

# SERVICE MANUAL

## HR8+HR8 P Solid Back

### MODELS

**Programmable controls HR8 P**



**Model HR8+HR8 P**

#### - NOTICE -

This manual is prepared for the use of trained Service Technicians and should not be used by those not properly qualified. If you have attended a training for this product, you may be qualified to perform all the procedures in this manual.

This manual is not intended to be all encompassing. If you have not attended a training for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained technician.

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## INDEX

<b>Index .....</b>	<b>3</b>
<b>General technical data .....</b>	<b>4</b>
Technical Data U.S. Standard Models .....	4
<b>Programming instructions for the HR8 P .....</b>	<b>5</b>
<b>Optional settings for the HR8 P .....</b>	<b>7</b>
<b>Removal and replacement of parts for the HR8 P .....</b>	<b>9</b>
Right or left side panel.....	9
Top cover.....	9
Knob .....	9
Instrument panel .....	10
Electric panel .....	10
Display .....	11
Panel and keypad assembly.....	11
Namepanel .....	11
Ceramic Element.....	12
Halogen Lamp (Holder).....	12
Electronic Transformer .....	13
Power section .....	13
High limit thermostat.....	14
Main switch .....	14
Contactor .....	15
Blower motor .....	15
Blower motor bottom rotisserie (stacked HR8 P).....	16
PT500 sensor.....	16
Heating element .....	17
Drive motor .....	17
Door adjustment (left side).....	18
Door glass inside .....	18
Door glass outside .....	19
<b>Electrical tests and service procedures .....</b>	<b>20</b>
PT500 Sensor test.....	20
Heating element test.....	20
Keypad test .....	21
Control location .....	22
<b>Part 1: General troubleshooting list .....</b>	<b>23</b>
Troubleshooting the HR8 P Rotisserie .....	23
<b>Part 2: Analytic troubleshooting list .....</b>	<b>24</b>
Servicing and repairing of the rotisserie HR8 P .....	24
<b>Exploded views &amp; Partlists .....</b>	<b>28</b>
<b>Electrical diagrams .....</b>	<b>33</b>


## GENERAL TECHNICAL DATA

This manual covers the HR8 P series rotisserie ovens. Ovens will also be delivered in stacked versions.

- HR8 P – Oven with eight spits ( 32 to 40 chickens )

All of the information, illustrations and specifications contained in this manual are based on the latest product information available at the time of printing.

### TECHNICAL DATA U.S. STANDARD MODELS

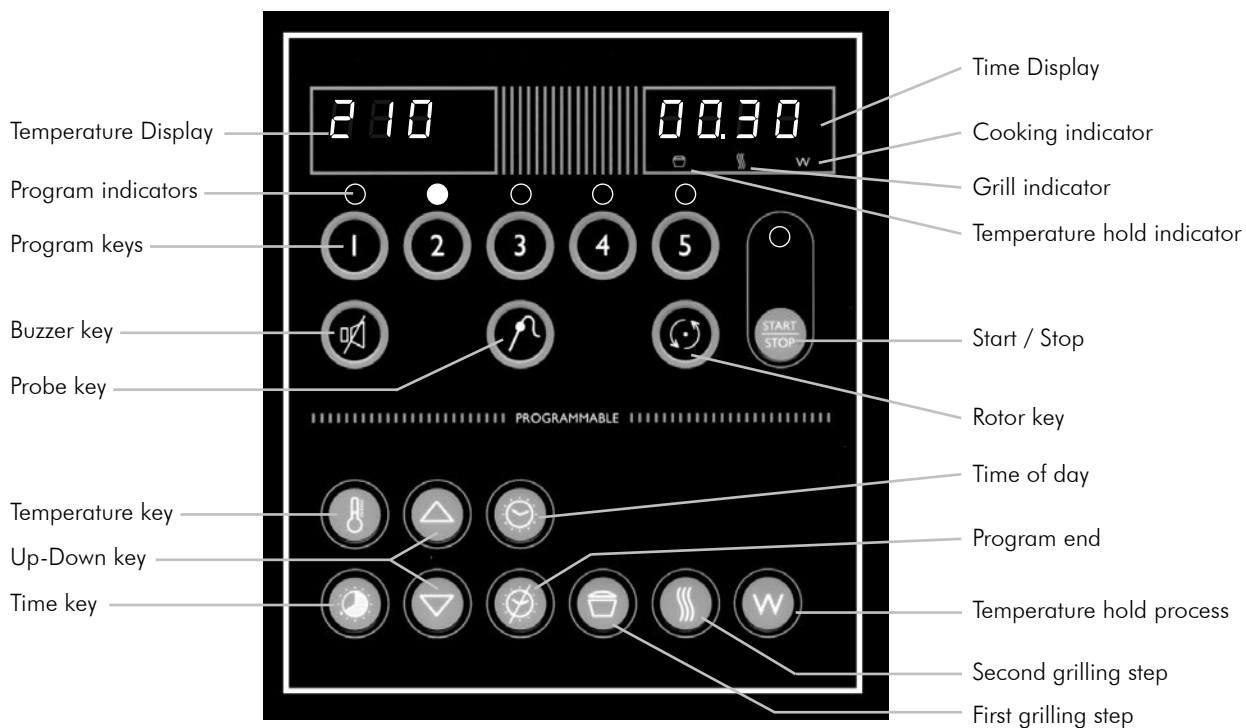
Type	HR8 P	HR8 P
Power	10500W	
Fuses needed with power connection 208 V, 3 ~ 60 Hz (3 phases without zero)	3x 35 A	
Fuses needed with power connection 208 V, 1N ~ 60 Hz (1 phase with zero)	–	
Recommended plug	NEMA 15-50P 	
<i>Stacked HR8 P cabinets: each cabinet comes with separate power cord!!</i>		
Net weight	399 lbs.	181 kg
Gross weight	478 lbs.	217 kg
Height	40"	1015 mm
Width	38 13/16"	985 mm
Depth	33 1/2"	850 mm

### Tools

- Standard set of tools.
- Metric wrenches, sockets and hex socket key wrenches.
- VOM with AC current tester (any VOM with a sensitivity of at least 20,000 ohms per volt can be used).
- Insulation value tester (Megger).
- Temperature tester.
- TL 84919 Field Service Grounding Kit.

## PROGRAMMING INSTRUCTIONS FOR THE HR8 P

### DISPLAY AND KEYS

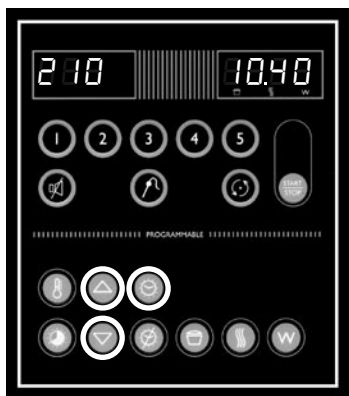


### SETTING THE HR8



When the main switch is turned to "1" the display lights up and the rotisserie is ON.

## SETTING ACTUAL TIME

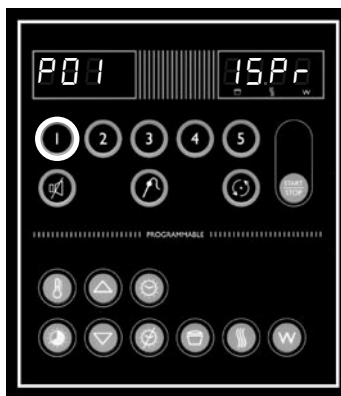


Press and hold *Time of day* key

Press *Up* or *Down* key

Release *Time of day* key

## 15 PROGRAMS



After the unit is switched-on the time display indicates: 15PR

Key 1:

1x = program 01

2x = program 06

3x = program 11

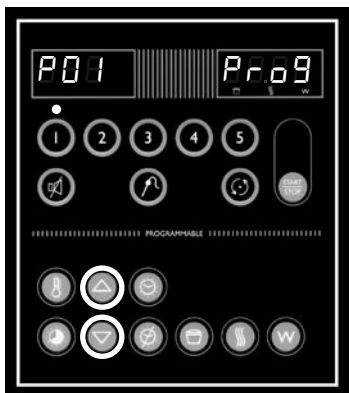
Key 2:

1x = program 02

2x = program 07

3x = program 12

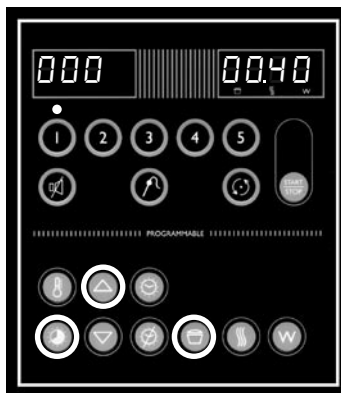
## ENTERING A PROGRAM



Select Program number

Press both *Up* and *Down* keys during 2 seconds

## FIRST COOKING STEP (TIME)



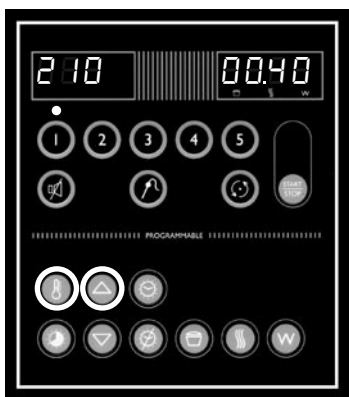
Press *Cooking process* key

Cooking symbol lights up

Press and hold the *Time* key

Press *Up* or *Down* key

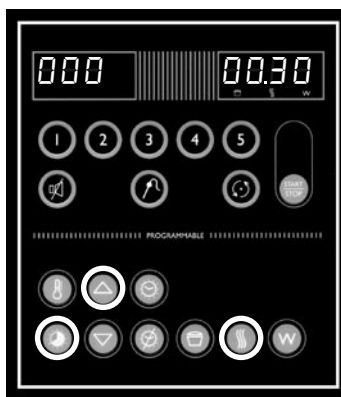
## FIRST COOKING STEP (TEMP.)



Press and hold the *Temperature* key

Press *Up* or *Down* key

## SECOND COOKING STEP (TIME)



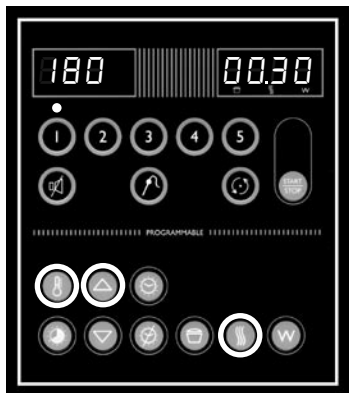
Press *Grilling process* key

Grilling symbol lights up

Press and hold the *Time* key

Press *Up* or *Down* key

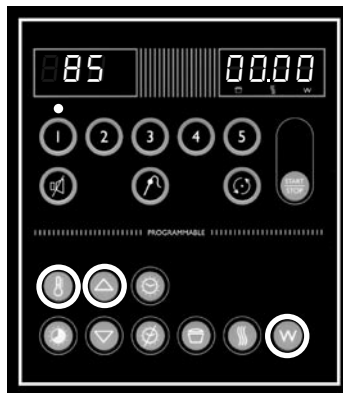
## SECOND COOKING STEP (TEMP.)



Press and hold *Temperature* key

Press *Up* or *Down* key

## TEMPERATURE HOLD



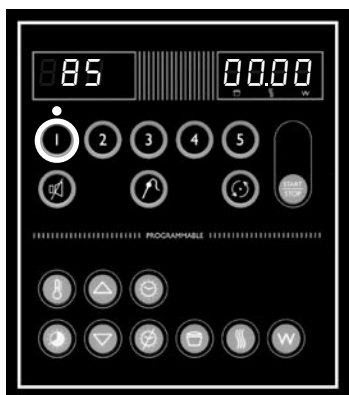
Press *Temperature Hold* process key

Temperature Hold symbol lights up

Press and hold the *Temperature* key

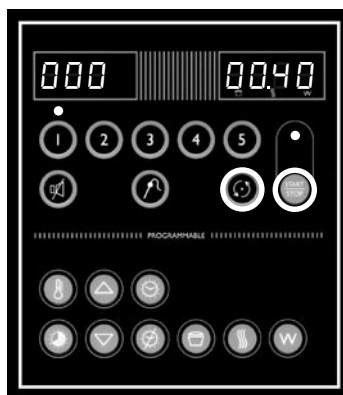
Press *Up* or *Down* key

## LOADING PROGRAM



Press program number to load pre-set values

## PROGRAM START & LOADING



Press *Start / Stop* key

*On* indicator lights up

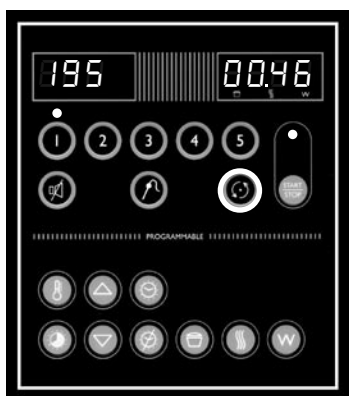
Press *Rotor* key to start turning the rotor

Press *Rotor* key again to stop

Load the rotisserie with products

## OPTIONAL SETTINGS FOR THE HR8 P

### INTERRUPTING ACTIVE PROGRAM



Press *Rotor* key

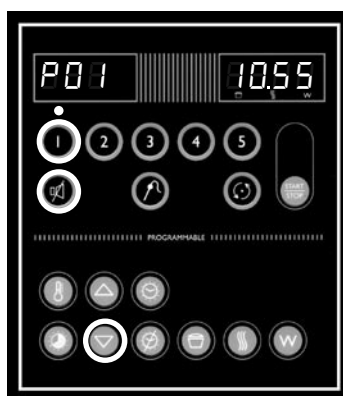
Heaters and front lamp switch off

Rotor stops

*On* indicator is blinking

Process time in hold

### SET ADDITIONAL BUZZER SIGNAL

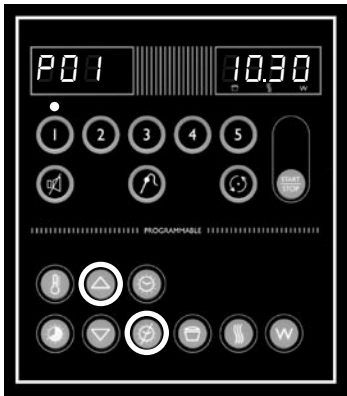


Select a pre-defined program

Press and hold *Buzzer* key

Press *Down* key

## SET PROGRAM END TIME

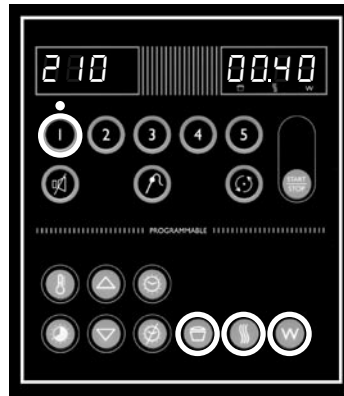


Select a pre-defined program

Press and hold the *Program end* key

Press *Up* key

## DISPLAY SET TIME & TEMPERATURE



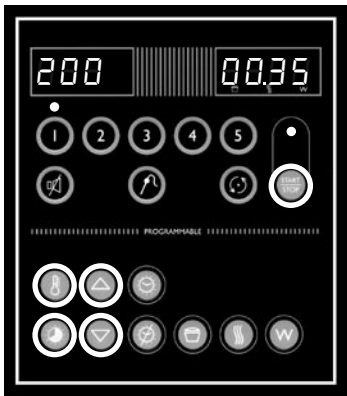
Select a pre-defined program

Press *Cooking*, *Grilling* or *Temperature hold* key

No time indication for *Temperature hold*

Visible during process or program selection

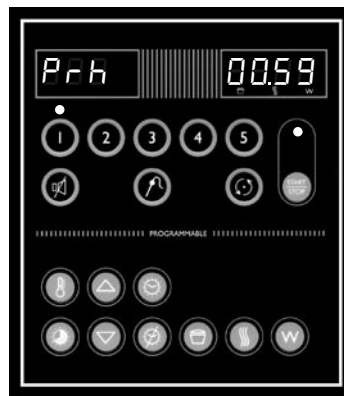
## ADJUSTING ACTIVE PROGRAM



Press and hold *Temperature* or *Time* key

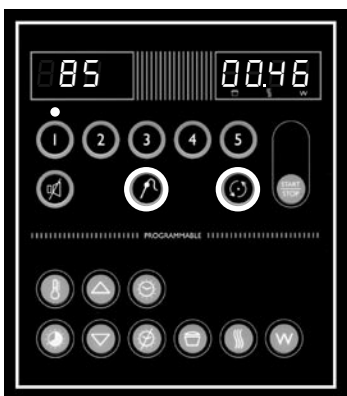
Adjust temperature or time with *Up* or *Down* key

## PREHEAT INDICATION



Under 40°C (104°F) the display shows PRH

## TEMPERATURE PROBE (OPTIONAL)



Press the *Rotor* key

Insert the probe in the meat up to the core

Press *Temperature sensor* key; after 20 seconds the temperature reading switches off

## INDICATIONS DURING PROCESS

- Process indicators shows actual process after completion indicator switches off
- Time display shows remaining program time which is the sum of the remaining cooking and grilling time
- Temperature display indicates actual temperature in the grill. Under 40°C (104°F) the display shows PRH (preheat)
- When remaining time reaches 0, the process indicators and the On-indicator switches off



## REMOVAL AND REPLACEMENT OF PARTS FOR THE HR8 P

**WARNING:** Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced. Follow OSHA lockout/tagout procedures.

**RIGHT OR LEFT SIDE PANEL**

1. Remove the screws that secure the panel to the frame.
2. Remove the panel.
3. Reverse the procedure to install.

**TOP COVER**

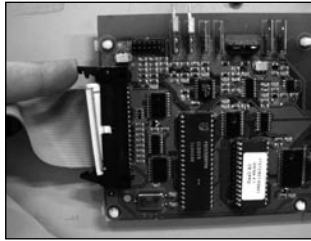
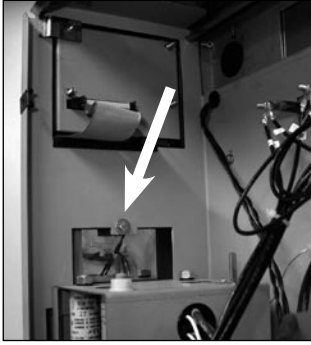
1. Remove the left side panel according prior procedure.
2. Remove the screws securing both large and small top covers.
3. Remove the top cover. (Lift at left side and remove to the left).
4. Reverse the procedure to install.

**KNOB**

1. Remove cover plate on the knob with a small screw driver.
2. Loosen the screw inside the knob.
3. Remove the knob with ring.
4. Reverse the procedure to install.

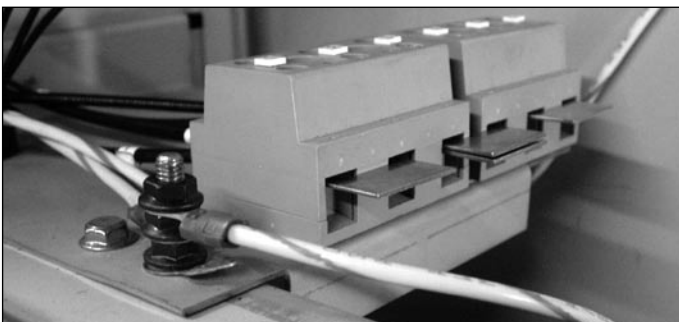
**Note:** check that the ring behind the knob is in the right position and runs free from the panel.

## INSTRUMENT PANEL



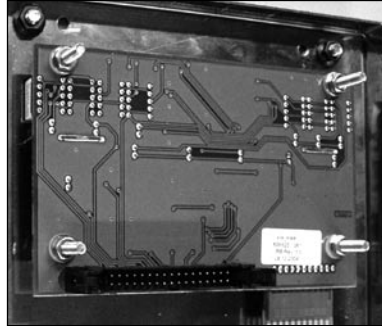
1. Remove the right side panel according prior procedure.
2. Remove the knobs according prior procedure.
3. Remove the screw that secures the panel.
4. Remove the 2 bolts on the backside of the instrument panel.
5. Remove the screws that secure the meat probe holder and remove the holder (if supplied).
6. Remove the flatcable on the power section.
7. Remove the clip on the back, top left side that secures panel and frame.
8. Remove the instrument panel.
9. Reverse the procedure to install.

## ELECTRIC PANEL



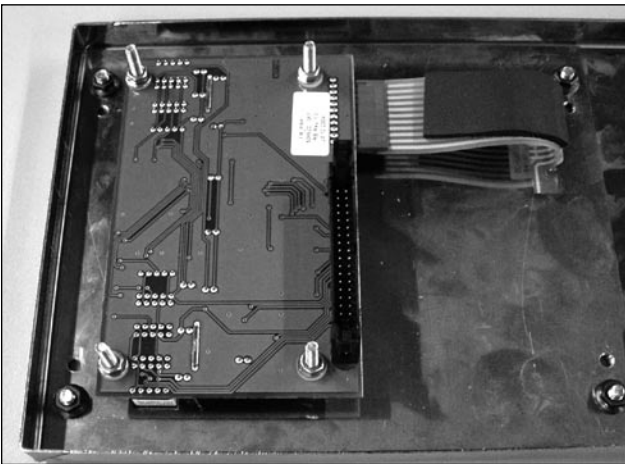
1. Remove the instrument panel according prior procedure.
2. Remove on the front side the screws that secure the panel.
3. Remove on the inside bottom of the electric panel the bolt and nuts.
4. Disconnect the wiring.
5. Slide the electrical panel backwards.
6. Reverse the procedure to install.

## DISPLAY



1. Remove the right side panel according prior procedure.
2. Disconnect the flatcable on the display.
3. Remove the clip on the back, top left side that secures panel and frame.
4. Remove the nuts and washers on the backside of the display and remove the metal cover.
5. Remove the nuts and plastic rings that secure the board and remove the board. Do not forget to disconnect the blue connector on the board.
6. Reverse the procedure to install.

## PANEL AND KEYPAD ASSEMBLY



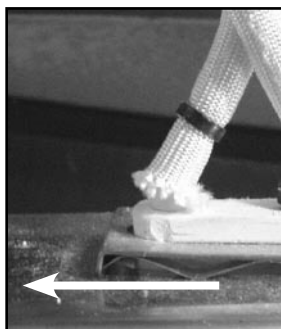
1. Remove the instrument panel according prior procedure.
2. Remove the display according prior procedure.
3. Remove the nuts that secure the panel with foil and remove panel.
4. Reverse the procedure to install.

## NAMEPANEL



1. Remove the instrument panel according prior procedure.
2. Remove the 4 nuts that secure the panel and remove panel.
3. Reverse the procedure to install.

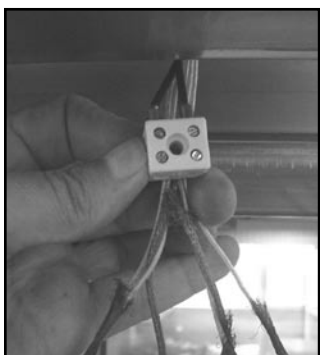
## CERAMIC ELEMENT



1. Remove the rotor discs, suction and fan plate according prior procedures.
2. Remove the 3 screws that secure the reflector ass. and lower the reflector.
3. Loosen the bolts that secure the cover plate and turn the cover plate open towards yourself.
4. Lower the reflector until the connector is on the inside of the cabinet.
5. Remove the wiring of the ceramic element on the connector.
6. Remove the ceramic element from the reflector by sliding off the clip.
7. Reverse the procedure to install.

**Note:** On a single unit or on the top side of a stacked unit it is easier to remove the top plate and access the connector from this side.

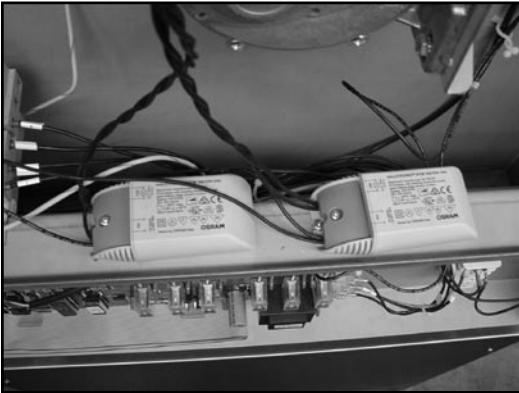
## HALOGEN LAMP (HOLDER)



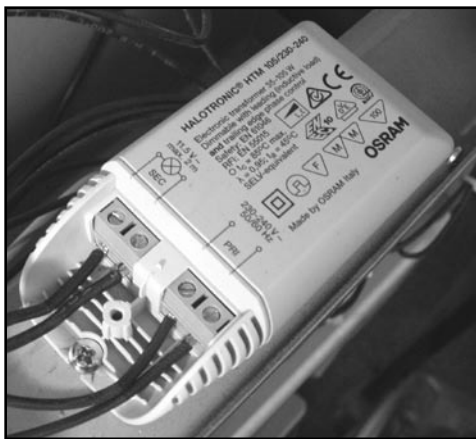
1. Remove the screws that secure the lamp holder.
2. Lower the lamp holder until the connector is on the inside of the cabinet.
3. Remove the glass and lamp from the lamp holder. Turning direction of glass is counter clockwise.
4. Remove the wiring of the lamp on the connector.
5. Remove the holder. You have to deform the holder to take it out.
6. Insert a new holder and click this in.
7. Reverse the procedure to install.

**Note:** On a single unit or on the top side of a stacked unit it is easier to remove the top plate and access the connector from this side.

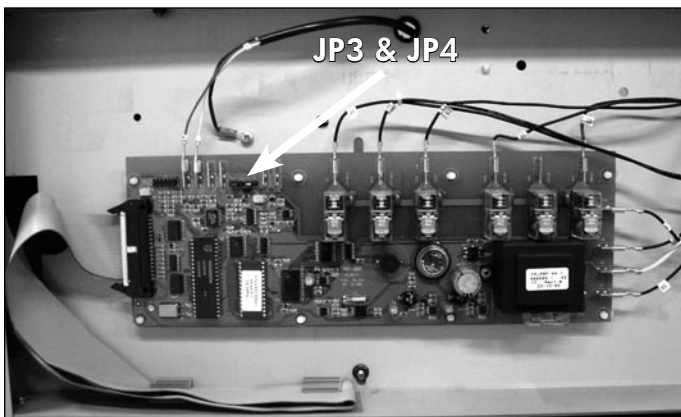
## ELECTRONIC TRANSFORMER



1. Remove the right side panel according prior procedure.
2. Remove the screw that secures the cover plate and remove the cover plate.
3. Remove the wiring.
4. Remove the screw that secures the transformer and remove the transformer.
5. Reverse the procedure to install.



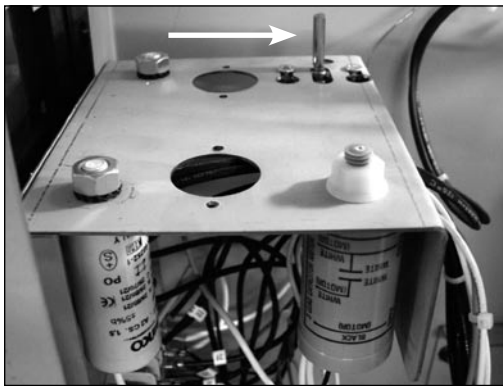
## POWER SECTION



1. Remove the right side panel according prior procedure.
2. Disconnect wiring and flatcable on the board.
3. Remove the board from the clips by pressing the clips together.
4. Reverse the procedure to install.

**Note:** When installing new board, ensure that JP3 and JP4 on new board are set the same as on the old board.

## HIGH LIMIT THERMOSTAT



1. Remove the right side panel according prior procedure.
2. Remove the suction and fan plate on the inside of the oven.
3. Remove the thermostat-probe from the clip in the oven and guide it outside through the opening in the side wall.
4. Remove the screws on the electric panel that secure the thermostat.
5. Remove the thermostat and disconnect the wiring.
6. Reverse the procedure to install.

**Note:** Set the new high limit thermostat to its maximum position.

## MAIN SWITCH



1. Remove the instrument panel according prior procedure.
2. Loosen the screws on the electric panel that secure the switch.
3. Remove the switch and disconnect the wiring.
4. Reverse the procedure to install.

## CONTACTOR



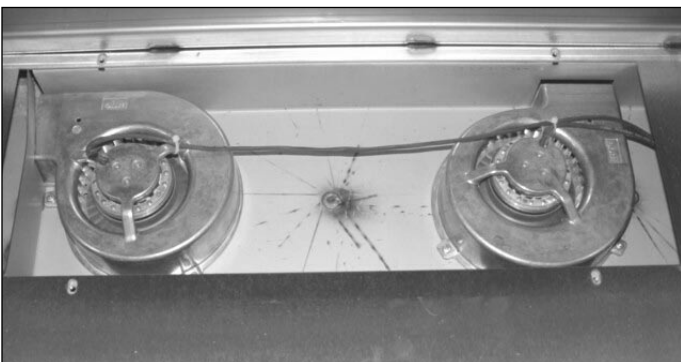
1. Remove the right side panel according prior procedure.
2. Disconnect the lead wires to the contactor.
3. Push down on the locking tab and lift out and then up to remove it from the mounting bracket.
4. Reverse the procedure to install.

## BLOWER MOTOR

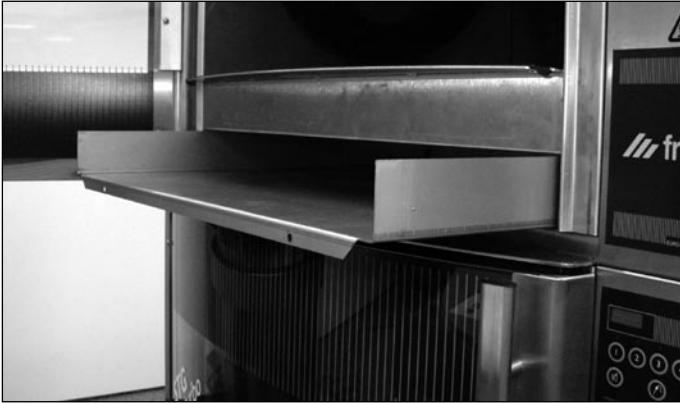


1. Remove the right side panel and the top cover according to prior procedures.
2. Remove the rotor discs, suction and fan plate in the oven.
3. Remove the wing nut on the fan blade and remove fan blade. (Left handed threads)
4. Disconnect wiring of the motor.
5. Remove the screws that secure the motor and remove the motor.
6. Reverse the procedure to install.

**Note:** The blowers are equipped with a capacitor. Check the direction of rotation of the motor (clockwise) and change the wiring if necessary.



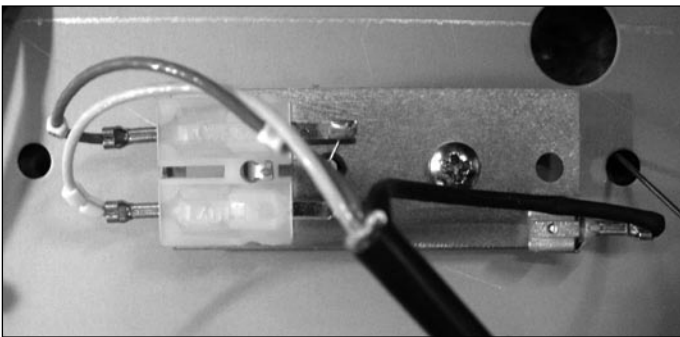
## BLOWER MOTOR BOTTOM ROTISSERIE (STACKED HR8 P)



1. Remove the right side panel according prior procedures.
2. Remove the rotor discs, suction and fan plate in the bottom oven.
3. Remove the wing nut on the fan blade and remove fan blade. Left handed threads.
4. Remove fat drawer from upper oven.
5. Remove the bolts that secure the intermediate plate and remove this plate.
6. Remove the drip trays from the upper oven.
7. Remove the bolts that secure the top plate and remove the top plate.
8. Disconnect wiring of the motor.
9. Remove the screws that secure the motor and remove the motor.
10. Reverse the procedure to install.

**Note:** The blowers are equipped with a capacitor. Check the direction of rotation of the motor (clockwise) and change the wiring if necessary.

## PT500 SENSOR

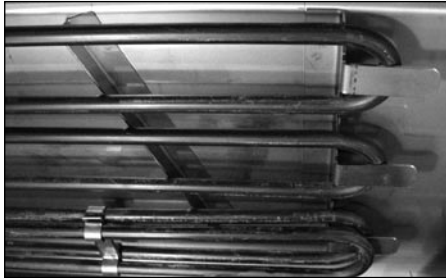
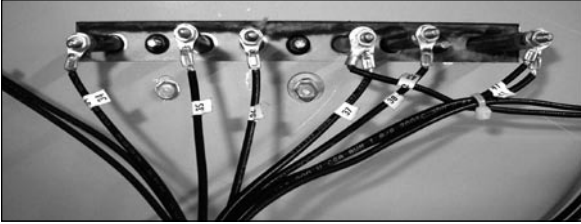


1. Remove the right side panel according to prior procedure.
2. Disconnect the wiring of the sensor.
3. Remove the screw that secures the sensor and remove the sensor.
4. Reverse the procedure to install.

**Note:** The wiring cable is an insulated cable with an earthing screen.

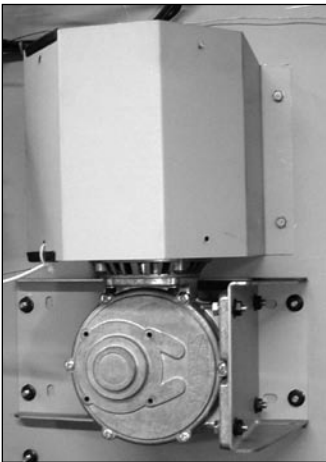


## HEATING ELEMENT



1. Remove the rotor discs, right side panel, suction and fan plate according prior procedures.
2. Disconnect the wiring from the element.
3. Remove the mounting nut.
4. Remove the element from the mounting clip and pull it from the wall.
5. Reverse the procedure to install.

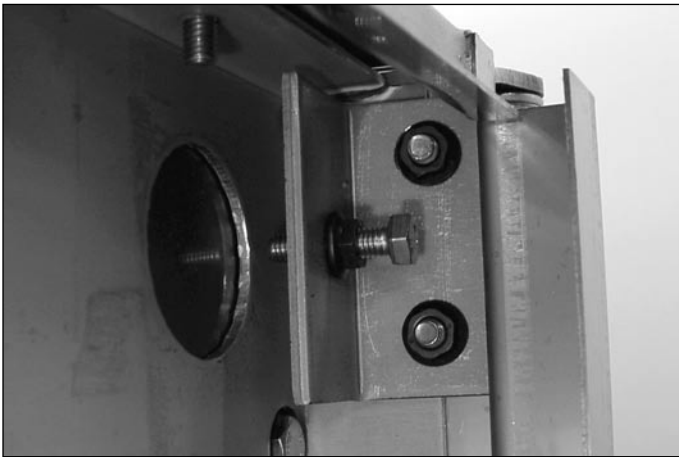
## DRIVE MOTOR



1. Remove the right side panel and rotor discs according prior procedure.
2. Disconnect the wiring of the motor. Check where the wire, marked A is connected.
3. Remove the screws that secure the fan cover and remove the cover.
4. Set the drive arm in a position vertical downwards. This can be done manually or by turning the fan blade by hand.
5. Mark the position of the motor support with a marker.
6. Remove the bolts that secure the motor and the nuts that secure the motor support and remove the motor.
7. Check the white Teflon ring. Replace if necessary.
8. Install the fan blade on the new motor.
9. Reverse the procedure to install.

**Note:** Always make a test run on maximum temperature to insure the motor is well mounted and adjusted.

## DOOR ADJUSTMENT (LEFT SIDE)



1. Remove the left side panel according prior procedure.
2. Loosen the nuts of the upper hinge. The door must be closed.
3. Loosen the locknut and adjust the bolt in or out to adjust the door.
4. Tighten the nuts of the hinge and mount the left-hand panel.

## DOOR GLASS INSIDE



1. Lift the door upward out of the hinges and place on a table.
2. Remove the cap nuts and rings on the profiles of the door.
3. Remove the profiles from the glass.
4. Mount the profiles on the new glass. Do not forget the nylon rings inside the holes and the rings between metal and glass.
5. Mount the cap nuts and rings.
- Note!** Tightening of nuts max. 4.2Nm (3.1 lbf.ft)
6. Place the door in the hinges.

## DOOR GLASS OUTSIDE



1. Lift the inner door out of the hinges and lay aside.
2. Remove the left side panel according prior procedure.
3. Remove the 2 nuts behind the top hinge. The door must be closed.
4. Hold the door on both sides and move this towards yourself, before lifting it out of the hinges. Place the door with the rounded side down on a table.
5. Remove the screws, cap nuts and rings on the profiles of the door and remove the profiles.
6. Mount the profiles on the new glass. Do not forget the nylon rings inside the holes and the rings between metal and glass.
7. Reverse the procedure to install.

## ELECTRICAL TESTS AND SERVICE PROCEDURES

**WARNING:** Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced. Follow OSHA Lockout/Tagout procedures.

### PT500 SENSOR TEST

Temperature		Resistance
°F	°C	± 5 Ohms
60	16	531
70	21	541
80	27	553
90	32	562
100	38	574
125	52	601
150	65	626
200	94	681
250	121	732
350	177	837
450	233	940

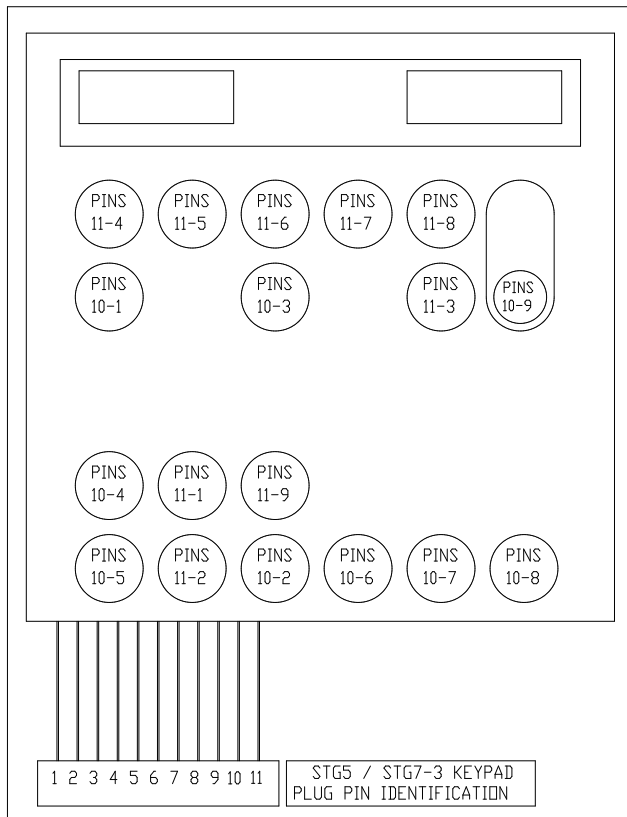
1. Remove the right side panel according prior procedure.
2. Remove the wiring from the sensor.
3. Connect a temperature sensor to the probe for comparison.
4. Test the probe with an Ohmmeter.

### HEATING ELEMENT TEST

Type	Wattage/Voltage	Resistance $\Omega$ -5% + 10%	Current A
HR8 P	3100 / 208	14.0	14.9
	3100 / 230	17.0	13.4
HR8 P	500 / 230	105.0	2.2 (2.0 at 208V)

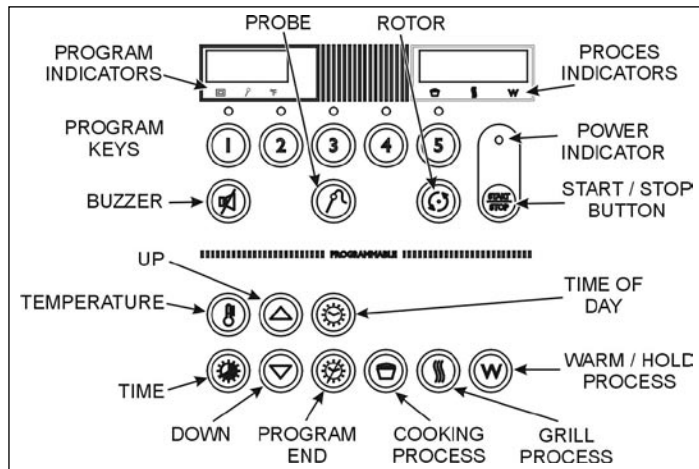
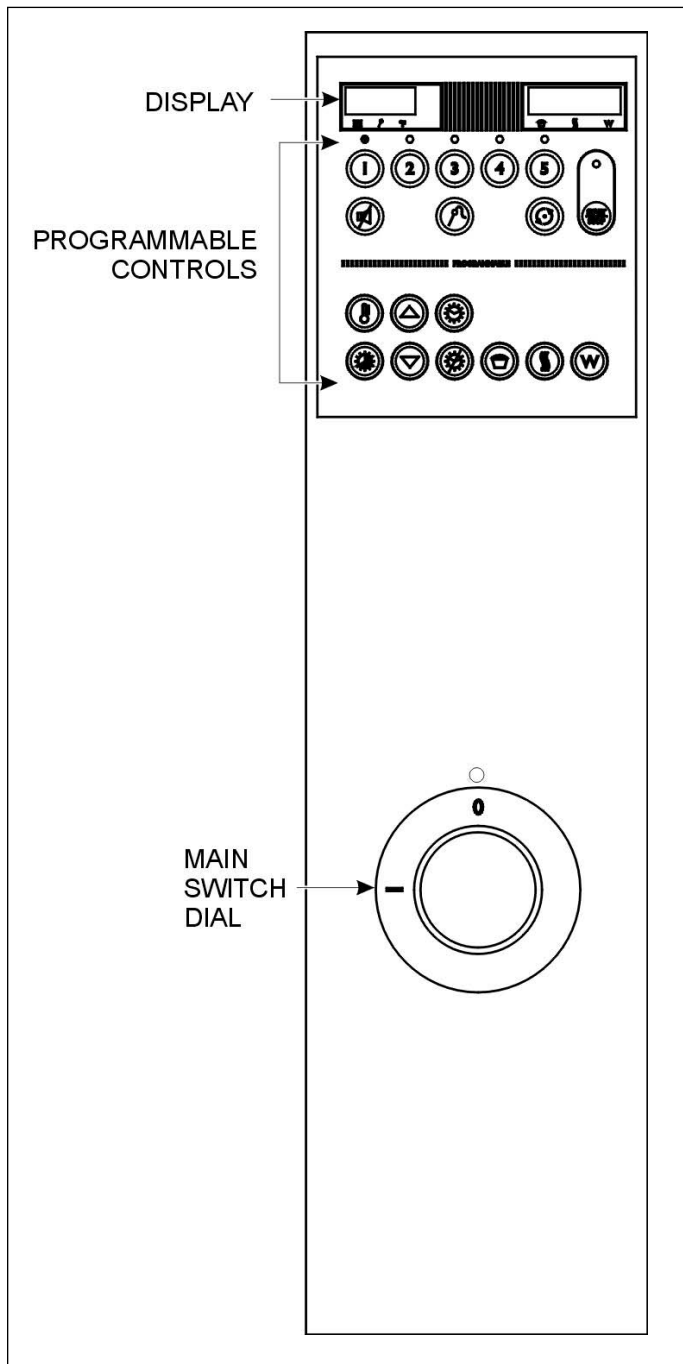
**Note:** When testing the resistance of the element remove the wiring.

## KEYPAD TEST



1. Remove the instrument panel according prior procedure.
2. Remove the display according prior procedure.
3. Remove the nuts that secure the panel with foil and remove panel.
4. Use a multimeter to test. Connect the measuring pins to the cable plug pins for each key to be tested as indicated in the diagram. You can set the multimeter on a beep signal or set it on resistance measuring. Press the key to be tested and the meter should give a beep signal or indicates a resistance less than 200 Ohms.

## CONTROL LOCATION



## PART 1: GENERAL TROUBLESHOOTING LIST

## TROUBLESHOOTING THE HR8 P ROTISSERIE

Symptom	Possible causes
No power to oven controls.	<ol style="list-style-type: none"> <li>1. Main breaker open.</li> <li>2. Fuse F1 burned.</li> <li>3. Main switch malfunction</li> <li>4. Wiring loose.</li> </ol>
Main fuse or breaker blows.	<ol style="list-style-type: none"> <li>1. Wiring incorrectly.</li> <li>2. Heating element, drive motor, blower or contactor switch shorted.</li> <li>3. Wiring shorted.</li> </ol>
Drive motor does not run in program mode.	<ol style="list-style-type: none"> <li>1. Main braker on L1 or L2 open (also no readings on display).</li> <li>2. Fuse F1 burned (also no readings on display).</li> <li>3. Capacitor malfunction.</li> <li>4. Wiring loose.</li> <li>5. Main switch malfunction.</li> <li>6. Motor malfunction.</li> </ol>
Blower motor does not run.	<ol style="list-style-type: none"> <li>1. Capacitor malfunction.</li> <li>2. Wiring loose.</li> <li>3. Motor inoperative.</li> </ol>
Oventemperature differs from temperature setting in program mode.	<ol style="list-style-type: none"> <li>1. Safety thermostat malfunction.</li> <li>2. Blower motor(s) inoperative (turning direction?)</li> <li>3. Electronic control inoperative.</li> <li>4. PT-500-sensor malfunction.</li> <li>5. Dirty fanguard or fanblade(s).</li> </ol>
All heating elements out, halogen lamps and blowers operate while oven cavity is below set temperature.	<ol style="list-style-type: none"> <li>1. Safety thermostat malfunction.</li> <li>2. Contactor inoperative.</li> <li>3. Wiring loose.</li> </ol>
Oven temperature does not reach desired temperature in program mode.	<ol style="list-style-type: none"> <li>1. Safety thermostat malfunction.</li> <li>2. PT-500-sensor malfunction.</li> <li>3. Electronic control inoperative.</li> <li>4. Heater(s) inoperative.</li> <li>5. Incorrect line voltage.</li> </ol>
No display and/or keypad does not function.	<ol style="list-style-type: none"> <li>1. Loose flatcable from display to electronic control.</li> <li>2. Fuse F4 (63mA) burned.</li> <li>3. Fuse F1 or F2 burned.</li> <li>4. Display and/or electronic control malfunction.</li> </ol>
Halogen lamp(s) do not light up.	<ol style="list-style-type: none"> <li>1. Lamp(s) broken.</li> <li>2. Wiring loose.</li> <li>3. Transformer malfunction.</li> </ol>

## PART 2: ANALYTIC TROUBLESHOOTING LIST

### SERVICING AND REPAIRING OF THE ROTISSERIE HR8 P

This is an analytic description for servicing and repairing all major parts of the rotisseries and warmers. It consists off 4 basic steps to recognize and solve the problems. These steps are:

1. Symptoms.
2. Possible causes.
3. Solving of the problem: checking/action.
4. Replacing of parts and testing.
  - a. Replacing is described in the service manual.
  - b. For testing see programming of rotisserie on page 5 in this manual.

Description of part	Symptoms	Possible causes	Solving: checking/action
Inside door	Broken glass	Slamming of door.  Fastening bolts and nuts are loose.  No sealing ring between steel and glass.	Give instruction to operator.  Tighten all fastenings.  Mount new glass with sealing rings between glass and steel.
Outside door	Broken glass      Door adjustment	Slamming of door.  Fastening bolts and nuts are loose.  No sealing ring between steel and glass.  Door not well adjusted and closes against bottom side.	Give instruction to operator.  Tighten all fastenings.  Mount new glass with sealing rings between glass and steel.  Adjust door on hinge and tighten the hinge plate.
Transformer	Lamps don't light up	Wiring.  Transformer Malfunction.  Relay on power board.	Check the wiring. Check the power on the transformer.  Check the 11.5V outgoing signal on the transformer.  Check power on relay X18

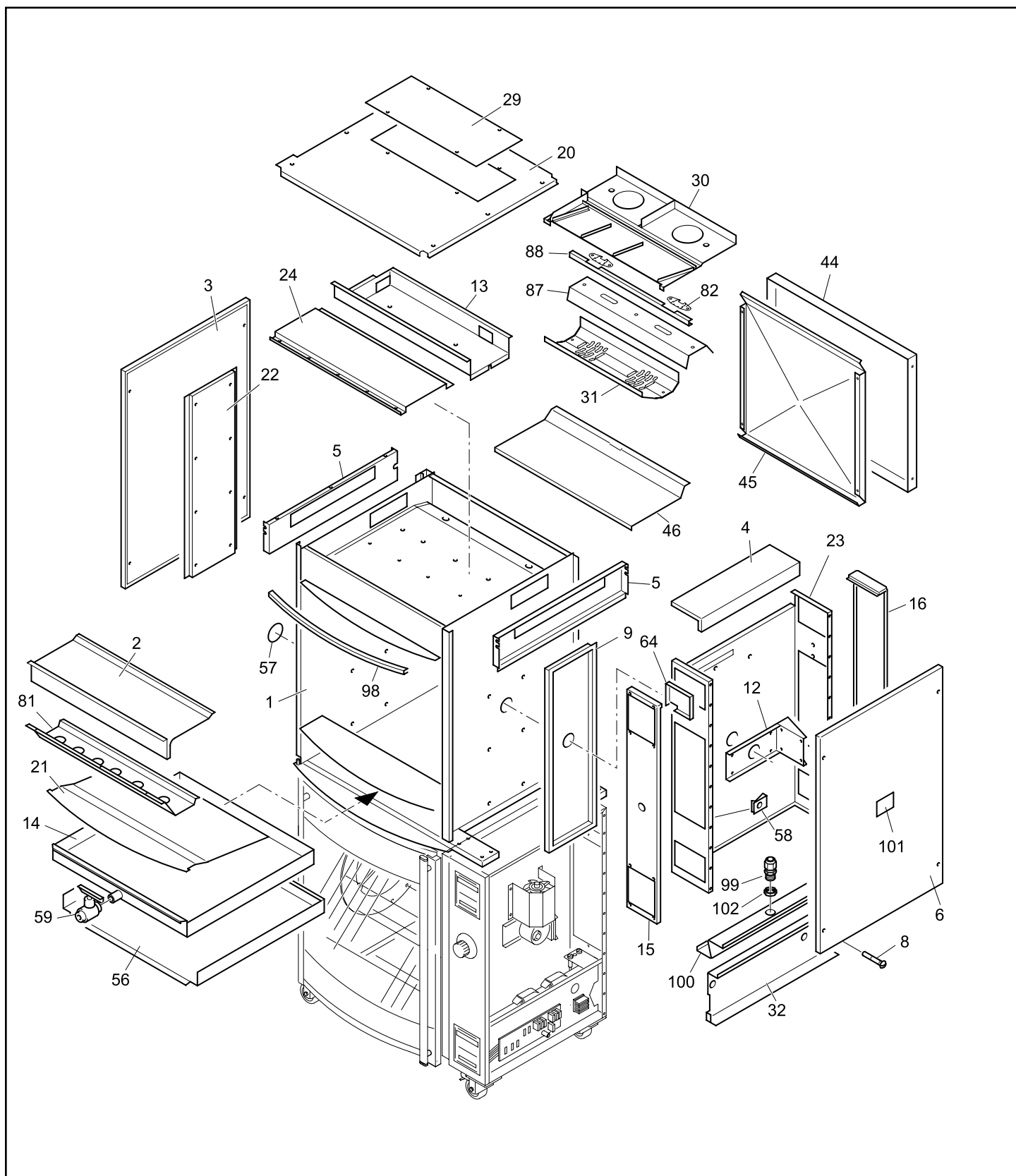


Heating element	Rotisserie doesn't reach adjusted temperature	Wiring.  Element malfunction.	Check the wiring. Check the power on the element.  Check the current with AC current tester. See table on page 20.
	Duration of grilling time is too long	Wiring.  Element malfunction.	Check the wiring.  Check the current with AC current tester. See table on page 20.
PT-sensor	Temperature indication on display runs up very fast and over the maximum of 250°C / 482°F 290°C / 550°F in 20 seconds)	No connection between wires.	Check the wiring. Check thin wire on sensor.
	Temperature indication on display doesn't go up and stays on Prh	Full contact between wires of sensor.	Check the wiring.
	Rotisserie doesn't reach adjusted temperature	Short circuit in sensor.  Malfunction sensor.	Measure resistance of sensor. This is zero.  Measure resistance of sensor with a thermometer probe next to the sensor. See table in service manual.
	Temperature indication on display runs up too fast.	Sensor not in right position.  Malfunction sensor.	Check position of sensor.  Measure resistance of sensor. See table on page 20.
Safety thermostat	Contactor doesn't come in after starting of program	Wiring.  Thermostat malfunction.	Check the wiring.  Check if the thermostat is making contact.
	Contactor switches off before reaching the adjusted temperature in program	Thermostat malfunction.  Thermostat probe not in right position.	Check if the thermostat is turned fully clockwise (contact closed).  Check the position of the thermostat probe.
Main switch	No power to all, or some oven controls	Wiring.  Malfunction of the cams on the switch.	Check the wiring on the switch.  Check the cams.
	Switch comes in, but one or more functions from the switch don't work.	Contacts burned.	Check the wiring. Check the power on all contacts.  Check the contacts of the switch.

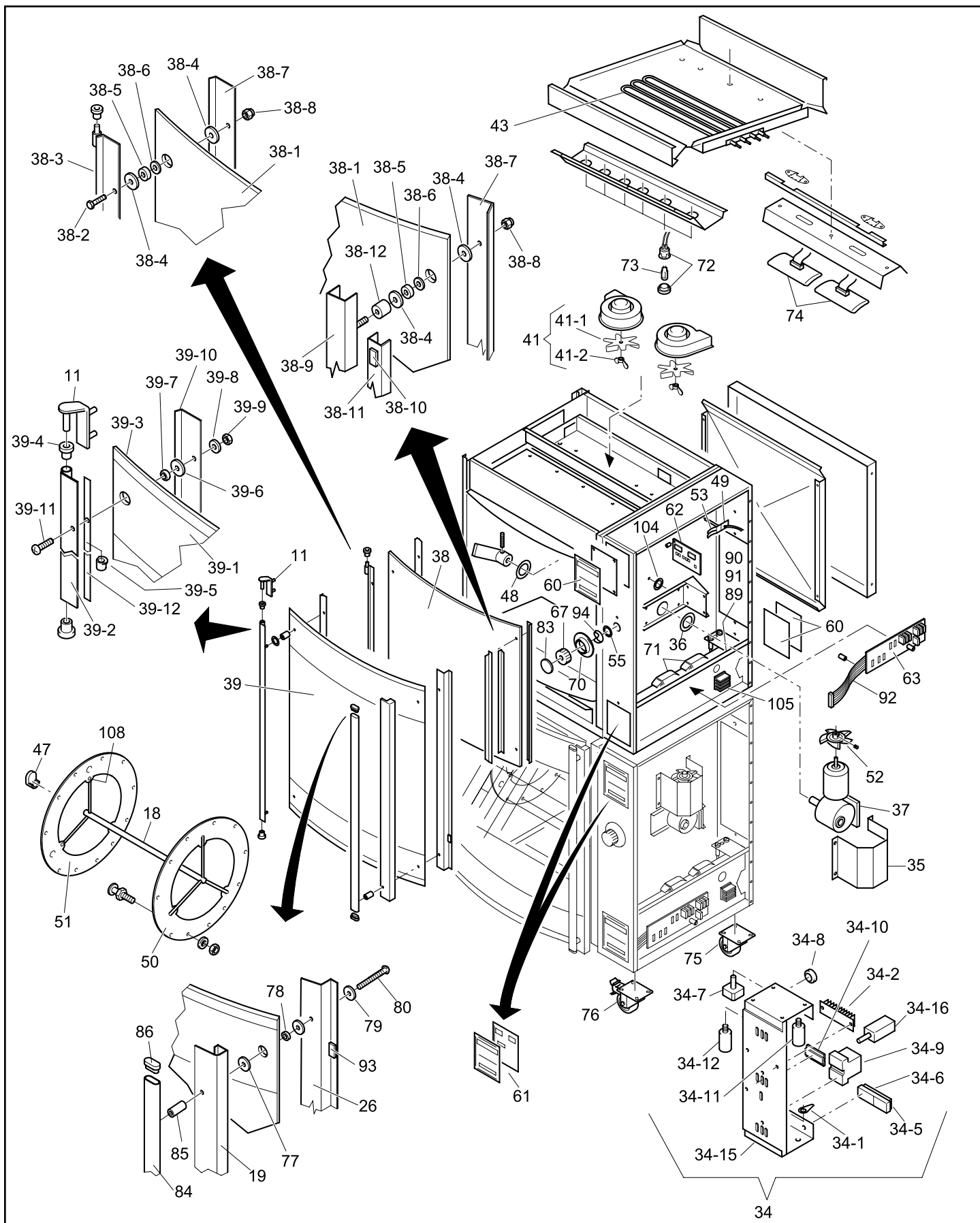
Contactor	Contactor doesn't come in	<p>Wiring.</p> <p>Coil malfunction.</p> <p>Contact burned.</p> <p>Thermostat malfunction.</p>	<p>Check the wiring.</p> <p>Check resistance of the coil. This should be 525Ω.</p> <p>Check the contacts of the contactor.</p> <p>Check the thermostat (see safety thermostat).</p>
Keypad on display	No possibility to make a program	<p>Permanent contact of one, or more, membrane keys.</p> <p>Some keys don't function.</p>	<p>Check key functions.</p> <p>Check functions of keypad. See table on page 21.</p> <p>Check grey flat cable connection.</p> <p>Check green flat cable connection.</p> <p>Check functions after connecting a new grey flat cable.</p>
Display and power board	<p>No illumination on display</p> <p>Some function doesn't work or stay activated.</p> <p>No possibility to make a program</p>	<p>Wiring.</p> <p>Fuse burned.</p> <p>Flat cable.</p> <p>Display malfunction.</p> <p>Power board malfunction.</p> <p>Relay malfunction.</p> <p>Power board malfunction.</p>	<p>Check the wiring.</p> <p>Check the power on the board.</p> <p>Check the 63 mA fuse on the power board. Replacing of fuse for 100 mA is permitted.</p> <p>Check grey flat cable connection.</p> <p>Check functions after connecting a new grey flat cable.</p> <p>Check power to display on connector J1 of power board. 5V DC between pin 30 and 32 or between 31 and 33.</p> <p>Check functions after connecting a new display board.</p> <p>Check functions after connecting a new power board.</p> <p>Check relay on function with problem.</p> <p>Check functions after connecting a new power board.</p>
Capacitor	Drive motor or blower don't work	<p>Wiring.</p> <p>Capacitor malfunction.</p>	<p>Check the wiring.</p> <p>Check function after connecting a new capacitor.</p> <p>Checking of capacitor: Discharge capacitor with screwdriver. Set meter on MΩ and connect the pins of the meter on contacts, value runs up. Change the pins on contacts, value runs up again. This means the capacitor is OK.</p>

Drive motor	Motor doesn't run	Wiring.	Check the wiring. Check the power to the motor.
		Coil malfunction	Check resistance of the coils. Between whiteA and white wire 234Ω Between whiteA and brown wire 117Ω Between white and brown wire 117Ω
		Reduction gearbox.	Check if reduction gearbox is blocked.
		Relay on power board.	Check power on relay X14.
	Motor runs after starting it up by hand	Capacitor malfunction.	Check capacitor (see capacitor) or connect new capacitor.
	Motor stops during process and comes in again after a period of time	Coil overheated, thermistor switches off (105°C – 221°F).	Check position of fan blade. Air is sucked up over the motor. Check cooling circuit of motor. Check if rotisserie is close to another heat source. Measure temperature motor during process.
	Fuse F1 or F2 burned	Short circuit in coil to earth	Check insulation value of coil with Megger on 500V. Minimum value is 0.5 MΩ.
Blower	Blower doesn't run	Wiring.	Check the wiring. Check the power on the blower.
		Coil malfunction.	Check resistance of the coils. Between blue and brown wire = 310Ω Between blue and black wire = 190Ω Between brown and black wire = 500Ω
		Relay on power board.	Check power on relay X9 and X10
	Blower runs after starting it up by hand	Capacitor malfunction.	Check capacitor (see capacitor) Or connect new capacitor.
	Blower stops during process and comes in again after a period of time	Coil overheated, thermistor switches off (150°C – 302°F).	Check cooling circuit of blower. Check if rotisserie is close to another heat source. Measure temperature blower during process.
	Temperature indication on display runs up very fast (180°C - 355°F after 5 minutes)	Blower doesn't turn and heat stays in top of cavity	Check the wiring. Check the power on the blower.
	Fuse F1 or F2 burned	Short circuit in coil to earth	Check insulation value of coil with a Megger on 500V. Minimum value is 0.5 MΩ.

## EXPLODED VIEWS & PARTLISTS



Item	Partnumber	Qt.	Description
2	9170525	2	Heat shield
3	9170419	2	Side panel, left
4	9174005	1	Cover, removable
5	9170421	4	Side panel, top
6	9170531	2	Side panel, right
8	4288322	16	Screw M5 x 10, SS socket button head
9	9170425	2	Reinforcement, side plate, right
12	9170444	2	Support, gear motor
13	9170650	2	Mounting plate, blower
14	9170451	2	Drawer
15	9170544	2	Operation panel
16	9174031	2	Panel, customer side
20	9174004	2	Cap, top
21	9172202	2	Bottom plate, coated
22	9174013	2	Reinforcement, side plate, left
23	9174015	2	Cover plate, machine components
24	9174016	2	Ceiling
29	9174099	2	Cover, removable
30	9170526	2	Cover plate, blower
31	9174627	2	Air guide plate
32	9174034	2	Mounting plate
44	9170505	2	Back wall, outside
45	9174640	2	Back wall, inside
46	9172232	2	Bottom plate, coated
56	9170481	1	Separation plate
57	9112430	8	Washer, insulation support
58	9172053	16	Nut
59	9171008	2	Drain-tap with handle
64	9174146	2	Protection plate, electric components
81	9174642	2	Lamp holder
82	9170651	4	Cover plate
87	9174641	2	Reflector
88	9174643	2	Bracket, reflector
98	9172116	2	Sealing profile, Silicon L= 71 cm
99	9171013	2	Strain relief PG21
100	9174140	2	Spark catcher
101	9123410	1	Indication plate
102	0167519	2	Connector



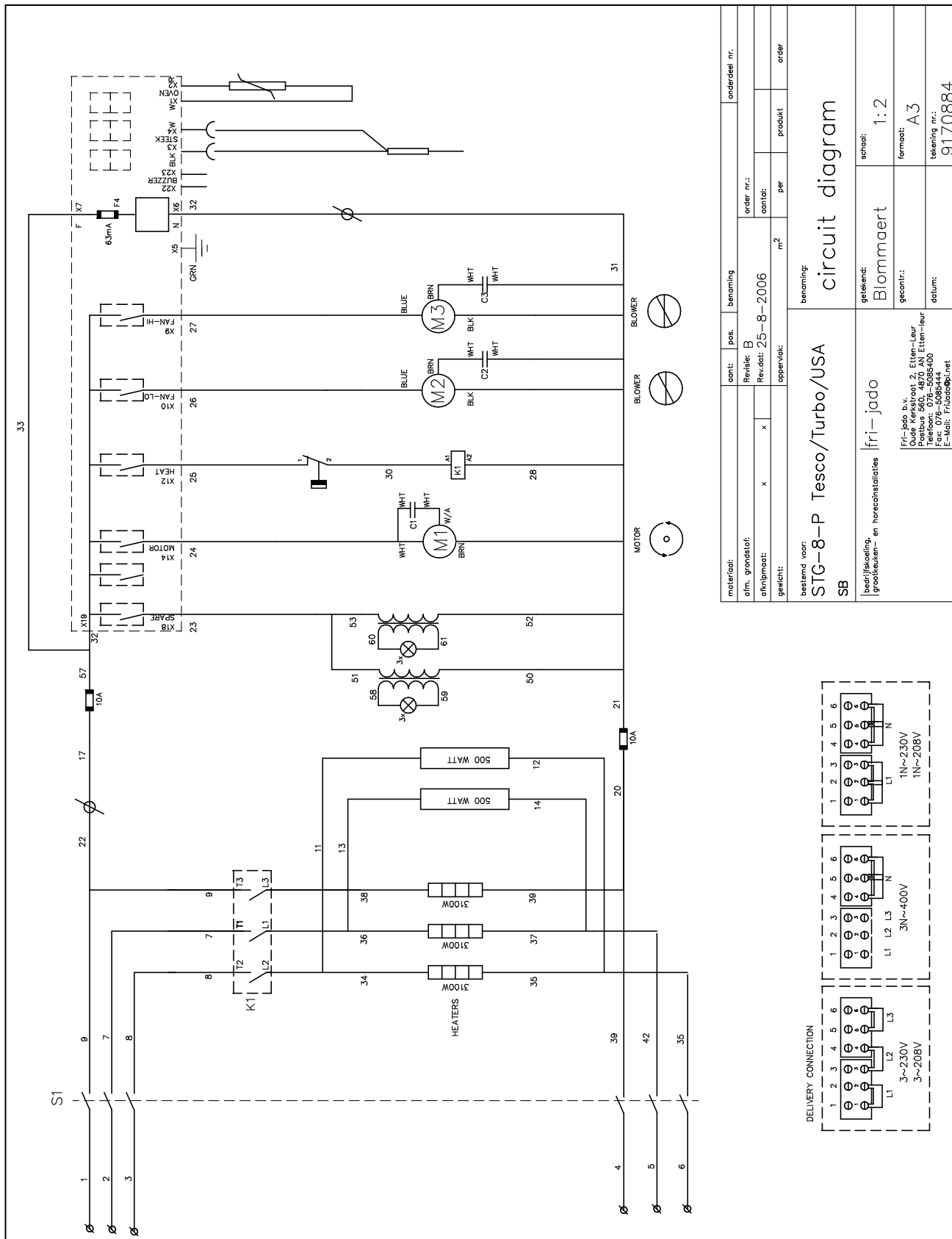
HR8+HR8 P - Components

Item	Partnumber	Qt.	Description
11	9170427	2	Hinge, left
18	9172205	2	Rotor shaft, ass., coated
19	9170536	2	Profile, magnet
26	9174631	2	Fastening, door handle
34	9173051	2	Electric panel, ass.
34-1	0166555	2	Earth symbol
34-2	8033659	2	Connecting block, 9-pol.
34-5	9044564	2	Connecting block, 1,2,3
34-6	9044572	2	Connecting block, 4,5,6
34-7	9070531	2	Thermostat 50-250 °C
34-8	9070840	4	Grommet
34-9	3500069	2	Contacto
34-10	9077088	2	Bracket, magnetic switch
34-11	9077101	2	Capacitor 2,5 mF
34-12	9110030	4	Capacitor 1,5 mF
34-15	9174106	2	Electric panel
34-16	9172328	2	Main switch
35	9174161	2	Protection support
36	9110797	2	Sealring, drive bearing
37	9173004	2	Gearmotor, complete with drive arm
38	9179862	2	Door inside, ass.
38-1	9172001	2	Glass, inner
38-2	0211520	4	Bolt M5 x 12 ss hexagon head
38-3	9170423	2	Hinge profile
38-4	9174162	16	Seal ring
38-5	9174163	8	Distance ring, inner glass 3 mm
38-6	3704516	8	Distance ring, inner glass 2 mm
38-7	9174029	4	Cover profile, inner glass
38-8	4285408	8	Nut, M5
38-9	9174632	2	Holder, magnet
38-10	9070141	20	Magnet block
38-11	9174633	2	Profile
38-12	9172291	4	Spacing pin
39	9172115	2	Glass black, outer incl. hinge profile
39-1	9172019	2	Glass black, outer
39-2	9170535	2	Hinge profile
39-3	9172079	4	Protection profile
39-4	9172054	4	Brass bearing 8 mm
39-5	9172122	4	Brass bearing 8 mm, adjusted
39-6	9174162	4	Seal ring
39-7	4289966	4	Distance ring, outerglass
39-8	4311110	4	Washer
39-9	0144359	4	Nut, self locking M5
39-10	9174022	2	Mounting profile, hinge side
39-11	4288321	4	Screw M5 x 16, SS socket button head
39-12	4302141	2	Tape 20 x 0,8
41	9140027	4	Blower
41-1	9141934	4	Fan blade

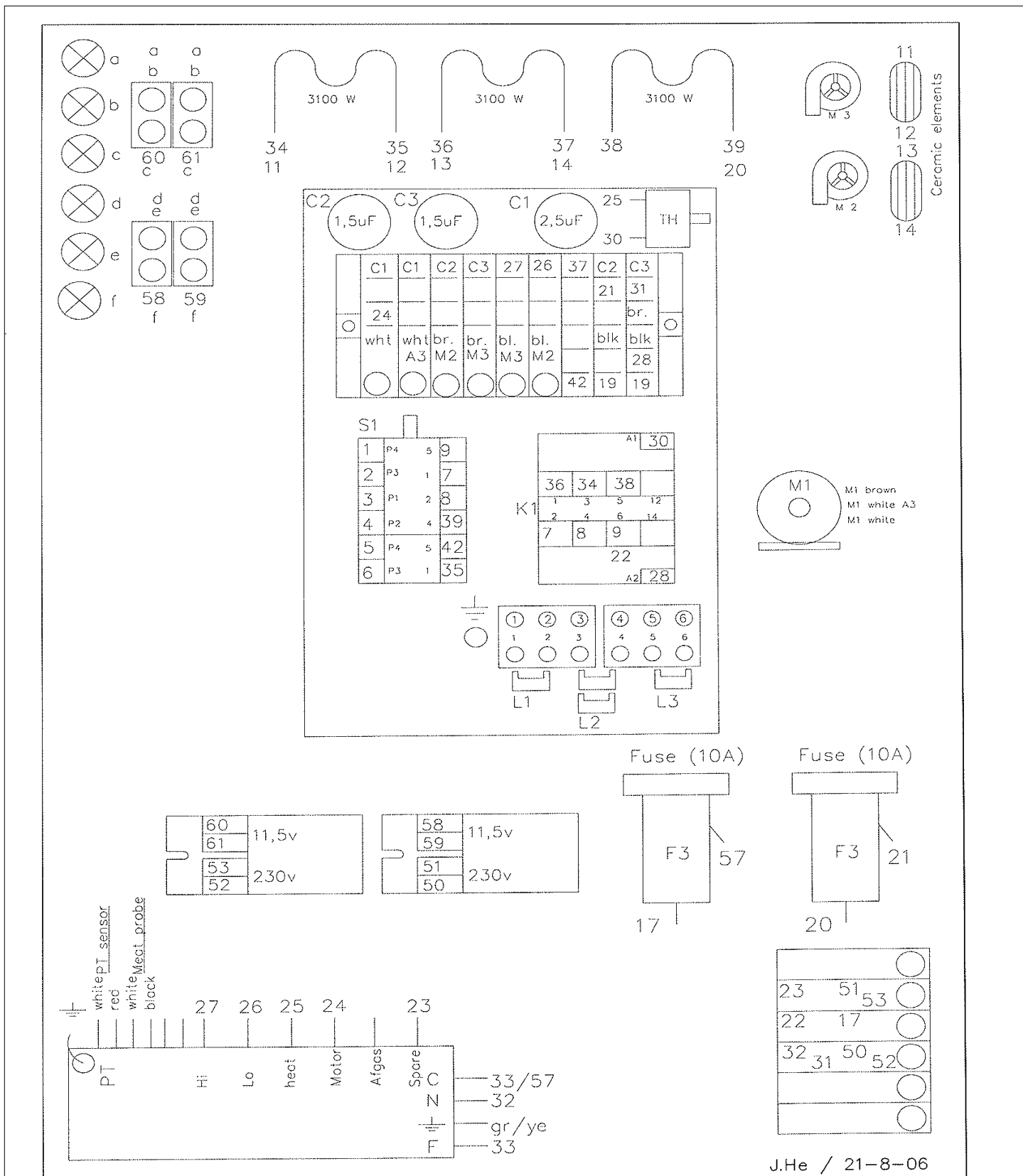
Item	Partnumber	Qt.	Description
41-2	9073150	4	Wingnut, left hand threaded
43	9110909	6	Heating element 208 V, 3100 W
47	9172063	2	Steel bearing, 14 mm
48	9073131	2	Sealing ring
49	9070094	2	Temperature sensor
50	9172259	2	Rotor disc, right, coated, incl. support pins
51	9172258	2	Rotor disc, left, coated, incl. support pins
52	2000072	2	Fanblade, gearmotor
53	9044140	2	Sensor cable
55	9110802	2	Plug, TG
60	9172043	4	Name plate Hobart, foil + backplate
61	9172045	2	Keypad + backplate
62	9110242	2	Display
63	9110276	2	Power section
67	9172021	2	Control knob, grey
70	9172037	2	Back plate, main switch 0-1
71	3701026	4	Transformer, Halogen lamps
72	9171078	12	Lamp holder, incl. glass
73	3701052	12	Lamp 20W, 12V/300°C
74	9044650	4	Heating element, Ceramic, 500 W
75	9172065	2	Castor without brake
76	9172066	2	Castor with brake
77	9174162	8	Seal ring
78	4289966	4	Distance ring, outerglass
79	9174680	4	Washer
80	4288320	4	Screw M5x45 SS
83	9172049	2	Cover, knob
84	9174131	2	Door handle
85	9172300	4	Spacing pin
86	9171014	4	Plug, door handle
89	9174398	2	Fuse holder plate
90	9044205	4	Fuse holder
91	9110250	4	Fuse SC10, 10A
92	9172113	2	Flatcable, 34-pol. (P)
93	9070141	24	Magnet block
94	9172052	2	Locking ring, knob
104	9171018	6	Plug
105	9151010	2	Connecting block
108	9172252	24	Tensilock bolt M5x10, mushroom head, coated



## ELECTRICAL DIAGRAMS



HR8 P - Circuit Diagram



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