



SAMSUNG

SPLIT-TYPE AIR CONDITIONER

Basic : HS-H60P/H80P SERIES

Model : AQ09MA AQ18MA

AQ12MA AQ24MA

Model Code : AQ09MSBN/AQ09MSBX

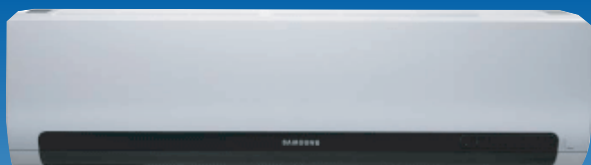
AQ12MSBN/AQ12MSBX

AQ18MSBN/AQ18MSBX

AQ24MSBN/AQ24MSBX

***SERVICE* Manual**

AIR CONDITIONER



AQ09MSBN/AQ12MSBN/AQ18MSBN/AQ24MSBN



AQ09MSBX/AQ12MSBX/AQ18MSBX/AQ24MSBX

THE FEATURE OF PRODUCT

- **Good Morning Mode**
- **Catechin Filter**
- **Silver Nano Evaporator**
- **Deodorizing Filter**
- **Anti-Bacterial Cross Fan**

For more information, Please access to our service web site(<http://itself.sec.samsung.co.kr>)

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2. Product Specifications

2-1 The Feature of Product

■ **Good Morning Mode**

■ **Catechin Filter**

Catechin, extracted from the green tea, is contained in the filter and deactivates captured bacteria and unpleasant odors.

■ **Silver Nano Evaporator**

■ **Deodorizing Filter**

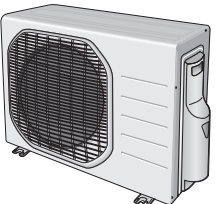
Activated carbon is incorporated in the filter, efficiently absorbing cigarette smoke, pet odors, and other unpleasant smells, replacing them with clean, refreshing air.

■ **Anti-Bacterial Cross Fan**

2-2 Product Specifications

ITEM		AQ09MSBN	AQ09MSBX	AQ12MSBN	AQ12MSBX	AQ18MSBN	AQ18MSBX	AQ24MSBN	AQ24MSBX
		indoor	outdoor	indoor	outdoor	indoor	outdoor	indoor	outdoor
		wall mount		wall mount		wall mount		wall mount	
cooling (kW)		2.7		3.6		5.2		6.8	
heating (kW)		2.9		3.8		5.8		7	
dehumidifying		1		1.3		1.9		2.6	
air volume (l/min)	cooling	7.5/6.9/6.3	25	8.3/7.0/5.7	25	13.9/13.1/11.7	25	13.7/11.9/9.8	25
	heating	8.0/7.4/6.8	25	9.5/8.9/8.3	25	14.7/13.8/12.5	25	14.7/13.1/11.5	25
noise (dB)	cooling	37/29	51	39/30	53	45/36	58	47/39	61
	heating	37/30	52	39/31	54	45/37	59	47/40	62
energy eff (kW/kW)	cooling	3.21		3.21		2.81		2.81	
	heating	3.41		3.22		3.22		2.81	
power		220/240-50		220/240-50		220/240-50		220/240-50	
power consum (W)	cooling	840		1120		1850		2420	
	heating	850		1180		1800		2490	
operating current (A)	cooling	3.9		5.2		8.4		10.8	
	heating	3.7		5.5		8.2		11.2	
power factor (%)	cooling	96		98		96.6		94	
	heating	96.5		98		96.2		94	
starting current (A)		20		20		20		20	
power cord	length (m)	2		2		2		2	
	number of core wire	3		3		3		-	
	capacity	250V 10A		250V 10A		250V 10A		-	
outer dimension (mm)		950x268x178	720X548X265	950x268x178	720X548X265	1099X315X200	720X548X265	1099X315X200	720X548X265
		37.4x10.6x7.0	28.3X21.6X10.4	37.4x10.6x7.0	28.3X21.6X10.4	43.3X12.4X7.9	28.3X21.6X10.4	43.3X12.4X7.9	28.3X21.6X10.4
weight (kg)		9	33.8	9	33.8	13	39	13	56
Refrigerant Pipe		Φ6.35 x 5m		Φ6.35x5m		Φ6.35x5m		Φ6.35x5m	
		Φ9.52x5m		Φ12.8x5m		Φ12.8x5m		Φ15.4x5 m	
drain hose		18x550		18x550		18x550		18x550	
compressor	type	G4091JU1EP		G8C124JU1EL		G8D190JUA EH		G5A240JUA EM	
	motor type	Induction motor		Induction motor		Induction motor		Induction motor	
	rated output	944		1300		2000		2470	
oil type									
Blower	type	Cross-fan	Propeller	Cross-fan	Propeller	Cross-fan	Propeller	Cross-fan	Propeller
	motor type	Resin/steel	steel	Resin/steel	steel	Resin/steel	steel	Resin/steel	steel
	rated output								
Heat Exchanger		2ROW 10STEP	1ROW 20STEP	2ROW 10STEP	1ROW 20STEP	2ROW 16STEP	2ROW 24STEP	2ROW 16STEP	2ROW 24STEP
Refrigerant Control Unit		capillary tube		capillary tube		capillary tube		capillary tube	
Freezer Oil Capacity		280		500		600		800	
Refrigerant to Change(R410a)		750 g		900 g		1210 g		1500 g	
Protection Device (OLP)		MRA12054-12007		MRA12128-12007		INTERNAL		INTERNAL	
Cooling test condition		INDOOR UNIT: DB27°C WB19°C	OUTDOOR UNIT: DB35°C WB24°C	INDOOR UNIT: DB27°C WB19°C	OUTDOOR UNIT: DB35°C WB24°C	INDOOR UNIT: DB27°C WB19°C	OUTDOOR UNIT: DB35°C WB24°C	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	INDOOR UNIT: DB32°C WB23°C	OUTDOOR UNIT: DB43°C WB26°C	INDOOR UNIT: DB32°C WB23°C	OUTDOOR UNIT: DB43°C WB26°C	INDOOR UNIT: DB32°C WB23°C	OUTDOOR UNIT: DB43°C WB26°C

2-3 The Comparative Specifications of Product

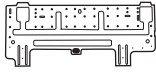
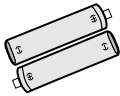
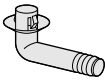
Item		AQ09MSBN	AQ09MSBX	AQ12MSBN	AQ12MSBX
Design	Indoor Unit				
	Outdoor Unit				
	indoor unit				
	outdoor unit				
net weight	indoor unit	9	9	13	13
	outdoor unit	33.8	33.8	39	56
outer dimension	indoor unit	950x268x178	950x268x178	1099x315x200	1099x315x200
	outdoor unit	720x548x265	720x548x265	790x548x285	790x548x285
noise	indoor unit	37	39	45	47
	outdoor unit	51	51	58	61

2-3 The Comparative Specifications of Product

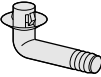
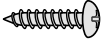
Item		AQ18MSBN/ AQ18MSBX	AQ24MSBN/ AQ24MSBX
Design	Indoor Unit		
	Outdoor Unit		
Net Weight	Indoor Unit	13.0kg	
	Outdoor Unit	31.5kg	
Outer Dimension (WidthxHeightxDepth)	Indoor Unit	1,080x315x205mm	
	Outdoor Unit	790x548x285mm	
Noise	Indoor Unit	48dB↓	
	Outdoor Unit	58dB↓	59dB ↓
Air Purifying System	Filter	Silver Nano Filter Catechin Filter Deodorizing Filter	
Indoor Display		Digital i	

2-4 Accessory and Option Specifications

2-4-1 Accessories

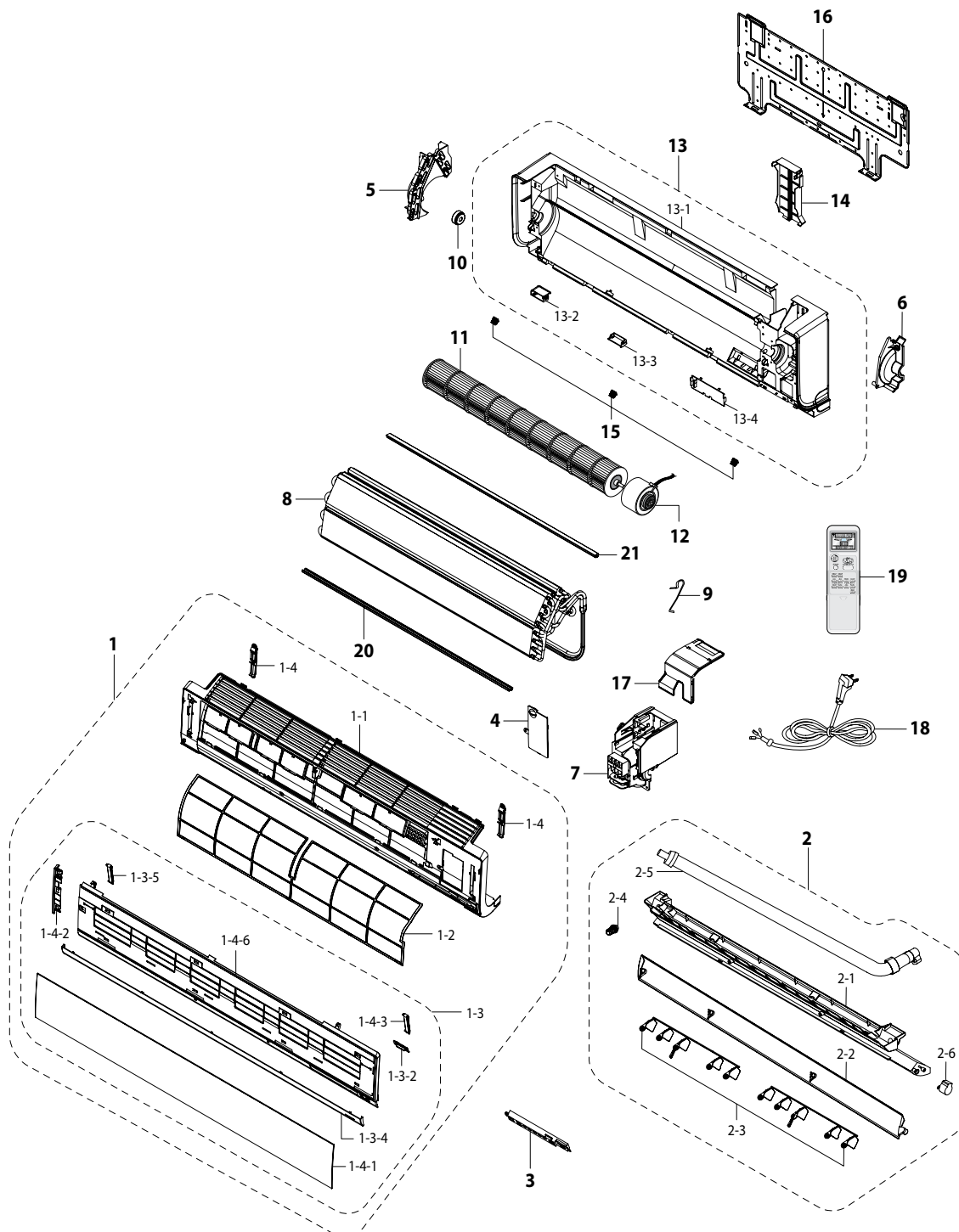
Item	Descriptions	Code-No.	Q'TY	Remark
	Installation Plate	DB61-02918A	1	Indoor Unit
		DB93-03494H	1	
	Remote Control	DB93-03170M (H/P)	1	
		DB93-03170N (C/O)	1	
	Batteries for Remote Control	DB47-90024A	2	
	User's Manual	DB98-26666A	1	
			1	
	Installation Manual	DB98-26664A (**09.12**)	1	Outdoor Unit
		DB98-26665A (**18.24**)	1	
	3-wire Assembly Cable (**18**)	-	1	
	5-wire Assembly Cable (**24**)	-	1	
	Drain Plug	DB73-26182A (**09.**; **12**) DB73-20134A (**18.**; **24**)	1	
	Rubber Leg	DB73-20134A	4	
	Assembly Pipe, ø6.35mm	DB96-10453B	1	Accessory Box
	Assembly Pipe, ø12.70mm (**18**)	DB62-70003E	1	

Accessories(cont.)

Item	Descriptions	Code-No.	Q'TY	Remark
	Assembly Pipe, ø15.88mm (**24**)	DB62-02672H	1	Accessory Box
	Assembly Pipe	15.88(**24**)	1	
	Vinyl Tape, Width 80mm	DB72-00459A	1	
	Drain Plug	DB67-20011A	1	
	Rubber Leg	DB73-00182A DB73-20134A	4	
	Cable-Tie	DB65-10088C	4	
	Cement Nail	-	6	
	M4x16 Tapping Screws	6002-000215	6	
	M3.8x20 Screws for wood		6	
	Drain Hose, length 2m	DB67-00274A	1	
	Putty 100g	DB98-10568A	1	
	PE T3 Foam Tube	-	1	

5. Exploded Views and Parts List

5-1 Indoor Unit



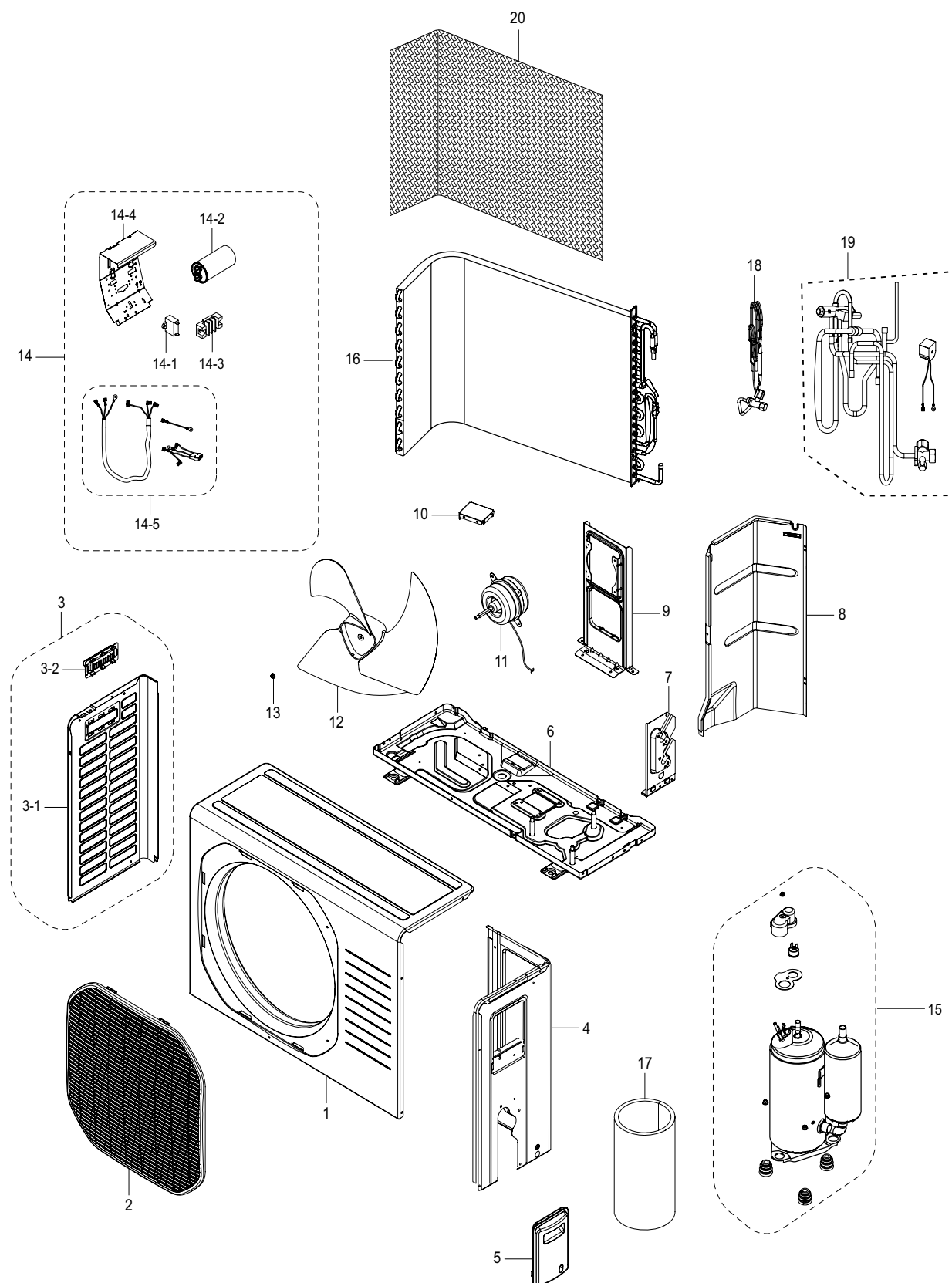
■Part List

NO.	Code NO.	Description	Specification	Q'TY				SN/SNA
				AQ09MSBN	AQ12MSBN	AQ18MSBN	AQ24MSBN	
1	DB92-00878B	ASSY PANEL FRONT	ASSY	1	1			SA
	DB92-00882B					1	1	SA
1_1	DB64-01644B	PANEL FRONT		1	1			SA
	DB64-01647B					1	1	SA
1_2	DB63-01584A	FILTER PRE		1	1			SNA
	DB63-01588A					2	2	SA
1_3	DB92-00880B	ASSY GRILLE		1	1			SA
	DB92-00883B					1	1	SA
1_3_1	DB61-02922A	GUIDE RAIL		2	2	2	2	SA
1_3_2	DB64-01641B	BUTTON POWER		1	1	1	1	SA
1_3_3	DB64-01643B	GRILLE AIR INLET		1	1			SA
	DB64-01646B					1	1	SA
1_3_4	DB64-01642A	WINDOW DISPLAY		1	1			SNA
	DB64-01645A					1	1	SA
1_3_5	DB66-01154A	LINK GRILLE		2	2	2	2	SA
2	DB94-01181A	ASSY TRAY DRAIN	ASSY	1	1			SA
	DB94-01179A					1		SA
	DB93-04408A						1	SA
2_1	DB63-01644A	TRAY DRAIN		1	1			SNA
	DB63-01590A					1		SNA
	DB62-04684P						1	SNA
2_2	DB61-02924A	BLADE H		1	1			SA
	DB61-02928A					2		SNA
	6002-000536						2	SNA
2_3	DB61-02925A	BLADE V		2	2			SNA
	DB61-02936A					1		SNA
	DB31-00370A						1	SNA
2_4	DB73-00374A	RUBBER CAP DRAIN		1	1	1		SA
	DB62-04684Q						1	SA
2_5	DB94-01182A	ASSY DRAIN HOSE	ASSY	1	1	1		SA
	DB63-01590A						1	SA
2_6	DB31-00371A	MOTOR STEP		1	1			SNA
	DB31-00370A					1		SA
	6002-000213						1	SA
3	DB93-04408A	ASSY DISPLAY	ASSY	1	1	1		SA
	DB93-04439A						1	SA
4	DB63-01585A	COVER TERMINAL		1	1			SNA
	DB63-01587A					1	1	SA
5	DB61-02927A	HOLDER EVAP		1	1			SNA
	DB61-02937A					1		SA
	DB96-06655D						1	SA

NO.	Code NO.	Description	Specification	Q`TY				SN/SNA
				AQ09MSBN	AQ12MSBN	AQ18MSBN	AQ24MSBN	
6	DB61-02917A	HOLDER MOTOR		1	1			SA
	DB61-02931A					1	1	SA
7	DB93-04556C	ASSY CONTROL IN	ASSY	1	1			SA
	DB93-04419E					1		SA
	DB93-04419A						1	SA
8	DB96-06670C	ASSY EVAP TOTAL	ASSY	1	1			SA
	DB96-06665A					2		SNA
	6009-001001						2	SNA
9	DB67-60030A	SPRING SENSOR		1	1	1.6		SNA
	0207-001448						1.6	SNA
10	DB94-00455A	ASSY BEARING RUBBER	ASSY	1	1	1		SNA
	DB94-01173B						1	SNA
11	DB94-00627A	ASSY CROSS FAN	ASSY	1	1			SA
	DB94-01228A					1		SNA
	DB73-00181A						1	SNA
12	DB31-00270A	MOTOR FAN IN		1	1			SA
	DB31-00413A					1		SA
	DB94-01182B						1	SA
13	DB94-01176B	ASSY BACK BODY	ASSY	1	1			SNA
	DB94-01178B					1	1	SA
13_1	DB61-03049A	BODY BACK		1	1			SNA
	DB61-02934A					1	1	SA
13_2	DB61-02919A	BUSH BODY LF		1	1			SNA
	DB61-02932A					1	1	SA
13_3	DB61-02920A	BUSH BODY RH		1	1			SNA
	DB61-02933A					1	1	SA
14	DB61-02916A	HOLDER PIPE		1	1			SA
	DB61-02929A					1	1	SA
15	DB67-00721B	CAP SCREW		3	3			SNA
	DB67-00728B					2	2	SA
16	DB61-02918A	PLATE HANGER		1	1			SA
	DB61-02930A					1	1	SA
17	DB63-01586A	COVER CONTROL		1	1			SNA
	DB63-01589A					1	1	SA
17_1	DB61-02942A	PLATE CONTROL IN		1	1	1		SA
	DB61-02935A						1	SA
18	DB93-01549F	ASSY POWER CORD		1	1			SA
	DB93-01549C					1		SNA
	DB68-02809A						1	SNA
19	DB93-04394H	ASSY REMOCON	ASSY	1	1	1		SNA
	DB98-26666A						1	SA

MEMO

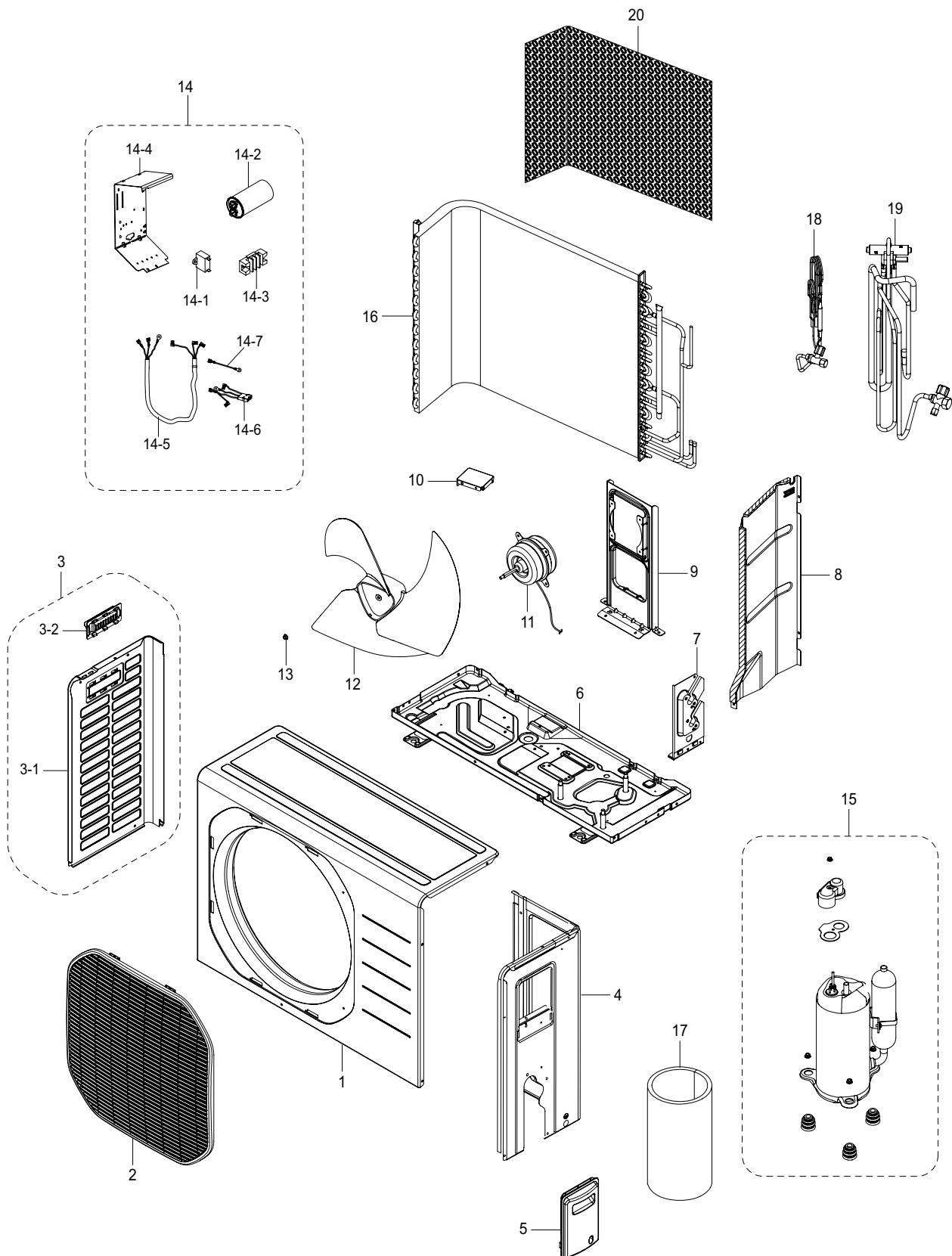
5-2 Outdoor Unit(H/P)



■Part List

NO.	Code NO.	Description	Specification	Q`TY		SA/SNA
				AQ09MSBX	AQ12MSBX	
1	DB90-01341A	ASSY CABINET FRONT	ASSY	1		SA
	DB90-01341H				1	SA
2	DB63-00847A	GUARD FAN		1	1	SA
3	DB90-01332A	ASSY CABINET SIDE LF	ASSY	1	1	SA
3_1	DB64-00992A	HANDLE LF		1	1	SA
4	DB90-01546F	ASSY CABINET SIDE RH	ASSY	1	1	SNA
5	DB63-00853A	COVER CONTROL		1	1	SA
6	DB61-01643B	BASE OUTDOOR		1		SNA
	DB61-01643E				1	SNA
7	DB61-01645A	BRACKET VALVE		1	1	SNA
8	DB94-00668E	ASSY PARTITION	ASSY	1		SA
	DB94-00668D				1	SA
9	DB61-01644A	BRACKET MOTOR		1	1	SA
10	DB61-01808A	SUPPORT B/M		1	1	SA
11	DB31-00220A	MOTOR FAN		1		SA
	DB31-00220B				1	SA
12	DB67-00397A	FAN PROPELLER		1	1	SA
13	DB60-30004A	SCREW MACHINE		1	1	SNA
14	G4A091JU1EP-LS	COMPRESSOR		1	1	0
15	DB63-20003A	GASKET		1		SNA
	DB63-00765A				1	SNA
16	DB73-00067A	GROMMET ISOLATOR		3		SNA
	DB63-00763A				3	SNA
17	DB60-00276A	FLANGE NUT		3		SNA
	6021-001142				3	SNA
18	DB62-03859A	FELT COMP SOUND		1		SNA
	DB63-01664A				1	SNA
19	DB96-06861A	ASSY COND		1		SA
	DB96-06675D				1	SA
20	DB67-60028A	SPRING OLP		1		SNA
	DB61-01897A				1	SNA
21	DB63-00762A	COVER TERMINAL		1	1	SA
22_1	DB65-10046A	CLIP CAPACITOR		1	1	SNA
22_2	2501-001238	C OIL		1		SA
	2501-001237				1	SA
22_3	2301-001375	C FILM,LEAD OTHER		1	1	SA
22_4	DB93-00481J	ASSY LEAD WIRE COMP	ASSY	1		SA
	DB93-00481K				1	SA
22_5	DB61-00250A	HOLDER WIRE CLAMP		1	1	SA
22_6	DB65-40049E	TERMINAL BLOCK		1	1	SA
23	DB96-06784A	ASSY VALVE CHECK	ASSY	1		SA
	DB99-00861A					SA
24	DB96-06802A	ASSY 4WAY VALVE	ASSY	1		SA
	DB99-00860A				1	SA
25	DB96-06784A	ASSY VALVE CHECK	ASSY	1		SA
	DB99-00861A				1	SA
26	DB71-00090G	BAR STEEL		1		SA
	DB71-00090A				1	SA

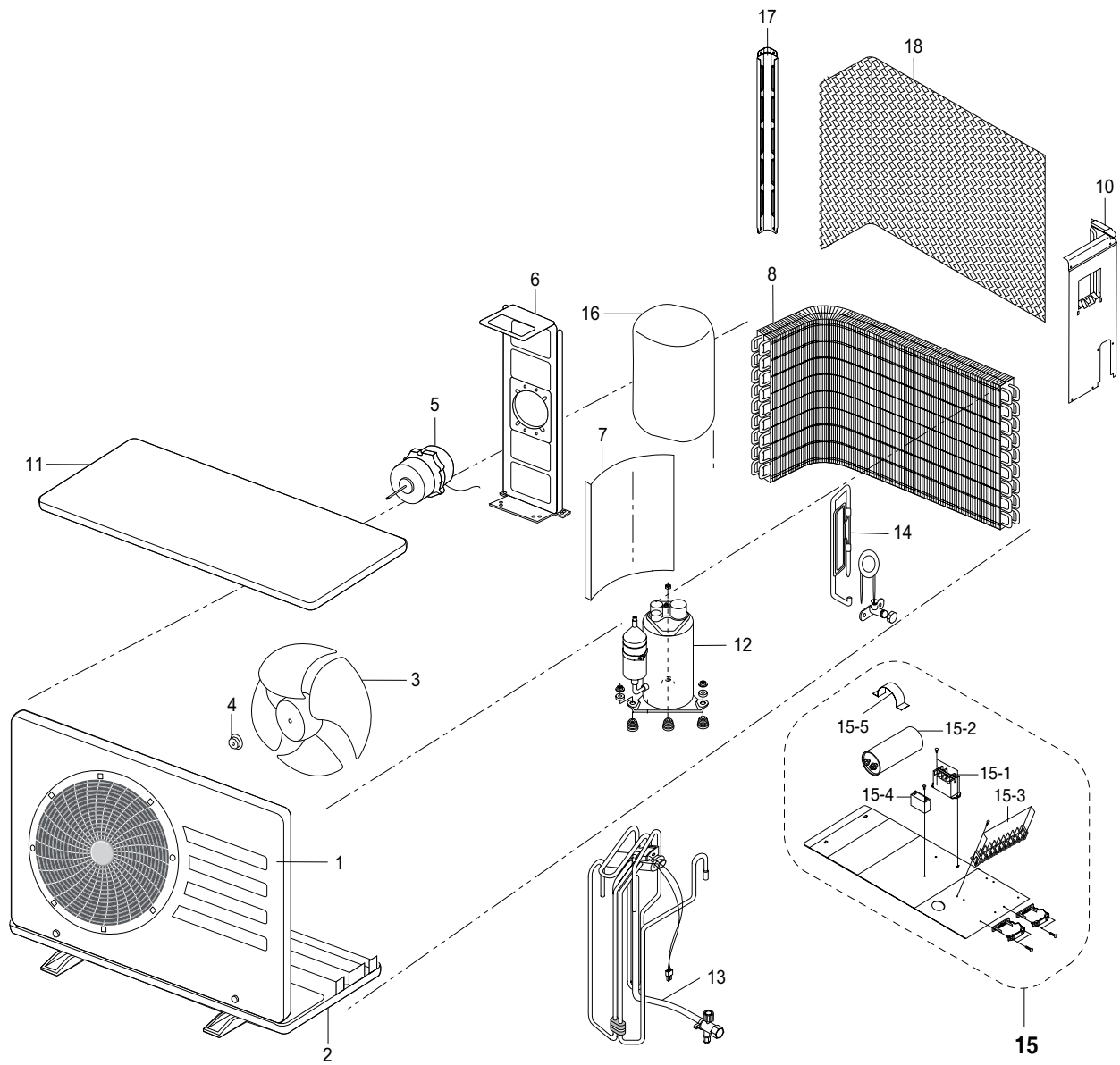
5-2 Outdoor Unit(H/P)



■Part List

NO.	Code NO.	Description	Specification	Q'TY	SA/SNA
				AQ18MSBX	
1	DB90-01711D	ASSY CABINET FRONT	ASSY	1	SA
2	DB63-00847A	GUARD FAN		1	SA
3	DB90-01713A	ASSY CABINET SIDE LF	ASSY	1	SA
3_1	DB64-00992A	HANDLE LF		1	SA
4	DB90-02876A	ASSY CABINET SIDE RH	ASSY	1	SA
5	DB63-00853A	COVER CONTROL		1	SA
6	DB61-02069A	BASE OUTDOOR		1	SNA
7	DB61-02068A	BRACKET VALVE		1	SA
8	DB94-00638C	ASSY PARTITION		1	SNA
9	DB61-01644A	BRACKET MOTOR		1	SA
10	DB61-01808A	SUPPORT B/M		1	SNA
11	DB31-00265E	MOTOR FAN		1	SA
12	DB67-00238A	FAN PROPELLER		1	SA
13	DB60-30020A	SCREW MACHINE		1	SA
14	G8D190JUA EH	COMPRESSOR		1	0
15	DB63-00817A	GASKET		1	SNA
16	DB63-00815A	GROMMET ISOLATOR		3	SNA
17	6021-001142	FLANGE NUT		3	SA
18	DB63-00816A	COVER TERMINAL		1	SNA
19	DB62-03032A	FELT COMP SOUND		1	SNA
20	DB96-06369B	ASSY COND		1	SA
21	DB93-04248C	ASSY CONTROL OUT	ASSY	1	SA
20_1	DB65-10046A	CLIP CAPACITOR		1	SNA
20_2	2501-001240	C OIL		1	SA
20_3	2301-001370	C FILM, LEAD OTHER		1	SA
	DB39-01033B	CONNECT WIRE FAN		1	SNA
	DB39-01035D	CONNECT WIRE LEAD		1	SNA
	DB39-01031G	CONNECT WIRECOMP		1	SNA
20_5	DB61-00250A	HOLDER WIRE CLAMP		1	SA
20_6	DB65-40049E	TERMINAL BLOCK		1	SA
21	DB99-00834A	ASSY VALVE CHECK	ASSY	1	SA
22	DB99-00833A	ASSY 4WAY VALVE	ASSY	1	SA
23	DB99-00834A	ASSY VALVE CHECK	ASSY	1	SA
24	DB61-02405A	GUIDE SCREEN		1	SNA

24k BTU

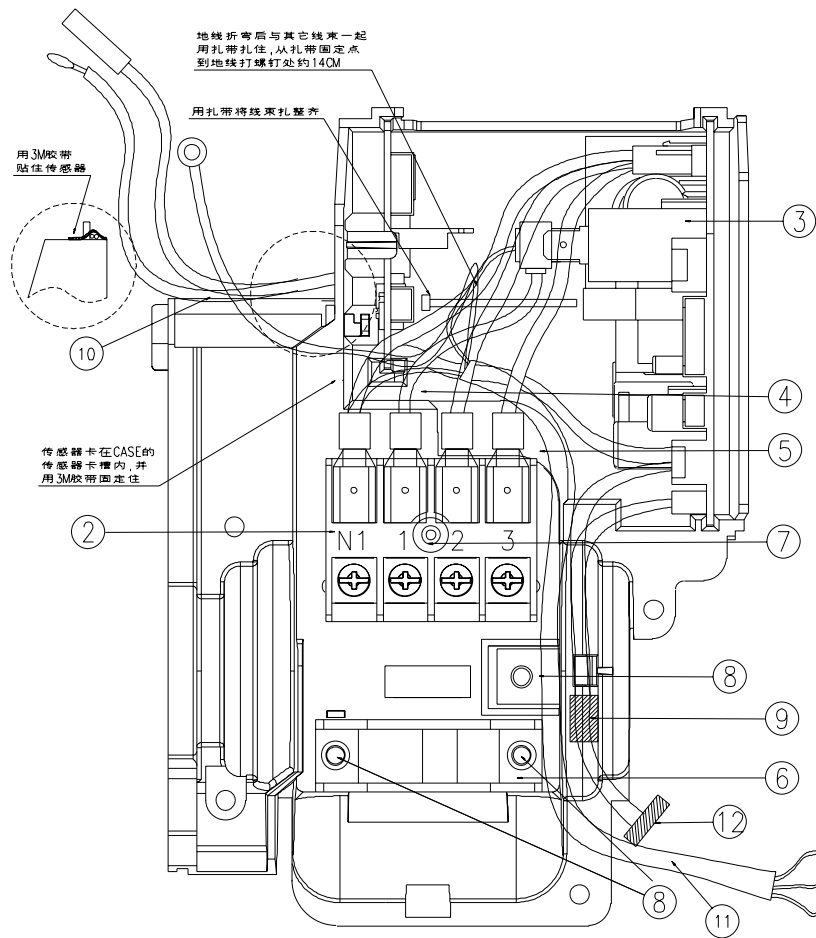


■Part List

NO.	Code NO.	Description	Specification	Q'TY	SA/SNA
				AQ24MSBX	
1	DB90-01146C	ASSY-CABI FRONT;	ASS'Y	1	
2	DB90-00970J	ASSY BASE OUT-PART;	ASS'Y	1	
3	DB67-00142A	FAN-PROPELLER;	AS+GF20%	1	
4	DB60-30020A	NUT-FLANGE	M6	1	
5	DB31-00264D	MOTOR FAN;	YDK95-60-4-1	1	
6	DB61-00686A	BRACKET MOTOR;	SGCC-M	1	
7	DB94-00649A	ASSY PARTITION;	ASS'Y	1	
8	DB96-06018B	ASSY COND;	ASS'Y	1	
9	DB90-40176B	ASSY COVER-CONTROL;	ASS'Y	1	
10	DB90-01651A	ASSY-CABI SIDE RH;	ASS'Y	1	
11	DB90-10616G	ASSY CABI-UP;	ASS'Y	1	
12	G5A240JUAEM	ROTARY COMPRESSOR:220-240V,50HZ,1PH,R410;	ROTARY	1	
13	DB96-04133A	ASSY TUBE-4WAY VALVE;	ASS'Y	1	
14	DB99-00787C	ASSY VALVE CHECK;	ASS'Y	1	
15	DB93-04383B	ASSY CONTROL OUT;	ASS'Y	1	
15-1	3501-000305	RELAY-POWER;	EL200/240A1-F	1	
15-2	2501-001240	C-OIL;	50uF/450VAC	1	
15-3	DB65-00164A	TERMINAL BLOCK;	8P	1	
15-4	2301-001379	C-FILM,LEAD-OTHER;	4uF/450VAC	1	
16	DB72-00630C	INSULATION-SOUND;	FELT	1	
17	DB63-00692A	GUARD COND-(PAINT);	SECC-P	1	
18	DB61-00821A	GUIDE-SCREEN;	P.E.H	1	
19	DB63-00838A	GUARD FAN;	SC-90073R	1	

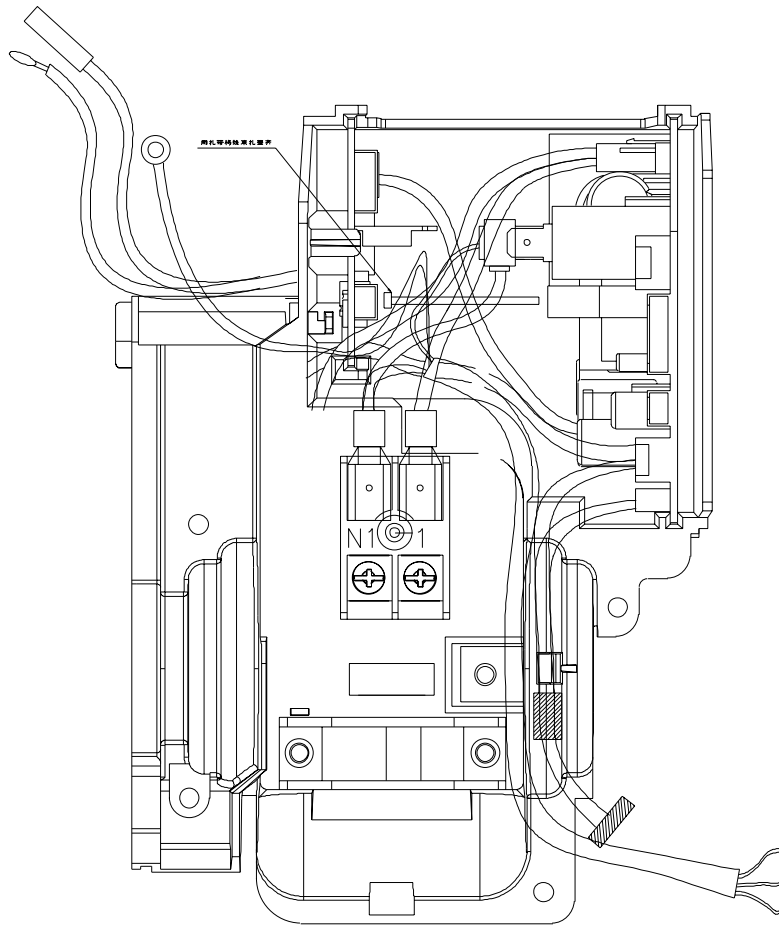
5-3 Ass'y Control In

■DB93-04556A



E-BOM List[DB93-04556A]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01174A	1	CONNECT WIRE-PBA	SA
4	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
5	DB61-01980A	1	HOLDER-WIRE CLAMP	SA
6	DB61-02923A	1	CASE CONTROL	SA
7	DB61-02942A	1	PLATE-CONTROL IN	SA
8	DB65-00176D	1	TERMINAL BLOCK-TERMINAL	SNA
9	DB68-02809A	1	LABEL BAR CODE	SNA
10	DB93-01549G	1	ASSY-POWER CORD	SA
11	DB93-04418A	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

■ DB93-04556B



E-BOM List[DB93-04556B]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01174A	1	CONNECT WIRE-PBA	SA
4	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
5	DB61-01980A	1	HOLDER-WIRE CLAMP	SA
6	DB61-02923A	1	CASE CONTROL	SA
7	DB61-02942A	1	PLATE-CONTROL IN	SA
8	DB65-00061F	1	TERMINAL BLOCK	SNA
9	DB68-02809A	1	LABEL BAR CODE	SNA
10	DB93-01549G	1	ASSY-POWER CORD	SA
11	DB93-04418B	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

E-BOM List[DB93-04556C]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01174A	1	CONNECT WIRE-PBA	SA
4	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
5	DB61-00171A	1	HOLDER-WIRE CLAMP	SNA
6	DB61-02923A	1	CASE CONTROL	SA
7	DB61-02942A	1	PLATE-CONTROL IN	SA
8	DB65-00176D	1	TERMINAL BLOCK-TERMINAL	SNA
9	DB68-02809A	1	LABEL BAR CODE	SNA
10	DB93-01549F	1	ASSY-POWER CORD	SA
11	DB93-04418A	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

E-BOM List[DB93-04556D]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01174A	1	CONNECT WIRE-PBA	SA
4	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
5	DB61-00171A	1	HOLDER-WIRE CLAMP	SNA
6	DB61-02923A	1	CASE CONTROL	SA
7	DB61-02942A	1	PLATE-CONTROL IN	SA
8	DB65-00061F	1	TERMINAL BLOCK	SNA
9	DB68-02809A	1	LABEL BAR CODE	SNA
10	DB93-01549F	1	ASSY-POWER CORD	SA
11	DB93-04418B	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

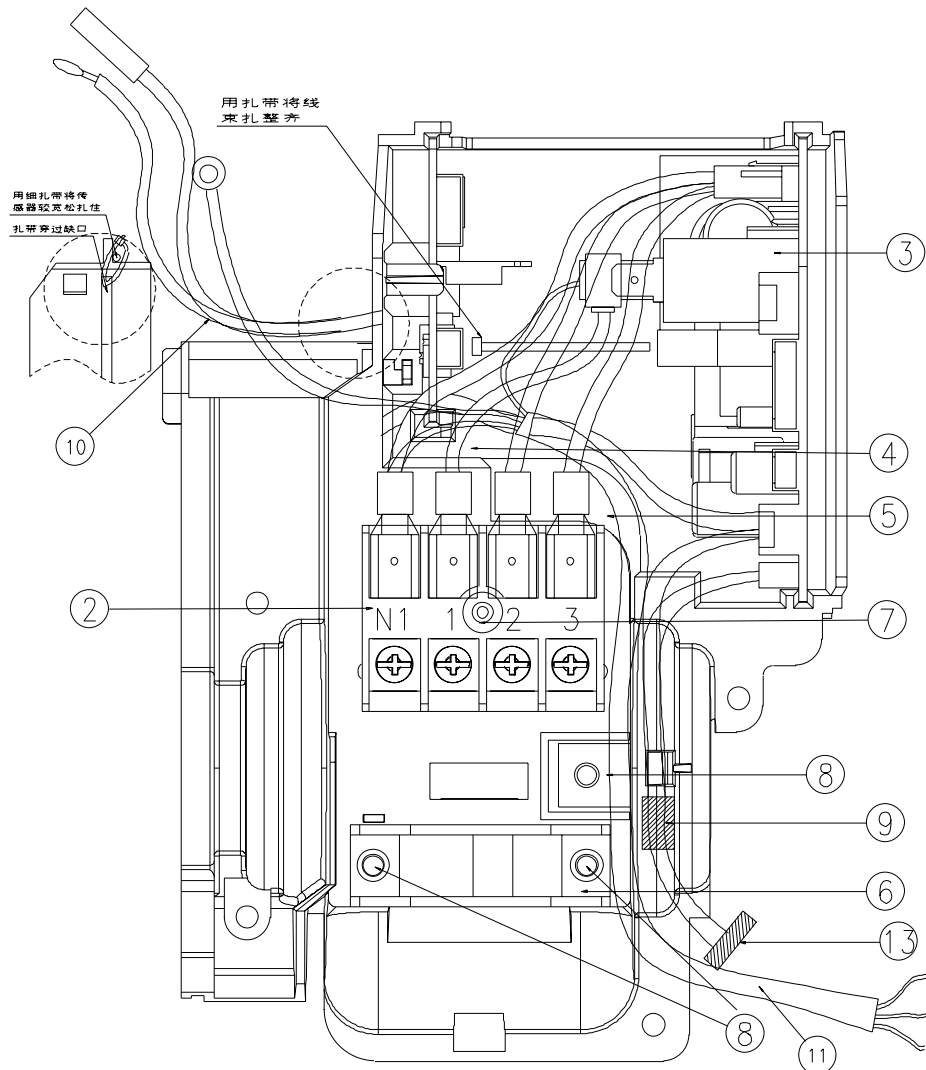
E-BOM List[DB93-04556E]				
NO.	Parts Code	Quantity	Parts Description	Service
1	3903-000095	1	CBF-POWER CORD	SA
2	6001-000929	1	SCREW-MACHINE	SNA
3	6002-000231	3	SCREW-TAPPING	SA
4	DB39-01174A	1	CONNECT WIRE-PBA	SA
5	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
6	DB61-00171A	1	HOLDER-WIRE CLAMP	SNA
7	DB61-02923A	1	CASE CONTROL	SA
8	DB61-02942A	1	PLATE-CONTROL IN	SA
9	DB65-00176D	1	TERMINAL BLOCK-TERMINAL	SNA
10	DB68-02809A	1	LABEL BAR CODE	SNA
11	DB93-04418A	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

E-BOM List[DB93-04556F]				
NO.	Parts Code	Quantity	Parts Description	Service
1	3903-000095	1	CBF-POWER CORD	SA
2	6001-000929	1	SCREW-MACHINE	SNA
3	6002-000231	3	SCREW-TAPPING	SA
4	DB39-01174A	1	CONNECT WIRE-PBA	SA
5	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
6	DB61-00171A	1	HOLDER-WIRE CLAMP	SNA
7	DB61-02923A	1	CASE CONTROL	SA
8	DB61-02942A	1	PLATE-CONTROL IN	SA
9	DB65-00061F	1	TERMINAL BLOCK	SNA
10	DB68-02809A	1	LABEL BAR CODE	SNA
11	DB93-04418B	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

E-BOM List[DB93-04556G]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01071A	1	CBF CABLE-POWER CORD	SNA
4	DB39-01174A	1	CONNECT WIRE-PBA	SA
5	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
6	DB61-00171A	1	HOLDER-WIRE CLAMP	SNA
7	DB61-02923A	1	CASE CONTROL	SA
8	DB61-02942A	1	PLATE-CONTROL IN	SA
9	DB65-00176D	1	TERMINAL BLOCK-TERMINAL	SNA
10	DB68-02809A	1	LABEL BAR CODE	SNA
11	DB93-04418A	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

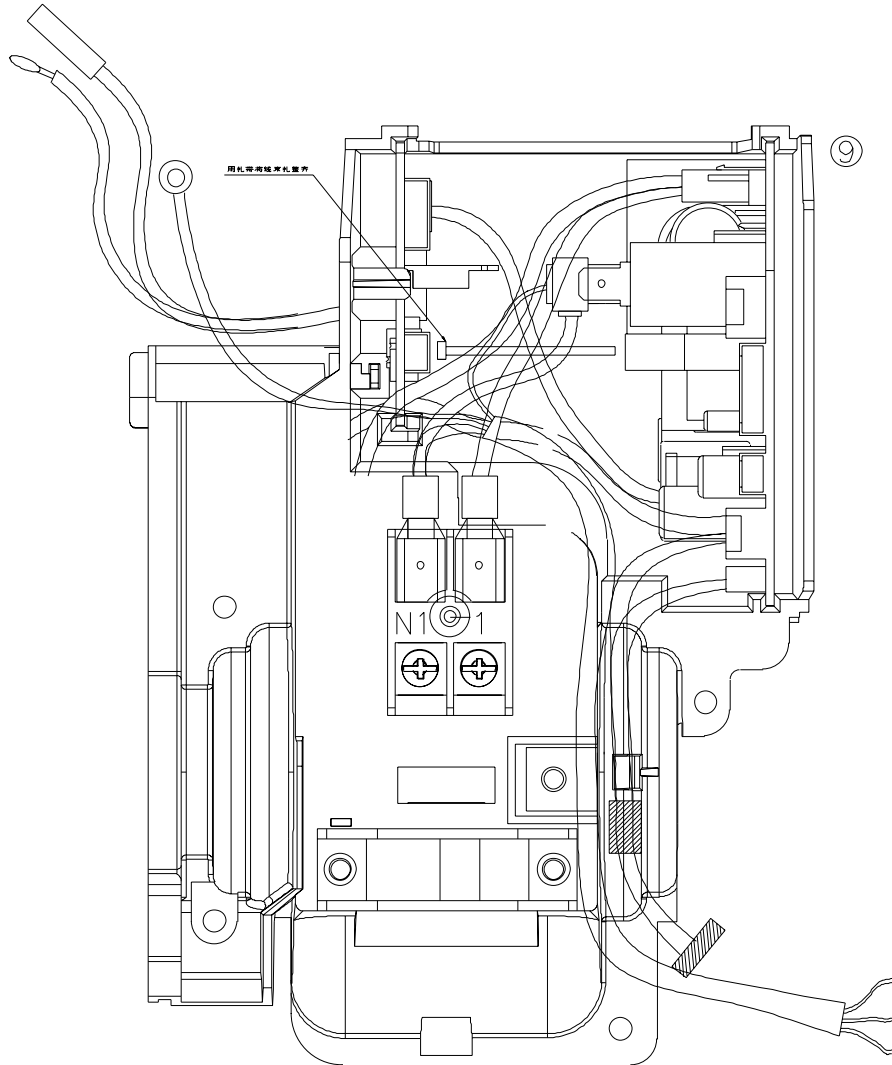
E-BOM List[DB93-04556H]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01174A	1	CONNECT WIRE-PBA	SA
4	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
5	DB61-00171A	1	HOLDER-WIRE CLAMP	SNA
6	DB61-02923A	1	CASE CONTROL	SA
7	DB61-02942A	1	PLATE-CONTROL IN	SA
8	DB65-00061F	1	TERMINAL BLOCK	SNA
9	DB68-02809A	1	LABEL BAR CODE	SNA
10	DB93-04418B	1	ASSY PCB MAIN	SA
11	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
12	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

DB93-04419A



E-BOM List[DB93-04419A]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	2	SCREW-TAPPING	SA
3	DB39-01165C	1	CONNECT WIRE-RELAY	SA
4	DB39-01165D	1	CONNECT WIRE-RELAY	SA
5	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
6	DB61-01980A	1	HOLDER-WIRE CLAMP	SA
7	DB61-02935A	1	CASE CONTROL	SA
8	DB61-02942A	1	PLATE-CONTROL IN	SA
9	DB65-00105H	1	TERMINAL BLOCK	SNA
10	DB68-02809A	1	LABEL BAR CODE	SNA
11	DB93-04418E	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

■ DB93-04419B



E-BOM List[DB93-04419B]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	2	SCREW-TAPPING	SA
3	DB39-01165C	1	CONNECT WIRE-RELAY	SA
4	DB39-01165D	1	CONNECT WIRE-RELAY	SA
5	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
6	DB61-01980A	1	HOLDER-WIRE CLAMP	SA
7	DB61-02935A	1	CASE CONTROL	SA
8	DB61-02942A	1	PLATE-CONTROL IN	SA
9	DB65-00105J	1	TERMINAL BLOCK	SNA
10	DB68-02809A	1	LABEL BAR CODE	SNA
11	DB93-04418F	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

E-BOM List[DB93-04419C]				
Level	Parts Code	Quantity	Parts Description	Service
..1	6001-000929	1	SCREW-MACHINE	SNA
..1	6002-000231	3	SCREW-TAPPING	SA
..1	DB39-01165E	1	CONNECT WIRE-TERMINAL TO RELAY	SNA
..1	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
..1	DB61-01980A	1	HOLDER-WIRE CLAMP	SA
..1	DB61-02935A	1	CASE CONTROL	SA
..1	DB61-02942A	1	PLATE-CONTROL IN	SA
..1	DB65-00176D	1	TERMINAL BLOCK-TERMINAL	SNA
..1	DB68-02809A	1	LABEL BAR CODE	SNA
..1	DB93-01638D	1	ASSY POWER CORD	SA
..1	DB93-04418C	1	ASSY PCB MAIN	SA
..1	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
..1	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

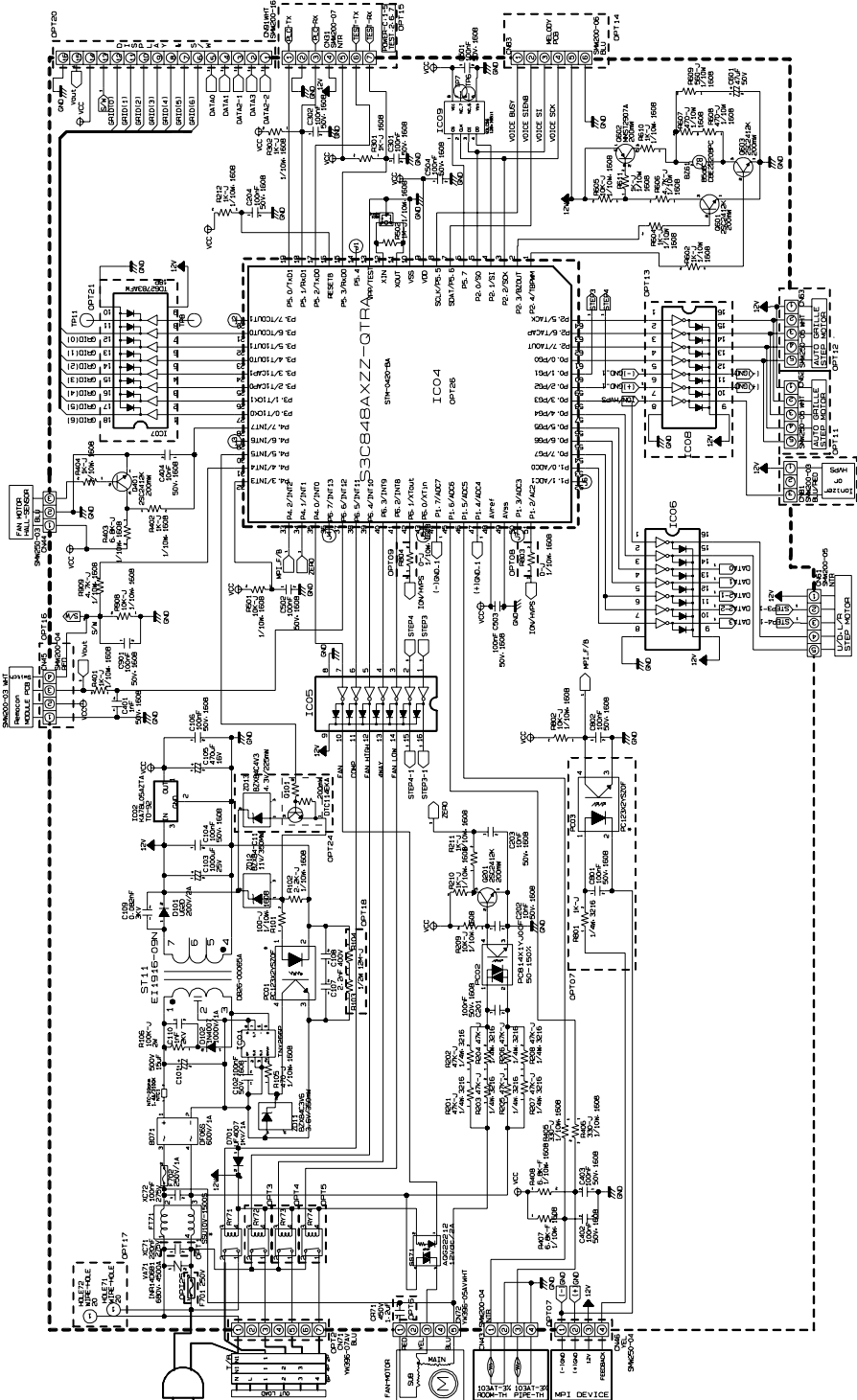
E-BOM List[DB93-04419D]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01165E	1	CONNECT WIRE-TERMINAL TO RELAY	SNA
4	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
5	DB61-01980A	1	HOLDER-WIRE CLAMP	SA
6	DB61-02935A	1	CASE CONTROL	SA
7	DB61-02942A	1	PLATE-CONTROL IN	SA
8	DB65-00061F	1	TERMINAL BLOCK	SNA
9	DB68-02809A	1	LABEL BAR CODE	SNA
10	DB93-01638D	1	ASSY POWER CORD	SA
11	DB93-04418D	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

E-BOM List[DB93-04419E]				
NO.	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01165E	1	CONNECT WIRE-TERMINAL TO RELAY	SNA
4	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
5	DB61-00171A	1	HOLDER-WIRE CLAMP	SNA
6	DB61-02935A	1	CASE CONTROL	SA
7	DB61-02942A	1	PLATE-CONTROL IN	SA
8	DB65-00176D	1	TERMINAL BLOCK-TERMINAL	SNA
9	DB68-02809A	1	LABEL BAR CODE	SNA
10	DB93-01549C	1	ASSY POWER CORD	SA
11	DB93-04418C	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

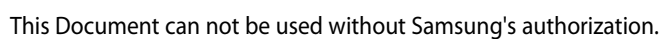
E-BOM List[DB93-04419F]				
Level	Parts Code	Quantity	Parts Description	Service
1	6001-000929	1	SCREW-MACHINE	SNA
2	6002-000231	3	SCREW-TAPPING	SA
3	DB39-01165E	1	CONNECT WIRE-TERMINAL TO RELAY	SNA
4	DB39-01327A	1	CONNECT WIRE-MAIN TO DISPLAY	SNA
5	DB61-00171A	1	HOLDER-WIRE CLAMP	SNA
6	DB61-02935A	1	CASE CONTROL	SA
7	DB61-02942A	1	PLATE-CONTROL IN	SA
8	DB65-00061F	1	TERMINAL BLOCK	SNA
9	DB68-02809A	1	LABEL BAR CODE	SNA
10	DB93-01549C	1	ASSY POWER CORD	SA
11	DB93-04418D	1	ASSY PCB MAIN	SA
12	DB93-04688A	1	ASSY CONNECTOR WIRE	SNA
13	DB95-01113A	1	ASSY-THERMISTOR WIRE	SNA

8. Schematic Diagram

8-1. Main PCB



This Document can not be used without Samsung's authorization.

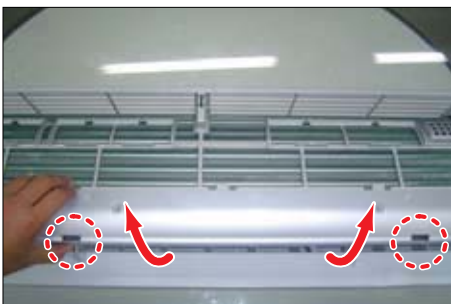


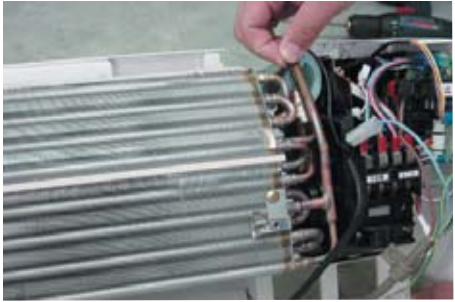
4. Disassembly and Reassembly

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

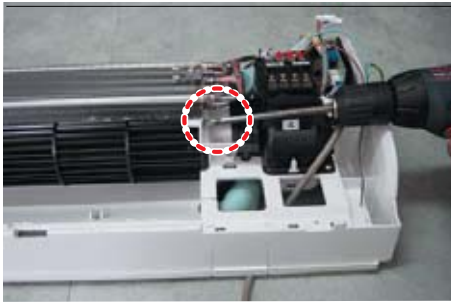
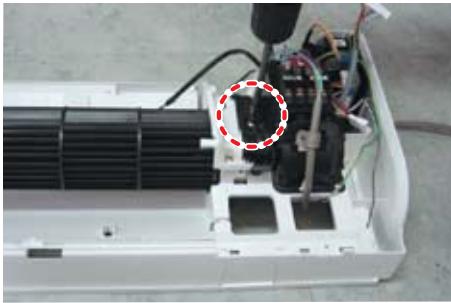
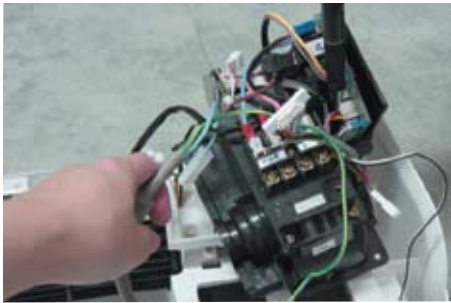
4-1 Indoor Unit

NO.	Parts	Procedure	Remark
1	PANEL-FRONT	1) Stop the driving of air conditioner and shut off main power supply. 2) Please open the front grille. 3) Please detach link grilles from main frame. 4) To detach front grille from main frame, please catches finger stop 5) Please loosen clamping screw and detach the terminal cover. 6) Please take out filter to downward.	    

NO.	Parts	Procedure	Remark
		7) Please detach the cover screw 3EA from the bottom of the panel front.	
		8) Loosen screws 3EA at the bottom of panel front and 2EA at the front of the panel front.	
		9) Loosen the screw of the ASSY DISPLAY.	
		10) Please separate Linked connector from the assy display.	
		11) Unlock 2 hooks between panel front and try drain to separate panel front.	

NO.	Parts	Procedure	Remark
		12) Unlock 2 hooks between panel front and back body.	
2	TRAY DRAIN	1) Please detach stepping motor wire. 2) Please pull tray drain and separate from back body.	
3	evap	1) Loosen the ground wire screw. 2) Detach the temperature sensor. 3) Detach the holder pipe.	  

4-2 Outdoor Unit

NO.	Parts	Procedure	Remark
		4) Loosen 3 EA screws, left of holder evap 5) Loosen 1 EA screw, right of holder motor. 6) Detach the heat exchanger from indoor unit.	  
4	MAIN PCB	1) Loosen 4 EA screws of holder 2) Detach Link wires of indoor, outdoor unit and fan motor. 3) Detach assy control from indoor unit.	 

NO.	Parts	Procedure	Remark
5	FAN MOTOR CROSS FAN	1) Loosen 2EA screws of holder motor and Detach the holder. 2) Loosen a screw and detach the cross fan. 3) Detach the holder bearing and motor.	

MEMO

12. Troubleshooting

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

12-1 Basic Breakdown Diagnosis Items

1. The input voltage should be rating voltage $\pm 10\%$ range.

The airconditioner may not operate properly if the voltage is out of this range.

2. Is the link cable linking the indoor unit and the outdoor unit linked properly?

Check the terminals if the indoor unit and outdoor unit are properly linked by the same number of cables.

Otherwise the airconditioner may not operate properly.

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

No	Operation of air conditioner	Explanation
1	The OPERATION indication LED(GREEN) blinks when a power plug of the indoor unit is plugged in for the first time.	It indicates power is on. The LED stops blinking if the operation ON/OFF button on the remote control unit is pushed.
2	In a COOL operation mode, the compressor does not operate at a room temperature higher than the setting temperature that the INDOOR FAN should operate. In a HEAT operation mode, the compressor does not operate at a room temperature lower than the setting temperature that indoor fan should operate.	In happens after a delay of 3 minutes when the compressor is reoperated. The same phenomenon occurs when a power is on. As a phenomenon that the compressor is reoperated after a delay of 3 minutes, the indoor fan is adjusted automatically with reference to a temperature of the air blew.
3	Fan speed setting is not allowed in DRY() mode.	The speed of the indoor fan is set to LL in DRY mode. Fan speed is selected automatically in AUTO mode.
4	Compressor stops operation intermittently in DRY() mode.	Compressor operation is controlled automatically in DRY mode depending on the room temperature and humidity.
5	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(GREEN) of the indoor unit lights up and the air conditioner does not operate.	Timer is being activated and the unit is in ready mode. The unit operates normally if the timer operation is cancelled.
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.

12-2 Trouble check in the initial status

12-2-1 Diagnosis and marking of the part in trouble.

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

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

☐ : Lamp off ☒ : Lamp flickering

12-2-2 Operation with abnormal motion

No	Abnormal condition	Inspection		Initial Diagnosis
1	No response from the remote control operation signal.	• Plug out and plug in 5 seconds later.	Able to operate the remote control.	OK
			Unable to operate the remote control.	Press the (⏻) button in the indoor unit. • If it operates, the remote control and indoor unit receiver are in trouble. • If not, the indoor unit is in trouble.
2	Unable to operate the outdoor unit	• Press the TURBO button with the remote control. • In 3 minutes, check the voltage between the indoor unit terminal block N1 and 1.	AC200V ~ AC240V	Problem with the outdoor unit or PCB
			No power source displayed.	Problem with the relay (RY71) or PCB

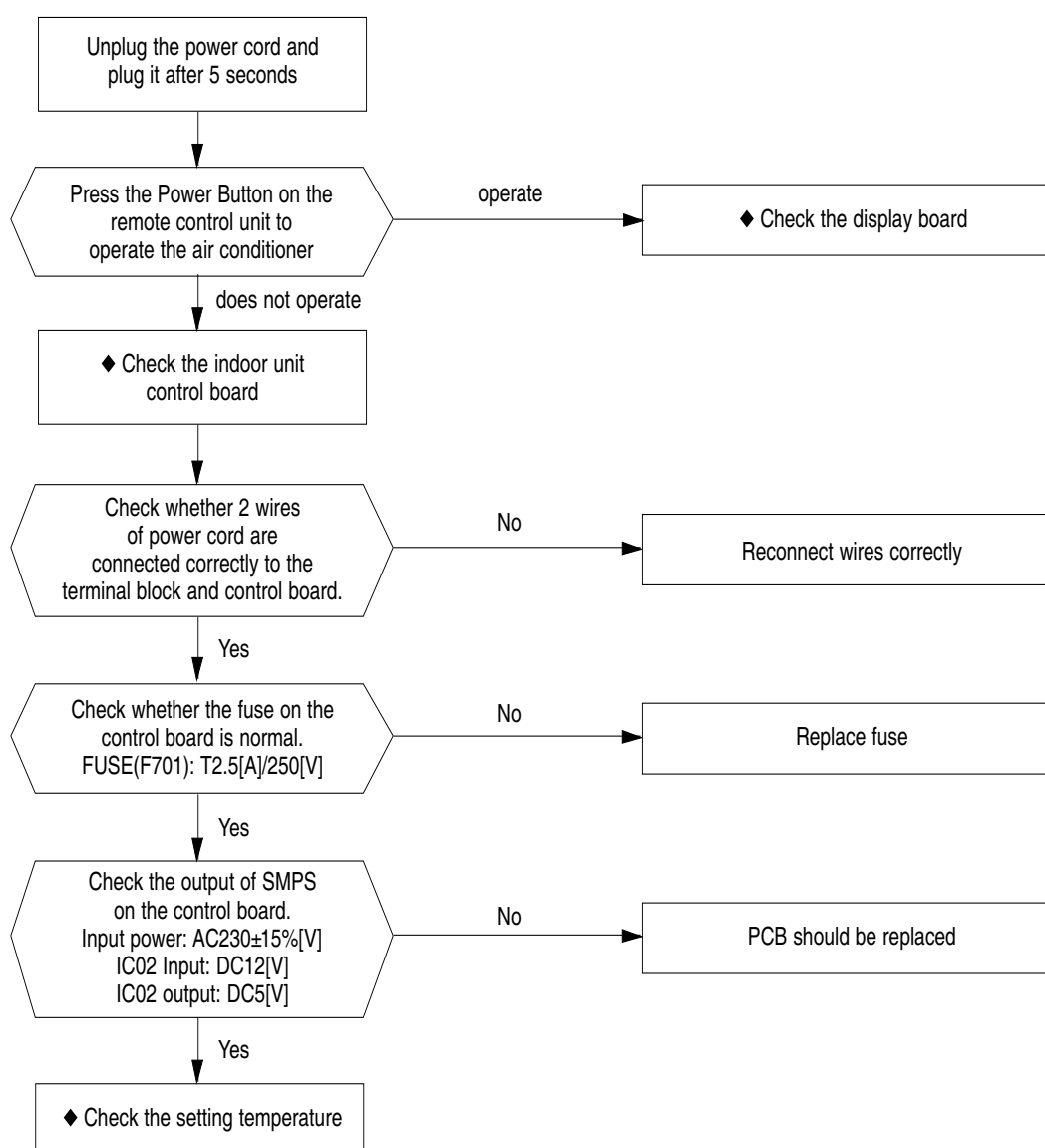
12-3 Breakdown diagnosis by symptoms

12-3-1 No Power (completely dead)-Initial diagnosis

1. Checklist :

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

2. Troubleshooting procedure

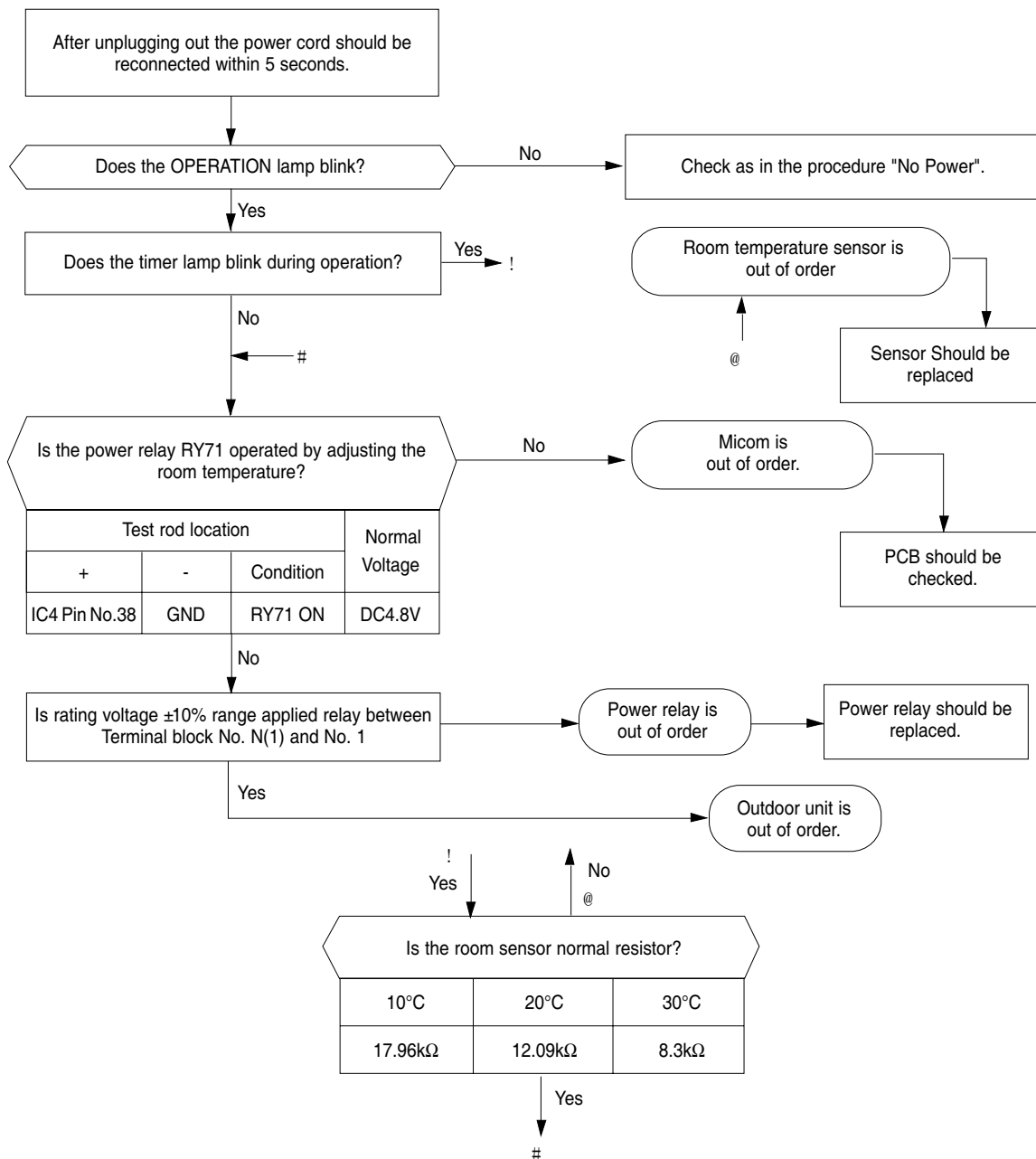


12-3-2 When the Outdoor Unit Does Not Operate. (Initial Diagnosis)

1. Checklist :

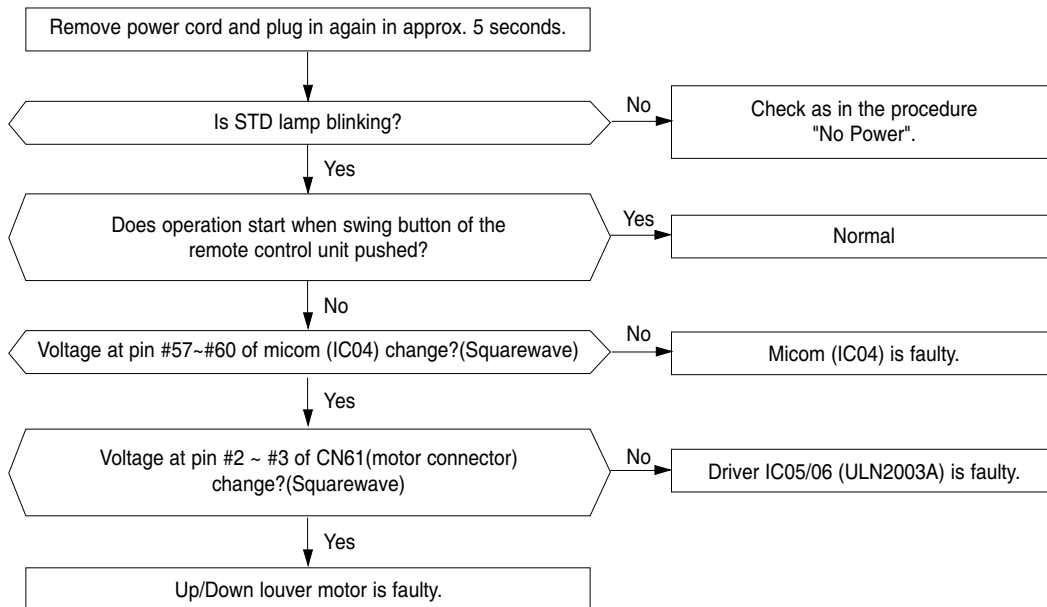
- 1) Is input voltage normal?
- 2) Is the set temperature of the remote control higher than room temperature in COOL mode?
- 3) Is the set temperature of the remote control lower than room temperature in HEAT mode?
- 4) Is the POWER IN connector (CN71) linked correctly?
- 5) Is the outdoor unit properly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

2. Troubleshooting procedure



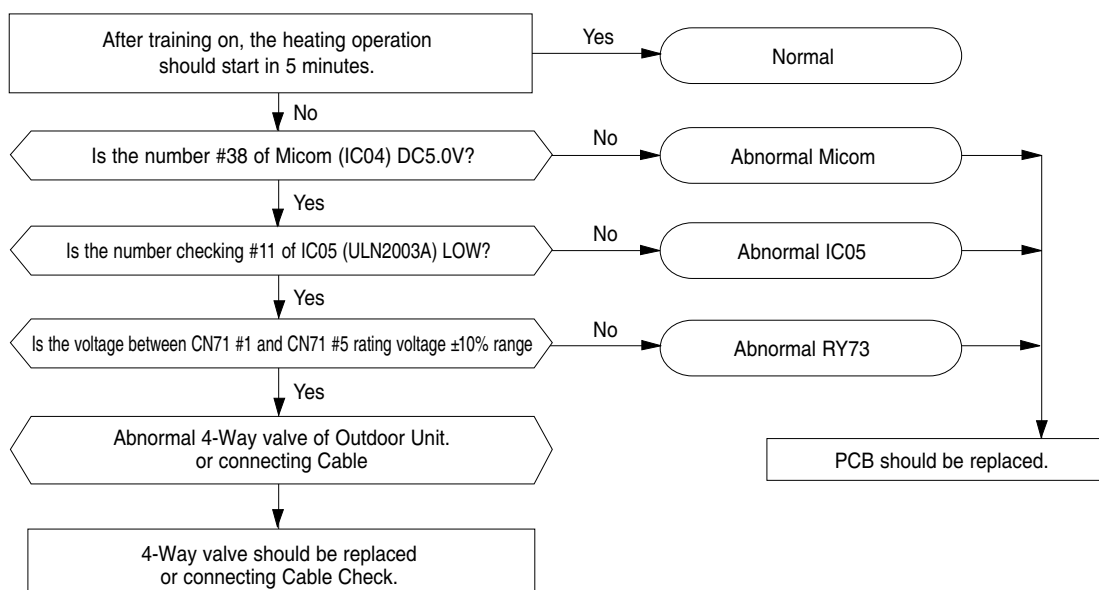
12-3-3 When the Up/Down Louver Motor Does Not Operate. (Initial Diagnosis)

1. Checklist :
 - 1) Is input voltage normal?
 - 2) Is the Up/Down louver motor properly connected with the connector (CN61)?
2. Troubleshooting procedure



12-3-4 In the HEAT 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?



12-3-5 When the remote control is not receiving

1. Check if the connector was normally assembled.
2. Put the set in operation and check the voltage of No. 15(+) and No. 16(-) of the main PCB CN91 while operating the remote control. When the voltage descends below 3V, the assembly module PCB is normal and the main PCB is poor. Then replace the main PCB.
3. Replace the assembly display PCB because the module PCB is poor if the voltage between No. 15~16 of CN91 maintains 5V after the remote control starts operation.

12-4 PCB Inspection Method

12-4-1 Pre-inspection Notices

1. Check if you pulled out the AC power plug when you eliminate the PCB or front panel.
2. Don't hold the PCB side not impose excessive force on it to eliminate the PCB.
3. Don't pull the lead wire but hold the whole housing to connect or disconnect a connector to the PCB.

12-4-2 Inspection Procedure

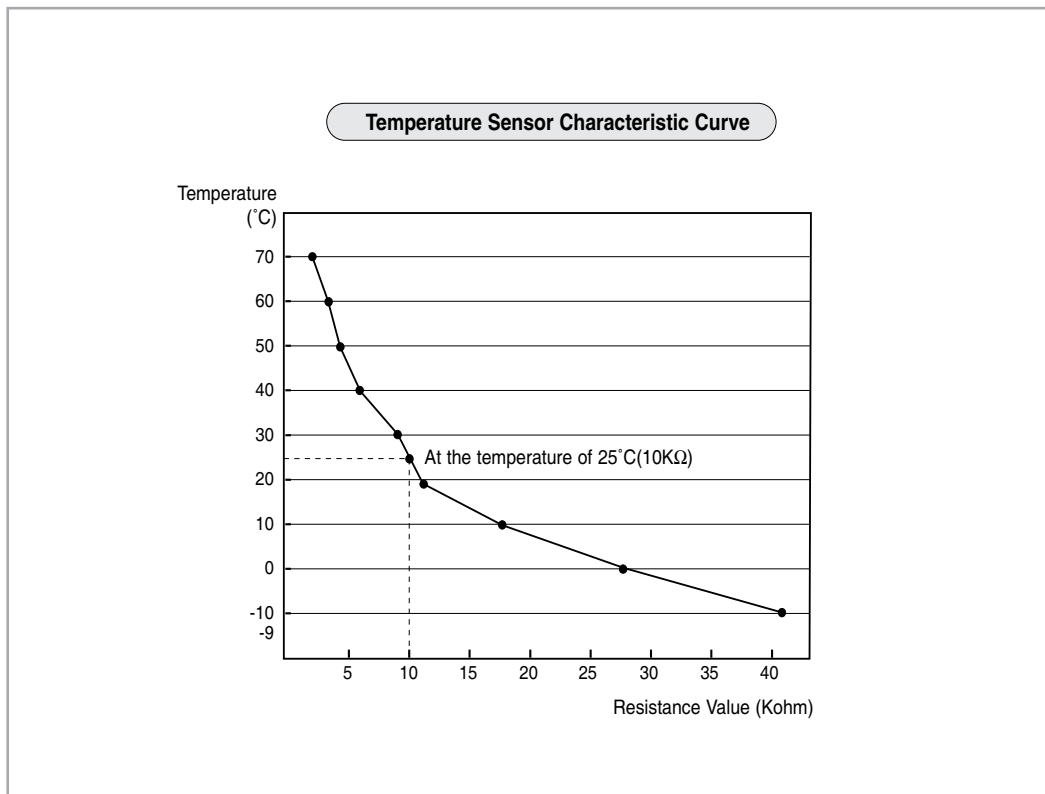
1. Check connector connection and peeling of PCB or bronze coating pattern when you think the PCB is broken.
2. The PCB is composed of the 3 parts.
 - **Main PCB Part** : MICOM and surrounding circuit, relay, room fan motor driving circuit and control circuit, sensor driving circuit, power circuit of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

12-4-3 Detailed Inspection Procedure

No	Procedure	Inspection Method	Cause
1	Plug out and pull the PCB out of the electronic box. Check the PCB fuse.	1) Is the fuse disconnected? (F701)	• Overcurrent • Indoor Fan Motor Short • AC Part Pattern Short of the MAIN PCB
2	Supply power. If the operating lamp twinkles at this time, the above 1)~3) have no relation.	Checking the power voltage.	
		1) Is the DB71 input voltage AC200V~AC240V?	• Power Cord is fault, Fuse open. Wrong Power Cable Wiring, AC Part is faulty.
		2) Is the voltage between both terminals of the C103 on the 2 nd side of the transformer DC12V $\pm 0.5V$?	• Switching Trans or Power Circuit is faulty
3	Press the ON/OFF button and operate TURBO mode. But, exclude the RESERVE operation.	3) Is the voltage between both terminals of OUT and GND of IC02(KA78L05) DC5V $\pm 0.5V$?	• Power Circuit is faulty, Load Short
		Checking the power voltage.	
		1) Check the voltage of the relay(RY71) coil(IC05 PIN #11 and GND : 0V, PIN#6 and GND : 5V) during operation(3 minutes after TURBO operation).	• Relay(RY71) Coil Disconnection, IC05 is faulty
4	Press the ON/OFF button. 1. FAN Speed [High] 2. Continuous Operation	2) Check the voltage of both terminals of terminal block 1 and N(1) after 3 minute operation.: AC220V	• Relay(RY71) Contact is faulty
		1) Is the voltage over AC180V being imposed on terminal #3 and #5 of the fan motor connector(CN72)?	• Fan Motor of the indoor is faulty
		2) The fan motor of the indoor unit doesn't run.	• Fan Motor Connector(CN72) is faulty
4		3) The power voltage between terminal #3 and #5 of the connector(CN72) is 0V.	• ASS'Y Main PCB is faulty • Connection is faulty

12-4-4 Temperature Sensor Feature Conversion Table(Room Temperature Sensor); 103AT

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



12-5 Main Part Inspection Method

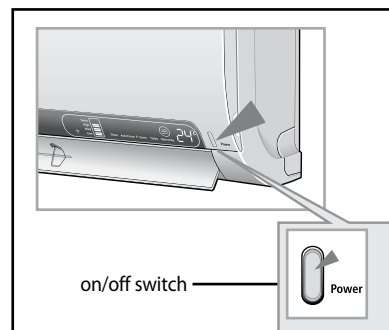
Part	Breakdown Inspection Method			
Room Temperature Sensor	Measure resistance with a tester			
	Normal	At the normal temperature 37kΩ~ 8.3kΩ(-7℃~+30℃) *Refer to Table 12-3-4.		
	Abnormal	∞, 0Ω · · · Open or Short		
Room Fan Motor	Measure the resistance between terminals of the connector (CN72) with a tester.			
	Normal	At the normal temperature (10℃ ~ 30℃)		
		Compare terminal	Resistance	Remark
		Yellow, Blue	404.4Ω ± 10%	Main
Yellow, Red		340Ω ± 10%	Sub	
Abnormal	∞, 0Ω · · · Open or Short			
Outdoor Fan Motor	Measure the resistance between motor wires with a tester.			
	Normal	At the normal temperature (10℃ ~ 30℃)		
		Compare terminal	Resistance	Remark
		Yellow, Red	360Ω ± 10%	Main
Black, Yellow		328Ω ± 10%	Sub	
Abnormal	∞, 0Ω · · · Open or Short			
Stepping Motor	Measure the resistance between the red wire and each terminal wire with a tester.			
	Normal	About 300Ω at the normal temperature (20℃ ~ 30℃)		
	Abnormal	∞, 0Ω · · · Open or Short		

3. Alignment and Adjustments

3-1 Test Mode

■ How to Approach Test Mode

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



■ Test Mode Operation Option

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

- **Temperature Display Part** : Display the set option at one-second intervals. (Only for models having the temperature display part)
ex) 0b0000-1730F8 : 0b→00→00→17→30→F8→0b...(Repeat)
- **When an error occurs, display the Error Mode.**

LED Display				Cause	Follow-up Measures																		
Waiting Operation	LAMP																						
	OPERATION	TIMER	TURBO																				
																							
OFF				Indoor temperature sensor error (OPEN/SHORT)	• Check assembling status of the sensor part's connector on the indoor unit main PCB • Measure the resistance value on both sides – connector no. 1 and no. 2 (E1), no. 3 and no. 4 (E2) – by separating the sensor part's connector																		
OFF				Indoor heat exchanger temperature sensor error (OPEN/SHORT)	<table><tr><th>Temp. (°C)</th><th>Resistance Value(KΩ)</th><th>Temp. (°C)</th><th>Resistance Value(KΩ)</th><th>Others</th></tr><tr><td>15</td><td>14.68</td><td>30</td><td>8.31</td><td rowspan="3">The error of DATA is ±2%.</td></tr><tr><td>20</td><td>12.09</td><td>35</td><td>6.94</td></tr><tr><td>25</td><td>10.00</td><td>40</td><td>5.83</td></tr></table> * If not meet the above DATA, replace sensors.	Temp. (°C)	Resistance Value(KΩ)	Temp. (°C)	Resistance Value(KΩ)	Others	15	14.68	30	8.31	The error of DATA is ±2%.	20	12.09	35	6.94	25	10.00	40	5.83
Temp. (°C)	Resistance Value(KΩ)	Temp. (°C)	Resistance Value(KΩ)	Others																			
15	14.68	30	8.31	The error of DATA is ±2%.																			
20	12.09	35	6.94																				
25	10.00	40	5.83																				
OFF				Indoor fan motor speed detecting error (Occur when it continues for 15 seconds at below 450rpm)	• Check assembling status of the Motor Hall IC output connector (CN44) on the indoor unit main PCB																		
OFF				EEPROM error (Option memory) * Display only for models having the returning function for the power failure	• Reset options • Replace the PCB																		
Blink all lamps				When there is an option related error When options are not set When there is an option data error	• Reset options																		

■ Test Mode Operation Option(cont.)

- **Operation Mode** : Cool mode. Operate the cool mode by operating the compressor by force without the compressor ON/OFF according to the set temperature/indoor temperature. (Do not follow the antifreeze control)
- **Up-down louver** : Up-down swing mode
- **Indoor Fan** : High



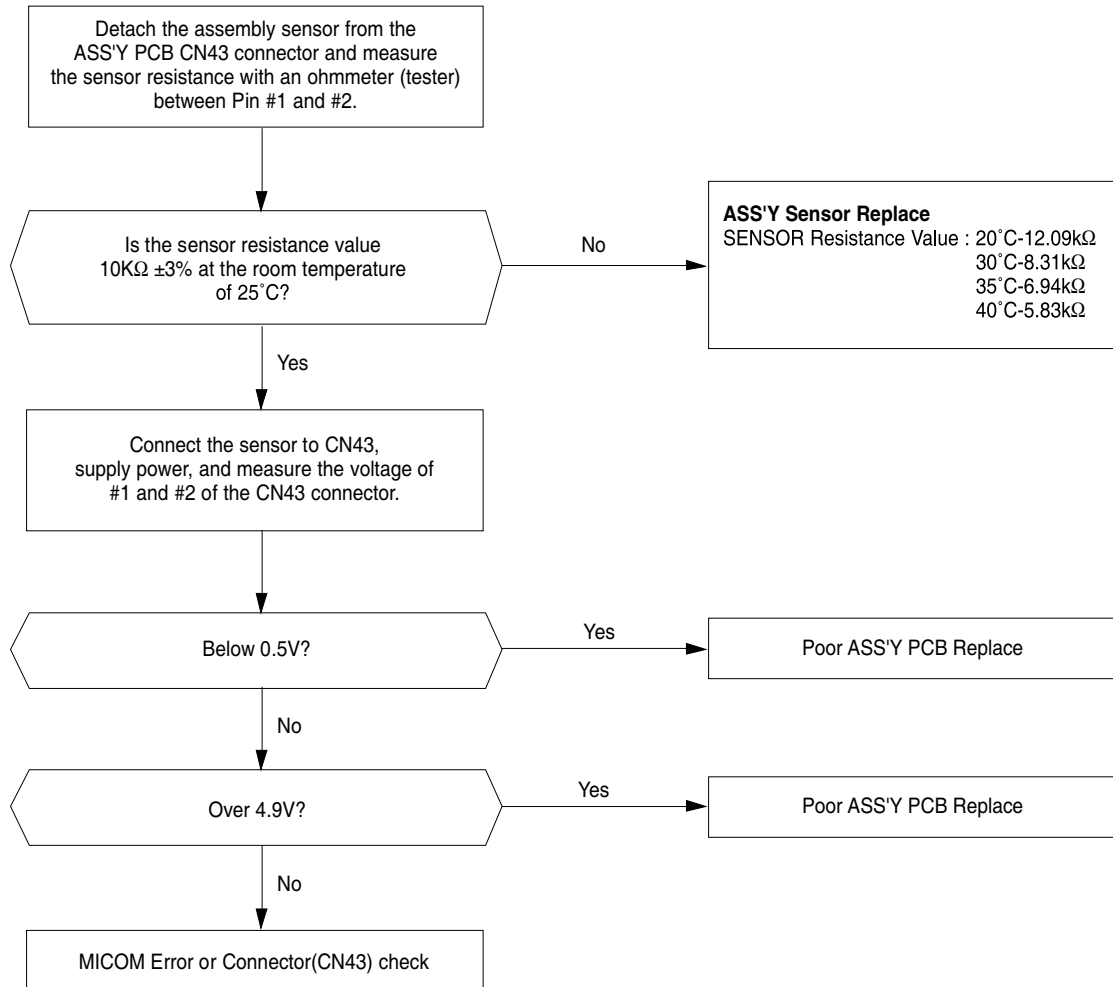
• Because the Test Mode operate the cool mode by force not related to the set temperature / indoor temperature, check whether each subordinate is operated normally or not after completing installation and must turn off the power of the air conditioner.

3-2 Error Mode and Check Method

Error Mode	LAMP	7-segment Display
Indoor unit room temperature sensor error (open or short)		<i>E1</i>
Indoor unit heat exchanger temperature sensor error (open or short)		<i>E2</i>
Indoor fan motor malfunction		<i>E3</i>
EEPROM error		<i>E6</i>
Option error (option wasn't set up or option data error)		Display Flickering

3-2-1 Room temperature sensor Error

Error Mode	LAMP	7-segment Display
Indoor unit room temperature sensor error(open or short)		E 1



3-2-2 Room Pipe sensor Error

Error Mode	LAMP	7-segment Display
Indoor unit heat exchanger temperature sensor error (open or short)		E2

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

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

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

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

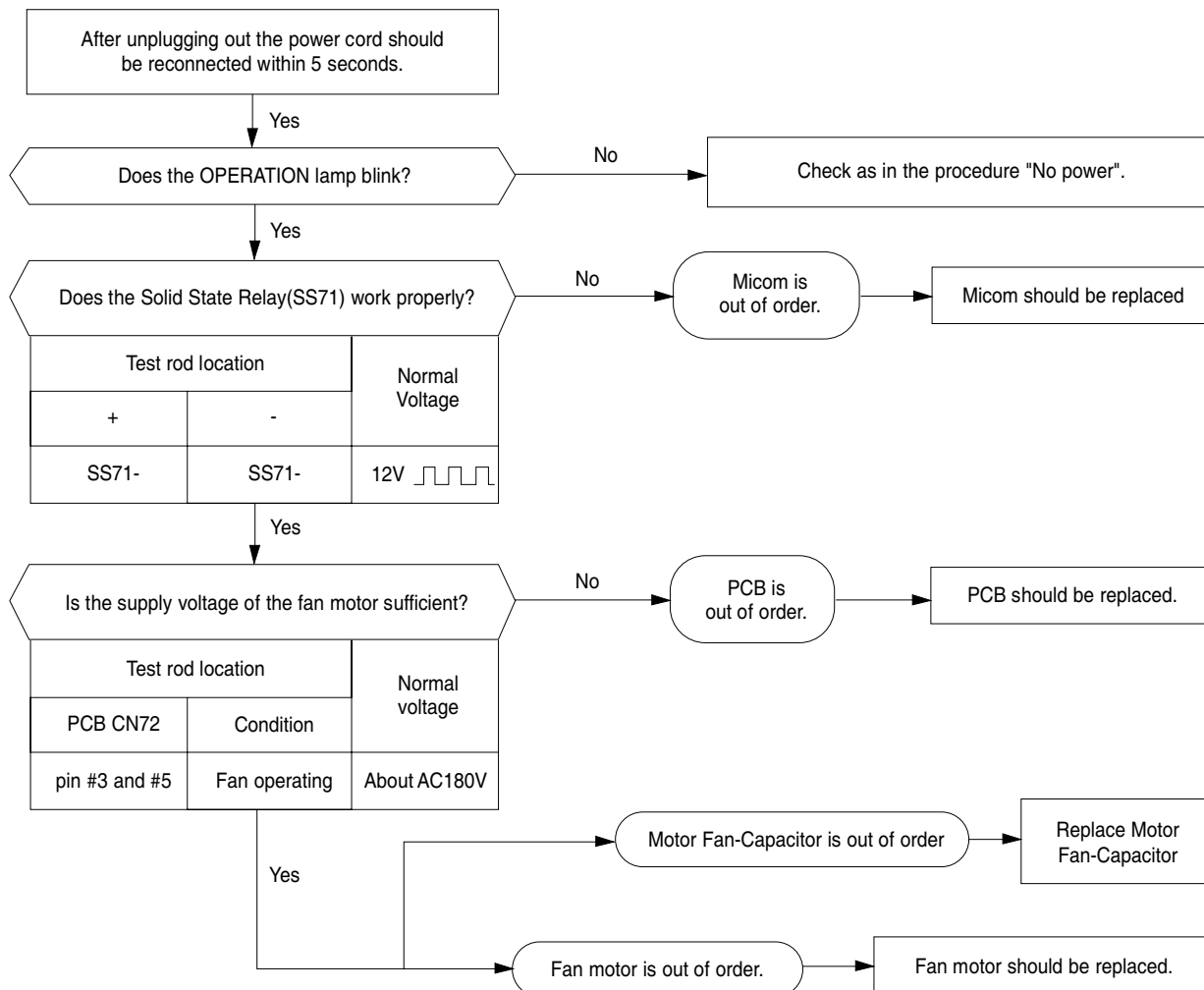
3-2-3 Indoor Unit Fan Motor Error

Error Mode	LAMP	7-segment Display
Indoor Unit Fan Motor Malfunction		E3

1. Checklist :

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

2. Troubleshooting procedure

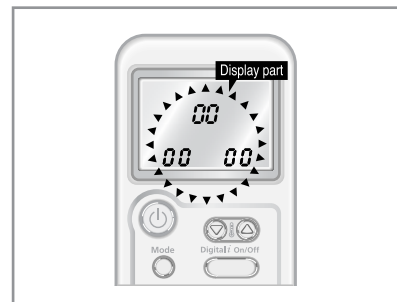


3-3 Setting Option Setup Method

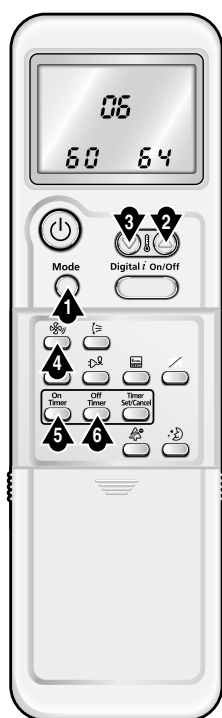
ex) Option No. : 066064- 170373

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 remote display shown as .

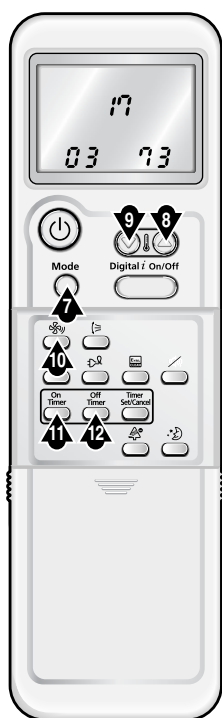


Step 2 : Enter the Option Setup mode and select your option according to the following procedure.



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

- 1 The default value is  .
Otherwise, push the  button to  .
Every time you push the button, the display panel reads 1 or 0 repeatedly.
- 2 Push the  button to set the display panel to 5 .
Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.
- 3 Push the  button to set the display panel to 5 .
Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.
- 4 Push the  button to set the display panel to 0 .
Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.
- 5 Push the  button to set the display panel to 5 .
Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.
- 6 Push the  button to set the display panel to 4 .
Every time you push the button, the display panel reads 0 → 1 → 2 → 3 → ... 9 → A → b → c → d → E → F repeatedly.



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

7

Press  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

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

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  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  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,  to set the display part to 0 and check the display part.
→ The display part shows 00 04.

Press the Mode Selection key,  to set the display part to 7 and check the display part.
→ The display part shows 03 73.

Step 4 : Pressing the ON/OFF button ()

When pressing the operation ON/OFF key with the direction of remote control for unit, the sound "Ding" or "Diriring" is heard and the OPERATION ICON() lamp of the display is flickering at the same time, then the input of option is completed. (If the 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 control.

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

Third, Press ON/OFF key with the direction of remote control for set.

• Error Mode

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

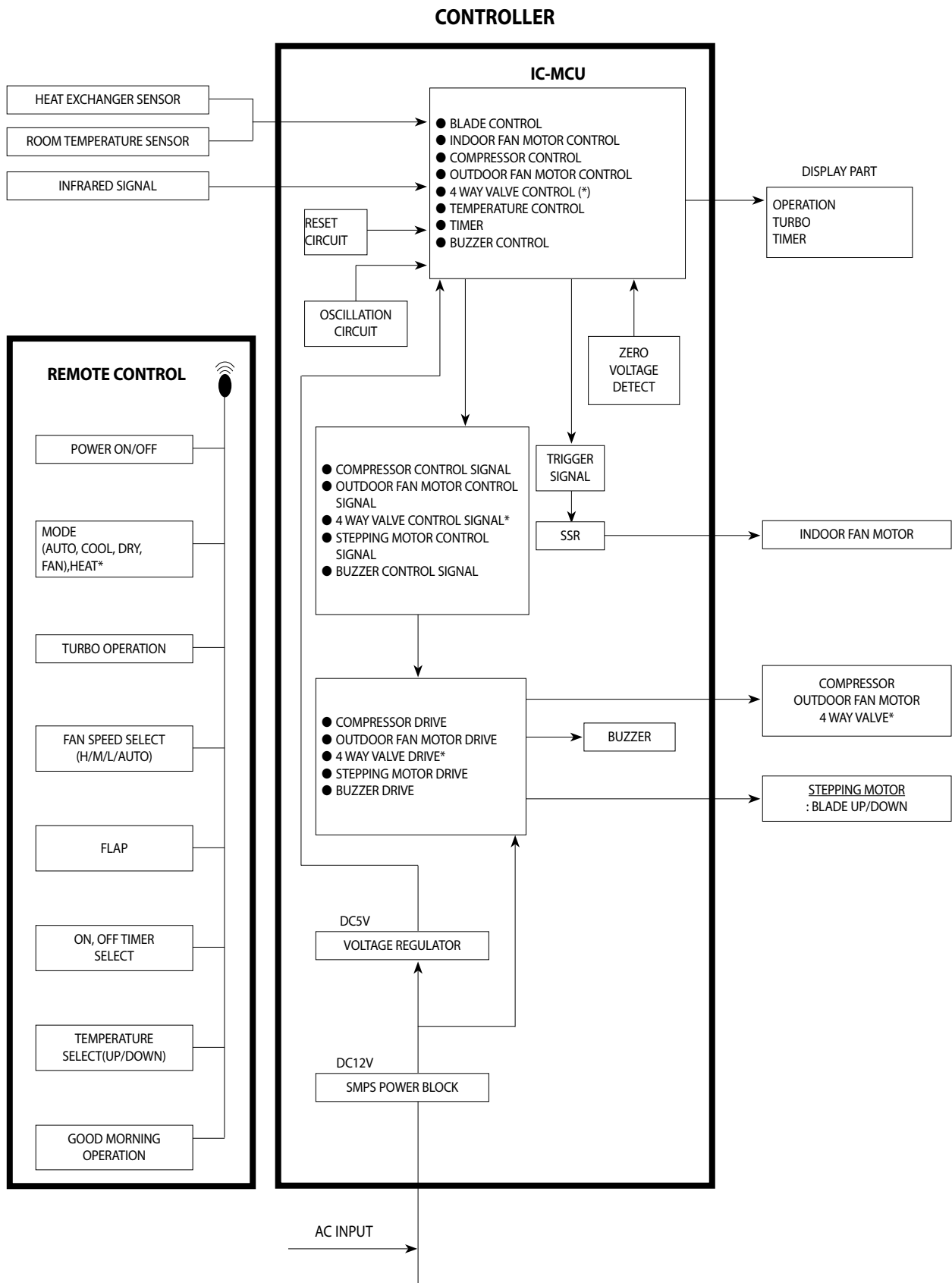
2nd If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

■ OPTION ITEMS

REMOCON MODEL	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
AQ09MSBN	0	6	7	0	1	4	1	7	0	2	4	E
AQ12MSBN	0	6	0	0	0	0	1	5	0	2	4	E
AQ18MSBN	0	8	7	0	2	7	1	8	0	3	8	2
AQ24MSBN	0	8	0	0	0	0	1	8	0	3	8	2

13. Block Diagram

* : OPTION

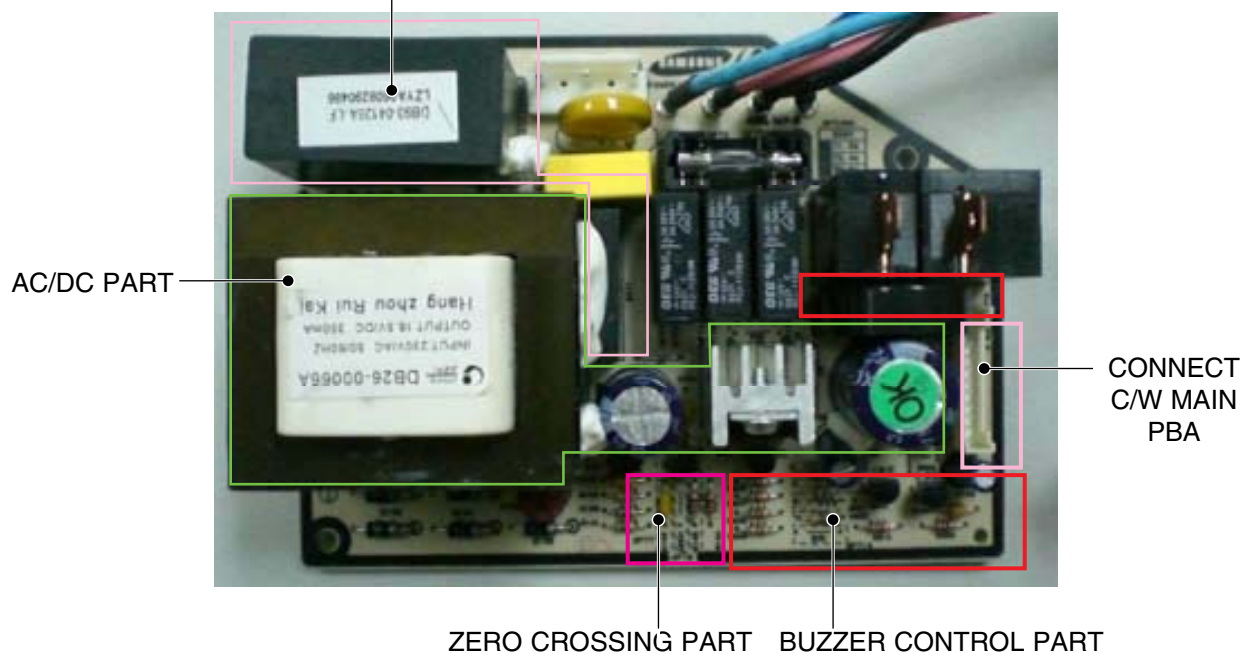


DISPLAY PART



REMOTECONTROL PART

INDOOR FAN CONTROL PART



AC/DC PART

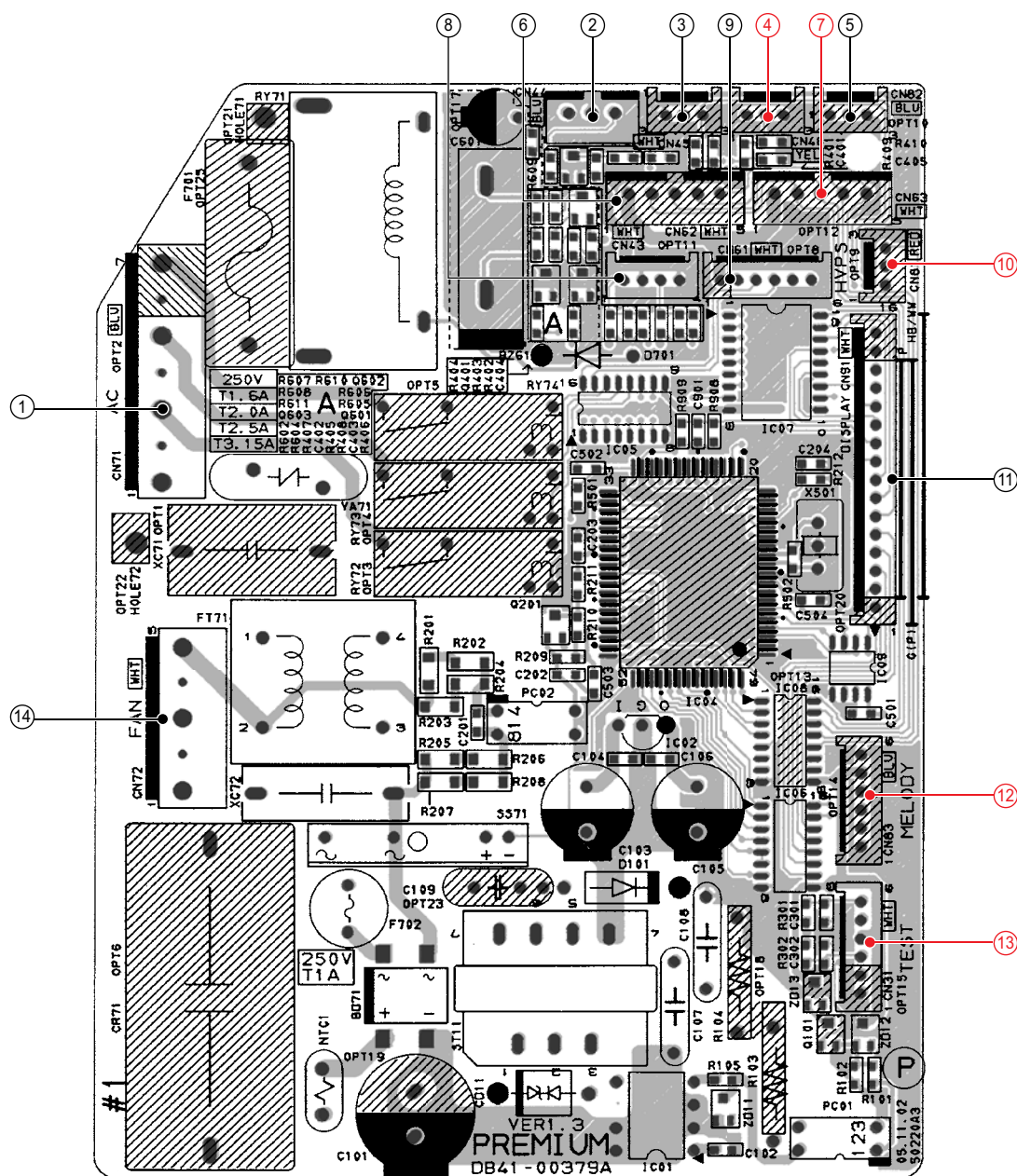
CONNECT
C/W MAIN
PBA

ZERO CROSSING PART

BUZZER CONTROL PART

10. PCB Diagram

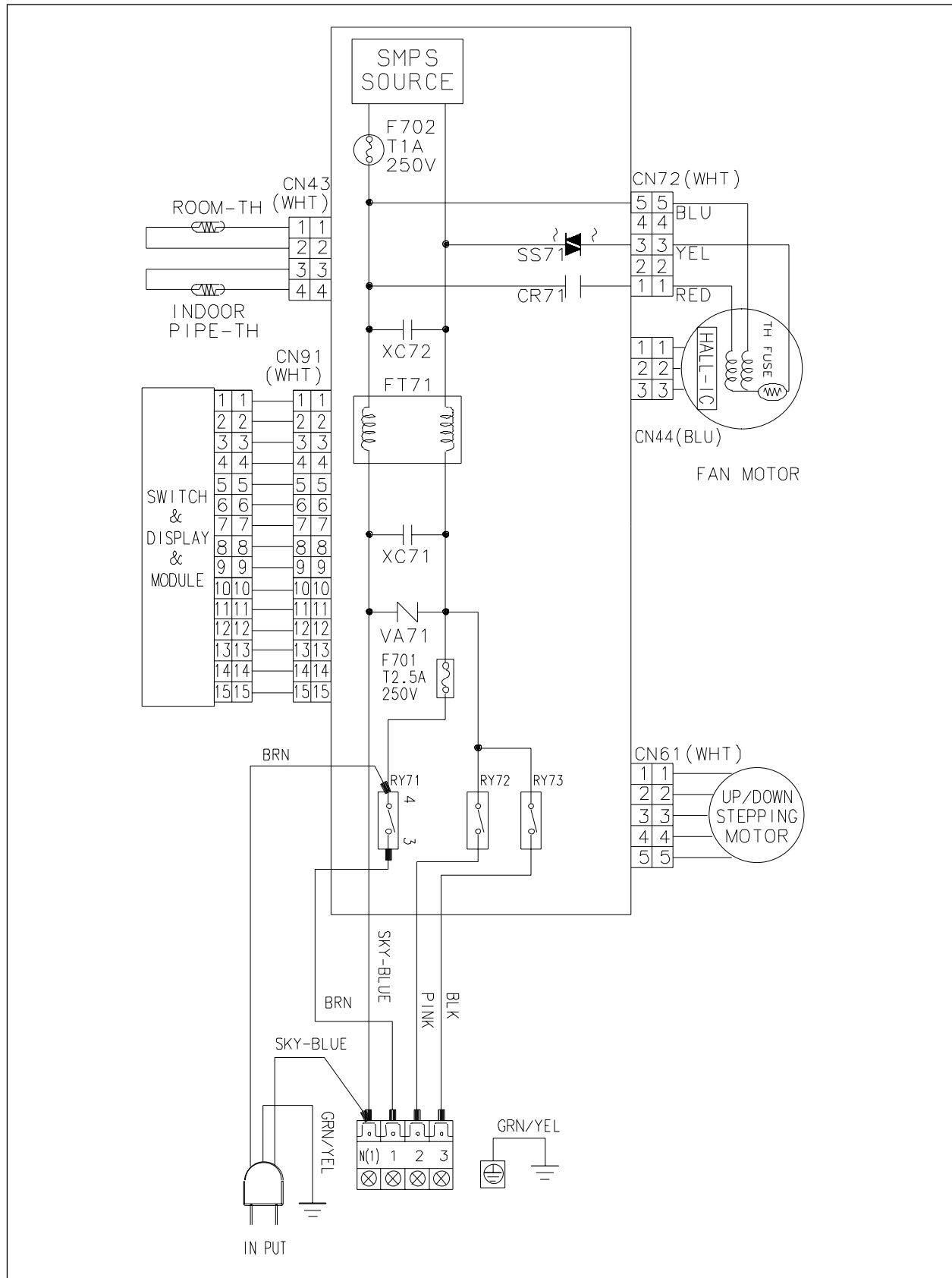
⚠ The red number connector is not used.



①	Power	⑧	Temperature Sensor
②	Motor RPM Feedback	⑨	BLADE-H Motor
③	Remocon Module	⑩	HVPS(High voltage Generator)
④	Humidity Sensor	⑪	DISPLAY PCB Connection
⑤	Anios	⑫	Melody PCB Connection
⑥	Auto grill 1	⑬	Test Board Connection
⑦	Auto grill 2	⑭	Indoor Fan Motor

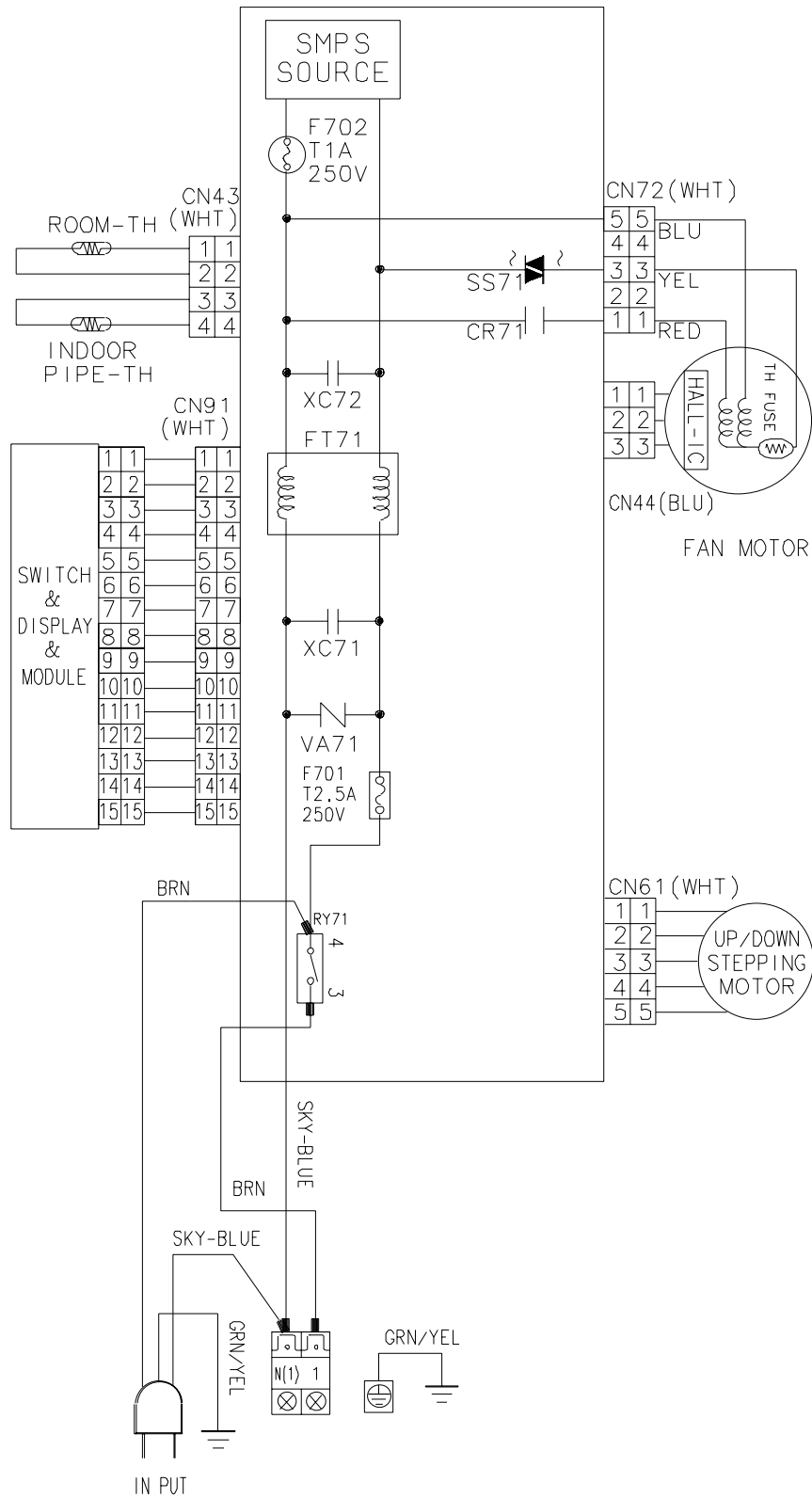
7. Wiring Diagram

■ H/P



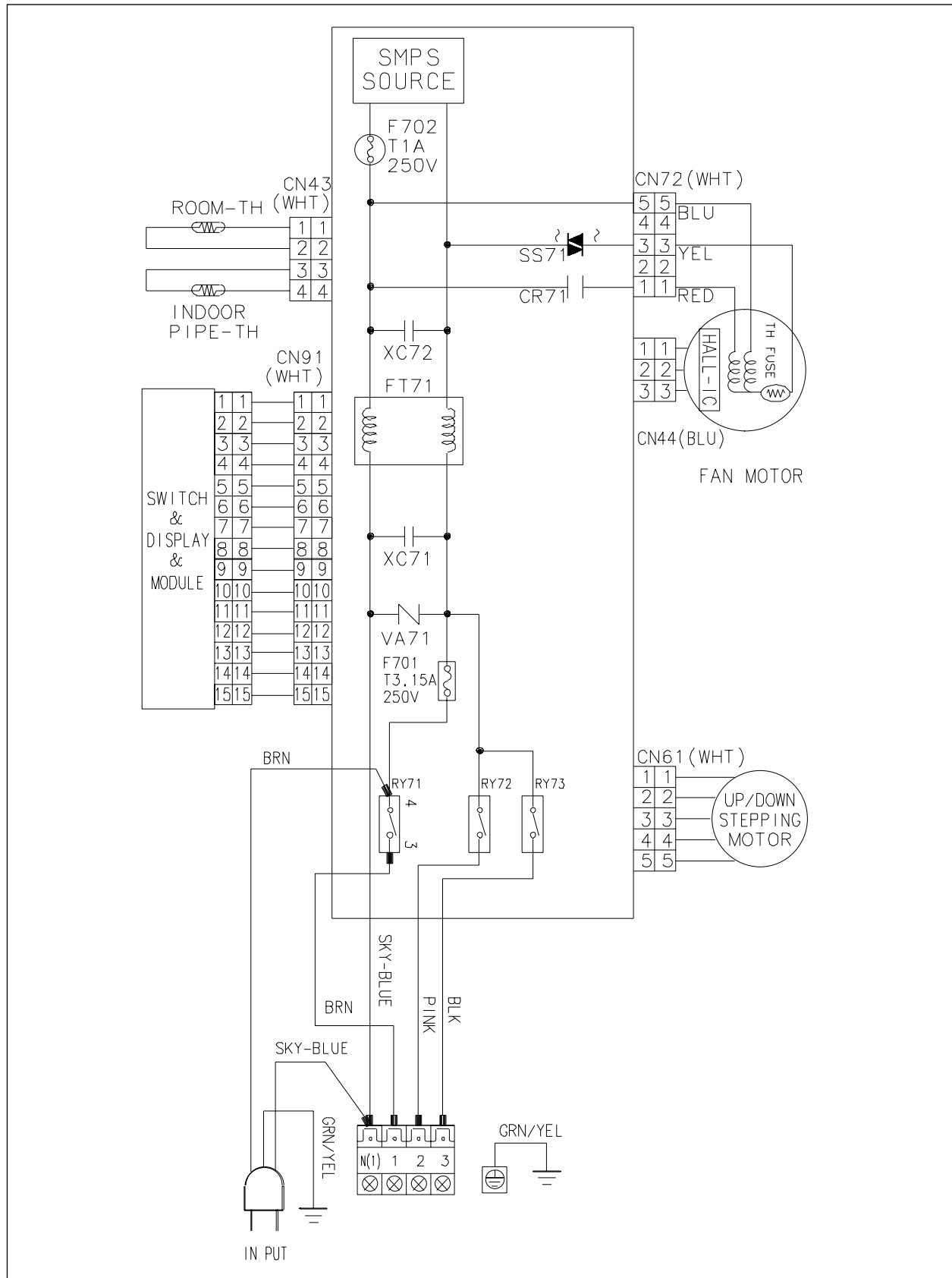
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■ C/O



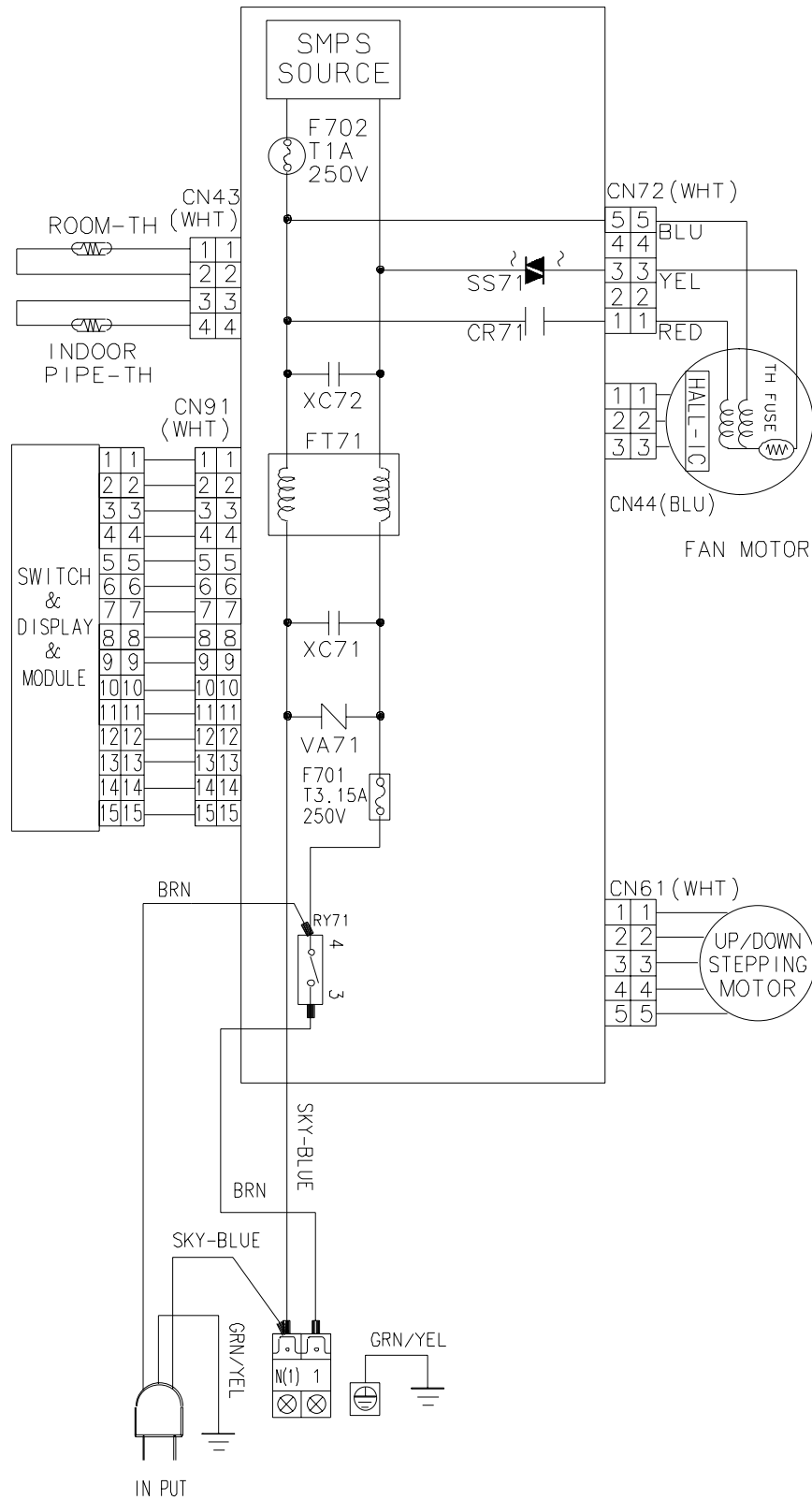
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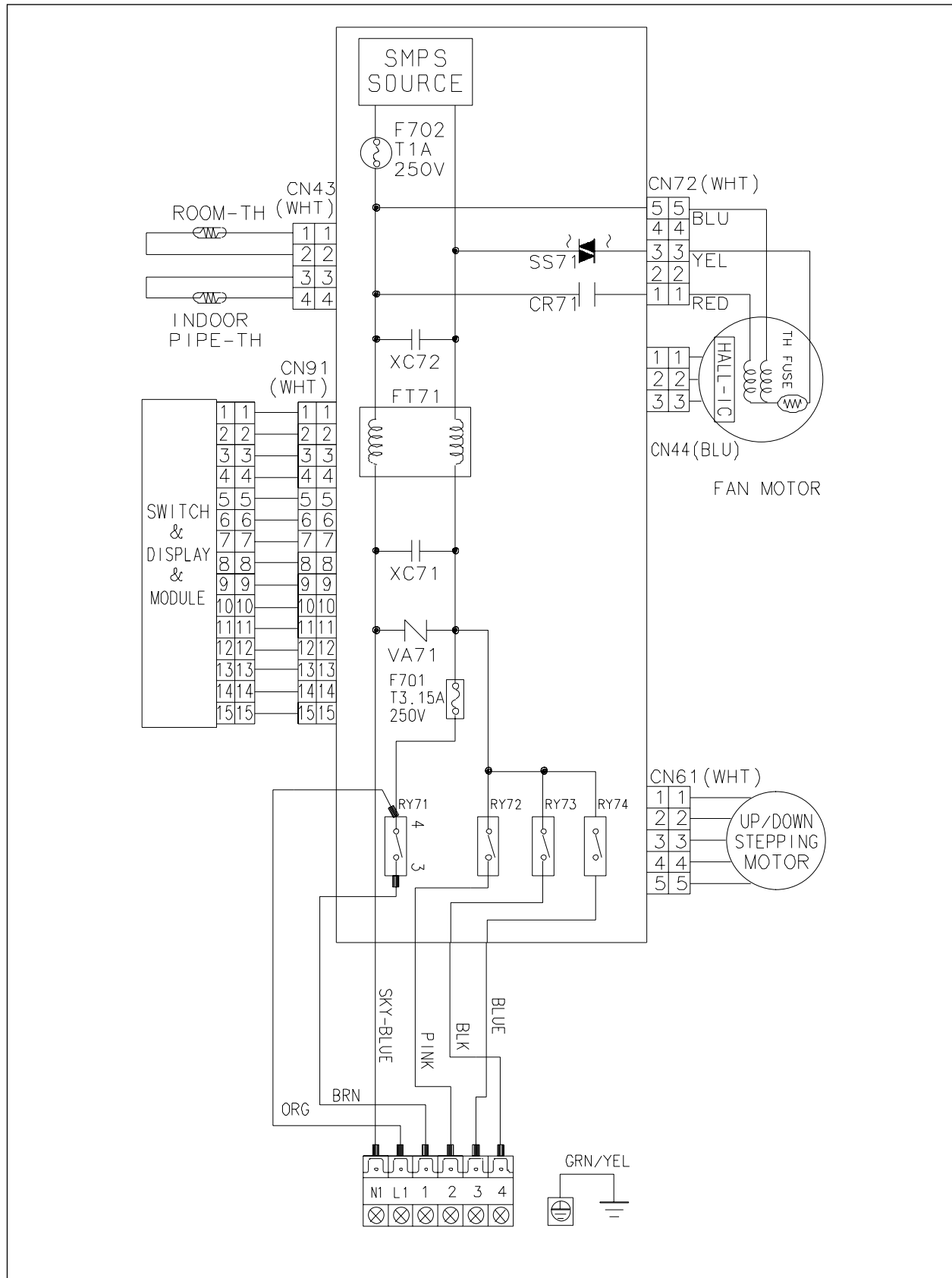
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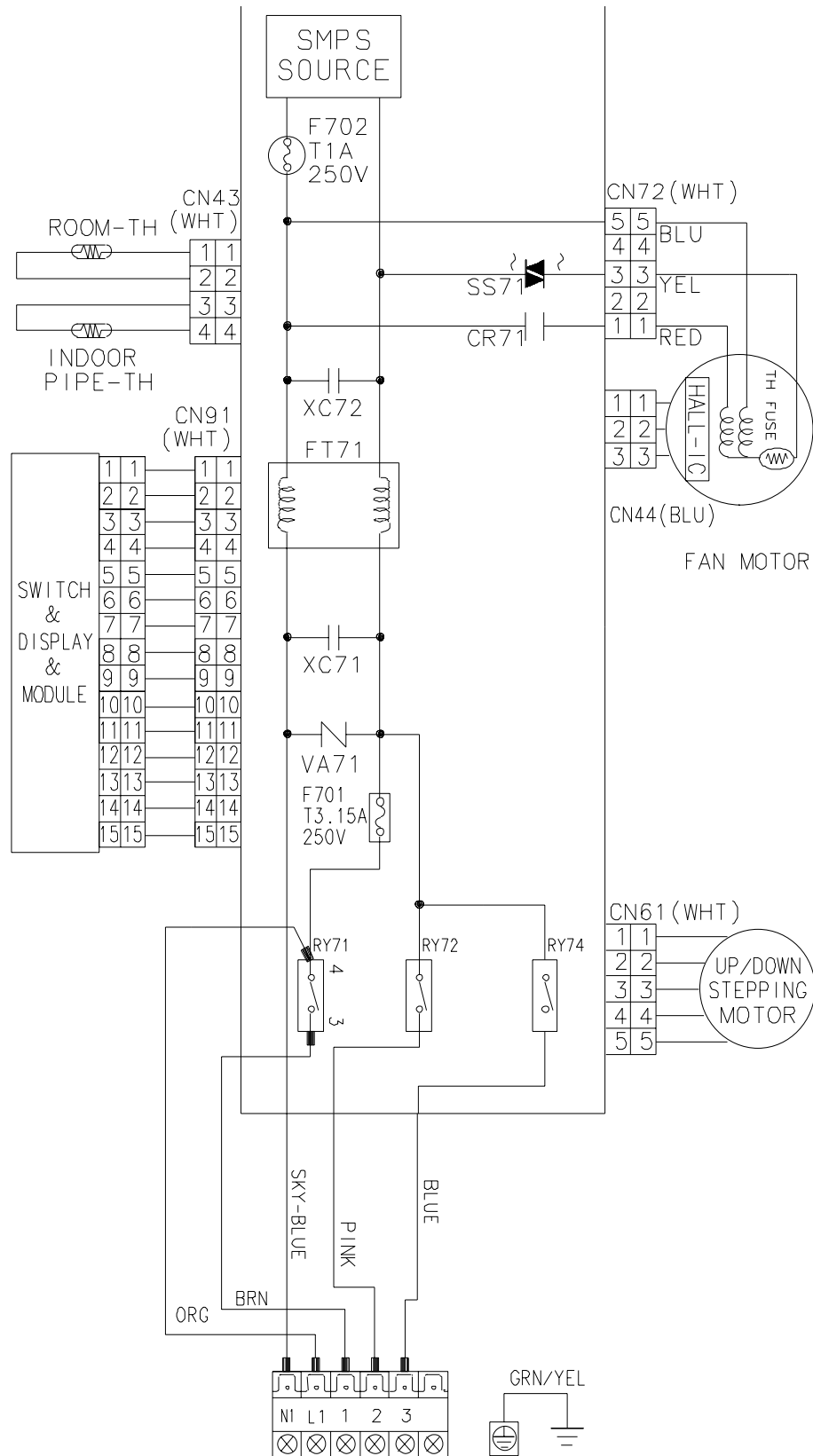
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6. Electrical Parts List

■ MAIN PCB : DB93-04418A

Parts Code	Design location	Q'TY	Description	Spec.	Service	Remark
0402-000012	D701	1	DIODE-RECTIFIER	UF4007,1KV,1A,DO-41,TP	SNA	
0402-000137	D102	1	DIODE-RECTIFIER	1N4007,1KV,1A,DO-41,TP	SNA	
0402-001194	D101	1	DIODE-RECTIFIER	UG2D,SHG2D,200V,2A,-,TP	SNA	
0402-001298	BD71	1	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	SNA	
0403-000252	ZD11	1	DIODE-ZENER	BZX84C3V6,3.4-3.8V,350mW,SOT-23,TP	SNA	
0403-000466	ZD13	1	DIODE-ZENER	BZX84C4V3,4.3,225mW,SOT-23,TP	SNA	
0403-001285	ZD12	1	DIODE-ZENER	BZX84-C11,10.4-11.6V,350mW,SOT-23,TP	SNA	
0501-000534	Q201	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q401	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q601	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q603	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-002296	Q602	1	TR-SMALL SIGNAL	MMST2907A,PNP,200mW,SMT3,TP,100-300	SNA	
0504-001064	Q101	1	TR-DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	SNA	
0506-000175	IC05	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC06	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC08	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0604-001003	PC02	1	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	SNA	
0604-001038	PC01	1	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST	SNA	
1003-001462	IC07	1	IC-SOURCE DRIVER	TD62783AFW,SOL,18P,-,8,-500MA,TP,PLASTIC,50V,-40TO85C,1.47,50V,-	SNA	
1103-001016	IC09	1	IC-EEPROM	93C56,256x8/128x16Bit,SOP,8P,5x4mm,-,2.7/5.5V,-,-,-40to+85C,10uA,-,TP	SNA	
1203-000429	IC02	1	IC-POS.FIXED REG.	78L05A,TO-92,3P,-,PLASTIC,4.6/	SNA	
1203-002545	IC01	1	IC-PWM CONTROLLER	266,DIP,8P,300MIL,PLASTIC,-0.3/700V,-,40TO+150C,560MA,-,ST	SNA	
1404-001274	NTC1	1	THERMISTOR-NTC	22ohm,1.4A,3100K,9.5mW/C,-,7.0,-	SNA	
1405-000160	VA71	1	VARIATOR	680V,4500A,17.5x6.5mm,TP	SNA	
2003-000448	R106	1	R-METAL OXIDE(S)	100Kohm,5%,2W,AA,TP,4x12mm	SNA	
2007-000074	R101	1	R-CHIP	100ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R405	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R406	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R105	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R607	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R608	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000078	R210	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R211	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R212	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R301	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R302	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R401	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R402	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R404	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	

■ MAIN PCB : DB93-04418A(cont.)

Code No.	Location No.	Q'TY	Description	Specification	SA/SNA	Remark
2007-000078	R602	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R604	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R610	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R611	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R606	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R909	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	
2007-000087	R403	1	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R209	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R501	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R605	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R802	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R908	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000109	R502	1	R-CHIP	1Mohm,5%,1/10W,TP,1608	SNA	
2007-000119	R609	1	R-CHIP	560ohm,5%,1/10W,TP,1608	SNA	
2007-000124	R102	1	R-CHIP	2.2Kohm,5%,1/10W,TP,1608	SNA	
2007-000944	R201	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R202	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R203	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R204	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R205	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R206	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R207	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R208	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-001068	R407	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2007-001068	R408	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2201-000983	C110	1	C-CERAMIC,DISC	1NF,10%,2KV,Y5P,TP,9X5MM,7.5	SNA	
2201-000987	C107	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM,10	SNA	
2201-000987	C108	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM,10	SNA	
2201-002193	C109	1	C-CERAMIC,DISC	0.082nF,?10%,3000V,SL,-,8.5 X 3,5	SNA	
2203-000257	C202	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C203	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C404	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000440	C401	1	C-CER,CHIP	1nF,10%,50V,X7R,1608	SNA	
2203-005249	C102	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C104	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C106	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C201	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C204	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C301	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C302	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C402	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C403	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C501	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C502	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C503	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C504	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C802	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C901	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2301-001220	XC71	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001220	XC72	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001251	CR71	1	C-FILM,LEAD-PPF	1.2uF,10%,450Vac,BK,38x18x30,3	SNA	

MAIN PCB : DB93-04418A(cont.)

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
2401-000037	C105	1	C-AL	470uF,20%,16V,GP,TP,8x11.5,5	SNA	
2401-000151	C103	1	C-AL	1000uF,20%,25V,GP,TP,10x20,5	SNA	
2401-002300	C601	1	C-AL	47?F,20%,50V,GP,TP,6.3x11,5mm	SNA	
2401-004219	C101	1	C-AL	15?F,20%,500V,-,TP,12.5X20,5mm	SNA	
2802-001198	X501	1	RESONATOR-CERAMIC	10MHZ,0.5%,BK,8X3X5.5MM	SNA	
3002-001129	BZ61	1	BUZZER-PIEZO	85DB,-,-,2KHZ,-	SNA	
3501-001154	RY72	1	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	SA	
3501-001154	RY73	1	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	SA	
3501-001169	RY71	1	RELAY-POWER	12VDC,0.9W,20000MA,SPST,20MS,10MS	SNA	
3502-000115	SS71	1	SSR	12Vdc,-,2A,1mS,1mS	SNA	
3601-000400	F701-1	1	FUSE-CARTRIDGE	250V,2.5A,TIME-LAG,GLASS,5.2x20mm	SNA	
3601-001209	F702	1	FUSE-RADIAL LEAD	250V,1A,TIME-LAG,-,8.5x8mm	SNA	
3711-000262	CN72	1	HEADER-BOARD TO CABLE	1WALL,3P,1R,7.92MM,STRAIGHT,SN,WHT	SNA	
3711-000879	CN44	1	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5mm,STRAIGHT,SN,BLU	SNA	
3711-004352	CN91	1	HEADER-BOARD TO CABLE	BOX,15P,1R,2mm,STRAIGHT,SN,NTR	SNA	
3711-004379	CN43	1	HEADER-BOARD TO CABLE	BOX,4P,1R,2mm,STRAIGHT,SN,NTR	SNA	
3711-004484	CN61	1	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,NTR	SNA	
DB09-00496A	IC04	1	IC MICOM	S3C848AXZZ-QT8A,-,64P,+5V,10MHz,STM-0627-OA, ROM Size: 48K bytes,8BIT,8BIT,QFP,QFP,-,8BIT,-40~+85	SA	
DB26-00065A	ST11	1	TRANS SWITCHING	EI1916-09N,9W,PREMIUM,-,160V/280V,PL-3 EI1916,-,EI1916,50/60Hz,UL,1.65mH?10%,,-,750mA,DC12V,INDIA IMPROVE	SNA	
DB27-00017A	FT71	1	COIL CHOKE	USAV-07153,UU1116,15.0mH,-,25?~+85?,-,1.3ohm,-,15mH,105,20*18mm,13,0.6,BK,-25?	SNA	
DB39-01270A	POWER(N)	1	CONNECT WIRE	WW2-P/J,#1015 18 AWG,-,1P,-,BLU,-,175022-1 (AMP),ST780400 (KET),TP,220V/50Hz,4mm,170mm,-,-,SSEC	SNA	
DB39-01270B	FAN(H)	1	CONNECT WIRE	WW2-P/J,#1015 18 AWG,-,1P,-,PINK,-,175022-1 (AMP),ST780400 (KET),TP,220V/50Hz,4mm,170mm,-,-,SSEC	SNA	
DB39-01270C	4-WAY	1	CONNECT WIRE	WW2-P/J,#1015 18 AWG,-,1P,-,BLK,-,175022-1 (AMP),ST780400 (KET),TP,220V/50Hz,4mm,170mm,-,-,SSEC	SNA	
DB41-00554A		1	PCB MAIN	VIVACH ,CEM-3,2,Revision 1,1.6T,90*120,-,-,-,SSEC	SA	
DB61-00924A	F701	1	HOLDER-FUSE	-,FH-51B,-,-,-,SSEC	SNA	

MAIN PCB : DB93-04418B

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
0402-000012	D701	1	DIODE-RECTIFIER	UF4007,1KV,1A,DO-41,TP	SNA	
0402-000137	D102	1	DIODE-RECTIFIER	1N4007,1KV,1A,DO-41,TP	SNA	
0402-001194	D101	1	DIODE-RECTIFIER	UG2D,SHG2D,200V,2A,-,TP	SNA	
0402-001298	BD71	1	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	SNA	
0403-000252	ZD11	1	DIODE-ZENER	BZX84C3V6,3.4-3.8V,350MW,SOT-23,TP	SNA	
0403-000466	ZD13	1	DIODE-ZENER	BZX84C4V3,4.3,225mW,SOT-23,TP	SNA	
0403-001285	ZD12	1	DIODE-ZENER	BZX84-C11,10.4-11.6V,350mW,SOT-23,TP	SNA	
0501-000534	Q201	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q401	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q601	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q603	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-002296	Q602	1	TR-SMALL SIGNAL	MMST2907A,PNP,200mW,SMT3,TP,100-300	SNA	
0504-001064	Q101	1	TR-DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	SNA	
0506-000175	IC05	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC06	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC08	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0604-001003	PC02	1	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	SNA	
0604-001038	PC01	1	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST	SNA	
1003-001462	IC07	1	IC-SOURCE DRIVER	TD62783AFW,SOL,18P,-,8,-500MA,TP,PLASTIC,50V,-40TO85C,1.47,50V,-	SNA	
1103-001016	IC09	1	IC-EEPROM	93C56,256x8/128x16Bit,SOP,8P,5x4mm,-,2.7/5.5V,-,-,40to+85C,10uA,-,TP	SNA	
1203-000429	IC02	1	IC-POS.FIXED REG.	78L05A,TO-92,3P,-,PLASTIC,4.6/	SNA	
1203-002545	IC01	1	IC-PWM CONTROLLER	266,DIP,8P,300MIL,PLASTIC,-0.3/700V,-,40TO+150C,560MA,-,ST	SNA	
1404-001274	NTC1	1	THERMISTOR-NTC	22ohm,1.4A,3100K,9.5mW/C,-,7.0,-	SNA	
1405-000160	VA71	1	VARISTOR	680V,4500A,17.5x6.5mm,TP	SNA	
2003-000448	R106	1	R-METAL OXIDE(S)	100Kohm,5%,2W,AA,TP,4x12mm	SNA	
2007-000074	R101	1	R-CHIP	100ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R405	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R406	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R105	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R607	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R608	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000078	R210	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R211	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R212	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R301	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R302	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R401	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R402	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R404	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R602	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R604	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R610	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R611	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R606	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	

MAIN PCB : DB93-04418B(cont.)

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
2007-000084	R909	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	
2007-000087	R403	1	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R209	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R501	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R605	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R802	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R908	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000109	R502	1	R-CHIP	1Mohm,5%,1/10W,TP,1608	SNA	
2007-000119	R609	1	R-CHIP	560ohm,5%,1/10W,TP,1608	SNA	
2007-000124	R102	1	R-CHIP	2.2Kohm,5%,1/10W,TP,1608	SNA	
2007-000944	R201	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R202	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R203	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R204	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R205	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R206	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R207	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R208	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-001068	R407	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2007-001068	R408	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2201-000983	C110	1	C-CERAMIC,DISC	1NF,10%,2KV,Y5P,TP,9X5MM,7.5	SNA	
2201-000987	C107	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM,10	SNA	
2201-000987	C108	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM,10	SNA	
2201-002193	C109	1	C-CERAMIC,DISC	0.082nF,?10%,3000V,SL,-,8.5 X 3,5	SNA	
2203-000257	C202	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C203	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C404	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000440	C401	1	C-CER,CHIP	1nF,10%,50V,X7R,1608	SNA	
2203-005249	C102	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C104	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C106	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C201	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C204	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C301	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C302	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C402	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C403	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C501	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C502	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C503	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C504	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C802	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C901	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2301-001220	XC71	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001220	XC72	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001251	CR71	1	C-FILM,LEAD-PPF	1.2uF,10%,450Vac,BK,38x18x30,3	SNA	
2401-000037	C105	1	C-AL	470uF,20%,16V,GP,TP,8x11.5,5	SNA	

MAIN PCB : DB93-04418B(cont.)

Parts Code	Design location	Q'TY	Description	Spec.	A/SNA	Remark
2401-000151	C103	1	C-AL	1000uF,20%,25V,GP,TP,10x20,5	SNA	
2401-002300	C601	1	C-AL	47?F,20%,50V,GP,TP,6.3x11,5mm	SNA	
2401-004219	C101	1	C-AL	15?F,20%,500V,-,TP,12.5X20,5mm	SNA	
2802-001198	X501	1	RESONATOR-CERAMIC	10MHZ,0.5%,BK,8X3X5.5MM	SNA	
3002-001129	BZ61	1	BUZZER-PIEZO	85DB,-,2KHZ,-	SNA	
3501-001169	RY71	1	RELAY-POWER	12VDC,0.9W,20000MA,SPST,20MS,10MS	SNA	
3502-000115	SS71	1	SSR	12Vdc,-,2A,1mS,1mS	SNA	
3601-000400	F701-1	1	FUSE-CARTRIDGE	250V,2.5A,TIME-LAG,GLASS,5.2x20mm	SNA	
3601-001209	F702	1	FUSE-RADIAL LEAD	250V,1A,TIME-LAG,-,8.5x8mm	SNA	
3711-000262	CN72	1	HEADER-BOARD TO CABLE	1WALL,3P,1R,7.92MM,STRAIGHT,SN,WHT	SNA	
3711-000879	CN44	1	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5mm,STRAIGHT,SN,BLU	SNA	
3711-004352	CN91	1	HEADER-BOARD TO CABLE	BOX,15P,1R,2mm,STRAIGHT,SN,NTR	SNA	
3711-004379	CN43	1	HEADER-BOARD TO CABLE	BOX,4P,1R,2mm,STRAIGHT,SN,NTR	SNA	
3711-004484	CN61	1	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,NTR	SNA	
DB09-00496A	IC04	1	IC MICOM	S3C848AXZZ-QT8A,-,64P,+5V,10MHz,STM-0627-OA, ROM Size: 48K bytes,8BIT,8BIT,QFP,QFP,-,8BIT,-40~+85	SA	
DB26-00065A	ST11	1	TRANS SWITCHING	EI1916-09N,9W,PREMIUM,-,160V/280V,PL-3 EI1916,-,EI1916,50/60Hz,UL,1.65mH?10%,-,-,750mA,DC12V,INDIA IMPROVE	SNA	
DB27-00017A	FT71	1	COIL CHOKE	USAV-07153,UU1116,15.0mH,-25?~+85?,-,1.3ohm,-,15mH,105,20*18mm,13,0.6,BK,-25?	SNA	
DB39-01270A	POWER(N)	1	CONNECT WIRE	WW2-P/J,#1015 18 AWG,-,1P,-,BLU,-,175022-1 (AMP),ST780400 (KET),TP,220V/50Hz,4mm,170mm,-,,-,SSEC	SNA	
DB41-00554A		1	PCB MAIN	VIVACH ,CEM-3,2,Revision 1,1.6T,90*120,-,-,-,SSEC	SA	
DB61-00924A	F701	1	HOLDER-FUSE	-,FH-51B,-,-,-,SSEC	SNA	

MAIN PCB : DB93-04418C

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
0402-000012	D701	1	DIODE-RECTIFIER	UF4007,1KV,1A,DO-41,TP	SNA	
0402-000137	D102	1	DIODE-RECTIFIER	1N4007,1KV,1A,DO-41,TP	SNA	
0402-001194	D101	1	DIODE-RECTIFIER	UG2D,SHG2D,200V,2A,-,TP	SNA	
0402-001298	BD71	1	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	SNA	
0403-000252	ZD11	1	DIODE-ZENER	BZX84C3V6,3.4-3.8V,350MW,SOT-23,TP	SNA	
0403-000466	ZD13	1	DIODE-ZENER	BZX84C4V3,4.3,225mW,SOT-23,TP	SNA	
0403-001285	ZD12	1	DIODE-ZENER	BZX84-C11,10.4-11.6V,350mW,SOT-23,TP	SNA	
0501-000534	Q201	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q401	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q601	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q603	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-002296	Q602	1	TR-SMALL SIGNAL	MMST2907A,PNP,200MW,SMT3,TP,100-300	SNA	
0504-001064	Q101	1	TR-DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	SNA	
0506-000175	IC05	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC06	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC08	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0604-001003	PC02	1	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	SNA	
0604-001038	PC01	1	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST	SNA	
1003-001462	IC07	1	IC-SOURCE DRIVER	TD62783AFW,SOL,18P,-,8-500MA,TP,PLASTIC,50V,-40TO85C,1.47,50V,-	SNA	
1103-001016	IC09	1	IC-EEPROM	93C56,256x8/128x16Bit,SOP,8P,5x4mm,-2.7/5.5V,-,-40to+85C,10uA,-,TP	SNA	
1203-000429	IC02	1	IC-POS.FIXED REG.	78L05A,TO-92,3P,-,PLASTIC,4.6/	SNA	
1203-002545	IC01	1	IC-PWM CONTROLLER	266,DIP,8P,300MIL,PLASTIC,-0.3/700V,-,-40TO+150C,560MA,-,ST	SNA	
1404-001274	NTC1	1	THERMISTOR-NTC	22ohm,1.4A,3100K,9.5mW/C,-,7.0,-	SNA	
1405-000160	VA71	1	VARISTOR	680V,4500A,17.5x6.5mm,TP	SNA	
2003-000448	R106	1	R-METAL OXIDE(S)	100Kohm,5%,2W,AA,TP,4x12mm	SNA	
2007-000074	R101	1	R-CHIP	100ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R405	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R406	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R105	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R607	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R608	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000078	R210	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	

MAIN PCB : DB93-04418C(cont.)

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
2007-000078	R211	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R212	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R301	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R302	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R401	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R402	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R404	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R602	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R604	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R610	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R611	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R606	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R909	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	
2007-000087	R403	1	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R209	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R501	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R605	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R802	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R908	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000109	R502	1	R-CHIP	1Mohm,5%,1/10W,TP,1608	SNA	
2007-000119	R609	1	R-CHIP	560ohm,5%,1/10W,TP,1608	SNA	
2007-000124	R102	1	R-CHIP	2.2Kohm,5%,1/10W,TP,1608	SNA	
2007-000944	R201	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R202	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R203	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R204	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R205	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R206	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R207	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R208	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-001068	R407	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2007-001068	R408	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2201-000983	C110	1	C-CERAMIC,DISC	1NF,10%,2KV,Y5P,TP,9X5MM,7.5	SNA	
2201-000987	C107	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM,10	SNA	
2201-000987	C108	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM,10	SNA	
2201-002193	C109	1	C-CERAMIC,DISC	0.082nF,?10%,3000V,SL,-,8.5 X 3,5	SNA	
2203-000257	C202	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C203	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C404	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000440	C401	1	C-CER,CHIP	1nF,10%,50V,X7R,1608	SNA	
2203-005249	C102	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C104	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C106	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C201	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C204	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C301	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C302	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	

MAIN PCB : DB93-04418C(cont.)

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
2203-005249	C402	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C403	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C501	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C502	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C503	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C504	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C802	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C901	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2301-001220	XC71	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001220	XC72	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001251	CR71	1	C-FILM,LEAD-PPF	1.2uF,10%,450Vac,BK,38x18x30,3	SNA	
2401-000037	C105	1	C-AL	470uF,20%,16V,GP,TP,8x11.5,5	SNA	
2401-000151	C103	1	C-AL	1000uF,20%,25V,GP,TP,10x20,5	SNA	
2401-002300	C601	1	C-AL	47?F,20%,50V,GP,TP,6.3x11,5mm	SNA	
2401-004219	C101	1	C-AL	15?F,20%,500V,-,TP,12.5X20,5mm	SNA	
2802-001198	X501	1	RESONATOR-CERAMIC	10MHZ,0.5%,BK,8X3X5.5MM	SNA	
3002-001129	BZ61	1	BUZZER-PIEZO	85DB,-,2KHZ,-	SNA	
3501-001169	RY71	1	RELAY-POWER	12VDC,0.9W,20000MA,SPST,20MS,10MS	SNA	
3502-000115	SS71	1	SSR	12Vdc,-,2A,1mS,1mS	SNA	
3601-000400	F701-1	1	FUSE-CARTRIDGE	250V,2.5A,TIME-LAG,GLASS,5.2x20mm	SNA	
3601-001209	F702	1	FUSE-RADIAL LEAD	250V,1A,TIME-LAG,-,8.5x8mm	SNA	
3711-000262	CN72	1	HEADER-BOARD TO CABLE	1WALL,3P,1R,7.92MM,STRAIGHT,SN,WHIT	SNA	
3711-000879	CN44	1	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5mm,STRAIGHT,SN,BLU	SNA	
3711-004352	CN91	1	HEADER-BOARD TO CABLE	BOX,15P,1R,2mm,STRAIGHT,SN,NT	SNA	
3711-004379	CN43	1	HEADER-BOARD TO CABLE	BOX,4P,1R,2mm,STRAIGHT,SN,NT	SNA	
3711-004484	CN61	1	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,NT	SNA	
DB09-00496A	IC04	1	IC MICOM	S3C848AXZZ-QT8A,-,64P,+5V,10MHz,STM-0627-OA, ROM Size: 48K bytes,8BIT,8BIT,QFP,QFP,-,8BIT,-40~+85	SA	
DB26-00065A	ST11	1	TRANS SWITCHING	EI1916-09N,9W,PREMIUM,-,160V/280V,PL-3 EI1916,-,EI1916,50/60Hz,UL,1.65mH?10%,,-,750mA,DC12V,INDIA IMPROVE	SNA	

MAIN PCB : DB93-04418D

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
0402-000012	D701	1	DIODE-RECTIFIER	UF4007,1KV,1A,DO-41,TP	SNA	
0402-000137	D102	1	DIODE-RECTIFIER	1N4007,1KV,1A,DO-41,TP	SNA	
0402-001194	D101	1	DIODE-RECTIFIER	UG2D,SHG2D,200V,2A,-,TP	SNA	
0402-001298	BD71	1	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	SNA	
0403-000252	ZD11	1	DIODE-ZENER	BZX84C3V6,3.4-3.8V,350mW,SOT-23,TP	SNA	
0403-000466	ZD13	1	DIODE-ZENER	BZX84C4V3,4.3,225mW,SOT-23,TP	SNA	
0403-001285	ZD12	1	DIODE-ZENER	BZX84-C11,10.4-11.6V,350mW,SOT-23,TP	SNA	
0501-000534	Q201	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q401	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q601	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q603	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-002296	Q602	1	TR-SMALL SIGNAL	MMST2907A,PNP,200mW,SMT3,TP,100-300	SNA	
0504-001064	Q101	1	TR-DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	SNA	
0506-000175	IC05	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC06	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC08	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0604-001003	PC02	1	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	SNA	
0604-001038	PC01	1	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST	SNA	
1003-001462	IC07	1	IC-SOURCE DRIVER	TD62783AFW,SOL,18P,-,8,-500MA,TP,PLASTIC,50V,-40TO85C,1.47,50V,-	SNA	
1103-001016	IC09	1	IC-EEPROM	93C56,256x8/128x16Bit,SOP,8P,5x4mm,-,2.7/5.5V,-,-,40to+85C,10uA,-,TP	SNA	
1203-000429	IC02	1	IC-POS.FIXED REG.	78L05A,TO-92,3P,-,PLASTIC,4.6/	SNA	
1203-002545	IC01	1	IC-PWM CONTROLLER	266,DIP,8P,300MIL,PLASTIC,-0.3/700V,-,-40TO+150C,560MA,-,ST	SNA	
1404-001274	NTC1	1	THERMISTOR-NTC	22ohm,1.4A,3100K,9.5mW/C,-,7.0,-	SNA	
1405-000160	VA71	1	VARISTOR	680V,4500A,17.5x6.5mm,TP	SNA	
2003-000448	R106	1	R-METAL OXIDE(S)	100Kohm,5%,2W,AA,TP,4x12mm	SNA	
2007-000074	R101	1	R-CHIP	100ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R405	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R406	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R105	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R607	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R608	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000078	R210	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R211	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	

MAIN PCB : DB93-04418D(cont.)

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
2007-000078	R212	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R301	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R302	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R401	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R402	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R404	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R602	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R604	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R610	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R611	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R606	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R909	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	
2007-000087	R403	1	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R209	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R501	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R605	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R802	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R908	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000109	R502	1	R-CHIP	1Mohm,5%,1/10W,TP,1608	SNA	
2007-000119	R609	1	R-CHIP	560ohm,5%,1/10W,TP,1608	SNA	
2007-000124	R102	1	R-CHIP	2.2Kohm,5%,1/10W,TP,1608	SNA	
2007-000944	R201	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R202	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R203	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R204	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R205	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R206	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R207	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R208	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-001068	R407	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2007-001068	R408	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2201-000983	C110	1	C-CERAMIC,DISC	1NF,10%,2KV,Y5P,TP,9X5MM,7.5	SNA	
2201-000987	C107	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM, 10	SNA	
2201-000987	C108	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM, 10	SNA	
2201-002193	C109	1	C-CERAMIC,DISC	0.082nF,?10%,3000V,SL,-,8.5 X 3,5	SNA	
2203-000257	C202	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C203	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C404	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000440	C401	1	C-CER,CHIP	1nF,10%,50V,X7R,1608	SNA	
2203-005249	C102	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C104	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C106	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C201	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C204	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C301	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C302	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	

MAIN PCB : DB93-04418D (cont.)

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
2203-005249	C402	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C403	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C501	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C502	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C503	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C504	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C802	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C901	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2301-001220	XC71	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001220	XC72	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001363	CR71	1	C-FILM,LEAD-PPF	2000nF,+10-5%,- 50V,BK,38x18x30mm,33	SNA	
2401-000037	C105	1	C-AL	470uF,20%,16V,GP,TP,8x11.5,5	SNA	
2401-000151	C103	1	C-AL	1000uF,20%,25V,GP,TP,10x20,5	SNA	
2401-002300	C601	1	C-AL	47?F,20%,50V,GP,TP,6.3x11,5mm	SNA	
2401-004219	C101	1	C-AL	15?F,20%,500V,-,TP,12.5X20,5mm	SNA	
2802-001198	X501	1	RESONATOR- CERAMIC	10MHZ,0.5%,BK,8X3X5.5MM	SNA	
3002-001129	BZ61	1	BUZZER-PIEZO	85DB,-,2KHZ,-	SNA	
3501-001268	RY71	1	RELAY-POWER	12V,0.9W,25000mA,SPST,20mS,10mS	SA	
3502-000115	SS71	1	SSR	12Vdc,-,2A,1mS,1mS	SNA	
3601-000263	F701-1	1	FUSE- CARTRIDGE	250V,3.15A,TIME- LAG,GLASS,5x20mm	SNA	
3601-001209	F702	1	FUSE-RADIAL LEAD	250V,1A,TIME-LAG,-,8.5x8mm	SNA	
3711-000262	CN72	1	HEADER-BOARD TO CABLE	1WALL,3P,1R,7.92MM,STRAIGHT,SN,N,WHT	SNA	
3711-000879	CN44	1	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5mm,STRAIGHT,SN,BLU	SNA	
3711-004352	CN91	1	HEADER-BOARD TO CABLE	BOX,15P,1R,2mm,STRAIGHT,SN,NTR	SNA	
3711-004379	CN43	1	HEADER-BOARD TO CABLE	BOX,4P,1R,2mm,STRAIGHT,SN,NTR	SNA	
3711-004484	CN61	1	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,NTR	SNA	
DB09-00496A	IC04	1	IC MICOM	S3C848AXZZ-QT8A,- ,64P,+5V,10MHz,STM-0627-OA, ROM Size: 48K bytes,8BIT,8BIT,QFP,QFP,- ,8BIT,-40~+85	SA	
DB26-00065A	ST11	1	TRANS SWITCHING	EI1916-09N,9W,PREMIUM,- ,160V/280V,PL-3 EI1916,- ,EI1916,50/60Hz,UL,1.65mH?10%,-, ,750mA,DC12V,INDIA IMPROVE	SNA	
DB27-00017A	FT71	1	COIL CHOKE	USAV-07153,UU1116,15.0mH,- 25?~+85?,-,1.3ohm,- ,15mH,105,20*18mm,13,0.6,BK,-25?	SNA	

MAIN PCB : DB93-04418D

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
0402-000012	D701	1	DIODE-RECTIFIER	UF4007,1KV,1A,DO-41,TP	SNA	
0402-000137	D102	1	DIODE-RECTIFIER	1N4007,1KV,1A,DO-41,TP	SNA	
0402-001194	D101	1	DIODE-RECTIFIER	UG2D,SHG2D,200V,2A,-,TP	SNA	
0402-001298	BD71	1	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	SNA	
0403-000252	ZD11	1	DIODE-ZENER	BZX84C3V6,3.4-3.8V,350MW,SOT-23,TP	SNA	
0403-000466	ZD13	1	DIODE-ZENER	BZX84C4V3,4.3,225mW,SOT-23,TP	SNA	
0403-001285	ZD12	1	DIODE-ZENER	BZX84-C11,10.4-11.6V,350mW,SOT-23,TP	SNA	
0501-000534	Q201	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q401	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q601	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-000534	Q603	1	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	SNA	
0501-002296	Q602	1	TR-SMALL SIGNAL	MMST2907A,PNP,200MW,SMT3,TP,100-300	SNA	
0504-001064	Q101	1	TR-DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	SNA	
0506-000175	IC05	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC06	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0506-000175	IC08	1	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	SNA	
0604-001003	PC02	1	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	SNA	
0604-001038	PC01	1	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST	SNA	
1003-001462	IC07	1	IC-SOURCE DRIVER	TD62783AFW,SOL,18P,-,8,-500MA,TP,PLASTIC,50V,-40TO85C,1.47,50V,-	SNA	
1103-001016	IC09	1	IC-EEPROM	93C56,256x8/128x16Bit,SOP,8P,5x4mm,-,2.7/5.5V,-,-40to+85C,10uA,-,TP	SNA	
1203-000429	IC02	1	IC-POSIFIXED REG.	78L05A,TO-92,3P,-,PLASTIC,4.6/	SNA	
1203-002545	IC01	1	IC-PWM CONTROLLER	266,DIP,8P,300MIL,PLASTIC,-0.3/700V,-,-40TO+150C,560MA,-,ST	SNA	
1404-001274	NTC1	1	THERMISTOR-NTC	22ohm,1.4A,3100K,9.5mW/C,-,7.0,-	SNA	
1405-000160	VA71	1	VARIATOR	680V,4500A,17.5x6.5mm,TP	SNA	
2003-000448	R106	1	R-METAL OXIDE(S)	100Kohm,5%,2W,AA,TP,4x12mm	SNA	
2007-000074	R101	1	R-CHIP	100ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R405	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000076	R406	1	R-CHIP	330ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R105	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R607	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000077	R608	1	R-CHIP	470ohm,5%,1/10W,TP,1608	SNA	
2007-000078	R210	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R211	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R212	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R301	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R302	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R401	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R402	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R404	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R602	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R604	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R610	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000078	R611	1	R-CHIP	1Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R606	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	
2007-000084	R909	1	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	SNA	

MAIN PCB : DB93-04418D(cont.)

Code No.	Location No.	Q'TY	Description	Spec.	SA/SNA	Remark
2007-000087	R403	1	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R209	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R501	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R605	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R802	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000090	R908	1	R-CHIP	10Kohm,5%,1/10W,TP,1608	SNA	
2007-000109	R502	1	R-CHIP	1Mohm,5%,1/10W,TP,1608	SNA	
2007-000119	R609	1	R-CHIP	560ohm,5%,1/10W,TP,1608	SNA	
2007-000124	R102	1	R-CHIP	2.2Kohm,5%,1/10W,TP,1608	SNA	
2007-000944	R201	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R202	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R203	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R204	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R205	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R206	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R207	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-000944	R208	1	R-CHIP	47Kohm,5%,1/4W,TP,3216	SNA	
2007-001068	R407	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2007-001068	R408	1	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	SNA	
2201-000983	C110	1	C-CERAMIC,DISC	1NF,10%,2KV,Y5P,TP,9X5MM,7.5	SNA	
2201-000987	C107	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM,10	SNA	
2201-000987	C108	1	C-CERAMIC,DISC	2.2NF,20%,400V,Y5U,BK,12.5X6MM,10	SNA	
2201-002193	C109	1	C-CERAMIC,DISC	0.082nF,?10%,3000V,SL,-,8.5 X 3,5	SNA	
2203-000257	C202	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C203	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000257	C404	1	C-CER,CHIP	10nF,10%,50V,X7R,1608	SNA	
2203-000440	C401	1	C-CER,CHIP	1nF,10%,50V,X7R,1608	SNA	
2203-005249	C102	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C104	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C106	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C201	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C204	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C301	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C302	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C402	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C403	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C501	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C502	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C503	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C504	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C802	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2203-005249	C901	1	C-CER,CHIP	100nF,10%,50V,X7R,1608	SNA	
2301-001220	XC71	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001220	XC72	1	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	SNA	
2301-001363	CR71	1	C-FILM,LEAD-PPF	2000nF,+10-5%,450V,BK,38x18x30mm,33	SNA	
2401-000037	C105	1	C-AL	470uF,20%,16V,GP,TP,8x11.5,5	SNA	
2401-000151	C103	1	C-AL	1000uF,20%,25V,GP,TP,10x20,5	SNA	
2401-002300	C601	1	C-AL	47?F,20%,50V,GP,TP,6.3x11,5mm	SNA	

MAIN PCB : DB93-04418D

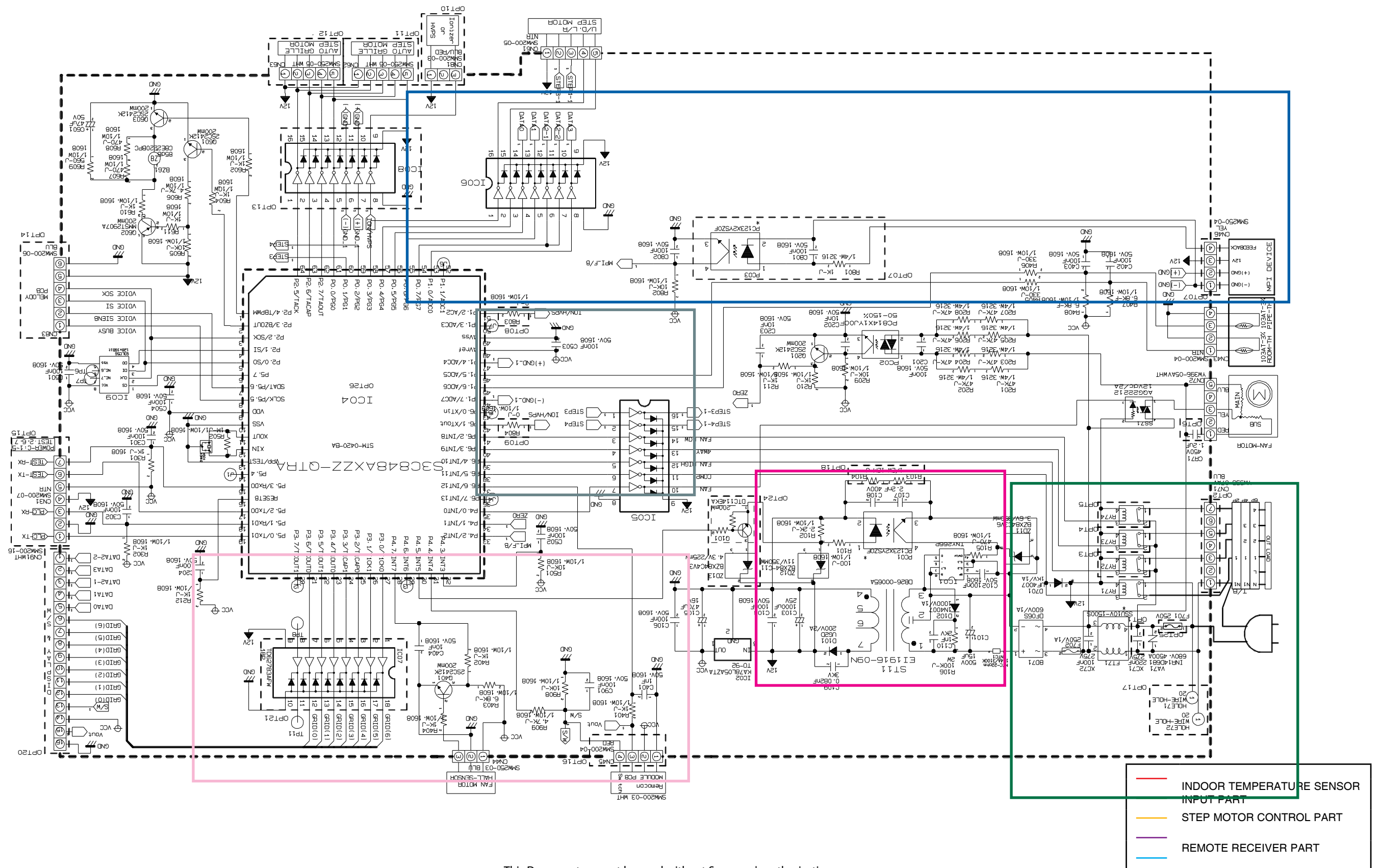
Parts Code	Location No.	Q'TY	Description	Spec	SA/SNA	Remark
2401-004219	C101	1	C-AL	15?F,20%,500V,-,TP,12.5X20,5mm	NA	
2802-001198	X501	1	RESONATOR-CERAMIC	10MHZ,0.5%,BK,8X3X5.5MM	SNA	
3002-001129	BZ61	1	BUZZER-PIEZO	85DB,-,2KHZ,-	SNA	
3501-001154	RY72	1	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	SA	
3501-001154	RY73	1	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	SA	
3501-001154	RY74	1	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	SA	
3501-001268	RY71	1	RELAY-POWER	12V,0.9W,25000mA,SPST,20mS,10mS	SA	
3502-000115	SS71	1	SSR	12Vdc,-,2A,1mS,1mS	SNA	
3601-000263	F701-1	1	FUSE-CARTRIDGE	250V,3.15A,TIME-LAG,GLASS,5x20mm	SNA	
3601-001209	F702	1	FUSE-RADIAL LEAD	250V,1A,TIME-LAG,-,8.5x8mm	SNA	
3711-000262	CN72	1	HEADER-BOARD TO CABLE	1WALL,3P,1R,7.92MM,STRAIGHT,SN,WHT	SNA	
3711-000879	CN44	1	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5mm,STRAIGHT,SN,BLU	SNA	
3711-004352	CN91	1	HEADER-BOARD TO CABLE	BOX,15P,1R,2mm,STRAIGHT,SN,NTR	SNA	
3711-004379	CN43	1	HEADER-BOARD TO CABLE	BOX,4P,1R,2mm,STRAIGHT,SN,NTR	SNA	
3711-004484	CN61	1	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,NTR	SNA	
DB09-00496A	IC04	1	IC MICOM	S3C848AXZZ-QT8A,-,64P,+5V,10MHz,STM-0627-OA, ROM Size: 48K bytes,8BIT,8BIT,QFP,QFP,-,8BIT,-40~+85	SA	
DB26-00065A	ST11	1	TRANS SWITCHING	EI1916-09N,9W,PREMIUM,-,160V/280V,PL-3 EI1916,-,EI1916,50/60Hz,UL,1.65mH?10%,-,750mA,DC12V,INDIA IMPROVE	SNA	
DB27-00017A	FT71	1	COIL CHOKE	USAV-07153,UU1116,15.0mH,-25?~+85?,-,1.3ohm,-,15mH,105,20*18mm,13,0.6,BK,-25?	SNA	
DB39-01270E	POWER(N)	1	CONNECT WIRE	WW2-P/J,#1015 18 AWG,-,1P,-,BLU,-,175022-1 (AMP),ST780400 (KET),TP,220V/50Hz,4mm,170mm,-,TUBE?SSEC	SNA	
DB39-01270F	FAN(H)	1	CONNECT WIRE	WW2-P/J,#1015 18 AWG,-,1P,-,RED,-,175022-1 (AMP),ST780400 (KET),TP,220V/50Hz,4mm,160mm,-,TUBE?SSEC	SNA	
DB39-01270G	4-WAY	1	CONNECT WIRE	WW2-P/J,#1015 18 AWG,-,1P,-,BLK,-,175022-1 (AMP),ST780400 (KET),TP,220V/50Hz,4mm,160mm,-,TUBE?SSEC	SNA	
DB39-01270G	FAN(L)	1	CONNECT WIRE	WW2-P/J,#1015 18 AWG,-,1P,-,BLK,-,175022-1 (AMP),ST780400 (KET),TP,220V/50Hz,4mm,160mm,-,TUBE?SSEC	SNA	
DB41-00554A		1	PCB MAIN	VIVACH ,CEM-3,2,Revision 1,1.6T,90*120,-,-,-,SSEC	SA	
DB61-00924A	F701	1	HOLDER-FUSE	-,FH-51B,-,-,-,SSEC	SNA	

■ **MAIN PCB : DB93-04418D(cont.)**

9. Circuit Descriptions

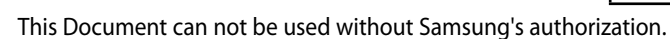
9-1 PCB Circuit Descriptions

9-1-1 Main PCB

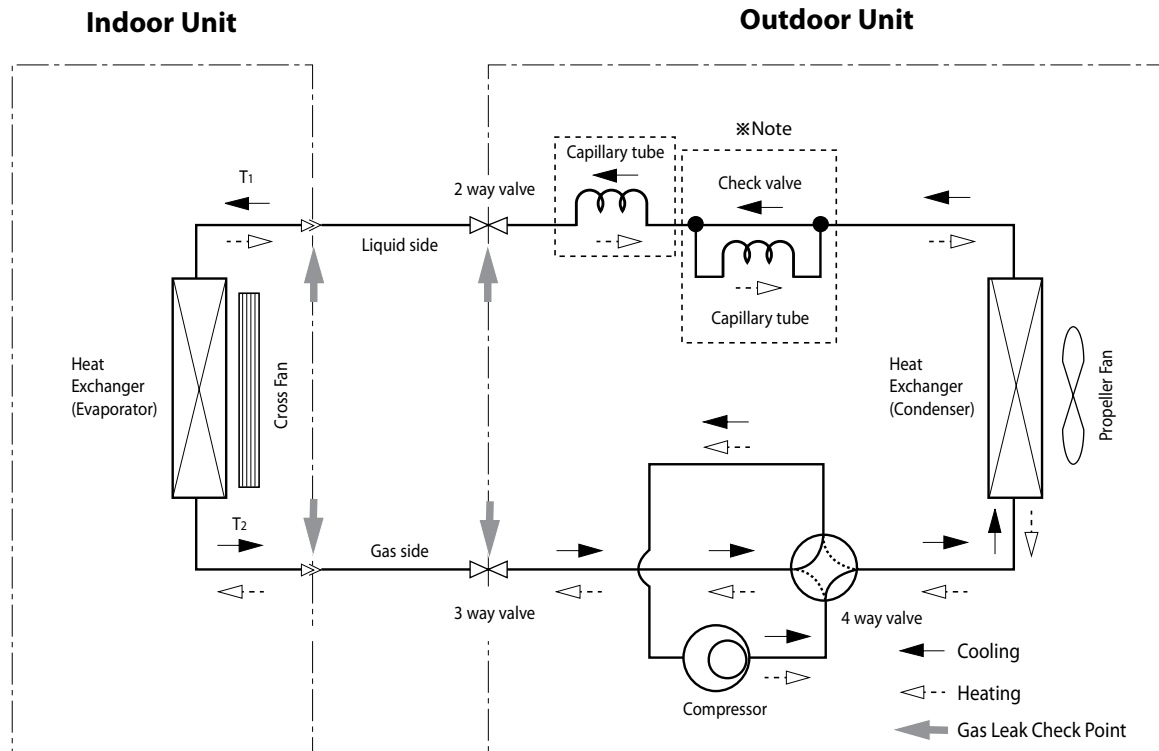


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9-2

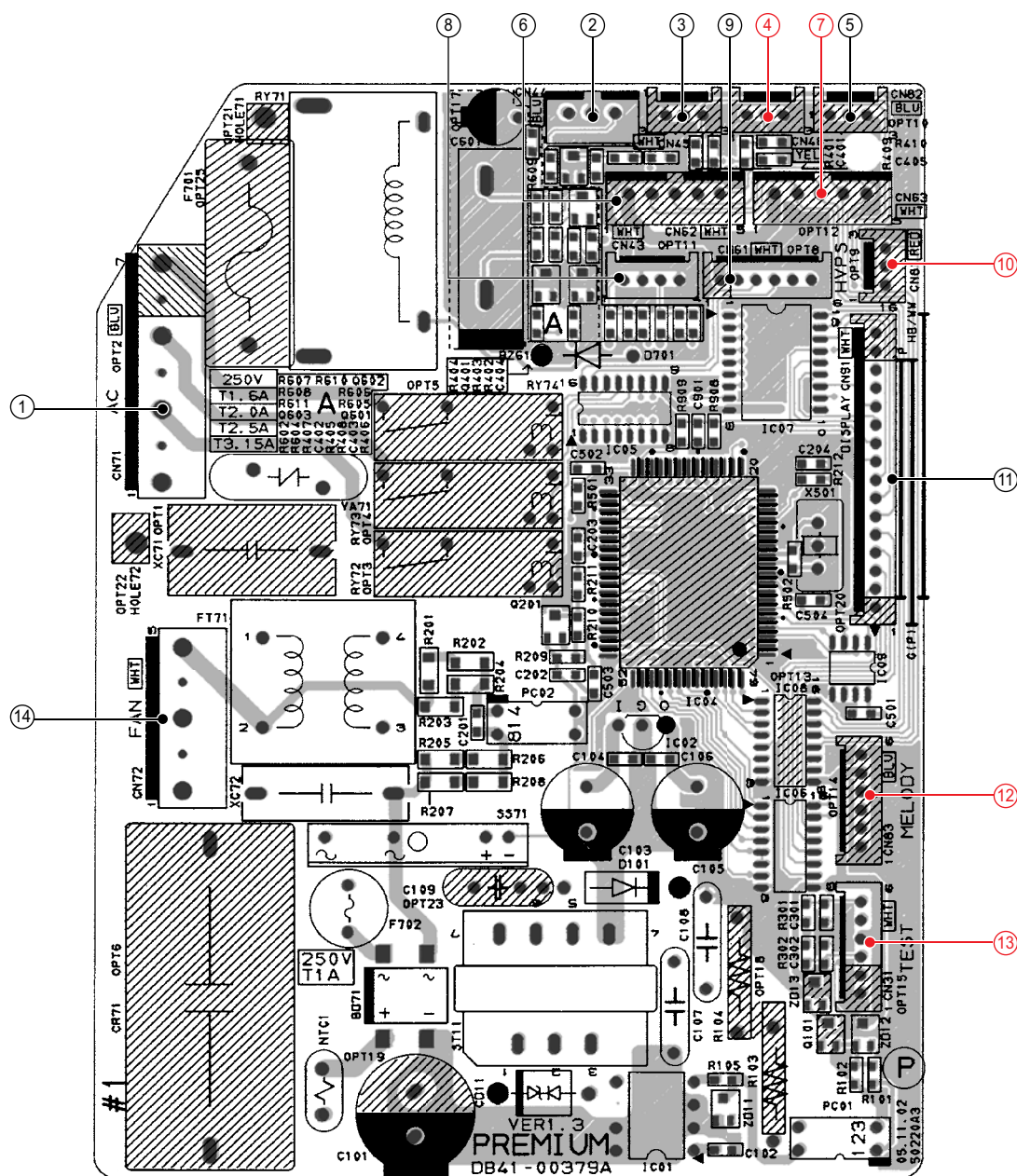


9-2 Refrigerating Cycle Diagram



10. PCB Diagram

⚠ The red number connector is not used.



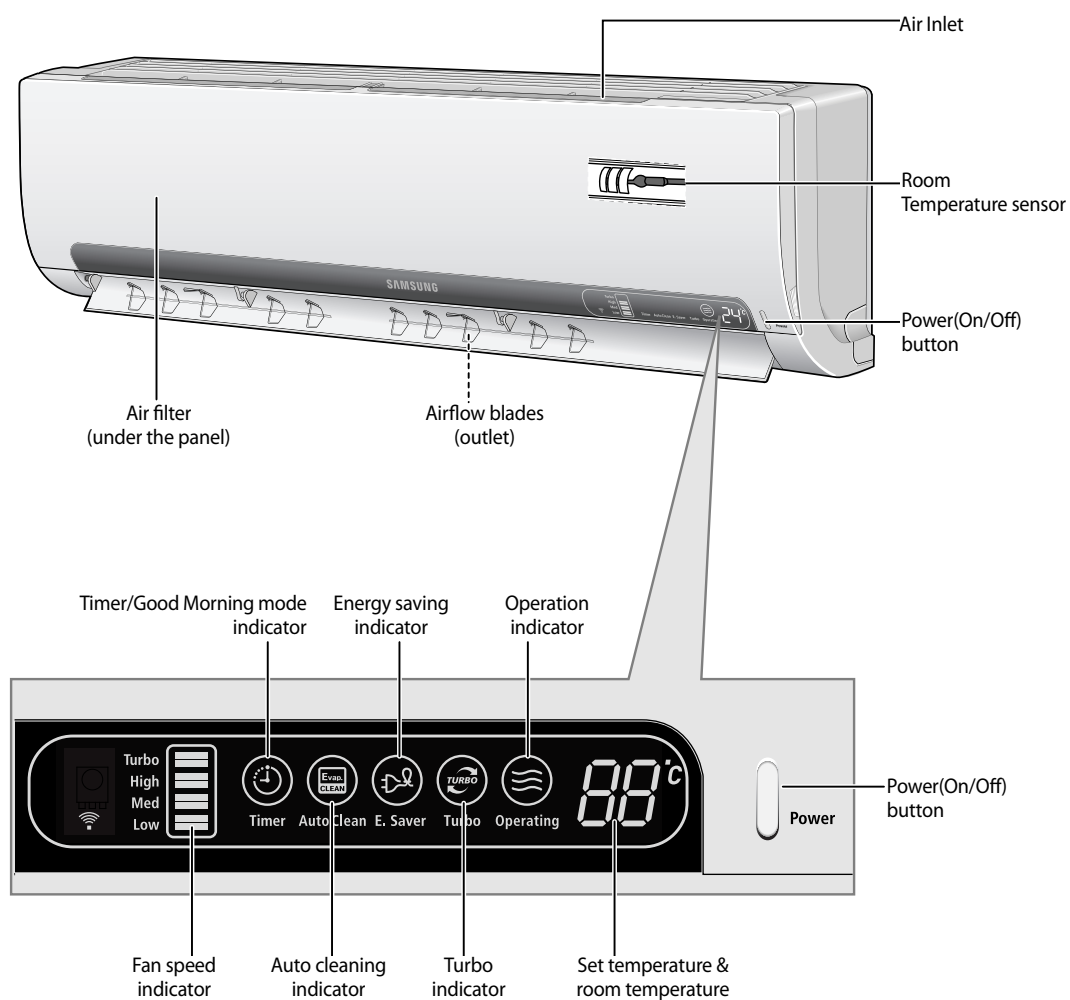
①	Power	⑧	Temperature Sensor
②	Motor RPM Feedback	⑨	BLADE-H Motor
③	Remocon Module	⑩	HVPS(High voltage Generator)
④	Humidity Sensor	⑪	DISPLAY PCB Connection
⑤	Anios	⑫	Melody PCB Connection
⑥	Auto grill 1	⑬	Test Board Connection
⑦	Auto grill 2	⑭	Indoor Fan Motor

11. Operating Instructions

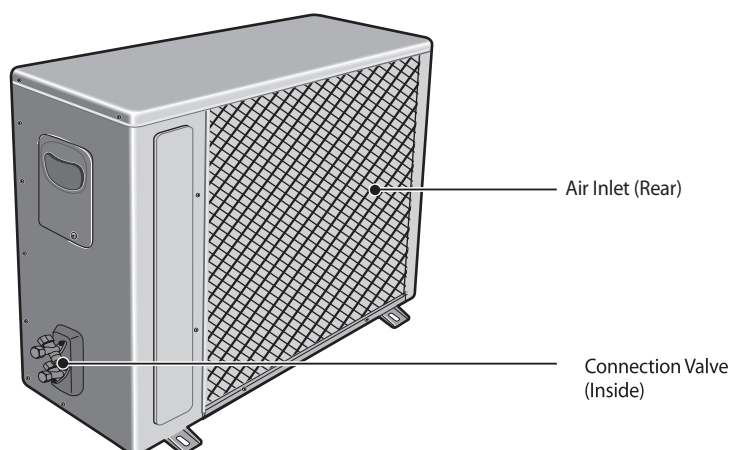
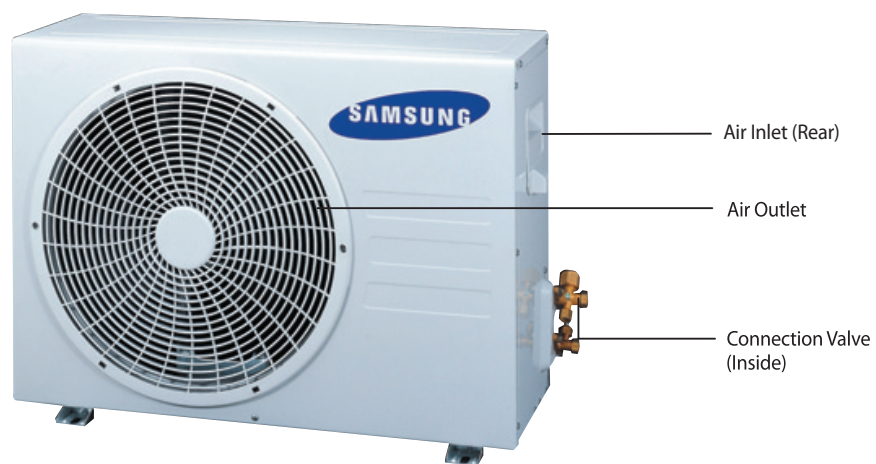
11-1 Name of Each Part

- ▶ The design and shape can be changed according to the model.

Indoor Unit

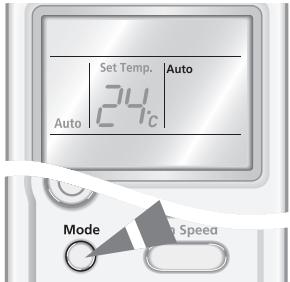
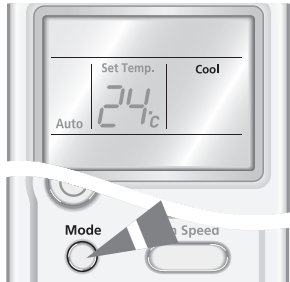
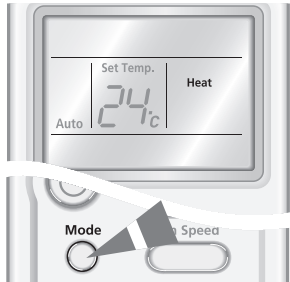


Outdoor Unit

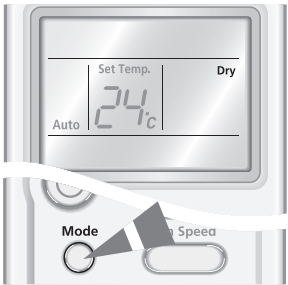
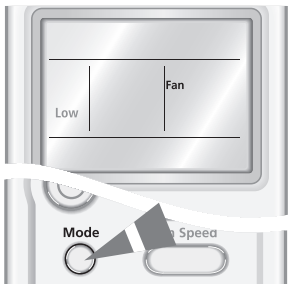


11-2 Main Function

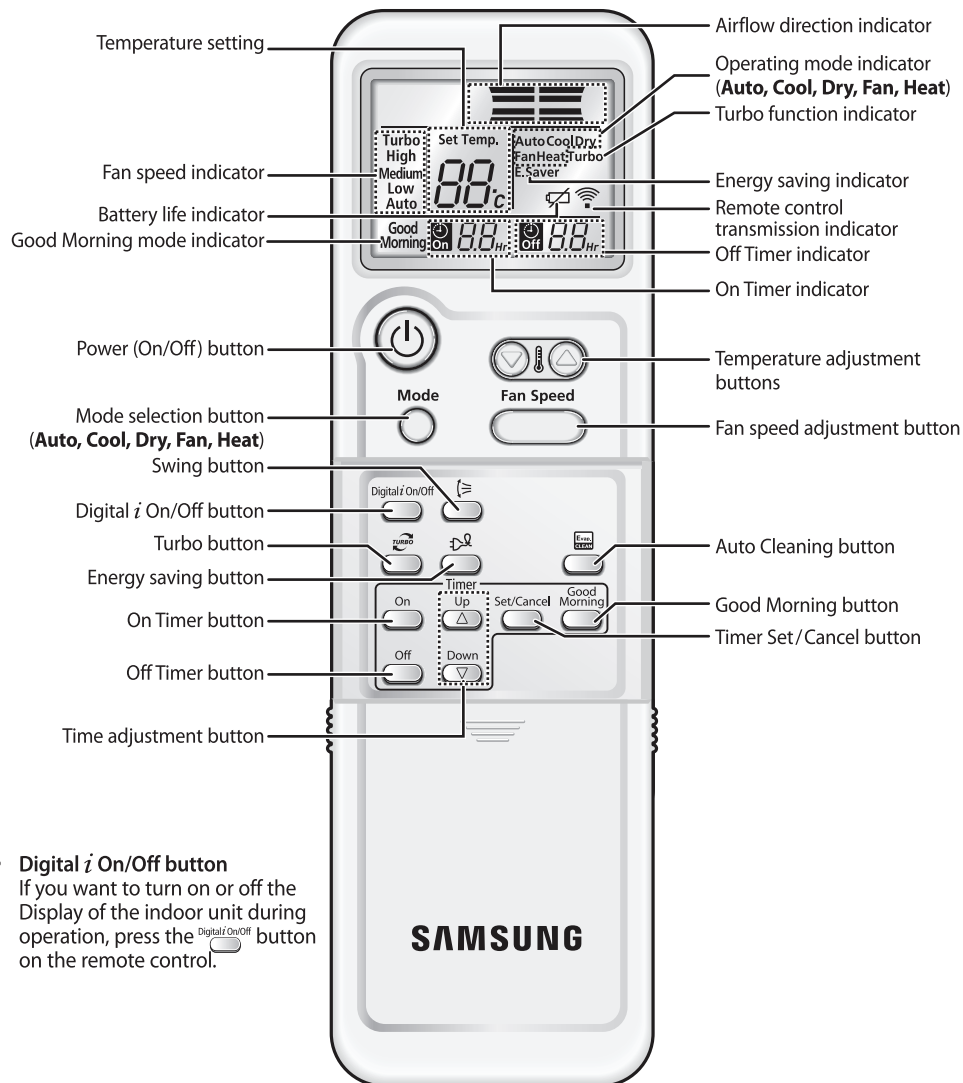
11-2-1 Basic Function

Mode	Explanation	Remark
Auto Mode	Press the  button on the remote control until Auto is displayed.	
Cool Mode	Press the  button on the remote control until Cool is displayed. Press the  button to select the fan speed until the required setting is displayed. Auto → Low → Medium → High Result: Each time you press the  button, the indoor unit beeps.	 
Heat Mode	Press the  button to select the fan speed until the required setting is displayed. Auto → Low → Medium → High Result: ◆ Each time you press the  button, the indoor unit beeps. ◆ If the room temperature reaches the set temperature (selected temperature+5°C), the air conditioner stops heating, but the fan is still operating. ◆ The air conditioner starts heating, provided that the room temperature is lower than the desired temperature (selected temperature+3°C).	 

11-2-2 Applied Function

Mode	Explanation	Remark
Dry Mode	Press the  button on the remote control until Dry is displayed.	
Fan Mode	Press the  button on the remote control until Fan is displayed.	

11-3 Wireless Remote Control-Buttons and Display



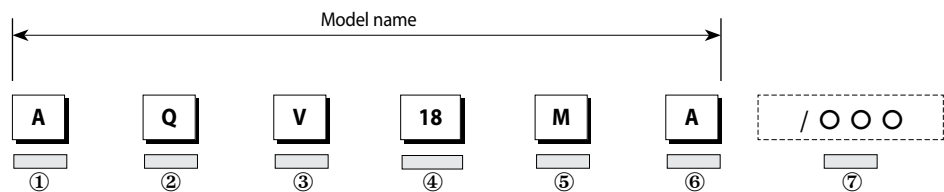
Note **Digital i On/Off button**
If you want to turn on or off the Display of the indoor unit during operation, press the  button on the remote control.

14. Reference Sheet

14-1 Index for Model Name

※ Private Expert Model for Split Type and Europe Type

Model Code



Product ①②	
Cooling Only	AS
Heat Pump	AQ

Inverter ③	
Inverter	V

Capacity ④
Btu

Project ⑤	
BIG	B
Forte	F
GP	G
HB	H
WW Premium	J
Moderato	M
Neo Classic	N
Deluxe Classic	L
Presto	P
Tiffany	T
Vivace	V
WW	W
Tsar	Z

Serial Version ⑥	
New	A
1st VE Model	B
2nd VE Model	C

Buyer Code ⑦	
MIDDLE EAST	MID
RUSSIA	SER

14-2 Refrigerant Pressure during the Charging

Outdoor Unit Temperature	Low Pressure kg/cm ² (PSIC)
Less than 20°C	4.5 ~ 4.7(64~67)
Less than 24°C	4.7 ~ 4.8(67~68)
Less than 28°C	4.8 ~ 4.9(68~70)
Less than 32°C	4.9 ~ 5.0(70~71)
Less than 36°C	5.0 ~ 5.1(71~73)
Less than 40°C	5.1 ~ 5.2 (73~74)
Less than 44°C	5.2 ~ 5.3 (74~75)

14-3 Pressure & Capacity mark

■ Power/Heat

W	cal/s	kcal/h	Btu/h	HP	kg.m/s	lb-m/s
1	0.23885	0.85985	3.4121	0.001341	0.10197	0.73756
4.1868	1	3.6	14.286	0.0056146	0.42693	3.088
1.163	0.27778	1	3.9683	0.0015596	0.11859	0.85778
0.29307	0.06999	0.252	1	3.9302x10 ⁻⁴	0.029885	0.21616
745.7	178.11	641.19	2,544.4	1	76.04	550
9.8067	2.3423	8.4322	33.462	0.013151	1	7.233
1.3558	0.32383	1.1658	4.6262	0.0018182	0.13826	1

14-4 Q & A for Non-trouble

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

Q & A for Non-trouble(cont.)

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

Q & A for Non-trouble(cont.)

Classification	Class	Description
Operation	Q	The remote controller won't operate.
	A	When the batteries run out or the transmitter or receiver of the remote controller is blocked by obstacles, change the batteries or keep the obstacles away from the controlling area. Also, the remote controller may not work under intensive light from a 3-wave length lamp or a neon sign due to the EMI. In this case, take the remote controller closer to the receiver.
Installation	Q	Who installs the air conditioner? (Relocation/Re-installation)
	A	When relocating or re-installing the air conditioner, make sure to contact Samsung Electronics Service Center or Authorized Service Agent and have them to do the job. (If not, it could cause personal injury or product damage.) The cost for the relocation/re-installation of the air conditioner is subject to the customer's expense. There is a cost table. But, our service engineer needs to visit to total up the cost correctly. When you move in, make sure to contact Samsung Electronics Service Center or Authorized Service Agent in advance to streamline the process.
	Q	Is it possible to install the outdoor unit outside?
	A	It is possible to install it at a designated place in the apartment or on the rooftop nearby. But, it's illegal hanging an angle iron case with the outdoor unit in it outside the apartment. Also, it is illegal obstructing passers-by with the outdoor unit installed outside.
	Q	What can be done to install the outdoor unit facing the road because it is a commercial building?
	A	The following is an excerpt from Building Code going into effect from JUNE 1st 2005. "The exhaust pipe of a cooling or ventilation facility installed in a building adjacent to the streets of commercial or residential areas shall be installed higher than 2m to prevent the exhaust air from blowing directly to passers-by and the current facilities shall be corrected by MAY 31st 2005." So, please install it higher than 2m or not to blow the hot exhausting air directly to passers-by.
	Q	What about installing a windscreen during installation not to blow hot air directly to passers-by?
	A	When the hot air from the front of the outdoor unit is blocked, the product's performance will be affected and it will fail to operate properly. So, keep it at least 300mm away from its surrounding walls and give it good ventilation.

14-5 Cleaning/Filter Change

14-5-1 Cleaning Your Air Conditioner

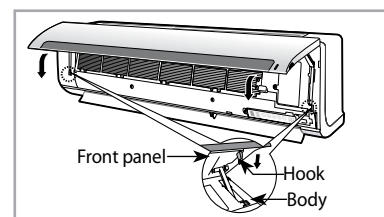
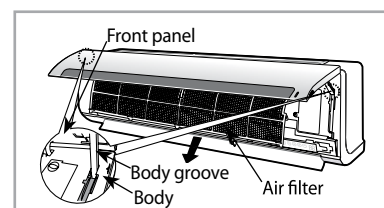
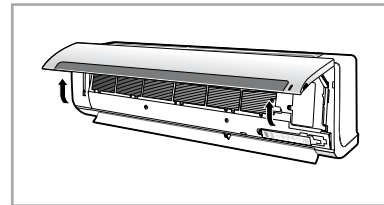
For the best use of your air conditioner, you must clean it every 2 weeks regularly to remove the dust that accumulates on the air filter.

For the best use of your air conditioner, you must clean it every 2 weeks regularly to remove the dust that accumulates on the air filter.

CAUTION Before cleaning your air conditioner, ensure that you have switched off the breaker used for the unit.

- 1 Open the front panel by pulling tabs on the lower right and left sides of the indoor unit.
- 2 Detach the front panel by pulling it forwards.
- 3 Hold the edge of the air filter under the front panel and pull to release.
- 4 Remove all dust on the air filter with a vacuum cleaner or brush.
- 5 When you finish, insert the top of the filter into the slot and fix it to 5 tabs or 3 tabs of the panel.
- 6 Clean the front panel with a damp cloth and mild detergent (do NOT use benzene, solvents or other chemicals).
- 7 Reassemble the air filter and the front panel.

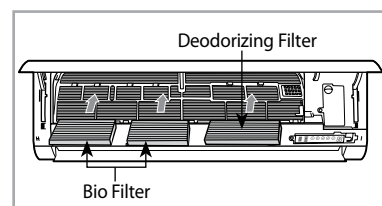
Note If you have not used the air conditioner for a while, select the Fan mode for 3 to 4 hours to dry the inside of the air conditioner.



Cleaning Deodorizing and Bio filter (Option)

There are Deodorizing and Bio filters inside your air conditioner. They remove odours and dust in your room. You should clean the filters every 3 months.

- 1 Open the upper front panel by pulling the lower right and left tabs of the panel.
- 2 Pull out the deodorizing and Bio filter.
- 3 Wash the filters with clean water, then dry them in the shade.
- 4 Insert the filters in their place.
- 5 Close the front panel.



14-5-2 Cleaning Deodorizing and Bio Filters (Option)

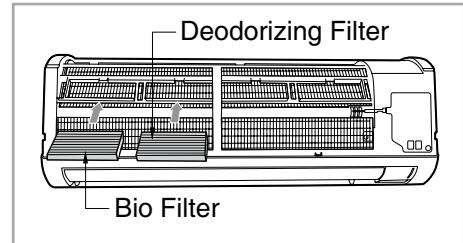
To remove minute dust particles and odors, deodorizing and Bio filters are installed in the air conditioner.

You should clean the filters every 3 months.

1. Open the upper front grille by pulling right and left sides of the grille.
2. Pull out the deodorizing and Bio filters.
3. Wash the filters with clean water, then dry them in the shade.
4. Insert the filters into the original position.

Note : • You can change the position of filters with each other.

5. Close the front grille.



14-6 Installation

14-6-1 Before Installation

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

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

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

14-6-2 Installation Procedure

■ Location

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

■ Wall Drilling

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

■ Fixing Indoor Unit & Outdoor Unit

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

■ Pipe Spooling & Connecting

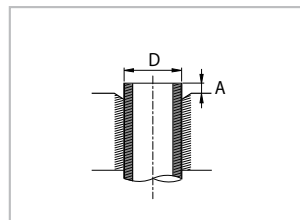
You shall cut the pipe with a pipe cutter and grind all the burrs of the cut surface.

Pipe expansion may continue until the pipe surface becomes uneven or torn apart.

Be sure to use a torque wrench to tighten pipes or flare nuts.

<Torque & Depth>

Outer Diameter(D)	Torque(kgf·cm)	Depth(A)
6.35mm(1/4")	140~170	1.3mm
9.52mm(3/8")	250~280	1.8mm
12.70mm(1/2")	380~420	2.0mm
15.88mm(5/8")	440~480	2.2mm
19.05mm(3/4")	990~1,210	2.2mm



■ Leak Test

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

■ Drain Hose Connecting

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

■ Electric & Earth Work

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

■ Inspection & Trial Run

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

14-7 Installation Diagram of Indoor Unit and Outdoor Unit

14-7-1 Air-Purge Procedure

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



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



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



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



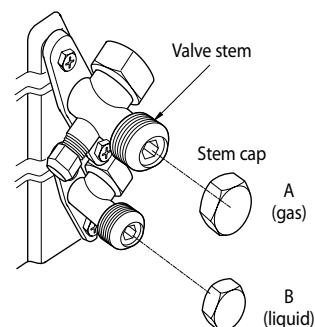
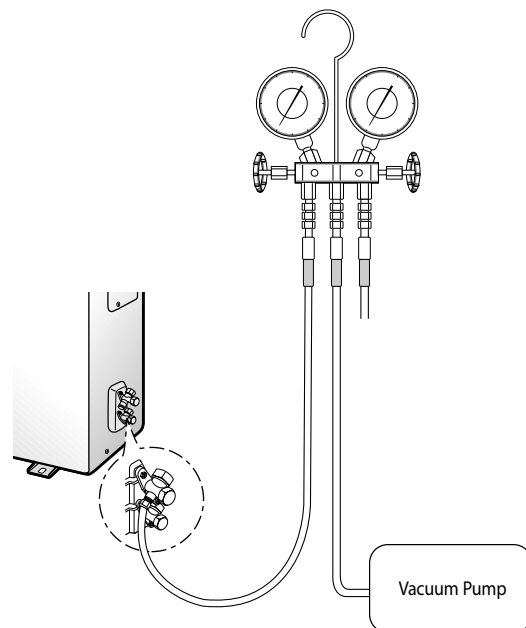
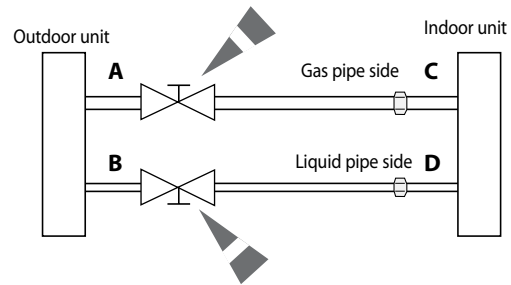
- 5) Set valve cork of both liquid side and gas side of packed valve to the open position.



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



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



14-7-2 "Pump down" Procedure

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

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



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



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



- 4) Turn the 3 way valve clockwise to close.



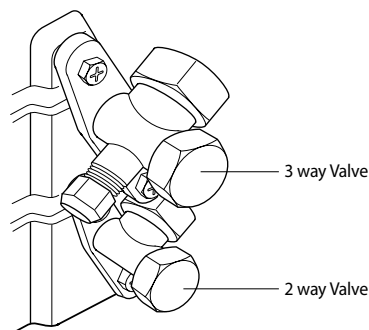
- 5) When the pressure gauge indicates "0" turn the 3 way valve clockwise to close.



- 6) Stop operation of the air conditioner.



- 7) Close the cap of each valve.



Remarks

Relocation of the air conditioner

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



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Code No.

1. Precautions

1-1 Installing the air conditioner

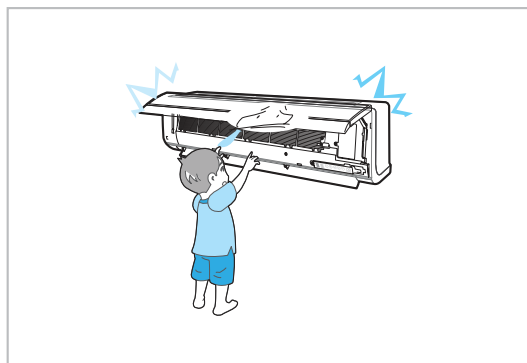
- Users should not install the air conditioner by themselves.
Ask the dealer or authorized company to install the air conditioner except the window-type air conditioner in U.S.A and Canada.
- If you don't install the air conditioner properly, it may cause a fire, a water leakage or an electric shock.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

1-2 Power supply and circuit breaker

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

1-3 During operation

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



1-4 Disposing of the unit

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

1-5 Others

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

