MOFFAT

ROTEL II “MINI” & “SLIMLINE”

SERVICE MANUAL

Revision 1/F3655

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⚠ **WARNING:** **ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

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CONTENTS

This manual is designed to take a more in depth look at the Moffat Rotel II “Mini” and “Slimline” ovens for the purpose of making the units more understandable to service people.

There are settings explained in this manual that should never require to be adjusted, but for completeness and those special cases where these settings are required to change, this manual gives a full explanation as to how, and what effects will result.

IMPORTANT: MAKING ALTERATIONS MAY VOID WARRANTIES AND APPROVALS.

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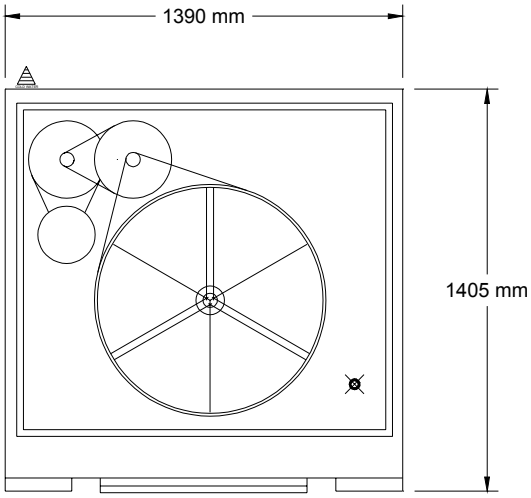
1. SPECIFICATIONS

1.1 ROTEL “MINI”

3-DECK 16” OVENS - R12/16



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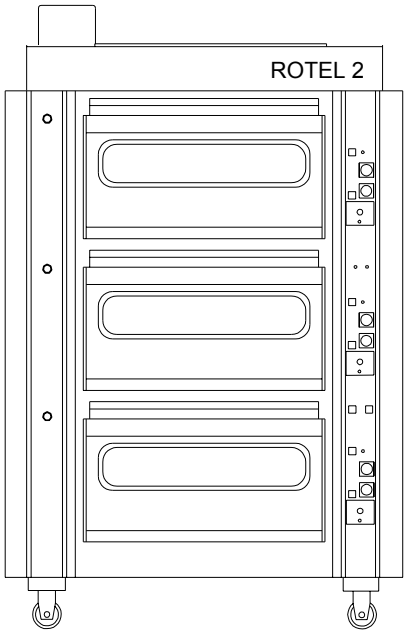

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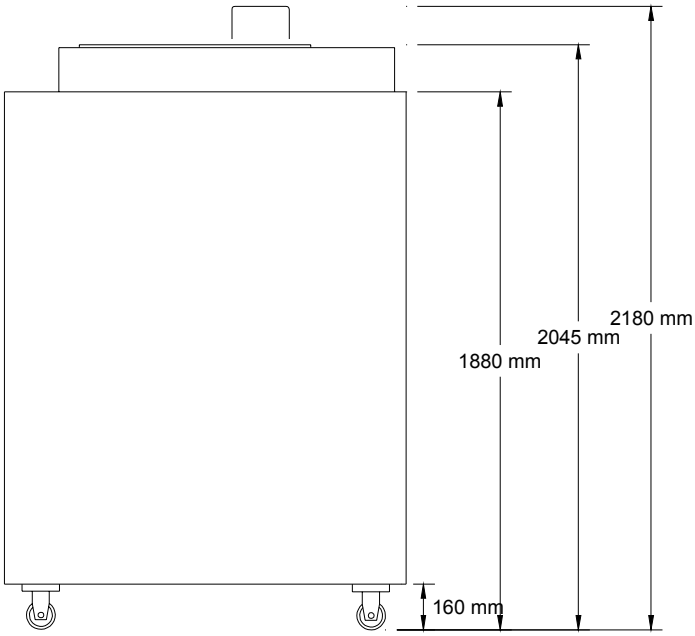

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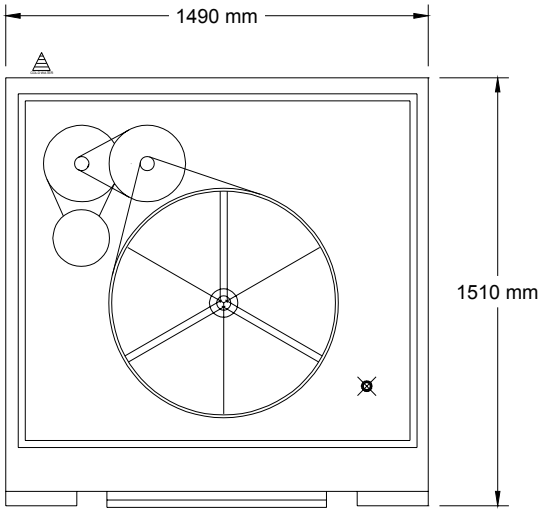
3-DECK 18” OVENS - R10/18 and R12/18



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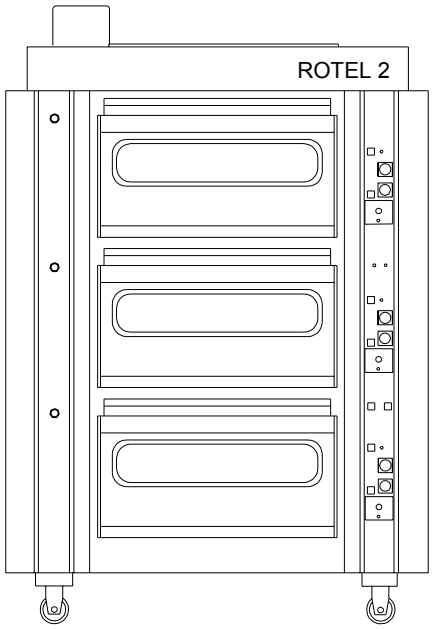

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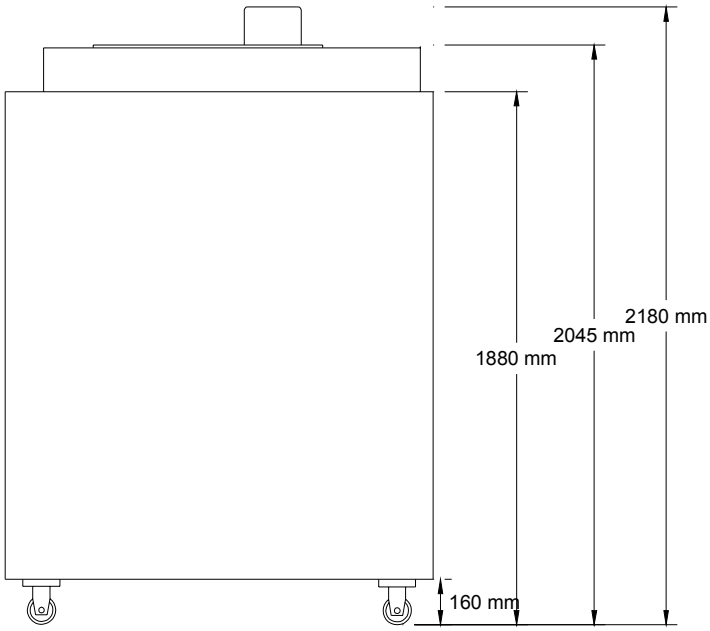

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ROTEL "MINI" SPECIFICATIONS

R6

Configuration of oven:	2 deck (1 split, 1 standard)
Electrical requirements:	3P+N+E, 415VAC, 19.5kW, 50Hz, 27.2A/phase
Capacity:	6 baking trays (16" x 29" or 18" x 29")
Dimensions (16" oven):	1390mm W x 1405mm D x 2195mm H
Dimensions (18" oven):	1490mm W x 1510mm D x 2195mm H
Crown heights (standard decks):	210mm
Crown heights (split decks):	150mm (per split)

R8

Configuration of oven:	2 deck (2 split)
Electrical requirements:	3P+N+E, 415VAC, 20kW, 50Hz, 27.9A/phase
Capacity:	8 baking trays (16" x 29" or 18" x 29")
Dimensions (16" oven):	1390mm W x 1405mm D x 2175mm H
Dimensions (18" oven):	1490mm W x 1510mm D x 2175mm H
Crown heights:	150mm (per split)

R10

Configuration of oven:	3 deck (2 split, 1 standard)
Electrical requirements:	3P+N+E, 415VAC, 28kW, 50Hz, 39A/phase
Weight:	900kg (16"); 940kg (18")
Capacity:	10 baking trays (16" x 29" or 18" x 29")
Dimensions (16" oven):	1390mm W x 1405mm D x 2060mm H
Dimensions (18" oven):	1490mm W x 1510mm D x 2095mm H
Crown heights (standard decks):	210mm
Crown heights (split decks):	150mm (per split)

R12

Configuration of oven:	3 deck (3 split)
Electrical requirements:	3P+N+E, 415VAC, 30kW, 50Hz, 42A/phase
Weight:	980kg (16"); 1020kg (18")
Capacity:	12 baking trays (16" x 29" or 18" x 29")
Dimensions (16" oven):	1390mm W x 1405mm D x 2180mm H
Dimensions (18" oven):	1490mm W x 1510mm D x 2180mm H
Crown heights (split decks):	Top deck top split: 200mm Top deck lower split: 115mm Mid and bottom deck per split: 150mm

MR4D2S

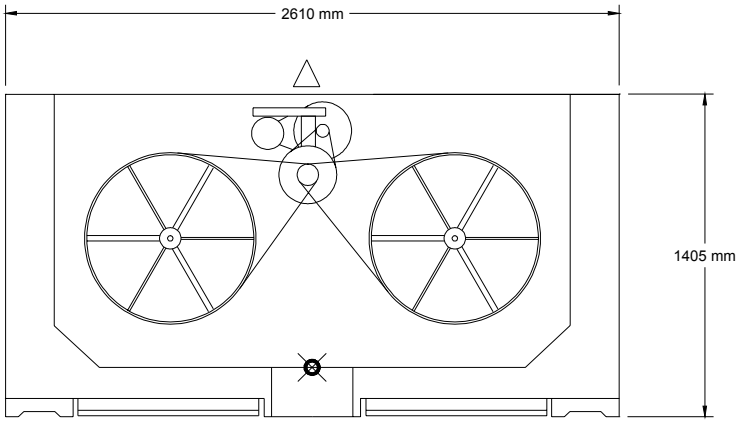
Configuration of oven:	4 deck (2 split, 2 standard)
Electrical requirements:	3P+N+E, 415VAC, 33.5kW, 50Hz, 46.7A/phase
Capacity:	12 baking trays (16” x 29” or 18” x 29”)
Dimensions (16” oven):	1390mm W x 1405mm D x 2450mm H
Dimensions (18” oven):	1490mm W x 1510mm D x 2450mm H
Crown heights (standard decks):	210mm
Crown heights (split decks):	150mm (per split)

MR4D

Configuration of oven:	4 deck (4 standard)
Electrical requirements:	3P+N+E, 415VAC, 30kW, 50Hz, 42A/phase
Capacity:	8 baking trays (16” x 29” or 18” x 29”)
Dimensions (16” oven):	1390mm W x 1405mm D x 2210mm H
Dimensions (18” oven):	1490mm W x 1510mm D x 2210mm H
Crown heights:	210mm

1.2 ROTEL “SLIMLINE”

3-DECK 16” OVENS - R24/16



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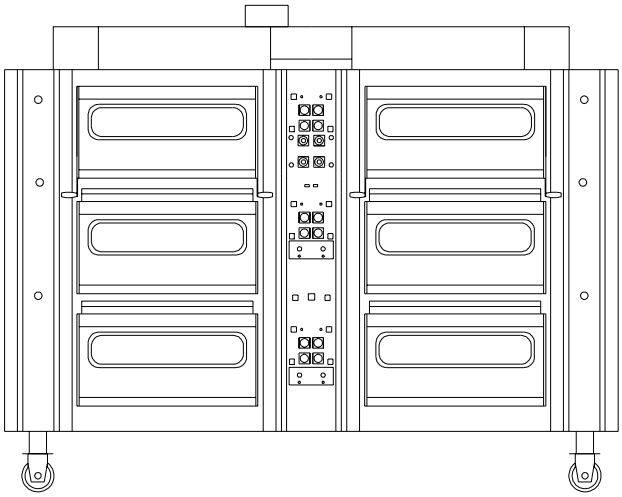

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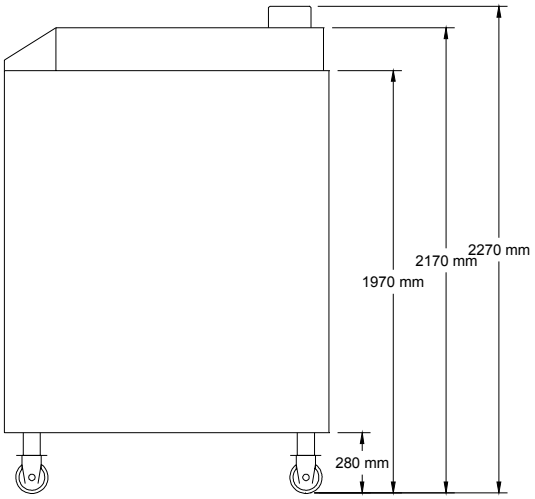

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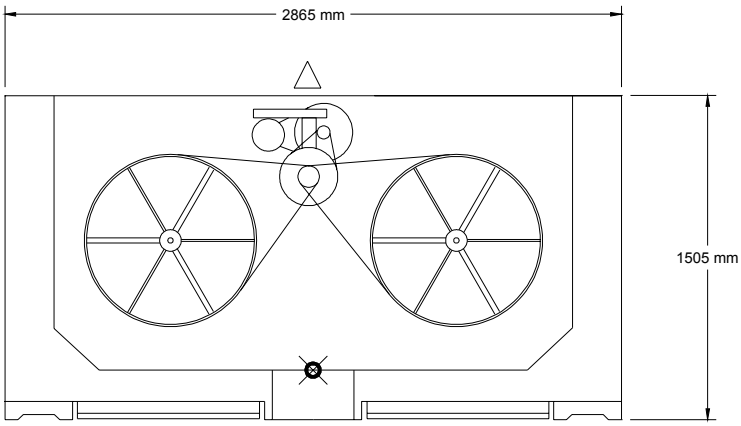
3-DECK 18” OVENS - R24/18



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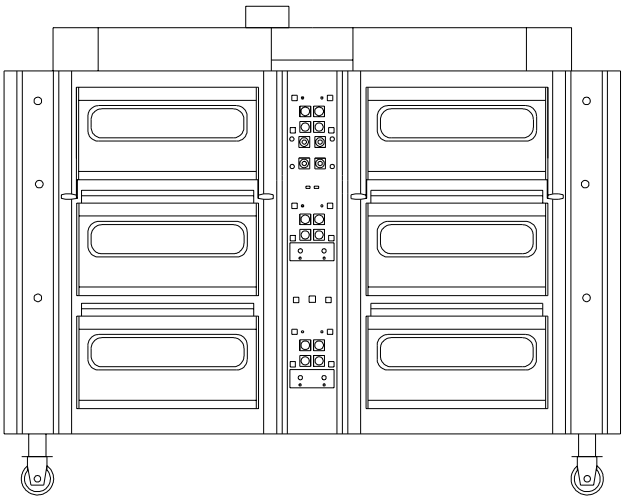

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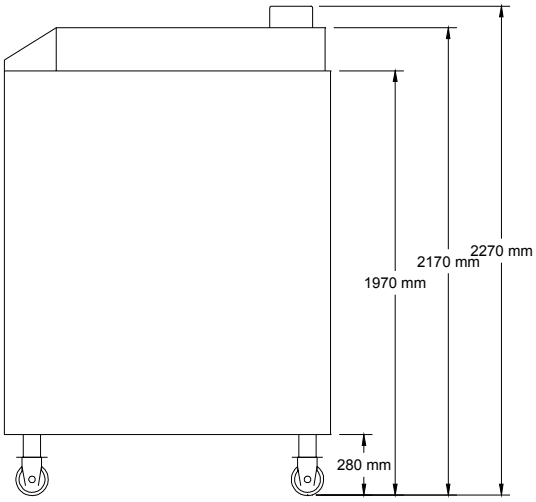

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ROTEL "SLIMLINE" SPECIFICATIONS

R16

Configuration of oven:	2 deck (2 split)
Electrical requirements:	3P+N+E, 415VAC, 40kW, 50Hz, 55.7A/phase
Capacity:	16 baking trays (16" x 29" or 18" x 29")
Dimensions (16" oven):	2610mm W x 1405mm D x 2260mm H
Dimensions (18" oven):	2865mm W x 1505mm D x 2260mm H
Crown heights:	150mm (per split)

SR3D1S

Configuration of oven:	3 deck (1 split, 2 standard)
Electrical requirements:	3P+N+E, 415VAC, 45kW, 50Hz, 62.7A/phase
Capacity:	16 baking trays (16" x 29" or 18" x 29")
Dimensions (16" oven):	2610mm W x 1405mm D x 2210mm H
Dimensions (18" oven):	2865mm W x 1505mm D x 2210mm H
Crown heights (standard decks):	210mm
Crown heights (split decks):	150mm (per split)

SR3D2S

Configuration of oven:	3 deck (2 split, 1 standard)
Electrical requirements:	3P+N+E, 415VAC, 52kW, 50Hz, 72.4A/phase
Weight:	1400kg (16"); 1800kg (18")
Capacity:	20 baking trays (16" x 29" or 18" x 29")
Dimensions (16" oven):	2610mm W x 1405mm D x 2275mm H
Dimensions (18" oven):	2865mm W x 1505mm D x 2275mm H
Crown heights (standard decks):	210mm
Crown heights (split decks):	150mm (per split)

R24

Configuration of oven:	3 deck (3 split)
Electrical requirements:	3P+N+E, 415VAC, 60kW, 50Hz, 84A/phase
Weight:	1960kg (16"); 2360kg (18")
Capacity:	24 baking trays (16" x 29" or 18" x 29")
Dimensions (16" oven):	2610mm W x 1405mm D x 2270mm H
Dimensions (18" oven):	2865mm W x 1505mm D x 2270mm H
Crown heights (split decks):	Top deck top split: 200mm Top deck lower split: 115mm Mid and bottom deck per split: 150mm

SR4D2S

Configuration of oven:	4 deck (2 split, 2 standard)
Electrical requirements:	3P+N+E, 415VAC, 65kW, 50Hz, 90.5A/phase
Weight:	1900kg (16”); 2040kg (18”)
Capacity:	24 baking trays (16” x 29” or 18” x 29”)
Dimensions (16” oven):	2610mm W x 1405mm D x 2500mm H
Dimensions (18” oven):	2865mm W x 1505mm D x 2500mm H
Crown heights (standard decks):	210mm
Crown heights (split decks):	150mm (per split)

2. INSTALLATION

⚠ **WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

It is most important that this machine is installed correctly and that the operation is correct before use. Installation must comply with local electrical, health and safety requirements.

2.1 BEFORE CONNECTION

- Remove all packing.
- Check equipment and parts for damage. Report any damage immediately to carrier and distributor.
- Position oven in its allocated working space and lock the castors to prevent any movement of the machine.

2.2 INSTALLATION PROCEDURE

- The Rotel oven is to be connected to a 400-415 volt AC 3 Phase, Neutral and Earth electrical supply.
- An all-pole electrical isolation switch should be mounted on the wall and be fully accessible to the operator.

  1.5m above the floor is a recommended height.
- Connect the water filter supplied to a position on the bakery wall in close proximity to the connection point (left hand front) of the oven. An isolating tap should be positioned close to the filter on the in-feed side, so that the water can be turned off when the filter needs cleaning.
- The water pressure should be set such that a ten litre bucket (downstream of the filter) is filled in approximately 25 seconds.
- Should any difficulties be found in correctly setting up the Rotel oven, further information can be found in the Service section of this manual.

2.3 COMMISSIONING

The following commissioning checks must be carried out before the Rotel oven is handed over for use, to ensure that the unit operates correctly and the operator(s) understand correct operation.

- Ensure that the unit is level. Any adjustment required can be made by adjusting the height of the castors.
- Check that all electrical connections to the unit are tight.
- Turn the unit on and check that the current draw on each element is correct.
- When the oven has pre-heated test the steam operation of each deck.
- Each operator must be instructed in the correct usage of the machine.

Please consult the supplied operator's manual for full operation and safety information.

2.4 RATING PLATE LOCATION

The rating plate for the Rotel ovens is located at the bottom front right hand corner of the oven (below the bottom door).

Figure 2.1

3. OPERATION

NOTE: A full user's operation manual is supplied with the product and can be used for further referencing of installation, operation and service.

3.1 OPERATING THE OVENS

- Turn the power on. There is only one power switch on the oven which activates all baking chambers.
- Turn the lights on. There is only one light switch on the oven which activates all oven chamber lights.
- Ensure that the water is turned on. Check that the water is switched on at the mains connection, and at any isolation valves adjacent to the water filter or oven inlet.
- Ensure flue dampers are closed. Do not leave flue dampers open during the entire baking cycle as it can cause excessive heat loss (use flue dampers at specific times for specific product results).
- Set all temperature controllers on 230°C. If possible set all baking chambers at the same temperature and heat balance.

NOTE: There should be no more than 30°C temperature variation between each deck.

- Set all heat balance controls which control both top and bottom oven heat, to ensure an even and uniform colour and bakeout of the products.

NOTE: Temperature controllers maintain constant temperature for overall bake. Heat balance controls maintain even and uniform bakeout of products.

- Load products into ovens. Load quickly and sequentially to product variety and/or workplace specifications. Keep turntable rotating - stop only when necessary and resume as soon as possible.
- Set bake timer then press start button. Do this immediately on each deck as soon as the deck is loaded.
- Set steam timer. Press, then release button. Pressing the steam button on the control panel produces steam for a particular oven chamber. The neon light will illuminate for the period of time that the water is being injected.

  Steam only at the beginning of a bake cycle and do not steam again for the entire period of the bake.

NOTE: The steam control is electronically barred from use for a period after initial steam to avoid accidental use and flooding of the oven generators. Steam on the baked products in the early stages of baking helps to produce a thin, shiny crust on the outer surface of the products.

It may be noticed that steam will escape from around the door if the steam damper is closed. This is due to the fact that steam causes expansion of the air in the oven chamber. This expansion cannot be held in so steam will escape through the oven seals. There is no cause for concern and it will be found that opening the flue damper slightly will reduce the volume of steam escaping.

- Check product quality mid bake (optional). Visually monitor products in oven for colour.
- Baking timer alarm will ring after preset time. Press start/stop button to stop. The timer will then automatically reset to preset time.
- Open the oven doors and visually check for product colour. If products are too light, leave in oven for additional appropriate time.
- Remove bread tins/trays from the oven.
- Depan bread on knockout bench or racks.
- Continue further baking in oven or use the following sequence to shutdown.

- **Shutdown**
  - Check no product is left in oven.
  - Turn the temperature and heat balance to minimum settings
  - Ensure all timers are off.
  - Close all dampers.
  - Press 'stop' rotation.
  - Turn lights off.
  - Turn power off.

3.2 EXPLANATION OF CONTROL SYSTEM

General

Turning the main power switch “on” supplies power to the temperature control and timer circuits on each deck. Turning the light switch “on” turns the lights on for all decks.

Heating

The heating on each deck is individually controlled by an electronic thermostat, comprising of a temperature controller and a thermocouple probe in each oven chamber. When the temperature in a deck is below the temperature set on the relevant temperature controller, power is supplied from terminal 5 of the temperature controller to the bottom element heating contactor and mid/top element heating contactor on the gear plate.

On standard decks the power to the top elements is routed from the contactor through an energy regulator located on the control panel which can be set to vary the intensity of top heat in the baking chamber. The power to the bottom element contactor coil is routed through another energy regulator on the control panel which can be set to vary the intensity of bottom heat.

On split decks, the power to the top elements is routed from the heating contactor through an energy regulator on the control panel to vary the amount of top heat in the baking chamber.

Bake Timer

Each deck also has a bake timer which can be set from 2 minutes to 60 minutes. The timer can be set to the desired time and will commence counting when the time start/stop switch is pressed. When the set time has elapsed the buzzer will sound and the indicator light beside the timer will illuminate to indicate which deck has reached “time-up”. The buzzer will continue until the timer start/stop switch is pressed, after which the timer will automatically reset to the preset time.

Steaming - Rotel Mini

Each deck has the option of adding steam at a time determined by the user. When the steam switch is pressed the water solenoid is activated, injecting water into troughs beneath the oven bottom elements for a period of seven seconds (set on a timer located on the gear plate inside the unit). Following this is a seven minute “drying time”, during which no further steam can be added. This prevents flooding of the oven. Also, during this drying time the oven top and middle elements will not operate.

The following figures show the contact positions of the steam timers and relays in the three phases of steaming.

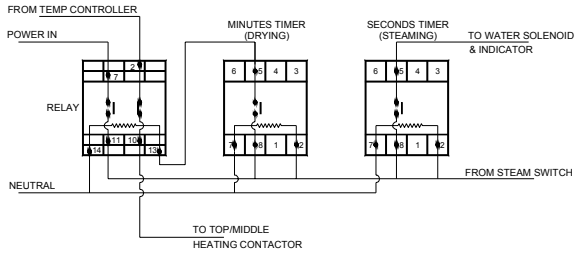

Figure 3.1 - Rotel “Mini” Not Steaming

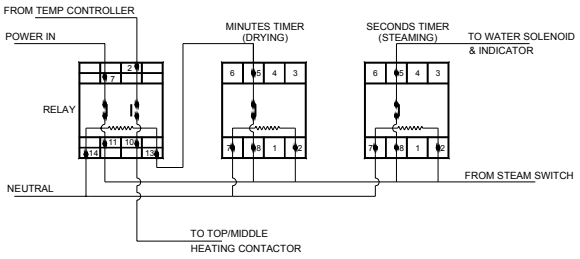

Figure 3.2 - Rotel “Mini” While Steaming (7 sec)

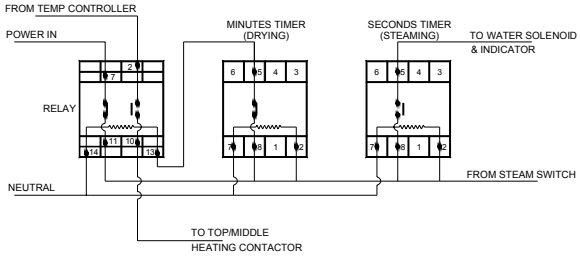

Figure 3.3 - Rotel “Mini” While Drying (7 min)

Steaming - Rotel Slimline

Each deck has the option of adding steam at a time determined by the user. When the steam switch is pressed the water solenoid is activated, injecting water into troughs beneath the oven bottom elements. Following this is a “drying time”, during which no further steam can be added. This prevents flooding of the oven. Also, during this drying time the oven top and middle elements will not operate.

The steam injection and drying times of all decks are controlled by one PLC controller, located at the bottom of the electrical gear plate.

A 24VDC output from the PLC is wired through

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each of the steam switches on the control panel. When a steam switch is pressed, this voltage is supplied back to the inputs on the PLC, which in turn supplies a 240V output to the water solenoid of the relevant deck for the steaming period.

The PLC also breaks the power supply of the top element contactor (standard decks) or top/middle element contactor (split decks), therefore preventing these elements from activating during the “drying time”.

The steaming time can be adjusted by the user via the steam time rotary selection knob on the front of the control panel. The following tables detail the PLC controlled steam and drying times at the four different settings.

Standard decks

Steam selector setting	Steam time	Drying time
1	2 seconds	2 minutes
2	3 seconds	3 minutes
3	4 seconds	4 minutes
4	5 seconds	5 minutes

Split decks

Steam selector setting	Steam time	Drying time
1	3 seconds	3 minutes
2	4 seconds	4 minutes
3	5 seconds	5 minutes
4	6 seconds	6 minutes

Should further adjustment be necessary, refer to the calibration / adjustment section of this manual.

4. MAINTENANCE

4.1 CLEANING

WARNING: ALWAYS TURN THE POWER SUPPLY OFF BEFORE CLEANING.

IMPORTANT: THIS UNIT IS NOT WATER PROOF.
DO NOT USE A WATER JET SPRAY TO CLEAN INTERIOR OR EXTERIOR OF THIS UNIT.

- Wipe over control panels and switches with a lint-free rag.
- Wipe down all external surfaces with a dry cloth.
- Weekly - use an approved stainless steel cleaner on external surfaces.
- Do not clean the internal baking chamber of the oven while it is still hot.
- The standard turntable has a removable section to facilitate cleaning.
- Take great care when cleaning around the internal oven elements.
- Use a long-handled cleaning broom to brush out crumbs. Work from top to bottom.
- Use a long-handled scraper to scrape surfaces.
- Clean door glass with stainless steel wool.

4.2 ROUTINE PROCEDURES

WEEKLY

- **Doors**

  Clean door glass.

MONTHLY

- **Doors**

  Check hinges for free working and check springs for tension. Replace springs if tension is too weak to hold door closed correctly.

- **Oven light**

  Clean glass.

THREE MONTHLY

- **Door seals / springs**

  Check for seals showing signs of leakage. If there is a problem check door alignment and hinge spring tension. Correct any alignment or replace any springs that are weak.

- **Vee belts**

  Check and tension if necessary. Check for alignment and wear. Vee belts should not operate too taut as this can cause damage to belts and bearings

  A drive should be tensioned until it will just drive under full load without slipping. Worn belts should be replaced immediately. Vee belts must not be cut, joined or applied with belt dressing of any kind.

SIX MONTHLY

- **Electric motor**

  Clean off dust, dirt and oil with a dry cloth.

- **Steam lines**

  Check for correct spray, remove and clean if necessary.

- **Drive shaft top and bottom bearings**

  Apply grease gun to grease nipple and give 5-6 strokes of the gun. Do not give more as this could damage seals or bearings.

  (It is recommended that a high temperature grease used).

- **Water filter**

  Clean water filter.

5. TROUBLE SHOOTING

⚠ **WARNING:** **ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

FAULT	POSSIBLE CAUSE	REMEDY
THE OVEN DOES NOT OPERATE / START (NO HEAT AND DECKS DO NOT TURN)	The mains switch, circuit breaker, or fuses are “off” at the power board in the bakery, or within the oven	Turn on.
NO HEAT IN ANY OVEN CHAMBERS (DECKS TURNING)	The main switch on the oven is “off” or temperature controls are set at zero. The 6A control circuit breaker is tripped. The main switch is faulty.	Turn on and set to desired temperature. Check for fault and reset. Replace. **(Refer service section 6.3.1)**
OVENS HEAT UP BUT DECKS DO NOT TURN	The deck rotation isolation switch is OFF. Motor overload tripped. The drive motor is faulty. Drive belt on top of oven is loose or broken.	Press green button to reset. Check for fault and reset. Replace. **(Refer service section 6.5.4)** Adjust / replace.
NO TEMPERATURE CONTROL IN ONE DECK ONLY	Temperature controller not set correctly. Temperature controller faulty. **(Refer fault diagnosis 6.1.1)** Heating contactor faulty. **(Refer fault diagnosis 6.1.1)** Thermocouple faulty.	Set controller correctly (refer to operator’s handbook). Replace. **(Refer service section 6.3.5)** Replace. **(Refer service section 6.4.1)** Replace. **(Refer service section 6.3.6)**
UNEVEN HEAT IN ONE DECK	Energy regulators (simmerstats) not set correctly. 20A circuit breaker (on oven gear plate) tripped. Energy regulators (simmerstats) faulty. **(Refer fault diagnosis 6.1.2)** Heating contactor faulty. **(Refer fault diagnosis 6.1.2)** Element faulty / blown. **(Refer fault diagnosis 6.1.2)**	Set correctly (refer operator’s manual). Check for fault and reset. Replace. **(Refer service section 6.3.3)** Replace. **(Refer service section 6.4.1)** Replace. **(Refer service section 6.5.1)**

FAULT	POSSIBLE CAUSE	REMEDY
TIMER / BUZZER DOES NOT OPERATE	Timer not set correctly. Time start/stop button faulty. **(Refer fault diagnosis 6.1.3)** Timer faulty. **(Refer fault diagnosis 6.1.3)** Buzzer faulty.	Set correctly (refer operator's manual). Replace. **(Refer service section 6.3.1)** Replace. **(Refer service section 6.3.4)** Replace. **(Refer service section 6.3.7)**
NO STEAM IN ANY DECK	Water turned off at mains supply. **Rotel Slimline only:** No power to PLC controller, or PLC faulty.	Turn on water. Check and replace if necessary.
NO STEAM IN ONE DECK ONLY	Steam switch faulty. **(Refer fault diagnosis 6.1.4)** Water solenoid faulty. **(Refer fault diagnosis 6.1.4)** Bottom element contactor faulty. **(Refer fault diagnosis 6.1.4)** Steam tube blocked. **Rotel Mini only:** Steam timer / relay faulty. **(Refer fault diagnosis 6.1.4)** **Rotel Slimline only:** PLC controller faulty.	Replace. **(Refer service section 6.3.1)** Replace. **(Refer service section 6.4.5)** Replace. **(Refer service section 6.4.1)** Clean or replace steamer tube. Check and replace if necessary. **(Refer service section 6.4.2 / 6.4.3)** Replace. **(Refer service section 6.4.4)**
POOR STEAMING	Water pressure to low. Steam tube nozzles blocked.	Increase water pressure if possible. Otherwise steam injection time may have to be increased. Clean or replace steamer tubes.
NO OVEN LIGHTS OPERATE	2A lighting circuit breaker tripped. Light switch faulty. Light transformer faulty.	Check for fault and reset. Replace. **(Refer service section 6.3.1)** Replace. **(Refer service section 6.4.6)**
ONE OVEN LIGHT DOES NOT OPERATE.	Oven lamp blown. Oven lampholder faulty.	Replace. **(Refer service section 6.4.7)** Replace. **(Refer service section 6.4.7)**
TIME-UP INDICATOR LIGHTS UP ON INCORRECT DECK	Diode on bake timer faulty.	Replace diode (Type 1000V, IN4007).

6. SERVICE PROCEDURES

WARNING: **ENSURE POWER SUPPLY IS SWITCHED OFF BEFORE SERVICING.**

WARNING: **ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

SECTION **PAGE NO.**

6.1 FAULT DIAGNOSIS

6.1.1 NO TEMPERATURE CONTROL IN ONE DECK ONLY

Temperature controller faulty

Check that the thermocouple is connected to terminals 1 and 2 of the temperature controller.

Check that there is 230-240V supply across terminals 7 and 8 of the temperature controller.

Set the temperature controller to a temperature above that in the oven (eg in a cool oven set to 200°C). Check that there is voltage at terminal 4 (if not then check wiring to temperature controller). With the temperature controller calling for heat there should be voltage switched to terminal 5 of the controller. If not then the temperature controller is faulty - replace.

Set the temperature controller to a temperature below that in the oven (eg in a cool oven set to 10°C). There should not be voltage switched to terminal 5 of the controller. If there is then the temperature controller is faulty - replace.

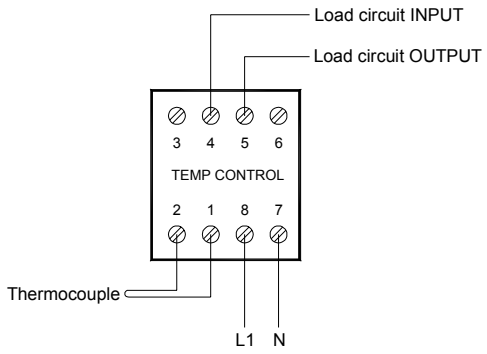


Figure 6.1.1

Heating contactor faulty

Check for voltage on the input side of the contactor poles (terminals L1 to L3). If no voltage then check wiring.

With the temperature controller turned off, check that the contactor is not energised. Check that there is no voltage on the output side of the contactor poles (terminals T1 to T3). If there is voltage when the contactor is not energised then the contactor is faulty - replace.

With the temperature controller turned on (calling for heat) check that the contactor energises. If not check for voltage across the contactor coil (terminals A1-A2). If no voltage then check wiring to contactor coil. If there is voltage and the contactor does not energise then the contactor is faulty - replace. If the contactor does energise then check for voltage on the output side of the contactor poles (terminals T1 to T3). If there is no voltage with the contactor energised then the contactor is faulty - replace.

NOTE: When heating, the bottom element contactor on standard decks will cycle on/off as controlled by the bottom heat simmerstat.

6.1.2 UNEVEN HEAT IN ONE DECK

Energy regulator (simmerstat) faulty

Check that the energy regulator is wired correctly (see figure below). With power supplied to the energy regulator (terminal P1), voltage should cycle on/off at terminal 2, at a frequency determined by the setting of the energy regulator. If there is no voltage, or if the voltage doesn't cycle, then the energy regulator is faulty - replace.

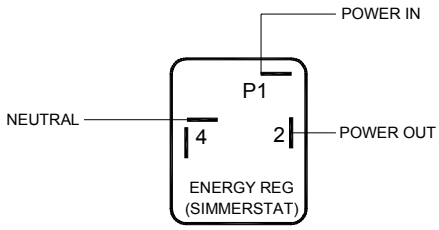


Figure 6.1.2

Heating contactor faulty

Refer to section 6.1.1 - heating contactor faulty.

Heating element faulty / blown

Either;

Disconnect the leads and check the resistance of the suspect element. The correct resistances are given in the table below.

Or;

With the heating contactor on (calling for heat) check the current draw of the suspect element. The correct current draws are given below.

Element	Resistance (per element)	Current draw (per element)
Top (all decks)	75 Ω	3.2 A
Middle long (split decks only)	37 Ω	6.5 A
Middle short (split decks only)	77 Ω	3.1 A
Bottom long (all decks)	37 Ω	6.5 A
Bottom short (all decks)	77 Ω	3.1 A

6.1.3 TIMER / BUZZER DOES NOT OPERATE

Time start/stop switch faulty

Check that there is voltage to the time start stop switch. If not then check wiring.

With the switch latched in the on (I) position, check for voltage out of the time start/stop switch. If there is no voltage then the switch is faulty - replace.

Timer faulty

Set the timer for two minutes and press the timer start/stop switch. Check that power is being supplied from the start/stop switch to terminals 2 and 7 on the timer. When the timer reaches time up power should switch to terminals 6, 3 and 1. If not then the timer is faulty - replace.

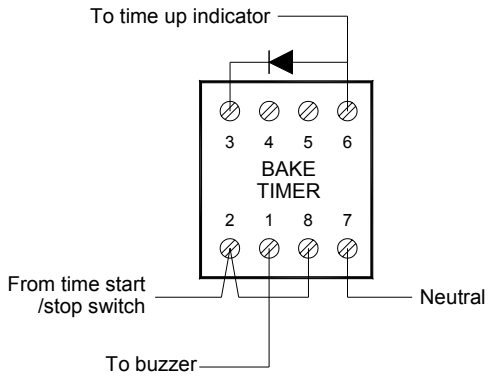


Figure 6.1.3

6.1.4 NO STEAM IN ONE DECK ONLY

Steam switch faulty

Check that there is voltage to the steam switch. If not then check wiring.

With the switch held in the on (I) position (the switch is momentary), check for voltage out of the steam switch. If there is no voltage then the switch is faulty - replace.

Water solenoid faulty

Initiate a steam sequence by pressing the steam button. Check for voltage at the water solenoid. If there is no voltage then check wiring to the solenoid. If there is voltage but the solenoid does not energise then it is faulty - replace.

Bottom element contactor faulty

Refer to section 6.1.1 - heating contactor faulty.

Steam timer/relay faulty (Rotel "Mini" only)

Check that the operation of the steam timers and relay is as per the diagrams below.

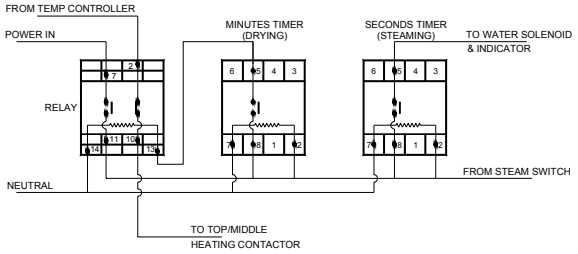


Figure 6.1.4 - "Mini" Not Steaming

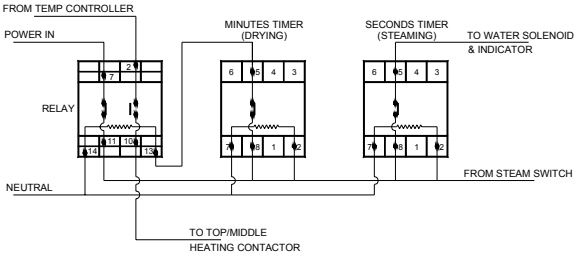


Figure 6.1.5 - "Mini" While Steaming (7 sec)

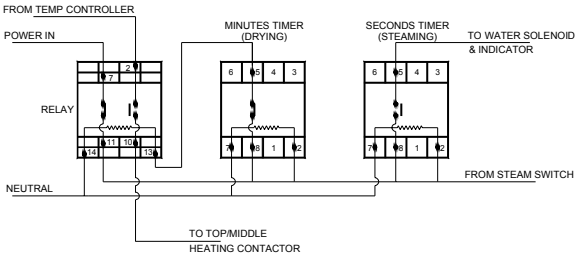


Figure 6.1.6 - "Mini" While Drying (7 min)

RETURN TO MAIN MENU

6.2 ACCESS

6.2.1 ROTEL "MINI" CONTROL PANEL / GEAR PLATE

1) Remove the screw at the bottom of the front right hand side panel.
2) Lift the panel and slide away from the oven at the bottom.
3) The panel can now be removed to give access to the rear of the control panel and the electrical gear plate.

Figure 6.2.1

6.2.2 "SLIMLINE" CONTROL PANEL / GEAR PLATE

1) Remove the two screws along the right hand edge of the control panel.
2) The control panel should now hinge open along its left hand edge, allowing access to the rear of the control panel and the electrical gear plate.

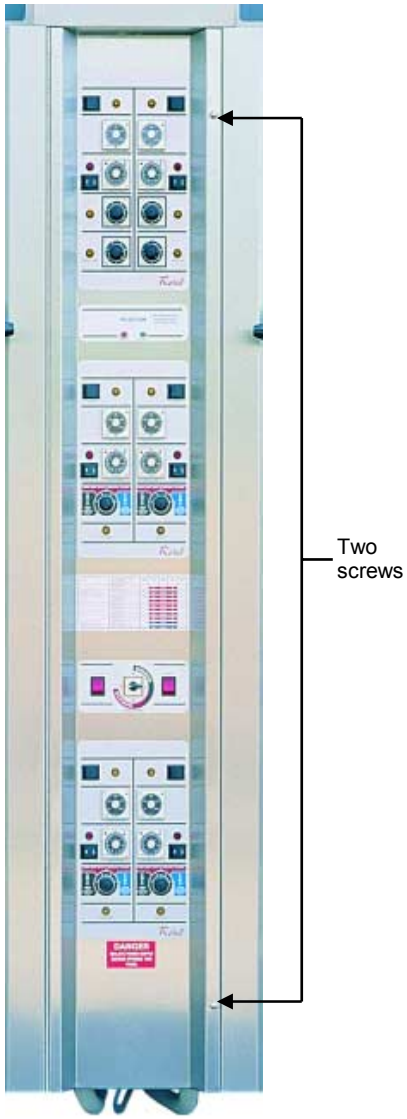


Figure 6.2.2

RETURN TO MAIN MENU

6.3 REPLACEMENT - CONTROL PANEL

6.3.1 ROCKER SWITCH (POWER/LIGHTS/ TIMER/STEAM)

1) Gain access to the rear of the control panel (refer 6.2.1 / 6.2.2).
2) Remove the wires from the rear of the toggle switch, noting their positions.
3) Push the switch through the front of the control panel.

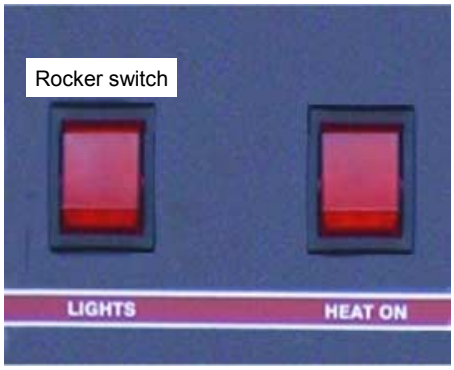


Figure 6.3.1

4) Replace switch and reassemble in reverse order.

6.3.2 INDICATOR

1) Gain access to the rear of the control panel (refer 6.2.1 / 6.2.2).
2) Remove the wires from the rear of the indicator, noting their positions.
3) Undo the nut securing the indicator and push through the front of the control panel.
4) Replace and reassemble.

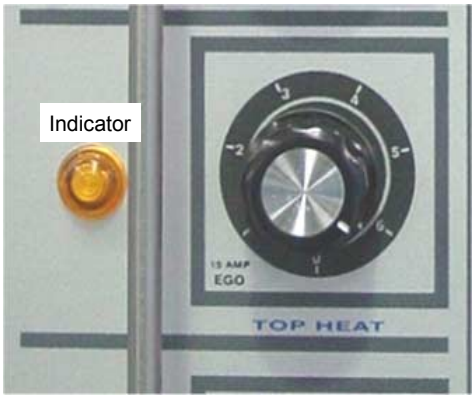


Figure 6.3.2

6.3.3 ENERGY REGULATOR

1) Gain access to the rear of the control panel (refer 6.2.1 / 6.2.2).
2) Remove the wires from the rear of the energy regulator, noting their positions.
3) Remove the knob from the front of the energy regulator.
4) Remove the energy regulator from the control panel and replace.

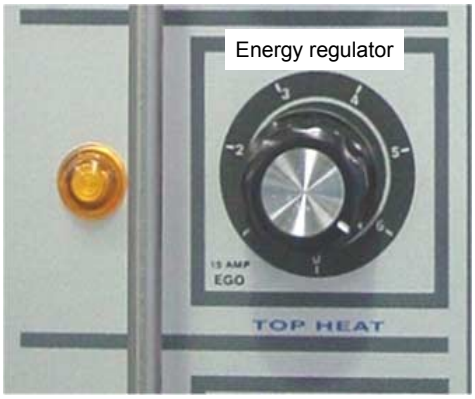


Figure 6.3.3

6.3.4 BAKE TIMER

1) Remove the bake timer by sliding it away from the control panel out of its base.
2) Fit a new timer in its place. Ensure that the range is set to 60min.

   Check the operation of the timer.

(**NOTE:** Timer is type Omron H2C).

Figure 6.3.4

RETURN TO MAIN MENU

6.3.5 TEMPERATURE CONTROLLER

1) Remove the temperature controller by sliding it away from the control panel out of its base.
2) Fit a new temperature controller in its place.

   Check the operation of the temperature controller.

(**NOTE:** Temperature controller is type Omron E5C2).

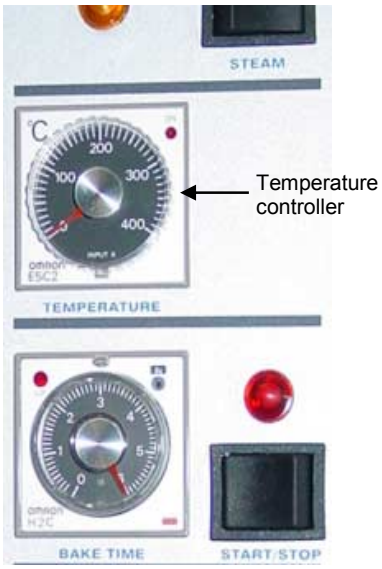


Figure 6.3.5

6.3.6 THERMOCOUPLE

1) Gain access to the rear of the control panel (refer 6.2.1 / 6.2.2).
2) Disconnect the thermocouple from the back of the temperature controller.
3) **"Mini":** Remove the RH side panels.
   "Slimline": Remove the centre rear panel.
4) Prise out the silicone from the thermocouple entry tube at the rear outside of the oven, and remove the thermocouple.

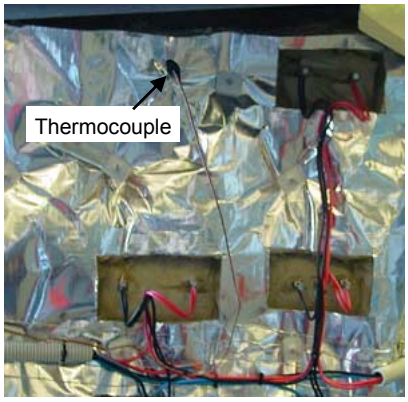


Figure 6.3.6

5) Replace the thermocouple and reassemble. Ensure that the thermocouple tube is sealed with high temperature silicone sealant.

NOTE: **"Mini":** The thermocouple is routed around the right hand side of the oven.

"Slimline: The thermocouple is routed underneath the centre of the ovens.

6.3.7 BUZZER

1) Gain access to the rear of the control panel (refer 6.2.1 / 6.2.2).
2) Unscrew the wires from buzzer (mounted half-way down control panel).
3) Remove the buzzer from the mounting bracket.
4) Fit new buzzer to mounting bracket, and attach wires.

Figure 6.3.7

6.4 REPLACEMENT - GEAR PLATE

6.4.1 HEATING CONTACTOR

1) Gain access to the gear plate (refer 6.2.1 / 6.2.2).
2) Remove the wires from the faulty contactor, noting their positions.
3) Remove the contactor from the gear plate.
4) Replace and reassemble in reverse order.

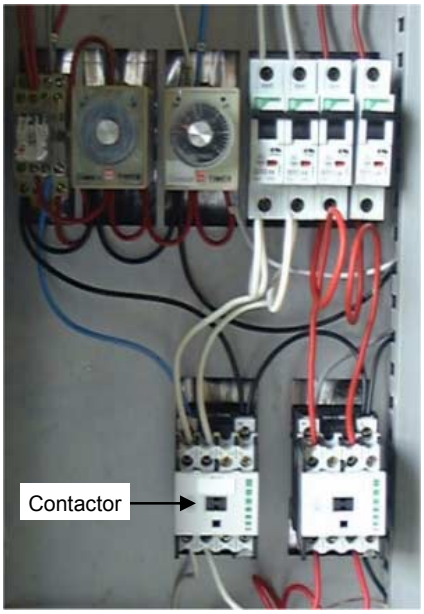


Figure 6.4.1

6.4.2 STEAM RELAY ("MINI" ONLY)

1) Gain access to the gear plate (refer 6.2.1 / 6.2.2).
2) Pull the faulty relay from its base.
3) Replace the relay by pushing a new one into the existing base.

Figure 6.4.2

6.4.3 STEAM TIMER ("MINI" ONLY)

1) Gain access to the gear plate (refer 6.2.1 / 6.2.2).
2) Pull the faulty timer from its base.
3) Replace the timer by pushing a new one into the existing base.

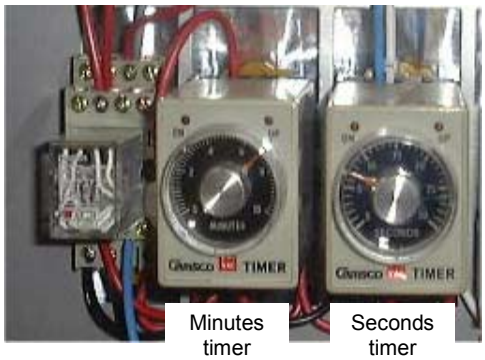


Figure 6.4.3

6.4.4 STEAM PLC ("SLIMLINE" ONLY)

NOTE: Older Slimline models fitted with a steam card must be upgraded to a PLC. Refer to Appendix A in this manual for instructions.

1) Gain access to the gear plate (refer 6.2.1 / 6.2.2).
2) Remove the PLC cover.
3) Transfer all wires to the new PLC. Refer to the wiring chart (section 7.2.5) if clarification on wiring positions is required.
4) Remove the old PLC from the gear plate, and replace with the new PLC.

Figure 6.4.4

6.4.5 WATER SOLENOID

Ensure that the water is switched off at the mains supply before commencing.

1) **"Mini":** Remove the left hand side front panel.

   "Slimline": Remove the relevant side front panel (LH side for left hand oven, RH side for right hand oven).

2) Remove the electrical cover from the valve and disconnect wires from the solenoid terminals.

3) Undo the hose clips securing the water inlet and outlet hoses to the valve.

Figure 6.4.5

4) Unscrew the solenoid from its mounting bracket.

5) Replace and reassemble in reverse order.

6.4.6 LIGHTING TRANSFORMER

1) **"Mini":** Remove the left hand side front panel.

   "Slimline": Remove the relevant side front panel (LH side for left hand oven, RH side for right hand oven).

2) Remove the transformer from the mounting bracket.

3) Transfer the wires to the new transformer and secure to the mounting bracket.

Figure 6.4.6

6.4.7 OVEN LAMP / LAMPHOLDER

1) **"Mini":** Remove the left hand side front panel.

   "Slimline": Remove the relevant side front panel (LH side for left hand oven, RH side for right hand oven).

2) Remove the oven lamp from the holder and replace if necessary.

3) If the lampholder is to be replaced then unscrew it from the mounting bracket, remove the wires from the connector block and replace.

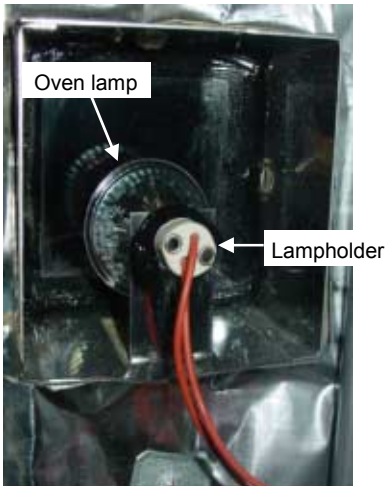


Figure 6.4.7

6.5 REPLACEMENT - HEAD GEAR / TURNTABLES / ELEMENTS

6.5.1 HEATING ELEMENT

1) Remove the relevant outer panels to gain access to the faulty element terminals.
2) Undo the wires from the element terminals, and unscrew the nuts securing the element to the oven wall.

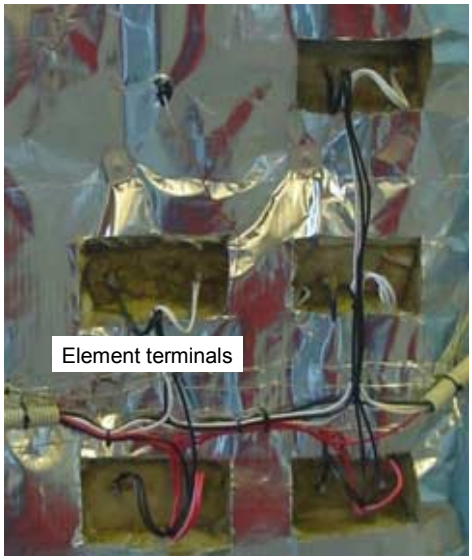


Figure 6.5.1

3) Unfasten the element from the front of the oven.

   Top elements: Bend back securing tabs.

   Mid elements (split decks): Undo bolt.

   Bottom elements: Undo bolt securing steam cover and remove.

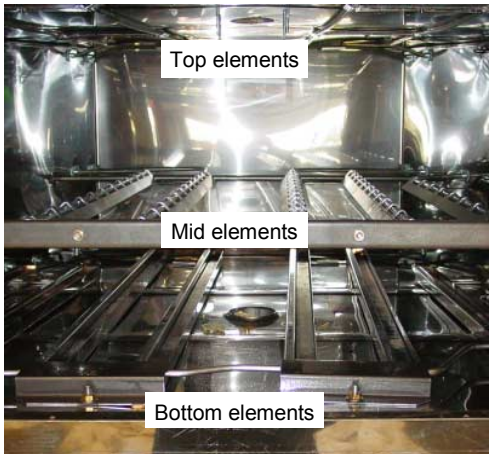


Figure 6.5.2

4) Withdraw the element assembly from the oven.
5) Replace and reassemble in reverse order.

6.5.2 TURNTABLE CARBON BUSH

In order to replace a turntable carbon bush, the drive shaft must be removed. It is therefore necessary to have at least 2 metres clearance above the oven for removal of the shaft.

It is recommended that all carbon bushes are replaced at the same time.

1) Starting in the bottom deck, lift the carousel/ turntable assembly (approximately 10mm) to take the weight off the collar below the carbon bush, and support with blocks.
2) Loosen the two grubscrews locking the collar to the shaft.
3) Mark the collar and shaft (to aid in re-assembly).
4) Remove the split pin securing the collar to the drive shaft. The shaft may have to be rotated to allow this.

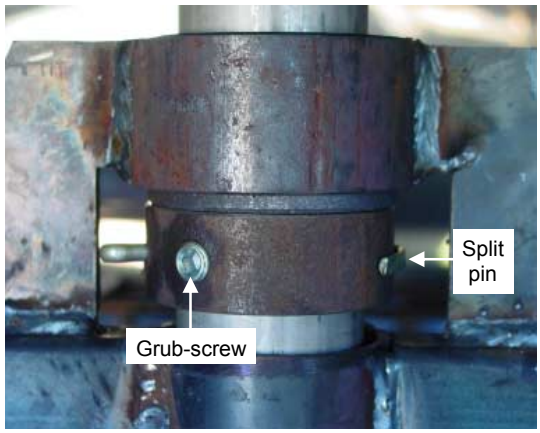


Figure 6.5.3

5) Repeat steps (1) to (4) for each deck.
6) Remove the drive belt from the rack drive wheel on top of the oven.
7) Undo the two bolts securing the rack drive wheel to the drive shaft. Remove the drive wheel.

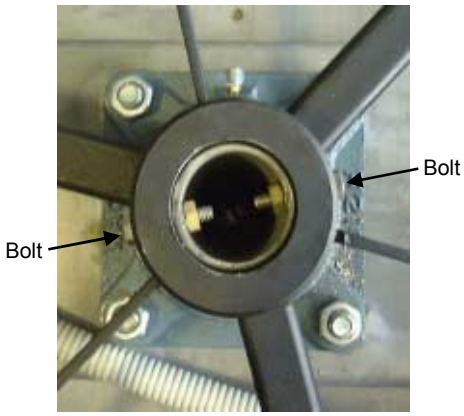


Figure 6.5.4

RETURN TO MAIN MENU

8) Check whether there are grub screws locking the bottom bearing to the drive shaft underneath the oven. If there is then loosen this grub screw.

9) The shaft can now be lifted out through the top of the ovens.

10) Remove the carousel/turntable assembly and collar from each deck, numbering them (1 for top deck, 2 for second deck etc) to aid re-assembly.

11) Bend out the retaining tabs holding the bottom carbon bush of each carousel / turntable in place.

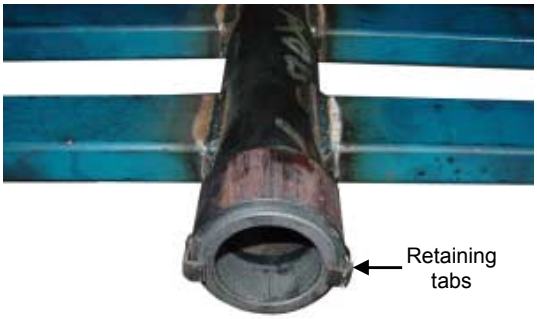


Figure 6.5.5

12) Chisel out the old carbon bushes from each carousel/turntable assembly.

13) Fit new carbon bushes to the carousel / turntables. The bush holders will require heating in order for the bush to fit.

14) Bend over the retaining tabs to secure the bottom bushes in place.

15) Check the deck shaft seals and replace if necessary. Deck seals are fitted at the top of each deck.

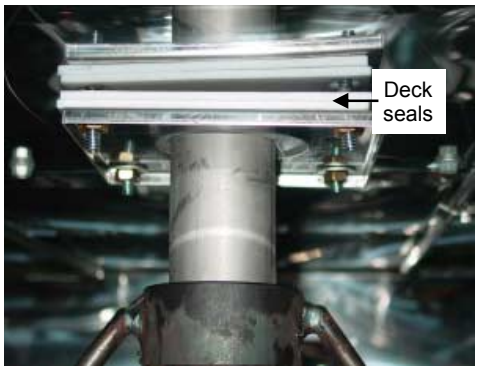


Figure 6.5.6

16) Refit each carousel/turntable assembly to the oven, ensuring that they are put in the correct deck.

17) Refit the drive shaft through the ovens, ensuring that it is threaded correctly through each deck and that the collars are inserted as illustrated below.

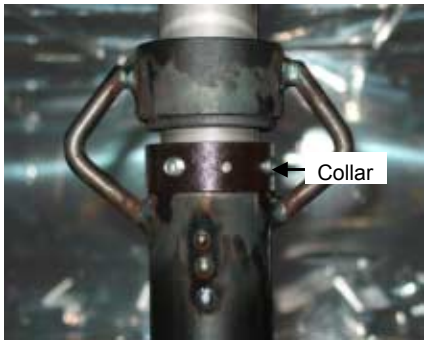


Figure 6.5.7

Ensure that the bottom deflector plate is fitted as the shaft is positioned into the bottom bearing.

18) Lift each carousel/turntable assembly as in step (1) (approximately 10mm).

19) Rotate the shaft and each collar in order to line up the marks made when removing the turntables.

20) Refit the split pins to the collars, and tighten the grub screws to ensure that the collars are tight on the drive shaft.

21) Refit the drive wheel to the top of the shaft, and fit the drive belt.

6.5.3 DRIVE MOTOR

1) Slacken off the four bolts securing the motor to it's mounting frame.

2) Remove the drive belt from the motor pulley.

3) Remove the wiring cover from the motor and disconnect the wiring (noting positions).

4) Undo the four motor mounting bolts.

5) Remove the motor.

6) Remove the pulley from the motor shaft taking care not to lose the shaft key.

7) Fit the pulley and key to the new motor, and reassemble this assembly onto the oven.

8) Ensure that the belt tensions are set correctly.

Figure 6.5.8

6.5.4 DRIVE SHAFT TOP BEARING

1) Undo the two bolts securing the rack drive wheel to the drive shaft. Remove the drive wheel.

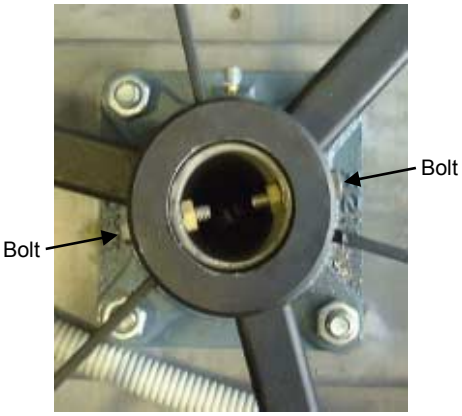


Figure 6.5.9

2) Remove the four bolts securing the top bearing housing to the top of the oven.
3) Remove the bearing assembly from the shaft.
4) Replace the bearing and reassemble in reverse order.

NOTE: The bearing is type UCF210.

Figure 6.5.10

6.5.5 DRIVE SHAFT BOTTOM BEARING

1) Check whether there are grub screws locking the bottom bearing to the drive shaft underneath the oven. If there are then loosen these grub screws.
2) Undo the four bolts securing the bottom bearing housing to the underside of the oven.
3) The bearing and housing should now drop away from the shaft. If not then a bar may be required under the oven to lever the bearing off the shaft, or a bottle jack placed under the bearing and the drive shaft pushed through the bearing and into the oven.
4) Replace the bearing and reassemble in reverse order.

   Ensure that the bottom deflector plate is fitted as the shaft is positioned into the bottom bearing.

NOTE: On models without grub-screws locking the shaft to the bottom bearing the bearing is type UCF209.

On models with grub-screws locking the shaft to the bottom bearing the bearing is type UCF210.

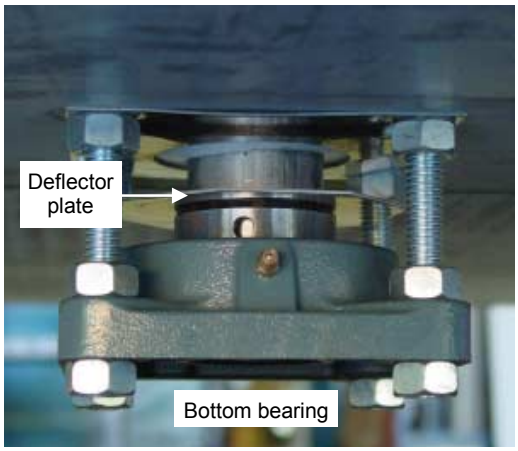


Figure 6.5.11

6.6 REPLACEMENT - DOORS

6.6.1 DOOR SEALS

1) Open the oven door and drill out the five rivets along the door opening securing the door seal.

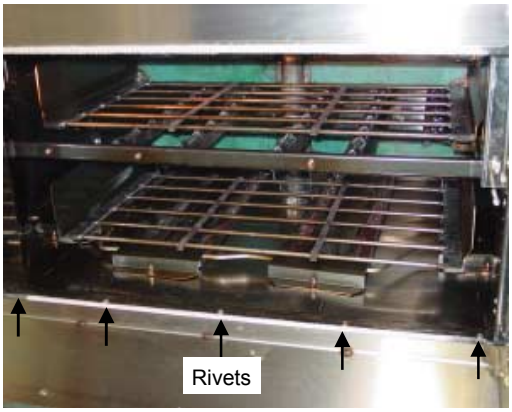


Figure 6.6.1

2) Remove the door seal assembly from the oven.
3) Remove the steel rod from the door seal, and thread into new seal.
4) Fit the new seal assembly back onto the oven and secure with five rivets along width of the door opening.

6.6.2 DOOR SPRING

1) **"Mini":** Remove the left hand side front panel.

   "Slimline": Remove the relevant side front panel (LH side for left hand oven, RH side for right hand oven).
2) Remove the broken spring.
3) Thread the end of the new spring through the hinge.

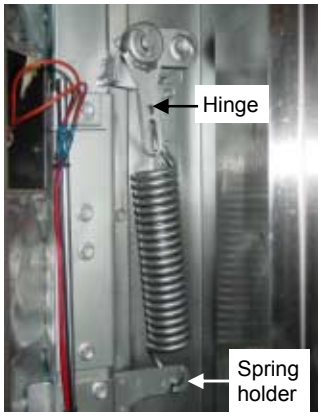


Figure 6.6.2

4) Using a large screwdriver or similar, lever the other end of the spring over the spring holder. (This will be easiest with the door in the 'up' position).
5) Replace the outer panel(s).

6.6.3 DOOR HINGE

1) Remove the door spring (refer section 6.6.2).
2) Whilst supporting the door, undo the two bolts securing the door hinge to the door assembly.

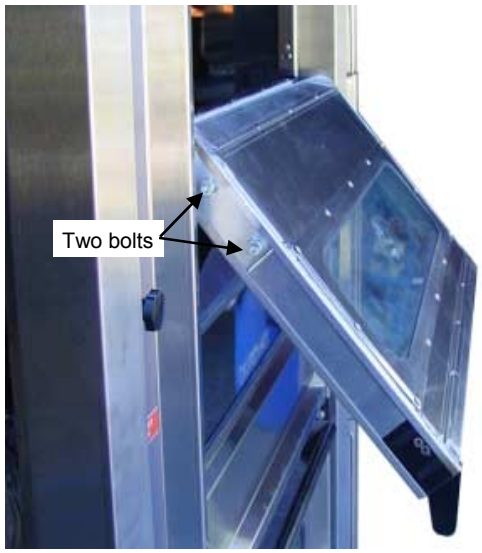


Figure 6.6.3

3) Slide the door off the control side hinge and remove from the oven.
4) Undo the two bolts securing the hinge assembly to the oven.

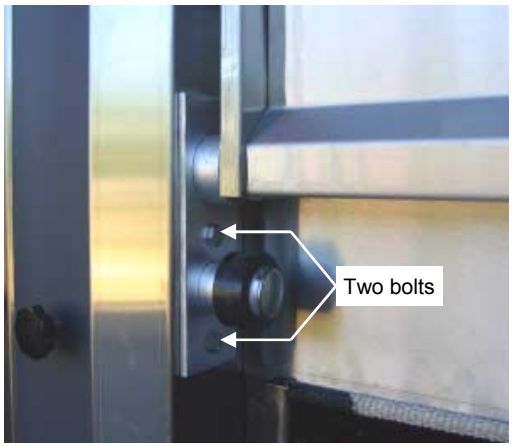


Figure 6.6.4

5) Withdraw the hinge assembly and replace.
6) Reassemble in reverse order.

6.6.4 DOOR GLASS

1) Open the oven door.
2) Drill out the 12 rivets securing the glass retainer panel to the door.

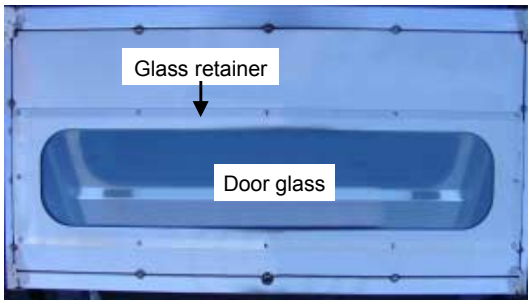


Figure 6.6.5

3) Remove the retainer panel, and remove the broken door glass.
4) Replace with new glass.

NOTE: It is recommended that the glass seal is replaced at the same time.

5) Rivet glass retainer panel back onto door to secure the glass in place.

6.7 ADJUSTMENT / CALIBRATION

6.7.1 STEAM / DRYING TIME - ROTEL MINI

The steam times and drying times are able to be adjusted separately for each deck.

1) Gain access to the electrical gear plate (refer section 6.2.1).
2) To adjust the steaming time, turn the steam (right hand) timer to the desired setting. This timer is adjustable from 1 to 30 seconds (the factory setting is 7).
3) To adjust the drying time, turn the drying (left hand) timer to the desired setting. This timer is adjustable from 1 to 10 minutes (the factory setting is 7).

Figure 6.7.1

NOTE: These times should be adjusted with care, and as a basic rule of thumb, a drying time of one minute should be allowed for every second of steaming. Adjusting these times should only be necessary if there is a problem with low water pressure.

6.7.2 STEAM / DRYING TIME - SLIMLINE

The steam times and drying times for all decks are controlled by one PLC. These times can be adjusted for all decks on the PLC.

1) Gain access to the electrical gear plate (refer section 6.2.2).
2) To adjust the steaming time, turn the steam time (left hand) potentiometer located on the PLC.
3) To adjust the drying time, turn the drying time (right hand) potentiometer.

NOTE: Turning the potentiometer clockwise increases the time setting.

Turning the potentiometer anti-clockwise decreases the time setting.

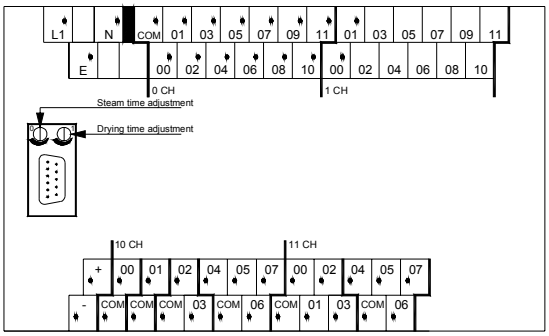


Figure 6.7.2

NOTE: These times should be adjusted with care, and as a basic rule of thumb, a drying time of one minute should be allowed for every second of steaming. Adjusting these times should only be necessary if there is a problem with low water pressure.

6.7.3 HEIGHT OF CAROUSELS / TURNTABLES

The height of the carousel / turntable within the decks is determined by the height of the drive shaft, which is supported by the bottom bearing.

1) Loosen the locknuts on the bolts securing the bottom bearing housing to the base of the oven.
2) Adjust the bearing mounting bolts until the drive shaft is at the desired height.
3) Tighten the locknuts.

NOTE: Adjustment of the bearing height may be easier if the weight of the shaft and carousels / turntables is supported with a bottle jack or similar.

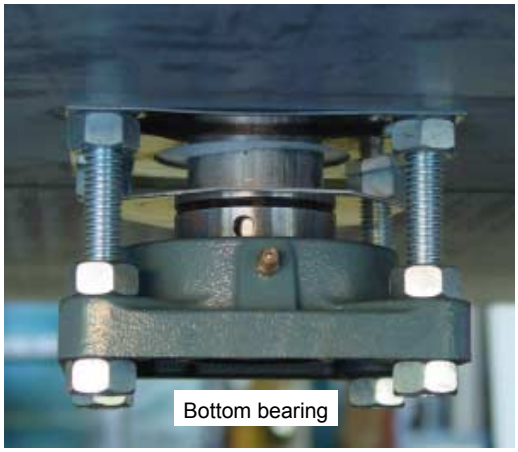


Figure 6.7.3

6.7.4 STOP ARM ADJUSTMENT (SPLIT DECKS)

1) Open the oven door.
2) Loosen the locknut on the stop-arm adjustment bolt.
3) Tighten or loosen the stop arm adjustment bolt until the correct operation is attained.

   The arm should be adjusted such that it catches in the stop bracket on the turntable when the deck door is opened.

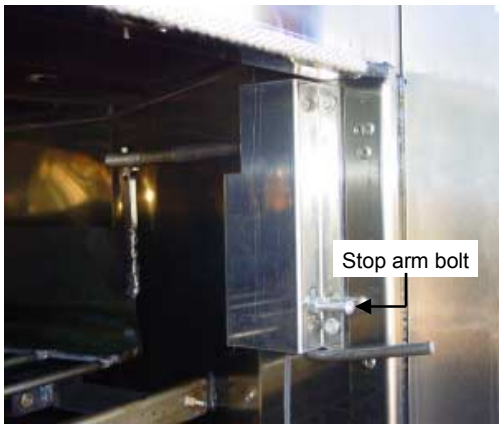
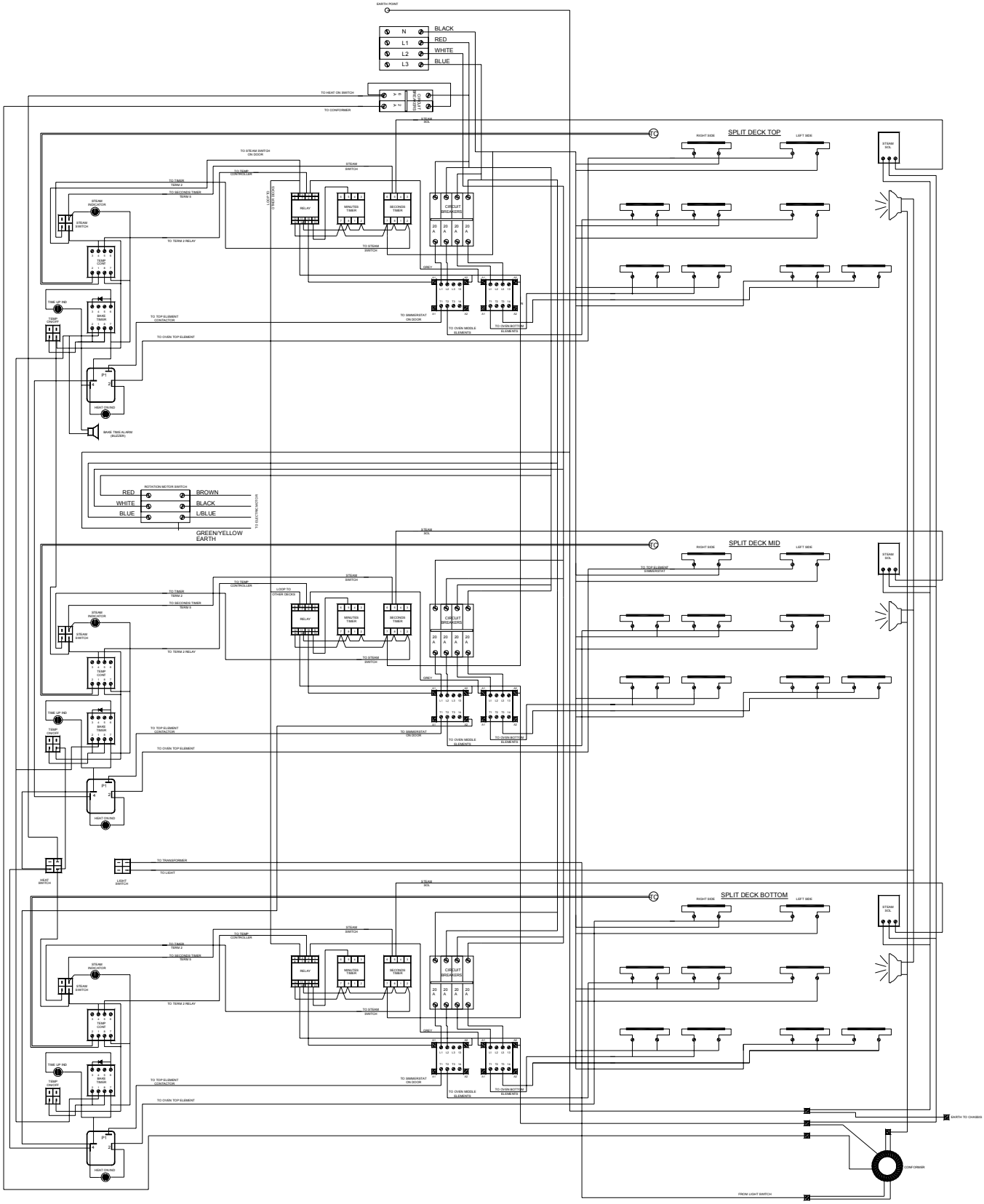


Figure 6.7.4

7. ELECTRICAL WIRING DIAGRAMS

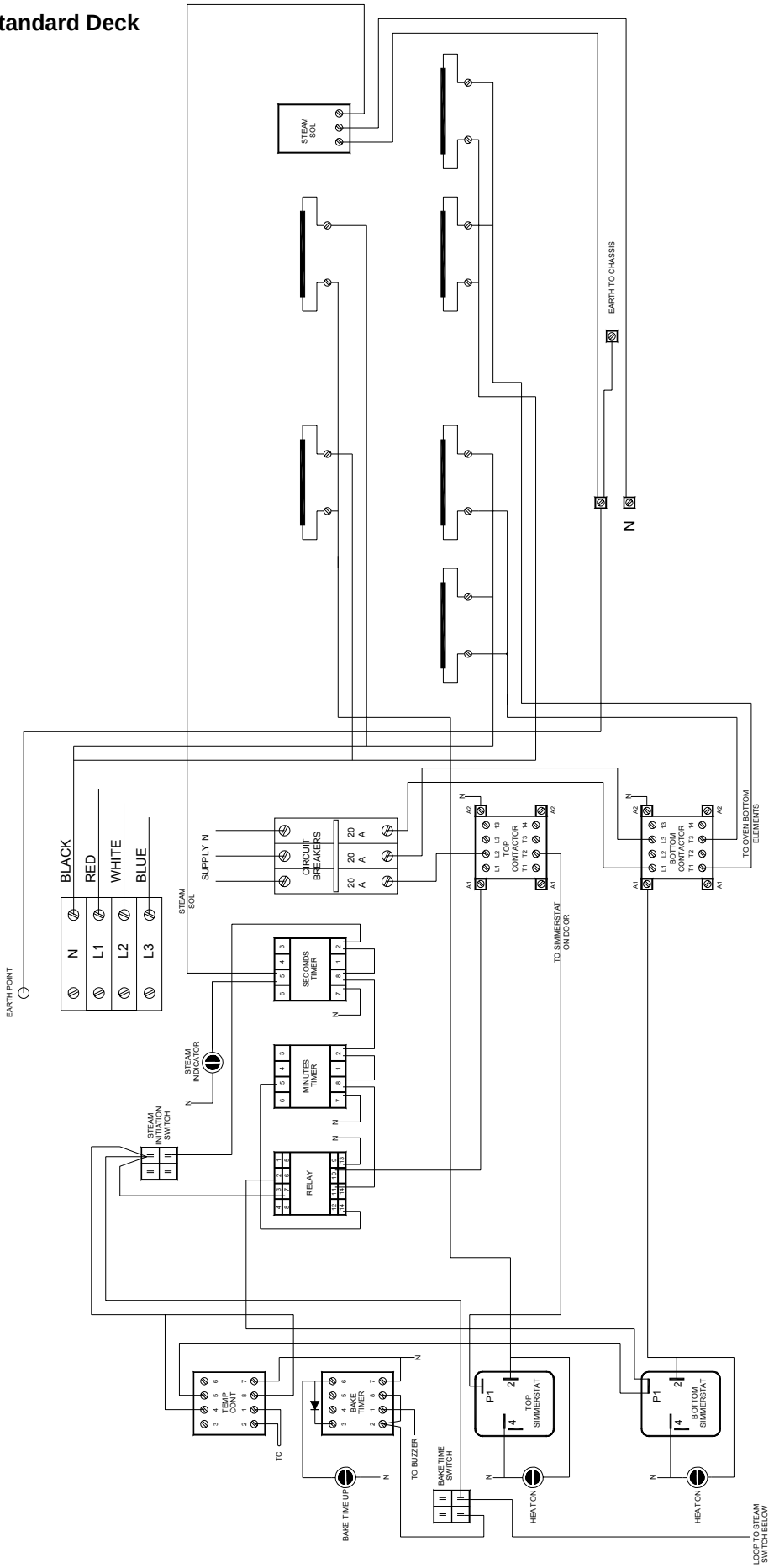
7.1 ROTEL “MINI” OVEN

7.1.1 Rotel Mini Overall (R12 Illustrated)



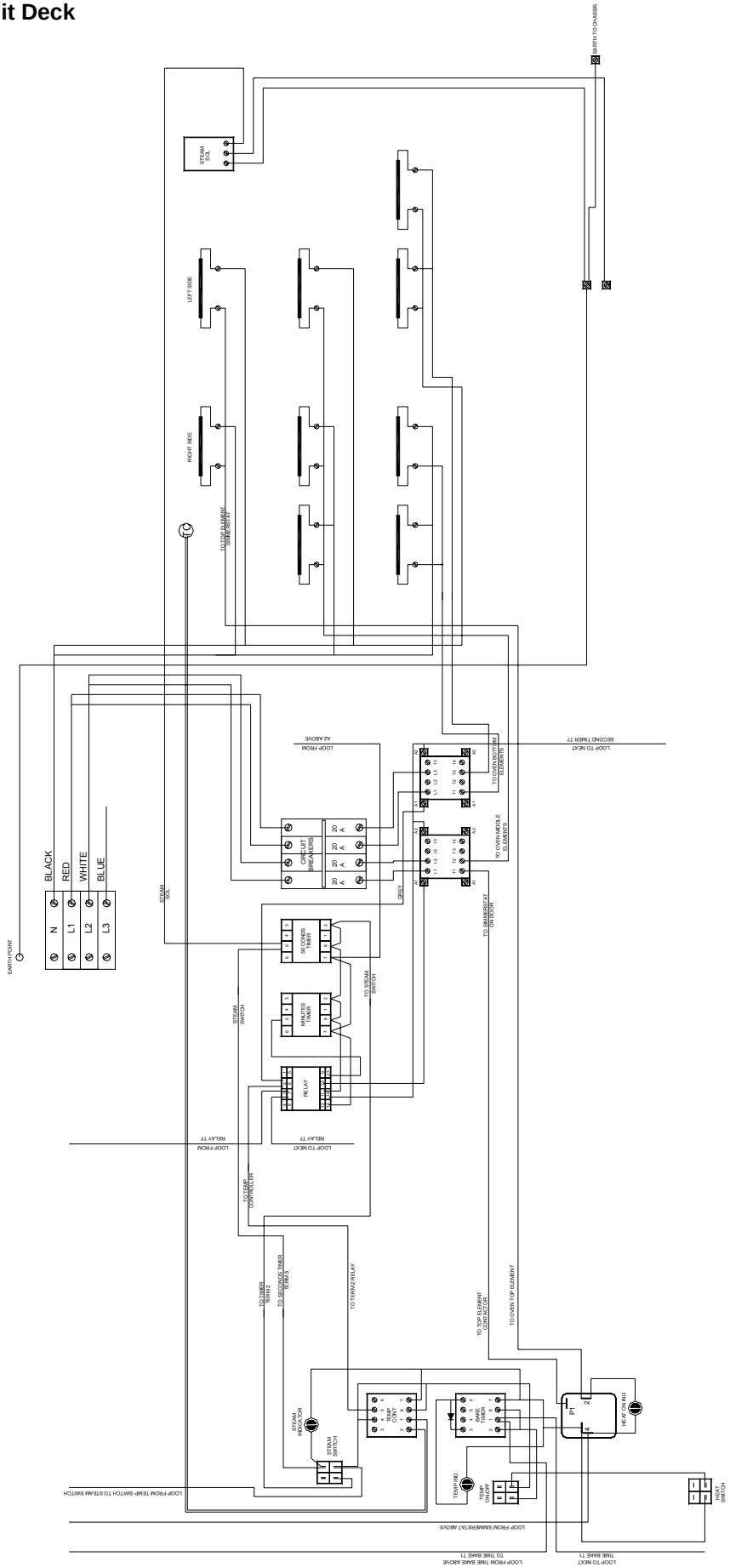
RETURN TO MAIN MENU

7.1.2 “Mini” Standard Deck



RETURN TO MAIN MENU

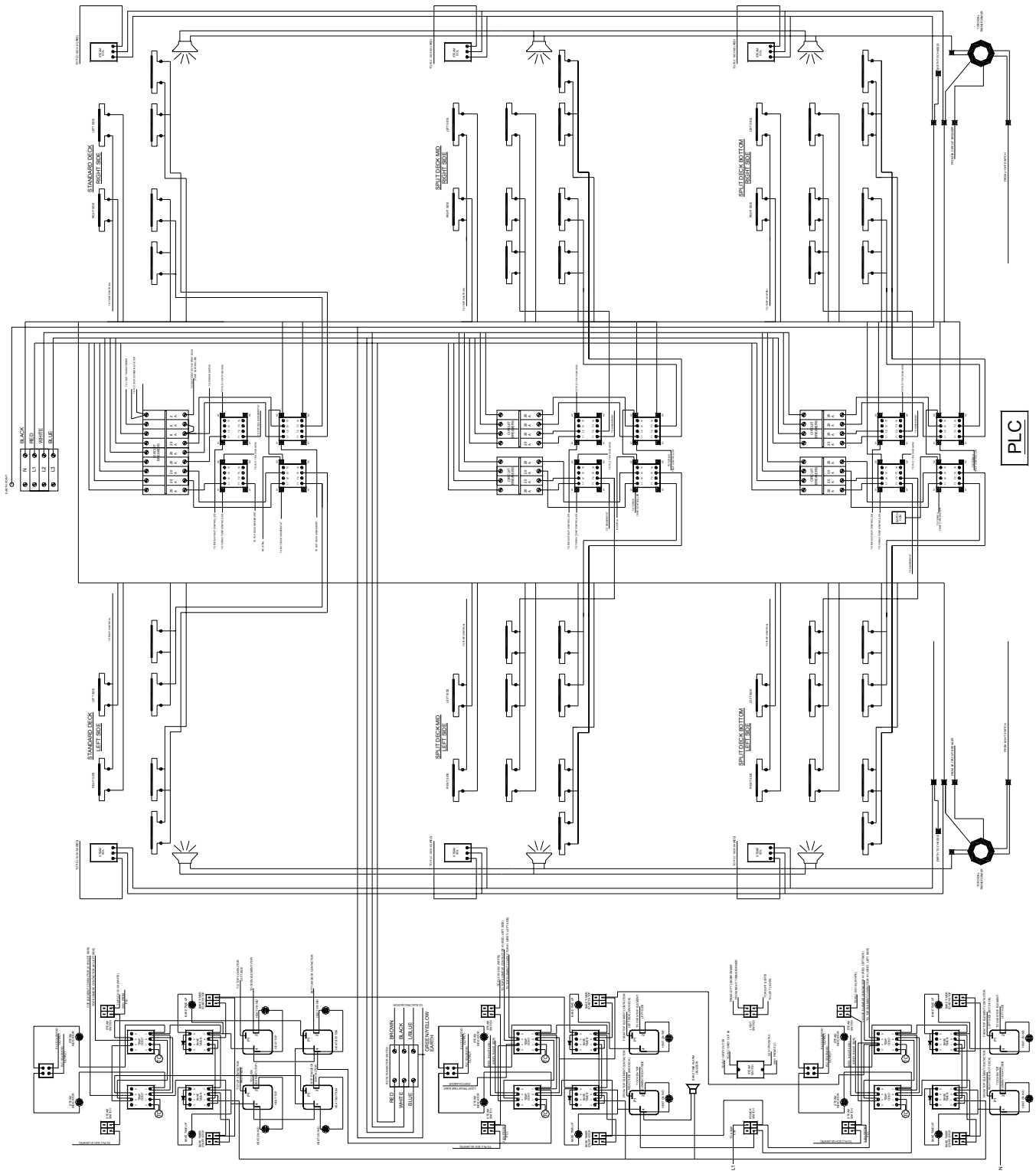
7.1.3 “Mini” Split Deck



RETURN TO MAIN MENU

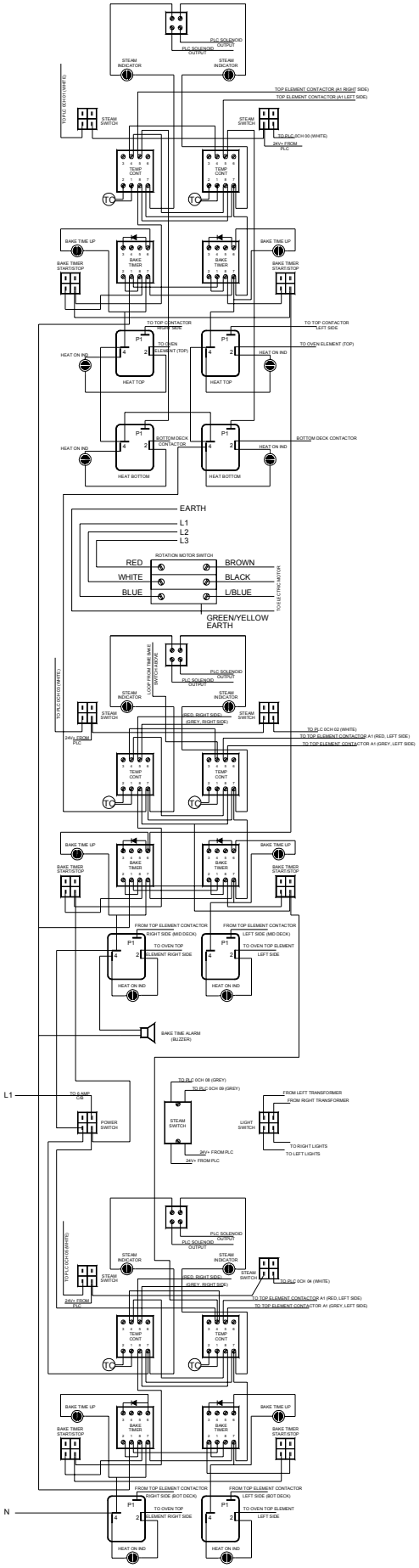
7.2 ROTEL SLIMLINE OVEN

7.2.1 Slimline Overall



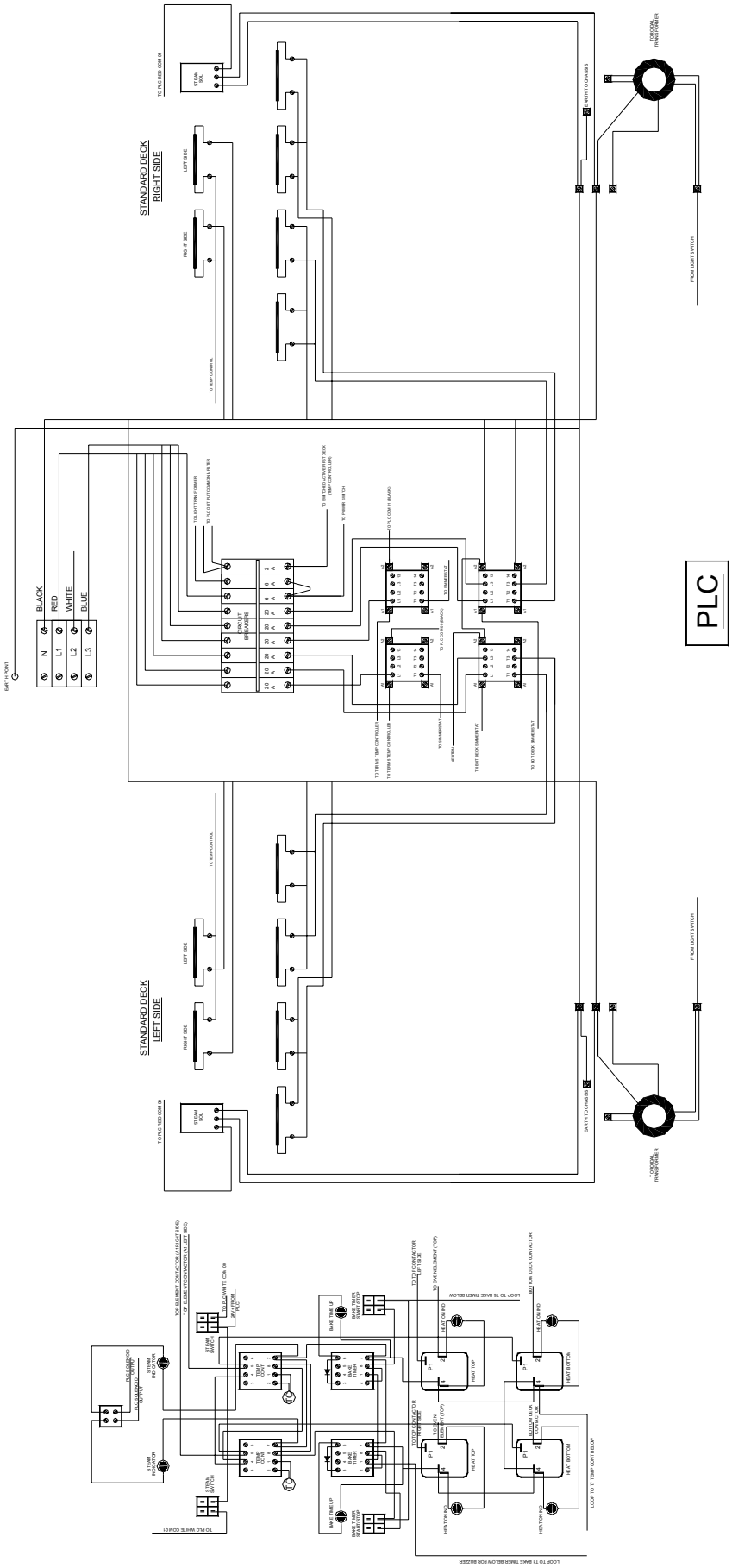
RETURN TO MAIN MENU

7.2.2 Slimline Control Panel (3D2S Illustrated)



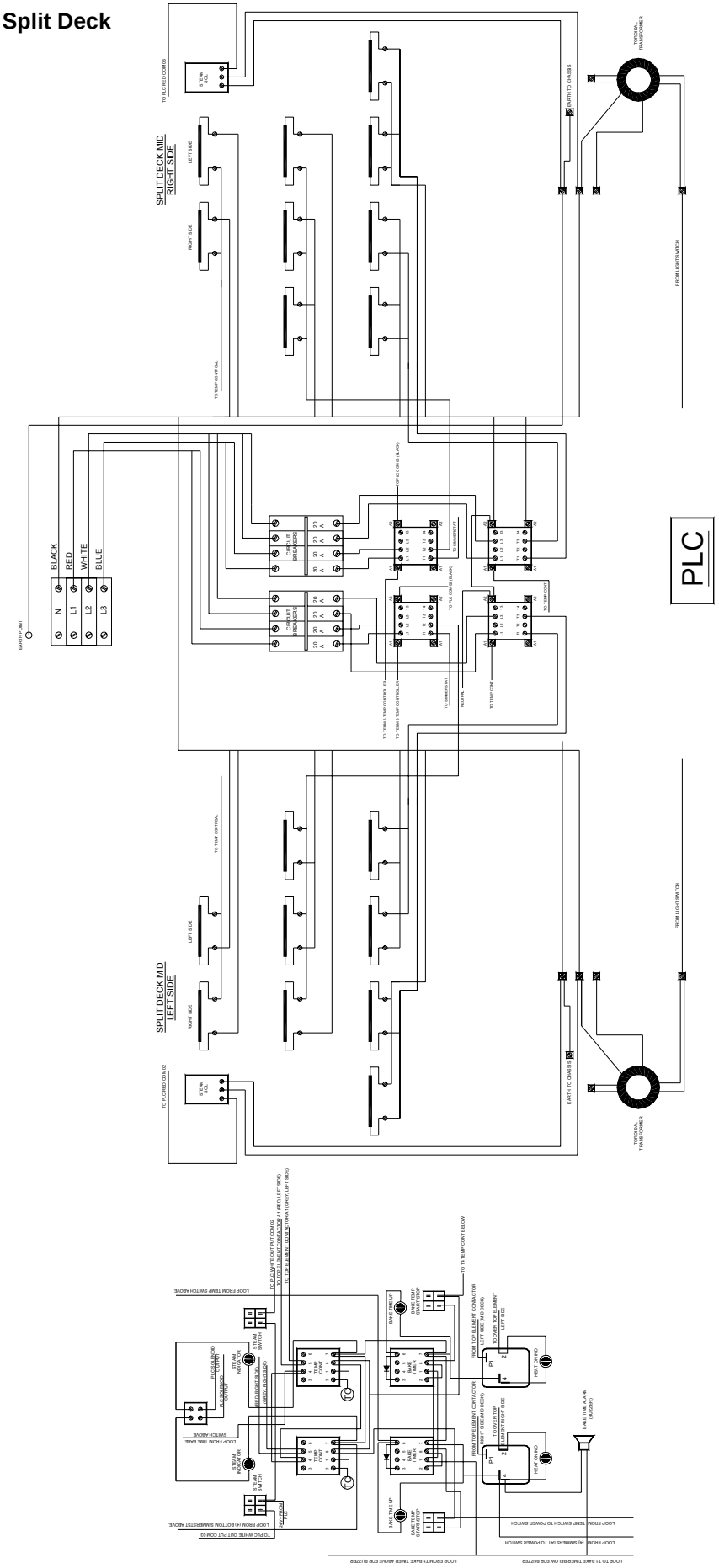
RETURN TO MAIN MENU

7.2.3 Slimline Standard Deck

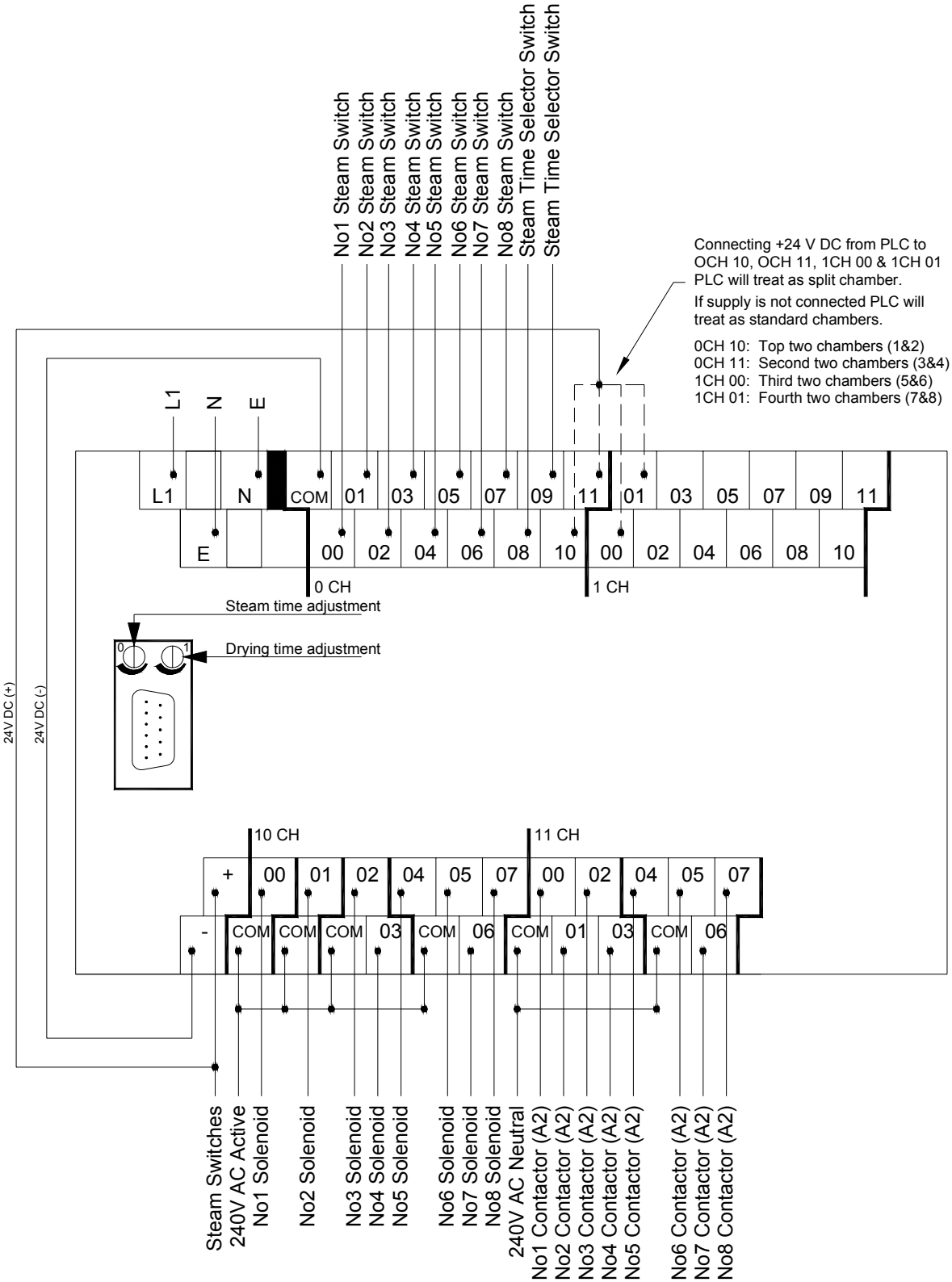


RETURN TO MAIN MENU

7.2.4 Slimline Split Deck



7.2.5 Slimline PLC Controller



8. SPARE PARTS

PART NO		DESCRIPTION
300341	RW4620	Door spring
301826	RW1490	Temperature controller (Omron E5C2-R20)
301825	RW1220	Timer (Omron H2C-8)
301844	RW1140 (or 015500)	Energy regulator (EGO 50.56078.007)
301837	RW4606	Buzzer (not illustrated)
301853	RW2740	Heating contactor
300275	RW5110	12 minute drying timer (“Mini” only)
300276	RW5120	30 second steam timer (“Mini” only)
301822	RW1222	PLC steam controller (“Slimline” only)
301768	RW4575 RW4576	Water solenoid valve - Goyen Goyen solenoid repair kit
301852	RW2802	Lighting transformer
300976	RW3156	Carbon bush
300191	RW1510	V Belt A39
300494	RW3121	Motor 0.37kW 6-pole
300219		Top shaft bearing UC210
300218		Bottom shaft bearing UC209

9. ACCESSORIES

301681 Cleaning Brush

300993 Water Filter & Cartridge assembly
RW1178 Water Filter Cartridge (SC13)

10. PARTS DIAGRAMS

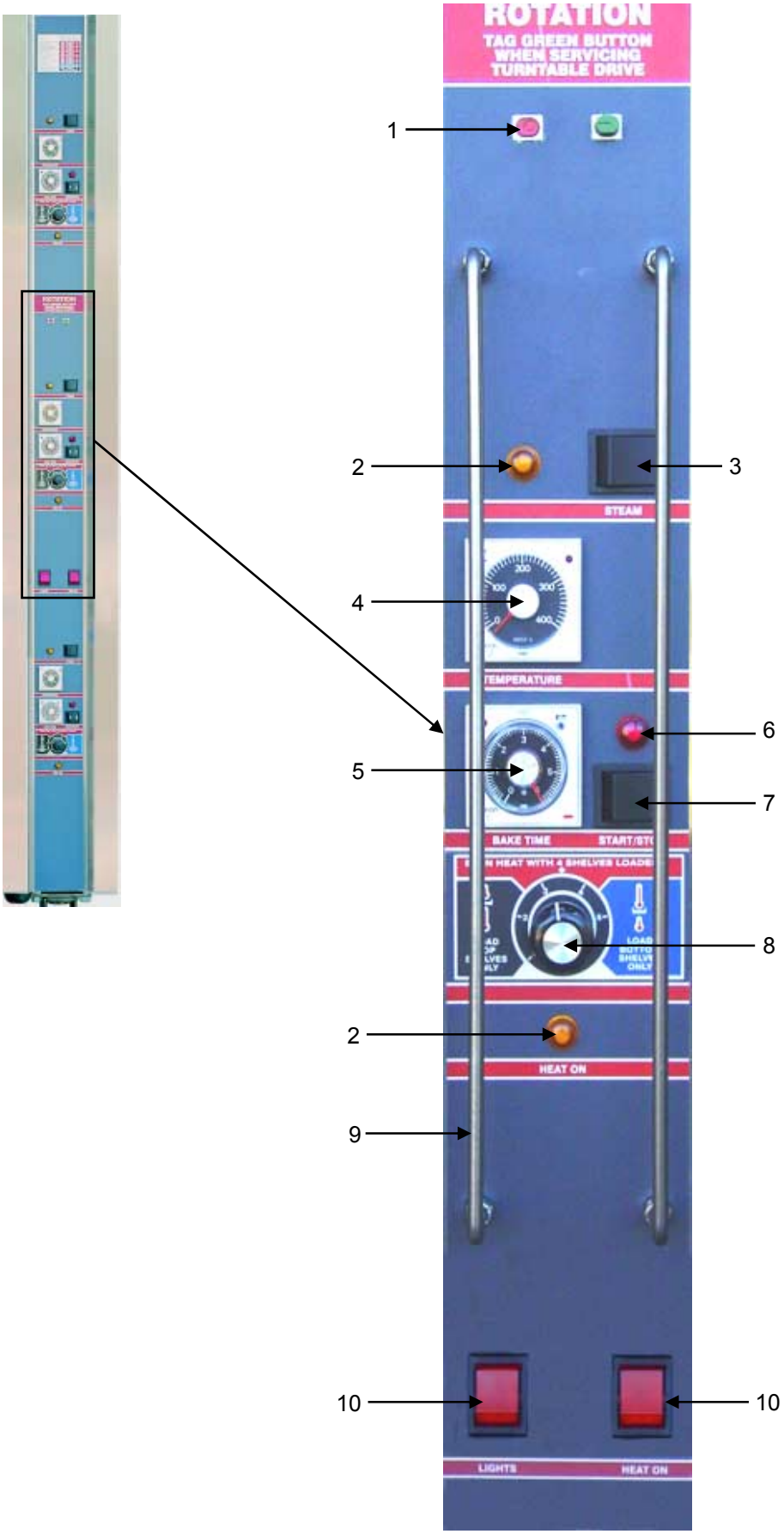
10.1 ROTEL "MINI" OVERALL
(R12 3 deck 3 split illustrated)

Pos	Part No.		Description
1	302351 302350		Façade front (16” oven) Façade front (18” oven)
2	302354 302352		Façade LH side (16” oven) Façade LH side (18” oven)
3	302355 302353		Façade RH side (16” oven) Façade RH side (18” oven)
4	302357 302356		Façade rear (16” oven) Façade rear (18” oven)
5	302109		Decal - façade
6	300627	RV1520	7 sided knob
7	302525 302527	RW4627 RW4623	Door assembly LH bottom hinged (split deck) Door assembly LH top hinged (std deck) - not illustrated
8	---------		Control panel assembly (refer section 10.3)
9	300769		Handle pocket - black
10	302214		Side panel - front
11	302237		Side panel - middle
12	302260		Side panel - rear
13	300341	RW4620	Door spring
14	301655		Spring holder - bottom door only
15	300270	RW5150 RW5160	Castor 4” black - swivel Castor 4” black - fixed

10.2 ROTEL "SLIMLINE" OVERALL
(3 deck 2 split illustrated)

Pos	Part No.		Description
1	301586		Façade - front LH
	302105		Decal - front LH (Moffat)
2	301585		Façade - front nose
3	301587		Façade - front RH
	302110	RW0029	Decal - front RH (Rotel 2)
4	301588		Façade - LH side
5	301589		Façade - RH side
6	301590		Façade - rear
7	300627	RV1520	7 sided knob (flue damper)
	302108	RW0049	Damper decal
8	302527	RW4623	Door assembly LH top hinged (std deck)
9	302528	RW4622	Door assembly RH top hinged (std deck)
10	302525	RW4627	Door assembly LH bottom hinged (split deck)
11	302526	RW4628	Door assembly RH bottom hinged (split deck)
12	---------		Control panel assembly (refer section 10.4)
13	300769	RW0049	Handle pocket - black
14	302231		Side panel front (3 deck 3 split)
	302225		Side panel front (3 deck 2 split)
15	302254		Side panel middle (3 deck 3 split)
	302248		Side panel middle (3 deck 2 split)
16	302264		Side panel rear (3 deck 3 split)
	302271		Side panel rear (3 deck 2 split)
17	300341	RW4620	Door spring
18	301655		Spring holder - bottom door only
	301696		Spring holder - top doors (not illustrated)
19	300267	RW4680	Castor

10.3 CONTROL PANEL - ROTEL “MINI”

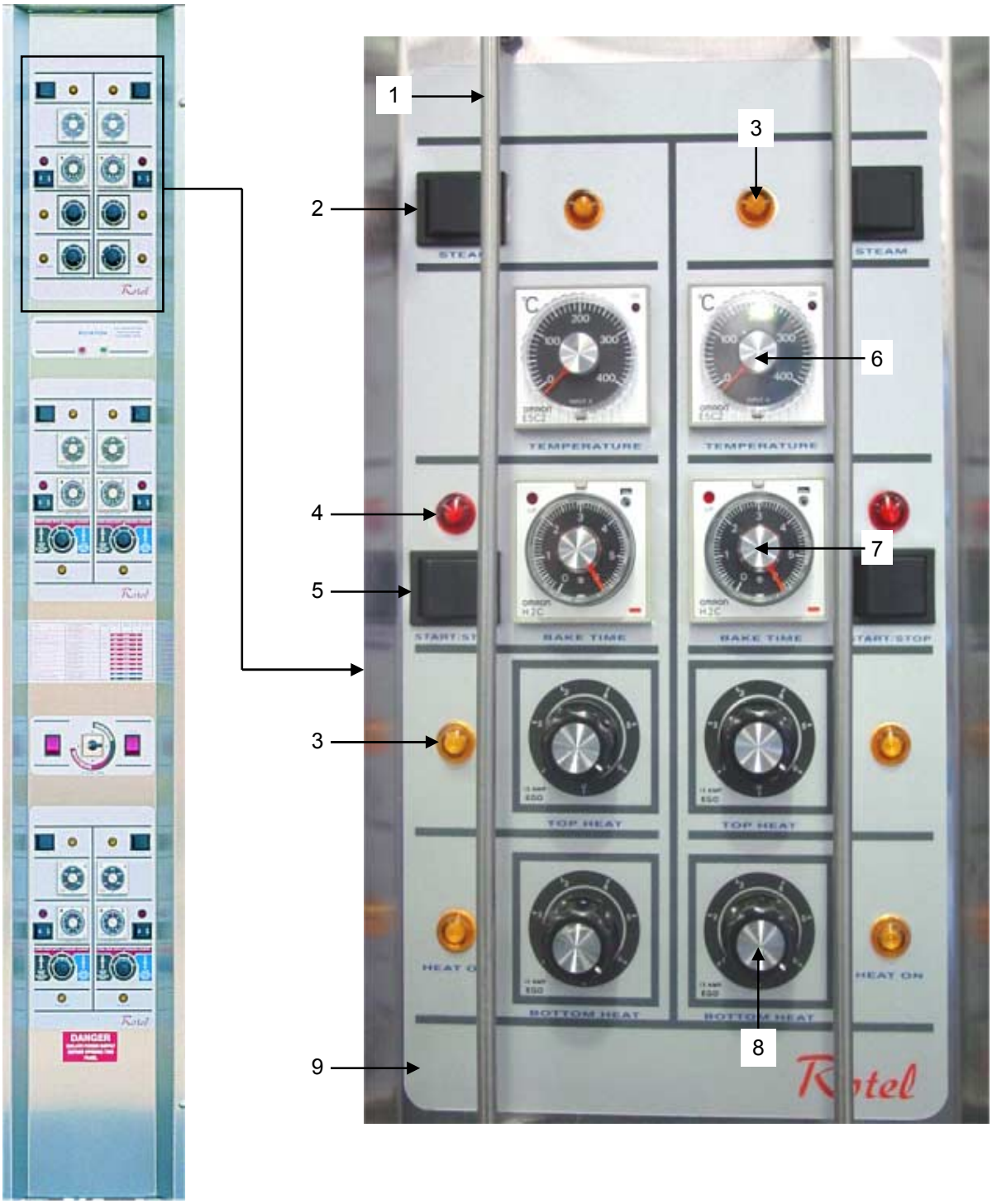


RETURN TO MAIN MENU

Pos	Part No.		Description
1	301845	RW3122	Rack rotation switch
2	300277	RW2760P RW2760	Neon - amber (from March 2001) Neon - amber (to March 2001)
3	301851	RW4580	Steam switch - momentary
4	301826	RW1490	Temperature controller (Omron E5C2-R20)
5	301825	RW1220	Timer (Omron H2C-8)
6	300278	RW3030P RW3030	Neon - red (from March 2001) Neon - red (to March 2001)
7	301850	RW4605	Timer switch
8	301844 301832	RW1140 (or 015500) RW1141	Energy regulator (EGO 50.56078.007) Knob
9	300540		Bump bar / Guard
10	301849	RW4600	Illuminated rocker switch
	301837	RW4606	Buzzer (not illustrated)

10.4 CONTROL PANEL - ROTEL “SLIMLINE”

10.4.1 “SLIMLINE” STANDARD DECK

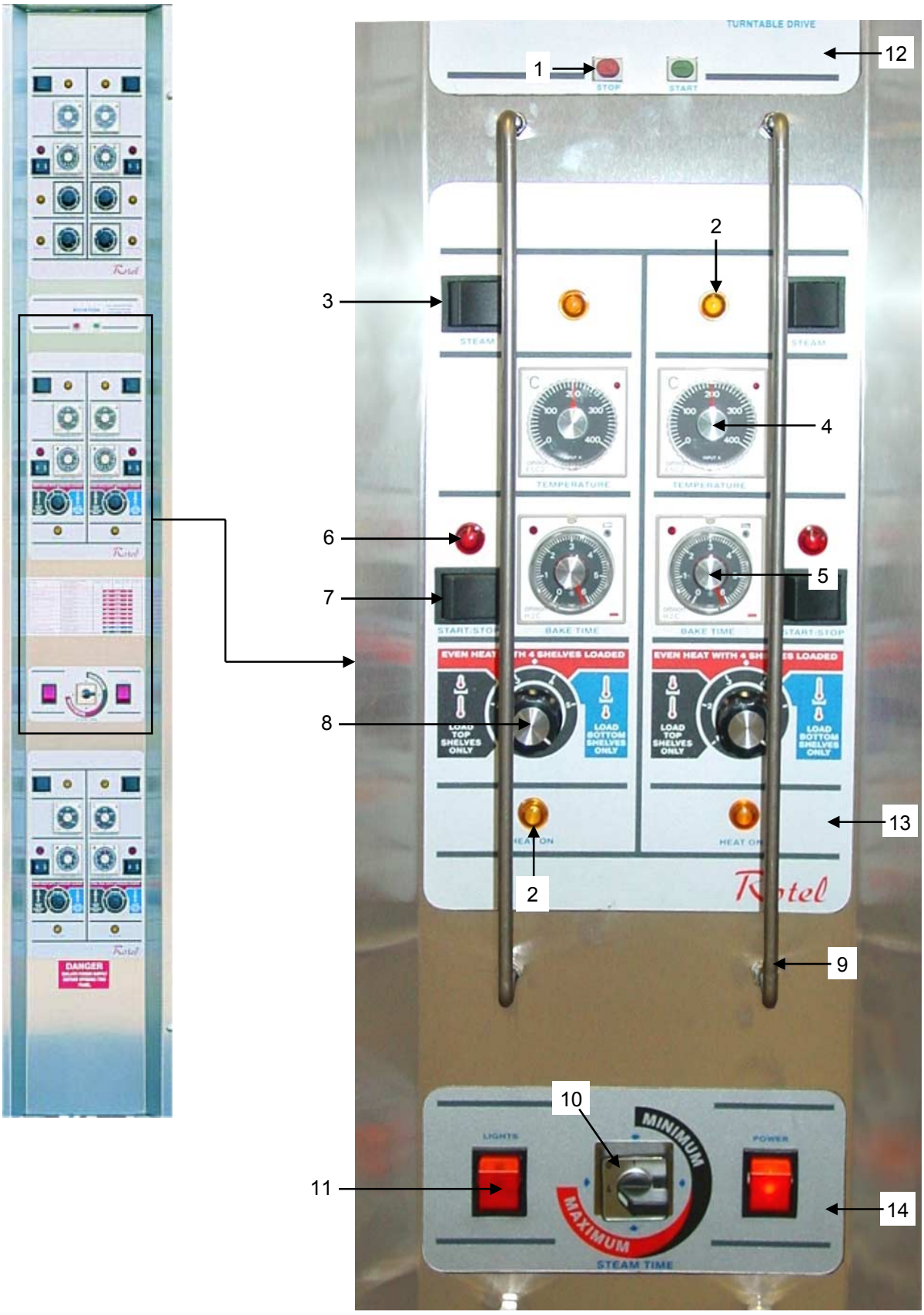


RETURN TO MAIN MENU

Pos	Part No.		Description
1	300540		Bump bar / Guard
2	301851	RW4580	Steam switch - momentary
3	300277	RW2760P RW2760	Neon - amber (from March 2001) Neon - amber (to March 2001)
4	300278	RW3030P RW3030	Neon - red (from March 2001) Neon - red (to March 2001)
5	301850	RW4605	Timer switch
6	301826	RW1490	Temperature controller (Omron E5C2-R20)
7	301825	RW1220	Timer (Omron H2C-8)
8	301844 301832	RW1140 (or 015500) RW1141	Energy regulator (EGO 50.56078.007) Knob
9	302101	RW0042	Decal - standard deck control
	301837	RW4606	Buzzer (not illustrated)

10.4 CONTROL PANEL “SLIMLINE”

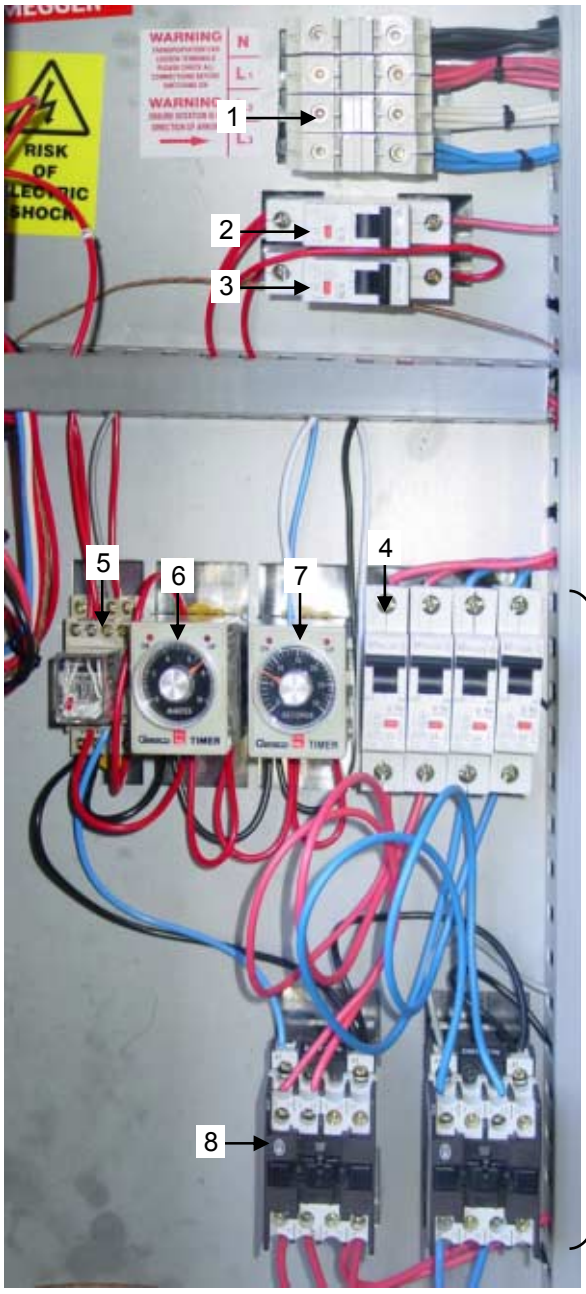
10.4.2 “SLIMLINE” SPLIT DECK



RETURN TO MAIN MENU

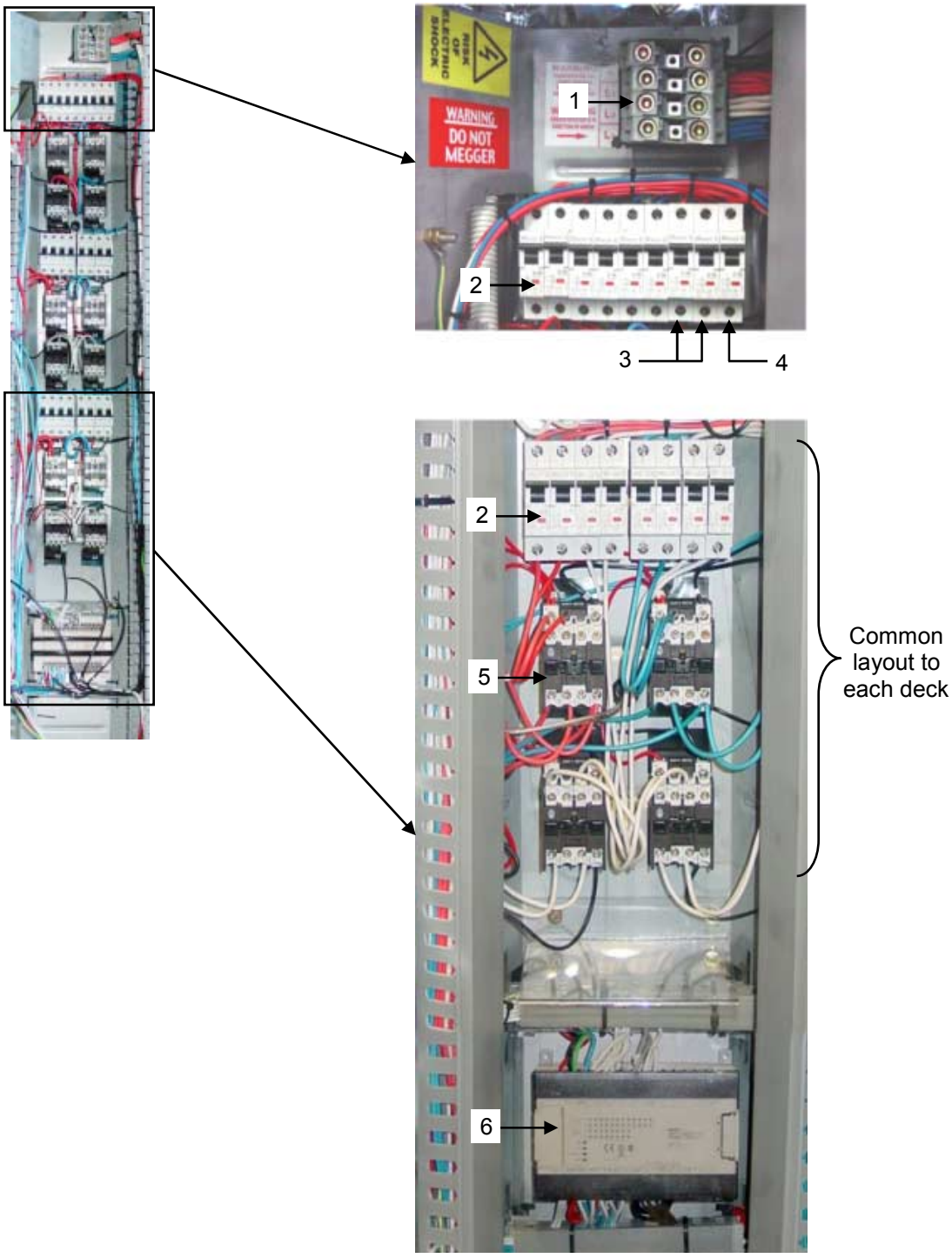
Pos	Part No.		Description
1	301845	RW3122	Rack rotation switch
2	300277	RW2760P RW2760	Neon - amber (from March 2001) Neon - amber (to March 2001)
3	301851	RW4580	Steam switch - momentary
4	301826	RW1490	Temperature controller (Omron E5C2-R20)
5	301825	RW1220	Timer (Omron H2C-8)
6	300278	RW3030P RW3030	Neon - red (from March 2001) Neon - red (to March 2001)
7	301850	RW4605	Timer switch
8	301844 301832	RW1140 (or 015500) RW1141	Energy regulator (EGO 50.56078.007) Knob
9	300540		Bump bar / Guard
10	301821	RW4571	Rotary switch - steam time
11	301849	RW4600	Illuminated rocker switch
12	302128	RW0045	Decal - rotation stop/start
13	302102 302126	RW0043	Decal - split deck control (3 deck-2split ovens) Decal - split deck control (3deck-3 split ovens)
14	302106	RW0044	Decal - steam/light control
	301837	RW4606	Buzzer (not illustrated)

10.5 GEAR PLATE - ROTEL “MINI”



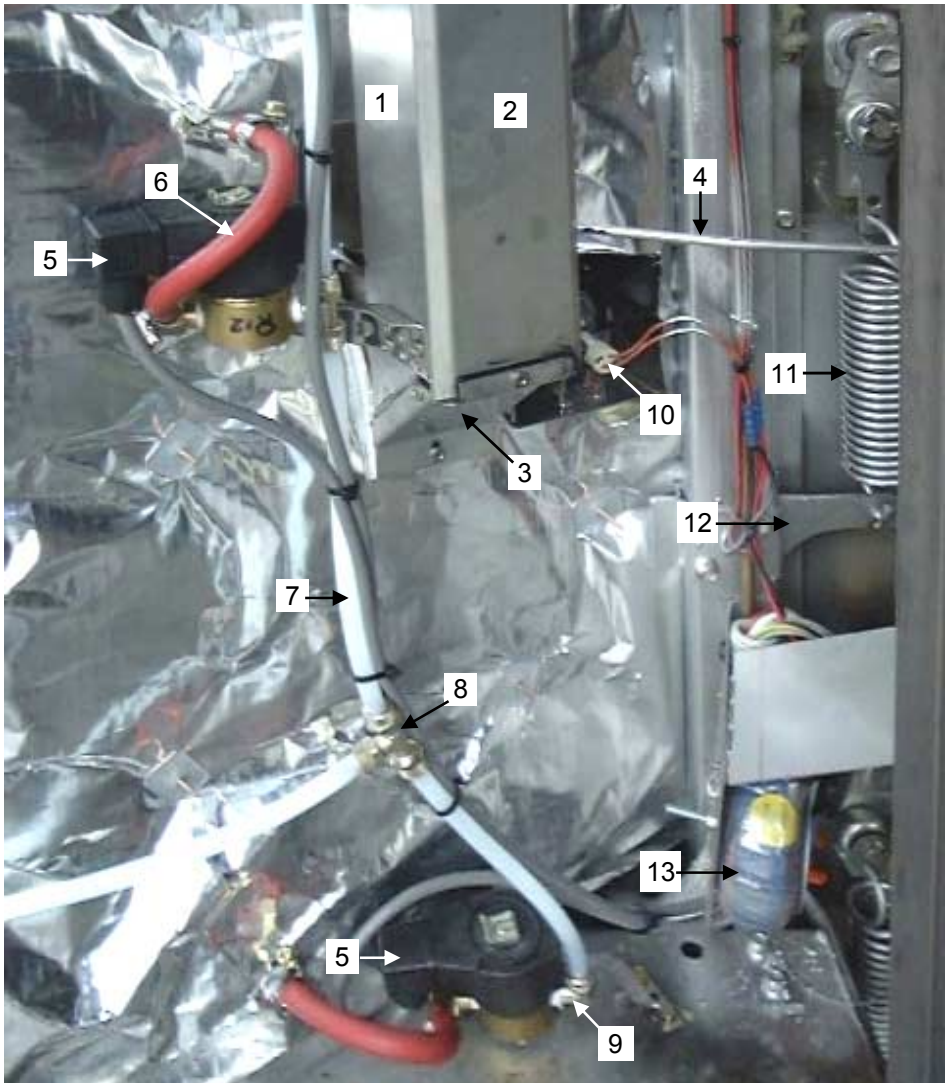
Pos	Part No.		Description
1	300280		Terminal block
2	300308	RW4692	6A Circuit breaker
3	300307	RW4690	2A Circuit breaker
4	300306	RW4694	20A Circuit breaker
5	301831 300867	RW5100	Relay MY4N Relay base
6	300275	RW5120	12 minute timer
7	300276	RW5110	30 second timer
8	301853	RW2740 RW2741	Heating contactor Heating contactor (old style)

10.6 GEAR PLATE - ROTEL “SLIMLINE”



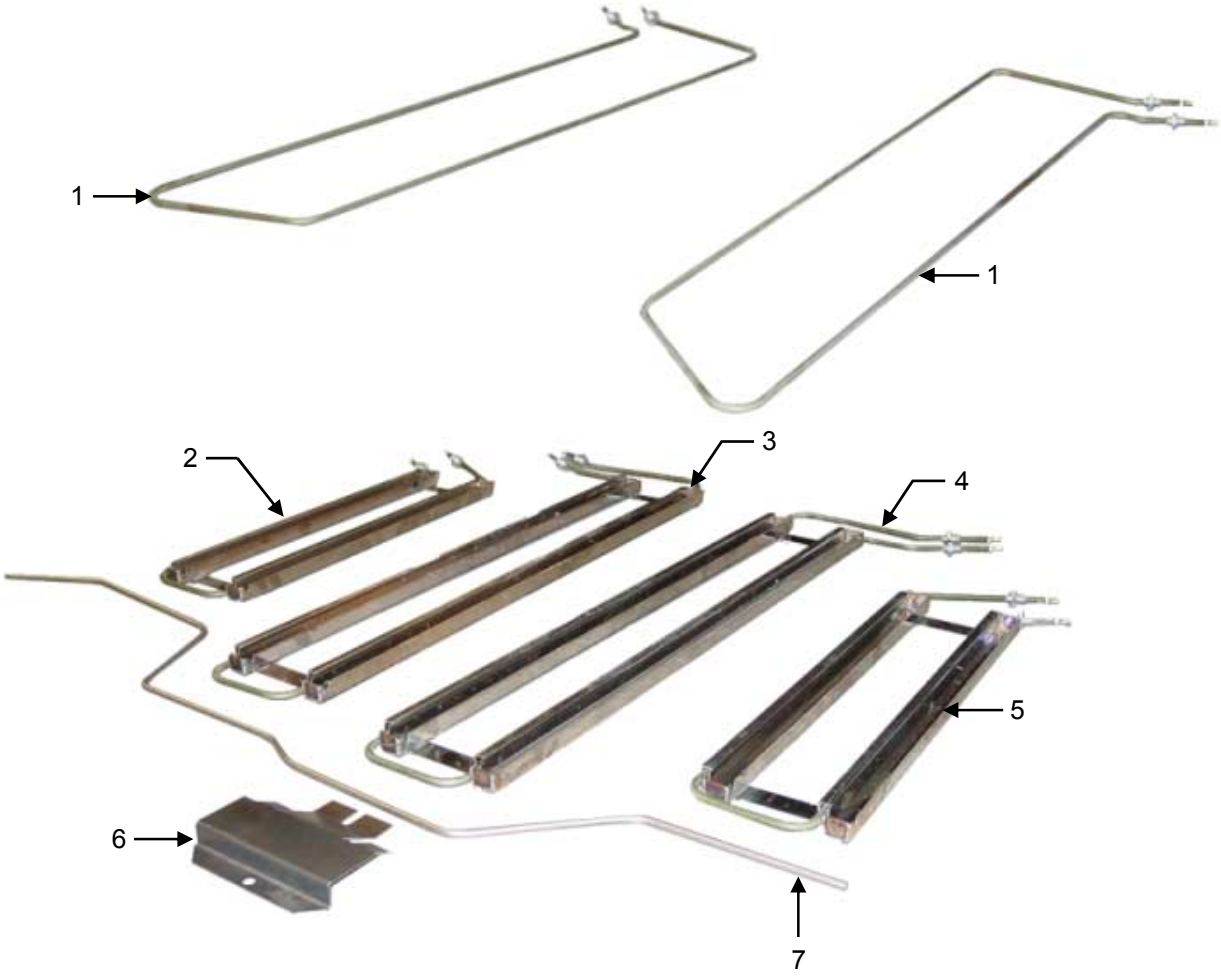
Pos	Part No.		Description
1	300280		Terminal block
2	300306	RW4694	20A Circuit breaker
3	300308	RW4692	6A Circuit breaker
4	300307	RW4690	2A Circuit breaker
5	301853	RW2740 RW2741	Heating contactor Heating contactor (old style)
6	301822	RW1222	PLC steam controller

10.7 NON-CONTROL PANEL SIDE



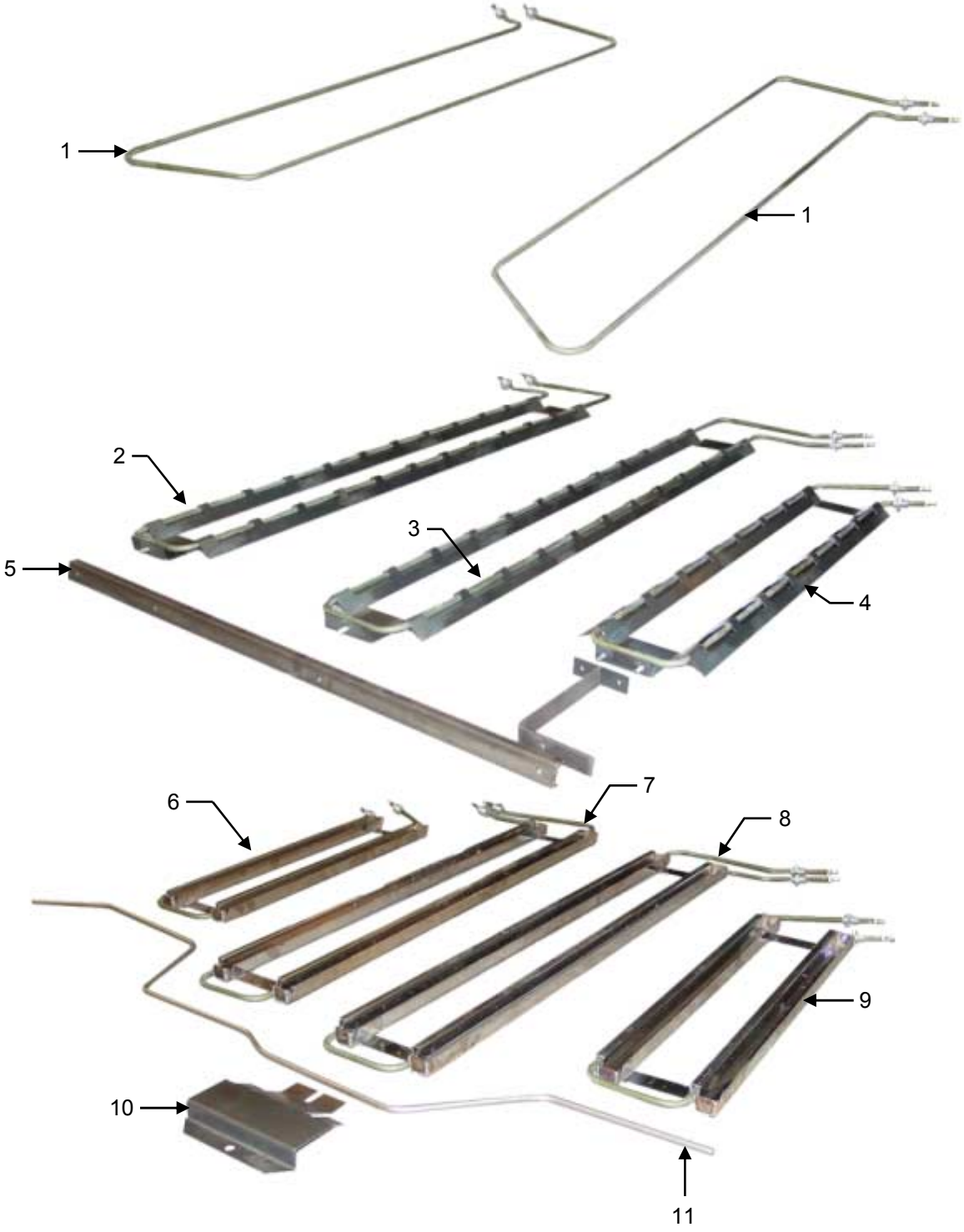
Pos	Part No.		Description
1	302340		Flue back panel (u-section)
2	302341		Flue cover
3	301611		Flue bottom panel
4	301374		Vent actuator shaft
5	301768	RW4575 RW4576	Water solenoid valve - Goyen Goyen solenoid repair kit
6	301515	RW4760	¼" 250 psi red hose
7	300998		7.5mm diameter hose
8	301522		Tee fitting
9	301516		Solenoid fitting elbow
10	300489 300488	RW4725 RW4720 (or 020212)	Lamp holder Lamp - 20W 12V
11	300341	RW4620	Door spring (5x400x165)
12	301696		Spring holder - top and middle doors
13	301852	RW2802	Lighting transformer

10.8 ELEMENTS - STANDARD DECK



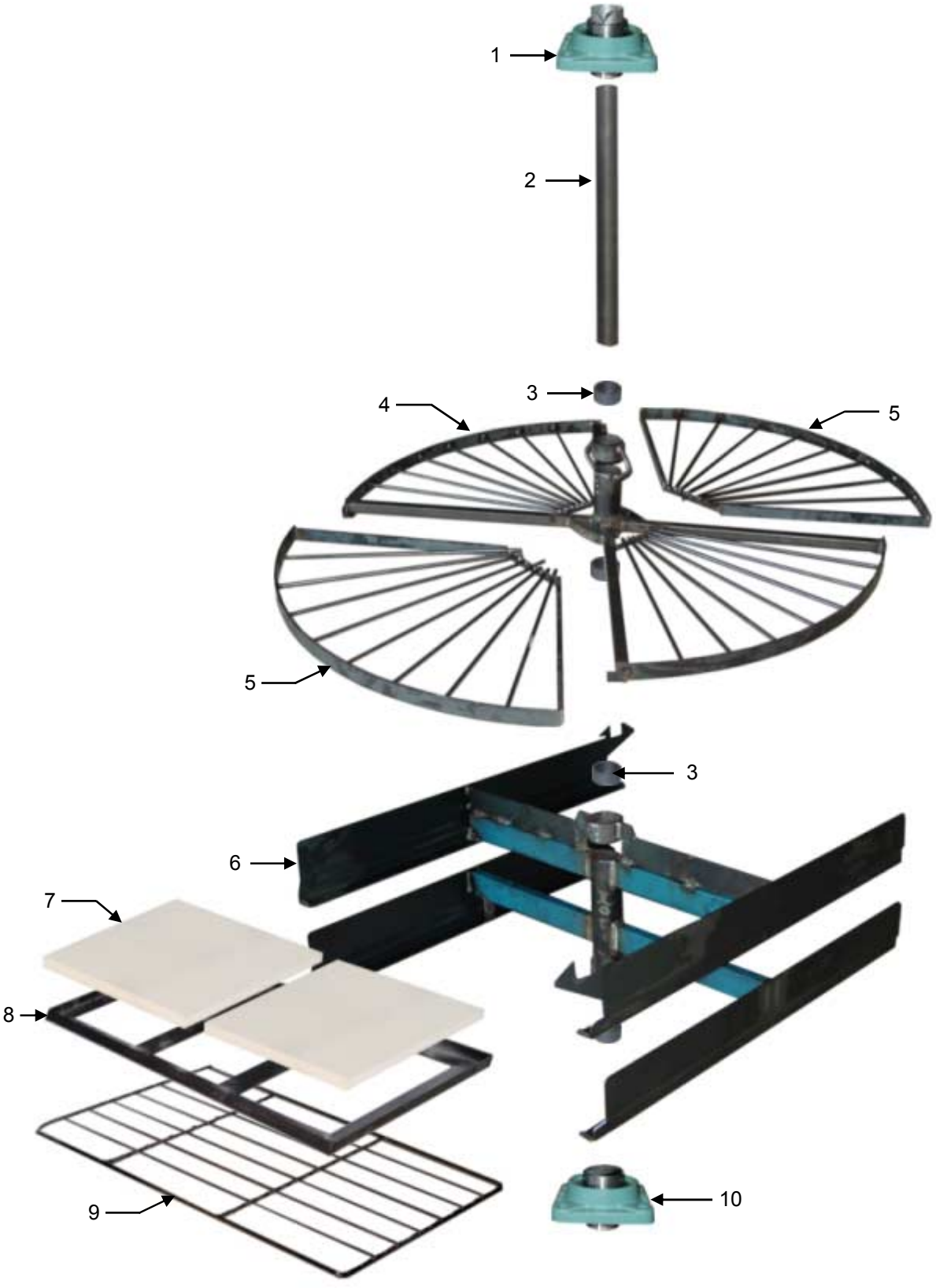
Pos	Part No.		Description
1	302011	RW4500	Element 770W
2	302012		Element 750W
	302517	RW4520L	Bottom LH element c/w steam generator
3	302013		Element 1550W
	302507	RW4515L	Bottom LH element c/w steam generator
4	302013		Element 1550W
	302508	RW4515R	Bottom RH element c/w steam generator
5	302012		Element 750W
	302518	RW4520R	Bottom RH element c/w steam generator
6	301554		Steam cover (centre elements and non-water entry side)
	301995		Steam cover (water entry side)
7	302502	RW4582	Steam tube - LH 18” oven
	302503	RW4583	Steam tube - RH 18” oven
	302500	RW4586	Steam tube - LH 16” oven
	302501	RW4587	Steam tube - RH 16” oven

10.9 ELEMENTS - SPLIT DECK



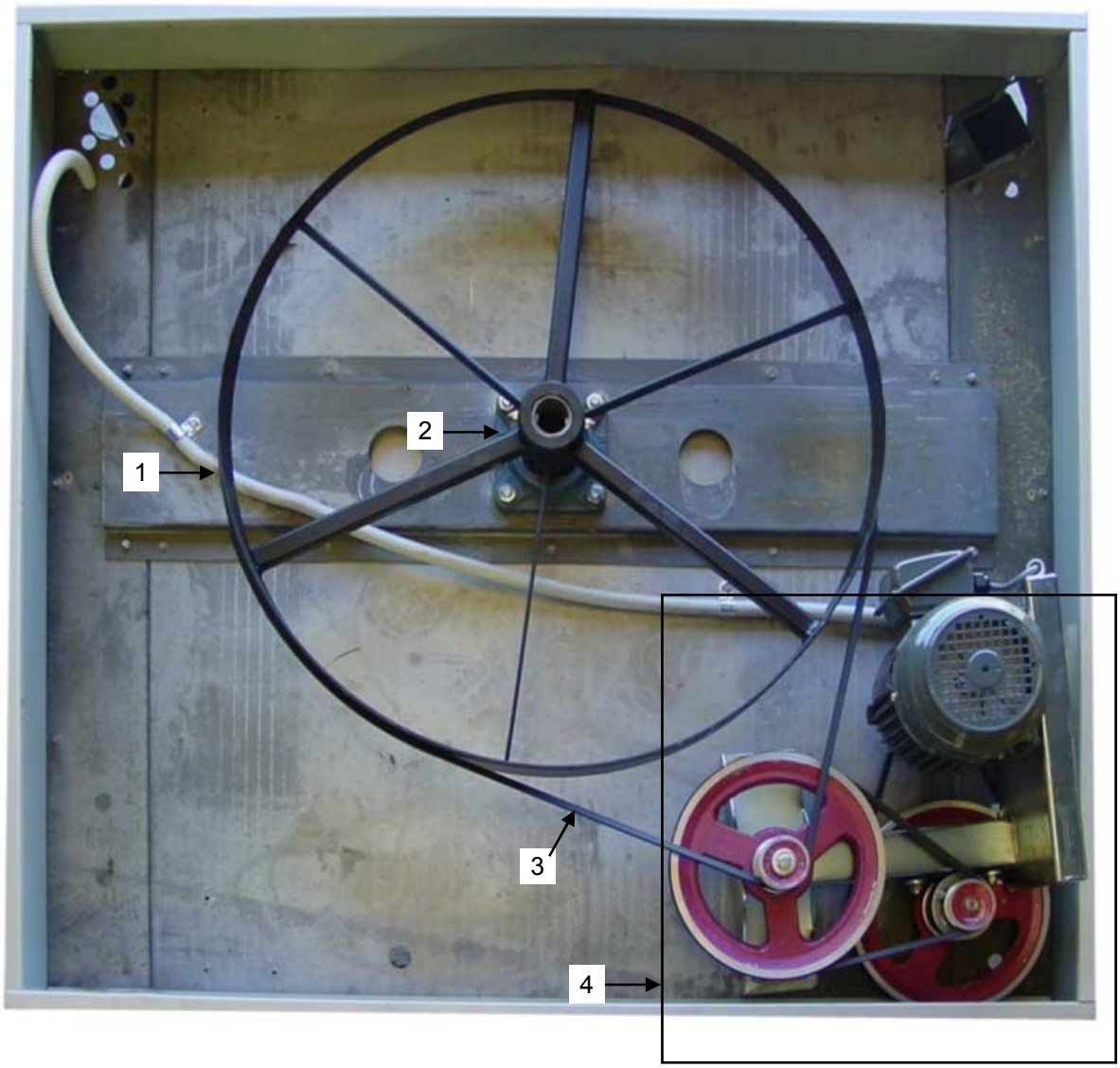
Pos	Part No.		Description
1	302011	RW4500	Element 770W
2	302013		Element 1550W
	302519	RW4560L	Middle LH element c/w heat sink
3	302013		Element 1550W
	302520	RW4560R	Middle RH element c/w heat sink
4	302012		Element 750W
	302521	RW4540	Middle element c/w heat sink
5			
6	302012		Element 750W
	302517	RW4520L	Bottom LH element c/w steam generator
7	302013		Element 1550W
	320507	RW4515L	Bottom LH element c/w steam generator
8	302013		Element 1550W
	302508	RW4515R	Bottom RH element c/w steam generator
9	302012		Element 750W
	302518	RW4520R	Bottom RH element c/w steam generator
10	301554		Steam cover (centre elements and non-water entry side)
	301995		Steam cover (water entry side)
11	302502	RW4582	Steam tube - LH 18” oven
	302503	RW4583	Steam tube - RH 18” oven
	302500	RW4586	Steam tube - LH 16” oven
	302501	RW4587	Steam tube - RH 16” oven

10.10 SHAFT / TURNTABLE ASSEMBLY



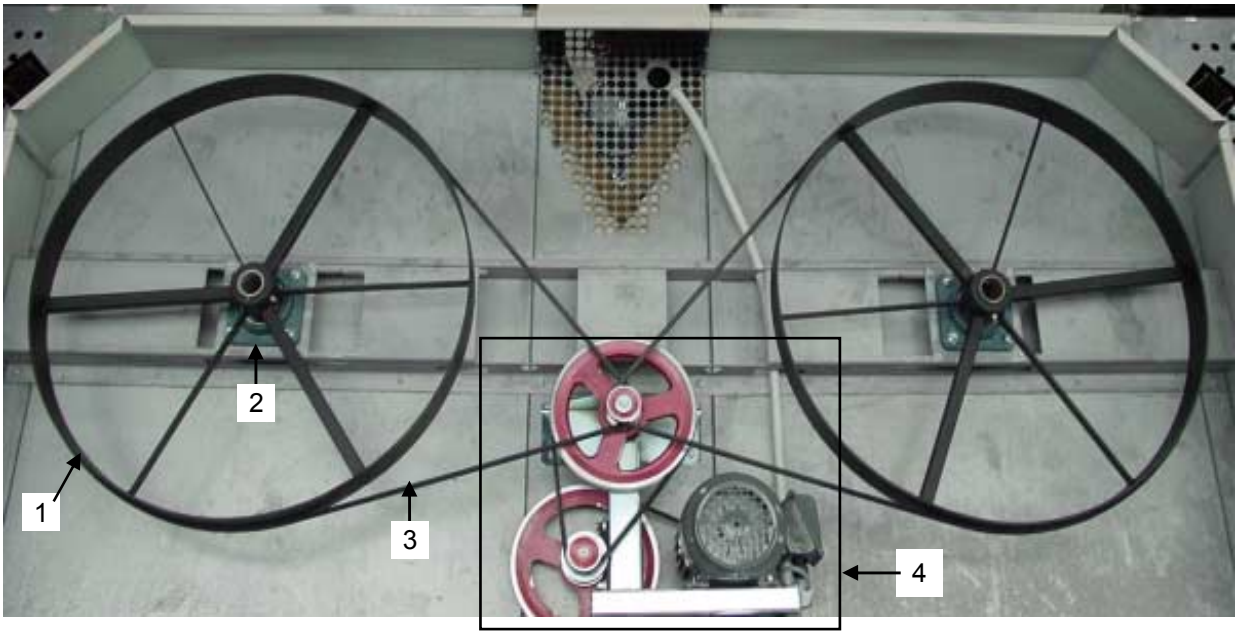
Pos	Part No.		Description
1	300219		Bearing UC210 2NS
	300246		Bearing housing F210J
			Top bearing shim
	301508		Top bearing shaft seal - 85x85 Teflon (not illustrated)
2	302053		Drive shaft (R12 - 3 deck 3 split)
	302059		Drive shaft (R24 - 3 deck 3 split)
	302057		Drive shaft (R24 - 3 deck 2 split)
3	300976	RW3156	Carbon bush
4			Carousel turntable (16” standard deck)
			Carousel turntable (18” standard deck)
5			Carousel turntable lift-out section (16” standard deck)
			Carousel turntable lift-out section (18” standard deck)
	301688		Carousel assy (16” standard deck) - includes items 3,4,5
		RW4644	Carousel assy (18” standard deck) - includes items 3,4,5
6	301685		Turntable assembly (16” split deck)
	301686		Turntable assembly (18” split deck)
7		SRCS	Stone sole
8			Stone sole frame
9	301683		Cooking wire WA (16”)
	301684		Cooking wire WA (18”)
10	300218		Bearing UC209 2NS
	300245		Bearing housing F209J
			Bottom bearing shim
	301508		Bottom bearing shaft seal - 85x85 Teflon (not illustrated)
	301633		Seal retainer - bottom (not illustrated)
	301509		Middle decks shaft seal - 130x130 Teflon (not illustrated)

10.11 HEAD GEAR - ROTEL “MINI”



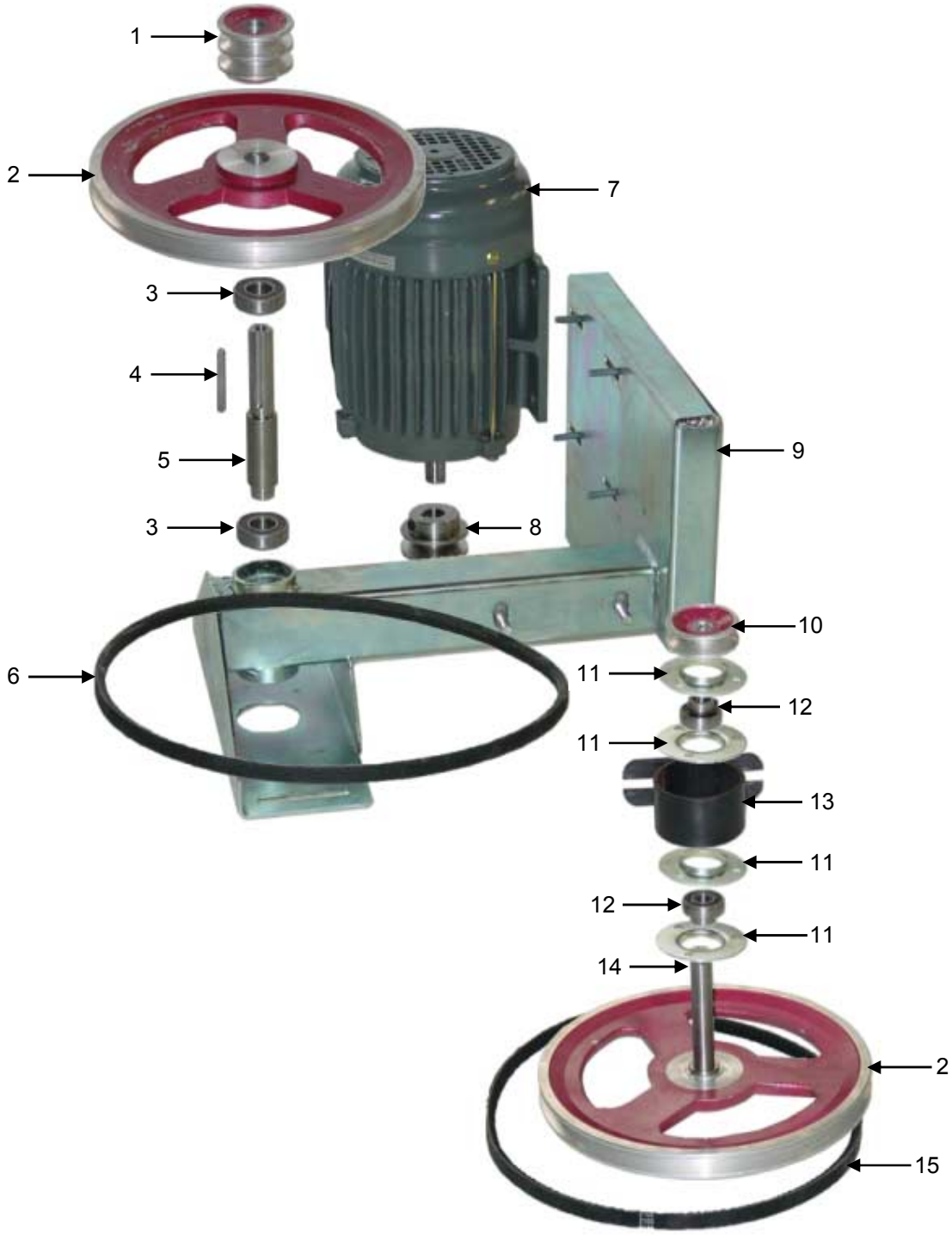
Pos	Part No.		Description
1	301679		Drive wheel
2	300219 300246		Bearing Bearing housing
3	300188		V Belt A108
4	302169	RW1069	Motor / Drive assembly (refer section 10.13 for breakdown)

10.12 HEAD GEAR - ROTEL “SLIMLINE”



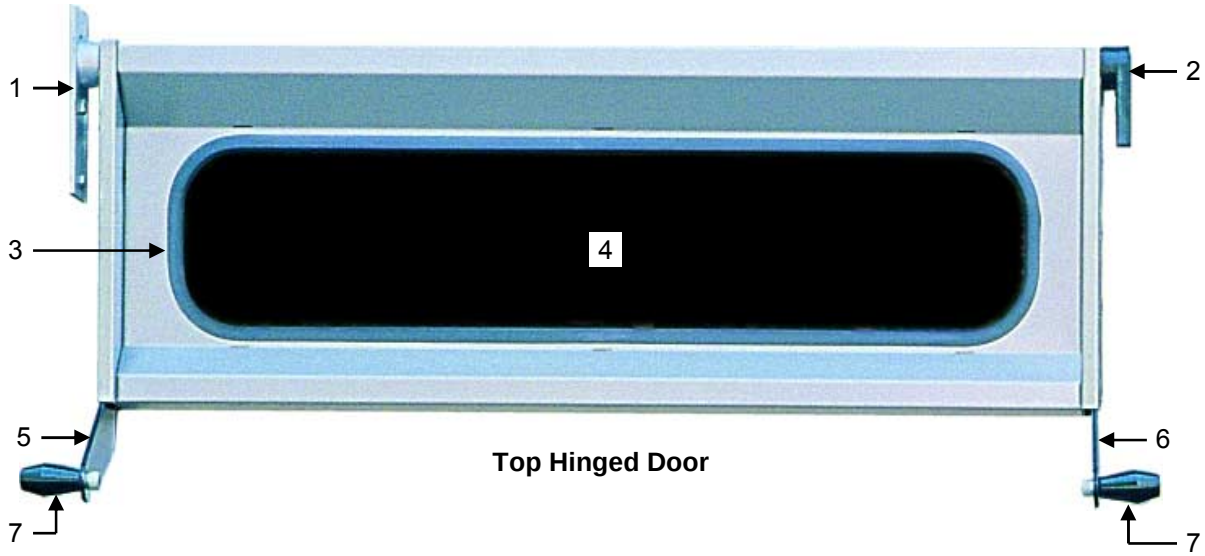
Pos	Part No.		Description
1	301679		Drive wheel
2	300219 300246		Bearing Bearing housing
3	300189	RW1525	V Belt A112
4	302169	RW1069	Motor / Drive assembly (refer section 10.13 for breakdown)

10.13 MOTOR ASSEMBLY

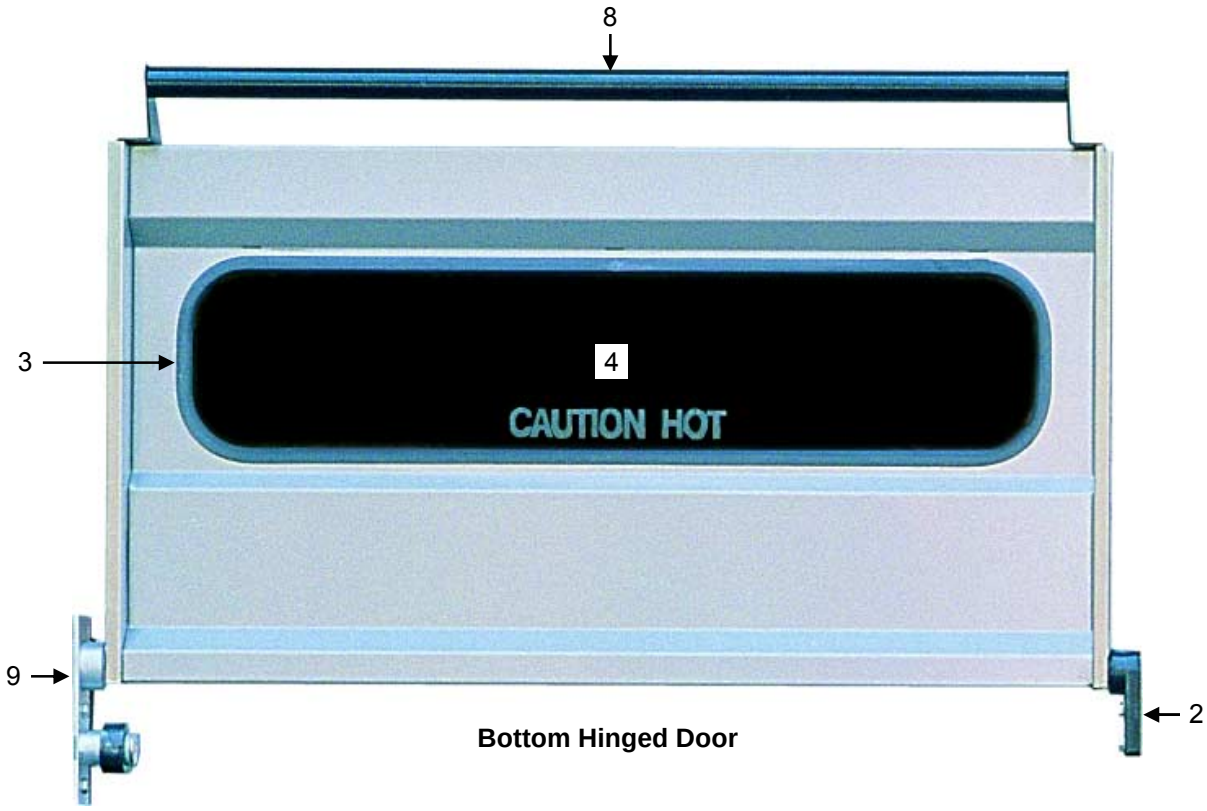


Pos	Part No.		Description
1	300206		Pulley 2x2A
2	300202	RW1096	Pulley 10x1A
3	300228		Bearing 6004 2NS
4	301375		Key - ¼" x 50mm
5	300720		Shaft - drive
6	300191	RW1510	V Belt A39
7	300494	RW3121	Motor 0.37kW 6-pole
8	300528	RW1101	Pulley 50mm steel
9	301678		Motor mounting frame WA
10	300204	RW1097	Pulley 2x1A
11	300232		Bearing housing
12	300216		Bearing UB203 2NS
13	300997		Bearing holder WA painted
14	300715		Shaft - intermediate
15	300191		V Belt - cogged AX39
	302169	RW1069	Motor / Drive assembly (includes all above items)

10.14 DOORS
(LH Doors Illustrated)



Top Hinged Door



Bottom Hinged Door

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Pos	Part No.		Description
1	301673	RW4615L	Door hinge - LH top hinged door (refer section 10.15)
	301672	RW4615R	Door hinge - RH top hinged door (refer section 10.15)
2	301769	RW4615	Door hinge - control panel side
3	301510	RW4635 (or 090202)	Window seal (2m required)
4	300990	RW4630	Door glass - 750x170x10
	302422		Glass retainer (not illustrated)
5	302029	RW4651	Door handle - LH (top hinged doors)
6	302030	RW4652	Door handle - RH (top hinged doors)
7	300609	RV3685 / RW3685	Torpedo knob
8	302514	RW4640	Door handle (bottom hinged doors)
9	301671	RW4610L	Door hinge - LH bottom hinged door (refer section 10.15)
	301670	RW4610R	Door hinge - RH bottom hinged door (refer section 10.15)
	300328	RW4618	Door stop ø40mm (fits RW4610L and RW4610R)
	301676	RW4611L	Door hinge - LH bottom door only (refer section 10.15)
	301677	RW4611R	Door hinge - RH bottom door only (refer section 10.15)
	300329	RW5166	Door stop ø78mm (fits RW4611L and RW4611R)
	302527	RW4623	Door assembly LH top hinged (std deck)
	302528	RW4622	Door assembly RH top hinged (std deck)
	302525	RW4627	Door assembly LH bottom hinged (split deck)
	302526	RW4628	Door assembly RH bottom hinged (split deck)
	302100	RW4636	Door seal set (2 per set)
	302100		Door seal assembly c/w rod
	301500	RW4636A	Door seal - no rod (1 metre required per seal)

10.15 DOOR HINGES

Bottom hinged LH door (40mm stop)

301671	RW4610L	Hinge assy
300328	RW4618	Door stop ø40mm
300341	RW4625	Spring bearing assy

Bottom hinged RH door (40mm stop)

301670	RW4610R	Hinge assy
300328	RW4618	Door stop ø40mm
300341	RW4625	Spring bearing assy

Top hinged LH door

301673	RW4615L	Hinge assy
300341	RW4625	Spring bearing assy

Top hinged RH door

301672	RW4615R	Hinge assy
300341	RW4625	Spring bearing assy

Bottom LH door (78mm stop)

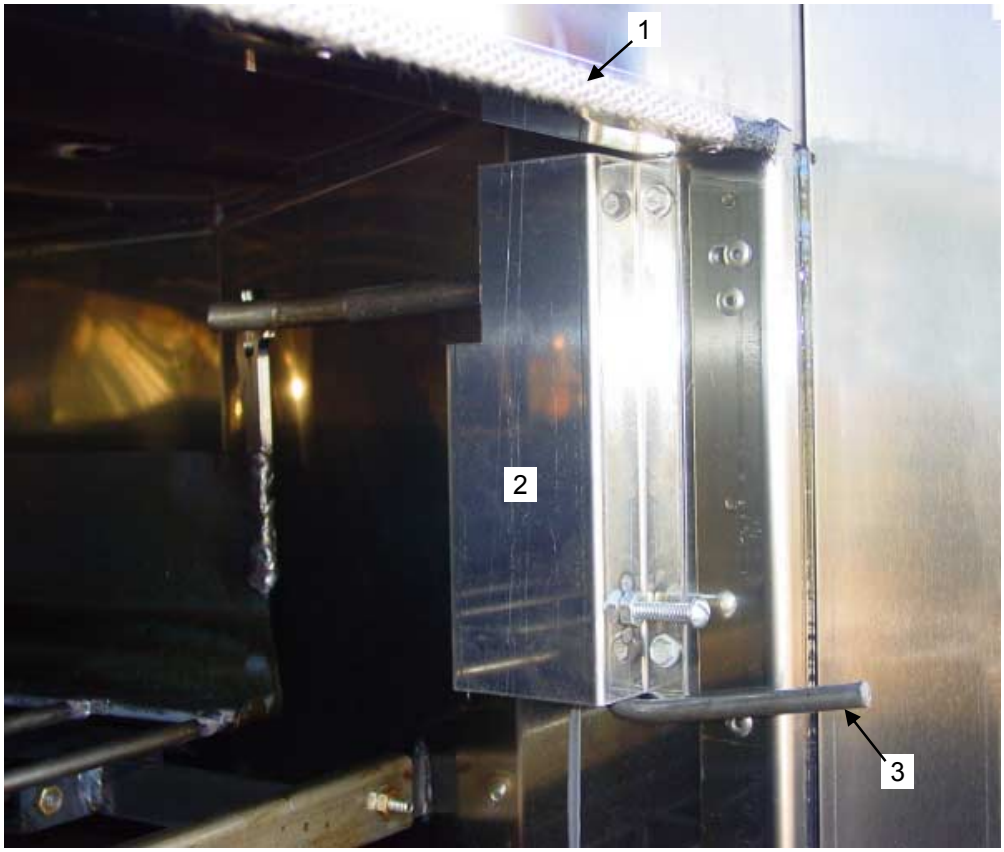
301676	RW4611L	Hinge assy
300329	RW5166	Door stop ø78mm
300341	RW4625	Spring bearing assy

Bottom RH door (78mm stop)

301677	RW4611R	hinge assy
300329	RW5166	Door stop ø78mm
300341	RW4625	Spring bearing assy

301769	RW4615	All doors (control side)

10.16 SPLIT DECK DOOR OPENING



Pos	Part No.		Description
1	302100	RW4636	Door seal assembly c/w rod
	301500	RW4636A	Door seal - no rod (1 metre required per seal)
		RW4636	Door seal set (2 per set)
2	301618		Stop arm cover
3	301680		Stop arm

11. SERVICE CONTACTS

AUSTRALIA

VICTORIA - MOFFAT PTY
HEAD OFFICE AND MAIN WAREHOUSE
740 Springvale Road
Mulgrave VIC 3170
Spare Parts Department

Tel (03) 9518 3888
Fax (03) 9518 3838
Free Call 1800 337 963
Fax (03) 9518 3895

NEW SOUTH WALES - MOFFAT PTY
Unit 8/142 James Ruse Drive
Rosehill NSW 2142
Spare Parts

Free Call 1800 337 963
Fax (03) 9518 3895

QUEENSLAND - MOFFAT PTY
30 Prosperity Place
Geebung QLD 4034
Spare Parts

Free Call 1800 337 963
Fax (03) 9518 3895

SOUTH AUSTRALIA - MOFFAT PTY
28 Greenhill Rd
Wayville SA 5034
Spare Parts

Tel (08) 8274 2116

Free Call 1800 337 963

WESTERN AUSTRALIA - MOFFAT PTY
PO Box 689
Joondalup Business Centre WA 6027
Spare Parts

Tel (08) 9305 8855

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APPENDIX A. UPGRADE TO PLC CONTROLLER

Slimline models fitted with a steam card must be upgraded to a Steam PLC.

Refer to the wiring diagram below (figure A.1) or section 7.2.5 for further clarification of the following instructions.

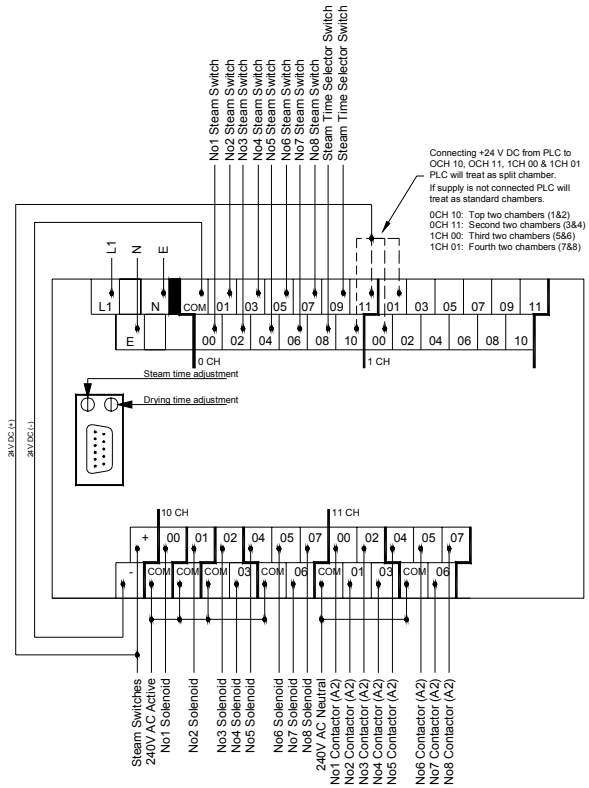

Figure A.1

1) Fit a 240V supply to terminals ‘L1’ and ‘10CH COM’.
2) Fit a neutral to terminals ‘N’ and ‘11CH COM’.
3) Fit a wire from the 24VDC positive terminal on the PLC to the in side of each of the steam switches on the control panel.
4) Fit a wire from the out side of each steam switch on the control panel to PLC terminals ‘0CH 00’ to ‘0CH 05’ (on 3 deck units) or ‘0CH 00’ to ‘0CH 07’ (4 deck units).
5) Fit two wires from the 24VDC positive terminal on the PLC to the steam time selector switch on the control panel.

   Fit two wires from the steam time selector switch on the control panel to PLC terminals ‘0CH 8’ and ‘0CH 9’.

   The exact wiring to and from the steam time selector switch depends on the type of steam switch installed in the oven. The operation should be as follows:

Switch position	PLC Inputs	
	0CH8	0CH9
1	0	0
2	+24VDC	0
3	0	+24VDC
4	+24VDC	+24VDC

7) Fit a wire from terminals ‘10CH 00 to ‘10CH07’ to the phase terminal of each water solenoid.
8) Fit the neutral wire from the top element contactors (standard decks) or top/middle element contactors (split decks) to terminals ‘11CH 00’ to ‘11CH 07’.

   The controller will break the power supply of these contactors during the “drying time”.
9) Fit a wire from the 24VDC negative terminal to ‘0CH COM’.
10) Fit a wire from the 24VDC positive terminal to the appropriate terminals to identify standard and split decks.

    0CH 10: Top two chambers
    0CH11: Second level two chambers
    1CH00: Third level two chambers
    1CH01: Fourth level two chambers

    If +24VDC is supplied to a terminal, then the respective deck is treated by the PLC as a split deck. If there is no connection then the deck is treated as a standard deck.

    For example: A Rotel Slimline 3D2S (top decks standard, second and third level decks split) would be connected as follows:

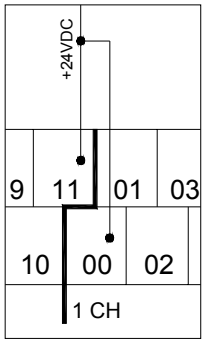

Figure A.2

RETURN TO MAIN MENU