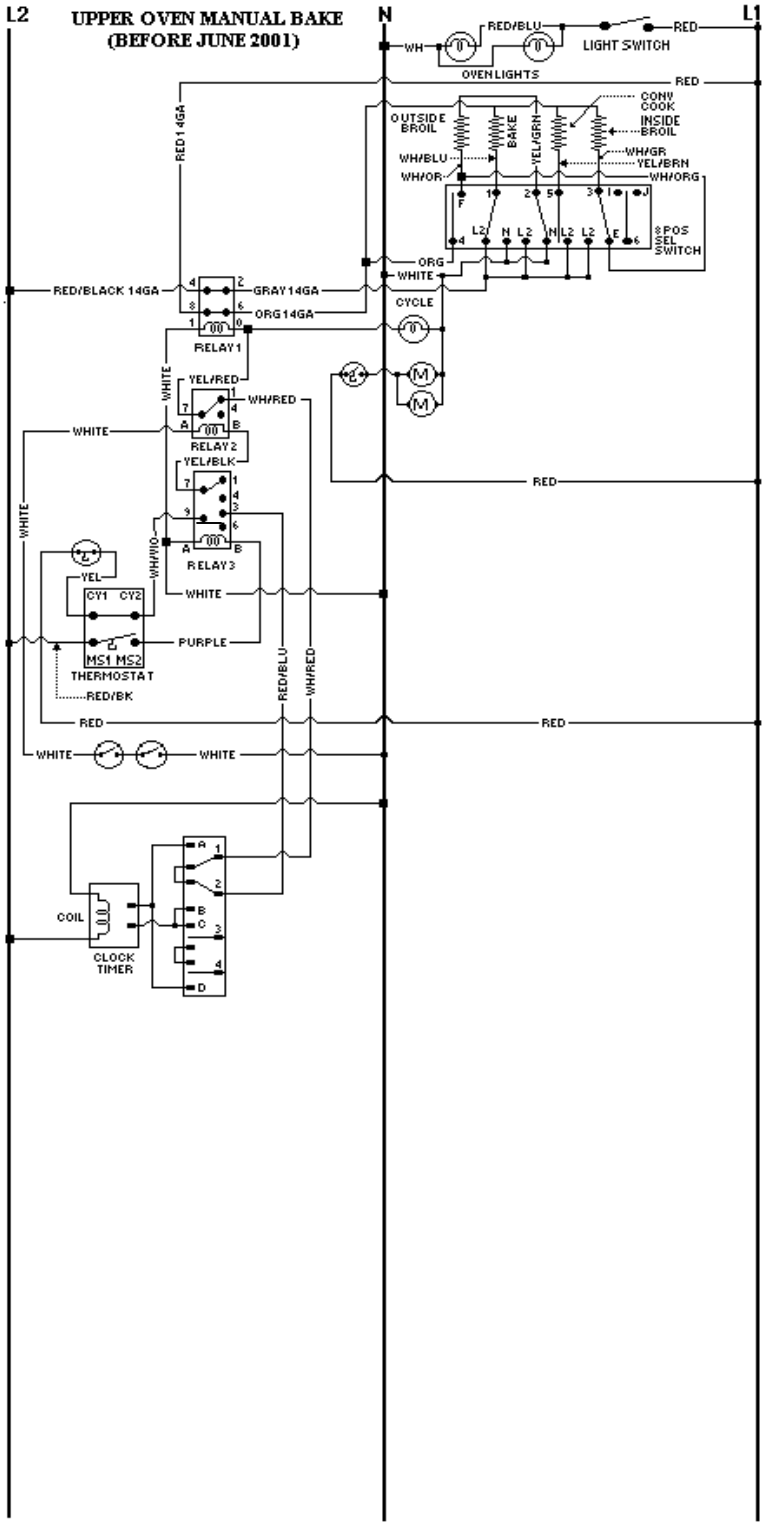


RELAY #6

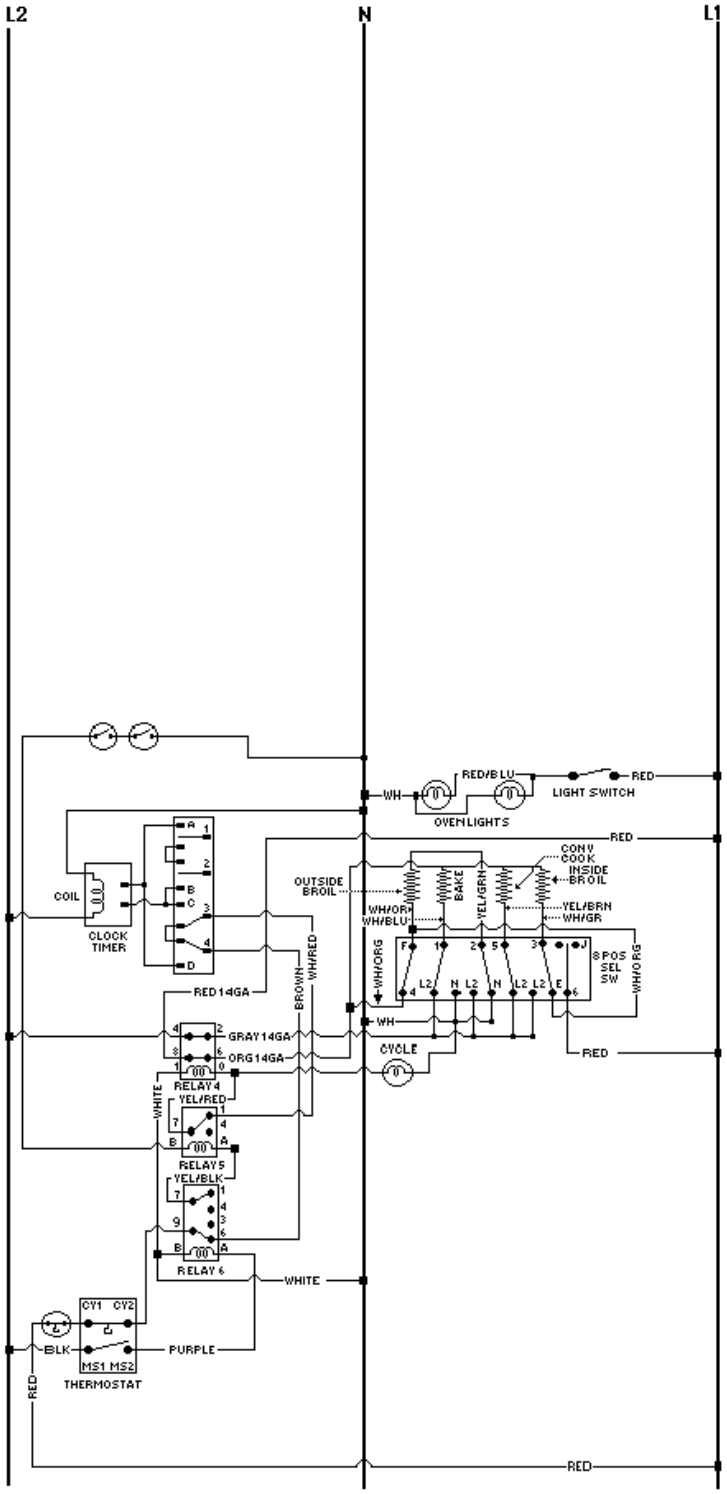




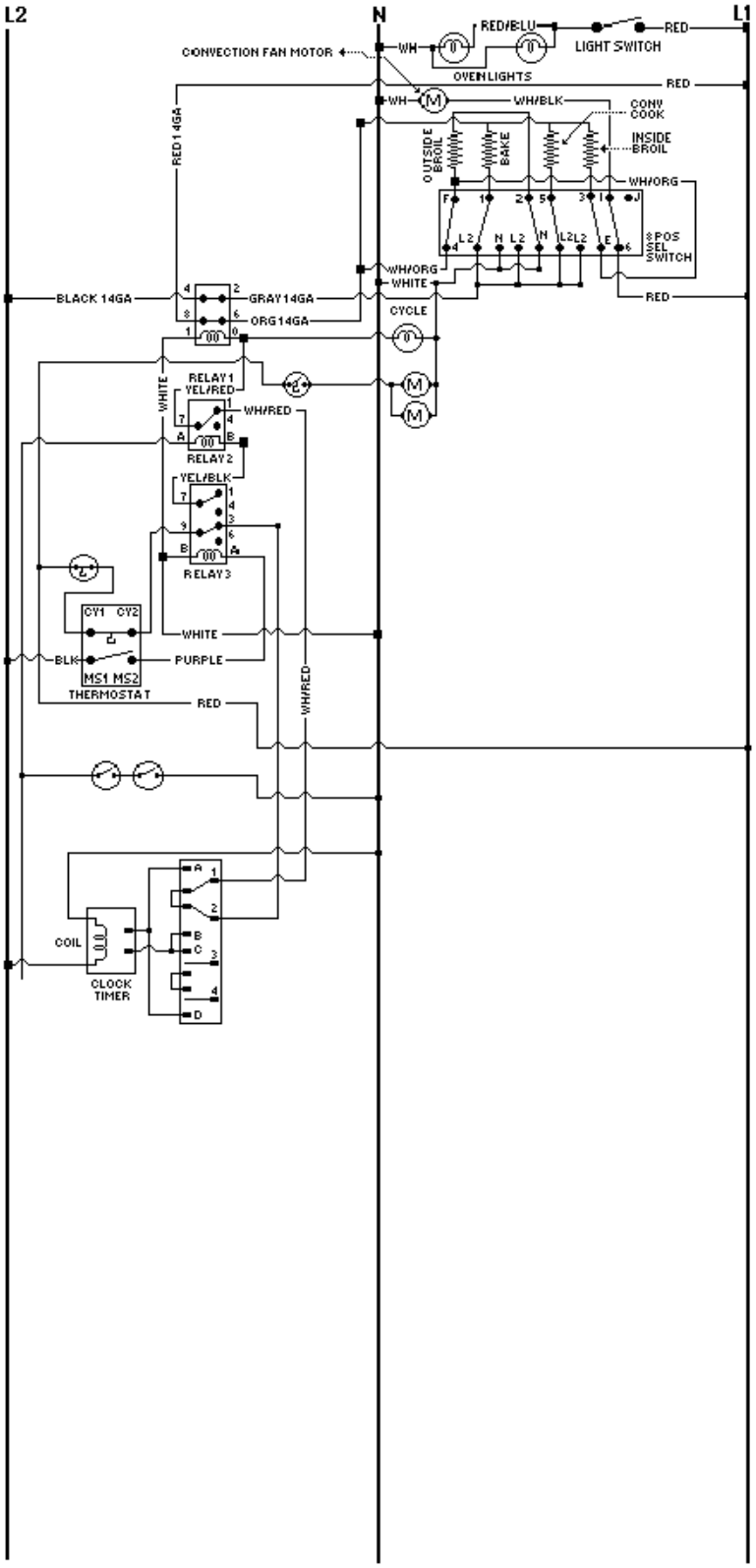
VEDO205 BUILT-IN 30" W. DOUBLE OVEN
UPPER OVEN MANUAL BAKE
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



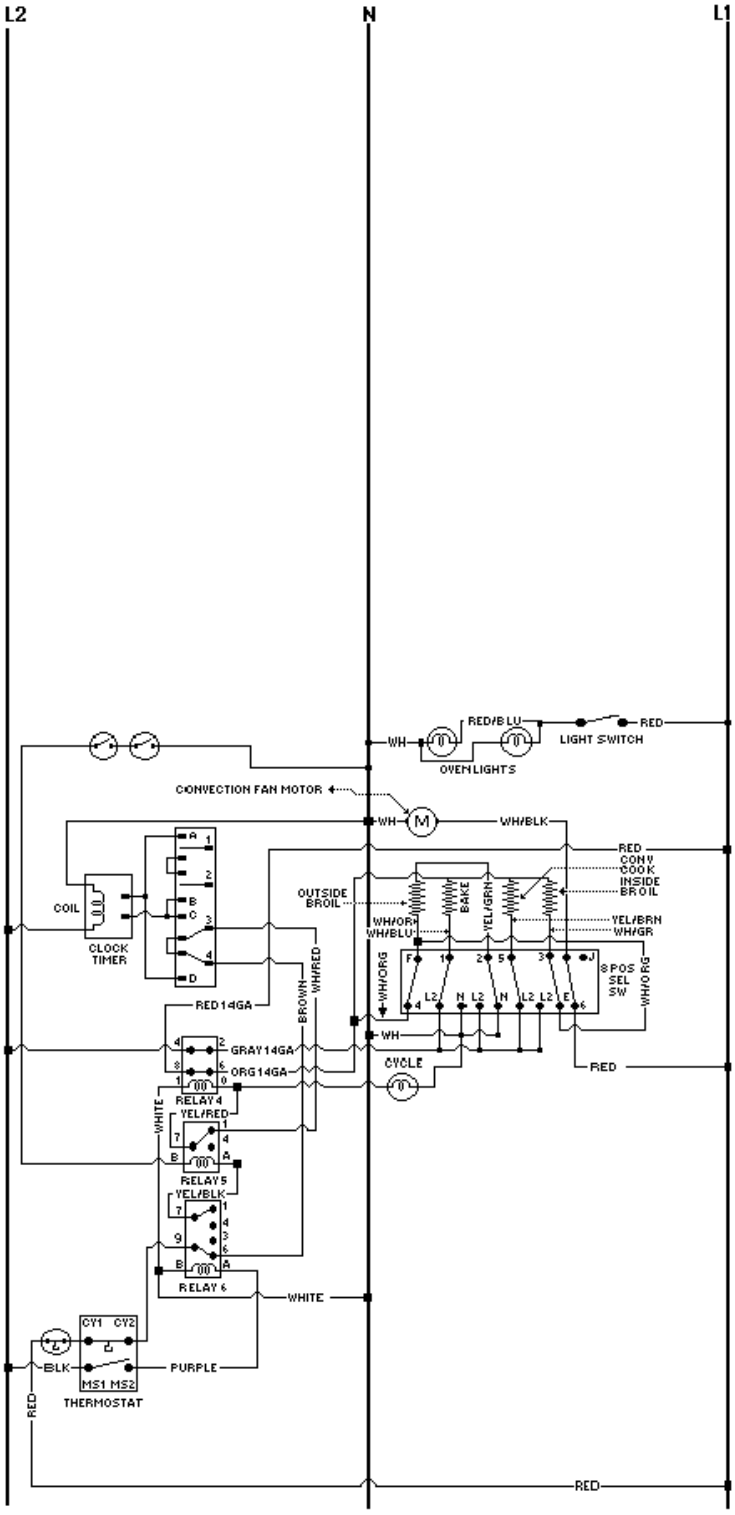
VEDO205 BUILT-IN ELECTRIC 30" W. DOUBLE OVEN
LOWER OVEN MANUAL BAKE
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



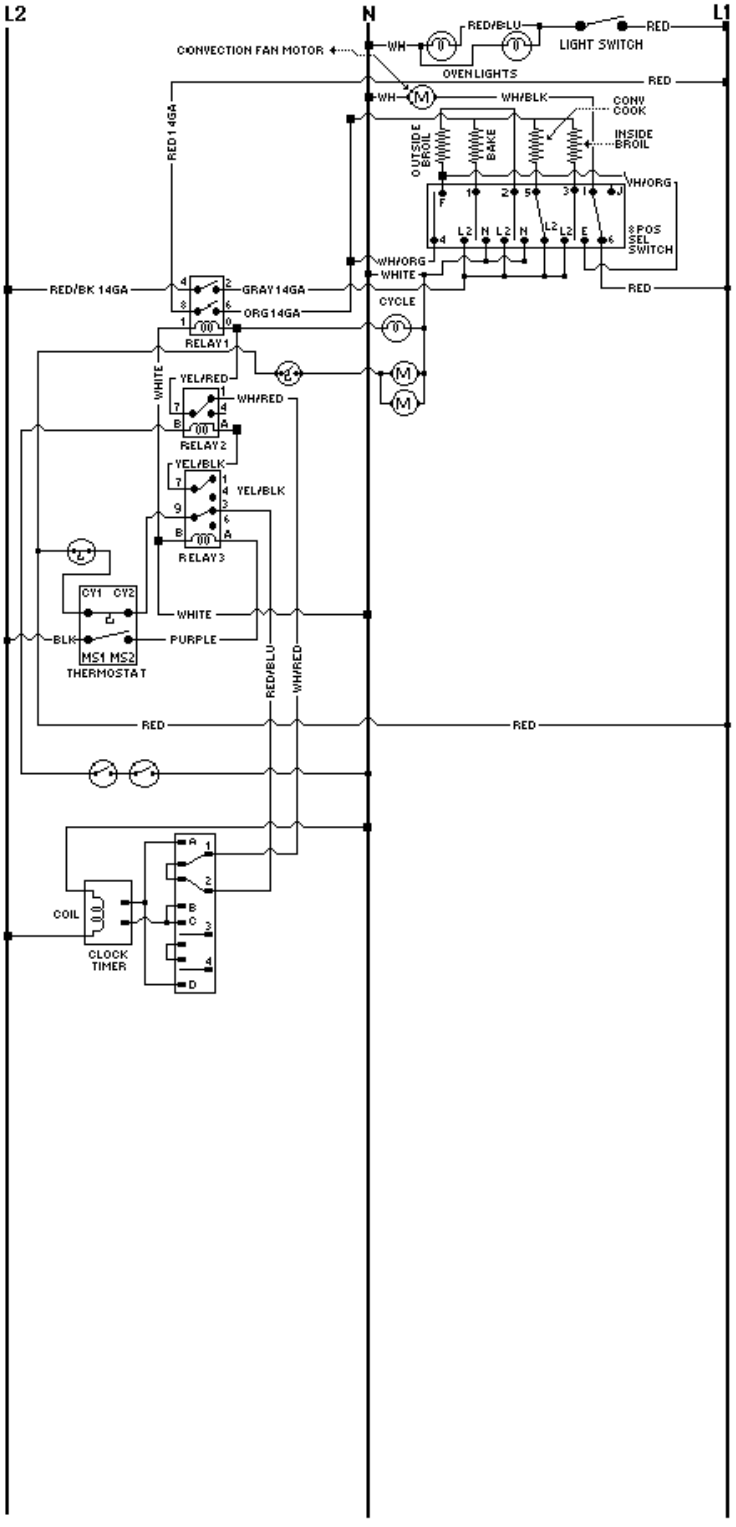
VEDO205 BUILT-IN ELECTRIC 30" W. DOUBLE OVEN
UPPER OVEN CONVECTION BAKE
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



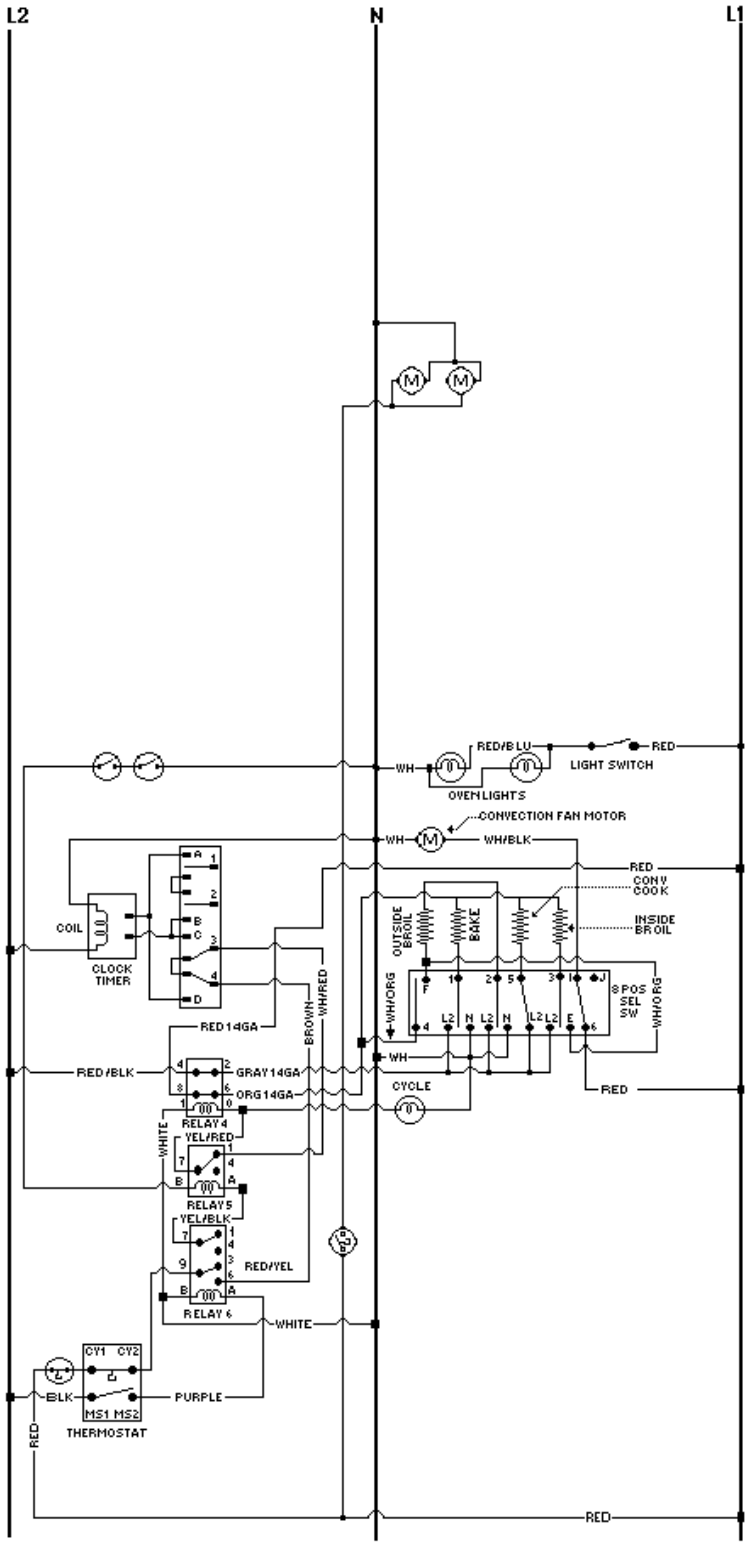
VEDO205 BUILT-IN ELECTRIC 30" W. DOUBLE OVEN
LOWER OVEN CONVECTION BAKE
(BEFORE JUNE 2001 / SEE G-018 & G019 for updates)



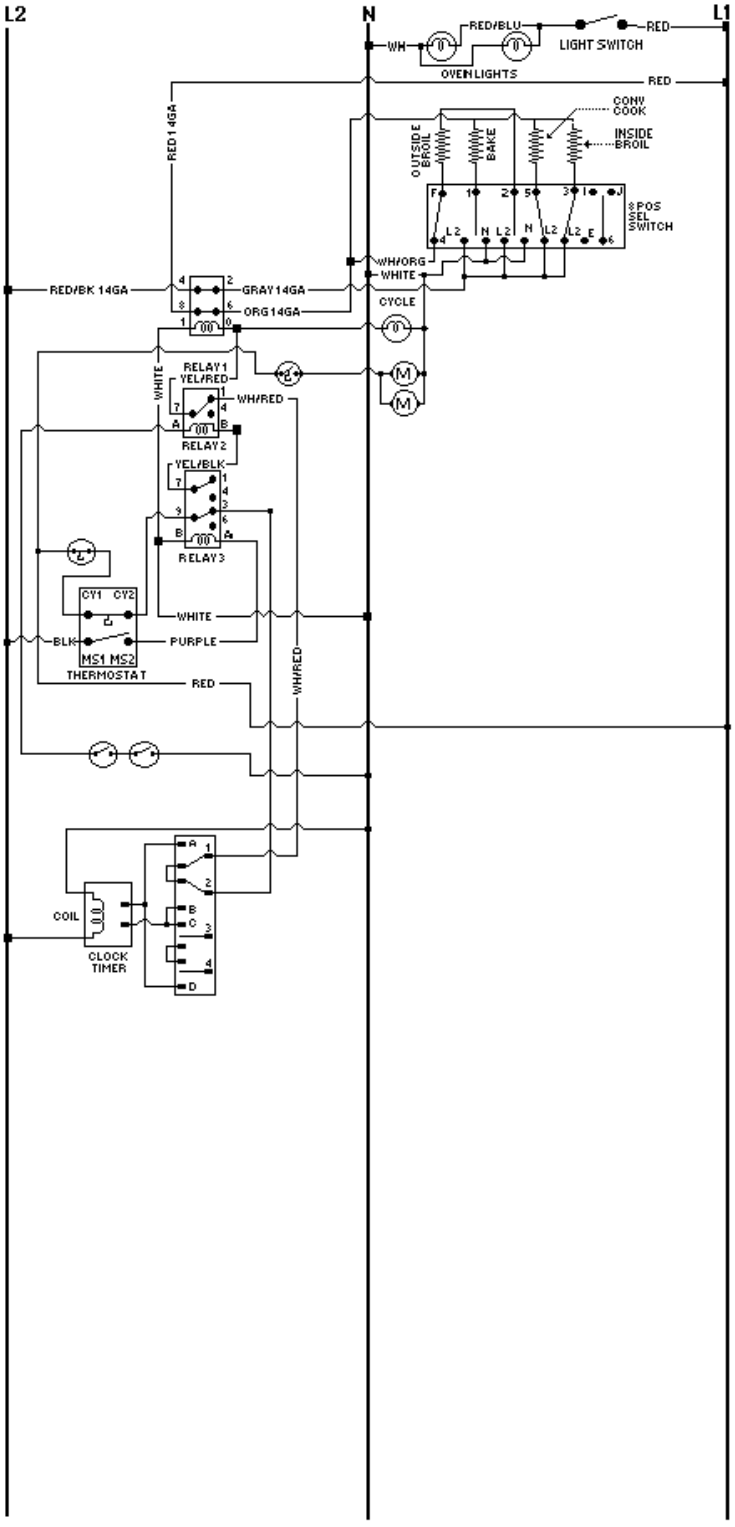
VEDO205 BUILT-IN ELECTRIC 30" W. DOUBLE OVEN
UPPER OVEN CONVECTION COOK
(BEFOR JUNE 2001 / SEE G-018 & G-019 for updates)



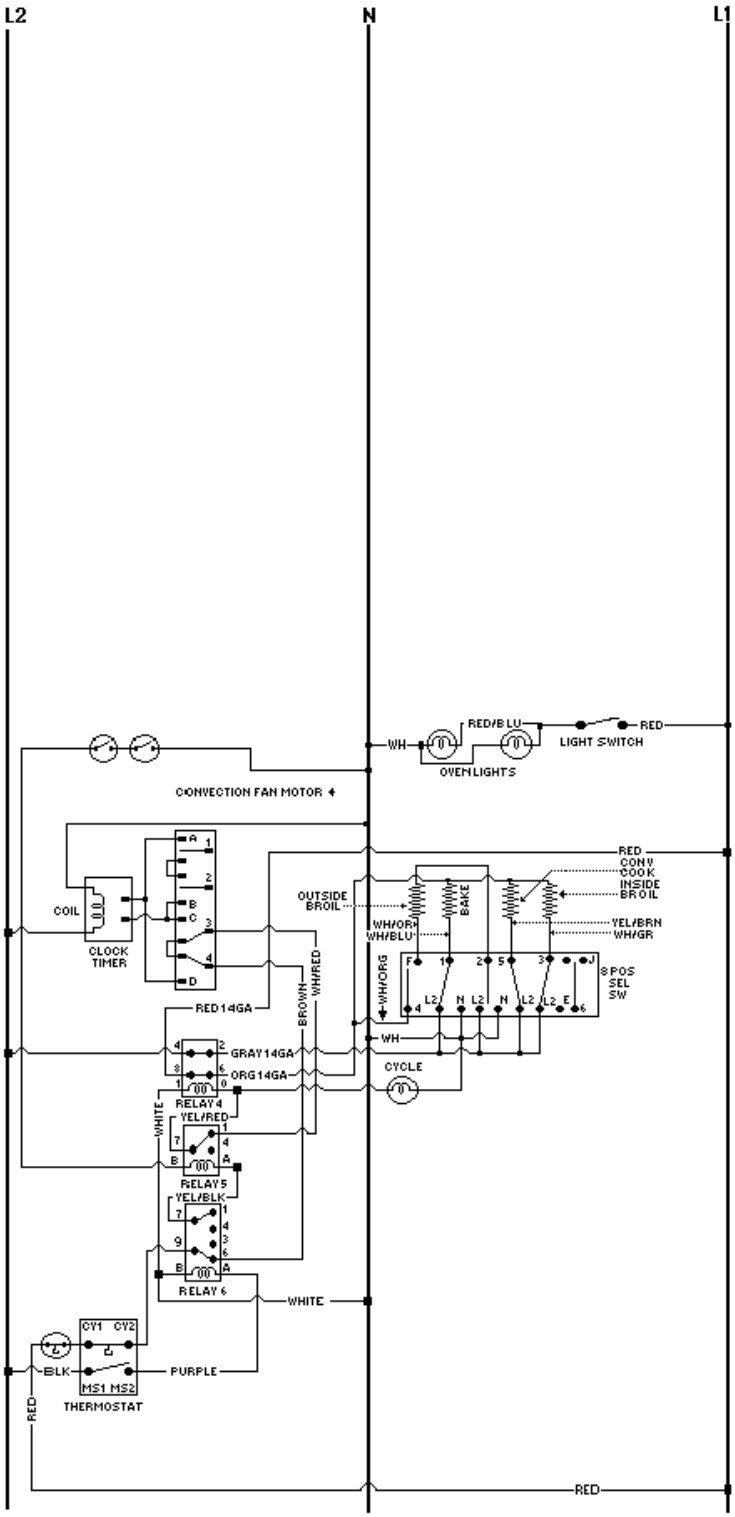
VEDO205 BUILT-IN ELECTRIC 30" W. DOUBLE OVEN
LOWER OVEN CONVECTION COOK
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



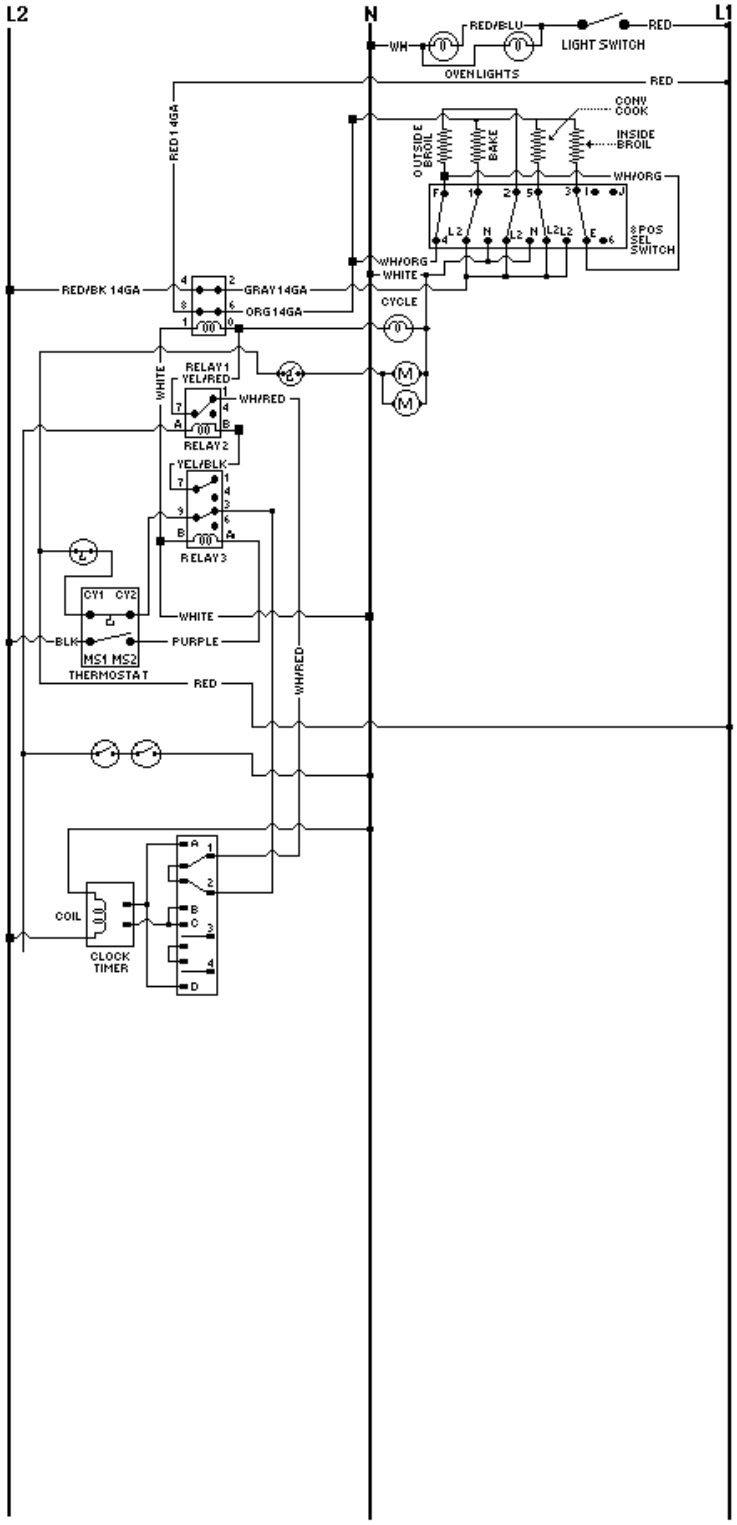
VEDO205 BUILT-IN ELECTRIC 30” W. DOUBLE OVEN
UPPER OVEN MINI BROIL
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



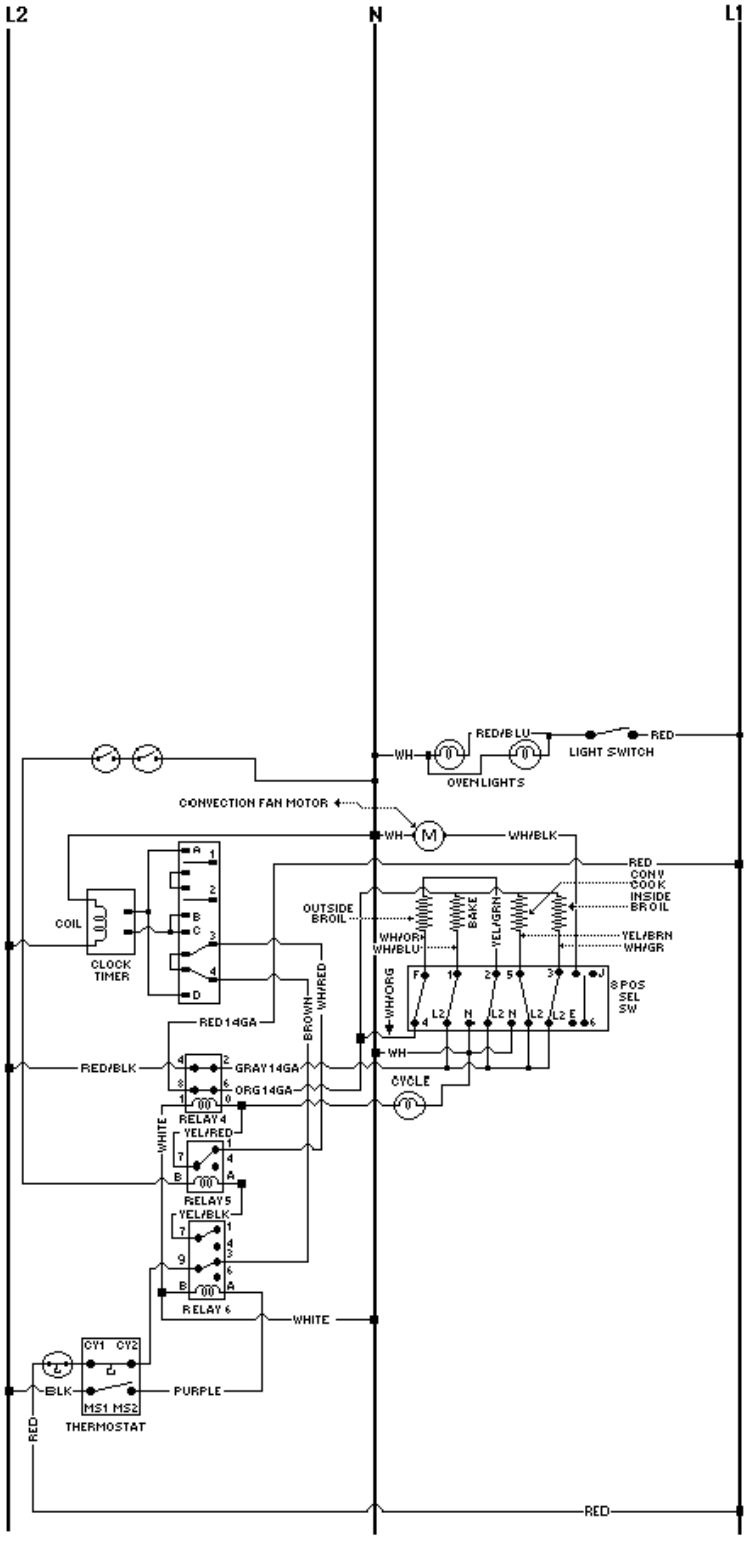
VEDO205 BUILT-IN ELECTRIC 30” W. DOUBLE OVEN
LOWER OVEN MINI BROIL
(BEFORE JUNE 2001 / G-018 & G-019 for updates)



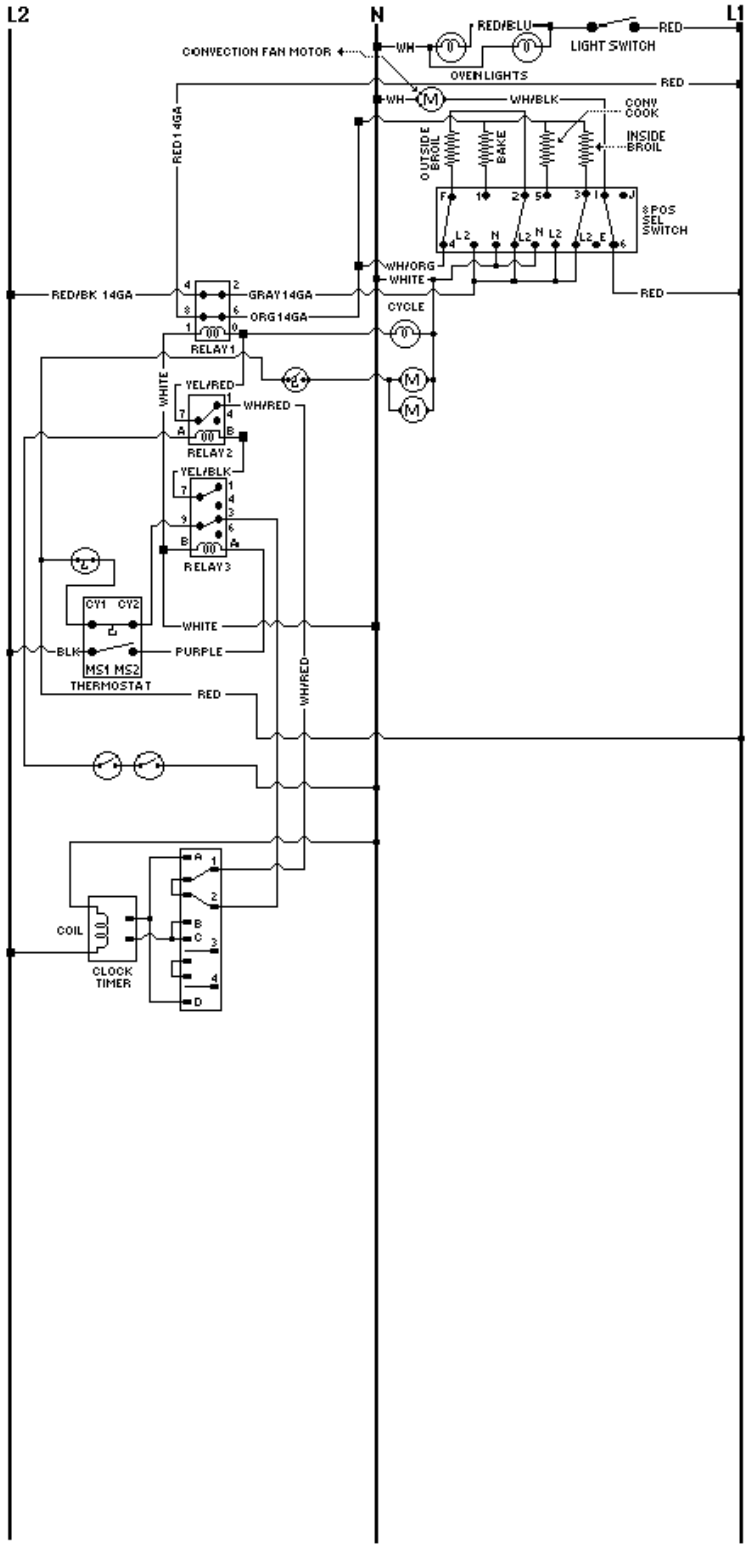
VEDO205 BUILT-IN ELECTRIC 30" W. DOUBLE OVEN
UPPER OVEN MAXI BROIL
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



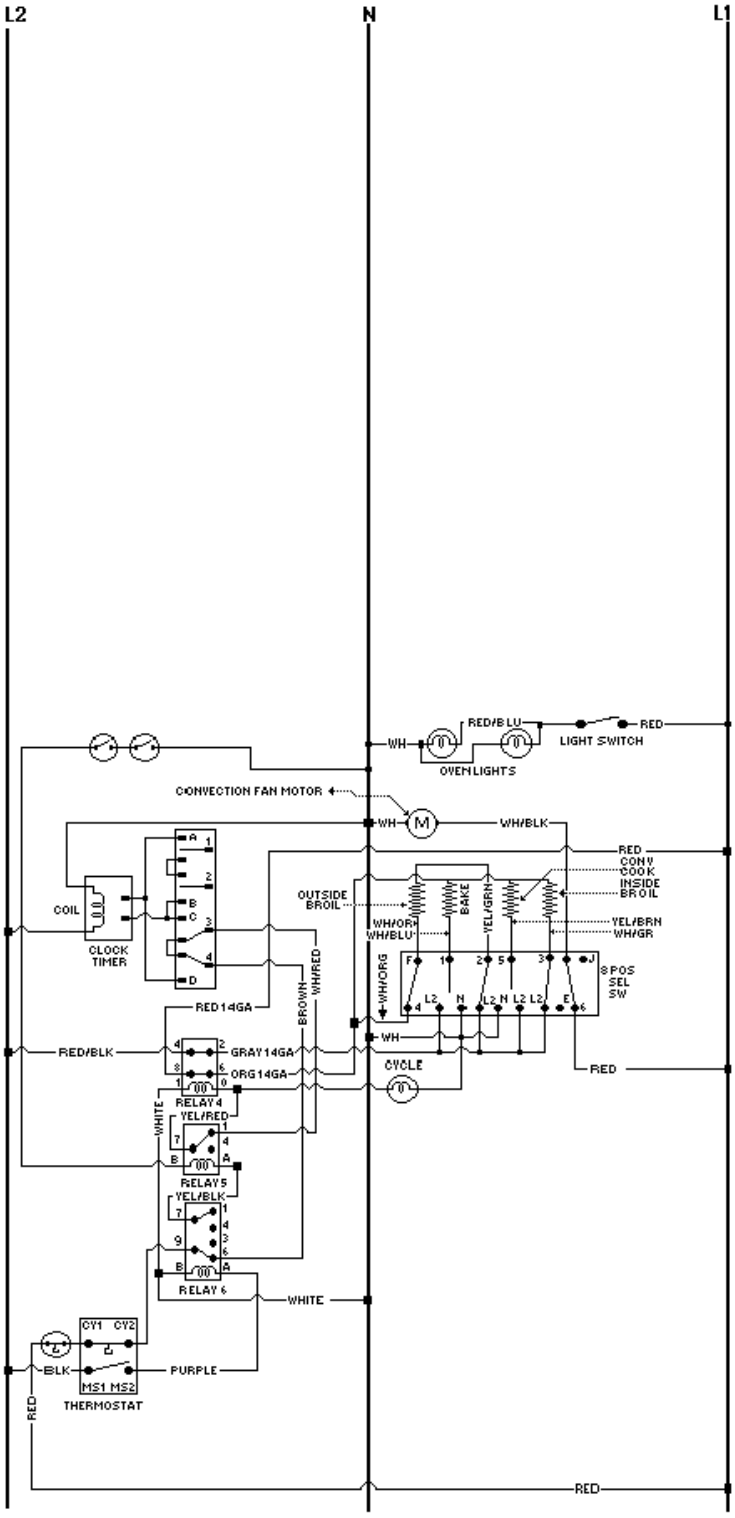
VEDO205 BUILT-IN 30" W. DOUBLE OVEN
LOWER OVEN MAXI BROIL
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



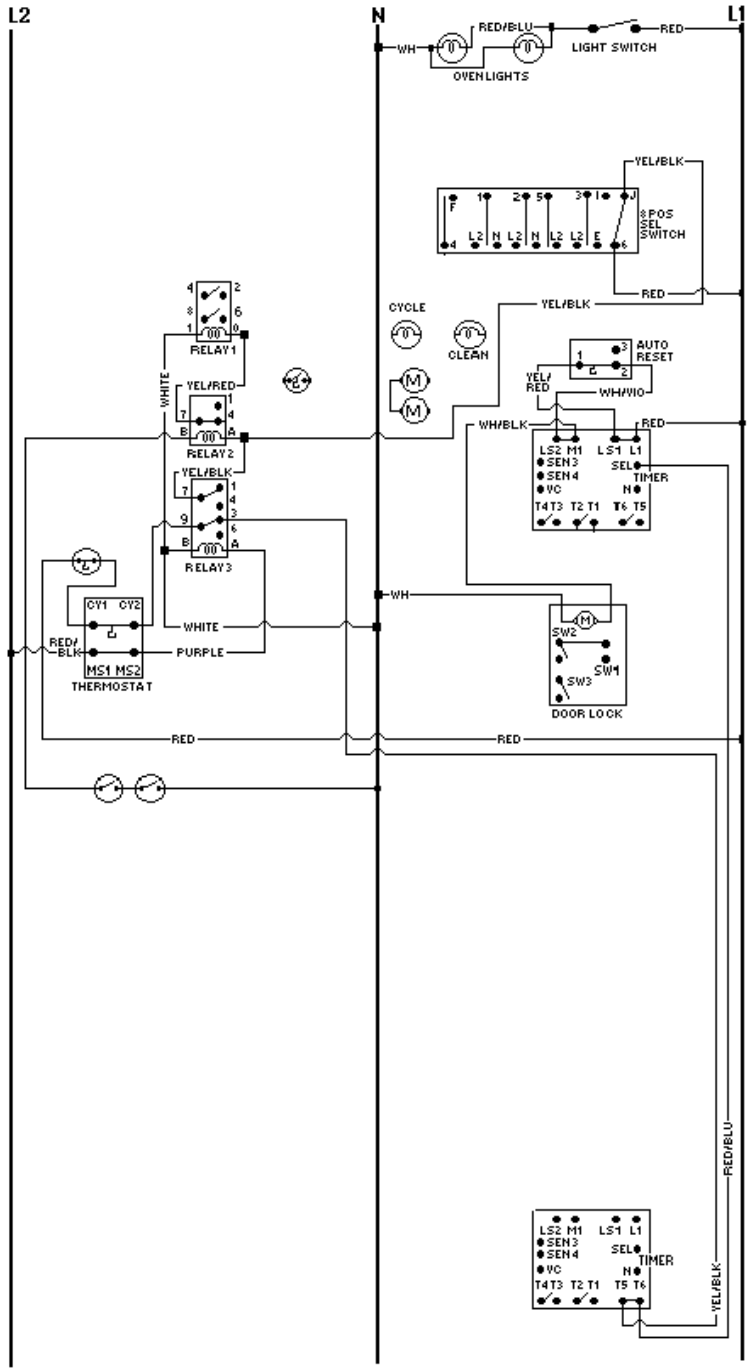
VEDO205 BUILT-IN 30" W. ELECTRIC DOUBLE OVEN
UPPER OVEN CONVECTION BROIL
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



VEDO205 BUILT-IN ELECTRIC 30” W. DOUBLE OVEN
LOWER OVEN CONVECTION BROIL
(BEFOR JUNE 2001 / SEE G-018 & G-019 for updates)

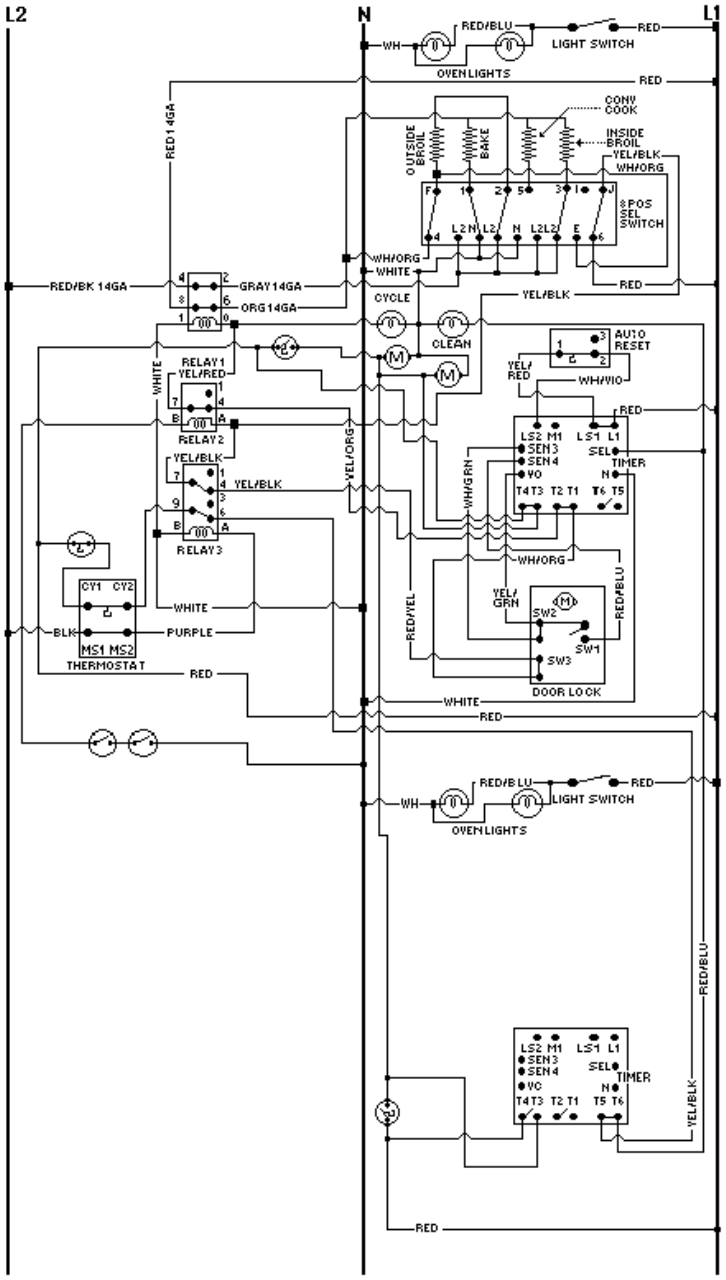


VEDO205 BUILT-IN 30" W. DOUBLE OVEN
UPPER OVEN CLEAN (BEFORE DOOR LOCK)
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)



Selector Clean position closes Heating Elements circuits 4 – F, 1 – N, 2 – L2, 3 – L2 and Door Lock Module / Timer circuit J – 6 switches Relay #2. Thermostat clean position closes the Cycle Switch and Thermostat Clean Switch, which switches Relay #3. Switching Relay #3 allows circuit J – 6 to turn on the Clean Indicator Light and enable the Door Lock Module / Timer which closes Relays LS1 – L1 and LS2 – M1. This powers the Door Lock Motor until 10 seconds after Sensor 3 is signaled be VC that Door Lock Switch SW2 has been closed mechanically (along with SW3) by the Door Lock Bolt.

VEDO205 BUILT-IN ELECTRIC 30" W. DOUBLE OVEN
UPPER OVEN CLEAN (AFTER DOOR LOCK)
(AFTER JUNE 2001 / SEE G-018 & G-019 for updates)

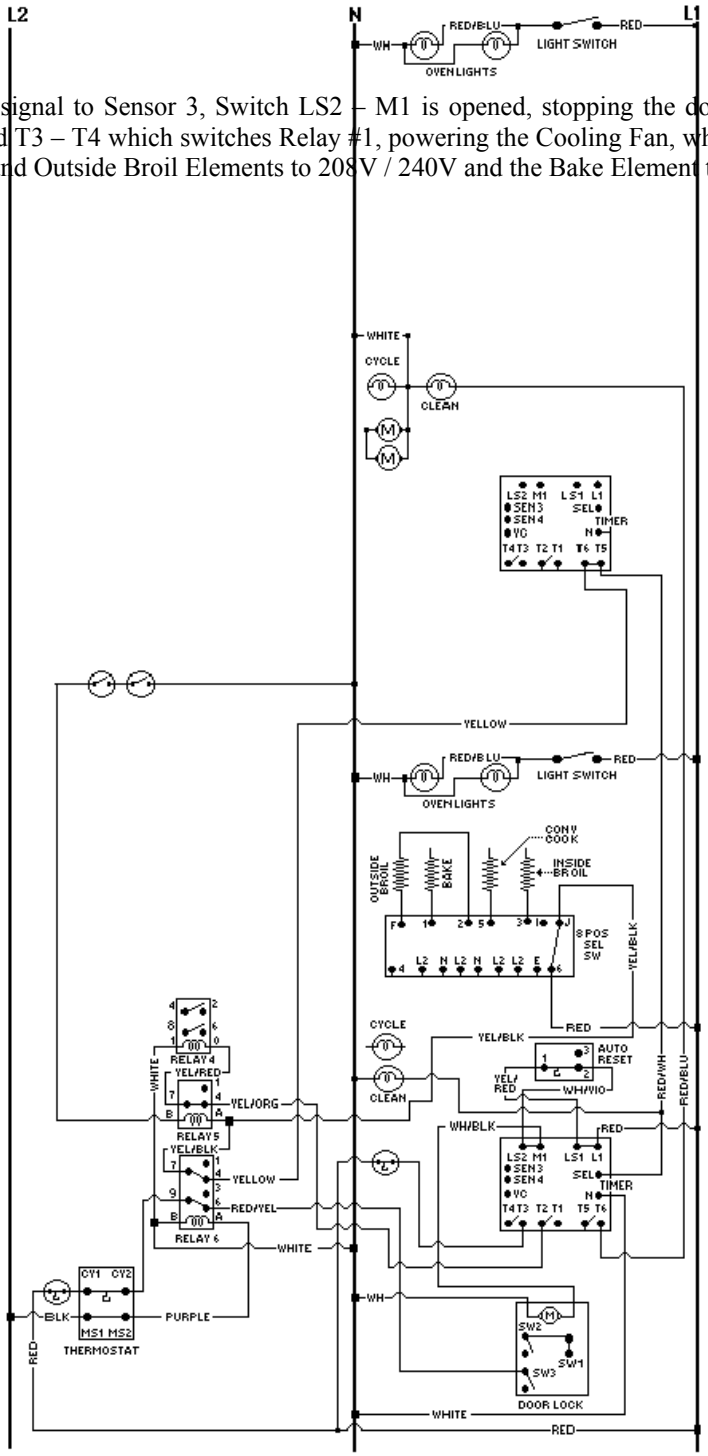


10 seconds after the signal to Sensor 3, Switch LS2 – M1 is opened, stopping the door lock motion and switches T1 – T2, and T3 – T4 which switches Relay #1, powering the Cooling Fan, which closes Relay #1 powering the Inside and Outside Broil Elements to 208V / 240V and the Bake Element to 120V.

Auto Reset switches to 1 – 3 which turns Door Lock Indicator on and disables Door Lock Motor circuit.

VEDO205 BUILT-IN ELECTRIC 30" W. DOUBLE OVEN
LOWER OVEN CLEAN (BEFORE DOOR LOCK)
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)

Selector Clean position closes Heating Elements circuits 4 – F, 1 – N, 2 – L2, 3 – L2 and Door Lock Module / Timer circuit J – 6 switches Relay #2. Thermostat clean position closes the Cycle Switch and Thermostat Clean Switch, which switches Relay #3. Switching Relay #3 allows circuit J – 6 to turn on the Clean Indicator Light and enable the Door Lock Module / Timer which closes Relays LS1 – L1 and LS2 – M1. This powers the Door Lock Motor until 10 seconds after Sensor 3 is signaled be VC that Door Lock Switch SW2 has been closed mechanically (along with SW3) by the Door Lock Bolt.

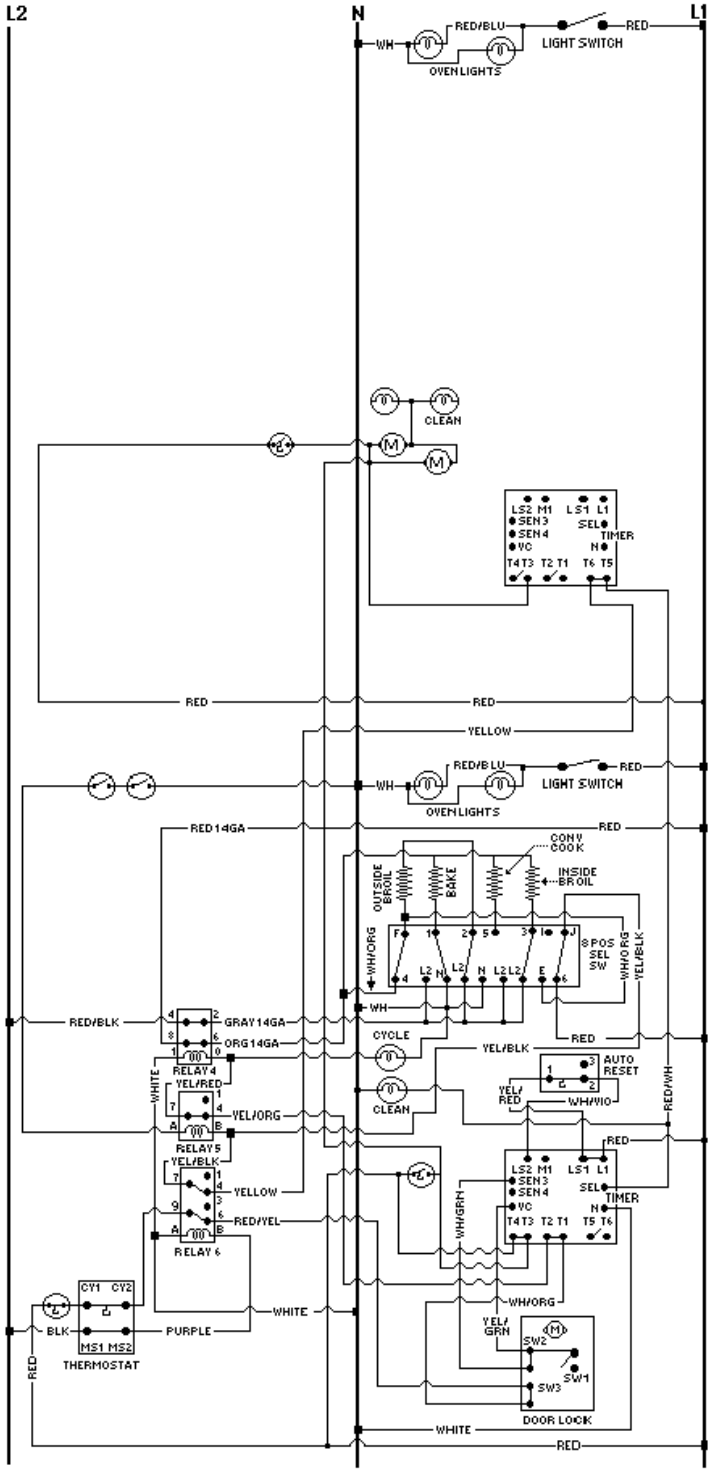


10 seconds after the signal to Sensor 3, Switch LS2 – M1 is opened, stopping the door lock motion and switches T1 – T2, and T3 – T4 which switches Relay #1, powering the Cooling Fan, which closes Relay #1 powering the Inside and Outside Broil Elements to 208V / 240V and the Bake Element to 120V.

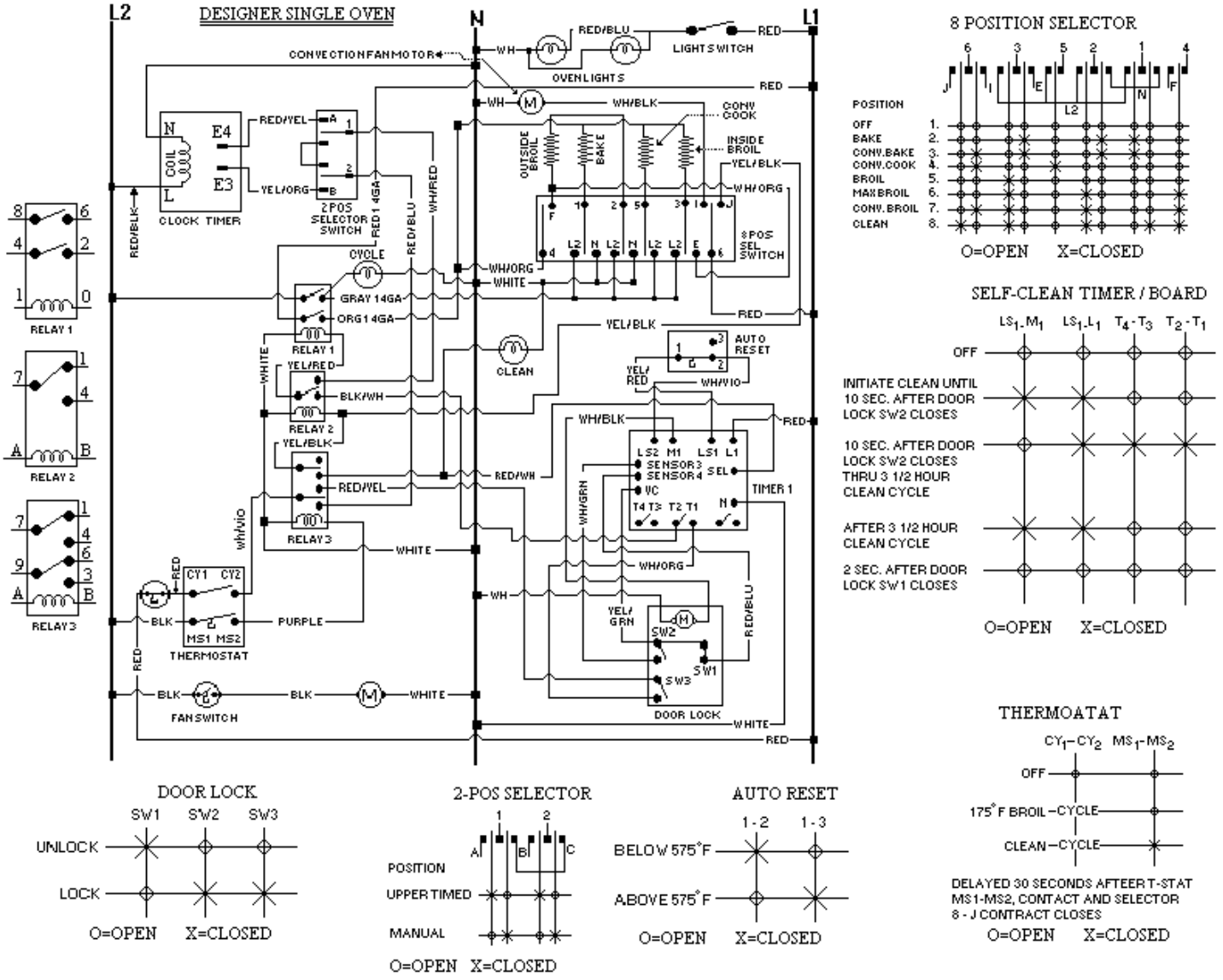
VEDO205 BUILT-IN ELECTRIC 30 " W. DOUBLE OVEN
LOWER OVEN CLEAN (AFTER DOOR LOCK)
(BEFORE JUNE 2001 / SEE G-018 & G-019 for updates)

Auto Reset switches to 1 – 3 which turns Door Lock Indicator on and disables Door Lock Motor circuit.

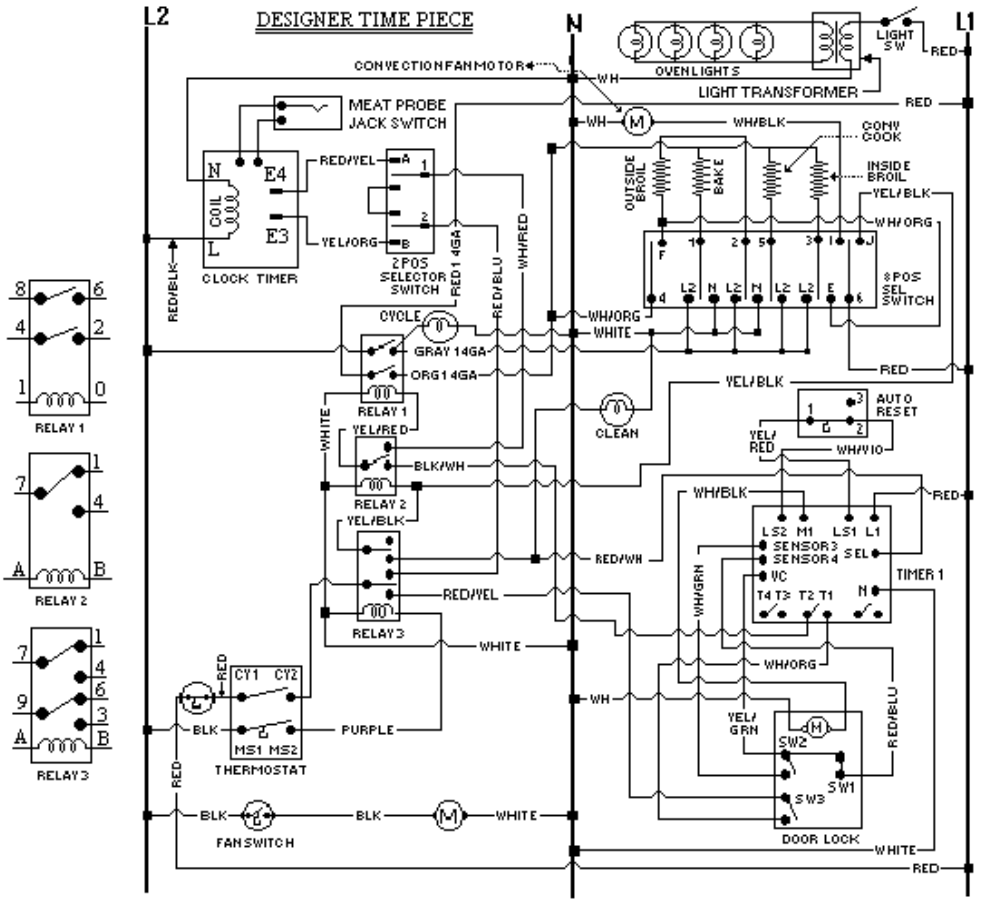
Timer Switches T3 – T4, T1 – T2, open, turning off the Cooling Fan, which will then be powered at 120V by the Fan Limit Switch when needed, and opening the circuit to Relay #1 which disables the Heating Elements. Switch LS2 – M1 closes to power the Door Lock Motor.

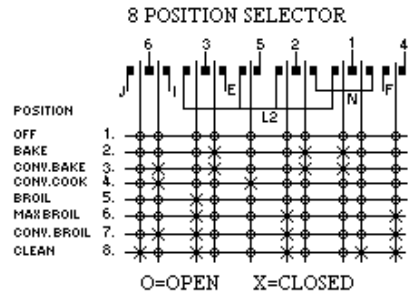


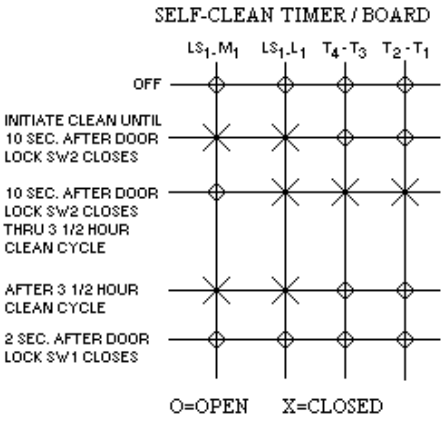
Wiring Diagram Built-in Electric Single Oven (DESO105)
Designer Oven

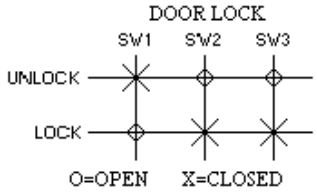


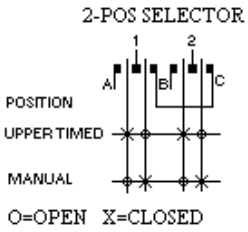
Wiring Diagram Built-in Electric Single Oven (DESO105)
Designer Time Piece

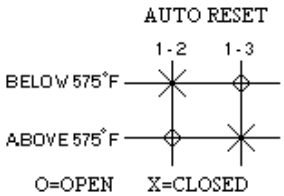


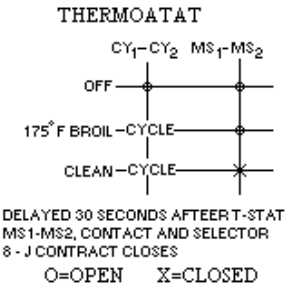




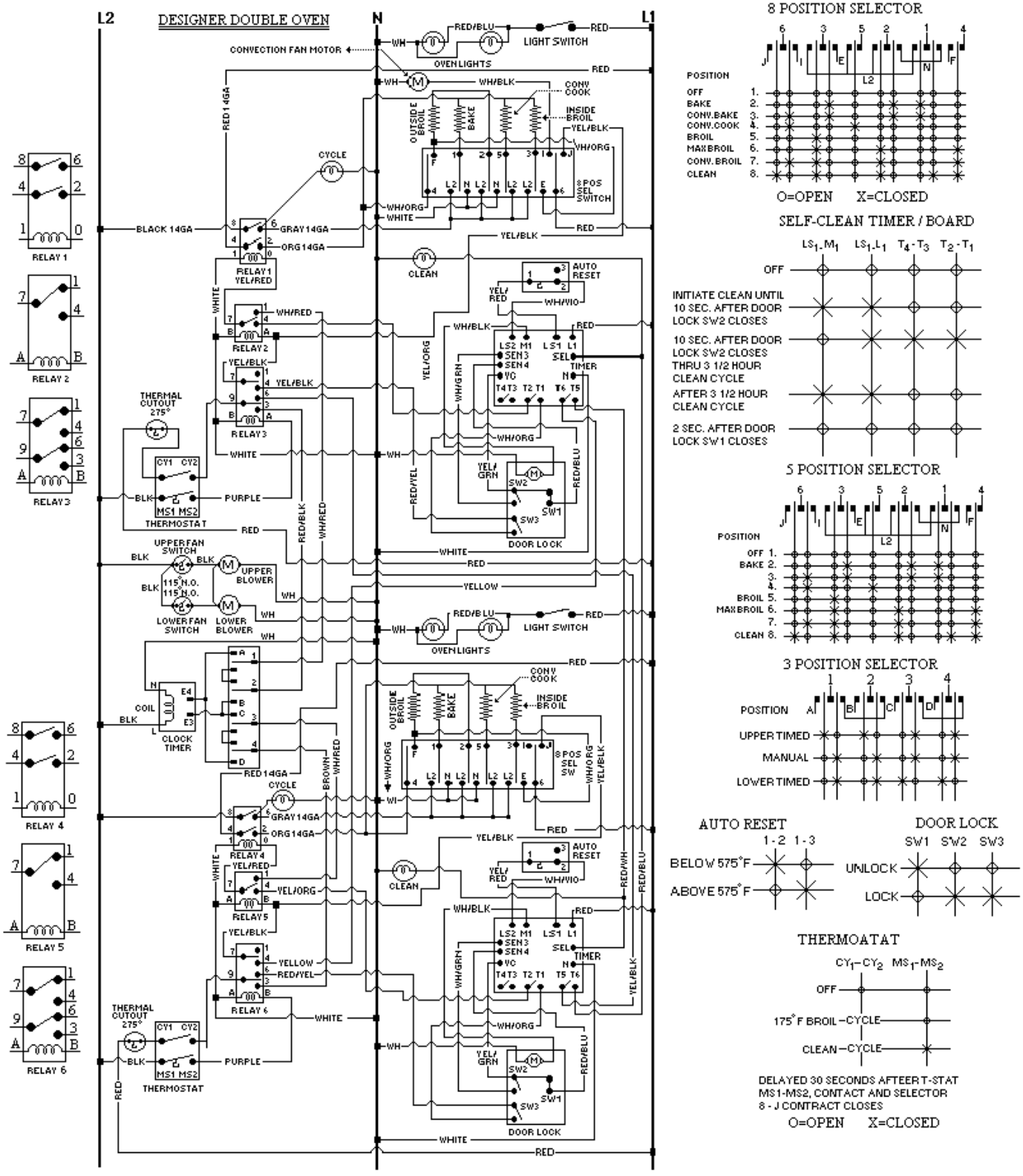




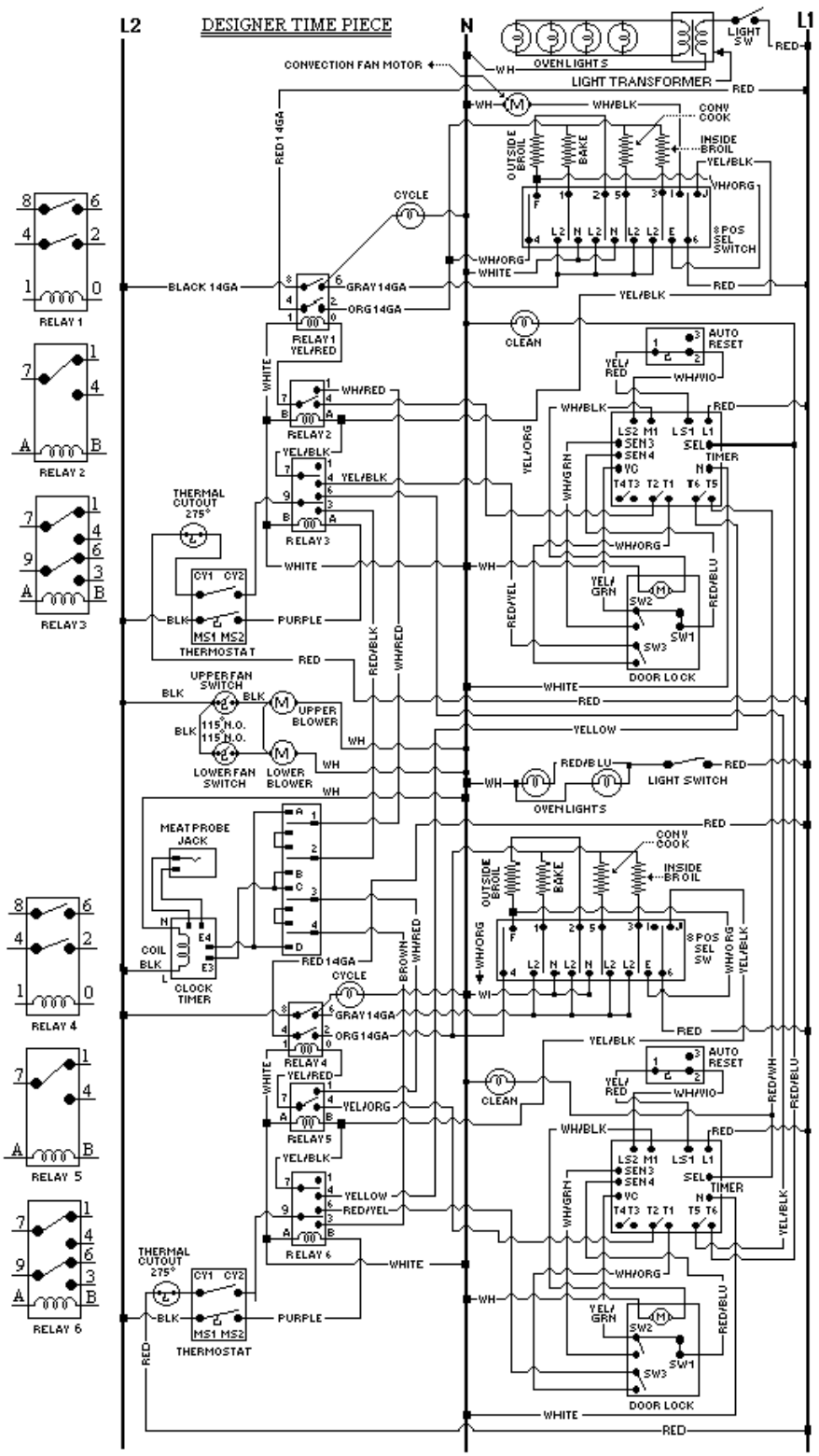




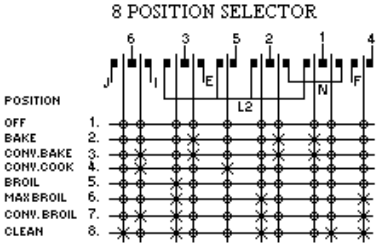
Wiring Diagram Built-in Double Oven (DED0200)
Designer Oven



Wiring Diagram Built-in Electric Double Oven (DEDO200)
Designer Time Piece

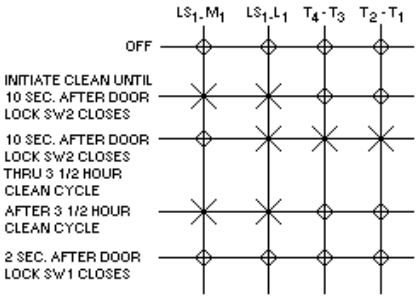


8 POSITION SELECTOR

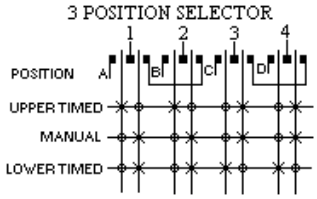


O=OPEN X=CLOSED

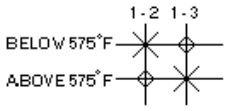
SELF-CLEAN TIMER / BOARD



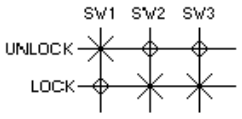
3 POSITION SELECTOR



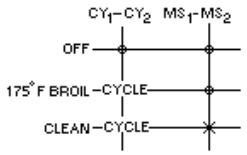
AUTO RESET



DOOR LOCK



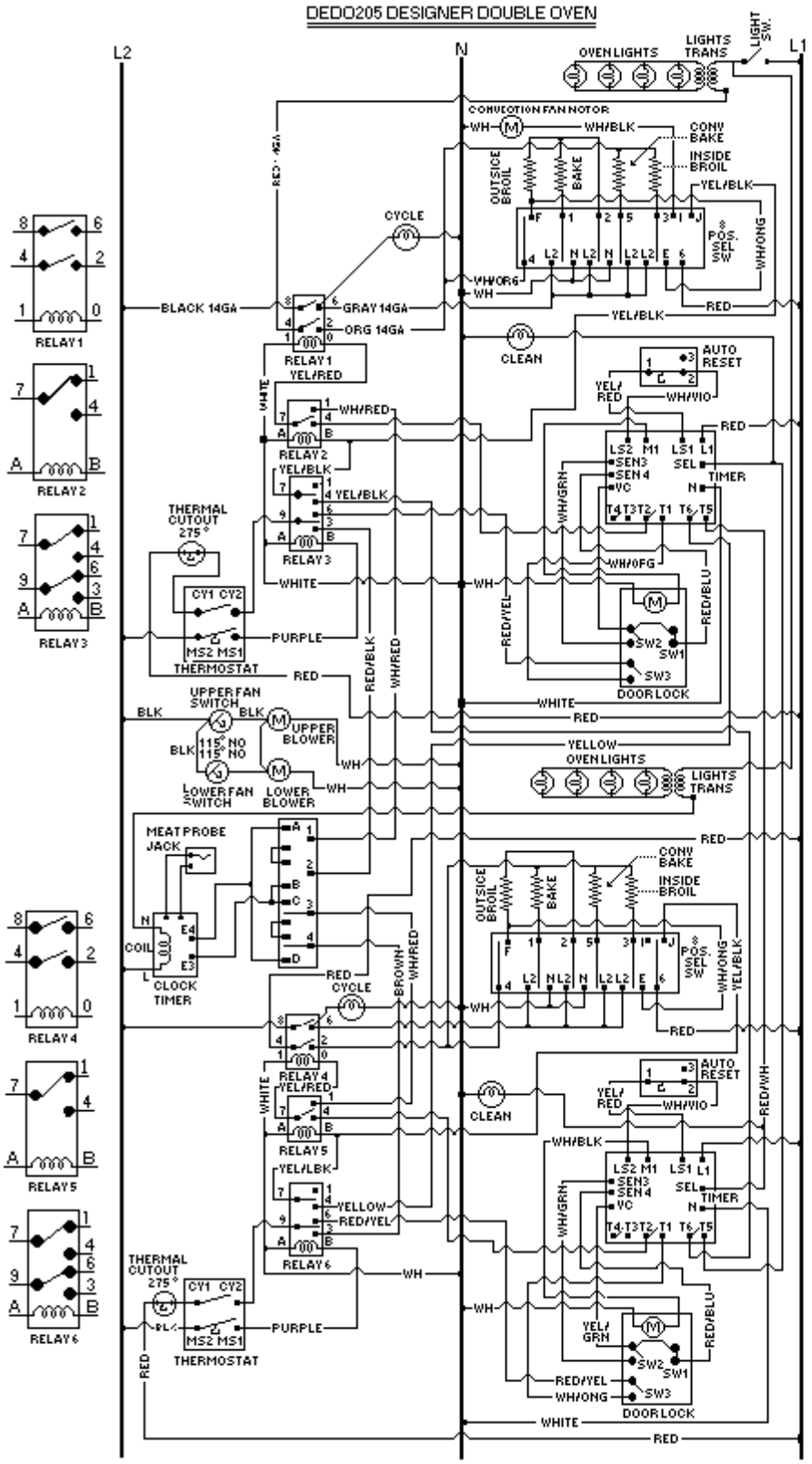
THERMOATAT



DELAYED 30 SECONDS AFTEER T-STAT MS1-MS2, CONTACT AND SELECTOR 8 - J CONTRACT CLOSES

O=OPEN X=CLOSED

DESIGNER TIME PIECE DOUBLE OVEN



8 POSITION SELECTOR SWITCH

POSITION	6	3	5	2	1	4
OFF						
BAKE					X	
CONV. BAKE					X	X
CONV. COOK				X		
BROIL			X			
MAXI BROIL			X		X	
CONV. BROIL		X				
CLEAN	X					

O = OPEN X = CLOSED

SELF CLEAN TIMER / BOARD

	LS_1-M_1	LS_1-L_1	T_4-T_3	T_2-T_1
OFF				
INITIATE CLEAN UNTIL 10 SEC. AFTER DOOR LOCK SW2 CLOSES	X			
10 SEC. AFTER DOOR LOCK SW2 CLOSES THRU 3 1/2 HOUR CLEAN CYCLE		X		
AFTER 3 1/2 HOURS CLEAN CYCLE			X	
2 SEC. AFTER DOOR LOCK SW1 CLOSES				X

3 POSITION SELECTOR

POSITION	A	B	C	D
UPPER TIMED	X			
MANUAL		X		
LOWER TIMED			X	

AUTO RESET

	1-2	1-3
BELOW 575°F	X	
ABOVE 575°F		X

DOOR LOCK

	SW1	SW2	SW3
UNLOCK		X	
LOCK	X		X

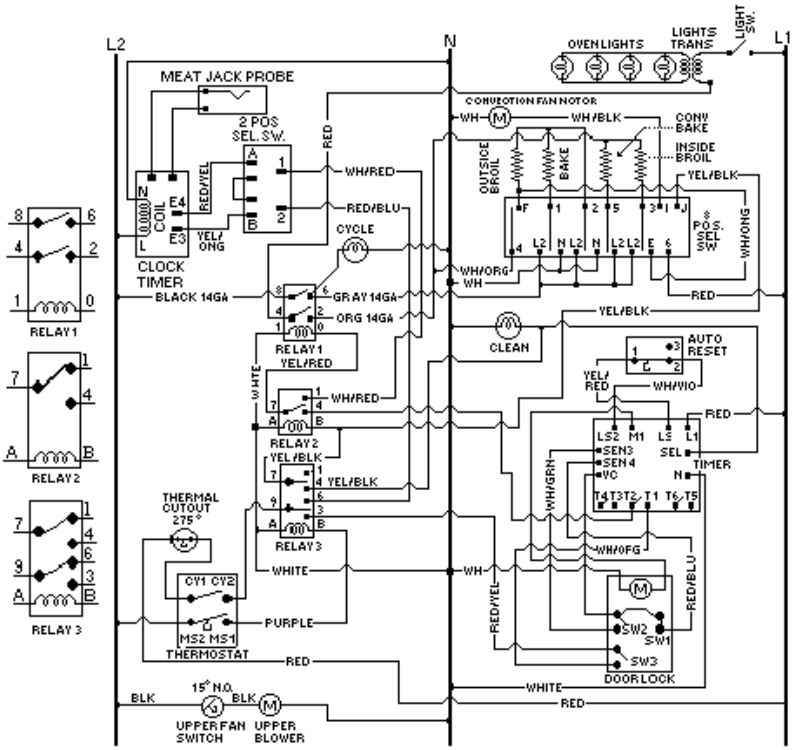
THERMOATAT

	CY_1-CY_2	MS_1-MS_2
OFF		
175 F BROIL - CYCLE	X	
CLEAN - CYCLE	X	X

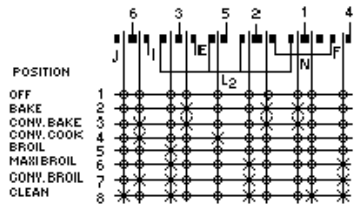
DELAY 30 SECONDS AFTER T-STAT MS1-MS2 CONTACT AND SELECTOR 6 - J CONTACT CLOSES

O = OPEN X = CLOSED

DESIGNER SINGLE ELECTRIC OVEN
TIME PIECE

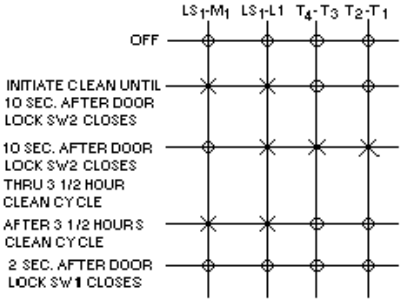


8 POSITION SELECTOR SWITCH

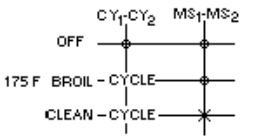


O = OPEN X = CLOSED

SELF CLEAN TIMER / BOARD



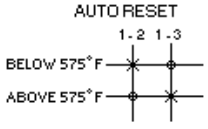
THERMOSTAT



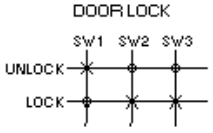
DELAY 30 SECONDS AFTER T-STAT
MS1-MS2 CONTACT AND SELECTOR
6 - J CONTACT CLOSES

O = OPEN X = CLOSED

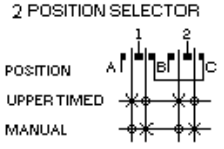
AUTO RESET



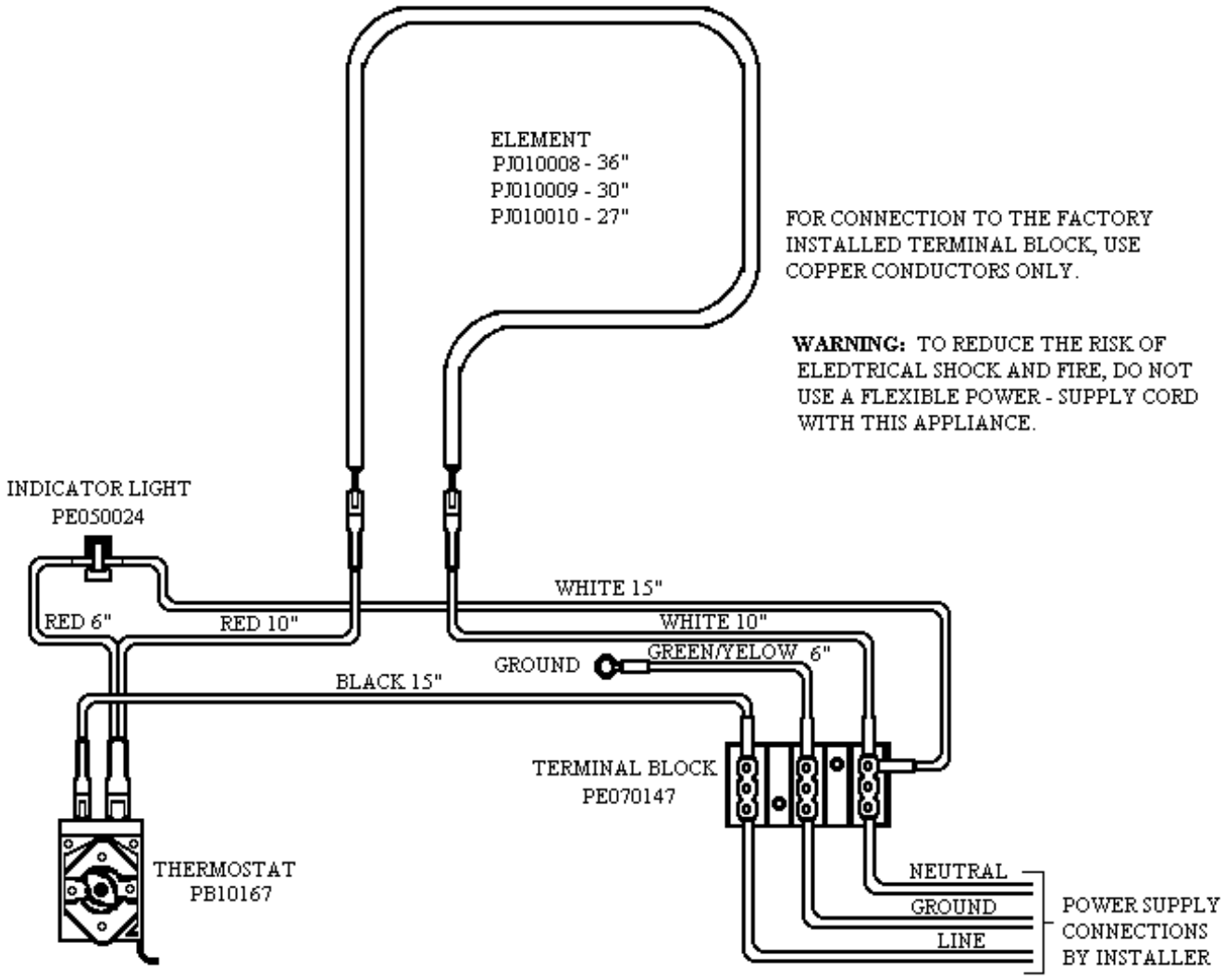
DOOR LOCK



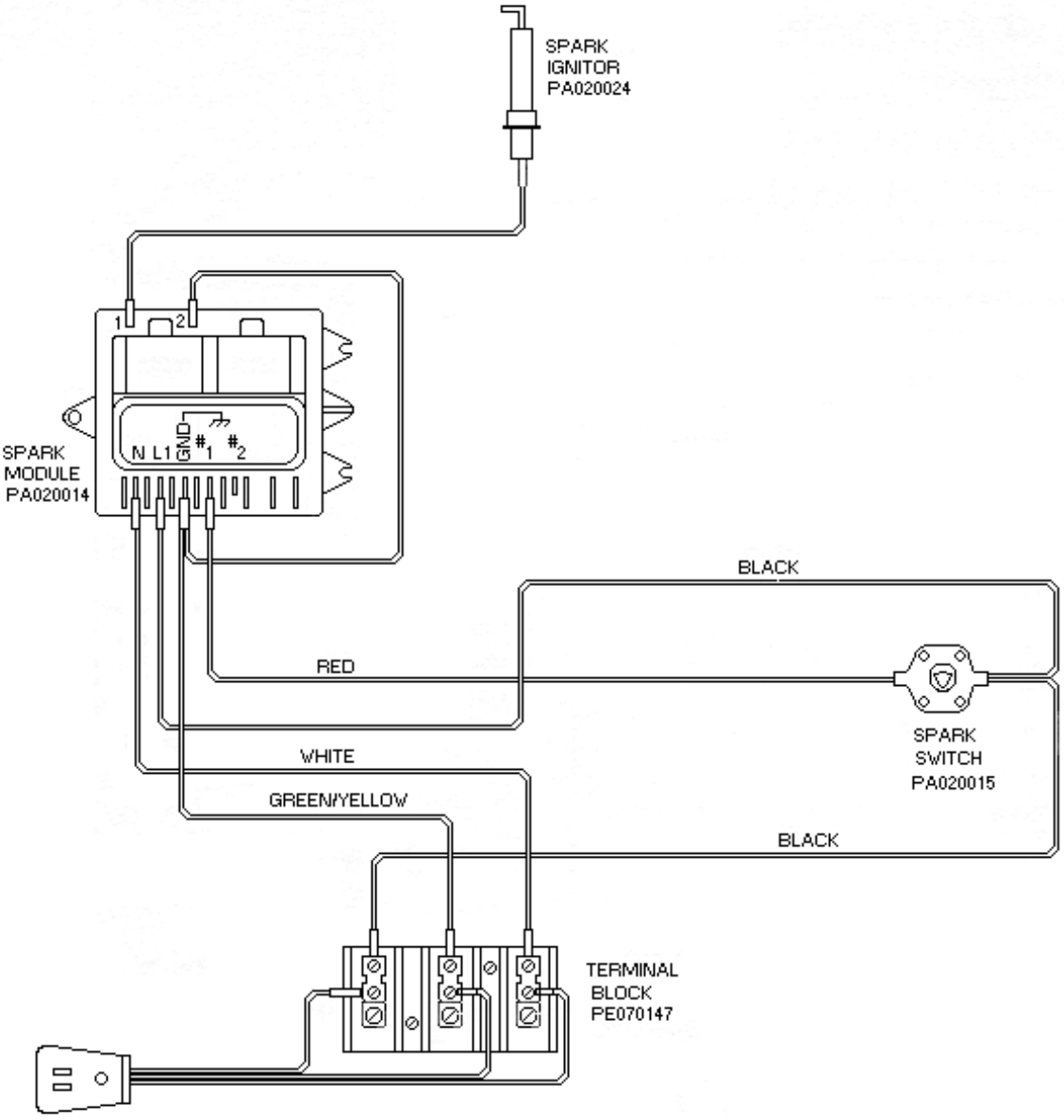
2 POSITION SELECTOR



WIRING DIAGRAM
BUILT-IN ELECTRIC WARMING DRAWER



WIRING DIAGRAM
BUILT-IN 24" W. WOK
(INDOOR MODELS ONLY)



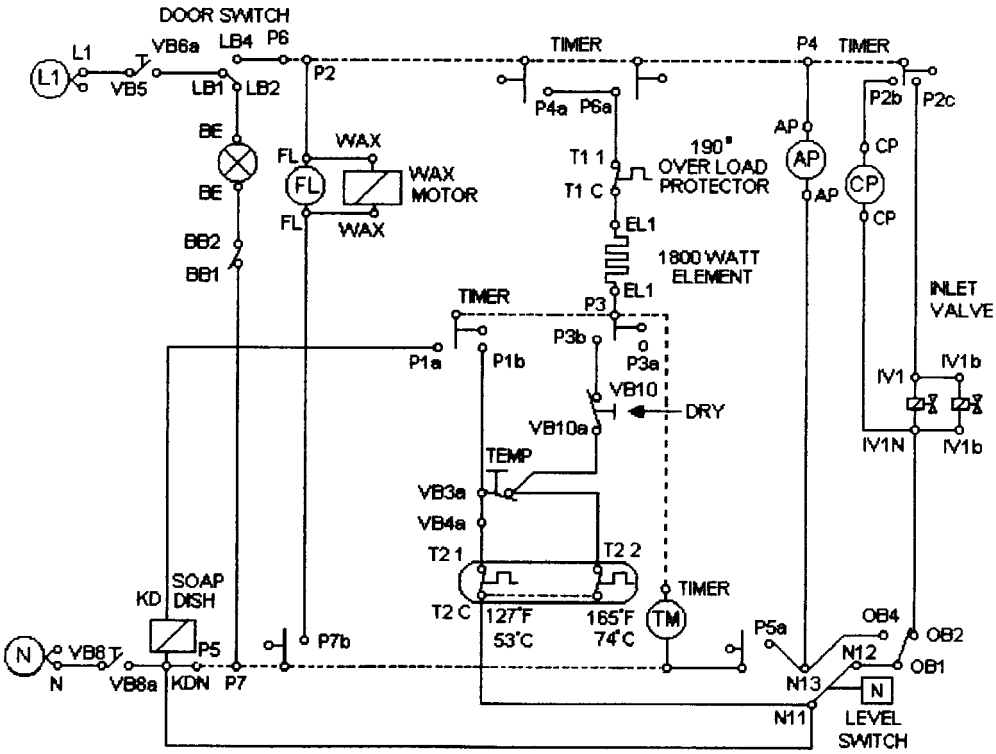
WARNING !!!
ELECTRICAL GROUNDING INSTRUCTIONS

This appliance is equipped with a three prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle. Do not remove the grounding prong from this plug.

REFER ONLY TO FEATURES WHICH ARE EQUIPPED WITH THIS UNIT.

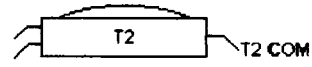
VUD141 UNDERCOUNTER DISHWASHER

AP DRAIN PUMP
BB LIGHT SWITCH
BE INTERNAL LIGHT
CP CIRCULATION PUMP
EL HEATING ELEMENT
FL FAN
IV FILL VALVE
KD COMBI DISPENSER
LB LIGHT SWITCH
LU DOOR
N LEVEL SWITCH
P TIMER
T THERMOSTAT
WAX VENT DOOR SWITCH
VB ROTARY SWITCH
OB BASE PAN OVER-FLOW PROTECTION SWITCH



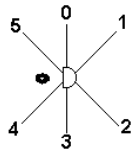
Internal connection - - - - - - - - - - - - - - -

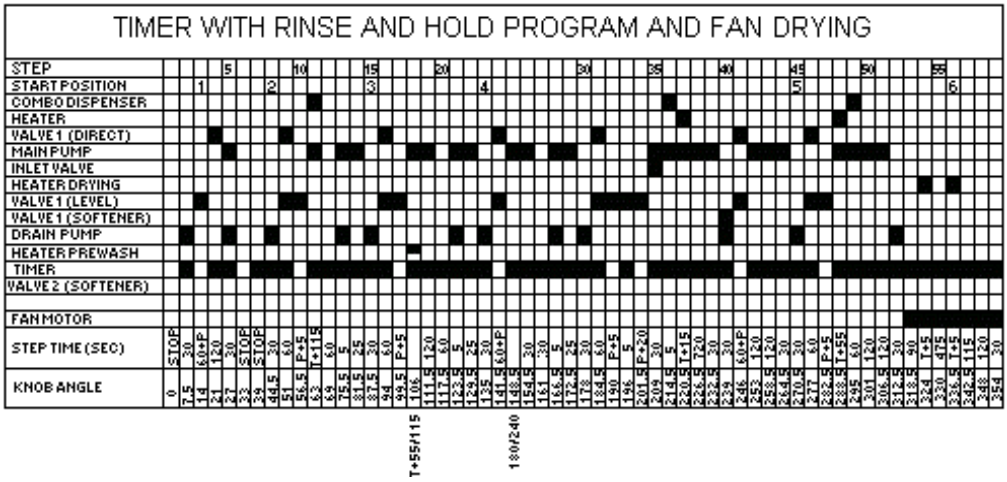
T2 1-127 F (53 C)
T2 2-165 F (74 C)

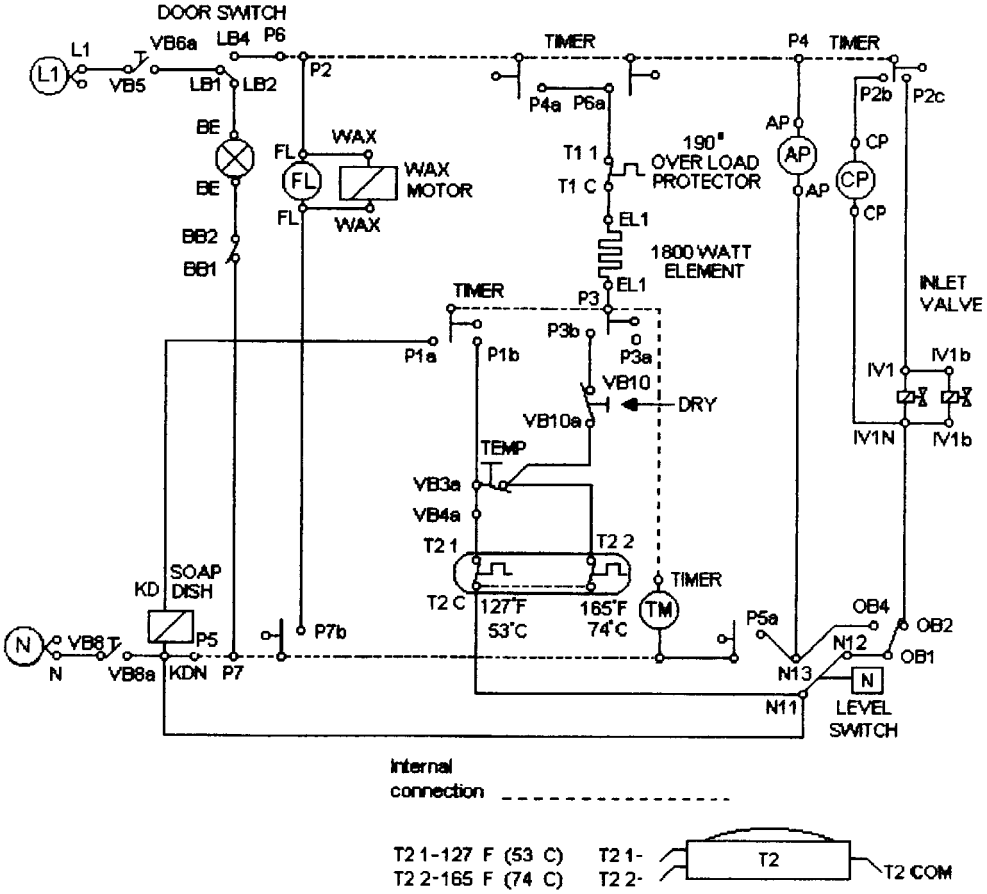


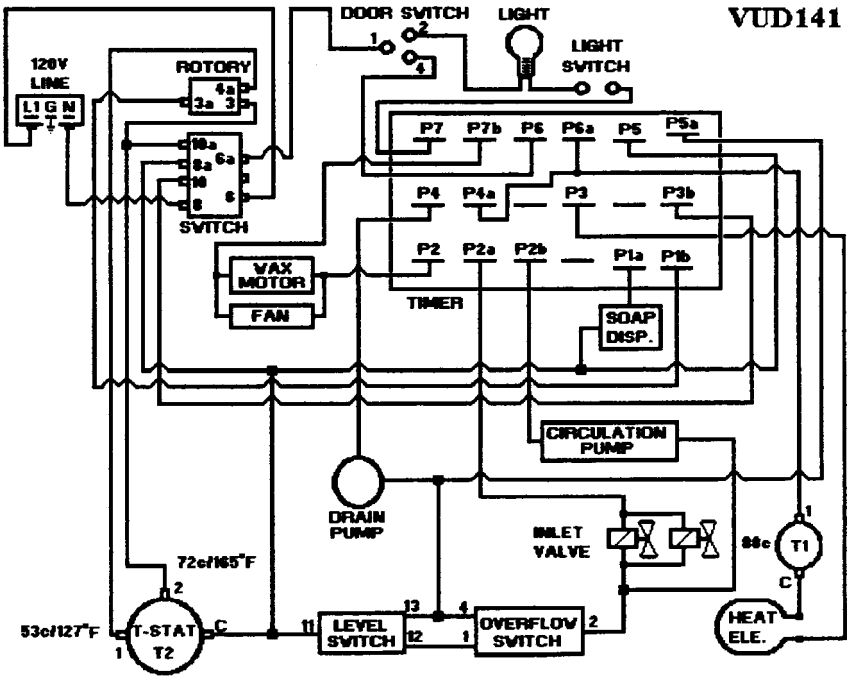
SWITCH CONTACT		4a 3a 3	6a 6	8a 8	10a 10
POSITION	0				
	1	X	X	X	X
	2	X	X	X	
	3	X		X	X
	4		X	X	
	5		X	X	X

VB ROTARY SWITCH FOR SELECTING TEMP & DRY HEAT

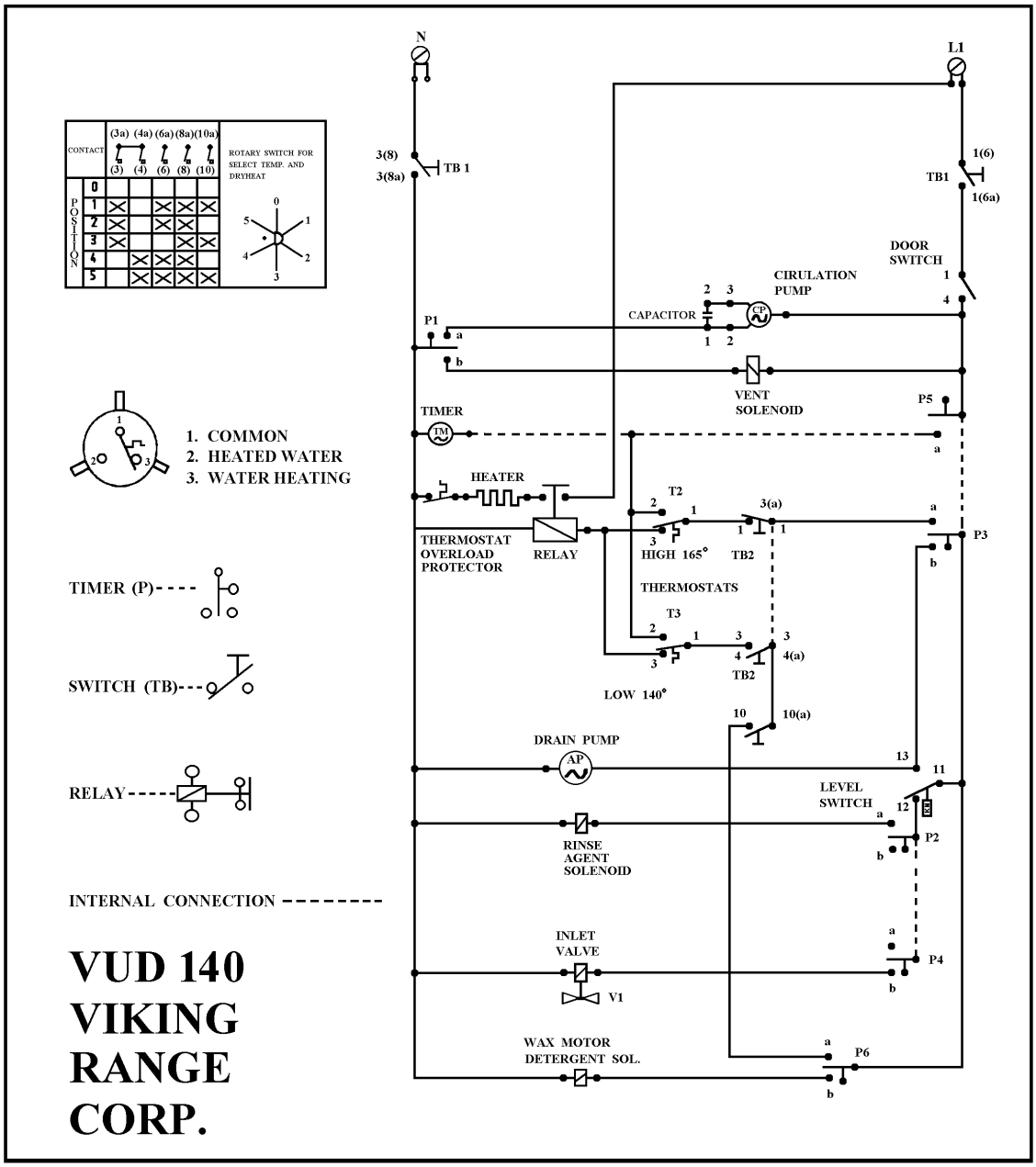





DOOR SWITCH
VB6a
LB4
P6
L1
VB5
LB1
LB2
P2
TIMER
P4
TIMER
P4a
P6a
P2b
P2c
AP
CP
BE
WAX
FL
WAX MOTOR
T1 1
T1 C
190°
OVER LOAD
PROTECTOR
EL1
1800 WATT
ELEMENT
BB2
BB1
TIMER
P3
INLET
VALVE
P1a
P1b
P3b
P3a
VB10
DRY
IV1
IV1b
VB10a
IV1N
TEMP
VB3a
VB4a
T2 1
T2 2
KD
SOAP
DISH
T2 C
127°F
53°C
165°F
74°C
TIMER
TM
P5a
OB4
OB2
N
VB8
P5
P7b
N12
OB1
VB8a
KDN
P7
N13
N
N11
LEVEL
SWITCH
Internal
connection
T2 1-127 F (53 C)
T2 2-165 F (74 C)
T2 1-
T2 2-
T2
T2 COM

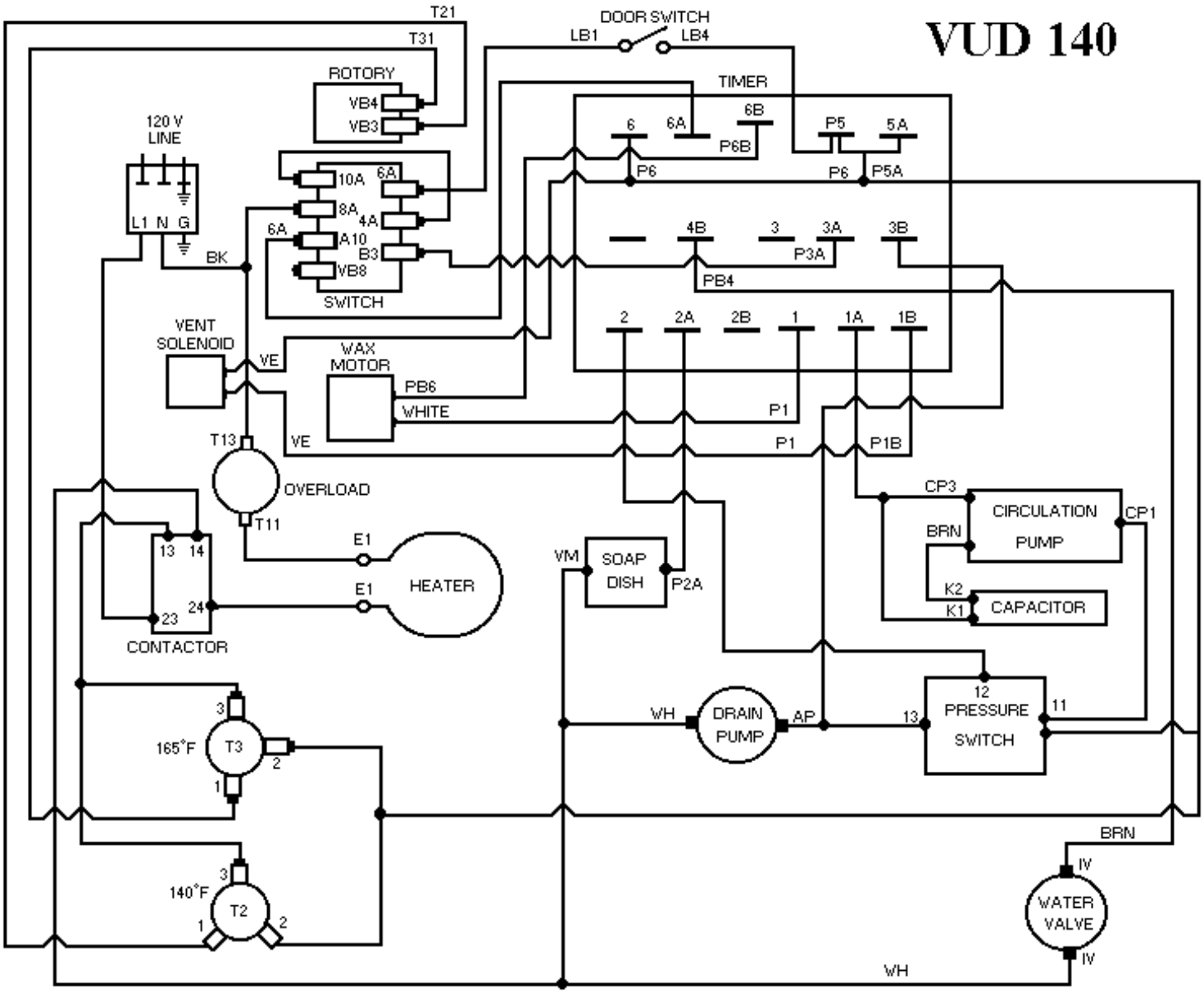

VUD141
DOOR SWITCH
LIGHT
LIGHT
SWITCH
120V
LINE
L1 G N
ROTORY
SWITCH
P7
P7b
P6
P6a
P5
P5a
P4
P4a
P3
P3b
P2
P2a
P2b
P1a
P1b
TIMER
WAX
MOTOR
FAN
SOAP
DISP.
CIRCULATION
PUMP
DRAIN
PUMP
INLET
VALVE
88c
T1
72c/165°F
53c/127°F
T-STAT
T2
LEVEL
SWITCH
OVERFLOW
SWITCH
HEAT
ELE.

VUD 140 UNDERCOUNTER DISHWASHER



WIRING DIAGRAM

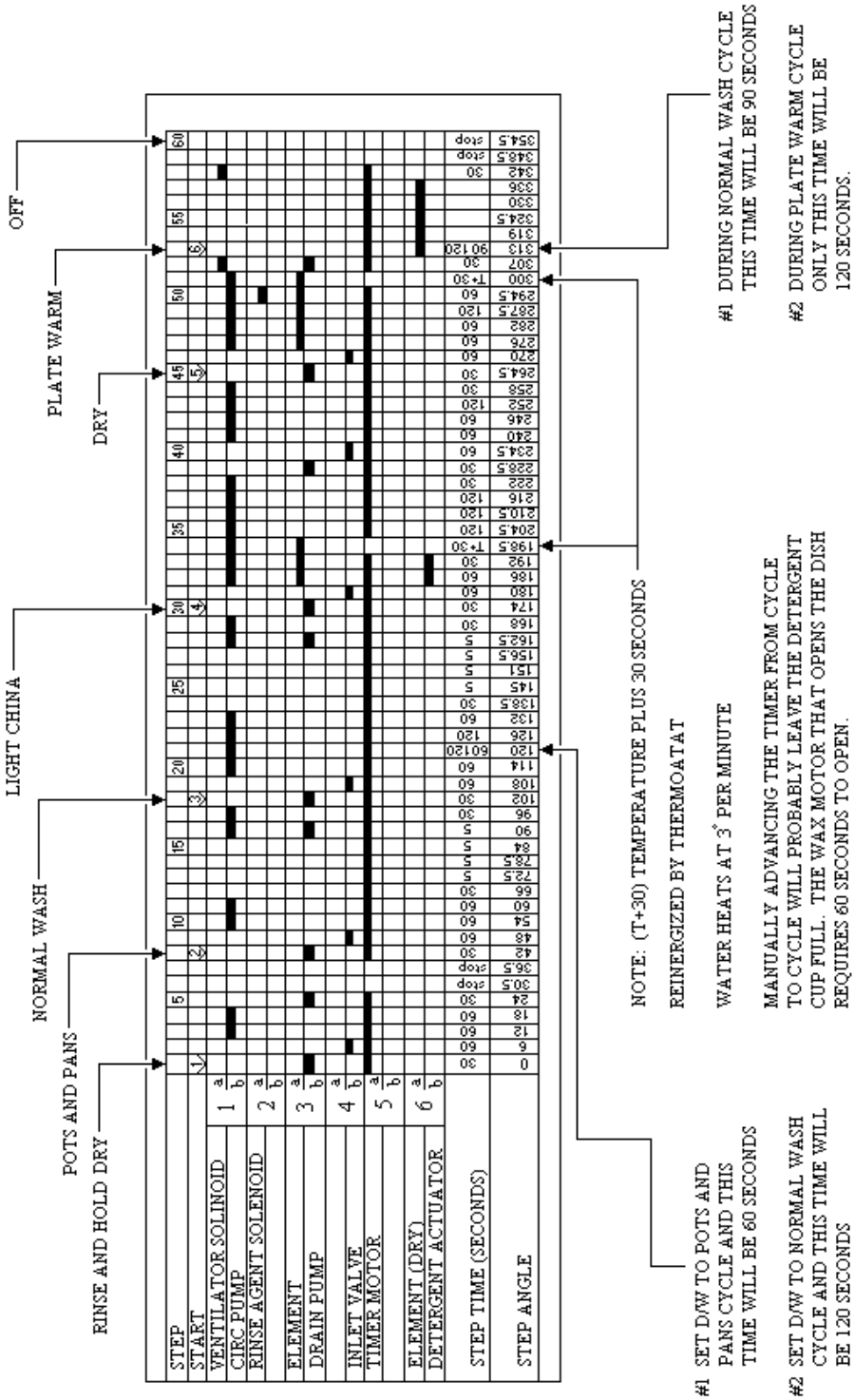
VUD 140 UNDERCOUNTER DISHWASHER



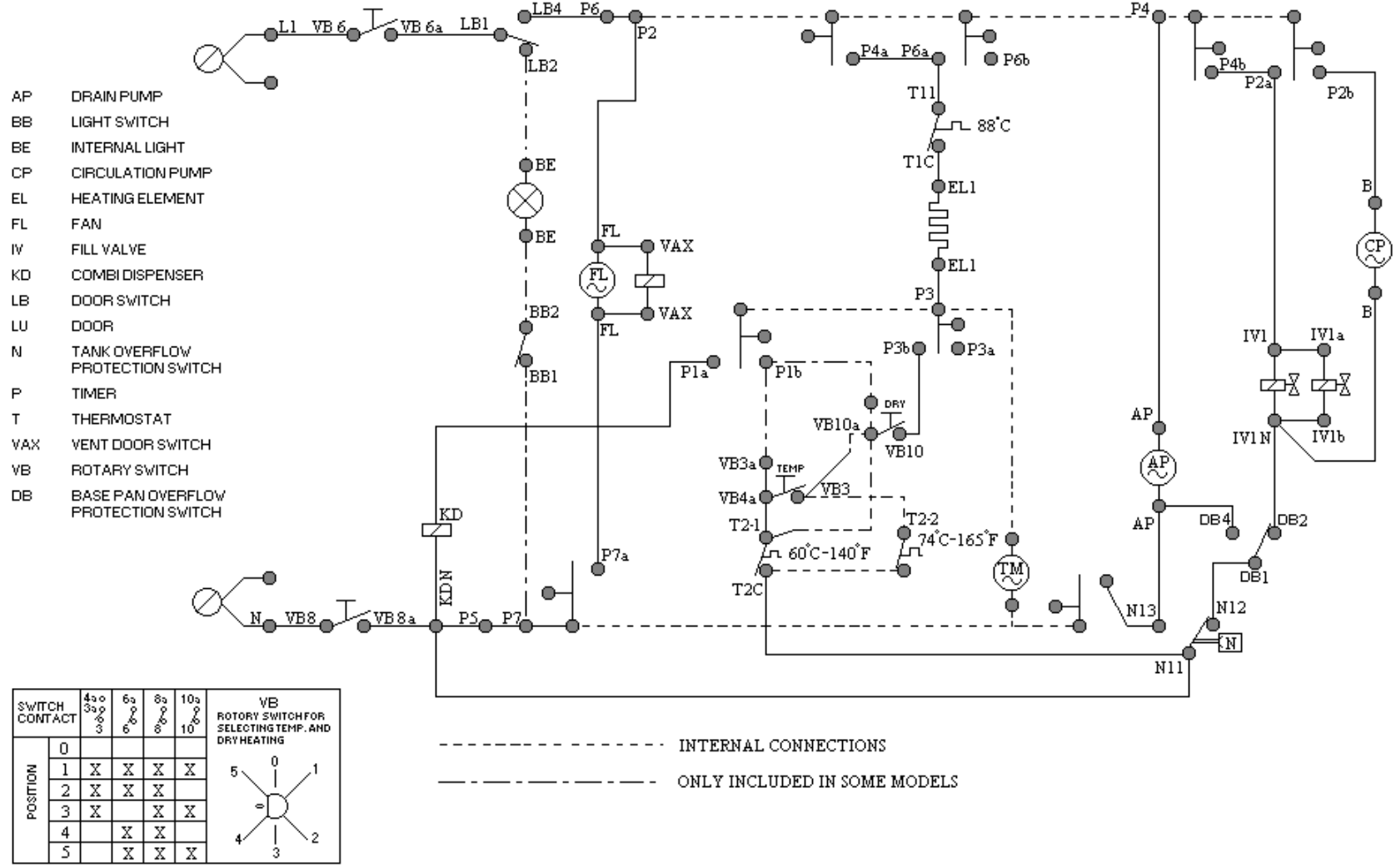
REV.1-12/12/00

CYCLE SELECTION

VUD140 UNDERCOUNTER DISHWASHER

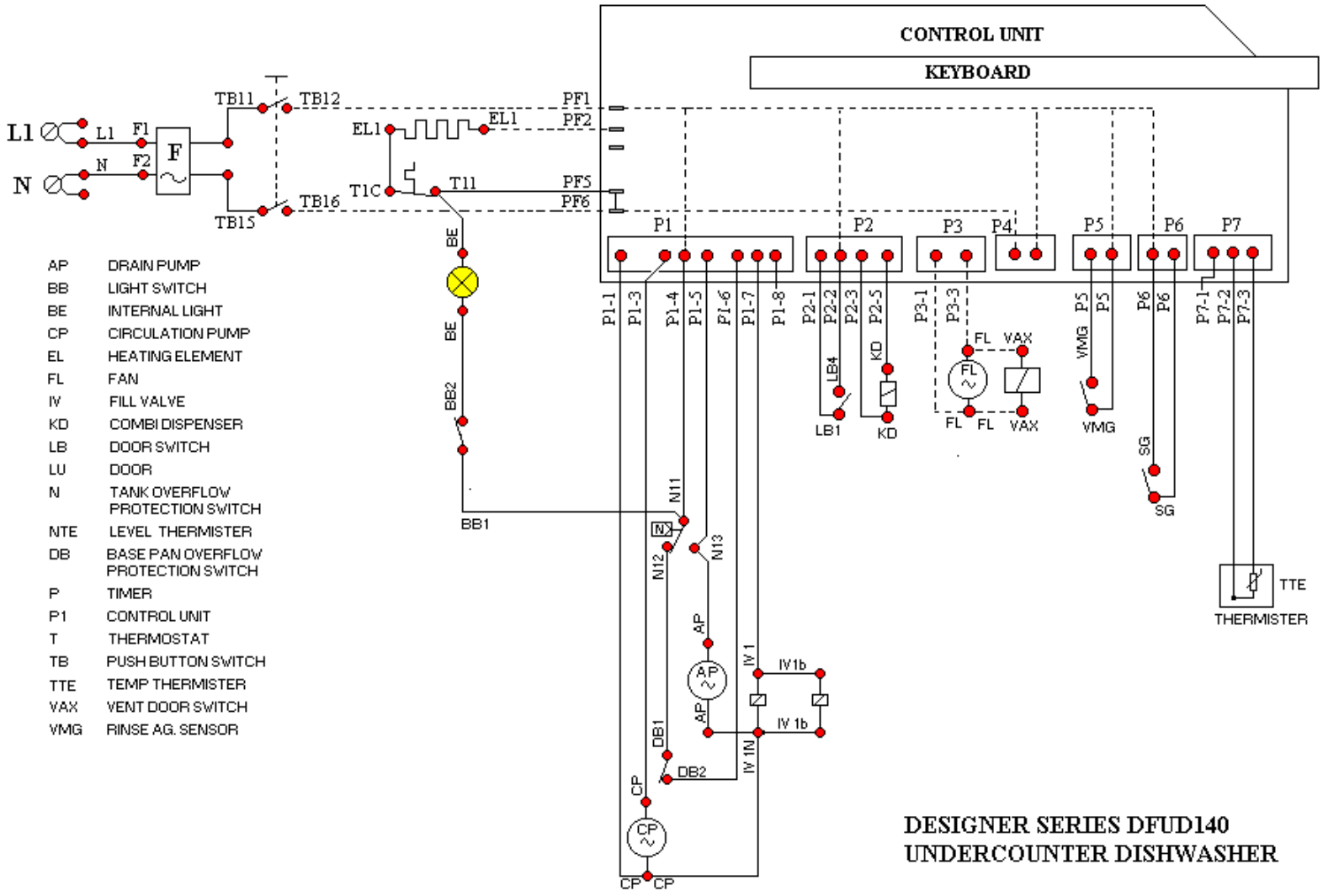


REV. 1-12/12/00



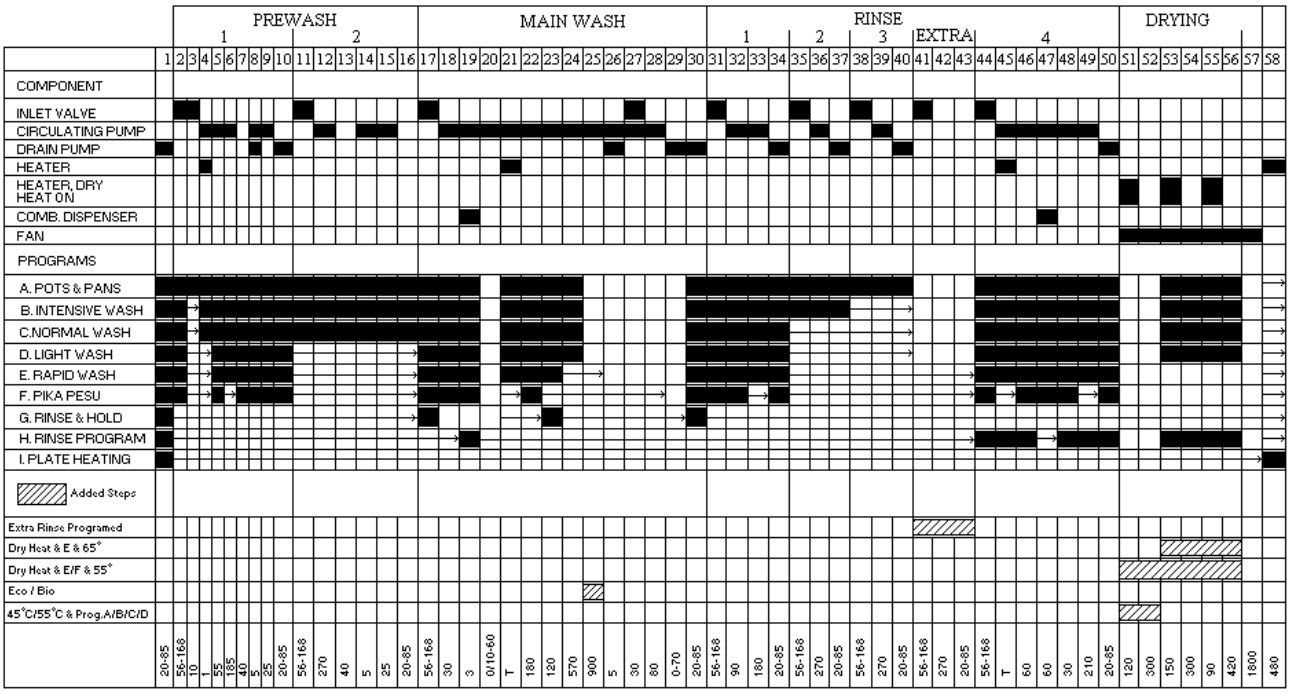
SWITCH CONTACT		4a 3a	6a	8a	10a
POSITION	0				
	1	X	X	X	X
	2	X	X	X	
	3	X		X	X
	4		X	X	
	5		X	X	X

VB
ROTORY SWITCH FOR SELECTING TEMP. AND DRY HEATING



AP	DRAIN PUMP
BB	LIGHT SWITCH
BE	INTERNAL LIGHT
CP	CIRCULATION PUMP
EL	HEATING ELEMENT
FL	FAN
IV	FILL VALVE
KD	COMBI DISPENSER
LB	DOOR SWITCH
LU	DOOR
N	TANK OVERFLOW PROTECTION SWITCH
NTE	LEVEL THERMISTER
DB	BASE PAN OVERFLOW PROTECTION SWITCH
P	TIMER
P1	CONTROL UNIT
T	THERMOSTAT
TB	PUSH BUTTON SWITCH
TTE	TEMP THERMISTER
VAX	VENT DOOR SWITCH
VMG	RINSE AG. SENSOR

DESIGNER SERIES DFUD140
UNDERCOUNTER DISHWASHER



Geographical location of switches on the keyboard. (Some switches are not displayed on some models.)

INLET TIME

Press 5 Five Times to Enter Program Mode.
Press 3 to get Normal Inlet Time (Default)
Press 4 to get 25% increase
Press 5 to get 50% increase
Press 6 to get 100% increase
Press 7 to get 150% increase
Press 8 to get 200% increase

DRAINAGE TIME

Press 3 Five Times to Enter Program Mode.
Press 3 to get 20 sec. Drain Time
Press 4 to get 25 sec. Drain Time (Default)
Press 5 to get 35 sec. Drain Time
Press 6 to get 45 sec. Drain Time
Press 7 to get 65 sec. Drain Time

VIKING RANGE
DESIGNER SERIES DFUD140 FAULT CODES

FAULT TRACING: PRESS TEMPERATURE FIVE TIMES AND THEN:

1) PRESS QUICK WASH ONCE FOR INLET VALVE.
2) PRESS RINSE AND HOLD ONCE FOR SOAP DISPENSER.
3) PRESS ECONOMY ONCE FOR HEATER.
4) PRESS HEATED DRY FOR CIRCULATION PUMP.
5) PRESS HEATED DRY FOR DRAIN PUMP.
6) PRESS DELAY START ONCE FOR FAN MOTOR.

INLET TIME ADJUSTMENT: PRESS ECONOMY FIVE TIMES AND THEN:

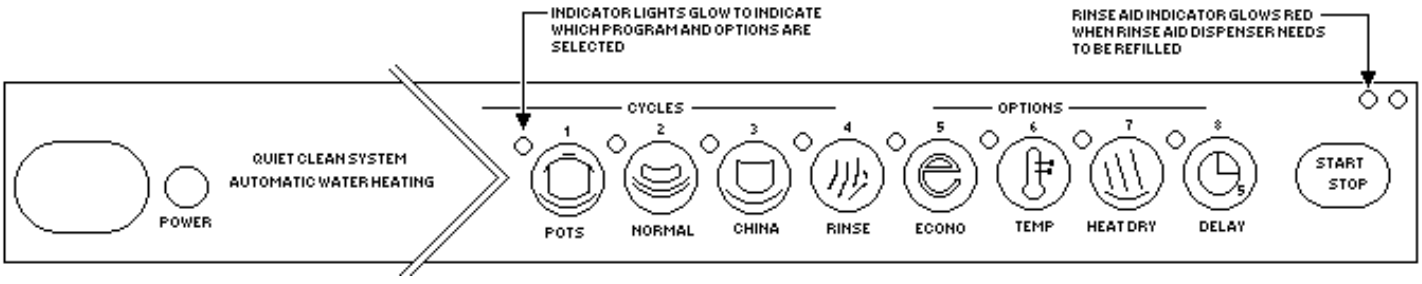
1) PRESS QUICK WASH TO GET NORMAL FILL TIME.
2) PRESS RINSE AND HOLD WASH TO INCREASE 25%.
3) PRESS ECONOMY TO INCREASE 50%.
4) PRESS TEMPERATURE TO INCREASE 100%.
5) PRESS HEATED DRY TO INCREASE 150%.
6) PRESS DELAY START TO INCREASE 200%.

DRAIN TIME ADJUSTMENT: PRESS QUICK WASH FIVE TIMES AND THEN:

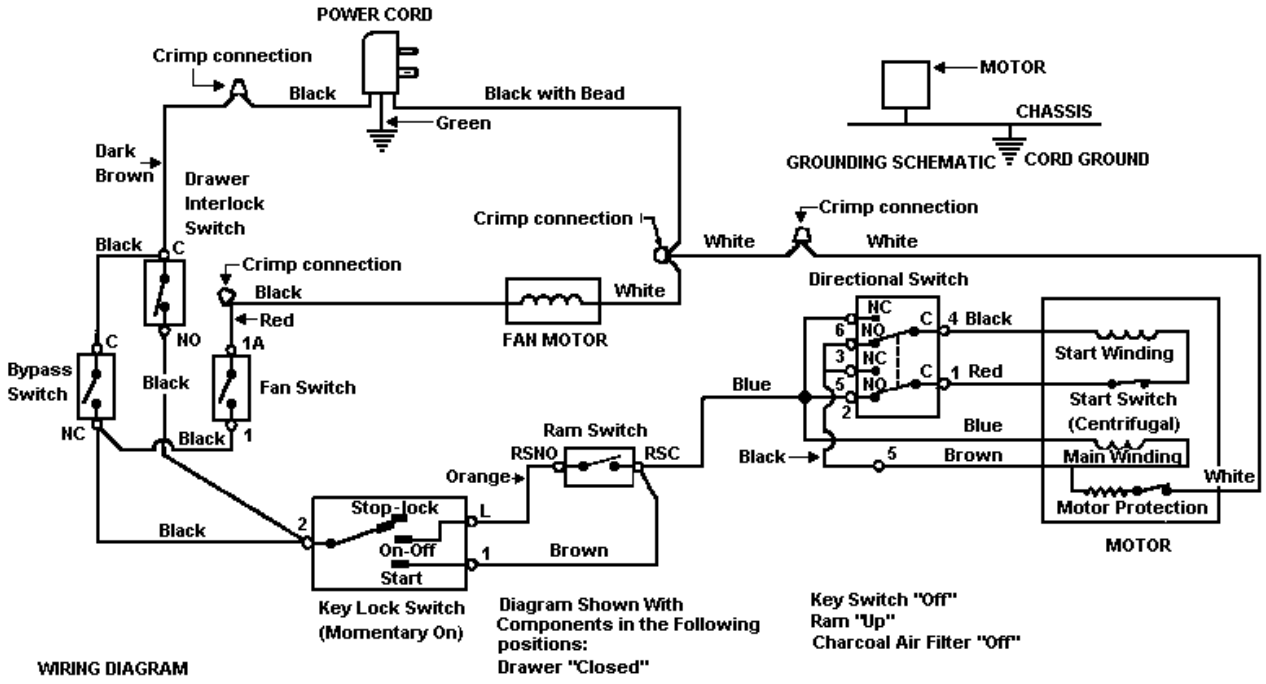
1) PRESS QUICK WASH ONCE FOR A 20 SECOND DRAIN.
2) PRESS RINSE AND HOLD ONCE FOR A 25 SECOND DRAIN.
3) PRESS ECONOMY ONCE FOR A 35 SECOND DRAIN.
4) PRESS TEMPERATURE ONCE FOR A 45 SECOND DRAIN.
5) PRESS HEATED DRY ONCE FOR A 85 SECOND DRAIN.

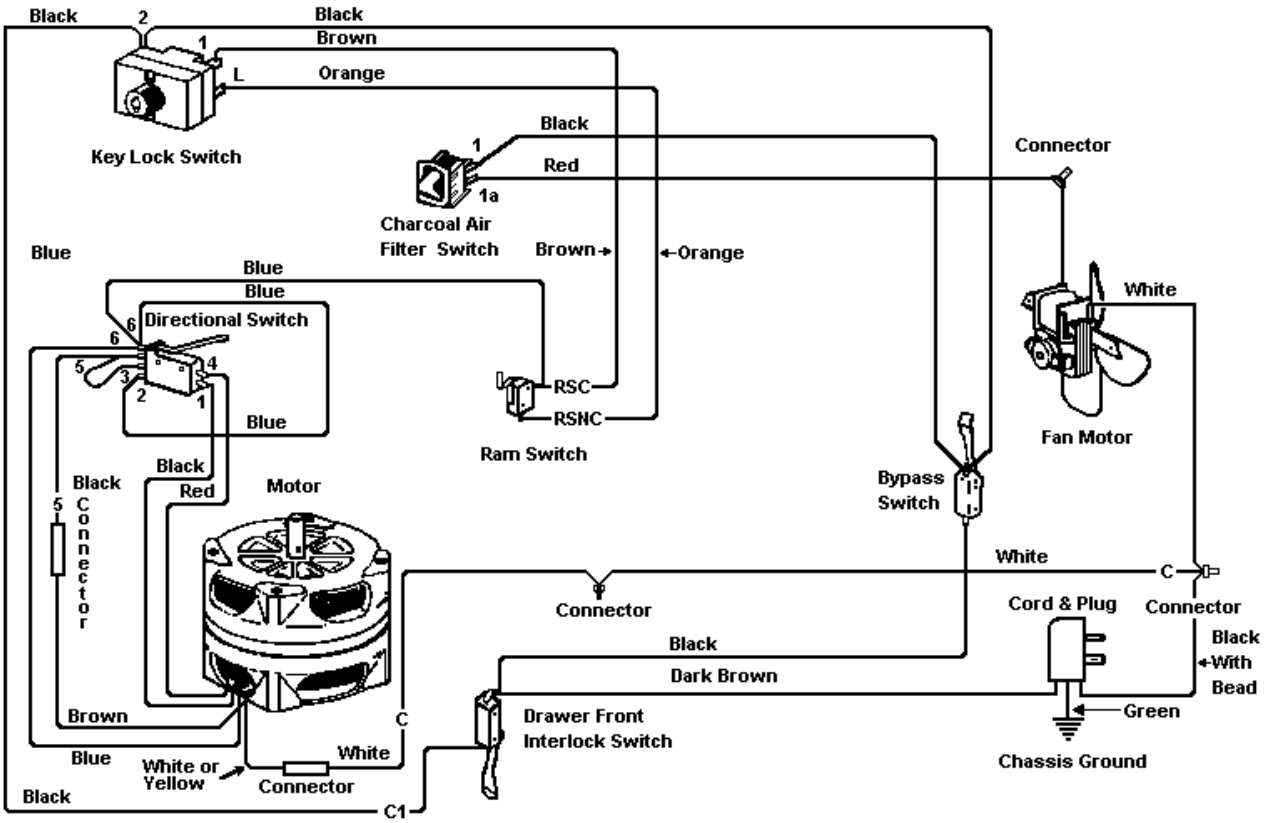
PROTECTED START PROGRAM: PRESS RINSE AND HOLD FIVE TIMES AND THEN:

1) PRESS ECONOMY WASH ONCE FOR PROTECTED START.
2) PRESS RINSE AND HOLD ONCE FOR NORMAL START.



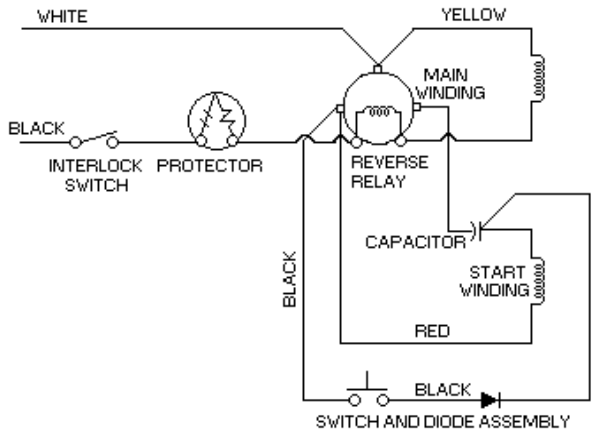
VUC UNDERCOUNTER COMPACTOR



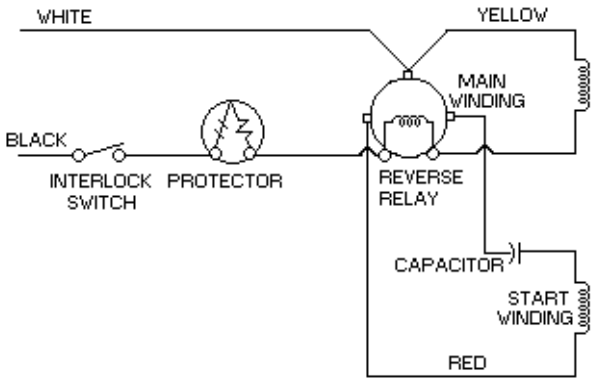


WASTE DISPOSERS

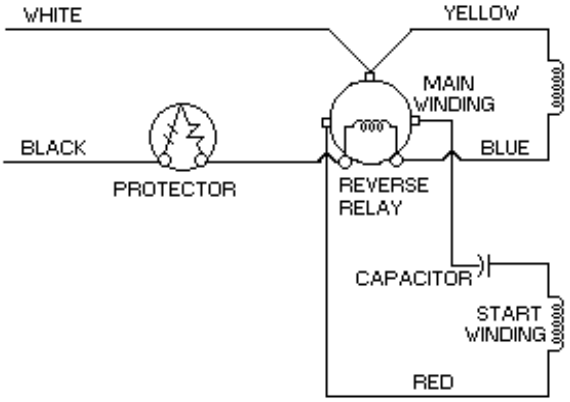
VBFW1030



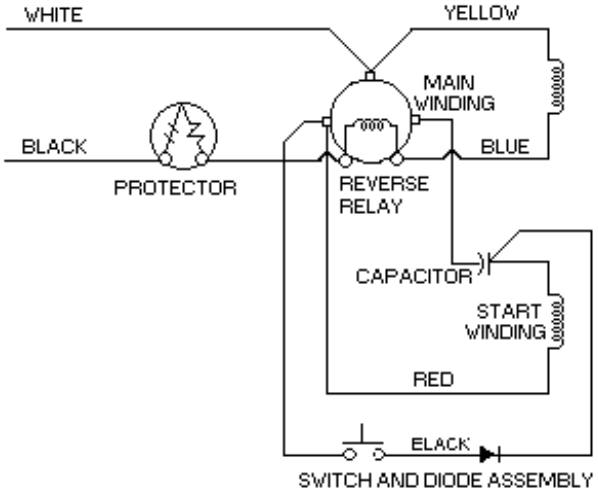
VBHW1010



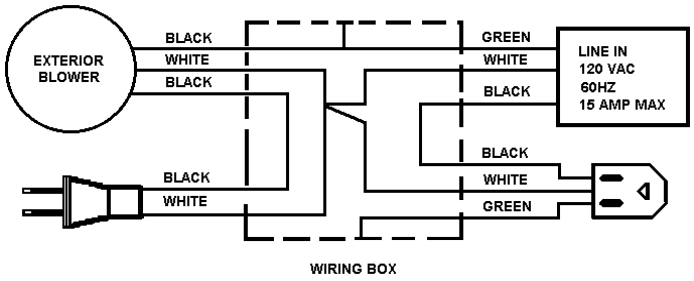
VCFW1000

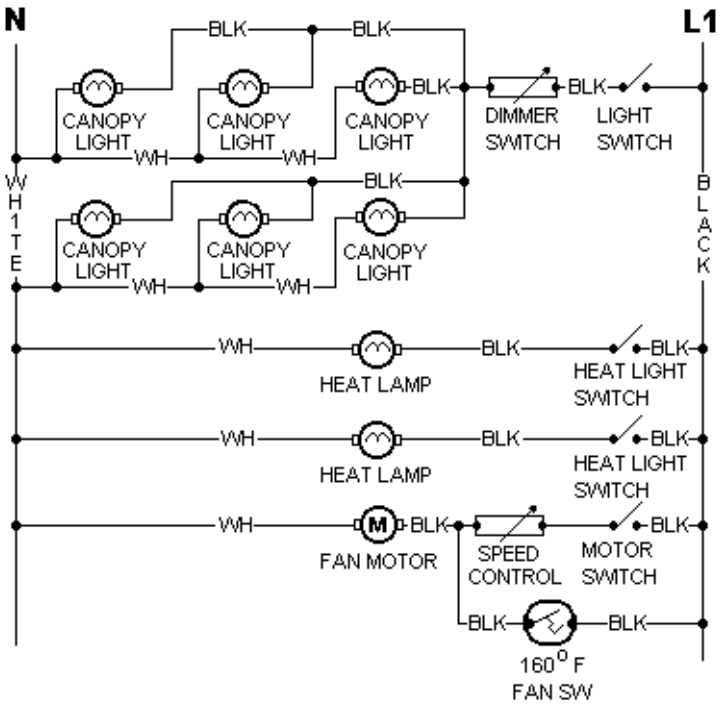


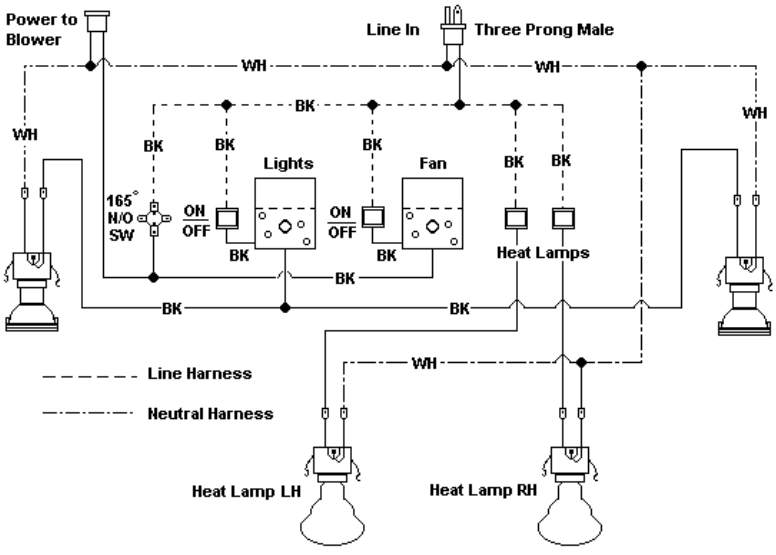
VCFW1020



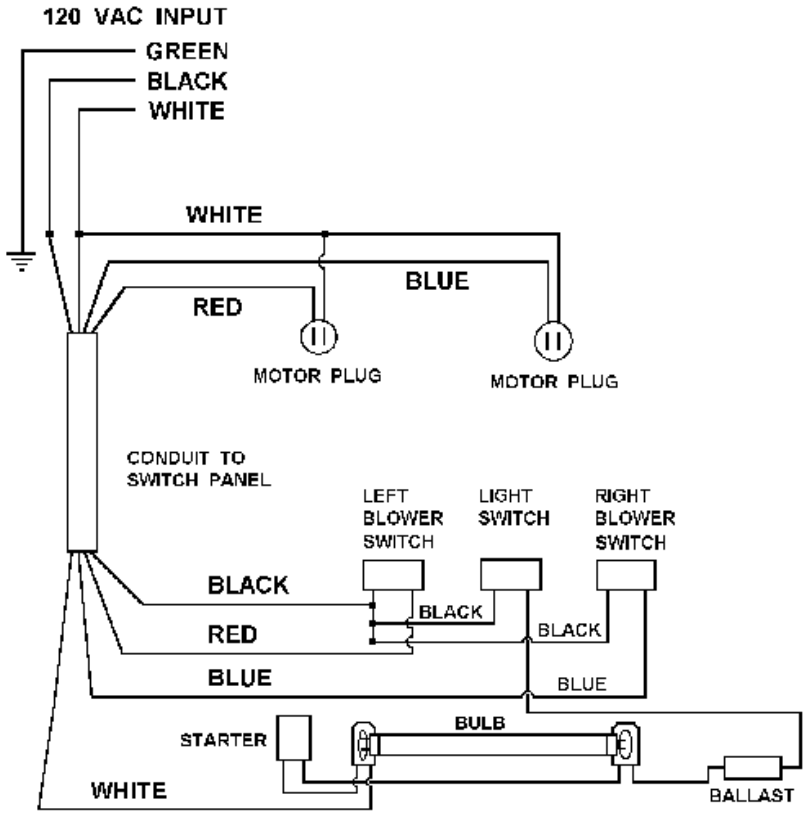
WIRING DIAGRAM BUILT-IN HOODS





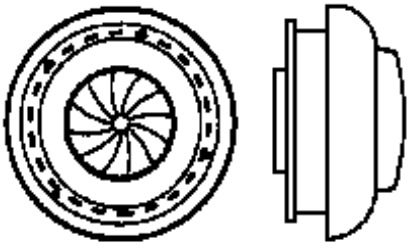


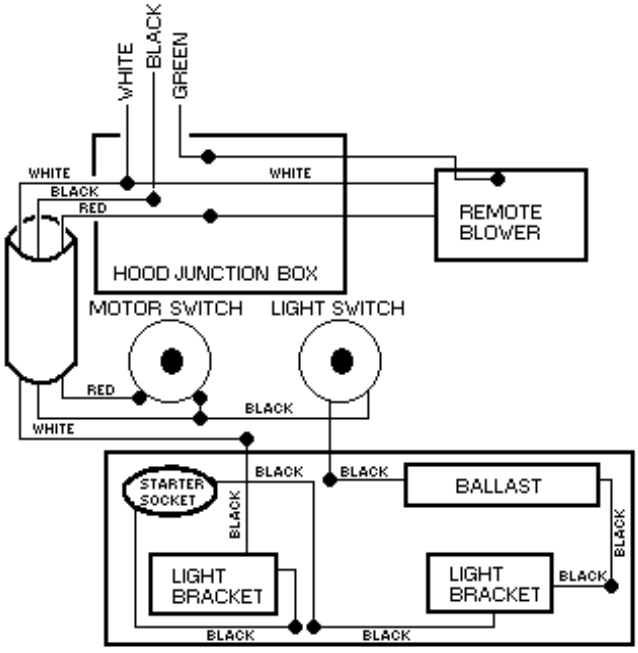
WIRING DIAGRAM
INTERIOR POWER RANGEHOOD



WIRING DIAGRAM

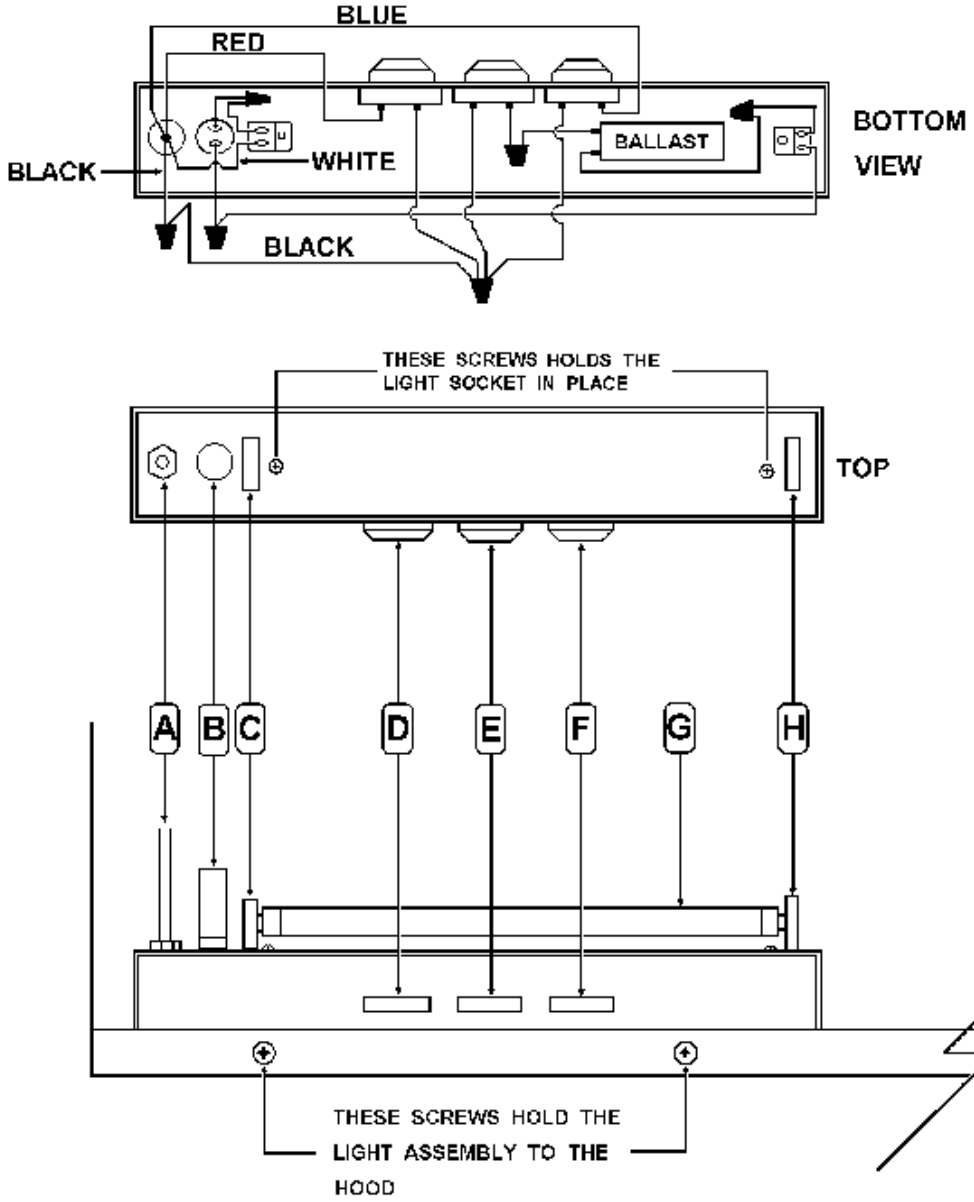
EXTERIOR VENTILATOR





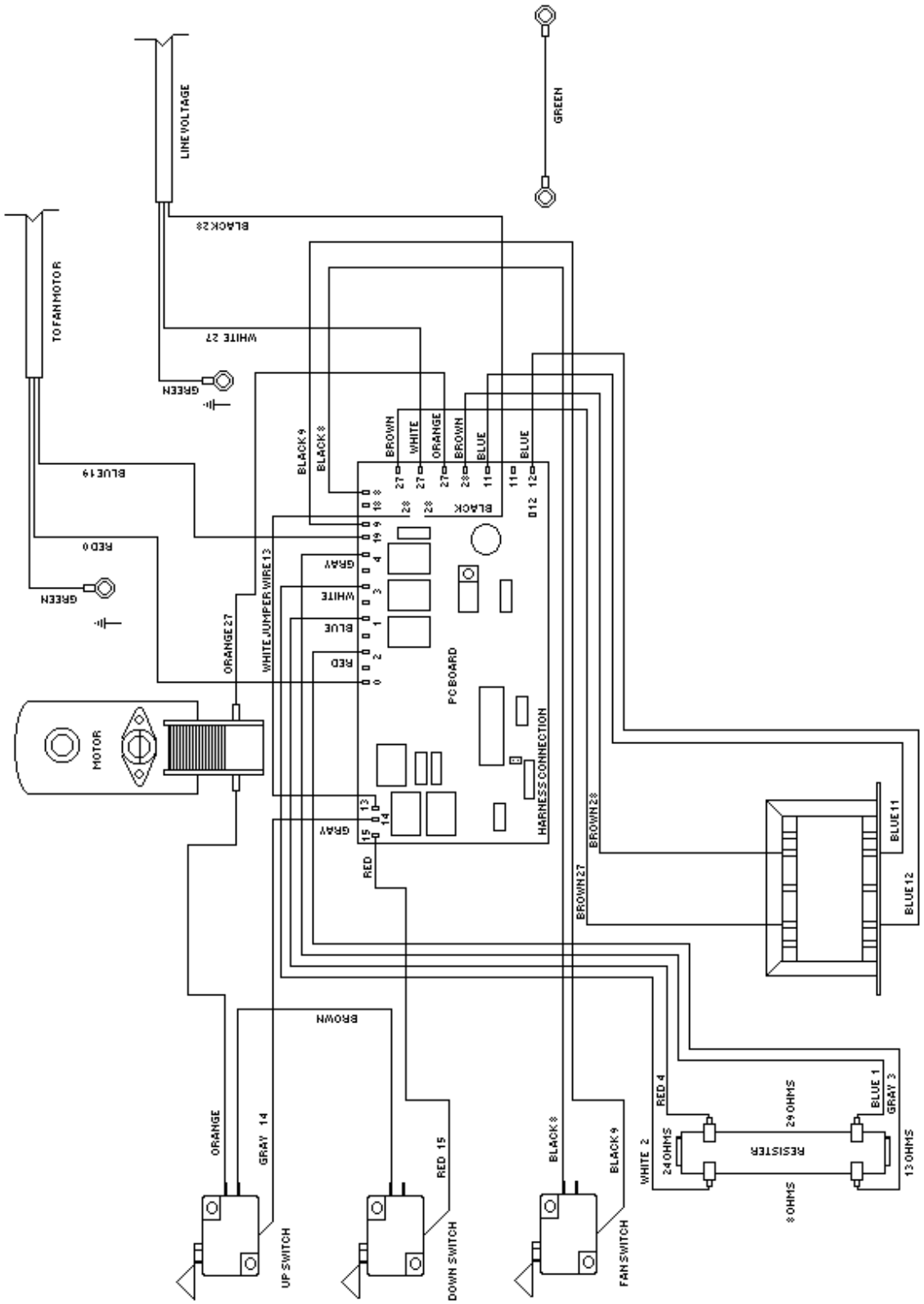
INTERIOR POWER RANGEHOOD

LIGHT ASSEMBLY AND DIAGRAM



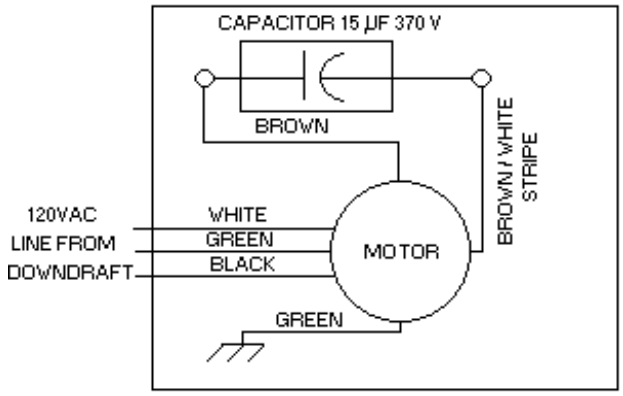
A. VOLTAGE SUPPLY
B. STARTER
C. LIGHT SOCKET (SHORT LEAD)
D. FAN SWITCH
E. LIGHT SWITCH
F. FAN SWITCH
G. FLUORESCENT BULB
H. LIGHT SOCKET (LONG LEAD)

WIRING DIAGRAM (DOWNDRAFT)

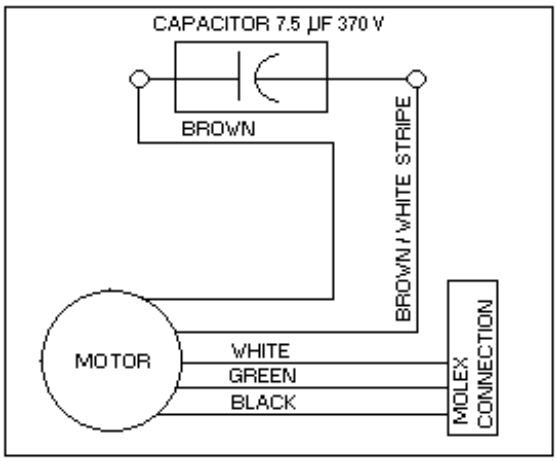


WIRING DIAGRAM
VEDV900-VEDV1200-VIDV500

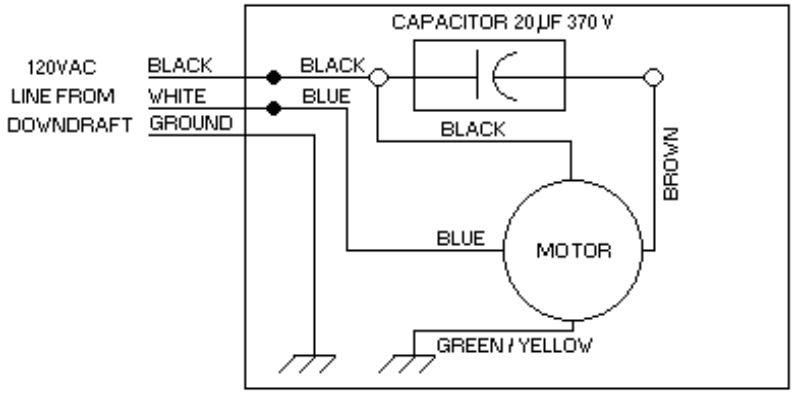
WIRING DIAGRAM
VEDV900



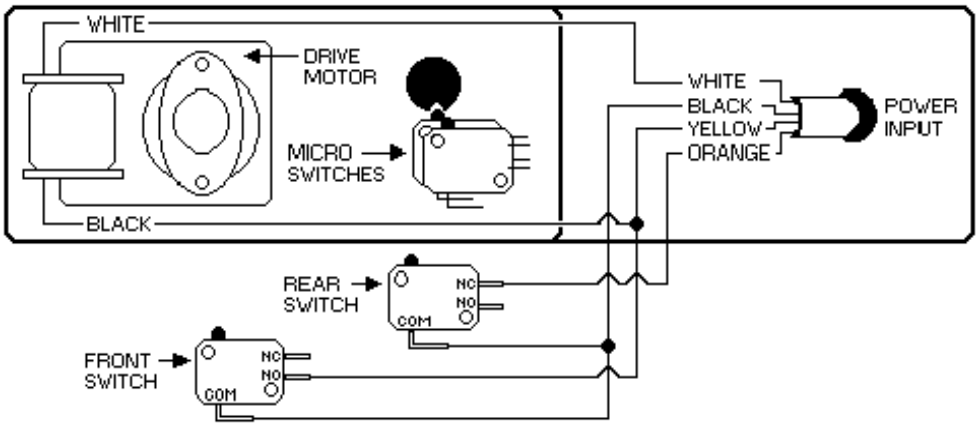
WIRING DIAGRAM
VIDV500

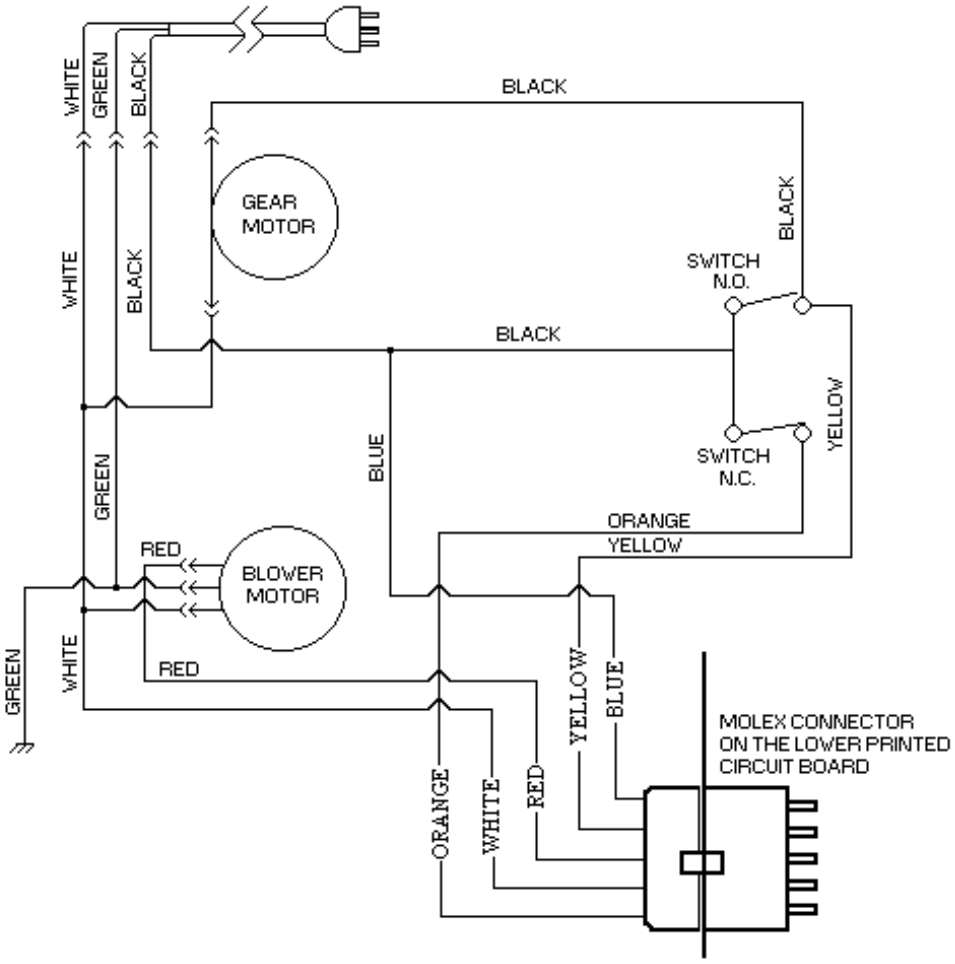


WIRING DIAGRAM
VEDV1200

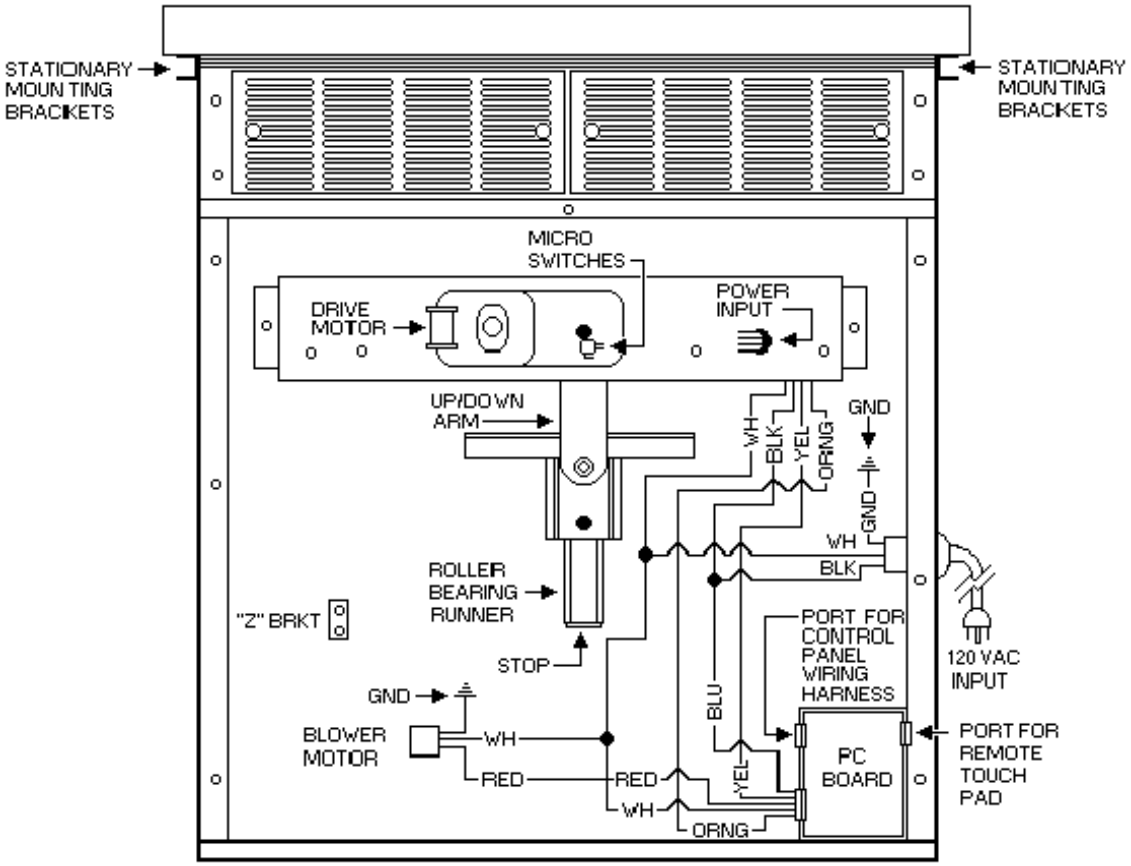


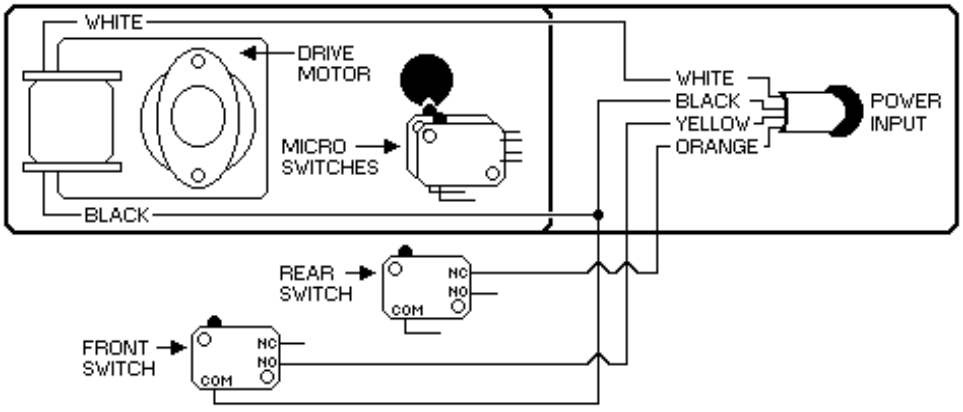
VIPR DOWNDRAFT
WIRING DIAGRAM





VIPR DOWNDRAFT
WIRING SCHEMATIC AND LAYOUT

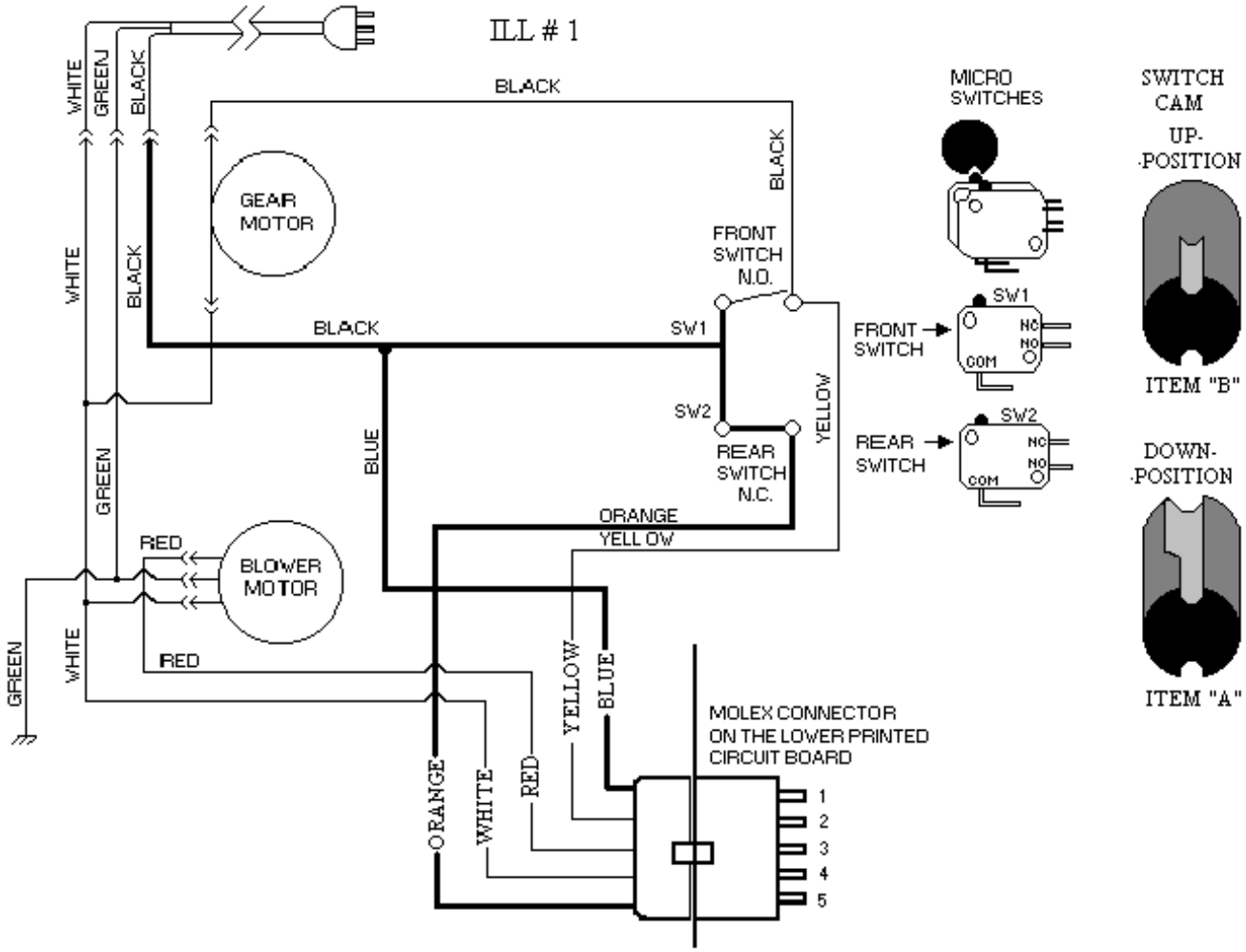




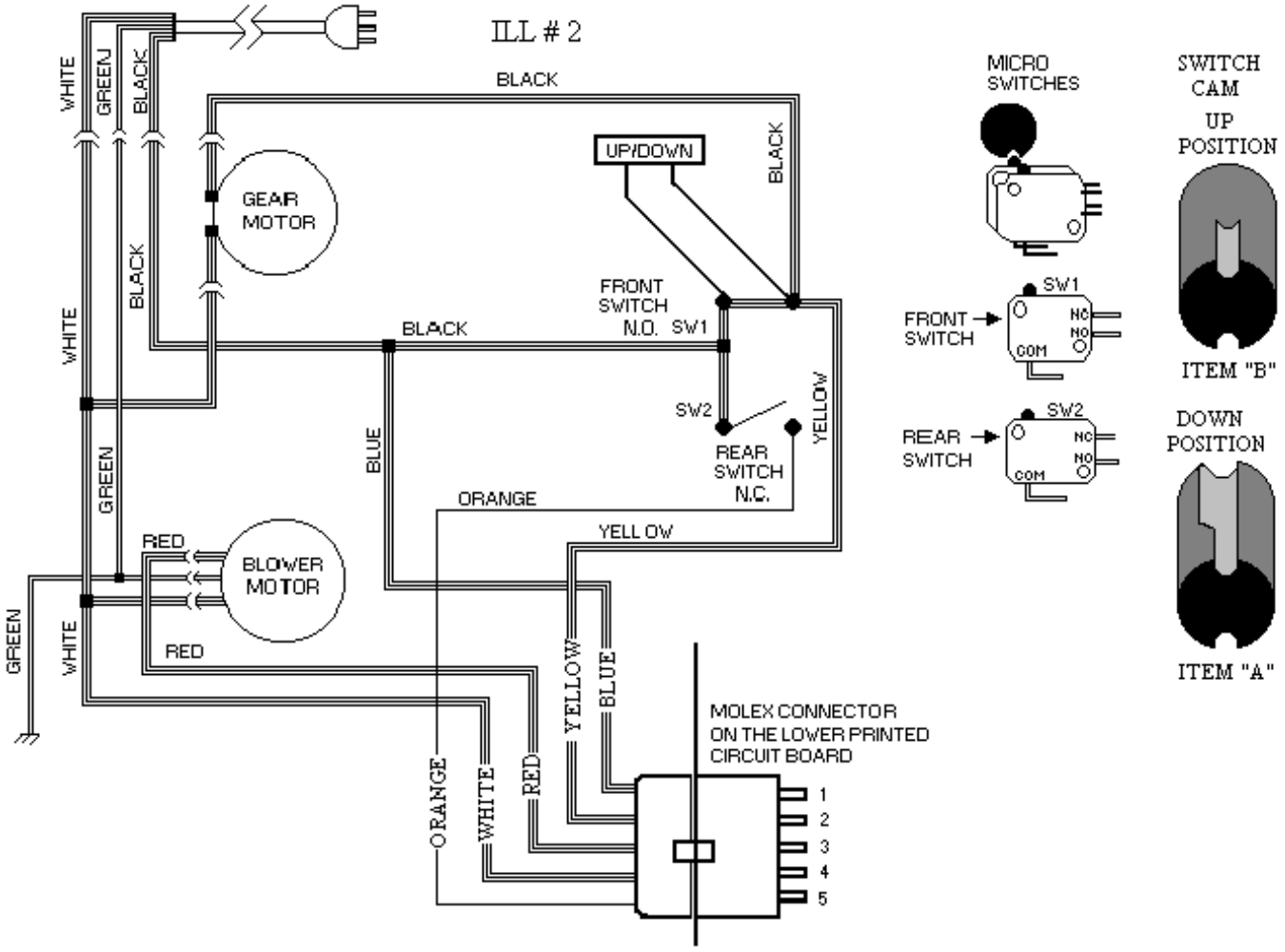
WIRING DIAGRAM

DOWN POSITION (OFF)

Downdraft in the down position (off). The Switch Cam is in the down position (Item "A"). SW1 is open and SW2 is closed. The P.C. Board has 120VAC potential between pin #4 and pin #5.

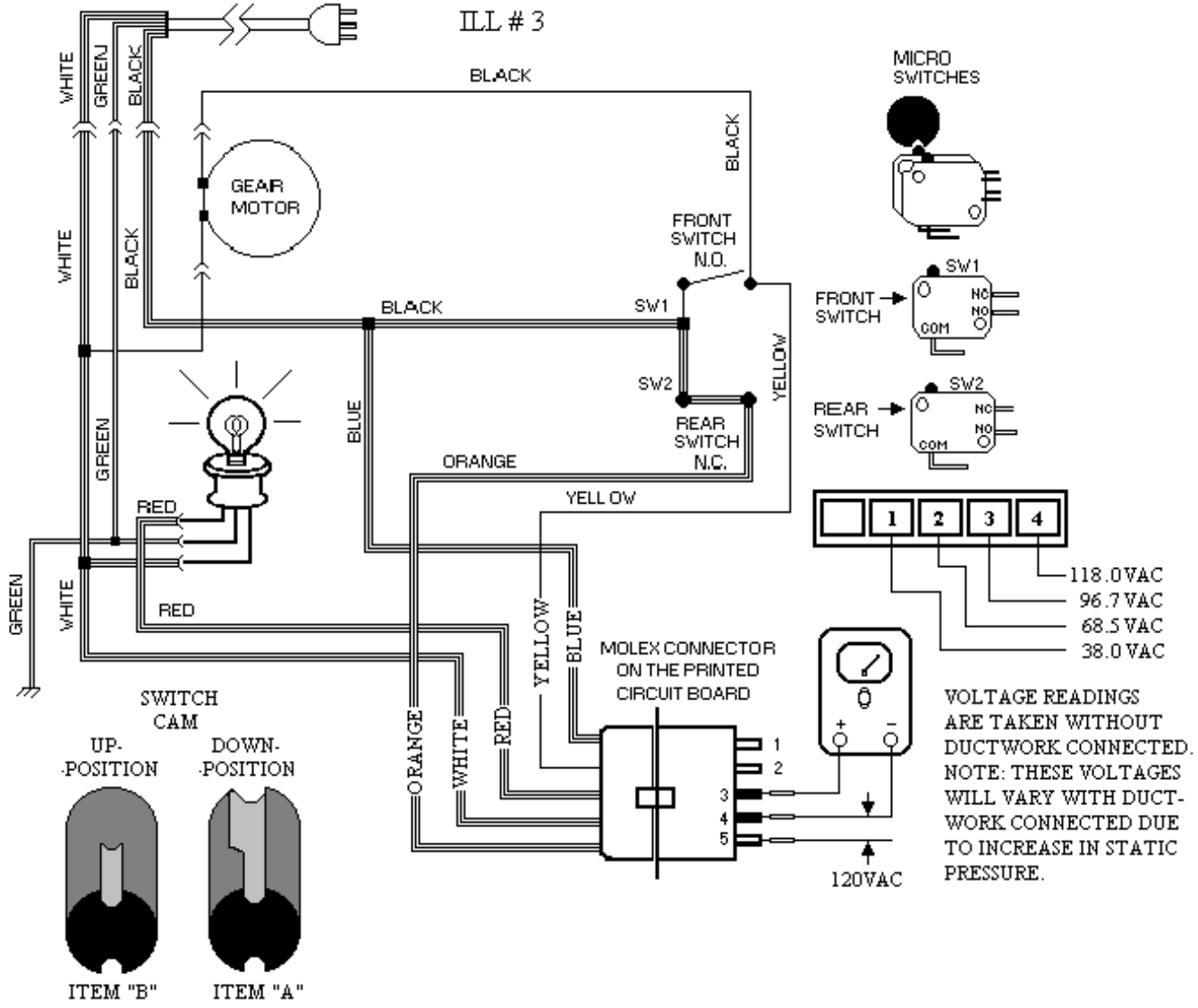


WIRING DIAGRAM
UP – POSITION



Pressing the UP / DOWN switch momentarily shunts SW1 energizing the Gear Motor. The Gear Motor rotates, closing SW1 and opening SW2. With SW1 closed the Gear Motor continues to rotate the Switch cam. The Switch Cam rotates 180° to the UP position (Item "B"), keeping SW2 closed and opening SW1 stopping the Gear Motor (Ill # 3) and leaving the chimney in the up position.

WIRING DIAGRAM
UP POSITION

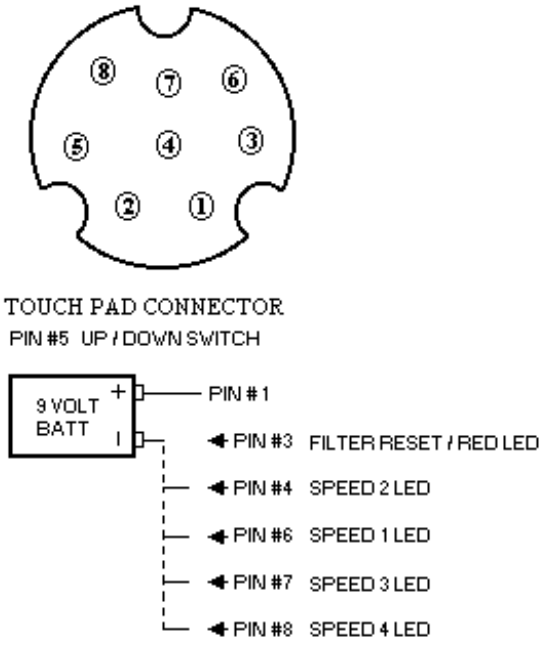


With the Chimney in the UP position, SW2 is closed supplying 120VAC to Pin #5 (black wire). The P.C. Board circuit connects power to Pin #3 (red wire) to complete power to the Blower Motor. **NOTE:** The function of the double groove in the Switch Cam (Item "A") is to keep SW2 closed to allow power to the Blower circuit.

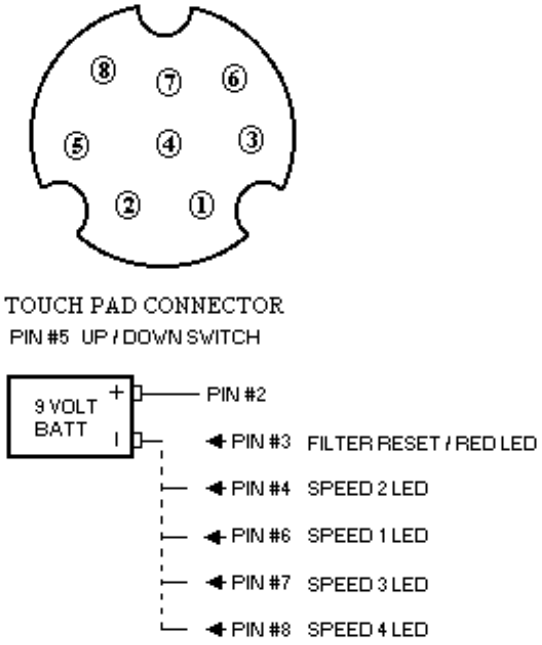
To check the power to the Blower without the motor: Attach a light bulb to the motor plug as shown. The light will glow if there is output from the P.C. Board. By pressing each speed control in turn the brightness of the bulb will change.

You can check the Voltage output at the P.C. Board. Connect the Voltmeter to the RED and WHITE output leads or the Molex connections at Pin #3 and Pin #4.

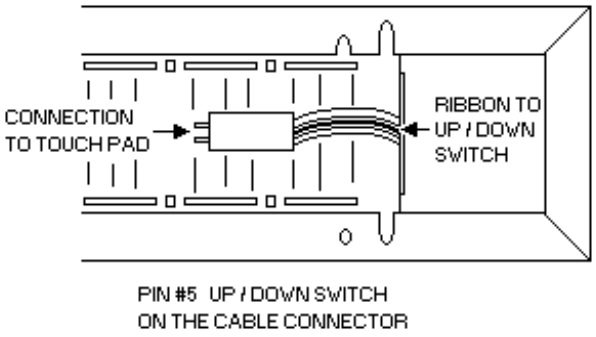
TROUBLESHOOTING THE CONNECTING CABLE BETWEEN THE TOUCH PAD AND THE LOWER P.C. BOARD



CONNECT A 9VOLT BATTERY BETWEEN PIN #1 (+) TO EACH PIN (-). ONE AT A TIME. THE LED WILL LIGHT AS INDICATED ABOVE.

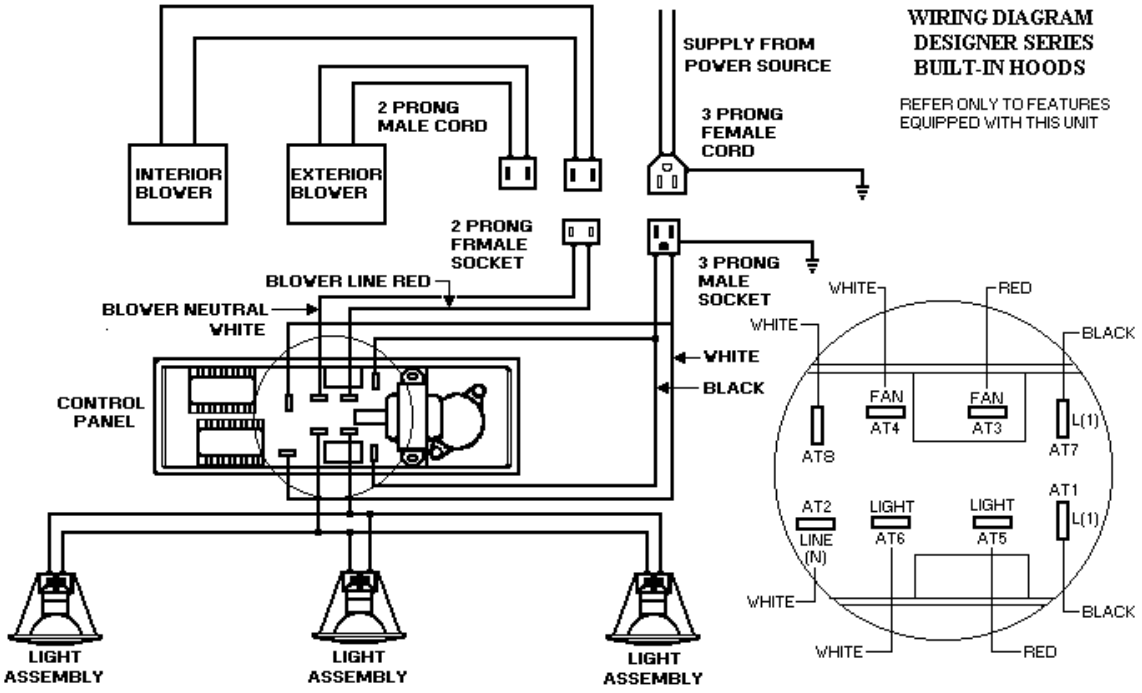


CONNECT A 9VOLT BATTERY BETWEEN PIN #2 (+) TO EACH PIN (-). ONE AT A TIME. THE LED WILL LIGHT AS INDICATED ABOVE.

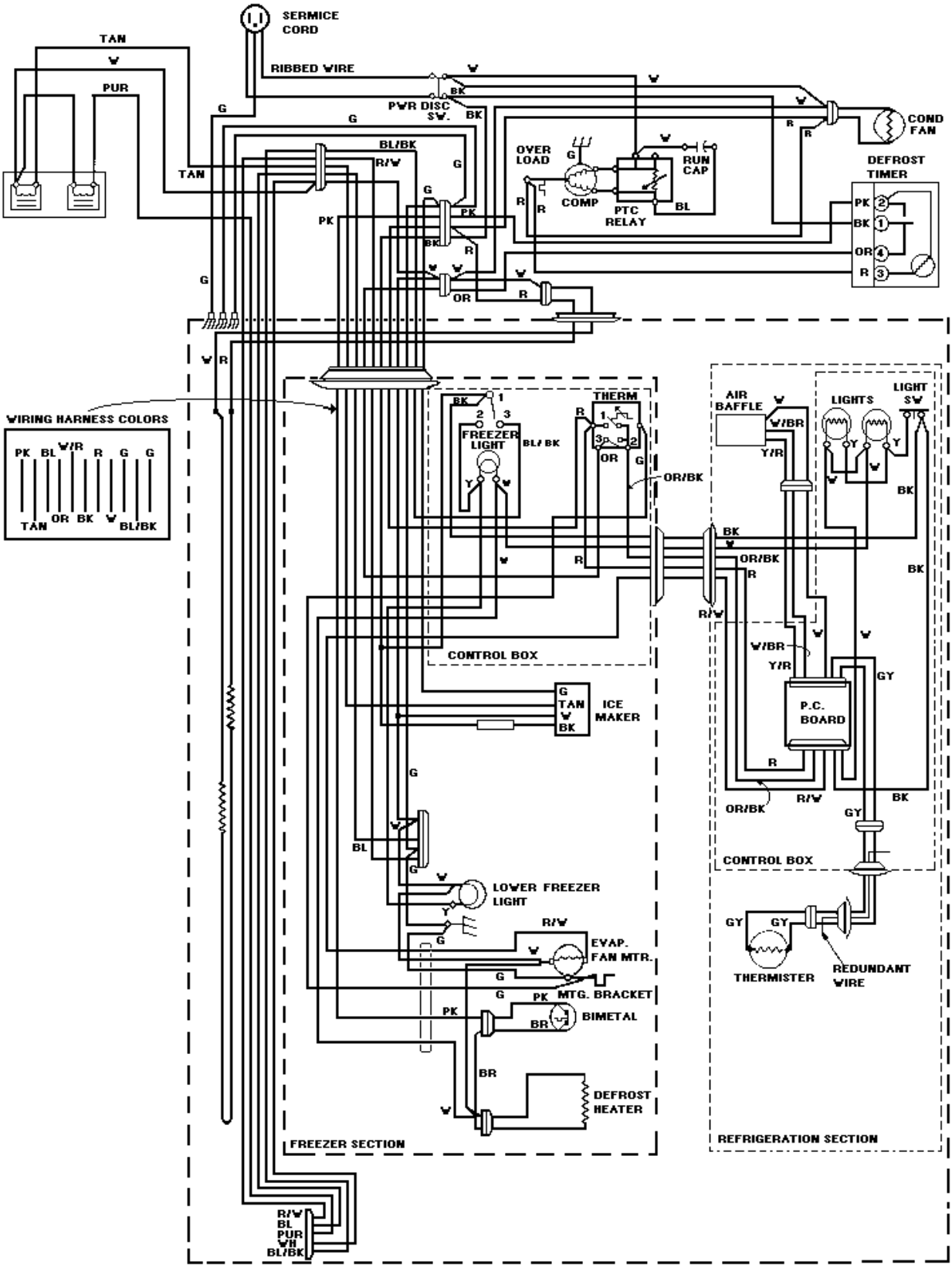


TO CHECK THE FUNCTION OF THE UP/DOWN TOUCH SWITCH SHORT ACROSS THE RIBBON CONNECTION TO THE TOUCH PAD(See Above). WITH THE SWITCH SHORTED THE CHIMNEY WILL RISE AND NOT RETURN TO THE DOWN POSITION. THE SPEED TOUCH PAD WILL NOT WORK.

WIRING DIAGRAM DESIGNER SERIES
BUILT-IN HOODS

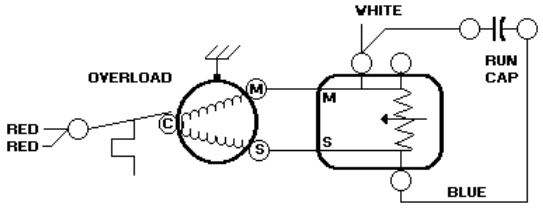


WIRING DIAGRAM
VCSB 36”-42”-48” REFRIGERATOR

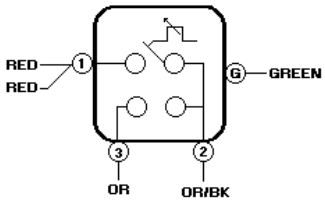


M-001

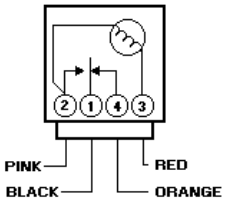
REFRIGERATOR COMPONENTS



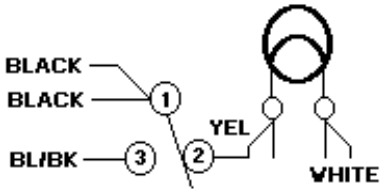
COMPRESSOR PTC RELAY



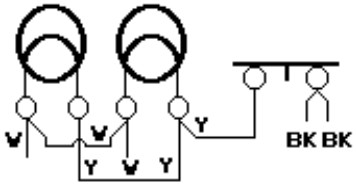
THERMOSTAT



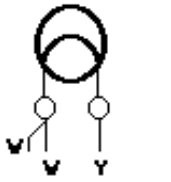
DEFROST TIMER



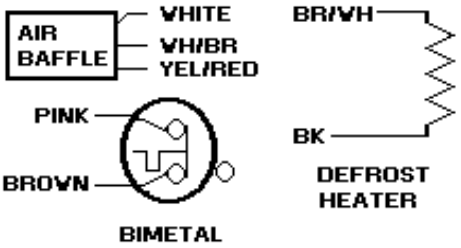
FREEZER LIGHT



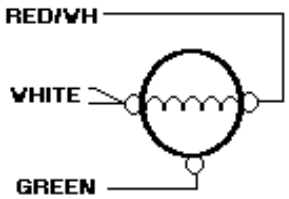
LIGHTS LIGHT SWITCH



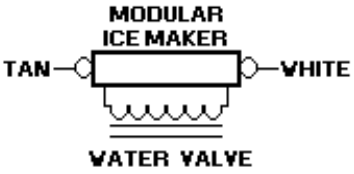
LOWER FREEZER LIGHT



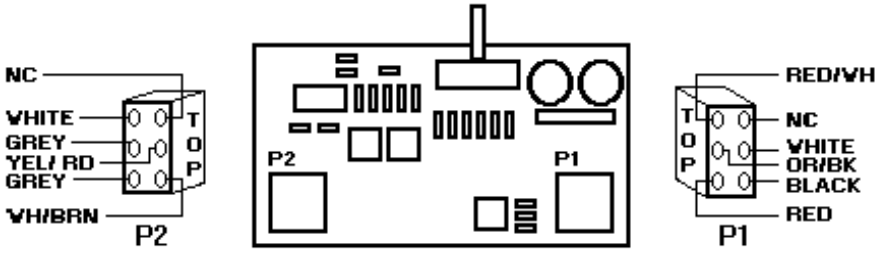
BIMETAL DEFROST HEATER



EVAP. FAN MOTOR

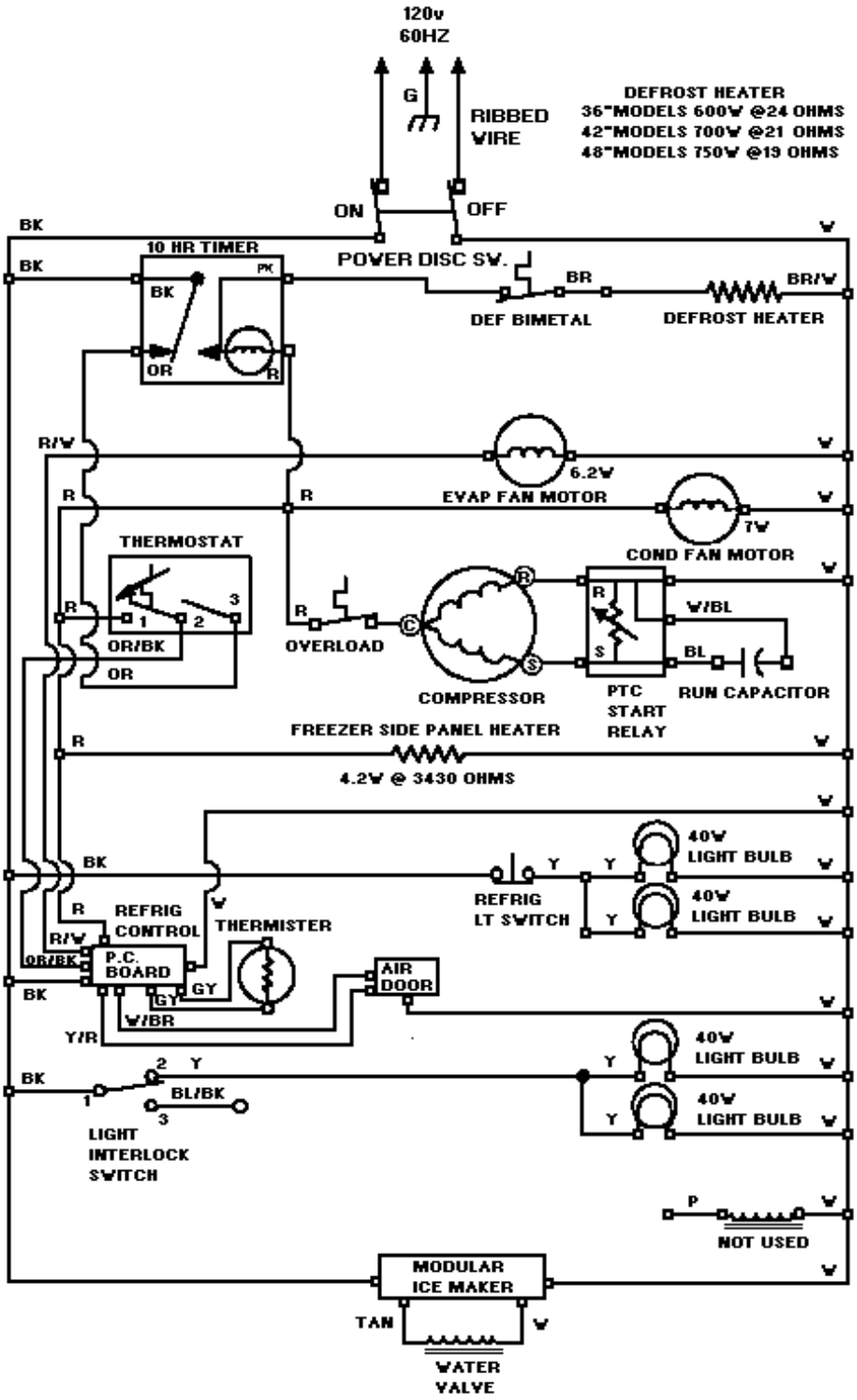


WATER VALVE



BK --- BLACK	BL/OR --- BLUE/ORANGE TRACER
BL --- BLUE	W/BL ----- WHITE/BLUE TRACER
BR --- BROWN	W/BR ---- WHITE/BROWN TRACER
GY --- GRAY	Y/BK ----- YELLOW/BLACK TRACER
OR --- ORANGE	Y/O ------ YELLOW/ORANGE TRACER
PK --- PINK	Y/R ------ YELLOW/RED TRACER
PUR - PURPLE	BR/W ---- BROWN/WHITE TRACER
R ----- RED	OR/BK -- ORANGE/BLACK TRACER
TAN - TAN	R/W ------ RED/WHITE TRACER
W ----- WHITE	G/Y ------ GRAY/WHITE TRACER
Y ----- YELLOW	G -------- GREEN OR GREEN/YELLOW TRACER
	BK/Y ---- BLACK/YELLOW TRACER
	BLBK --- BLUE/BLACK TRACER

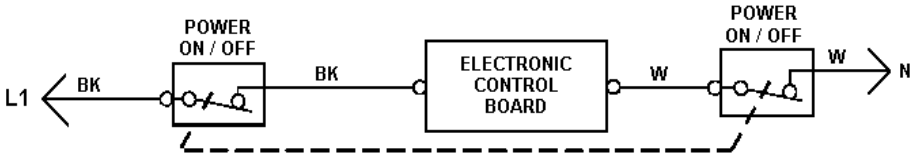
WIRING DIAGRAM

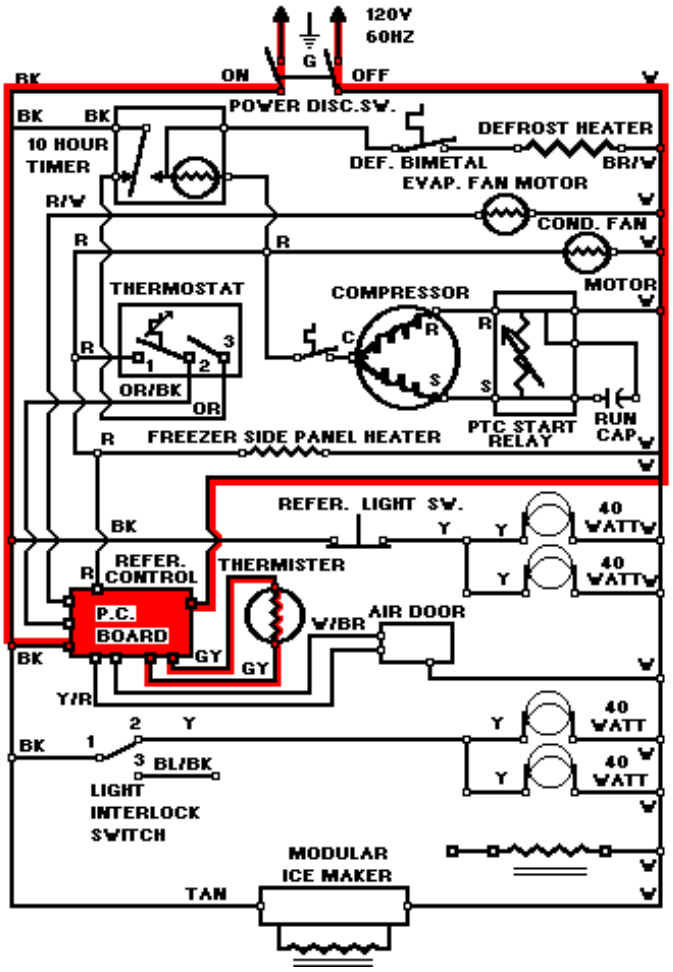


LINE CIRCUIT (#1)

THE COOLING CYCLE

1. Unit plugged in, Electronic Control Board Energized (also during Defrost)



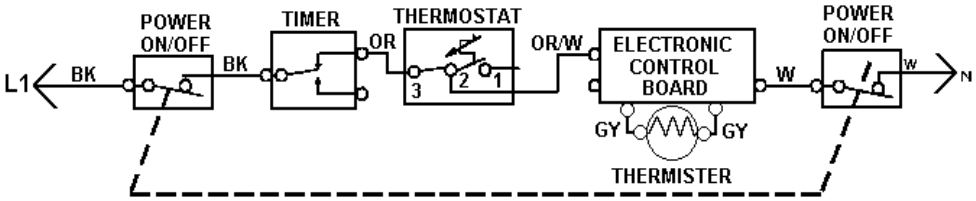


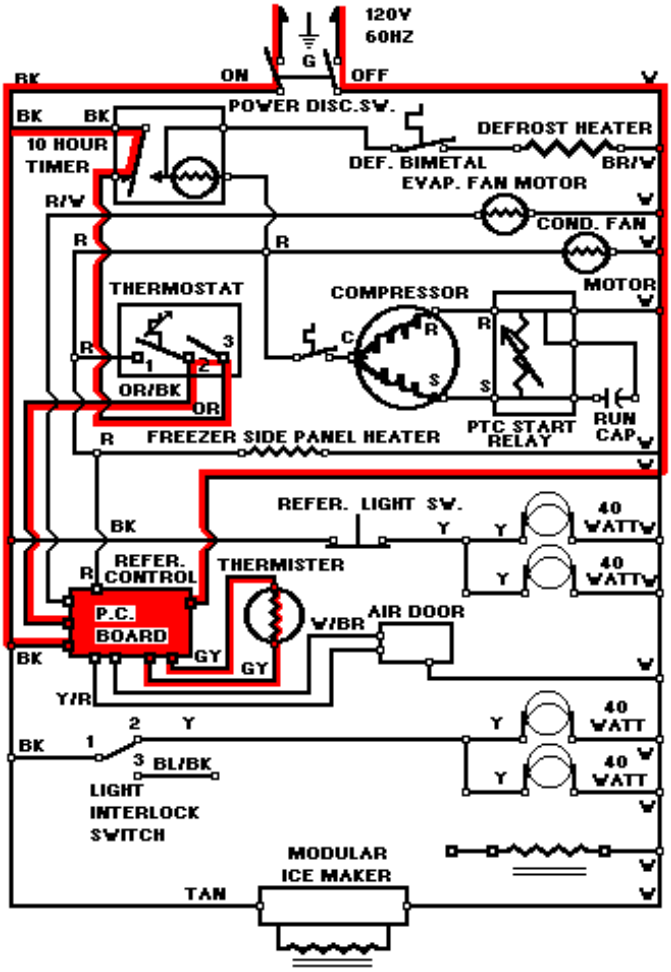
WATER VALVE

LINE CIRCUIT (#2)

THE COOLING CYCLE

2. Freezer Thermostat Turned On. But Satisfied – Low Voltage to Thermister.



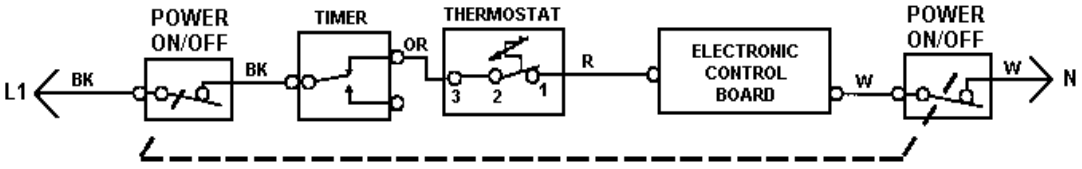


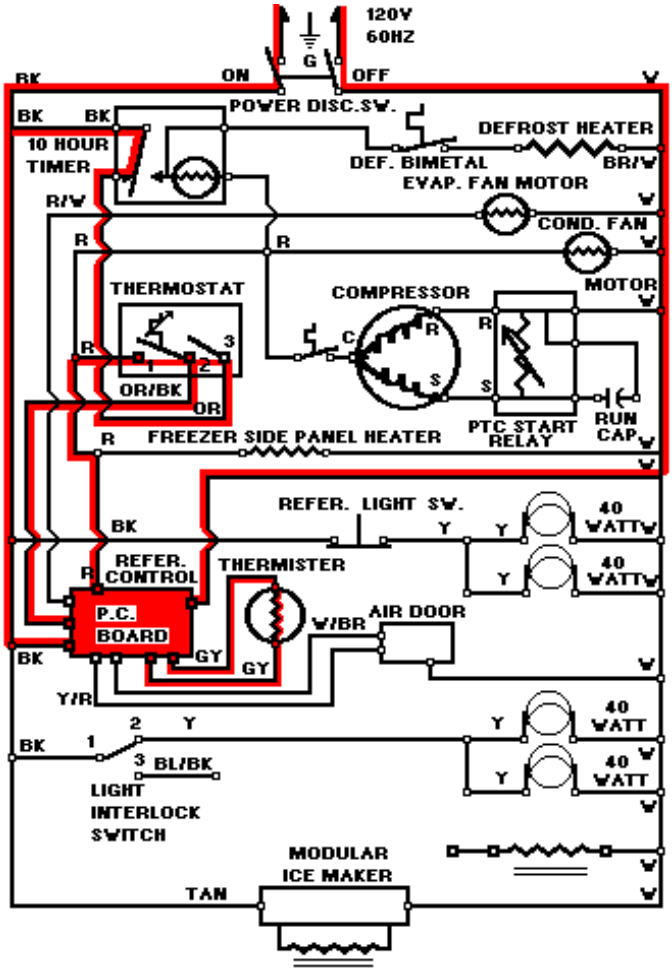
LINE CIRCUIT (#3)

THE COOLING CYCLE

3. Freezer Thermostat Turned On and Calling For Cooling.

- ♦ COMPRESSOR ON – INPUT SIGNAL TO ELECTRONIC CONTROL BOARD.



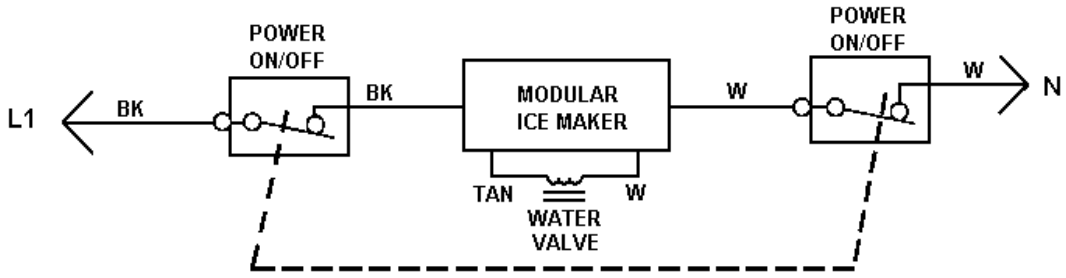


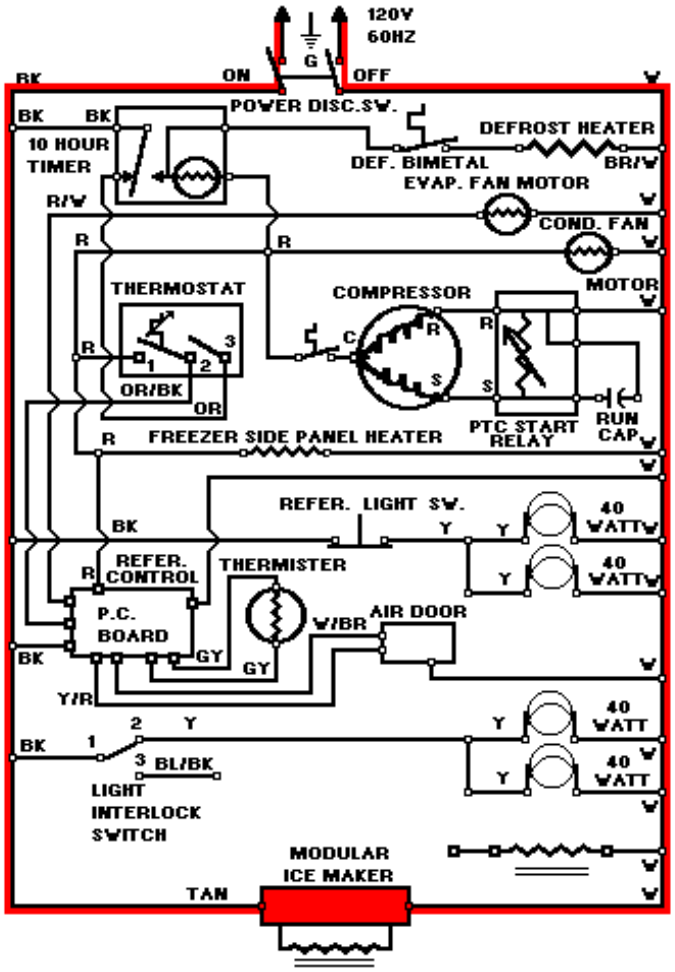
WATER VALVE

LINE CIRCUIT (#4)

THE COOLING CYCLE

4. Freezer Thermostat Calling for Cooling – Compressor Circuit at Instant Start.



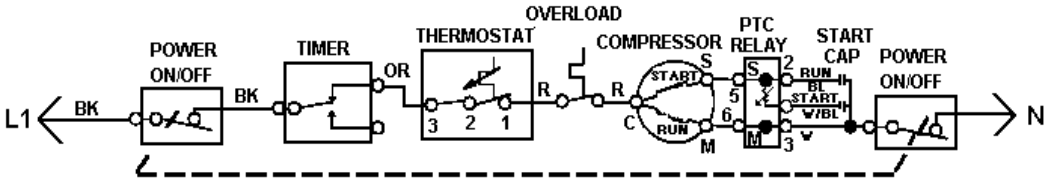


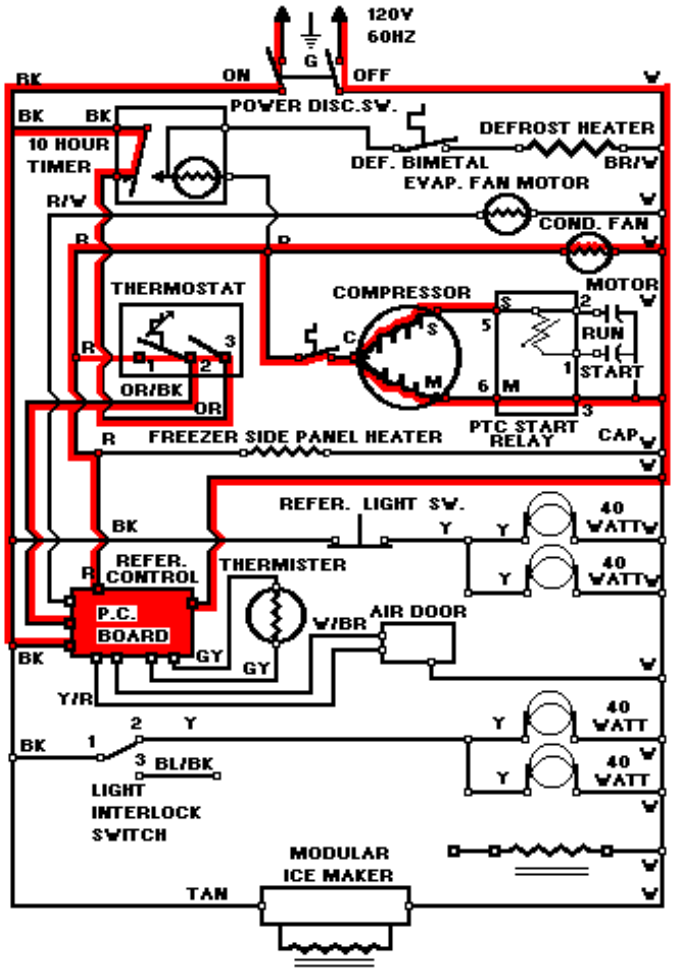
WATER VALVE

LINE CIRCUIT (#5)

THE COOLING CYCLE

5. Freezer Thermostat Turned On and Calling for Cooling – Compressor Circuit During Run.



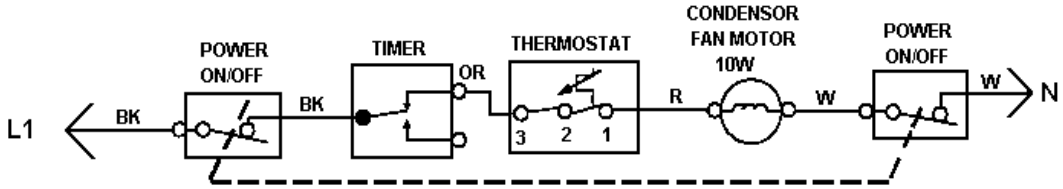


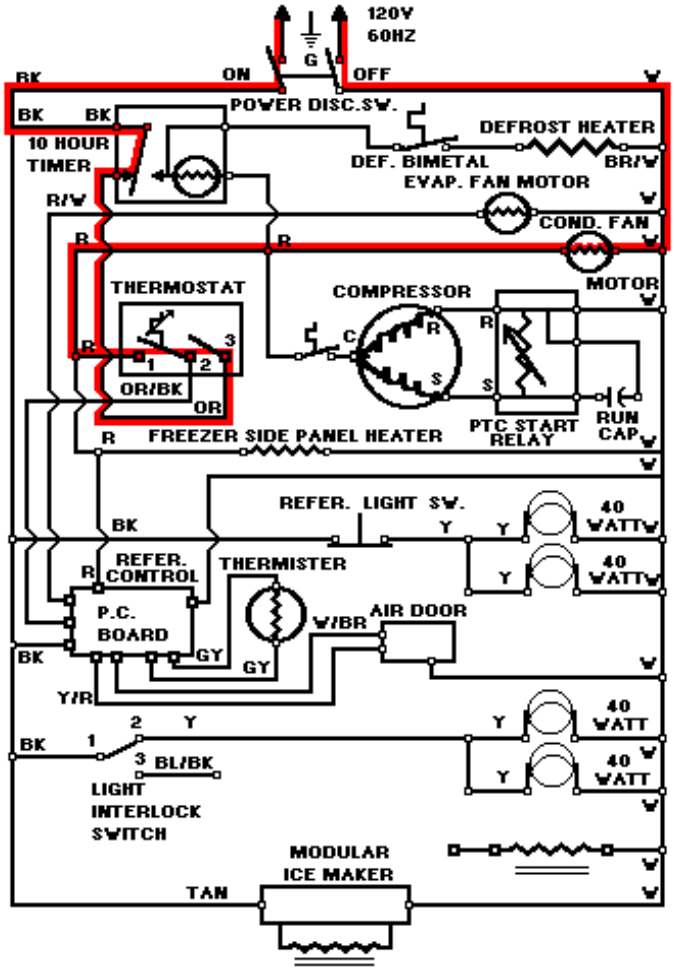
WATER VALVE

LINE CIRCUIT (#6)

THE COOLING CYCLE

6. Freezer Thermostat Calling for Cooling – Condenser Fan Motor Circuit.

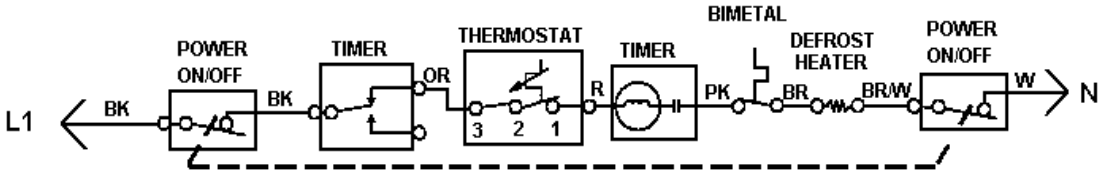


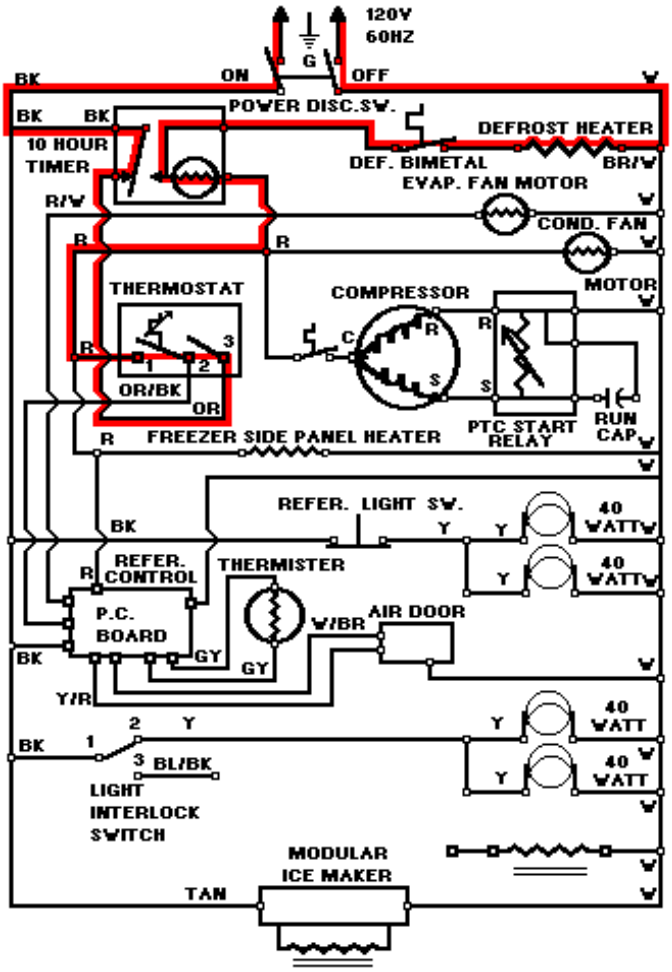


LINE CIRCUIT (#7)

THE COOLING CYCLE

7. Freezer Thermostat Turned On and Calling for Cooling – Defrost Timer Running.



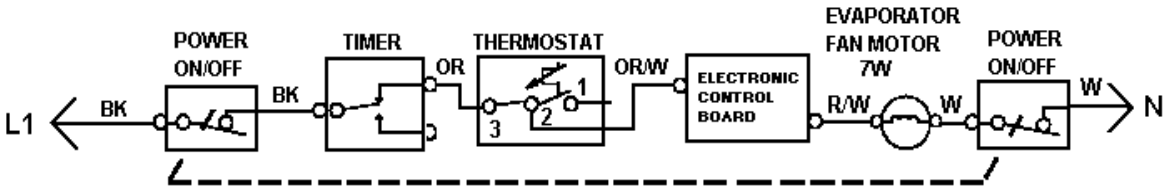


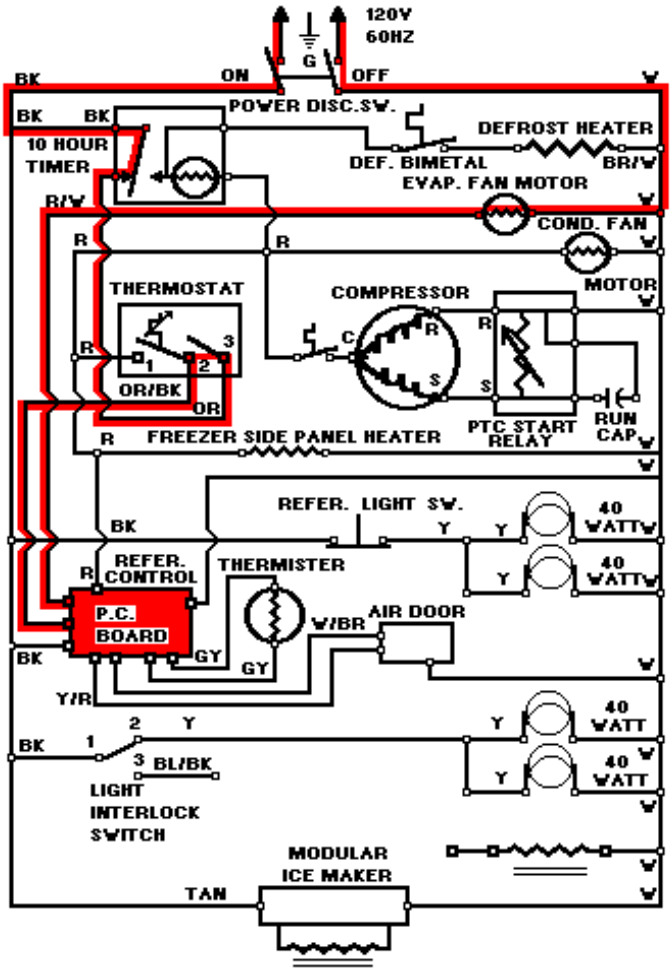
WATER VALVE

LINE CIRCUIT (#8)

THE COOLING CYCLE

8. Freezer Thermostat Turned On and Calling For Cooling – Evaporator Fan Motor Circuit.



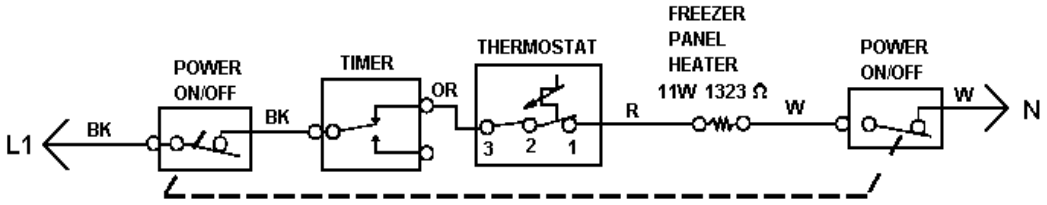


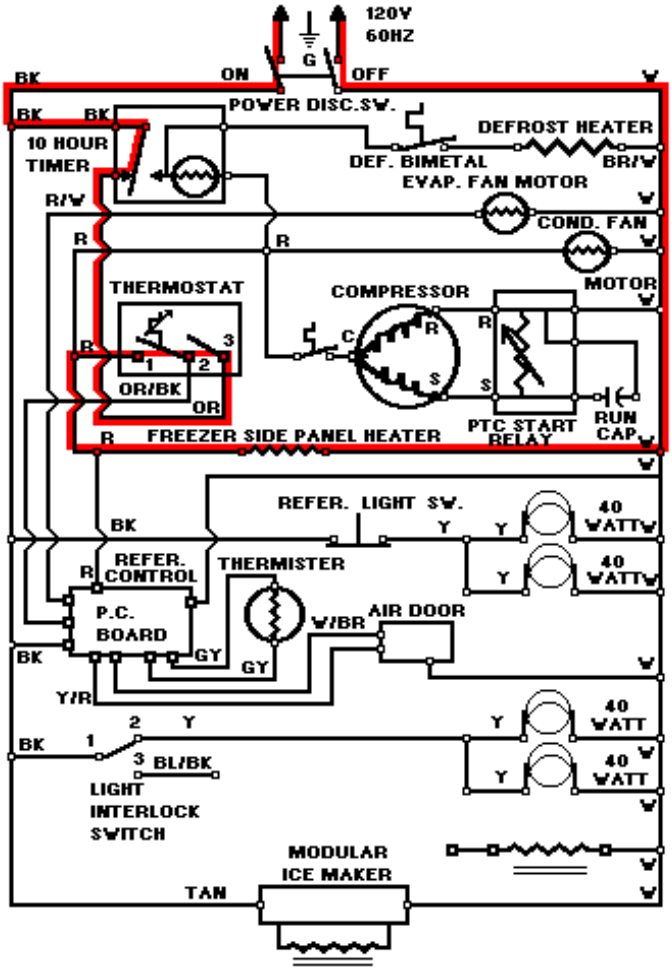
WATER VALVE

LINE CIRCUIT (#9)

THE COOLING CYCLE

9. Freezing Thermostat Calling for Cooling – Freezing Side Panel Heater Circuit.

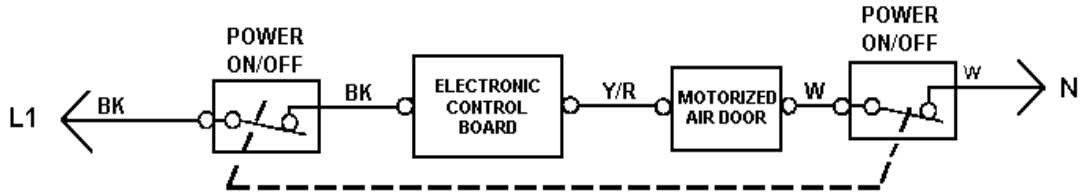


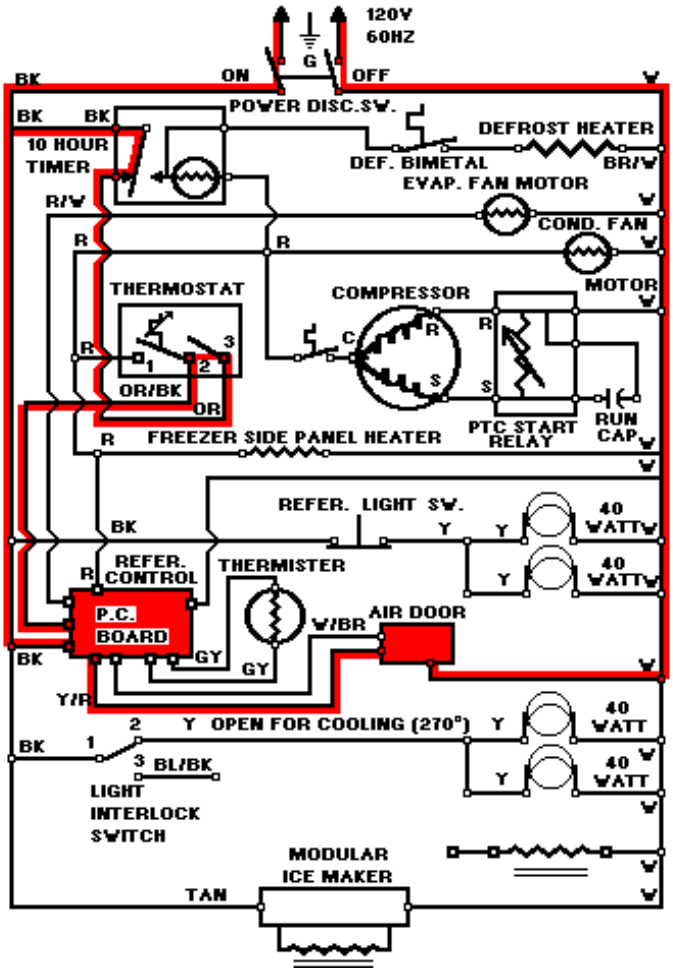


LINE CIRCUIT (#10)

THE COOLING CYCLE

10. Refrigerator Control Calling for Cooling – Motorized Air Door Opening.



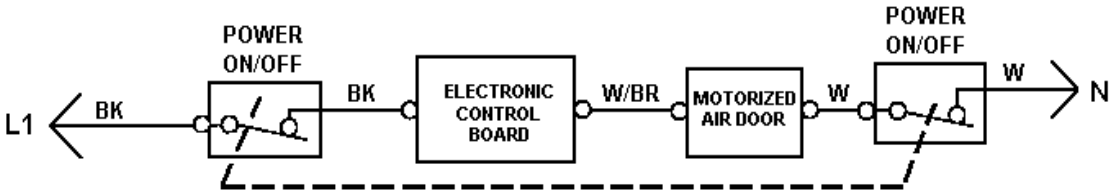


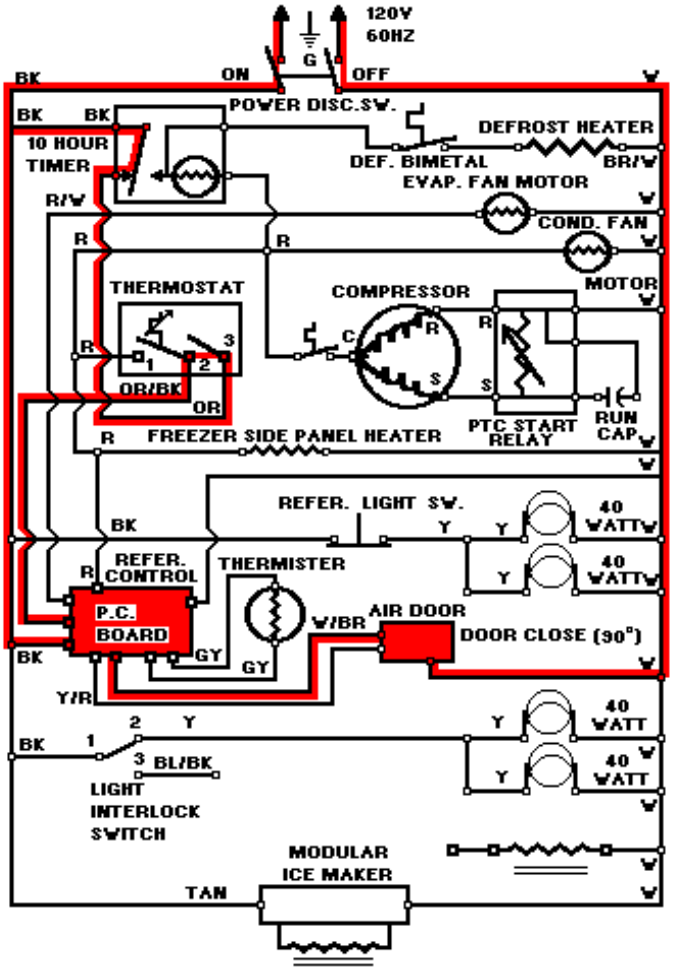
WATER VALVE

LINE CIRCUIT (#11)

THE COOLING CYCLE

11. Refrigerator Control Satisfied – Motorized Air Door Closing.

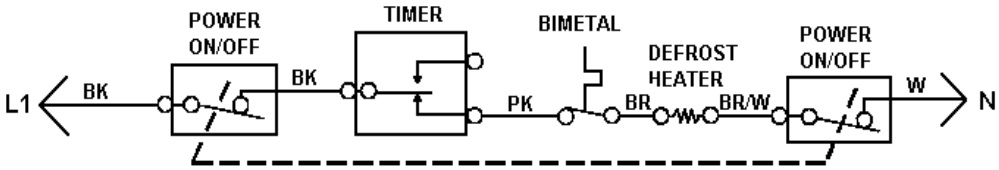


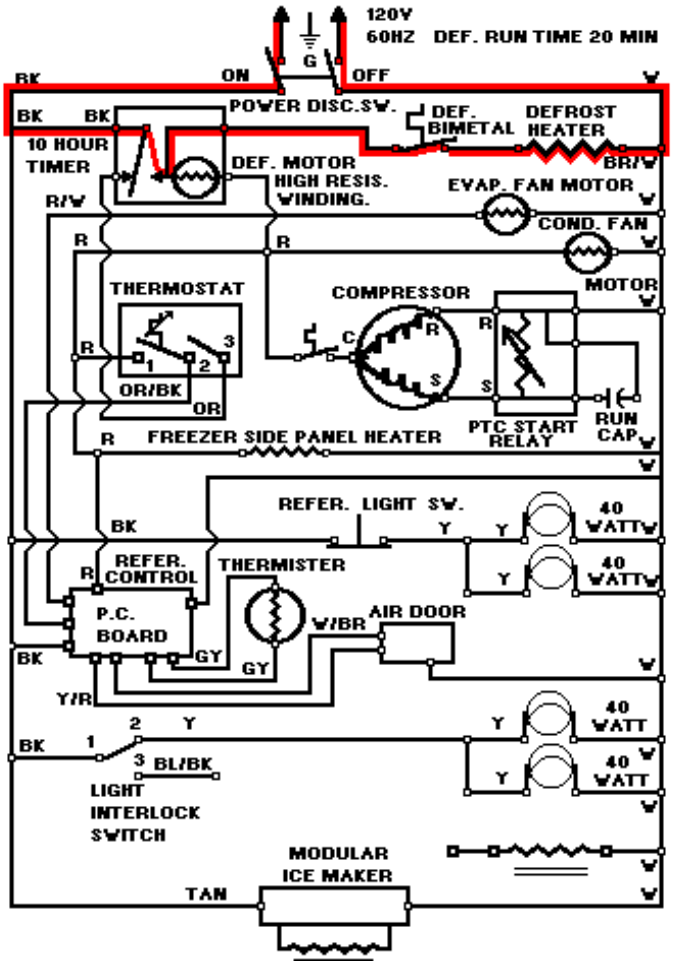


LINE CIRCUIT (#12)

THE DEFROST CYCLE

12. Defrost Heater Circuit.



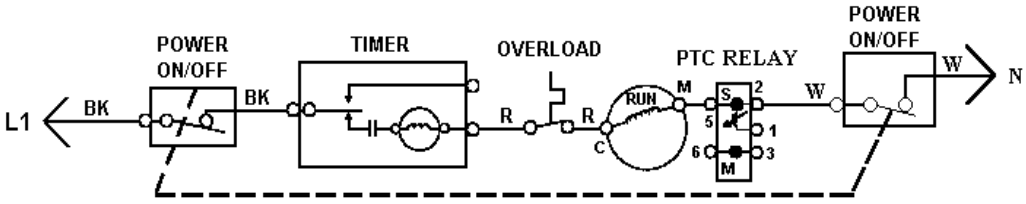


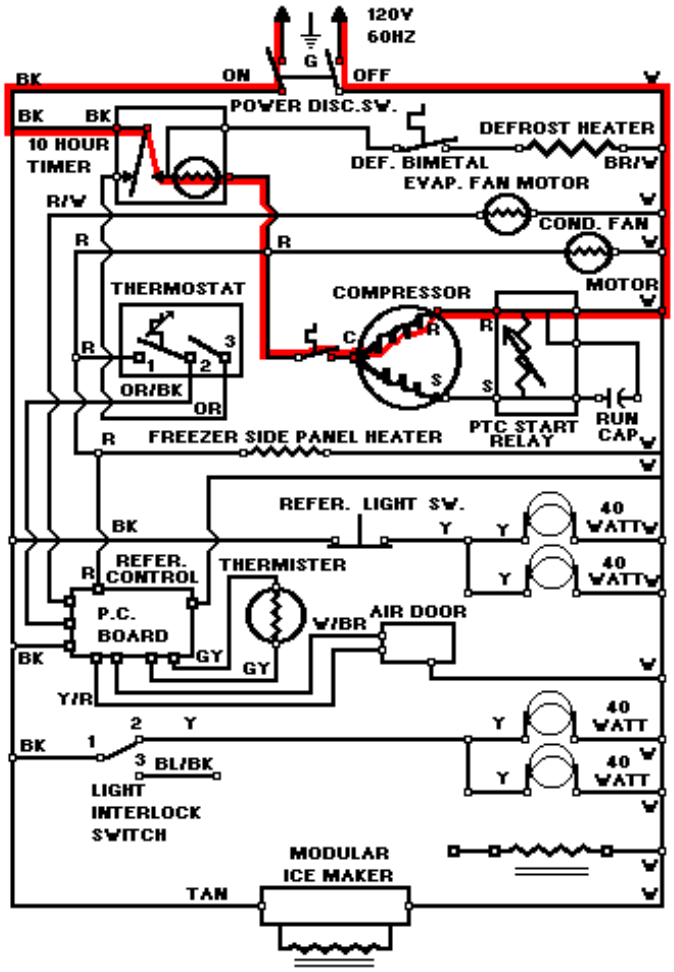
WATER VALVE

LINE CIRCUIT (#13)

THE DEFROST CYCLE

13. Defrost Timer Motor Running.



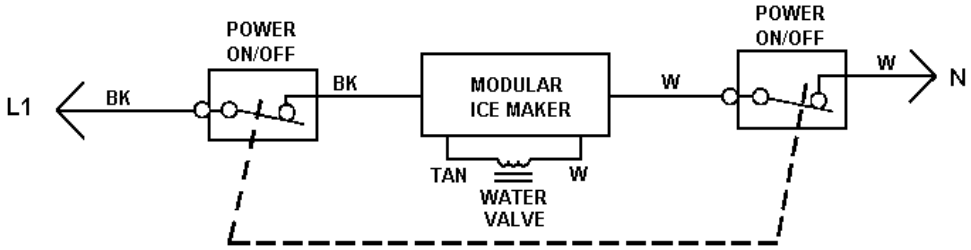


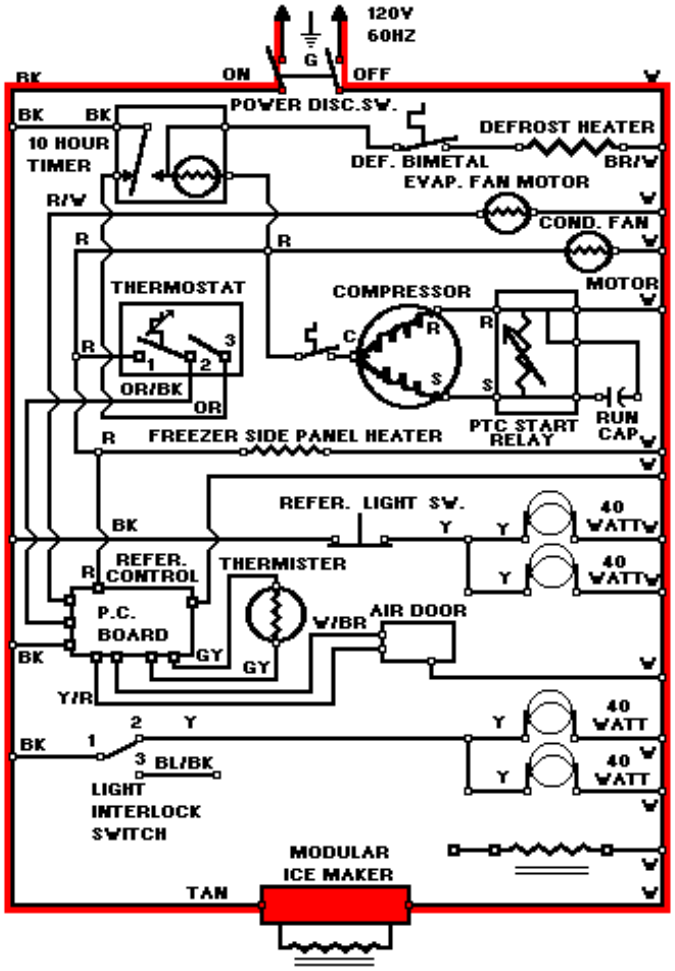
WATER VALVE

LINE CIRCUIT (#14)

THE DISPENSER CIRCUIT

14. Module Ice Maker Circuit.



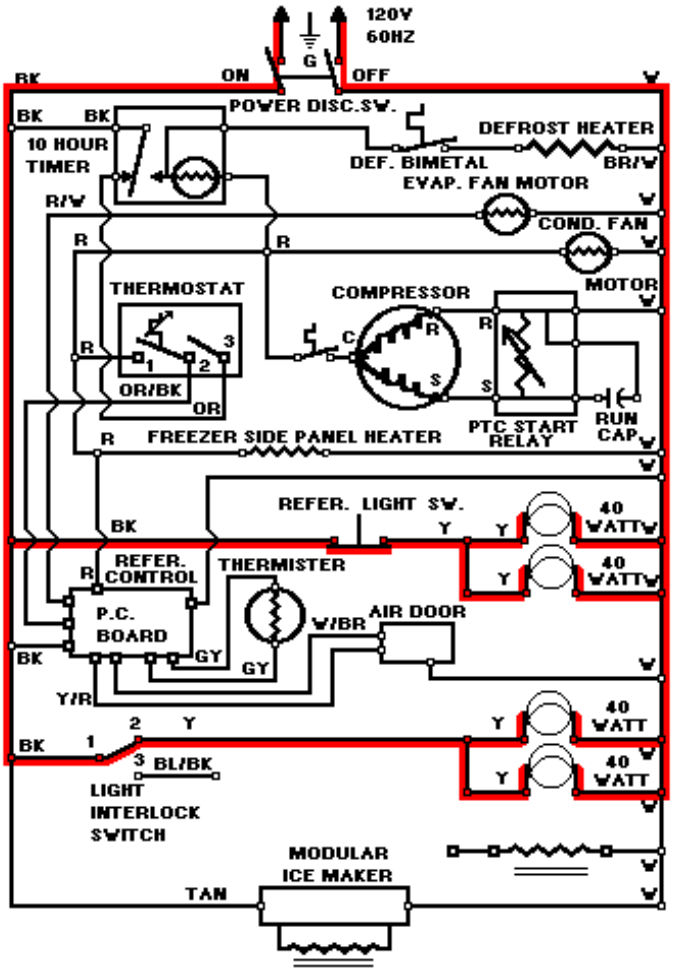


WATER VALVE

LINE CIRCIT (#15)

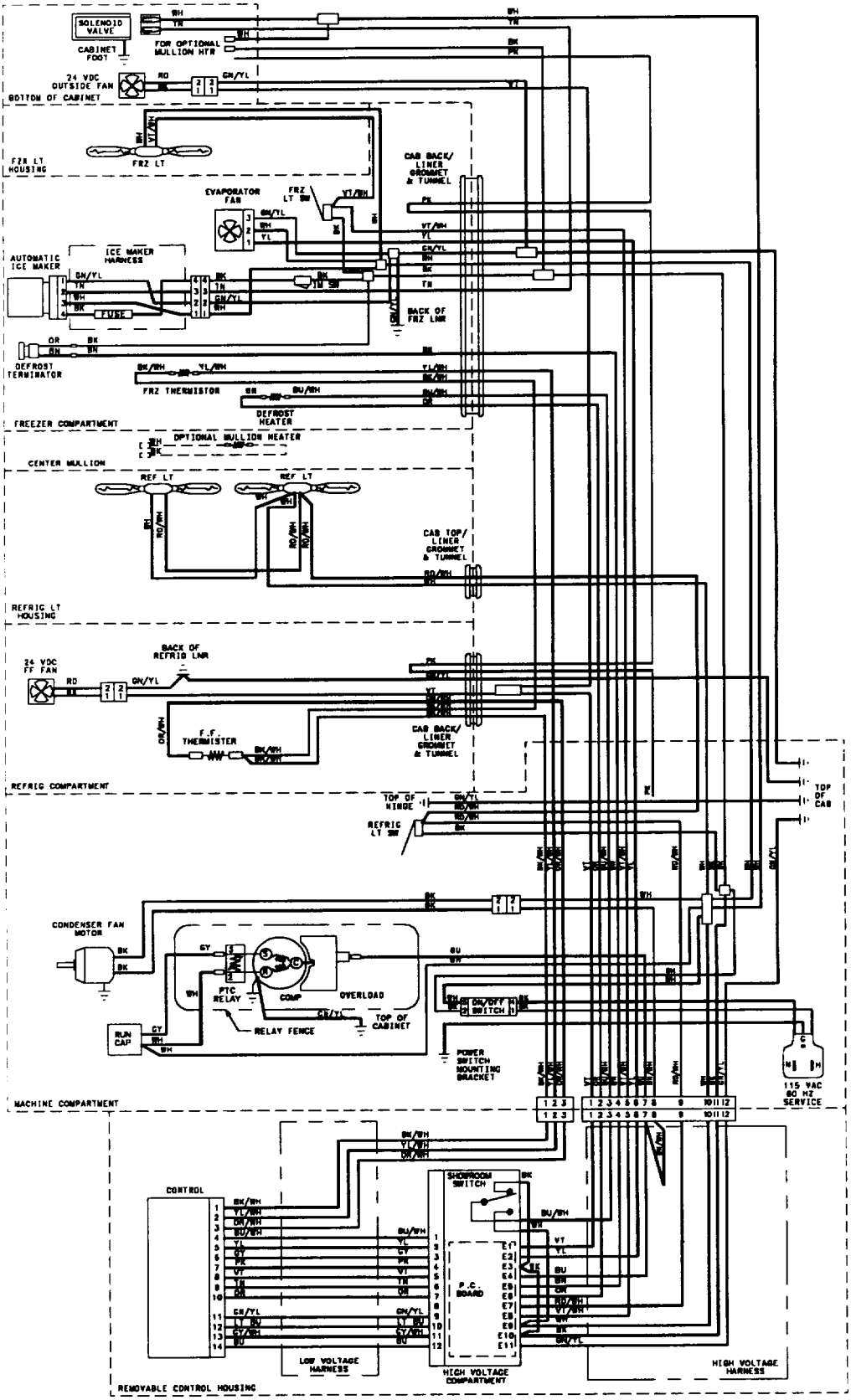
REFRIGERATOR AND FREEZER LIGHT CIRCUIT

15. Refrigerator and Freezer Light Circuit.

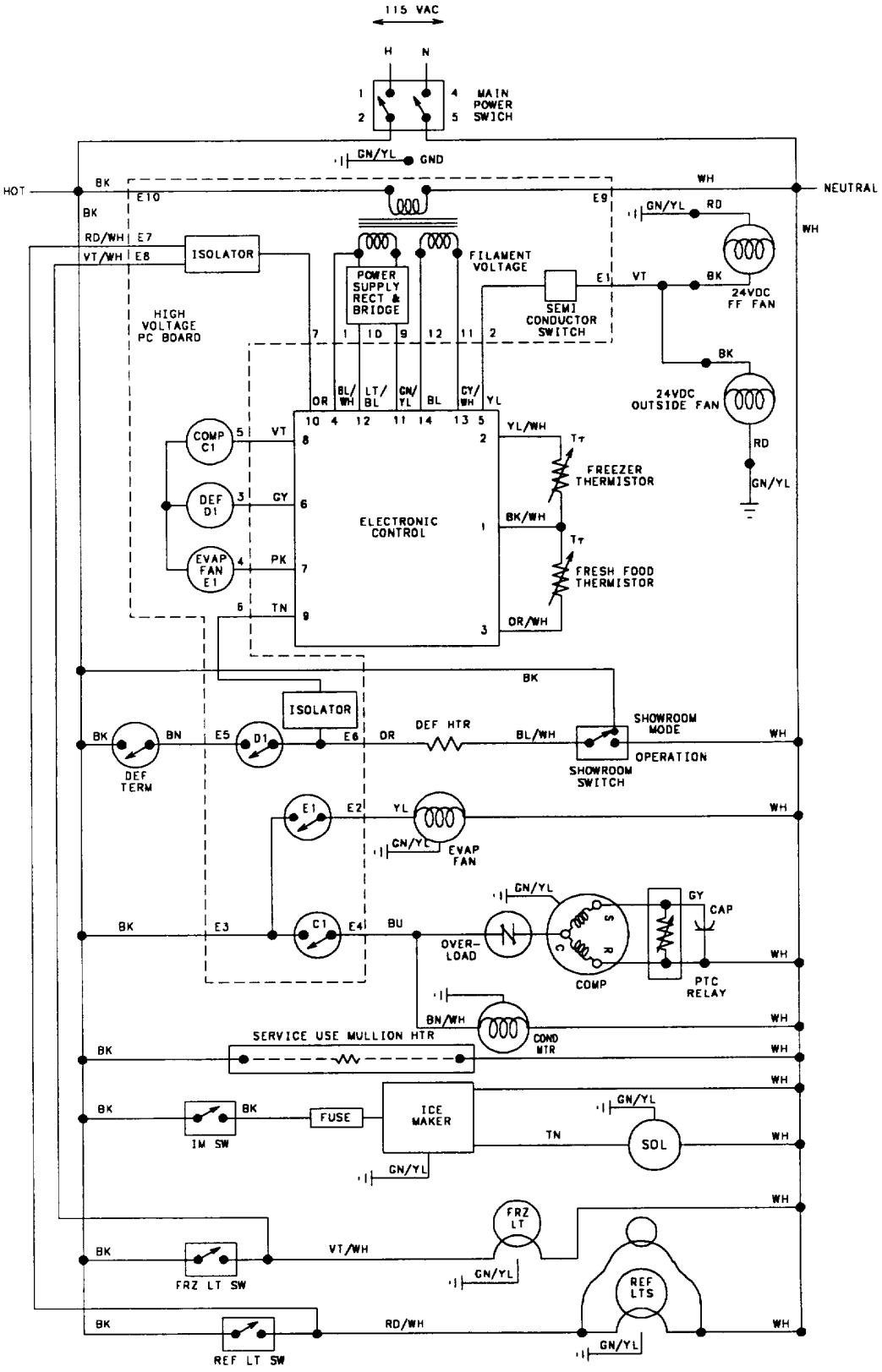


WATER VLAVE

WIRING DIAGRAM VCBB360 REFRIGERATOR /FREEZER

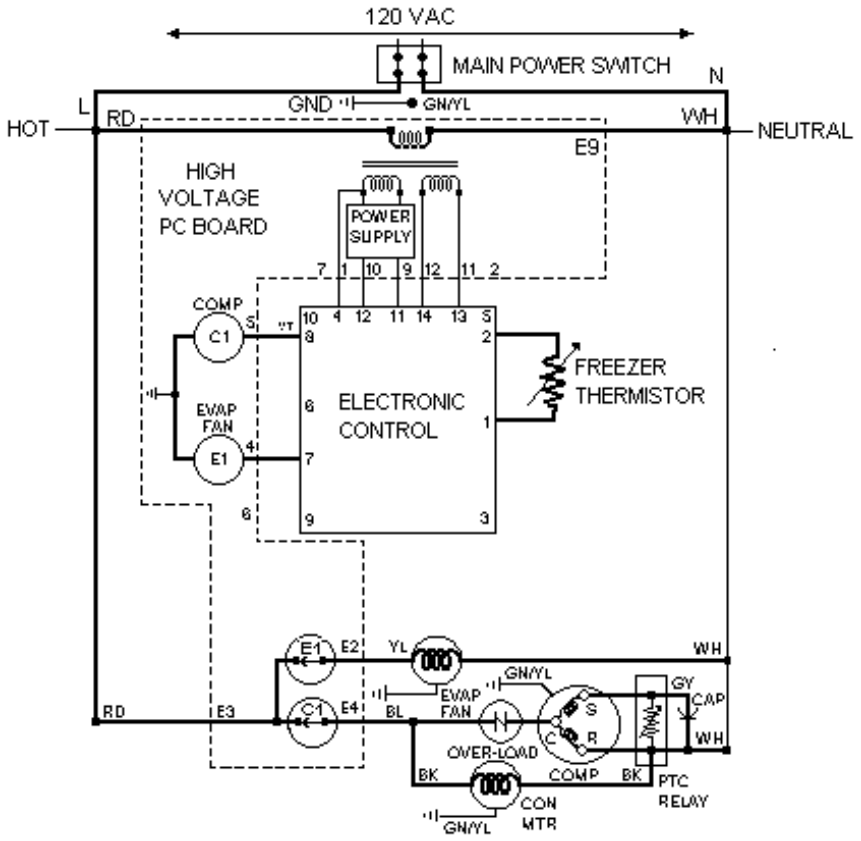


WIRE SCHEMATIC VCBB360 REFRIGERATOR / FREEZER



Electronic Function Description

WARNING: To avoid electrical shock which can cause severe personal injury or death, disconnect power to refrigerator using power switch before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct grounding and polarization. After servicing, reconnect power using power switch.



Freezer Compartment Theory of Operation

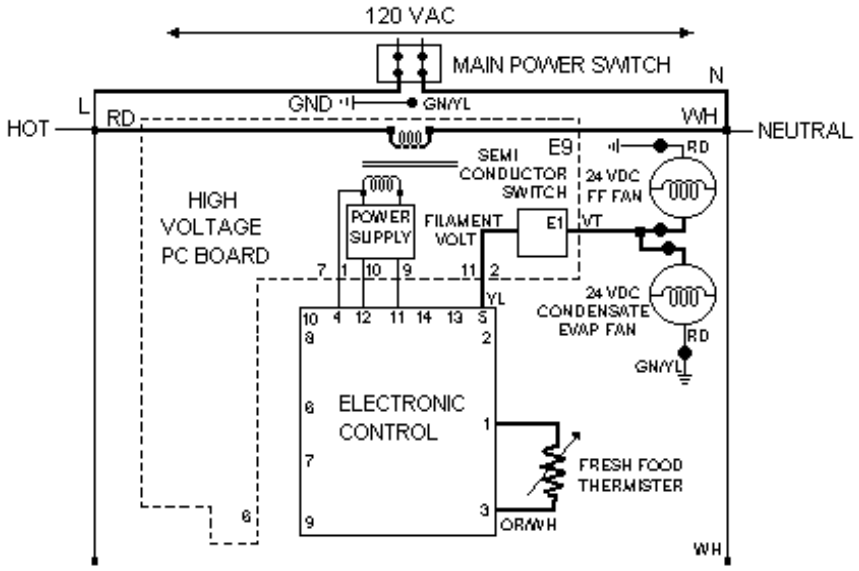
As the freezer thermistor warms, the resistance decreases allowing low voltage to be sent to electronic control. Electronic control sends two low voltage signals, one to the compressor relay coil (C1) and one to the evaporator relay (E1).

When both relay coils are energized and both relay contacts are closed, high voltage circuits to evaporator fan motor and compressor / condenser fan motors are complete.

As thermistor cools during refrigeration cycle, resistance through thermistor increases blocking low voltage signal to electronic control interrupting circuit.

Electronic Function Description

WARNING: To avoid electrical shock which can cause severe personal injury or death, disconnect power to refrigerator using power switch before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct grounding and polarization. After servicing, reconnect power using power switch.



Refrigeration Compartment Theory of Operation

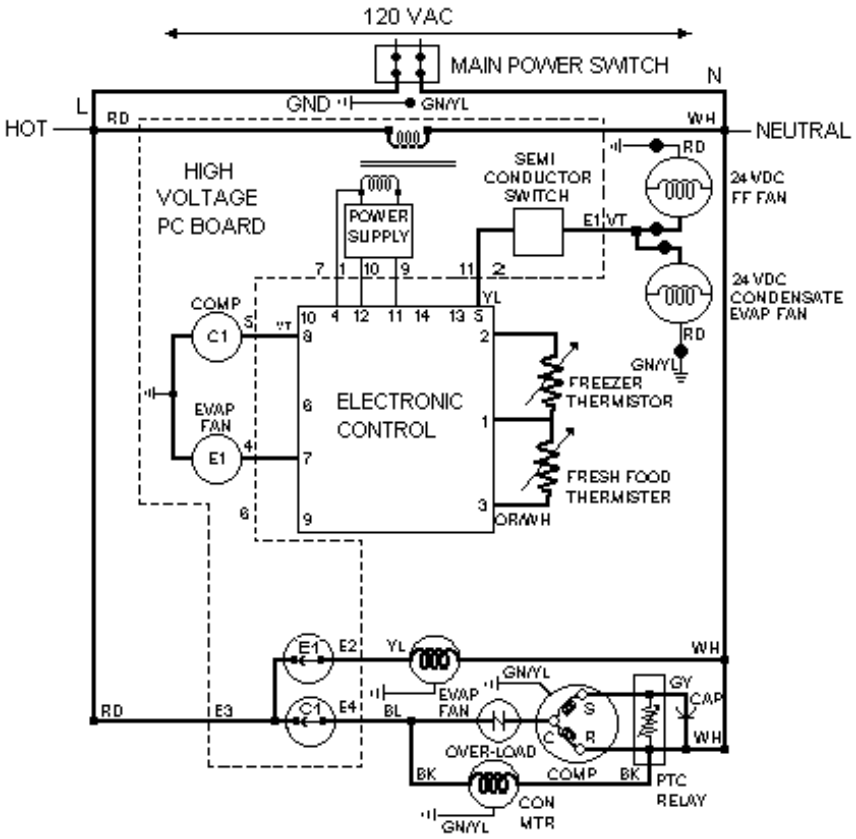
As fresh food thermistor warms, resistance decreases allowing low voltage signal to be sent to the electronic control. Electronic control sends a low voltage signal, to semiconductor switch for DC fresh food fan and DC condensate evaporator fan.

Both fans begin operating. Fresh food fan circulates freezer air into fresh food compartment. Condensate evaporator fan circuilates air over condensate drain pan aiding in evaporation.

As fresh food thermistor cools, resistance increases blocking low voltage signal to electronic control interrupting circuit to DC fresh food fan and DC condensate evaporation fan.

Electronic Function Description

WARNING: To avoid electrical shock which can cause severe personal injury or death, disconnect power to refrigerator using power switch before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct grounding and polarization. After servicing, reconnect power using power switch.



Refrigerator and Freezer Compartment Theory of Operation

If both freezer and fresh food thermistors are warm, their resistance drops (see table Refrigerator and Freezer Thermistor in Temperature Control Section) and the electronic signals for compressor / condenser fan motor operation and for operation of fresh food and condensate evaporator fans.

After freezer thermistor cools sufficiently to raise resistance and block the signal to the electronic control, compressor / condenser fan motor will shut off.

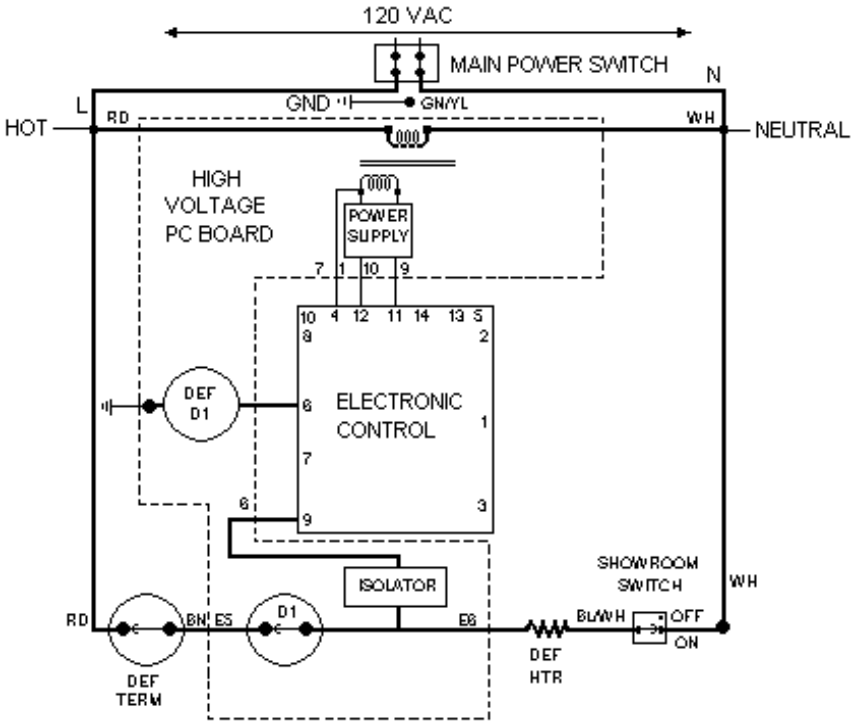
However, fresh food and condensate evaporator fans
will continue to run until fresh food thermistor cools and signal is blocked to electronic control.

If fresh food thermistor cools before freezer thermistor, electronic control will interrupt circuit to fresh food and condensate evaporator fans while evaporator fan motor will continue to operate under control of freezer thermistor.

Electronic Function Description

WARNING: To avoid electrical shock which can cause severe personal injury or death, disconnect power to refrigerator using power switch before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct grounding and polarization. After servicing, reconnect power using power switch.

IMPORTANT: When the showroom switch is OFF, the isolator sees line voltage which keeps the electronic controller from signaling the evaporator fan motor or compressor relay coils and also keeps the fresh food and condensate evaporation fans off.



Adaptive Defrost Theory of Operation

After sesignated compressor run time, refrigeration cycle is interrpted and electronic control sends a low voltage signal to defrost relay coil (def D1).

Powering the relay coil closes contact (D1) completing high voltage circuit to defrost heater through closed defrost terminator (closes at 15 F).

Isolator, which is part of high voltage PC board, recognizes presence of line voltage to defrost heater and sends low voltage signal to electronic control.

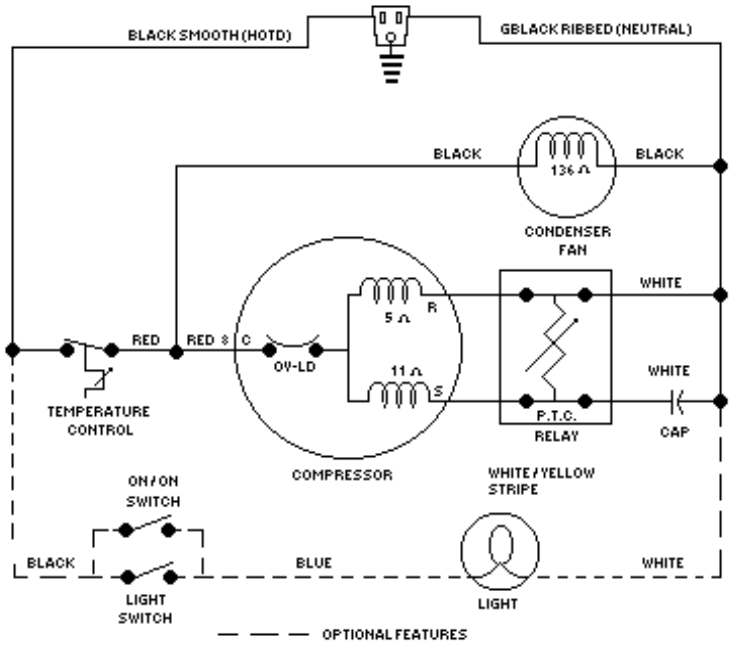
Electronic control keeps count of number of minutes, defrost terminator remains closed (opens at 48 F).

Length of time defrost terminator is closed determines if the next defrost cycle advances by 4 hours of compressor run, stays at the same interval, or delays by 4 hours of compressor run.

If defrost terminator does not open before 29 minutes, defrost cycle is automatically terminated be electronic control and refrigeration cycles will resume after 6 minutes dwell time.

WIRING DIAGRAM

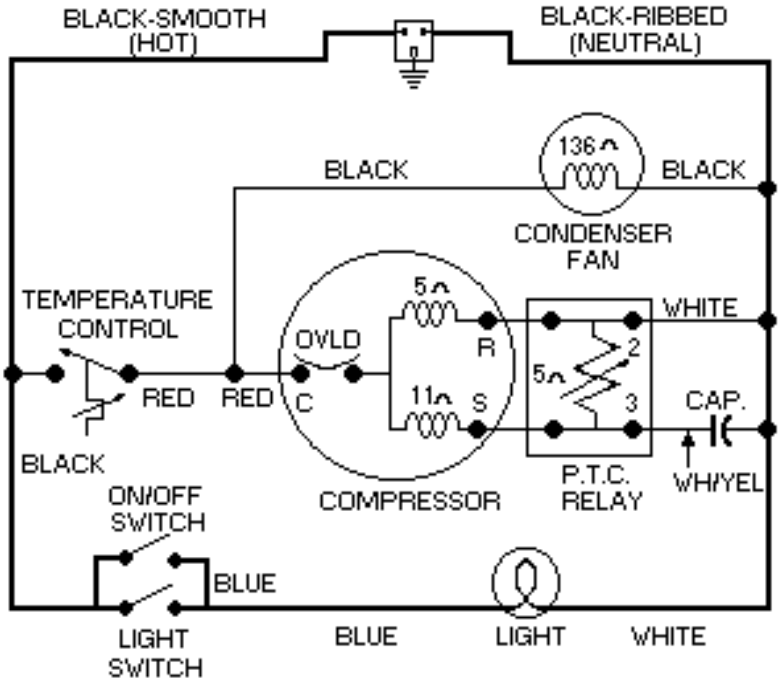
UNDERCOUNTER 24" W. REFERATOR



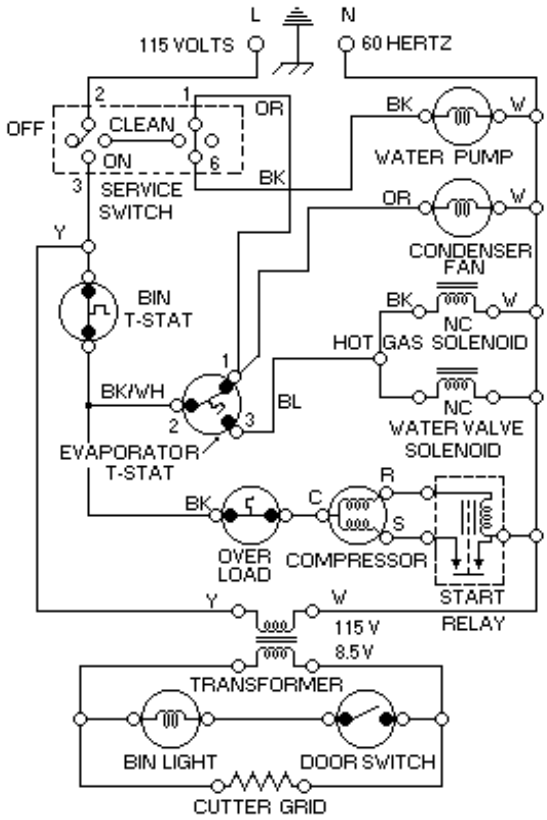
WARNING: ELECTRICAL GROUNDING INSTRUCTIONS.

This appliance is equipped with a three prong grounding plug for your protection against shock hazard and should be plugged directoy into a properly grounded three prong receptacle. Do not cut or remove the grounding prong from this plug.

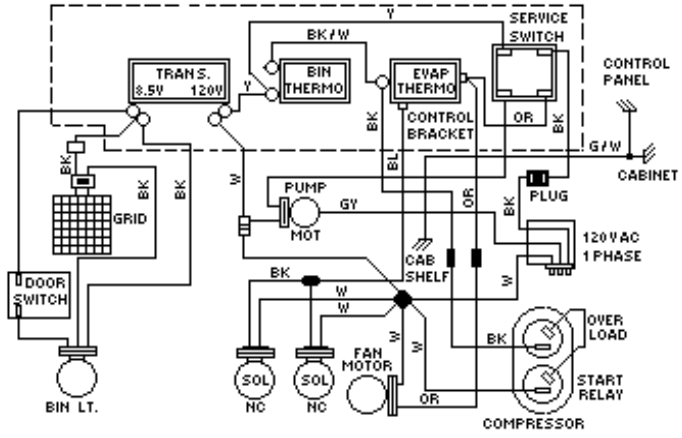
WIRING DIAGRAM
24” W. WINE COOLER



WIRING DIAGRAM
18" W. ICE MACHINE



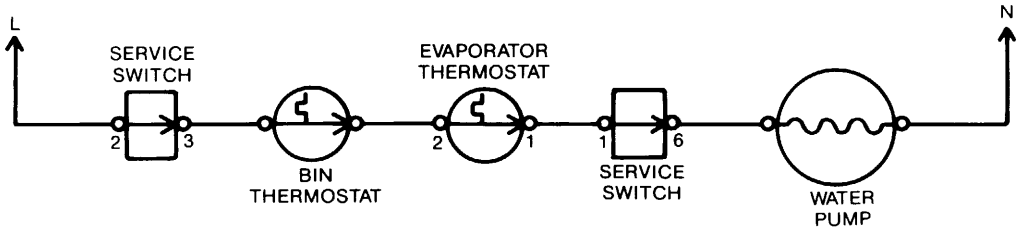
COLOR CHART	
R	RED
BK	BLACK
BL	BLUE
W	WHITE
Y	YELLOW
OR	ORANGE
BK/W	BLACK / WHITE TRACER
G / Y	GREEN / YELLOW TRACER



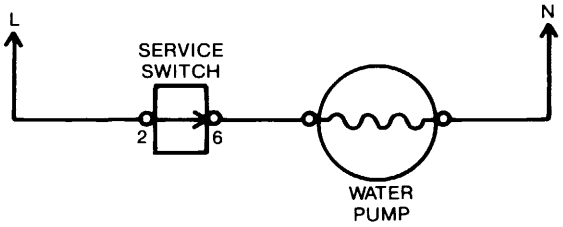
PROBLEM DIAGNOSIS
LINEAR LINE CIRCUITS

These line strip circuit diagrams can be used to
Check the electrical system in the ice maker.

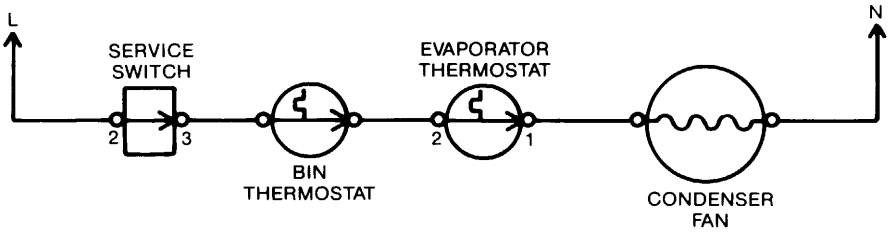
Water Pump (ICE MAKING cycle)



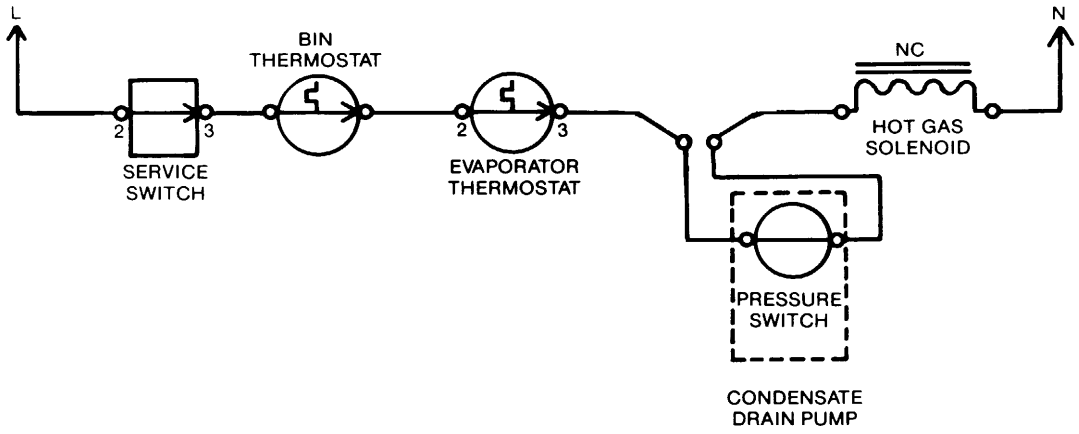
Water Pump (CLEAN CYCLE)



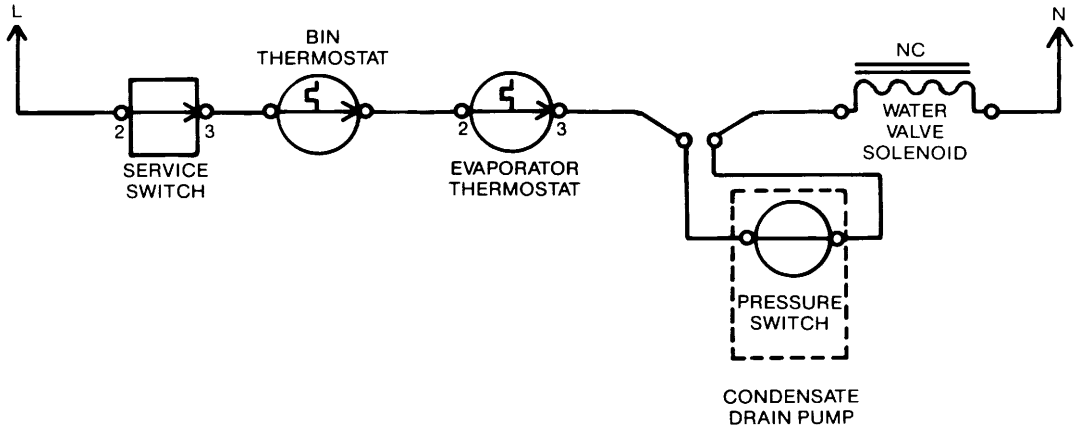
Condenser Fan



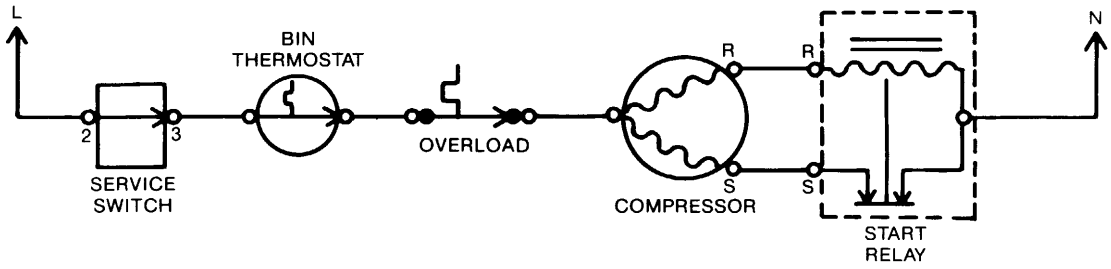
Hot Gas Valve Solenoid (Units With Condensate Drain)



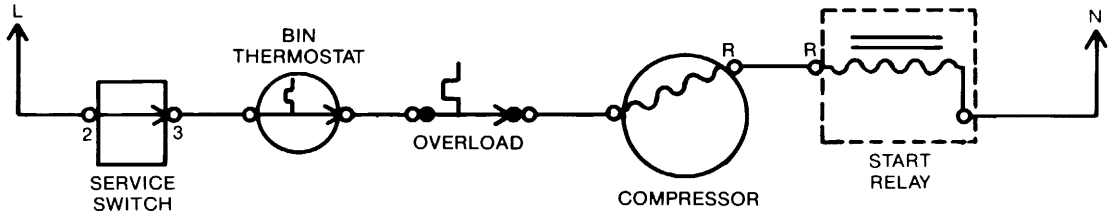
Water Valve Solenoid (Unit With Condensate Drain)



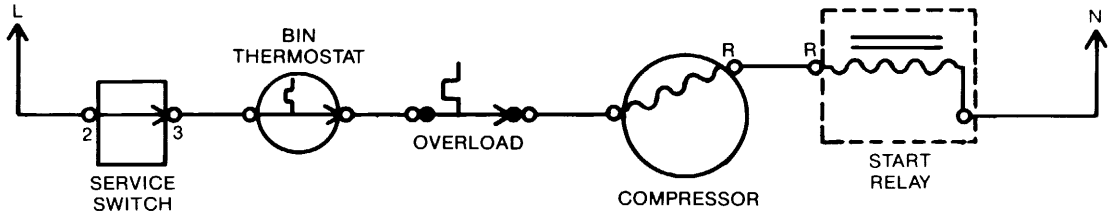
Compressor (start)



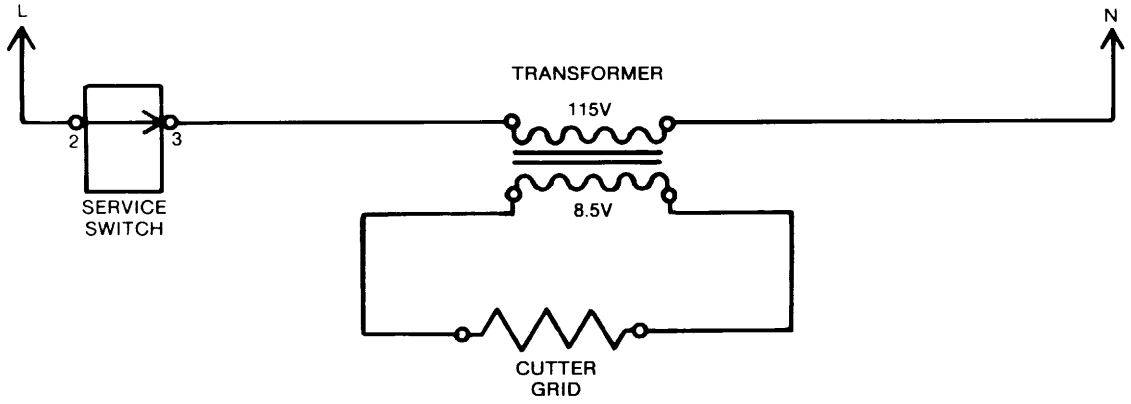
Compressor (Run)



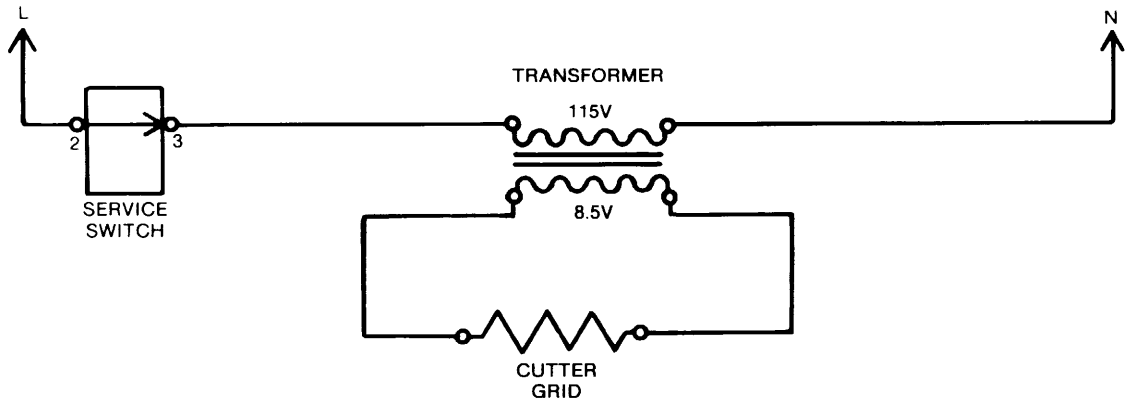
Bin Light



Cutter Grid



Condensate Pump (HARVEST Cycle)



Condensate Pump (at all times except during HARVEST Cycle)