SAMSUNG

GAS RANGES

MODELS AND

MODEL CODES: DOP30T940DS/**

CONTENTS

SERVICE Manual

GAS RANGES

SANSUNG!	 Precaution Specifications Disassembly and Reassembly Troubleshooting Wiring Diagram PCB Diagrams
SAMS UNG PROPRIETARY. DO	

Disclaimer:

This manual contains confidential and proprietary information of Samsung Electronics Co., Ltd. ("Samsung")

All text, graphics, user interfaces, visual interfaces, photographs, trademarks, and logos (collectively, "Content"), including but not limited to the design, structure, selection, coordination, "look and feel" and arrangement of such Content, contained in this manual is owned, controlled or licensed by or to Samsung, and is protected by trade dress, copyright, patent and trademark laws, and various other intellectual property rights and unfair competition laws.

No part of this manual or the Content may be copied, reproduced, republished, uploaded, posted, publicly displayed, encoded, translated, transmitted or distributed in any way (including "mirroring") to anyone, any entity, any other computer, server, Web site or other medium for publication or distribution or for any commercial purpose, without Samsung's express prior written consent.

Samsung reserves the right, at its sole discretion, to change, modify, add or remove portions of any part of this manual at any time. It is your responsibility to check the manual periodically for changes. Your use of the manual will mean that you accept and agree to this disclaimer. If you do not agree with any part of this disclaimer, please stop using this manual immediately.

Contents

1. Precaution	
1-1 Forward	
1-2 Safety Precautions	5
1-3 Important Safety Instructions	6
1-4 Model and Serial Number Label and Tech Sheet Locations	8
2. Soecifications	
2.1 New Appearance Design.	
2-1 New Appearance Design. 2-2 Oven Features.	
2-3 Control Panel - Oven	
2-4 Control Panel - Gas Cooktop.	
2-5 Table of Specifications	
2-6 Accessories	
3. Disassembly and Reassembly	17
3-1 BASIC STEP	18
3-1-1 (Step A) - COVER BACK	
3-1-2 (Step B) – ASSY CONTROL BOX	
3-1-3 (Step C) – ASSY FRAME COOKTOP	20
3-1-4 (Step D) - Oven Door	24
3-1-5 (Step E) - Side Panel	
3-1-6 (Step F) – ASSY COOKTOP BURNER	
3-1-7 (Step G) – ASSY DRAWER	29
3-2 COMPONENT REPLACEMENT STEP	30
3-2-1 MAIN PCB ASSEMBLY	30
3-2-2 ASSY DISPLAY MODULE	34
3-2-3 ASSY MODE S/W & ASSY TEMP S/W	
3-2-4 KNOB LED PCB	
3-2-5 ELECTRODE	38
3-2-6 BURNER CUP	40
3-2-7 GAS ORIFICE NOZZLE (Stack Burner)	42
3-2-8 GAS ORIFICE NOZZLE (Dual Burner)	43
3-2-9 VALVE COOKTOP & BYPASS ADJUSTMENT (Respond high altitude)	44
3-2-10 SWITCH IGNITION	46
3-2-11 ASSY MOTOR	47
3-2-12 ASSY DOOR LATCH	48
3-2-13 SWITCH-DOOR PLUNGER	49
3-2-14 ASSY LAMP	50
3-2-15 SENSOR-THERMISTER	
3-2-16 GASKET DOOR	52
3-2-17 HANDLE-DOOR, GLASS INNER	53
3-2-18 HEATER-BROIL	56
3-2-19 HEATER-BAKE	57
3-2-20 SUPPORT RACK LEFT/RIGHT	58

Contents

4. Troubleshooting	59
4-1 Failure Display Codes	59
4-2 Control parts	
4-3 Cooktop parts	
4-4 Oven parts	
5. Wiring Diagram5-1 Wiring Diagram	84
5-1 Wiring Diagram	84
6. PCB Diagrams	95
6-1 Main PCB	85
6-2 Sub PCB	
6-3 Display PCB	
6-4 PCB & Touch Keypad	22
6-5 DCR parts	٥٥٠٠٠٠٠٠
0-5 FCB parts	70
6-4 PCB & Touch Keypad 6-5 PCB parts	
E. S.	•
A Property of the second secon	
SAMSUNG PROPRIETARY. DV	

1-1 Forward

This SAMSUNG Service Manual, "Slide In Gas Ranges," provides the technician with information on the operation and service of the slide in self-cleaning gas ranges. It is to be used as a training service manual. For specific information on the model being serviced, refer to the user manual or tech sheet provided with the gas range.

1-2 Safety Precautions

- Repairs of the appliance should be carried out by a licensed technician only. Incorrect repairs may result in dangerous situations. If you need repairs, contact a SAMSUNG Service Center or your dealer.
- If the power cord is defective, it must be replaced by a licensed technician with a UL-listed range cord.
- If the gas supply is damaged or defective, it must be replaced by a licensed technician or gas supplier.
- Electrical leads and cables should not be allowed to touch the oven.
- Rating plate is located on the left side of the opening for the warming drawer or storage drawer.
- The gas and electrical supplies to the appliance should be turned off and/or disconnected when the range is being serviced or repaired.



WARNING

- To avoid risk of death or severe personal injury from electrical shock, disconnect power before working on/servicing the appliance.
- To avoid risk of death, severe personal injury, or property damage from fire or explosion, turn off the gas supply before working on/servicing the appliance. **IF YOU SMELL GAS:**
- 1. **DO NOT** light a match, candle, or cigarette.
- 2. **DO NOT** turn on any gas or electric appliances.
- 3. **DO NOT** touch any electrical switches.
- 4. **DO NOT** use any type of phone in the building.
- 5. Clear the room, building, or area of all occupants.
- Immediately call the gas supplier from a phone outside of the building. Follow the gas supplier's instructions.
- 7. If you cannot reach the gas supplier, call the fire department.
- To avoid risk of death, severe personal injury, or property damage from fire or explosion, do not wear loose-fitting, or hanging garments near an open flame during operation and/or servicing the appliance.
- When the oven operates, the interior parts will be very hot.

SAMSUNG Electronics assumes no responsibility for any repairs made on our products by anyone other than authorized service technicians.

1-3 Important Safety Instructions

Read and follow all instructions before using or servicing the range to prevent death, personal injury, fire, explosion, and/or property damage. This guide does not cover every possible condition that may occur. For further assistance, contact a licensed technician or the manufacturer.

All electrical and gas equipment and their moving parts can be dangerous. Please read the important safety information on the appliance and in this manual. The information must be followed to minimize the risk of death, personal injury, and/or property damage.



This is the safety alert symbol. It alerts you of potential hazards that can kill or injure you or others. The following safety messages explain the potential hazards:



DANGER

Hazardous situation that will result in death and/ or serious personal injury.



WARNING

Hazardous situation that could result in death, serious personal injury, and/or property damage.



CAUTION

Hazardous situation that may result in moderate personal injury, and/or property damage.

- Be sure your appliance is properly installed and grounded by a licensed technician.
- Do not repair or replace any part of the appliance unless specifically recommended in the manual. All other servicing should be referred to a licensed technician.
- Always disconnect power to the appliance before servicing by turning off the circuit breaker or removing the fuse.
- Always turn off the main gas supply to this appliance before servicing by closing the gas supply valve to this appliance.
- Always check gas fittings and components for leaks before servicing the appliance. If a leak is detected, shut off the gas supply and notify a licensed technician and/or gas supplier.



WARNING



- INJURIES CAN OCCUR IF THE RANGE TIPS - INSTALL ANTI-TIP DEVICE PACKED WITH RANGE



FOLLOW ALL INSTALLATION INSTRUCTIONS

To reduce the risk of tipping the range, the range must be secured by a properly installed anti-tip device. To check if the bracket is installed properly:

- Warming drawer: Grasp the top rear edge of the range and carefully attempt to tilt it forward.
 Verify that the anti-tip device is engaged.
- Storage drawer: Remove drawer and verify leveling leg is inserted into and fully secured by the anti-tip device.

Refer to the installation manual for proper anti-tip bracket installation.

Do not step, lean, or sit on the doors of the range.
 This can cause the range to tip, resulting in burns or serious injuries.



WARNING

• DO NOT TOUCH SURFACE BURNERS, SURFACE BURNER GRATES, OVEN BURNERS, INTERIOR SURFACES OF OVEN, OR WARMING DRAWER HEATING ELEMENT – Burners, heating element, and surfaces may be hot even though they are dark in color. Interior surfaces of an oven become hot enough to cause burns. During and after use, do not touch or let clothing or other flammable materials contact burners, heating element, grates, or interior surfaces of oven until they have had sufficient time to cool. Other surfaces of the appliance may become hot enough to cause burns. Among these surfaces are oven vent openings and surfaces near these openings, oven doors, and windows of oven doors.



CAUTION

Do not store items of interest to children in cabinets above a range or on the backguard of a range – Children climbing on the range to reach items could be seriously injured.

- Do Not Leave Children Alone Children should not be left alone or unattended in the area where the appliance is in use. They should never be allowed to sit or stand on any part of the appliance.
- Never Use Your Appliance for Warming or Heating the Room.
- Storage in or on Appliance Flammable materials should not be stored in an oven or near surface units. Be sure all packing materials are removed from the appliance before operating it. Keep plastics, clothes, and paper away from parts of the appliance that may become hot.
- Wear Proper Apparel Loose-fitting or hanging garments should never be worn while using the appliance.
- Do Not Use Water on Grease Fires Turn off the oven to avoid spreading the flame. Smother the fire or flame by closing the door or using baking soda or a dry-chemical or foam-type extinguisher.
- Use Only Dry Pot Holders Moist or damp pot holders on hot surfaces may result in burns from steam. Do not let the pot holder touch hot heating elements. Do not use a towel or other bulky cloth.



WARNING

SURFACES

• DO NOT TOUCH SURFACE BURNERS OR AREAS NEAR BURNERS — Surface burners may still be hot after they have been turned off. Areas near surface burners may become hot enough to cause burns. During and after use, do not touch or let clothing or other flammable materials contact surface burners or areas near burners until they have had sufficient time to cool. Among these areas are the cooktop, surface burner grates, and surfaces close to the cooktop.



WARNING

To avoid risk of death or personal injury from electrical shock, make sure your range has been properly grounded and always disconnect it from the main power supply before any servicing.

SURFACE BURNERS

- Use Proper Pan Size This appliance is equipped with one or more surface burners of different sizes. Select utensils having flat bottoms large enough to cover the surface burner flames. The use of undersized utensils will expose a portion of the surface burner flames to direct contact and may result in ignition of clothing. Proper relationship of utensil to burner will also improve efficiency.
- Never Leave Surface Burners Unattended at High Heat Settings – Boilovers could ignite or extinguish the burner flames. Both conditions create an explosion and/or fire hazard.
- Protective Liners Do not use aluminum foil to line cooktop surface or oven bottoms, except as suggested in the manual. Improper installation of these liners may result in a risk of electric shock, fire, or burner damage.
- Glazed Cooking Utensils Only certain types of glass, glass/ceramic, ceramic, earthenware, or other glazed utensils are suitable for range-top service without breaking due to the sudden change in temperature.
- Utensil Handles Should Be Turned Inward and Not Extend Over Adjacent Surface Burners To reduce the risk of burns, ignition of flammable materials, and spillage due to unintentional contact with the utensil, the handle of a utensil should be positioned so that it is turned inward and does not extend over adjacent surface burners.
- Surface Burner Components The burners, burner caps, and burner cups should always be cleaned by hand. They are not dishwasher-safe. The orifices should always be checked for dirt and debris whenever the burner cups are cleaned.
- Be sure you know which control knob operates each surface burner. Make sure you turned on the correct surface burner.

COOKTOP COOKING SURFACES

- Clean Cooktop With Caution If a wet sponge or cloth is used to wipe spills on a hot cooking area, be careful to avoid a steam burn. Some cleaners can produce noxious fumes if applied to a hot surface.
- Clean the cooktop surface with a nonabrasive cleaner on painted metal surfaces.

VENTILATING HOODS:

- Clean Ventilating Hoods Frequently Grease should not be allowed to accumulate on hood or filter.
- When flaming foods under the hood, turn the fan on.

DEEP-FAT FRYERS:

• Use extreme caution when moving the grease kettle or disposing of hot grease.

SELF-CLEAN OVENS



CAUTION

- BEFORE CLEANING, REMOVE BROILER PAN, OVEN RACKS, AND UTENSILS.
- WIPE EXCESS SPILLS FROM OVEN INTERIOR.
- SEE USER INSTRUCTIONS.
- **Do Not Clean Door Gasket** The door gasket is essential for a good seal. Care should be taken not to rub, damage, or move the gasket.
- Do Not Use Oven Cleaners No commercial oven cleaner or oven liner protective coating of any kind should be used in or around any part of the oven.
- Never keep pet birds in the kitchen The health of birds is extremely sensitive to the fumes released during an oven self-clean cycle. Fumes may be harmful or fatal to birds. Move birds to a well-ventilated room.

- Important Instruction In the event the self-clean mode "F" code goes on or three long beeps sound, the oven is malfunctioning in the self-clean mode. Turn off or disconnect appliance from electrical and gas supplies and have the appliance serviced by a licensed technician.
- **Use Care When Opening Door** Let hot air or steam escape before you remove or replace food in the oven.
- Do Not Heat Unopened Food Containers Buildup of pressure may cause container to burst and result in injury.
- **Keep Oven Vent Ducts Unobstructed** The oven vent is located above the left-rear surface unit. This area could become hot during oven use. Never block this vent and never place plastic or heat-sensitive items near the vent.
- Placement of Oven Racks Always place oven racks in the desired location while the oven is cool. If a rack must be moved while the oven is hot, do not let the pot holder contact a hot oven burner or oven bottom.

1-4 Model and Serial Number Label and Tech Sheet Locations

These models have Model/Serial Number labels and Tech Sheets located as shown below.

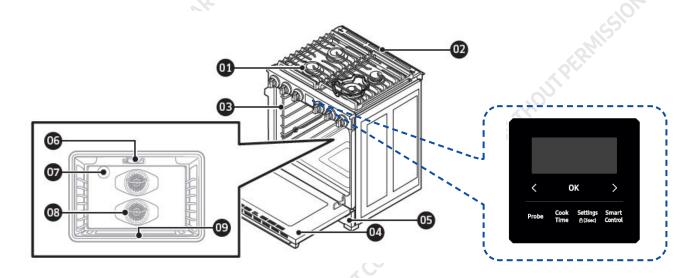




2-1 New Appearance Design

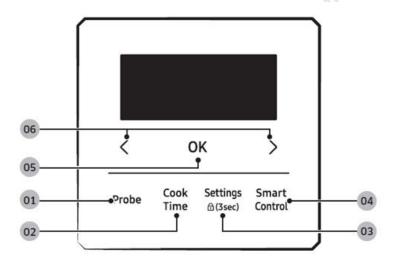
- Air Sous Vide
- Air Fry
- 23K BTU Dual Burner
- Dual Fan Convection
- All Dual Brass Burner

2-2 Oven Features



01	Surface burners	02	Oven Vents cover
03	Ladderracks	04	Removable oven door
05	Storage drawer	06	Broil oven burner
07	Oven light (1 locations)	08	Convection fan
09	Bake oven burner		

2-3 Control Panel - Oven



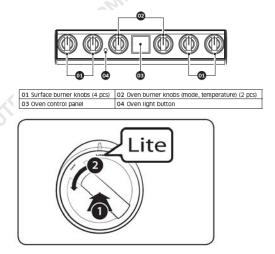
01	Probe	Activate the temperature probe mode.
02	Cook Time	Set the cooking time.
03	Settings	Display the user options available.
04	Smart Control	Set Smart control function ON/OFF .
05	ОК	Start a function or set the time.
06	ζ,>	Select a function or set time.

2-4 Control Panel - Gas Cooktop

LIGHTING A GAS SURFACE BURNER

Make sure all surface burners are positioned and assembled properly.

- **1.** Push in and turn the control knob to the LITE position. You will hear a "clicking" sound indicating the electronic ignition system is working properly.
- 2. After the surface burner lights, turn the control knob to adjust the power setting of the surface burner and turn off the electronic ignition system
- If the control knob is left in the Lite position, the electronic ignition system will continue to click and spark. It is not recommended to operate any surface burner in the Lite position, since all electronic igniters spark at the same time.



GAS SURFACE BURNERS AND CONTROL KNOBS

temperatures to meet your cooking needs.

Your gas range cooktop has five gas burners. All cooktop 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 9,500 BTU burner provides precise cooking performance for delicate foods and foods that require low heat for long cooking times. The 9,500 BTU burner allows the LO setting to be used for a very low simmer setting.

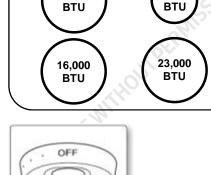
The 16,000 BTU round burners are general-purpose burners that can be used for most cooking. The HI to LO settings provide a wide range of cooking

The 23,000 BTU burner provides maximum output. These burners can also be used as general-purpose

burners, but they are designed to provide quick heat to large cookware.

The 23,000 BTU burner spreads out the heat with a larger circle of flames.

This provides better heat distribution for larger cookware (12 in [30.5 cm]) or larger pots and pans.



16,000

9,500

2-5 Table of Specifications

Model	DOP30T840GS/DA		
Cavity			
Cavity Color	Black		
C:	Whole Oven(Cu.ft)	6.3	
Size	Drawer (Cu.ft)	1.0	
Base			
	Knob Feature	Anodizing	
	Cooktop Frame	Black Porcelain Enamel	
Cooktop	Illuminated Knobs	Yes	
	Welcome Lighting (Ambient)	0	
	Re-ignition	0	
	Display Design	2.25" PMOLED	
	Control Type	Glass Touch	
Control	Display Color	White	
	Display Language	EN	
	Control Language	EN	
Classian	Self Clean	O (2/3/5 hrs)	
Cleaning	Green Clean	0 ,0	
Exterior Art Long Hairline		0 5	
Cooktop			
Grate	Edge-to-Edge		
10x	Number of Burners	4	
	TTL Power	64.5K BTU	
M	Left Front	16K (Dual Valve, Brass, Stack Burner)	
Ski	Left Rear	16K (Dual Valve, Brass, Stack Burner)	
Burner Spec	Right Front	23K, Double (Dual Valve- Brass)	
	Right Rear	9.5K (Dual Valve, Brass, Stack Burner)	
	Burner - Body	All Brass	
	Burner Cap	Brass (All burner) * black cap included (All burner)	
Oven			
	Bake Element	3000W	
	Broil Element	4200W	
	Convection Element	Dual Convection	
	Convection Heater	1300W	
	Interior Light (Watts / Location)	1 Incandescent 40W / Back	
	# of Rack Positions	7	

Model	DOP30T840GS/DA		
Oven - Cooking Mode			
_	Bake	150°F (65°C) - 550°F (285°C) 350°F (175°C)	
	Broil	High - Med - Low High	
	Convection Bake	150°F (65°C) - 550°F (285°C) 325°F (160°C)	
Basic Function (Knob)	Convection Roast	150°F (65°C) - 550°F (285°C) 325°F (160°C)	
	Air Fry	350°F (175°C) - 500°F (260°C) 425°F (220°C)	
	Stone Bake Mode	350°F (175°C) - 500°F (260°C) 425°F (220°C)	
	Keep Warm	175°F (80°C)	
	Dehydrate	150°F (65°C)	
Special Function	Proof	95°F (35°C)	
Special Function	Air Sous Vide	100°F (40°C) - 205°F (95°C) 150°F (65°C)	
Clean	57.	elf Clean / Green Clean	
Oven Control Feature			
	Cook Time	0	
00	Timer Off(3sec)	0	
PK	Delay Start	0	
ING	Temp Probe	0,00	
Touch Control	Clock	0	
Chi	Light On/Off	0	
2,	Child Lock(3sec)	0	
	IQ Control	0	
	Touch to wake-up	0	
	Temp. Adjustment (+/-35F)	0	
	Temp Unit (C/F)	F Default	
	Conv. Auto Conversion (Default:-25F)	X	
	12 hour Energy Saving	0	
Extra Features	Sound On/Off	0	
=/(Wi-Fi On/Off	0	
	Demo Mode	0	
	Sabbath	0	
	Time 12Hr/24Hr	0	
	Manual Language	EN/FR/ES	
Oven Door	, , , , , ,		
	Door Screen Print	Smog	
	Automatic Safety Door Lock	0	
	Removable Oven Door	0	
	Soft Close	0	

Model	DOP30T840GS/DA		
Drawer			
	Туре	Storage	
	Cavity Size(cu.ft)	1.0	
	Drawer Rail	0	
	Handle	None	
Connectivity			
	Wi-Fi	0	
	Voice Control(3rd Party)	O (Bixby/Alexa/Google)	
Accessories/Others			
	Ladder Rack	0	
	Number of Rack Position	7	
	Number of Racks	4	
	Gliding Rack	2	
	Wire Rack(Flat/Broil Rack)	1	
Rack	Air Fry tray	1	
	Meat Probe	1	
	Griddle(AI/Cast Iron)	X	
	Wok Grate	1 .5	
	Anti Tip Device	1 25/1	
	Rear Kit	0	
Smart Feature MRT			
	Wi-Fi Type	0	
Connection	SmartThings	0	
	bluetooth	0	
Power			
	Input Power	240V/60Hz	
	Circuit Breaker	40A	
Dimension			
	Net Size	(2915/16) x (361/4 ~ 37) x (2811/16) inch	
	(W x H x D) (inch/mm)	(760.4) x (920.75 ~ 939.8) x (728.66) mm	
	Shipping Size	(331/16) x (41 3/4) x (30 5/16) inch	
	(W x H x D) (inch/mm)	839.8 x 1060.45 x 769.9 mm	
	Cavity Size	25 x 221/3 x 19 3/8 (inch)	
	(W x H x D) (inch/mm)	635 x 568 x 492 (mm)	
	Net Weight		
	(lbs/kg)	238.1lbs / 108kg	
	Shipping Weight	264.5lbs / 120kg	
	(lbs/kg)	204.3tb5 / 120kg	
	Loading Qty - 40ft HC	84	
	Number of Rack Position	7	

2-6 Accessories

Item	Description	Code No.	Quantity
	ASSY GRATE SIDE-LEFT	DG94-05097A	1
	ASSY GRATE SIDE-RIGHT	DG94-05098A	1
	ASSY GRATE-WOK	DG94-01759A	1
	BRACKET COVER	DG61-01994B	1
	ASSY BRACKET SUB	DG94-00870B	RINIS TON
	COVER-LEG	DG63-00854A	2
	Rack-Flat	DG67-00282A	1
	Gliding Rack	DG94-00908C	2
	Air Fry Rack	DG63-00700A	1

Item	Description	Code No.	Quantity
	Filter	DG94-04671A	2
	Meat Probe	DG94-00674C	1
9 9	Surface burners and caps	DG98-02466A	1
	Brass burner caps	DG98-02448C	1

■ Tool for assembly and disassembly

Item	How to use	Pictures
Screw driver(+)	Use for assembly and disassembly of all screws	
Tubing Wrench	Use for assembly and disassembly of tubing to the cup	THE THE PART OF TH
7mm Vox Driver	Use for assembly and disassembly of injector nozzles. [cooktop/Broil/Bake burner]	8 1000
9mm Vox Driver	Use for assembly and disassembly of injector nozzles. [Convection Fan]	8

3-1 BASIC STEP

3-1-1 (Step A) - COVER BACK



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

0/2		, Q ^v
Parts	Explanation Photo	Explanation
COVER BACK	CoverBack	 Turn off the electrical supply going to the range. Pull the range away from the wall so that you can access the rear panel. Remove 2 screws from Cover Back. Lift up Cover Back to unlock hooks and separate Cover Back

3-1-2 (Step B) – ASSY CONTROL BOX



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
ASSY CONTROL BOX		 Remove 6 Knobs from the Assy Control Box. Remove 2 screws next to the each 4 valve shafts (Total 8 pcs) Open the Door and Remove 3 screws from the bottom of Assy Control Box. Remove 3 screws from the top of Assy Control Box. Lift the Assy Control Box slightly to separate from the range. (Assy Wire Main is still connected to the Assy Control Box) Disconnect 2 wire connectors. Remove the Assy Control Box from the range.

3-1-3 (Step C) – ASSY FRAME COOKTOP



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

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



CAUTION

Check the parts code of the knob and/or Switch Ignition in case of replacement.

Parts	Explanation Photo	Explanation
	GoverAir Electrode	EMITHOUTPERMISSIE
		Turn off the electrical supply going to the range.
ASSY FRAME COOKTOP		2. Shut off the valve in the gas supply line to the range.
COOKIOP		3. Lift off 2 Assy Grates
		4. Lift off 5 burner caps & 4 heads from the burner cup and mid-heads.
		III PERMI
	BurnerHead	THOU
		EMI,
		alistik
	BurnerCap	0,

Parts	Explanation Photo	Explanation
ASSY FRAME COOKTOP	Burner mid-head (Semi-Rapid) Burner mid-head (Rapid) Assy Frame Cooktop Burner cup (Dual)	5. Remove 6 screws from the Burner mid-head & 3 screws from Burner cup.6. Take off the electrode wire from the Burner mid-head
	Burner, mid-head Electrode wire	E.MITHOUT PERMISSION

Parts	Explanation Photo	Explanation
ASSY FRAME COOKTOP		7. Remove 4 screws from the Left/Right Chassis 8. Remove 3 screws from the Rear Chassis 9. Remove 3 screws from the Control Chassis 10. Remove 8 screws from the back of Cooktop and take off Assy Cover Air & Left/Right/Rear Chassis
		11. Remove 4 screws from Assy Frame cooktop 12. Take off the Assy Frame cooktop Make sure the electrodes are placed under the openings of Cooktop to prevent interference and damage during replacement.

3-1-4 (Step D) - Oven Door



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

The door is very heavy. Be careful when removing door. Do not lift door by the door handle.



CAUTION

Parts	Explanation Photo	Explanation
		To remove Oven Door:
		1. Fully open the door
		2. Pull the hinge locks downward (use pliers)
	E Pall	3. Firmly grasp both side of the door at the top.
OVEN DOOR		4. Close door to the door removal position, which is approximately 5 degrees. Lift door up and out until the hinge arm are clear of the slot.
		To replace door:
		1. Firmly grasp both sides of the door at the top
		position and insert hinges into slots
	2. Fully open the door. (If the door will not fully open, it means that the indentation is not seated correctly in the bottom edge of the slot. Push the hinge locks up to the locked position.) 3. Close the oven door.	

3-1-5 (Step E) - Side Panel



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



CAUTION

Parts	Explanation Photo	Explanation
Side Panel	Left and Right is symmetric A A BACK FRONT BACK	 Follow the Step A, B and C. Remove 4 screws from top side of Side Panel. Remove 2 screws from left and right side of Side Panel. Remove 6 screws from back side of Side Panel. Pull forward the Side Panel from the range

3-1-6 (Step F) – ASSY COOKTOP BURNER



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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

Parts	Explanation Photo	Explanation
Assy Cooktop Burner		1. Follow the Step A, B and C. 2. Unplug Electrode wire from Module spark 3. Disconnect 1 flexible tube.

Parts	Explanation Photo	Explanation
Assy Cooktop Burner	Holder Tube	4. Release wire from Holder Tube 5. Take off Holder Tube .
	Assy Cooktop Burner	6. Remove the Assy Cooktop Burner

3-1-7 (Step G) - ASSY DRAWER



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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

Parts	Explanation Photo	Explanation
ASSY DRAWER	Right Side 2	1. Open the ASSY DRAWER 2. Raise the plastic(right side) and drop the plastic(Left side) 3. Pull out the ASSY DARWER

3-2 COMPONENT REPLACEMENT STEP

3-2-1 MAIN PCB ASSEMBLY



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
MAIN PCB ASSEMBLY	SGREW-TAPPING MAIN PBA	 Follow the step A. Disconnect 8 wire connectors from the Main PCB. Remove 2 screw of PCB assembly and replace the PCB.

PCB-SUB



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
Parts PCB-SUB	Explanation Photo	1. Follow the Step B. 2. Remove 2 screw and COVER PCB-SUB. 3. Disconnect 6 wire connector from the PCB. 4. Remove 4 screw and HOLDE PCB-SUB. 5. Remove 1 screw and Replace the PCB-SUB (Fixed with 1 hooks)

PCB-Bluetooth



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
PCB-Bluetooth		 Follow the Step B. Remove 2 screw and COVER PCB-SUB. Disconnect 6 wire connector from the PCB. Remove 4 screw and HOLDE PCB-SUB. Replace the PCB-Bluetooth (Fixed with 1 hooks)

PCB-WiFi



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
PCB-WiFi		 Follow the Step B. Remove 1 screw and HOLDER PCB-WiFi. Replace the PCB-Bluetooth (Fixed with 1 hooks)

3-2-2 ASSY DISPLAY MODULE



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
Parts ASSY DISPLAY	Explanation Photo	1. Follow the Step B. 2. Remove 2 screw and COVER PCB-SUB. 3. Disconnect 6 wire connector from the PCB. 4. Remove 4 screw and HOLDE PCB-SUB. 5. Disconnect 1 wire connector from the ASSY
		6. Remove 4 screw and ASSY DISPLAY MODULE. 7. Replace ASSY DISPLAY MODULE.

3-2-3 ASSY MODE S/W & ASSY TEMP S/W



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts Explanation Photo Explanation	
ASSY MODE S/W & ASSY TEMP S/W ASSY TEMP S/W Mode S/W Mode S/W Mode S/W Mode S/W Temp S/W S/W A Push it to the right and pull it out 5. Replace the each S/W	5/W) m the Mode m the Temp

3-2-4 KNOB LED PCB



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
KNOB LED PCB	2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	 Pull the knob out each valve. Remove 2 screw from each HOLDER. Disconnect 1 wire connector form KNOB LED SUB. Remove HOLDER LED as Hook Bending. Replace KNOB LED-SUB

3-2-5 ELECTRODE



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

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



CAUTION

If replacing more than one burner cup, do not mix up the gas orifices. Incorrectly sized orifices could result in personal injury, fire, and/or poor cooking results.

Parts	Explanation Photo	Explanation
	[Stack Burner] Electrode Gas Orifice Burner Cup	1. Follow the Step A and C.
ELECTRODE	Tube Electrode	2-1) (Stack burner) Disconnect wire connectors from the terminal on the spark module. 2-2) (Dual burner) Carefully rotate electrode holder and pull it out from the bottom of the electrodes on the burner cups. Lift and slide the electrode wire out of the slot on the burner cup.
	Spark module	E DERMISSION

3-2-6 BURNER CUP



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

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



CAUTION

If replacing more than one burner cup, do not mix up the gas orifices. Incorrectly sized orifices could result in personal injury, fire, and/or poor cooking results.

Parts	Explanation Photo	Explanation
BURNER CUP	[Single : Rapid type] Screw Screw Screw Screw Screw Tube Screw Double Double Burner Cup	 Follow the Step A and C. Using a tubing wrench on the gas line fitting and a channel lock wrench on the burner cup base, firmly hold the cup base in place while disconnecting the gas line. (Single type only) Remove 2 screws for each burner cup. The burner cup can be removed. Replace it. The new burner cup must be replaced with the same size as the one removed. After replacement, You must check gas leakage.

3-2-7 GAS ORIFICE NOZZLE (Stack Burner)



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

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



CAUTION

If replacing more than one burner cup, do not mix up the gas orifices. Incorrectly sized orifices could result in personal injury, fire, and/or poor cooking results.

Parts	Explanation Photo	Explanation
GAS ORIFICE NOZZLE (Stack Burner)	ZEA ZEA Description Continue Con	 Lift off the cooktop burner caps and the cooktop burner heads from the cooktop burner manifold cups. Using a 9/32-inch socket wrench or 7mm nut driver, remove the burner orifice from the bottom of each burner manifold cup. Install a new gas orifice to the burner cup.

3-2-8 GAS ORIFICE NOZZLE (Dual Burner)



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

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



CAUTION

If replacing more than one burner cup, do not mix up the gas orifices. Incorrectly sized orifices could result in personal injury, fire, and/or poor cooking results.

Parts	Explanation Photo	Explanation
GAS ORIFICE NOZZLE (Dual Burner)	BurnerCover	 Remove screw on burner cover using screw driver. Remove burner cover. Remove 2 orifices using 9/32-inch socket wrench. Install new two gas orifice to the burner cup and burner cover. Remove 1 orifice on middle of burner using 9/32-inch socket wrench. Install a new gas orifice to the burner cup

3-2-9 VALVE COOKTOP & BYPASS ADJUSTMENT (Respond high altitude)



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

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



CAUTION

If replacing more than one burner cup, do not mix up the gas orifices. Incorrectly sized orifices could result in personal injury, fire, and/or poor cooking results.

■ Response method for high altitude each model

NX9900BD	DOP30T940DS/DA	Adjust the bypass
	DOP30T840GS/DA	Adjust the bypass

**High Altitude Conversion Kit : DG96-01146A

Parts	Explanation Photo	Explanation
	3 (Adaptor)	1. Follow the Step B and C,F.
		Place a finger behind each side of the switch ignition and pull it straight out to release it from the control shaft.
		3. Using a tubing wrench and a channel lock wrench, disconnect the gas lines from the valve cooktop. Do not bend or crimp gas lines during Removal.
VALVE COOKTOP		4. Remove the Valve Cooktop followed by removal of 3 screw on the valve cooktop.
	4/(Screw)	5. Replace the Valve Cooktop and Check gas leakage.
	(A) Scientification of the control o	• When assembling or disassembling the valve, the screw torque should be adjusted to 1.5N.m.
VALVE ADJUSTMENT	Inner flame bypass screw	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
	Outer flame	2. 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 bypass screw	3. Recheck the low flame setting.
		4. Repeat step1 ~ 3 to check and adjust the low flame settings on the remaining surface.

3-2-10 SWITCH IGNITION



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

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



CAUTION

If replacing more than one burner cup, do not mix up the gas orifices. Incorrectly sized orifices could result in personal injury, fire, and/or poor cooking results.

Parts	Explanation Photo	Explanation
SWITCH IGNITION	Connectors of Switch Ignition 4 2 2 2	1. Follow the Step B
		2. Place a finger behind each side of the switch ignition and pull it straight out to release it from the control shaft. Repeat this step to all switches.
		3. Disconnect the wires from the connectors.
		4. Bend the Clamp for disconnecting the Wire of Switch Ignition.
	TAR	5. Replace the Switch Ignition.

3-2-11 ASSY MOTOR



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

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



CAUTION

Check the parts code of the knob and/or Switch Ignition in case of replacement.

Parts	Explanation Photo	Explanation
ASSY MOTOR	Connector	 Follow the Step A and C. Remove 4 screws from Cover back main and Cover adiabatic-top. Disconnect 1 terminal housing from the Assy Motor and Main Wire.

3-2-12 ASSY DOOR LATCH



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

3-2-13 SWITCH-DOOR PLUNGER



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
		1. Turn off the electrical supply going to the range.
		2. Shut off the gas shut-off valve in the gas supply line to the range.
		3. Open the oven door.
SWITCH-DOOR PLUNGER	Switch Door Plunger	4. Carefully pull out the switch door plunger switch from the upper left corner of the cavity front. Gently grasp the plunger with pliers and work from side to side while pulling. Pull out far enough to expose the wires.
	of Calif	5. Note the location and mark the wires; then disconnect the wire to the switch door plunger.
		6. Replace with the switch-door plunger, re- connect the wires in their original positions, and reinstall switch in the oven frame.

3-2-14 ASSY LAMP



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
ASSY LAMP	Remove Replace Glass bulb cover Bulb	 Open the oven door and remove the racks from inside the oven. There is 1 Lamps which located in Left-Upper side. Turn oven lamp cover counterclockwise to loosen and remove the cover. Remove the oven light bulb. After replacement, Install Oven light cover by turning clockwise.

3-2-15 SENSOR-THERMISTER



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation	
SENSOR- THERMISTER	SENSOR-THERMOSTER SCREW-TAPPING UPPER-SENSOR THERMOSTER CONNECTOR	 Follow the Step A. Open the oven door and remove the racks from inside the oven. Disconnect connector of the sensor thermistor to the rear of the range. The oven sensor thermistor is in the upper right-hand corner of the oven cavity. Remove 2 screws and carefully pull the sensor wire leads until the wire connectors appear. Reverse the order to install the oven temperature sensor. If you can't access the wire connectors from inside the oven, remove the rear cover panel. Mark and disconnect the two wires going to the oven sensor thermistor. 	

3-2-16 GASKET DOOR



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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



CAUTION

Parts	Explanation Photo	Explanation
		1. Open the oven door to its fully down position.
		Pull the ends of the gasket out of the liner holes.
		3. Pull the oven door gasket clips out of the holes until all of the clips are removed.
ASSY LAMP	WORD!	4. When the service is complete, Insert gasket clips in each mounting hole. Push the ends of gasket in end holes in the bottom of the front oven frame.
		5. Close the oven door.
		REASSEMBLY NOTE
	PROPALIFIE TO THE PROPERTY OF	When you install the new gasket, make sure that all of the clips are seated in their liner holes, and that the ends of the gasket are pushed fully into their holes. Use the pointed end of a pencil to push the gasket ends into the holes.

3-2-17 HANDLE-DOOR, GLASS INNER



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

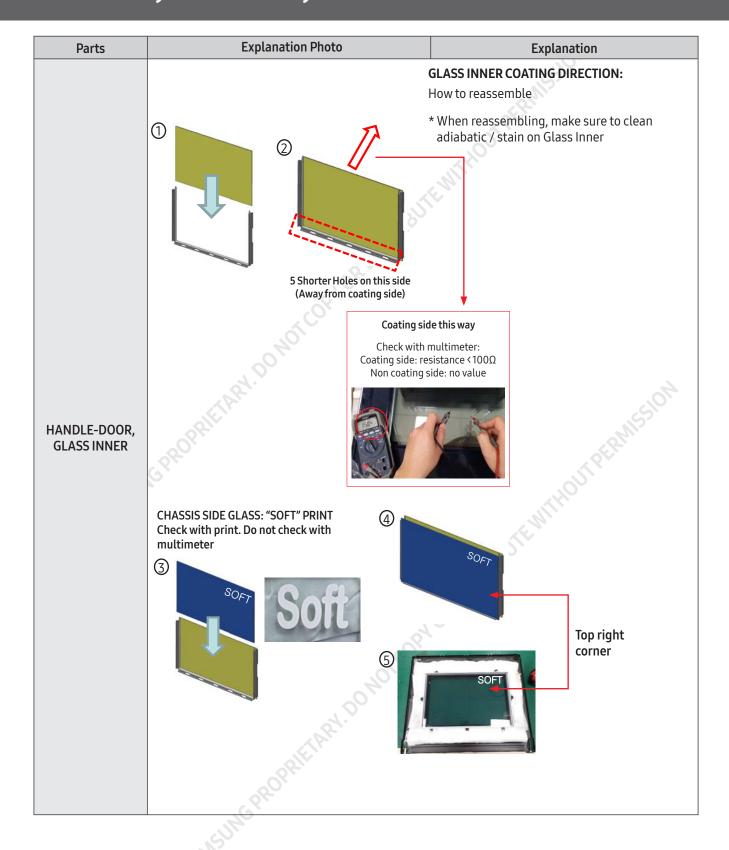
Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.



CAUTION

Parts	Explanation Photo	Explanation
HANDLE-DOOR, GLASS INNER		1. Remove Doorfrom the oven 2. Remove two handle screws (top) and 3 screw-tapping (bottom), then separate Assy Door Sub Put door down gently on padded surface as to not damage Chassis / Handle

Parts	Explanation Photo	Explanation
		AOUTPERMISSIO
	2	To remove Handle-Door
		1. Remove 2 screws to remove Handle- Door To remove Glass-Inner (Up) 1. Remove 6 screws to remove each Assy
HANDLE-DOOR, GLASS INNER	3	Hinge. 2. Remove 2 screws to remove Glass-Sub
		3. Remove 5 screws to remove Baffle Door
		4. Remove Glass Inner Sub
		5. Disassemble Glass Inner Sub by unfolding flanges, then remove Glass Inner
	(Glass-InnerSub) (S) (Flange 2 EA)	See next page for Glass Inner direction
	EIR	



3-2-18 HEATER-BROIL



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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

Parts	Explanation Photo	Explanation
ASSY POWER CORD		 Follow Step A. Open the oven door and remove the Accessories from inside the oven. Remove the 2 connectors from the broil element. Romove the 4 screws which securing the broil element to the cavity. Than remove the broil element.

3-2-19 HEATER-BAKE



WARNING

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.



WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

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

Parts	Explanation Photo	Explanation
BURNER BROIL	ASSY TERMIANL BLOCK WITH BRACKET	 Follow Step A. Remove the 2 screws from ASSY TERMINAL BLOCK and remove it with Terminal block bracket. Remove 2 connectors from Heater Cutting the COVER BACK MAIN Bracket using nipper. (14points) Remove the 1 screw from Heater and pull forward to remove. Assembly Cover with 6 screws after finish service.

3-2-20 SUPPORT RACK LEFT/RIGHT

Parts	Explanation Photo	Explanation
SUPPORT RACK LEFT/RIGHT	Holder, Rack 22 Points Bracket 22 Points	 Open the oven door and remove the racks from inside the oven. Push handle side to upward and take off from Holder Rack 2 Points. Move slightly Upward and Pull out Pin of Rack from bracket 2points. Left and Right side is symmetrical structure, Do following same process.

4-1 Failure Display Codes

There are two kinds of error codes. One denotes an oven temperature sensor error and the other denotes a safety error. Possible error codes during use can be checked before service.

1. Touch the 'Settings' key and Touch the 'Plus' and 'OK' to select 'Set time' menu.







2. Touch the 'Plus' and 'Minus' to set the time to 12:34.





3. Touch the 'OK' key to go to the home screen.



4. Push the 'Settings' and the 'Light' at the same time for 3 seconds. Error codes are displayed.





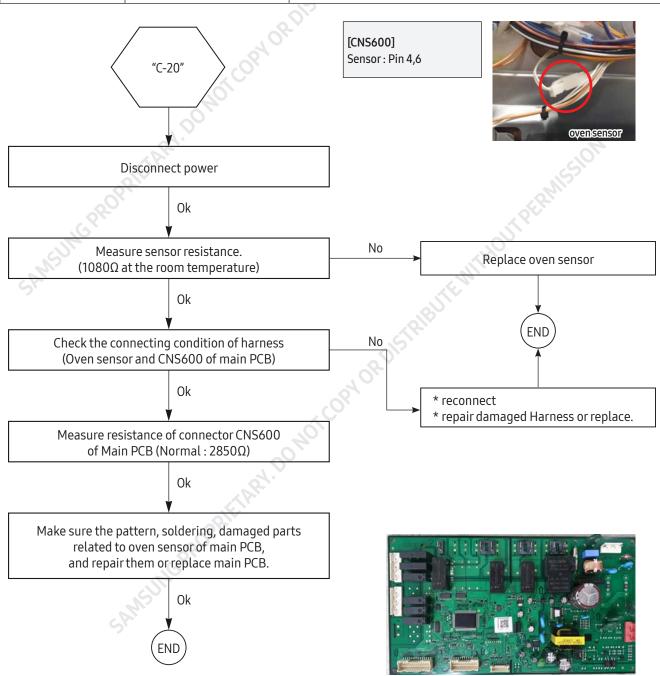
5. Touch the 'Plus' and 'Minus', to display the latest 5 error codes.



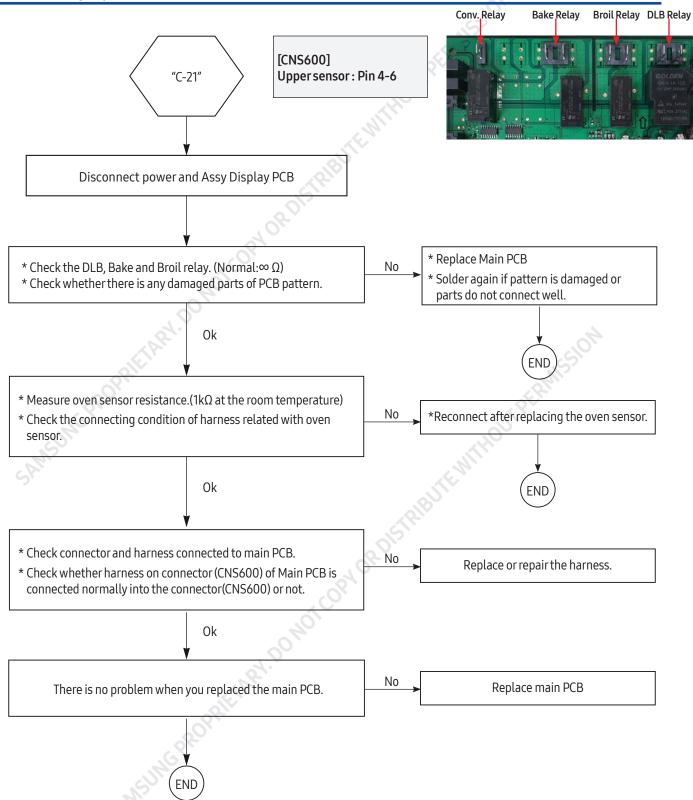


6. Turn the mode knob OFF to return to normal display mode.

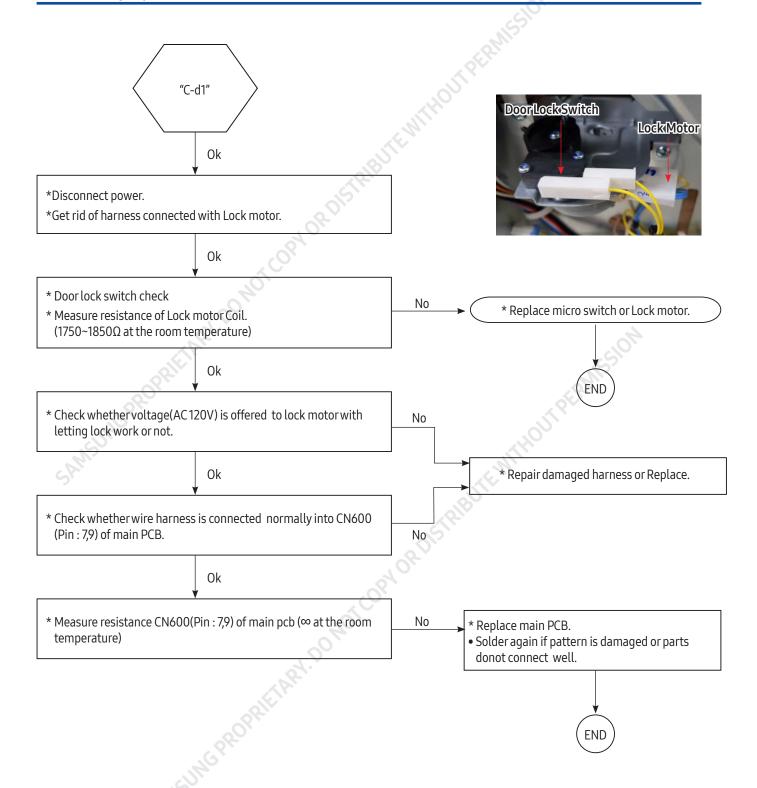
Information code	Meaning	SOLUTION
(over 2950Ω)Disconnect sensor harnessresistance :1080Ω at the resistance	 Disconnect power. Open the back cover. Disconnect sensor harness from control Measure sensor resistance :1080Ω at the room temperature If there are any problems, replace oven sensor. 	
C-20	Oven sensor shorted. (Under 930Ω)	 2. If there is not any problem with oven sensor, Please check whether there is a damaged terminal or wire harness. 3. Check resistance of oven sensor connector on main PCB (Normal:2850Ω



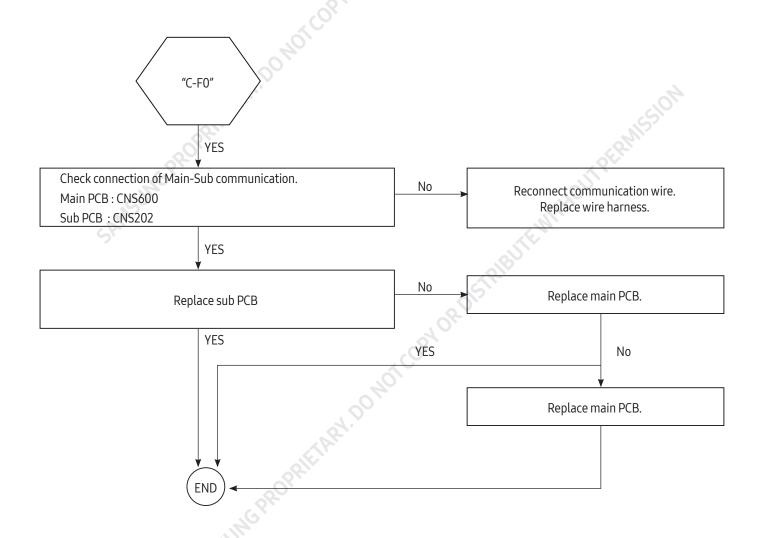
Information code	Meaning	SOLUTION
C-21	Oven heating over	 Disconnect power. Open the back cover. Disconnect sensor harness from control. Measure sensor resistance: 1kΩ at the room temperature → If there are any problems, replace oven sensor. Check the broil, bake and convection heater. Check the resistance of the each heater. Check whether DLB, Broil, Bake and Convection heater relay are working 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)



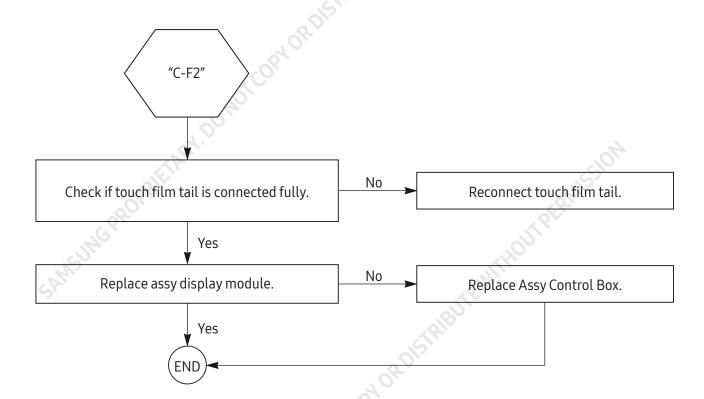
Information code	Meaning	SOLUTION
C-d0	Key Short	1. Clean the touch panel and make sure there is no water on/around them. 2. If the problem continues, replace sub PCB. * If key data 30sec over keeping, IC reset. (Touch model)
C-d1	Door locking information	1. Disconnect power. Open the back cover. Check whether harness has been connected with door lock switch and motor. 2. Confirm whether resistance value of door lock motor is normal. 3. With operating door lockout, measure a voltage of connector on harness which is linked with door lock motor. (Normal Voltage: AC 120V) 4. Check whether door locking switch is working.



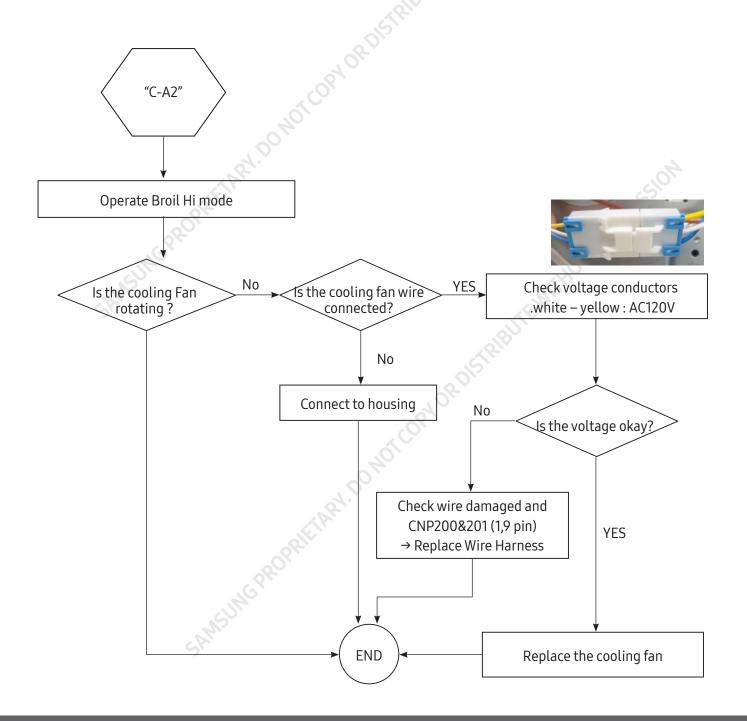
Information code	Meaning	SOLUTION
1. Main ↔ Sub module communication information C-F0 2. Sub ↔ LCD communication information	1. Check Wire Harness - Main ↔ Sub · Main : CNS600, Sub : CNS202	
		- Sub ↔ LCD · Sub : CNS200, LCD : CN103
	2. Replace Sub PCB	
	information	3. Replace Main PCB
		4. Replace Assy Display Module



Information code	Meaning	SOLUTION
		1. Check if touch film tail is connected fully.
C-F2	Main↔Touch communication information	2. Replace Assy display module.
		3. Replace Assy Control Box.



Information code	Meaning	SOLUTION	
C-A2	Ambient Temperature of Sub PCB very hot	1. To reset error, disconnect power or press"OFF" key	
		2. Operate the oven to Broil Mode to check cooling fan rotation.	
		3. If cooling fan is locked, replace the cooling Fan	



Error Trouble Shooting

SYMPTOM	DIAGNOSIS	REMEDY		
	* Measure an input voltage.	* check circuit breaker.		
	(240/120V or 208/120V) (L1 : BLK, N : WHT, L2 : RED)	* Make sure that the state of wire is connected with Terminal block.		
	* Measure voltage of connector on main PCB (CNP100 pin:3,5 / CNP101 pin:1,3) - L1~N:120V	* Replace of repair if harness has been loosen or disconnected.		
	* Measure resistance both ends of terminal on thermostat. (normal : 0 ohms)			
Oven not operating	* Check whether harness is connected	* Replace the thermostat.		
(No power, No	terminal on thermostat has been loosen or disconnected.	* Replace or repair harness.		
display)	* Measure voltage DC voletage on main PCB. - CE101 : DC 12V - CE104 : DC 5V	* Replace or repair after confirming the state of working of main PCB		
	* Make sure whether harness between connector on sub PCB and connector on main PCB has been loosen or disconnected.	• Replace or repair sub PCB or main.		
	* Make sure that the relay on main PCB is being worked normally			
Oven temperature is risen slowly	* Make sure whether harness is connected with Broil and Bake heater has been loosen or disconnected.	* Repair and replace harness.		
	* Make sure whether Broil and Bake 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	* Replace or repair relay.		
	on main PCB	* Replace or repair main PCB.		
Oven temperature is risen fast.	* Check whether temperature is risen over 400°F(204°C) within 10 minutes in a state of room temperature.	* Replace or repair it if relay on main PCB have a short circuit.		
	* 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 main PCB is in normal state.	* Replace after confirming whether it has been loosen or disconnected.		
	* Make sure connector on Sub PCB or Display touch Film tail.	* Replace or repair after confirming whether keypad cable has not been loosen or disconnted.		
	* Check whether sub PCB has not been damaged.	* Replace assembly of sub PCB		

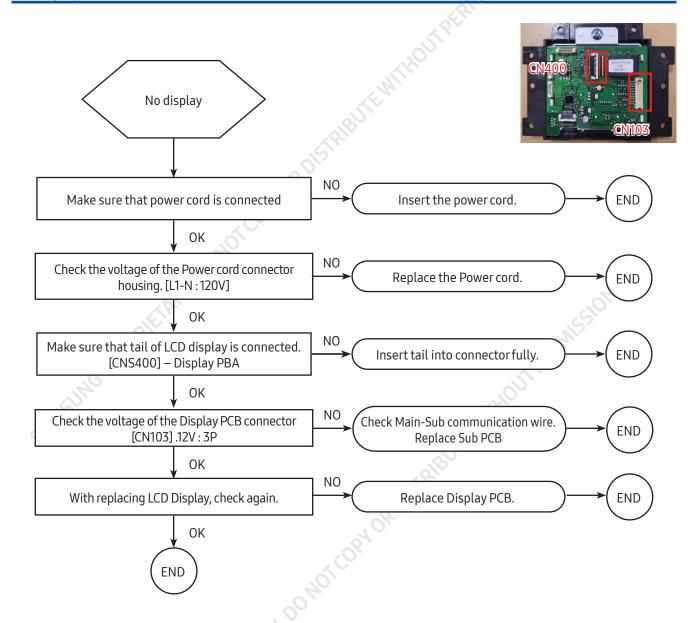
SYMPTOM	DIAGNOSIS	REMEDY	
Oven lamp is not	* Make sure the door lock feature is not turned on.	* Unlock the controls by pressing and holding the lock key for 3 or more seconds.	
	* Check for a burned out bulb.	* Replace with a 40 watt appliance bulb.	
	* Check the harness connections	* Repair or replace loose or disconnected harness.	
working.	(CNP200&201 Pin :3), and the oven lamp relay (RY214)	* Replace any malfunctioning relays.	
	* Measure the resistance across the light	* Replace the light ballast/socket.	
	ballast/socket terminals. (Normal : ∞)	* Replace the PCB.	
Convection fan is not rotated.	* Check the harness and harness connector (CNP200&201 Pin:11,13) on the PCB and at the terminals at each convection motor).	* Reconnect a loose or disconnected harness or replace a damaged harness.	
	* Check the display control harness and connectors (CNS200) on the PCB Touch control film tail on the PCB.	* Reconnect securely or replace a damaged membrane control harness.	
	* Check the convection fan relay	* Replace the malfunctioning relay.	
	(SSR200,201/RY211,212) and the connector (CNP200&201) on the PCB.	* Replace the PCB.	
	* Measure the resistance across the fan motor terminals.	* Replace the burned out fan motor.	
The oven smells and/or smokes		* The insulation around the oven will give off a slight odor until the adhesive has cured. This should go away after the first couple of oven uses.	
	* This is normal.	* The oven is designed to burn off dirt and/or foreign substances.	
		* If the oven is dirty, run a self-cleaning cycle. (See page 36 in the "User Manual".) A ventilation system should be used while the oven is self cleaning.	
The LCD display is dim or not visible	* Check the display control harness and connectors (CNS200) on the PCB Touch	* Reconnect securely or replace a damaged membrane control harness.	
	control film tail	* Replace the PCB assembly. (PCB and control touch panel.)	
The buzzer does not beep when a keypad is touched.	* Check to see if the Sabbath function has	* Press and hold the (Bake turning on) Setting+Lamp for at least 3 seconds.	
	been turned on. * The buzzer does not work on the PCB.	* The display will show the time of day when the function is turned off.	
		* Replace the PCB.	

SYMPTOM	DIAGNOSIS	REMEDY
None of the cooktop burners will light.	* There is no electrical power to the range.	* Plug in the power cord and/or reset the circuit breaker for the range.
	* The gas supply valve to the range is closed.	* Open the gas supply valve.
	* Check the terminals on the spark module for voltage.	* Replace the faulty spark module(Re-Ignition).
	* 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 spark module.	* Reconnect loose connection or replace damaged harness.
One cooktop burner	* Check the spark module.	* Disconnect the spark module terminal for the nonworking burner. If no voltage is measured, replace the spark module.
	* 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.		Clean and/or replace the surface burner orifice.
	* Check for a dirty surface burner orifice.	NOTE : 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.	* Faulty gas pressure regulator.	* Replace the gas pressure regulator.
		* Clean and/or replace the surface burner orifice.
One cooktop burner lights, but doesn't stay lit.	* Check for a dirty surface burner orifice.	NOTE : Replacement orifice should always be the same size as removed.
	* 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.
Cooktop burner flames are soft blue or have yellow tips.	* This is normal.	* Soft blue flames are normal flames for NG operation.
	THIS IS HUITHAL.	* Soft blue flames with yellow tips are normal flames for LP operation.

SYMPTOM	DIAGNOSIS			REMEDY	
Cooktop burner flames are mostly yellow.	* Check for proper sized orifices:				
		NG	LP		
	LF	0.68 / 1.60	0.50 / 1.04		
	LR	0.68 / 1.60	0.50 / 1.04		# Devil and a sign of a si
	RF	0.85 / 1.46 * 2	0.43 / 0.83 * 2		* Replace any wrong sized orifices
	RR	0.61 / 1.20	0.50 / 0.78		
	NOTE: High-altitude orifice kits are available.				
	* Check for crimped or cracked gas line between the pressure gas regulator and the surface burner control manifold.			d	* Replace the damaged gas line.
	* Faulty gas pressure regulator.			* Replace the gas pressure regulator.	

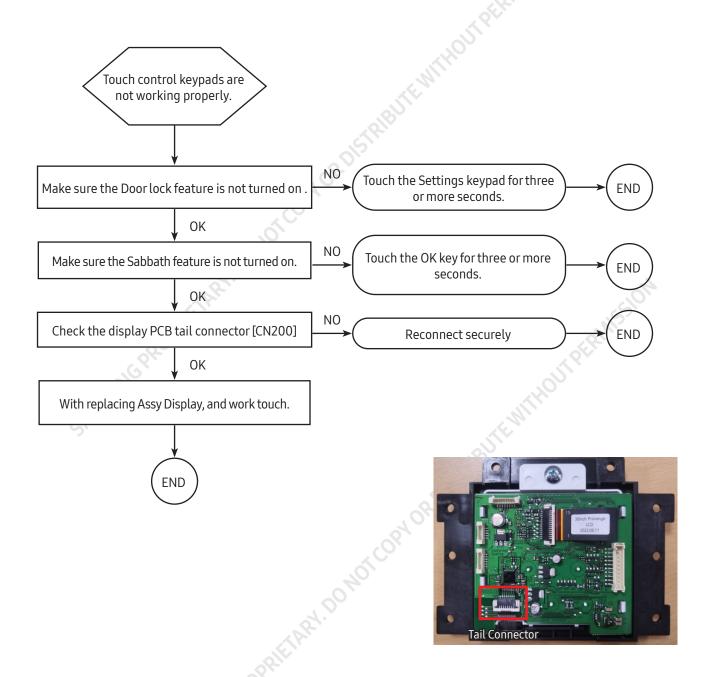
4-2 Control parts

No display



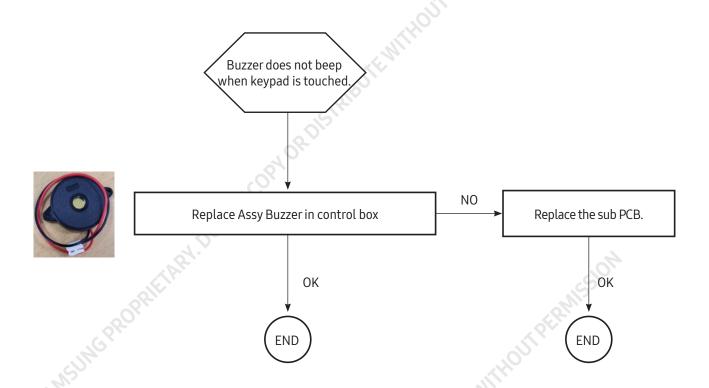
Control parts

Touch Keypad is not working properly



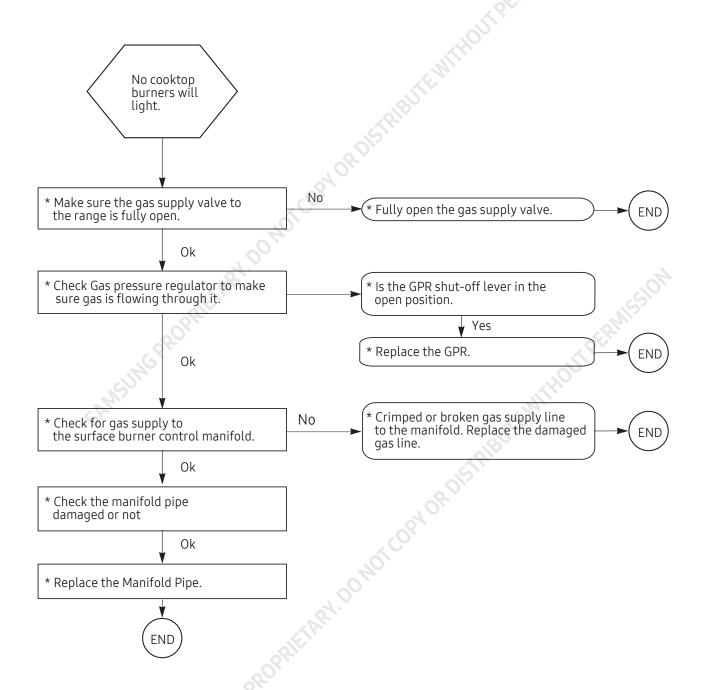
Control parts

Buzzer does not beep when keypad is touched



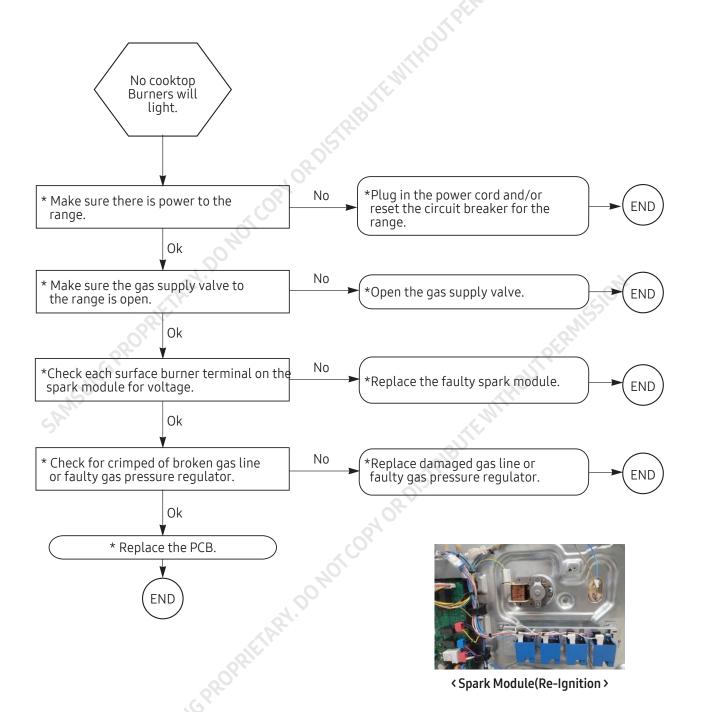
4-3 Cooktop parts

Cooktop burner not lighted [Gas malfunction]



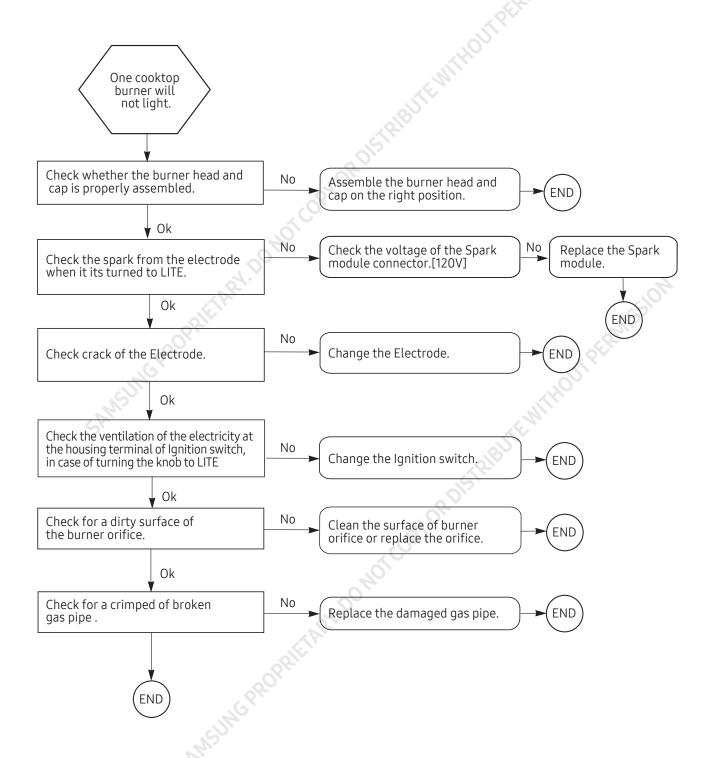
Cooktop parts

Cooktop burners not lighted [Electric malfunction]



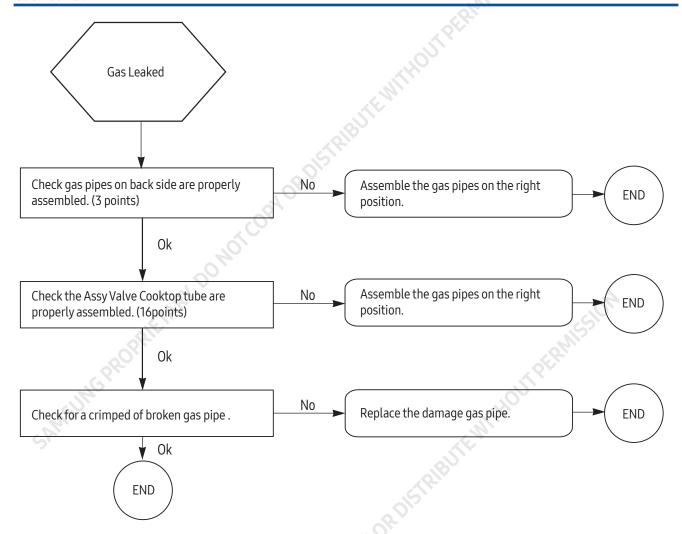
Cooktop parts

One cooktop burner not lighted [Electric malfunction]



Cooktop / Oven parts

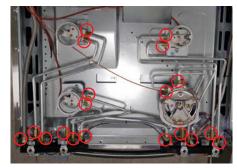
Gas Leaked



Back Side (3 Points)

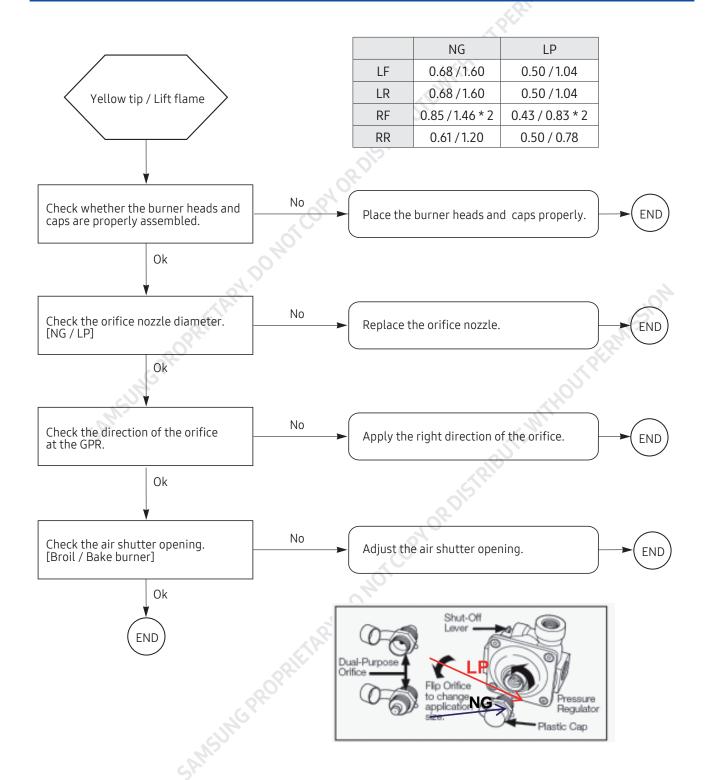


Assy Valve Cooktop (19 Points)



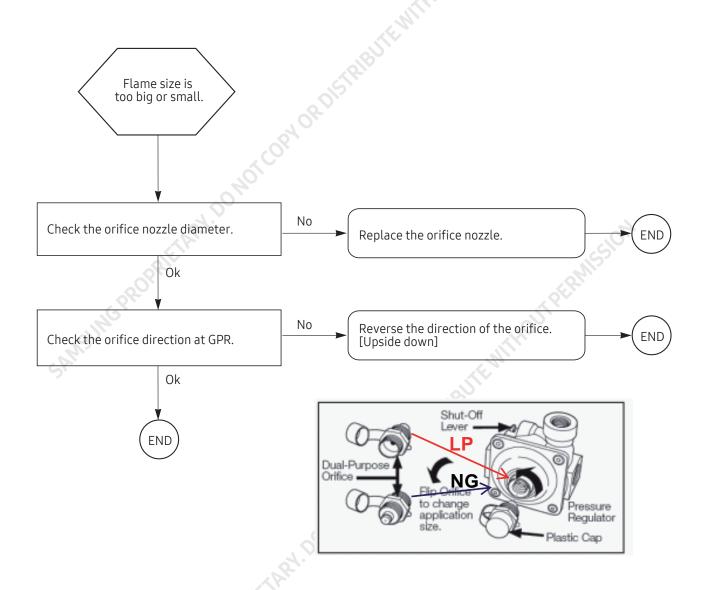
Cooktop / Oven parts

The flame looks abnormal. [Yellow tip / Lift flame]



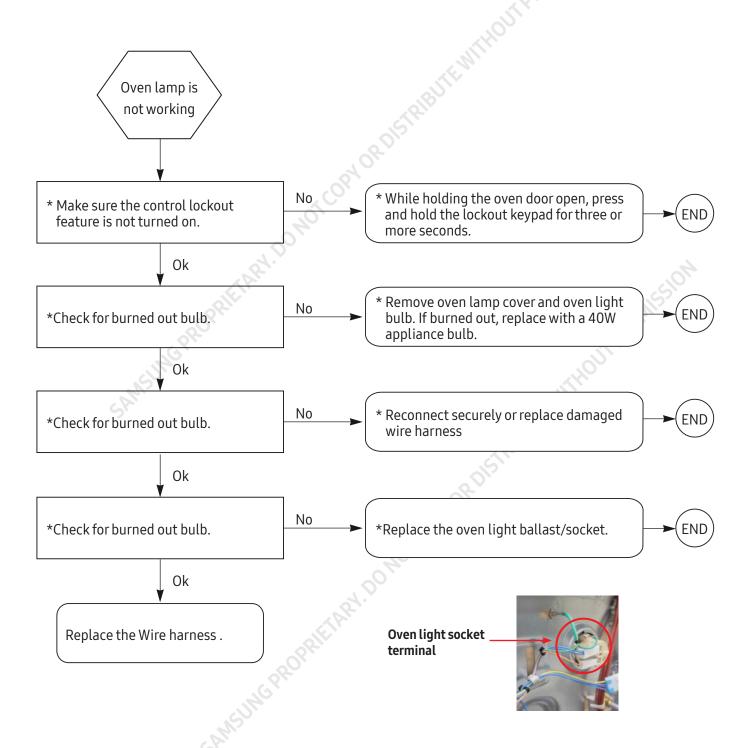
Cooktop / Oven parts

Flame size is too big or too small



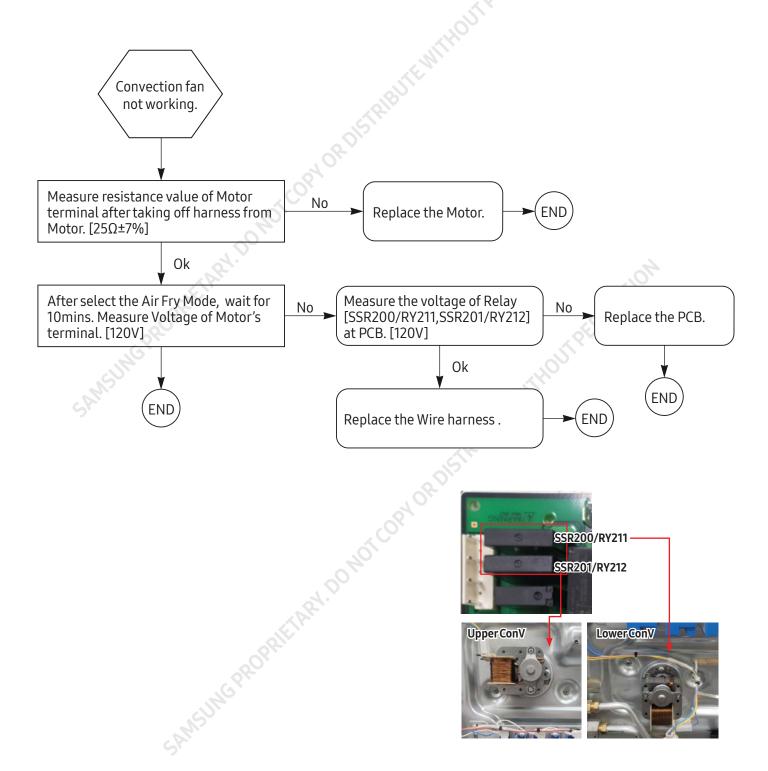
4-4 Oven parts

Oven lamp not working



Oven parts

Convection fan not working



Oven parts

Wi-Fi Connection is not working

Step.1

- -Check whether Wi-Fi function is set by "On". : Touch 'Smart Control' key 3 sec
- If the Wi-Fi is not able to connect, register the range to SmartThings app by referring to the following instructions.
- Make sure that the mobile phone is connected to 2.4GHz Wi-Fi network.
- Do not use the hidden AP in the wireless router settings during the device registration.
- Use a unique SSID consisting of the alphabetic letters and the numeric digits without any blank.
- For Wi-Fi security protocols, WPA2-PSK AES is recommended.



Step.2

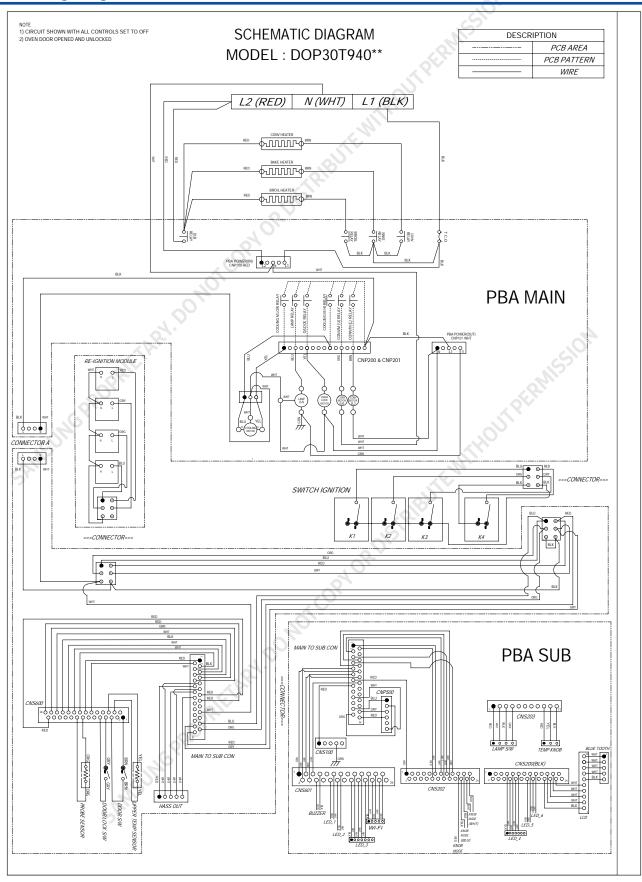
- Check communication between Wi-Fi module and Sub PCB.
- A) Press Cook time and Minus(<) at same time. (double key)
 Display will show Project Name, Main Version, Panel Version, Display Version, Touch Version and Network PCB version.
 - If network version is ordinarily showed, try to use SMART CONTROL feature again.
 - If network version is abnormal, Check to Wi-Fi module. (2-B)
- B) Check input voltage on Wi-Fi module. (12V)
 - If input Voltage have problem, Check to connector of Wire and Sub PCB. (CNS601)
 - → If connection of wire have problem, re-connect and try SMART CONTROL feature again.
 - If input Voltage is ok, replace Sub PCB



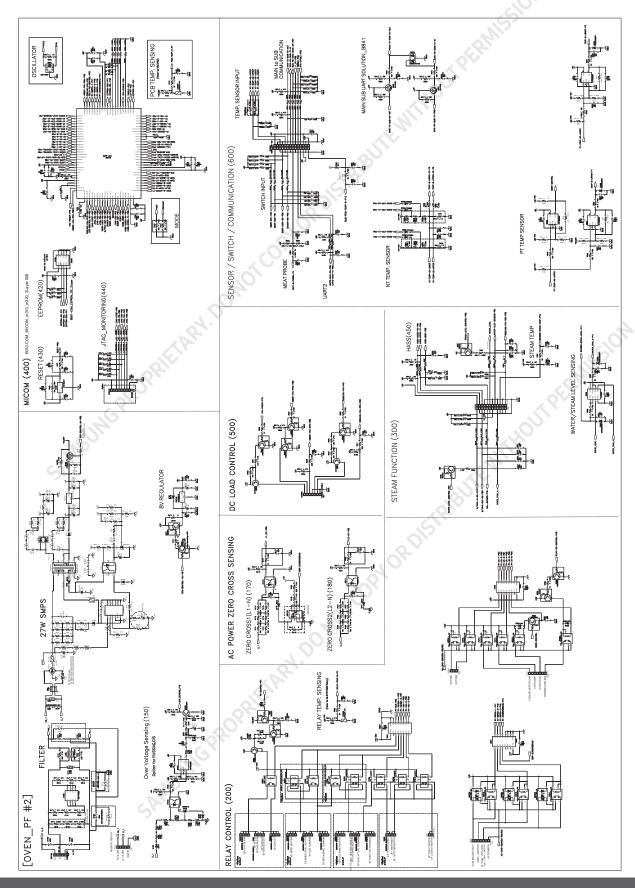
Pin 24 : GND Pin 25 : 12VDC

5. Wiring Diagram

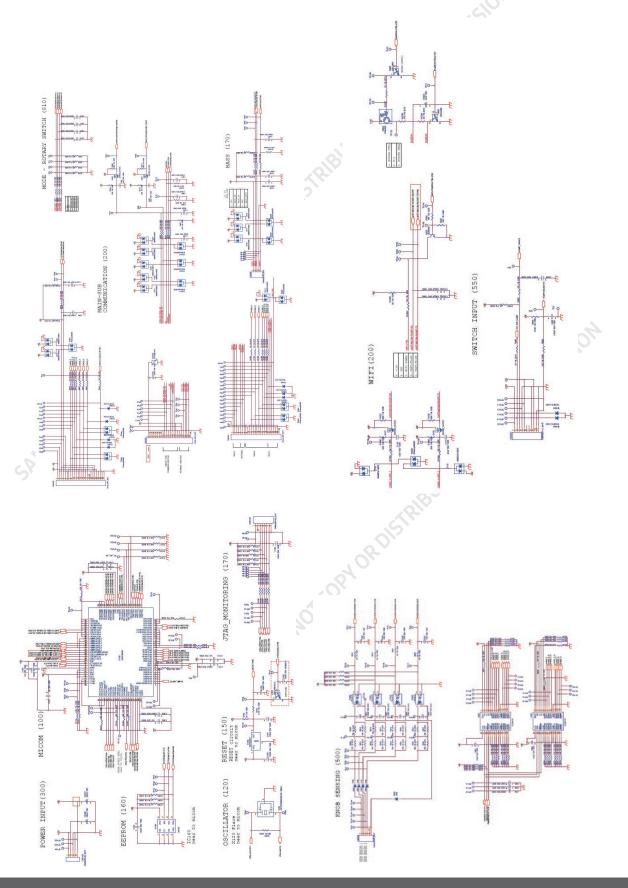
5-1 Wiring Diagram



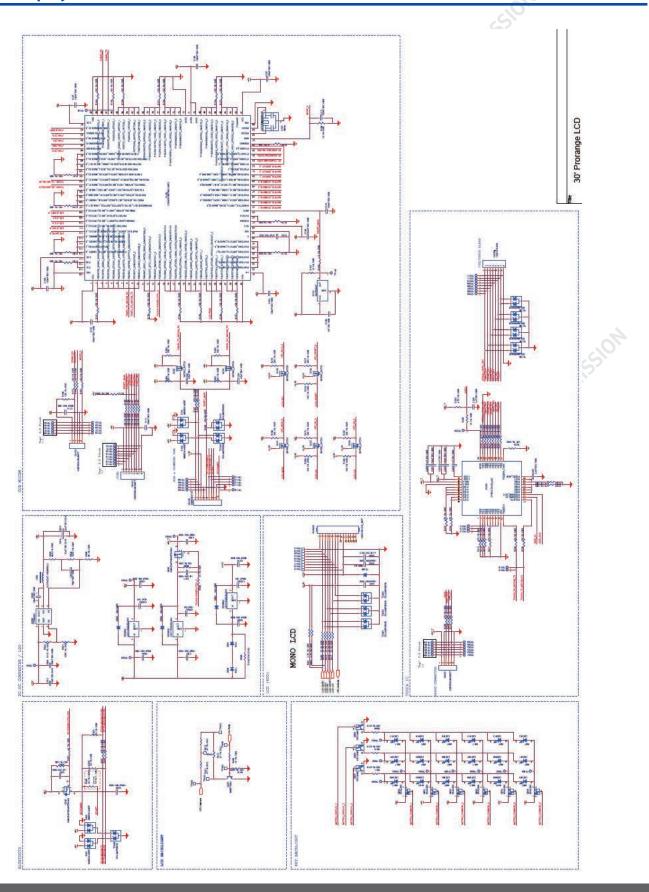
6-1 Main PCB



6-2 Sub PCB



6-3 Display PCB



6-4 PCB & Touch Keypad

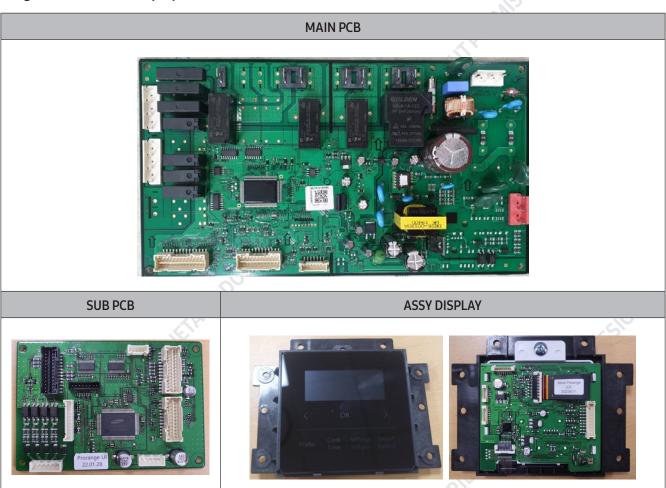
Explanation of Touch Keypad



Touch Keypad

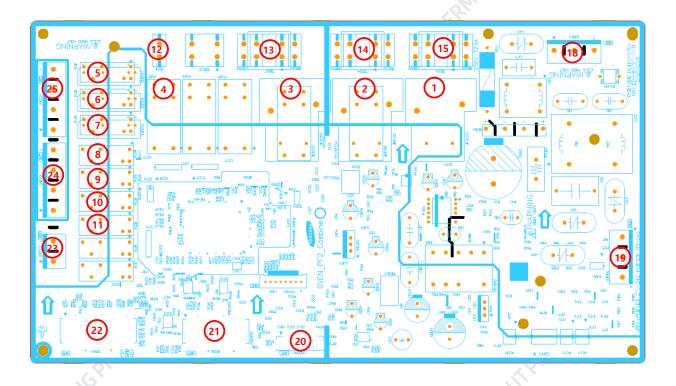
- 1. Touch control panel allows user to select time and temperature, set clock & option, Wi-Fi, probe on by touching the control panel in the front.
- 2. The marking on the front of touch glass acts as a guide for where the panel should be touched to select and program that function.
 - If touch control stops working, you can check connected state of touch film or replace the control panel.
- 3. Touch glass tail connects the Keypad to PCB.

* Figure of PCB and Display



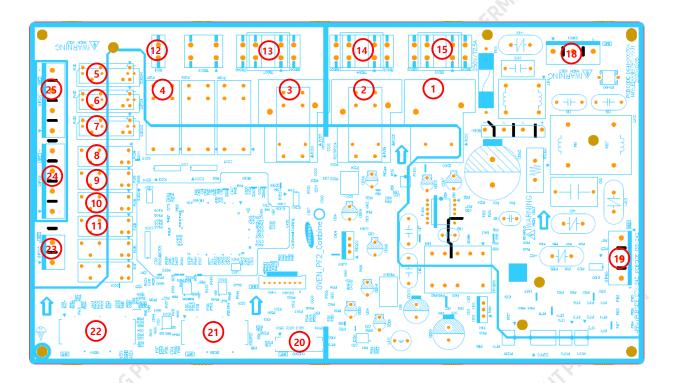
6-5 PCB parts

Explanation of DOP30T940 Main PCB parts



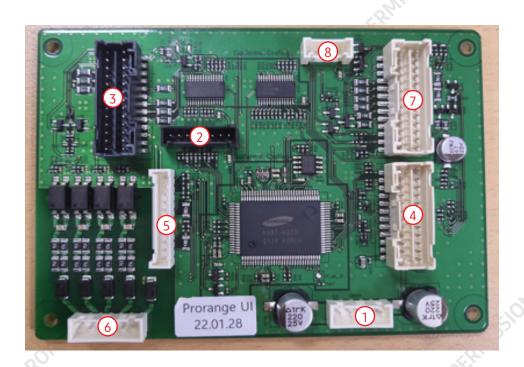
No.	Parts Number	Part Name	Function and Rule
1	RY200	DLB Relay	Circuit is designed to have broil relay or convection relay worked after DLB relay is being worked by Double line break. (It will not be problem with reversing the order in inserting Red)
2	RY201	Broil Relay	Broil relay(RY201), Bake relay(RY204), convection relay(RY207) will be on-off
3	RY204	Bake Relay	 working by mi-com signal after DLB relay is worked. Broil relay: It is relay for operating broil heater. It will not be problem with reversing the order in inserting Brown.) Bake relay: It is relay for operating bake heater. It will not be problem with reversing the order in inserting Blue.) Convection relay: It is relay for operating convection heater in Conv.Bake or Conv.Roast mode.
4	RY207	Convection Heater Relay	
5	SSR200	Convection Fan (Lower) Relay	This relay is connected with Lower convection fan motor.
6	SSR201	Convection Fan (Upper) Relay.	This relay is connected with Upper convection fan motor.
7	RY213	Cooling Fan Motor (Upper) Relay	This relay is connected with Upper cooling fan motor.
8	RY209	Warming Center Relay	Deleted (Not used)
9	RY210	Door Lock Relay	This relay is connected with Door lock motor .
10	RY214	Oven-Lamp Relay	This relay is connected with Oven lamp.
11	RY215	Cooling Fan Motor (Lower)	This relay is connected with Lpper cooling fan motor.
12	TB211	Conv. Heater Terminal	This terminal is for connecting harness with Convection heater relay.

Explanation of DOP30T940 Main PCB parts



No.	Parts Number	Part Name	Function and Rule
13	TB207	Live Common Terminal Bake Heater Terminal	This terminal is for connecting with Bake heater(1,2) & AC Live Common(3,4).
14	TB204	Broil/Bake Common Terminal	This terminal is for connecting harness with Broil heater relay(1,2) & Broil/Bake relay(3,4).
15	TB201	DLB Terminal	This terminal is for connecting harness with DLB relay.
18	CNP101	Noise Filter Connector	This connector is for noise filter output.
19	CNP100	Power Connector	This connector is for supplying power to SMPS.
20	CNS500	DC Load Control Connector	Deleted (not used)
21	CNS300	HASS Connector	This connector is for HASS. (It is not to consumer.)
22	CNS600	Sensor/Switch/Communication	This connector is for MAIN to SUB Communication & to control sensor, switch.
23	CNP202	Relay Control	Deleted (not used)
24	CNP201	Relay Control	This connector is connected to wire harness with Cooling Motor(Lower), Oven Lamp, Door Lock, Warming Center relay.
25	CNP200	Relay Control	This connector is connected to wire harness with Cooling Motor(Upper), Conv. Motor (Upper), Conv. Motor (Lower) relay.

Explanation of DOP30T940 Sub PCB parts



No.	Parts Number	Part Name	Function and Rule
1	CNS100	Main-Sub Power Input connector	This connector is for sub PBA power input
2	CNS180	JTAG Connector	Not using (only for developer)
3	CNS200	Sub-Display Communication con- nector	This connector is for communication between Sub and Display PBA, and knob lighting
4	CNS202	Main-Sub Communication con- nector	This connector is for communication between Main and Sub PBA, rotary switch sensing.
5	CNS203	Lamp/Temp Knob Switch connector	This connector is for lamp and temp knob switch input.
6	CNP500	Knob-sensing connector	This connector is for knob-sensing.
7	CNS601	Buzzer, Wifi connector	This connector is for buzzer, knob lighting, wifi connecting.
8	CNS602	MICOM Download Connector	This connector is for Micom S/W downloading

Explanation of DOP30T940 Sub PCB parts



No.	Parts Number	Part Name	Function and Rule
1	CN101	JTAG Connector	Not using (only for developer)
2	CN102	MICOM Download Connector	This connector is for Micom S/W downloading
3	CN103	Sub-Display Comm/Bluetooth Connector	This connector is for Sub/Display communication and bluetooth.
4	CN200	Touch Film Connector	This connector is for Touch-Film.
5	CN201	Touch Download Connector	This connector is for downloading program for touch IC. (only for developer)
6	CNS400	LCD Connector	This connector is for LCD.

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