SAMSUNG

SYSTEM AIR CONDITIONER

	Indoor Unit	Outdoor Unit
Model :	AC026KNADEH	AC026JXSCEH
	AC035KNADEH	AC035JXSCEH
	AC071KNADEH	AC071JXSCEH

Model Code :	AC026KNADEH/EU	AC026JXSCEH/EU
	AC035KNADEH/EU	AC035JXSCEH/EU
	AC071KNADEH/EU	AC071JXSCEH/EU

SERVICE Manual

AIR CONDITIONER

CONTENTS

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

Contents

1. Precautions

1-1 Precautions for the Service

◆ **Use the standard parts when replacing the electric parts.**
– Confirm the model name, rated voltage, rated current of the electric parts.

◆**When repairing the equipment, connection of the harness parts must be firm and solid.**
– A loose connection may cause noise or other malfunction.

◆**When assembling and disassembling the equipment while it is laid down, lay it on soft cloth.**
– Otherwise it may scratch the back of the exterior of the product.

◆**Remove dust or dirt completely from the housing block, wiring block and service parts during repair.**
– This helps prevent the danger of fire caused by tracking or short circuit.

◆**Fasten the valve caps of service valves and charging valves of outdoor unit as much as possible using adjustable wrenches.**

◆**Check the status of the components' assembly after repair service.**
– The status must be the same as before the repair service.

1-2 Precautions related to static electricity and PL

◆ **The PCB power supply block is susceptible to static electricity. Therefore, care must be taken during repair or measuring while the power is on.**
– Wear insulation gloves for PCB repair or measuring.

◆ **Check whether the installation location is at least two meters away from other electronic products such as TV, video, or audio.**
– Otherwise, the video quality might be degraded or noise might be generated.

◆ **Do not let end users repair the products themselves.**
– Unauthorized disassembly might cause electric shock or fire.

1-3 Precautions related to product safety

- **Do not pull the power cord and do not touch the power plug or aux power switch with wet hands.**
  – It might cause electric shock or fire.

- **A damaged power line or power plug must be replaced to prevent danger.**

- **Do not bend the power cable with excessive force, and do not place a heavy weight on the case as it might damage the cable.**
  – It might cause electric shock or fire.

- **Do not use multiple electric outlets.**
  – This might cause electric shock or fire.

- **Connect the ground terminal when necessary.**
  – You must connect the ground terminal if you determine that there is a danger of electric leakage due to moisture or water.

- **Unplug the power cable or turn off the auxiliary power switch for electric part replacement and repair service.**
  – Otherwise it might cause electric shock.

- **Instruct end users to separate the batteries from the remote controllers and store them separately when the product is not used for long time.**
  – Otherwise leakage from the dry cell may cause problems with the remote controller.

1-4 Other precautions

- **The pipes should have no leaks during installation, and the compressor must be stopped before removing connecting pipes for pump down work. Operating the compressor while the service valve is open and coolant pipe is not properly connected may cause explosion or injury due to abnormal high pressure created inside the coolant cycle as the air can be absorbed through the pipe.**

- **Pump Down work procedure (When uninstalling the product)**
  – Turn on the air conditioner, select cooling operation, and run the compressor for more than three minutes.
  – Release the high pressure and low pressure valve caps.
  – Close the high pressure valve completely using an L-wrench
  – After about two minutes, close the low pressure valve completely.
  – Stop running the air conditioner.
  – Separate the connecting pipe.

2. Product Specifications

2-1 The Feature of Product

◆ **Built-in Cassette Type**

After installed, the air conditioner can be harmonized with a room interior.

◆ **High Performance & Energy Saving**

With the advanced BLDC inverter technology, it makes a room cool with highly energy saving and arises the efficiency of air conditioner.

◆ **Long Ambient Operation(In Low Temperature)**

It can arise the reliability and the capacity of the air conditioner, especially operated in low temperature.

◆ **Eco-friendly Product(Lead-Free, ROHS, WEEE)**

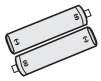
◆ **Easy installation of ultra-lightweight indoor unit**

2-2 Product Specifications

ITEM				AC026KNADEH/EU AC026JXSCEH/EU	AC035KNADEH/EU AC035JXSCEH/EU
IMAGE	Indoor Unit				
	Outdoor Unit				
	Remote Controller				
Power	Product			1Φ, 220-240V/50Hz	1Φ, 220-240V/50Hz
Indoor	L x H x D		mm	896*261*261	896*261*261
Outdoor	L x H x D		mm	790*285*548	790*285*548
Indoor	Product		kg(Net)	11.0	11.0
Outdoor	Product		kg(Net)	37.0	37.0
Capacity	Cooling(STD)		W	2600	3500
	Heating(STD)		W	3400	4300
Power Consumption	Cooling(STD)		W	610	940
	Heating(STD)		W	750	1020
Operation current	Cooling(STD)		A	3.1	4.4
	Heating(STD)		A	3.6	4.7
Noise (Cooling/ Heating)	Indoor unit	In case of strongest air blow	dBA	43/43	43/43
	Outdoor unit	In case of strongest air blow	dBA	52/52	54/54
Refrigerant (R410A)			g	1270	1270
Connecting Pipe		Liquid	mm	6.35	6.35
		Gas	mm	9.52	9.52
Additional Refrigerant (R410A)			g/m	-	-
Standard			m	5	5
Extension length(Total)			m	20	20
Extension length(Elevation)			m	15	15
Option Code			Product Option	01026C-195467-271A22-372500	01026C-195469-27232B-372700
			Installation Option	020000-100000-200100-300000	020000-100000-200100-300000

ITEM				AC071KNADEH/EU AC071JXSCEH/EU
IMAGE	Indoor Unit			
	Outdoor Unit			
	Remote Controller			
Power	Product			1Φ, 220-240V/50Hz
Indoor	L x H x D		mm	1063*317*294
Outdoor	L x H x D		mm	940*330*1420
Indoor	Product		kg(Net)	18.0
Outdoor	Product		kg(Net)	96.0
Capacity	Cooling(STD)		W	7100
	Heating(STD)		W	8000
Power Consumption	Cooling(STD)		W	1860
	Heating(STD)		W	2330
Operation current	Cooling(STD)		A	8.4
	Heating(STD)		A	10.6
Noise (Cooling/ Heating)	Indoor unit	In case of strongest air blow	dBA	51/51
	Outdoor unit	In case of strongest air blow	dBA	58/60
Refrigerant (R410A)			g	2900
Connecting Pipe		Liquid	mm	9.52
		Gas	mm	15.88
Additional Refrigerant (R410A)			g/m	25
Standard			m	5
Extension length(Total)			m	75
Extension length(Elevation)			m	30
Option Code			Product Option	01026C-19547F-274750-371700
			Installation Option	020000-100000-200100-300000

2-3 Accessories

Item	Description	Code No.	Q'ty	Remark
	Remote Control	DB93-15882H	1	Essential Offer (Indoor Unit)
	Batteries for Remote Control	4301-000121	2	
	User's & Installation Manual	DB68-06253A DB68-06254A	1/1	
	Remote Control Holder	DB61-06087A	1	
	M4 x 16 Tapped Screws	6002-000234	2	
	Cap Screws	DB67-01404B	1	
	CARD WARRNATY	DB68-02596B	1	
	Drain Plug	DB67-20011A	1	Essential Offer (Outdoor Unit)
	Rubber Leg	DB67-01533A	4	
	ASSY-INSTALLATION MANUAL	DB68-05400A	1	

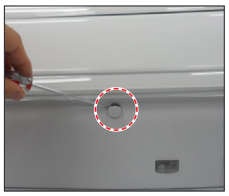
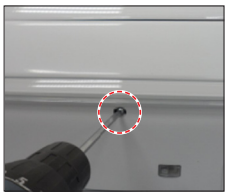
3. Disassembly and Reassembly

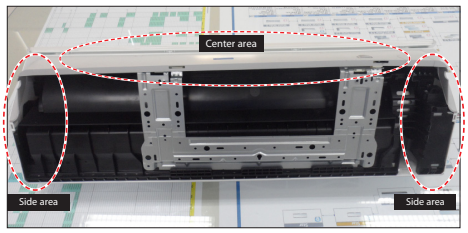
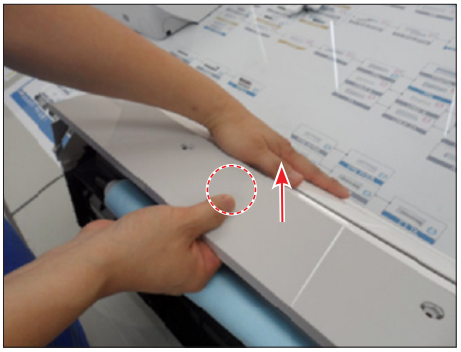
◆ Necessary Tools

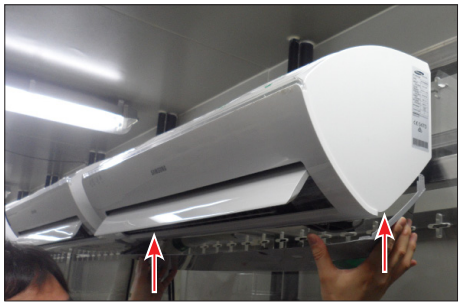
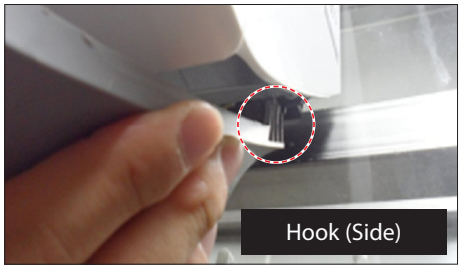
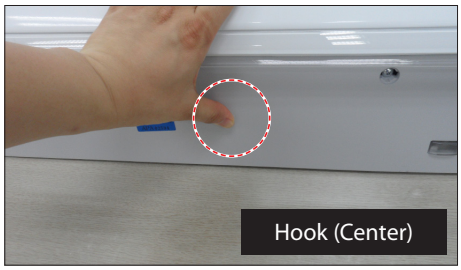
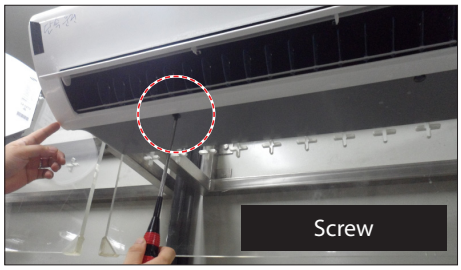
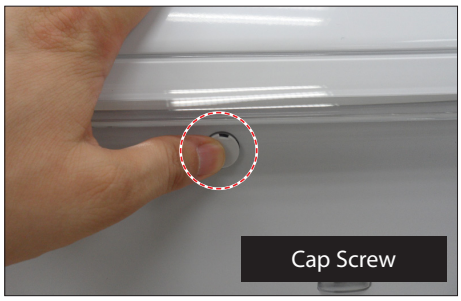
Item	Remarks
+SCREW DRIVER	
Adjustable Wrench (8mm, 10mm, 13mm)	
M6, M8 Hex Wrench	

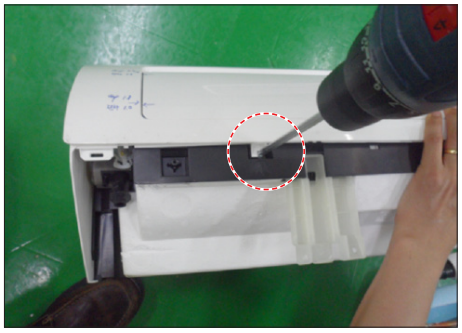
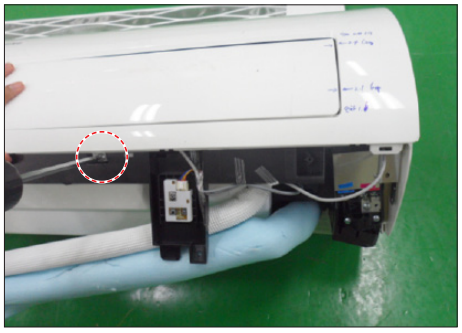
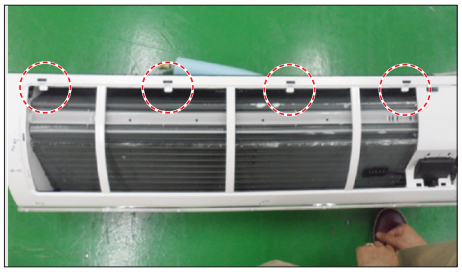
3-1 Indoor unit

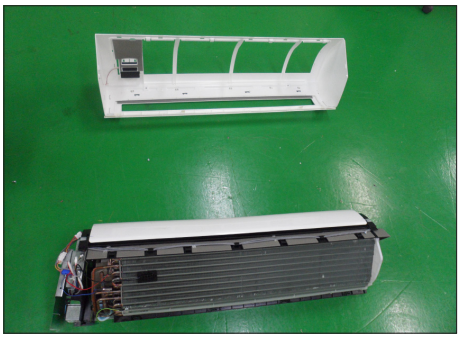
◆ AC026KNADEH / AC035KNADEH / AC071KNADEH

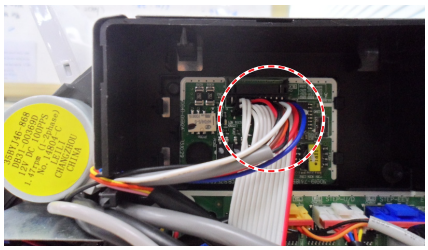
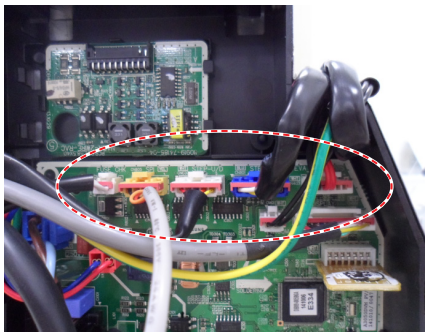
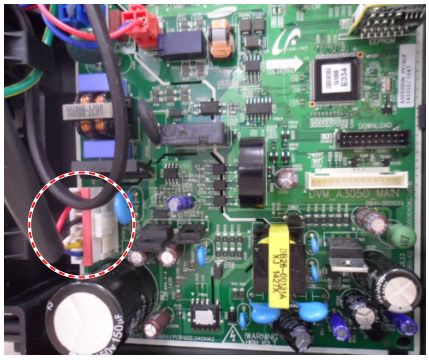
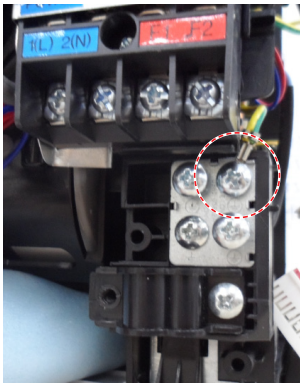
No	Parts	Procedure	Remark
1	PANEL-FRONT	1) Stop the driving of air conditioner and shut off main power supply.	
		2) Detach FILTER PRE from the PANEL FRONT.	
		3) Cover Panel is assembled on bottom of indoor unit as shown in the figure. Remove the Cap Screw as shown on the right side and then remove the screw and separate the Cover Panel.	  

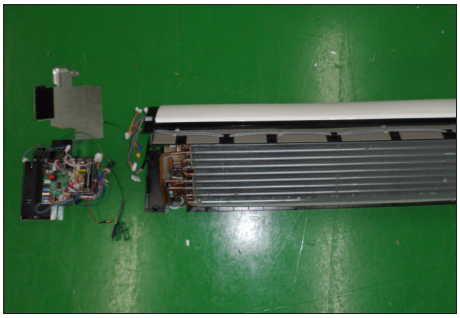
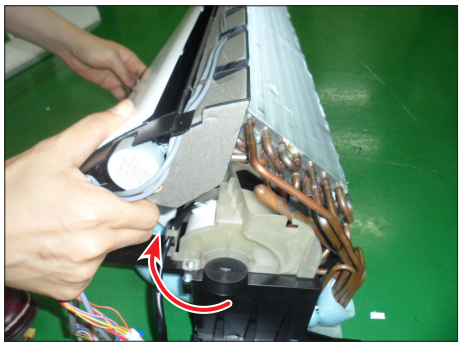
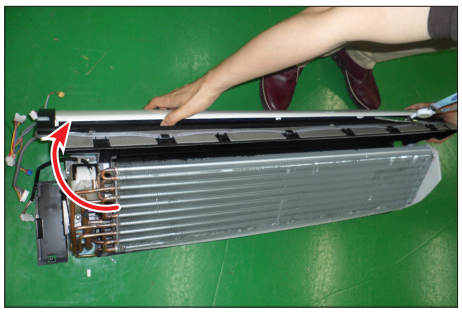
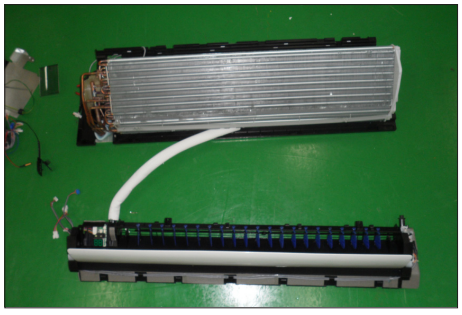
No	Parts	Procedure	Remark
		4) Cover Panel is fixed to body by Hook in center area and side area.	
			<table><tr><td></td><td>HOOK</td></tr><tr><td>015/022/028/ 036/045</td><td>  </td></tr><tr><td>056/071/082</td><td></td></tr></table>
		5) Separate the hook after pushing both end of Cover Panel as shown in the figure. (Watch out for the damage of the hook)	
		6) Raise front part upward obliquely as shown in the figure and then remove the hooks.	
			

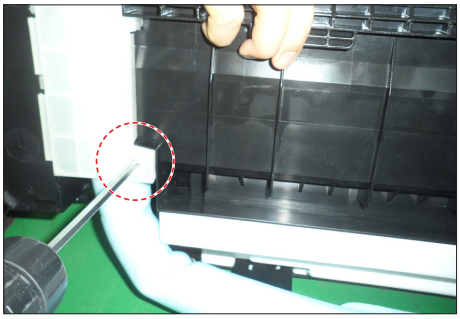
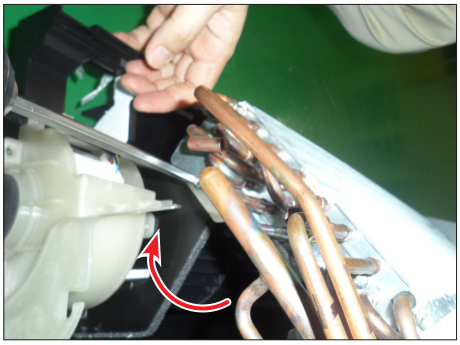
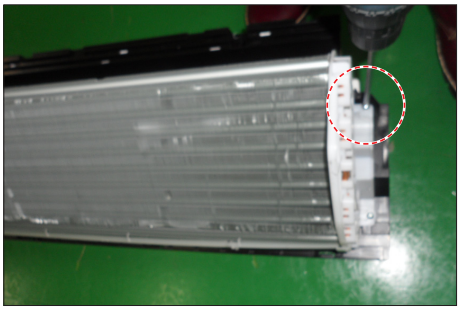
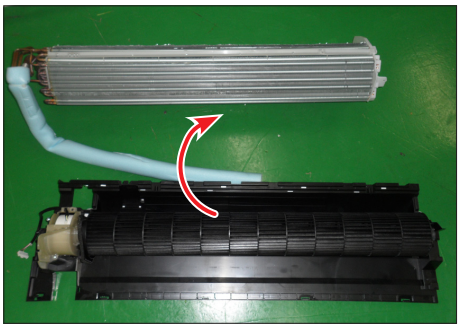
No	Parts	Procedure	Remark
		Caution: Assembly of Cover Panel after service end. - Reassembly is in the reverse order of the removal. - Piping and drain hose must be careful not to damage and Progress must be done with both hands.	    

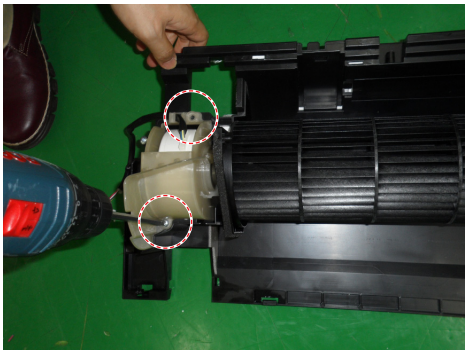
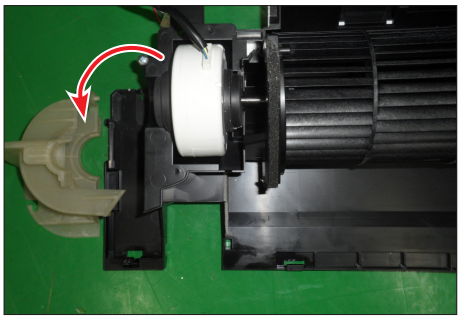
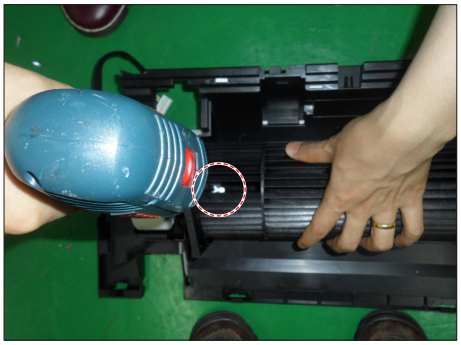
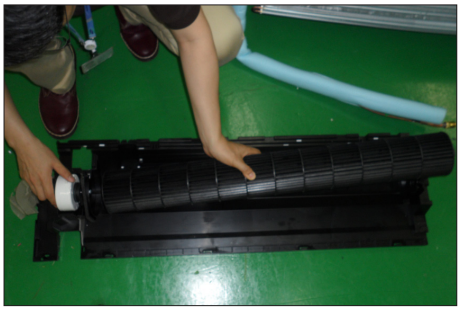
No	Parts	Procedure	Remark
		7) To detach the PANEL-FRONT from the main frame, unfasten 2 screws at the bottom. (use + Screw Driver)	
			
		8) To detach the COVER-PANEL from the main frame, loosen 4 HOOK Structures. When separate the hook : Use the (-) screw Driver. (-)Screw Driver Insert the hook and then pull the hook as shown on the right side. (Watch out for the damage of the hook)	
			 

No	Parts	Procedure	Remark
		9) Remove the Panel Frame from the Main Frame as shown on the right side.	  

No	Parts	Procedure	Remark
2	CONTORL IN	1) Lossen Sub PBA Wire. ⚠ Caution: When you separate the connector, pull pressing the locking button.	
			
		2) Lossen Stepping Motor, EEV, Display, Sensor, SPI, Fuse Wire. ⚠ Caution: When you separate the connector, pull pressing the locking button.	
		3) Lossen Motor, Terminal Wire. ⚠ Caution: When you separate the connector, pull pressing the locking button.	
		4) Loosen Earth Wire.	

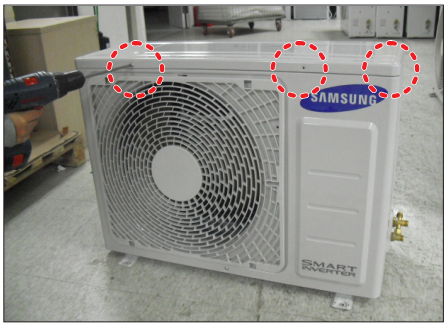
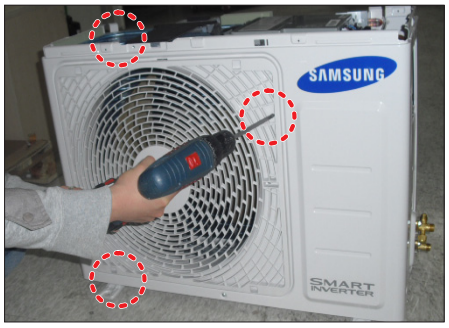
No	Parts	Procedure	Remark
5	EVAPORATOR	9) Take off the CASE-CONTROL from the main frame after loosen the remaining connector. ⚠ Caution: When you separate the connector, pull pressing the locking button.	
3	TRAY DRAIN	1) To detach TRAY-DRAIN from the main frame, pull the bottom of the TRAY-DRAIN towards you.	  

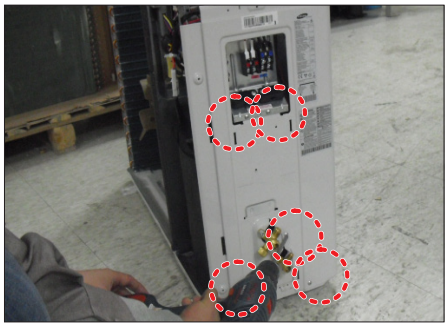
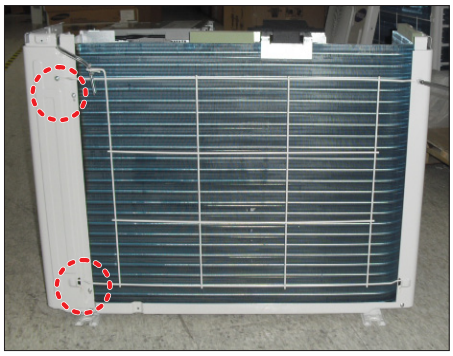
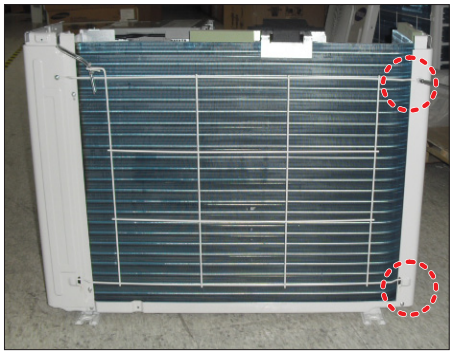
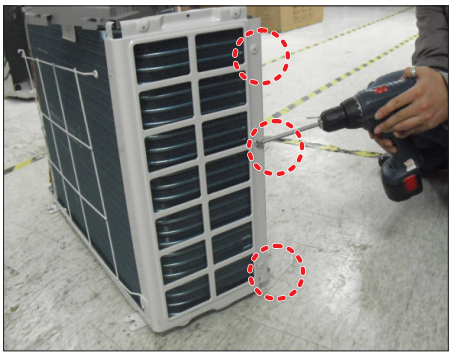
No	Parts	Procedure	Remark
4	Evaporator	1) Detach the HOLDER PIPE.	
		2) Unfasten the screw at the left side. (use + Screw Driver)	
		3) Unfasten the screw at the right side. (use + Screw Driver)	
		4) To detach Evaporator from the main frame, pull the bottom of the Evaporator towards you.	

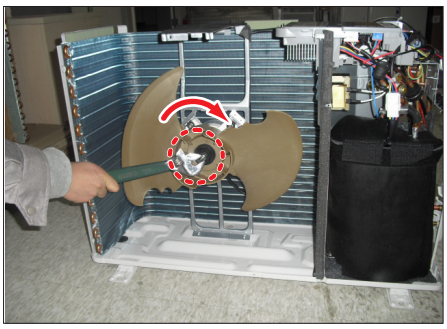
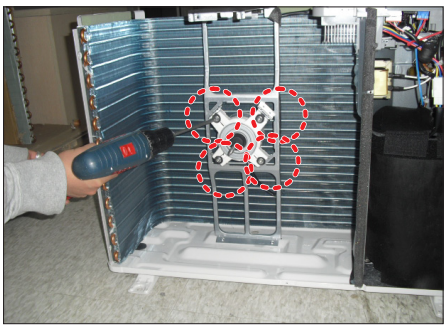
No	Parts	Procedure	Remark
5	FAN MOTOR & CROSS FAN	1) Unfasten the screw. (use + Screw Driver)	
		2) Detach the FAN Motor case.	
		3) Unfasten the screw a little. (use + Screw Driver)	
		4) Pull the CROSS-FAN to the left side.	

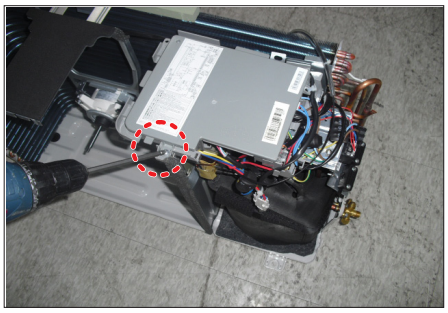
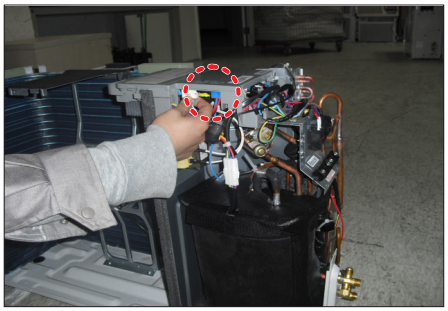
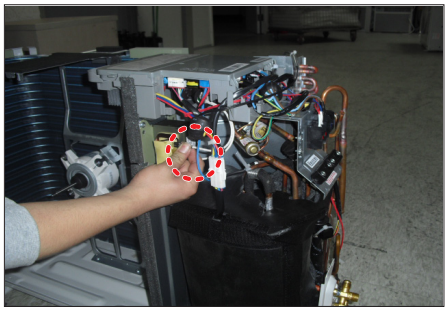
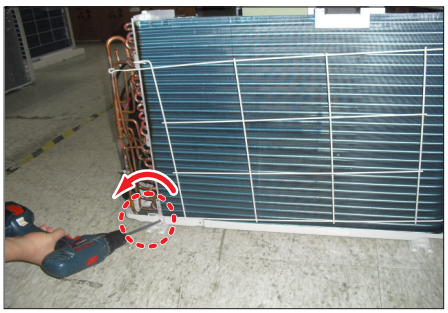
3-2 Outdoor unit

◆ AC026JXSCEH / AC035JXSCEH

No	Parts	Procedure	Remark
1	common work	1) Loosen 1 pcs screw of cover control,and detach it.	
		2) Loosen 5 pcs screws on both right and left cabinet side edges and to detach the cover-top	
			
		3) Loosen 7 screws fixed to disassemble cabi-front , and detach it.	
			

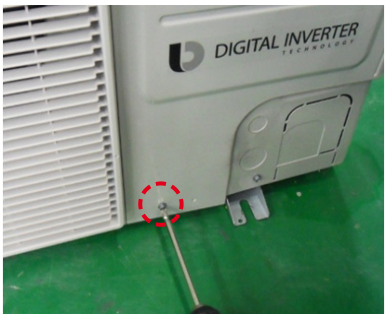
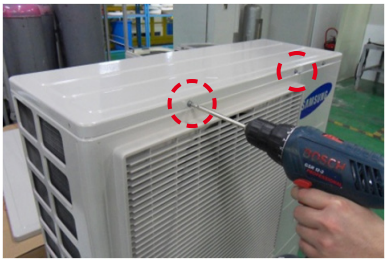
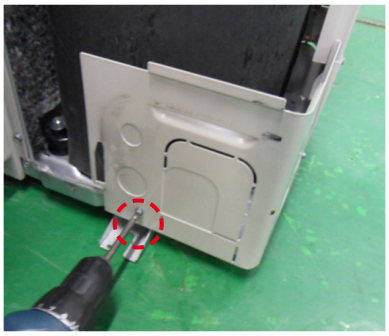
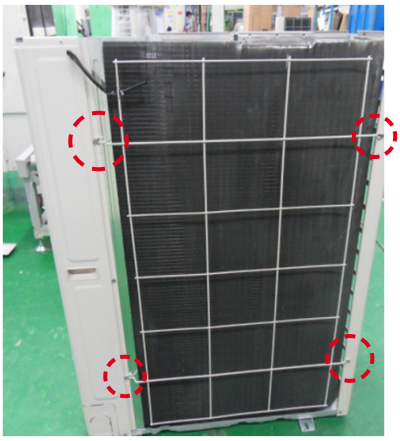
No	Parts	Procedure	Remark
	common work	4) Loosen 7 screws to disassemble the cabi-right ,and detach it.	
			
		5) Loosen 2 screws to disassemble steel-bar.	
		6) Loosen 3 screws to disassemble cabi-left.	

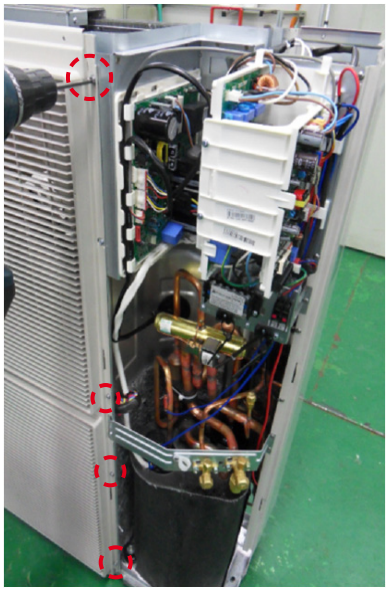
No	Parts	Procedure	Remark
2	fan&motor	1) Loosen 1 screw as indication and detached the fan.	
		2) Loosen 4 pcs motor screws and disconnect the wire between assy control out and motor.	
		3) Loosen 2 pcs bracket-motor screw and detach it.	

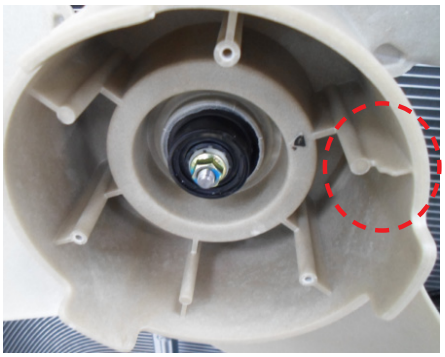
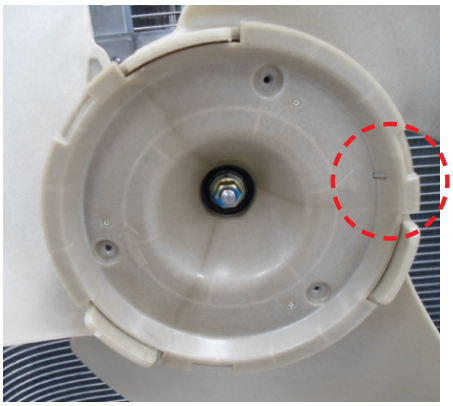
No	Parts	Procedure	Remark
3	assy control out	1) Loosen fixing 1 screw from cover -control 2) Detach several connections from assy control out, take out assy control out.	  
4	Heat exchanger	1) Release the refrigerant at first 2) Loosen fixing screw on both side. 3) Disassemble the pipes in both inlet and outlet with welding torch. 4) Detach the heat exchanger.	

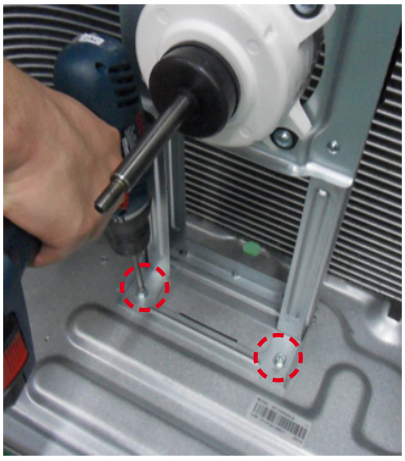
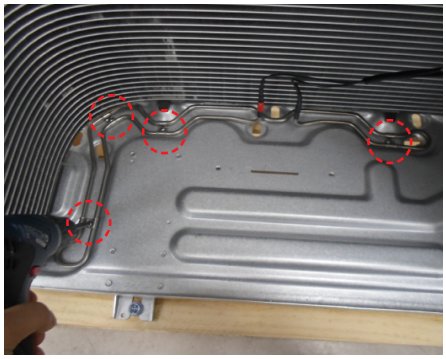
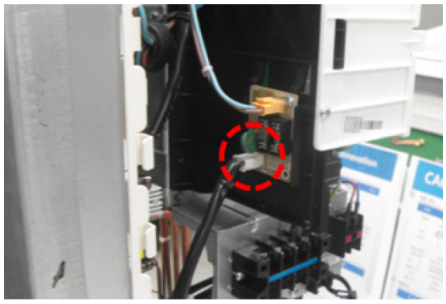
No	Parts	Procedure	Remark
5	compressor	1) Disconnect the compressor lead wire .	
		2)Disassembly the felt comp sound. loosen the 3 bolts at the bottom of compres sor.	

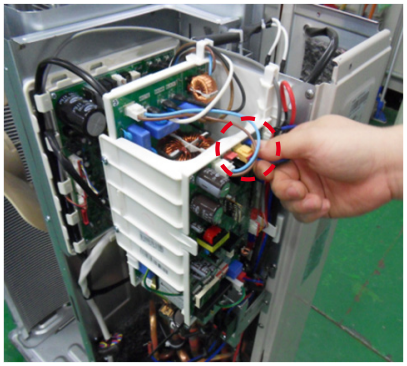
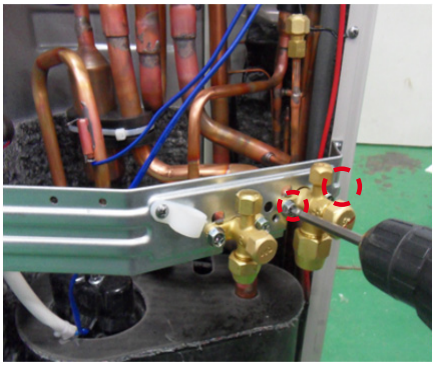
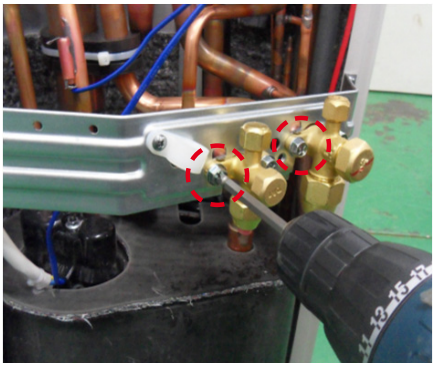
◆ AC071JXSCEH

No	Parts	Procedure	Remark
1	Cabi Front RH	⚠ You must turn off the Power before disassembly. 1) Unscrew and remove two mounting screw in the Cabinet Front RH. (Use +Screw Driver)	 
2	Cabi Top	1) Unscrew and remove 9 screws on each side of the Cabinet-Top. (Use +Screw Driver)	
3	Cabi Install Front	1) Unscrew and remove 1 screw in the Cabinet-Install Front. (Use +Screw Driver)	
4	Guard Cond	1) Pull the sensor from Guard Cond. 2) Unscrew and remove 4 screws in the Guard Cond. (Use +Screw Driver)	

No	Parts	Procedure	Remark
5	Cabi Back RH	1) Pull the sensor from Cabi Back RH. 2) Unscrew and remove 4 screws on each side of the Cabinet Back RH. (Use +Screw Driver)	
6	Cabi Install Back	1) Unscrew and remove 1 screw in the Cabinet-Install Back. (Use +Screw Driver)	
7	Cabi Front LF	1) Unscrew and remove 10 screws in the Cabinet-Front LF. (Use +Screw Driver)	

No	Parts	Procedure	Remark
8	Fan	1) Unscrew and remove 3 screws in the Ass'y Fan Propeller-Total. (Use +Screw Driver)	
		2) Remove the Cover from the Fan Propeller	
		3) Turn 2 mounting nuts as shown in the picture and remove it. (Use Adjustable Wrench)	
		⚠ When you assemble the Fan Propeller and the Cover, must check the rib in the hole.	
			

No	Parts	Procedure	Remark
9	Motor	1) Separate the Fan Propeller. 2) Unscrew and remove the 8 Motor mounting screws. (Use +Screw Driver) 3) Disconnect the Motor wire From Ass'y Control Out.	
10	Bracket Motor	1) Unscrew and remove 2 mounting screws in Bracket Motor. (Use +Screw Driver)	
11	Heater	1) Unscrew and remove 4 screws on the Base Out. (Use +Screw Driver) 2) Disconnect the heater wire from the Ass'y Control Out.	 

No	Parts	Procedure	Remark
12	Control Out	1) Disconnect 4 Connecters From Ass'y Control Out. 2) Unscrew and remove 1 mounting screw in Control Out. (Use +Screw Driver) 3) Separate Ass'y Control Out.	 
13	Assy 4way Valve	1) Purge the Coolant first. 2) Unscrew and remove 2 mounting screws in Service Valve. (Use +Screw Driver) 3) Separate the pipe from the Entrance/Exit using a welder. ⚠ When removing the compressor, Heat Exchanger, and Pipe, purge the Coolant inside the Compressor completely and remove the pipe with a welding flame.	
14	Assy EEV Valve	1) Unscrew and remove 2 mounting screws in Service Valve. (Use +Screw Driver) 2) Separate the pipe from the Entrance/ Exit using a welder.	

4. Troubleshooting

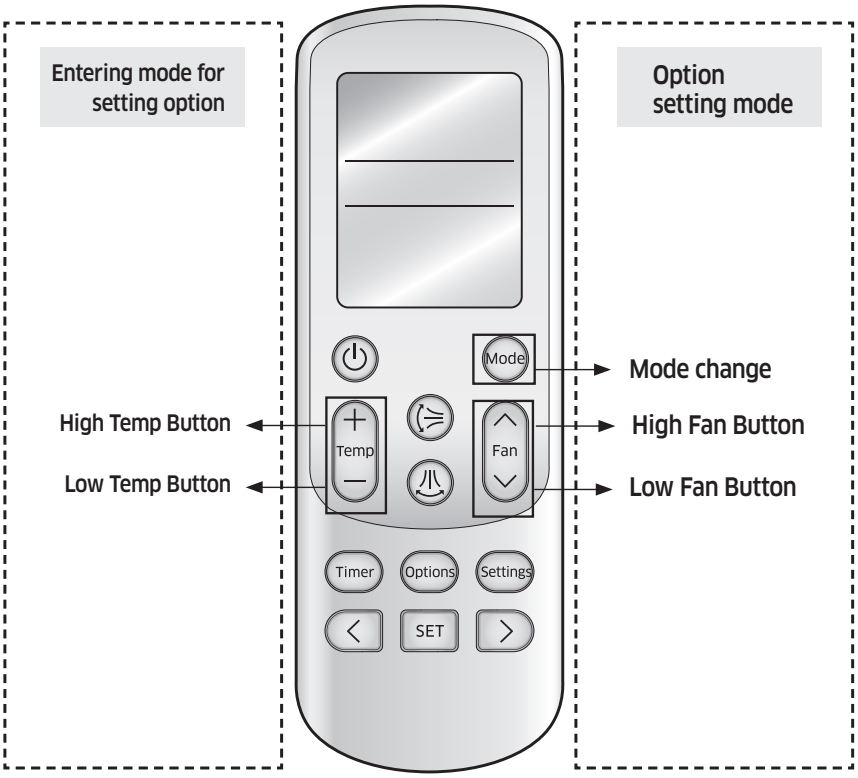
4-1 Troubleshooting for indoor unit

▶ Set the indoor unit address and installation option with remote controller option.
Set the each option separately since you cannot set the ADDRESS setting and indoor unit installation setting option at the same time.You need to set twice when setting indoor unit address and installation option.

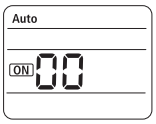
▶ Please use the proper wireless remocon which can set 24 digit option code. Following is the instructions of setting option code with wireless remocon of MR-EH01.

▶ Please refer to the wired remocon installation manual for setting with the wired remocon.

The procedure of setting option



Step 1. Entering mode to set option

1. Remove batteries from the remote controller.
2. Insert batteries and enter the option setting mode while pressing High Temp button and Low Temp button  .
3. 

Check if you have entered the option setting status.

Step 2. The procedure of option setting

After entering the option setting status, select the option as listed below.

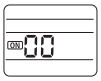
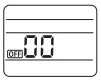
CAUTION

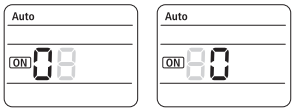
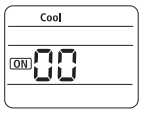
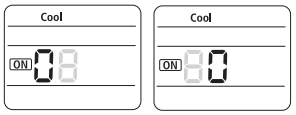
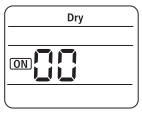
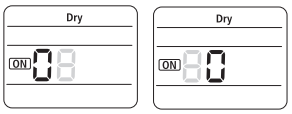
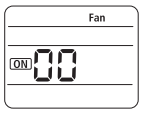
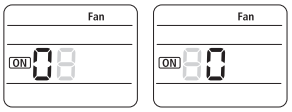
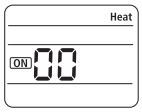
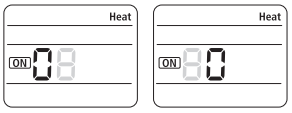
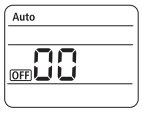
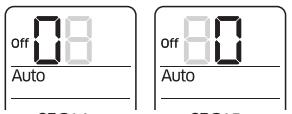
Option setting is available from SEG1 to SEG 24

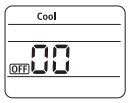
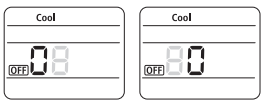
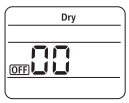
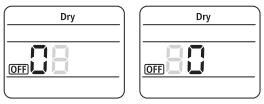
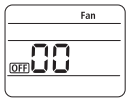
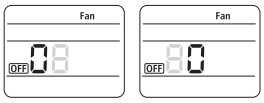
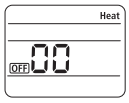
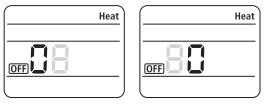
- SEG1, SEG7, SEG13, SEG18 arenot need to be set at MR-DH00. They are the page options which were used at the previous other remocons.
- Set the each 2 bit option code in order except page options.

For example : SEG2, 3 → SEG4, 5 → SEG6, 8 → SEG9, 10 → SEG11, 12 → SEG 14, 15 → SEG 16, 17 → SEG 18, 20 → SEG 21, 22 → SEG23, 24.

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
0	X	X	X	X	X	1	X	X	X	X	X
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18	SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
2	X	X	X	X	X	3	X	X	X	X	X

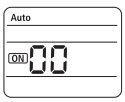
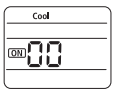
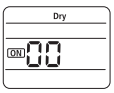
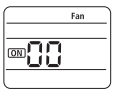
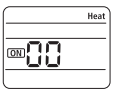
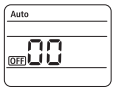
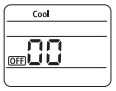
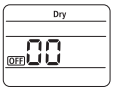
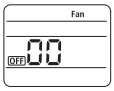
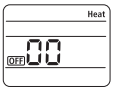
On(SEG1~12)	Off(SEG13~24)
	

Option setting	Status
1. Setting SEG2, SEG3 option Press Low Fan button(∨) to enter SEG2 value. Press High Fan button(∧) to enter SEG3 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG2 SEG3
2. Setting Cool mode Mode Press Mode button to be changed to Cool mode in the ON status.	
3. Setting SEG4, SEG5 option Press Low Fan button(∨) to enter SEG4 value. Press High Fan button(∧) to enter SEG5 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG4 SEG5
4. Setting Dry mode Mode Press Mode button to be changed to DRY mode in the ON status.	
5. Setting SEG6, SEG8 option Press Low Fan button(∨) to enter SEG6 value. Press High Fan button(∧) to enter SEG8 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG6 SEG8
6. Setting Fan mode Mode Press Mode button to be changed to FAN mode in the ON status.	
7. Setting SEG9, SEG10 option Press Low Fan button(∨) to enter SEG9 value. Press High Fan button(∧) to enter SEG10 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG9 SEG10
8. Setting Heat mode Mode Press Mode button to be changed to HEAT mode in the ON status.	
9. Setting SEG11, SEG12 option Press Low Fan button(∨) to enter SEG11 value. Press High Fan button(∧) to enter SEG12 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG11 SEG12
10. Setting Auto mode Mode Press Mode button to be changed to AUTO mode in the OFF status.	
11. Setting SEG14, SEG15 option Press Low Fan button(∨) to enter SEG14 value. Press High Fan button(∧) to enter SEG15 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG14 SEG15

Option setting	Status
12. Setting Cool mode Mode Press Mode button to be change to Cool mode in the OFF status.	
13. Setting SEG16, SEG17 option Press Low Fan button(∨) to enter SEG16 value. Press High Fan button(∧) to enter SEG17 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG16 SEG17
14. Setting Dry mode Mode Press Mode button to be change to Dry mode in the OFF status.	
15. Setting SEG18, SEG20 option Press Low Fan button(∨) to enter SEG18 value. Press High Fan button(∧) to enter SEG20 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG18 SEG20
16. Setting Fan mode Mode Press Mode button to be change to Fan mode in the OFF status.	
17. Setting SEG21, SEG22 option Press Low Fan button(∨) to enter SEG21 value. Press High Fan button(∧) to enter SEG22 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG21 SEG22
18. Setting Heat mode Mode Press Mode button to be change to HEAT mode in the OFF status.	
19. Setting SEG23, SEG24 mode Press Low Fan button(∨) to enter SEG23 value. Press High Fan button(∧) to enter SEG24 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 SEG23 SEG24

Step 3. Check the option you have set

After setting option, press Mode button to check whether the option code you input is correct or not.

Option	[SEG2,3]	[SEG4,5]	[SEG6,8]	[SEG9,10]	[SEG11,12]
Remote Controller Display					
Option	[SEG14,15]	[SEG16,17]	[SEG18,20]	[SEG21,22]	[SEG23,24]
Remote Controller Display					

Step 4. Input option

Press operation button with the direction of remote control for set.
For the correct option setting, you must input the option twice.

Step 5. Check operation

1. Reset the indoor unit by pressing the RESET button of indoor unit or outdoor unit.
2. Take the batteries out of the remote controller and insert them again and then press the operation button.

Setting an indoor unit address (MAIN/RMC)

1. **Check whether power is supplied or not.**
   - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
2. **The panel(display) should be connected to an indoor unit to receive option.**
3. **Before installing the indoor unit, assign an address to the indoor unit according to the air conditioning system plan.**
4. **Assign an indoor unit address by wireless remote controller.**

   -The initial indoor unit ADDRESS is set as "MAIN : 0, RMC : 0".
   -Set Main and RMC Address only the setting is required.
   -There is no need to assign the indoor unit Main Address if the outdoor unit is addressing automatically.
   The indoor unit Main address will follow the outdoor unit's automatically.
   -Assign 12 digit when setting the indoor unit address.
   -No need to assign SEG4, 5, 8, 10 which are non applicable. Even though those segments are set, they will be ignored.
   -If you set the applicable segments with numbers other than the indiciated, the initial setting will be maintained.

Option No. : 0AXXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4	SEG5	SEG6	
Explanation	PAGE		MODE		Setting Main address		RESERVED	RESERVED	The unit digit of an indoor unit	
Indication and Details	Indication	Details	Indication	Details	Indication	Details			Indication	Details
	0		A		0	No Main address			0~3(ACN*)	A single digit
					1	Main address setting mode			0~4 (AJN*)	

Option	SEG7		SEG8	SEG9		SEG10	SEG11		SEG12	
Explanation	PAGE		RESERVED	Setting RMC address		RESERVED	Group channel(*16)		Group address	
Indication and Details	Indication	Details		Indication	Details		Indication	Details	Indication	Details
	1			0	No RMC address		RMC1	0~2	RMC2	0~F
				1	RMC address setting mode					

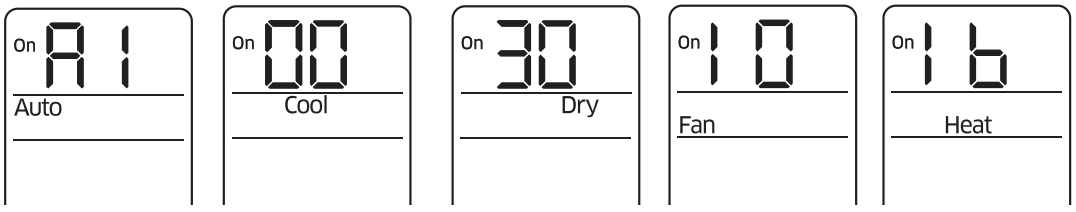
*SEG6: AJN** models should check maximum installation indoor unit number of outdoor unit. (Indoor1: 0, Indoor2: 1, ~)

CAUTION
- When "A"~"F" is entered to SEG5~6, the indoor unit MAIN ADDRESS is not changed.
- If you set the SEG 3 as 0, the indoor unit will maintain the previous MAIN ADDRESS even if you input the option value of SEG6.
- If you set the SEG 9 as 0, the indoor unit will maintain previous RMC ADDRESS even if you input the option value of SEG11~12.

Example) If you want to set as "MAIN : 3, CHANNEL : 1, RMC : B",

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	A	1	-	-	3
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	-	1	-	1	B

assign option codes except SEG 1, 7 which are page options.



Setting an indoor unit installation option (suitable for the condition of each installation location)

1. **Check whether power is supplied or not.**
   - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
2. **The panel(display) should be connected to an indoor unit to receive option.**
3. **Set the installation option according to the installation condition of an air conditioner.**
   - The default setting of an indoor unit installation option is "02000-100000-200000-300000".
   - Individual control of a remote controller(SEG20) is the function that controls an indoor unit individually when there is more than one indoor unit.
   - No need to assign SEG3, 6, 9, 10, 11, 16, 21, 22, 23, 24 which are non applicable. Even though those segments are set, they will be ignored.
   - If you set the applicable segments with numbers other than the indiciated, the initial setting will be maintained.
4. **Set the indoor unit option by wireless remote controller.**

Option No. : 02XXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3	SEG4		SEG5		SEG6
Explanation	PAGE		MODE		RESERVED	Use of external temperature sensor		Use of central control		RESERVED
Indication and Details	Indication	Details	Indication	Details		Indication	Details	Indication	Details	
	0		2			0	Disuse	0	Disuse	
						1	Use	1	Use	

Option	SEG7		SEG8		SEG9	SEG10	SEG11	SEG12	
Explanation	PAGE		Use of drain pump		RESERVED	RESERVED	RESERVED	Master / Slave	
Indication and Details	Indication	Details	Indication	Details				Indication	Details
	1		0	Disuse				0	slave
			1	Use				1	master
			2	Use + 3minute delay					

Option	SEG13		SEG14		SEG15		SEG16		SEG17		SEG18	
Explanation	PAGE		Use of external control		Setting the output of external control		S-Plasma ion		Buzzer control		Number of hours using filter	
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	2		0	Disuse	0	Thermo on	0	Disuse	0	Use	2	1000 Hour
			1	ON/OFF Control	1	Operation on	1	Use			6	2000 Hour
			2	OFF Control					1	Disuse		
			3	WINDOW Control								

Option	SEG19		SEG20		SEG21		SEG22	SEG23	SEG24
Explanation	PAGE		Individual control of a remote controller		Heating setting compensation				
Indication and Details	Indication	Details	Indication	Details	Indication	Details			
	3		0 or 1	Indoor 1	0	Disuse	RESERVED	RESERVED	RESERVED
			2	Indoor 2					
			3	Indoor 3					
			4	Indoor 4	1	2˚C			
					2	5˚C			

▶ If you input a number other than 0~4 on the individual control of the indoor unit(SEG 20), the indoor is set as "Indoor 1".
Example) If you want to set as "Exterior temperature sensor : USE, External control : USE, Number of hours using filer : 2000hr",

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	2	-	1	0	-
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	0	-	-	-	0
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	1	0	-	0	6
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	0	-	-	-	-

assign option codes except SEG 1, 7, 13, 19 which are page options.

Changing a particular option

You can change each digit of set option.

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		The option mode you want to change		The tens' digit of an option SEG you will change		The unit digit of an option SEG you will change		The changed value	
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		D		Option mode	0~F	Tens' digit of SEG	0~9	Unit digit of SEG	0~9	The changed value	0~F

NOTE

- When changing a digit of an indoor unit address setting option, set the SEG3 as 'A'.
- When changing a digit of indoor unit installation option, set the SEG3 as '2'.

Ex) When setting the 'buzzer control' into disuse status.

Option	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
Explanation	PAGE	MODE	The option mode you want to change	The tens' digit of an option SEG you will change	The unit digit of an option SEG you will change	The changed value
Indication	0	D	2	1	7	1

Detection of errors

- If an error occurs during the operation, an LED flickers and the operation is stopped except the LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.
- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.
- When E108 error occurs, change the address and reset the system.Ex.) When address of the indoor unit #1 and #2 are set as 5, address of the indoor unit #1 will become 5 and indoor unit #2 will display E108, A002.

● On ◑ Flickering X Off

Abnormal condition	Error code	LED Display		
		⏻	⏻	TURBO
Error on indoor temperature sensor (Short or Open)	E121	X	◑	X
1. Error on Eva-in sensor (Short or Open) 2. Error on Eva-out sensor (Short or Open) 3. Discharge sensor error (Short or Open)	E122 E123 E126	◑	◑	X
Indoor fan error	E154	X	X	◑
1. Error on outdoor temperature sensor (Short or Open) 2. Error on cond sensor 3. Error on discharge sensor Other outdoor unit sensor error that is not on the above list	E221 E237 E251	◑	X	◑
1. When there is no communication between the indoor•outdoor units for 2 minutes 2. Communication error received from the outdoor unit 3. 3 miniute tracking error on outdoor unit 4. Communication error after tracking due to unmatching number of installed units 5. Error due to repeated communication address 6. Communication address not confirmed Other outdoor unit communication error that is not on the above list	E101 E102 E202 E201 E108 E109	X	◑	◑
Self diagnosis error display 1. Error due to opened EEV (2nd detection) 2. Error due to closed EEV (2nd detection) 3. Eva in sensor is detached 4. Eva out sensor is detached 5. Thermal fuse error (Open)	E151 E152 E128 E129 E198	☒	◑	◑
1. COND mid sensor is detached 2. Refrigerant leakage (2nd detection) 3. Abnomally high temperature on Cond (2nd detection) 4. Low pressure s/w (2nd detection) 5. Abnomally high temperature on discharged air on outdoor unit (2nd detection) 6. Indoor operation stop due to unconfirmed error on outdoor unit 7. Error due to reverse phase detection 8. Comp stop due to freeze detection (6th detection) 9. High pressure sensor is detached 10. Low pressure sensor is detached 11. Outdoor unit copression ration error 12. Outdoor sump down_1 prevetion control 13. Compressor down due to low pressure sensor prevention control_1 14. Simultaneous opening of cooling/heating MCU SOL valve (1st detection) 15. Simultaneous opening of cooling/heating MCU SOL valve (2nd detection) Other outdoor unit self-diagnosis error that is not on the above list	E241 E554 E450 E451 E416 E559 E425 E403 E301 E306 E428 E413 E410 E180 E181	☒	◑	◑
EEPROM error	E162	◑	◑	◑
EEPROM option error	E163	◑	◑	◑

4-2 Troubleshooting for outdoor unit

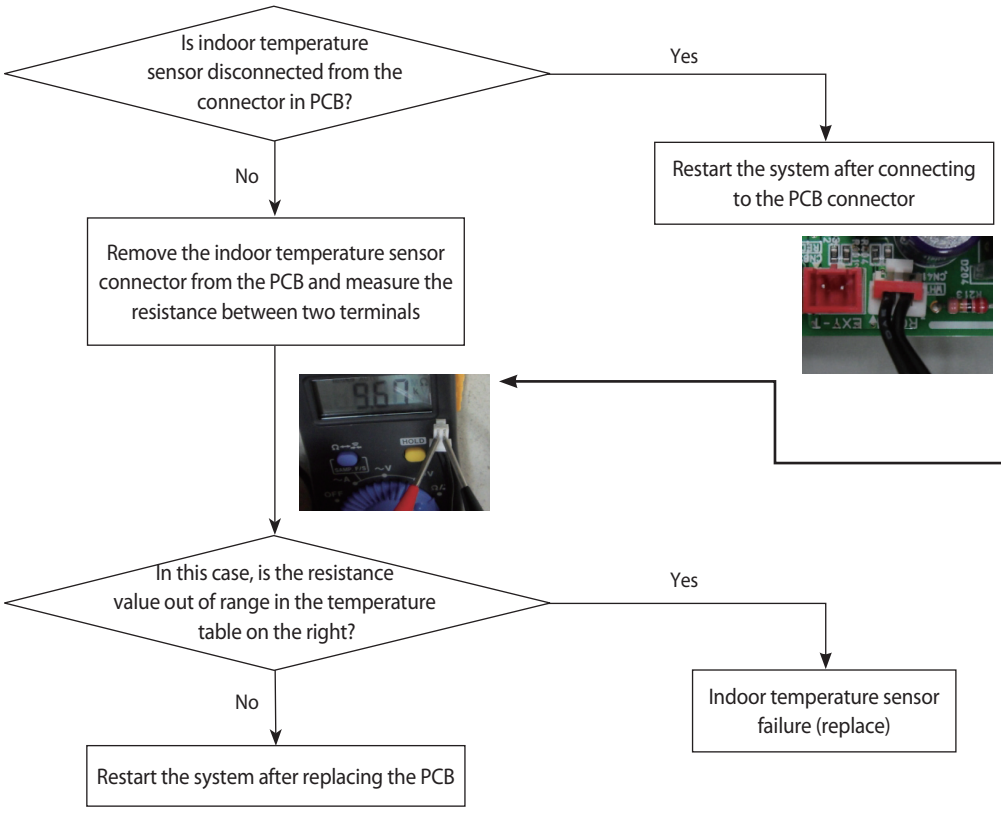
If an error occurs during the operation, it is displayed on the outdoor unit PCB LED, both MAIN PCB and INVERTER PCB.

No.	Error Code	Meaning	Remarks
1	**E201**	Unit quantity miss matching between indoor and outdoor.	Check indoor quantity setting in outdoor
2	**E202**	Abnormal state, no communication between Indoor and Outdoor Main PCB	Check electrical connection and setting
3	**E203**	1min. Time out of communcation error(Main↔ Inverter)	Check electrical connection and setting
4	**E221**	Outdoor temp sensor error	Check Outdoor sensor Open/Short
5	**E231**	Cond. temp sensor error	Check Cond. sensor Open/Short
6	**E251**	Discharge temp sensor error	Check Discharge sensor Open/Short
7	**E320**	OLP Sensor Error	Check OLP sensor Open/Short
8	**E403**	Detection of Outdoor Freezing when Comp. Stop	Check Outdoor Cond.
9	**E404**	Protection of Outdoor Overload when Comp. Stop	Check Comp. when it start
10	**E416**	Discharge temperature of a compressor in an outdoor unit is overheated.	
11	**E440**	Heating operation is not available since the outdoor air temperature is over 30°C.	Heating
	E441	Cooling operation is not available since the outdoor air temperature is lower than -5°C.	Cooling
12	**E458**	Outdoor unit BLDC Fan 1 or Fan 2 error	FAN1 error
	E475		FAN2 error
13	**E461**	Comp. Starting error	
14	**E462**	Primary Current Trip error	
15	**E463**	Over current trip / PFC over current error	Check OLP sensor
16	**E464**	IPM(IGBT Module) Over Current(O.C)	
17	**E465**	Comp. Over load error	
18	**E466**	DC-Link voltage under/over error	Check AC Power or DC_Link voltage
19	**E467**	Comp. wire missing error	Check Comp. wire
20	**E468**	Current sensor error	Check Outdoor Inverter PBA
21	**E471**	Outdoor EEPROM error	Check Outdoor EEPROM date
22	**E474**	IPM(IGBT Module) or PFCM Temperature sensor Error	Check Outdoor Inverter PBA
23	**E484**	PFC Overload Error	Check Outdoor Inverter PBA
24	**E500**	IPM is over heated.	Check Outdoor Inverter PBA
25	**E554**	GAS Leak error	Check indoor and outdoor unit model
26	**E556**	Capacity miss match between indoor and outdoor	Check indoor and outdoor unit model

4-3 Troubleshooting by symptoms

4-3-1 Indoor temperature sensor (open/short)

Indoor unit display	
Symptom	In case of open or short circuit of indoor temperature sensor
Failure	Short or leakage of the corresponding sensor

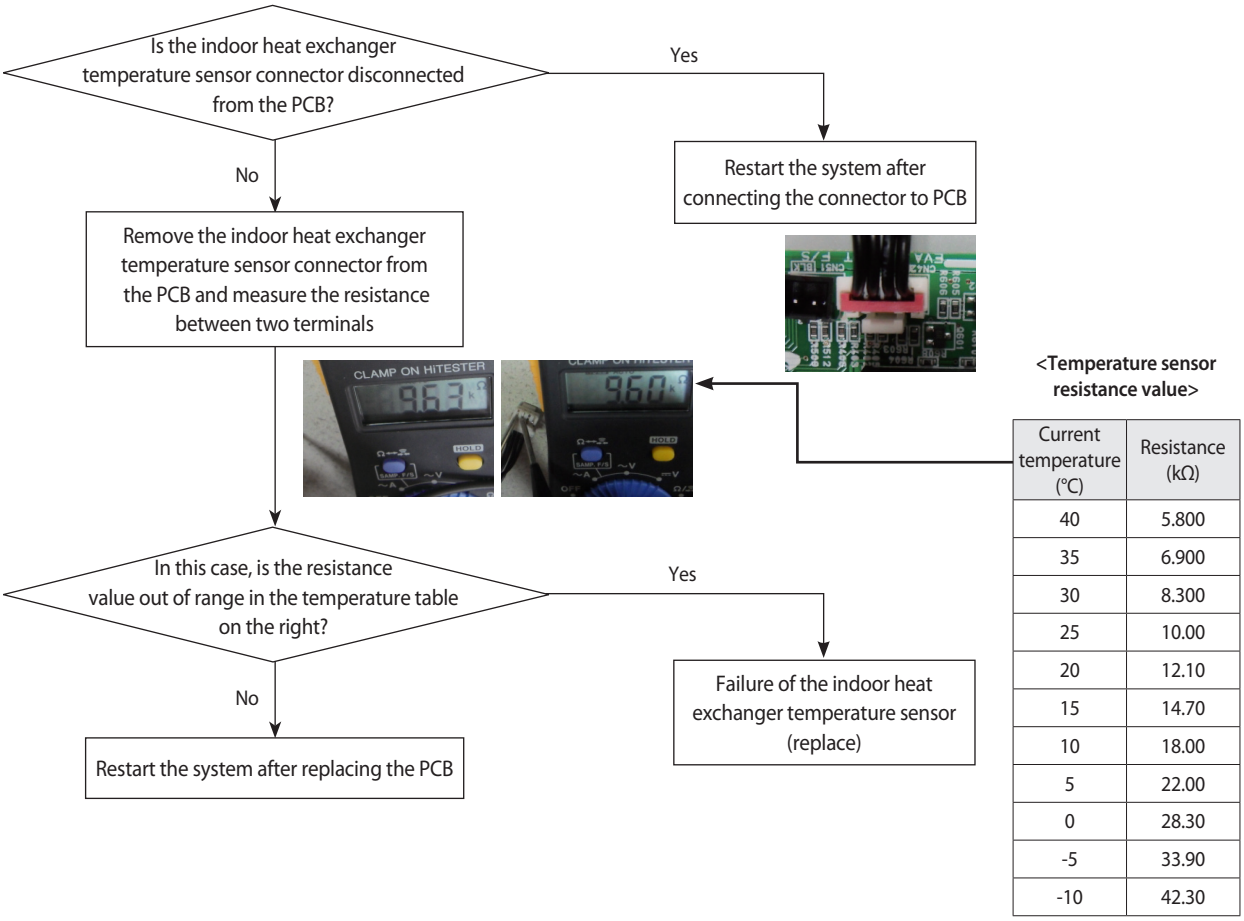


<Temperature sensor resistance value>

Current temperature (℃)	Resistance (kΩ)
40	5.800
35	6.900
30	8.300
25	10.00
20	12.10
15	14.70
10	18.00
5	22.00
0	28.30
-5	33.90
-10	42.30

4-3-2 Indoor heat exchanger temperature sensor (open/short)

Indoor unit display	
Symptom	Short or open circuit of indoor heat exchanger temperature sensor
Failure	Short or open circuit in the corresponding sensor

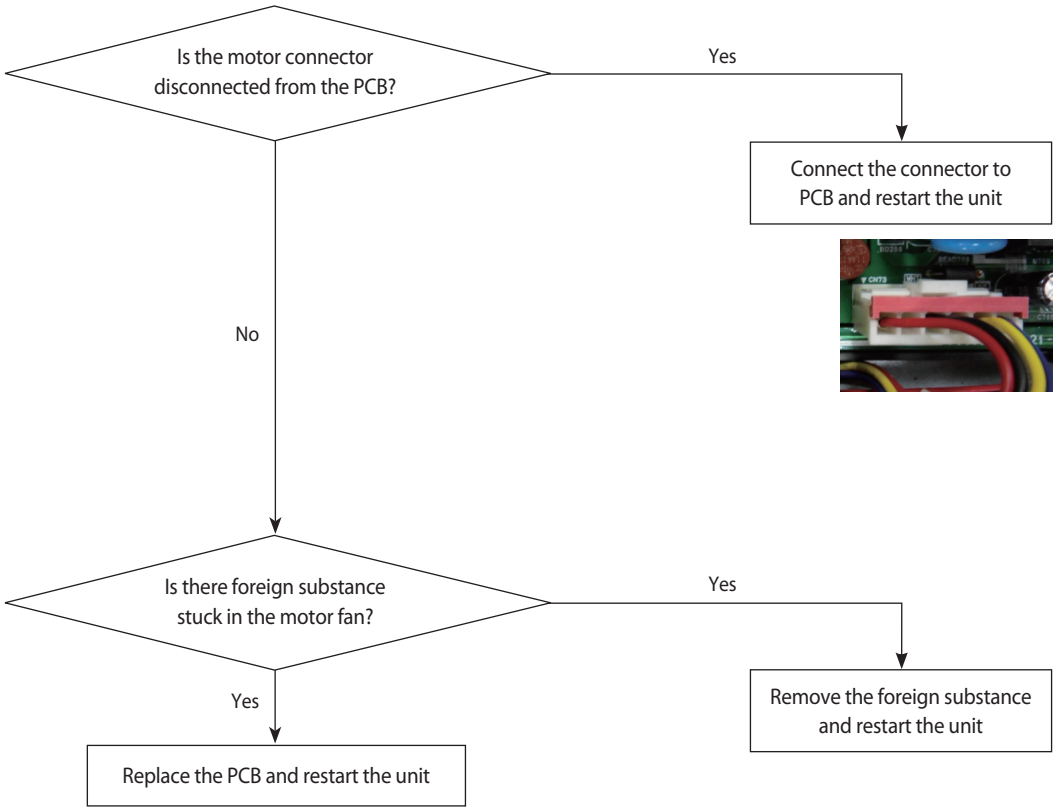


<Temperature sensor resistance value>

Current temperature (℃)	Resistance (kΩ)
40	5.800
35	6.900
30	8.300
25	10.00
20	12.10
15	14.70
10	18.00
5	22.00
0	28.30
-5	33.90
-10	42.30

4-3-3 Indoor FAN error

Indoor unit display	
Symptom	Indoor unit fan does not run /Runs at excessive high speed and stops
Failure	Check if the motor connector is disconnected/ check the motor fan assembly status

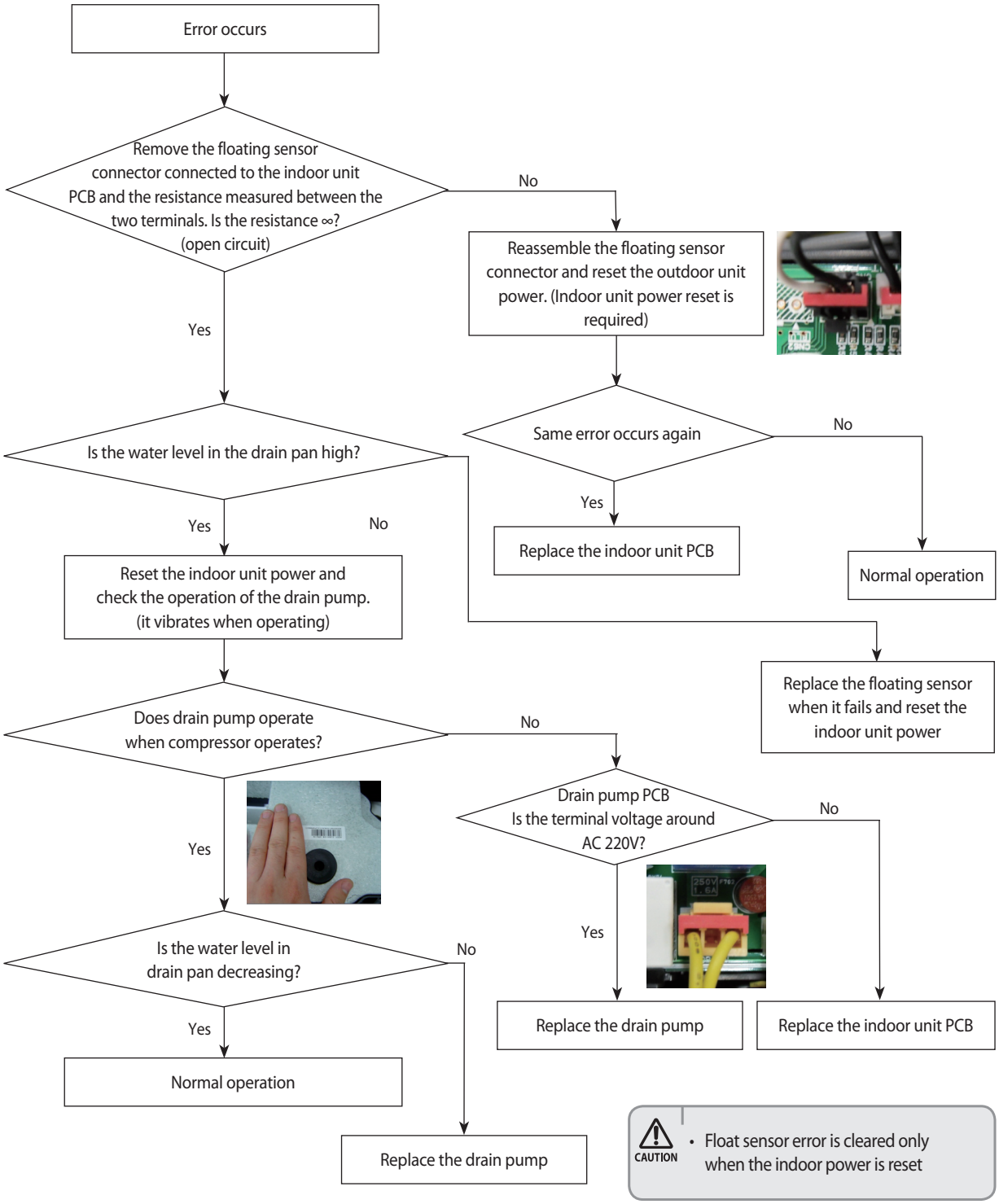


4-3-4 Communication error after finishing Tracking

Indoor unit display	
Symptom	Communication error between the indoor and outdoor unit for two minutes
Failure	Communication error between the indoor unit and outdoor unit

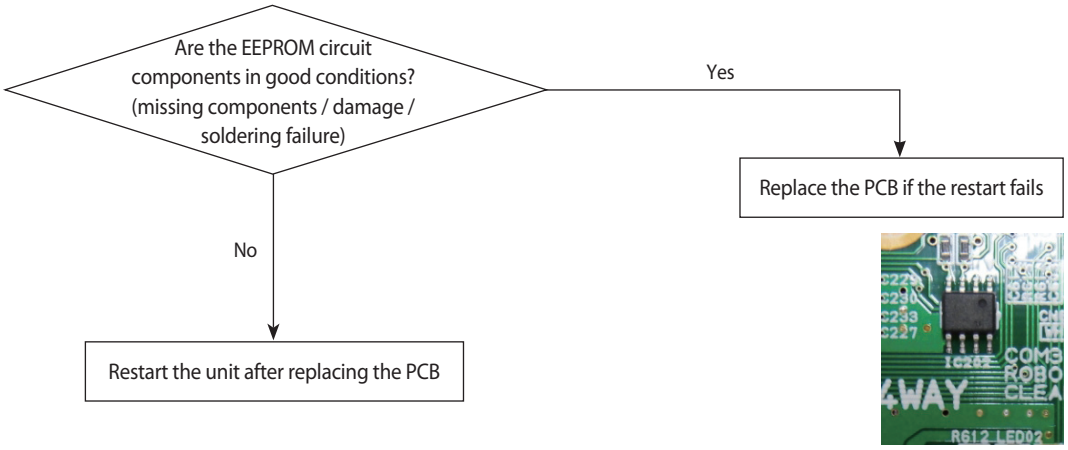
4-3-5 Indoor unit float sensor error

Indoor unit display	TURBO
Symptom	The indoor unit floating sensor is open and that state is maintained for more than one minute
Failure	Increase in the drain pan water level due to failure of the indoor unit drain pump, or float sensor failure



4-3-6 EEPROM circuit failure

Indoor unit display	
Symptom	EEPROM circuit failure
Failure	EEPROM component failure, EEPROM circuit parts missing/damaged/soldering failure

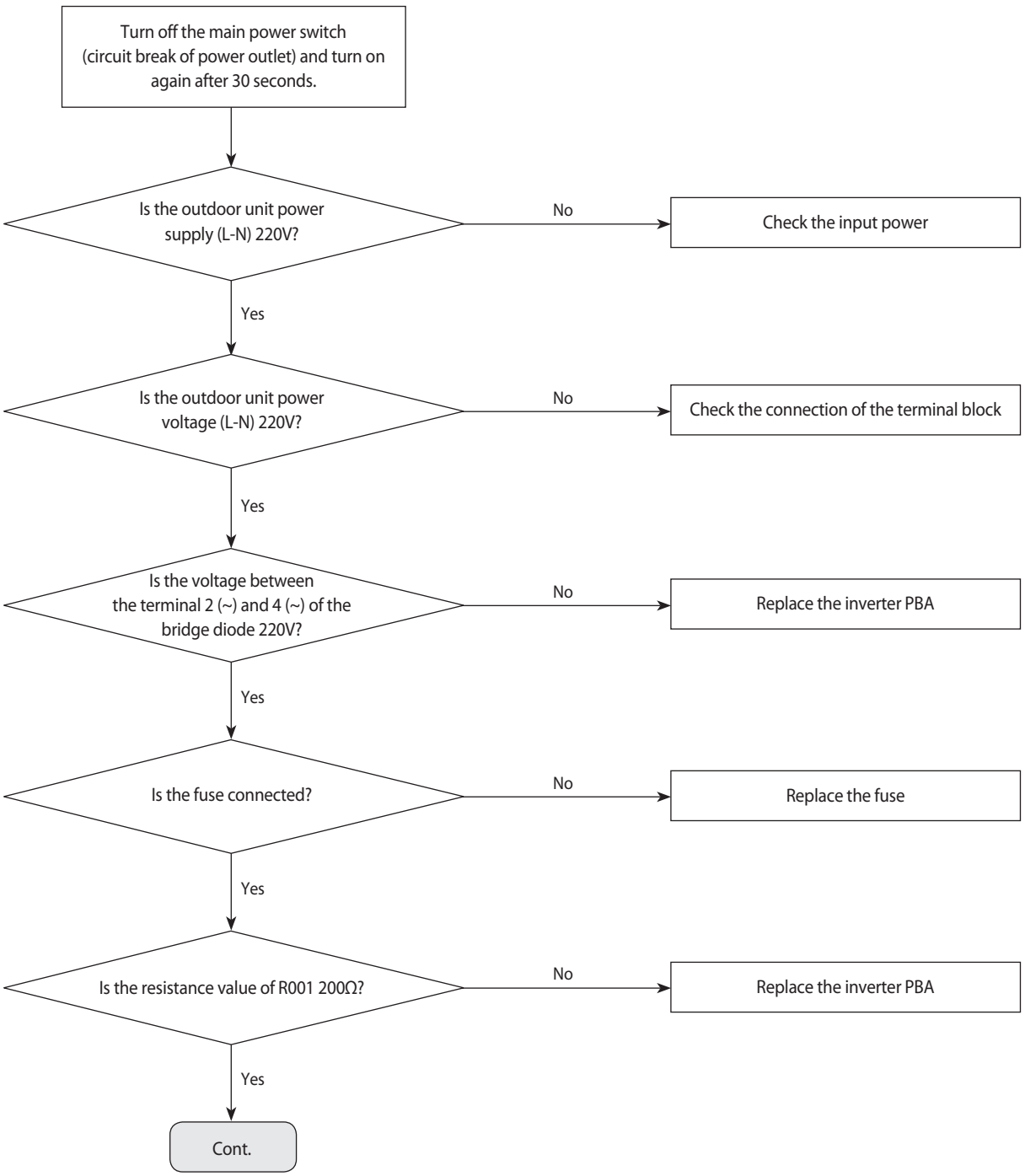


4-3-7 Outdoor unit is not powered on – Initial diagnosis

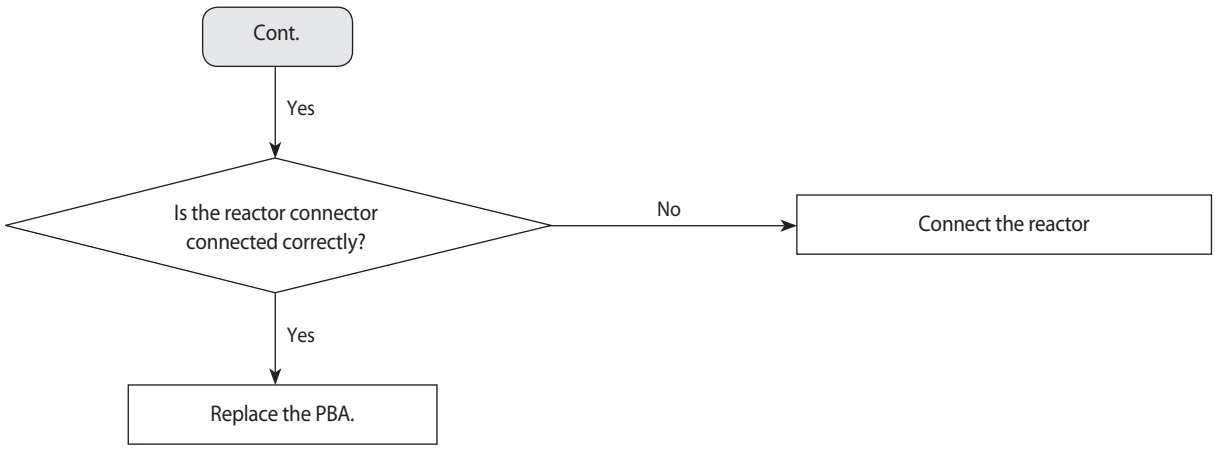
1. Check items

1) Is the power supply voltage 220V?
2) Is the AC power connected correctly?
3) Are the LEDs in the main PCB and inverter PCB of the outdoor unit ON?
4) Is the input power voltage of the indoor unit 220V?
5) Is the wired remote controller connected correctly?

2. Check procedure



Outdoor unit is not powered on – Initial diagnosis (cont.)

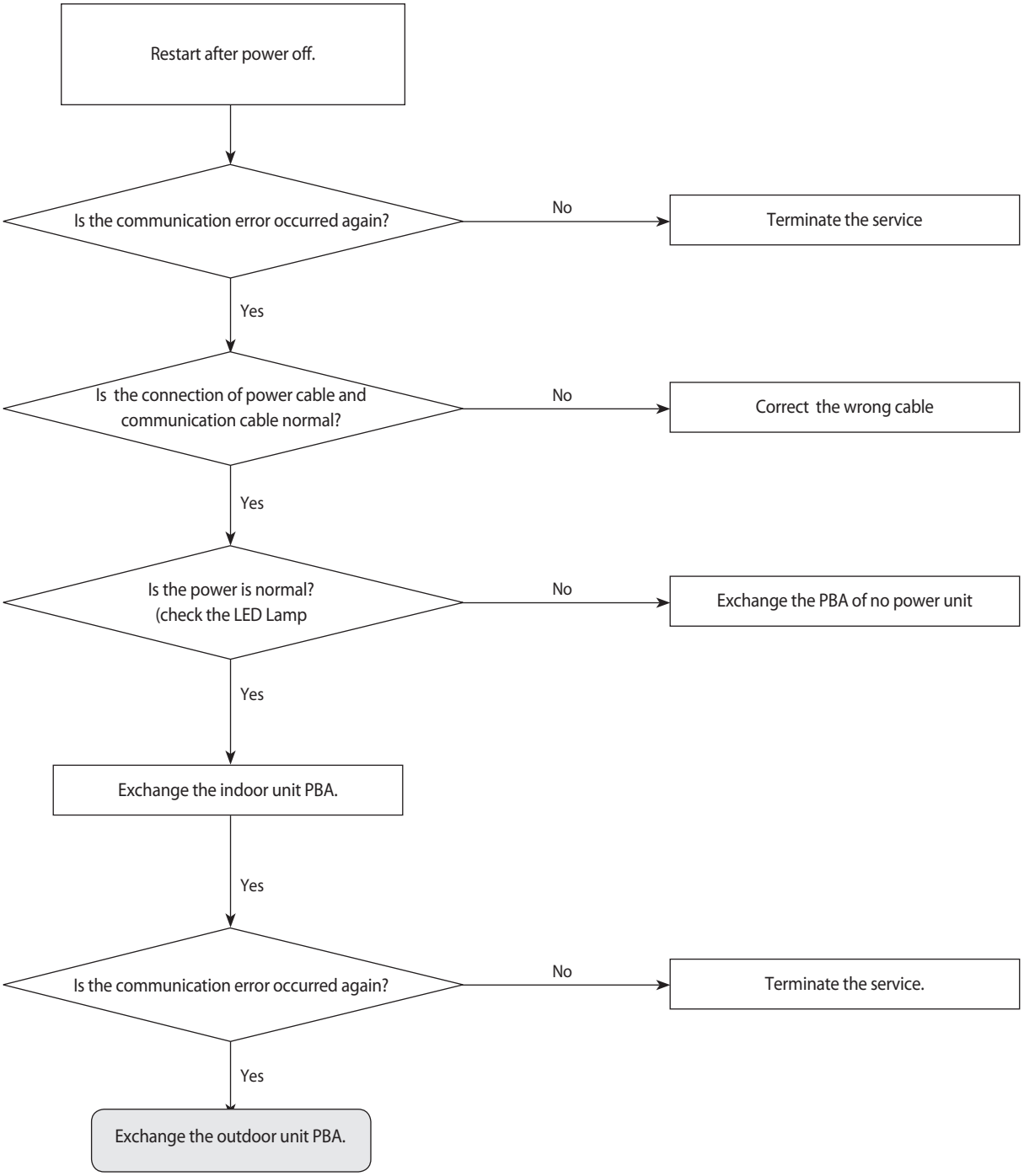


4-4-1 Communication error

1. 1.Checklist :

1) Is the cable between the indoor unit and outdoor unit connected correctly?
2) Isn't the power cable and communication cable cross?

2. Troubleshooting procedure

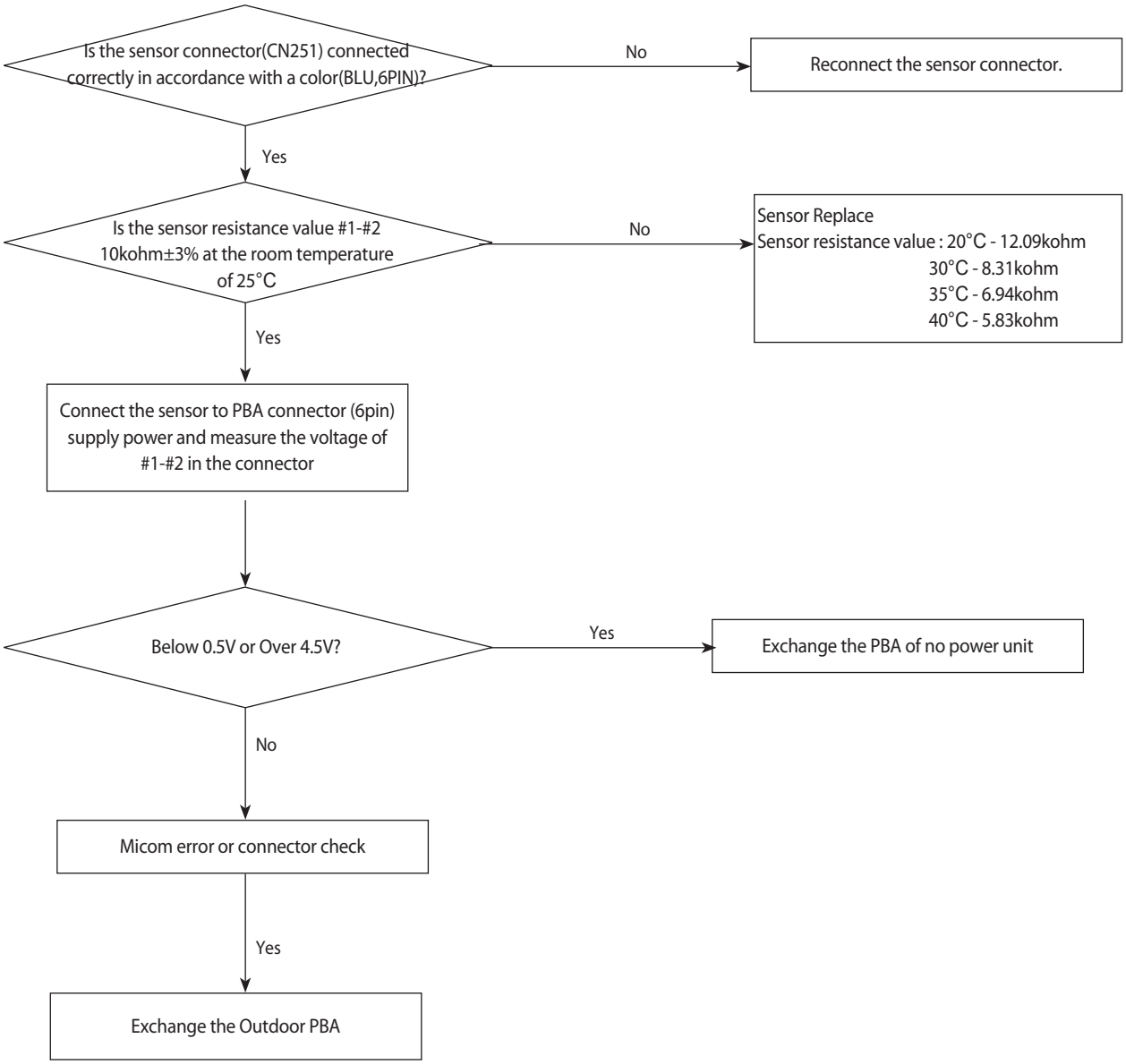


4-4-2 Outdoor temperature sensor error

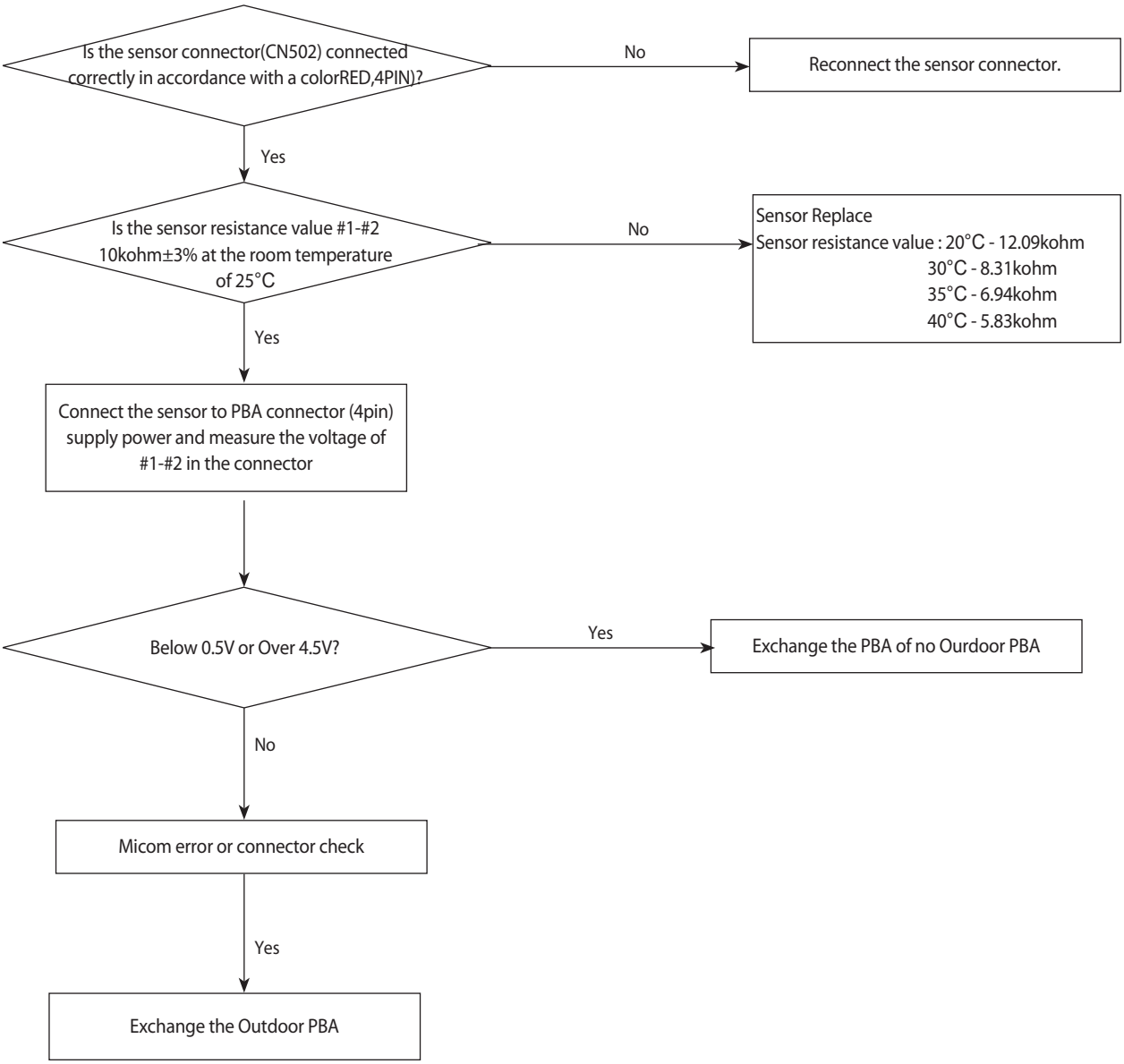
1. 1.Checklist :

1) Is the cable between the indoor unit and outdoor unit connected correctly?
2) Is the sensor placed correctly?
3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
4) Is the resistance value of sensor connection pull-up correct?

4-4-2-1. Troubleshooting procedure (PF2)



4-4-2-2. Troubleshooting procedure (PF3)

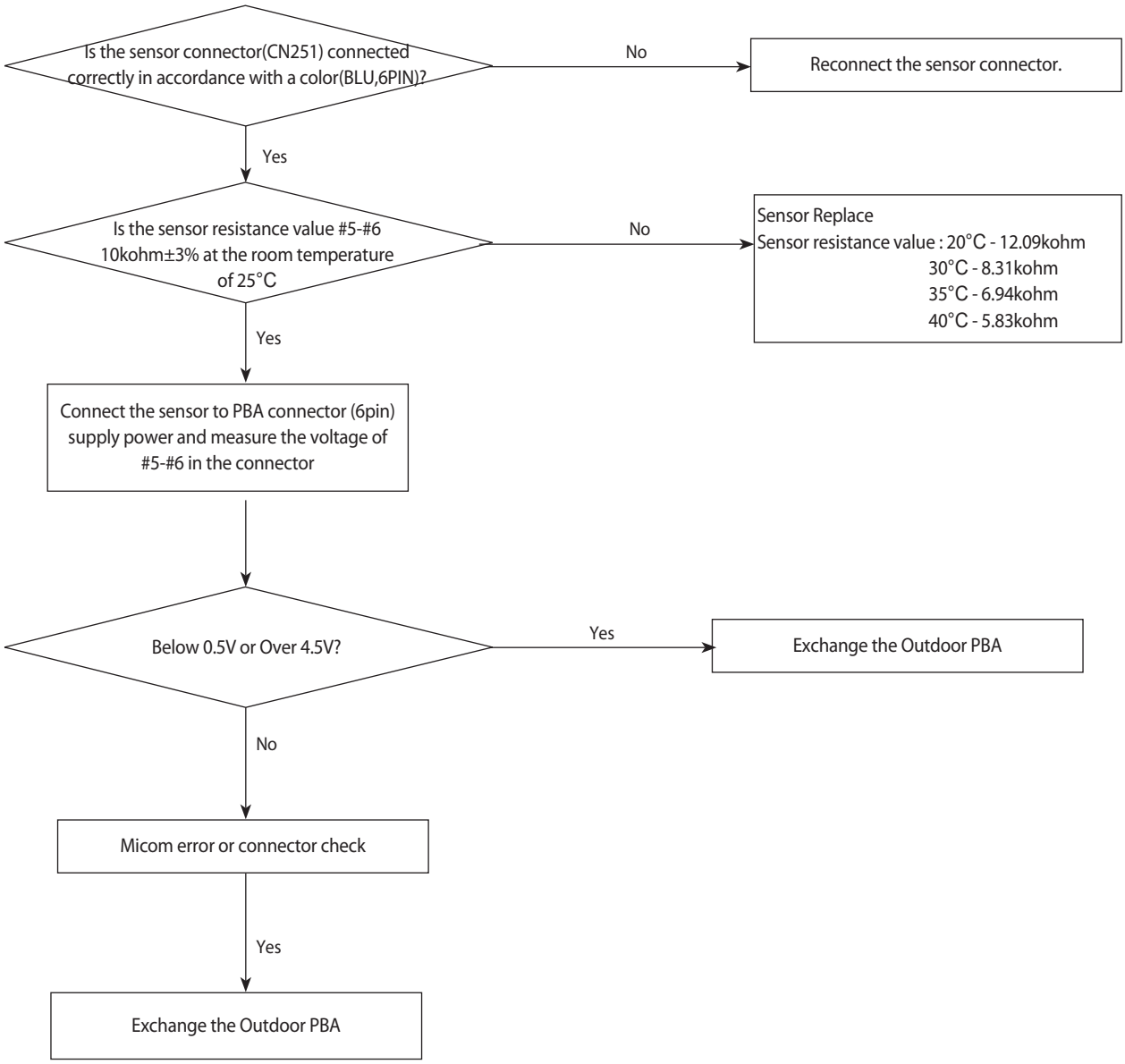


4-4-3 Outdoor Coil temperature sensor error

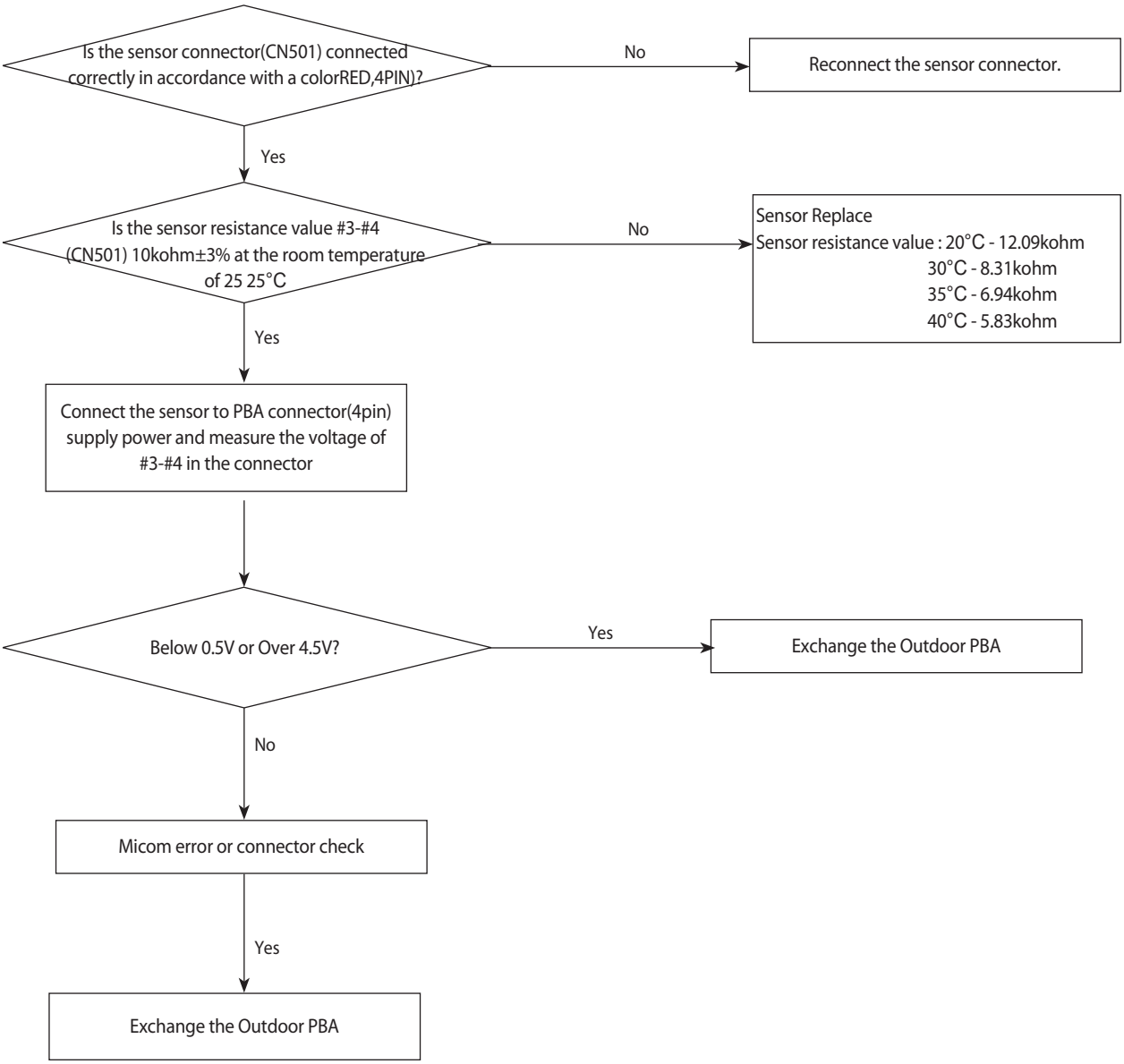
1.Checklist :

1) Is the sensor connected correctly?
2) Is the sensor placed correctly?
3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
4) Is the resistance value of sensor connection pull-up correct?

4-4-3-1. Troubleshooting procedure (PF2)



4-4-3-2. Troubleshooting procedure (PF3)

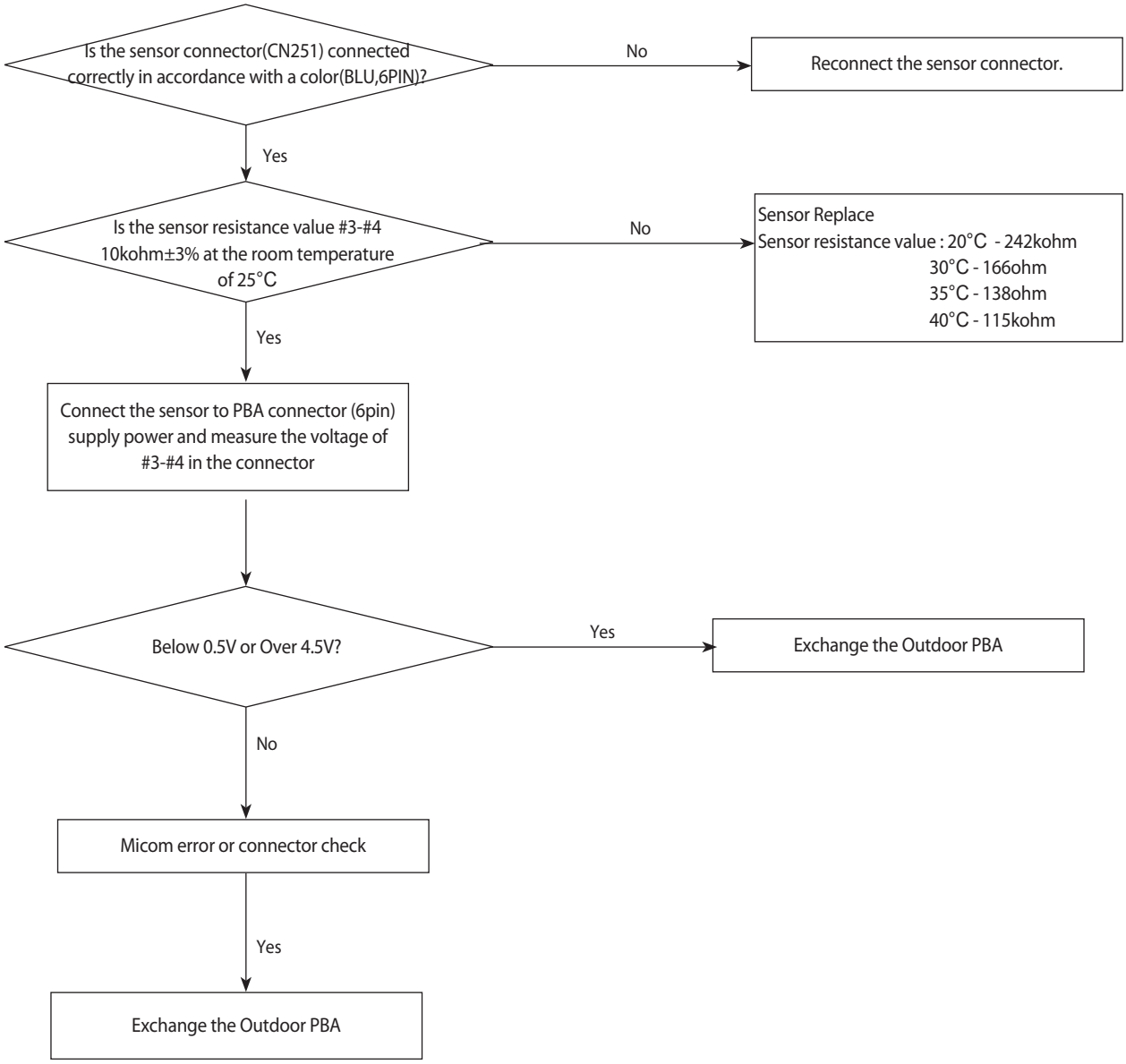


4-4-4 Outdoor Discharge temperature sensor error

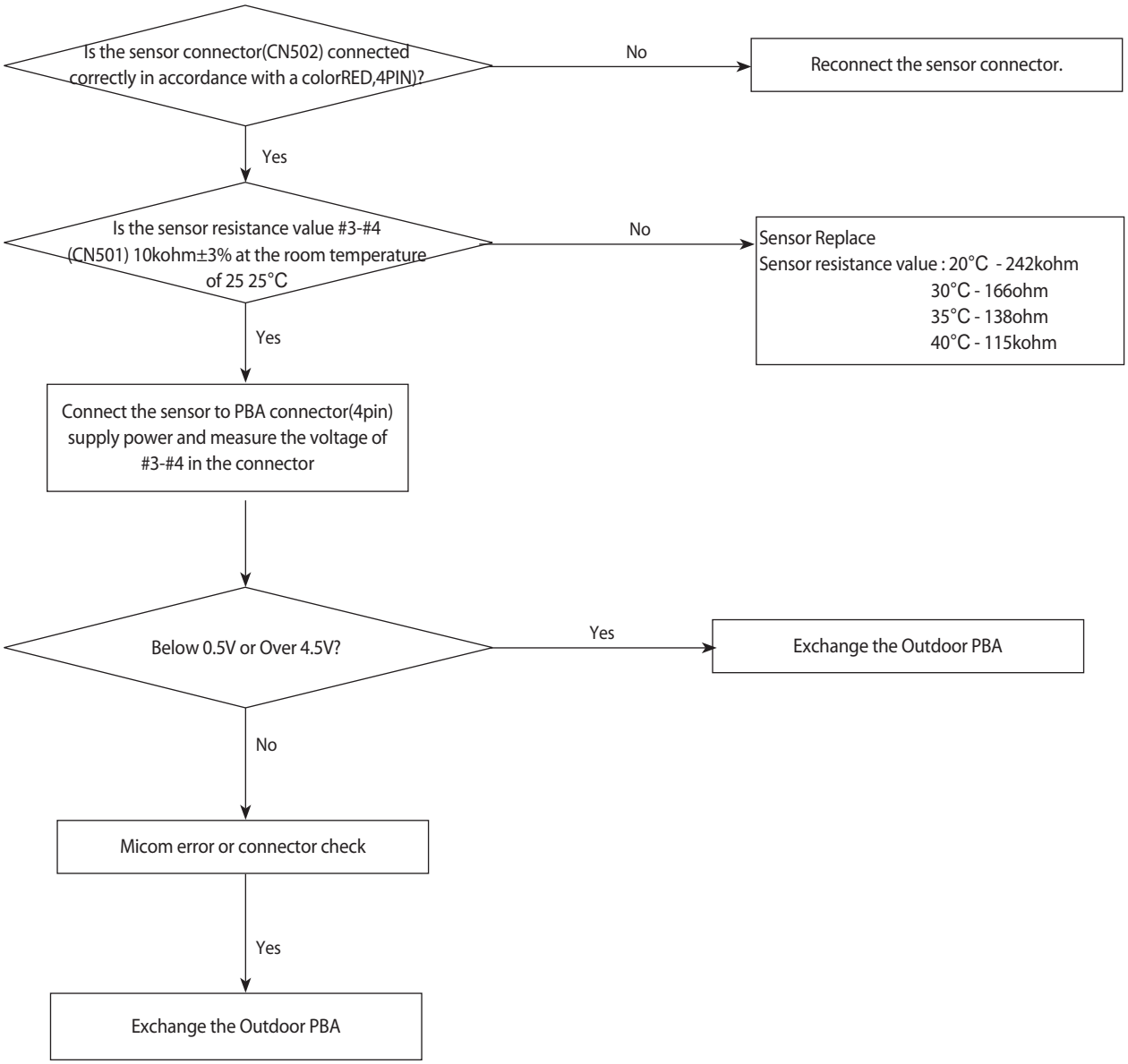
1.Checklist :

1) Is the sensor connected correctly?
2) Is the sensor placed correctly?
3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
4) Is the resistance value of sensor connection pull-up correct?

4-4-4-1. Troubleshooting procedure (PF2)



4-4-4-2. Troubleshooting procedure (PF3)

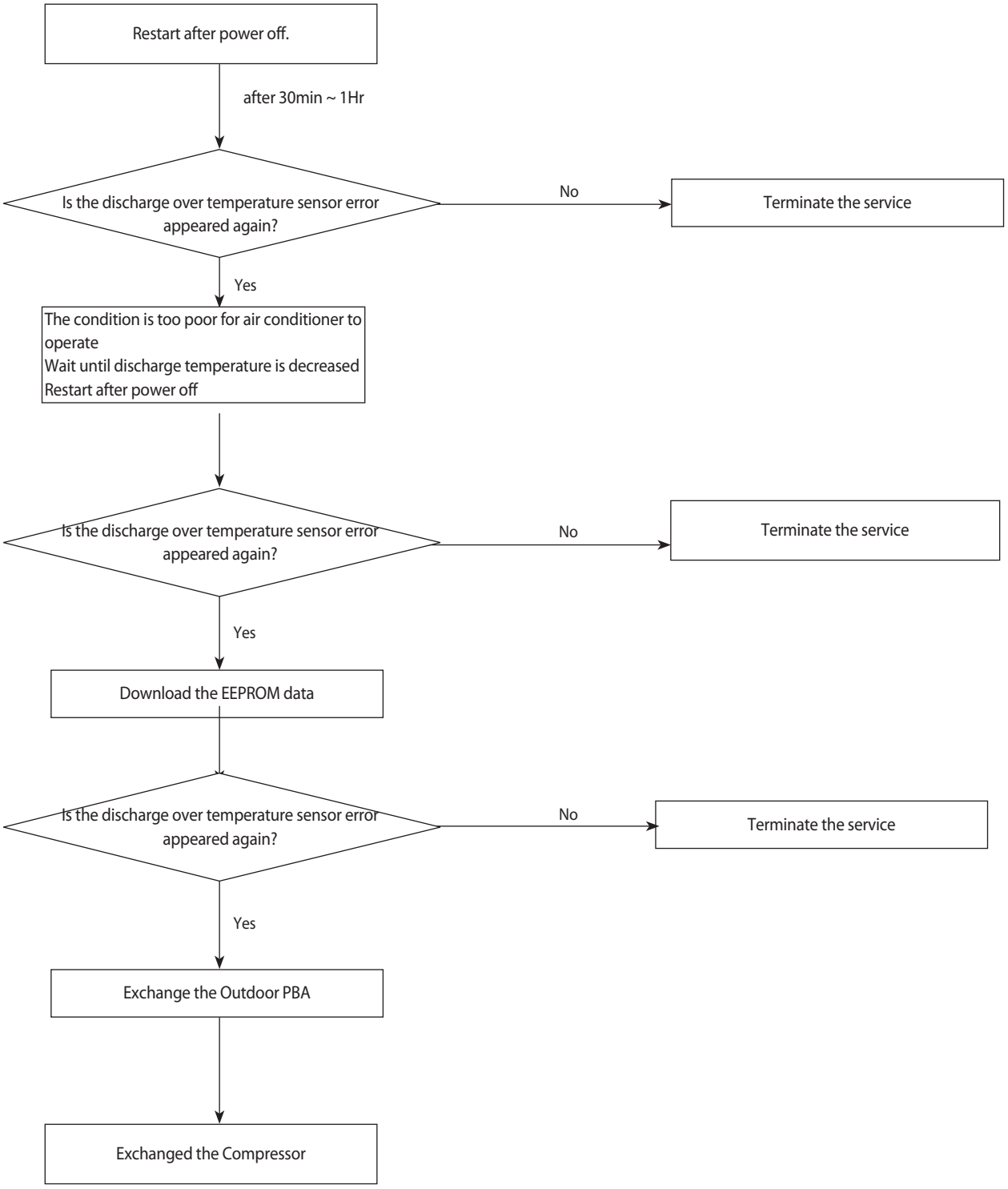


4-4-5 Outdoor Discharge over temperature error

1.Checklist :

1) Check the discharge temperature in the outdoor unit
2) Check the compressor locking or gas leak
3) 3) Download the EEPROM data

2. Troubleshooting procedure

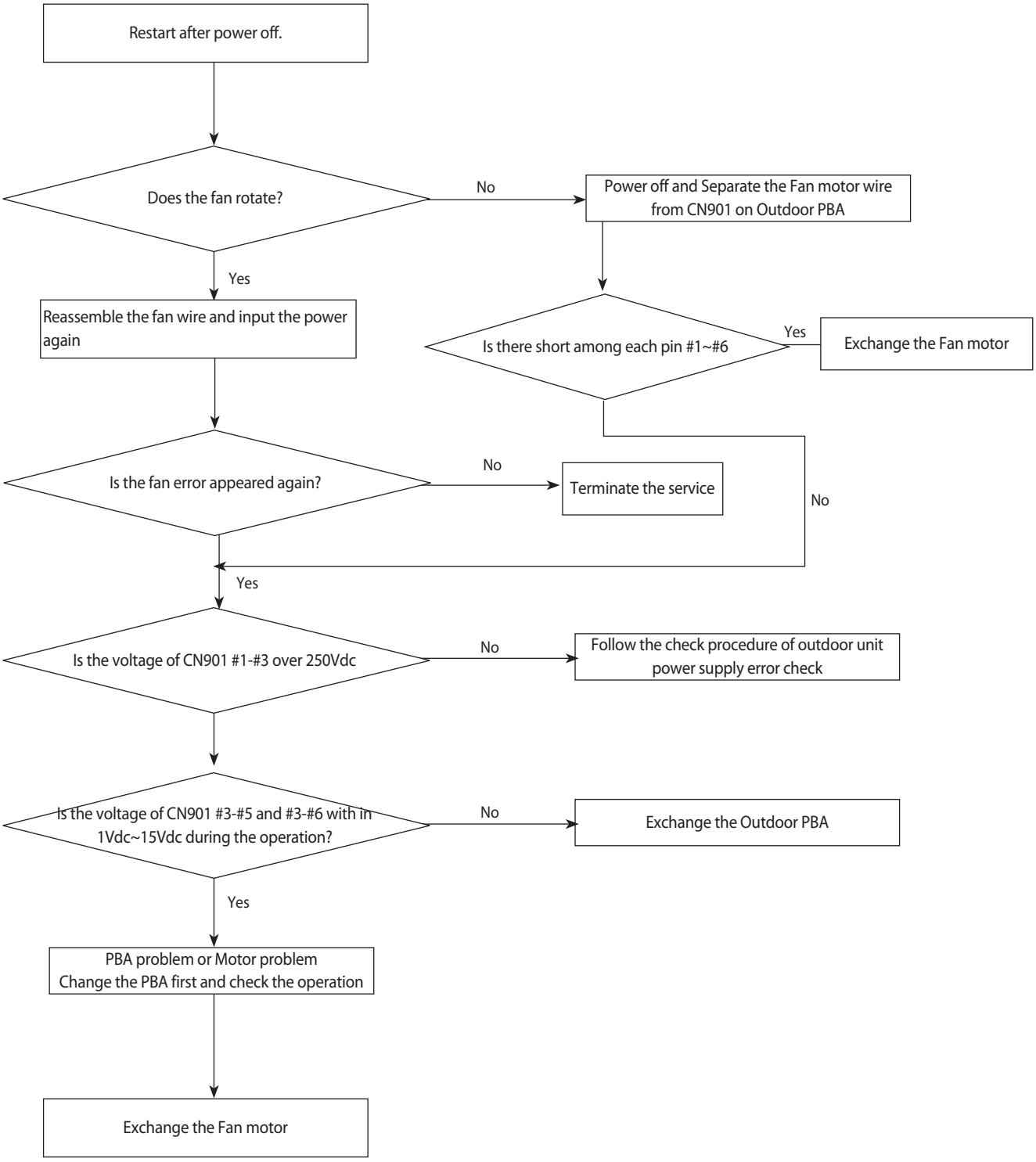


4-4-6 Outdoor Fan motor error

1.Checklist :

1) Are the input power voltage and the power connection correct?
2) Is the motor wire connected to the outdoor PBA correctly?
3) Is there no assembly error or none-assembly in the terminal of motor wire connector?
4) Is there no obstacle at the surrounding of motor and propeller?

2. Troubleshooting procedure

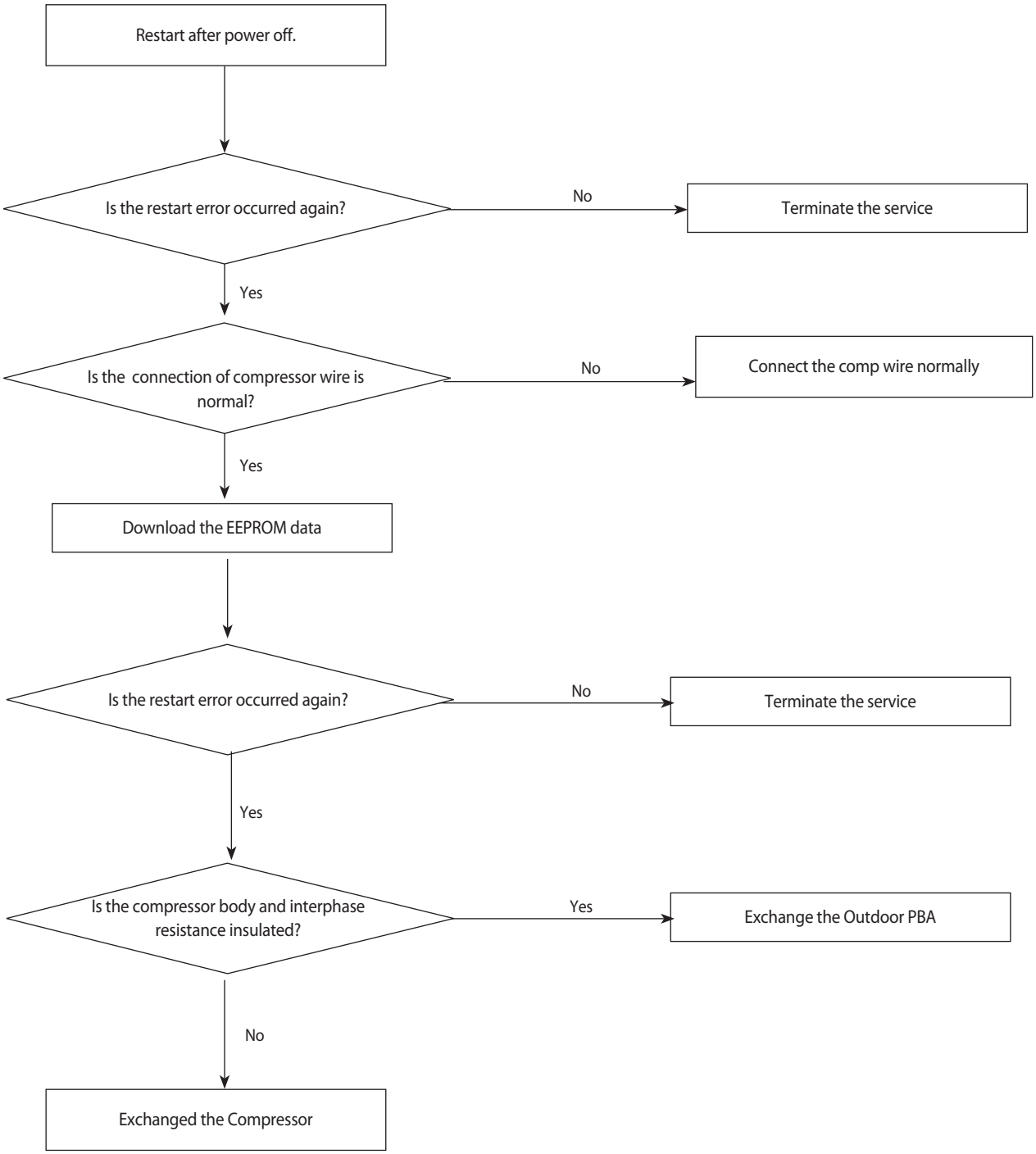


4-4-7 Compressor starting error

1.Checklist :

1) Is the connection of cable for the compressor?
2) Is the compressor wire is connected clockwise? U(RED)-V(BLU)-W(YEL)
3) Is the interphase resistance of compressor normal?

2. Troubleshooting procedure

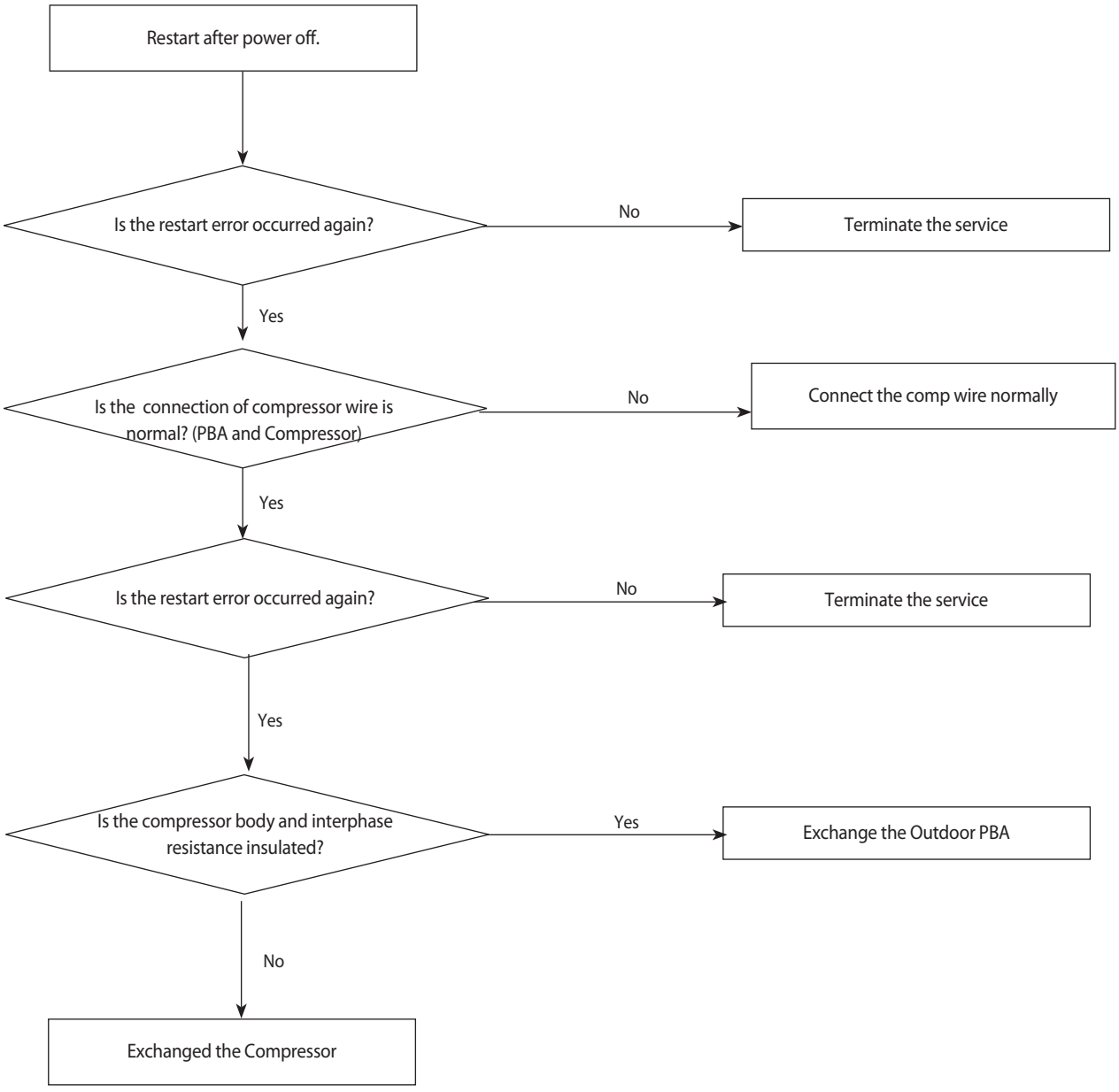


4-4-8 Compressor wire missing error/rotation error

1.Checklist :

1) Is the connection of cable for the compressor?
2) Is the compressor wire is connected clockwise? U(RED)-V(BLU)-W(YEL)
3) Is the interphase resistance of compressor normal?

2. Troubleshooting procedure

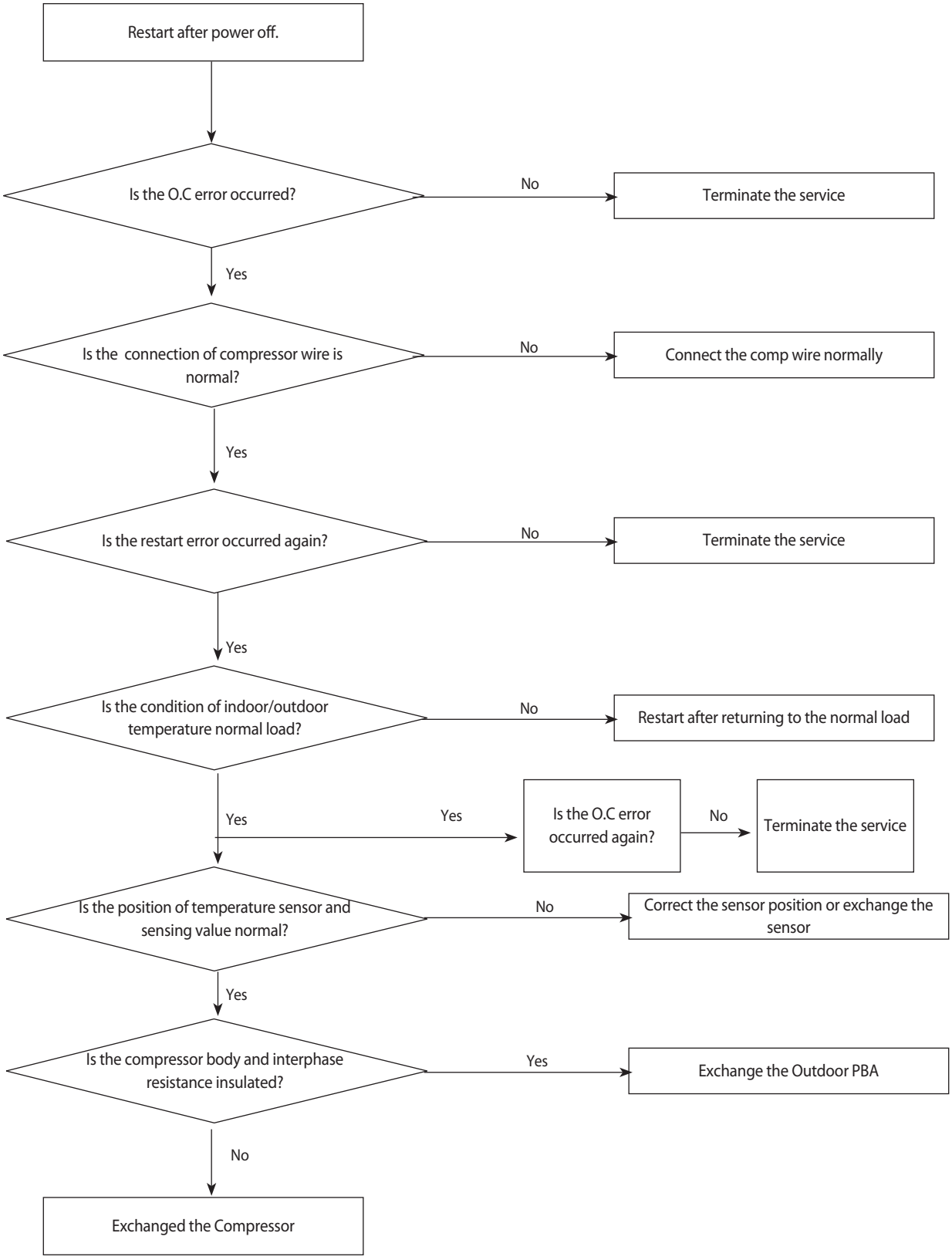


4-4-9 O.C(Over Current) error

1.Checklist :

1) Is the IPM Shunt(PF2:R451,R452,R453,PF3:R413,R414,R415) resistance value correct? Check the resistor is opened
2) Is the condition of surrounding temperature abnormal overload?
3) Is there any problem as like the temperature sensor separation or measurement value error?
4) Is the interphase resistance of compressor normal?

2. Troubleshooting procedure



4-4-10 DC_link voltage sensor error

1.Checklist :

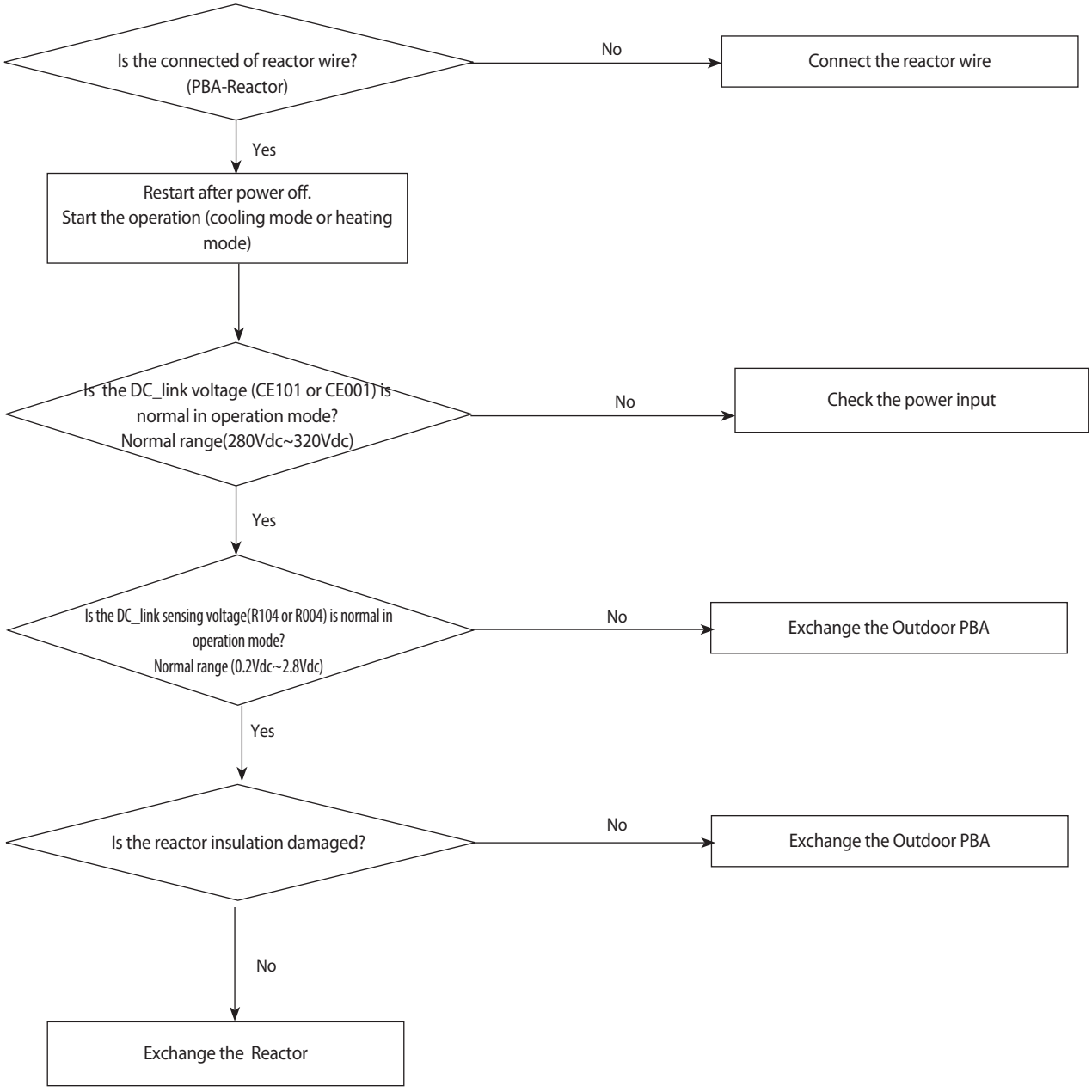
1) Is the input voltage of outdoor terminal block is normal?

2) Is the reactor wire connected?

3) Is the DC_link capacitor(PF2:CE101,CE102,CE103,PF3:CE001,CE002,CE003,CE004)) assembled in accordance the specification? (Outdoor PBA)

4) Is the DC_link resistor(PF2:R104,R106,R107,R108,PF3:R004,R005,R006,R007) value is normal? (Outdoor PBA)

2. Troubleshooting procedure

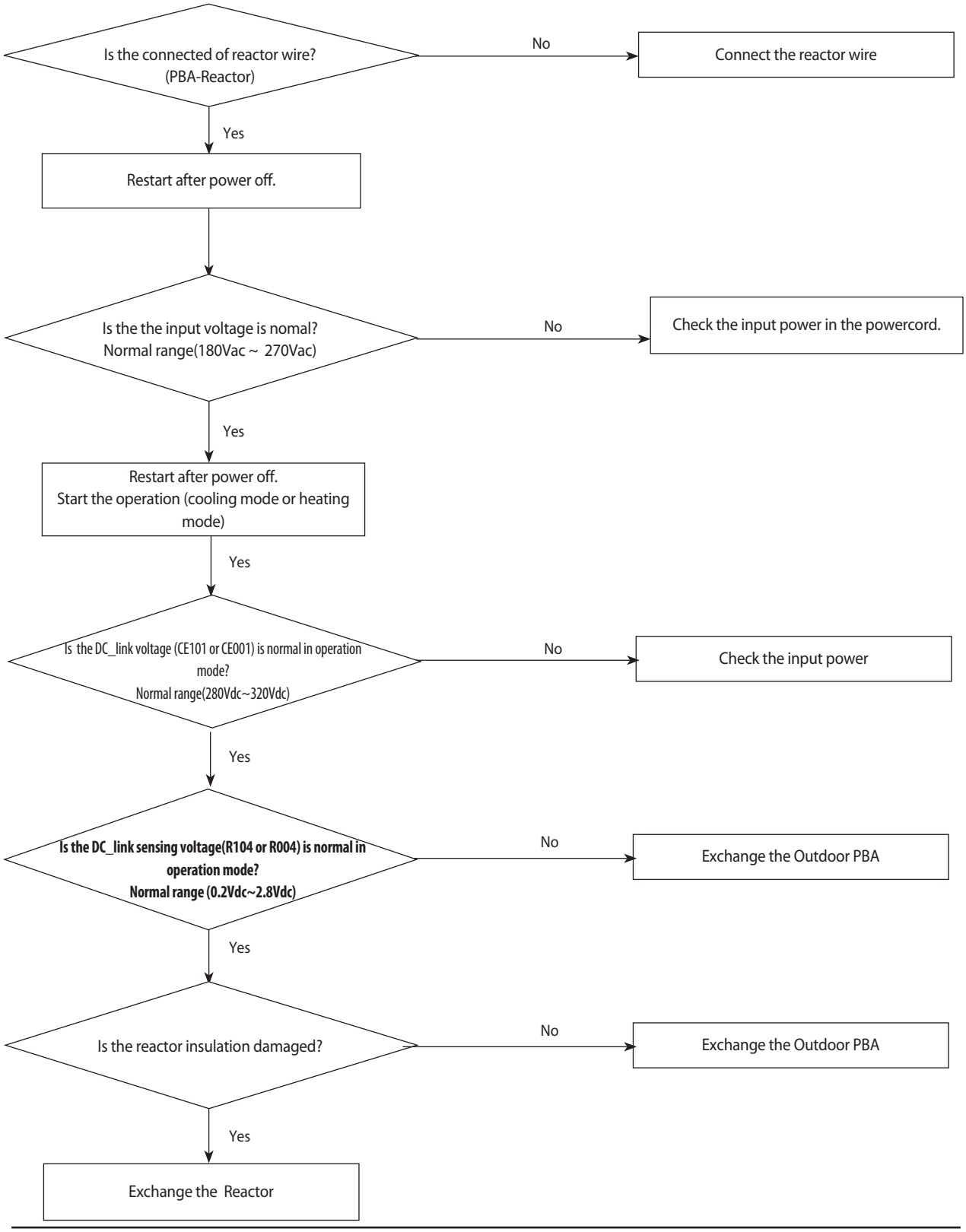


4-4-11 DC_link voltage under/over error, Over voltage protection error/PFC over load

1.Checklist :

1) Is the input voltage of outdoor terminal block is normal?
2) Is the reactor wire connected?
3) Is the reactor wire connected?
4) **Is the DC_link capacitor(PF2:CE101,CE102,CE103,PF3:CE001,CE002,CE003,CE004)) assembled in accordance the specification? (Outdoor PBA)**
5) Is the DC_link resistor(PF2:R104,R106,R107,R108,PF3:R004,R005,R006,R007) value is normal? (Outdoor PBA)

2. Troubleshooting procedure

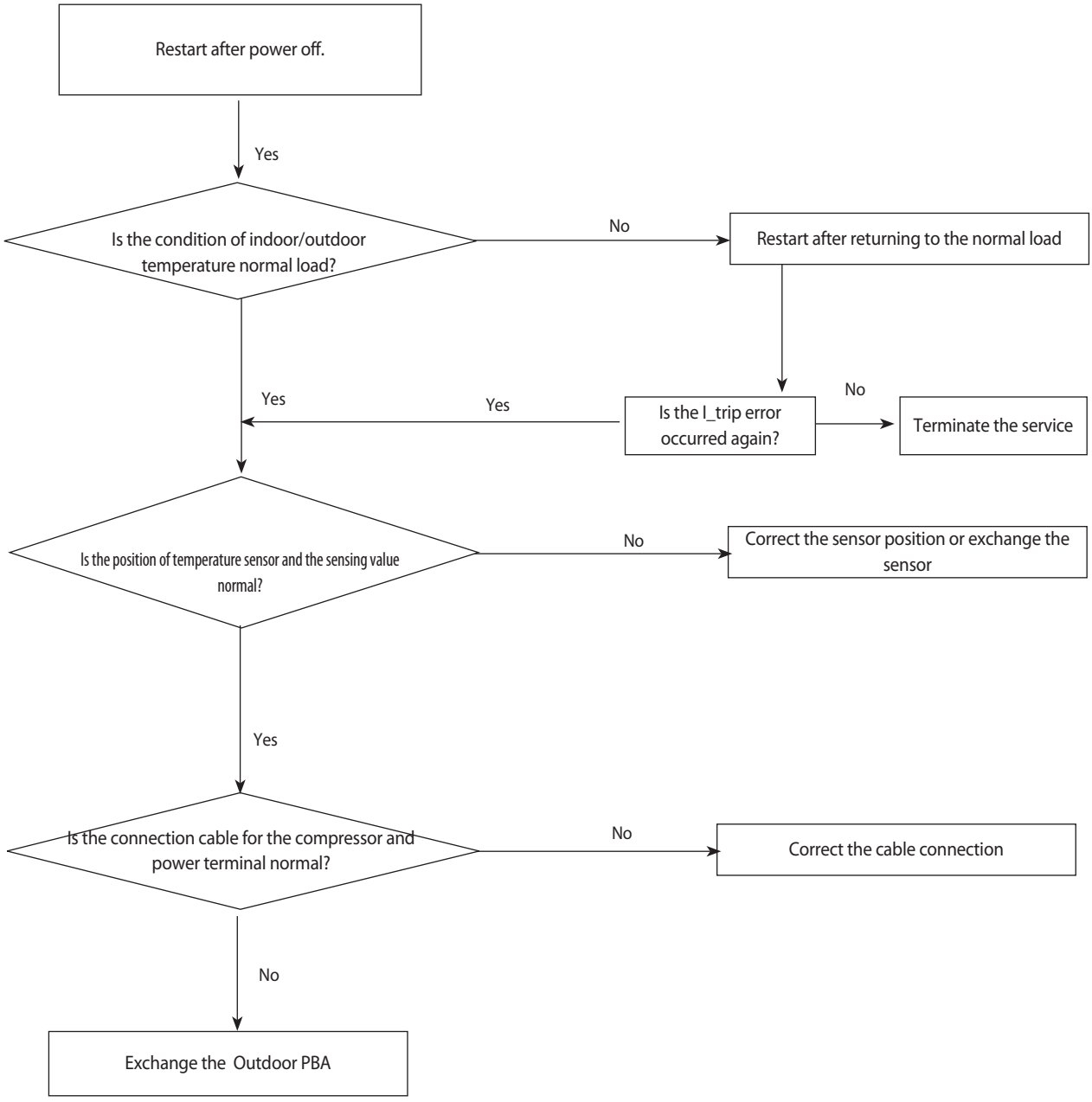


4-4-12 DC_link voltage sensor error

1.Checklist :

1) Is the PFC Shunt(PF2:R062,R063,PF3:R807,R808,R809) resistance value correct? Check the resistor is opened
2) Is the condition of surrounding temperature abnormal overload?
3) Is there any problem as like the temperature sensor separation or measurement value error?
4) Is the interphase resistance of compressor normal?

2. Troubleshooting procedure



4-4-13 Current sensor error/Input current sensor error

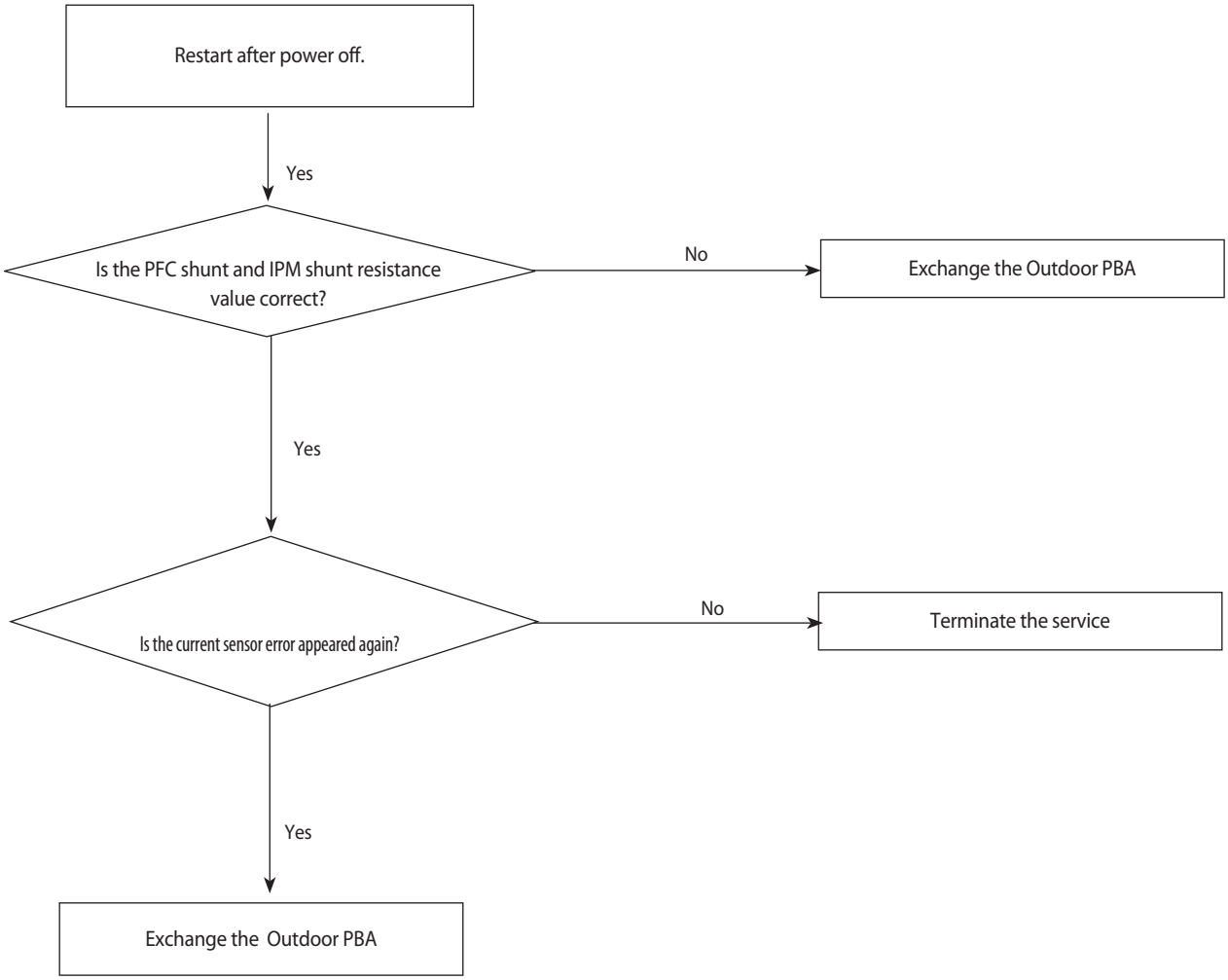
1.Checklist :

1) Is the PFC Shunt(PF2:R062,R063,PF3:R807,R808,R809) resistance value correct? Check the resistor is opened

2) Is the IPM Shunt(PF2:R451,R452,R453,PF23:R413,R414,R415) resistance value correct? Check the resistor is opened

3) Is there no short or open around IC451(PF2) or IC451,IC452(PF3)?

2. Troubleshooting procedure

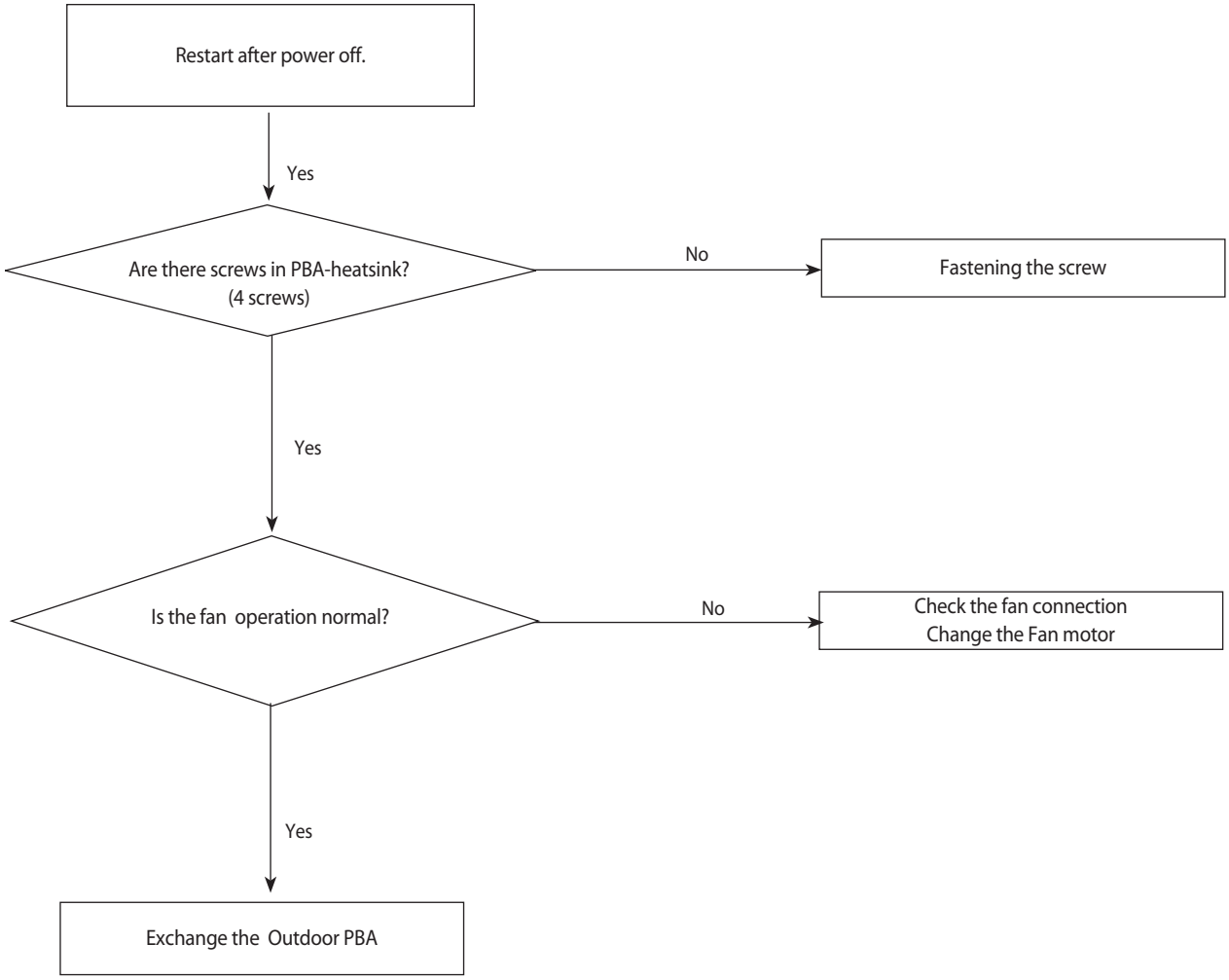


4-4-14 Heatsink sensor error/Heatsink over heat

1.Checklist :

1) Are there screws assembly in PBA-heatsink?
2) Is the gap PBA-heatsink
3) Is the fan operation normal?
4) Is the cover assembly in control-box normal?

2. Troubleshooting procedure

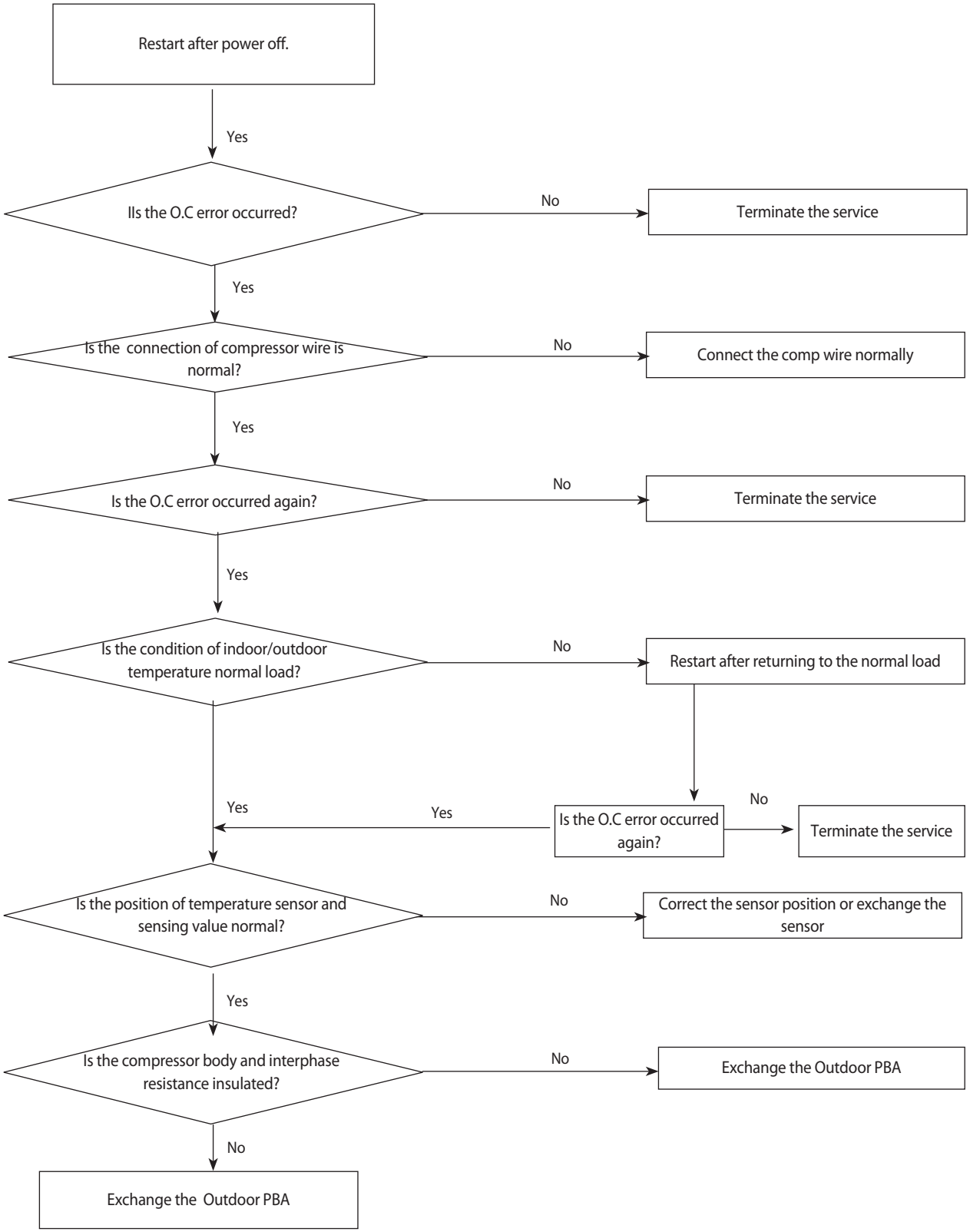


4-4-15 Comp Vlimit error/Comp current limit error

1.Checklist :

1) Is the PFC Shunt(PF2:R062,R063,PF3:R807,R808,R809) resistance value correct? Check the resistor is opened
2) Is the condition of surrounding temperature abnormal overload?
3) Is there any problem as like the temperature sensor separation or measurement value error?
4) Is the interphase resistance of compressor normal?

2. Troubleshooting procedure

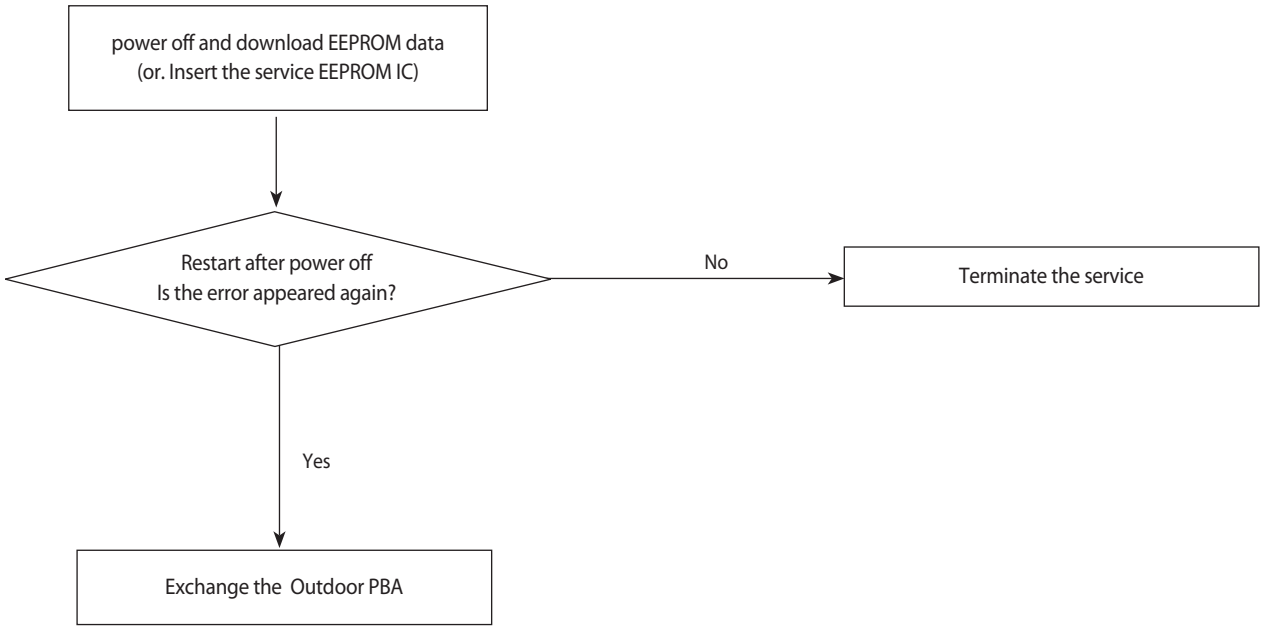


4-4-16 EEPROM error/OTP error

1.Checklist :

1) Is there a short around micom?
2) Is there a short around IC202(PF2) or IC701(PF3)?
3) Did you download or insert EEPROM IC, after changing outdoor PBA?

2. Troubleshooting procedure



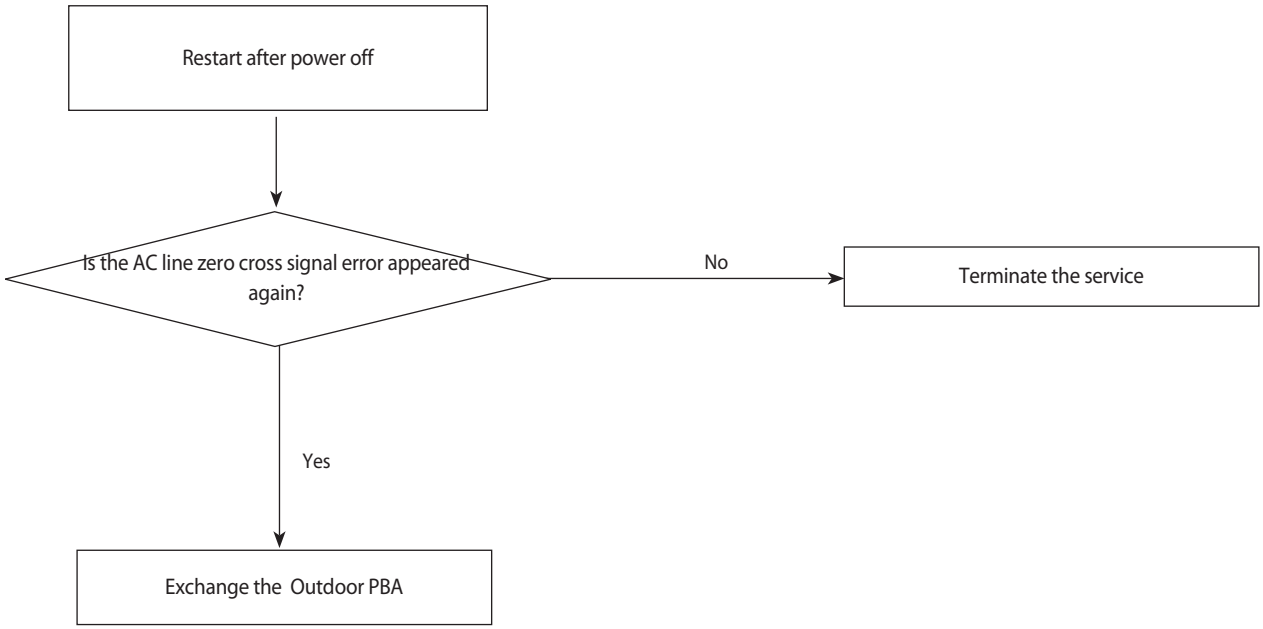
4-4-17 AC zero cross signal error

1.Checklist :

1) Check the power condition at customer's house (Is there any power noise?)

2) Have been there power failure?

2. Troubleshooting procedure

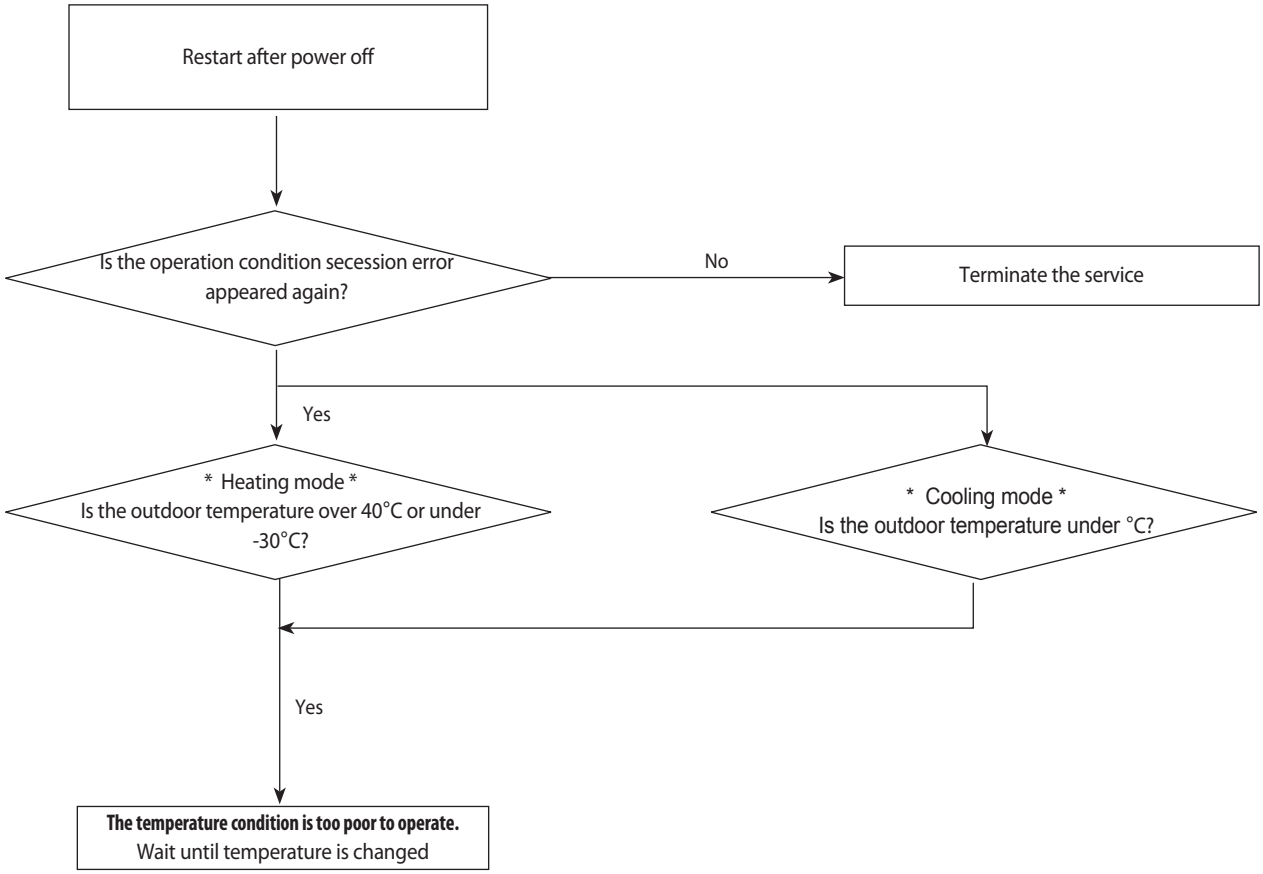


4-4-18 Operation condition secession error

1.Checklist :

1) Check the temperature around the outdoor unit.

2. Troubleshooting procedure

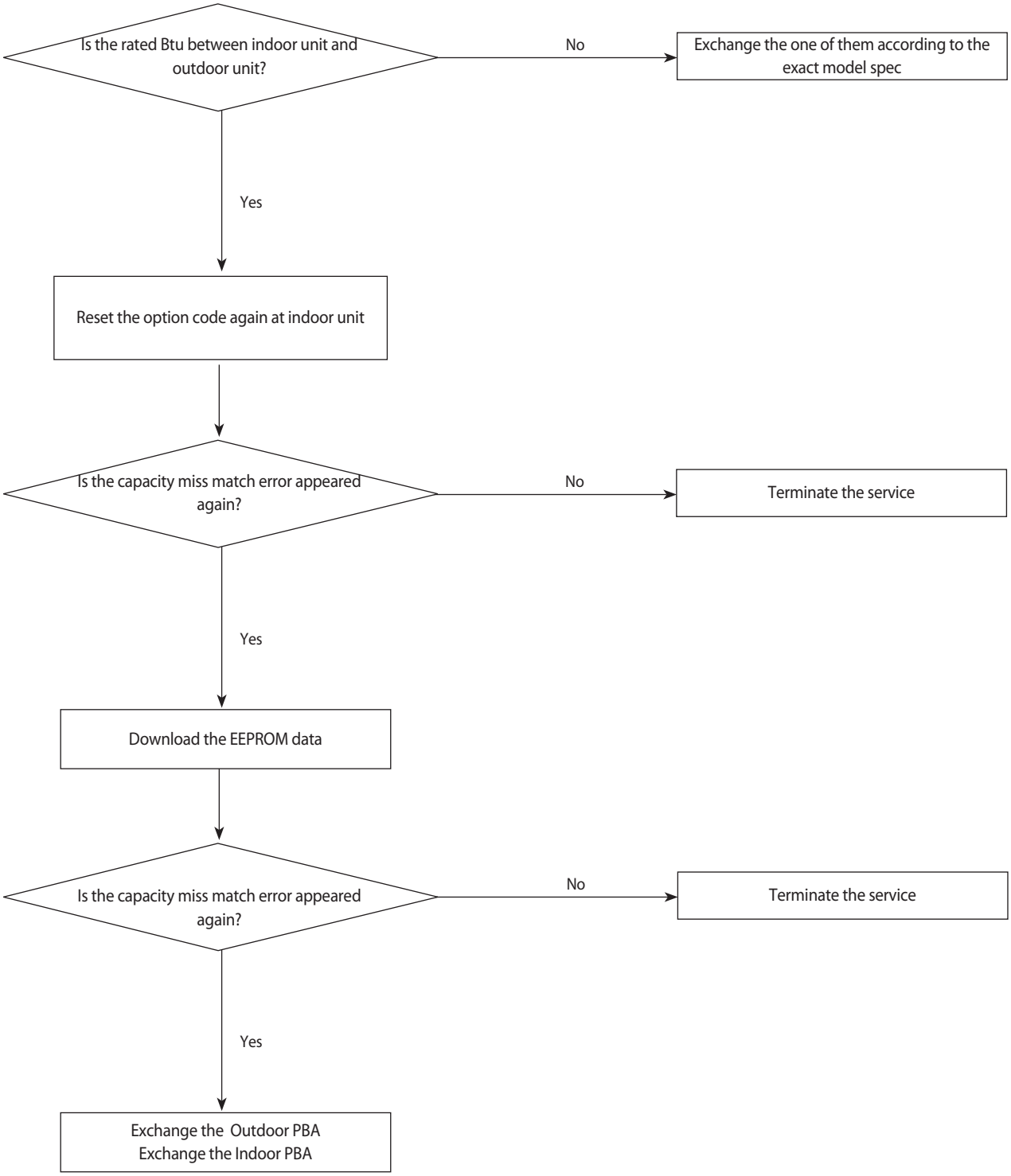


4-4-19 Capacity miss match error

1.Checklist :

1) Check the Btu between indoor and outdoor unit
2) Check the indoor unit option and outdoor unit EEPROM data

2. Troubleshooting procedure

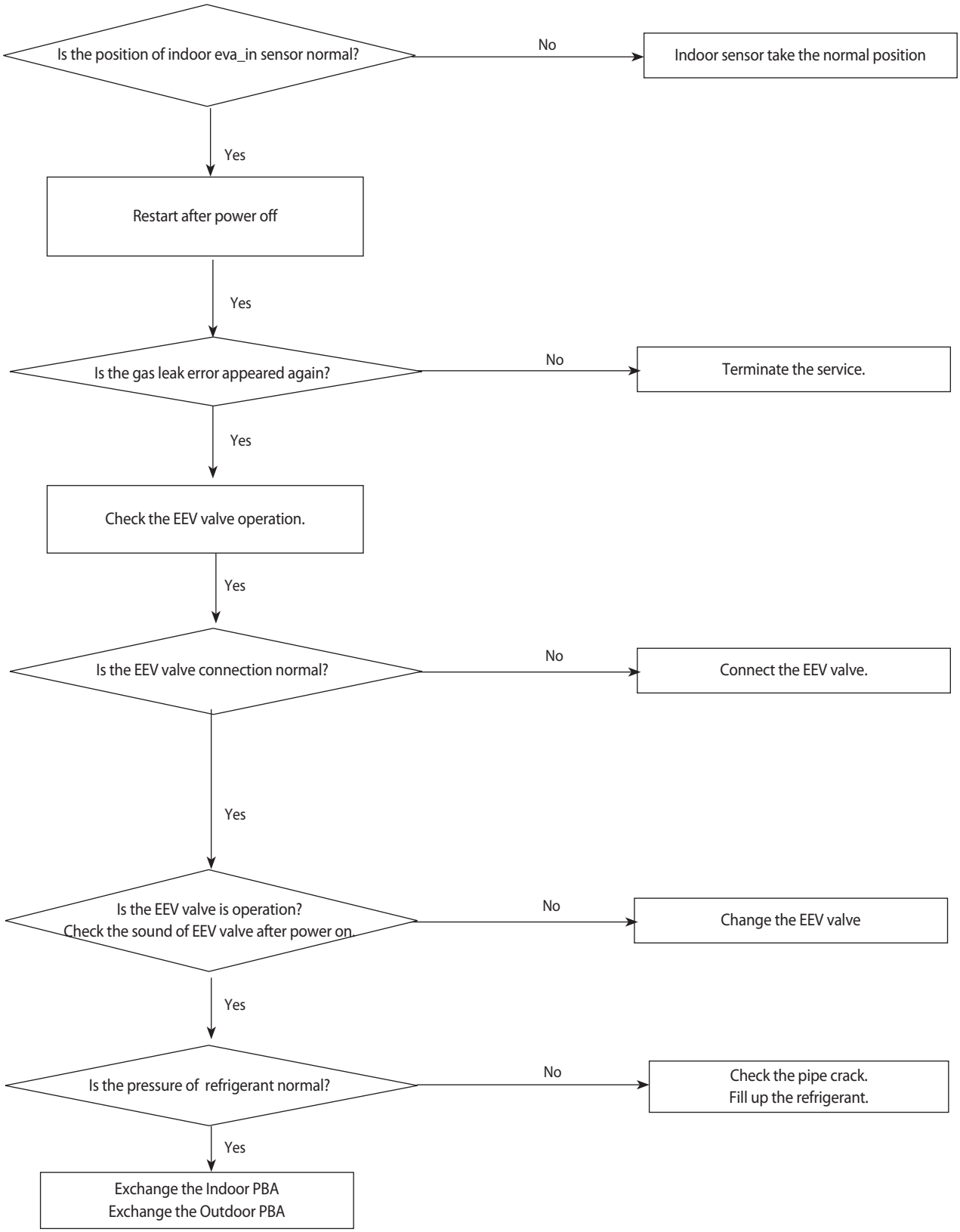


4-4-20 Gas leak error

1.Checklist :

1) Is the position of indoor Eva_in sensor normal?
2) Check the pipe crack
3) Check the EEV valve connection in Outdoor unit
4) Check the refrigerant was charged

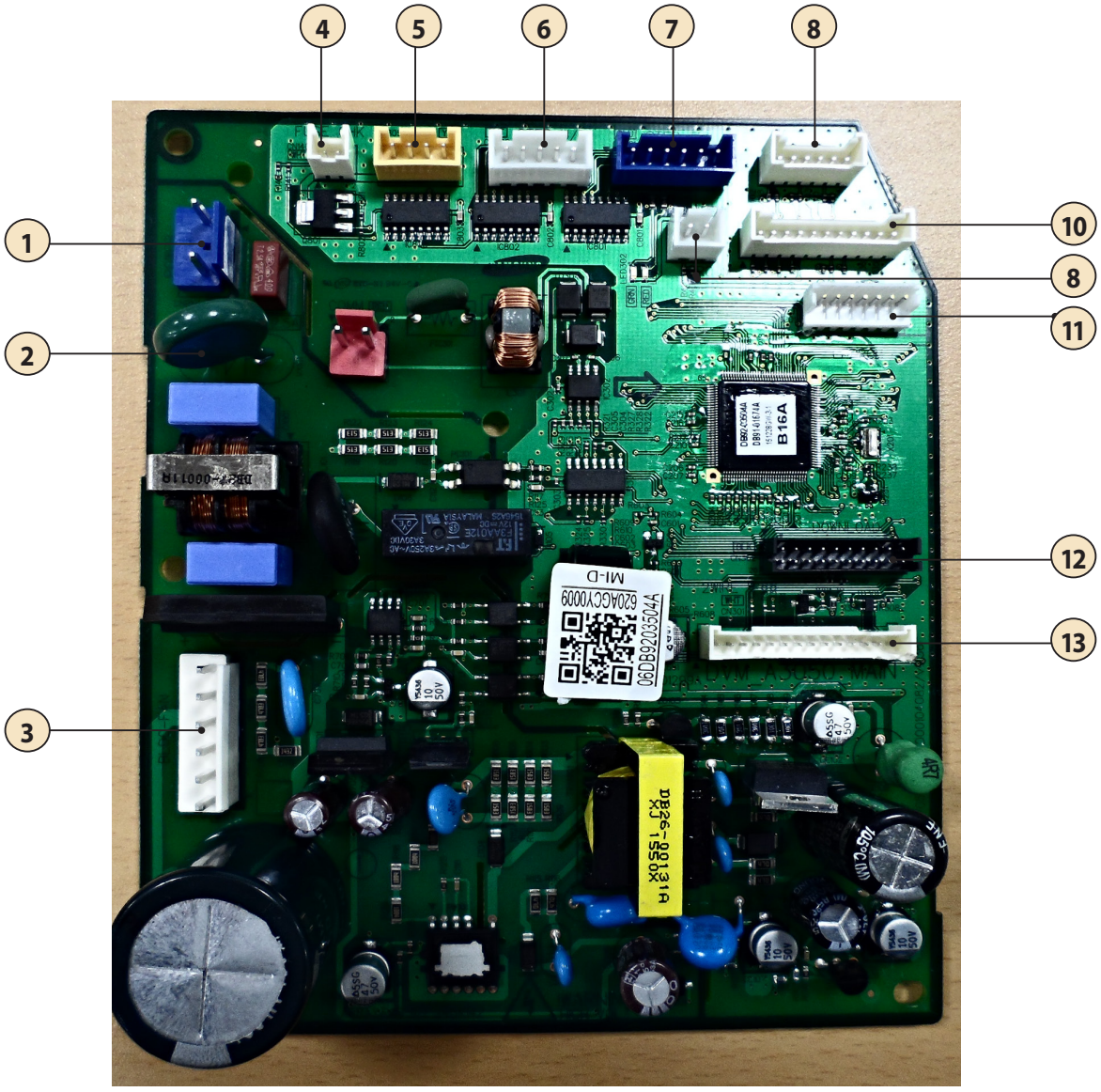
2. Troubleshooting procedure



5. PCB Diagram

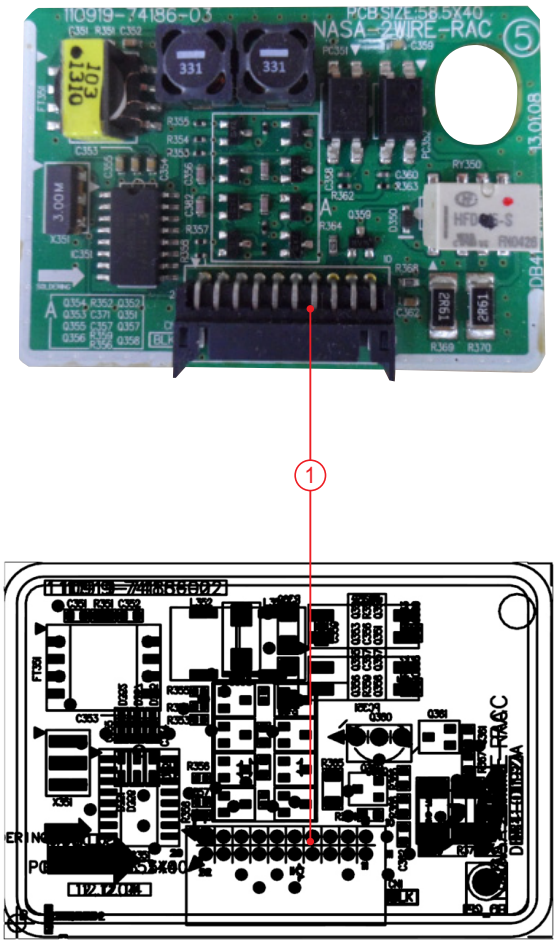
5-1 PCB Diagram

5-1-1 Indoor Unit PCB
(AC026KNADEH / AC035KNADEH / AC071KNADEH)
Main PBA



① **CNP101-POWER** #1 : L #2 : NOT USED #3 : N	② **CN303-COM1** #1~2 : COMMUNICATION SIGNAL	③ **CN701-BLDC FAN** #1 : DC 310V #2 : NOT USED #3 : GND #4 : PWM SIGNAL #5 : FEEDBACK SIGNAL	④ **CN140-FUSE CHECK** #1 : THERMAL FUSE SIGNAL #2 : GND
⑤ **CN805-SPI** #1~2 : GND #3 : SPI CONTROL SIGNAL #4 : NOT USED	⑥ **CN802-STEP UP/DOWN** #1 : DC 12V #2~5 : LOUVER SIGNAL	⑦ **CN801-EEV** #1~4 : EEV SIGNAL #5~6 : DC 12V	⑧ **CN401-ROOM** #1 : OOM TEMPERATURE SENSOR SIGNAL #2 : GND
⑨ **CN403-EVA IN/OUT/DIS** #1 : EVA IN TEMPERATURE SENSOR SIGNAL #2 : GND #3 : EVA OUT TEMPERATURE SENSOR SIGNAL #4 : GND #5 : DISCHARGE TEMPERATURE SENSOR SIGNAL #6 : GND	⑩ **CN501-DISPLAY** #1~3 : LED SIGNAL #4 : REMOCON SIGNAL #5 : GND #6 : DC 5V #7~8 : REMOCON SIGNAL #9~11 : NOT USED	⑪ **CN201-EEPROM** #1 : GND #2 : NOT USED #3 : DC 5V #4~7 : EEPROM SIGNAL	⑫ **CN302-DOWNLOAD** #1~8 : DOWNLOAD SIGNAL #9 : GND #10~11 : DC 5V #12~16 : DOWNLOAD SIGNAL #17 : GND #18~20 : DOWNLOAD SIGNAL
⑬ **CN301-to 2WIRE SUB** #1~2 : COMMUNICATION SIGNAL #3~4 : SUB PBA SIGNAL #5 : EXTERNAL CONTROL SIGNAL #6 : COMP CHECK SIGNAL #7 : ERROR CHECK SIGNAL #8 : DC 5V #9 : GND #10 : DC 12V #11~14 : COMMUNICATION SIGNAL			

■ Sub PCB

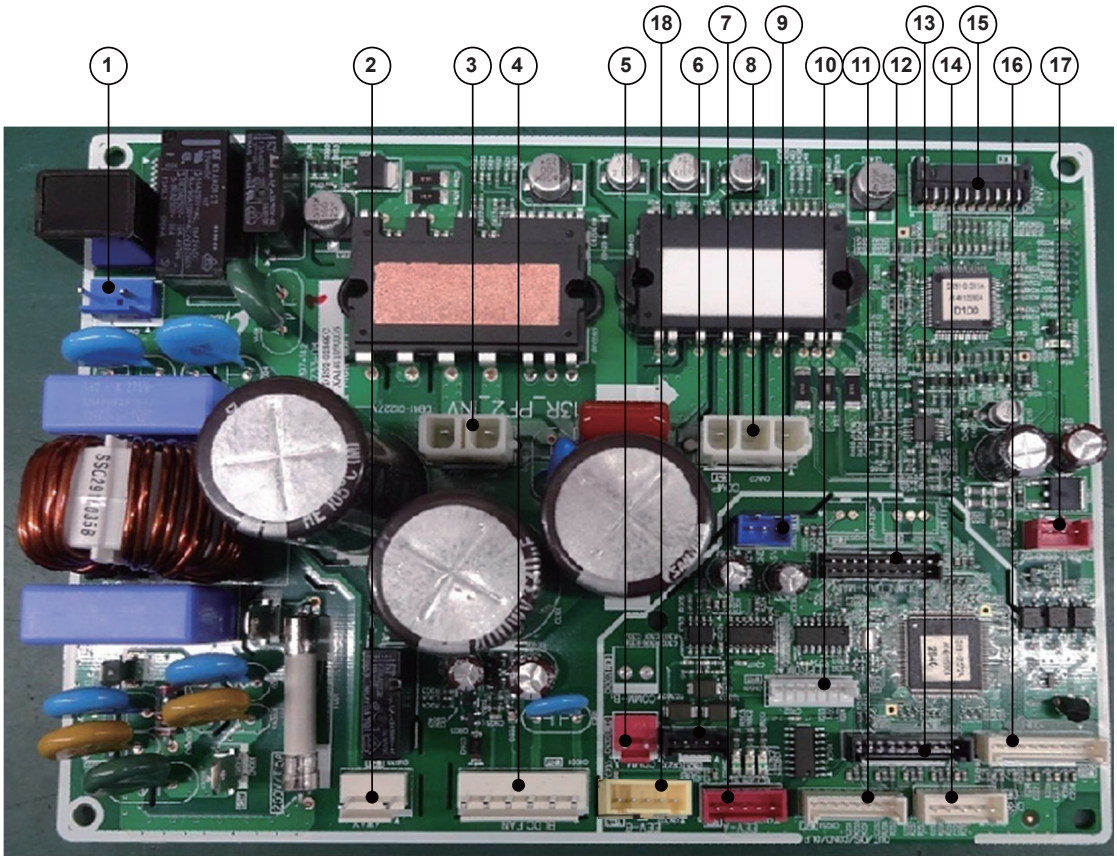


① CN1-2WIRES COMM.
#1,#2,#19,#20:COMM. SIGNAL
#3,#18:EXTERNAL CONTROL
#4,#17:COMP CHECK
#5,#16:ERROR CHECK
#6:VCC(DC5V)
#7,#14:GND
#8,#13,#15:DC12V
#9~#12:COMM. SIGNAL

5-1-2 Outdoor Unit PCB

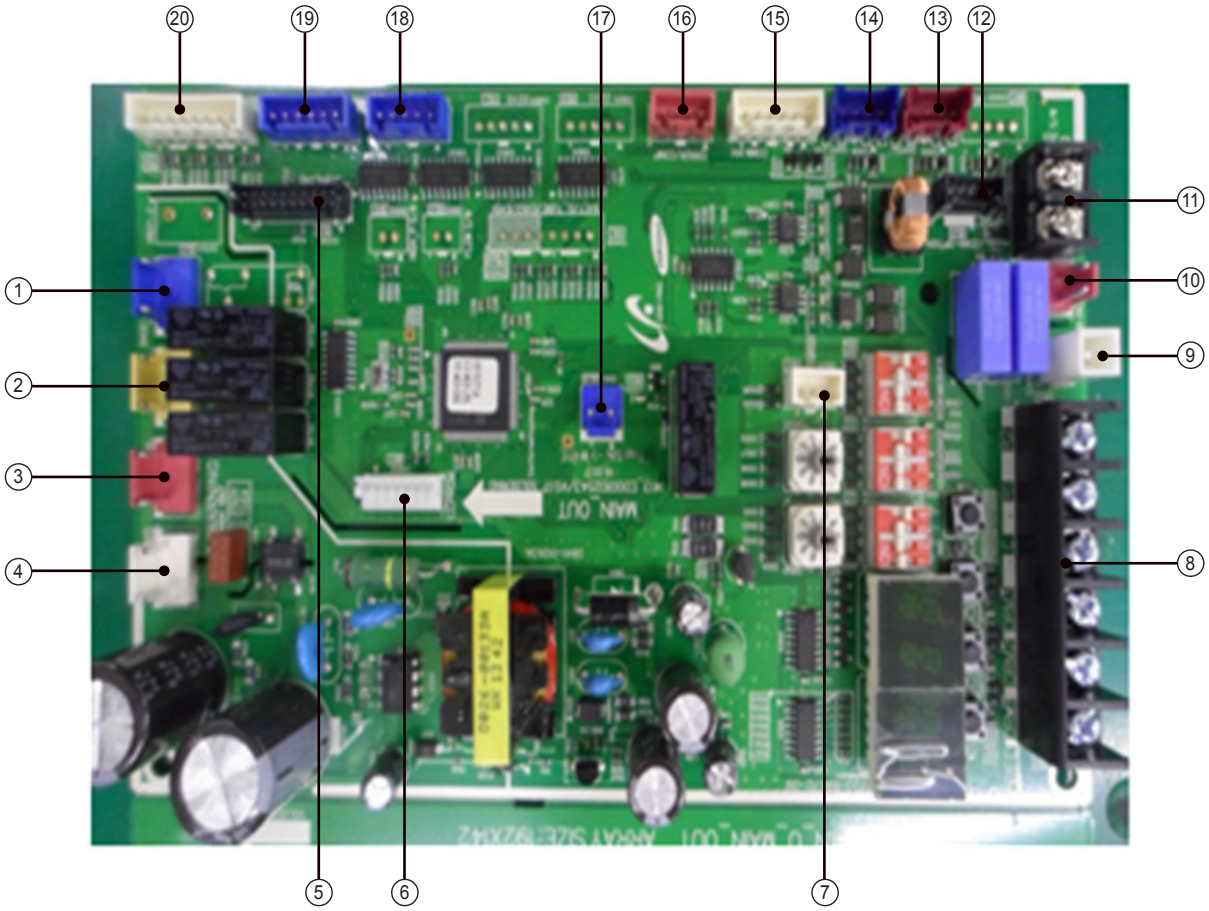
Outdoor Unit PCB(AC026JXSCEH / AC035JXSCEH)

Main PCB



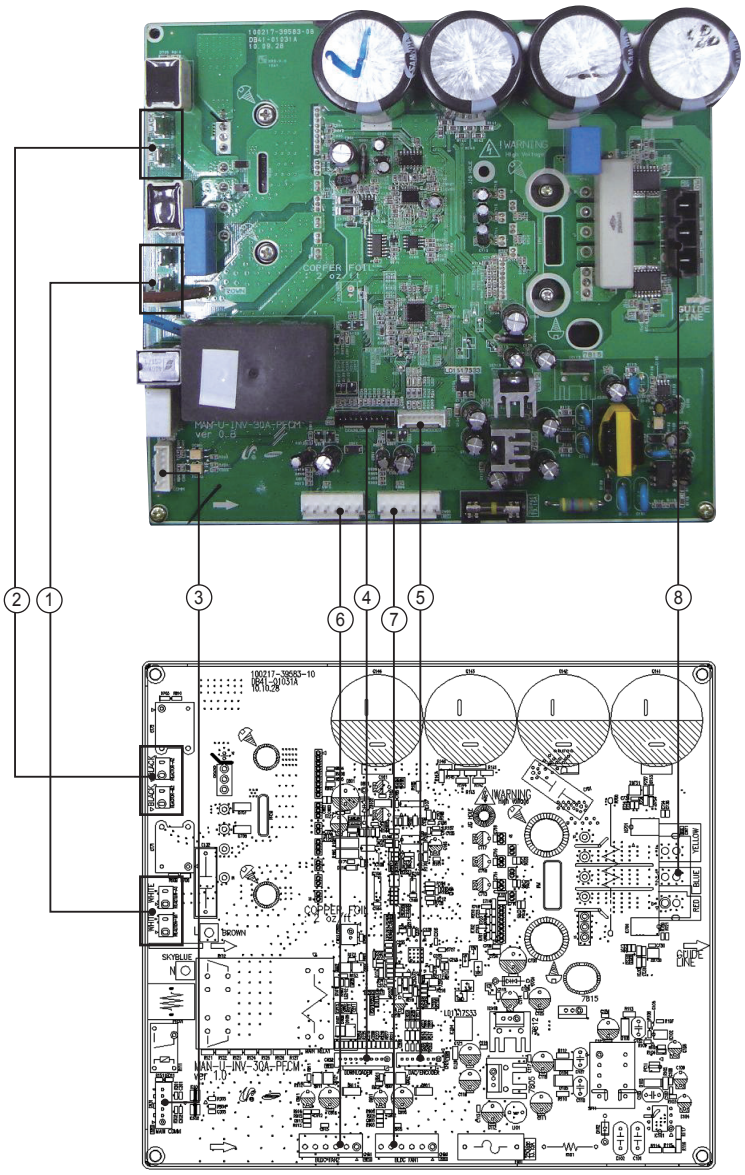
No	Spec.
1	SMPS POWER: YW396-03AV BLU
2	4WAY:YW396-03AV WHT
3	REACTOR:DBT081-2P WHT
4	BLDC FAN:YW396-06V WHT
5	COMM:YW396-02V RED
6	SUB PBA POWER:SMW200-05P BLK
7	EEVA:SMW250-05 RED
8	COMP:DBT061-3P WHT
9	SMPS: SMW250-03 BLU
10	EEPROM:B7P-MQ WHT
11	TEMP SENSOR: SMW200-08P WHT
12	MAIN DOWNLOAD:YDW200-20 BLK
13	SUB PBA: SMW200-10P BLK
14	DRED:SMW250-05 WHT
15	INV DOWNDOWN: YDAW200-20TR BLK
16	SUB PBA: SMW200-10P WHT
17	ENABLE CGND: SMW250-03 RED
18	EEVB/SUB PBA:SMW250-05 YEL

Outdoor Unit PCB(AC071JXSCEH)
Main PCB



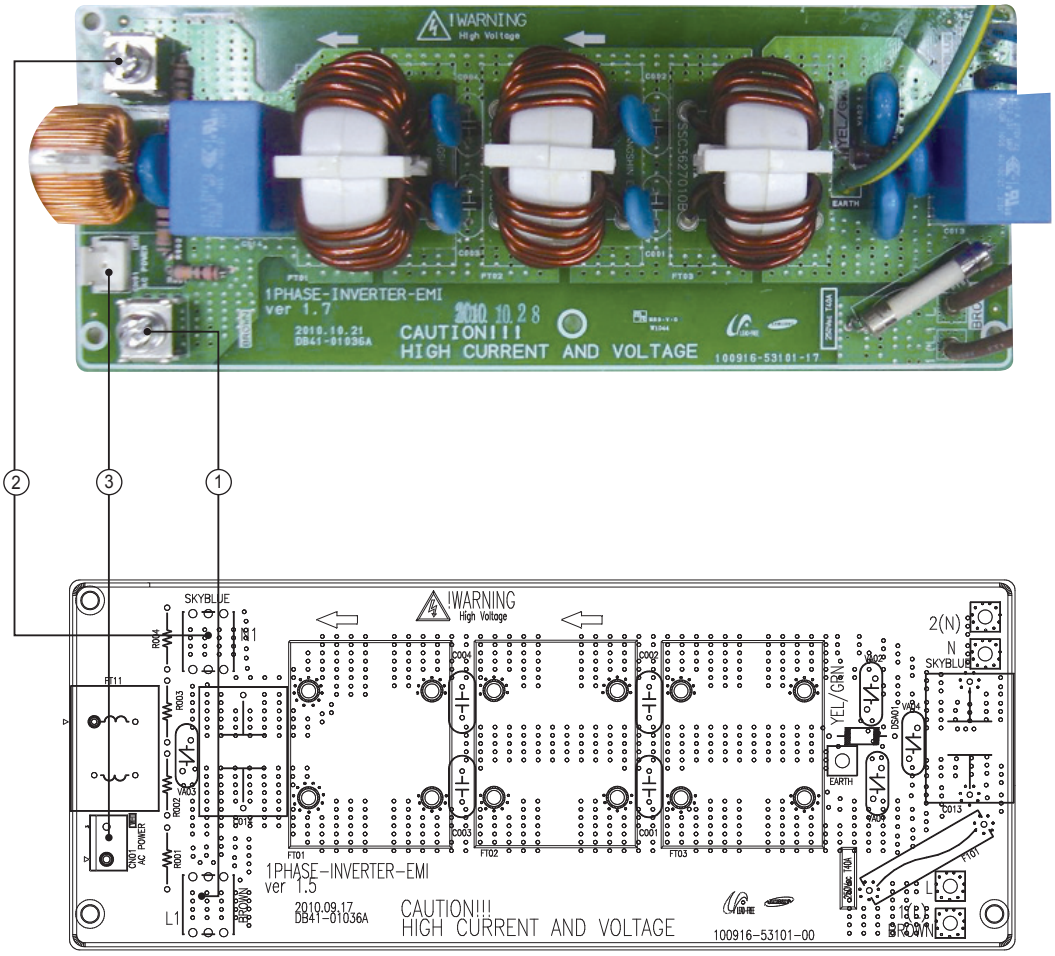
No	Part Code	Local	Function	Description
1	3711-003404	CN703	BASE-HEATER	YW396-03AV BLU
2	3711-003406	CN702	4WAY-1	YW396-03AV YEL
3	3711-003407	CN701	HOTGAS	YW396-03AV RED
4	3711-000203	CN101	POWER	YW396-03AV WHT
5	3711-002001	CN306	DOWNLOAD	YDW200-20P BLK
6	3711-007817	CN806	EEPROM	B7P-MQ WHT
7	3711-000024	CN501	MODE SELECTOR	SMW250-03 WHT
8	DB65-00320A	CN304	DRED	DAPC-2009-6P BLK
9	3711-000744	CN103	EARTH	YDW236-01 WHT
10	3711-000177	CN303	COMM-INDOOR	YW396-02V RED
11	3716-001162	CN003	QUIET S/W	BR-7623-2P BLK
12	3711-005096	CN302	COMM-OPTION	SMW200-05 BLK
13	3711-007069	CN402	HIGH PRESSURE S/W	B04B-XARK-1 RED
14	3711-007325	CN401	LOW PRESSURE S/W	B04B-XARK-1 BLU
15	3711-001038	CN305	COMM INV	SMW250-06 WHT
16	3711-000939	CN801	ERROR/COMP CHECK	SMW250-04 RED
17	3711-000176	CN12	DC12V	YW396-02V BLU
18	3711-000997	CN803	EEV1	SMW250-05 BLU
19	3711-001036	CN802	EEV4	SMW250-06 BLU
20	3711-001084	CN403	OUT TEMP/COND/DISQ/OLP	SMW250-08 WHT

INVERTER PCB



① Reactor-A1/B1	② Reactor-A2/B2	③ CN50(2PIN/RED)-Communication	④ CN22-Downloader
#Reactor-A2 : WHT #Reactor-B2 : WHT	#Reactor-A2 : BLK #Reactor-B2 : BLK	#1 : RXD, #2 : TXD #3 : GND, #4 : DC 5V #5 : DC 12V, #6 : INV. SMPS signal	#1 : RXD_ATARO, #2 : TXD_ATARO #3, #8 : N.C, #4~#7 : DATA signal #9 : GND, #10 : DC 5V
⑤ CN21-DAC/ENCODER	⑥ CN91-FAN2	⑦ CN90-FAN1	⑧ CN71-COMP.
For S/W engineer debugging	#1 : DC 360V #2 : N.C #3 : GND #4 : DC 15V #5 : FAN RPM #6 : FAN RPM feedback	#1 : DC 360V #2 : N.C #3 : GND #4 : DC 15V #5 : FAN RPM #6 : FAN RPM feedback	#1 : COMP. U-phase(RED) #2 : COMP. V-phase(BLU) #3 : COMP. U-phase(YEL)

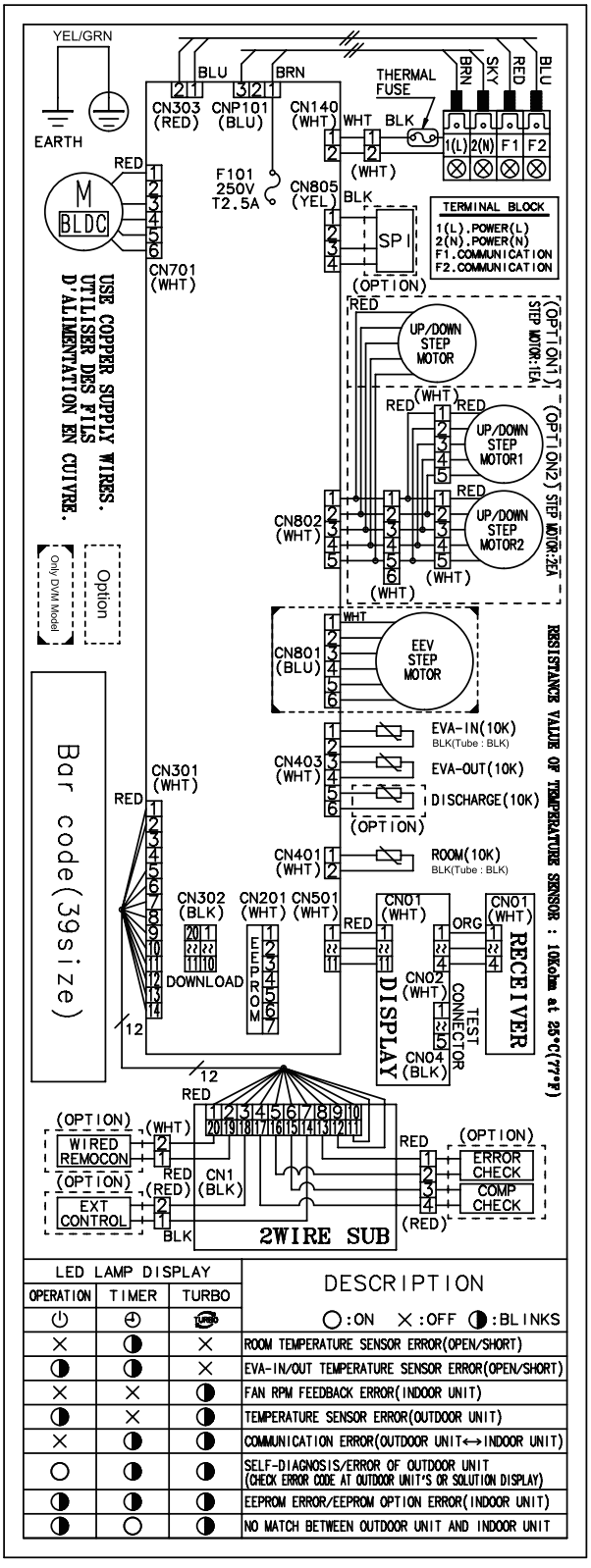
EMI PCB



① L1-AC POWER L phase	② N1-AC POWER N phase	③ CN01-AC POWER
L1 : BRN	N1 : SKY-BLU	#1-#3 : AC 220~240V

6. Wiring Diagram

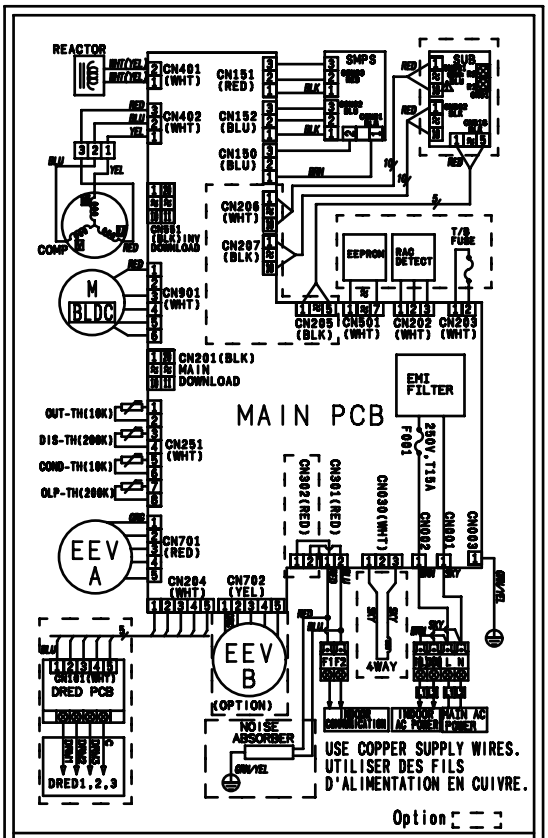
6-1 Indoor Unit



LED LAMP DISPLAY			DESCRIPTION
OPERATION	TIMER	TURBO	○:ON ×:OFF ◑:BLINKS
×	◑	×	ROOM TEMPERATURE SENSOR ERROR(OPEN/SHORT)
◑	◑	×	EVA-IN/OUT TEMPERATURE SENSOR ERROR(OPEN/SHORT)
×	×	◑	FAN RPM FEEDBACK ERROR(INDOOR UNIT)
◑	×	◑	TEMPERATURE SENSOR ERROR(OUTDOOR UNIT)
×	◑	◑	COMMUNICATION ERROR(OUTDOOR UNIT↔INDOOR UNIT)
○	◑	◑	SELF-DIAGNOSIS/ERROR OF OUTDOOR UNIT (CHECK ERROR CODE AT OUTDOOR UNIT'S OR SOLUTION DISPLAY)
◑	◑	◑	EEPROM ERROR/EEPROM OPTION ERROR(INDOOR UNIT)
◑	○	◑	NO MATCH BETWEEN OUTDOOR UNIT AND INDOOR UNIT

6-2 Outdoor Unit

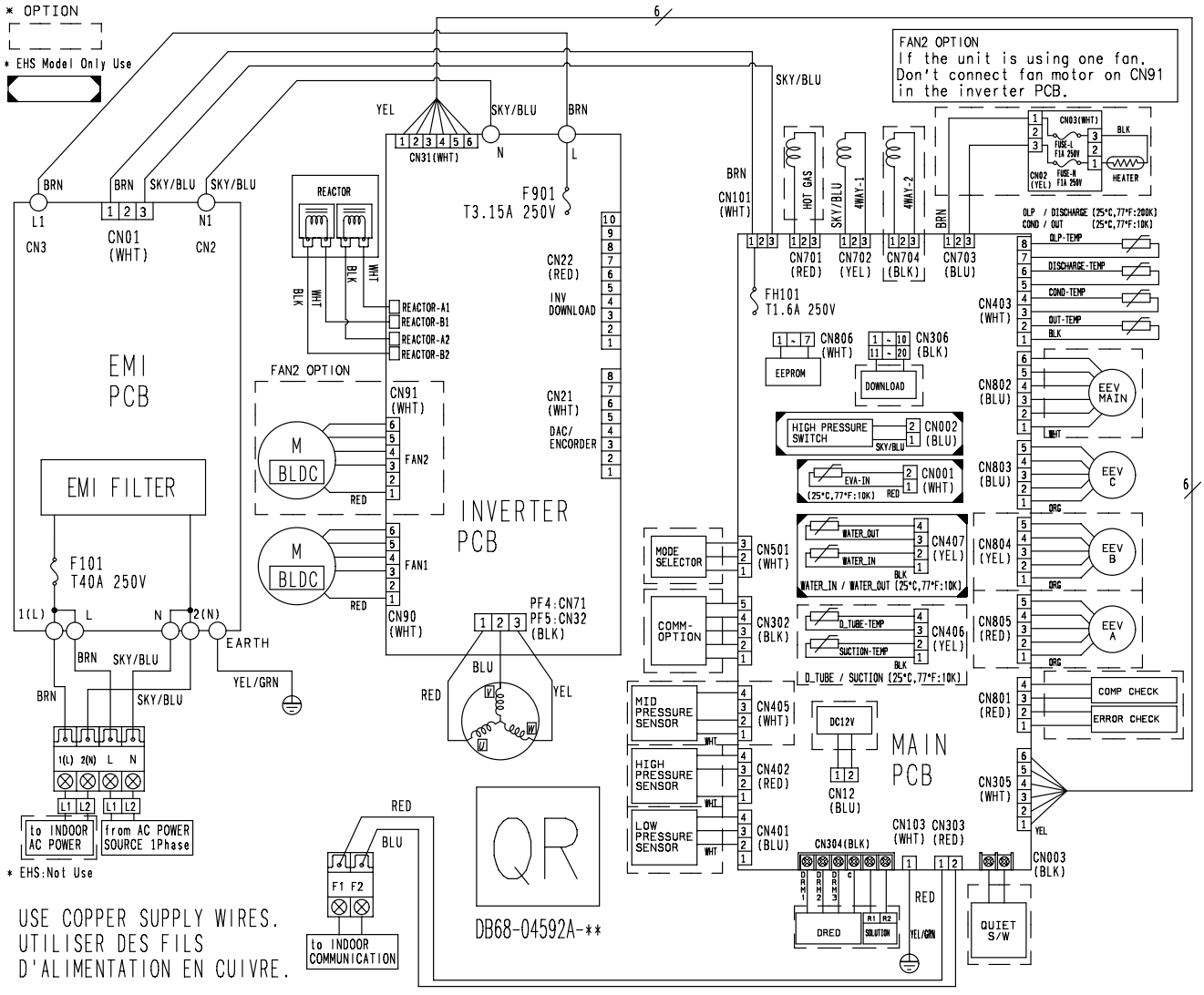
■ AC026JXSCEH, AC035JXSCEH



ERROR MODE	
E198	IDU_Terminal Block Thermal Fuse Error
E201	Communication Error (Pre tracking fail or The mismatched of indoor unit)
E202	Communication Error between the outdoor and indoor unit
E203	Time out Comm. (Inv Micom↔Main Micom)
E221	Outdoor Temperature Sensor Error(OPEN/SHORT)
E231	COND Temperature Sensor Error(OPEN/SHORT)
E251	Discharge Temperature Sensor Error(OPEN/SHORT)
E320	COMP-OLP Temperature Sensor Error(Open/Short)
E403	Comp Down by a freezing protection
E404	System stop to protect from overload
E416	Discharge Temperature Sensor Over Error
E422	EEV or Valve Close
E440	Prohibit Operation Condition Error(Heating)
E441	Prohibit Operation Condition Error(Cooling)
E458	Fan Error
E461	Comp Starting Error
E462	AC Input I_Limit Trip Error
E463	System stop due to OLP(Temp.)
E464	IPM Over Current(O.C) Error
E465	Comp V_Limit/I_Limit Error
E466	DC Link Voltage Protecting Error
E467	Comp Wire Missing Error
E468	Current Sensor Error
E469	DC Link Voltage Sensor Error
E470	EEPROM Read/Write Error
E471	EEPROM Read/Write Error (H/W)
E474	Heatsink Sensor Error
E483	Over Voltage Protecting Error
E484	PFC Overload Error
E485	Input Current Sensor Error
E488	AC Input V_Limit Sensor Error
E500	IPM Overheat Error
E554	Gas Leak Error
E556	Model Mismatching Error(ODU/IDU)
E590	EEPROM CHECKSUM Error (Main↔INVERTER)

DB68-04512A | ※ NOTE - 25°C (77°F) at 10Kohm / 200Kohm

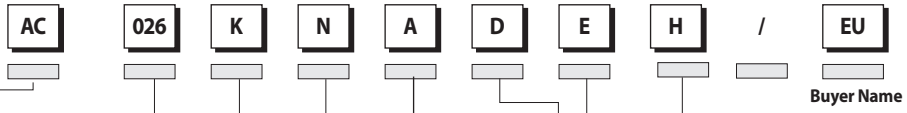
■ AC071JXSCEH



7. Preference Sheet

7-1 Index of Model Name

Model Code



Capacity (3 DIGIT)
KW / BTU / Liter

Product Type	
Code	Type
AM	DVM
AJ	PMA
AC	CAC (USD) / ASD
AE	EHS
AN	VTL
AK	PAK (Packaged System)
AG	CHR

Product Type	
Code	Type
E	2012
F	2013
G	2014
H	2015
I	2016
J	2017

Rating Voltage	
Code	Type
A	A(115V, 60hz, 1Φ)
B	B(220V, 60Hz, 1Φ)
C	C(208~230V, 60Hz)
D	D(200~220V, 50Hz)
E	E(220~240V, 50Hz)
F	F(208~230V, 60Hz, 3Φ)
G	G(380~415V, 50Hz, 3Φ)
H	H(380V, 60Hz, 3Φ)
J	J(460V, 60Hz, 3Φ)
K	K(220~240V, 50/60Hz, 1Φ)
M	M(127V, 50Hz)
N	N (380~415V, 50/60Hz, 3Φ)

Refrigerant		
Code	Type	Refrigerant
C	COOLING ONLY	R410a
H	HEAT PUMP	
R	HEAT RECOVERY	
D	COOLING ONLY	R22
E	HEAT PUMP	
A	Cooling only	R134
B	Heat Pump	
N	N/A	

Product Type (Indoor)	
Code	Type
1	1 Way CST
2	2 Way CST
N	Mini 4 Way CST
4	4 Way CST
H	HSP Duct
M	MSP Duct
L	LSP Duct
E	Fresh Air Intake Duct
G	Ceiling Conceiled Duct
C	Ceiling
J	Console
F	Floor Mounting
P	FAC
V	RAC-Jungfrau
Q	RAC-Neo Forte(EEV)
T	RAC-Neo Forte
D	RAC-Domestic
R	RAC-Maldive
A	RAC-New Model (Slim)
7	RAC-Vivace
U	AIR HANDIING UNIT
Z	AIR HANDLING UNIT
Y	HYDRO UNIT
B	HYDRO UNIT
X	HYDRO UNIT
W	WATER TANK
K	FLAT
S	STAND

Product Type (Outdoor)	
Code	Type
A	Inv+Side+General Temp
S	Inv+Side+Low Temp
Q	Inv+Side+Tropical Temp
F	Inv+Top+Tropical Temp
B	Non Inv+Side+General Temp
N	Non Inv+Side+Low Temp
R	Non Inv+Side+Tropical Temp
Z	Non Inv+Top+Tropical Temp
U	UNITED STATUS DUCT
K	DVM PLUS4
V	DVM Inverter
L	DVM SLIM
G	DVM GHP
M	DVM MINI
W	DVM WATER
C	DVM GEO(GEOTHERMAL)
D	DVM PLUS3
X	DVM PLUS2
J	FREE JOINT MULTI
P	PACK MULTI
H	DVM HOME
E	SINGLE
T	MULTI
Y	MONO

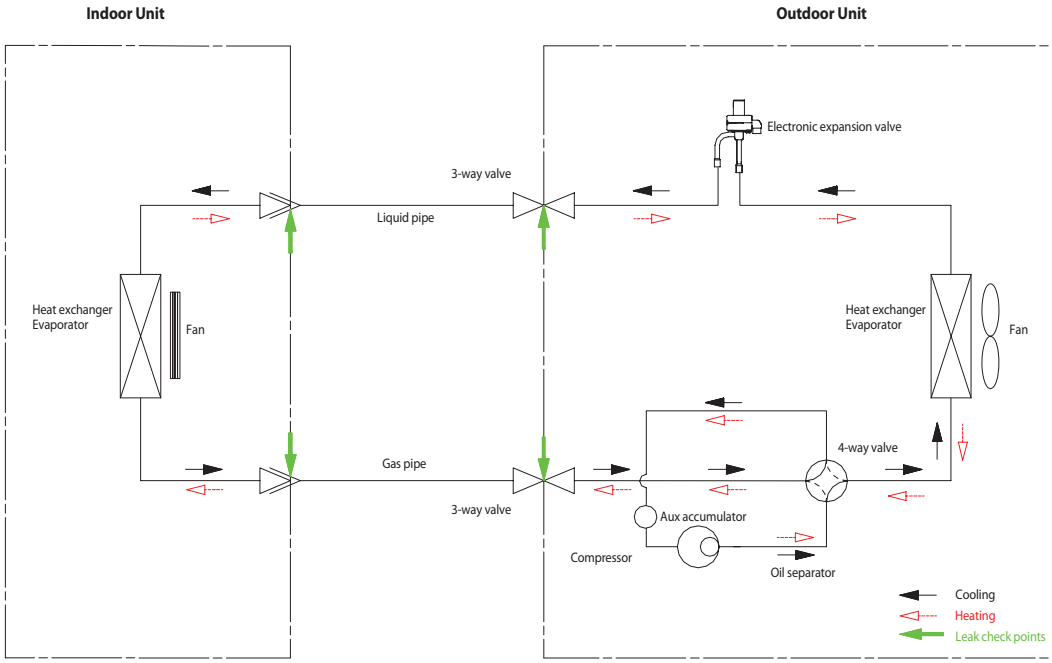
Product Type (Indoor)	
Code	Type
F	FLAGSHIP
P	PREMIUM
D	DELUXE
S	STANDARD
F	CASCADE
G	CASCADE (EEV)
E	MULTI (/ SOLAR TANK)
D	STANDRAD (/ STANDARD TANK)

Product Type (Outdoor)	
Code	Type
F	FLAGSHIP
P	PREMIUM
D	DELUXE <- Basic
S	STANDARD
L	FLAGSHIP + TROPICAL
R	PREMIUM + TROPICAL
T	DELUXE + TROPICAL<- Basic
N	STANDARD + TROPICAL

Product Type	
Code	Type
S	Set (NASA)
N	Indoor (NASA)
X	Outdoor(NASA)
A	Set (NASA)
B	Indoor (No NASA)
C	Outdoor (No NASA)

※ "/" can be removed from the buyer card if there are not enough digits.

7-2 Refrigerating Cycle Diagram



■ **CONDENSER**

High temperature and high pressure gas state coolant discharged from the compressor is converted to a liquid state as it is cooled down by the heat emission in the outdoor condenser unit, and sent to the evaporator.

■ **COMPRESSOR**

Low temperature and low pressure coolant is compressed and sent to the cycling system

■ **EVAPORATOR**

Liquid coolant sucked in through the capillary tubes cools down the room by absorbing the surrounding heat as it evaporates (converting from liquid to gas). (Absorbing heat required for evaporation)

■ **SERVICE VALVE**

You can open the valve by turning the need valve counterclockwise using hex wrench, and it is used for vacuum, gas purging, coolant injection, coolant purging, and indoor-outdoor unit connection.

■ **ACCUMULATOR**

Accumulator prevents the flow of liquid-state coolant into the compressor. (Liquid-state coolant flowing into the compressor will overload the compressor.)

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