

SERVICE DATA SHEET - 30" Induction Cooktop

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

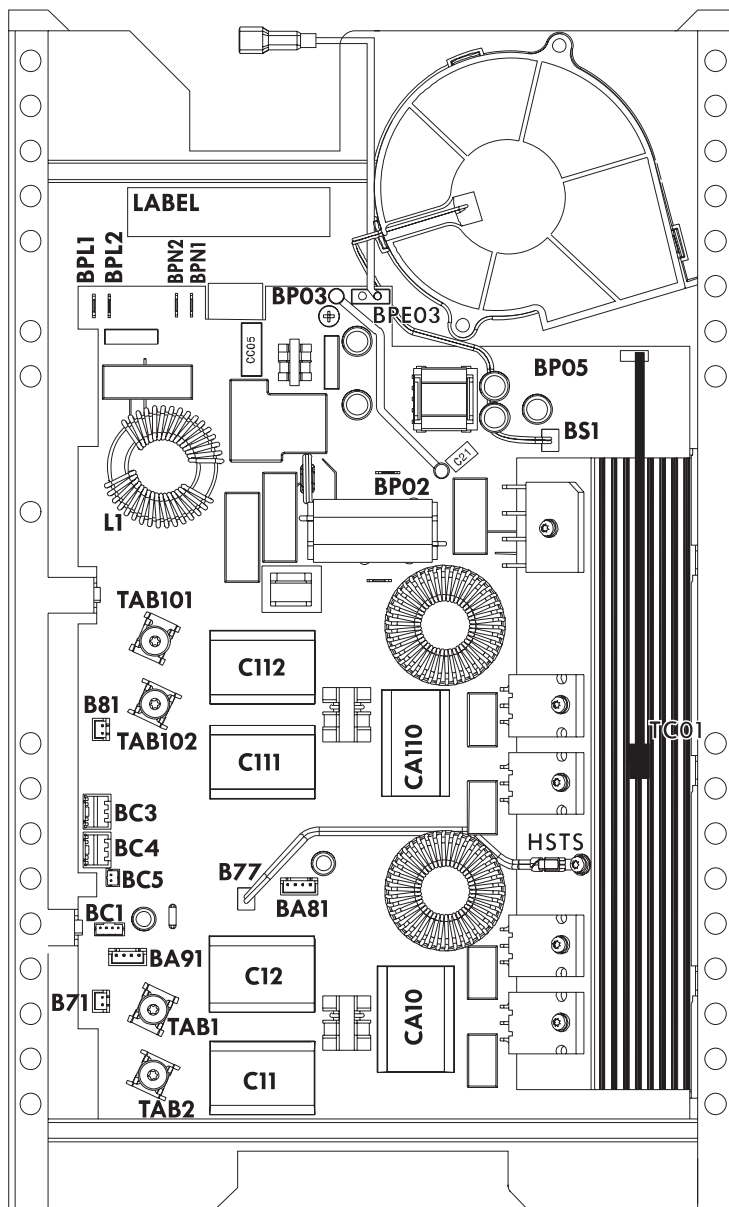
To avoid the possibility of personal injury and/or property damage, it is important that safe servicing practices be observed. The following are examples, but without limitation, of such practices.

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



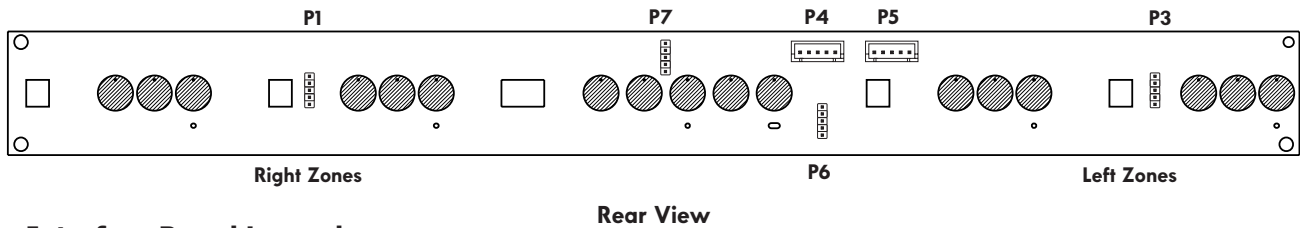
Induction Generator Housing Legend:

- BPL1 & BPL2:** AC Line 1 Input (Power)
- BPN1 & BPN2:** AC Line 2 Input (Power)
- BS1:** FAN Drive Output
- BP02:** Chassis connection
- BP03:** Chassis connection
- BP05:** Thermal CutOut Input (TC01)
- BC1:** ID Bridge*
- BC3:** Pin 1: Vcc (5Vdc) Input
- BC4:** Pin 2: MACS Serial Communication
- Pin 3: Ground
- BC5:** MACS Bus Supply Output*
- B71:** Inductor Temperature Sensor Input
- B77:** Heat Sink Temperature Sensor Input (HSTS)
- B81:** Inductor Temperature Sensor Input
- BA81:** Not Used (Programming Header)
- BA91:** Not Used (Programming Header)
- TAB1:** Power output (Black)
- TAB2:** Power output (Red)
- TAB101:** Power output (Black)
- TAB102:** Power output (Red)

* BC1 and BC5 connectors are used to identify the generator housing. They can be connected in different configuration. Refer to the Interconnection System section of this booklet.

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

USER INTERFACE BOARD



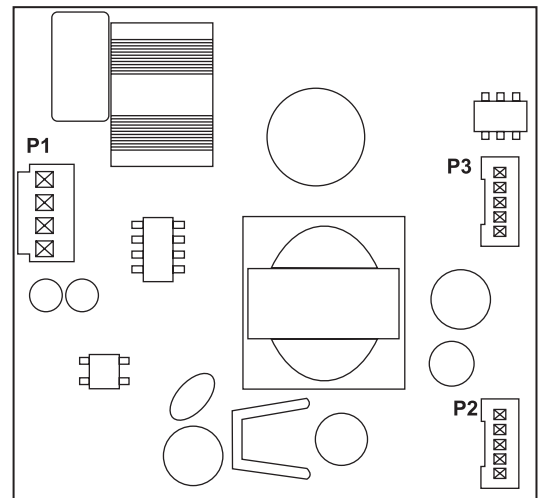
User Interface Board Legend:

- P1:** Not used (Left Zones Programming Connector)
- P3:** Not used (Right Zones Programming Connector)
- P4 & P5:** MACS Serial Communication
 - Pin 1: Vled (8Vdc) Input
 - Pin 2: Zero Cross Input
 - Pin 3: Ground
 - Pin 4: Vcc (5Vdc) Output
 - Pin 5: Data, Input/Output
- P6:** Not used (UART Programming Connector)
- P7:** Not used (Timer Programming Connector)

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** Pin 1 Ground
- &** Pin 2 Vled(8Vdc) Output
- P3** Pin 3 Not Used (13Vdc Output)
- Pin 4 Not Used
- Pin 5 Zero Cross Output



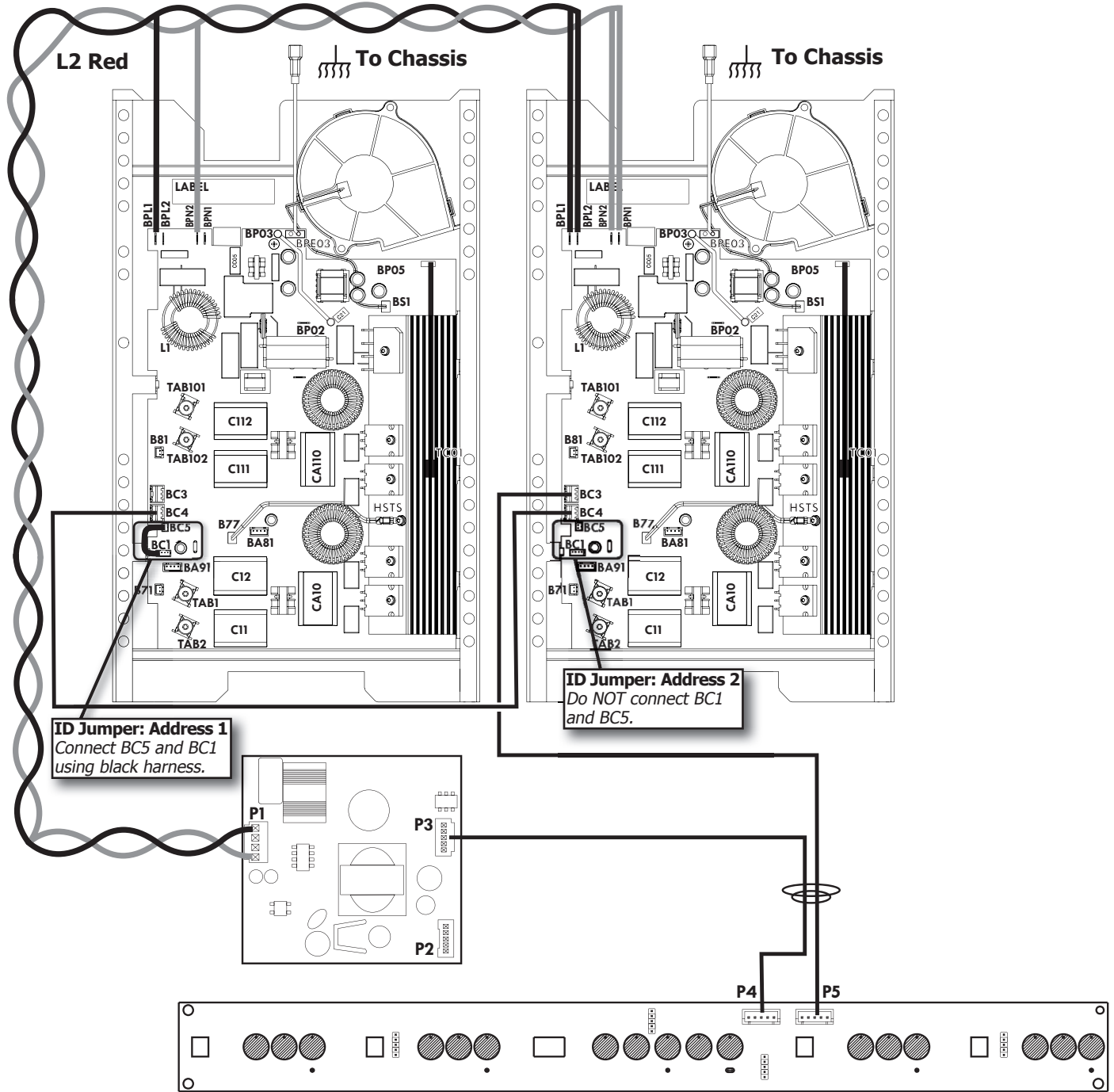
POWER LEVEL EXPLANATION TABLES

Indicated	% Power	Notes
0	0	Off
L*	1.5	Keep Warm
1	3	-
2	5.5	-
2.	8	-
3	10.5	-
3.	13	-
4	15.5	-
4.	18	-
5	21	-
5.	25	-
6	31	-
6.	38	-
7	45	-
8	64	-
9	100	-
P	125-141	Boost

* Accessed via the Keep-Warm Button

INTERCONNECTIONS SYSTEM

L1 Black



IMPORTANT Do not allow any wires to touch any boards.

ERROR CODES

UI Display	Error Description	Corrective Action
C11	Shorted keypad. The defective control will flash the error code in its display.	1- Cycle power on affected zone. If stuck button comes back while zone is on then proceed.
		2- Verify there is no mechanical interference near the defective control (harness, metallic devices, etc.).
		3- Replace defective control.
C15 / C16 C17	FMEA Error.	Replace defective control.
C20	Loss of communication with ID1 Generator Housing Assembly.	1- Check communication harness attached to the ID1 Induction Generator Housing. Replace if defective.
		2- Verify ID1 Connection is the proper one.
		3- Replace ID1 generator.
C21	Loss of communication with ID2 Generator Housing Assembly.	1- Check communication harness attached to the ID2 Induction Generator Housing. Replace if defective.
		2- Verify ID2 Connection is the proper one.
		3- Replace ID2 generator.
C22	Loss of communication with ID3 Generator Housing Assembly.	1- Check communication harness attached to the ID3 Induction Generator Housing. Replace if defective.
		2- Verify ID3 Connection is the proper one.
		3- Replace ID3 generator.
C23	Loss of communication between 2 or more generator.	1- Check communication harness from UI to harnesses and generator to generator.
		2- Check ID1 connection to verify that the ID jumper is connected from BC1 to BC5.
C24	UART communication is lost.	Replace Main Control.
C25	Rear Zones I2C lost/error.	Check wiring harness to main control board - Replace main control board.
C26	Front Zones I2C lost/error.	Check wiring harness to main control board - Replace main control board.
C2A	All I2C communication lost.	Check wiring harness to main control board - Replace main control board.
C2C	All communication lost.	Check wiring harness to main control board - Replace main control board.
C2F	Bridge Communication Lost.	Replace UI controls.
ID1, ID2 or ID3 will be designated in the display with 30s for ID1, 70s for ID2 and 90s for ID3.		
C30/70/ 90	AC input voltage too high in either ID1, ID2 or ID3 place designated by UI display.	1- Verify AC Input voltage at cooktop input (customer wiring) and AC from pole.
		2- Verify AC voltage between BPL and PBN connectors should measure 240V AC +- 24V AC.
		3- Replace Induction Generator Housing.
C31/71/ 91	Internal generator error ID1/ ID2/ ID3.	Replace Induction Generator Housing ID1, ID2 or ID3.
C32/72/ 92	Power supply defect ID1/ ID2/ID3.	Replace Induction Generator Housing ID1, ID2 or ID3.
C33/73/ 93	Cooling fan blocked ID1/ ID2/ID3.	1- Verify there is no interference for the fan.
		2- Replace generator housing ID1, ID2 or ID3.
C34/74/ 94	Main AC Phase error ID1/ ID2/ID3	Replace generator housing ID1, ID2 or ID3.
C35/75/ 95	Main AC voltage too low ID1/ID2/ID3.	1- Check line voltage coming into the house if all zones are showing this error.
		2- Replace generator housing ID1, ID2 or ID3.
C36/76/ 96	Internal communication error ID1/ID2/ID3.	Replace generator housing ID1, ID2 or ID3.

ERROR CODES

UI Display	Error Description	Corrective Action
C37/77/97	Internal induction generator housing error ID1, ID2 or ID3.	Replace generator housing ID1, ID2 or ID3.
C38/78/98	Fan not connected ID1, ID2 or ID3.	1- Verify fan is correctly connected at BS1. 2- Replace induction generator housing ID1, ID2 or ID3.
C39	Configuration mismatch between generator and UI control.	1- Verify if user interface is the right one for that model. 2- Verify if generators are the correct type. 3- If all displays are showing this error replay UI otherwise replace appropriate generator.
C40/80/A0	IGBT heat sink sensor error ID1/ID2/ID3.	1- Verify if the heat sink sensor is installed properly (measure approx. 100kOhm for NTC). 2- Replace generator housing assembly ID1, ID2 or ID3.
C41/81/A1	Induction sensor (coils) defect ID1/ID2/ID3.	1- Verify if the inductor (coils) are connected properly (measure approx. 00hm at room temperature). 2- Replace the induction generator housing if 0 ohm otherwise the inductor (coil).
C42/82/A2	General pot detection alarm ID1/ID2/ID3.	1- Verify pans are the proper type (magnet sticks to the bottom of pan). 2- Verify pan is not warped or rusty, pan is proper size, pan is placed correctly. 3- Replace induction generator housing ID1, ID2 or ID3.
C43/83/A3	Pot detection sensor fail ID1/ID2/ID3.	1- Verify pan is not warped or rusty, pan is proper size for zone, pan is placed correctly. 2- Replace induction generator housing ID1, ID2 or ID3.
C44/84/A4	Board temperature warning ID1/ID2/ID3.	1- Ensure customer is not using the cooktop with a dry pan at a high temperature level. 2- Allow zone to cool down and then continue cooking.
C45/85/A5	Board temperature alarm ID1/ID2/ID3.	1- Ensure customer is not using the cooktop with a dry pan at a high temperature level. 2- Replace induction generator housing ID1, ID2 or ID3.
C51/52/53/54/55/56	Element temperature sensor failure ID1/ID2/ID3.	1- Verify induction 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 (measure approx. 100K Ohms at room temperature). 3- Replace induction generator housing ID1, ID2 or ID3.
C62	Loss of zero cross at timer input.	1-Verify harness between switching power supply and main control (UI). Replace harness if defective. 2- Verify power supply signal at P3 pins 2 & 3 (GND), should measure ~2.8Vdc +/- 0.5Vdc. Replace switcher. 3- Replace main control.
C63/64/65/66/67/68	Element temperature sensor too hot ID1/ID2/ID3.	1- Ensure customer does not use the cooktop with a dry pan at high temperature levels. 2- Verify the inductor temperature sensor is installed properly and not damaged in the proper generator (measure approx. 100k Ohms at room temperature). 3- Replace induction generator housing ID1, ID2 or ID3.

ADDITIONAL ERROR (FAULT) CONDITIONS

Symptom or failure	Control Display	Possible cause or condition	Suggested Corrective Action
Pan does not heat up.	Normal operation.	Pan too small for proper pan detection and only works with low power.	Use larger pan or this pan on a smaller cooking zone. Refer to owners guide for proper pan selection.
	Flashing "Power level" and pan does not heat.	Pan not detected.	Check whether the pots or pans are suitable for induction. Refer to owners guide for proper pan selection.
		Induction coil not correctly connected or induction coil open.	Check the coil wire terminal connections. Ensure that they are properly connected and tightened. Test continuity of coil (should be less than 1 ohm).
		Distance between coil and glass ceramic too large.	Check whether the coil is properly positioned and touching the glass cooktop surface.
Individual buttons cannot be used or cannot always be used.	None.	Test cables & connections. Touch control defective.	1. Follow instructions for proper use of touch controls. 2. Replace Touch Control.
Cooking power too low or shuts down prematurely.	None.	Fluids spilled or object lying on control panel keypads.	Clean up spills or remove objects. Restart cooktop in normal manner.
	Normal operation	Ventilation slots obstructed.	Clear vent openings.
		Unsuitable pots (bottom bent).	Follow owners guide for proper pan selection.
		Distance between coil and glass ceramic too large.	Check whether the glass ceramic was pushed down when being screwed in position and the coil has been correctly positioned.
H in display when cooking zone is cold and switched off.	"H"	Temperature sensor defect.	1. Test coil sensor , approximately 100Kohms at room temperature. Replace coil if resistance is incorrect. 2. Replace power generator board.

