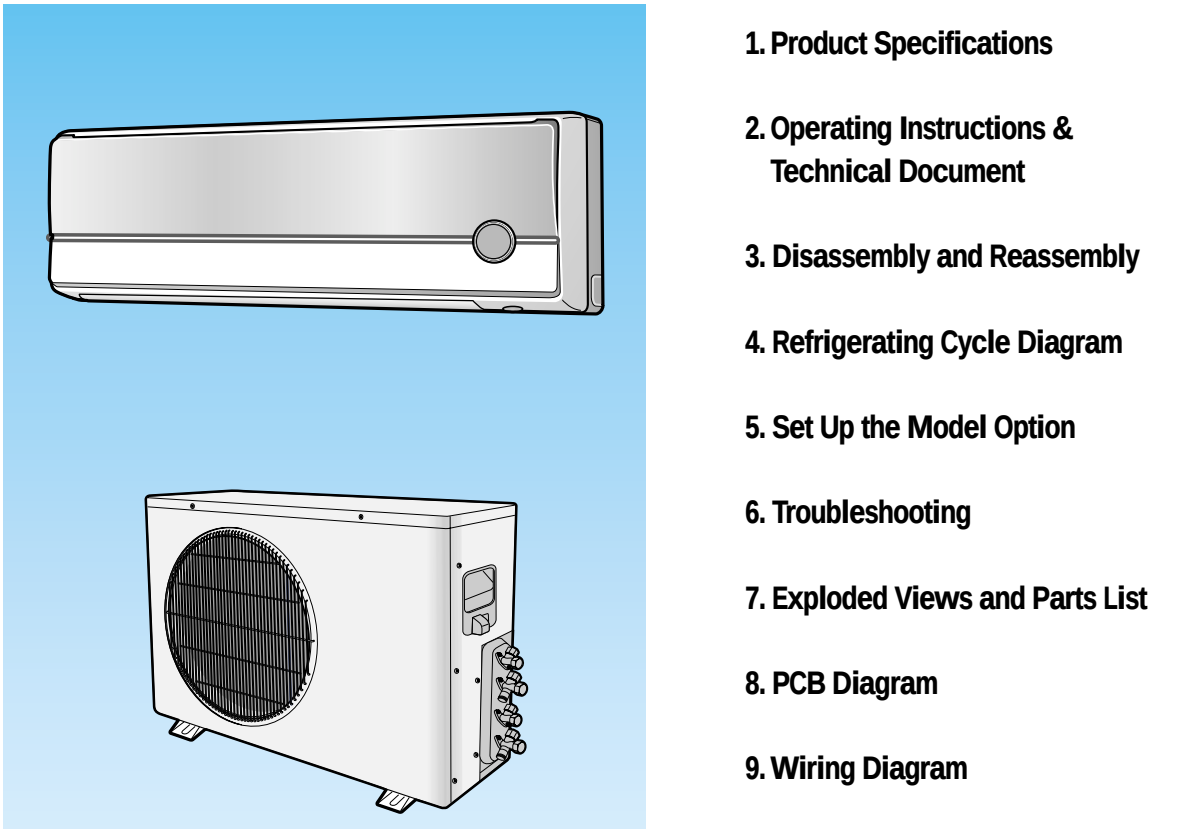
SAMSUNG

MULTI AIR CONDITIONER

INDOOR UNIT	OUTDOOR UNIT
MH18AP1(P2)-09	MH18AP1(P2)X
MH19AP1(P2)-07 MH19AP1(P2)-12	MH19AP1(P2)X
MH24AP1(P2)-12	MH24AP1(P2)X
MH26AP1(P2)-07 MH26AP1(P2)-12	MH26AP1(P2)X

SERVICE *Manual*

AIR CONDITIONER



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1. Product Specifications

1-1 Table

Item				Model	MH18AP1(P2)		MH19AP1(P2)	
					INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT
					MH18AP1(P2)-09	MH18AP1(P2)X	MH19AP1(P2)-07 MH19AP1(P2)-12	MH19AP1(P2)X
Type					WALL-MOUNTING MULTI SPLIT		WALL-MOUNTING MULTI SPLIT	
Perfor-mance	Cooling/Heating	1 Unit(A)		kW	2.65 / 2.78		2.05 / 2.25	
		1 Unit(B/C)			2.65 / 2.78		3.51 / 3.60	
		2 Unit(A+B/C)			5.30 / 5.56		5.56 / 5.85	
		2 Unit(B+C)			-		-	
		3 Unit(A+B+C)			-		-	
	Dehumidifying(A+B/C)			ℓ/h	1.1+1.1	-	1.0+1.4	-
	Noise	Cooling / Heating		dB	39 / 39	57 / 57	(–07):36 / 36, (–12):43 / 43	57 / 57
	Power			ø/V/Hz	1 / 220-240V~ / 50		1 / 220-240V~ / 50	
Power	Power Consumption	1 Unit(A)		W	1,020 / 980		870 / 780	
	(Cooling/Heating)	1 Unit(B/C)			1,020 / 980		1,270 / 1,420	
		2 Unit(A+B/C)			1,940 / 1,900		2,100 / 2,120	
		2 Unit(B+C)			-		-	
		3 Unit(A+B+C)			-		-	
	Operating Current	1 Unit(A)		A	4.5 / 4.4		3.9 / 3.5	
	(Cooling/Heating)	1 Unit(B/C)			4.5 / 4.4		5.7 / 6.3	
		2 Unit(A+B/C)			8.6 / 8.4		9.3 / 9.4	
		2 Unit(B+C)			-		-	
		3 Unit(A+B+C)			-		-	
	Starting Current(Cooling/Heating)			A	30		30	
Size	Outer Dimension	WxHxD		mm	795 x 258 x 179	880 x 638 x 310	795 x 258 x 179 890 x 285 x 179	880 x 638 x 310
				inch	313 x 102 x 70	346 x 251 x 122	313 x 102 x 70 350 x 112 x 70	346 x 251 x 122
	Weight			kg	7.5	59.5	7.5 / 8.5	60
	Refrigerant Pipe	Liquid		OD(mm)xL(m)	ø6.35 x 7.5		ø6.35 x 7.5	
		Gas			ø9.52 x 7.5		ø9.52 x 7.5	
	Drain Hose			ID(mm)	ø17		ø17	
	Compressor	Type			-	ROTARY	-	ROTARY
		Model Name			-	G4A097JU1EP	-	G4A080JU1EP G8C124JU1EL
		Capacitor			-	35 / 35	-	30 / 35
		Motor	Type(Model)		-	INDUCTION MOTOR	-	INDUCTION MOTOR
			Rated Output(A+B/C)	W	-	925+925	-	820+1,060
	Blower	Type			CROSS-FAN	PROPELLER	CROSS-FAN	PROPELLER
		Motor	Type		RESIN	STEEL	RESIN	STEEL
			Rated Input	W	35	100	(–07):35 / (–12):35	100
Heat Exchanger					2ROW 10STEP	2ROW 14STP	2ROW 10STEP 2ROW 12STEP	2ROW 10STEP 2ROW 18STEP
Refrigerant Control Unit					A,B-UNIT:CAPILLARY TUBE		A,B-UNIT:CAPILLARY TUBE	
Refrigerant to Change(R410A)					A-UNIT:770g / B-UNIT:770g		A-UNIT:620g / B-UNIT:1,080g	
Additional Refrigerant (Refrigerant must be added if the piping)				g/m	20(A,B-UNIT)	-	18(A-UNIT) 25(B-UNIT)	-
Protection Device					-	RAC12131-9622	-	RAC12126-9622 RAC12128-9622
Standard Conditions					ISO R5151 STANDARD		ISO R5151 STANDARD	

Table(cont.)

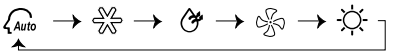
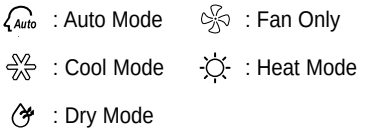
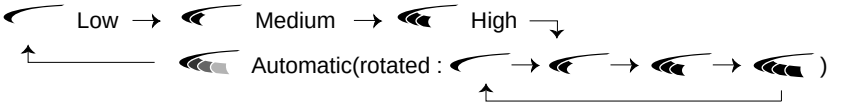
Item				Model	MH24AP1(P2)		MH26AP1(P2)	
					INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT
					MH24AP1(P2)-12	MH24AP1(P2)X	MH26AP1(P2)-12 MH26AP1(P2)-07	MH26AP1(P2)X
Type					WALL-MOUNTING MULTI SPLIT		WALL-MOUNTING MULTI SPLIT	
Perfor-mance	Cooling/Heating	1 Unit(A)		kW	3.51 / 3.51		3.51 / 3.65	
		1 Unit(B/C)			3.8 / 3.8		2.05 / 2.06	
		2 Unit(A+B/C)			7.02 / 7.6		5.56 / 5.71	
		2 Unit(B+C)			-		4.1 / 4.12	
		3 Unit(A+B+C)			-		7.61 / 7.77	
	Dehumidifying(A+B/C)			ℓ/h	1.4+1.4	-	1.4+1.0 / 1.0	-
	Noise	Cooling / Heating		dB	42 / 42	60 / 60	(–12):43 / 43, (–07):36 / 36	60 / 60
	Power			ø/V/Hz	1 / 220-240V~ / 50		1 / 220-240V~ / 50	
Power	Power Consumption	1 Unit(A)		W	1,280 / 1,280		1,370 / 1,310	
	(Cooling/Heating)	1 Unit(B/C)			1,280 / 1,280		1,590 / 1,720	
		2 Unit(A+B/C)			2, 560 / 2, 560		2,780 / 2,840	
		2 Unit(B+C)			-		1,640 / 1,490	
		3 Unit(A+B+C)			-		2,900 / 2,630	
	Operating Current	1 Unit(A)		A	5.7 / 5.7		6.0 / 5.8	
	(Cooling/Heating)	1 Unit(B/C)			5.7 / 5.7		7.2 / 7.8	
		2 Unit(A+B/C)			11.4 / 11.4		12.4 / 12.7	
		2 Unit(B+C)			-		7.5 / 6.9	
		3 Unit(A+B+C)			-		13.0 / 11.7	
	Starting Current(Cooling/Heating)			A	35		40	
Size	Outer Dimension	WxHxD		mm	790 x 245 x 165	1,000 x 790 x 310	890 x 285 x 179 795 x 258 x 179	1,000 x 790 x 310
				inch	311 x 96 x 65	394 x 311 x 122	350 x 112 x 70 313 x 102 x 70	394 x 311 x 122
	Weight			kg	7.7	69	8.5 / 7.5	71
	Refrigerant Pipe	Liquid		OD(mm)xL(m)	ø6.35 x 7.5		ø6.35 x 7.5	
		Gas			ø9.52 x 7.5		ø9.52 x 7.5	
	Drain Hose			ID(mm)	ø17		ø17	
	Compressor	Type			-	ROTARY	-	ROTARY
		Model Name			-	G8C124JU1EL	-	G8C124JU1EL G8C150JU1EH
		Capacitor			-	35 / 35	-	35 / 35
		Motor	Type(Model)		-	INDUCTION MOTOR	-	INDUCTION MOTOR
			Rated Output(A+B/C)	W	-	1,060+1,060	-	1,060+1,250
	Blower	Type			CROSS-FAN	PROPELLER	CROSS-FAN	PROPELLER
		Motor	Type		RESIN	STEEL	RESIN	STEEL
			Rated Input	W	35	150	(–12):35 / (–07):35	150
Heat Exchanger					2ROW 12STEP	2ROW 18STEP	2ROW 12STEP 2ROW 10STEP	2ROW 16STEP 2ROW 20STEP
Refrigerant Control Unit					A,B-UNIT:CAPILLARY TUBE		A-UNIT:CAPILLARY TUBE B,C-UNIT:ELEC.EXPANSION V/V	
Refrigerant to Change(R410A)					A-UNIT:1,000g / B-UNIT:1,000g		A-UNIT:910g / B-UNIT:1,290g	
Additional Refrigerant (Refrigerant must be added if the piping)				g/m	16(A,B-UNIT)	-	16(A-UNIT) 21(B+C-UNIT)	-
Protection Device					-	RAC12128-9622	-	RAC12128-9622 RAC12122-9622
Standard Conditions					ISO R5151 STANDARD		ISO R5151 STANDARD	

MEMO

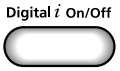
2. Operating Instructions & Technical Document

2-1 Operating Instructions

2-1-1 The Feature of Key in remote control

No	NAMED OF KEY	FUNCTION OF KEY
1	 (On/Off)	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 	Mode selection button. Each time you press this button Mode is changed in the following order   : Auto Mode : Fan Only : Cool Mode : Heat Mode : Dry Mode
4		Fan speed adjustment button. Each time you press this button, FAN SPEED is changed in the following order.  Low → Medium → High Automatic(rotated : → → →)
5		Swing 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		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.

The Feature of Key in remote control(cont.)

No	NAMED OF KEY	FUNCTION OF KEY
8		On Timer button. 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 set the operating time, press the  button one or more times until the required time display.
9		Off Timer button. 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 set the operating time, press the  button one or more times until the required time display.
10		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.
11		Digital *i* On/Off button. If you want to turn off the display during operation press the  button.

2-1-2 Name & Function of Key in remote control

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

Room Temp	Operation Type
Tr≥ 21°C+ΔT	Cool Operation (Set Temp:24˚C+ΔT)
21°C +ΔT>Tr	Heat Operation (Set Temp:22˚C+ΔT)

   ΔT= -1°C, -2°C, 0°C, +1°C, +2°C
   ΔT is controlled by setting temperature up/down key of remote control

2. COOL MODE : The unit operates according to the difference between the setting and room temperature. (18°C~30°C)

3. HEAT MODE : The unit operates according to the difference between the setting and room temperature.(16°C~30°C)
   *Prevention against cold wind : In order to prevent the cool air from flowing out at the heat mode, the indoor fan does not operate or operates very slowly in the following cases. At this time, the indoor heat exchanger will be preheating.
   - For 3~5 minutes after the initial operation
   - For deicing operation
   - The operation of an indoor fan in accordance with the temperature of an indoor heat exchanger

The temperature of indoor heat exchanger	Indoor fan speed
below 28˚C	off
28˚C~below 34˚C	LL Speed
34˚C~below 40˚C	L Speed
above 40˚C	Setting Speed

   *High temperature release function : It is a function to detect an outdoor overload by the sensor of an indoor heat exchanger and to turn the outdoor fan or the compressor ON/OFF for safety.
   *Deice : Deicing operation is controlled by indoor unit's heat exchanger temperature and accumulating time of compressor's operation.
   Deice ends by sensing of the processing time by deice 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 control.
   *The air conditioner starts up in the most suitable mode for the room temperature:

Room Temperature	Operating Mode	Temperature Setting
Less than 21˚C	Heat	22˚C approx.
21˚C or above	Cool	24˚C approx.

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. 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 30 minutes 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 30 minutes to 24 hours.

11. SELF DIAGNOSIS

Error Mode	DISPLAY 7-SEGMENT		Remark
	Operation Off	Operation On	
Indoor unit room temperature sensor error (open or short)	OFF	E1	
Indoor unit heat exchanger temperature sensor error(open or short)	OFF	E2	
Indoor FAN MOTOR error : Keep the RPM value 450 below for 15 seconds	OFF	E3	
EEPROM error	OFF	E6	
Error in option In case of No option set-up In case of option data error	All lamp blinking	All lamp blinking	

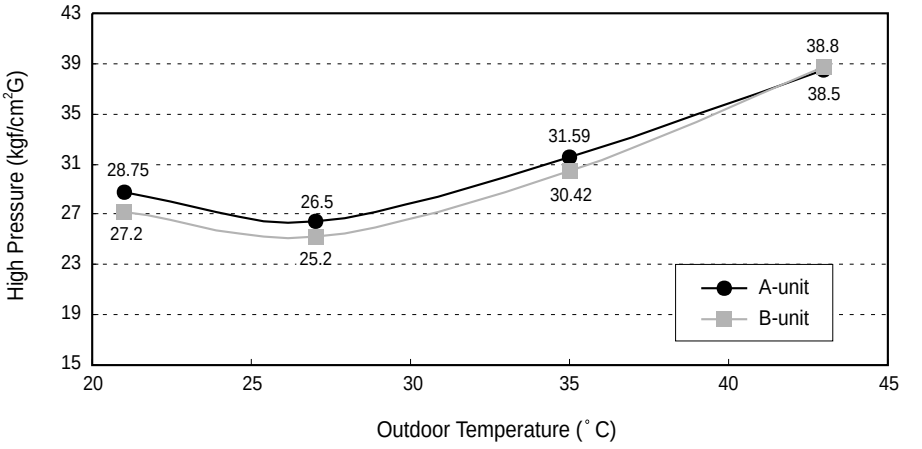
12. BUZZER SOUND : Whenever the On/Off button is pressed or whenever change occurs to the condition which is set up or select, the compulsory operation mode, buzzer is sounded "beep".

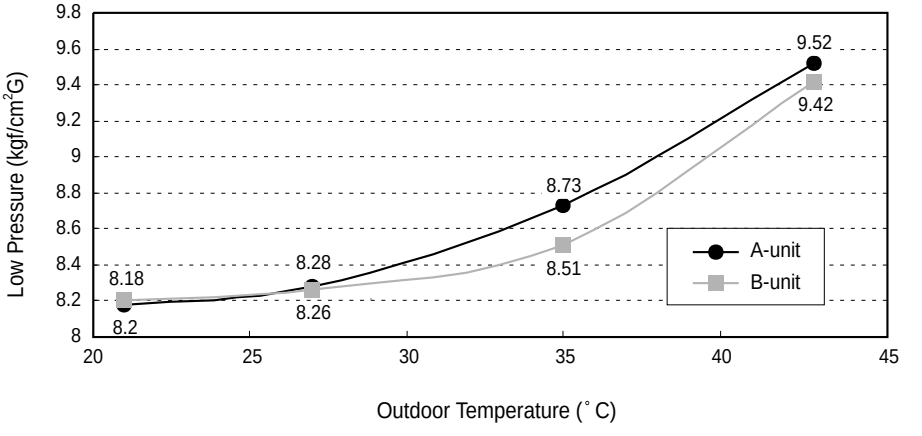
2-2 Technical Document (Pressure Graph)

2-2-1 MH18AP1(P2)

■ Cooling(7.5m–Piping)

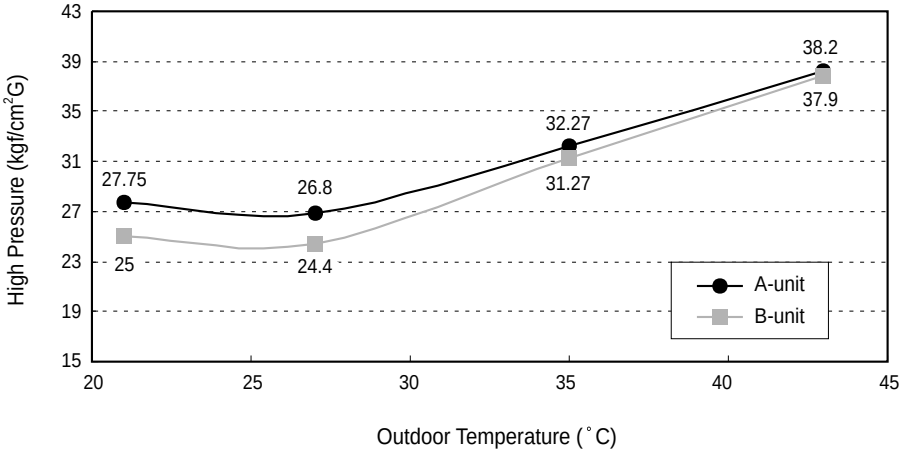
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Cooing	27/19	21/15	28.75	27.2	8.18	8.2
	27/19	27/20	26.5	25.2	8.28	8.26
	27/19	35/24	31.59	30.42	8.73	8.51
	27/19	43/26	38.5	38.8	9.52	9.42

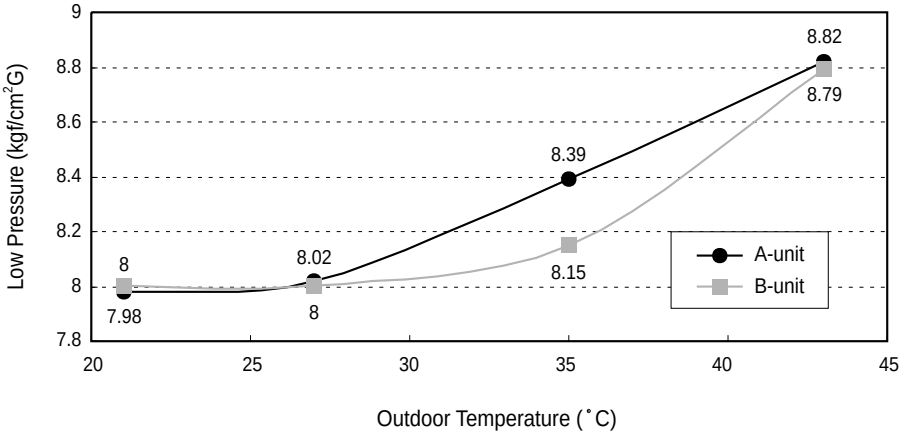




■ Cooling(15m–Piping)

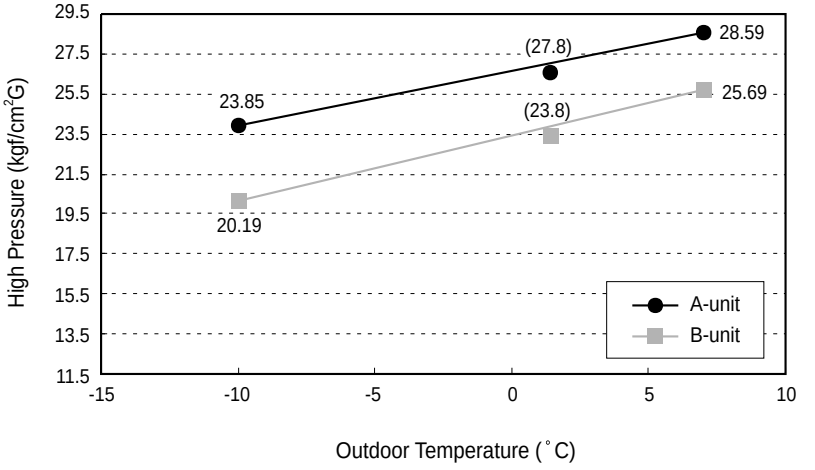
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Cooing	27/19	21/15	27.75	25.0	7.98	8.0
	27/19	27/20	26.8	24.4	8.02	8.00
	27/19	35/24	32.27	31.27	8.39	8.15
	27/19	43/26	38.2	37.9	8.82	8.79

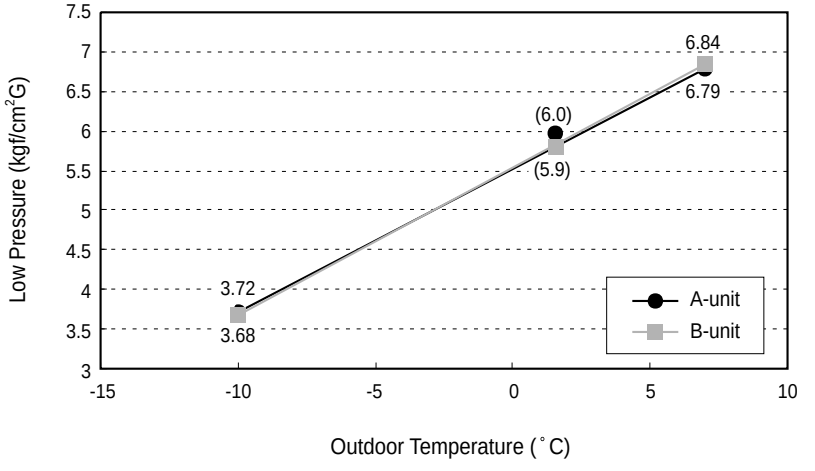




■ Heating(7.5m–Piping)

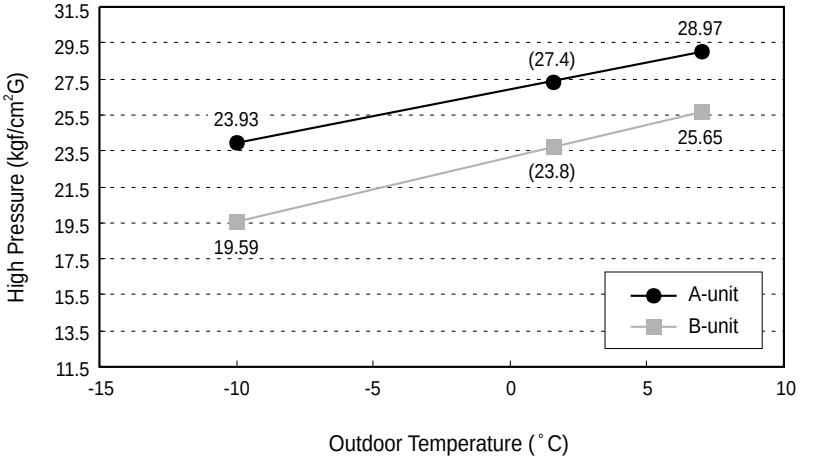
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Heating	20/15	–10	23.85	20.19	3.72	3.68
	20/15	7	28.59	25.69	6.79	6.84

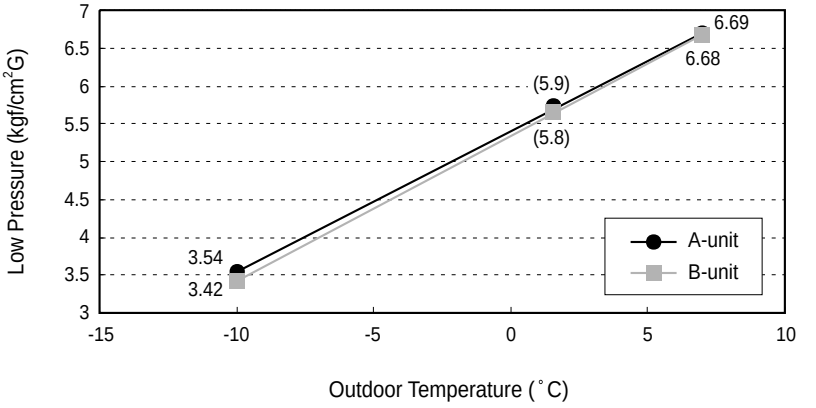




■ Heating(15m–Piping)

	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Heating	20/15	–10	23.93	19.59	3.54	3.42
	20/15	7	28.97	25.65	6.69	6.68

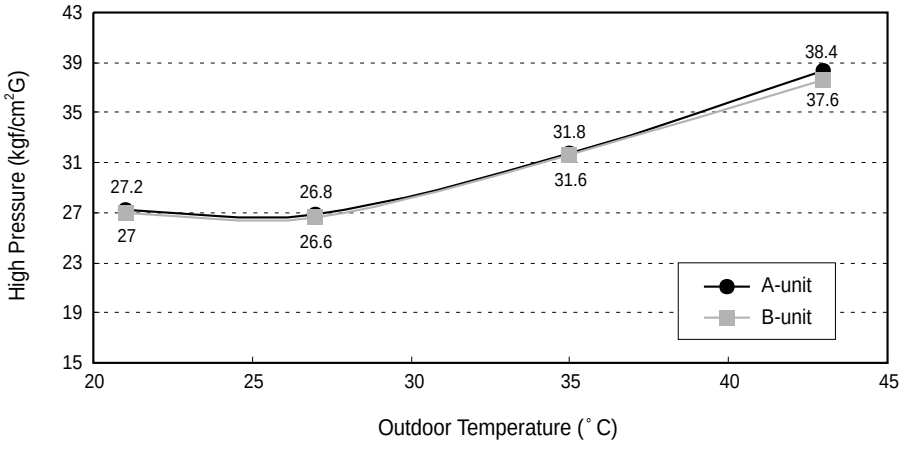


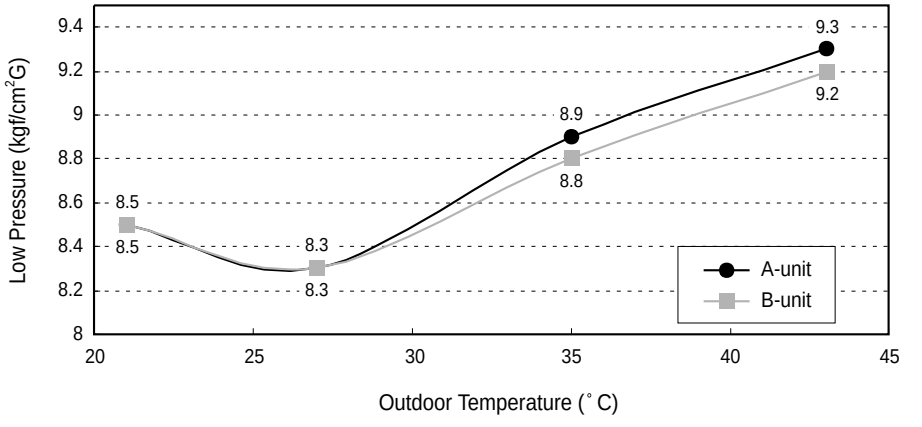


2-2-2 MH19AP1(P2)

■ Cooling(7.5m–Piping)

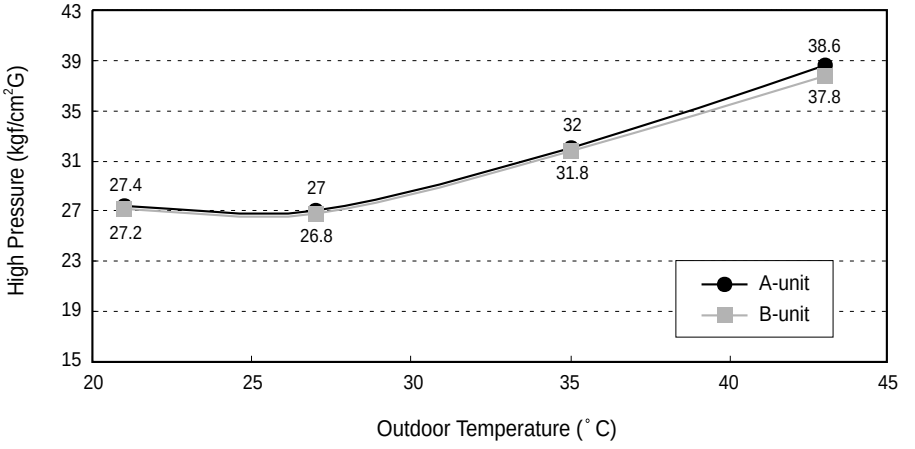
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Cooing	27/19	21/15	27.2	27.0	8.5	8.5
	27/19	27/20	26.8	26.6	8.3	8.3
	27/19	35/24	31.8	31.6	8.9	8.8
	27/19	43/26	38.4	37.6	9.3	9.2

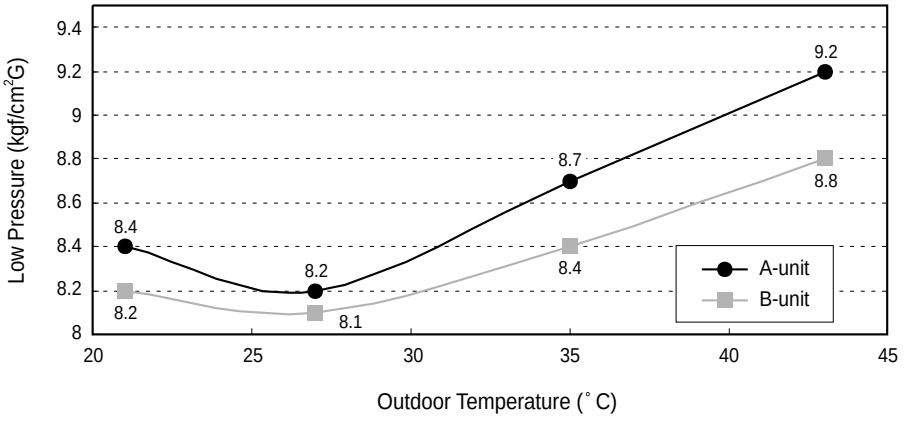




■ Cooling(15m–Piping)

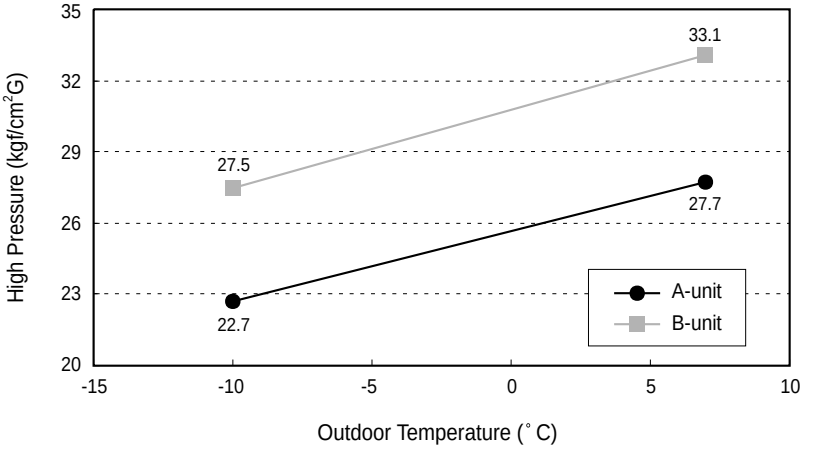
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Cooing	27/19	21/15	27.4	27.2	8.4	8.2
	27/19	27/20	27.0	26.8	8.2	8.1
	27/19	35/24	32.0	31.8	8.7	8.4
	27/19	43/26	38.6	37.8	9.2	8.8

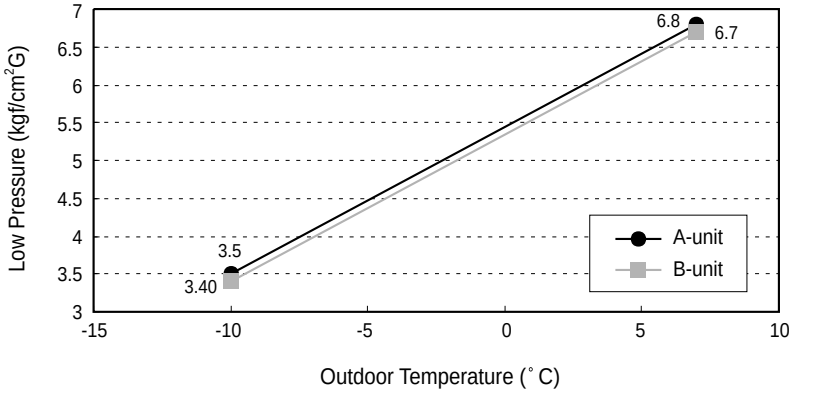




■ Heating(7.5m–Piping)

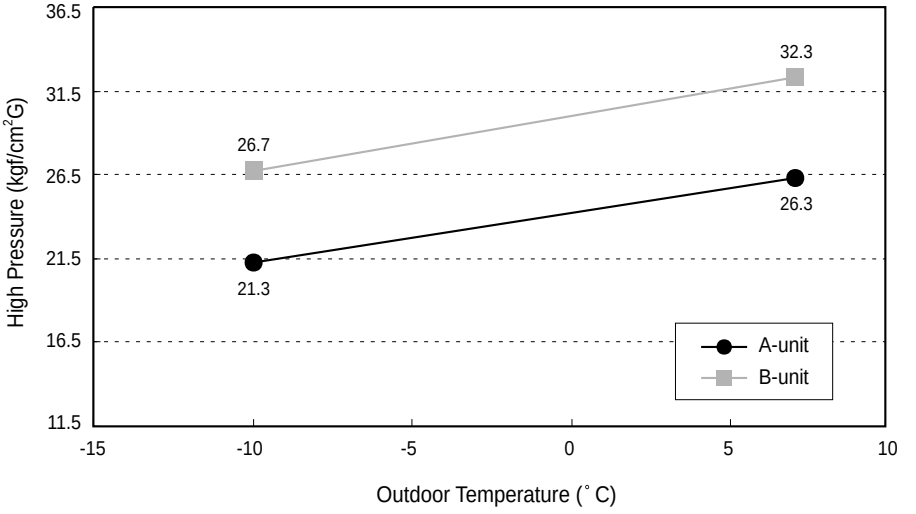
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Heating	20/15	–10	22.7	27.5	3.5	3.4
	20/15	7	27.7	33.1	6.8	6.7

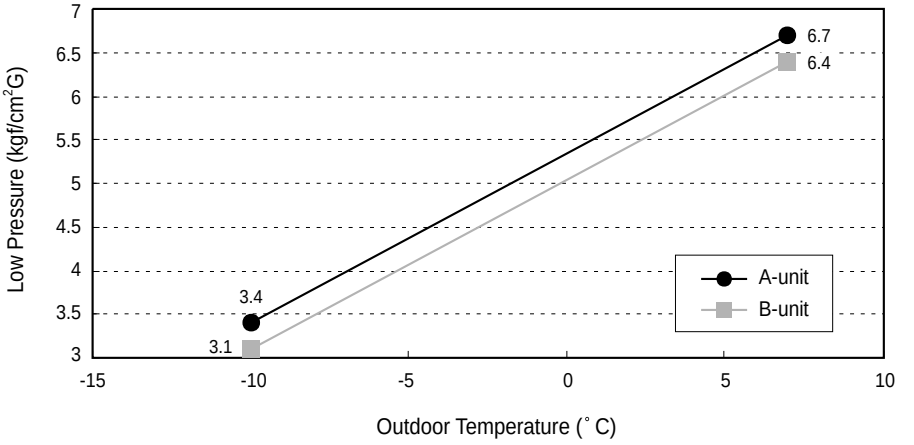




■ Heating(15m–Piping)

	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit (7.5m)	B-unit (32.5m)
Heating	20/15	–10	21.3	26.7	3.4	3.1
	20/15	7	26.3	32.3	6.7	6.4

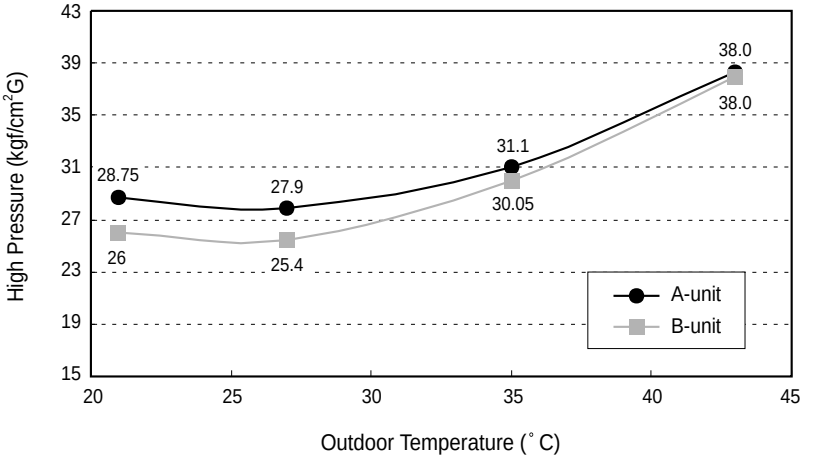


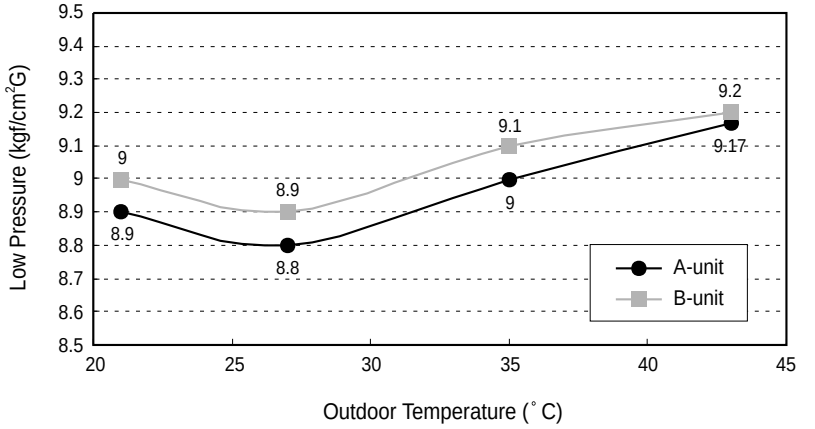


2-2-3 MH24AP1(P2)

■ Cooling(7.5m–Piping)

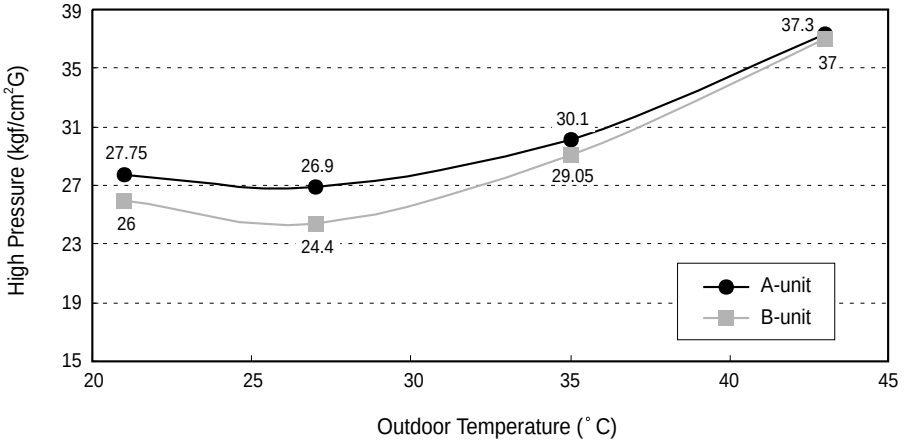
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Cooing	27/19	21/15	28.75	26	8.9	9.0
	27/19	27/20	27.9	25.4	8.8	8.9
	27/19	35/24	31.1	30.05	9.0	9.1
	27/19	43/26	38.0	38.0	9.17	9.2

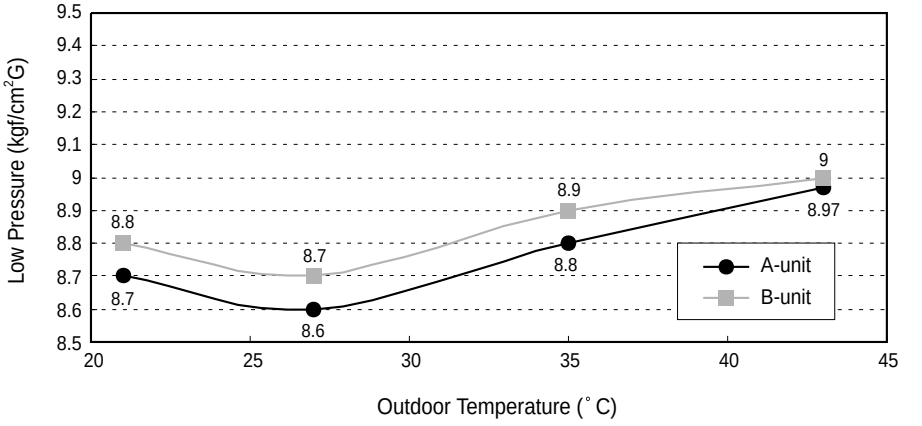




■ Cooling(15m–Piping)

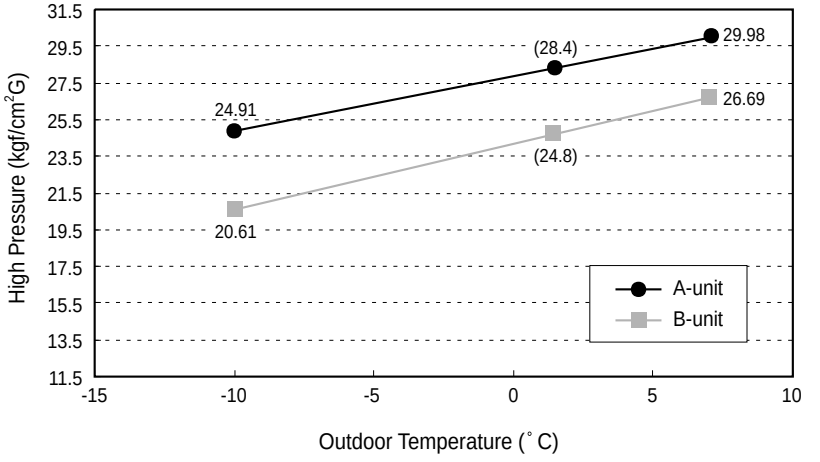
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Cooing	27/19	21/15	27.75	26.0	8.7	8.8
	27/19	27/20	26.9	24.4	8.6	8.7
	27/19	35/24	30.1	29.05	8.8	8.9
	27/19	43/26	37.3	37.0	8.97	9.0

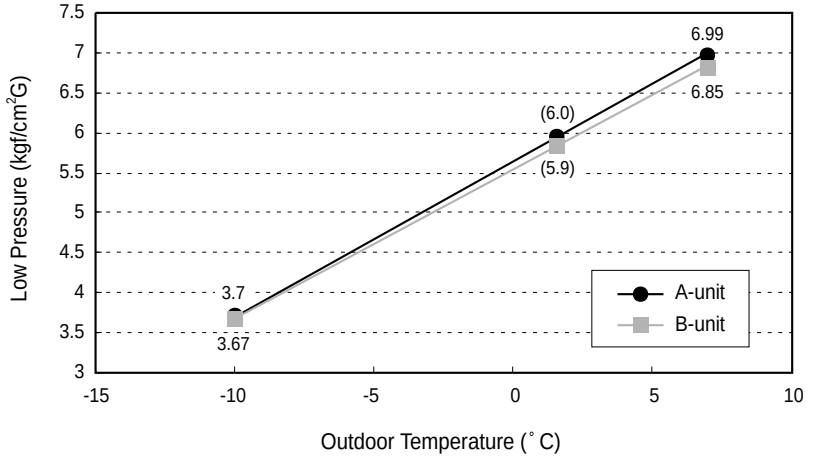




■ Heating(7.5m–Piping)

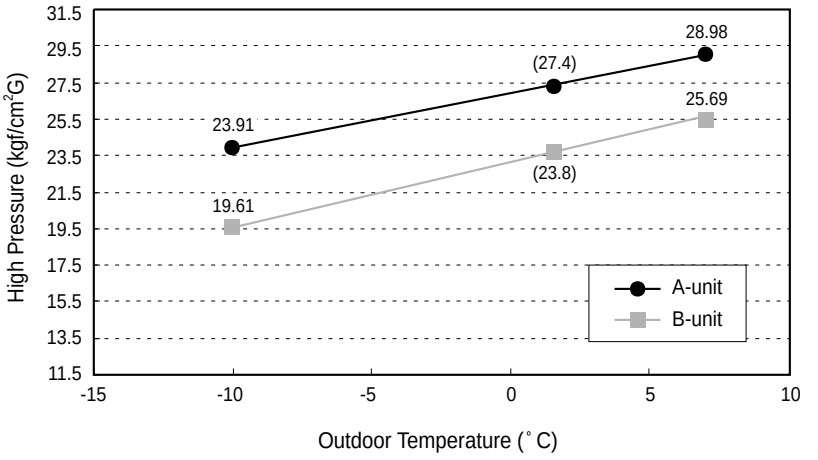
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Heating	20/15	–10	24.91	20.61	3.70	3.67
	20/15	7	29.98	26.69	6.99	6.85

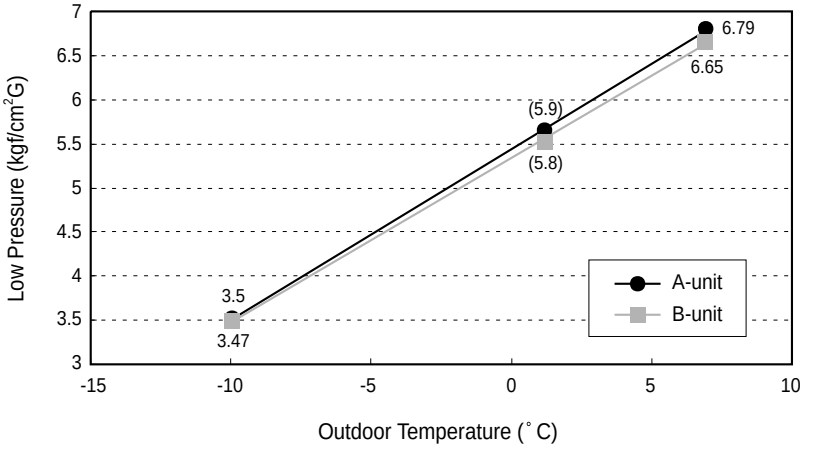




■ Heating(15m–Piping)

	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Heating	20/15	–10	23.91	19.61	3.50	3.47
	20/15	7	28.98	25.69	6.79	6.65

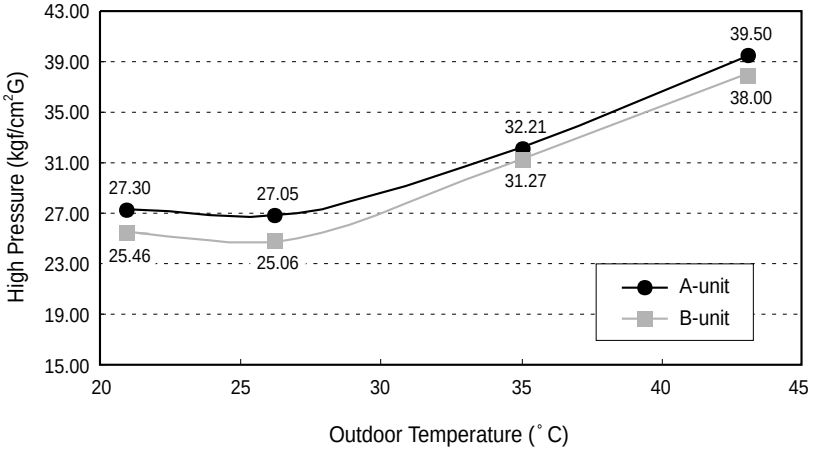


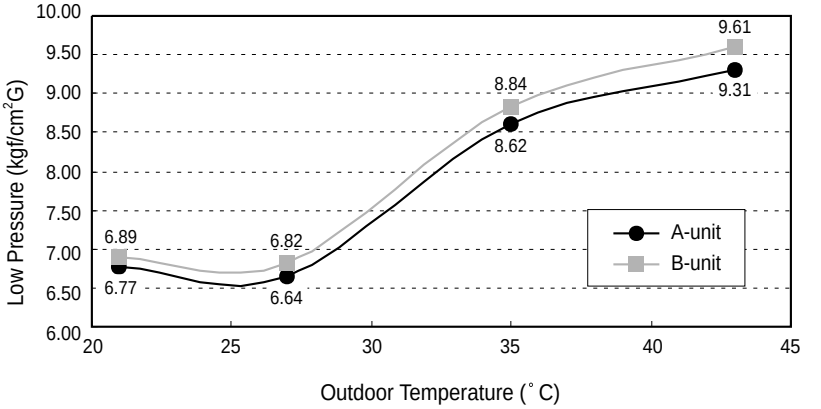


2-2-4 MH26AP1(P2)

■ Cooling(7.5m–Piping)

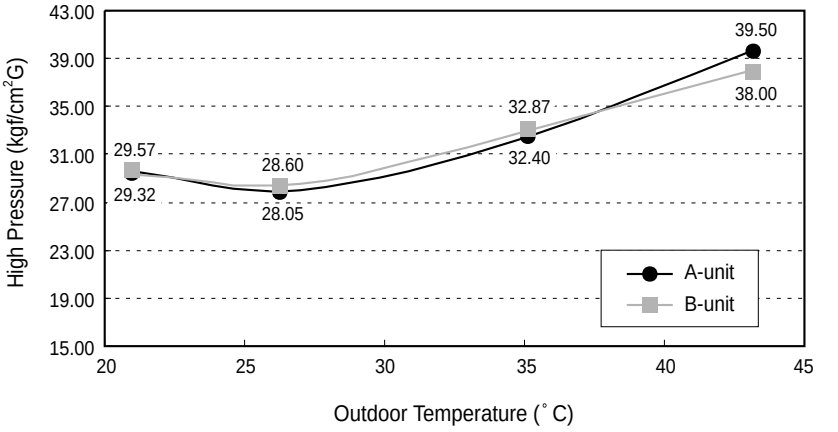
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Cooing	27/19	21/10	27.30	25.46	6.77	6.89
	27/19	27/19	27.05	25.06	6.64	6.82
	27/19	35/24	32.21	31.27	8.62	8.84
	27/19	45/26	39.50	38.00	9.31	9.61

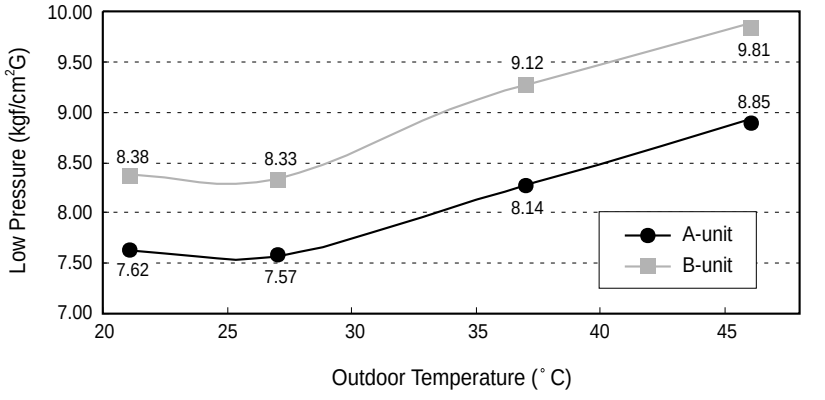




■ Cooling(15m–Piping)

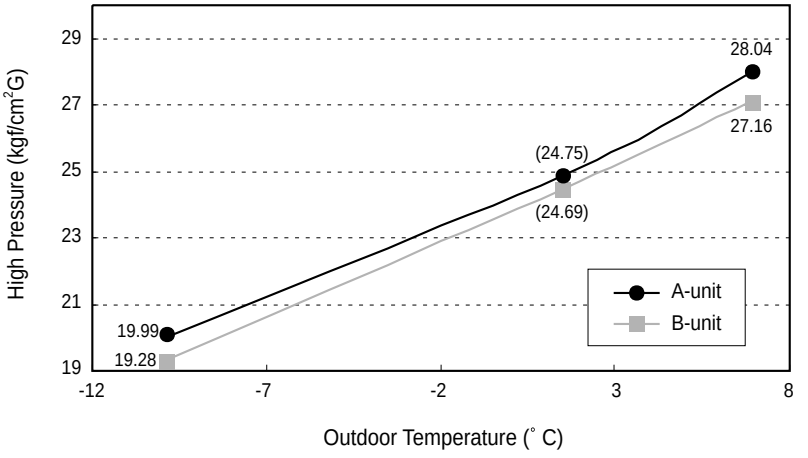
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Cooing	27/19	21/10	29.57	29.32	7.62	8.38
	27/19	27/19	28.05	28.60	7.57	8.33
	27/19	35/24	32.40	32.87	8.14	9.12
	27/19	45/26	39.50	38	8.85	9.81

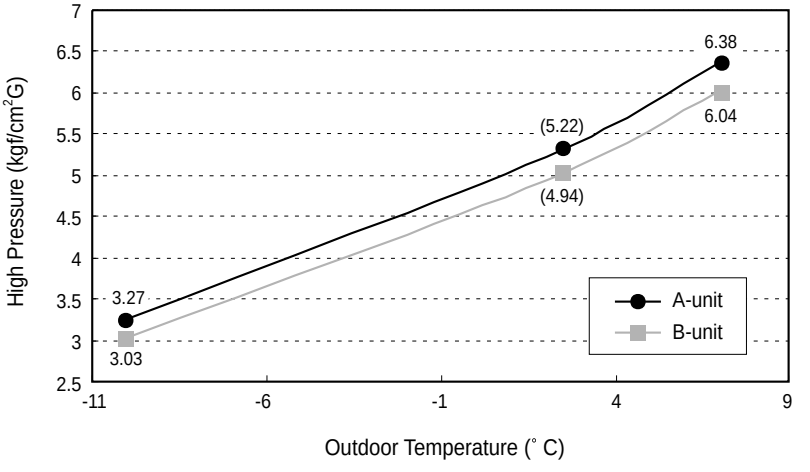




■ Heating(7.5m–Piping)

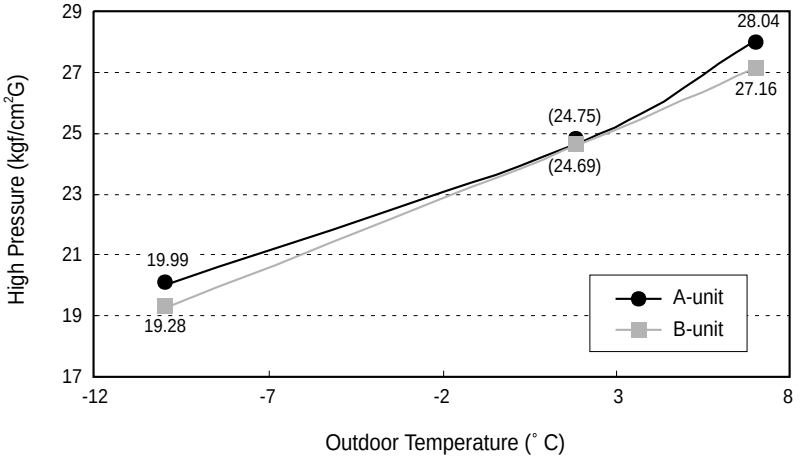
	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Heating	20/15	–10	19.99	19.28	3.27	3.03
	20/15	2	24.75	24.69	5.22	4.94
	20/15	7	28.04	27.16	6.38	6.04

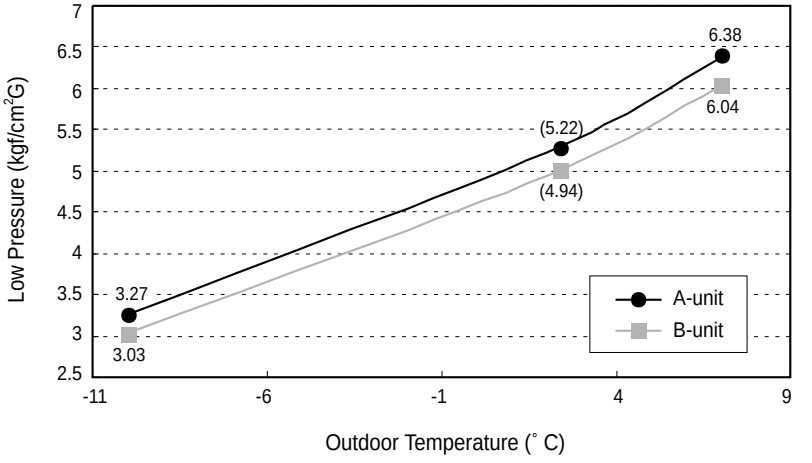




■ Heating(15m–Piping)

	Indoor (DB/WB)	Outdoor (DB)	High Pressure		Low Pressure	
			A-unit	B-unit	A-unit	B-unit
Heating	20/15	–10	19.99	19.28	3.27	3.03
	20/15	2	24.75	24.69	5.22	4.94
	20/15	7	28.04	27.16	6.38	6.04

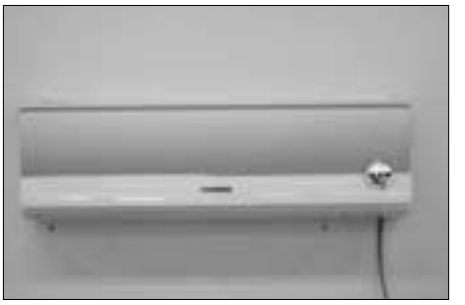
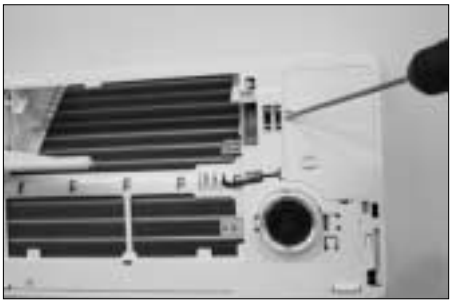
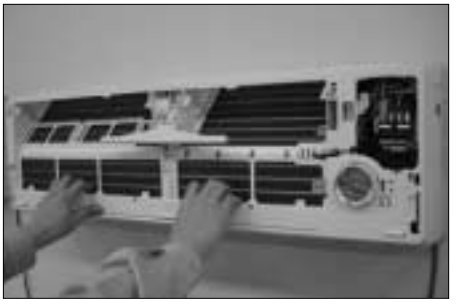


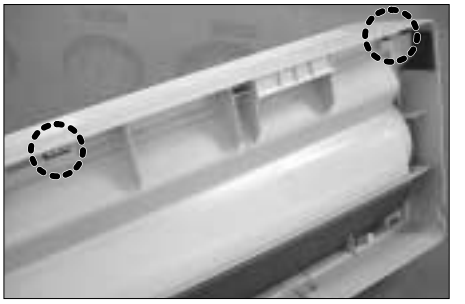
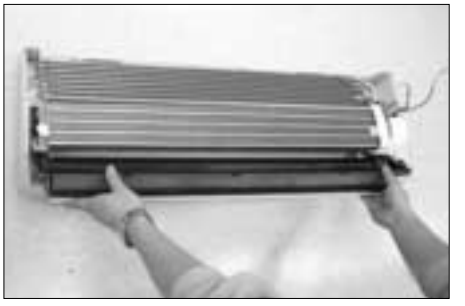


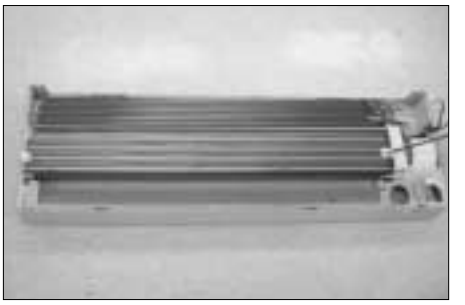
3. Disassembly and Reassembly

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

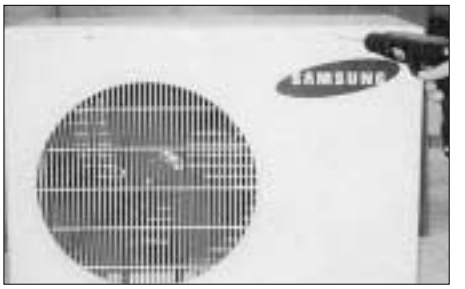
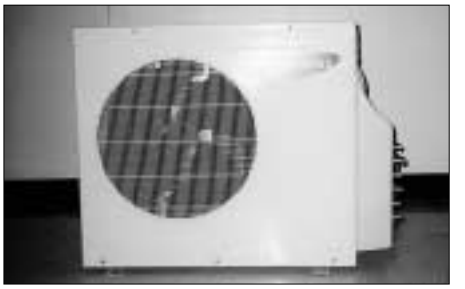
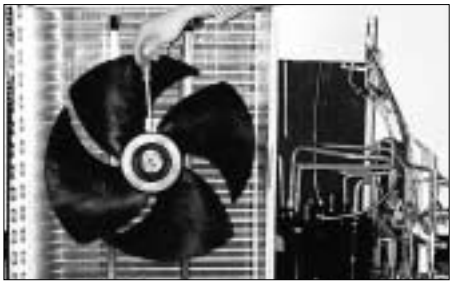
3-1 Indoor Unit

No	Parts	Procedure	Remark
1	Front Panel	1) Stop the air conditioner operation and block the main power. 2) Detach tape of Front Panel upper.	
		3) Slide the lower Front Grille down, then disassemble it by pulling it forwards. 4) Open the upper Front Grille by pulling right and left sides of the Grille. 5) Take the left and right Filter out. 6) Loosen one of the right screw and detach the Terminal Cover. 7) Detach the thermistor from the Front Grille.	
		8) Loosen 5 fixing screws of Front Grille.	
		9) Pull the lower left and right of discharge softly for the outside cover to be pulled out.	

No	Parts	Procedure	Remark
		10) At first, press the left and center hook of the back side of the Panel Grille with the thumb to remove the hook. And press the right of the upper side of the Panel Grille with the fingers. And then disassemble the Panel Grille.	 
2	Electrical Parts (Main PCB)	1) Take all the connector of PCB upper side out.(Including Power Cord) 2) Detach the outdoor unit connection wire from the Terminal Block. 3) If pulling the main PCB up, it will be taken out.	
3	Tray Drain	1) Pull Tray Drain out from the Back Body.	

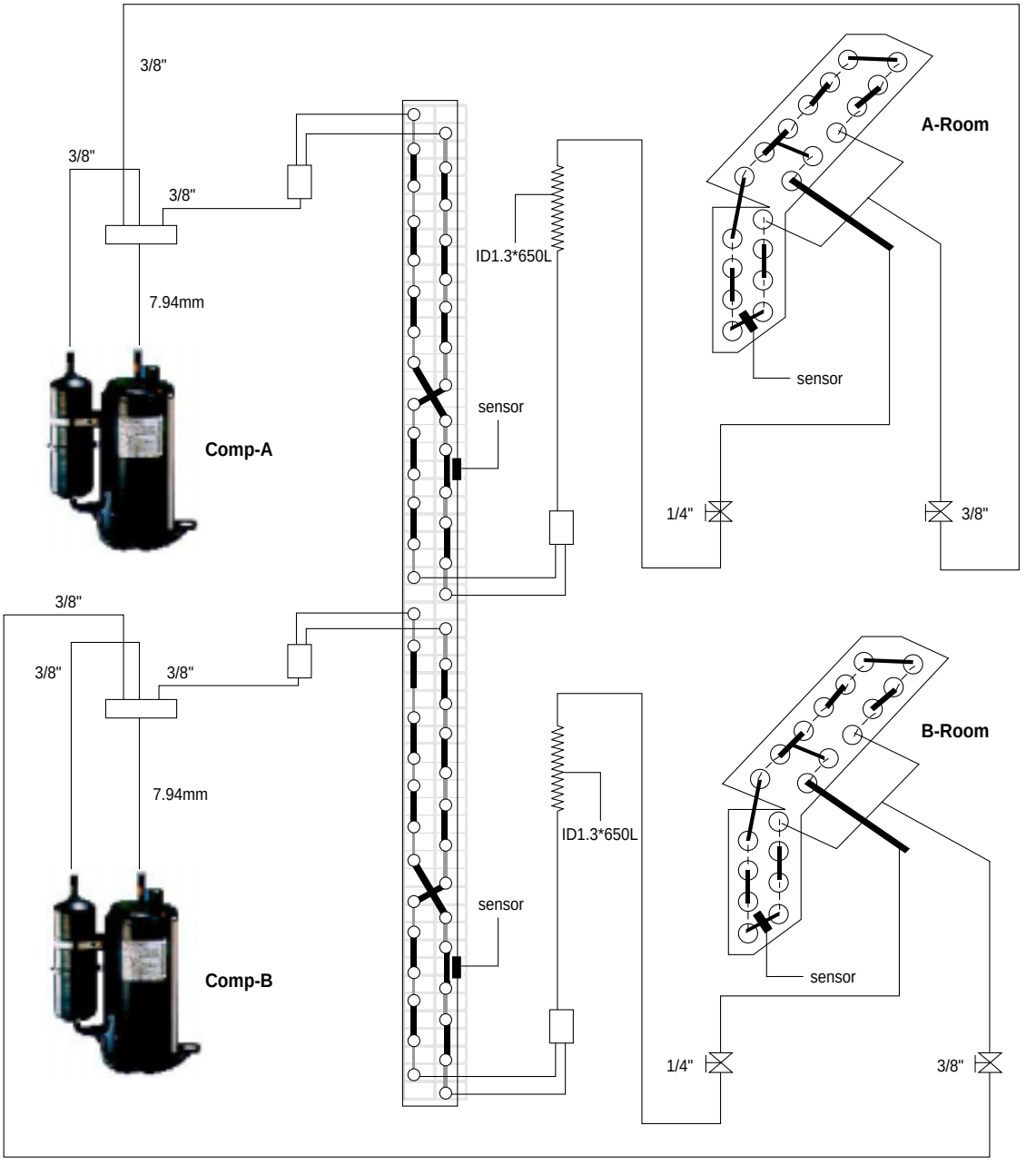
No	Parts	Procedure	Remark
4	Heat Exchanger	1) Loosen 2 fixing earth screws of right side. 2) Detach the Connection Pipe. 3) Detach the Holder Pipe at the rear side. 4) Loosen 3 fixing screws of right and left side.	
		5) Detach the Heat Exchanger from the indoor unit.	 
5	Fan Motor & Cross Fan	1) Loosen 2 fixing screws and detach the Motor Holder. 2) Loosen 1 fixing screw of Fan Motor. (with a M3 wrench) 3) Detach the Fan Motor from the Fan.	
		4) Detach the Fan from the left Holder Bearing.	

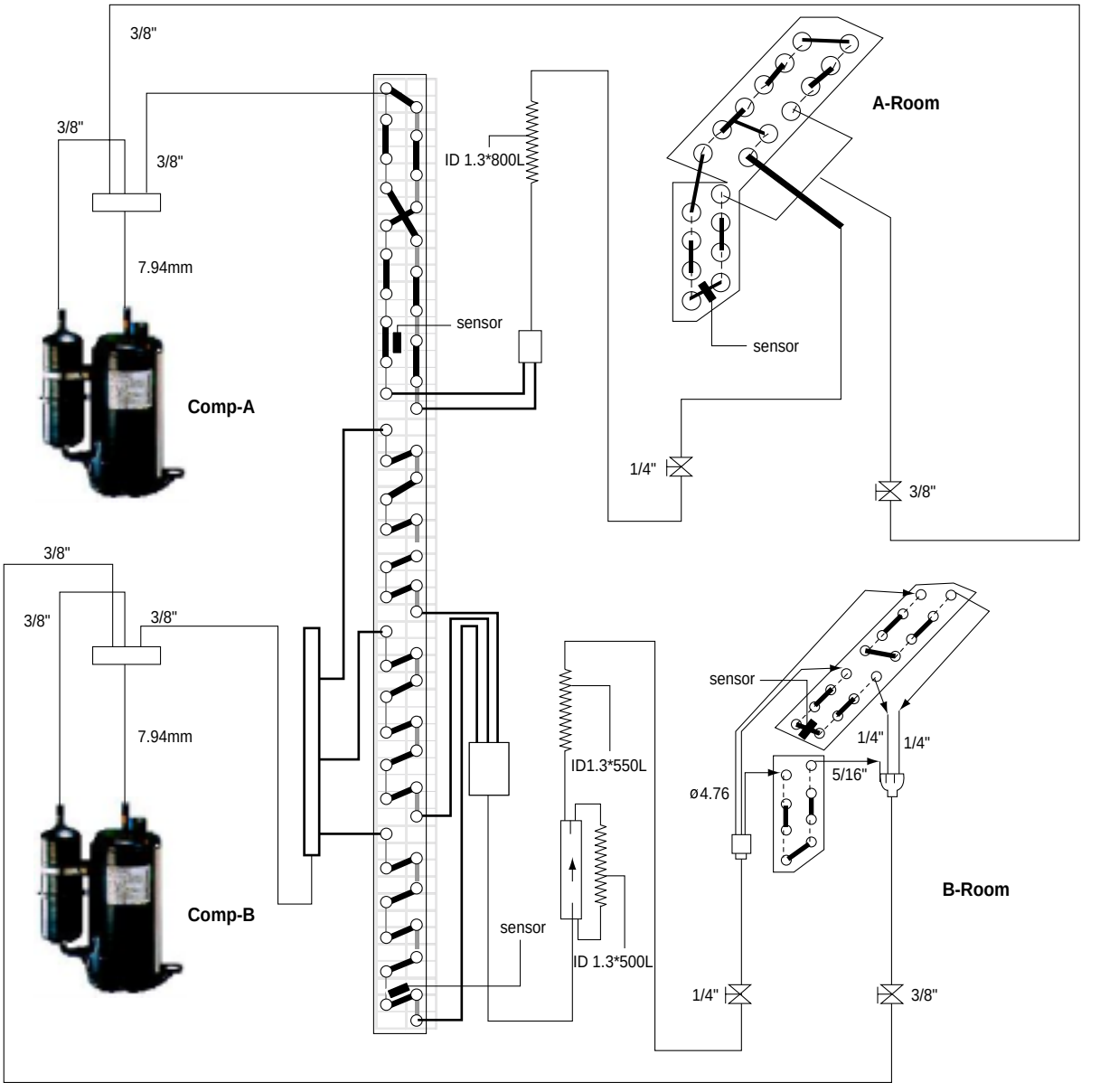
3-2 Outdoor Unit

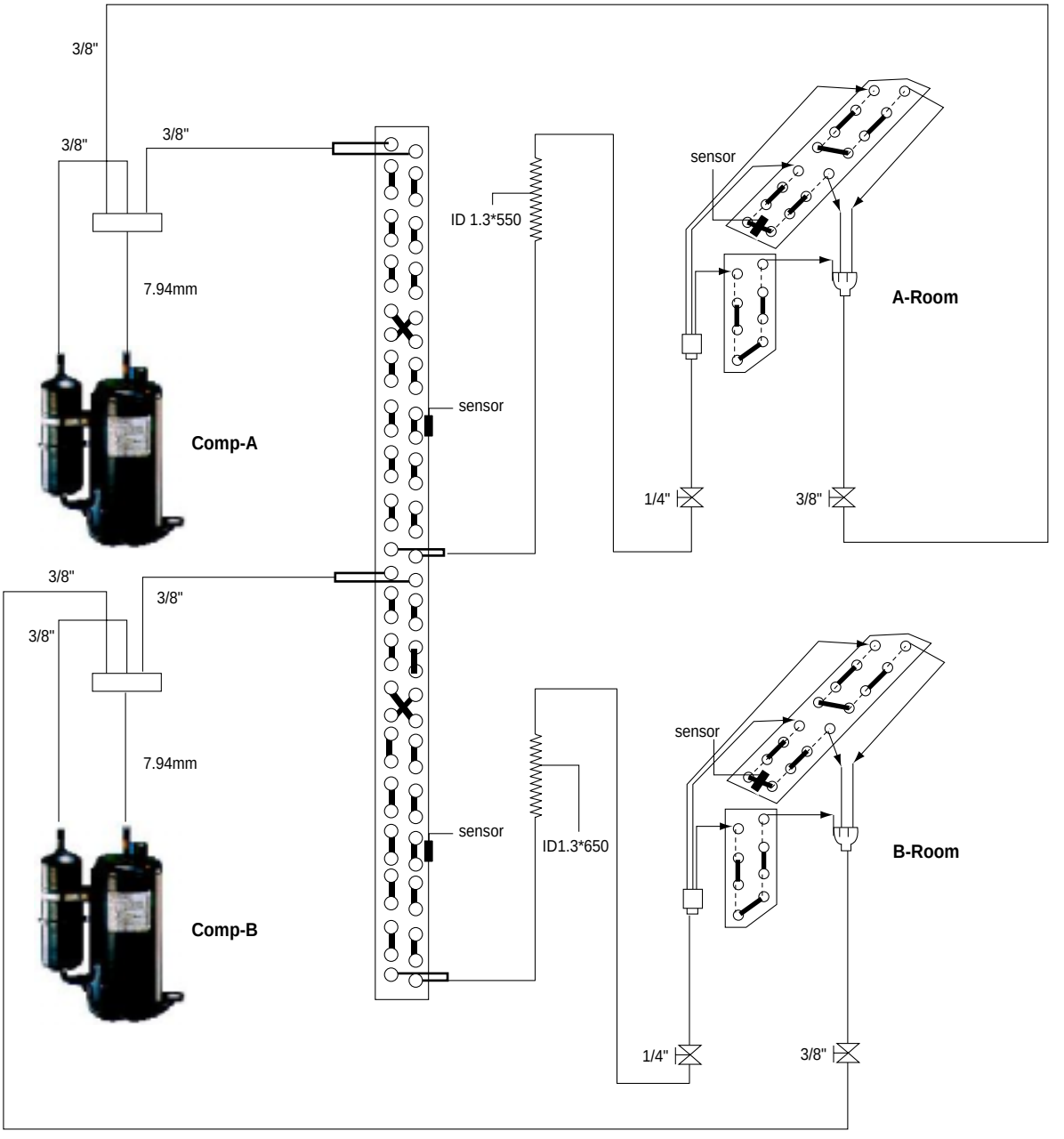
No	Parts	Procedure	Remark
1	Cabinet	1) Turn off the unit and remove the power cable. 2) Detach the Top Cover. 3) Detach the Control Box Cover. 4) Unplug the Ass'y Cable. 5) Detach the Cabinet-Side. 6) Detach the Cabinet-Front. * When you assemble the parts, check if the each parts and Component Electric Box are fixed firmly.	<MH18AP1(P2)X/MH19AP1(P2)X>  <MH24AP1(P2)X/MH26AP1(P2)X> 
2	Fan Motor & Propeller Fan	1) Detach the Nut Flange. (Turn to the clockwise) 2) Disassemble the Propeller Fan.	<MH18AP1(P2)X/MH19AP1(P2)X>   <MH24AP1(P2)X/MH26AP1(P2)X> 

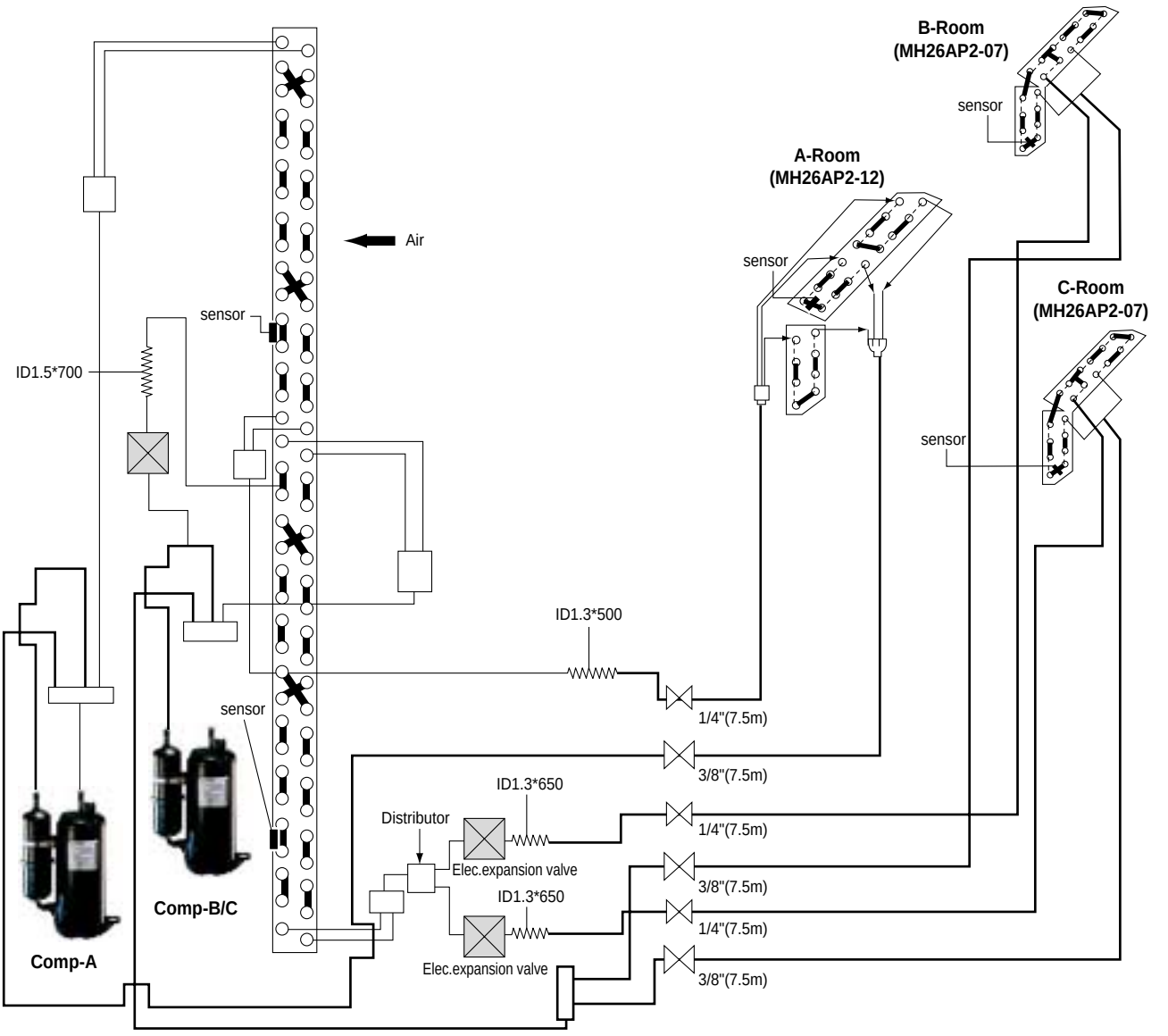
4. Refrigerating Cycle Diagram

4-1 MH18AP1(P2)X




3/8"
3/8"
3/8"
7.94mm
Comp-A
ID 1.3*800L
sensor
A-Room
sensor
1/4"
3/8"
3/8"
3/8"
3/8"
7.94mm
Comp-B
ID1.3*550L
sensor
ID 1.3*500L
sensor
1/4"
1/4"
5/16"
ø4.76
B-Room
1/4"
3/8"


3/8"
3/8"
3/8"
7.94mm
Comp-A
sensor
ID 1.3*550
sensor
A-Room
1/4"
3/8"
3/8"
3/8"
3/8"
7.94mm
Comp-B
sensor
ID1.3*650
sensor
B-Room
1/4"
3/8"


B-Room
(MH26AP2-07)
sensor
A-Room
(MH26AP2-12)
sensor
C-Room
(MH26AP2-07)
sensor
Air
sensor
ID1.5*700
ID1.3*500
1/4"(7.5m)
3/8"(7.5m)
sensor
ID1.3*650
Distributor
1/4"(7.5m)
Elec.expansion valve
3/8"(7.5m)
ID1.3*650
1/4"(7.5m)
Elec.expansion valve
3/8"(7.5m)
Comp-B/C
Comp-A

5. Set Up the Model Option

5-1 Setting Option Setup Method

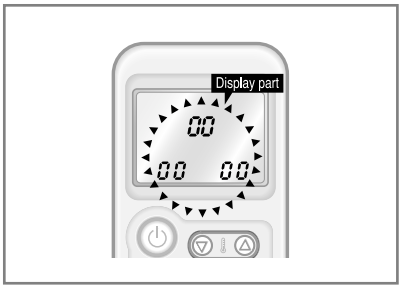
ex) Option No. : 066064- 170373

Step 1 : **Enter the Option Setup mode.**

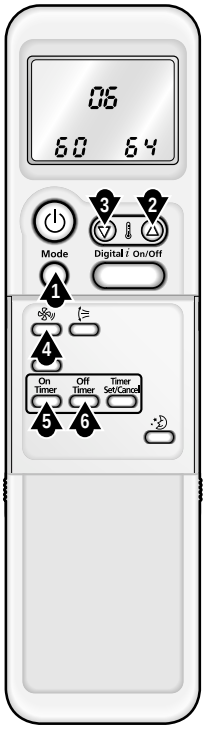
1st Take out the batteries of remote control.

2nd Press the temperature (▽ / △) button simultaneously and insert the battery again.

3rd Make sure the remocon display shown as 00 00 00 .



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



✳ Setting is not required if you must 0 a value which has a 0 default.

1

The default value is 00 00 00 .
Otherwise, push the Mode button to 0 .
Every time you push the button, the display panel reads 1 or 0 repeatedly.

2

Push the △ button to set the display panel to 6 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

3

Push the ▽ button to set the display panel to 6 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

4

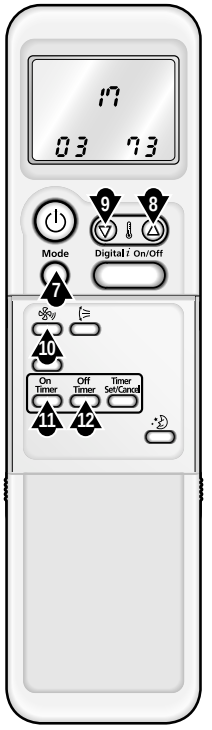
Do not touch the Fan Speed button because its default is 0 .
Unless the display panel reads 0 , push the Fan Speed button to 0 .

5

Push the On Timer button to set the display panel to 6 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

6

Push the Off Timer 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.



✳ Setting is not required if you must 0 a value which has a 0 default.

7

Press Mode button, then the default value is 00 00 .

8

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

Do not touch the ▼ button because its default is 0.
Unless the display panel reads 0, push the ▼ button to 0.

10

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.

11

Push the On Timer 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.

12

Push the Off Timer 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.

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

Press the Mode Selection key, Mode to set the display part to 0 and check the display part.

➡ The display part shows 06 60 64 .

Press the Mode Selection key, Mode to set the display part to 1 and check the display part.

➡ The display part shows 17 03 13 .

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 OPERATION ICON(≋) lamp of the display 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
MH18AP1(P2)-09	024553-106340
MH19AP1(P2)-07	023553-10620c
MH19AP1(P2)-12	067503-106362
MH24AP1(P2)-12	067533-106362
MH26AP1(P2)-07	025773-10620c
MH26AP1(P2)-12	067553-106351

6. Troubleshooting

6-1 Items to be checked first

1. The input voltage should be rating voltage ±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 4 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.

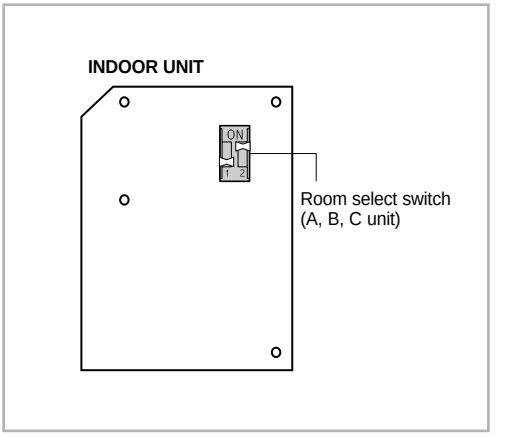
3. When a problem occurs due to the contents illustrated in the table below it is a symptom not related to the malfunction of the airconditioner.

No	Operation of air conditioner	Explanation
1	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
2	Fan speed setting is not allowed in AUTO(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.
3	Compressor stops operation intermittently in DRY( ) mode.	Compressor operation is controlled automatically in DRY mode depending on the room temperature and humidity.
4	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 10 minutes (maximum) until the deice is completed.
5	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.
6	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.
7	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.
8	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.

6-2 Checking and Testing operations

To complete the installation, perform the following checks and tests to ensure that the air conditioner is operating correctly.

1. Review all the following elements in the installation:
   - Installation site strength
   - Piping connection tightness to detect any gas leakages
   - Connection wiring
   - Heat-resistant insulation of the piping
   - Drainage
   - Earthing wire connection
   - Correct operations (follow the steps below)
   - Room select switch in the indoor unit



ROOM NO	Room select switch	
	1(#51)	2(#52)
A unit	ON	ON
A unit	ON	OFF
B unit	OFF	OFF
C unit	OFF	ON

2. Apply the power to the outdoor unit.
   - Check the fuse (250V~, 5A) : The fuse is opened when the power line (L, N) is short.

3. Check the connection of PCB communication of outdoor unit.
   (Check whether the red LED of outdoor unit PCB is flickering.)

   • The communication lamp is flickering after the display of each unit on the outdoor PCB display part. (every one second).
   LED is not flickering, if the connection is bad or the room select switch is located in the wrong position.

   - LED lamp (red) flickering after display of A (0.5 sec)
   - LED lamp (red) flickering after display of B (0.5 sec)
   - LED lamp (red) flickering after display of C (0.5 sec)

   Note : PCB switch C is used for triple split multi air conditioner.

   Result: If all of three units display lamps are flickering, the connection wires and the room option connections are good.

● If the lamp is not flickering, check as follows:

A. Check the display part of indoor unit of each unit (A,B) after outdoor unit PCB switch S/W-A is on.
   Check the status of each unit indoor room select switch. (Adjust the select switch suitable to the unit A, B.)

   - A unit : A
   - B unit : b
   - C unit : C

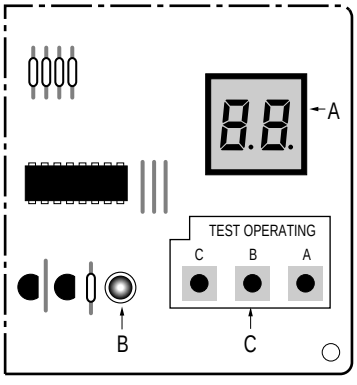
B. Check the communication connection of outdoor unit PCB (Check whether the red LED of outdoor unit PCB is flickering).
   The communication lamp is flickering after the display of each unit on the outdoor unit PCB. (every one second)

   - LED lamp (red) is flickering after display of A (0.5 sec)
   - LED lamp (red) is flickering after display of B (0.5 sec)
   - LED lamp (red) is flickering after display of C (0.5 sec)

Result: If all of three units display lamps are flickering, the connection wires and the room option connections are good.

■ MH18–/MH19–/MH24–

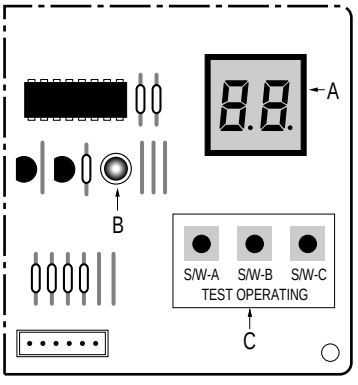
OUTDOOR UNIT



A : PCB display
B : Red LED
C : PCB switch

■ MH26–

OUTDOOR UNIT



A : PCB display
B : Red LED
C : PCB switch

The error indicated on the PCB display of outdoor unit

Display	Explanation	Remark
Er→t0	Outdoor sensor error (Short/Open)	Be sure to check after applying the power to the outdoor unit.
Er→tA	Outdoor A cond pipe sensor error (Short/Open)	
Er→tb	Outdoor B cond pipe sensor error (Short/Open)	
Er→tC	Outdoor C cond pipe sensor error (Short/Open)	
Er→ A	A unit test operation error	Display when the test operation finishes. • When the pipe temperature difference of indoor unit (pipe temperature 4 minutes before - Actual pipe temperature) is less than 5˚C.
Er→ b	B unit test operation error	
Er→ C	C unit test operation error	
Er→CA	A unit test communication error	Be sure to check during the test operation.
Er→Cb	B unit test communication error	
Er→CC	C unit test communication error	
Er→C0	A,B,C unit all communication error	Display of power application.
6d→ A	A room test operation OK	Display 4 minutes after the COMP is on.
6d→ b	B room test operation OK	
6d→ C	C room test operation OK	
A	Communication unit number display : A unit	• Normal operation Unit A,B and C are changed every one second. ┌A → B → C┐ The communication lamp is flickering after display of each unit. (possibility to check the communication status) • During the test operation the unit under test is on and off every 0.25s.
b	Communication unit number display : B unit	
C	Communication unit number display : C unit (In case of triple split multi air conditioner)	
Er→AC	High temperature of the A cond	
Er→bC	High temperature of the B cond	
Er→ 6	Refrigerant leaks	

The error indicated on the display panel of indoor unit

Display	Explanation	Remark
E1	Indoor unit room temperature sensor error	When inputting MICOM over 4.9V and below 0.4V
E2	IN sensor of indoor unit heat exchanger error	
E3	Indoor unit fan motor	15 seconds after the fan being operating below 450RPM
E4	Indoor unit communication error	Wrong data for 60 seconds
E6	Indoor unit EEPROM error	
ALL LAMP is flickering	Indoor unit EEPROM option error	
Eb	Outdoor unit B, C cools and heats simultaneously	Cool and heat mode is operating simultaneously.
E7	Outdoor unit pipe is wrong connected	The pipes or the cables are wrong connected.
E8	Outdoor unit sensor error(short/open)	Check the temperature sensor of B condenser pipe.
E9	Outdoor unit sensor error(short/open)	Check the temperature sensor of A condenser pipe.
E5	Outdoor unit sensor error(short/open)	Check the outdoor temperature sensor.
EA	Error in setting indoor unit's address & outdoor unit communication error	Check the indoor unit's address.

4. Check the test operation status by pressing the PCB switch S/W-A and S/W-B of outdoor unit.
   - Check the operation status by pushing the switch one at time.
   - Perform the test operation only for the unit selected last.
   - Check the pipe pressure and the other operation status during the test operation.
   - Check items when the error occurs during the test operation (each unit)
     - Check there is enough refrigerant.
     - Check pipe connections.

EXAMPLE

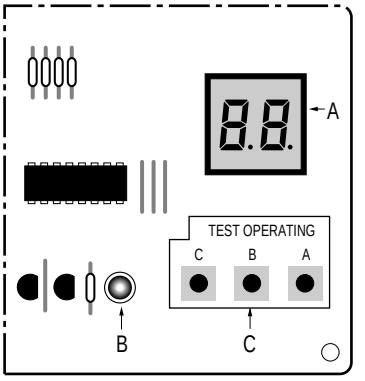
◆ In case of unit A test, push once the PCB switch S/W-A (same for unit B).
- In such a case, the indoor unit of unit A is operated automatically by the outdoor unit.
- In case the unit A test stops, push once more the switch S/W-A.

< Operation >

1. Once the test is started, the COMP is on and Good (displayed Gd) or Error (displayed Er) is displayed after 4 minutes .
   : Taking difference between the present temperature of indoor heat exchanger and the temperature 4 minutes later, if the temperature difference is over 5°C, the connection is good or if the temperature difference is below 5°C, the connection is bad.
2. If the result of the test operation is good operation, is possible for 30 minutes max.
   If there is an error, the outdoor unit shall be stopped immediately.
   If an error occurs, push switch S/W-A or S/W-B once to resume from the error status. Restart is then possible.
3. Once the test operation is completed, push switch S/W-A or S/W-B to finish the test.
4. Once the test is completed, operate the indoor unit normally.
5. Check the operation is normal. Start up is over.

■ MH18–/MH19–/MH24–

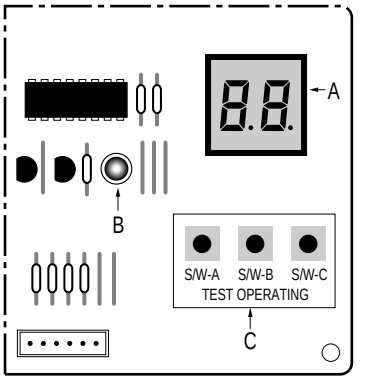
OUTDOOR UNIT



A : PCB display
B : Red LED
C : PCB switch

■ MH26–

OUTDOOR UNIT



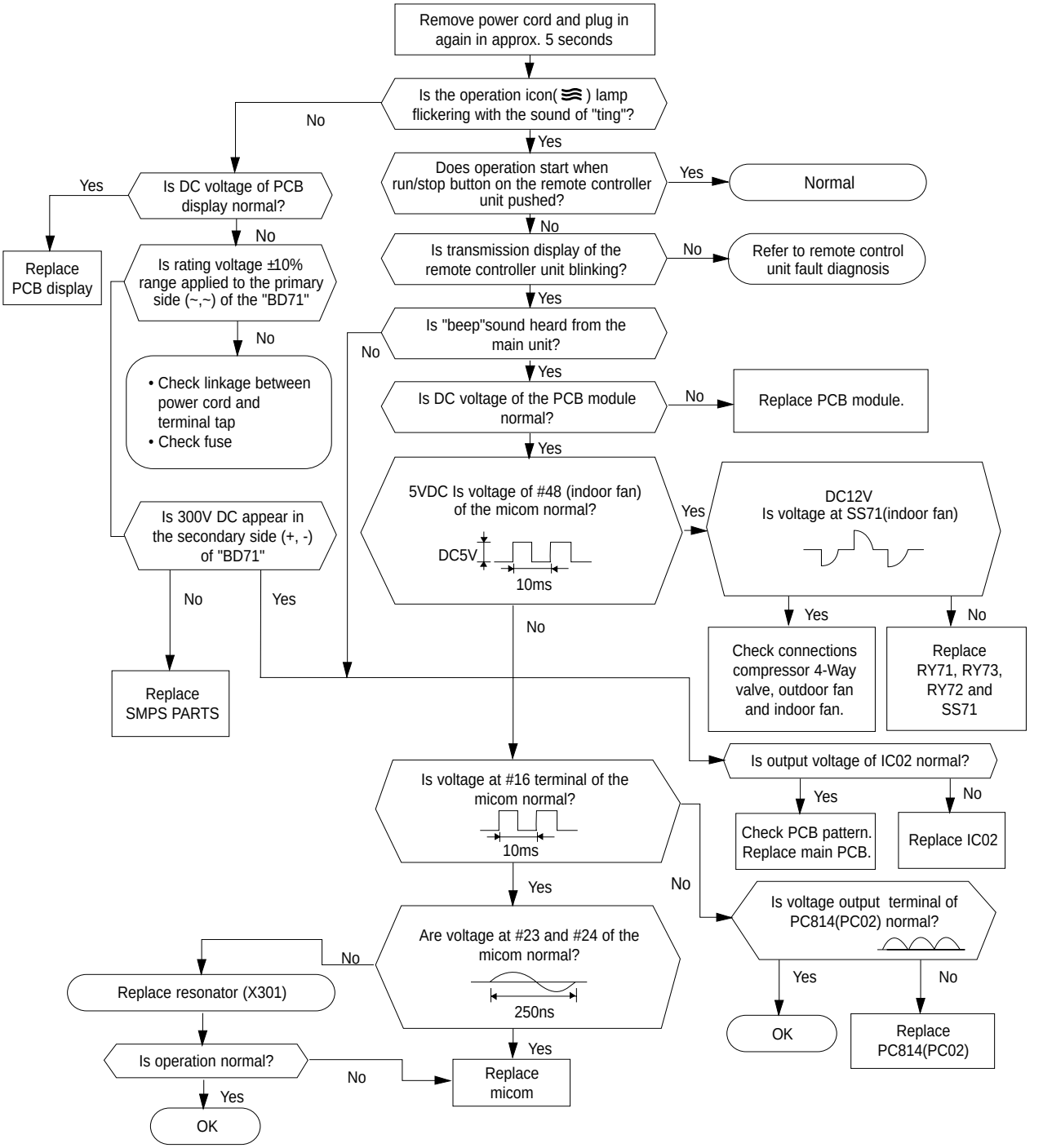
A : PCB display
B : Red LED
C : PCB switch

6-3 Fault Diagnosis by Symptom

6-3-1 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 KA7805 (IC02) normal? (4.5VDC-5.5VDC)

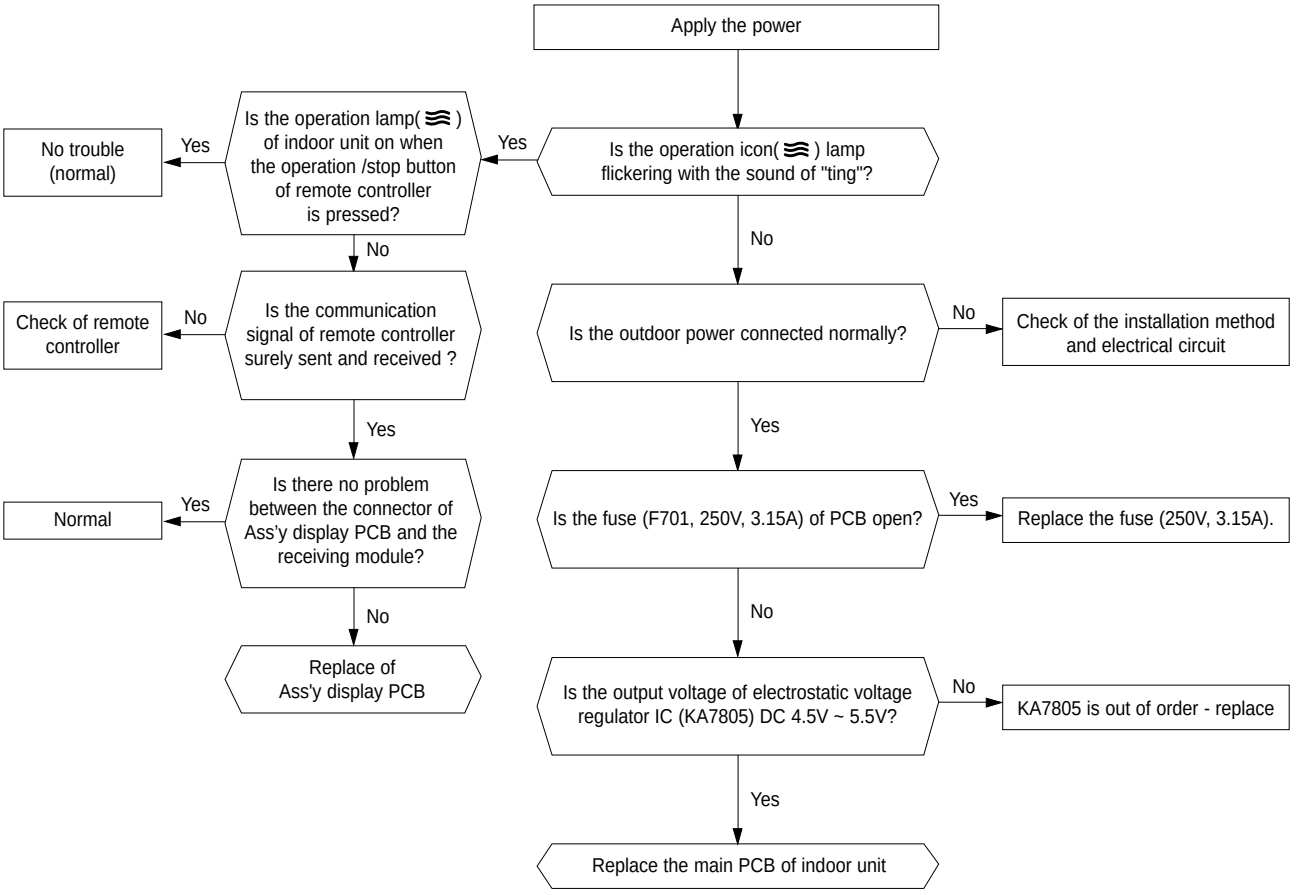
2. Troubleshooting procedure



6-3-2 When the power voltage is not available

1. Checklist :
   1) Is the power voltage is normal? (The rating voltage ±10% range)
   2) Is the power cord is correctly connected and is the contact good?
   3) Does the sound "ting" come out?
      If it doesn't come out the sound "ting", do inspect and repair in accordance with the following inspection sequence.

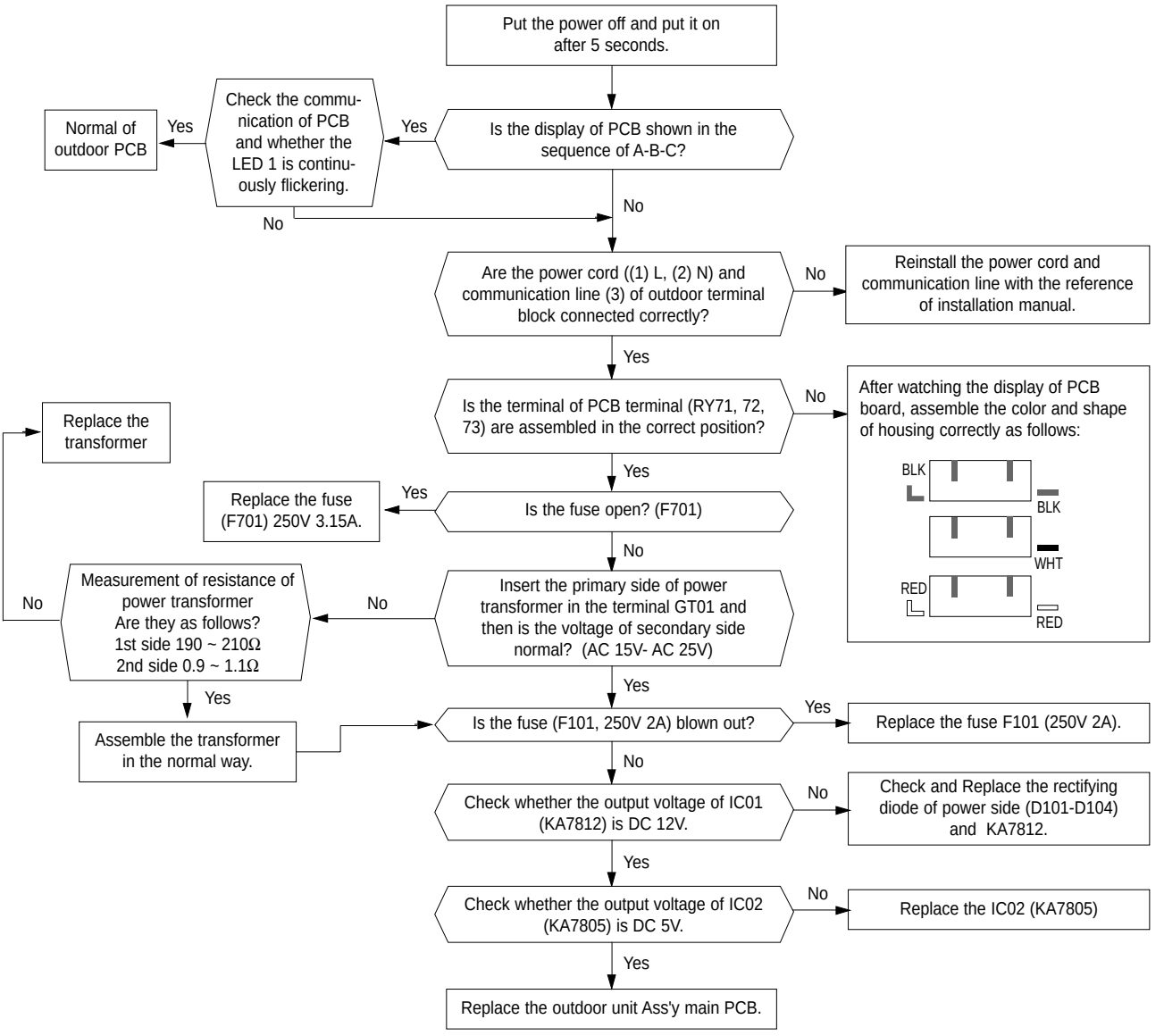
2. Troubleshooting procedure



6-3-3 No Power (Outdoor unit)

1. Checklist :
   1) Is the power source normal (The rating Voltage ±10% range)?
   2) Is the outdoor power connected normally? ((1) of terminal : L, (2) of terminal : N, (3) of terminal : communication)?
   3) Check whether the display of outdoor PCB(SEG1) is shown in the order of A- B - C when the power is applied.
      If the display (SEG1) is not shown the inspection and repair shall be performed in the sequence of the following:

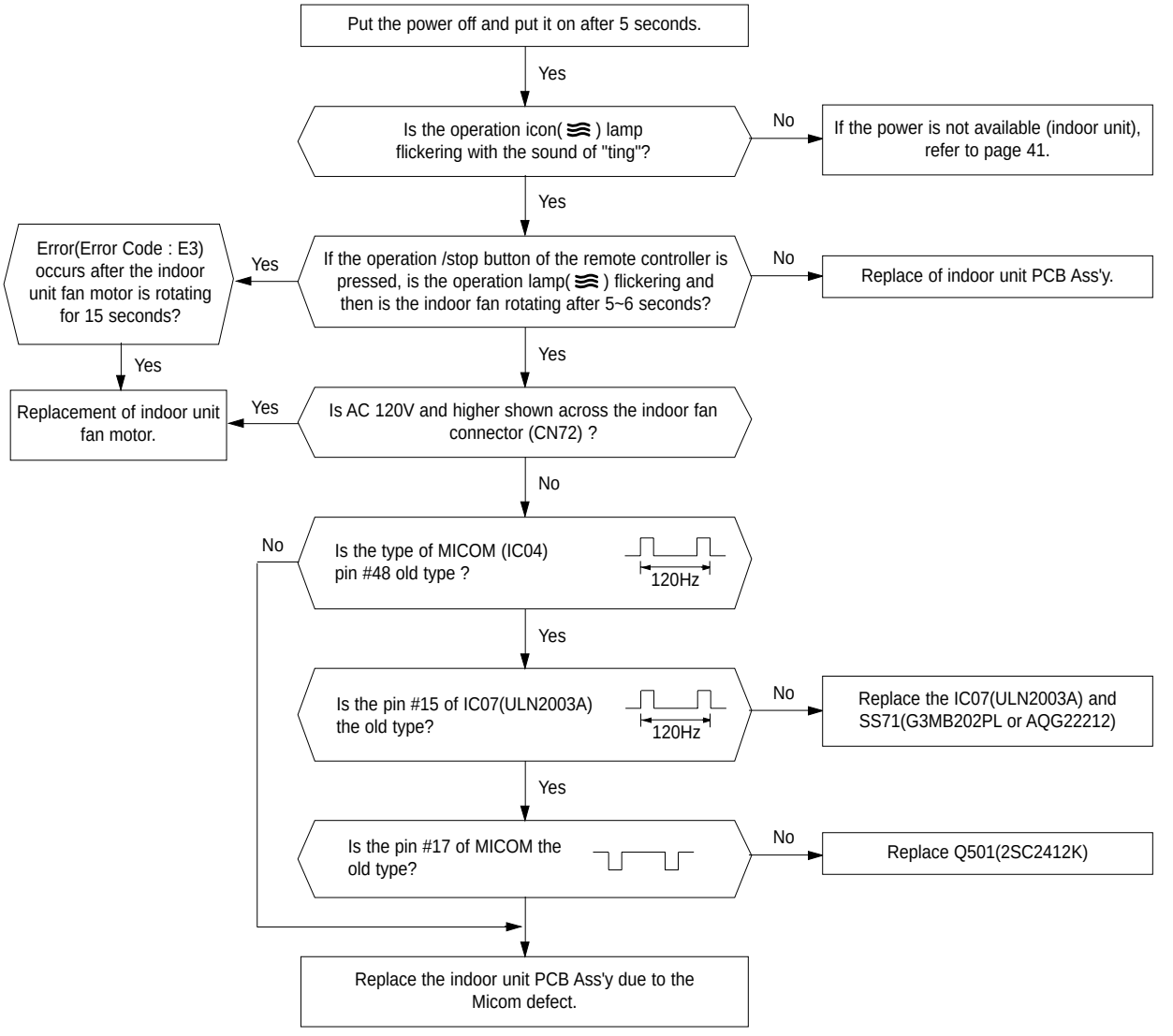
2. Troubleshooting procedure



6-3-4 When the fan of indoor unit does not operate

1. Checklist :
   1) Is the power voltage normal?
   2) Is the connector of indoor fan with the good contact? (CN72)
   3) Is the soldering status of running condenser (CR71) with the good contact?
   4) Is connector of the Hall IC with the good contact (CN44)?
   5) Is the indoor fan rotating when it is under operation mode?

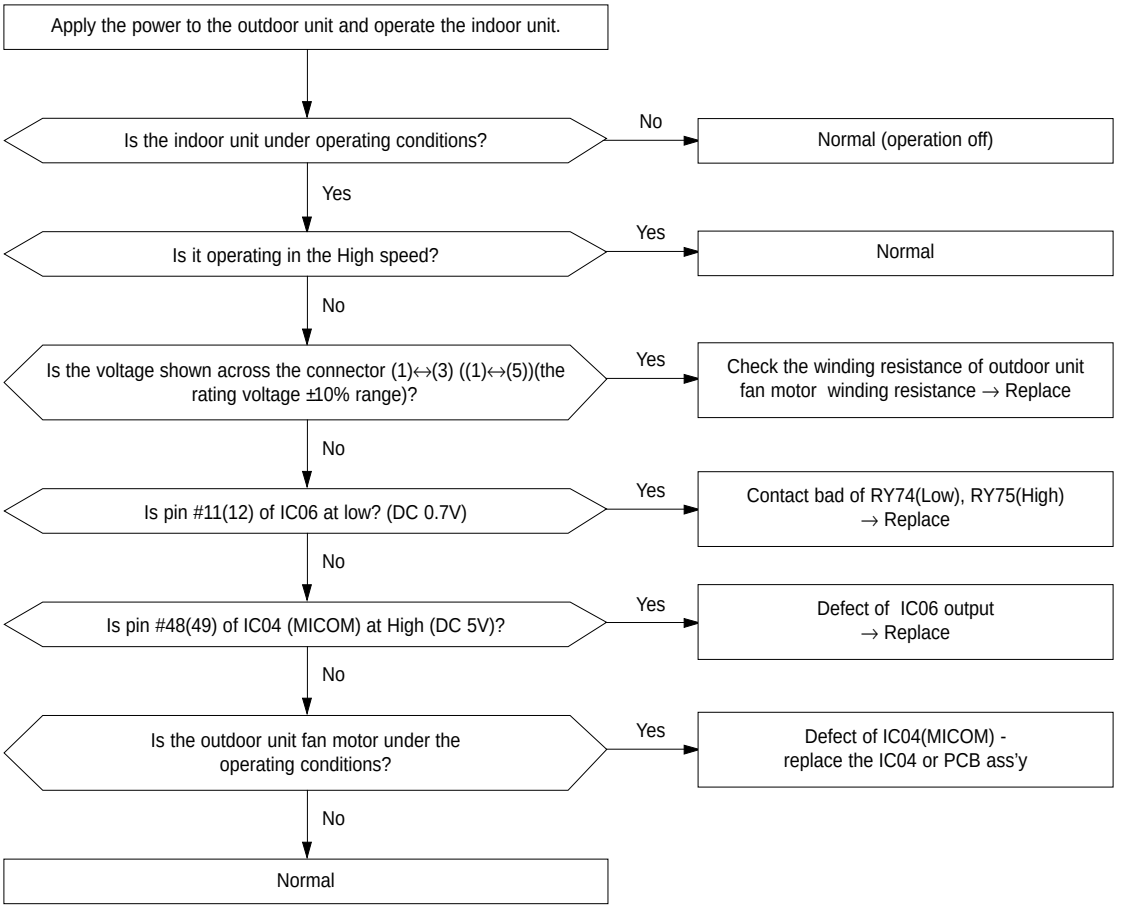
2. Troubleshooting procedure



6-3-5 When the outdoor unit fan does not operate

1. Checklist :
   1) The outdoor unit fan motor operates only when the operating conditions are satisfied and is selected by the RY74(LOW) and RY75(HI) to rotate.
   2) Is the power voltage normal?
   3) Is the contact of outdoor unit fan motor (CN73) good?
   4) Is the winding resistance of outdoor unit fan motor 58Ω at Hi side and 143Ω at low side?
   5) The outdoor unit fan motor operates with Hi at over 28°C and low at below 26°C during the cooling operation, and operates with Hi at below 14°C and low at over 15°C during the heating operation.

2. Troubleshooting procedure

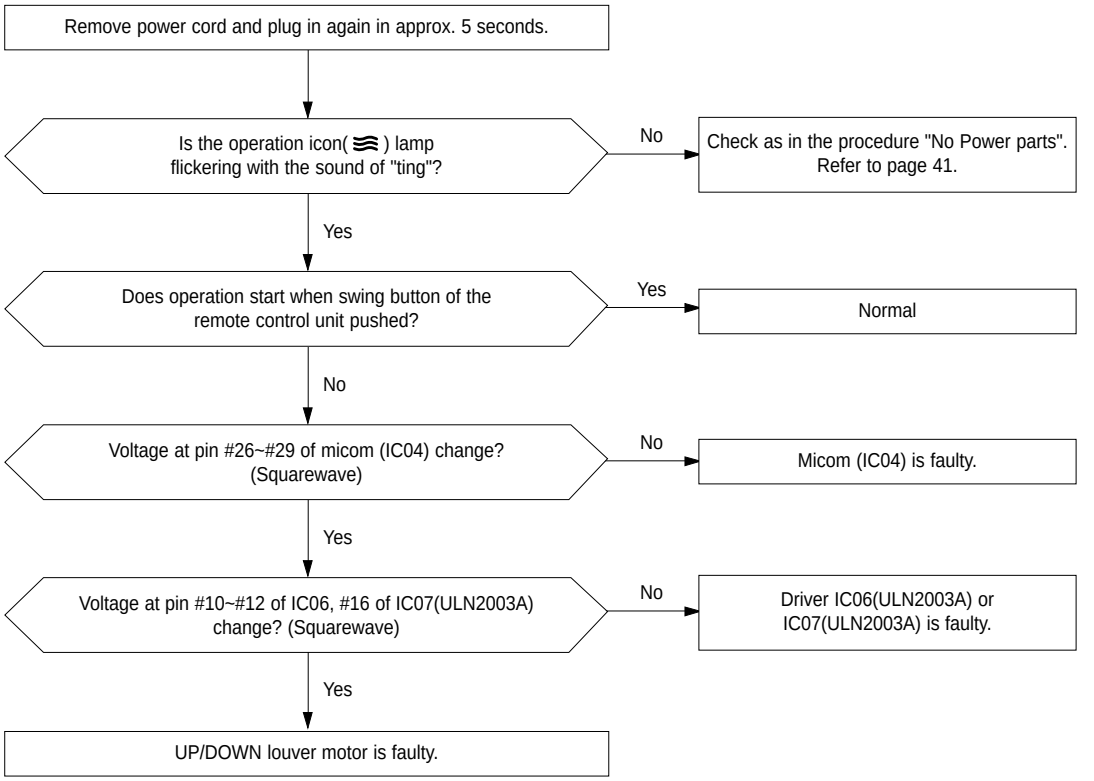


✻ Operating specification of the FAN of outdoor unit
   (1) When the COMP is under the COMP ON condition during the cooling and heating operation, Hi or LOW operation is selected according to the temperature condition of outdoor room.
   (2) When A room and B room are mixed to operate , it is always under low operation.
   (3) Perform the comp ON/OFF control in the dry mode.
   (4) When it is under the operation of anti-freezing, overload protection, defrost operation, it may be Low, high or Off.
   (5) Hi = High speed, Low = Low speed

6-3-6 When the UP/DOWN louver motor does not operate. (Initial Diagnosis)

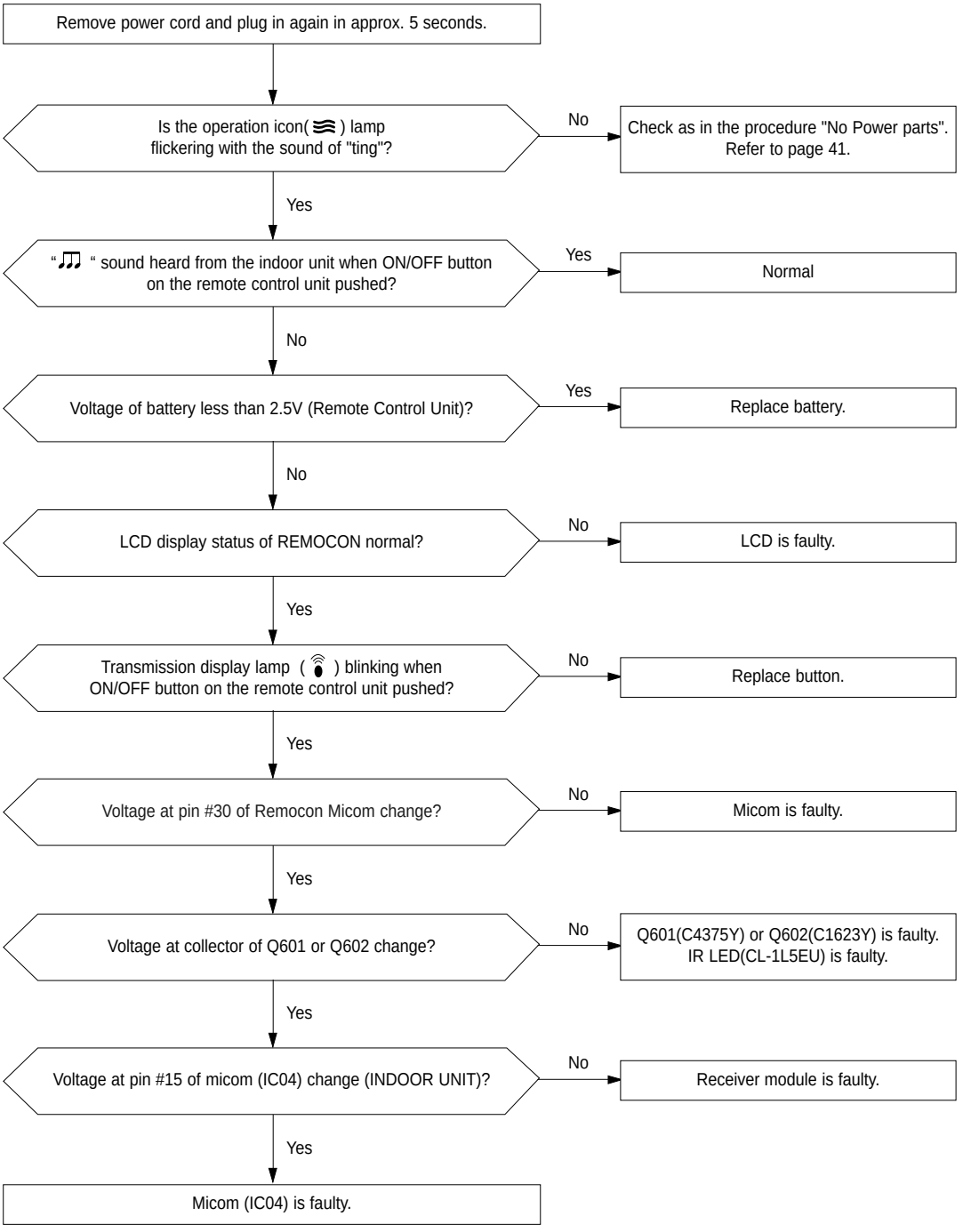
1. Checklist :
   1) Is input voltage normal?
   2) Is the UP/DOWN louver motor properly connected with the connector (CN61)?

2. Troubleshooting procedure



6-3-7 If Operation by remote control unit is impossible. (Initial Diagnosis)

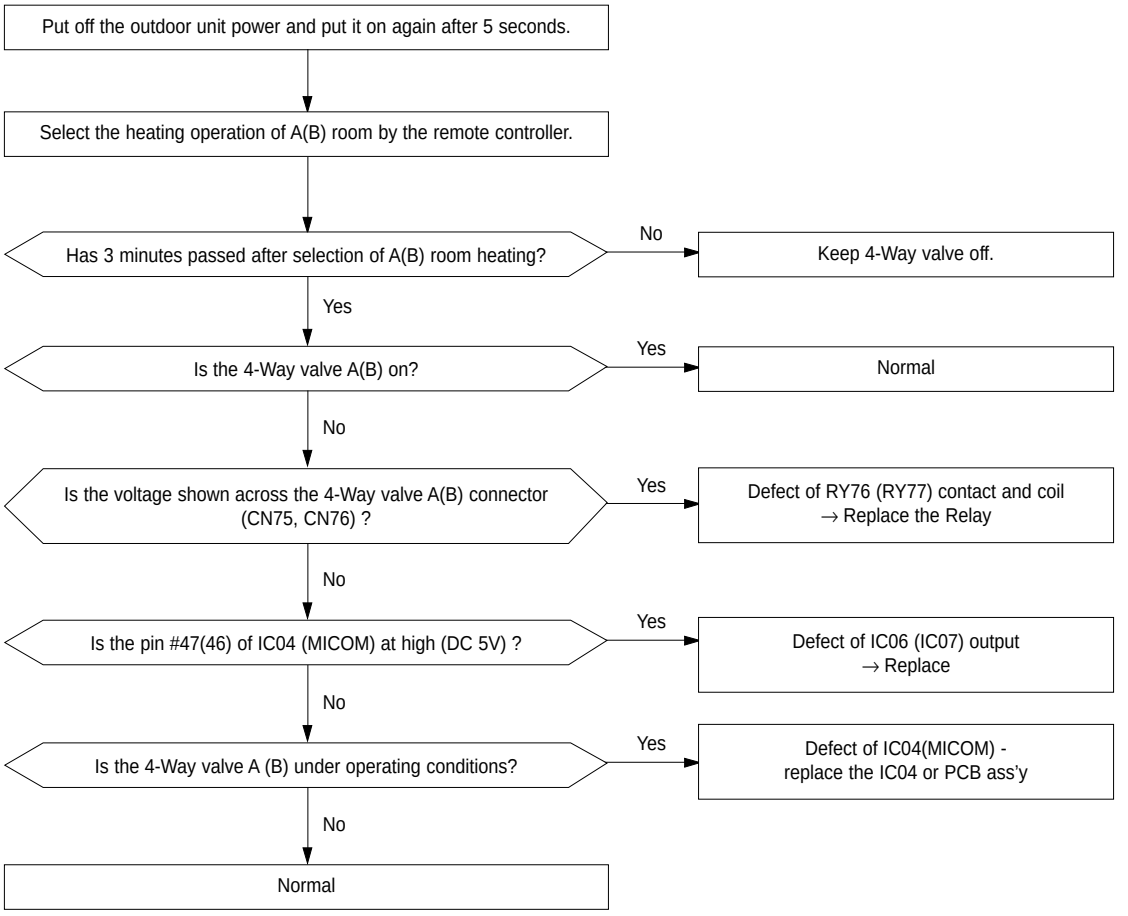
1. Troubleshooting procedure



6-3-8 When the 4-Way valve (A,B) is not operating

1. Checklist :
   1) Are the 4-Way valve A and B under the operating conditions?
      When the COMP A (4-Way valve A) and COMP B (4-Way valve B) are on during the heating operating)
   2) Is the power voltage normal?
   3) Is the connecting of 4-Way valve A (CN75) and B (CN76) good?

2. Troubleshooting procedure

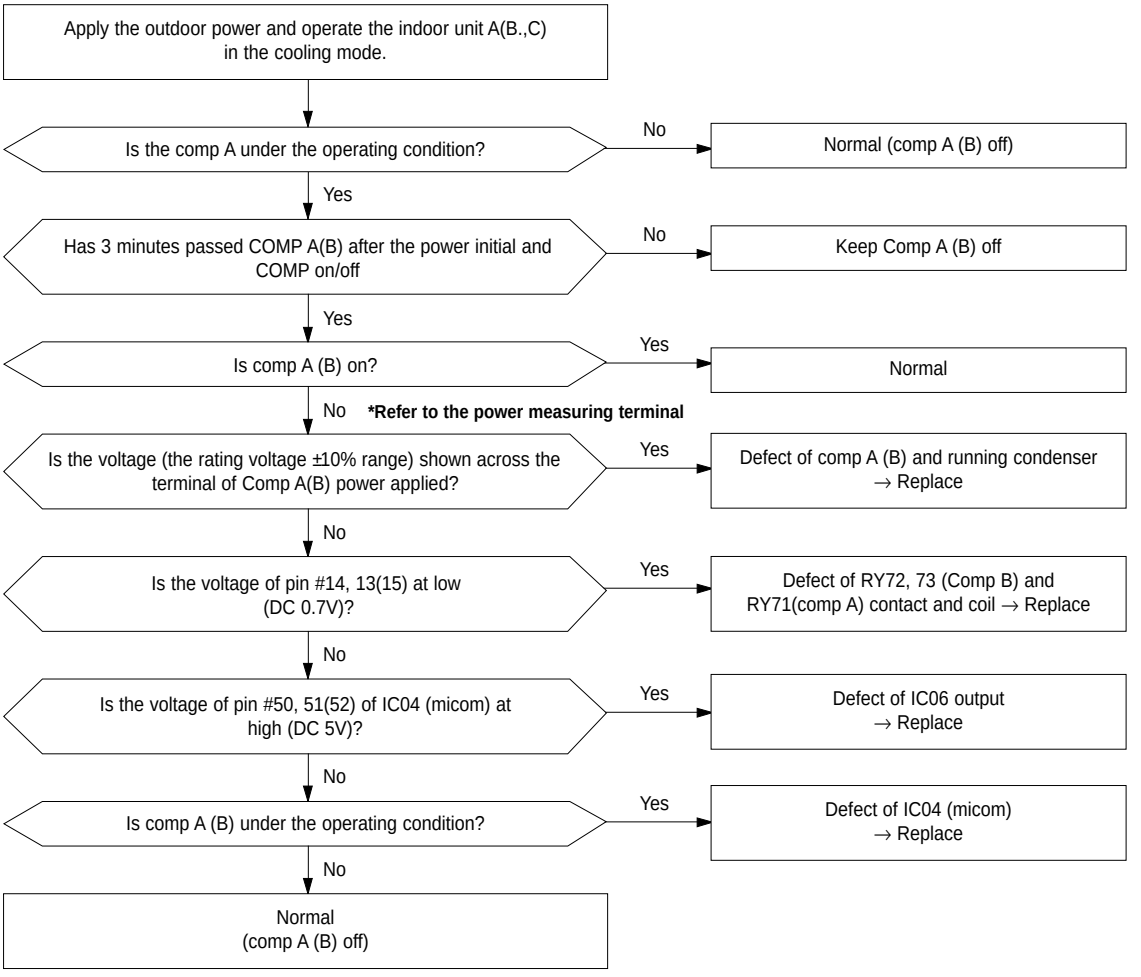


* 4-Way valve operating conditions
  (1) During the defrost control, put the 4-Way valve A(B) off.
  (2) During the heating operation put the 4-Way valve A(B) on.
  (3) The changeover of heating to cooling : put the 4-Way valve off immediately (in case of B and C room).
  (4) The changeover of cooling to heating : it is on after 170 seconds delay.

6-3-9 When the compressor does not operate

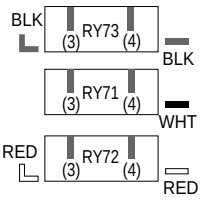
1. Checklist :
   1) Is the COMP A under the operating conditions? (cooling operating of A, B(C) room)
   2) Is the power voltage normal? (the rating voltage ±10% range)
   3) Are the connector connection of COMP A(RY72, 73) and B(RY71) good?
   4) The COMP A(B) is operated on and off in accordance with the operating conditions of indoor unit of A(B, C) room.

2. Troubleshooting procedure



✻ Comp A (B) operating conditions
   (1) Comp A : Comp on /off control in accordance with the A room during the heating and cooling indoor unit operation
   (2) Comp B : Comp on /off control in accordance with the B(C) room during the heating and cooling indoor unit operation

✻ Comp A(B) power measuring terminal
   (1) Comp A measuring ; RY73 (4) ↔ RY72 (4)
   (2) Comp B measuring ; RY71 (4) ↔ RY72 (4)
   (3) Power input ; RY72 (3) ↔ RY73(3)



6-4 PCB Inspection

6-4-1 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.

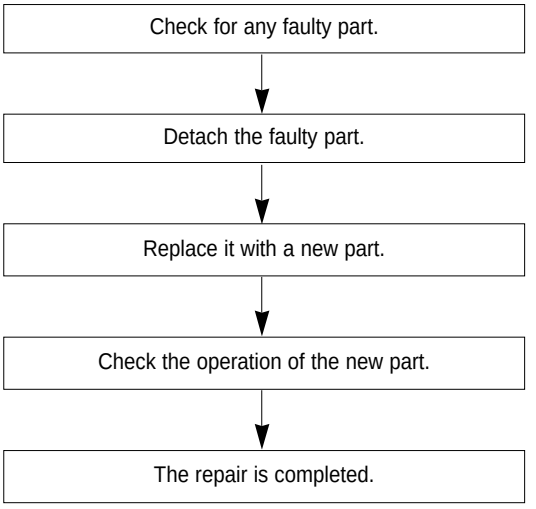
6. When soldering any part, care should be exercised not to apply any high-wattage soldering iron to the part for a long time. Some parts are of so low a heat resistance that they may be broken or have the properties changed if a soldering iron is so applied (Otherwise, the pattern may possibly be separated 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.

6-4-2 Procedure

The parts should be replaced in the following procedure.

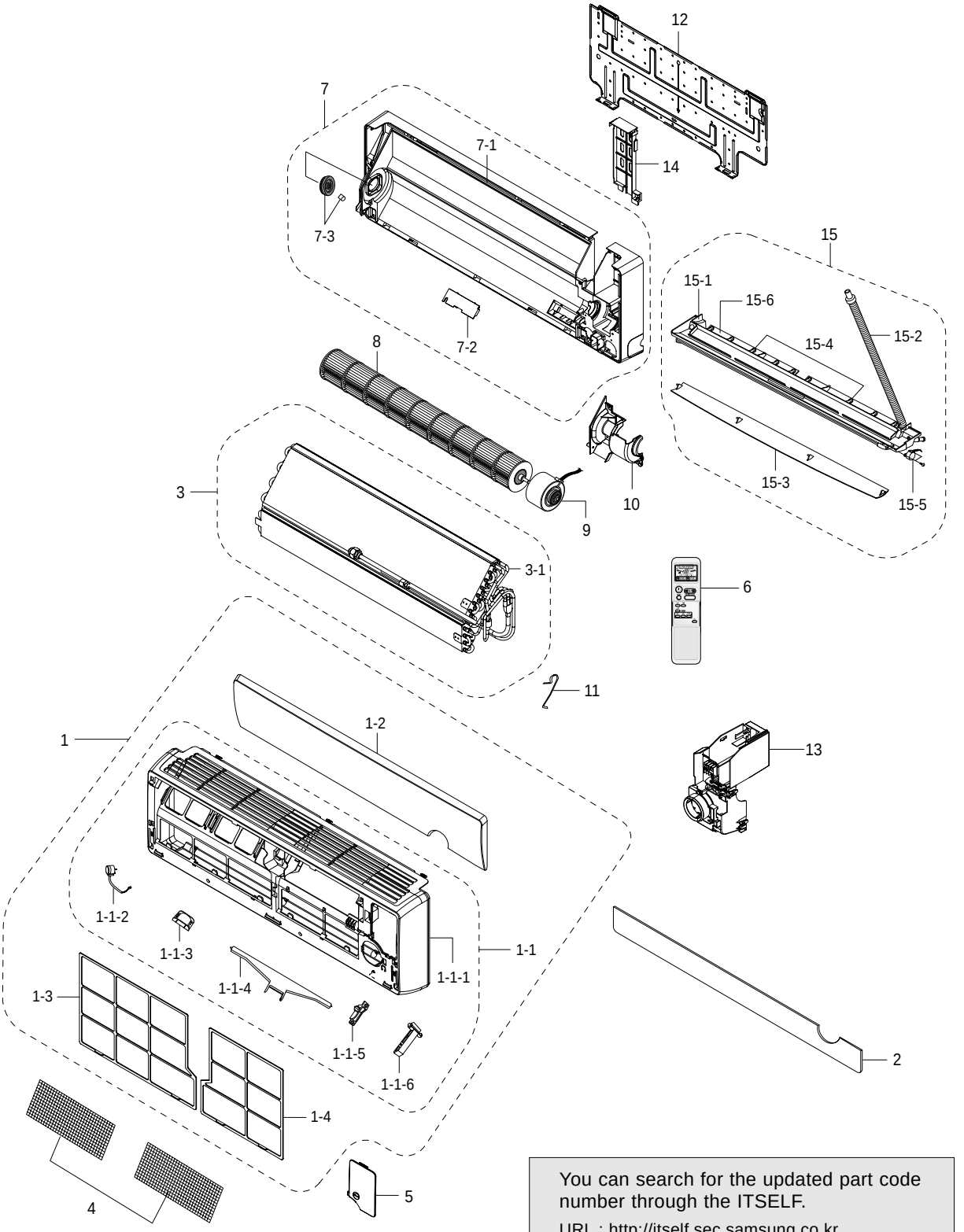


6-4-3 Detailed Inspection Procedure

No	Procedure	Inspection Method	Cause
1	Pull out the power plug from the AC terminal and confirm the fuse on the PCB assembly.	1) Is the broken?	• Voltage over • Indoor unit fan motor short-circuit.
2	Turn the power on. If lamp blinks trouble is not related to the items 1 through 4 on the right.	Voltage check	
		1) AC voltage at both end of transformer Primary? the rating voltage ±10% range	• Irregular power code or power fuse, or poor wiring.
		2) AC voltage at both end of transformer secondary? 14~18Vac	• Transformer is faulty.
		3) DC voltage at OUT and GND of IC01 (KA7812)? 12VDC	• Power circuit is faulty.
		4) DC voltage at OUT and GND of IC02? 5VDC	• Power circuit is faulty.
		5) DC voltage at Q201 Base and GND change? squarewave	• Q201 is faulty. D101~D104 (IN4007)
3	Set TURBO operating mode when RMC switch pushed after a delay of 3 minutes (A-unit and B-unit)	Voltage check	
		1) Voltage of relay (RY71, 72, 73) coil Voltage at pin #13, 14, 15 of IC07 : 12VDC	• Relay(RY71) coil is open. IC6(KID65003A) is faulty.
		2) Voltage at RY72 No ③ and RY71 No ③, RY72 No ③ and RY73 No ③, the rating voltage ±10% range	• Relay contactor is faulty or Relay is faulty
4	Set operating mode when RMC switch pushed. 1. TURBO mode	1) Compressor does not operate.	• Temperature of Heat exchange is lower. • PCB is faulty. • Room sensor or Heat exchanger temperature sensor is faulty
5	Set operating mode when RMC switch pushed. 1. [FAN] mode 2. Fan speed [Hi] 3. Continuously operation	1) Voltage at ③ ⑤ both ends of CN72 : above 180V~	• Indoor unit fan motor is faulty.
		2) Indoor unit fan motor does not operate.	• Poor connection of indoor fan motor and connector of RPM sensing (CN44)

7. Exploded Views and Parts List

7-1 Indoor Unit



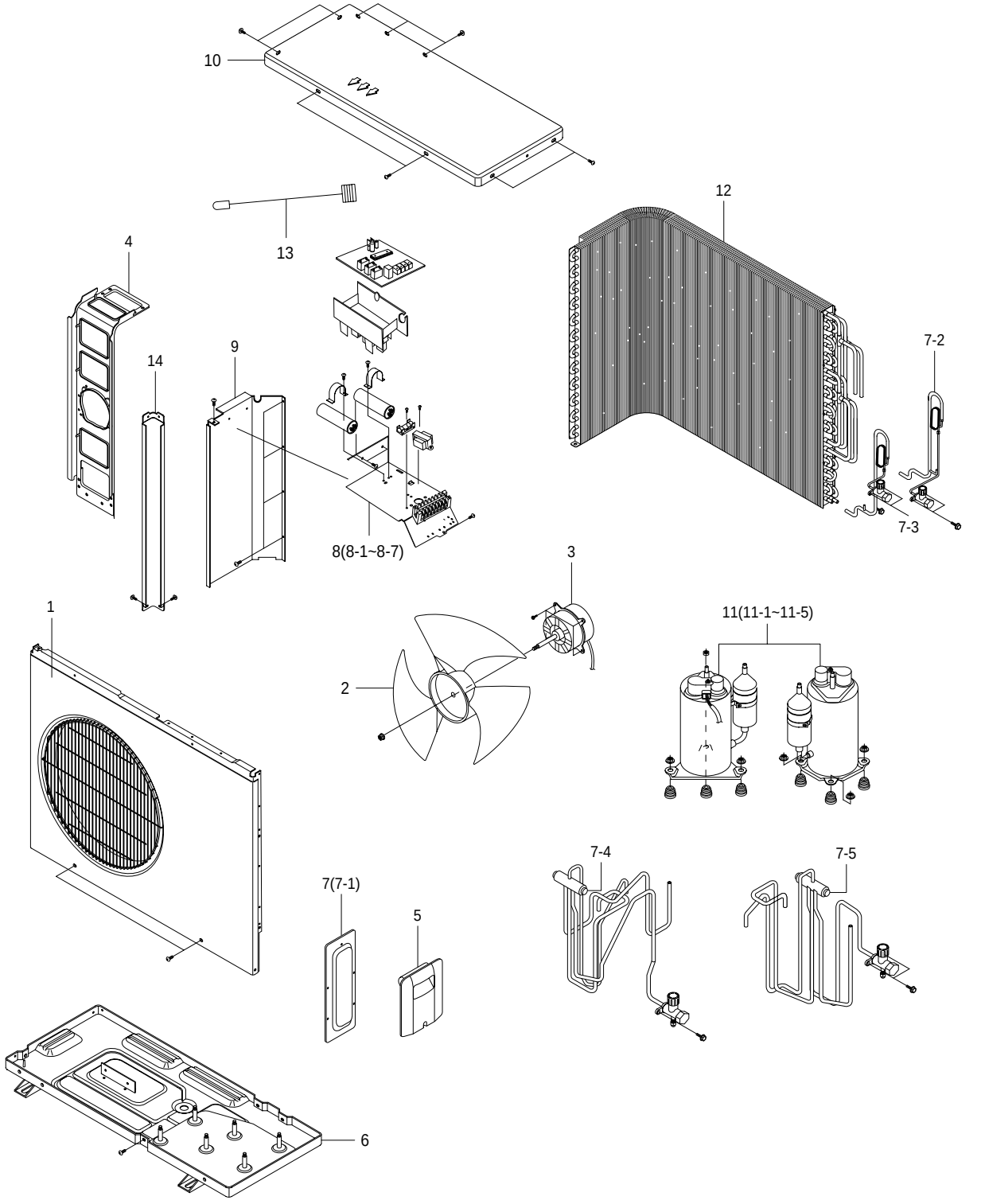
You can search for the updated part code number through the ITSELF.

URL : http://itself.sec.samsung.co.kr

■ Parts List

No.	Code No.	Description	Specification	Q'TY	
				MH18AP1(P2)-09 MH19AP1(P2)-07 MH26AP1(P2)-07	MH19AP1(P2)-12 MH24AP1(P2)-12 MH26AP1(P2)-12
1	DB92-00558A	ASS'Y PANEL FRONT TOTAL	ASS'Y	1	-
	DB92-00561A	ASS'Y PANEL FRONT TOTAL	ASS'Y	-	1
1-1	DB92-00557A	ASS'Y PANEL FRONT SUB P	ASS'Y	1	-
	DB92-00560A	ASS'Y PANEL FRONT SUB P	ASS'Y	-	1
1-1-1	DB92-00556A	ASS'Y PANEL FRONT SUB	ASS'Y	1	-
	DB92-00559A	ASS'Y PANEL FRONT SUB	ASS'Y	-	1
1-1-2	DB31-00166B	MOTOR STEP	-	1	1
1-1-3	DB61-01123A	HOLDER-MOTOR DC	HIPS	1	-
	DB61-01114A	HOLDER-MOTOR DC	HIPS	-	1
1-1-4	DB61-01132A	HINGE GRILLE	HIPS	1	-
	DB61-01115A	HINGE GRILLE	HIPS	-	1
1-1-5	DB61-01133A	GUIDE LINK	HIPS	1	-
	DB61-01116A	GUIDE LINK	HIPS	-	1
1-1-6	DB66-00365A	LINK MOTOR	ABS	1	-
	DB66-00364A	LINK MOTOR	ABS	-	1
1-2	DB64-00655A	GRILLE UP	ABS	1	-
	DB64-00640A	GRILLE UP	ABS	-	1
1-3	DB63-00590B	FILTER PRE LF	PP	1	-
	DB63-00585B	FILTER PRE LF	PP	-	1
1-4	DB63-00591B	FILTER PRE RH	PP	1	-
	DB63-00586B	FILTER PRE RH	PP	-	1
2	DB92-00538A	ASS'Y GRILLE LOW	ASS'Y	1	-
	DB92-00540A	ASS'Y GRILLE LOW	ASS'Y	-	1
3	DB96-02145A	ASS'Y EVAP TOTAL	ASS'Y	1	-
	DB96-03243A	ASS'Y EVAP TOTAL	ASS'Y	-	1
3-1	DB96-02146A	ASS'Y EVAP	ASS'Y	1	-
	DB96-02091B	ASS'Y EVAP	ASS'Y	-	1
4	DB95-00367E	ASS'Y FILTER BIO	ASS'Y	1	1
5	DB63-00588A	COVER TERMINAL	HIPS	1	-
	DB63-00581A	COVER TERMINAL	HIPS	-	1
6	DB93-02531P	ASS'Y REMOCON	ASS'Y	1	1
7	DB94-00486A	ASS'Y BACK BODY SUB	ASS'Y	1	-
	DB94-00488A	ASS'Y BACK BODY SUB	ASS'Y	-	1
7-1	DB61-01119A	BODY BACK	HIPS	1	-
	DB61-01098A	BODY BACK	HIPS	-	1
7-2	DB63-00580A	COVER-IONIZER	HIPS	1	1
7-3	DB94-00258A	ASS'Y BEARING	ASS'Y	1	1
8	DB94-00040F	ASS'Y CROSS FAN	ASS'Y	1	-
	DB94-00040R	ASS'Y CROSS FAN	ASS'Y	-	1
9	DB31-00152A	MOTOR FAN IN	-	1	-
	DB31-00152B	MOTOR FAN IN	-	-	1
10	DB61-01120A	HOLDER-MOTOR	PP	1	-
	DB61-01099A	HOLDER-MOTOR	PP	-	1
11	DB67-60030A	SPRING-SENSOR	STS301	1	1
12	DB70-00288A	PLATE HANGER	SGCC-M	1	-
	DB70-00276A	PLATE HANGER	SGCC-M	-	1
13	DB93-02567A	ASS'Y CONTROL IN	ASS'Y	1	-
	DB93-02568A	ASS'Y CONTROL IN	ASS'Y	-	1
14	DB61-01121A	HOLDER-PIPE	HIPS	1	-
	DB61-01100A	HOLDER-PIPE	HIPS	-	1
15	DB94-00465A	ASS'Y TRAY DRAIN	ASS'Y	1	-
	DB94-00468A	ASS'Y TRAY DRAIN	ASS'Y	-	1
15-1	DB63-00592A	TRAY DRAIN	HIPS	1	-
	DB63-00587A	TRAY DRAIN	HIPS	-	1
15-2	DB94-00062E	ASS'Y DRAIN HOSE	ASS'Y	1	1
15-3	DB61-01125A	BLADE-H	HIPS	1	-
	DB61-01103A	BLADE-H	HIPS	-	1
15-4	DB61-01126A	BLADE-V	PP	1	-
	DB61-01104A	BLADE-V	PP	-	1
15-5	DB95-20138A	ASS'Y MOTOR STEPPING	ASS'Y	1	1
15-6	DB63-00635A	GUARD-SAFETY WIRE	STS27	1	-
	DB63-00634A	GUARD-SAFETY WIRE	STS28	-	1

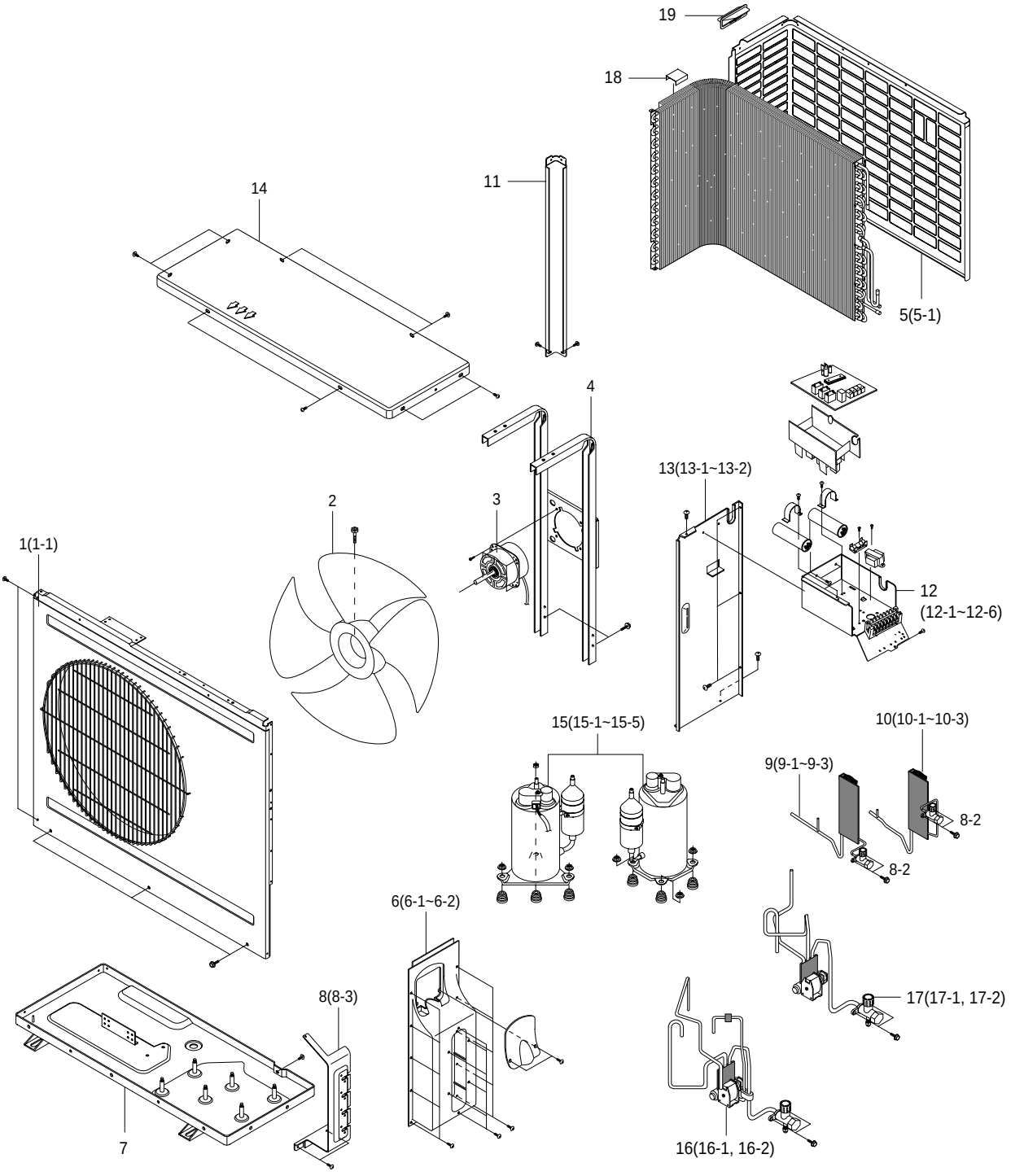
■ MH18AP1(P2)X / MH19AP1(P2)X



■ **Parts List**

No.	Code No.	Description	Specification	Q'TY	
				MH18AP1(P2)X	MH19AP1(P2)X
1	DB90-00734A	ASS'Y CABI FRONT	ASS'Y	1	1
2	DB67-50063A	FAN-PROPELLER	AS+G/F20%,D405	1	1
3	DB31-00001B	MOTOR-FAN	IC-9630SLJ5A	1	1
4	DB61-20008C	BASE-MOTOR	SGCC-M,T1.2	1	1
5	DB90-40176B	ASS'Y-COVER CONTROL	ASS'Y	1	1
6	DB90-00733A	ASS'Y BASE OUT	ASS'Y	1	1
7	DB99-00422A	ASS'Y VALVE	ASS'Y	1	-
	DB99-00424A	ASS'Y VALVE	ASS'Y	-	1
7-1	DB61-00889A	BRACKET-VALVE	SECC-P,T1.6	1	1
7-2	DB96-03154A	ASS'Y TUBE CAPILLARY-A	ASS'Y	1	-
	DB96-03235A	ASS'Y TUBE CAPILLARY-A	ASS'Y	-	1
7-3	DB96-03155A	ASS'Y TUBE CAPILLARY-B	ASS'Y	1	-
	DB99-00427A	ASS'Y VALVE CHECK-B	ASS'Y	-	1
7-4	DB99-00408A	ASS'Y VALVE 4WAY-A	ASS'Y	1	-
	DB99-00425A	ASS'Y VALVE 4WAY-A	ASS'Y	-	1
7-5	DB99-00409A	ASS'Y VALVE 4WAY-B	ASS'Y	1	-
	DB99-00426A	ASS'Y VALVE 4WAY-B	ASS'Y	-	1
8	DB93-02609A	ASS'Y CONTROL OUT	ASS'Y	1	-
	DB93-02610A	ASS'Y CONTROL OUT	ASS'Y	-	1
8-1	DB61-00891A	CASE CONTROL OUT	SGCC-M,T0.8	1	1
8-2	DB61-00585A	CASE PCB OUT	ABS,T2.5	1	1
8-3	2501-001237	C-OIL	35µF,450V	2	1
8-4	2501-001158	C-OIL	30µF,420VAC	-	1
8-5	DB65-40072A	TERMINAL-BLOCK	8P	1	1
8-6	2501-001066	C-OIL	2.5µF,450VAC	1	1
8-7	DB93-02252D	ASS'Y PCB MAIN-24K MULTI G1 OUT	ASS'Y	1	1
9	DB94-00180A	ASS'Y PARTITION	ASS'Y	1	1
10	DB90-00742A	ASS'Y CABI-UPPER	ASS'Y	1	1
11	G4A097JU1EP	ROTARY COMPRESSOR	G4A097JU1EP	2	-
	G4A080JU1EP	ROTARY COMPRESSOR	G4A080JU1EP	-	1
	G8C124JU1EL	ROTARY COMPRESSOR	G8C124JU1EL	-	1
11-1	DB73-00067A	GROMMET ISOLATOR	NR	6	-
	DB73-00070A	GROMMET ISOLATOR	NR 35˚	-	6
11-2	DB60-30028A	NUT-WASHER	M8	6	6
11-3	DB60-30018A	NUT-FLANGE	M5	2	2
11-4	DB63-10165D	COVER TERMINAL	PBT,2.5	2	2
11-5	DB35-00015W	PROTECTOR O/L	RAC12131-9622	2	-
	DB35-00015T	PROTECTOR O/L	RAC12126-9622	-	1
	DB35-00015V	PROTECTOR O/L	RAC12128-9622	-	1
12	DB96-01717F	ASS'Y-COND UNIT	ASS'Y	1	-
	DB96-01717G	ASS'Y-COND UNIT	ASS'Y	-	1
13	DB32-00025A	THERMISTOR-OUT ASS'Y	ASS'Y	1	1
14	DB63-00343A	GUARD-COND	SC-90073T	1	1

■ MH24AP1(P2)X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15(15-1~15-5)
10(10-1~10-3)
9(9-1~9-3)
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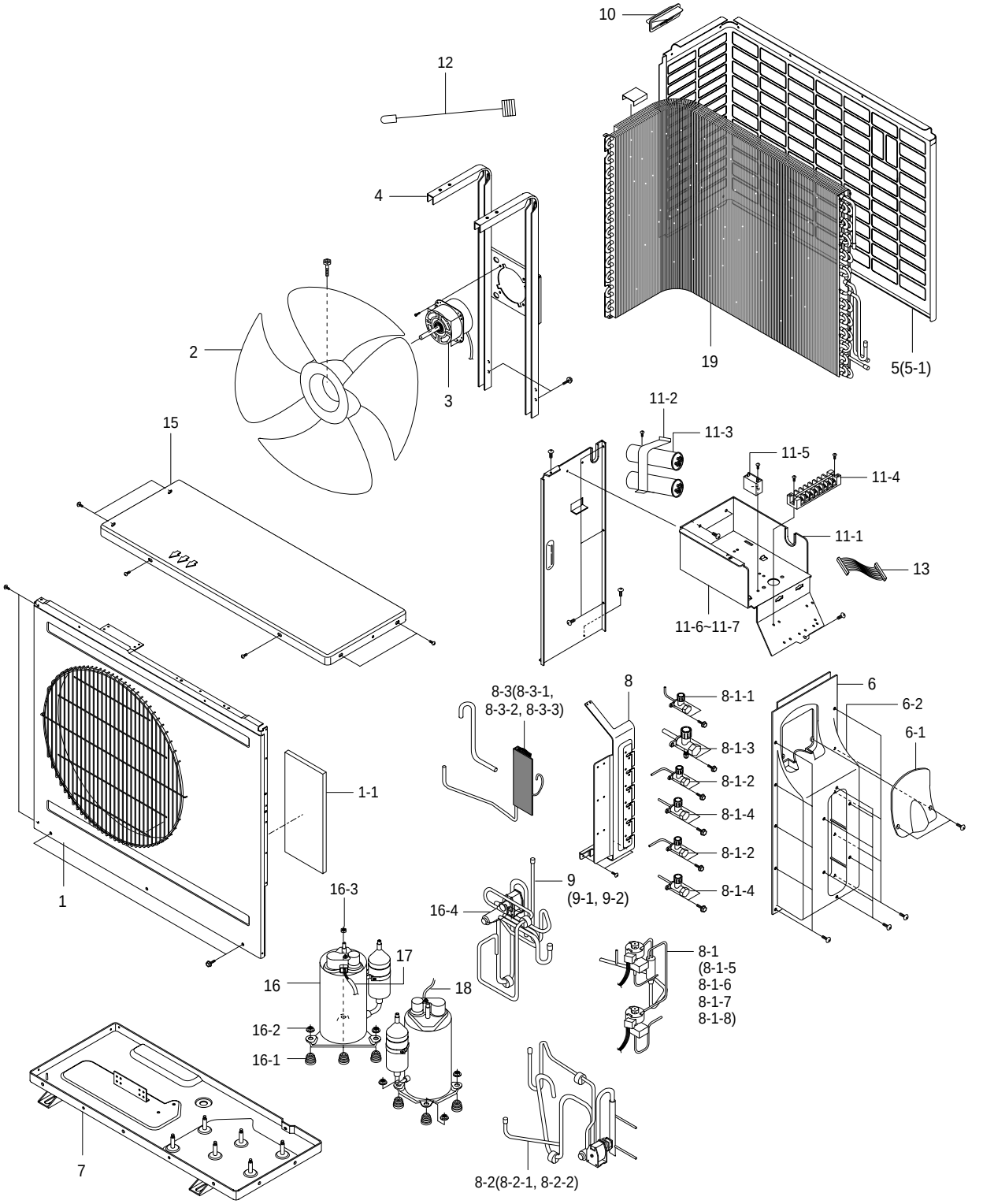
8-2
6(6-1~6-2)
17(17-1, 17-2)
8(8-3)
7
16(16-1, 16-2)

■ **Parts List**

No.	Description	Specification	Q'TY	Remark
1	ASS'Y-WELD FRONT	SC-90073T	1	
1-1	INSUL FRONT OUT	FOAM PE+PV-SHEET	1	
2	FAN-PROPELLER	AS+G/F20%	1	
3	MOTOR-FAN OUT	OSM-8065SRC	1	
4	BASE-MOTOR	SGCC-M	1	
5	ASS'Y CABINET-BACK	ASS'Y	1	
5-1	INSUL SIDE CABI	FOAM PE+PV-SHEET	1	
6	ASS'Y-COVER VALVE	ASS'Y	1	
6-1	COVER-CONTROL	PP	1	
6-2	COVER-VALVE	pp	1	
7	ASS'Y-BASE OUT	AM24A1B2	1	
8	ASS'Y-VALVE	AD24A1E2	1	
8-1	VALVE-PACKED 1/2"	1/2”	2	
8-2	VALVE-PACKED 1/4"	1/4”	2	
8-3	BRACKET-VALVE	SC-90073T	1	
9	ASS'Y CHECK V/V, A	ASS'Y	1	
9-1	VALVE CHECK	30kg/m2G	1	
9-2	TUBE CAPI (C)	ID 1.7x1200	1	
9-3	TUBE CAPI (H)	ID 1.5x500	1	
10	ASS'Y CHECK V/V, B	ASS'Y	1	
10-1	VALVE CHECK	30kg/m2G	1	
10-2	TUBE CAPI (C)	ID 1.7x1200	1	
10-3	TUBE CAPI (H)	ID 1.5x500	1	
11	GUARD-COND	SC-90073T	1	
12	ASS'Y CONTROL OUT	UD24A1E2	1	
12-1	CASE CONTROL OUT	SGCC-M	1	
12-2	CASE PCB OUT	P.P	1	
12-3	C-OIL	30µFx420V	2	
12-4	TERMINAL BLOCK	8P	1	
12-5	C-OIL	5µFx450V	1	
12-6	ASS’Y PCB MAIN OUT	HEAT-PUMP	1	
13	ASS'Y-PARTITION	ASS'Y	1	
13-1	INSUL PARTITION	FOAM PE+PV-SHEET	1	
13-2	PARTITION	SGCC-M	1	
14	ASS’Y-CABI UPPER	ASS’Y	1	
15	ASS'Y-COMP	48A124JV1EG	2	
15-1	GROMMET-ISOLATOR	EPDM	6	
15-2	NUT-WASHER	M8	6	
15-3	NUT-FLANGE	P10.8	2	
15-4	COVER-TERMINAL	NORYL	2	
15-5	OLP	MRA12030-12008	2	
16	ASS'Y 4-WAY V/V, A	ASS'Y	1	
16-1	4-WAY VALVE	SAGINOMIYA	1	
16-2	SOLENOID-V/V	SAGINOMIYA	1	
17	ASS'Y 4-WAY V/V, B	ASS'Y	1	
17-1	4-WAY VALVE	SAGINOMIYA	1	
17-2	SOLENOID-V/V	SAGINOMIYA	1	
18	CONDENSER	ASS'Y	1	
19	COVER-HANDLE	ABS	1	

■ MH26AP1(P2)X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8-1-8)
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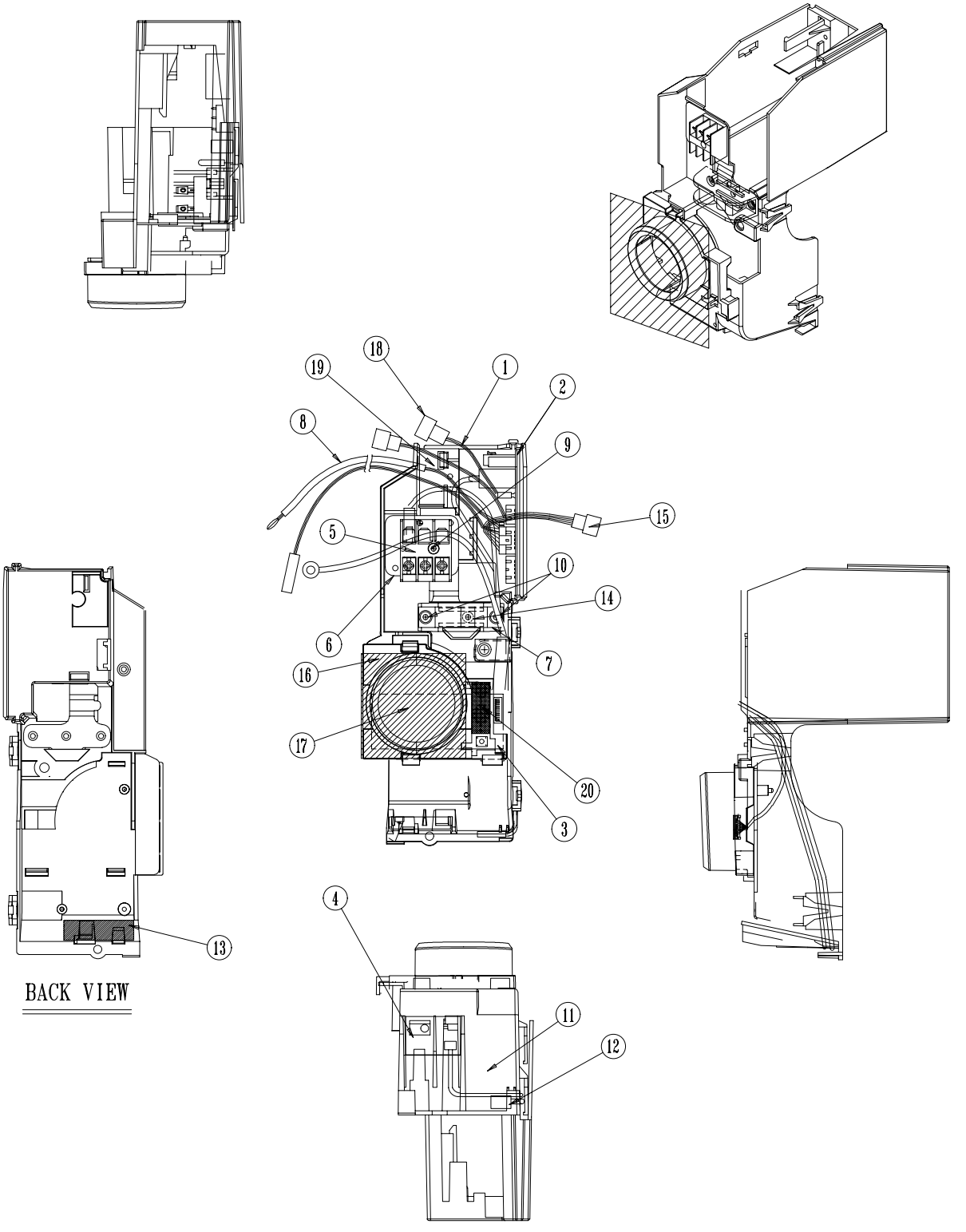
8-2(8-2-1, 8-2-2)

■ Parts List

No.	Description	Specification	Q'TY	Remark
1	ASS'Y-WELD FRONT	ASS'Y	1	
1-1	INSUL FRONT OUT	EVA+Foam pE	1	
2	FAN-PROPELLER	AS+G/F20%	1	
3	MOTOR-FAN OUT	OSME-806SRC	1	
4	BASE-MOTOR	SGCC-M	1	
5	ASS'Y-CABINET-BACK	ASS'Y	1	
5-1	INSUL CABI BACK	FOAM PU+FOAM PE	1	
6	ASS'Y COVER VALVE	ASS'Y	1	
6-1	COVER-CONTROL	p.p	1	
6-2	COVER-VALVE	P.P	1	
7	ASS'Y-BASE OUT	ASS'Y	1	
8	ASS'Y-BRACKET VALVE	ASS'Y	1	
8-1	ASS'Y EXPANSION VALVE	ASS'Y	1	
8-1-1	VALVE-PACKED 1/4"	1/4"	2	
8-1-2	VALVE-PACKED 1/4"	1/4"	1	
8-1-3	VALVE-PACKED 1/2"	1/2"	1	
8-1-4	VALVE-PACKED 3/8"	3/8"	2	
8-1-5	COIL EXPANSION	SAGINOMIYA	1	
8-1-6	COIL EXPANSION	SAGINOMIYA	1	
8-1-7	BODY EXPANSION	SAGINOMIYA	2	
8-1-8	TUBE DISTRIBUTOR	ASS'Y	1	
8-2	ASS'Y-4-WAY VALVE B	ASS'Y	1	
8-2-1	VALVE 4-WAY	ASS'Y	1	
8-2-2	SOLENOID	ASS'Y	1	
8-3	ASS'Y-CHECK VALVE A	ASS'Y	1	
8-3-1	VALVE CHECK	ASS'Y	1	
8-3-2	TUBE CAPILLARY C	C12200-T	1	
8-3-3	TUBE CAPILLARY H	C12200-T	1	
9	ASS'Y-4-WAY VALVE A	ASS'Y	1	
9-1	SOLENOID VALUE	ASS'Y	1	
9-2	VALVE 4-WAY	ASS'Y	1	
10	COVER HANDLE	SC-90073T	1	
11	ASS'Y CONTROL OUT	ASHM260VE	1	
11-1	CASE CONTROL OUT	SGCC-M	1	
11-2	CLIP-CAPACITOR	SGCC-M	1	
11-3	C-OIL	30µFxø420V	2	
11-4	TERMINAL BLOCK	10P	1	
11-5	C-OIL	5µFxø450V	1	
11-6	TRANS-POWER	ASS'Y	1	
11-7	ASS'Y-MAIN PCB OUT	ASS'Y	1	
12	THERMISTOR OUT	ASS'Y	1	
13	CONNECT WIRE-DISPLAY	ASS'Y	1	
14	ASS'Y PARTITION	ASS'Y	1	
14-1	INSUL PARTITION	EVA+FOAM PE	1	
14-2	PARTITION	SGCC-M	1	
15	ASS'Y-CABI UPPER	ASS'Y	1	
16	ASS'Y-COMP	48A124JV1EG	2	
16-1	GROMMET-ISOLATOR	EPDM	6	
16-2	NUT-HEXAGON	M8	6	
16-3	NUT-FLANGE	P10.8	2	
16-4	COVER-TERMINAL	NORYL	2	
17	ASS'Y-OLP A	MRA12030-12008	1	
18	ASS'Y-OLP B	MRA12030-12008	1	
19	CONDENSER	ASS'Y	1	

7-3 Ass'y Control In (Indoor Unit)

■ **MH18AP1(P2)-09, MH19AP1(P2)-07, MH26AP1(P2)-07 : DB93-02567A**
MH19AP1(P2)-12, MH24AP1(P2)-12, MH26AP1(P2)-12 : DB93-02568A



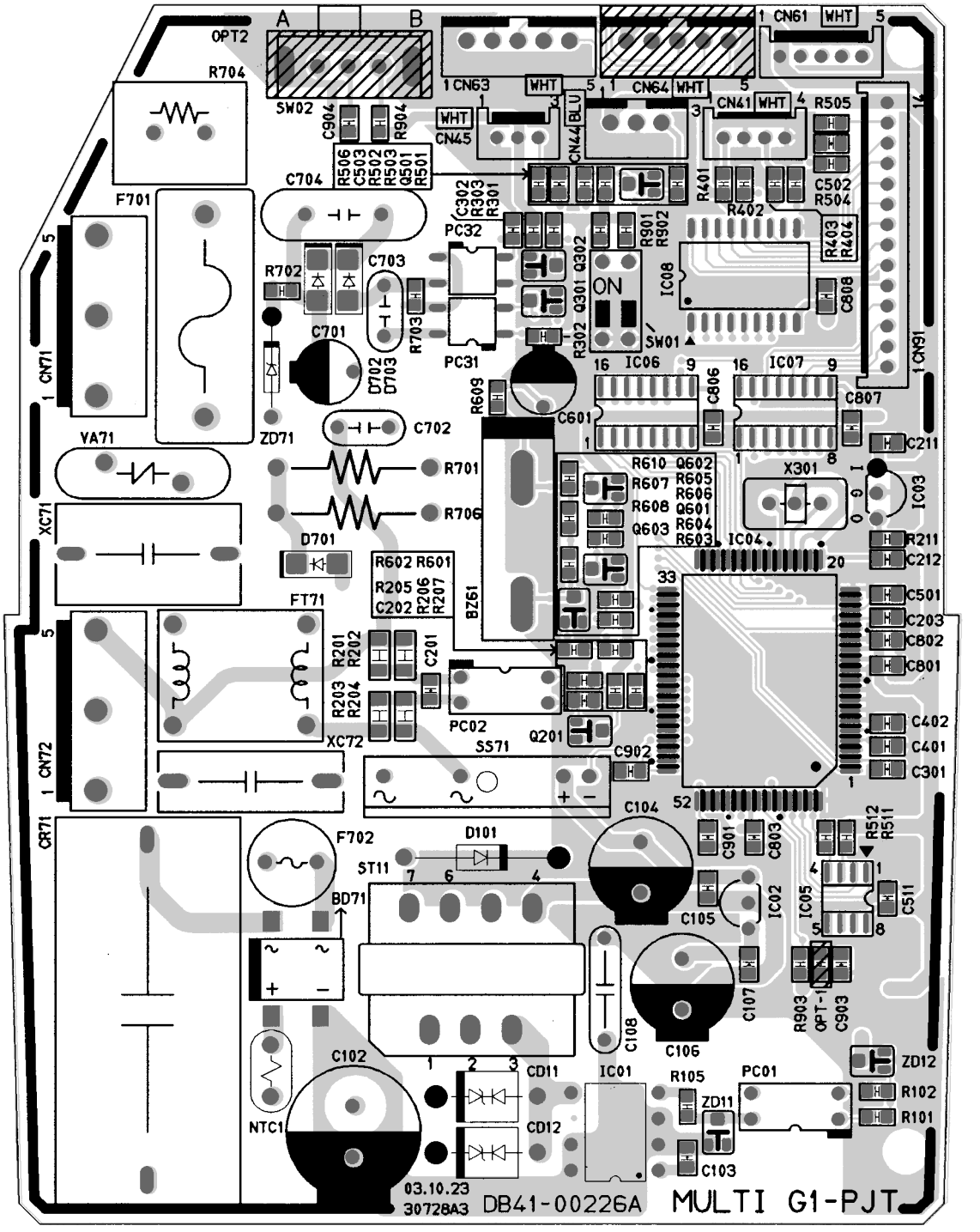
■ **Parts List**

No.	Code No.	Description	Specification	Q'TY	
				MH18AP1(P2)-09 MH19AP1(P2)-07 MH26AP1(P2)-07	MH19AP1(P2)-12 MH24AP1(P2)-12 MH26AP1(P2)-12
1	DB61-01127A	CASE-CONTROL AC	ABS	1	-
	DB61-01631A	CASE-CONTROL AC	ABS	-	1
2	DB93-02416A	ASS'Y MAIN PCB	ASS'Y	1	1
3	DB93-01368C	ASS'Y S/W & DISPLAY PCB	ASS'Y	1	1
4	DB93-01369A	ASS'Y-MODULE PCB	ASS'Y	1	1
5	DB65-00046A	ASS'Y TERMINAL BLOCK	ASS'Y	1	1
6	DB70-00289A	PLATE TERMINAL LOW	SGCC-M,TI,2	1	1
7	DB61-00171A	HOLDER WIRE CRAMP	HIPS	1	1
8	DB32-00020A	ASS'Y THERMISTOR	ASS'Y	1	1
9	6001-000929	SCREW-MACHINE	PH M3xL22	1	1
10	6001-000725	SCREW-MACHINE	TH M4xL16	2	2
11	DB93-01380B	C/W MODULE	ASS'Y	1	-
	DB93-01380A	C/W MODULE	ASS'Y	-	1
12	DB39-00643M	C/W STEP MOTOR UP/DOWN	ASS'Y	1	-
	DB39-00643F	C/W STEP MOTOR UP/DOWN	ASS'Y	-	1
13	DB62-01368X	SEAL	61x40x3,30FOAM-PE,GRAY	1	1
14	-	SCREW-MACHINE	PH M4X10	-	-
15	DB39-00780B	C/W STEPPING MOTOR	ASS'Y(AUTO GRILLE)	1	1
16	DB61-01110A	HOLDER-DISPLAY	ABS	1	1
17	DB64-00763A	HALF MIRROR	95,TI,5	1	1
18	-	ASS'Y PCB HYPS	ASS'Y	-	-
19	-	ASS'Y C/W HYPS(12V)	ASS'Y	-	-
20	DB72-00126N	SEAL	T3,FOAM-PE,GRAY	1	1

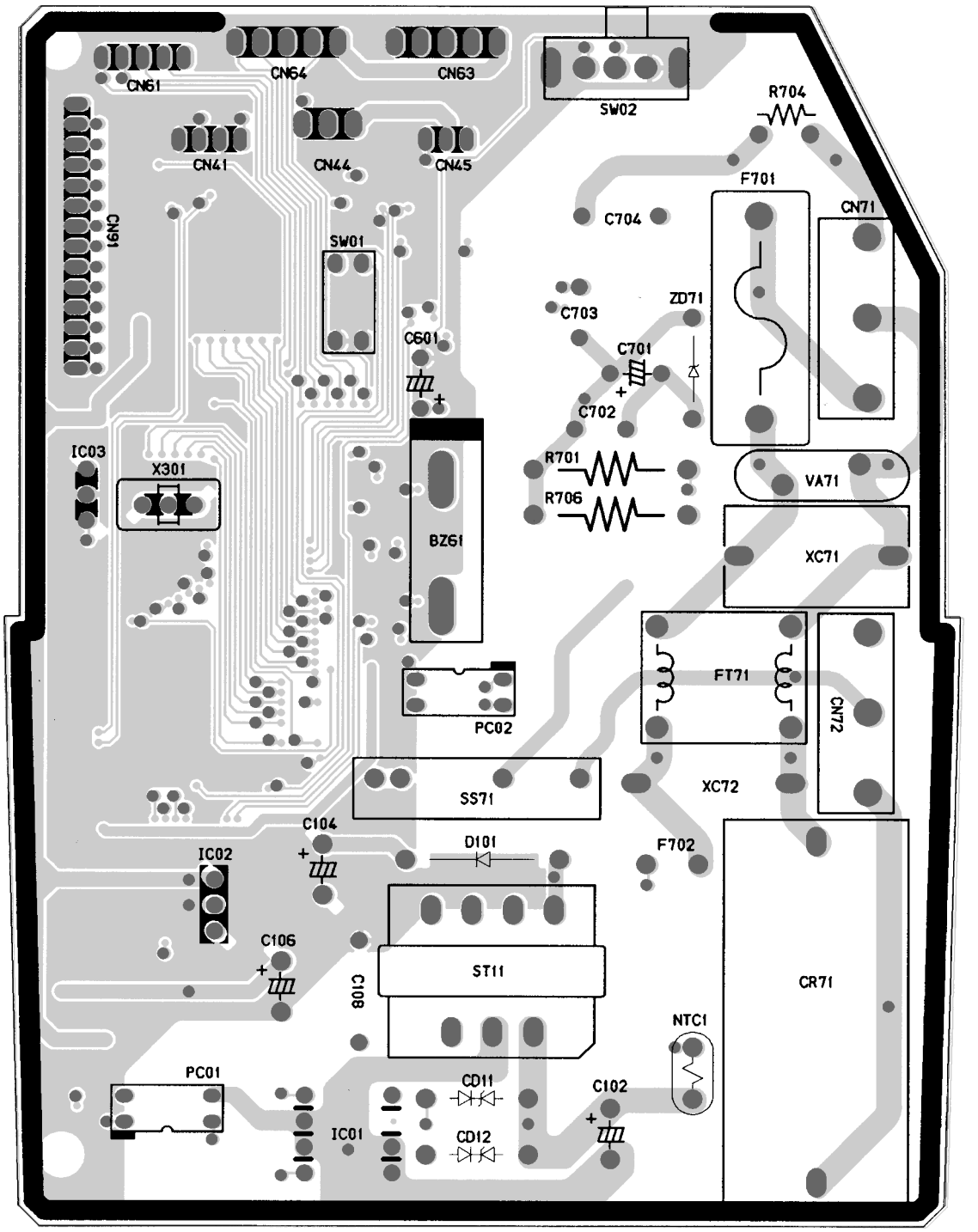
8. PCB Diagram

8-1 MAIN PCB(Indoor Unit)

■ **TOP**



■ BOTTOM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VA71
BZ61
XC71
FT71
CN72
PC02
SS71
XC72
C104
D101
F702
IC02
C106
ST11
C108
CR71
NTC1
PC01
CD11
C102
IC01
CD12

■ Parts List

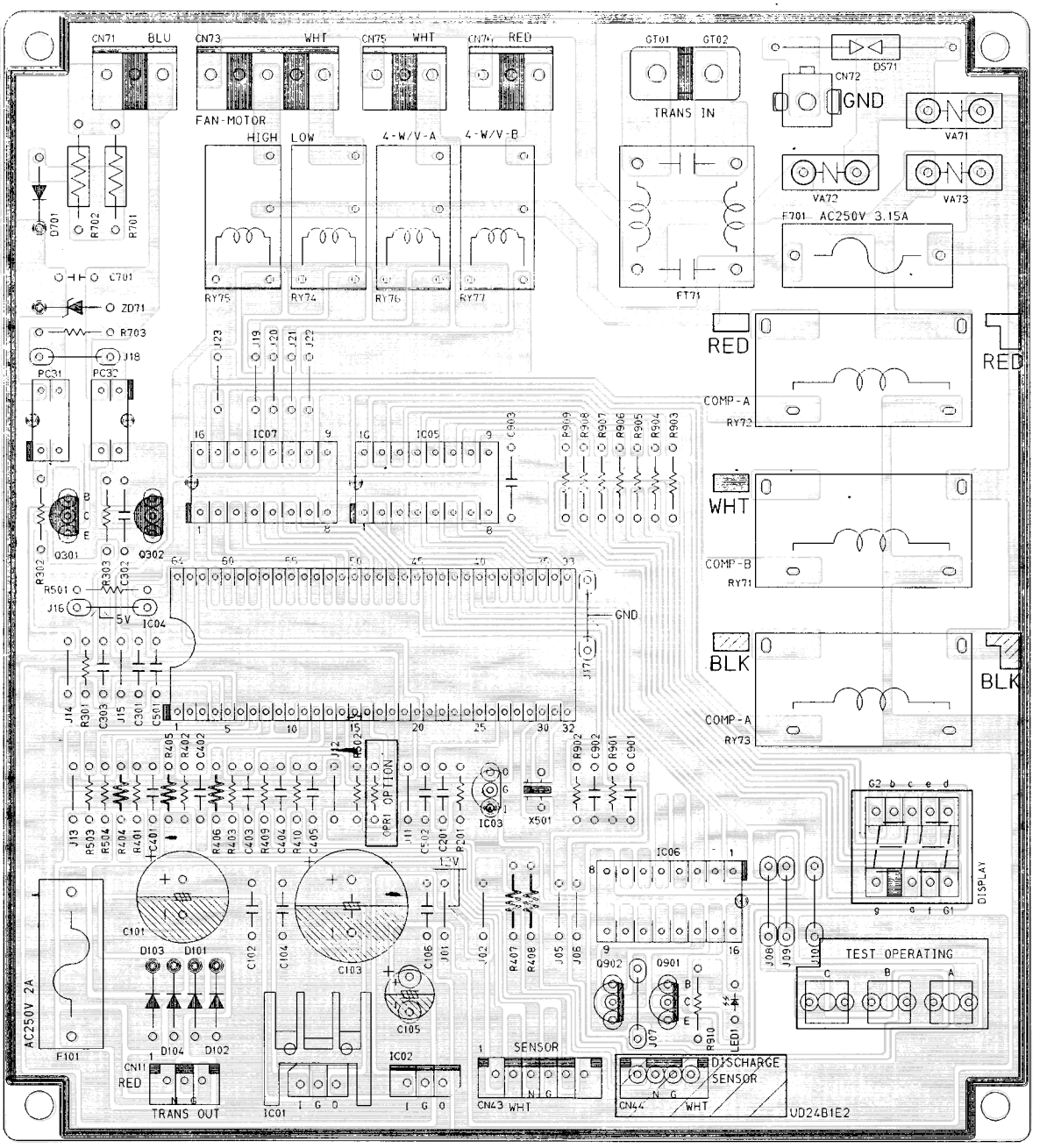
Location No.	Description	Specification	Q'TY	Remark
PCB	PCB-BOARD	FR-4,1.6t	1	
D101	DIODE-RECTIFIER	UG2D,200V,2A,DO-204AC,TP	1	
D701, D702, D703	DIODE-RECTIFIER	MRA4005,600V,1A,SMA,TP	3	
BD71	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	1	
ZD11	DIODE-ZENER	BZX84C3V6,3.6,350mW,SOT-23,TP	1	
ZD71	DIODE-ZENER	1N4749A,24V,5%,1W,DO-41,TP	1	
ZD12	DIODE-ZENER	BZX84-C11,10.4-11.6V,350MW,SOT-23,TP	1	
CD11,CD12	DIODE-TVS	ST02D-200,185/200/215V,200W,DO-214	2	
Q201,Q302,Q501Q601,Q603	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,1	5	
Q602	TR-SMALL SIGNAL	MMST2907A,PNP,200mW,SOT-23,TP,100-	1	
Q301	TR-DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	1	
IC06,IC07	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	2	
PC01	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST	1	
PC31,PC32	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	2	
PC02	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	1	
IC08	IC-SOURCE DRIVER	TD62783AFW,SOL,18P,-,8,-500MA,TP	1	
IC05	IC-EEPROM	93LC56,128x16Bit,SOP,8P,150MIL,-,2.5V,-	1	
IC03	IC-VOLTAGE COMP.	7533,TO-92,3P,-,SINGLE,-,-,PLASTIC	1	
IC02	IC-POSI.ADJUST REG.	78L05A,TO-92,3P,-,PLASTIC,4.6	1	
IC01	IC-PWM CONTROLLER	266,DIP,8P,300MIL,PLASTIC,-0.3/7	1	
NTC1	THERMISTOR-NTC	22ohm,1.4A,3100K,9.5MW/C,-,7.0,-	1	
VA71	VARISTOR	560V,2500A,17.5x7.5mm,TP	1	
R701,R706	R-METAL OXIDE(S)	100Kohm,5%,2W,AA,TP,4x12mm	2	
R704	R-CEMENT	5.1Kohm,5%,5W,-,BK,12.7x10x25.4mm	1	
OPT_1	R-CHIP	0ohm,5%,1/8W,TP,2012	1	
R609	R-CHIP	560ohm,5%,1/8W,TP,2012	1	
R702	R-CHIP	100Kohm,5%,1/8W,TP,2012	1	
R201, R202, R203, R204	R-CHIP	100Kohm,5%,1/4W,TP,3216	4	
R101	R-CHIP	100ohm,5%,1/8W,TP,2012	1	
R205,R303,R505,R601	R-CHIP	10Kohm,5%,1/8W,TP,2012	9	
R603,R901~R904				
R206,R207,R211,R301	R-CHIP	1Kohm,5%,1/8W,TP,2012	10	
R501,R502,R506,R602				
R604,R610				
R102	R-CHIP	2.2Kohm,5%,1/8W,TP,2012	1	
R402,R404	R-CHIP	330ohm,5%,1/8W,TP,2012	2	
R504,R606,R703	R-CHIP	4.7Kohm,5%,1/8W,TP,2012	3	
R105,R302,R607,R608	R-CHIP	470ohm,5%,1/8W,TP,2012	4	
R511,R512	R-CHIP	47Kohm,5%,1/8W,TP,2012	2	
R401,R403	R-CHIP	6.8Kohm,1%,1/8W,TP,2012	2	

■ **Parts List (cont.)**

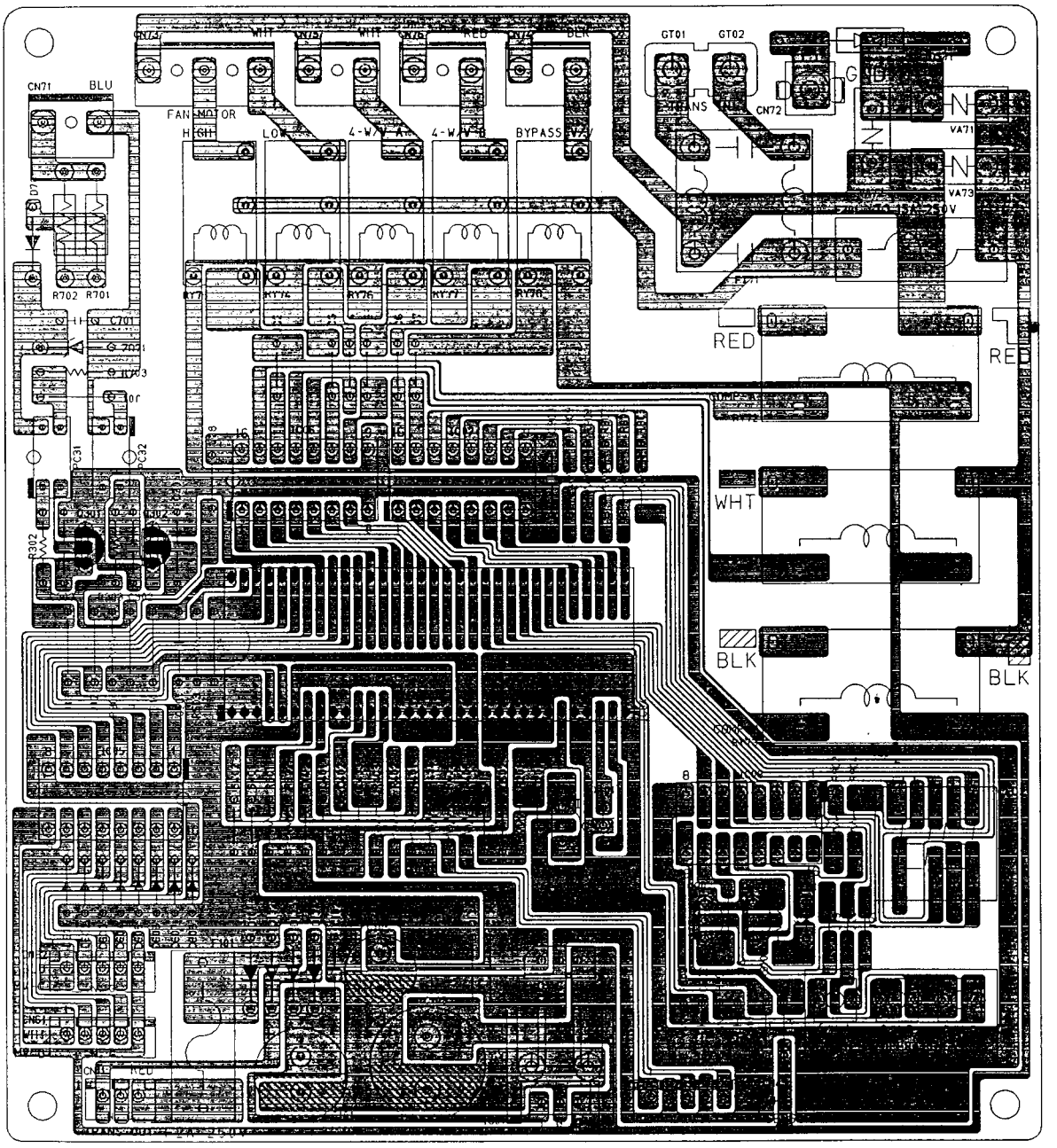
Location No.	Description	Specification	Q'TY	Remark
R503	R-CHIP	6.8Kohm,5%,1/8W,TP,2012	1	
C108	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5x6mm,10	1	
C103,C105,C107,C201		C-CER,CHIP;100nF,+80-20%,50V,Y5V,TP,2012	21	
C211,C212,C302,C401				
C402,C502,C511				
C801~803,C806~808				
C901~904				
C301,C503	C-CER,CHIP	1nF,10%,50V,X7R,TP,2012,-	2	
C202,C203,C501	C-CER,CHIP	10nF,+80-20%,50V,Y5V,TP,2012	3	
C704	C-FILM,LEAD-PEF	10nF,10%,630V,TP,16x11x7.5mm,5	1	
C702,C703	C-FILM,LEAD-PEF	4.7nF,10%,100V,TP,10x8.5x5.0mm	2	
XC72	C-FILM,MPPF	100nF,10%,275V,BK,18x6x12,15	1	
CR71	C-FILM,MPPF	1.2uF,10%,450Vac,BK,38x18x30,3	1	
XC71	C-FILM,PCF	220NF,10%,275V,BK,18x10x6,18	1	
C104	C-AL	1000uF,20%,25V,GP,TP,10x20,5	1	
C106	C-AL	470uF,20%,16V,GP,TP,10x12.5,5	1	
C701	C-AL	47uF,20%,50V,GP,TP,6.3x11,2.5	1	
C601	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	
C102	C-AL	15uF,20%,450V,GP,TP,12.5x20mm,5	1	
X301	RESONATOR-CERAMIC	10MHZ,0.5%,BK,8x3x5.5mm	1	
BZ61	BUZZER-PIEZO	85DB,-,-,2KHZ,-	1	
SW01	SWITCH-DIP	24V,300mA,SLIDE,-	1	
SS71	SSR	12Vdc,-,2A,1mS,1mS	1	
F701_1	FUSE-CARTRIDGE	250V,3.15A,TIME-LAG,GLASS,5x20mm	1	
F702	FUSE-RADIAL LEAD	250V,1A,TIME-LAG,-,8.5x8mm	1	
F701	FUSE-BLOCK	500V,-,100M	1	
CN71	CONNECTOR-HEADER	1WALL,3P,1R,7.92MM,STRAIGHT,SN,BL	1	
CN72	CONNECTOR-HEADER	1WALL,3P,1R,7.92MM,STRAIGHT,SN,WH	1	
CN44	CONNECTOR-HEADER	BOX,3P,1R,2.5mm,STRAIGHT,SN	1	
CN63	CONNECTOR-HEADER	BOX,5P,1R,2.5mm,STRAIGHT,SN	1	
CN91	CONNECTOR-HEADER	BOX,14P,1R,2mm,STRAIGHT,SN	1	
CN45	CONNECTOR-HEADER	BOX,3P,1R,2mm,STRAIGHT,SN	1	
CN41	CONNECTOR-HEADER	BOX,4P,1R,2mm,STRAIGHT,SN	1	
CN61	CONNECTOR-HEADER	BOX,5P,1R,2mm,STRAIGHT,SN	1	
IC04	IC MICOM	MB89538APF-101,MB89538APF-101,64P,+5V,10M	1	
ST11	TRANS SWITCHING	TRANS SWITCHING;-,JT1916-09,-,310V,FERRITE,-,EI191	1	
FT71	COIL,CHOKE	LS404190M,AS-S660,19MH,+50,-30%,-,300MOHM,2A,-,-,-	1	

8-2 MAIN PCB(Outdoor Unit)

■ 18K/19K/24K



■ 26K


CN71
BLU
FAN MOTOR
HIGH
LOW
BYPASS
GT01
GT02
CN72
RED
WHT
BLK
RED
BLK

■ Parts List

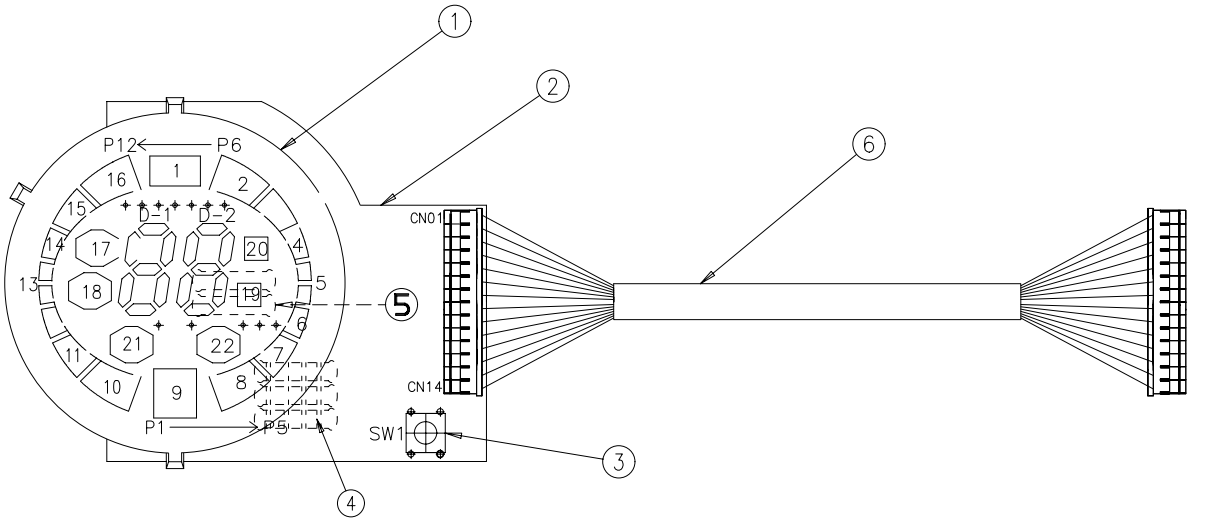
Location No.	Description	Specification	Q'TY	Remark
F701	FUSE	FST 250V 3.15A	1	
F101	FUSE	FST250V 2A	1	
F701,F101	HOLDER-FUSE	FH-51H 7.5A	2	
R401~R403	R-CARBON	RD 1/8 TP 331-J	3	
R901,R902	R-CARBON	RD 1/4 TP 103-J	2	
R201	R-CARBON	RD 1/8 TP 102-J	1	
R701,R703	R-CARBON	RD 2W TP 562-J	2	
R702	R-CARBON	RD 1/4 TP 472-J	1	
R501,R502	R-CARBON	RD 1/8 TP 103-J	2	
R503	R-CARBON	RD 1/4 TP 470-J	1	
R303	R-CARBON	RD 1/4 TP 123-J	1	
R301,R503	R-CARBON	RD 1/8 TP 621-J	2	
R903~R910	R-CARBON	RD 1/2 TP 471-J	8	
R404~R406	R-METER FIRM	RD 1/8 TP 183-F	3	
C302	C-CERAMIC	CA OA 50V 102Z	1	
C102,C104,C106,C202	C-CERAMIC	CA OA 50V 104Z	15	
C301,C303,C401~C403				
C501,C502,C702				
C901,C901,C903				
C103	C-ELEC	CE 04 25V 222-M	1	
C105	C-ELEC	CE 04 25V 471-M	1	
C101	C-ELEC	CE 04 25V 102-M	1	
C701	C-MYLAR	472-2A	1	
IC01	IC-VOLT REGU	KA7812A	1	
IC02	IC-VOLT REGU	KA7805A	1	
IC03	IC RESET	KA75332Z	1	
IC04	IC-MCU	MB89635R	1	
IC05~IC08	IC-DRIVE	KID65003AP	4	
PC31,PC32	PHOTO COUPLER	PC817B	2	
D101~D104,D701	DIODE-RECT	1N4007	5	
D401~D408	DIODE-SWITCHING	1N4148	8	
ZD71	ZENNER-DIODE	UZP30P 30V	1	
SEG1	LED-DISPLAY	SSD-A3202GMT-S GRN	1	
SEG1	HOLDER-SEVEN		1	
LED1	LED-LAMP	RED LTL-4213	1	
FT71	FILTER NOISE	MD250V 1.6A 6mH	1	
X101	PERSONATOR-CERAMIC	10MHz	1	
Q901,Q902	TRANSISTOR	KSR2002	2	
Q301,Q302	TRANSISTOR	KSR1002	2	
S/W-A,S/W-B,S/W-C	SWITCH-TACT	KPT-1115V	3	

■ **Parts List (cont.)**

Location No.	Description	Specification	Q'TY	Remark
VA71,VA72	VARISTOR	INR14D 471K	2	
DS71	DISCHARGER	MP362MA	1	
J01~J22	WIRE SO COPPER	P10.6 T 50MM	22	
RY71~RY73	RELAY-POWER	G4A-1A	3	
RY74~RY77	RELAY	JQ1a-12V	4	
CN71	CONNECTOR WAFER	YW396-03AV BLU	1	
CN43	CONNECTOR WAFER	SMW250-06 WHT	1	
CN11	CONNECTOR WAFER	SMW250-03 RED	1	
CN73	CONNECTOR WAFER	YW396-05AV WHT	1	
CN74	CONNECTOR WAFER	YW396-03AV BLK	1	
CN75	CONNECTOR WAFER	YW396-03AV WHT	1	
CN76	CONNECTOR WAFER	YW396-03AV RED	1	
CN91,CN92	CONNECTOR WAFER	YW250-14 WHT	2	
CN61	CONNECTOR WAFER	YW250-05 WHT	1	
CN62	CONNECTOR WAFER	YW250-05 BLU	1	
GT01	CONNECTOR-TERMINAL	GP88191-2	2	
IC01	SCREW-PH	M3*G FeFzY	1	
IC01	HEATSI-PH	AL H25	1	
PCB	PCB-OUT	FR-1	1	

8-3 ASS'Y DISPLAY PCB

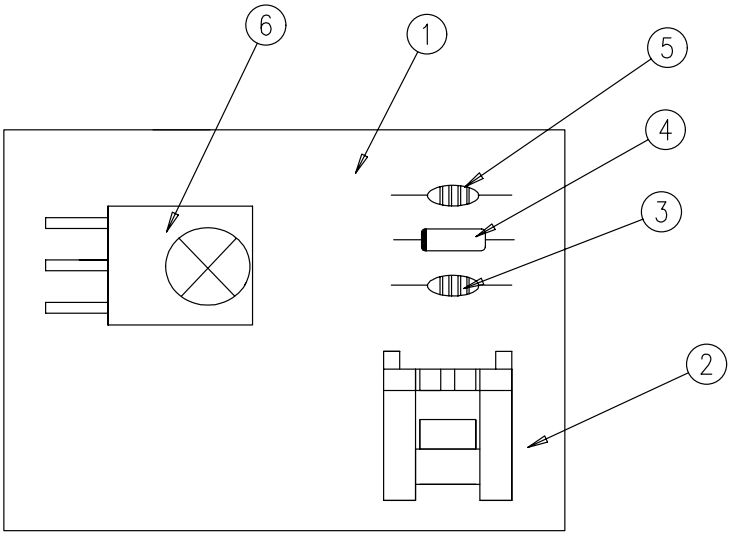
■ 18K/19K/24K/26K : DB93-01368G



■ **Parts List**

No	Description	Specification	Q'TY	Remark
1	ASS'Y LED MODULE		1	SNA
2	PCB-DISPLAY	FR-1 T1.6	1	SNA
3	TACT SWITCH	KPT-1105A	1	SNA
4	RESISTOR	200ohm, 2W	2	SNA
5	RESISTOR	100ohm, 2W	3	SNA
6	CONNECTOR WIRE	14P	1	SNA

8-4 ASS'Y MODULE PCB : DB93-01369A



■ **Parts List**

No	Description	Specification	Q'TY	Remark
1	PCB MODULE	FR1 T1.6	1	SNA
2	CONNECTOR-HEADER	BOX, 3P, 1R, 2mm, ANGLE, SN	1	SNA
3	C-CERAMIC, MLC-AXIAL	1nF, 10%, 50V, Y5P, TP, 1.9 x 3.5, -	1	SNA
4	DIODE-SWITCHING	1N4148, 100V, 200mA, DO-35, TP	1	SNA
5	C-CERAMIC, MLC-AXIAL	100nF, +80-20%, 50V, Y5V, TP, 3.5 x 1	1	SNA
6	MODULE	FRP4021H7	1	SNA

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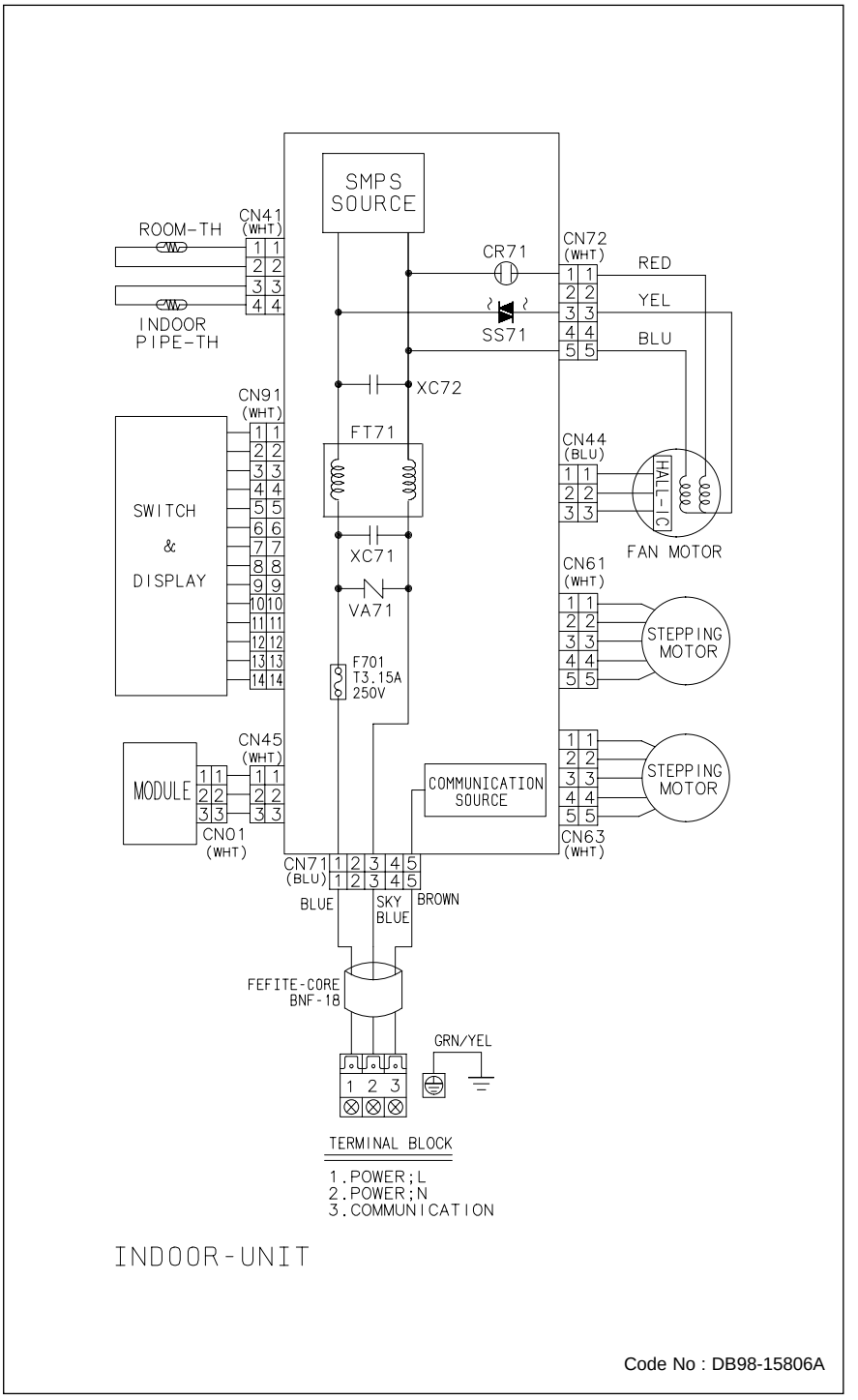
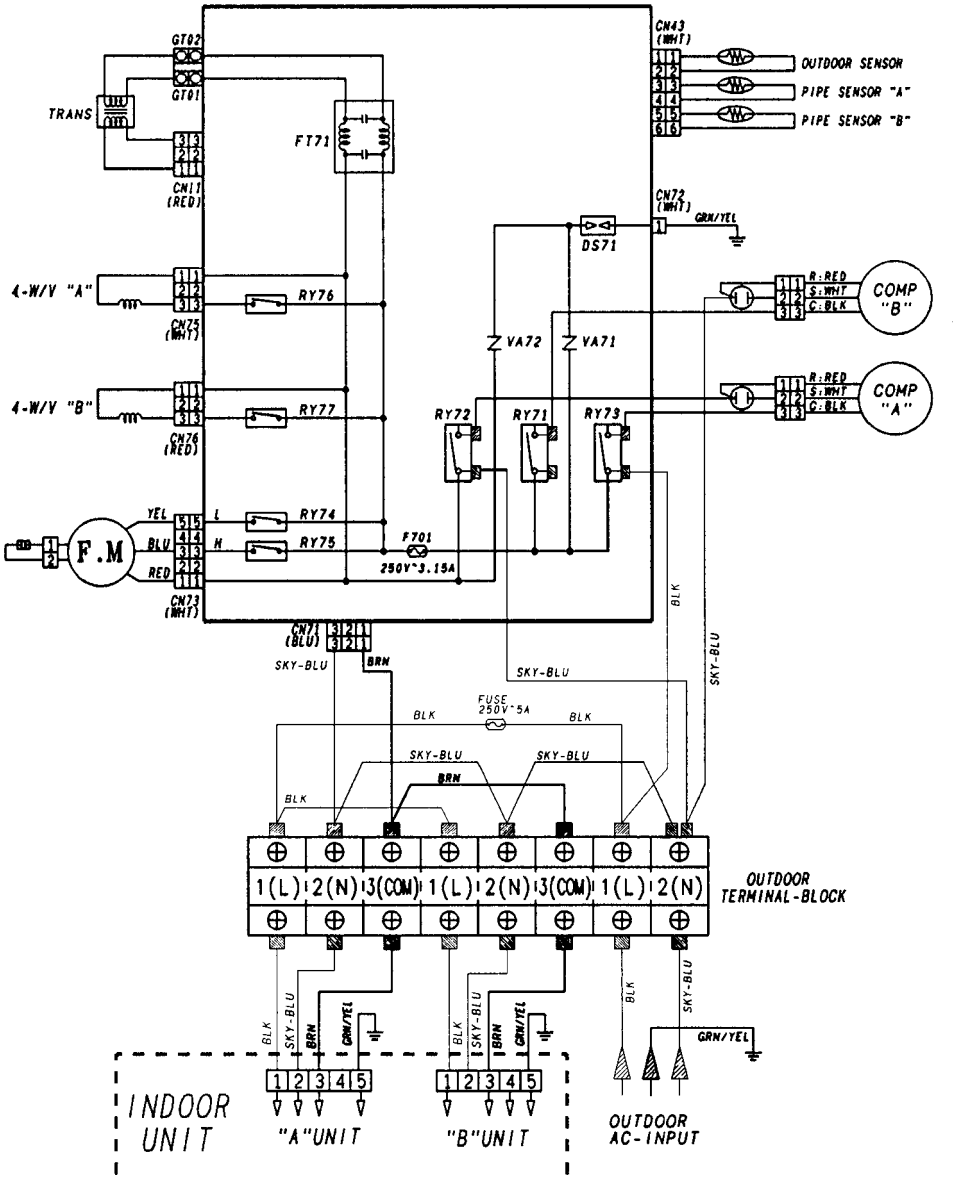
9. Wiring Diagram

9-1 Indoor Unit

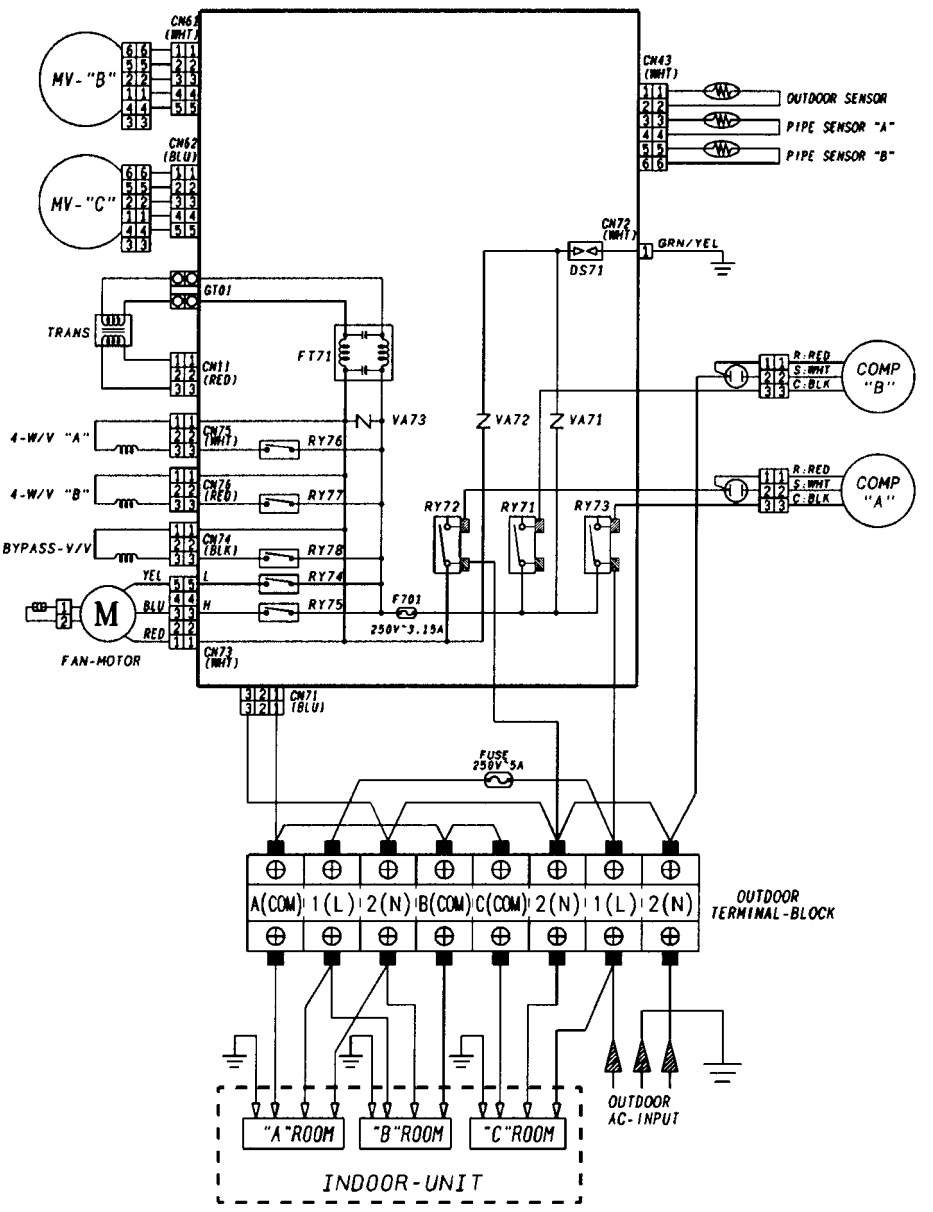


■ MH18AP1(P2)X/MH19AP1(P2)X/MH24AP1(P2)X



Code No : DB68-20814A

■ MH26AP1(P2)X



Code No : DB68-01437A

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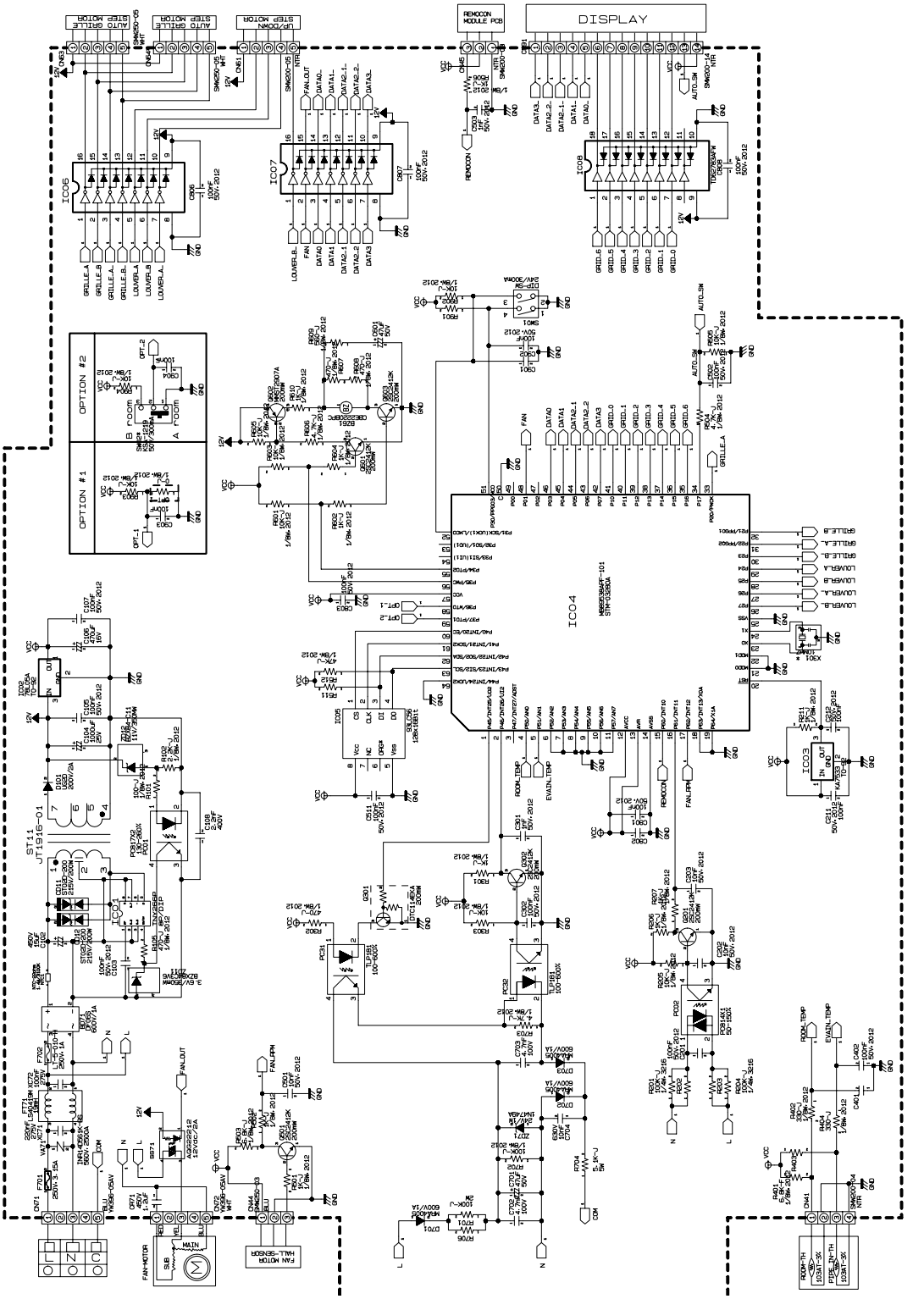
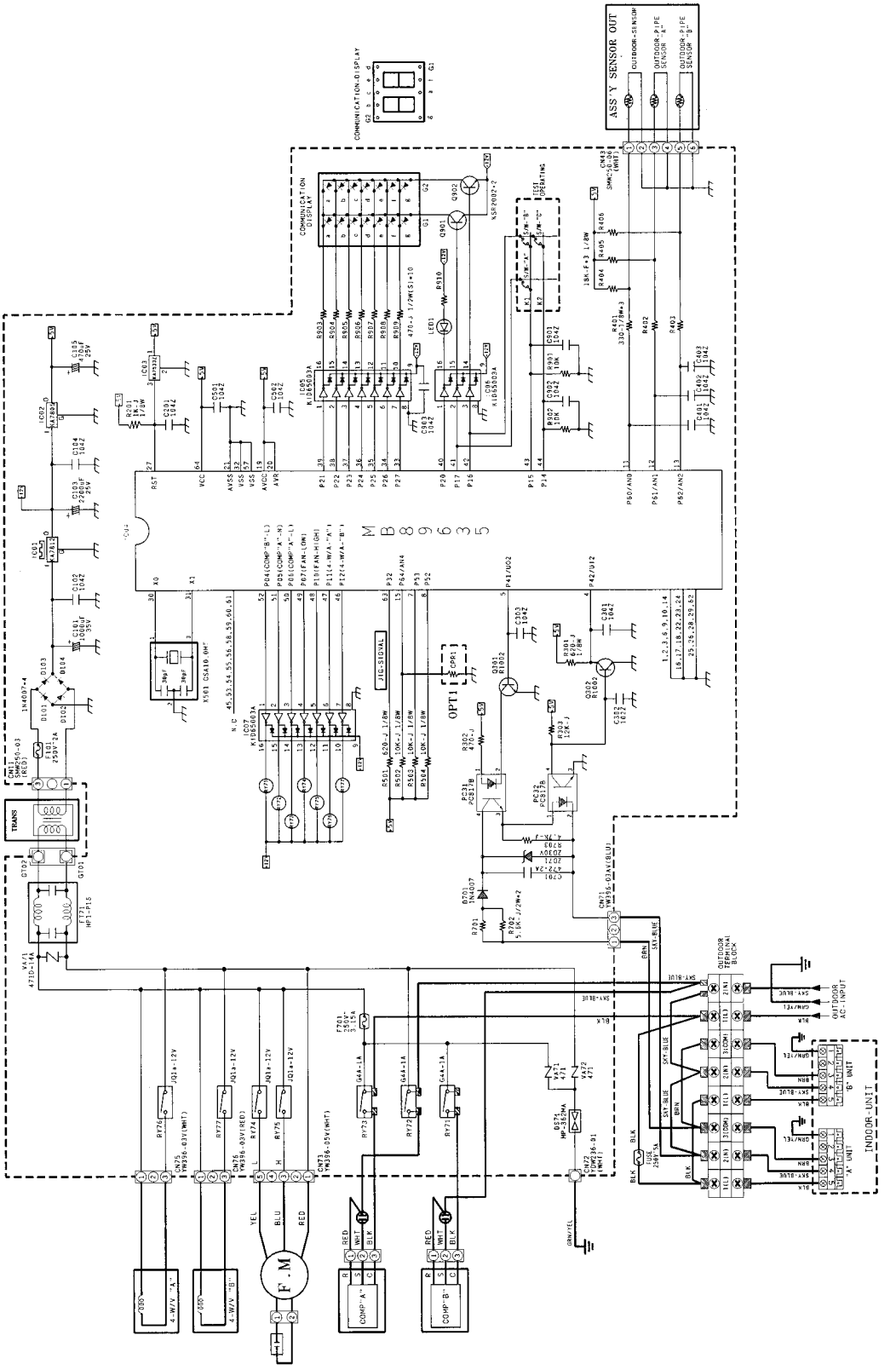
10. Schematic Diagram

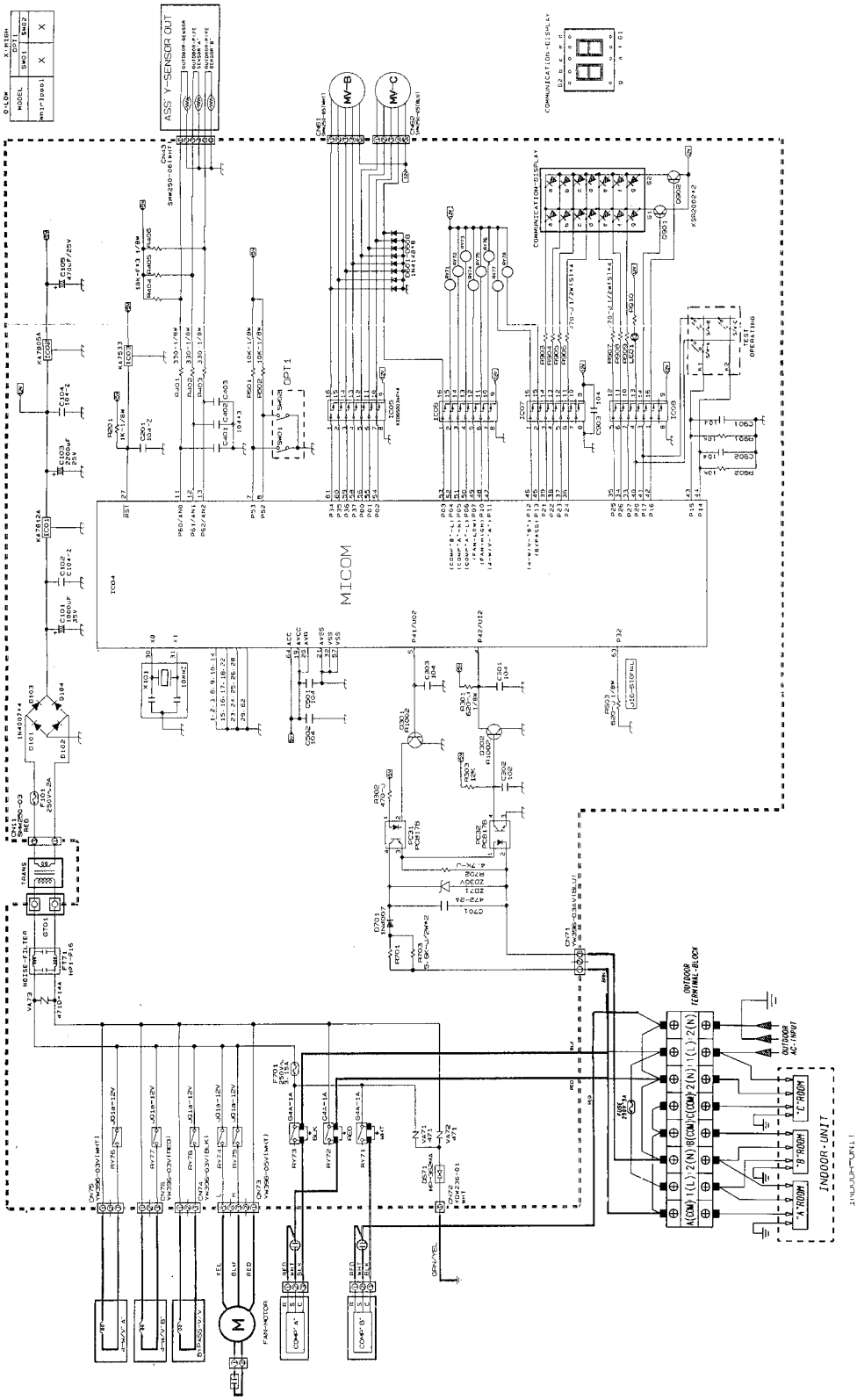
10-1 Indoor Unit



■ MH18AP1(P2)X/MH19AP1(P2)X/MH24AP1(P2)X



■ MH26AP1(P2)X



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