



ROOM AIR CONDITIONER

INDOOR UNIT

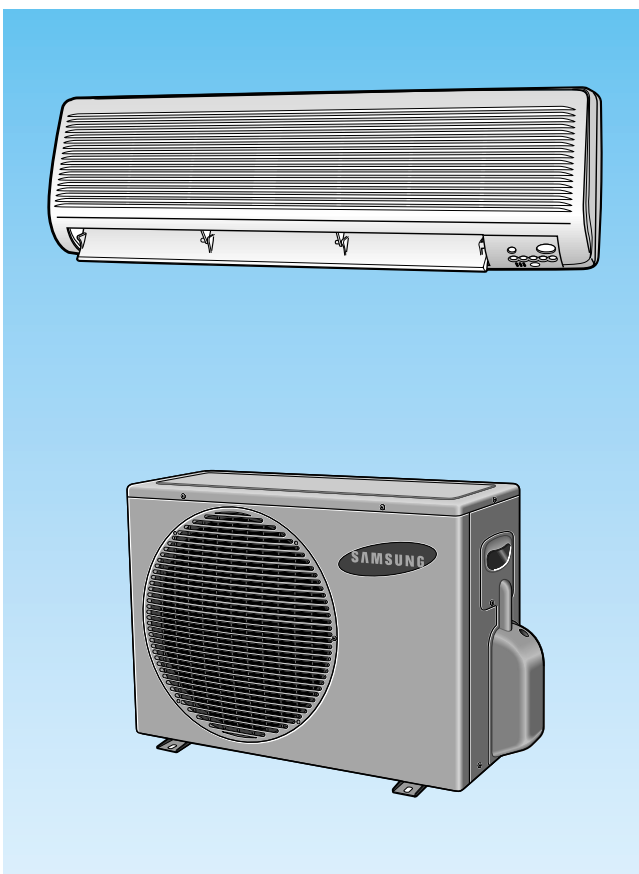
AQ12*5(6)MB AQ12*A(B)ME
AQ12*5(6)ME AQ09*5(6)MED
AQ09*5(6)ME AQ07*5(6)MED
SH09Z*5(6) SH12Z*A(B)
AQ07*5(6)ME SH09Z*5(6)D
SH07Z*5(6) SH07Z*5(6)D
AQ09*7(8)ME
SH09Z*7(8)
AQ07*7(8)ME
SH07Z*7(8)
AQ12*9(0)ME
SH12Z*9(0)

OUTDOOR UNIT

UQ12*5(6)MB UQ12*A(B)ME
UQ12*5(6)ME UQ09*5(6)MED
UQ09*5(6)ME UQ07*5(6)MED
SH09Z*5(6)X SH12Z*A(B)X
UQ07*5(6)ME SH09Z*5(6)DX
SH07Z*5(6)X SH07Z*5(6)DX
UQ09*7(8)ME
SH09Z*7(8)X
UQ07*7(8)ME
SH07Z*7(8)X
UQ12*9(0)ME
SH12Z*9(0)X

SERVICE *Manual*

AIR CONDITIONER



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1. Precautions

1. Warning: Prior to repair, disconnect the power cord from the circuit breaker.
2. Use proper parts: Use only exact replacement parts. (Also, we recommend replacing parts rather than repairing them.)
3. Use the proper tools: Use the proper tools and test equipment, and know how to use them. Using defective tools or test equipment may cause problems later-intermittent contact, for example.
4. Power Cord: Prior to repair, check the power cord and replace it if necessary.
5. Avoid using an extension cord, and avoid tapping into a power cord. This practice may result in malfunction or fire.
6. After completing repairs and reassembly, check the insulation resistance.
Procedure: Prior to applying power, measure the resistance between the power cord and the ground terminal. The resistance must be greater than 30 megaohms.
7. Make sure that the grounds are adequate.
8. Make sure that the installation conditions are satisfactory.
Relocate the unit if necessary.
9. Keep children away from the unit while it is being repaired.
10. Be sure to clean the unit and its surrounding area.

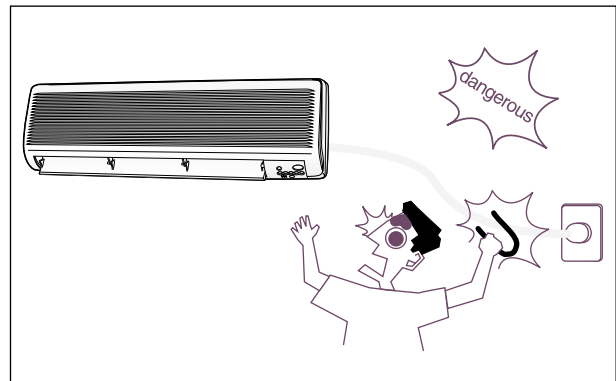


Fig. 1-1 Avoid Dangerous Contact

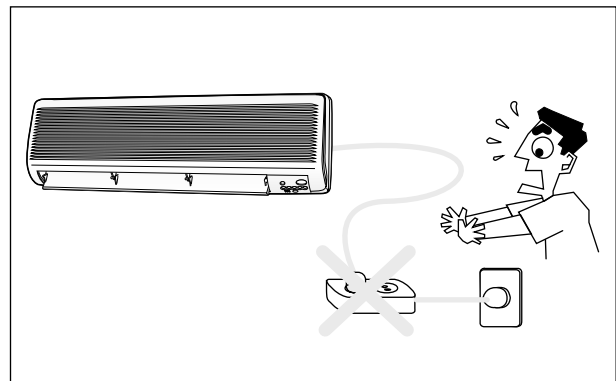


Fig. 1-2 No Tapping and No Extension Cords

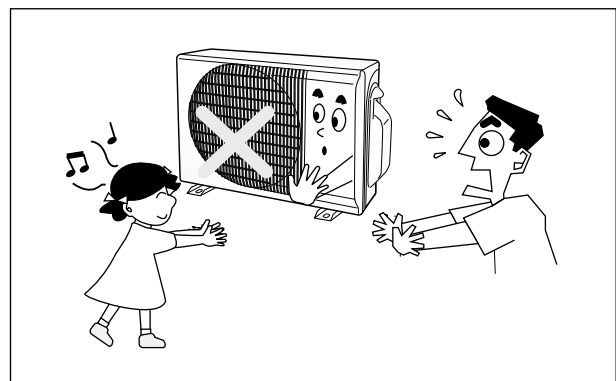


Fig. 1-3 No Kids Nearby!

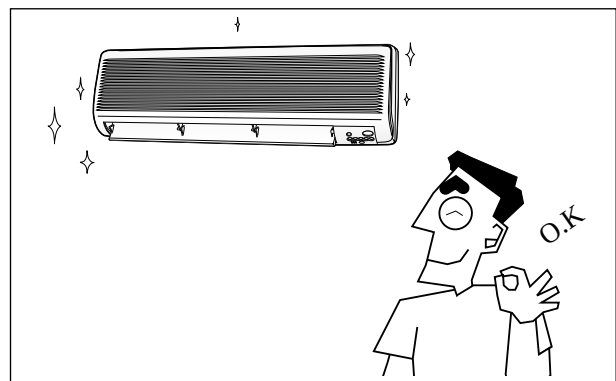


Fig. 1-4 Clean the Unit

2. Product Specifications

2-1 Table

Item				Model	AQ12*5(6)MB		AQ12*5(6)ME		AQ09*5(6)ME/SH09Z*5(6)	
					Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type				Wall-mounting		Wall-mounting		Wall-mounting		
Performance	Cooling		BTU/h(KW)	12000		12000 (3.4)		9000 (2.72)		
	Heating		BTU/h(KW)	13000		13000 (3.7)		10000 (2.95)		
	Dehumidying		l/h	1.9		1.9		1.4		
	Air volume	Cooling	m³/min	7.4	19	7.4	19	6.0	18	
		Heating		8.1	19	8.1	19	6.7	18	
	Noise	Cooling	dB	41	53	41	53	38	51	
		Heating		41	53	41	53	38	51	
	Energy efficiency ratio	Cooling	BTU/h•W	9.375		10.0		9.375		
		Heating	(W/W)	10.0		10.6		10.752		
Power		V-Hz	1-220 -60		1-220 / 240-50		1-220 / 240-50			
Power	Power Consumption	Cooling	W	1280		1200		960		
		Heating		1300		1230		930		
	Operating Current	Cooling	A	6.0		5.4		4.4		
		Heating		6.2		5.5		4.2		
	Power factor	Cooling	%	97		96.6		94.9		
		Heating		95.3		97.2		96.3		
	Starting current		A	30		30		30		
	Power cord	Length	m	-		-		-		
		Number of core wire		-		-		-		
Fuse capacity			A	250V-10 / 16A		250V-10 / 16A		250V-10 / 16A		
Size	Outer Dimension	Width x Height	mm	790 x 245 x 165	762 x 532 x 280	790 x 245 x 165	762 x 532 x 280	790 x 245 x 165	660 x 497 x 235	
		x Depth	inch	31.1 x 9.6 x 6.5	30 x 20.9 x 11	31.1 x 9.6 x 6.5	30 x 20.9 x 11	31.1 x 9.6 x 6.5	26 x 19.6 x 9.3	
	Weight			7.7	35	7.7	35	7.7	29	
	Refrigerant pipe	Liquid	mm x L(MT)	ø6.35 x 5		ø6.35 x 5		ø6.35 x 5		
		GAS	mm x L(MT)	ø12.7 x 5		ø12.7 x 5		ø9.52 x 5		
	Drain hose		D x L(mm)	ø18 x 2000		ø18 x 2000		ø18 x 2000		
	Compressor	Type		Rotary		Rotary		Rotary		
		Motor	Type		-	-	-	-	-	-
			Rated output		-	-	-	-	-	-
	Blower	Type			Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller
		Motor	Type		Resin	steel	Resin	steel	Resin	steel
			Rated output	W	15	25	15	25	15	25
Heat exchanger				2ROW 12STEP	1ROW 20STEP	2ROW 12STEP	1ROW 20STEP	2ROW 12STEP	1ROW 18STEP	
Refrigerant control unit				CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE		
Freezer oil capacity				410		410		360		
Refrigerant to change(R-22)				800		820		670		
Protection device				MRA 12002-9200/MRA 12002-12008		MRA 12030-12008/RAC12030-9622		RAC 12054-9622		
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 WB26°C		

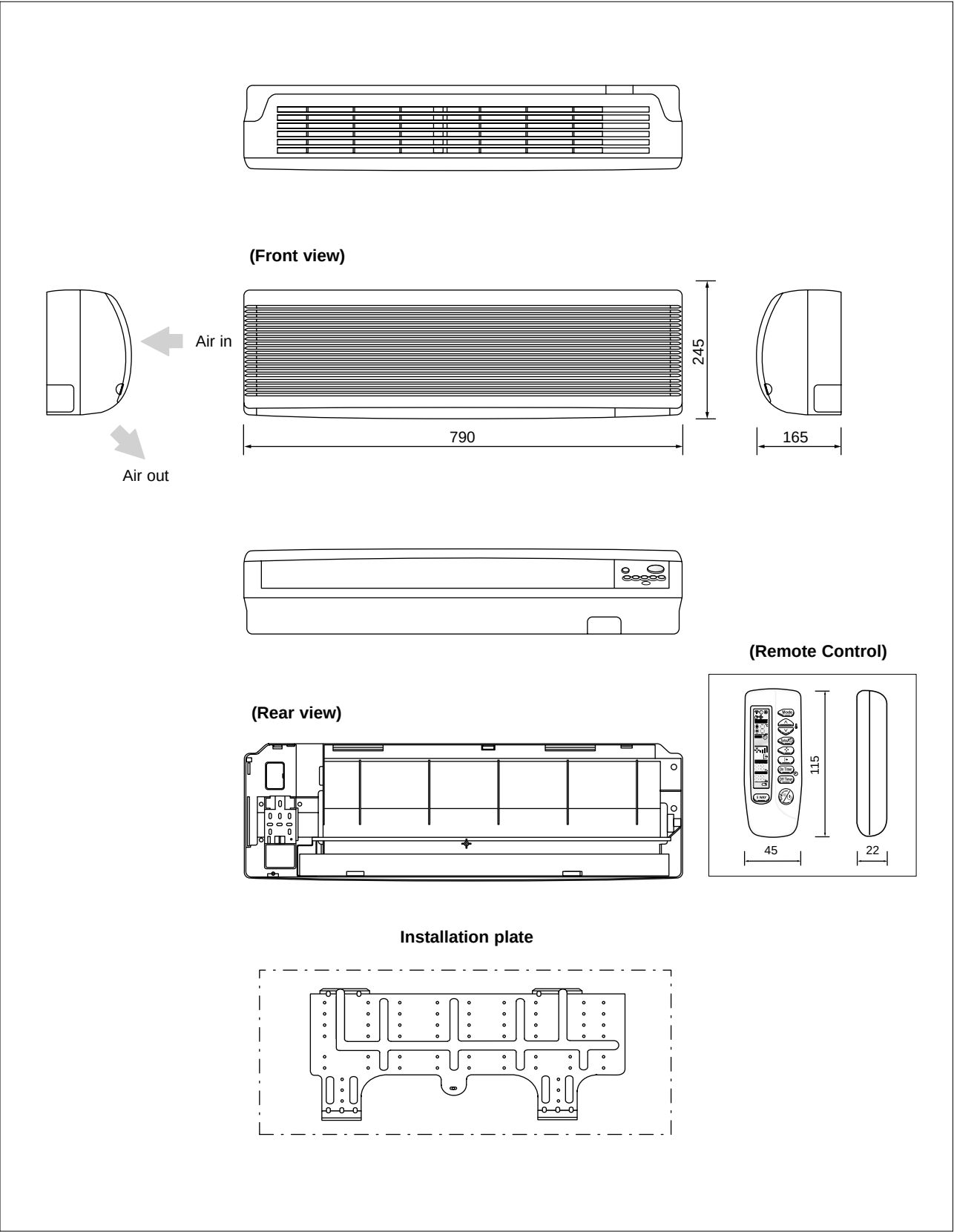
AQ07*5(6)ME/SH07Z*5(6)		AQ09*7(8)ME/SH09Z*7(8)		AQ07*7(8)ME/SH07Z*7(8)		AQ12*9(0)ME/SH12Z*9(0)	
Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Wall-mounting		Wall-mounting		Wall-mounting		Wall-mounting	
7500 (2.3)		9000 (2.64)		7500 (2.2)		12000 (3.5)	
8000 (2.38)		10000 (2.93)		8000 (2.34)		13000 (3.8)	
0.9		1.4		0.9		1.9	
5.6	18	6.0	20.5	5.6	20.5	7.4	19
5.5	18	6.7	20.5	5.5	20.5	8.1	19
35	50	38	51	35	50	41	53
35	50	38	51	35	50	41	53
10.0		9.47		10.0		10.3	
10.959		10.75		10.96		10.2	
1-220 / 240-50		1-220 / 240-50		1-220 / 240-50		1-220 / 240-50	
750		950		750		1170	
730		930		730		1270	
3.3		4.2		3.3		5.0	
3.3		3.9		3.2		5.4	
98.8		98.3		98.8		101.7	
96.7		10.37		99.2		102.3	
30		30		30		30	
-		-		-		-	
-		-		-		-	
250V-10 / 16A		250V-10 / 16A		250V-10 / 16A		250V-10 / 16A	
790 x 245 x 165	660 x 497 x 235	790 x 245 x 165	660 x 470 x 242	790 x 245 x 165	660 x 470 x 242	790 x 245 x 165	720 x 532 x 245
31.1 x 9.6 x 6.5	26 x 19.6 x 9.3	31.1 x 9.6 x 6.5	26 x 18.5 x 9.5	31.1 x 9.6 x 6.5	26 x 18.5 x 9.5	31.1 x 9.6 x 6.5	28.3 x 20.9 x 9.6
7.7	29	7.7	2.5	7.7	25	7.7	39
ø6.35 x 5		ø6.35 x 5		ø6.35 x 5		ø6.35 x 5	
ø9.52 x 5		ø9.52 x 5		ø9.52 x 5		ø12.7 x 5	
ø18 x 2000		ø18 x 2000		ø18 x 2000		ø18 x 2000	
Rotary		Rotary		Rotary		Rotary	
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller
Resin	steel	Resin	steel	Resin	steel	Resin	steel
15	25	15	25	15	25	15	25
2ROW 12STEP	1ROW 18STEP	2ROW 12STEP	1ROW 18STEP	2ROW 12STEP	1ROW 18STEP	2ROW 12STEP	2ROW 20STEP
CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE	
360		360		360		410	
630		600		620		970	
RAC 12086-9622		MRA 12110-12008/RAC12054-9622		MRA 12086-12008/RAC12086-9622		MRA 12030-12008/RAC12030-9622	
INDOOR UNIT : DB27°C WB19°C				OUTDOOR UNIT : DB35°C WB24°C			
INDOOR UNIT : DB32°C WB23°C				OUTDOOR UNIT : DB43°C WB26°C			

Table (Cont.)

Item				Model	AQ12*A(B)ME / SH12Z*A(B)		AQ09*5(6)MED/SH09Z*5(6)D		AQ07*5(6)MED / SH07Z*5(6)D	
					Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type				Wall-mounting		Wall-mounting		Wall-mounting		
Performance	Cooling		BTU/h(KW)	12000 (3.5)		9000 (2.64)		7500 (2.20)		
	Heating		BTU/h(KW)	13000 (3.8)		10000 (2.85)		8000 (2.34)		
	Dehumiditying		ℓ/h	1.9		1.4		0.9		
	Air volume	Cooling	m³/min	7.4	23.0	6.0	18	5.6	18	
		Heating		7.9	23.0	6.7	18	5.5	18	
	Noise	Cooling	dB	41	53	38	51	35	50	
		Heating		41	53	38	51	35	50	
	Energy efficiency ratio	Cooling	BTU/h•W	(2.99)		8.91		9.74		
		Heating	(W/W)	(2.99)		10.87		10.959		
Power			V-Hz	1-220 / 240-50		1-220 / 240-50		1-220 / 240-50		
Power	Power Consumption	Cooling	W	1170		1010		770		
		Heating		1270		920		730		
	Operating Current	Cooling	A	5.4		4.4		3.4		
		Heating		5.5		4.0		3.2		
	Power factor	Cooling	%	96.0		99.8		94.4		
		Heating		96.0		99.8		95.0		
	Starting current			A	30		30		30	
	Power cord	Length	m	-		-		-		
		Number of core wire		-		-		-		
Fuse capacity			A	250V-10 / 16A		250V-10 / 16A		250V-10 / 16A		
Size	Outer Dimension	Width x Height	mm	790 x 245 x 165	740 x 530 x 230	790 x 245 x 165	660 x 497 x 235	790 x 245 x 165	660 x 497 x 235	
		x Depth	inch	31.1 x 9.6 x 6.5	29.1 x 20.6 x 9.1	31.1 x 9.6 x 6.5	26 x 19.6 x 9.3	31.1 x 9.6 x 6.5	26 x 19.6 x 9.3	
	Weight			7.7	35.0	7.7	29	7.7	29	
	Refrigerant pipe	Liquid	mm x L(MT)	ø6.35 x 5		ø6.35 x 5		ø6.35 x 5		
		GAS	mm x L(MT)	ø12.7 x 5		ø9.52 x 5		ø9.52 x 5		
	Drain hose		D x L(mm)	ø18 x 2000		ø18 x 2000		ø18 x 2000		
	Compressor	Type		Rotary		Rotary		Rotary		
		Motor	Type	-	-	-	-	-	-	
			Rated output	-	-	-	-	-	-	
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller	
		Motor	Type	Resin	steel	Resin	steel	Resin	steel	
Rated output			W	15	25	15	25	15	25	
Heat exchanger				2ROW 12STEP	1ROW 24STEP	2ROW 12STEP	1ROW 22STEP	2ROW 12STEP	1ROW 22STEP	
Refrigerant control unit				CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE		
Freezer oil capacity				410		360		360		
Refrigerant to change(R-22)				1000		610		520		
Protection device				RAC12030-9622		RAC 12054-9622		RAC 12086-9622		
Cooling test Condition				INDOOR UNIT : DB27℃ WB19℃				OUTDOOR UNIT : DB35℃ WB24℃		
Maximum operation Condition				INDOOR UNIT : DB32℃ WB23℃				OUTDOOR UNIT : DB43℃ WB26℃		

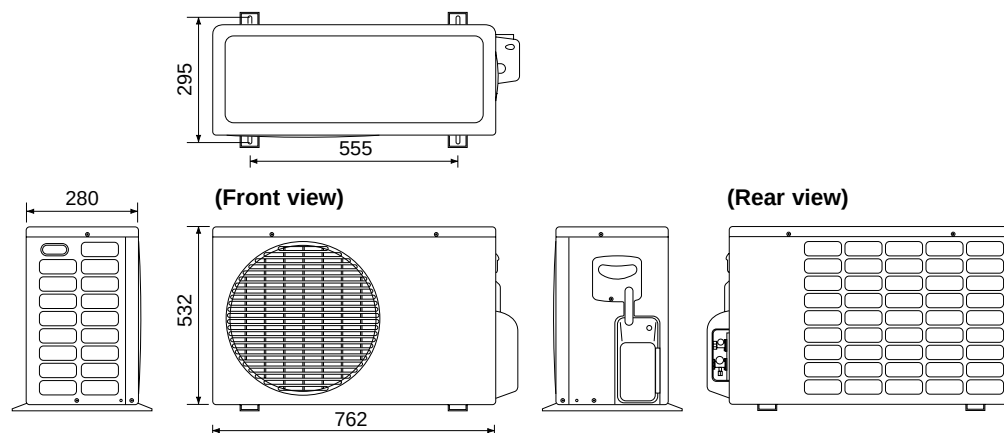
2-2 Dimensions

2-2-1 Indoor Unit



2-2-2 Outdoor Unit

UQ12*5(6)M*



UQ09*5(6)M*

UQ07*5(6)M*

SH09Z*5(6)X

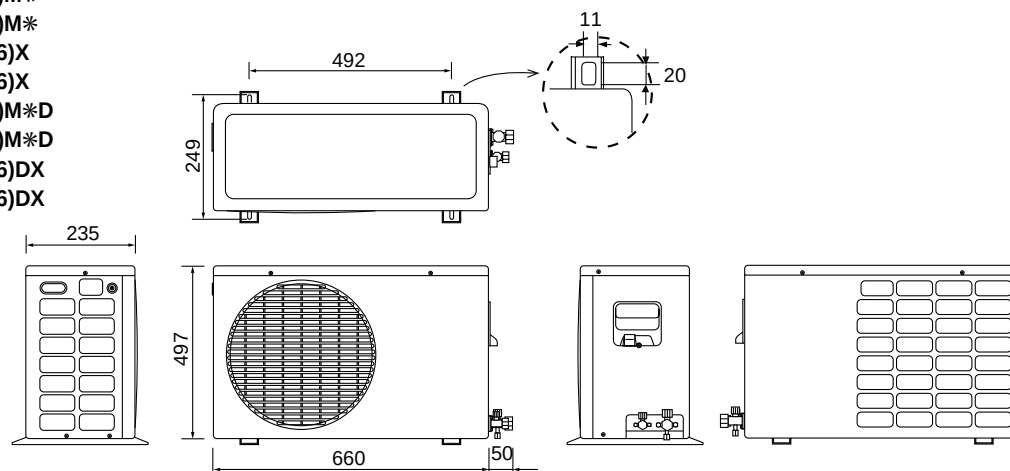
SH07Z*5(6)X

UQ09*5(6)M*D

UQ07*5(6)M*D

SH09Z*5(6)DX

SH07Z*5(6)DX

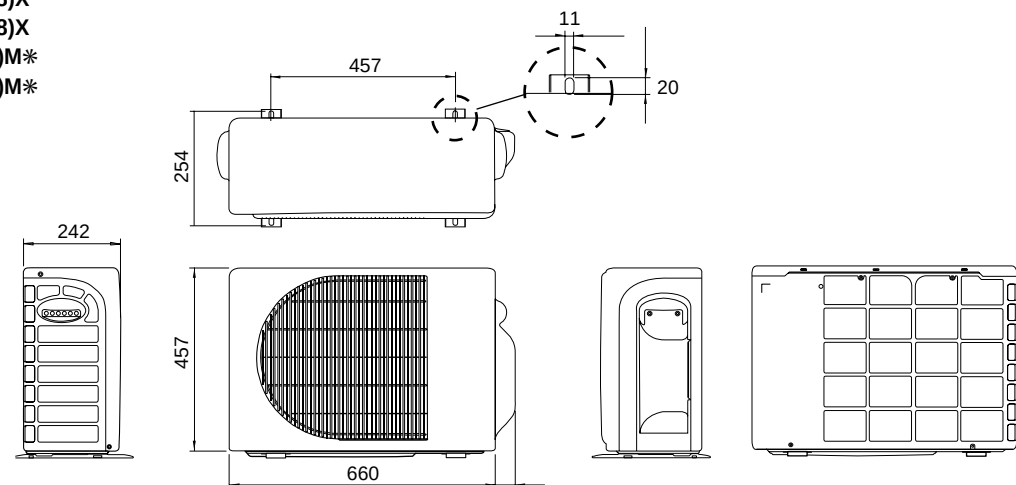


SH07Z*7(8)X

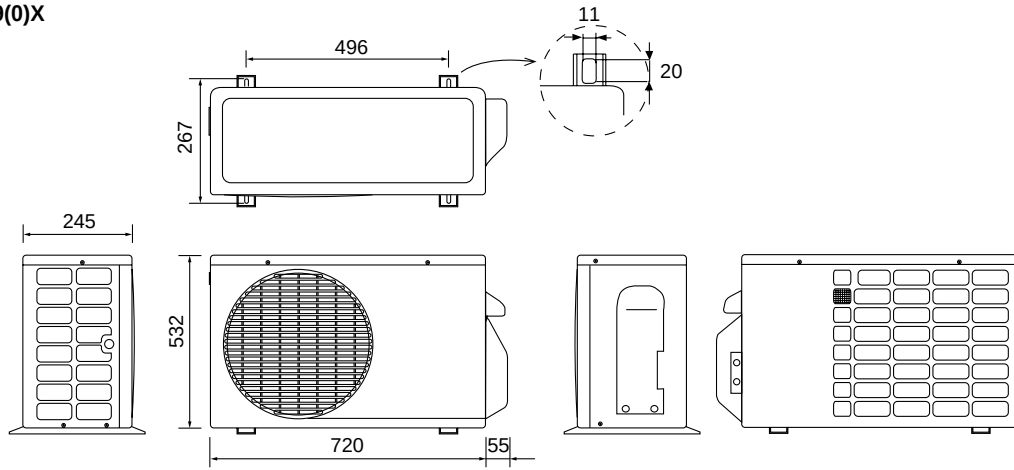
SH09Z*7(8)X

UQ07*7(8)M*

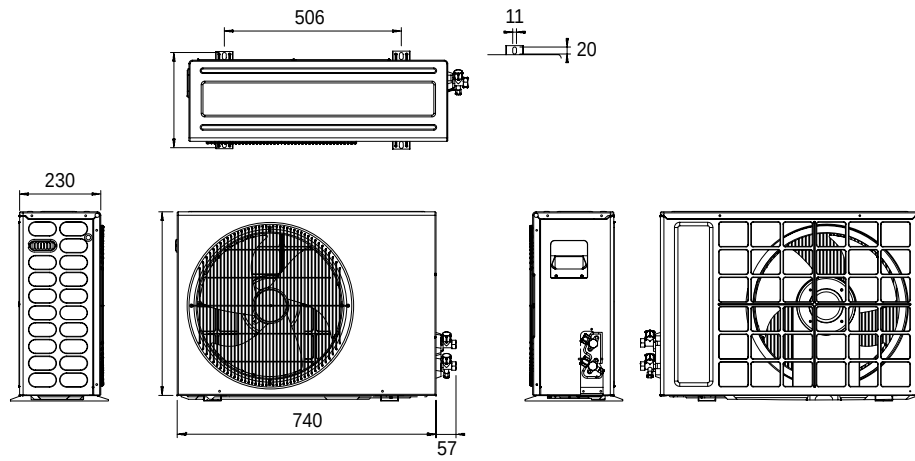
UQ09*7(8)M*



UQ12*9(0)M*
SH12Z*9(0)X

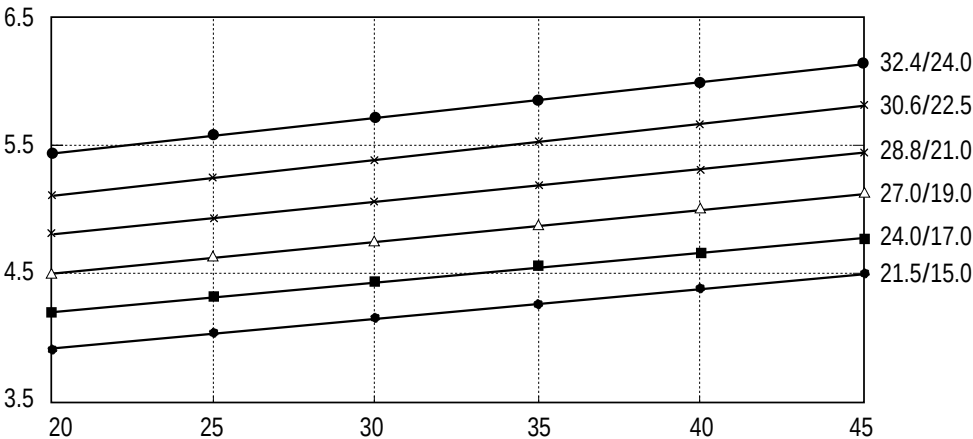


UQ12*A(B)ME
SH12Z*A(B)X

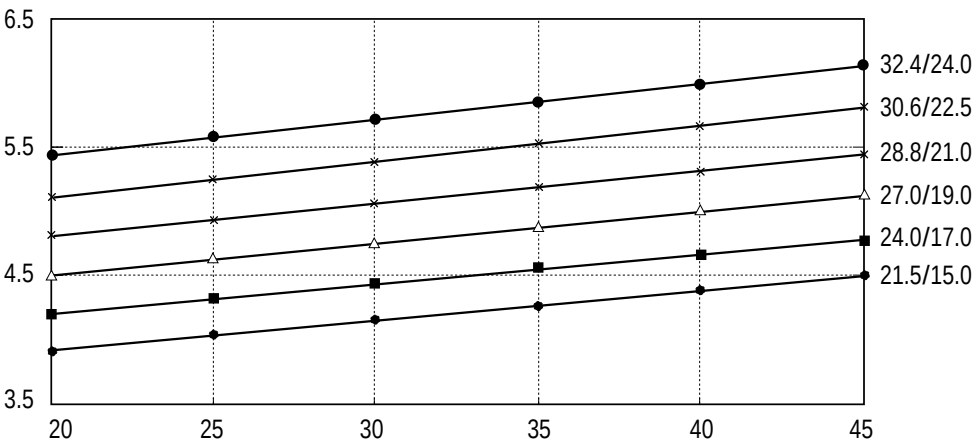


2-3 Pressure Graph

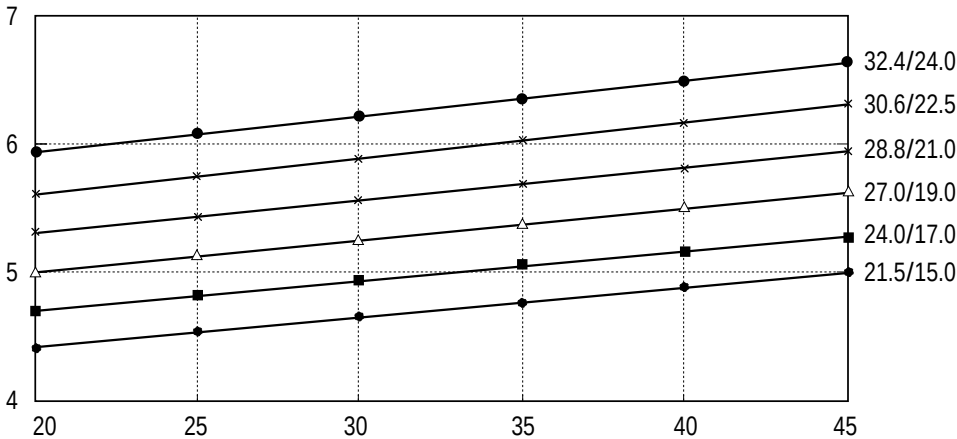
12K BTU



9K BTU



7K BTU



3. Operating Instructions and Installation

3-1 Operating Instructions

3-1-1 Name & Function of Key in remote controller

NO	NAMED OF KEY	FUNCTION OF KEY
1		Power On/Off button to start and stop airconditioner or timer set up.
2	 (UP)	Temp. up button. To increase the temperature by the pressing the temperature button.
	 (DOWN)	Temp. down button. To decrease the temperature by the pressing the temperature button.
3		Each time you press this button Mode is changed in the following order  →  →  →  →   : Auto Mode  : Fan Only  : Cool Mode  : Heat Mode  : Dry Mode
4		Press TURBO until the appearance. the air condition cools or heats the room as quickly as possible. after 30minutes, the air, the airconditioner is reset automatically to the previous mode.
		Press  until the appearance. the sleep timer can be used when you are cooling or heating your room to switch the air conditioner off automatically after a perriod of six hours.
5		Each time you press this button, FAN SPEED is changed in the following order.  →  →  → 
6		Adjust air flow vertically.
7		The ON Timer enables you to switch on the air conditioner automatically after a given period of time that is from 30 minutes to 24 hours. To cancel, press the  (Set/Cancel) button.
8		The Off Timer enables you to switch off the air conditioner automatically after a given period of time that is from 30 minutes to 24 hours. To cancel, press the  (Set/Cancel) button.
9		To select the 5 way function with the remote control, press the 5 way button one or more times until the desired mode is selected. Each time you press the 5 way button.  →  →  →  →  Each 5 way indicator on the indoor unit comes on in order.

3-1-1 Name & Function of Key in remote controller

1. **AUTO MODE** : In this mode, operation mode(COOL, HEAT) is selected automatically by the room temperature of initial operation.

Room Temp	Operation Type
$T_r \geq 21^{\circ}\text{C} + \Delta T$	Cool Operation (Set Temp: $24^{\circ}\text{C} + \Delta T$)
$21^{\circ}\text{C} + \Delta T > T_r$	Heat Operation (Set Temp: $22^{\circ}\text{C} + \Delta T$)

$\Delta T = -1^{\circ}\text{C}, -2^{\circ}\text{C}, 0^{\circ}\text{C} + 1^{\circ}\text{C} + 2^{\circ}\text{C}$

ΔT is controlled by setting temperature up / down key of remote controller

2. **COOL MODE** : The unit operates according to the difference between the setting and room temperature. ($18^{\circ}\text{C} \sim 30^{\circ}\text{C}$)
3. **HEAT MODE** : The unit operates according to the difference between the setting and room temperature. ($16^{\circ}\text{C} \sim 30^{\circ}\text{C}$)
 - *Prevention against cold wind : For about 3~5 minutes after initial operation, thermo control or “de-ice”, the indoor fan will either not operate or operate very slowly, then switch to the selected fan speed. This period is to allow the indoor unit's heat-exchanger to prewarm before emitting warm air.
 - *High temperature release function : The outdoor unit for and compressor ON/OFF control for safety operation, when the over-heat is heat exchanger of indoor unit.
 - *De-ice : Deicing operation is controlled by indoor unit's heat exchanger temperature and accumulating time of compressor's operation.
 - De-ice ends by sensing of the processing time by de-ice Condition.

4. **DRY MODE** : Has 3 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)

5. **TURBO MODE** : This mode is available in AUTO, COOL, HEAT, DRY, FAN MODE. When this button is pressed at first, the air conditioner is operated “powerful” state for 30 minutes regardless of the set 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.
6. **SLEEP MODE** : Sleep mode is available only in COOL or HEAT 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.
 - *In HEAT mode : The setting temperature is automatically dropped by 1°C each 1hour. When the temperature has been dropped by total of 2°C , that temperature is maintained.
7. **FAN SPEED** : Manual (3 step), Auto (4 step) Fan speed automatically varies depending on both the difference between setting and the room temperature.

8. COMPULSORY OPERATION :

For operating the air conditioner without the remote controller.

*AUTO : The operating is the same function that AUTO MODE in the remote controller. And each time you press the button the 5WAY function is changed as follow.
STD → NATURE → POWER → SAVING → SILENCE → POWER OFF

Each time you press This button, 5WAY function is changed in the following order
STD(standard) → NATURE → POWER(High-speed) → Saving(Power-Saving) → SILENCE → POWER OFF

* STD(standard)(

* NATURE(

* POWER(

* SAVING(

* SILENCE(

Each mode has Auto, Cool and SLEEP operation designed in advance.

9. SWING : BLADE-H is rotated vertically by the stepping motor.

*Swing 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.

10. 24-Hour ON / OFF Real Setting Timer. : The air conditioner is turned ON at a specified time using .

OFF TIMER : The air Conditioner is turned OFF at a specified time using .

*ON TIMER : Only timer LED lights on.

*OFF TIMER : Both timer and operation LED lights on.

11. SELF Diagnosis

Check Point	LED DISPLAY					
	TIMER	STD	NATURE	POWER	SAVING	SILENCE
						
Indoor unit room temperature sensor error(open or short)						
Indoor unit heat exchanger temperature sensor error(open or short)						
Indoor fan malfunction						
EEPROM error						
Option error(option wasn't set up or option data error)						

 : LED blinking  : LED off

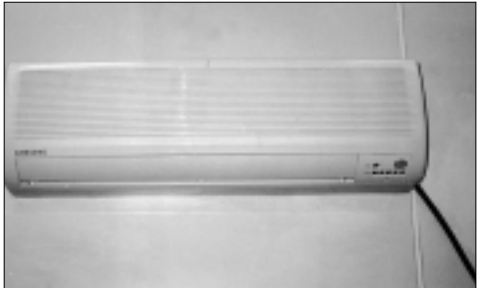
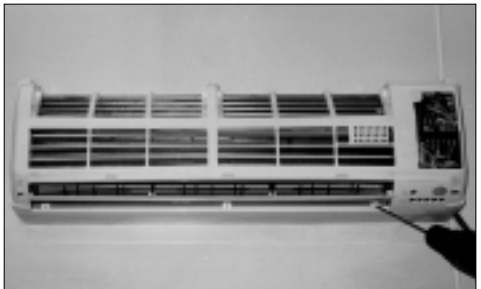
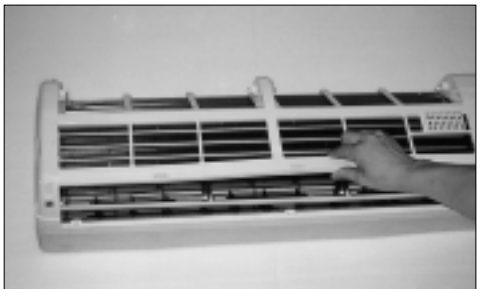
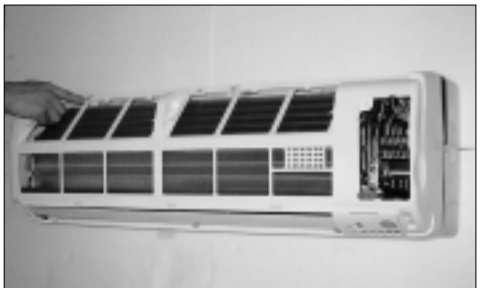
12. BUZZER SOUND : Whenever the ON / OFF button is pressed or whenever change occurs to the condition which is set up or select, the compulsory operation mode, buzzer is sounded "beep".

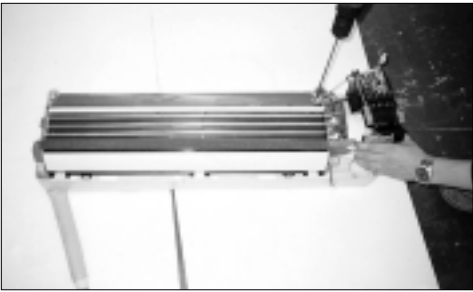
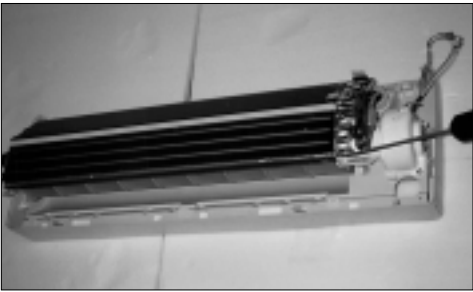
MEMO

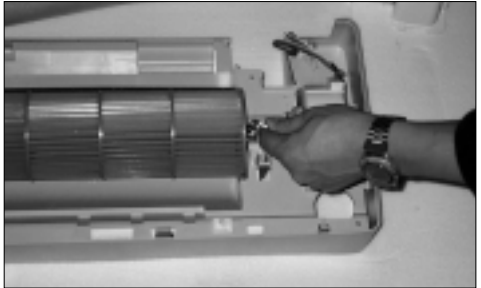
4. Disassembly and Reassembly

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

4-1 Indoor Unit

No	Parts	Procedure	Remark
1	Front Grille	1) Stop the air conditioner operation and block the main power. 2) Separate tape of front panel upper. 3) Contract the second finger to the left, and right handle and pull to open the inlet grille. 4) Take the left and right filter out. *Taking off the deodorizing filter. 5) Loosen one of the right fixing screw and separate the terminal cover. 6) Loosen three fixing screws of front grille. 7) Pull the upper left and right of discharge softly for the outside cover to be pulled out. 8) Pull softly the lower part of discharge and push it up. Caution; Assemble the front panel and fix the hooks of left and right.	    

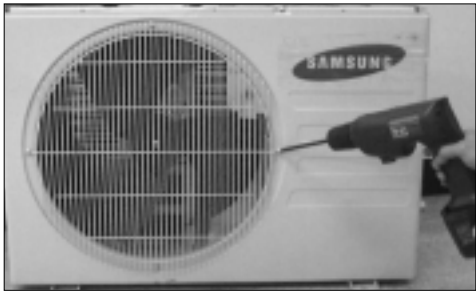
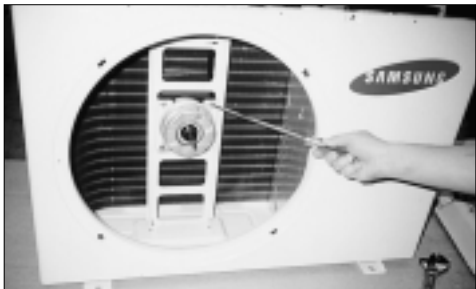
No	Parts	Procedure	Remark
2	Electrical Parts (Main PCB)	1) Do "1" above. 2) Take all the connector of PCB upper side out. (Inclusion Power cord) 3) Separate the outdoor unit connection wire from the terminal block. 4) If pulling the Main PCB up. it will be taken out.	
3	Ass'y Tray Drain.	1) Do "1", "2", above. Separate the drain hose from the extension drain hose. 2) Pull tray drain out from the back body.	
4	Heat Exchanger	1) Do "1" and "2", "3", above. 2) Loosen two fixing earth screws of right side. 3) Separate the connection pipe. 4) Separate the holder pipe at the rearside. 5) Loosen the three fixing screws of right and left side. 6) Lifting the heat exchanger up a little to push the up side for separation from the indoor unit.	  

No	Parts	Procedure	Remark
5	Fan Motor and Cross Fan	1) Do "1" "2" "3" "4", above. 2) Loosen the fixing two screws and separate the motor holder. 3) Loosen the fixing screw of fan motor. (By use of M3 wrench) 4) Separate the fan motor from the fan. 5) Separate the fan from the left holder bearing.	 

4-2 Outdoor Unit

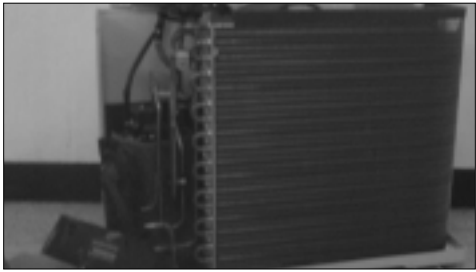
• UQ12*5(6)M*

No	Parts	Procedure	Remark
1	Common Work	1) Loosen the fixing screw and separate the Handle-Cabi RH. 2) Separate the connection wire from the terminal block. 3) Loosen 6 fixing screws and separate the upper cabinet. 4) Loosen the fixing screw of Ass'y E-part. 5) Loosen 5 fixing screws and separate the side cabinet.	   

No	Parts	Procedure	Remark
2	Fan-Motor	1) Loosen 4 fixing screw of the Guard-Fan. 2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw) 3) Separate the fan. 4) Loosen four fixing screws to separate the motor.	  

- SH09Z*5(6)X SH09Z*5(6)DX
- UQ09*5(6)M* UQ09*5(6)M*
- SH07Z*5(6)X SH07Z*5(6)DX
- UQ07*5(6)M* UQ07*5(6)M*

No	Parts	Procedure	Remark
1	Common Work	1) Loosen the fixing two screws and separate the cover E-parts. 2) Separate the connection wire from the terminal block. 3) Loosen five fixing screws and separate the cabi Upper. 4) Loosen two fixing screws of Ass'y E-part. 5) Loosen nine fixing screws and separate the cabi side.	   
2	Fan and Motor	1) Do "1", above. 2) Loosen four screws and sepearaate Guard Fan from front cabinet.	

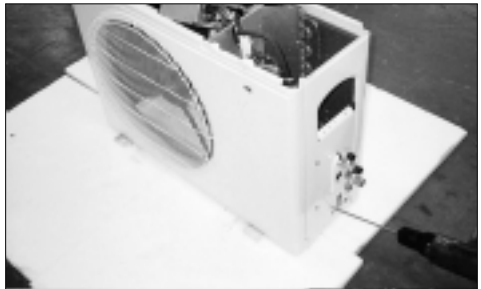
No	Parts	Procedure	Remark
		2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw) 3) Separate the fan. 4) Loosen four fixing screws to separate the motor.	 
3	Heat Exchanger	1) Do "1", 2 above. 2) Loosen two fixing screws of left and right side. 3) Disassemble the inlet and outlet pipe by welding. 4) Separate the heat exchanger.	 
4	Compressor	1) Do "1", above. 2) Loosen the nut on the terminal cover and open the terminal cover. 3) Disassemble the inlet and outlet pipe of compressor by welding. 4) Disassemble the inlet and outlet pipe of condenser by welding. 5) Loosen the three bolts of the lower part. 6) Separate the compressor.	

- SH07Z*7(8)X/SH09Z*7(8)X
- UQ07*7(8)M*/UQ09*7(8)M*

No	Parts	Procedure	Remark
1	Common Work	1) Loosen the fixing tow screws and separate the COVER TERMINAL. 2) Loosen the fixing two screws and separate the cover control. 3) Separate the connection wire from the terminal block. 4) Loosen six fixing screws and separate the cabi front. 5) Loosen the one fixing screw of Ass'y E-part. 6) Loosen 12 fixing screws and separate the cabi side.	    

No	Parts	Procedure	Remark
2	Fan and Motor	1) Do "1" above. 2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw) 3) Separate the fan. 4) Loosen Four fixing screws to separate the motor. 5) Loosen two fixing screws and separate the motor bracket from the base.	 
3	Heat Exchanger	1) Do "1", "2" above. 2) Loosen two fixing screws of left and right side. 3) Disassemble the inlet and outlet pipe by welding. 4) Separate the heat exchanger.	
4	Compressor	1) Do "1", "2", "3" above. 2) Open the terminal cover of compressor and unscrew the connection terminal. 3) Disassemble the inlet and outlet pipe of compressor by welding. 4) Loosen the three bolts of the lower part. 5) Separate the compressor.	 

- **UQ12*9(0)ME**
- **SH12Z*9(0)X**

No	Parts	Procedure	Remark
1	Common Work	1) Loosen the fixing two screws and separate the cover E-parts. 2) Separate the connection wire from the terminal block. 3) Loosen five fixing screws and separate the cabi Upper. 4) Loosen two fixing screws of Ass'y E-part. 5) Loosen seven fixing screws and separate the cabi side.	   
2	Fan and Motor	1) Do "1", above. 2) Loosen four screws and separate Guard Fan from front cabinet.	

No	Parts	Procedure	Remark
		2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw) 3) Separate the fan. 4) Loosen four fixing screws to separate the motor.	 
3	Heat Exchanger	1) Do "1", "2" above. 2) Loosen two fixing screws of left and right side. 3) Disassemble the inlet and outlet pipe by welding. 4) Separate the heat exchanger.	 
4	Compressor	1) Do "1" above. 2) Loosen the nut on the terminal cover and open the terminal cover. 3) Disassemble the inlet and outlet pipe of compressor by welding. 4) Disassemble the inlet and outlet pipe of condenser by welding. 5) Loosen the three bolts of the lower part. 6) Separate the compressor.	

- SH12Z*A(B)X
- UQ12*A(B)ME

No	Parts	Procedure	Remark
1	Common Work	1) Loosen the fixing one screws and separate the COVER TERMINAL. 2) Loosen the fixing one screws and separate the cover control. 3) Separate the connection wire from the terminal block. 4) Loosen 13 fixing screws and separate the cabi front. 5) Loosen the one fixing screw of Ass'y E-part. 6) Loosen 4 fixing screws and separate the cabi side.	    

No	Parts	Procedure	Remark
2	Fan and Motor	1) Do "1", above. 2) Remove the nut flange (Turn to the right to remove, as it is a left hand screw) 3) Separate the fan. 4) Loosen four fixing screws to separate the motor. 5) Loosen five fixing screws and separate the motor bracket from the base.	 
3	Heat Exchanger	1) Do "1", "2" above. 2) Loosen two fixing screws of left and right side. 3) Disassemble the inlet and outlet pipe by welding. 4) Separate the heat exchanger.	
4	Compressor	1) Do "1", "2", "3" above. 2) Open the terminal cover of compressor and unscrew the connection terminal. 3) Disassemble the inlet and outlet pipe of compressor by welding. 4) Loosen the three bolts of the lower part. 5) Separate the compressor.	 

MEMO

5. Troubleshooting

5-1 Items to be checked first

- 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 STD operation indication LED 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 a HEAT operation mode, the compressor does not operate at a room temperature lower than the setting temperature that indoor fan should operate.	In happens after a delay of 3 minutes when the compressor is reoperated. The same phenomenon occurs when a power is on. As a phenomenon that the compressor is reoperated after a delay of 3 minutes, the indoor fan is adjusted automatically with reference to a temperature of the air blew
3	Fan speed setting is not allowed in AUTO or DRY mode.  	The speed of the indoor fan is set to LL in DRY mode. Fan speed is 5 steps 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	Compressor of the outdoor unit is operating although it is turned off in a HEAT mode.	When the unit is turned off while de-ice is activated, the compressor continues operation for up to 9 minutes (maximum) until the deice is completed.
6	Timer LED only 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.
7	The compressor and indoor fan stop intermittently in HEAT mode.	The compressor and indoor fan stop intermittently if room temperature exceeds a setting temperature in order to protect the compressor from overheated air in a HEAT mode.
8	Indoor fan and outdoor fan stop operation intermittently in a HEAT mode.	The compressor operates in a reverse cycle to remove exterior ice in a HEAT mode, and indoor fan and outdoor fan do not operate intermittently for within 20% of the total heater operation
9	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.

- 4) Indoor unit observes operation condition of the air conditioner, and displays self diagnosis details on the display panel.

NO	Display	Self Diagnosis
1	STD LED blinking (1Hz)	Restore from power failure (input initial power)
2	TIMER LED blinking (1Hz)	Indoor unit Room sensor Error (open or short)
3	STD and TIMER LED blinking (1Hz)	Indoor unit heat exchanger temperature sensor Error (open or short)
4	NATURE LED blinking (1Hz)	Indoor fan malfunctioning (for speed is Below 450rpm)

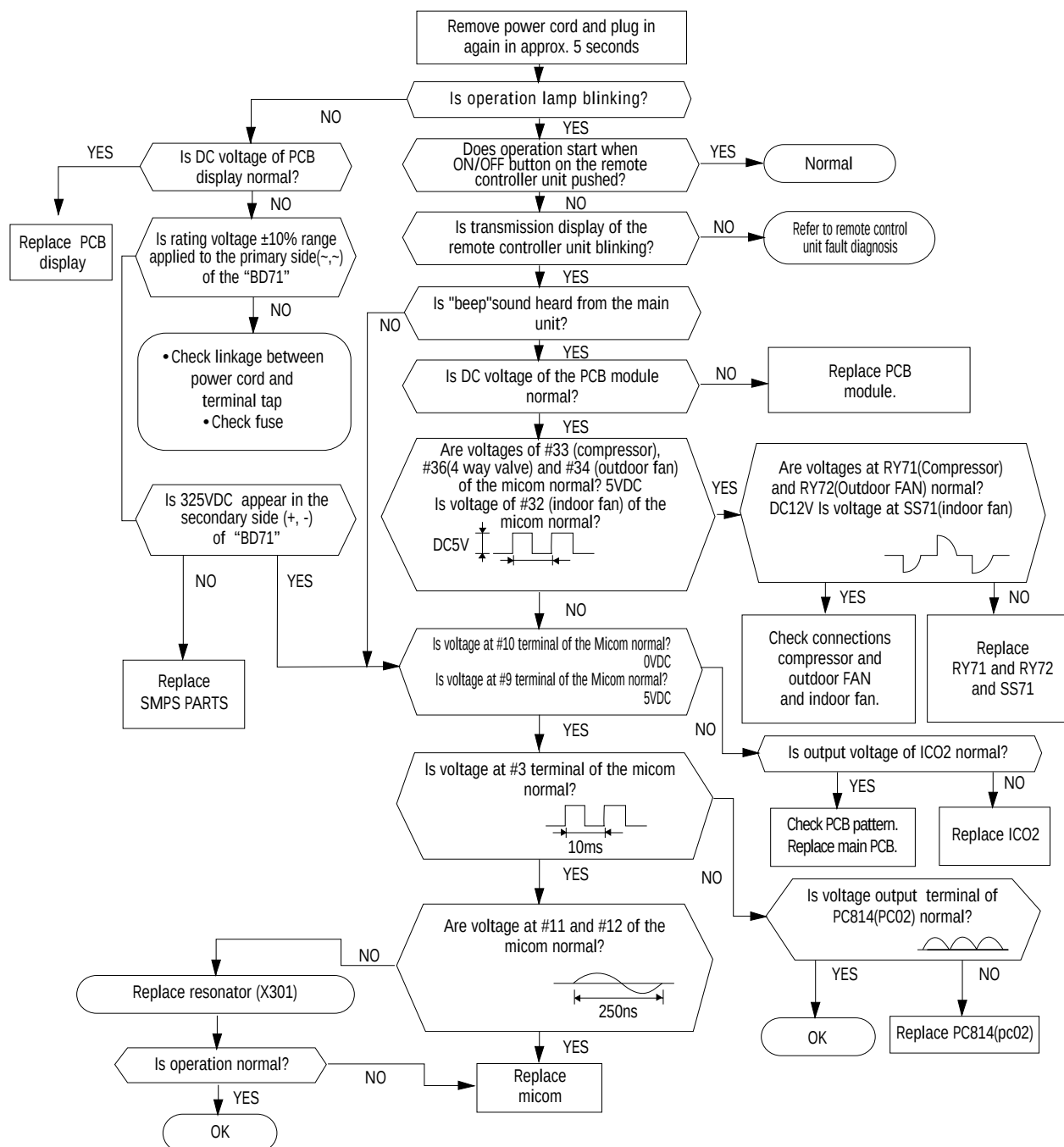
5-2 Fault Diagnosis by Symptom

5-2-1 No Power (completely dead)-Initial diagnosis

1) Checklist :

- (1) Is input voltage normal?
- (2) Is AC power linked correctly?
- (3) Is output voltage of DC regulator IC KA78L05 (IC02) normal? (4.5VDC-5.5VDC)

2) Troubleshooting procedure

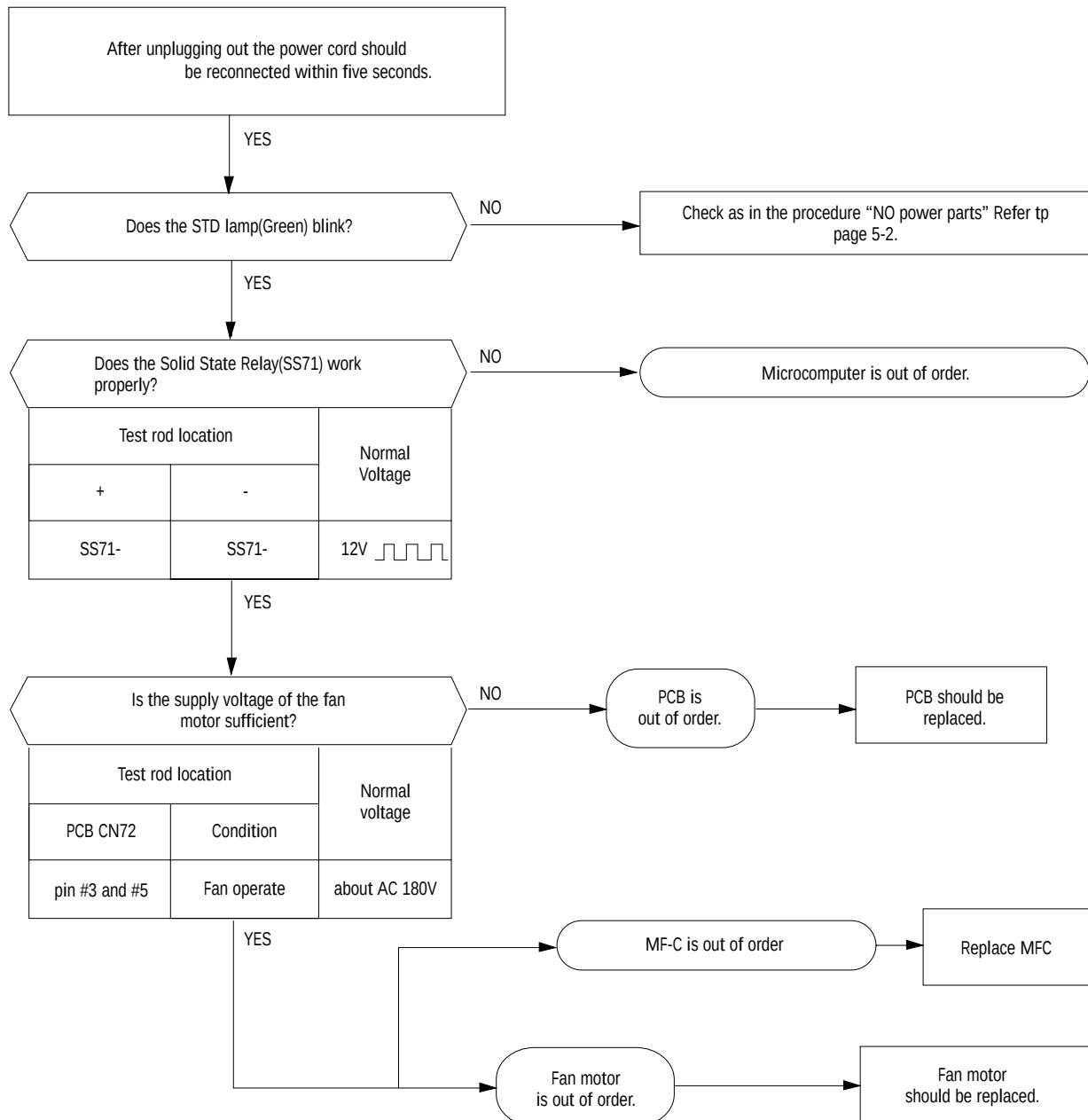


5-2-2 When the Indoor Unit Fan Does Not Operate. (Initial Diagnosis)

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 (CN42)?
- (4) Is the running capacitor (CR71) properly connected with PCB board?

2) Troubleshooting procedure

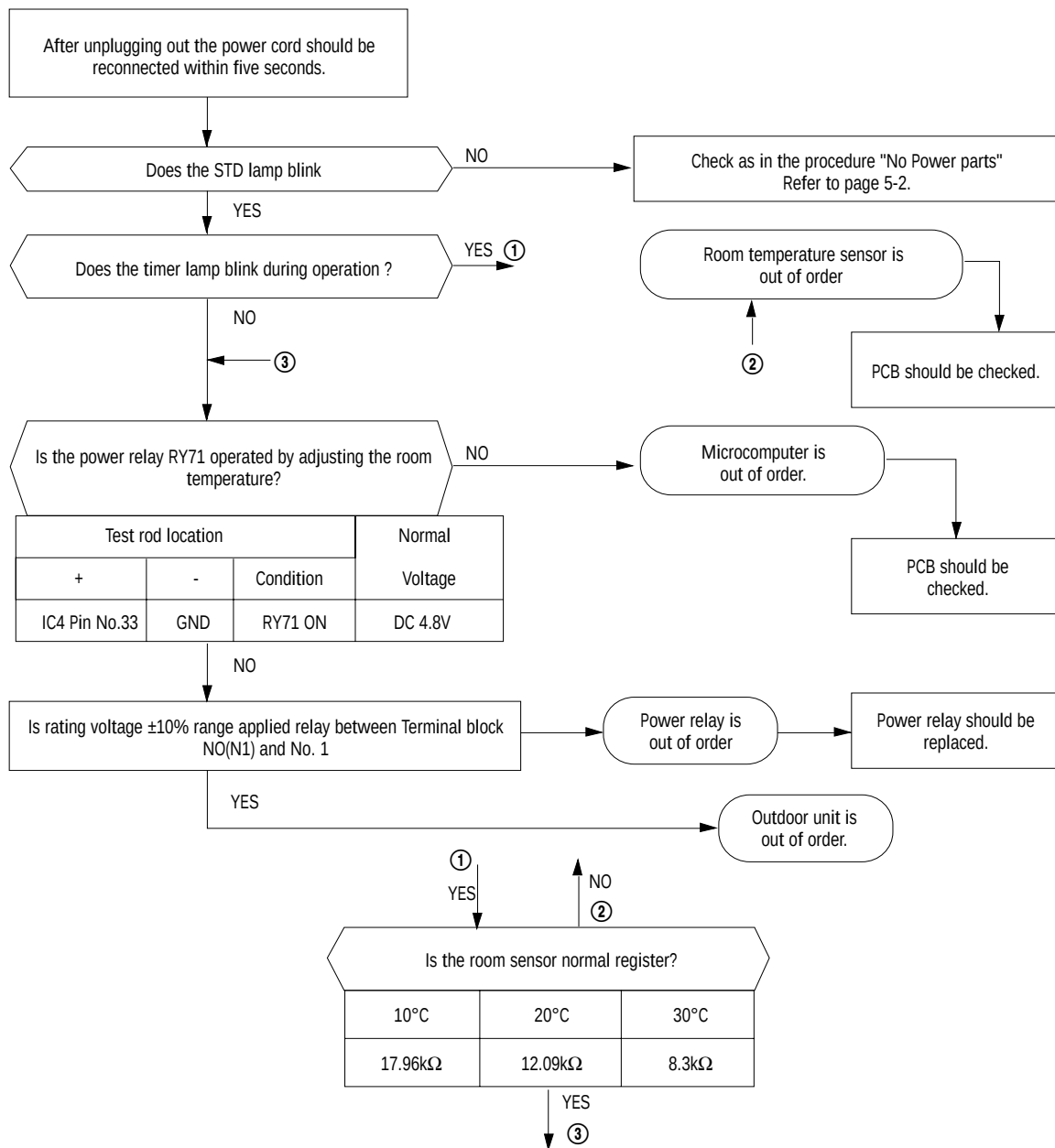


5-2-3 When the Outdoor Unit Does Not Operate. (Initial Diagnosis)

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 POWER IN connector (CN71) linked correctly?
- (4) Is the outdoor unit properly connected with the TERMINAL BLOCK connector((N1), 1)?

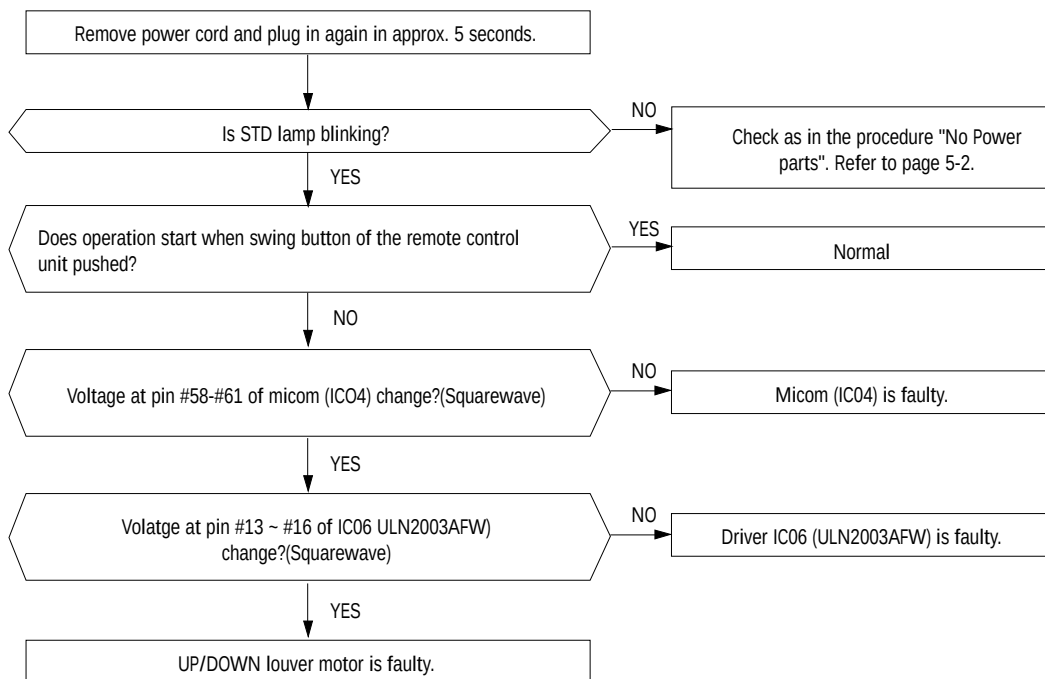
2) Troubleshooting procedure



5-2-4 When the UP/DOWN Louver Motor Does Not Operate. (Initial Diagnosis)

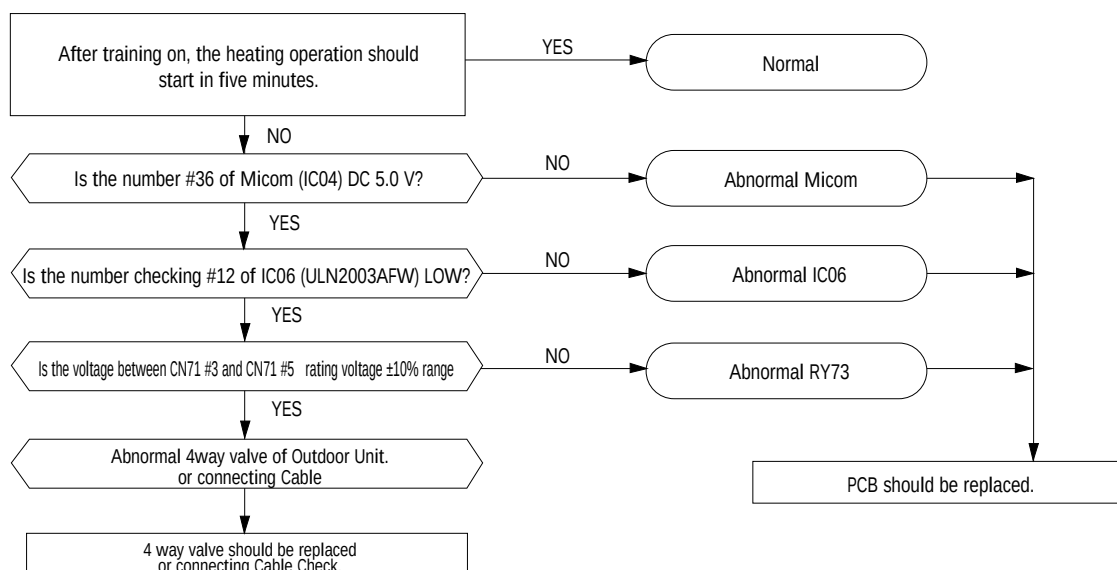
- 1) Checklist :
 - (1) Is input voltage normal?
 - (2) Is the UP / DOWN louver motor properly connected with the connector (CN61)?

2) Troubleshooting procedure



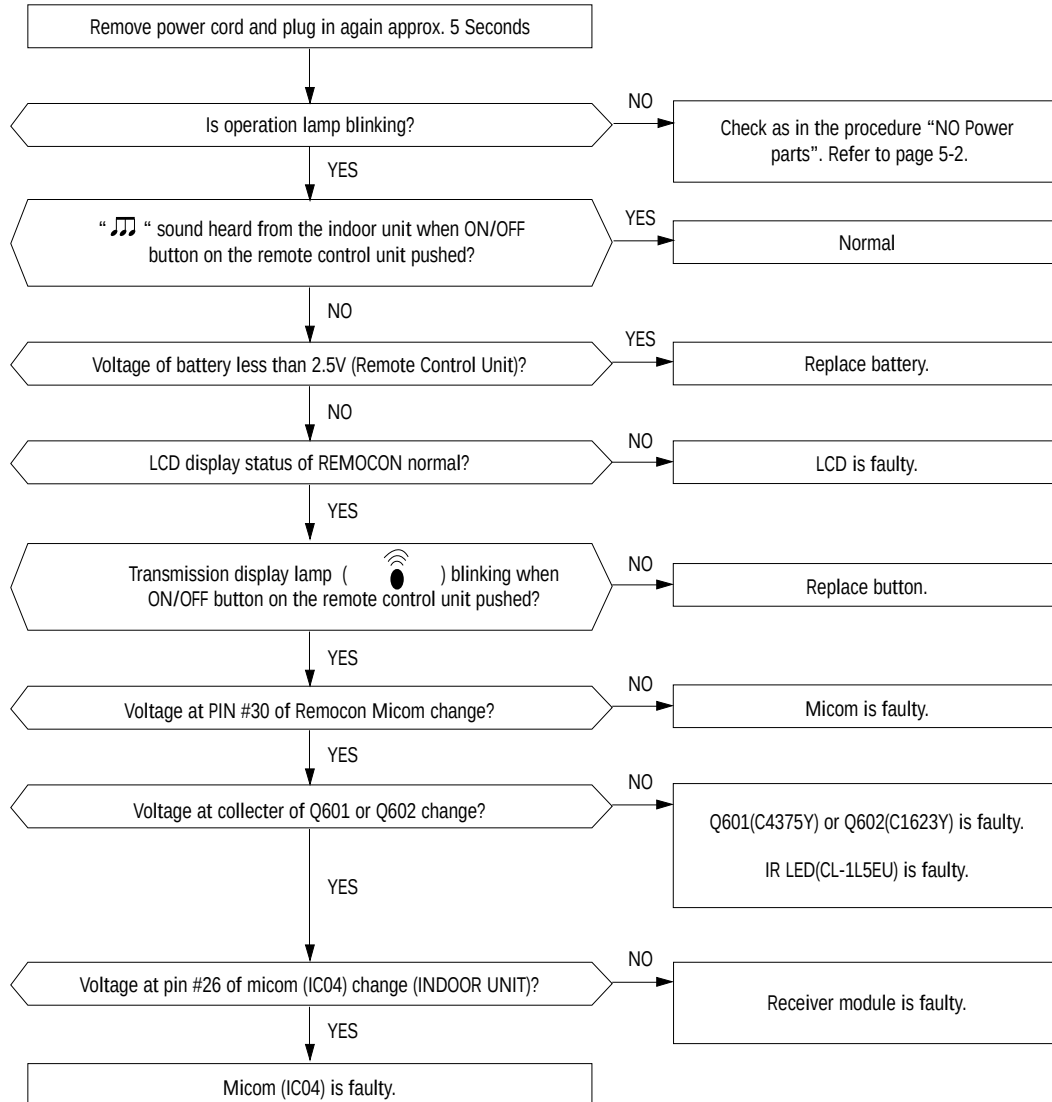
5-2-5 In the mode, When there is no warm air current. Check this first;

- (1) Is the set temperature of Remote Control lower than room temperature in Heat mode?
- (2) Is the Indoor PCB properly connected with the CN71 connector?



5-2-6 If Operation By Remote Control Unit Is Impossible. (Initial Diagnosis)

1) Troubleshooting procedure



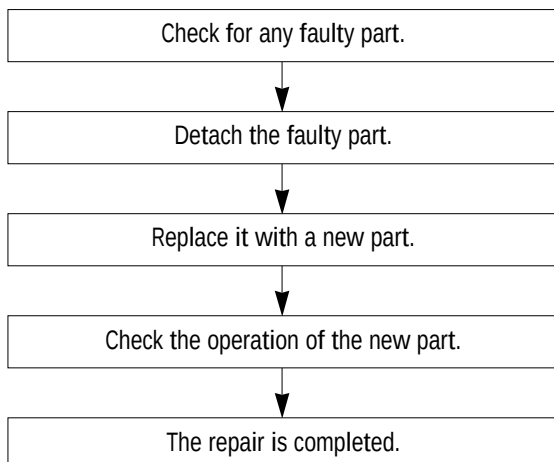
5-3 PCB Inspection

5-3-1 Cautions for Part Replacement

1. The human body carries much static electricity. Before touching a part for repair, replacement or the similar purpose, be sure to touch a grounded metallic portion by hand to let the static electricity go through the metallic portion to the earth. Especially when handling any micro computer or IC, carefully remove such static electricity before touching them.
2. When repairing any part on a work bench, be sure to place an insulative sheet on the bench and always keep the sheet surface neat without any metal fragments. If any such fragment touches a part, a secondary trouble will possibly be caused in the part.
3. Before replacing any parts, be sure to turn off the power supply. If such replacement is done with the power supply kept on, an electric shock, short circuit or destruction of a part may result.
4. During replacement or repair of a part, carefully handle it : The printed circuit board has fine lead wires (jumper wires) and glass-made parts (diode) on its substrate. So if a circuit board is roughly handled, such lead wires and parts will be easily broken or damaged by bending or shock.
5. When soldering the lead wires of any new part, be sure to polish them using an emery paper or the like before soldering them. Since the lead wires of any new part are covered with an oxide film, solder cannot adhere to the lead wires if not polished.
6. When soldering any part, care should be exercised not to apply any high-wattage soldering iron to the part for a long time. Some parts are of so low a heat resistance that they may be broken or have the properties changed if a soldering iron is so applied (Otherwise, the pattern may possibly be separated and raised).
7. The heat of the soldering iron should be transferred to the entire object to be soldered. If the solder pieces are not well fused due to insufficient transfer of the heat from the soldering iron, no satisfactory electrical continuity can be assured even if the soldered objects appear well connected to each other.
8. The solder used should be limited to a minimum. If excessive solder is used, it will cause inter-pattern contact, which may cause malfunction of the circuit.

5-3-2 Procedure

The parts should be replaced in the following procedure.



5-3-3 Detailed Procedure

No.	Malfunction	Checking point (symptoms)	Causes
1	Pull out the power plug from the AC terminal and confirm the fuse on the PCB assembly	1. Is the broken(open)?	▷ Voltage over ▷ Indoor unit fan motor short-circuit
2	Turn the power on.	Voltage check	SMPS circuit is faulty
		1. AC voltage at BD71(~,~)? : rating voltage $\pm$ 10% range	▷ SMPS circuit is faulty
		2. DC voltage at BD71(+,-)? : about 325[v] $\pm$ 10%	
		3. DC voltage at IC02 : IN-GND → DC12[v] : OUT-GND → DC5[v]	
		4. Voltage waveform at Q201 : collector-GND → squarewave	▷ PC02, R202-R205
3	Set the TURBO mode	Voltage check	SMPS circuit is faulty
		1. check voltage of IC06 (pin#10,pin#8) : relay on → 0.7[v] : relay off → 12[v]	▷ IC06 is faulty
		2. Voltage at terminal block ((N1) -1) → rating voltage	▷ RY71 is faulty

5-4 Fault Diagnosis of Major Parts

Parts	Diagnosis							
Temp.Sensor Heat ex. Sensor	Measure resistance with a tester.							
	Normal	Ambient temperature	15℃	20℃	25℃	30℃	35℃	40℃
		Resistance of thermistor[kΩ]	14.68	12.09	10	8.31	6.94	5.83
Abnormal	∞, 0Ω ... open or short							
Indoor Fan Motor	Measure resistance between terminals (CN72) with a tester							
	Normal	At ambient temperature (10℃ ~ 30℃)						
		between	Voltage					
		Red, Blue	410±10%		Main			
		Red, Yellow	325±10%		Sub			
	Abnormal	∞, 0Ω ... open or short						
	Measure the voltage between ground and signal wire of the fan motor							
Normal	between	Voltage						
	Gray, Orange	0.5V~4.5V						
	Yellow, Orange	5V						
Abnormal	Abnormal if voltage does not change from 0V to 5V.							
Outdoor Fan Motor	Normal	At ambient temperature (10℃ ~ 30℃)						
			***7(*8)**		***5(*6)(*9)(*0)**			
		between	Resistance					
		Black, Red	304±10%		360±10%		Main	
	Black, White	289±10%		257±10%		Sub		
Abnormal	∞, 0Ω ... open or short							
Stepping Motor (UP/DOWN swing motor)	Measure resistance between red wire and each terminal.							
	Normal	Approx. 380Ω at ambient temperature (20℃ ~30℃)						
	Abnormal	∞, 0Ω ... open or short						

5-5 Set up the Model option

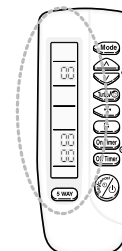
The Method for Setting up the model option with remocon

- **It is necessary to set up option code after replacing the main-PCB as a service parts.**

Make sure that you can set up the option of code the remote controller after you replace the main PBA otherwise, the unit won't be working properly and all LED lamps on display will be flickering.

Step 1 : Preparing the remocon to main PCB option set

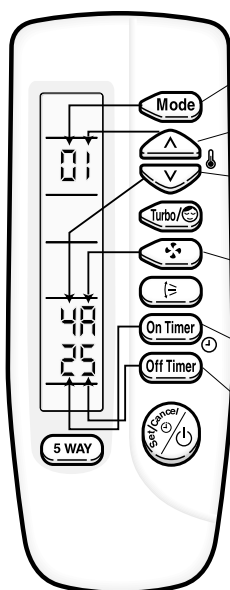
- 1st Remove the battery from the remocon.
- 2nd Press the temperature raise / down button simultaneously and insert the battery again.
- 3rd Make sure the remocon display shown as .



Step 2 : Second stage preparation of the remocon option set.

※ **Note** ; In case the wrong letter has been selected, continue to press the button until the correct letter appears.

- 1st If the first stage number "0" appears on the display, proceed to the second stage.
- 2nd Every time the ① and ⑦ button, "0" and "1" each continue to appear.
- 3rd Whenever pressing the ②, ③, ④, ⑤, ⑥, ⑧, ⑨, ⑩, ⑪, ⑫ button, the number increase from 0~9(0123456789) and A, b, C, d, E, F each time.



① If the first number is 0, it is correct otherwise press until 0 appear.

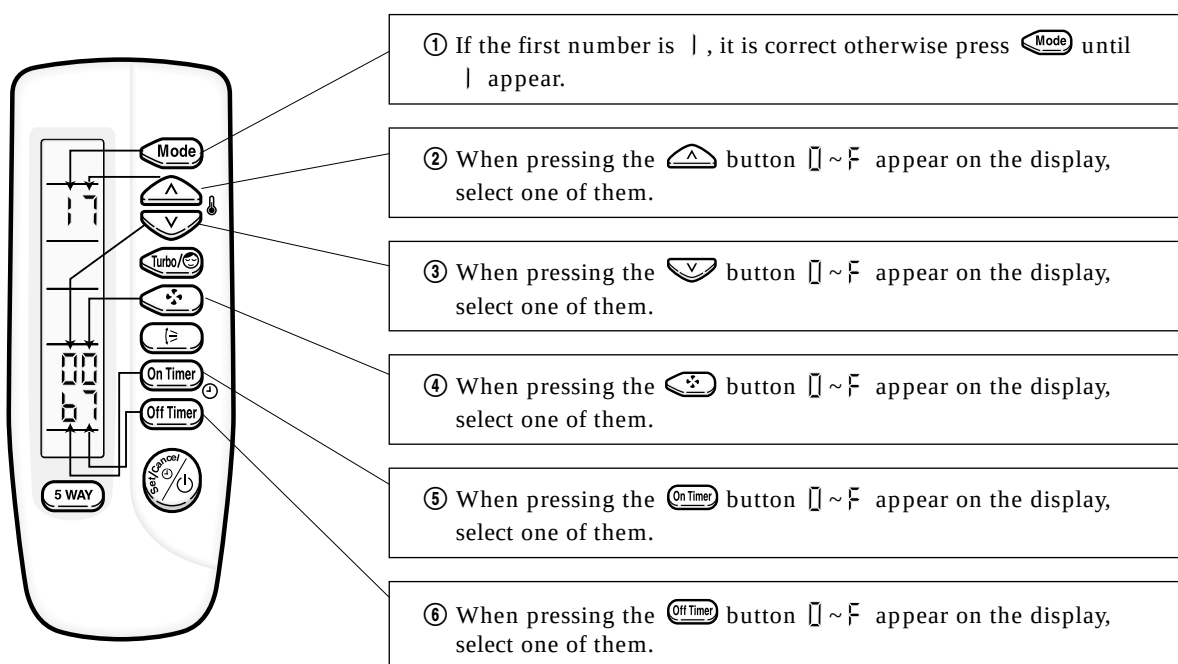
② When pressing the button 0 ~ F appear on the display, select one of them.

③ When pressing the button 0 ~ F appear on the display, select one of them.

④ When pressing the button 0 ~ F appear on the display, select one of them.

⑤ When pressing the button 0 ~ F appear on the display, select one of them.

⑥ When pressing the button 0 ~ F appear on the display, select one of them.



Step 3 : Reconfirming option set after completion

(in case of ex. 014A25-1700b7)

After pressing **Mode** selector for the □ mode, the display shown as 01 48 25.

After pressing **Mode** selector for the | mode, the display shown as 17 00 b7.

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” or “Diriring” is heard and the first LED lamp on the left side is flickering at the same time, then the input of option is completed. (If the diriring 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

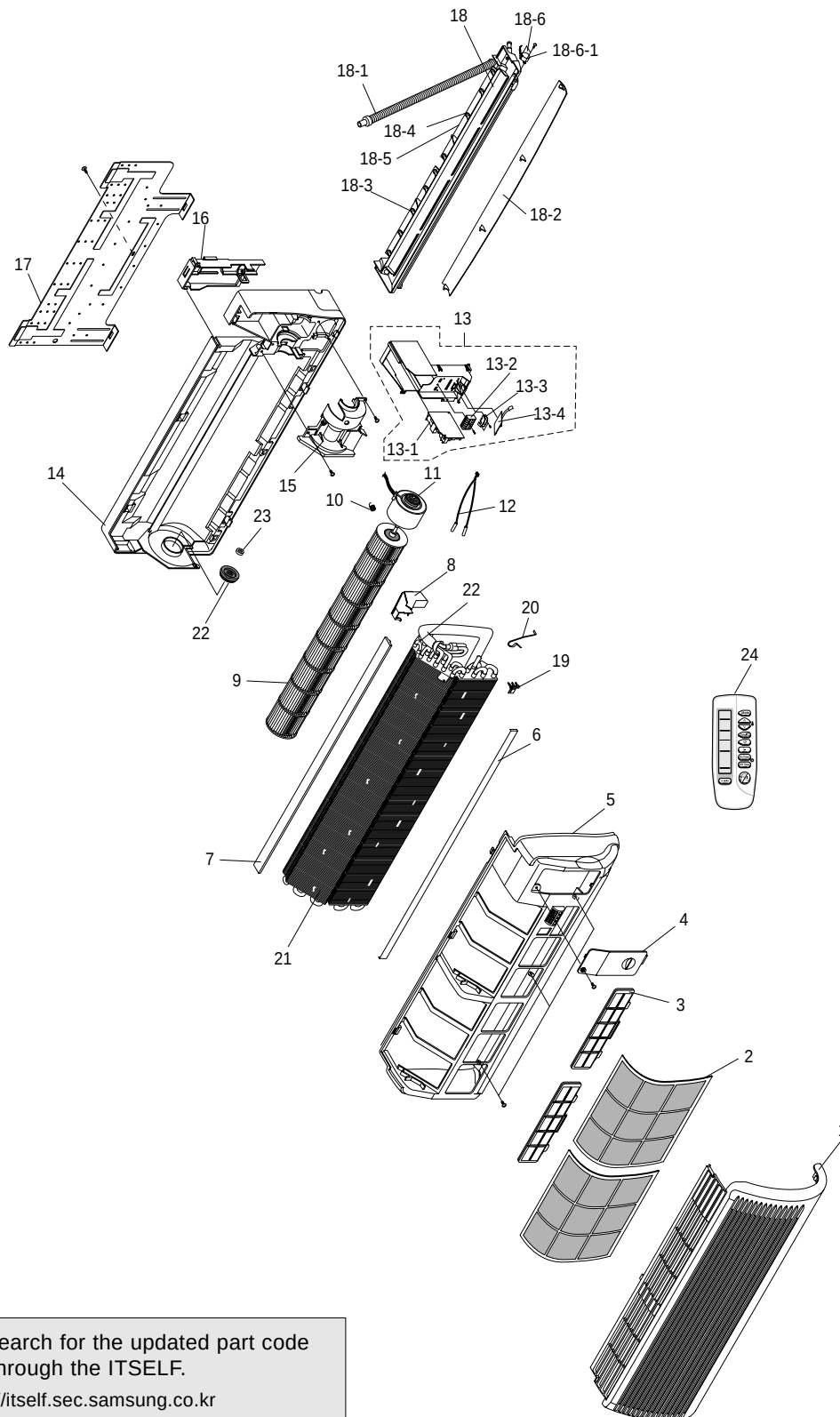
- 1st If all lamps of indoor unit are flickering, Plug out and plug in again and pressing ON/OFF key to retry.
- 2nd If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for it's model.

<Table of the option code>

MODEL	OPTION CODE
AQ12*5MB	017725-17021d
AQ12*6MB	007725-17021d
AQ12*5ME	017626-17021d
AQ12*6ME	007626-17021d
AQ09*5ME SH09Z*5	016A25-1700d9
AQ09*6ME SH09Z*6	006A25-1700d9
AQ09*5MED SH09Z*5D	016024-1700EA
AQ09*6MED SH09Z*6D	006024-1700EA
AQ07*5ME / AQ07*5MED SH07Z*5 / SH07Z*5D	014A25-1700b7
AQ07*6ME / AQ07*6MED SH07Z*6 / SH07Z*6D	004A25-1700b7
AQ09*7ME SH09Z*7	016825-1700d9
AQ09*8ME SH09Z*8	006825-1700d9
AQ07*7ME SH07Z*7	014825-170067
AQ07*8ME SH07Z*8	004825-170067
AQ12*9ME SH12Z*9	017d25-17021d
AQ12*0ME SH12Z*0	007d25-17021d
AQ12*A(B)ME SH12Z*A(B)X	007227-17023F

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>

■ Indoor Unit Parts List

① (AQ**A*M*/SH**ZA*)

② (AQ**B*M*/SH**ZB*)

No.	CODE NO	Description	Q'TY				
			AQ12*5(6)MB	AQ12*5(6)ME	AQ09*5(6)ME/SH09Z*5(6) AQ09*7(8)ME/SH09Z*7(8)	AQ07*5(6)ME/SH07Z*5(6) AQ07*7(8)ME/SH07Z*7(8)	AQ12*9(0)ME SH12Z*9(0)
1	DB64-00085A	GRILLE AIR INLET(①)	1	1	1	1	1
	DB64-00256A	GRILLE AIR INLET(②)	1	1	1	1	1
2	DB63-00064A	GUARD-AIR FILTER	2	2	2	2	2
3	DB74-00011A	FILTER CLEANER ASS'Y	1	1	1	1	1
4	DB63-00067A	COVER TEMINAL	1	1	1	1	1
5	DB92-00031E	ASS'Y PANEL(①)	1	1	1	1	1
	DB92-00031T	ASS'Y PANEL(②)	1	1	1	1	1
6	DB67-00051A	SPACER EVAP LOW	1	1	1	1	1
7	DB67-00032A	SPACER EVAP UP	1	1	1	1	1
8	DB63-00083A	COVER U BEND	1	1	1	1	1
9	DB94-00040E	ASS'Y FAN CROSS(SF)	1	1	1	1	1
10	DB60-20011A	BOLT SPECIAL	1	1	1	1	1
11	DB31-00033A	MOTOR FAN IN	1	1	1	1	1
12	DB32-00020A	THERMISTOR WIRE ASS'Y	1	1	1	1	1
13	DB93-00459A	ASS'Y CONTROL IN	1	1	1	1	1
13-1	DB93-00437A	ASS'Y PCB MAIN	1	1	1	1	1
13-1-1	1103-001175	IC EPROM	1	1	1	1	1
13-1-2	1203-001813	IC PWM CONTROLLER	1	1	1	1	1
13-1-3	3501-001169	RELAY MINIATURE	1	1	1	1	1
13-1-4	3502-000115	SSR	1	1	1	1	1
13-2	DB65-00030A	TERMINAL BLOCK ASS'Y	1	1	1	1	1
13-3	DB61-00171A	HOLDER WIRE CLAMP	1	1	1	1	1
13-4	DB93-00268A	ASS'Y PCB DISPLAY	1	1	1	1	1
13-4-1	DB32-00037A	MODULE REMOCON	1	1	1	1	1
14	DB94-00056G	ASS'Y BACK BODY(RIGHT SIDE)	1	1	1	1	1
15	DB61-00162A	HOLDER MOTOR	1	1	1	1	1
16	DB61-00165A	HOLDER PIPE	1	1	1	1	1
17	DB70-00036A	PLATE HANGER	1	1	1	1	1
18	DB94-00058F	ASS'Y TRAY DRAIN(RIGHT SIDE)	-	1	1	1	1
	DB94-00058H	ASS'Y TRAY DRAIN(RIGHT SIDE)	1	-	-	-	-
18-1	DB94-00062E	ASS'Y DRAIN HOSE	1	1	1	1	1
18-2	DB66-00127B	BLADE H	1	1	1	1	1
18-3	DB66-00128A	BLADE V,A	3	3	3	3	3
18-4	DB66-00128B	BLADE V,B	6	6	6	6	6
OPTION 18-5	DB63-00082A	SCREEN SAFETY WIRE	-	1	1	1	1
18-6	DB95-20138A	ASS'Y MOTOR STEPPING	1	1	1	1	1
18-6-1	DB31-10129A	MOTOR STEPPING; GSP 24RW	1	1	1	1	1
19	DB61-40251A	HOLDER SENSOR	1	1	1	1	1
20	DB67-60030A	SPRING SENSOR	1	1	1	1	1
21	DB96-00784A	EVAPORATOR ASS'Y	1	1	-	-	1
	DB96-00783A	EVAPORATOR ASS'Y	-	-	1	1	-
22	DB94-40003A	RUBBER BEARING	1	1	1	1	1
23	DB94-40007A	BEARING	1	1	1	1	1
24	DB93-00251L	ASS'Y REMOCON	1	1	1	1	1

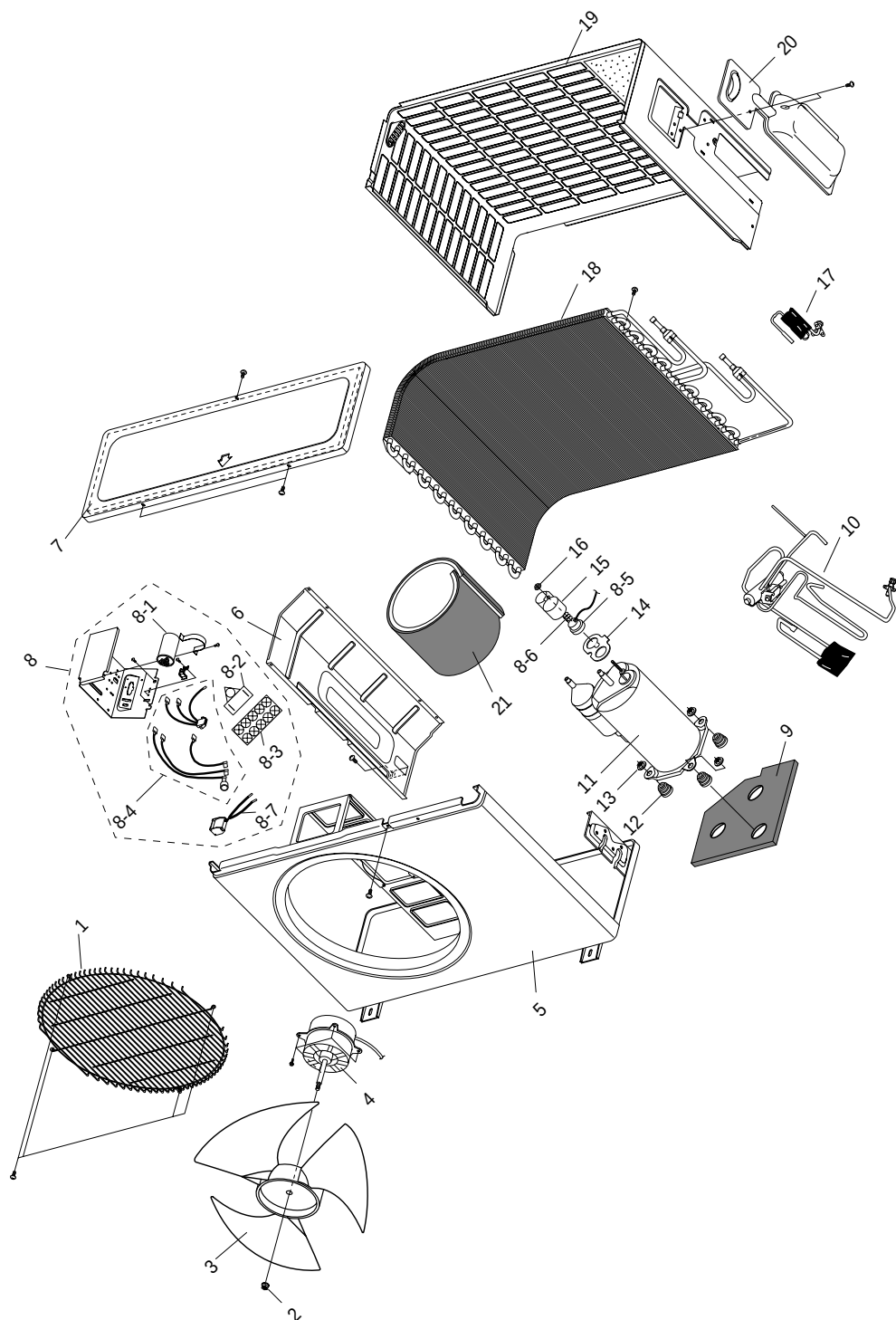
■ Indoor Unit Parts List

① (AQ**A**M*/SH**ZA*)

② (AQ**B**M*/SH**ZB*)

No.	CODE NO	Description	Q'TY		
			AQ12**A(B))ME	AQ09**5(6)MED SH09Z**5(6)D	AQ07**5(6)MED SH07Z**5(6)D
1	DB64-00085A	GRILLE AIR INLET(①)	1	1	1
	DB64-00256A	GRILLE AIR INLET(②)	1	1	1
2	DB63-00064A	GUARD-AIR FILTER	2	2	2
3	DB74-00011A	FILTER CLEANER ASS'Y	1	1	1
4	DB63-00067A	COVER TEMINAL	1	1	1
5	DB92-00031E	ASS'Y PANEL(①)	1	1	1
	DB92-00031T	ASS'Y PANEL(②)	1	1	1
6	DB67-00051A	SPACER EVAP LOW	1	1	1
7	DB67-00032A	SPACER EVAP UP	1	1	1
8	DB63-00083A	COVER U BEND	1	1	1
9	DB94-00040E	ASS'Y FAN CROSS(SF)	1	1	1
10	DB60-20011A	BOLT SPECIAL	1	1	1
11	DB31-00033A	MOTOR FAN IN	1	1	1
12	DB32-00020A	THERMISTOR WIRE ASS'Y	1	1	1
13	DB93-00459E	ASS'Y CONTROL IN	1	1	1
13-1	DB93-00437A	ASS'Y PCB MAIN	1	-	-
	DB93-01017A	ASS'Y PCB MAIN	-	1	1
13-1-1	1103-001175	IC EPROM	1	1	1
13-1-2	1203-001813	IC PWM CONTROLLER	1	1	1
13-1-3	3501-001169	RELAY MINIATURE	1	1	1
13-1-4	3502-000115	SSR	1	1	1
13-2	DB65-00030A	TERMINAL BLOCK ASS'Y	1	1	1
13-3	DB61-00171A	HOLDER WIRE CLAMP	1	1	1
13-4	DB93-00268A	ASS'Y PCB DISPLAY	1	1	1
13-4-1	DB32-00037A	MODULE REMOCON	1	1	1
14	DB94-00056G	ASS'Y BACK BODY(RIGHT SIDE)	1	1	1
15	DB61-00162A	HOLDER MOTOR	1	1	1
16	DB61-00165A	HOLDER PIPE	1	1	1
17	DB70-00036A	PLATE HANGER	1	1	1
18	DB94-00058F	ASS'Y TRAY DRAIN(RIGHT SIDE)	1	1	1
	DB94-00058H	ASS'Y TRAY DRAIN(RIGHT SIDE)	-	-	-
18-1	DB94-00062E	ASS'Y DRAIN HOSE	1	1	1
18-2	DB66-00127B	BLADE H	1	1	1
18-3	DB66-00128A	BLADE V,A	3	3	3
18-4	DB66-00128B	BLADE V,B	6	6	6
OPTION 18-5	DB63-00082A	SCREEN SAFETY WIRE	1	1	1
18-6	DB95-20138A	ASS'Y MOTOR STEPPING	1	1	1
18-6-1	DB31-10129A	MOTOR STEPPING; GSP 24RW	1	1	1
19	DB61-40251A	HOLDER SENSOR	1	1	1
20	DB67-60030A	SPRING SENSOR	1	1	1
21	DB96-01366A	EVAPORATOR ASS'Y	-	1	1
	DB96-01443A	EVAPORATOR ASS'Y	1	-	-
22	DB94-40003A	RUBBER BEARING	1	1	1
23	DB94-40007A	BEARING	1	1	1
24	DB93-00251L	ASS'Y REMOCON	1	1	1

6-2 Outdoor Unit(UQ12*5(6)MB(E))

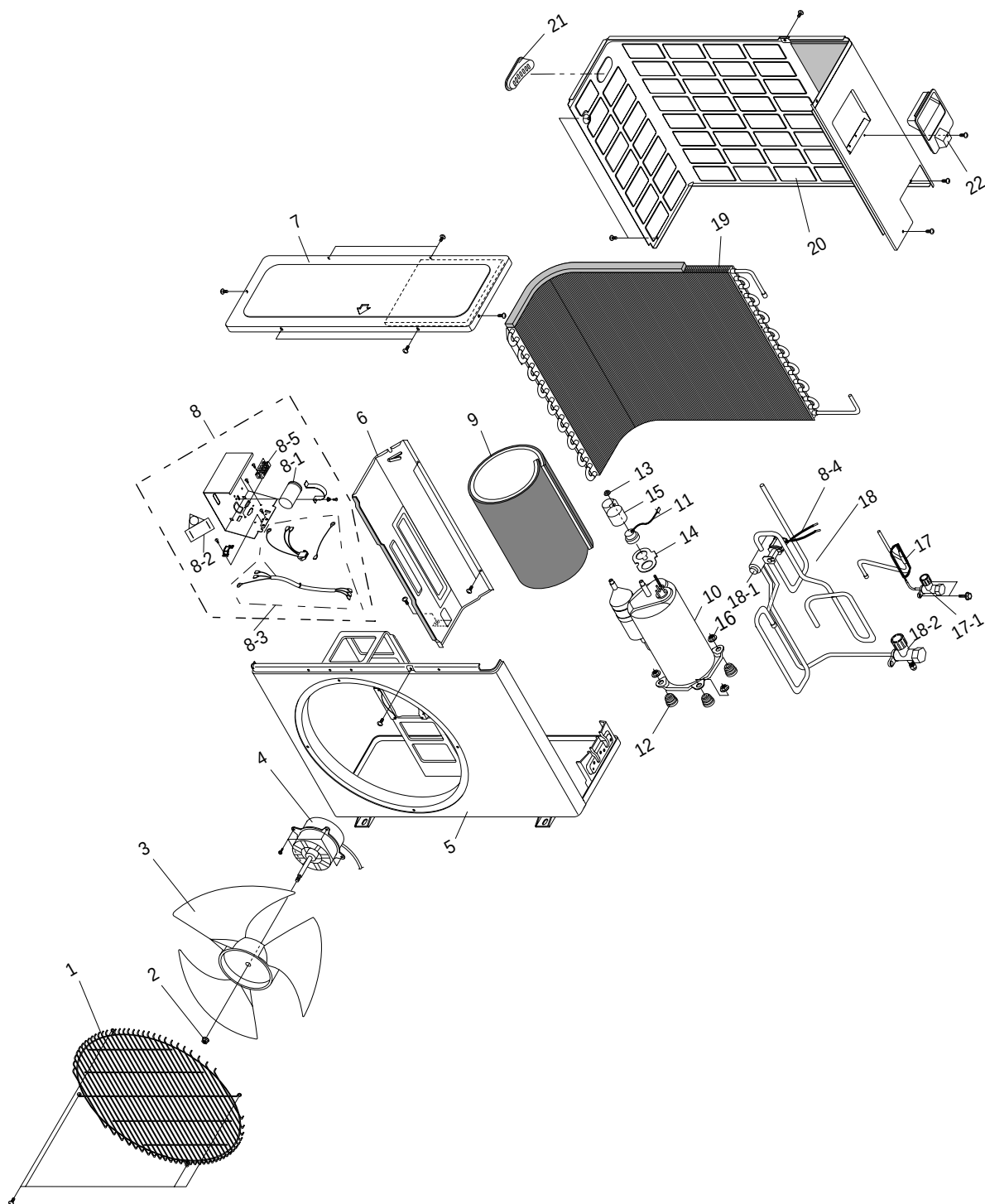


■ Parts List (OUTDOOR UNIT)

No.	CODE NO	Description	Specification	Q'TY		Remark
				UQ12*5(6)MB	UQ12*5(6)ME	
1	DB63-00071A	GUARD FAN	HSER	1	1	
2	DB60-30004A	NUT FLANGE	2C SM20C M6 NTR	1	1	
3	DB67-50063A	PROPELLER-FAN	AS+G/F, Ø405	1	1	
4	DB31-10058C	MOTOR FAN OUT	ASSO2OWTVA	1	1	
5	DB90-00272A	ASS'Y FRAME(PAINT)	ASS'Y	1	-	
6	DB94-50077A	ASS'Y PARTITION	ASS'Y	1	1	
7	DB90-00085B	CABINET UPPER	SECC-P	1	1	
8	DB93-00453B	ASS'Y CONTROL OUT	ASS'Y	1	-	
	DB93-00478C or DB93-00453A	ASS'Y CONTROL OUT	ASS'Y { 2 stage OLP Single OLP	-	1	
	2501-001226	CAPACITOR COMP	25µF 370VAC	1	-	
	2501-001236	CAPACITOR COMP	30µF 450VAC	-	1	
8-2	2301-001377	CAPACITOR MOTOR	1.2µF 450VAC	1	1	
8-3	DB65-40049E	TERMINAL BLOCK	4P DFT-20A	1	1	
8-4	DB93-00481A or DB93-00412A	ASS'Y LEAD WIRE	ASS'Y { 2 stage OLP Single OLP	1	1	
8-5	DB47-20001G/L	O L P	MRA12002-9200/MRA12002-12008	1	-	
	DB35-00015G or DB35-00010B	O L P	RAC12030-9622- 2 stage OLP MRA12030-12008- Single OLP	-	1	
8-6	DB67-60020A	O L P SPRING	STS304	1	1	
8-7	DB33-00007C	ASS'Y SOLENOIDE	220-240,6W,LB81 RANCO	1	1	
9	DB72-50574D	CLOTH COMP BOTTOM	FELT	1	1	
10	DB99-00089A	ASS'Y 4WAY VALVE	ASS'Y	1	1	
11	48A135IV1EL	COMPRESSOR	220V 60Hz	1	-	
	48A124JV1EL	COMPRESSOR	220V-240V/50Hz	-	1	
12	DB73-10004B	GROMMET-ISOLATOR	SILICON	3	3	
13	DB60-30028A	NUT-WASHER	HEX 2C MB ZPC	3	3	
14	DB63-20002A	GASKET	EPDM	1	1	
15	DB63-10165D	COVER TERMINAL	PBT	1	1	
16	DB60-30018A	NUT-FLANGE	M5, SM20C	1	1	
17	DB96-00513A	ASS'Y-CAPILLARY	ASS'Y(1.7x1100)	1	-	
	DB99-00085A	ASS'Y-CHECK VALVE	ASS'Y (C=1.7x1200 H=1.5x300)	-	1	
18	DB96-00509A	ASS'Y COND	ASS'Y(SF)	1	-	
19	DB64-00136B	CABINET SIDE	ASS'Y(BENDING)	1	1	
20	DB67-90025A	HANDLE CABI, RH	ABS	-	1	
21	DB72-00211A	CLOTH-COMP SIDE	FELT	1	1	

Outdoor Unit

- UQ07*5(6)ME UQ07*5(6)MED
- SH07Z*5(6)X SH07Z*5(6)DX
- UQ09*5(6)ME UQ09*5(6)MED
- SH09Z*5(6)X SH09Z*5(6)DX

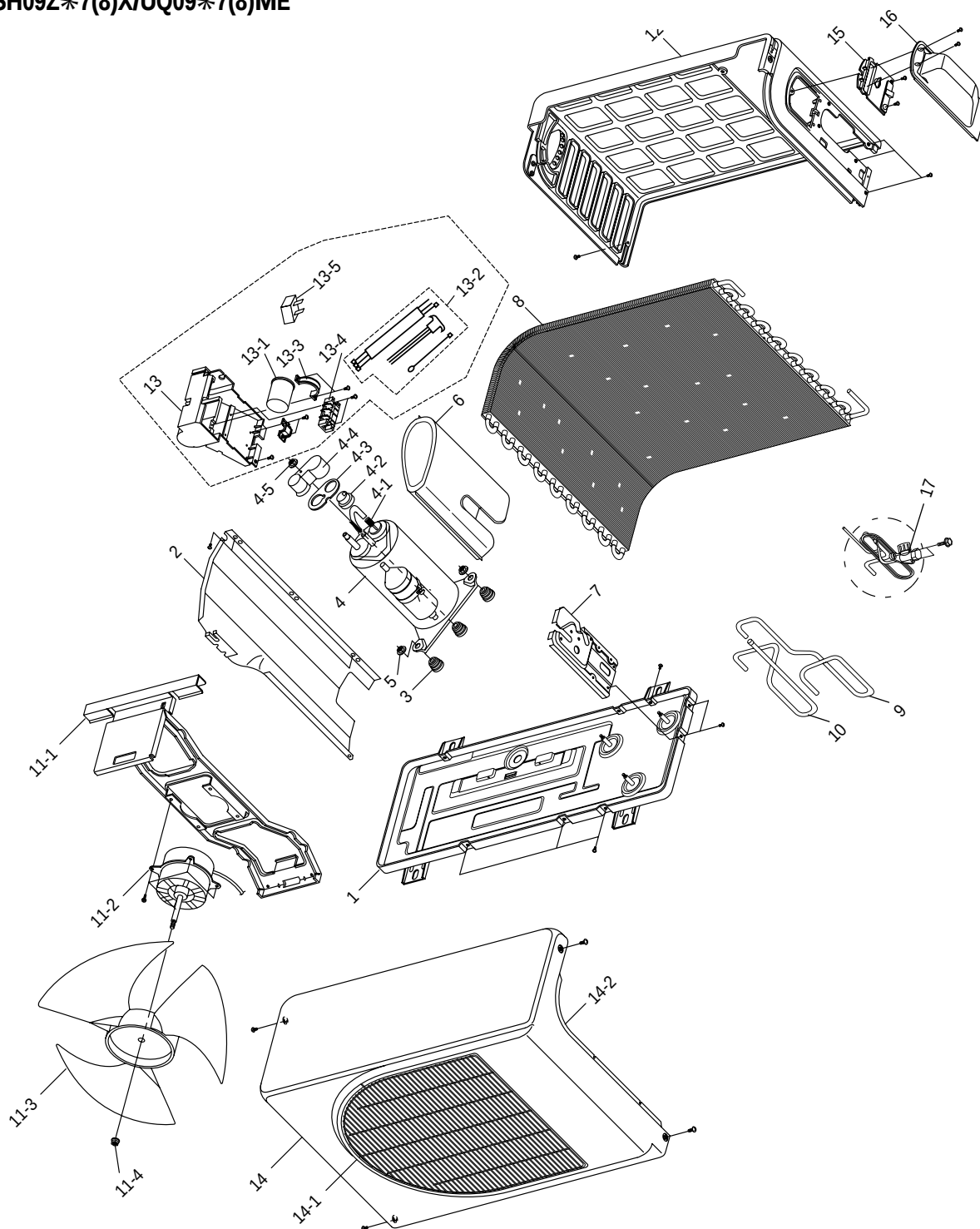


■ Parts List

No.	CODE NO	Description	Specitication	Q'TY			
				UQ07*5(6)ME SH07Z*5(6)X	UQ09*5(6)ME SH09Z*5(6)X	UQ07*5(6)MED SH07Z*5(6)DX	UQ09*5(6)MED SH09Z*5(6)DX
1	DB63-00086B	GUARD-FAN	HSWR, IP2, 5&3, SC-90073T, NEW A-P/J 370FAN	1	1	1	1
2	DB60-30004A	NUT-FLALNGE	2C, M6, SM20C, NTR	1	1	1	1
3	DB67-00036A	FAN-PROPELLER	AS+G/F20%, PI 375, BLK	1	1	1	1
4	DB31-10058C	MOTOR-FAN OUT	AMASS-020WTVA, FAN OUT, 220/240	1	1	1	1
5	DB90-00264A	ASS'Y FRAME (PAINT)	SC-90073T	1	1	1	1
6	DB94-00078A	ASS'Y PARTITION	ASS'Y 620mm COND	1	1	-	-
	DB94-00141A	ASS'Y PARTITION	ASS'Y 636mm COND ø7	-	-	1	1
7	DB90-00077B	ASS'Y CABI-UPPER	ASS'Y	1	1	-	-
	DB90-00077D	ASS'Y CABI-UPPER	ASS'Y	-	-	1	1
8	DB93-00478B	ASS'Y CONTROL OUT	ASS'Y	1	-	1	-
	DB93-00478A	ASS'Y CONTROL OUT	ASS'Y	-	1	-	-
	DB93-00478L	ASS'Y CONTROL OUT	ASS'Y, 1.2/450	-	-	-	1
8-1	2501-001228	C-OIL (COMP)	35µF, 370VAC	1	-	1	-
	2501-001229	C-OIL (COMP)	40µF, 370VAC	-	1	-	1
8-2	2301-001375	C-OIL (MOTOR)	1.0µF, 450VAC	1	1	1	-
	2301-001377	C-OIL(MOTOR)	1.2µF, 450VAC	-	-	-	1
8-3	DB33-00481A	ASS'Y LEAD WIRE	V2 P/D, HEATPUMP	1	1	1	1
8-4	DB33-00007C	SOLENOID ASS'Y	220-240, 6W, LB81 RANCO	1	1	1	1
8-5	DB65-40049D	TERMINAL BLOCK	4P, (N1), 1, 2, 3, AWG16, 67.5 x 29.4	1	1	1	1
9	DB72-00453A	CLOTH-COMP	T8, 425, 225, 44F COMP	1	1	1	1
10	44B080 JW1EL	ROTARY COMP	1Ph, 50Hz	1	-	1	-
	44B102 JW1EL	ROTARY COMP	1Ph, 50Hz	-	1	-	1
11	DB35-00015F	PROTECTOR O/L	RAC12086-9622, 2 Stage-OLP	1	-	1	-
	DB35-00015B	PROTECTOR O/L	RAC12054-9622, 2 Stage-OLP	-	1	-	1
12	DB73-00070A	GROMMET-ISOLATOR	NR	3	3	3	3
13	DB60-30018A	NUT-FLANGE	PI0.8, M5, SM20C	1	1	1	1
14	DB63-20002A	GASKET	EPDM, TO.8	1	1	1	1
15	DB63-10165D	COVER-TERMINAL	PBT	1	1	1	1
16	DB60-30028A	NUT-WASHER	HEX, 2C, M8, ZPC	3	3	3	3
17	DB96-00554A	ASS'Y TUBE CAPILLARY	ID1.5 x 1100+1/4"	1	1	-	-
	DB96-01234A	ASS'Y TUBE CAPILLARY	ID1.5 x 1000+1/4"	-	-	1	-
	DB96-01237A	ASS'Y TUBE CAPILLARY	ID1.5 x 1100+1/4"	-	-	-	1
17-1	DB62-00254B	VALVE-SERVICE	1/4INCH	1	1	1	1
18	DB99-00090A	ASS'Y VALVE 4WAY	VK1100B+3/8"	1	1	-	-
	DB99-00149A	ASS'Y VALVE 4WAY	VK1100B+3/8"	-	-	1	1
18-1	DB62-00118A	TUBE-4WAY VALVE	BRASS, 3/8INCH, T1.0, RANCO	1	1	1	1
18-2	DB62-40073B	VALVE-SERVICE	C3771BD, 432L/H, 3/8", 30Kg/cm²G	1	1	1	1
19	DB75-00029A	ASS'Y COND	1.5D-FIN, COATting 620mm	1	1	-	-
	DB96-01286A	ASS'Y COND	1.5LOUVER, COATting 636mm	-	-	1	1
20	DB64-60171B	CABINET-SIDE	SECC-P, T 0.8, A-P/J	1	1	-	-
	DB64-60171C	CABINET-SIDE	SECC-P, T 0.8, A-P/J	-	-	1	1
21	DB67-90024A	HANDLE-CABI LF	ABS	1	1	-	-
	DB67-00171A	HANDLE-CABI LF	ABS	-	-	1	1
22	DB63-10443C	COVER-E, PARTS ASS'Y	SC-90073R	1	1	1	1

Outdoor Unit

- SH07Z*7(8)X/UQ07*7(8)ME
- SH09Z*7(8)X/UQ09*7(8)ME

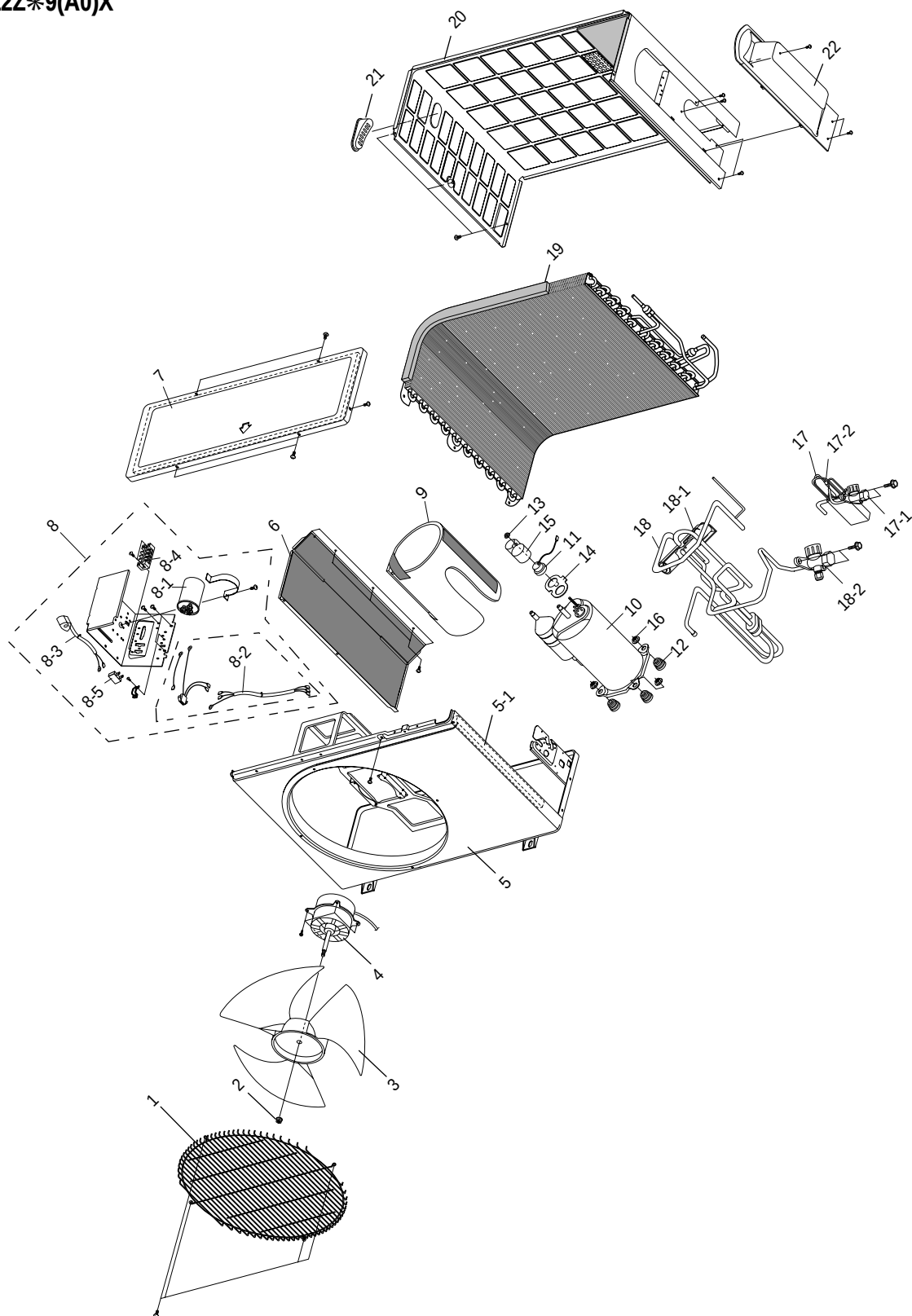


■ Parts List

No.	CODE NO	Description	Q'TY	
			Mold	
			SH09Z*7(8)X UQ09*7(8)ME	SH07Z*7(8)X UQ07*7(8)ME
1	DB90-00262A	ASS'Y BASE OUT	1	1
2	DB94-00045A	ASS'Y PARTITION; 7K,9K	1	1
3	DB73-10004B	GROMMET ISOLATOR(SILICON)	3	3
4	44B102JW1EL	ROTARY COMP	1	-
	44B080JW1EL	ROTARY COMP	-	1
4-1	DB67-60020A	SPRING OLP	1	1
4-2	DB35-00015B or DB35-00010E or DB35-00015F or DB35-00010F	PROTECTOR O/L; RAC12054-12008, 2 Stage OLP MRA12110-12008, Single OLP PROTECTOR O/L; RAC12086-12008, 2 Stage OLP MRA12086-12008, Single OLP	1 - -	- 1
4-3	DB63-20002A	GASKET;EPDM	1	1
4-4	DB63-10165D	COVER TERMINAL	1	1
4-5	DB60-30018A	NUT FLANGE	1	1
5	DB60-30028A	NUT WASHER	3	3
6	DB72-00453A	CLOTH COMP SIDE	1	1
7	DB61-00168A	BRACKET VALVE	1	1
8	DB75-00029A	CONDENSER ASS'Y	1	1
9	DB96-00093A	ASS'Y 4WAY VALVE	1	1
9-1	DB33-00002A	SOLENOID COIL ASS'Y	1	1
10	DB96-00195A	ASS'Y TUBE CAPLLARY	1	1
11-1	DB90-00110A	ASS'Y BRACKET MOTOR	1	1
11-2	DB31-00034A	MOTOR FAN OUT	1	1
11-3	DB67-00036A	FAN PROPELLER	1	1
11-4	DB60-30004A	NUT FLANGE	1	1
12	DB90-00109A	ASS'Y CABI SIDE	1	1
13	DB93-00666A or DB93-00433A or DB93-00666B or DB93-00433B	ASS'Y CONTROL OUT;9K 2 Stage OLP Single OLP ASS'Y CONTROL OUT;7K 2 Stage OLP Single OLP	1 - -	- 1
13-1	2501-001229 2501-001228	C OIL;40μF,370VAC C OIL;35μF,370VAC	1 -	- 1
13-2	DB93-00481A or DB93-00413A	ASS'Y-LEAD WIRE 2 Stage OLP Single OLP	1	1
13-3	DB61-00174A	HOLDER CAPACITOR	1	1
13-4	DB65-40049D	TERMINAL BLOCK;4P	1	1
13-5	2301-001375	C OIL;1.5μF, 450VAC	1	1
14	DB90-00108C	ASS'Y CABI FRONT	1	1
14-1	DB63-00099A	GUARD FAN WIRE	1	1
14-2	DB61-00173A	GUIDE BELL MOUTH	1	1
15	DB90-00152A	ASS'Y COVER CONTROL	1	1
16	DB94-00021A	ASS'Y COVER VALVE	1	1
17	DB90-00195A	ASS'Y-CAPILLARY	1	1

Outdoor Unit

- UQ12*9(A0)ME
- SH12Z*9(A0)X

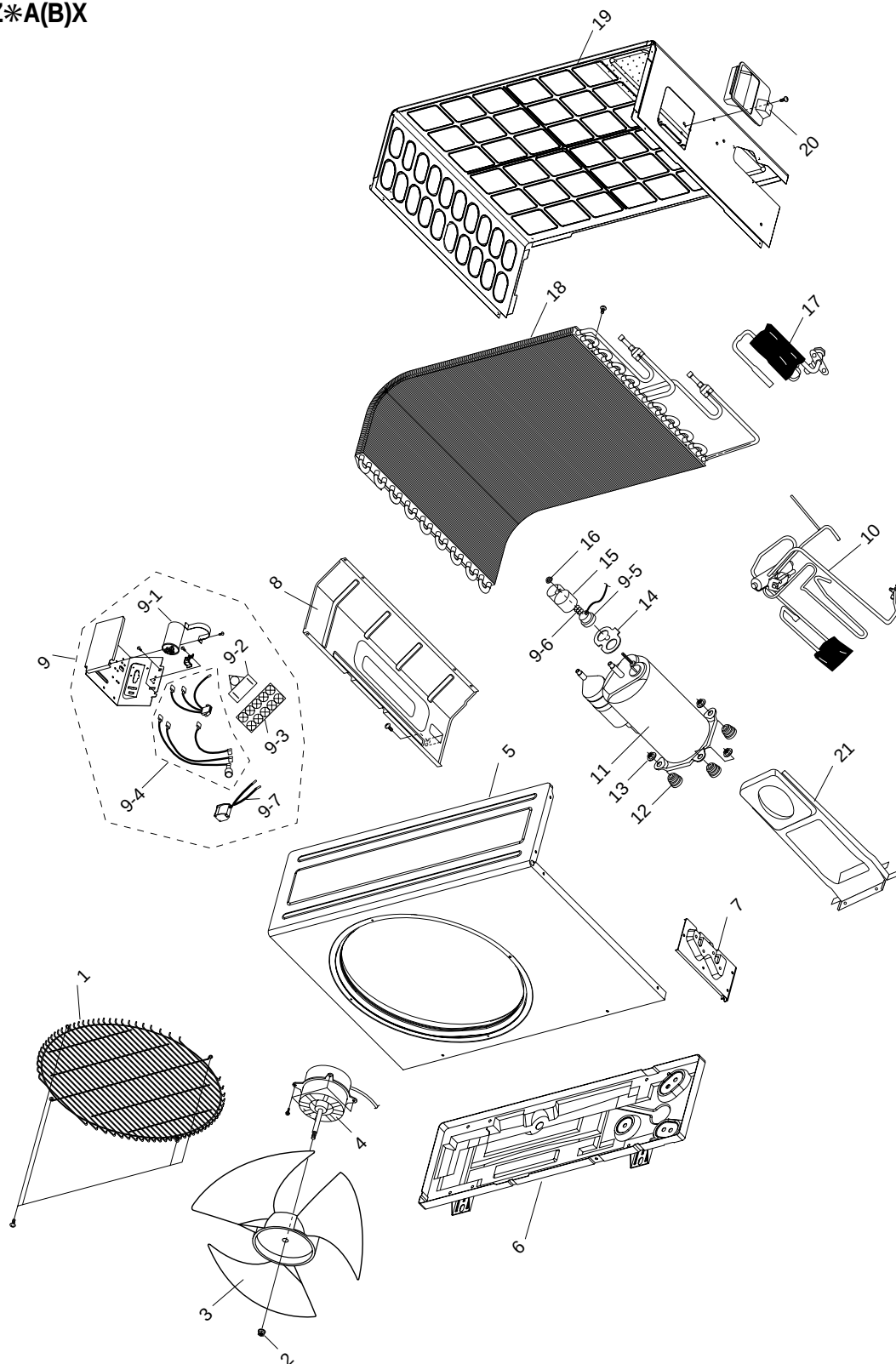


■ Parts List

No.	CODE NO	Description	Specitication	Q'TY
				UQ12*9(0)ME SH12Z*9(0)X
1	DB63-00071A	GUARD-FAN	HSER, IP2, SC-90073T, NEW V-P/J 405FAN	1
2	DB60-30004A	NUT-FLALNGE	2C, M6, SM20C, NTR	1
3	DB67-50063A	FAN-PROPELLER	AS+G/F20%, PI 405, BLK	1
4	DB31-10058C	MOTOR-FAN OUT	AMASS-020WTVA, FAN OUT, 220/240	1
5	DB90-00372A	ASS'Y FRAME	V2 P/D, 48F, SAMSUNG, SILK	1
5-1	DB72-00194J	SEAL-FRONT, RH	30FOAM-PU, T15, 15, 400, BLK	1
6	DB94-00098A	ASS'Y PARTITION	V2 P/D, 12K, 2ROW COND	1
7	DB90-00374A	ASS'Y CABI-UPPER	V2 P/D, SC90073 T+FOAM-PU	1
8	DB93-00478C or DB93-00453A	ASS'Y CONTROL OUT	ASS'Y $\left\{ \begin{array}{l} \text{2 Stage OLP} \\ \text{Single OLP} \end{array} \right.$	1
8-1	2501-001236	C-OIL	30μF, 450VAC	1
8-2	DB93-00481A or DB93-00413A	ASS'Y LEAD WIRE	HEATPUMP $\left\{ \begin{array}{l} \text{2 Stage OLP} \\ \text{Single OLP} \end{array} \right.$	1
8-3	DB33-00007C	SOLENOID ASS'Y	220-240, 6W, LB81 RANCO	1
8-4	DB65-40049D	TERMINAL BLOCK	4P, (N1), 1, 2, 3, AWG16, 67.5 x 29.4	1
8-5	2301-001377	C-OIL	1.2μF, 450VAC	1
9	DB72-00453A	CLOTH-COMP	8t, FELT	1
10	48A124JV1EL	ROTARY COMP	1ph, 208-240V-, 50Hz	1
11	DB35-00010B DB35-00015G	PROTECTOR O/L	MRA12030-12008 $\left\{ \begin{array}{l} \text{Single OLP} \\ \text{2 Stage OLP} \end{array} \right.$ RAC12030-9622	1
12	DB73-10004B	GROMMET-ISOLATOR	SILICON	3
13	DB60-30018A	NUT-FLANGE	PI0.8, M5, SM20C	1
14	DB63-20002A	GASKET	EPDM, TO.8	1
15	DB63-10165D	COVER-TERMINAL	PBT	1
16	DB60-30028A	NUT-WASHER	HEX, 2C, MB, ZPC	3
17	DB99-00060A	ASS'Y VALVE, CHECK	AQ12A2ME, CHECK-V/V_1/4"	1
17-1	DB62-00254A	VALVE-SERVICE 1/4"	ASS'Y, 1/4", 45KG/CM2G	1
17-2	DB62-40034A	VALVE-CHECK	1/2", 30KG/CM2G	1
18	DB99-00097A	ASS'Y VALVE 4WAY	SH12ZA1X, VK1100B+1/2"+TUBE	1
18-1	DB62-00118A	TUBE-4WAY VALVE	BRASS, 3/8INCH, T1.0, RANCO	1
18-2	DB62-00251A	VALVE-SERVICE	1/2"+9.52, 45/30KG, AQV12A2ME	1
19	DB96-00286A	ASS'Y COND	AQ12A1ME, 1.7D-FIN, COATING	1
20	DB64-00090A	CABINET-SIDE	SECC-P, T 0.8, SC-90073T, NEW V-P/J	1
21	DB67-90024A	HANDLE-CABILF	ABS, T2	1
22	DB94-00044A	ASS'Y COVER VALVE	V2 P/D, PP+RUBBER	1

Outdoor Unit

- UQ12*A(B)ME
- SH12Z*A(B)X

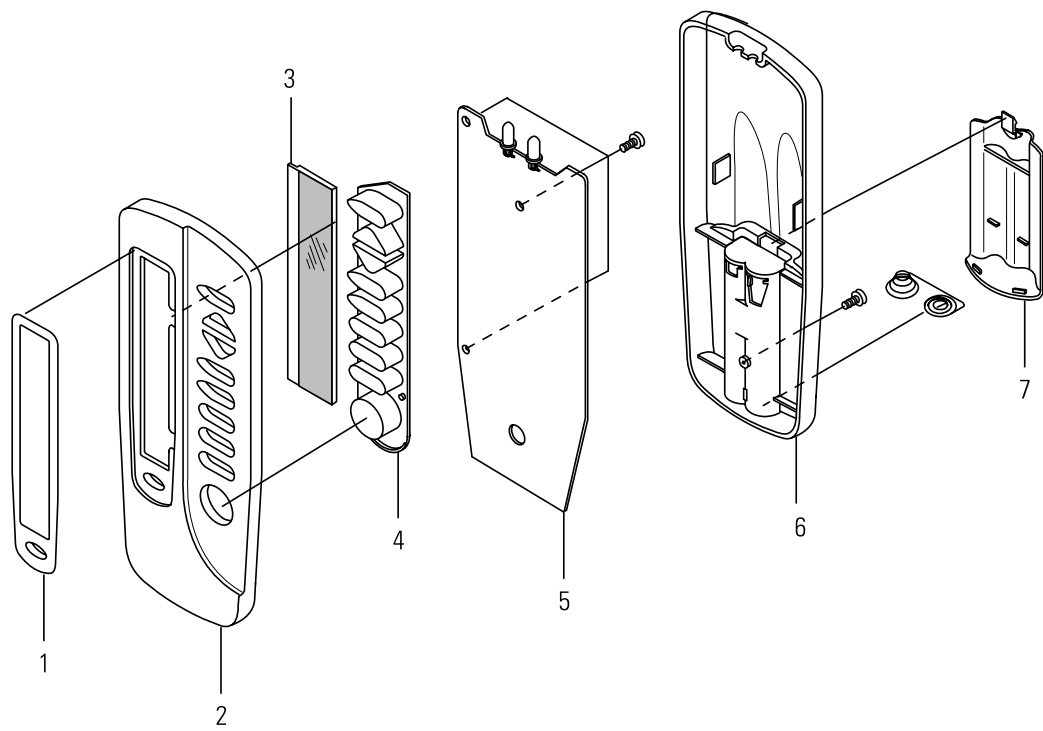


■ Parts List (OUTDOOR UNIT)

No.	CODE NO	Description	Specification	Q'TY	Remark
				UQ12*A(B)ME SH12Z*A(B)X	
1	DB63-00071A	GUARD FAN	HSER, CD 2.0	1	
2	DB60-30020A	NUT FLANGE	2C SM20C M6 NTR	1	
3	DB67-50063A	PROPELLER-FAN	AS+G/F, ø405	1	
4	DB31-10058C	MOTOR FAN OUT	220/240V, 60/50HZ	1	
5	DB90-00633B	ASS'Y CABI FRONT	ASS'Y	1	
6	DB90-00635B	ASS'Y BASE OUT	ASS'Y	1	
7	DB61-00803A	BRACKET VALVE	SECC-P, T1.6	1	
8	DB94-00163A	ASS'Y PARTITION	ASS'Y	1	
9	DB93-00478N	ASS'Y CONTROL OUT	ASS'Y	1	
9-1	2501-001236	CAPACITOR COMP	30μF 450VAC	1	
9-2	2301-001375	CAPACITOR MOTOR	1.5μF 450VAC	1	
9-3	DB65-40049E	TERMINAL BLOCK	4P, (N1), 1, 2, 3, AWG16	1	
9-4	DB93-00481A	ASS'Y LEAD WIRE	ASS'Y	1	
9-5	DB35-00015G	O L P	RAC12030-9622	-	
9-6	DB67-60020A	O L P SPRING	STS304	1	
9-7	DB33-00007C	ASS'Y SOLENOIDE	220-240,6W,LB81 RANCO	1	
10	DB99-00155A	ASS'Y 4WAY VALVE	VK1100B	1	
11	48A124JV1EL	COMPRESSOR	220-240V/50Hz	1	
12	DB73-00067A	GROMMET-ISOLATOR	NR	3	
13	DB60-30028A	NUT-WASHER	HEX 2C MB ZPC	3	
14	DB63-20002A	GASKET	EPDM	1	
15	DB63-10165D	COVER TERMINAL	PBT	1	
16	DB60-30018A	NUT-FLANGE	M5, SM20C	1	
17	DB99-00157B	ASS'Y CHECK V/V	ASS'Y(1.5x700/1.5x500)	-	
18	DB96-01461A	ASS'Y COND	ASS'Y(SF)	1	
19	DB90-00634A	CABINET SIDE	ASS'Y(BENDING)	1	
20	DB63-10443C	HANDLE CABI, RH	ABS	-	
21	DB61-00802A	BRACKET MOTOR	SGCC-M, T1.2	1	

6-3 Remote Control & PCB Box

6-3-1 ASS'Y REMOCON : DB93-00251L

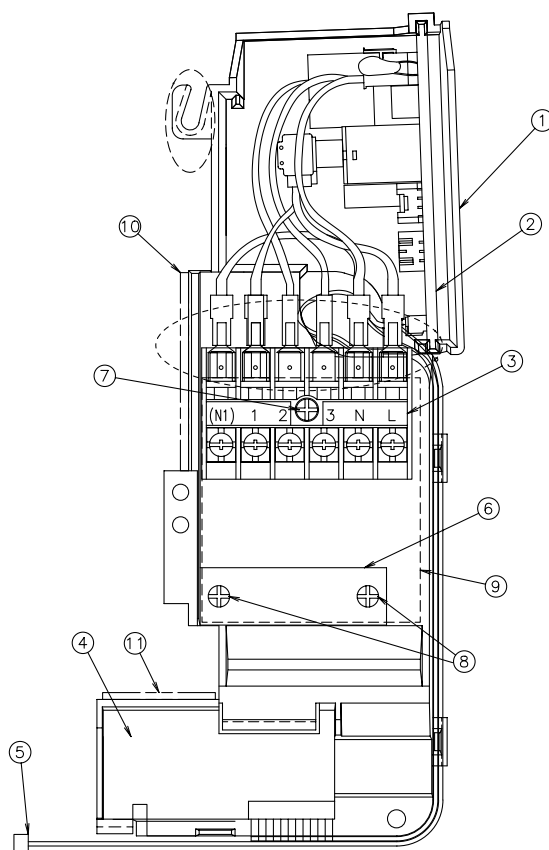


■ Parts List

No	Description	Q'TY	Remark
1	INLAY LCD	1	
2	CASE TOP	1	
3	LCD	1	
4	KEY RUBBER	1	
5	ASS'Y PCB REMOCON	1	
6	CASE LOW	1	
7	BATTERY COVER	1	

6-4 Indoor Control Unit

6-4-1 ASS'Y CONTROL-IN : DB93-00459A / DB93-00459E



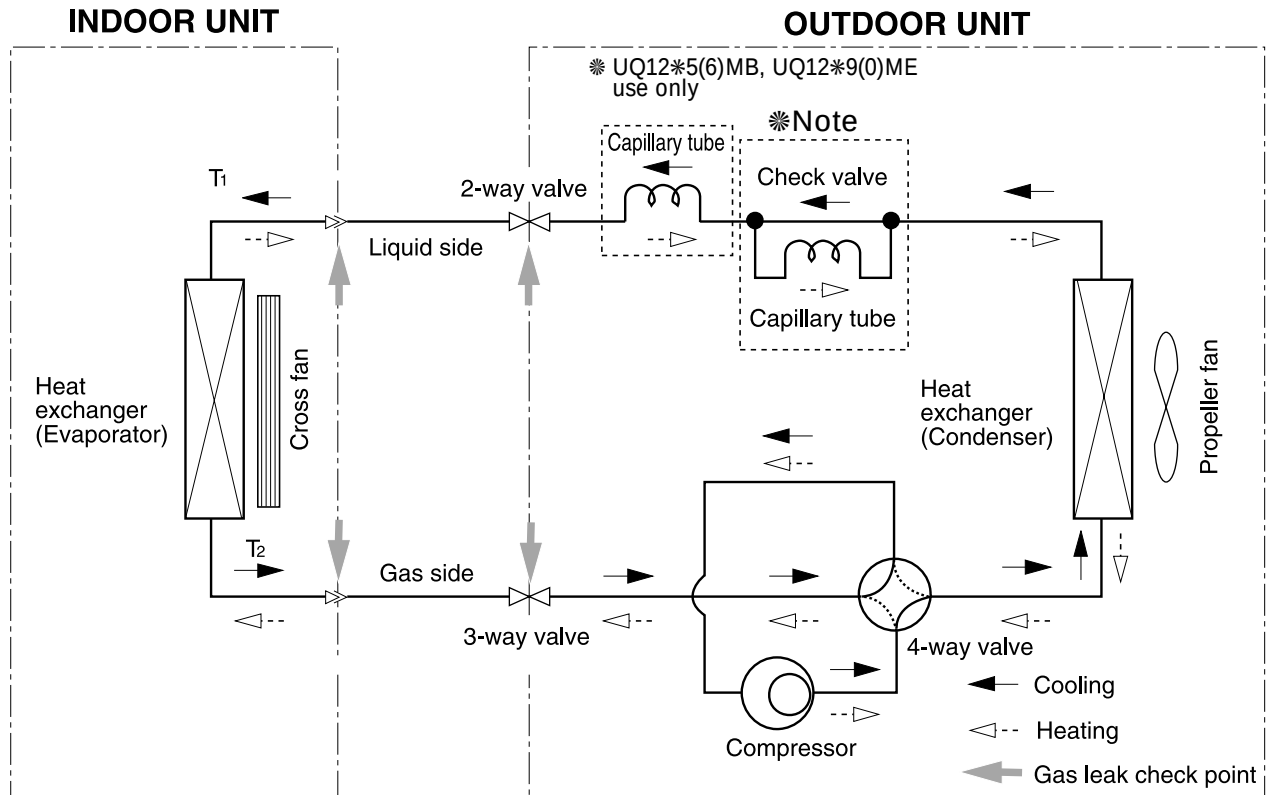
■ Parts List

No	Description	Specification	Remark
1	HOLDER CONTROL	ABS	
2	ASS'Y MAIN PCB	ASS'Y	
3	ASS'Y TERMINAL BLOCK	6P	
4	ASS'Y DISPLAY PCB	ASS'Y	
5	CONNECTOR WIRE PCB U/D	5P	
6	HOLDER WIRE CLAMP	-	
7	SCREW	PH, M3 5 L22	
8	SCREW	TH + M4 5 x16, ZPC(WHT), SWRCH	
9	HOLDER CLAMP IN	-	
10	SEAL PANEL FRONT RH	-	
11	SEAL H/CONTROL FRONT	-	

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7. Block Diagrams

7-1 Refrigerating Cycle Block Diagram



※ Note

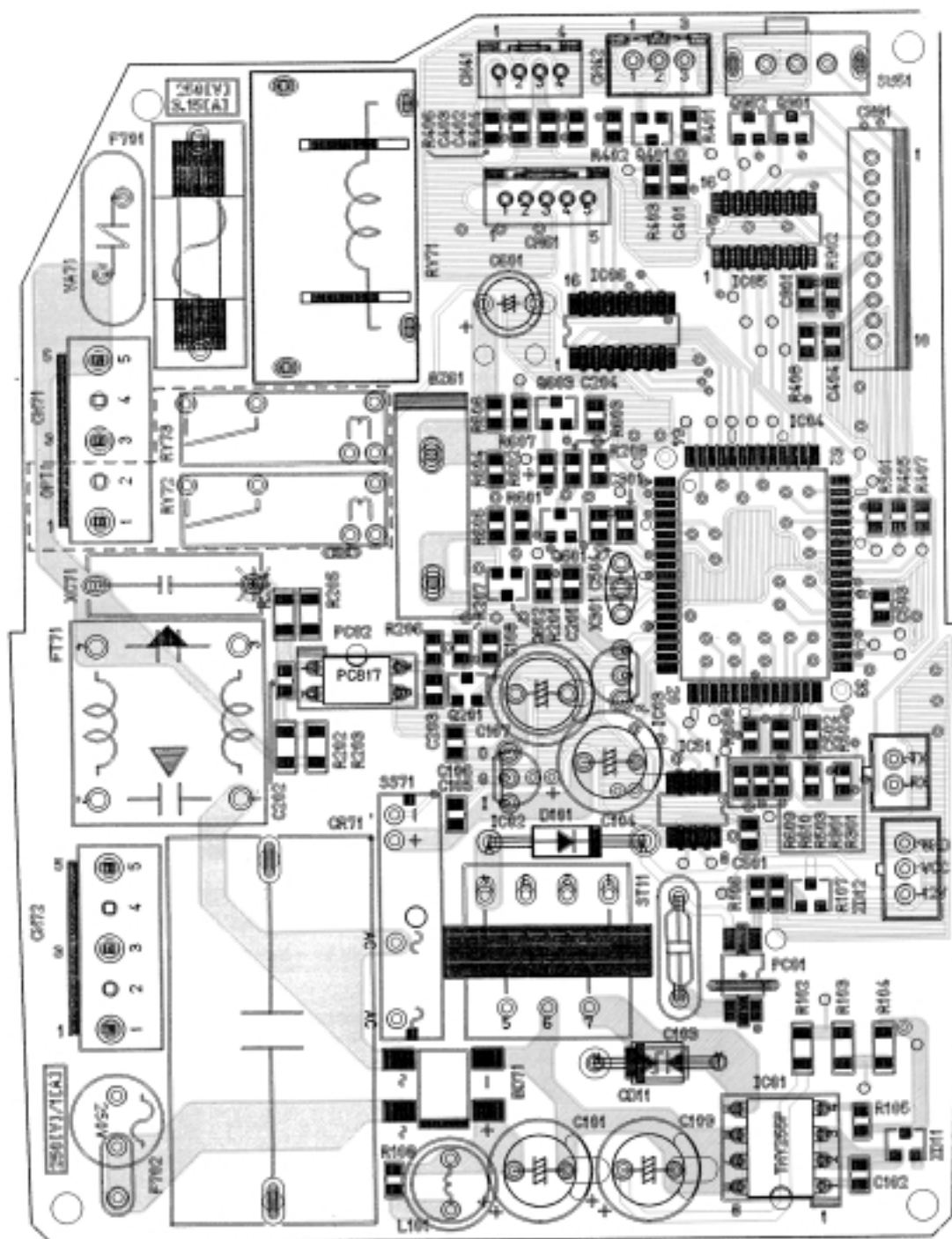
- The check valve is applied only to UQ12*5(6)ME(B)/SH12Z*5(6)X
UQ12*9(0)ME(B)/SH12Z*9(0)X as below
UQ12*A(B)ME(B)/SH12Z*A(B)X

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8. PCB Diagrams

8-1 ASS'Y MAIN PCB;DB93-00437A

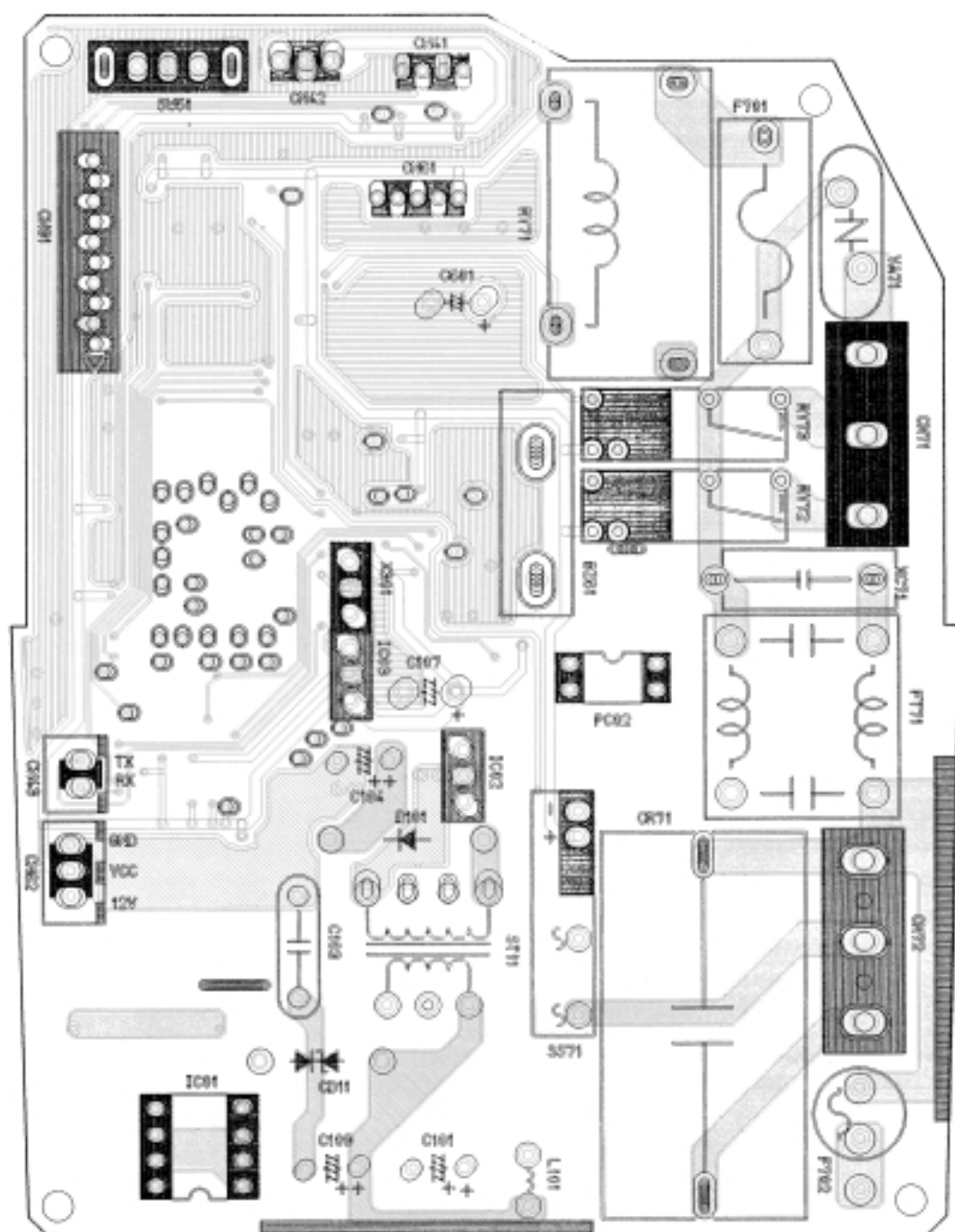
■ TOP PATTERN



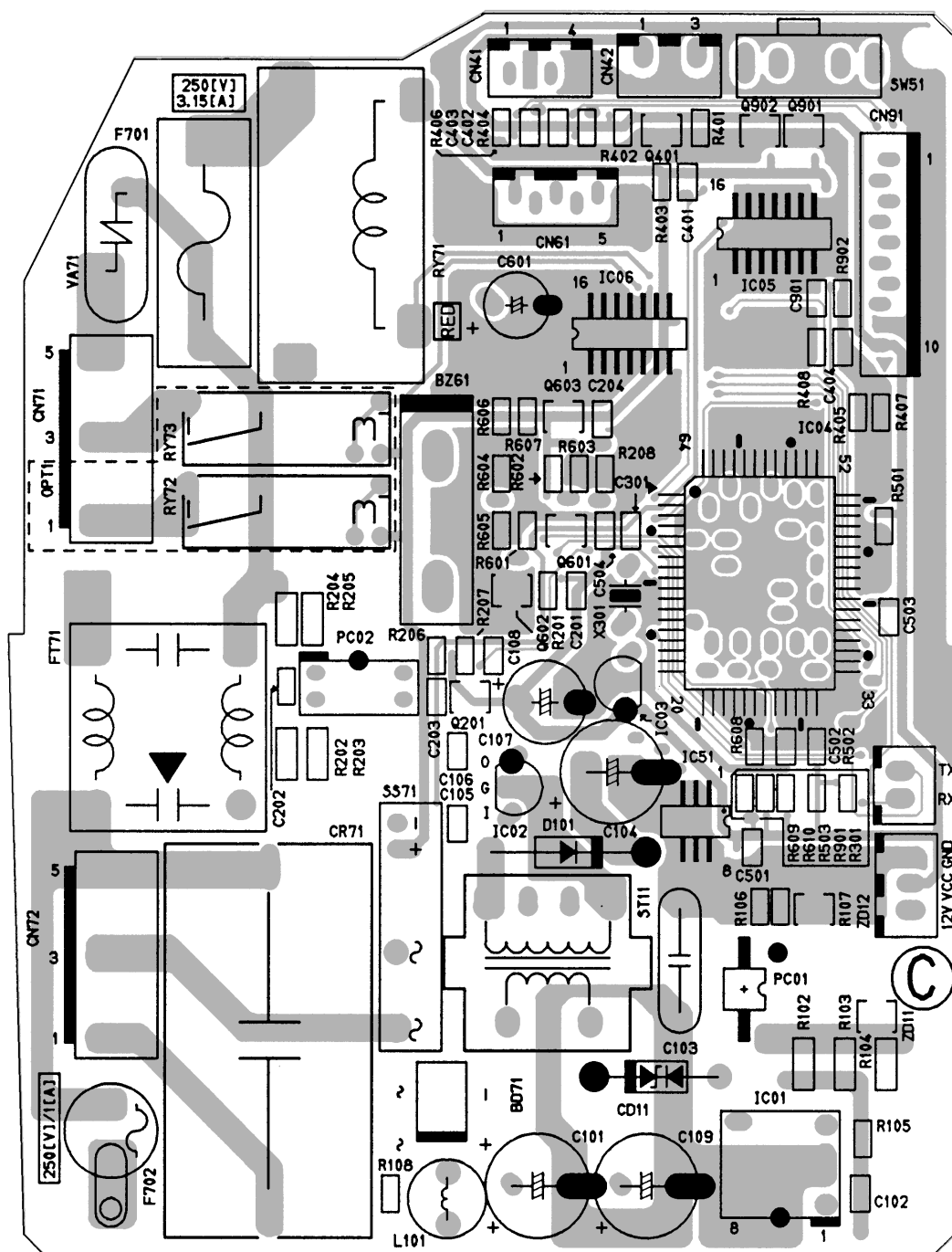
■ Parts List

No	Description	Specification	Location No.
1	PCB-MAIN	120x93	
2	IC-MCU	KS88C4632	IC04
3	IC DRIVE	ULN2003AFW	IC05, IC06
4	EEPROM	93LC56B-I/SN	IC51
5	PHOTO COUPLER	TLP181	PC01
6	TR SMALL SIGNAL	MMST2907A	Q603
7	TR SMALL SIGNAL	2SC2412K	Q201, Q401, Q601, Q602
8	TR DIGITAL	DTA114EKA	Q901, Q902
9	DIODE BRIDGE	DF06S	BD71
10	ZENER	BZX84-C11	ZD12
11	ZENER	BZX84-C3V6	ZD11
12	SSR	G3MB202PL	SS71
13	TR SWITCH	TNY255P	IC01
14	IC VOLT REGULATOR	KA78L05	IC02
15	IC	KA7533Z	IC03
16	PHOTO COUPLER	PC814	PC02
17	FR-DIODE	UG2B	D101
18	T.V.S	ST02D-200	CD11
19	VARISTOR	INR14D561K-BS	VA71
20	RESONATOR CERAM IC	10MHZ	X301
21	SW TRANS	JT1916-1701PS2	ST11
22	FILTER NOISE	HP1-P10	FT71
23	COIL	5mH/50mA	L101
24	RELAY POWER	UKH-12S	RY71
25	BUZZER	CBE2220BA	BZ61
26	HOLDER FUSE	FB58	F701
27	FUSE	250V, 3.15A	F701
28	FUSE	250V, 1A	F702
29	CONNECTOR HEADER	YW396-05AV WHT	CN72
30	CONNECTOR HEADER	YW396-05AV BLU	CN71
31	CONNECTOR HEADER	SMW200-10 WHT	CN91
32	CONNECTOR HEADER	SMW200-5PWHT	CN61
33	CONNECTOR HEADER	SMW300-3P WHT	CN42
34	CONNECTOR HEADER	SMW200-4P WHT	CN41
35	C-FILM	1.2μF, 450V	CR71
36	C-AL	SD 1000μF, 25	C104
37	C-AL	47μF, 50V	C601
38	C-AL	470μF, 16V	C107
39	C-ELEC	SD 6.8μF/450V	C101, C109
40	C-CERAMIC	SDE 2G 222M	C103
41	C-FILM	100NK 275V X2	XC71
42	C-CHIP	CS2012Y5V104Z500NR	C102, C105, C106, C108, C201, C202, C301, C402, C403, C501, C502, C503, C504, C901
43	C-CHIP	CS2012Y5V103Z500NR	C203, C204, C401
44	C-CHIP	CS2012X7R102K500NR	C404
45	R-CHIP	MCR18EZHZJ224	R102, R103, R104
46	R-CHIP	MCR18EZHZJ104	R202, R203, R204, R205
47	R-CHIP	MCR10EZHF6801	R404, R406
48	R-CHIP	MCR10EZHZJ103	R206, R501, R502, R503, R602, R609, R610, R902
49	R-CHIP	MCR10EZHZJ682	R402
50	R-CHIP	MCR10EZHZJ472	R108, R603, R901
51	R-CHIP	MCR10EZHZJ102	R201, R207, R208, R301, R401, R403, R408, R601, R607, R608
52	R-CHIP	MCR10EZHZJ561	R606
53	R-CHIP	MCR10EZHZJ471	R105, R604, R605
54	R-CHIP	MCR10EZHZJ331	R405, R407
55	R-CHIP	MCR10EZHZJ221	R106, R107
56	RELAY-MINIATURE	F3AA012E	RY72, RY73

■ BOTTOM PATTERN

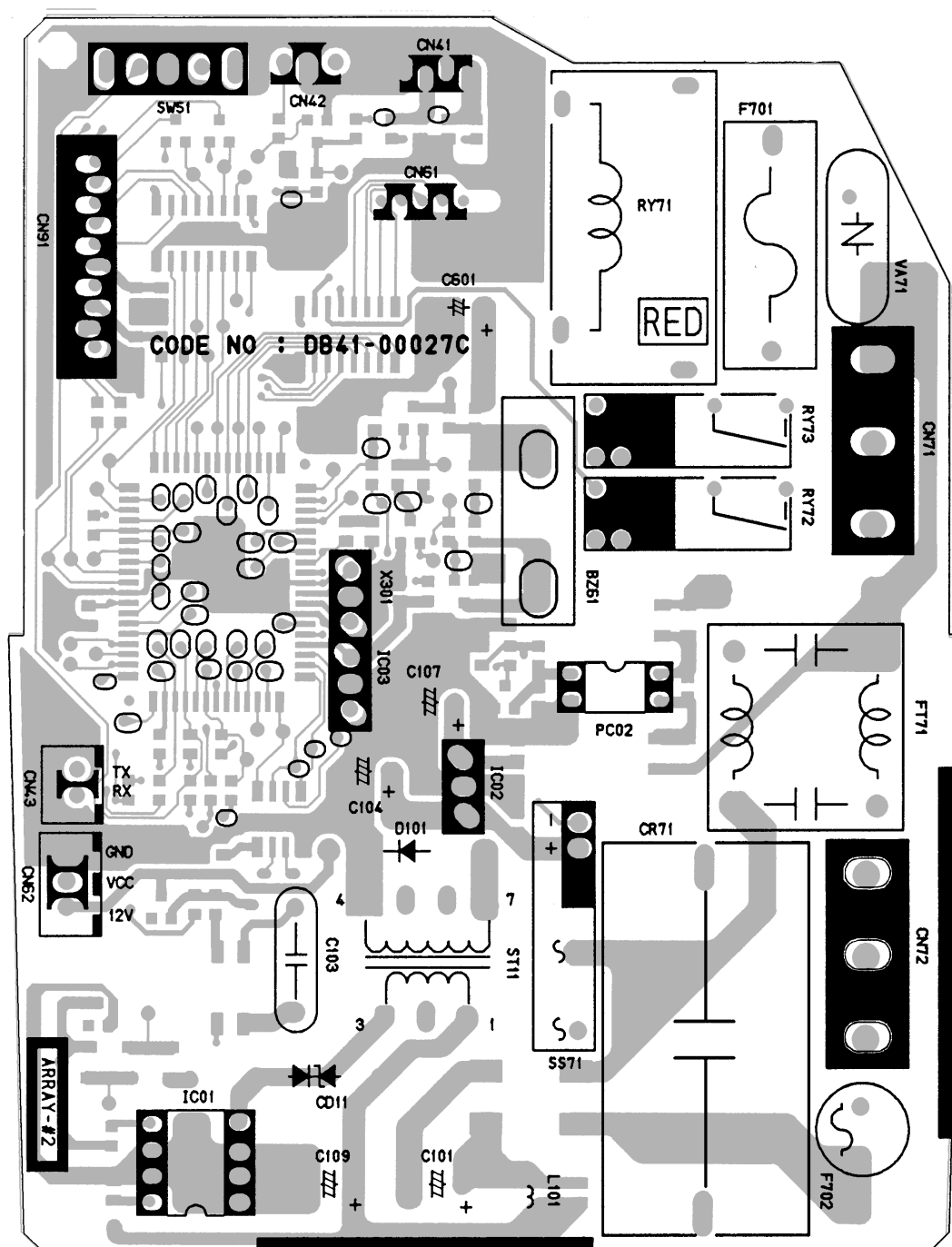


■ TOP PATTERN

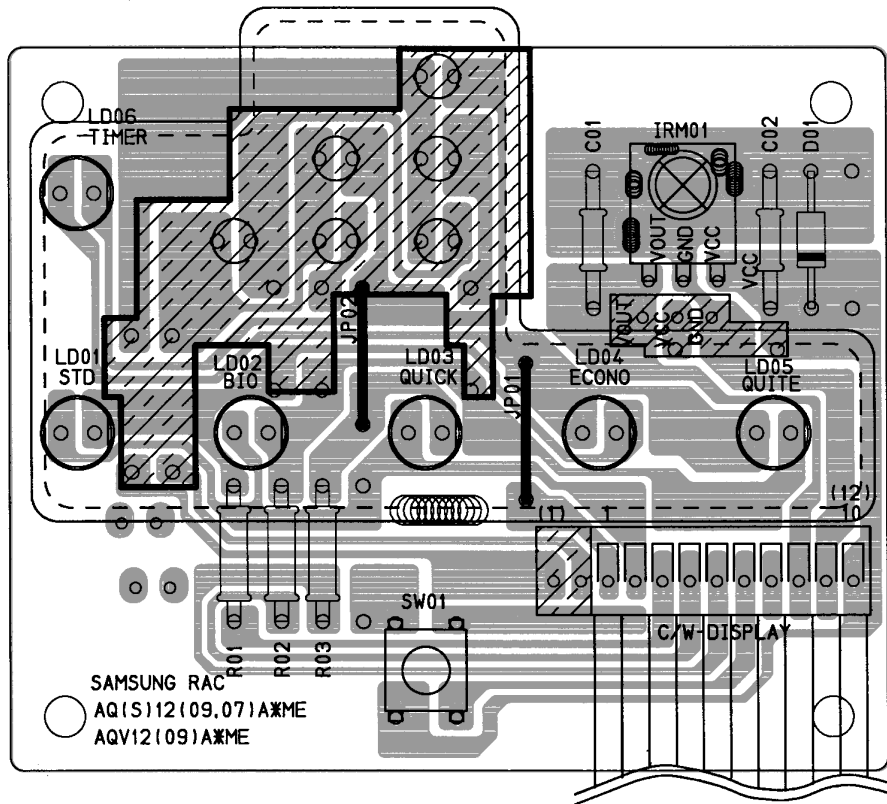


■ Parts List

No	Description	Specification	Location No.
1	PCB-MAIN	120x93	
2	IC-MCU	KS88C4632	IC04
3	IC DRIVE	ULN2003AFW	IC05, IC06
4	EEPROM	93LC56B-I/SN	IC51
5	PHOTO COUPLER	TLP181	PC01
6	TR SMALL SIGNAL	MMST2907A	Q603
7	TR SMALL SIGNAL	2SC2412K	Q201, Q401, Q601, Q602
8	TR DIGITAL	DTA114EKA	Q901, Q902
9	DIODE BRIDGE	DF06S	BD71
10	ZENER	BZX84-C11	ZD12
11	ZENER	BZX84-C3V6	ZD11
12	SSR	G3MB202PL	SS71
13	TR SWITCH	TNY255P	IC01
14	IC VOLT REGULATOR	KA78L05	IC02
15	IC	KA7533Z	IC03
16	PHOTO COUPLER	PC814	PC02
17	FR-DIODE	UG2B	D101
18	T.V.S	ST02D-200	CD11
19	VARISTOR	INR14D561K-BS	VA71
20	RESONATOR CERAM IC	10MHZ	X301
21	SW TRANS	JT1916	ST11
22	FILTER NOISE	HP1-P10 / NFP-1010	FT71
23	COIL	5mH/50mA	L101
24	RELAY POWER	UKH-12S	RY71
25	BUZZER	CBE2220BA	BZ61
26	HOLDER FUSE	FB58	F701
27	FUSE	250V, 3.15A	F701
28	FUSE	250V, 1A	F702
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34	CONNECTOR HEADER	SMW200-4P WHT	CN41
35	C-FILM	1.2μF, 450V	CR71
36	C-AL	SD 1000μF, 25	C104
37	C-AL	47μF, 50V	C601
38	C-AL	470μF, 16V	C107
39	C-ELEC	SD 6.8μF/450V	C101, C109
40	C-CERAMIC	SDE 2G 222M	C103
41	C-CHIP	CS2012Y5V104Z500NR	C102, C105, C106, C108, C201, C202, C301, C402, C403, C501, C502, C503, C504, C901
42	C-CHIP	CS2012Y5V103Z500NR	C203, C204, C401
43	C-CHIP	CS2012X7R102K500NR	C404
44	R-CHIP	MCR18EZHZJ224	R102, R103, R104
45	R-CHIP	MCR18EZHZJ104	R202, R203, R204, R205
46	R-CHIP	MCR10EZHF6801	R404, R406
47	R-CHIP	MCR10EZHZJ103	R206, R501, R502, R503, R602, R609, R610, R902
48	R-CHIP	MCR10EZHZJ682	R402
49	R-CHIP	MCR10EZHZJ472	R108, R603, R901
50	R-CHIP	MCR10EZHZJ102	R201, R207, R208, R301, R401, R403, R408, R601, R607, R608
51	R-CHIP	MCR10EZHZJ561	R606
52	R-CHIP	MCR10EZHZJ471	R105, R604, R605
53	R-CHIP	MCR10EZHZJ331	R405, R407
54	R-CHIP	MCR10EZHZJ221	R106, R107
55	RELAY-MINIATURE	F3AA012E	RY72, RY73



8-3 ASS'Y DISPLAY PCB;DB93-00268A



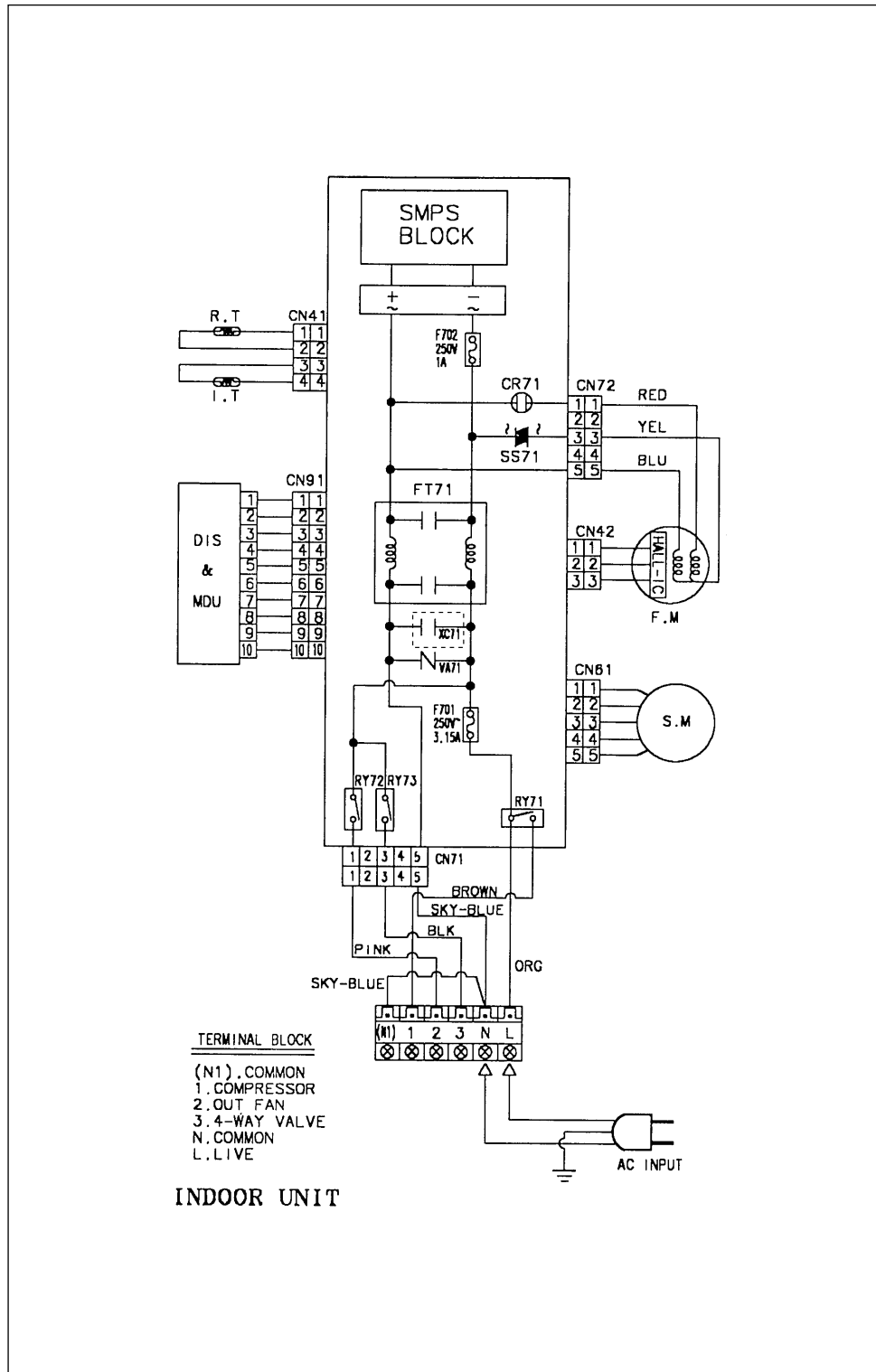
■ Parts List

No	Description	Location No.	Specification	Q'TY	Remark
1	PCB-DISPLAY		64.5x53	1	
2	LED-LAMP	LD01,LD02,LD03,LD04,LD05	SO5511	5	
3	LED-LAMP	LD06	SY5511	1	
4	MODULE REMOCON	IRM01	KSM-713TH5	1	
5	DIODE SWITCHING	D01	IN4148	1	
6	R-CARBON	R01,R02,R03	470 1/2W 5%	3	
7	CONNECTOR WIRE	C/W-DISPLAY	SMAW200-10P	1	
8	TACT SWITCH	SW01	KPT-1105A	1	
9	C-CERAMIC	C02	104Z	1	
10	C-CERAMIC	C01	102K	1	
11	JUMP	JP-1,JP02	10mm	2	
12	COVER DISPLAY UP		ABS(V2)	1	

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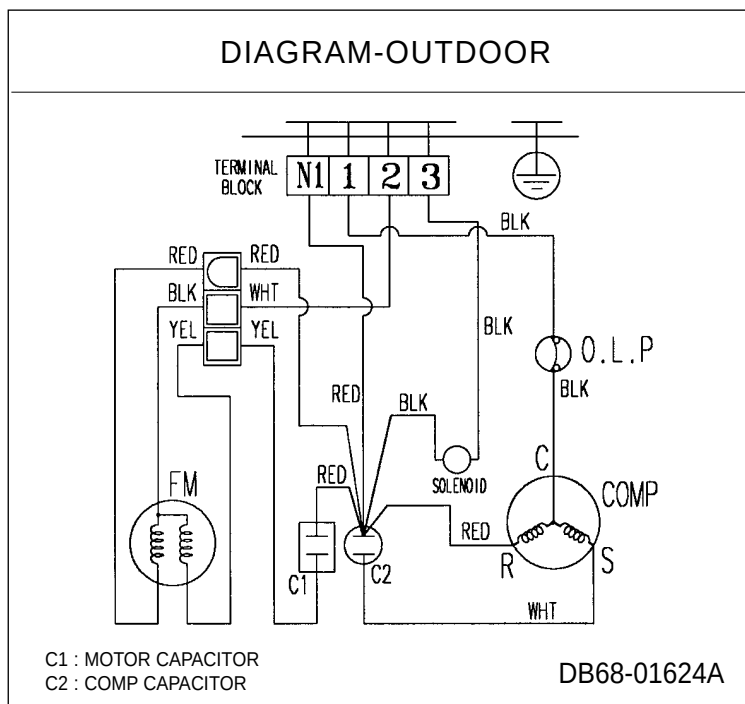
9. Wiring Diagrams

9-1 Indoor Unit

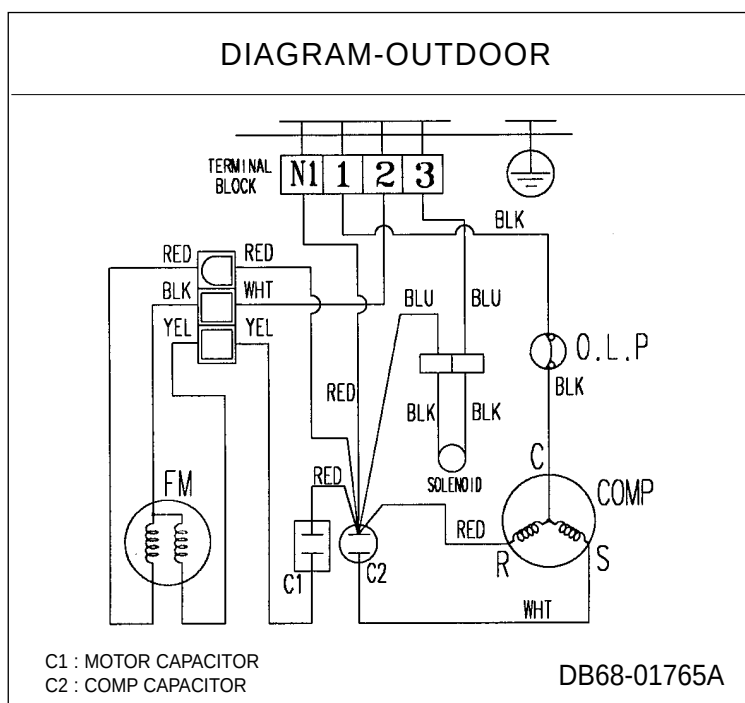


9-2 Outdoor Unit

• UQ***5(6)**/UQ**09(0)**/SH**Z***X



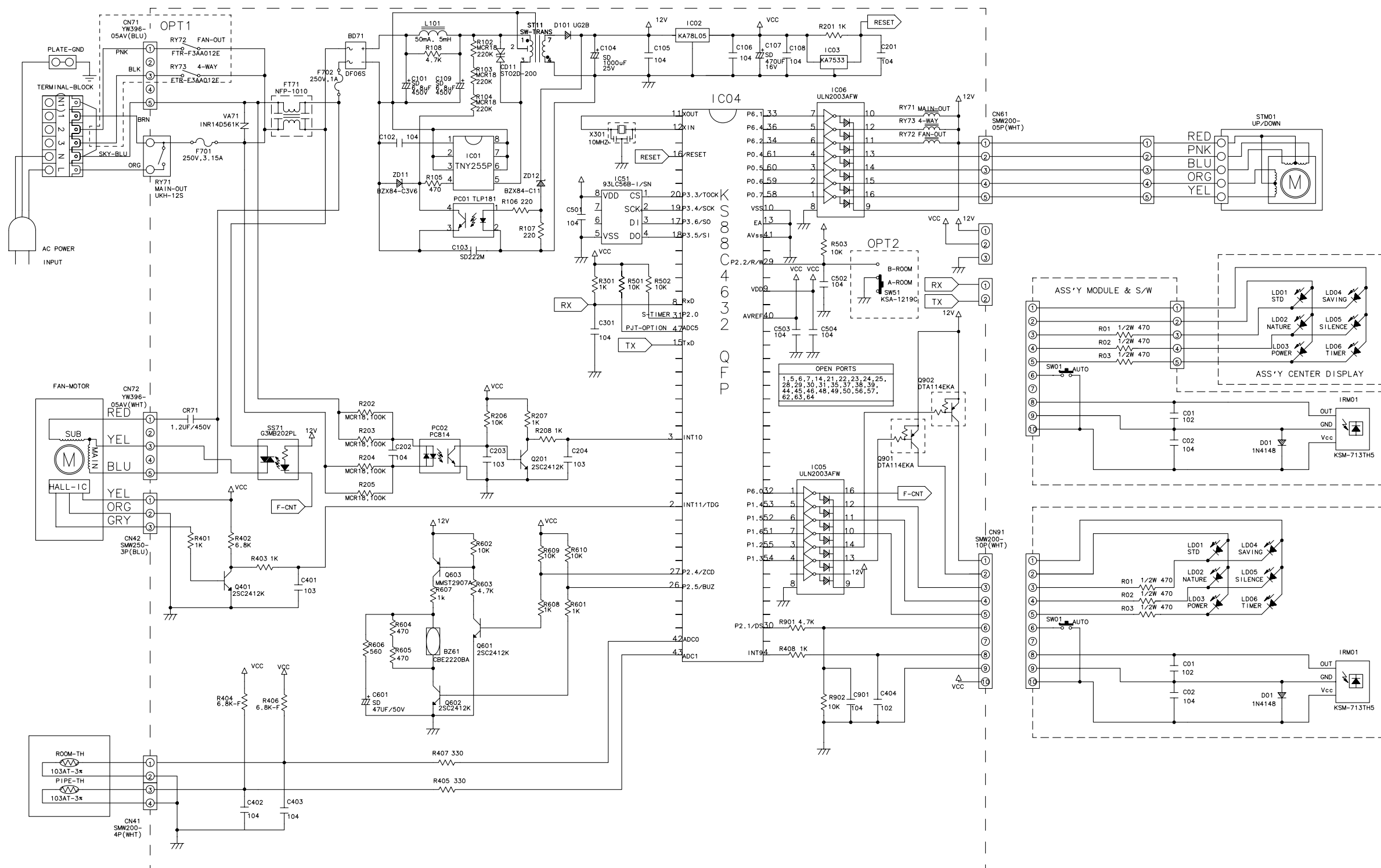
• UQ***7(8)** / SH**Z*7(8)X



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10. Schematic Diagrams

10-1 Indoor Unit



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UPDATE LOG SHEET

Application date	Page	Part#	Note(Cause & Solution)	S/Bulletin#

Use this page to keep any special servicing information. (Service Bulletin, etc.)
 If only parts number changes, Just change parts number directly on parts list.
 And if you need more information, please see the service website.

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