AGA TC3 Total Control Cast Iron Range Cooker Installation Guide

Contents

TC3 Total Control Cast Iron Range Cooker

Product Information

AGA TOTAL CONTROL Model No's: TC3 & TC5

The AGA TOTAL CONTROL is a versatile appliance that allows for efficient cooking and heating. It comes in two models: TC3 and TC5. This appliance is designed and constructed to meet the required safety standards when properly installed and used.

Important: Any alteration that is not approved by AGA could invalidate the approval of the appliance, operation of the warranty, and affect your statutory rights. Please read the accompanying warranty for more details.

This appliance may contain materials that require proper handling. The necessary personal protective clothing should be worn when handling certain parts that contain these materials. Please refer to the user manual for specific instructions regarding handling and disposal.

Installation Requirements

The installation of this appliance must be done by competent engineers who have been specifically factory trained on the product

and have the appropriate equipment. It is important to comply with the current Building Regulations and obtain any necessary planning permission.

The installation must be in accordance with the relevant requirements of the IEE Wiring Regulations and Building Regulations. Additionally, it should comply with any requirements of the local authority.

Product Usage Instructions

Health and Safety

When using the AGA TOTAL CONTROL, it is important to prioritize safety. Always follow these guidelines:

- Read and understand the user manual before using the appliance.
- Ensure that the necessary personal protective clothing is worn when handling certain parts.
- Exercise caution when handling fire cement, glues, and sealants.
- Avoid inhaling or making direct contact with glass yarn, mineral wool, and insulation pads.
- Dispose of any materials properly, reducing dust with water spray and securely wrapping parts.

Installation

Before commencing the site survey or installing the appliance, please read the instructions carefully. Ensure that the installation is done by competent engineers who have been factory trained on the product.

Refer to the user manual for specific installation requirements, including clearances and power supply specifications. Make sure to comply with the IEE Wiring Regulations, Building Regulations, and any local authority requirements.

Maintenance

Regularly check the AGA TOTAL CONTROL after installation to ensure proper functioning. Refer to the user manual for a post-installation checklist and follow any maintenance instructions provided.

AGA TOTAL CONTROL

Model No's: TC3 & TC5

Installation Guide

REMEMBER: when replacing a part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by AGA.

PLEASE READ THESE INSTRUCTIONS BEFORE COMMENCING SITE SURVEY OR INSTALLING THIS APPLIANCE.

CE **For use in GB and IE**

09/13 EINS 516350

HEALTH AND SAFETY

Consumer Protection

As responsible manufacturers we take care to make sure that our products are designed and constructed to meet the required safety standards when properly installed and used.

PLEASE READ THE ACCOMPANYING WARRANTY.
Any alteration that is not approved by AGA could invalidate the approval of the appliance, operation of the warranty and could also affect your statutory rights.
In the interests of safety and effective use, please read the following before using your new AGA appliance.

Important
This appliance may contain some of the materials that are indicated below. It is the Users/Installers responsibility to ensure that the necessary personal protective clothing is worn when handling, where applicable, the pertinent parts that contain any of the listed materials that could be interpreted as being injurious to health and safety, see below for information.

Fire Cement – when handling use disposable gloves.

Glues and Sealants – exercise caution – if these are still in liquid form use face mask and disposable gloves.

Glass Yarn, Mineral Wool, Insulation Pads – may be harmful if inhaled, may be irritating to skin, eyes, nose and throat. When handling avoid inhaling or contact with skin or eyes. Use disposable gloves, face masks and eye protection. After handling wash hands and other exposed parts. When disposing of the product, reduce dust with water spray, ensure that parts are securely wrapped.

INSTALLATION REQUIREMENTS

THIS APPLIANCE MUST ONLY BE INSTALLED BY COMPETENT ENGINEERS WHO HAVE BEEN SPECIFICALLY FACTORY TRAINED ON THE PRODUCT AND WHO HAVE THE APPROPRIATE EQUIPMENT.

With specific exceptions, the installing of any type of AGA cooker is subject to the respective directions contained in the current issue of the Building Regulations. In addition, planning permission may need to be obtained, which should be applied for separately.

The installation of the appliance must be in accordance with the relevant requirements of the IEE Wiring Regulations and Building Regulations. It should be in accordance also with any requirements of the local authority.

In your own interest, and that of safety to comply with the law. all appliances should be installed by an authorised AGA engineer or distributor, in accordance with the relevant regulations.

DELIVERY REQUIREMENTS

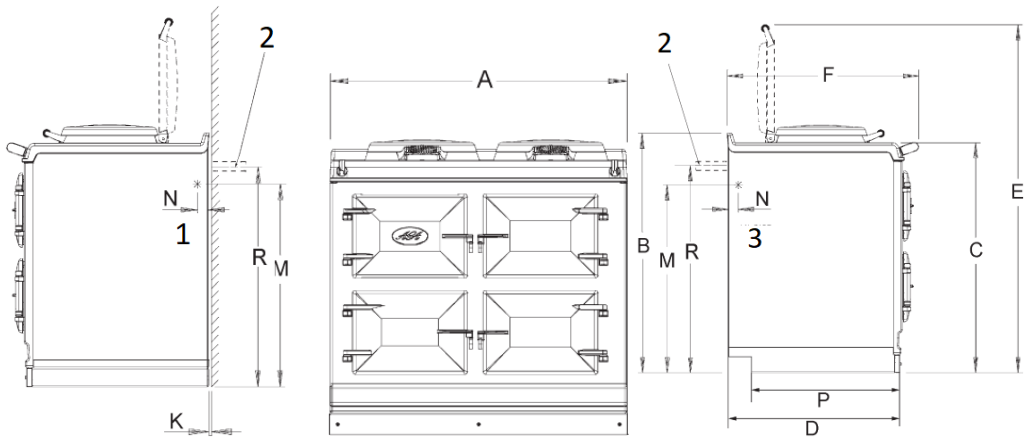
The AGA TC3 arrives on 1 pallet

The AGA TC5 (Hotcupboard Option) arrives on 2 pallets.

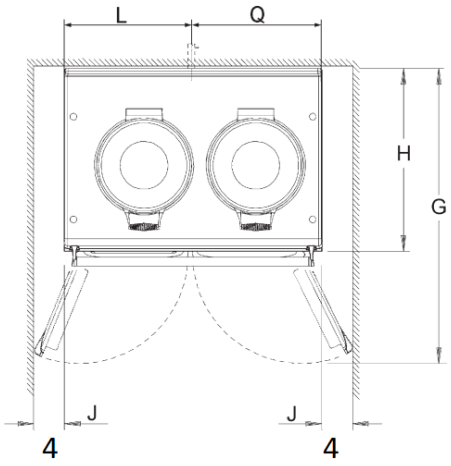
There must be access to the kitchen to manipulate a foot print of 1005mm x 740mm. A wooden template (skate with castor wheels) of dimensions 1005mm x 740mm could be used to check if the AGA Total Control fully built appliance is able to fit through the property grounds and doors into its installation position in the kitchen. It must also be considered that the height of the appliance is 960mm off pallet and 1100mm on the pallet, so high level obstacles/restrictions must not be overlooked.

If this skate/template **<u>can</u>** be manipulated through the property grounds and doors into position, then the AGA Total Control can be installed as intended with no re-work.

APPLIANCE DIMENSIONS – AGA TC3



RH SIDE VIEW FRONT VIEW LH SIDE VIEW



PLAN VIEW

1. RH SIDE OVEN VENT OPTION
2. REAR OVEN VENT PIPE POSITION
3. LH SIDE OVEN VENT OPTION
4. MINIMUM WALL POSITION

Fig. 1

DESN 516358 A

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
mm	987	948	910	680	1388	760	1145	698	116	10	536	813	30	634	448	824

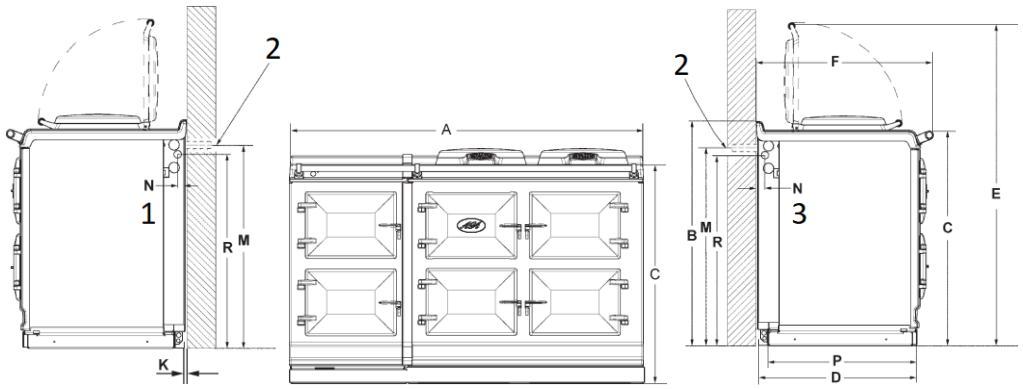
Cooker Dimensions

When surveying for a cooker installation the actual clearance required for the ‘body’ of the appliance should be increased by 10mm beyond the figures quoted above. This allows safe margin to take into account the natural dimensional variations found in major castings. In particular the width across the appliance recess could be critical.

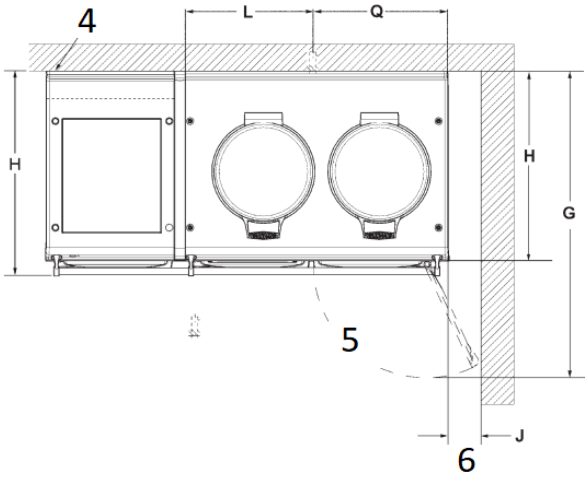
APPLIANCE WEIGHT

Model: AGA Total Control (TC3) – 370kg

APPLIANCE DIMENSIONS – AGA TC5



R.H. SIDE VIEW FRONT VIEW L.H. SIDE VIEW



PLAN VIEW

1. RH SIDE OVEN VENT OPTION
2. REAR OVEN VENT PIPE POSITION
3. LH SIDE OVEN VENT OPTION
4. HOTCUPBOARD ELECTRICITY SUPPLY
5. OVEN DOOR ON OPEN POSITION
6. MINIMUM WALL POSITION

Fig. 2

DESN 516445

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
mm	1478	948	910	680	1388	760	1145	698	116	10	536	824	30	634	448	813

Cooker Dimensions

When surveying for a cooker installation the actual clearance required for the ‘body’ of the appliance should be increased by 10mm beyond the figures quoted above. This allows safe margin to take into account the natural dimensional variations found in major castings. In particular the width across the appliance recess could be

critical.

APPLIANCE WEIGHT

Model: AGA Total Control (TC3) – 370kg

Hotcupboard – 110kg

CLEARANCES

The complete cooker is floor-mounted and the space in which the appliance is to be fitted must have the following minimum dimensions:-

A minimum clearance of 60mm is required above the raised insulating cover handle.

Side Clearances: A 3mm gap is required each side between the cooker top plate and adjoining work surfaces that may be fitted, this is to allow for the safe removal of the top plate should this be required at a later date.

Where cookers are fitted against side walls a 116mm clearance is required on the right and left hand side for oven doors access.

If the AGA is to be installed in a brick recess, then the minimum clearance should be increased by at least 10mm, to allow for the walls not being square.

In addition, a minimum clearance of 1000mm must be available at the front of the cooker to enable the cooker to be serviced.

Cooker Base or Hearth

It is essential that the base or hearth on which the cooker stands should be level and be capable of supporting the total weight of the appliance. The base of the built-in AGA plinth must be level and sit above finished floor height for service access.

The front plinth cover is removable and must not be obstructed by flooring or tiles. If necessary the cooker must be raised by the thickness of the tiles to ensure the plinth can be removed. Shims are provided to eliminate rocking.

Tiling

When the cooker is to stand in a recess or against a wall which is to be tiled, in no circumstances should the tiles overlap the cooker top plate, access to remove the hot plate must be allowed for servicing at a later date.

A gap of at least 10mm must be observed between the rear of the top plate, and the wall behind the appliance. **If the rear wall is of combustible material there must be a gap of 25mm.**

POWER SUPPLY – AGA TC3

WARNING: THIS APPLIANCE MUST BE EARTHED.

THIS APPLIANCE IS DESIGNED FOR THE VOLTAGE STATED ON THE RATING PLATE, WHICH IS SITUATED BEHIND THE PLINTH COVER.

A 1PH 32 amp 230V or 3PH 400V minimum 16A per phase ~ 50 Hz fused electrical supply is required adjacent to the appliance. External wiring to the unit must be installed using the mains cable provided, in accordance with the current wiring regulations and any local regulations which apply. If cable is shortened, new ferrules must be fitted to the stripped conductors.

The method of connection to the mains electricity supply must facilitate complete electrical isolation of the appliance, by a multi-pole switch, having a contact separation of at least 3mm on all poles.

The isolator should not be positioned immediately above the cooker, but must be fitted within 2 metres of the appliance.

The isolator maybe separate from the connection point.

The mains connection point must be accessible within the areas shown in Fig 3A, Page 8 for cable routing options.

For 2 or 3 phase installations an optional adaptor kit must be obtained (Part No. AE4M280354).

POWER SUPPLY – HOTCUPBOARD (AGA TC5)

THE HOTCUPBOARD ATTACHMENT REQUIRES A INDEPEDENT SINGLE PHASE POWER SUPPLY.

WARNING: THIS APPLIANCE MUST BE EARTHED.

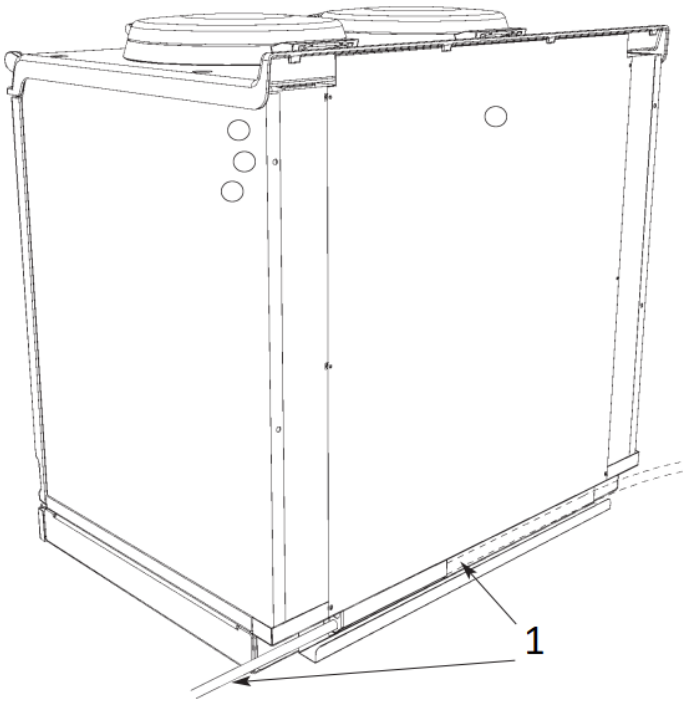
THIS APPLIANCE IS DESIGNED FOR THE VOLTAGE STATED ON THE RATING PLATE, WHICH IS SITUATED ON A SLIDE-OUT TRAY IN THE HOTCUPBOARD BASE PLATE ABOVE THE PLINTH.

A 230v ~ 50 Hz, 3 amp fused electrical supply is required adjacent to the appliance. External wiring to the unit must be installed using a 3 core silicon – SIHF insulation cable and in accordance with the current wiring regulations and any local regulations which apply.

The method of connection to the mains electricity supply must facilitate complete electrical isolation of the appliance, preferably by a fused double pole switch, having a contact separation of at least 3mm in both poles.

The isolator should not be positioned immediately above the hotcupboard, but must be fitted with 2 metres of the appliance.

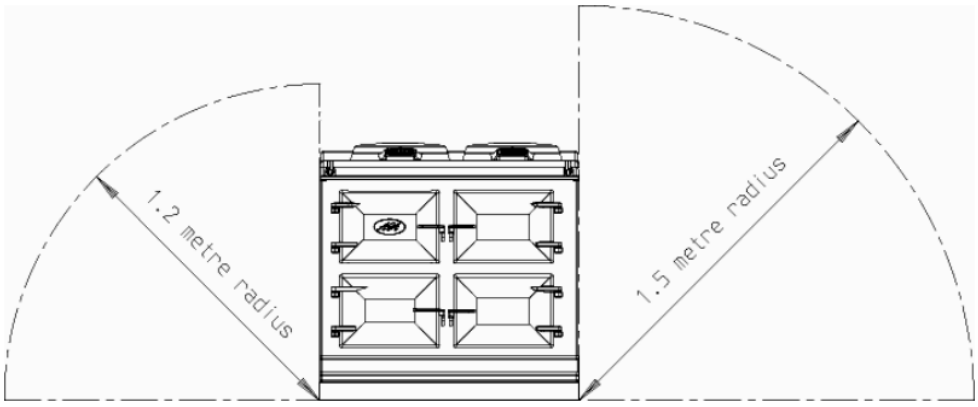
MAINS CABLE ROUTING – AGA TC3



1. MAINS CABLE FED FROM CONTROL TRAY LEFT OR RIGHT EXIT THROUGH DUCTING DEPENDENT UPON POSITION OF SUPPLY SOCKET

Fig. 3

DESN 516103

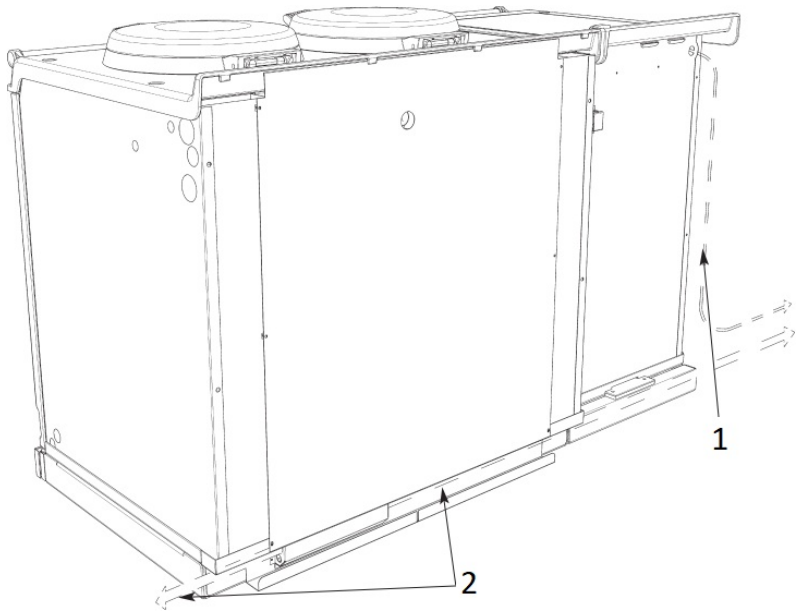


THE MAINS SUPPLY CONNECT POINT MUST BE WITHIN THE ZONES SHOWN

Fig. 3A

DESN 516105

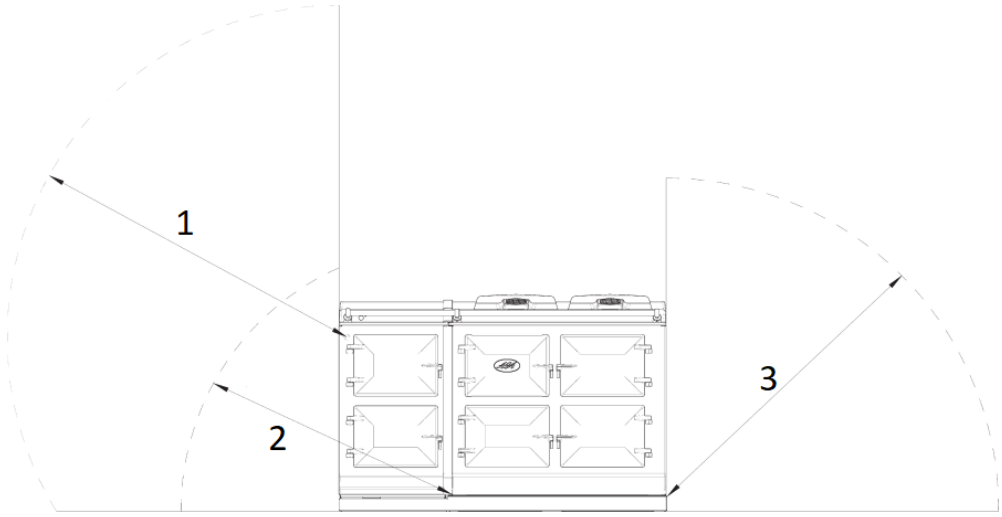
MAINS CABLE ROUTING – AGA TC5 (HOTCUPBOARD OPTION)



1. HOTCUPBOARD POWER SUPPLY
2. MAINS CABLE FED FROM CONTROL TRAY LEFT OR RIGHT EXIT THROUGH DUCTING DEPENDENT UPON POSITION OF SUPPLY SOCKET

Fig. 4

DESN 516446



THE MAINS SUPPLY CONNECT POINT MUST BE WITHIN THE ZONES SHOWN

1. 2m radius
   Hotcupboard cable
2. 1.2m radius
   AGA TC3 cable
3. 1.5m radius

Fig. 4A

DESN 516447

VENT PIPE CONNECTION

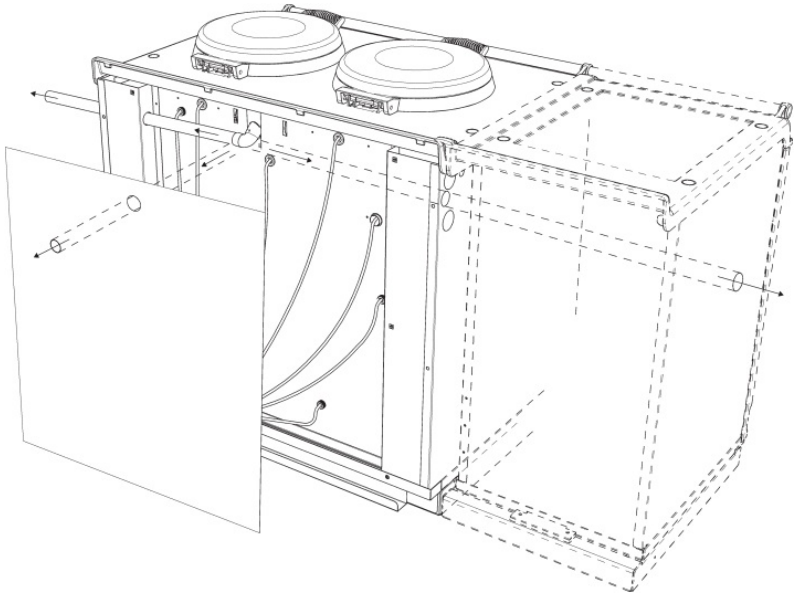


Fig. 5

DESN 516559

The appliance is shown with the oven venting from the RH side.

To gain access remove rear panel (6 screws).

It can also be vented from the LH side, by rotating the copper elbow 180° before fitting the vent pipe.

It can also be vented from the rear using a 45° fitting and exiting through hole in back panel.

Reseal pipe connection with aluminium tape.

When installing a AGA TC5 which is venting to the left hand side, care must always be taken to ensure the vent pipe is fully lagged (using insulation provided). Where the vent pipe passes behind the hotcupboard, ensure that the mains cable is kept away from the hot surface of the vent pipe.

Rear or right hand venting is preferable on AGA TC5 installations.

OVEN VENTING SYSTEMS

See Fig. 6

The appliance oven venting pipe can be achieved up to a maximum length of 6 metres, through an outside wall. Great care must be taken in all-timber houses.

If the oven vent pipe passes through combustible material, there must be an air gap of at least 25mm around the pipe and preferably wrapped with insulation material.

The max supply to the motor, as calculated should be limited to 22V (DC), for ideal operating conditions. Calculating the voltage for the particular pipework is as follows:-

1. Keep the pipe run as simple as possible – avoid bends.
2. “Vertical risers” are not permitted.
3. Pipe run should be horizontal – slight downwards slope towards the fan.

Minimum 12 volts for first metre of vent pipe run inclusive of 1 bend

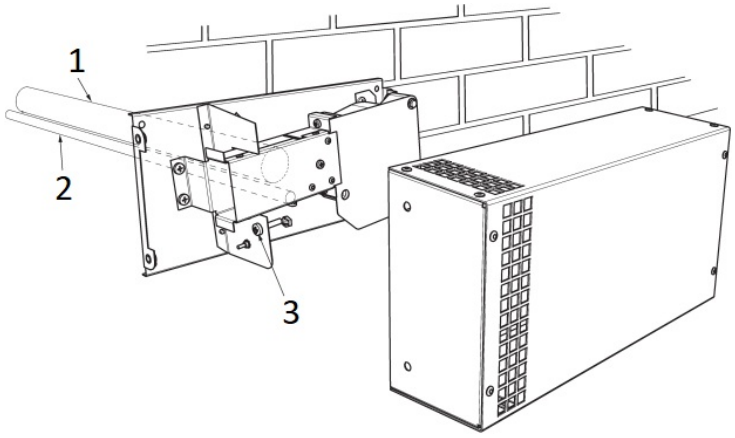
Each extra metre add 1 volt.

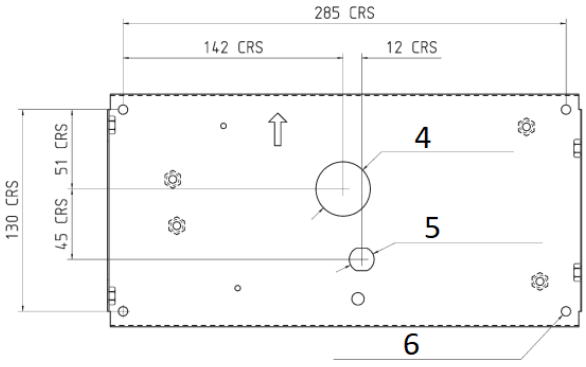
Each extra bend add 2 volts

Maximum allowed 22 volts.

Minimum setting is 15 volts.

NOTE: IN THE OVEN VENTING, PROVISION MUST BE MADE FOR EASY ‘RODDING’ OF THE PIPEWORK TO FACILITATE CLEANING.





WALL FIXING AND SERVICE HOLE REQUREMENTS

1. VENT PIPE FROM OVEN
2. SUPPLY CABLE
3. EARTH POST
4. Ø35 VENT PIPE
5. Ø16 CABE ENTRY
6. WALL MOUNTING HOLES

Fig. 6

DESN 516111

HOTCUPBOARD INSTALLATION

NOTE: The AGA TC5 hotcupboard should arrive with the top plate in a jacked up position. This is to allow the complete appliance to be slid onto its plinth when alongside the AGA TC3 without the top plates clashing. The hotcupboard top plate should then be wound down to its correct height once the appliance is in its final position.

1. Detach hotcupboard from plinth by removing two screws and tongue bracket from plinth (See Fig. 7), slide hotcupboard forwards and away from rear fixing bracket (See Fig. 8).

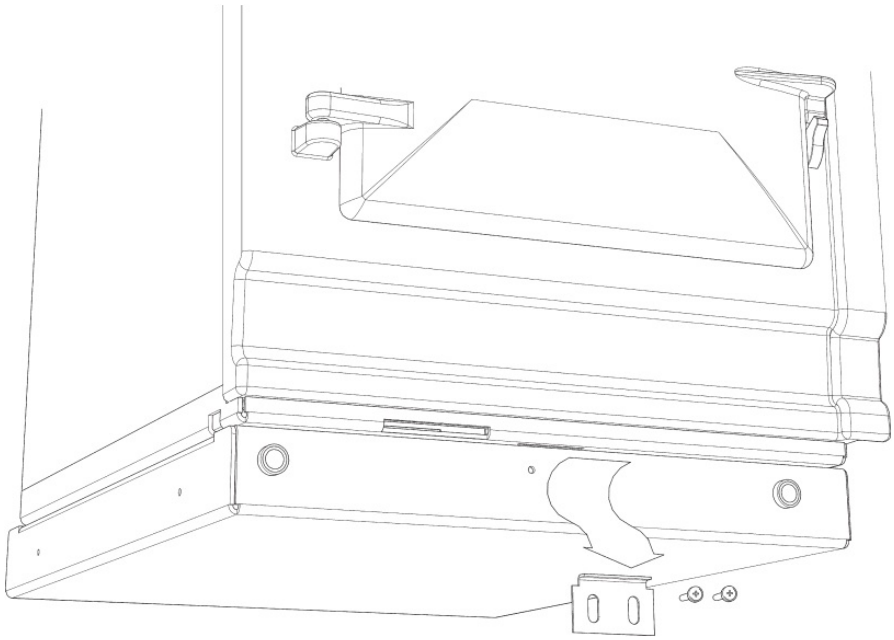


Fig. 7

DESN 516448

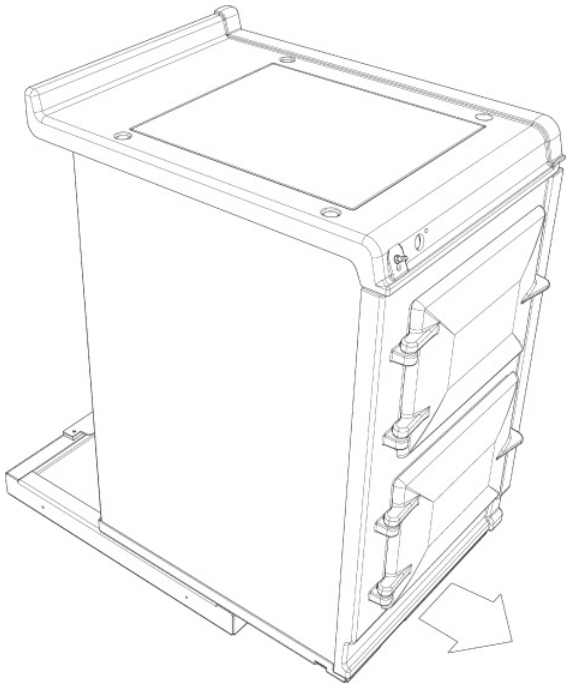
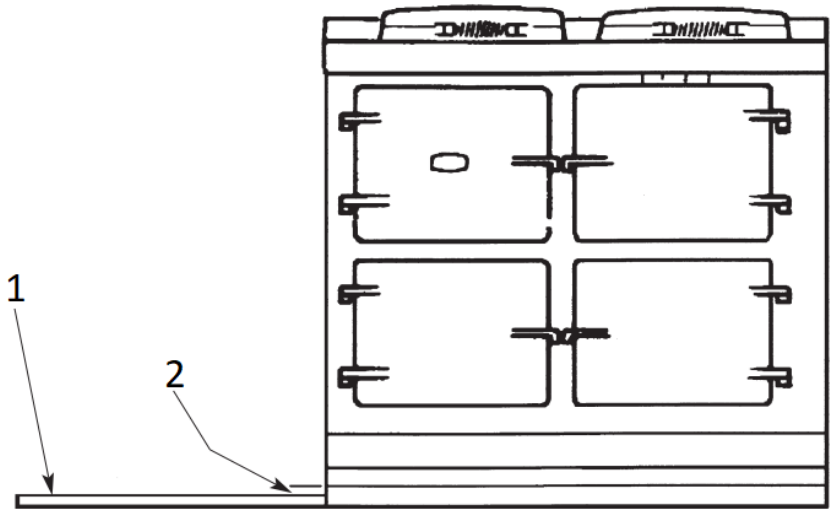


Fig. 8

2. Position the plinth alongside the AGA Total Control leaving no gap between the two plinths (See Fig. 9).

Check with a spirit level that the plinth level is correct, and also check height differential between the hotcupboard plinth and Total Control plinth is correct (11mm). If necessary, use shims in each corner to level the plinth.

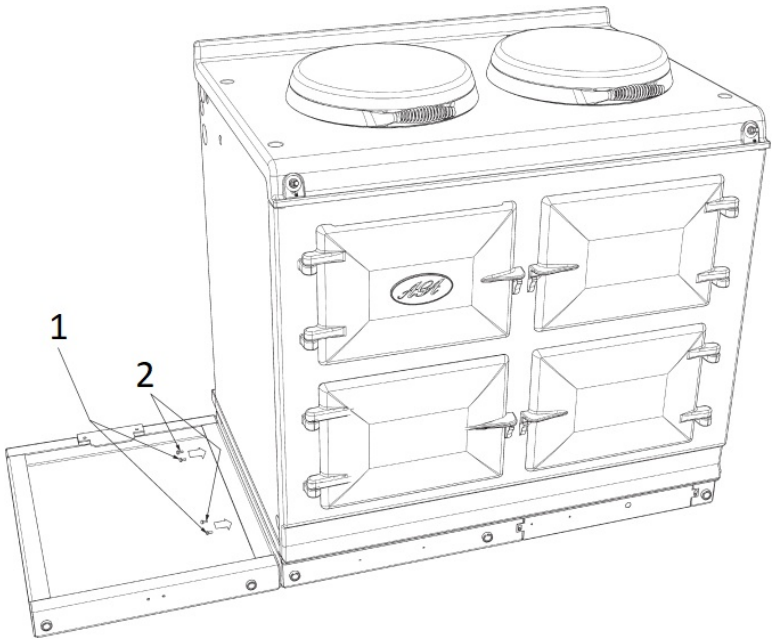


1. HOTCUPBOARD PLINTH BASE
2. 11mm $^{+1}_{-0}$ HEIGHT DIFFERENTIAL

Fig. 9

3. Attach hotcupboard plinth to the AGA Total Control plinth using M6 screws and washers provided (See Fig. 10).

Attach locking screw and jacking screw into plinth. Make sure at this stage that the jacking screw does not protrude beyond outer face of plinth. Ensure locking screw is located into AGA TC3 plinth but not fully tightened. A gap of approximately 3mm should be present between the plinths apart from at the very front where the hotcupboard spacer plate should be touching the AGA TC3 plinth.



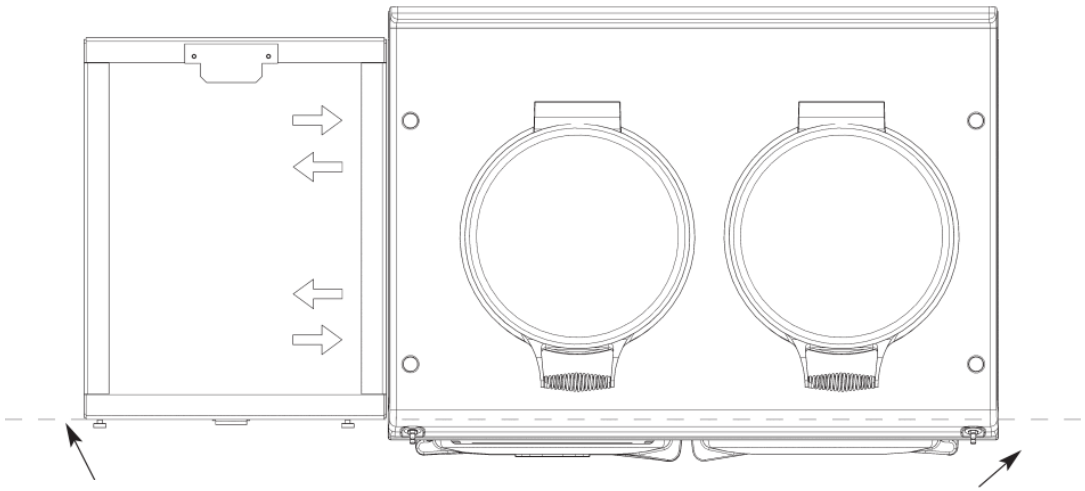
1. LOCKING SCREW
2. JACKING SCREW

Fig. 10

DESN 516550

4. Run a straight edge along the front of the AGA Total Control plinth, to ensure the front face of both plinths sit squarely against the straight edge. (See Fig. 11)

When satisfied both plinths sit squarely, jacking screws can be tightened until they just make contact with the AGA Total Control plinth, and locking screws can now be tightened.

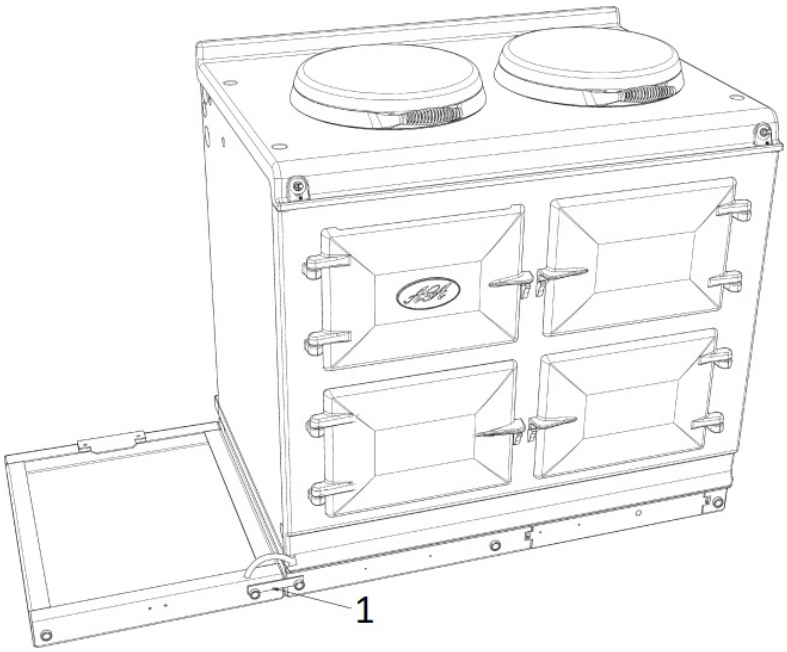


USE STRAIGHT EDGE ACROSS BOTH PLINTHS TO ENSURE PLINTHS ARE ALIGNED SQUARELY

Fig. 11

DESN 516551

5. Front jointing bracket can now be hooked into place over the two pot magnets. This will latch the two plinths together. (See Fig. 12)



1. HOOK FRONT JOINTING BRACKET INTO PLACE TO LOCK TWO FLINTHS TOGETHER

Fig. 12

DESN 516553

6. Slide hotcupboard onto plinth until rear tongue bracket engages fully into rear of base slot, (See Fig. 13). Ensure the appliance is aligned squarely with the plinth then proceed to engage the front tongue bracket into the slot on the underside of the base plate. Once satisfied that the front tongue bracket is engaged fully lock it into place by tightening the two M6 screws fully. Ensure that the electrical cable does not come into contact with oven vent pipe from the AGA TC3.

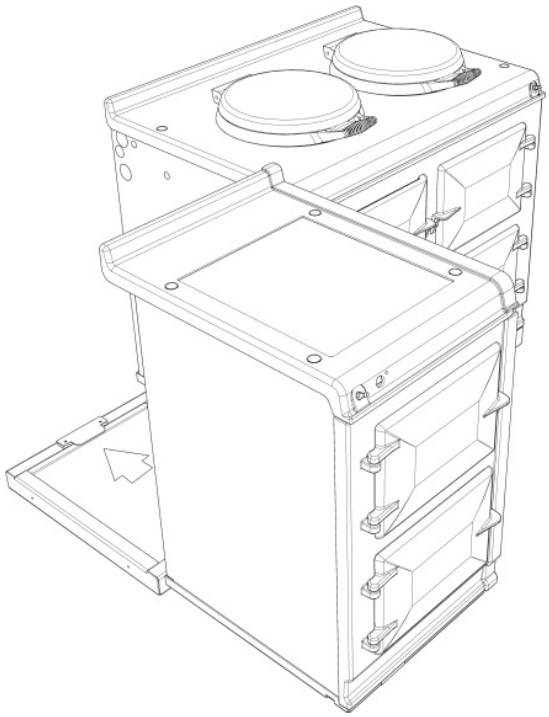
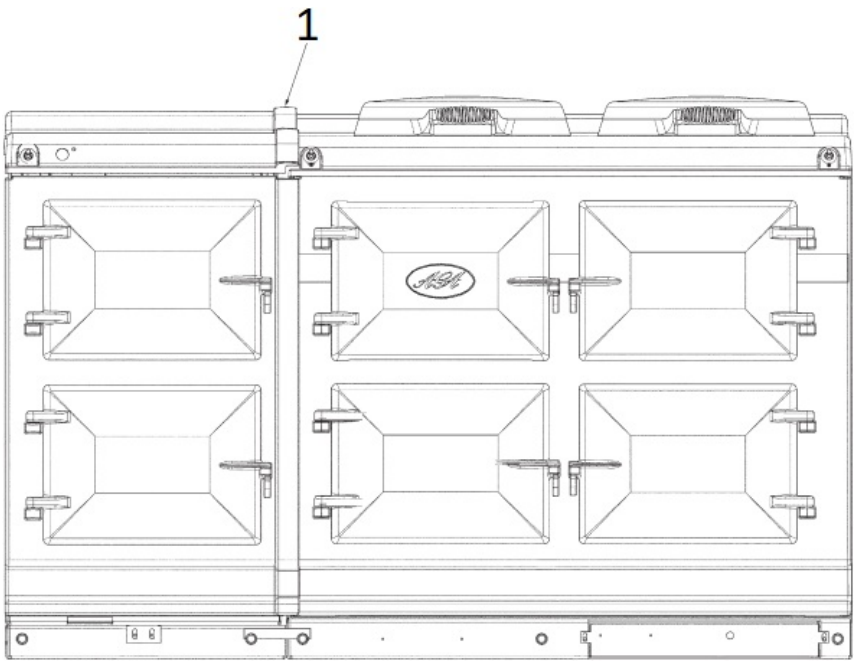


Fig. 13

DESN 516552

7. The hotcupboard top plate is set 5mm higher than the AGA Total Control top plate. This is to prevent damage to the enamel during installation. Lower the top plate using the adjusters (See Figs. 14 and 15).



1. 5mm HEIGHT DIFFERENCE

Fig. 14

DESN 516554

8. Using the stay rod nut adjusting tool, carefully lower the top plate adjusting nuts until the top plate sits at the required height, making sure that the top sits level and matches the height of the AGA TC3. (See Fig. 15).

For servicing requirement, top plate should be removed by raising adjusters approximately 5mm, the top plate can now be removed easily without causing damage to the enamelled surfaces.

When removing the top plate, the switch wiring harness should be disconnected from the main wiring harness at the connection point located at the front left hand side of the appliance, beneath the formex cover sheet.

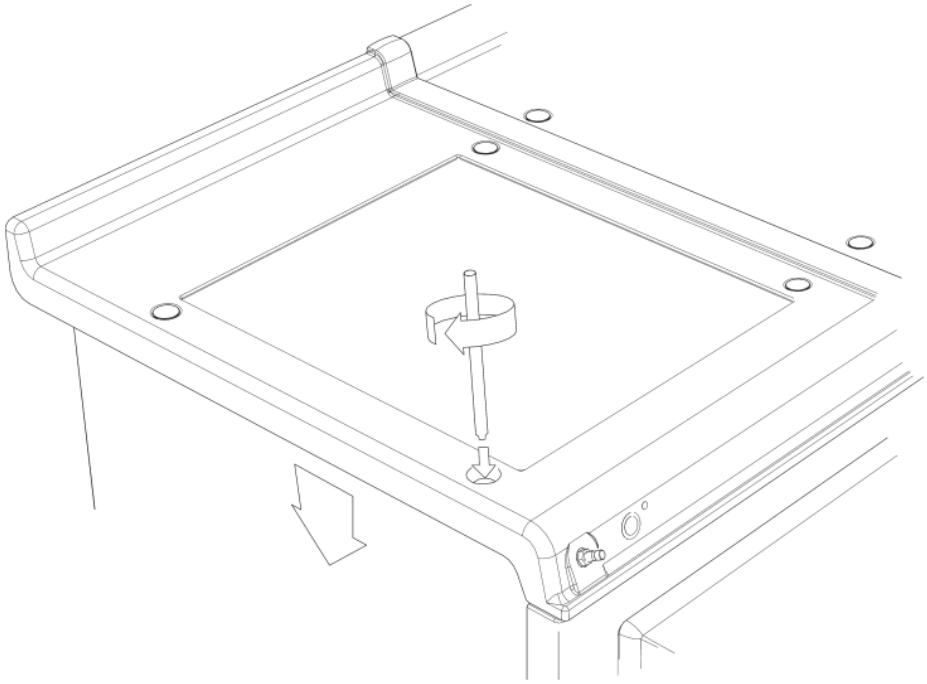


Fig. 15

DESN 516555

9. Slide the complete handrail assembly over the left hand and centre fixing studs. Once the assembly has been fitted to the AGA appliance, fit the handrail endcaps (ensuring the handrail is evenly spaced at each end). The endcaps should be carefully pushed into place until they sit flush with the outside face of each bracket. (A light smear of lubricant, such as washing up liquid can be applied to the end cap rubber ‘O’ rings to aid fitment of endcaps into handrail if required).

The handrail can now be locked into place using the grub screws on the underside of the handrail brackets.

Finally fit plinth facia onto magnets positioned on plinth, ensuring the facia sits squarely and centrally.

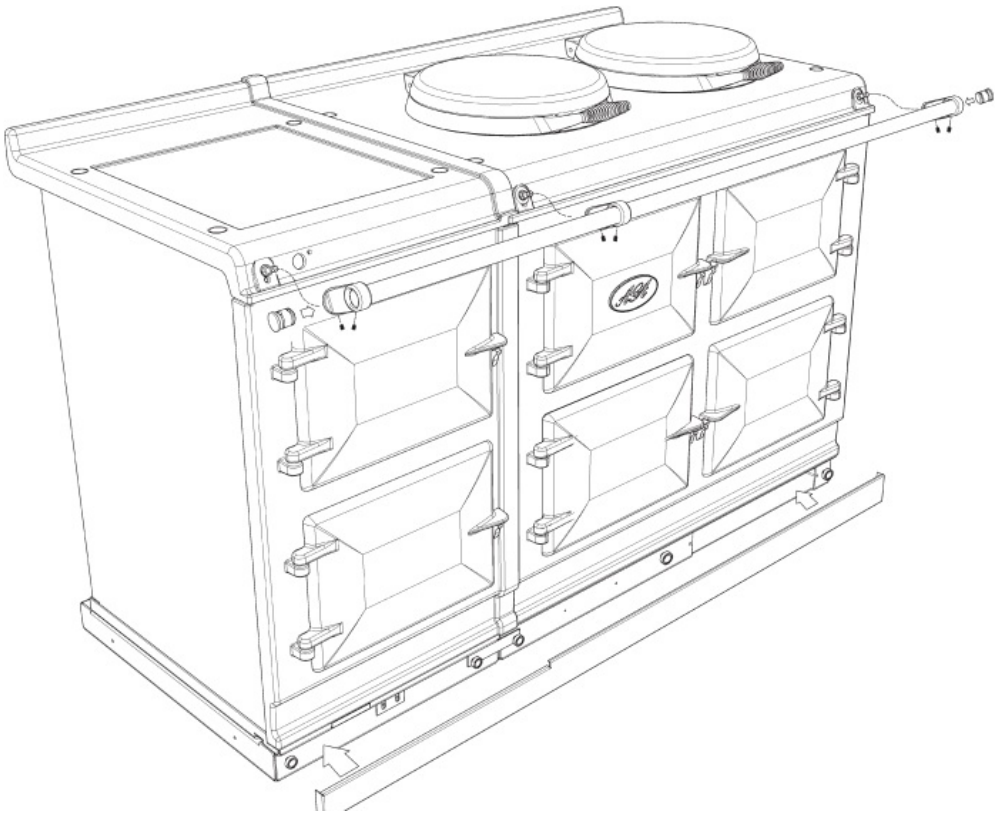


Fig. 16

DESN 516557

HANDRAIL CONNECTION – AGA TC3

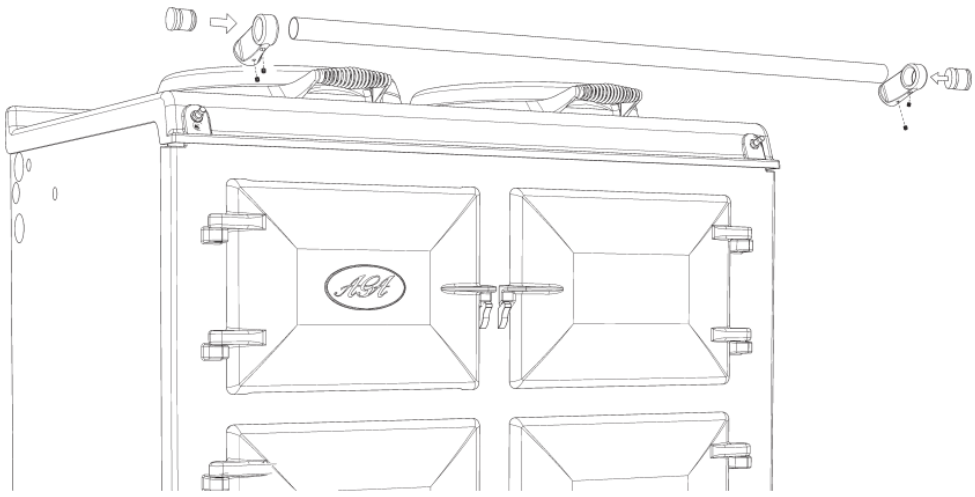


Fig. 17

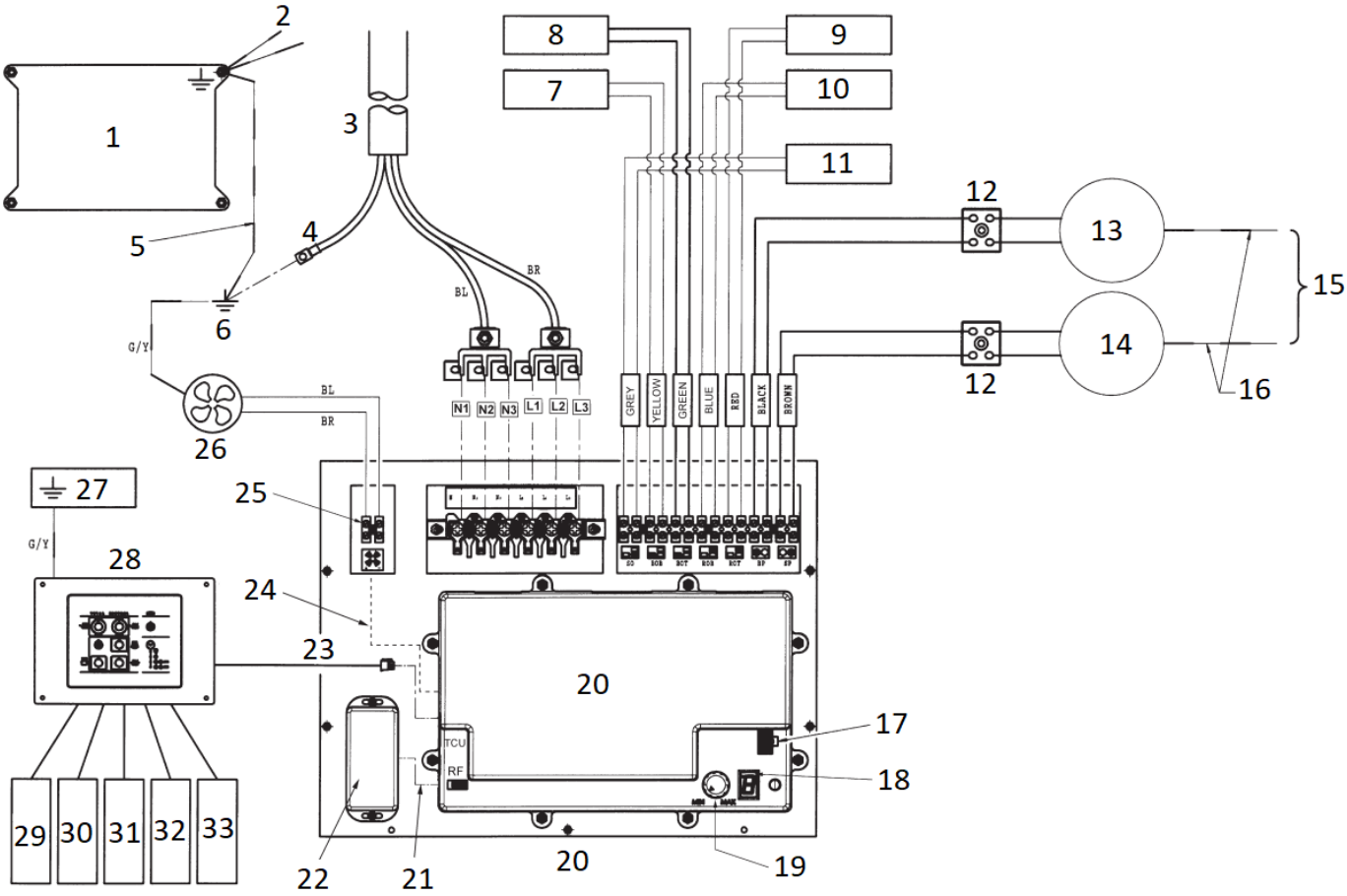
DESN 516560

Handrail brackets, endcaps and handrail require assembly.

Locate endcaps onto handrail, place brackets over endcaps and then slide complete assembly onto locating studs.

Once assembly is correctly located, lock into position with grub screws (located on underside of handrail).

WIRING DIAGRAM – AGA TC3



1. ROAST OVEN BACKPLATE
2. BOILING, SIMMERING PLATE EARTHS
3. MAINS
   IN
4. EARTH
   G/Y
5. NICKEL EARTH CABLE SLEEVED, C/W RING TONGUES
6. CONTROLS TRAY EARTH
7. BAKING OVEN BOTTOM
8. BAKING OVEN TOP
9. ROAST OVEN TOP
10. ROAST OVEN BOTTOM
11. SIMMER OVEN
12. 2-WAY TERMINAL BLOCK
13. BOILING PLATE
14. SIMMERING PLATE
15. TO ROAST OVEN EARTH POINT
16. NICKEL EARTH CABLE C/W RING TONGUES
17. CONFIGURATION KEY
18. DIAGNOSTIC DISPLAY
19. VENT FAN REGULATOR CONTROL

20. MAIN CONTROL BOARD
21. RF CONNECTION LEAD
22. RF UNIT
23. COMM CABLE
24. VENT FAN CONNECTION LEAD
25. VENT FAN TERMINAL BLOCK
26. OVEN VENT FAN
27. CONTROLS HOUSING
28. FACIA PANEL
29. BAKING OVEN THERMOCOUPLE
30. BOILING PLATE THERMOCOUPLE
31. SIMMER PLATE THERMOCOUPLE
32. ROAST OVEN THERMOCOUPLE
33. SIMMER OVEN THERMOCOUPLE

L2 = 5kW

L2 = 5kW

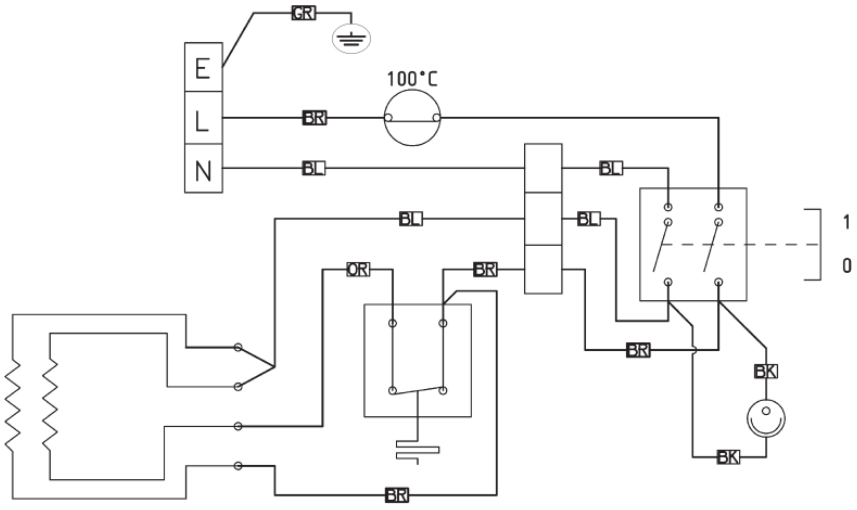
L3 = 5kW

KEY

BL – BLUE
BR – BROWN
G/Y – GREEN/YELLOW

Fig. 18

WIRING DIAGRAM – AGA TC5 (HOTCUPBOARD OPTION)



CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION, WHEN SERVICING CONTROLS WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION.

VERIFY PROPER OPERATION AFTER SERVICING

COLOUR KEYS

BR – BROWN
BL – BLUE
GR – GREEN
OR – ORANGE
BK – BLACK

Fig. 19

AGA TOTAL CONTROL POST INSTALLATION CHECKLIST

☐ **SERIAL No.**

Tick Box

- Check hotplate lid settings. ☐
- Check oven door seals, adjust door alignment if necessary. ☐

Baking and Simmering Oven rope seals **MUST** have a gap between the door hinges. The Roasting Oven is fitted with a continuous seal. ☐

Ensure any plastic film isn removed from the inside of the oven doors. ☐

- Ensure Roasting Oven roof baffle is fitted in the correct position. ☐
- Gain access to controls tray and check mains voltage. **DO NOT** remove any electrical covers to access mains lead. Terminal measurements can be made through small holes in the cover. ☐

1PH **3PH** **3PH** **3PH**

Record voltage ☐ L1 ☐ L2 ☐ L3 ☐ ☐

- Measure vent pipe run and calculate fan speed voltage. Ensure vent pipe routing complies with the Installation Instruction. ☐

Record routing ☐

Record vent speed voltage ☐

- Switch on cooker, set controls to manual and turn on all cooking zones and vent fan. Raise hotplate lids to avoid staining. ☐
- During warm-up, slow flashing indicator lights will be observed. ☐
- After 1 hour, check oven and hotplate thermocouple temperatures using Engineers Handset (approx.).

1. Hotspot (325 – 335°C) ☐

2. Simmerspot (195 – 205°C) ☐
3. Roasting Oven (235 – 245°C) ☐
4. Baking Oven (180 – 185°C) ☐
5. Simmering Oven (95 – 115°C) ☐

- During warm-up period, check customer's handset handshakes and instruct customer on it's application and operation. ☐
- Attach warning hanger (EGLL516660) to AGA Total Control handrail when installation is complete. Advise customer to remove and read warning hanger. ☐
- Guide customer through the Users Instructions of the appliance, offering best practices on oven maintenance, energy usage, enamel cleaning (boiled vegetable water staining on enamel etc.). ☐

Engineer's Signature …….. Date …….

For further advice or information contact your local AGA Specialist

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

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Documents / Resources

	AGA TC3 Total Control Cast Iron Range Cooker [pdf] Installation Guide TC3, TC5, TC3 Total Control Cast Iron Range Cooker, Total Control Cast Iron Range Cooker, Control Cast Iron Range Cooker, Iron Range Cooker, Range Cooker, Cooker

References

- AGA Cookshop | Official Online Shop
- AGA Range Cookers - World's Best Cooking Experience | AGA Living
- Search - Manual-Hub.com