SAMSUNG

SLIDE IN RANGE

BASIC: NE58H9970WS
MODEL: NE58*9560W*
MODEL CODE: NE58N9560WS/AC

SERVICE Manual

SLIDE IN RANGE

CONTENTS

Refer to the service manual in the GSPN(see rear cover) for the more information.

• Contents

1. Precaution

1-1 Forward

This SAMSUNG Service Manual, " 30" Slide In Self-Cleaning Electric Range," provides the technician with information on the operation and service of the Slide In Self-Cleaning Electric Range. It is to be used as a training Service Manual. For specific information on the model being serviced, refer to the "Owner's Manual" or "Tech Sheet" provided with the electric 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 qualified service agent with a UL listed range cord.
- Electrical leads and cables should not be allowed to touch the oven.
- Rating plate is located on the left side of storage drawer.
- The power supply of the appliance should be turned off when it is being repaired.

⚠ WARNING

- To avoid risk of severe personal injury or death, disconnect power before working/servicing on appliance to avoid electrical shock.
- 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 your oven to prevent the risk of fire, electric shock, injury to person, or damage when using the range. This guide doesn't cover all possible conditions that may occur.
For further assistance contact your service agent or manufacturer.

WARNING

This symbol will help alert you to hazards or unsafe practices which could cause serious bodily harm or death.

- Be sure your appliance is properly installed and grounded by a qualified 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 qualified technician.
- Always disconnect power to appliance before servicing by removing the fuse or switching off the circuit breaker

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 of the range, the range must be secured by properly installed anti-tip devices. 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 devices are engaged.
- Storage drawer : Remove drawer and verify leveling leg is inserted into and fully secured by the anti-tip devices.

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 HEATING ELEMENTS OR INTERIOR SURFACES OF OVEN** – Heating elements 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 heating elements 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 back guard 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 area where 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 oven to avoid spreading the flame. Smother the fire or flame by closing the door or use dry chemical, baking soda or foam- type extinguisher.
- Use Only Dry Potholders – Moist or damp potholders on hot surfaces may result in burns from steam. Do not let potholder touch hot heating elements. Do not use a towel or other bulky cloth.

WARNING

SURFACES

- **DO NOT TOUCH SURFACE UNITS OR AREAS NEAR UNITS** – Surface units may be hot even though they are dark in color. Areas near surface units may become hot enough to cause burns. During and after use, do not touch, or let clothing or other flammable materials contact surface units or areas near units until they have had sufficient time to cool. Among these areas are the cook-top and surfaces close to the cook-top.

WARNING

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

1. Precaution

SURFACE COOKING UNITS

- **Use Proper Pan Size** – This appliance is equipped with one or more surface units of different sizes. Select utensils having flat bottoms large enough to cover the surface unit heating element. The use of undersized utensils will expose a portion of the heating element to direct contact and may result in ignition of clothing. Proper relationship of utensil to burner will also improve efficiency.
- **Never Leave Surface Units Unattended at High Heat Settings** – Boil overs may cause smoking and greasy spillovers may ignite.
- **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 Units** – 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 units.
- Be sure you know which burner switch operates each surface unit. Make sure you turned on the correct surface unit.

SELF-CLEAN OVENS

- **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.
- **Clean in the self-clean cycle only parts listed in this manual**. Before self-cleaning the oven, remove the broiler pan and any utensils from 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 well-ventilated room.
- **Important Instruction** – In the event the self-clean mode "F" code goes on, or three long beeps sound, oven is malfunctioning in the self-clean mode. Turn off or disconnect appliance from power supply and have serviced by a qualified technician.

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.**

OVEN

- **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** – Build-up of pressure may cause container to burst and result in injury.
- **Keep Oven Vent Ducts Unobstructed** – the oven vent is located in the front above the oven door and under the cook top. 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 desired location while oven is cool. If rack must be moved while oven is hot, do not let potholder contact hot heating element in oven.
- **Do Not** allow aluminum foil or meat probe to contact heating elements.

GLASS/CERAMIC COOKING SURFACES

- **Do Not Cook on Broken Cook-Top** – If cook top should break, cleaning solutions and spillovers may penetrate the broken cook top and create a risk of electric shock. Contact a qualified technician immediately.
- **Clean Cook Top With Caution** – If a wet sponge or cloth is used to wipe spills on a hot cooking area, be careful to avoid steam burn. Some cleaners can produce noxious fumes if applied to a hot surface.

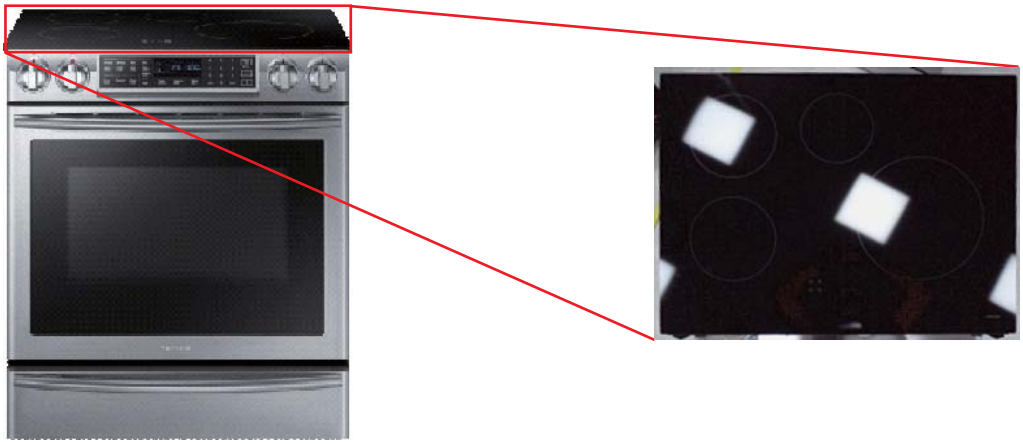
DEEP FAT FRYERS:

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

1. Precaution

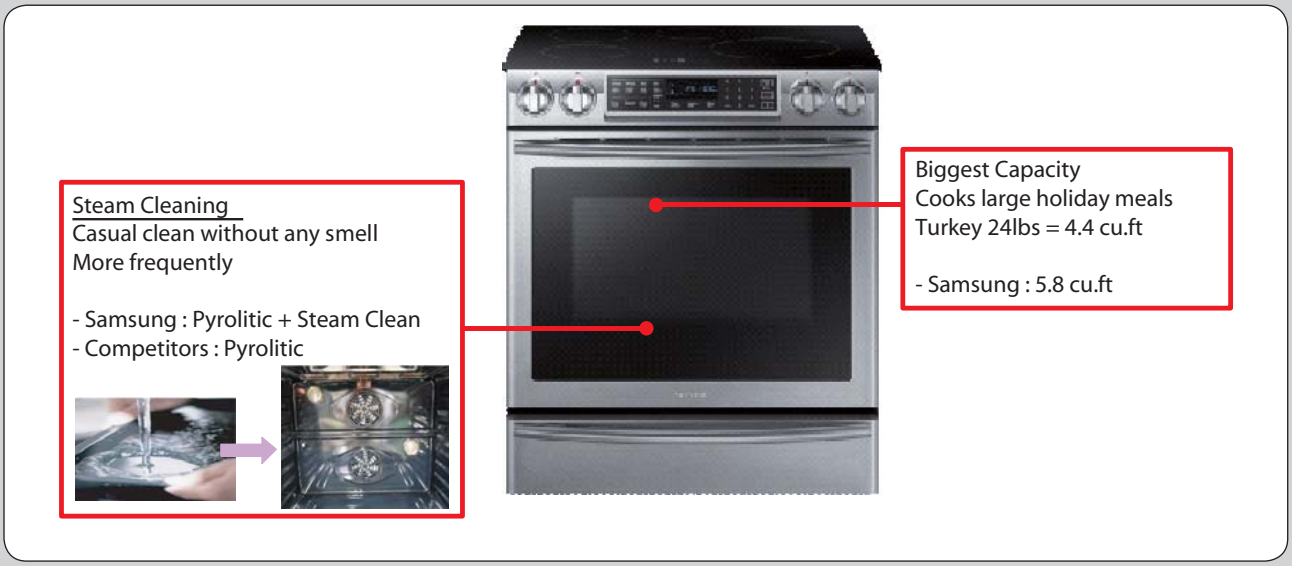
1-4 Model & Serial Number Label and Tech Sheet Locations

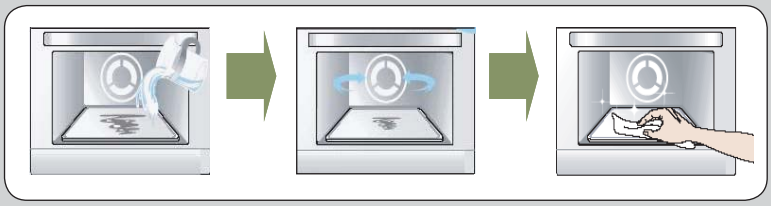
This Model / Serial Number label and Tech Sheet locations are shown below.



2. Specifications

2-1 Features

Features


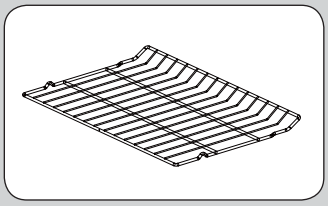
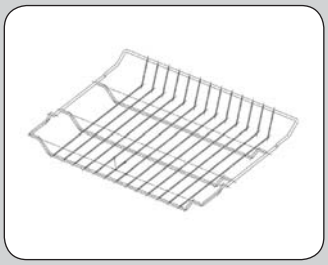
Features	
Item	Steam Clean
How to Use	- Pour the water 10oz (+detergent) - Push the steam cleaning button - After finished steam clean feature, the oven will be shut off automatically in half a minute. - Wipe it out with wet cloths.
Operating (Temperature)	About 158°F
Operating Time	20 Minutes
Used Heater	Bottom Bake Heater
Smell	No smell
Tool to clean	Wet cloths
	
Big Capacity - It benefits consumers to cook large family meals during the Thanksgiving & Christmas seasons (i.e Turkey 25 lbs = 4.4 cu ft, 20 lbs = 3.5 cu.ft)	

2. Specifications

2-2 Table of Specifications

Items		Model	
		BASIC MODEL	NEW MODEL
Model Name		NE58H9970WS	NE58*9560W*
Category		Convection	Convection
Overall	Width	30"	30"
	Installation type	Slide in	Slide in
	Color availability	STS	STS/BSS
Control	Oven	Touch	Touch
	Cooktop	Knob	Knob
	Display	VFD	LED
	Electronic clock	Yes	Yes
	Control lock capability	Yes	Yes
	Audible preheat signal	Yes	Yes
Cooktop	Meterial	Ceramic glass	Ceramic glass
	# of element	4	4
Power	LR	7" - 1,800/2,300W	7" - 1,800/2,300W
	RR	6" - 1,200/2,000W	6" - 1,200/2,000W
	CR	-	-
	LF	7" - 1,800/2,300W	7" - 1,800/2,300W
	RF	11" - 2,400/3,300W	11" - 2,400/3,300W
Oven	Capacity(cu.ft)	5.8	5.8
	Broil element	4,200 watts	4,200 watts
	Bake element	3,000 watts	3,000 watts
	Convection System	Yes	Yes
	Convection element	Yes(1,250W / 240V)	Yes(1,250W / 240V)
	# of Racks	3	3
	Interior oven light	120V, 40 watts	120V, 40 watts
	Cleaning	Pyrolytic & steam	Pyrolytic & steam
Drawer	Type	Warming drawer	Warming drawer
	Element	600W	600W
	Warming rack	No	No
Dimensions (inch)	Oven interior (W x H x D)	25 x 21 1/8 x 19	25 x 21 1/8 x 19
	Exterior - Width	31 (Cook top) : 787mm 29 4/5 (Body) : 757mm	31 (Cook top) : 787mm 29 4/5 (Body) : 757mm
	Exterior - Height	36 (cook top) : 913mm	36 (cook top) : 913mm
	Exterior - Depth	26 3/10 (Door) : 667.7mm 28 3/5 (with handle) : 727.7mm	26 3/10 (Door) : 667.7mm 28 3/5 (with handle) : 727.7mm
	Net weight : Kg	105Kg	100Kg
Power	Rating(240V 60Hz)	Range : 6,300 W Cooktop : 7,100 W	Range : 5,200 W Cooktop : 7,100 W

2-3 Accessory

Item	Description	Code No.	Q'ty
	RACK-FLAT	DG67-00108A	2
	RACK WIRE-BOTTOM	DG75-01056A	1

3. Disassembly and Reassembly

WARNING

ELECTRICAL SHOCK HAZARD

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

3-1 Removing the Assy-Frame Cooktop

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 burner cup	
7mm Vox Driver	Use for assembly and disassembly of injector nozzles. (Cooktop/Broil/Bake burner)	
9mm Vox Driver	Use for assembly and disassembly of injector nozzles. (Convection Fan)	

3-2 Removing Cover-Back Main Wire

PRECAUTION

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

Parts	Explanation Photo	Explanation
Cover-Back Main wire		1. Turn off the electrical supply going to the range. 2. Pull the range away from the wall so that you can access the rear panel. 3. Remove the 9 screws from the Cover-Back Main Wire and remove the panel.

* Reassembly of All part is the reverse order of disassembly.

3-3 Removing PCB-Main

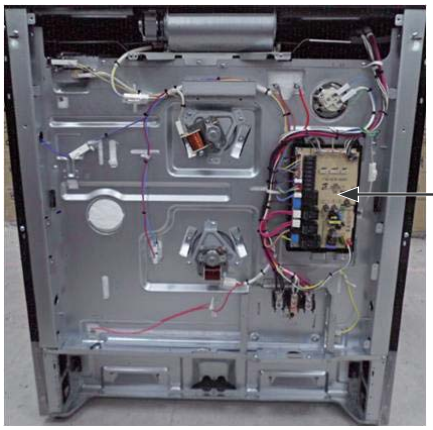
WARNING

ELECTRICAL SHOCK HAZARD

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

PRECAUTION

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

Parts	Explanation Photo	Explanation
PCB Main		**1.** Turn off the electrical supply going to the range. **2.** Pull the range away from the wall so that you can access the rear panel. **3.** Remove cover-back main wire. (See step 3 on page 10) **4.** There is 1 PCB (printed circuit board) on the rear of the range.

* Reassembly of All part is the reverse order of disassembly.

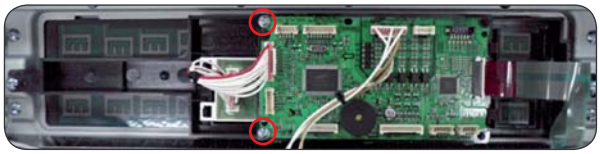
3-4 Removing Sub PCB

WARNING

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

PRECAUTION

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

Parts	Explanation Photo	Explanation
 Sub PCB		**1.** Turn off the electrical supply going to the range. **2.** Remove 4 screws under the control box. (See step 1,2 on page 13) **3.** Remove connector on SUB PCB.
		**4.** Remove 2 screws.

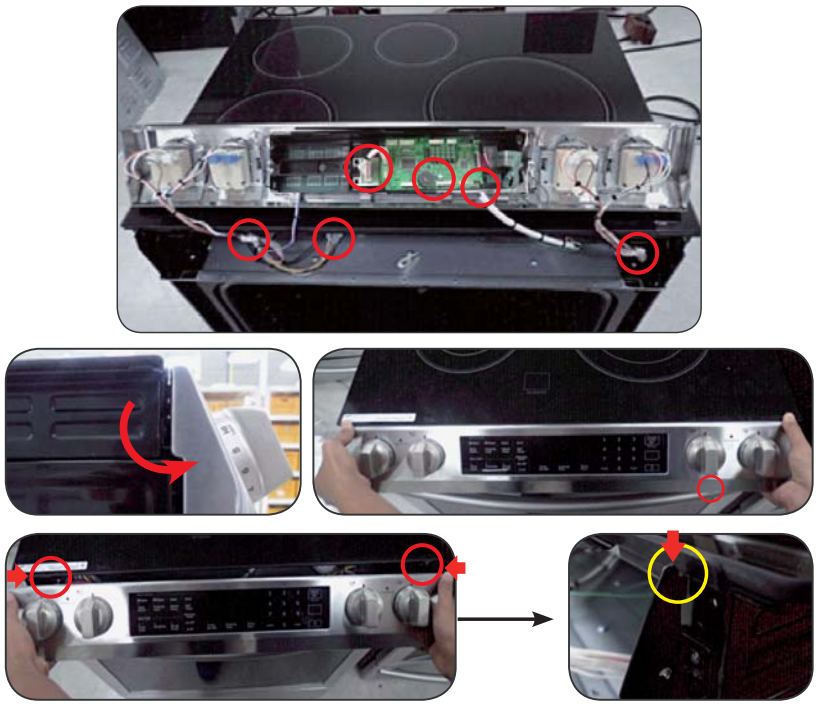
* Reassembly of All part is the reverse order of disassembly.

3-5 Removing Surface elements and The Ceramic Glass Cooktop

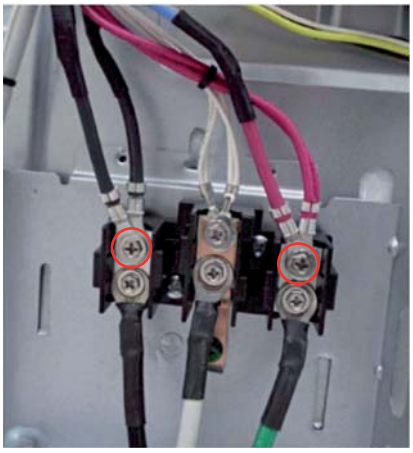
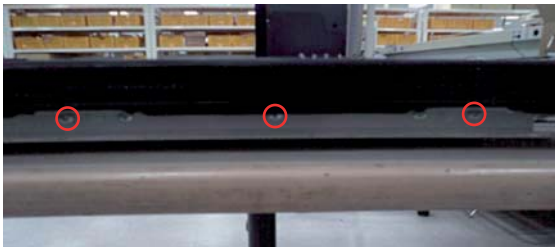
WARNING

ELECTRICAL SHOCK HAZARD

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

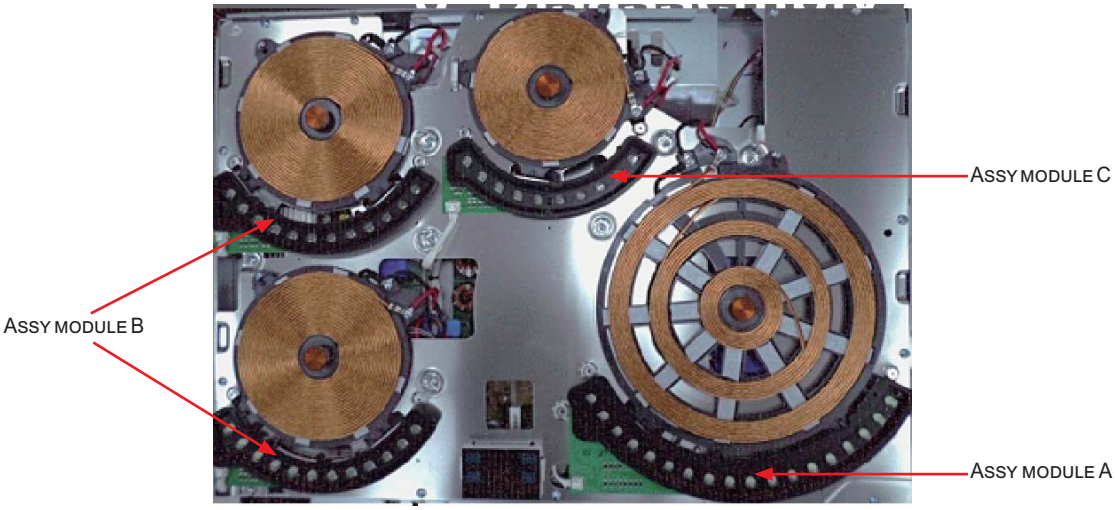
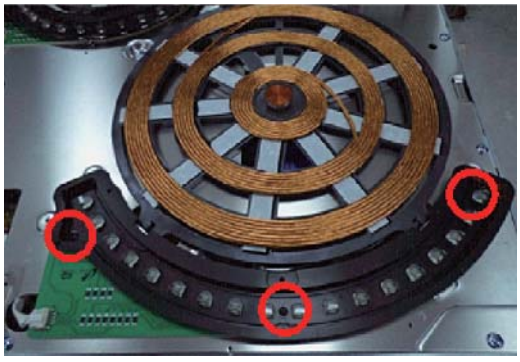
Parts	Explanation Photo	Explanation
 Surface elements and Ceramic Glass Cooktop		1. Unplug the cord or disconnect power 2. Open oven door and remove the 4 screws located at under the Control box.
		3. Disconnect 6 wire harness connectors. Then remove the 2 screws. 4. Be careful to locking, please lift in the direction of the arrow control box. 5. Remove 2 screws at the rear (Right, Left).
		6. Remove cover back main wire. (See step 1,2,3 on page 10)

3. Disassembly and Reassembly

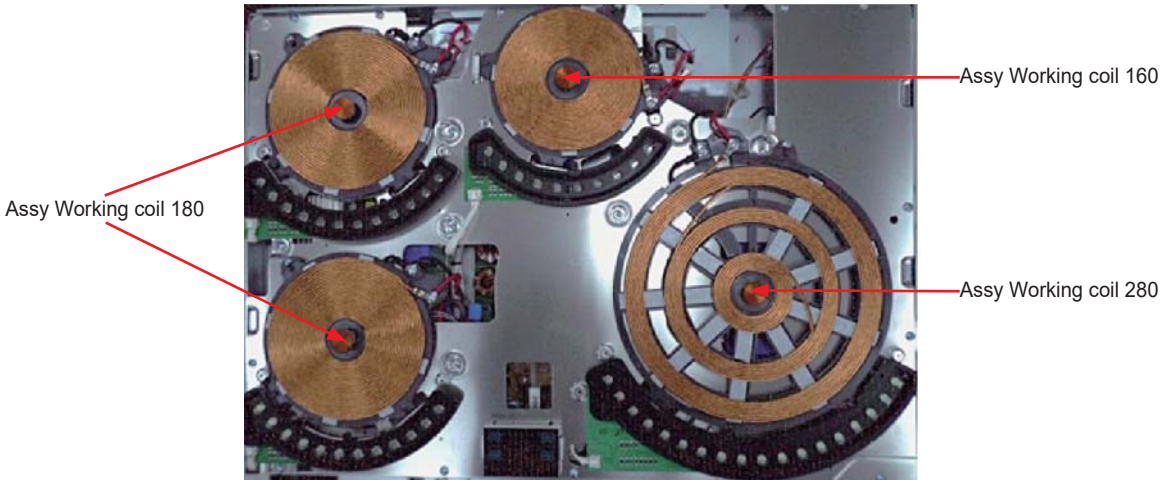
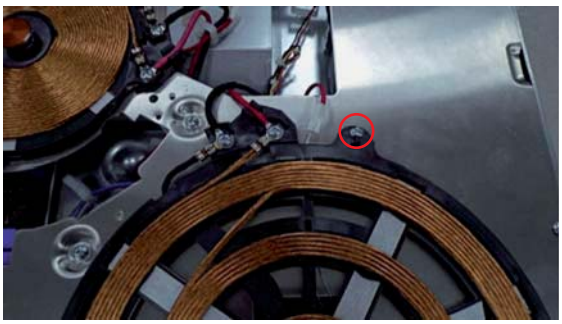
<table>
<tr><th>Parts</th><th>Explanation Photo</th><th>Explanation</th></tr>
<tr><td rowspan="2">Surface elements and Ceramic Glass Cooktop</td><td>  </td><td>7. Remove the cover main and cover back guard wire.
8. Slightly lift up
9. Remove 3 screw both side of Bracket mountain.</td></tr>
<tr><td>  </td><td>REASSEMBLY NOTE :
When you reinstall the element make surethat the wires are inserted into the correcttap then reinstall the bracket screw tosecure it to the cooktop.</td></tr>
<tr><td colspan="3">Attention
The Ceramic Glass may break if you use force especially on the edge.</td></tr>
</table>

* Reassembly of all parts are the reverse order of disassembly.

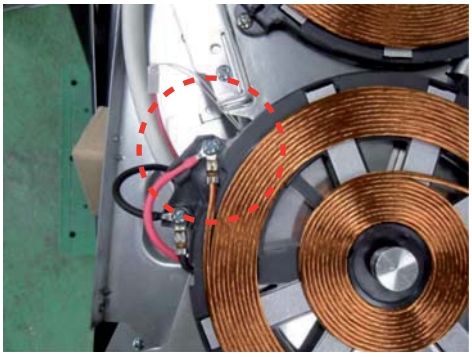
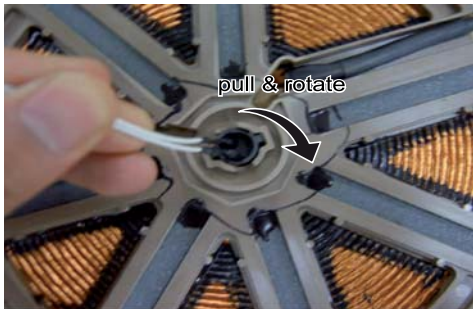
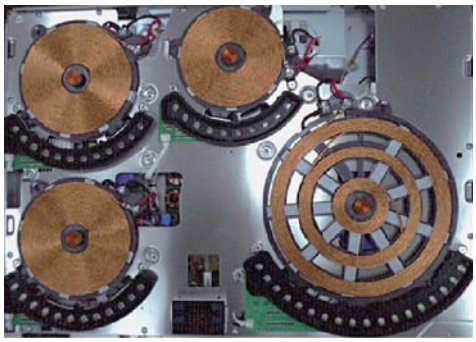
3-6 Replacement of the Assy Module, Assy -Working Coil

<table>
<tr><th colspan="3">Explanation Photo</th></tr>
<tr><td colspan="3"> 
</td></tr>
<tr><th>Parts</th><th>Explanation Photo</th><th>Explanation</th></tr>
<tr><td>Assy-
Module</td><td> 
  </td><td>1. Remove the 3 screws, and then disconnect wire located on the LED light PCB.</td></tr>
</table>

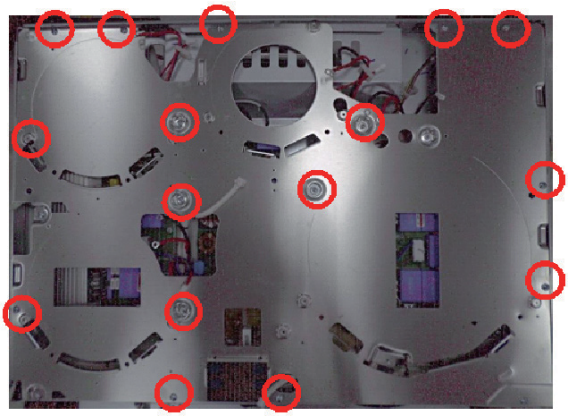
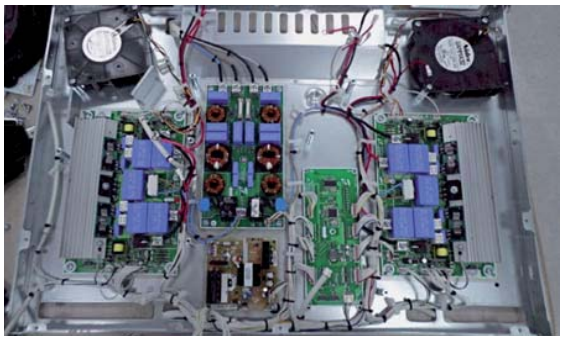
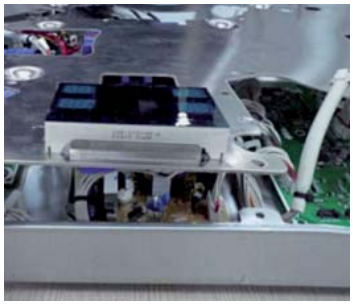
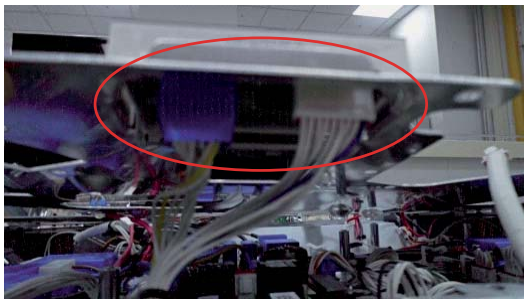
3-6 Replacement of the Assy Module, Assy -Working Coil

<table>
<tr><th colspan="3">Explanation Photo</th></tr>
<tr><td colspan="3"> 
</td></tr>
<tr><th>Parts</th><th>Explanation Photo</th><th>Explanation</th></tr>
<tr><td>Assy-Working Coil</td><td>  </td><td>1. Remove the 1 screw to replace assy-working coil.</td></tr>
</table>

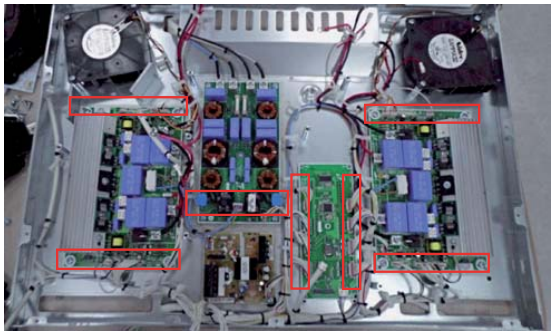
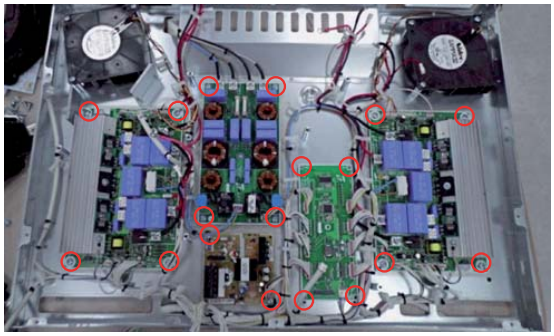
3-6 Replacement of the Assy Module, Assy -Working Coil (Continued)

Parts	Explanation Photo	Explanation
Assy-Working Coil		**2.** Disconnect all lead wires from the Assy-Working Coil.
		**3.** For the replacement of Sensor-Top, pull the Sensor-Top toward bottom side. **4.** Rotate the Sensor-Wire by 90degree until the Sensor-Top can be remove from the Coil-Working.
		**5.** After replacement, connect the Sensor-Top and all lead wires.
	Warning Wire connecting position is very improtant. Please pay attention to the routing of the wires.	

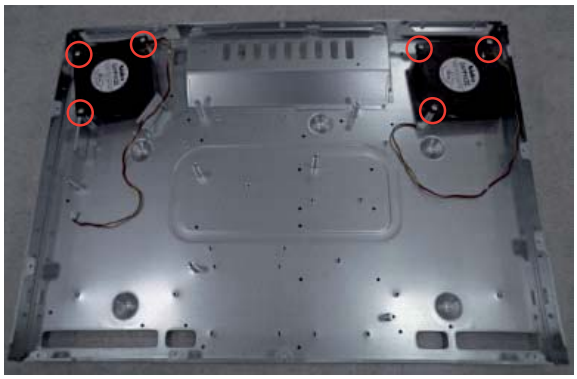
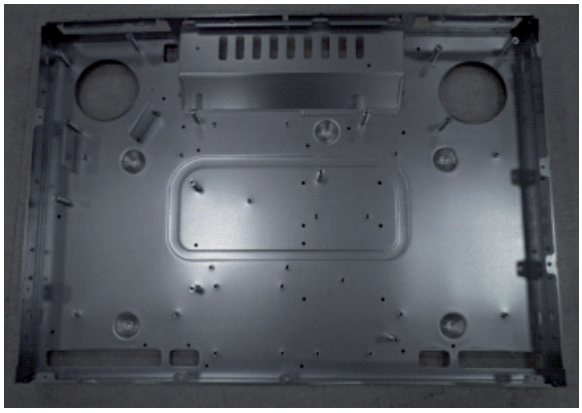
3-7 Replacement of the Assy-Induction Module

<table>
<tr><th>Parts</th><th>Explanation Photo</th><th>Explanation</th></tr>
<tr><td rowspan="3">Assy-
Induction
Module</td><td> 
  </td><td>1. Remove 16 screws on Case-Induction</td></tr>
<tr><td colspan="2">Warning
Wire connecting position is very improtant.
Please pay attention to the routing of the wires.</td></tr>
<tr><td> 
  </td><td>2. Lift up the case induction, and disconnect 2 wires on the 88 segment.</td></tr>
</table>

3-7 Replacement of the Assy-Induction Module

<table>
<tr><th>Parts</th><th>Explanation Photo</th><th>Explanation</th></tr>
<tr><td rowspan="3">Assy-
Induction
Module</td><td>  </td><td>3. Remove the sub wire of Communication and Inverter.</td></tr>
<tr><td colspan="2">Warning
Wire connecting position is very improtant.
Please pay attention to the routing of the wires.</td></tr>
<tr><td>  </td><td>4. Remove the 18 screws.
5. Lift up PCB</td></tr>
</table>

3-7 Replacement of the Assy-Induction Module

Parts	Explanation Photo	Explanation
Assy-Induction Module	 	**6.** Remove the 6 screws **7.** Lift up Fan motor.

3-8 Removing The Latch-Door & Switch-Door Plunger

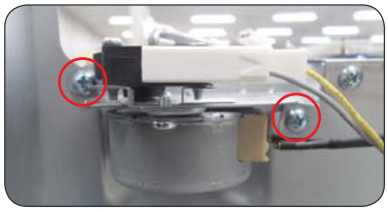
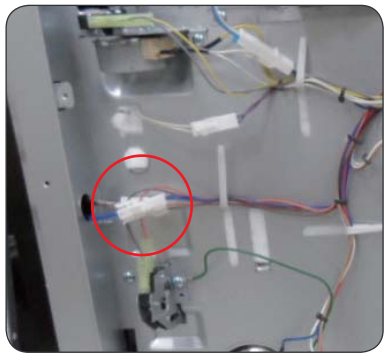
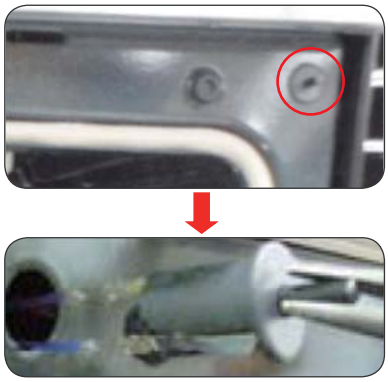
WARNING

ELECTRICAL SHOCK HAZARD

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

CAUTION

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

Parts	Explanation Photo	Explanation
 Latch-Door & Switch-Door Plunger		**1.** Turn off the electrical supply going to the range. **2.** Open the oven door. **3.** Raise the cooktop (see page 14 for the procedure). **4.** To remove the Latch-Door: **a)** Remove the 2 screws from the front of cavity.
		**b)** Remove two screw from Cover-Back Main Guard and remove latch-door
		**5.** To remove the Switch-Door Plunger **a)** Remove the Cover-Back Guard Wire. (see page 10 for the procedure). **b)** Release the wire from Cable Clamp. **c)** Remove the Switch-Door Plunger from the range. Remove the switch carefully with a pair of pliers and using a slight up and down motion while pulling the switch out.
		

* Reassembly of All part is the reverse order of disassembly.

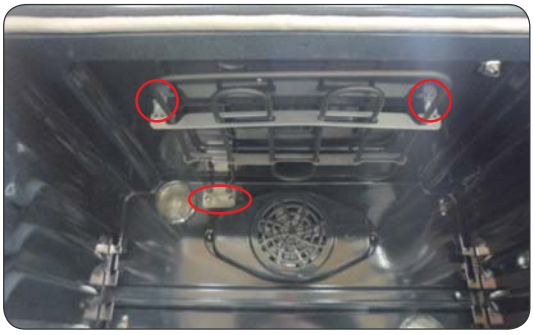
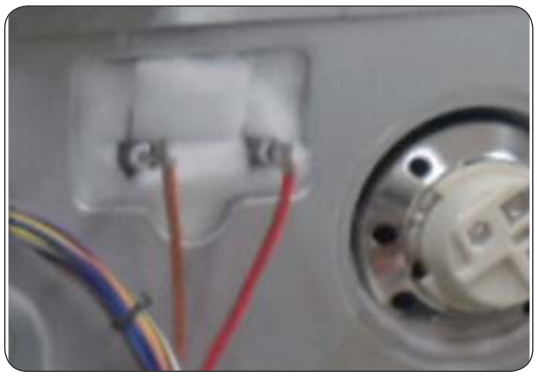
3-9 Removing Heater-Broil

WARNING

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

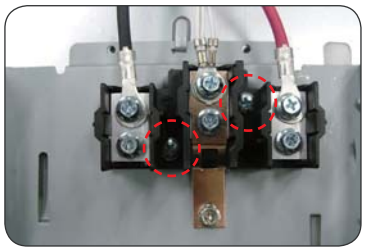
CAUTION

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

Parts	Explanation Photo	Explanation
 Broil	 	1. Turn off the electrical supply going to the range. 2. Open the oven door and remove the racks from inside the oven. 3. Remove oven from its mounting location and remove the rear cover. 4. Remove the two wires from the broil element. 5. Remove the four screws that are securing the broil element to the cavity. Remove the broil element.

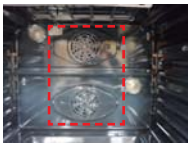
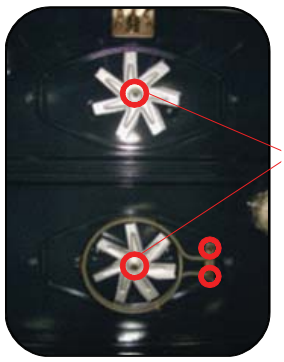
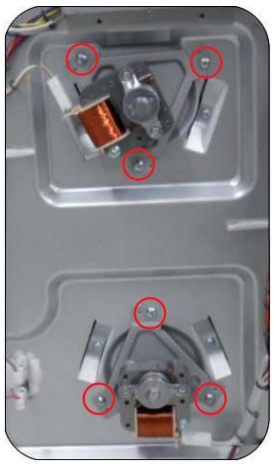
* Reassembly of All part is the reverse order of disassembly.

3-10 Removing Heater-Bake

Parts	Explanation Photo	Explanation
		**1.** Unplug range or disconnect power. **2.** Pull the range out of its mounting location so that you can access the rear of the unit. **3.** Remove Cover-Back Main Wire. (See step 3~4 on page 10 for procedure) Remove terminal block and bracket cover access by unscrewing the three screws. Disconnect the two wires from the heater bake element.
 Heater-Bake		**4.** Remove the two screws securing the heater-bake.
		**5.** Cut the insulation on the lower side.
		**6.** Carefully pull out Heater-Bake and replace it.

* Reassembly of All part is the reverse order of disassembly.

3-11 Removing Convection Element, Fan-Convection and Motor-Convection

Parts	Explanation Photo	Explanation
 Convection Element, Fan-Convection , Motor-Convection	  Bracket convection heater 	1. Disconnect power and remove oven racks. 2. Pull the range out of its mounting location so that you can access the rear of the unit. 3. Remove Cover-Back Main Wire from the unit. (See step 3 on page 10 for procedure) 4. Remove oven door. (See Page 29 on page for procedure) 5. Unscrew 2 screws and remove Cover-Casing. 6. Unscrew 2 screws and remove Bracket-Convection Heater to remove Heater-Convection. 7. Unscrew nut of Fan-Convection, and 2 Fan-Convection. 8. Unscrew 3 points and disconnect a Motor-Convection wire and disconnect Heater-Convection wire.

CAUTION

Be careful not to bend the Fan-Convection(Blade)

* Reassembly of All part is the reverse order of disassembly.

3-12 Removing 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.

CAUTION

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

Parts	Explanation Photo

Explanation

1. Disconnect power.
2. Remove oven door.
3. Turn the glass bulb cover in the oven counterclockwise to remove.
4. Turn bulb counterclockwise to remove from socket.
5. Replace bulb and cover by turning clockwise.

Lamp

CAUTION

Be careful not to scratch or chip the oven liner paint when to remove the oven light socket in the next step.

Explanation Photo	Explanation

To replace socket assembly:

6. Disconnect the wires from the socket terminals.
7. Use a screwdriver and bend the clips on the socket away from the edges of the liner hole(there are 6 clips on th e socket), and pull the socket out of the liner. Push the socket out from the rear of the unit.

* Reassembly of All part is the reverse order of disassembly.

3-13 Removing Sensor-Thermistor

WARNING

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

PRECAUTION

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

Parts	Explanation Photo	Explanation
 Sensor-Thermistor	  Lower Sensor	**1.** Turn off the electrical supply going to the range and remove the oven from its mounting location. **2.** Remove oven door and racks from inside the oven. **3.** Unscrew Sensor-Thermistor. **4.** Remove Cover-Back Main Wire and disconnect a wire from Sensor-Thermistor. **5.** Replace the Sensor-Thermistor.

* Reassembly of All part is the reverse order of disassembly.

3-14 Removing Assy-Drawer & Heater-Warming Drawer (Continued)

⚠ WARNING

ELECTRICAL SHOCK HAZARD

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

⚠ PRECAUTION

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

Parts	Explanation Photo
 Assy-Drawer & Heater-Warming Drawer	   

Explanation

To remove Assy-Drawer:

1. CAUTION -Turn power OFF before removing the storage Drawer.
2. Open the drawer to the fully opened position.
3. Locate glide lever on each side of drawer, push down on the left glide lever and pull up on the right glide lever.
4. Pull out the storage drawer.

3-14 Removing Assy-Drawer & Heater-Warming Drawer

Parts	Explanation Photo	
Assy-Drawer & Heater-Warming Drawer		**To remove Heater-Warming Drawer:** **1.** Remove the screw from Bracket-Warming Heater.
		**2.** Remove Cover-Warming Heater and disconnect 2 wires. **3.** Pull out the Heater-Warming Drawer.

* Reassembly of All part is the reverse order of disassembly.

3-15 Removing and Replacing Oven Door

WARNING

The door is very heavy. Be careful when removing door Do not lift door up by the Handle-Door.

Parts	Explanation Photo	Explanation
 Oven door		**To remove Oven Door:** **1.** Fully open the door **2.** Pull the hinge locks downward.
		**3.** Firmly grasp both side of the door at the top. **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 the hinges into the hinge openings on the oven.
		**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.

* Reassembly of All part is the reverse order of disassembly.

3-16 Removing Handle-Door and Glass-Inner (Continued)

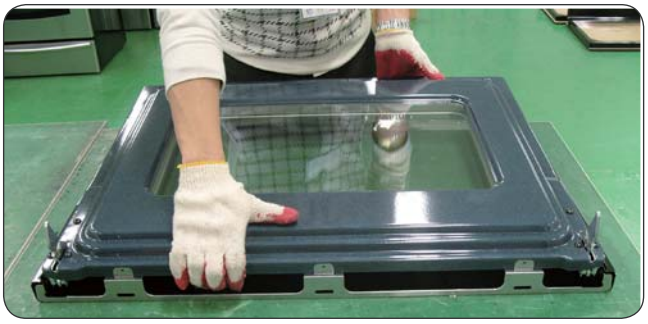
WARNING

ELECTRICAL SHOCK HAZARD

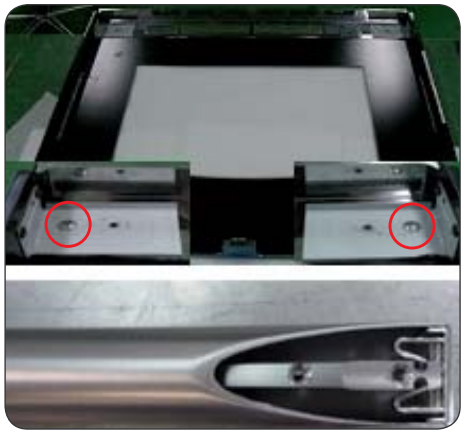
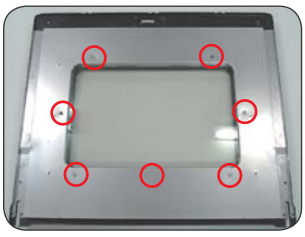
Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

PRECAUTION

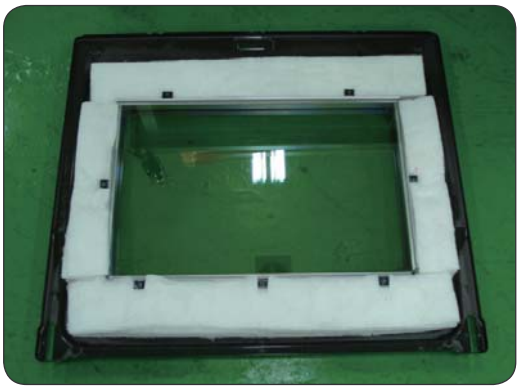
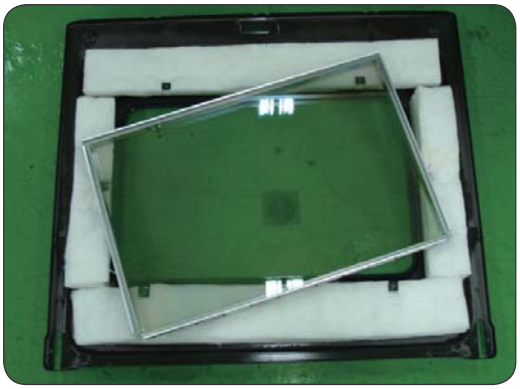
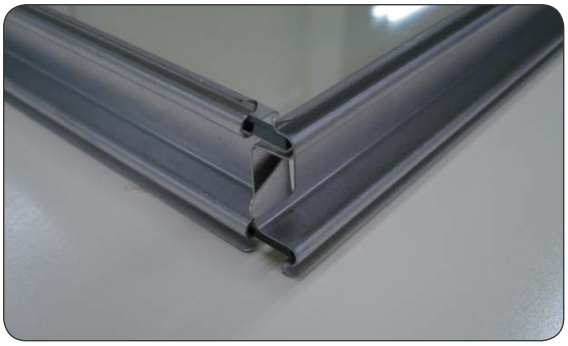
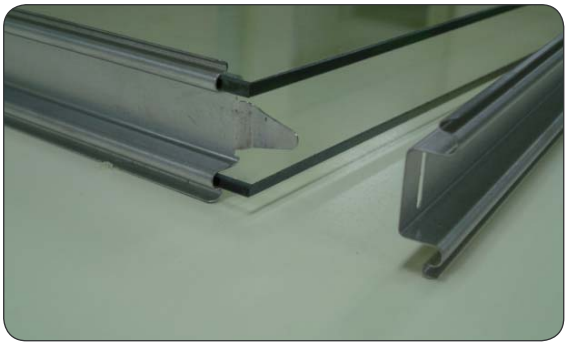
When you work on the electric range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Door		**1.** Remove the oven door from the range (see page 29 for the procedure.) **2.** Place the oven door on a padded work surface with the front glass facing down. **3.** Remove 3 bottom screws from the door.
		**4.** Remove 2 Handle-screws from the door.
		**5.** Lift the door rear assembly off the front assembly and set it aside
	 	**6.** Remove 2 spacers and 2 screws.

3-16 Removing Handle-Door and Glass-Inner (Continued)

Parts	Explanation Photo	Explanation
Handle Door		**To remove Handle-Door** **1.** Remove 2 screws to remove Handle-Door
Glass-Inner	 	**To remove Glass-Inner** **1.** Remove 6screws from rear side of door to remove 2 Hinge-Door.
	 	**2.** Remove 4screws ro remove Glass-Inner Sub Assembly **3.** Remove 7screws ro remove Baffle-Door

3-16 Removing Handle-Door and Glass-Inner

<table>
<tr><th>Parts</th><th>Explanation Photo</th></tr>
<tr><td rowspan="5">Handle
Door</td><td>   </td></tr>
<tr><td>Explanation</td></tr>
<tr><td>4. Remove Baffle-Door and take out the Glass-Inner assembly.</td></tr>
<tr><td>Explanation Photo</td></tr>
<tr><td>   </td></tr>
<tr><td>Explanation</td></tr>
<tr><td>5. Unfold 2 flanges of Cover-Frame Inner Glass to taking out Glass-Inner</td></tr>
</table>

* Reassembly of All part is the reverse order of disassembly.

3-17 Removing Gasket-Door

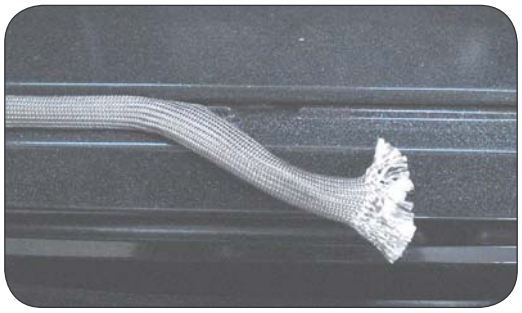
WARNING

ELECTRICAL SHOCK HAZARD

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

PRECAUTION

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

Parts	Explanation Photo
 Gasket door	 
	Explanation
	1. Open the oven door to its fully down position. **2.** 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.
	REASSEMBLY NOTE: 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.

* Reassembly of All part is the reverse order of disassembly.

3-18 Removing The Panel-Side

WARNING

ELECTRICAL SHOCK HAZARD

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

PRECAUTION

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

Parts	Explanation Photo	Explanation
Panel Side		1. Turn off the electrical supply. 2. Remove the oven door from the range (see page 3-15 for the procedure). 3. Pull the range away from the wall so you can access the back of the unit. 4. Remove the 8 screws from the rear of Panel-Side and remove Cooktop. 5. Remove the (each) 3screws from the top the Panel-Side. 6. Pull the back of the side panel out from the range approximately 10˚ 7. Push forward and remove Panel-Side.

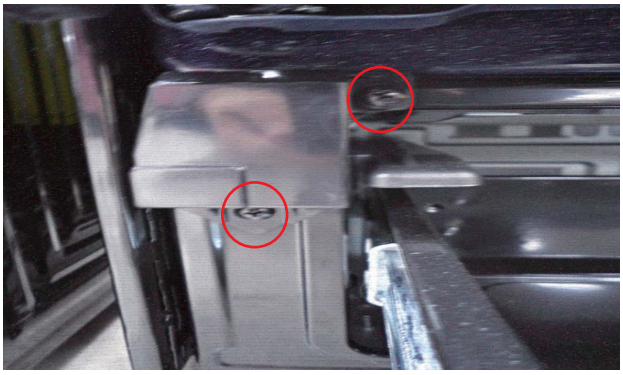
* Reassembly of All part is the reverse order of disassembly.

3-19 Removing the Wi-Fi module

WARNING

ELECTRICAL SHOCK HAZARD

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

Parts	Explanation Photo	Explanation
WI-FI MODULE		**1.** Turn off the electrical supply. **2.** Remove the drawer from the range (see page 3-13 removing assy-drawer & heater warming drawer for the procedure). **3.** Remove the 2 screws from the drawer pedestal front and take off holder wi-fi.
	  	**4.** Remove the Cover Wi-Fi (rubber). **5.** Tilt the hook on holder and take off Wi-Fi module. **6.** Remove connector on Wi-Fi module

4. Troubleshooting

4-1 Failure Display Codes

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

1. Touch '**Clock**' key.

2. Touch a number '**1,2,3,4**' key.

3. Touch '**START/SET**' key.

4. Touch '**Clock**' and '**Num 1**' keys at the same time for 3seconds. Check codes are displayed.

5. Touch number '**0**' key, the last 5 check codes can be checked. But, if the oven turns off, the stored check codes are deleted.

6. Touch '**OFF**' key to return to normal display mode.

Check code

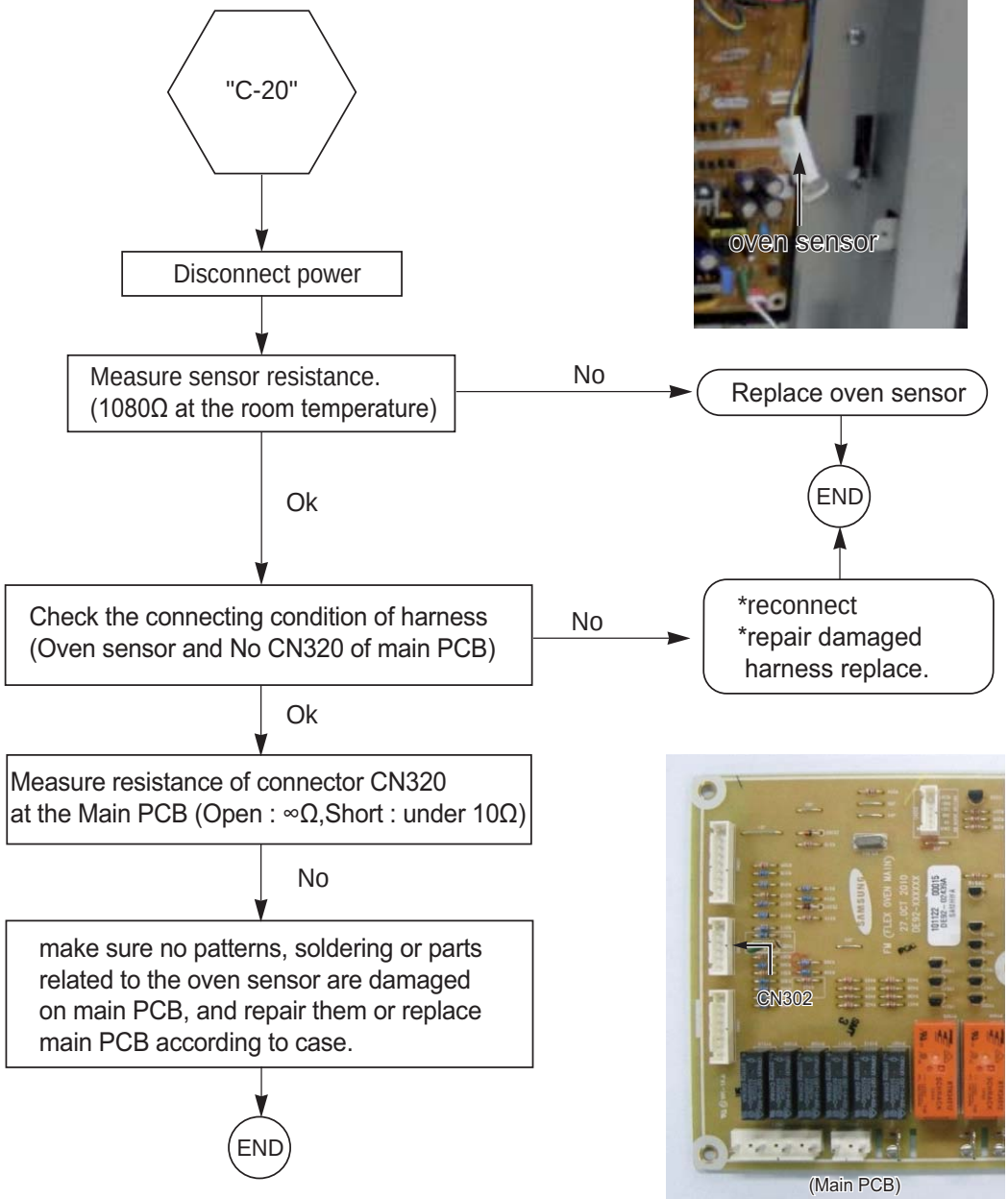
Failure code	CAUSE	SOLUTION
C-d0	This code occurs if the key short.	1. Check whether cable of keypad has been inserted into connector of sub pcb. 2. Check whether between sub pcb and connector or keypad and cable have a short circuit. 3. if there is not a problem occurred with connector on sub pcb and cable of keypad, replace the sub pcb.
C-d1	This code occurs if the door lock is mispositioned.	1. Disconnect power. Open the cover back. Check whether harness has been connected with door lock switch and motor. 2. Confirm whether resistance value of door lock motor is correct. Normal value should be 2500 ~ 2700 Ω at the room temperature. 3. Operate door lock, measure voltage at the plug supplying power to the door lock motor. (normal voltage : AC 120V) 4. Check whether door locking switch is working normally.
C-F0	This code occurs if communication between the Main and Sub PCB is interrupted.	1. Check whether connector of main pcb has been inserted. 2. Check whether connector of sub pcb has been inserted. 3. If no issue with connector on Main and Sub PCBs has been detected replace Main PCB.
C-F2	This code occurs if communication between the Main and Touch PCB is interrupted.	1. Check whether connector of sub pcb has been inserted. 2. If no issue with connector on Sub PCB has been detected replace Sub PCB 3. If the problem has not been solved after replacing Sub PCB replace control PCB.

4. Troubleshooting

4-1 Failure Display Codes

Failure code	CAUSE	SOLUTION
C-20	The oven sensor is open when the oven is operating.	1. check whether connector at the main pcb has been inserted. 2. Check whether connector at the sensor has been inserted. 3. If connectors at the Main PCB and the sensor are inserted correctly,replace the temperature sensor. 4. If the problem is still not solved, replace the Main PCB.
	The oven sensor is short when the oven is operating.	
C-21	This code occurs if the internal temperature rises abnormally high.	1. Disconnect power. Open back cover. Disconnect sensor harness from sensor. Measure sensor resistance : 1080Ω at the room temperature. -> If there are any problems, replace oven sensor. 2. Check the resistance of broil, bake and convection heater. 3. Check whether DLB, broil, bake and convection relays on the Main PCB are working normally. 4. Check whether any part of a wire harness on Main PCB is disconnected. 5. Check the resistance of oven sensor connector on main pcb. (Normal : 2850Ω) 6. Unit will display "C-21" after beeping 10 times if temperature is higher then the specified during operation. 7. Please make sure through the method of 4-1 on 30 page, if those series of working for informing error take long time or not functioned.
C-30	The PCB temp sensor is open when the oven is operating.	1. Disconnect power. Open back cover. 2. Replace the main pcb.
C-30	The PCB temp sensor is short when the oven is operating.	
C-31	This code occurs if the PCB temperature rises abnormally high.	

4-1 Failure Display Codes



(Main PCB)

4. Troubleshooting

4-1 Failure Display Codes

Safety error

"C-21" or "C-d1"

Disconnect power and sub PCB

* DLB, Bake, Broil,convection relay check.(Nomal:∞Ω)
* Check whether there is any damaged parts of sub PCB.

No

* Replace main PCB
* Solder again if pattern is damaged or parts is wrong contacted.

END

Ok

* Measure oven sensor resistance. (1080Ω at the room temperature)
* Check the condition of the connector related to oven sensor.

No

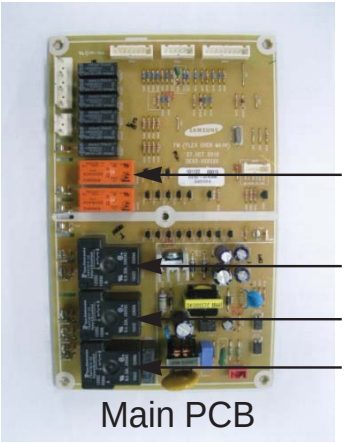
*Reconnect after replacing the oven sensor.

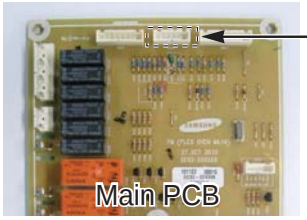
END

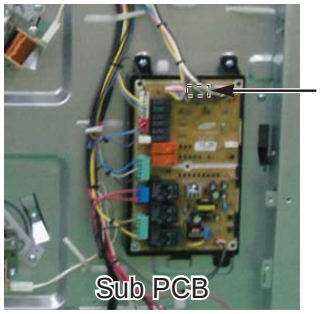
Ok

* Check connector and harness connected to main PCB.
* Check whether harness on connector (CN320) of main PCB is connected nomally into the connector(CN320) or not.

No







Ok

With replacing sub PCB or main PCB, and make set work.

No

END

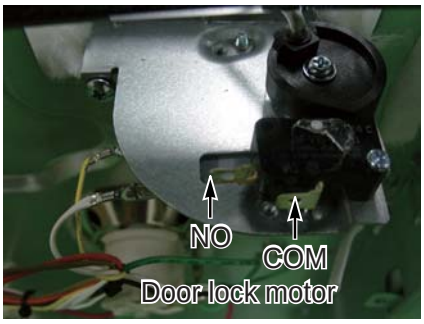
Replace or repair the harness.

Replace sub PCB or main PCB

4-1 Failure Display Codes

"C-d1"

*Disconnect power.
*Get rid of harness connected with Lock motor



* Micom switch check (com-NC,com-NO)
* Measure resistance of Lock motor Coil.(1750~1850Ω at the room temperature)

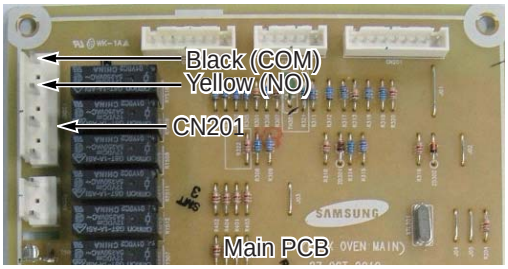
No → * Replace micro switch or Lock motor. → END

* Check oven sensor
(See page 29)

Ok

*Check whether
*Check if voltage is present at the lock motor terminals allowing it to operate.

No



Ok

*Check whether harness connected normally into CN201 of main PCB.

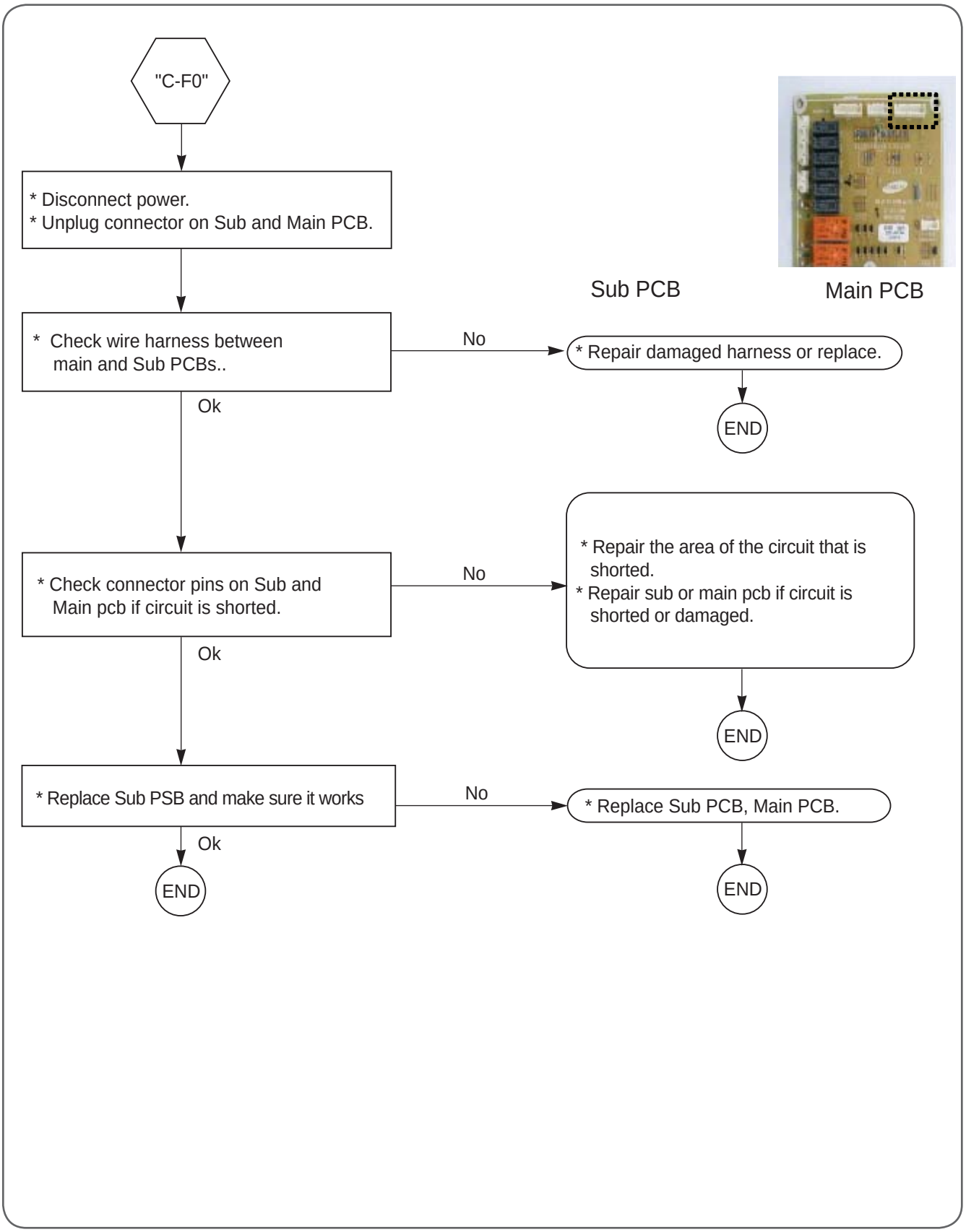
No → * Repair damaged harness or replace

*Measure resistance CN201 of main pcb.
(COM-NO: ∞ at the room temperature)
*COM : black color
*NO : yellow color

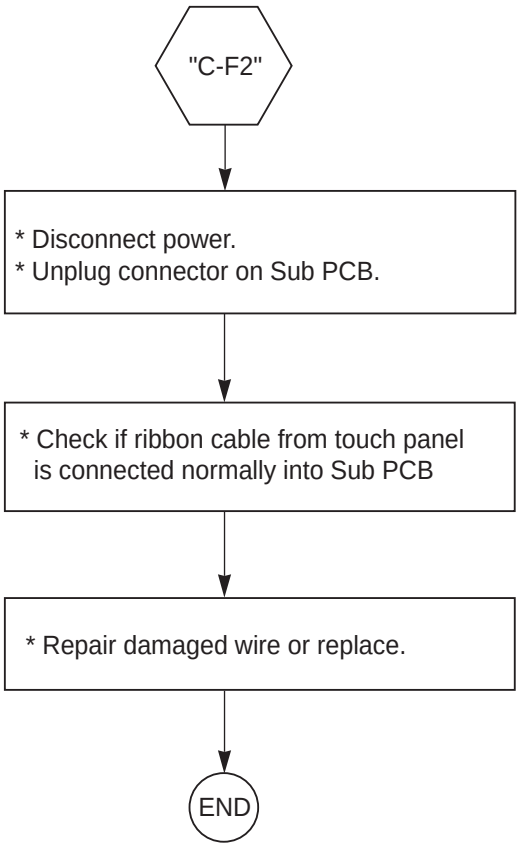
No → * Replace main PCB.
* Solder again if pattern is damaged or parts is wrong contacted.
→ END

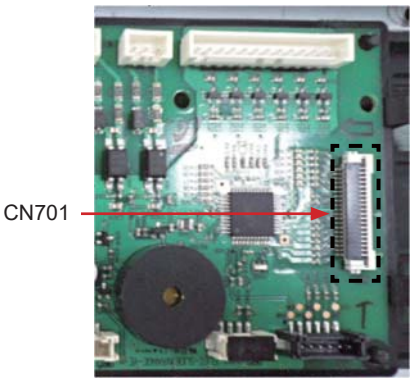
4. Troubleshooting

4-1 Failure Display Codes



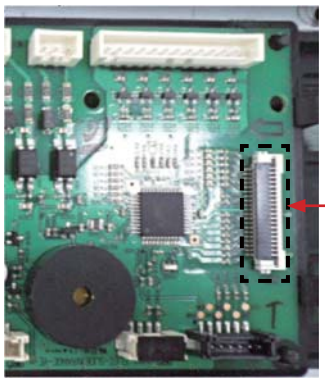
4-1 Failure Display Codes



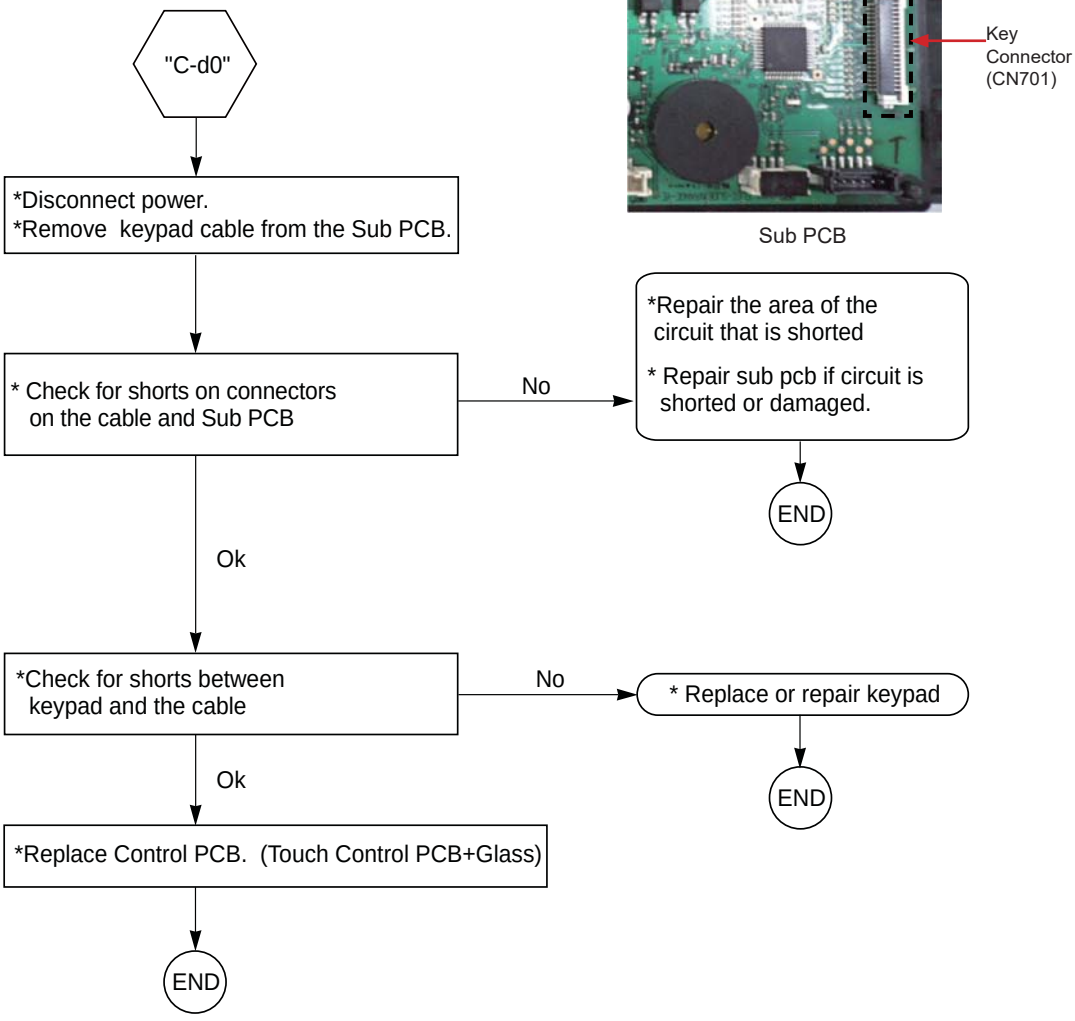


Sub PCB

4-1 Failure Display Codes



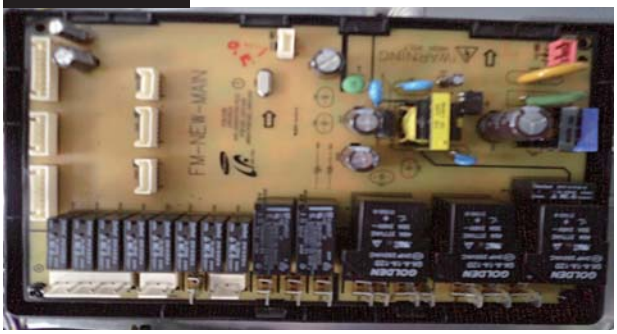
Sub PCB



Control PCB Operation

Sort of Control PCB

Main PCB



Sub PCB

Glass touch

LED

4. Troubleshooting

SYMPTOM	DIAGNOSIS	REMEDY
Oven not operating (No power, No display)	* Measure an input voltage. (240/120V or 208/120V) * Measure an input voltage of terminal block.	* Check circuit breaker. * Check state of a wire connected to Terminal Block
	* Measure supplied voltage at the connector on main PCB L1~N : 120V	* Replace or repair if harness has been lose or disconnected.
	* Make sure that the relay on Sub PCB is working normally * Check whether connector between sub and main pcb have been loosen or disconnected.	* Replace sub PCB if relay has been damaged or there is any cracking on the sub PCB. * Repair harness connecting Main and Sub PCBs * 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 ohoms) * Check whether harness connected to terminal of a thermostat have been loosen or disconnected. * Measure voltage regulator on main PCB. - IC02 : 7812(DC 12V) - IC03 : 7805(DC 5V)	* Replace the thermostat. * Replace or repair harness. * Replace or repair after check PCB.
Oven temperature is risen slowly.	* Make sure whether wire harness is connected to broil, bake and convection heaters has been lose or disconnected.	* Repair and replace harness. * Disconnect terminals for each heater and measure resistance, replace any heaters with abnormal resistance. .
	* Make sure whether relays are normally operated or pcb have short circuit.	* Replace or repair relay. * Replace or repair main PCB.

4. Troubleshooting

SYMPTOM	DIAGNOSIS	REMEDY
Oven temperature rises to fast	* Check whether temperature rises over 400'F within 10 minutes in room temperature.	* Repair or replace if relays on Main or Sub PCBs are shorted
	* Check whether harness has been connected incorrectly or is shorted	* Replace or repair harness.
	* Make sure resistance of each harness is within normal range.	* Replace heater with abnormal resistance range.
The self-cleaning feature will not operate when warming center or warming drawer is on.	* This is in normal state.	* The self-cleaning feature will not operate when warming center or warming drawer is on.
Keypad is not working correctly.	Make sure that the keypad cable is connected correctly.	* Replace pcb after check whether keypad cable is connected correctly.
	Check whether connector on pcb is shorted or damaged..	* Replace or repair after confirming whether keypad cable has been loosen or disconnted.
	Check whether touch control PCB has been damaged.	* Replace assembly of touch control pcb. (PCB + Glass touch)
Oven lamp is not working.	* Check the oven lamp relay on sub PCB and connector.	* Replace or repair if harness has been loosen or disconnected. * Replace oven lamp relay or Ry-source relay. * Replace main PCB.
	Measure the resistance value of both ends of lamp terminal.	* Replace lamp.
Warmer drawer heating is not working	* Check warmer drawer relay (Ry06) on sub PCB and terminal(T03).	* Replace terminal(T03) or relay(Ry06). * Replace main PCB.
	* Measure whether resistance value of warmer drawer heater is in normal extent or not.	* Replace warmer drawer heater.

4. Troubleshooting

SYMPTOM	DIAGNOSIS	REMEDY
Convection fan is not spinning	Check whether convection fan relay on Sub PCB and connector is in normal.	* Replace or repair Relay. * Replace or repair connector.
	Make sure harness between Sub PCB and Main PCB has been connected correctly	* Replace or repair harness. * Replace or repair connector. * Replace main PCB.
Smell or smoke during initial use	This is in normal state.	* Smell or smoke from the oven during initial cycle is coming from dirt and grime from manufacturing process and is normal * Make sure the room is well ventilated during self-clean cycle
LED Display is partially or fully dim	* LED display is inferior.	* Replace LED or sub PCB
Touch tone not active when keypad buttons are selected	Check the state of buzzer on sub PCB and whether PCB pattern have a short circuit or has been open.	* Replace or repair main PCB.
Virtual Flame is not show when turn on the Knob	* Check whether Virtual flame has set off in option menu or wire harness has been disconnected .	* Set on the Virtual Flame in option menu. * Replace or repair if harnmess has been loosen or disconnected * Replace Led module.

4-2 Failure Display Codes (Cooktop)

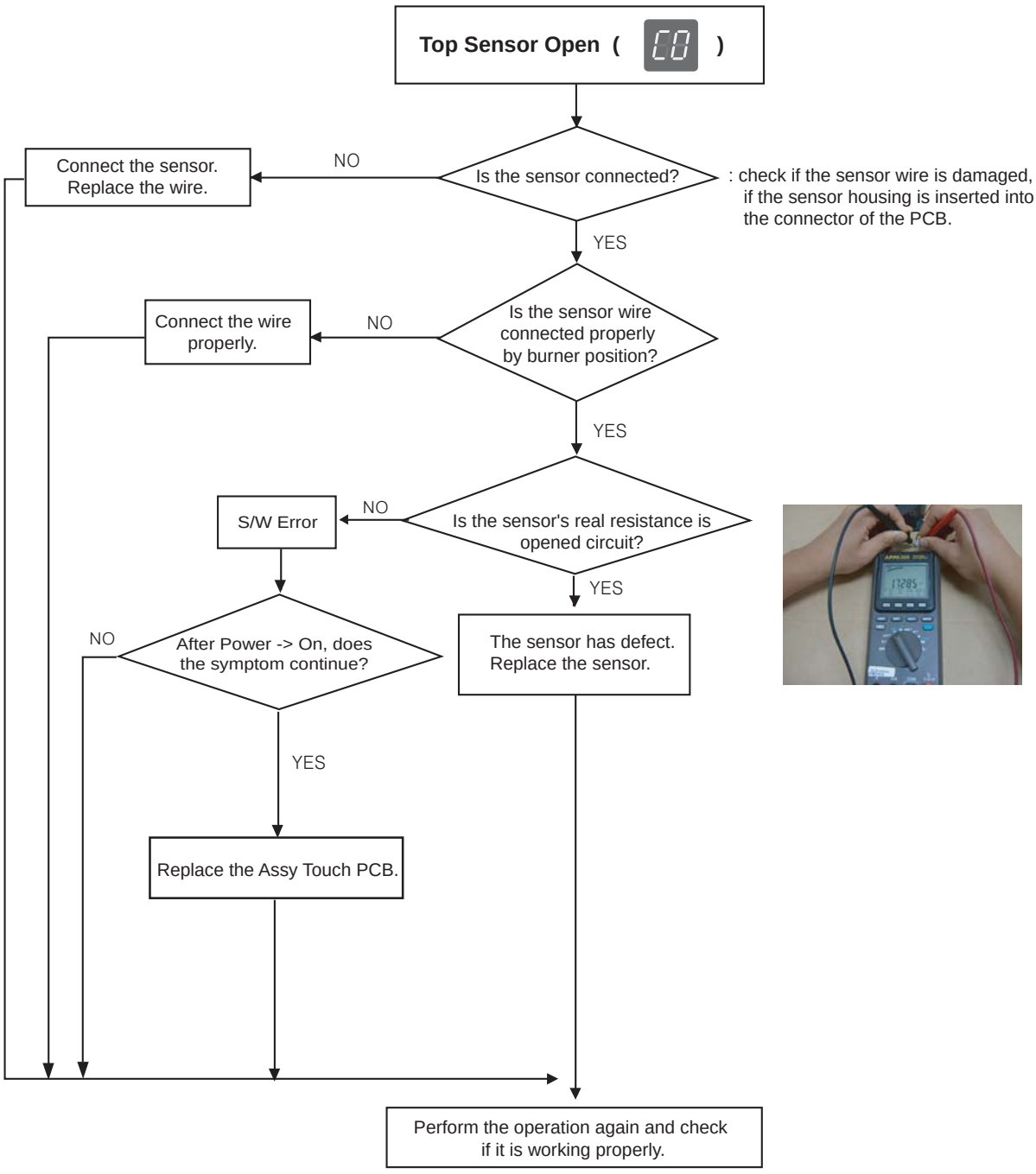
4-2-1 Temp Sensor

Displayed Code	Solution	Page
	**Top Sensor Open (Sensor-Top)** It occurs due to a defective sensor, misplaced wires, a defective PCB and when A/D value that MICOM senses rises over 252. Also, it may occur when the ambient temperature falls under 14°F.	50 Page
	Top Sensor Short (Sensor-Top) It occurs due to a defective sensor, misplaced wires, a defective PCB and when A/D value that MICOM senses falls under 10.	51 Page
	**IGBT Sensor Open (Assy-Inverter Module)** It occurs due to a defective sensor, misplaced wires, a defective PCB and when A/D value that MICOM senses rises over 239. Also, it may occur when the ambient temperature falls under 14°F.	52 Page
	IGBT Sensor Short (Assy-Inverter Module) It occurs due to a defective sensor, misplaced wires, a defective PCB and when A/D value that MICOM senses falls under 10.	53 Page

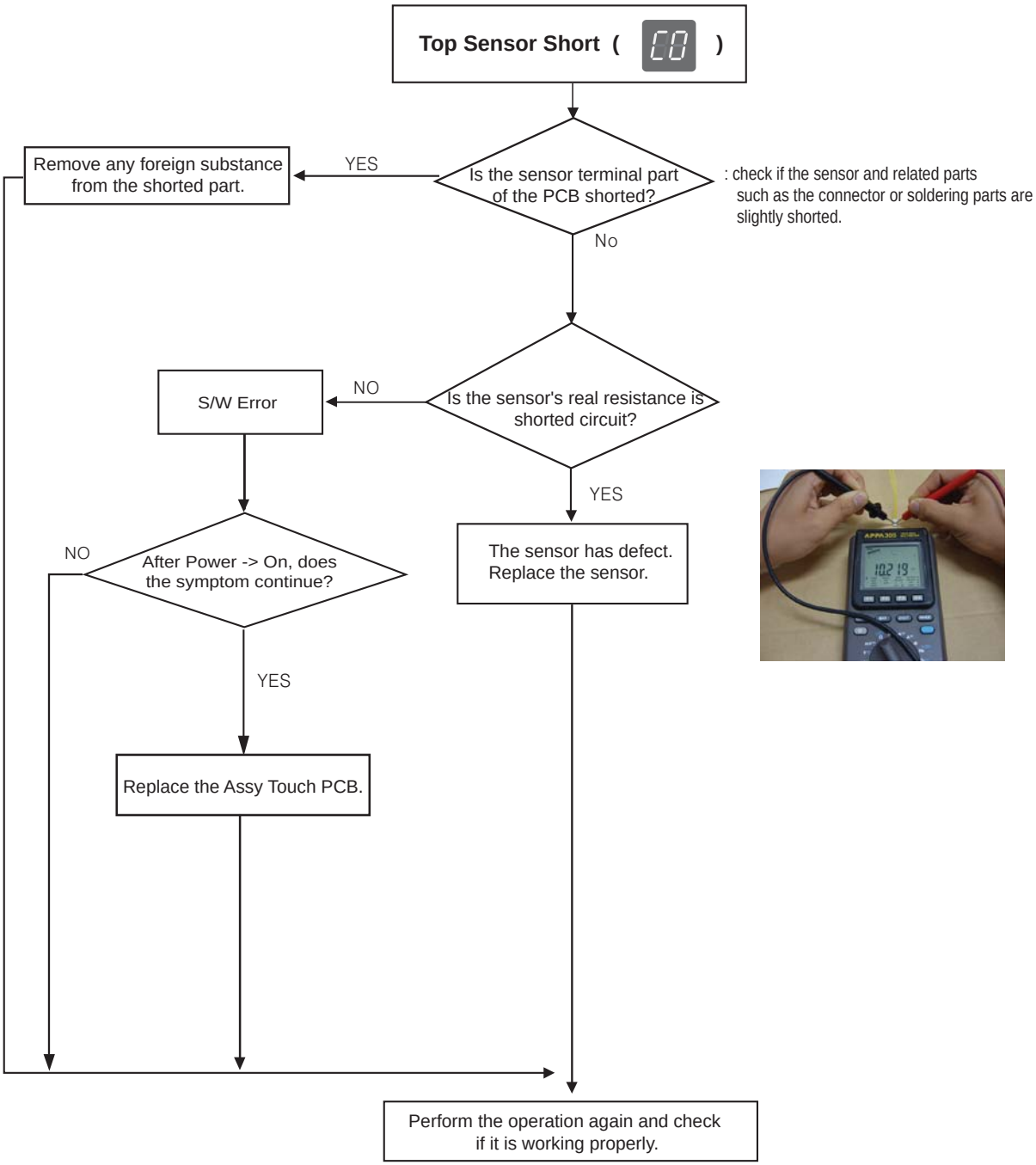
4-2-2 Safety

Displayed Code	Gerneral Function	Solution	Page
	Over Temperature	It occurs when the temperature of the Top Sensor rises very highly. (Estimated temperature of ceramic glass's surface is more than 482°F.) ex: Place a empty cookware on the burner and operate the induction cooktop.	54 Page
	Pan Detection	It occurs when the cookware is unsuitable or too small or no cook-ware has been placed on the cooking zone. If the suitable cookware is placed again, the induction cooktop will operate normally.	55 Page
	DC Motor Locking	It occurs when the DC Motor cannot operate due to defects of PCB, wiring or some disturbance on motor blade.	56 Page
	Communication	It occurs when the communication between Display PCB and Inverter Module PCB is interrupted, due to defects of PCB, wiring mistake.	57 Page

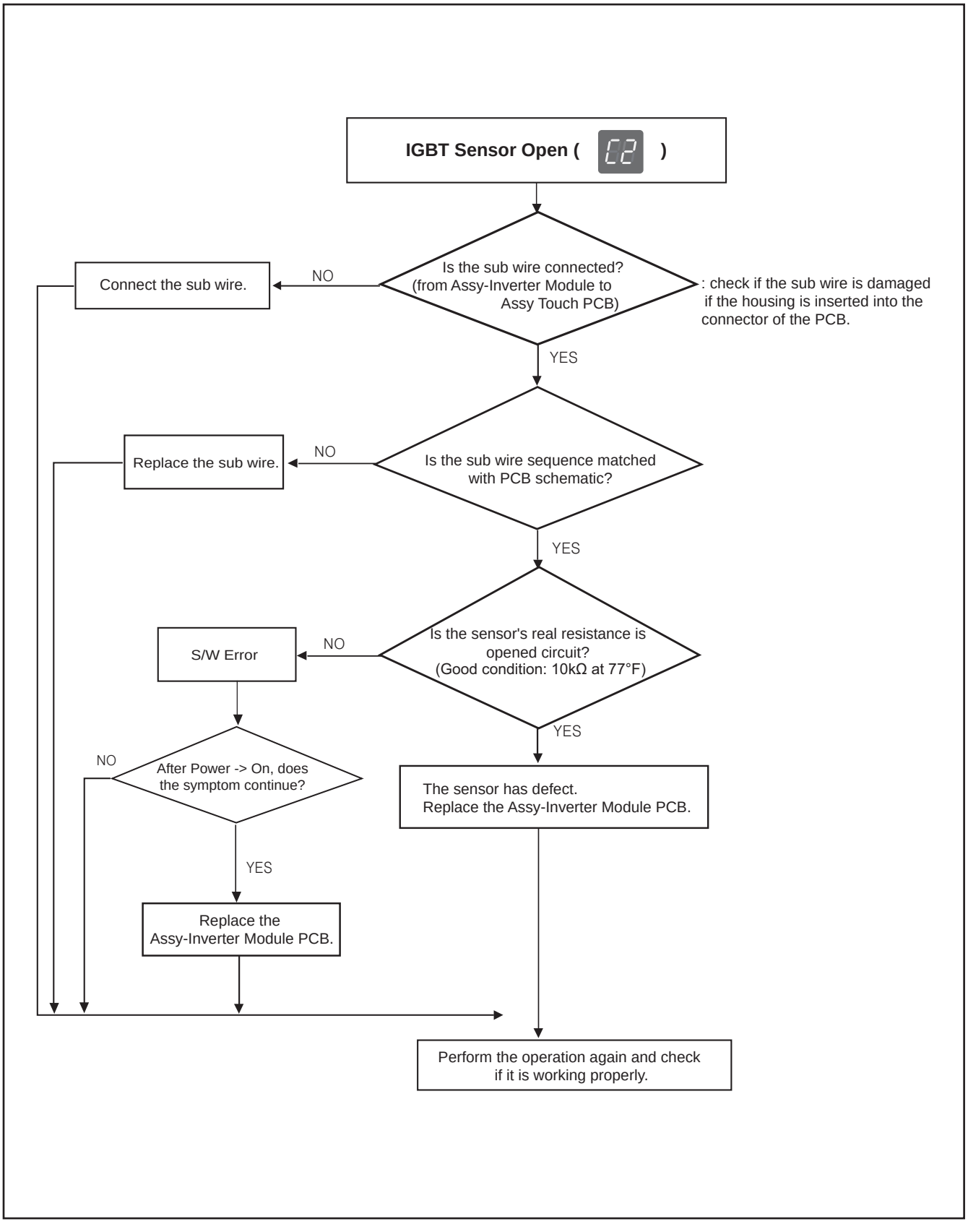
4-2-3 C0



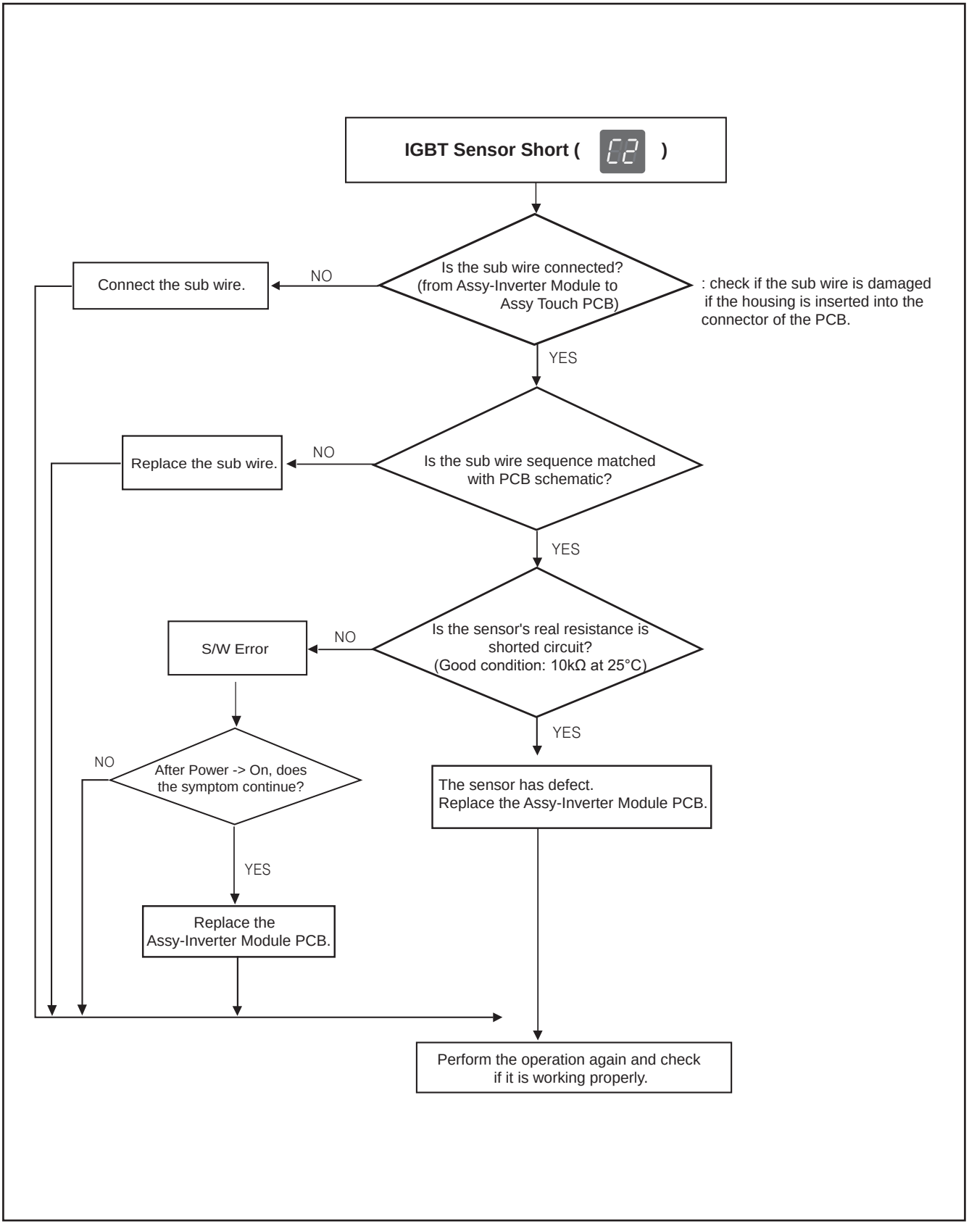
4-2-4 C0



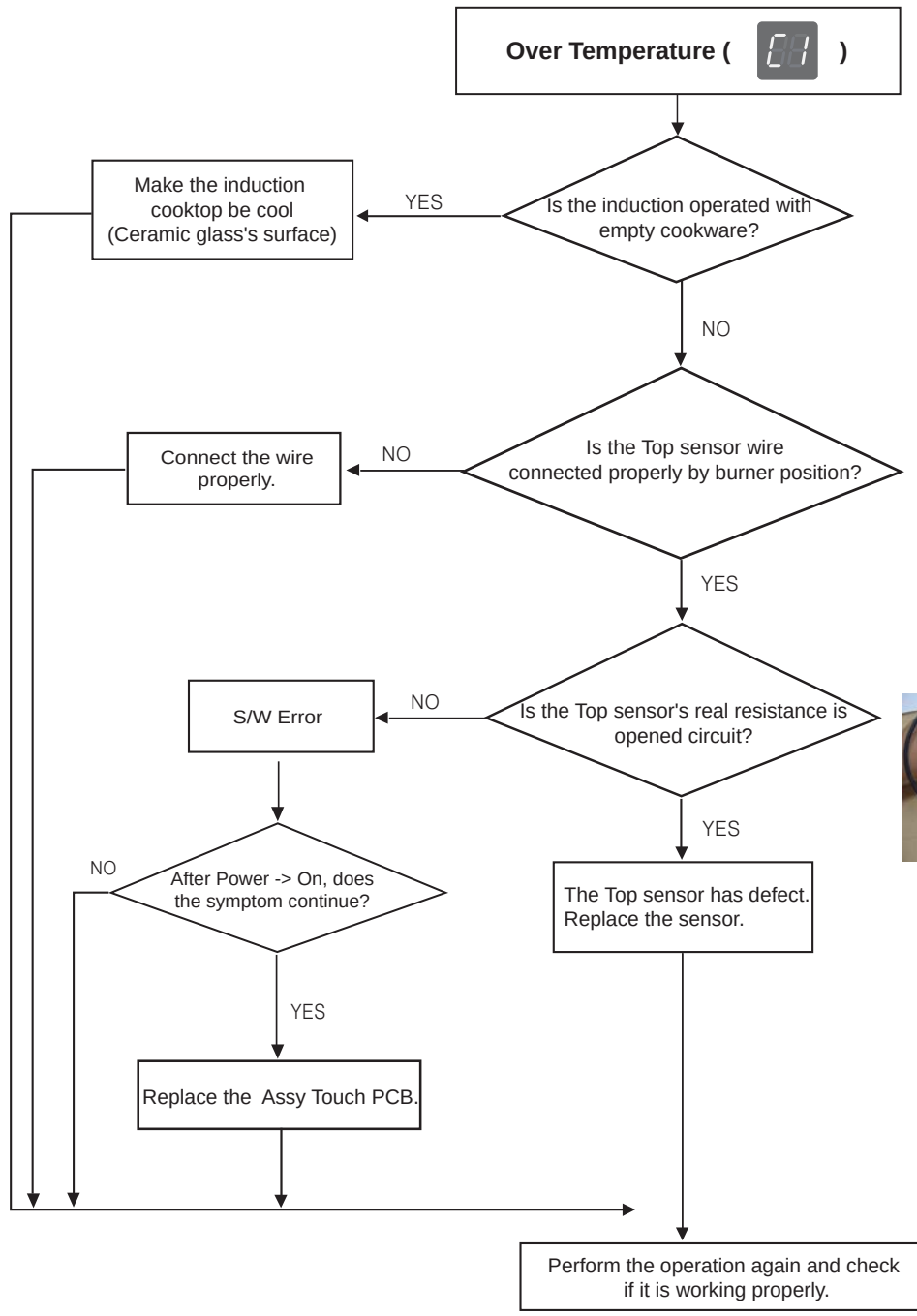
4-2-5 C2



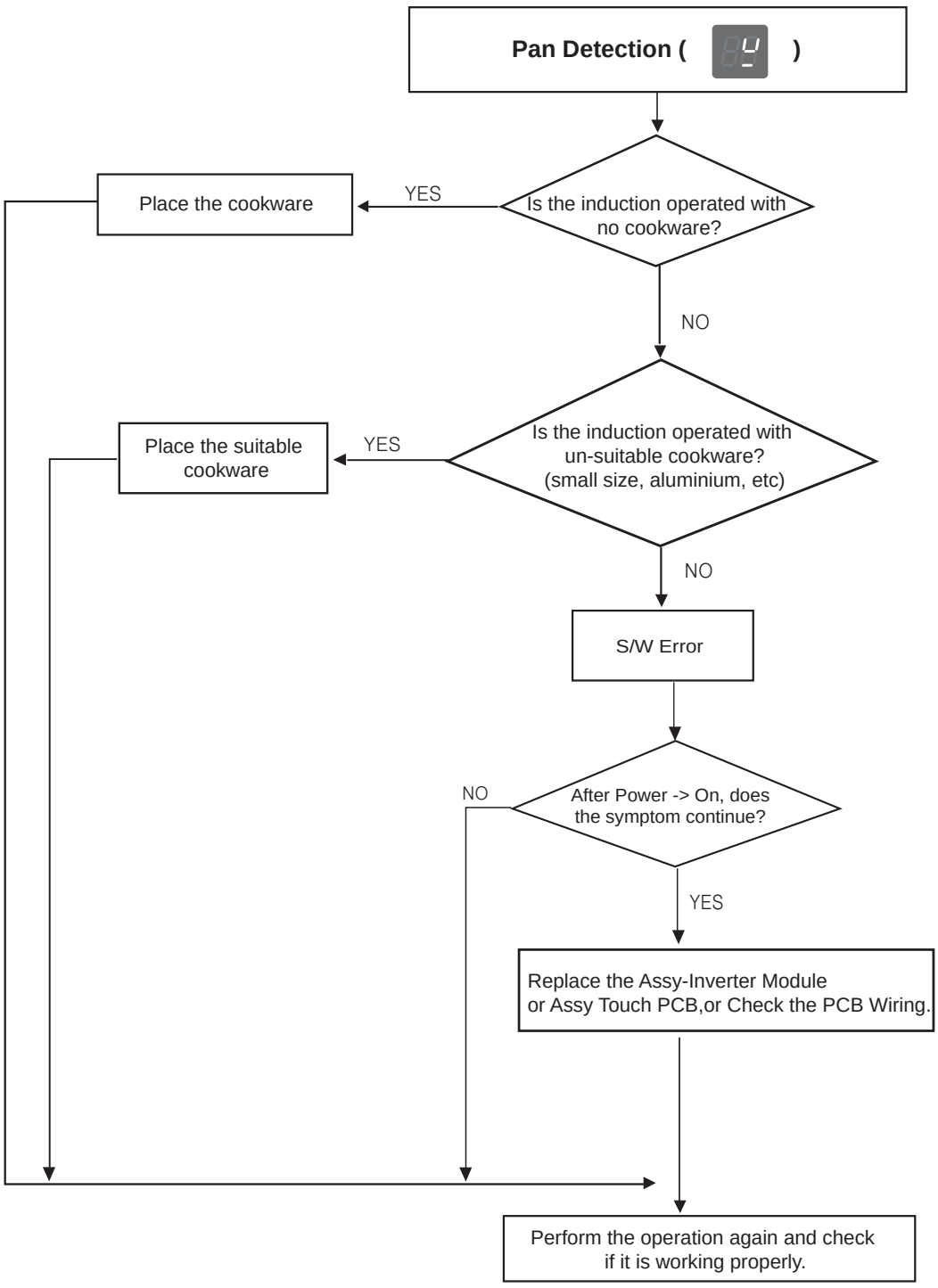
4-2-6 C2



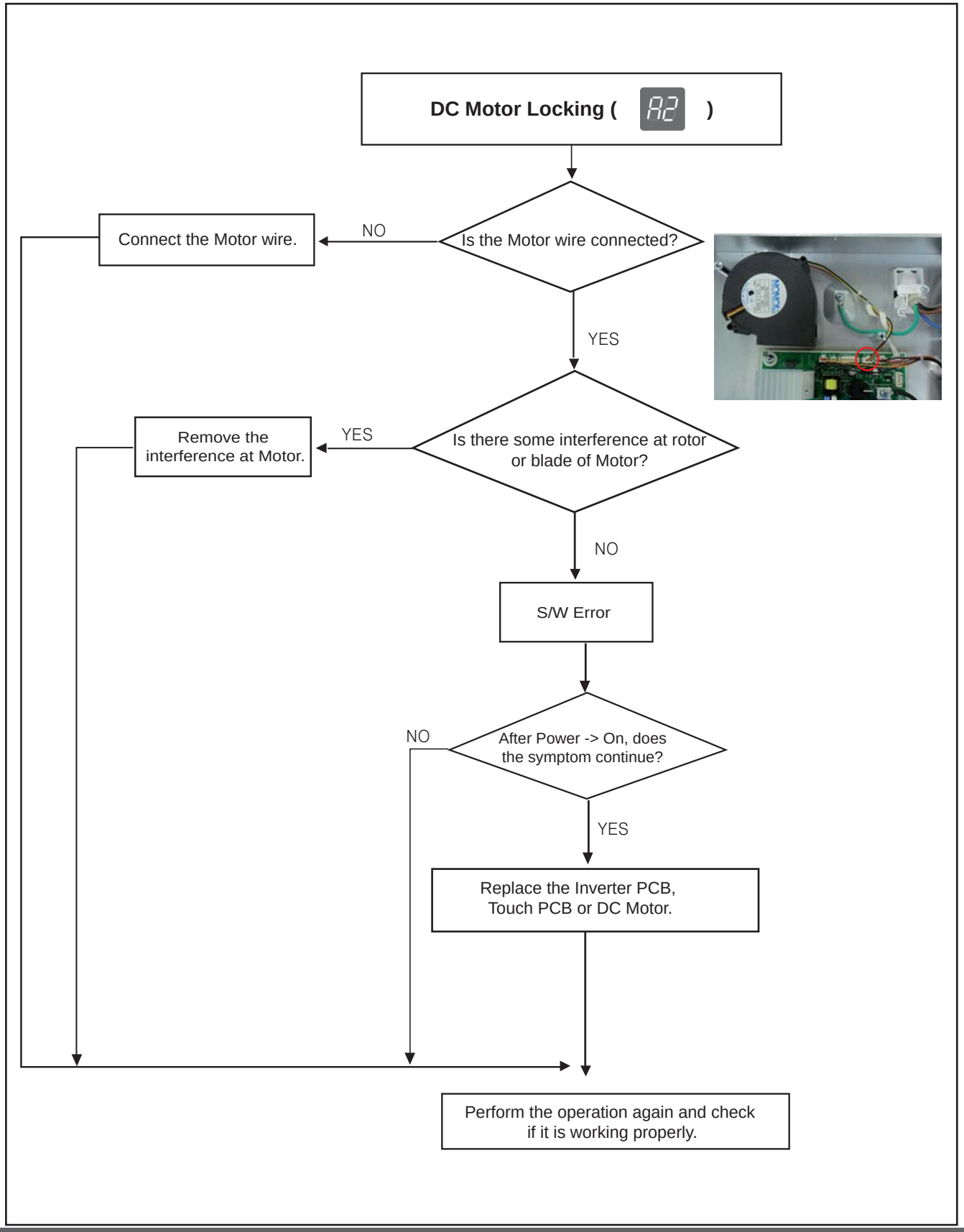
4-2-7 E4



4-2-8

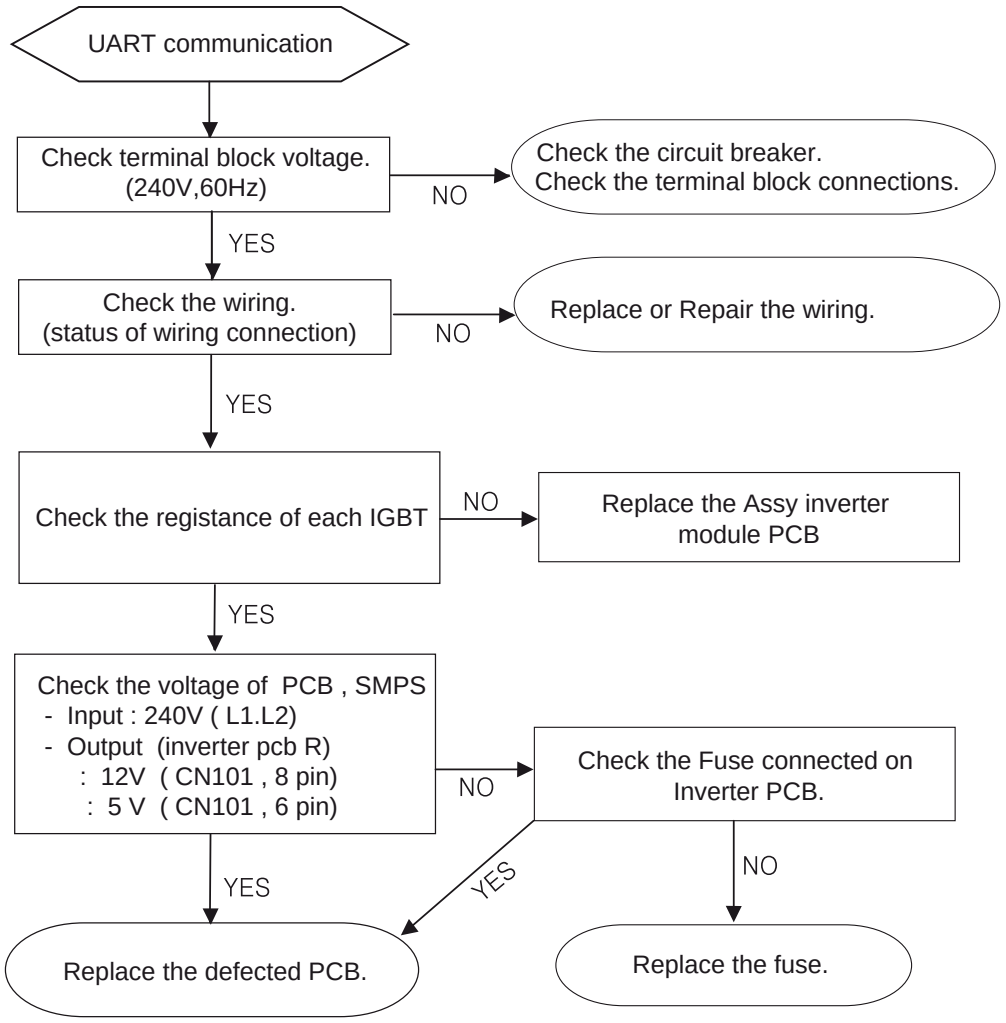


4-2-9 A2



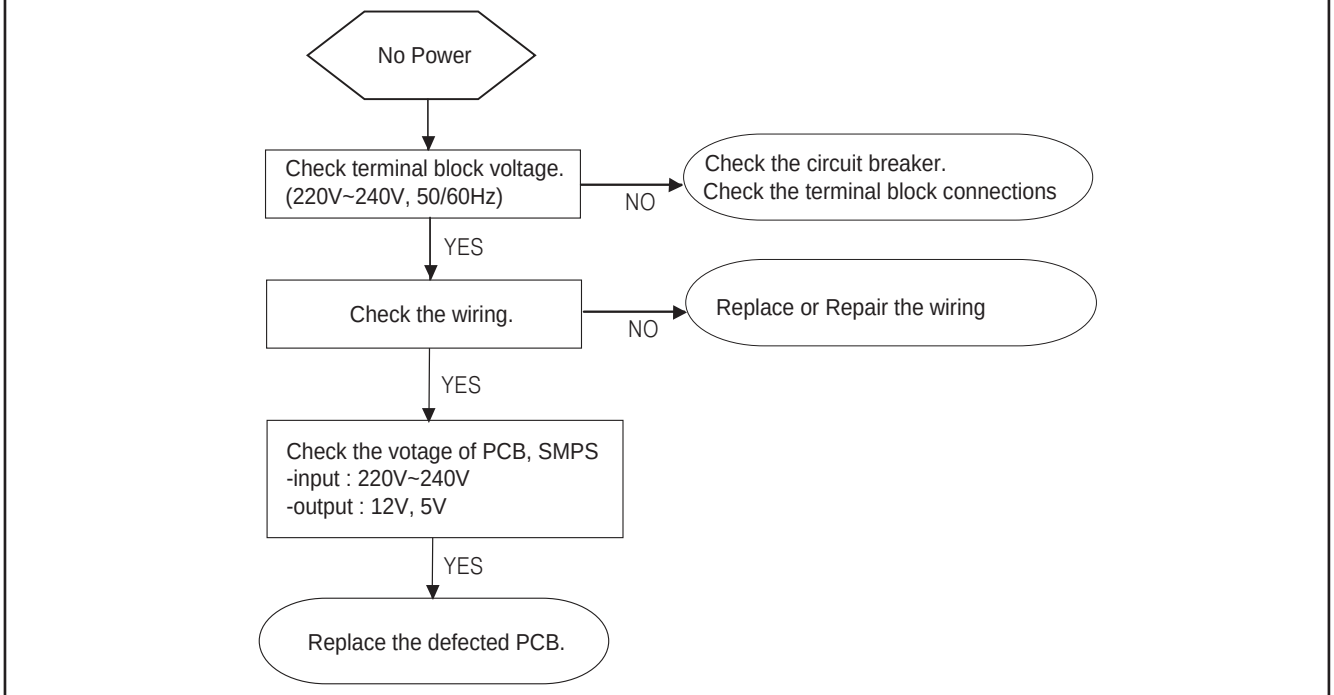
4-2-10 F0

Troubleshooting (Communication)

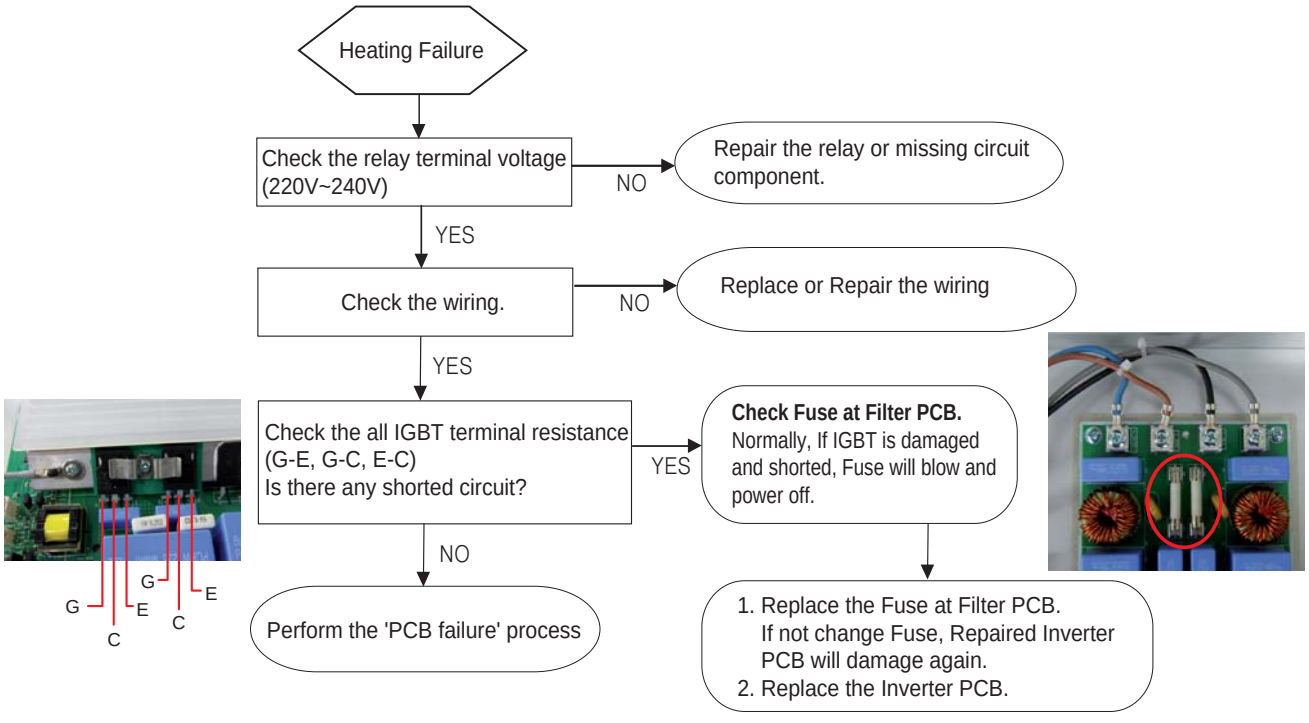


4-3 Electrical Malfunction

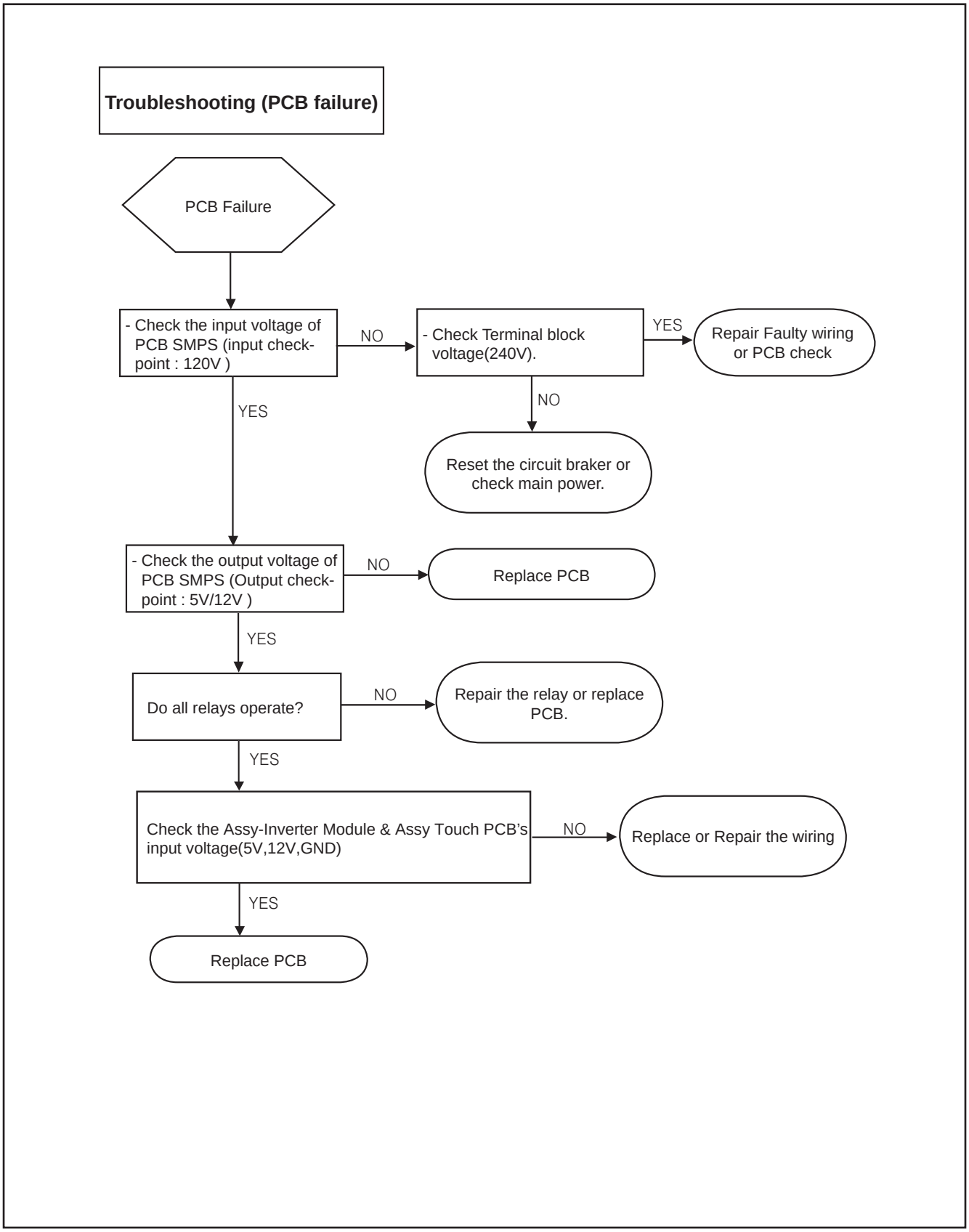
Troubleshooting (Power)



Troubleshooting (Heating)



4-3 Electrical Malfunction



4-3 Electrical Malfunction

Troubleshooting (Wi-Fi connection)

Step 1.

- Check whether display showed 
  - If display showed icon, check to 'Samsung Smart Home' app.
    Delete and re-install the app. And then, try again
    (Follow manual instruction for samsung smart home app).
  - If display is not show icon, check to home network.
  - If home network is ok, follow to step 2.
  - If home network have problem, contact home network service center.

Step 2.

- Check communication between wi-fi module and sub pcb

a) Press keepwarm and Num3 at the same time.
Display will show pJt name, main pcb version, sub pcb version and network version.

- If network version is ordinarily showed, try to use smart control feature again.
- If network version is showed as like below, check to wi-fi module. (2-b)

VFD DISPLAY

LED DISPLAY

b) Remove the wi-fi module (see page 3-21 removing the wi-fi module for the procedure).
Check input voltage on wi-fi module. (5V)

- If input voltage is ok, replace wi-fi module.
- If input voltage have problem, check to connector of wire and sub pcb. (2-c)

Pin 4 : GND
Pin 5 : 5VDC

c) Remove the cover back main wire
(see page 3-2 removing cover back main wire for the procedure).

- If connection of wire is ok, check to next step (2-d)
- If connection of wire have problem, re-connect and try smart control feature again.

d) Remove the sub pcb (see page 3-4 removing sub pcb for the procedure).
Check whether connector of wire is fully and correctly inserted. (CN270)
And then, check input voltage on sub pcb. (5V)

- If input voltage is ok, replace wi-fi module.
- If input voltage have problem, replace sub pcb.

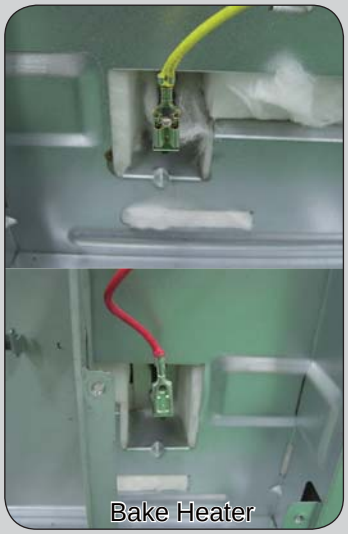
Pin 4 : GND
Pin 5 : 5VDC

4-3 Electrical Malfunction

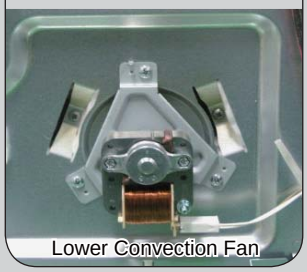
Component testing procedures

WARNING

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

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 : 12 ~ 14Ω (at the room temperature) * Terminal voltage of Broil heater : AC 240V * Replace or repair harness * Replace or repair sub 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 : 17 ~ 19Ω (at the room temperature) * Terminal voltage of bake heater : AC 240V * Replace or repair harness * Replace or repair sub 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 : 41 ~ 46Ω(at the room temperature) * Terminal voltage of convection heater : AC 240V * Replace or repair harness * Replace or repair sub PCB
 Warming Drawer	* Measure the resistance of values of heater, after taking off harness from heater. * Measure the terminal voltage of heater after making oven work by pressing warming drawer keypad	* Approx : 22 ~ 25Ω(at the room temperature) * Terminal voltage of Drawer heater : AC 120V * Replace or repaire harness * Replace or repaire sub PCB

4-3 Electrical Malfunction

FIGURE	TESTS MEASURE	RESULTS
	* Measure the state of micro switch and motor after taking off harness from the heater. * Check whether the lock works normally by pressing cooking time button and delay start keypad at the same time for 3 seconds.	* Lock motor Resistance : 2500 ~ 2700Ω (at the room temperature) voltage : 120V * Micro switch COM-NO * Replace or repair if harness has been loosen or disconnected.
	* 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 at the lamp sockets terminal, after turning on the Lamp by pressing the Oven light on the main keypad.	* Approx : ∞Ω * Terminal voltage of lamp socket : 120V * Replace or repair harness. * Replace or repair sub PCB
 Upper Convection Fan  Lower Convection Fan	* 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 to measure voltage for more then one minute as fan will normally cycle on and off)	**Approx** * Convection Fan : 20 ~ 30Ω * Terminal Voltage of Convection Fan : 120V * Replace or repair harness * Replace or repair main PCB.

4-3 Electrical Malfunction

FIGURE	TESTS MEASURE	RESULTS
 Door plunger switch	* Check the state of working of switch. * Make sure wire, housing and terminals are connected and have not been damaged.	Normal open : 0Ω Normal close : ∞Ω * Replace or repair if wire or terminal has been damaged.
	* Measure resistance valur of oven sensor.. * Check whether wire or housing has been loosen or disconnected.	**Approx.** at the room temperature :1080Ω

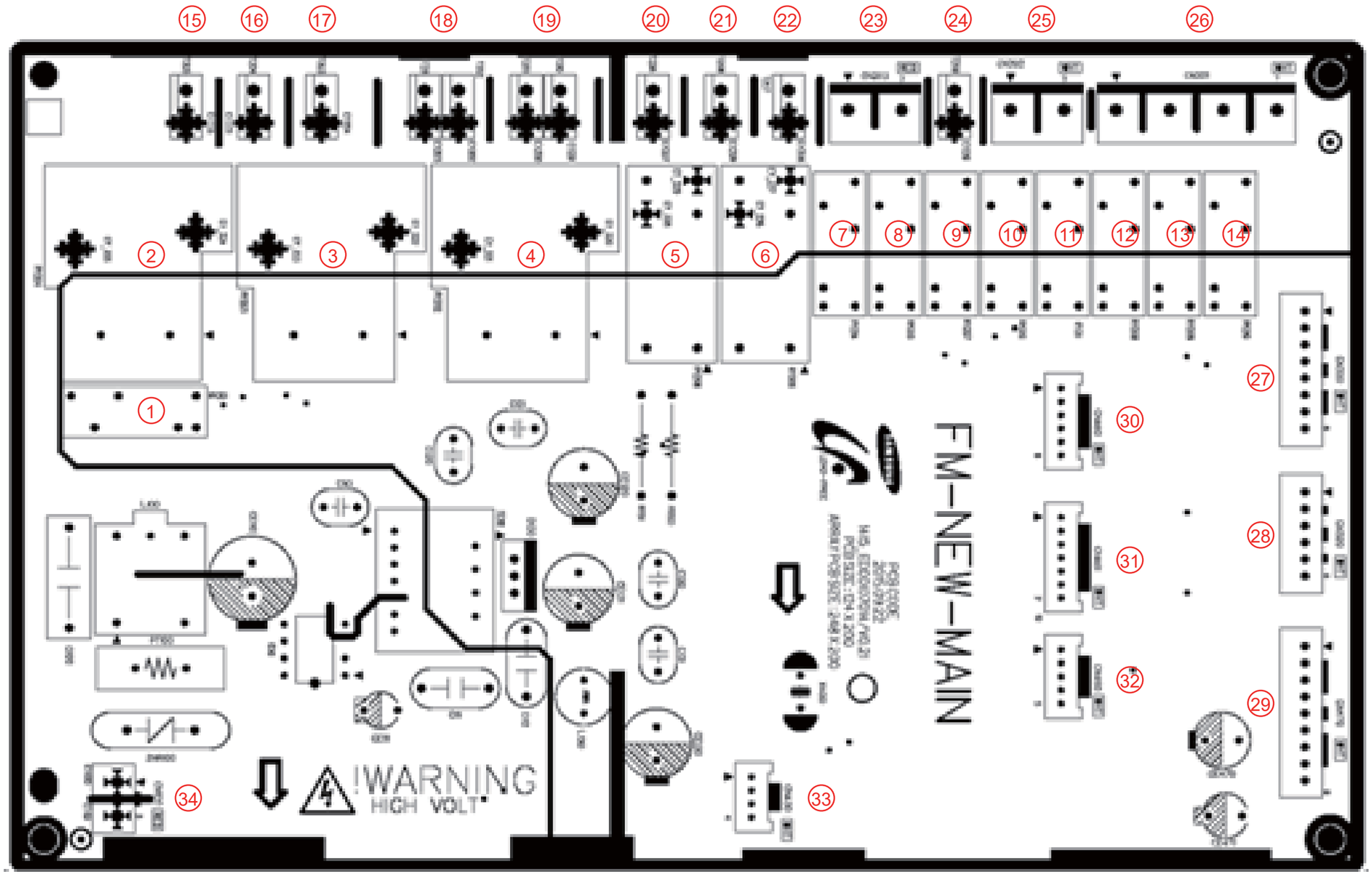
4-3 Electrical Malfunction

Oven sensor resistance (Temperature vs. Sensor resistance)

Ro = 1000 Ohms (0˚C), RP = 2757 Ohms, Up = 5V, a = 0.00375

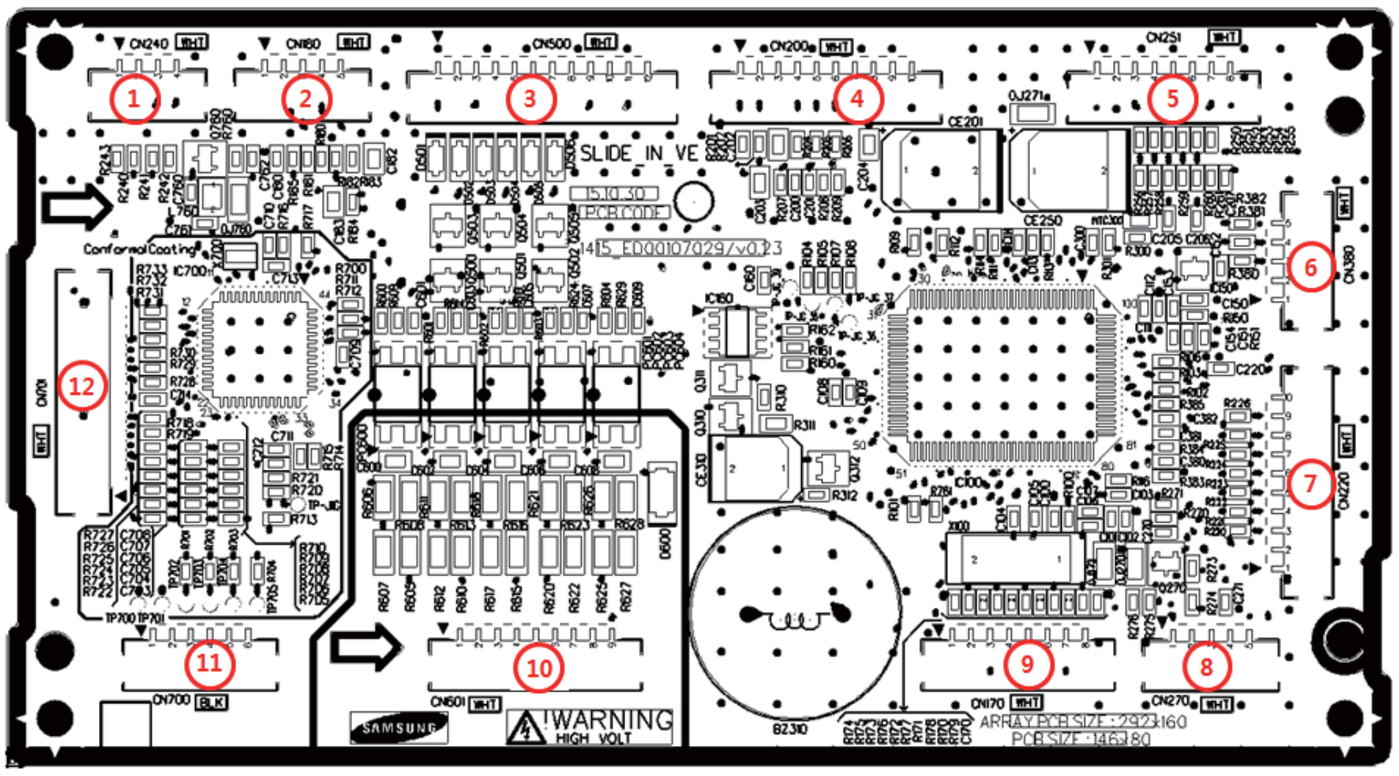
degree F	degree C	ohms	degree F	degree C	ohms
0	-17.8	932.12	113	45	1170.17
14	-10	961.86	122	50	1188.93
23	-5	980.95	212	100	1374.93
32	0	1000.00	302	150	1558.01
41	5	1019.02	392	200	1738.06
50	10	1038.02	482	250	1915.39
59	15	1056.99	572	300	2089.69
68	20	1075.92	662	350	2261.07
77	25	1094.83	752	400	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

5-1 PCB Diagrams (Main)



No.	Parts Number	Part Name	Function and Rule
1	RY201	RY-Source Relay	This is relay which control source of DLB, BAKE, BROIL, W/Drawer
2	RY204	Bake-Heater Relay	Broil relay(Ry203), Bake relay(Ry204), convection relay(Ry205) 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(Ry205) 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	RY202	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	RY206	Warming Drawer Heater Relay	This is Relay to control Warming Drawer-Heater.
6	RY205	Convection Relay	"Broil relay(Ry203), Bake relay(Ry204), convection relay(Ry205) 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	RY214	OPTION (Cooling Fan)	This is a spare relay. (This relay is connected with Cooling fan Lo in this model)
8	RY213	OPTION (Cooling Fan)	This is a spare relay. (This relay is connected with Cooling fan Hi in this model)
9	RY207	WC-Heater Relay	This is Relay to control Warming Centor-Heater.
10	RY212	Oven-Lamp-L Relay	This is relay which is connected with Oven-Lamp-Low.
11	RY211	Oven-Fan-L Relay	This is relay which is connected with Oven-Fan-Low.
12	RY208	Conv-Fan-U Relay	This is relay which is connected with Conv. Fan.
13	RY209	Conv-Lamp-U Relay	This is relay which is connected with Conv-Lamp-Upper
14	RY210	Door Lock Relay	This is relay which is connected with door lock motor.
15	T205	Bake Terminal	This is terminal to connect harness with Bake relay.
16	T204	Broil Terminal	This is terminal to connect harness with Broil relay.
17	T203		
18	T211	DLB Terminal	This is terminal to connect harness with DLB relay.
	T202		
19	T201		
	T210		
20	T206	Convection-Heater Terminal	This is terminal to connect harness with convection-heater relay.
22	T207		
21	T208	WD-Heater Terminal	This is terminal to connect harness with relay to get heater on warming drawer work.
23	CN203	spare connector	This is for spare relays (RY213, RY214). (This connector is connected with Cooling fan in this model.)
24	T209	WC-Heater Termainal	This is terminal to connect harness with relay to get heater on warming centor work.
25	CN202	Relay Connector	OVEN FAN L, OVEN LAMP L
26	CN201	Relay Connector	CONV FAN U, OVEN LAMP U, DOOR LOCK, AC120V_LINE
27	CN300	Door Lock, Divider Connector	This is connector which is connected with Door plung switch and Door lock switch, divider switch.
28	CN320	Oven Sensing Connector	This connector which is connected with oven sensor.
29	CN470	Sub Communication Connector	This is connector which is connected with Sub PCB to communicate.
30	CN460	COOK TOP UART	(For ELEC OVEN) This is to connect Cook-Top to FM-NEW-MAIN PBA.
31	CN461	COOK TOP UART	(For GAS OVEN) This is to connect BLDC-FAN-SUB PBA to FM-NEW-MAIN PBA.
32	CN450	HASS	This is to connect HASS.
33	CN430	On Board Writing Connector	When do micom revision, connect to micom writer. And this connector which is connected with Touch PCB to communicate.
34	CN100	Power Connector	This is to supply power with SMPS.

5-2 PCB Diagrams (Sub)



No.	Parts Number	Part Name	Function and Rule
1	CN240	Option Connector	This is connector to select H/W option.
2	CN180	HASS Connector	This is connector for HASS.
3	CN500	Knob Light 5Volt Power connector	This is connector to provide 5V power to knob light.
4	CN200	Main Communication Connector	This is connector which is connected with Main PCB to communicate.
5	CN251	BLDC-FAN-SUB Control Ceonnector	This is to connect BLDC-FAN-SUB PBA. (For GAS Model)
6	CN380	Rotary Switch Connector	This is connector for Rotary Switch.
7	CN220	LED Module Connector	This is connector for LED Display Module.
8	CN270	WIFI Connector	This is connector to connect WIFI Module.
9	CN170	JTAG Monitoring Connector	This is connector for JTAG equipment.
10	CN601	Knob sensing Connector	This is connector to check knob ON/OFF.
11	CN700	Touch Download Connector	This is connector to download program for touch IC.
12	CN701	Touch Film Connector	This is to connect Touch-Film.

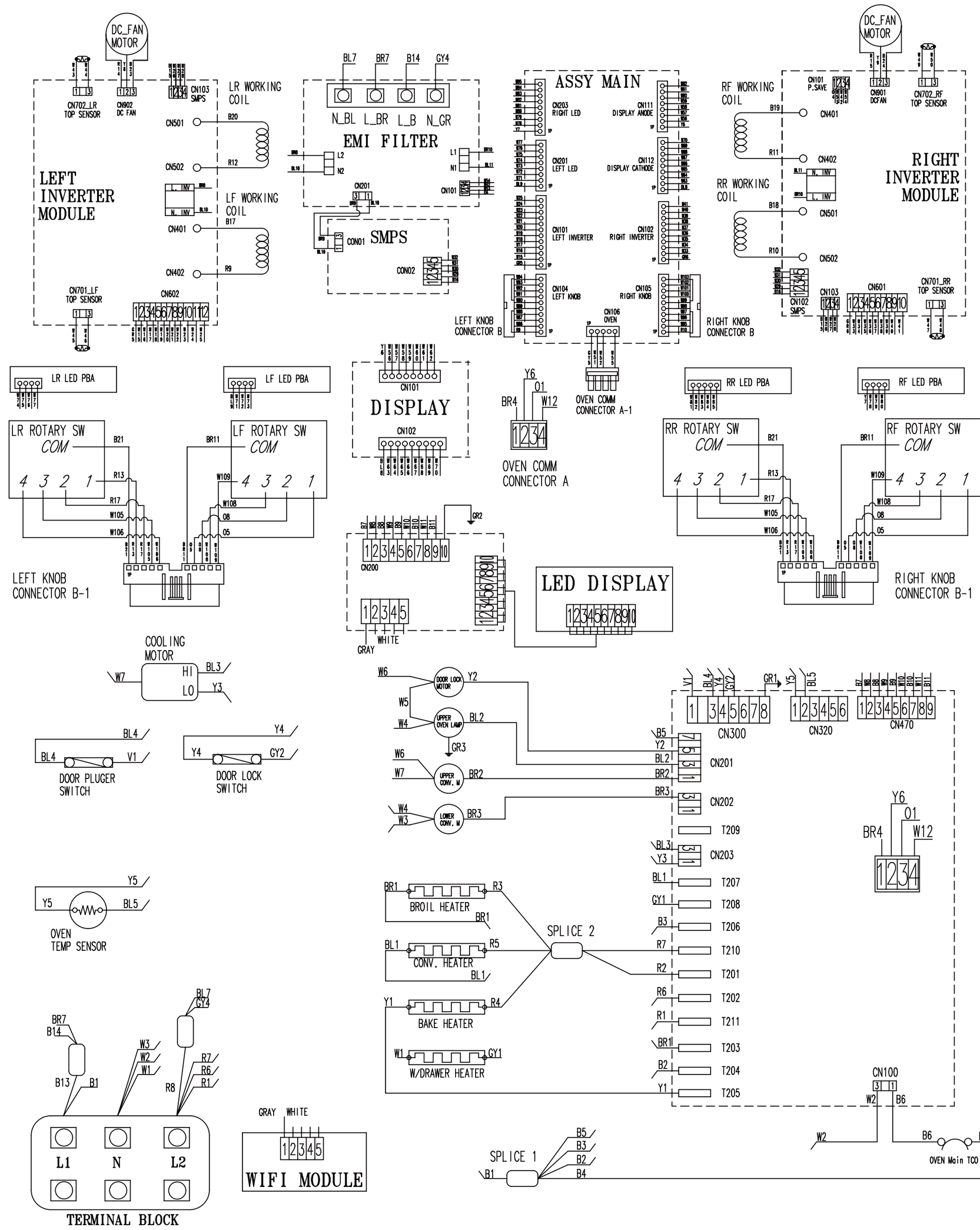
6-1 Wiring diagram(New ver. PCB)

NOTE
1) INPUT POWER : AC240V 60Hz, 13400W
   1-1) OVEN HEATER : MAX 6300W
   1-2) COOKTOP : MAX 7100W
2) OVEN DOOR OPENED AND UNLOCKED

WIRING DIAGRAM

MODEL : NE58*9560W*

COLOR		COLOR	
RED	R	ORANGE	O
WHITE	W	VIOLET	V
BLUE	BL	BLACK	B
YELLOW	Y	GRAY	GY
SKY	SK	GREEN	GR
BROWN	BR		



HEATING ELEMENTS

COOKTOP ELEMENTS		
COMPONENTS	INPUT	WATTAGE
RF INDUCTION ELEMENT	240V	2300
RR INDUCTION ELEMENT	240V	1200
LF INDUCTION ELEMENT	240V	1800
LR INDUCTION ELEMENT	240V	1800

OVEN HEATING ELEMENTS		
COMPONENTS	INPUT	WATTAGE
BAKE	240V	3000W
BROIL	240V	4200W
CONVECTION	240V	1250W
WARM DRAWER	120V	600W

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