



Fast Track Troubleshooting

Model:
FTQ352IWUB/XAA
FTQ352IWUW/XAA
FTQ352IWUX/XAA

IMPORTANT SAFETY NOTICE – “For Technicians Only” This service data sheet is intended for use by persons having electrical, electronic, and mechanical experience and knowledge at a level generally considered acceptable in the appliance repair trade. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible, nor assume any liability for injury or damage of any kind arising from the use of this data sheet.

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SUPPORT INFORMATION

Training — Plus One

<http://my.plus1solutions.net/clientPortals/samsung/>

Help — GSPN <http://service.samsungportal.com/>

Samsung 'Electric Range' Diagnostic Code Quick Guide

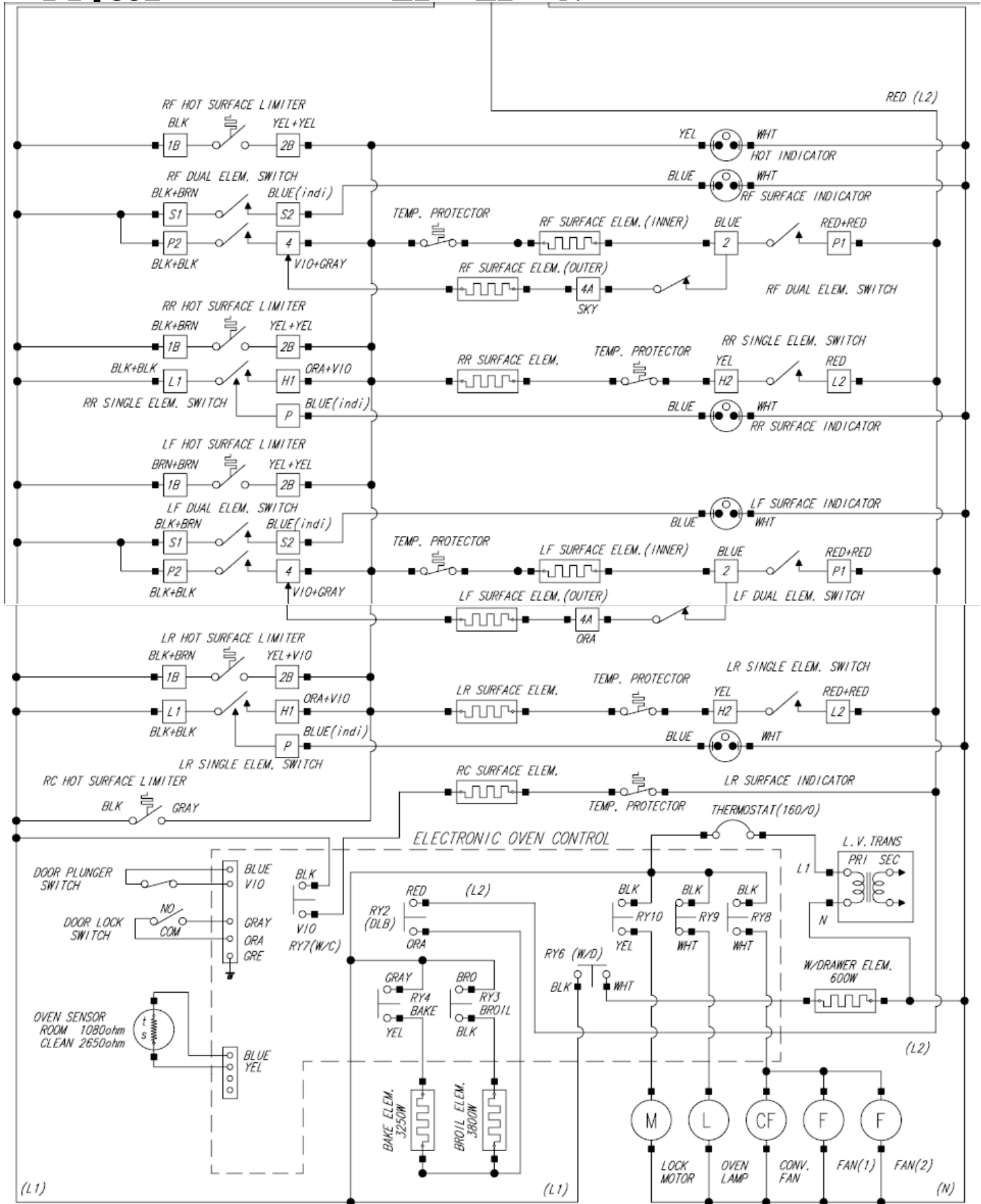
Display Failure Codes	POWER LOSS CLEARS CODES 1)Press Clock AM/PM pad. 2) Press pad again, select AM. 3)Press # 1-2-3-4 pads. 4)Press Set/Start pad. 5)Press Custom Cook & # 0 pads simultaneously for 2 seconds. 6) error codes will display. 7) Press number 0 pad to review last 5 codes. 8) Press Clear/Off to exit.	
Failure Code	Cause	Solution
E27 E28	Oven sensor opened(over 2950Ω) Oven sensor shorted (Under 930Ω)	1. Disconnect power. Open the back cover. Disconnect sensor harness from control Measure sensor resistance :1080Ω at room temperature → If different value, replace oven sensor. 2. If there is not any problem with oven sensor, Please check whether there is a damaged terminal or wire on harness. 3. Check resistance of oven sensor connector on main PCB (Normal:2850Ω)
E-08 E-0A	Oven not heating error Oven over heating error	1. Disconnect power. Open the back cover. Disconnect sensor harness from control. Measure sensor resistance :1080Ω at the room temperature → If different value, replace oven sensor. 2. Check the broil, bake and convection heater. Check the resistance of each. 3. Check whether DLB of sub PCB, Broil, Bake and Convection heater relay are being activated 4. Check wiring harnesses between main PCB on sub PCB. 5. Check the resistance of oven sensor connector on main PCB. (Normal : 2850Ω)
SE	Shorted key	1. Check if cable of keypad has been inserted into connector of main PCB. 2. Check for short between main PCB and connector or keypad and cable. 3. If there is not a problem with connector on main PCB and cable of keypad, replace the main PCB.
E-OE	Door locking error	1. Disconnect power. Open the back cover. Check wiring harness connections between door lock switch and motor. 2. Check resistance of door lock motor ,1750~1850Ω at the room temperature. 3. With operating door lockout, measure voltage at door lock motor. (Normal Voltage : AC 120V) 4. Check whether door locking switch is operating properly.
LE	Low Voltage Error	It occurs when the DC 12V is dropped under 9V. It may occurs due to defects of PCB or wiring.



Door Lock Error: Press and hold Cook Time & Delay Start for 3 seconds to test motor operation.

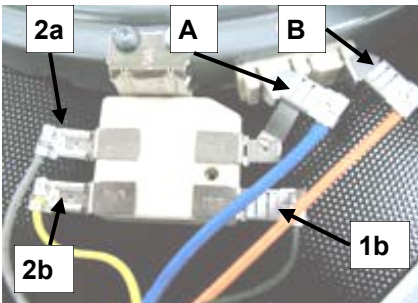
FT0352***

L1 L2 N



Electric Range Surface Burners and Infinite Switches Wiring, Resistance and Test Points

LF & RF Burner

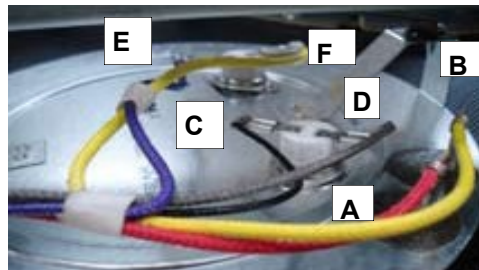


LF & RF radiant element

Position	Color
A	Blue
B	Orange
LF 1b	brown+brown
RF 1b	black
2b	Yellow+yellow
LF 2a	Gray+gray
RF 2a	Gray
Position	Ohms
1b-2b	$\infty\Omega$
2a-"A"	45~55 Ω
2a-"B"	42~48 Ω



RC warming element



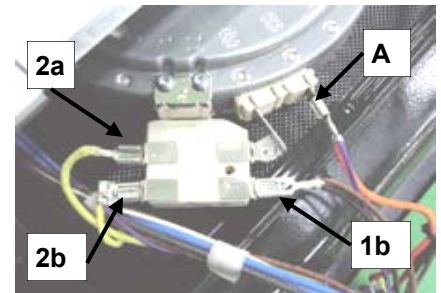
RC warming element

Position	Color
A	red or yellow
B	yellow or red
C	black or gray
D	gray or black
E	yellow or violet
F	violet or yellow

RC warming element

Position	Ohms
A-B	560~600 Ω
C-D	$\infty\Omega$
E-F	0 Ω

LR & RR Burner

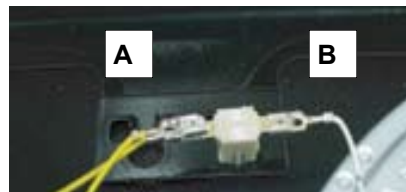


LR & RR radiant element

Position	Color
A	orange+violet
1b	black+brown
2b	yellow+violet
2a	yellow
Position	Ohms
1b-2b	$\infty\Omega$
2a-"A"	45~50 Ω



Hot indicator Lamp



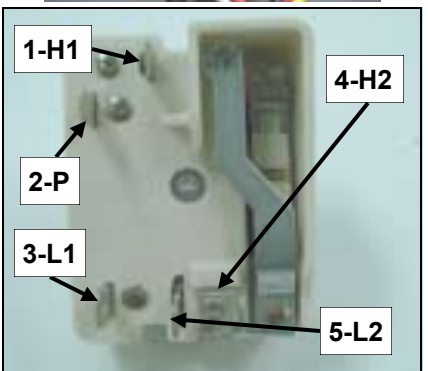
Hot indicator Lamp

Position	Color
A	yellow+yellow
B	white



LF & RF INF Switch

Position	Color
P1	red+red
S1	black+brown
P2	black+black
S2	blue (Indicator lamp)
4A	violet
LF 4	violet+gray & yellow
RF 4	violet+gray
2	blue



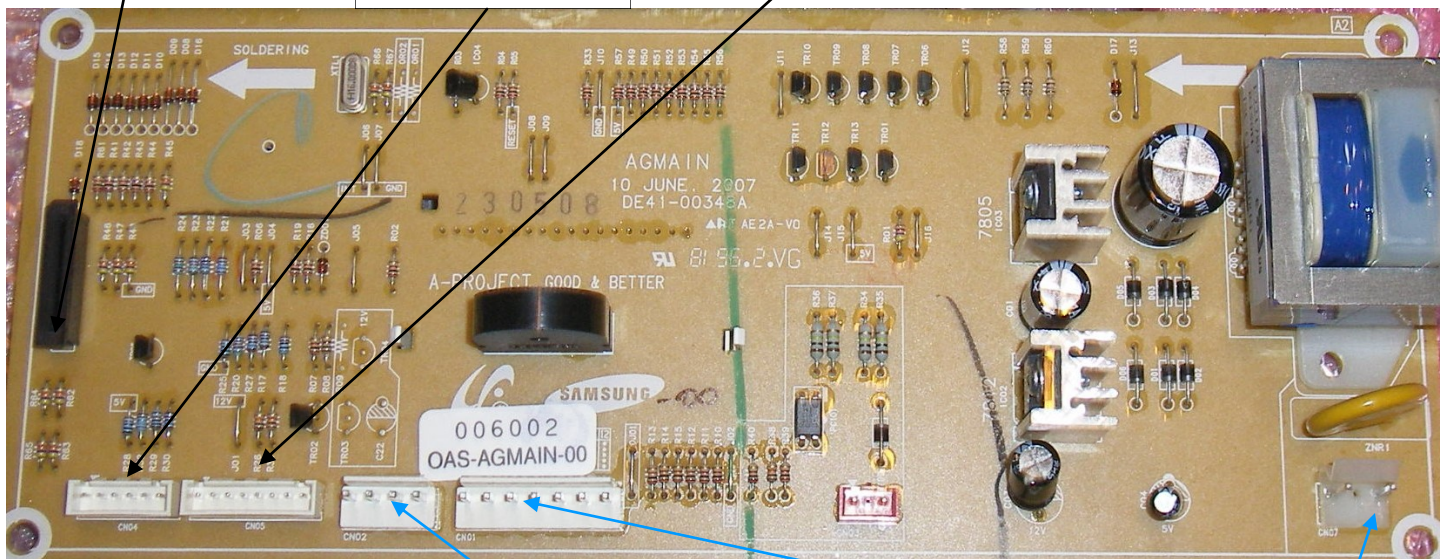
LR & RR INF Switch

Position	Color
3-L1	black+brown
5-L2	red+red
4-H2	yellow
2-P	blue
1-H1	orange+orange+violet

CN07 15 pin ribbon connector to Keypad

CN04 Connector to Sub PCB Ass'y
Blue Orange, Blue Orange, Blue Orange

CN05 Connector to Sub PCB Ass'y
Blk~Wht, Blk~Wht, Blk~Wht, Blk~Wht



CN02 Oven Sensor
1-2 Oven Sensor (Yel-Blu)

CN01
1 Gnd (Green)
3 Door Lock N/C (Blk)
4 Door Lock Com (Org)
5 Door Lock N/O (Pnk)
6-7 Door Sw (Blu-Vio)

CN07 120vac supply
1 N
3 L1

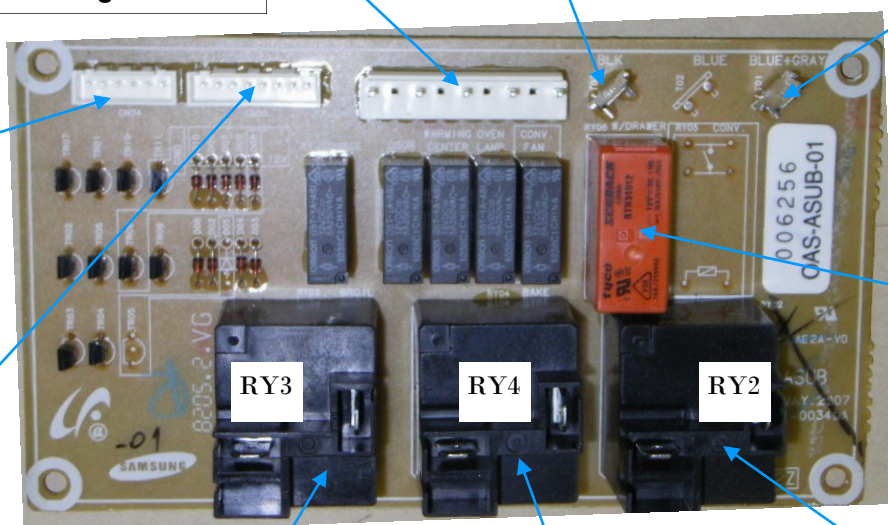
CN01
Lock Motor (Yellow)
Oven Lamp (White)
Conv. Fan (White)
Door Switch
Warming Center

T03 Warming Drawer Out (Black)

T01 L1 120vac Supply for Warming Drawer Relay (Blue + Gray)

CN04 Connector to Oven PCB Ass'y
Blue Orange, Blue Orange, Blue Orange

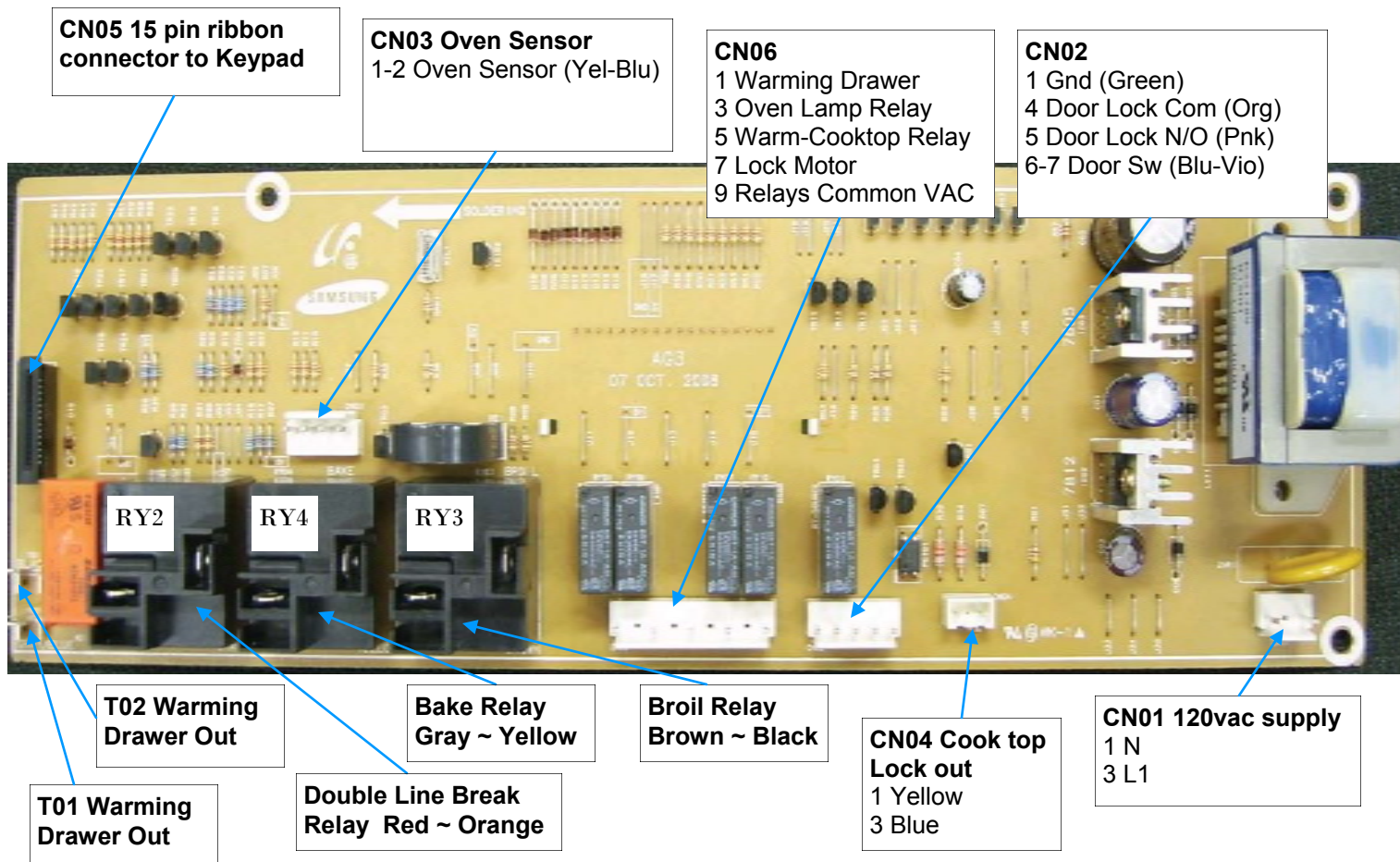
CN05 Connector to Oven PCB Ass'y
Blk~Wht, Blk~Wht, Blk~Wht, Blk~Wht



Broil Relay
Brown ~ Black

Bake Relay
Gray ~ Yellow

Double Line Break Relay
Red ~ Orange



Electric Range Components							
Burner Elements				Oven Temp Sensor Resistance Chart			
Component	Voltage	Wattage	Ω @ Room Temp	Degree °F	Ω	Degree °F	Ω
LR	240vac	1200	45 Ω ~50 Ω	0	932.12	104	1151.38
RR	240vac	1200	45 Ω ~50 Ω	14	961.86	113	1170.17
RF & LF Dual	240vac	1200/2500	45 Ω ~55 Ω /23 Ω	23	980.95	122	1188.93
RC Warm	240vac	100	570 Ω ~580 Ω	32	1000	212	1374.93
Oven Elements				41	1019.02	302	1558.01
Component	Voltage	Wattage	Ω @ Room Temp	50	1038.02	392	1738.06
Broil	240vac	3800 W	13 ~ 16 Ω	59	1056.99	482	1915.39
Bake	240vac	3000 W	26 ~ 30 Ω	68	1075.92	572	2089.69
Warm Dr	120vac	600 W	22 ~ 25 Ω	77	1094.83	662	2261.07
Components				86	1113.71	752	2429.52
Door Lock Mtr	120vac		1750 ~ 1850 Ω	95	1132.56	842	2595.05
						932	2757.65

WARNING: It is critical to route wires and wire harness identical to the way they were, to prevent electromagnetic interference causing possible fault codes.