

PARTS & SERVICE MANUAL

Impinger Advantage Electric w/ Push Button Controls

1450 Series - Domestic

MODELS:

Please note that the model numbering system changed March 2007. The chart below shows the old model numbering system and its matching new model number.

Old Model Number	\rightarrow	New Model Number
1452	\rightarrow	1452-00z-U-Kxxxx
1453	\rightarrow	1453-00z-U-Kxxxx

P/N: L371079 REV: 10.21.09

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CODE	LANGUAGE	COUNTRY		CODE	LANGUAGE	COUNTRY
0	English	Dom. & Int. Default		N	Finnish	Finland
В	French	France/Luxembourg		0	Restricted	
С	German	Germany		Р	Norwegian	Norway
D	Italian	Italy		Q	English	Japan
Е	Spanish	Spain		R	Swedish	Sweden
F	English	UK/India/Africa/Hungary	r.	S	English	Australia
G	Spanish	Mexico/Latin America		Т	Mandarin	China
Н	Portuguese	Portugal		U	Restricted	
I	Not Used			V	English	Pacific Rim/Korea
J	Danish	Denmark		W	English	Middle East
K	Dutch & French	Belgium		Х	Not Used	
L	Dutch	Netherlands		Y	Not Used	
М	Greek	Greece		Z	Not Used	

AGENCY CODE TABLE

CODE	AGENCY
Ν	No Agency
E	CE & RoHS compliance combined
U	US & Canada compliance only
А	Advantage style oven to be phased-out
В	Australia AGA

SEQUENCE OF OPERATION IMPINGER ADVANTAGE ELECTRIC SERIAL NUMBER N28654 AND ABOVE (OVENS WITH PUSH BUTTON CONTROLS)

MODEL 1452	120VAC	60 HZ.	3 PHASE
MODEL 1453	120VAC	60 HZ.	3 PHASE

POWER SUPPLY	Electrical power is to be supplied to the oven by a four conductor
	service.
	Black conductor is hot.
	Red conductor is hot.
	Orange conductor is hot.
	Green conductor is ground.
CONTROL BOX AUTO	When the temperature in the control box reaches $120^{\circ}F \pm 3^{\circ}F$ (48.9°C
COOL DOWN	\pm 1.7°C), the cooling fan thermostat will switch power to the control
	box cooling fan. The thermostat will interrupt power to the cooling fan
	when the control box temperature falls to $100^{\circ}F \pm 3^{\circ}F$ ($37^{\circ}C \pm 1.7^{\circ}C$).
MAIN FAN CIRCUIT	Electrical power is permanently supplied through six 50 A fuses to the
	normally open contacts of the heat relay. Power is also supplied,
	through the 10 Amp motor and control fuse, through the normally
	closed control box hi-limit thermostat, to the normally open oven power
	switch. Power is also supplied to the control box cooling fan
	thermostat. Closing the oven power switch supplies line voltage to the
	main fan motor. Closing the oven power switch also supplies line
	voltage to the heat circuit and to the primary of the oven control
	transformer.
HEAT CIRCUIT	Closing the oven power switch supplies line voltage through the main
	fan air pressure switch, through the normally closed oven cavity hi-limit
	thermostat, to the oven control.
TEMPERATURE CONTROL	Closing the oven power switch supplies line voltage to the primary of
	the control transformer and through the air pressure switch and oven
	cavity hi-limit, to the oven control. Secondary voltage, 24VAC, is
	supplied to the oven control. The oven control is set to desired
	temperature. The thermocouple will provide varying millivolts to the
	oven control. The oven control supplies line voltage to the heat
	contactor at intermittent intervals to maintain desired temperature. The
	display on the oven control will indicate when the heat contactor is
	energized.
	NOTE: The display also indicates oven temperature.
CONVEYOR DRIVE	Closing the oven power switch supplies line voltage to the conveyor
	motor and to the primary of the control transformer. Secondary
	voltage, 24VAC, is supplied to the oven control. Setting the oven
	control to the desired time outputs voltage, through a reversing switch,
	to the conveyor motor.
	NOTE: The conveyor system uses a hall effect sensor and magnet to
	prove operation of the conveyor motor. If the motor is not running,
	"BELT JAM" is indicated on the display.

SCHEMATIC DIAGRAM MODEL 1452, 1453 SERIAL NUMBER N28654 AND ABOVE





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TROUBLESHOOTING GUIDE IMPINGER ADVANTAGE ELECTRIC OVENS SERIAL NUMBER N28654 AND ABOVE (OVENS WITH PUSH BUTTON CONTROLS)

SYMPTOM	POSSIBLE CAUSE	EVALUATION
Oven fan will not run	Incoming power supply	Check circuit breaker, reset if required. Check power
		plug to be sure it is firmly in receptacle. Measure
		incoming power, call power co. if required.
	Fuse, 10 Amp	Check, replace if necessary.
	Fuse holder	Check, replace if necessary.
	Thermostat, control	Terminals are normally closed, open at 130°F (55°C). If
	box hi-limit	open, reset and test for proper operation. If thermostat
		will not hold, and control box temperature is not
		exceeding 130°F (55°C), replace thermostat.
	Switch, oven power	Check for line voltage supplied to switch. If no voltage is
		present, trace winng back to fuse holder. Check
		continuity between switch terminals. Replace switch as
	Motor main fan	Check for line voltage supplied to motor. If no voltage is
		present trace wiring back to oven power switch Check
		motor for opens, shorts or arounds
		WITH POWER OFF: Turn fan blade to check for locked
		rotor.
No control box cooling	Incoming power supply	Check circuit breaker, reset if required. Check power
5		plug to be sure it is firmly in receptacle. Measure
		incoming power, call power co. if required.
	Fuse, 10 Amp	Check, replace if necessary.
	Fuse holder	Check, replace if necessary.
	Switch, oven power	Check for line voltage supplied to switch. If no voltage
		is present, trace wiring back to fuse holder. Check
		continuity between switch terminals. Replace switch as
		needed.
	Cooling fan	Check for supply voltage to the cooling fan. If no
		Voltage is present, trace wiring back to the fuse holder.
		If voltage is present and motor does not run, check
		WITH POWER OFF: Check for locked rotor
No automatic control	Incoming power supply	Check circuit breaker, reset if required Check power
box cooling		plug to be sure it is firmly in receptacle. Measure
box coomig		incoming power, call power co, if required.
	Cooling fan thermostat	Check cooling fan thermostat (thermostat closes at
	5	120°F and opens at 100°F). With cooling fan thermostat
		pre-heated, check for continuity.
Control box cooling fan	Cooling fan thermostat	See "Cooling fan thermostat" (NOTE: Thermostat will
continues to run	_	remain closed if control box temperature remains above
		120°F.
Oven will not heat	Main fan	If not operating, refer to "Oven fan will not run"
	Air pressure switch	Check air switch terminals for supply voltage to
		terminals NO and COM. If voltage is present on one side
		only, check for air tube blockage or misalignment. If
		these are okay, adjust air pressure switch or replace
		Switch as needed.
	oven cavity ni-limit	Terminals are normally closed, opens at 660°F (350°C).
	และกายรเลเ	thermostat will not hold for maximum temperature, and
		oven is not exceeding control setting check for proper
		location of the capillary hulb in its spring holder. If above
		checks are okay, replace hi-limit thermostat
	Control transformer	Check for supply voltage to primary of control

		transformer. If no voltage is present, trace wiring back to oven power switch. If voltage is present, check for 24VAC at transformer secondary. If there is primary voltage, but no secondary voltage, replace control transformer
	Oven control	Check for 24VAC supply to oven control. If no voltage is present, trace wiring back to control transformer. Check for supply voltage to oven control. If no voltage is present, trace wiring back to hi-limit thermostat. If voltage is present, check for a read-out on the display. If there is no read-out on the display, replace oven control. If there is a read-out on the display, set the oven control to maximum temperature (see installation operations manual for temperature adjustment). With the oven control at maximum temperature, check for supply voltage to the heat contactor. If there is voltage at the heat contactor, proceed to "Heat contactor ". If there is no voltage at the heat contactor, trace wiring back to the oven control. If there is no voltage output at the oven control, check the read-out on the oven control. If the thermocouple has failed or become disconnected from the oven control
	Thermocouple	Check to see that the thermocouple is securely connected to the oven control. If the thermocouple is connected to the oven control, and the display indicates "PROBE FAIL", disconnect the thermocouple from the oven control and measure the resistance of the thermocouple. The thermocouple should read approx. 11Ω . If these readings are not achieved, replace the thermocouple. If these readings are correct, proceed.
	Oven control	If the thermocouple checks good, but the oven control display indicates that there is a thermocouple failure, replace the oven control. If the oven control indicates a temperature reading, but the oven will not heat, proceed.
	Thermocouple	WITH POWER ON AND THERMOCOUPLE ATTACHED TO THE OVEN CONTROL: Measure the DC millivolt output of the thermocouple. Refer to the thermocouple chart (located in the "Removal" section of the manual) for proper millivolt readings. If these readings are not achieved, replace thermocouple.
	Oven control	If the thermocouple checks good, but there is no supply voltage output to the heat contactor, replace the oven control. If there is supply voltage output to the heat contactor, proceed.
	Heat contactor(s)	Check for supply voltage to the heat contactor. If voltage is present, listen for contacts to open and close. Also check for opens or shorts in the operating coil. Replace heat contactor as needed.
Intermittent heating	Thermal/overload of main fan motor	The main fan motor is equipped with internal thermal protection and will cease to operate if overheating occurs. As the motor overheats and cool, this will cause the heating system to cycle on and off intermittently. Improper ventilation or lack of preventive maintenance may cause this problem. Also most of the problems listed under "Oven will not heat" can cause intermittent failure.
Conveyor will not run	Incoming power supply	Check circuit breaker, reset if required. Check power plug to be sure it is firmly in receptacle. Measure incoming power, call power co. if required.
L		

	Fuse holder	Check, replace if necessary.
	Switch, oven power	Check for line voltage supplied to switch. If no voltage
		is present, trace wiring back to fuse holder. Check
		continuity between switch terminals. Replace switch as
		needed.
	Control transformer	Check for supply voltage to primary of control
		transformer. If no voltage is present, trace wiring back to
		oven power switch. If voltage is present, check for
		24VAC at transformer secondary. If there is primary
		voltage, but no secondary voltage, replace control
		transformer.
	Conveyor motor	Check for supply voltage to the conveyor motor at
		terminal J3 #2 to line 2. If no voltage is present, trace
		wiring back to oven power switch. If voltage is present,
		but the motor will not run, check the motor windings for
		opens or shorts. If any of the above checks fail, replace
		conveyor motor.
	Capacitor, conveyor motor	Check for shorts or grounds. Replace capacitor as
		needed.
		WARNING: Capacitor has a stored charge, discharge
		before testing.
	Switch, conveyor reversing	Check continuity between switch terminals. Replace
		switch as needed.
	Oven control	If there is voltage supplied to the motor, and the motor
		capacitor and reversing switch check good, replace the
0		oven control.
Conveyor motor runs,	NOTE: Display will indicate	
but there is no speed		
display	Over exetted	Ob a she fan awtrout walte na frans awar aantral ta hall affa st
	Oven control	Check for output voltage from oven control to hall effect
		Sensor (sensor is located in the conveyor motor).
		wellow wire Voltage at the motor connector, red wire and
		yellow wire. Voltage should be approx. TOVDC. If ho
		there is no voltage output of the oven control, replace
		aven control
	Convoyor motor	If there is voltage supplied to the hall effect senser
	Conveyor motor	in there is voltage supplied to the hall effect sensor,
		Mossure frequency across the vellow and white wires in
		the motor connector. Frequency reading should be
		approx 25-100 Hz If these readings are not achieved
		replace conveyor motor. If the readings are achieved,
		proceed
	Oven control	If the hall effect sensor readings are correct, but there is
		n speed indicated on the display replace the over
		control
		control.

REMOVAL, INSTALLATION & ADJUSTMENTS IMPINGER ADVANTAGE SERIES

CAUTION:

BEFORE REMOVING OR INSTALLING ANY COMPONENT IN THE OVEN, DISCONNECT ELECTRICAL POWER AND GAS SUPPLY. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY!

MOTOR, MAIN FAN - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove louvered motor cover from back of oven.
- 3. Remove wireway by taking out the (5) five hex screws.
- 4. Disconnect wiring from motor.
- 5. Remove the twelve (12) hex head bolts from the oven back and slide back straight out of the oven.
- 6. Remove two (2) bolts from fan hub and remove fan from motor shaft.
- NOTE: Measure distance from fan blade to rear wall assembly before removal to aid in reassembly.
- 7. Remove the eight (8) hex head bolts from the motor mount and slide the motor assembly out of the oven back.
- 8. Remove motor by taking off motor clamp and removing the four (4) mounting nuts and washers.
- 9. Reassemble in reverse order. When motor mount assembly is set on the oven back, align motor shaft in the center of the hole. Set fan assembly on the motor shaft.
 - NOTE: A. Torque specs on bolts (150 in/lb. torque)
 - B. It is recommended that an anti-seize compound be brushed on to the bolts around the back and motor mount bracket before assembly.

FAN, MAIN - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove back assembly. (See MOTOR, MAIN FAN)
- 3. Reinstall and locate fan so that the bottom of the fan spider is 1 1/2" from the top of the oven back cone. (See Drawing)



CAPACITOR, MOTOR - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove motor cover from back of oven.
- 3. Discharge capacitor.
- 4. Remove and replace.

COOLING FAN, CONTROL BOX - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control panel top and front cover.
- 3. Remove four (4) screws from the fan frame.
- 4. Disconnect cord and plug and remove fan.
- 5. Reassemble in reverse order.

THERMOSTAT, COOLING FAN - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control panel top and front cover.
- 3. Remove lead wires and mark for reassembly.
- 4. Remove two (2) screws and remove thermostat.
- 5. Reassemble in reverse order.

THERMOCOUPLE - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control panel top and front cover.
- 3. Slide thermocouple out of oven chamber.
- NOTE: Remove conveyor and bottom fingers to aid in removal and installation of thermocouple.
- 4. Remove two (2) wires from temperature control. Make note of wire numbers or color and location for reinstallation.
- 5. Reassemble in reverse order making sure the metal end on the thermocouple is in the wire form in the oven chamber.

THERMOCOUPLE MEASURMENT

TEMPERATURE (°F)	D.C. MILLVOLTS (APPROX.)
200°	2.8
250°	4.0
300°	5.1
350°	6.0
400°	7.1
450°	8.2
500°	9.3
550°	10.4
600°	11.5

CONTROL TRANSFORMER - REPLACEMENT

- 1. Shut power off at main breaker.
- 2. Remove control panel top and front cover.
- 3. Remove two (2) wires on primary side, note color and location.
- 4. Remove two (2) wires on secondary side, note color and location.
- 5. Remove two (2) screws from transformer base and replace assembly.
- 6. Reinstall in reverse order and check system operation.

CONVEYOR DRIVE MOTOR - REPLACEMENT

- 1. Shut power off at main breaker.
- 2. Remove control panel top and front cover.
- 3. Loosen set screw on conveyor drive sprocket and slide sprocket off shaft.
- 4. Disconnect motor plug.
- 5. Remove four (4) screws from motor frame, on control box side, and remove motor assembly.
- 6. Reassemble in reverse order making sure to align chain sprockets and adjust motor for proper chain tension (1/2" SAG).

REVERSING SWITCH REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control box cover and front panel.
- 3. Disconnect wires from reversing switch and mark for reassembly.
- 4. Remove mounting nut and remove reversing switch.
- 5. Reassemble in reverse order and check system operation.

Impinger I – 1450 Series Electric Service Manual - Domestic

MERCURY CONTACTOR

- 1. Shut off power at main breaker.
- 2. Remove control panel top and front cover.
- 3. Disconnect contactor wires and mark for reinstallation.
- 4. Remove screws from mounting bracket and replace contactor.
- NOTE: Be sure contactor is not mounted upside down as this will cause a <u>constant on</u> condition.
- 5. Reassemble in reverse order.

HEATING ELEMENT

- 1. Shut off power at main breaker.
- 2. Remove rear motor cover.
- 3. Disconnect heater element wires and mark for reassembly.
- 4. Remove oven back assembly.
- 5. Remove fan shroud.
- 6. Remove two (2) mounting screws and remove heating element.
- Reassemble in reverse order. NOTE: Be sure all wire connections are tight.

CAPACITOR, CONVEYOR MOTOR - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control box cover and front panel.
- 3. Discharge capacitor before removing wires. Mark wires for reassembly.
- 4. Remove mounting screw and remove capacitor.
- 5. Reassemble in reverse order and check system operation.

BEARING, CONVEYOR – REPLACEMENT

- 1. Remove conveyor from oven and place on flat work surface.
- 2. Remove connecting links from conveyor belt. See Operator Manual for more information.
- 3. Remove conveyor belt from conveyor. Remove drive sprocket from drive shaft, if required.
- 4. Move shaft toward end of conveyor to allow shaft with bearings to slip out of holding bracket.
- 5. Replace bearing and reassemble in reverse order.

THERMOSTAT, CONTROL BOX HI-LIMIT - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control box cover and front panel.
- 3. Remove wiring from thermostat and mark for reassembly.
- 4. Remove mounting screws and remove thermostat.
- 5. Reassemble in reverse order and check system operation. NOTE: <u>Be sure to press reset button on new thermostat to set for operation</u>.

THERMOSTAT, OVEN CAVITY HI-LIMIT - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control box cover and front panel. Remove conveyor assembly and fingers from oven to aid in removal of thermostat from oven.
- 3. Disconnect wires from thermostat and mark for reassembly.
- 4. Remove thermostat from oven.
- 5. Reassemble in reverse order and check system operation.

AIR PRESSURE SWITCH – REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control panel top and front cover.
- 3. Disconnect wires from air pressure switch and mark for reassembly.
- 4. Remove air switch tube from air pressure switch.
- NOTE: There are two types of air pressure switches used. Remove air pressure switch from its mount.
- 5. Reassemble in reverse order and check system operation.
- 6. To adjust air pressure switch, remove cover from switch to expose adjusting screw. To increase sensitivity, turn screw counter-clockwise. To decrease sensitivity, turn screw clockwise.

CONTROL TRANSFORMER – REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control panel top and front cover.
- 3. Remove two (2) wires on primary side, note color and location.
- 4. Remove two (2) wires on secondary side, note color and location.
- 5. Remove two (2) screws from transformer base and replace assembly.
- 6. Reinstall in reverse order and check system operation.

REVERSING CONVEYOR DIRECTION

All ovens leaving our plant are wired to operate conveyors from left to right. To reverse conveyor direction, use the following procedure.

- 1. Shut off power at oven switch.
- 2. Set conveyor reversing switch in the other position.
- 3. Turn oven "on" and check for proper operation.

ON-OFF SWITCH - REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control box cover.
- 3. Remove access cover.
- 4. Depress spring clips on side of switch and push out.
- 5. Remove wires from back of switch, note wire number and location.
- 6. Reassemble in reverse order and check system operation.
- NOTE: Make sure switch housing is fully seated in control box housing.

OVEN CONTROL – REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control box cover and front panel.
- 3. Remove all wiring connections and mark for reassembly.
- 4. Remove oven control by pulling control from the mounting pins. Remove control from oven.
- 5. Before installing new oven control, set voltage jumper (located at the bottom center of the oven control) to the proper voltage (120V/240V) position. Install the four pushbutton extensions (included with the oven control) by pushing the extensions onto the four set buttons on control.
- 6. Reassemble in reverse order and check system operation.
- 7. Set the oven control for the proper operating mode. The 1400 series ovens use a single temperature control system. The oven control must be set to the proper operating mode. Set the control as follows: With the oven power switch "off", depress the "time" and "up" buttons and turn the oven "on". Control will indicate "Imp I or Imp II" Release the buttons, The control will indicate "Temp to store". Press the "up" or "down" button until "Imp I" appears on the display. Press the "temp" button. The control is now set for single burner operation.

OVEN CONTROL – REPLACEMENT (CONT'D) PROGRAMMING INSTRUCTIONS

- 1. Before applying power to oven, ensure proper voltage jumper setting for 120V or 240V, and the 50 Hz / 60 Hz jumper setting is correct. Jumpers are located at bottom center of control board.
- 2. Set digital control for proper oven cavity and conveyor belt during power-up.
 - A. Single Cavity Ovens Impinger I or Impinger II Press and hold the 2 inside buttons while turning the power switch on. After Imp. I or II is displayed, release the buttons and control will request the conveyor belt setting – "Imp I" or "Low Pro" or "Imp II". The up or down button will toggle between those choices. When desired conveyor belt is selected, press the temp button to store settings.
- 3. Set digital control for proper temperature scale °F or °C
 - A. Press and hold the 2 RH buttons to enter Sub-Level program. A prompt will be displayed "Technicians Only." After a couple seconds a second prompt will say "Please Release Buttons." After releasing the buttons, quickly press the TIME button and the UP button to enter the program. After Sub Set Point is displayed, press temp button to indicate scale. The up or down buttons will toggle choices between °F or °C. After desired scale is selected, allow control to go into normal run mode. These special prompts are for Prom chips 007 and above. Prom chips 006 and below, the Sub-Level program can be entered by pressing the two right buttons only.
- 4. Set bake time and oven temperature Set Point Menu \square \square \square \square
 - A. Press and hold the 2 LH buttons to enter Set Point program. Once in set point program, press temp button and adjust temperature using up or down arrows. Press time button while still in set point program and adjust time using up or down buttons. Pressing time or temp button will show what that respective setting is. Once desired settings are programmed, allow control to go into normal running mode.
 - B. For normal calibration, set bake time to 10:00 minutes and temperature to 500°F/260°C. Bake time can be checked using standard QA procedures. Install cavity temperature probes per standard QA procedures.
- 5. Adjust temperature offset Sub Set Point Menu
 - A. Follow instructions in step 4 to enter the Sub-level program. After sub set point is displayed, pressing the temp button will access the following temperature features: SCALE (°F or °C), HI TEMP, LOW TEMP, OFFSET (+ or -), MANUFACTURE MODE (Clear or Active).

** Do not change SCALE after it was set in step 4A or setting will reset to default values.

- B. To adjust the temperature offset, access the OFFSET display in the Sub Set Point Menu. If cavity temperature is above the set temperature, decrease (down button) the offset value. If cavity temperature is below the set temperature, increase (up button) the offset value. The amount of offset needed should be the difference between the cavity temp and the set temp. Allow oven to reach set temp and verify cavity temperature. Readjust offset as necessary.
- C. HI TEMP and LOW TEMP are not normally changes unless requested by the customer. Accessing these displays and pressing the up or down buttons will change each indicated setting accordingly.
- D. MANUFACTURE MODE is not normally used, so this feature should be set to "clear."
- E. While in Sub Set Point Menu, pressing the time button will access the following time features: HI TIME and LOW TIME. These are not normally changes unless requested by the customer. Accessing these displays and pressing the up or down button will change each indicated setting accordingly.

FUSE HOLDER – REPLACEMENT

- 1. Shut off power at main breaker.
- 2. Remove control box cover.
- 3. Remove all wiring from fuse holder and mark for reassembly.
- 4. Remove mounting nut for fuse holder and remove fuse holder.
- 5. Reassemble in reverse order and check system operation.

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GENERAL VIEW ADVANTAGE SERIES

LETTER	PART NUMBER	DESCRIPTION
A	369003	Door hinge
В	See Access Deer Section in manual for complete parts breakdown	
С		
D	369828	Handle spacer
E	369209	Latch & strike
0	370110	Door assembly (solid)
Р	369157	Door assembly (with window)
Q	1534	Finger support assembly
R	369057	Support bracket pin
S	369643	Strike assembly
Т	1009	Oven top
U	369062	Top, control box
V	369140	Compression spring
W	369903	Washer, flat
Х	369141	Conveyor hold down bracket
Y	369139	Shoulder screw
Z	369058	Baffle, inlet and outlet
*	369211	Thumb screw (not shown)
AA	369203	Stud, wing head
BB	369749	Chain cover kit (includes AA, CC)
CC	369204	Split ring retainer
DD	369373	Receptacle, snapin
EE	369748	Bracket, chain cover
FF	369328	Leg, stand
GG	369052	Adjustable leg
HH	369030	Caster, 6"
JJ	369904	Insulation holder assembly
KK	369053	Finger housing
11		Columnating plates –
	0000755	see installation operations manual
MM	369055	Finger cover
NN	369218	Crumb pan, internal
00	369926	Window frame, bottom
PP	369925	Glass, access window
QQ	369927	Window frame, top



CONTROL BOX – 1452, 1453 S/N N28654 and ABOVE

LETTER	PART #	DESCRIPTION
A	369158	Sprocket, Drive
В	370373	Conveyor Motor
С	369507	Control Box Thermostat
D	369025	Air Pressure Switch
E	369119	Fuse Holder
F	369134	Fuse, 50A
G	369118	Terminal Block
Н	369838	Thermostat, Control Box Hi-Limit
I	370067	Mercury Contactor
J	369378	Cooling Fan
K	369331	Finger Guard. Cooling Fan
L	369129	Fuse Holder
М	369166	Fuse, 10A
Ν	370388	Cover, Access
0	370359	Reversing Switch
Р	369368	Thermostat, Hi-Limit
Q	370360	Capacitor, Conveyor Motor
R	370241	Transformer, 24VAC
S	370362	Thermocouple, Type K
Т	370418	Control Box Top
U	370355	Control, Oven
V	370363	Front Cover
W	370354	Facia, Front
X	369432	Switch, On-Off



OVEN BACK ADVANTAGE SERIES

LETTER	PART NUMBER	DESCRIPTION
A	370422	Cover, Motor (S/N 21468 & Above)
В	369212	Motor, Main Fan (60 Hz.)
С	369033	Motor clamp
D	369215	Motor support assembly
E	369192	Capacitor, 7.5 MFD
F	369306	Oven back assembly, gas oven
G	369646	Stand-off
Н	369647	Inlet panel
J	369213	Main fan
K	369547	Bracket, thermostat
	369287	Heating element, 208V
М	369315	Heating element, 220V
	369122	Heating element, 240V



CONVEYOR 1450 SERIES

LETTER	PART NUMBER	DESCRIPTION
	369830	Complete conveyor assembly
A	369163	Conveyor Belt (32" Belt)
	369816	Conveyor Belt (20" Belt)
	369362	Conveyor Belt, 1 ft. Section (32" Belt)
	370092	Conveyor Belt, 1 ft. Section (30" Belt)
В	369825	Retaining Ring
С	369813	Conveyor Bearing Block
D	369314	Roll, Conveyor, Notched
E	369812	Conveyor Idler Shaft
F	369160	Conveyor Pan Stop
G	369005	Connecting Link (32" Belt)
	369814	Connecting Link (30" Belt)
Н	369811	Conveyor Drive Shaft
J	369161	Roller Chain Sprocket
K	369806	Crumb Pan
L	370050	Conveyor Frame
М	371043	Drive Chain



ACCESS DOOR 1450 SERIES

LETTER	PART NUMBER	DESCRIPTION
	369110	Access Door Assembly
А	370724	Extrusion
В	369928	Dowel, Access Door
С	370726	Bracket Assembly
D	370725	Dowel Thread
E	370727	Bracket Assembly
F	370723	Glass
Not Shown	369929	Retainer, Window



STAINLESS STEEL ACCESS DOOR ALL MODELS (SN 0908210000875 AND ABOVE)

LETTER	PART NUMBER	DESCRIPTION
	369110	Access Door Assembly
А	371140	Bracket Assembly, Left
В	371142	Dowel, Access Door
С	370722	Screw
D	371143	8-32 x 3/8 Hx Serr Flng
E	371141	Bracket Assembly, Right
F	370725	Dowel Thread
G	371144	Access Door Frame (top or bottom)
Н	370723	Glass



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