

SERVICE MANUAL

**CVAP VAPOR
OVEN
CB & CG
PROCESS CONTROL MODELS**

(.04 Software)

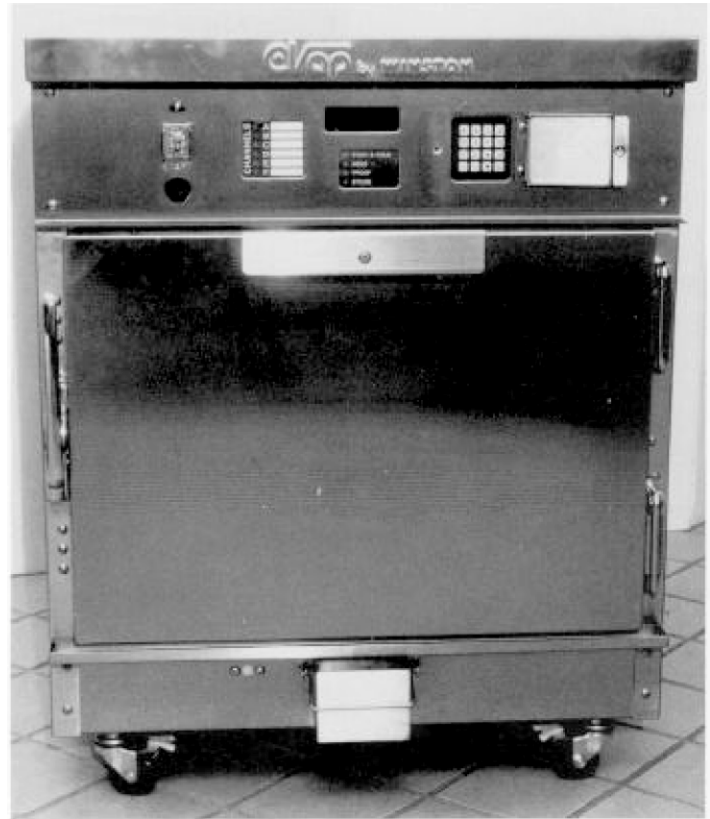
MANUAL REORDER: LIT 6422 REV 0/5-89

FOR MODEL NOS.

CG15P11SE

CB21P11SE

CB53P11SE



DANGER

The procedures contained in this manual involve accessing bare electrical terminals and exposes one to voltages capable of producing serious injury or death. Any person attempting diagnosis and/or repair involving removal of panels and/or exposure to live electrical components must be trained or experienced in such service procedures. Disconnect electrical service while performing the procedures listed in this manual.

WINSTON

PRODUCTS COMPANY

INTRODUCTION

This Service Manual is to be used for the following model **CVAP VAPOR OVENS: CB21P11SE, CG15P11SE AND CB53P11SE.**

SAFETY

Knowledge of the proper installation, operation and maintenance procedures is an important step to insure safe operation of any equipment. The instructions in this manual are meant as guidelines for proper service of the **CVAP VAPOR OVEN**. In accordance with generally accepted product safety labeling guidelines for potential hazards, the following two signal words are used throughout this handbook where applicable.

DANGER — — Used to indicate the presence of a hazard which could cause severe personal injury, death, or substantial property damage if warning is ignored.

CAUTION — — Used to indicate the presence of a hazard which could cause minor personal injury or property damage if warning is ignored.

RECOMMENDED TOOLS

Nut driver 5/16"
Nut driver 7/16"
Nut driver 3/8"
Nut driver 5/8"
Nut driver 11/32"
Flat blade screwdriver 3/16"
Flat blade screwdriver 1/4"
Phillips screwdriver #2
Calibration screwdriver
Pliers, standard
Open end wrench 1/2"
Open end wrench 9/16"
Open end wrench 3/8"
Open end wrench 1"
Putty knife
Needle nose pliers
Allen wrench 5/64"
Terminal crimpers
Wire strippers
Wire cutters
Sharp knife
Nylon string - 10 feet

DANGER: THE PROCEDURES CONTAINED IN THIS MANUAL INVOLVE ACCESSING BARE ELECTRICAL TERMINALS AND EXPOSES ONE TO VOLTAGES CAPABLE OF PRODUCING SERIOUS INJURY OR DEATH. ANY PERSON ATTEMPTING DIAGNOSIS AND/OR REPAIR INVOLVING REMOVAL OF PANELS AND/OR EXPOSURE TO LIVE ELECTRICAL COMPONENTS MUST BE TRAINED OR EXPERIENCED IN SUCH SERVICE PROCEDURES. DISCONNECT ELECTRICAL SERVICE WHILE PERFORMING THE PROCEDURES LISTED IN THIS MANUAL.

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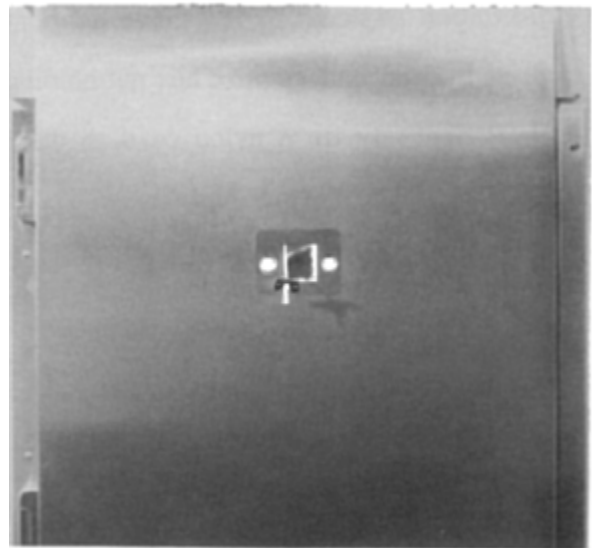
REPLACE AIR THERMOCOUPLE PROBE ASSEMBLY

Tools: Phillips screwdriver #2; Flat blade screwdriver 1/4"; Nut driver 3/8"; knife.

Component: AIR THERMOCOUPLE PROBE ASSEMBLY

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove the two screws holding power board bracket to escutcheon. Save screws for reuse.
4. Carefully lay power board bracket back from escutcheon.
5. Disconnect faulty air thermocouple #1 or #2, whichever applicable, from circuit board.
6. Remove the two screws holding the access plate to side of cabinet, (MI thermocouple probe assembly is behind bottom access plate and #2 assembly behind top). Save screws for reuse.
7. Cut a hole through the insulation at the faulty air thermocouple access hole.
8. Loosen and remove the two hex nuts holding the probe bracket to cabinet side. Save nuts for reuse. (See picture at right.)
9. Securely tie a thin cord, (preferably nylon) to the circuit board end of the thermocouple wire.
10. Remove the faulty thermocouple probe and bracket from cabinet side.
11. Carefully pull thermocouple wire down through cabinet side. When wire is completely pulled through, remove cord from old thermocouple leaving cord in place.
12. Remove defective probe assembly from bracket.
13. Insert new probe assembly into bracket and mount to cabinet side.
14. Securely tie cord to new thermocouple wire. From the top of the unit, carefully pull the thermocouple wire up through cabinet side. When wire is completely pulled through remove cord and attach thermocouple wires to circuit board.
15. Reassemble cabinet and put unit back into service.



REPLACE EVAPORATOR THERMOCOUPLE

Tools:Phillips screwdriver #2; Flat blade screwdriver 1/4"; Nut driver 5/16" and 7/16".

Component: EVAPORATOR THERMOCOUPLE

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove the two screws holding the power board bracket to escutcheon. Save screws for reuse.
4. Carefully lay power board bracket back from escutcheon.
5. Disconnect faulty evaporator thermocouple #3 from circuit board.
6. Lay cabinet on side; pad floor to protect cabinet side from scratches. Use care to prevent damage to power cord.
7. Loosen and remove the six screws holding galvanized oven bottom. Remove bottom and insulation adjacent to it. Save all screws for reuse.
8. Loosen and remove hex nut holding thermocouple ring to tank stud. Save hex nut for reuse.
9. Securely tie a nylon cord to the circuit board end of the thermocouple wire.
10. Remove thermocouple ring from tank stud and carefully pull wire down through cabinet side. When wire is pulled clear, untie nylon cord but do not remove cord from cabinet.
11. Attach new thermocouple ring to tank stud.
12. Securely tie nylon cord to the circuit board end of the new evaporator thermocouple.
13. From the top of the unit, carefully pull the thermocouple wire up through cabinet side. When wire is completely pulled through, remove nylon cord and attach thermocouple wires to circuit board.
14. Reassemble cabinet and put unit back into service.

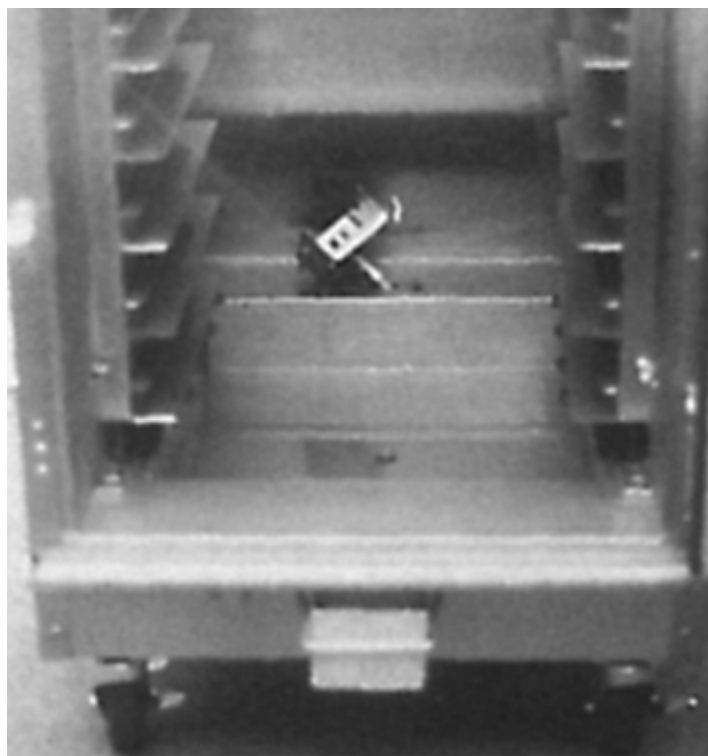
REPLACE FLOAT AND ARM HOLDER ASSEMBLY

Tools: Open end wrench 9/16", Open end wrench 1/2", Phillips screwdriver #2, Nut driver 5/16", Putty knife.

Component: FLOAT AND ARM HOLDER ASSEMBLY

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Remove shelf racks
3. Loosen and remove the two screws holding the float guard to the cabinet base. Save screws for reuse.
4. From inside cabinet, carefully pull float assembly upwards exposing tubing. (See picture below)
5. Remove brass hex nut from bushing, thus freeing tubing from float assembly. Save tubing and brass nut for reuse.
6. Install tubing to new float assembly.
7. Mount float assembly to cabinet base.
8. Reassemble cabinet and put unit back into service.



REPLACE FLOAT AND ARM ASSEMBLY

Tools: Phillips screwdriver #2; Needle nose pliers.

Component: **FLOAT AND ARM ASSEMBLY**

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Remove shelf racks and save for reuse.
3. Loosen the wing nut(s) holding float guard to float assembly. (Older model CVAPs have two Phillip screws securing float guard to float assembly).
4. Using needle nose pliers, push then pull float pin from the arm holding assembly freeing the float and arm.
5. Install new float and arm assembly.
6. Reassemble cabinet and put unit back into service.

REPLACE FLOAT/NEEDLE VALVE AND SEAT

Tools: Phillips screwdriver #2; Needle nose pliers.

Component: **NEEDLE VALVE AND SEAT**

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Remove shelf racks and save for reuse.
3. Loosen the wing nut(s) holding the float guard to the float assembly. (Older model CVAPs have two Phillip screws securing float guard to float assembly).
4. Using needle nose pliers, push then pull the float pin from the arm holder assembly thus freeing the float and arm assembly.
5. Remove needle valve and replace rubber seat.
6. Reassemble cabinet and put unit back into service.

REPLACE DOOR LATCH AND CATCH

Tools: Flat blade screwdriver 1/4"; Phillips screwdriver #2; Allen wrench 5/64".

Component: DOOR LATCH AND CATCH

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the three screws holding latch to door.
3. Loosen and remove the three screws holding catch to cabinet.
4. Install new latch and catch. Prior to final tightening of the catch, insure for proper alignment as per the latch position. See DOOR GASKET ADJUSTMENT and follow prior to putting unit back into service.

REPLACE POWER CORD

Tools: Flat blade screwdriver 1/4"; Phillips screwdriver #2; Nut driver 5/16"; Standard pliers.

Component: POWER CORD

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove wire nuts from power cord inside terminal box. Save wire nuts for reuse.
4. Loosen and remove the screw holding ground wire in terminal box. Save screw for reuse.
5. Compress and remove power cord strain relief and remove cord.
6. Install new power cord, connect ground wire, attach wire nuts and reinsert strain relief.
7. Reassemble cabinet and put unit back into service.

REPLACE DOOR HINGES

Tools: Flat blade screwdriver 1/4"; Phillips screwdriver #2; Nut driver 3/8".

Component: DOOR HINGE

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Remove the two hinge covers from door hinges. Save for reuse.
3. Remove the six hinge screws holding the door to cabinet side. **CAUTION:** Use care to prevent door from falling while removing these screws. Remove door from cabinet. Save screws for reuse.
4. Loosen and remove the ten screws holding the inner door panel to outer door panel. Save all screws for reuse.
5. Separate the two panels and remove insulation. Save insulation for reuse.
6. Loosen and remove the six screws holding the hinges and spacers to outer door panel. Save screws and spacers for reuse.
7. Install new hinges on door. Perform **DOOR GASKET ADJUSTMENT** prior to putting cabinet back into service.

REPLACE DOOR GASKET

Tools: Phillips screwdriver #2; Flat blade screwdriver 1/4", Allen wrench 5/64".

Component: DOOR GASKET

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the 10 screws holding the inner and outer door panels together. Save screws for reuse.
3. Remove the old gasket by sliding it out of the groove between the inside door panel and the mounting bracket. Install new gasket, perform **DOOR GASKET ADJUSTMENT**, reassemble cabinet and put unit back into service.

DOOR GASKET ADJUSTMENT

Tools: Allen wrench 5/64"; Phillips screwdriver #2; Flat blade screwdriver 1/4".

Door adjustment should be such that the gasket will seize a 1" wide strip of bond paper through-out the entire length of the gasket while door is closed.

ADJUST DOOR CATCH

1. Adjust the seal of the door by adjusting the door catch. Loosen the allen screw, but do not take it completely out.
2. Once loosened enough, turn the catch one complete turn clockwise to tighten seal, or one turn counterclockwise to loosen. Tighten allen screw to where end is receding somewhat from end of catch.

ADJUST DOOR HINGES

1. Remove the two hinge covers and save for reuse.
2. Loosen but do not remove the six hinge screws on door.
3. Move the door inward toward cabinet interior for tighter seal, or outward for looser seal.
4. While holding door in position, tighten hinge screws. Replace hinge covers and put unit back into service.

REPLACE CASTER

Tools: Flat blade screwdriver #2; Channel lock pliers.

Component: CASTER

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Pad floor and lay cabinet on side.
3. Using screwdriver, pry caster out from leg.
4. Install new caster, reassemble cabinet and put unit back into service.

REPLACE EVAPORATOR HEATER

Tools: Nut driver 5/16", 7/16"; Standard pliers; Open end wrench 3/8".

Component: EVAPORATOR HEATER

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Pad floor and lay cabinet on side.
3. Loosen and remove the six screws holding galvanized oven bottom and remove bottom. Save screws for reuse.
4. Loosen and remove the sixteen nuts holding the three heater shields in place. Remove shields and drain pipe, now allowing heater to be removed. Save nuts, shields and pipe for reuse.
5. Using great care, hold the heater end behind the wire terminal, loosen and remove the hex nut, (both heater ends). (See picture below.)
6. Install the new evaporator heater making sure the terminal connections are tight.
7. Reassemble cabinet and put unit back into service.



REPLACE AIR HEATER

Tools: Nut driver 5/16"; Wire cutters; Open end wrench 3/8" and 9/16".

Component: AIR HEATER

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Remove shelf racks and save for reuse.
3. Loosen and remove the two hex nuts from the heater holder if applicable, (older models have heater shields versus heater holders). Remove the heater holder or shield from heater. Save hex nuts, holder or shield for reuse.
4. Pad floor and lay cabinet on side.
5. Loosen and remove the six screws holding the galvanized oven bottom and remove bottom. Save screws for reuse.
6. Using great care, hold the heater end behind the wire terminal, loosen and remove the hex nut, (both heater ends). (Refer to picture on page 10.)
7. Loosen and remove the two compression nuts around each end of the heater bushings. Pull the heater outward to expose the ferrule around each heater end. It will be necessary to pinch the ferrules several times with cutters to remove them from the heaters. Once this is accomplished the heater can be removed.
8. For models having air heaters coming out of the top of the evaporator tank, use the following procedure: When installing a new heater, the top loop should be 1-3/4" above the tank top. This should allow 1/4" clearance between the heater and the bottom of the shelf racks.
9. Install new air heater, making sure terminal connections are tight.
10. Reassemble cabinet and put unit back into service.

REPLACE POWER SWITCH

Tools: Nut driver 5/8", Phillips screwdriver #2.

Component: POWER SWITCH

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove the hex nut and switch guard holding the power switch to escutcheon. Save nut and switch guard for reuse.
4. Move switch to one side without disconnecting wiring. Transfer the wiring to the new power switch from the respective left to right terminals of the old switch.
5. Reassemble cabinet and put unit back into service.

REPLACE START SWITCH

Tools: Nut driver 11/31"; Nut driver 5/16"; Phillips screwdriver #2; Flatblade screwdriver 3/16".

Component: START SWITCH

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove the two screws holding the power board bracket to escutcheon. Save screws for reuse.
4. Loosen and remove the two nuts holding the start switch to bracket. Save nuts for reuse.
5. Transfer the wiring to new start switch from respective left to right terminals of the old start switch.
6. Reassemble cabinet and put unit back into service.

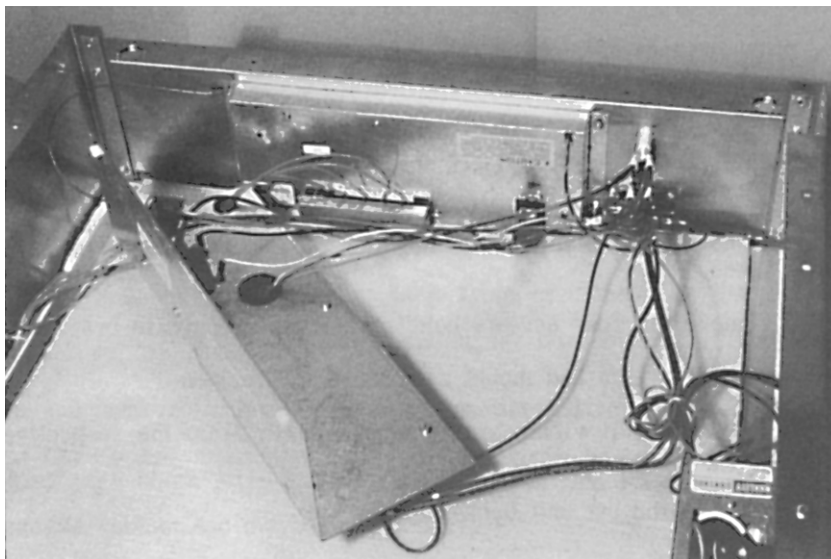
REPLACE CIRCUIT BOARD

Tools: Nut Driver 11/32"; Phillips screwdriver #2; Flat blade screwdriver 3/16".

Component:CIRCUIT BOARD

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding top to side members and remove top. Save screws for reuse.
3. Loosen and remove the two screws holding the power board bracket to the escutcheon. Save screws for reuse.
4. Carefully lay power board bracket back from escutcheon.
5. Disconnect wiring harness plug from circuit board.
6. Disconnect thermocouples from circuit board.
7. Loosen and remove the four nuts holding the circuit board mounting bracket to the escutcheon.
8. Remove circuit board and mounting bracket from escutcheon.
9. Install new circuit board and mounting bracket on escutcheon.
10. Attach thermocouple wires observing red and yellow terminal connections.
11. Reassemble cabinet and put unit back into service.



REPLACE TRANSFORMER

Tools: Phillips screwdriver #2; Flat blade screwdriver 1/4".

Component: TRANSFORMER

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove the two screws holding the power board bracket to escutcheon. Save screws for reuse.
4. Carefully lay power board bracket back from escutcheon.
5. Disconnect the two wiring harness plugs from power board bracket.
6. Loosen and remove the two screws holding transformer to bracket. Save screws for reuse.
7. Mount new transformer and attach wiring harness plugs.
8. Reassemble cabinet and put unit back into service.

REPLACE POWER BOARD

Tools: Flat blade screwdriver 1/4"; Phillips screwdriver #2

Component: POWER BOARD

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove the four screws holding the power board to bracket.
4. Move power board to side and mount new board to bracket.
5. **IMPORTANT:** Transfer wiring to new power board from the respective top to bottom terminals of the old power board.
6. Reassemble cabinet and put unit back into service

REPLACE KEY PAD

Tools: Nut Driver 11/32", Phillips screwdriver #2.

Component: KEY PAD

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove the two screws holding power board bracket to escutcheon. Save screws for reuse.
4. Carefully lay power board bracket back from escutcheon.
5. Loosen and remove the four nuts holding the circuit board mounting bracket to escutcheon.
6. Remove circuit board mounting bracket from escutcheon and disconnect key pad ribbon.
7. Loosen and remove the two nuts holding key pad bracket to escutcheon and remove old key pad.
8. Install new key pad being careful to properly position rubber gasket under key pad.
9. Reassemble cabinet and put unit back into service.

REPLACE BUZZER

Tools: Phillips screwdriver #2; Flatblade screwdriver 3/16".

Component: BUZZER

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save screws for reuse.
3. Loosen and remove the two screws holding the power board bracket to escutcheon. Save screws for reuse.
4. Carefully lay power board bracket back from escutcheon.
5. Loosen and remove the two screws holding the buzzer bracket to power board bracket. Save screws for reuse.
6. Loosen and remove buzzer collar from bracket and replace on old bracket.
7. Loosen but do not remove screws holding wires to buzzer. Transfer wires to new buzzer making sure black wire attaches to positive terminal and white to negative.
8. Reassemble cabinet and put back into service.

REPLACE MEAT PROBE

Tools: Phillips screwdriver #2; Flatblade screwdriver 1/4"; Side cutters; Needle nose pliers; Terminal crimpers.

Component: MEAT PROBE

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply, drain and allow to cool.
2. Loosen and remove the six screws holding the top to side members and remove top. Save all screws for reuse.
3. Loosen and remove the screw holding the probe grounding cable to the cabinet chassis. Save screw for reuse.
4. Remove the two screws holding power board bracket from escutcheon and carefully lay bracket back.
5. Remove the #4 thermocouple wires from circuit board.
6. Remove terminal end from grounding cable and using needle nose pliers, thread cable loose from the metal "L" tube.
7. Remove the metal "L" tube by pulling up with a twisting motion. Pull tube off of thermocouple wires. Save tube for reuse.
8. Remove probe from cabinet inner top by pulling downward.
9. Install new probe, starting with threading thermocouple wires and grounding cable up through inner top. **Use EXTREME CAUTION** not to severely twist rubber tube while inserting through inner top. Install metal "L" by first threading metal grounding cable through holes in ring on tube. **NOTE:** The cable must be pulled up tight enough that the red and yellow cover shield on the thermocouple wires is showing past the open end of the tube.
10. Attach thermocouple wires to circuit board.
11. Reassemble cabinet and put unit back into service.

PARTS IDENTIFICATION

PHOTO REF NUMBER	PARTS DESCRIPTION	ORDER NUMBER	KIT CONTENT	
			QTY	DESC.
1	Indicator Lamp	PS1103/3	3	Lamps
2	Switch, On, Off, (CVAP, FRY, S/T)	PS1529	1	Switch
3	Push Button, Black	PS1652	1	Button
4	Latch & Catch-Door	PS1256	1	Latch
			1	Catch
5	Drip Cup	PS1423	1	Drip Cup
			1	Baffle
6	Caster Asm		2	Caster Asm
	2" Non Lock (CG)-Rear	PS1480/2		
	2" Lock (CG)-Front	PS1481/2		
	4" Lock (CB)-Front	PS1482/2		
	4" Non Lock (CB)-Rear	PS1483/2		
7	Key Pad(CVAP-P.04)	PS1651	1	Key Pad Asm
8	Clamp-Instruction Envelope	PS1638	1	Clamp
			1	Screw
			1	Envelope
9	Door Asm		1	Door Asm
			2	Hinges
			1	Latch
	Model CB21	PS1471		
	Model CB53 (Top)	PS1472		
	Model CB53 (Bottom)	PS1477		
	Model CG15	PS1479		
10	Hinge Kit Door	PS1255/2	2	Hinges
			2	Hinge Covers
11	Fitting, Water Inlet (Plastic)	PS1683	1	Fitting
			1	O-Ring
12	Shelf Rack, Flue		1	Shelf Rack
	Model CB21	PS1650		Complete
	Model CB53 (Top)	PS1646		
	Model CB53 (Bottom)	PS1645		
	Model CG15	PS1656		
13	Scr 10-32 X 1/2-Catch	PS1239/6	6	Screws
14	Cover, Evap CPC/CGPC/CD	PS1674	1	Cover, Evap

PARTS IDENTIFICATION

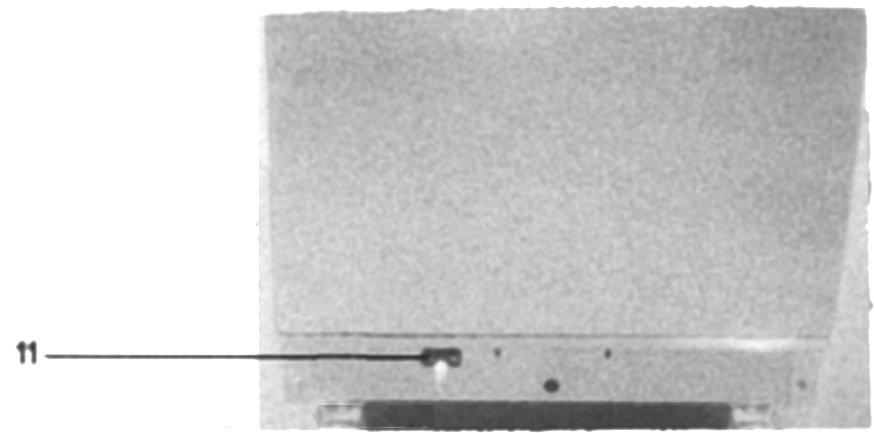
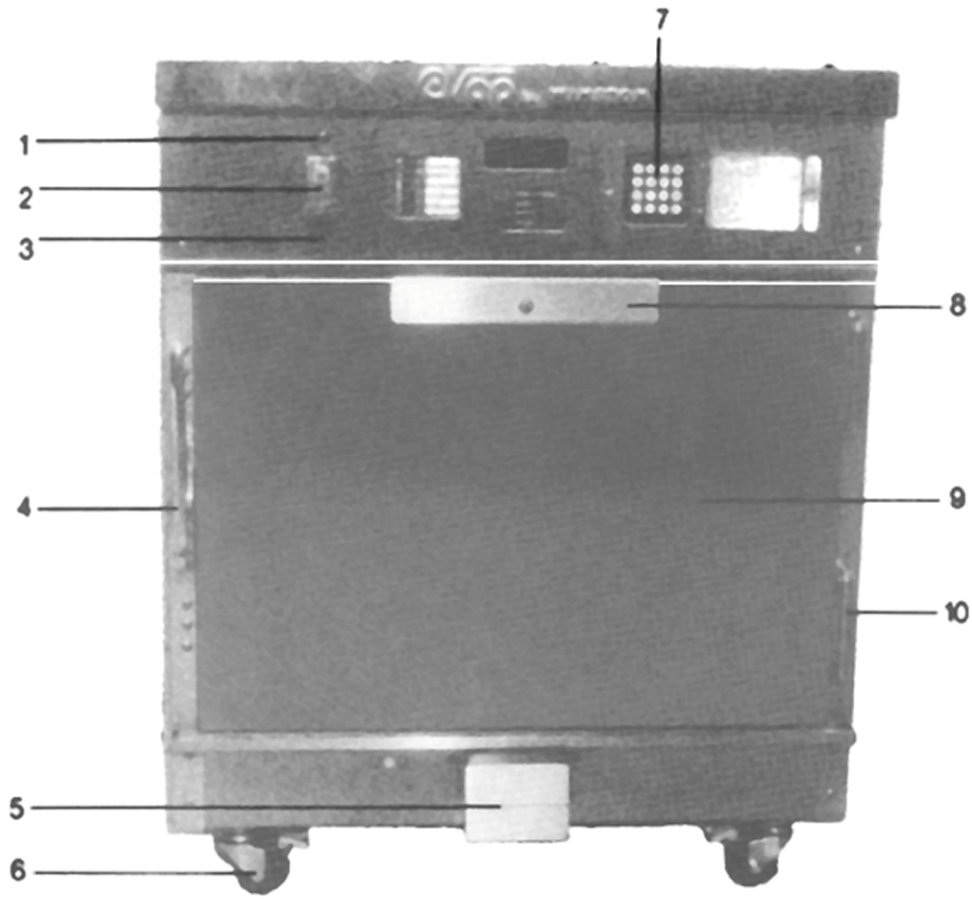
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PHOTO REF NUMBER	PARTS DESCRIPTION	ORDER NUMBER	KIT CONTENT	
			QTY	DESC.
15	Gasket – Door		1	Gasket
	Model CB21	PS1441		
	Model CB53 (Top)	PS1442		
	Model CB53 (Bottom)	PS1446		
	Model CG15	PS1444		
16	Scr 10-32X1-1/2 - latch	PS1238/6	1	Screws
17	Float/Valve/Cover Kit	PS1426	1	Cover
			1	Bail
			1	Float Arm
			1	Float Bulb
			1	O-Ring
			2	Washers
			2	Screws
			1	Needle Valve & Seat
			1	Holder, Arm Asm.
18	Heater – Air/Flu Type 120V, 720W	PS1641	1	Heater
			2	Ferrules
			2	Compression Nuts
			2	Washers
			2	Nuts
19	Probe – Meat (PC CVAP)	PS1422	1	Meat Probe
20	Bracket, Probe Holder	PS1675	1	Bracket, Probe
21	Drain Pipe (CB, CG)	PS1629	1	Drain Pipe
22	Thermocouple, Water (CVAP D, P.04)	PS1642	1	Thermocouple Asm.
23	Heater, Water 120V, 720W	PS1434	1	Heater
			2	Ferrules
			2	Compression Nuts
			2	Washers
			2	Nuts
24	Wire Harness (.03, .04)	PS1672	1	Wire Harness
25	Transformer (CVAP-D, P.04)	PS1644	1	Transformer Asm

PARTS IDENTIFICATION

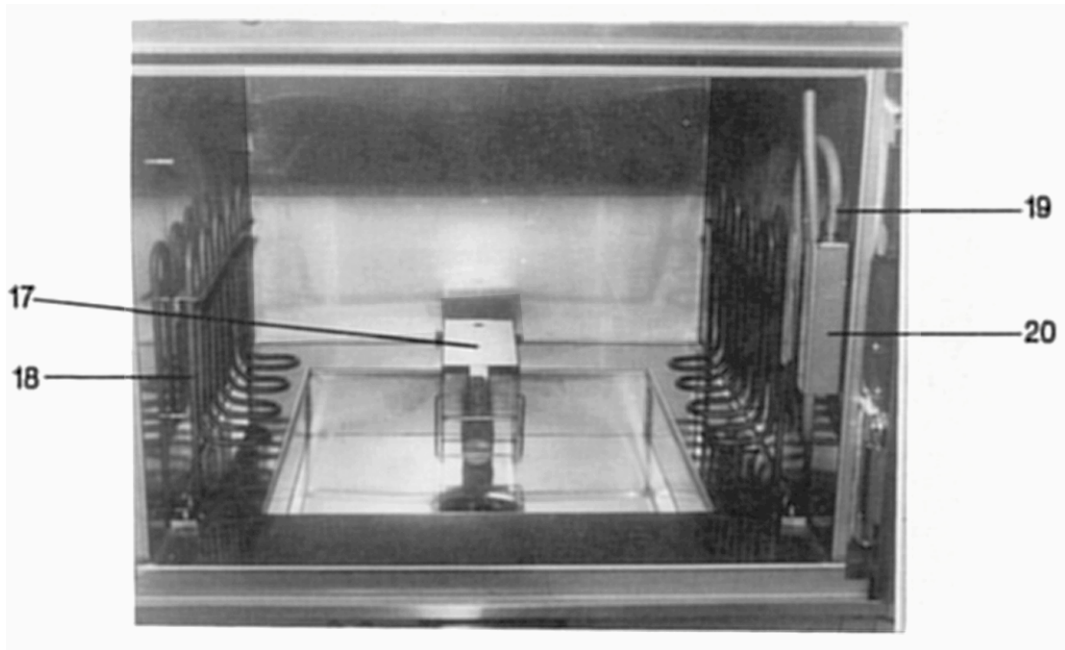
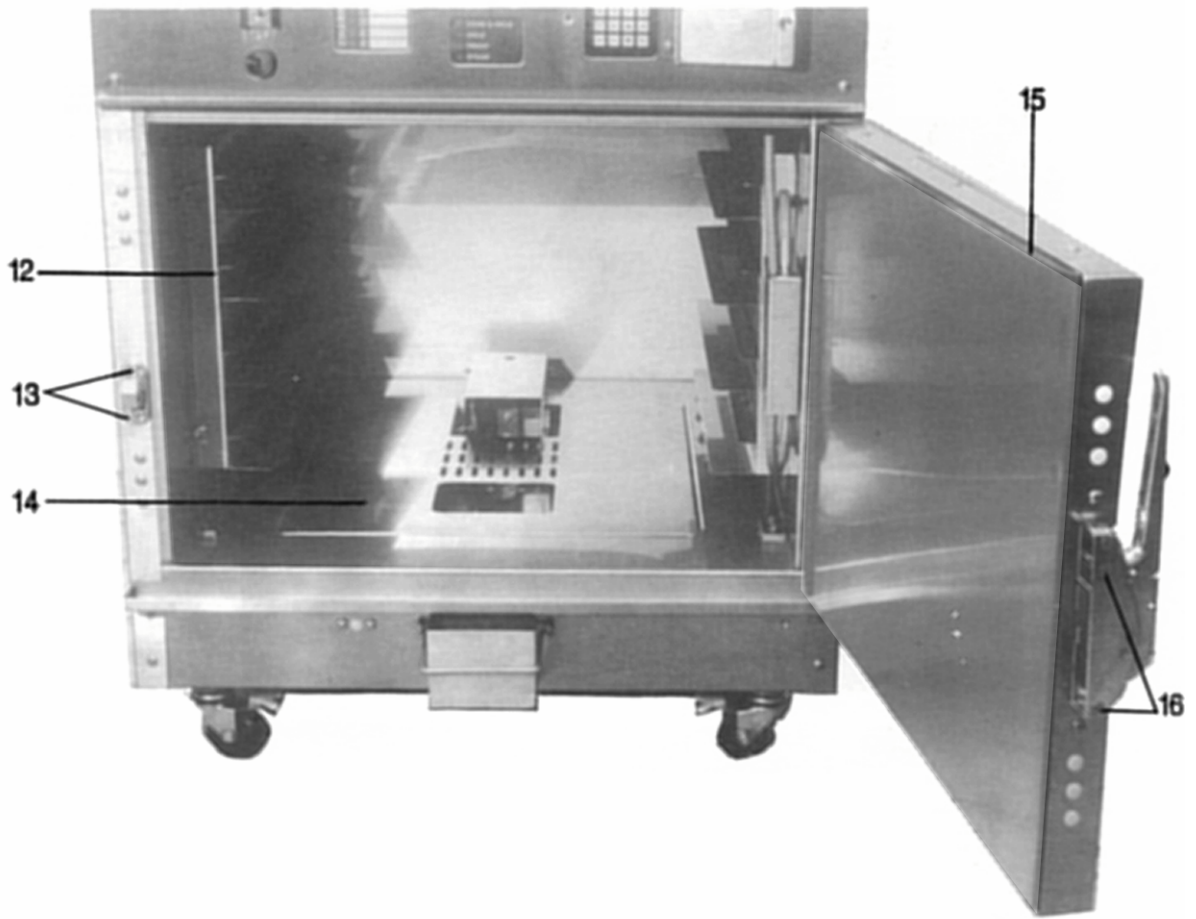
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PHOTO REF NUMBER	PARTS DESCRIPTION	ORDER NUMBER	KIT CONTENT	
			QTY	DESC.
26	Circuit Board, Power (CVAP-D, P.04)	PS1639	1	Power Board Asm.
27	Wire Connector, Small (CB/CG)	PS1533/6	6	Wire ConnectorS
28	Cordset	PS1595	1	Cordset
29	Circuit Board, Main	PS1649	1	Control Board & Housing
30	Buzzer	PS1586	1	Buzzer
31	Switch, Push Button	PS1100	1	Switch & Shield
32	Wiring Control PCCVAP (.03, .04)	PS1673	1	Wire Harness
33	Needle Valve Seat	PS1418/6	6	Needle Valve Seats
34	Inlet Tube & Connector (CVAP)	PS1419	1 2 2 1	Water Line Ferrules Inserts O-Ring
35	Float (Plastic Bulb Only)	PS1657	1 1	Float Bulb Screw
36	Thermocouple - Air (CVAP-D, P.04)	PS1643	1 1 1	Probe, Air Clamp O-Ring



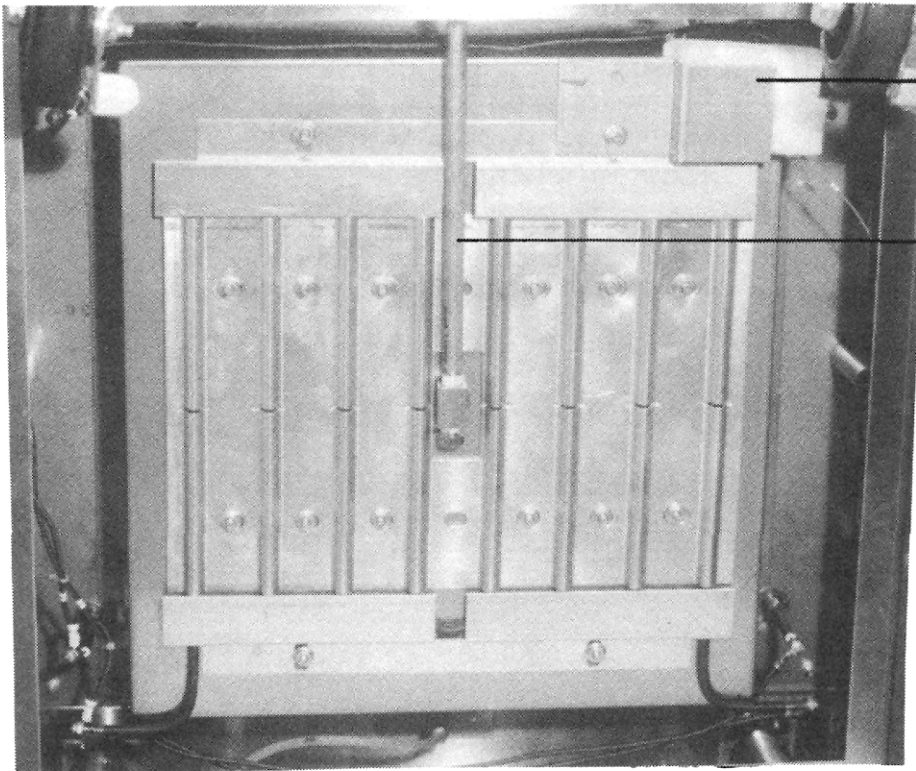
**CVAP
VAPOR OVEN**

**COMPLETE UNIT
(MODEL CG15P SHOWN)**



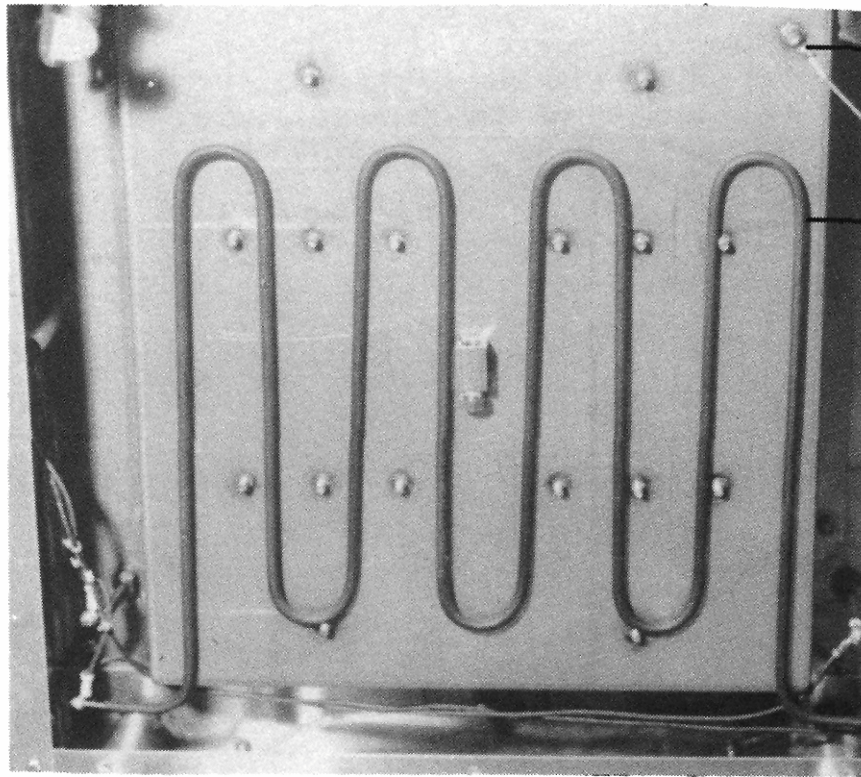
**CVAP
VAPOR OVEN**

AIR HEATERS, SHELF RACKS & FLOAT



Thermocouple cover
(Reference only)

21

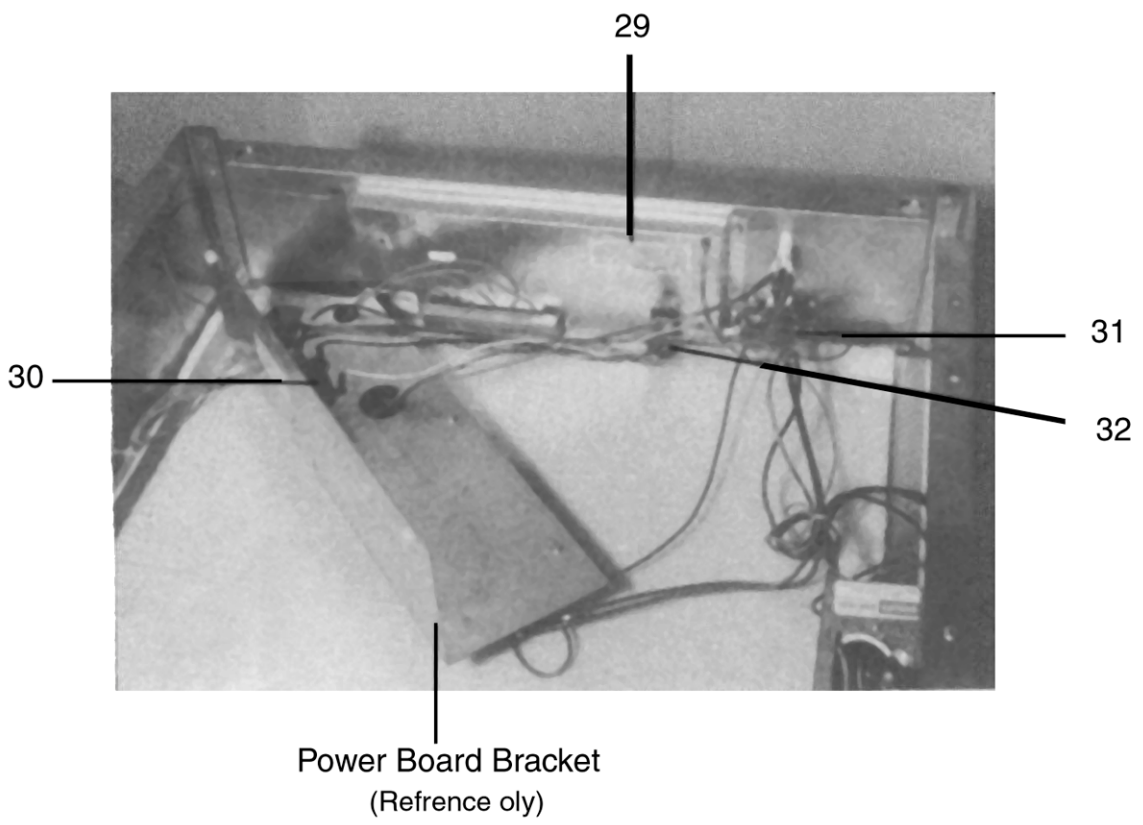
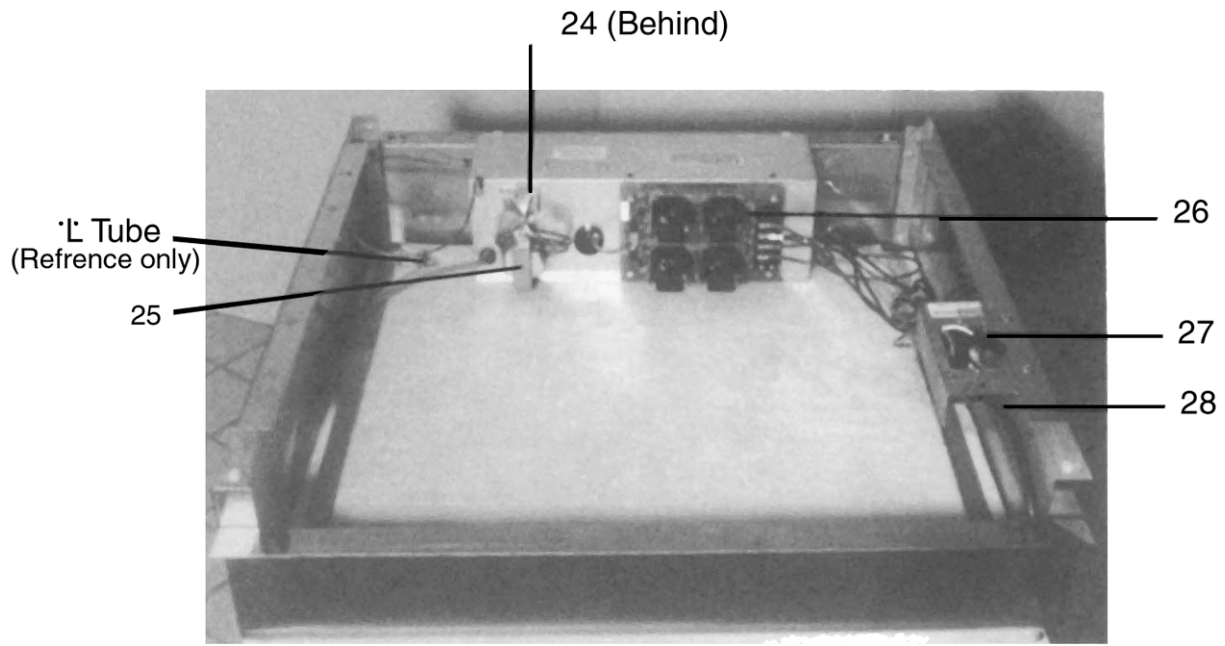


22

23

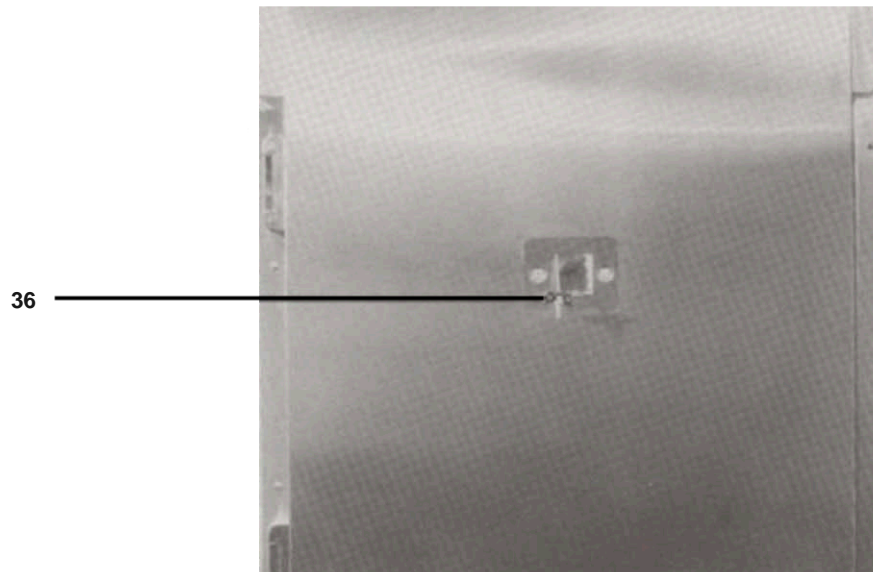
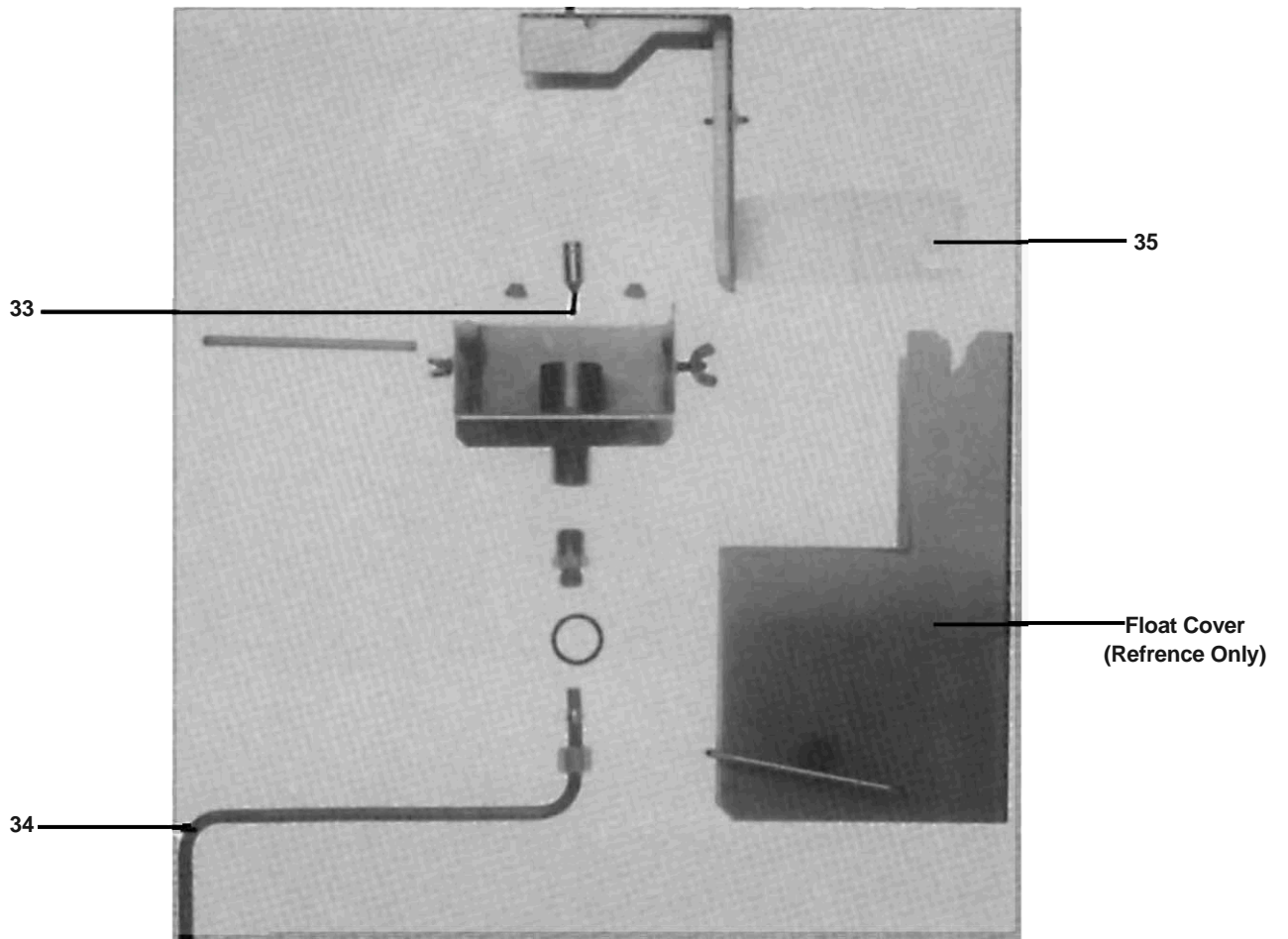
**CVAP
VAPOR OVEN**

WATER HEATER



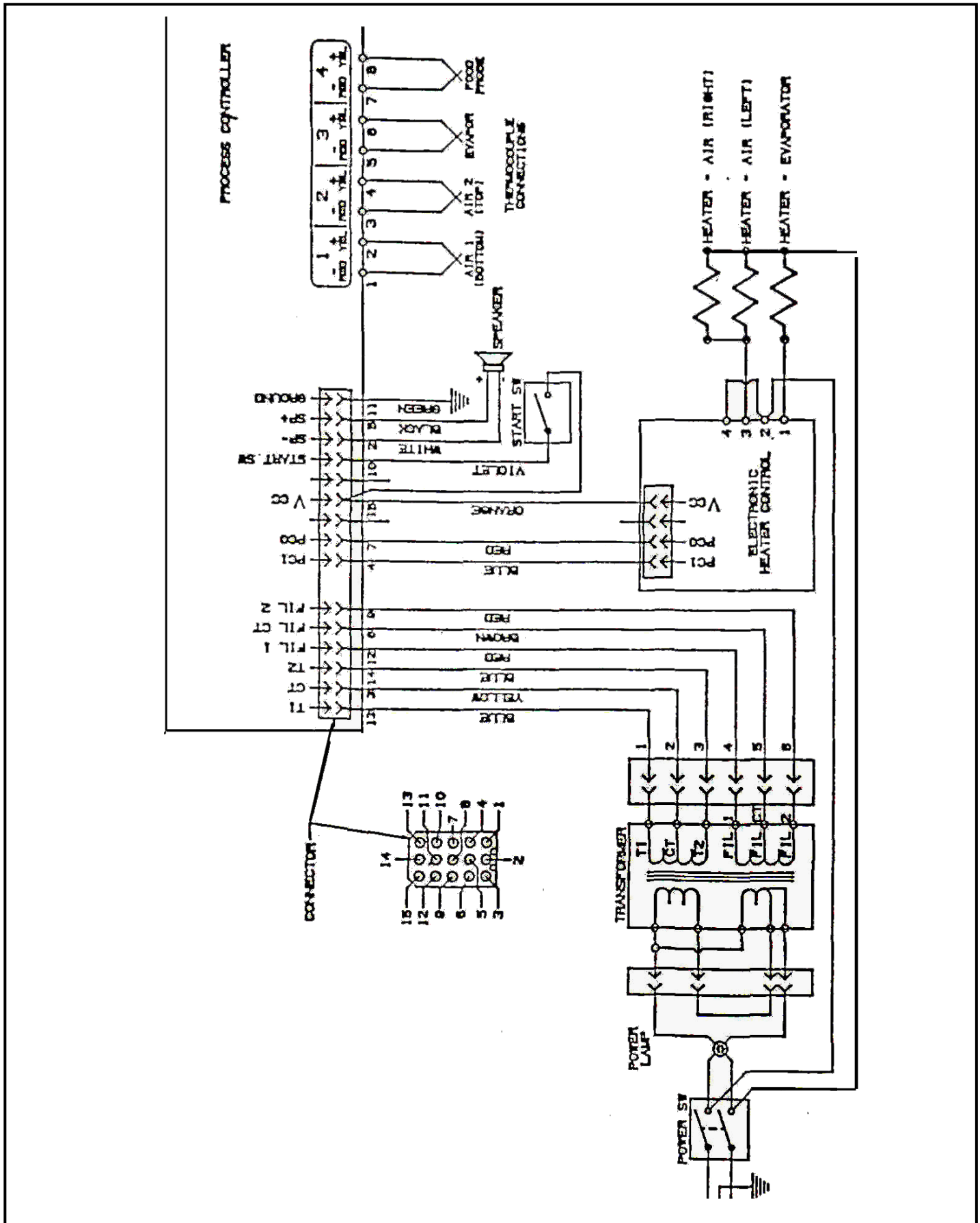
**CVAP
VAPOR OVEN**

CONTROL PANEL



**CVAP
VAPOR OVEN**

FLOAT SYSTEM/AIR THERMOCOUPLE



**CVAP
VAPOR OVEN**

SCHEMATIC (653P79)

TROUBLESHOOTING

SYMPTOMS

FAULTS

No Power Light.....	1,2,3,4,33
Food drying out	5,7,10,12,23,28,32
Food excessively moist.....	8,9,11,27,28
Food not hot enough.....	8,10,11,12,13,14,28
Food too hot.....	7,9,15,28
No heat (air or water)	15,16,29
No heat (air)	11,13,15,16,29,31
No heat (water)	12,14,15,16,29,32
No display.....	16,29
Display sporratic.	16,19
Unable to change channels.....	16,17,18,20
LED(s) on channel indicator out.	16,20
Unit will not cook utilizing probe.	16,25
Unit will not go into Start (cook) mode.	16,30
Leaking water; flooding.	6,21,22,24
Air heaters constantly on.	15,16,26
Water heaters constantly on.....	15,16,27

* For Display Error Messages (ER 1 thru ER 6), see EXPLANATION OF ERROR MESSAGES on page 28.

TROUBLESHOOTING

FAULTS

1. Cord set not plugged in.
2. Circuit breaker tripped.
3. Power Cord defective.
4. Power Switch defective.
5. Evaporator Tank empty.
6. In-Line water tubing cut or kinked.
7. Air temperature set too high.
8. Air temperature set too low.
9. Water temperature set too high.
10. Water temperature set too low.
11. Air heating element(s) defective.
12. Water heating element(s) defective.
13. Air heater terminal connection(s) loose.
14. Water heater terminal connection(s) loose.
15. Power Board defective.
16. Control Board defective.
17. Key Pad defective.
18. Key Pad Strip defective.
19. Control Board grounding wire loose or off.
20. LED(s) defective.
21. Float needs adjustment.
22. Needle Valve Seat defective.
23. Water-Inlet tube clogged.
24. Drip Cup O-Ring defective.
25. Probe defective.
26. Air Thermocouple defective.
27. Water Thermocouple defective.
28. Control Board out of calibration. Send in for repair.
29. Transformer defective.
30. Start Switch defective.
31. Air Heater terminal connection on power board loose or off.
32. Water Heater terminal connection on power board loose or off.
33. Power Light defective.

EXPLANATION OF ERROR MESSAGES

ER 1. THROUGH ER 6

ERROR MESSAGE ER 1: Check air thermocouple #1 connection at the circuit board. If connection is satisfactory, replace faulty thermocouple.

ERROR MESSAGE ER 2: Check air thermocouple #2 connection at the circuit board. If connection is satisfactory, replace faulty thermocouple.

ERROR MESSAGE ER 3: Check water thermocouple #3 connection at the circuit board. If connection is satisfactory, replace faulty thermocouple.

ERROR MESSAGE ER 4: Check probe thermocouple #4 connection at the circuit board. If connection is satisfactory, replace faulty thermocouple.

ERROR MESSAGE ER 5: Replace circuit board.

ERROR MESSAGE ER 6: Replace circuit board.

ZAP WARRANTY AGREEMENT

This warranty agreement applies to Commercial Equipment, Equipment Service Parts, and Safety Parts (collectively, "Products") manufactured by Winston Industries, LLC ("Winston") and its corporate predecessors and is extended to any purchaser, lessee or successor purchaser ("Purchaser").

NEW EQUIPMENT

Any part of a new Steamer appliance except gaskets, hoses, lamps, power cords, and evaporators which proves to be defective in material or workmanship within three (3) years from the date of manufacture, will be repaired or replaced (at Winston's option) free of charge.

Any part of a new appliance, other than Steamers, except gaskets, hoses, lamps, power cords, fryer baskets, glass panels, and evaporators which proves to be defective in material or workmanship within one (1) year from the date of original installation or 15 months from the date of manufacture, whichever comes first, will be repaired or replaced (at Winston's option) free of charge.

REPLACEMENT PARTS

Any appliance replacement part except gaskets, hoses, lamps, power cords, fryer baskets, glass panels, batteries, and evaporators which proves to be defective in material or workmanship within ninety (90) days from the date of original installation will be repaired or replaced free of charge.

LABOR, TRAVEL, TRANSPORTATION

The warranty for new equipment covers the repair or replacement (at Winston's option) of the defective part(s), delivery of the replacement part(s), labor charges for the removal and installation of replacement part(s) for one (1) year from the start of the warranty period. This warranty includes travel time not to exceed two hours and mileage not to exceed 50 miles (100 miles round trip).

The warranty for replacement parts covers the repair or replacement (at Winston's option) of the defective part(s) and does not include any labor charges for the removal and installation of any part(s), travel, transportation or other expenses incidental to the repair or replacement of part(s).

The warranty does not cover: gaskets, hoses, lamps, power cords, fryer baskets, glass panels, evaporators, software, corrosion of stainless steel, normal maintenance, lubrication, cleaning or descaling, programming or adjusting temperatures, calibration, tightening of fasteners or plumbing connections, appliances with removed or altered identification tags, damage resulting from delivery of the appliance, customer mishandling or abuse, or no problem found.

THE USE OF POOR QUALITY WATER WILL VOID PRODUCT WARRANTIES. See Product Use and Care Manual for water quality recommendations.

PROPER INSTALLATION IS THE RESPONSIBILITY OF THE DEALER, PURCHASER, OWNER/USER, OR INSTALLING CONTRACTOR, AND IS NOT COVERED BY THIS WARRANTY.

As a condition to the application of this warranty, Purchaser *will* operate, clean and maintain Products in accordance with use and care instructions, warnings, manuals and any other notices and/or instructions from Winston which may be with or on Products or sent separately; *will* notify Winston of resale, removal or retirement of Products; *will* notify Winston immediately of any accident or injury arising out of use of Products and cooperate with Winston in the investigation of any such accident or injury; *will* maintain registration with Winston of location and serial number of Products while in Purchaser's control and use; *will* require all personnel operating Products to become thoroughly familiar with use and care instructions and all other notices and/or instructions before such personnel operate Products; *will* thoroughly train all personnel operating Products to follow all instructions contained on or in all Safety Labels and use and care instructions; *will* immediately affix Safety Labels and put into use the use and care instructions; *will* immediately use, according to instructions, Safety Parts supplied by Winston; *will* install Equipment Service Parts in accordance with Winston's written instructions; *will* utilize only Winston manufactured replacement parts and make no changes or alterations to Products, except as approved or instructed in writing by Winston; and *will* when requested by Winston, cooperate with Winston in the prevention of injuries from Purchaser's use of Products.

PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST WINSTON SHALL BE FOR THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS AS PROVIDED HEREIN. THE TOTAL LIABILITY OF WINSTON WITH RESPECT TO ITS PRODUCTS, WHETHER UNDER WARRANTY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE OF THE PRODUCTS AND THE LABOR AND TRAVEL TO REPLACE THE PRODUCTS OR ANY PART THEREOF. WINSTON SHALL NOT BE LIABLE TO THE PURCHASER OR OTHERS FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSS OF PROFITS RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING BUT NOT LIMITED TO, DEFECTIVE WORKMANSHIP, MATERIALS OR ANY ERROR OR OMISSION OF WINSTON.

WINSTON EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY OF MERCHANTABILITY.

For warranty inquiries and customer specific warranties, call Winston Customer Service at 1-800-234-5286 or 502-495-5400.

PARTS ORDERING INFORMATION

ALWAYS REFER TO THE MODEL NUMBER AND SERIAL NUMBER WHEN PLACING A PARTS ORDER.

[] MODEL		[] SERIAL NO.
FOR SERVICE, IDENTIFY ALL NUMBERS IN THIS BLOCK		
[] V 3 PHASE VOLTAGE	[] A 3 PH LINE CURRENT	[] OPERATING PRESSURE
[] V 1 PHASE VOLTAGE	[] 1 PH LINE CURRENT	
[] HZ FREQUENCY	[] A MOTOR CURRENT	
WINSTON PRODUCTS COMPANY LOUISVILLE, KY		

Use only genuine Winston Products replacement parts in your appliance. Refer to the parts identification section of this manual to identify the part(s) needed.

PROCEDURES FOR REPLACING NEW COMPONENTS ARE INCLUDED IN THIS MANUAL AND IN EACH COMPONENT REPAIR KIT. FOLLOW THOSE INSTRUCTIONS CAREFULLY.

To order parts or obtain other information, contact:

WINSTON PRODUCTS COMPANY
2345 Carton Drive
Louisville, Kentucky 40299
(502) 491-1810

Customer Service (800) 234-5286