

# SERVICE DATA SHEET

## 30" Induction Cooktop with Ceramic Glass

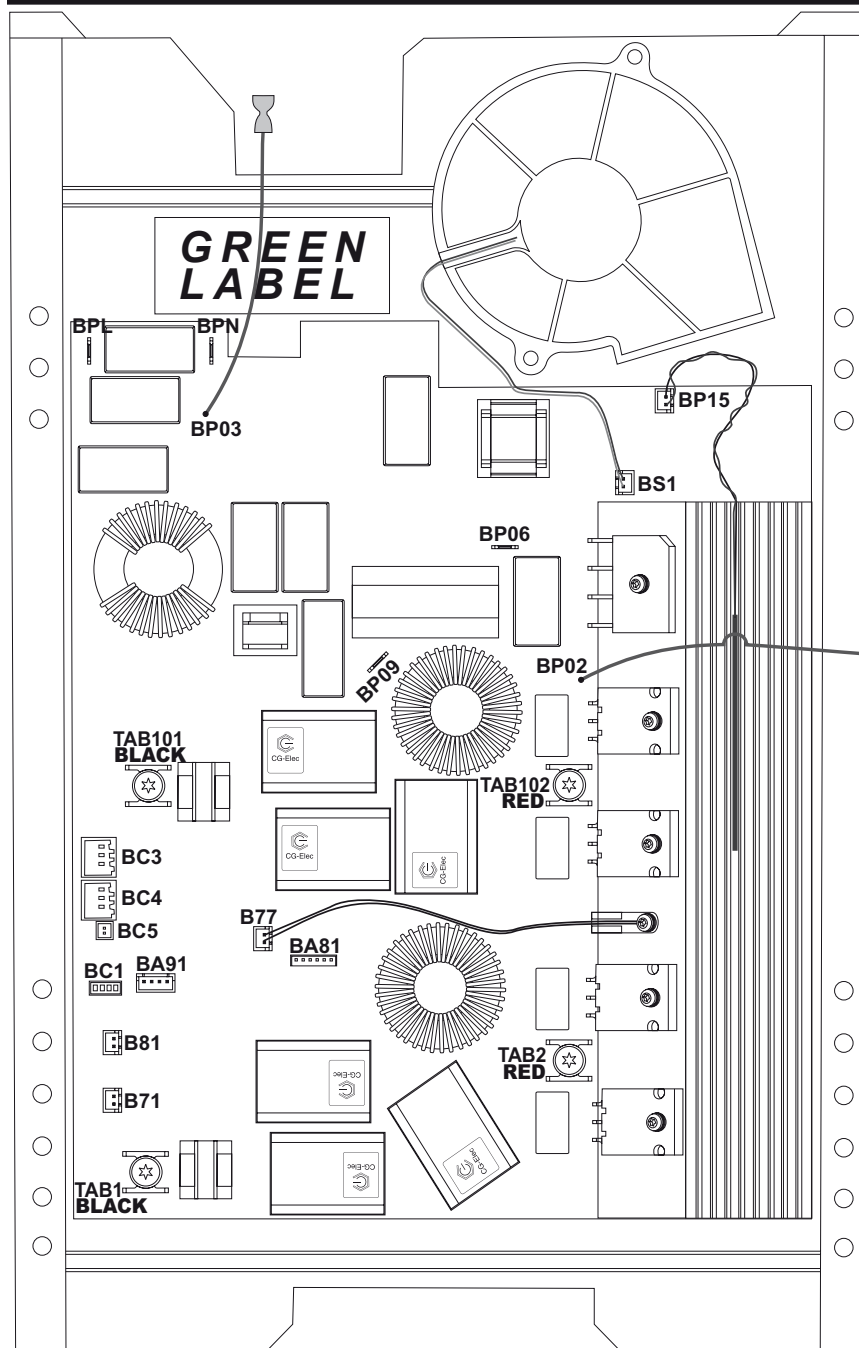
**NOTICE -** This service data sheet is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. The manufacturer cannot be responsible, nor assume any liability for injury or damage of any kind arising from the use of this data sheet.

### SAFE SERVICING PRACTICES

To avoid the possibility of personal injury and/or property damage, it is important that safe servicing practices be observed. The following are examples, but without limitation, of such practices.

1. Before servicing or moving an appliance remove power cord from electrical outlet, trip circuit breaker to OFF, or remove fuse.
2. Never interfere with the proper installation of any safety device.
3. **GROUNDING:** The standard color coding for safety ground wires is *GREEN* or *GREEN WITH YELLOW STRIPES*. Ground leads are not to be used as current carrying conductors. **It is extremely important that the service technician reestablish all safety grounds prior to completion of service. Failure to do so will create a potential safety hazard.**
4. Prior to returning the product to service, ensure that:
  - All electric connections are correct and secure.
  - All electrical leads are properly dressed and secured away from sharp edges, high-temperature components, and moving parts.
  - All uninsulated electrical terminals, connectors, heaters, etc. are adequately spaced away from all metal parts and panels.
  - All safety grounds (both internal and external) are correctly and securely reassembled.

## INDUCTION GENERATOR HOUSING

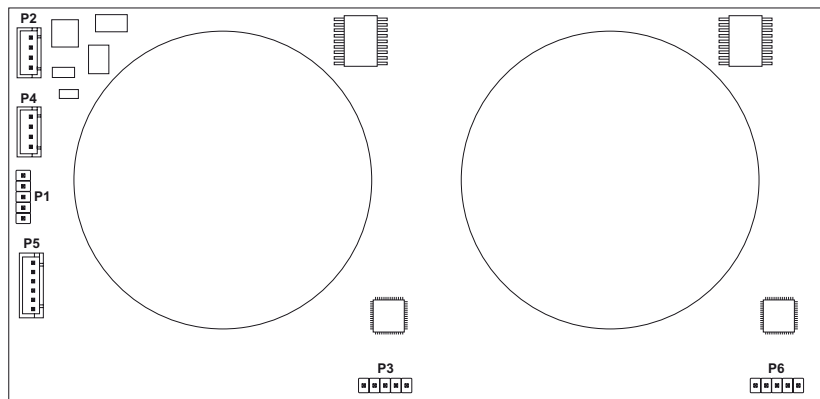


### Induction Generator Housing Legend:

- BPL:** AC Line 1 Input (Power)
- BPN:** AC Line 2 Input (Power)
- BS1:** FAN Drive Output
- BP02:** Chassis connection
- BP03:** Chassis connection
- BP06:** Not Used
- BP09:** Not Used
- BP15:** Thermal CutOut Input
- BC1:** ID Bridge
- BC3:** Pin 1 : Vcc (5Vdc) Input
- BC4:** Pin 2 : MACS Serial Communication  
Pin 3 : Ground
- BC5:** Not Used
- B71:** Inductor Temperature Sensor Input
- B77:** Heat Sink Temperature Sensor Input
- B81:** Inductor Temperature Sensor Input High Power
- BA81:** Not Used (Programming Header)
- BA91:** Not Used (Programming Header)
- TAB1:** Power output (Black) High Power
- TAB2:** Power output (Red) High Power
- TAB101:** Power output (Black)
- TAB102:** Power output (Red)

**IMPORTANT**  
**DO NOT REMOVE**  
**THIS BAG**  
**OR DESTROY THE**  
**CONTENTS**  
 WIRING DIAGRAMS AND  
 SERVICE  
 INFORMATION ENCLOSED  
**REPLACE**  
**CONTENTS IN BAG**

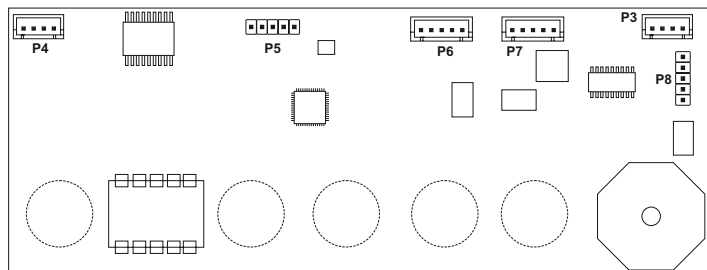
## ZONE CONTROL BOARD



### Zone Control Board Legend:

<b>P1</b>	Not Used	<b>P5</b>	Pin 1	Vcc (5Vdc) Output
<b>P3</b>	Not Used (Programming header)		Pin 2	ID1 Input
<b>P6</b>	Not Used (Programming header)		Pin 3	Vcc (5Vdc) Output
<b>P2</b>	Pin 1		Pin 4	ID2 Input
<b>&amp;</b>	Pin 2		Pin 5	ID3 Input
<b>P4</b>	Pin 3		Pin 6	Vcc (5Vdc) Output
	Pin 4			

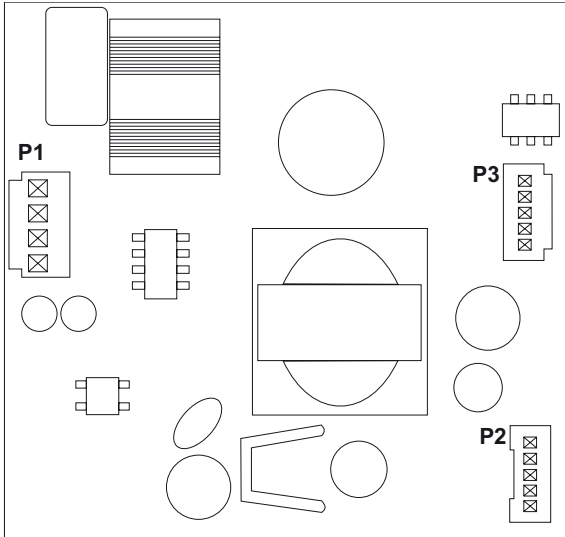
## MAIN CONTROL BOARD



### Main Control Board Legend:

<b>P1</b>	Not Used	<b>P6</b>	Pin 1	Vled(8Vdc) Input
<b>P2</b>	Not Used	<b>&amp;</b>	Pin 2	Zero Cross Input
<b>P5</b>	Not Used (Programming header)	<b>P7</b>	Pin 3	Ground
<b>P8</b>	Not Used (Programming header)		Pin 4	Vcc (5Vdc)
<b>P3</b>	Pin 1		Pin 5	MACS Serial Communication
<b>&amp;</b>	Pin 2			
<b>P4</b>	Pin 3			
	Pin 4			

# POWER SUPPLY BOARD



## Power Supply Board Legend:

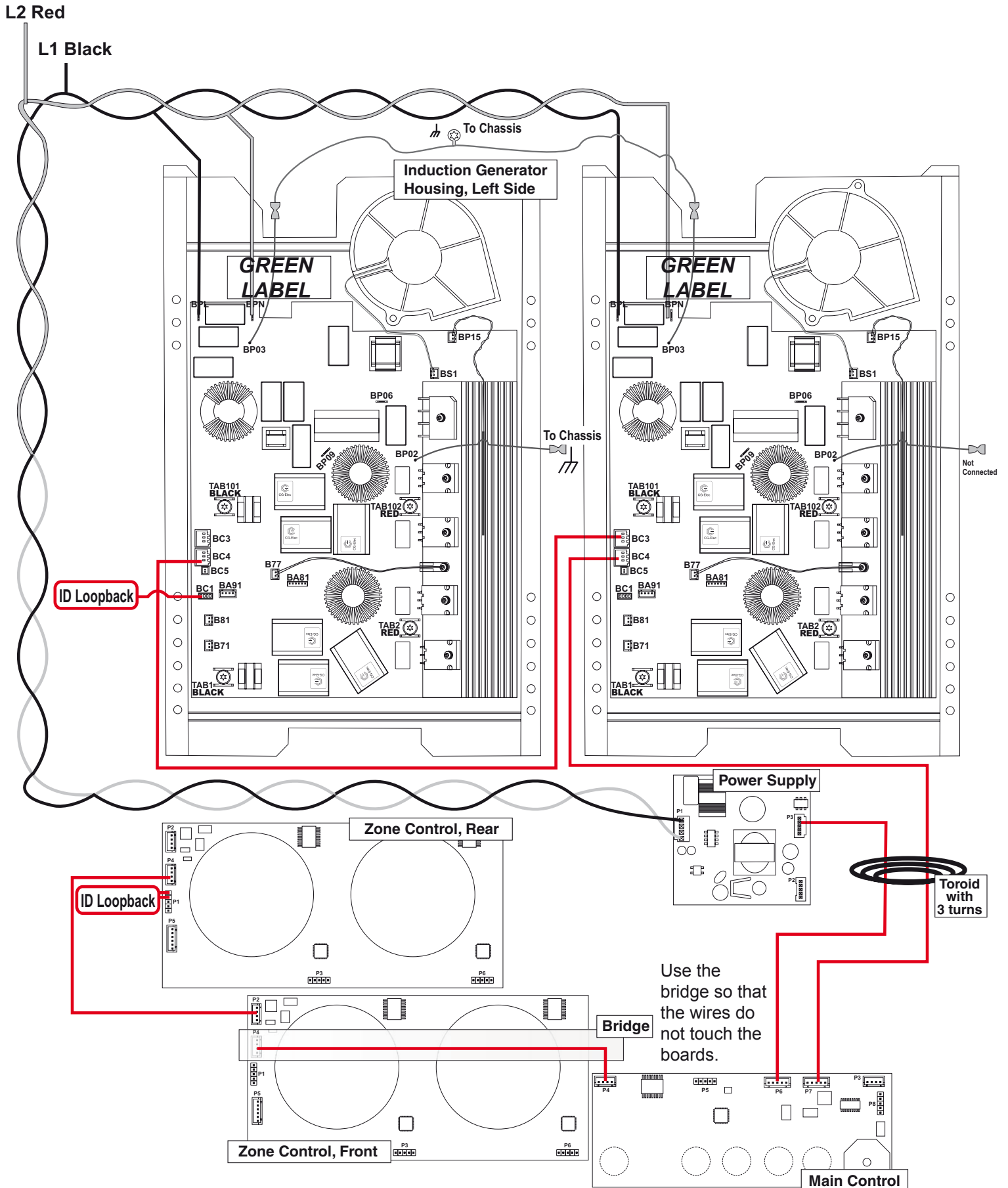
- P1** Pin 1 Vac Input (120 - 240 Vac)  
 Pin 2 Not Used  
 Pin 3 Not Used  
 Pin 4 Vac Input (120 - 240 Vac)
- P2 & P3** Pin 1 Ground  
 Pin 2 Vled(8Vdc) Output  
 Pin 3 Not Used (13Vdc Output)  
 Pin 4 Not Used  
 Pin 5 Zero Cross Output

# POWER LEVEL EXPLANATION TABLES

Power Levels	Relative Inductor Power (%)
Keep Warm	2.5
Lo	3
1.2	3.5
1.4	4
1.6	4.5
1.8	5
2	5.5
2.2	6
2.4	7
2.6	8
2.8	9
3	10.5
3.5	13
4	15.5
4.5	18
5	21
5.5	25
6	31
6.5	38
7	45
7.5	50
8	54
8.5	59
9	64
9.5	80
Hi	100
Power Boost	See Inductors Power Levels Table

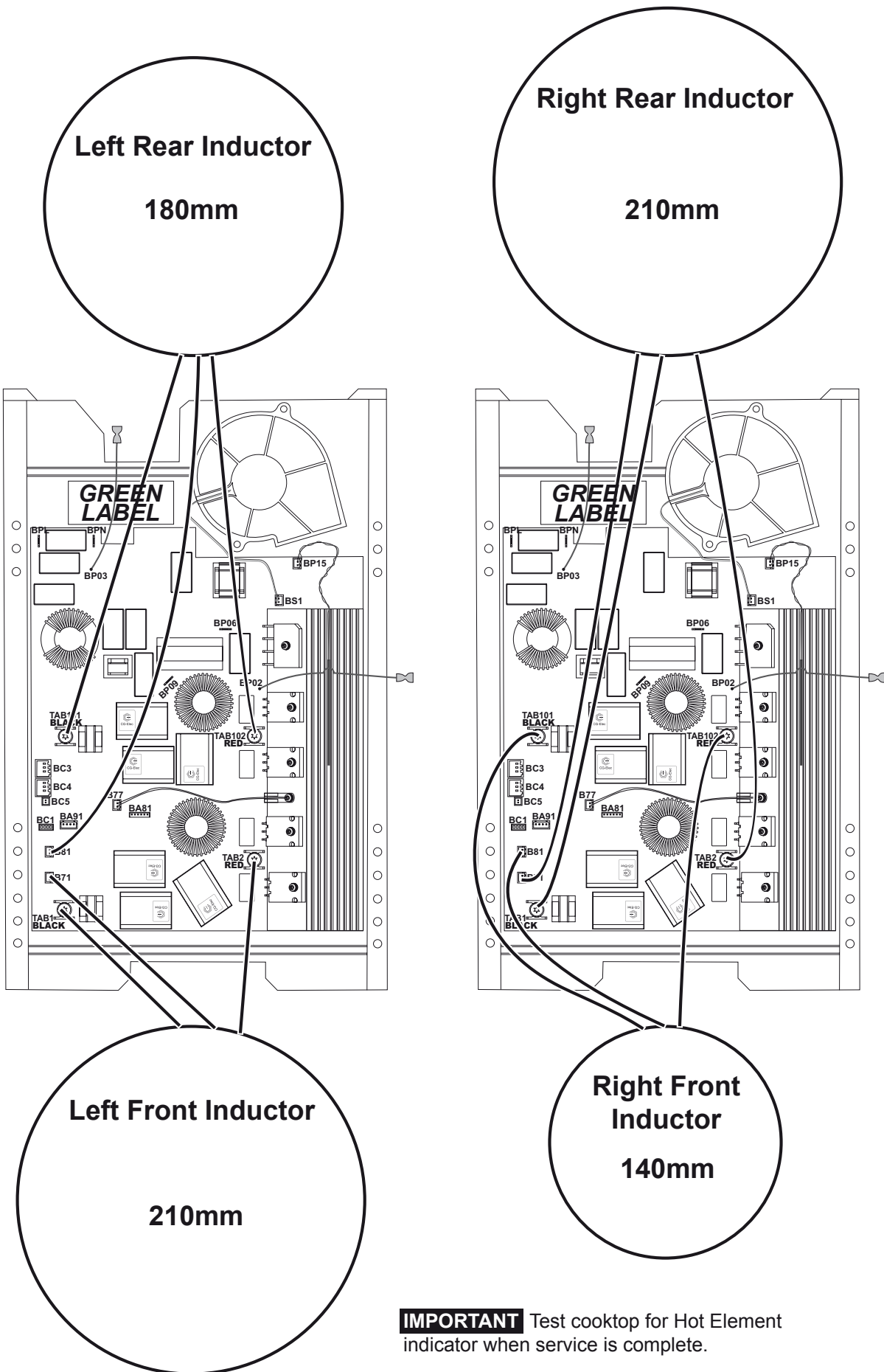
Inductor Size	Nominal Power level	Power Boost Levels	
140mm	1450W	2016W (139%)	10 minutes max
180mm	1875W	2606W (139%)	10 minutes max
210mm HP	2300W	2900W (126%)	14 minutes max
270mm	2650W	3000W (113%)	10 minutes max

# INTERCONNECTIONS SYSTEM



**IMPORTANT** DO NOT ALLOW ANY WIRES TO TOUCH ANY BOARDS

# INDUCTOR CONNECTIONS



**IMPORTANT** Test cooktop for Hot Element indicator when service is complete.

## ERROR CODES

UI Display	Error Description	Corrective Action
<b>C11</b>	Shorted keypad. The defective control will flashes the error code in its display.	1- Verify there is no mechanical interference near the defective control (harnesses, metallic devices, etc).
		2- Replace the defective control.
<b>C15</b>	FMEA Error	Base Line Railed.
		RC circuit for Capacitive touch sensing.
		Continuity of both Cancel buttons traces.
		Replace Timer board or Housing containing Timer board.
<b>C20</b>	Loss of communication with Left Generator Housing Assembly Induction. (MACS)	1- Check communication harness attached to the Left Induction Generator Housing. Replace if defective.
		2- Verify ID loopback connector is present on the left side Induction Generator Housing (30" only otherwise no loopback connector). Replace if defective.
		3- Verify there is no ID loopback connector present on the right side Induction Generator Housing .
		4- Replace left side Induction Generator Housing.
<b>C21</b>	Loss of communication with Right Generator Housing Assembly Induction. (MACS)	1- Check communication harness attached to the Right Induction Generator Housing. Replace if defective.
		2- Verify ID loopback connector is present on the left side Induction Generator Housing (30") or center Induction Generator Housing (36"). Replace if defective.
		3- Verify there is no ID loopback connector present on the right side Induction Generator Housing.
		4- Replace right side Induction Generator Housing.
<b>C22</b>	Loss of communication with Center Generator Housing Assembly Induction. (MACS)	1- Check communication harness attached to the Center Induction Generator Housing. Replace if defective.
		2- Verify ID loopback connector is present on the center Induction Generator Housing. Replace if defective.
		3- Verify there is no ID loopback connector present on the right and left side Induction Generator Housings.
		4- Replace center Induction Generator Housing.
<b>C23</b>	Loss of communication with 2 or more Housing Assembly Induction. (MACS)	1- Check communication harnesses between Main Control and Induction Generator Housings (3 harnesses for 30" and 4 for 36"). Replace if defective.
		2- Replace Main Control
		3- Replace each Generator Housing in succession starting from the right most and working left.
<b>C24</b>	UART communication has been lost.	1- Replace Main Control
<b>C25</b>	Loss of communication with Rear Zones Control.(I2C lost/ error)	1- Verify ID loopback connector is present on the rear 2 zones control. Replace if defective.
		2- Verify communication harness between front 2 zones Control P2 and rear 2 zones control P2. Replace if defective.
		3- Replace rear 2 zones Control.
<b>C26</b>	Loss of communication with Front Zones Control. (I2C lost/ error)	1- Verify ID loopback connector is present on the rear 2 zones control. Replace if defective.
		"2- Verify ID loopback connector is not present on the front 2 zones control."
<b>C2A</b>	All communication has been lost with I2C in all zones.	1- Check wiring between main control and zones
		2- Replace Main Control
<b>C2C</b>	All communication has been lost between I2C and Macs.	1- Check wiring between main control and zones and wiring between main control and generators.
		2- Replace Main Control

## ERROR CODES

UI Display	Error Description	Corrective Action
C30/35	AC input voltage too high/low, left side Induction Generator Housing	1- Verify AC Input voltage at cooktop input (customer wiring).
		2- Verify AC voltage between left side housing BPL and PBN connectors. Should measure 240Vac +- 24Vac.
		3- Replace left side Induction Generator Housing
C31, C32, C34, C36, C37	Internal generator error, left side Housing Assembly Induction	1- Replace left side Induction Generator Housing
C33	Cooling FAN Blocked, left side Housing Assembly Induction.	1- Verify there is no mechanical interference for the fan to operate on the left side Induction Generator Housing.
		2- Replace left side Induction Generator Housing
C38	FAN Not Connected, left side Housing Assembly Induction	1- Verify fan is correctly connected at BS1 of left side Housing Assembly Induction
		2- Replace left side Induction Generator Housing
C40	IGBT, Heat sink sensor defect, left side Induction Generator Housing	1- Verify the heat sink sensor is installed properly and not damaged in the left side Induction Generator Housing (measured approx 100K ohms at room temperature).
		2- Replace left side Housing Assembly
C41- C42-C43	Induction sensor / Pot detection defect, left side Induction Generator Housing	1- Verify the inductors are well connected and not damaged on the left side Induction Generator Housing (measure approx 0 ohm at room temperature).
		2- Replace left side Housing Assembly
C44-C45	Board Temperature Alarm, left side Induction Generator Housing.	1- Verify all airway are free. There should be some hot air going out at the center front of the cooktop edge.
		2- Ensure customer do not use the cooktop with dry pan at high temperature levels.
		3- Replace left side Induction Generator Housing
C46	Power Fail Detect, left side Induction Generator Housing.	1- Check AC input supply
		2- Check cooktop wiring
		3- Replace left side Induction Generator Housing
C51 C52 C55 C56 C57 C58	Element temperature sensor breaks (Left Front Zone) Element temperature sensor breaks (Left Rear Zone) Element temperature sensor breaks (Right Front Zone) Element temperature sensor breaks (Right Rear Zone) Element temperature sensor breaks (Center Front Zone) Element temperature sensor breaks (Center Rear Zone)	1- Verify, inductor temperature sensor is connected properly at B71 or B81 as per wiring diagram.
		2- Verify the inductor temperature sensor is installed properly and not damaged in the associate Induction Generator Housing (measured approx 100K ohms at room temperature)
		3- Replace associate induction Generator Housing
C62	Loss of Zero Cross at timer input	1- Verify harness between switching power supply and Main Control. Replace harness if defective or damaged.
		2- Using a DC voltmeter, verify power supply signal at P3, pins 1-5. Should measure 2.8Vdc +- 0.5Vdc. Replace Power Supply if defective.
		3- Replace Main Timer Control.
C63 C64 C65 C66 C67 C68	Left Front Zone element temperature sensor too hot. Left Rear Zone element temperature sensor too hot. Right Front Zone element temperature sensor too hot. Right Rear Zone element temperature sensor too hot. Center Front Zone element temperature sensor too hot. Center Rear Zone element temperature sensor too hot.	1- Ensure customer do not use the cooktop with dry pan at high temperature levels.
		2- Verify the inductor temperature sensor is installed properly and not damaged in the associate Induction Generator Housing (measured approx 100K ohms at room temperature)
		3- Replace associate induction Generator Housing

## ERROR CODES

UI Display	Error Description	Corrective Action
<b>C70/75</b>	AC input voltage too high/low, right side Induction Generator Housing	1- Verify AC Input voltage at cooktop input (customer wiring).
		2- Verify AC voltage between right side housing BPL and PBN connectors. Should measure 240Vac +/- 24Vac.
		3- Replace right side Induction Generator Housing
<b>C71, C72, C74, C76, C77</b>	Internal generator error, right side Induction Generator Housing	1- Replace right side Induction Generator Housing
<b>C73</b>	Cooling FAN Blocked, right side right side Induction Generator Housing	1- Verify there is no mechanical interference for the fan to operate on the right side Induction Generator Housing.
		2- Replace right side Induction Generator Housing
<b>C78</b>	FAN Not Connected, right side Induction Generator Housing	1- Verify fan is correctly connected at BS1 of right side Housing Assembly Induction
		2- Replace right side Induction Generator Housing
<b>C80</b>	IGBT, Heat sink sensor defect, left side Induction Generator Housing	1- Verify the heat sink sensor is installed properly and not damaged in the right side Induction Generator Housing (measured approx 100K ohms at room temperature).
		2- Replace right side Housing Assembly
<b>C84-C85</b>	Board Temperature Alarm, right side Induction Generator Housing.	1- Verify all airway are free. There should be some hot air going out at the center front of the cooktop edge.
		2- Ensure customer do not use the cooktop with dry pan at high temperature levels.
		3- Replace right side Induction Generator Housing
<b>C86</b>	Power Fail Detect, right side Induction Generator Housing.	1- Check AC input supply
		2- Check cooktop wiring
		3- Replace right side Induction Generator Housing