SAMSUNG

SPLIT-TYPE AIR CONDITIONER

	INDOOR UNIT	OUTDOOR UNIT
Basic Code:	AR09JVSSEWKNED AR12JVSSEWKNED AR12JVSSCWKNCB	AR09JVSSEWKXED AR12JVSSEWKXED AR12JVSSCWKXCB
Model Code:	AR12JVFSWWKNAF	AR12JVFSWWKXAF

SERVICE Manual

AIR CONDITIONER

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1. Precautions

1-1 Installing the air conditioner

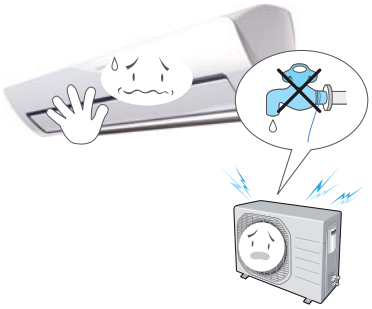
- Uses should not install the air conditioner by themselves.
  Ask the dealer or authorized company to install the air conditioner except window-type air conditioner in U.S.A and Canada.
- If you don't install the air conditioner properly, it may cause a fire, a water leakage or an electric shock.
- You must install the air conditioner according to the national wiring regulations and safety regulations.
- Install the indoor unit higher than 2.5m from the floor to avoid the injury caused by the operation of the fan.
  (except the window-type air conditioner)
- The manufacturer is not responsible for any accidents or injury caused by an incorrect installation.
- When installing the built-in type air conditioner, keep all electric cables such as the power cable and the connection cord in pipes, ducts, or cable channels to protect them from the danger of impact or any other incidents.

1-2 Power supply and circuit breaker

- If the power cord of the air conditioner is damaged, it must be replaced by the manufacturer or a qualified person in order to avoid a hazard.
- The air conditioner must be plugged into an independent circuit if applicable or connect the power cable to the auxiliary circuit breaker.
  An all pole disconnection form the power supply must be incorporated in the fixed wiring with a contact opening of>3mm.
- Do not extend an electric cord to the air conditioner.
- The air conditioner must be plugged in after you complete the installation.

1-3 During operation

- Do not repair the air conditioner at your discretion.
  It is recommended to contact a service center directly.
- Never spill any kind of liquid on the air conditioner.
  If this happens, turn off the air conditioner and contact an authorized service center.
- Do not insert anything between the airflow blades to prevent damage of the inner fan and consequent injury.
  Keep children away from the air conditioner.
- Do not place any obstacles in front of the air conditioner.
- Do not spray any kind of liquid into the indoor unit. If this happens, turn off the air conditioner and contact a service center.
- Make sure that the air conditioner is well ventilated at all times.
  Do not place a cloth or other materials over it.
- Remove the batteries if you don't use the remote control for a long time. (If applicable)
- Use the remote control within 7 meters from the indoor unit. (If applicable)

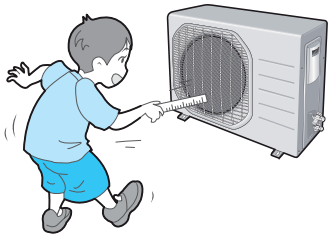


1-4 Disposing of the unit

- **Before the throwing out the air conditioner, remove the batteries from the remote control.**
- **When you dispose of the air conditioner, consult your dealer. If pipes are removed incorrectly, refrigerant may blow out and cause air pollution. When it contacts with your skin, it can cause skin injury.**
- **The package of the air conditioner should be recycled or disposed of properly for environmental reasons.**

1-5 Others

- **Never store or load the air conditioner upside down or sideways to prevent the damage to the compressor.**
- **Young children or infirm persons should be always supervised when they use the air conditioner.**
- **Max current is measured according to IEC standard for safety.**
- **Current is measured according to ISO standard for energy efficiency.**



2. Product Specifications

2-1 The Feature of Product

■ 2 step cooling
- Get cool quickly and keep cool comfortably without shivering

■ Single user mode
- No worrying about the electricity bill, even using it when you're alone.

■ Crystal gloss design
- Uniquely stylish and innovative design to enhance your life and home

■ Smart Wi-Fi
- Control air conditioner anytime and anywhere

■ Smart Installation
- Get the confidence that it' s perfectly installed

■ Smart Check
- Don' t worry about the trouble-shooting in your home

■ Triple Protector Plus
- Use longer without damage in unsuitable conditions

■ Easy Installation
- Secure the easy Installation of Indoor unit and pipe connection

■ Easy Filter
- Quick and easy to clean filter saves time and effort

2-2 Product Specifications

MODEL				AR09JVSSEWK/ED		AR12JVSSEWK/ED		AR12JVSSCWK/CB	
				Indoor Unit	Outoor Unit	Indoor Unit	Outoor Unit	Indoor Unit	Outoor Unit
Type				Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted
Performance	Capacity	Cooling	KW	1.5/2.64/3.2		1.18/3.52/4.0		1.5/3.52/4	
		Heating	(Low/Std/Max)	-		-		-	
	Running Frequency	Cooling	Hz	35/49/60		24/71/77		35/71/82	
		Heating	(Low/Std/Max)	-		-		-	
	Noise	声压	dB	42/40	53	44/42	53	44/42	53
		声功率	(H/L)	-	-	-	-	-	-
	Energy Efficiency Ratio	Cooling	W/W	3.62		3.23		3.41	
		Heating	(Std)	-		-		-	
	Power		ph-V-Hz	1phase , 220V / 60Hz		1phase , 220V / 60Hz		1phase , 220V / 60Hz	
Pow	Power Consumtion	Cooling	KW	0.46/0.73/1.25		0.37/1.09/1.25		0.46/1.03/1.25	
		Heating	(Low/Std/Max)	-		-		-	
	Operating Current	Cooling	A	2.8/3.5/4.3		2.0/5.0/6.0		2.8/5.7/6.7	
		Heating	(Low/Std/Max)	-		-		-	
	Power Factor	Cooling	%	70/90/90		70/90/90		70/90/90	
		Heating	(Low/Std/Max)	-		-		-	
Size	Gross Dimension	W*D*H	mm	886*317*335	844*622*353	886*317*335	844*622*353	886*317*335	844*622*353
	Weight(Net)		kg	9.8	26	9.8	26	9.8	26
	Refrigerant Pipe	Liquid	mm	6.35 (1/4 inch)		6.35 (1/4 inch)		6.35 (1/4 inch)	
		Gas	mm	9.52 (3/8 inch)		9.52 (3/8 inch)		9.52 (3/8 inch)	
	Drain Hose		L*D	550±20		550±20		-	
	Compressor	Type		UG9A090LNAEPSS		UG9A090LNAEPSS		UG9A090LNAEPSS	
		Motor	Type	AC motor		AC motor		AC motor	
			Rated Output(W)	-		-		-	
	Oil Type			-		-		-	
	Blower	Type		CROSS-FLOW	PROPELLER	CROSS-FLOW	PROPELLER	CROSS-FLOW	PROPELLER
		motor	Type	BLDC	BLDC	BLDC	BLDC	BLDC	BLDC
Heat Exchanger				2ROW x 14STEP x L635mm, 2-2path	1ROW x 49STEP x 703mm	2ROW x 14STEP x L635mm, 2-2path	1ROW x 49STEP x 703mm	2ROW x 14STEP x L635mm, 2-2path	1ROW x 49STEP x 703mm
Refrigerant Control Unit				R410A		R410A		R410A	
Freezer Oil Capacity			cc	-		-		-	
Refrigerant to Change(R410A)			g	730g		730g		730g	
Proterction Device(OLP)				-		-		-	
Operation condition range		Cooling		16~46(cooling)		16~46(cooling)		16~46(cooling)	
		Heating		-		-		-	

ITEM	MODEL	Develop Model	Develop Model	Develop Model
		AR09JVSSEWK/ED	AR12JVSSEWK/ED	AR12JVSSCWK/CB
Design	Indoor Unit			
	Outdoor Unit			
Net Weight	Indoor Unit	9.8	9.8	9.8
	Outdoor Unit	26	26	26
Outer Dimension	Indoor Unit	886*317*335	886*317*335	886*317*335
	Outdoor Unit	844*622*353	844*622*353	844*622*353
Noise	Indoor Unit	42(UT)/40(T)	44(UT)/42(T)	44(UT)/42(T)
	Outdoor Unit	53	53	53
Air Purifying System	Filter	FULL HDFILTER	FULL HDFILTER	FULL HDFILTER

2-4 Accessory and Option Specifications

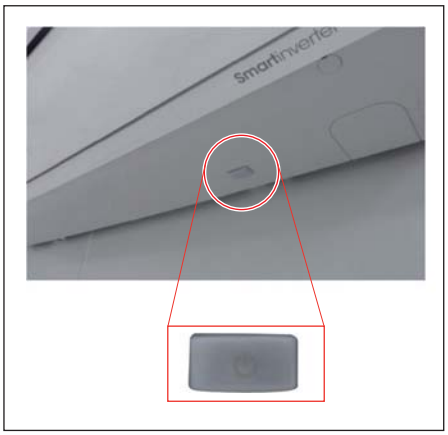
Item	Descriptions	Code-No.	Q'TY	Remark
	Installation Plate	DB90-07732A	1	Indoor unit case
	ASSY WIRELESS REMOCON	DB93-14643C	1	
	Batteries for Remote controller	4301-000121	2	
	User's & Installation Manual	DB68-04932A(09K,12K ED) DB68-04935A(12K CB)	1	
	HOLDER REMOCON	DB61-06087A	-	
	CAP-SCREW	DB67-01404B	2	
	M4 x 16 Tapped Screws	DB97-11984A	-	
	Drain Plug	DB67-20011A	-	Outdoor unit case
	Rubber Leg	DB73-20134A	4	

3. Alignment and Adjustments

3-1 Test Mode

■ How to Approach Test Mode

You can approach the test mode by pressing the on/off switch of indoor unit for 5 seconds.



■ Test mode operation option

After installing the air conditioner, check whether each subordinate is normally operated or not by operating the test mode.

- **When an Error occurs, display the Error Mode.**
- **Operation Mode :** Cool mode. operate the cool mode by operating the compressor by force without the compressor ON/OFF according to the set temperature/indoor temperature. (Do not follow the antifreeze control)
- **Up-down louver :** Up-down swing mode
- **Indoor Fan :** Turbo

Note

- Because the teat mode operate the cool mode by force not related to the set temperature / indoor temperature, check whether each subordinate is operated normally or not after completing installation and must turn off the power of the air conditioner.

3-2 Display Error and Check Method

3-2-1 Indoor Display Error and Check Method

ERROR MODE				DESCRIPTION
7-SEG	LED1	LED2	LED3	
	OPERATION	TIMER	OPTION	
E101,E102	○	◑	◑	Communication error (indoor <-> outdoor)
E121	○	◑	○	ROOM TH sensor error
E122,E123	◑	◑	○	INDOOR MID,INDOOR IN PIPE-TH sensor error
E154	○	○	◑	Fan error(indoor)
E162	◑	◑	◑	EEPROM error
E163	◑	◑	◑	Option error
FROM E200	◑	○	◑	Outdoor error display
E422	●	○	◑	EEV or Valve Close error-Self diagnosis

● : LAMP ON ○ : LAMP OFF ◑ : LAMP BLINK

* Note *

If the Set doesn't work (No power), check the Thermal fuse of Terminal block OPEN or SHORT with Multimeter.

* Measure the Thermal fuse housing PIN#1 ~ 2 :
  OPEN(disconnection) -> defective product

3-2-2 Outdoor LED Display Error and Check Method (12K/18K/24K)

LED PATTERN			7SEG DISPLAY	DESCRIPTION
YEL	GRN	RED		
○	○	○	———	Power off
◎	◎	◎	———	Reset
⦿	⦿	⦿		
○	◎	●	———	Normal Operation
○	○	⦿	———	Abnormal Communication
○	●	●		
○	○	◎	E464	IPM OVER CURRENT (O.C) ERROR
○	◎	○	E461	Comp Starting Error
○	◎	◎	E474	Heatsink Sensor Error
			E500	Heatsink Over Heat
○	●	◎	E466	DC-Link Voltage Under/Over Error
			E483	Over Voltage Protection Error
◎	○	●	E463	OLP-TH Over Temperature Error
◎	◎	○	E320	OLP-TH Sensor Error
◎	◎	●	E468	Current Sensor Error
			E485	Input Current Sensor Error
◎	●	○	E465	Comp V_limit/I_limit Error
◎	●	●	E102	Time out Comm(Indoor<->Outdoor)
●	○	◎	E471	EEPROM Data Error
●	○	●	E467	Comp Wire Missing Error
●	◎	◎	E469	DC-Link Voltage Sensor Error
●	◎	●	E462	AC Input I_Limit Trip Error

● LED ON, ○ LED OFF, ⦿ LED BLINKING

3-3 Setting Option Setup Method

ex) Option No. :

Note :

SEG1, SEG7, SEG13, SEG19 need not to be pressed in, so in fact the Option No. we should press in is as below.

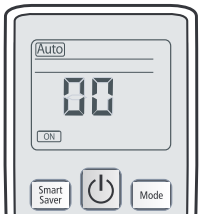
30 00 07 C2 6C 83 10 00 00 00 20 00 00 00 00 00 00 10 00 00

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12	SEG13	SEG14	SEG15	SEG16	SEG17	SEG18	SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
0	3	0	0	0	0	1	7	C	2	6	C	2	8	3	1	0	0	3	0	0	0	0	0
SEG25	SEG26	SEG27	SEG28	SEG29	SEG30	SEG31	SEG32	SEG33	SEG34	SEG35	SEG36	SEG37	SEG38	SEG39	SEG40	SEG41	SEG42	SEG43	SEG44	SEG45	SEG46	SEG47	SEG48
0	2	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	1	3	0	0	0	0	0

Step 1

Enter the Option Setup mode.

1. Tack out the batteries of remote control.
2. Press the temperature button simultaneously and insert the battery again.
3. Make sure the remote control display shown as .



Step 2

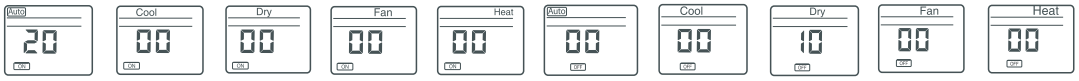
Enter the Options Setup mode and select your options asscording to the following procedure.

	Feature	Display
1	The default value is . Every time you push the Mode button, the display panel reads ON Auto ➡ Cool ➡ Dry ➡ Fan ➡ Heat , OFF Auto ➡ Cool ➡ Dry ➡ Fan ➡ Heat repeatedly.	Auto 00 ON
2	Push the button to set the display panel to 3. Every time you push the button, the display panel reads 0➡1➡2➡3➡ ..... ➡9➡A➡b➡c➡d➡E➡F repeatedly.	Auto 30 ON
3	Push the Mode button to . Every time you push the button, the display panel reads 0➡1➡2➡3➡ ..... ➡9➡A➡b➡c➡d➡E➡F repeatedly.	Cool 00 ON
4	Push the Mode button to . Push the button to set the display panel to 7. Every time you push the button, the display panel reads 0➡1➡2➡3➡ ..... ➡9➡A➡b➡c➡d➡E➡F repeatedly.	Dry 07 ON
5	Push the Mode button to . Push the button to set the display panel to C. Every time you push the button, the display panel reads 0➡1➡2➡3➡ ..... ➡9➡A➡b➡c➡d➡E➡F repeatedly.	Fan C0 ON
6	Push the button to set the display panel to 2. Every time you push the button, the display panel reads 0➡1➡2➡3➡ ..... ➡9➡A➡b➡c➡d➡E➡F repeatedly.	Fan C2 ON

	Feature	Display
7	Push the Mode button to 00. Push the Fan button to set the display panel to 6. Every time you push the Fan button, the display panel reads 0→1→2→3→ ……→9→A→b→c→d→E→F repeatedly.	Heat 60
8	Push the Fan button to set the display panel to 8. Every time you push the Fan button, the display panel reads 0→1→2→3→ ……→9→A→b→c→d→E→F repeatedly.	Heat 6C
9	Push the Mode button to 00. Push the Fan button to set the display panel to 8. Every time you push the Fan button, the display panel reads 0→1→2→3→ ……→9→A→b→c→d→E→F repeatedly.	Auto 80
10	Push the Fan button to set the display panel to 3. Every time you push the Fan button, the display panel reads 0→1→2→3→ ……→9→A→b→c→d→E→F repeatedly.	Auto 83
11	Push the Mode button to 00. Push the Fan button to set the display panel to 1. Every time you push the Fan button, the display panel reads 0→1→2→3→ ……→9→A→b→c→d→E→F repeatedly.	Cool 10
12	Push the Mode button to 00.	Dry 00
13	Push the Mode button to 00.	Fan 00
14	Push the Mode button to 00.	Heat 00

Step 3 Upon completion of the selection, check you made right selections.

Press the Mode (Mode) Selection key to set the display part and check the display part.
→ The display part shows like below when each time you press Mode button.



Step 4 Pressing the ON/OFF button (⏻) .

When pressing the operation ON/OFF key with the direction of remote control for unit, the sound "Ding" or "Diriring" is heard and the OPERATION ICON(≡) lamp of the display is flickering at the same time, then the input of option is completed.
(If the deriving sound isn't heard, try again pressing the ON/OFF button.)

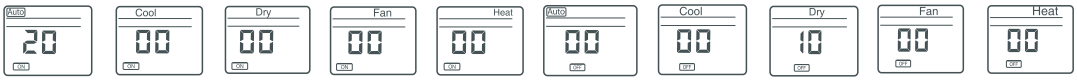
Step 5

Enter the Options Setup mode and select your options asscording to the following procedure.

	Feature	Display
1	Step 1 (Enter the Option Setup mode) is executed. (Seg25 ~ 48 for setting remote control Setup)	
2	Push the Fan Mode button to set the display panerl to 2. Every time you push the Fan button, the display panel reads 0 → 1 → 2 → 3 → ··· 9 → A → b → c → d → E → F repeatedly.	Auto 20 ON
3	Push the Mode button to Cool 00	Cool 00 ON
4	Push the Mode button to Dry 00	Dry 00 ON
5	Push the Mode button to Fan 00	Fan 00 ON
6	Push the Mode button to Heat 00	Heat 00 ON
7	Push the Mode button to On 00 OFF .	Auto 00 OFF
8	Push the Mode button to Cool 00 .	Cool 00 OFF
9	Push the Mode button to Dry 00 .	Dry 00 OFF
10	Push the Fan Mode button to set the display panerl to 1. Every time you push the Fan button, the display panel reads 0 → 1 → 2 → 3 → ··· 9 → A → b → c → d → E → F repeatedly.	Dry 10 OFF
11	Push the Mode button to Fan 00 .	Fan 00 OFF
12	Push the Mode button to Heat 00 .	Heat 00 OFF

Step 6 Upon completion of the selection, check you made right selections.

Press the Mode (Mode) Selection key to set the display part and check the display part.
→ The display part shows like below when each time you press Mode button.



Step 7 Pressing the ON/OFF button ( ) .

When pressing the operation ON/OFF key with the direction of remote control for unit, the sound "Ding" or "Diriring" is hea
and the OPERATION ICON( ) lamp of the display is flickering at the same time, then the input of option is completed.
(If the deriving sound isn't heard, try again pressing the ON/OFF button.)

Step 8 Unit operation test-run

First : Remove the battery from the remote control.
Second : Re-insert the battery into the remote control.
Third : Press ON/OFF key with the direction of remote control for set.

■Error mode

1. If all lamps of indoor unit are flickering, Plug out, plug in power plug again and press ON/OFF key to retry.
2. If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

☐ Option Items

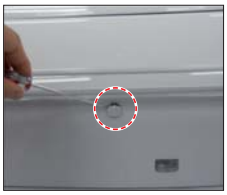
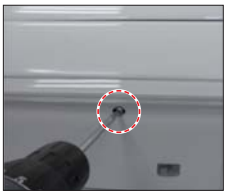
Model	Option
AR09JVSSEWK/ED	000001-131209-21888A-300000
AR12JVSSEWK/ED	000002-171229-21888A-300000
AR12JVSSCWK/CB	000002-131229-21888A-300000

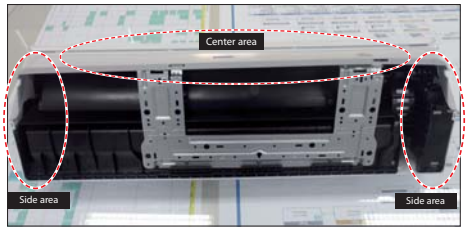
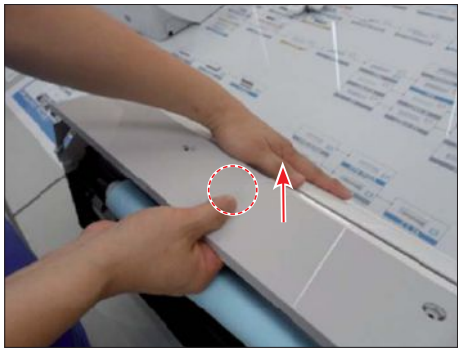
4. Disassembly and Reassembly

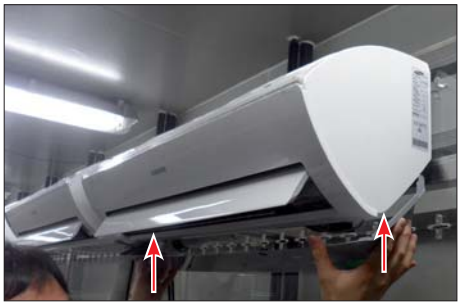
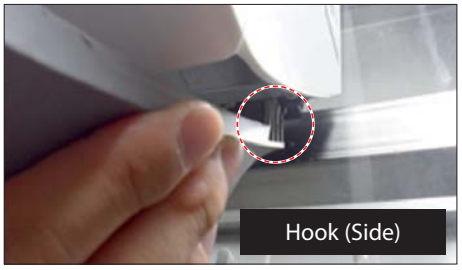
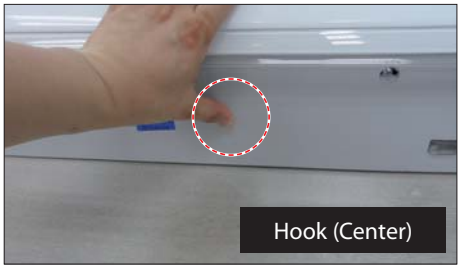
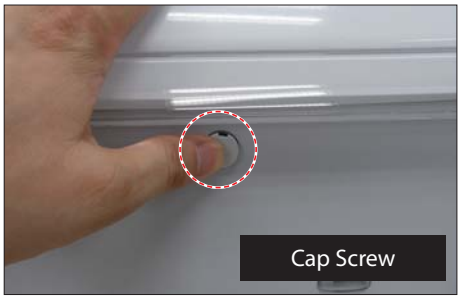
■ Necessary Tools

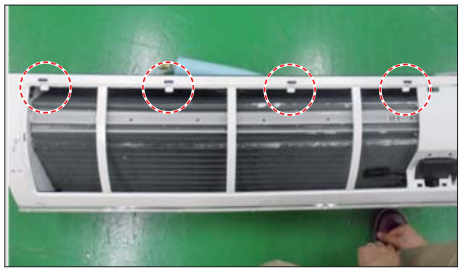
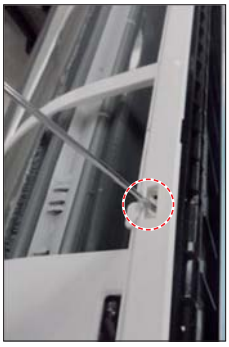
Item	Remark
+SCREW DRIVER	
MONKEY SPANNER	
- SCREW DRIVER	

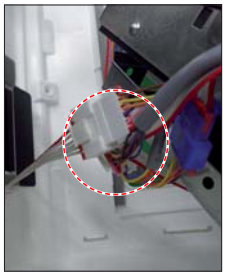
4-1. Indoor Unit

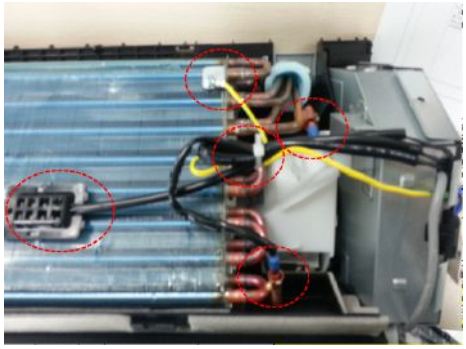
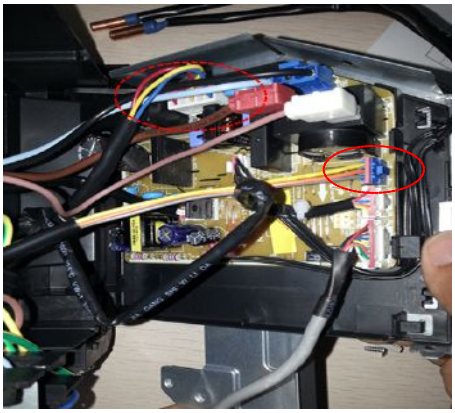
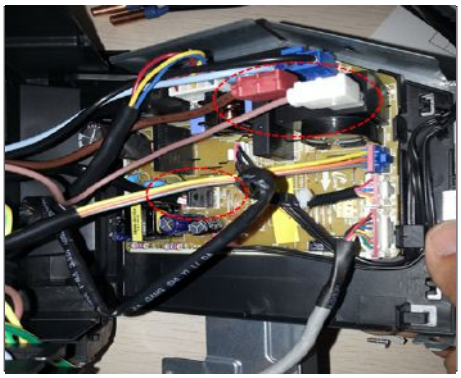
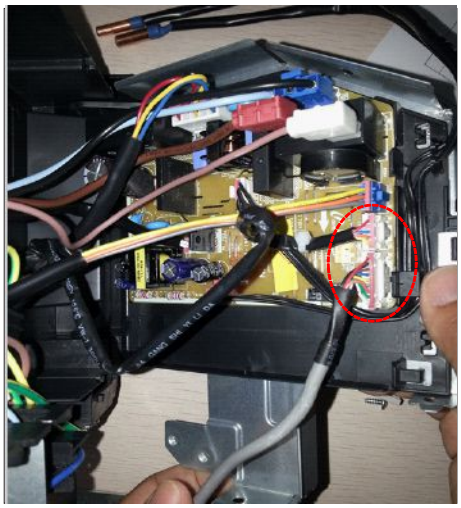
No	Parts	Procedure	Remark
1	PANEL-FRONT	1) Stop the driving of air conditioner and shut off main power supply.	
		2) Detach FILTER PRE from the PANEL FRONT.	
		3) Cover Panel is assembled on bottom of indoor unit as shown in the figure. Remove the Cap Screw as shown on the right side and then remove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

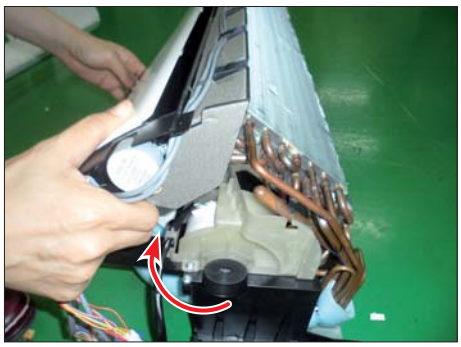
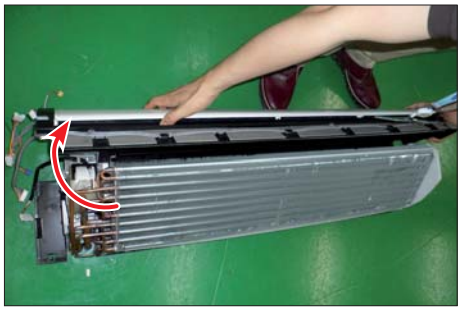
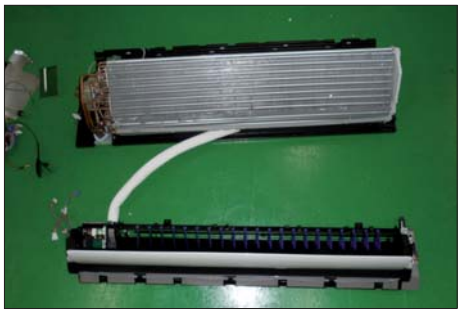
No	Parts	Procedure	Remark
		4) Cover Panel is fixed to body by Hook in center area and side area.	 HOOK 9/12K 18/24/30K  
		5) Separate the hook after pushing both end of Cover Panel as shown in the figure. (Watch out for the damage of the hook)	
		6) Raise front part upward obliquely as shown in the figure and then remove the hooks.	 

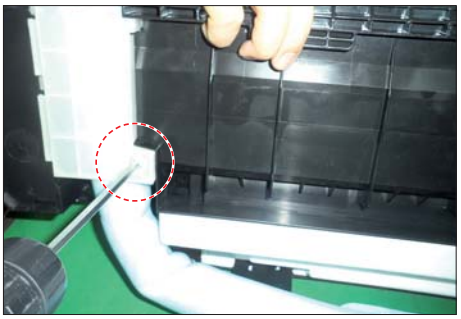
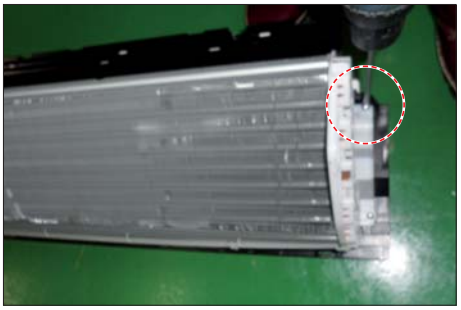
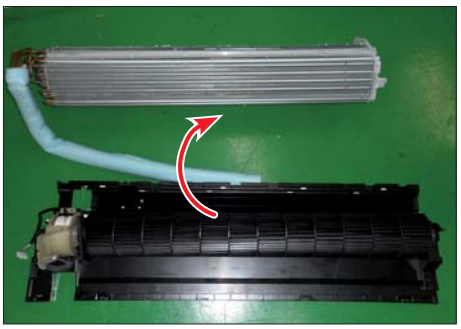
No	Parts	Procedure	Remark
		Caution: Assembly of Cover Panel after service end. - Reassembly is in the reverse order of the removal. - Piping and drain hose must be careful not to damage and Progress must be done with both hands.	  Hook (Side)  Hook (Center)  Screw  Cap Screw

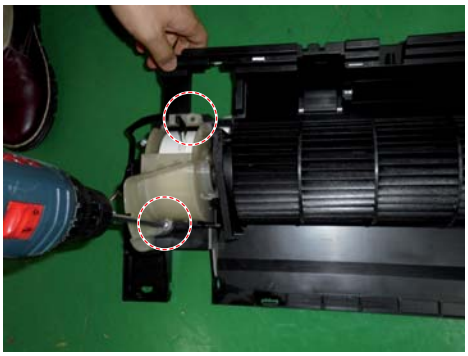
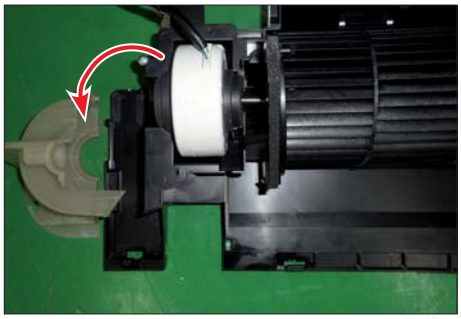
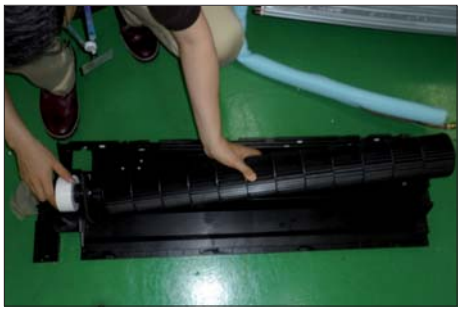
No	Parts	Procedure	Remark
		7) To detach the PANEL-FRONT from the main frame, unfasten 2 screws at the bottom. (use + Screw Driver)	 
		8) To detach the COVER-PANEL from the main frame, loosen 4 HOOK Structures. When separate the hook : Use the (-) screw Driver. (-)Screw Driver Insert the hook and then 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.	 
		10) Remove the WIFI KIT connector. WIFI KIT connector is located of Panel Front. (For model with WIFI KIT)	  

No	Parts	Procedure	Remark
2	CONTORL IN	5) Cut off CABLE TIE, take off SENSOR WIRE and Screw	
		6) Loosen MOTOR Wire and Motor feedback wire ⚠ Caution: When you separate the connector, pull pressing the locking button.	
		7) Loosen the Relay wires and Terminal Block fuse wire ⚠ Caution: When you separate the connector, pull pressing the locking button.	
		8) Loosen the Motor step wire connector, Display wire connector ⚠ Caution: When you separate the connector, pull pressing the locking button.	

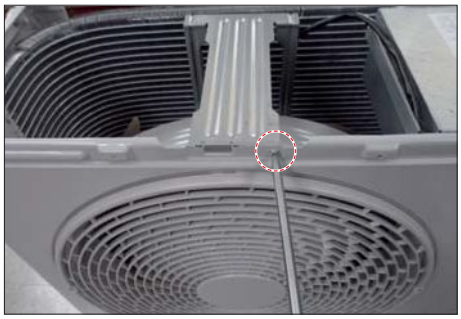
No	Parts	Procedure	Remark
5	EVAPORATOR	9) Take off the CASE-CONTROL from the main frame after loosen the remaining connector. ⚠ Caution: When you separate the connector, pull pressing the locking button.	
3	TRAY DRAIN	1) To detach TRAY-DRAIN from the main frame, pull the bottom of the TRAY-DRAIN towards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

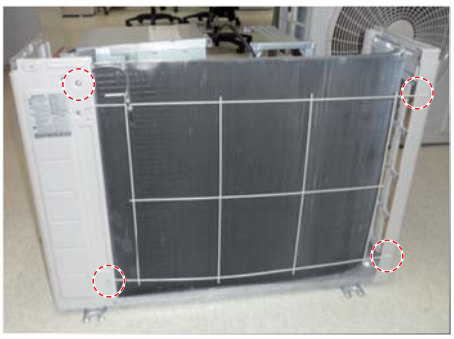
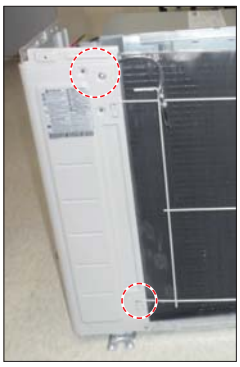
No	Parts	Procedure	Remark
4	Evaporator	1) Detach the HOLDER PIPE.	
		2) Unfasten the screw at the left side. (use + Screw Driver)	
		3) Unfasten the screw at the right side. (use + Screw Driver)	
		4) To detach Evaporator from the main frame, pull the bottom of the Evaporator towards you.	

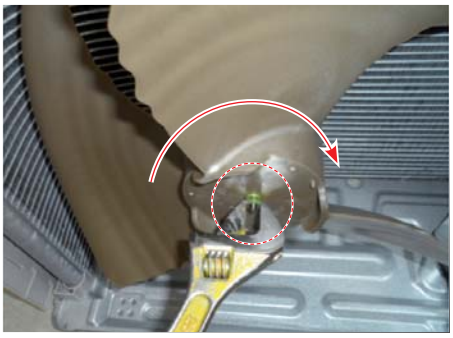
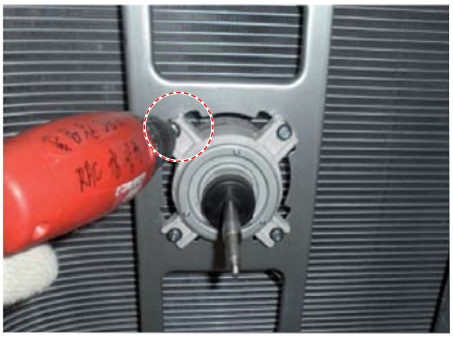
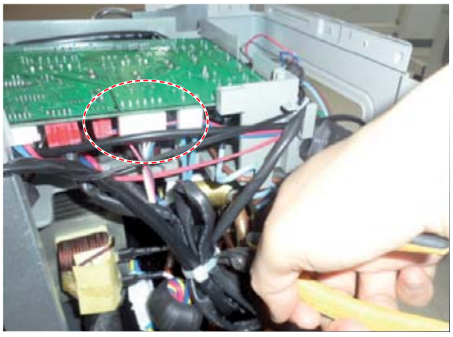
No	Parts	Procedure	Remark
5	FAN MOTOR & CROSS FAN	1) Unfasten the screw. (use + Screw Driver)	
		2) Detach the FAN Motor case.	
		3) Unfasten the screw a little. (use + Screw Driver)	
		4) Pull the CROSS-FAN to the left side.	

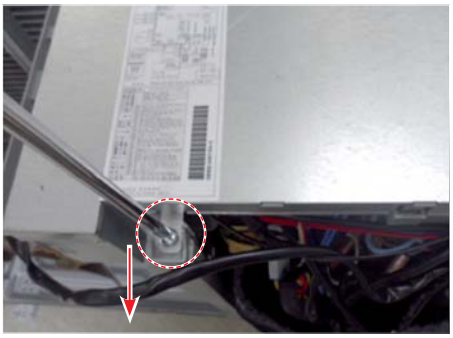
No	Parts	Procedure	Remark
6	Assy SPI Lamp	1) Remove the Assy SPI Lamp from the Back Body as shown on the right side. **Caution** - Confirm Seal of backside necessarily after replace of Assy SPI Lamp. - Seal should be close adhesion to SPI Lamp. - Measure as shown on the right side since replace. (If the seal is not close adhesion perfectly : Defectiveness can happen)	 

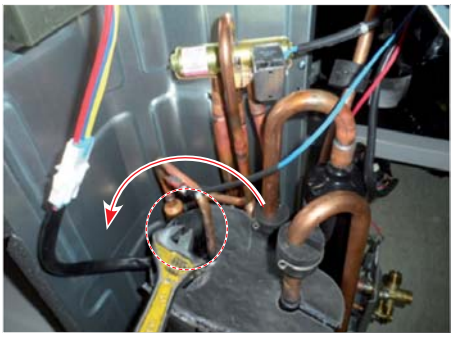
4-2. Outdoor Unit

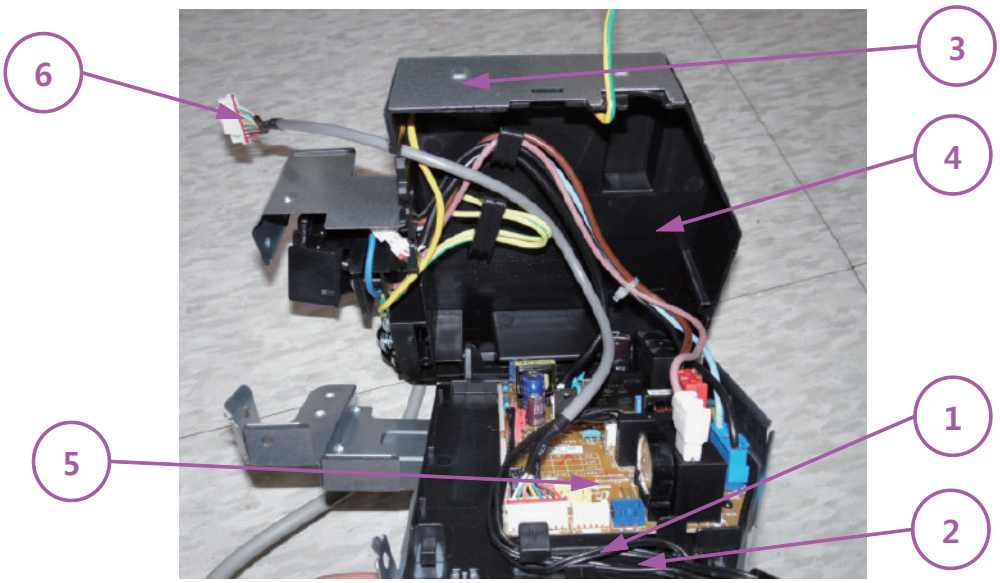
No	Parts	Procedure	Remark
1	Common Work	1) Loosen each screws and detach the Cabi Top Cover.	
		2) Loosen screws of the Cabi Front and detach it.	  

No	Parts	Procedure	Remark
		3) Remove the 4 Cond Bar from the holder of outdoor unit cabinet.	
		4) Loosen fixing screws from the Cabi Front Lh and detach it.	
		5) Loosen fixing screws from the Cabi Side Rh and detach it.	   

No	Parts	Procedure	Remark
2	Fan & Motor	1) Detach the Nut Flange like the picture on the right side.(Turn clockwise because the screw is left-handed.) (Use Monkey Spanner.)	
		2) Detach the Fan Propeller. 3) Loosen 4 fixing screws to detach the Motor. (Use Monkey Spanner.)	
		4) Disconnect the wire between Ass'y Control Out and Motor.	
		8) Loosen 2 fixing bolts and detach the Bracket Motor	

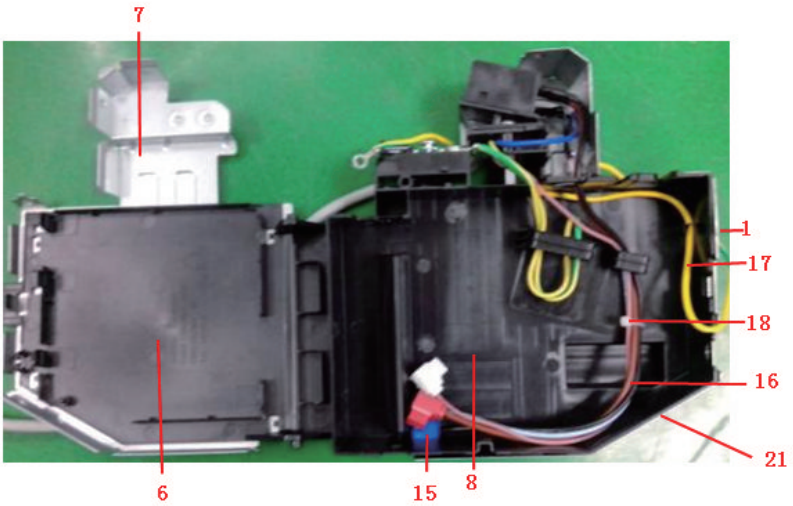
No	Parts	Procedure	Remark
3	Ass'y Control Out	1) To remove the Cover control box : Pull the motor wire is allow sufficient space as shown on the right side and then remove the screw. 2) Detach several connectors from the Ass'y Control Out. 3) Detach several connectors from the PCB of Ass'y Control Out.	  
4	Heat Exchanger	1) Release the refrigerant at first. 2) Loosen fixing screw on both sides. 3) Disassemble the pipes in both inlet and outlet with welding torch. 4) Detach the Heat Exchanger.	 

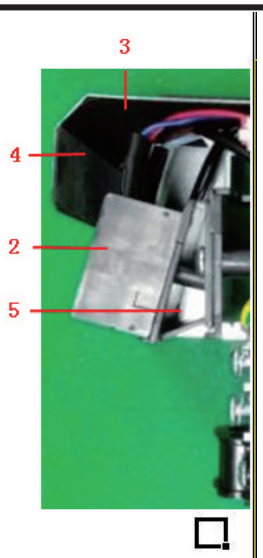
No	Parts	Procedure	Remark
5	Compressor	1) Loosen the fixing nut and detach the Compressor Lead Wire. (Use Monkey Spanner.)	
		2) Loosen the bolts at the bottom of Compressor like the picture on the right side. (Use Monkey Spanner.)	

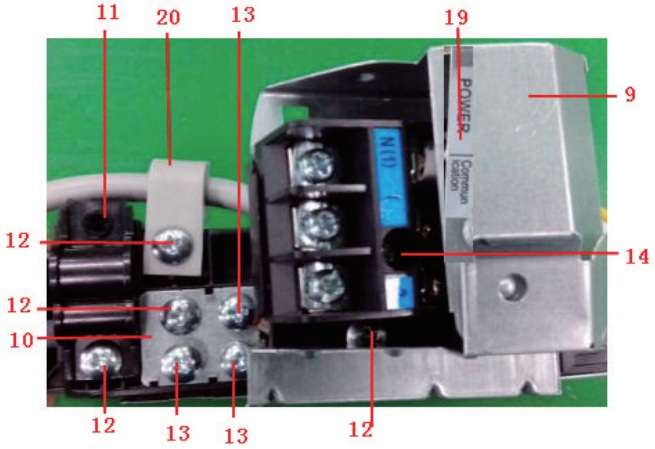


No	DESCRIPTION	CODE	Qty
	DB92-03451C		
1	SENSOR TEMP	DB32-00204A	1
2	SENSOR TEMP	DB32-00205A	1
3	LABEL BAR CODE	DB68-02809A	1
4	ASSY CASE CONTROL IN	DB90-08602C	1
5	ASSY PBA MAIN	DB92-03442E	1
6	ASSY CONNECTOR WIRE-DISPLAY	DB93-15325A	1

5-2 ASSY CASE CONTROL IN

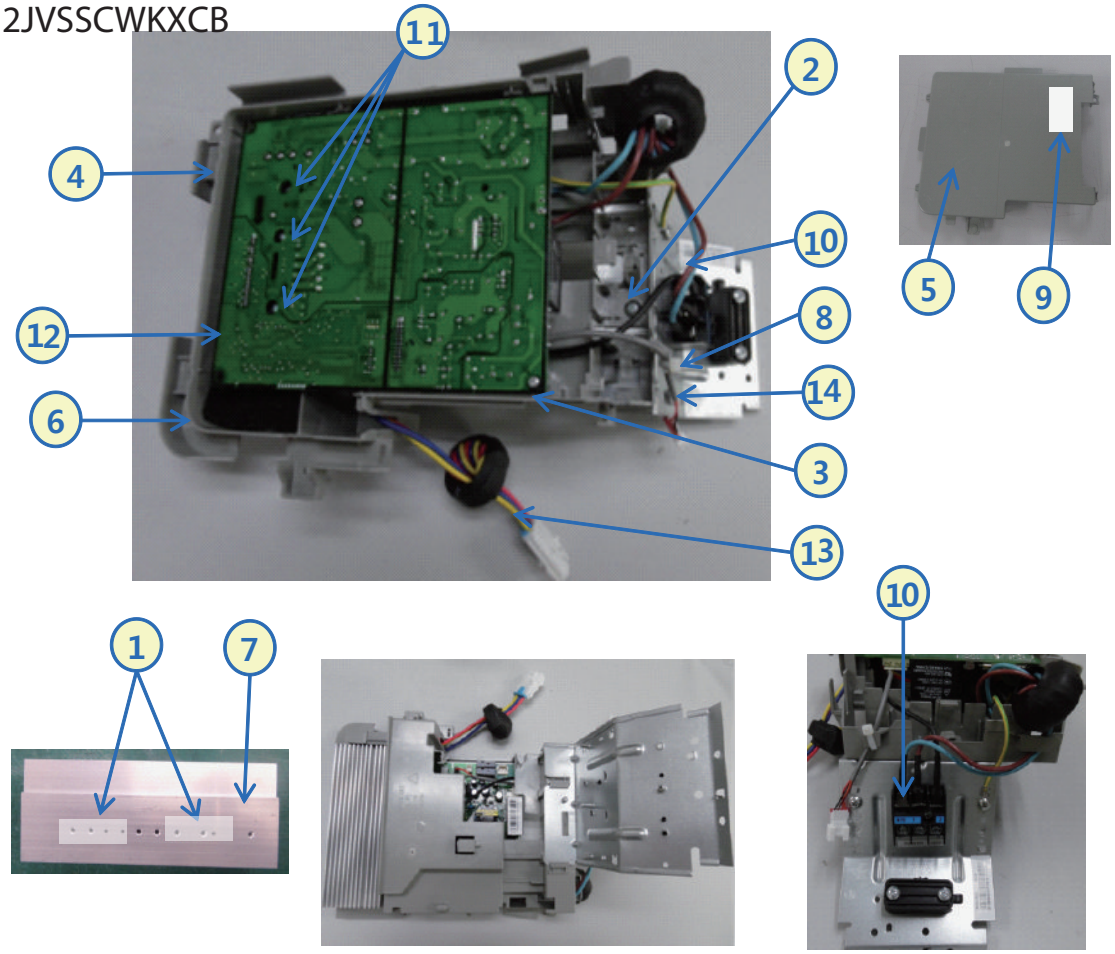






No	NAME	CODE	Q'ty	unit
1	LABEL BAR CODE	DB68-02809A	1	EA
2	TERMINAL BLOCK-THERMAL FUSE	DB65-00325A	1	EA
3	SEAL CONTROL-LEFT	DB62-11655A	1	EA
4	SEAL CUTT	DB62-11656B	0. 052	M
5	SUPPORT-CONTROL	DB61-05963A	1	EA
6	CASE CONTROL-RIGHT	DB61-06289A	1	EA
7	PLATE CONTROL-LEFT	DB61-06295A	1	EA
8	CASE CONTROL-LEFT	DB61-06288A	1	EA
9	ASSY PLATE-CONTROL	DB90-08595A	1	EA
10	PLATE CONTROL-SUB	DB61-05812A	1	EA
11	HOLDER-WIRE	DB61-05871A	1	EA
12	SCREW-TAPPING	6002-000231	4	EA
13	SCREW-SPECIAL	6009-001001	3	EA
14	ASSY-SCREW TAPPING	DB91-00309A	1	EA
15	ASSY CONNECTOR WIRE-POWER	DB93-14215B	1	EA
16	ASSY CONNECTOR WIRE-POWER	DB93-14224B	1	EA
17	ASSY CONNECTOR WIRE-EARTH	DB93-14245A	1	EA
18	CABLE TIE	DB65-10088D	1	EA
19	ASSY-LABEL CAUTION	DB98-32314A	1	EA
20	ASSY POWER CORD	DB39-01071A	1	EA
21	PLATE CONTROL-SUB	DB61-06298A	1	EA

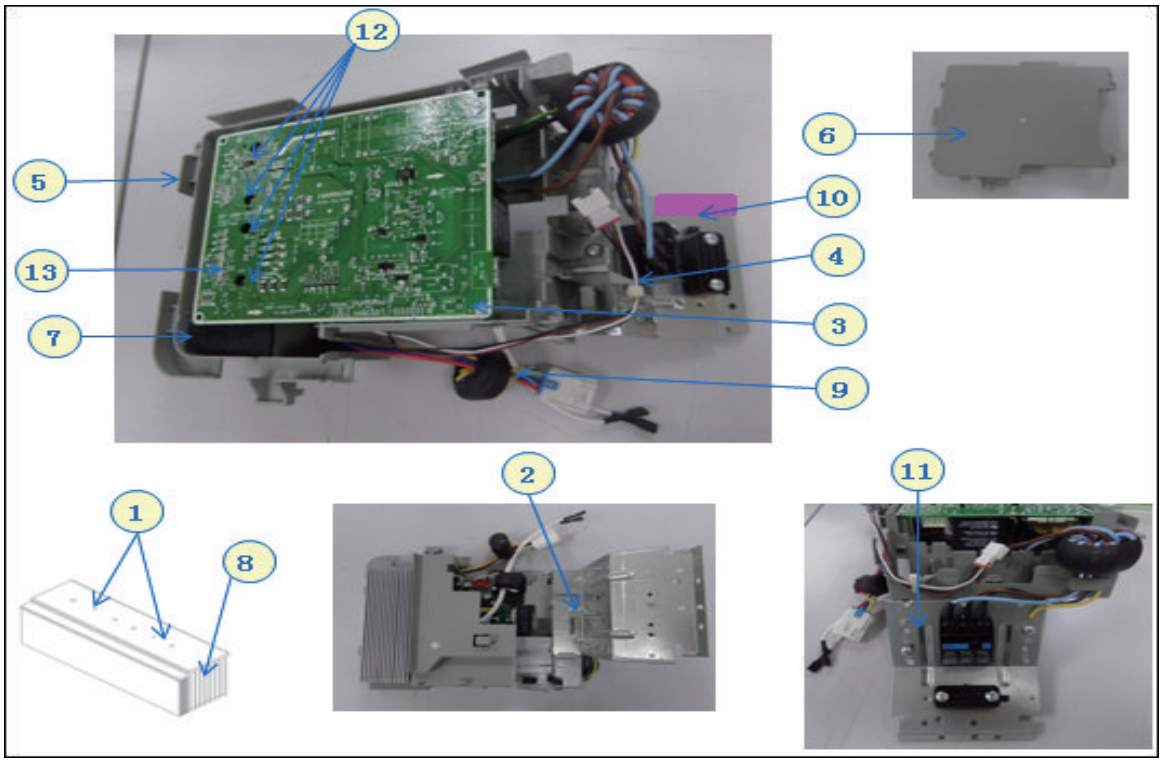
AR09JVSSEWKXED
AR12JVSSCWKXCB



No	NAME	CODE	Q'ty	unit
		DB92-03446	A	
1	GREASE-SILICON	0205-000178	0.002	KG
2	SCREW-TAPPING	6002-000527	1	PC
3	SCREW-TAPPING	6002-000630	1	PC
4	CASE CONTROL-OUT	DB61-04658A	1	PC
5	CASE CONTROL-UPPER S	DB61-04676A	1	PC
6	INSULATION-COND IN	DB62-05644U	1	PC
7	HEAT SINK	DB62-09724C	1	PC
8	CABLE TIE	DB65-10088D	1	PC
9	LABEL BAR CODE	DB68-02809A	1	PC
10	ASSY CASE CONTROL OUT	DB90-06307C	1	PC
11	ASSY-SCREW MACHINE	DB91-00933A	3	PC
12	ASSY PCB MAIN	DB92-02865A	1	PC
13	ASSY CONNECTOR WIRE	DB93-09497A	1	PC
14	ASSY CONNECTOR WIRE	DB93-14398A	1	PC

5-3 Assy Control Out

AR12JVSSEWKXED



No	NAME	CODE	Q'ty				unit	REMARK
	ASSY CONTROL OUT	DB93-10959	F					
1	GREASE-SILICON	0205-000178	0.002				KG	
2	SCREW-TAPPING	6002-000527	1				PC	
3	SCREW-TAPPING	6002-000630	1				PC	
4	CABLE TIE	6501-000123	1				PC	
5	CASE CONTROL-OUT	DB61-04658A	1				PC	
6	CASE CONTROL-UPPER S	DB61-04676A	1				PC	
7	INSULATION-COND IN	DB62-04956E	1				PC	
8	HEAT SINK	DB62-09725A	1				PC	
9	CABLE TIE	DB65-10088D	1				PC	
10	LABEL BAR CODE	DB68-02809A	1				PC	
11	ASSY CASE CONTROL OUT	DB90-06307C	1				PC	
12	ASSY-SCREW MACHINE	DB91-00933A	4				PC	
13	ASSY PCB MAIN	DB92-03036A	1				PC	
14	ASSY CONNECTOR WIRE	DB93-09493A	1				PC	
15	ASSY CONNECTOR WIRE	DB93-09497A	1				PC	
16	ASSY CONNECTOR WIRE	DB93-10986A	1				PC	

6. Electrical Parts List

6-1 INDOOR MAIN PCB - DB92-03442E

Parts Code	Design Loc	Quantity	Parts Description	Spec.	Unit
0201-002081	ADHESIVE-SIL	1.5	ADHESIVE-SIL	737,WHITE,-,-	G
0202-001463	SOLDER-WIRE	4.5	SOLDER-WIRE	LFC2-W3.0,-,D3,99.79Sn/0.2Cu/0.01P,-	G
0202-001608	SOLDER-WIRE FLUX	0.2	SOLDER-WIRE FLUX	LFC7-107,D0.8,99.3Sn/0.7Cu/0.01P,Flux3-4%	G
0204-004665	FLUX	2.5	FLUX	KSP-70M-S,14%,FLUX	G
1203-000274	IC02	1	IC-POSI.FIXED REG.	7805,TO-220,3P,-,PLASTIC,4.8/5	PC
1203-006089	IC01	1	IC-PWM CONTROLLER	TOP253PN,DIP,7P,6.35x9.57mm,PLASTIC,- 0.3V/700V,15W,-40Cto+150C,1.37A,ST	PC
1405-000160	VA71	1	VARISTOR	680V,560Vdc,4500A,17.5x6.5mm,TP,1120V,250pF	PC
2201-000983	C103	1	C-CERAMIC,DISC	1nF,10%,2000V,Y5P,TP,9x5mm,7.5mm	PC
2201-000987	C107	1	C-CERAMIC,DISC	2.2nF,20%,400V,Y5U,TP,12.5x6mm,10mm	PC
2201-000987	C108	1	C-CERAMIC,DISC	2.2nF,20%,400V,Y5U,TP,12.5x6mm,10mm	PC
2301-001915	CR71	1	C-FILM,LEAD	1.2,-25to+85,450V,+10~-5,37x18x26.5,CP	PC
2301-002032	XC71	1	C-FILM,LEAD-PPF	100nF,10%,275V,TP,12.5X6X12.0	PC
2301-002032	XC72	1	C-FILM,LEAD-PPF	100nF,10%,275V,TP,12.5X6X12.0	PC
2401-001998	C109	1	C-AL	1000uF,20%,25V,GP,TP,10x20,5mm	PC
2401-004267	C101	1	C-AL	22uF,20%,500V,TP,16*25,7.5mm	PC
3002-001129	BZ61	1	BUZZER-PIEZO	85dB,2KHz,BK	PC
3501-001268	RY71	1	RELAY-POWER	12V,0.9W,25000mA,1FormA,20ms,10ms	PC
3502-000115	SS71	1	SSR	12V,2A,1ms,1ms,9.6V,264V	PC
3502-001087	SS72	1	SSR	12V,2A,0.2ms,9.6~25,264V	PC
3601-001288	F701	1	FUSE-AXIAL LEAD	250V,2.5A,TIME-LAG,CERAMIC-TUBE,5.2x20mm	PC
3711-000260	CN71	1	HEADER-BOARD TO CABLE	1WALL,3P,1R,7.92mm,STRAIGHT,SN,BLU	PC
3711-000262	CN72	1	HEADER-BOARD TO CABLE	1WALL,3P,1R,7.92MM,STRAIGHT,SN,WHT	PC
3711-000796	CN42	1	HEADER-BOARD TO CABLE	BOX,2P,1R,2.5MM,STRAIGHT,SN,RED	PC
3711-000879	CN44	1	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5mm,STRAIGHT,SN,BLU	PC
3711-000941	CN81	1	HEADER-BOARD TO CABLE	BOX,4P,1R,2.5mm,STRAIGHT,SN,YEL	PC
3711-004379	CN43	1	HEADER-BOARD TO CABLE	BOX,4P,1R,2mm,STRAIGHT,SN,WHT	PC
3711-004484	CN61	1	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,WHT	PC
3711-004712	CN91	1	HEADER-BOARD TO CABLE	BOX,9P,1R,2mm,STRAIGHT,SN,WHT	PC
3711-007067	CN31	1	HEADER-BOARD TO CABLE	BOX,6P,1R,2mm,STRAIGHT,SN,BLK	PC
DB26-00115A	ST11	1	TRANS SWITCHING	85~265V	PC
DB27-00017A	FT71	1	COIL CHOKE	15mH	PC
DB67-00942A	VA71-1	1	CAP	VIVALDI-P/J,SHP2,1,5.2,11.5,18.5,GREEN,SSEC	PC
DB68-02809A	LABEL BAR CODE	1	LABEL BAR CODE	ART,45,15,E-PASS	PC
DB93-12824A	CN11	1	ASSY CONNECTOR WIRE	2,1007,26,WHT,25045HP-02B/WHT,YBNH200-02P/WHT,- ,150,2.5pi /UL125/BLK,30,-,-,PBA-TERMINAL BLOCK,BORACAY,N,-,BORACAY,AWG 2	PC
DB94-05345A	-	1	ASSY PCB AUTO	MAIN,AR5000,90*120,220- 240V,12V,5V,9W,INV,SSR,3050,DB92-03442E	PC
0402-000137	D101	1	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP	PC
1404-001413	NTC1	1	THERMISTOR-NTC	18ohm,3A,3200K,19MWC,15mm,BK,17x6mm	PC
2001-000429	R901	1	R-CARBON	1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	PC
2002-001104	R108	1	R-COMPOSITION	12Mohm,5%,1/2W,AA,TP,3.4x9mm	PC
2002-001104	R109	1	R-COMPOSITION	12Mohm,5%,1/2W,AA,TP,3.4x9mm	PC
2003-000706	R105	1	R-METAL OXIDE(S)	47Kohm,5%,2W,AA,TP,3.8x12mm	PC
2401-000480	C106	1	C-AL	10uF,20%,50V,GP,TP,5x11,5	PC
2401-000832	C111	1	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	PC
2401-002619	C105	1	C-AL	47uF,20%,25V,GP,TP,5x11,5	PC
2802-001198	X501	1	RESONATOR-CERAMIC	10MHz,0.5%,BK,8x3x5.5mm	PC
3601-001209	F702	1	FUSE-RADIAL LEAD	250V,1A,TIME-LAG,-,8.5x8mm	PC
3812-001283	J10	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J11	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J14	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J15	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J16	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J17	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J20	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J22	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J23	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J25	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J29	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J3	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC

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2007-000078	R304	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R405	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R407	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000081	R111	1	R-CHIP	2.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R205	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R301	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R302	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R502	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R503	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R504	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000087	R406	1	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	PC
2007-000090	R306	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	PC
2007-000097	R902	1	R-CHIP	47Kohm,5%,1/10W,TP,1608	PC
2007-000109	R501	1	R-CHIP	1Mohm,5%,1/10W,TP,1608	PC
2007-000476	R101	1	R-CHIP	1Mohm,1%,1/4W,TP,3216	PC
2007-000476	R102	1	R-CHIP	1Mohm,1%,1/4W,TP,3216	PC
2007-000476	R103	1	R-CHIP	1Mohm,1%,1/4W,TP,3216	PC
2007-000591	R500	1	R-CHIP	22ohm,1%,1/10W,TP,1608	PC
2007-000781	R106	1	R-CHIP	33ohm,5%,1/8W,TP,2012	PC
2007-001011	R211	1	R-CHIP	51Kohm,5%,1/4W,TP,3216	PC
2007-001011	R212	1	R-CHIP	51Kohm,5%,1/4W,TP,3216	PC
2007-001011	R213	1	R-CHIP	51Kohm,5%,1/4W,TP,3216	PC
2007-001011	R214	1	R-CHIP	51Kohm,5%,1/4W,TP,3216	PC
2007-001011	R215	1	R-CHIP	51Kohm,5%,1/4W,TP,3216	PC
2007-001011	R216	1	R-CHIP	51Kohm,5%,1/4W,TP,3216	PC
2007-001068	R401	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	PC
2007-001068	R402	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	PC
2007-001068	R409	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	PC
2007-001074	R107	1	R-CHIP	6.8ohm,5%,1/8W,TP,2012	PC
2007-001318	R305	1	R-CHIP	1Kohm,5%,1/4W,TP,3216	PC
2007-007385	R113	1	R-CHIP	1.2Mohm,1%,1/4w,TP,3216	PC
2007-009922	R701	1	R-CHIP	300Kohm,1%,1/4W,TP,3216	PC
2007-009922	R702	1	R-CHIP	300Kohm,1%,1/4W,TP,3216	PC
2007-009922	R703	1	R-CHIP	300Kohm,1%,1/4W,TP,3216	PC
2203-000257	C403	1	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	PC
2203-000257	C501	1	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	PC
2203-000440	C901	1	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	PC
2203-005249	C104	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C110	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C112	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C113	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C201	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C301	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C302	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C303	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C401	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C402	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C404	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C502	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C503	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
2203-005249	C504	1	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	PC
DB41-01293A	PCB	1	PCB MAIN	FR-1,1Layer,T1.6,90X120,2,1Oz,189.5X142	PC
DB91-01658A	IC04	1	ASSY MICOM	15R A3050 RAC Light Inv Good3 Model AC Motor Heat Pump,STM-1431-0A,S3F8S6B,64QFP,ROM 64KB	PC
0903-002055	IC04	1	IC-MICROCONTROLLER	S3F8S6B,QFP,64P,14.0x20.0mm,12MHz,QFP,Plastic,5V,-40to+85C,2KB,64KB,8BIT MICROCONTROLLER	PC

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3812-001283	J31	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J32	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J33	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J34	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J4	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J5	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J56	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J7	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J8	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
3812-001283	J9	1	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	PC
6042-000001	ECN71-1	1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	PC
6042-000001	ECN71-2	1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	PC
6042-000001	ECN72-1	1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	PC
6042-000001	ECN72-2	1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	PC
6042-000001	ERY71-1	1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	PC
6042-000001	ERY71-2	1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	PC
6042-000001	ERY71-3	1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	PC
6042-000001	ERY71-4	1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	PC
6042-000002	EC101-1	1	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	PC
6042-000002	EC101-2	1	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	PC
6042-000002	ECR71-1	1	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	PC
6042-000002	ECR71-2	1	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	PC
6042-000002	EF701-1	1	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	PC
6042-000002	EF701-2	1	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	PC
DB94-05347A	-	1	ASSY PCB SMD	MAIN,AR5000,90*120,220-240V,12V,5V,9W,INV,SSR,3050,DB92-03442E	PC
0201-002394	-	3.40E-04	ADHESIVE-EPOXY	HT-1331S(SPL-K4),RED,550~650,SMD GLUE	PC
0401-001099	D601	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0402-001192	D103	1	DIODE-RECTIFIER	ES2D,200V,2A,SMB,TP	PC
0402-001298	BD71	1	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	PC
0402-001427	D102	1	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	PC
0402-001741	D201	1	DIODE-RECTIFIER	S1M,1000V,1A,SMA,TP	PC
0403-000258	ZD02	1	DIODE-ZENER	BZX84C5V6,5.2-6V,225mW,SOT-23,TP	PC
0403-001285	ZD01	1	DIODE-ZENER	BZX84-C11,10.4-11.6V,350mW,SOT-23,TP	PC
0501-000534	Q401	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	PC
0501-000534	Q601	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	PC
0504-001064	Q101	1	TR-DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	PC
0504-001064	Q602	1	TR-DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	PC
0506-000175	IC05	1	TR-ARRAY	2003,NPN,7,1000mW,SOP-16,ST,1000	PC
0604-001002	PC01	1	PHOTO-COUPLER	TR,100-600%,170mW,SOP-4,TP	PC
0604-001172	PC02	1	PHOTO-COUPLER	TR,150-300,200mW,SOP,TP	PC
1103-001431	IC03	1	IC-EEPROM	AT24C08C-SSHM-T,8Kbit,x8,SOP,8P,4.9x3.9mm,1.8/5.5,-40to+85,18uA,TP	PC
1203-006245	IC06	1	IC-VOL. DETECTOR	KIA7033AT,TSM,3P,2.9x1.6x0.7mm,PLASTIC,3.3V,350mW,-30to+85C,TP	PC
2007-000033	J12	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000033	J18	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000033	J19	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000033	J2	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000033	J24	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000033	J26	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000033	J27	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000033	J28	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000033	J30	1	R-CHIP	0ohm,5%,1/4W,TP,3216	PC
2007-000074	R110	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000076	R403	1	R-CHIP	330ohm,5%,1/10W,TP,1608	PC
2007-000076	R404	1	R-CHIP	330ohm,5%,1/10W,TP,1608	PC
2007-000076	R408	1	R-CHIP	330ohm,5%,1/10W,TP,1608	PC
2007-000076	R601	1	R-CHIP	330ohm,5%,1/10W,TP,1608	PC
2007-000076	R602	1	R-CHIP	330ohm,5%,1/10W,TP,1608	PC
2007-000077	R112	1	R-CHIP	470ohm,5%,1/10W,TP,1608	PC
2007-000078	R206	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R303	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC

6-2 OUTDOOR MAIN PCB - DB92-02865A

Parts Code	Design Loc	Quantity	Parts Description	Spec.	Unit
0201-001528	ADHESIVE-SIL	0.91	ADHESIVE-SIL	LDC2577D,Y/GRN,175CPS,-	G
0202-001338	SOLDER-BAR	0.483	SOLDER-BAR	LeeD-free Solder BAR,W20L350H8,99.3Sn/0.7Cu/0.01P	G
0202-001463	SOLDER-WIRE	4.347	SOLDER-WIRE	LFC2-W3.0,-,D3,99.79Sn/0.2Cu/0.01P,-	G
0204-004665	FLUX	0.386	FLUX	KSP-70M-S,14%,FLUX	G
0204-005794	SOLVENT	1	SOLVENT	S-1000,(CH3)2CHOH,100%,0.79	G
0402-000324	BD102	1	DIODE-BRIDGE	D3SB60,600V,4A,SIP-4,ST	PC
0402-001299	BD101	1	DIODE-BRIDGE	TS25P05G,D25XB60,600V,25A,SIP-4,BK	PC
1003-002610	IPM400	1	POWER MODULE	600V,20A,DIP,FNC42060F,26,IPM	PC
1203-002735	IC802	1	IC-POSI.FIXED REG.	KIA7815API,TO-220IS,3P,10.3x15.3mm,PLASTIC,15V,2W,-30to+150,1A,-,ST	PC
1404-001498	PTC020	1	THERMISTOR-PTC	40ohm,25%,290Vac,7A,TR	PC
1405-000154	VA003	1	VARISTOR	560V,460Vdc,4500A,17.5x7.5mm,BK,920V,600pF	PC
1405-000154	VA004	1	VARISTOR	560V,460Vdc,4500A,17.5x7.5mm,BK,920V,600pF	PC
1405-001239	VA001	1	VARISTOR	680V,560Vdc,6000A,17x7.3mm,BK,1120V,350pF	PC
1405-001239	VA002	1	VARISTOR	680V,560Vdc,6000A,17x7.3mm,BK,1120V,350pF	PC
2003-000497	R816	1	R-METAL OXIDE(S)	150Kohm,5%,2W,AA,TP,4x12mm	PC
2201-002002	C002	1	C-CERAMIC,DISC	4.7nF,20%,400V,Y5U,16x6mm,10mm	PC
2201-002002	C003	1	C-CERAMIC,DISC	4.7nF,20%,400V,Y5U,16x6mm,10mm	PC
2201-002002	C004	1	C-CERAMIC,DISC	4.7nF,20%,400V,Y5U,16x6mm,10mm	PC
2201-002002	C005	1	C-CERAMIC,DISC	4.7nF,20%,400V,Y5U,16x6mm,10mm	PC
2301-001285	C001	1	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm	PC
2301-001285	C006	1	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm	PC
2301-001992	CR041	1	C-FILM,LEAD	1.5,-25to+85,450V,+10~-5,37x18x30,CP wire,PP,PBT,P2	PC
2301-002315	XC01	1	C-FILM,LEAD-PPF	10000nF,10%,450V,BK,21x31x31mm	PC
2301-002315	XC02	1	C-FILM,LEAD-PPF	10000nF,10%,450V,BK,21x31x31mm	PC
2401-003842	CE414	1	C-AL	100uF,20%,450V,WT,BK,25.4X25,10	PC
2401-004267	CE406	1	C-AL	22uF,20%,500V,TP,16*25,7.5mm	PC
3501-001154	RY022	1	RELAY-MINIATURE	12V,200mW,3000mA,1FormA,10ms,10ms	PC
3501-001154	RY040	1	RELAY-MINIATURE	12V,200mW,3000mA,1FormA,10ms,10ms	PC
3501-001154	RY041	1	RELAY-MINIATURE	12V,200mW,3000mA,1FormA,10ms,10ms	PC
3501-001279	RY021	1	RELAY-POWER	12V,400mW,16000mA,1FormA,15ms,5ms	PC
3711-000203	CN030	1	HEADER-BOARD TO CABLE	1WALL,2P/3P,1R,7.92mm,STRAIGHT,SN,WHT,11.82x8.6x9.4m	PC
3711-002001	CN570	1	HEADER-BOARD TO CABLE	BOX,20P,2R,2.0mm,STRAIGHT,SN,BLK,5.0X22.0X6.6mm	PC
3711-003381	CN040	1	CONNECTOR-HEADER	1WALL,3P,1R,7.92mm,ANGLE,SN,WHT,8.5x19.74x9.4	PC
3711-007656	CN451	1	HEADER-BOARD TO CABLE	BOX,3,1R,6mm,STRAIGHT,WHT	PC
3711-007817	CN571	1	HEADER-BOARD TO BOARD	3WALL,7P,1R,2mm,STRAIGHT,SN,WHT	PC
3712-001047	CN003	1	CONNECTOR-TERMINAL	TAB,MALE,N,0.5/4.75mm	PC
3712-001139	CN001	1	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	PC
3712-001139	CN002	1	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	PC
3712-001139	CN301	1	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	PC
DB26-00135A	T1	1	TRANS SWITCHING	15W Type1,230V,5V, 12V, 15V,EE2218,1.5mH,15W	PC
DB27-00076A	FT001	1	COIL FILTER	MALDIVE,12mH,22m,10A	PC
DB61-05915A	SUPPORT PBA-BD	1	SUPPORT-PCB	XS02,PA66-FR(40),3.2g,BLACK	PC
DB61-05916A	SUPPORT PBA-IPM	1	SUPPORT-PCB	XS01_V2MD,HIPS,S834S1,BLACK	PC
DB94-04081A		1	ASSY PCB AUTO	OUTDOOR,A3050,175*142,PF#0,DB92-02865A	PC
1203-003318	IC803	1	IC-POSI.ADJUST REG.	KIA431A,TO-92,3P,4.7x4.8mm,PLASTIC,700mW,-40to+85,1mA,2.47/2.52V,TP,Marking:3B, Shunt	PC
1203-007747	IC804	1	IC-PWM CONTROLLER	FSL117MRIN,DIP,8P,9.83*6.67mm,PLASTIC,FSL117MRIN,-40to+125C,ST	PC
1404-001413	NTC1	1	THERMISTOR-NTC	18ohm,3A,3200K,19MWC,15mm,BK,17x6mm	PC
2201-002028	C809	1	C-CERAMIC,DISC	0.47nF,10%,2000V,Y5P,7.5x5mm,7.5mm	PC
2201-002427	C810	1	C-CERAMIC,DISC	2.2nF,10%,2000V,Y5P,TP,12.5x5mm,7.5mm	PC
2401-000287	CE411	1	C-AL	100uF,20%,16V,WT,TP,6.3x11,5	PC
2401-001281	CE301	1	C-AL	4.7uF,20%,50V,WT,TP,5x11,5	PC
2401-001374	CE413	1	C-AL	470uF,20%,16V,WT,TP,10x12.5mm,5mm	PC
2401-001838	CE407	1	C-AL	470uF,20%,25V,WT,TP,10x16,5mm	PC
2401-002438	CE408	1	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	PC
2401-002438	CE409	1	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	PC
2401-002438	CE410	1	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	PC
2401-003585	CE412	1	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	PC
3601-001538	F001	1	FUSE-AXIAL LEAD	250V,15A,TIME-LAG,CERAMIC,6.35x31.8mm	PC
3601-001764	FH002	1	FUSE-RADIAL LEAD	250V,2.5A,TIME-LAG,Thermoplastic,8.5x8mm	PC
3711-000015	CN251	1	HEADER-BOARD TO CABLE	BOX,2P,1R,2.5mm,STRAIGHT,SN,WHT,5.8X7.4X7.0mm	PC
4715-001093	DSA001	1	SURGE ABSORBER	3600V,20%,2000A,-,AXIAL	PC
DB94-04082A		1	ASSY PCB SMD	OUTDOOR,A3050,175*142,PF#0,DB92-02865A	PC
0202-001459	SOLDER-CREAM	1	SOLDER-CREAM	S3X58-M405,D20~38um,96.5Sn/3Ag/0.5Cu,FLUX 5%	G
0401-001099	D020	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D021	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D030	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D040	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D454	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC

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0401-001099	D618	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D619	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D620	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D621	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D622	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0401-001099	D623	1	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	PC
0402-001192	D615	1	DIODE-RECTIFIER	ES2D,200V,2A,SMB,TP	PC
0402-001192	D616	1	DIODE-RECTIFIER	ES2D,200V,2A,SMB,TP	PC
0402-001380	D617	1	DIODE-RECTIFIER	S3J,600V,3A,SMC,TP	PC
0402-001427	D612	1	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	PC
0402-001795	D613	1	DIODE-RECTIFIER	US1M,1000V,1A,SMA,TP	PC
0402-001795	D614	1	DIODE-RECTIFIER	US1M,1000V,1A,SMA,TP	PC
0403-001499	ZD401	1	DIODE-ZENER	MMSZ5252B,22.8/25.2V,500mW,SOD-123,TP	PC
0404-001020	D491	1	DIODE-SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	PC
0404-001020	D492	1	DIODE-SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	PC
0501-000465	Q301	1	TR-SMALL SIGNAL	MMBT3904,NPN,350mW,SOT-23,TP,30-300	PC
0506-000175	IC801	1	TR-ARRAY	2003,NPN,7,1000mW,SOP-16,ST,1000	PC
0601-002423	LED801	1	LED	SMD(REVERSE),RED,3.2x1.6mm,639nm,3.2x1.6x1.1mm	PC
0601-002955	LED803	1	LED	SMD(REVERSE),YEL,1.6x1.5mm,588nm,3.2x1.6x1.1mm	PC
0601-002956	LED802	1	LED	SMD(REVERSE),GRN,1.6x1.5mm,3.2x1.6x1.1mm	PC
0604-001002	PC1	1	PHOTO-COUPLER	TR,100-600%,170mW,SOP-4,TP	PC
0604-001148	IC301	1	PHOTO-COUPLER	TR,100-600%,200mW,SMD-4,TP	PC
1201-002946	IC451	1	IC-OP AMP	TSSOP,TR,14P,5x4.4x1.2mm,100,5.5V,-40to+85C,63dB,1,1nA,1nA,1.7mV	PC
1203-004967	IC805	1	IC-VOL. DETECTOR	KIA7042AT,TSM,3P,2.9x1.6mm,PLASTIC,4.2V,350mW,-30to+75C,20mA,-,-	PC
2007-000043	R409	1	R-CHIP	1Kohm,1%,1/10W,TP,1608	PC
2007-000043	R809	1	R-CHIP	1Kohm,1%,1/10W,TP,1608	PC
2007-000052	R811	1	R-CHIP	10Kohm,1%,1/10W,TP,1608	PC
2007-000066	R309	1	R-CHIP	20Kohm,1%,1/10W,TP,1608	PC
2007-000066	R810	1	R-CHIP	20Kohm,1%,1/10W,TP,1608	PC
2007-000067	R812	1	R-CHIP	15Kohm,1%,1/10W,TP,1608	PC
2007-000074	R401	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000074	R402	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000074	R403	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000074	R404	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000074	R405	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000074	R406	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000074	R514	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000074	R571	1	R-CHIP	100ohm,5%,1/10W,TP,1608	PC
2007-000076	R252	1	R-CHIP	330ohm,5%,1/10W,TP,1608	PC
2007-000076	R511	1	R-CHIP	330ohm,5%,1/10W,TP,1608	PC
2007-000076	R512	1	R-CHIP	330ohm,5%,1/10W,TP,1608	PC
2007-000078	R311	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R502	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R503	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R504	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R506	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R507	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R509	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R510	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R513	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R530	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R531	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000078	R570	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	PC
2007-000084	R408	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R515	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R516	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R517	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R518	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R519	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R520	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R521	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R522	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R523	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R524	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R525	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R526	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R527	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R536	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R538	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC
2007-000084	R801	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	PC

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2007-000084	R802	1	R-CHIP	4. 7Kohm, 5%, 1/10W, TP, 1608	PC
2007-000084	R803	1	R-CHIP	4. 7Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R528	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R533	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R534	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R537	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R546	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R564	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R565	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R566	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R804	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R805	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000090	R806	1	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	PC
2007-000109	R532	1	R-CHIP	1Mohm, 5%, 1/10W, TP, 1608	PC
2007-000120	R313	1	R-CHIP	680ohm, 5%, 1/10W, TP, 1608	PC
2007-000238	R312	1	R-CHIP	1. 5Kohm, 1%, 1/8W, TP, 2012	PC
2007-000238	R314	1	R-CHIP	1. 5Kohm, 1%, 1/8W, TP, 2012	PC
2007-000239	R310	1	R-CHIP	1. 5Kohm, 1%, 1/10W, TP, 1608	PC
2007-000239	R807	1	R-CHIP	1. 5Kohm, 1%, 1/10W, TP, 1608	PC
2007-000239	R808	1	R-CHIP	1. 5Kohm, 1%, 1/10W, TP, 1608	PC
2007-000256	R455	1	R-CHIP	1. 6Kohm, 1%, 1/10W, TP, 1608	PC
2007-000256	R457	1	R-CHIP	1. 6Kohm, 1%, 1/10W, TP, 1608	PC
2007-000256	R468	1	R-CHIP	1. 6Kohm, 1%, 1/10W, TP, 1608	PC
2007-000256	R491	1	R-CHIP	1. 6Kohm, 1%, 1/10W, TP, 1608	PC
2007-000385	R104	1	R-CHIP	14. 3Kohm, 1%, 1/4W, TP, 3216	PC
2007-000536	R492	1	R-CHIP	200ohm, 1%, 1/10W, TP, 1608	PC
2007-000537	R817	1	R-CHIP	200ohm, 1%, 1/4W, TP, 3216	PC
2007-000537	R818	1	R-CHIP	200ohm, 1%, 1/4W, TP, 3216	PC
2007-000614	R251	1	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	PC
2007-000614	R469	1	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	PC
2007-000614	R470	1	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	PC
2007-000614	R471	1	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	PC
2007-000614	R472	1	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	PC
2007-000614	R473	1	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	PC
2007-000614	R474	1	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	PC
2007-000651	R475	1	R-CHIP	27Kohm, 1%, 1/10W, TP, 1608	PC
2007-000669	R540	1	R-CHIP	2Kohm, 1%, 1/10W, TP, 1608	PC
2007-000683	R454	1	R-CHIP	3. 3Kohm, 1%, 1/10W, TP, 1608	PC
2007-000683	R459	1	R-CHIP	3. 3Kohm, 1%, 1/10W, TP, 1608	PC
2007-000683	R466	1	R-CHIP	3. 3Kohm, 1%, 1/10W, TP, 1608	PC
2007-000763	R476	1	R-CHIP	330ohm, 1%, 1/10W, TP, 1608	PC
2007-000763	R477	1	R-CHIP	330ohm, 1%, 1/10W, TP, 1608	PC
2007-000924	R106	1	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	PC
2007-000924	R107	1	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	PC
2007-000924	R108	1	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	PC
2007-000929	R820	1	R-CHIP	470ohm, 1%, 1/10W, TP, 1608	PC
2007-000929	R821	1	R-CHIP	470ohm, 1%, 1/10W, TP, 1608	PC
2007-000934	R819	1	R-CHIP	470ohm, 5%, 1/4W, TP, 3216	PC
2007-000934	R828	1	R-CHIP	470ohm, 5%, 1/4W, TP, 3216	PC
2007-000944	R301	1	R-CHIP	47Kohm, 5%, 1/4W, TP, 3216	PC
2007-000944	R302	1	R-CHIP	47Kohm, 5%, 1/4W, TP, 3216	PC
2007-000944	R303	1	R-CHIP	47Kohm, 5%, 1/4W, TP, 3216	PC
2007-000944	R304	1	R-CHIP	47Kohm, 5%, 1/4W, TP, 3216	PC
2007-000944	R305	1	R-CHIP	47Kohm, 5%, 1/4W, TP, 3216	PC
2007-000944	R306	1	R-CHIP	47Kohm, 5%, 1/4W, TP, 3216	PC
2007-000944	R307	1	R-CHIP	47Kohm, 5%, 1/4W, TP, 3216	PC
2007-000944	R308	1	R-CHIP	47Kohm, 5%, 1/4W, TP, 3216	PC
2007-000979	R478	1	R-CHIP	5. 6Kohm, 1%, 1/10W, TP, 1608	PC
2007-001175	R410	1	R-CHIP	8. 2Kohm, 1%, 1/10W, TP, 1608	PC
2007-007385	R813	1	R-CHIP	1. 2Mohm, 1%, 1/4w, TP, 3216	PC
2007-007385	R814	1	R-CHIP	1. 2Mohm, 1%, 1/4w, TP, 3216	PC
2007-007385	R815	1	R-CHIP	1. 2Mohm, 1%, 1/4w, TP, 3216	PC
2007-008023	R822	1	R-CHIP	100Kohm, 5%, 1W, TP, 6432	PC
2007-008023	R823	1	R-CHIP	100Kohm, 5%, 1W, TP, 6432	PC
2007-008023	R824	1	R-CHIP	100Kohm, 5%, 1W, TP, 6432	PC
2007-010245	R064	1	R-CHIP	0. 01ohm, 1%, 2W, TP, 6432	PC
2007-010245	R065	1	R-CHIP	0. 01ohm, 1%, 2W, TP, 6432	PC
2007-010245	R451	1	R-CHIP	0. 01ohm, 1%, 2W, TP, 6432	PC
2007-010245	R452	1	R-CHIP	0. 01ohm, 1%, 2W, TP, 6432	PC
2007-010245	R453	1	R-CHIP	0. 01ohm, 1%, 2W, TP, 6432	PC

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2203-000257	C302	1	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	PC
2203-000257	C303	1	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	PC
2203-000257	C507	1	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	PC
2203-000257	C806	1	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	PC
2203-000257	C807	1	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	PC
2203-000257	C808	1	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C404	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C406	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C407	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C409	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C410	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C411	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C414	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C501	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C504	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C505	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C506	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C510	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000440	C542	1	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	PC
2203-000783	C455	1	C-CER, CHIP	0.33nF, 5%, 50V, C0G, TP, 1608	PC
2203-000783	C458	1	C-CER, CHIP	0.33nF, 5%, 50V, C0G, TP, 1608	PC
2203-002002	C453	1	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	PC
2203-002002	C454	1	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	PC
2203-002002	C459	1	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	PC
2203-002002	C520	1	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	PC
2203-002002	C521	1	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	PC
2203-002002	C522	1	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	PC
2203-002002	C523	1	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	PC
2203-002002	C524	1	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	PC
2203-002398	C543	1	C-CER, CHIP	22nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C251	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C401	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C402	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C403	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C408	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C460	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C503	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C508	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C509	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C511	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C512	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C515	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C517	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C518	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C519	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C801	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C802	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C803	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C804	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-005249	C805	1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	PC
2203-006460	C541	1	C-CER, CHIP	2200nF, 10%, 16V, X5R, TP, 1608, -	PC
2203-007269	C451	1	C-CER, CHIP	22000nF, 20%, 10V, X5R, TP, 2012, 0.85T	PC
2203-007486	C301	1	C-CER, CHIP	1000nF, 10%, 50V, X5R, TP, 1608	PC
2402-001268	CE405	1	C-AL, SMD	100uF, 20%, 25V, WT, TP, 8x6.3mm	PC
2402-001368	CE402	1	C-AL, SMD	47uF, 20%, 25V, TP, 6.3x4.9mm	PC
2402-001368	CE403	1	C-AL, SMD	47uF, 20%, 25V, TP, 6.3x4.9mm	PC
2402-001368	CE404	1	C-AL, SMD	47uF, 20%, 25V, TP, 6.3x4.9mm	PC
2703-003657	L1	1	INDUCTOR-SMD	3.3uH, 20%, 3030, 0.12ohm, 1050mA, Wirewound	PC
2703-003657	L2	1	INDUCTOR-SMD	3.3uH, 20%, 3030, 0.12ohm, 1050mA, Wirewound	PC
2802-001211	X501	1	RESONATOR-CERAMIC	8MHZ, 0.1%, TP, 3.2X1.3X0.9 MM	PC
DB41-01226A	PCB MAIN	1	PCB MAIN	FR-4, 2Layer, 142*175, PF#0, OUTDOOR, 1Oz, 142*175	PC
DB91-01515A	IC501	1	ASSY MICOM	Soc 1Phase PF0 Capless, STM-125F-0A, HART-I910, 64LQFP, ROM 64KB	PC
0903-001843	-	1	IC-MICROCONTROLLER	HART-I910, LQFP, 64P, 12x12mm, 8MHz, 5V, 600mW, -40to+85C, 12KB, 64KB, Inverter SOC	PC
DB98-31449A	ASSY-LABEL MICOM	1	ASSY-LABEL MICOM	QFP, 64P, WHT, 9*9	PC
DC68-02310A	LABEL-BAR CODE	1	LABEL-BAR CODE	SEW-6HR128ATC, ART, W45, L15	PC

OUTDOOR MAIN PBA(DB92-03036A)

Parts Code	Parts Description	Design Loc	Quantity
1203-000002	IC-POSI.ADJUST REG.	IC157	1
1203-006089	IC-PWM CONTROLLER	IC151	1
1404-001274	THERMISTOR-NTC	NTC151	1
1404-001498	THERMISTOR-PTC	PTC020	1
1405-000154	VARISTOR	VA003	1
1405-000154	VARISTOR	VA004	1
1405-000160	VARISTOR	VA002	1
1405-000160	VARISTOR	VA151	1
3501-001264	RELAY-POWER	RY022	1
3501-001264	RELAY-POWER	RY040	1
3501-001264	RELAY-POWER	RY041	1
3501-001279	RELAY-POWER	RY021	1
3704-001601	SOCKET-IC	IC502	1
3711-000015	HEADER-BOARD TO CABLE	CN251	1
3711-000203	HEADER-BOARD TO CABLE	CN030	1
3711-003381	CONNECTOR-HEADER	CN040	1
3711-007656	HEADER-BOARD TO CABLE	CN451	1
3711-007659	HEADER-BOARD TO CABLE	CN051	1
3711-007717	HEADER-BOARD TO CABLE	CN551	1
3712-001047	CONNECTOR-TERMINAL	CN003	1
3712-001139	CONNECTOR-TERMINAL	CN001	1
3712-001139	CONNECTOR-TERMINAL	CN002	1
3712-001139	CONNECTOR-TERMINAL	CN301	1
4719-002483	POWER MODULE	PFC050	1
4719-002484	POWER MODULE	IPM400	1
DB26-00119A	TRANS SWITCHING	PT151	1
DB27-00076A	COIL FILTER	FT001	1
DB61-04692A	SUPPORT-PBA	IPM/PFCM UNDER	1
DB94-04419A	ASSY PCB AUTO	-	1
2003-000855	R-METAL OXIDE(S)	R151	1
2201-000153	C-CERAMIC,DISC	C004	1
2201-000153	C-CERAMIC,DISC	C005	1
2201-000322	C-CERAMIC,DISC	C151	1
2201-000322	C-CERAMIC,DISC	C152	1
2201-000446	C-CERAMIC,DISC	C002	1
2201-000446	C-CERAMIC,DISC	C003	1
2201-000551	C-CERAMIC,DISC	C165	1
2201-000551	C-CERAMIC,DISC	C166	1
2201-002128	C-CERAMIC,DISC	C061	1
2301-001285	C-FILM,LEAD-PPF	C001	1
2301-001285	C-FILM,LEAD-PPF	C006	1
2301-001992	C-FILM,LEAD	CR041	1
2306-000123	C-FILM,LEAD-PPF	C060	1
2306-000123	C-FILM,LEAD-PPF	C400	1
2401-000481	C-AL	CE152	1
2401-001281	C-AL	CE301	1
2401-001548	C-AL	CE159	1
2401-001838	C-AL	CE154	1

2401-001838	C-AL	CE157	1
2401-003139	C-AL	CE155	1
2401-003224	C-AL	CE153	1
2401-003224	C-AL	CE156	1
2401-003645	C-AL	CE158	1
2401-004267	C-AL	CE151	1
2401-005163	C-AL	CE101	1
2401-005163	C-AL	CE102	1
2401-005163	C-AL	CE103	1
3601-001538	FUSE-AXIAL LEAD	F001	1
4715-001093	SURGE ABSORBER	DSA001	1
DB94-04420A	ASSY PCB SMD	-	1
0401-001099	DIODE-SWITCHING	D020	1
0401-001099	DIODE-SWITCHING	D021	1
0401-001099	DIODE-SWITCHING	D030	1
0401-001099	DIODE-SWITCHING	D040	1
0401-001099	DIODE-SWITCHING	D501	1
0401-001099	DIODE-SWITCHING	D503	1
0401-001099	DIODE-SWITCHING	D551	1
0401-001099	DIODE-SWITCHING	D552	1
0402-001192	DIODE-RECTIFIER	D154	1
0402-001192	DIODE-RECTIFIER	D155	1
0402-001298	DIODE-BRIDGE	BD151	1
0402-001427	DIODE-RECTIFIER	D152	1
0402-001427	DIODE-RECTIFIER	D153	1
0402-001795	DIODE-RECTIFIER	D151	1
0403-001499	DIODE-ZENER	ZD051	1
0403-001499	DIODE-ZENER	ZD401	1
0404-001020	DIODE-SCHOTTKY	D451	1
0404-001020	DIODE-SCHOTTKY	D452	1
0404-001020	DIODE-SCHOTTKY	D453	1
0404-001020	DIODE-SCHOTTKY	D454	1
0404-001020	DIODE-SCHOTTKY	D491	1
0404-001020	DIODE-SCHOTTKY	D492	1
0404-001020	DIODE-SCHOTTKY	D502	1
0404-001020	DIODE-SCHOTTKY	D553	1
0407-000123	DIODE-SWITCHING	D611	1
0501-000534	TR-SMALL SIGNAL	Q301	1
0501-000534	TR-SMALL SIGNAL	Q651	1
0501-000534	TR-SMALL SIGNAL	Q652	1
0506-000175	TR-ARRAY	IC801	1
0601-002423	LED	LED801	1
0601-002955	LED	LED803	1
0601-002956	LED	LED802	1
0604-001148	PHOTO-COUPLER	IC301	1
0604-001172	PHOTO-COUPLER	IC152	1
1201-002946	IC-OP AMP	IC451	1
1202-000104	IC-VOLTAGE COMP.	IC251	1

1202-000104	IC-VOLTAGE COMP.	IC611	1
1203-001211	IC-VOL. DETECTOR	IC503	1
1203-005454	IC-POSI.FIXED REG.	IC153	1
2007-000029	R-CHIP	R166	1
2007-000043	R-CHIP	R054	1
2007-000052	R-CHIP	R309	1
2007-000066	R-CHIP	R155	1
2007-000066	R-CHIP	R255	1
2007-000066	R-CHIP	R469	1
2007-000066	R-CHIP	R472	1
2007-000066	R-CHIP	R473	1
2007-000074	R-CHIP	R053	1
2007-000074	R-CHIP	R057	1
2007-000074	R-CHIP	R401	1
2007-000074	R-CHIP	R402	1
2007-000074	R-CHIP	R403	1
2007-000074	R-CHIP	R404	1
2007-000074	R-CHIP	R405	1
2007-000074	R-CHIP	R406	1
2007-000074	R-CHIP	R507	1
2007-000076	R-CHIP	R509	1
2007-000077	R-CHIP	R557	1
2007-000077	R-CHIP	R558	1
2007-000077	R-CHIP	R661	1
2007-000077	R-CHIP	R662	1
2007-000078	R-CHIP	R310	1
2007-000078	R-CHIP	R311	1
2007-000078	R-CHIP	R501	1
2007-000078	R-CHIP	R510	1
2007-000078	R-CHIP	R511	1
2007-000078	R-CHIP	R512	1
2007-000078	R-CHIP	R514	1
2007-000078	R-CHIP	R517	1
2007-000078	R-CHIP	R651	1
2007-000080	R-CHIP	R256	1
2007-000080	R-CHIP	R257	1
2007-000080	R-CHIP	R409	1
2007-000080	R-CHIP	R504	1
2007-000080	R-CHIP	R621	1
2007-000082	R-CHIP	R052	1
2007-000084	R-CHIP	R408	1
2007-000084	R-CHIP	R551	1
2007-000084	R-CHIP	R552	1
2007-000084	R-CHIP	R553	1
2007-000084	R-CHIP	R554	1
2007-000084	R-CHIP	R555	1
2007-000084	R-CHIP	R556	1
2007-000090	R-CHIP	R515	1

2007-000090	R-CHIP	R516	1
2007-000090	R-CHIP	R559	1
2007-000090	R-CHIP	R560	1
2007-000090	R-CHIP	R561	1
2007-000090	R-CHIP	R663	1
2007-000090	R-CHIP	R664	1
2007-000093	R-CHIP	R502	1
2007-000093	R-CHIP	R508	1
2007-000106	R-CHIP	R506	1
2007-000109	R-CHIP	R503	1
2007-000120	R-CHIP	R313	1
2007-000238	R-CHIP	R312	1
2007-000238	R-CHIP	R314	1
2007-000263	R-CHIP	R614	1
2007-000263	R-CHIP	R616	1
2007-000263	R-CHIP	R801	1
2007-000263	R-CHIP	R802	1
2007-000263	R-CHIP	R803	1
2007-000346	R-CHIP	R168	1
2007-000346	R-CHIP	R169	1
2007-000346	R-CHIP	R170	1
2007-000346	R-CHIP	R171	1
2007-000476	R-CHIP	R163	1
2007-000476	R-CHIP	R164	1
2007-000476	R-CHIP	R165	1
2007-000614	R-CHIP	R470	1
2007-000614	R-CHIP	R471	1
2007-000614	R-CHIP	R474	1
2007-000614	R-CHIP	R475	1
2007-000614	R-CHIP	R478	1
2007-000669	R-CHIP	R254	1
2007-000669	R-CHIP	R476	1
2007-000669	R-CHIP	R477	1
2007-000683	R-CHIP	R454	1
2007-000683	R-CHIP	R459	1
2007-000683	R-CHIP	R466	1
2007-000708	R-CHIP	R253	1
2007-000869	R-CHIP	R252	1
2007-000924	R-CHIP	R106	1
2007-000924	R-CHIP	R107	1
2007-000924	R-CHIP	R108	1
2007-000924	R-CHIP	R658	1
2007-000924	R-CHIP	R659	1
2007-000924	R-CHIP	R660	1
2007-000929	R-CHIP	R153	1
2007-000929	R-CHIP	R154	1
2007-000934	R-CHIP	R158	1
2007-000934	R-CHIP	R159	1

2007-000939	R-CHIP	R652	1
2007-000944	R-CHIP	R301	1
2007-000944	R-CHIP	R302	1
2007-000944	R-CHIP	R303	1
2007-000944	R-CHIP	R304	1
2007-000944	R-CHIP	R305	1
2007-000944	R-CHIP	R306	1
2007-000944	R-CHIP	R307	1
2007-000944	R-CHIP	R308	1
2007-000962	R-CHIP	R055	1
2007-000962	R-CHIP	R654	1
2007-001068	R-CHIP	R491	1
2007-001074	R-CHIP	R152	1
2007-001174	R-CHIP	R104	1
2007-001174	R-CHIP	R657	1
2007-001175	R-CHIP	R056	1
2007-001175	R-CHIP	R410	1
2007-001175	R-CHIP	R655	1
2007-002637	R-CHIP	R611	1
2007-002637	R-CHIP	R612	1
2007-002637	R-CHIP	R613	1
2007-002637	R-CHIP	R615	1
2007-002637	R-CHIP	R617	1
2007-002637	R-CHIP	R618	1
2007-007225	R-CHIP	R455	1
2007-007225	R-CHIP	R457	1
2007-007225	R-CHIP	R468	1
2007-007225	R-CHIP	R492	1
2007-007342	R-CHIP	R157	1
2007-007385	R-CHIP	R167	1
2007-007445	R-CHIP	R156	1
2007-007768	R-CHIP	R251	1
2007-007768	R-CHIP	R259	1
2007-007818	R-CHIP	R260	1
2007-008003	R-CHIP	R513	1
2007-008023	R-CHIP	R101	1
2007-008023	R-CHIP	R102	1
2007-008023	R-CHIP	R103	1
2007-010245	R-CHIP	R062	1
2007-010245	R-CHIP	R063	1
2007-010245	R-CHIP	R451	1
2007-010245	R-CHIP	R452	1
2007-010245	R-CHIP	R453	1
2203-000236	C-CER, CHIP	C054	1
2203-000257	C-CER, CHIP	C053	1
2203-000257	C-CER, CHIP	C057	1
2203-000257	C-CER, CHIP	C302	1
2203-000257	C-CER, CHIP	C303	1
2203-000257	C-CER, CHIP	C517	1
2203-000257	C-CER, CHIP	C518	1
2203-000257	C-CER, CHIP	C611	1
2203-000257	C-CER, CHIP	C612	1

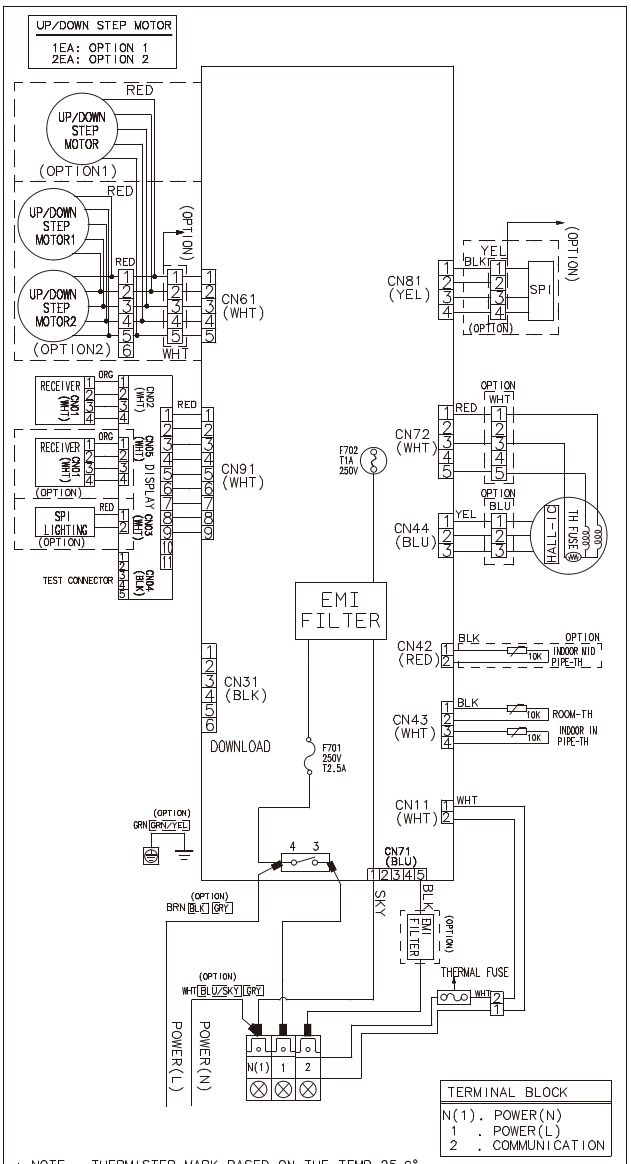
2203-000257	C-CER, CHIP	C613	1
2203-000257	C-CER, CHIP	C651	1
2203-000440	C-CER, CHIP	C404	1
2203-000440	C-CER, CHIP	C406	1
2203-000440	C-CER, CHIP	C407	1
2203-000440	C-CER, CHIP	C409	1
2203-000440	C-CER, CHIP	C410	1
2203-000440	C-CER, CHIP	C411	1
2203-000440	C-CER, CHIP	C414	1
2203-000440	C-CER, CHIP	C501	1
2203-000440	C-CER, CHIP	C514	1
2203-000440	C-CER, CHIP	C515	1
2203-000440	C-CER, CHIP	C516	1
2203-000783	C-CER, CHIP	C455	1
2203-000783	C-CER, CHIP	C458	1
2203-002002	C-CER, CHIP	C453	1
2203-002002	C-CER, CHIP	C454	1
2203-002002	C-CER, CHIP	C459	1
2203-005249	C-CER, CHIP	C051	1
2203-005249	C-CER, CHIP	C052	1
2203-005249	C-CER, CHIP	C156	1
2203-005249	C-CER, CHIP	C157	1
2203-005249	C-CER, CHIP	C158	1
2203-005249	C-CER, CHIP	C159	1
2203-005249	C-CER, CHIP	C163	1
2203-005249	C-CER, CHIP	C251	1
2203-005249	C-CER, CHIP	C252	1
2203-005249	C-CER, CHIP	C401	1
2203-005249	C-CER, CHIP	C402	1
2203-005249	C-CER, CHIP	C403	1
2203-005249	C-CER, CHIP	C408	1
2203-005249	C-CER, CHIP	C460	1
2203-005249	C-CER, CHIP	C506	1
2203-005249	C-CER, CHIP	C507	1
2203-005249	C-CER, CHIP	C508	1
2203-005249	C-CER, CHIP	C509	1
2203-005249	C-CER, CHIP	C510	1
2203-005249	C-CER, CHIP	C511	1
2203-005249	C-CER, CHIP	C512	1
2203-005249	C-CER, CHIP	C519	1
2203-005249	C-CER, CHIP	C520	1
2203-005249	C-CER, CHIP	C521	1
2203-005249	C-CER, CHIP	C614	1
2203-005249	C-CER, CHIP	C801	1
2203-006104	C-CER, CHIP	C301	1
2203-006348	C-CER, CHIP	C253	1
2203-006348	C-CER, CHIP	C502	1
2203-006348	C-CER, CHIP	C503	1
2203-006348	C-CER, CHIP	C504	1
2203-006348	C-CER, CHIP	C505	1
2203-006348	C-CER, CHIP	C523	1
2402-001183	C-AL, SMD	CE451	1
2402-001268	C-AL, SMD	CE051	1
2402-001268	C-AL, SMD	CE405	1
2402-001368	C-AL, SMD	CE402	1
2402-001368	C-AL, SMD	CE403	1
2402-001368	C-AL, SMD	CE404	1
2703-003657	INDUCTOR-SMD	L151	1
2802-001211	RESONATOR-CERAMIC	X501	1
DB41-01011A	PCB MAIN-OUT	PCB	1
DB91-01568A	ASSY MICOM	IC501-1	1
DB09-00591A	IC MICOM	IC501	1

INDOOR DISPLAY PBA(DB92-02876) - 3-LED

Parts Code	Design Loc	Parts Description	Spec.	Quantity
3711-003848	CN01	HEADER-BOARD TO CABLE	BOX, 11P, 1R, 2mm, ANGLE, SN, WHT	1
3711-004379	CN02	HEADER-BOARD TO CABLE	BOX, 4P, 1R, 2mm, STRAIGHT, SN, WHT	1
3711-005096	CN04	HEADER-BOARD TO CABLE	BOX, 5P, 1R, 2MM, STRAIGHT, SN, BLK	1
DB94-04103A		ASSY PCB SMD	GOOD, A3050, 64*36, DB92-02876A	1
0504-001080	Q01	TR-DIGITAL	KRC246S, NPN, 200mW, 2.2K/10Kohm, SOT-	1
0504-001080	Q02	TR-DIGITAL	KRC246S, NPN, 200mW, 2.2K/10Kohm, SOT-	1
0504-001080	Q03	TR-DIGITAL	KRC246S, NPN, 200mW, 2.2K/10Kohm, SOT-	1
2007-000029	J1	R-CHIP	0ohm, 5%, 1/8W, TP, 2012	1
2007-000029	J2	R-CHIP	0ohm, 5%, 1/8W, TP, 2012	1
2007-000029	J3	R-CHIP	0ohm, 5%, 1/8W, TP, 2012	1
2007-000029	J5	R-CHIP	0ohm, 5%, 1/8W, TP, 2012	1
2007-000029	J6	R-CHIP	0ohm, 5%, 1/8W, TP, 2012	1
2007-000300	R10	R-CHIP	10Kohm, 5%, 1/8W, TP, 2012	1
2007-000468	R04	R-CHIP	1Kohm, 5%, 1/8W, TP, 2012	1
2007-000468	R05	R-CHIP	1Kohm, 5%, 1/8W, TP, 2012	1
2007-000468	R6	R-CHIP	1Kohm, 5%, 1/8W, TP, 2012	1
2007-000468	R7	R-CHIP	1Kohm, 5%, 1/8W, TP, 2012	1
2007-000468	R8	R-CHIP	1Kohm, 5%, 1/8W, TP, 2012	1
2007-000468	R9	R-CHIP	1Kohm, 5%, 1/8W, TP, 2012	1
2007-000872	R11	R-CHIP	4.7Kohm, 5%, 1/8W, TP, 2012	1
2203-000206	C1	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 2012	1
DB94-04102A		ASSY PCB AUTO	GOOD, A3050, 64*36, DB92-02876A	1
0601-003285	LED1	LED	ROUND, BLUE, 3.1mm, 3.9x5.4mm	1
0601-003285	LED2	LED	ROUND, BLUE, 3.1mm, 3.9x5.4mm	1
0601-003285	LED3	LED	ROUND, BLUE, 3.1mm, 3.9x5.4mm	1
DB41-01224A	PCB DISPLAY	PCB DISPLAY	FR-1, 1Layer, 64*36, GOOD, 1Oz, 165*192	1

7. Wiring Diagram

Indoor Unit



7-SEG	LED1	LED2	LED3	DESCRIPTION
	OPERATION	TIMER	OPTION	
E121	○	◑	○	ROOM TH sensor error
E122,E123	◑	◑	○	INDOOR MID,INDOOR IN PIPE-TH sensor error
E154	○	○	◑	Fan error(indoor)
E162	◑	◑	◑	EEPROM error
E163	◑	◑	◑	Option error
FROM E200	◑	○	◑	Outdoor error display
E422	●	○	◑	EEV or Valve Close error-Self diagnosis

● : LAMP ON ○ : LAMP OFF ◑ : LAMP BLINK

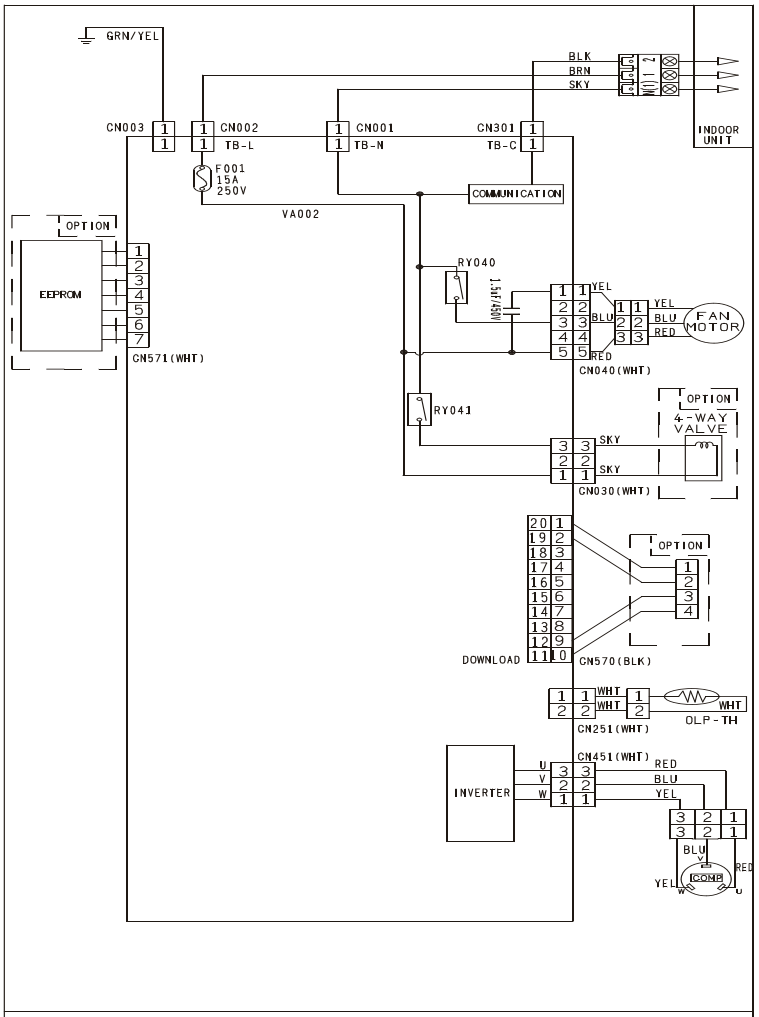
* Note *
If the Set doesn't work (No power), check the Thermal fuse of Terminal block OPEN or SHORT with Multimeter.
* Measure the Thermal fuse housing PIN#1 ~ 2 :
OPEN(disconnection) -> defective product

CODE NO:DB68-05002A | INDOOR-UNIT

DB68-05002A-1

Outdoor Unit

AR09JVSSEWKXED
AR12JVSSCWKXCB



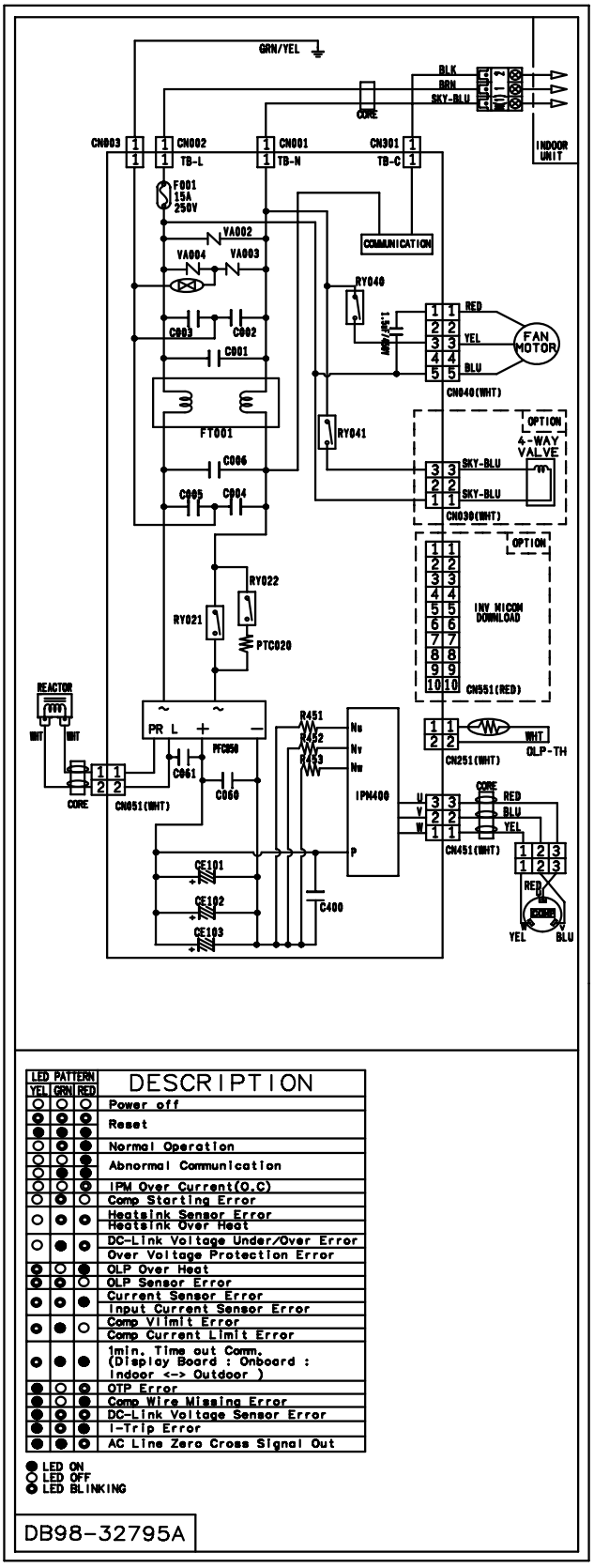
LED PATTERN YEL	GRN	RED	7SEG DISPLAY	DESCRIPTION
○	○	○	-	Power off
◎	◎	◎	-	Reset
●	●	●		
○	◎	●	-	Normal Operation
○	○	●	-	Abnormal Communication
○	●	●		
○	○	◎	E464	IPM Over Current(O.C)
○	◎	○	E461	Comp Starting Error
○	◎	◎	E474	Heatsink Sensor Error
			E500	Heatsink Over Heat
○	●	◎	E466	DC-Link Voltage Under/Over Error
			E483	Over Voltage Protection Error
◎	○	●	E463	OLP-TH Over Temperature Error
◎	◎	○	E320	OLP-TH Sensor Error
◎	◎	●	E468	Current Sensor Error
			E485	Input Current Sensor Error
◎	●	○	E465	Comp V_limit/I_limit Error
◎	●	●	E102	Time out Comm(Indoor<->Outdoor)
●	○	◎	E471	EEPROM Data Error
●	○	●	E467	Comp Wire Missing Error
●	◎	◎	E469	DC-Link Voltage Sensor Error
●	◎	●	E462	AC Input I_Limit Trip Error

● LED ON
○ LED OFF
◎ LED BLINKING

DB68-04021A-1

DB68-04021A

AR12JVSSEWKXED



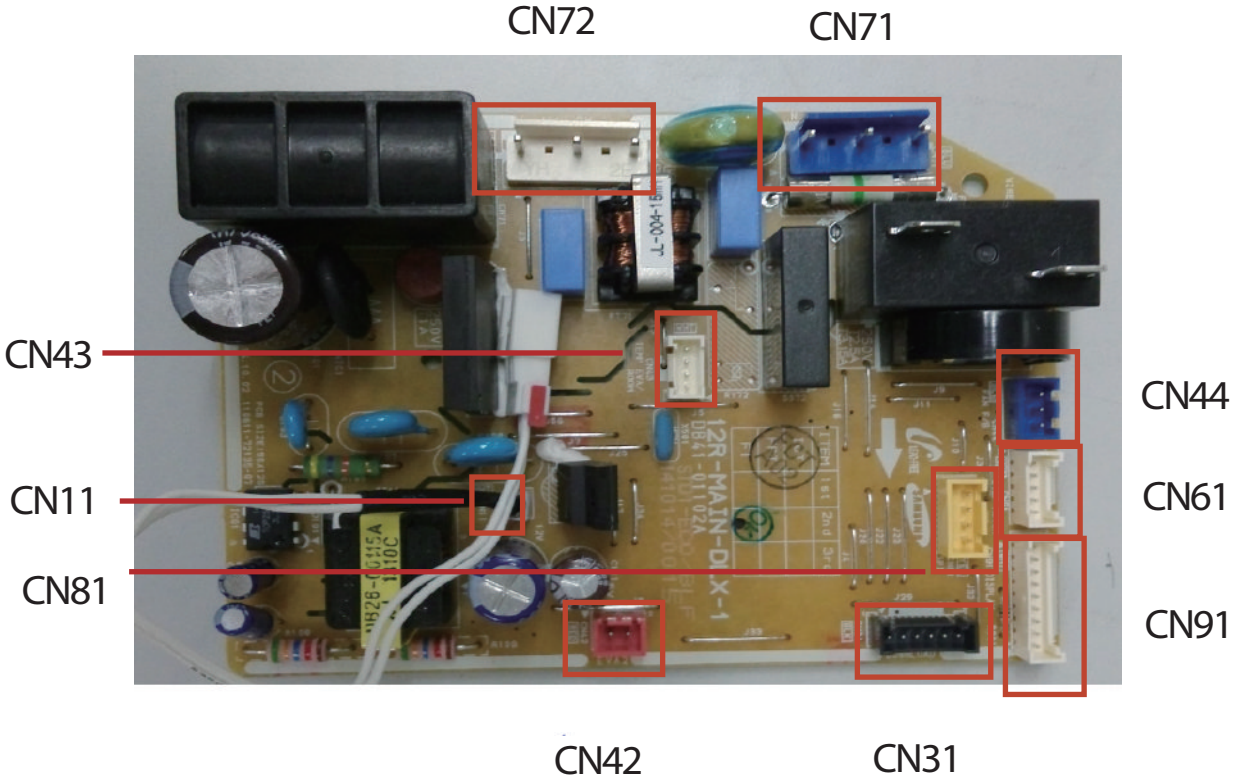
LED PATTERN YEL	GRN	RED	DESCRIPTION
○	○	○	Power off
◉	◉	◉	Reset
●	●	●	
○	◉	●	Normal Operation
○	○	●	Abnormal Communication
○	●	●	
○	○	◉	IPM Over Current(O.C)
○	◉	○	Comp Starting Error
○	◉	◉	Heatsink Sensor Error
			Heatsink Over Heat
○	●	◉	DC-Link Voltage Under/Over Error
			Over Voltage Protection Error
◉	○	●	OLP Over Heat
◉	◉	○	OLP Sensor Error
◉	◉	●	Current Sensor Error
			Input Current Sensor Error
◉	●	○	Comp Vlimit Error
			Comp Current Limit Error
◉	●	●	1min. Time out Comm. (Display Board : Onboard : Indoor <-> Outdoor)
●	○	◉	OTP Error
●	○	●	Comp Wire Missing Error
●	◉	◉	DC-Link Voltage Sensor Error
●	◉	●	I-Trip Error
●	●	◉	AC Line Zero Cross Signal Out

● LED ON
○ LED OFF
◉ LED BLINKING

DB98-32795A

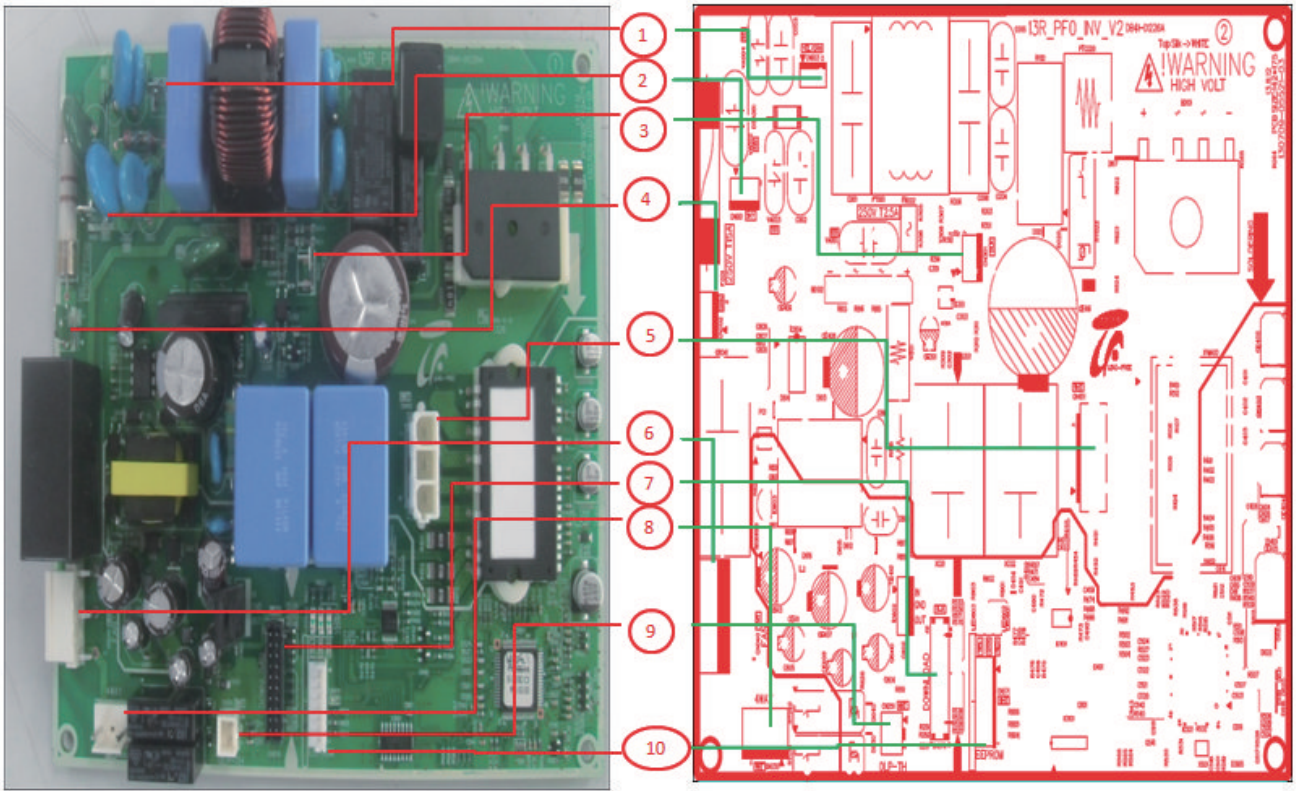
8. PCB Diagram

8-1 Indoor Main PCB--DB92-03442 SERIES

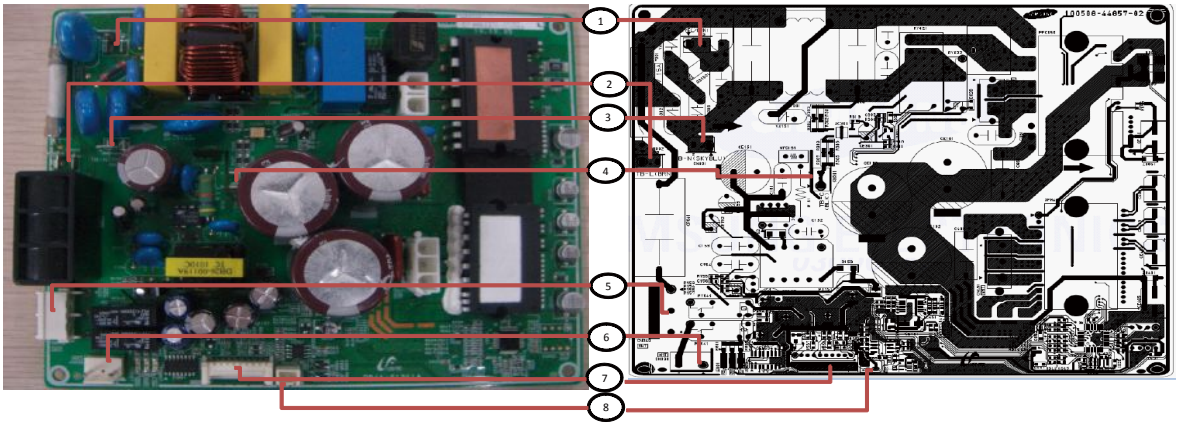


CN72 - AC-MOTOR #1 : Motor start Capacitor connect #3 : AC phase control singal #5 : Power	**CN71 - -N/OUTFAN/4-WAY** #1 : POWER-N #3 : OUTFAN RELAY signal #5 : 4-WAY RELAY signal	**CN44 - MOTOR_F/B** #1 : DC 5V #3 : GND #5 : Feedback signal input	**CN61 -STEP MOTOR** #1 : GND #2 -5 : STEP MOTOR signal
CN91 - DISPLAY #1- #4 : DIO ; CLK ; STB ; IRQ #5 : GND #6 : VCC #7 : Vout #8 : PWM_LED #9 : ROOM_TEMP	**CN31 - DOWNLOAD** #1,4,5,6: Download Signal #2 : VCC #3: GND	**CN42 - TEMPERATURE SENSOR** #1: EVA_TEMP #2: GND	**CN43 - TEMPERATURE SENSOR** #1: ROOM_TEMP #3: EVA_TEMP #2-4: GND
CN11 - 12V #1: 12V Signal	**CN81 - SPI** #1 : SPI Signal #2 : GND #3 : DC 12V		

8-2 Outdoor PCB-DB92-02865A

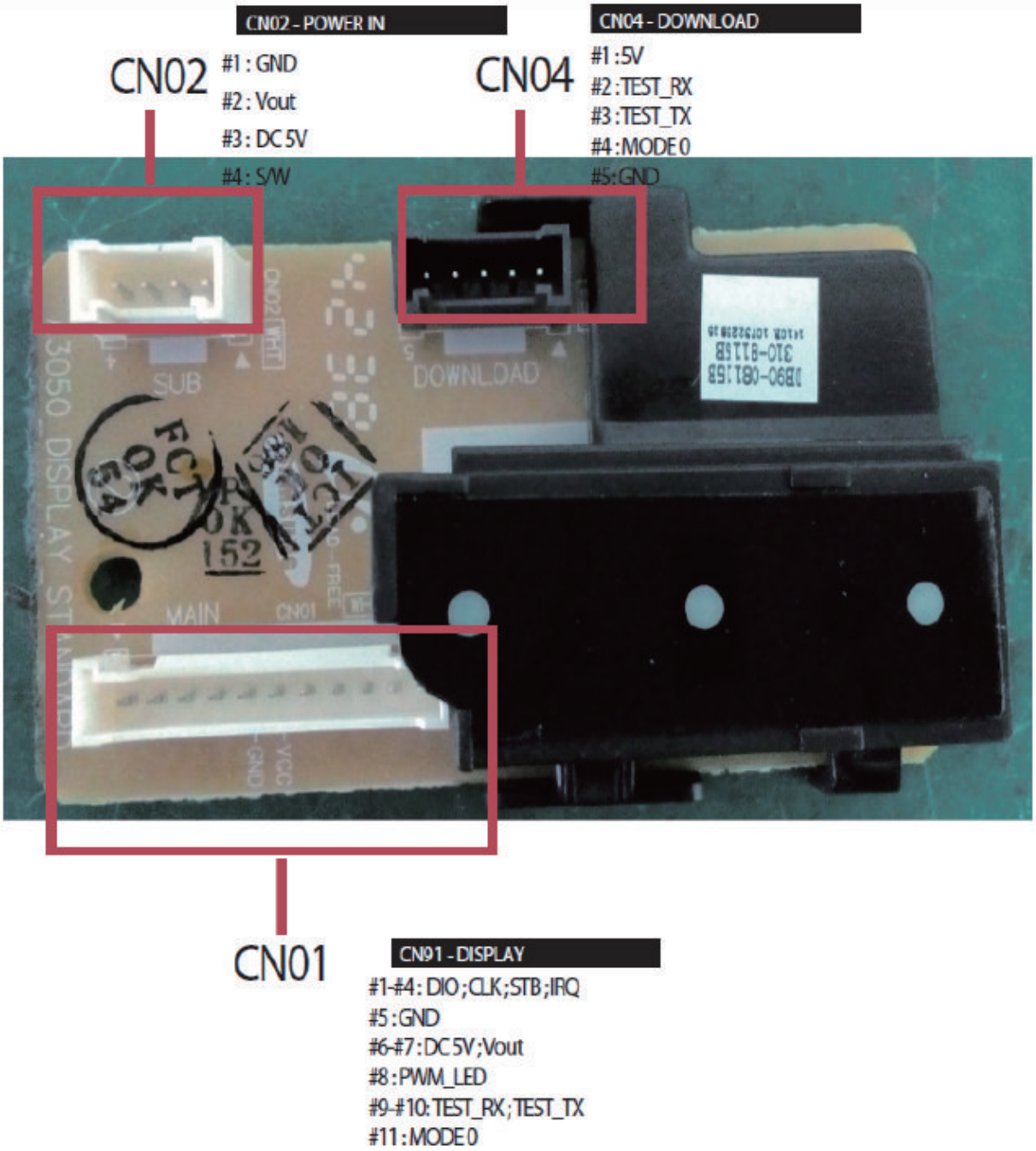


① CN003- EARTH #1 : EARTH	② CN001 - POWER N #1 : N	③ CN301 - Communication #1 : Comm	④ CN002 - Power L #1 : L
⑤ CN451- Comp #1 : W phase #2 : V phase #2 : U phase	⑥ CN040 - FAN MOTOR #1 : Cap #3 : L #5 : N	⑦ CN570 -Download #1~#10: DOWNLOAD	⑧ CN030 - 4WAY #1 : L #3 : N
⑨ CN251 - OLP sensor #1, #2 : OLP SENSOR	⑩ CN571 - EEPROM #1~#7:EEPROM		

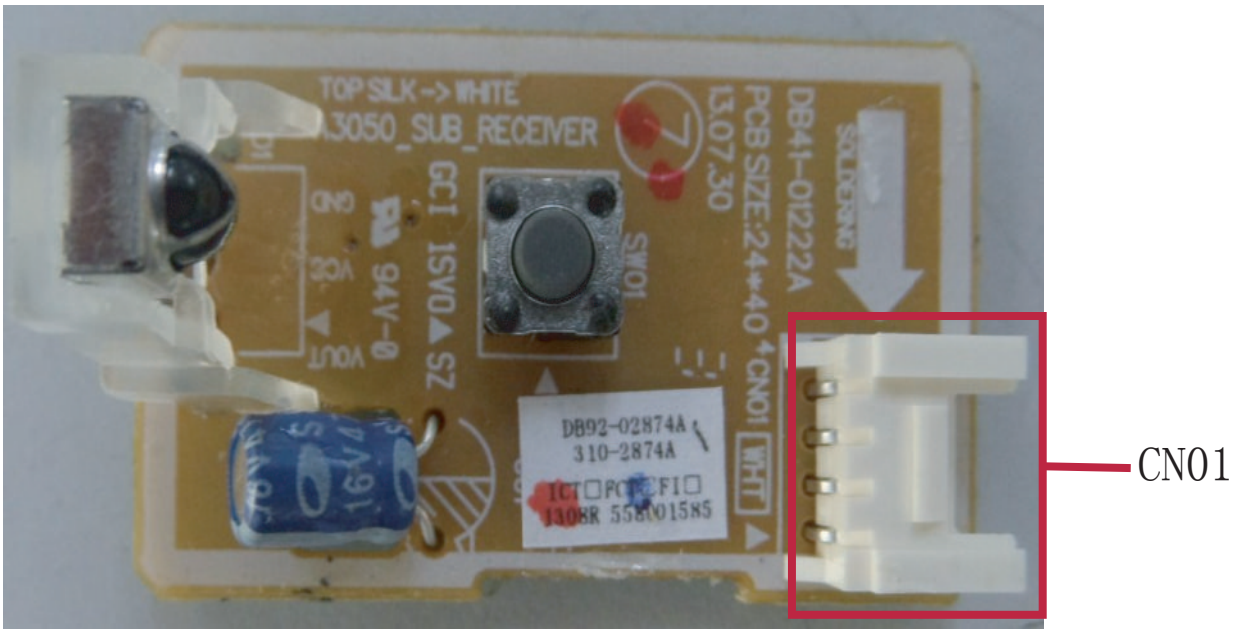


1. CN003-Earth Teminal
2. CN002-Power L Terminal
3. CN001-Power N Terminal
4. CN301-Control Terminal
5. CN040-Fan Connector
6. CN030-4Way Connector
7. CN551-Download Connector
8. CN251-SENSOR Connector
   #1~#2 : OLP SENSOR

8-3 ASSY CASE PCB-DISPLAY DB90-08115B



8-4 SUB PCB--RECEIVE-DB92-02874



CN01 - RECEIVE #1 : GND #2 : Vout #3 : Vcc #4 : S/W			

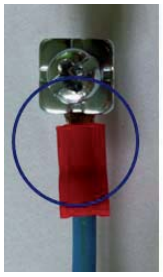
8-5 Wire connecting the indoor unit terminal blocks

1. Terminal press of Ring terminal shall be set facing up before connecting wire.

Is inverted

Terminalhasbeencut.

2. There shall be no empty space between Ring terminal and Screw after Clamp.
   If not, there exists a possibility of fire which can be caused by electric heat in the connecting part.



①

②

③

④

⑤

⑥

①, ② : Good
③ Bad : Ring terminal is connected reversely
④ Bad : Not clamped Screw
⑤ Bad : In the gap between Ring terminal & Screw
⑥ Bad : Unused Ring Terminal

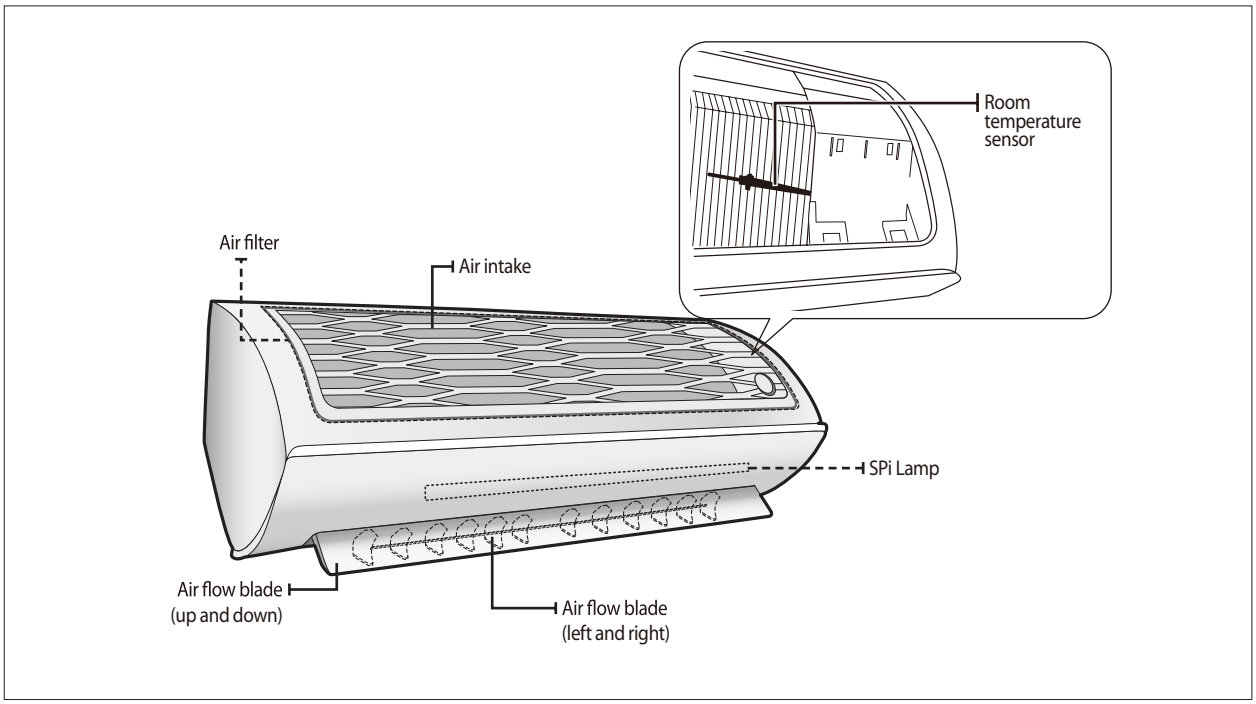
9. Operating Instructions

9-1 Name of Each Part

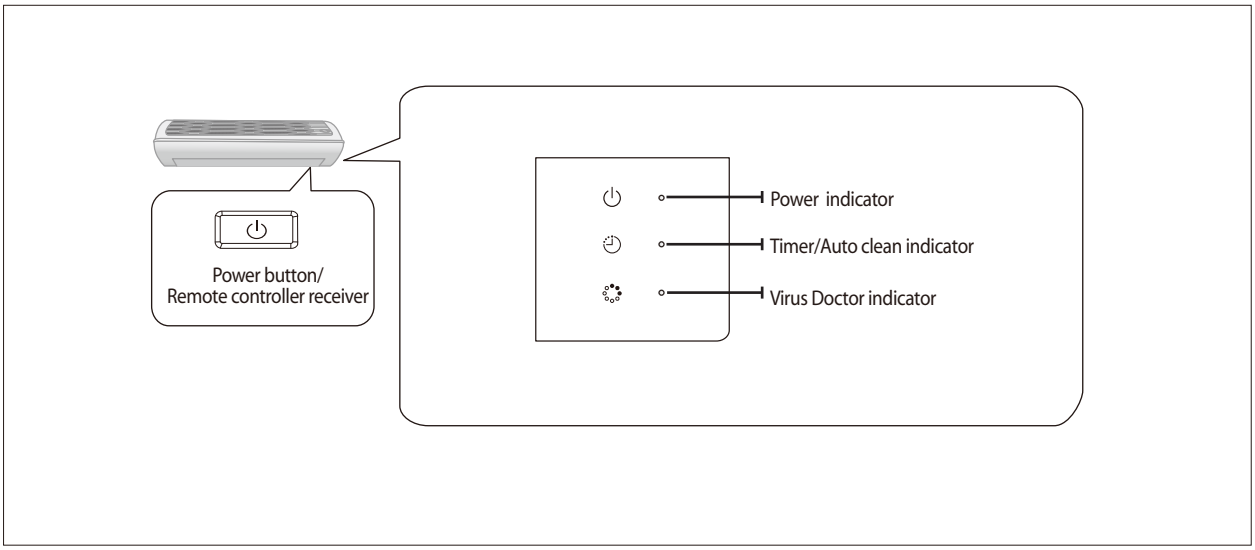
9-1-1 Indoor Unit

The design and shape are subject to change according to the model.

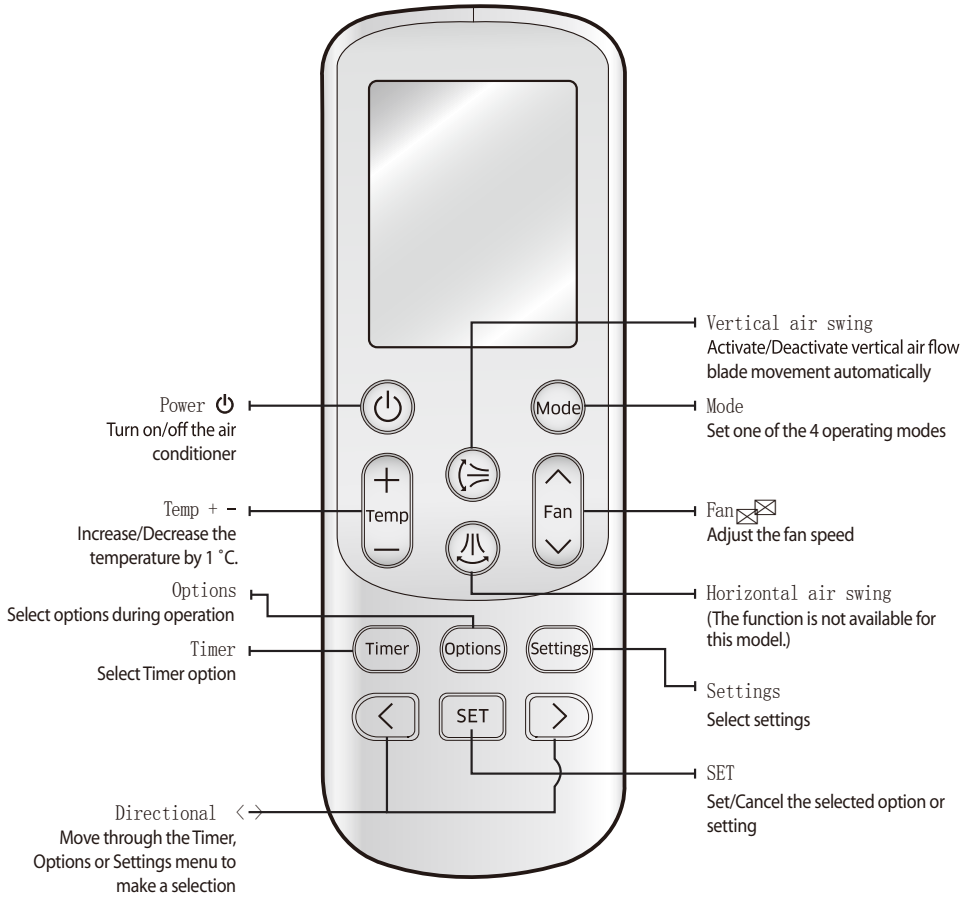
■ Main Parts



■ Display



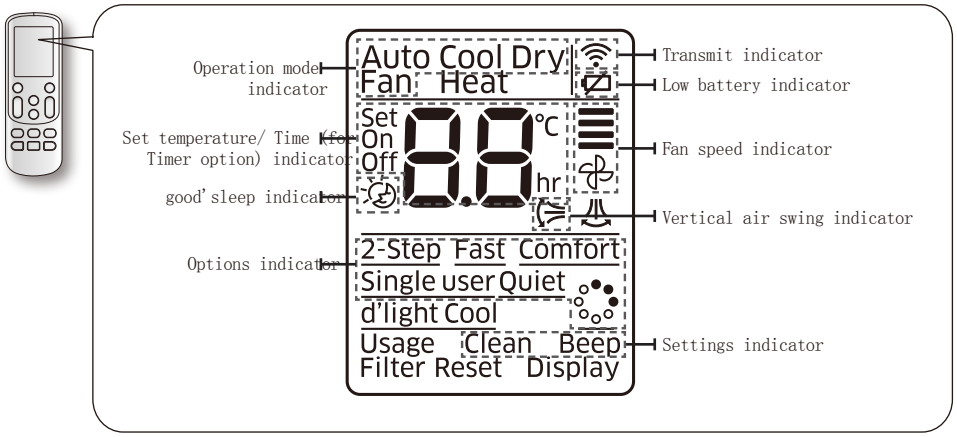
Remote controller buttons



NOTE

• In case you wish to cancel the options or settings that you have just set, press the Options or Settings button again, then the most recently selected item will blink and you may simply cancel it by pressing the SET button while selected item is blinking.

Remote controller display



CAUTION

- Make sure that the water does not get to the remote controller.
- Heat mode and the following function are displayed on the remote controller display but not supported in this model.
  - Horizontal air swing( ) / d'light Cool / Usage / Filter Reset / Display

Low Battery warning

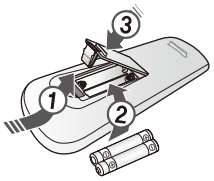
When the battery is exhausted, ( ) will be displayed in the remote controller display. When the icon appears, change the batteries. The remote controller requires two 1.5 V AAA type batteries.

Storing the remote controller

When you do not use the remote controller for long time, remove the batteries from the remote controller and store it.

Inserting the batteries

1. Push the lever as arrow indicates on the rear side of the remote controller and pull up.
2. Insert two AAA batteries.
   Check and match the "+" and "-" signs accordingly. Make sure you have inserted the batteries in correct position.
3. Close the cover by place it back to its original position.
   You should hear click sound when the cover is locked properly.



NOTE

- The signal may not be received properly if electronic flourescent lamps such as inverter flourescent lamps are operating in the same space.
- other electrical products operate by the remote controller, call your nearest contact center.

10. Troubleshooting

10-1 Items to be checked first

1. The input voltage should be rating voltage ±10% range.
   The air conditioner may not operate properly if the voltage is out of this range.

2. Is the line cable linking the indoor unit and the outdoor unit linked properly?
   The indoor unit and the outdoor unit shall be linked by 5 cables.
   Check the terminals if the indoor unit and outdoor unit are properly linked by the same number of cables.
   Otherwise the air conditioner may not operate properly.

3. When a problem occurs due to the contents illustrated in the table below it is a symptom not related to the malfunction of the air conditioner.

NO	Operation of air conditioner	Explanation
1	The OPERATION indication LED(BLUE) blinks when a power plug of the indoor unit is plugged in for first time.	It indicates power is on. The LED stops blinking if the operation ON/OFF button on the remote control unit is pushed.
2	In a COOL operation mode, the compressor does not operate at a room temperature higher than the setting temperature that the INDOOR FAN should operate. **[In case of heat pump model]** In a HEAT operation mode, the compressor does not operate at a room temperature lower than the setting temperature that indoor fan should operate.	In happens after a delay of 3 minutes when the compressor is reoperated. The same phenomenon occurs when a power is on. As a phenomenon that the compressor is reoperated after a delay of 3 minutes, the indoor fan is adjusted automatically with reference to a temperature of the air blew.
3	Fan speed setting is not allowed in DRY mode.	The speed of the indoor fan is set to LL in DRY mode. Fan speed is selected automatically in AUTO mode.
4	Compressor stops operation intermittently in Dry mode.	Compressor operation is controlled automatically in DRY mode depending on the room temperature and humidity.
5	Timer LED(ORANGE) of the indoor unit lights up and the air conditioner does not operate.	Timer is being activated and the unit is in ready mode. The unit operates normally if the timer operation is cancelled.
6	The compressor stops intermittently in a COOL mode or DRY mode, and fan speed of the indoor unit decreases.	The compressor stops intermittently or the fan speed of the indoor unit decreases to prevent inside/outside air frozen depending on the inside/outside air temperature.
7	**[In case of heat pump model]** Compressor of the outdoor unit is operating although it is turned off in a HEAT mode.	When the unit is turned off while de-ice is activated, the compressor continus operation for up to 9 minutes(maximum) until the deice is completed.
8	**[In case of heat pump model]** The compressor and indoor fan stop intermittenly in HEAT mode.	The compressor and indoor fan stop intermittently if room temperature exceeds a setting temperature in order to protect the compressor from overheated air in a HEAT mode.
9	**[In case of heat pump model]** Indoor fan and outdoor fan stop operation intermittently in a HEAT mode.	The compressor operates in a reverse cycle to remove exterior ice in a HEAT mode, and indoor fan and outdoor fan do not operate intermittently for within 20% of the total heater operation.

10-2 Communication Error

10-2-1 Communication Error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E101/E102	Communication error(Indoor<->outdoor)
◎	●	●		

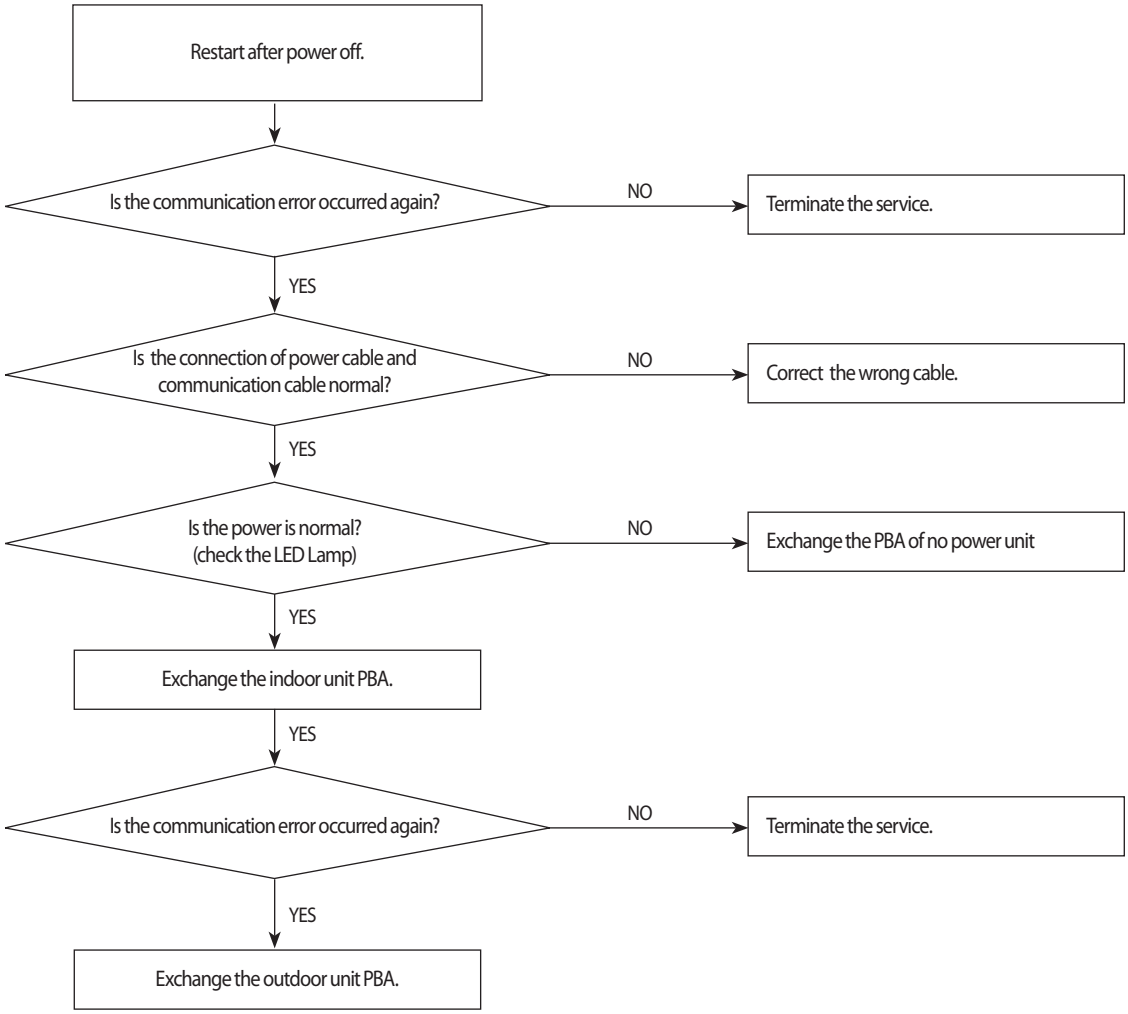
Outdoor display

◎	●	●	1min. Time out Comm.
○	○	●	Abnormal Communication
○	●	●	

● LED ON ◎ LED BLINKING ○ LED OFF

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



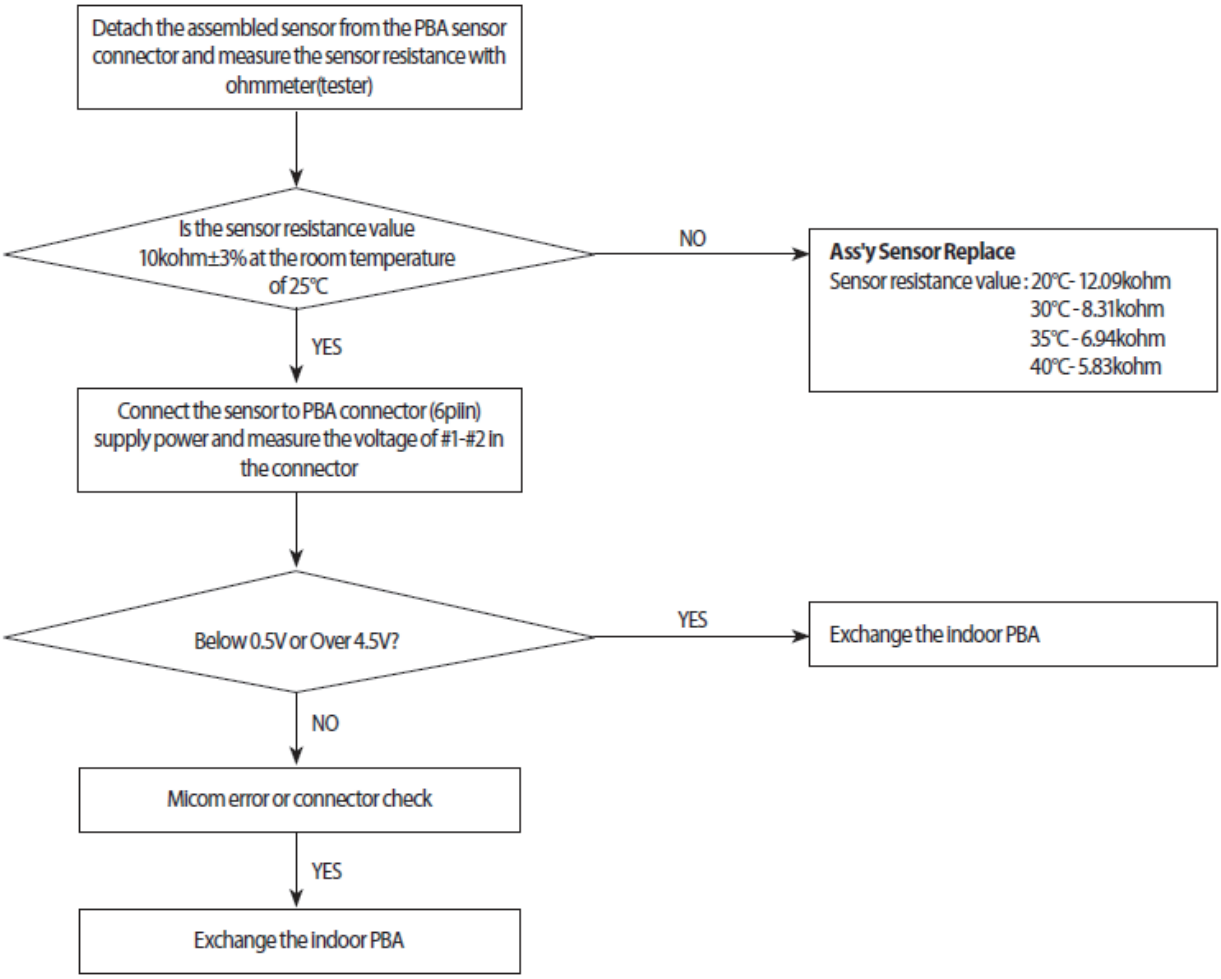
10-2-2 Indoor temperature sensor Error

Indoor display

7-SEG	LED1	LED2	LED3	DESCRIPTION
	OPERATION	TIMER	OPTION	
E121	○	◑	○	ROOM TH sensor error
● LED ON	○ LED OFF	◑ LED BLINKING		

1. Checklist :
   1) Is the indoor units temperature sensor connected correctly?
   2) Is the sensor placed correctly?
   3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?

2. Troubleshooting procedure



10-2-3 Indoor Eva-in temperature sensor error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED 2	LED 3	E122, E123	Indoor MID, Indoor IN PIPE-TH sensor error
◎	◎	○		

● LED ON ◎ LED BLINKING ○ LED OFF

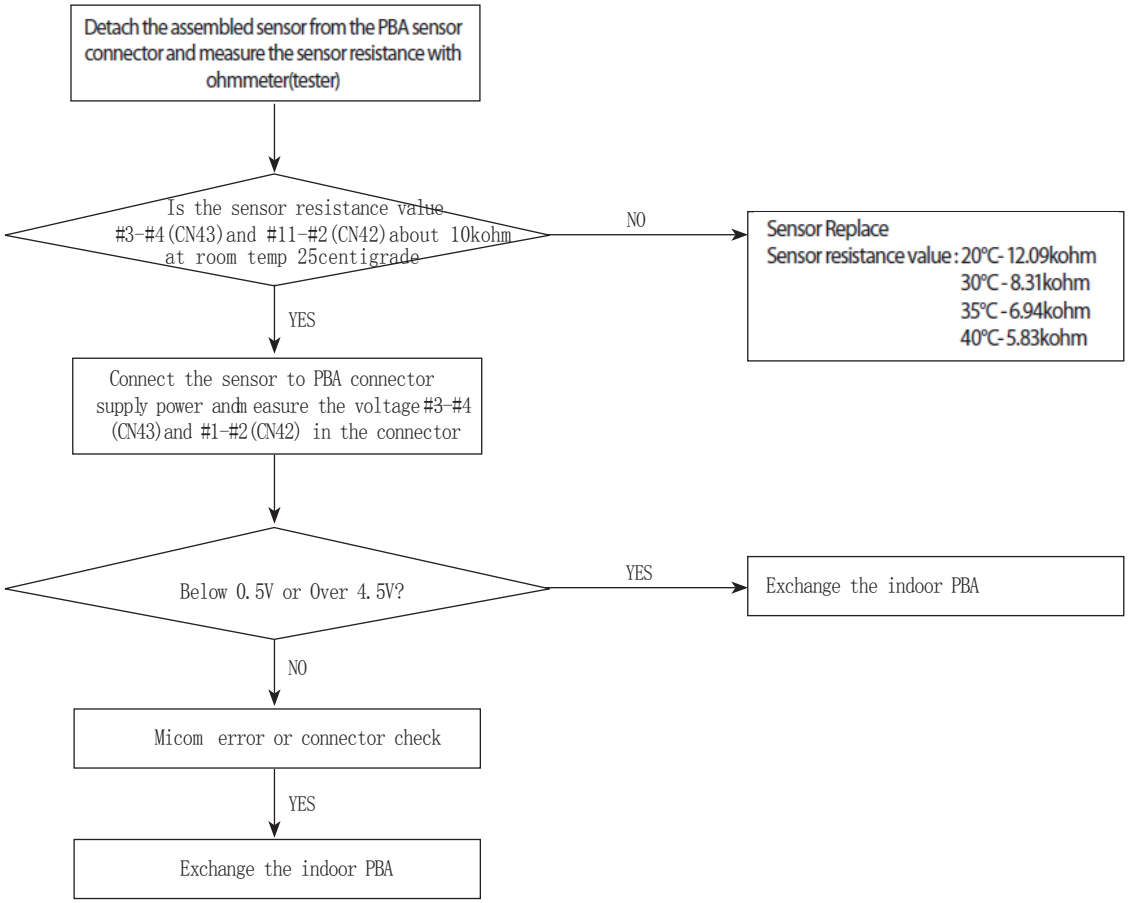
1. Checklist :

   1) Is the indoor units temperature sensor connected correctly?

   2) Is the sensor placed correctly?

   3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?

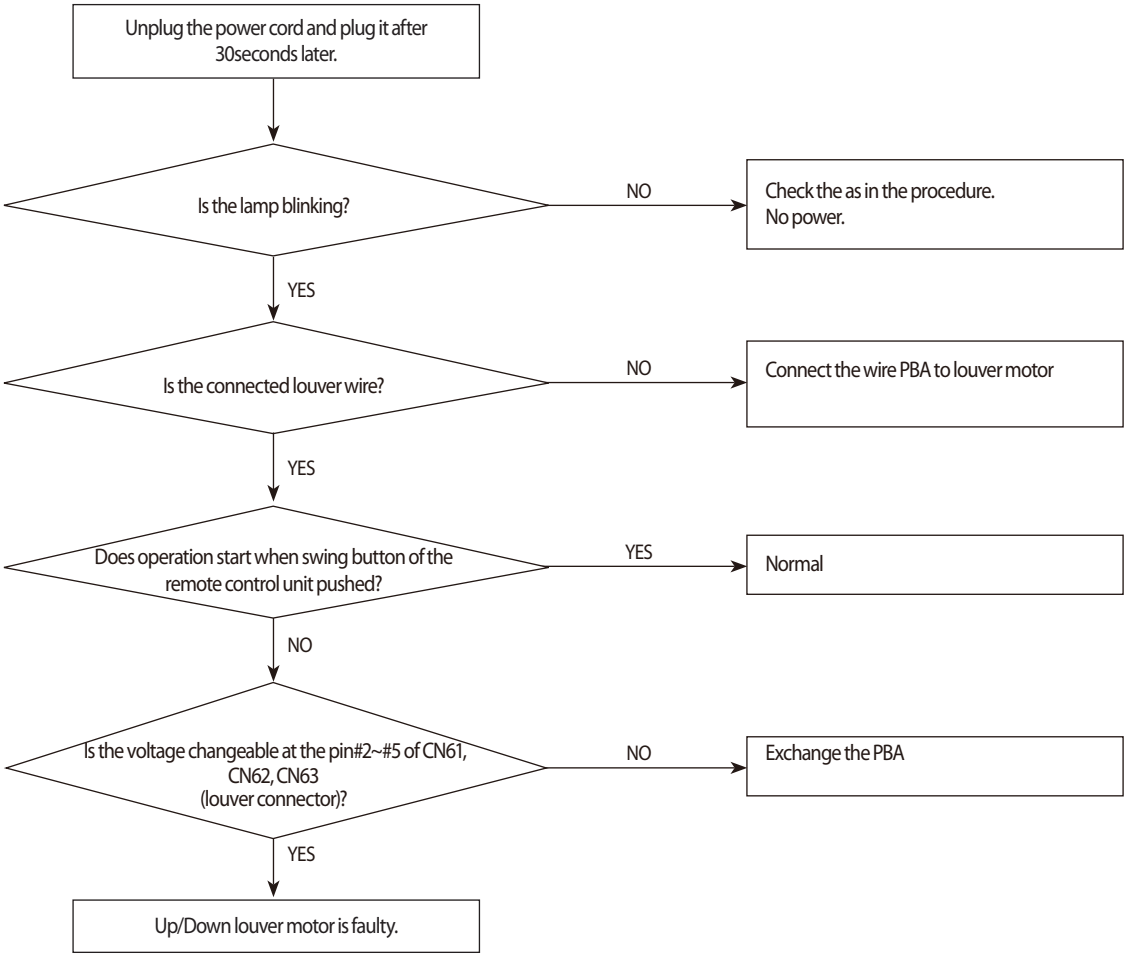
2. Troubleshooting procedure



10-2-4 When the Up/Down, Left/Right, Grill louver motor does not operate (Initial Diagnosis) (Not displayed)

1. Checklist :
   1) Is the input power voltage normal?
   2) Is the Up/Down louver motor properly connected with the connector? (CN61, CN62, CN63)

2. Troubleshooting procedure



10-2-5 Indoor fan motor speed detecting error (AC MOTOR FAN)

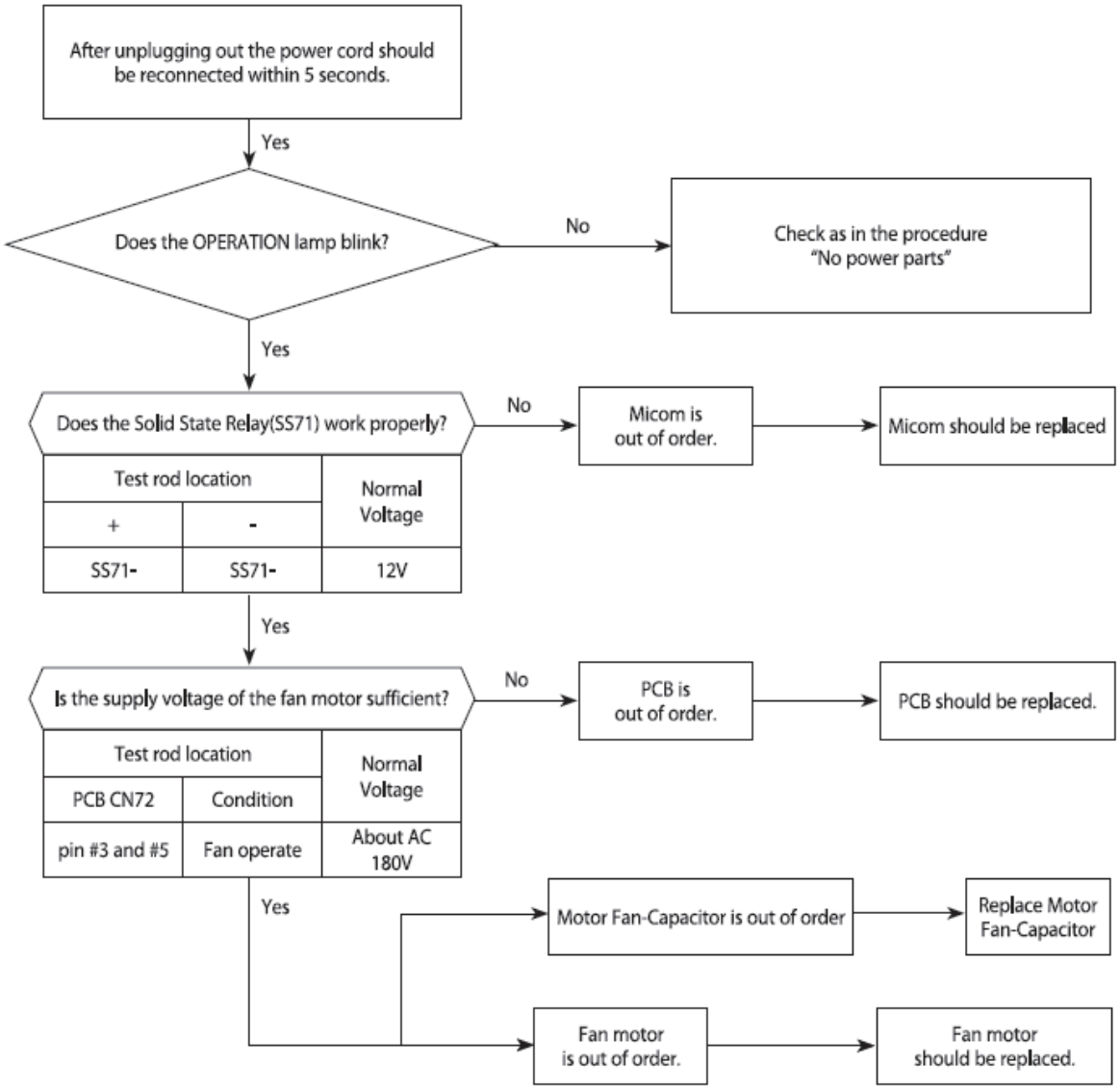
Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E154	Indoor fan error
○	○	◎		

● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is the indoor unit fan motor properly connected with the connector (CN72)?
   2) Is the AC voltage correct?
   3) Is HALL IC in indoor fan motor properly connected with the connector (CN44)?
   4) Is the running capacitor (CR71) properly connected with PCB board?

2. Troubleshooting procedure



10-2-6 Outdoor temperature sensor error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E221	Outdoor temperature sensor error
◎	○	◎		

Outdoor display

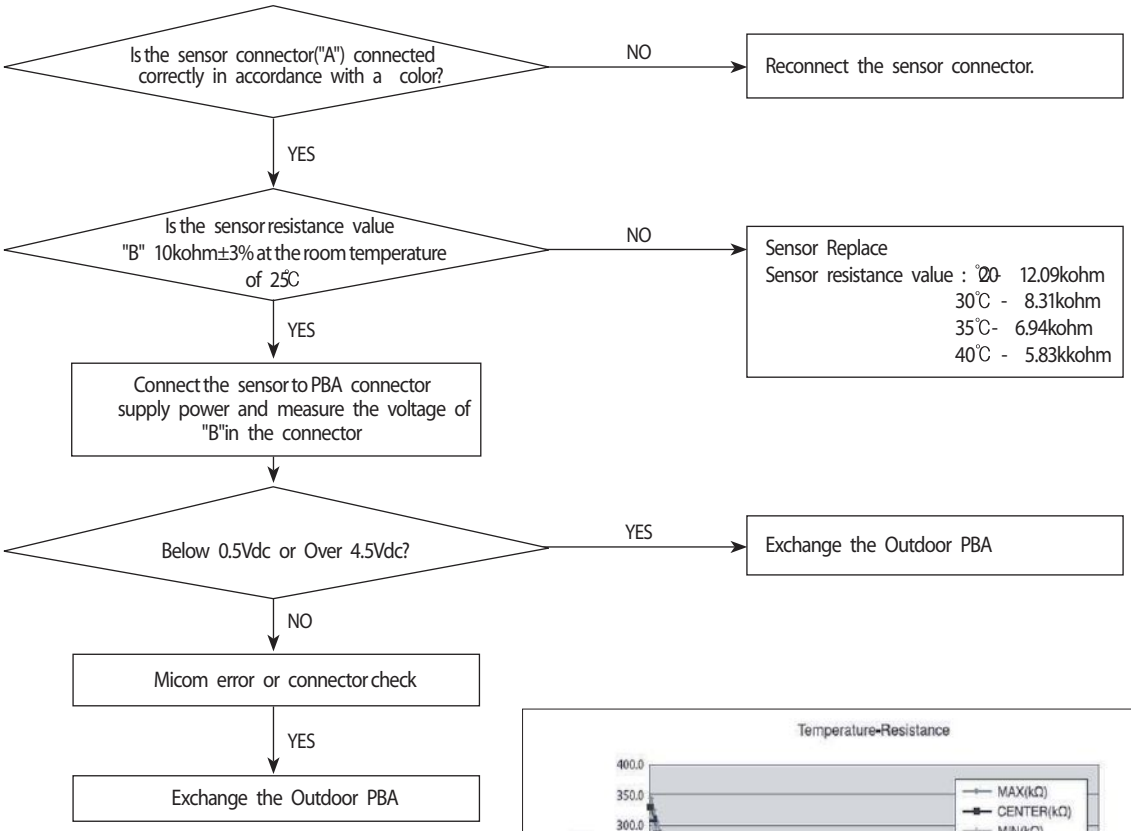
◎	○	◎	Outdoor temperature sensor error

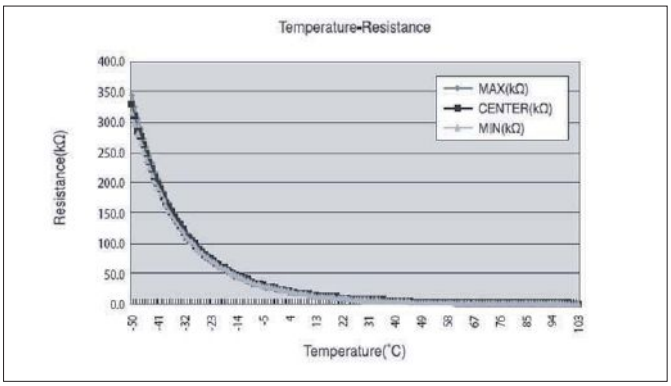
● LED ON ◎ LED BLINKING ○ LED OFF

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?

MODEL	"A"	"B"
ALL	CN251	CN251 #1-#2

2. Troubleshooting procedure





10-2-7 Outdoor Cond temperature sensor error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E231	Outdoor Cond temperature sensor error
◎	○	◎		

Outdoor display

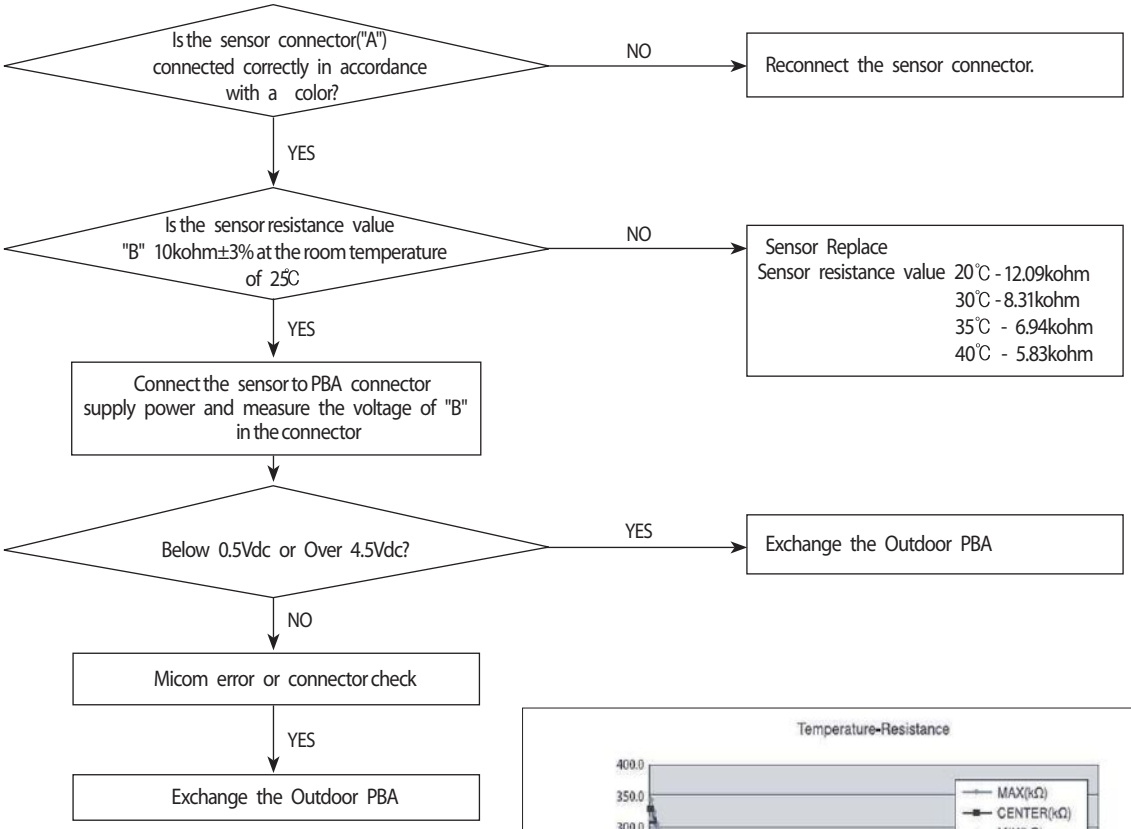
◎	●	◎	Outdoor Cond temperature sensor error

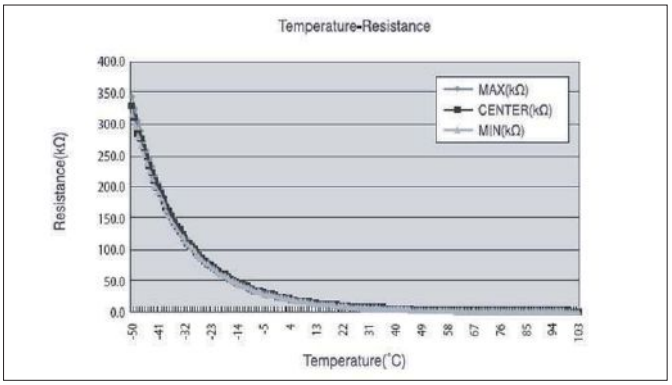
● LED ON ◎ LED BLINKING ○ LED OFF

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?

MODEL	"A"	"B"
ALL CN251	CN251 #5-#6	

2. Troubleshooting procedure





10-2-8 Outdoor Discharge temperature sensor error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E251	Outdoor Discharge temperature sensor error
◎	○	◎		

Outdoor display

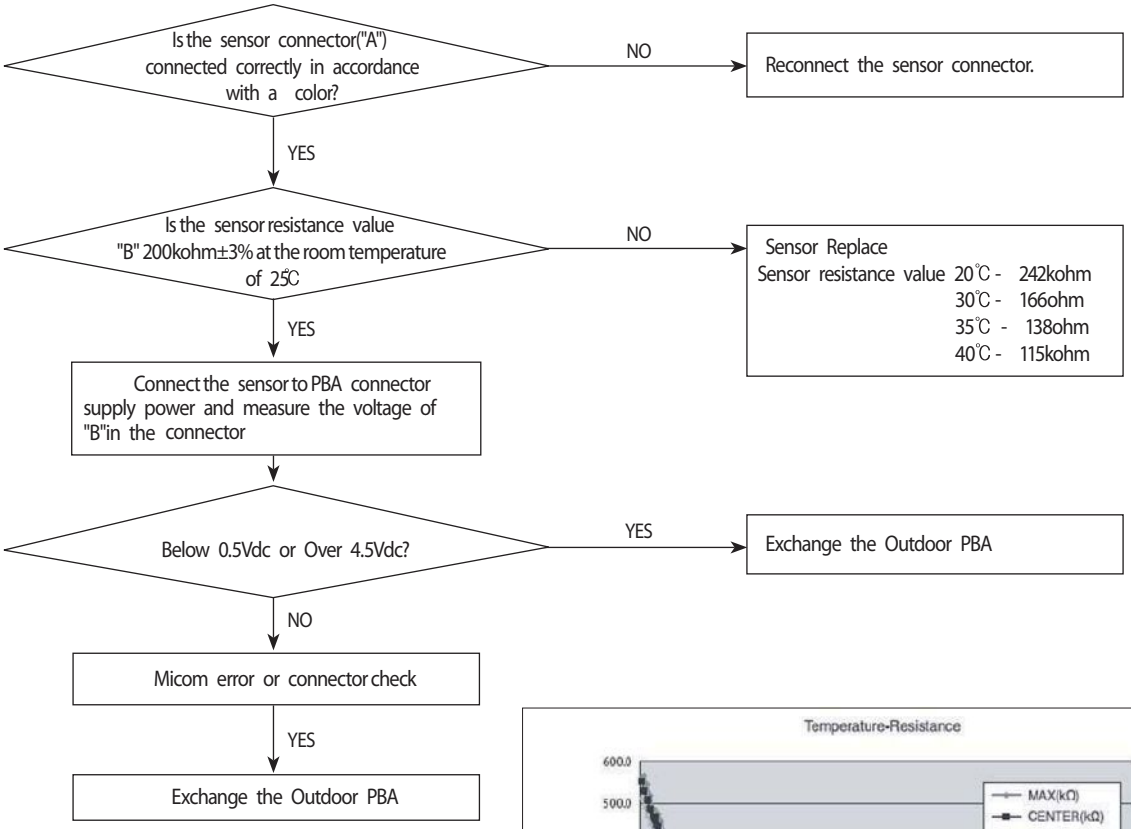
◎	◎	○	Outdoor Discharge temperature sensor error

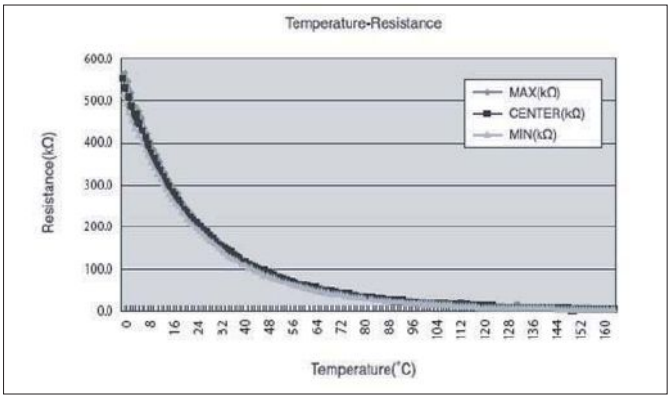
● LED ON ◎ LED BLINKING ○ LED OFF

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?

MODEL	"A"	"B"
ALL CN251	CN251 #3-#4	

2. Troubleshooting procedure





10-2-9 Outdoor Discharge over temperature error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E416	Outdoor Discharge ove temperature error
◎	○	◎		

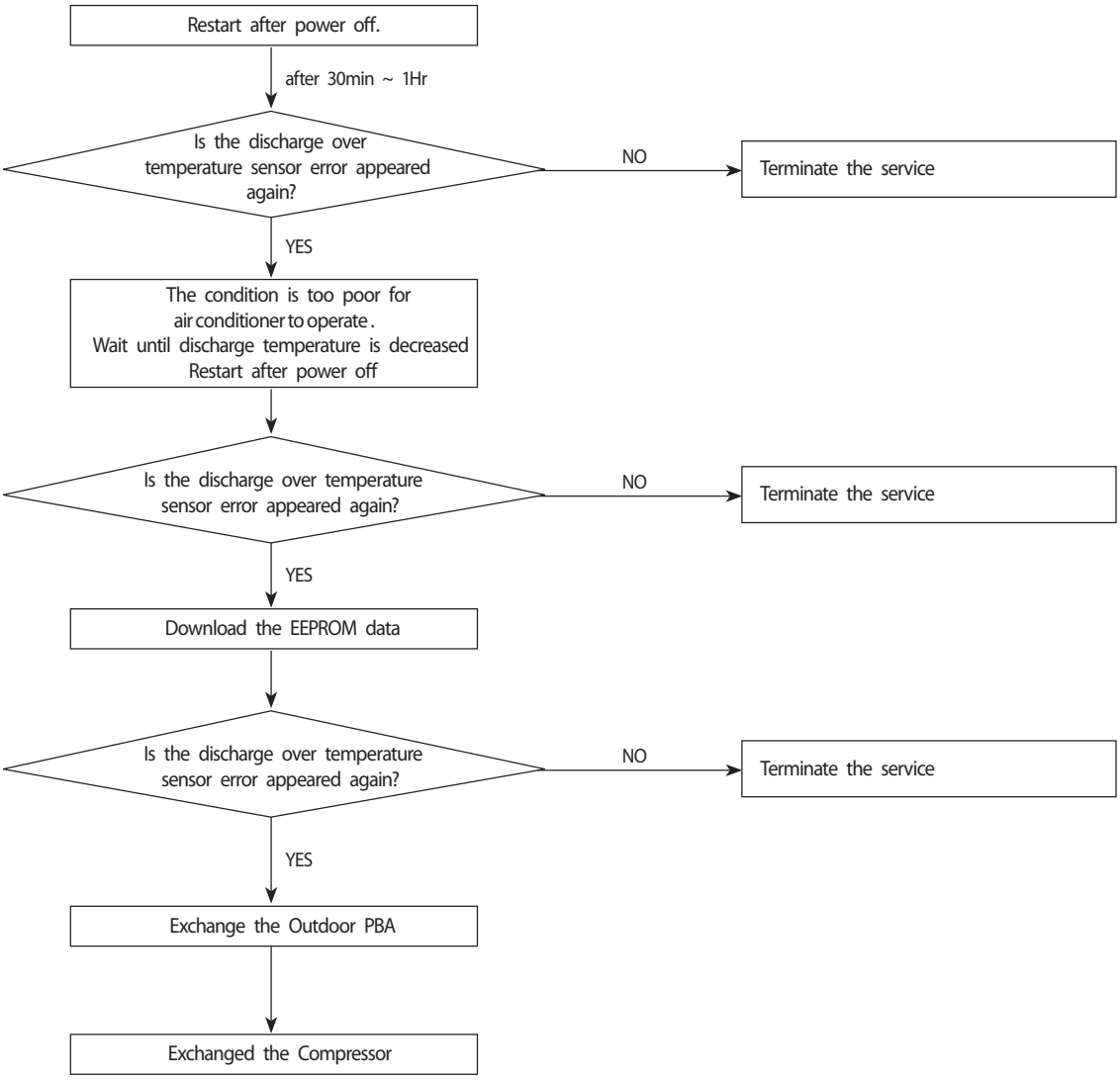
Outdoor display

◎	◎	●	Outdoor Discharge over temperature error

● LED ON ◎ LED BLINKING ○ LED OFF

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

2. Troubleshooting procedure



10-2-10 Outdoor Fan motor error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E458	Outdoor fan error
◎	○	◎		

Outdoor display

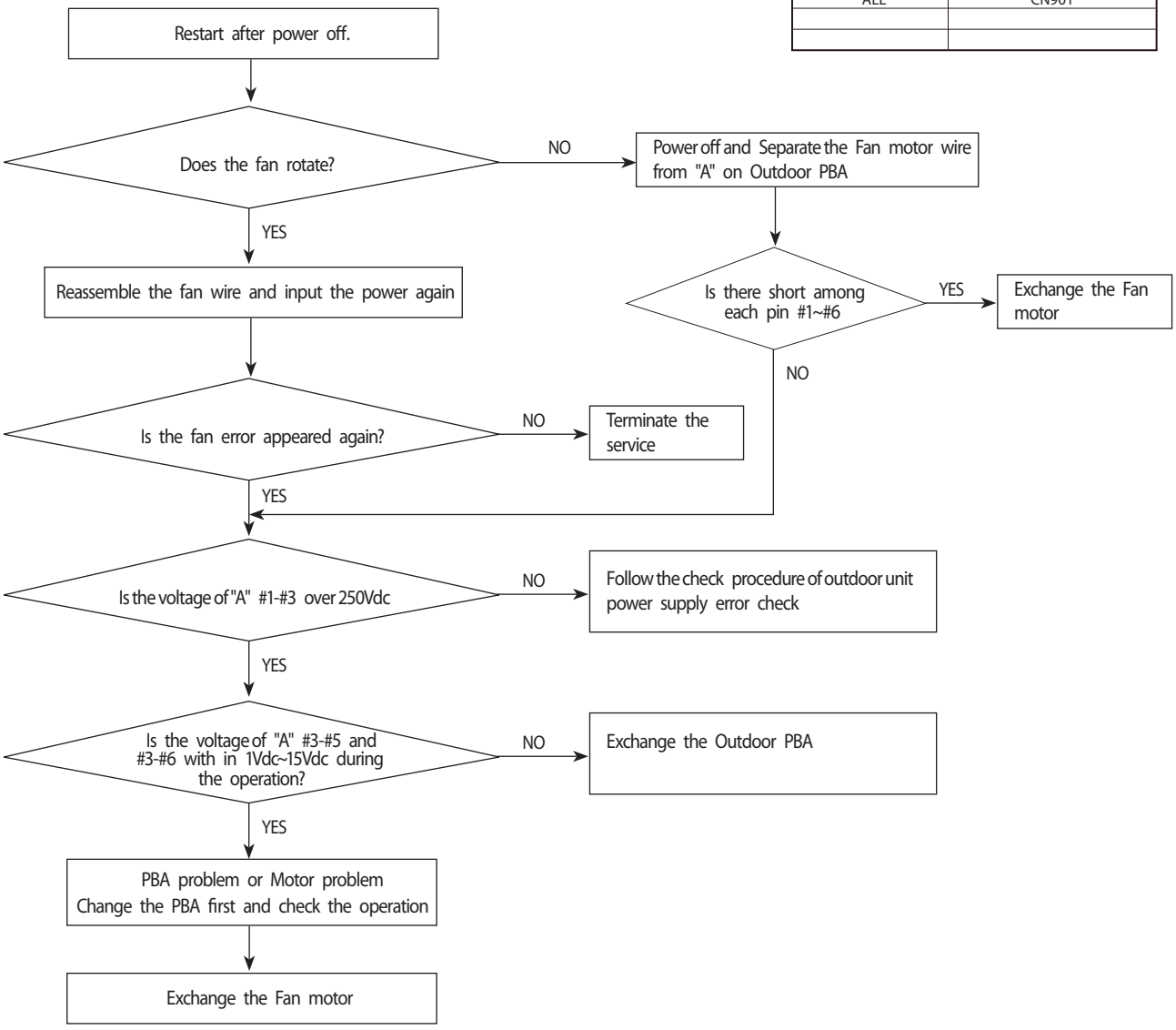
●	○	○	Outdoor fan error

● LED ON ◎ LED BLINKING ○ LED OFF

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 non-assembly in the terminal of motor wire connector?
   4) Is there no obstacle at the surrounding of motor and propeller?

2. Troubleshooting procedure

MODEL	"A"
ALL	CN901



10-2-11 Compressor starting error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E461	Comp starting error
◎	○	◎		

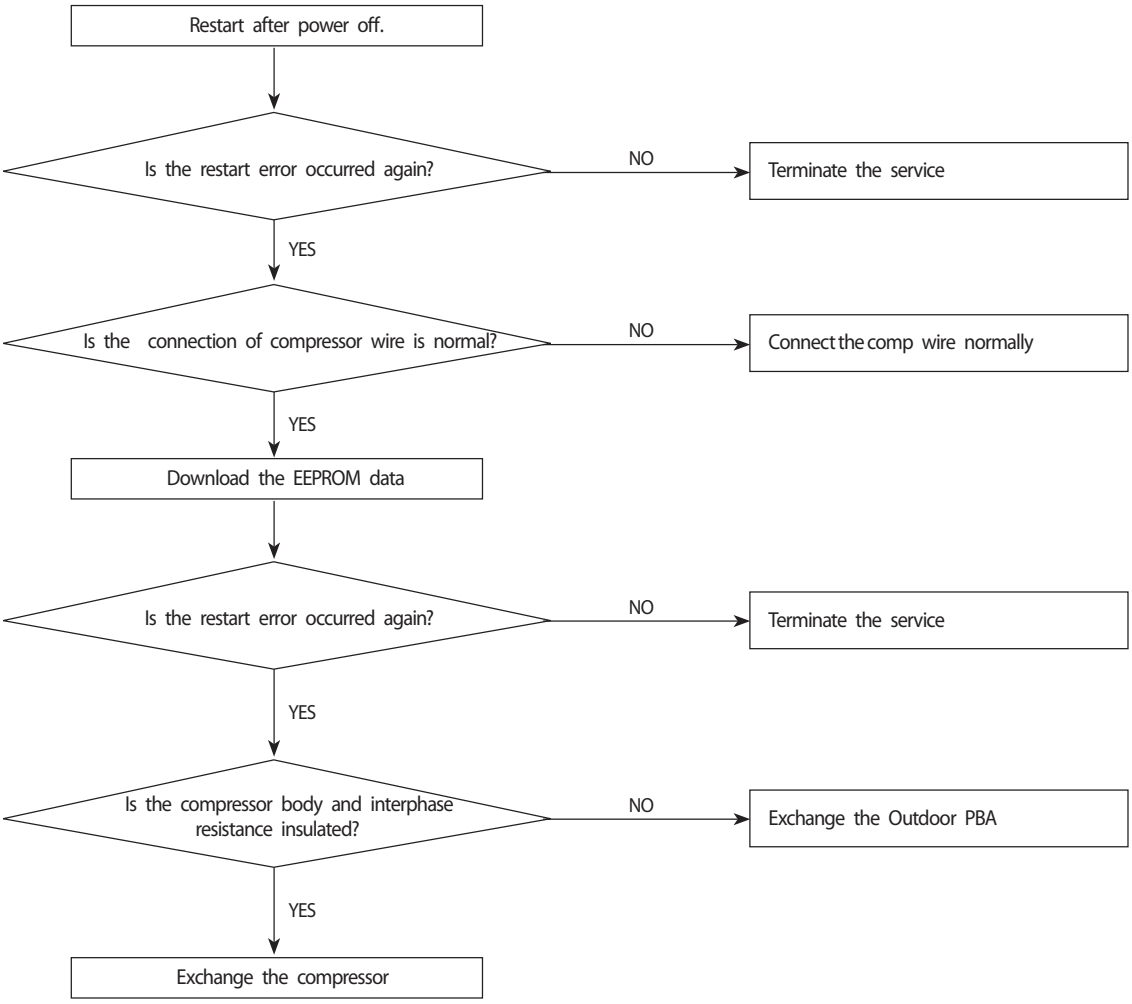
Outdoor display

○	◎	○	Comp starting error

● LED ON ◎ LED BLINKING ○ LED OFF

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



10-2-12 Compressor wire missing error/rotation error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E467	Compressor wire missing errorr/rotation error
◎	○	◎		

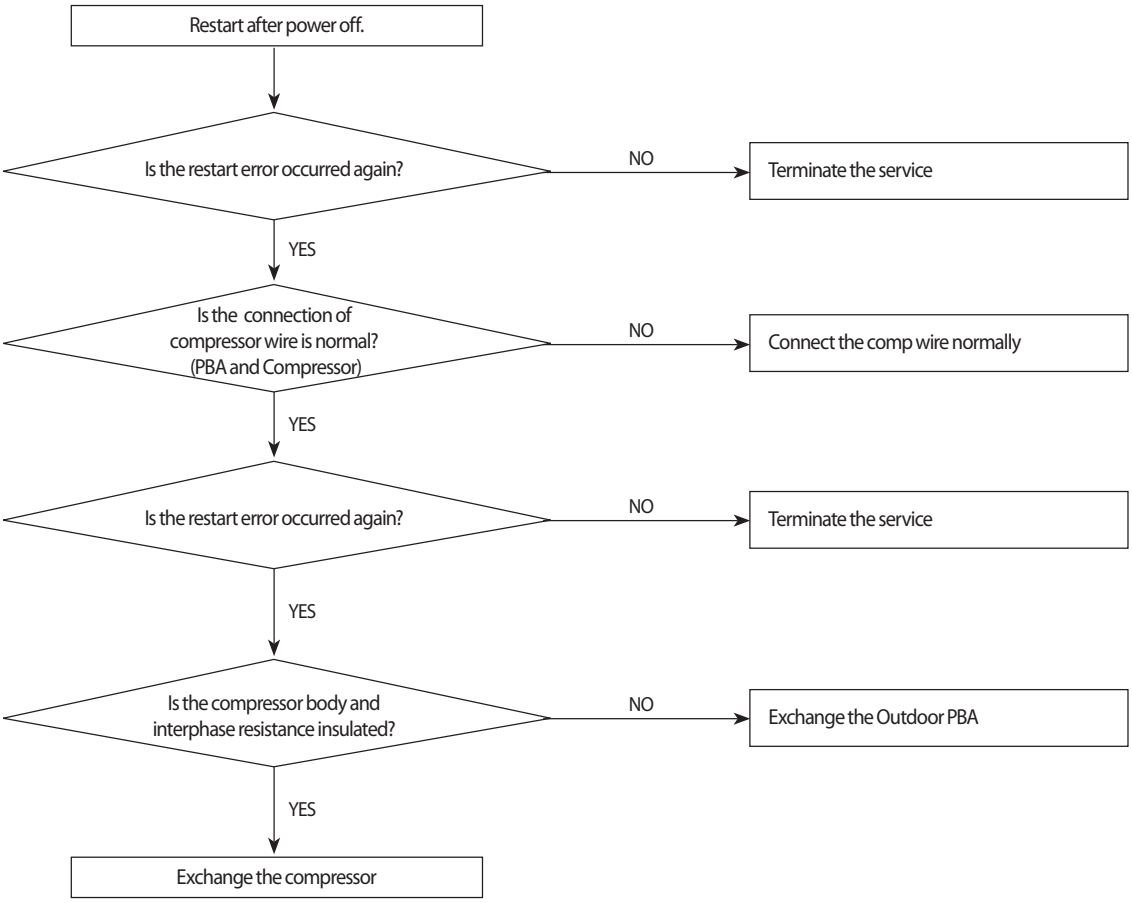
Outdoor display

●	○	●	Compressor wire missing error/rotation error

● LED ON ◎ LED BLINKING ○ LED OFF

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



10-2-13 O.C(Over Current) error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E464	IPM Over Current(O.C) Error
◎	○	◎		

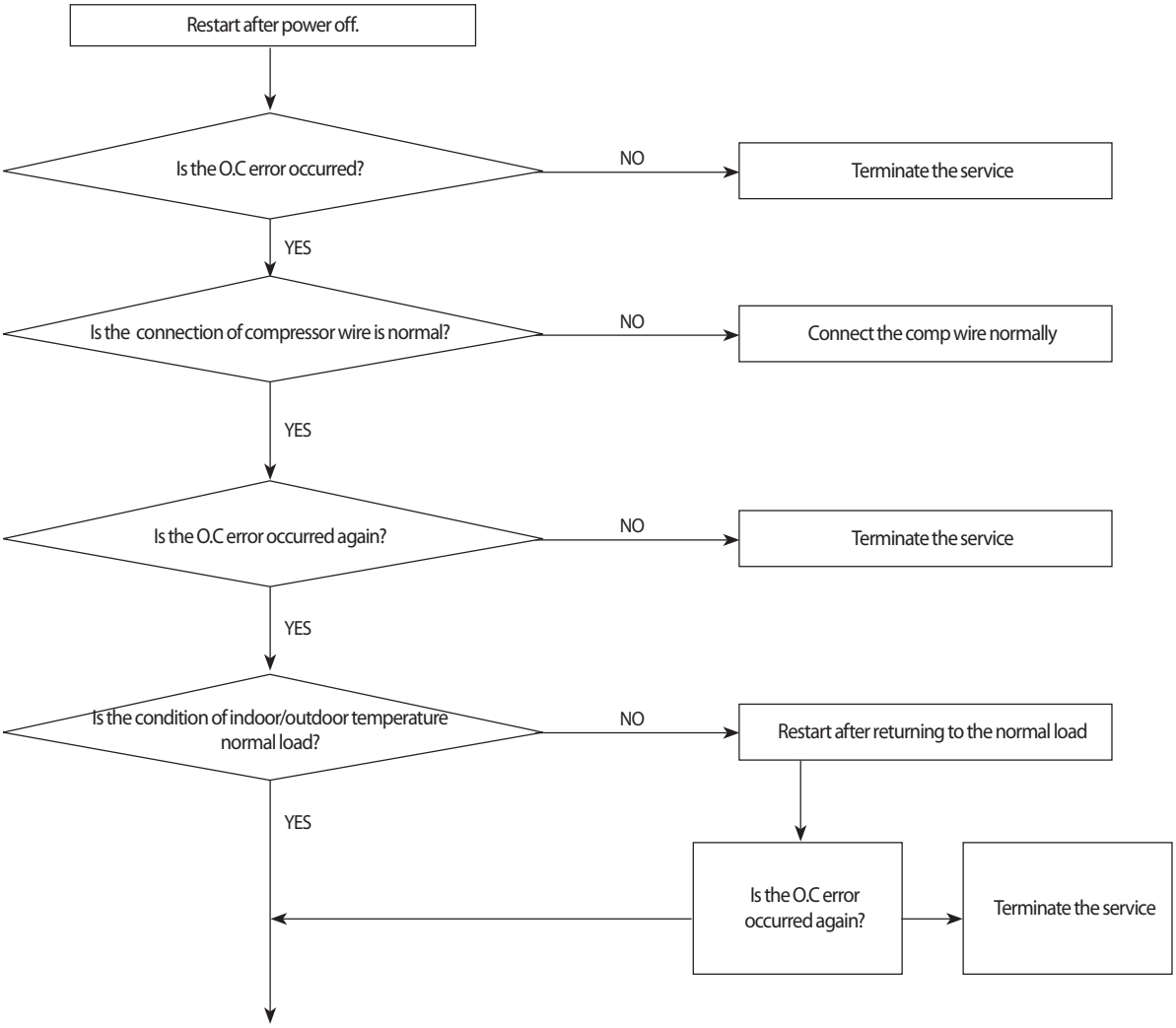
Outdoor display

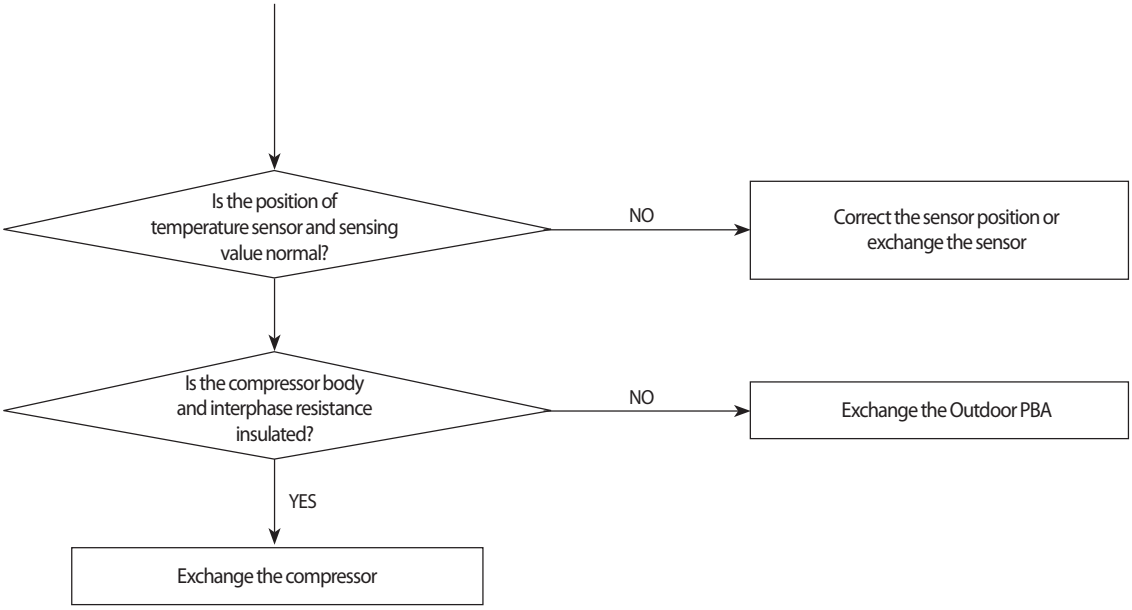
○	○	◎	IPM Over Current(O.C) Error

● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is the IPM Shunt 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




Is the position of temperature sensor and sensing value normal?
NO
Correct the sensor position or exchange the sensor
Is the compressor body and interphase resistance insulated?
NO
Exchange the Outdoor PBA
YES
Exchange the compressor

10-2-14 DC_link voltage sensor error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E469	DC_link voltage sensor error
◎	○	◎		

Outdoor display

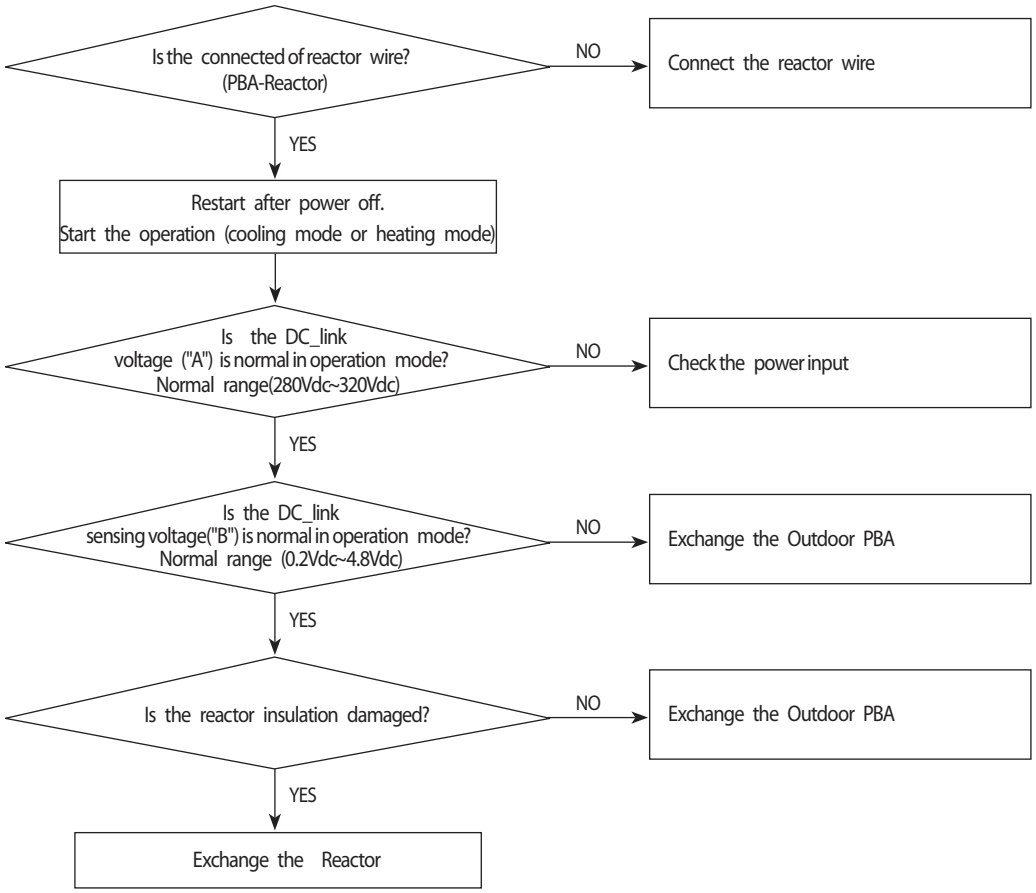
●	◎	◎	DC_link voltage sensor error

● LED ON ◎ LED BLINKING ○ LED OFF

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("A") assembled in accordance the specification? (Outdoor PBA)
   4) Is the DC_link resistor("B") value is normal? (Outdoor PBA)

2. Troubleshooting procedure

MODEL	"A"	"B"
DB92-02866A	CE101,CE102,CE103	R101
DB92-02867A	CE053,CE054,CE055,CE056	R062



10-2-15 DC_link voltage sensor error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E488	AC Input Voltage Sensor Error
◎	○	◎		

Outdoor display

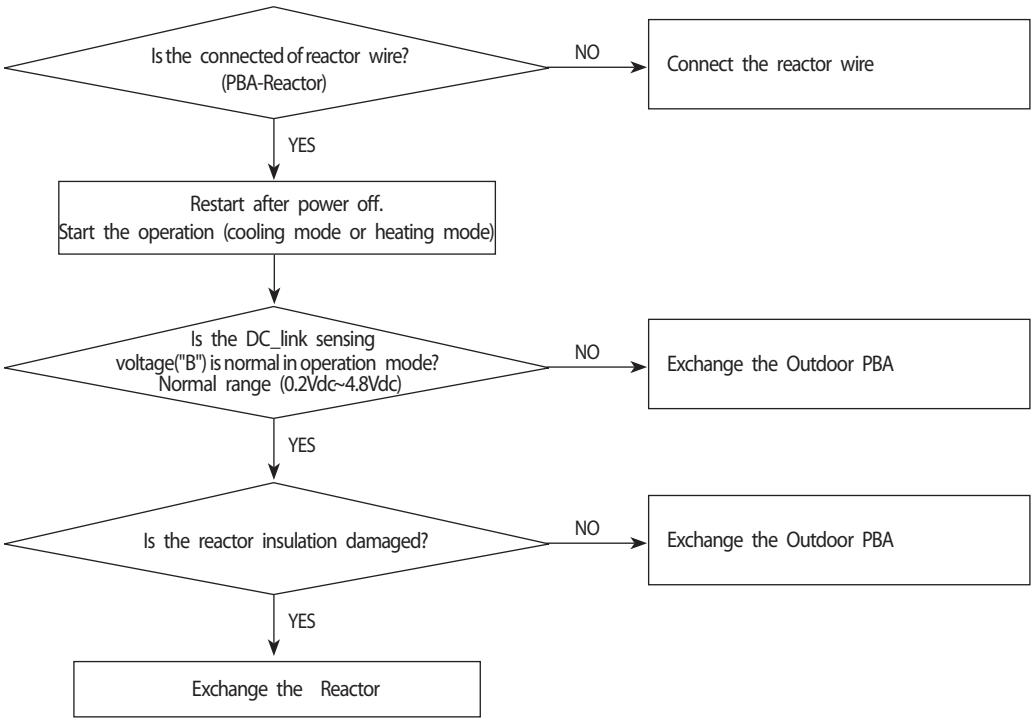
●	◎	◎	AC Input Voltage Sensor Error

● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is the input voltage of outdoor terminal block is normal?
   2) Is the reactor wire connected?
   3) Is the PFC resistor("A") value is normal? (Outdoor PBA)

2. Troubleshooting procedure

MODEL	"A"	"B"
DB92-02866A/2867A	R105,R106,R107,R108	R105



10-2-16 DC_link voltage under/over error, H/W DC-link Over voltage protection error/PFC over load

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E466	DC-Link voltage under/over error
◎	○	◎	E483	Over Voltage Protection Error
			E484	PFC over load

Outdoor display

○	●	◎	DC-Link voltage under/over error
			PFC over load
			Over Voltage Protection Erro

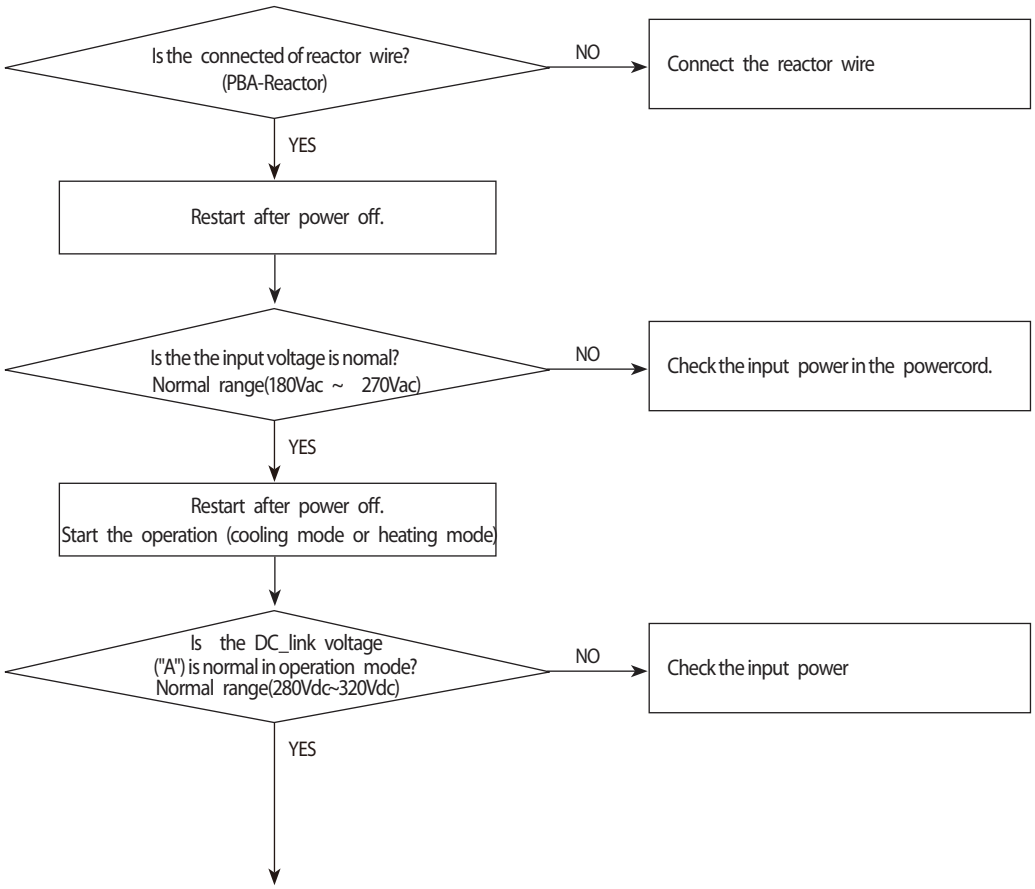
● LED ON ◎ LED BLINKING ○ LED OFF

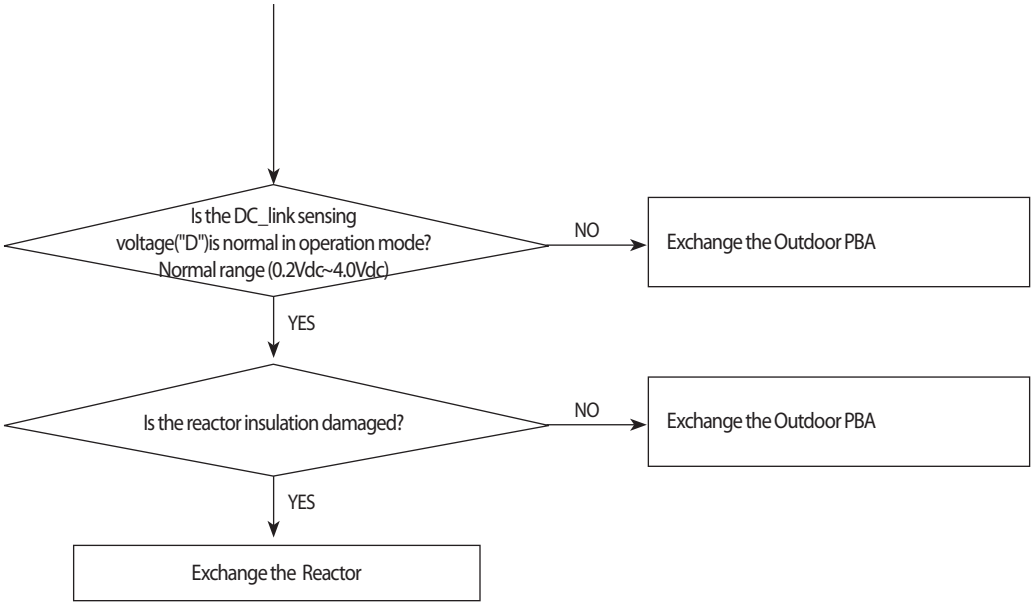
1. Checklist :
   1) Is the input voltage of outdoor terminal block is normal?
   2) Is the input voltage is higher than 300Vac?
   3) Is the reactor wire connected?
   4) Is the DC_link capacitor(A") assembled in accordance the specification? (Outdoor PBA)
   5) Is the DC_link resistor("B") value is normal? (Outdoor PBA)
   6) Is the PFC resistor("C") value is normal? (Outdoor PBA)

MODEL	"A"	"B"
DB92-02866A	CE101,CE102,CE103	R101,R102,R103,R104
DB92-02867A	CE053,CE054,CE055,CE056	R059,R060,R061,R062

MODEL	"C"	"D"
DB92-02866A/2867A	R105,R106,R107,R108	R105

2. Troubleshooting procedure




Is the DC_link sensing
voltage("D")is normal in operation mode?
Normal range (0.2Vdc~4.0Vdc)
NO
Exchange the Outdoor PBA
YES
Is the reactor insulation damaged?
NO
Exchange the Outdoor PBA
YES
Exchange the Reactor

10-2-17 I_trip error, PFC over current

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3	E462	AC Input I_Limit Trip Error
◎	○	◎		

Outdoor display

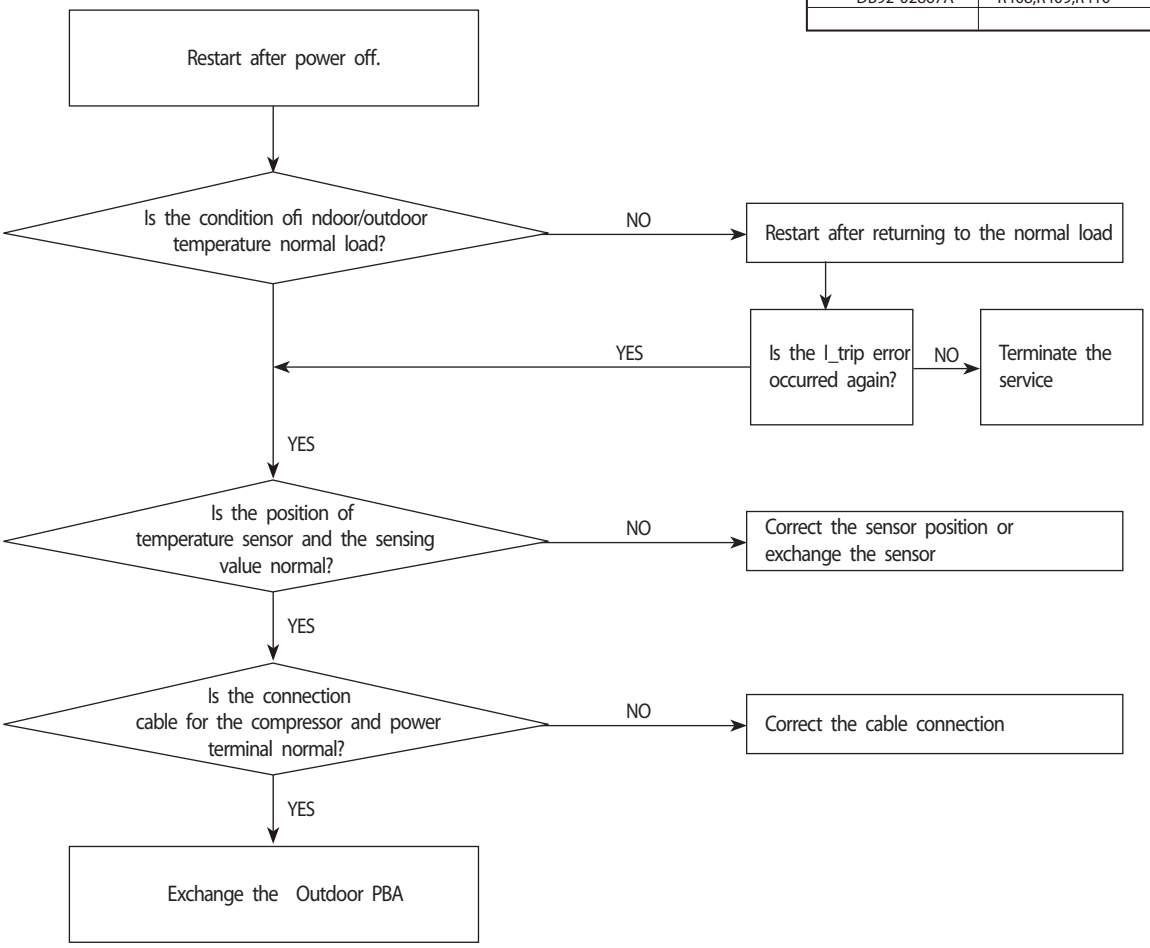
●	◎	●	AC Input I_Limit Trip Error

● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is the PFC Shunt("A") 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

MODEL	"A"
DB92-02866A	R410,R411,R412
DB92-02867A	R408,R409,R410



10-2-18 Current sensor error/Input current sensor error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E462	AC Input I_Limit Trip Error

Outdoor display

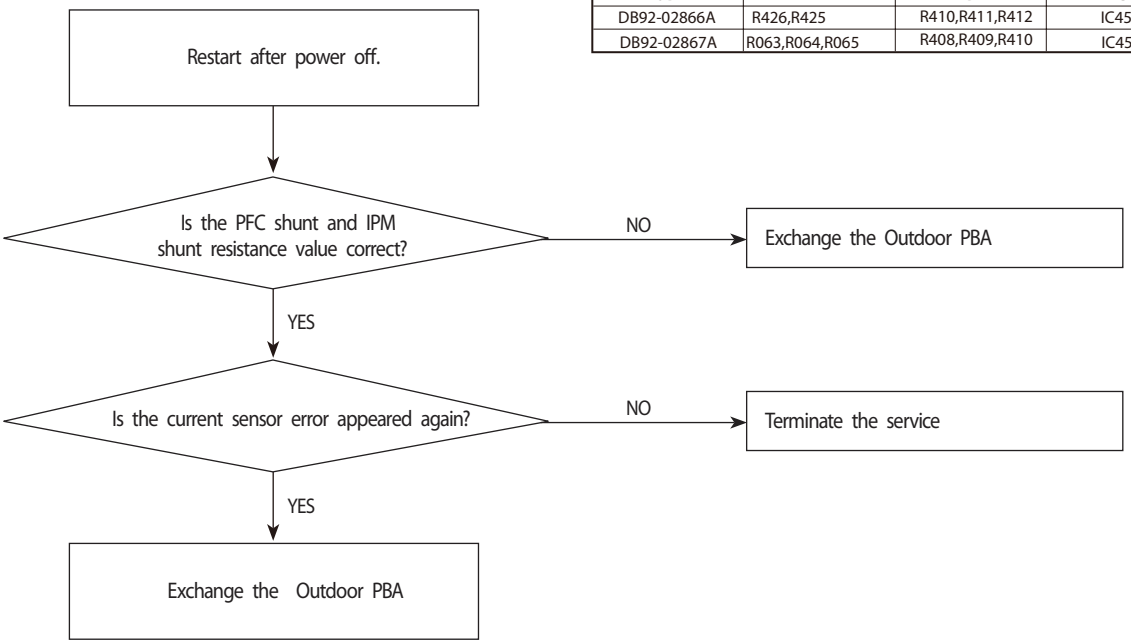
◎	◎	●	Current sensor error
			Input current sensor error

● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is the PFC Shunt("A") resistance value correct? Check the resistor is opened
   2) Is the IPM Shunt("B") resistance value correct? Check the resistor is opened
   3) Is there no short or open around "C"?

2. Troubleshooting procedure

MODEL	"A"	"B"	"C"
DB92-02866A	R426,R425	R410,R411,R412	IC451
DB92-02867A	R063,R064,R065	R408,R409,R410	IC451



10-2-19 Heatsink sensor error/Heatsink over heat

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E474	Heatsink sensor error
			E500	Heatsink Over Temperature Error

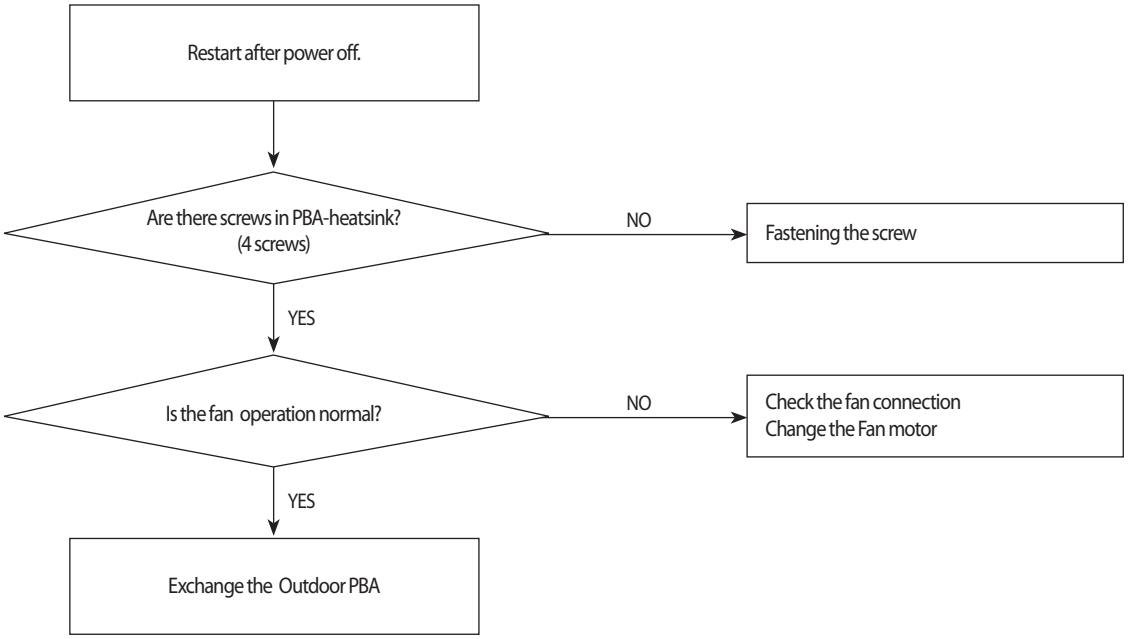
Outdoor display

◎	◎	●	Heatsink sensor error
◎	●	○	Heatsink Over Temperature Error

● LED ON ◎ LED BLINKING ○ LED OFF

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



10-2-20 Comp Vlimit error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E465	Comp V_limit/I_limit Error

Outdoor display

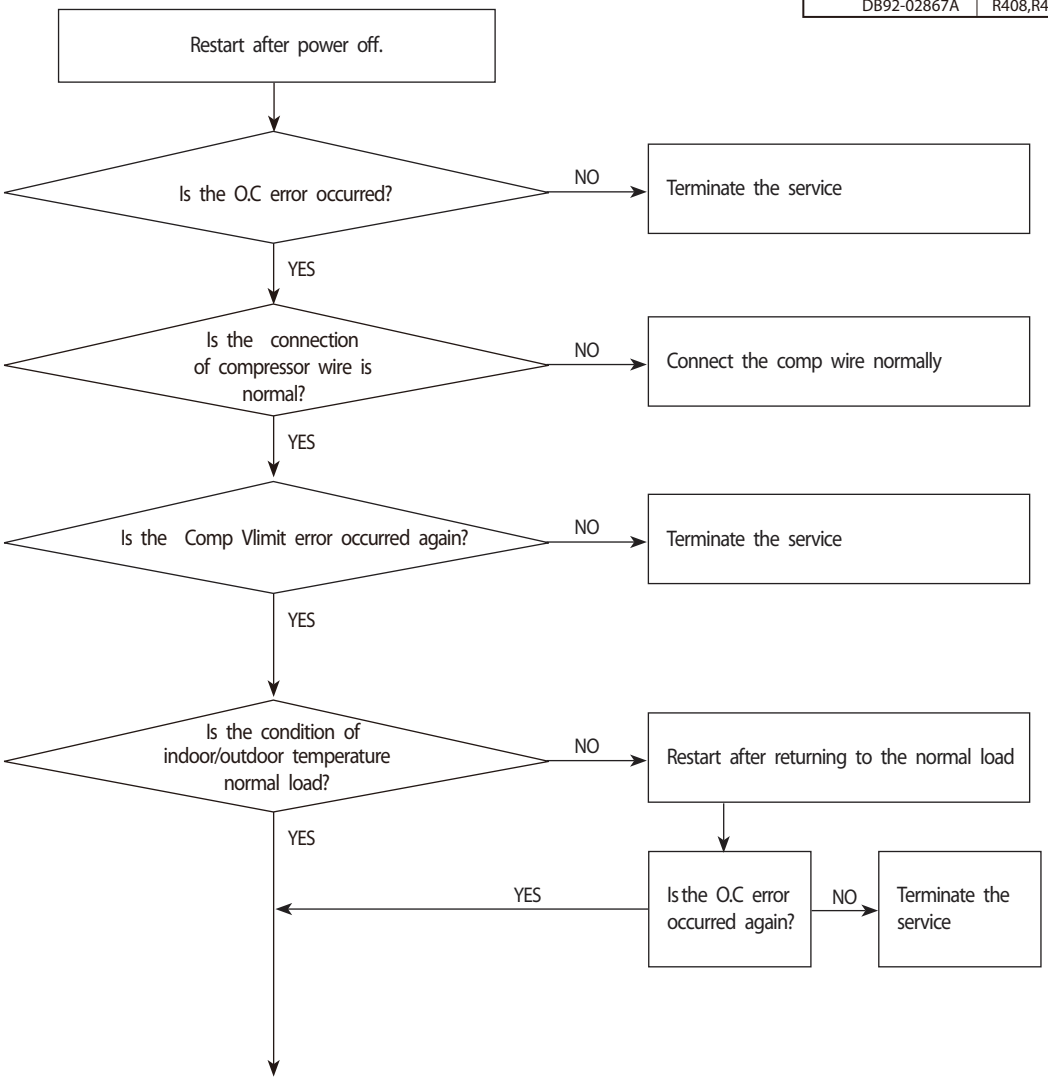
◎	●	○	Comp V_limit/I_limit Error

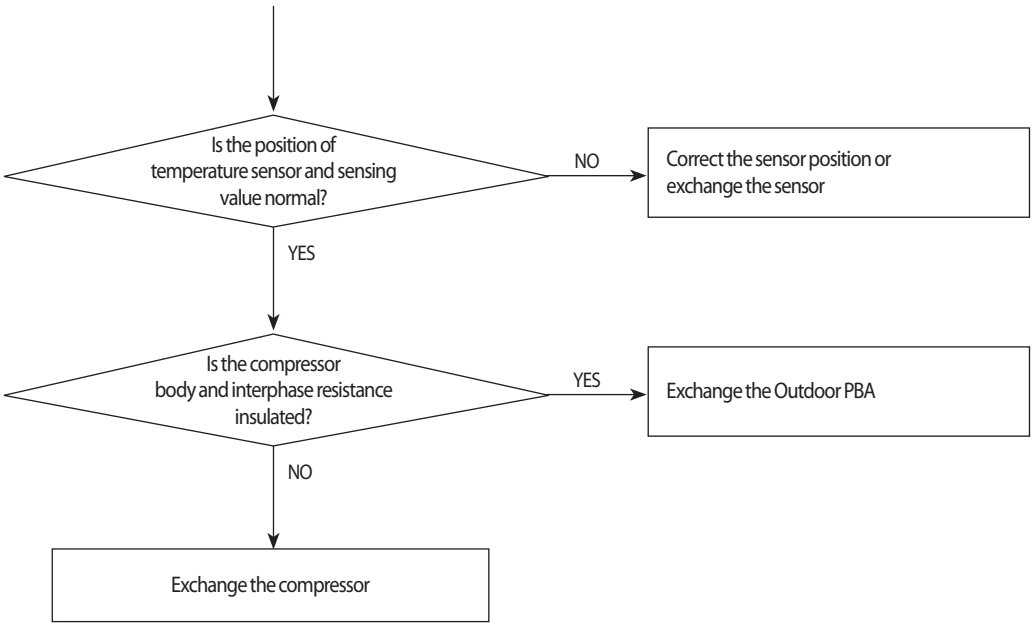
● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is the IPM Shunt("A") 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

MODEL	"A"
DB92-02866A	R410,R411,R412
DB92-02867A	R408,R409,R410




Is the position of temperature sensor and sensing value normal?
NO
Correct the sensor position or exchange the sensor
YES
Is the compressor body and interphase resistance insulated?
YES
Exchange the Outdoor PBA
NO
Exchange the compressor

10-2-21 EEPROM error/OTP error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E470	EEPROM Data Error (no data)
			E471	OTP errorEEPROM Data Error (Main Micom↔Inv Micom)

Outdoor display

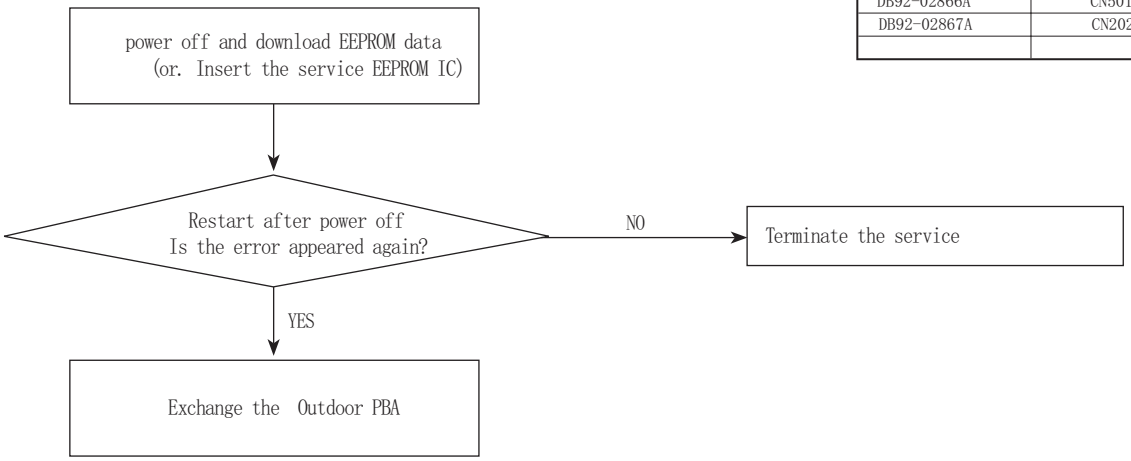
○	●	○	EEPROM Data Error (no data)
●	○	◎	OTP errorEEPROM Data Error (Main Micom↔Inv Micom)

● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is there a short around micom?
   2) Is there a short around "A"?
   3) Did you download or insert EEPROM IC, after changing outdoor PBA?

2. Troubleshooting procedure

MODEL	"A"
DB92-02866A	CN501
DB92-02867A	CN202



10-2-22 Operation condition secession error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E440	Prohibit Operation Condition Error (Heating)
			E441	Prohibit Operation Condition Error (Cooling)

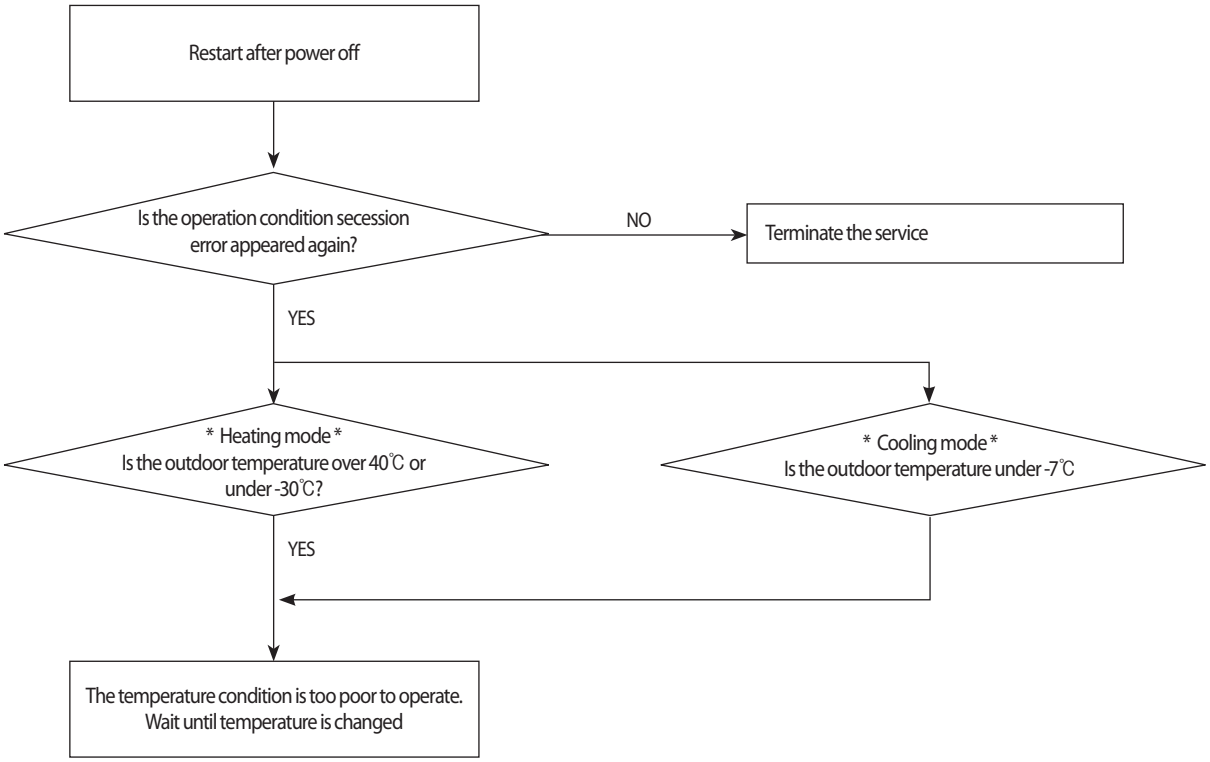
Outdoor display

●	◎	○	Operation condition secession

● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Check the temperature around the outdoor unit.

2. Troubleshooting procedure



10-2-23 Gas leak error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E554	GAS Leak error

Outdoor display

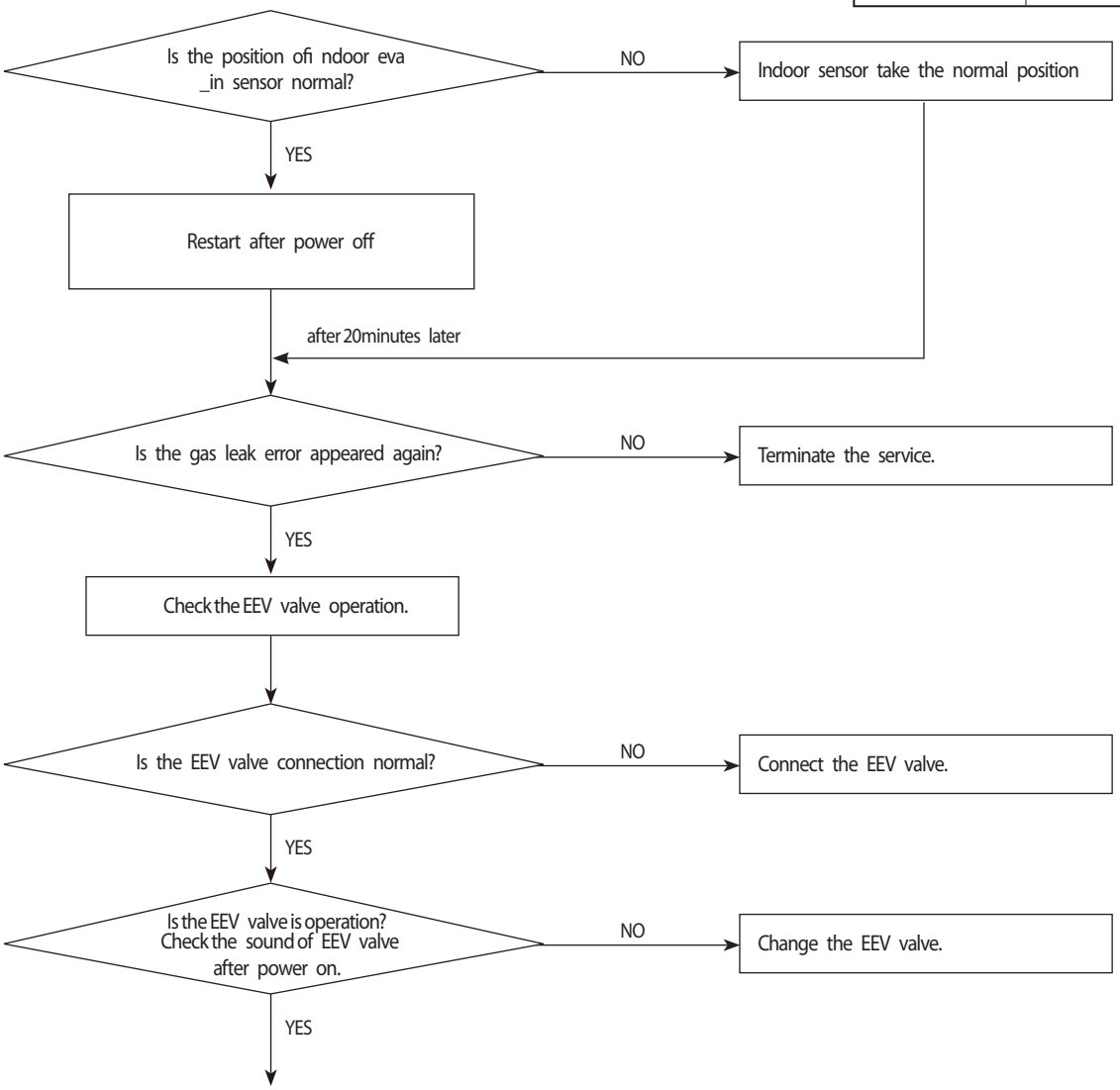
●	●	○	GAS Leak error

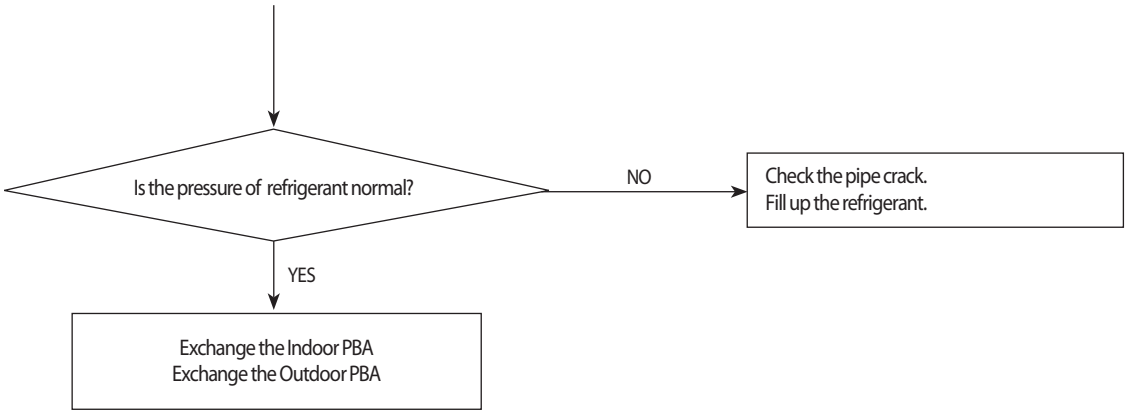
● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is the position ofi ndoor Eva_in sensor normal?
   2) Check the pipe crack
   3) Check the EEV valve connection("A") in Outdoor unit
   4) Check the refrigerant was charged

2. Troubleshooting procedure

MODEL	"A"
DB92-02866A	CN701
DB92-02867A	CN701



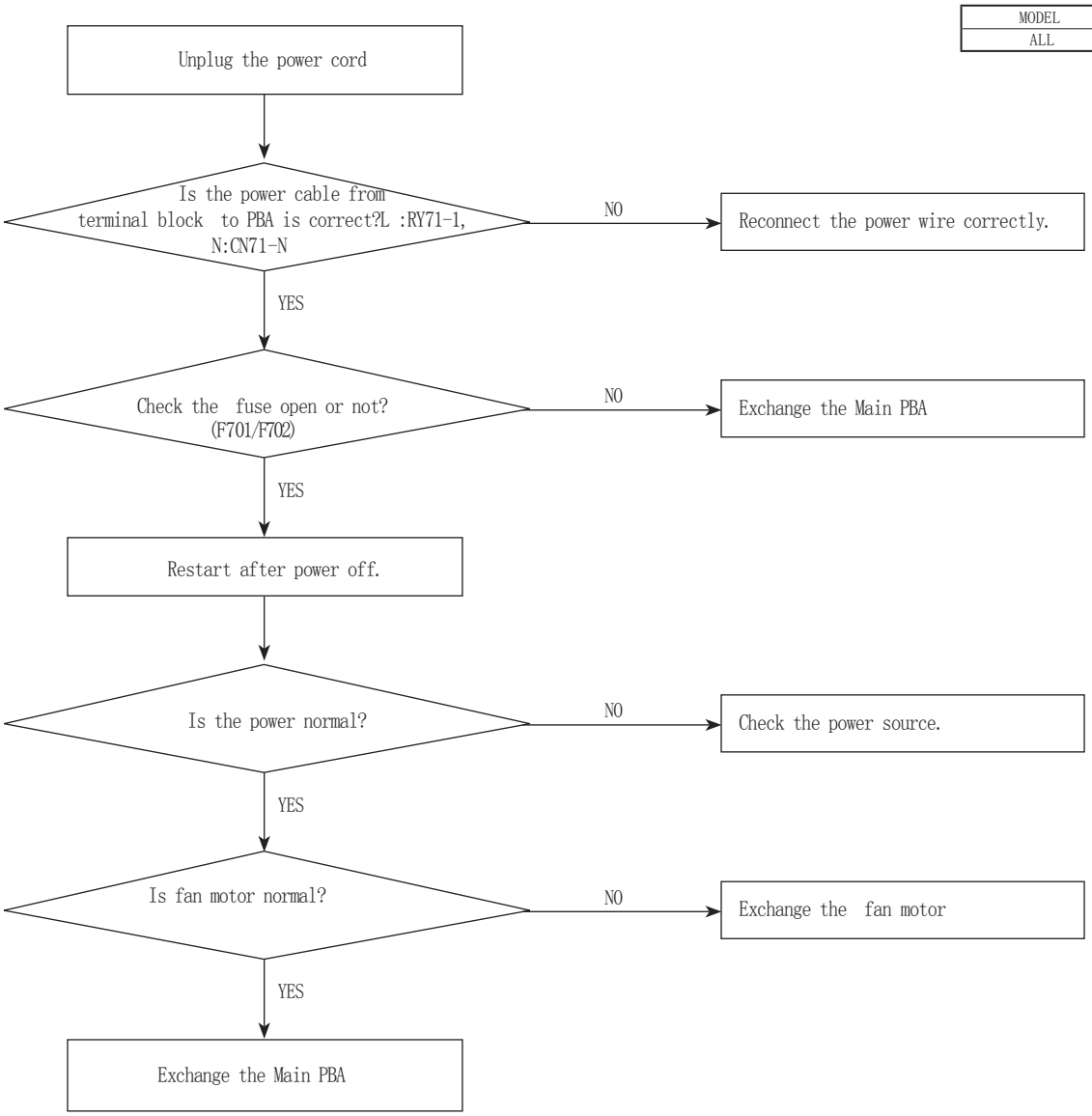

Is the pressure of refrigerant normal?
NO
Check the pipe crack.
Fill up the refrigerant.
YES
Exchange the Indoor PBA
Exchange the Outdoor PBA

102-24 No power indoor (Initial Diagnosis) (Not displayed)

1. Checklist :
   1) Is input power normal?
   2) Is AC power linked correctly? (L,N,E)
   3) Is mis-wiring between communication wire and Power wire?

2. Troubleshooting procedure

MODEL
ALL



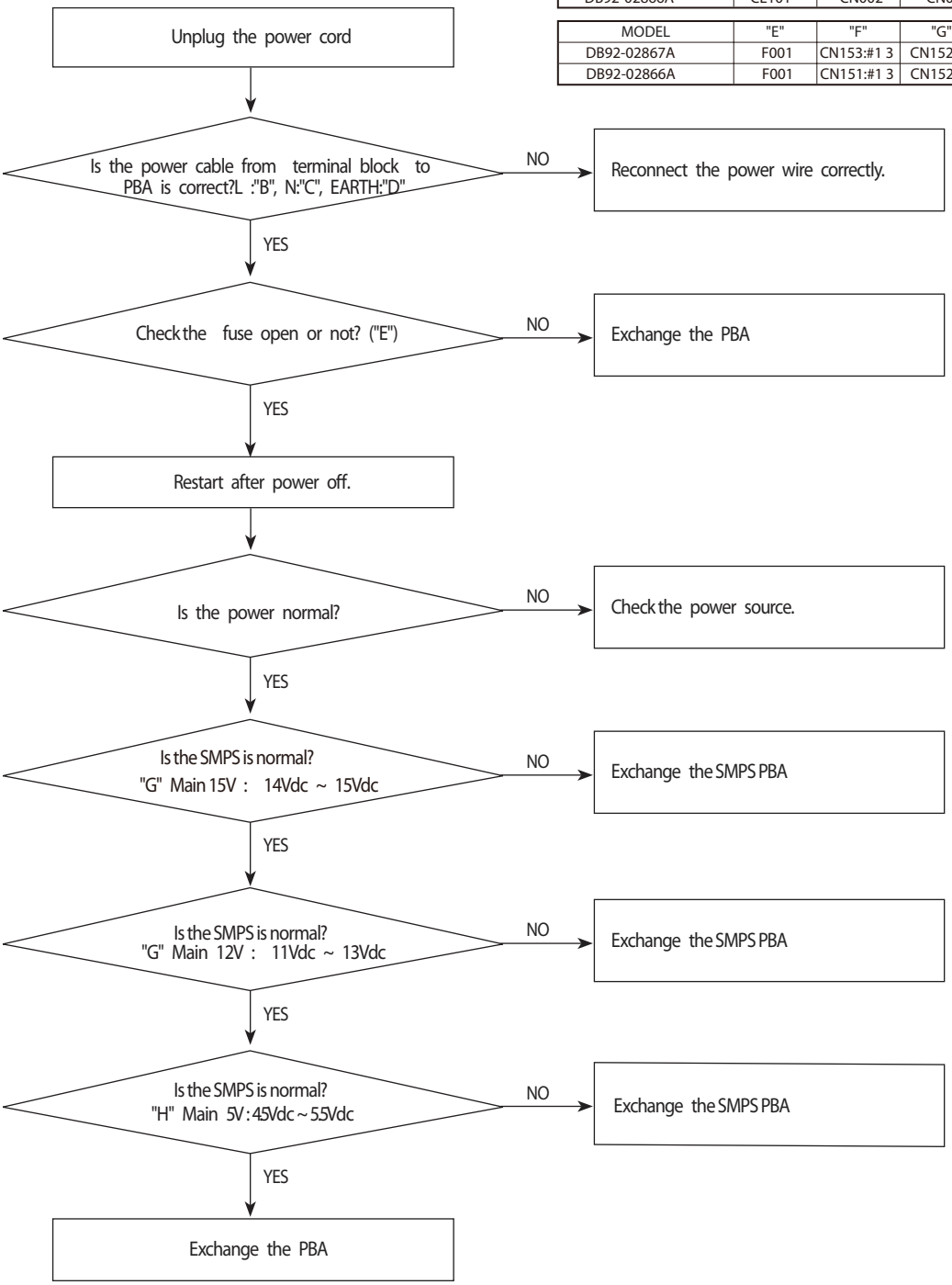
10-2-25 No power outdoor (Initial Diagnosis) (Not displayed)

1. Checklist :
   1) Is input power normal?
   2) Is AC power linked correctly? (L,N,E)
   3) Is mis-wiring between communication wire and Power wire?
   4) Is input voltage of SMPS DC-link capacitor("A") normal?
   5) Is the voltage of SMPS DC normal?

MODEL	"A"	"B"	"C"	"D"
DB92-02867A	CE101	CN002	CN001	CN003
DB92-02866A	CE101	CN002	CN001	CN003

MODEL	"E"	"F"	"G"	"H"
DB92-02867A	F001	CN153:#1 3	CN152#1 2	CN152#2 3
DB92-02866A	F001	CN151:#1 3	CN152#1 2	CN152#2 3

2. Troubleshooting procedure



10-2-26 AC zero cross signal error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E472	AC zero cross signal error

Outdoor display

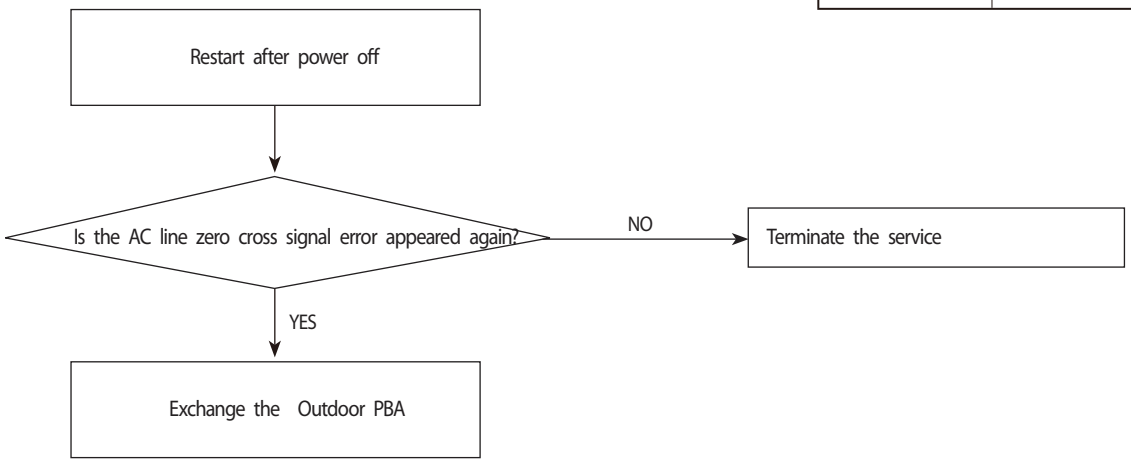
●	●	◎	AC zero cross signal error

● LED ON ◎ LED BLINKING ○ LED OFF

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

MODEL	Error display
DB92-02866A/2867A	O



10-2-27 AC zero cross signal error

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E556	Capacity miss match error

Outdoor display

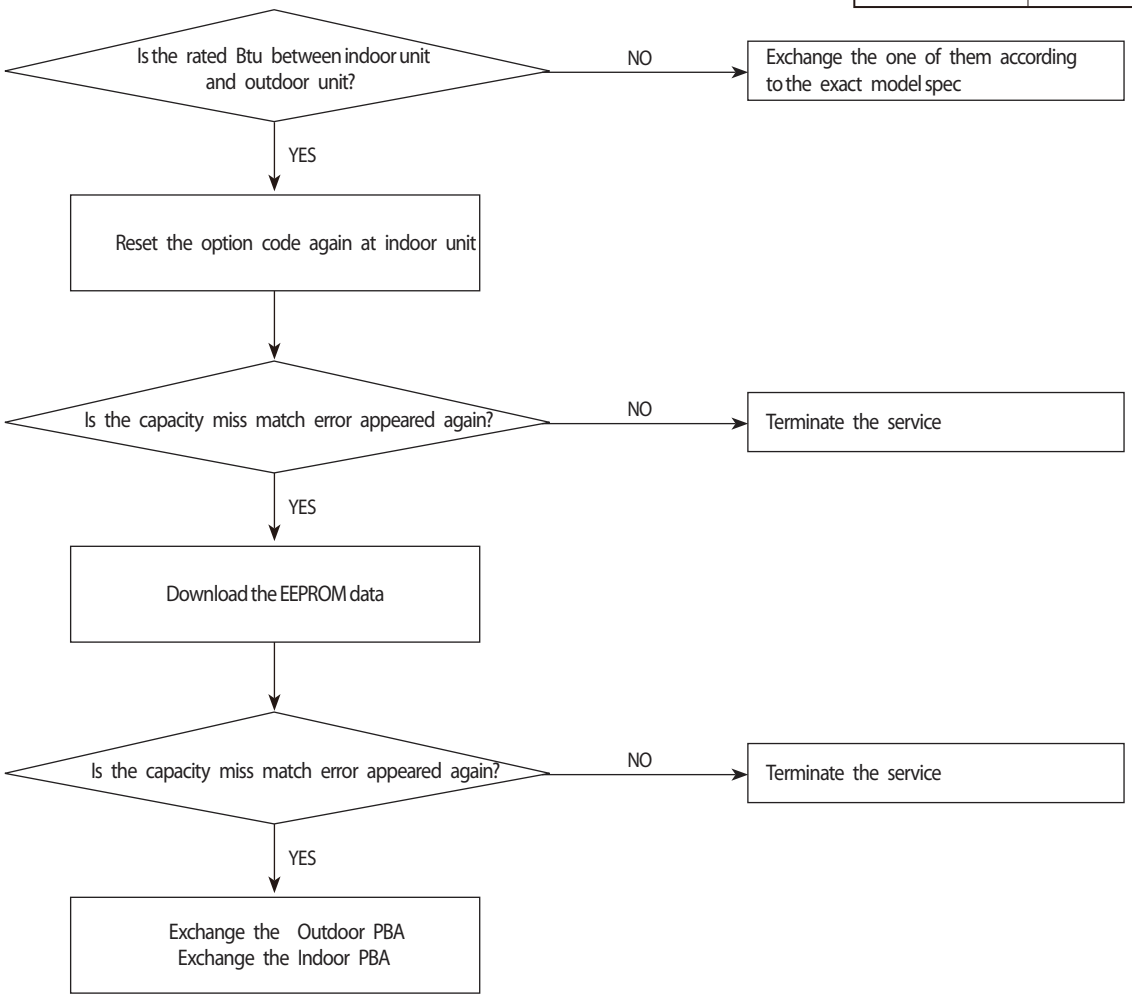
◎	○	○	Capacity miss match error

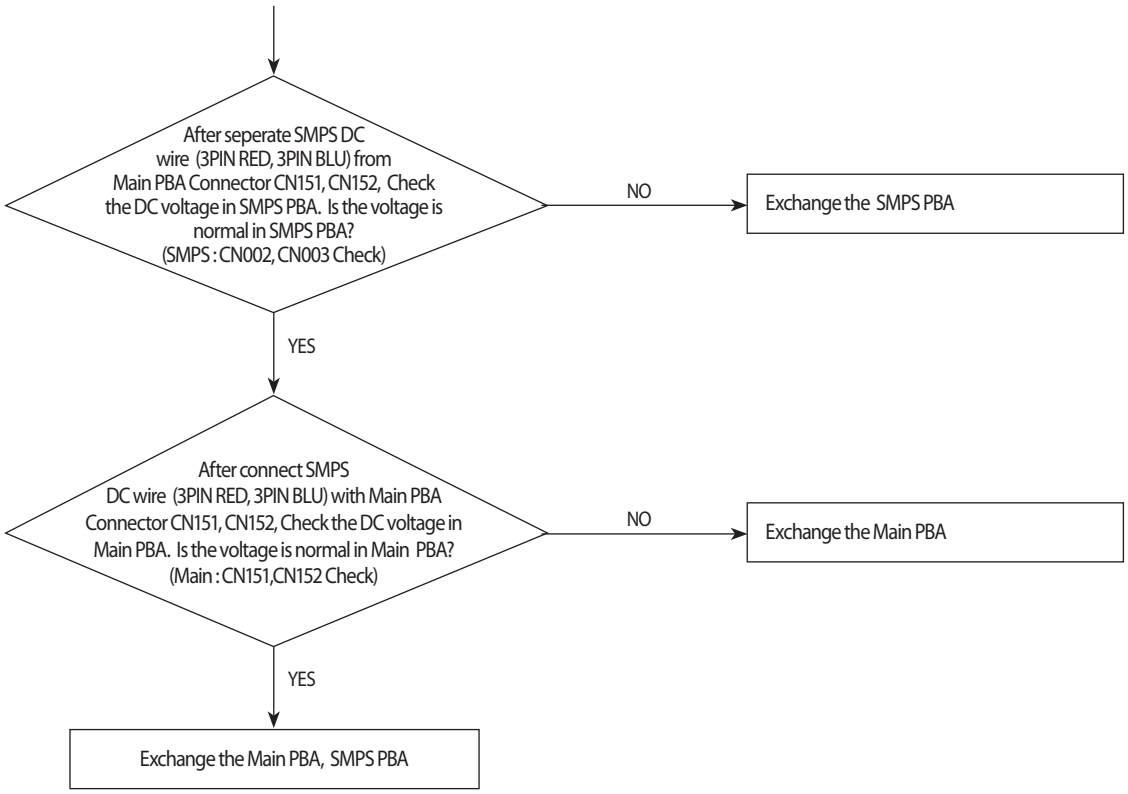
● LED ON ◎ LED BLINKING ○ LED OFF

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

MODEL	Error display
DB92-02866A/2867A	O

2. Troubleshooting procedure




After seperate SMPS DC wire (3PIN RED, 3PIN BLU) from Main PBA Connector CN151, CN152, Check the DC voltage in SMPS PBA. Is the voltage is normal in SMPS PBA? (SMPS : CN002, CN003 Check)
NO
Exchange the SMPS PBA
YES
After connect SMPS DC wire (3PIN RED, 3PIN BLU) with Main PBA Connector CN151, CN152, Check the DC voltage in Main PBA. Is the voltage is normal in Main PBA? (Main : CN151,CN152 Check)
NO
Exchange the Main PBA
YES
Exchange the Main PBA, SMPS PBA

10-2-28 When the remote control is not receiving

1. Checklist :
    1) Check if the connector was normally assembled.
    2) Check the battery in remote control
    3) All the lights out and check again : Change electronic typed to a fluorescent light
    4) Put the set in operation and check the voltage of display PBA
    5) Replace the display PBA

10-2-29 EEV or Valve Close error-Self diagnosis

Indoor display

3-LED DISPLAY			7-SEG DISPLAY	DESCRIPTION
LED1	LED2	LED3		
◎	○	◎	E422	EEV or Valve Close error-Self diagnosis

Outdoor display

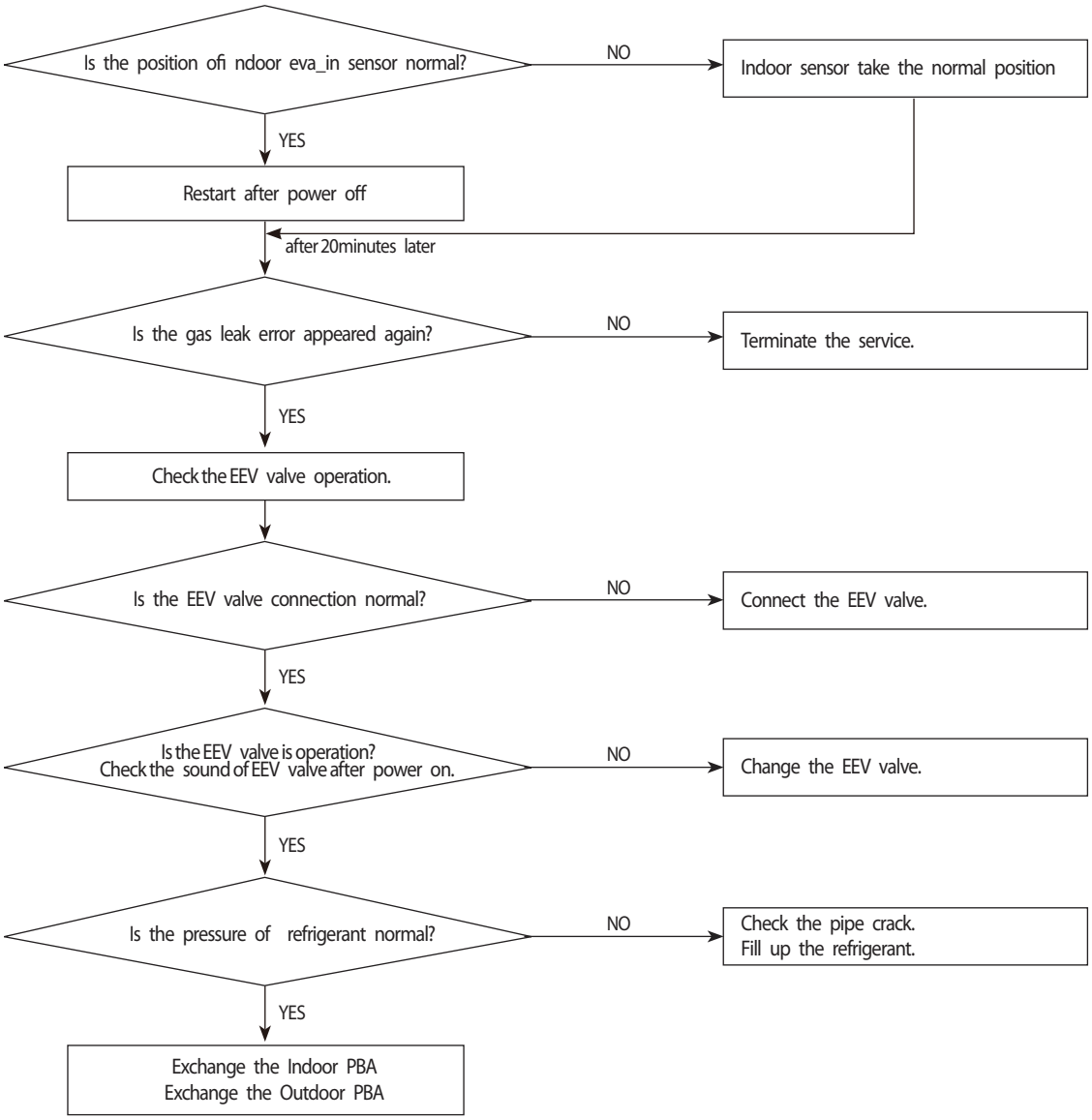
●	●	○	EEV or Valve Close error-Self diagnosis

● LED ON ◎ LED BLINKING ○ LED OFF

1. Checklist :
   1) Is the position ofi ndoor Eva_in sensor normal?
   2) Check the pipe crack
   3) Check the EEV valve connection("A") in Outdoor unit
   4) Check the refrigerant was charged

MODEL	"A"
DB92-02866A/2867A	CN701

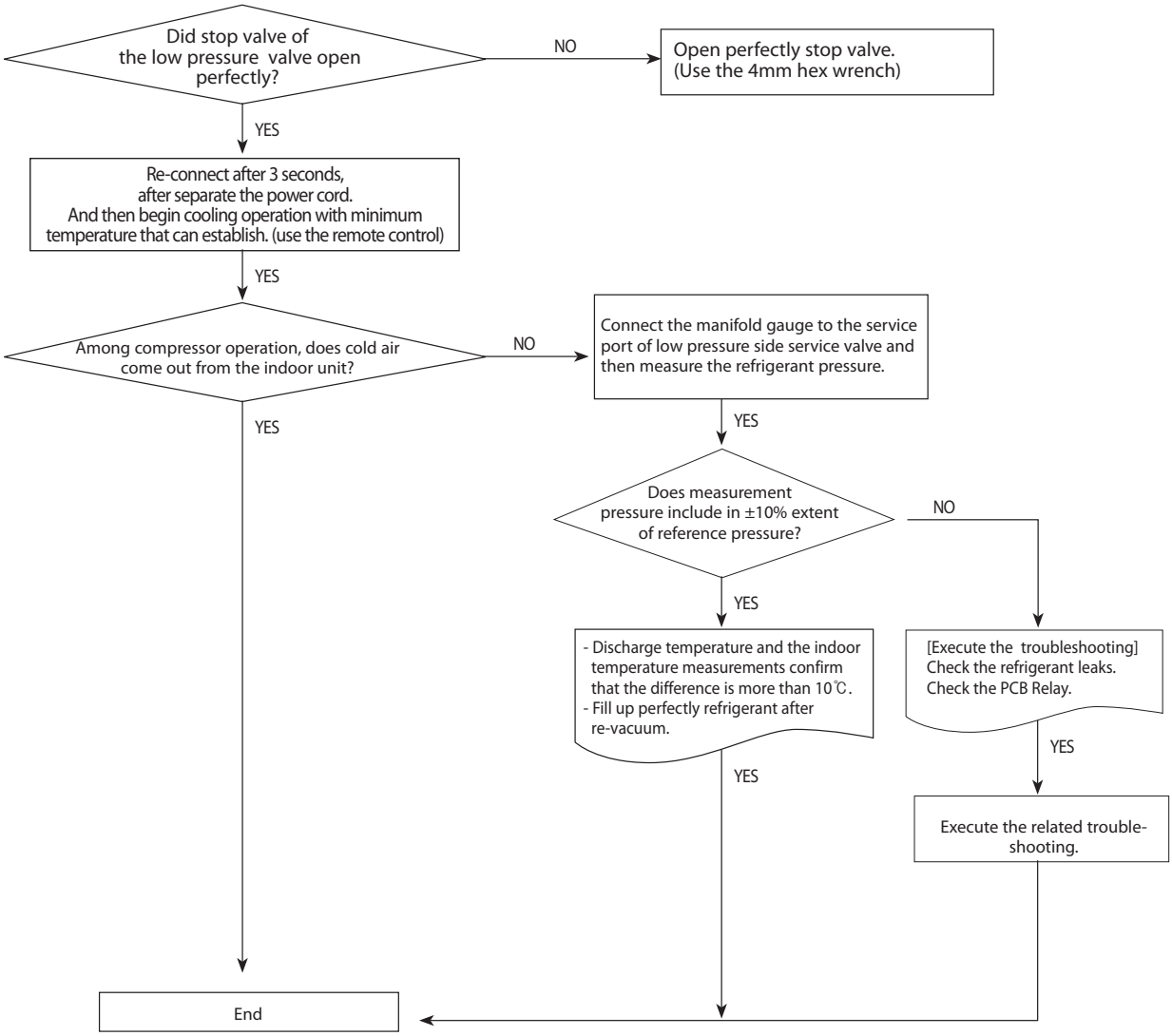
2. Troubleshooting procedure



10-2-30 10-3-18 Smart Install error

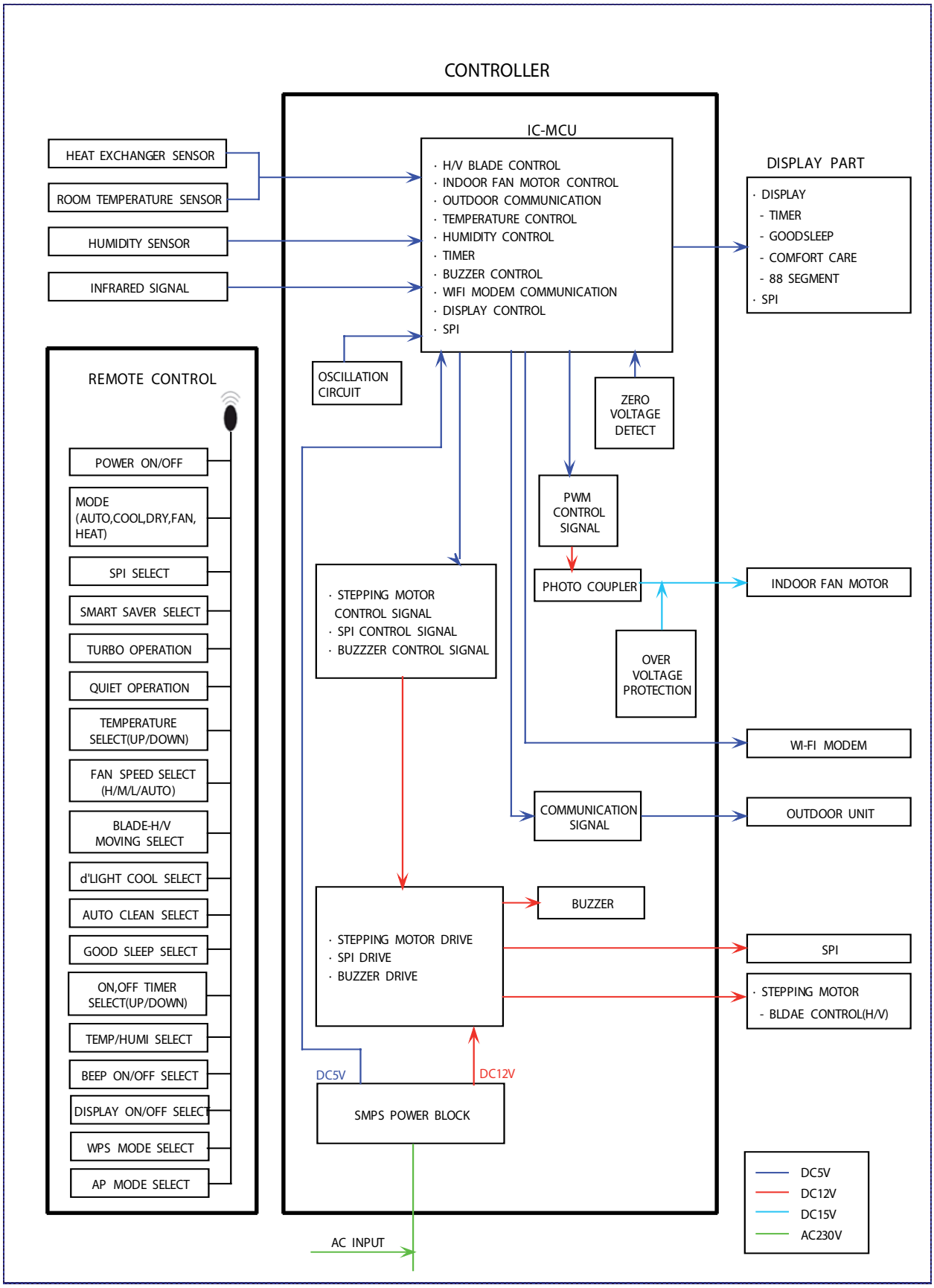
1. Checklist :
   1) Check the leakage region.(Use leakage detection liquid or soapy water)
   2) When leakage region is found from service valve and piping connection flare nut part : After the related measures to check the refrigerant supplements and operation.
   3) If the leakage region is pipe welding part : Weld leakage region after refrigerant gas release.(Brass parts should only apply)
   4) If the leakage region is surface area (Heat exchanger or pipe welding region is not) : Replace parts.
   5) Check the PBA Relay
      - Display of indoor unit : Ensure that the operating pilot lamp has been lighted.
      - Ensure that the Relay input voltage of indoor unit PBA is normally.(If the PBA is defective, replace)

2. Troubleshooting procedure

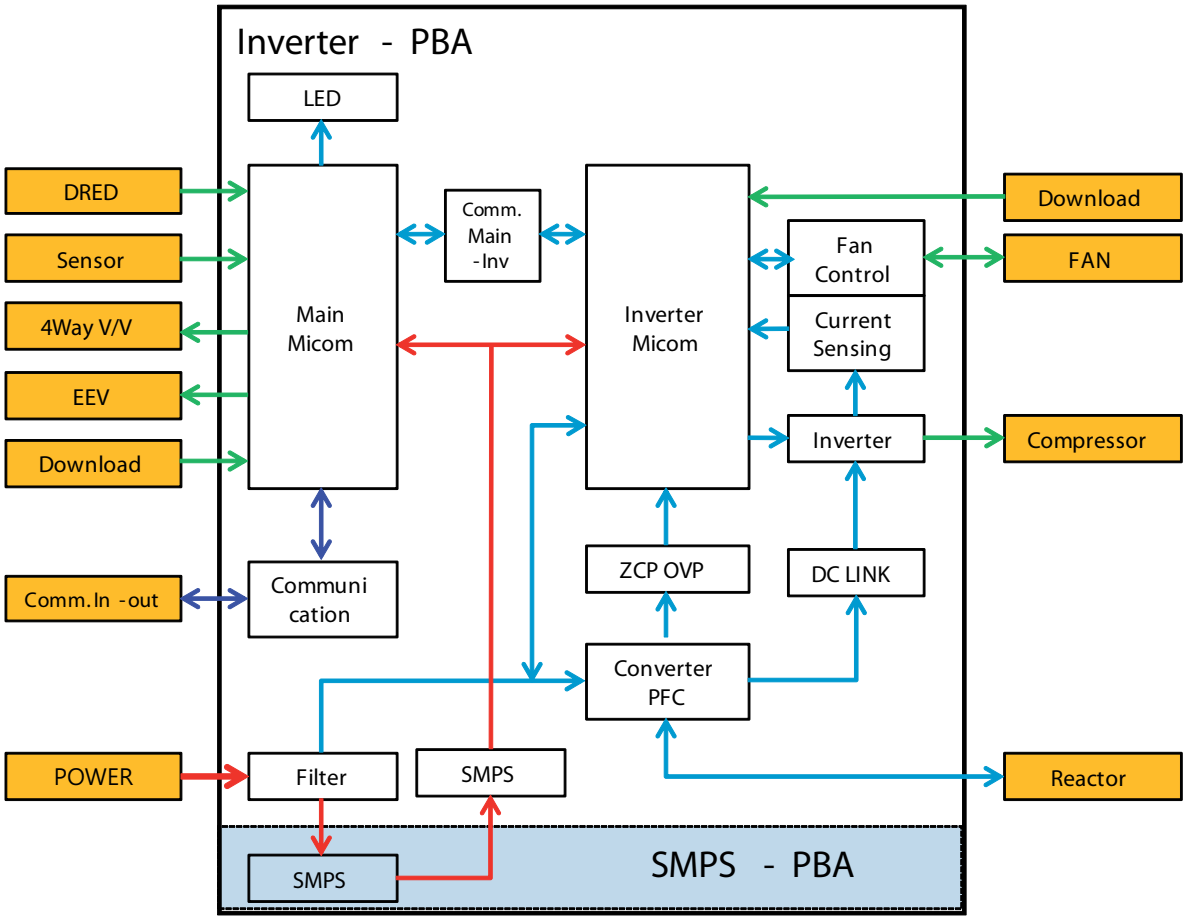


11. Block Diagram

11-1 Indoor unit



11-2 Outdoor unit



11-2-1 Pre-inspection Notices

1. Check if you pulled out the AC power plug when you eliminate the PCB or front panel.
2. Don't hold the PCB side not impose excessive force on it to eliminate the PCB.
3. Don't pull the lead wire but hold the whole housing to connect or disconnect a connector to the PCB.
4. In case of outdoor PCB disassembly, check first the complete discharge of condenser after 1 minute power off.

11-2-2 Inspection procedure

1. Check connector connection and peeling of PCB or bronze coating pattern when you think the PCB is broken.
2. The PCB is composed of 3 parts.
   - Indoor Main part : MICOM and surrounding circuit, relay, fan motor sensing and driving circuit, temperature sensing ,circuit power circuit of SMPS, buzzer circuit. Communication circuit.
   - Display part : LED lamp, Switch, Remote-control module.
   - Outdoor Main part : MICOM and surround circuit, fan motor sensing and driving circuit, compressor driving circuit, power circuit of SMPS, PFC control circuit, 4way circuit, communication circuit, OPTION. (EEV control circuit, temperature sensing circuit)

11-2-3 Indoor detailed inspection procedure

No	procedure	Inspection Method	Cause
1	Plug out and pull the PCB out of the control box Check the PCB fuse.	1) Is 1st fuse disconnected? 2) Is 2nd fuse disconnected?	. Over current. . Indoor Fan motor short. . AC part and pattern short of Indoor PBA.
2	Supply power If the operating lamp twinkles at this time , the above 1)~3) have no relation.	Check the power voltage	
		1) Is the BD71 input voltage 200Vac ~240Vac?	. Power cord is fault, Fuse open, Wrong Power cable Wiring, AC part is faulty.
		2) Is the voltage between both terminal of C109(+)-(-) 12Vdc?	. Switching Trans of Power circuit is faulty.
		3) Is the voltage between both terminal of C111(+)-(-) 5Vdc?	. Power circuit is faulty, Load short.

11-2-4 Outdoor detailed inspection procedure

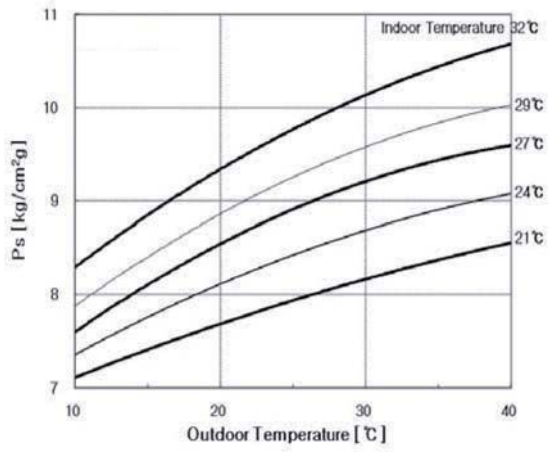
No	Procedure	Inspection Method	Cause
1	Plug out and pull the PCB out of the control box Check the PCB fuse (Wait 3 minutes after power off)	1) Is 1st fuse disconnected?	. Over current . AC part and pattern short of Outdoor PBA
2	Check the Wiring	1) Is the Compressor wire connected clock-wise? 2) Is the Reactor wire connected normal? 3) Is the Fan wire connected normal? 4) Is the 4way wire connected normal? 5) Is the sensor wire connected normal? 6) Is the EEV wire connected normal?	. Wrong assembly . Installation(service) condition is bad
3	"Supply power and operate the set (Use Remote-control, button in indoor set)"	Check the power voltage	
		1) Is the voltage between Terminal block L-N 200Vac~240Vac?	. Power cord is faulty, Wrong Power cable Wiring
		2) Is the C006 voltage 200Vac~240Vac?	. Fuse open . L,N,F1,F2 wire wrong wiring (Terminal Block-PBA)
		2) Is the CN150 voltage 200Vac~240Vac?	. Power circuit is faulty . Load short
		4) Is the PFC050(#26-#27) voltage 200Vac~240Vac after 3 minutes later?	. Fuse open . L,N,F1,F2 wire wrong wiring (Terminal Block-PBA) . PTC020 open . RY021, RY022 is faulty . Outdoor Micom(IC201) error
		5) Is the CE101 voltage 280Vdc~320dc after 3 minutes later?	. PFC050 is faulty . Reactor wire is wrong connection . Power circuit is faulty, Load short . BLDC Fan motor error
		6) Is the voltage CN151 #1-#2 voltage 15Vdc?	. Switching Trans of Power circuit is faulty . Load short
		7) Is the voltage CN152 #1-#2 voltage 12Vdc?	. Switching Trans of Power circuit is faulty . Load short
		8) Is the voltage CN151 #3-#2 voltage 5Vdc?	. Switching Trans of Power circuit is faulty . Load short
4	Check the LED lamp display	1) Normal : RED on, GRN blink, YEL off 2) Abnormal - All off : check no power - abnormal display : check error mode	. F1,F2 wire wrong wiring . Outdoor PBA is faulty

12. Reference Sheet

12-1 Low Refrigerant Pressure Distribution

Note : Please measure the refrigerant pressure after the air conditioner operates on testing cooling mode during more than 10 minutes.

■ **Indoor Temp. Variation : 20°C ~ 32°C**
■ **Outdoor Temp. Variation : -5°C ~ 45°C**



12-2 Pressure & Capacity mark

■ **Power/Heat**

W	cal/s	kcal/h	Btu/h	HP	kg.m/s	lb.m/s
1	0.23885	0.85985	3.4121	0.001341	0.10197	0.73756
4.1868	1	3.6	14.286	0.0056146	0.42693	3.088
1.163	0.27778	1	3.9683	0.0015596	0.11859	0.85778
0.29307	0.06999	0.252	1	3.9302×10^{-4}	0.029885	0.21616
745.7	178.11	641.19	2,544.4	1	76.04	550
9.8067	2.3423	8.4322	33.462	0.013151	1	7.233
1.3558	0.32383	1.0658	4.6262	0.0018182	0.13826	1

12-3 Q & A for Non-trouble

Classification	Class	Description
Cooling	Q	**The cooling is weak.**
	A	When it is hot outside, its cooling capacity decreases due to the increase of the ambient temperature. When the dust filter gets blocked or warm outside air gets in, the cooling capacity will decrease. So, make sure to clean the dust filter frequently, prevent heat loss by closing the doors and insulate the cooling area by using curtains, blinds, shades or window tinting.
	Q	**The cooling is good generally. But, it gets weak when it is considerably hot.**
	A	It occurs when the outdoor unit is exposed to direct sun light and heat-up air is not ventilated well. So, set up a sunblind over the outdoor unit and keep stuff away from the unit to increase the ventilation. When the cooling capacity decreases during a heat wave, clean the heat exchanger of the outdoor unit or spray some cold water to the heat exchanger to increase the cooling capability.
	Q	**The cooling is weak. Does it need refrigerant charging?**
	A	It is not correct charging refrigerant regularly. Except that you have moved in several times or the connection pipes are broken, the refrigerant does not run low. So, when refrigerant is additionally charged, it could be costly and cause a product's failure. When the refrigerant leaks, all of it will escape in a short time resulting in cooling failure and no water coming out of the drain hose. So, if water comes out from the drain hose, it indicates the normal operation of the product and it does not need refrigerant charging.
	Q	**It fails to do cooling.**
	A	When the air conditioner is set to ventilation or the desired temperature is set higher than the current temperature, it fails to do cooling. In this case, select cooling or set the desired temperature lower.
Leakage	Q	**It floods the floor.**
	A	Place the drain hose properly. When it is not placed properly, the drain water would flow back flooding the floor. So, straighten out the drain hose for the water to be drained well.
	Q	**Water drips at the drain connection (service valve) of the outdoor unit.**
	A	When a glass bottle is taken out of the refrigerator, moisture gets condensed on its surface due to the temperature differences. The same principle applies to the air conditioner. When cold refrigerant goes through the copper tube, moisture gets condensed on the surface of the tube and the connection areas. To prevent the water condensation, the pipes are insulated. But, the connection areas of the outdoor unit are not insulated for the purpose of maintenance or repair, and water gets condensed due to the temperature differences and drips down. Generally, it evaporates right away. But, when it drips much during muggy days, put a water pan on the floor.
	Q	**It leaks even though a drain pump is used.**
	A	It occurs when the drain pump is plugged out or it is out of order. Check the power of the drain pump and the position of the drain hose, and when the pump is faulty, contact the drain pump manufacturer. Samsung Electronics do not manufacture drain pumps. So, we are not able to correct the drain pump problems.
Smells	Q	**Whenever the air conditioner is turned on, it irritates my eyes and gives me a headache.**
	A	There are no components in the air conditioner irritating the eyes and sending out chemical smells. But, when the air conditioner is turned on, other smell sources are sucked into the air conditioner and get out of it. So find and root out the smell sources. Generally, it occurs at a interior renovated place, a pharmacy, a gasoline handling place, a tire shop, a second-hand book shop or an electronic component handling place, when its chemical or musty smells are sucked in and sent out, it can be misled that the air conditioner generates them.

Classification	Class	Description
Smells	Q	**Whenever the air conditioner is turned on, it stinks.**
	A	When are no components in the air conditioner sending out chemical smells. But, when the air conditioner is turned on, other smell sources are sucked into the air conditioner and get out of it. So, find and root out the smell sources. Generally, when the drain hose is taken out to the washing room or there are sources of smells such as a diaper bin, a shoe shelf or a socks bin, bad smells generate. Also, it occurs where glass cleaners or air fresheners are used; when they are sucked in interacting with dusts and moistures inside, bad smells generate. these kinds of organic materials noxious to human bodies. So, we recommend against the use of them.
	Q	**Whenever the air conditioner is turned on, it smells sour.**
	A	When the room is papered recently, its paste smells would be sucked inside. Also, when the air conditioner is installed in the study room of young boys loving sweat-generating activities such as the basketball, excessive sweats evaporate and get sucked into the air conditioner resulting in bad smells. So, find and root out problem or refresh the room frequently.
	Q	**Whenever the air conditioner is turned on, it smells musty.**
	A	It is due to the improper keeping of the product after its use. When keeping the product, dry up the inside with the operation of ventilation to prevent must. When the product is kept without drying up the inside with ventilation, mold would grow inside resulting in must. So, open the windows and switch on the ventilation function to get rid of the saturated smell inside.
	Q	**Whenever the air conditioner is turned on, it sends out bad smells such as stale smells.**
	A	It occurs generally when there are pet animals in the house. Their smells stay at the same place. But, when the air conditioner is turned on, the air gets circulated resulting in the circulation of the smells. So, find and root out the problem or refresh the room frequently.
	Q	**It sends out bad smells.**
	A	When the air filter is filthy, it could send out bad smells. So, clean the filter and ventilate the room with the windows open while operating the ventilation function.
Operation	Q	**It won't start.**
	A	There is a power failure or it is plugged out. Also, check if the power distribution panel is switched off.
	Q	**It goes off during operation.**
	A	When the hot air does not escape properly, it goes off during operation. it occurs when it does not ventilate properly because the outdoor unit is covered, the back of the outdoor unit is blocked by a cardboard or a plywood panel, and the front of the outdoor unit is blocked by the closed window or other obstacles. Clear the above obstacles from the outdoor unit.
	Q	**It generally works properly. But, when it's considerably hot, it goes off during operation.**
	A	It occurs when the outdoor unit is exposed to direct sunlight and the hot air does not escape properly. Set up a sun blind over the outdoor unit and clear the neighboring obstacles from the outdoor unit to provide good ventilation. When it goes off frequently during a heat wave, it would prevent the turn-off and increase the cooling capacity cleaning the outdoor unit or spraying some water to the heat exchanger.
	Q	**The remote controller won't operate.**
	A	When the batteries run out or the transmitter or receiver of the remote controller is blocked by obstacles, change the batteries or keep the obstacles away from the controlling area. Also, the remote controller may mot work under intensive light from a 3-wave length lamp or a neon sign due to the EMI. In this case, take the remote controller closer to the receiver.

Classification	Class	Description
Installation	**Q**	**Who installs the air conditioner? (Relocation/Re-installation)**
	A	When relocating or re-installing the air conditioner, make sure to contact Samsung Electronics Service Center or Authorized Service Agent and have them to do the job. (If not, it could cause personal injury or product damage.) The cost for the relocation/re-installation of the air conditioner is subject to the customer's expense. There is a cost table. But, our service engineer needs to visit to total up the cost correctly. When you move in, make sure to contact Samsung Electronics Service Center or Authorized Service Agent in advance to streamline the process.
	Q	**Is it possible to install the outdoor unit outside?**
	A	It is possible to install it at a designated place in the apartment or on the rooftop nearby. But, it's illegal hanging an angle iron case with the outdoor unit in it outside the apartment. Also, it is illegal obstructing passers-by with the outdoor unit installed outside.
	Q	**What can be done to install the outdoor unit facing the road because it is a commercial building?**
	A	The following is an excerpt from building code going into effect from JUNE 1 st 2005. "The exhaust pipe of a cooling or ventilation facility installed in a building adjacent to the streets of commercial or residential areas shall bel installed higher than 2 m to prevent the exhaust air from blowing directly to passers-by and the current facilities shall be corrected by MAY 31 st 2005." So, please install it higher than 2 m or not to blow the hot exhausting air directly to passers-by.
	Q	**What about installing a windscreen during installation not to blow hot air directly to passers-by?**
	A	When the hot air from the front of the outdoor unit is blocked, the product's performance will be affected and it will fail to operate properly. So, keep it at least 300mm away from its surrounding walls and give it good ventilation.

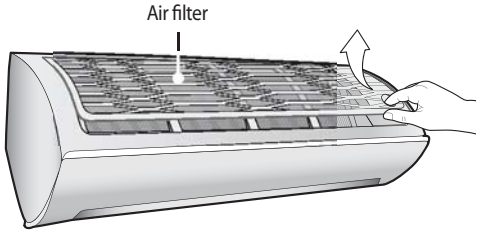
12-4 Cleaning /Filter Change

12-4-1 Cleaning your Air Conditioner

To get the best possible use out of your air conditioner, you must clean it regularly to remove the dust that accumulates on the air filter.

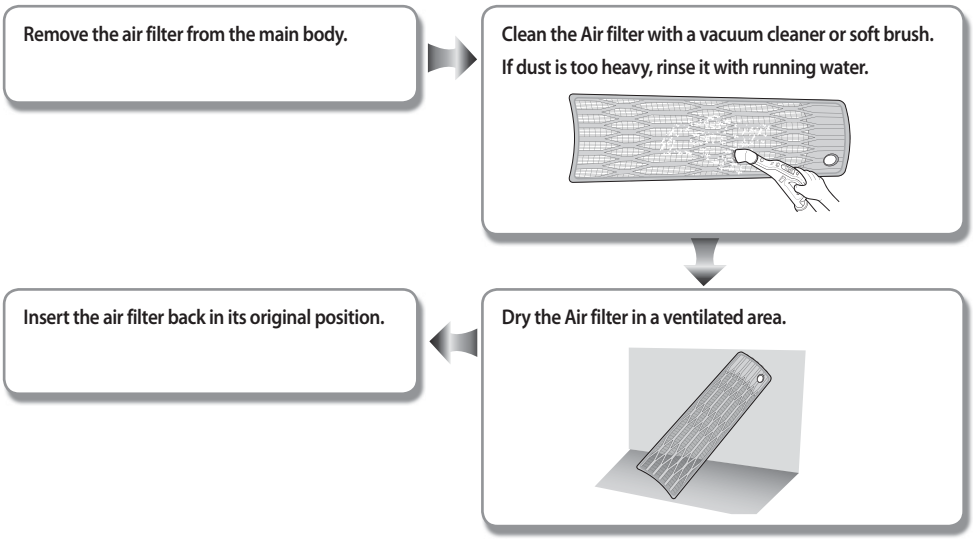
Removing the Air filter

There is a hole on the bottom right side of the filter. Put your finger in that hole to get a grip on the filter and slightly push it up to release the hooks from the bottom side. Then, pull it down to remove the filter from the main body.



Cleaning the air filter

Washable foam based air filter captures large particles from the air. The filter is cleaned with a vacuum or by hand washing.



NOTE

- Clean the Air filter every 2 weeks. Cleaning term may differ depending on the usage and environmental conditions. In dusty area, clean it once a week.
- If the Air filter dries in a confined (or humid) area, odors may generate. If it occurs, re-clean and dry it in a well-ventilated area.
- When the filter clean reminder is on, please press the 2nd F button and then press the ECO Run button on remote controller.

12-5 Installation

12-5-1 Before Installation

Keep the air conditioner outlet and inlet free from its surroundings.
In case of installation, keep the symmetry and fix it to prevent vibration.
The pipe length shall meet the standard as far as possible.

12-5-2 Installation Procedure

■ Location

Install the product in an area to guarantee the best cooling effect, convenience of piping and electric work, and inexistence of vibration or wind.

■ Wall Drilling

Drill the wall downward in a diameter of 60 to 65mm.

■ Fixing Indoor Unit & Outdoor Unit

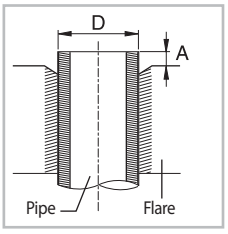
Fix the air conditioner indoor unit securely to the wall. Secure the outdoor unit in a suitable position.

■ Pipe Spooling & Connectingt

You shall cut the pipe with a pipe cutter and grind all the burrs of the cut surface.
pipe expansion may continue until the pipe surface becomes uneven or torn apart.
Be sure to use a torque wrench to tighten pipes or flare nuts.

<Torque & Depth>

Outer Diameter (D)	Torque(kgf·cm)	Depth(A)
ø6.35 mm(1/4")	140~170	1.3 mm
ø9.52 mm(3/8")	250~280	1.8 mm
ø12.70 mm(1/2")	380~420	2.0 mm
ø15.88 mm(5/8")	440~480	2.2 mm
ø19.05 mm(4/4")	9900~1,210	2.2 mm



■ Leak Test

Put an inset gas like nitrogen in the outdoor unit pipe and put soap bubbles or other test liquids on the pipe surface for the leak test.

■ Drain Hose Connecting

Install the drain hose downward to drain water naturally. Be sure to pour water into the hose to check if it drains well.

■ Electric & Earth Work

Electric and earth work shall meet the "Electric Facility Technology Standard" and the "Internal Wire Regulation" of the Electric Business Laws.

■ Inspection & Trial Run

Upon completion of the tests, you shall make a trial run while you explain the main functions of the air conditioner to finish the installation.

12-6 Installation Diagram of Indoor Unit and Outdoor Unit

12-6-1 Air-Purge Procedure

1) Connect each assembly pipe to the appropriate valve on the outdoor unit and tighten the flare nut.

2) Connect the charging hose of low pressure side of manifold gauge to the packed valve having a service port (3/8" Packed valve) as shown at the figure.

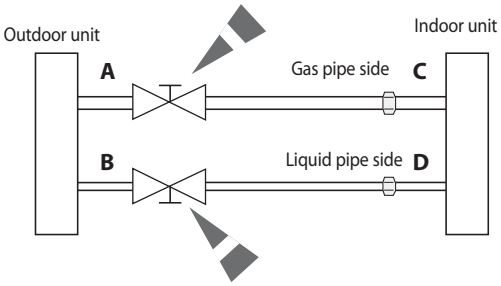
3) Open the valve of the low pressure side of manifold gauge counter-clockwise.

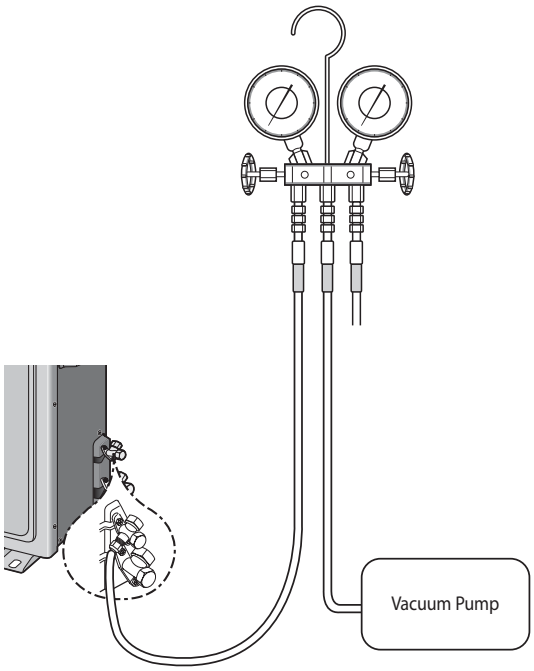
4) Purge the air from the system using vacuum pump for about 30 minutes.
   - After that, please recheck that pressure is stabilized.
   - Close the valve of the low pressure side of manifold gauge clockwise.
   - Remove the hose of the low pressure side of manifold gauge.

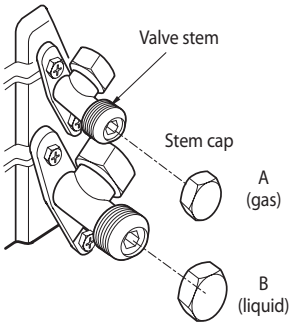
5) Set valve cork of both liquid side and gas side of packed valve to the open position.

6) Mount the valve stem nuts to the 2 way and 3 way valve. And mount the service port cap to 3 way valve.

7) Check for gas leakage.
   - At this time, especially check for gas leakage from the 3 way valve's stem nuts, and from the service port cap.







12-6-2 "Pump down" Procedure

Pump down will be carried out when an evaporator is replaced or when the unit is relocated in another area.

1) Remove the caps from the 3 way valve and the 3 way valve.

2) Turn the 3 way valve clockwise to close and connect a pressure gauge (low pressure side) to the service valve, and open the 3 way valve again.

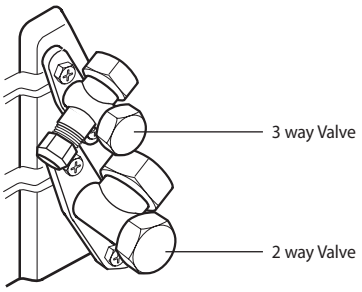
3) Set the unit to cool operation mode. (Check if the compressor is operating.)

4) Turn the 3 way valve clockwise to close.

5) When the pressure gauge indicates "0" turn the 3 way valve clockwise to close.

6) Stop operation of the air conditioner.

7) Close the cap of each valve.



Remarks

Relocation of the air conditioner

- Refer to this procedure when the unit is relocated.
- Carry out the pump down procedure (refer to the details of 'pump down').
- Remove the power cord.
- Disconnect the assembly cable from the indoor and outdoor units.
- Remove the flare nut connecting the indoor unit and the pipe.
- At this time, cover the pipe of the indoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
- Disconnect the pipe connected to the outdoor unit.
  At this time, cover the valve of the outdoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
- Make sure you do not bend the connection pipes in the middle and store together with the cables.
- Move the indoor and outdoor units to a new location.
- Remove the mounting plate for the indoor unit and move it to a new location.

12-7.Reference Sheet

Index for Model Name

✳ Project model code for overseas from 2007(For RAC Export Models)

Model Code

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
Project		Capacity		Sell	Feature		Series		Color		Unit	Export	
A	R	1	2	J	V	S	S	E	W	K	N/X	E	D

ITEM	1ST	2ND
RAC	A	R
FAC	A	F
WAC	A	W

Item	Reference	3TH	4TH
1	Export	0	9
2	Export	1	2
3	Export	1	8
4	Export	2	4
5	Export	3	0

Item	5TH
12Year	E
13Year	F
14Year	H
15Year	J
16Year	K

Item	6TH
INVERTER HP	S
INVERTER CO	V

Item1	Item2	7TH
Export	The virus doctor (The India / Latin America A / PAC K besides)	S
Export	NO virus doctor (the India / Latin America A / PAC K besides)	F

Special instructions:
About AR**FSSSCUR/SA ,the 7TH is "S", but there is no virus doctor in these models.

9TH DIGIT		
Export	1st MODEL	A
Export	2nd MODEL	B
Export	3rd MODEL	C
Export	4th MODEL	D
Export	5th MODEL	E

Item 1	Item 2	Item 3	8TH	9TH
Export	RAC	FMC FLG (Best)	1ST MODEL	F
Export	RAC	FMC DLX (Better)	1ST MODEL	D
Export	RAC	FMC STD (Good1)	1ST MODEL	S
Export	RAC	FMC ENT (Good2)	1ST MODEL	N

Division	Series	Project	Color Name	Division component	Sinkeolreo code (10TH,11TH)	Remark
A3050	F	Best	Twilight	Grille	WK	
	F	Best	TBD	Grille	TBD	
	D	Better	Twilight	Grille	WK	
	D	Better	TBD	Grille	TBD	
	S	Good1	Twilight	Grille	WK	Deco : Transparency
	S	Good1	Midnight Blue	Deco	UR	Grille : Twilight
	N	Good2	Twilight	Grille	WK	
	N	Good2	TBD	Grille	TBD	Grille : Metalic Gray

Item1	Item2	12TH
Export	SET	/
Export	IN	N
Export	OUT	X

Item	The existing code	The sales area	CIS Desription	The integrated code (13TH,14TH)
1	ED	LATIN AMERICA	LATIN AMERICA	ED

● Except the RAC Export Models for China.

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

Code No. AC-00045K_1