INSTALLATION AND OPERATION MANUAL

GARLAND INDUCTION SINGLE, DUAL AND WOK TABLE TOP UNITS, MODELS: GIU2.5, GIU3.5, GIU5.0, GIU3.5 DUAL, GIU5.0 DUAL, GIWOK3.5 & GIWOK5.0

FOR YOUR SAFETY:
DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE

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 EQUIPMENT

CONFORMS TO UL-197 & NSF-4 CERTIFIED TO CAN/CSA C22.2NO. 109 VDE EN60335-2-38.

PLEASE READ ALL SECTIONS OF THIS MANUAL AND RETAIN FOR FUTURE REFERENCE.

THIS PRODUCT HAS BEEN CERTIFIED AS COMMERCIAL COOKING EQUIPMENT AND MUST BE INSTALLED BY PROFESSIONAL PERSONNEL AS SPECIFIED.

INSTALLATION AND ELECTRICAL CONNECTION MUST COMPLY WITH CURRENT CODES:
IN CANADA - THE CANADIAN ELECTRICAL CODE PART 1 AND / OR LOCAL CODES.
IN USA – THE NATIONAL ELECTRICAL CODE ANSI / NFPA – CURRENT EDITION.

Users are cautioned that maintenance and repairs must be performed by a Garland authorized service agent using genuine Garland replacement parts. Garland will have no obligation with respect to any product that has been improperly installed, adjusted, operated or not maintained in accordance with national and local codes or installation instructions provided with the product, or any product that has its serial number defaced, obliterated or removed, or which has been modified or repaired using unauthorized parts or by unauthorized service agents.
For a list of authorized service agents, please refer to the Garland web site at http://www.garland-group.com.
The information contained herein, (including design and parts specifications), may be superseded and is subject to change without notice.

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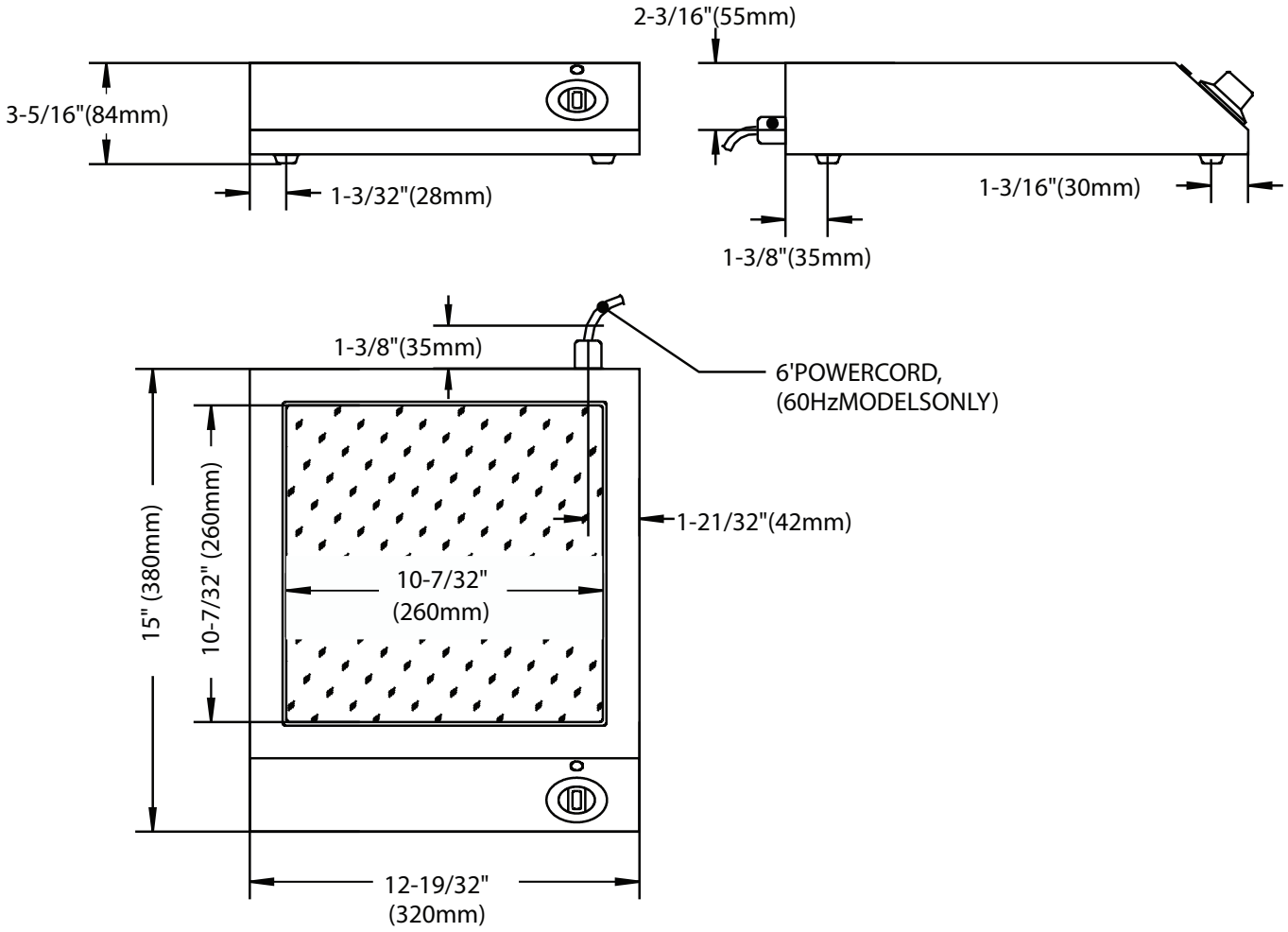
Part # 4520896 (01/31/08)

TABLE OF CONTENTS

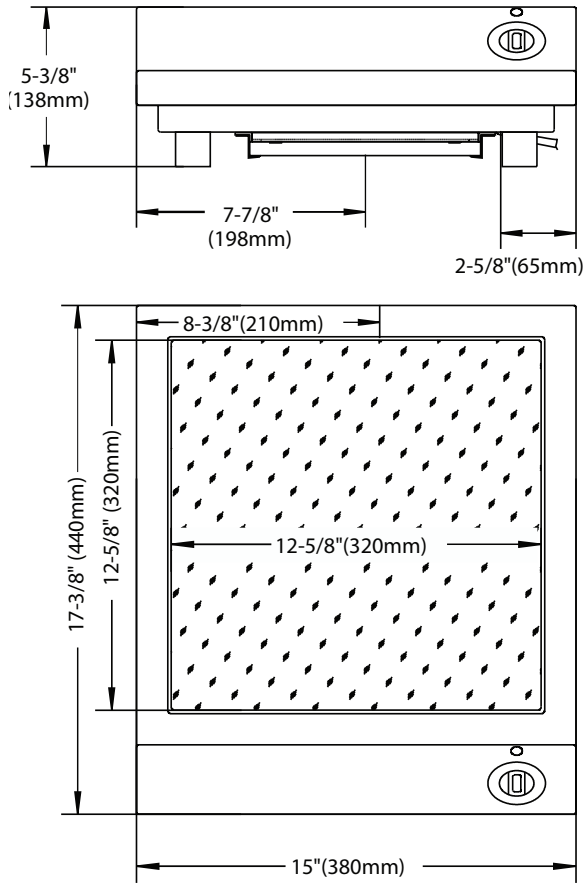
DIMENSIONS AND SPECIFICATIONS, GIU 2.5

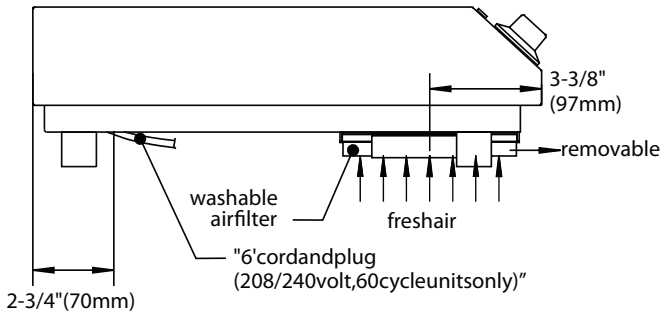


PLUG CONFIGURATIONS:		
Model	**Electrical Characteristics**	**Plug**
GUI-2.5	208V/60Hz/1Ø 240V/60Hz/1Ø	 NEMA 6-15P

Electrical Loading:							
Model	**Watts**	**208/60/1**	**208/60/3**	**240/60/1**	**230/50/1**	**400/50/3**	**440/60/3**
GUI-2.5	2500	12 amp	N/A	9 amp	10 amp	N/A	N/A

DIMENSIONS AND SPECIFICATIONS, GIU 3.5/5.0





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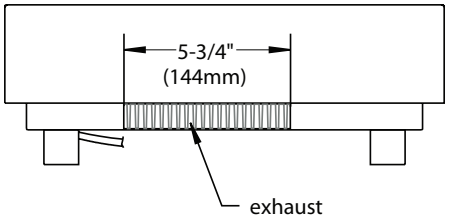
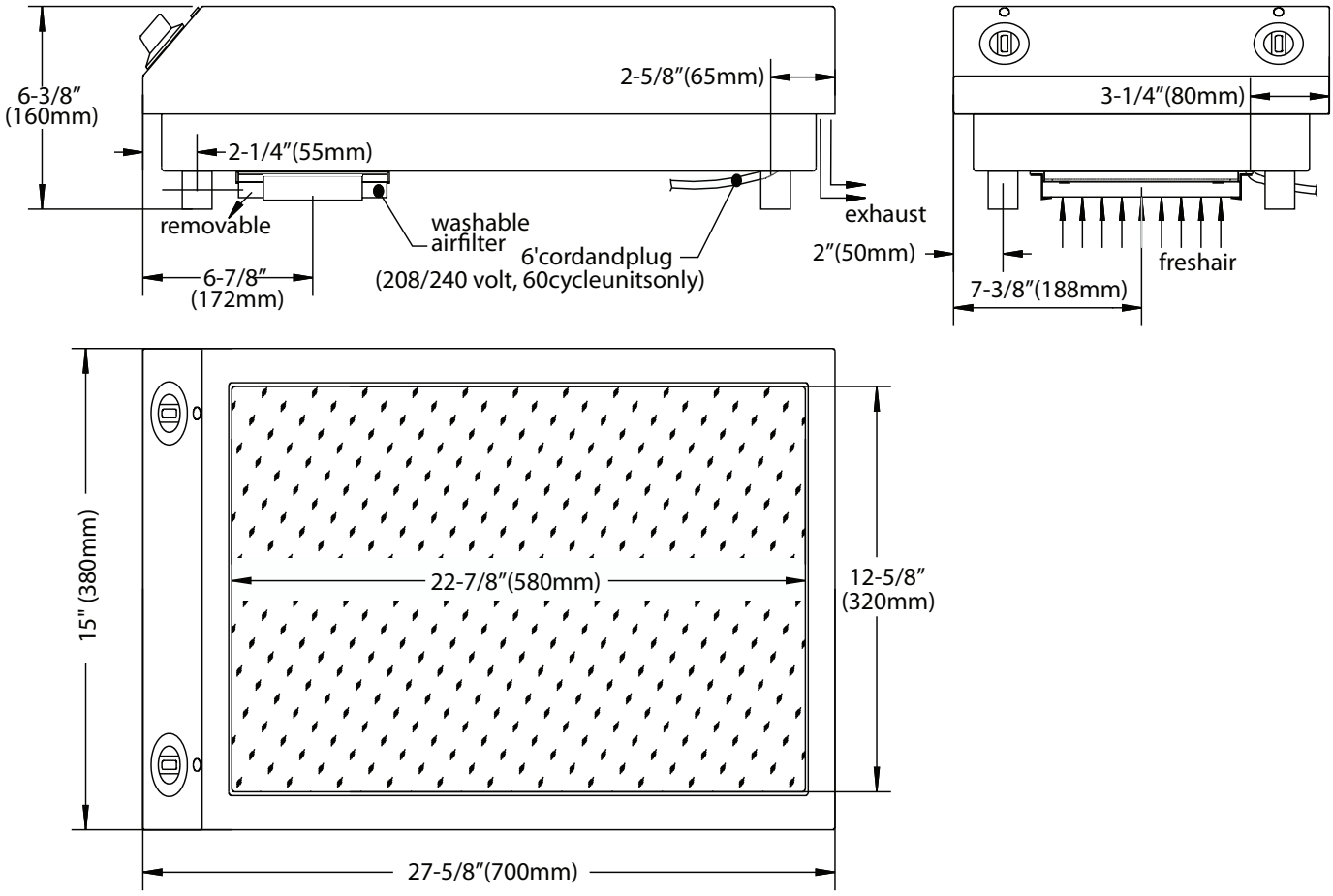


PLUG CONFIGURATIONS:		
Model	**Electrical Characteristics**	**Plug**
GMUI-3.5	208V/60Hz/1Ø 240V/60Hz/1Ø	 NEMA 6-20P
GMUI-5.0	208V/60Hz/3Ø	 NEMA 15-20P

Electrical Loading:							
Model	**Watts**	**208/60/1**	**208/60/3**	**240/60/1**	**230/50/1**	**400/50/3**	**440/60/3**
GMIU-3.5	3500	16 amp	N/A	14 amp	15 amp	N/A	N/A
GMIU-5.0	5000	N/A	14 amp	N/A	N/A	8 amp	7 amp

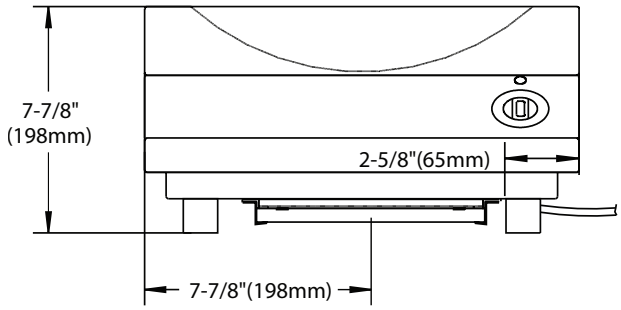
DIMENSIONS AND SPECIFICATIONS, GIU 3.5/5.0 DUAL

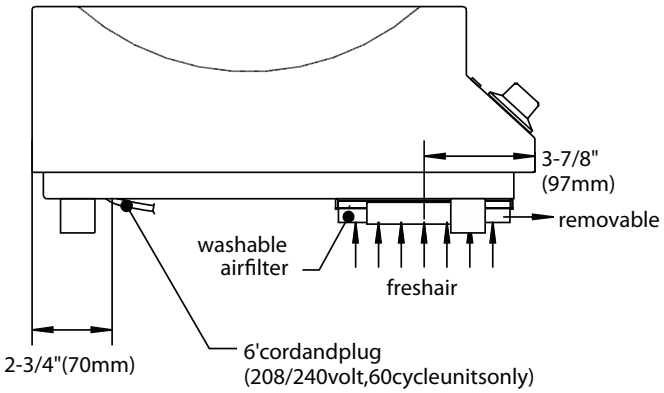


Plug Configurations:		
Model	**Electrical Characteristics**	**Plug**
GUI-3.5 DUAL	208V/60Hz/3Ø	 NEMA 15-30P
GUI-5.0 DUAL	208V/60Hz/3Ø	 NEMA 15-50P

Electrical Loading:							
Model	**Watts**	**208/60/1**	**208/60/3**	**240/60/1**	**230/50/1**	**400/50/3**	**440/60/3**
GIU-3.5 DUAL	7000	N/A	20 amp	N/A	N/A	10 amp	9 amp
GIU-5.0 DUAL	10,000	N/A	28 amp	N/A	N/A	15 amp	13 amp

DIMENSIONS AND SPECIFICATIONS, GI 3.5/5.0 WOK





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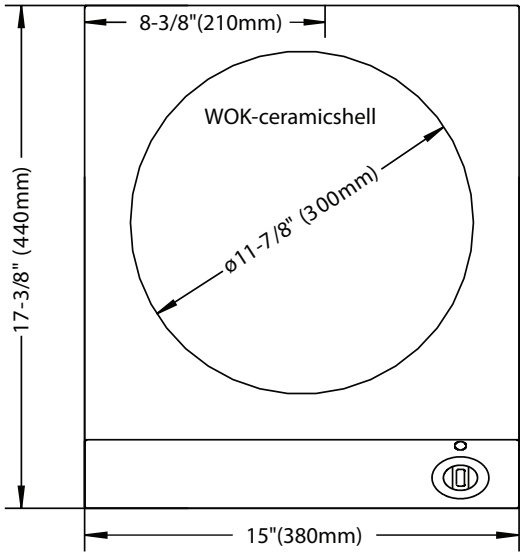
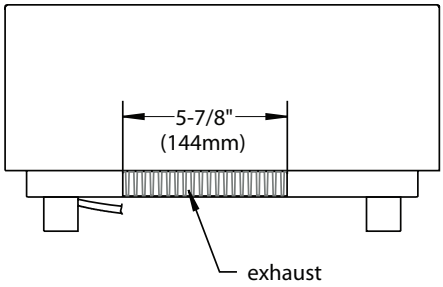




PLUG CONFIGURATIONS:		
Model	**Electrical Characteristics**	**Plug**
GIWOK-3.5	208V/60Hz/1Ø 240V/60Hz/1Ø	 NEMA 6-20P
GIWOK-5.0	208V/60Hz/3Ø	 NEMA 15-20P

Electrical Loading:							
Model	**Watts**	**208/60/1**	**208/60/3**	**240/60/1**	**230/50/1**	**400/50/3**	**440/60/3**
GIWOK-3.5	3500	16 amp	N/A	14 amp	10 amp	N/A	N/A
GIWOK-5.0	5000	N/A	14 amp	N/A	N/A	8 amp	7 amp

DIMENSIONS AND SPECIFICATIONS, Continued

Operation And Control

Lamp operation 24V DC/max. 40mA (Green)

Output regulator - Potentiometer 10k Ohm

Operation Conditions

Max. Tolerance Of The Nominal Supply Voltage	+6/-10%
Supply Frequency	50/60 Hz
Protection Class	1P 43
Minimal Diameter Of The Pan	5" (127mm)

Plug Descriptions

NEMA 6-15P

208/240 volt, single phase, 15 amp

NEMA 6-20P

208/240 volt, single phase, 20 amp

NEMA 15-20P

208 volt, 3 phase, 20 amp

NEMA 15-30P

208 volt, 3 phase, 30 amp

NEMA 15-50P

208 volt, 3 phase, 50 amp.

INTRODUCTION

Application

The following instructions contain information, which is fundamentally important and must be taken into account during assembly, operation and maintenance. They must therefore read very carefully before installation and operation by the responsible specialist staff and the operator(s). They must always be available for consultation at the place of operation.

Purpose of induction cookers

The Garland induction unit cookers are especially suitable as cookers in the kitchen and for the preparation of meals on the table. A cooker can be used for cooking, warming up, keeping warm, flambéing, roasting, etc. The cookers are to be used only with pans made of material which is suitable for induction. There are specific manufacturers who sell special types of pots and pans for induction cooking.

NOTE: For Wok models, only use supplied pans or "Spring of Switzerland" wok pans. Other pans may not have the same shape as the ceramic wok bowl, causing overheating and cracking of the ceramic.

DO NOT use induction cookers to heat up any other metallic objects other than pots and pans provided for it.

Description of products

We manufacture several basic types of induction cookers with various performances and measurements. All are built to last; they are also compact and powerful with a revolutionary technology in a complete case of stainless steel. All of our accessories are designed to coordinate with the induction units and since each unit is equipped with continuous control, they allow efficient cooking.

Features include:

- Simple operation with rotary switch
- Compact powerful electronics enable flat construction and safe operation
- A maximum of safety thanks to multiple safety functions
- Short cooking time
- Electronic checking
- Compact measurement – light weight
- Meets all current standards: VDE EN 60335-1/-2/36, CE-conforming
- UL197; CAN/CSA/C22.2 No., 109, NSF 4-1996

INSTALLATION

Location

The Cooker must always be set up on a clean and even surface (Table, base etc.) The Cooker stands on non-slip rubber pads and is not permanently installed and does not have to be fixed on the surface. It must be set up in such a way that it can not fall down or move in an uneven position. It requires an area of at least 15.7" x 18.9" (400 x 480mm) The air inlet and air outlet must not be obstructed. The area must be able to withstand a loading of 88 lbs (44Kg). The control knob to operate the Cooker must be easily accessible.

1 Make Sure that the induction unit does not take in hot ambient air (concerns units standing side by side, or one behind the other, or standing near a frying pan or oven).

2. The induction unit must not be placed near or on a hot surface.

3. Make sure that the induction unit does not take in grease laden air which is produced by other applications (deep fat fryer, grill, frying pan). In which case you must use an air an air duct (available as an accessory).

4. The air intake temperature must be under 104°F (40°)

5. The operating staff has to make sure that the installation, support and inspection is done by qualified personnel.

Installation Ambience

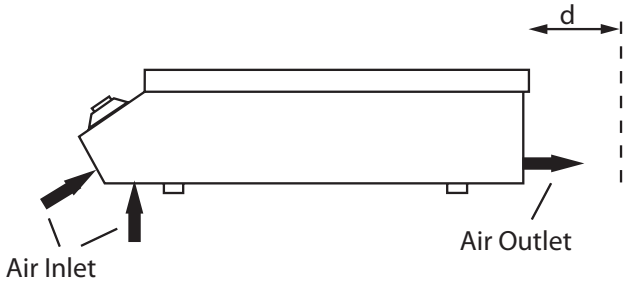
CONDITIONS	STORAGE	FUNCTION
Max. Ambient Temperature	> -4°F(-20°C) to 158°F(70°C)	> 41°F (5°C) to 104°F (40°C)
Max. Relative Humidity Of Air	> -10% to 90%	> 30% to 90%

Clearances

There is a minimum clearance of 1.5" (40mm) from the back wall.

This induction unit is equipped with an air cooling system. Make sure that the air supply and air exhaust are not blocked (wall, fabric etc)

Induction Unit
Side View



d: Minimal distance to wall = 1.5" (40 mm)

Electrical Connections

Turn the control knob to the OFF-position before connecting the cooker to the voltage supply.

The operator has to insure that all installation, maintenance and inspection work is carried out by authorized and qualified personnel.

1. Check and ensure that the supply voltage matches the voltage given on the specification plate.

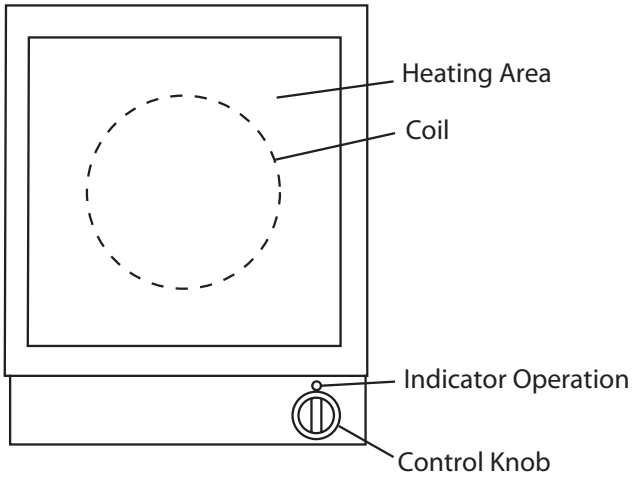
2. The electrical connections must satisfy local house installation regulations. The valid national and local regulations must be observed.

3. The cooker is provided with a cord and plug (60 cycle units only).

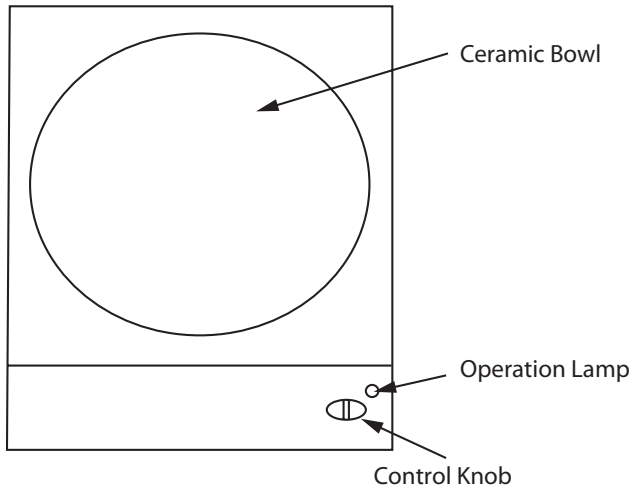
Function Test

Before carrying out function checks, the operator must know how to operate the cooker.

Induction Cooker
Top View



Induction Wok Cooker
Top View



Your cooker must be positioned in a suitable place and connected to a voltage supply. Make sure the cooker is well positioned and free from exposure to vibration.

Make sure the knob is in the "OFF" position.

Remove all objects from the glass ceramic cooking zone, verify if this area is neither cracked not broken. Don't continue with use when the glass ceramic cooking zone is cracked or broken, immediately switch off and disconnect the cooker from the outlet.

CAUTION The glass ceramic cooking zone is warmed up from the heat of the pan. To avoid injuries (burning) do not touch this area.

1. Use a pan that is suitable for induction cooking, having a bottom diameter of at least 127 mm (5"). Note for Wok units, use supplied wok pan.

2. Put some water in the pan and place the pan in the center of the heating area.

3. Turn the control knob ON (in a position between 1 and 10) The indicator will illuminate lights (green), and the water will be heated.

4. Take the pan away from the heating area, the indicator light will flash.

5. Place the pan back on the heating area, the indicator light will illuminate and the heating process will continue.

6.. Turn the control knob to the OFF position, the heating process will stop, indicator light turns off.

The shining indicator light operation means that energy is being transferred to the pan.

If the indicator operation remains off, check the following:

1. Is the cooker connected to the outlet?

2. Is the control knob in the ON position

3. Did you use a suitable pan (bottom diameter at least 127 mm (5"), pan made of suitable material)?

4. Is the pan placed in the center of the heating area?

To verify if the pan is suitable, use a permanent magnet and find out if it sticks to the bottom of the pan. If not, your pan is not suitable for induction cooking. Choose a pan which is recommended for induction cooking.

If in spite of all positive controls and tests the cooker doesn't work, refer to the Trouble Shooting Section.

Heating

The induction cooker is switched on with the control knob (OFF → ON). The cooker is immediately ready for operation. The illumination indicator operation lights means that energy is being transferred to the pan.

The power rating is set by turning the control knob. The inductive power depends on the position of the potentiometer,

Position 1: Minimum Power

Position 10: Maximum Power for GUI 2.5

Position 12: Maximum Power for all other models.

Control Knob

The number that points to the indicator operation marks the actual position of the control knob.

OFF - Position

0 points to the indicator operation.

ON - Position

Any position, where other than 0 points to the indicator operation.

Simmer Control

We have designed these units with excellent simmer control, The 3.5kW and 5.0Kw units all feature an infinite control and we have marked the overlays from 1-12 as the power increases. (0-10 for GUI2.5). We have designed the units such that the range from 1-9 (1-7 on GIU2.5) controls the heat from about 5% to 50% of total power, giving a great range of simmer control. The power jumps dramatically for strong boiling and quick heat after that.

Cooking Process

Due to the following characteristics, the operator must be more attentive when using the induction cooker than it would be required with other appliances.

The heat storage capacity of this system is very low. If the heating level is changed with the control knob, the food is immediately exposed to a different temperature. Empty pots and pans will heat up very quickly and are then ready for cooking. Once this has occurred, carefully adjust the heating graduation to the desired cooking level by setting and adjusting the power with the control knob.

Set and adjust the power with the control knob. The pan should always remain in the center of the heating area, otherwise, the bottom of the pan is heated unequally and the food inside the pan may burn.

When heating up oil or grease, constantly check the pan to prevent oil and grease from overheating and burning.

Comfort

The cooker only transmits energy if a pan is placed on the heating area. If you take the pan away from the heating area, power transfer stops immediately. If the pan is put back on the heating area, the selected power will be transferred to the pan again.

After switching the cooker to the OFF position cooking will stop.

Pan Detection

During pan detection, the indicator operation flashes. No power is transferred and the indicator lamp flashes if no pan or an unsuitable pan is detected. Pans having a diameter smaller than 127 mm (5") are not detected.

Control Of The Heating Area

The heating area is controlled with a temperature sensor. Overheated pans (hot oil, empty pans) will be detected. Energy transfer will be stopped. The induction unit must be restarted after it has cooled down.

Out Of Operation

If the cooker is not in use, make sure that the control knob is in the OFF position. If you don't use the cooker for a longer period (several days), unplug the unit.

Make sure that no liquid can enter into the cooker, and do not clean the cooker with a jet of water.

SAFETY CONCERNS

Description Of Danger Signs

This symbol identifies the safety information which may cause danger (personal injury) for people at non-observance of proper operation

CAUTION

Indicates a hazard or unsafe practice which could result in minor personal injury or property damage.

Information signs mounted directly on the cooker must be observed at all times and kept in a fully legible condition.

EXAMPLE:

CAUTION Refer to instructions before operating or servicing the unit.

Safety Conscious Work

The safety information contained in these instructions for use, the existing national regulation for the prevention of accidents as well as any internal working operating and safety regulations stipulated by the operator must be observed.

The staff for assembly, installation, commissioning, operation and maintenance must have the appropriate qualifications. The field of responsibility, competence and supervision of the staff must be defined and controlled

Certain risks may be associated with non-observance of precautions, including:

1. Danger to persons through electrical causes
2. Danger to persons through overheated pans
3. Danger to persons through an overheated cooking platform (ceran plate)

The operating reliability of the cookers can only be guaranteed with proper use.

Operator/Operating Personnel Safety Information

Any risks from electric power must be eliminated. The induction unit shall only be used if the installation of the electricity is fitted by an approved installation contractor in accordance with specific national and local regulations.

1. The heating area is warmed up from the heat of the pan. To avoid injuries (burning) do not touch the heating area.
2. To Avoid overheating of pans by means of evaporating the contents, don't heat up pans unattended.
3. Switch the control knob off if you take the pan away for a while. This will avoid having the heating process continue automatically when a pan is placed back on the heating area.
4. Do not insert any piece of paper, cardboard, cloth, etc. between the pan and the heating area, as this might initiate a fire.

5 As metallic objects are heated up very quickly when placed on the operating heating area, do not place any other objects (Closed cans, aluminum foil, cutlery, jewelry, watches etc.) on the induction cooker.

6. Persons with a pacemaker should consult their doctor before using an induction cooker.
7. Do not place credit cards, phone cards, cassette tapes or other objects that are sensitive to magnetism on the Ceran plate.
8. The induction cooker has an internal air-cooling system. Do not obstruct the air inlet – and air outlet slots with objects (cloth). This would cause overheating and therefore the cooker would switch off.
9. Avoid liquid entering the cooker. Do not let water or food overflow the pan.
10. Do not clean the cooker with a jet of water
11. If the heating area (Ceran plate) is cracked or broken, the induction cooker must be switched off and disconnected from the electrical connection. Don't touch any parts inside the cooker.

Unauthorized Reconstruction And Use Of Spare Parts

Reconstruction of the cooker or changes to the cooker are not allowed. Contact the manufacturer if you intend to make any changes on the cooker. To guarantee the safety, use only genuine spare parts and accessories. The use of other components voids all warranties.

TROUBLE SHOOTING

CAUTION Do not open the cooker, dangerous electric voltage inside.

The cookers may only be opened by authorized service personnel.

Stop any actions if the heating area (Ceran plate) is cracked or broken, the induction cooker must be switched off and disconnected from the electric supply. Don't touch any parts inside the cooker.

Error Messages

LED 8	LED 7	LED 6	LED 5	CODE	SIGNIFICATION	NOTES
-	-	-	-	-	No fault, normal operation	
-	-	-	on	1	No spool current, Hardware overcurrent	
-	-	on	-	2	High spool current, Software overcurrent	
-	-	on	on	3	Temperature cooling plate	
-	on	-	-	4	Temperature cooking platform	*
-	on	-	on	5	Power rotary switch in line break	
-	on	on	-	6	Inside temperature	
-	on	on	on	7	Sensing element of cooking platform, short circuit	**
on	on	-	-	12	Power reduction cooling plate temperature	***
on	on	-	on	13	Power reduction cooking platform temperature	***

* The induction unit can only be re-started by turning the control knob off and back on again.

** The induction unit continues working but the temperature of the cooking platform is not controlled anymore.

*** The induction unit continues working with reduced power cycles.

Trouble Shooting Guide

Fault	Possible Cause	Action to take through operator or operating personnel
No heating indicator operation is off (dark)	No electrical supply	Check if the electrical supply (cable plugged in the wall socket), check preliminary fuses
	Control knob in OFF - position	Turn control knob ON
	Pan too small (bottom diameter less than 5" (127 mm)	Use a suitable pan
	Pan is not placed in the center of the heating area (the cooker can't detect the pan)	Move the pan to the center of the heating area
	Unsuitable pan	Choose a pan which is recommended for induction cooking *
	Cooker defective	Ask your supplier for repair service, unplug the cooker from the electrical supply
Poor heating, indicator operation is on (shines)	Used pan is not ideal	Use a pan which is recommended for induction cooking, compare results with 'your' pan
	Air-cooling system obstructed	Verify, that air inlet and air outlet are not obstructed with objects
	Ambient temperature is too high (the cooling system is not able to keep the cooker in normal operating conditions **	Verify, that no hot air is sucked in by the fan. Reduce the ambient temperature. The air inlet temperature must be lower than 40°C/110°F
	One phase is missing (only with three phase supply)	Check preliminary fuses
	Cooker defective	Ask your supplier for repair service, unplug the cooker from the electrical supply
No reaction to control knob positions	Control knob defective	Ask your supplier for repair service, unplug the cooker from the electrical supply
Heating cycle switches off and on within minutes, fan is active	Air inlet or outlet obstructed	Remove objects from air inlet and air outlet slots, clean the slots
	Fan dirty	Clean fan
Heating cycle switches off and on within minutes, fan is never active	Fan defective	Ask your supplier for repair service
	Fan control defective	

TROUBLE SHOOTING Continued

Fault	Possible Cause	Action to take through operator or operating personnel
After a longer permanent operating time, the heating switches off and on within minutes	Coil overheated, cooking area too hot	Switch cooker off, remove pan and wait until the cooking area has cooled off
	Empty pan	
	Pan with overheated oil	
Small metallic objects (e.g. Spoon) are heated up within the cooking area	Pan detection tuned incorrectly	Control logic board

* To verify if the pan is suitable, use a permanent magnet and find out if it sticks on the bottom of the pan. If not, your pan is not suitable for induction cooking. Choose a pan which is recommended for induction cooking. Choose pan material suitable for induction appliances.

** The cooling-system (fan) starts to operate when the heat temperature exceeds 55°C/130°F. At heat temperatures higher then 70°C/160°F, the controller automatically reduces the power to keep the power unit in normal operating conditions. The cooker runs in a non continuous mode. This mode can be heard.

CLEANING AND SERVICING

Cleaning

Common types of soiling and recommendations how to treat them:

Slight soiling, no burned residues

Wipe with a moist cloth (scotch), without cleaning agent.

Sticky soiling

Remove with a scraper (razor blade). Then wipe the heating area with a moist cloth.

Lime deposits, caused by water which has boiled over

These spots can be removed with vinegar or a special cleaning agent.

Food containing sugar, plastic, aluminum foil.

Immediately scrape off the sugar, plastic or aluminum foil residues thoroughly from the hot cooking area. eg with a razor blade. After removal of the residues, clean it with a cleaning agent.

If the heating area soiled with residues of sugar, plastic or aluminum foil cools down without prior cleaning, the ceramic surface might become deformed by pinhead sized pits.

Make sure that no liquid can enter in the induction unit. Do not clean the Cooker with a jet of water.

Support

Good maintenance of the induction cooker requires regular cleaning, care and servicing. The operator has to ensure that all components relevant to safety are in perfect working order at all times.

The cooker has to be examined at least once a year by an authorized technician.

CAUTION Do not open the cooker, dangerous electric voltage inside.

The cookers may only be opened by authorized personnel.


Garland