



ROOM AIR CONDITIONER

INDOOR UNIT

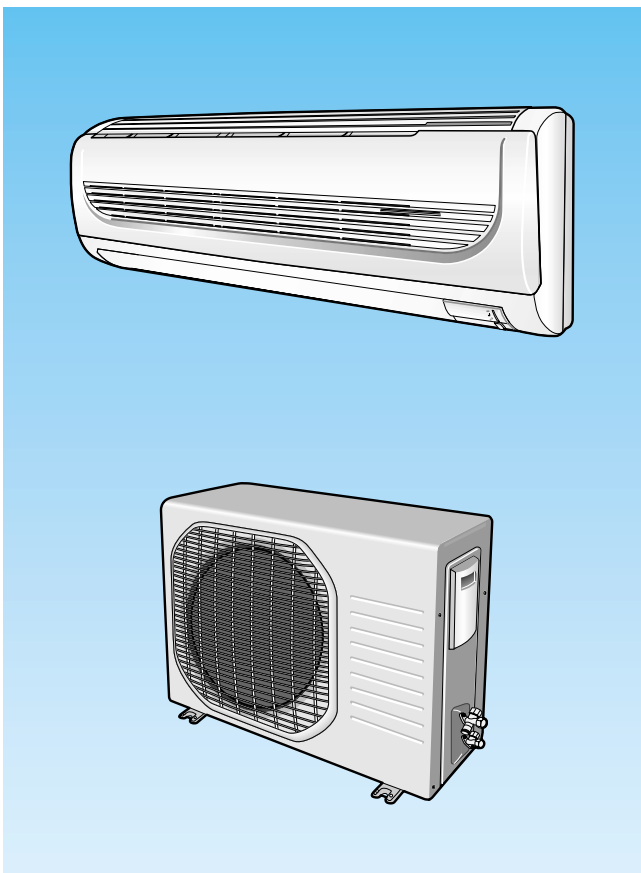
SC09AWH
SC09ZWH
AS09WHWE
AS09WHWD
KF-25G/SWA
SC12AWH
SC12ZWH
AS12WHWE
AS12WHWD
KF-35G/SWA

OUTDOOR UNIT

SC09AWHX
SC09ZWHX
US09WHWE
US09WHWD
KF-25W/SWA
SC12AWHX
SC12ZWHX
US12WHWE
US12WHWD
KF-35W/SWA

SERVICE *Manual*

AIR CONDITIONER



CONTENTS

1. Product Specifications
2. Disassembly and Reassembly
3. Refrigerating Cycle Diagram
4. Set Up the Model Option
5. Troubleshooting
6. Exploded Views and Parts List
7. Block Diagram
8. Wiring Diagram
9. Schematic Diagram



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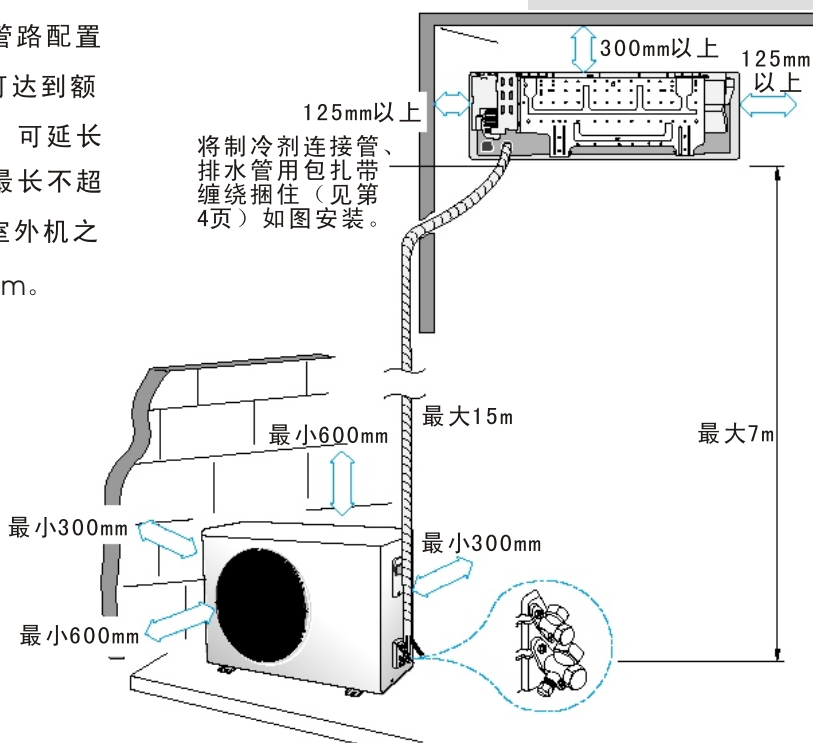
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第二部分 安装手册

前言

- ◆为了正确安装，请先阅读本安装手册。
- ◆空调器安装须由专业技术人员安装，用户不要尝试自行安装。
- ◆在安装空调器及其配管和连接线时，请尽可能按照本安装手册进行。
- ◆空调器配管及连线完成并经检查无误后再将空调器接通电源。
- ◆安装测试完毕后，安装人员应根据用户指南向用户说明正确使用及维护空调器的方法, 然后请用户阅读并保管好用户指南及安装手册。

※本空调器在额定管路配置（4m）条件下，可达到额定能力。如需要，可延长连接管长度，但最长不超过15m。室内、室外机之间最大高度差为7m。



安装顺序:

选择安装位置——→ 安装空调器——→
安装制冷剂连接管——→ 排水管连接
——→ 电气连接 ——→ 检查与测试



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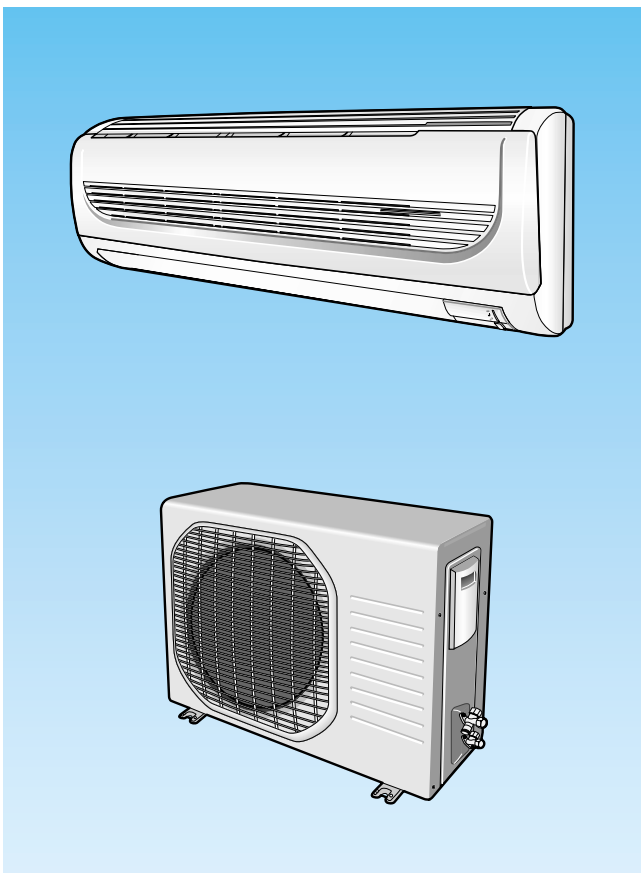
SC09AWH
SC09ZWH
AS09WHWE
AS09WHWD
KF-25G/SWA
SC12AWH
SC12ZWH
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AS12WHWD
KF-35G/SWA

OUTDOOR UNIT

SC09AWHX
SC09ZWHX
US09WHWE
US09WHWD
KF-25W/SWA
SC12AWHX
SC12ZWHX
US12WHWE
US12WHWD
KF-35W/SWA

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9. Schematic Diagram

1. Product Specifications

1-1 Table

Item				Model	SC09AWH		SC12AWH	
					Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type				Wall-mounted		Wall-mounted		
Performance	Cooling		kW	2.7		3.5		
	Dehumidifying		ℓ/h	1.0		1.4		
	Air Volume		m³/min	7.3	25	8.3	25	
	Noise		dB	38 / 36 / 34	51 / 51	41 / 39 / 37	53 / 53	
	Energy Efficiency Ratio		W/W	2.70		2.99		
	Power		V-Hz	1-220 / 240-50		1-220 / 240-50		
Power	Power Consumption		W	1,000		1,170		
	Operating Current		A	4.5		5.7		
	Power Factor		%	98.2		96.9		
	Starting Current		A	21.0		30.0		
	Power Cord	Length	m	-		-		
		Number of Core Wire		-		-		
		Capacity	A	250V-10A		250V-10A		
Size	Outer Dimension		W x H x D	mm	825 x 285 x 189	720 x 548 x 265	825 x 285 x 189	720 x 548 x 265
				inch	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4
	Weight(Net)		kg	8.2	33.0	8.4	33.8	
	Refrigerant Pipe		Liquid	mm x L(m)	ø6.35 x 7.5		ø6.35 x 7.5	
			GAS	mm x L(m)	ø9.52 x 7.5		ø9.52 x 7.5	
	Drain Hose		D x L(mm)	ø18 x 550		ø18 x 550		
	Compressor	Type		Rotary		Rotary		
		Motor	Type	Induction Motor(PSC)		Induction Motor(PSC)		
			Rated Output	900		1,075		
	Oil Type			DAPHNE FV68S(PVE)		DAPHNE FV68S(PVE)		
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	
		Motor	Type	steel	steel	steel	steel	
			Rated Output	W	15	50	15	50
	Heat Exchanger				2ROW 14STEP	1ROW 24STEP	2ROW 14STEP	1ROW 24STEP
Refrigerant Control Unit				CAPILLARY TUBE		CAPILLARY TUBE		
Freezer Oil Capacity			cc	350		520		
Refrigerant to Change(R410A)			g	580		830		
Protection Device(OLP)				MRA99134-9201		MRA99908-9201		
Cooling Test Condition				INDOOR UNIT : DB27°C WB19°C		OUTDOOR UNIT : DB35°C WB24°C		
Maximum Operation Condition				INDOOR UNIT : DB32°C WB23°C		OUTDOOR UNIT : DB43°C WB28°C		

Table(cont.)

Item				Model	SC09ZWH / AS09WHWE		SC12ZWH / AS12WHWE	
					Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type				Wall-mounted		Wall-mounted		
Performance	Cooling		kW	2.7		3.5		
	Dehumidifying		ℓ/h	1.0		1.4		
	Air Volume		m³/min	7.3	25	8.3	25	
	Noise		dB	38 / 36 / 34	51 / 51	41 / 39 / 37	53 / 53	
	Energy Efficiency Ratio		W/W	2.70		2.99		
	Power		V-Hz	1-220 / 240-50		1-220 / 240-50		
Power	Power Consumption		W	1,000		1,170		
	Operating Current		A	4.5		5.2		
	Power Factor		%	98.2		96.9		
	Starting Current		A	21.0		30.0		
	Power Cord	Length	m	-		-		
		Number of Core Wire		-		-		
Capacity		A	250V-10A		250V-10A			
Size	Outer Dimension		W x H x D	mm	825 x 285 x 189	720 x 548 x 265	825 x 285 x 189	720 x 548 x 265
				inch	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4
	Weight(Net)		kg	8.2	33.0	8.4	33.8	
	Refrigerant Pipe		Liquid	mm x L(m)	ø6.35 x 5.0		ø6.35 x 5.0	
			GAS	mm x L(m)	ø9.52 x 5.0		ø12.7 x 5.0	
	Drain Hose		D x L(mm)	ø18 x 550		ø18 x 550		
	Compressor	Type		Rotary		Rotary		
		Motor	Type	Induction Motor(PSC)		Induction Motor(PSC)		
			Rated Output		1,005		1,206	
	Oil Type				SUNISO-4GSD		SUNISO-4GSD	
	Blower	Type		Cross-flow		Propeller	Cross-flow	Propeller
		Motor	Type	steel		steel	steel	steel
			Rated Output		W	15	50	15
Heat Exchanger				2ROW 14STEP	1ROW 24STEP	2ROW 14STEP	1ROW 24STEP	
Refrigerant Control Unit				CAPILLARY TUBE		CAPILLARY TUBE		
Freezer Oil Capacity			cc	360		600		
Refrigerant to Change(R22)			g	580		830		
Protection Device(OLP)				RAC12110-9622		RAC12074-9622		
Cooling Test Condition				INDOOR UNIT : DB27℃ WB19℃		OUTDOOR UNIT : DB35℃ WB24℃		
Maximum Operation Condition				INDOOR UNIT : DB32℃ WB23℃		OUTDOOR UNIT : DB43℃ WB28℃		

Item				Model		AS09WHWD		AS12WHWD		
						Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	
Type				Wall-mounted		Wall-mounted				
Performance	Cooling		kW	2.65		3.5				
	Dehumidifying		ℓ/h	1.0		1.4				
	Air Volume		m³/min	7.3	25	8.3	25			
	Noise		dB	38 / 36 / 34	51 / 51	41 / 39 / 37	53 / 53			
	Energy Efficiency Ratio		W/W	2.82		2.99				
	Power		V-Hz	1-220-50		1-220-50				
Power	Power Consumption		W	940		1,170				
	Operating Current		A	4.6		5.8				
	Power Factor		%	97.0		92.0				
	Starting Current		A	21.0		30.0				
	Power Cord	Length	m	-		-				
		Number of Core Wire		-		-				
		Capacity	A	250V-10A		250V-10A				
Size	Outer Dimension		W x H x D	mm	825 x 285 x 189	720 x 548 x 265	825 x 285 x 189	720 x 548 x 265		
				inch	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4		
	Weight(Net)		kg	8.2	33.0	8.4	33.8			
	Refrigerant Pipe		Liquid	mm x L(m)	ø6.35 x 5.0		ø6.35 x 5.0			
			GAS	mm x L(m)	ø9.52 x 5.0		ø12.7 x 5.0			
	Drain Hose		D x L(mm)	ø18 x 550		ø18 x 500				
	Compressor	Type			Rotary		Rotary			
		Motor	Type			Induction Motor(PSC)		Induction Motor(PSC)		
			Rated Output			1,005		1,206		
	Oil Type				SUNISO-4GSD		SUNISO-4GSD			
	Blower	Type			Cross-flow	Propeller	Cross-flow	Propeller		
		Motor	Type		steel	steel	steel	steel		
			Rated Output	W	15	50	15	50		
	Heat Exchanger				2ROW 14STEP	1ROW 24STEP	2ROW 14STEP	1ROW 24STEP		
Refrigerant Control Unit				CAPILLARY TUBE		CAPILLARY TUBE				
Freezer Oil Capacity			cc	360		600				
Refrigerant to Change(R22)			g	580		920				
Protection Device(OLP)				RAC12054-9622		RAC12074-9622				
Cooling Test Condition				INDOOR UNIT : DB27°C WB19°C		OUTDOOR UNIT : DB35°C WB24°C				
Maximum Operation Condition				INDOOR UNIT : DB32°C WB23°C		OUTDOOR UNIT : DB43°C WB28°C				

Table(cont.)

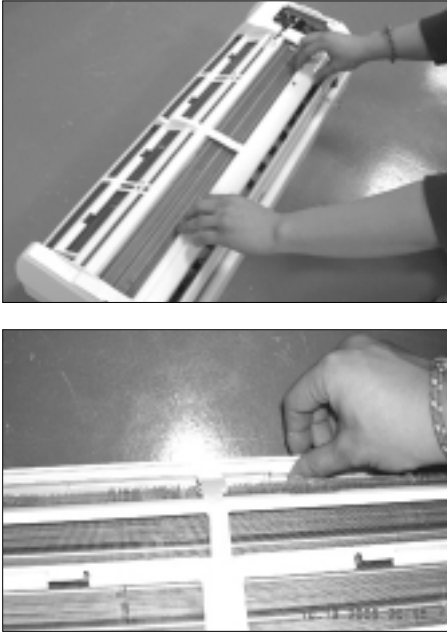
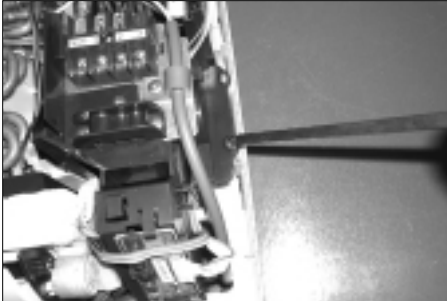
Item				Model	KF-25G / SWA		KF-35G / SWA	
					Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type				Wall-mounted		Wall-mounted		
Performance	Cooling		kW	2.65		3.5		
	Dehumidifying		ℓ/h	1.0		1.4		
	Air Volume		m³/min	7.3	25	8.3	25	
	Noise		dB	38 / 36 / 34	51 / 51	41 / 39 / 37	53 / 53	
	Energy Efficiency Ratio		W/W	2.82		2.99		
	Power		V-Hz	1-220-50		1-220-50		
Power	Power Consumption		W	940		1,170		
	Operating Current		A	4.6		5.8		
	Power Factor		%	97.0		92.0		
	Starting Current		A	21.0		30.0		
	Power Cord	Length	m	-		-		
		Number of Core Wire		-		-		
		Capacity	A	250V-10A		250V-10A		
Size	Outer Dimension		W x H x D	mm	835 x 285 x 189	720 x 548 x 265	835 x 285 x 189	720 x 548 x 265
				inch	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4
	Weight(Net)		kg	8.2	33.0	8.4	33.8	
	Refrigerant Pipe		Liquid	mm x L(m)	ø6.35 x 4.0		ø6.35 x 4.0	
			GAS	mm x L(m)	ø9.52 x 4.0		ø12.7 x 4.0	
	Drain Hose		D x L (mm)	ø18 x 550		ø18 x 550		
	Compressor	Type		Rotary		Rotary		
		Motor	Type	Induction Motor(PSC)		Induction Motor(PSC)		
			Rated Output		1,005		1,206	
	Oil Type			SUNISO-4GSD		SUNISO-4GSD		
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	
		Motor	Type	steel	steel	steel	steel	
			Rated Output		W	15	50	15
Heat Exchanger				2ROW 14STEP	1ROW 24STEP	2ROW 14STEP	1ROW 24STEP	
Refrigerant Control Unit				CAPILLARY TUBE		CAPILLARY TUBE		
Freezer Oil Capacity			cc	360		600		
Refrigerant to Change(R22)			g	580		920		
Protection Device(OLP)				RAC12054-9622		RAC12074-9622		
Cooling Test Condition				INDOOR UNIT : DB27°C WB19°C		OUTDOOR UNIT : DB35°C WB24°C		
Maximum Operation Condition				INDOOR UNIT : DB32°C WB23°C		OUTDOOR UNIT : DB43°C WB28°C		

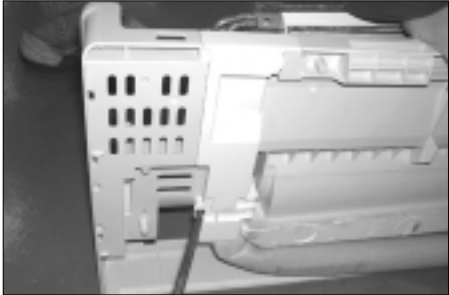
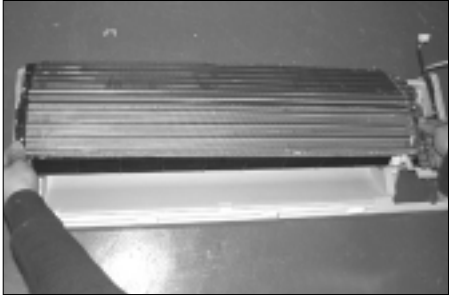
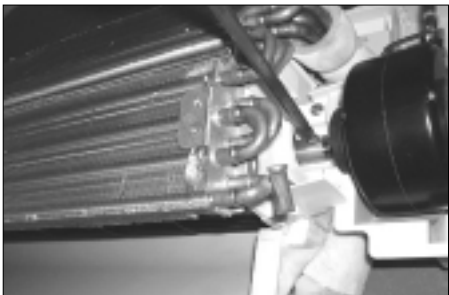
2. Disassembly and Reassembly

Stop operation of the air conditioner and remove the power cord before repairing the unit.

2-1 Indoor Unit

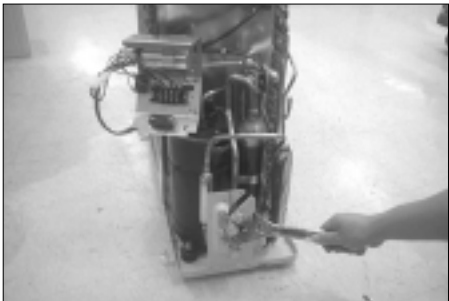
No	Parts	Procedure	Remark
1	Front Grille	1) Stop the air conditioner operation and block the main power. 2) Open the Front Grille by pulling right and left sides of the hook. 3) Loosen 1 of the right screw and detach the Terminal Cover. 4) Detach the thermistor from the Front Grille. 5) Loosen 2 fixing screws of Front Grille.	   

No	Parts	Procedure	Remark
		6) Unlock 2 hooks to fix Panel Front and Tray Drain. 7) Unlock 3 hooks to fix Panel Front and Back-Body.	
2	Control-In (Main PCB)	1) Take all the connector of PCB upper side out. (Inclusion Power Cord) 2) Detach the outdoor unit connection wire from the Terminal Block. 3) Loosen 4 fixing screws of Ass'y Control-In.	
3	Tray Drain	1) Pull Tray Drain out from the Back Body.	

No	Parts	Procedure	Remark
4	Heat Exchanger	1) Loosen 2 fixing earth screws of right side. 2) Detach the Connection Pipe. 3) Detach the Holder Pipe at the rear side. 4) Loosen the 3 fixing screws of right and left side. 5) Lifting the Heat Exchanger up a little to push the up side for separation from the indoor unit.	  
5	Fan Motor & Cross Fan	1) Loosen the fixing screw and detach the Motor Holder. 2) Detach the Fan Motor from the Fan. 3) Detach the Fan From the left Holder Bearing.	 

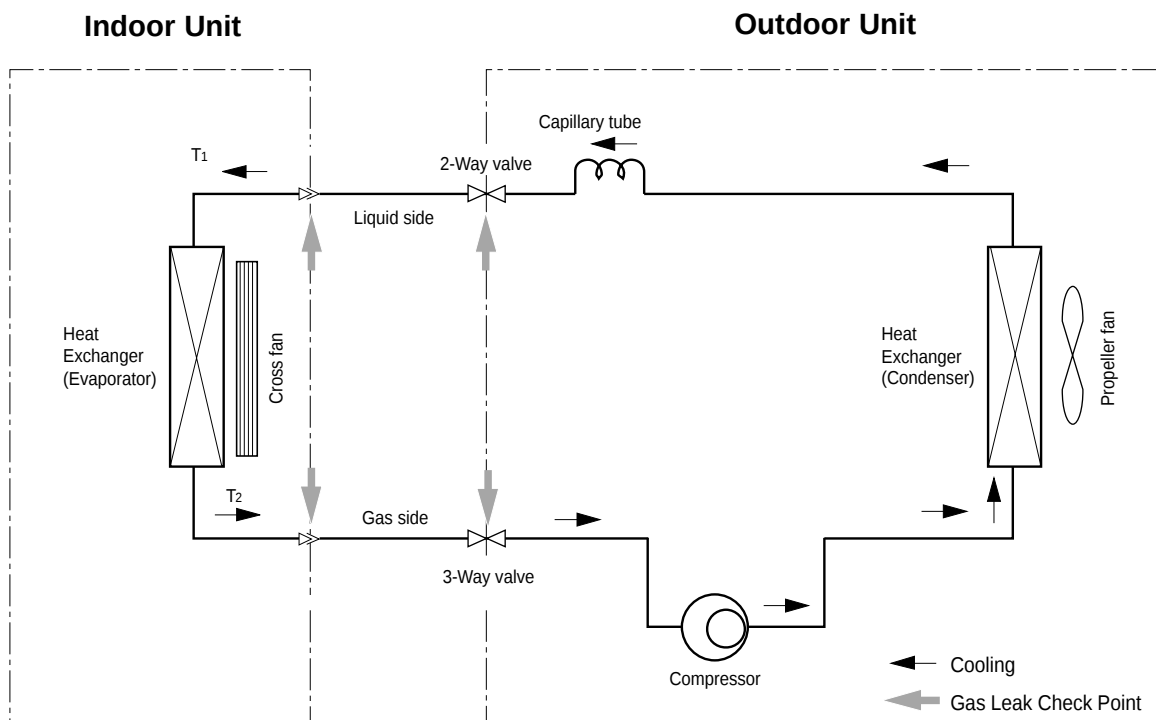
2-2 Outdoor Unit

No	Parts	Procedure	Remark
1	Common Work	1) Loosen each 3 fixing screws on both right and left Cabinet-Side edge and a fixing screw on the Cabinet-Front lower to detach the Cabinet-Front. 2) Loosen 2 fixing screws of the Ass'y-Control. 3) Loosen 6 fixing screws of the Cabinet-Side RH. 4) Loosen 2 fixing screws of the Cabinet-Side LF.	    

No	Parts	Procedure	Remark
2	Fan & Motor	1) Detach the Nut Flange.(Turn counterclockwise because the screw is right-handed) 2) Detach the Fan. 3) Loosen 4 fixing screws to detach the Motor.	
3	Heat Exchanger	1) Loosen 2 fixing screws on both sides. 2) Disassemble the pipe in both inlet and outlet with welding torch. 3) Detach the Heat Exchanger.	 
4	Compressor	1) Loosen the Terminal Cover nut to open the Terminal Cover. 2) Disassemble the cloth sound felt. 3) Disassemble the pipe in both inlet and outlet of the Compressor with welding torch. 4) Disassemble the pipe in both inlet and outlet of the Condenser with welding torch. 5) Loosen the 3 bolts at the bottom. 6) Detach the Compressor.	

3. Refrigerating Cycle Diagram

3-1 Refrigerating Cycle Diagram



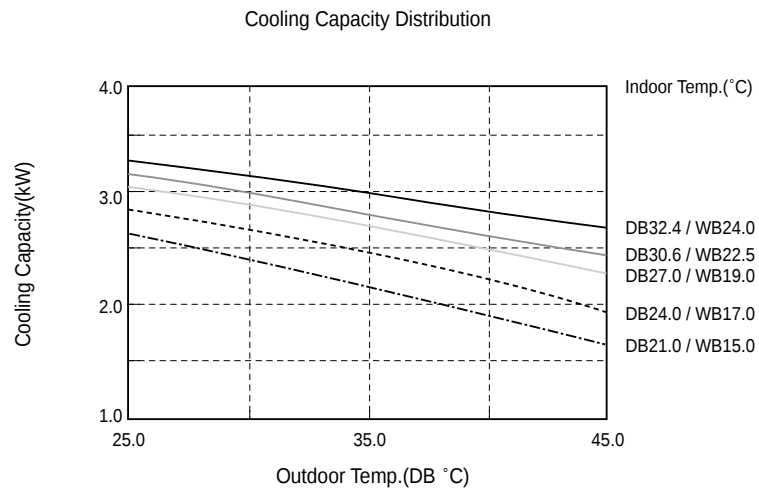
3-2 Refrigerant Cycle Characteristic

3-2-1 Capacity Distributions

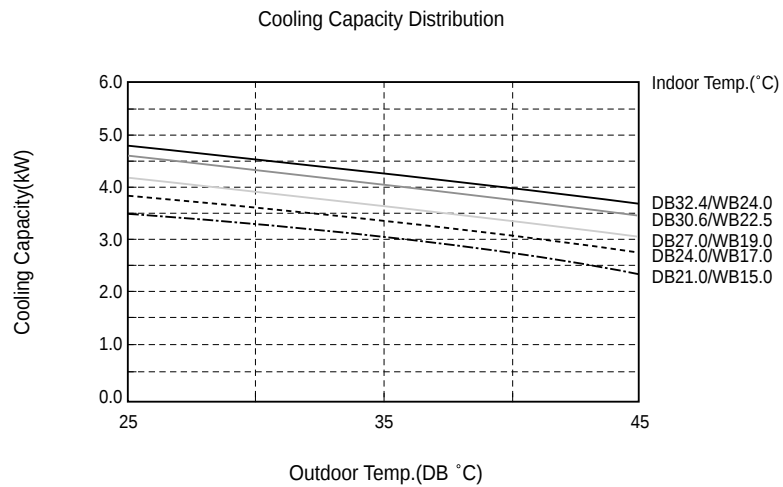
Capacity Distributions according to indoor and outdoor temperature variation.

- Indoor Temp. Variation : 21.0°C ~ 32.4°C
- Outdoor Temp. Variation : 25.0°C ~ 45.0°C

■ 9,000Btu



■ 12,000Btu

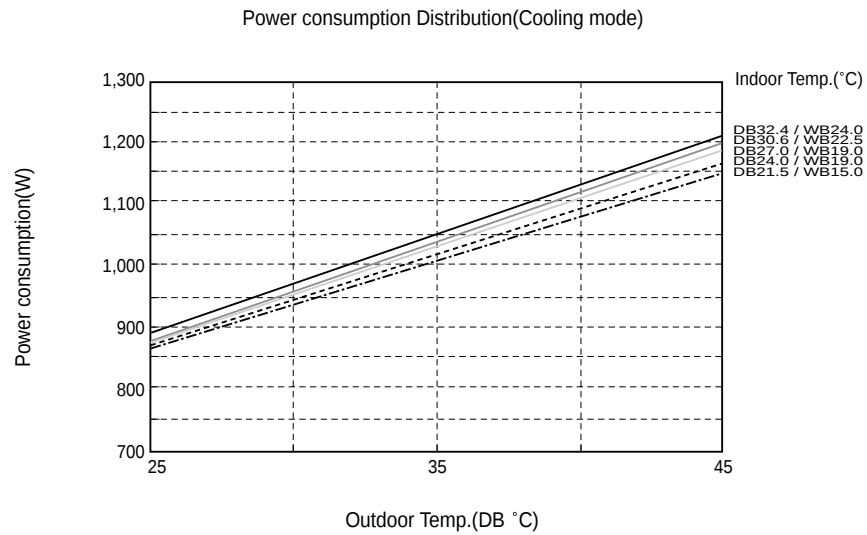


3-2-2 Power Consumption Distributions

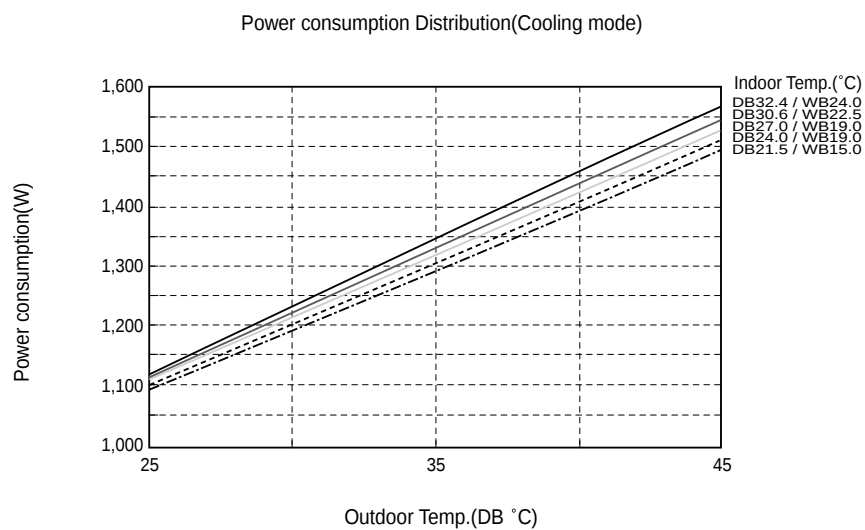
Power Consumption Distributions according to indoor and outdoor temperature variation.

- Indoor Temp. Variation : 21.0°C ~ 32.4°C
- Outdoor Temp. Variation : 25.0°C ~ 45.0°C

■ 9,000Btu

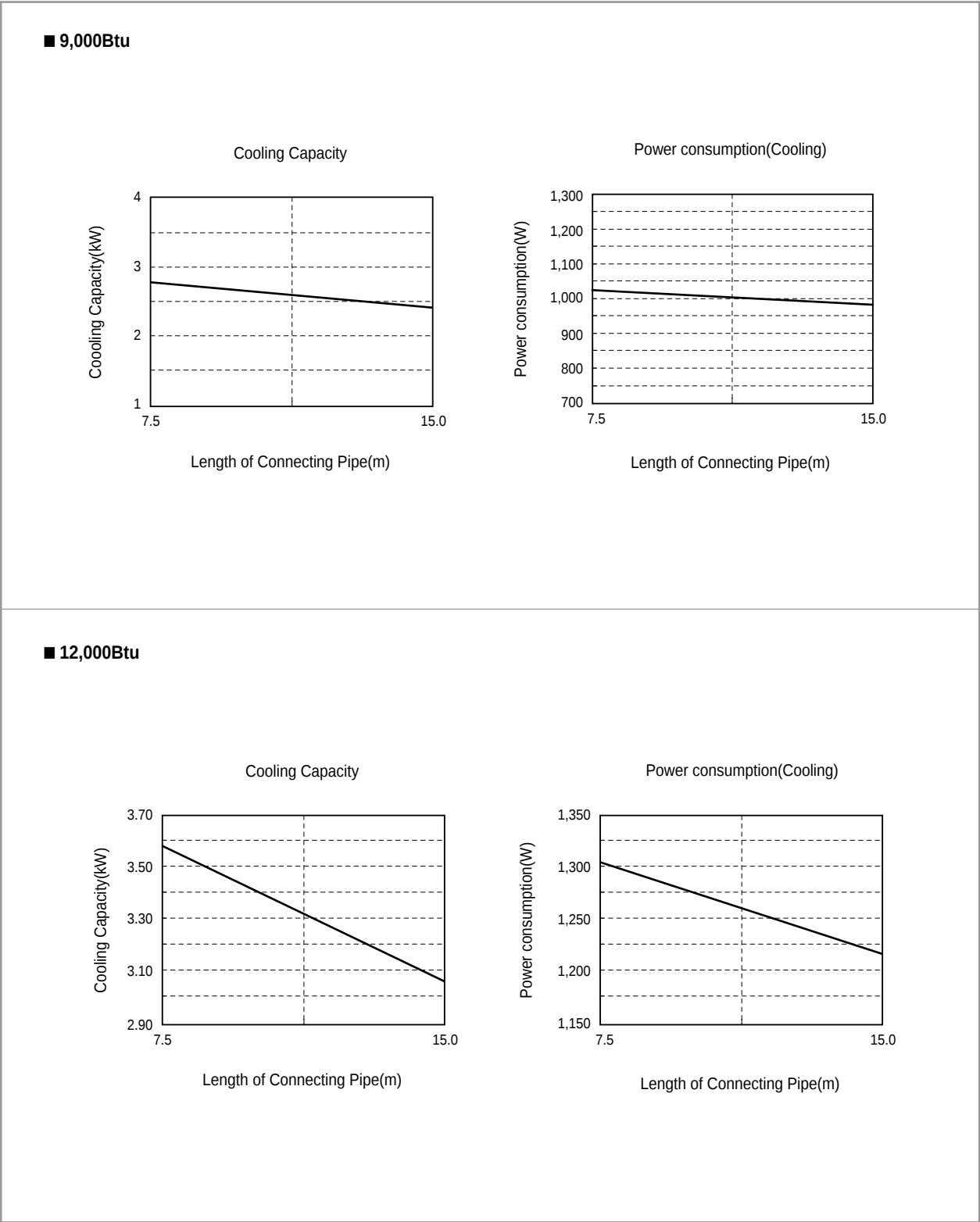


■ 12,000Btu



3-2-3 Capacity and Power Consumption Distributions

Capacity and power Consumption distributions according to the length of connecting Pipe between indoor unit and outdoor unit.



4. Set Up the Model Option

4-1 Setting Option Setup Method

ex) Option No. : 25 02 57 03 40

Step 1 : Enter the Option Setup mode.

- 1st Take out the batteries of remote control.
- 2nd Press the temperature  button simultaneously and insert the battery again.
- 3rd Make sure the remote display shown as .



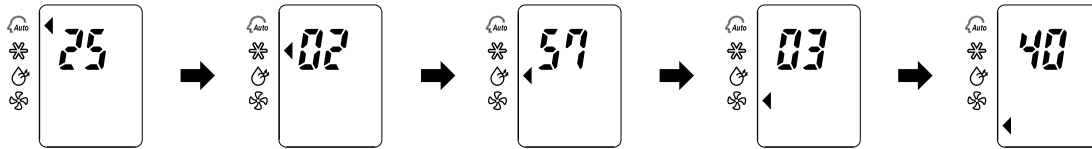
Step 2 : Enter the Option Setup mode and select your option according to the following procedure.

Feature		Display
	1 Setting Option SEG1. 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.	
	2 Setting Option SEG2. Push the  button to set the display panel to 5. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	3 Change it into the set display of Option SEG3 and SEG4 with the  button.	
	4 Setting Option SEG3. Push the  button to set the display panel to 0. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	5 Setting Option SEG4. 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.	

	Feature	Display
	6 Change it into the set display of Option SEG5 and SEG6 with the  button.	
	7 Setting Option SEG5. Push the  button to set the display panel to 5. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	8 Setting Option SEG6. 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.	
	9 Change it into the set display of Option SEG7 and SEG8 with the  button.	
	10 Setting Option SEG7. Push the  button to set the display panel to 0. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	11 Setting Option SEG8. 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.	
	12 Change it into the set display of Option SEG9 and SEG10 with the  button.	
	13 Setting Option SEG9. Push the  button to set the display panel to 4. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	14 Setting Option SEG10. Push the  button to set the display panel to 0. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	

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

Whenever you press the  button, the set Option will be displayed.



Step 4 : Pressing the ON/OFF button ()

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

Step 5 : Unit operation test-run

First, Remove the battery from the remote controller.

Second, Re-insert the battery into the remote controller.

Third, Press ON/OFF () key with the direction of remote controller for set.

• Error Mode

- 1st If all lamps of indoor unit are flickering, Plug out, plug in power plug again and press ON/OFF key to retry.
- 2nd 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.

4-2 Table of the option Code

Model	Option Code									
	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10
SC09AWH	2	0	0	0	0	A	0	0	c	8
SC09ZWH AS09WHWD AS09WHWE KF-25G / SWA	2	0	0	0	0	A	0	0	F	b
SC12AWH SC12ZWH AS12WHWD AS12WHWE KF-35G / SWA	2	0	0	0	0	A	0	3	4	0

5. Troubleshooting

Check the basic items first to judge if the problem was caused by breakdown or misuse. If none of the basic items are related to the problem, please scrutinize the machine according to the 'Breakdown Diagnosis by Symptoms' method.

5-1 Basic Breakdown Diagnosis Items

1. The input voltage should be rating voltage $\pm 10\%$ range.
The airconditioner may not operate properly if the voltage is out of this range.
2. Is the link 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 airconditioner 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 airconditioner.

No	Operation of air conditioner	Explanation
1	The OPERATION indication LED(GREEN) blinks when a power plug of the indoor unit is plugged in for the 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 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(GREEN) 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.

5-2 Trouble check in the initial status

5-2-1 Diagnosis and marking of the part in trouble.

Please check the air conditioner operation status and write the check result in the chart in the room.

Description	LAMP		
	OPERATION	TIMER	TURBO
			
Indoor unit room temperature sensor error (open or short)	○	◐	○
Indoor unit heat exchanger temperature sensor error (open or short)	◐	◐	○
Indoor fan motor mal function	◐	○	◐
EEPROM error	○	◐	◐
Option error (option wasn't set up or option data error)	◐	◐	◐

○ : Lamp off ◐ : Lamp flickering

5-2-2 Operation with abnormal motion

No	Abnormal condition	Inspection		Initial Diagnosis
1	No response from the remote control operation signal.	• Plug out and plug in 5 seconds later.	Able to operate the remote control.	OK
			Unable to operate the remote control.	Press the  button in the indoor unit. • If it operates, the remote control and indoor unit receiver are in trouble. • If not, the indoor unit is in trouble.
2	Unable to operate the outdoor unit	• Press the TURBO button with the remote control. • In 3 minutes, check the voltage between the indoor unit terminal block N(1) and 1.	AC200V ~ AC240V	Problem with the outdoor unit or PCB
			No power source displayed.	Problem with the relay (RY71) or PCB

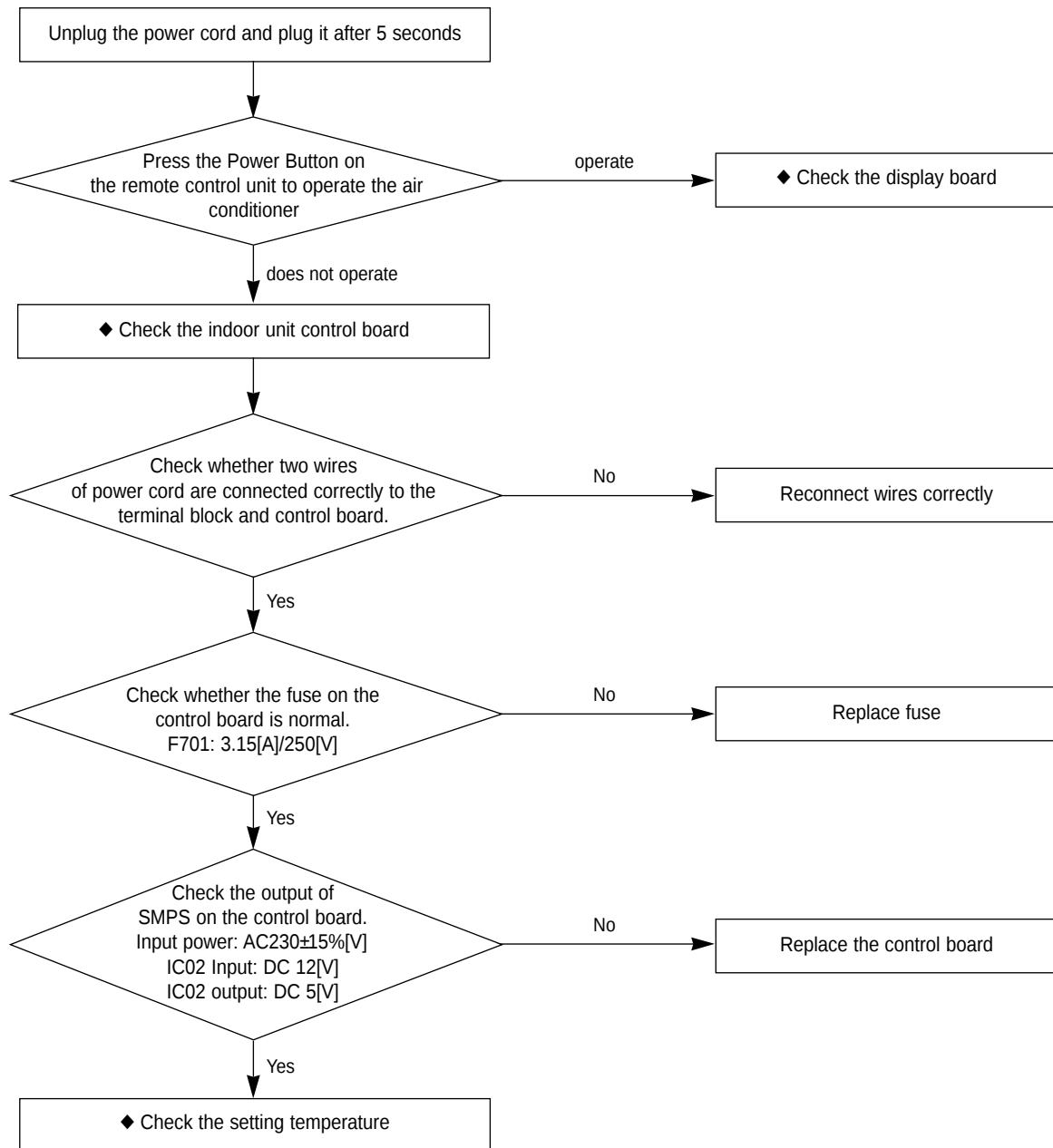
5-3 Breakdown diagnosis by symptoms

5-3-1 No Power (completely dead)-Initial diagnosis

1. Checklist :

- 1) Is input voltage normal?
- 2) Is AC power linked correctly?
- 3) Is input voltage of DC regulator IC KA7805 (IC02) normal? (11VDC-12.5VDC)
- 4) Is output voltage of DC regulator IC KA7805 (IC02) normal? (4.5VDC-5.5VDC)

2. Troubleshooting procedure

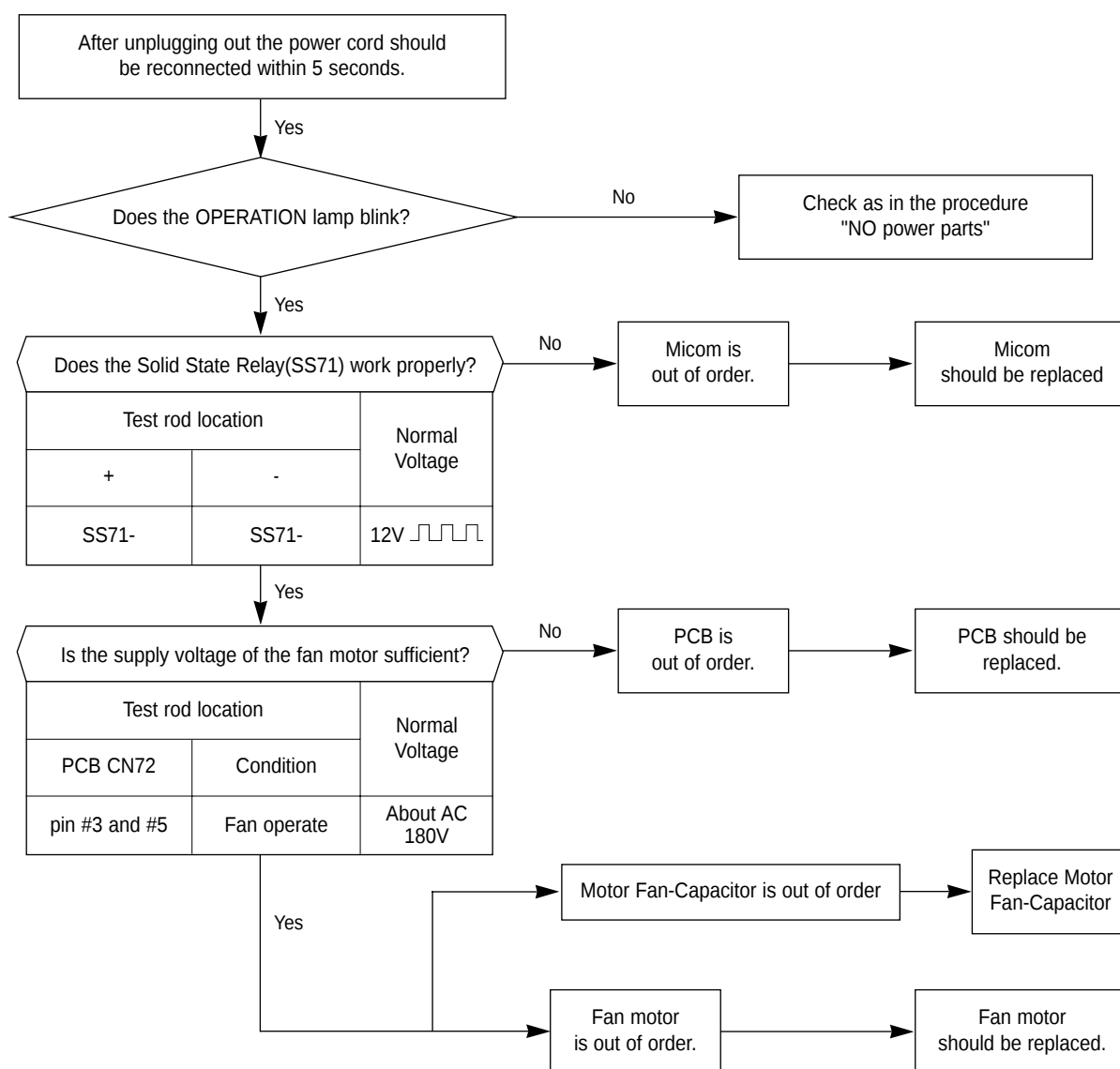


5-3-2 When the Indoor Unit Fan Does Not Operate. (Initial Diagnosis)

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

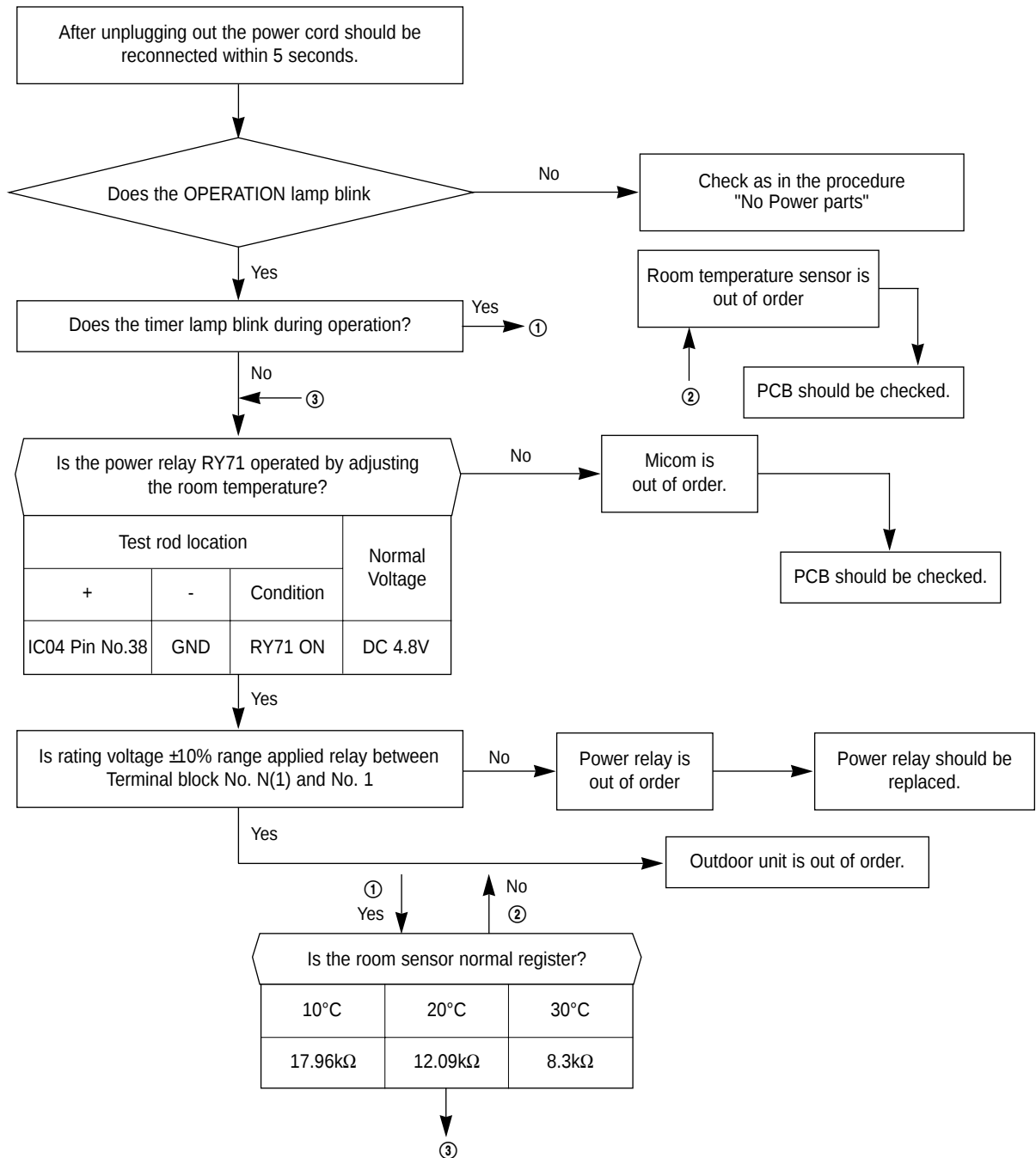


5-3-3 When the Outdoor Unit Does Not Operate. (Initial Diagnosis)

1. Checklist :

- 1) Is input voltage normal?
- 2) Is the set temperature of the remote control higher than room temperature in COOL mode?
- 3) Is the set temperature of the remote control lower than room temperature in HEAT mode?
- 4) Is the POWER IN connector (CN71) linked correctly?
- 5) Is the outdoor unit properly connected with the TERMINAL BLOCK connector(N(1), 1, 2, 3)?

2. Troubleshooting procedure

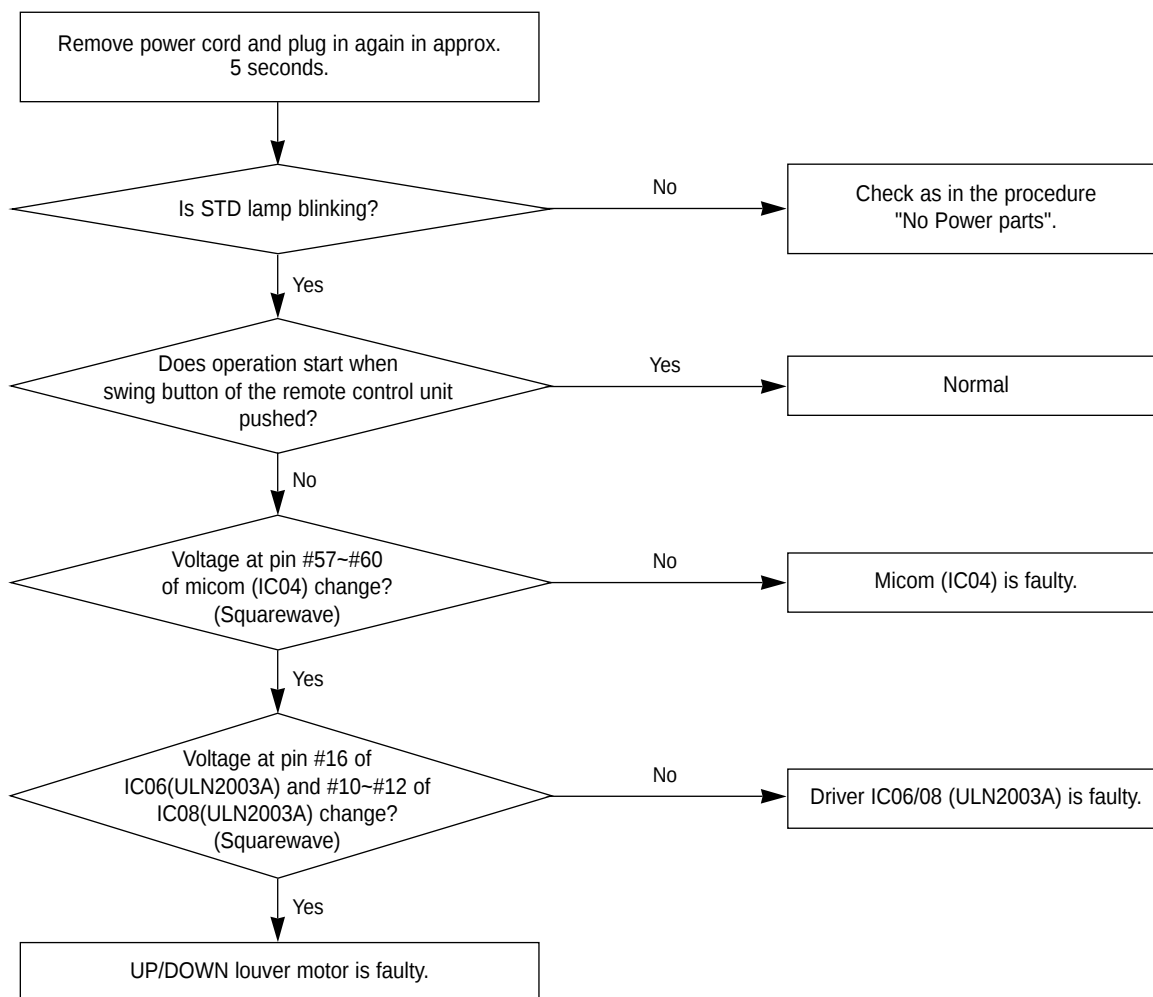


5-3-4 When the UP/DOWN Louver Motor Does Not Operate. (Initial Diagnosis)

1. Checklist :

- 1) Is input voltage normal?
- 2) Is the UP/DOWN louver motor properly connected with the connector (CN61)?

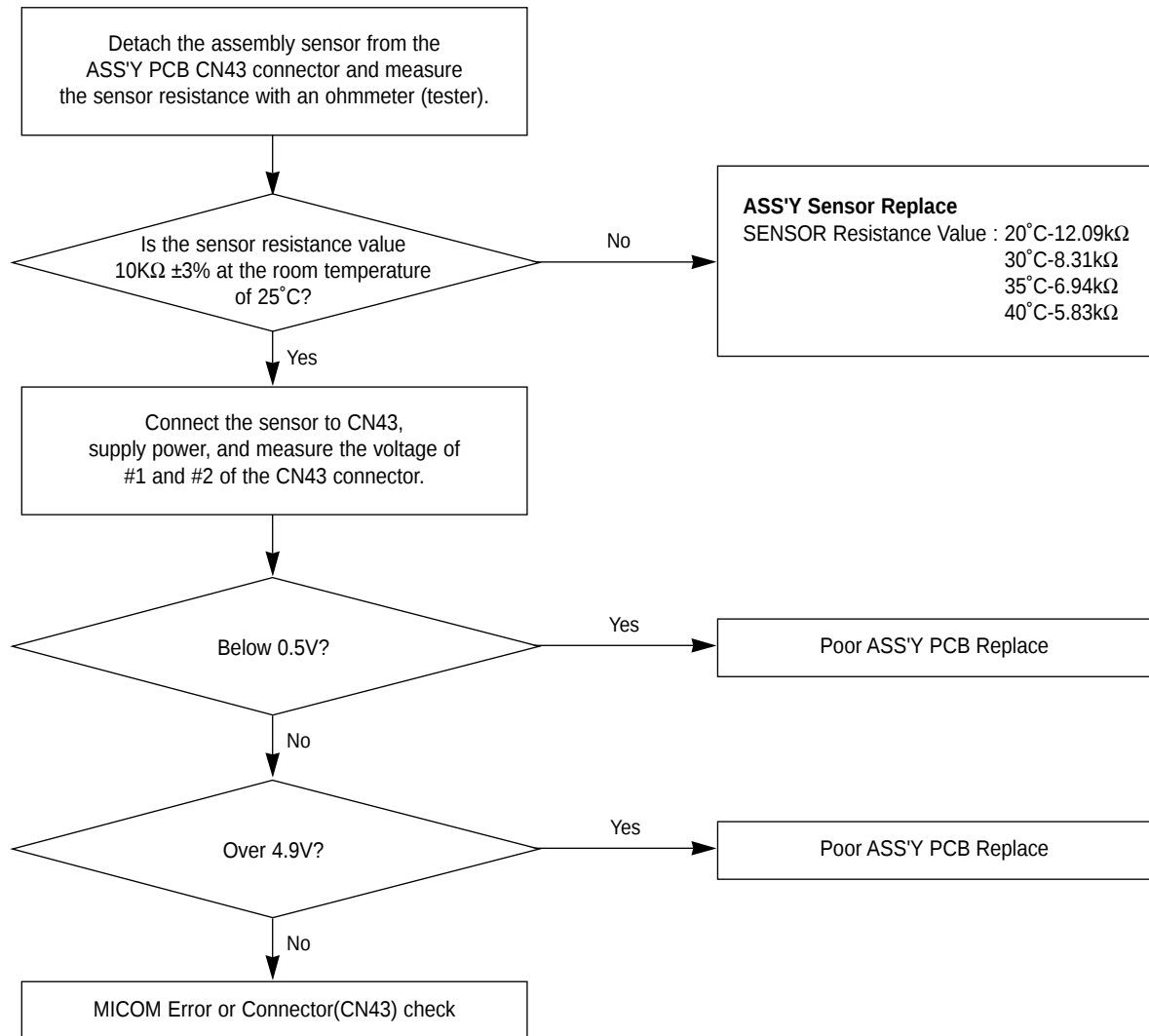
2. Troubleshooting procedure



5-3-5 Room temperature sensor failure

Description	LAMP		
	OPERATION	TIMER	TURBO
			
Indoor unit room temperature sensor error(open or short)	○	◐	○

○ : Lamp off ◐ : Lamp flickering



5-3-6 Room Pipe sensor failure

Description	LAMP		
	OPERATION	TIMER	TURBO
			
Indoor unit heat exchanger temperature sensor error (open or short)			

○ : Lamp off ◐ : Lamp flickering

1. Check the assembly condition of the sensor connector(CN43) on the indoor unit Main PCB and if not assembled, reassemble the connector accurately.
2. Detach the room pipe sensor connector(CN43) and check the resistance between connector 3 and 4.

Temperature(°C)	Resistance Value(Kohm)	Temperature(°C)	Resistance Value(Kohm)	Others
15	14.68	30	8.31	The data tolerance is ±3%.
20	12.09	35	6.94	
25	10	40	5.83	

If the above data is not met, replace the room pipe sensor.

3. Assemble the room pipe sensor to PCB, plug in, and check the voltage of connector 3 and 4. If the resistance is below 0.5V or over 4.9V, replace the indoor Main PCB. (short or disconnected in the PCB board)

5-3-7 When the remote control is not receiving.

1. Check if the connector was normally assembled.
2. Put the set in operation and check the voltage of No. 3(+) and No. 2(-) of the main PCB CN91 while operating the remote control. When the voltage descends below 3V, the assembly module PCB is normal and the main PCB is poor. Then replace the main PCB.
3. Replace the assembly display PCB because the module PCB is poor if the voltage between No. 2~3 of CN91 maintains 5V after the remote control starts operation.

5-4 PCB Inspection Method

5-4-1 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.

5-4-2 Inspection Procedure

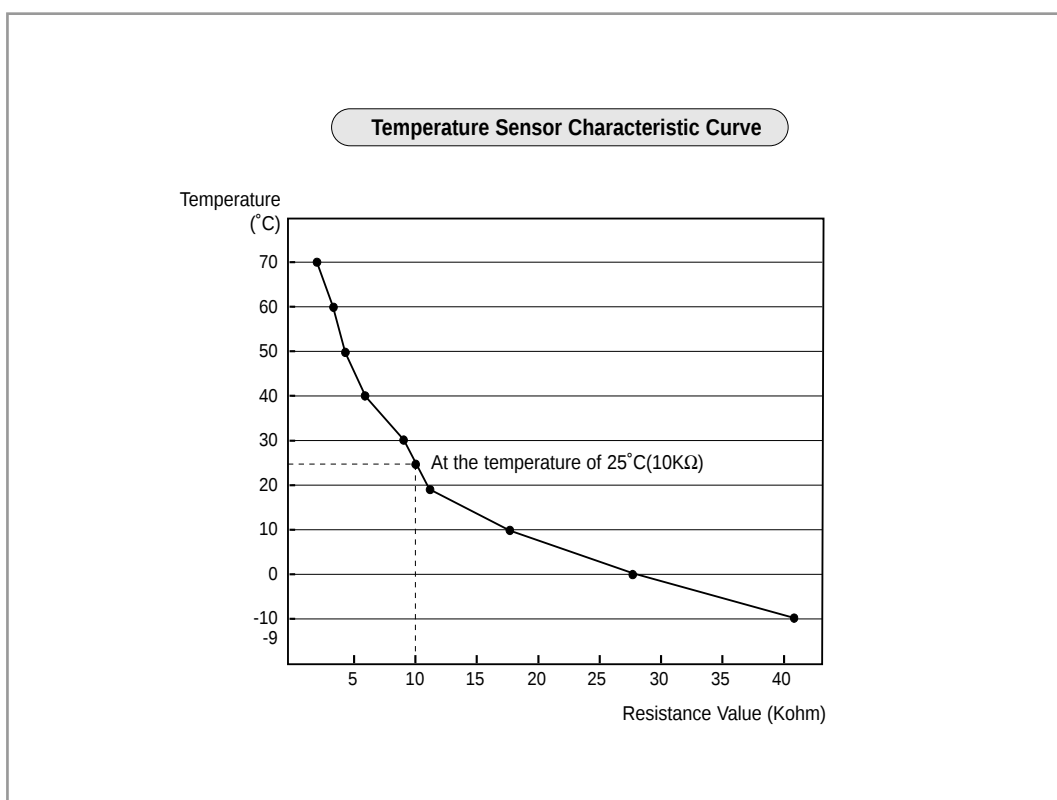
1. Check connector connection and peeling of PCB or bronze coating pattern when you think the PCB is broken.
2. The PCB is composed of the 3 parts.
 - **Main PCB Part** : MICOM and surrounding circuit, relay, room fan motor driving circuit and control circuit, sensor driving circuit, power circuit of DC12V and DC5V, and buzzer driving circuit.
 - **Display part** : LED lamp
 - **Switch part** : Switch

5-4-3 Detailed Inspection Procedure

No	Procedure	Inspection Method	Cause
1	Plug out and pull the PCB out of the electronic box. Check the PCB fuse.	1) Is the fuse disconnected? (F701)	• Overcurrent • Indoor Fan Motor Short • AC Part Pattern Short of the MAIN PCB
2	Supply power. If the operating lamp twinkles at this time, the above 1)~3) have no relation.	Checking the power voltage.	
		1) Is the DB71input voltage AC200V~AC240V?	• Power Cord is fault, Fuse open. Wrong Power Cable Wiring, AC Part is faulty.
		2) Is the voltage between both terminals of the C102 on the 2 nd side of the transformer AC12V $\pm 0.5V$?	• Switching Trans or Power Circuit is faulty
		3) Is the voltage between both terminals of OUT and GND of IC02(KA78L05) DC5V $\pm 0.5V$?	• Power Circuit is faulty, Load Short
3	Press the ON/OFF button and operate TURBO mode. But, exclude the RESERVE operation.	Checking the power voltage.	
		1) Check the voltage of the relay(RY71) coil(IC05 PIN #11 and GND : 0V, PIN#6 and GND : 5V) during operation(3 minutes after TURBO operation).	• Relay(RY71) Coil Disconnection, IC05 is faulty
		2) Check the voltage of both terminals of terminal block 1 and N(1) after 3 minute operation.: AC220V	• Relay(RY71) Contact is faulty
4	Press the ON/OFF button. 1. FAN Speed [High] 2. Continuous Operation	1) Is the voltage over AC180V being imposed on terminal #3 and #5 of the fan motor connector(CN72)?	• Fan Motor of the indoor is faulty
		2) The fan motor of the indoor unit doesn't run.	• Fan Motor Connector(CN72) is faulty
		3) The power voltage between terminal #3 and #5 of the connector(CN72) is 0V.	• ASS'Y Main PCB is faulty • Connection is faulty

5-4-4 Temperature Sensor Feature Conversion Table(Room Temperature Sensor); 103AT

Temperature [°C]	Sensor Resistance [Kohm]	Temperature [°C]	Sensor Resistance [Kohm]	Temperature [°C]	Sensor Resistance [Kohm]	Temperature [°C]	Sensor Resistance [Kohm]
70	2.229						
69	2.296	49	4.300	29	8.622	9	18.700
68	2.365	48	4.444	28	8.944	8	19.480
67	2.437	47	4.594	27	9.281	7	20.290
66	2.512	46	4.749	26	9.632	6	21.150
65	2.589	45	4.912	25	10	5	22.050
64	2.669	44	5.080	24	10.380	4	22.990
63	2.752	43	5.256	23	10.780	3	23.900
62	2.838	42	5.439	22	11.200	2	25.030
61	2.928	41	5.630	21	11.630	1	26.130
60	3.021	40	5.828	20	12.090	0	27.280
59	3.116	39	6.033	19	12.560	-1	28.470
58	3.216	38	6.246	18	13.060	-2	29.720
57	3.319	37	6.468	17	13.570	-3	31.040
56	3.426	36	6.699	16	14.120	-4	32.430
55	3.537	35	6.941	15	14.680	-5	33.890
54	3.652	34	7.192	14	15.280	-6	35.430
53	3.772	33	7.455	13	15.900	-7	37.050
52	3.897	32	7.729	12	16.550	-8	38.760
51	4.026	31	8.015	11	17.240	-9	40.560
50	4.161	30	8.313	10	17.960		



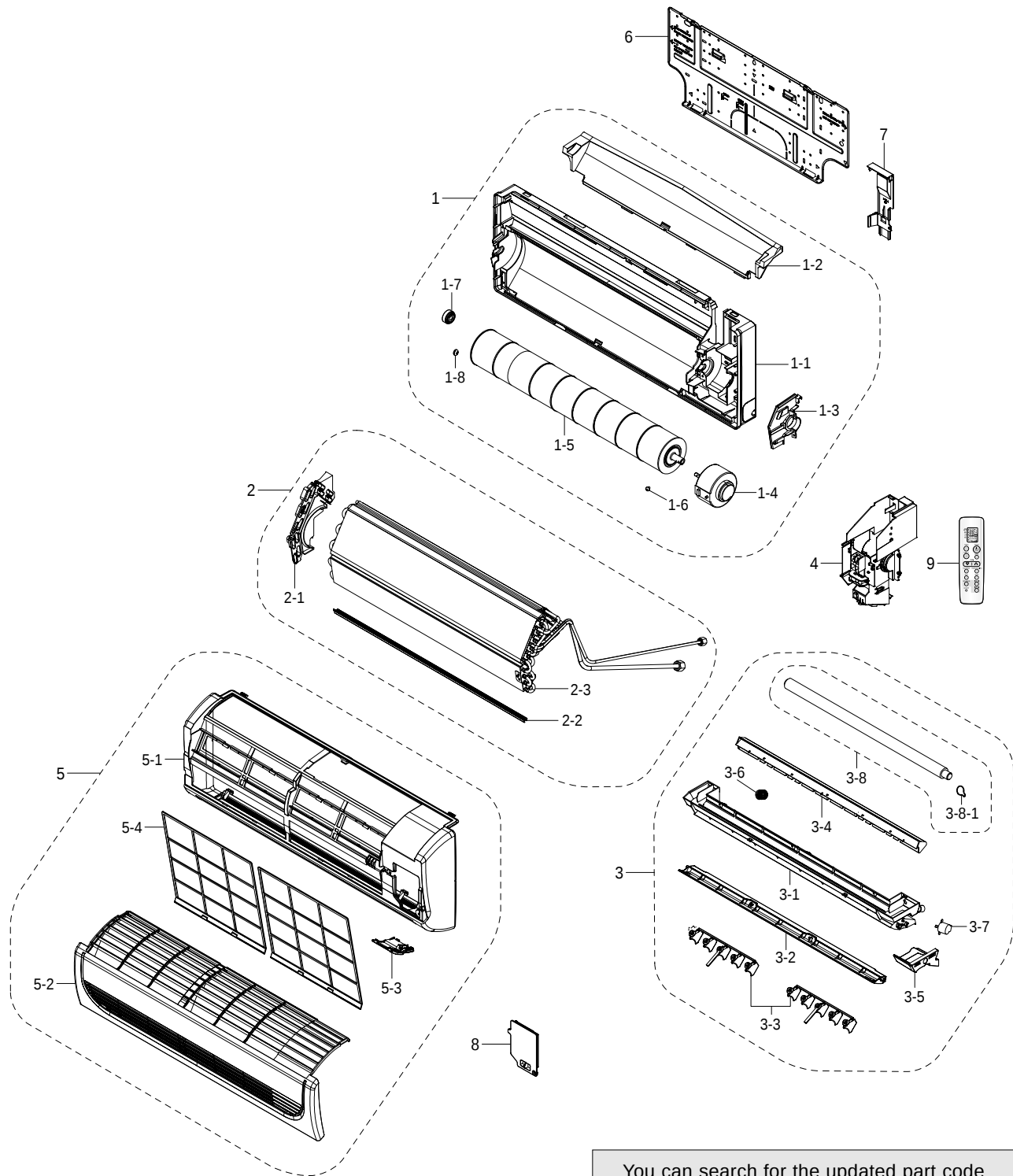
5-5 Main Part Inspection Method

Part	Breakdown Inspection Method		
Room Temperature Sensor	Measure resistance with a tester		
	Normal	At the normal temperature 37kΩ~ 8.3kΩ(-7℃~+30℃) *Refer to Table 5-4-4.	
	Abnormal	∞, 0Ω . . . Open or Short	
Room Fan Motor	Measure the resistance between terminals of the connector (CN72) with a tester.		
	Normal	At the normal temperature (10℃ ~ 30℃)	
		Compare terminal	Resistance
Yellow, Blue		404.4Ω ± 10%	Main
Yellow, Red		340Ω ± 10%	Sub
Abnormal	∞, 0Ω . . . Open or Short		
Outdoor Fan Motor	Measure the resistance between motor wires with a tester.		
	Normal	At the normal temperature (10℃ ~ 30℃)	
		Compare terminal	Resistance
Yellow, Red		360Ω ± 10%	Main
Black, Yellow		328Ω ± 10%	Sub
Abnormal	∞, 0Ω . . . Open or Short		
Stepping Motor	Measure the resistance between the red wire and each terminal wire with a tester.		
	Normal	About 300Ω at the normal temperature (20℃ ~ 30℃)	
	Abnormal	∞, 0Ω . . . Open or Short	

MEMO

6. Exploded Views and Parts List

6-1 Indoor Unit



You can search for the updated part code number through the ITSELF.
URL : <http://itself.sec.samsung.co.kr>

■ Parts List

No.	Code No.	Description	Specification	Q'TY		Remark
				SC09AWH	SC12AWH	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112A	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112B	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, P11.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536A	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB64-00990A	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532A	ASS'Y-REMOCON	REMOCON	1	1	

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY		Remark
				SC09ZWH AS09WHWE	SC12ZWH AS12WHWE	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112C	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112D	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, PI1.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536A	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB64-00990A	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532A	ASS'Y-REMOCON	REMOCON	1	1	

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY		Remark
				KF-25G / SWA	KF-35G / SWA	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112C	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112D	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, PI1.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536B	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB63-00846B	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532C	ASS'Y-REMOCON	REMOCON	1	1	

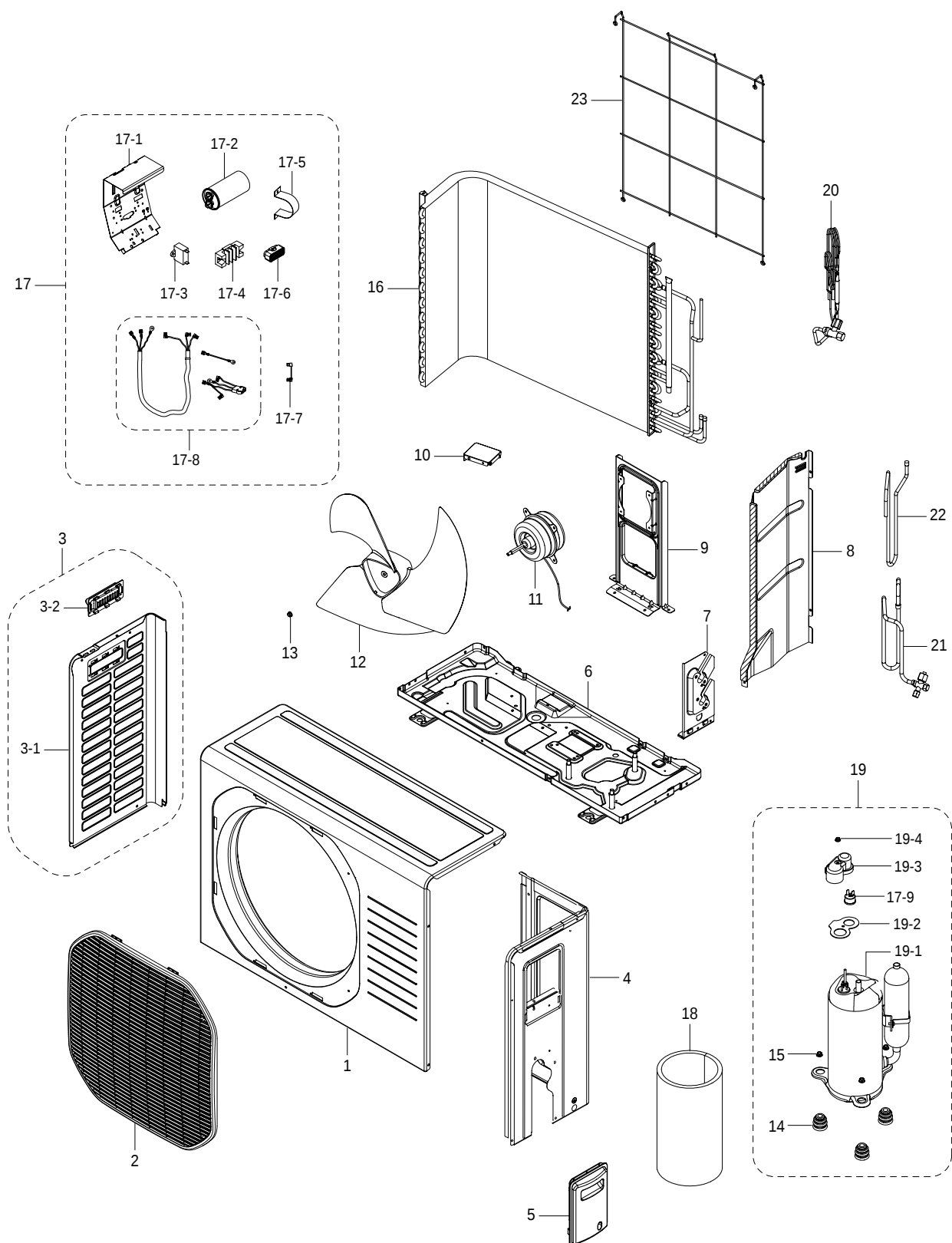
■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY		Remark
				AS09WHWD (INDONESIA)	AS12WHWD (INDONESIA)	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112C	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112D	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, PI1.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536B	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB63-00846B	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532A	ASS'Y-REMOCON	REMOCON	1	1	

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY		Remark
				SC09ZWH (AUSTRALIA)	SC12ZWH (AUSTRALIA)	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112C	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112D	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, PI1.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536A	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB64-00990A	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532A	ASS'Y-REMOCON	REMOCON	1	1	

6-2 Outdoor Unit



■ Parts List

No.	Code No.	Description	Specification	Q'TY	
				SC09AWHX	SC12AWHX
1	DB90-01341A	ASS'Y-CABI FRONT	T0.7, SECCD-P	1	1
2	DB63-00847A	GUARD-FAN	PP	1	1
3	DB90-01332A	ASS'Y CABI SIDE LF	ASS'Y	1	1
3-1	DB64-01094A	CABI SIDE LF(COATING)	T0.6, SECC-P	1	1
3-2	DB64-00992A	HANDLE LF	PP	1	1
4	DB90-01331A	ASS'Y CABI SIDE RH	T0.6, SECC-P	1	1
5	DB63-00853A	COVER-CONTROL	ABS-V0	1	1
6	DB90-01330A	ASS'Y-BASE	T1.0, SECC-P	-	1
	DB90-01330B	ASS'Y-BASE	T1.0, SECC-P	1	-
7	DB99-00401A	ASS'Y BRACKET VALVE	SECC-P, T1.0	1	1
8	DB94-00459C	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	-	1
	DB94-00459B	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	1	-
9	DB61-01644A	BRACKET-MOTOR	SGCC-M T1.6	1	1
10	DB97-02225A	ASS'Y PLATE SUPPORT B/M	ASS'Y	-	1
	DB97-02225C	ASS'Y PLATE SUPPORT B/M	ASS'Y	1	-
11	DB31-00220A	MOTOR-OUT	YDK-25F6M13E-1	1	1
12	DB67-00397A	PROPELLER-FAN	AS+G/F 20%	1	1
13	DB60-30004A	NUT FLANGE		1	1
14	DB63-00815A	GROMMET	NR	-	3
	DB63-00763A	GROMMET	NR	3	-
15	DB60-30028A	NUT WASHER		3	3
16	DB96-03231A	ASS'Y-COND	2x24, PF1.5, LOUVER	-	1
	DB96-03247A	ASS'Y-COND	1x24, PF1.5, LOUVER	1	-
17	DB93-02614A	ASS'Y-CONTROL OUT	ASS'Y	1	-
	DB93-02614B	ASS'Y-CONTROL OUT	ASS'Y	-	1
17-1	DB61-01642A	CASE-CONTROL OUT	SGCC-M T0.6	1	1
17-2	2501-001236	CAPACITOR-COMP	30μFx450V	-	1
	2501-001237	CAPACITOR-COMP	35μFx450V	1	-
17-3	2301-001375	CAPACITOR-MOTOR	1.5μFx450V	1	1
17-4	DB65-40049E	TERMINAL-BLOCK		1	1
17-5	DB65-10046A	CLIP-CAPACITOR		1	1
17-6	DB61-00250A	HOLDER-WIRE		1	1
17-7	DB93-50062C	LEAD WIRE		1	1
17-8	DB93-00480F	ASS'Y LEAD WIRE		-	1
	DB93-00480G	ASS'Y LEAD WIRE		1	-
17-9	DB35-00029A	OLP	MRA99908-9201	-	1
	DB35-00029B	OLP	MRA99134-9201	1	-
18	DB72-00726A	SPONGE-FELT COMP CLOTH	FELT+PVC	-	1
	DB72-00726B	SPONGE-FELT COMP CLOTH	FELT+PVC	1	-
19	DB95-00468A	ASS'Y-COMP		-	1
	DB95-00467A	ASS'Y-COMP		1	-
19-1	DB95-00501A	COMP	802 354 45, SANYO	-	1
	DB95-00534A	COMP	802 141 55, SANYO	1	-
19-2	DB63-00943A	GASKET		-	1
	DB63-00999A	GASKET		1	-
19-3	DB63-00942A	COVER-TERMINAL		1	1
19-4	DB60-30018A	NUT FLANGE		1	1
20	DB96-03233A	ASS'Y CAPILLARY	ASS'Y	1	1
21	DB96-03232A	ASS'Y-TUBE SUCTION	ASS'Y	1	-
	DB62-02566A	ASS'Y-TUBE SUCTION	ASS'Y	-	1
22	DB62-02557A	TUBE DISCHARGE	C1220T-0	1	-
	DB62-02565A	TUBE DISCHARGE	C1220T-0	-	1
23	DB71-00090A	BAR-STEEL		-	1
	DB71-00090B	BAR-STEEL		1	-

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY	
				SC09ZWHX US09WHWE	SC12ZWHX US12WHWE
1	DB90-01341A	ASS'Y-CABI FRONT	T0.7, SECC-P	1	1
2	DB63-00847A	GUARD-FAN	PP	1	1
3	DB90-01332A	ASS'Y CABI SIDE LF	ASS'Y	1	1
3-1	DB64-01094A	CABI SIDE LF(COATING)	T0.6, SECC-P	1	1
3-2	DB64-00992A	HANDLE LF	PP	1	1
4	DB90-01331A	ASS'Y CABI SIDE RH	T0.6, SECC-P	1	1
5	DB63-00853A	COVER-CONTROL	ABS-V0	1	1
6	DB90-01330E	ASS'Y-BASE	T1.0, SECC-P	-	1
	DB90-01330B	ASS'Y-BASE	T1.0, SECC-P	1	-
7	DB99-00401A	ASS'Y BRACKET VALVE	SECC-P, T1.0	1	1
8	DB94-00459C	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	-	1
	DB94-00459B	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	1	-
9	DB61-01644A	BRACKET-MOTOR	SGCC-M T1.6	1	1
10	DB97-02225A	ASS'Y PLATE SUPPORT B/M	ASS'Y	-	1
	DB97-02225C	ASS'Y PLATE SUPPORT B/M	ASS'Y	1	-
11	DB31-00220A	MOTOR-OUT	YDK-25F6M13E-1	1	1
12	DB67-00397A	PROPELLER-FAN	AS+G/F 20%	1	1
13	DB60-30004A	NUT FLANGE		1	1
14	DB63-00815A	GROMMET	NR	-	3
	DB63-00763A	GROMMET	NR	3	-
15	DB60-30028A	NUT WASHER		3	3
16	DB96-03231A	ASS'Y-COND	2x24, PF1.5, LOUVER	-	1
	DB96-03247A	ASS'Y-COND	1x24, PF1.5, LOUVER	1	-
17	DB93-02749A	ASS'Y-CONTROL OUT	ASS'Y	-	1
	DB93-02749B	ASS'Y-CONTROL OUT	ASS'Y	1	-
17-1	DB61-01642A	CASE-CONTROL OUT	SGCC-M T0.6	1	1
17-2	2501-001236	CAPACITOR-COMP	30μF×450V	-	1
	2501-001238	CAPACITOR-COMP	40μF×450V	1	-
17-3	2301-001375	CAPACITOR-MOTOR	1.5μF×450V	1	1
17-4	DB65-40049E	TERMINAL-BLOCK		1	1
17-5	DB65-10046A	CLIP-CAPACITOR		1	1
17-6	DB61-00250A	HOLDER-WIRE		1	1
17-7	DB93-50062C	LEAD WIRE		-	-
17-8	DB93-00480F	ASS'Y LEAD WIRE		1	1
17-9	DB30-00030C	OLP	RAC12074-9622	-	1
	DB30-00020G	OLP	RAC12110-9622	1	-
18	DB72-00726E	SPONGE-FELT COMP CLOTH	FELT+PVC	-	1
	DB72-00726D	SPONGE-FELT COMP CLOTH	FELT+PVC	1	-
19	DB95-00552A	ASS'Y-COMP		-	1
	DB95-00551A			1	-
19-1	48D129JU1EL	COMP		-	1
	44B102JX1EL	COMP		1	-
19-2	DB63-20002A	GASKET		1	1
19-3	DB63-10165A	COVER-TERMINAL		1	1
19-4	DB60-30018A	NUT FLANGE		1	1
20	DB96-03319A	ASS'Y CAPILLARY	ASS'Y	-	1
	DB96-03319B	ASS'Y CAPILLARY	ASS'Y	1	-
21	DB96-03569A	ASS'Y-TUBE SUCTION	ASS'Y	-	1
	DB96-03567A	ASS'Y-TUBE SUCTION	ASS'Y	1	-
22	DB62-02757A	TUBE DISCHARGE	C1220T-0	-	1
	DB62-02758A	TUBE DISCHARGE	C1220T-0	1	1
23	DB71-00090A	BAR-STEEL		-	1
	DB71-00090B	BAR-STEEL		1	-

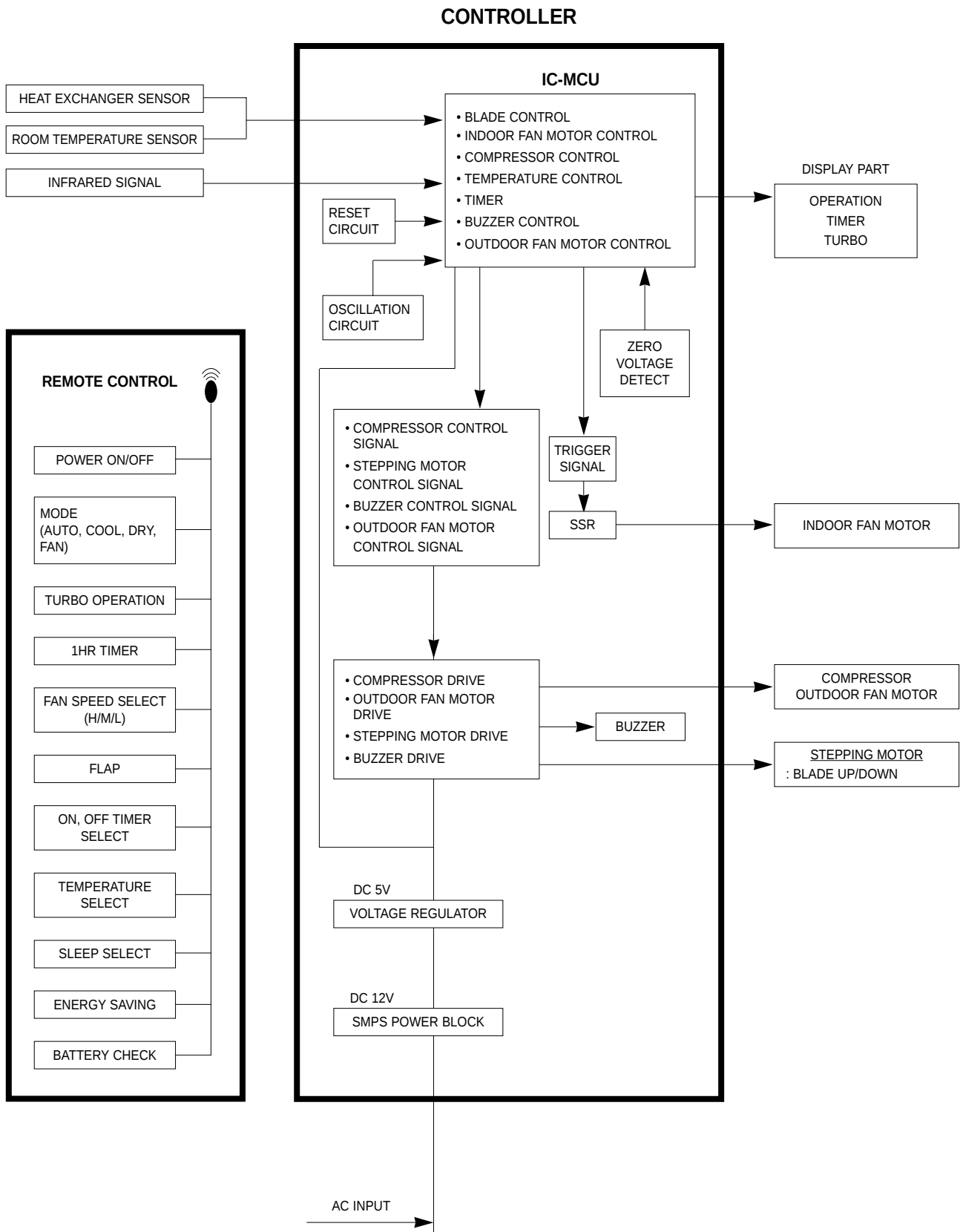
■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY	
				US09WHWD	US12WHWD
1	DB90-01341A	ASS'Y-CABI FRONT	T0.7, SECC-P	1	1
2	DB63-00847A	GUARD-FAN	PP	1	1
3	DB90-01332A	ASS'Y CABI SIDE LF	ASS'Y	1	1
3-1	DB64-01094A	CABI SIDE LF(COATING)	T0.6, SECC-P	1	1
3-2	DB64-00992A	HANDLE LF	PP	1	1
4	DB90-01331A	ASS'Y CABI SIDE RH	T0.6, SECC-P	1	1
5	DB63-00853A	COVER-CONTROL	ABS-V0	1	1
6	DB90-01330E	ASS'Y-BASE	T1.0, SECC-P	-	1
	DB90-01330B	ASS'Y-BASE	T1.0, SECC-P	1	-
7	DB99-00401A	ASS'Y BRACKET VALVE	SECC-P, T1.0	1	1
8	DB94-00459D	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	-	1
	DB94-00459E	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	1	-
9	DB61-01644A	BRACKET-MOTOR	SGCC-M T1.6	1	1
10	DB97-02225A	ASS'Y PLATE SUPPORT B/M	ASS'Y	-	1
	DB97-02225C	ASS'Y PLATE SUPPORT B/M	ASS'Y	1	-
11	DB31-00220A	MOTOR-OUT	YDK-25F6M13E-1	1	1
12	DB67-00397A	PROPELLER-FAN	AS+G/F 20%	1	1
13	DB60-30004A	NUT FLANGE		1	1
14	DB63-00815A	GROMMET	NR	-	3
	DB63-00763A	GROMMET	NR	3	-
15	DB60-30028A	NUT WASHER		3	3
16	DB96-03231A	ASS'Y-COND	2x24, PF1.5, LOUVER	-	1
	DB96-03247A	ASS'Y-COND	1x24, PF1.5, LOUVER	1	-
17	DB93-02749F	ASS'Y-CONTROL OUT	ASS'Y	-	1
	DB93-02749E	ASS'Y-CONTROL OUT	ASS'Y	1	-
17-1	DB61-01642A	CASE-CONTROL OUT	SGCC-M T0.6	1	1
17-2	2501-001236	CAPACITOR-COMP	30μF×450V	-	1
	2501-001237	CAPACITOR-COMP	35μF×450V	1	-
17-3	2301-001375	CAPACITOR-MOTOR	1.5μF×450V	1	1
17-4	DB65-40049E	TERMINAL-BLOCK		1	1
17-5	DB65-10046A	CLIP-CAPACITOR		1	1
17-6	DB61-00250A	HOLDER-WIRE		1	1
17-7	DB93-50062C	LEAD WIRE		-	-
17-8	DB93-00480F	ASS'Y LEAD WIRE		1	1
17-9	DB30-00030C	OLP	RAC12074-9622	-	1
	DB30-00030A	OLP	RAC12054-9622	1	-
18	DB72-00726E	SPONGE-FELT COMP CLOTH	FELT+PVC	-	1
	DB72-00726D	SPONGE-FELT COMP CLOTH	FELT+PVC	1	-
19	DB95-00543B	ASS'Y-COMP		-	1
	DB95-00542B	ASS'Y-COMP		1	-
19-1	48D129MXAEL	COMP		-	1
	44B102MX1EL	COMP		1	-
19-2	DB63-20002A	GASKET		1	1
19-3	DB63-10165A	COVER-TERMINAL		1	1
19-4	DB60-30018A	NUT FLANGE		1	1
20	DB96-03319A	ASS'Y CAPILLARY	ASS'Y	-	1
	DB96-03319C	ASS'Y CAPILLARY	ASS'Y	1	-
21	DB96-03569A	ASS'Y-TUBE SUCTION	ASS'Y	-	1
	DB96-03567B	ASS'Y-TUBE SUCTION	ASS'Y	1	-
22	DB62-02757B	TUBE DISCHARGE	C1220T-0	-	1
	DB62-02758B	TUBE DISCHARGE	C1220T-0	1	1
23	DB71-00090A	BAR-STEEL		-	1
	DB71-00090B	BAR-STEEL		1	-

■ Parts List(cont.)

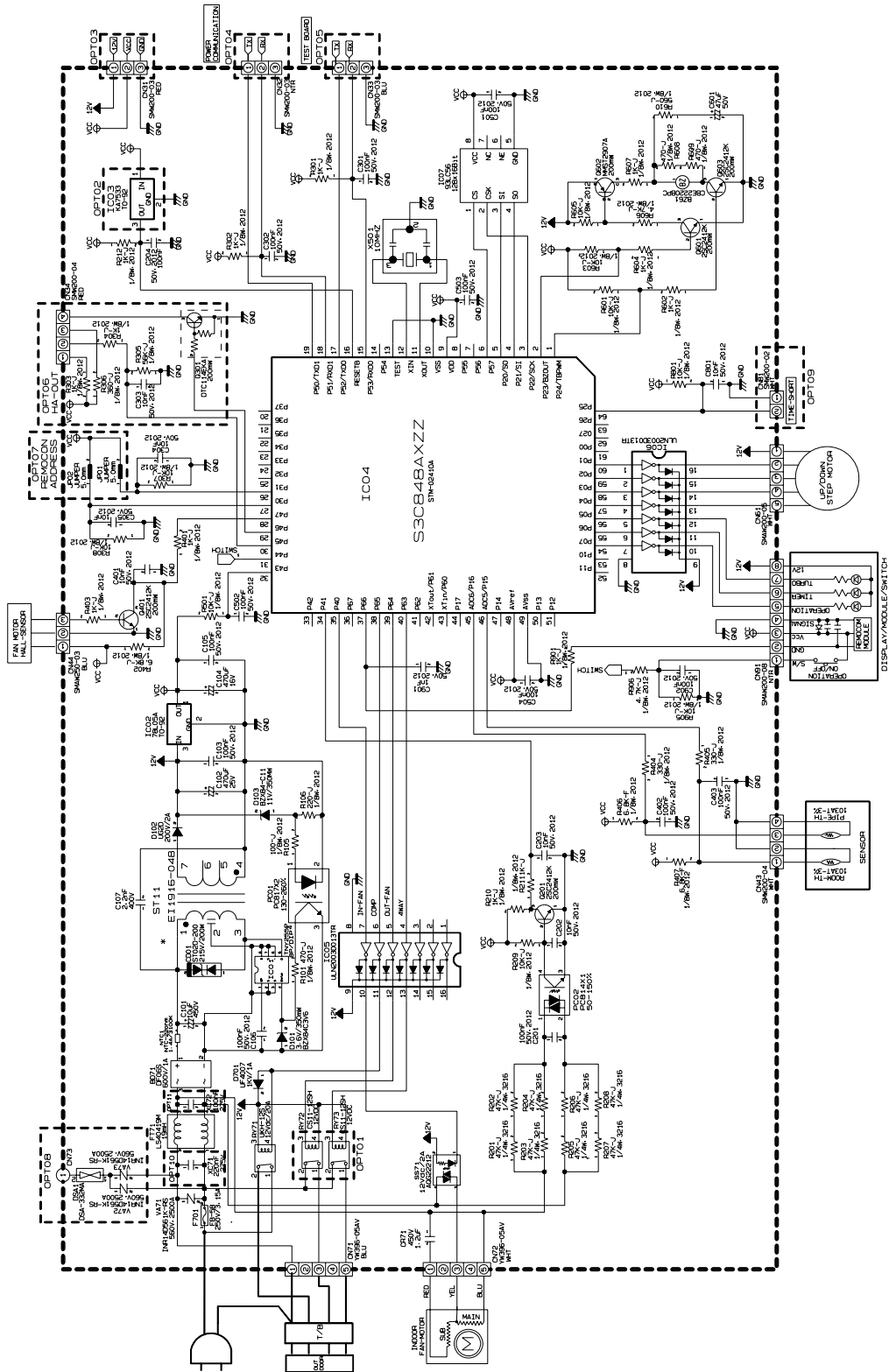
No.	Code No.	Description	Specification	Q'TY	
				KF-25W / SWA	KF-35W / SWA
1	DB90-01341A	ASS'Y-CABI FRONT	T0.7, SECC-P	1	1
2	DB63-00847A	GUARD-FAN	PP	1	1
3	DB90-01332A	ASS'Y CABI SIDE LF	ASS'Y	1	1
3-1	DB64-01094A	CABI SIDE LF(COATING)	T0.6, SECC-P	1	1
3-2	DB64-00992A	HANDLE LF	PP	1	1
4	DB90-01331A	ASS'Y CABI SIDE RH	T0.6, SECC-P	1	1
5	DB63-00853A	COVER-CONTROL	ABS-V0	1	1
6	DB90-01330E	ASS'Y-BASE	T1.0, SECC-P	-	1
	DB90-01330B	ASS'Y-BASE	T1.0, SECC-P	1	-
7	DB99-00401A	ASS'Y BRACKET VALVE	SECC-P, T1.0	1	1
8	DB94-00459D	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	-	1
	DB94-00459E	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	1	-
9	DB61-01644A	BRACKET-MOTOR	SGCC-M T1.6	1	1
10	DB97-02225A	ASS'Y PLATE SUPPORT B/M	ASS'Y	-	1
	DB97-02225C	ASS'Y PLATE SUPPORT B/M	ASS'Y	1	-
11	DB31-00220A	MOTOR-OUT	YDK-25F6M13E-1	1	1
12	DB67-00397A	PROPELLER-FAN	AS+G/F 20%	1	1
13	DB60-30004A	NUT FLANGE		1	1
14	DB63-00815A	GROMMET	NR	-	3
	DB63-00763A	GROMMET	NR	3	-
15	DB60-30028A	NUT WASHER		-	3
	DB60-30040A	NUT WASHER		3	-
16	DB96-03231A	ASS'Y-COND	2x24, PF1.5, LOUVER	-	1
	DB96-03247A	ASS'Y-COND	1x24, PF1.5, LOUVER	1	-
17	DB93-02749C	ASS'Y-CONTROL OUT	ASS'Y	-	1
	DB93-02749D	ASS'Y-CONTROL OUT	ASS'Y	1	-
17-1	DB61-01642A	CASE-CONTROL OUT	SGCC-M T0.6	1	1
17-2	2501-001236	CAPACITOR-COMP	30μF×450V	-	1
	2501-001237	CAPACITOR-COMP	35μF×450V	1	-
17-3	2301-001375	CAPACITOR-MOTOR	1.5μF×450V	1	1
17-4	DB65-40049H	TERMINAL-BLOCK		1	1
17-5	DB65-10046A	CLIP-CAPACITOR		1	1
17-6	DB61-00250A	HOLDER-WIRE		1	1
17-7	DB93-50062C	LEAD WIRE		-	-
17-8	DB93-00480F	ASS'Y LEAD WIRE		1	1
17-9	DB30-00030C	OLP	RAC12074-9622	-	1
	DB30-00030A	OLP	RAC12054-9622	1	-
18	DB72-00726E	SPONGE-FELT COMP CLOTH	FELT+PVC	-	1
	DB72-00726D	SPONGE-FELT COMP CLOTH	FELT+PVC	1	-
19	DB95-00543B	ASS'Y-COMP		-	1
	DB95-00542B	ASS'Y-COMP		1	-
19-1	48D129MXAEL	COMP		-	1
	44B102MX1EL	COMP		1	-
19-2	DB63-20002A	GASKET		1	1
19-3	DB63-10165A	COVER-TERMINAL		1	1
19-4	DB60-30018A	NUT FLANGE		1	1
20	DB96-03319A	ASS'Y CAPILLARY	ASS'Y	-	1
	DB96-03319C	ASS'Y CAPILLARY	ASS'Y	1	-
21	DB96-03569A	ASS'Y-TUBE SUCTION	ASS'Y	-	1
	DB96-03567B	ASS'Y-TUBE SUCTION	ASS'Y	1	-
22	DB62-02757B	TUBE DISCHARGE	C1220T-0	-	1
	DB62-02758B	TUBE DISCHARGE	C1220T-0	1	-
23	DB71-00090A	BAR-STEEL		-	1
	DB71-00090B	BAR-STEEL		1	-

7. Block Diagram



9. Schematic Diagram

9-1 Indoor Unit



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1. Product Specifications

1-1 Table

Item				Model	SC09AWH		SC12AWH	
					Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type				Wall-mounted		Wall-mounted		
Performance	Cooling		kW	2.7		3.5		
	Dehumidifying		ℓ/h	1.0		1.4		
	Air Volume		m³/min	7.3	25	8.3	25	
	Noise		dB	38 / 36 / 34	51 / 51	41 / 39 / 37	53 / 53	
	Energy Efficiency Ratio		W/W	2.70		2.99		
	Power		V-Hz	1-220 / 240-50		1-220 / 240-50		
Power	Power Consumption		W	1,000		1,170		
	Operating Current		A	4.5		5.7		
	Power Factor		%	98.2		96.9		
	Starting Current		A	21.0		30.0		
	Power Cord	Length	m	-		-		
		Number of Core Wire		-		-		
		Capacity	A	250V-10A		250V-10A		
Size	Outer Dimension		W x H x D	mm	825 x 285 x 189	720 x 548 x 265	825 x 285 x 189	720 x 548 x 265
				inch	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4
	Weight(Net)		kg	8.2	33.0	8.4	33.8	
	Refrigerant Pipe		Liquid	mm x L(m)	ø6.35 x 7.5		ø6.35 x 7.5	
			GAS	mm x L(m)	ø9.52 x 7.5		ø9.52 x 7.5	
	Drain Hose		D x L(mm)	ø18 x 550		ø18 x 550		
	Compressor	Type		Rotary		Rotary		
		Motor	Type	Induction Motor(PSC)		Induction Motor(PSC)		
			Rated Output	900		1,075		
	Oil Type			DAPHNE FV68S(PVE)		DAPHNE FV68S(PVE)		
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	
		Motor	Type	steel	steel	steel	steel	
			Rated Output	W	15	50	15	50
	Heat Exchanger				2ROW 14STEP	1ROW 24STEP	2ROW 14STEP	1ROW 24STEP
Refrigerant Control Unit				CAPILLARY TUBE		CAPILLARY TUBE		
Freezer Oil Capacity			cc	350		520		
Refrigerant to Change(R410A)			g	580		830		
Protection Device(OLP)				MRA99134-9201		MRA99908-9201		
Cooling Test Condition				INDOOR UNIT : DB27°C WB19°C		OUTDOOR UNIT : DB35°C WB24°C		
Maximum Operation Condition				INDOOR UNIT : DB32°C WB23°C		OUTDOOR UNIT : DB43°C WB28°C		

Table(cont.)

Item				Model		SC09ZWH / AS09WHWE		SC12ZWH / AS12WHWE						
				Indoor unit		Outdoor unit		Indoor unit		Outdoor unit				
Type				Wall-mounted				Wall-mounted						
Performance	Cooling			kW		2.7		3.5						
	Dehumidifying			ℓ/h		1.0		1.4						
	Air Volume			m³/min		7.3		25		8.3		25		
	Noise			dB		38 / 36 / 34		51 / 51		41 / 39 / 37		53 / 53		
	Energy Efficiency Ratio			W/W		2.70		2.99						
	Power			V-Hz		1-220 / 240-50		1-220 / 240-50						
Power	Power Consumption			W		1,000		1,170						
	Operating Current			A		4.5		5.2						
	Power Factor			%		98.2		96.9						
	Starting Current			A		21.0		30.0						
	Power Cord		Length	m		-		-						
			Number of Core Wire		-		-							
Capacity			A		250V-10A		250V-10A							
Size	Outer Dimension		W x H x D		mm		825 x 285 x 189		720 x 548 x 265		825 x 285 x 189		720 x 548 x 265	
					inch		32.5 x 11.2 x 7.44		28.4 x 21.6 x 10.4		32.5 x 11.2 x 7.44		28.4 x 21.6 x 10.4	
	Weight(Net)			kg		8.2		33.0		8.4		33.8		
	Refrigerant Pipe		Liquid		mm x L(m)		ø6.35 x 5.0		ø6.35 x 5.0					
			GAS		mm x L(m)		ø9.52 x 5.0		ø12.7 x 5.0					
	Drain Hose			D x L(mm)		ø18 x 550		ø18 x 550						
	Compressor	Type		Rotary				Rotary						
		Motor	Type		Induction Motor(PSC)				Induction Motor(PSC)					
			Rated Output		1,005				1,206					
	Oil Type				SUNISO-4GSD				SUNISO-4GSD					
	Blower	Type		Cross-flow				Propeller		Cross-flow		Propeller		
		Motor	Type		steel		steel		steel		steel			
			Rated Output		W		15		50		15		50	
Heat Exchanger					2ROW 14STEP		1ROW 24STEP		2ROW 14STEP		1ROW 24STEP			
Refrigerant Control Unit					CAPILLARY TUBE				CAPILLARY TUBE					
Freezer Oil Capacity				cc		360		600						
Refrigerant to Change(R22)				g		580		830						
Protection Device(OLP)					RAC12110-9622				RAC12074-9622					
Cooling Test Condition					INDOOR UNIT : DB27℃ WB19℃				OUTDOOR UNIT : DB35℃ WB24℃					
Maximum Operation Condition					INDOOR UNIT : DB32℃ WB23℃				OUTDOOR UNIT : DB43℃ WB28℃					

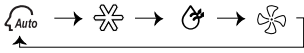
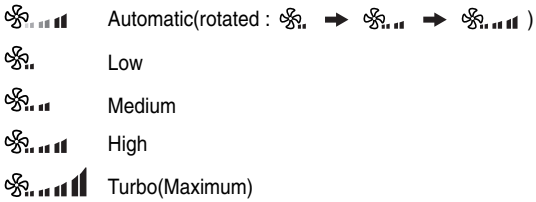
Model				AS09WHWD		AS12WHWD		
				Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	
Type				Wall-mounted		Wall-mounted		
Performance	Cooling		kW	2.65		3.5		
	Dehumidifying		ℓ/h	1.0		1.4		
	Air Volume		m³/min	7.3	25	8.3	25	
	Noise		dB	38 / 36 / 34	51 / 51	41 / 39 / 37	53 / 53	
	Energy Efficiency Ratio		W/W	2.82		2.99		
	Power		V-Hz	1-220-50		1-220-50		
Power	Power Consumption		W	940		1,170		
	Operating Current		A	4.6		5.8		
	Power Factor		%	97.0		92.0		
	Starting Current		A	21.0		30.0		
	Power Cord	Length	m	-		-		
		Number of Core Wire		-		-		
Capacity		A	250V-10A		250V-10A			
Size	Outer Dimension		W x H x D	mm	825 x 285 x 189	720 x 548 x 265	825 x 285 x 189	720 x 548 x 265
				inch	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4
	Weight(Net)		kg	8.2	33.0	8.4	33.8	
	Refrigerant Pipe		Liquid	mm x L(m)	ø6.35 x 5.0		ø6.35 x 5.0	
			GAS	mm x L(m)	ø9.52 x 5.0		ø12.7 x 5.0	
	Drain Hose		D x L(mm)	ø18 x 550		ø18 x 500		
	Compressor	Type		Rotary		Rotary		
		Motor	Type	Induction Motor(PSC)		Induction Motor(PSC)		
			Rated Output	1,005		1,206		
	Oil Type			SUNISO-4GSD		SUNISO-4GSD		
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	
		Motor	Type	steel	steel	steel	steel	
			Rated Output	W	15	50	15	50
	Heat Exchanger				2ROW 14STEP	1ROW 24STEP	2ROW 14STEP	1ROW 24STEP
Refrigerant Control Unit				CAPILLARY TUBE		CAPILLARY TUBE		
Freezer Oil Capacity			cc	360		600		
Refrigerant to Change(R22)			g	580		920		
Protection Device(OLP)				RAC12054-9622		RAC12074-9622		
Cooling Test Condition				INDOOR UNIT : DB27°C WB19°C		OUTDOOR UNIT : DB35°C WB24°C		
Maximum Operation Condition				INDOOR UNIT : DB32°C WB23°C		OUTDOOR UNIT : DB43°C WB28°C		

Table(cont.)

Item				Model		KF-25G / SWA		KF-35G / SWA			
						Indoor unit	Outdoor unit	Indoor unit	Outdoor unit		
Type				Wall-mounted		Wall-mounted					
Performance	Cooling		kW	2.65		3.5					
	Dehumidifying		ℓ/h	1.0		1.4					
	Air Volume		m³/min	7.3	25	8.3	25				
	Noise		dB	38 / 36 / 34	51 / 51	41 / 39 / 37	53 / 53				
	Energy Efficiency Ratio		W/W	2.82		2.99					
	Power		V-Hz	1-220-50		1-220-50					
Power	Power Consumption		W	940		1,170					
	Operating Current		A	4.6		5.8					
	Power Factor		%	97.0		92.0					
	Starting Current		A	21.0		30.0					
	Power Cord	Length	m	-		-					
		Number of Core Wire		-		-					
		Capacity	A	250V-10A		250V-10A					
Size	Outer Dimension		W x H x D	mm	835 x 285 x 189	720 x 548 x 265	835 x 285 x 189	720 x 548 x 265			
				inch	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4	32.5 x 11.2 x 7.44	28.4 x 21.6 x 10.4			
	Weight(Net)		kg	8.2	33.0	8.4	33.8				
	Refrigerant Pipe		Liquid	mm x L(m)	ø6.35 x 4.0		ø6.35 x 4.0				
			GAS	mm x L(m)	ø9.52 x 4.0		ø12.7 x 4.0				
	Drain Hose		D x L (mm)	ø18 x 550		ø18 x 550					
	Compressor	Type		Rotary		Rotary					
		Motor	Type	Induction Motor(PSC)		Induction Motor(PSC)					
			Rated Output	1,005		1,206					
	Oil Type				SUNISO-4GSD		SUNISO-4GSD				
	Blower	Type		Cross-flow		Propeller		Cross-flow		Propeller	
		Motor	Type	steel		steel		steel		steel	
			Rated Output	W	15		50		15		50
Heat Exchanger				2ROW 14STEP		1ROW 24STEP		2ROW 14STEP		1ROW 24STEP	
Refrigerant Control Unit				CAPILLARY TUBE		CAPILLARY TUBE					
Freezer Oil Capacity			cc	360		600					
Refrigerant to Change(R22)			g	580		920					
Protection Device(OLP)				RAC12054-9622		RAC12074-9622					
Cooling Test Condition				INDOOR UNIT : DB27°C WB19°C		OUTDOOR UNIT : DB35°C WB24°C					
Maximum Operation Condition				INDOOR UNIT : DB32°C WB23°C		OUTDOOR UNIT : DB43°C WB28°C					

2. Operating Instructions & Installation

2-1 The Feature of Key in remote control

No	BUTTON	FUNCTION
1		On/Off button. Press the  button to stop or run the air conditioner.
2	 (UP)	Temperature adjustment button(UP). To increase the temperature by the pressing the temperature button.
	 (DOWN)	Temperature adjustment button(DOWN). To decrease the temperature by the pressing the temperature button.
3		Mode selection button. Each time you press this button, Mode is changed in the following order.   : Auto Mode  : Dry Mode  : Cool Mode  : Fan Mode
4		Fan speed adjustment button. Each time you press this button, FAN SPEED is changed in the following order.  Automatic(rotated :  →  →  → ) Low Medium High Turbo(Maximum)
5		Flap button. It adjusts the airflow to upward and downward.
6		Turbo button. The air conditioner cools or heats the room as quickly as possible. After 30minutes, the air conditioner is reset automatically to the previous mode.
7		Energy saving button. If you wish to save energy when using your air conditioner, select the Energy saving mode with the  button.
8		Sleep button. The sleep timer can be used when you are cooling or heating your room to switch the air conditioner off automatically after a period of 6 hours.
9		On Timer button. The On Timer enables you to switch on the air conditioner automatically after a given period of time that is from 1 hour to 24 hours. To set the operating time, press the  button one or more times until the required time display.

No	BUTTON	FUNCTION
10		Off Timer button. The Off Timer enables you to switch off the air conditioner automatically after a given period of time that is from 1 hour to 24 hours. To set the operating time, press the  button one or more times until the required time display.
11	SET/CANCEL 	Timer Set/Cancel button. After setting On Timer or Off Timer, press the  button to set it completely. And press the  button again to cancel On Timer or Off Timer set.
12	BATTERY 	Battery life indicator. If you want to check the battery life, press the  button. The longer will remain the battery life. If one battery life indicator remains, replace new batteries.

2-2 Details for Operation Property

1. **AUTO MODE** : In this mode, operation COOL mode is selected automatically by the difference between the setting and room temperature.

Operation Type	Room Temp.	
Cool Operation	$Tr \geq Ts + 1.0^{\circ}\text{C}$	Compressor ON
	$Tr \leq Ts$	Compressor OFF

Ts : Setting temperature.

2. **COOL MODE** : The unit operates according to the difference between the setting and room temperature. (16°C~30°C)
3. **DRY MODE** : Has 4 states, each determined by room temperature.
The unit operates in DRY mode.
*Compressor ON/OFF time is controlled compulsorily (can not set up the fan speed, always breeze).
*Protective function : Low temperature release. (Prevention against freeze)
4. **TURBO MODE** : This mode is available in AUTO, COOL, DRY, FAN MODE.
When this button is pressed at first, the air conditioner is operated "powerful" state for 30 minutes regardless of the setting temperature, room temperature.
When this button is pressed again, or when the operating time is 30 minutes, turbo operation mode is canceled and returned to the previous mode.
*But, if you press the TURBO button in DRY or FAN mode that is changed with AUTO mode automatically.
5. **SLEEP MODE** : Sleep mode is available only in COOL mode.
The operation will stop after 6 hours.
*In COOL mode : The setting temperature is automatically raised by 1°C each 1hour When the temperature has been raised by total of 2°C, that temperature is maintained.

6. **FAN SPEED** : Fan speed automatically varies depending on both the difference between setting and the room temperature.
Can set up the fan speed in COOL, FAN mode.

7. **COMPULSORY OPERATION** :

For operating the air conditioner without the remote control.

*The operating is the same function that AUTO MODE in the remote control.

8. **FLAP** : BLADE-H is rotated vertically by the stepping motor.

*Flap Set : Press the  button under the remote control is displayed on LCD the  and the blades move up and down. If the one more time press the  button, blades location is stop.

9. **SETTING THE ON/OFF TIMER** :

*ON TIMER : The On Timer enables you to switch on the air conditioner automatically after a given period of time.

You can set the period of time from 1 hour to 24 hours.

*OFF TIMER : The Off Timer enables you to switch off the air conditioner automatically after a given period of time. You can set the period of time from 1 hour to 24 hours.

10. **BUZZER SOUND** : Whenever the On/Off button is pressed or whenever change occurs to the condition which is set up or select, the compulsory operation mode, buzzer is sounded "beep".

2-3 Installation

2-3-1 Before Installation

Keep the air conditioner drain hose outlet and inlet free from its surroundings.

In case of breakdown, keep the symmetry and fix it to prevent vibration.

The pipe length shall meet the standard as far as possible.

2-3-2 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 in the vicinity.

■ Wall Drilling

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

■ Fixing Indoor Unit & Outdoor Unit

Fix the air conditioner hard enough so that it can not fall to the ground. On the roadside, the outdoor unit shall be installed 2m above ground and kept away from pedestrians to prevent direct exposure to hot wind.

■ Pipe Spooling & Connecting

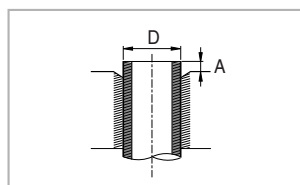
You shall cut the pipe straightly with a pipe cutter and grind all the burrs of the cut surface.

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)
6.35mm(1/4")	140~170	1.3mm
12.70mm(1/2")	380~420	2.0mm
15.88mm(5/8")	440~480	2.2mm



■ Leak Test

Put an inert 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.

2-4 Installation Diagram of Indoor Unit and Outdoor Unit

2-4-1 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 stabilization.
 - Close the valve of the low pressure side of manifold gauge clockwise.
 - Remove the hose of the low pressure side of manifold gauge.



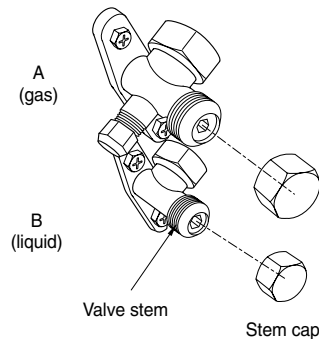
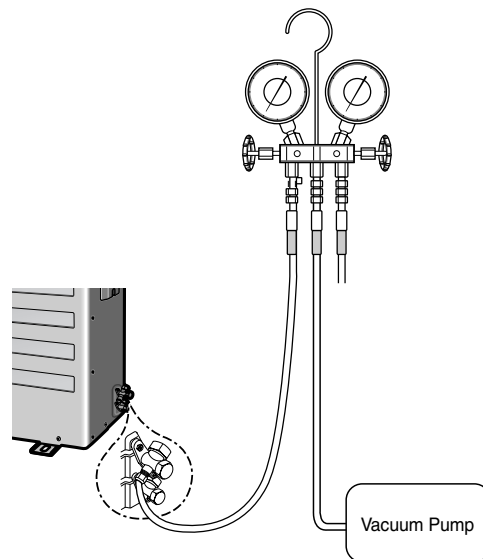
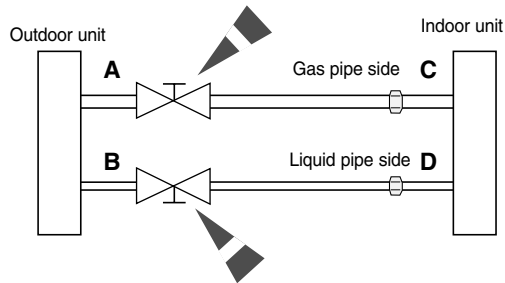
- 5) Set valve cork of both liquid side and gas side of packed valve to the open position.



- 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.



2-4-2 Refrigerant Refill(R22)

Refill an air conditioner with refrigerant when refrigerant has been leaked at installing or using.

1) Purge air(for new installation only).



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



3) Connect the tank to refill with refrigerant.



4) Set the unit to cool operation mode.



5) Check the pressure indicated by the pressure gauge(low pressure side).

*** Standard pressure is should be 4.5~5.5kg/cm² in a regular, high operation mode.**



6) Open the refrigerant tank and fill with refrigerant until the rated pressure is reached.

*** It is recommended not to pour the refrigerant in too quickly, but gradually while operating a pressure valve.**



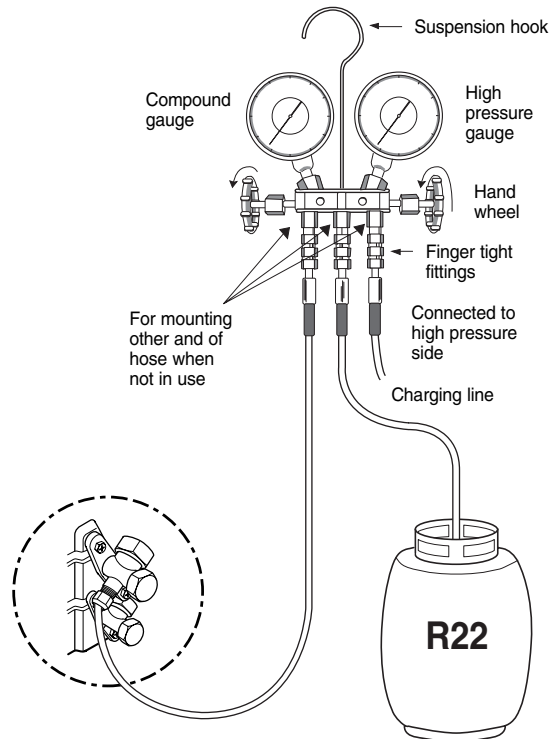
7) Stop operation of the air conditioner.



8) Close the 3-Way valve, disconnect the pressure gauge, and open the 3-Way valve again.



9) Close the cap of each valve.



2-4-3 "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 2-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 2-Way valve clockwise to close.



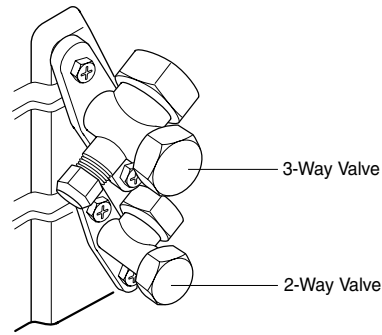
- 5) When the pressure gauge indicates "0" turn the 3-Way valve clockwise to close.



- 6) Stop operation of the air conditioner.



- 7) Close the cap of each valve.



Remarks

Relocation of the air conditioner

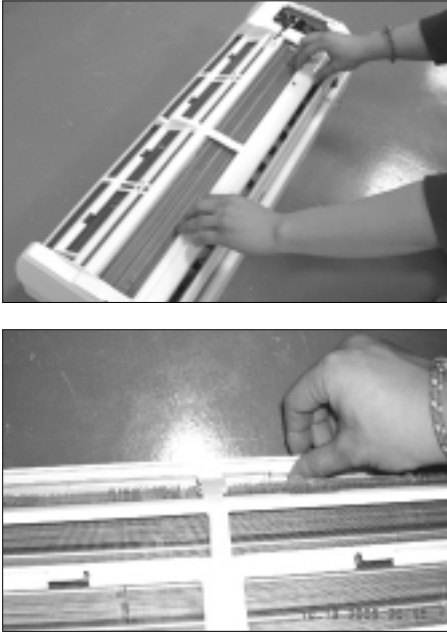
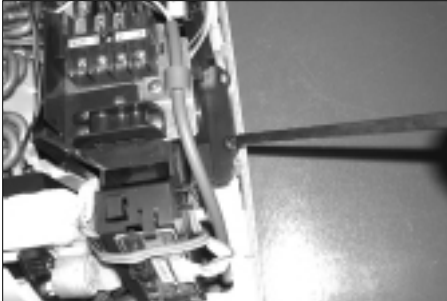
- Refer to this procedure when the unit is relocated.
- Carry out the pump down procedure (refer to the details of 'pump down').
- Remove the power cord.
- Disconnect the assembly cable from the indoor and outdoor units.
- Remove the flare nut connecting the indoor unit and the pipe.
- At this time, 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.

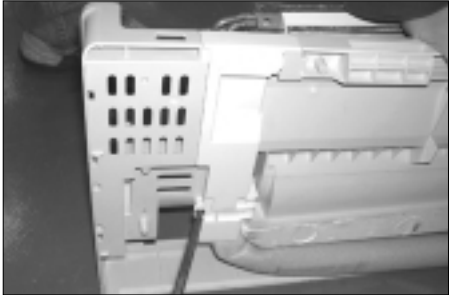
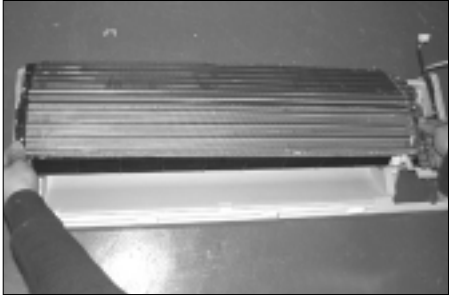
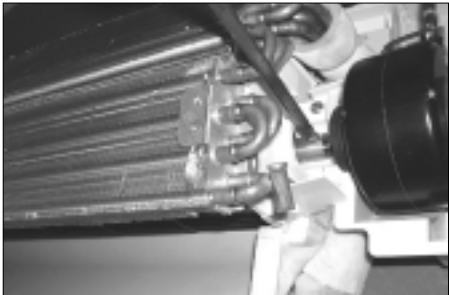
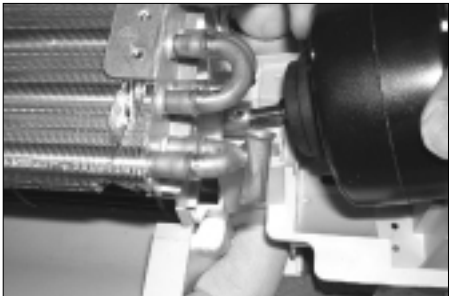
2. Disassembly and Reassembly

Stop operation of the air conditioner and remove the power cord before repairing the unit.

2-1 Indoor Unit

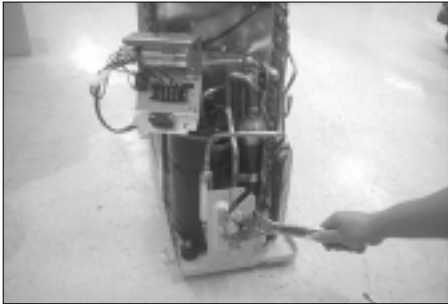
No	Parts	Procedure	Remark
1	Front Grille	1) Stop the air conditioner operation and block the main power. 2) Open the Front Grille by pulling right and left sides of the hook. 3) Loosen 1 of the right screw and detach the Terminal Cover. 4) Detach the thermistor from the Front Grille. 5) Loosen 2 fixing screws of Front Grille.	   

No	Parts	Procedure	Remark
		6) Unlock 2 hooks to fix Panel Front and Tray Drain. 7) Unlock 3 hooks to fix Panel Front and Back-Body.	
2	Control-In (Main PCB)	1) Take all the connector of PCB upper side out. (Inclusion Power Cord) 2) Detach the outdoor unit connection wire from the Terminal Block. 3) Loosen 4 fixing screws of Ass'y Control-In.	
3	Tray Drain	1) Pull Tray Drain out from the Back Body.	

No	Parts	Procedure	Remark
4	Heat Exchanger	1) Loosen 2 fixing earth screws of right side. 2) Detach the Connection Pipe. 3) Detach the Holder Pipe at the rear side. 4) Loosen the 3 fixing screws of right and left side. 5) Lifting the Heat Exchanger up a little to push the up side for separation from the indoor unit.	  
5	Fan Motor & Cross Fan	1) Loosen the fixing screw and detach the Motor Holder. 2) Detach the Fan Motor from the Fan. 3) Detach the Fan From the left Holder Bearing.	 

2-2 Outdoor Unit

No	Parts	Procedure	Remark
1	Common Work	1) Loosen each 3 fixing screws on both right and left Cabinet-Side edge and a fixing screw on the Cabinet-Front lower to detach the Cabinet-Front. 2) Loosen 2 fixing screws of the Ass'y-Control. 3) Loosen 6 fixing screws of the Cabinet-Side RH. 4) Loosen 2 fixing screws of the Cabinet-Side LF.	    

No	Parts	Procedure	Remark
2	Fan & Motor	1) Detach the Nut Flange.(Turn counterclockwise because the screw is right-handed) 2) Detach the Fan. 3) Loosen 4 fixing screws to detach the Motor.	
3	Heat Exchanger	1) Loosen 2 fixing screws on both sides. 2) Disassemble the pipe in both inlet and outlet with welding torch. 3) Detach the Heat Exchanger.	 
4	Compressor	1) Loosen the Terminal Cover nut to open the Terminal Cover. 2) Disassemble the cloth sound felt. 3) Disassemble the pipe in both inlet and outlet of the Compressor with welding torch. 4) Disassemble the pipe in both inlet and outlet of the Condenser with welding torch. 5) Loosen the 3 bolts at the bottom. 6) Detach the Compressor.	

4. Set Up the Model Option

4-1 Setting Option Setup Method

ex) Option No. : 25 02 57 03 40

Step 1 : Enter the Option Setup mode.

- 1st Take out the batteries of remote control.
- 2nd Press the temperature  button simultaneously and insert the battery again.
- 3rd Make sure the remote display shown as .



Step 2 : Enter the Option Setup mode and select your option according to the following procedure.

Feature		Display
	1 Setting Option SEG1. 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.	
	2 Setting Option SEG2. Push the  button to set the display panel to 5. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	3 Change it into the set display of Option SEG3 and SEG4 with the  button.	
	4 Setting Option SEG3. Push the  button to set the display panel to 0. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	5 Setting Option SEG4. 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.	

	Feature	Display
	6 Change it into the set display of Option SEG5 and SEG6 with the  button.	
	7 Setting Option SEG5. Push the  button to set the display panel to 5. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	8 Setting Option SEG6. 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.	
	9 Change it into the set display of Option SEG7 and SEG8 with the  button.	
	10 Setting Option SEG7. Push the  button to set the display panel to 0. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	11 Setting Option SEG8. 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.	
	12 Change it into the set display of Option SEG9 and SEG10 with the  button.	
	13 Setting Option SEG9. Push the  button to set the display panel to 4. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	
	14 Setting Option SEG10. Push the  button to set the display panel to 0. Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.	

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

Whenever you press the  button, the set Option will be displayed.



Step 4 : Pressing the ON/OFF button ()

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

Step 5 : Unit operation test-run

First, Remove the battery from the remote controller.

Second, Re-insert the battery into the remote controller.

Third, Press ON/OFF () key with the direction of remote controller for set.

• Error Mode

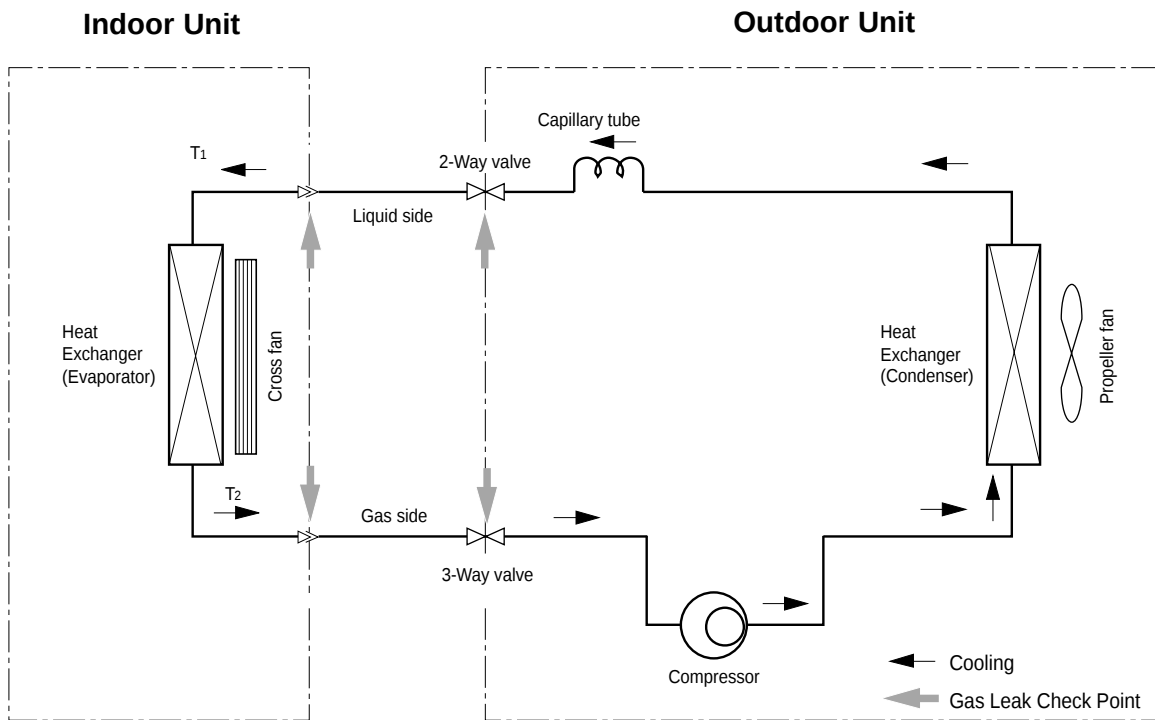
- 1st If all lamps of indoor unit are flickering, Plug out, plug in power plug again and press ON/OFF key to retry.
- 2nd If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

4-2 Table of the option Code

Model	Option Code									
	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10
SC09AWH	2	0	0	0	0	A	0	0	c	8
SC09ZWH AS09WHWD AS09WHWE KF-25G / SWA	2	0	0	0	0	A	0	0	F	b
SC12AWH SC12ZWH AS12WHWD AS12WHWE KF-35G / SWA	2	0	0	0	0	A	0	3	4	0

3. Refrigerating Cycle Diagram

3-1 Refrigerating Cycle Diagram



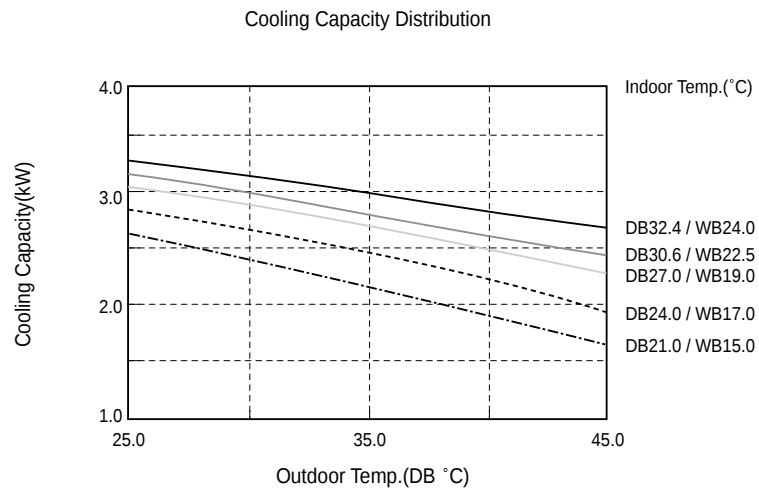
3-2 Refrigerant Cycle Characteristic

3-2-1 Capacity Distributions

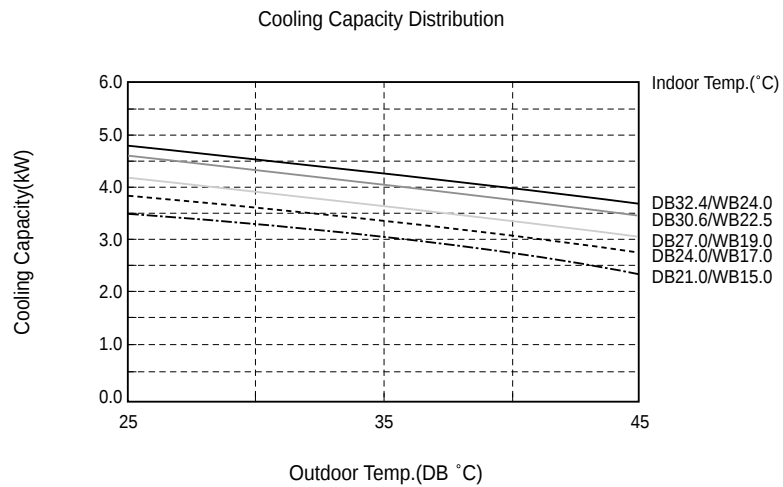
Capacity Distributions according to indoor and outdoor temperature variation.

- Indoor Temp. Variation : 21.0°C ~ 32.4°C
- Outdoor Temp. Variation : 25.0°C ~ 45.0°C

■ 9,000Btu



■ 12,000Btu

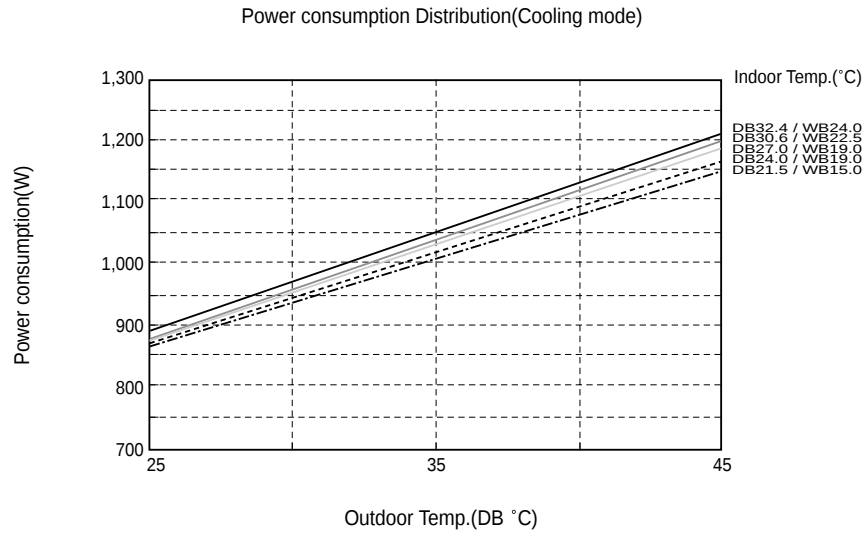


3-2-2 Power Consumption Distributions

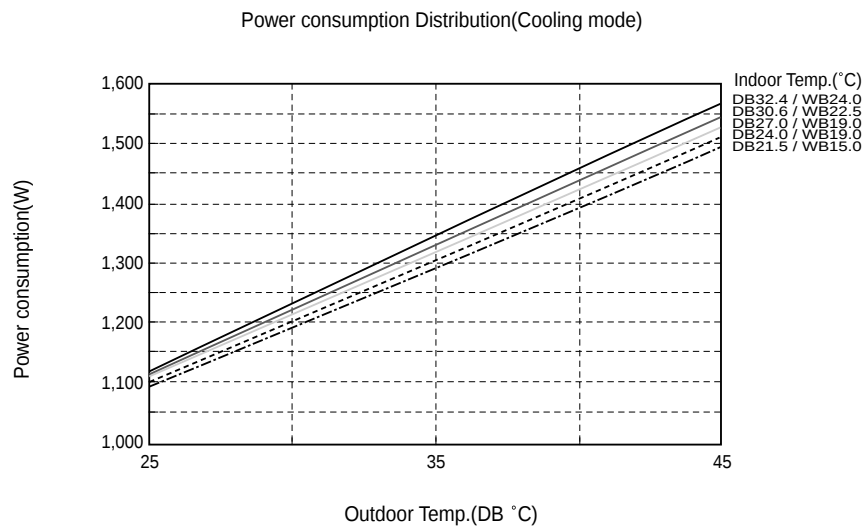
Power Consumption Distributions according to indoor and outdoor temperature variation.

- Indoor Temp. Variation : 21.0°C ~ 32.4°C
- Outdoor Temp. Variation : 25.0°C ~ 45.0°C

■ 9,000Btu

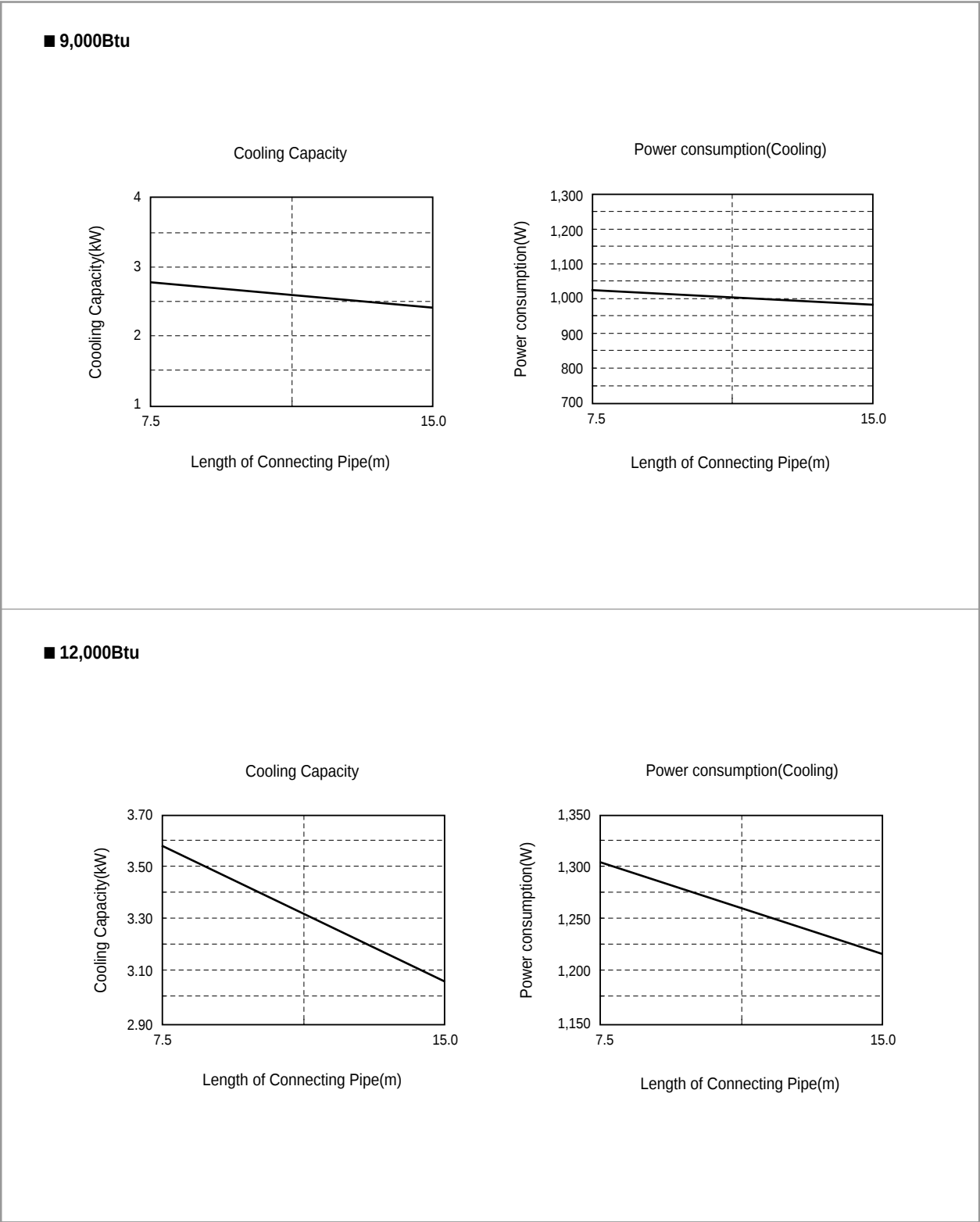


■ 12,000Btu



3-2-3 Capacity and Power Consumption Distributions

Capacity and power Consumption distributions according to the length of connecting Pipe between indoor unit and outdoor unit.



5. Troubleshooting

Check the basic items first to judge if the problem was caused by breakdown or misuse. If none of the basic items are related to the problem, please scrutinize the machine according to the 'Breakdown Diagnosis by Symptoms' method.

5-1 Basic Breakdown Diagnosis Items

1. The input voltage should be rating voltage $\pm 10\%$ range.
The airconditioner may not operate properly if the voltage is out of this range.
2. Is the link 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 airconditioner 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 airconditioner.

No	Operation of air conditioner	Explanation
1	The OPERATION indication LED(GREEN) blinks when a power plug of the indoor unit is plugged in for the 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 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(GREEN) 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.

5-2 Trouble check in the initial status

5-2-1 Diagnosis and marking of the part in trouble.

Please check the air conditioner operation status and write the check result in the chart in the room.

Description	LAMP		
	OPERATION	TIMER	TURBO
			
Indoor unit room temperature sensor error (open or short)	○	◐	○
Indoor unit heat exchanger temperature sensor error (open or short)	◐	◐	○
Indoor fan motor mal function	◐	○	◐
EEPROM error	○	◐	◐
Option error (option wasn't set up or option data error)	◐	◐	◐

○ : Lamp off ◐ : Lamp flickering

5-2-2 Operation with abnormal motion

No	Abnormal condition	Inspection		Initial Diagnosis
1	No response from the remote control operation signal.	• Plug out and plug in 5 seconds later.	Able to operate the remote control.	OK
			Unable to operate the remote control.	Press the  button in the indoor unit. • If it operates, the remote control and indoor unit receiver are in trouble. • If not, the indoor unit is in trouble.
2	Unable to operate the outdoor unit	• Press the TURBO button with the remote control. • In 3 minutes, check the voltage between the indoor unit terminal block N(1) and 1.	AC200V ~ AC240V	Problem with the outdoor unit or PCB
			No power source displayed.	Problem with the relay (RY71) or PCB

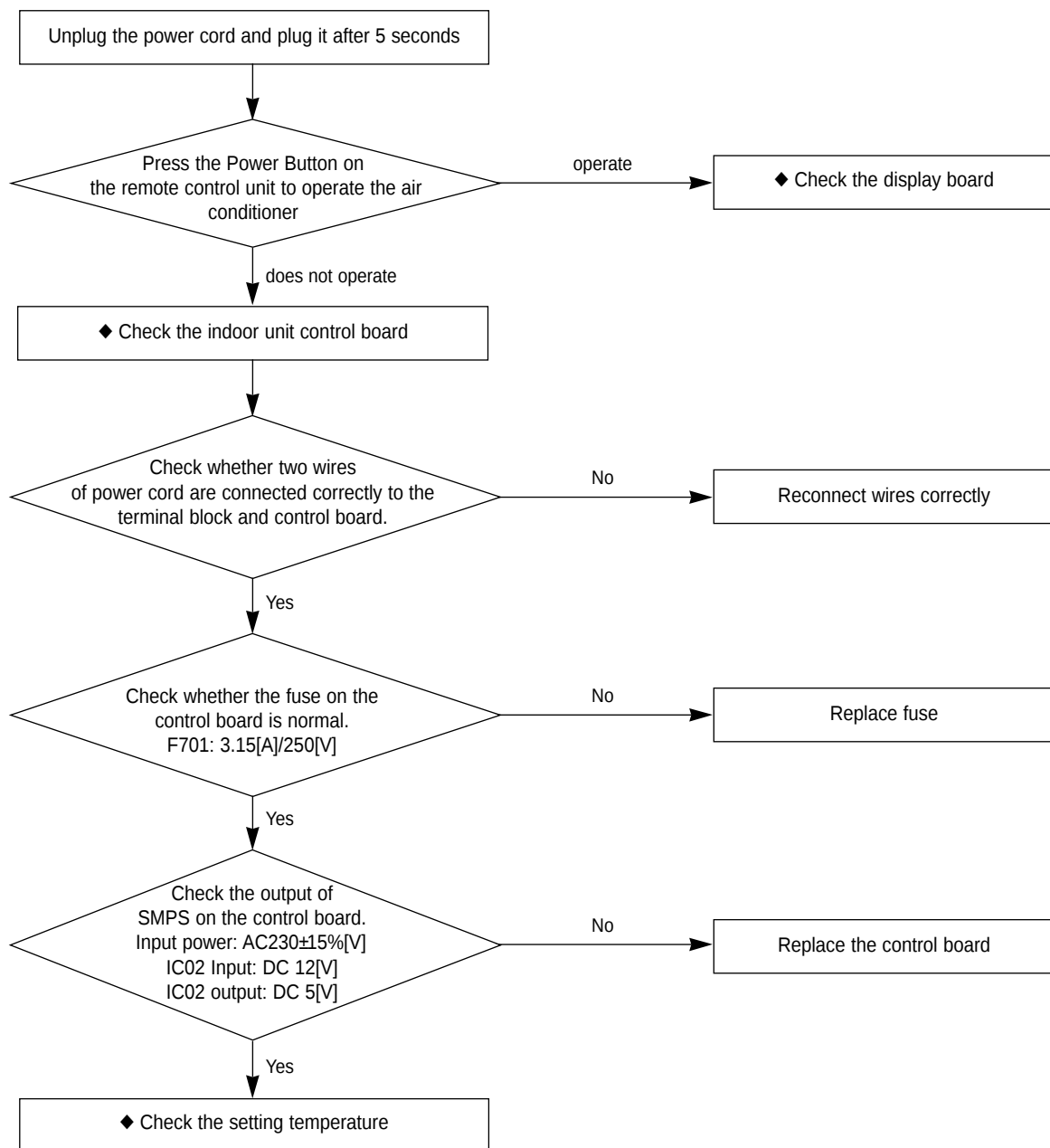
5-3 Breakdown diagnosis by symptoms

5-3-1 No Power (completely dead)-Initial diagnosis

1. Checklist :

- 1) Is input voltage normal?
- 2) Is AC power linked correctly?
- 3) Is input voltage of DC regulator IC KA7805 (IC02) normal? (11VDC-12.5VDC)
- 4) Is output voltage of DC regulator IC KA7805 (IC02) normal? (4.5VDC-5.5VDC)

2. Troubleshooting procedure

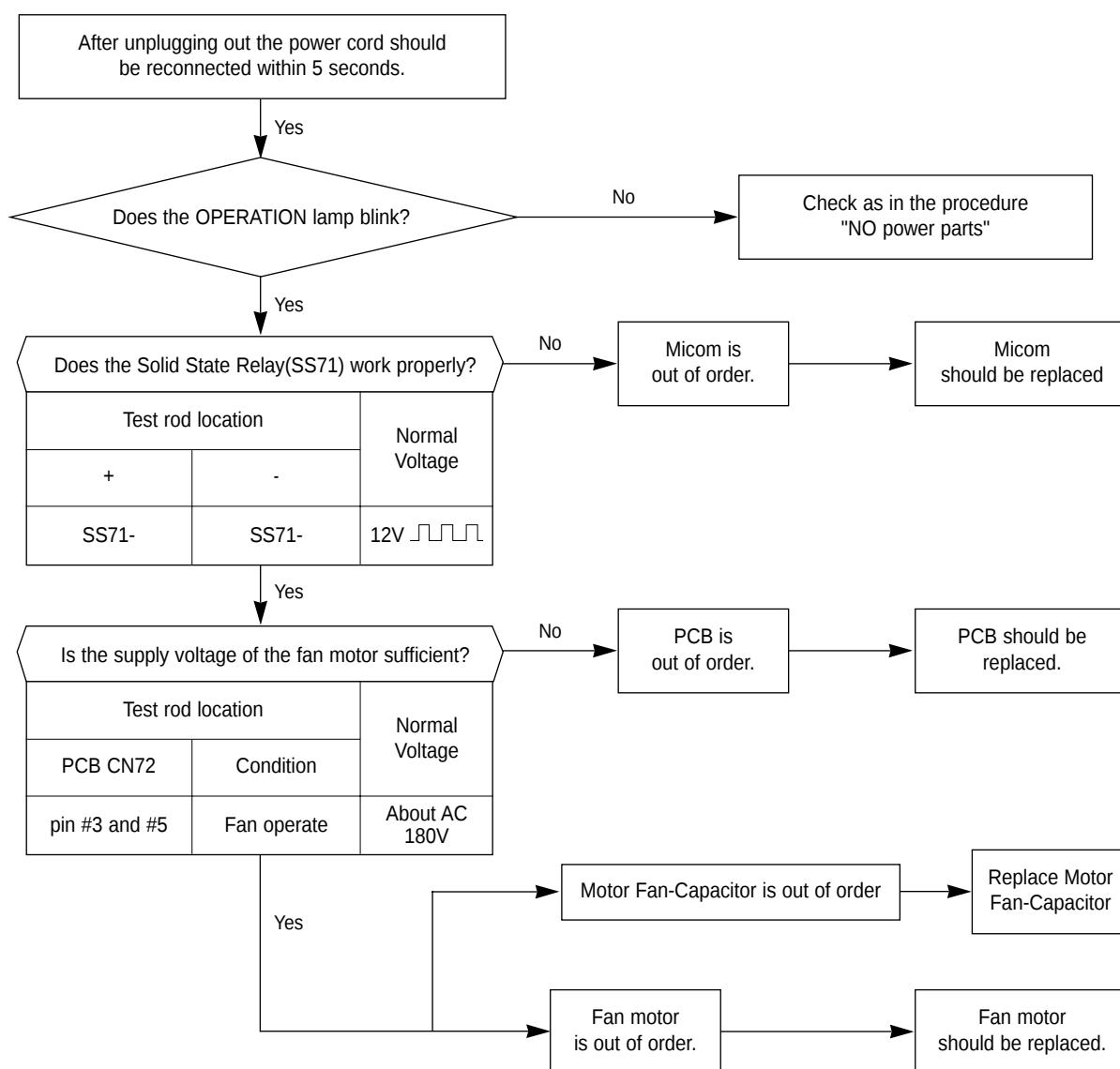


5-3-2 When the Indoor Unit Fan Does Not Operate. (Initial Diagnosis)

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

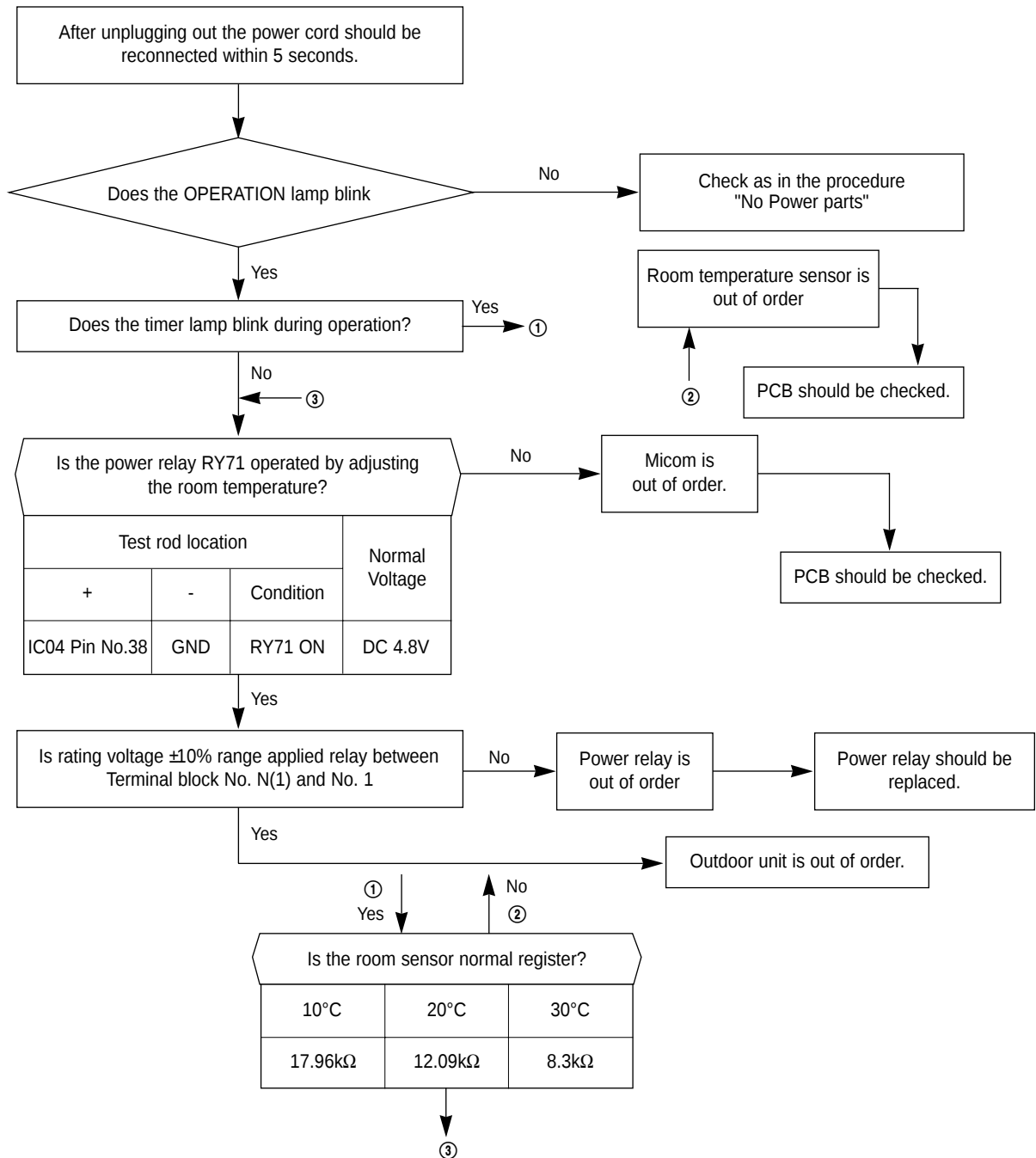


5-3-3 When the Outdoor Unit Does Not Operate. (Initial Diagnosis)

1. Checklist :

- 1) Is input voltage normal?
- 2) Is the set temperature of the remote control higher than room temperature in COOL mode?
- 3) Is the set temperature of the remote control lower than room temperature in HEAT mode?
- 4) Is the POWER IN connector (CN71) linked correctly?
- 5) Is the outdoor unit properly connected with the TERMINAL BLOCK connector(N(1), 1, 2, 3)?

2. Troubleshooting procedure

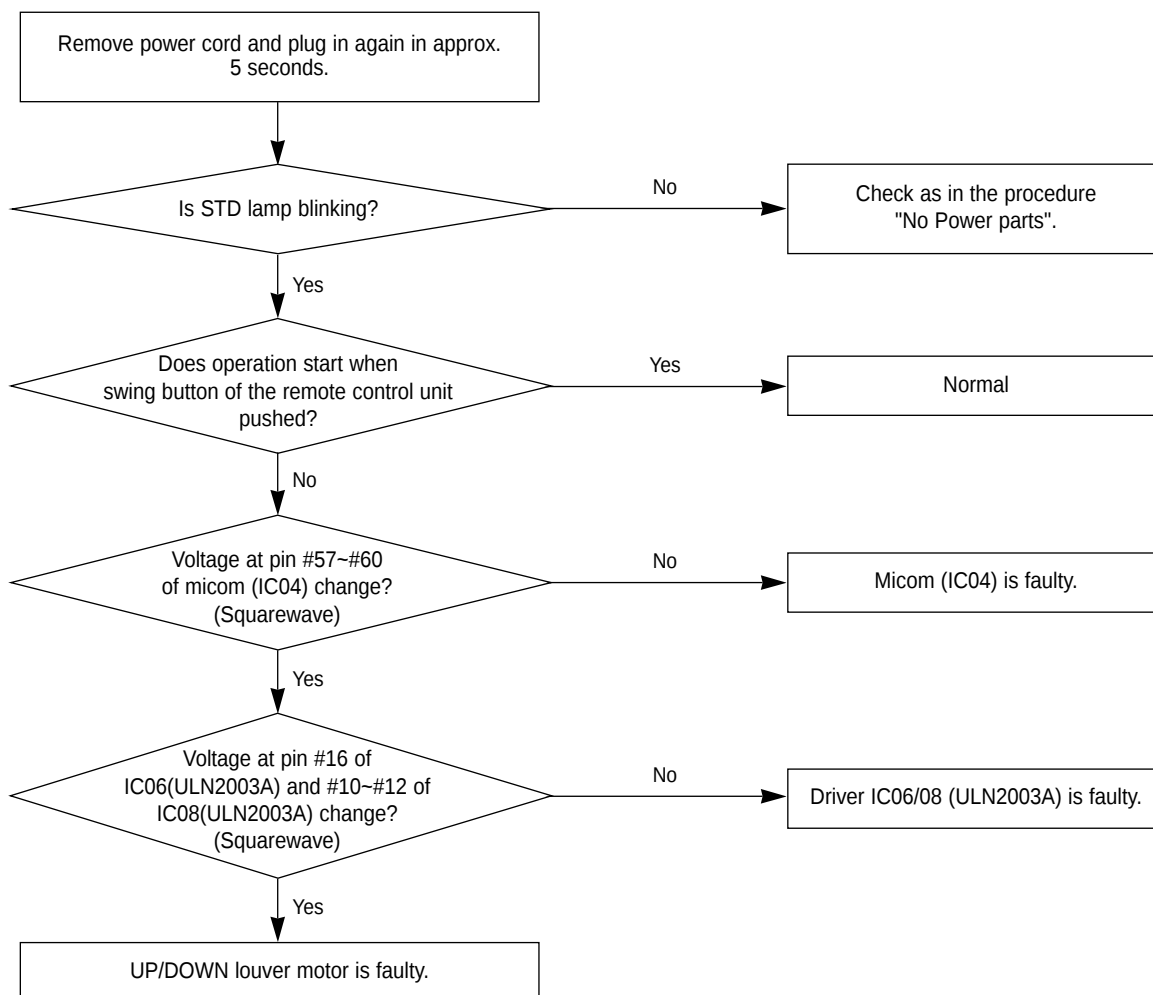


5-3-4 When the UP/DOWN Louver Motor Does Not Operate. (Initial Diagnosis)

1. Checklist :

- 1) Is input voltage normal?
- 2) Is the UP/DOWN louver motor properly connected with the connector (CN61)?

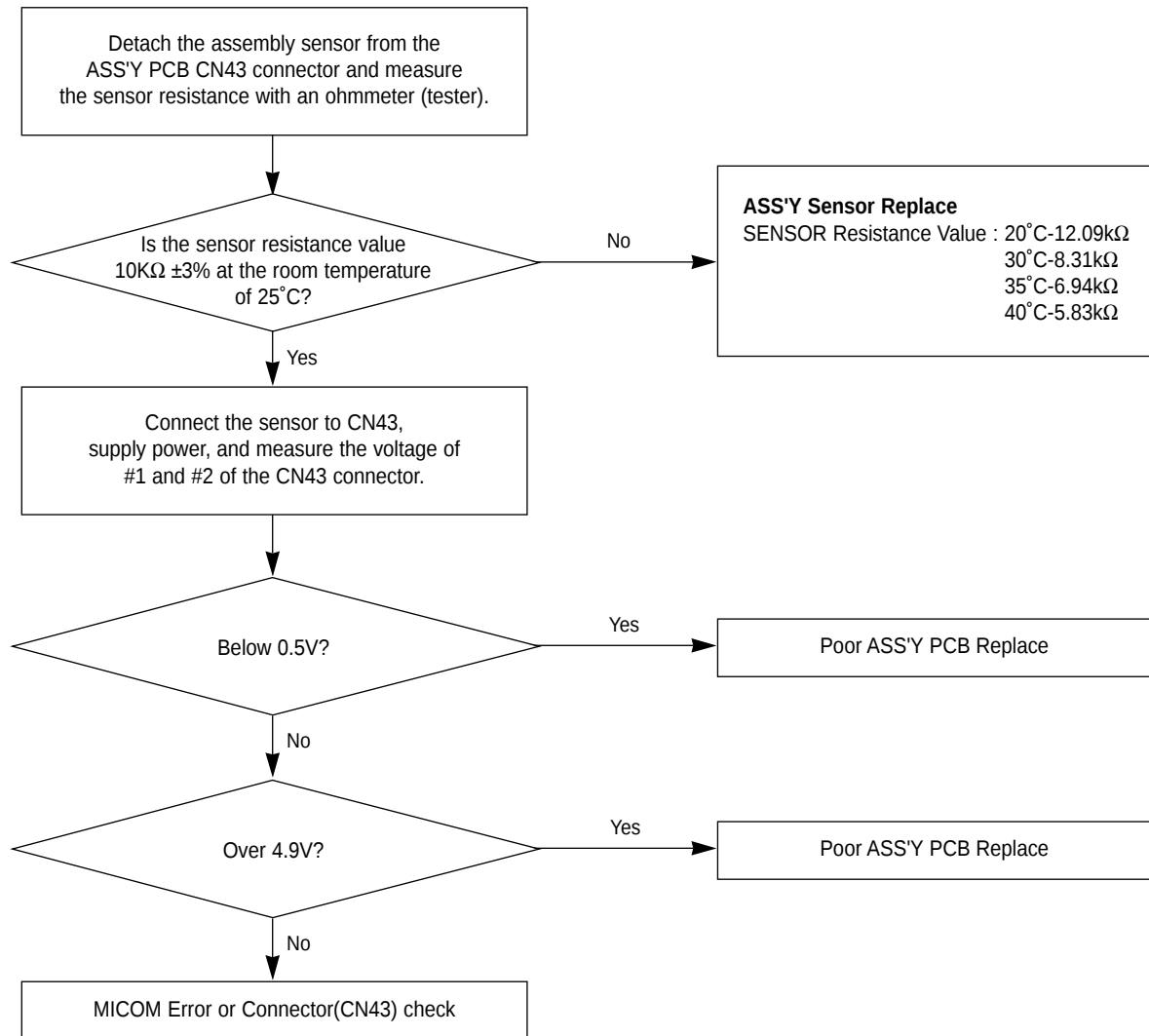
2. Troubleshooting procedure



5-3-5 Room temperature sensor failure

Description	LAMP		
	OPERATION	TIMER	TURBO
			
Indoor unit room temperature sensor error(open or short)	○	◐	○

○ : Lamp off ◐ : Lamp flickering



5-3-6 Room Pipe sensor failure

Description	LAMP		
	OPERATION	TIMER	TURBO
			
Indoor unit heat exchanger temperature sensor error (open or short)			

○ : Lamp off ◐ : Lamp flickering

1. Check the assembly condition of the sensor connector(CN43) on the indoor unit Main PCB and if not assembled, reassemble the connector accurately.
2. Detach the room pipe sensor connector(CN43) and check the resistance between connector 3 and 4.

Temperature(°C)	Resistance Value(Kohm)	Temperature(°C)	Resistance Value(Kohm)	Others
15	14.68	30	8.31	The data tolerance is ±3%.
20	12.09	35	6.94	
25	10	40	5.83	

If the above data is not met, replace the room pipe sensor.

3. Assemble the room pipe sensor to PCB, plug in, and check the voltage of connector 3 and 4. If the resistance is below 0.5V or over 4.9V, replace the indoor Main PCB. (short or disconnected in the PCB board)

5-3-7 When the remote control is not receiving.

1. Check if the connector was normally assembled.
2. Put the set in operation and check the voltage of No. 3(+) and No. 2(-) of the main PCB CN91 while operating the remote control. When the voltage descends below 3V, the assembly module PCB is normal and the main PCB is poor. Then replace the main PCB.
3. Replace the assembly display PCB because the module PCB is poor if the voltage between No. 2~3 of CN91 maintains 5V after the remote control starts operation.

5-4 PCB Inspection Method

5-4-1 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.

5-4-2 Inspection Procedure

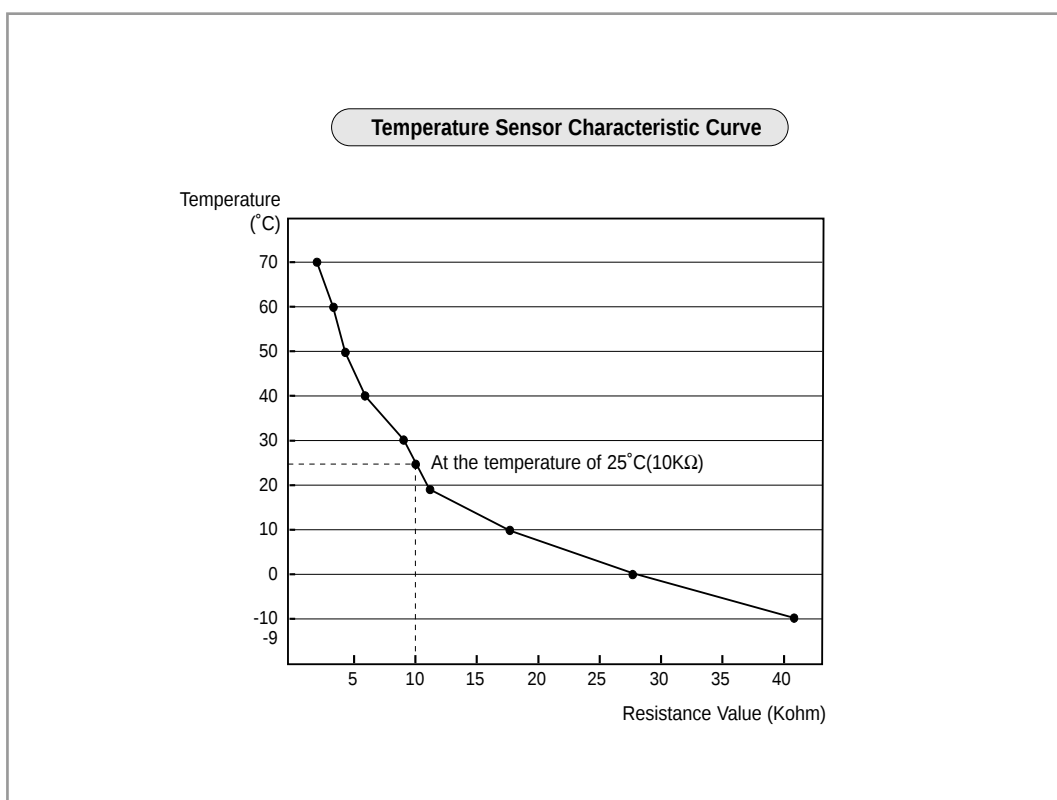
1. Check connector connection and peeling of PCB or bronze coating pattern when you think the PCB is broken.
2. The PCB is composed of the 3 parts.
 - **Main PCB Part** : MICOM and surrounding circuit, relay, room fan motor driving circuit and control circuit, sensor driving circuit, power circuit of DC12V and DC5V, and buzzer driving circuit.
 - **Display part** : LED lamp
 - **Switch part** : Switch

5-4-3 Detailed Inspection Procedure

No	Procedure	Inspection Method	Cause
1	Plug out and pull the PCB out of the electronic box. Check the PCB fuse.	1) Is the fuse disconnected? (F701)	• Overcurrent • Indoor Fan Motor Short • AC Part Pattern Short of the MAIN PCB
2	Supply power. If the operating lamp twinkles at this time, the above 1)~3) have no relation.	Checking the power voltage.	
		1) Is the DB71input voltage AC200V~AC240V?	• Power Cord is fault, Fuse open. Wrong Power Cable Wiring, AC Part is faulty.
		2) Is the voltage between both terminals of the C102 on the 2 nd side of the transformer AC12V $\pm 0.5V$?	• Switching Trans or Power Circuit is faulty
		3) Is the voltage between both terminals of OUT and GND of IC02(KA78L05) DC5V $\pm 0.5V$?	• Power Circuit is faulty, Load Short
3	Press the ON/OFF button and operate TURBO mode. But, exclude the RESERVE operation.	Checking the power voltage.	
		1) Check the voltage of the relay(RY71) coil(IC05 PIN #11 and GND : 0V, PIN#6 and GND : 5V) during operation(3 minutes after TURBO operation).	• Relay(RY71) Coil Disconnection, IC05 is faulty
		2) Check the voltage of both terminals of terminal block 1 and N(1) after 3 minute operation.: AC220V	• Relay(RY71) Contact is faulty
4	Press the ON/OFF button. 1. FAN Speed [High] 2. Continuous Operation	1) Is the voltage over AC180V being imposed on terminal #3 and #5 of the fan motor connector(CN72)?	• Fan Motor of the indoor is faulty
		2) The fan motor of the indoor unit doesn't run.	• Fan Motor Connector(CN72) is faulty
		3) The power voltage between terminal #3 and #5 of the connector(CN72) is 0V.	• ASS'Y Main PCB is faulty • Connection is faulty

5-4-4 Temperature Sensor Feature Conversion Table(Room Temperature Sensor); 103AT

Temperature [°C]	Sensor Resistance [Kohm]	Temperature [°C]	Sensor Resistance [Kohm]	Temperature [°C]	Sensor Resistance [Kohm]	Temperature [°C]	Sensor Resistance [Kohm]
70	2.229						
69	2.296	49	4.300	29	8.622	9	18.700
68	2.365	48	4.444	28	8.944	8	19.480
67	2.437	47	4.594	27	9.281	7	20.290
66	2.512	46	4.749	26	9.632	6	21.150
65	2.589	45	4.912	25	10	5	22.050
64	2.669	44	5.080	24	10.380	4	22.990
63	2.752	43	5.256	23	10.780	3	23.900
62	2.838	42	5.439	22	11.200	2	25.030
61	2.928	41	5.630	21	11.630	1	26.130
60	3.021	40	5.828	20	12.090	0	27.280
59	3.116	39	6.033	19	12.560	-1	28.470
58	3.216	38	6.246	18	13.060	-2	29.720
57	3.319	37	6.468	17	13.570	-3	31.040
56	3.426	36	6.699	16	14.120	-4	32.430
55	3.537	35	6.941	15	14.680	-5	33.890
54	3.652	34	7.192	14	15.280	-6	35.430
53	3.772	33	7.455	13	15.900	-7	37.050
52	3.897	32	7.729	12	16.550	-8	38.760
51	4.026	31	8.015	11	17.240	-9	40.560
50	4.161	30	8.313	10	17.960		



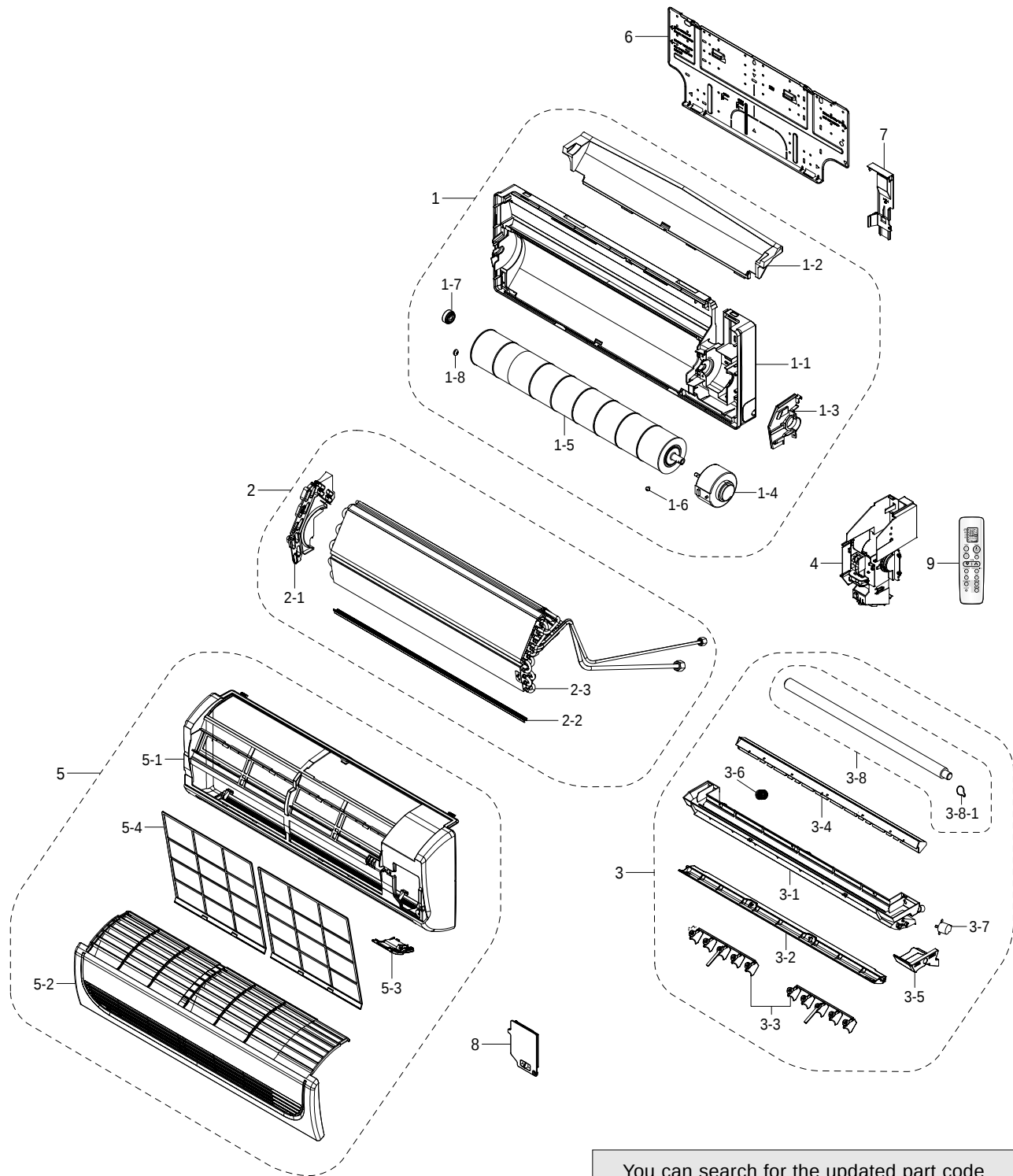
5-5 Main Part Inspection Method

Part	Breakdown Inspection Method		
Room Temperature Sensor	Measure resistance with a tester		
	Normal	At the normal temperature 37kΩ~ 8.3kΩ(-7℃~+30℃) *Refer to Table 5-4-4.	
	Abnormal	∞, 0Ω . . . Open or Short	
Room Fan Motor	Measure the resistance between terminals of the connector (CN72) with a tester.		
	Normal	At the normal temperature (10℃ ~ 30℃)	
		Compare terminal	Resistance
Yellow, Blue		404.4Ω ± 10%	Main
Yellow, Red		340Ω ± 10%	Sub
Abnormal	∞, 0Ω . . . Open or Short		
Outdoor Fan Motor	Measure the resistance between motor wires with a tester.		
	Normal	At the normal temperature (10℃ ~ 30℃)	
		Compare terminal	Resistance
Yellow, Red		360Ω ± 10%	Main
Black, Yellow		328Ω ± 10%	Sub
Abnormal	∞, 0Ω . . . Open or Short		
Stepping Motor	Measure the resistance between the red wire and each terminal wire with a tester.		
	Normal	About 300Ω at the normal temperature (20℃ ~ 30℃)	
	Abnormal	∞, 0Ω . . . Open or Short	

MEMO

6. Exploded Views and Parts List

6-1 Indoor Unit



You can search for the updated part code number through the ITSELF.
URL : <http://itself.sec.samsung.co.kr>

■ Parts List

No.	Code No.	Description	Specification	Q'TY		Remark
				SC09AWH	SC12AWH	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112A	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112B	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, P11.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536A	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB64-00990A	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532A	ASS'Y-REMOCON	REMOCON	1	1	

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY		Remark
				SC09ZWH AS09WHWE	SC12ZWH AS12WHWE	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112C	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112D	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, PI1.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536A	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB64-00990A	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532A	ASS'Y-REMOCON	REMOCON	1	1	

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY		Remark
				KF-25G / SWA	KF-35G / SWA	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112C	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112D	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, PI1.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536B	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB63-00846B	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532C	ASS'Y-REMOCON	REMOCON	1	1	

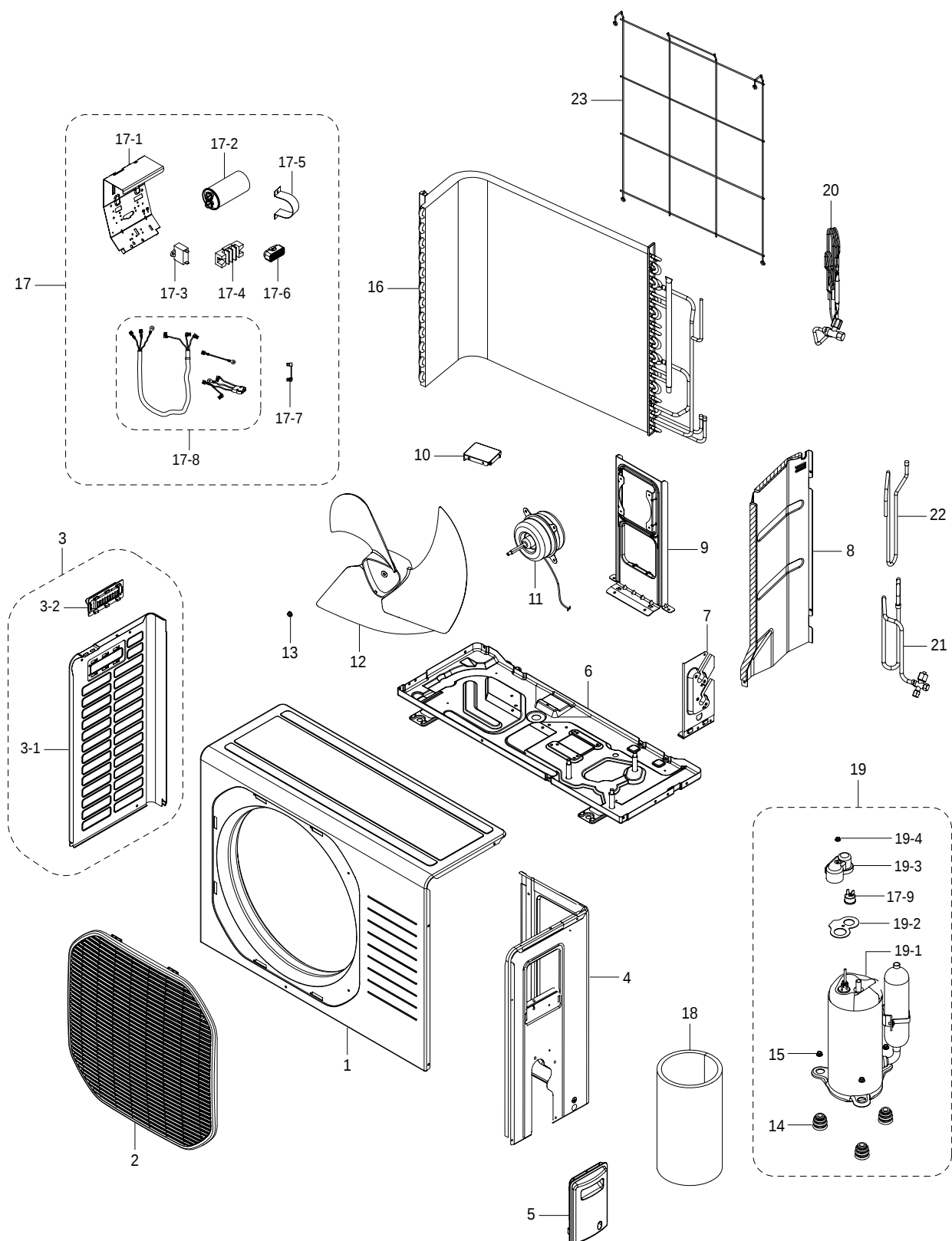
■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY		Remark
				AS09WHWD (INDONESIA)	AS12WHWD (INDONESIA)	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112C	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112D	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, PI1.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536B	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB63-00846B	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532A	ASS'Y-REMOCON	REMOCON	1	1	

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY		Remark
				SC09ZWH (AUSTRALIA)	SC12ZWH (AUSTRALIA)	
1	DB94-00454B	ASS'Y-BACK BODY	ASS'Y	1	1	Refer to page 41
1-1	DB61-01632A	BACK-BODY	HIPS	1	1	
1-2	DB69-00834A	CUSHION-BACK BODY	EPS	1	1	
1-3	DB61-01634A	SUPPORTER-EVAP RH	HIPS	1	1	
1-4	DB31-00219A	MOTOR-IN	YDK-20S4F8C-1	1	1	
1-5	DB94-00456A	ASS'Y-CROSS FAN	OD92x635	1	1	
1-6	DB97-02075A	ASS'Y BOLT-SPECIAL	ASS'Y	1	1	
1-7	DB73-00181A	RUBBER-BEARING	RUBBER	1	1	
1-8	DB94-40007A	MOLD-BEARING	BEARING	1	1	
2	DB96-03112C	ASS'Y CYCLE IN	ASS'Y	-	1	
	DB96-03112D	ASS'Y CYCLE IN	ASS'Y	1	-	
2-1	DB63-00850A	COVER BEARING	ABS	1	1	
2-2	DB60-00118A	SPACE-EVAP-LOW	PVC	1	1	
2-3	DB96-03060A	ASS'Y-EVAP	1.3S, 2x14	-	1	
	DB96-03257A	ASS'Y-EVAP	1.5S, 2x14	1	-	
3	DB94-00457D	ASS'Y-TRAY DRAIN	ASS'Y	1	1	
3-1	DB63-00848A	TRAY-DRAIN	ABS	1	1	
3-2	DB61-01635A	BLADE-H	HIPS	1	1	
3-3	DB61-01636A	BLADE-V	PP	2	2	
3-4	DB63-00849A	STABILIZER	ABS	1	1	
3-5	DB69-00839A	CUSHION-TRAY RH	EPS30	1	1	
3-6	DB73-00180A	RUBBER-CAP	GUM-EPM	1	1	
3-7	DB95-20138A	ASS'Y-STEPPING-MOTOR	PM24-600g, 24BYJ48	1	1	
3-8	DB94-00458A	ASS'Y DRAIN HOSE	ASS'Y	1	1	
3-8-1	DB61-01715A	CLIP TERMINAL HOSE	STS, PI1.0	1	1	
4	DB93-02481*	ASS'Y-CONTROL IN	ASS'Y	1	1	
5	DB92-00536A	ASS'Y-PANEL FRONT	ASS'Y	1	1	
5-1	DB64-00989A	PANEL-FRONT	HIPS	1	1	
5-2	DB64-00990A	GRILLE-AIR INLET	HIPS	1	1	
5-3	DB97-02064A	ASS'Y-COVER DISPLAY	ASS'Y	1	1	
5-4	DB63-00846A	GUARD-AIR FILTER	PP	2	2	
6	DB70-00406A	PLATE-HANGER	SGCC-M T0.6x320x650	1	1	
7	DB61-01638A	HOLDER-PIPE	PS	1	1	
8	DB63-00844A	COVER TERMINAL	ABS-V0	1	1	
9	DB93-02532A	ASS'Y-REMOCON	REMOCON	1	1	

6-2 Outdoor Unit



■ Parts List

No.	Code No.	Description	Specification	Q'TY	
				SC09AWHX	SC12AWHX
1	DB90-01341A	ASS'Y-CABI FRONT	T0.7, SECCD-P	1	1
2	DB63-00847A	GUARD-FAN	PP	1	1
3	DB90-01332A	ASS'Y CABI SIDE LF	ASS'Y	1	1
3-1	DB64-01094A	CABI SIDE LF(COATING)	T0.6, SECC-P	1	1
3-2	DB64-00992A	HANDLE LF	PP	1	1
4	DB90-01331A	ASS'Y CABI SIDE RH	T0.6, SECC-P	1	1
5	DB63-00853A	COVER-CONTROL	ABS-V0	1	1
6	DB90-01330A	ASS'Y-BASE	T1.0, SECC-P	-	1
	DB90-01330B	ASS'Y-BASE	T1.0, SECC-P	1	-
7	DB99-00401A	ASS'Y BRACKET VALVE	SECC-P, T1.0	1	1
8	DB94-00459C	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	-	1
	DB94-00459B	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	1	-
9	DB61-01644A	BRACKET-MOTOR	SGCC-M T1.6	1	1
10	DB97-02225A	ASS'Y PLATE SUPPORT B/M	ASS'Y	-	1
	DB97-02225C	ASS'Y PLATE SUPPORT B/M	ASS'Y	1	-
11	DB31-00220A	MOTOR-OUT	YDK-25F6M13E-1	1	1
12	DB67-00397A	PROPELLER-FAN	AS+G/F 20%	1	1
13	DB60-30004A	NUT FLANGE		1	1
14	DB63-00815A	GROMMET	NR	-	3
	DB63-00763A	GROMMET	NR	3	-
15	DB60-30028A	NUT WASHER		3	3
16	DB96-03231A	ASS'Y-COND	2x24, PF1.5, LOUVER	-	1
	DB96-03247A	ASS'Y-COND	1x24, PF1.5, LOUVER	1	-
17	DB93-02614A	ASS'Y-CONTROL OUT	ASS'Y	1	-
	DB93-02614B	ASS'Y-CONTROL OUT	ASS'Y	-	1
17-1	DB61-01642A	CASE-CONTROL OUT	SGCC-M T0.6	1	1
17-2	2501-001236	CAPACITOR-COMP	30μFx450V	-	1
	2501-001237	CAPACITOR-COMP	35μFx450V	1	-
17-3	2301-001375	CAPACITOR-MOTOR	1.5μFx450V	1	1
17-4	DB65-40049E	TERMINAL-BLOCK		1	1
17-5	DB65-10046A	CLIP-CAPACITOR		1	1
17-6	DB61-00250A	HOLDER-WIRE		1	1
17-7	DB93-50062C	LEAD WIRE		1	1
17-8	DB93-00480F	ASS'Y LEAD WIRE		-	1
	DB93-00480G	ASS'Y LEAD WIRE		1	-
17-9	DB35-00029A	OLP	MRA99908-9201	-	1
	DB35-00029B	OLP	MRA99134-9201	1	-
18	DB72-00726A	SPONGE-FELT COMP CLOTH	FELT+PVC	-	1
	DB72-00726B	SPONGE-FELT COMP CLOTH	FELT+PVC	1	-
19	DB95-00468A	ASS'Y-COMP		-	1
	DB95-00467A	ASS'Y-COMP		1	-
19-1	DB95-00501A	COMP	802 354 45, SANYO	-	1
	DB95-00534A	COMP	802 141 55, SANYO	1	-
19-2	DB63-00943A	GASKET		-	1
	DB63-00999A	GASKET		1	-
19-3	DB63-00942A	COVER-TERMINAL		1	1
19-4	DB60-30018A	NUT FLANGE		1	1
20	DB96-03233A	ASS'Y CAPILLARY	ASS'Y	1	1
21	DB96-03232A	ASS'Y-TUBE SUCTION	ASS'Y	1	-
	DB62-02566A	ASS'Y-TUBE SUCTION	ASS'Y	-	1
22	DB62-02557A	TUBE DISCHARGE	C1220T-0	1	-
	DB62-02565A	TUBE DISCHARGE	C1220T-0	-	1
23	DB71-00090A	BAR-STEEL		-	1
	DB71-00090B	BAR-STEEL		1	-

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY	
				SC09ZWHX US09WHWE	SC12ZWHX US12WHWE
1	DB90-01341A	ASS'Y-CABI FRONT	T0.7, SECC-P	1	1
2	DB63-00847A	GUARD-FAN	PP	1	1
3	DB90-01332A	ASS'Y CABI SIDE LF	ASS'Y	1	1
3-1	DB64-01094A	CABI SIDE LF(COATING)	T0.6, SECC-P	1	1
3-2	DB64-00992A	HANDLE LF	PP	1	1
4	DB90-01331A	ASS'Y CABI SIDE RH	T0.6, SECC-P	1	1
5	DB63-00853A	COVER-CONTROL	ABS-V0	1	1
6	DB90-01330E	ASS'Y-BASE	T1.0, SECC-P	-	1
	DB90-01330B	ASS'Y-BASE	T1.0, SECC-P	1	-
7	DB99-00401A	ASS'Y BRACKET VALVE	SECC-P, T1.0	1	1
8	DB94-00459C	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	-	1
	DB94-00459B	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	1	-
9	DB61-01644A	BRACKET-MOTOR	SGCC-M T1.6	1	1
10	DB97-02225A	ASS'Y PLATE SUPPORT B/M	ASS'Y	-	1
	DB97-02225C	ASS'Y PLATE SUPPORT B/M	ASS'Y	1	-
11	DB31-00220A	MOTOR-OUT	YDK-25F6M13E-1	1	1
12	DB67-00397A	PROPELLER-FAN	AS+G/F 20%	1	1
13	DB60-30004A	NUT FLANGE		1	1
14	DB63-00815A	GROMMET	NR	-	3
	DB63-00763A	GROMMET	NR	3	-
15	DB60-30028A	NUT WASHER		3	3
16	DB96-03231A	ASS'Y-COND	2x24, PF1.5, LOUVER	-	1
	DB96-03247A	ASS'Y-COND	1x24, PF1.5, LOUVER	1	-
17	DB93-02749A	ASS'Y-CONTROL OUT	ASS'Y	-	1
	DB93-02749B	ASS'Y-CONTROL OUT	ASS'Y	1	-
17-1	DB61-01642A	CASE-CONTROL OUT	SGCC-M T0.6	1	1
17-2	2501-001236	CAPACITOR-COMP	30μF×450V	-	1
	2501-001238	CAPACITOR-COMP	40μF×450V	1	-
17-3	2301-001375	CAPACITOR-MOTOR	1.5μF×450V	1	1
17-4	DB65-40049E	TERMINAL-BLOCK		1	1
17-5	DB65-10046A	CLIP-CAPACITOR		1	1
17-6	DB61-00250A	HOLDER-WIRE		1	1
17-7	DB93-50062C	LEAD WIRE		-	-
17-8	DB93-00480F	ASS'Y LEAD WIRE		1	1
17-9	DB30-00030C	OLP	RAC12074-9622	-	1
	DB30-00020G	OLP	RAC12110-9622	1	-
18	DB72-00726E	SPONGE-FELT COMP CLOTH	FELT+PVC	-	1
	DB72-00726D	SPONGE-FELT COMP CLOTH	FELT+PVC	1	-
19	DB95-00552A	ASS'Y-COMP		-	1
	DB95-00551A			1	-
19-1	48D129JU1EL	COMP		-	1
	44B102JX1EL	COMP		1	-
19-2	DB63-20002A	GASKET		1	1
19-3	DB63-10165A	COVER-TERMINAL		1	1
19-4	DB60-30018A	NUT FLANGE		1	1
20	DB96-03319A	ASS'Y CAPILLARY	ASS'Y	-	1
	DB96-03319B	ASS'Y CAPILLARY	ASS'Y	1	-
21	DB96-03569A	ASS'Y-TUBE SUCTION	ASS'Y	-	1
	DB96-03567A	ASS'Y-TUBE SUCTION	ASS'Y	1	-
22	DB62-02757A	TUBE DISCHARGE	C1220T-0	-	1
	DB62-02758A	TUBE DISCHARGE	C1220T-0	1	1
23	DB71-00090A	BAR-STEEL		-	1
	DB71-00090B	BAR-STEEL		1	-

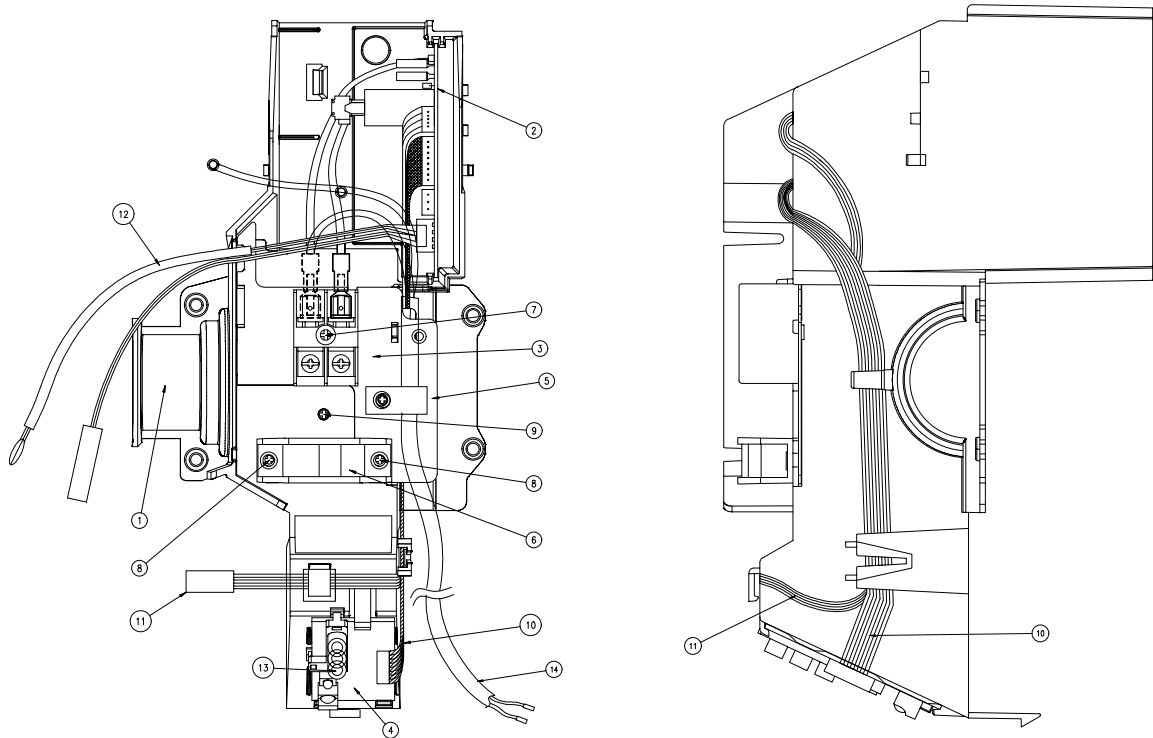
■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY	
				US09WHWD	US12WHWD
1	DB90-01341A	ASS'Y-CABI FRONT	T0.7, SECC-P	1	1
2	DB63-00847A	GUARD-FAN	PP	1	1
3	DB90-01332A	ASS'Y CABI SIDE LF	ASS'Y	1	1
3-1	DB64-01094A	CABI SIDE LF(COATING)	T0.6, SECC-P	1	1
3-2	DB64-00992A	HANDLE LF	PP	1	1
4	DB90-01331A	ASS'Y CABI SIDE RH	T0.6, SECC-P	1	1
5	DB63-00853A	COVER-CONTROL	ABS-V0	1	1
6	DB90-01330E	ASS'Y-BASE	T1.0, SECC-P	-	1
	DB90-01330B	ASS'Y-BASE	T1.0, SECC-P	1	-
7	DB99-00401A	ASS'Y BRACKET VALVE	SECC-P, T1.0	1	1
8	DB94-00459D	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	-	1
	DB94-00459E	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	1	-
9	DB61-01644A	BRACKET-MOTOR	SGCC-M T1.6	1	1
10	DB97-02225A	ASS'Y PLATE SUPPORT B/M	ASS'Y	-	1
	DB97-02225C	ASS'Y PLATE SUPPORT B/M	ASS'Y	1	-
11	DB31-00220A	MOTOR-OUT	YDK-25F6M13E-1	1	1
12	DB67-00397A	PROPELLER-FAN	AS+G/F 20%	1	1
13	DB60-30004A	NUT FLANGE		1	1
14	DB63-00815A	GROMMET	NR	-	3
	DB63-00763A	GROMMET	NR	3	-
15	DB60-30028A	NUT WASHER		3	3
16	DB96-03231A	ASS'Y-COND	2x24, PF1.5, LOUVER	-	1
	DB96-03247A	ASS'Y-COND	1x24, PF1.5, LOUVER	1	-
17	DB93-02749F	ASS'Y-CONTROL OUT	ASS'Y	-	1
	DB93-02749E	ASS'Y-CONTROL OUT	ASS'Y	1	-
17-1	DB61-01642A	CASE-CONTROL OUT	SGCC-M T0.6	1	1
17-2	2501-001236	CAPACITOR-COMP	30μF×450V	-	1
	2501-001237	CAPACITOR-COMP	35μF×450V	1	-
17-3	2301-001375	CAPACITOR-MOTOR	1.5μF×450V	1	1
17-4	DB65-40049E	TERMINAL-BLOCK		1	1
17-5	DB65-10046A	CLIP-CAPACITOR		1	1
17-6	DB61-00250A	HOLDER-WIRE		1	1
17-7	DB93-50062C	LEAD WIRE		-	-
17-8	DB93-00480F	ASS'Y LEAD WIRE		1	1
17-9	DB30-00030C	OLP	RAC12074-9622	-	1
	DB30-00030A	OLP	RAC12054-9622	1	-
18	DB72-00726E	SPONGE-FELT COMP CLOTH	FELT+PVC	-	1
	DB72-00726D	SPONGE-FELT COMP CLOTH	FELT+PVC	1	-
19	DB95-00543B	ASS'Y-COMP		-	1
	DB95-00542B	ASS'Y-COMP		1	-
19-1	48D129MXAEL	COMP		-	1
	44B102MX1EL	COMP		1	-
19-2	DB63-20002A	GASKET		1	1
19-3	DB63-10165A	COVER-TERMINAL		1	1
19-4	DB60-30018A	NUT FLANGE		1	1
20	DB96-03319A	ASS'Y CAPILLARY	ASS'Y	-	1
	DB96-03319C	ASS'Y CAPILLARY	ASS'Y	1	-
21	DB96-03569A	ASS'Y-TUBE SUCTION	ASS'Y	-	1
	DB96-03567B	ASS'Y-TUBE SUCTION	ASS'Y	1	-
22	DB62-02757B	TUBE DISCHARGE	C1220T-0	-	1
	DB62-02758B	TUBE DISCHARGE	C1220T-0	1	1
23	DB71-00090A	BAR-STEEL		-	1
	DB71-00090B	BAR-STEEL		1	-

■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY	
				KF-25W / SWA	KF-35W / SWA
1	DB90-01341A	ASS'Y-CABI FRONT	T0.7, SECC-P	1	1
2	DB63-00847A	GUARD-FAN	PP	1	1
3	DB90-01332A	ASS'Y CABI SIDE LF	ASS'Y	1	1
3-1	DB64-01094A	CABI SIDE LF(COATING)	T0.6, SECC-P	1	1
3-2	DB64-00992A	HANDLE LF	PP	1	1
4	DB90-01331A	ASS'Y CABI SIDE RH	T0.6, SECC-P	1	1
5	DB63-00853A	COVER-CONTROL	ABS-V0	1	1
6	DB90-01330E	ASS'Y-BASE	T1.0, SECC-P	-	1
	DB90-01330B	ASS'Y-BASE	T1.0, SECC-P	1	-
7	DB99-00401A	ASS'Y BRACKET VALVE	SECC-P, T1.0	1	1
8	DB94-00459D	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	-	1
	DB94-00459E	ASS'Y-PARTITION	ASS'Y, SGCC-M, T0.6	1	-
9	DB61-01644A	BRACKET-MOTOR	SGCC-M T1.6	1	1
10	DB97-02225A	ASS'Y PLATE SUPPORT B/M	ASS'Y	-	1
	DB97-02225C	ASS'Y PLATE SUPPORT B/M	ASS'Y	1	-
11	DB31-00220A	MOTOR-OUT	YDK-25F6M13E-1	1	1
12	DB67-00397A	PROPELLER-FAN	AS+G/F 20%	1	1
13	DB60-30004A	NUT FLANGE		1	1
14	DB63-00815A	GROMMET	NR	-	3
	DB63-00763A	GROMMET	NR	3	-
15	DB60-30028A	NUT WASHER		-	3
	DB60-30040A	NUT WASHER		3	-
16	DB96-03231A	ASS'Y-COND	2x24, PF1.5, LOUVER	-	1
	DB96-03247A	ASS'Y-COND	1x24, PF1.5, LOUVER	1	-
17	DB93-02749C	ASS'Y-CONTROL OUT	ASS'Y	-	1
	DB93-02749D	ASS'Y-CONTROL OUT	ASS'Y	1	-
17-1	DB61-01642A	CASE-CONTROL OUT	SGCC-M T0.6	1	1
17-2	2501-001236	CAPACITOR-COMP	30μF×450V	-	1
	2501-001237	CAPACITOR-COMP	35μF×450V	1	-
17-3	2301-001375	CAPACITOR-MOTOR	1.5μF×450V	1	1
17-4	DB65-40049H	TERMINAL-BLOCK		1	1
17-5	DB65-10046A	CLIP-CAPACITOR		1	1
17-6	DB61-00250A	HOLDER-WIRE		1	1
17-7	DB93-50062C	LEAD WIRE		-	-
17-8	DB93-00480F	ASS'Y LEAD WIRE		1	1
17-9	DB30-00030C	OLP	RAC12074-9622	-	1
	DB30-00030A	OLP	RAC12054-9622	1	-
18	DB72-00726E	SPONGE-FELT COMP CLOTH	FELT+PVC	-	1
	DB72-00726D	SPONGE-FELT COMP CLOTH	FELT+PVC	1	-
19	DB95-00543B	ASS'Y-COMP		-	1
	DB95-00542B	ASS'Y-COMP		1	-
19-1	48D129MXAEL	COMP		-	1
	44B102MX1EL	COMP		1	-
19-2	DB63-20002A	GASKET		1	1
19-3	DB63-10165A	COVER-TERMINAL		1	1
19-4	DB60-30018A	NUT FLANGE		1	1
20	DB96-03319A	ASS'Y CAPILLARY	ASS'Y	-	1
	DB96-03319C	ASS'Y CAPILLARY	ASS'Y	1	-
21	DB96-03569A	ASS'Y-TUBE SUCTION	ASS'Y	-	1
	DB96-03567B	ASS'Y-TUBE SUCTION	ASS'Y	1	-
22	DB62-02757B	TUBE DISCHARGE	C1220T-0	-	1
	DB62-02758B	TUBE DISCHARGE	C1220T-0	1	-
23	DB71-00090A	BAR-STEEL		-	1
	DB71-00090B	BAR-STEEL		1	-

6-3 Ass'y-Control In(Code No : DB93-02481*)

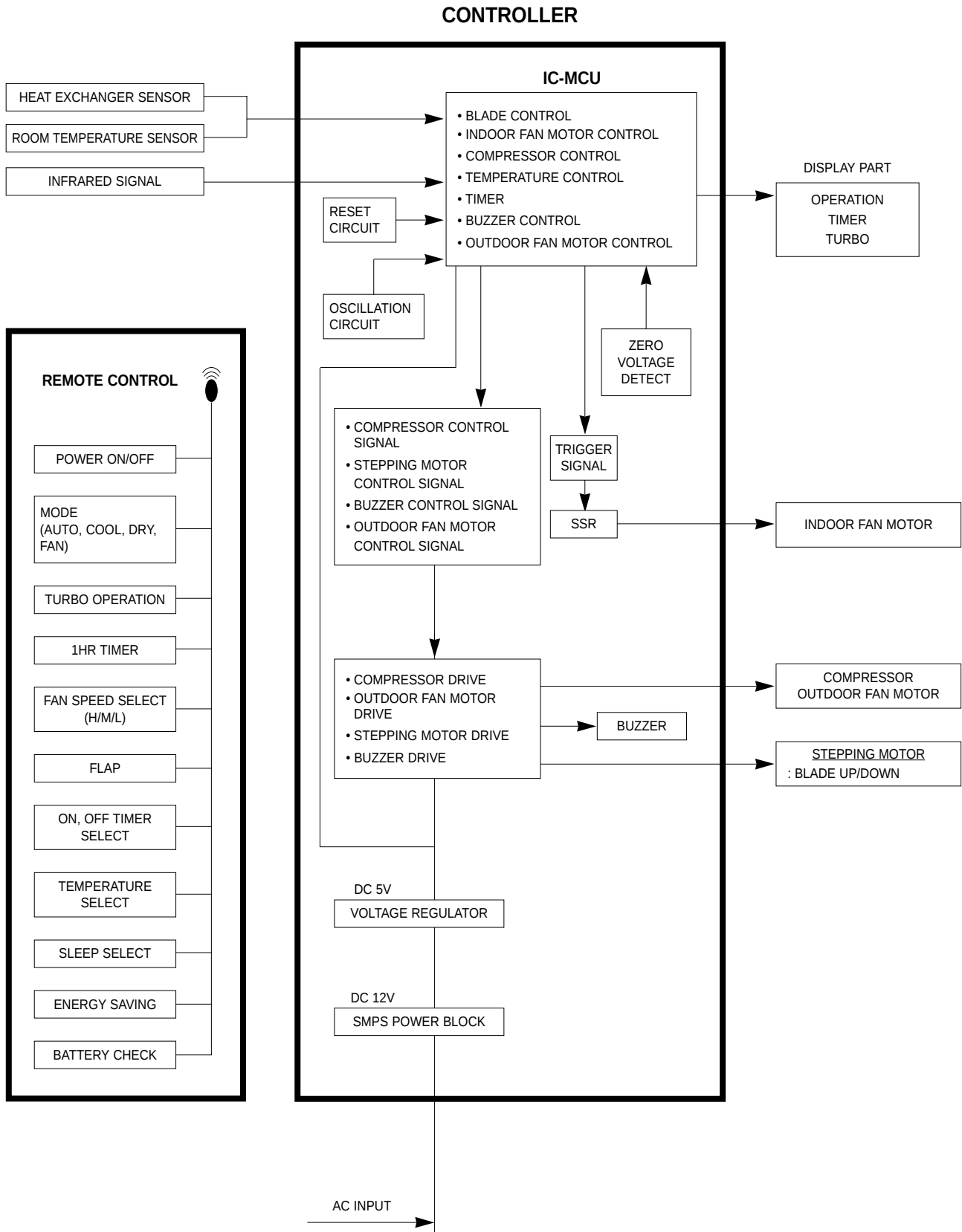


Code No.	MODEL	Code No.	MODEL
DB93-02481B	SC09AWH/EDC, SC12AHW/EDC, SC09ZWH/EDC,	DB93-02481H	KF-35G/SWA
	SC12ZWH/EDC, AS09WHWE/XSS, AS12WHWE/XSS,	DB93-02481K	KF-25G/SWA
	AS09WHWE/SMR, AS12WHWE/SMR	DB93-02481M	AS09WHWD/XSE, AS12WHWD/XSE
DB93-02481D	SC09ZWH/XSA, SC12ZWH/XSA		

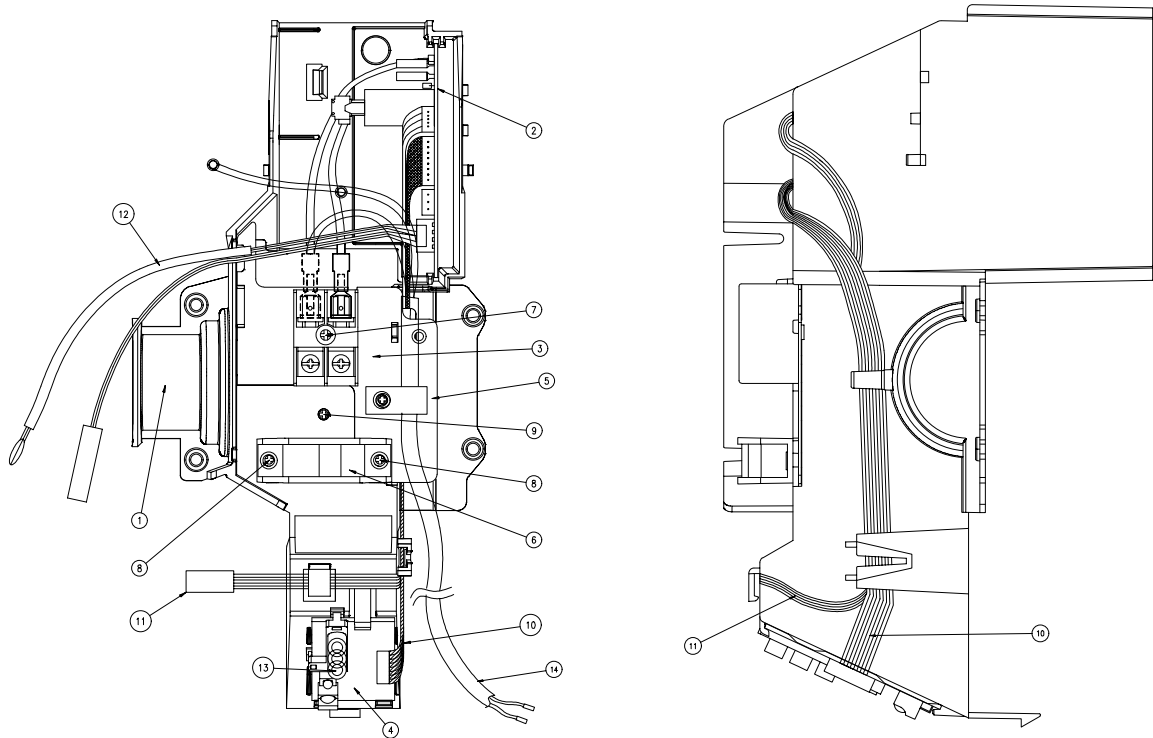
■ Parts List

No.	Code No.	Description	Specification	Q'TY	Remark
1	DB61-01637A	CASE-CONTROL	ABS	1	
2	DB93-02482B	ASS'Y PCB MAIN	FR-4, 120x90	1	
3	DB93-02489A	ASS'Y TERMINAL BLOCK	4P	1	
4	DB93-02483A	ASS'Y S/W & MODULE & DISPLAY PCB	FR-1, 30x70	1	
5	DB61-01639A	PLATE-CONTROL	SGCC-M, T1-2	1	
6	DB61-00171A	HOLDER-WIRE CLAMP	ABS	1	
7	-	SCREW-MACHINE	PH M3xL22	1	SNA
8	-	SCREW-MACHINE	TH M4xL16	2	SNA
9	-	SCREW-MACHINE	TH M4xL10	1	SNA
10	DB39-00949A	CONNECTOR WIRE S/W & MODULE & DISPLAY	8P	1	
11	DB39-00147D	CONNECTOR WIRE STEP MOTOR UP/DOWN	5P	1	
12	DB32-00020D	ASS'Y THERMISTOR WIRE	4P(103AT)	1	
13	DB63-00851A	COVER CLAMP	HIPS	1	
14	-	POWER CORD	3P	1	

7. Block Diagram



6-3 Ass'y-Control In(Code No : DB93-02481*)



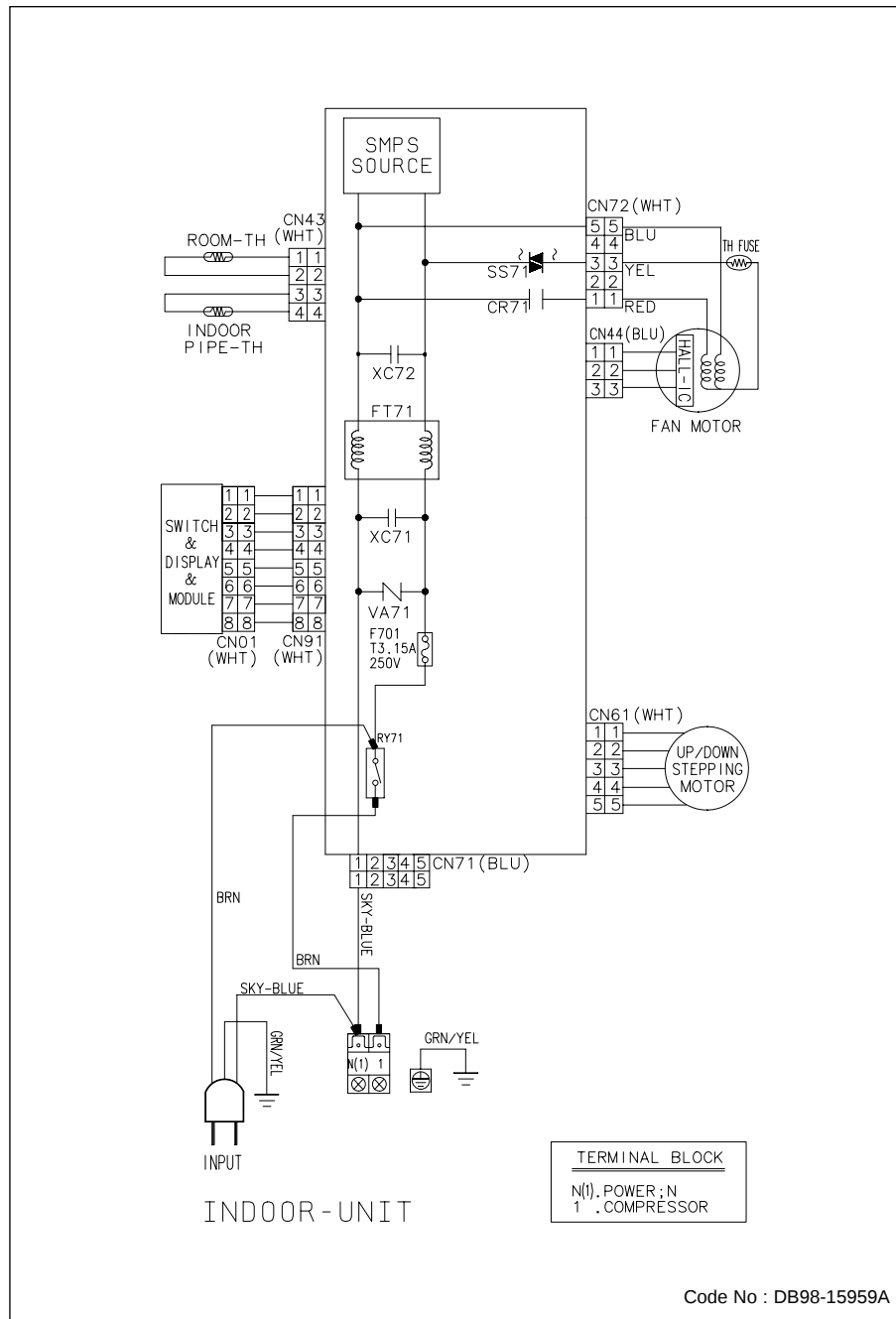
Code No.	MODEL	Code No.	MODEL
DB93-02481B	SC09AWH/EDC, SC12AHW/EDC, SC09ZWH/EDC,	DB93-02481H	KF-35G/SWA
	SC12ZWH/EDC, AS09WHWE/XSS, AS12WHWE/XSS,	DB93-02481K	KF-25G/SWA
	AS09WHWE/SMR, AS12WHWE/SMR	DB93-02481M	AS09WHWD/XSE, AS12WHWD/XSE
DB93-02481D	SC09ZWH/XSA, SC12ZWH/XSA		

■ Parts List

No.	Code No.	Description	Specification	Q'TY	Remark
1	DB61-01637A	CASE-CONTROL	ABS	1	
2	DB93-02482B	ASS'Y PCB MAIN	FR-4, 120x90	1	
3	DB93-02489A	ASS'Y TERMINAL BLOCK	4P	1	
4	DB93-02483A	ASS'Y S/W & MODULE & DISPLAY PCB	FR-1, 30x70	1	
5	DB61-01639A	PLATE-CONTROL	SGCC-M, T1-2	1	
6	DB61-00171A	HOLDER-WIRE CLAMP	ABS	1	
7	-	SCREW-MACHINE	PH M3xL22	1	SNA
8	-	SCREW-MACHINE	TH M4xL16	2	SNA
9	-	SCREW-MACHINE	TH M4xL10	1	SNA
10	DB39-00949A	CONNECTOR WIRE S/W & MODULE & DISPLAY	8P	1	
11	DB39-00147D	CONNECTOR WIRE STEP MOTOR UP/DOWN	5P	1	
12	DB32-00020D	ASS'Y THERMISTOR WIRE	4P(103AT)	1	
13	DB63-00851A	COVER CLAMP	HIPS	1	
14	-	POWER CORD	3P	1	

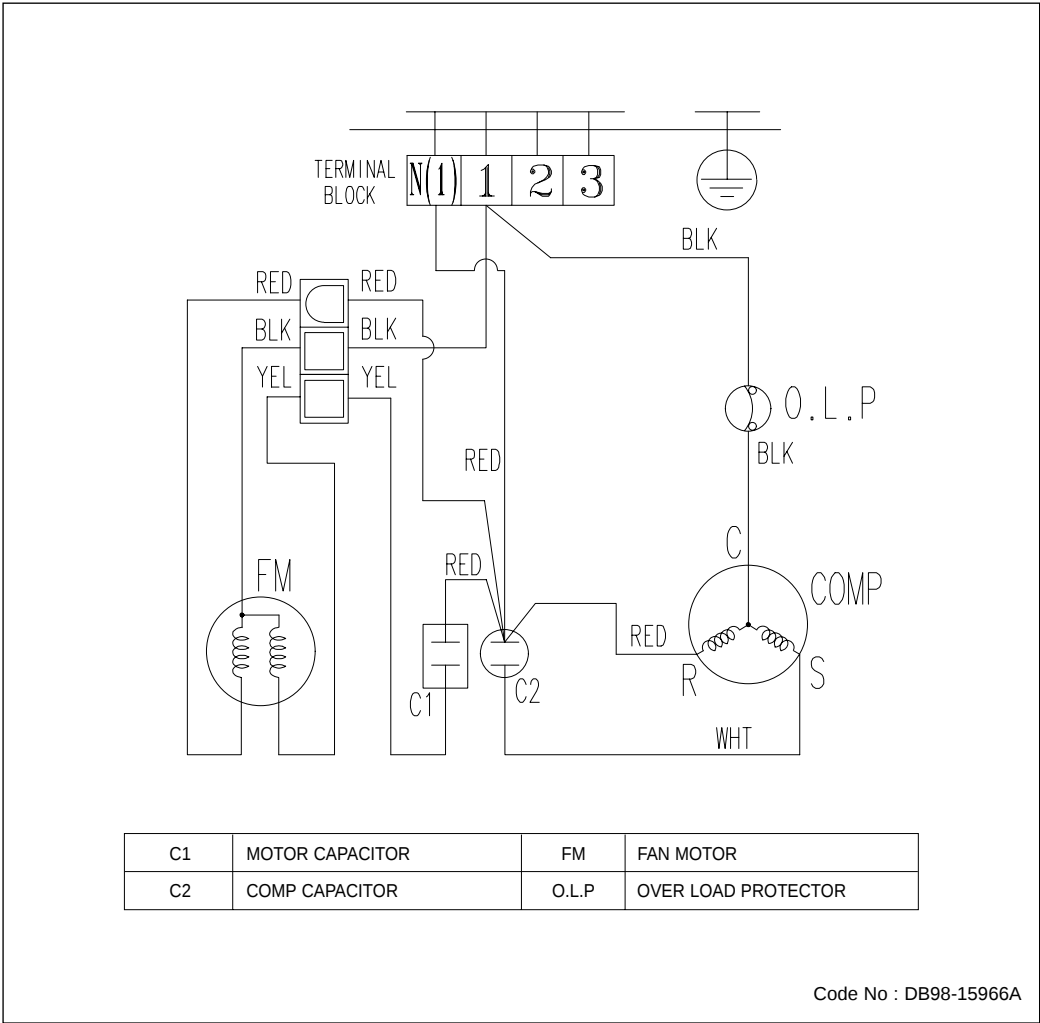
8. Wiring Diagram

8-1 Indoor Unit



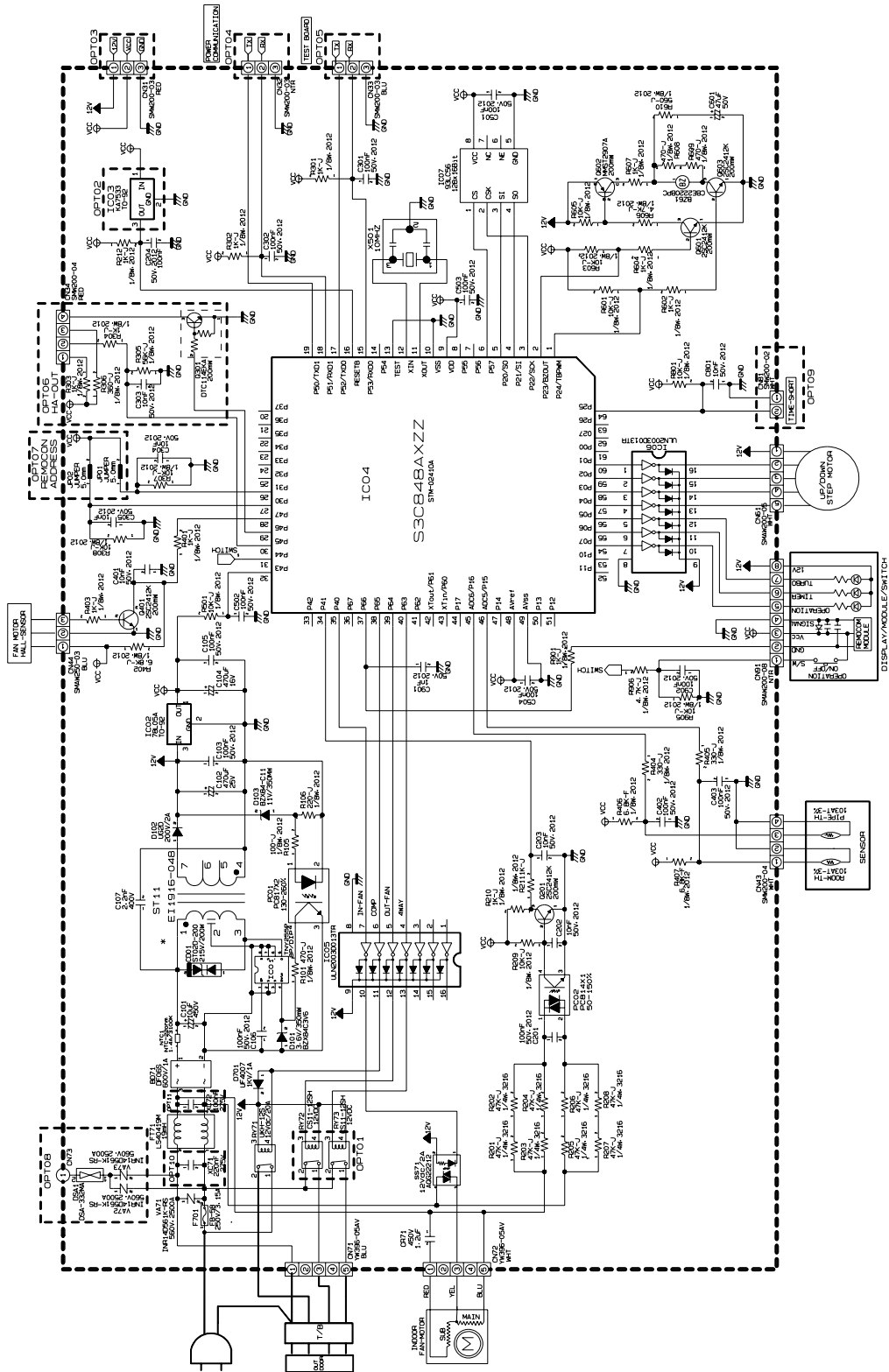
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8-2 Outdoor Unit



9. Schematic Diagram

9-1 Indoor Unit



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