SAMSUNG

PRO RANGES

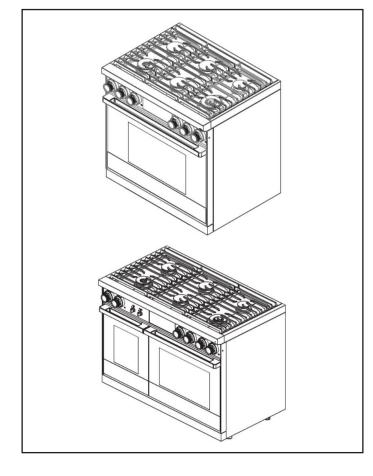
MODELS AND

MODEL CODES: DOP36C86DL*

DOP48C86DL*

SERVICE Manual

PRO RANGES



CONTENTS

- 1. General Specification
- 2. Disassembly
- 3. Hardware
- 4. Trouble Shooting
- 5. Reference

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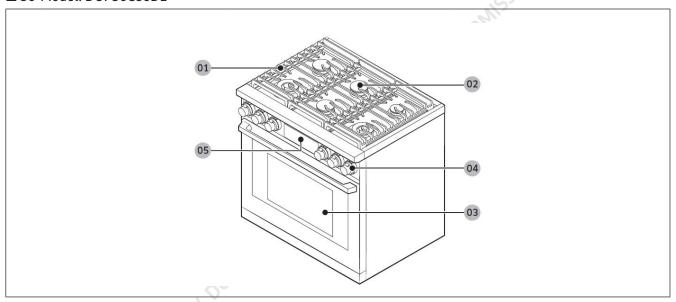
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1-1. New Appearance Design

Model	DOP36C86DL*	DOP48C86DL*
Knob lighting	Υ	Y
iQ Connect (Wi-Fi)	Υ	ullihoo Y
Bluetooth	Y	Υ
Power Burner	22K BTU, Brass Dual	22K BTU, Brass Dual

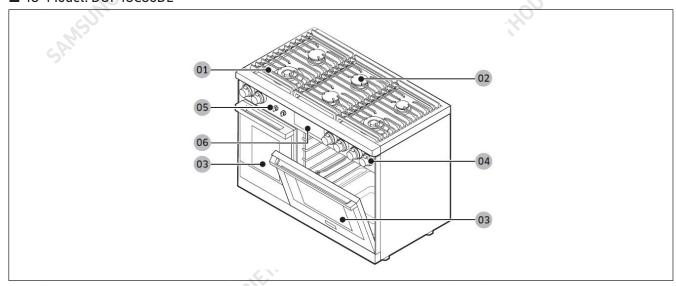
1-2. Features - Pro Range

■ 36"Model: DOP36C86DL*



01	Grate	02	Surface burners	03	Removable oven door
04	Surface burner knobs (6)	05	Control panel		Chilly Control of the

■ 48" Model: DOP48C86DL*



01	Grate	02	Surface burners	03	Removable oven door
04	Surface burner knobs (6)	05	Knob (Manual oven lighting)	06	Control panel

1-3. Accessories

Item	Description	Code No.		Code No.		Ouantitu
iteiii	Description	DOP36C86DL*	DOP48C86DL*	Quantity		
A STATE OF THE PARTY OF THE PAR	ASSY GRATE CENTER	DG98-02345A	DG98-02344A	1		
AND DESCRIPTION OF THE PARTY OF	ASSY GRATE LEFT	DG98-01468A	DG98-02342A	1		
THE REAL PROPERTY AND ADDRESS OF THE PERSON ADDRESS OF THE P	ASSY GRATE RIGHT	DG98-01469A	DG98-02343A	1		
	ASSY GRATE WOK	DG98-01472A	DG98-01472A	5101		
	ASSY BRACKET	DG61-00783A	DG61-00783A	1		

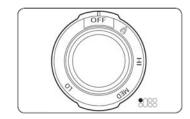
Itam	Docarintion	Code No.		Oautitu
Item	Description	DOP36C86DL*	DOP48C86DL*	Quantity
	TRAY STEAM	- -	DG63-00512A	2
	TRAY STEAM-HALF	SIST ^{RIBUTE}	DG63-00513A	2
	RACK WIRE (Steam oven)	70 ²	DG67-00166A	1
	RACK WIRE (Basic oven)	DG67-00149A	DG67-00149A	1
	ASSY WIRE RACK (GlideRack)	DG94-01747A	DG94-01747B	AMIS 2

1-4. Functions

LIGHTING A GAS SURFACE BURNER

Make sure all surface burners are positioned and assembled properly.

1. Push in the knob and turn it counter clockwise to the "Flame position". The igniter for the burner will Spark repeatedly until it lights. The spark makes a "clicking" sound. The burner should light within four seconds. The flame should burn evenly around the perimeter of the burner, except underneath each grate support finger, where the flame height is reduced by Dacor's Smart Flame feature. A normal flame is steady and blue in color.



- 2. Place the cooking utensil on the grate.
- Adjust the flame to the level necessary to perform the desired cooking process.



When a burner knob is set to LO, the igniter may continue to spark if the burner is cold. The burner will stop sparking when warm. To reduce cold burner sparking, set the knob to HIGH for about 60 seconds, then right the flame to cook. The igniter will also spark automatically if the flame is distorted by a draft or by the household ventilation system. Eliminate any drafts or reduce the ventilation blower speed to reduce this type of problem.

GAS SURFACE BURNERS AND CONTROL KNOBS

Your appliance has four or six gas burners and one electric griddle. All burners are open-port design to provide you easy assembly and accurate and dependable operation. The different burner sizes ensure you have the proper heat source for the desired cooking job.

The 9,000 BTU and 16,000 BTU stack dual burner is general-purpose burner that can be used for most cooking. The HI to LO settings provide a wide cooktop of cooking temperatures to meet your cooking needs.

The 22,000 BTU dual burner provides maximum power among the burners. This provides better heat distribution for larger cookware (12 in [30.5 cm]) or larger pots and pans.

Each surface burner has a control knob with settings from HI to LO. They also have a "Flame position" setting that is only used to light the flame. The electronic ignition system sparks when the control knob is in the "Flame position", and stop sparking once the flame is on. The surface burner indicator next to the control knob shows which burner the knob controls.

Special Cooktop Features

- 1. Perma-Flame™
 - The Perma-Flame instant re-ignition feature automatically re-lights a burner quickly if it goes out. With Perma-Flame, your cooking experience is uninterrupted because the flame is re-ignited at the same level as when it went out.
- 2. Smart Flame™
 - Smart Flame technology reduces the temperature under the fingers of the porcelain-coated cast iron grates. Smart-Flame extends grate life and protects the finish.
- 3. SimmerSear™
 - Dacor's exclusive precision burner control system. It allows you to cook with a wide range of heat settings, from simmer to sear.

1-5. Specification

	Modern	nist Pro range	
Model	DOP36C86DL*	DOP48C86DL*	
Color	*=S → Stainless Steel / *=M → Matte Black		
Controls Features			
Control Type – Oven	Touch + POF	Pup Display (auto)	
Display Type	7"	TFT LCD	
Control Type – Rangetop	Weig	hted Knob	
Number of Knob	6 burner knobs	6 burner knobs + 2 lamp knob	
LED Knob Backlit	age)	Yes	
LED Indicator	610	Yes	
Show lighting	Yes		
Rangetop			
Number of burners	6 burners	6 burners	
Total Power	101K BTU	101K BTU	
Left Rear	16K BTU	16K BTU	
Left Front	22K BTU	22K BTU	
Center Rear	16K BTU	16K BTU	
Center Front	16K BTU	16K BTU	
Right Rear	9K BTU	9K BTU	
Right Front	22K BTU	22K BTU	

	Modernist Pro range				
Model DOP36C86DL* DOP48C86DL* (Steam oven / Bas		m oven / Basic oven)			
Sealed Burner		Yes			
Grate	Porcelain coated Matt Black continuous grate				
Oven					
Cleaning	Self Clean / Green Clean / Descale / Draining	Green Clean / Descale / Draining	Self Clean / Green Clean		
Bake	175 °F (80 °C) - 550 °F (285 °C)	175 °F (80 °C) - 450 °F (230 °C)	175 °F (80 °C) - 550 °F (285 °C)		
Convection Bake	175 °F (80 °C) - 550 °F (285 °C)	175 °F (80 °C) - 450 °F (230 °C)	175 °F (80 °C) - 550 °F (285 °C)		
Convection Roast	175 °F (80 °C) - 550 °F (285 °C)	175 °F (80 °C) - 450 °F (230 °C)	175 °F (80 °C) - 550 °F (285 °C)		
Broil	LO / HI	LO/HI	L0 / HI		
Pure Conv.Sear	175 °F (80 °C) - 475 °F (245 °C)	-	175 °F (80 °C) - 475 °F (245 °C)		
Convection Broil	175 °F (80 °C) - 550 °F (285 °C)	175 °F (80 °C) - 450 °F (230 °C)	175 °F (80 °C) - 550 °F (285 °C)		
Steam Bake	230 °F (110 °C) - 550 °F (285 °C)	230 °F (110 °C) - 450 °F (230 °C)	-		
Steam Roast	230 °F (110 °C) - 550 °F (285 °C)	230 °F (110 °C) - 450 °F (230 °C)	-		
4 Part Pure Convection	175°F (80 °C) - 550 °F (285 °C)	175°F (80 °C) - 450 °F (230 °C)	175°F (80 °C) - 550 °F (285 °C)		
Chef Mode	Yes (15)	-	Yes (15)		
Steam	all -	215°F (100°C)	1/1/2		
Fine Steam	_	195°F (90°C)	OEPI-		
Guided Steam Mode	-	Yes (20)	- 177		
Steam Reheat	-	Yes (10)	- 1/0		
Keep Warm	Yes	Yes	Yes		
Proof	95°F (°C) / 105°F (°C)	85°F (°C) / 95°F (°C)	95°F (°C) /105°F (°C)		
Stone Bake Mode	175°F (80°C) ~ 550°F (285°C)	018	175°F (80°C) ~ 550°F (285°C)		
Dehydrate	100°F (40°C) ~ 225°F (285°C)	-15	100°F (40°C) ~ 225°F (285°C)		
Number of Rack Positions	6	4	6		
Oven Capacity (cu.ft)	4.8	1.8	4.8		
Bake Heater	3,000 W	1,000 W	3,000 W		
Broil Heater	4,400 W	2,400 W	4,400 W		
Convection Heater	1,300 W + 1,300 W	2,000 W	1,300 W + 1,300 W		
Convection Fan	2	1	2		
Steam Heater	500 W	2000 W	-		
Rack Position	6	4	6		
Interior Lamp (VueLight™)	New Halogen (yellow feel), 2	New Halogen (yellow feel),1	New Halogen (yellow feel), 2		
Steam Type	Steam Assist	Pure Steam & Steam Assist	-		

NA - J. I	Modernist Pro range				
Model	DOP36	C86DL*	DOP48C86DL* (Stea	m oven / Basic oven)	
Delay Start			Yes		
Timer		Yes			
Sabbath Mode			Yes		
Child Lock (=Control Lock)		Yes			
Additional					
Smart		WI-FI	- Bluetooth		
Accessories/Others					
Griddle		Al + Cer	amic Coating		
Wok Grate		240	Yes		
Anti-Tip Device	. (O _x	Yes		
Wire Rack	401	1	1	1	
GlideRack™	301	2	-	2	
Temp. Probe	04.	1	1	1 👃	
Steam Tray		-	2 (with/without holes1 each)	30,	
Half Steam Tray	OPILL	-	2 (with/without holes1each)		
Convection Filter		2	1	2	
Water Reservoir	1 (650 ml,	Automatic)	1 (1,500 ml, Manual) -		
Application Dimensions					
Net Dimensions (W x H x D)	911 x 918 x 714 (mm)	35 7/8 x 36 1/8 x 28 1/8 (in)	1216 x 918 x 714 (mm)	47 7/8 x 36 1/8 x 28 1/8 (in)	
Gross Dimension (W x H x D)	965 x 1250 x 825 (mm) 38 x 49 3/16 x 32 ½ (in)		1270 x 1250 x 825 (mm)	50 x 49 3/16 x 32 ½ (in)	
Net Weight	180 (kg) 39613/16 (lb)		230 (kg)	5071/16 (lb)	
Gross Weight	213 (kg) 469 9/16 (lb)		293 (kg) 645 15/16 (l		
Rating Specifications					
Input Voltage	240 VAC, 60Hz				
Power	33.0 A	, 7.9 kW	43.0 A,	10.3 kW	

2-1. Tool for assembly and disassembly

	How to use	Pictures
Screw driver	User for assembly and disassembly of all screws	El Paris
Tubing wrench	User for assembly and disassembly of tubing to the burner cup	AVSSO TISLES AND
1⁄4" vox driver	Use for assembly and disassembly of valve with manifold.	8
7mm vox driver	Use for assembly and disassembly of injector cooktop nozzles.	8 1000
9mm vox driver	Use for assembly and disassembly of convection fan.	8
7mm vox driver (L type)	Use for assembly and disassembly of light switch inside of panel control.	
Special Tool	Use for assembly and disassembly of 18K burner brass nuts.	OUT

2-2. Basic Step



WARNING

Disconnect the main power supply before servicing the appliance. Replace all parts before operating the appliance. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the appliance before servicing. Check all gas lines and fittings for leaks before operating the appliance. Replace all panels before operating appliance. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.



CAUTION

When you work on the Pro range and Rangetop, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
		MITHOUTPERMISSIO
		Turn off the appliance and disconnect electrical supply going to the appliance. Output Description:
		2. Shut off the valve in the gas supply line to the rangetop.
		3. Fully open the door to the lowest position.
STEPA		Pull the hinge locks downward and make sure it to be locked firmly.
DISASSEMBLY OF OVEN	SCHOOL HEISEN	5. Firmly grasp both side of the door at the top.
DOOR		6. Close the door to the 'door removal position', which is approximately 25 degrees from upright position. Slightly lift the door up and pull it out until the hinge arms are clear of the slot.
		7. Place the door near the range, and disconnect LED wire under the rightmost side of the door.
		8. Place the removed door on a flat area without any probability to fall.
	4	



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Parts	Explanation Photo	Explanation
STEP B DISASSEMBLY OF RANGETOP		 Follow Step A. Make sure to disconnect the gas line to the appliance. Remove 6 screws from the rear panel of Pro range and remove rear panel. Remove 4 screws from the rear side of each side panel, and remove side panel. Remove 2 screws from the front side of each side trim. Remove 3 screws from the outer side of each side trim, and remove side trim.

7. Disconnect flexible manifold pipe from regulator by using wrench. 8. Disconnect 2 wire connectors on the re of the range. 9. Remove 2 screws from each side of the range. 10. Lift the rangetop from the Pro range w more than 2 members. Steam oven and Basic oven because of its heavy weight and sharp edges. More than 2 popele are recommended to lift the rangetop, Steam oven, or Basic oven.	arside



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Parts	Explanation Photo	Explanation
	2 2	JITHOUT PERMISSIO.
	3	1. Follow Step B.
	5	Remove 3 screws from the panel between two ovens.
STEP C DISASSEMBLY OF STEAM OVEN	22.6	3. Remove 1 screw from the front trim between two ovens.
STEAMIOVEN		4. Remove 2 screws from the bottom bracket of Steam oven and remove the bracket.
		5. Remove 3 screws from the bottom chassis, and remove the chassis.
		OR DISTRIBUTE WITHOUT PER

Parts	Explanation Photo	Explanation
		EWITHOUT PERMISSIO
STEP C DISASSEMBLY OF STEAM OVEN		 Remove 1 screw from the bottom of the front trim. Remove the front trim and inter-oven panel. Disconnect 1 wire connector on the rear side of the range. Remove 4 screws from the rear-bottom side of the Steam oven, and remove the panel. Remove 3 screws, located on the rear bottom of the Steam oven, after removing the panel. Remove 2 screws from the front-bottom of the Steam oven, and remove the lower bracket.

Parts	Explanation Photo	Explanation
STEP C DISASSEMBLY OF STEAM OVEN		12. After removing the lower bracket, remove 3 screws from the front-bottom of Steam oven.13. Lift the Steam oven from the base part.



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Parts	Explanation Photo	Explanation
		HOUTPERMISSIO
	4	1. Follow Step C.
	4	Remove 3 screws from the rear-bottom of the Basic oven, and remove the bracket.
STEP D DISASSEMBLY OF BASIC OVEN	4	3. Remove 3 screws from the rear-bottom of the Basic oven, after removing the covering bracket. After removing the screws, remove the bracket too.
		4. Remove 3 screws from the bottom trim of Basic oven and remove the bottom trim.
	5 5 5	5. Remove 3 screws under the Basic oven and lift the Basic oven.
		JE TRIP

2-3. Range Top



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Parts Explanation Photo Explanation	
DISASSEMBLY OF ASSY FRAME 1. Remove 3 screws from the Frame top for the side. 2. Remove 2 screws from chassis panel be side. 3. Lift up Assy Frame. 4. Disconnect 3 wire housing	



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Parts	Explanation Photo	Explanation
DISASSEMBLY OF COOKTOP PART		 Remove 2 screws from the burner head. 6 burner head, total 14 screws. Disconnect the 6 electrode wires from burner head.

Parts	Explanation Photo	Explanation
		RHOUT PERMISSIO
DISASSEMBLY OF COOKTOP PART (CONTINUED)		 Remove 3 screws from the left front burner. Remove 3 screws from the right front burner. Remove 6 screws from the frame rear. Remove 3 screws from the frame front. Separate frame rear from cooktop.

Parts	Explanation Photo	Explanation
	3	HOUTPERMISSIO
	14	
	15	
		13. Remove frame right from cooktop.
DISASSEMBLY OF		14. Remove frame left from cooktop.
COOKTOP PART (CONTINUED)	16	15. Remove frame front from cooktop.
		16. Disconnect 3 wire housing.
	16	17. Lift up cooktop frame.
	TO TO THE PARTY OF	
	77	

Parts	Explanation Photo	Explanation
	18 18	HOUTPERNISSIO
		18. Remove 4 screws from the trim up.
	(21)	19. Remove the trim up from cooktop.
		20. Remove 4 screws from cover PCB.
DISASSEMBLY OF	21	21. Lift up the cover PCB.
COOKTOP PART (CONTINUED)		22. Disassemble electric parts. Replacing PCB parts.
	22	23. Disassemble burner cups (6pcs). Replacing Burner cups.
		24. Pull and remove the knobs.
		RIBE
	Constraint of the Constraint o	
	24	

Parts	Explanation Photo	Explanation
DISASSEMBLY OF COOKTOP PART (DISPLAY, SPEAKER)	Pop up display module 25 27 28 28 30 31	 25. Disconnect wire housing from Pop up display module. 26. Remove 4 screws from POP-up display left side. 27. Remove 3 screws from POP-up display right side 28. Remove 4 screws from assy panel control both side. 29. Remove 3 screw from assy control bottom side. 30. Slightly separate assy panel control from cooktop. 31. Remove 24 screws from HOLDER KNOB. 32. Remove 2 screw from the speaker (x2).
	32 B910100000 B40700 3001 502025	JE TRIBUTE TO



3-4. Valve bypass adjustment and burner nozzle change



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■ Response method for high altitude each model

	DOP36C86DLM/DA	Change to the high altitude conversion kit
	DOP36C86DLS/DA	Change to the high altitude conversion kit
NVOCODA	DOP48C86DLM/DA	Adjust the bypass
NY9900M	DOP48C86DLS/DA	Adjust the bypass
	DOP48C96DLM/DA	Adjust the bypass
	DOP48C96DLS/DA	Adjust the bypass

**High Altitude Conversion Kit : DG96-01146A

Parts	Explanation Photo	Explanation
VALVE & NOZZLE - BYPASS		Quickly turn one of the control knobs counter clockwise to the lowest setting. The flame should stay lit. If the flame flutter or goes out, adjust the bypass valve on the control valve for burner
	Inner flame bypass screw Outer flame bypass screw	Using a small flat-bladed screwdriver, adjust the bypass valve screw in the base of the valve stem. Turn the bypass valve screw counter clockwise to increase the flame size. (Only need to be controlled 'Inner flame screw)
	Dual valve	3. Recheck the low flame setting.
	20 HOTC	4. Repeat step1 ~ 3 to check and adjust the low flame settings on the remaining surface.
VALVE & NOZZLE - NOZZLE	Burner Cap Burner Head DITHABT960" / DITJ36T960"	Lift off the rangetop burner caps and the rangetop burner heads from the rangetop burner manifold cups.
		2. Using a 9/32" or 7 mm nut driver, remove the burner orifice from the bottom of each burner manifold cup.
	ORDI ^C	Save these orifices and note their positions for future conversions back to sea - level.
	Rangetop Burner Orifice	Identify the proper orifice by orifice size for each of the rangetop burners.
		4. Install the proper orifice in each of the burner manifold cups and tighten with a 9/32" or 7 mm driver.
	E PROPRIE!	Any other placement of orifices could result in dangerous operating Note conditions and/or poor cooking results.

2-5. Small Oven



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CAUTION

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Parts	Explanation Photo	Explanation
Parts DISASSEMBLY OF SMALL OVEN		1. Remove 2 screws from Cover side panel. 2. Remove 9 screws from case left. 3. Remove 2 screws from case up 4. Remove 2 screws from case up. 5. Remove case up from 18in oven. 6. Remove 3 screws from case up rear.
	6 6	7. Remove case up rear.
		8. Remove 2 screws from cover back left
	8	side.

Parts	Explanation Photo	Explanation
	15	OUTPERNISSIO
	T T	
		15. Remove1 screw from cooling motor left below side.
DISASSEMBLY OF	(18)	16. Remove1 screw from cooling motor right below side.
		17. Remove 2 screws from assy pcb main. Replacing PCB parts.
SMALL OVEN (CONTINUED)	19	18. Remove assy pcb main from the top.
(CONTINUED)		19. Pull and Remove the door switch.
		20. Disconnect the wire housing from the door switch.
		21. Remove 2 screws from holder pump.
		22. Lift up the holder pump.
	22	

Parts	Explanation Photo	Explanation
	23	OUT PERMISSIO.
	25	
		23. Disconnect wire housing under the holder pump and remove holder pump.
		24. Remove 4 screws from cover case.
		25. Remove cover case.
DISASSEMBLY OF SMALL OVEN (CONTINUED)		26. Remove 3 screws from assy cavity top left side.
	28	27. Remove 3 screws from assy cavity top right side.
		28. Remove 2 screws from the bracket.
		29. Remove 1 screw from the bracket barrier upper side.
	29	30. Remove 1 screw from the bracket barrier lower side.
	30	

Parts	Explanation Photo	Explanation
	Explanation Photo 31 32 32	31. Remove the bracket barrier.32. Remove 2 screws.
DISASSEMBLY OF SMALL OVEN (CONTINUED)	34	 33. Remove 1 screw from left side of front frame. 34. Remove 1 screw from right side of front frame. 35. Remove assy part from assy cavity.

Parts	Explanation Photo	Explanation
	30	OUT PERMISSIO.
	37	
		36. Remove 2 screws from water bowl case.
	38	37. Remove the water bowl case.
		38. Remove 2 screws from water bowl entrance.
DISASSEMBLY OF SMALL OVEN (CONTINUED)		39. Push and Remove the water bowl entrance.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	39	40. Remove 2 screws from heater that located cavity upper inside.
		41. Disconnect 2 heater wire housing.
		42. Remove 2 Nuts from back side of heater
	40 40	Ser.
	42 42 42	

Parts	Explanation Photo	Explanation
	43 43	OUTPERMISSIO
DISASSEMBLY OF SMALL OVEN (CONTINUED)	43 49 49 49	 43. Remove 4 screws from cover casing. 44. Remove 3 screws from motor bracket. 45. Holder the fan shaft by 9mm vox driver and rotate the fan and disassemble. 46. Disconnect 2 heater wire housing. 47. Remove 2 screws from heater that located cavity back inside. 48. Remove 2 screws from assy steam generator left side. 49. Remove 2 screws from assy steam generator right side. 50. Disconnect Steam silicon tube and wire harness. 51. Remove the assy steam generator from cavity back.

Parts	Explanation Photo	Explanation
	52	OUT PERMISSIO.
		51. Disconnect bottom heater wire housing.
DISASSEMBLY OF	53	52. Remove 1 screw from cover heater.
18IN OVEN (CONTINUED)	30	53. Remove 1 screw from heater.
(00000000)		54. Pull and remove bake heater from cavity back.
	1 5 4	JOJIPERMISSION

2-6. Big Oven



WARNING

Disconnect the main power supply before servicing the appliance. Replace all parts before operating the appliance. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the appliance before servicing. Check all gas lines and fittings for leaks before operating the appliance. Replace all panels before operating appliance. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.



CAUTION

When you work on the Pro range and Rangetop, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation	
		SUITE WITHOUT PERMIT	
		Disassemble big oven from the base bottom.	
	4 , 5	2. Remove 9 screws from case right.	
DISASSEMBLY OF		3. Remove 9 screws from case left.	
BIG OVEN (48/36" PRO RANGE		4. Remove 2 screws from the right side of case up.	
COMMON)	5	5. Remove 1 screw from the rear side of case up and 1 screw from left side.	
		6. After removing screws from case up, lift the case up and disconnect 1 wire connector.	
	NEUTRIC O		

Parts	Explanation Photo	Explanation
		HOUT PERMISSIN
	8	7. Remove 7 screws from rear panel and lift the cover on the Ass'y cavity.
	9	8. Remove 5 screws from the right-rear side of
DISASSEMBLY OF BIG OVEN		the cavity.
(48/36" PRO RANGE COMMON)		9. Same wise, remove 5 screws from the left- rear side of the Ass'y cavity.
		10. Remove 3 screws from the rear panel and 1 screw below the terminal block.
		11. Remove rear panel from the Ass'y cavity.
		ASTRIBUTE WITH
	10	

Parts	Explanation Photo	Explanation
	12	HOUT PERMISSIO.
	13	
		12. Remove 3 screws to remove cooling motor.
		13. Disconnect 20 connectors and remove 2 screws from Main PCB. Remove Main PCB.
DISASSEMBLY OF BIG OVEN	13	14. Remove 2 screws from Main PCB Holder and remove the holder.
(48/36" PRO RANGE COMMON)		15. Disconnect 4 connectors from Sub PCB.
	14	16. Remove 1 screw from the left side of the Sub PCB holder and 1 screw from opposite corner. After removing the screw, remove Sub PCB holder.
	15	JE TRIBUTE IN
	16	
	16	

Parts	Explanation Photo	Explanation
raits	17 The state of th	Explanation
DISASSEMBLY OF BASIC OVEN (48/36" PRO RANGE COMMON)	20	 17. Remove totally 4 screws from the top of the Ass'y cavity and lift the top plate. 18. Remove 2 screws from the front of door latch to separate it from Ass'y cavity. 19. Disconnect 2 wire connectors from each lamp on the top. Push down to remove the lamp. 20. Remove 4 screws from the cover casing inside of the cavity and pull the cover casing out. 21. Turn the nut that holds broil heater and remove the nut.

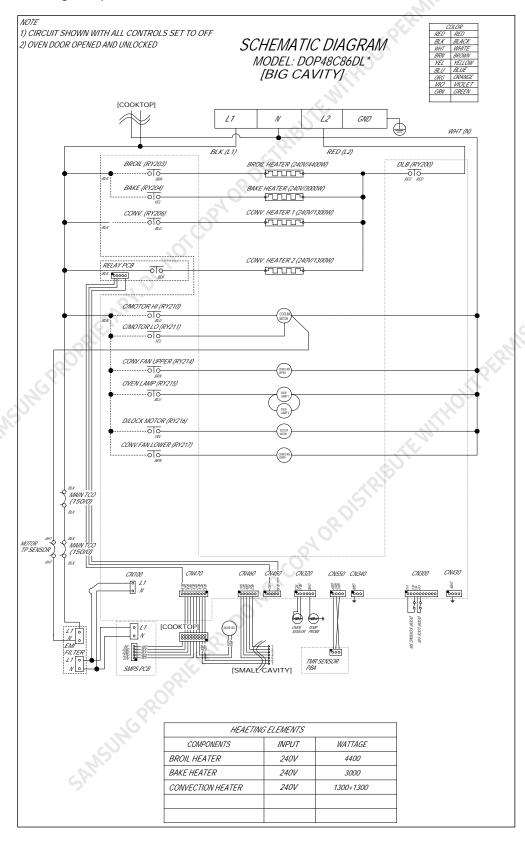
Parts	Explanation Photo	Explanation
		HOUTPERMISSIO
		22. Disconnect 3 wire connectors at the rear side which are connected to the broil heater.23. Remove 2 nuts next to the broil heater by
DISASSEMBLY OF BASIC OVEN	24	7mm vox driver. 24. Remove 3 screws from the convection motor bracket.
(48/36" PRO RANGE COMMON)		25. Fix the convection fan and remove nut cap from the motor axis.26. Disconnect 2 wire connectors from the rear
	25	side of convection heater. 27. Remove 2 screws from the convection heater and remove the convection heater. Replacing it.
	20	
	27	

Parts	Explanation Photo	Explanation
	29	RHOUT PERMISSIO.
DISASSEMBLY OF BASIC OVEN (48/36" PRO RANGE COMMON)	31)	 28. Remove 5 screws from the rear-bottom side of the Ass'y cavity. 29. Disconnect1 connector and remove bottom panel. 30. Remove 1 screw from the cover air bottom and remove the cover. 31. Remove1 screw that holds bake heater and pull the bake heater out. Replacing bake heater.

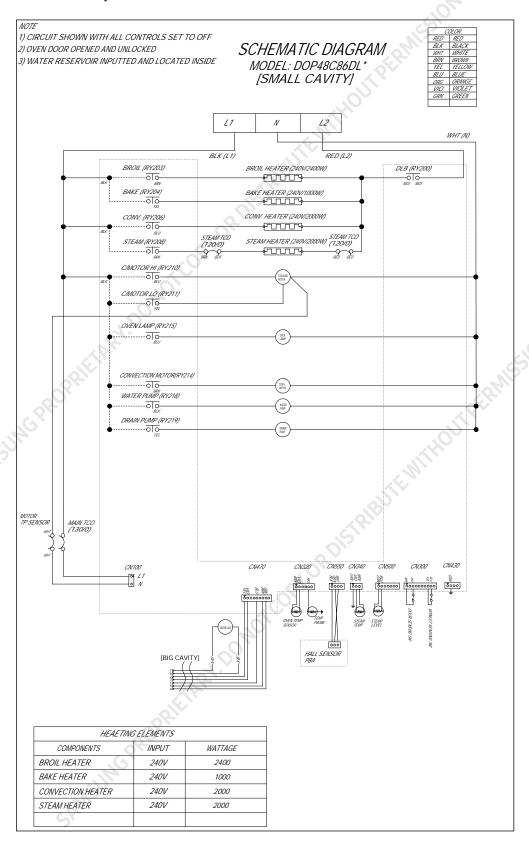
Parts	Explanation Photo	Explanation
DISASSEMBLY OF BASIC OVEN (48/36" PRO RANGE COMMON)	Explanation Photo 32 33 33 33 34	32. Remove 2 screws from the side cover. If the cover is already removed, then skip this. 33. Remove 1 screw that covering Temp. Probe. In 48" Pro range, the Probe socket will be on the right side, while the 36" Pro range contains the Probe socket on its left side. 34. Disconnect 3 wire connectors that connected to the Temp. Probe socket. 35. Rotate the Temp. Probe socket to remove it. Using tube wrench.
	35	K TRIBU

3-1. Schematic Diagram

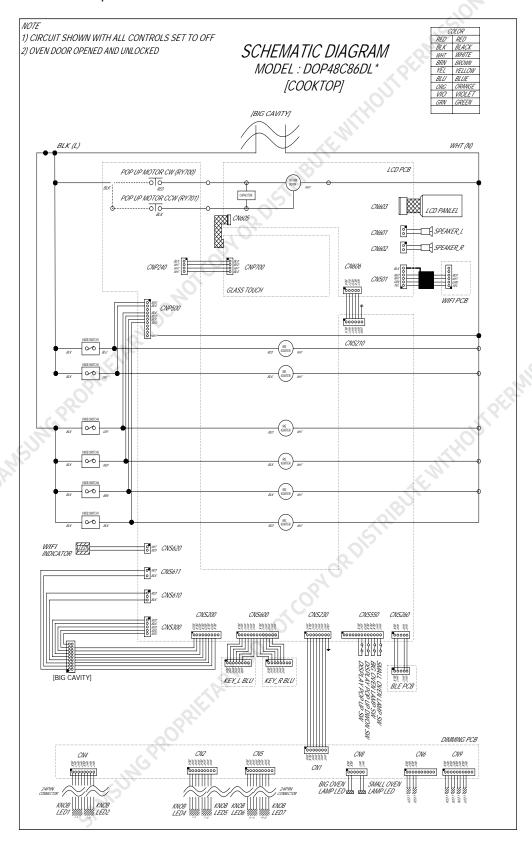
■ DOP48C86DL* (Big cavity)



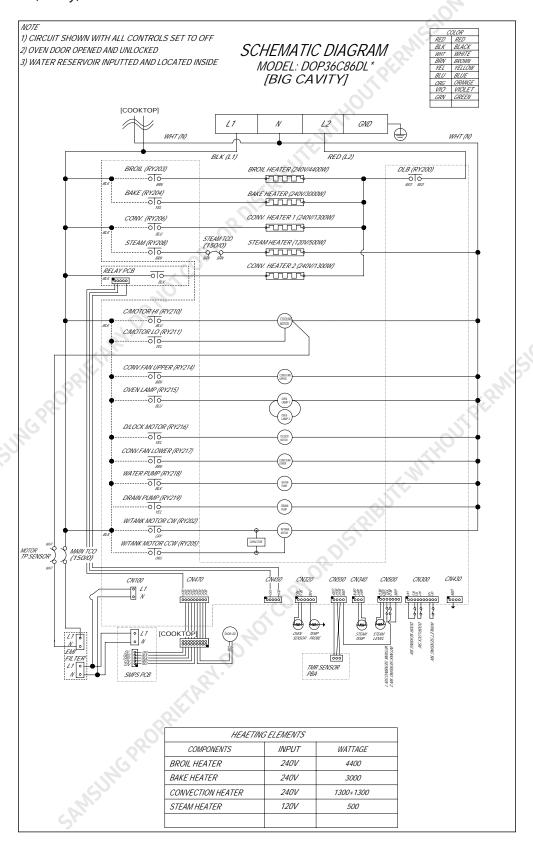
■ DOP48C86DL* (Small cavity)



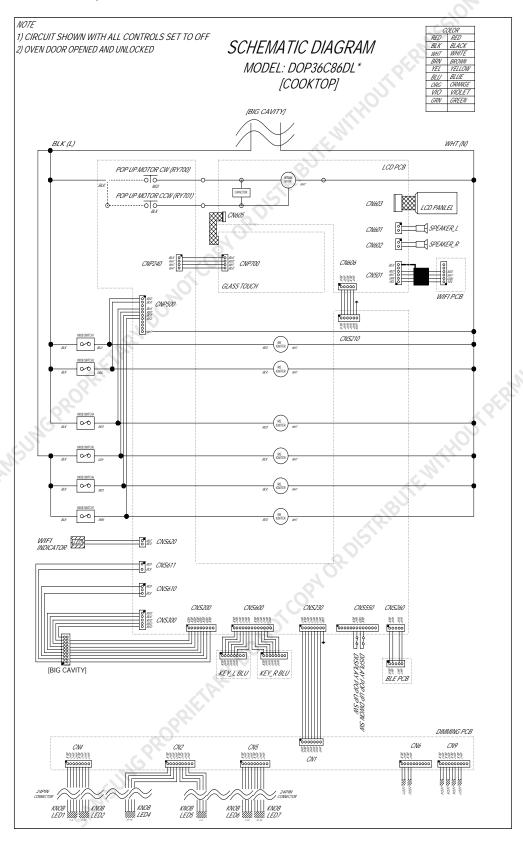
■ DOP48C86DL* (Cooktop)

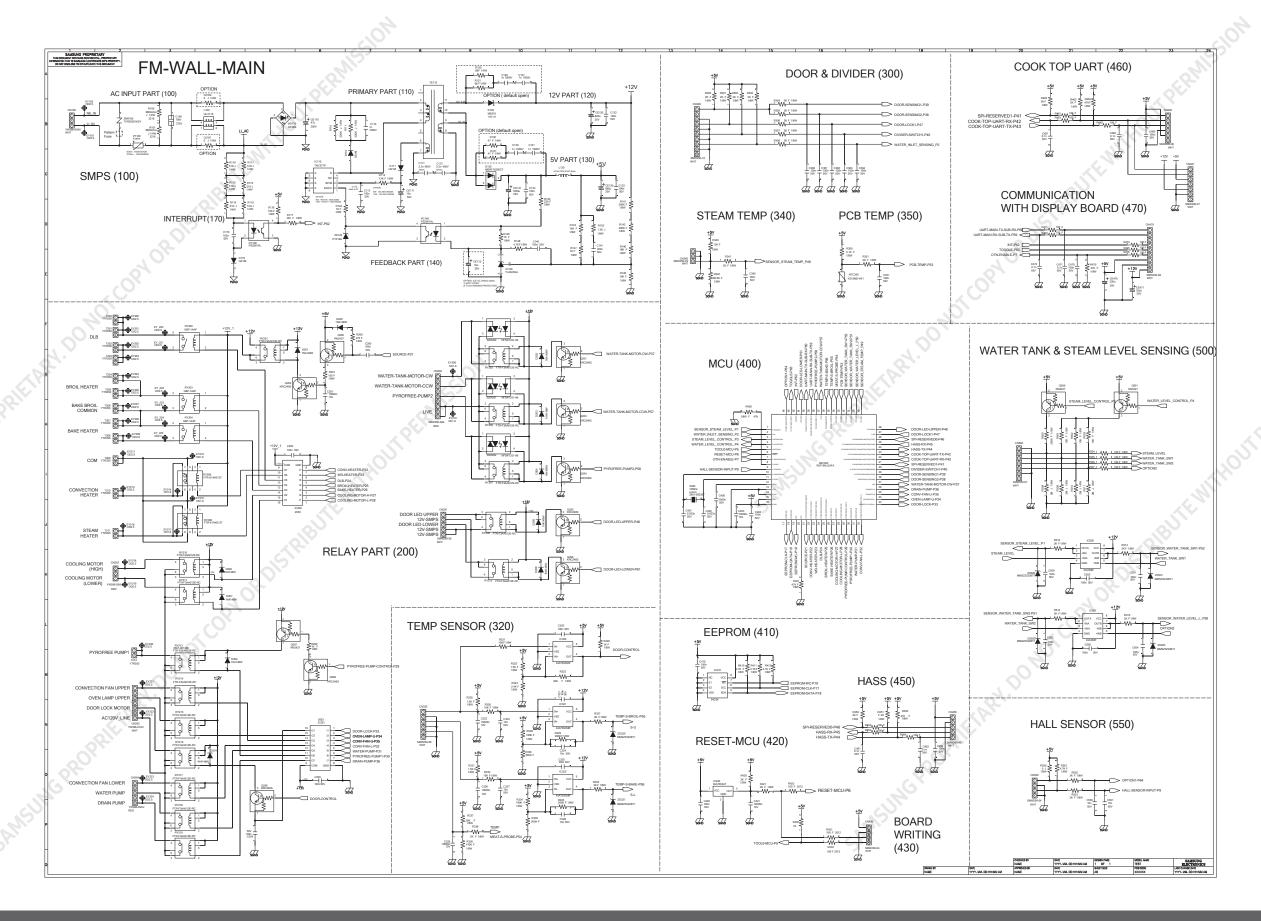


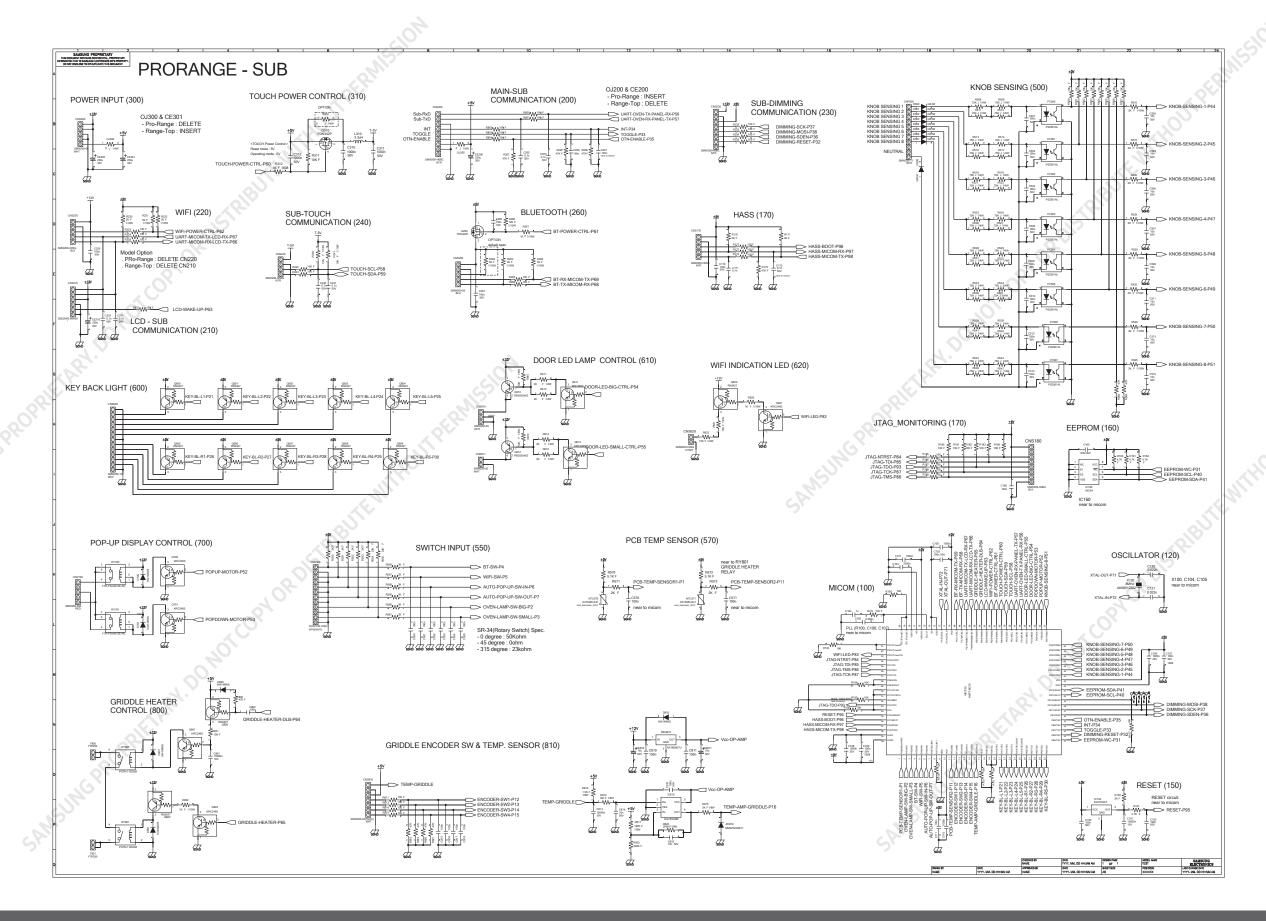
■ DOP36C86DL* (Cavity)

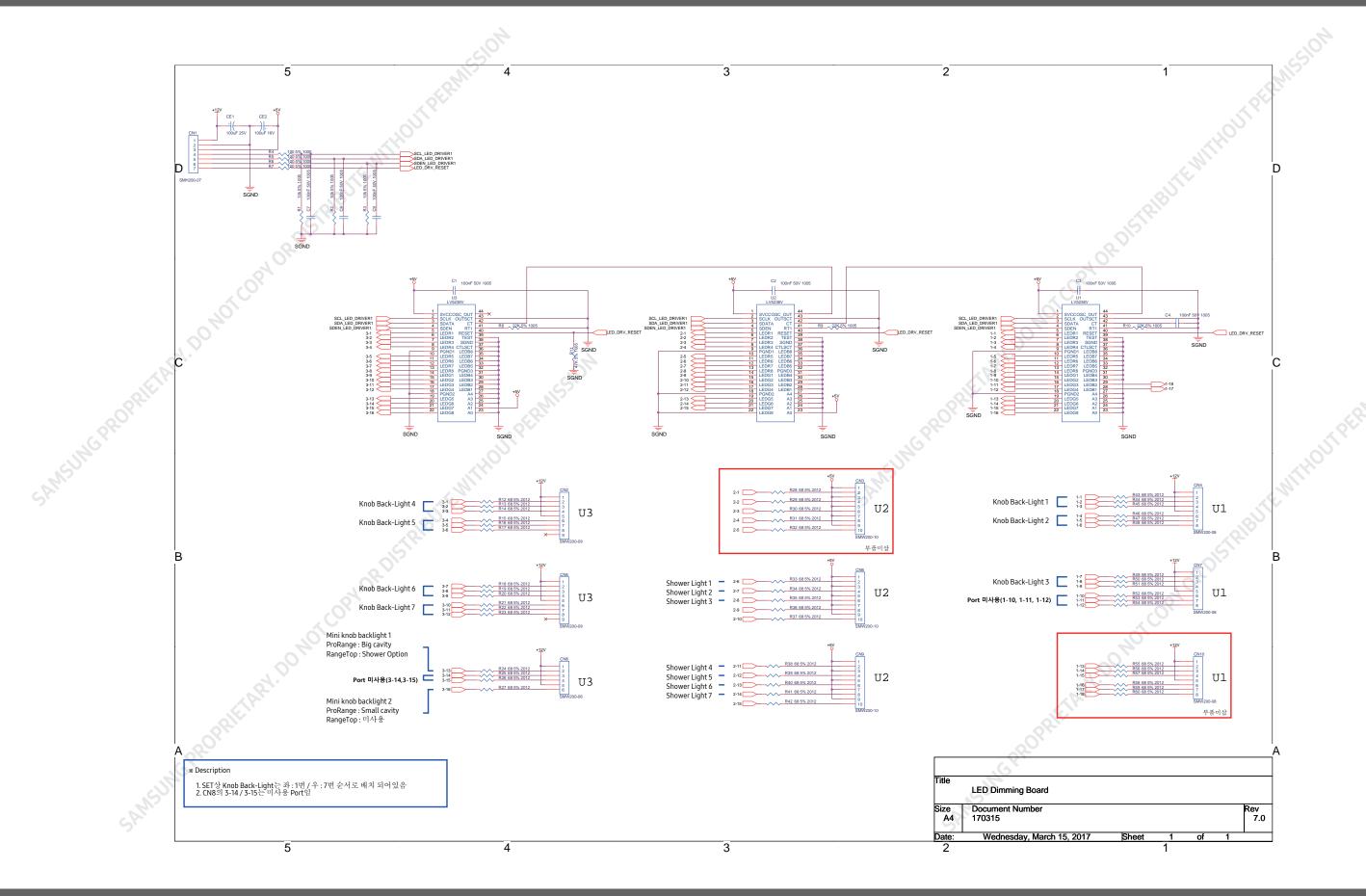


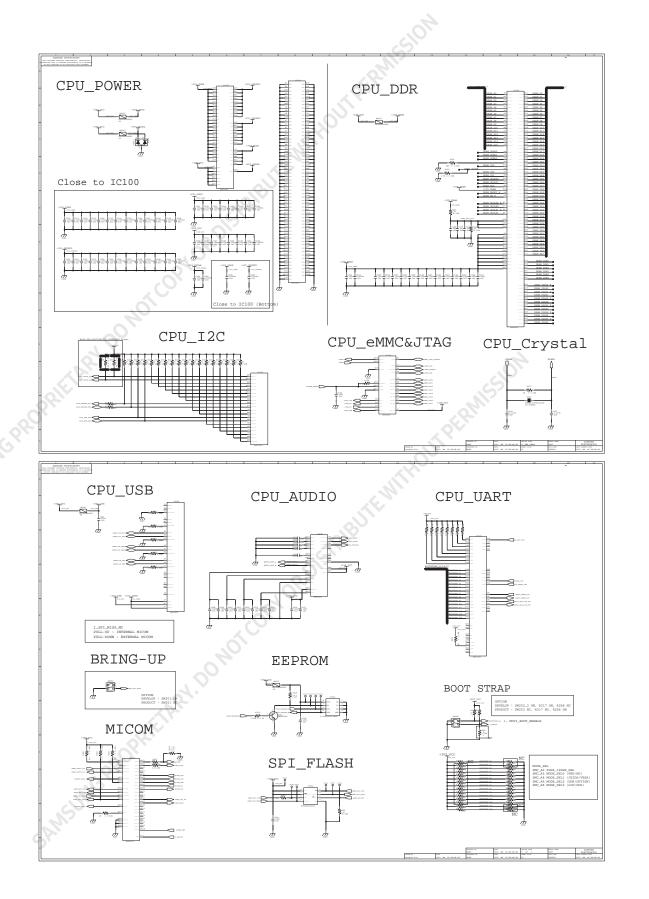
■ DOP36C86DL* (Cooktop)

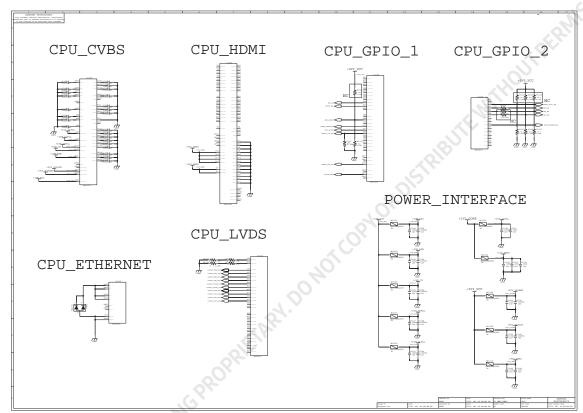


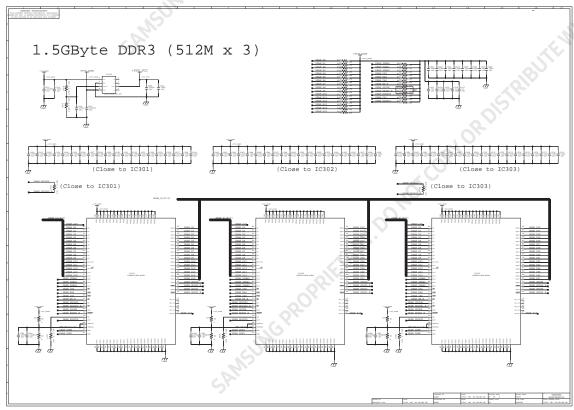


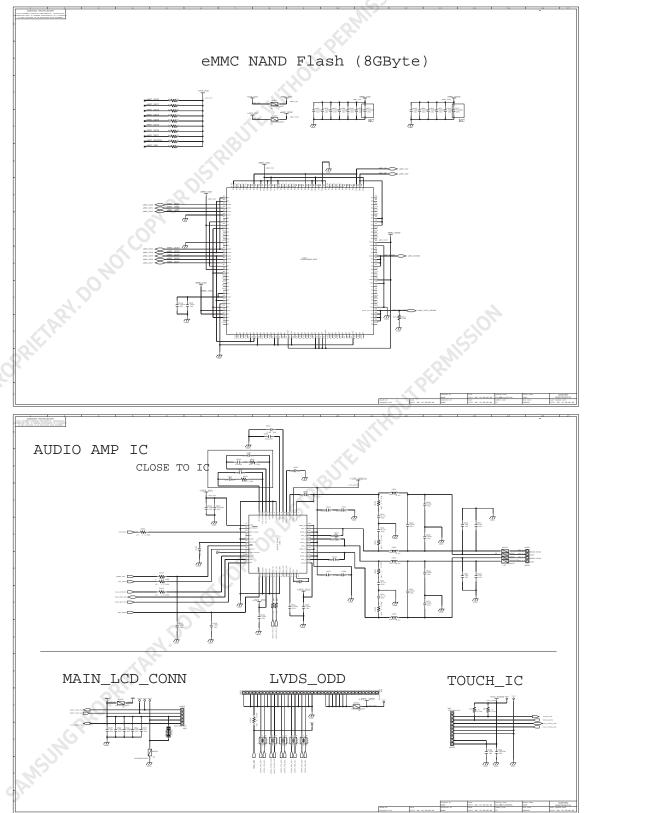


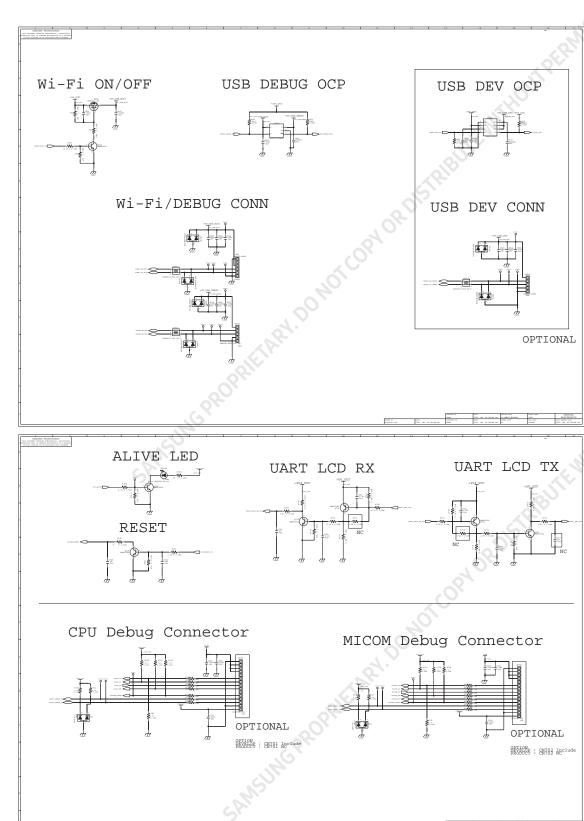




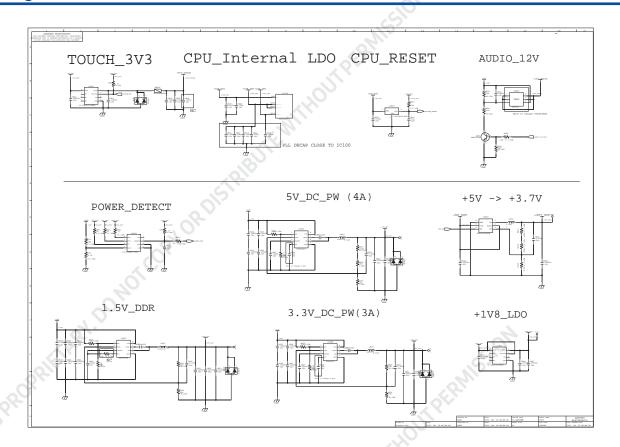


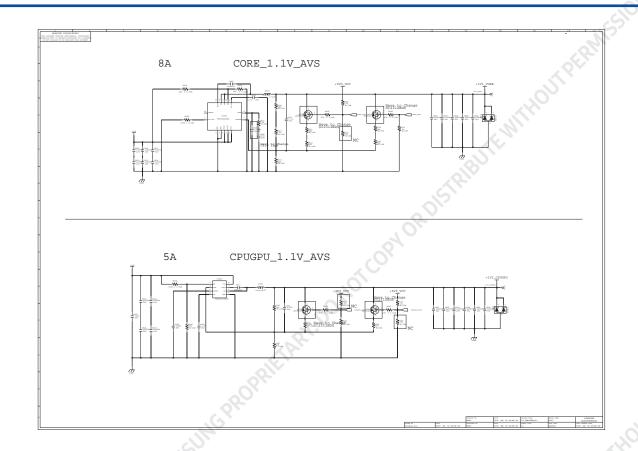




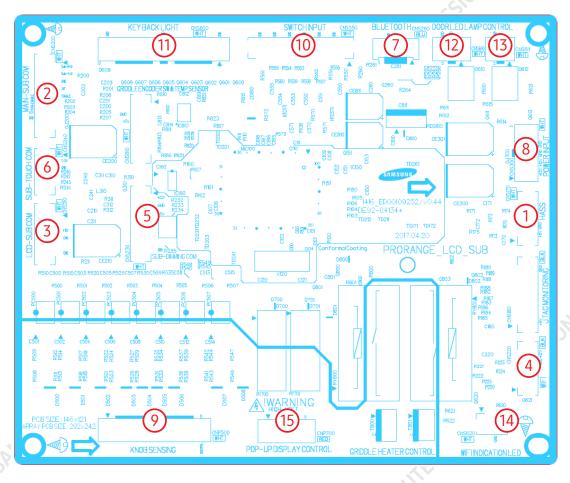


3-2. Wiring Diagram



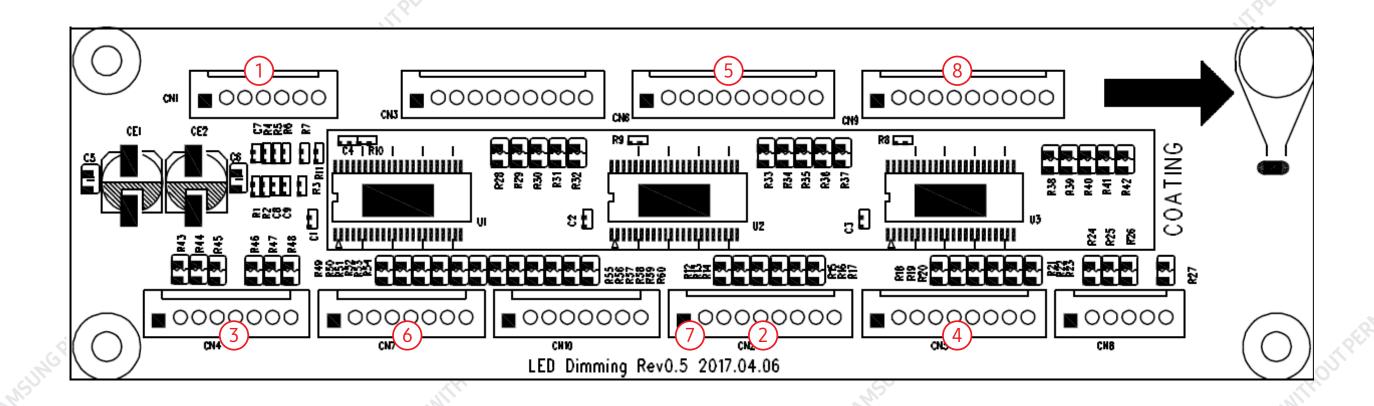


3-3. PCB diagram for 36"/48" Prorange rangetop part



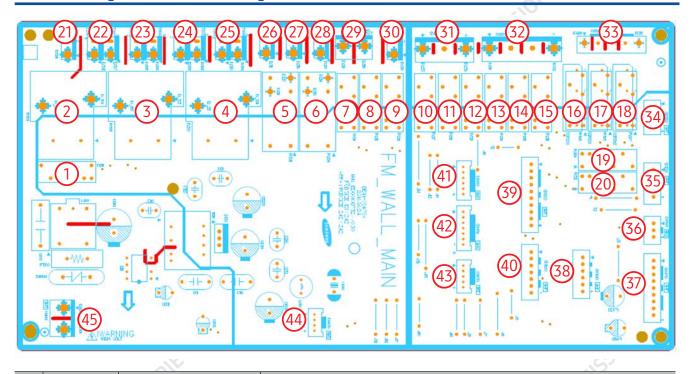
No.	Part Number	Part Name	Function and Rule	
1	CNS170	HASS Connector	This is connector for HASS.	
2	CNS200	Main Communication Connector	This is connector which is connected with Main PCB to communicate.	
3	CNS210	LCD Communication Connector	This is connector which is connected with LCD PBA to communicate.	
4	CNS220	WIFI Communication Connector	This is connector which is connected with Wi-Fi module to communicate.	
5	CNS230	LED Dimming Communication Connector	This is connector which is connected with LED Dimming module to communicate.	
6	CNS240	Touch Communication Connector	This is connector which is connected with Touch IC to communicate.	
7	CNS260	Bluetooth Communication Connector This is connector which is connected with Bluetooth module to communicate.		
8	CNS300	Power Input Connector This is connector to provide DC power (12V, 5V) to Sub PCB.		
9	CNS500	Knob Sensing Connector This is connector which is connected to Assy switch Ignition for sensing knob position sta		
10	CNS550	This is connector for receiving Switch input signal as below. • Bluetooth, Wi-Fi On/Off Switch • Pop-Up Display In/Out Switch • Oven (Big, Small) Lamp On/Off		
11	CNS600	Key Backlight Connector This is connector which is connected Key Backlight LED module.		
12	CNS610	Big Oven Door LED Lamp Connector This is connector which is connected Big Oven Door LED Lamp.		
13	CNS611	Small Oven Door LED Lamp Connector This is connector which is connected Small Oven Door LED Lamp (use only in 48" pro range		
14	CNS620	Wifi Indication LED Connector	This is connector which is connected LED module indicating IQ Control stutus.	
15	CNS700	Pop Up Display Connector	This is connector which is connected motor for Pop-Up or Down of display	

3-4. Dimming PCB diagram for 36"/48" Prorange rangetop part



No.	Part Number	r Part Name Function and Rule	
1	CN1	Sub Communication Connector	This is connector which is connected with LCD SUB PCB to communicate.
2	CN2	Knob Light Connector	This is connector which is connected with 4th, 5th Knob Light module.
3	CN4	Knob Light Connector	This is connector which is connected with 1st, 2nd Knob Light module.
4	CN5	Knob Light Connector	This is connector which is connected with 6th, 7th Knob Light module. (use only in 48" prorange / rangetop)
5	CN6	Shower Light Connector	This is connector which is connected with 1st, 2nd, 3rd Shower Light module.
6	CN7	Knob Light Connector	This is connector which is connected with 3rd Knob Light module.
7	CN8	Mini Knob Light Connector	This is connector which is connected with two Mini Knob Light module.
8	CN9	Shower Light Connector	This is connector which is connected with 4th, 5th, 6th, 7th Shower Light module.

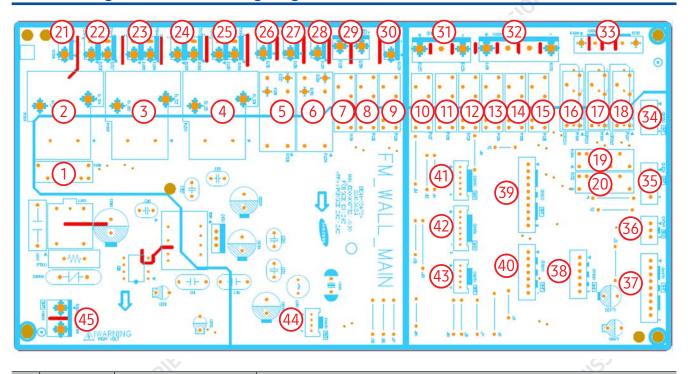
3-5. PCB diagram for 48" Prorange small oven



No.	Part Number	Part Name	Function and Rule	
1	RY201	RY-Source Relay	This is relay which control source of DLB, Bake, Broil relay.	
2	RY204	Bake-Heater Relay	Broil relay(RY203), Bake relay(RY204), convection relay(RY206) will be on-off working by mi-com signal after DLB relay is worked. (Broil relay: It will not be problem with reversing the order in inserting Brown) (Bake relay: It will not be problem with reversing the order in inserting Blue)	
3	RY203	Broil-Heater Relay	Broil relay(RY203), Bake relay(RY204), convection relay(RY206) will be on-off working by mi-com signal after DLB relay is worked.	
4	RY200	DLB Relay	Circuit is designed to have broil relay or convection relay worked after DLB relay is being worked by Double line break.	
5	RY208	Steam-Heater Relay	This is relay to control steam heater.	
6	RY206	Convection Relay	Broil relay(RY203), Bake relay(RY204), convection relay(RY206) will be on-off working by mi-com signal after DLB relay is worked.	
7	RY211	Cooling Motor High Relay	This is relay to control Cooling Motor. (High speed)	
8	RY210	Cooling Motor Lower Relay	This is relay to control Cooling Moto. (Low speed)	
9	RY213	Pyro-free Pump1 Relay	This is relay which is connected with Pyro-free pump upper side. (Not use in this model)	
10	RY217	Conv-Fan-L Relay	This is relay which is connected with Conv-Fan-Low. (Not use in this model)	
11	RY218	Water Pump Relay	This is relay which is connected with Water Pump.	
12	RY219	Drain Pump Relay	This is relay which is connected with Drain Pump.	
13	RY214	Conv-Fan-U Relay	This is relay which is connected with Conv-Fan.	
14	RY215	Oven Lamp Relay	This is relay which is connected with Oven Lamp.	
15	RY216	Door Lock Motor Relay	This is relay which is connected with Door Lock Motor. (Not use in this model)	
16	RY202	Water Tank Motor-CW Relay	This is relay to control Water tank motor to clockwise direction. (Not use in this model)	
17	RY205	Water Tank Motor-CCW Relay	This is relay to control Water tank motor to clockwise direction. (Not use in this model)	

No.	Part Number	Part Name	Function and Rule	
18	RY207	Pyro-free Pump2 Relay	This is relay which is connected with Pyro-free pump lower side. (Not use in this model)	
19	RY209	Door LED-U Relay	This is relay which is connected with Door LED-Upper. (Not use in this model)	
20	RY212	Door LED-L Relay	This is relay which is connected with Door LED-Lower. (Not use in this model)	
21	T208	Bake Terminal	This is terminal to connect harness with Bake relay.	
22	T206 T207	Bake Broil Common Terminal	This is terminal to common connect bake and broil heater.	
23	T205 T204	Broil Terminal	This is terminal to connect harness with Broil relay.	
24	T203 T202	DI D Terminal	This is terminal to connect harness with DLD relay.	
25	T201 T200	DLB Terminal	This is terminal to connect harness with DLB relay.	
26	T209	Common Terminal	This is terminal to common connect convection, steam, cooling motor.	
27	T211	Steam Heater	This is connector which is connected with Steam Heater.	
28	T210	Convection Heater	This is connector which is connected with Convection Heater.	
29	CN202	Cooling Motor	This is connector which is connected with Cooling Motor.	
30	T212	Pyro-free Pump1	This is connector which is connected with Pyro-free Pump1. (Not use in this model)	
31	CN204	Relay Connector	WATER PUMP, DRAIN PUMP	
32	CN203	Relay Connector	CONV FAN, OVEN LAMP, DOOR LOCK, AC120V_LINE	
33	CN200	Relay Connector	WATER TANK MOTOR-CW, WATER TANK MOTOR-CCW, PYROFREE-PUMP2, LIVE (Not use in this model)	
34	CN550	Cooling Motor Hall Sensing	This connector which is connected with Cooling motor hall sansor.	
35	CN201	Relay Connector	DOOR LED-U, DOOR LED-L (Not use in this model)	
36	CN340	Steam Temp	This connector which is connected with Steam temp sensor.	
37	CN470	Sub Communication Con- nector	This is connector which is connected with Big Cavity Main PCB to communicate.	
38	CN320	Oven Sensing Connector	This connector which is connected with oven sensor.	
39	CN300	Door switch, Water Inlet switch	This is connector which is connected with Door plunger switch and water inlet switch.	
40	CN500	Water level Sensing Connector	This connector which is connected with water level sensor.	
41	CN460	Cooktop UART1	This connector is for communication with main PBA of lower oven for double oven.(Not use in this model)	
42	CN461	Cooktop UART 2	This connector is for communication with PBA of cooktop (Not use in this model)	
43	CN450	HASS Connector	It is connector for HASS (Not use in this model)	
44	CN430	Micom Writing Connector	This is connector for writing Micom.	
45	CN100	Power Connector	This is to supply power with SMPS.	

3-6. PCB diagram for 36" Prorange big oven



No.	Part Number	Part Name	Function and Rule	
1	RY201	RY-Source Relay	This is relay which control source of DLB, Bake, Broil, Warming Drawer relay.	
2	RY204	Bake-Heater Relay	Broil relay(RY203), Bake relay(RY204), convection relay(RY206) will be on-off working by mi-com signal after DLB relay is worked. (Broil relay: It will not be problem with reversing the order in inserting Brown) (Bake relay: It will not be problem with reversing the order in inserting Blue)	
3	RY203	Broil-Heater Relay	Broil relay(RY203), Bake relay(RY204), convection relay(RY206) will be on-off working by mi-com signal after DLB relay is worked. (Broil relay: It will not be problem with reversing the order in inserting Brown) (Bake relay: It will not be problem with reversing the order in inserting Blue)	
4	RY200	DLB Relay	Circuit is designed to have broil relay or convection relay worked after DLB relay is being worked by Double line break. (It will not be problem with reversing the order in inserting Red)	
5	RY208	Steam-Heater Relay	This is relay to control steam heater.	
6	RY206	Convection Relay	Broil relay(RY203), Bake relay(RY204), convection relay(RY206) will be on-off working by mi-com signal after DLB relay is worked. (Broil relay: It will not be problem with reversing the order in inserting Brown) (Bake relay: It will not be problem with reversing the order in inserting Blue)	
7	RY211	Cooling Motor High Relay	This is relay to control Cooling Motor which is in upper cavity.	
8	RY210	Cooling Motor Lower Relay	This is relay to control Cooling Motor which is in lower cavity.	
9	RY213	Pyro-free Pump1 Relay	This is relay which is connected with Pyro-free pump upper side. (Not use in this model)	
10	RY217	Conv-Fan-L Relay	This is relay which is connected with Conv-Fan-Low.	
11	RY218	Water Pump Relay	This is relay which is connected with Water Pump. (use only in 36" model)	
12	RY219	Drain Pump Relay	This is relay which is connected with Drain Pump. (use only in 36" model)	
13	RY214	Conv-Fan-U Relay	This is relay which is connected with Conv-Fan-Upper.	
14	RY215	Oven Lamp Relay	This is relay which is connected with Oven Lamp.	

No.	Part Number	Part Name	Function and Rule	
15	RY216	Door Lock Motor Relay	This is relay which is connected with Door Lock Motor.	
16	RY202	Water Tank Motor-CW Relay	This is relay to control Water tank motor to clockwise direction. (use only in 36" model)	
17	RY205	Water Tank Motor-CCW Relay	This is relay to control Water tank motor to clockwise direction. (use only in 36" model)	
18	RY207	Pyro-free Pump2 Relay	This is relay which is connected with Pyro-free pump lower side. (Not use in this model)	
19	RY209	Door LED-U Relay	This is relay which is connected with Door LED-Upper.	
20	RY212	Door LED-L Relay	This is relay which is connected with Door LED-Lower.	
21	T208	Bake Terminal	This is terminal to connect harness with Bake relay.	
22	T206 T207	Bake Broil Common Terminal	This is terminal to common connect bake and broil heater.	
23	T205 T204	Broil Terminal	This is terminal to connect harness with Broil relay.	
24	T203 T202	DIDTerminal	This is to receive the constant of the DI Durcher	
25	T201 T200	DLB Terminal	This is terminal to connect harness with DLB relay.	
26	T209	Common Terminal	This is terminal to common connect convection, steam, cooling motor.	
27	T211	Steam Heater	This is connector which is connected with Steam Heater. (use only in 36" model)	
28	T210	Convection Heater	This is connector which is connected with Convection Heater.	
29	CN202	Relay connector	This is connector which is connected with Cooling Motor.	
31	CN204	Relay Connector	CONV FAN L, WATER PUMP, DRAIN PUMP	
32	CN203	Relay Connector	CONV FAN U, OVEN LAMP U, DOOR LOCK, AC120V_LINE	
33	CN200	Relay Connector	WATER TANK MOTOR-CW, WATER TANK MOTOR-CCW, PYROFREE-PUMP2, LIVE	
34	CN550	Water Tank Sensing Connector	This connector which is connected with Water Tank sensor (use only in 36" model)	
35	CN201	Relay Connector	DOOR LED-U, DOOR LED-L	
36	CN340	Steam Temp	This connector which is connected with Steam temp sensor (use only in 36" model)	
37	CN470	Sub Communication Connector	This is connector which is connected with LCD Sub PCB to communicate.	
38	CN320	Oven Sensing Connector	This connector which is connected with oven sensor.	
39	CN300	Door Lock, Divider Connector	This is connector which is connected with Door plunger switch and Door lock switch.	
40	CN500	Water & Steam Sensing Con- nector	This connector which is connected with water&steam sensor. (use only in 36" model)	
41	CN460	Cooktop UART1	This connector is for communication with main PBA of steam oven for 48" oven. (use only in 48" model)	
42	CN461	Cooktop UART 2	This connector is for communication with PBA of cooktop (N/A for this model)	
43	CN450	HASS Connector	It is connector for HASS (Smart Test).	
44	CN430	Micom Writing Connector	This is connector for writing Micom.	
45	CN100	Power Connector	This is to supply power with SMPS.	

4-1. 36" / 48" pro range cooktop

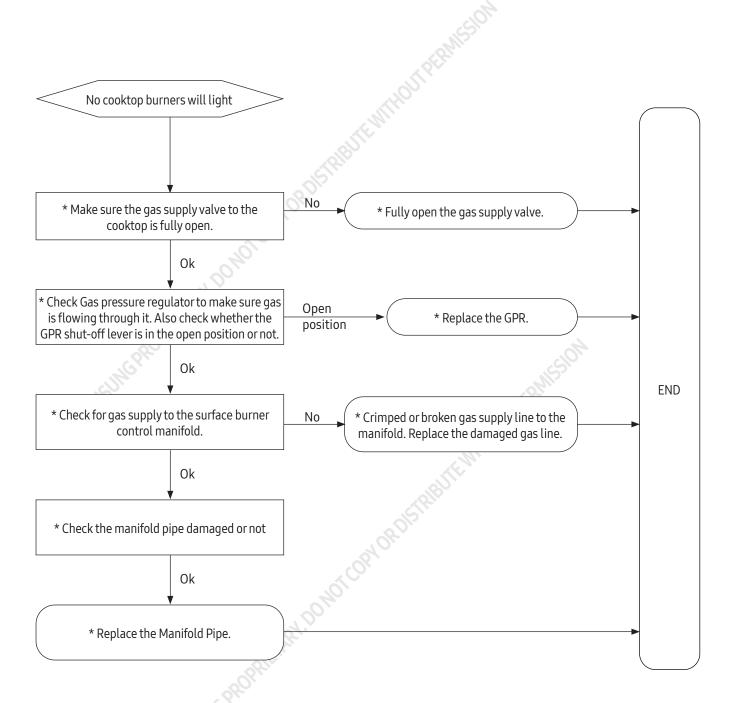
4-1-1. Error Trouble Shooting

SYMPTOM	DIAGNOSIS	REMEDY
	* Smell Gas but no spark ignition	* Plug in the power cord and/or reset the circuit breaker for the cooktop.
	* The gas supply valve to the cooktop is closed.	* Open the gas supply valve.
None of the cooktop burners will light.	* Check the terminals on the spark module for voltage.	* Replace the faulty re-ignition module.
Zameis mangina	* Check for crimped or broken gas line between the pressure gas regulator and the surface burner control manifold.	* Replace the damaged gas line.
	* Gas pressure regulator switch is closed.	* Replace the gas pressure regulator.
	* Check the harness connections at the reignition module.	* Reconnect loose connection or replace damaged harness.
	* Check the re-ignition module.	* Disconnect the re-ignition module terminal for the nonworking burner. If no voltage is measured, replace the re-ignition module.
One cooktop burner	* Check the electrode for that burner.	* Disconnect the electrode and check whether electrode wire or tip is broken. Replace the faulty electrode.
does not light.	* Check for water or cooked food covering the burner ports.	* Clean and/or replace the surface burner orifice. Replacement orifice should always be the same size as removed.
	* Check for crimped or broken gas lines.	* Replace damaged gas lines.
	* Faulty surface burner control	* Each surface burner control is an integral part of the surface burner control manifold. Replace the manifold.
All surface burners will light, but don't	* Check for crimped gas line between the pressure gas regulator and the surface burner control manifold.	* Replace the damaged gas line.
stay lit.	* Reversible regulator plastic cap not correct .	* Replace the gas pressure regulator.
	uoti	* Clean and/or replace the surface burner orifice.
One cooktop burner lights, but doesn't	* Check for a dirty surface burner orifice.	Replacement orifice should always be the same size as removed.
stay lit.	* Check for a crimped gas line.	* Replace the crimped gas line.
	* Faulty surface burner control.	* Each surface burner control is an integral part of the surface burner control manifold. Replace the manifold.

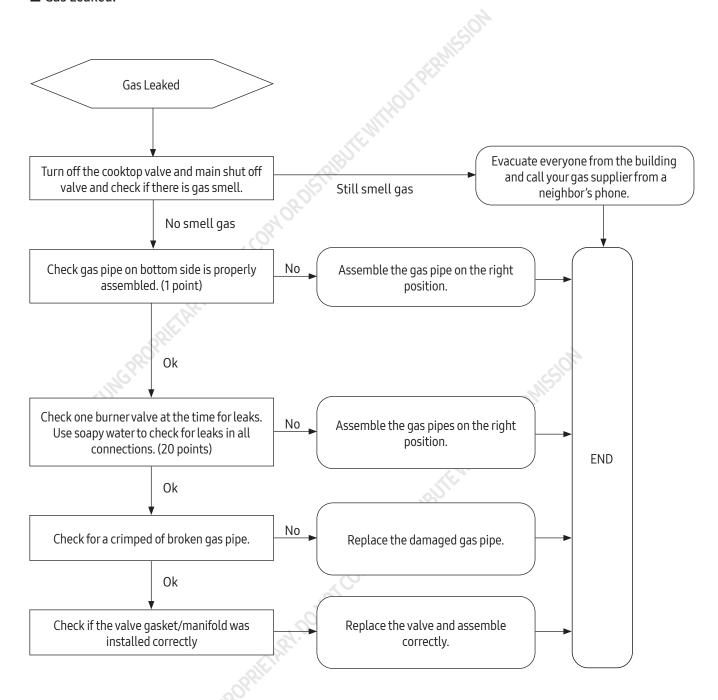
SYMPTOM	DIAGNOSIS	REMEDY
Cooktop burner flames are mostly	* Check for proper sized orifices: [NG] BURNER ORIFICE SYZES AND OUTPUT RATINGS (Natural Gas S in WCP) Burner BTU/n Rate Orifice Size [mm] Lecation BTU/n Burner 18,000 in 0.707 / 0.041 727 (2 pcs) LP	* Replace any wrong sized orifices.
yellow.	* Check for crimped or cracked gas line between the pressure gas regulator and the surface burner control manifold.	* Replace the damaged gas line.
	* Check if there is something obstructing air to the burner cup around the burner head perimeter.	* Replace the burner head.
	* Faulty gas pressure regulator.	* Replace the gas pressure regulator.
Cooktop burner flames are soft blue or have yellow tips.	* This is normal.	* Soft blue flames are normal flames for NG operation. * Soft blue flames with yellow tips are normal flames for LP operation.
All cooktop burners	* Check the terminals on the SMPS for voltage.	* If no voltage is measured, replace the SMPS PCB.
light, but All knob lighting LEDs doesn't light.	* Check the harness and connections at connectors on the MAIN PCB.	* Reassembly wire harness, if the same phenomenon is repeated, replace the wire harness.
One cooktop burner lights, but knob lighting LED don't lights.	* Check if the plastic LED housing is installed correctly and/or there are no plastic fingers broken so it allows a secure attachment between the plastic lens and the valve	* If no voltage is measured, replace the MAIN PCB. * If the same phenomenon is repeated after replace the pcb, replace the wire harness
Hood connectivity does not normally operation	* Check the Auto connectivity led of the hood is turned on.	* If Auto connectivity led of the hood turned off, press the button turn on. * If auto connectivity led doesn't turn on even if press the button, do the hood and cooktop pairing.
Hood is not marked on the smart home	* Check the WIFI indicator led is turned on.	* If WIFI indicator led of the cooktop turned off, short press the wifi button under the RF knob dial. * If WIFI indicator led doesn't turn on even if press the button, try to easy setup.
app screen	* Check the Bluetooth led of the hood is turned on.	* If Bluetooth led of the hood turned off, press the Bluetooth button on the hood. * If Bluetooth led of the hood turned on, replace the Bluetooth pcb of hood and cooktop

4-1-2. Gas Malfunction

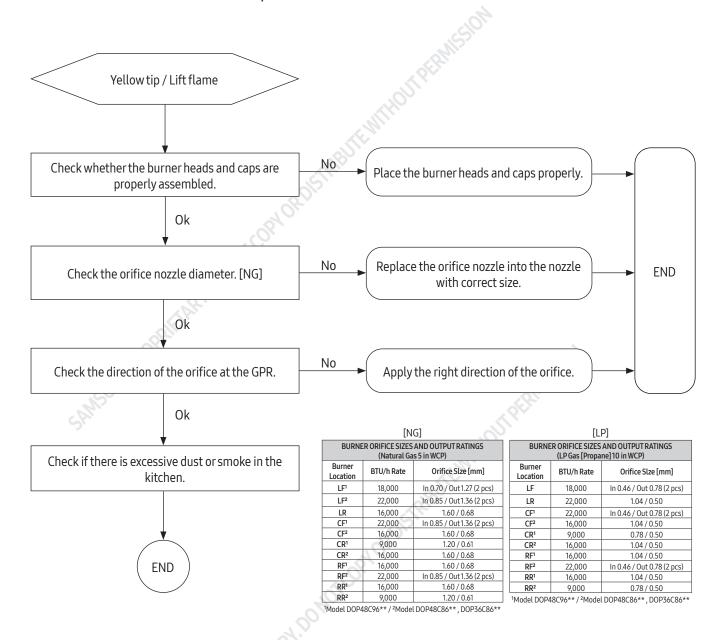
■ Cooktop burner not lighted.



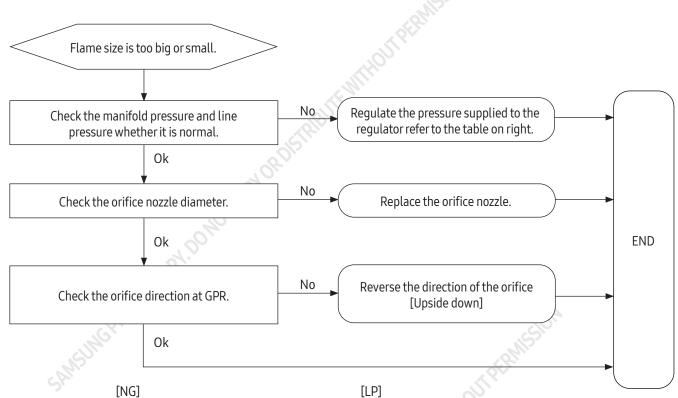
■ Gas Leaked.



■ The flame looks abnormal (Yellow tip / Lift flame)



■ Flame size is too big or too small



BURNER ORIFICE SIZES AND OUTPUT RATINGS (Natural Gas 5 in WCP)			
Burner Location	BTU/h Rate	Orifice Slze [mm]	
LF1	18,000	In 0.70 / Out 1.27 (2 pcs)	
LF ²	22,000	In 0.85 / Out 1.36 (2 pcs)	
LR	16,000	1.60 / 0.68	
CF ¹	22,000	In 0.85 / Out 1.36 (2 pcs)	
CF ²	16,000	1.60 / 0.68	
CR1	9,000	1.20 / 0.61	
CR ²	16,000	1.60 / 0.68	
RF ¹	16,000	1.60 / 0.68	
RF ²	22,000	In 0.85 / Out 1.36 (2 pcs)	
RR ¹	16,000	1.60 / 0.68	
RR ²	9,000	1.20 / 0.61	

BURNE	BURNER ORIFICE SIZES AND OUTPUT RATINGS		
	(LP Gas [Propane] 10 in WCP)		
Burner Location	BTU/h Rate	Orifice Slze [mm]	
LF	18,000	In 0.46 / Out 0.78 (2 pcs)	
LR	22,000	1.04 / 0.50	
CF ¹	22,000	In 0.46 / Out 0.78 (2 pcs)	
CF ²	16,000	1.04 / 0.50	
CR1	9,000	0.78 / 0.50	
CR ²	16,000	1.04 / 0.50	
RF ¹	16,000	1.04 / 0.50	
RF ²	22,000	In 0.46 / Out 0.78 (2 pcs)	
RR ¹	16,000	1.04 / 0.50	
RR ²	9,000	0.78 / 0.50	

NG 5in wc

13in wc

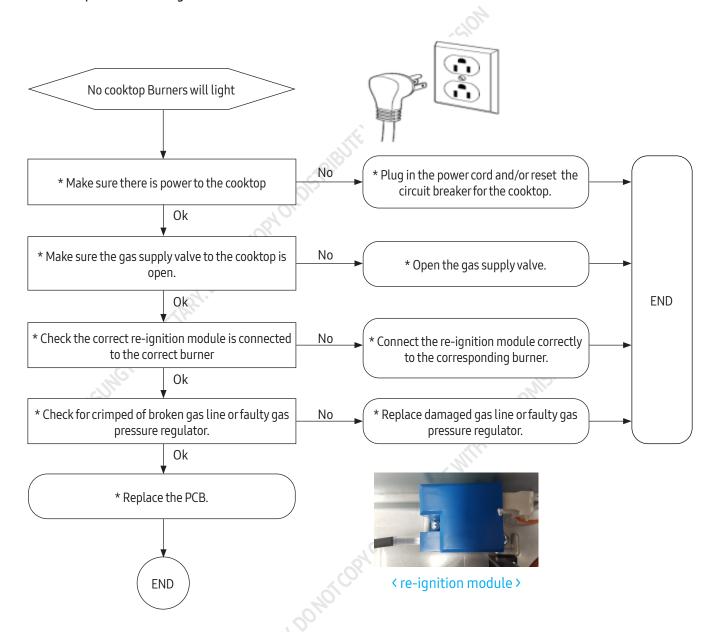
Min

¹Model DOP48C96** / ²Model DOP48C86** , DOP36C86**

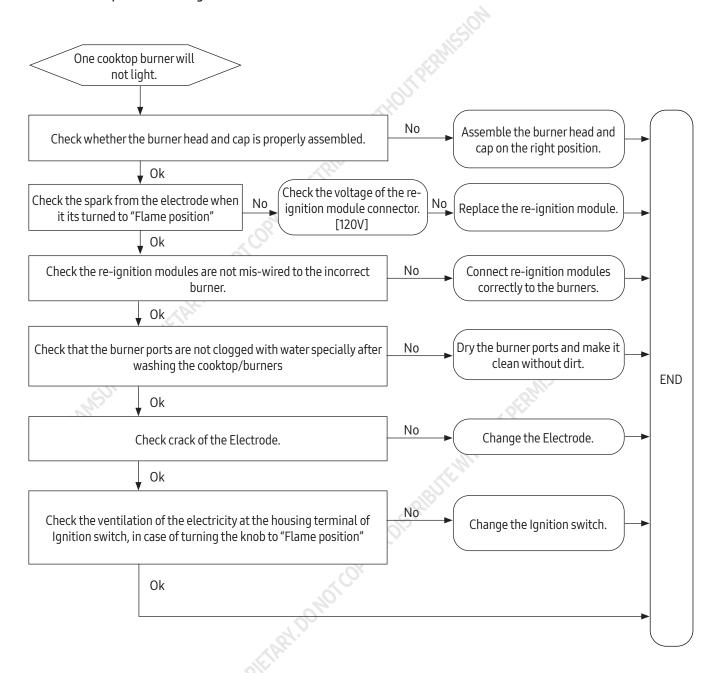
¹Model DOP48C96** / ²Model DOP48C86** , DOP36C86**

4-1-3. Electric Malfunction

■ Cooktop burners not lighted



■ One cooktop burner not lighted



4-2. 48" small oven

4-2-1. Parts Checking Method

FIGURE	TESTS MEASURE	RESULTS	
< Broil Heater>	* Measure resistance values of heater's terminal after taking off harness from heater. * Measure voltage of heater's terminal after making oven work by pressing broil keypad.	* Approx : 22 ~ 25Ω (at the room temperature) * Terminal voltage of Broil heater : AC 240V * Replace or repair harness * Replace or repair main PCB	
⟨ Bake Heater >	 * Measure resistance values of heater's terminal after taking off harness from heater. * Measure voltage of heater's terminal after making oven work by pressing bake keypad. (Make sure that voltage has to be measured for more than 1 minute because heater is supposed to on-off cycling work.) 	* Approx : 53 ~ 59Ω (at the room temperature) * Terminal voltage of bake heater : AC 240V * Replace or repair harness * Replace or repair main PCB	
⟨Convection Heater⟩	* Measure the resistance values of heater's terminal after taking off harness from heater. * Measure the voltage of heater's terminal after having oven worked, by pressing convection bake keypad. (Make sure that voltage has to be measured for more than 1 minute because heater is supposed to on-off cycling work.	* Approx : $27 \sim 30\Omega$ (at the room temperature) * Terminal voltage of convection heater : AC 240V * Replace or repair harness * Replace or repair main PCB	
⟨Steam Heater⟩	* Measure resistance values of heater's terminal after taking off harness from heater. * Measure voltage of heater's terminal after making oven work by pressing steam bake keypad. (Make sure that voltage has to be measured for over temperature in cavity than 215 °F because heater is supposed to on-off cycling work.)	* Approx : 26 ~ 29Ω (at the room temperature) * Terminal voltage of Steam heater heater : AC 240V * Replace or repair harness * Replace or repair main PCB	
< Oven lamp >	* First of all, make sure that lamp filament is disconnected or not. * Measure resistance socket's terminal after separating harness from heater and removing lamp. * Measure the voltage of socket's terminal after having lamp worked by pressing oven light keypad.	* Approx : ∞Ω * Terminal voltage of lamp socket : 120V * Replace or repair harness. * Replace or repair main PCB	

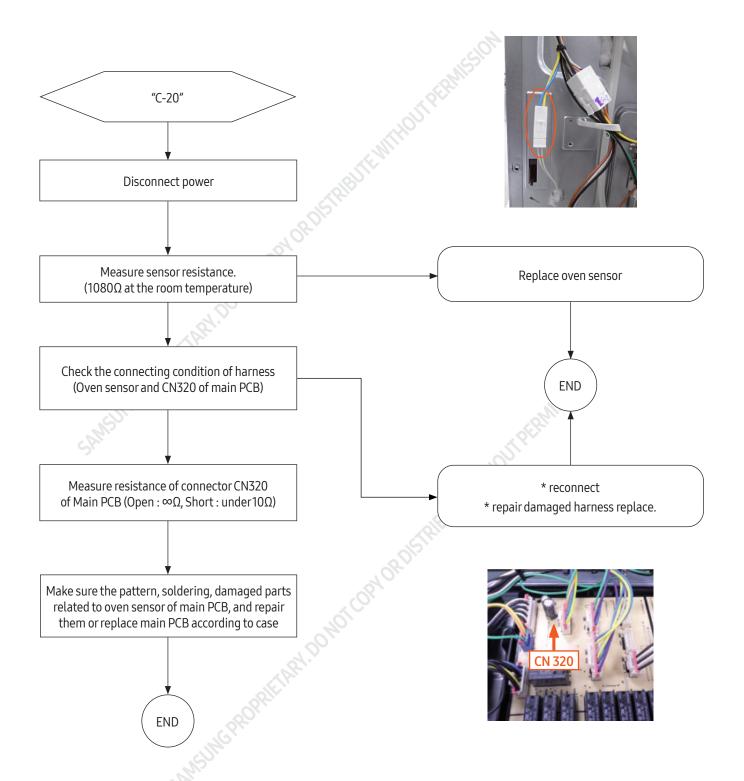
FIGURE	TESTS MEASURE	RESULTS
√fan-convection >	* Measure resistance value of Motor terminal after taking off harness from Motor. * Measure Voltage of Motor's terminal after making oven work by pressing bake keypad. (Make sure that voltage has to be measured for more than 1 minute because Fan is supposed to on-off Cycling work.)	Approx * Convection Fan : 20 ~ 30Ω * Terminal Voltage of Convection Fan : 120V * Replace or repair harness * Replace or repair main PCB.
< Oven sensor>	* Check whether the resistance values of oven sensor is same with a chart's one. * Check whether wire or housing has been loosen or disconnected.	Approx * at the room temperature :1080Ω

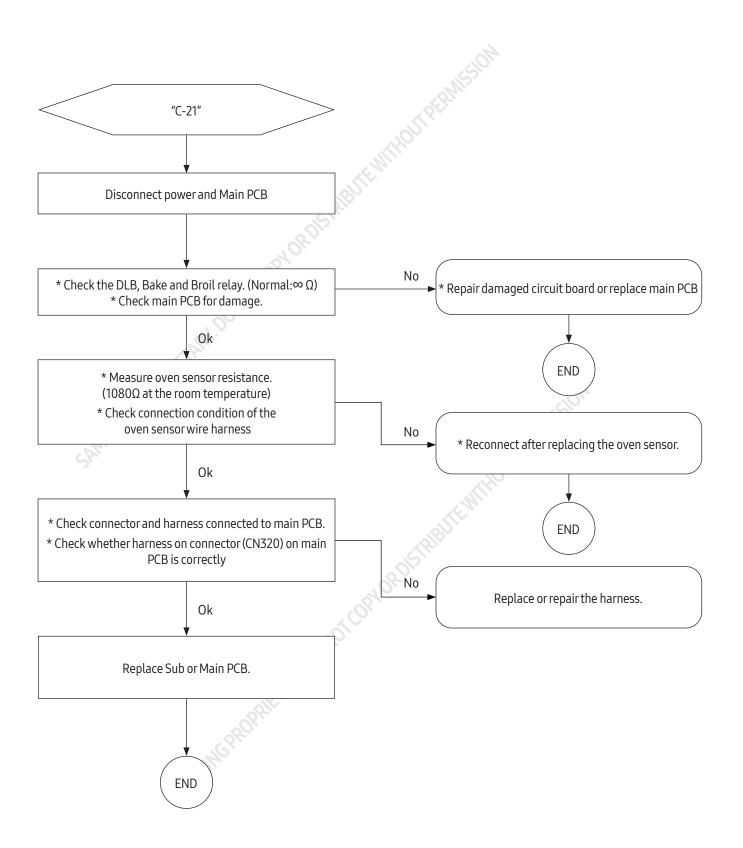
Oven sensor resistance (Temperature vs. Sensor resistance) Ro = 1000 Ohms (0°C), RP = 2757 Ohms, UP = 5V, a = 0.00375

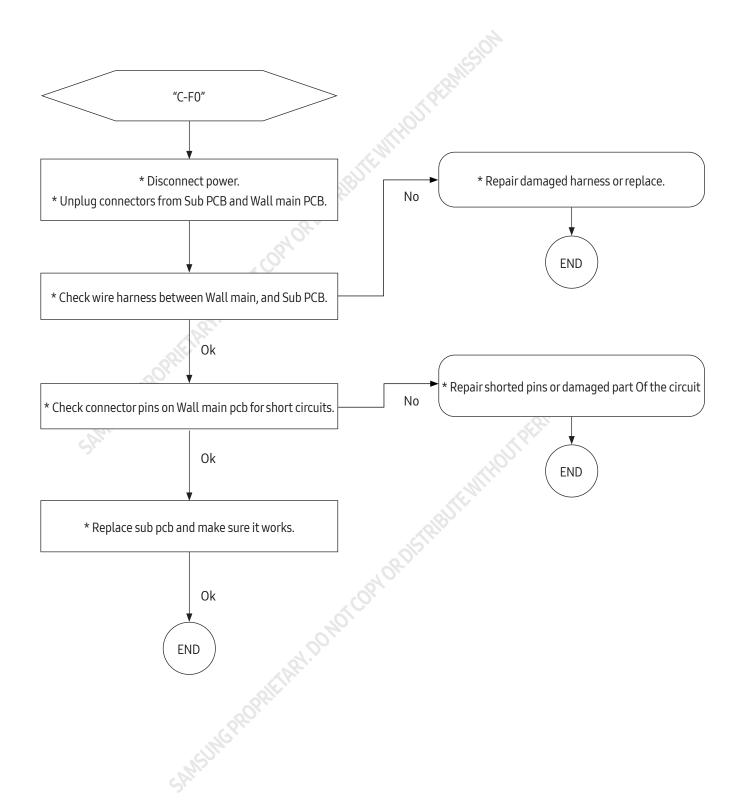
degree F	degree C	ohms	degree F	degree C	ohms
0	-17.8	932.12	113	45	1170.17
14	-10	961.86	122	50	1188.93
23	-5	980.85	212	100	1374.93
32	0	1000.00	302	150	1558.01
41	5	1019.02	392	200	1738.06
50	10	1038.02	482	250	1915.39
59	15	1056.99	572	300	2089.69
68	20	1075.92	662	350	2261.07
77	25	1094.83	752	400	2429.52
86	30	1113.71	842	450	2595.05
95	35	1132.56	932	500	2757.65
104	40	1151.38	1000	538	2878.57

4-2-2. Sensor

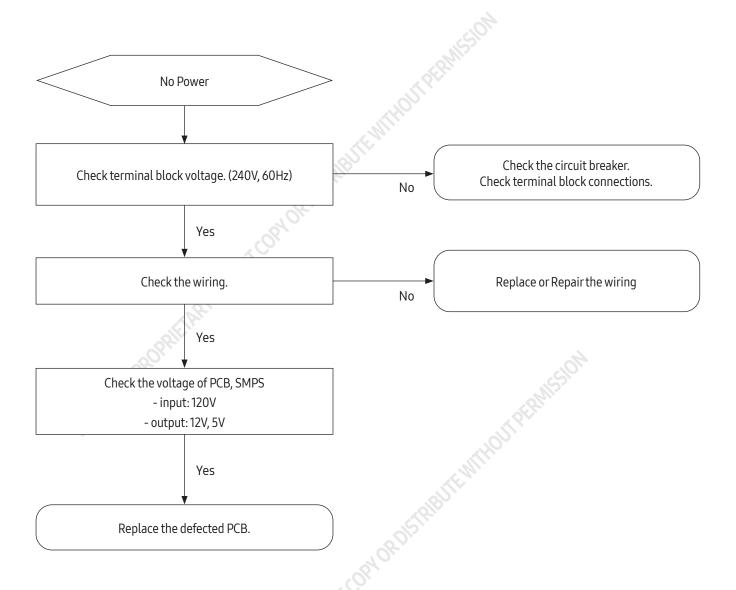
FIGURE	TESTS MEASURE	RESULTS
	Oven sensor opened	1. Check whether connector at the main pcb has been inserted. 2. Check whether connector at the sensor has been inserted.
C-20	Oven sensor shorted.	If connectors at the main pcb and the sensor are inserted correctly, replace the temperature sensor. If the problem is still not solved, replace the main PCB.
C-21	Oven heating over	 Disconnect power .Disconnect sensor harness from control .Measure sensor resistance :1080Ω at the room temperature → If there are any problems, replace oven sensor. Check the broil, bake and convection heater . Check the resistance of the each heater. Check whether DLB of sub PCB, Broil, Bake and Convection heater relay are being worked normally. Check whether there is any disconnection of harness which is linked with main PCB on main PCB. Check the resistance of oven sensor connector on main PCB. (Normal : 2850kΩ)
C-23	The temp probe sensor is short when oven is operating.	 Disconnect power. Disconnect probe harness from control. Measure probe resistance.: 50kΩ at room temperature> If there are any problems, replace meat probe. If there is not any problem with meat probe, Please check whether there is a damaged terminal or wire on harness. Check resistance of meat probe connector on main PCB (Normal :10kΩ~11kΩ)
6.70	The PCB temp sensor is open when the oven is operating.	THOUT!
C-30	The PCB temp sensor is short when the oven is operating.	Disconnect power. Open back cover. Replace the main PCB.
C-31	This code occurs if the PCB temperature rises abnormally high.	EIRIBU
C-70	The steam sensor is open when the steam mode is operating. The steam sensor is short when the steam mode is operating.	 Check whether connector at the main pcb has been inserted. Check whether connector at the sensor has been inserted. If connectors at the Main PCB and the sensor are inserted correctly, replace the temperature sensor. If the problem is still not solved, replace the Main PCB.
C-72	The Drain system-related problem. When the water level sensor sensed the water is remained after max time draining.	1. Check the ground wire on the steam generator. 2. Check the pump motor operation and wire connection. 3. If the problem is still not solved, replace the Main PCB.
C-F0	This code occurs if communication between the Main and Sub PBA is interrupted.	1. Check whether connector of main pcb has been inserted. 2. Check whether connector of sub pcb has been inserted. 3. If there is not a problem occurred with connector on sub pcb and main pcb, replace the main pcb.



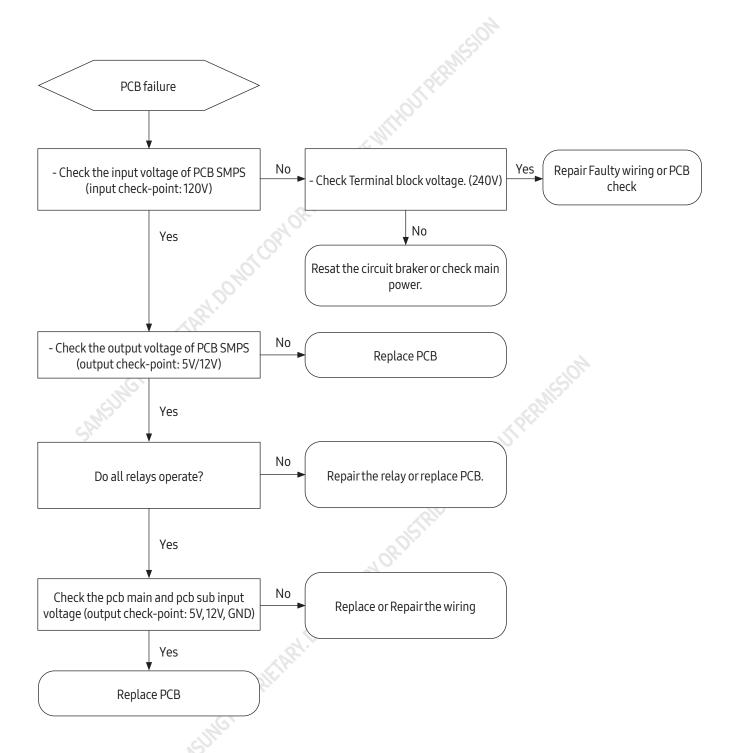




4-2-3. Troubleshooting (Power)



4-2-4. Troubleshooting (PCB failure)



4-3.36"/48" big oven

4-3-1. Parts Checking Method

FIGURE	TESTS MEASURE	RESULTS
< Broil Heater>	* Measure resistance values of heater's terminal after taking off harness from heater. * Measure voltage of heater's terminal after making oven work by pressing broil keypad.	* Approx : 11 ~ 15Ω (at the room temperature) * Terminal voltage of Broil heater : AC 240V * Replace or repair harness
< Bake Heater>	* Measure resistance values of heater's terminal after taking off harness from heater. * Measure voltage of heater's terminal after making oven work by pressing bake keypad. (Make sure that voltage has to be measured for more than 1 minute because heater is supposed to on-off cycling work.)	* Approx : 18 ~ 21Ω (at the room temperature) * Terminal voltage of bake heater : AC 240V * Replace or repair harness
Convection Heater>	* Measure the resistance values of heater's terminal after taking off harness from heater. * Measure the voltage of heater's terminal after having oven worked, by pressing convection bake keypad. (Make sure that voltage has to be measured for more than 1 minute because heater is supposed to on-off cycling work.	* Approx : $40 \sim 46\Omega$ (at the room temperature) * Terminal voltage of convection heater : AC 240V * Replace or repair harness
<pre> <steam heater=""> ** DOP36C86DL* </steam></pre>	 * Measure resistance values of heater's terminal after taking off harness from heater. * Measure voltage of heater's terminal after making oven work by pressing steam bake keypad. (Make sure that voltage has to be measured for over temperature in cavity than 215 °F because heater is supposed to on-off cycling work.) 	* Approx : 26 ~ 30Ω (at the room temperature) * Terminal voltage of Steam heater heater : AC 120V * Replace or repair harness
< Oven lamp >	* First of all, make sure that lamp filament is disconnected or not. * Measure resistance socket's terminal after separating harness from heater and removing lamp. * Measure the voltage of socket's terminal after having lamp worked by pressing oven light keypad.	* Approx : ∞Ω * Terminal voltage of lamp socket : 120V * Replace or repair harness. * Replace or repair main PCB

FIGURE	TESTS MEASURE	RESULTS
< Door Lock >	* Measure the state of micro switch and motor after taking off harness from the heater. * Check whether lock work normally by pressing Control Lock (3sec) for 3 seconds.	* Lock motor Resistance : 1600 ~ 2200Ω (at the room temperature) voltage : 120V * Micro switch COM-NC * Replace or repair if harness has been loosen or disconnected.
<pre><upperfan-convection></upperfan-convection></pre>	* Measure resistance value of Motor terminal after taking off harness from Motor. * Measure Voltage of Motor's terminal after making oven work by pressing bake keypad. (Make sure that voltage has to be measured for more than 1 minute because Fan is supposed to on-off Cycling work.)	Approx * Convection Fan: 20 ~ 30Ω * Terminal Voltage of Convection Fan: 120V * Replace or repair harness * Replace or repair main PCB.
< Oven sensor>	* Check whether the resistance values of oven sensor is same with a chart's one. * Check whether wire or housing has been loosen or disconnected.	Approx * at the room temperature :1080Ω

Oven sensor resistance (Temperature vs. Sensor resistance) Ro = 1000 Ohms (0°C), RP = 2757 Ohms, UP = 5V, a = 0.00375

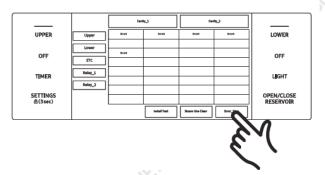
degree F	degree C	ohms	degree F	degree C	ohms
0	-17.8	932.12	113	45	1170.17
14	-10	961.86	122	50	1188.93
23	-5	980.85	212	100	1374.93
32	0	1000.00	302	150	1558.01
41	5	1019.02	392	200	1738.06
50	10	1038.02	482	250	1915.39
59	15	1056.99	572	300	2089.69
68	20	1075.92	662	350	2261.07
77	25	1094.83	752	400	2429.52
86	30	1113.71	842	450	2595.05
95	35	1132.56	932	500	2757.65
104	40	1151.38	1000	538	2878.57

4-3-2. Failure Display Codes

■ There is a check code. Possible check codes during use can be checked before service.



1. Touch **UPPER** and **LOWER** for 5 seconds. Information is displayed on screen.

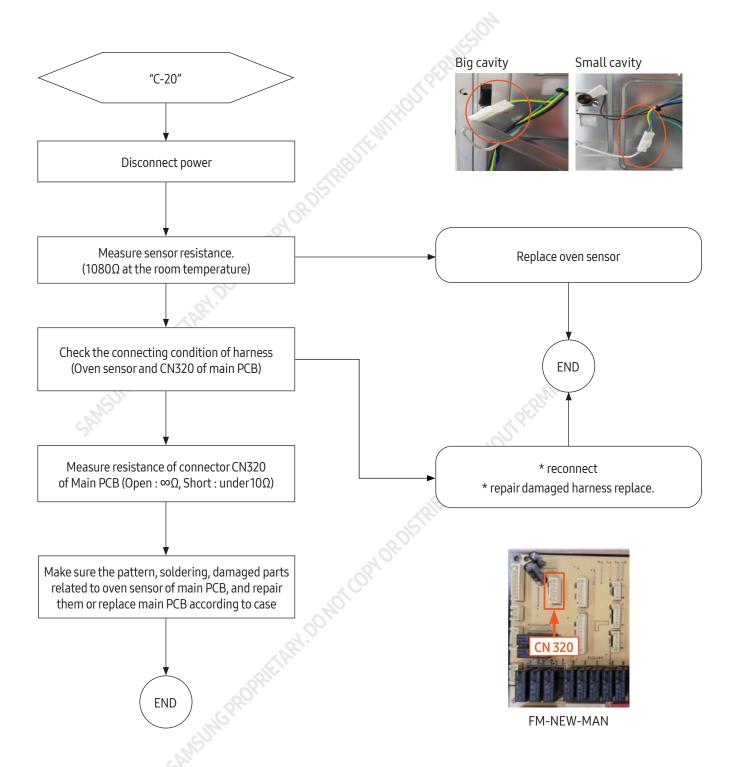


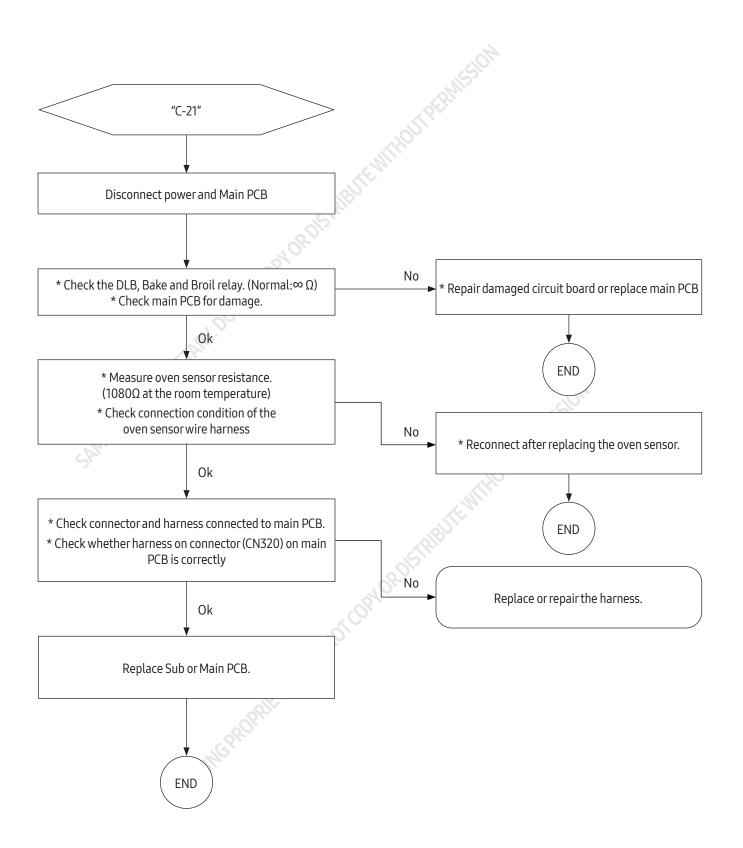
- 2. Touch **Error_Disp** the latest 5 check codes can be checked on display.
- 3. Touch **UPPER** and **LOWER** for 5 seconds to return to normal display mode.

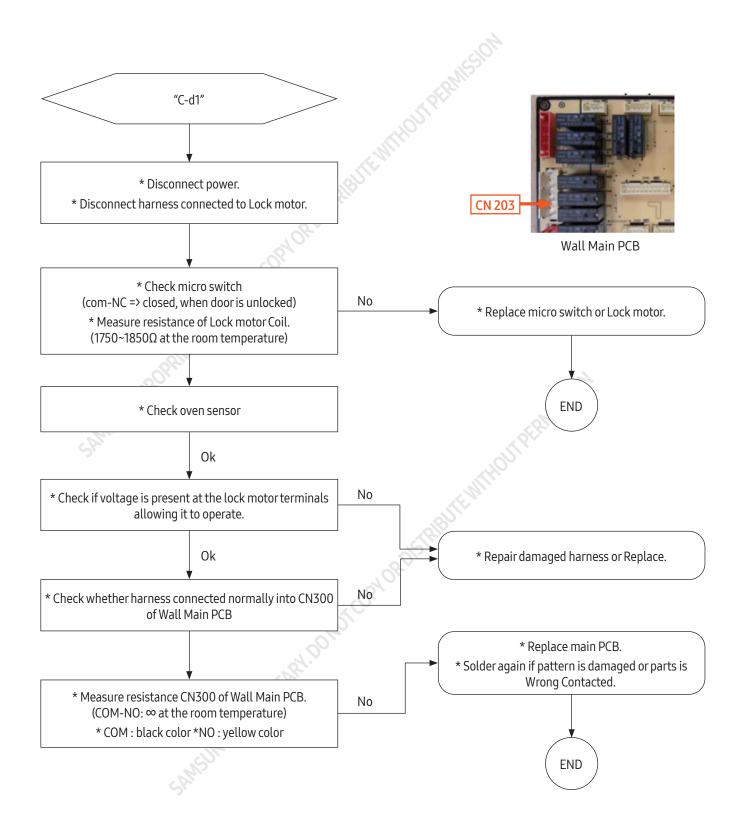
4-3-3. Sensor

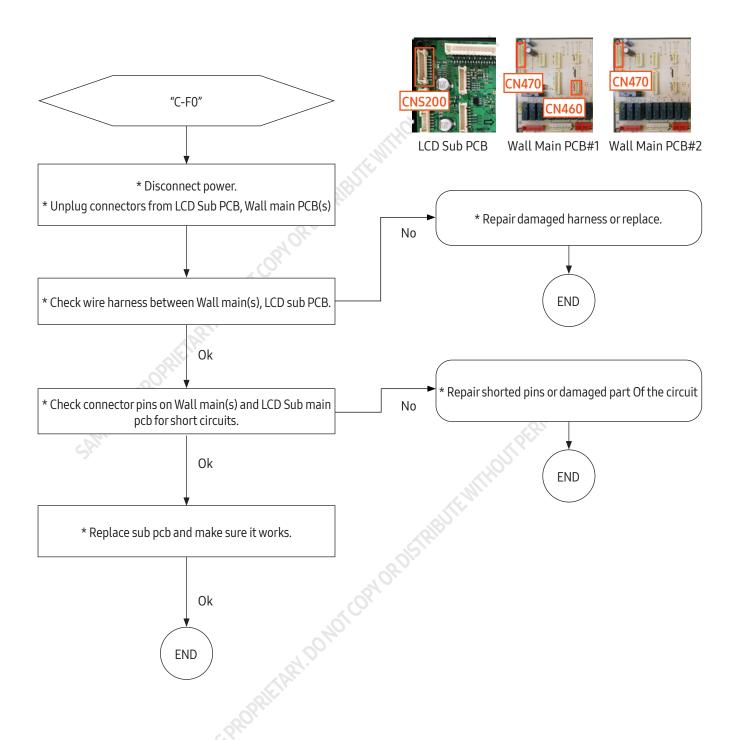
FIGURE	TESTS MEASURE	RESULTS
	Oven sensor opened over 5 seconds in the operating mode	1. Check whether connector at the main pcb has been inserted. 2. Check whether connector at the sensor has been inserted.
C-20	Oven sensor shorted over 5 seconds in the operating mode	If connectors at the main pcb and the sensor are inserted correctly, replace the temperature sensor If the problem is still not solved, replace the main PCB.
C-21	Oven heating over	 Disconnect power. Disconnect sensor harness from control . Measure sensor resistance :1080Ω at the room temperature → If there are any problems, replace oven sensor. Check the broil, bake and convection heater. Check the resistance of the each heater. Check whether DLB of sub PCB, Broil, Bake and Convection heater relay are being worked normally. Check whether there is any disconnection of harness which is linked with main PCB on main PCB. Check the resistance of oven sensor connector on main PCB. (Normal : 2850Ω)
C-d1	Door locking error	 Disconnect power. Check whether harness has been connected with door lock switch and motor. Confirm whether resistance value of door lock motor is to be normal one or not. With operating door lockout, measure a voltage of connector on harness which is linked with door lock motor. (Normal voltage : AC 120V) Check whether door locking switch is being worked normally.
C-23	The temp probe sensor is short when oven is operating.	 Disconnect power. Disconnect probe harness from control. Measure probe resistance. : 50kΩ at room temperature> If there are any problems, replace meat probe. If there is not any problem with meat probe, Please check whether there is a damaged terminal or wire on harness. Check resistance of meat probe connector on main PCB (Normal :10kΩ~11kΩ)
C-30	The PCB temp sensor is open when the oven is operating.	S ^A
	The PCB temp sensor is short when the oven is operating.	Disconnect power. Open back cover. Replace the main PCB.
C-31	This code occurs if the PCB temperature rises abnormally high.	
C-70	The steam sensor is open when the steam mode is operating. The steam sensor is short when the steam mode is operating.	 Check whether connector at the main pcb has been inserted. Check whether connector at the sensor has been inserted. If connectors at the Main PCB and the sensor are inserted correctly, replace the temperature sensor. If the problem is still not solved, replace the Main PCB.

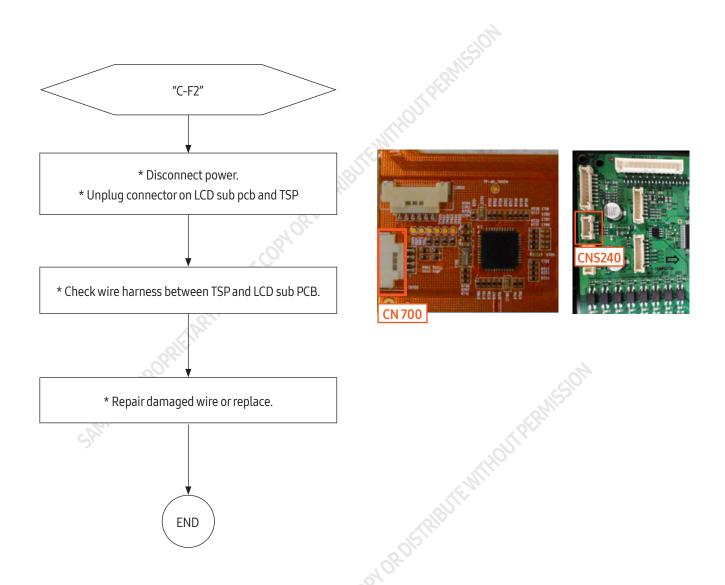
FIGURE	TESTS MEASURE	RESULTS	
C-72	The Drain system-related problem. When the water level sensor sensed the water is remained after max time draining.	 Check the ground wire on the steam generator. Check the pump motor operation and wire connection. If the problem is still not solved, replace the Main PCB. 	
C-F0	This code occurs if communication between the Wall Main#1,#2,LCD Sub are interrupted.	 Check whether connector of Wall main pcb(s) has been inserted. Check whether connector of LCD sub pcb has been inserted. If there is not a problem occurred with connector on LCD sub pcb and Wall main pcb(s), replace the Wall main pcb(s). 	
	LCD PBA LC	CD SUB WALL MAIN #1	
	CN605 CNS24 CN605 CNS24 CNS24 CNS24	CN470	
C-F2	This code occurs if communication between the wall main and TSP are interrupted.	 Check whether connector of LCD sub pcb has been inserted. If there is not a problem occurred with connector on LCD sub pcb, replace the LCD sub pcb. If can't solve the problem after replace the LCD sub pcb, replace the control box. 	
_	LCD PBA LC	CD SUB WALL MAIN #1	
	CN605 CNS24 CNS24 TSP CN700	CN470	

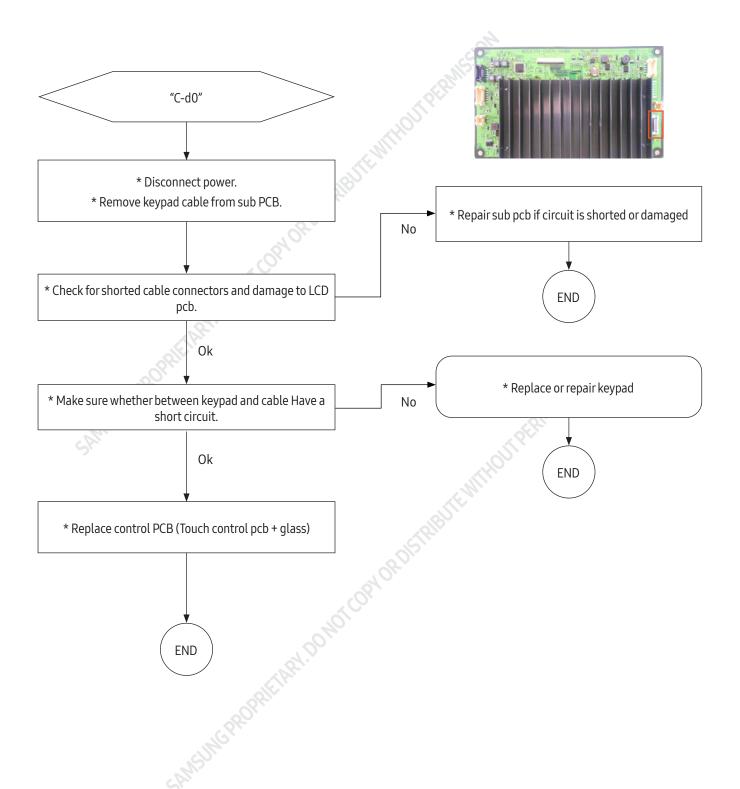




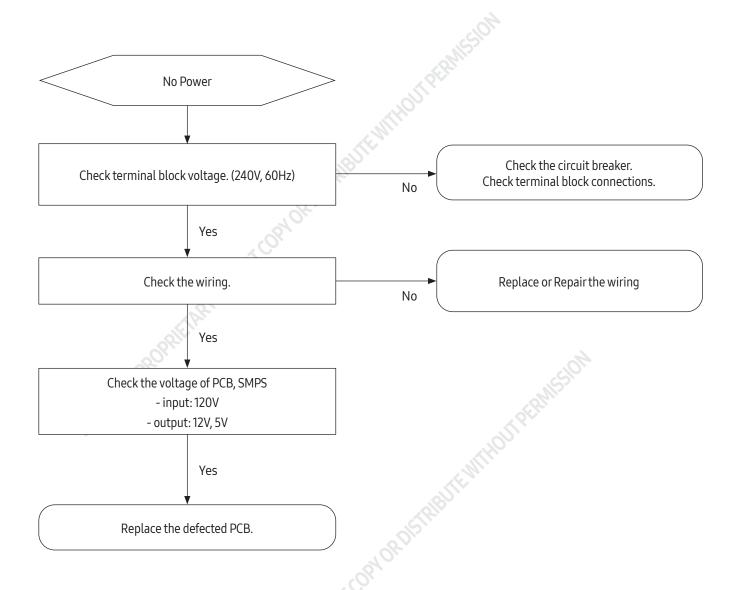




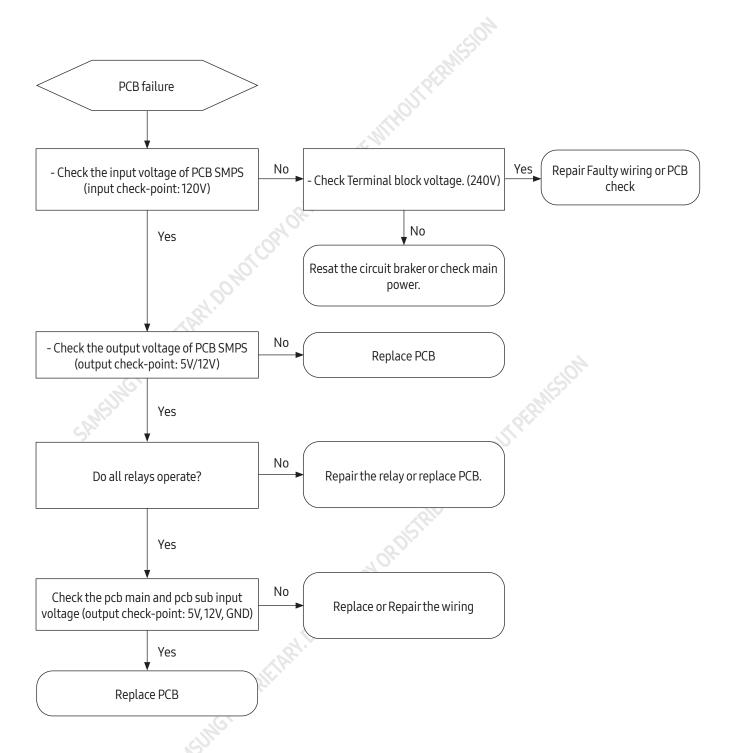




4-3-4. Troubleshooting (Power)



4-3-5. Troubleshooting (PCB failure)



5. Reference

■ Checkpoints before service request

SYMPTOM	DIAGNOSIS	REMEDY
	* Measure an input voltage. (240/120V or 208/120V) * Measure an input voltage of terminal block.	* check circuit breaker. * Make sure that the state of wire is connected with Terminal block.
	* Measure voltage of connector on main PCB L1~N: 120V	* Replace of repair if harness has been loosen or disconnected.
Oven not operating (No power, No display)	* Make sure that the relay on sub PCB is being worked normally. * Make sure whether harness between connector on sub PCB and connector on main PCB has been loosen or disconnected.	 * Replace sub PCB if relay has been damaged or there is any cracking on the sub PCB. * Repair harness is connected main PCB with sub PCB * After confirming whether harness has been inserted into relay on sub PCB or not, take action follow as; - Replace or repair harness. - Replace or repair sub PCB.
	* Measure resistance both ends of terminal on thermostat. (normal : 0 ohms) * Check whether harness is connected terminal on thermostat has been loosen or disconnected. * Measure voltage capacitor on Wall main PCB. - CE120 : DC12V, CE130 : DC 5V	* Replace the thermostat. * Replace or repair harness. * Replace or repair after confirming the state of working of Wall main PCB
, IMG PR	* Make sure whether harness is connected with Broil, Bake and convection heater has been loosen or disconnected.	* Repair and replace harness.
Oven temperature Rises slowly	* Make sure whether Broil, Bake, and convection heater has been disconnected.	* After taking out terminal from each heater, measure resistance of heater and then replace that if it is not a normal resistance value.
	* Make sure that heater relay and pattern on main PCB	* Replace or repair relay. * Replace or repair wall main PCB(s)
	* Check whether temperature is risen over 400°F(202°C) within 10 minutes in a state of room temperature.	* Repair or replays shorted relays on wall main(s)
Oven temperature Rises too fast.	* Check whether harness has been misconnected or have a short circuit.	* Replace or repair harness.
	* Measure resistance values of each heater are within a normal extent or not.	* Replace heater is in a abnormal state.
Keypad is not worked normally in partially or entirely.	* Make sure that keypad cable on LCD PCB is in normal state.	* Replace after confirming whether it has been loosen or disconnected.
	* Make sure connector on LCD PCB or PCB pattern.	* Replace or repair after confirming whether keypad cable has been loosen or Disconnected.
Oven lamp is not working.	* Check the oven lamp relay and connector .	* Replace or repair if harness has been loosen or disconnected. * Replace oven lamp relay or Resource relay. * Replace main PCB
	* Measure the resistance value of both ends of lamp terminal.	* Replace lamp if it has been disconnected. (120V / 40W)

5. Reference

SYMPTOM	DIAGNOSIS	REMEDY
	* Check whether Convection fan relay on Wall main PCB and connector is in normal.	* Replace or repair Relay. * Replace or repair connector.
Convection fan is not rotated.	* Make sure whether harness between Connector on Wall main PCB and connector on Wall main PCB has been connected normally.	* Replace or repair harness. * Replace or repair connector. * Replace Wall main PCB.
Pop Up display does not lifted.	* Make sure whether harness between Connector on LCD sub PCB and connector on display module has been connected normally.	* Replace or repair harness. * Replace or repair connector. * Replace Wall main PCB.
It has smell or smoke when oven has been started initially.	* This is in normal state.	* It has smell or smoke with burning dirt in oven or a foreign substance when oven has been working initially. * Ventilate after getting self cleaning mode to work.
LED display is a little bit dim partially or invisible entirely.	* LED display is inferior.	* Replace LED PCB.
There is not buzzer beep sound when keypad is being worked.	* Check the state of buzzer on LCD PCB and whether PCB pattern have a short circuit or has been open.	* Replace or repair LCD PCB. * Replace or repair speaker.
The oven door is locked.	* The circuit breaker has been tripped or there was a powerfailure while the oven door was locked	* Activate control lockout and then, unlock the control.

SAMSUNG

GSPN (GLOBAL SERVICE PARTNER NETWORK)

Area	Web Site
Europe, CIS, Mideast & Africa	gspn1.samsungcsportal.com
Asia	gspn2.samsungcsportal.com
North & Latin America	gspn3.samsungcsportal.com
China	china.samsungportal.com