



Rayburn Ranger Field Service Manual



The information detailed in this guide applies to the Rayburn Ranger electric cooker, at all times the service technician **MUST** apply their competencies and ensure the appliance is left safe for continued use, should the appliance fail any test then engineering judgement must be applied as to whether the appliance can be left operational.

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YEARS



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Product Overview.

The brand new Rayburn Ranger, a fully-electric Rayburn cooker providing flexible, energy-efficient cooking and stunning styling.

A cast iron hotplate that can be set to boiling or simmering mode.

Two zone Induction hob.

The cooker includes two large capacity radiant ovens plus a warming oven, which operate independently. It also benefits from a grill,

The Rayburn Ranger vents into the room. We recommend this model is used in conjunction with a cooker hood. The oven vent outlets are located on top of the Ranger and are designed for venting the moisture from the ovens.

General information

Regular servicing is not required for this cooker

- **DO NOT ALTER** or **MODIFY** the appliance.
- The appliance warranty does not cover commercial use.
- Please refer to the Rayburn Ranger cooker installation instructions for specific information regarding appliance dimensions, clearances, electrical requirements etc.
- Installation instructions and are available to view at https://www.agaliving.com/sites/default/files/user_guides_uploaded/07-22%20EINS%20517932%20RAYBURN%20RANGER%20100%20i%20GB_1.pdf

Important Note

Before carrying out work on the appliance, the power supply MUST be isolated and tested for safe electrical isolation.

All electric 2 x 13 amp connections.

The main cooker and the induction unit assembly are electrically tested before leaving the factory.

Always inspect the cooker before any work is carried out and notify the customer of any existing damage.

Cooking zones



1. Cast iron Boiling / Simmering plate
2. 2-zone induction hob with bridging feature
3. Roasting oven with Grill – 5mm 'Radiant' steel with enamelled liner
4. Control panel
5. Baking/Simmering oven - 5mm 'Radiant' steel with enamelled liner
6. Warming oven

User control panel.



The Ovens

Roasting Oven and Grill

The upper oven is indirectly heated by two elements, one concealed in the base of the oven and the other is visible in the roof. These elements heat the lined cavity to provide cooking results consistent with traditional heat storage ovens, but with the flexibility to turn the ovens off when not in use. The appliance features three settings Roast, Grill & Bake

Baking/Simmering Oven

The lower oven is indirectly heated by two elements, one concealed in the base and the other visible in the top of the oven. These elements heat the lined cavity oven to provide cooking results comparable with traditional heat storage ovens, but with flexibility to turn the oven off when not in use. The appliance features two settings bake and simmer.

Warming Oven

The Warming oven is indirectly heated by one element which is fitted underneath the oven.

The OVEN IS NOT A HOLDING OVEN and therefore is not designed to hold food at a given temperature for long periods

Essential tools

Always protect the cooker and work area before carrying out any work on the appliance.

Inspect the cooker for any existing damage before starting work.

When undertaking maintenance work on this appliance the engineer should ensure the following tools are available

- Multi meter
- Clamp meter
- Insulation resistance tester
- Tool kit
- Torque driver with screwdriver bits

The main electrical terminal block connections on the Rayburn Ranger **must** be tightened by the use of a torque screwdriver, please see below for the correct setting.

Main Terminal Block connections 2.5Nm.

Removal and replacement of major components

Before carrying out work on the appliance, the power supply MUST be isolated and tested for safe electrical isolation.

The Rayburn Ranger utilises a wheel system which allows the appliance to be wheeled out from its position for essential work to be carried out.

When removing the cooker from its position, the front stability feet can be raised with a 13mm spanner to allow the cooker to be wheeled out from its position.



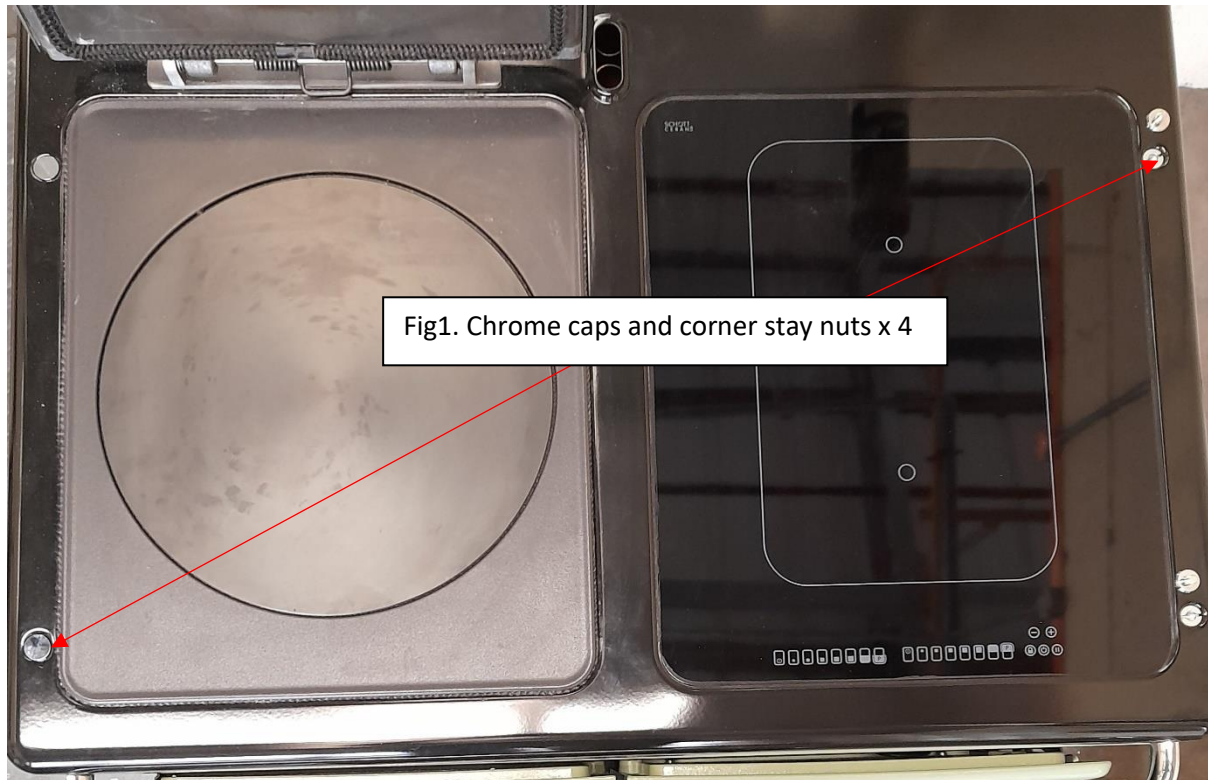
To gain access to the front stability feet remove the front plinth at the base of the cooker.

Some repairs will require the top plate to be lifted it is recommended to utilise two engineers for this , the top can be propped (as shown) or alternatively one engineer can hold the top upright while the other engineer carries out the work.



To gain access to the underside of the top plate.

To lift the top plate, remove 4 chrome caps covering the corner stay nuts, then remove the 4 corner stay nuts Fig1.



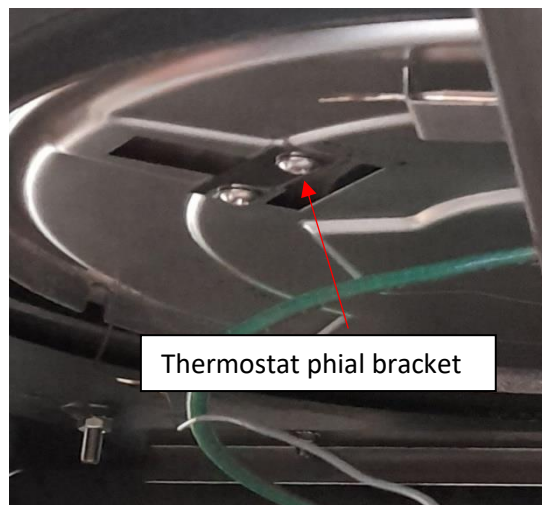
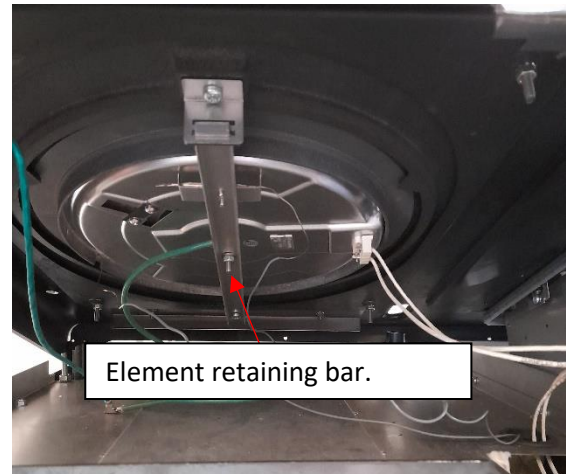
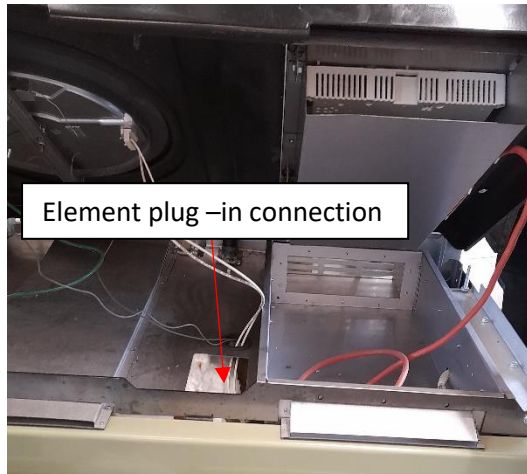
The top plate can then be lifted upwards from the main chassis,

You can then view the underside of the top plate along with the fitting of the element and the induction unit.



Removal and replacement of top plate element and Induction unit.

To remove the hob element, follow the element leads and unplug the electrical connection plug, remove the hob element retaining bar on the underside of the element, loosen the 2 screws securing the thermostat phial to the underside of the element and withdraw the thermostat phial from the element, the element can then be lifted out of position



Replace in reverse order, always remember to refit the earth connection.

Removal and replacement of Induction unit.

To remove / replace the induction unit the top plate will need to be lifted and supported, disconnect the plug –in electrical connection **Fig2**, then remove induction cover plate and the cable brackets **Fig3**.

Fig 2

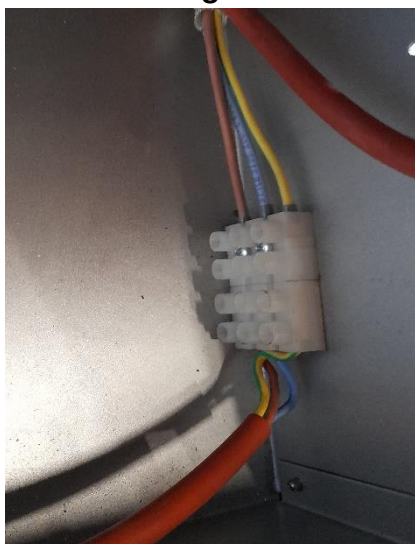
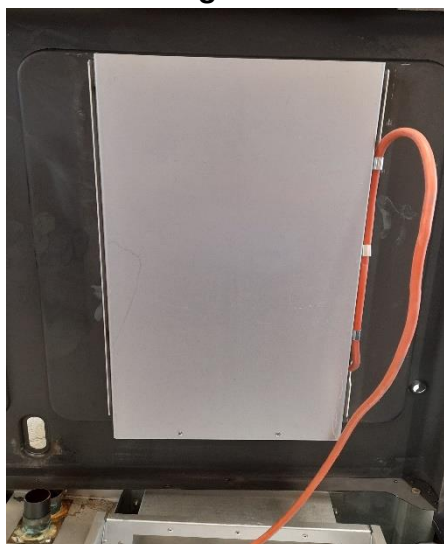


Fig 3



When the induction unit cover plate is removed this will allow access to the mounting brackets **Fig 4**, remove the 4 screws and then carefully remove the springs securing the unit, then gently pull the induction unit off the brackets **Fig 5** and replace in reverse order.

Fig 4.

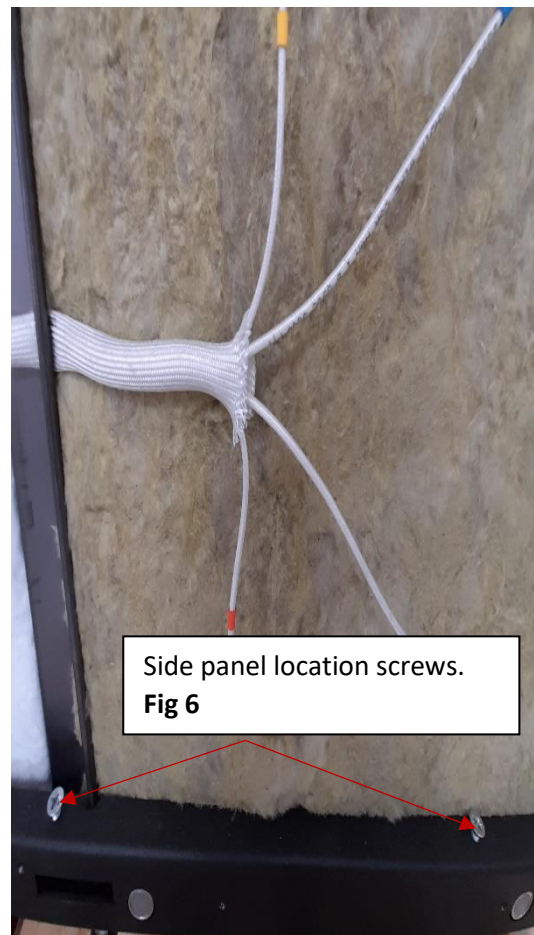
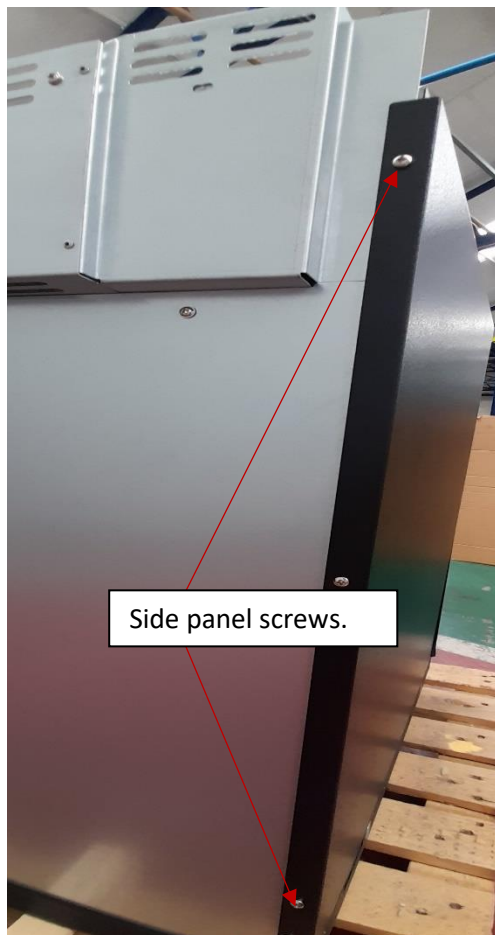


Fig 5.



Removal and replacement of side panels.

To remove the side panels on the Ranger, the cooker will need to be pulled out from its position, then remove the screws securing the side panel to the back panel, then slide the back panel backwards approx ½ inch and pull outwards.



When replacing the side panels, locate the cut-outs in the base of the side panel onto the screws in the cooker base and then slide the side panel back into its position. Fig 6

Access to grill and left hand ovens element connections and grill overhear thermostat.

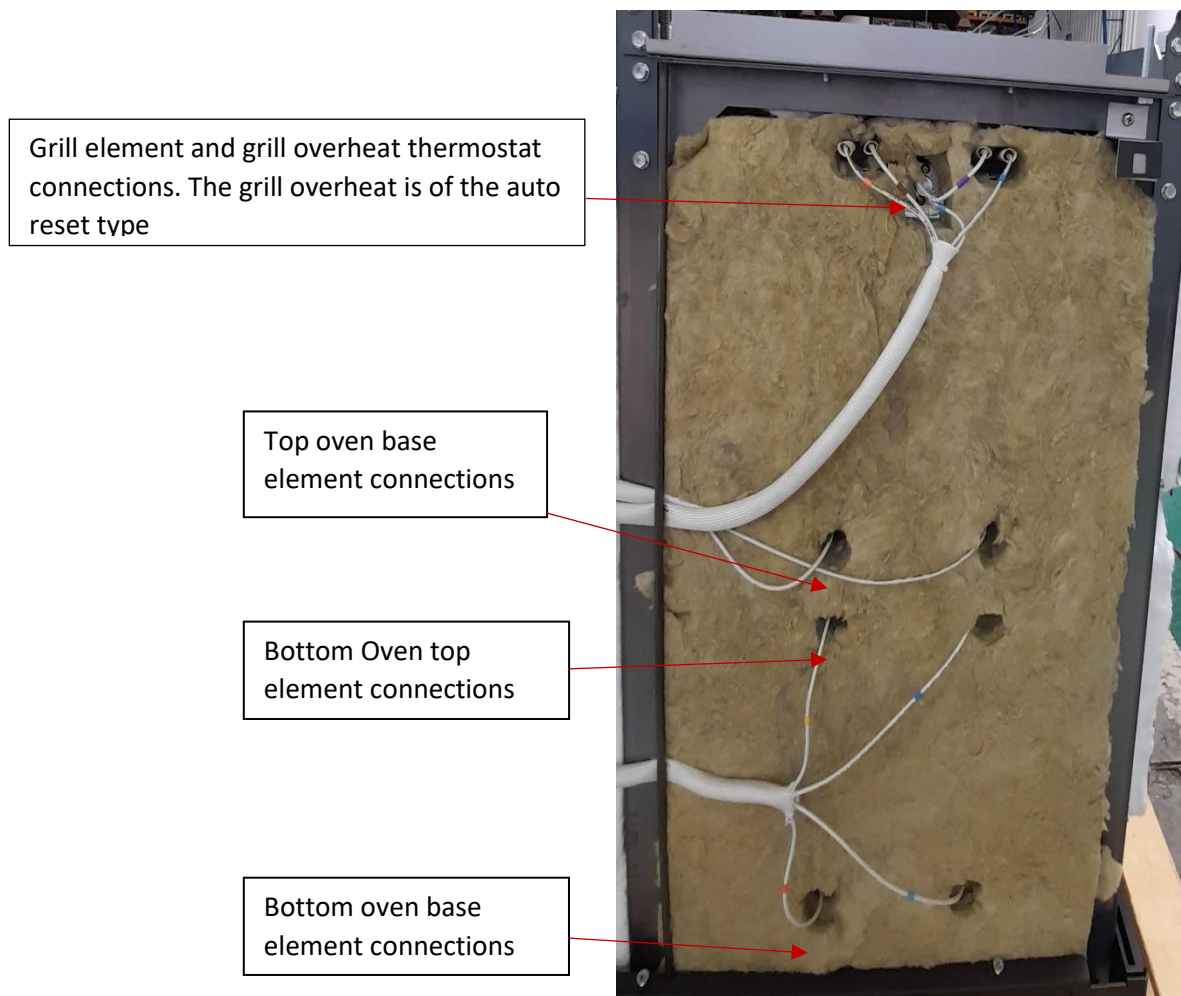


Fig 7.

When the left hand side panel is removed, this gives access to the left hand oven element connections as shown in **Fig 7**.

Always note the configuration of the connections when disconnecting the cables.

Roast oven base and grill element removal,

When removing the elements it is best to remove the door for better access. Lift the door off its hinge and place in a safe position, then remove. The oven shelf guides by pulling outwards.

To remove the grill element (900watts), remove 2 screws holding the grill support bar, then remove the 2 screws holding the grill element in position. When the screws have been removed slide the element to the right hand side, note the configuration of the connections and remove and replace as necessary. Replace components in reverse order.

Grill element securing screws

Grill element support bar



Grill element securing screws



Roast oven base element removal and replacement.

When removing the roast oven base element (300 watts) it is recommended to remove the oven door for better access and then remove the oven shelf guides. The element is positioned below the oven base plate. Pull the base plate forward and lift on one side and pull out of the oven cavity **Fig10.**

Remove the two screws securing the element to the oven cavity and then slide the element out **Fig11.** Replace components in reverse order.



Fig10.



Fig11.

The elements in the lower left oven (2 x300 watts) can be accessed and exchanged in a similar way as the top left oven elements. **Fig 12 & 13.**

Fig 12. Lower left oven top element.



Fig13.Lower oven base element.



To gain access and remove and replace the warming oven element.

The warming oven element (100 watts) is fixed to the bottom of the warming oven, to gain access to the warming oven element, the side panels and the back panel will need to be removed. Then the insulation will need to be removed, the element can then be removed from the underneath of the oven. The new element can then be fixed into position and then route the element cables back to their connections in the back of the control box.



Remove the insulation to gain access to warming oven element



The element is attached to the base of the oven.

Access to the grill cooling fan.

To gain access to remove and replace the cooling fan, the Ranger will need to be pulled out from its position and then remove the top plate, side panels and back plate. This will allow access to the four screws holding the fan in its position. Disconnect the fan connection plug and then remove the bolt securing the earth connection and then remove the four securing screws holding the fan in position.



Bottom left oven overheat thermostat.

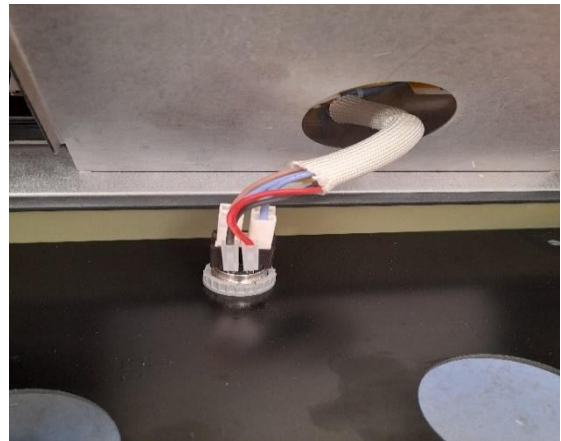
To gain access to the bottom oven overheat thermostat, the side panels and back panel will need to be removed. The thermostat is located on the back of the oven cavity and is of the manual resettable type.



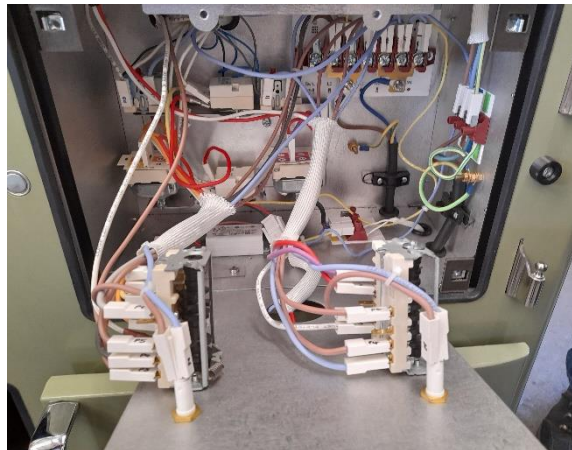
To gain access to the main terminal block, switches and thermostats.

Remove the four chrome decorative caps, then remove the 4 screws beneath the chrome caps and then remove the 2 control knobs. Hold the glass whilst doing this and then pull down the panel gently towards you.

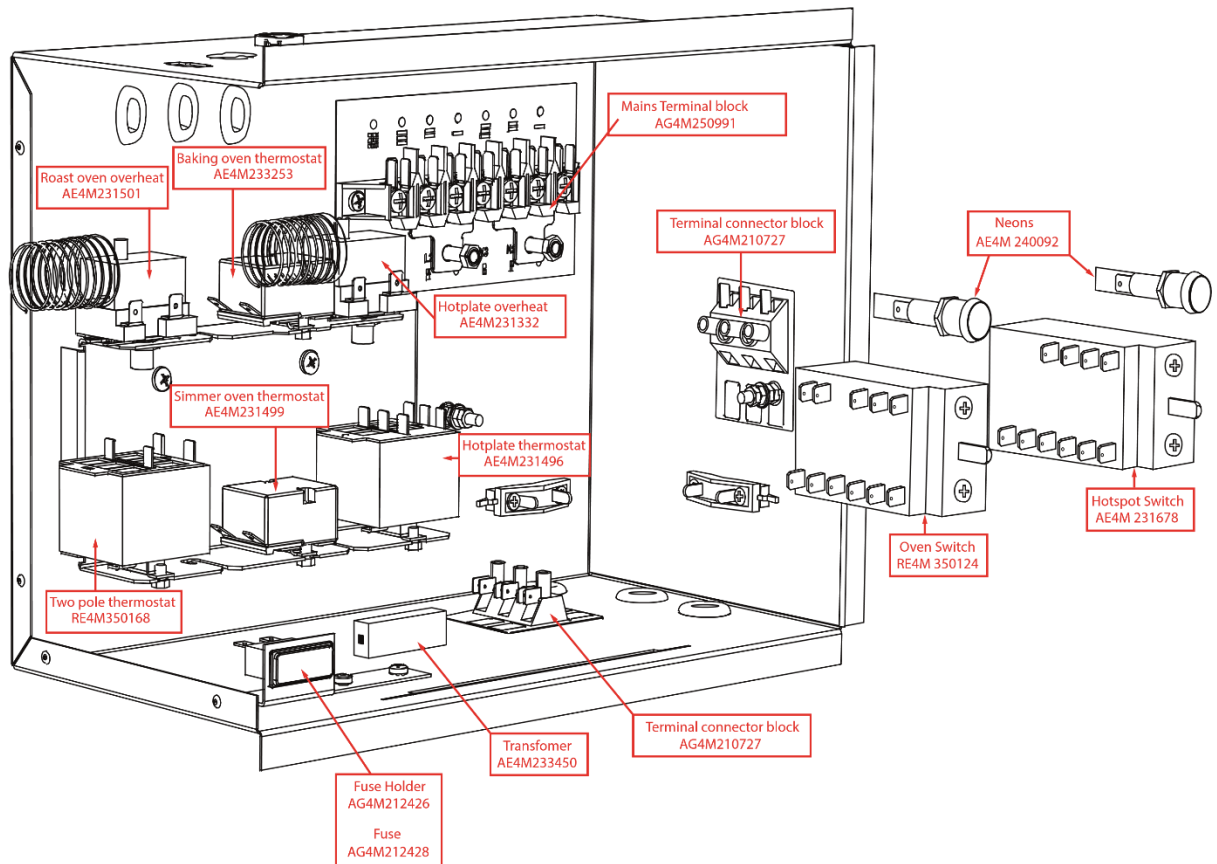
When the glass panel is pulled out this will give access to the warming oven switch, take a note or a photo of the configuration of the wiring of the switch and then remove the red and blue spade connections that feed the neon on the switch. Then unclip the main body of the switch from the push button that is left on the glass control panel. Remove the glass and place in a safe position.



Once the glass has been removed and placed in a safe position, remove the 2 screws securing the switch mounting plate to the chassis. The switch mounting plate is hinged and then lower down to a resting position. You will then see the main terminal block, switches and thermostats.



Switch and Thermostat Identification



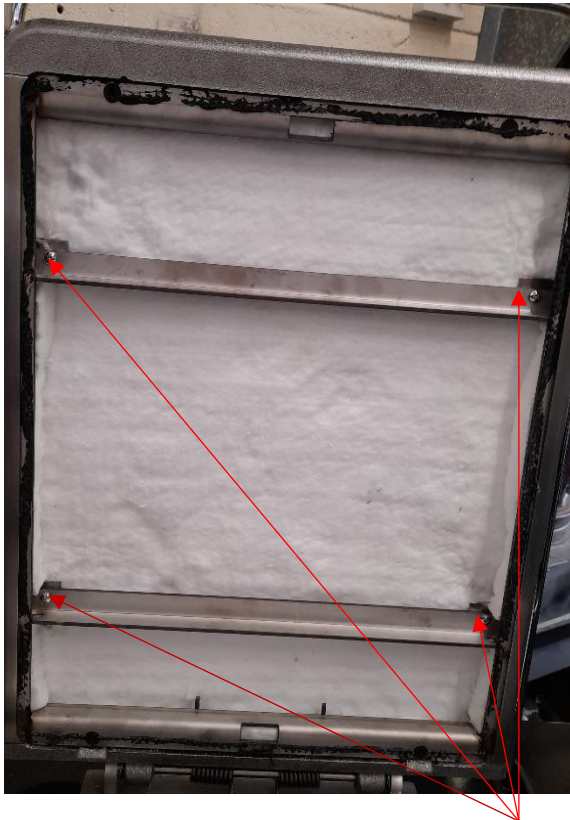
Removal and replacement of lid liner.

Lift the lid and remove the rope seal, also remove all of the old sealant securing the rope in place. When the rope is removed, slide the liner down and then lift out of position. This will also give access to the lid insulation and the lid top cover screws.



Removal and replacement of lid top

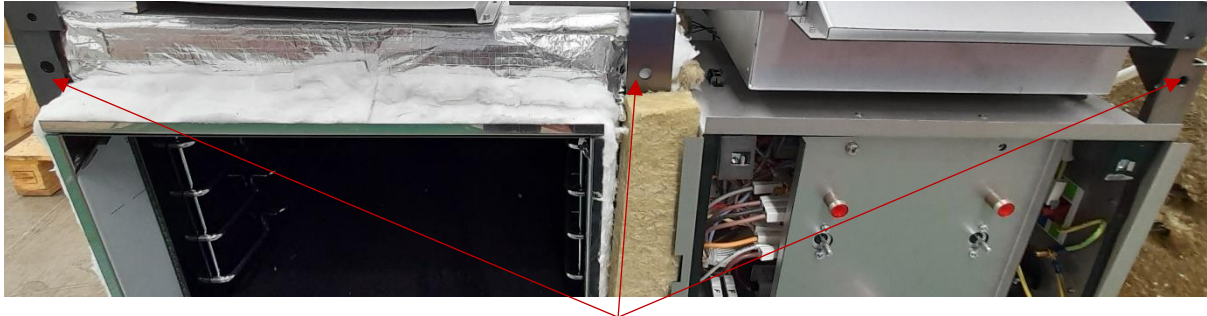
To remove the top of the Ranger lid, remove the 4 screws as shown below, **then** the lid top can be pulled away from the frame, replace in reverse order.



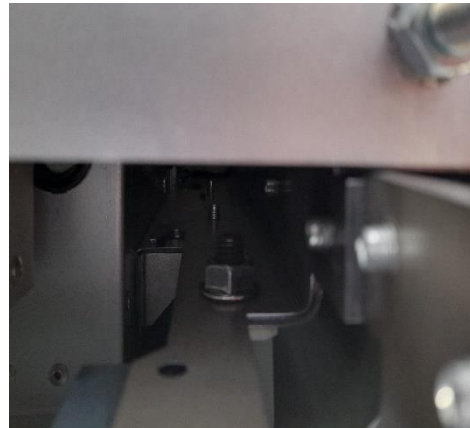
Screws for removal of lid top.

Removal and replacement of front plate.

To remove the front plate, remove the doors and then top plate will need to be lifted and propped and then both side panels will need to be removed. The front plate is attached to the main chassis by 3 bolts, 1 at both ends and 1 in the middle. Once the 3 securing nuts are removed the front plate can be pulled forward and lifted away from the main chassis of the cooker.



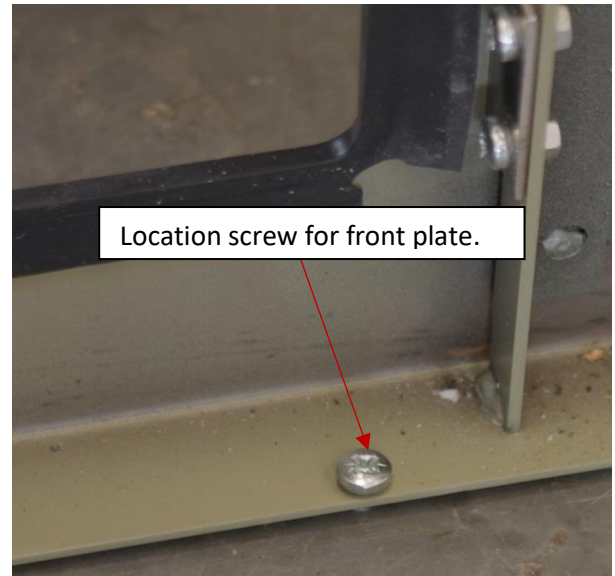
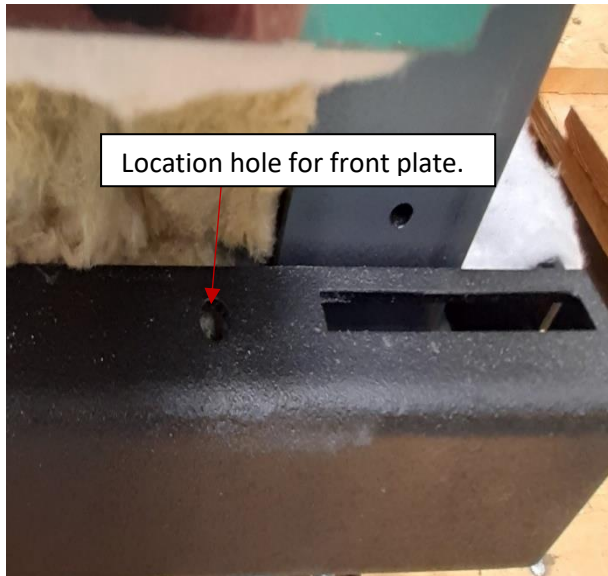
The arrows indicate the holes where the front plate bolts locate.



Location of front plate nuts.

Removal and replacement of front plate.

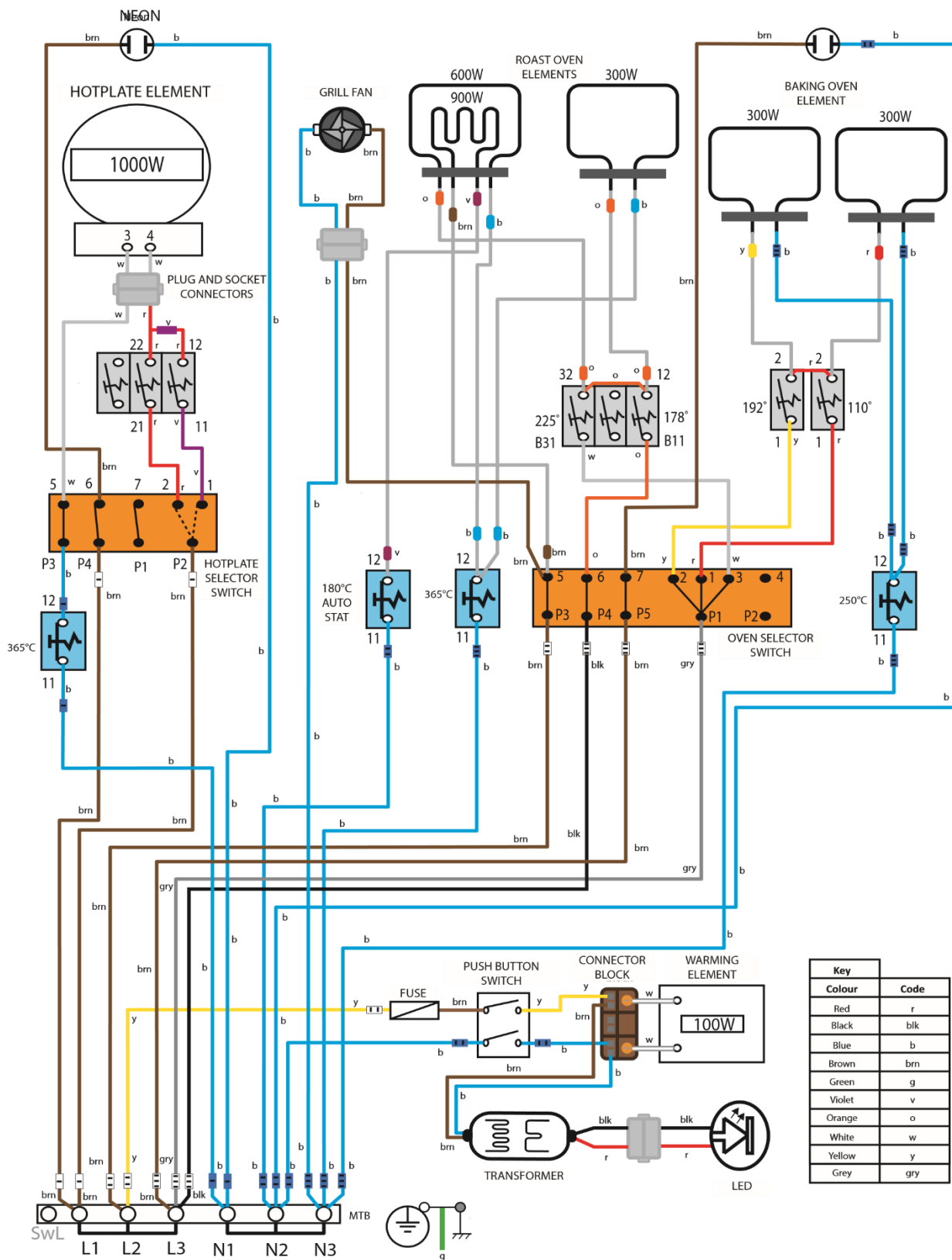
When replacing the front plate there are screws located at the base of the front plate, these locate into the base of the chassis as shown in the pictures below.



Essential Parts.

• Oven selector switch	RE4M350124
• Hotplate selector switch	AE4M231678
• Warming Oven Switch	RE4M350125
• Warming Oven Transformer	AE4M233450
• Roast Oven Thermostat	AE4M231501
• Simmer Oven Thermostat	AE4M231499
• Hotplate Thermostat	AE4M231496
• Induction Unit	AE4M232049
• Cooling fan	AE4M233207
• Hotplate element (1000Watts)	AE4M232863
• Warming Oven Element (100watts)	AE4M232240
• Grill Element (900watts)	AE4M232863
• 300 Watt Element	AE4M233518
• Roast Oven Overheat Thermostat	AE4M231501
• Boiling Plate Overheat Thermostat	AE4M231332
• Baking Oven Overheat Thermostat	AE4M231653
• 180° Auto Overheat Thermostat	RE4M350201

Circuit diagram. Rayburn Ranger



DESN 517948

With AGA Rangemaster's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliances described and illustrated at any time.

