

Installation and Operation Manual

Gas Target Top Range Electric Ovens

RN8110GE RNB8110GE
RNL8110GE RNLB8110GE
RN8110GEC RNB8110GEC
RNL8110GEC RNLB8110GEC



Date Purchased

Serial Number

Dealer

Service Provider



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Waldorf Gas Target Top Range Electric Ovens

RN (L)(B) 8110GE	Gas Target Top Range Electric Static Oven.
RN (L)(B) 8110GEC	Gas Target Top Range Electric Convection Oven.
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Introduction

We are confident that you will be delighted with your WALDORF Gas Target Top Range Electric Oven, and it will become a most valued appliance in your commercial kitchen.

To ensure you receive the utmost benefit from your new Waldorf appliance, there are two important things you can do.

Firstly:

Please read the instruction book carefully and follow directions given. The time taken will be well spent.

Secondly:

If you are unsure of any aspect of the installation, instructions or performance of your appliance, contact your WALDORF dealer promptly. In many cases a phone call could answer your question.

CE Only:

These instructions are only valid if the country code appears on the appliance. If the code does not appear on the appliance, refer to the supplier of this appliance to obtain the technical instructions for adapting the appliance to the conditions for use in that country.



Warning

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS APPLIANCE.



Warning

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS ARE TO BE POSTED IN A PROMINENT LOCATION. THIS INFORMATION SHALL BE OBTAINED BY CONSULTING THE LOCAL GAS SUPPLIER.



Warning

GREAT CARE MUST BE TAKEN BY THE OPERATOR TO USE THE EQUIPMENT SAFELY TO GUARD IT AGAINST RISK OF FIRE.

- THE APPLIANCE MUST NOT BE LEFT ON UNATTENDED.
- IT IS RECOMMENDED THAT A REGULAR INSPECTION IS MADE BY A COMPETENT SERVICE PERSON TO ENSURE CORRECT AND SAFE OPERATION OF YOUR APPLIANCE IS MAINTAINED.
- DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPOURS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.



Caution

- This appliance is for professional use and is only to be used by qualified persons.
- Only authorised service persons are to carry out installation, servicing or gas conversion operations.
- Components having adjustments protected (e.g. paint sealed) by the manufacturer should not be adjusted by the user / operator.
- DO NOT operate the appliance without the legs supplied fitted.

Model Numbers Covered in this Specification

RN[1]8110GE Gas Target Top Range Electric Static Oven - 900 mm.

RN[1]8110GEC Gas Target Top Range Electric Convection Oven - 900 mm.

NOTE:

[1]: - Model Options;

- Standard.L - Low Back.B - Bold Front.

LB - Low Back and Bold Front.

General

A commercial heavy duty, gas fired Target Top Range / Electric Oven, having a high output, two stage double-ring cast iron burner offering accurate temperature control and infinitely variable heat with the heat radiating out from the centre of the Target Top. The Main Burner is located underneath removable cast target top plates.

With heavy duty, high efficiency electric static or convection oven options, fitted with a 900mm, 6.5kW electric static oven and a 6.6kW Convection Oven created for compact modular kitchens. Both ovens are fitted with 4.5kW bottom element and 2.0kW top element. The Convection oven is fitted with a 100W oven fan motor.

Specifications

Gas Supply Requirements

- Australia:

	Natural Gas	LP Gas (Propane)
Input Rate (N.H.G.C.)	45 MJ/hr	45 MJ/hr
Gas Supply Pressure	1.13 - 3.40 kPa	2.75 - 4.50 kPa
Burner Operating Pressure (*)	1.0 kPa	2.60 kPa
Gas Connection	³/ ₄ " B.S.P. Male	

- New Zealand:

	Natural Gas	LP Gas
Input Rate (N.H.G.C.)	45 MJ/hr	45 MJ/hr
Gas Supply Pressure	1.13 - 3.40 kPa	2.75 - 4.50 kPa
Burner Operating Pressure (*)	1.0 kPa	2.60 kPa
Gas Connection	³/ ₄ " B.S.P. Male	

- UK Only:

Category: II_{2H3P} . Flue Type: A_1 .

		Natural Gas (G20)	Propane (G31)
	Nominal	11.5 kW	11.5 kW
Heat Input (nett)	Reduced	4.7 kW	7.9 kW
	Pilot	200W	200W
	Nominal	1.22 m³/hr	0.89 kg/hr
Gas Rate (nett)	Reduced	0.50 m³/hr	0.61 kg/hr
	Pilot	0.02 m³/hr	0.02 kg/hr
Supply Pressure		20 mbar	37 mbar
Burner Operating Pressure (*)		9.9 mbar	26.8 mbar
Gas Connection		³ / ₄ " B.S.F	P. Male

* Measure burner operating pressure at target top hob manifold test point with target top burner (Inner and Outer Ring) operating at full setting. Operating pressure is ex-factory set through appliance regulator and not to be adjusted, apart from when carrying out gas conversion, if required. (Refer to 'Gas Conversion' section for details).

- All Other Markets:

	Natural Gas	Town Gas (**)
Input Rate (N.H.G.C.)	45 MJ/hr	45 MJ/hr
Gas Supply Pressure	1.13 - 3.40 kPa	0.75 - 1.50 kPa
Burner Operating Pressure (*)	0.95 kPa	0.63 kPa
Gas Connection	³ / ₄ " B.S.P. Male	

	LP Gas (Propane)	Butane
Input Rate (N.H.G.C.)	45 MJ/hr	45 MJ/hr
Gas Supply Pressure	2.75 - 4.50 kPa	2.75 - 4.50 kPa
Burner Operating Pressure (*)	2.60 kPa	2.60 kPa
Gas Connection	onnection 3/4" B.S.P. Male	

NOTE:

- (**) Measure burner operating pressure at target top hob manifold test point with target top burner (Inner and outer ring) operating at full setting.
- NAT, LPG & Butane Only Operating pressure is ex-factory set and is not to be adjusted, apart from when converting between gasses, if required.
- TOWN GAS Only Burner operating pressure is to be adjusted using adjustable gas regulator supplied. Town Gas Option is only available with specific ex-factory built Town Gas models, which can also be converted to any other gas. Standard models can only be converted between Nat. Gas, LP Gas and Butane, but not Town Gas.
- Refer to 'Gas Conversion and Specifications' section of this manual for further details.

Gas Connection

Gas supply connection point is located at rear of the appliance, 130mm from right hand side, 32mm from rear, 655mm from floor and is reached from beneath appliance. An optional underside connection is available. (Refer to the 'Dimensions' section).

Connection is 3/4" BSP male thread.

Electrical Supply Requirements

MODEL	1-Phase Connection 1P+N+E, 230-240V		Phase Connection +N+E, 400-415V
RN8110GE	6.5 kW, 26.6 Amps @ 235 V	6.5 kW	L1 - 8.2 Amps L2 - 9.2 Amps L3 - 9.2 Amps
RN8110GEC	6.8 kW, 27.9 Amps @ 235 V	6.8 kW	L1 - 9.5 Amps L2 - 9.2 Amps L3 - 9.2 Amps

Electrical Connection



Warning

THIS APPLIANCE MUST BE EARTHED. IF SUPPLY CORD IS DAMAGED, IT MUST BE REPLACED BY A SUITABLY QUALIFIED PERSON IN ORDER TO AVOID A HAZARD.

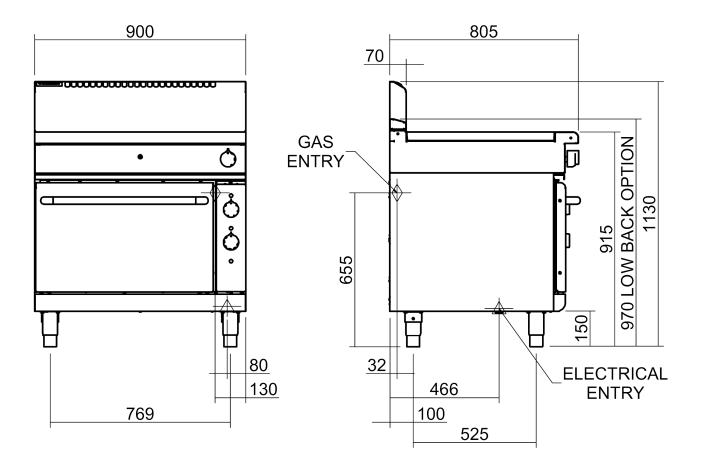
Electrical supply connection point is located at rear of appliance, 80mm from right hand side, 466mm from rear and 150mm from floor.

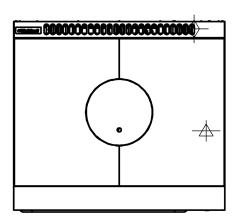
When connecting a this electric appliance to mains supply, ensure that the following is carried out:-

- An isolating switch is fitted within 2m of appliance, but not on appliance and in such a position that user does not have to reach across cooking surface.
- Supply cord shall be oil-resistant, sheathed flexible cable and not lighter than ordinary polychloroprene or other equivalent synthetic elastomer sheathed cord (as per AS / NZS 3191 part 2.10.11. or IEC 60245-IEC-57) e.g. HO5 RN-F Type.
- Branch supply line shall be individually overload protected to correct current rating and supply chord shall be protected against any mechanical or thermal damage.
- A grommet is fitted around wiring entry hole into appliance.
- All wiring connections must be tight.

Refer to appropriate wiring standards for size of cable to be supplied to an appliance for current drawn on that line.

RN(L)8110GE / GEC





Installation Requirements

NOTE:

- It is most important that this appliance is installed correctly and that operation is correct before use. Installation shall comply with local gas, electrical and health and safety requirements.
- This appliance shall be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of health harmful substances in the room, the appliance is installed in.

Waldorf Target Top Range Electric Ovens are designed to provide years of satisfactory service, and correct installation is essential to achieve the best performance, efficiency and trouble-free operation.

This appliance must be installed in accordance with National installation codes and in addition, in accordance with relevant National / Local codes covering gas, electrical and fire safety.

Australia / New Zealand: - AS/NZS5601 - Gas Installations.

- AS / NZS3000 - Wiring Rules.

United Kingdom: - Gas Safety (Installation & Use) Regulations 1998.

BS6173 - Installation of Catering Appliances.
BS5440 1 & 2 - Installation Flueing & Ventilation.
BS7671 - Requirements for Electrical Installation.

Ireland: - IS 820 - Non - Domestic Gas Installations.

Installations must be carried out by qualified persons only. Failure to install equipment to relevant codes and manufacturer's specifications shown in this section will void the warranty.

Components having adjustments protected (e.g. paint sealed) by manufacturer are only to be adjusted by an authorised service agent. They are not to be adjusted by the installation person.

Unpacking

- Remove all packaging and transit protection from appliance including all protective plastic coating from exterior stainless steel panels.
- Check equipment and parts for damage. Report any damage immediately to carrier and distributor.
- Report any deficiencies to distributor who supplied the appliance.
- Check available gas and electrical supply is correct to as shown on rating plate located on front right hand corner of bottom sill.

Location

1. Installation must allow for a sufficient flow of fresh air for combustion air supply.

Combustion Air Requirements:					
	RN8110GE RN8110GEC				
Natural Gas	12m³/hr	12m³/hr			
LPG	12m³/hr	12m³/hr			
Town Gas	12m³/hr	12m³/hr			

- 2. Installation must include adequate ventilation means, to prevent dangerous build up of combustion products.
- 3. Never directly connect a ventilation system to appliance flue outlet.
- 4. Any gas burning appliance requires adequate clearance and ventilation for optimum and trouble-free operation. Minimum installation clearances shown overleaf are to be adhered to.
- 5. Position appliance in its approximate working position.
- 6. All air for burner combustion is supplied from beneath appliance. Legs must always be fitted and no obstructions placed on underside or around base of appliance, as obstructions will cause incorrect operation and / or failure of appliance.

7. Components having adjustments protected (e.g. paint sealed) by manufacturer are only to be adjusted by an authorised service agent. They are not to be adjusted by the installation person.

NOTE: Do not obstruct or block appliances flue. Never directly connect a ventilation system to appliance flue outlet.

	Combustible Surface	Non Combustible Surface
Left / Right Hand Side	50mm	0mm
Rear	50mm	0mm

Clearances

NOTE: Only non-combustible materials can be used in close proximity to this appliance.

* Side clearances can be 50mm when adjacent surface is at least 100mm below cooking surface.

Appliance

Assembly

This model is delivered completely assembled. Ensure that legs are securely attached.

NOTE:

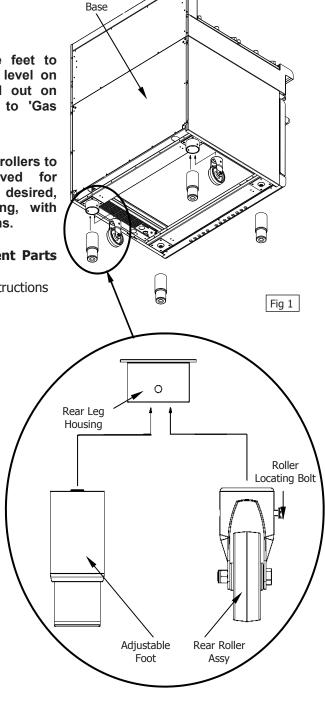
- This appliance is fitted with adjustable feet to enable it to be positioned securely and level on uneven floors. This should be carried out on completion of gas connection. Refer to 'Gas Connection Section'.
- This appliance can also be fitted with rear rollers to enable appliance to be easily moved for positioning and cleaning purposes. If desired, these rollers are supplied in packaging, with appliance. See below for fitting instructions.

Optional Accessories (Refer to Replacement Parts List)

• Plinth Kit. For installation details, refer to instructions supplied with each kit.

Fitting Rear Rollers.

- Raise appliance from floor by approx. 75mm
 using suitable lifting equipment (i.e. Palletiser /
 Forklift) to allow rear adjustable feet to be
 removed.
- 2. Unscrew and remove both rear adjustable feet from rear leg housings.
- 3. Fit rear roller to rear leg housing and align screw hole in side of rear leg housing with threaded hole in rear roller.
- 4. Secure rear roller to leg support with bolt supplied and tighten bolt using a 10mm A/F spanner.
- 5. Fit second roller and tighten.
- 6. Lower appliance back to floor and adjust front adjustable feet to level appliance.



Gas Connection

NOTE: ALL GAS FITTING MUST ONLY BE CARRIED OUT BY AN QUALIFIED SERVICE PERSON.

- 1. It is essential that gas supply is correct for appliance to be installed and that adequate supply pressure and volume are available. The following checks should be made before installation:-
 - a. Gas Type the appliance has been supplied for is shown on coloured stickers located above gas connection and onrating plate. Check this is correct for gas supply the appliance is being installed for. Gas conversion procedure is detailed in this manual.
 - b. **Supply Pressure** required for this appliance is shown in 'Specifications' section in this manual. Check gas supply to ensure adequate supply pressure exists.
 - c. The Input Rate of this appliance is shown on Rating Plate and in 'Specifications' section in this manual. Input rate should be checked against available gas supply line capacity. Particular note should be taken if appliance is being added to an existing installation.



NOTE: It is important that adequately sized piping runs directly to connection joint on appliance with as few tees and elbows as possible to give maximum supply volume.

2. Fit gas regulator supplied, into gas supply line as close to appliance as possible.

NOTE: Gas pressure regulator provided with this appliance is convertible between Natural Gas and LPG as per 'Gas Conversion Section' in this manual.

Ensure regulator is converted to correct gas type that appliance will operate on.

Regulator outlet pressure is fixed ex-factory for gas type that regulator is converted to and it is NOT to be adjusted.

Regulator connections are $^{3}/_{4}$ " BSP female. Connection to appliance is $^{3}/_{4}$ " BSP male.

(Refer to 'Specifications' section for gas supply location dimensions).

NOTE: A Manual Isolation Valve must be fitted to individual appliance supply line.

- 3. Correctly locate appliance into its final operating position and using a spirit level, adjust legs so that appliance is level and at correct height.
- 4. Connect gas supply to appliance. A suitable joining compound which resists breakdown action of LPG must be used on every gas line connection, unless compression fittings are used.
- 5. Check gas operating pressure is as shown in 'Specifications' section.
- 6. Check all gas connections for leakages using soapy water or other gas detecting equipment.

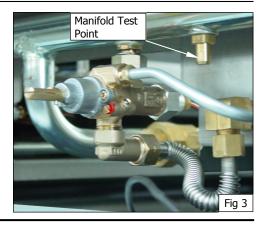


Warning

DO NOT USE A NAKED FLAME TO CHECK FOR GAS LEAKAGES.

NOTE: Measure burner operating pressure at target top hob manifold test point with target top burner (Inner and outer ring) operating at full setting.

7. Verify operating pressure remains correct.



Electrical Connection



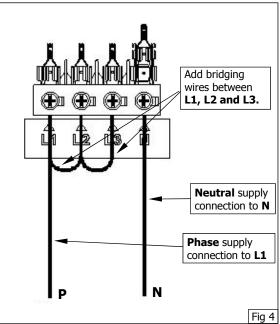
Warning

THIS APPLIANCE MUST BE EARTHED. IF SUPPLY CORD IS DAMAGED, IT MUST BE REPLACED BY A SUITABLY QUALIFIED PERSON IN ORDER TO AVOID A HAZARD.

NOTE: ALL ELECTRICAL CONNECTIONS MUST ONLY BE CARRIED OUT BY A QUALIFIED PERSON.

Each appliance should be connected to an adequately protected power supply and isolation switch mounted adjacent to, but not behind appliance. This switch must be clearly marked and readily accessible in case of fire.

- 1. Check electricity supply is correct as shown on Rating Plate attached to lower front hand side of front sill panel.
- 2. Supply terminal connections are located at rear of appliance. Refer to 'Electrical Connections' in 'Dimensions' section of manual.
- 3. Open oven door and remove oven control panel to allow connection access for electrical supply.
- 4. Connect mains supply to L1, L2 and L3 connection terminals. Refer to 'Electrical Supply Requirements' section for connection details.



NOTE: This appliance can be converted from 3 Phase to Single Phase supply by connecting single phase input to L1 and adding a bridge wire between L1, L2 and L3 connections, (refer to Fig 3 overleaf and information shown in 'Electrical Supply Requirements Table' in 'Specifications' Section).



Caution

Changing supply from 3 phase to single phase will increase electrical current loading on supply cable. Ensure supply cable used is of a sufficient size for current loading, refer to 'Electrical Supply Requirements' table.

- 5. Connect neutral and earth conductors to neutral stud and earth stud respectively.
- 6. For all connections ensure conductors are secure and appropriately terminated.
- 7. Tighten cable gland to secure against tension on cable.
- 8. Check that the polarity of each connection is correct to the mains connection terminals markings on the appliance.

NOTE:

- · Appliance must be earthed.
- Fixed wiring installations must incorporate an all-pole disconnection switch.
- 9. Correctly locate appliance into its final operating position and using a spirit level, adjust legs so that appliance is level and at correct height.
- 10. Connect power supply to appliance.
- 11. Check electrical supply is within input rating specification, refer to 'Specifications' section).

Installation

Commissioning

- Before leaving the new installation;
 - a. Check the following functions in accordance with operating instructions specified in 'Operation' section of this manual.
 - Light the Target Top Pilot Burner.
 - Light the Target Top Main Burner.
 - Check the Target Top Low Fire Burner operation.
 - Check the Target Top High Fire Burner operation.
 - Check the Oven Heating.
 - Check the Oven Thermostat operation.
 - Check the Oven Fan operation (GEC models only).
 - Check current draw and loading for equipment. Refer specification section for correct electrical requirements.
 - Check all connections are correct and that all cover panels have been re-fitted.
 - Ensure that this instruction manual is left with appliance.
 - Ensure that all relevant details and contacts have been added to front of this manual.
 - b. Ensure operator has been instructed in areas of correct lighting, operation, and shutdown procedure for appliance.
- 2. This manual must be kept by the owner for future reference, and a record of **Date of Purchase**, **Date of Installation** and **Serial Number of Appliance** recorded and kept with this manual. (These details can be found on Rating Plate attached to front right hand corner of bottom sill. Refer to 'Gas Connection' section).

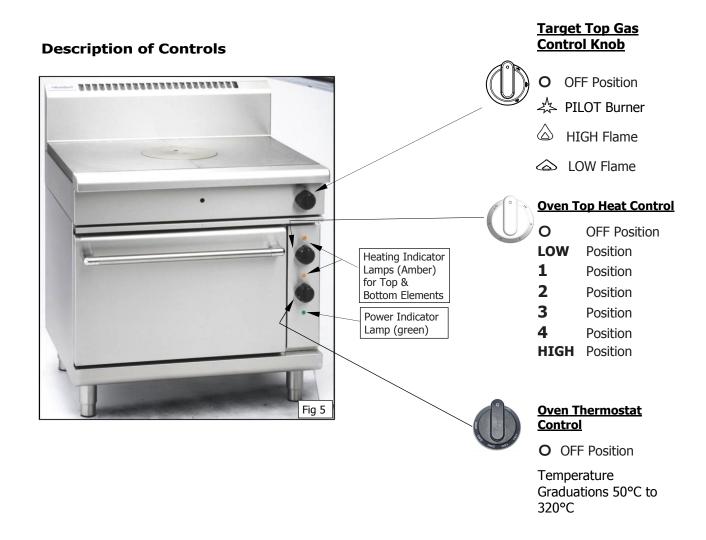
NOTE:

- If for some reason it is not possible to get appliance to operate correctly, turn 'Off' electrical power and gas supply and contact supplier of this appliance.
- Make sure that electrical and gas supply are turned 'Off' before any service or maintenance work is carried out on appliance.

Operation Guide



- This appliance is for professional use and is only to be used by qualified persons.
- Only authorised service persons are to carry out installation, servicing or gas conversion operations.
- Components having adjustments protected (e.g. paint sealed) by the manufacturer should not be adjusted by the user / operator.
- 1. Waldorf appliances have been designed to provide simplicity of operation and 100% safety protection.
- 2. Improper operation is almost impossible, however bad operation practices can reduce the life of the appliance and produce a poor quality product. To use this appliance correctly please read the following sections carefully:-
 - Lighting the Pilot Burner (Target Top).
 - Lighting the Main Burner (Target Top).
 - Oven.



Lighting Pilot Burner (Target Top)

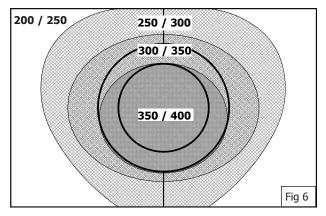
- 1. Remove centre casting with casting removal tool.
- 2. Depress control knob and rotate anti-clockwise to 'PILOT' position.
- 3. With control knob depressed, manually light pilot burner located in front of main burner.
- 4. Hold in control knob for approximately 10 to 15 seconds, then release.
- 5. Pilot burner should remain alight. If not repeat **Items 2 to 4** above until pilot burner lights.

Lighting Main Burner (Target Top)

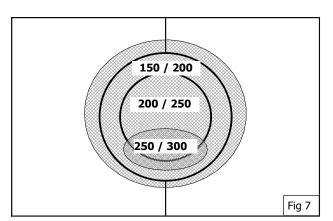
- 1. Ensure pilot burner is alight by checking through hole in centre of front control panel or by removing centre casting with casting removal tool.
- 2. Rotate gas control knob anti-clockwise to position marked 'HIGH'.
- 3. Main burner will now ignite automatically off pilot burner.
- 4. Once lit main burner will be burning at full rate. For a lower heat turn gas control knob fully anticlockwise to 'LOW' position.
- 5. Also for intermediate heat, position gas control knob between 'HIGH' and 'LOW' positions.

NOTE: Always set gas control knob to 'HIGH' position when lighting main burner. If pilot burner goes out during normal operation wait 5 minutes before re-lighting.

6. The cast iron work surface has a heat pattern that can be used effectively by positioning cooking pans etc. appropriately according to heat requirement.



Heat Pattern for Target Top on full heat (°C)



Heat Pattern for Target Top on Low Heat (°C)

IMPORTANT

Should any abnormal operation like;

- ignition problems,
- abnormal burner flame,
- burner control problems,
- partial or full loss of burner flame in normal operation, be noticed, appliance requires IMMEDIATE service by a qualified service person and should not be used until such service is carried out.

Oven

! IMPORTANT

- DO NOT USE aluminium foil or trays directly on cast iron sole plate(s).
- NEVER block or cover openings on each side of sole plate(s).

The oven is fitted with top and bottom elements. The thermostat maintains overall oven temperature. Top element is further controlled by oven top heat control. Convection ovens (RN8110GEC) are fitted with a circulation fan.

NOTE: The Thermostat on static oven provides overall control of temperature within oven by controlling both elements, whereas Oven Top Heat Control provides a means of balancing distribution of heat between top and bottom of oven.

Place oven racks in desired position.

Preheat:

Preheat oven by selecting desired temperature, and turning oven top heat control (Refer to Fig 5 on earlier page) to a maximum of 2. When desired temperature is reached, amber neon will go out.

Cooking:

When desired temperature has been reached, load oven with product and set oven top heat control to desired setting.

NOTE: When oven top heat control is set to a high setting, proportionally more heat is produced at top of oven. (This can be used for browning, etc, during cooking operation). With oven top heat control set on a low setting, less heat is produced from top oven elements. (This mode is used for general baking purposes to prevent cakes, etc, from getting too brown and crisp on top, but allow cake to cook through).

To obtain more top heat during cooking, turn oven top heat control to a higher position. (The higher the setting, the more top heat).

Turning 'OFF' the Oven:

- a. Turn oven top heat control to 'O' off position. Top heating will be turned 'OFF' and upper heating indicator lamp (Amber) will extinguish.
- b. Turn thermostat control knob to 'O' off position and lower heating indicator lamp (Amber) will extinguish. Oven is now turned 'OFF'.

General



Always turn off the electrical and gas supply before cleaning.

This appliance is not water proof.

Do not use water jet spray to clean interior or exterior of this appliance.

Clean the Target Top / Range regularly. A clean appliance looks better, will last longer and will perform better. Carbonised grease on cooking surface will hinder transfer of heat from cooking surface to food. This will result in loss of cooking efficiency.

DO NOT use water on Target Top while this item is still hot as warping and cracking may occur. Allow Target Top / Range to cool down and then remove for cleaning.

NOTE:

- DO NOT use abrasive detergents, strong solvents or caustic detergents as they could corrode or damage the target top / range.
- In order to prevent rust forming on Target Top, ensure that any detergent or cleaning material has been completely removed after each cleaning. Appliance should be switched 'On' briefly to ensure Target Top becomes dry.

To keep your Target Top / Range clean and operating at peak efficiency, follow procedures shown below:-

After Each Use

Clean Target Top / Range with a stiff nylon brush or a flexible spatula to remove any build up of carbon.

Daily Cleaning

- 1. Thoroughly clean splash back, interior and exterior surfaces of Target Top / Range with hot water, a mild detergent solution and a soft scrubbing brush.
- 2. Clean control panel with a damp cloth lightly moistened with a solution of mild detergent and water. Wipe dry with a clean dry cloth.
- 3. Brush Target Top (cast iron) with a soft bristled brush followed by wiping with a cloth to prevent accumulation of carbon.
- 4. Remove drip tray and clean with a mild anti bacterial detergent and hot water solution using a soft bristled brush. Dry drip tray thoroughly with a dry cloth.
- 5. Dry Target Top / Range thoroughly with a dry cloth and polish with a soft dry cloth.

Weekly Cleaning

NOTE:

- If Target Top / Range usage is very high, we recommend that weekly cleaning procedure is carried out more frequently.
- Ensure protective gloves are worn during cleaning process.
- DO NOT use harsh abrasive detergents, strong solvents or caustic detergents as they will damage Target Top / Range.
- DO NOT use water on Target Top / Range while it is still hot as cracking may occur. Allow castings to cool and remove for cleaning.

Target Top

- a. This should be kept clean of any build up of spillage's of food. Provided cast iron work surface is regularly used it will maintain itself in good condition with no special cleaning required.
- b. Clean food residue and spillage from channels around centre casting and main plates before use.
- c. **DO NOT use water on castings while they are still hot as cracking may occur.** Should it be necessary to clean castings, allow castings to cool and then remove for cleaning. Clean using a soft cloth moistened with a mild detergent and hot water solution and a scrubbing brush. Dry thoroughly with a dry cloth.
- d. Remove drip tray and clean with a mild anti bacterial detergent and hot water solution using a soft bristled brush. Dry drip tray thoroughly with a dry cloth.

Stainless Steel Surfaces

- a. Clean exterior surfaces of Target Top / Range with hot water, a mild detergent solution and a soft scrubbing brush. Note that gas control knobs are a push fit onto gas control valve spindles and can be removed to allow cleaning of front control panel.
- b. Baked on deposits or discolouration may require a good quality stainless steel cleaner or stainless steel wool. Always apply cleaner when appliance is cold and rub in direction of grain.
- c. To remove any discoloration, use an approved stainless steel cleaner or stainless steel wool. Always rub in direction of the grain.
- d. Remove drip trays and clean with a mild anti bacterial detergent and hot water solution using a soft bristled brush. Dry drip trays thoroughly with a dry cloth before re-fitting.
- e. Dry all components thoroughly with a dry cloth and polish with a soft dry cloth.

Periodic Maintenance

NOTE: All maintenance operations should only be carried out by a qualified service person.

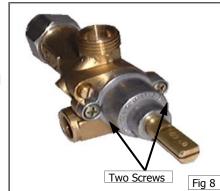
To achieve the best results, cleaning must be regular and thorough and all controls and mechanical parts should be checked and adjusted periodically by a qualified service person. If any small faults occur, have them attended to promptly. Don't wait until they cause a complete breakdown. It is recommended that the appliance is serviced every 6 months.

Gas Control Valve Re-Greasing

The gas control valve should be dismantled and greased every 6 months to ensure correct operation of the gas control valve.

To carry out this operation;-

- a. Remove gas control knobs from gas tap spindles by pulling knobs away from control panel.
- b. Remove drip tray from appliance.
- c. Remove two screws on underside of control panel, securing control panel to hob.
- d. Remove control panel from front of appliance.
- e. Remove 2 screws holding shaft plate to gas control body and remove control shaft and plate. (See Fig 8). Note orientation of shaft for correct re-assembly.
- f. Using needle nose pliers or similar, pull out gas control spindle, again noting its orientation.
- g. Apply a suitable high temperature gas cock grease or lubricant such as ROCOL A.S.P (Anti scuffing paste) / Dry Moly Paste to outside of spindle. (See Fig 9).
- h. Replace spindle and re-assemble gas control valve in reverse order.
- i. Refit control panel to appliance and secure with 2 screws.
- j. Refit knobs to gas control valve spindles.





Fault Finding

This section provides an easy reference guide to the more common problems that may occur during operation of your appliance. The fault finding guide in this section is intended to help you correct, or at least accurately diagnose problems with your equipment.

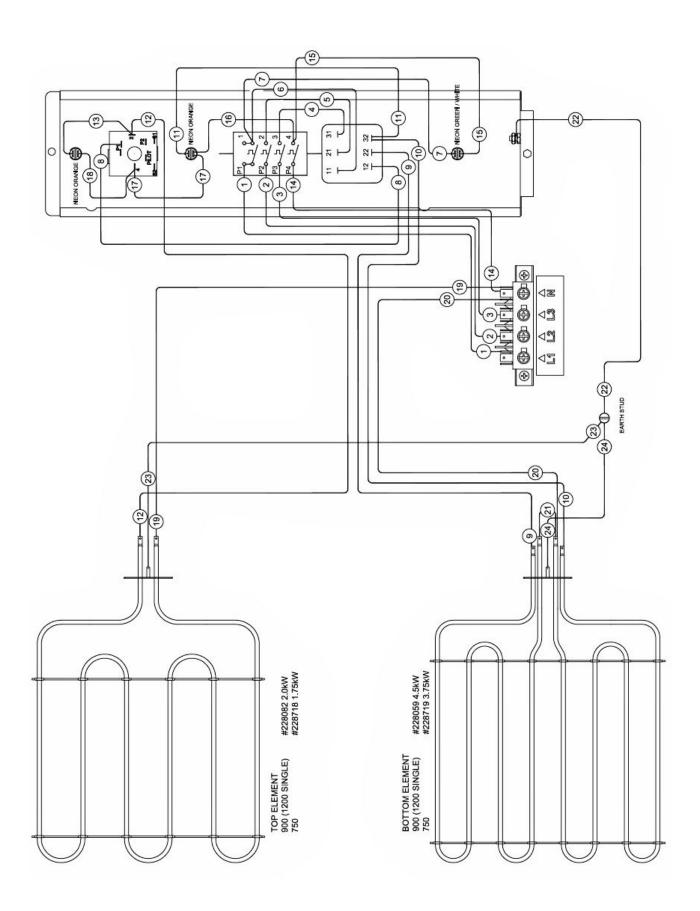
Although this section covers most common problems reported, you may encounter a problem not covered in this section. In such instances, please contact your local authorised service agent who will make every effort to help you identify and resolve the problem. Please note that the service agent will require the following information:-

 Model Trade Name and Serial Number of Appliance. (Both can be found on Technical Data Plate located on appliance).

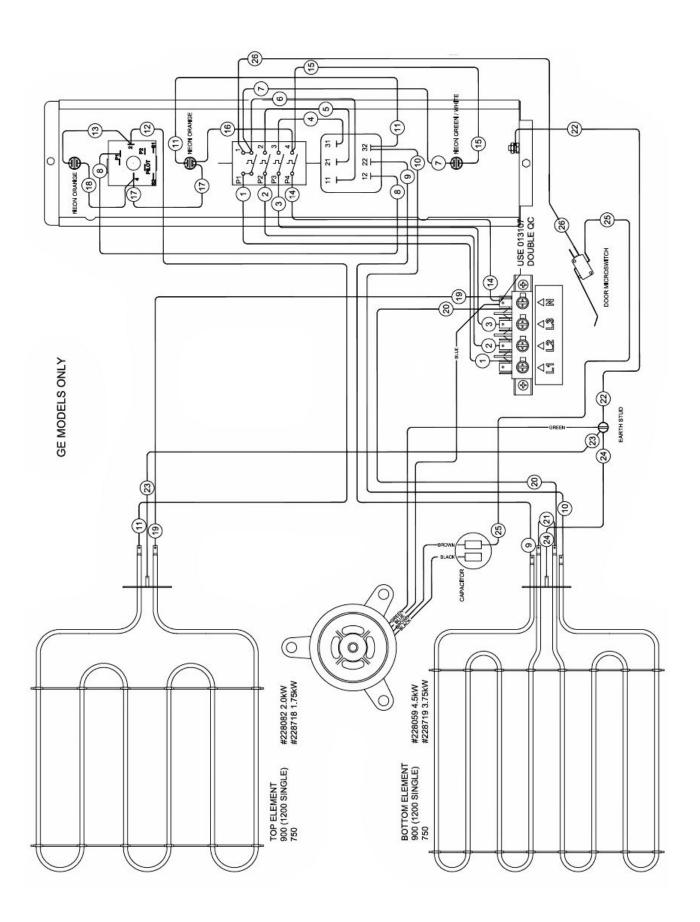
Fault	Possible Cause	Remedy
Pilot won't light.	No gas supply.	Ensure gas isolation valve is turned 'On', and bottles are not empty.
	Blocked pilot injector.	Call service provider.
Pilot goes out when gas control knob released.	Releasing knob before thermo- couple has heated.	Hold knob in for at least 20 seconds following ignition of pilot.
	Pilot flame too small Gas pressure too low Partially blocked pilot injector.	Clean or replace pilot injector.
	Thermocouple connection to gas control is loose or faulty.	Tighten thermocouple connection.
	Thermocouple faulty.	Inspect and replace if not in good working order.
		Call service provider.
Main burner will not light.	Incorrect supply pressure.	
	Faulty gas control.	Call service provider.
Element does not work when turned 'ON'.	Check individual fuses located behind control panel.	Replace blown fuse.
	Check for an electrical short by checking there is NO continuity between any "phase in" line and metal appliance body itself.	Call service provider.
	Check for item failing (element, control etc) by using a multimeter as shown on following pages.	Call service provider.
Complete power failure of appliance.	Check fuse connection at the mains supply.	Replace blown fuse.
	Ensure that the fuse size is correct to carry the load.	Carry out continuity and resistance check on appliance.
	Check for an electrical short to the appliance.	Call service provider.

NOTE: Components having adjustments protected (e.g. paint sealed) by the manufacturer, are only to be adjusted by an authorised service agent. They are not to be adjusted by an unauthorised service person.

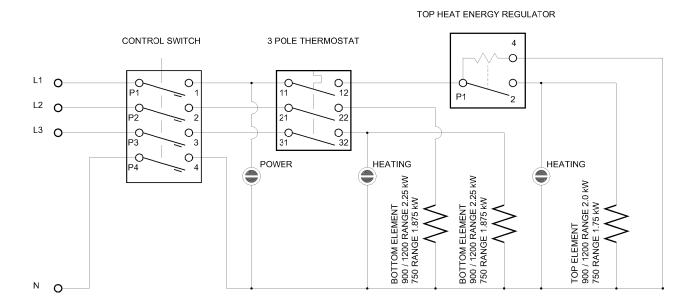
RN8110GE



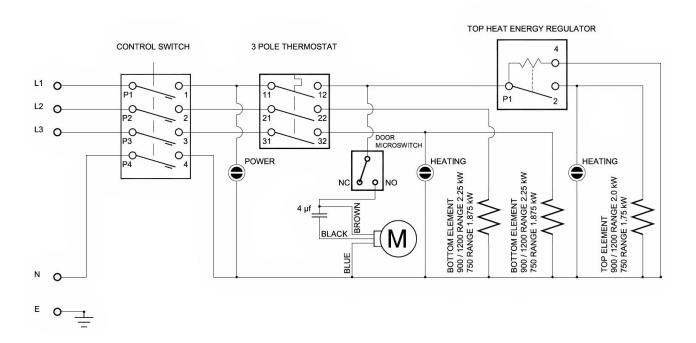
RN8110GEC



Wiring Layout for Static Oven



Wiring Layout for Convection Oven



Conversion Procedure



Caution

Ensure Appliance is isolated from gas and electrical supplies before commencing servicing.

NOTE:

- These conversions should only be carried out by qualified persons. All connections must be checked for leaks before re-commissioning appliance.
- Adjustment of components that have adjustments / settings sealed (e.g. paint sealed) can only be adjusted in accordance with the following instructions and shell be re-sealed before re-commissioning this appliance.
- For all relevant gas specifications refer to 'Gas Specification Tables' at rear of this section.

Remove the following:-

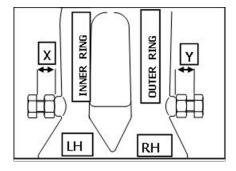
- Control knob from the target top control panel.
- Centre casting.
- Two half plate castings.
- Two front fire bricks.
- R/H main fire brick.

Main Burner Injectors

- 1. Remove main burner to reveal inner and outer ring injectors.
- 2. Remove injectors and replace with correct size injectors as shown in 'Gas Specifications Tables' at rear of this section.
- 3. Refit main burner to target top.

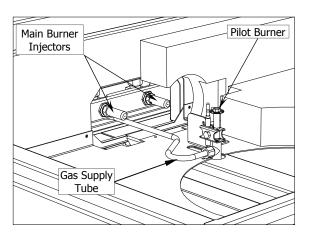
NOTE: Ensure main burner is pulled fully towards front of unit before tightening 2 main burner securing screws.

4. Set burner aeration screws 'X' and 'Y' for correct gas type aeration, as shown in 'Gas Specifications Tables' at rear of this section.



Pilot Burner

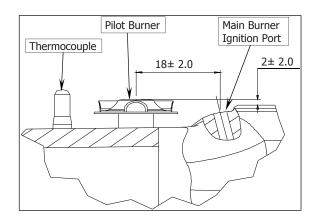
- 1. Disconnect gas supply tube from base of pilot burner.
- 2. Remove pilot burner and thermo couple retaining plate.
- 3. Remove pilot burner from mounting bracket.
- 4. Remove injector and spring from pilot burner and replace with correct size injector as shown in 'Gas Specifications Tables' at rear of this section.
- 5. Refit pilot burner to retaining bracket ensuring pilot burner ports are at same height as thermocouple.



Gas Conversion and Specifications

NOTE: Ensure pilot burner and thermocouple are correctly located and pilot burner aligns with main burner ignition port. (Refer to figure opposite for correct fitting and alignment dimensions).

- Re-connect gas supply tube to pilot burner.
- Refit RH main fire brick.
- Refit 2 front fire bricks.
- Refit 2 half plate castings ensure they are correctly interlocked.
- Refit centre casting.
- Refit front control panel and control knob.



Low Fire Adjustment

NOTE: Adjust low fire adjustment screw on gas control valve to as shown in 'Gas Specifications Tables' at rear of this section.

1. Light main burner and check flame size on simmer (LOW) position.

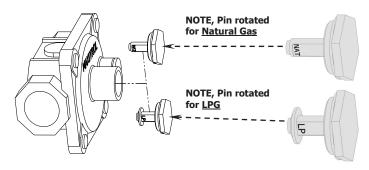


NOTE: 'Low Fire Screw' should be sealed with coloured paint on completion of low fire adjustment.

Gas Regulator

- NAT Gas / LPG / Butane Only.

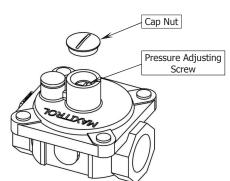
NOTE: Gas regulator supplied is convertible between Natural Gas and LP Gas, but it's outlet pressure is fixed ex-factory and is NOT to be adjusted.



- Town Gas Only.
- 1. Remove slotted cap from regulator.
- 2. Turn 'On' gas supply and appliance.
- 3. Adjust pressure adjusting screw to achieve correct burner operating pressure.

NOTE: Measure operating pressure at manifold test point with two burners operating at 'High Flame' setting.

- 4. Verify operating pressure remains correct (Re-adjust regulator if required).
- 5. Screw cap nut back onto regulator.



Gas Type Identification Label

On completion of gas conversion, replace gas type identification label located at:-

- Rear of appliance, above gas connection.
- Beside the rating plate.

Commissioning

Before leaving the installation;

1. Check all gas connections for leakage using soapy water or other gas detecting equipment.



Warning

DO NOT USE A NAKED FLAME TO CHECK FOR GAS LEAKAGES.

- 2. Carry out a 'Commissioning' check of appliance as shown in Installation Section of this manual.
- 3. Ensure any paint sealed components are re-sealed on completion of adjustments.

Gas Specifications

- Australia:

	Natural Gas	LP Gas (Propane)
Main Burner Injector (Inner Ring)	Ø 1.70mm	Ø 1.10mm
Main Burner Injector (Outer Ring)	Ø 2.60mm	Ø 1.55mm
Pilot Burner Injector	0.35	0.25
Burner Aeration Screw X (Inner)	25mm	25mm
Burner Aeration Screw Y (Outer)	28mm	28mm
Low Fire Adjustment	2 ¹ / ₂ turns out (ccw)	1 turn out (ccw)
Operating Pressure	1.0 kPa (*)	2.6 kPa (*)
Gas Regulator Cap Screw	NAT	LD

- New Zealand:

	Natural Gas	LP Gas (Propane)
Main Burner Injector (Inner Ring)	Ø 1.70mm	Ø 1.10mm
Main Burner Injector (Outer Ring)	Ø 2.60mm	Ø 1.55mm
Pilot Burner Injector	0.35	0.25
Burner Aeration Screw X (Inner)	25mm	25mm
Burner Aeration Screw Y (Outer)	28mm	28mm
Low Fire Adjustment	2 ¹ / ₂ turns out (ccw)	1 turn out (ccw)
Operating Pressure	1.0 kPa (*)	2.6 kPa (*)
Gas Regulator Cap Screw	NAT	LP

^{*} Measure burner operating pressure at target top hob manifold test point with target top burner (Inner and outer ring) operating at full setting. Operating pressure is ex-factory set through appliance regulator and not to be adjusted, apart from when carrying out gas conversion, if required. (Refer to details in this section for information).

Gas Conversion and Specifications

- UK Only:

Category: II_{2H3P} . Flue Type: A_1 .

	Natural Gas (G20)	Propane (G31)
Main Burner Injector (Inner Ring)	Ø 1.70mm	Ø 1.10mm
Main Burner Injector (Outer Ring)	Ø 2.60mm	Ø 1.55mm
Pilot Burner Injector	0.35	0.25
Burner Aeration Screw X (Inner)	25mm	20mm
Burner Aeration Screw Y (Outer)	28mm	25mm
Low Fire Adjustment	2 ¹ / ₂ turns out (ccw)	1¾ turn out (ccw)
Supply Pressure	20 mbar	37 mbar
Burner Operating Pressure (*)	9.9 mbar (*)	26.8 mbar (*)
Gas Regulator Cap Screw	NAT	D

* Measure burner operating pressure at target top hob manifold test point with target top burner (Inner and outer ring) operating at full setting. Operating pressure is ex-factory set through appliance regulator and not to be adjusted, apart from when carrying out gas conversion, if required. (Refer to details in this section for information).

- All Other Markets:

	Natural Gas	Town Gas (**)
Main Burner Injector (Inner Ring)	Ø 1.70mm	Ø 4.20mm
Main Burner Injector (Outer Ring)	Ø 2.60mm	Ø 6.30mm
Pilot Injector	0.35	0.70
Burner Aeration Screw X (Inner)	25mm	20mm
Burner Aeration Screw Y (Outer)	28mm	22mm
Low Fire Adjustment	2 ¹ / ₂ turns out (ccw)	Blank - 1 ¹ / ₂ turns out (ccw)
Supply Pressure	1.13 - 3.40 kPa	0.75 - 1.50 kPa
Burner Operating Pressure (*)	1.0 kPa	0.63 kPa
Gas Regulator Cap Screw	NAT	Adjustable Regulator (Adjust to Burner Operating Pressure specified)

	LP Gas (Propane)	Butane	
Main Burner Injector (Inner Ring)	Ø 1.10mm	Ø 1.00mm	
Main Burner Injector (Outer Ring)	Ø 1.55mm	Ø 1.45mm	
Pilot Injector	0.2	25	
Burner Aeration Screw X (Inner)	25n	nm	
Burner Aeration Screw Y (Outer)	28mm		
Low Fire Adjustment	1 turn out (ccw)		
Supply Pressure	2.75 - 4.50 kPa		
Burner Operating Pressure (*)	2.6 kPa		
Gas Regulator Cap Screw	LD		

NOTE:

- (*) Measure burner operating pressure at target top hob manifold test point with target top burner (Inner and Outer Ring) operating at full setting.
- NAT, LPG & Butane Only Operating pressure is ex-factory set and is not to be adjusted, apart from when converting between gasses, if required.
- (**) TOWN GAS Only Burner operating pressure is to be adjusted using adjustable gas regulator supplied. Town Gas Option is only available with specific ex-factory built Town Gas models, which can also be converted to any other gas. Standard models can only be converted between Nat. Gas, LP Gas and Butane, but not Town Gas.
- Refer to 'Gas Conversion and Specifications' section of this manual for further details.

Replacement Parts List

IMPORTANT:

Only genuine authorized replacement parts should be used for servicing and repair of this appliance. Instructions supplied with parts should be followed when replacing components.

For further information and servicing instructions, contact your nearest authorized service branch (contact details are as shown on reverse of front cover of this manual).

When ordering replacement parts, please quote part number and description as listed below. If part required is not listed below, request part by description and quote model number and serial number which is shown on rating plate.

Target Top

Controls

228853 230511 235347 017800 227384	Target Top Burner Kit. Pilot Burner Kit. Thermocouple Kit. Gas Control Valve Gas Control Knob		
229699	Gas Control Valve	(Town Gas).	
229693	Gas Control Knob	(Town Gas).	
031170	Injector Inner Ring	(Nat)	Ø 1.70mm.
031110	Injector Inner Ring	(LPG)	Ø 1.10mm.
031100	Injector Inner Ring	(Butane)	Ø 1.00mm.
031420	Injector Inner Ring	(Town Gas)	Ø 4.20mm.
031260	Injector Outer Ring	(Nat)	Ø 2.60mm.
031155	Injector Outer Ring	(LPG)	Ø 1.55mm.
031145	Injector Outer Ring	(Butane)	Ø 1.45mm.
031630	Injector Outer Ring	(Town Gas)	Ø 6.30mm.
227985	Pilot Injector	(Nat)	0.35.
227984	Pilot Injector	(LPG / Butane)	0.25.
232310	Pilot Injector	(Town Gas)	0.70.

<u>Oven</u>

228691	Oven Top Element 1.75kW.	(750 Ovens).
228690	Oven Bottom Element 3.75kW.	(750 Ovens).
228082	Oven Top Element 2kW.	(900 - 1200 Ovens).
228059	Oven Bottom Element 4.5kW.	(900 - 1200 Ovens).
228704	Door Spring Kit.	,
229021	Terminal Block Mains.	
227399	Control Knob Thermostat 50°C - 300°C.	
229146	Thermostat 50 - 300°C.	
229145	Switch (4-pole).	
013989	Energy Regulator.	
227398	Control Knob HI/LO Heat.	

Convection Oven Only

228938	Oven Door Microswitch.
010909	Motor Capacitor 4µf.
228116	Fan.
019479K	Motor Kit.

General

227012	Centre Casting.
227013	Half Plate Casting.
014997	Casting Removal Tool.
227892	Side Rack LH.
227893	Side Rack RH.
227896	Oven Rack.
228571	Index Mark Moulding.
227963	Neon Orange.
227962	Neon Green.
227850	Leg (150 mm) Adjustable.
229674	Rear Roller Assy.

Accessories

228800 Ranges 900 mm Plinth Kit.

Gas Regulator

Gas Type	Gas Regulators			
Gas Type	Part No.	Description		
Nat. Gas LPG, Butane	228531	3/4" BSP F/F Convertible.		
Town Gas	230185	¾" BSP F/F Adjustable.		

Gas Conversion Kits

Gas Type to Conver			rt to			
Model	Nat. Gas	LPG	Butane	Town Gas	Nat. Gas (UK)	LPG (UK)
RN8110G	231972	231971	231973	N/A (*)	231972	231971

NOTE: (*) Town Gas Option is only available with specific ex-factory built Town Gas models, which can also be converted to any other gas. Standard models can only be converted between Nat. Gas, LP Gas and Butane, but not Town Gas.