



LG Multi Type Air Conditioner *Inverter* **SERVICE MANUAL**

MODEL

• Indoor Unit:

Room Type

AMNH076LQL0
AMNH096LQL0
AMNH096LRL0
AMNH126LRL0
AMNH186LTL0
AMNH246LTL0
AMNH07GD4L0
AMNH09GD4L0
AMNH12GD4L0
AMNH18GD5L0
AMNH24GD5L0

Art Cool Type

AMNH096AP*1
AMNH126AP*1

Art Cool Deluxe Type

AMNH076DZ*0
AMNH096DU*0
AMNH126DU*0
AMNH186D3*0
AMNH246D3*0
AMNH07GDZ*0
AMNH09GDU*0
AMNH12GDU*0
AMNH18GD3*0
AMNH24GD3*0
AMNH07GDE*0
AMNH09GDE*0
AMNH12GDE*0

Duct Type

AMNH096BTG0
AMNH126BTG0
AMNH186BTG0
AMNH096BPA0
AMNH126BPA0
AMNH186BHA0
AMNH246BHA0
AMNC246BHA0
AMNH306BGA0
AMNC306BGA0
AMNH366BGA0
AMNC366BGA0

CVT

AMNH096VEA0
AMNH126VEA0
AMNH186VBA0
AMNH246VBA0

1 Way CST

AMNH096TCC0
AMNC096TCC0
AMNH126TCC0
AMNC126TCC0
AMNH09GTCC0
AMNH12GTCC0

4 Way CST

AMNH096TEC0
AMNH126TEC0
AMNH186TEC0
AMNH246TFC0
AMNH306TFC0
AMNH366TDC0
AMNH306TFA0
AMNC306TFC0
AMNC366TDC0
AMNH09GTEF0
AMNH12GTEF0
AMNH18GTEF0
AMNH24GTHF0

• Outdoor Unit: A6UW368FA0
A7UW428FA0
A8UW488FA0
A9UW548FA0

CAUTION

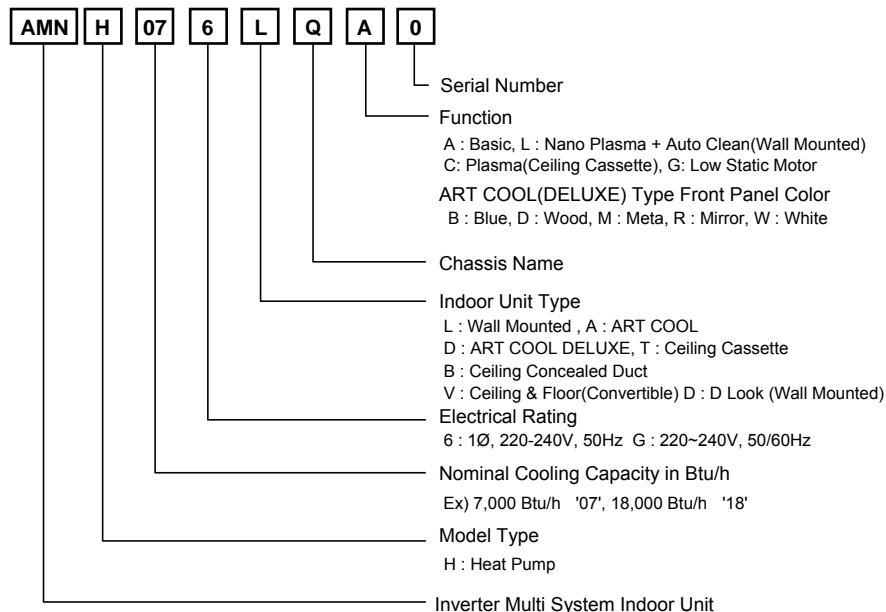
- BEFORE SERVICING THE UNIT, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.
- ONLY FOR AUTHORIZED SERVICE PERSONNEL.

TABLE OF CONTENTS

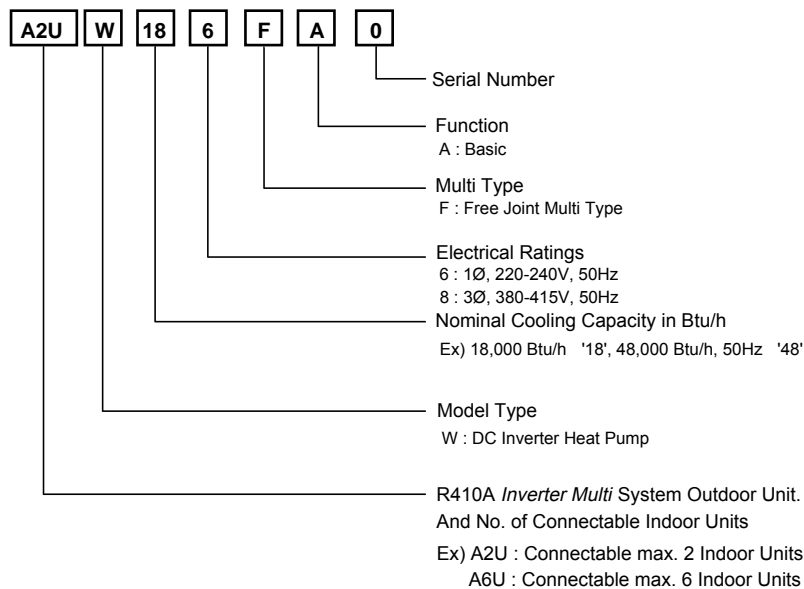
Model Number Nomenclature	3
Symbols Used in this Manual	5
Safety Precautions	6
Dimensions	12
Indoor Unit	12
Outdoor Unit	21
Product Specifications	22
Installation	32
Select the best location of indoor unit	32
How to fix	35
Piping and Drainage of Indoor Unit	42
Connection of indoor unit piping	43
Remote Controller Installation	66
Connecting Piping and the cable to Outdoor unit	68
Checking the Drainage and Pipe forming	70
Maximum Length of Pipe and Extra Charge of Refrigerant Charge	75
Test Running	82
System Layout and Piping Length	85
Installation	89
Installation of The Main Unit	90
Connection of Piping	91
Connection of Wiring	92
Operation	93
Function of control	93
Function of Indoor Unit	98
Function of Outdoor Unit	104
Remote Control Operation	105
Control Devices and Function	113
Simple Central Control	113
Term of Each part and Function	113
Electrical wiring	114
Deluxe Central Control	120
Disassembly of the parts (Indoor unit)	126
Indoor unit	126
Schematic Diagram	141
Electronic Control Device	141
Wiring Diagram	150
Components Locations	154
Troubleshooting Guide	172
Refrigeration Cycle Diagram	172
Self-diagnosis Function	174
Cycle Troubleshooting Guide	175
Electronic Parts Troubleshooting Guide	176
General Information	181
(3-way) Valve	200
Exploded View & Replacement Parts List	204
Indoor Unit	204
Outdoor Unit	244

Model Number Nomenclature

Indoor Unit



Outdoor Unit



Panel (Cassette, Built in Duct)

Category	CHASSIS	PANEL NAME	PANEL P/NO.	SERIAL NO.	Remark
CST PANEL	TF	PT-CFA	3721A10072B	8435002992862	COOLING
		PT-CFC	3721A10072G	8435002992879	COOLING + PLASMA
		PT-HFA	3821A10072A	8435002992886	HEATING
		PT-HFC	3721A10072E	8435002992893	HEATING + PLASMA
	TC,TC1	PT-CCA	3721A10023Z	8435002994095	COOLING
		PT-CCC	3721A10023W	8435002994101	COOLING + PLASMA
		PT-HCA	3721A10023Y	8435002994118	HEATING
		PT-HCC	3721A10023V	8435002994125	HEATING + PLASMA
	TE(family look)	PT-HEA	3721A10105A	8435002992978	HEATING
		PT-HEC	3721A10105B	8435002992985	HEATING + PLASMA
		PT-CEA	3721A10105C	8435002992954	COOLING
		PT-CEC	3721A10105D	8435002992961	COOLING + PLASMA
	TE1(family look)	PT-HEA1	3721A10105M		HEATING
		PT-HEC1	3721A10105N		HEATING + PLASMA
	TD(family look)	PT-HAD	3721A10106A	8435002994057	HEATING
		PT-HDC	3721A10106B	8435002994064	HEATING + PLASMA
		PT-CDA	3721A10106C	8435002994071	COOLING
		PT-CDC	3721A10106D	8435002994088	COOLING + PLASMA
TH(family look)	PT-HDA1	3721A10106X		HEATING	
	PT-HDC1	3721A10106Z		HEATING + PLASMA	
BUILT IN DUCT	BP	PB-HPA	3721A20168A		9K/12K
	BQ	PB-HQA	3721A20168B		18K/24K

P T - H E A

1	2	3	4	5	6
---	---	---	---	---	---

Number	Contents
1, 2	Panel for Cassette
3	-
4	Cooling/Heatpump
5	Chassis Name
6	Function

5. Chassis Name

Chassis	Abbreviation
TC	C
TB	B
TD	D
TE	E
TF	F
TH	H
TJ	J
BP	P
BQ	Q

6. Function

Function	
Basic	A
	B
Plasma Filter	C
	D
Elevation Grille	E
Elevation Grille + Plasma Filter	F
TE/TB/TD Before 2003 : Basic	0
TE/TD Before 2003 : Plasma Filter	1

Indoor Units

Category	Type	Chassis	Model Name				
			Capacity, kW(Btu/h)				
			2.1 (7000)	2.6 (9000)	3.5 (12000)	5.3 (18000)	7.0 (24000)
Wall Mounted	General	SQ	AMNH 076LQL0	AMNH 096LQL0	-	-	-
		SR	-	AMNH 096LRL0	AMNH 126LRL0	-	-
		ST	-	-	-	AMNH 186LTLO	AMNH 246LTC0
		S4	AMNH 07GD4L0	AMNH 09GD4L0	AMNH 12GD4L0	-	-
		S5	-	-	-	AMNH 18GD5L0	AMNH 24GD5L0
ART Cool	General	SP1	-	AMNN 096AP*1	AMNN 126AP*1	-	-
	Mirror	SZ	AMNH 076DZ*0 07GDZ*0	-	-	-	-
		SU	-	AMNH 096DU*0 09GDU*0	AMNH 126DU*0 12GDU*0	-	-
		S3	-	-	-	AMNH 186D3*0 18GD3*0	AMNH 246D3*0 24GD3*0
		SE	AMNH 07GDE*0	AMNH 09GDE*0	AMNH 12GDE*0	-	-
Ceiling Cassette	1Way	TC,TC1	-	AMNH/C 096TCC0 AMNH09 GTCC0	AMNH/C 126TCC0 AMNH12 GTCC0	-	-
	4Way	TE	-	AMNH 096TEC0	AMNH 126TEC0	AMNH 186TEC0	-
		TE1	-	AMNH 09GTEF0	AMNH 12GTEF0	AMNH 18GTEF0	-
		TF	-	-	-	-	AMNH 246TFC0
		TH	-	-	-	-	AMNH 246THF0
		TD	-	-	-	-	-
Ceiling Concealed Duct	High Static	BH	-	-	-	AMNH 186BHA0	AMNH 246BHA0
		BG	-	-	-	-	-
	Low Static	BT	-	AMNH 096BTG0	AMNH 126BTG0	AMNH 186BTG0	-
	Built in	BP	-	AMNH 096BPA0	AMNH 126BPA0	-	-
Ceiling & Floor	Convertible	VE	-	AMNH 096VEA0	AMNH 126VEA0	-	-
		VB	-	-	-	AMNH 186VBA0	AMNH 246VBA0

Outdoor Units

Inverter Multi Series			Distributor Type			
Heat Pump	Model Name		A6UW368FA0	A7UW428FA0	A8UW488FA0	A9UW548FA0
Rated Capacity	Cooling	kW(Btu/h)	9.67(33000)	12.3(42000)	14.1(48000)	15.2(52000)
	Heating	kW(Btu/h)	11.1(38000)	13.8(47000)	15.8(54000)	17.0(58000)
Number of Indoor Units to be Connected			Max 6 Units	Max 7 Units	Max 8 Units	Max 9 Units
Indoor Units		kW	4.1-13.5	4.7-15.8	5.3-18.5	6.2-20.8
Connectable Capacity		Btu/h	14000-46000	16000-54000	18000-63000	21000-71000
Power Supply			3Ø, 380-415V, 50Hz			



This symbol alerts you to the risk of electric shock.



This symbol alerts you to hazards that could cause harm to the air conditioner.

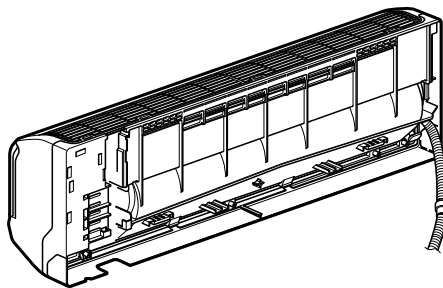
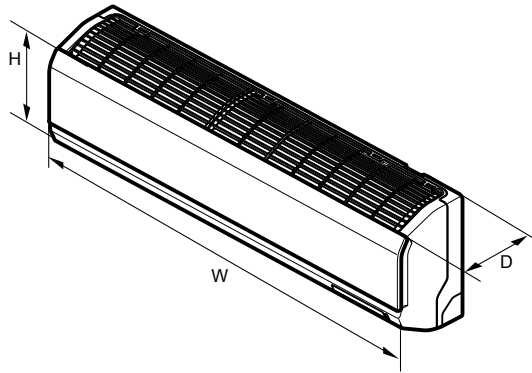


This symbol indicates special notes.

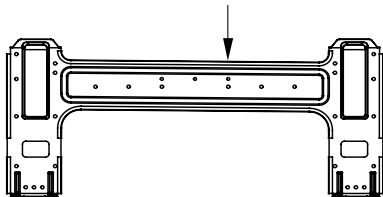
Dimensions

Indoor Unit

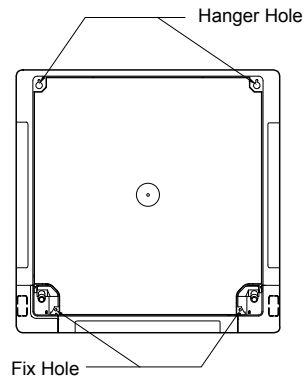
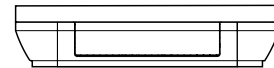
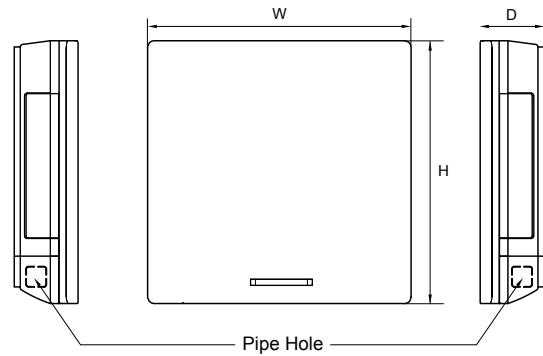
1. Split Type Indoor



Installation plate



2. Art Cool Type Indoor Unit

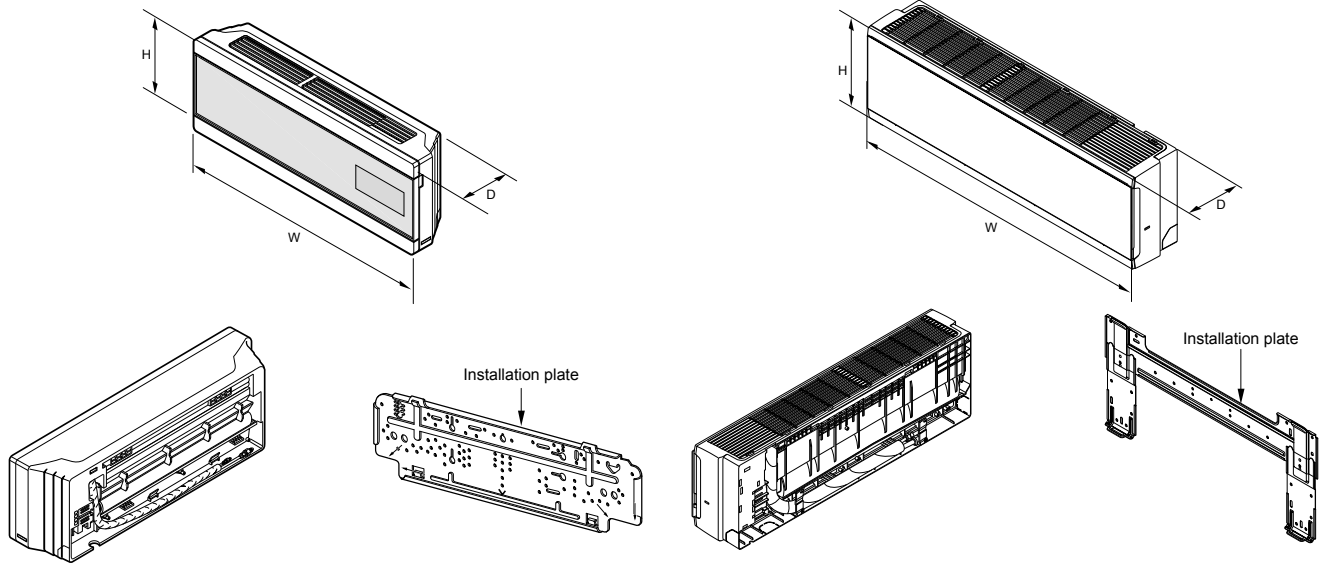


Dimension		Model	SQ	SR	ST	S4	S5	SP
			7k, 9k	9k, 12k	18k, 24k	7k, 9k, 12k	18k, 24k	9k, 12k
W	mm		824	900	1080	840	1090	570
H	mm		260	285	314	270	300	568
D	mm		155	156	172	153	178	137

3. Art Cool Deluxe Type

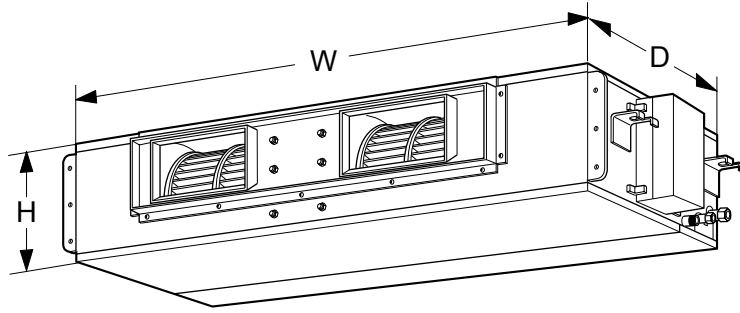
SZ,SU,S3

SE

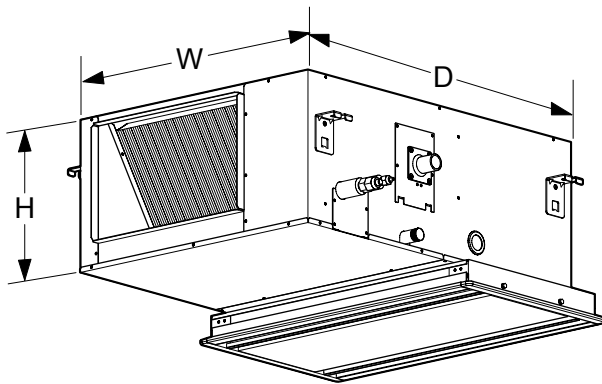


DIM	MODEL	SZ 7K	SU 9K, 12K	S3 18K, 24K	SE 7K, 9K, 12K
	Unit				
W	mm	900	1030	1170	895
H	mm	272	290	315	282
D	mm	135	153	173	165

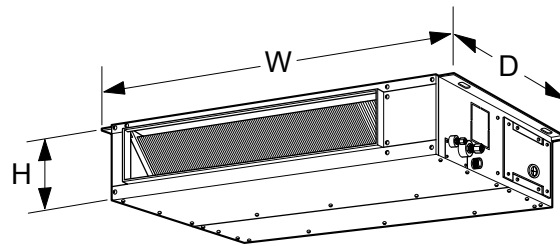
4. Duct Type



BH/BG



BP

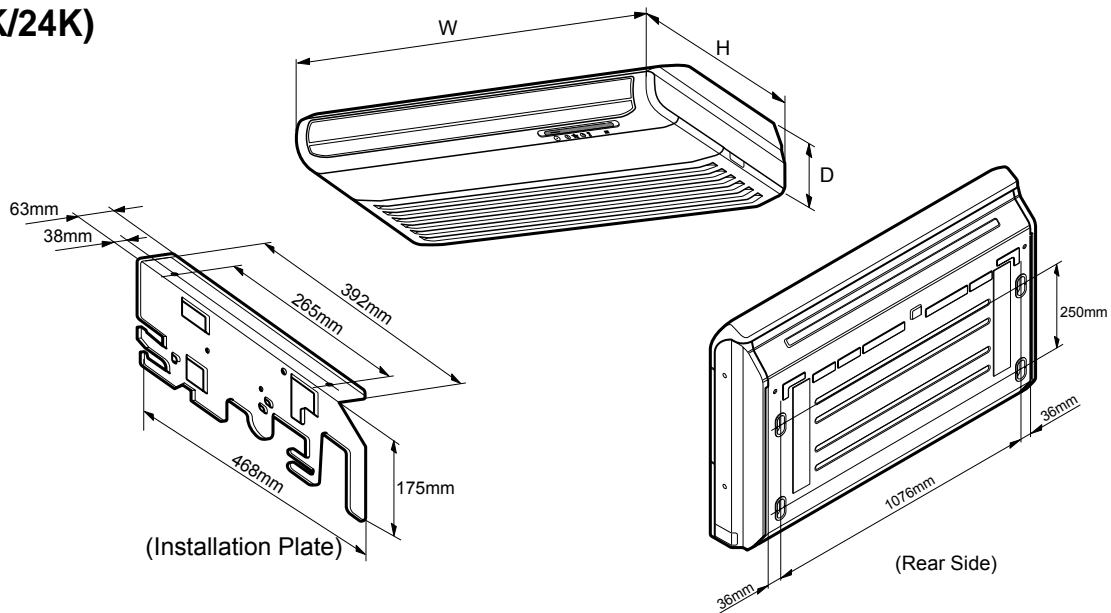


BT/BT1

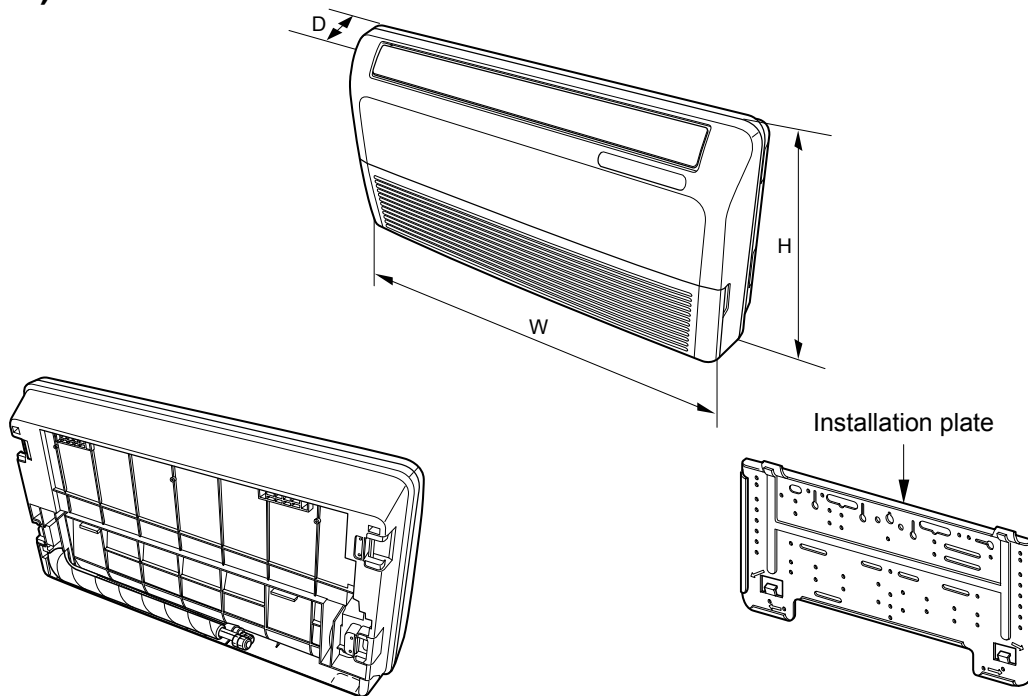
DIM \ MODEL	BT 9K/12K	BT1 18K	BH 18K/24K	BG 30K/36K	BP 9K/12K
W(mm)	708	1060	880	1180	580
H(mm)	230	230	260	298	300
D(mm)	537	357	450	450	750

5. CVT Type

VB(18K/24K)

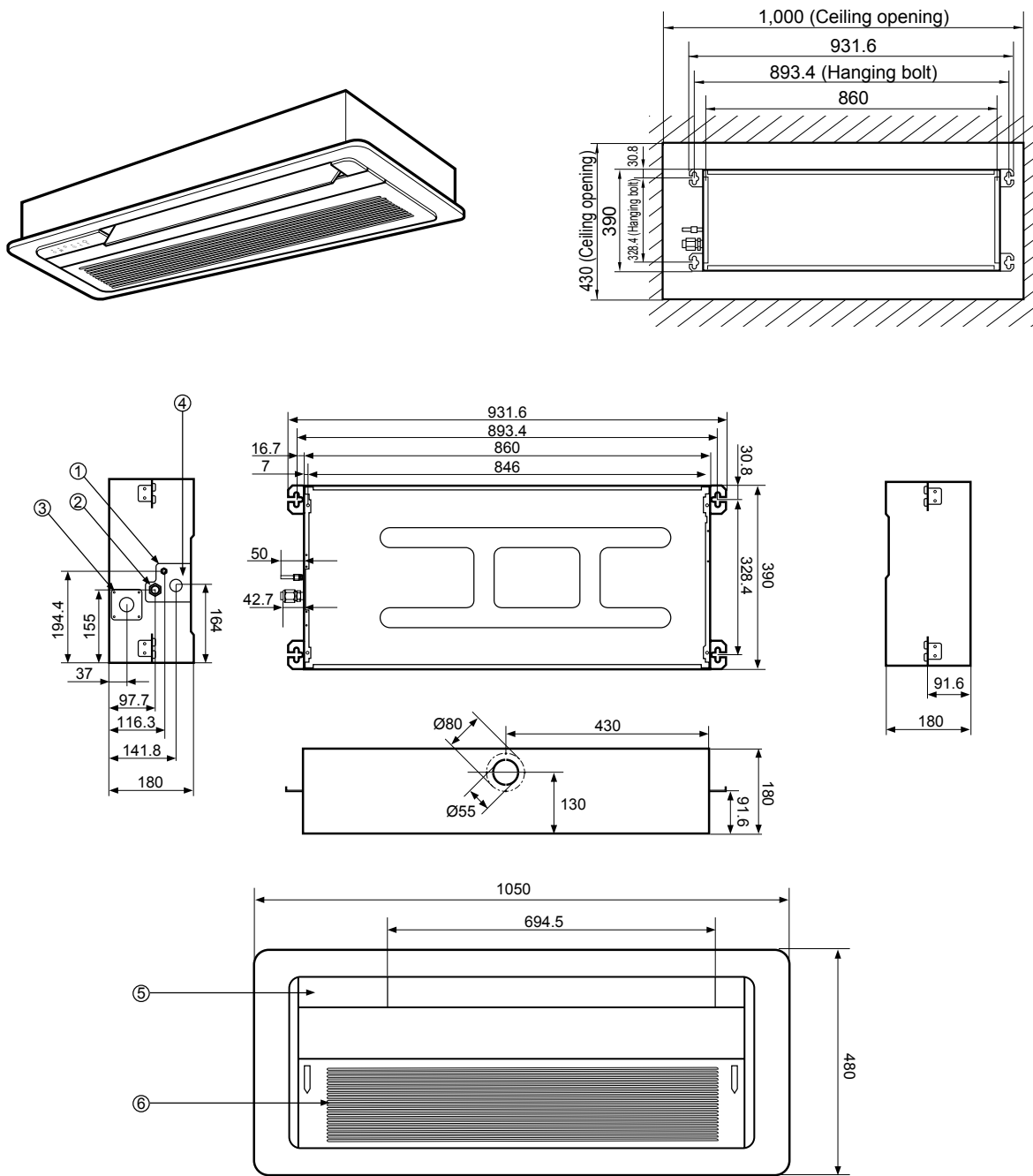


VE(8K/12K)



DIM	MODEL		VE	VB
	Unit		9K/12K	18K/24K
W	mm		900	1200
H	mm		285	615
D	mm		156	205

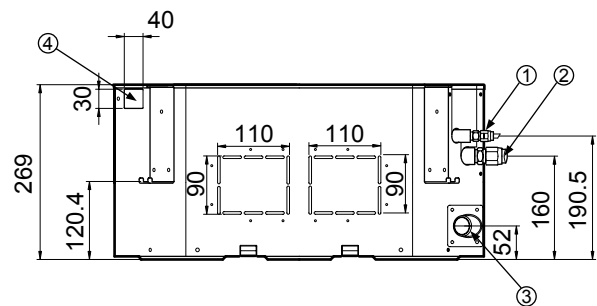
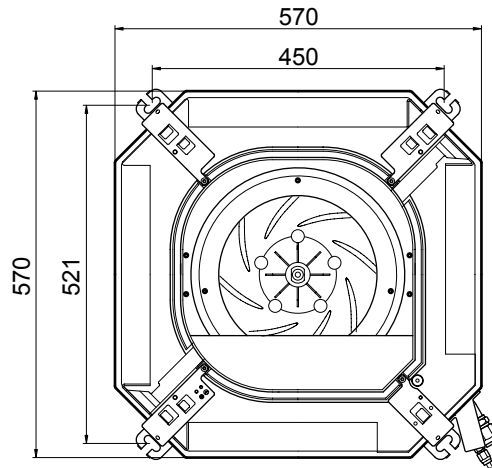
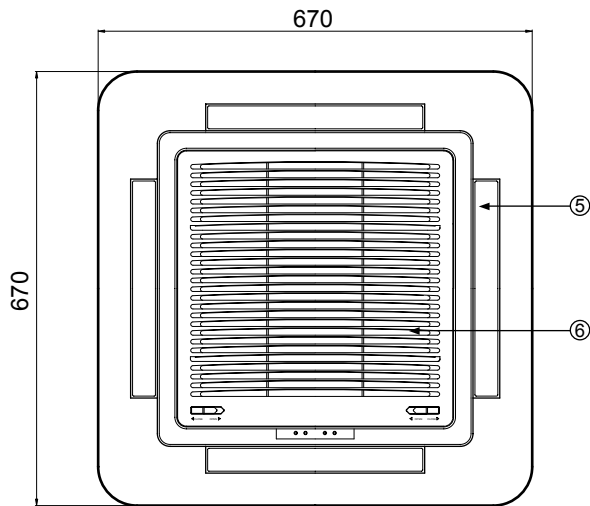
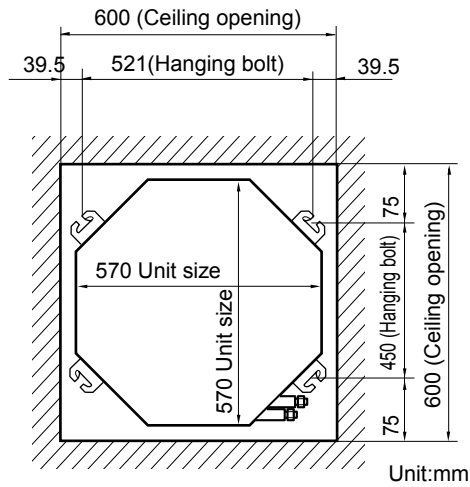
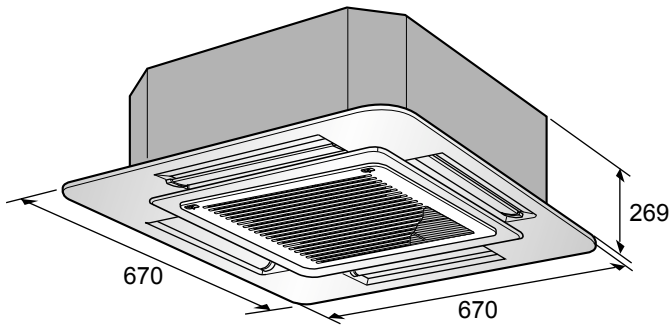
6. CST Type - TC,TC1 (9K/12K)



(unit : mm)

Number	Name	Description
1	Liquid pipe connection	ø6.35 flare
2	Gas pipe connection	ø9.52 flare
3	Drain pipe connection	
4	Power supply connection	
5	Air discharge grill	
6	Air suction grill	

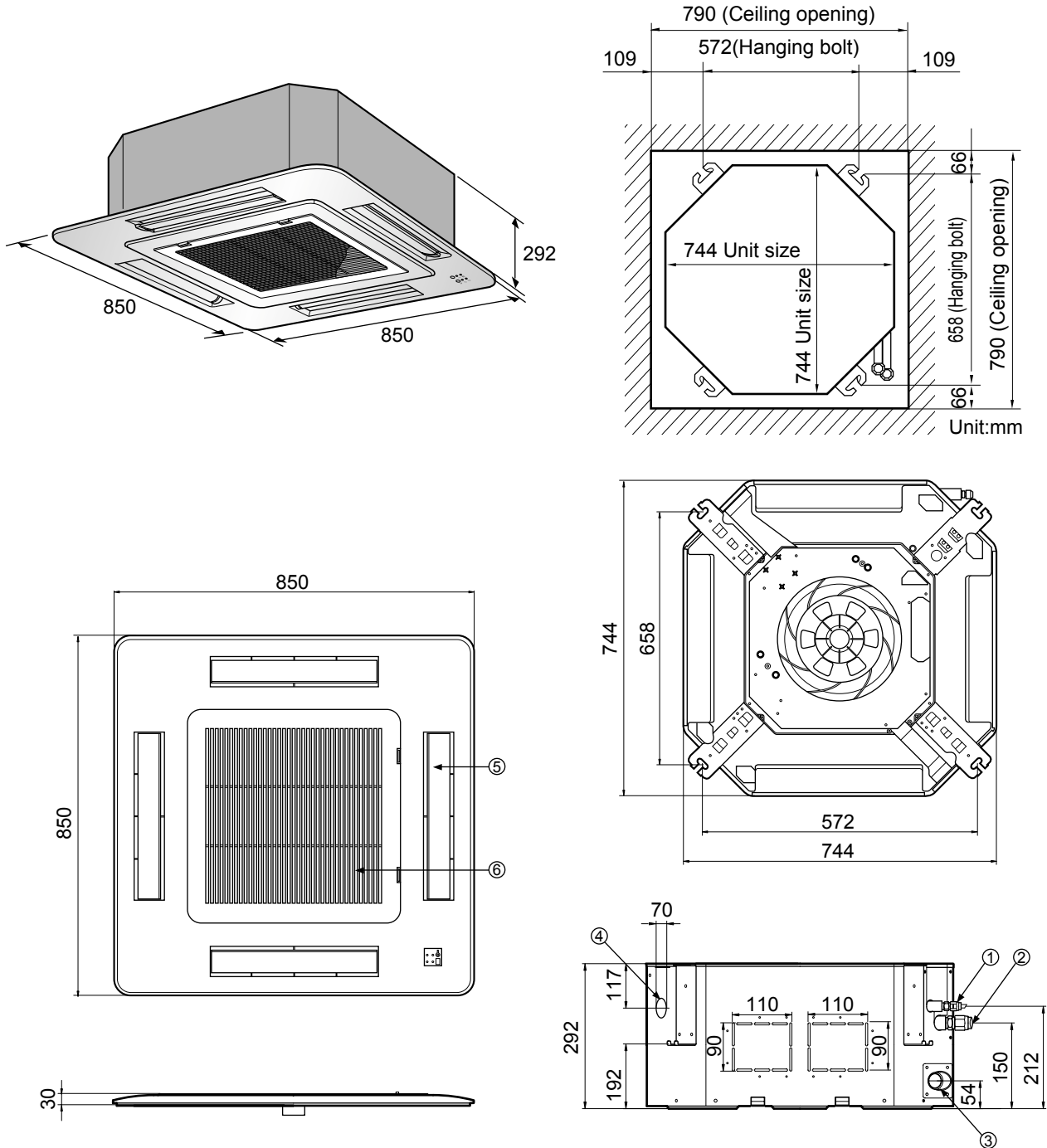
7. CST Type - TE(1) (9K/12K/18K)



(unit : mm)

Number	Name	Description
1	Liquid pipe connection	ø6.35 flare
2	Gas pipe connection	9k: Ø9.52, 12k: Ø9.52, 18k: Ø12.7 flare
3	Drain pipe connection	
4	Power supply connection	
5	Air discharge grill	
6	Air suction grill	

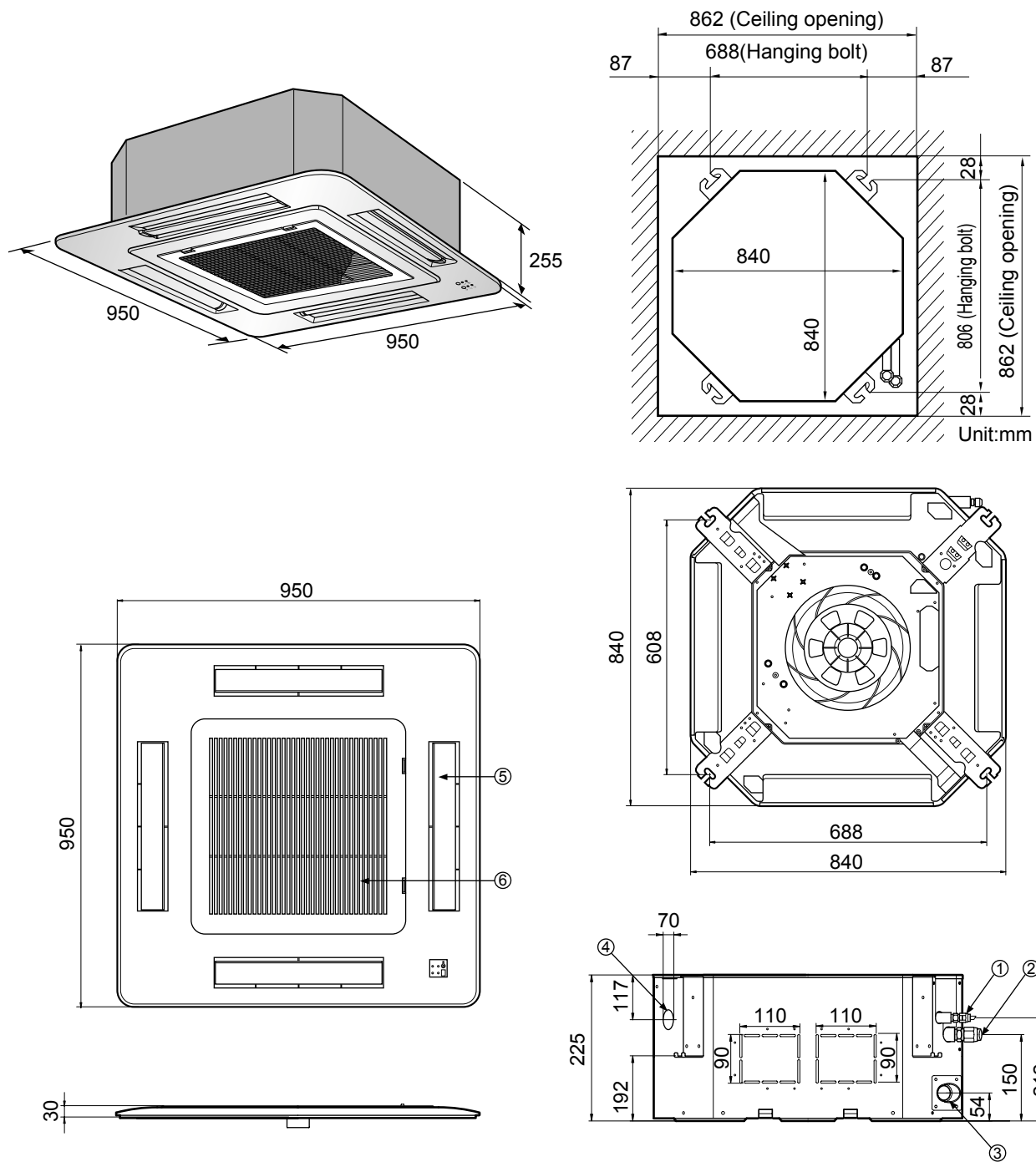
8. CST Type - TF (24K/30K)



(unit : mm)

Number	Name	Description
1	Liquid pipe connection	ø6.35 flare
2	Gas pipe connection	ø12.7 flare-24K, ø15.88 flare-30K
3	Drain pipe connection	
4	Power supply connection	
5	Air discharge grill	
6	Air suction grill	

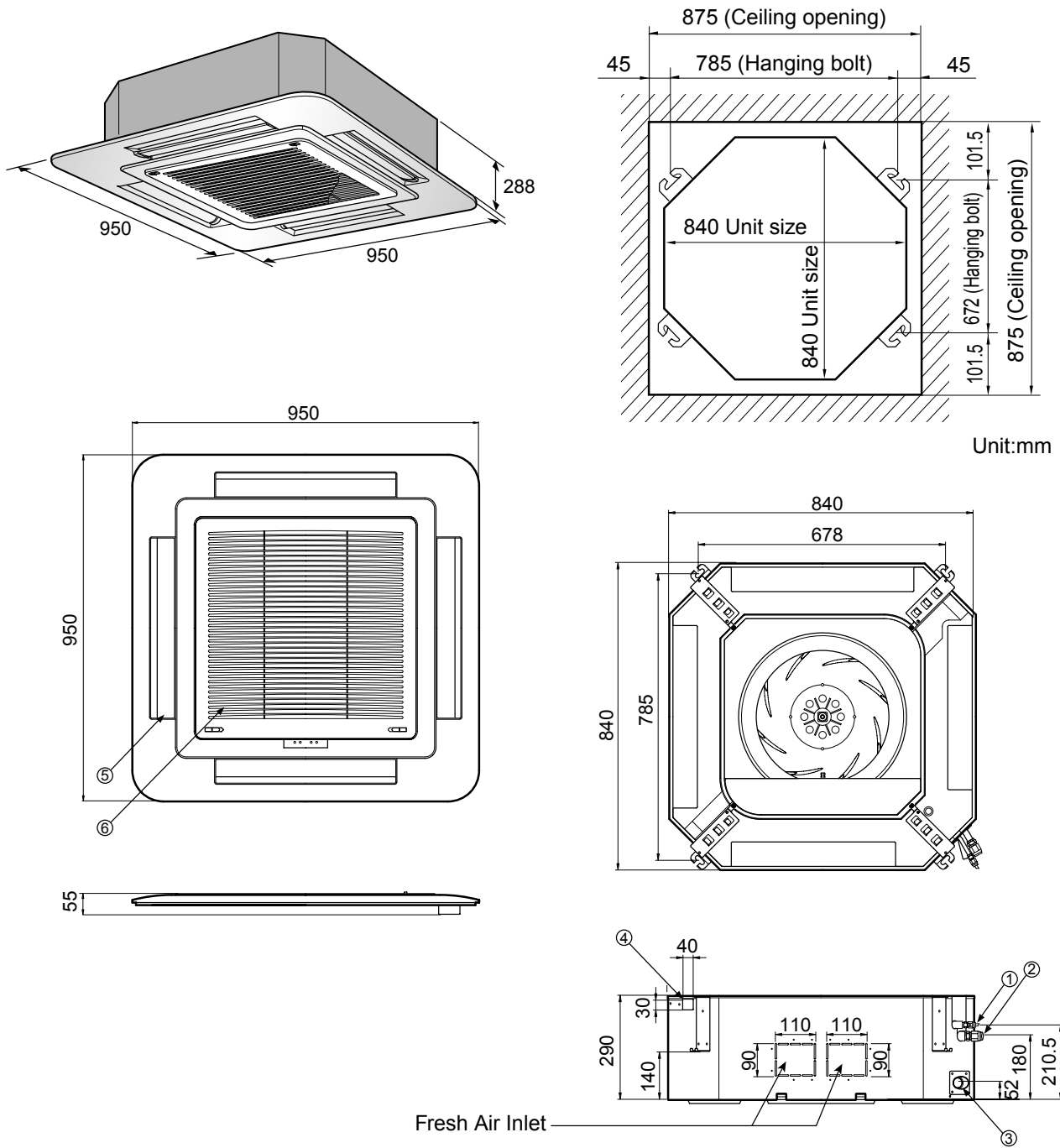
9. CST Type - TH (24K)



(unit : mm)

Number	Name	Description
1	Liquid pipe connection	ø6.35 flare
2	Gas pipe connection	ø12.7 flare-24K, ø15.88 flare-30K
3	Drain pipe connection	
4	Power supply connection	
5	Air discharge grill	
6	Air suction grill	

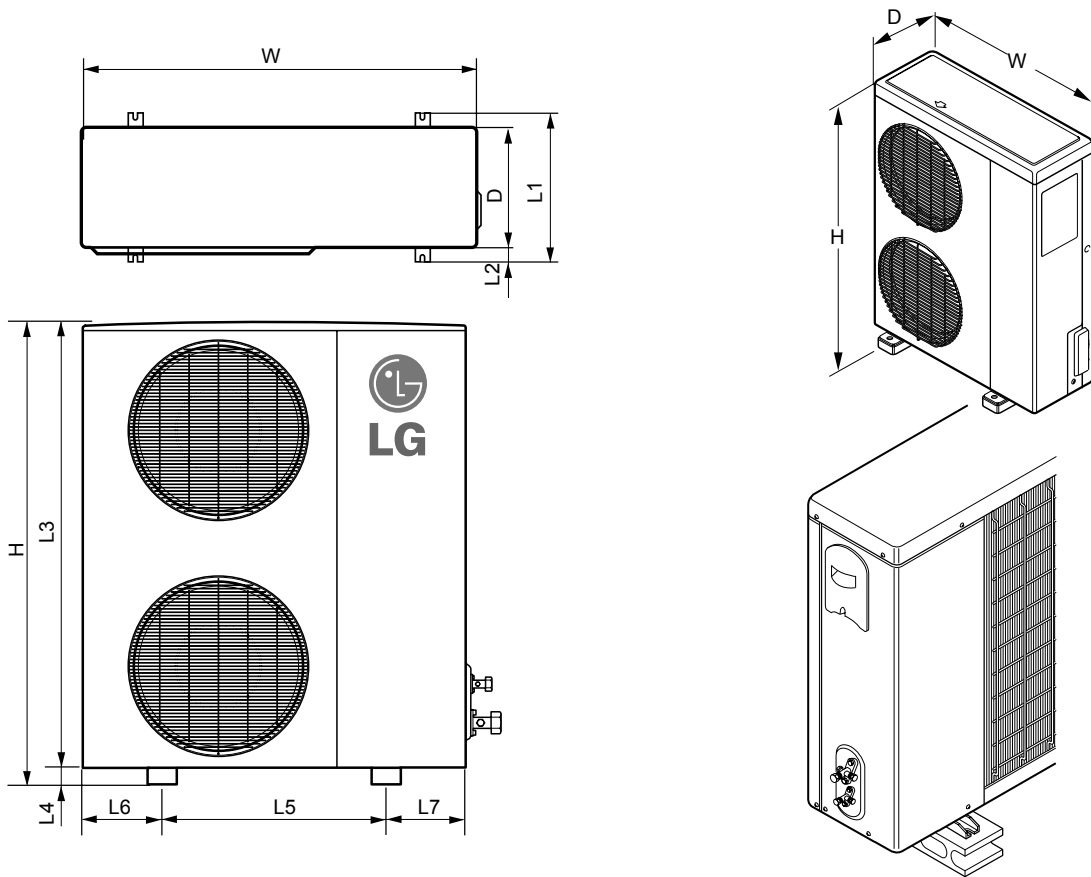
10. CST Type - TD(36K)



(unit : mm)

Number	Name	Description
1	Liquid pipe connection	ø6.35 flare
2	Gas pipe connection	ø15.88 flare
3	Drain pipe connection	
4	Power supply connection	
5	Air discharge grill	
6	Air suction grill	

Outdoor Unit



MODEL		UE2 36k	UH 42k, 48k, 54k
W	mm	870	900
H	mm	1060	1165
D	mm	320	370
L1	mm	360	460
L2	mm	20	45
L3	mm	1040	1135
L4	mm	20	30
L5	mm	550	550
L6	mm	160	175
L7	mm	165	175

Product Specifications

Indoor Unit

Indoor Unit Type			Wall Mounted					
Model			AMNH076LQL0	AMNH096LQL0	AMNH096LRL0	AMNH126LRL0	AMNH186LTL0	AMNH246LTL0
Rated Cooling Capacity ★	kcal/hr(W)		1764(2051)	2267(2638)	2267(2638)	3024(3515)	4536(5275)	5544(6446)
	Btu/hr		7000	9000	9000	12000	18000	22000
Rated Heating Capacity ★	kcal/hr(W)		2016(2343)	2520(2929)	2520(2929)	3326(3867)	4990(5803)	6099(7091)
	Btu/hr		8000	10000	10000	13200	19800	24200
Air Circulation	H/M/L	CMM(CFM)	5.5(194)	8.5(300)	8.5(300)	9.0(318)	13(459)	14(494)
Setting temperature range		°C	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30
Fan motor	Output	W	8.4	8.4	14.4	14.4	22	29
	Model		IC-8415LG62A	IC-8415LG62A	IC-8420LG48A	IC-8420LG48A	AMR-023E2	AMR-023E5
	No. of Poles		4	4	4	4	4	6
	Input	W	25	25	37	37	54	59
	Running Current	A	0.11	0.11	0.16	0.16	0.21	0.21
	Capacitor	µF/Vac	0.9 / 400	0.9 / 400	0.9 / 400	0.9 / 400	2.0 / 370	2.0 / 370
	Fan	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	No. Used / Diameter	EA/inch(mm)	1/3.43(87)	1/3.43(87)	1/3.43(87)	1/3.43(87)	1/3.74(95)	1/3.74(95)
Fan RPM	Cooling(H/M/L)	rpm	1080 / 970 / 880	1170 / 1100 / 1020	1200/1100/1000	1290 / 1200 / 1120	1140 / 1040 / 940	1260 / 1140 / 1000
	Heating(H/M/L)	rpm	1080 / 970 / 880	1170 / 1100 / 1020	1200/1100/1000	1290 / 1200 / 1120	1140 / 1040 / 940	1260 / 1140 / 1000
Noise Level(Sound Press.1m)	H/M/L	dBA	35 / 32 / 29	37 / 33 / 31	35 / 33 / 31	39 / 36 / 34	42 / 39 / 36	46 / 43 / 39
Temperature controller			Thermistor	Thermistor	Thermistor	Thermistor	Thermistor	Thermistor
Coil	Tube Size (OD)	inch(mm)	0.197(5.0)	0.197(5.0)	0.197(5.0)	0.197(5.0)	0.276(7.0)	0.276(7.0)
	Fins per inch		19	19	20	20	20	20
	No. of Rows & Column		2R,10C	2R,10C	2R,12C	2R,12C	2R,13C	2R,13C
Dehumidification Rate		l/h	1.0	1.2	1.4	1.8	2.0	2.5
Dimensions (W*H*D)		inch(mm)	32.4*10.2*6.1(824*260*155)	32.4*10.2*6.1(824*260*155)	35.4*11.2*6.1(900*285*156)	35.4*11.2*6.1(900*285*156)	42.9*12.4*6.8(1090*314*172)	42.9*12.4*6.8(1090*314*172)
Net Weight		kg(lbs)	7(15.4)	7(15.4)	8(17.6)	8(17.6)	12(26.5)	12(26.5)
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas	inch(mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)
	Drain hose (ID Ø)	mm	20	20	20	20	20	20
Packing Dimension (W*H*D)		inch(mm)	35.4*9.2*13.4(900*233*340)	35.4*9.2*13.4(900*233*340)	38.4*9.2*14.6(976*233*372)	38.4*9.2*14.6(976*233*372)	45.9*10.0*15.3(1165*255*388)	45.9*10.0*15.3(1165*255*388)
Stuffing Quantity	Without S/Parts	20/40ft	354/774 (360/780)	354/774 (360/780)	338/714 (340/720)	338/714 (340/720)	264/536 (270/540)	264/536 (270/540)
Front Panel Color	"★" Position		Morning Beige	Morning Beige	Morning Beige	Morning Beige	Morning Beige	Morning Beige

Indoor Unit Type			ART COOL DELUXE				
Model			AMNH076DZ*0	AMNH096DU*0	AMNH126DU*0	AMNH186D3*0	AMNH246D3*0
Rated Cooling Capacity ★	kcal/hr(W)		1764(2051)	2267(2638)	2772(3224)	4536(5275)	5796(6740)
	Btu/hr		7000	9000	12000	18000	23000
Rated Heating Capacity ★	kcal/hr(W)		1940(2257)	2495(2901)	3049(3546)	4990(5803)	6426(7472)
	Btu/hr		8000	10000	13200	19800	25500
Air Circulation	H/M/L	CMM(CFM)	5.5(194)	8.5(300)	9.0(318)	13(459)	14(494)
Setting temperature range		°C	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30
Fan motor	Output	W	4.7	7.8	7.8	25.6	25.6
	Model		OBM-1547P2	OBM-1547P2	OBM-1547P2	OBM-2510P2	OBM-2510P2
	No. of Poles		4	4	4	4	4
	Input	W	27	40	40	58	58
	Running Current	A	0.12	0.18	0.18	0.15	0.21
	Capacitor	µF/Vac	0.9/400	0.9/400	0.9/400	2.0 / 370	2.0 / 370
	Fan	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	No. Used / Diameter	EA/inch(mm)	1/3.43(87)	1/3.43(87)	1/3.43(87)	1/3.74(95)	1/3.74(95)
Fan RPM	Cooling(H/M/L)	rpm	1330/1230/1130	1320/1220/1120	1400/1300/1200	-	-
	Heating(H/M/L)	rpm	1330/1230/1130	1320/1220/1120	1400/1300/1200	-	-
Noise Level(Sound Press.1m)	H/M/L	dBA	35 / 32 / 29	37 / 33 / 31	39 / 36 / 34	40/38/36	44/42/40
Temperature controller			Thermistor	Thermistor	Thermistor	Thermistor	Thermistor
Coil	Tube Size (OD)	inch(mm)	0.197(5.0)	0.197(5.0)	0.197(5.0)	0.276(7.0)	0.276(7.0)
	Fins per inch		19	19	19	20	20
	No. of Rows & Column		2R,12C	2R,12C	2R,12C	2R,13C	2R,13C
Dehumidification Rate		l/h	1.0	1.2	1.5	2	2.5
Dimensions (W*H*D)		inch(mm)	42.9*12.4*6.8(1090*314*172)	35.4*10.7*5.3(900*272*135)	40.6*11.4*6.0(1030*290*153)	46.1*24.4*6.8(1170*315*173)	46.1*24.4*6.8(1170*315*173)
Net Weight		kg(lbs)	8.1(17.9)	9.5(20.9)	9.5(20.9)	13(28.7)	13(28.7)
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas	inch(mm)	3/8(9.52)	3/8(9.52)	3/8(9.52)	1/2 (12.7)	1/2 (12.7)
	Drain hose (ID Ø)	mm	20	20	20	20	20
Packing Dimension (W*H*D)		inch(mm)	38.8*8.7*14.3(985*220*363)	44.0*8.9*14.8(1117*225*377)	44.0*8.9*14.8(1117*225*377)	49.4*15.3*10.2(1255*388*258)	49.4*15.3*10.2(1255*388*258)
Stuffing Quantity	Without S/Parts	20/40ft	340/720	324/684	324/684	234/495	234/495
Front Panel Color	"★" Position						R:Mirror, M: Metal, N: Walnut, W: White, B: Blue, C: Cherry

Note : 1.★ See the page "Combination Table"
 2. Due to our policy of innovation some specifications may be changed without notification.

Indoor Unit Type			ART COOL Mirror			
Model			AMNH07GDE*0[MC07AH*NE0]	AMNH09GDE*0[MC09AH*NE0]	AMNH12GDE*0[MC12AH*NE0]	
Power supply	Ø/V/Hz		1/ 220~240/ 50	1/ 220~240/ 50	1/ 220~240/ 50	
Cooling capacity	kW		2.05	2.64	3.52	
	Btu/h		7,000	9,000	12,000	
Heating capacity	kW		2.34	2.93	3.87	
	Btu/h		8,000	10,000	13,200	
Current	Nominal running current	A	0.10	0.15	0.15	
Fan	Motor type		BLDC	BLDC	BLDC	
	Fan type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	
	Motor output x Number of unit		4.7 X 1	7.8 X 1	7.8 X 1	
	Air flow rate	cmm	7/6/4	8/7/5	10/8/6	
	(H/M/L)	cfm	247/212/141	282/247/177	353/283/212	
	Capacitor	µF/Vac	-	-	-	
	Drive		Direct Drive	Direct Drive	Direct Drive	
Coil	Row x column x FPI	mm	2R x 12C x 19	2R x 12C x 19	2R x 12C x 19	
Dimensions (WxHxD)	Body	mm(inch)	915x282x165 (36.0*11.1*6.5)	915x282x165 (36.0*11.1*6.5)	915x282x165 (36.0*11.1*6.5)	
Weight	Body	kg(lbs)	8.1(17.9)	9.5(20.9)	9.5(20.9)	
Air filter			Long Life Filter	Long Life Filter	Long Life Filter	
Sound level (H/M/L)		dB(A)+3	30/25/21	31/26/22	35/28/24	
Piping connections	Liquid	mm(inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	
	Gas	mm(inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	
Dehumidification rate		l/h	1.0	1.2	1.5	
Safety devices			Fuse, Thermal Protector for Fan Motor			
Temperature sensor			Thermistor	Thermistor	Thermistor	
Refrigerant			R410A	R410A	R410A	
Refrigerant control			LEV(in Outdoor unit or BD)	LEV(in Outdoor unit or BD)	LEV(in Outdoor unit or BD)	
Connectable outdoor unit			Multi F /F DX series	Multi F /F DX series	Multi F /F DX series	
Power and transmission interunit cable	No.x mm ²		4*0.75	4*0.75	4*0.75	

Indoor Unit Type			Wall Mounted				
Model			AMNH07GD4L0	AMNH09GD4L0	AMNH12GD4L0	AMNH18GD5L0	AMNH24GD5L0
Nominal Cooling Capacity ★		kcal/h(W)	1764(2051)	2267(2638)	3024(3515)	4536(5275)	5796(6740)
		Btu/h	7000	9,000	12,000	18,000	23,000
Nominal Heating Capacity ★		kcal/h(W)	2016(2343)	2520(2929)	3326(3867)	4990(5803)	6426(7472)
		Btu/h	8000	10,000	13,200	19,800	25,500
Air Circulation	H/M/L	CMM(CFM)	5.5(194)	8.2(290)	9.0(318)	13(459)	14(494)
Setting temperature range(cool/heat)		°C	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30
Fan motor	Output	W	20	20	20	20	20
Fan	Model		SIC-37CV-FI30-3	SIC-37CV-FI30-3	SIC-37CV-FI30-3	SIC-37CV-FI30-3	SIC-37CV-FI30-3
Fan	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	No. Used / Diameter	EA/inch(mm)	1/3.74(95)	1/3.74(95)	1/3.74(95)	1/3.94(100)	1/3.94(100)
Fan RPM	Cooling(H/M/L)	rpm	1000/870/750	1140/1000/800	1250/1080/970	1200/1100/1000	1360/1260/1100
	Heating(H/M/L)	rpm	1000/870/750	1140/1000/800	1250/1080/970	1200/1100/1000	1360/1260/1100
Noise Level (Sound Press.1m)	H/M/L	dB(A)	29 / 25 / 20	33 / 29 / 22	36 / 32 / 29	37 / 34 / 31	41 / 39 / 34
Temperature controller			Thermistor	Thermistor	Thermistor	Thermistor	Thermistor
Coil	Tube Size (OD)	inch(mm)	0.197(5.0)	0.197(5.0)	0.197(5.0)	0.276(7.0)	0.276(7.0)
	Fins per inch		20	20	20	20	20
	No. of Rows & Column		2R,15C	2R,15C	2R,15C	2R,15C	2R,15C
Dehumidification Rate		l/h	0.9	1.1	1.2	2.3	3.0
Dimensions (W*H*D)		inch(mm)	33.0*10.6*6.0(840*270*153)	33.0*10.6*6.0(840*270*153)	33.0*10.6*6.0(840*270*153)	42.9*11.8*7.0(1090*300*180)	42.9*11.8*7.0(1090*300*180)
Net Weight		kg(lbs)	7(15.4)	7(15.4)	7(15.4)	13(28.7)	13(28.7)
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas	inch(mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)
	Drain hose (ID Ø)	mm	20	20	20	20	20
Packing Dimension (W*H*D)		inch(mm)	35.7*13.1*8.8(906*332*223)	35.7*13.1*8.8(906*332*223)	35.7*13.1*8.8(906*332*223)	45.9*15.2*9.7(1165*387*246)	45.9*15.2*9.7(1165*387*246)
Stuffing Quantity	With(Without) S/Parts	20/40ft	437/906 (432/896)	437/906 (432/896)	437/906 (432/896)	270/558 (267/552)	270/558 (267/552)
Front Panel Color	"★" Position		Morning Beige	Morning Beige	Morning Beige	Morning Beige	Morning Beige

Product Specifications

Indoor Unit Type			ARTCOOL DELUXE				
Model			AMNH07GDZ*0	AMNH09GDU*0	AMNH12GDU*0	AMNH18GD3*0	AMNH24GD3*0
Nominal Cooling Capacity ★		kcal/h(W)	1764(2051)	2267(2638)	3024(3515)	4536(5275)	5796(6740)
		Btu/h	7000	9000	12000	18,000	23,000
Nominal Heating Capacity ★		kcal/h(W)	2016(2343)	2520(2929)	3326(3867)	4990(5803)	6426(7472)
		Btu/h	8000	10000	13200	19,800	25,500
Air Circulation	H/M/L	CMM(CFM)	5.5(194)	8.5(300)	9.0(318)	13(459)	14(494)
Setting temperature range	(cool/heat)	°C	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30
Fan motor	Output	W	20	20	20	20	20
	Model		SIC-37CV-FI30-3	SIC-37CV-FI30-3	SIC-37CV-FI30-3	SIC-37CV-FI30-3	SIC-37CV-FI30-3
Fan	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	No. Used / Diameter	EA/inch(mm)	1/3.43(87)	1/3.43(87)	1/3.43(87)	1/3.74(95)	1/3.74(95)
Fan RPM	Cooling(H/M/L)	rpm	1150/1032/940	1280/1208/1147	1345/1273/1213	1330/1254/1123	1400/1332/1188
	Heating(H/M/L)	rpm	1150/1032/940	1280/1208/1147	1345/1273/1213	1330/1254/1123	1400/1332/1188
Noise Level (Sound Press.1m)	H/M/L	dBA	31/29/27	33/31/29	35/31/29	39/37/35	43/41/38
Temperature controller			Thermistor	Thermistor	Thermistor	Thermistor	Thermistor
Coil	Tube Size (OD)	inch(mm)	0.197(5.0)	0.197(5.0)	0.197(5.0)	0.276(7.0)	0.276(7.0)
	Fins per inch		19	19	19	20	20
	No. of Rows & Column		2R,12C	2R,12C	2R,12C	2R,13C	2R,13C
Dehumidification Rate		l/h	1.0	1.2	1.5	2.0	2.5
Dimensions (W*H*D)		inch(mm)	35.4*10.7*5.6 (900*272*143)	40.6*11.4*6.0 (1030*290*153)	40.6*11.4*6.0 (1030*290*153)	46.1*24.4*6.81(1170*315*173)*	46.1*24.4*6.81(1170*315*173)*
Net Weight		kg(lbs)	8.1(17.9)	9.5(20.9)	9.5(20.9)	13(28.7)	13(28.7)
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas	inch(mm)	3/8(9.52)	3/8(9.52)	3/8(9.52)	1/2 (12.7)	1/2 (12.7)
Drain hose (ID Ø)		mm	20	20	20	20	20
Packing Dimension (W*H*D)		inch(mm)	38.8*14.3*8.7 (985*363*220)	44.0*14.8*8.9 (1117*377*225)	44.0*14.8*8.9 (1117*377*225)	*49.4*15.3*10.2(1255*388*258)*	*49.4*15.3*10.2(1255*388*258)*
Stuffing Quantity	With(Without) S/Parts	20/40ft	340/720	324/684	324/684	234/495	234/495
Front Panel Color	"★" Position		R:Mirror, M: Metal, N: Walnut, W: White, B: Blue, C: Cherry				

- Note : 1.★ See the page "Combination Table"
 2. Due to our policy of innovation some specifications may be changed without notification.

Indoor Unit Type			ART COOL	
Model			AMNH096AP*1	AMNH126AP*1
Rated Cooling Capacity ★		kcal/hr(W)	2267(2638)	2772(3224)
		Btu/hr	9000	12000
Rated Heating Capacity ★		kcal/hr(W)	2520(2929)	3049(3546)
		Btu/hr	10000	13200
Air Circulation	H/M/L	CMM(CFM)	7.5(264)	8.5(300)
Setting temperature range		°C	18~30 / 16~30	18~30 / 16~30
Fan motor	Output	W	24	24
	Model		SIC-39CV-D828-1	SIC-39CV-D828-1
Fan	Type		Turbo Fan	Turbo Fan
	No. Used / Diameter	EA/inch(mm)	1/24.32(617.7)	1/24.32(617.7)
Fan RPM	Cooling(H/M/L)	rpm	510/350/290	560/460/360
	Heating(H/M/L)	rpm	510/350/290	560/460/360
Noise Level(Sound Press.1m)	H/M/L	dBA	38 / 35 / 32	43 / 40 / 33
Temperature controller			Thermistor	Thermistor
Coil	Tube Size (OD)	inch(mm)	0.197(5.0)	0.197(5.0)
	Fins per inch		20	20
	No. of Rows & Column		2R,20C	2R,20C
Dehumidification Rate		l/h	1	1.2
Dimensions (W*H*D)		inch(mm)	22.4*22.4*5.4 (570*568*137)	22.4*22.4*5.4 (570*568*137)
Net Weight		kg(lbs)	9(19.84)	9(19.84)
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)
	Gas	inch(mm)	3/8 (9.52)	3/8(9.52)
Drain hose (ID Ø)		mm	20	20
Packing Dimension (W*H*D)		inch(mm)	25.7*25.2*8.5(653*641*216)	25.7*25.2*8.5(653*641*216)
Stuffing Quantity	Without S/Parts	20/40ft	239/539	239/539
Front Panel Color	"★" Position		M: Metal, B: Blue, D: Wood	

- Note : 1.★ See the page "Combination Table"
 2. Due to our policy of innovation some specifications may be changed without notification.

Indoor Unit Type		Ceiling Cassette - 1way			Ceiling Cassette - 4way				
Model		AMNH096TCC0	AMNH126TCC0	AMNH126TEC0	AMNH186TEC0	AMNH246TFC0	AMNH(C)306TFC0	AMNH(C)366TDC0	
Rated Cooling Capacity ★	kcal/hr(W)	2267(2638)	3024(3515)	3024(3515)	4536(5275)	6048(7033)	7056(8206)	9072(10551)	
	Btu/hr	9000	12000	12000	18000	24000	28000	36000	
Rated Heating Capacity ★	kcal/hr(W)	2520(2929)	3326(3867)	3326(3867)	4990(5803)	6653(7736)	7761(9027)	9979(11600)	
	Btu/hr	10000	13200	13200	19800	26400	30800	39600	
Air Circulation	H/M/L	CMM(CFM)	9(317)	10(353)	11(353)	13(459)	15/14/13(53/494/459)	18(636)	25/23/21(883/812/742)
External Static Pressure		mmAq	-	-	-	-	-	-	
Setting temperature range		°C	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	
Fan motor	Output	W	14	14	18.4	22.4	40.3	52.5	
	Model		AMR-023E7	AMR-023E7	IC-9630LGAE	IC-9630LGAC	OBM-350292	OBM-401592	IC-1630LGPJ
	No. of Poles		4	4	6	6	6	6	
	Input	W	50	50	75	90	121	146	175
	Running Current	A	0.56	0.56	0.35	0.75	0.53	0.67	0.8
	Capacitor	µF/Vac	0.9/400	0.9/400	2.5/440	2.5/440	4/440	4/440	4/450
Fan	Type		Cross Flow Fan	Cross Flow Fan	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan	
	No. Used / Diameter	EA/inch(mm)	1/4(102)	1/4(102)	1/13.0(330)	1/13.0(330)	1/15.0(382)	1/15.0(382)	1/15.0(382)
Fan RPM	Cooling(H/M/L)	rpm	900 / 800 / 700	1000 / 900 / 800	670 / 620 / 550	720 / 670 / 620	600/540/480	660/590/530	550/510/470
	Heating(H/M/L)	rpm	900 / 800 / 700	1000 / 900 / 800	670 / 620 / 550	720 / 670 / 620	600/540/480	660/590/530	550/510/470
Noise Level(Sound Press,1m)	H/M/L	dBA	35 / 32 / 28	37 / 33 / 29	38 / 35 / 32	41 / 39 / 37	43/41/39	44/41/39	40/38/36
Temperature controller			Thermistor	Thermistor	Thermistor	Thermistor	Thermistor	Thermistor	
Coil	Tube Size (OD)	inch(mm)	0.275(7)	0.275(7)	0.275(7)	0.275(7)	0.275(7)	0.275(7)	
	Fins per inch		18	18	19	19	21	21	
	No. of Rows & Column		2R11C	2R11C	2R11C	2R11C	2R12C	2R12C	2R12C
Dehumidification Rate		l/h	1.2	1.5	1.2	2.4	3	3.5	
Dimensions (W*H*D)	Indoor	inch(mm)	33.8*16.3*7(860*390*190)	33.8*16.3*7(860*390*190)	22.4*10.5*22.4(570*269*570)	22.4*10.5*22.4(570*269*570)	29.3*11.5*29.4(744*292*744)	29.3*11.5*29.4(744*292*744)	33.0*33.0*11.3(840*840*288)
	Panel	inch(mm)	41.3*18.9*1.2(1050*480*30)	41.3*18.9*1.2(1050*480*30)	26.4*26.4*1.2(670*670*30)	26.4*26.4*1.2(670*670*30)	33.5*33.5*1.2(850*850*30)	33.5*33.5*1.2(850*850*30)	37.4*37.4*1.2(950*950*30)
Net Weight		kg(lbs)	22(48.5)	22(48.5)	19(41.9)	19(41.9)	24(52.9)	32(70.5)	
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	
	Gas	inch(mm)	3/8(9.52)	3/8(9.52)	3/8(9.52)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	
Drain	Drain hose (ID Ø)	mm	32	32	32	32	32	32	
Packing Dimension (W*H*D)		inch(mm)	38.6*10.0*18.1	38.6*10.0*18.1(980*255*460)	25.2*13.0*25.2(640*330*640)	25.2*13.0*25.2(640*330*640)	32.6*14.4*32.6(828*365*828)	32.6*14.4*32.6(828*365*828)	36.4*13.0*36.4(925*330*925)
Stuffing Quantity	Without S/Parts	20/40ft	263/539	263/539	189/378	189/378	84/168	84/168	30/64(36/72)

Indoor Unit Type		Ceiling Cassette - 4way				
Model		AMNH09GTEF0[MT10AH NE1]	AMNH12GTEF0[MT12AH NE1]	AMNH18GTEF0[MT18AH NE1]	AMNH24GTHF0[MT24AH NHO]	
Power supply	ØV/Hz	1/ 220~240/ 50	1/ 220~240/ 50	1/ 220~240/ 50	1/ 220~240/ 50	
Cooling capacity	kW	2.64	3.52	5.28	7.03	
	Btu/h	9000	12000	18000	24000	
Heating capacity	kW	2.93	3.87	5.8	7.74	
	Btu/h	10000	13200	19800	26400	
Current	Nominal running current	A	0.35	0.35	0.75	0.8
Fan	Motor type		BLDC	BLDC	BLDC	BLDC
	Fan type		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor output x Number of unit		18.4 X 1	18.4 X 1	22.4 X 1	40.3 X 1
	Air flow rate(H/M/L)	cmm	8.5/7.5/6.5	9.5/8/6.5	12/10/9	17/15/13
		cfm	300/265/230	336/283/230	424/353/318	600/530/459
	Capacitor	µF/Vac	-	-	-	-
Coil	Drive	Direct Drive	Direct Drive	Direct Drive	Direct Drive	
Dimensions (WxHxD)	Row x Column x FPI	mm	2R x 11C x 18	2R x 11C x 18	2R x 11C x 18	2R x 9C x 18
	Body	mm(inch)	570*265*570(22.4*10.5*22.4)	570*265*570(22.4*10.5*22.4)	570*265*570(22.4*10.5*22.4)	840*840*225(33.1*33.1*8.8)
Weight	Decorative panel	mm	670*30*670(26.4*1.2*26.4)	670*30*670(26.4*1.2*26.4)	670*30*670(26.4*1.2*26.4)	950*950*30(37.4*37.4*1.2)
	Body	kg(lbs)	19(41.9)	19(41.9)	19(41.9)	26(126.5)
Decorative panel		kg(lbs)	3(6.6)	3(6.6)	3(6.6)	5(11)
Air filter		Long Life Filter	Long Life Filter	Long Life Filter	Long Life Filter	
Sound level (H/M/L)		dB(A)+3	33/29/24	36/34/27	41/35/30	32/29/26
Piping connections	Liquid	mm(inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
	Gas	mm(inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)	12.7 (1/2)
Drain	OD/ID	mm	32/25	32/25	32/25	32/25
Dehumidification rate		l/h	1.1	1.2	2.4	3
Safety devices			Fuse, Thermal Protector for Fan Motor			
Temperature sensor			Thermistor	Thermistor	Thermistor	Thermistor
Refrigerant			R410A	R410A	R410A	R411A
Refrigerant control			LEV(in Outdoor unit or BD)	LEV(in Outdoor unit or BD)	LEV(in Outdoor unit or BD)	LEV(in Outdoor unit or BD)
Connectable outdoor unit			Multi F /F DX series	Multi F /F DX series	Multi F /F DX series	Multi F /F DX series
Power and transmission interunit cable	No.x mm ²		4*0.75	4*0.75	4*0.75	4*0.75

Indoor Unit Type			Ceiling Cassette - 1way		
Model			AMNH09GTCC0	AMNH12GTCC0	
Rated Cooling Capacity ★	kcal/hr(W)		2267(2638)	3024(3515)	
	Btu/hr		9000	12000	
Rated Heating Capacity ★	kcal/hr(W)		2520(2929)	3326(3867)	
	Btu/hr		10000	13200	
Air Circulation	H/M/L	CMM(CFM)	9(317)	10(353)	
External Static Pressure		mmAq	-	-	
Setting temperature range		°C	18~30 / 16~30	18~30 / 16~30	
Fan motor	Output	W	14	14	
	Model		AMR-023E7	AMR-023E7	
	No. of Poles		4	4	
	Input	W	50	50	
	Running Current	A	0.56	0.56	
	Capacitor	µF/Vac		0.9/400	0.9/400
Fan	Type		Cross Flow Fan	Cross Flow Fan	
	No. Used / Diameter	EA/inch(mm)	1/4(102)	1/4(102)	
Fan RPM	Cooling(H/M/L)	rpm	900 / 800 / 700	1000 / 900 / 800	
	Heating(H/M/L)	rpm	900 / 800 / 700	1000 / 900 / 800	
Noise Level(Sound Press.1m)	H/M/L	dBA	35 / 32 / 28	37 / 33 / 29	
Temperature controller			Thermistor	Thermistor	
Coil	Tube Size (OD)	inch(mm)	0.275(7)	0.275(7)	
	Fins per inch		18	18	
	No. of Rows & Column		2R11C	2R11C	
Dehumidification Rate		l/h	1.2	1.5	
Dimensions (W*H*D)	Indoor	inch(mm)	33.8*15.3*7(860*390*190)	33.8*15.3*7(860*390*190)	
	Panel	inch(mm)	41.3*18.9*1.2(1050*480*30)	41.3*18.9*1.2(1050*480*30)	
Net Weight		kg(lbs)	22(48.5)	22(48.5)	
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)	
	Gas	inch(mm)	3/8(9.52)	3/8(9.52)	
	Drain hose (ID Ø)	mm	32	32	
Packing Dimension (W*H*D)		inch(mm)	38.6*10.0*18.1	38.6*10.0*18.1(980*255*460)	
Stuffing Quantity	Without S/Parts	20/40ft	263/539	263/539	

Indoor Unit Type			Ceiling Cassette - 4way	
Model			AMNH096TECO	
Nominal Cooling Capacity★		kcal/h(W)	2267(2638)	
		Btu/h	9000	
Nominal Heating Capacity★		kcal/h(W)	2520(2929)	
		Btu/h	10000	
Air Circulation	H/M/L	CMM(CFM)	9.5/8/7(336/283/247)	
Setting temperature range(cool/heat)		°C	18~30 / 16~30	
Fan motor	Output	W	18.4	
	Model		IC-9630LGAE	
	No. of Poles		6	
	Input	W	75	
	Running Current	A	0.35	
Capacitor		µF/Vac	2.5/440	
Fan	Type		Turbo Fan	
	No. Used / Diameter	EA/inch(mm)	1/13.0(330)	
Noise Level (Sound Press.1.5m)	H/M/L	dB(A)	38 / 35 / 32	
Temperature controller			Thermistor	
Coil	Tube Size (OD)	inch(mm)	0.275(7)	
	Fins per inch		19	
	No. of Rows & Column		2R11C	
Dehumidification Rate		l/h	1.2	
Dimensions (W*H*D)	Indoor Unit	inch(mm)	22.4*10.5*22.4 (570*269*570)	
	Decorative Panel	inch(mm)	26.4*1.2*26.4 (670*30*670)	
Net Weight	Body	kg(lbs)	19(41.9)	
	Panel	kg(lbs)	3(6.6)	
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	
	Gas	inch(mm)	3/8 (9.52)	
	Drain hose (ID Ø)	inch(mm)	1.26(32)	
Packing Dimension (W*H*D)	Indoor Unit	inch(mm)	"25.2*13.0*25.2 (640*330*640)	
	Decorative Panel	inch(mm)	"29.5*3.1*29.5 (750*80*750)	
Stuffing Quantity	With(Without) S/Parts	20/40ft	189/378(189/378)	

Notes : 1. Capacities are based on the following conditions:
 Cooling: - Indoor Temperature 27°C(80.6°F) DB /19°C(66.2°F) WB
 - Outdoor Temperature 35°C(95°F) DB /24°C(75.2°F) WB
 - Interconnecting Piping Length 7.5m
 - Level Difference of Zero.
 Heating: - Indoor Temperature 20°C(68°F) DB / 15°C(59°F) WB
 - Outdoor Temperature 7°C(44.6°F) DB / 6°C(42.8°F) WB
 - Interconnecting Piping Length 7.5 m
 - Level Difference of Zero.

- 2. Capacities are Net Capacities.
- 3. Due to our policy of innovation some specifications may be changed without notification.
- 4. ★ : See the page "Combination Table"

Indoor Unit Type			Ceiling Concealed Duct				
Model			AMNH096BTGO	AMNH126BTGO	AMNH186BTGO	AMNH096BPA0	AMNH126BPA0
Rated Cooling Capacity ★		kcal/hr(W)	2268(2637)	3024(3516)	4536(5274)	2268(2637)	3024(3516)
		Btu/hr	9000	12000	18000	9000	12000
Rated Heating Capacity ★		kcal/hr(W)	2520(2930)	3326(3868)	4990(5802)	2520(2930)	3326(3868)
		Btu/hr	10000	13000	19800	10000	13200
Air Circulation	H/M/L	CMM(CFM)	8/7/6(282/246/211)	10/9/8(352/317/282)	13.5/12/10(477/424/353)	11.5/10/8.5	11.5/10/8.5
External Static Pressure		mmAq	2	2	2	4	4
Setting temperature range		°C	18~30 / 16~30	18~30 / 16~30	18~30 / 16~30	18~30	18~30
Fan motor	Output	W	35	35	47	118	118
	Model		YDK110-35-4L	YDK110-35-4L	YSK110-70-4L	IC-13450LG31A	IC-13450LG31A
	No. of Poles		4	4	4	4	4
	Input	W	68	68	126	180	180
	Running Current	A	0.31	0.31	0.58	4.3	4.3
Capacitor		µF/Vac	2.5/400	2.5/400	2.5/370	6/370	6/370
Fan	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	No. Used / Diameter	EA/inch(mm)	1/7.8(197)	1/7.8(197)	2/7.8(197)	1/Ø177	1/Ø177
Fan RPM	Cooling(H/M/L)	rpm	930/840/810	950/850/780	1000/900/800	1125/990/870	1125/990/870
	Heating(H/M/L)	rpm	930/840/810	950/850/780	1000/900/800	1125/990/870	1125/990/870
Noise Level(Sound Press.1m)	H/M/L	dB(A)	34/32/30	37/34/31	38/36/34	38/36/34	38/36/34
Temperature controller			Thermistor	Thermistor	Thermistor	Thermistor	Thermistor
Coil	Tube Size (OD)	inch(mm)	0.276(7.0)	0.276(7.0)	0.276(7.0)	0.276(7.0)	0.276(7.0)
	Fins per inch		18	18	18	18	18
	No. of Rows & Column		2R,12C	3R,12C	2R, 12C	2R14C	3R14C
Dehumidification Rate		l/h	1	1.2	2	1.6	2
Dimensions (W*H*D)		inch(mm)	25.6*9.0*21.1(650*230*535)	25.6*9.0*21.1(650*230*535)	39.4*9.0*21.1(1000*230*535)	750*300*580(695*56.5*396)	750*300*580(695*56.5*396)
Net Weight		kg(lbs)	22(48.5)	22(48.5)	29(63.9)	30(6)	30(6)
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4(6.35)	1/4(6.35)
	Gas	inch(mm)	3/8 (9.52)	3/8 (9.52)	1/2 (12.7)	3/8(9.52)	3/8(9.52)
	Drain hose (ID Ø)	mm	25.4	25.4	25.4	25.4(OD)	25.4(OD)
Packing Dimension (W*H*D)		inch(mm)	29.9*24.6*11.8(760*625*300)	29.9*24.6*11.8(760*625*300)	29.9*24.6*11.8(760*625*300)	845*370*760(735*90*435)	845*370*760(735*90*435)
Stuffing Quantity	Without S/Parts	20/40ft	172/356	172/356	123/251	228/468	228/468
Front Panel Color	*** Position		-	-	-	NOBEL WHITE	NOBEL WHITE

- Note : 1. ★ See the page "Combination Table"
- 2. Due to our policy of innovation some specifications may be changed without notification.

Indoor Unit Type			Ceiling Concealed Duct			
Model			AMNH186BHA0	AMNH(C)246BHA0	AMNH(C)306BGA0	AMNH(C)366BGA0
Rated Cooling Capacity ★	kcal/hr(W)		4536(5275)	6048(7034)	7560(8792)	9072(10551)
	Btu/hr		18000	24000	30000	36000
Rated Heating Capacity ★	kcal/hr(W)		4990(5803)	6653(7737)	8316(9671)	9979(11606)
	Btu/hr		19800	26400	33000	39600
Air Circulation	H/M/L	CMM(CFM)	16.5/14.5/13(583/512/459)	18/16.5/14(636/583/494)	28/25/23(989/883/812)	32/29/26.5(1130/1024/936)
External Static Pressure			8	8	8	8
Setting temperature range			18-30 / 16-30	18-30 / 16-30	18-30 / 16-30	18-30 / 16-30
Fan motor	Output	W	118	118	124	272
	Model		IC-13450LG13C	IC-13450LG13C	IC-13450LG13J	IC-13450LG13A
	No. of Poles		4	4	4	4
	Input	W	180	180	250	323
	Running Current	A	0.92	0.92	1.1	1.42
	Capacitor	µF/Vac	6/370	6/370	6/370	6/370
Fan	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	No. Used / Diameter	EA/inch(mm)	2/6.97(177)	2/6.97(177)	2/6.97(177)	2/6.97(177)
Fan RPM	Cooling(H/M/L)	rpm	1356/-1270	1417/1350/1255	1415/1360/1290	1415/1360/1290
	Heating(H/M/L)	rpm	1356/-1270	1417/1350/1255	1415/1360/1290	1415/1360/1290
Noise Level(Sound Press.1m)	H/M/L	dBA	36/34/32	37/35/33	40/38/36	42/40/38
Temperature controller			Thermistor	Thermistor	Thermistor	Thermistor
Coil	Tube Size (OD)	inch(mm)	0.275(7)	0.275(7)	0.275(7)	0.275(7)
	Fins per inch		21	21	21	21
	No. of Rows & Column		3R10C	3R10C	3R 12C	3R 12C
Dehumidification Rate	l/h		2.0	2.5	3	3.5
Dimensions (W*H*D)	inch(mm)		34.6*10.2*17.7 (880*260*450)	34.6*10.2*17.7 (880*260*450)	46.4*11.7*17.7(1180*298*450)	46.4*11.7*17.7(1180*298*450)
Net Weight	kg(lbs)		35(77.2)	35(77.2)	38(83.8)	38(83.8)
Piping Connection	Liquid	inch(mm)	1/4(6.35)	1/4(6.35)	1/4(6.35)	1/4(6.35)
	Gas	inch(mm)	1/2(12.7)	1/2(12.7)	5/8(15.88)	5/8(15.88)
Drain hose (ID Ø)	mm		25.4(OD)	25.4(OD)	25.4(OD)	25.4(OD)
Packing Dimension (W*H*D)	inch(mm)		44.7*13.4*23.0(1135*340*585)	44.7*13.4*23.0(1135*340*585)	18.5*14.8*23.0(1435*375*585)	18.5*14.8*23.0(1435*375*585)
Stuffing Quantity	Without S/Parts		20/40ft	120/252	95/191	95/191

Indoor Unit Type			Ceiling & Floor(Convertible)			
Model			AMNH096VEA0	AMNH126VEA0	AMNH186VBA0	AMNH246VBA0
Rated Cooling Capacity ★	kcal/hr(W)		2268(2637)	3024(3516)	4536(5274)	6048(7032)
	Btu/hr		9000	12000	18000	24000
Rated Heating Capacity ★	kcal/hr(W)		2520(2930)	3326(3867)	4990(5801)	6350(7384)
	Btu/hr		10000	132000	19200	25200
Air Circulation	H/M/L	CMM(CFM)	7.8/6.4/5.0(276/226/177)	10.0/8.3/6.5(353/293/230)	135.1/12/11(477/424/388)	15/13.5/12(530/477/424)
External Static Pressure			-	-	-	-
Setting temperature range			18-30/16-30	18-30/16-30	18-30 / 16-30	18-30 / 16-30
Fan motor	Output	W	14.5	17.5	30	35
	Model		IC-18422LG31B	IC-18422LG31A	IC-9430LGCM	IC-9430LGCM
	No. of Poles		4	4	4	4
	Input	W	35	43	53	63
	Running Current	A	0.18	0.23	0.23	0.27
	Capacitor	µF/Vac	1.5/370	1.5/370	1.5/370	1.5/370
Fan	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	No. Used / Diameter	EA/inch(mm)	1/3.7(95)	1/3.7(95)	1/3.1(80)	1/3.1(80)
Fan RPM	Cooling(H/M/L)	rpm	960/870/760	1240/1120/900	1090/990/890	1160/1060/960
	Heating(H/M/L)	rpm	960/870/760	1240/1120/900	1090/990/890	1160/1060/960
Noise Level(Sound Press.1m)	H/M/L	dBA	36/32/28	40/36/31	43 / 40 / 37	45 / 42 / 39
Temperature controller			Thermistor	Thermistor	Thermistor	Thermistor
Coil	Tube Size (OD)	inch(mm)	0.197(5)	0.197(5)	0.275(7)	0.275(7)
	Fins per inch		20	20	18	20
	No. of Rows & Column		2R 12C	2R 12C	2R 12C	2R 14C
Dehumidification Rate	l/h		1	1.2	2.3	3.2
Dimensions (W*H*D)	inch(mm)		35.4*7.9*19.3 (900*200*490)	35.4*7.9*19.3 (900*200*490)	47.24*24.21*18.07(1200*615*205)	47.24*24.21*18.07(1200*615*205)
Net Weight	kg(lbs)		12(26.5)	12(26.5)	30(66.1)	30(66.1)
Piping Connection	Liquid	inch(mm)	1/4 (6.35)	1/4 (6.35)	1/4(6.35)	1/4(6.35)
	Gas	inch(mm)	3/8 (9.52)	3/8 (9.52)	1/2(12.7)	1/2(12.7)
Drain hose (ID Ø)	mm		20	20	20	20
Packing Dimension (W*H*D)	inch(mm)		38.2*11.2*22.2 (970*285*565)	38.2*11.2*22.2 (970*285*565)	50*10.9*27(1272*278*686)	50*10.9*27(1272*278*686)
Stuffing Quantity	Without S/Parts		20/40ft	189/383	102/219	102/219

Note : 1. ★ See the page "Combination Table"
 2. Due to our policy of innovation some specifications may be changed without notification.

Outdoor Unit - Distributor type models

Outdoor Unit			A6UW368FA0	A7UW428FA0
Nominal Capacity (Min~Rated~Max)	Cooling	kW	6.33~9.67~10.8	7.38~12.3~13.5
		Btu/h	21,600~33,000~37,000	25,200~42,000~46,000
	Heating	kW	6.68~11.1~12.3	8.26~13.8~15.2
		Btu/h	22,800~38,000~42,000	28,200~47,000~51,700
Nominal Input (Min~Rated~Max)	Cooling	kW	1.80~3.00~3.45	2.10~3.50~4.03
	Heating	kW	1.83~3.05~3.51	2.22~3.70~4.26
Running Current	Cooling	A	3.4-5.4-6.0	3.7-5.8-6.5
	Heating	A	3.5-5.4-6.1	3.9-6.0-6.8
Starting Current	(Cooling/Heating)		A	4.8
Power Supply			Ø / V / Hz	3 / 380~415 / 50
Power Supply Cable (outdoor)			No.* mm ²	5*2.5
Power and transmission cable (outdoor to BD)			No.* mm ²	4*1.25 (Including earth)
Power and transmission cable (BD to indoor)			No.* mm ²	4*0.75 (Including earth)
Dimensions	W*H*D	mm(inch)	900*1,165*370 (35.4*45.8*14.5)	900*1,165*370 (35.4*45.8*14.5)
Net Weight			kg(lbs)	80(176)
Max. Number of Connectable Indoor Units				6
Compressor (Inverter)	Type		Twin rotary	
	Qty x Model		1 x 5KD240X	
	Motor Type		BLDC	
	Oil Charge volume	cc	900	
	Oil Type		FV50S	
Refrigerant	Charge (at 5m)	g(oz)	2,800(98.8)	4,600(162.3)
	Type		R410A	
	Control		L.E.V	
Heat Exchanger	Rows x Column x FPI		2R x 48C x 18	2R x 44C x 18
	Defrosting Method		Reversing cycle	Reversing cycle
Fan	Capacitor	µF/Vac	-	
	Drive		Direct	
	Discharge direction	Side / Top	Side	
	Air Flow Rate	CMM(CFM)	32(1,130) x 2	48(1,695) x 2
Noise Level(H/L)	Sound Pressure at 1m	dB(A)±3	51/47	53/48
Piping connections	Liquid(Ø)	mm(inch)	6.35(1/4)	9.52(3/8)
	Gas(Ø)		15.88(5/8)	19.05(3/4)
Max. Interunit Piping Length	Total Piping(Main+Total Branch)	m	100	125
	Main Piping	m	40	55
	Total Branch Piping	m	60	70
	Each Branch Piping	m	20	20
Max. Elevation Difference	Indoor Unit~Outdoor Unit	m	30	30
	Indoor Unit~Indoor Unit	m	15	15

Note :

- Capacities are based on the following conditions:
 Cooling: - Indoor Temperature 27°C(80.6°F) DB /19°C(66.2°F) WB
 - Outdoor Temperature 35°C(95°F) DB /24°C(75.2°F) WB
 Heating: - Indoor Temperature 20°C(68°F) DB / 15°C(59°F) WB
 - Outdoor Temperature 7°C(44.6°F) DB / 6°C(42.8°F) WB
 Piping Length - Interconnecting Piping Length 7.5m
 - Level Difference of Zero.
- Due to our policy of innovation some specifications may be changed without notification.
- At least two indoor units should be connected.
- Minimum combination capacity rate should be more than 40%

Conversion Formula	
kW	= Btu/h × 0.0002931
CFM	= CMM × 35.3

Outdoor Unit			A8UW488FA0	A9UW548FA0
Nominal Capacity (Min~Rated~Max)	Cooling	kW	8.44~14.1~15.5	9.50~15.2~16.8
		Btu/h	28,800~48,000~52,800	32,400~52,000~57,200
	Heating	kW	9.50~15.8~16.4	10.2~17.0~17.9
		Btu/h	32,400~54,000~56,000	34,800~58,000~61,000
Nominal Input (Min~Rated~Max)	Cooling	kW	2.46~4.10~4.72	2.67~4.45~5.12
	Heating	kW	2.58~4.30~4.73	2.82~4.70~5.17
Running Current	Cooling	A	4.3-6.7-7.5	4.6-7.2-8.1
	Heating	A	4.5-7.0-7.7	4.9-7.6-8.3
Starting Current	(Cooling/Heating)		A	8.5
Power Supply			Ø / V / Hz	3 / 380~415 / 50
Power Supply Cable (outdoor)			No.* mm ²	5*3.5
Power and transmission cable (outdoor to BD)			No.* mm ²	4*1.25 (Including earth)
Power and transmission cable (BD to indoor)			No.* mm ²	4*0.75 (Including earth)
Dimensions	W*H*D	mm(inch)	900*1,165*370 (35.4*45.8*14.5)	900*1,165*370 (35.4*45.8*14.5)
Net Weight			kg(lbs)	95(209)
Max. Number of Connectable Indoor Units			8	9
Compressor (Inverter)	Type		Twin rotary	
	Qty x Model		1 x 5JD420X	
	Motor Type		BLDC	
	Oil Charge volume	cc	1300	
	Oil Type		FV50S	
Refrigerant	Charge (at 5m)	g(oz)	4,600(162.3)	
	Type		R410A	
	Control		L.E.V	
Heat Exchanger	Rows x Column x FPI		2R x 44C x 18	
	Defrosting Method		Reversing cycle	
Fan	Capacitor		µF/Vac	
	Drive		-	
	Discharge direction	Side / Top	Direct	
	Air Flow Rate	CMM(CFM)	Side	
Noise Level(H/L)	Sound Pressure at 1m	dB(A)±3	50(1,766) x 2	
Piping connections	Liquid(Ø)	mm(inch)	55/52	
	Gas(Ø)		53(1,872) x 2	
Max. Interunit Piping Length	Total Piping(Main+Total Branch)	m	135	
	Main Piping	m	145	
	Total Branch Piping	m	55	
	Each Branch Piping	m	80	
Max. Elevation Difference	Indoor Unit~Outdoor Unit	m	20	
	Indoor Unit~Indoor Unit	m	30	

Note :

- Capacities are based on the following conditions:
 Cooling: - Indoor Temperature 27°C(80.6°F) DB /19°C(66.2°F) WB
 - Outdoor Temperature 35°C(95°F) DB /24°C(75.2°F) WB
 Heating: - Indoor Temperature 20°C(68°F) DB / 15°C(59°F) WB
 - Outdoor Temperature 7°C(44.6°F) DB / 6°C(42.8°F) WB
 Piping Length - Interconnecting Piping Length 7.5m
 - Level Difference of Zero.
- Due to our policy of innovation some specifications may be changed without notification.
- At least two indoor units should be connected.
- Minimum combination capacity rate should be more than 40%

Conversion Formula	
kW	= Btu/h × 0.0002931
CFM	= CMM × 35.3

LG Branch Distributor

Model			PMBD3640	PMBD3630	PMBD3620	PMBD7230
Connectable Indoor Units	Number of Indoor Units		1~4	1~3	1~2	1~3
	Capacity	Btu/h	7k/9k/12k/18k/24k	7k/9k/12k/18k/24k	7k/9k/12k/18k/24k	18k/24k/30k/36k
Casing color			Paintingless	Paintingless	Paintingless	Paintingless
Power Source			Ø1, 50/60Hz, 220-240/220V	Ø1, 50/60Hz, 220-240/220V	Ø1, 50/60Hz, 220-240/220V	Ø1, 50/60Hz, 220-240/220V
Power Consumption		W	10	10	10	10
Running Current		A	0.05	0.05	0.05	0.05
Dimensions	W*H*D	inch(mm)	11.9*5.6*9.9(302*143*252)	11.9*5.6*9.9(302*143*252)	11.9*5.6*9.9(302*143*252)	11.9*5.6*9.9(302*143*252)
Packing Dimension	W*H*D	inch(mm)	16.6*8.0*11.8(422*202*300)	16.6*8.0*11.8(422*202*300)	16.6*8.0*11.8(422*202*300)	16.6*8.0*11.8(422*202*300)
Net Weight		kg	5.0	4.9	4.8	5.0
Connecting Cable	Direction Indoor Unit	No. * mm ²	4*0.75 (Includes earth)	4*0.75 (Includes earth)	4*0.75 (Includes earth)	4*0.75 (Includes earth)
	Direction Outdoor Unit	No. * mm ²	4*0.75 (Includes earth)	4*0.75 (Includes earth)	4*0.75 (Includes earth)	4*0.75 (Includes earth)
Piping Connection (To Outdoor Unit)	Liquid	inch(mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
	Gas	inch(mm)	3/4(19.05)	3/4(19.05)	3/4(19.05)	3/4(19.05)
Piping Connection (To Indoor Unit)	Liquid	inch(mm)	1/4 (6.35)*4EA	1/4 (6.35)*3EA	1/4 (6.35)*2EA	1/4 (6.35)*3EA
	Gas	inch(mm)	3/8 (9.52)*4EA	3/8 (9.52)*3EA	3/8 (9.52)*2EA	1/2 (12.7), 3/8 (15.88)*2EA
Piping length		m	-	-	-	-
Piping Elevation		m	-	-	-	-
Drain hose			Unusable			
Heat Insulation			Both Liquid and Gas pipes			
Accessories	Hanger	EA	4	4	4	4
	Screw	EA	8	8	8	8
	Manual	EA	1	1	1	1

Note :

1. BD unit or Indoor Unit Max. Height - BD unit or Indoor Unit Min. Height - Max.10m
Set up the BD unit and Indoor Unit in 15m.
2. The piping connection must be suit the piping sizes of the indoor unit which will be connected.
(If need, use the connector which is included in the indoor unit)
3. The BD should be installed inside the building.

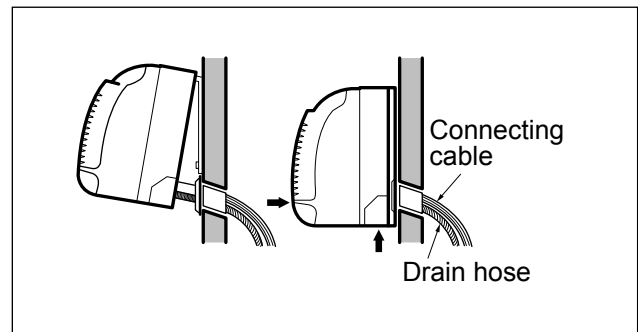
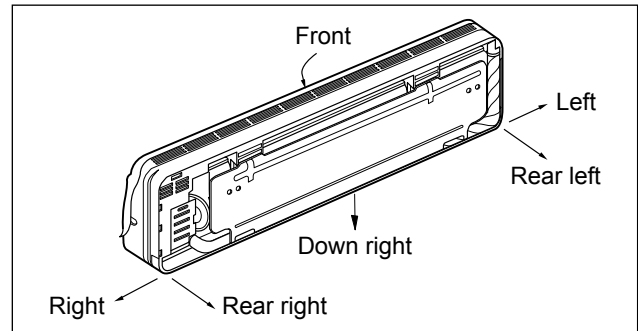
Installation

Read completely, then follow step by step.

Select the best location of indoor unit

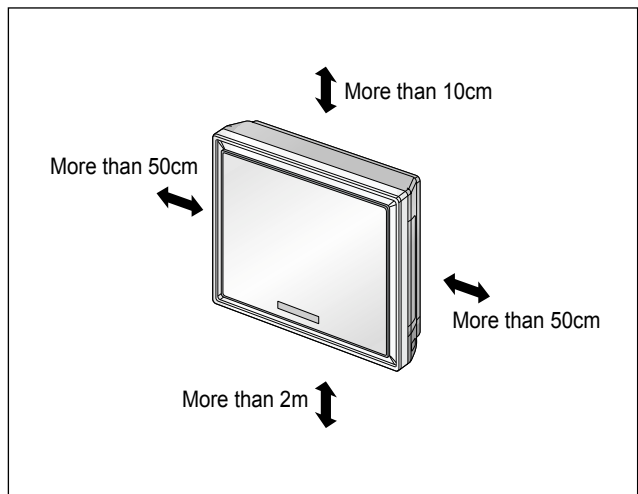
1. Split Type Indoor Unit

- There should not be any heat source or steam near the unit.
- There should not be any obstacles to prevent the air circulation.
- A place where air circulation in the room will be good.
- A place where drainage can be easily obtained.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the spaces indicated by arrows from the wall, ceiling, fence, or other obstacles.



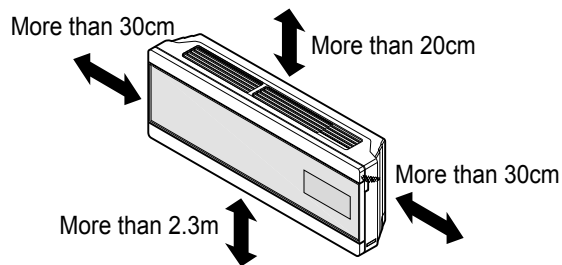
2. Art Cool Type Indoor Unit

- Do not have any heat or steam near the unit.
- Select a place where there are no obstacles in front of the unit.
- Make sure that condensation drainage can be conveniently routed away.
Do not install near a doorway.
- Ensure that the space around the left and right of the unit is more than 50cm. The unit should be installed as high on the wall as possible, allowing a minimum of 10cm from ceiling.
- Use a stud finder to locate studs to prevent unnecessary damage to the wall.



3. Art Cool Deluxe Type Indoor unit

- Do not have any heat or steam near the unit.
- Select a place where there are no obstacles in front of the unit.
- Make sure that condensation drainage can be conveniently routed away.
Do not install near a doorway.
- Ensure that the space around the left and right of the unit is more than 20cm. The unit should be installed as high on the wall as possible, allowing a minimum of 30cm from ceiling.
- Use a stud finder to locate studs to prevent unnecessary damage to the wall.



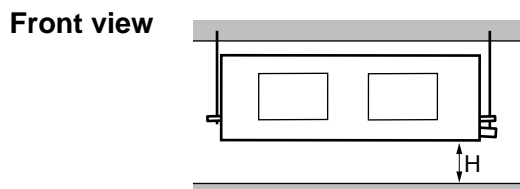
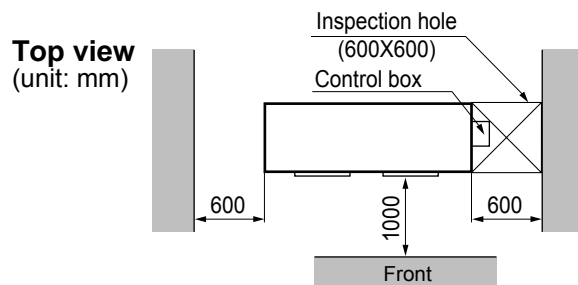
CAUTION

Install the indoor unit on the wall where the height from the floors more than 2.3 meters.

4. Duct Type Indoor Unit

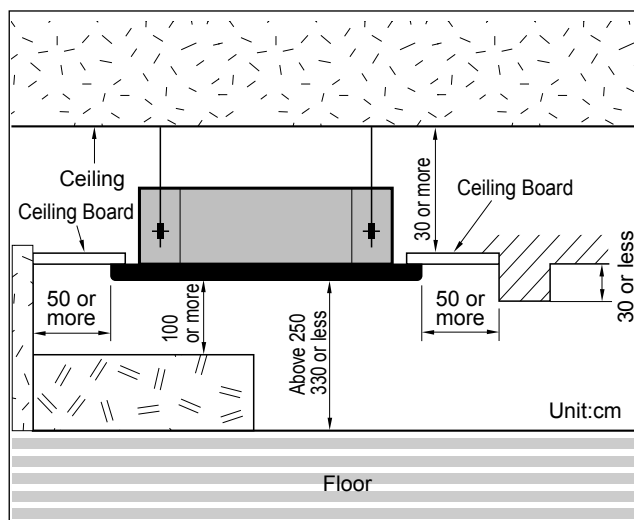
Install the air conditioner in the location that satisfies the following conditions.

- The place shall easily bear a load exceeding four times the indoor unit's weight.
- The place shall be able to inspect the unit as the figure.
- The place where the unit shall be leveled.
- The place shall allow easy water drainage. (Suitable dimension "H" is necessary to get a slope to drain as figure.)
- The place shall easily connect with the outdoor unit.
- The place where the unit is not affected by an electrical noise.
- The place where air circulation in the room will be good.
- There should not be any heat source or steam near the unit



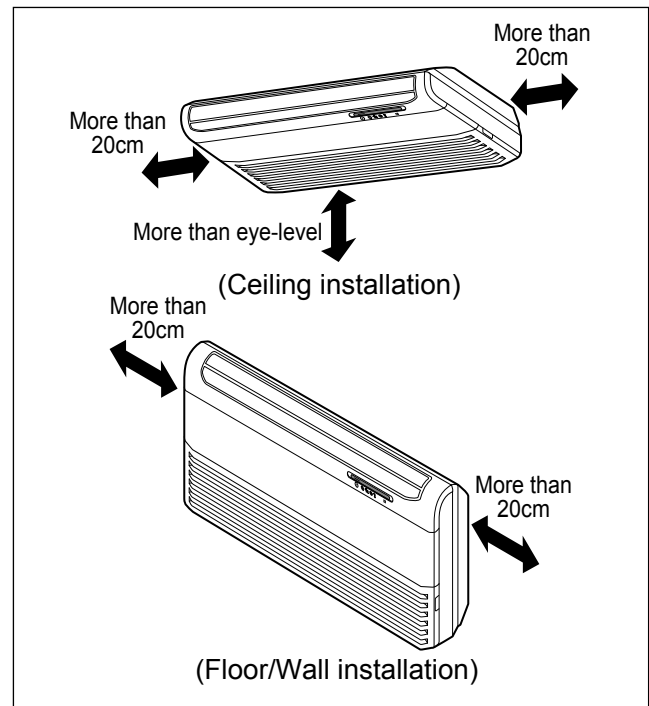
5. CST Type Indoor Unit

- There should not be any heat source or steam near the unit.
- There should not be any obstacles to the air circulation.
- A place where air circulation in the room will be good.
- A place where drainage can be easily obtained.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the spaces indicated by arrows from the wall, ceiling, or other obstacles.
- The indoor unit must have the maintenance space around.



6. CVT Type Indoor Unit

- There should not be any heat source or steam near the unit.
- There should not be any obstacles to prevent the air circulation.
- A place where air circulation in the room will be good.
- A place where drainage can be easily obtained.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the spaces indicated by arrows from the wall, ceiling, or other obstacles.



How to fix

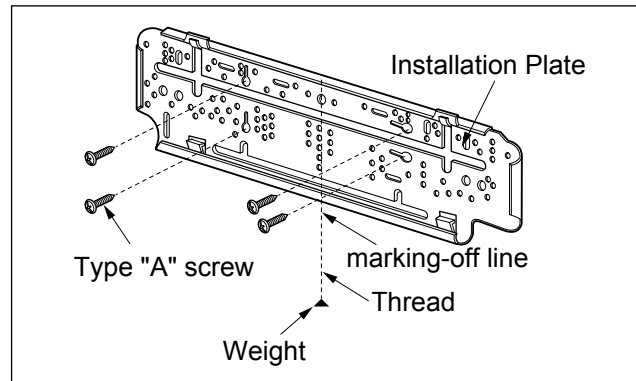
1. Room Type Indoor Unit Installation

The mounting wall should be strong and solid enough to protect it from the vibration.

1) Mount the installation plate on the wall with four Type "A" screws.

(If mounting the unit on the concrete wall, consider using anchor bolts.)

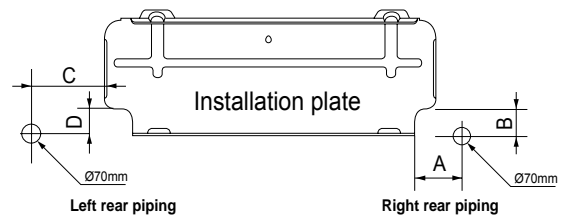
- Always mount the Installation plate horizontally by aligning the marking-off line by means of the thread and a level.



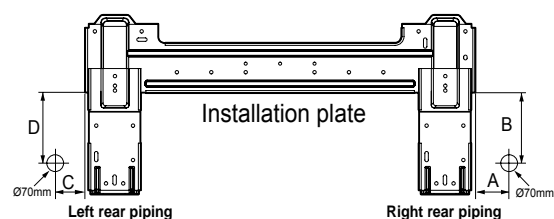
2) Drill the piping hole with 70mm dia. holecore drill.

- Line according to the arrows marked on lower the left and the right side of the Installation Plate. The meeting point of the extended line is the center of the hole.
- Drill the piping hole at either the right or the left and the hole should be slightly slant to the outdoor side.

The lower left and the right side of Installation Plate



CHASSIS (Grade)	Distance(mm)			
	A	B	C	D
SQ(7/9k)	75	12	80	12
SR(9/12k)	0	40	20	40
ST(18/24k)	105	0	210	0



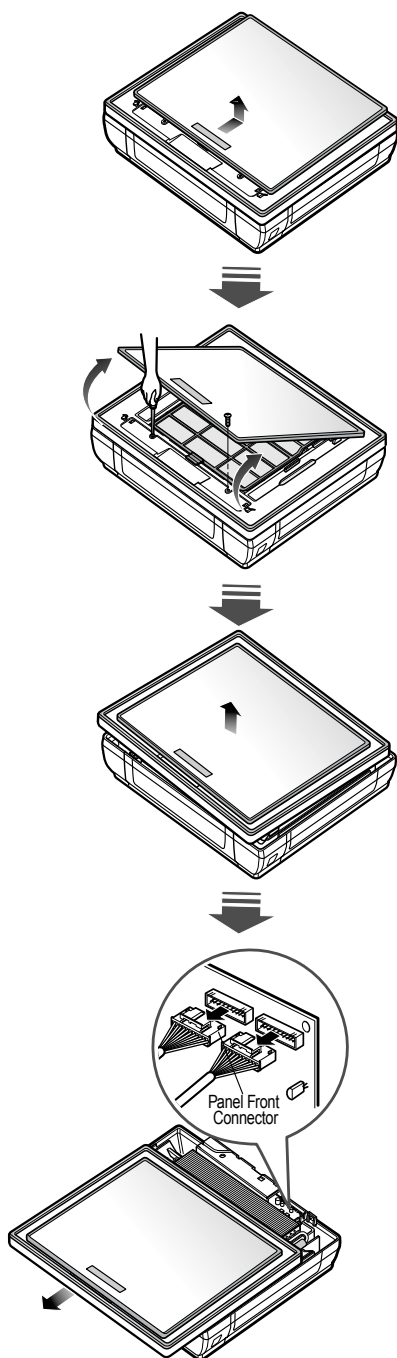
CHASSIS (Grade)	Distance (mm)			
	A	B	C	D
S4	50	105	59	105
SE	65	110	85	110
S5	95	122	235	122

2. Art Cool Type Indoor Unit

The wall you select should be strong and solid enough to prevent vibration

1) Open panel front

- First, Pull the grille bottom, then remove screws (2 pieces), and close grille bottom again.
- The moment of lifting the both lower parts of panel front, you can hear sound this panel came out, In this time panel front is separated
- After pull down this panel a bit, and separate connecting wire with product.

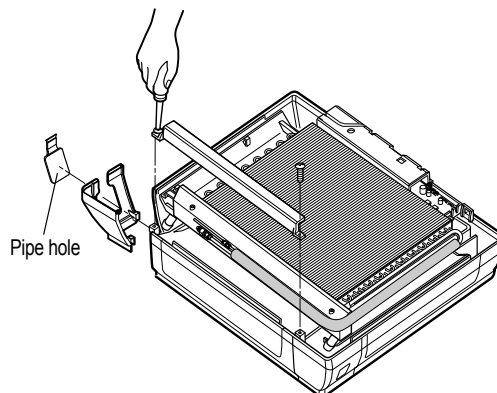


2) Cover pipe and cover side remove

- Remove two screws (for fixing cover pipe)
- Pull up the cover side of desired connecting direction, then cover side is separated.
- In case connecting direction is left or right, path through the hole of cover side.



CAUTION: After removing the pipe hole, cut the burr for safety.



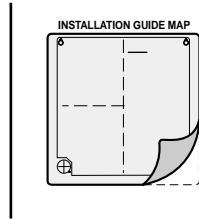
NOTE: When connecting pipe path through rear wall, don't remove the hole.

3) Drain hose junction

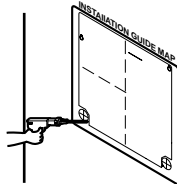
- Remove the rubber stopple of desired drain direction.
- As the following picture, Insert drain hose in the handle of drain pan, and join drain hose and connecting hose.

■ Sticking the installation guide map and fixing Indoor unit

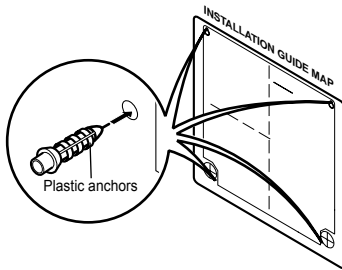
1. Put an Installation Guide Map on the desired surface.



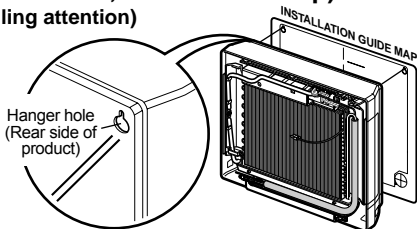
2. Make a hole with diameter of 6mm and depth of 30-35mm when piercing a screw point.



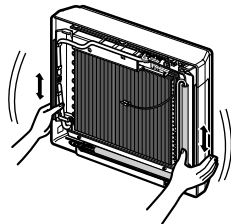
3. Drive the fore plastic anchors into drilled points.



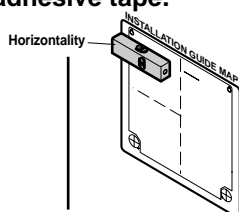
4. Hang the hole of product at the upper screws. (In this time, Remove the map) (Falling attention)



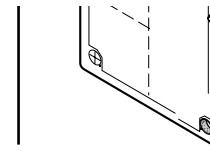
5. Check the fixed product with light power.



6. Look at suited horizon by horizontal meter on the horizontal setting line, and Fix lightly the map by adhesive tape.

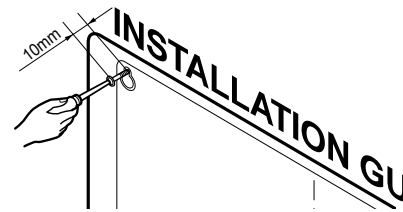


7. Drill the piercing part for connecting pipe as diameter 50mm. (In case of piercing rear surface)

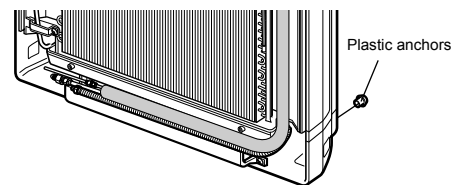


Refer to No. 5 on this page when making a hole in the wall.

8. First, Drive the two points of the upper parts by screws. (Leave 10mm for hanging product)



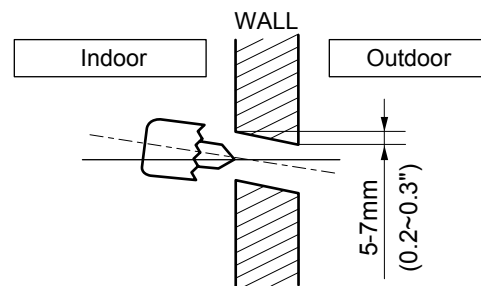
9. Drive the lower parts after facing the hole of product with plastic anchors, and fix completely the upper screws.



In case of nothing wrong in the matter, connect the pipe and the wire. (Installation manual reference)

■ Drill a hole in the wall

- Drill the piping hole with a $\varnothing 50\text{mm}$ hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.

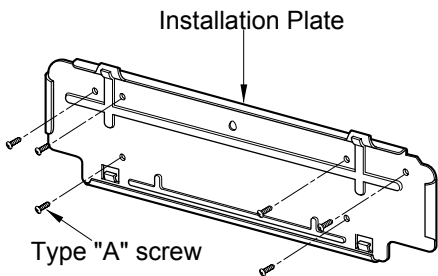


3. Art Cool Deluxe Type Indoor Unit

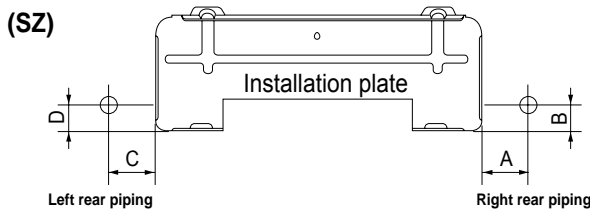
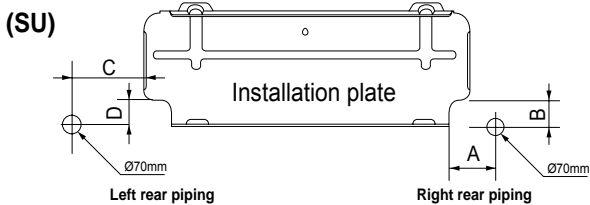
The wall you select should be strong and solid enough to prevent vibration

1) Mount the installation plate on the wall with four type A screws. If mounting the unit on a concrete wall, use anchor bolts.

- Mount the installation plate horizontally by aligning the centerline using a level.



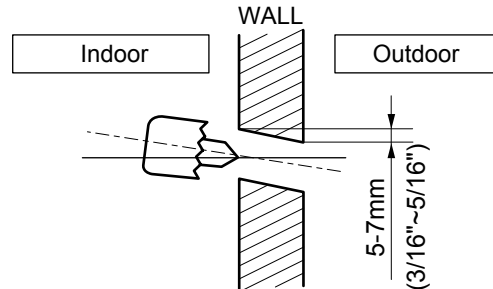
2) Measure the wall and mark the centerline. It is also important to use caution concerning the location of the installation plate—routing of the wiring to power outlets is through the walls typically. Drilling the hole through the wall for piping connections must be done safely.



CHASSIS (Grade)	Distance (mm)			
	A	B	C	D
SU (9k, 12k)	92	44	67	44
SZ (7k)	35	33	156	33

3) Drill a hole in the wall

- Drill the piping hole with a $\varnothing 70\text{mm}$ hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.



4. Duct Type Indoor Unit

- BH chassis

Install the unit above the ceiling correctly.

CASE 1

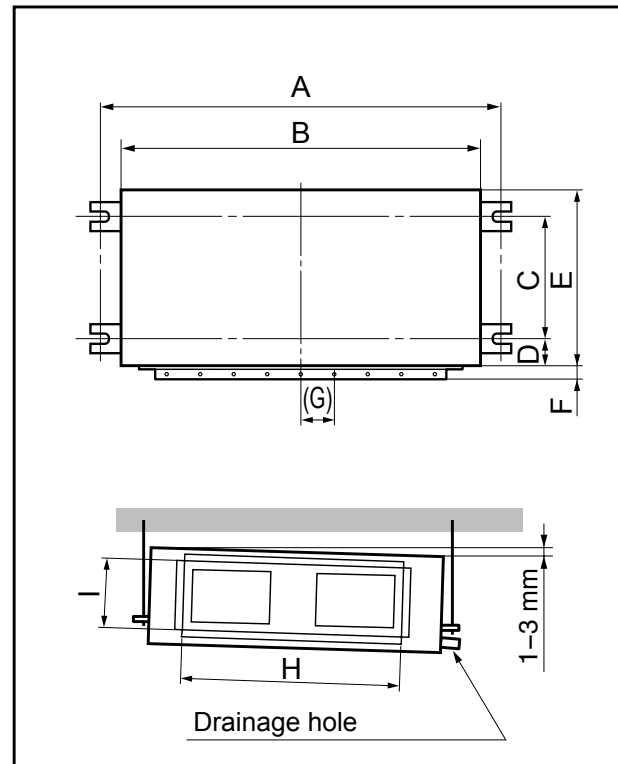
POSITION OF SUSPENSION BOLT

- Apply a joint-canvas between the unit and duct to absorb unnecessary vibration.
- Apply a filter Accessory at air return hole.

(Unit:mm)

Dimension Capacity	A	B	C	D	E	F	(G)	H	I
18k, 24k	932	880	355	45.5	450	30	87	750	163

- Install the unit leaning to a drainage hole side as a figure for easy water drainage.



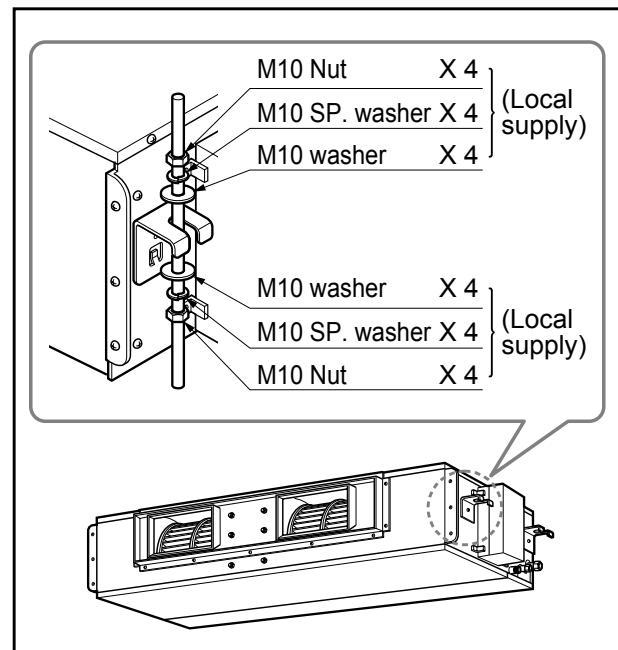
CASE 2

POSITION OF CONSOLE BOLT

- A place where the unit will be leveled and that can support the weight of the unit.
- A place where the unit can withstand its vibration.
- A place where service can be easily performed.

NOTE:

- Thoroughly study the following installation locations:
 1. In such places as restaurants and kitchens, considerable amount of oil steam and flour adhere to the fan, the fin of the heat exchanger, resulting in heat exchange reduction, spraying, dispersing of water drops, etc. In these cases, take the following actions:
 - Make sure that the ventilation fan for smoke-collecting hood on a cooking table has sufficient capacity so that it draws oily steam which should not flow into the suction of the air conditioner.
 - Make enough distance from a cooking room to install the air conditioner in such a place where it may not suck in oil steam.
 2. Avoid installing air conditioner in such circumstances where cutting oil mist or iron powder is in suspension in factories, etc.
 3. Avoid places where inflammable gas is generated, flows in, is stored or vented.
 4. Avoid places where sulfurous acid gas or corrosive gas is generated.
 5. Avoid places near high frequency generators.



- BT chassis

Install the unit above the ceiling correctly.

CASE 1

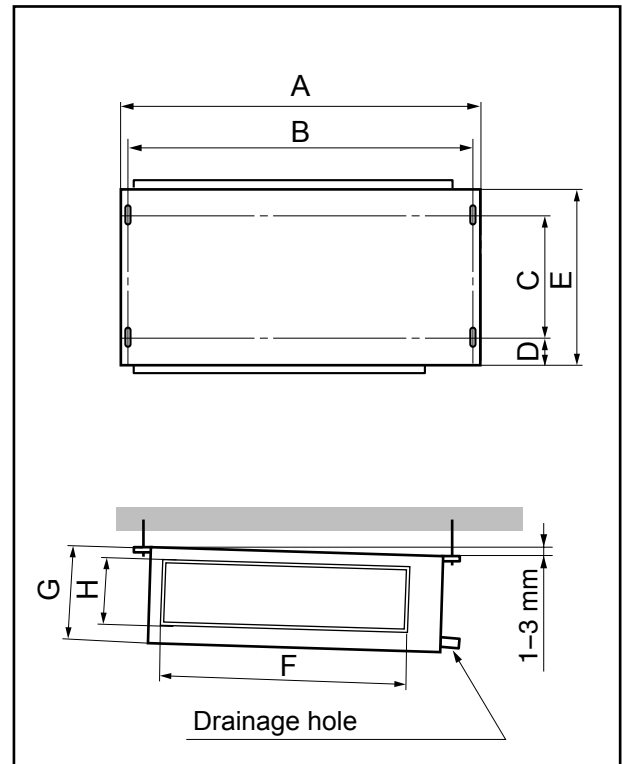
POSITION OF SUSPENSION BOLT

- Apply a joint-canvas between the unit and duct to absorb unnecessary vibration.
- Apply a filter Accessory at air return hole.

(Unit:mm)

Dimension Capacity	A	B	C	D	E	F	G	H
9k, 12k	708	678	434	51	537	455	230	172
18k	1060	1030	434	51	535	805	230	175

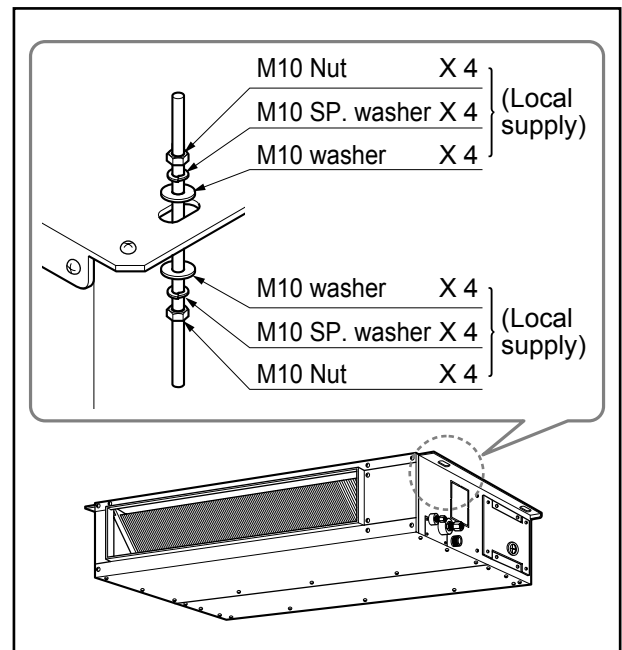
- Install the unit leaning to a drainage hole side as a figure for easy water drainage.



CASE 2

POSITION OF CONSOLE BOLT

- A place where the unit will be leveled and that can support the weight of the unit.
- A place where the unit can withstand its vibration.
- A place where service can be easily performed.



- BP chassis

Install the unit above the ceiling correctly.

CASE 1

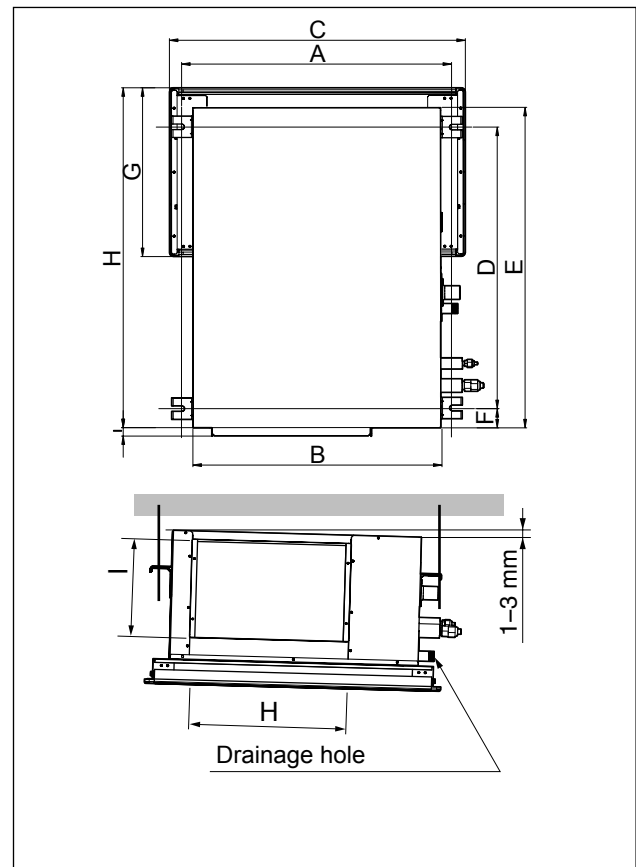
POSITION OF SUSPENSION BOLT

- Apply a joint-canvas between the unit and duct to absorb unnecessary vibration.
- Apply a filter Accessory at air return hole.

(Unit:mm)

Dimension	A	B	C	D	E	F	G	H	I	J	K
Capacity											
9k,12k	633	580	695	660	750	45	369	797	20	232	372

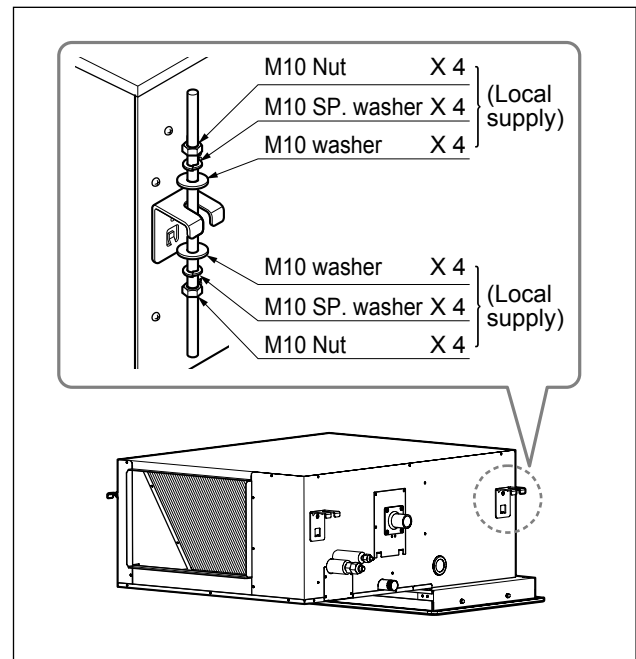
- Install the unit leaning to a drainage hole side as a figure for easy water drainage.



CASE 2

POSITION OF CONSOLE BOLT

- A place where the unit will be leveled and that can support the weight of the unit.
- A place where the unit can withstand its vibration.
- A place where service can be easily performed.

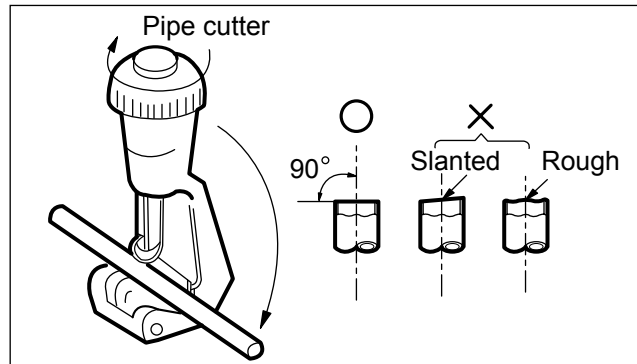


Piping and Drainage of Indoor Unit

1. Preparation of pipings

1) Cut the pipes and the cable.

- Use the accessory piping kit or the pipes purchased locally.
- Measure the distance between the indoor and the outdoor unit.
- Cut the pipes a little longer than the measured distance.
- Cut the cable 1.5m longer than the length of the pipe.

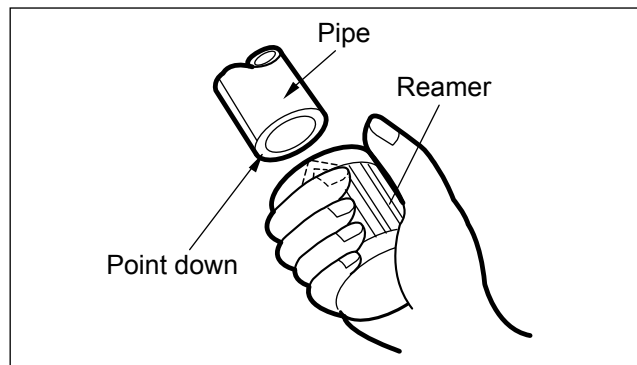


2) Remove burrs.

- Remove burrs from cut edges of pipes.
- Turn the pipe end toward down to avoid the metal powder entering the pipe.

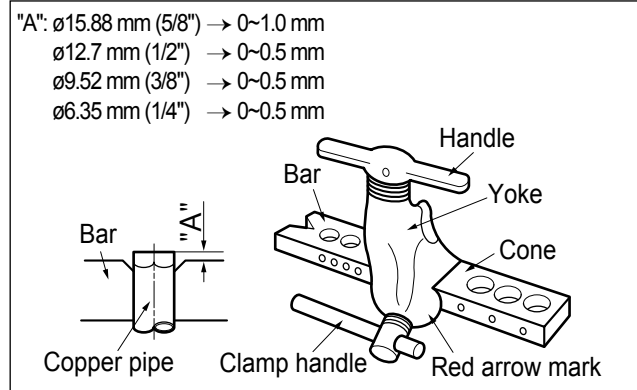


CAUTION: If burrs are not removed, they may cause a gas leakage.

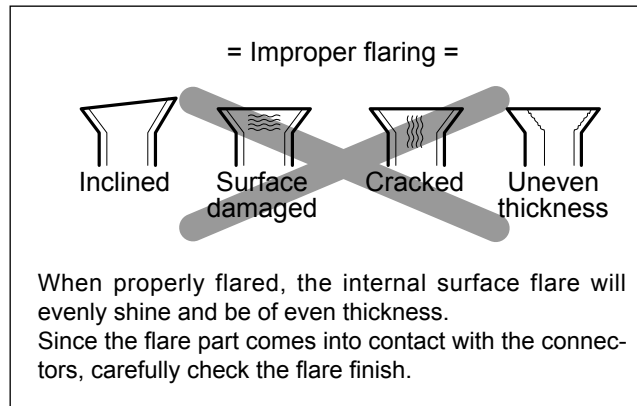


3) Flaring the pipes.

- Insert the flare nuts, mounted on the connection ports of both indoor and outdoor unit, onto the copper pipes. Some refrigerant gas may leak, when the flare nuts are removed from the indoor unit, as some gas is charged to prevent the inside of the pipe from rusting.
- Fit the copper pipe end into the Bar of flare tool about 0~0.5mm higher. (See illustration)
- Flare the pipe ends.



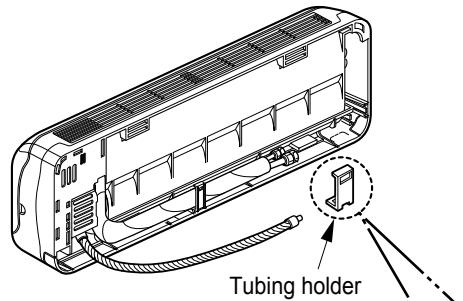
4) Tape the flaring portion to protect it from the dust or damages.



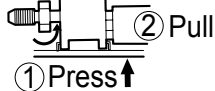
Connection of indoor unit piping

1. Split Type Indoor Unit

- Preparing the indoor unit's piping and drain hose for installation through the wall.
- Remove the plastic tubing retainer(see illustration below) and pull the tubing and drain hose away from chassis.
- Replace the plastic tubing holder in the original position.

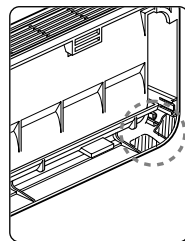


To remove the holder, press the bottom of chassis near the holder upward and pull the tab out of its hole.



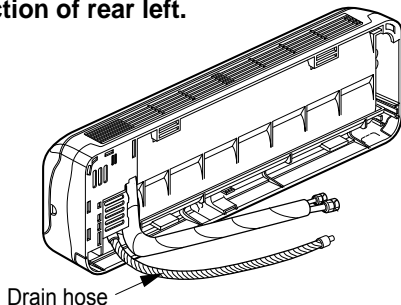
CAUTION

When install, make sure that the remaining parts must be removed clearly so as not to damage the piping and drain hose, especially power cord and connecting cable.



For left rear piping

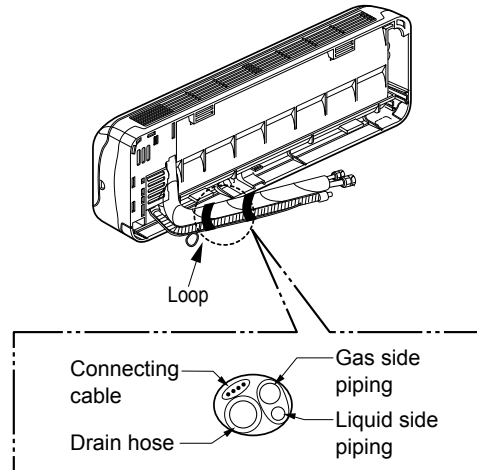
1. Route the indoor tubing and the drain hose in the direction of rear left.



2. Insert the connecting cable into the indoor unit from the outdoor unit through the piping hole.

- Do not connect the cable to the indoor unit.
- Make a small loop with the cable for easy connection later.

3. Tape the tubing, drain hose and the connecting cable. Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause drain pan to overflow inside the unit.

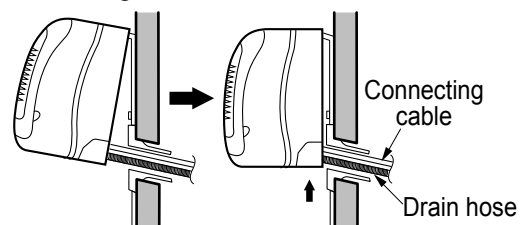


NOTE: If the drain hose is routed inside the room, insulate the hose with an insulation material* so that dripping from "sweating"(condensation) will not damage furniture or floors.

*Foamed polyethylene or equivalent is recommended.

4. Indoor unit installation

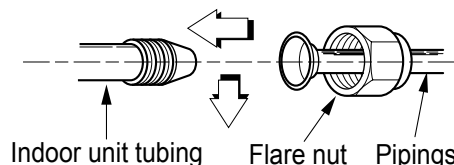
- Hook the indoor unit onto the upper portion of the installation plate.(Engage the two hooks of the rear top of the indoor unit with the upper edge of the installation plate.) Ensure that the hooks are properly seated on the installation plate by moving it left and right.



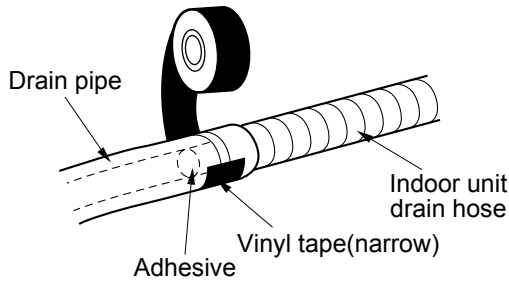
Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots(clicking sound).

5. Connecting the pipings to the indoor unit and drain hose to drain pipe.

- Align the center of the pipings and sufficiently tighten the flare nut by hand.

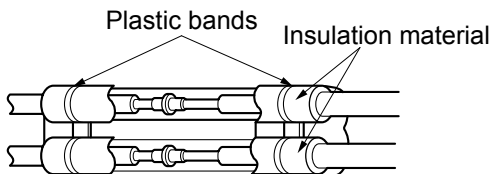


- When extending the drain hose at the indoor unit, install the drain pipe.

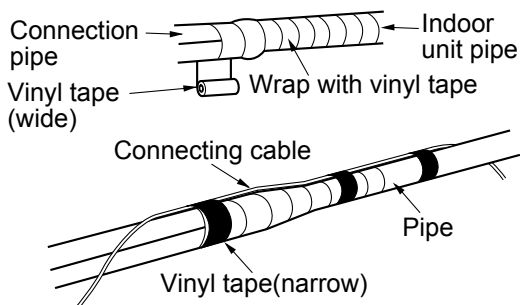


6. Wrap the insulation material around the connecting portion.

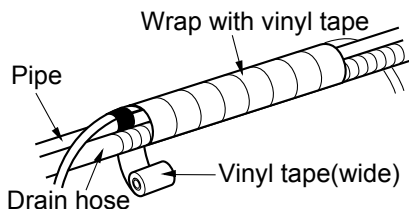
- Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there is no gap.



- Wrap the area which accommodates the rear piping housing section with vinyl tape.

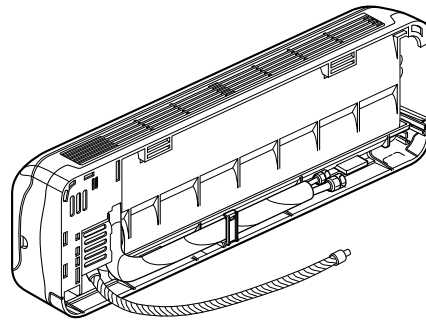


- Bundle the piping and drain hose together by wrapping them with vinyl tape over the range within which they fit into the rear piping housing section.

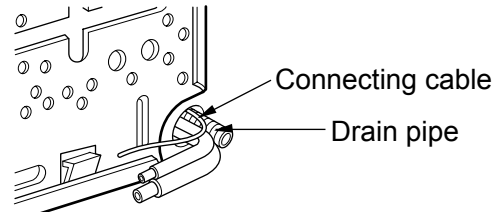


For right rear piping

1. Route the indoor tubing and the drain hose to the required piping hole position.



2. Insert the piping, drain hose and the connecting cable into the piping hole.

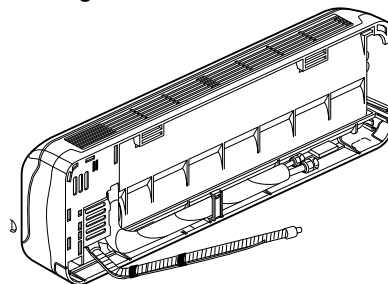


3. Insert the connecting cable into the indoor unit.

- Don't connect the cable to the indoor unit.
- Make a small loop with the cable for easy connection later.

4. Tape the drain hose and the connecting cable.

- Connecting cable

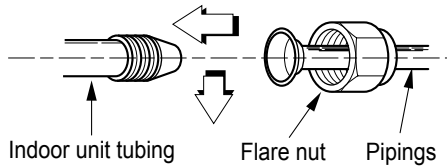


5. Indoor unit installation

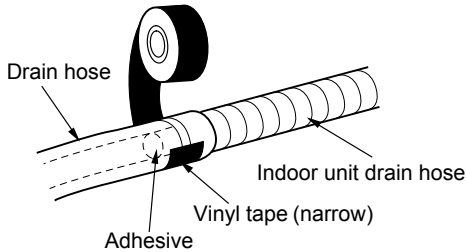
- Hang the indoor unit from the hooks at the top of the installation plate.
- Insert the spacer etc. between the indoor unit and the installation plate and separate the bottom of the indoor unit from the wall.

6) Connecting the pipings to the indoor unit and the drain hose to drain pipe.

- Align the center of the pipings and sufficiently tighten the flare nut by hand.

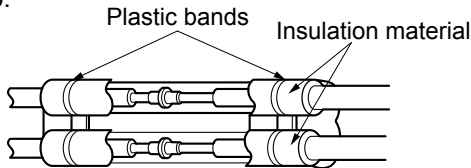


- When extending the drain hose at the indoor unit, install the drain pipe.

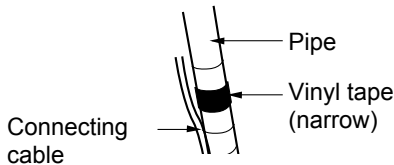
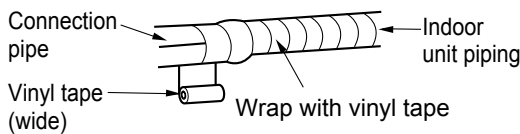


7) Wrap the insulation material around the connecting portion.

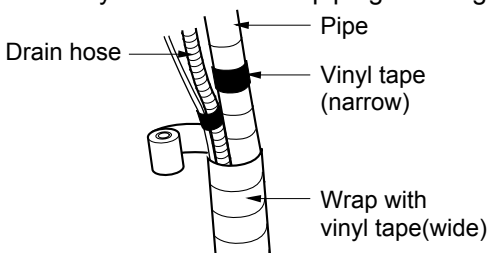
- Overlap the connection pipe heat insulation and the indoor unit pipe heat insulation material. Bind them together with vinyl tape so that there is no gap.



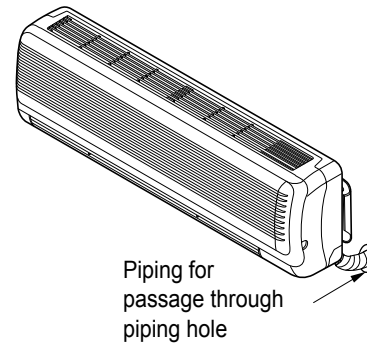
- Wrap the area which accommodates the rear piping housing section with vinyl tape.



- Bundle the piping and drain hose together by wrapping them with cloth tape over the range within which they fit into the rear piping housing section.

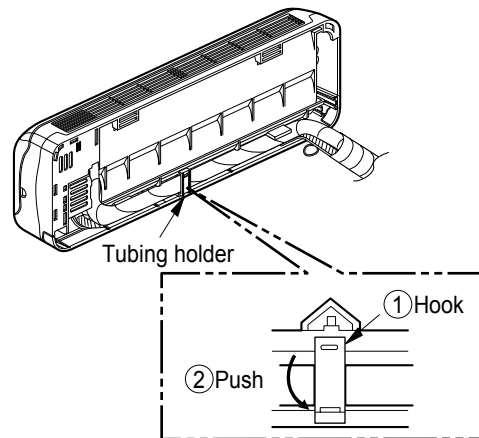


8) Reroute the pipings and the drain hose across the back of the chassis.



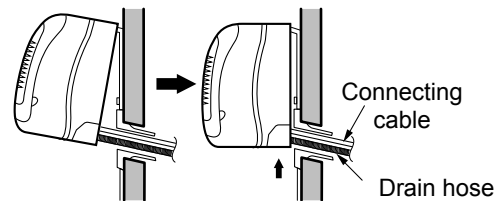
9) Set the pipings and the drain hose to the back of the chassis with the tubing holder.

- Hook the edge of tubing holder to tap on chassis and push the bottom of tubing holder to be engaged at the bottom of chassis.



10) Indoor unit installation

- Remove the spacer.
- Ensure that the hooks are properly seated on the installation plate by moving it left and right.



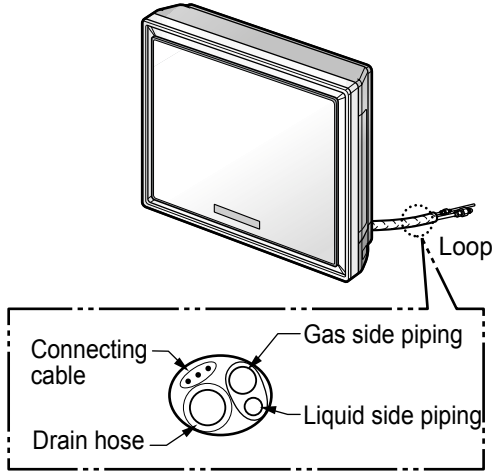
Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots (clicking sound).

2. Art Cool Type Indoor Unit

- Preparing the indoor unit's piping and drain hose for installation through the wall.

1) Route the indoor tubing and the drain hose in the direction of rear left or right.

2) Tape the tubing, drain hose, and the connecting cable. Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause drain pan to overflow inside the unit.

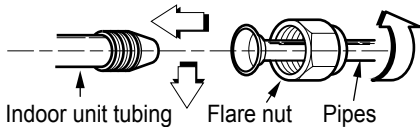


NOTE: If the drain hose is routed inside the room, insulate the hose with an insulation material* so that dripping from "sweating"(condensation) will not damage furniture or floors.

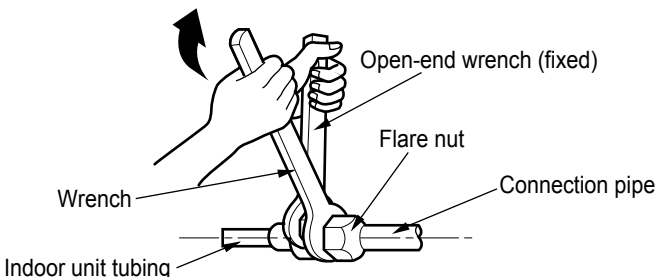
*Foamed polyethylene or equivalent is recommended.

3) Connecting the pipings to the indoor unit and drain hose to drain pipe.

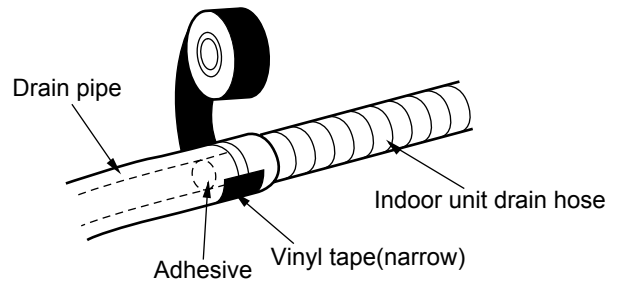
- Align the center of the pipes and sufficiently tighten the flare nut by hand.



- Tighten the flare nut with a wrench.

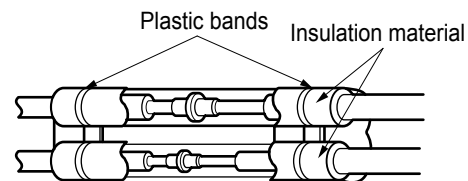


- When extending the drain hose at the indoor unit, install the drain pipe.

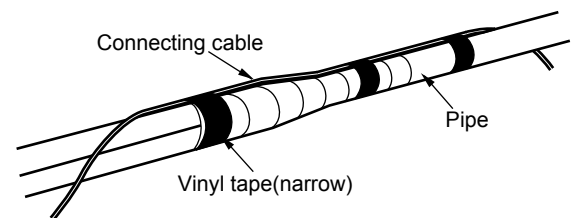
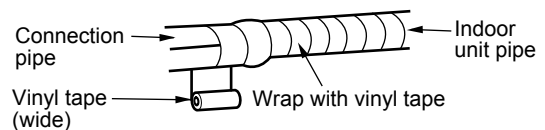


4) Wrap the insulation material around the connecting portion.

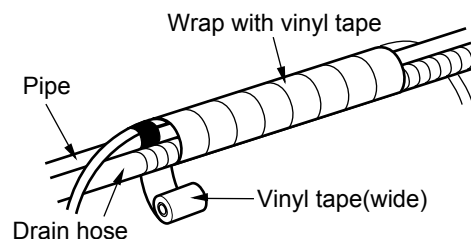
- Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there is no gap.



- Wrap the area which accommodates the rear piping housing section with vinyl tape.

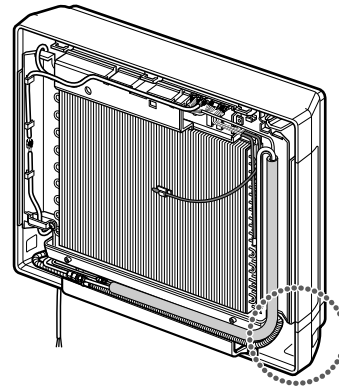


- Bundle the piping and drain hose together by wrapping them with vinyl tape for enough to cover where they fit into the rear piping housing section.

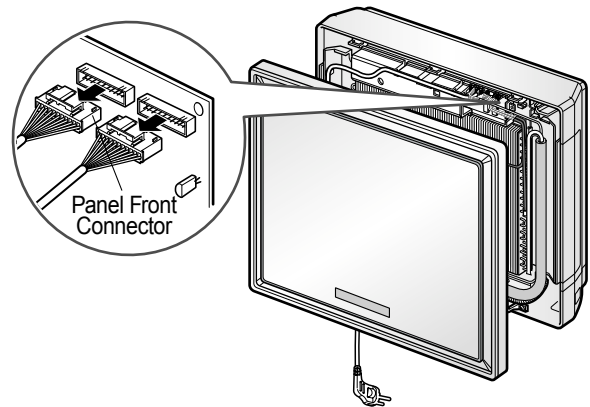


■ Panel Assembly

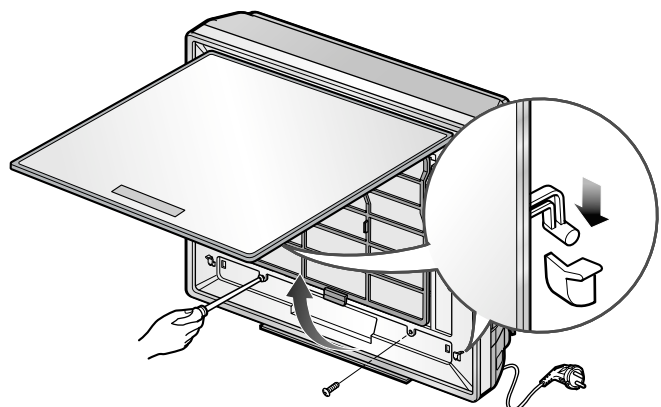
1. First, Check the side cover assembly exactly, Fix power cord in the bottom groove of cover side left.



2. Assemble connecting lead wire with controller and first fix the upper part of panel front, then match the lower part of panel front



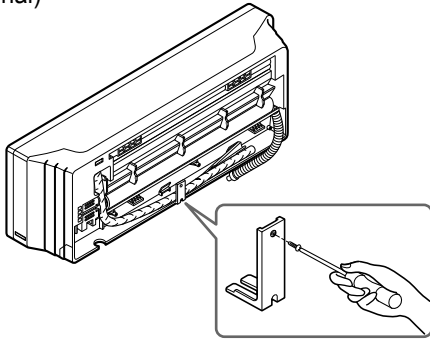
3. Drive two screws.



3. Art Cool Deluxe Type Indoor Unit

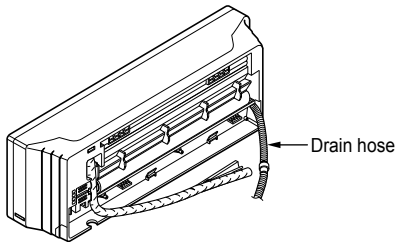
Connection of piping Indoor

- Preparing the indoor unit's piping and drain hose for installation through the wall.
- Remove the plastic tubing retainer(see illustration below) and pull the tubing and drain hose away from chassis.
- Replace the plastic tubing holder in the original position. (Optional)



For right rear piping

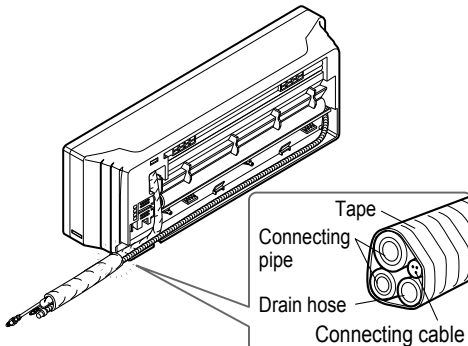
1. Route the indoor tubing and the drain hose in the direction of rear right.



2. Insert the connecting cable into the indoor unit from the outdoor unit through the piping hole.

- Do not connect the cable to the indoor unit.
- Make a small loop with the cable for easy connection later.

3. Tape the tubing, drain hose, and the connecting cable. Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause drain pan to overflow inside the unit.

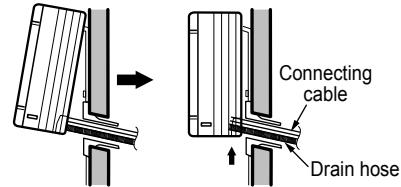


NOTE: If the drain hose is routed inside the room, insulate the hose with an insulation material* so that dripping from "sweating"(condensation) will not damage furniture or floors.

*Foamed polyethylene or equivalent is recommended.

4. Indoor unit installation

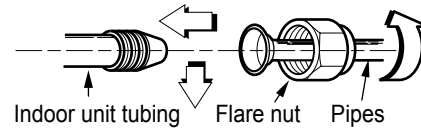
- Hook the indoor unit onto the upper portion of the installation plate.(Engage the two hooks of the rear top of the indoor unit with the upper edge of the installation plate.) Ensure that the hooks are properly seated on the installation plate by moving it left and right.



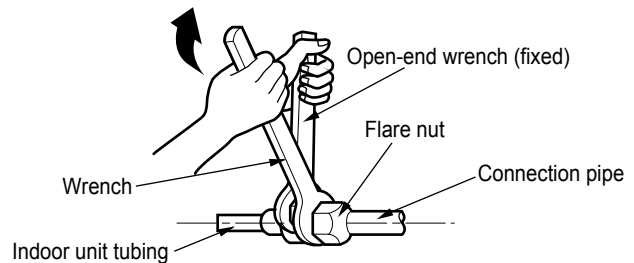
Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots(clicking sound).

4. Connecting the pipings to the indoor unit and drain hose to drain pipe.

- Align the center of the pipes and sufficiently tighten the flare nut by hand.



- Tighten the flare nut with a wrench.

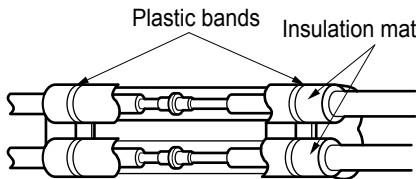


Outside diameter		Torque kg-m
mm	inch	
Ø6.35	1/4	1.8
Ø9.52	3/8	4.2
Ø12.7	1/2	5.5

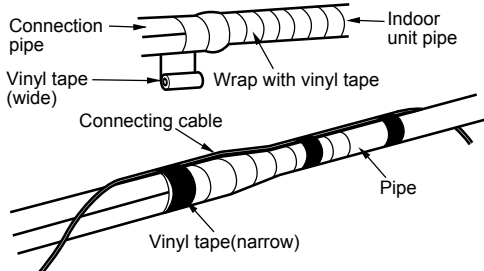
- When extending the drain hose at the indoor unit, install the drain pipe.

5. Wrap the insulation material around the connecting portion.

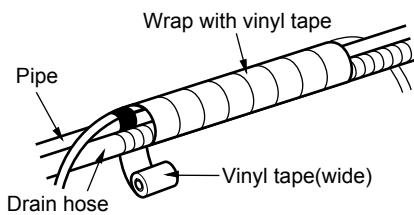
- Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there is no gap.



- Wrap the area which accommodates the rear piping housing section with vinyl tape.

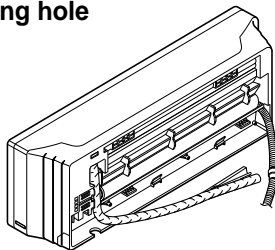


- Bundle the piping and drain hose together by wrapping them with vinyl tape for enough to cover where they fit into the rear piping housing section.

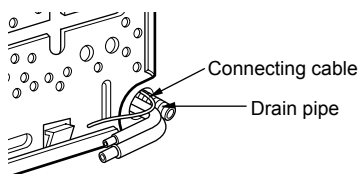


For left rear piping

1. Route the indoor tubing and the drain hose to the required piping hole position.



2. Insert the piping, drain hose, and the connecting cable into the piping hole.

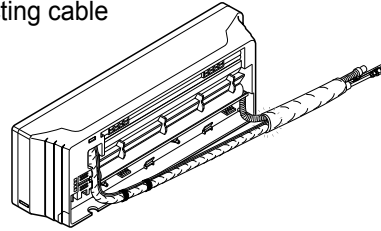


3. Insert the connecting cable into the indoor unit.

- Don't connect the cable to the indoor unit.
- Make a small loop with the cable for easy connection later.

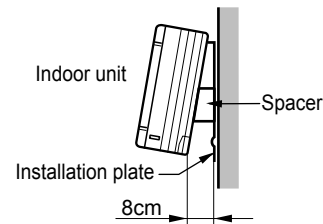
4. Tape the drain hose and the connecting cable.

- Connecting cable



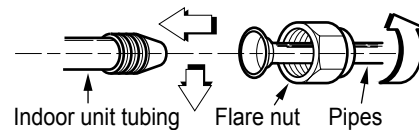
5. Indoor unit installation

- Hang the indoor unit from the hooks at the top of the installation plate.
- Insert the spacer etc. between the indoor unit and the installation plate and separate the bottom of the indoor unit from the wall.

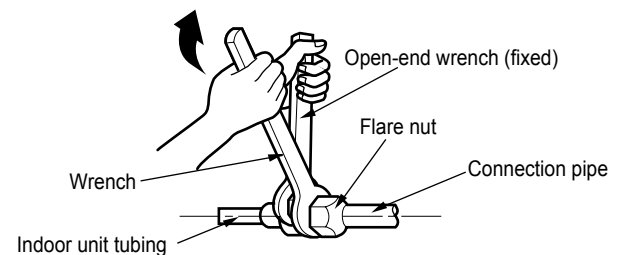


6. Connecting the pipings to the indoor unit and the drain hose to drain pipe.

- Align the center of the pipes and sufficiently tighten the flare nut by hand.

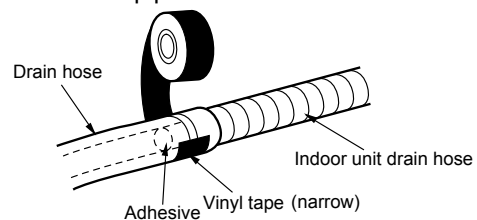


- Tighten the flare nut with a wrench.



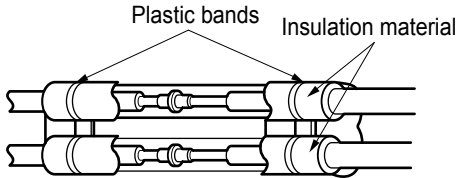
Outside diameter		Torque kg·m
mm	inch	
Ø6.35	1/4	1.8
Ø9.52	3/8	4.2
Ø12.7	1/2	5.5

- When extending the drain hose at the indoor unit, install the drain pipe.

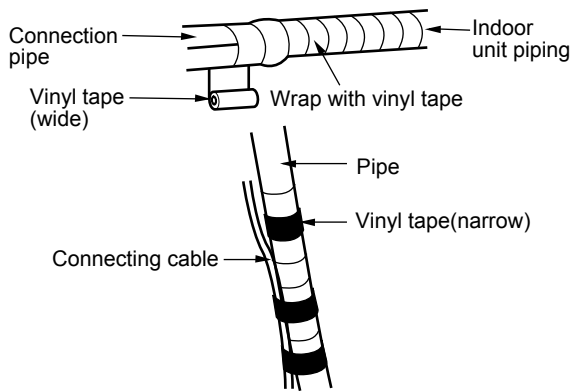


7. Wrap the insulation material around the connecting portion.

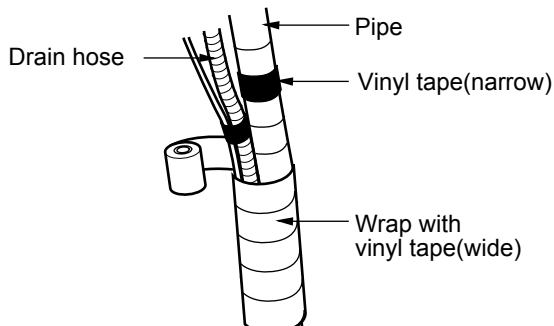
- Overlap the connection pipe heat insulation and the indoor unit pipe heat insulation material. Bind them together with vinyl tape so that there is no gap.



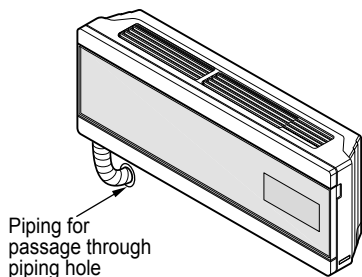
- Wrap the area which accommodates the rear piping housing section with vinyl tape.



- Bundle the piping and drain hose together by wrapping them with cloth tape over the range within which they fit into the rear piping housing section.

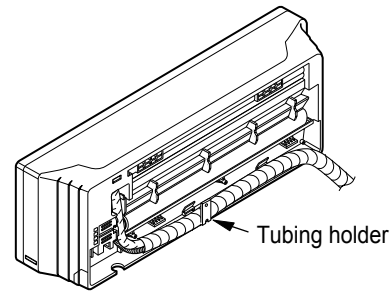


8. Reroute the pipings and the drain hose across the back of the chassis.



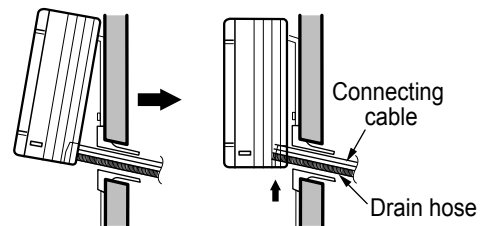
9. Set the pipings and the drain hose to the back of the chassis with the tubing holder.

- Hook the edge of tubing holder to tap on chassis and push the bottom of tubing holder to be engaged at the bottom of chassis.



10. Indoor unit installation

- Remove the spacer.
- Ensure that the hooks are properly seated on the installation plate by moving it left and right.



Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots (clicking sound).

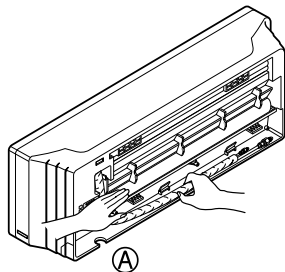
CAUTION

Installation Information (For left piping)

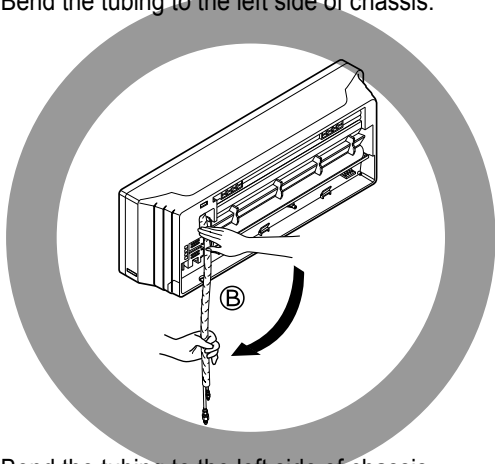
• **Good case**

For left piping. Follow the instruction below.

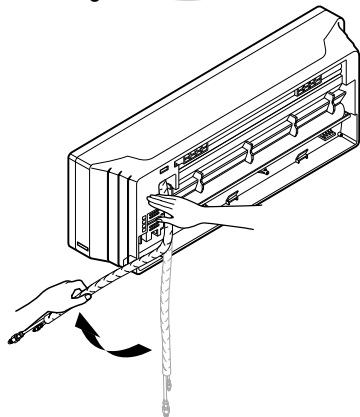
- Press on the upper side of clamp. (A)



- Bend the tubing to the left side of chassis.

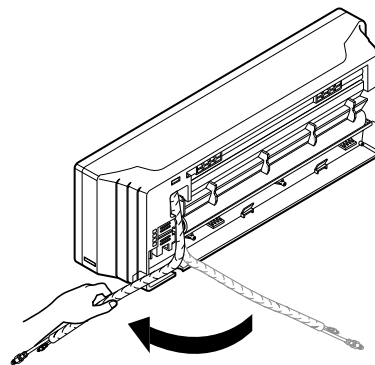
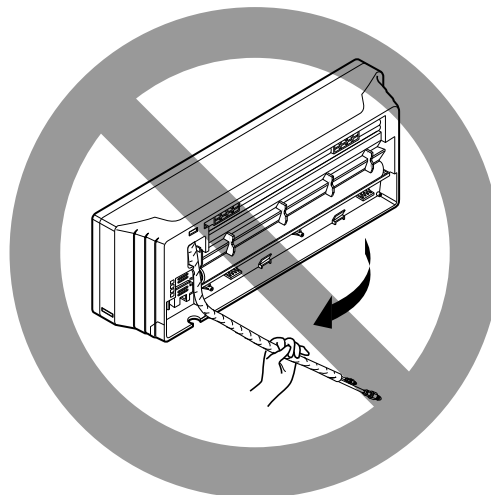
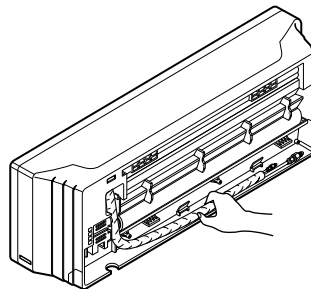


- Bend the tubing to the left side of chassis.



• **Bad case**

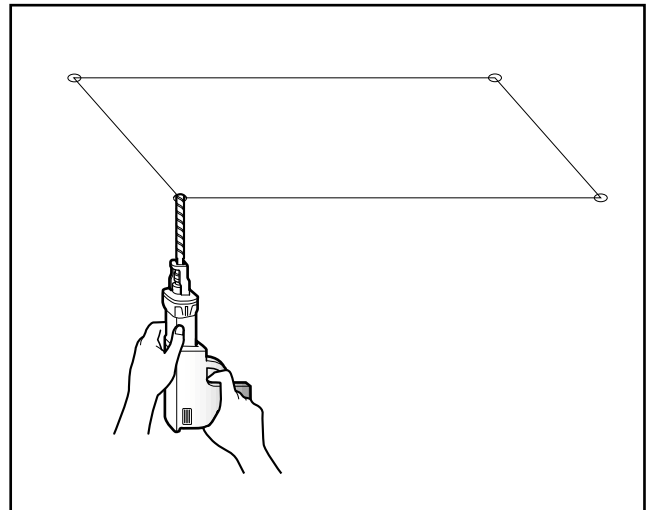
- Following bending type from right to left could cause problem of pipe damage.



4. Duct Type Indoor Unit

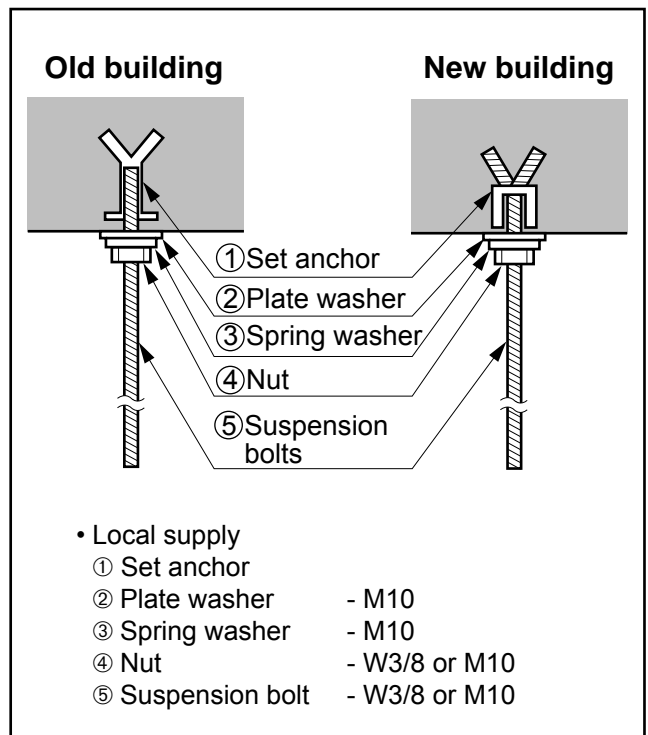
1) Indoor Unit Installation

- Select and mark the position for fixing bolts.
- Drill the hole for set anchor on the face of ceiling.



- Insert the set anchor and washer onto the suspension bolts for locking the suspension bolts on the ceiling.
- Mount the suspension bolts to the set anchor firmly.
- Secure the installation plates onto the suspension bolts (adjust level roughly) using nuts, washers and spring washers.

CAUTION: Tighten the nut and bolt to prevent unit falling.



5. CVT Type Indoor Unit - VB chassis

■ Before Installing, prepare Installation Plates

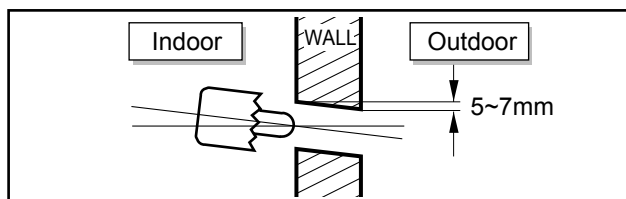
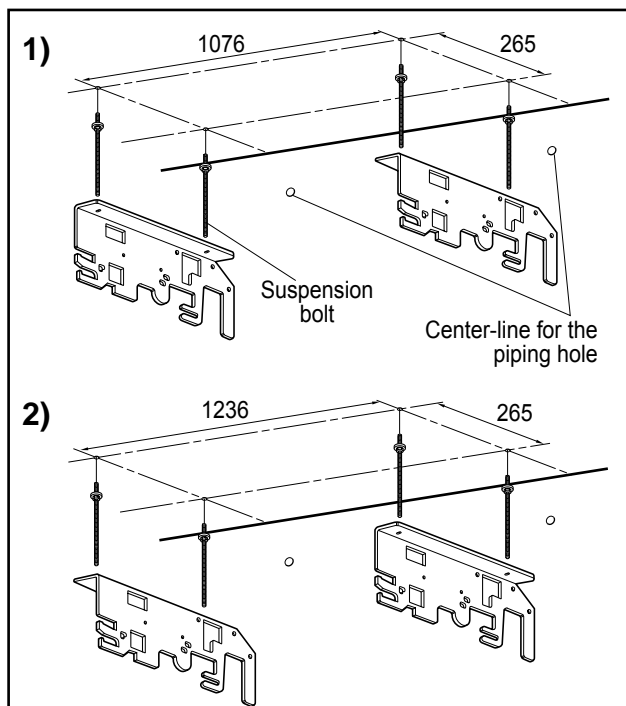
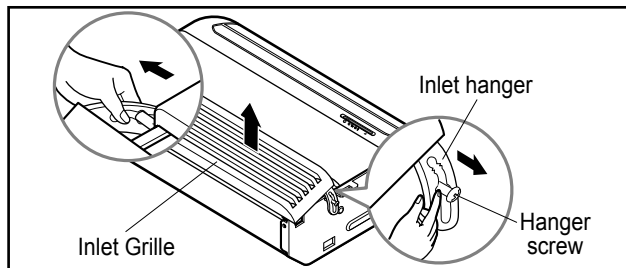
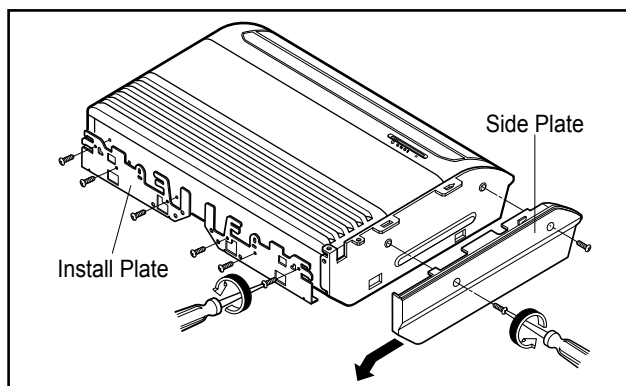
- 'Installation Plates' are attached at the bottom of indoor unit.
Detach them by removing each 3 screws at both sides.
- Detach 'Side Plate (R,L)' by removing each 2 screws on both sides.
- Pull the upper right and left side of 'Inlet Grille' to the front, and it will stop at slightly tilted position.
- Unhook the 'Inlet hanger' from the 'Hanger screw' on the both left and right side.
- Detach the 'Inlet Grille' from the Indoor Unit.

1) Installation on the ceiling

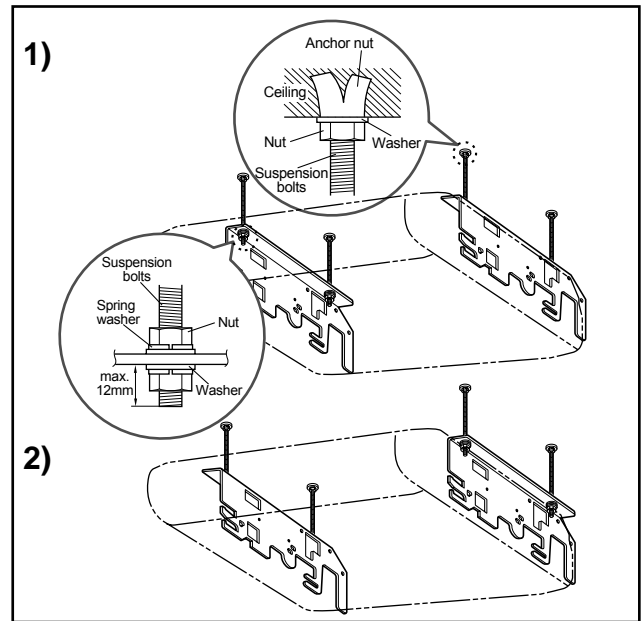
- Measure and mark the position for the Suspension bolts and the piping hole.
- Drill the hole for anchor nut on the ceiling.

※ Before secure the Installation Plates, select the bent direction of the Installation Plate to the inside or the outside according to the installation circumstances.

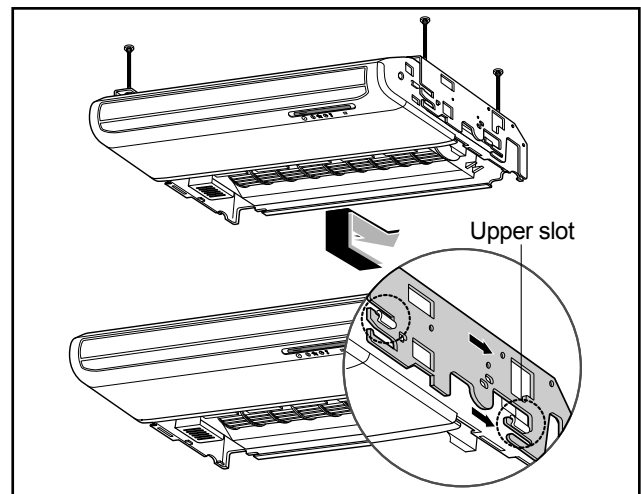
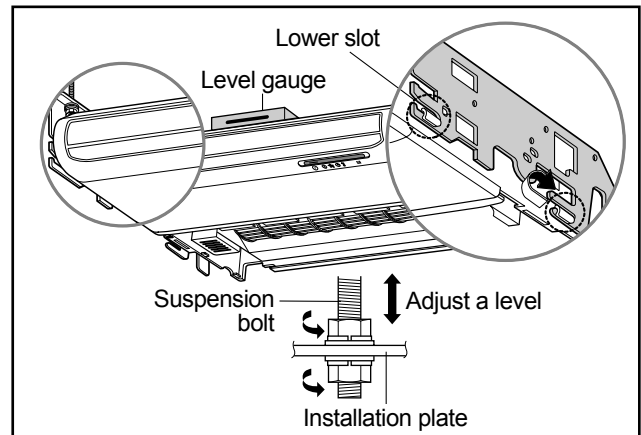
- Drill the piping hole on the wall slightly tilted to the outdoor side using a $\varnothing 70$ hole-core drill.



- Insert the nuts and washer onto the suspension bolts for locking the suspension bolts on the ceiling.
- Mount the suspension bolts to the anchor-nuts firmly.
- Secure the Installation plates onto the Suspension bolts (adjust level roughly.) using nuts, washers and spring washers.



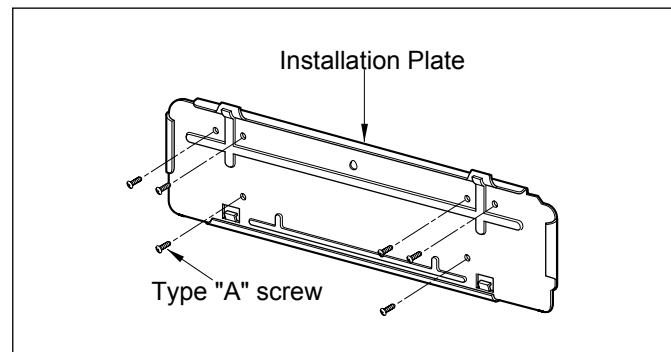
- Engage 2 hooks on the both left and right side of the unit to the lower slot of Installation Plates.
- Adjust a level with a level gauge on the direction of left-right, back-forth by adjusting suspension bolts.
- Move the hooks on the unit to the upper slot of Installation Plates. Then the unit will be declined to the bottomsides so as to drain well.



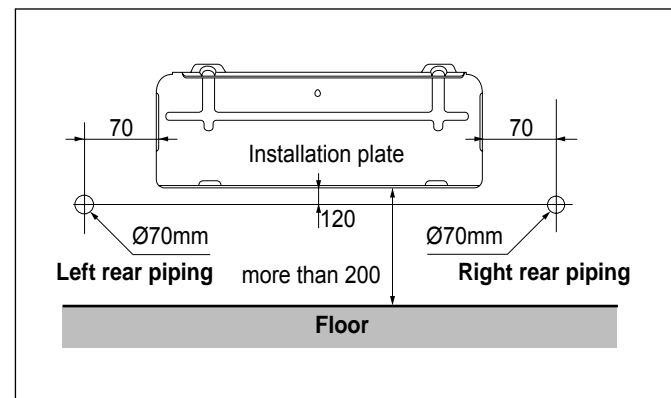
- VE chassis

The wall you select should be strong and solid enough to prevent vibration

1. Mount the installation plate on the wall with type "A" screws. If mounting the unit on a concrete wall, use anchor bolts.
- Mount the installation plate horizontally by aligning the centerline using a level.



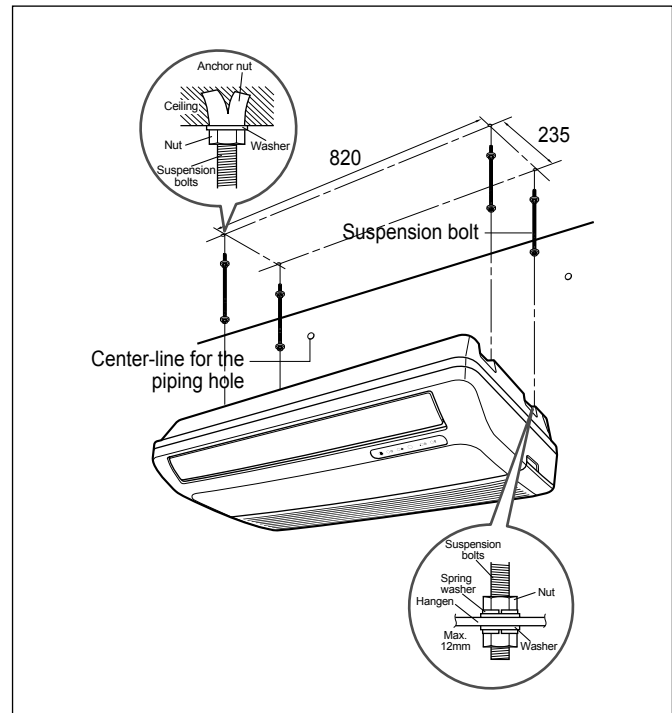
2. Measure the wall and mark the centerline. It is also important to use caution concerning the location of the installation plate—routing of the wiring to power outlets is through the walls typically. Drilling the hole through the wall for piping connections must be done safely.



Mounting the anchor Nut & Bolt (Ceiling Mounting)

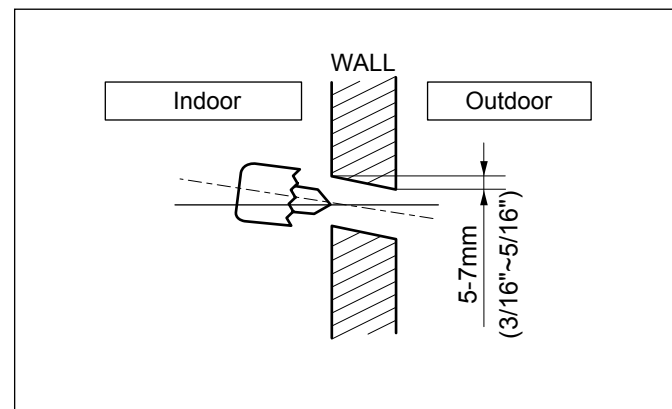
- Prepare 4 suspension bolts (Each bolts length should be same.)
- Measure and mark the position for the Suspension bolts and the piping hole.
- Insert the nuts and washer onto the suspension bolts for locking the suspension bolts on the ceiling.
- Mount the suspension bolts to the anchor-nuts firmly.

- Secure the Installation plates onto the Suspension bolts (adjust level roughly.) using nuts, washers and spring washers.
- Engage 2 hooks on the both left and right side of the unit to the lower slot of Installation Plates.
- Adjust a level with a level gauge on the direction of left-right, back-forth by adjusting suspension bolts.
- Move the hooks on the unit to the upper slot of Installation Plates. Then the unit will be declined to the bottomsides so as to drain well.



Drill a Hole in the Wall

- Drill the piping hole with a $\varnothing 70\text{mm}$ hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.

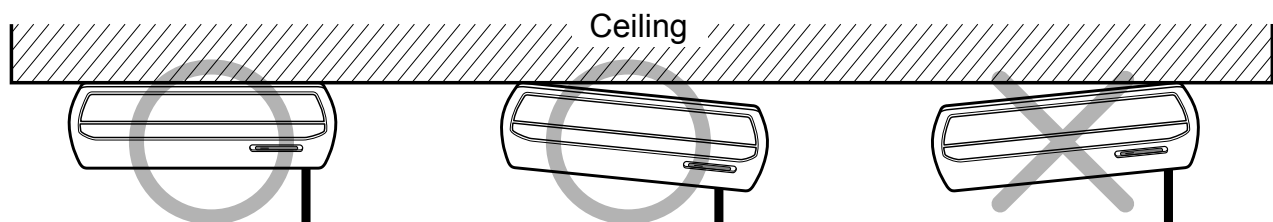
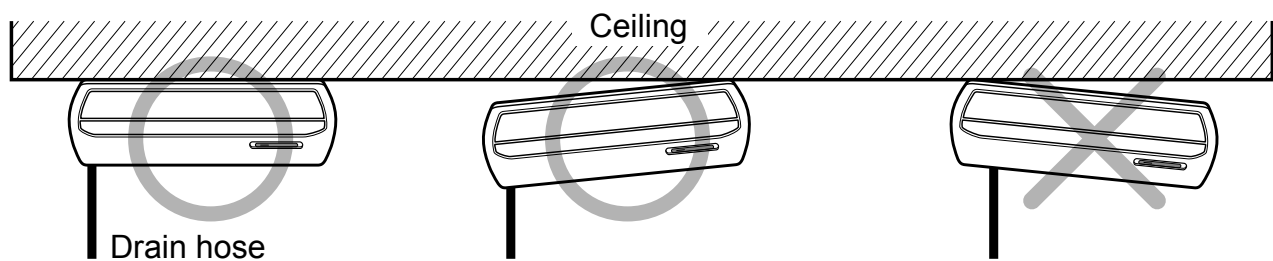


**CAUTION: Installation Information For Declination**

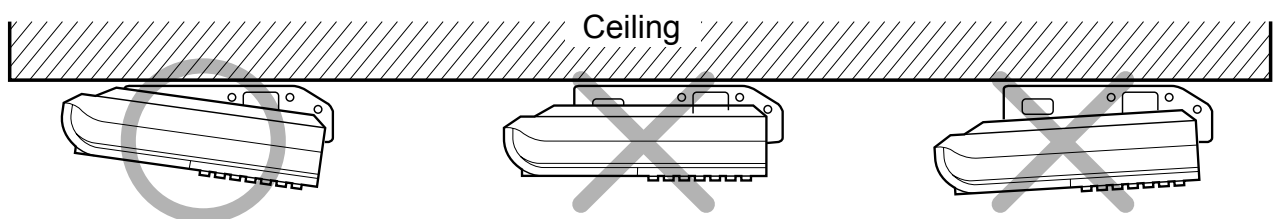
1. **Install declination** of the indoor unit is very **important for the drain** of the convertible type air conditioner.
2. Minimum thickness of the insulation for the connecting pipe shall be 7mm.
3. If the Installation Plates are fixed to horizontal line, the indoor unit after installing will be declined to the bottomside.

Front of view

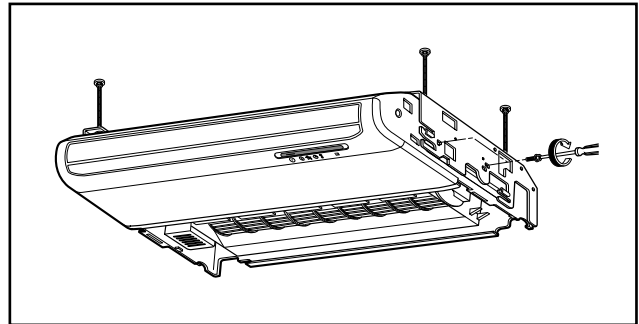
- The unit must be horizontal or declined to the drain hose connected when finished installation.

**Side of view**

- The unit must be declined to the bottomside of the unit when finished installation.

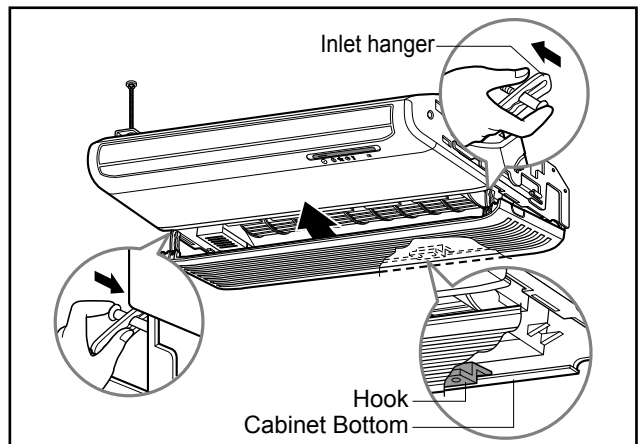


- Secure the unit to the Installation Plates with four M8 bolts and washers.

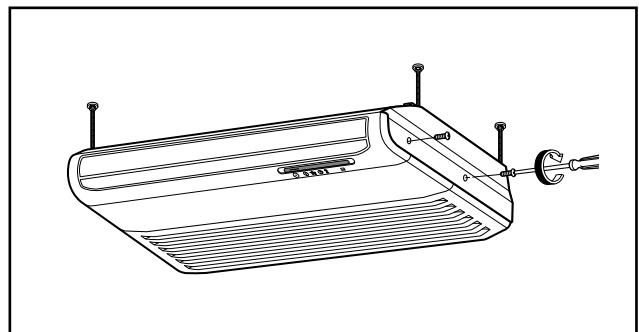
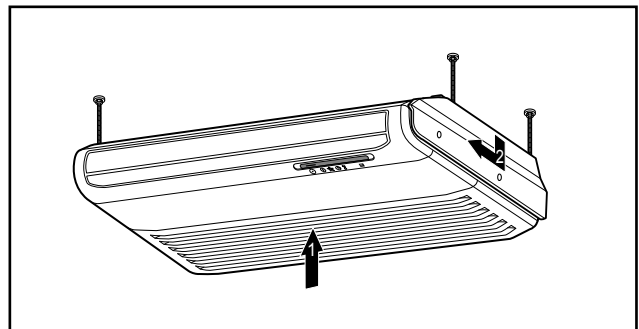


- Before working, refer to "Connecting pipe and cable to Indoor Unit".

- Hook up the Inlet Grille Hook to the cabinet.
- Hang the Inlet Hanger to the screw.

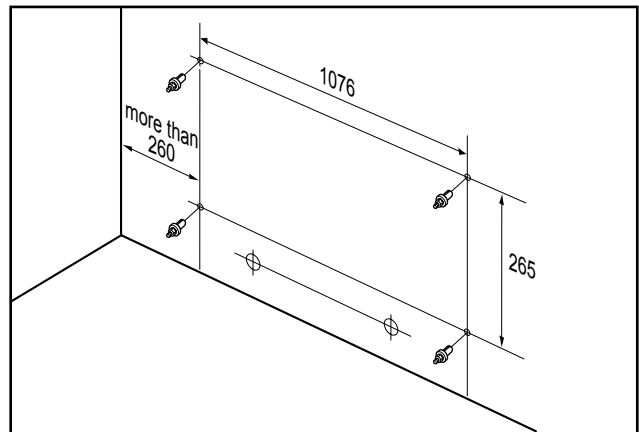


- Fit the projection hooks of the side plates to the 'Side Panel' and the 'Front Panel' by lifting it.
- Fasten the screws.

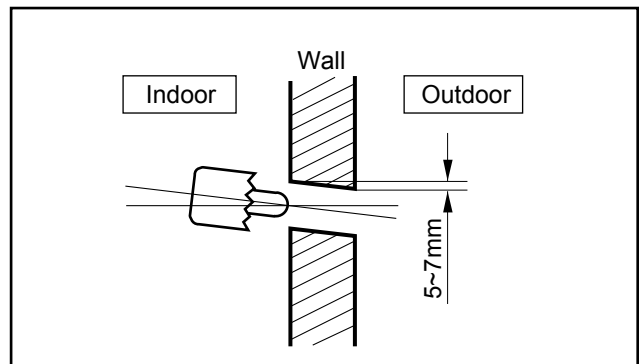


2) Installation on the Wall

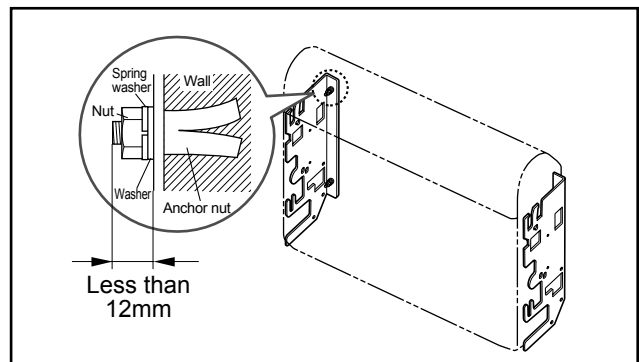
- Select and mark the position for fixing bolts and piping hole.
Decide the position for fixing bolts slightly tilted to the drain direction after considering the direction of drain hose.
- Drill the hole for anchor nut on the wall.



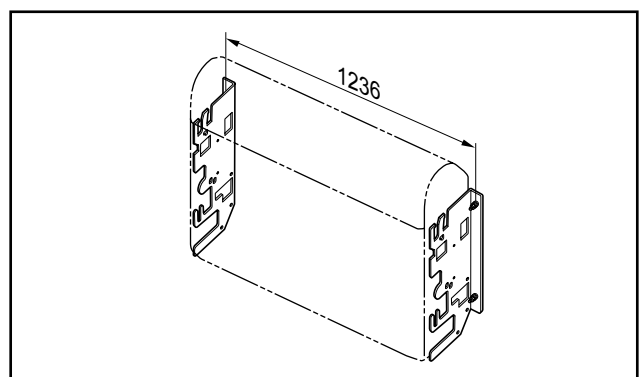
- Drill the piping hole on the wall slightly tilted to the outdoor side using a $\varnothing 70$ hole-core drill.



- Secure the 'Install Plate' onto the wall with four anchor bolts, washers and spring washers.

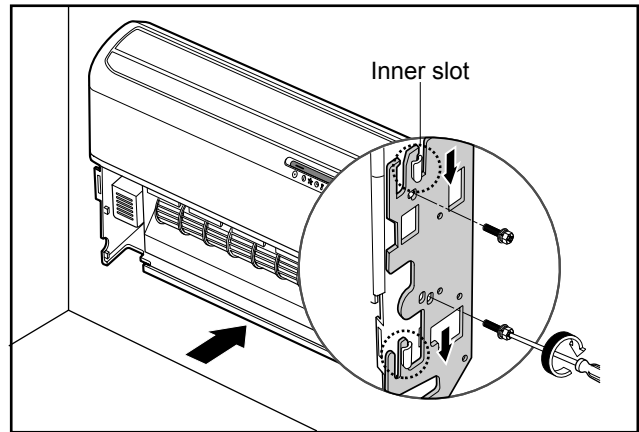


- ※ Before secure the Install Plates, select the bent direction of the 'Install Plate' to the inside or outside according to the installation circumstances.



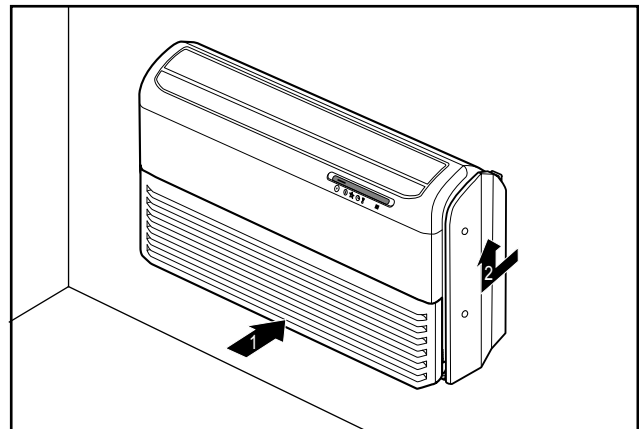
Install the Indoor unit onto Installation Plate.

- Insert 2 hooks on the both left and right side of the unit to the inner slot (wall side) of the Installation Plate.
- Secure the unit to the Installation Plate with four M8 bolts and washers.

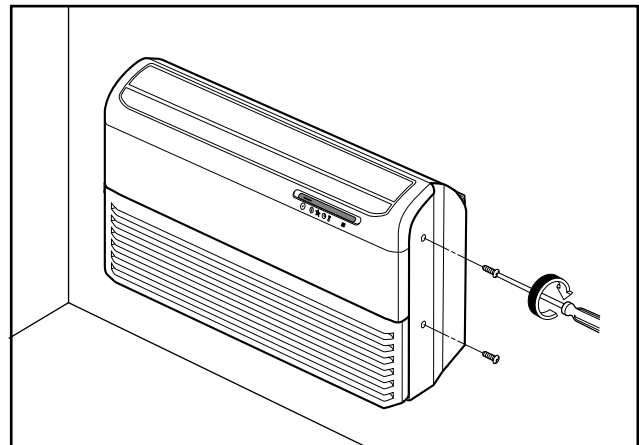


- Before working, refer to "Connecting pipe and cable to Indoor Unit".

- Hook up the Inlet Grille Hook to the cabinet.
- Hang the Inlet Hanger to the screw.



- Fit the projection hooks of the side plates to the 'Side Panel' and the 'Front Panel' by lifting it.
- Fasten the screws.



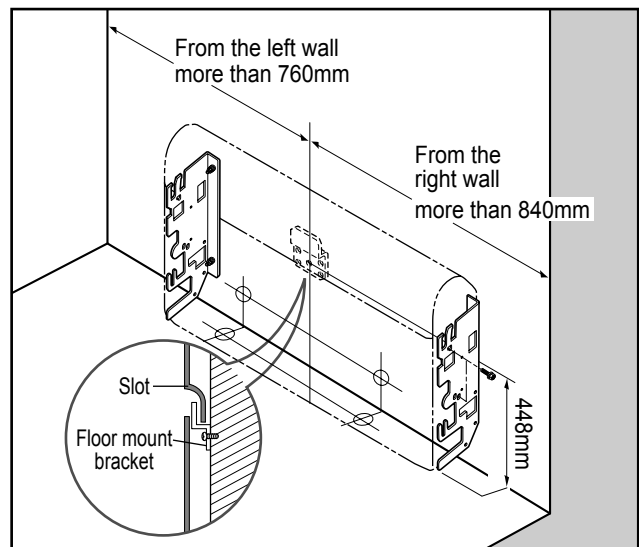
3) Installation on the floor

Installation of Mount Bracket.

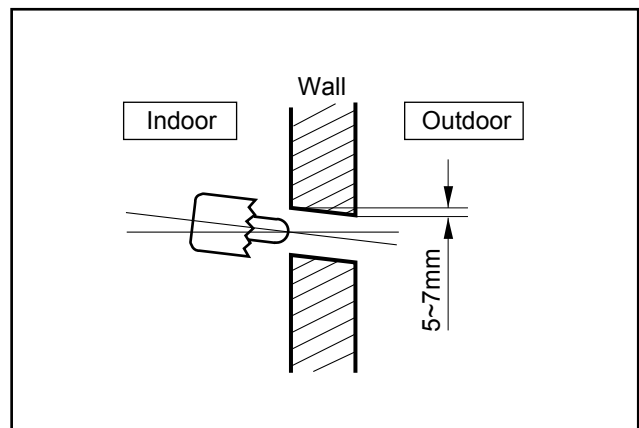
- Select and mark the position for Mount Brackets and the piping hole.
- Drill the hole for the anchor nut on the wall.
- Drill the piping hole using a $\varnothing 70$ hole-core drill.
- Secure the Mount Brackets on the wall with four M4 screws.

Install the indoor unit onto the Mount Brackets.

- Engage the slot at the back of the unit with Mount Bracket.

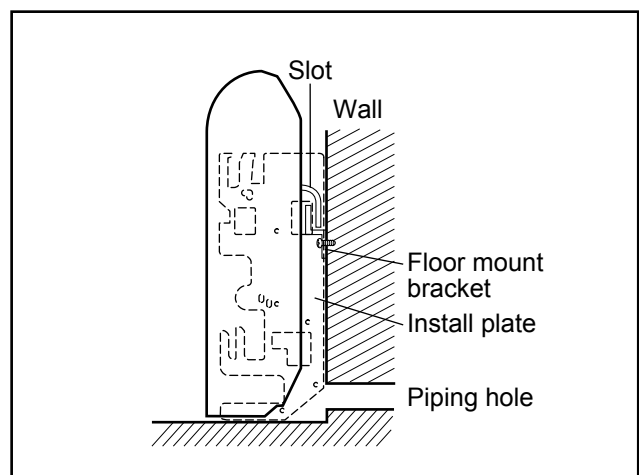


- Drill the piping hole with 70mm dia, hole core drill.
- Piping hole should be slightly slant to the outdoor side.



After Installing, reassemble detached parts.

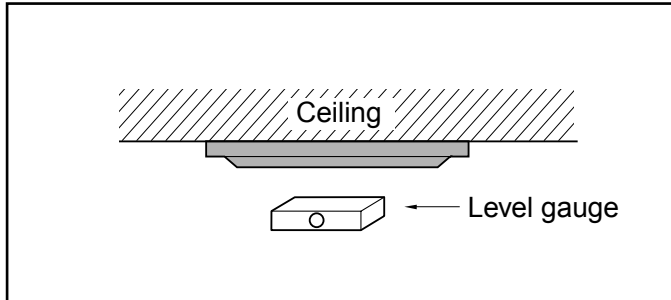
- Hang the 'Inlet Grille' and hook the 'Inlet Hanger' to the Hanger Screw.
- Assemble the 'Side Plates(R,L)' with 2 screws on both left and right side.



6. Ceiling Cassette Type Indoor Unit - TC, TC1 chassis

1) Ceiling opening dimensions and hanging bolt location

- The dimensions of the paper model for installing are the same as those of the ceiling opening dimensions.



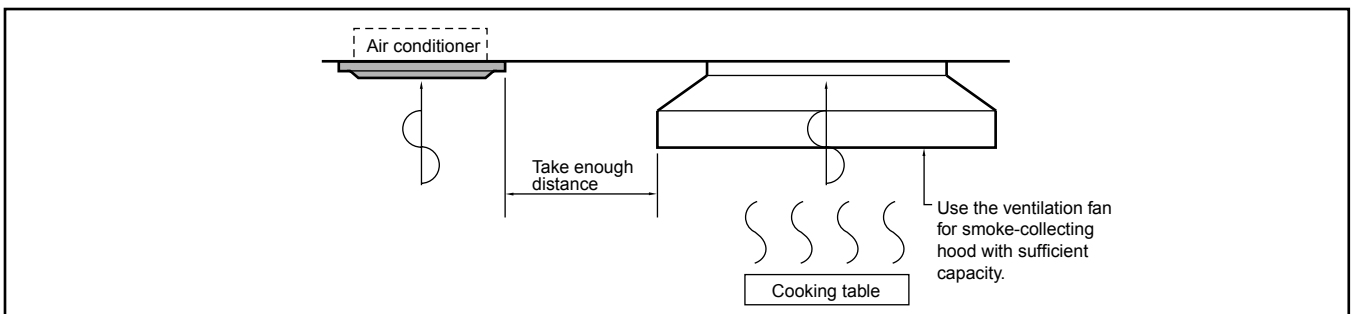
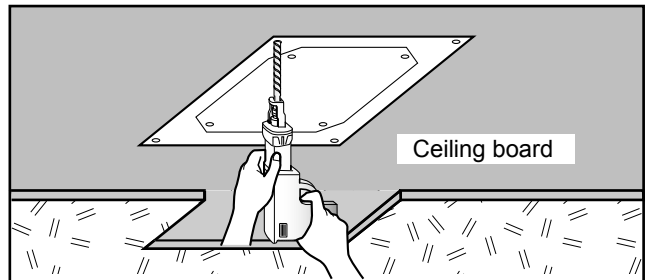
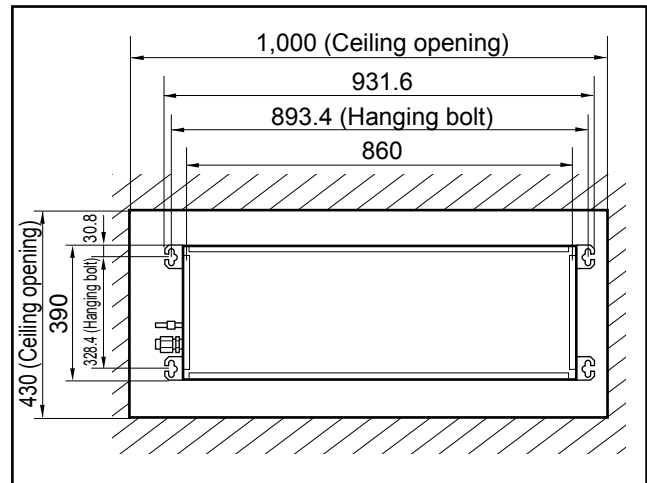
CAUTION

- This air-conditioner uses a drain pump.
- Install the unit horizontally using a level gauge.
- During the installation, care should be taken not to damage electric wires.

- Select and mark the position for fixing bolts and piping hole.
- Decide the position for fixing bolts slightly tilted to the drain direction after considering the direction of drain hose.
- Drill the hole for anchor bolt on the wall.

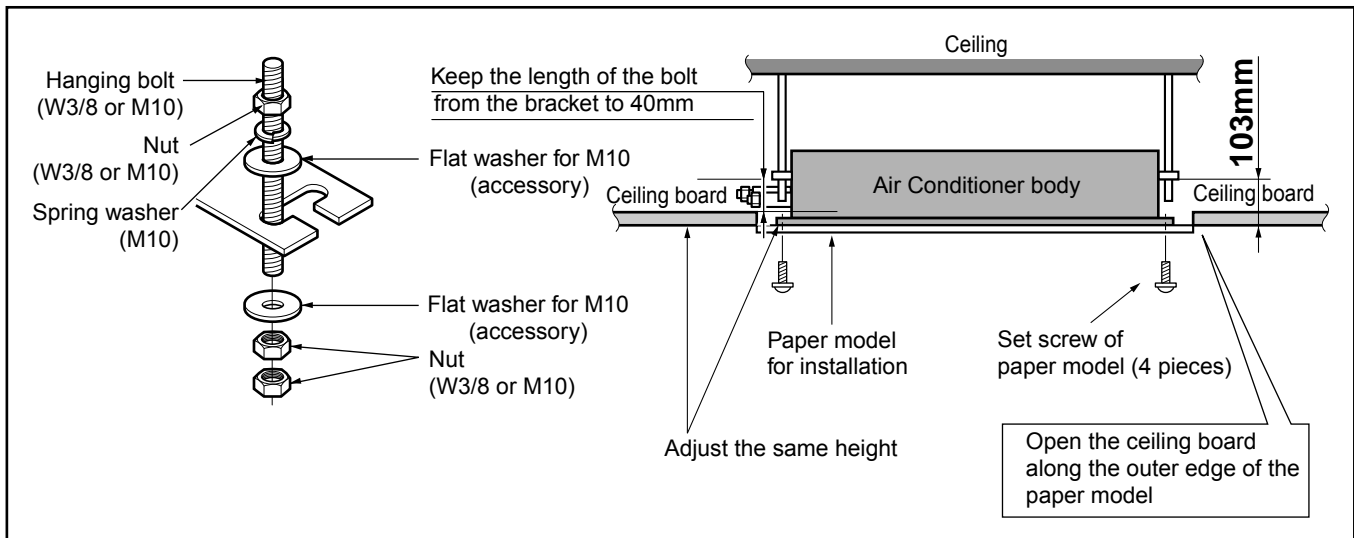
NOTE:

- Avoid the following installation location.
 - Such places as restaurants and kitchen where considerable amount of oil steam and flour is generated. These may cause heat exchange efficiency reduction, or water drops, drain pump mal-function. In these cases, take the following actions;
 - Make sure that ventilation fan is enough to cover all noxious gases from this place.
 - Ensure enough distance from the cooking room to install the air conditioner in such a place where it may not suck oily steam.



- Avoid installing air conditioner in such places where cooking oil or iron powder is generated.
- Avoid places where inflammable gas is generated.
- Avoid place where noxious gas is generated.
- Avoid places near high frequency generators.

2) Indoor Unit Installation



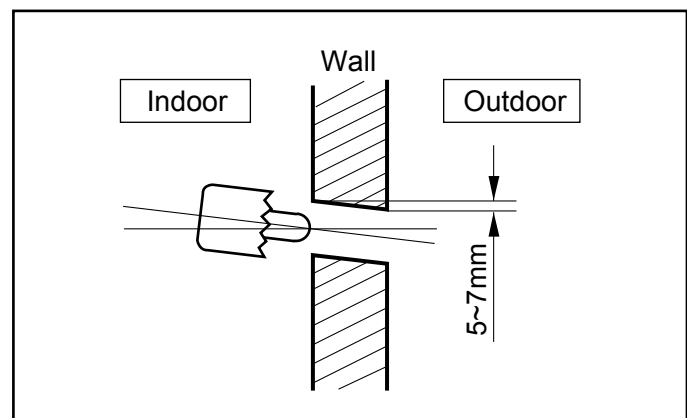
• The following parts are local purchasing.

- ① Hanging Bolt - W 3/8 or M10
- ② Nut - W 3/8 or M10
- ③ Spring Washer - M10
- ④ Plate Washer - M10

• Drill the piping hole on the wall slightly tilted to the outdoor side using a $\varnothing 70$ hole-core drill.

CAUTION

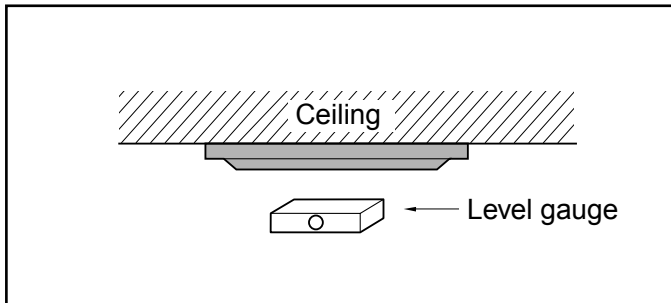
- Tighten the nut and bolt to prevent unit from falling off.



7. Ceiling Cassette Type Indoor Unit - TE(1)/TF/TH/TD chassis

1) Ceiling opening dimensions and hanging bolt location

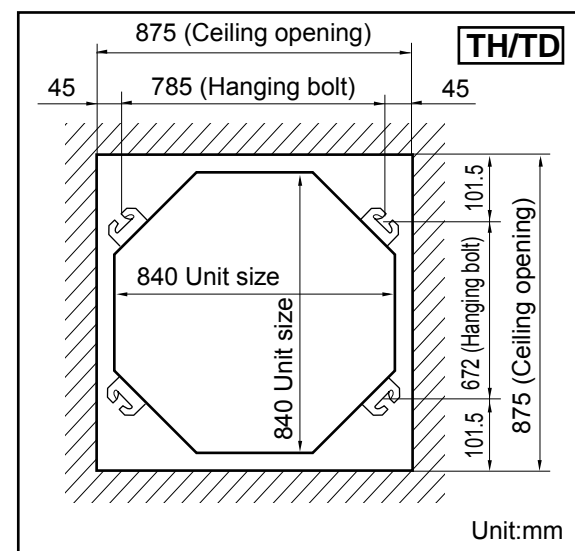
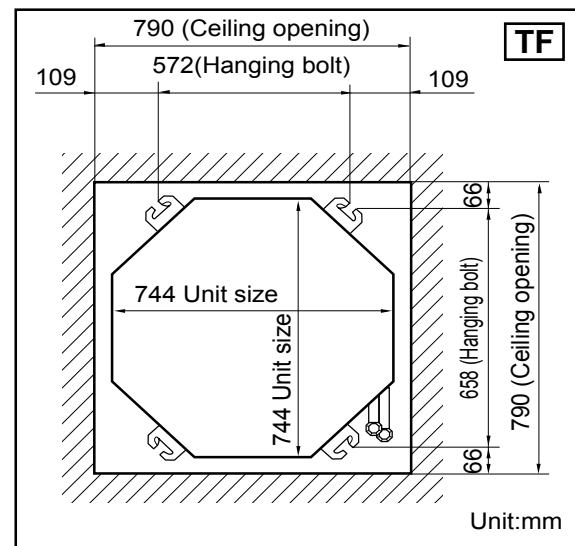
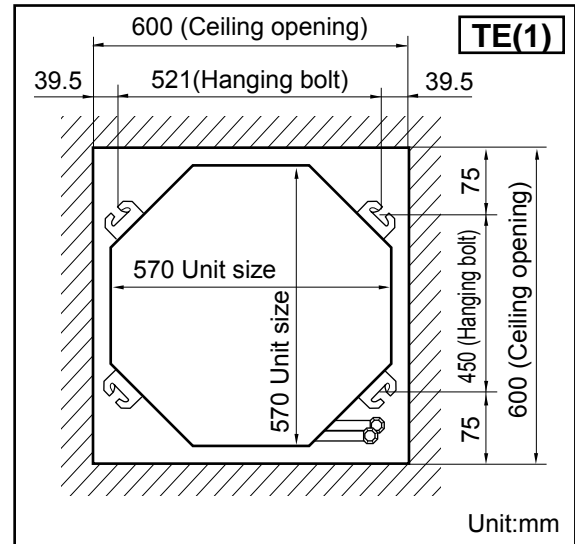
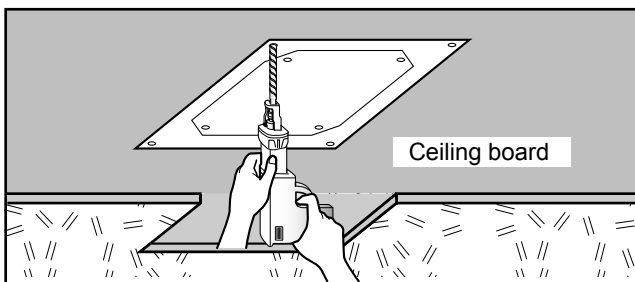
- The dimensions of cardboard for installing are the same as those of the ceiling opening dimensions.



CAUTION

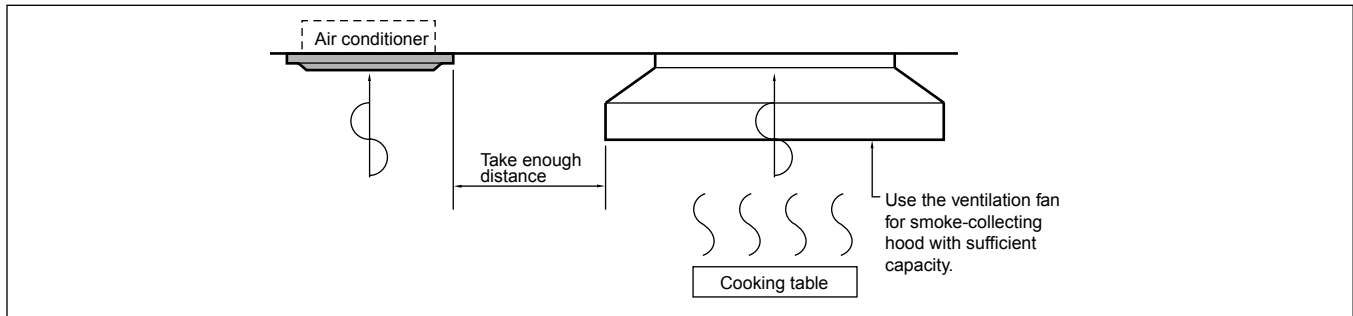
- This air-conditioner uses a drain pump.
- Install the unit horizontally using a level gauge.
- During the installation, be careful not to damage electric wires.

- Select and mark the position for fixing bolts and piping hole.
- Decide the position for fixing bolts slightly tilted to the drain direction after considering the direction of drain hose.
- Drill the hole for anchor bolt on the wall.



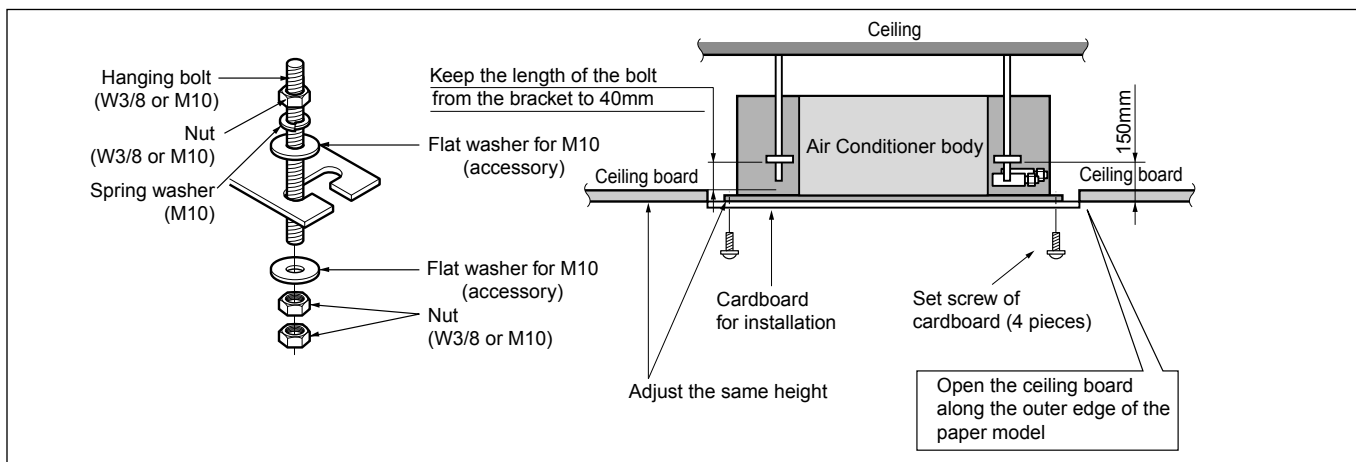
NOTE:

- Avoid the following installation location.
- 1. Such places as restaurants and kitchen where considerable amount of oil steam and flour is generated. These may cause heat exchange efficiency reduction, or water drops, drain pump mal-function. In these cases, take the following actions;
 - Make sure that ventilation fan is enough to cover all noxious gases from this place.
 - Ensure enough distance from the cooking room to install the air conditioner in such a place where it may not suck oily steam.



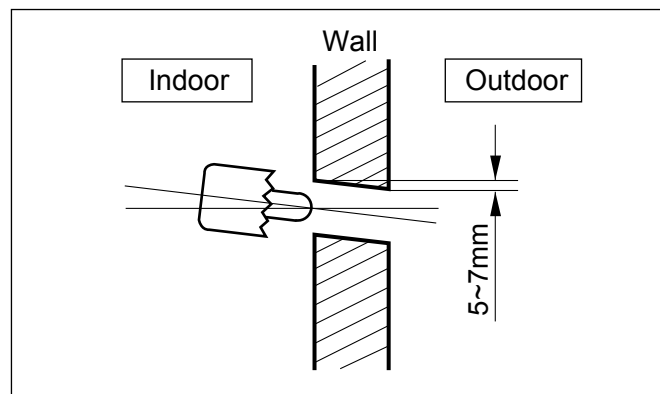
- 2. Avoid installing air conditioner in such places where cooking oil or iron powder is generated.
- 3. Avoid places where inflammable gas is generated.
- 4. Avoid place where noxious gas is generated.
- 5. Avoid places near high frequency generators.

2) The Indoor Unit Installation



- The following parts are local purchasing.
- ① Hanging Bolt - W 3/8 or M10
- ② Nut - W 3/8 or M10
- ③ Spring Washer - M10
- ④ Plate Washer - M10

- Drill the piping hole on the wall slightly tilted to the outdoor side using a $\varnothing 70$ hole-core drill.



CAUTION

- Tighten the nut and bolt to prevent the unit from falling off.

Remote Controller Installation

- Although the room temperature sensor is in the indoor unit, the remote controller should be installed in such places away from direct sunlight and high humidity.

Installation of the remote controller

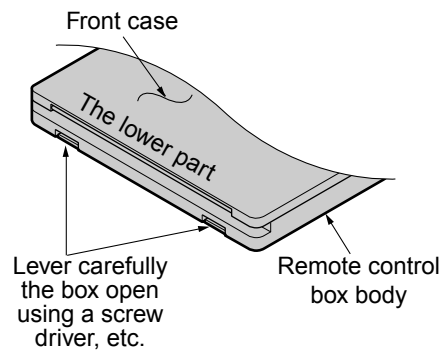
- Select places that are not splashed with water.
- Select control position after receiving customer approval.
- The room temperature sensor is built in the indoor unit.
- This remote controller equipped with liquid crystal display. If this position is higher or lower, display is difficult to see. (The standard height is 1.2 ~ 1.5m high)

Routing of the remote controller cord

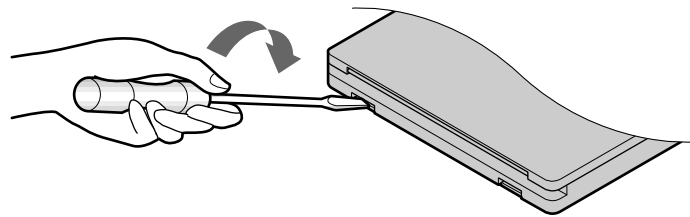
- Keep the remote controller cord away from the refrigerant piping and the drain piping.
- To protect the remote controller cord from electrical noise, place the cord at least 5cm away from other power cables (audio equipment, television set, etc.)
- If the remote controller cord is secured to the wall, provide a trap at the top of the cord to prevent water droplets from running.

WIRED REMOTE CONTROL INSTALLATION

DISASSEMBLING

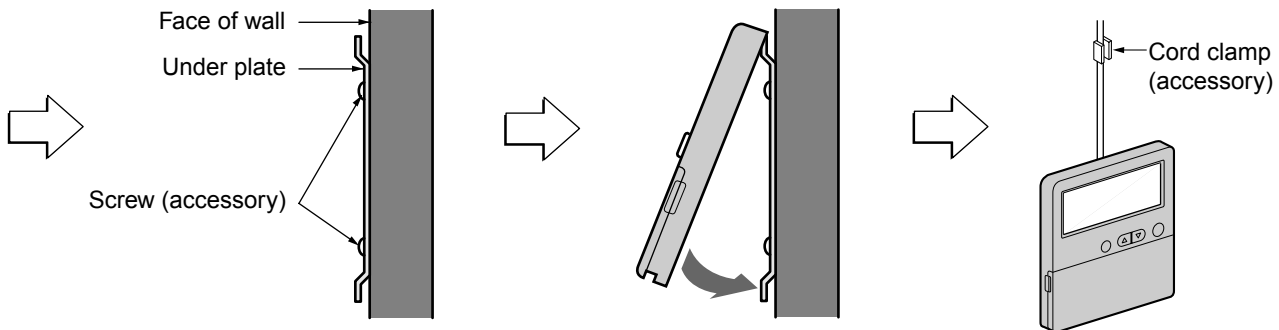


- Separate the under plate from Remote control box.

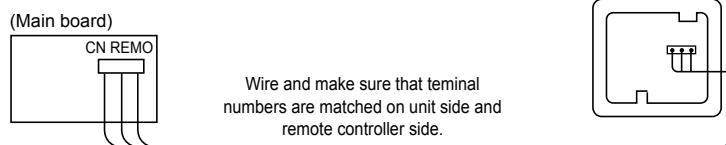


- Fix the under plate on the wall

- Fix the cord clamps on the wall by $\varnothing 3$ tapping screws (accessory).
- Fix the remote control cord.

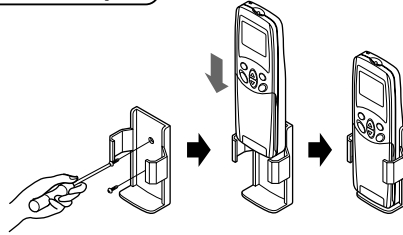


ELECTRICAL WIRING



Wire and make sure that terminal numbers are matched on unit side and remote controller side.

The maximum length of the cord is 100m.
If the length of the cord exceeds 50m,
use a wire size greater than 0.5mm².

REMOTE CONTROL PREPARATION(OPTIONAL)**HOW TO MOUNT ONTO A WALL****HOW TO INSERT BATTERIES**

- 1** Remove the battery cover from the remote controller.
 - Slide the cover according to the arrow direction.
- 2** Insert the two batteries.
 - Be sure that the (+) and (-) directions are correct.
 - Be sure that both batteries are new.
- 3** Re-attach the cover.
 - Slide it back into position.



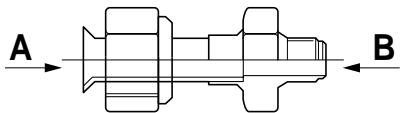
- Do not use rechargeable batteries, such batteries differ from standard dry cells in shape, dimensions, and performance.
- Remove the batteries from the remote controller if the air conditioner is not going to be used for some long time.

Connecting Pipings and the cable to Outdoor unit

1. Connecting the pipings to the Outdoor unit

1) When piping installation work you must be used the connector.

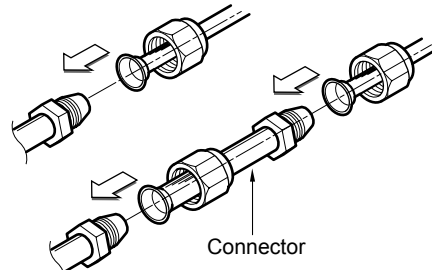
Indoor Units	Gas	Liquid
	A → B	
18k/24k	Ø9.52→Ø12.7	Not available



*Connecting pipe size

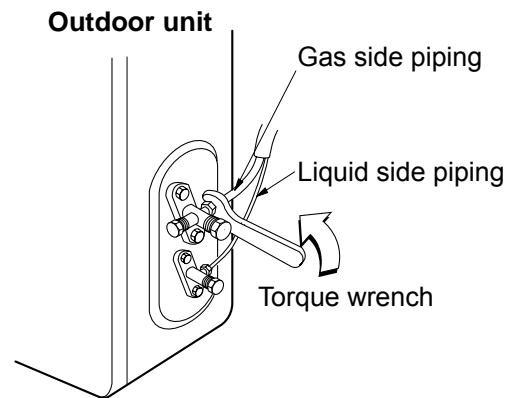
Indoor Units	Gas side	Liquid side
7k/9k/12k	Ø9.52(3/8)	Ø6.35(1/4)
18k/24k	Ø12.7(1/2)	Ø6.35(1/4)

2) Align the center of the pipings and sufficiently tighten the flare nut by hand



3) Finally, tighten the flare nut with torque wrench until the wrench clicks.

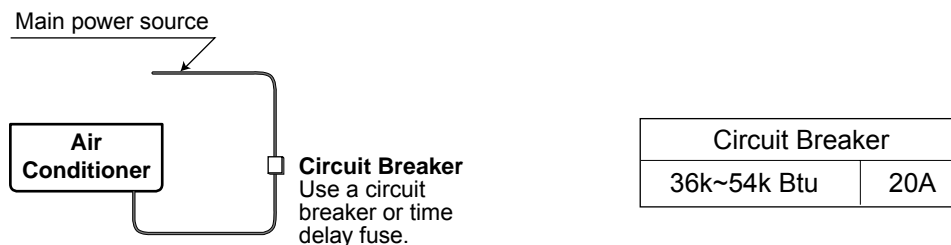
- When tightening the flare nut with torque wrench, ensure the direction for tightening follows the arrow on the wrench.



CAUTION: After the confirmation of the above conditions, prepare the wiring as follows:

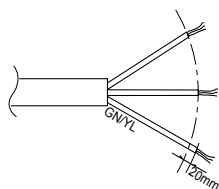
- 1) Never fail to have an individual power specialized for the air conditioner. As for the method of wiring, be guided by the circuit diagram pasted on the inside of control box cover.
- 2) The means for disconnection from a power supply shall be incorporated in the fixed wiring and have an air gap contact separation of at least 3mm in each active(phase) conductors.
- 3) The screw which fasten the wiring in the casing of electrical fittings are liable to come loose from vibrations to which the unit is subjected during the course of transportation. Check them and make sure that they are all tightly fastened. (If they are loose, it could give rise to burn-out of the wires.)
- 4) Specification of power source.
- 5) Confirm that electrical capacity is sufficient.
- 6) See to that the starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.
- 7) Confirm that the cable thickness is as specified in the power sources specification. (Particularly note the relation between cable length and thickness.)
- 8) Never fail to equip a leakage breaker where it is wet or moist.
- 9) The following troubles would be caused by voltage drop-down.
 - Vibration of a magnetic switch, damage on the contact point there of, fuse breaking, disturbance to the normal function of a overload protection device.
 - Proper starting power is not given to the compressor.

CAUTION: If a power plug is not to be used, provide a circuit breaker between power source and the unit as shown below.



CAUTION

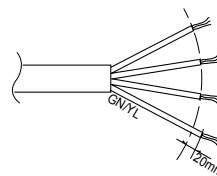
The power cord connected to the outdoor unit should be complied with the following specifications (Rubber insulation, type H05RN-F approved by HAR or SAA).



NORMAL CROSS-SECTIONAL AREA

Capacity	3 Phase
36k Btu/h	2.5mm ²
42k/48k/60k Btu/h	3.5mm ²

The connecting cable connected to the indoor and outdoor unit should be complied with the following specifications (Rubber insulation, type H07RN-F approved by HAR or SAA).



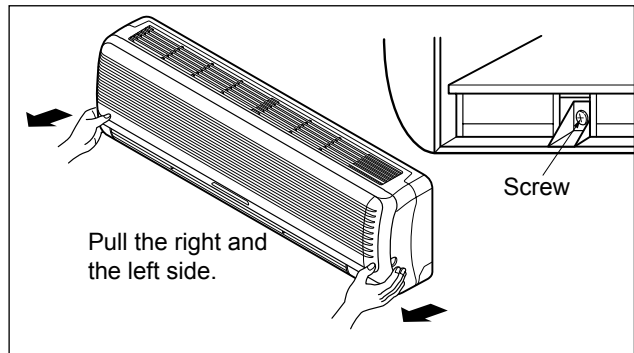
NORMAL CROSS-SECTIONAL AREA
0.75mm²

Checking the Drainage and Pipe forming

1. Split Type Indoor Unit

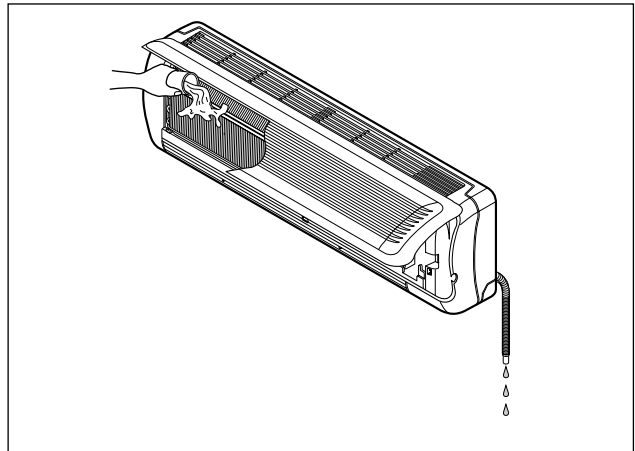
1) Remove the Grille from the cabinet

- Set the up-and-down air direction louver to open position(horizontally) by finger pressure.
- Remove the securing screws.
- To remove the Grille, pull lower the left and right side of the grille toward you (slightly tilted) and lift it straight upward.



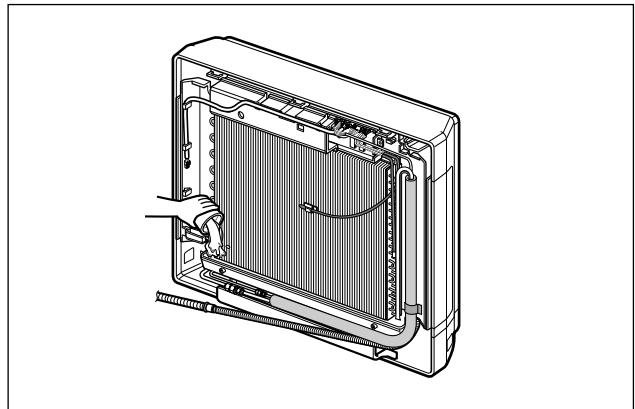
2) Check the drainage

- Pour a glass of water on the evaporator.
- Ensure if water flows drain hose of indoor unit without any leakage.



2. Art Cool Type Indoor Unit

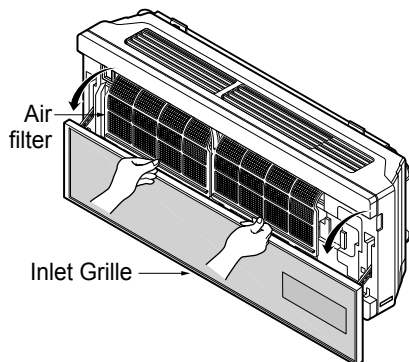
- Pour a glass of water on the evaporator.
- Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.



3. Art Cool Deluxe Type Indoor Unit

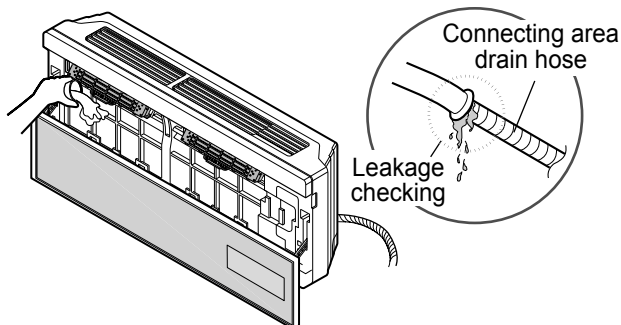
1) To remove the front panel from the indoor unit.

- Set the air direction louvers up-and-down to the position (horizontally) by hand.
- Remove the securing screws that retain the front panel. Pull the lower left and right sides of the grille toward you and lift it off.



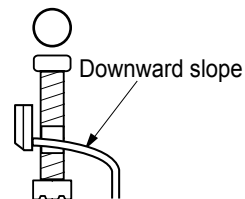
2) To check the drainage.

- Pour a glass of water on the evaporator.
- Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.

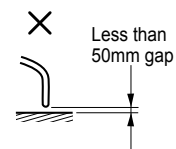
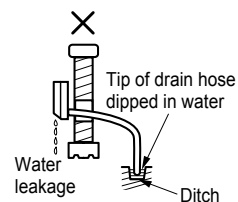
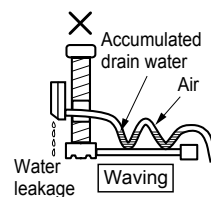
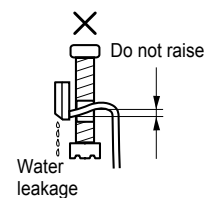


3) Drain piping

- The drain hose should point downward for easy drain flow.



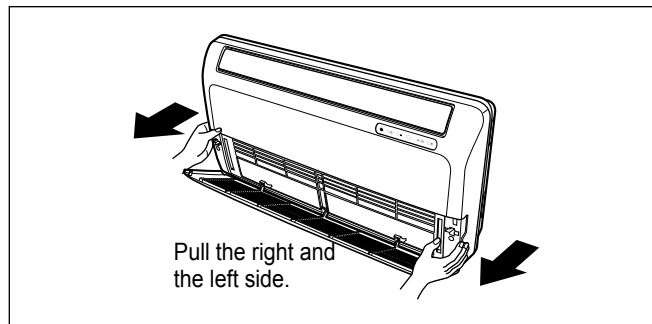
- Do not make drain piping.



4. Convertible Type Indoor Unit

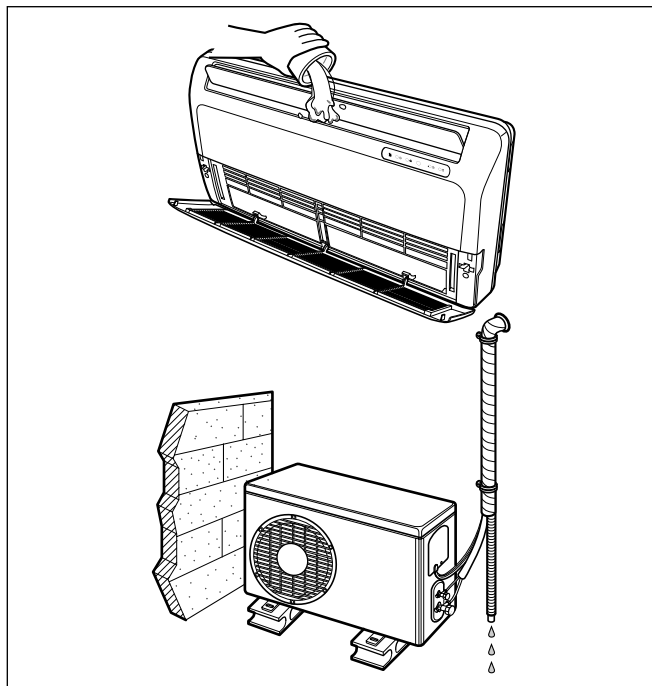
To remove the front panel from the indoor unit.

1. Set the air direction louvers up-and-down to the position(horizontally) by hand.
2. Remove the securing screws that retain the front panel. Pull the lower left and right sides of the grille toward you and lift it off.



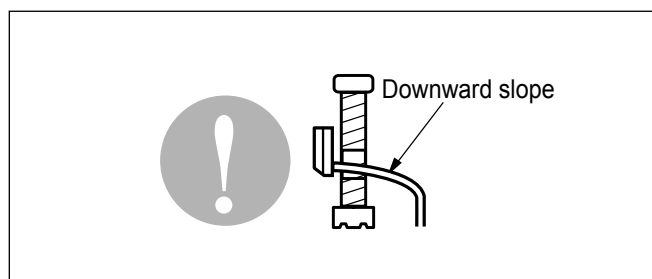
To check the drainage.

1. Pour a glass of water on the evaporator.
2. Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.

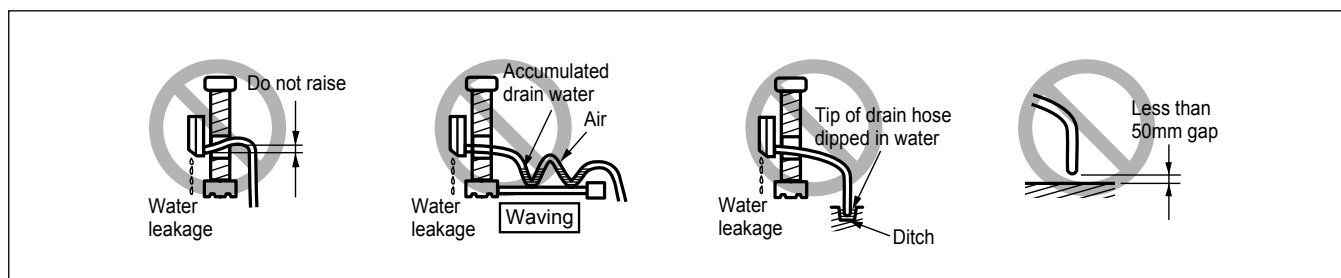


Drain piping

1. The drain hose should point downward for easy drain flow.



2. Do not make drain piping like the following.

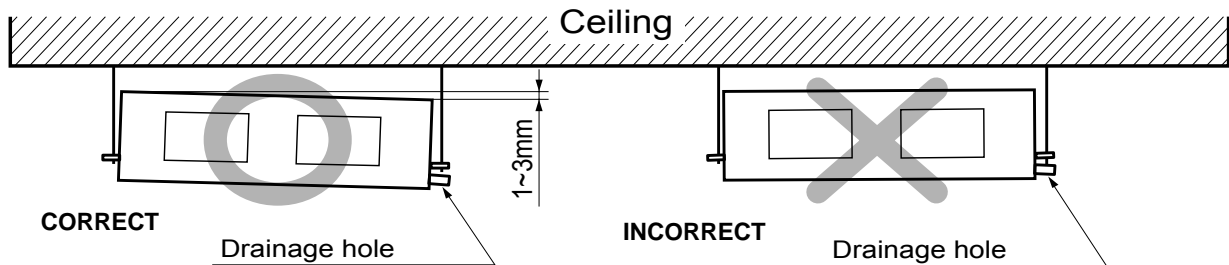


5. Duct Type Indoor Unit

1. Install declination of the indoor unit is very important for the drain of the duct type air conditioner.
2. Minimum thickness of the insulation for the connecting pipe shall be 5mm.

Front of view

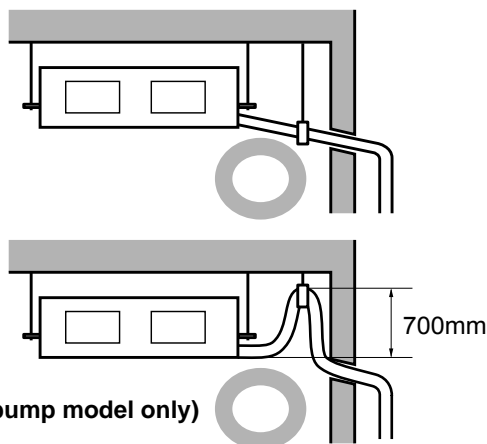
- The unit must be horizontal or declined to the drain hose connected when finished installation.



CAUTION FOR GRADIENT OF UNIT AND DRAIN PIPING

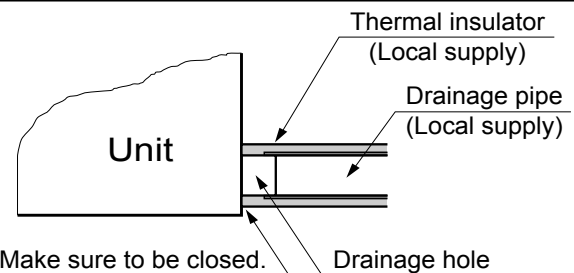
Lay the drain hose with a downware inclination so water will drain out.

- Always lay the drain with downward inclination (1/50 to 1/100). Prevent any upward flow or reverse flow in any part.
- 5mm or thicker formed thermal insulator shall always be provided for the drain pipe.



CORRECT

- Install the P-Trap (or U-Trap) to prevent a water leakage caused by the blocking of intake air filter.

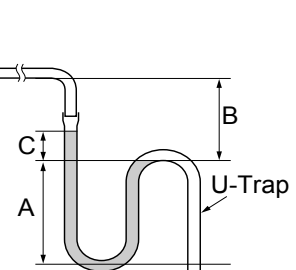


- Upward routing not allowed

INCORRECT

Applied U-Trap Dimension

- A ≥ 70mm
- B ≥ 2C
- C ≥ 2 x SP
- SP = External Pressure (mmAq)
- Ex) External Pressure = 10mmAq
- A ≥ 70mm
- B ≥ 40mm
- C ≥ 20mm



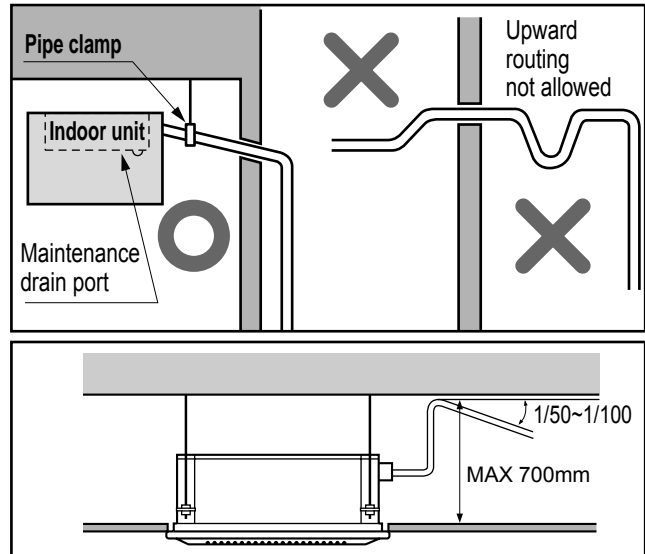
6. CST Type Indoor Unit

- Drain piping must have down-slope (1/50 to 1/100): be sure not to provide up-and-down slope to prevent reversal flow.
 - During drain piping connection, be careful not to exert extra force on the drain port on the indoor unit.
 - The outside diameter of the drain connection on the indoor unit is 32mm.

Piping material: Polyvinyl chloride pipe VP-25 and pipe fittings

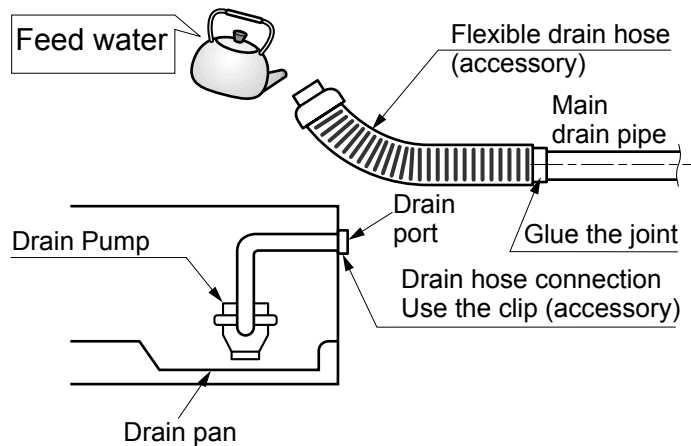
- Be sure to install heat insulation on the drain piping.

Heat insulation material: Polyethylene foam with thickness more than 8 mm.



Drain test

The air conditioner uses a drain pump to drain water. Use the following procedure to test the drain pump operation:

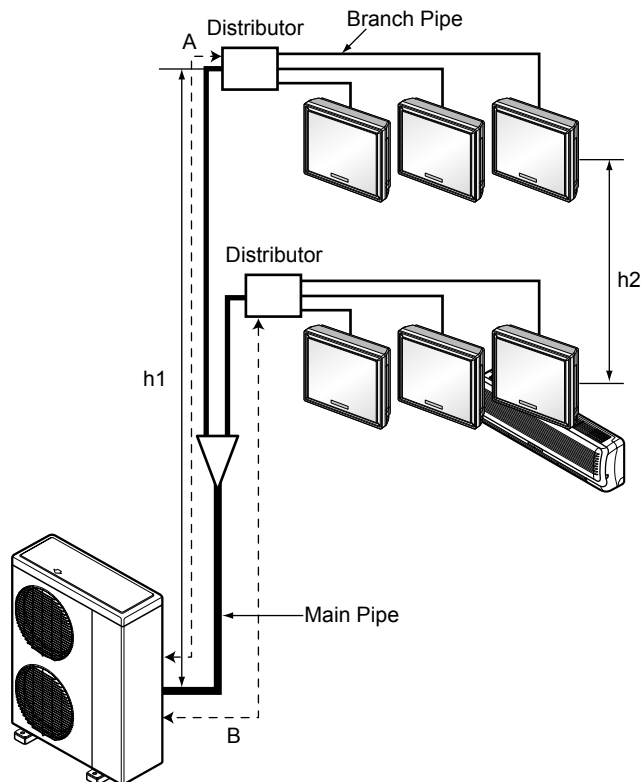


- Connect the main drain pipe to the exterior and leave it provisionally until the test comes to an end.
- Feed water to the flexible drain hose and check the piping for leakage.
- Be sure to check the drain pump for normal operating and noise when electrical wiring is finished.
- When the test is completed, connect the flexible drain hose to the drain port on the indoor unit.

Maximum Length of Pipe and Extra Charge of Refrigerant Charge

1. Inverter Multi -Distributor

1.1 The maximum allowable level and piping length



Distributor Type (m)

Capacity (Btu/h)	Total Length	Max Main Pipe Length (A/B)	Total Branch Pipe Length	Max Branch Pipe Length	Max Elevation (h1)	In - In Elevation (h2)
36k	100	40	60	20	30	15
42k	125	55	70	20	30	15
48k	135	55	80	20	30	15
54k	145	55	90	20	30	15

1.2 Refrigerant Charge

Model	Main piping length		Branch piping length	
	Standard length(m)	Additional refrigerant(g/m)	Standard length(m)	Additional refrigerant(g/m)
A6UW368FA0	5	40	30	7k/9k/12k/18k/24k : 25
A7UW428FA0	10	50	35	
A8UW488FA0	10	50	40	
A9UW548FA0	10	50	45	

Additional charge(g) = $\frac{\text{Main piping additional refrigerant}}{\text{a}}$ + $\frac{\text{Branch piping additional refrigerant}}{\text{b}}$

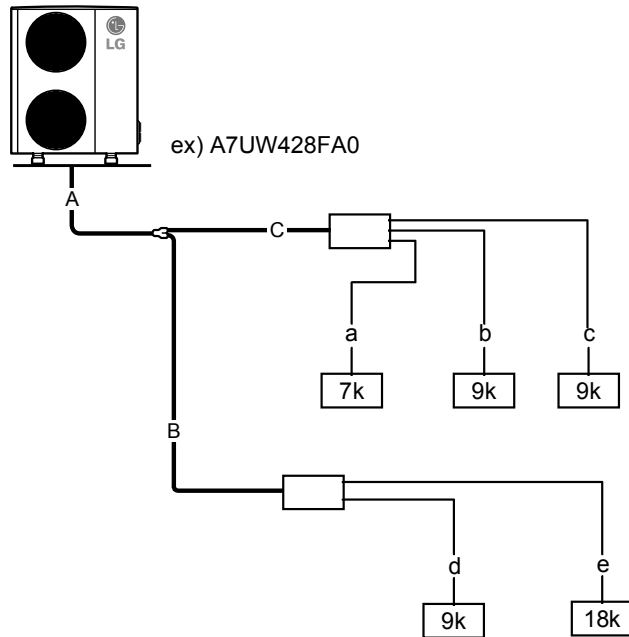
Ⓐ Main piping additional refrigerant = (Total main piping length - standard length) x Additional refrigerant

Ⓑ Branch piping additional refrigerant = (Total branch piping length - standard length) x Additional refrigerant

* Note : If additional charge value after calculation comes out to be negative, then do not consider additional charge.

1.3 Refrigerant charge

The calculation of the additional charge should be taken in account for the length of pipe.



- Total main pipe(A+B+C) = 30m
- Each branch pipe
 - a = 10m
 - b = 8m
 - c = 5m
 - d = 3m
 - e = 10m

❖ Additional Charge

$$= (30-10) \times 50$$

$$+ ((10+8+5+3+10)-35) \times 25$$

$$= 1000 + 25 = \underline{1025g}$$

Caution

- ▶ Regulation for refrigerant leakage(in Europe)
 - : the amount of refrigerant leakage should satisfy the following equation for human safety.

$$\frac{\text{Total amount of refrigerant in the system}}{\text{Volume of the room at which indoor unit of the least capacity is installed}} \leq 0.3 \text{ (kg / m}^3 \text{)}$$

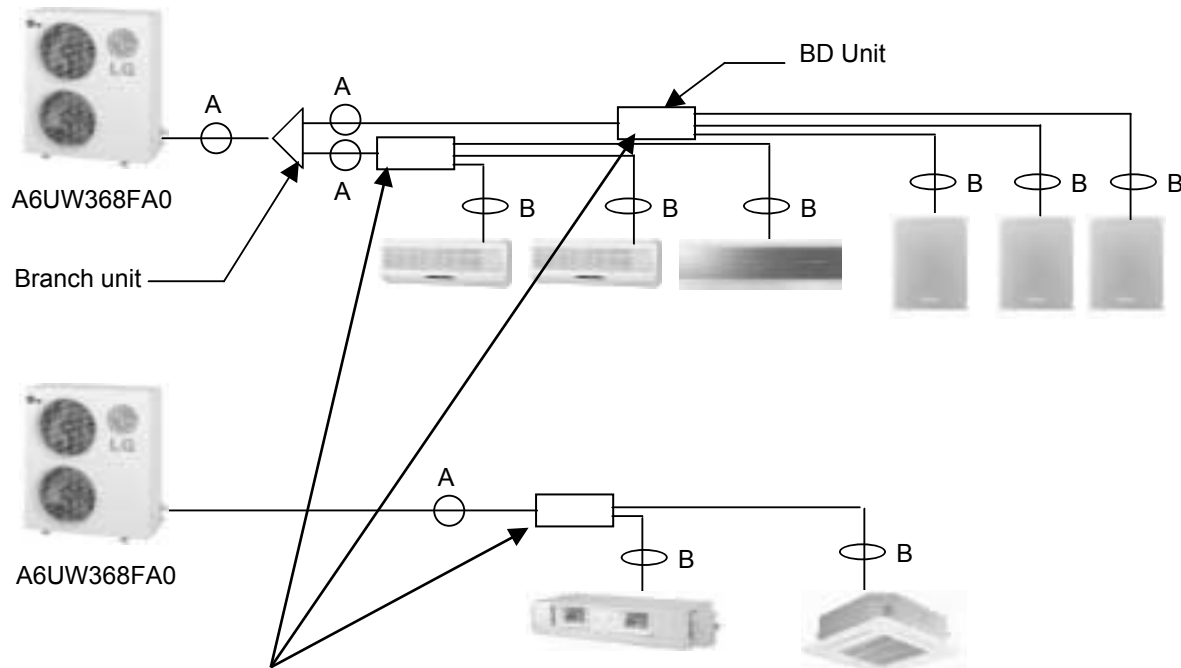
❑ If the above equation can not be satisfied, then follow the following steps.

- Selection of air conditioning system: select one of the next
 1. Effective opening part Installation
 2. Reconfirmation of outdoor unit capacity and piping length
 3. Reduction of the amount of refrigerant
 4. 2 or more security device installation of alarm for gas leakage
- Change indoor unit type
 - : installation position should be over 2m from the floor (Wall mounted type → Cassette type)
- Adoption of ventilation system
 - : choose ordinary ventilation system or building ventilation system
- Limitation in piping work
 - : design for earthquake-proof and prevention against thermal stress

1.4 Piping connection size

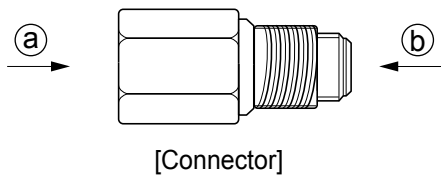
■ A6UW368FA0

		A	B
Liquid	mm	Ø6.35	Adjust to indoor unit piping size
Gas	mm	Ø15.88	

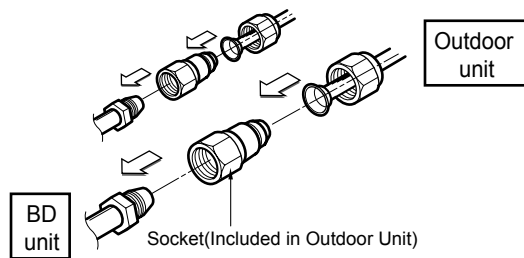


1. While piping installation you must use the connector

Gas		Liquid	
(a)	(b)	(a)	(b)
Ø19.05 → Ø15.88		Ø9.52 → Ø6.35	



2. Align the center of the pipings and sufficiently tighten the flare nut by hand.

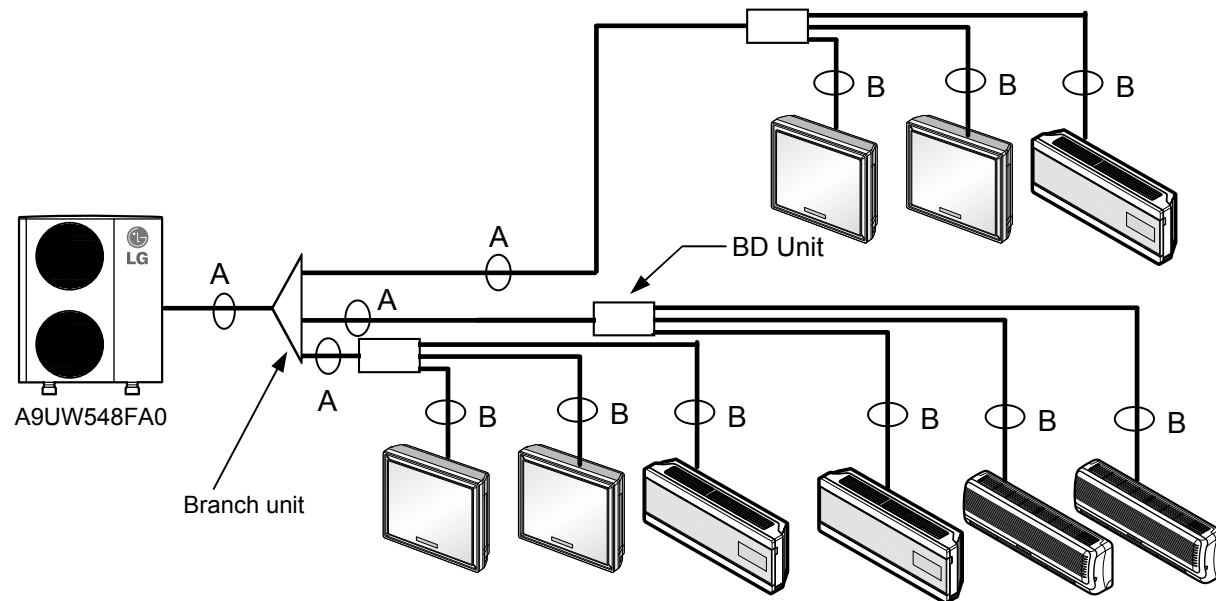
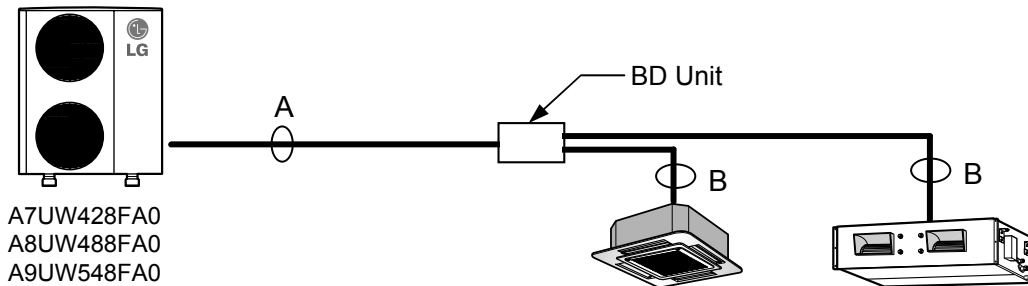
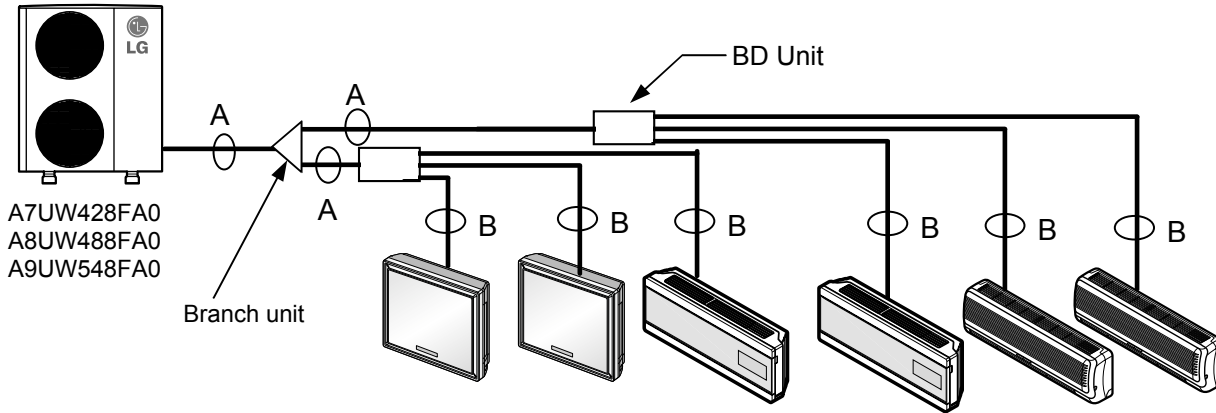


3. Finally, tighten the flare nut with torque wrench until the wrench clicks.

- When tightening the flare nut with torque wrench, ensure the direction for tightening follows the arrow on the wrench.

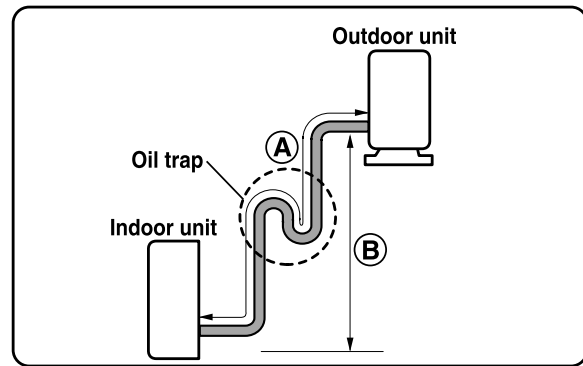
■ A7UW42/A8UW48/A9UW548FA0

		A	B
Liquid	mm	Ø 9.52	Adjust to indoor unit piping size
Gas	mm	Ø19.05	



1.5 Necessity of a trap

Since there is fear of the oil held inside the riser piping flowing back into the compressor when stopped and causing liquid compression phenomenon, or cases of deterioration of oil return, it will be necessary to provide a trap at an appropriate place in the riser gas piping.



In case more than 5m

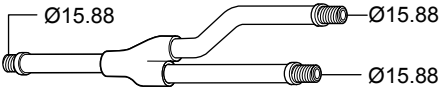
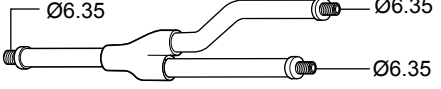
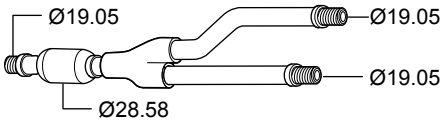
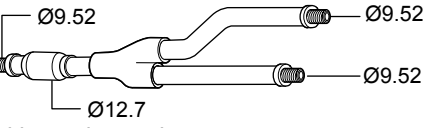
CAUTION

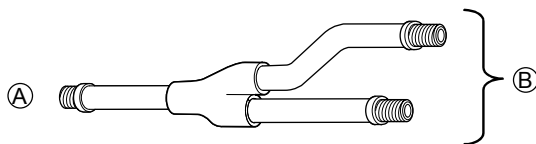
- Capacity is based on standard length and maximum allowance length is on the basis of reliability.
- Oil trap should be installed every 5~7 meters.

1.6 Branch (Accessory)

Y- Branch

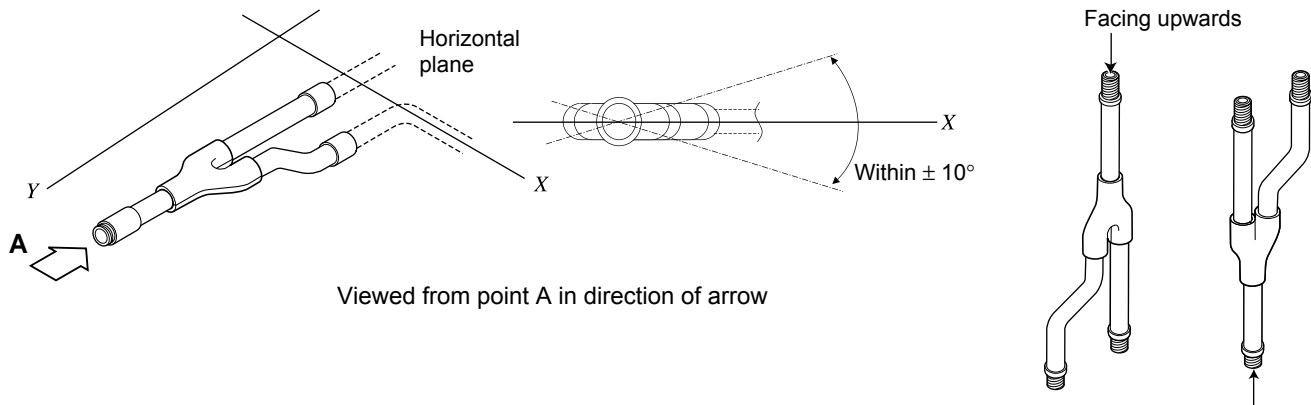
[unit:mm]

Gas Pipe	Liquid Pipe
 <p>• Included in outdoor unit.</p>	 <p>• Included in outdoor unit.</p>
 <p>• Included in outdoor unit.</p>	 <p>• Included in outdoor unit.</p>

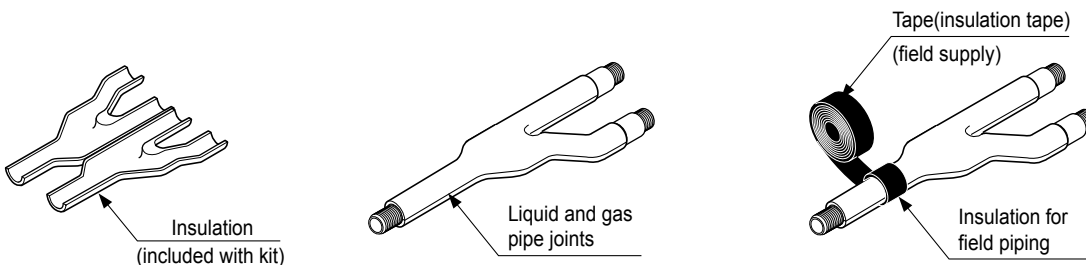


- Ⓐ To outdoor unit
- Ⓑ To BD unit

- Ensure that the branch pipes are attached horizontally or vertically (see the diagram below.)



- There is no limitation on the joint mounting configuration.
- If the diameter of the refrigerant piping selected by the procedures described is different from the size of the joint, the connecting section should be cut with a pipe cutter.
- Branch pipe should be insulated with the insulation in each kit.

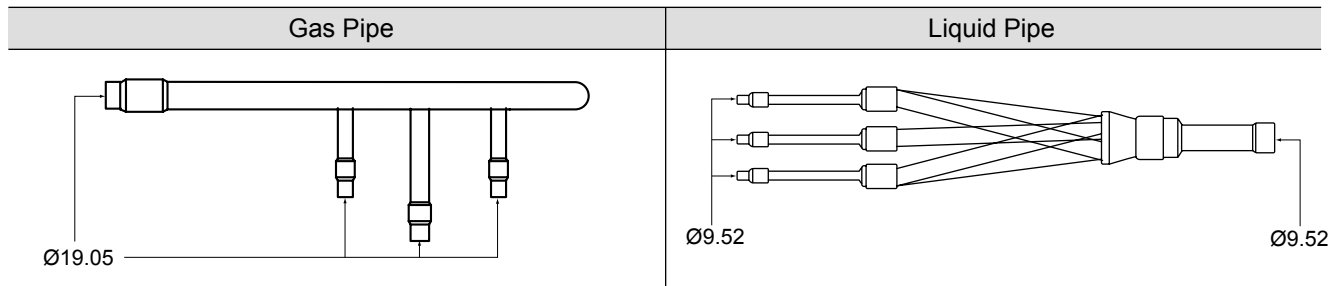


CAUTION

Do not use general electrical insulation tape, because it may get loose or get detached.

Branch kit

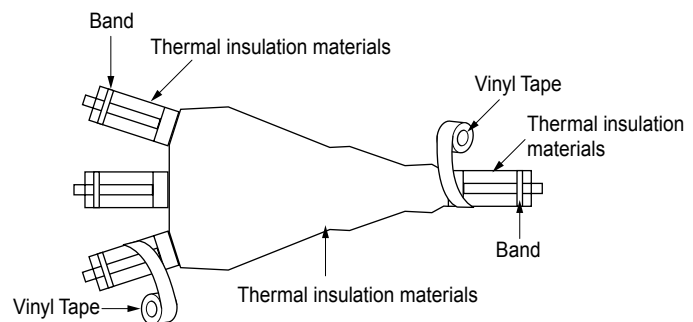
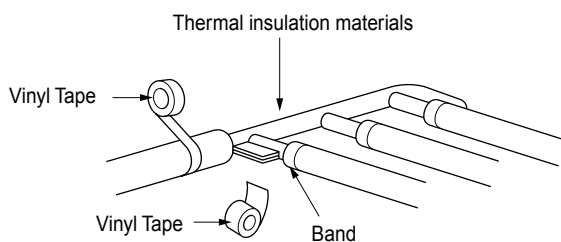
[unit:mm]



- When installing the branch pipe, direction and angle of installation is not limited.
- Take care so that burrs and foreign material may not enter into the cutting surface when connecting.

Thermal insulation work

- Securely wrap the refrigerant and the branch pipe by using thermal insulation materials provided. When using thermal insulation materials released, use withstand heat insulation materials.(thickness of more than 10mm)
- Securely adhere thermal insulation materials wrapping the branch pipe so that they do not widen. After wrapping them with auxiliary materials , bound them with a band .
- Finish the work by wrapping with a vinyl tape after the insulation material work.



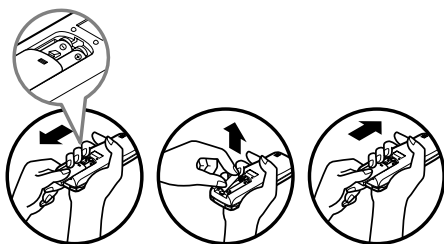
Test Running

SPLIT, ART cool, ART cool deluxe Type

1. Check that all tubing and wiring have been properly connected.
2. Check that the gas and liquid side service valves are fully open.

1) Prepare remote controller

- ① Remove the battery cover by pulling it according to the arrow direction.
- ② Insert new batteries making sure that the (+) and (-) of battery are installed correctly.
- ③ Reattach the cover by pushing it back into position.



NOTE:

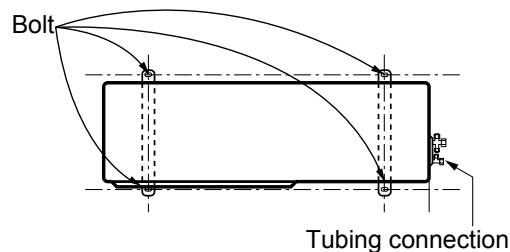
- Use 2 AAA(1.5volt) batteries. Do not use rechargeable batteries.
- Remove the batteries from the remote controller if the system is not going to be used for a long time.

2) Precautions in test run

- The initial power supply must provide at least 90% of the rated voltage. Otherwise, the air conditioner should not be operated.
- For test run, carry out the cooling operation firstly even during heating season. If heating operation is carried out firstly, it leads to the trouble of compressor. Then attention must be paid.
- Carry out the test run more than 5 minutes without fail. (Test run will be cancelled 18 minutes later automatically)
- The forced operation is started by pressing button for 2 seconds. (Cassette Type)
The test run is started by pressing button for 5 seconds. (Cassette Type)
The test run is started by pressing timer cancel button five times continuously. (Room type)
- To cancel the test run, press any button.

3) Settlement of outdoor unit

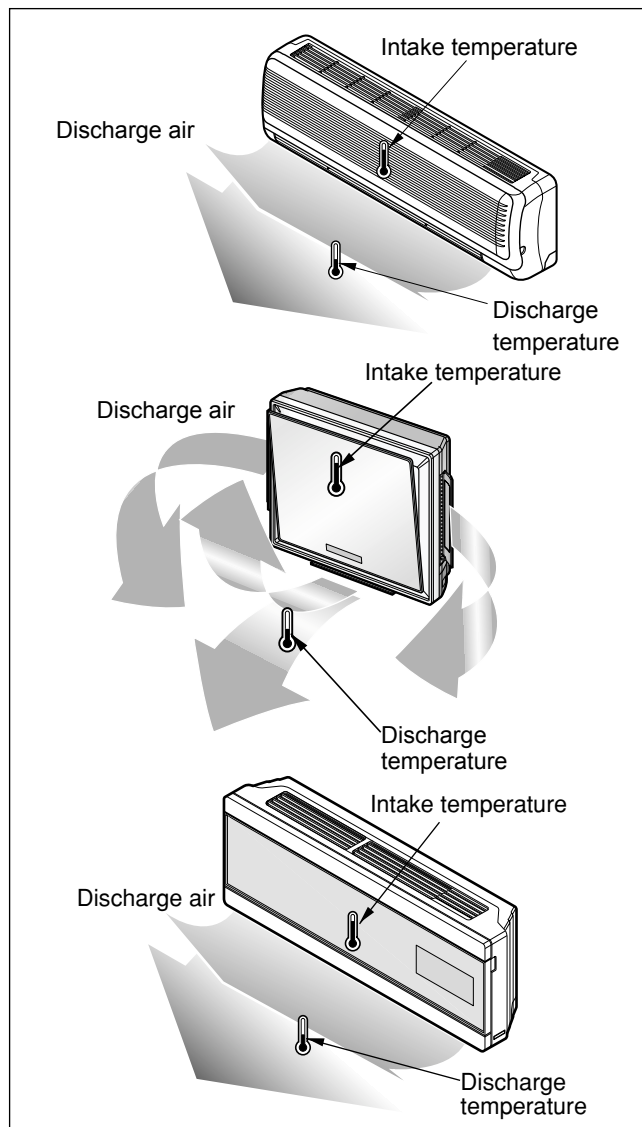
- Anchor the outdoor unit with a bolt and nut($\phi 10\text{mm}$) tightly and horizontally on a concrete or rigid mount.
- When installing on the wall, roof or rooftop, anchor the mounting base securely with a nail or wire assuming the influence of wind and earthquake.
- In the case when the vibration of the unit is conveyed to the hose, secure the unit with an anti-vibration rubber.



4) Evaluation of the performance

Operate unit for 15~20 minutes, then check the system refrigerant charge:

1. Measure the pressure of the gas side service valve.
2. Measure the temperature of the intake and discharge of air.
3. Ensure the difference between the intake temperature and the discharge is more than 8°C (Cooling) or reverse-ly (Heating).



CVT Type

1) Connection of power supply

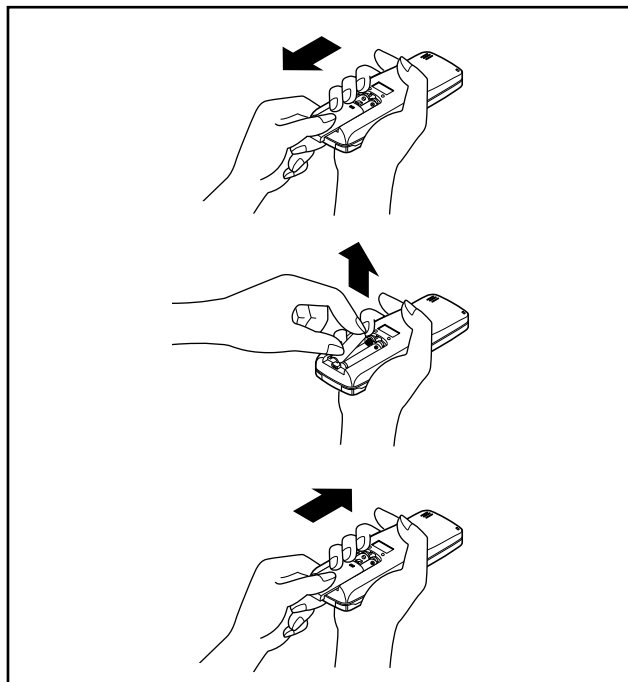
1. Connect the power supply cord to the independent power supply.

- Circuit breaker is required.

2. Prepare the remote control.

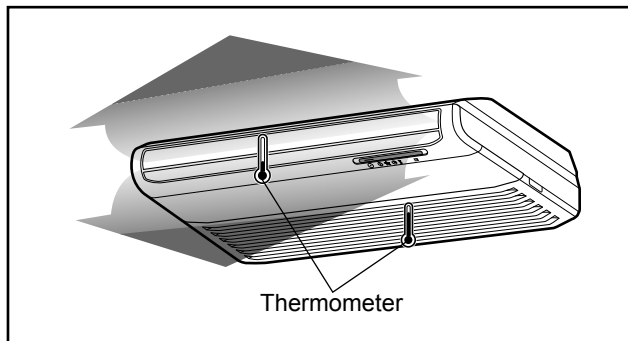
- Insert two batteries provided.
Remove the battery cover from the remote controller.
- Slide the cover according to the arrow direction.
Insert the two batteries.
(Two "R03" or "AAA" dry-cell batteries or equivalent.)
- Be sure that the (+) and (-) directions are correct.
- Be sure that both batteries are new.
Re-attach the cover.
- Slide it back into position.

3. Operate the unit for fifteen minutes or more.



2) Evaluation of the performance

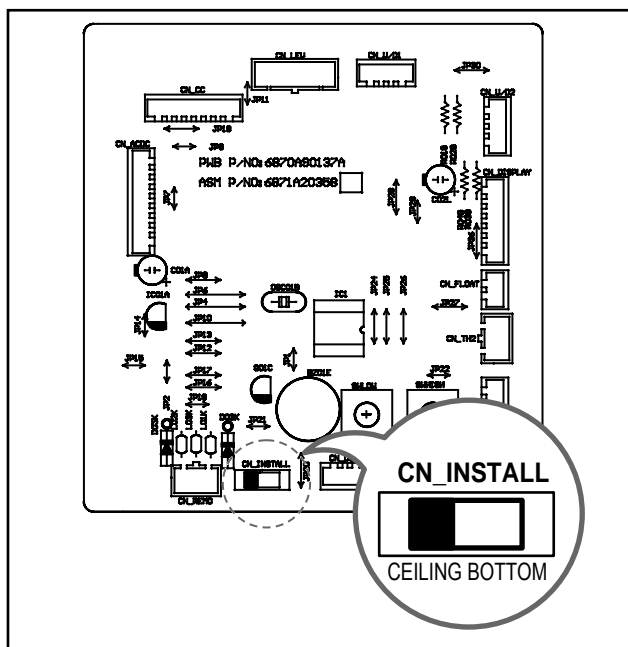
1. Measure the temperature of the intake and discharge air.
2. Ensure the difference between the intake temperature and the discharge one is more than 8°C (Cooling) or reversely (Heating).



3) Selection of the slide switch according to installation method

1. In case the indoor unit is installed on the floor, please change the side switch which is on the Main PCB Assembly to the 'BOTTOM' state.
2. In case the indoor unit is installed under the ceiling, please change the slide switch which is on the Main PCB Assembly to the 'CEILING' state.

※ The initial state of the slide switch is set for the bottom installation.



Ceiling Cassette Type

1) PRECAUTIONS IN TEST RUN

- The initial power supply must provide at least 90% of the rated voltage. Otherwise, the air conditioner should not be operated.

Caution

- ① For test run, carry out the cooling operation first even during winter season. If heating operation is carried out first, it leads to the trouble of compressor.
- ② Carry out the test run more than 5 minutes without stopping.
(Test run will be cancelled 18 minutes later automatically)
- The test run is started by pressing the room temperature checking button and down timer button for 3 seconds at the same time.
- To cancel the test run, press any button.

CHECK THE FOLLOWING ITEMS WHEN INSTALLATION IS COMPLETE

- After completing work, be sure to measure and record trial run properties, and store measured data, etc.
- Measuring data are room temperature, outside temperature, suction temperature, blow out temperature, air velocity, air volume, voltage, current, presence of abnormal vibration and noise, operating pressure, piping temperature.
- As to the structure and appearance, check following items.

- | | |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <input type="checkbox"/> Is the circulation of air adequate? | <input type="checkbox"/> Does the remote controller works properly? |
| <input type="checkbox"/> Is the drainage OK? | <input type="checkbox"/> Is there any error on wiring? |
| <input type="checkbox"/> Is the heat insulation complete
(refrigerant and drain piping)? | <input type="checkbox"/> Aren't terminal screws loosened? |
| <input type="checkbox"/> Is there any leakage of refrigerant? | |

M4.....118N.cm{12kgf.cm} M5.....196N.cm{20kgf.cm}
M6.....245N.cm{25kgf.cm} M8.....588N.cm{60kgf.cm}

5. Branch Distributor

PRECAUTIONS FOR SELECTING THE LOCATION

The BD unit is for indoor use. Install in a location such as above a ceiling or behind a wall in accordance with the following conditions:

- That the unit is fully supported, and is in a location with little or no vibration.
- That the refrigerant pipes for the indoor and outdoor units can be repaired with ease, and that the units are placed well within the distance from each other allowed by the pipe length.
- That there is nothing nearby that produces heat or steam(gas).
- When installing, that there is enough cavity for servicing the unit.
- Do not install in location that is hot or humid for long periods of time.
- A well-ventilated area.
- Do not install near bedrooms. The sound of refrigerant flowing through the piping may sometimes be audible. For restrictions on installation, refer to "INSTALLATION".

System Layout and Piping Length

For installation of the indoor units. Follow the instructions in the installation manual for each unit.

System Layout

Distributor Unit

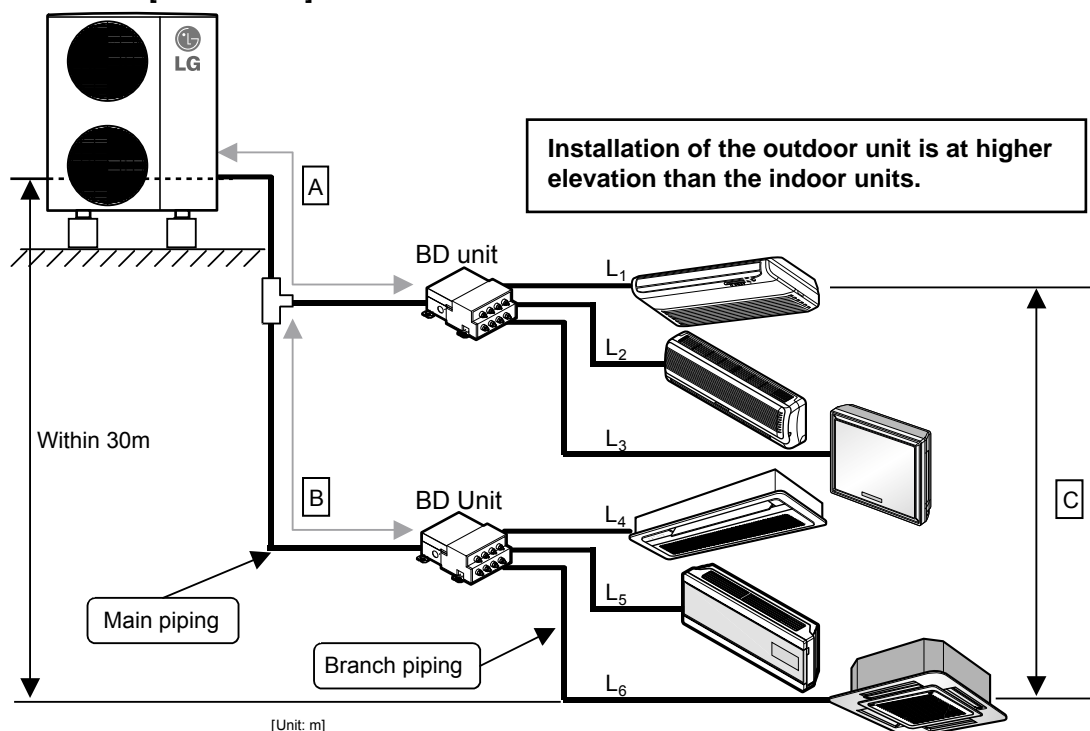
For 2 rooms : PMBD3620 (Ø9.52, Ø6.35)
 For 3 rooms : PMBD3630 (Ø9.52, Ø6.35)
 For 4 rooms : PMBD3640 (Ø9.52, Ø6.35)
 For 3 rooms : PMBD7230 (A: Ø12.7, Ø6.35)
 (B: Ø15.88, Ø6.35)
 (C: Ø15.88, Ø6.35)

Branch

For 5~8 rooms : Y- Branch
 For 9 rooms : Branch kit

Do not connect more than 9 indoor units together choose the distributor unit type (2rooms,3rooms or 4rooms) according to the installation pattern

A6UW368FA0 [FM37AH UE0]

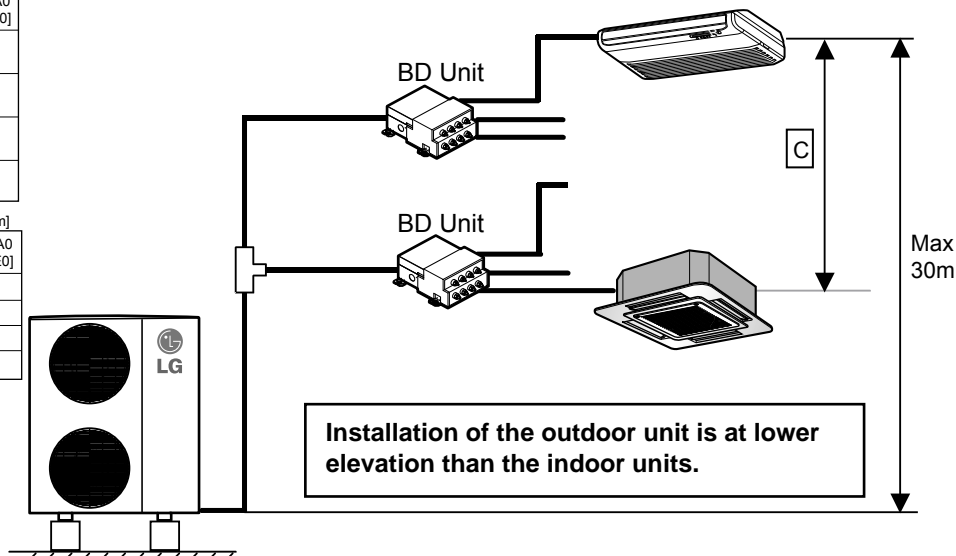


[Unit: m]

Piping	A6UW368FA0 [FM37AH UE0]
Total main piping length (A+B)	40
Total branch piping length (L ₁ +L ₂ +L ₃ +L ₄ +L ₅ +L ₆)	60
Each branch piping length (L ₁ , L ₂ , L ₃ , L ₄ , L ₅ , L ₆)	20
Total system piping length	100

[Unit: m]

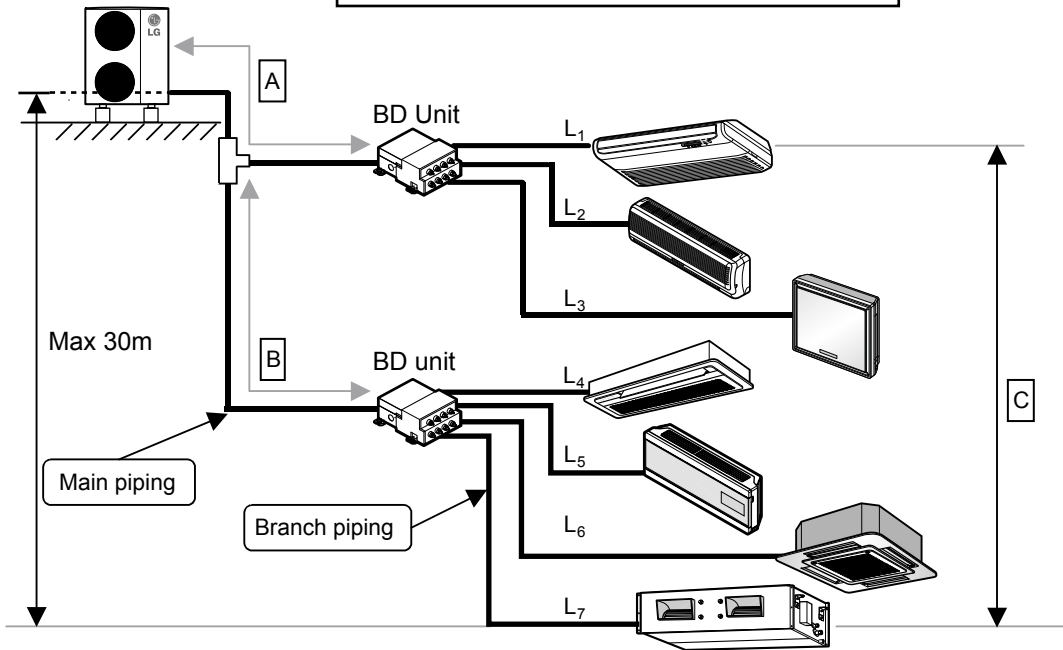
	A6UW368FA0 [FM37AH UE0]
Maximum elevation difference	
Indoor unit ↔ Outdoor unit	30
Indoor unit ↔ Indoor unit (C)	15
Indoor unit ↔ BD unit	30
BD unit ↔ BD unit	15



Installation

A7UW428FA0 [FM41AH UH0]

Installation of the outdoor unit is at higher elevation than the indoor units.

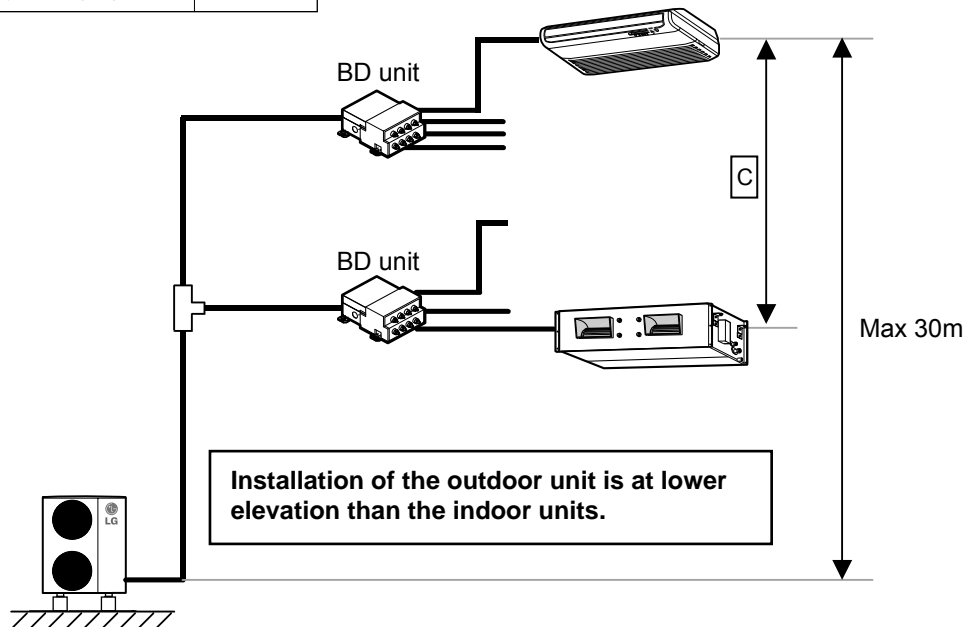


[Unit: m]

Piping	A7UW428FA0 [FM42AH UH0]
Total main piping length (A+B)	55
Total branch piping length (L ₁ +L ₂ +L ₃ +L ₄ +L ₅ +L ₆ +L ₇)	70
Each branch piping length (L ₁ , L ₂ , L ₃ , L ₄ , L ₅ , L ₆ , L ₇)	20
Total system piping length	125

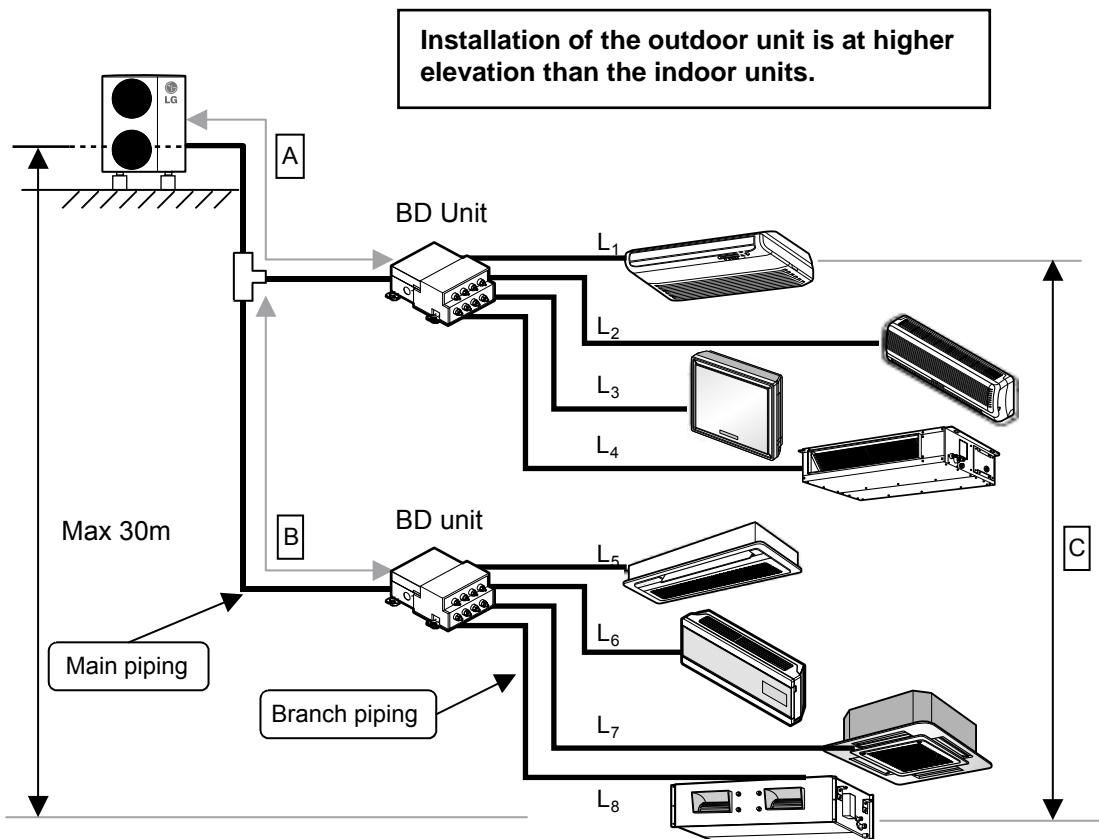
[Unit: m]

Maximum elevation difference	A7UW428FA0 [FM42AH UH0]
Indoor unit ↔ Outdoor unit	30
Indoor unit ↔ Indoor unit (C)	15
Indoor unit ↔ BD unit	30
BD unit ↔ BD unit	15



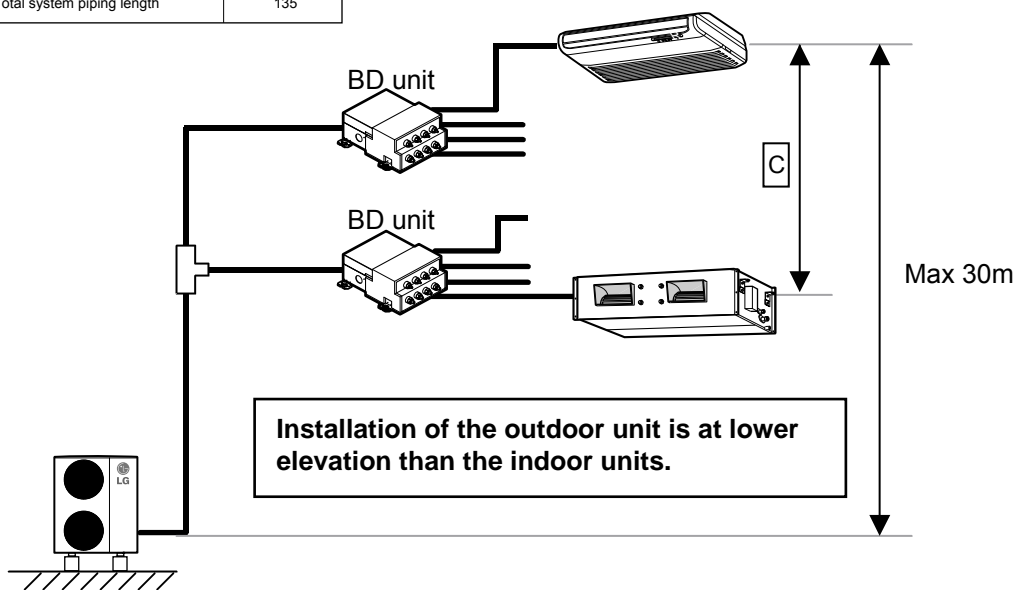
Installation of the outdoor unit is at lower elevation than the indoor units.

A8UW488FA0 [FM49AH UH0]

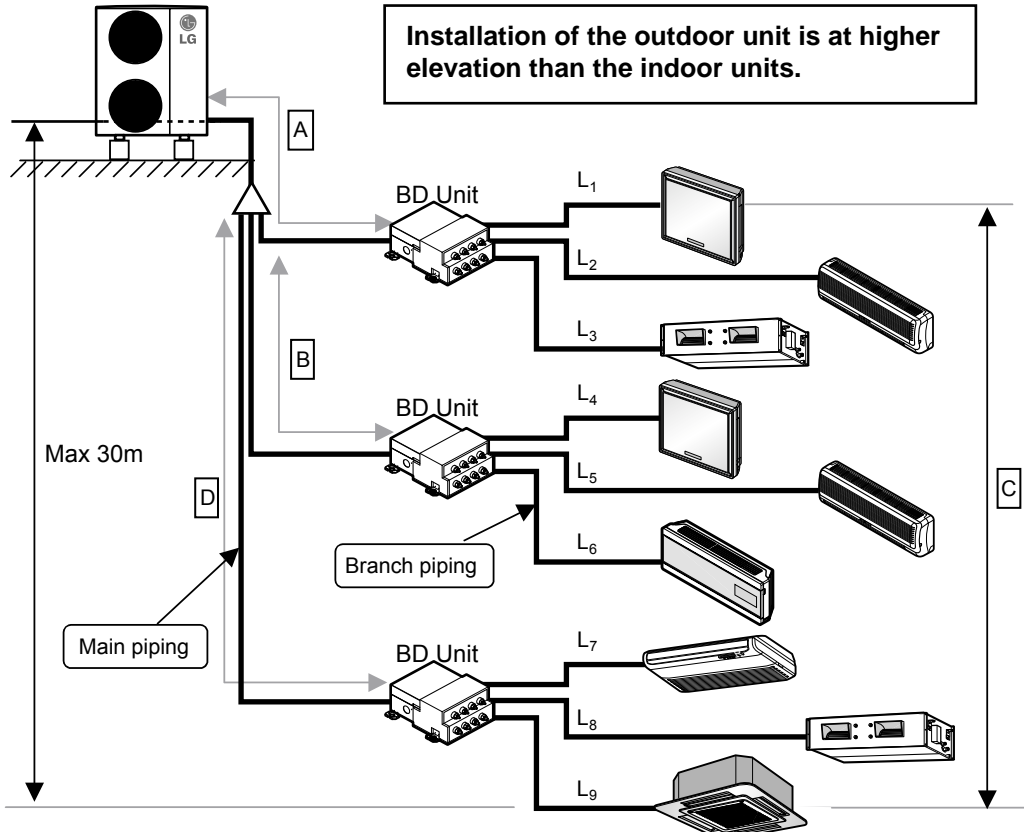


Piping	[Unit: m] A8UW488FA0 [FM49AH UH0]
Total main piping length (A+B)	55
Total branch piping length (L ₁ +L ₂ +L ₃ +L ₄ +L ₅ +L ₆ +L ₇ +L ₈)	80
Each branch piping length (L ₁ , L ₂ , L ₃ , L ₄ , L ₅ , L ₆ , L ₇ , L ₈)	20
Total system piping length	135

Maximum elevation difference	[Unit: m] A8UW488FA0 [FM49AH UH0]
Indoor unit ↔ Outdoor unit	30
Indoor unit ↔ Indoor unit (C)	15
Indoor unit ↔ BD unit	30
BD unit ↔ BD unit	15

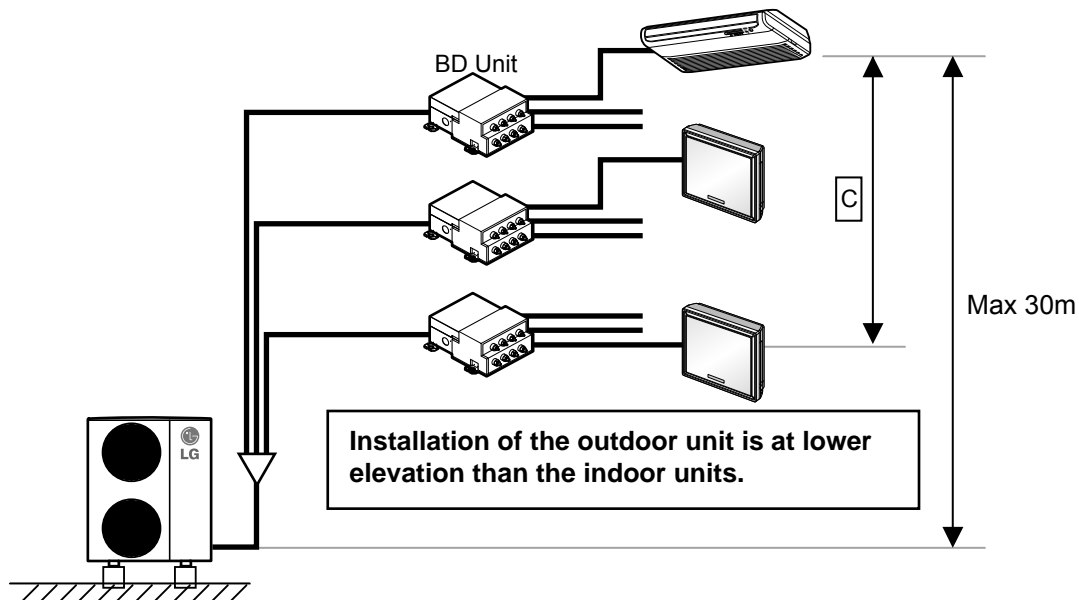


A8UW548FA0 [FM57AH UH0]



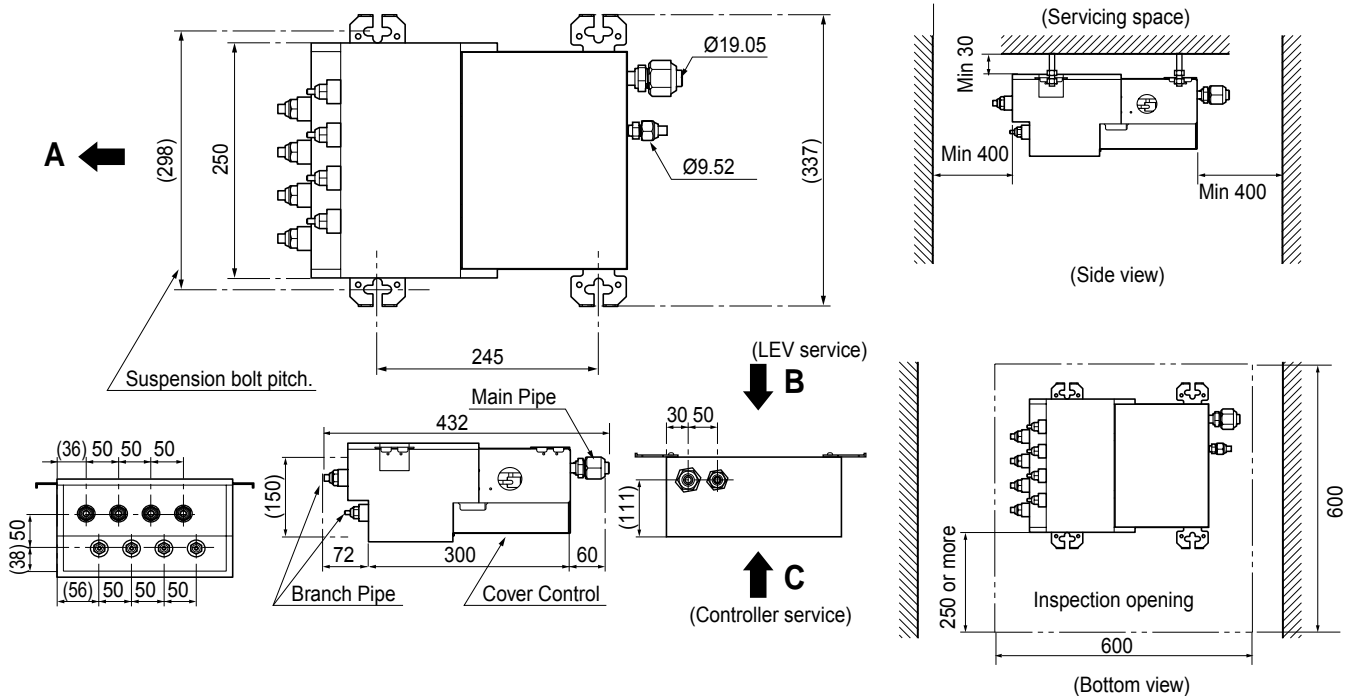
Piping	[Unit: m] A9UW548FA0 [FM57AH UH0]
Total main piping length (A+B+D)	55
Total branch piping length (L ₁ +L ₂ +L ₃ +L ₄ +L ₅ +L ₆ +L ₇ +L ₈ +L ₉)	90
Each branch piping length (L ₁ , L ₂ , L ₃ , L ₄ , L ₅ , L ₆ , L ₇ , L ₈ , L ₉)	20
Total system piping length	145

Maximum elevation difference	[Unit: m] A9UW548FA0 [FM57AH UH0]
Indoor unit ↔ Outdoor unit	30
Indoor unit ↔ Indoor unit (C)	10
Indoor unit ↔ BD unit	30
BD unit ↔ BD unit	10



Installation

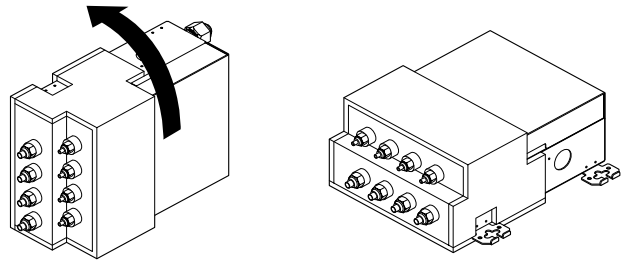
- This unit may be installed suspended from the ceiling or mounted on the wall.
- This unit may only be installed horizontally, as shown in the diagram below. (Side B is facing up) However, it may be freely installed in any direction, forward or backward, and to the sides.
- Be sure to secure a 600mm square opening for service and inspection as shown in the diagram below, for both ceiling - suspended installation and wall-mounted installation.
- BD unit does not require drain treatment as it uses internal insulation.
- Service direction is the side B and C
- The piping for the indoor unit may be led around in direction A
- The inclination of side B must be within ± 5 degree forward or backward or to the sides.



Installation of The Main Unit

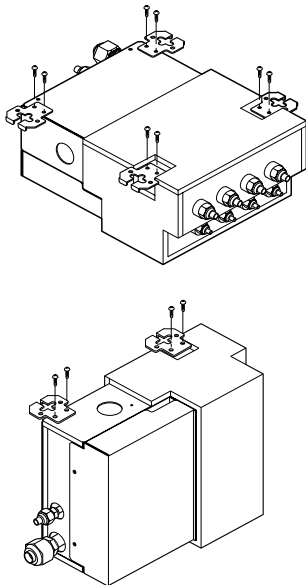
NOTICE :

- This unit has two different installation types:
(1) Ceiling-suspended type and (2) wall-mounted type.
- Choose the proper installation pattern according to the location of installation.
- The installation location for printed wiring board can be changed.
Follow the procedure specified in the "CONNECTING THE WIRING" section to change the location.



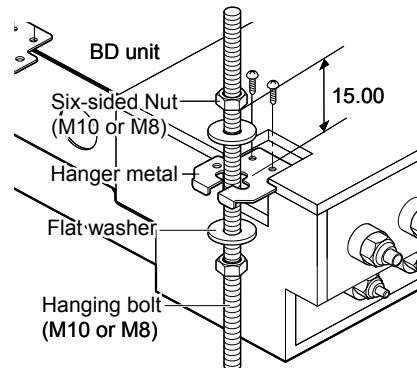
(1) Ceiling-suspended type (2) Wall-mountde type

(1) Ceiling-suspended type

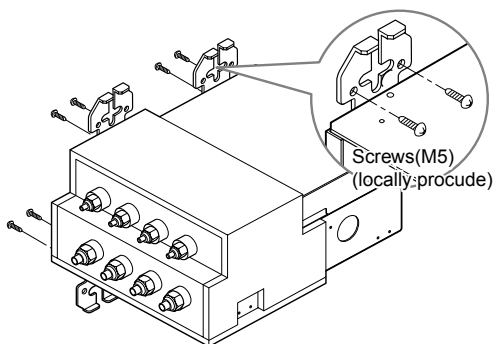


Procedure

- (1) Fix the furnished hanger metal with two screws.(4 locations in total).
- (2) Using an insert-hole-in- anchor, hang the hanging bolt.
- (3) Install a hexagon nut and a flat washer (locally-procured)to the hanging bolt as shown in the figure in the left, and ift the main unit to hang on the hanger metal.
- (4) After checking with a level that the unit is level, tighten the hexagon nut.
* The tilt of the unit should be within $\pm 5^\circ$ in front/back and left/right.



(2) Wall-mounted type



Procedure

- (1) Fix the furnished hanger metal with two screws.
(3 locations in total).
- (2) After checking with a level that the unit is level, fix the unit with the furnished wood screws.
* The tilt of the unit should be within $\pm 5^\circ$ in front/back and left/right.
* Block up the parts of hanger holes (2 places) by using insulation PE after installing the hanger.



CAUTIONS

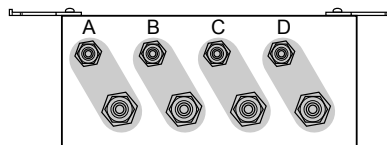
- Once a screw-hole on the main unit has had a screw hammered in, make sure to either hammer it again or cover it with alumiun tape.(This is to prevent condensation)
- Be sure to install the unit with the ceiling-sie up.
- Do not install near bedrooms. the sound of refrigerant flowing through the piping may sometimes be audible.

Connection of Piping

- When connecting indoor units, make sure to connect refrigerant pipes and connection wires to the appropriate connection ports marked with matching alphabets. (A, B, C, D)

NOTICE :

- Be sure to mark all the local refrigerant piping(liquid pipes, gas pipes, etc.) for each indoor unit designating clearly which room it belongs in.(A, B, C, D)



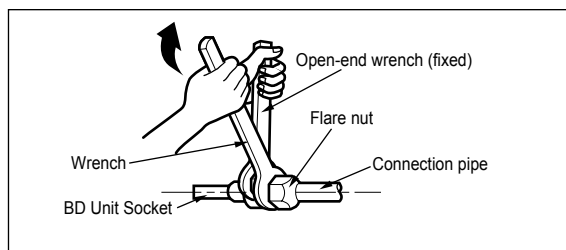
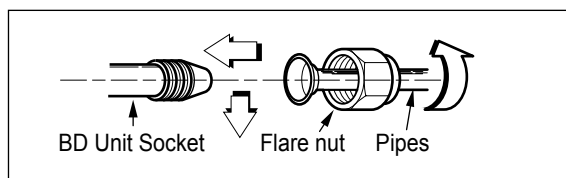
NOTICE :

For flaring work the piping, follow the instructions in the installation manual to each unit.

Connecting the pipings to the indoor unit and drain hose to drain pipe

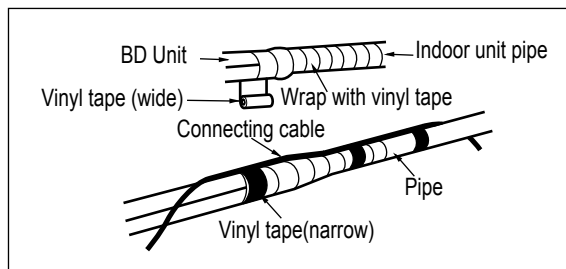
- Align the center of the pipings and sufficiently tighten the flare nut by hand.
- Tighten the flare nut with a wrench.

Outside diameter		Torque
mm	inch	kg·m
Ø6.35	1/4	1.8
Ø9.52	3/8	4.2
Ø12.7	1/2	5.5
Ø15.88	5/8	6.6
Ø19.05	3/4	6.6



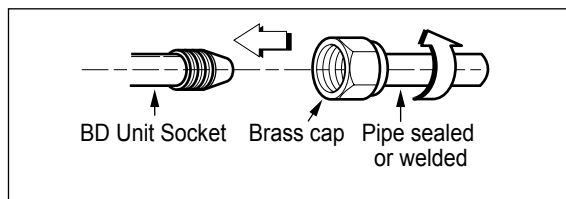
Wrap the insulation material around the connecting portion.

- Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there is no gap.
- Wrap the area which accommodates the rear piping housing section with vinyl tape.



Close up a socket for unoccupied room with a brass cap.

- Align the center of the piping and sufficiently tighten the brass cap by hand.
- Tighten the brass cap with a wrench.
- Wrap the joint part with insulation.



CAUTIONS

- Never use the plastic cap for sealing.
- Make sure to use brass cap with the end of pipe sealed or welded tightly.

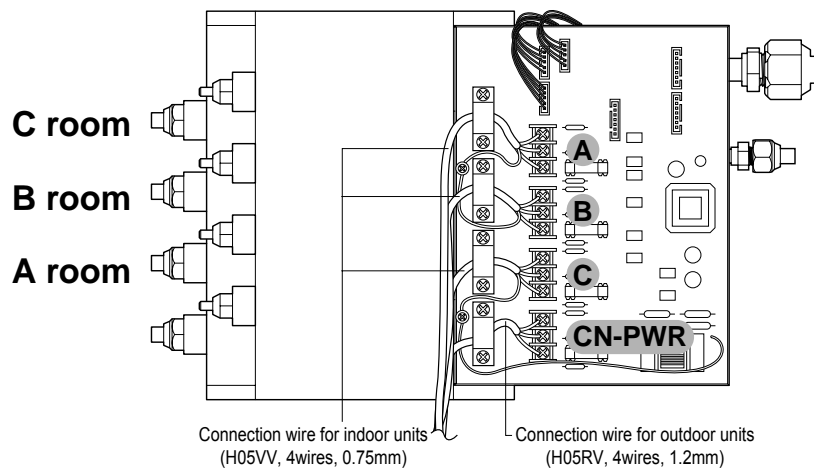
Connection of Wiring

- Connect refrigerant pipes and connection wires to the appropriate ports marked with matching alphabets (A, B and C) on this unit.
- Follow the instructions on the wiring nameplate to connect the connection wires of indoor/outdoor units to terminal board numbers.(1, 2 and 3) Always fix each ground wire separately with a ground screw.(See the figure below.)
- After completing the wiring, fix the outer coating of wires securely with wire clamps. The wire clamp on indoor unit side is furnished. Follow the procedure below to install.
- Refer to the circuit diagram on the control cover inside outdoor unit.

NOTICE :

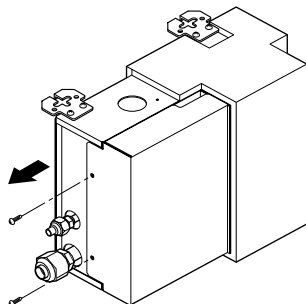
The terminal board numbers are arranged from top to bottom in order of 1, 2 and 3.

In Case of 3 rooms

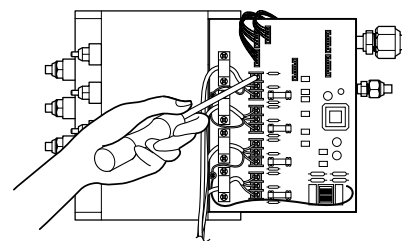


Warning
Do not use tapped wires, stand wires, extensioncords, or starburst connections, as they may cause overheating, electrical shock, or fire.

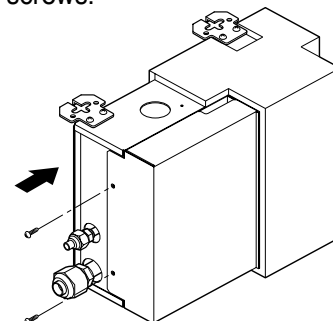
- (1) Remove the control cover. Loosen the two screws, and slide the cover in the direction of the arrow.



- (2) Perform wiring with reference the wiring diagram on a control cover of outdoor unit. Allow 300 mm for the pulling-out section of harness. Fix the wires completely with wire clamps(4 locations).



- (3) Put in the cover in the direction of the arrow then tighten the screws.



Operation

Function of control

1. MAIN UNIT FUNCTION

• DISPLAY

Operation Indicator

- On while in appliance operation, off while in appliance pause
- Flashing while in disconnection or short in Thermistor (3 sec off / 0.5 sec on)

Sleep Timer Indicator

- On while in sleep timer mode, off when sleep timer cancel or appliance operation pause

Timer Indicator

- On while in timer mode (on/off), off when timer mode is completed or canceled

Defrost Indicator

- Off except when hot start during heating mode operation or while in defrost control

■ Cooling Mode Operation

- When the intake air temperature reaches 0.5°C below the setting temp, the compressor and the outdoor fan stop.
- When it reaches 0.5°C above the setting temp, they start to operate again.

Compressor ON Temp	▶ Setting Temp+0.5°C
Compressor OFF Temp	▶ Setting Temp-0.5°C
- While in compressor running, operating with the airflow speed set by the remote control. While compressor is off fan operates at low speed regardless of the setting.

■ Soft Dry Operation Mode

- When the dehumidification operation input by the remote control is received, the intake air temperature is detected and the setting temp is automatically set according to the intake air temperature.

26°C ≤ Intake Air Temp	▶ 25°C
24°C ≤ Intake Intake Air Temp < 26°C	▶ Intake Air Temp-1°C
18°C ≤ Intake Intake Air Temp < 24°C	▶ Intake Air Temp-0.5°C
Intake Air Temp < 18°C	▶ 18°C
- While compressor off, the indoor fan repeats low airflow speed and stop.
- While the intake air temp is between compressor on temp. and compressor off temp., 10-min dehumidification operation and 4-min compressor off repeat.

Compressor ON Temp.	▶ Setting Temp+0.5°C
Compressor OFF Temp.	▶ Setting Temp-0.5°C
- In 10-min dehumidification operation, the indoor fan operates with the low airflow speed.

■ Heating Mode Operation

- When the intake air temp reaches +3°...above the setting temp, the compressor is turned off. When below the setting temp, the compressor is turned on.

Compressor ON Temp.	▶ Setting Temp.
Compressor OFF Temp.	▶ Setting Temp.+3°C
- While compressor on, the indoor fan is off when the indoor pipe temp. is below 20°C, when above 27°C, it

operates with the low or setting speed. When the indoor pipe temp is between 20°C and 27°C, it operates with Super-Low(while in sleep mode, with the medium airflow speed).

- While compressor off, the indoor fan is off when the indoor pipe temp is below 33°C, when above 35°C , it operates with the low airflow speed.
- While in defrost control, the indoor is outdoor fans are turned off.

■ Defrost Control(Heating)

- Defrost operation is controlled by timer and sensing temperature of outdoor pipe.
- The first defrost starts only when the outdoor pipe temperature falls below -6°C after 35 minutes passed from starting of heating operation and more than 4 minutes operation of compressor.
- Defrost ends after 12 minutes passed from starting of defrost operation when the outdoor pipe temperature rises over 15°C even before 12 minutes.
- The second defrost starts only when the outdoor pipe temperature falls below -6°C after 35 minutes passed from ending of the first defrost and more than 4 minutes operation of compressor.

■ Fuzzy Operation

- When any of operation mode is not selected like the moment of the power on or when 3 hrs has passed since the operation off, the operation mode is selected.
- When determining the operation mode, the compressor, the outdoor fan, and the 4 way valve are off and only the indoor fan is operated for 15 seconds. Then an operation mode is selected according to the intake air temp at that moment as follows.
 - 24°C ≤ Intake Air Temp ▶ Fuzzy Operation for Cooling
 - 21°C ≤ Intake Air Temp < 24°C ▶ Fuzzy Operation for Dehumidification
 - Intake Air Temp < 21°C ▶ Fuzzy Operation for Heating
- If any of the operation modes among cooling / dehumidification / heating mode operations is carried out for 10 sec or longer before Fuzzy operation, the mode before Fuzzy operation is operated.

1) Fuzzy Operation for Cooling

- According to the setting temperature selected by Fuzzy rule, when the intake air temp is 0.5°C or more below the setting temp, the compressor is turned off. When 0.5°C or more above the setting temp, the compressor is turned on.
 - Compressor ON Temp ▶ Setting Temp + 0.5°C
 - Compressor OFF Temp ▶ Setting Temp + 0.5°C
- At the beginning of Fuzzy mode operation, the setting temperature is automatically selected according to the intake air temp at that time.
 - 26°C ≤ Intake Air Temp ▶ 25°C
 - 24°C ≤ Intake Air Temp < 26°C ▶ Intake Air Temp + 1°C
 - 22°C ≤ Intake Air Temp < 24°C ▶ Intake Air Temp + 0.5°C
 - 18°C ≤ Intake Air Temp < 22°C ▶ Intake Air Temp
 - Intake Air Temp < 18°C ▶ 18°C
- When the Fuzzy key (Temperature Control key) is input after the initial setting temperature is selected, the Fuzzy key value and the intake air temperature at that time are compared to select the setting temperature automatically according to the Fuzzy rule.
- While in Fuzzy operation, the airflow speed of the indoor fan is automatically selected according to the temperature.

2) Fuzzy Operation for Dehumidification

- According to the setting temperature selected by Fuzzy rule, when the intake air temp is 0.5°C or more below the setting temp, the compressor is turned off. When 0.5°C or more above the setting temp, the compressor is turned on.

Compressor ON Temp	▶ Setting Temp + 0.5°C
Compressor OFF Temp	▶ Setting Temp+0.5°C
- At the beginning of Fuzzy mode operation, the setting temperature is automatically selected according to the intake air temp at that time.

26°C ≤ Intake Air Temp	▶ 25°C
24°C ≤ Intake Air Temp < 26°C	▶ Intake Air Temp + 1°C
22°C ≤ Intake Air Temp < 24°C	▶ Intake Air Temp + 0.5°C
18°C ≤ Intake Air Temp < 22°C	▶ Intake Air Temp
Intake Air Temp < 18°C	▶ 18°C
- When the Fuzzy key (Temperature Control key) is input after the initial setting temperature is selected, the Fuzzy key value and the intake air temperature at that time are compared to select the setting temperature automatically according to the Fuzzy rule.
- While in Fuzzy operation, the airflow speed of the indoor fan repeats the low airflow speed or pause as in dehumidification operation.

3) Fuzzy Operation for Heating

- According to the setting temperature selected by Fuzzy rule, when the intake air temp is 3°C or more above the setting temp, the compressor is turned off. When below the setting temp, the compressor is turned on.

Compressor ON Temp	▶ Setting Temp
Compressor OFF Temp	▶ Setting Temp + 3°C
- At the beginning of Fuzzy mode operation, the setting temperature is automatically selected according to the intake air temp at that time.

20°C ≤ Intake Air Temp	▶ Intake Air Temp + 0.5°C
Intake Air Temp < 20°C	▶ 20°C
- When the Fuzzy key (Temperature Control key) is input after the initial setting temperature is selected, the Fuzzy key value and the intake air temperature at that time are compared to select the setting temperature automatically according to the Fuzzy rule.
- While in Fuzzy operation, the airflow speed of the indoor fan is set to the high or the medium according to the intake air temperature and the setting temperature.

■ Airflow Speed Selection

- The airflow speed of the indoor fan is set to high, medium, low, or power (auto) by the input of the airflow speed selection key on the remote control.

■ On-Timer Operation

- When the set time is reached after the time is input by the remote control, the appliance starts to operate.
- The timer LED is on when the on-timer is input. It is off when the time set by the timer is reached.
- If the appliance is operating at the time set by the timer, the operation continues.

While in Fuzzy operation, the airflow speed of the indoor fan is automatically selected according to the temperature.

■ Off-Timer Operation

- When the set time is reached after the time is input by the remote control, the appliance stops operating.
- The timer LED is on when the off-timer is input. It is off when the time set by the timer is reached.
- If the appliance is on pause at the time set by the timer, the pause continues.

■ Off-Timer <=> On-Timer Operation

- When the set time is reached after the on/off time is input by the remote control, the on/off-timer operation is carried out according to the set time.

■ Sleep Timer Operation

- When the sleep time is reached after <1,2,3,4,5,6,7,0(cancel) hr> is input by the remote control while in appliance operation, the operation of the appliance stops.
- While the appliance is on pause, the sleep timer mode cannot be input.
- While in cooling mode operation, 30 min later since the start of the sleep timer, the setting temperature increases by 1°C. After another 30 min elapse, it increases by 1°C again.
- When the sleep timer mode is input while in cooling cycle mode, the airflow speed of the indoor fan is set to the low.
- When the sleep timer mode is input while in heating cycle mode, the airflow speed of the indoor fan is set to the medium.

■ Chaos Swing Mode

- By the Chaos Swing key input, the upper/lower vane automatically operates with the Chaos Swing or they are fixed to the desired direction.
- While in Chaos Swing mode, the angles of cooling and heating cycle operations are different.

■ Chaos Natural Wind Mode

- When the Chaos Natural Wind mode is selected and then operated, the high, medium, or low speed of the airflow mode is operated for 2~15 sec. randomly by the Chaos Simulation.

■ Jet Cool Mode Operation

- While in heating mode or Fuzzy operation, the Jet Cool key cannot be input. When it is input while in the other mode operation (cooling, dehumidification, ventilation), the Jet Cool mode is operated.
- In the Jet Cool mode, the indoor fan is operated at super-high speed for 30 min at cooling mode operation.
- In the Jet Cool mode operation, the room temperature is controlled to the setting temperature, 18°C.
- When the sleep timer mode is input while in the Jet Cool mode operation, the Jet Cool mode has the priority.
- When the Jet Cool key is input, the upper/lower vanes are reset to those of the initial cooling mode and then operated in order that the air outflow could reach further.

■ Auto Restarting Operation

- When the power is restored after a sudden power failure while in appliance operation, the mode before the power failure is kept on the memory and the appliance automatically operates in the mode on the memory.

■ Forced Operation

- To operate the appliance by force in case that the remote control is lost, the forced operation selection switch is on the main unit of the appliance to operate the appliance in the standard conditions.
- When the power is supplied while the slide switch is on the forced operation position, or when the slide switch position is switched to the Auto Restarting (or test operation) position or switched from the remote control position to the forced operation position while the power is on, the forced operation is carried out.
- When the slide switch position is switched from the forced operation position to the Auto Restarting position or the remote control position, the forced operation is canceled and the appliance stops operating.
- In the forced operation mode, the indoor fan is operated at low speed for around 15 sec and then the operation condition is set according to the intake air temperature as follows.
 - 24°C ≤ Intake Air Temp ◀ Cooling Mode Operation, 22°C, High Speed
 - 21°C ≤ Intake Air Temp < 24°C ◀ Dehumidification Operation, 23°C, High Speed
 - Intake Air Temp < 21°C ◀ Heating Mode Operation, 24°C, High Speed

■ Buzzer Sounding Operation

- When the appliance-operation key is input by the remote control, the short "beep-beep-" sounds.
- When the appliance-pause key is input by the remote control, the long "beep—" sounds.

Function of Indoor Unit

Split Type Indoor Unit

Operation ON/OFF by Remote controller

Sensing the Room Temperature

- Room temperature sensor. (THERMISTOR)

Room temperature control

- Maintains the room temperature in accordance with the Setting Temp.

Starting Current Control

- Indoor fan is delayed for 5 seconds at the starting.

Time Delay Safety Control

- Restarting is delayed for approx. 3 minutes.

Indoor Fan Speed Control

- High, Med, Low, Chaos

Operation indication Lamps (LED)

- ① --- Lights up in operation
- ☆ --- Lights up in Sleep Mode
- 🕒 --- Lights up in Timer Mode
- ❄ --- Lights up in Deice Mode

Soft Dry Operation Mode

- Intermittent operation of fan at low speed.

Sleep Mode Auto Control

- The fan is switched to low(Cooling), med(Heating) speed.
- The unit will be stopped after 1, 2, 3, 4, 5, 6, 7 hours.

Natural Air Control by CHAOS Logic

- The fan is switched to intermittent or irregular operation
- The fan speed is automatically switched from high to low speed.

* Airflow Direction Control

- The louver can be set at the desired position or swing up and down automatically.(Model base)

Deice (defrost) control (Heating)

- Both the indoor and outdoor fan stops during deicing.
- Hot start after deice ends.

Hot-start Control (Heating)

- The indoor fan stops until the evaporator piping temperature will be reached at 27°C.

"Wall Mounted Type is standard"

* Functions is dependent on model type.

Art Cool Type Indoor Unit

Operation ON/OFF by Remote controller

Sensing the Room Temperature

- Room temperature sensor. (THERMISTOR)

Room temperature control

- Maintains the room temperature in accordance with the Setting Temp.

Starting Current Control

- Indoor fan is delayed for 5 sec at the starting.






Time Delay Safety Control

- Restarting is inhibited for approx. 3 minutes.

Indoor Fan Speed Control

- High, Med, Low, CHAOS, JET COOL

Operation indication Lamps (LED)

-   --- Lights up in operation
-  --- Lights up in Sleep Mode
-  --- Lights up in Timer Mode
-  --- Lights up in Defrost Mode (for Heating Model)

OUTDOOR--- Lights up in compressor operation (for Cooling Model)

Soft Dry Operation Mode

- Intermittent operation of fan at low speed.

Sleep Mode Auto Control

- The fan is switched to low(Cooling), med(Heating) speed.
- The unit will be stopped after 1, 2, 3, 4, 5, 6, 7 hours.

Natural Air Control by CHAOS Logic

- The fan is switched to intermittent or irregular operation
- The fan speed is automatically switched from high to low speed.

Airflow Direction Control

- The louver can be set at the desired position or swing up and down automatically.

PLASMA

- The function will be operated while in any operation mode with selecting the function.
- The function is to be stopped while it is operating with selecting the function.

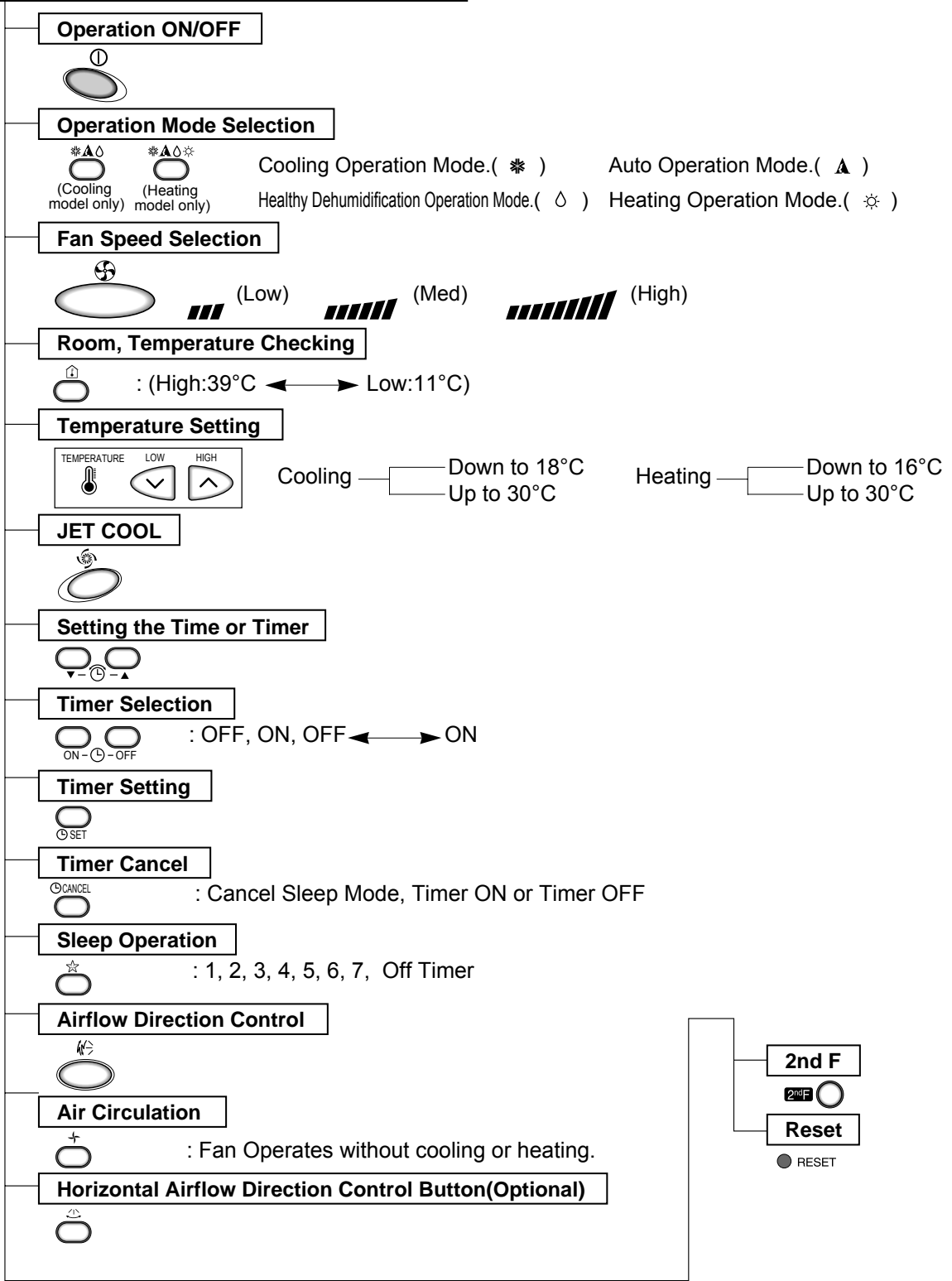
Defrost(Deice) control (Heating)

- Both the indoor and outdoor fan stops during defrosting.

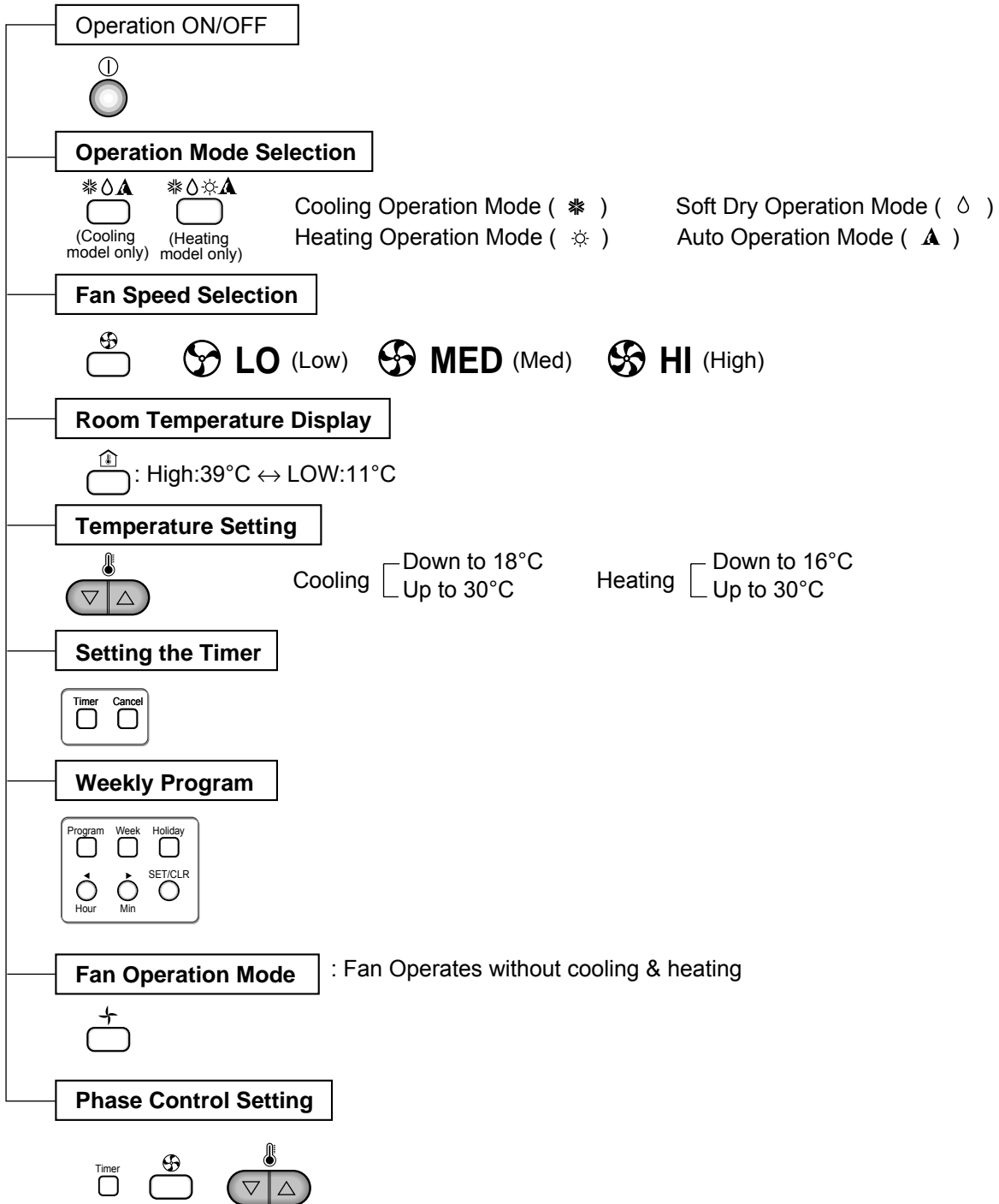
Hot-start Control (Heating)

- The indoor fan stops until the evaporator pipe temperature will be reached at 28°C.

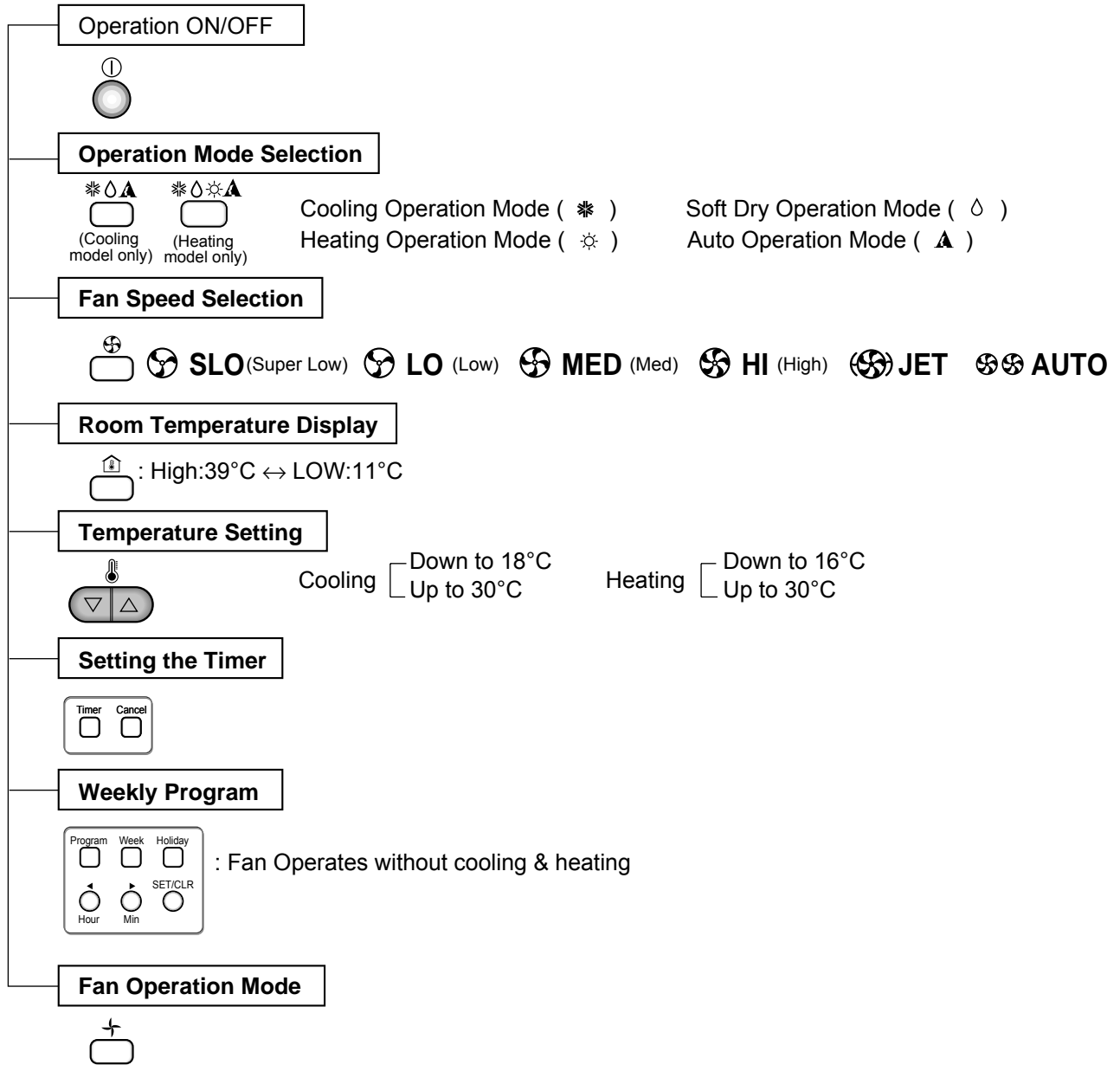
Art Cool Deluxe Type Remote Controller



Duct Type Remote Controller



CST Type Remote Controller



Function of Outdoor Unit

Outdoor Unit

Two Comp algorithm

- Inverter Comp is first priority and then Constant Comp is turning on responding to load condtion.

Operating Frequency

- Inverter Frequency varies considering condition such as room temp, outdoor temp, operating room number, Temp gap between room temp and set temp and so on.

LEV Control

- LEV pulse is modulated to keep constant superheat or subcooling.

Out door Fan Control

- Outdoor fan operates at High/Low or Off to respond to the load condition.

R/Valve Control

- Convert R/Valve to change cooling to heating, heating to cooling.

Comp Pre-Heat Logic

- Checking outdoor temp, D-Pipe temp, Heat Sink Temp, operate compressor at low frequency upto 5min to preheat oil.

Defrost Function

- After 35 min heating operation, check the defrost condition and if outdoor pipe temp is below -6°C and released from deice operation in case outdoor pipe temp is over 15°C or 7 min cooling mode.
- To deice outdoor heat exchanger in low temp condtion, convert operating mode from heating to cooling, in this case, indoor and outdoor fan is off.

Oil Return System

- In heating operation, every 3 hours, changes from heating to cooling for 5 min to return the oil in piping to compressor.

IPM Over Heat Protection

- To protect IPM overheat, down comp Hz.

Comp Overload Protection

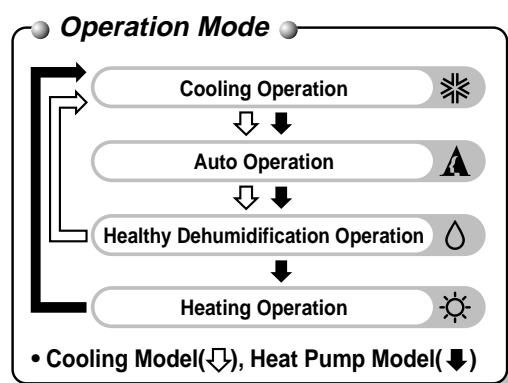
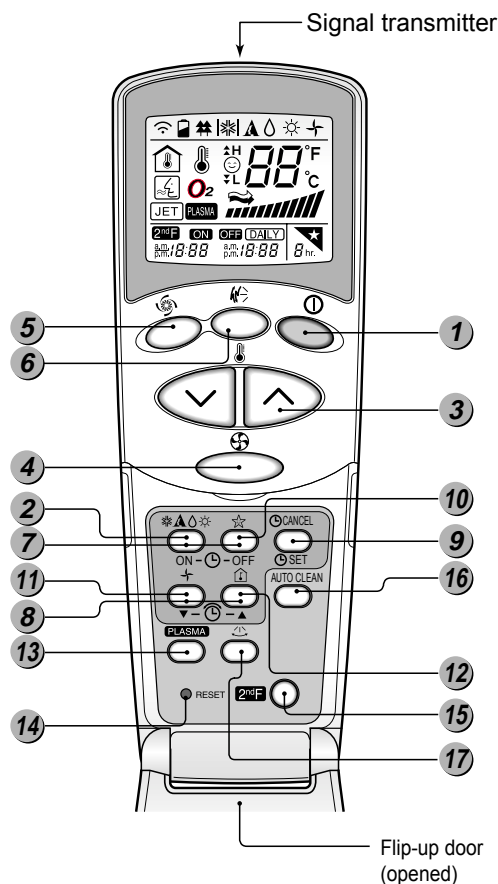
- To protect comp from being overload, down comp Hz.

Low Pressure Protection

- If cylce pressure is low (around 0.3kgf/cm^2), turn off comp and outdoor fan.

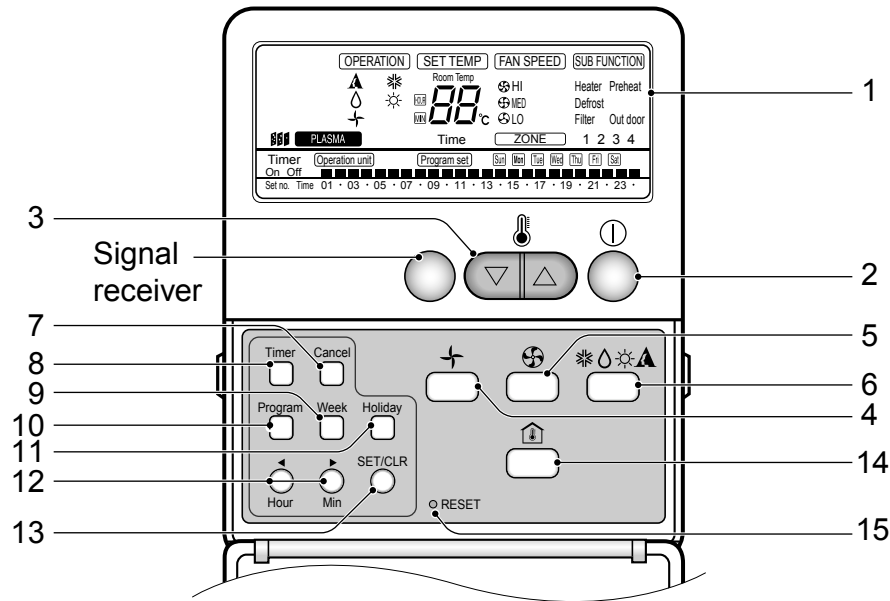
Remote Control Operation

The Remote Controller transmits the signals to the system.



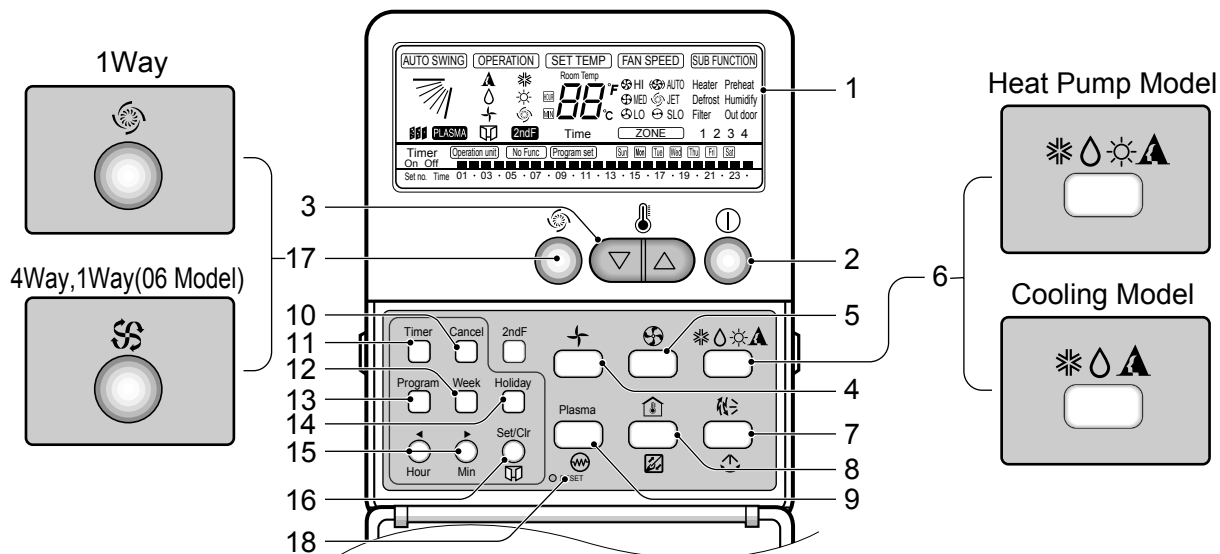
- 1 START/STOP BUTTON**
 Operation starts when this button is pressed and stops when the button is pressed again.
- 2 OPERATION MODE SELECTION BUTTON**
 Used to select the operation mode.
- 3 ROOM TEMPERATURE SETTING BUTTONS**
 Used to select the room temperature.
- 4 INDOOR FAN SPEED SELECTOR**
 Used to select fan speed in four steps low, medium, high and CHAOS.
- 5 JET COOL**
 Used to start or stop the speed cooling/heating. (Speed cooling/heating operates super high fan speed.)
- 6 CHAOS SWING BUTTON**
 Used to stop or start louver movement and set the desired up/down airflow direction.
- 7 ON/OFF TIMER BUTTONS**
 Used to set the time of starting and stopping operation.
- 8 TIME SETTING BUTTONS**
 Used to adjust the time.
- 9 TIMER SET/CANCEL BUTTON**
 Used to set the timer when the desired time is obtained and to cancel the Timer operation.
- 10 SLEEP MODE AUTO BUTTON**
 Used to set Sleep Mode Auto operation.
- 11 AIR CIRCULATION BUTTON**
 Used to circulate the room air without cooling or heating.
- 12 ROOM TEMPERATURE CHECKING BUTTON**
 Used to check the room temperature.
- 13 PLASMA(OPTIONAL)**
 Used to start or stop the plasma-purification function.
- 14 RESET BUTTON**
 Initialize remote controller.
- 15 2nd F Button**
 Used prior to using modes printed in blue at the bottom of buttons.
- 16 AUTO CLEAN (Model Base)**
 Used to set Auto Clean mode.
- 17 HORIZONTAL AIRFLOW DIRECTION CONTROL BUTTON (OPTIONAL)**
 Used to set the desired horizontal airflow direction.

Duct Type Remote Controller



- 1 Operation display**
Displays the operation conditions.
- 2 On/Off Button**
Operation starts when this button is pressed, and stops when the button is pressed again.
- 3 Set Temperature Button**
Used to set the temperature when the desired temperature is obtained.
- 4 FAN Operation Button**
Used to circulate room air without cooling or heating.
- 5 Fan Speed Button**
Used to set desired fan speed.
- 6 Operation Mode Selection Button**
Used to select the operation mode.
 - Auto Operation Mode.
 - Cooling Operation Mode.
 - Soft Dry Operation Mode.
 - Heating Operation Mode.(except cooling model)
- 7 Timer Cancel Button**
Used to cancel the timer.
- 8 Timer Set Button**
Used to set the timer when the desired time is obtained.
- 9 Week Button**
Used to set a day of the week.
- 10 Program Button**
Used to set the weekly timer.
- 11 Holiday Button**
Used to set a holiday of the week.
- 12 Time Set Button**
Used to set the time of the day and change the time in the weekly timer Function.
- 13 Set and Clear Button**
Used to set and clear the weekly timer.
- 14 Room Temperature Checking Button**
Used to check the room temperature.
- 15 Reset Button**
Used to set the current time and clear the setting time.

CST Type Remote Controller



- 1 Operation display**
Displays the operation conditions.
- 2 On/Off Button**
Operation starts when this button is pressed, and stops when the button is pressed again.
- 3 Set Temperature Button**
Used to set the temperature when the desired temperature is obtained.
- 4 FAN Operation Button**
Used to circulate room air without cooling or heating.
- 5 Fan Speed (Jet Cool Button: 4 Way)**
Used to set the desired fan speed or select Jet cool mode.
- 6 Operation Mode Selection Button**
Used to select the operation mode.
 - Auto Operation Mode
 - Cooling Operation Mode
 - Soft Dry Operation Mode
 - Heating Operation Mode(except cooling model)
- 7 Auto Swing Button**
Used to swing up and down/right and left(option)
- 8 Room Temperature Checking Button/Filter sign Release(Optional)**
Used to check the room temperature.
- 9 Plasma Air Clean Button (Option)/Heater(Optional)**
- 10 Timer Cancel Button**
Used to cancel the timer.
- 11 Timer Set Button**
Used to set the timer when the desired time is obtained.
- 12 Week Button**
Used to set a day of the week.
- 13 Program Button**
Used to set the weekly timer.
- 14 Holiday Button**
Used to set a holiday of the week.
- 15 Time Set Button**
Used to set the time of the day and change the time in the weekly timer Function.
- 16 Set and Clean/Ventilation(Optional)**
Used to set and clear the weekly timer.
- 17 Swirl Button (4 Way)**
Used to select swirl mode.
Jet Cool Button
Auto Swing Button(1 Way 06 Model)
- 18 Reset Button**
Used to set the current time and clear the setting time.

* Display temperature can be different from actual room temperature if the remote controller is installed at the place where sun-rays are falling directly or the place nearby heat source.
Note : 06 Model - AMNH09GTCC0, AMNH12GTCC0

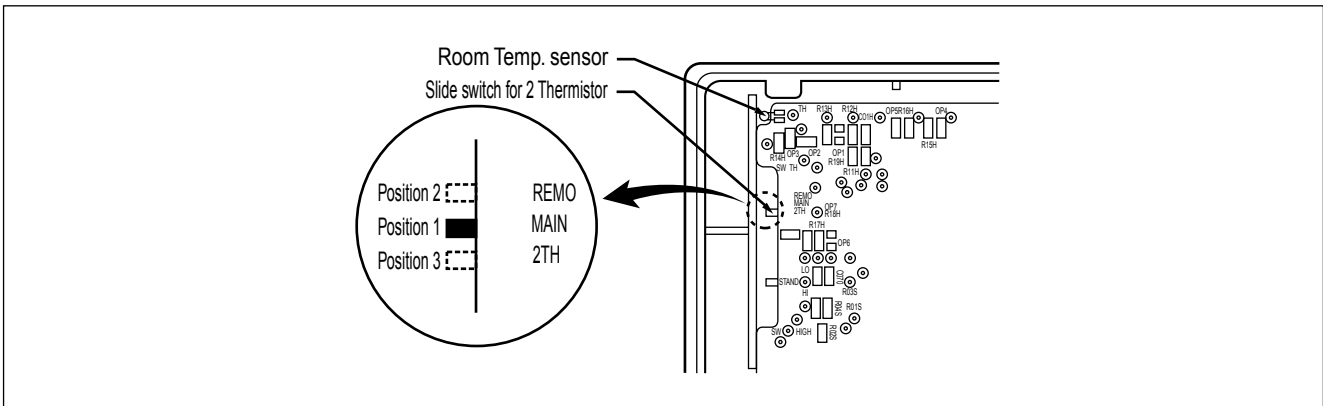
1) Two Thermistor System

(1) Open the rear cover of the wired remote-controller to set the mode.

(2) Select one of three selectable modes as follows.

- Position 1:
The room temperature is controlled by the thermistor of the main body.
- Position 2:
The room temperature is controlled by the thermistor of the wired remote-controller, control the temperature according to the position of wired remote-controller.
- Position 3:
The room temperature is controlled by lower temperature between the temperature of main body and of remote-controller sensor.

(3) Move the slide switch to set position.



(4) Close the rear cover and check if it works normally.



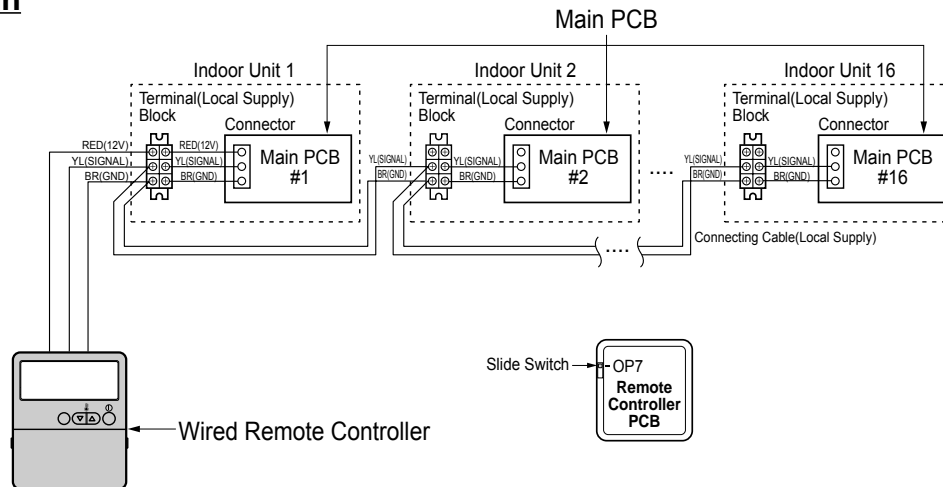
CAUTION: • Select the position after counselling with a customer.

- In case of cooling mode, room temperature is controlled by the main body sensor.
- To control the room temperature by a wired remote controller, install controller(room temp. sensor) to sense the temperature more accurately.
- Manufactured in the position 1.

2) Group Control(Optional Wiring)

- You can use a group control operation after connecting the brown and yellow wire of each air-conditioner.
- Remove the resistor "OP 7" in remote controller.
- It operates maximum 16 Units by only one Wired Remote Controller, and each Unit starts sequentially to prevent overcurrent.

Wiring design



Features

- Use Only One Wired Remote Controller with several air conditioners(max. 16 Units)
- Random starting to prevent overcurrent.



CAUTION: • Be careful not to exchange the color of wires.

- The maximum length of connecting wire should be below 200m(25Ω) on connecting each units.
- Use a wire more than 0.5mm²

3) E.S.P.(External Static Pressure) Setting

- (1) Open the rear cover of the wired remote-controller to set the mode.
- (2) Select one of three selectable modes as follows.

■ Without Zone System

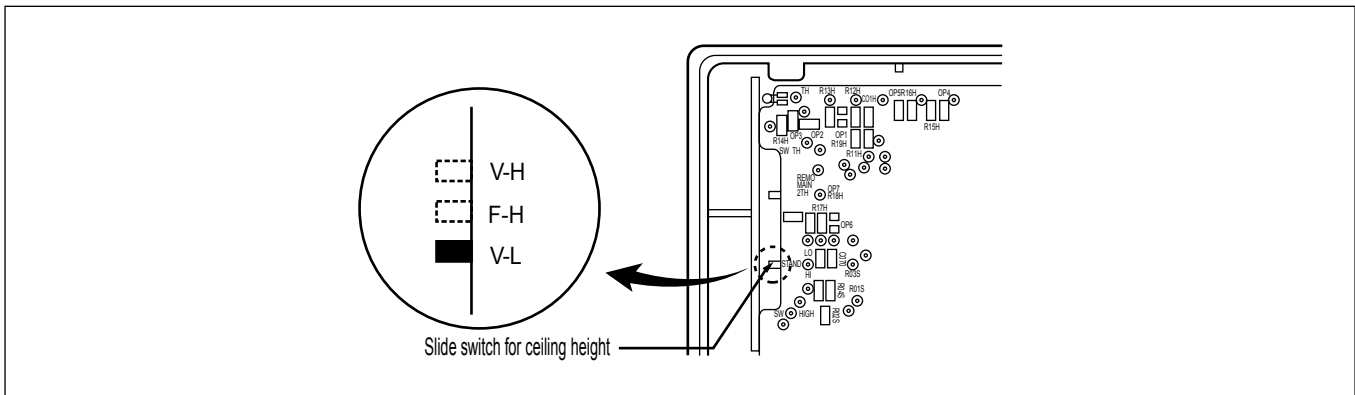
1. Position V-H, F-H:
 - This position sets the maximum E.S.P as a default set.
2. Position V-L:
 - This position sets the minimum E.S.P as a default set.

■ With Zone System

1. Position V-H:
 - Maximum E.S.P setting & Fan speed is varied according to the state of dampers by micom.
2. Position F-H:
 - Maximum E.S.P setting & Fan speed doesn't vary according to the opening & Closing of dampers.
3. Position V-L:
 - Minimum E.S.P setting & Fan speed is varied according to the state of dampers by micom.

* Maximum : 8mmAq
Minimum : 0mmAq

- (3) Move the slide switch to set position.



- (4) Close the rear cover and check if it works normally.

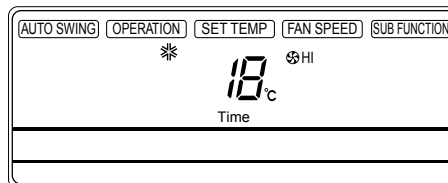
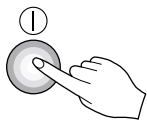
4) How to Set E.S.P?

Procedure of RPM change:

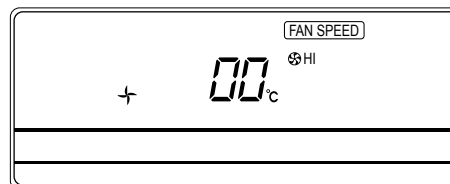
Ex) External Static pressure is 4mmAq for Model 36K.

- To protect the unit, compressor is designed to be off during E.S.P. setting.

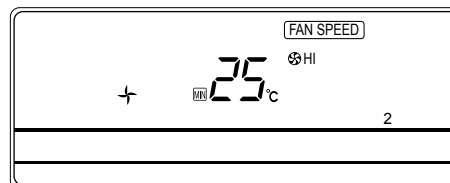
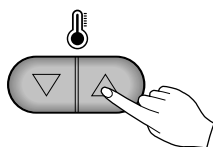
- 1** Push the "On/Off" button.
The unit will start.



- 2** Push the "Timer" and "Wind" button simultaneously for more than 3 seconds.



- 3** Push the "Up" of "Down" button for E.S.P adjustment.
And, adjust the number which you want. (In this example, the number is "225". Refer to the table 1 on the next page.)

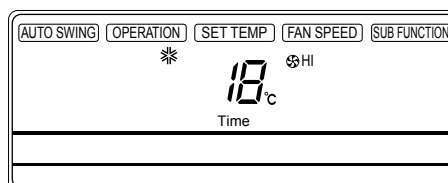
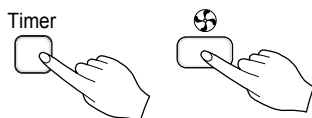


Note: The range of selection is from 1~254. Since, the display is two Digit only.
If the range selection is above 100 then the third digit will appear in the screen as shown.

- 4** Shift the fan speed mode by pressing the fan speed button.
And then, Adjust numbers of next steps by repeating the stage 3.
(In this example, the numbers are "237" and "243" respectively)



- 5** Push the "Timer" and "Wind" button simultaneously for more than 3 seconds.
Then, Wind Data is memorized by the EEPROM of the main PCB.



Duct ESP control table

Chassis	Static Pressure(mmAq)		0	1	2
	Ca(Btu/h)	Step(Hi/Med/Lo)	Setting Value		
BT	9K	8 CMM	220	215	210
		7 CMM	240	235	230
		6 CMM	255	250	245
	12K	10 CMM	175	170	150
		9 CMM	200	190	185
		8 CMM	220	215	210
	18K	14 CMM	170	150	130
		13 CMM	185	165	145
		12 CMM	220	180	160

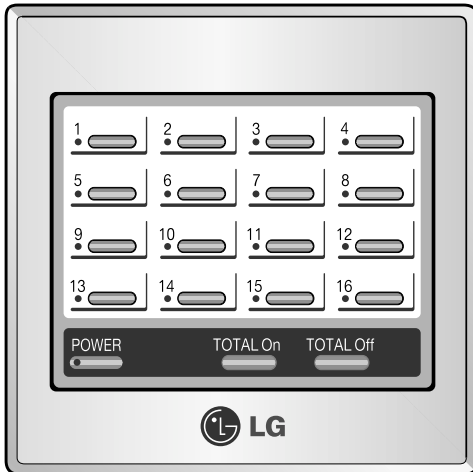
Chassis	Static Pressure(mmAq)		0	2	4
	Ca(Btu/h)	Step(Hi/Med/Lo)	Setting Value		
BP	9K	10.5 CMM	225	220	210
		9 CMM	245	240	230
		8.5 CMM	254	253	250
	12K	11.5 CMM	210	200	100
		10 CMM	235	230	220
		8.5 CMM	254	215	245

Chassis	Static Pressure(mmAq)		0	2	4	6	8	10
	Ca(Btu/h)	Step(Hi/Med/Lo)	Setting Value					
BH	18K	16.5 CMM	235	230	225	215	180	
		14.5 CMM	245	238	235	230	215	
		13 CMM	254	252	248	245	240	
	24K	18 CMM	220	205	190	170	1	
		16.5 CMM	235	230	220	200	100	
		14 CMM	250	240	235	230	210	

Control Devices and Function

Simple Central Control

Features



- Easy operation button.
- Independent operation for 16 indoor units each.
- Simultaneous turn ON/OFF for all of indoor units connected.
- Easy change operation mode to cooling or heating
- Set and clear lock-mode for each indoor unit
- Simultaneously set and clear lock-mode for all of indoor units connected.
- Display function for all of indoor units connected.

Term of Each part and Function

On/Off display LED (TOTAL 16EA)

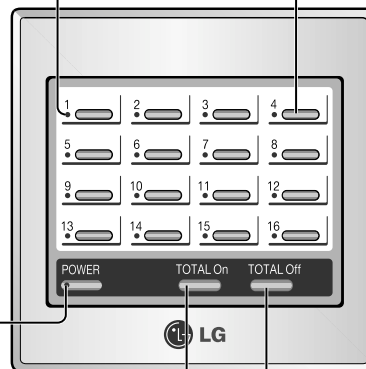
- On pressing individual on/off button, display the present operation state.
- Operation : green.
- Stop : off
- Error mode : blinking

Power display LED

- Indicate the state of DC Power supply in central control unit.
- On : red(Heating), green(Cooling)
- Off : no signal
- Error mode : blinking with red color

Individual On/Off button

- Control ON/OFF of a unit.



TOTAL Off button

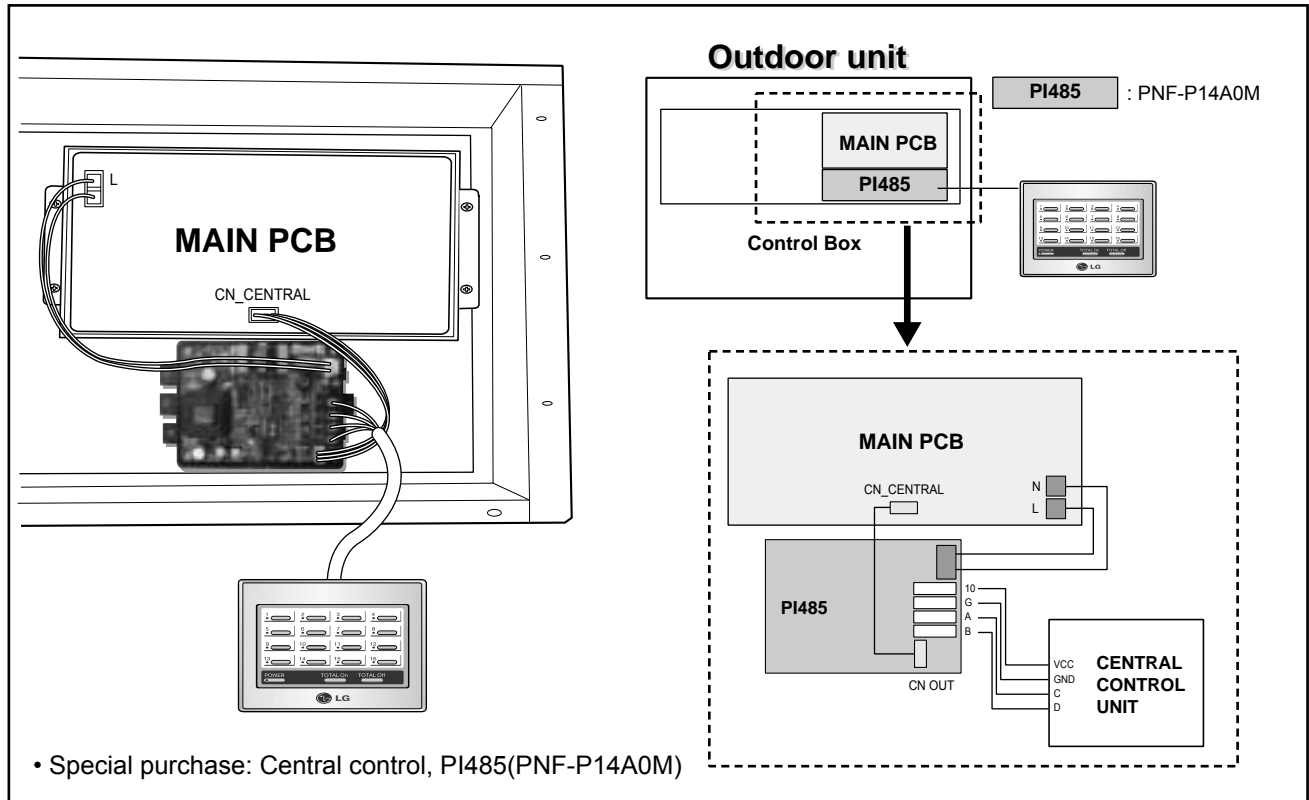
- Stop all linked units sequentially.

TOTAL On button

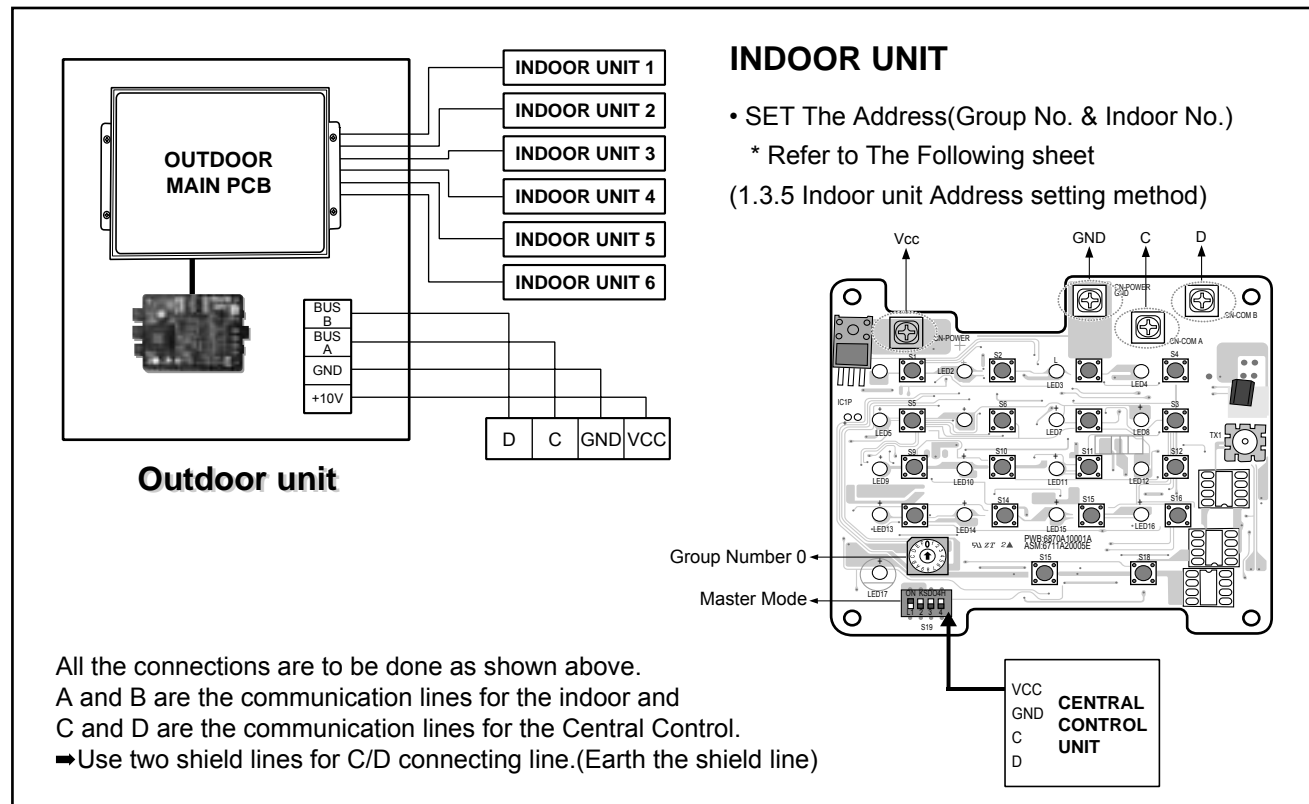
- Operate all linked units sequentially.

Electrical wiring

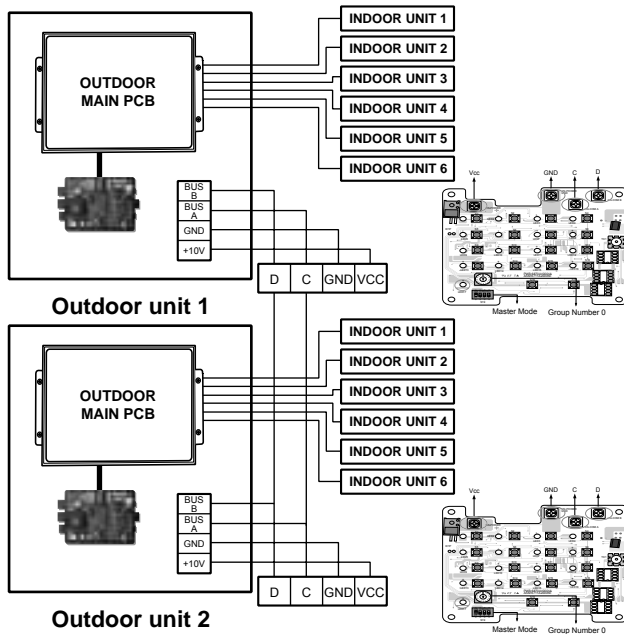
PICTORIAL VIEW OF THE CONNECTION



ONE SIMPLE CENTRAL CONTROL CONNECTION



■ 2 OR MORE SIMPLE CENTRAL CONTROL CONNECTION



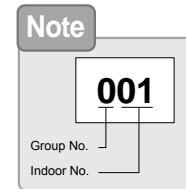
<Group Number 0>

Master DIP SWITCH

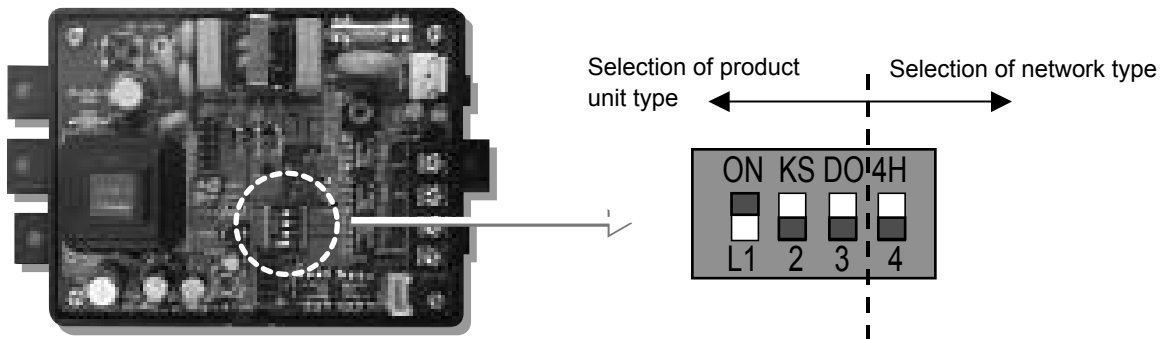
1. Adhere the PI485 Module (For connecting central control) to the Control Box.
 2. Connect the PI485 Module to central control.
 3. In the case of connecting two more than central control, set the Master/Slave mode and then connect each communication lines (C, D) <Refer to above fig>.
- *Special purchase: Central control (P/No. 4995A20105F),
PI485 Module (PNF-P14A0M)
* It can be added to 15 Central controls for the slave control.

<Group Number 1>

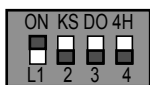
Slave DIP SWITCH



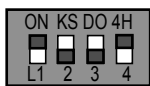
PI485 setting method (LG Aircon Network unit)



■ Settings method of TPS Inverter Multi Type



→ 1 ON + All OFF : Connection of "TPS Inverter Multi Connection + General Central Controller" Case.



→ 1,4 ON + All OFF : Connection of "TPS Inverter Multi Connection + Central Controller applied 「LGAP」" Case.

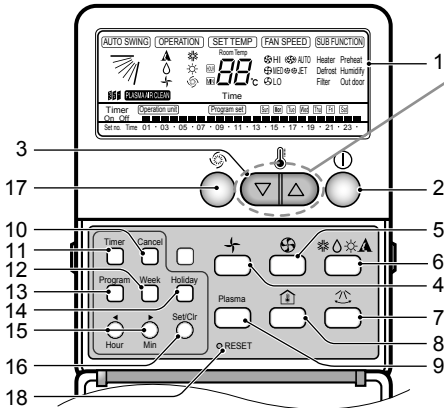
* LGAP : LG Air conditioners Protocol

• Function of LG Network

- It is possible to connect the network of LG air conditioners and to connect various contents of the network system, which is simple, deluxe and PC central control.
- Please refer to "LG Control System Manual" about the detail functions and the products possible to network.
- As the Interface for networking, PNF-P14A0M/R/C is applied.

Indoor Unit Address setting Method

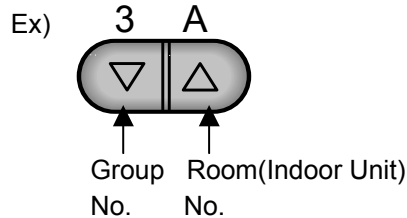
Using Wired Remocon



Heat Pump Model

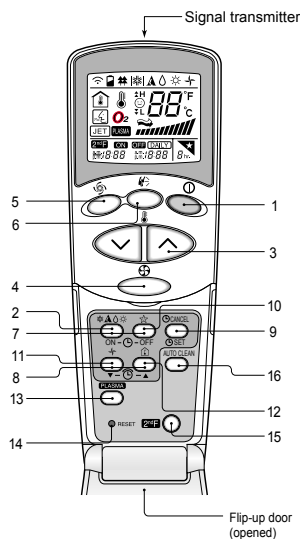
1. Press 13(program) and 16(set and clear) key more than 3 second then "Address Setting Mode" starts.
2. Set the address of indoor unit by using "Temperature setting" key.

■ Range of address : 00 ~ FF



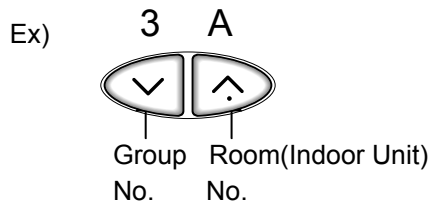
3. After setting address, press 13(program) and 16(set and clear) key more than 3 second then "Address Setting Mode" is finished.

Using Wireless Remocon



1. Address setting Method

- 1) Press 5(Jet Cool) & 13(Reset) key at the same time more than 3 seconds then "Address Setting Mode" starts.
 - 2) Set the address of indoor unit by using "Temperature setting" key.
- Range of address : 00 ~ FF



- 3) After address setting, pressing 1(On/Off) key, address setting is finished. The address that is set is displayed on a display window of indoor unit.
- * notice : The method of display and time is different according to indoor unit type.
- 4) If the remote control is reset, normal mode starts.

2. Address Monitoring

- 1) Press 6(Chaos Swing) & 13(Reset) key at the same time then "Address Monitoring Mode" starts.
 - 2) At the address monitoring mode, pressing 1(On/Off) key, The address that is set is displayed on a display window of indoor unit.
- * notice : The method of display and time is different according to indoor unit type.
- 3) If the remote control is reset, normal mode starts.

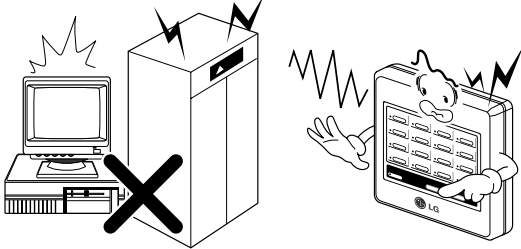
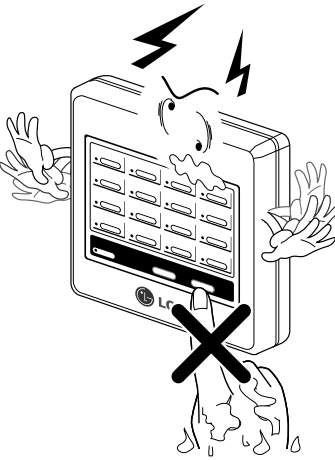
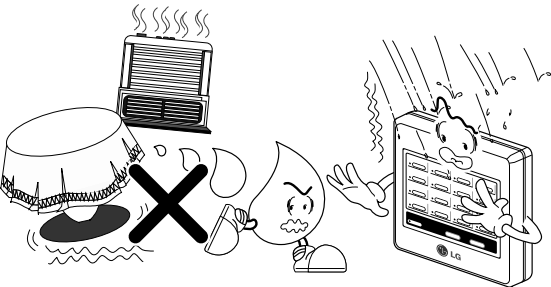
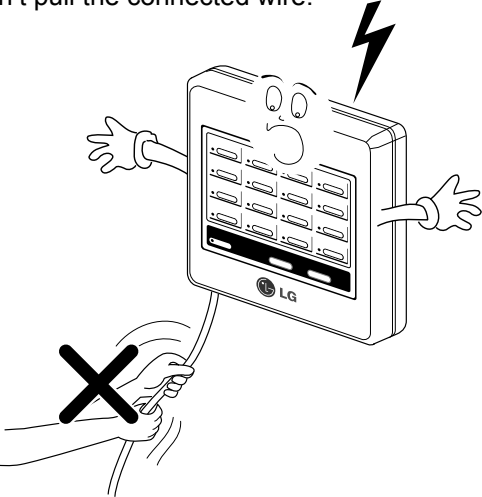
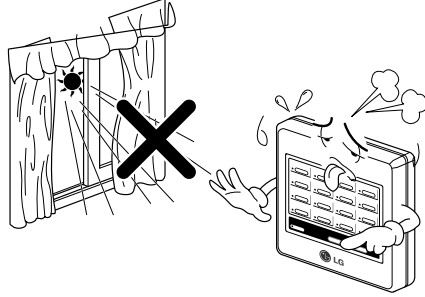
* Notice : Confirm that wired and wireless remote control are able to select the address or not.

Test run method

1. Set the wiring of system and indoor unit.
2. Apply power to the setting.
3. Do auto addressing to the outdoor unit.
4. After addressing, initialize the central controller(Manual initialize: Total on + total off + 16 key).
 - Cooling: Setting basically(Total On + Total Off + 4 key)
 - Heating: Total On + Total Off + 8 key → Red power lamp 'On'
6. Check up On/Off with a related indoor key pressing.

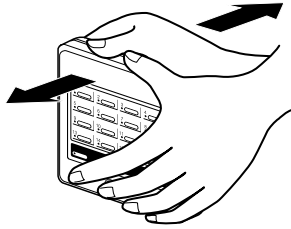
Installation

■ CAUTIONS

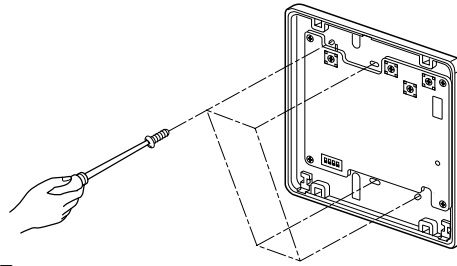
Do not install in this area	Keep in mind
<ul style="list-style-type: none"> • Don't install near elevator, computer, automatic door. (High noise area). 	<ul style="list-style-type: none"> • Don't operate with wet hands. 
<ul style="list-style-type: none"> • Don't install near high moisture & high oscillation area. 	<ul style="list-style-type: none"> • Don't pull the connected wire. 
<ul style="list-style-type: none"> • Don't install near direct sunlight or heat source. 	

■ INSTALLATION ORDER

1. Remove upper & lower case.



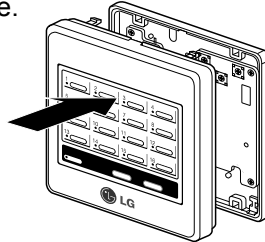
2. Fixate screw in the holes of the case bottom.



3. For Dip switch, and Rotary switch setting, refer to the page "How to Install".

4. For wiring connection, refer page "Installation Procedure"

5. Adjust the upper case in accordance with back case while assembling as shown in the figure.



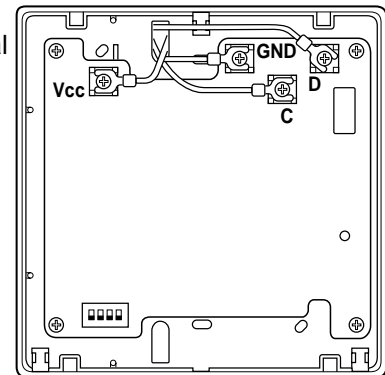
6. Check the operation by supplying the power.

■ LINK OF CONNECTING WIRE

1. First, separate the front case from rear case of controller, connect terminal C, D, Vcc, GND on PCB referring to the following table.

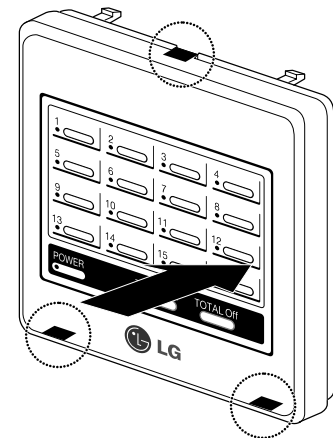
Maximum length of connecting wire

- Between controller and outdoor unit : 220m(25Ω)
- Between controllers : 220m(25Ω)



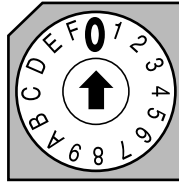
Out door unit Terminal Block	Wire Color	Central Control Terminal
GND	← BLUE →	GND
Vcc	← Red →	Vcc
C	← Brown →	C
D	← Yellow →	D

2. After attaching the supplied wire to terminal, link the connecting wire. If necessary, Cut the indicated part of front case to draw the lead wire.



■. ROTARY SWITCH SETTING(INSTALLATION FOR 2 OR MORE SIMPLE CENTRAL CONTROL)

The setting of Group Number in the Central Control is done by the rotary switch as shown in the figure below.

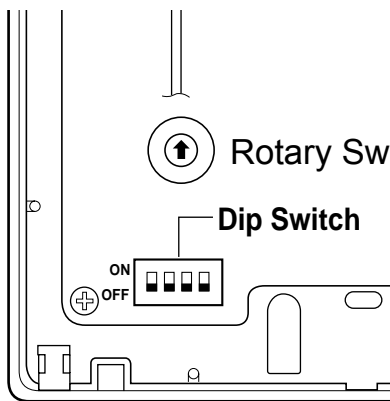


It is possible to set 0~15 Group(Total 16 Groups). All the numbers on the rotary switch represent the different Group Numbers. By changing the knob we can set rotary switch to the group number we want to control. The above fig. Shows the control of group number "0". Similarly we can control all the 16 Groups.

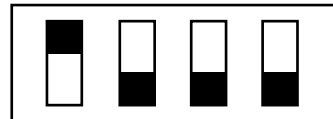
■. DIP SWITCH SETTING(INSTALLATION FOR 2 OR MORE SIMPLE CENTRAL CONTROL)

CAUTION

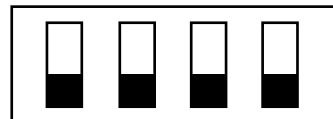
- Dip switch is now used only for the setting of master or slave mode.(In the case of two more than central controls.)
- Set one to Master, the others to slave.



Master Mode



Slave Mode



■. ACCEASSORY PARTS

Central control and sub P1485(with wire ass'y) should be purchased as optional.

<p>Central Control(1EA)</p>	<p>P1485(PQNFP14A0M)</p> <p>Wire Assembly 1</p> <p>Wire Assembly 2</p> <p>Screw(4EA)</p>
------------------------------------	----------------------------------------------------------------------------------------------------------------------

Deluxe Central Control

2.1.1 Summary

Deluxe Central control is a product available for individual and integrated monitoring and control of maximum 256 of TPS Inverter Multi air conditioner systems. Specially, operation status of the individual air conditioner can be particularly checked. Individual or simultaneous operation of the air conditioner, operation mode, wind quantity, user locking and temperature setup are also available.

Specially for this system, installation is simple and user's environment is excellent. Central control is available by a simple manipulation. In addition, this system have the self-battery built-in and can stably operate in spite of outside disturbance such as temporary power failure. This system has no need of additional peripheral equipment like UPS (Undisturbed Power System) and AVR to be purchased for stability when composing the existing PC central control system, and has so attractive advantage in installation costs.

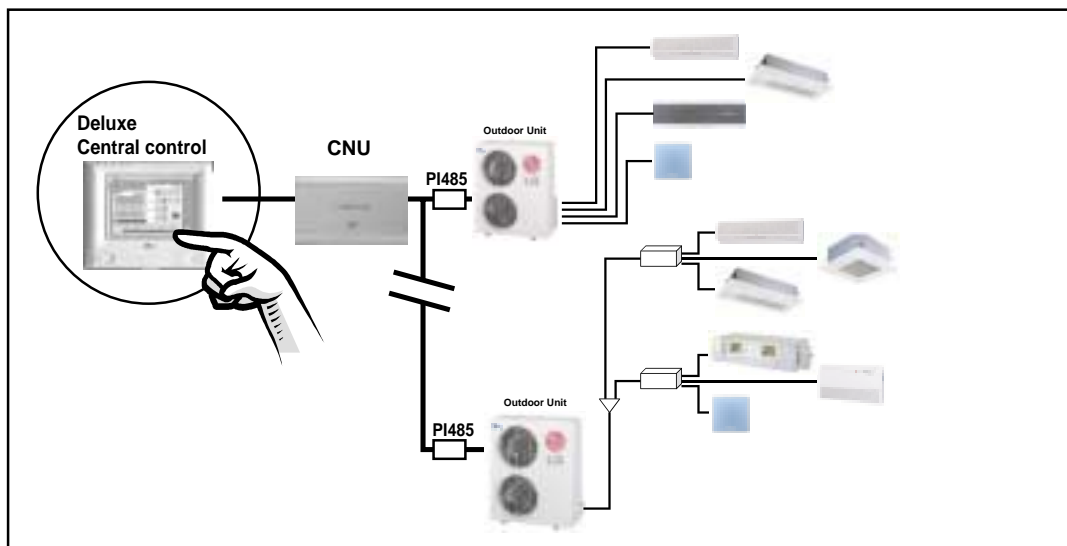
Using the Deluxe Central control enables the management room to setup lock of each air conditioner and prevent indoor control of the individual air conditioner and restrain the necessary use. In case of releasing the lock, you may control the system by using the wire/wireless remote control at the place where the individual air conditioner is installed.

Setup of a weekly schedule is available and detailed schedule of the individual air conditioner can be easily setup through the GUI. Details of schedule setup can be immediately checked with a graph. This system is a product to meet energy saving and convenience at the same time at a place like a school by using this schedule function.

Depending on installation environment, location and conditions of use, you can setup groups. With this setup, more efficient operation at the center is available. Setup without requiring other equipment is available by using the GUI and change by the consumer is also available after installation.

You can reduce development time to configure special system upon the request by the consumer and conveniently this system by using the touch panel.

Where needs from a new customer occur or where purchase of additional air conditioner is done, the Deluxe Central control can be smoothly installed.



Major Characteristics



Figure 2) Deluxe Central control

1. Individual/Integrated Operation/Monitoring

- You can identify operation status of the air conditioner, operation mode, wind quantity, wind direction, locking, temperature setting and error, etc by selecting the installed air conditioner through individual selection, group selection or all selection. Individual setup and operation of the detailed functions are available. Therefore, managing with Deluxe Central control installed at the control room at a building where a number of air conditioners are installed, is a convenient way.

2. Group Management

- Group management for the installed air conditioners is available. Group can be separated by their nature, location and size of each air conditioner which enables convenient use. In addition, allotment of respective name to the setup group allows further intuitive management.

3. Self-diagnosis Function

- The air conditioner installed can self-diagnosed its error status and then transmits the result to the central control. Therefore, a rapid countermeasure against failure of the air conditioner allows easy management and increases the usage life of air conditioner.

4. Semi-permanent Life / Convenient Maintenance

- Since the Deluxe Central control is designed for the semi-permanent use, this system can be used semi-permanently after installation, different from the existing PC or a large central control system requiring a continuous management due to the life of peripheral and other PC.

5. Management Costs Down

- In absence of the Central Control System, the manager controls a number of air conditioners. In addition, even if management was done at the center, there is only function of on/off management at best and thus 2 or 3 building managers were actually required. However, manipulation of all functions can be now done at a control room for the Deluxe Central control and so a manager can easily control all air conditioners. Automatic operation is also allowed without a manager, by using schedule function.

6. Convenient GUI / Touch Screen

- Not requires special education for using the Deluxe Central control, conveniently used only by pressing the buttons on the screen, and its function can be understood with intuitive pictogram. Especially schedule setting is done by simply by dragging, different from the existing system requiring to press the button by more than average 30 times to enter a schedule.

7. Schedule Automatic Operation Management / Energy Saving

- For the Schedule Automatic Operation, weekly setting is available. Enlisting of the schedule exception processing schedule (national holiday) is done for a year prevents the air conditioner from an unnecessary operation of air conditioner, allowing the system to be controlled at the center so that it can be only used for a necessary case and enabling to obtain excellent energy saving effect. Fixed schedule places like elementary school, middle school, high school and college or university will get its excellent working effect.

8. Power Failure Backup Function / Powerful Stability

- For the existing Central Control System, additional purchase of expensive UPS equipment in provision for a temporary power failure must be done in the past but for the Deluxe Central control, since the self-power failure compensation battery is built-in, power is automatically converted by maximum 2 hours. Therefore, there is almost no malfunction due to a temporary power failure because stable operation is available.

9. Mobility

- A wireless radio system may be installed at the Deluxe Central control, it will control the Airconditioners directly while going around the building with the wireless radio system and its self-battery function (100 m where there is no obstacle).

10. Convenient Installation

- This system can be freely fixed to the wall surface because of its small size, light weight and thin thickness. It can also stood up on the desk by using, its dedicated cradle. It is not subjected to spatial restriction in installation space and location since this system communicates on the basis of the I-GW and the Ethernet.

11. Stable Date Storage/Backup

- Setup information is saved as it is, even if no power is supplied then also all data is saved in the built-in flash memory.

12. Scalability

- Scalability of the system is easy in case of additionally purchasing equipment since scalable slot such as USB, Serial (RS-232c), PCMCIA, CF Type is prepared. This system is designed considering sufficient scalability in provision for special request by the customer.

13. Upgrade

- Additional installation of a new program is available via the CF memory card and the existing program can be upgraded to a new program. Using such upgrade function always enables to construct a modern type of Central Control System.

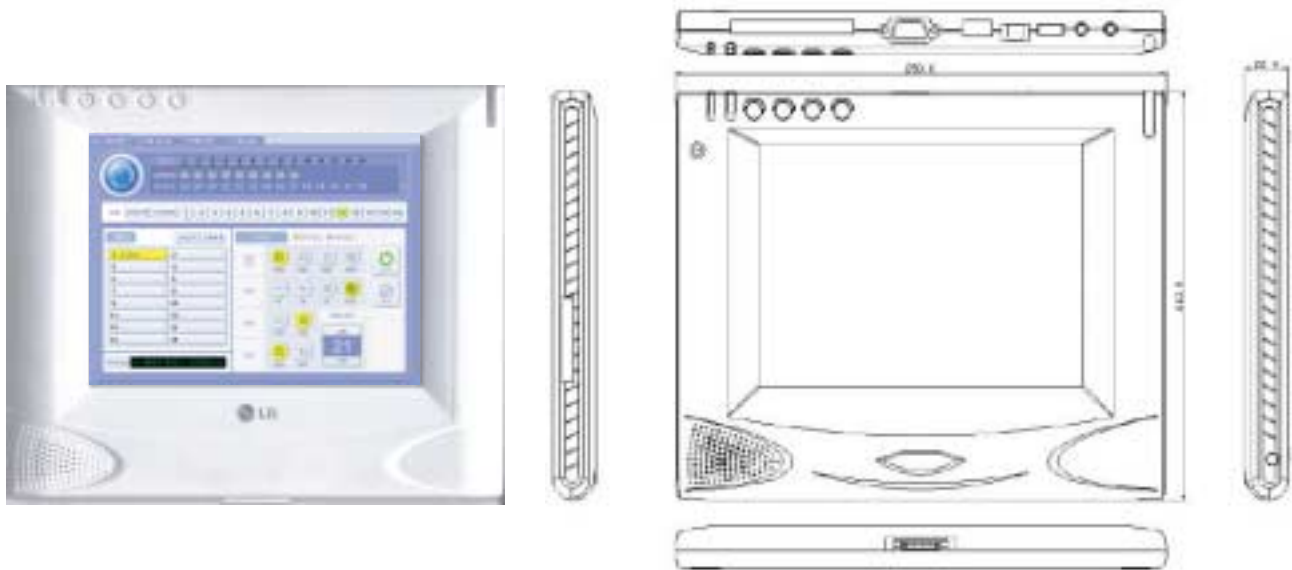


Figure 3) Deluxe Central control

Table 1) Comparison Between Central control Characteristics

	Internet Central control	PC Central control	Deluxe Central control
Dedicate PC	Non-required	Required	Non-required
Configuration	User S/W	User S/W, Engine S/W	Main Body of Web Pad Deluxe Central control
Position of program	Download to i-GW	Installation	Built-in
Max. installation set numbers	256sets (Less than 128 sets recommended)	256sets ¹⁾	256sets
Remote control	Available	-	-
Control & monitoring	Available	Available	Available
Schedule management	-	Available	Available
System setup	Available(Configure file modification)	Available	Available
System monitoring(overview)	-	Available	Available
User's lock	Available	Available	Available
Upgrade	Available	Available	Available
Touch screen	-	-	Built-in
Built-in Flash DB (backup)	-	-	Built-in
Wireless LAN (movable)	-	-	Available (option)
Non-interruption device	-	Separately add	Built-in
Requirements	Browser supporting JAVA	JVM (provided by MS)	-
Life	Semi-permanent	Peripheral devices & PC life	Semi-permanent

1) For the PC central control, installation set numbers may respond up to 1024 sets upon user's request.

2) JVM (Java Virtual Machine) is basically installed at the Windows but some versions of Window XP may be manually installed.

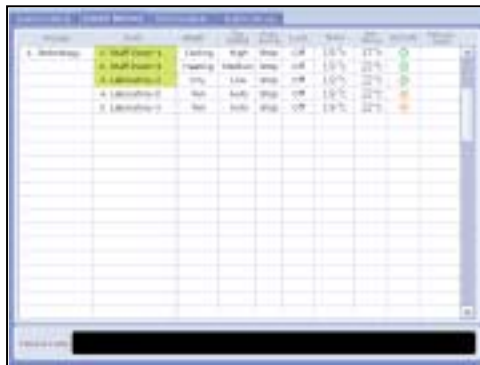
Major Function of Deluxe Central Control



[System Control]

To check general monitor function of the air con central control system such as selection of group and air conditioner, air conditioner control monitor function etc.

PQCSW501A0, PQCSW502A0



[System Monitor]

To check the actual time status of all air conditioners.

PQCSW501A0, PQCSW502A0



[System Set-up]

To manage the air conditioner through grouping and record setup of group and installation position, etc.

PQCSW501A0, PQCSW502A0



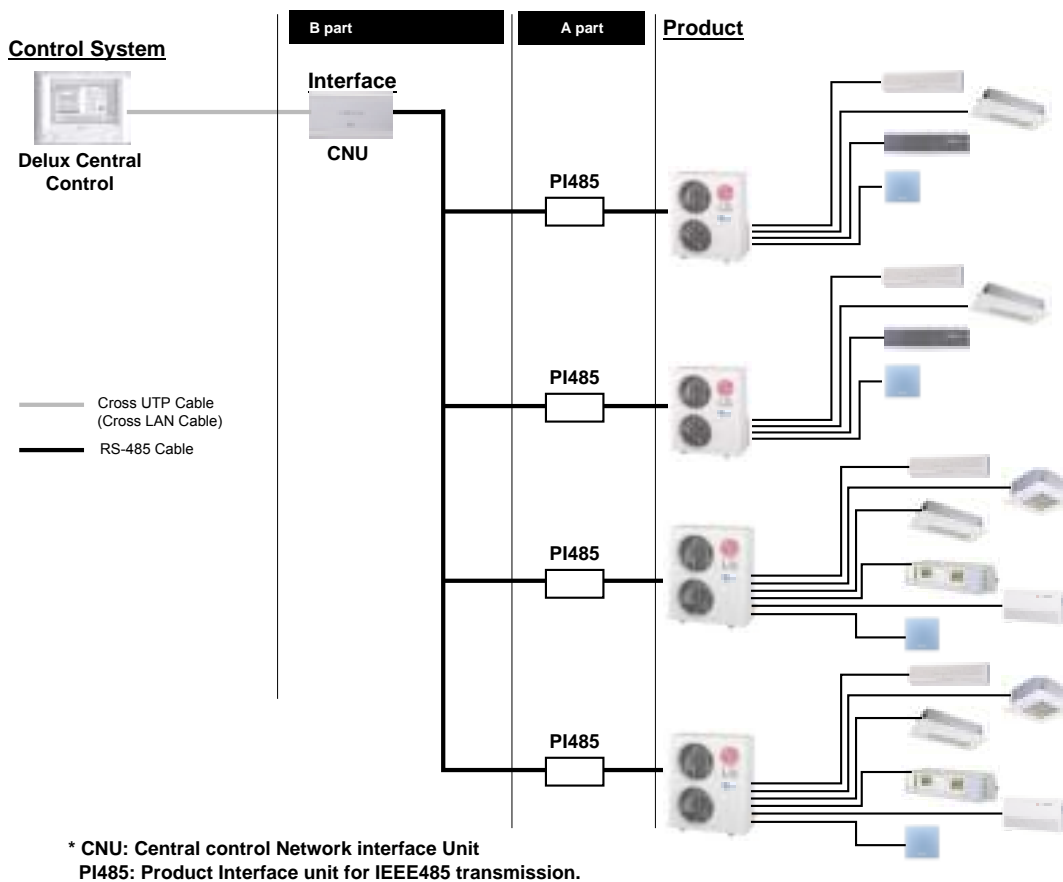
[Time Schedule]

Setup of a weekly schedule for all, group and individual air conditioner enabled operation of the system. Processing through enlist of extra schedule for a year is available.

PQCSW502A0

System Configuration

Scenario 1 : In case of not using Internet access function



Main Specifications

1. Control System

- Centralized control of maximum 256 indoor units
- Simple Touch PAD method
- GUI setting considering convenience of use
- Power failure compensation with independent Battery Built-in (Max. 2 hours)

2. CNU

- Combination of maximum 8 outdoor units
- 485 to Ethernet Converter Built-in

3. PI485

- 1 pcs per outdoor units

Note: - GUI(Graphic User Interface) may be changed without any notice, for improvement or options.

Disassembly of the parts (Indoor unit)

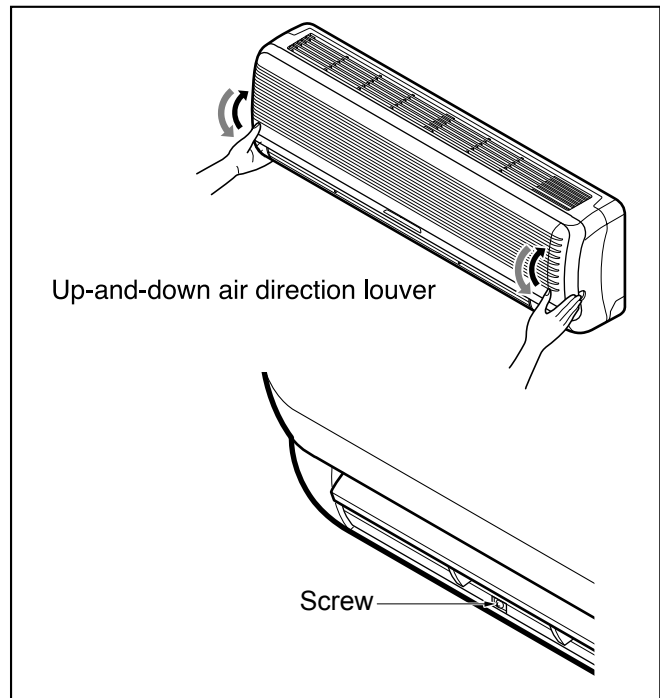
Indoor unit

1. Split Type Indoor unit

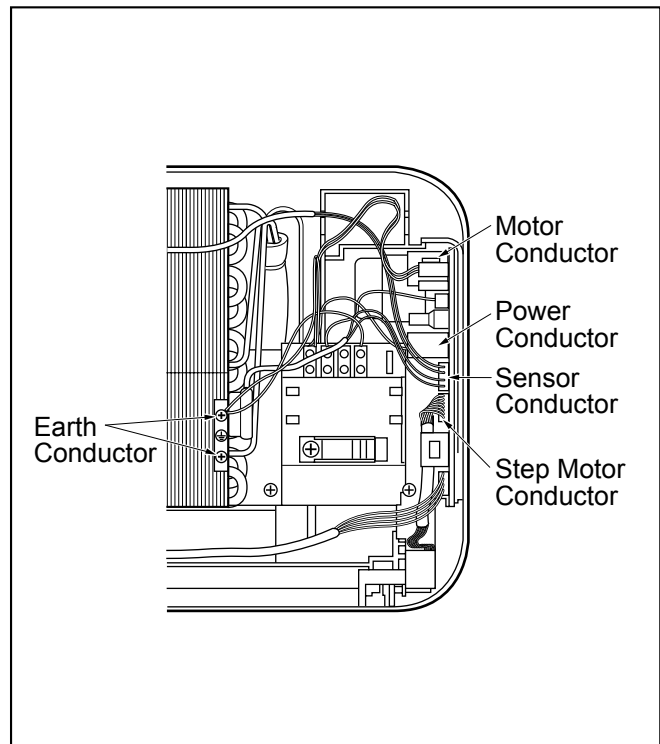
CAUTION: Disconnect the unit from power supply before making any checks.
Be sure the power switch is set to "OFF".

To remove the Grille from the Chassis.

- Set the up-and-down air discharge louver to open position (horizontally) by finger pressure.
- Remove the securing screws
- To remove the Grille, pull the lower left and right side of the grille toward you (slightly tilted) and lift it straight upward.

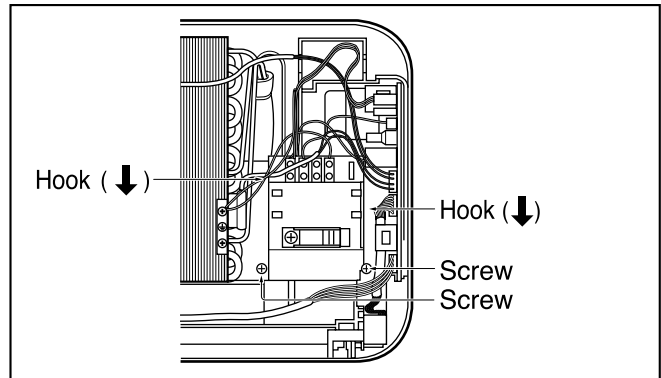


1) To remove the sensor, housing connect, earth conductor & step motor conductor with sensor holder, Motor, Evaporator & P.C.B.



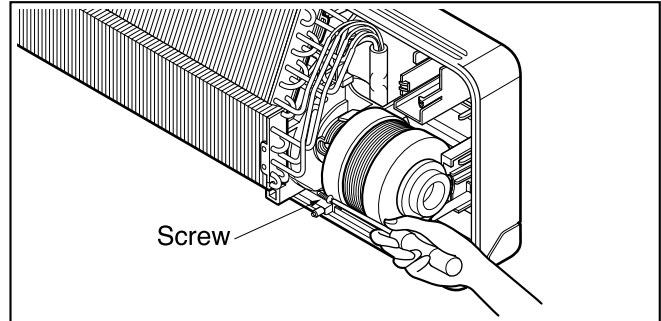
2) To remove the Control Box.

- Remove securing screws.
- Pull the control box out from the chassis carefully.



3) To remove the Discharge Grille.

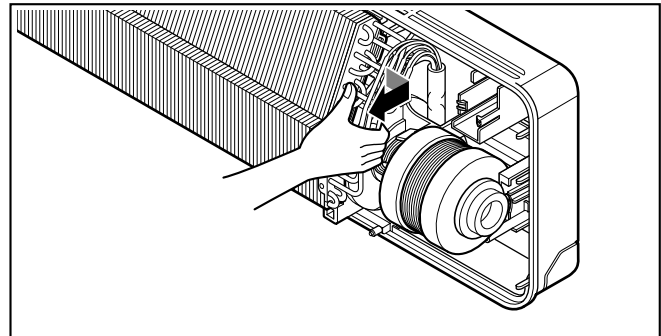
- Pull the discharge grille out from the chassis carefully.



4) To remove the Evaporator.

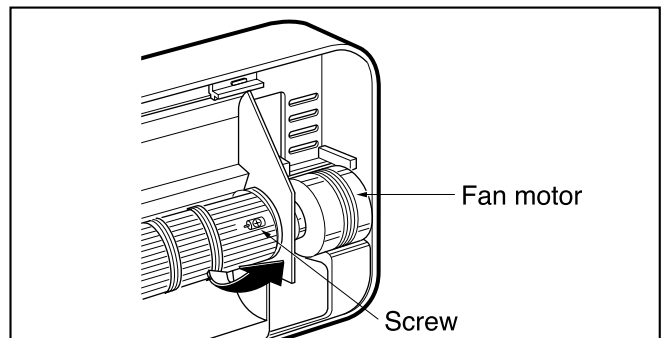
- Remove screws securing the evaporator and the holder eva.

- Unhook the tab on the right inside of the chassis at the same time, slightly pull the evaporator toward you until the tab is clear of the slot.

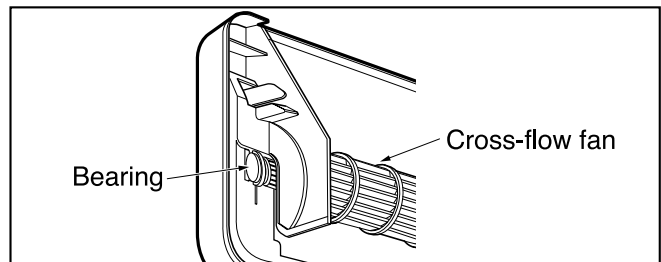


5) To remove the Cross-Flow Fan

- Loosen the screw securing the cross-flow fan to the fan motor (do not remove).
- Lift up the right side of the cross-flow fan and the fan motor, separate the fan motor from the cross-flow fan.



- Remove the left end of the cross-flow fan from the self-aligning bearing.

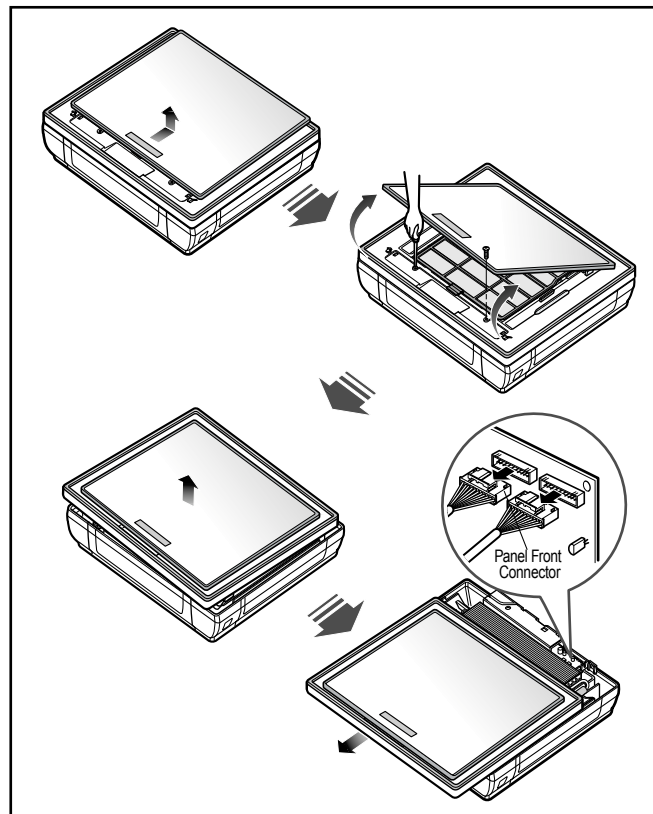


2. Art Cool Type Indoor Unit

⚠ CAUTION: Disconnect the unit from power supply before making any checks.
Be sure the power switch is set to "OFF".

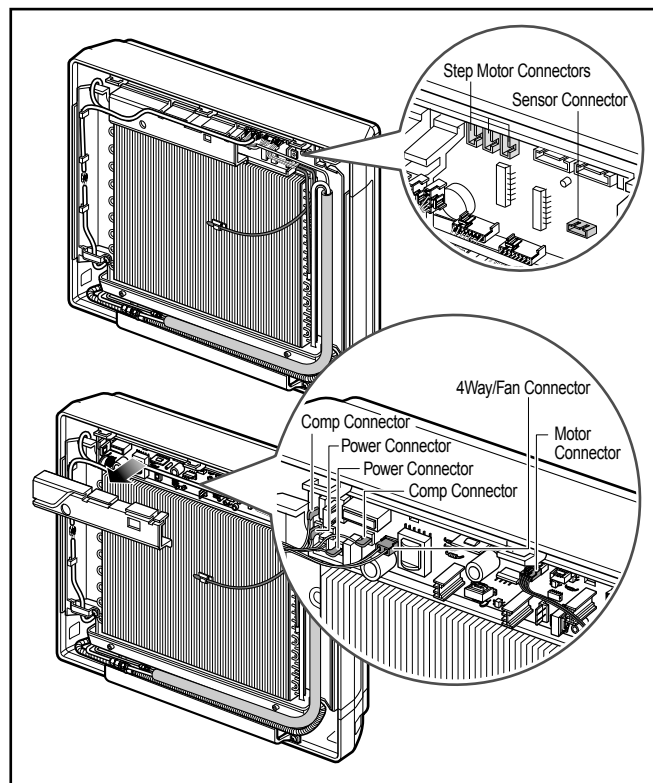
1. To remove the Grille from the Chassis.

- Pull the grille bottom, then remove 2 securing screws.
- Lift the both lower parts of panel front.
- After pull down this panel a bit, separate connecting wire with product.



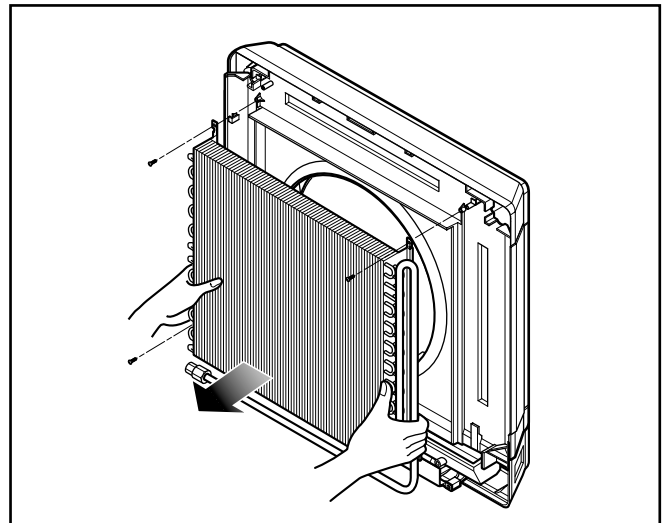
2. To remove the Control Box.

- Before removing the control box, be sure to disconnect the wires from PWB.
- Pull the cover control out from the control box and disconnect other wires.
- Remove securing screws.
- Pull the control box out from the chassis carefully.



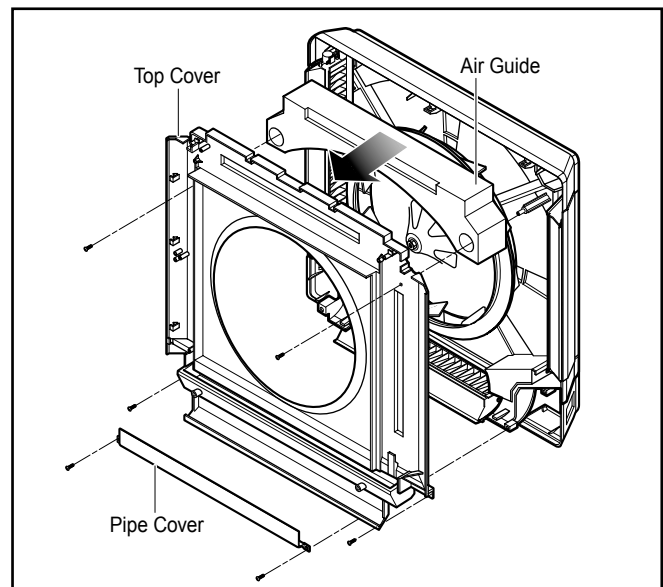
3) To remove the Evaporator.

- Remove 4 screws securing the evaporator.
- Pull the evaporator out from the chassis carefully.



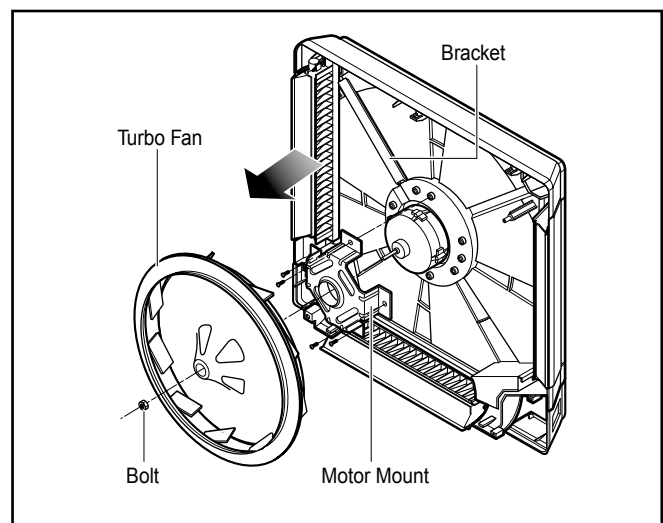
4) Before removing the Turbo Fan.

- Remove the securing screws from the chassis.
- Pull the pipe cover, top cover and the air guide.



5) To remove the Motor.

- Remove the securing bolt from the motor shaft.
- Pull the fan out from the motor shaft.
- Remove 4 screws securing motor mount from the chassis and lift up the motor mount and the bracket.

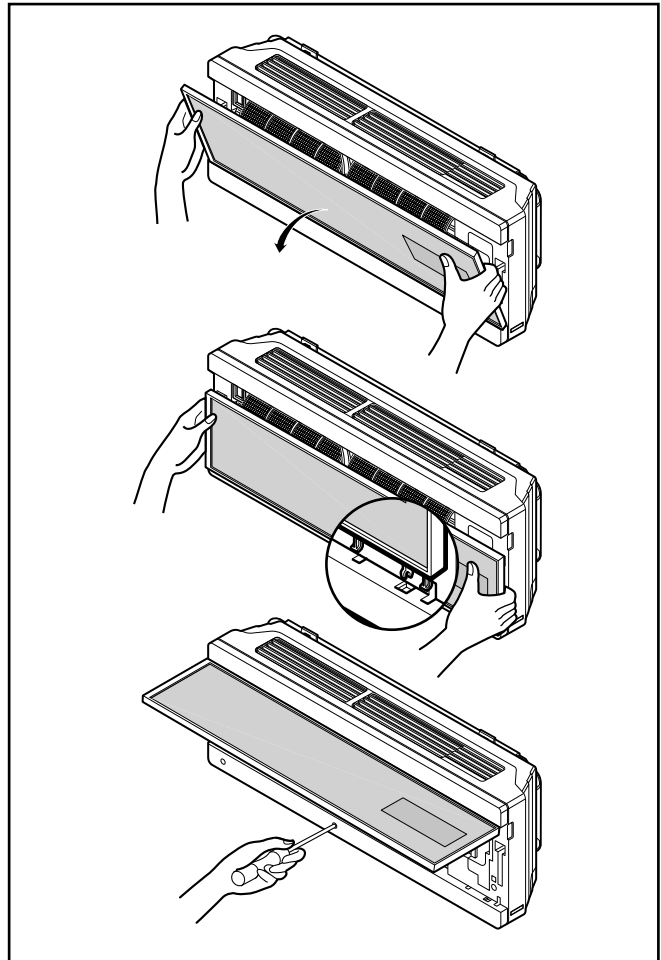


3. Art Cool Deluxe Type Indoor Unit(SZ,SU,S3)

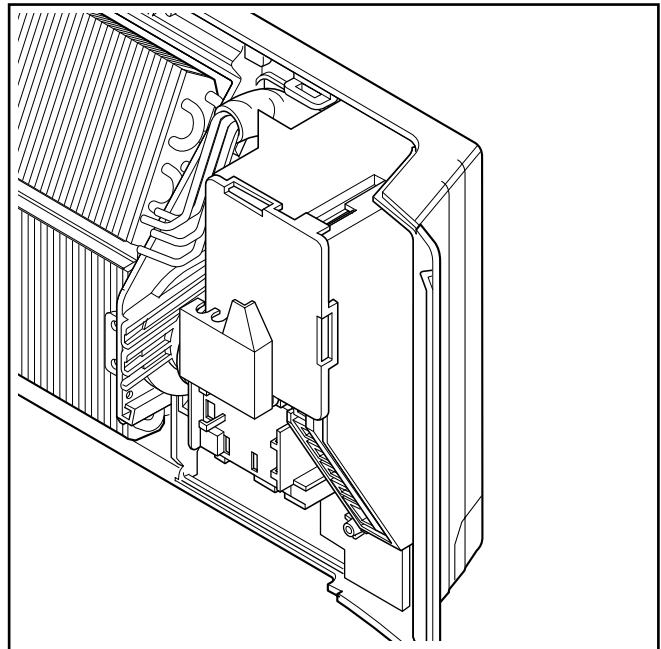
⚠ CAUTION: Disconnect the unit from power supply before making any checks.
Be sure the power switch is set to "OFF".

To remove the Grille from the Chassis.

- Hold up Inlet Grille Horizontally.
- To remove the Grille, pull the lower left and right side of the grille toward you (slightly tilted) and lift it straight upward.
- To separate connector assembly and than to remove Inlet Grille assembly.



- 1) Before removing the control box, be sure to take out the wire screwed at the other end.



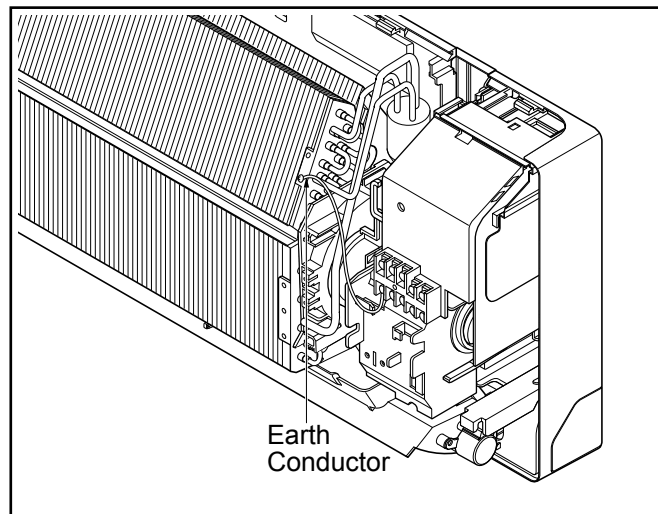
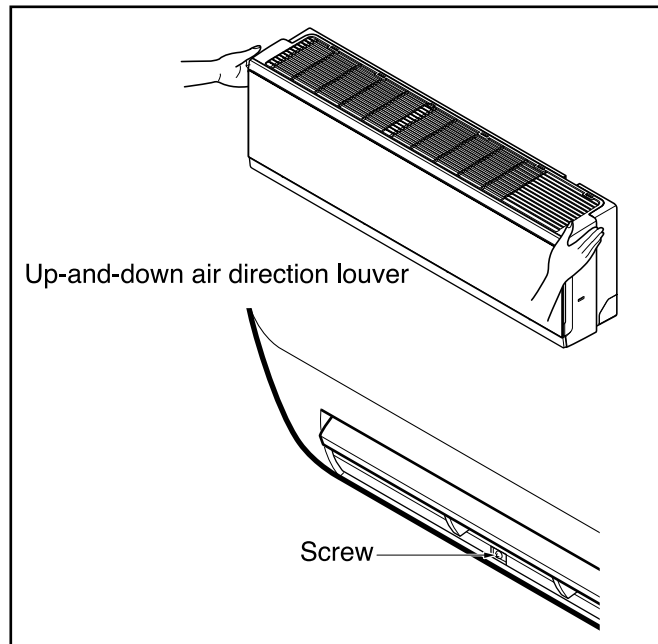
4. Art Cool Deluxe Type Indoor Unit(SE)

CAUTION: Disconnect the unit from power supply before making any checks.
Be sure the power switch is set to "OFF".

To remove the Grille from the Chassis.

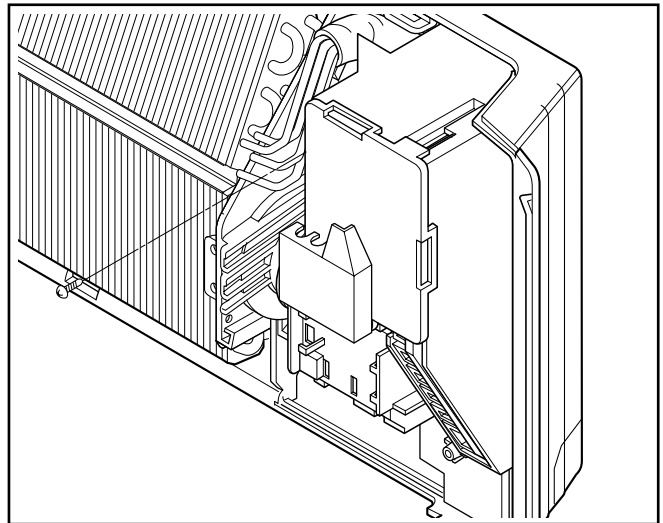
- Hold up Inlet Grille Horizontally.
- To remove the Grille, pull the lower left and right side of the grille toward you (slightly tilted) and lift it straight upward.
- To separate connector assembly and than to remove Inlet Grille assembly.

1) Before removing the control box, be sure to take out the wire screwed at the other end.



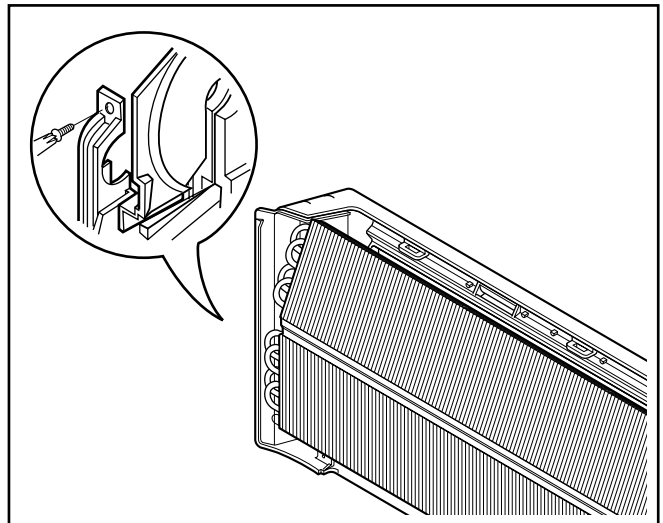
2) To remove the Control Box.

- Remove securing screws.
- Pull the control box out from the chassis carefully.



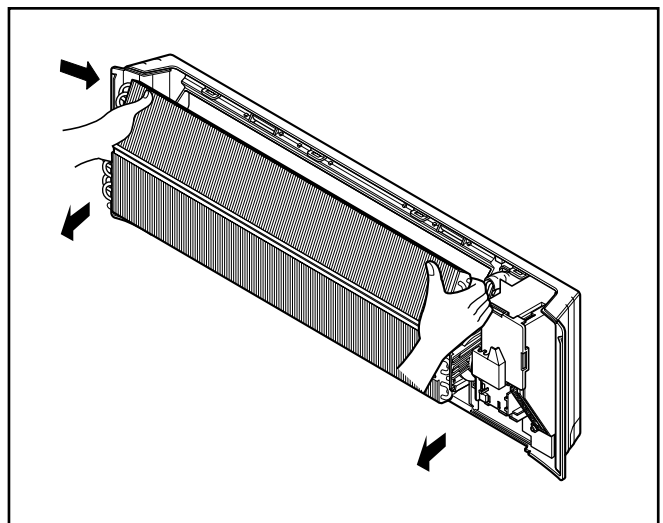
3) To remove the Discharge Grille.

- Unhook the discharge grille and pull the discharge grille out from the chassis carefully.

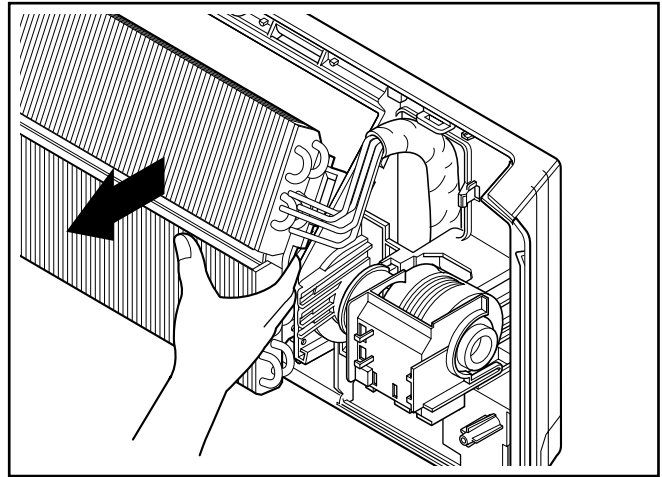


4) To remove the Evaporator.

- Remove 3 screws securing the evaporator(at the left 2EA in the Eva Holder, at the right 1EA).

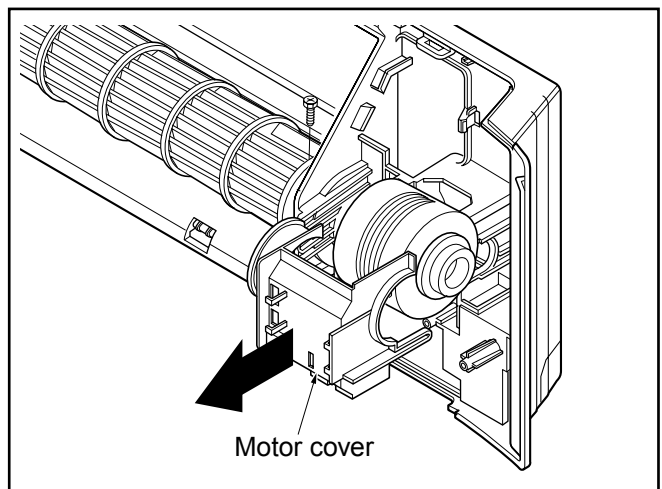


- Unhook the tab on the right inside of the chassis at the same time, slightly pull the evaporator toward you until the tab is clear of the slot.



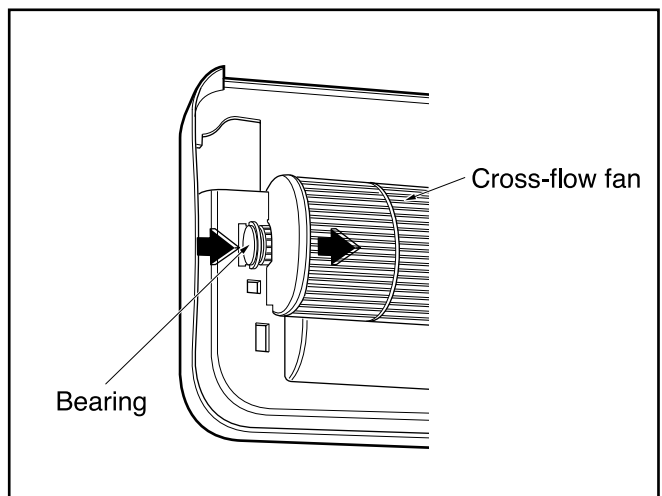
5) To remove the Motor Cover

- Remove 2 securing screw.
- Pull the motor cover out from the chassis carefully.



6) To remove the Cross-Flow Fan

- Loosen the screw securing the cross-flow fan to the fan motor (do not remove).
- Lift up the right side of the cross-flow fan and the fan motor, separate the fan motor from the cross-flow fan.



- Remove the left end of the cross-flow fan from the self-aligning bearing.

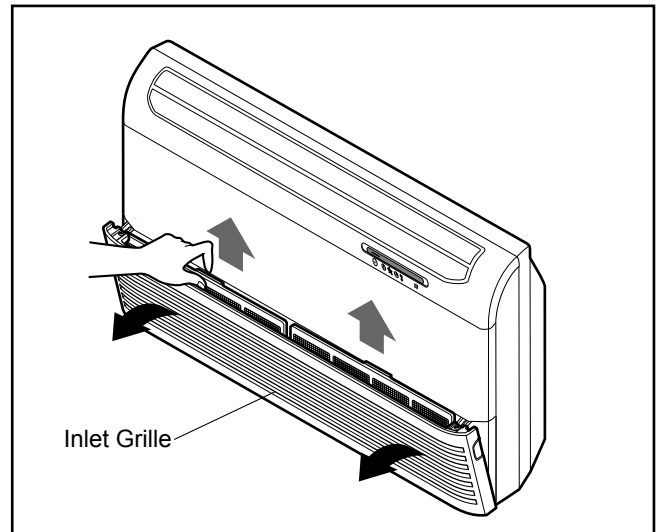
3. CVT Type - VB chassis



Warning : Disconnect the unit from power supply before making any checks.
Be sure the power switch is set to "OFF".

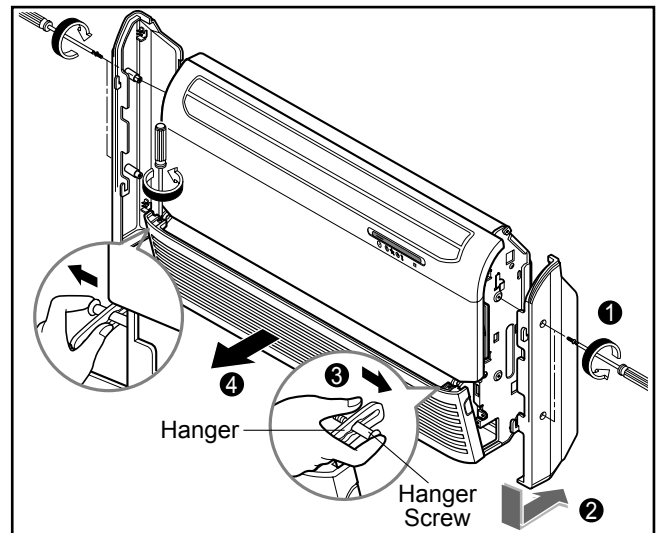
1. Remove the air filter.

- Pull the inlet grille slightly toward you.
- Pull out the air filter. (2 pieces)



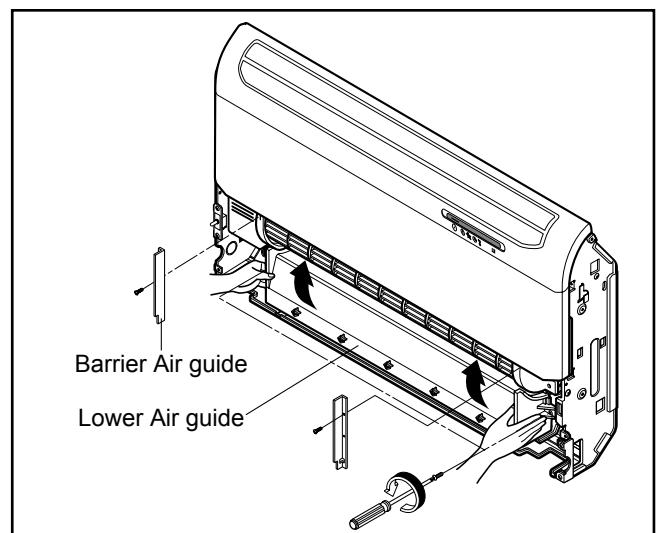
2. Remove the grille from chassis

- Remove the screws securing the side plate and push to the bottom-side.
- Unhook the hanger from the hanger screw at the left and the right side.
- Pick out the inlet grille.



3. Remove the lower air guide

- Remove a screw of both side fixing "barrier air-guide".
- Remove the screws of both sides of the lower air-guide.
- Remove the lower air-guide toward "arrow mark" by turning upwards as shown in figure.



VE chassis

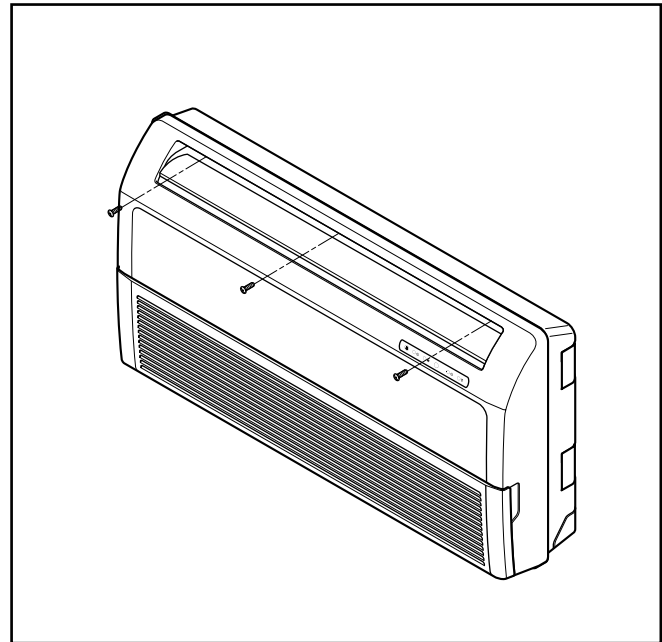
Warning :

Disconnect the unit from power supply before making any checks.

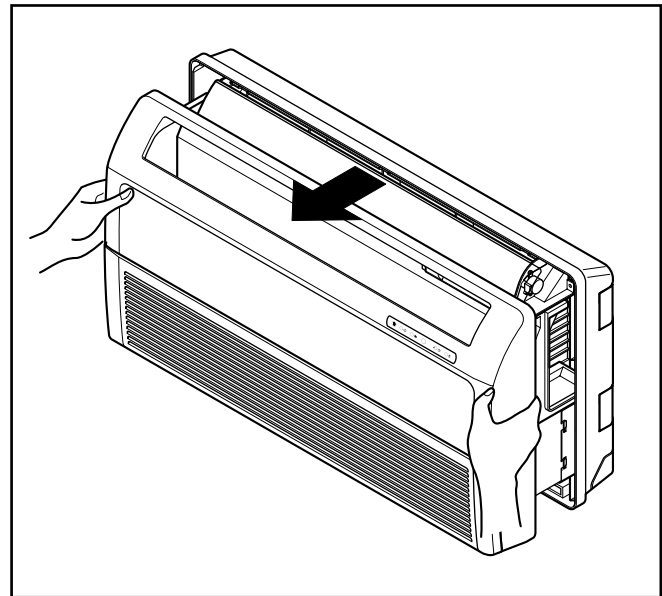
Be sure the power switch is set to "OFF".

To remove the Grille from the Chassis.

- Set the up-and-down air discharge louver to open position (horizontally) by finger pressure.
- Remove the securing screws.
- To remove the Grille, pull the lower left and right side of the grille toward you (slightly tilted) and lift it straight upward.

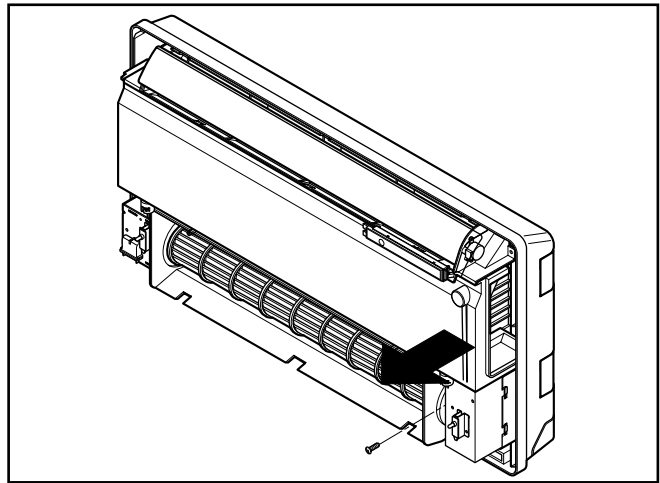


1. Before removing the control box, be sure to take out the wire screwed at the other end.



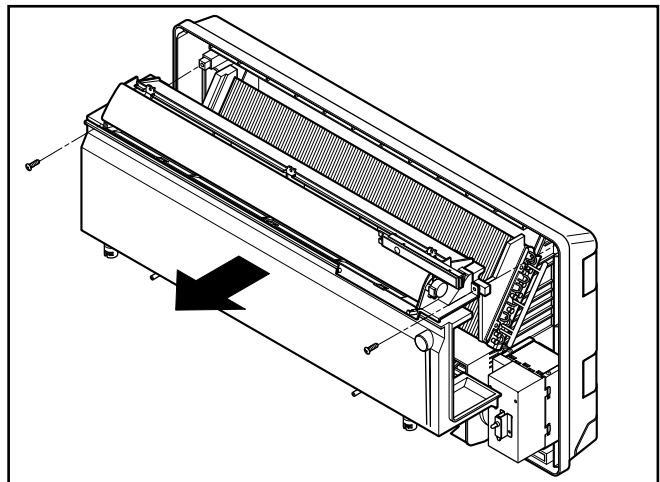
2. To remove the Control Box.

- Remove securing screws.
- Pull the control box out from the chassis carefully.



3. To remove the Discharge Grille.

- Unhook the discharge grille and pull the discharge grille out from the chassis carefully.

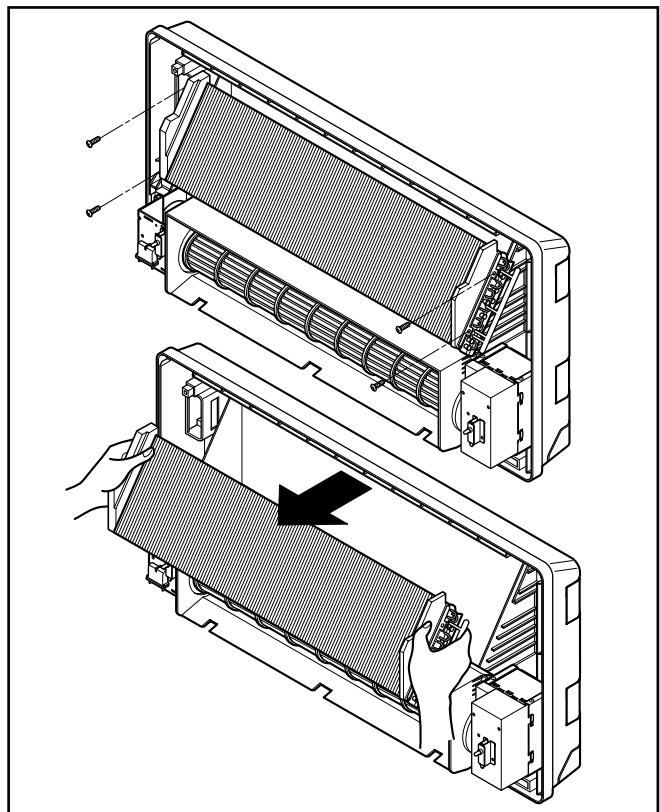


4. To remove the Evaporator.

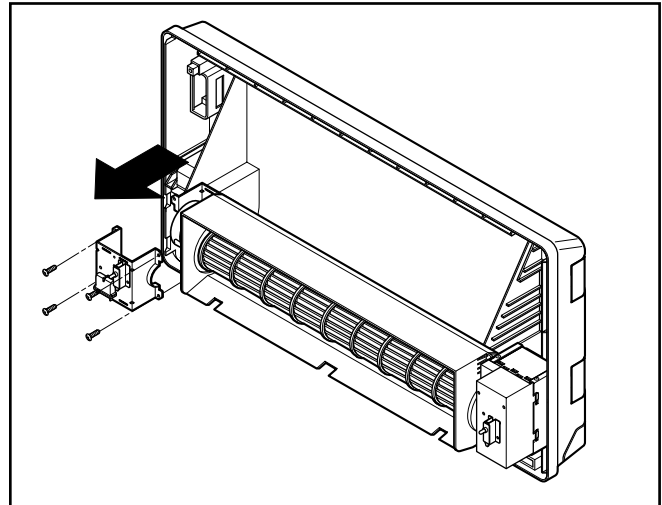
- Remove 3 screws securing the evaporator(at the left 2EA in the Eva Holder, at the right 1EA).



Caution label
When repair, do not damage the
Caution label.

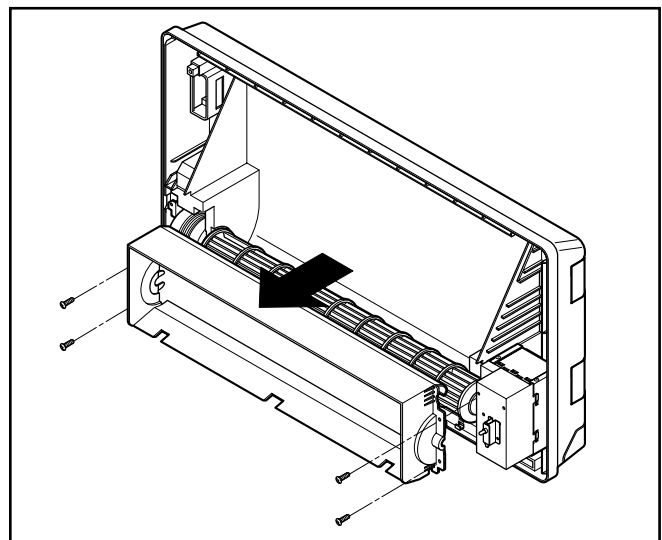


- Unhook the tab on the right inside of the chassis at the same time, slightly pull the evaporator toward you until the tab is clear of the slot.



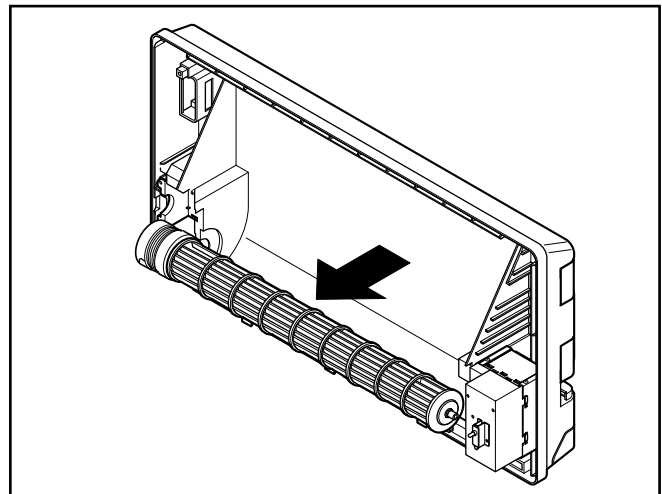
5. To remove the Motor Cover

- Remove 2 securing screw.
- Pull the motor cover out from the chassis carefully.



6. To remove the Cross-Flow Fan

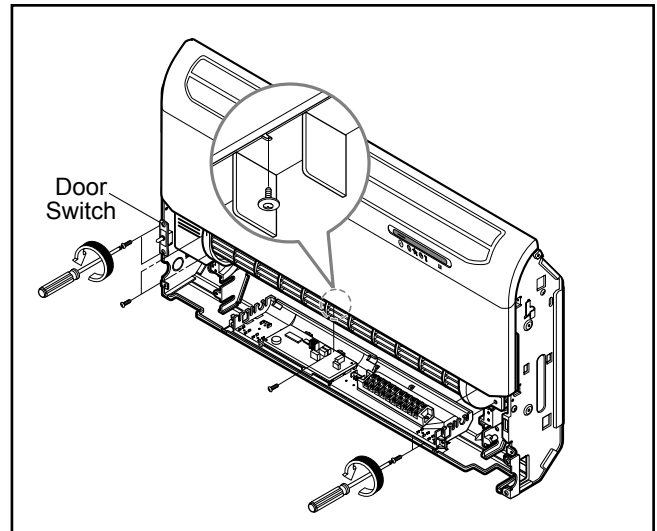
- Loosen the screw securing the cross-flow fan to the fan motor (do not remove).
- Lift up the right side of the cross-flow fan and the fan motor, separate the fan motor from the cross-flow fan.



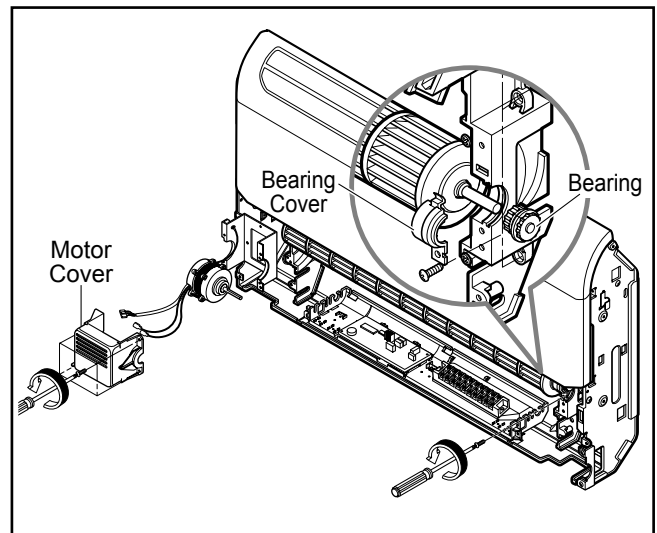
- Remove the left end of the cross-flow fan from the self-aligning bearing.

4. Remove air guide upper, crossflow fan and motor.

- Remove the screws of both sides and center securing the upper air-guide.
- Remove 2 screws fastening the bracket of door switch.

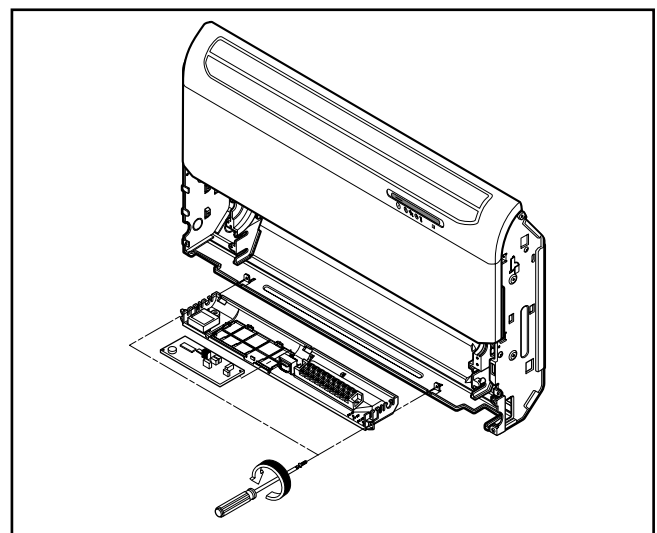


- Remove a bearing assembly by removing a screw and the bearing cover.
- Remove 4 screws securing the motor cover.
- Loosen the screw securing the crossflow fan to the fan motor shaft. (do not remove)
- Remove the crossflow fan by sliding it out from the shaft of fan motor.



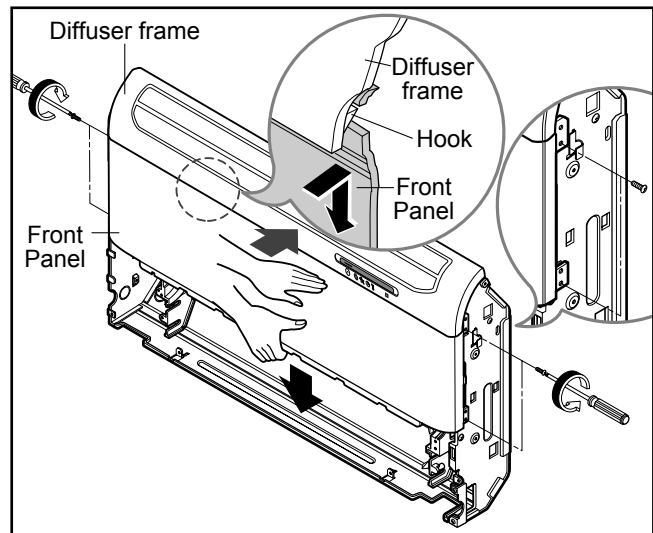
5. Remove the control box Assembly.

- Disconnect the step motor connector, fan motor connector, display PCB connector, thermistor connector and door switch connector from the main PCB.
- If necessary, disconnect power supply cord and connecting cable from the terminal block and remove the cord clamp screw.
- Remove 2 screws securing the control box and pick out the control box carefully.

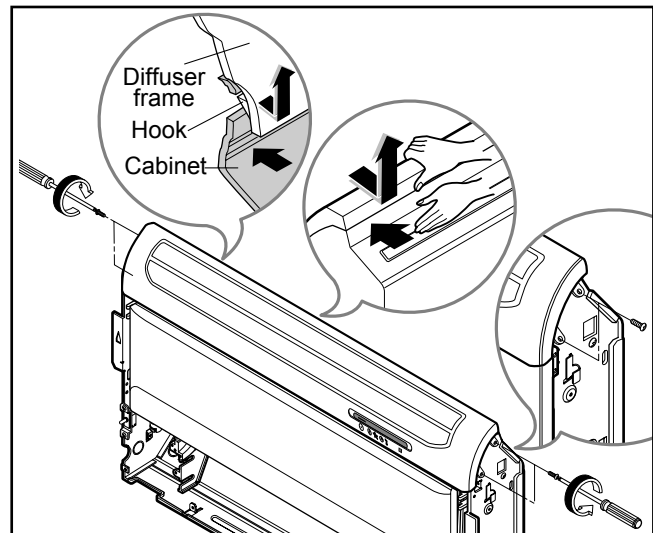


6. Remove the front panel.

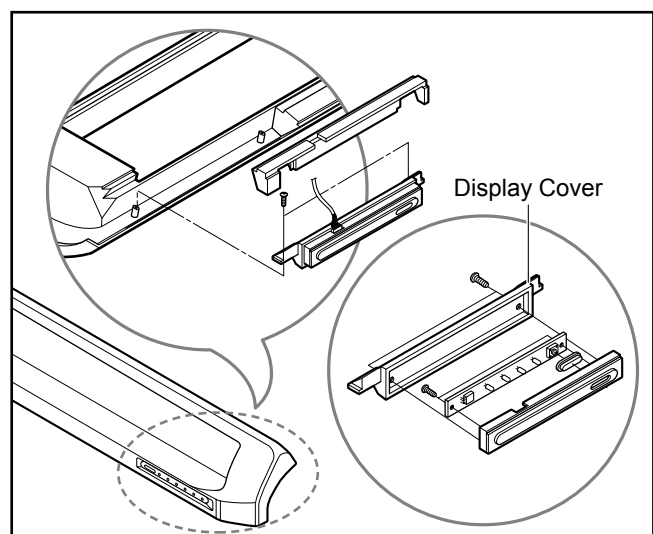
- Remove the screws of both sides fixing the front panel.
- Push the upper side of front panel strongly to pull out the front panel from the inner hook of diffuser frame.
- Pull down the front panel carefully not so as to harm the display PCB wires and thermistor wires.

**7. Remove the diffuser assembly.**

- Remove the screws of both side of diffuser assembly. (4 pieces)
- Push the upper side of cabinet strongly to pull out the inner hook of diffuser frame from the cabinet hole.
- Take up the diffuser frame carefully not so as to harm the display PCB wires and the step motor wires.

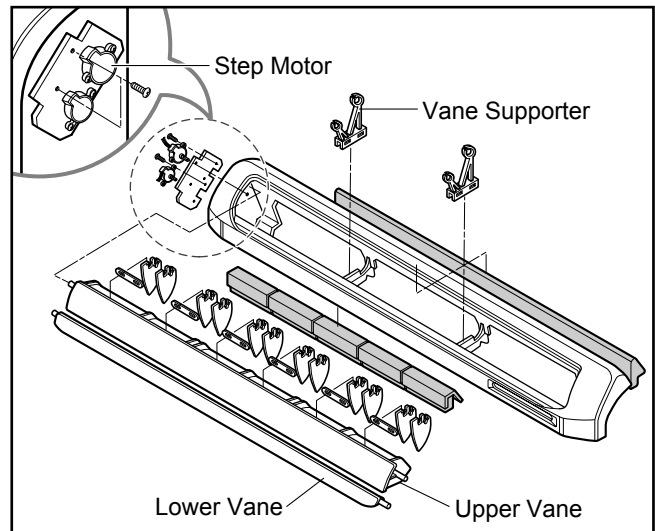
**8. Remove display PCB assembly.**

- Remove the screws at the both side of display cover.
- If necessary, disconnect the display PCB connector from PCB assembly.
- Remove 2 screws of PCB assembly.



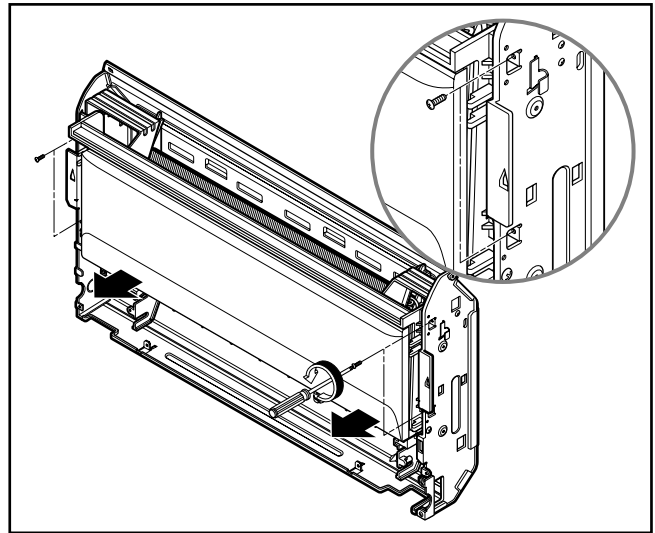
9. Remove the vane-upper, vane-lower and step motor.

- Remove 2 screws securing the step motor assembly and pull it out from the vanes carefully.
- Unhook the vanes from the vane supporter and remove the upper vane and lower vane by pulling the center of vanes with care.



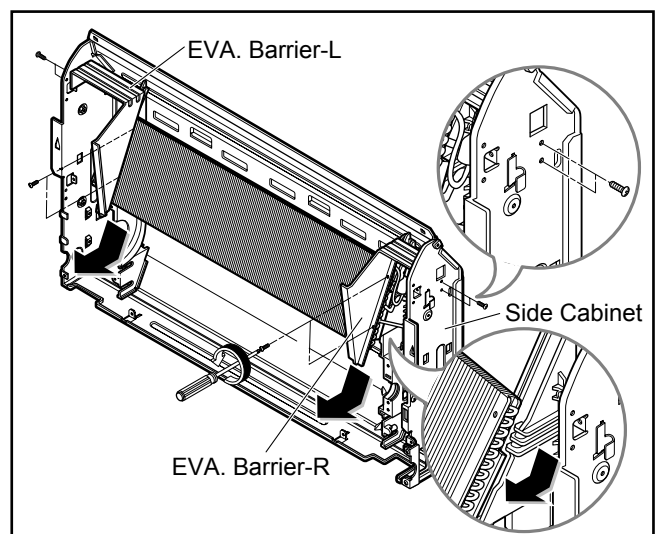
10. Remove the drain pan assembly.

- Remove the both side of screws. (4 pieces)
- Pull out the drain pan assembly.
- Be careful not to harm to the EPS packing of drain pan and the tubings of evaporator.



11. Remove the evaporator.

- Remove the screws of both sides securing the EVA barrier-R/L on the side cabinet.
- Remove the screws which fasten the barrier on the evaporator and take out the barrier assembly.
- Remove the evaporator assembly by sliding toward arrow mark. (As shown in figure)

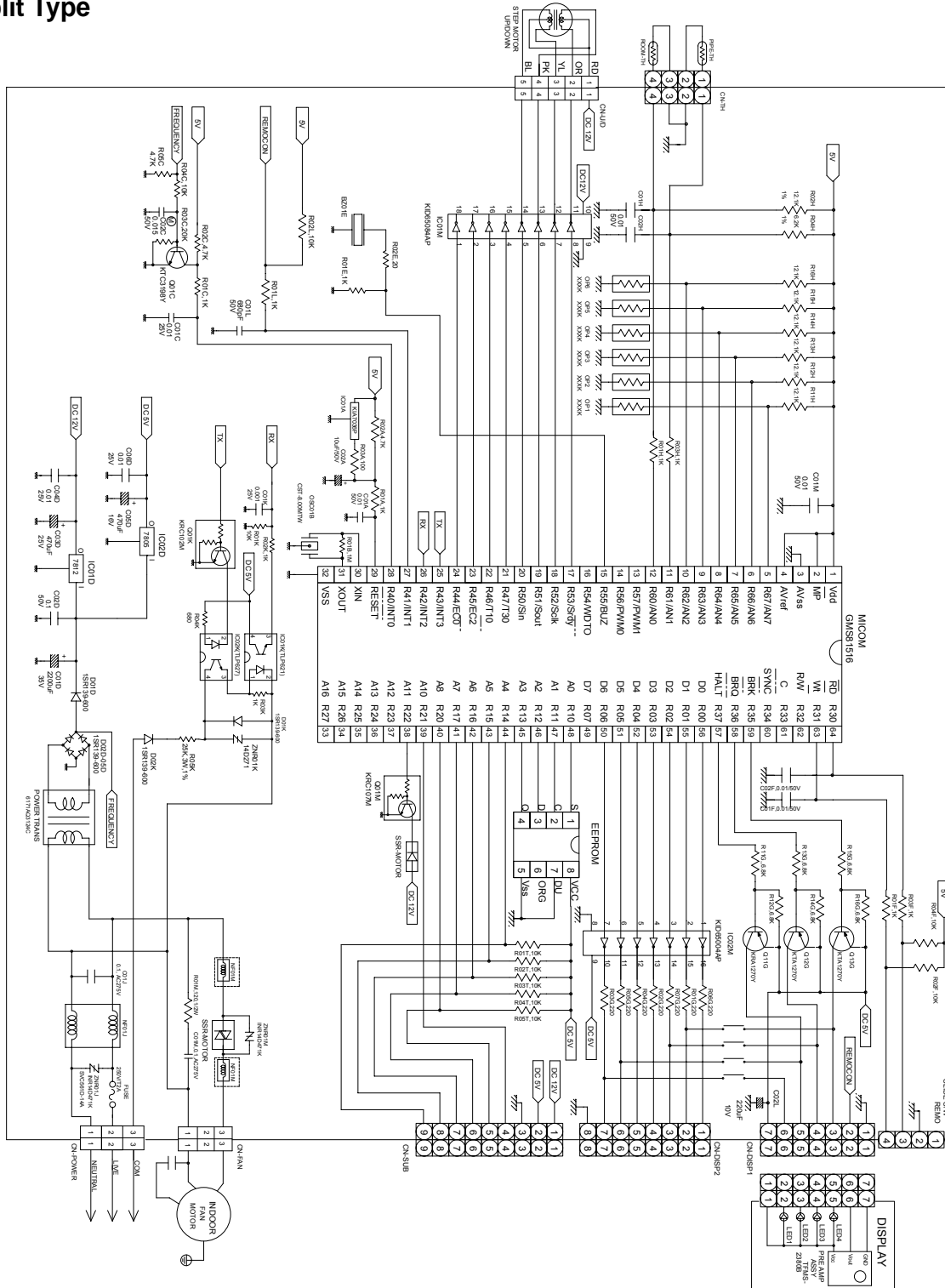


Schematic Diagram

Electronic Control Device

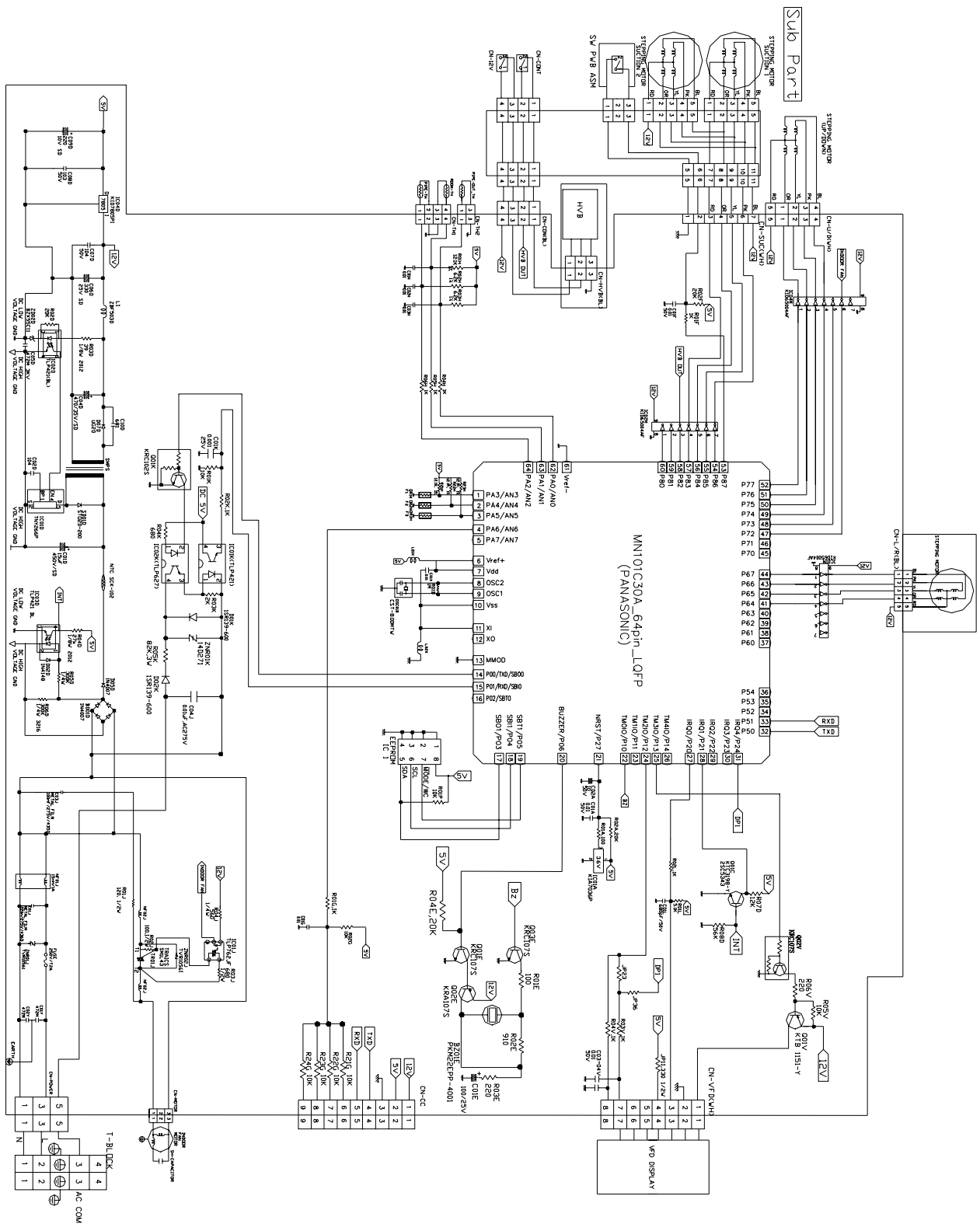
1. Indoor Unit

1) Split Type

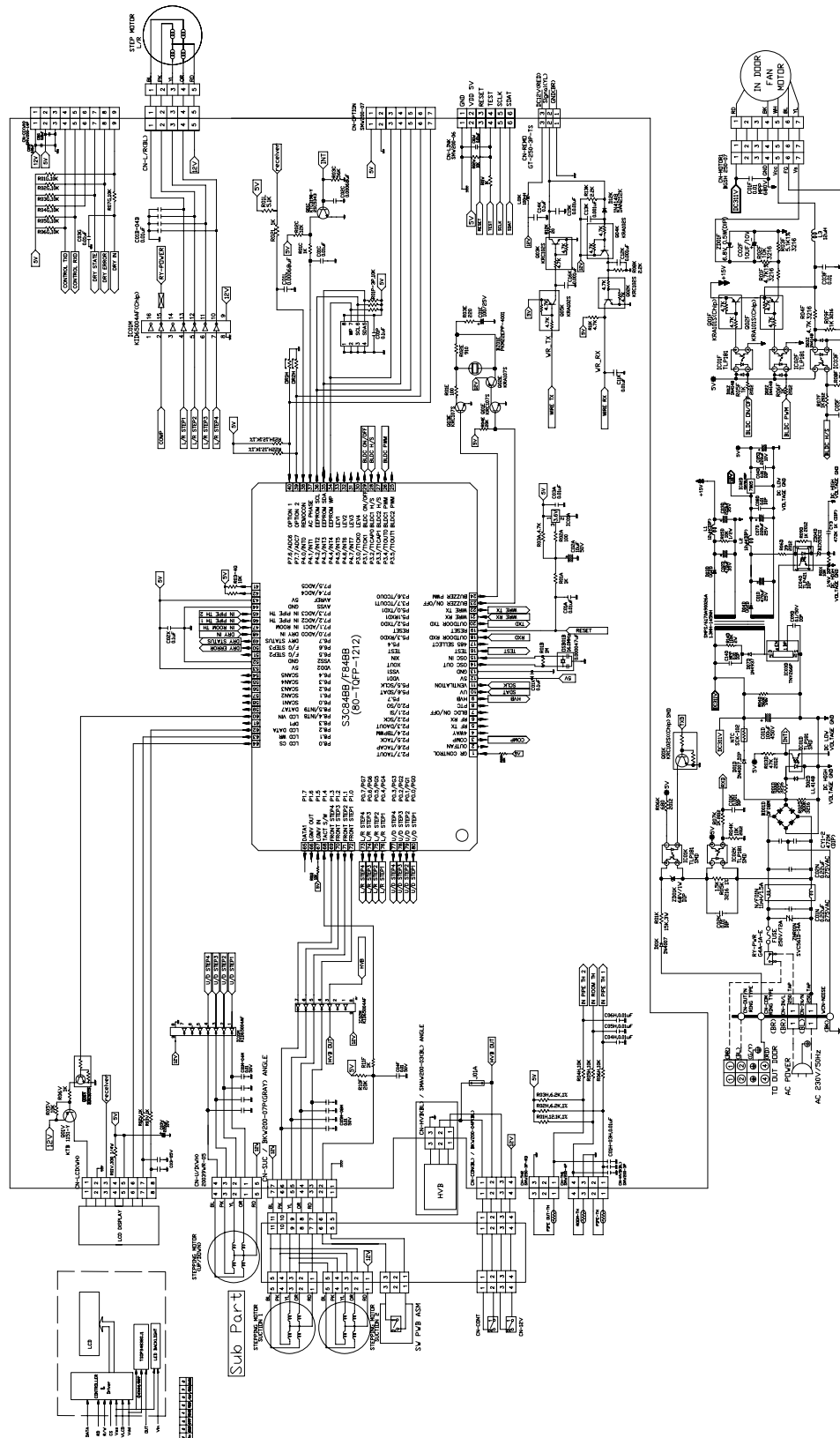


3) Art Cool Deluxe Type

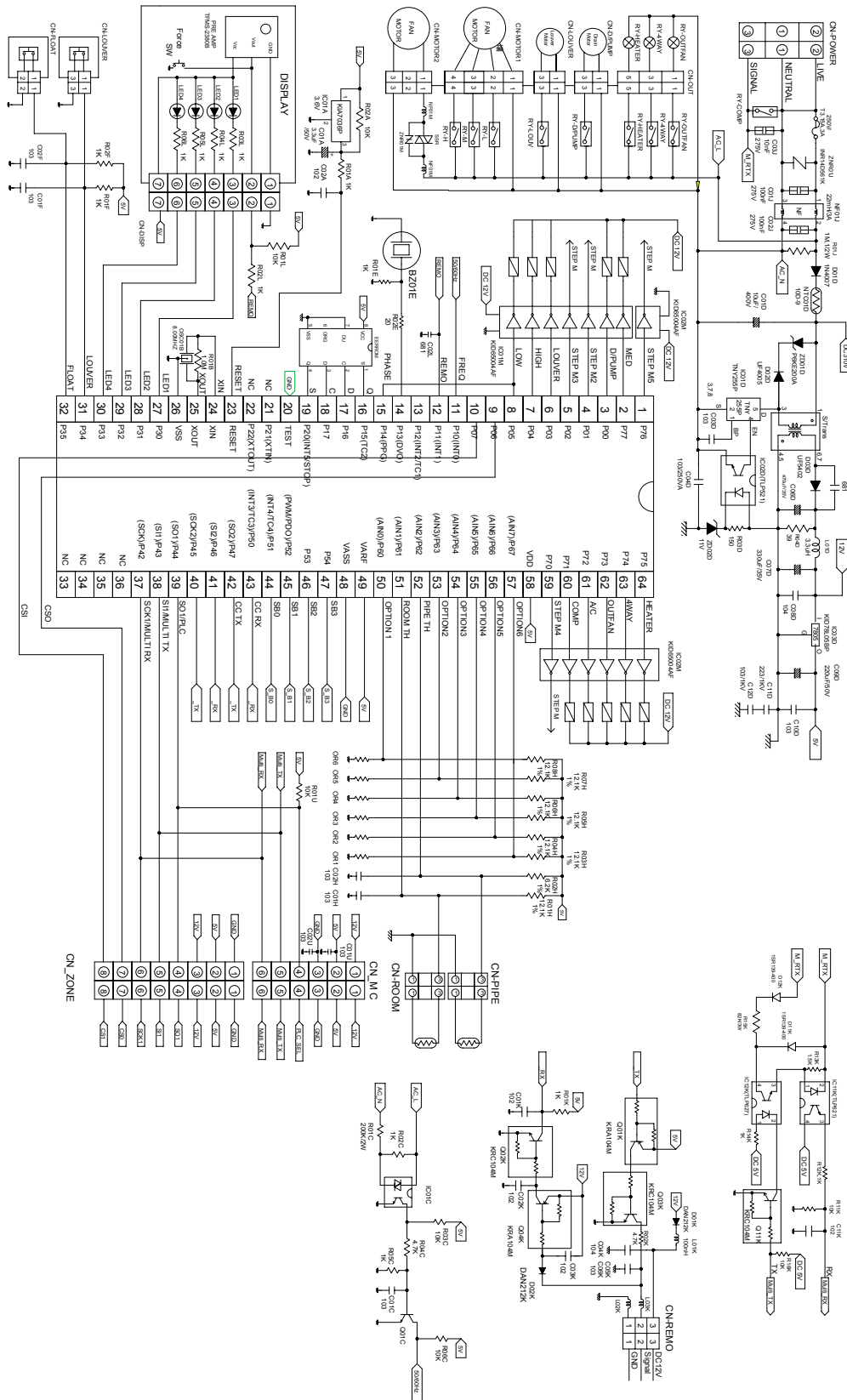
- A/C MOTOR



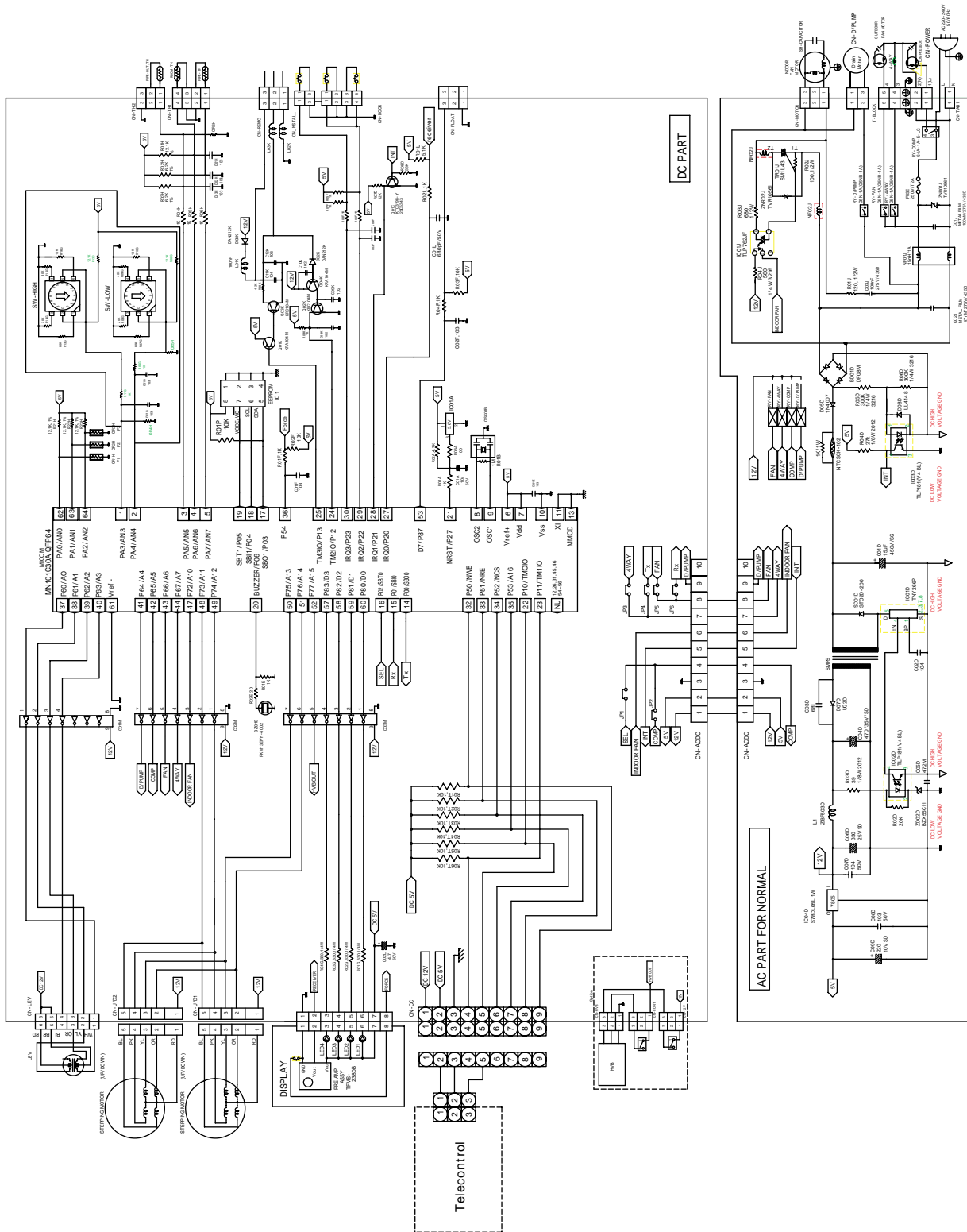
3) Art Cool Deluxe Type • BLDC MOTOR



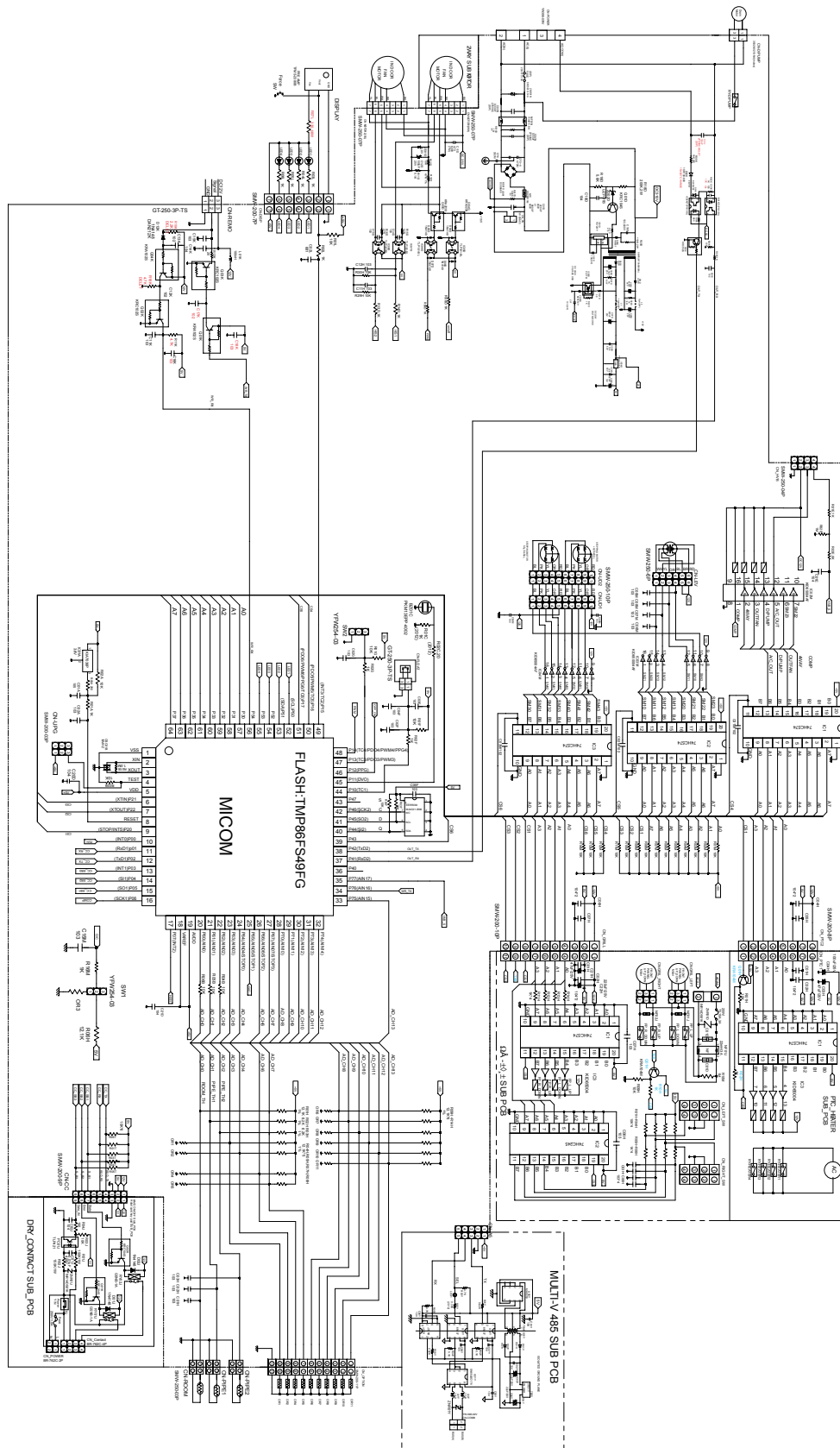
4) Duct Type



5) Convertible Type

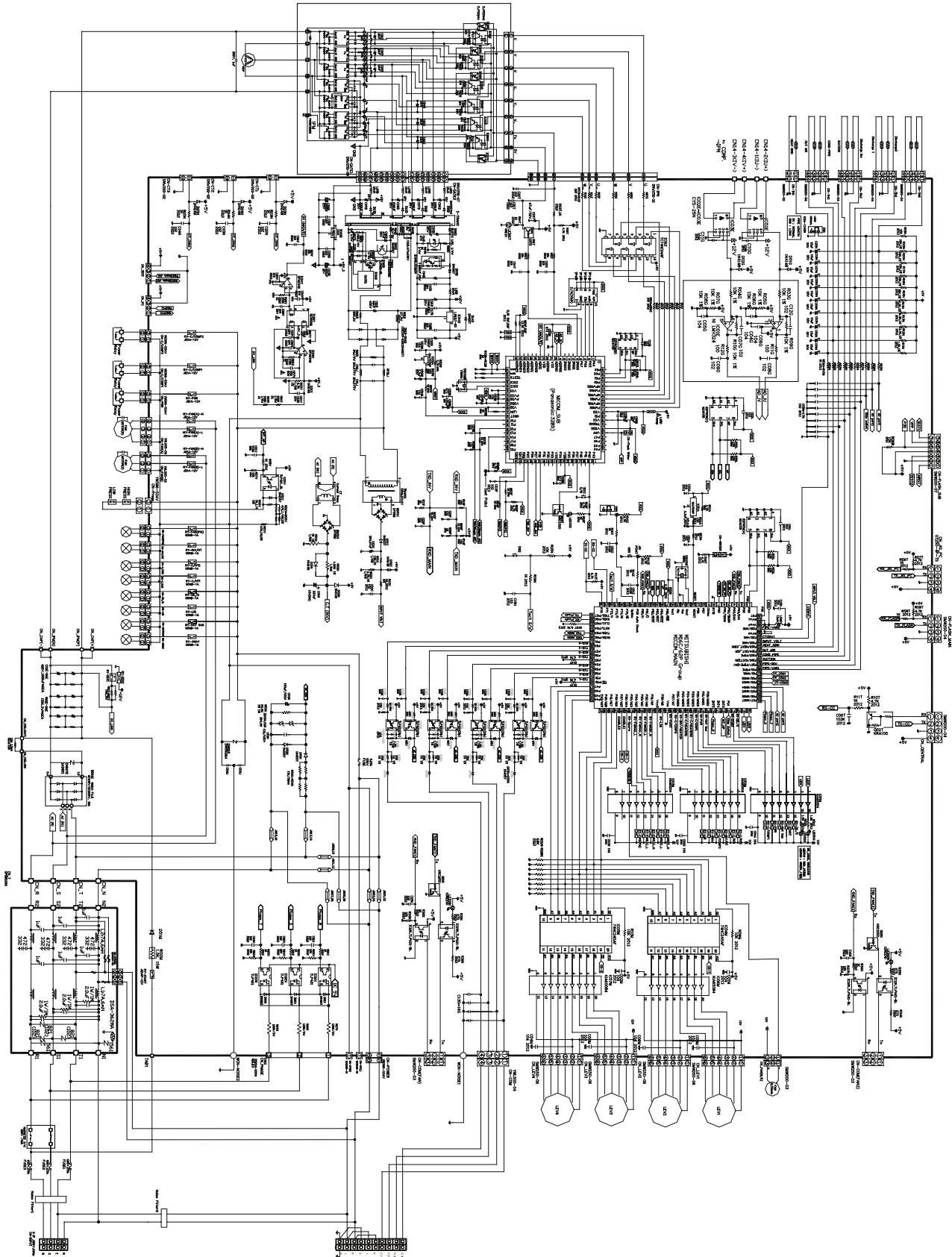


6) CST Type

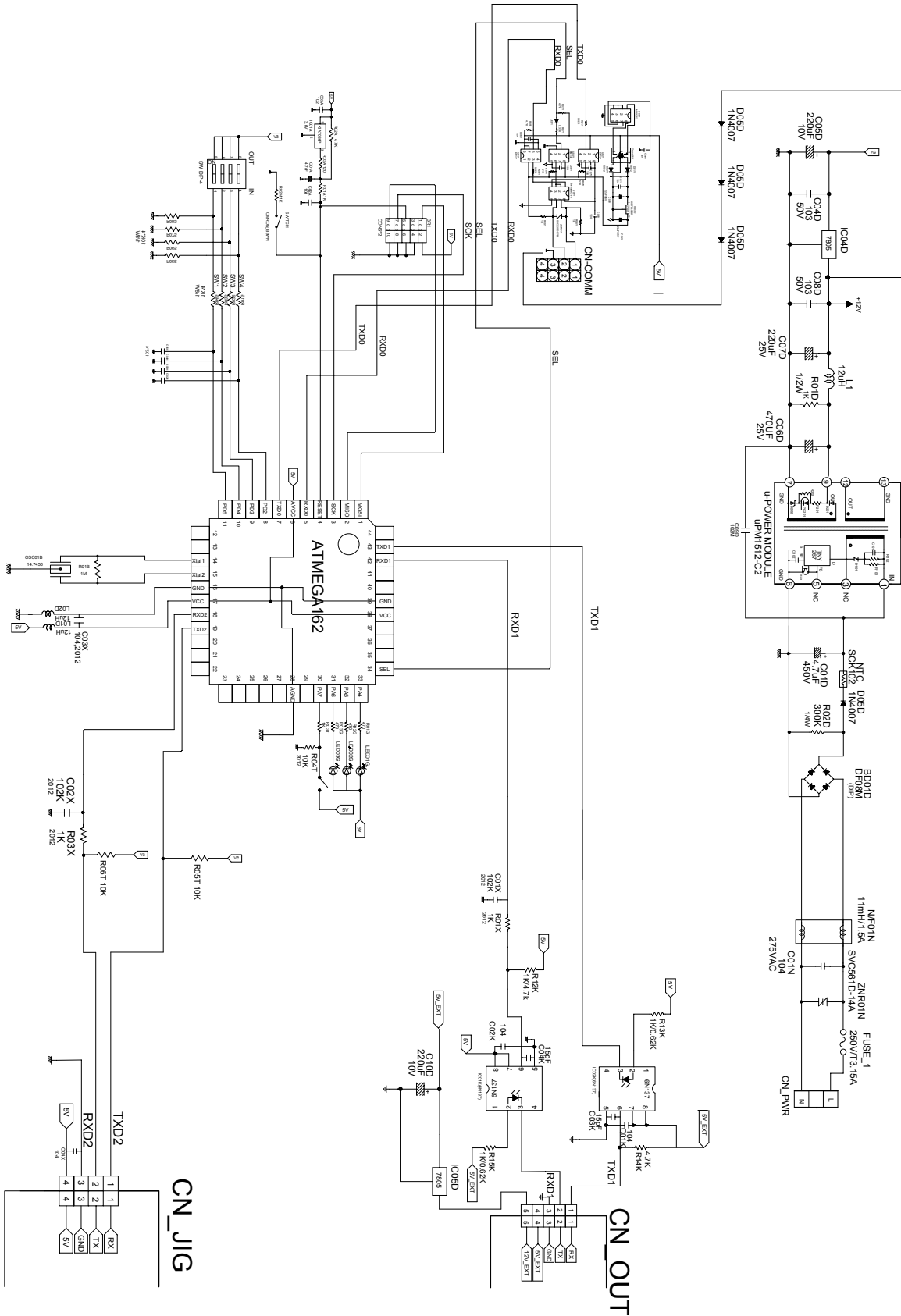


2. Outdoor Unit

1) A6UW368FA0, A7UW428FA0, A8UW488FA0, A9UW548FA0

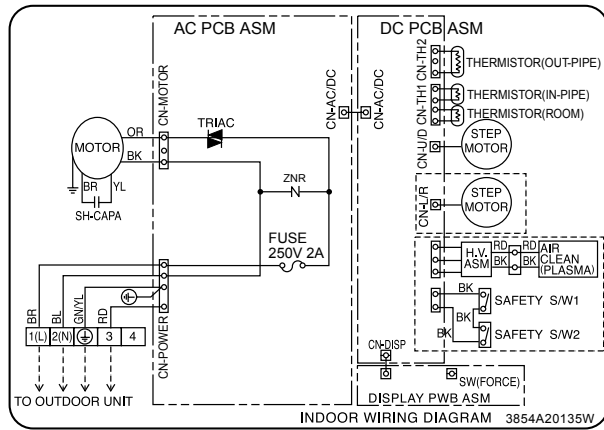


3. Central control unit Schematic diagram

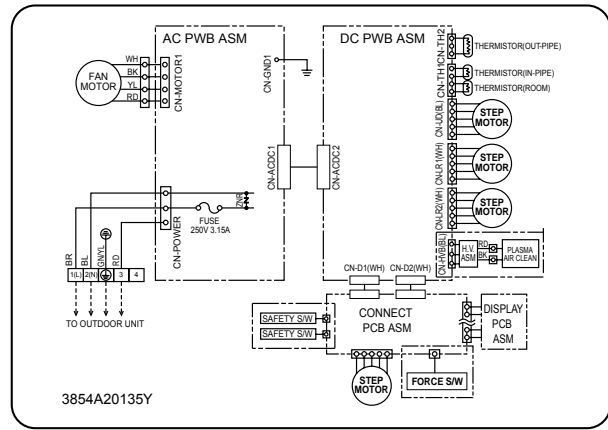


Wiring Diagram

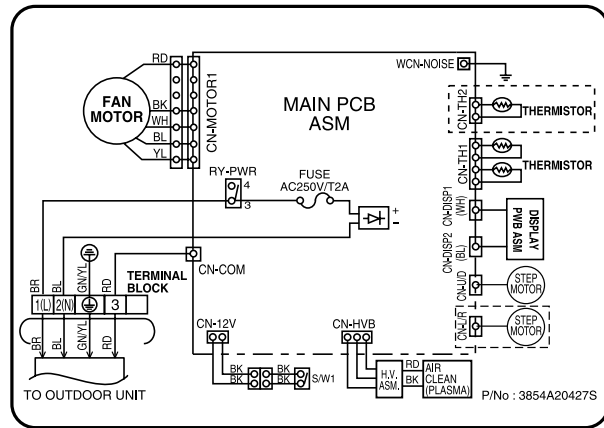
1. Room Type Indoor Unit -SQ/SR/ST chassis



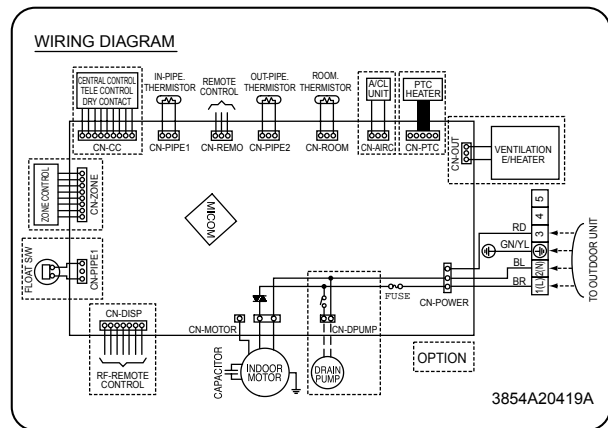
2. Art Cool Type Indoor Unit



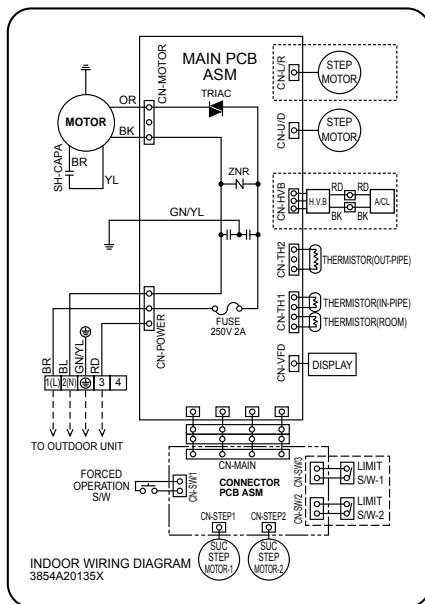
3. Room Type Indoor Unit - S4/S5 chassis



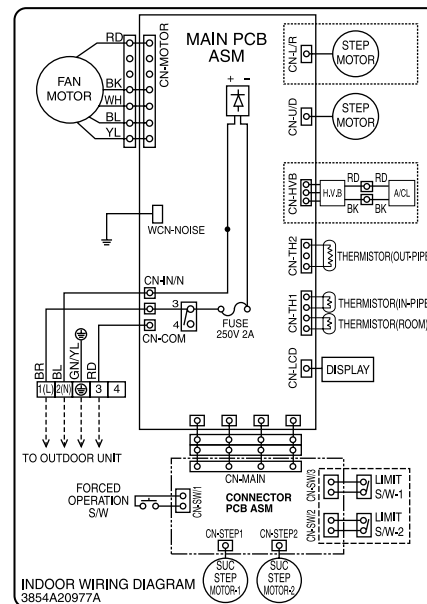
4. Duct Type Indoor Unit - BG/BT chassis



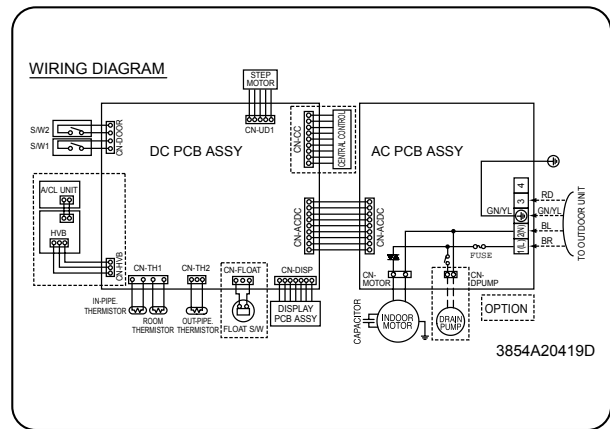
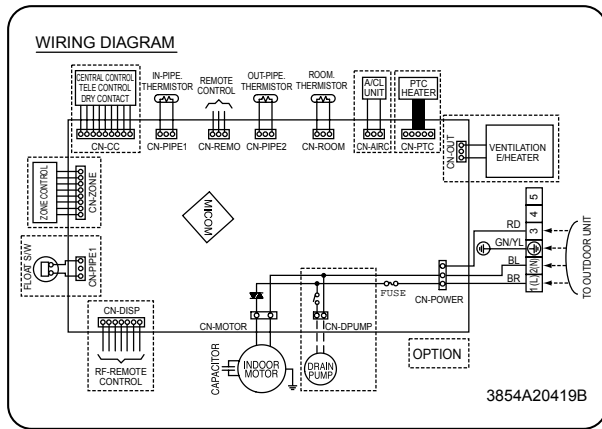
5. Art Cool Deluxe Type Indoor Unit A/C MOTOR



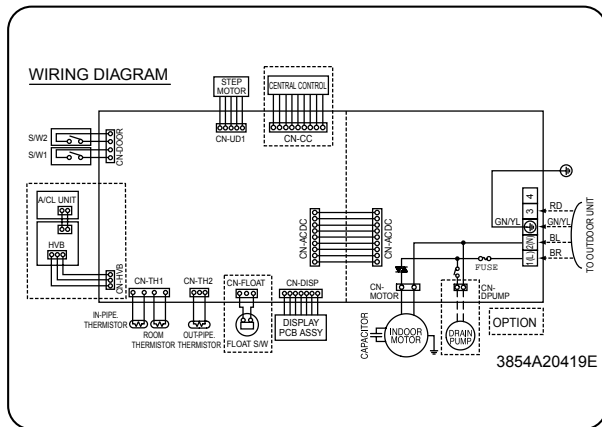
BLDC MOTOR



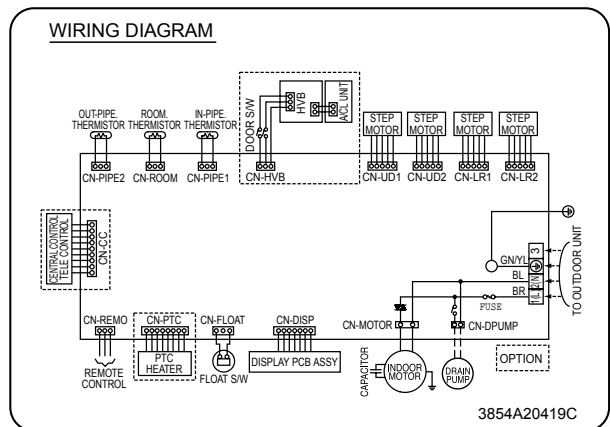
6. Duct Type Indoor Unit - BH/BP chassis 7. CVT Type Indoor Unit - VE chassis



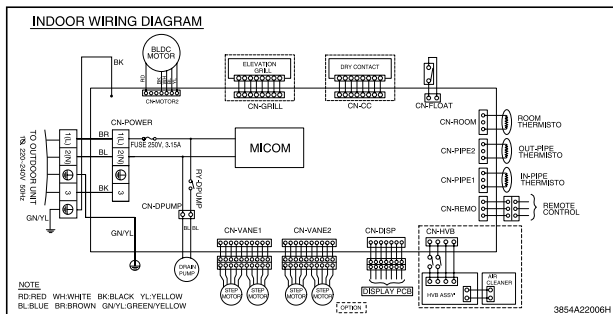
8. CVT Type Indoor Unit - VB chassis



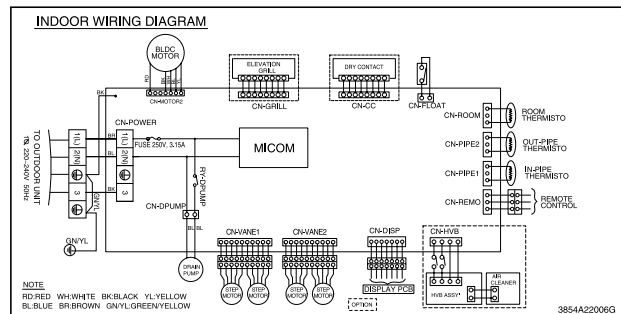
9. CST Type Indoor Unit - TE/TF/TD chassis



10. CST Type Indoor Unit - TE1 chassis

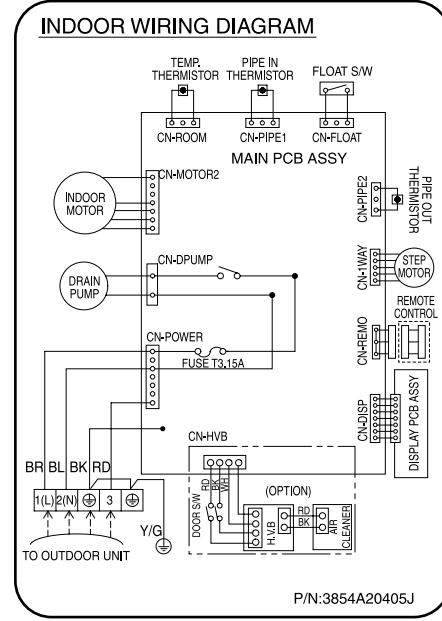
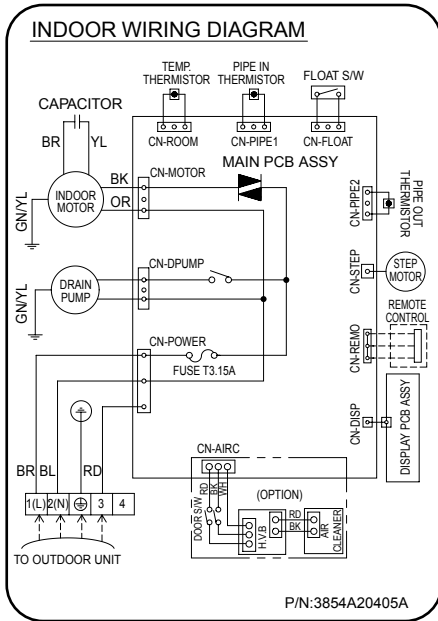


11. CST Type Indoor Unit - TH chassis

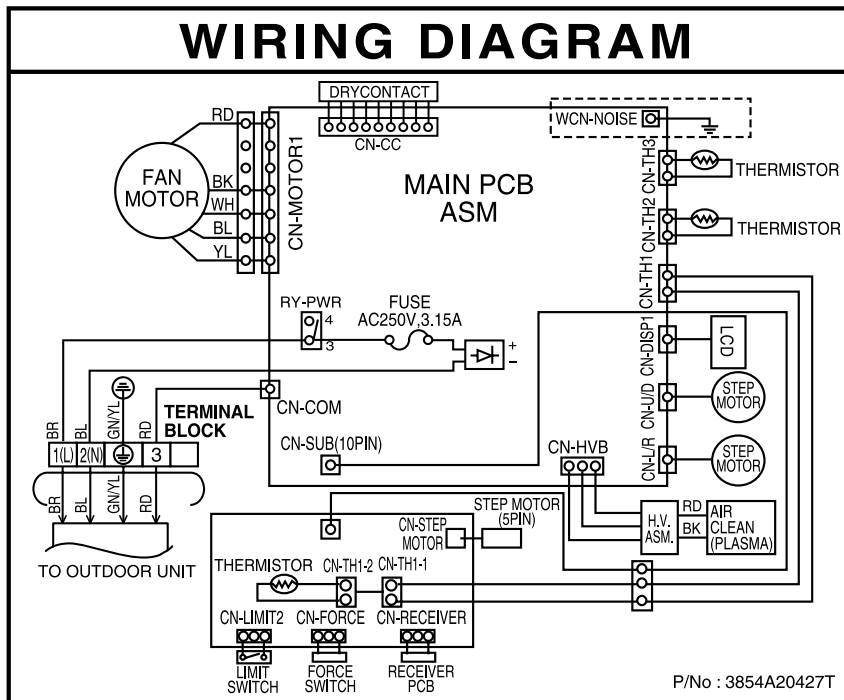


12. CST Type Indoor Unit - TC chassis

13. CST Type Indoor Unit - TC1 chassis

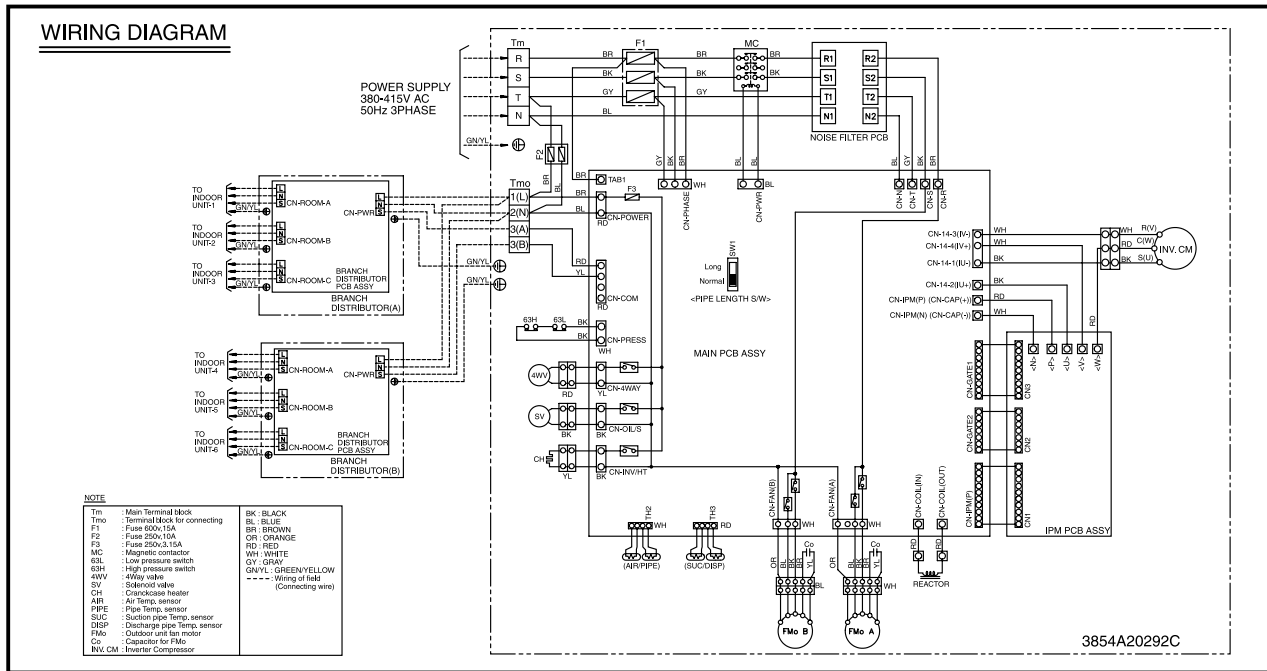


14. ART COOL MIRROR-SE

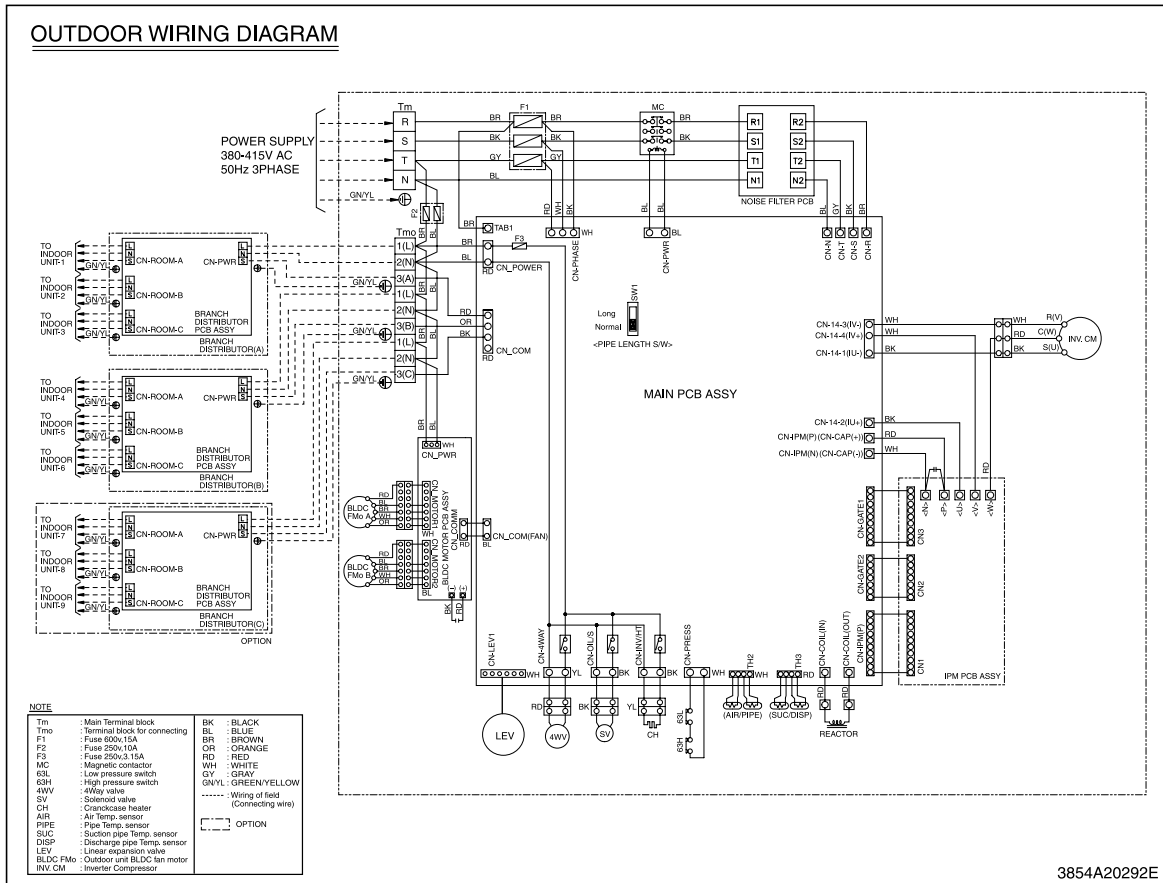


5. Outdoor Unit

1. A6UW386FA0

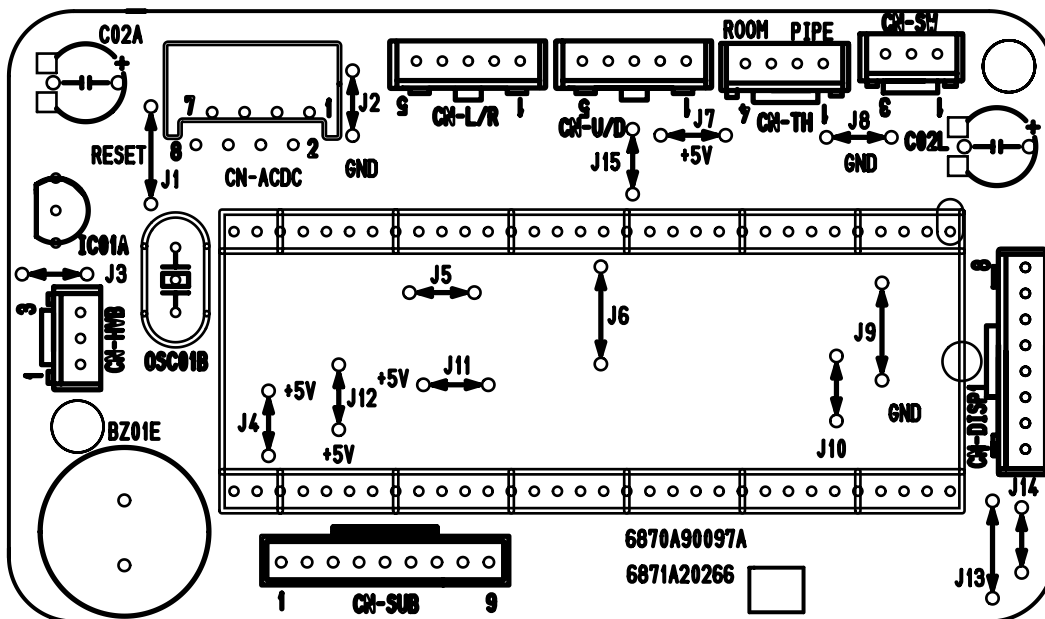


2. A7UW428FA0, A8UW488FA0, A9UW548FA0

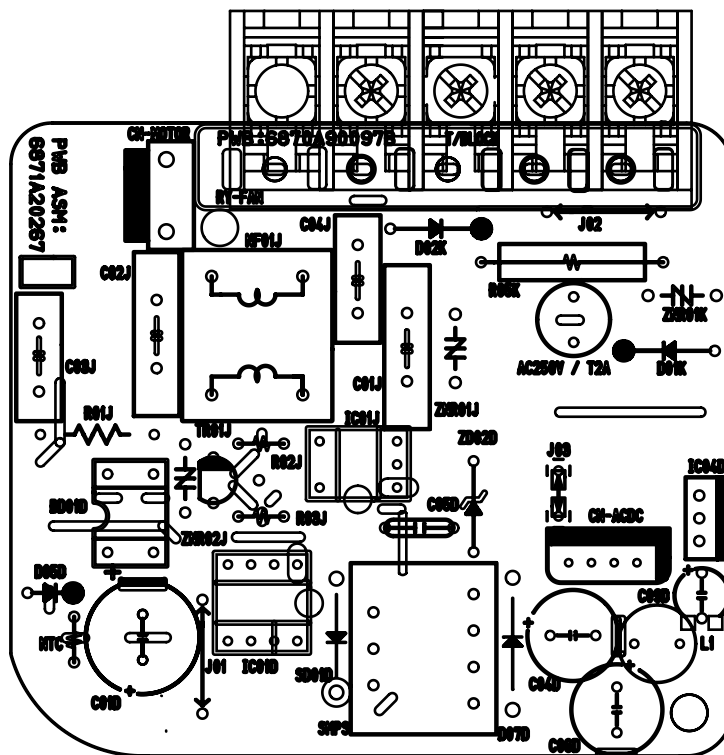


Components Locations

- 1. Indoor Unit
MAIN P.C.B ASM
- 1) Split Type
 - DC part

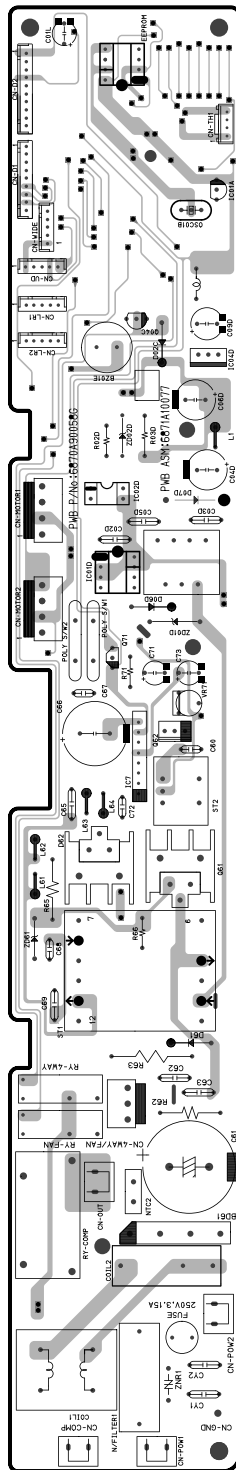


- AC part

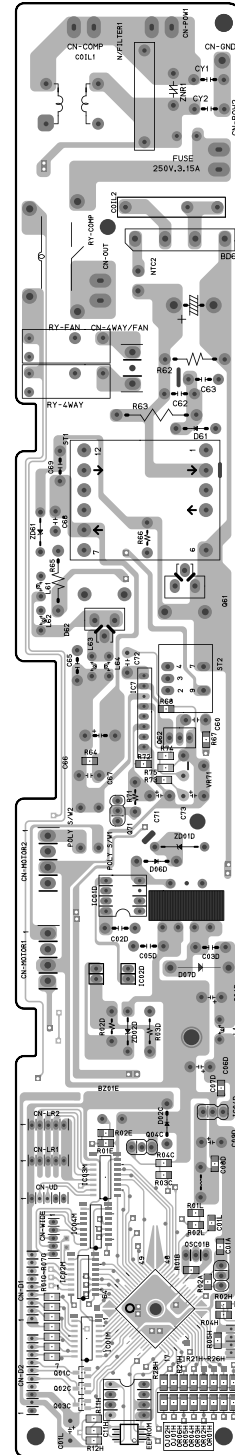


2) Art Cool Type

TOP VIEW



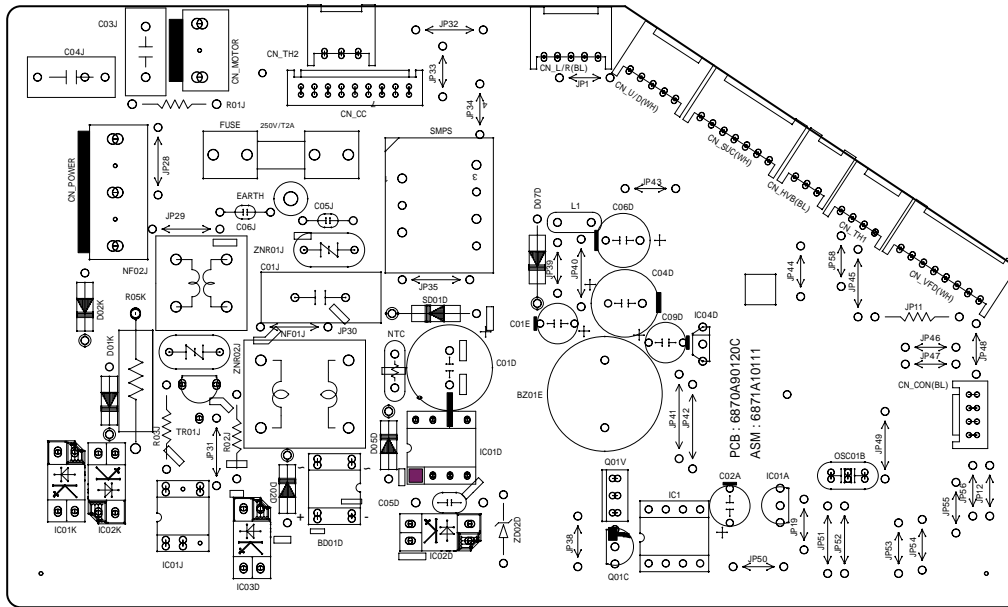
BOTTOM VIEW



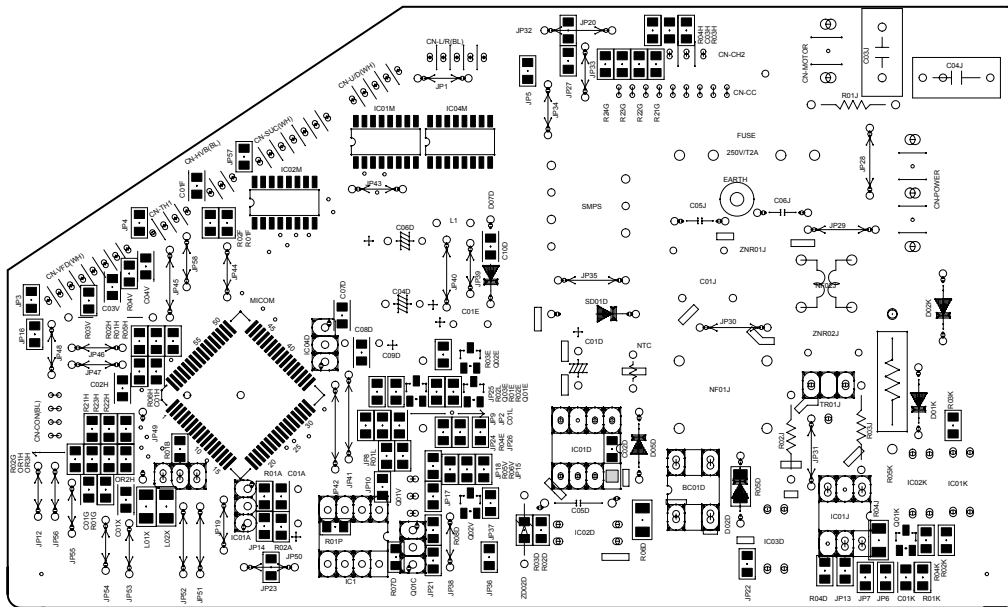
3) Art Cool Deluxe Type

- A/C MOTOR

TOP VIEW

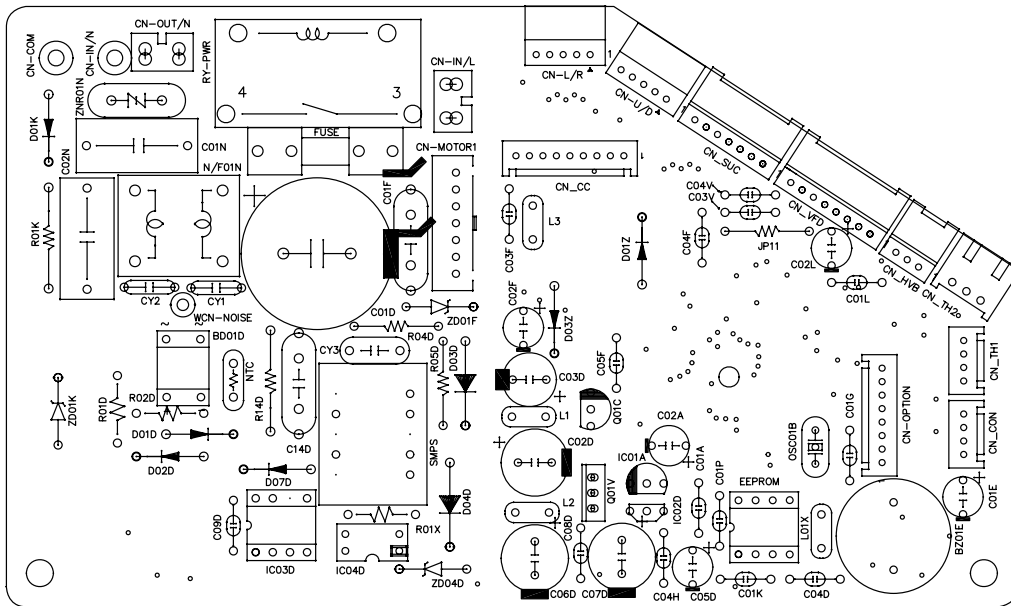


BOTTOM VIEW

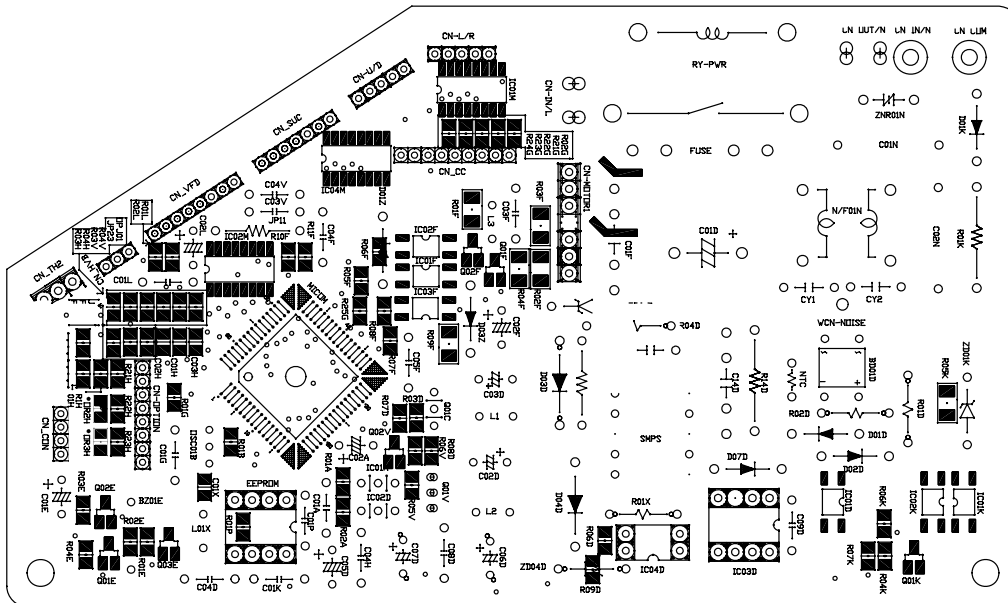


• BLDC MOTOR

TOP VIEW

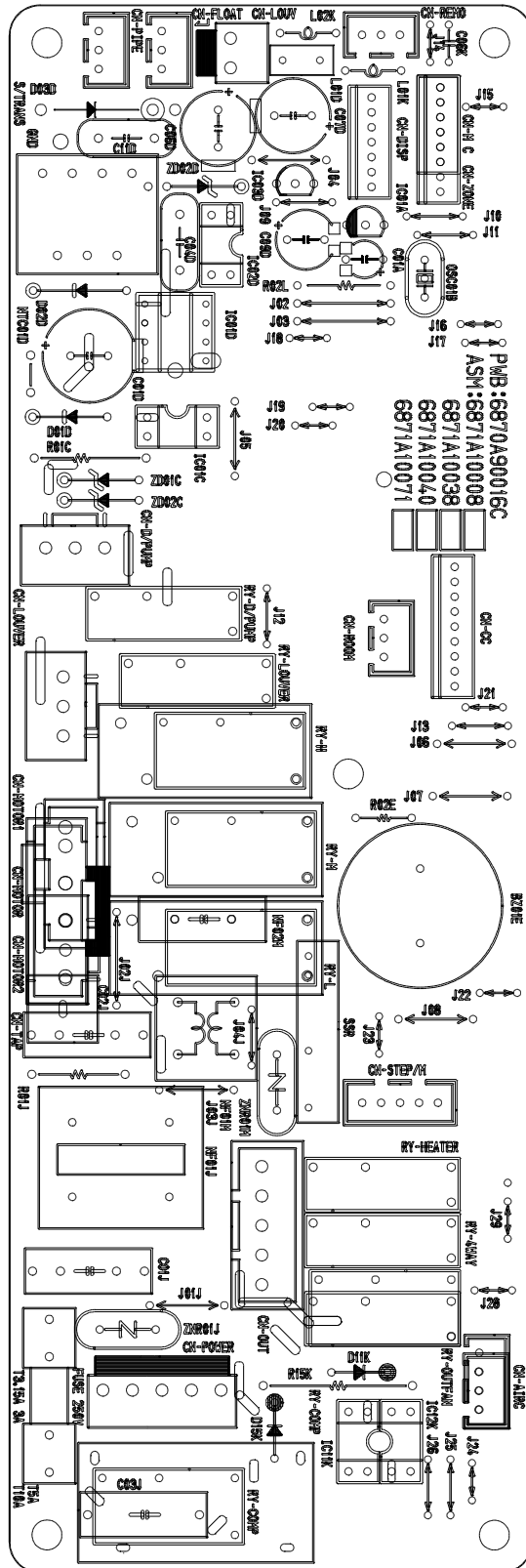


BOTTOM VIEW

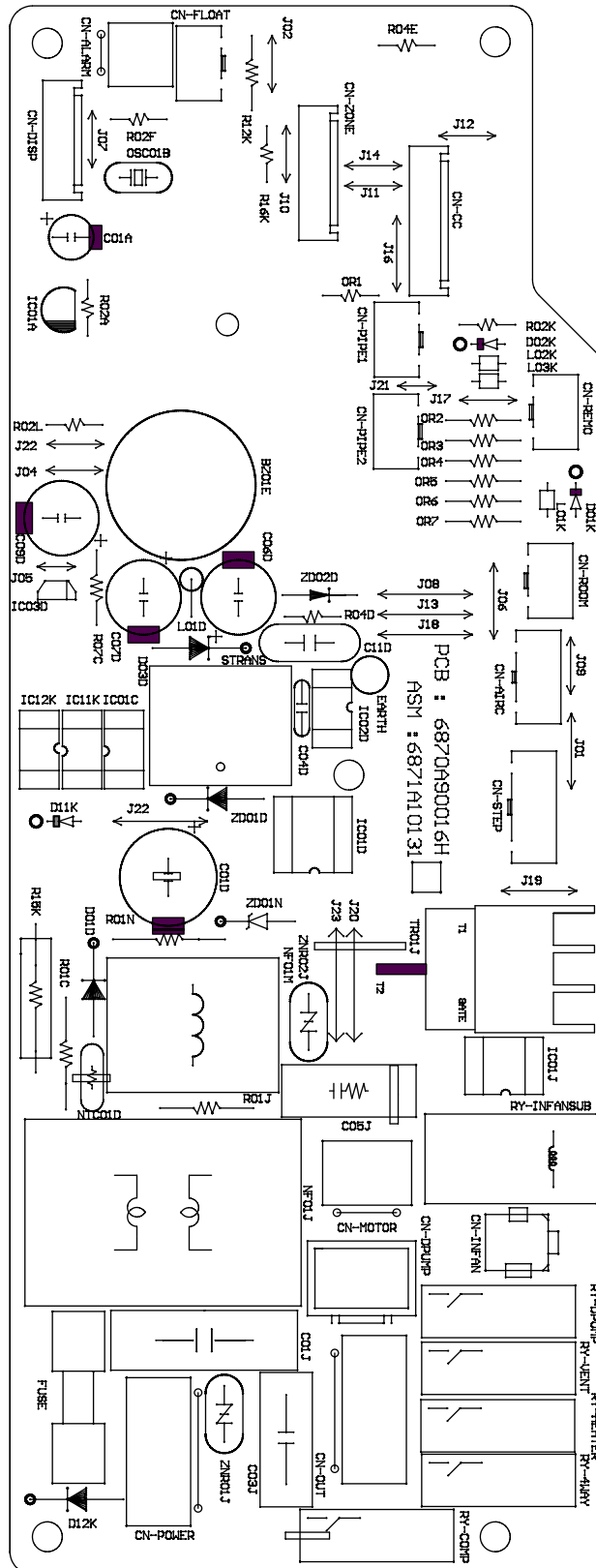


4) Duct Type

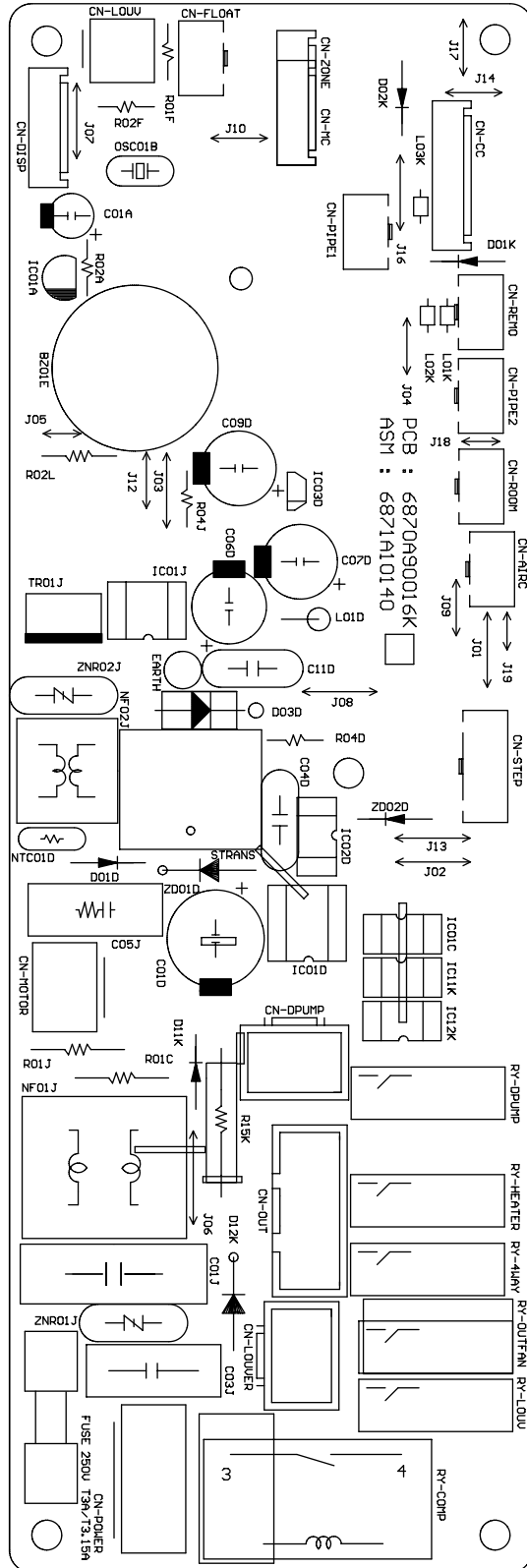
- High static (BH/BG chassis)
- Built in type (BP chassis)



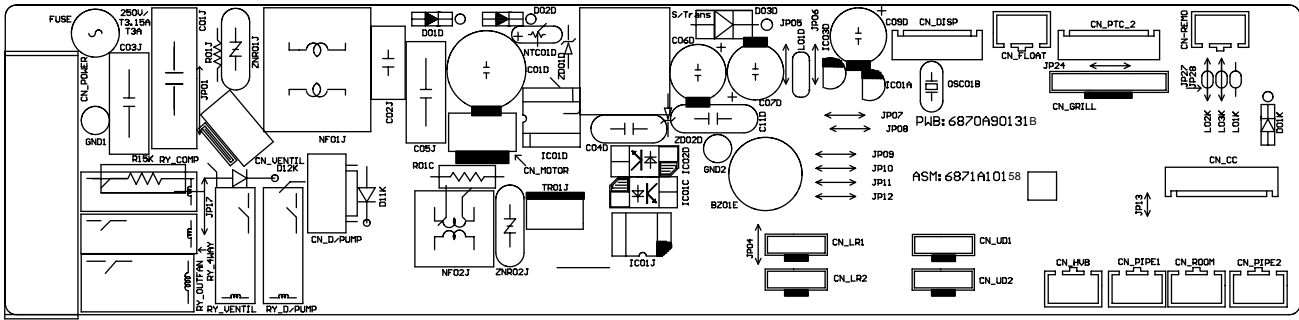
• Low static (BT, BT1 chassis)



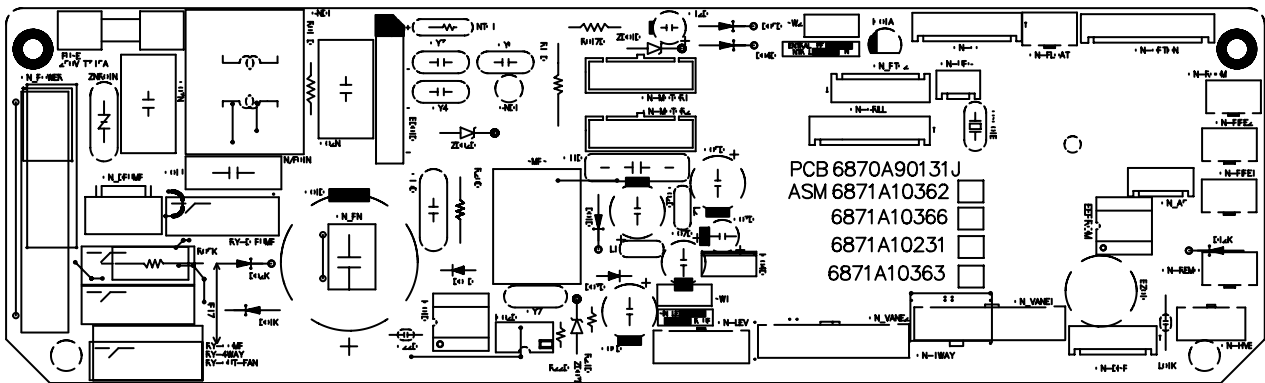
5) Casset Type
 • 1 way(TC Chasis)



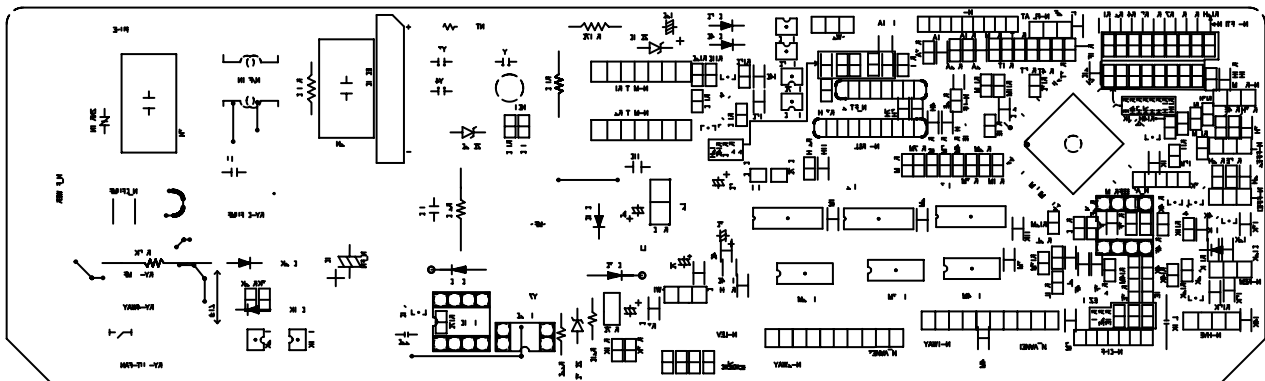
• 4 way(TE/TF/TD chassis)



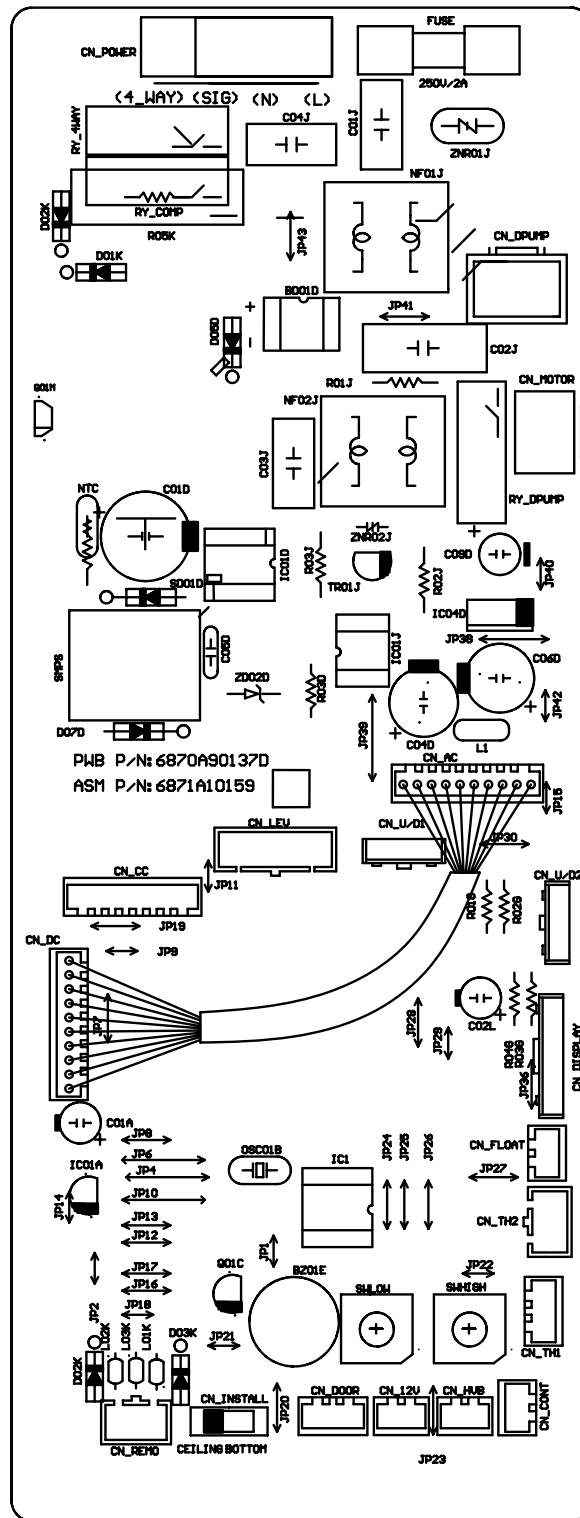
• 4 way(TE1/TH chassis)
TOP VIEW



BOTOM VIEW

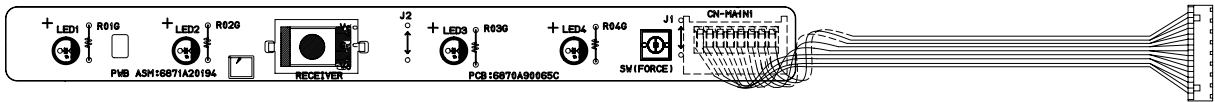


• VB chassis



2. Display ASSEMBLY

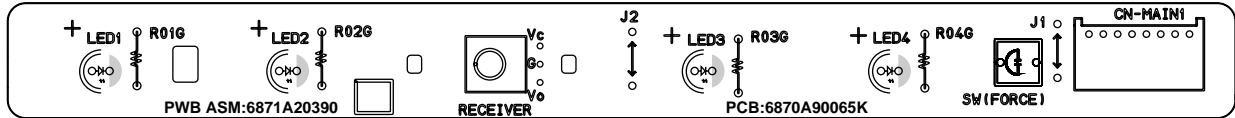
1) Split Type



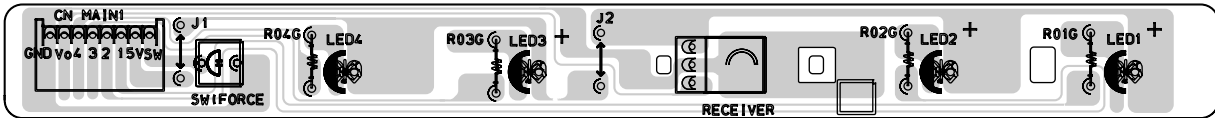
2) Convertible Type

VE chassis

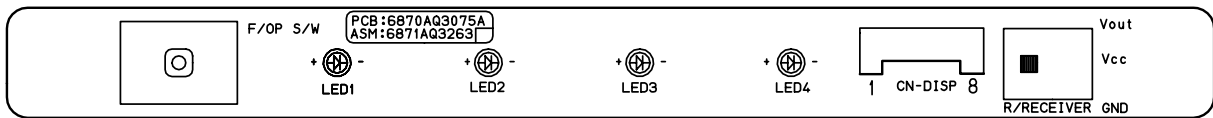
TOP VIEW



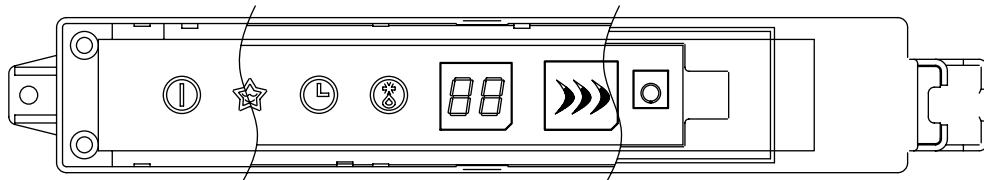
BOTTOM VIEW



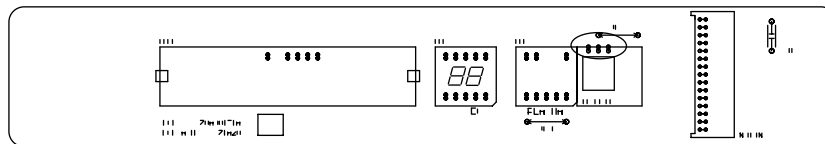
VB chassis



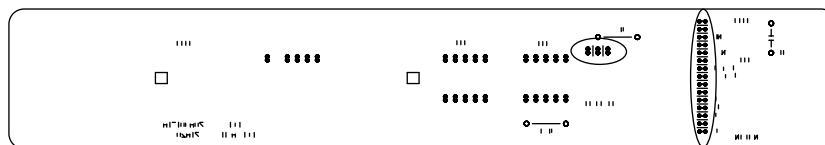
3) Art Cool Type



TOP VIEW

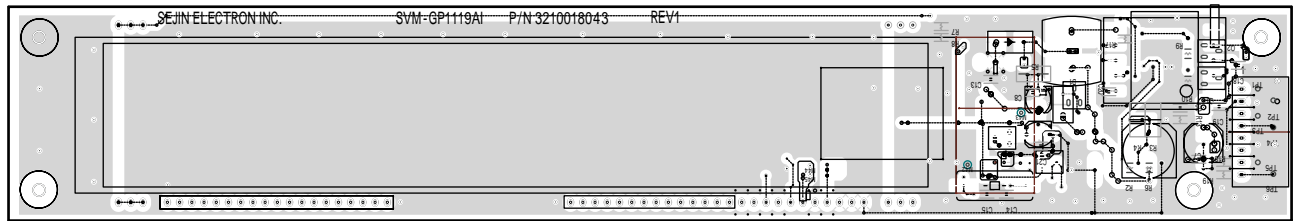


BOTTOM VIEW

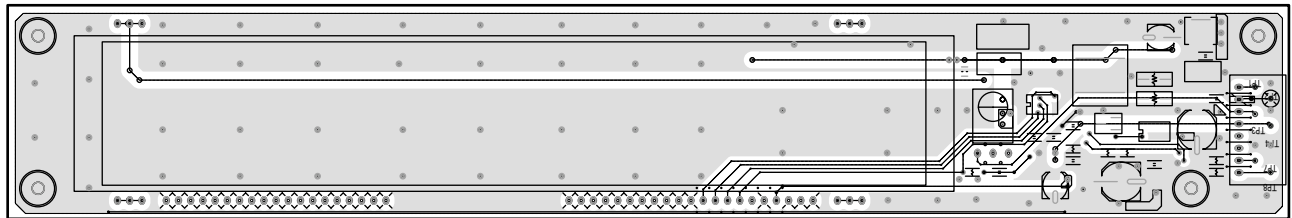


4) Art Cool Deluxe Type

TOP VIEW



BOTTOM VIEW



5) Art Cool Mirror

TOP VIEW

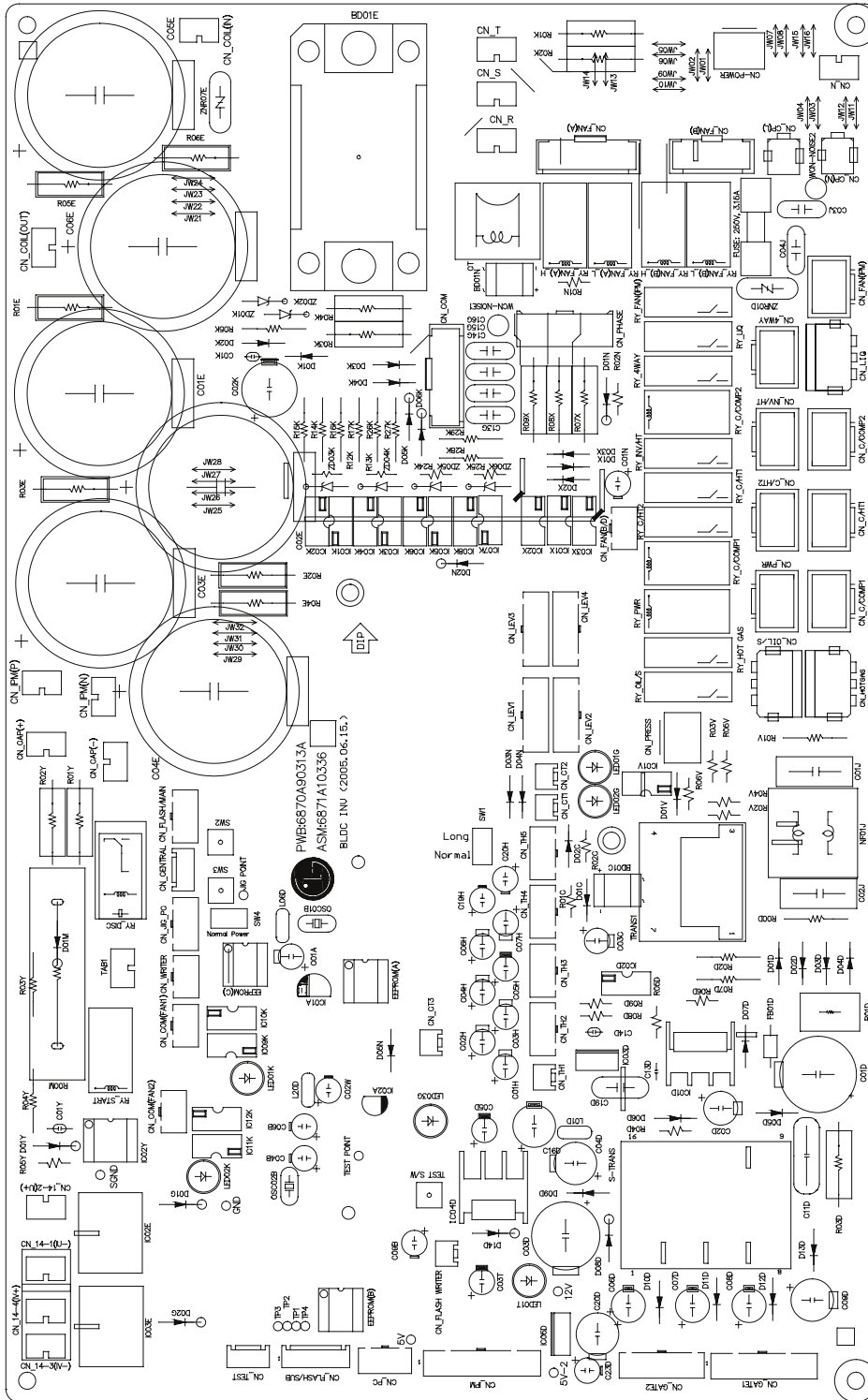


BOTTOM VIEW

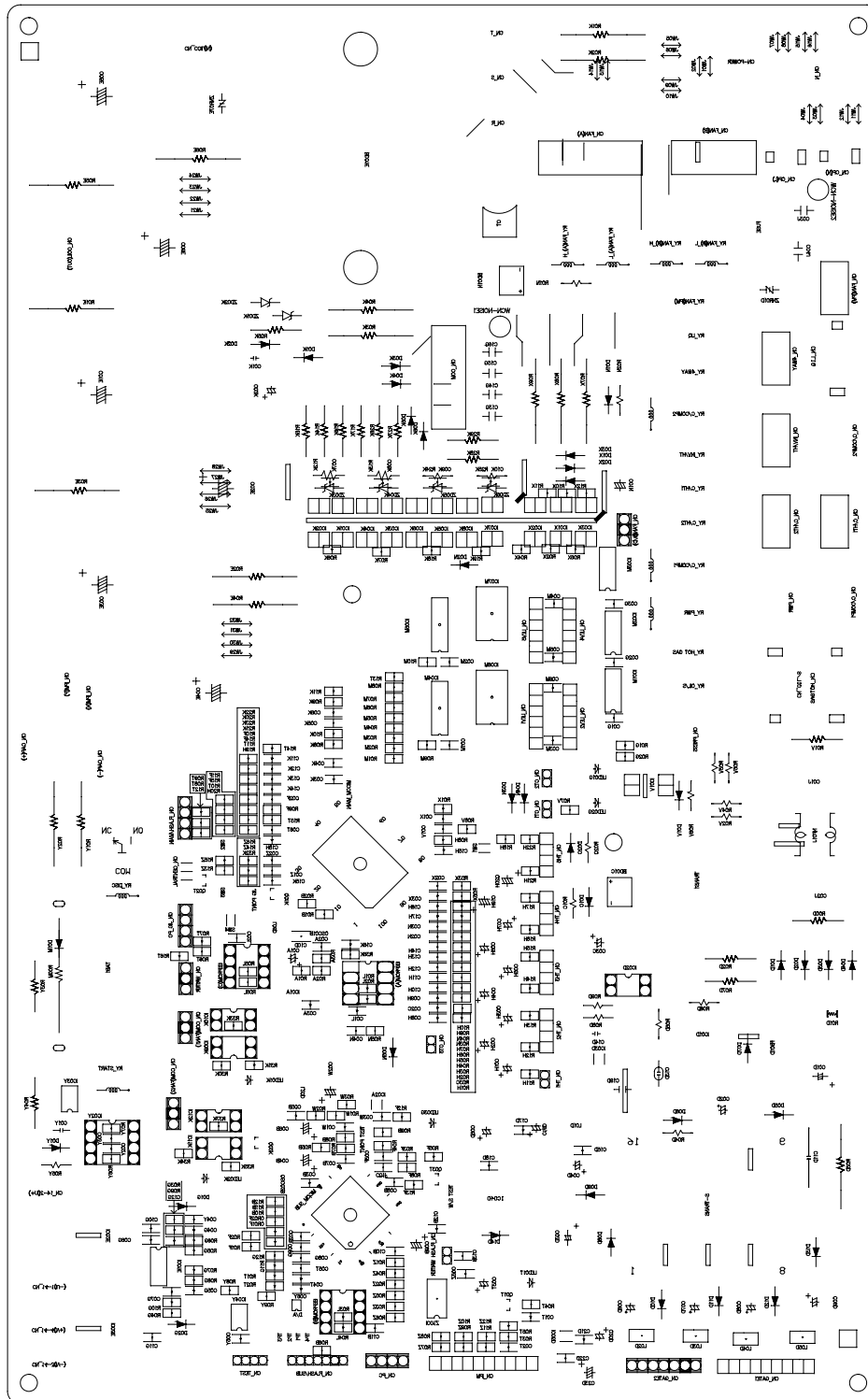


3. Outdoor Unit

1) Component side

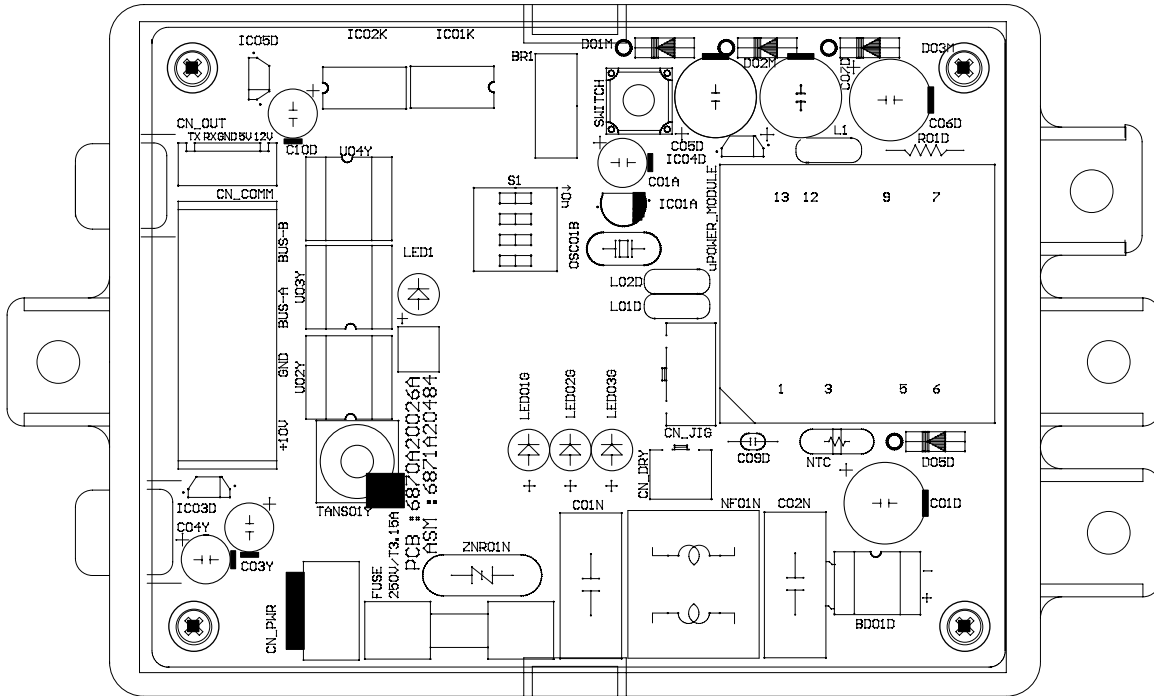


2) Solder side

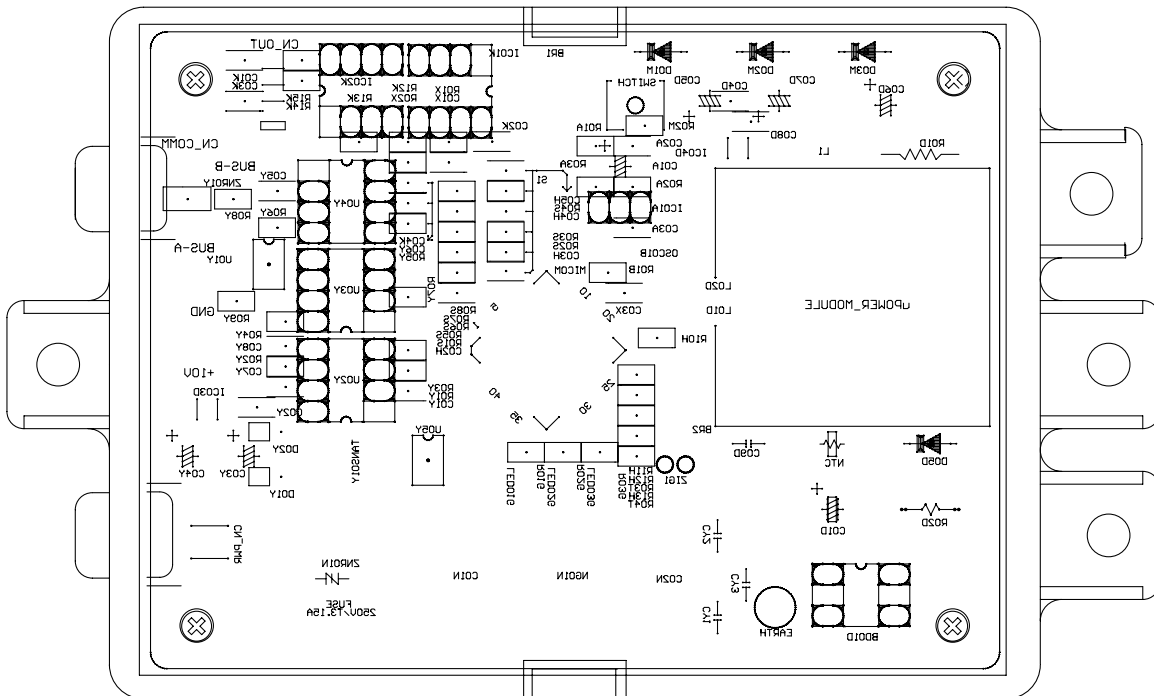


3) Central control PCB)

1) Top View



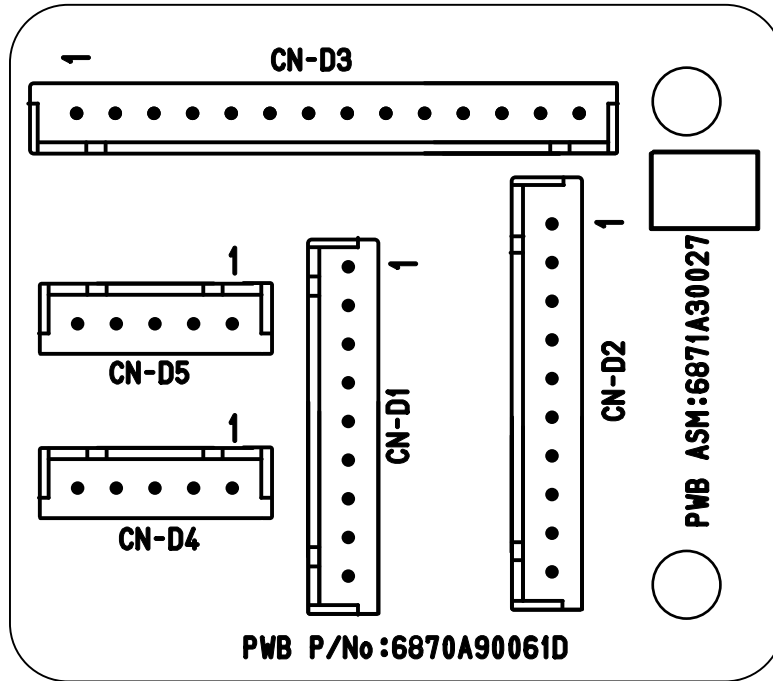
2) Bottom View



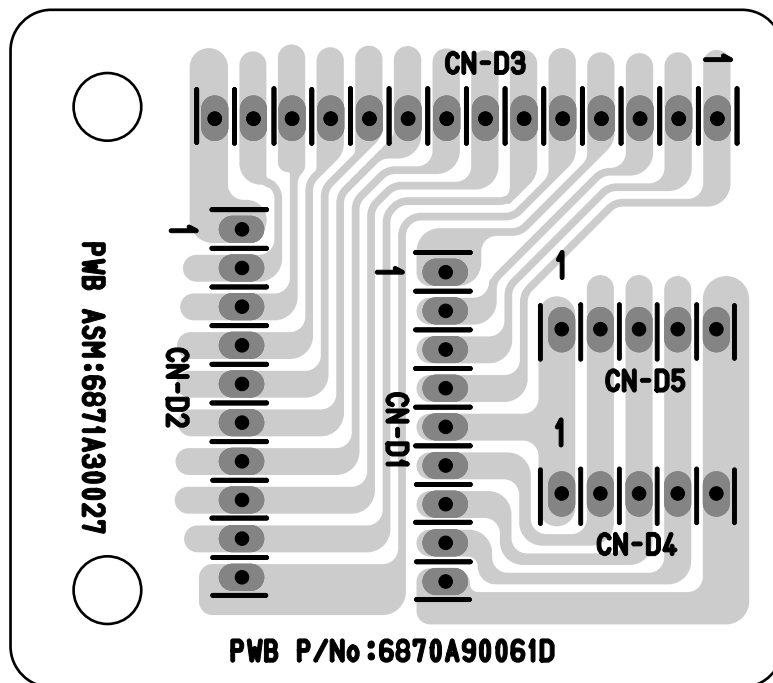
4. SUB P.W.B ASSEMBLY

1) Art Cool Type

TOP VIEW



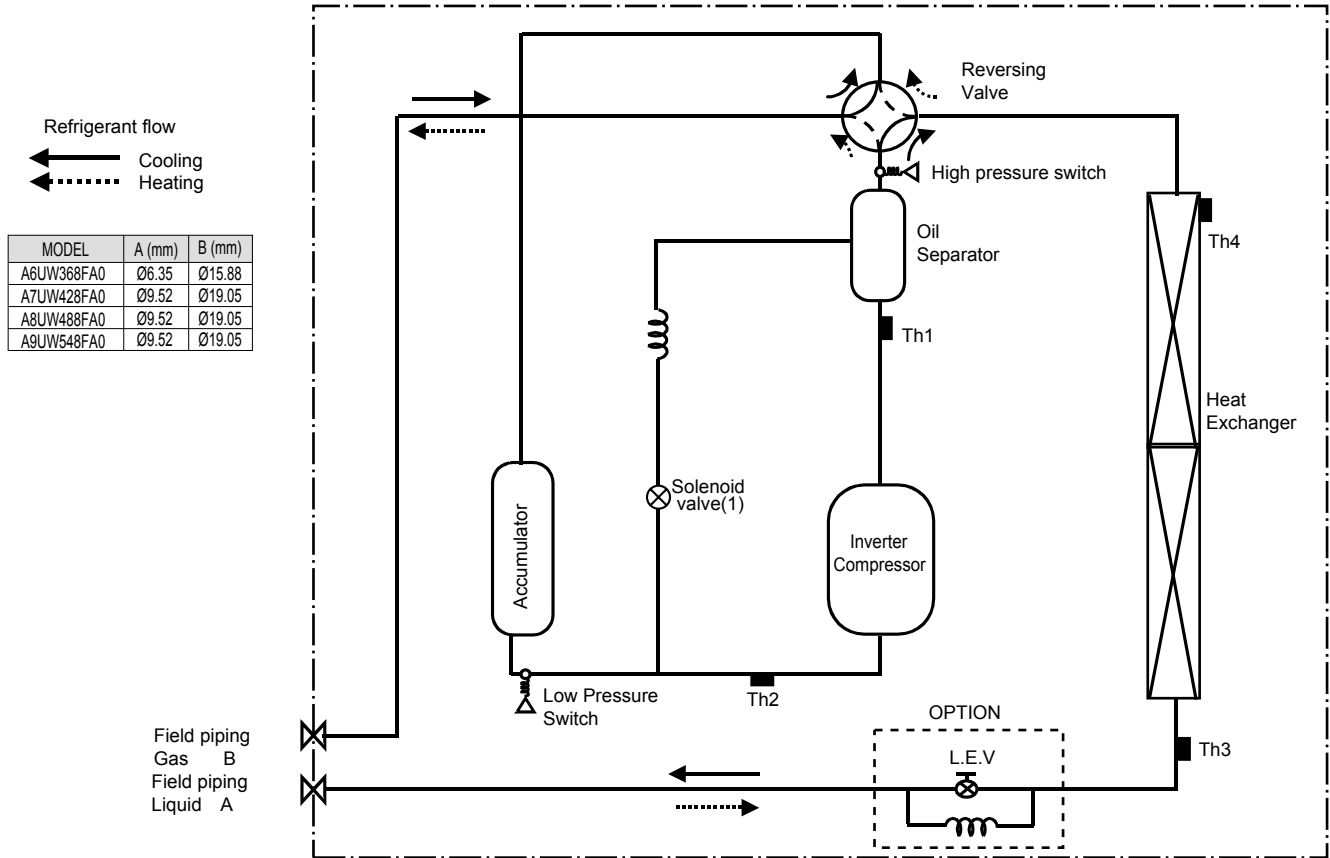
BOTTOM VIEW



Troubleshooting Guide

Refrigeration Cycle Diagram

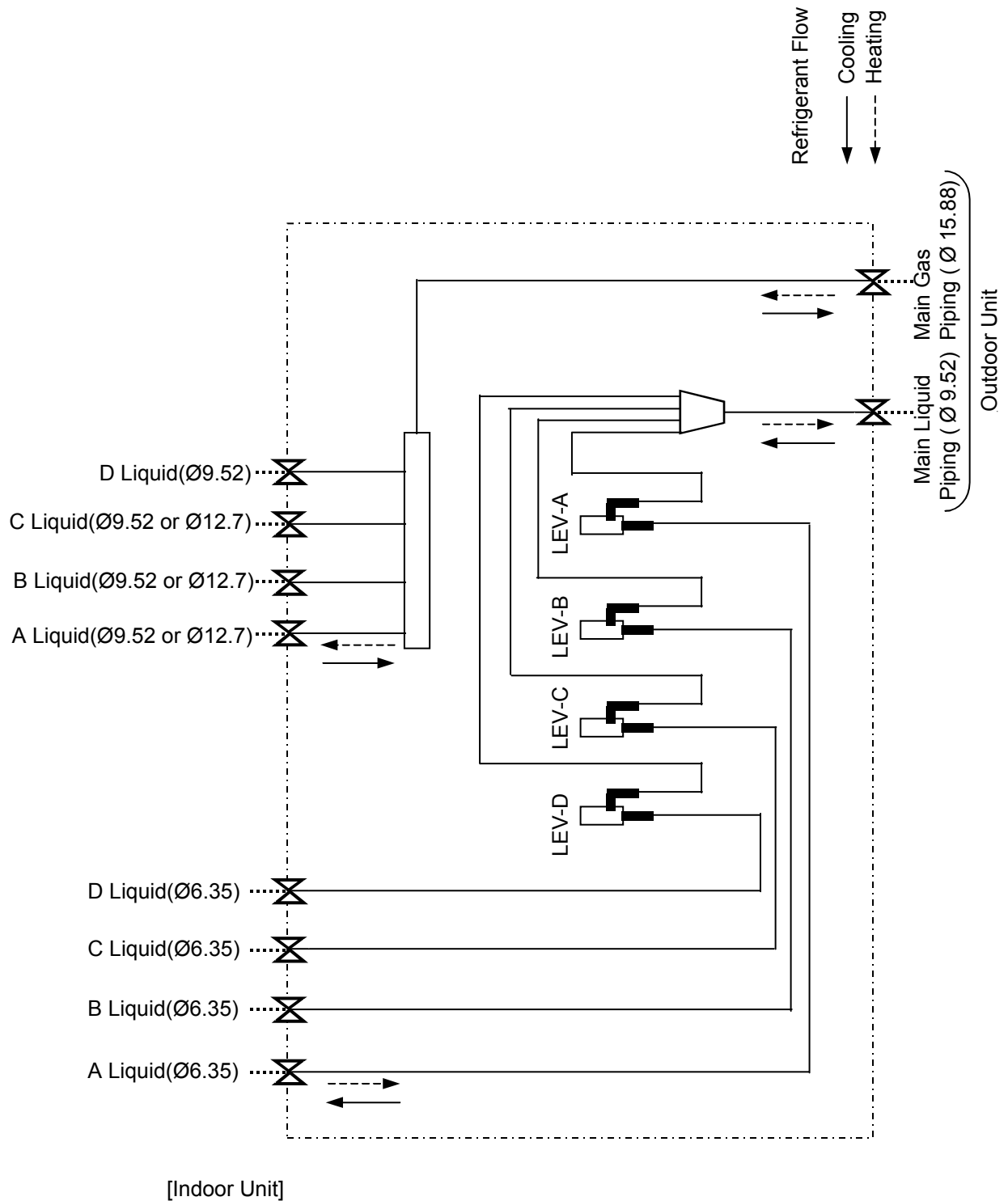
1. A6UW386FA0, A7UW428FA0, A8UW488FA0, A9UW548FA0



Notes:

- Th: Thermistor
- L.E.V: Linear Expansion Valve
- Th1: Discharge thermistor (Inverter)
- Th2: Suction thermistor
- Th3: Defrost thermistor
- Th4: Outdoor temp. thermistor

2. BD Unit



Self-diagnosis Function

■ Error Indicator

- The function is to self-diagnosis air conditioner and express the troubles identification if there is any trouble.
- Error mark is ON/OFF for the operation LED of evaporator body in the same manner as the following table.
- If more than two troubles occur simultaneously, primarily the highest trouble for error code is expressed.
- After error occurrence, if error is released, error LED is also released simultaneously.
- To operate again on the occurrence of error code, be sure to turn off the power and then turn on.
- Having or not of error code is different from Model.

Indoor Error

Error code	Description	INV TPS	LED 1 (Red)	LED 2 (Green)	Indoor Status
00	No Error	●			ON
01	Indoor Room themistor error	●		1time ●	OFF
02	Indoor in-piping sensor error	●		2times ●	OFF
03	Remote controller error	●		3times ●	OFF
04	Drain Pump error	●		4times ●	OFF
05	Communcation error between in and out	●		5times ●	OFF
06	Indoor Out-Piping sensor error	●		6times ●	OFF
07	Different mode operation	●		7times ●	OFF

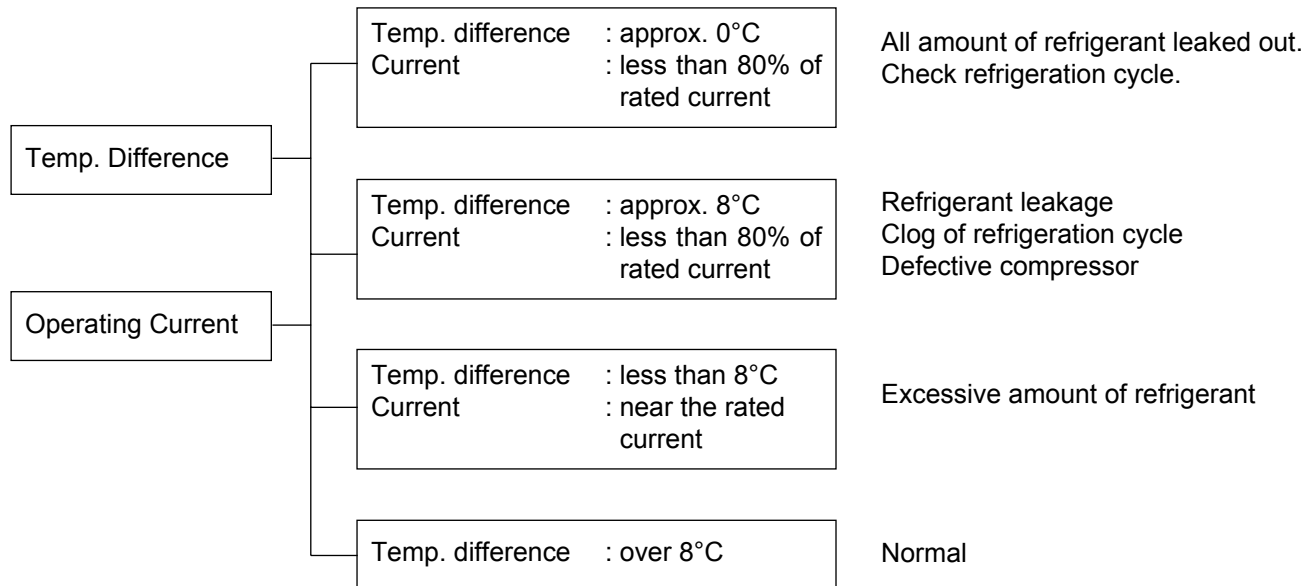
Outdoor Error

Error Code	Description	INV TPS	LED 1 (Red)	LED 2 (Green)	Indoor Status
21	DC Peak (IPM Fault)	●	2times ●	1times ●	Off
22	CT 2(Max CT)	●	2times ●	2times ●	Off
23	DC Link Low Volt.	●	2times ●	3times ●	Off
24	L/H press SW	●	2times ●	4times ●	Off
25	Low voltage / Over voltage	●	2times ●	5times ●	Off
26	DC Comp Position Error	●	2times ●	6times ●	Off
32	D-Pipe High (INV)	●	3times ●	2times ●	Off
33	D-Pipe High (Normal)	●	3times ●	3times ●	Off
40	CT Sensor (Open / Short)	●	4times ●	○	Off
41	INV. D-PipeTh Error (Open / Short)	●	4times ●	1times ●	Off
44	Outdoor Air Th Error (Open / Short)	●	4times ●	4times ●	Off
45	Cond. Pipe Error (Open / Short)	●	4times ●	5times ●	Off
46	Suction Pipe Error (Open / Short)	●	4times ●	6times ●	Off
47	Const D-PipeTh Error (Open / Short)	●	4times ●	7times ●	Off
51	Over Capacity	●	5times ●	1times ●	Off
52	Comm. Error(Main micon <-> Sub micom)	●	5times ●	2times ●	Off
53	Comm. Error(Indoor <-> Outdoor)	●	5times ●	3times ●	Off
54	Outdoor 3 phase power supply Reverse phase / phase omission	●	5times ●	4times ●	Off
60	EEPROM Check Sum Error	●	6times ●	○	Off
61	Cond. Pipe High	●	6times ●	1times ●	Off
62	Heatsink High	●	6times ●	2times ●	Off
63	Cond. Pipe Low	●	6times ●	3times ●	Off
65	Heatsink Th Error (Open/Short)	●	6times ●	5times ●	Off
67	Outdoor BLDC Fan Lock	●	6times ●	7times ●	Off
105	Comm. Error(Main board <->Fan board)	●	10times ●	5times ●	Off

Cycle Troubleshooting Guide

Trouble analysis

1. Check temperature difference between intake and discharge air, and operating current.



Notice:

Temperature difference between intake and discharge air depends on room air humidity. When the room air humidity is relatively higher, temperature difference is smaller. When the room air humidity is relatively lower temperature difference is larger.

2. Check temperature and pressure of refrigeration cycle.

Suction pressure (Compared with the normal value)	Temperature (Compared with the normal value)	Cause of Trouble	Description
Higher	High	Defective compressor	Current is low.
	Normal	Excessive amount of refrigerant	High pressure does not quickly rise at the beginning of operation.
Lower	Higher	Insufficient amount of refrigerant(Leakage) Clogging	Current is low.

Notice:

1. The suction pressure is usually 4.5~6.0 kg/cm²G at normal condition.
2. The temperature can be measured by attaching the thermometer to the low pressure tubing and wrap it with putty.

Electronic Parts Troubleshooting Guide

* Refer to electronic control device drawing & schematic diagram.

Trouble 1 The Product doesn't operate at all.

Turn off the main power and wait until LED on outdoor PCB is off.



Turn on the main power again.



Does "Beeping" sound is made from the indoor unit?



Check the voltage of power(AC220V/AC240V, 50Hz).

- The voltage of main power.
- The voltage applied to the unit.
- The connecting method of Indoor/Outdoor connecting cable (each color)
- The P.W.B. Ass'y (Fuse, Noise Filter, Power Transformer, IC01D, IC02D, etc.)



- Primarily, the operating condition of Micom is O.K.

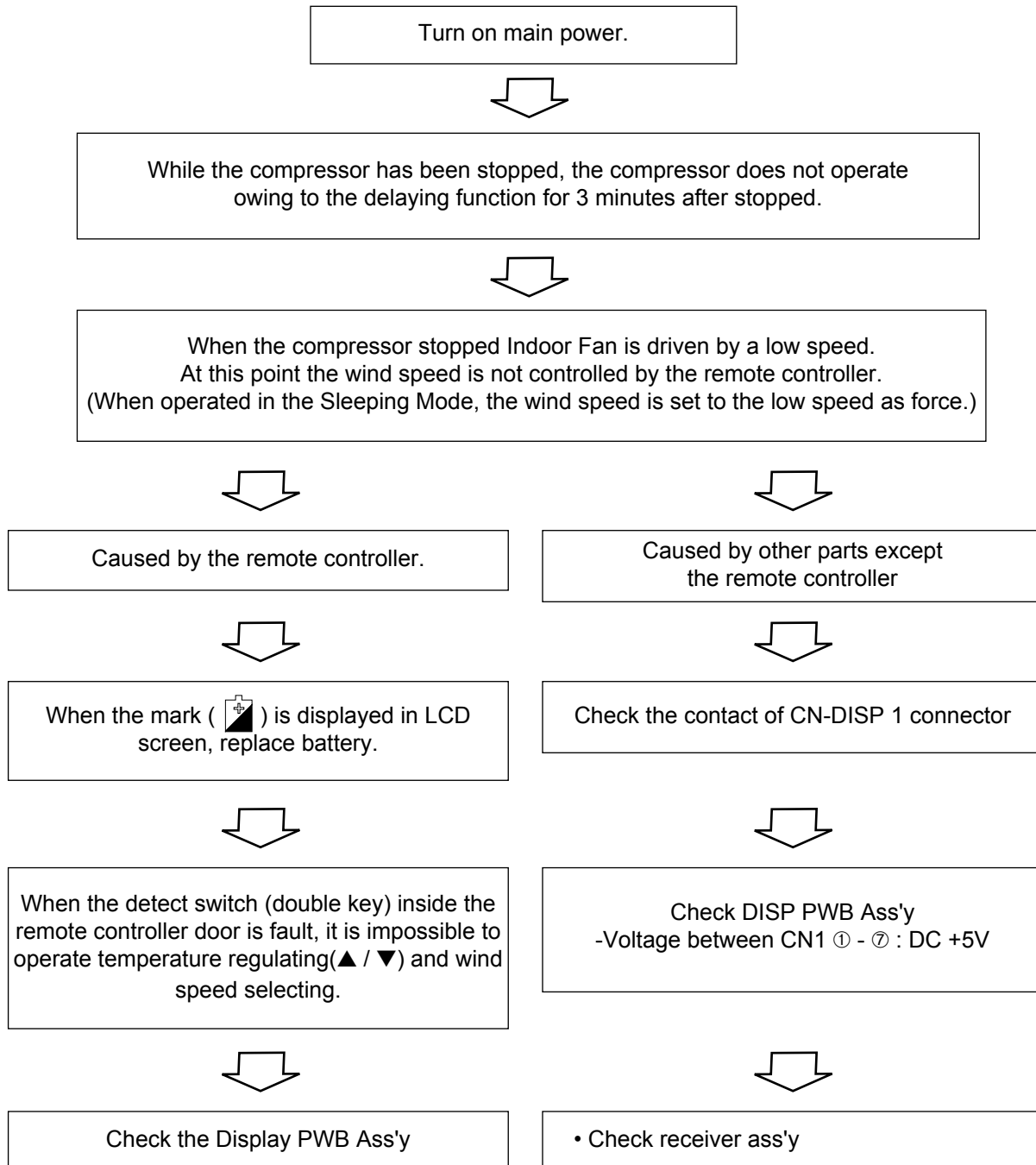


- Check CN-DISP1

The operation check of the P.C.B. Ass'y

Procedure	Specification	Remedy
1) The input voltage of power transformer.	1) AC230V ± 30V : Check the rated voltage	1) Replace power transformer.
2) The output voltage of power transformer.	2) 14V ± 3V	2) Replace power transformer.
3) IC01D(7812)	3) DC12V	3) Replace IC01D.
4) IC02D(7805)	4) DC5V	4) Replace IC02D.
5) IC01A(KIA7036)	5) The voltage of micom pin 29 : DC4.5V↑	5) Replace IC01A.

Trouble 2 Product doesn't operate with the remote controller.



Trouble 3 The Compressor/Outdoor Fan are don't operate

Turn on the main power.



Operate Cooling Mode by setting the disired temperature of the remote controller is less than one of the Indoor temperature by 1°C at least.



When in air circulation mode, compressor/outdoor fan is stopped.



Check the sensor for Indoor temperature is attatched as close as to be effected by the temperature of Heat Exchange (EVA.)



When the sensor circuit for Indoor temperature and connector are in bad Connection or are not engaged, Compressor/Outdoor fan is stopped.

- Check the related circuit of R02H(12.1K), R01H(1K), R04H(6.2K), R03H(1K), C01H(102), C02H(102), Micom(pin No. ,).
- Check the Indoor temperature sensor is disconnected or not (about 10K at 25°C).



Check the Relay(RY-PWR, RY-START) for driving Compressor.

- Check the voltage between CN-CP(L) and CN-CP(N) of terminal to connect the Outdoor (About AC220V / 240V).
- Check the related circuit of relay in Outdoor PCB Ass'y.

Check Point	Comp. ON	Comp. OFF
Between Micom(No. 71) and GND	DC 5V	DC 0V
Between IC01M(No. 11) and GND	DC 1V↓	DC 12V

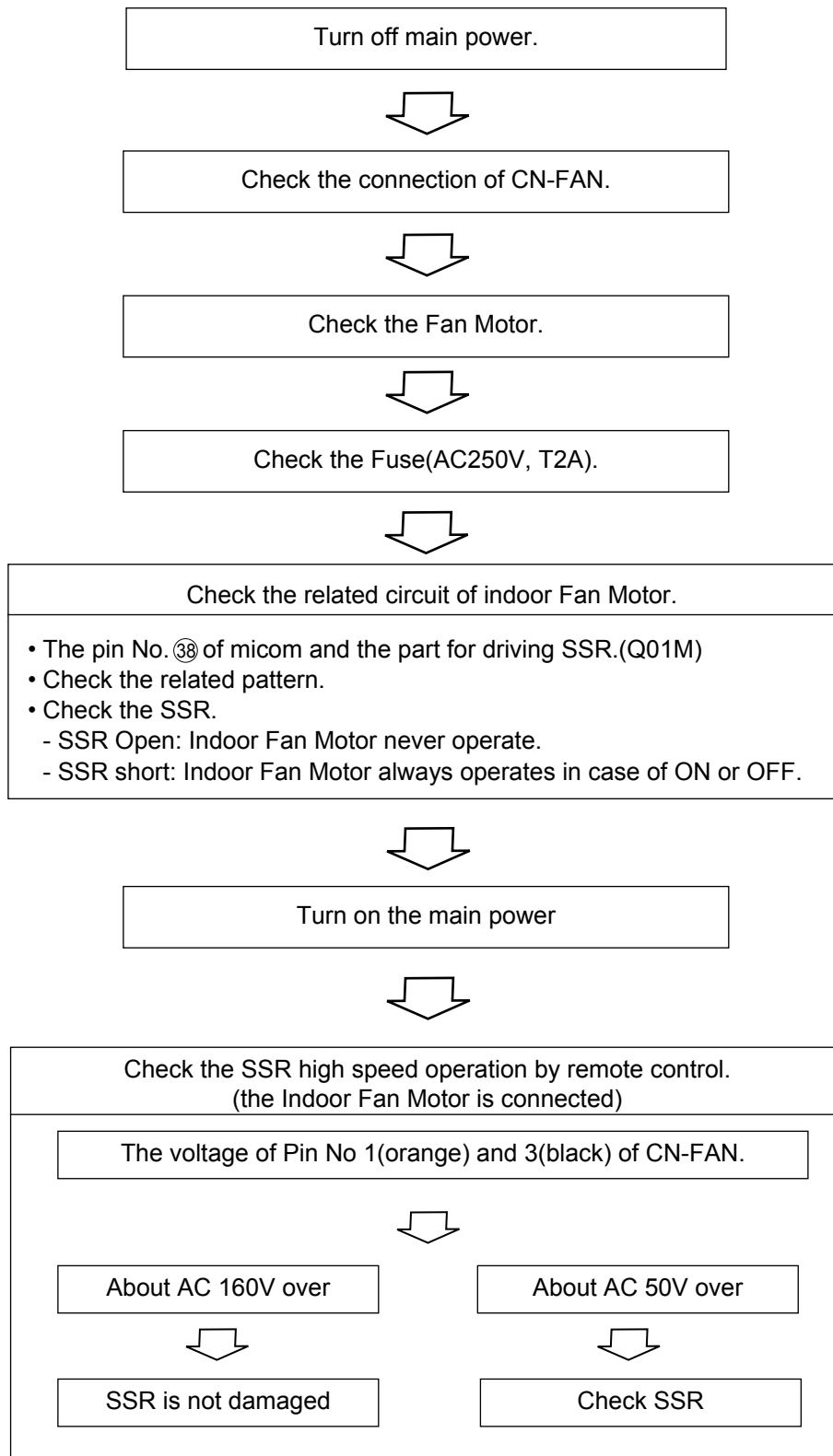


Turn off main power.



Check the electrical wiring diagram of Outdoor side.
Check the open or short of connecting wires between Indoor and Outdoor.

Trouble 4 When indoor Fan does not operate.



Trouble 5 When the louver does not operate.

- Confirm that the vertical louver is normally geared with the shaft of Stepping Motor.
- If the regular torque is detected when rotating the vertical louver with hands ⇒ Normal



- Check the connecting condition of CN-U/D or CN0L/R Connector
- Check the soldering condition(on PCB) of CN-U/D or CN0L/R Connector



Check the operating circuit of the vertical louver

- Confirm that there is DC +12V between pin ① of CN-U/D, CN0L/R and GND.
- Confirm that there is a soldering short at following terminals.
 - Between ①, ②, ③ and ④ of MICOM
 - Between ⑤, ⑥, ⑦ and ⑧ of IC01M
 - Between ⑱, ⑲, ⑳ and ㉑ of MICOM
 - Between ⑤, ⑥, ⑦ and ⑧ of IC01M



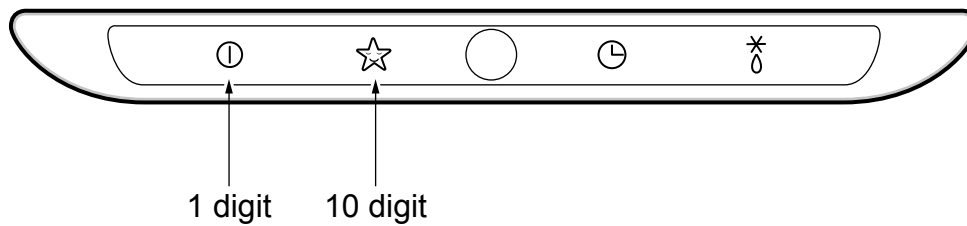
If there are no problems after above checks.

- Confirm the assembly condition that are catching and interfering parts in the link of the vertical louver

General Information

■ Error Indicator (Indoor)

- The function is to self-diagnosis air conditioner and express the troubles if there is any trouble.
- Error mark is displayed on display window of indoor units and wired-remote controller, and LED of outdoor unit control board.
- If more than two troubles occur simultaneously, lower number of error code is first displayed.
- After error occurs, if error is released, error LED is also released simultaneously.



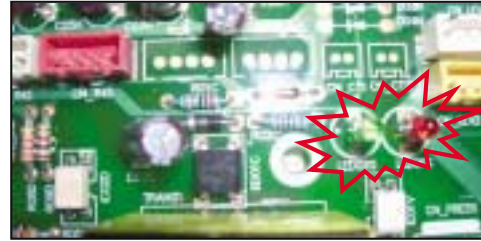
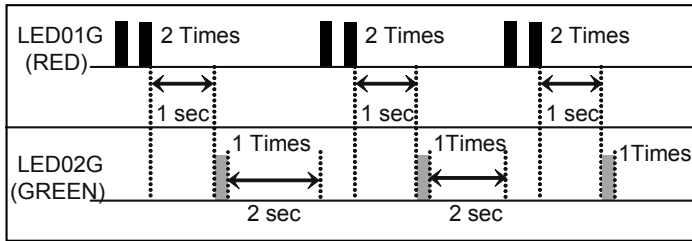
■ Indoor Error

Error code	Contents	Case of error	Indoor Status
01	Air sensor (open/short)	Open / Short	Off
02	Inlet pipe sensor	Open / Short	Off
03	Communication(Indoor ↔ Wired R/Control)	Communication Poorly	Off
04	Drain pump/ Float switch	Float switch Open	Off
05	Communication(Indoor ↔ Outdoor)	Communication Poorly	Off
06	Outlet pipe sensor	Open / Short	Off
07	Different operation mode	Different operation mode	Off

■ Error Indicator (Outdoor)

Outdoor Error

Ex) Error 21 (DC Peak)

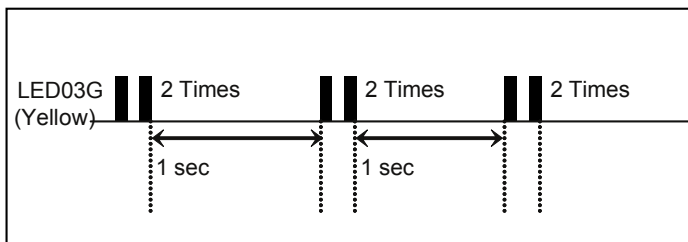


Error code	Description	LED01G (Red)	LED02G (Green)	Indoor Status
21	DC Peak (IPM Fault)	2 times ●	1 time ●	Off
22	CT 2(Max CT)	2 times ●	2 times ●	Off
23	DC Link Low Volt.	2 times ●	3 times ●	Off
24	L/H press SW	2 times ●	4 times ●	Off
25	Low voltage / Over voltage	2 times ●	5 times ●	Off

65	Heatsink Th Error (Open/Short)	6 times ●	5 times ●	Off
67	Outdoor BLDC Fan Lock	6 times ●	7 times ●	Off
105	Comm. Error (Main board <-> Fan board)	10 times ●	5 times ●	Off

Outdoor Error

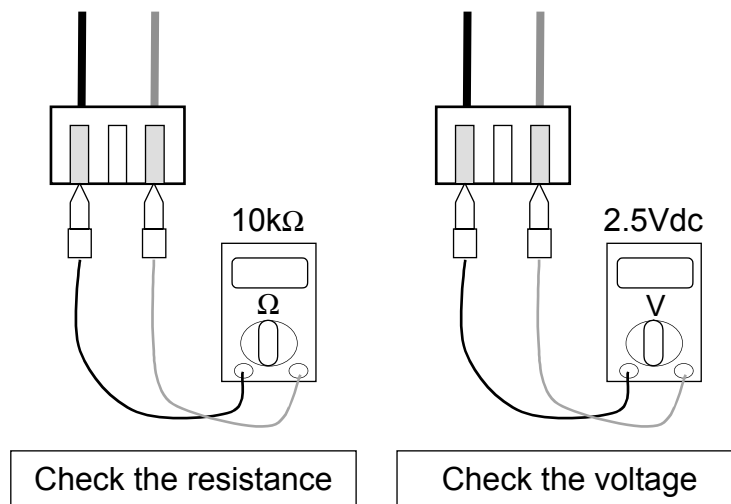
Ex) Error 26(DC Comp position Error)



Error code	Description	LED03G (Yellow)	Error Display Time
21	DC PEAK (IPM Fault)	1 times ●	25 sec
26	DC Comp position Error (No Position / Locking) Error	2 times ●	25 sec
52	Comm. Error (Main micon <-> Sub micom)	3 times ●	25 sec
23	DC Link Low voltage Error	5 times ●	25 sec
40	CT Sensor Open/Short Error	6 times ●	-
60	A/D Option Error	7 times ●	-
29	Comp over current Error	8 times ●	25 sec

1) Troubleshooting CH01, CH02, CH06

Display code	Title	Cause of error	Check point & Normal condition
01	Indoor air sensor	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	Normal resistor : 10KΩ/ at 25°C (Unplugged) Normal voltage : 2.5Vdc / at 25°C (plugged)
02	Indoor inlet pipe sensor	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	Normal resistor : 5KΩ/ at 25°C (Unplugged) Normal voltage : 2.5Vdc / at 25°C (plugged)
06	Indoor outlet pipe sensor	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	Normal resistor : 5KΩ/ at 25°C (Unplugged) Normal voltage : 2.5Vdc / at 25°C (plugged)

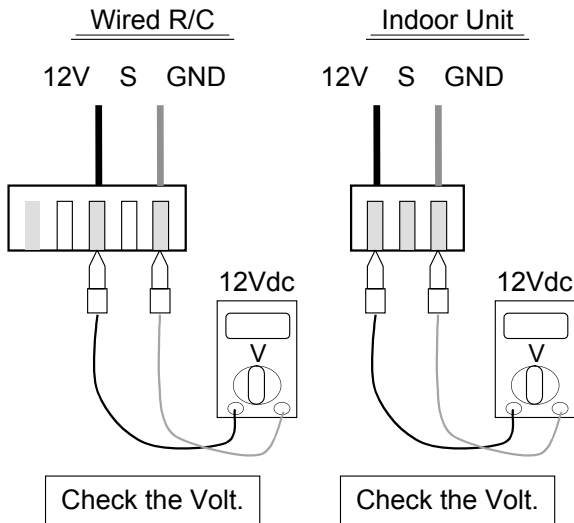


Check Point

1. Unplug the sensor on Indoor unit PCB.
2. Estimate the resistance of each sensor.
3. If the resistance of the sensor is 10KΩ/ 5KΩ at 25°C, then sensor is normal.
4. If the resistance of the sensor is 0 KΩ or ∞, then sensor is abnormal. → Change the sensor.
5. Plug the sensor on Indoor unit PCB and Power ON.
6. Estimate the voltage of each sensor.
7. If the voltage of the sensor is 2.5Vdc at 25°C, then sensor is normal.
8. If the resistance of the sensor is 0 or 5Vdc, then sensor is abnormal. → Repair or Change the PCB.

2) Troubleshooting CH03

Display code	Title	Cause of error	Check point & Normal condition
03	Communication Wired R/C	<ul style="list-style-type: none"> • Open / Short • Wrong connection 	<ul style="list-style-type: none"> • Connection of wire • Main PCB Volt. DC12V • Noise interference



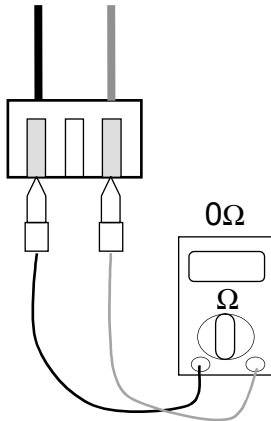
Check Point

1. Check the wire connection. (Open / Short) → Repair the connection
2. Check the soldering state of connector. (Soldered poorly) → Repair or Change the PCB.
3. Check the volt. Of main PCB power source. (DC 12V, DC 5V) → Repair or Change the main PCB.
4. Check the installation of wired remote controller. (Noise interference) → Adjust the state of installation

3) Troubleshooting CH04

Display code	Title	Cause of error	Check point & Normal condition
04	Drain pump / Float switch	<ul style="list-style-type: none"> • Float switch Open. (Normal : short) 	<ul style="list-style-type: none"> • The connection of wire(Drain pump/ Float switch) • Drain pump power input. (220V) • Drain tube installation. • Indoor unit installation. (Inclination)

CN Float



Check the resistance



Check Point

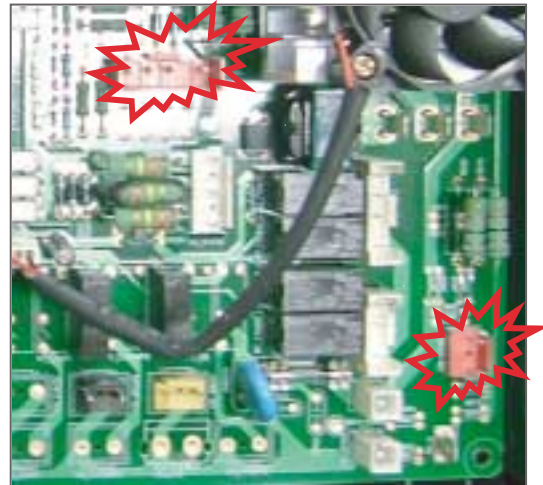
1. Check the wire connection. (Open, Soldered poorly) → Repair the connection or change the PCB.
2. Check the resistance of float switch (Abnormal : Open, Normal : short) → Check the float switch.
3. Check the level of water
4. Check the volt. Of Drain pump power supply. (AC 230V) → Repair or Change the main PCB.

4) Troubleshooting CH05, CH53

Display code	Title	Cause of error	Check point & Normal condition
05 / 53	Title Communication (Indoor → Outdoor)	<ul style="list-style-type: none"> • Communication poorly 	<ul style="list-style-type: none"> • Power input AC 220V. (Outdoor, Indoor) • The connector for transmission is disconnected. • The connecting wires are misconnected. • The communication line is shorted at GND. • Transmission circuit of outdoor PCB is abnormal. • Transmission circuit of indoor PCB is abnormal.

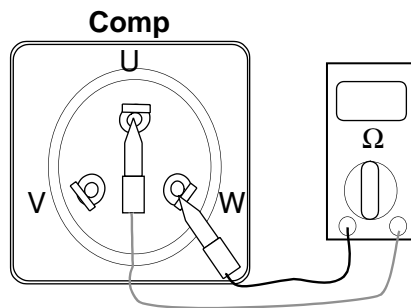
Check Point

1. Check the input power AC230V. (Outdoor, Indoor unit)
 2. Check the communication wires are correctly connected.
Adjust the connection of wire Confirm the wire of "Live", "Neutral"
 3. Check the resistance between communication line and GND.
(Normal : Over 2MΩ)
 4. Check the connector for communication is correctly connected.
 5. If one indoor unit is operated normally, outdoor PCB is no problem.
Check the another indoor unit.
- * CH05 is displayed at indoor unit, CH53 is displayed at outdoor unit.
6. If all indoor unit is displayed CH05 but outdoor PCB not display
CH53 : Check the CN_COM and CN_POWER is correctly connected.

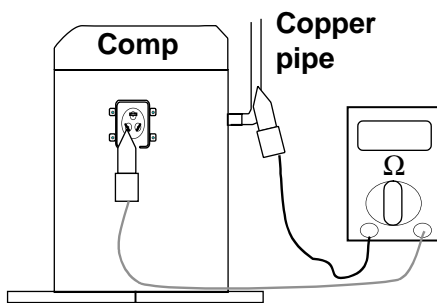


5) Troubleshooting CH21

Display code	Title	Cause of error	Check point & Normal condition
21	DC PEAK (IPM Fault)	<ul style="list-style-type: none"> Instant over current Over Rated current Poor insulation of IPM 	<ul style="list-style-type: none"> An instant over current in the U,V,W phase <ul style="list-style-type: none"> - Comp lock - The abnormal connection of U,V,W Over load condition <ul style="list-style-type: none"> - Overcharging of refrigerant Pipe length. Outdoor Fan is stop Poor insulation of compressor



Resistance(Ω) at 20°C		
Terminal	5KD240XBA	5JD420XBB
U-V	1.843	1.08
V-W	1.893	1.12
W-U	1.812	1.09



Resistance(Ω) at 20°C	
Terminal	Inverter Comp.
U-GND	2M Ω
V-GND	2M Ω
W-GND	2M Ω

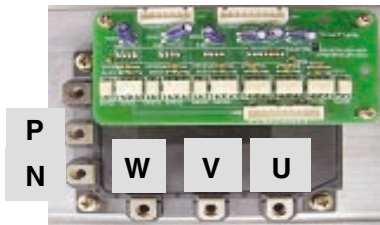
Check Point

1. Check the wire connection. (U,V,W)
2. Check the load condition. (Refrigerant, Pipe length, ...) Adjust the load condition
3. Check the electricity leakage of the compressor. Normal : Over 2M Ω .
4. Check the resistance of compressor.
5. Check the IPM circuit.(Continue next page)

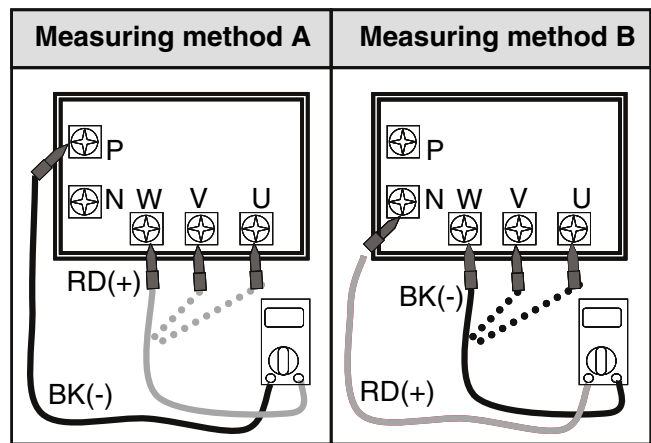
Troubleshooting CH21

Check the IPM (Measuring after Comp connector disconnect)

1) Test mode set diode mode($\rightarrow|$)

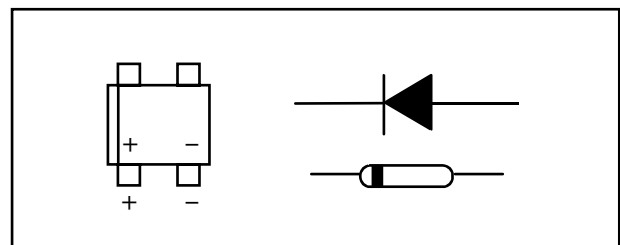
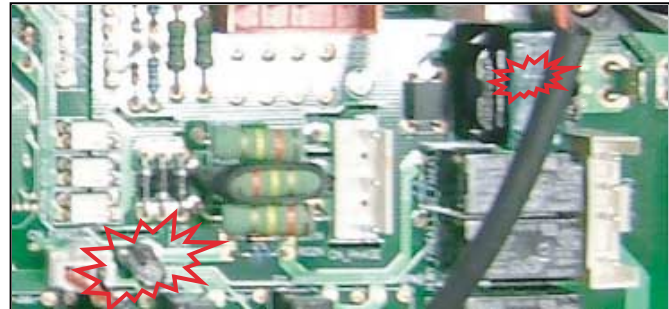
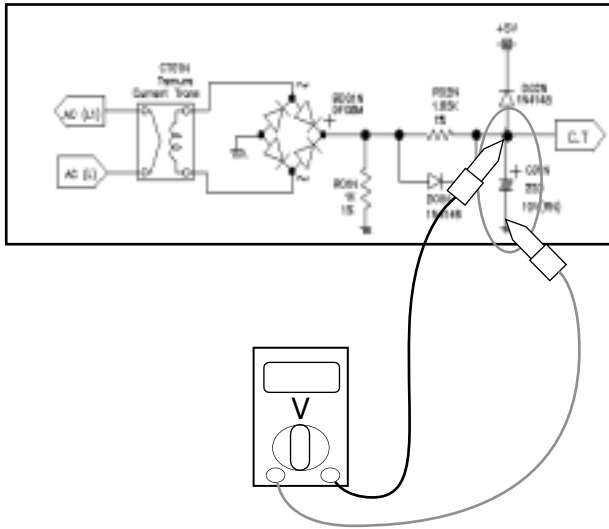


Terminal	Measuring method	
	A	B
U	0.4~0.6V	0.4~0.6V
V	0.4~0.6V	0.4~0.6V
W	0.4~0.6V	0.4~0.6V



6) Troubleshooting CH22

Display code	Title	Cause of error	Check point & Normal condition
22	Max. C/T	Over current	Malfunction of compressor Blocking of pipe Low voltage input Refrigerant, pipe length, blocked, ...

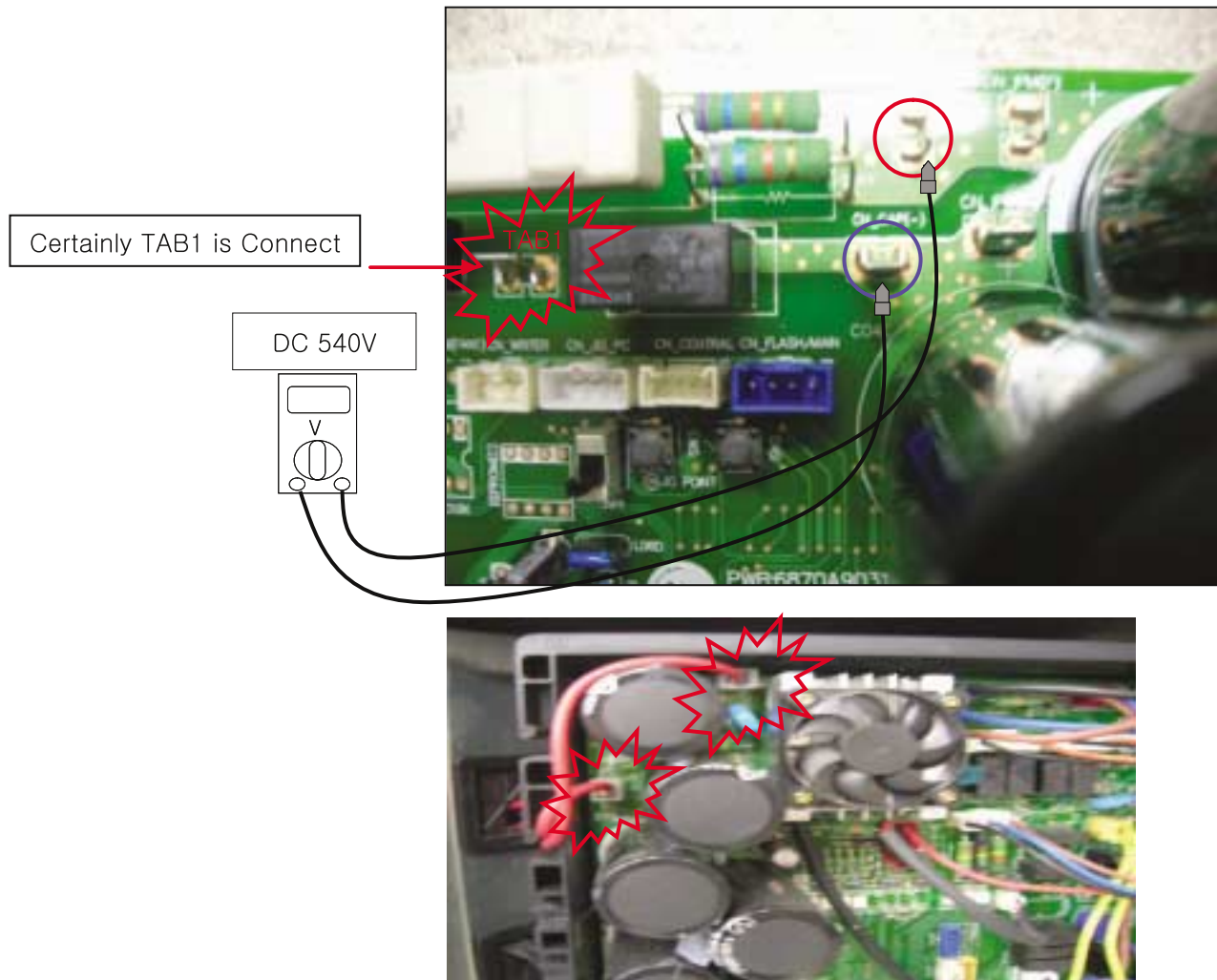


Check Point

1. Check the power source.(200~240V)
2. Check the fan operation is right.
3. Check the current.
4. Check the install condition.
5. Check the internal circuit. (C/T, Diode, Resistor)

7) Troubleshooting CH23

Display code	Title	Cause of error	Check point & Normal condition
23	DC Link Low voltage	<ul style="list-style-type: none"> DC Link volt is below 300V 	<ul style="list-style-type: none"> Check point & Normal condition Check the TAB1 is connect. At not operating : DC Link voltage(260V ↑) At Comp operating : DC Link voltage(500V ↑)

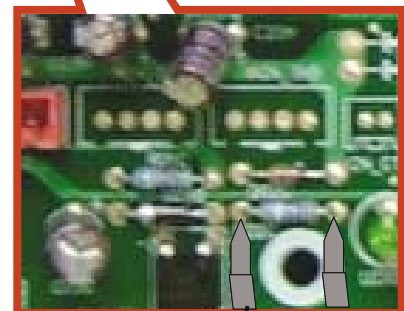
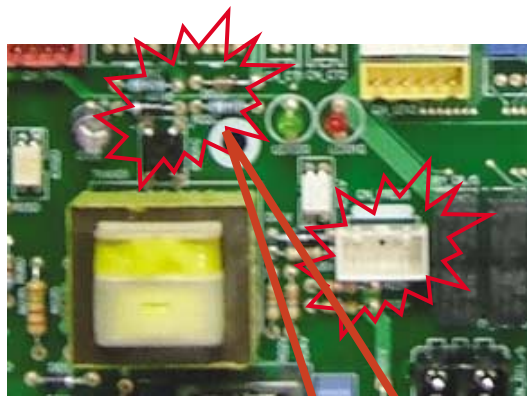
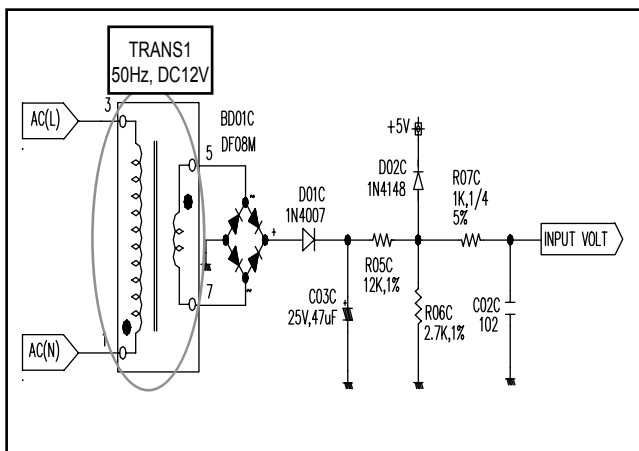


Check Point

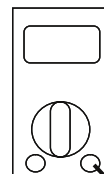
1. Check the Tab1 connection condition. (Refer to outdoor wiring diagram)
2. Check the CN_COIL(IN), CN_COIL(OUT) connection condition.
3. Check the DC Link voltage at not operating(260V ↑)
4. Check the DC Link voltage at Comp operating(500V ↑)

8) Troubleshooting CH24, CH25

Display code	Title	Cause of error	Check point & Normal condition
24	Press S/W Open	<ul style="list-style-type: none"> Low / High press S/W open. 	<ul style="list-style-type: none"> Check the connection of "CN_Press". Check the components.
25	Input voltage	<ul style="list-style-type: none"> Abnormal Input voltage (140Vac ↓, 300Vac ↑) 	<ul style="list-style-type: none"> Check the power source. Check the components.



DC 3V ± 10%



Check Point

• CH 24

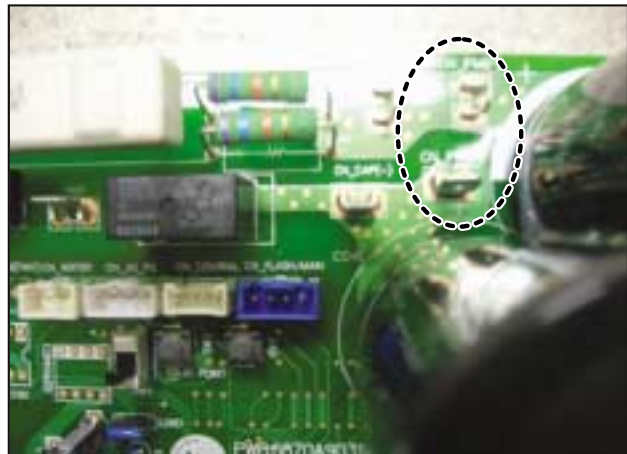
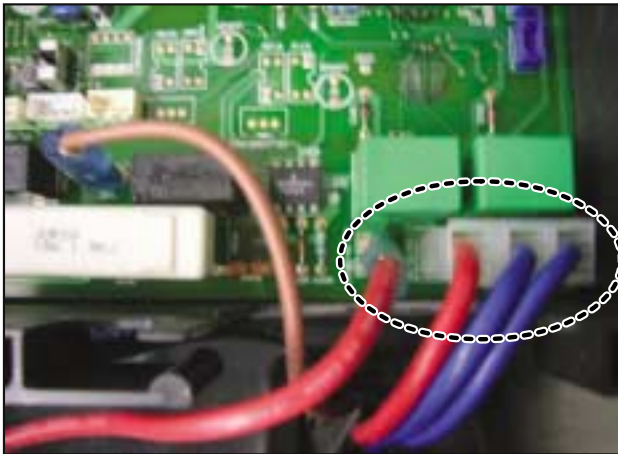
1. Check the connection of "CN_PRESS"
2. Check the component of press switch.
3. Check the install condition for over load.
4. Check the SVC V/V open.
5. Check the leakage of refrigerant.

• CH 25

1. Check the power source.
2. Check the components
 - ✱ Trans1
 - Primary resistance : 2.27kΩ ±10%
 - Secondary resistance : 9Ω ±10%

9) Troubleshooting CH26

Display code	Title	Cause of error	Check point & Normal condition
26	DC Compressor Position	<ul style="list-style-type: none"> Compressor Starting fail error 	<ul style="list-style-type: none"> Check the connection of comp wire "U,V,W" Malfunction of compressor Check the component of "IPM", detection parts.

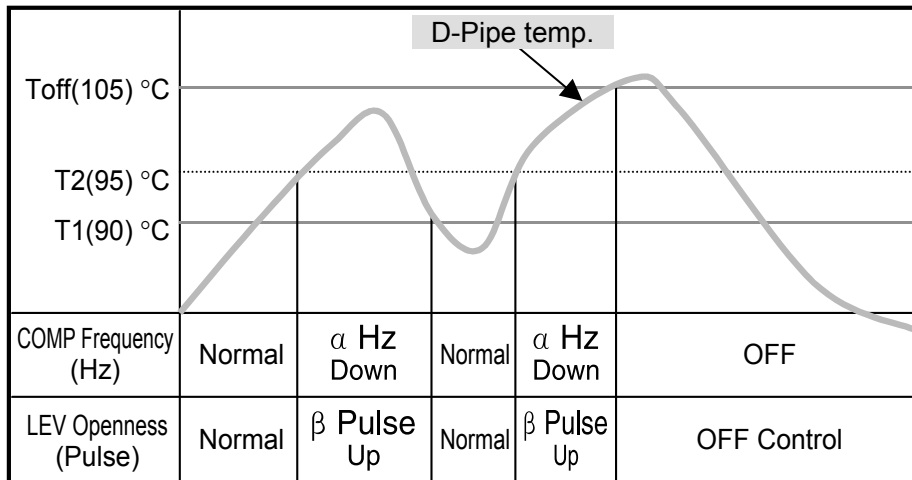


Check Point

1. Check the connection condition of PCB.
2. Check the connection condition of Comp. U,V,W wire.
3. Check the connection condition of CN_IPM(P), CN_IPM(N).
4. Check the comp resistor and insulation resistance .
5. Check the IPM.
6. Check the pressure of refrigerant.
7. Check the Service Valve Open.

10) Troubleshooting CH32

Display code	Title	Cause of error	Check point & Normal condition
32	D-pipe (Inverter) temp. high (105°C)	<ul style="list-style-type: none"> Discharge sensor (Inverter) temp. high 	<ul style="list-style-type: none"> Check the discharge pipe sensor for INV. Check the install condition for over load. Check the leakage of refrigerant. Check the Service Valve open. Check the outdoor fan.



Check Point

1. Check the install condition for over load.
2. Check the Service Valve open.
3. Check the outdoor fan operating condition
4. Check the leakage of refrigerant.

11) Troubleshooting CH40

Display code	Title	Cause of error	Check point & Normal condition
40	C/T Sensor Error	<ul style="list-style-type: none"> Initial current error 	<ul style="list-style-type: none"> Malfunction of current detection circuit. (Open / Short) The voltage of "C01N" Is 4.0Vdc(25A) .

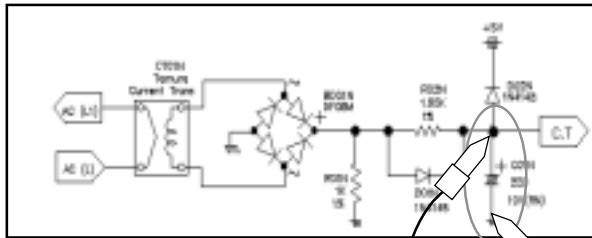


Figure 1.

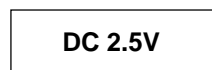
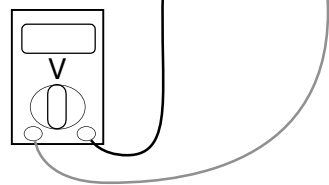
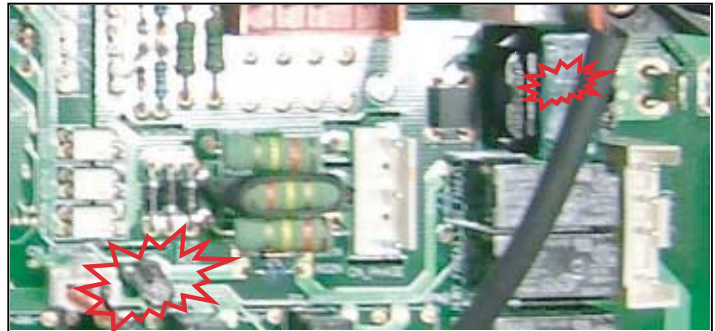
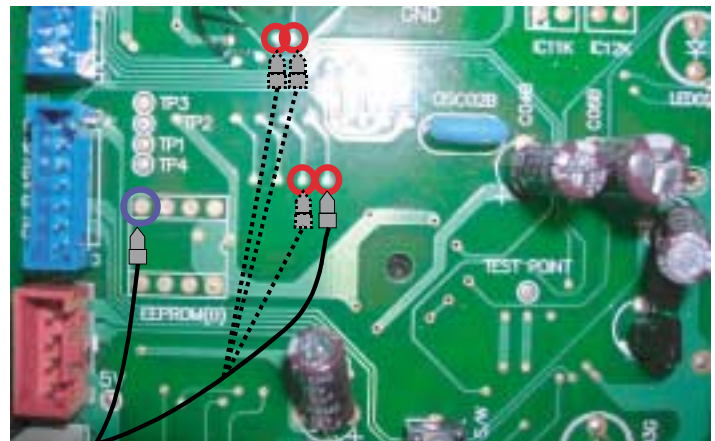


Figure 2.

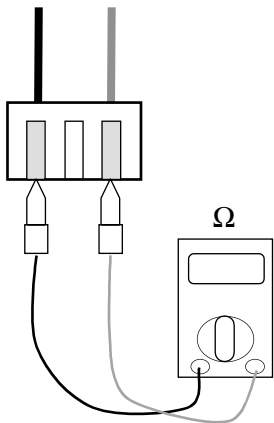


Check Point

1. Check the input voltage.(200~240V)
2. Check the voltage of C01N at not operating.(0V)
3. Check the voltage of Figure2. red point at not operating.(2.5V)

12) Troubleshooting CH41, CH44, CH45, CH46, CH47, CH65

Display code	Title	Cause of error	Check point & Normal condition
41	D-pipe sensor (Inverter)	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	<ul style="list-style-type: none"> • Normal resistor : 200KΩ / at 25°C (Unplugged) • Normal voltage : 4.5Vdc / at 25°C (plugged)
44	Air sensor	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	<ul style="list-style-type: none"> • Normal resistor : 10KΩ / at 25°C (Unplugged) • Normal voltage : 2.5Vdc / at 25°C (plugged)
45	Condenser Pipe sensor	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	<ul style="list-style-type: none"> • Normal resistor : 5KΩ / at 25°C (Unplugged) • Normal voltage : 2.5Vdc / at 25°C (plugged)
46	Suction Pipe sensor	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	<ul style="list-style-type: none"> • Normal resistor : 5KΩ / at 25°C (Unplugged) • Normal voltage : 2.5Vdc / at 25°C (plugged)
47	D-pipe sensor (Constant)	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	<ul style="list-style-type: none"> • Normal resistor : 200KΩ / at 25°C (Unplugged) • Normal voltage : 4.5Vdc / at 25°C (plugged)
65	Heat sink sensor	<ul style="list-style-type: none"> • Open / Short • Soldered poorly • Internal circuit error 	<ul style="list-style-type: none"> • Normal resistor : 10KΩ / at 25°C (Unplugged) • Normal voltage : 2.5Vdc / at 25°C (plugged)



Check Point

1. Estimate the resistance of each sensor.(Unplugged)
2. Estimate the voltage of each sensor.(Plugged)
3. If the resistance of the sensor is 0 k Ω or ∞ , then sensor is abnormal.
If the voltage of the sensor is 0 V or 5Vdc, then sensor is abnormal.

13) Troubleshooting CH51, CH60

Display code	Title	Cause of error	Check point & Normal condition
51	Over capacity	<ul style="list-style-type: none"> Over capacity 	<ul style="list-style-type: none"> Check the indoor unit capacity. Check the combination table.
60	Over capacity	<ul style="list-style-type: none"> Check sum error 	<ul style="list-style-type: none"> Check the PCB ASM P/No. Check the poor soldering.

Model	Gross max. capacity	Max. single indoor unit capacity
A6UW368FA0	47	24
A7UW428FA0	58	24
A8UW488FA0	64	24
A9UW548FA0	73	24

Check Point

• CH 51

1. Check the indoor unit capacity.

• CH 60

1. Check the insertion condition of EEPROM.
2. Check the poor soldering

14) Troubleshooting CH54

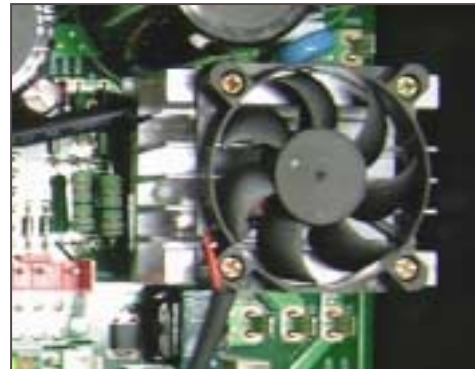
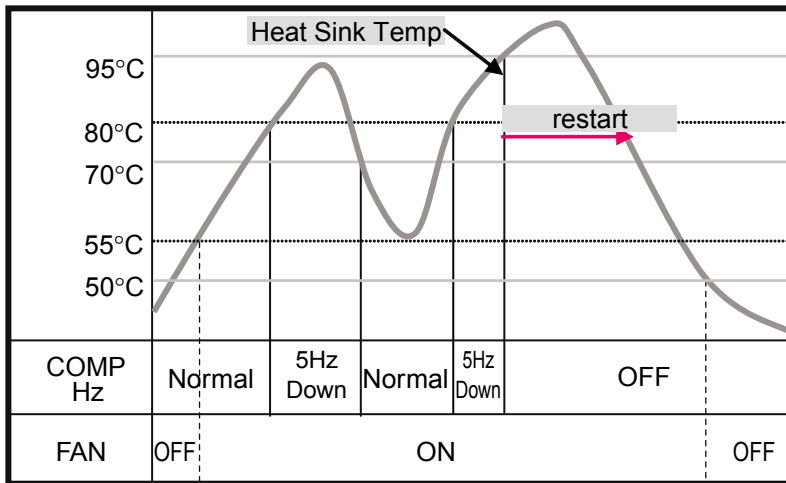
Display code	Title	Cause of error	Check point & Normal condition
54	3-phase wrong wiring of main outdoor unit	<ul style="list-style-type: none"> • 3-phase wrong wiring of outdoor unit (Reverse Phase /omission of phase) 	<ul style="list-style-type: none"> • Abnormal Main PCB • No connection of CN_Phase • Changed R, S, T connection order

Check Point

1. Check the connection condition of R,S,T wire.
2. Check the connection condition of CN_Phase.
3. Check the outdoor main fuse.

15) Troubleshooting CH61, CH62

Display code	Title	Cause of error	Check point & Normal condition
61	Condenser pipe sensor temp. high	<ul style="list-style-type: none"> Condenser pipe sensor detected high temp.(65°C) 	<ul style="list-style-type: none"> Check the load condition. Check the sensor of Condenser pipe sensor.
62	Heat sink sensor temp. high	<ul style="list-style-type: none"> Heat sink sensor detected high temp.(95°C) 	<ul style="list-style-type: none"> Check the fan is locked. Check the sensor of heat sink.



Check Point

• CH 61

1. Check the install condition for over load. (Refrigerant, Pipe length, Blocked, ...)

• CH 62

1. Check the fan is locked.
2. Check the sensor of heat sink.

16) Troubleshooting CH67, CH105

Display code	Title	Cause of error	Check point & Normal condition
67	Outdoor fan lock	<ul style="list-style-type: none"> Outdoor fan is not operating 	<ul style="list-style-type: none"> Check the fan condition. Check the fan connector
105	Communication error between main PCB and fan PCB	<ul style="list-style-type: none"> Communication error between main PCB and fan PCB 	<ul style="list-style-type: none"> Short or fusing of communication line Poor outdoor unit PCB Power input when the DC link capacitor discharges

Check Point

• CH 67

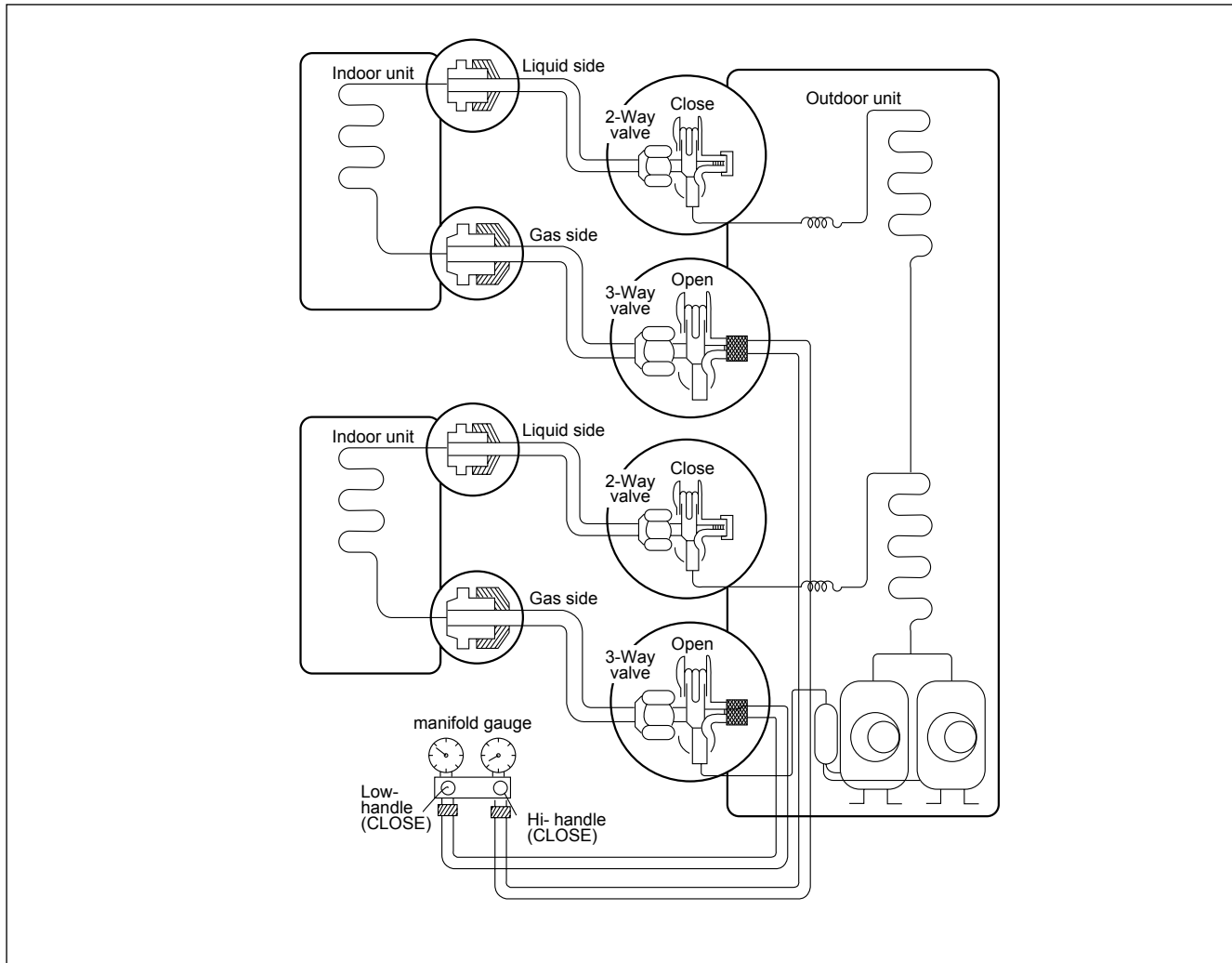
1. Check the install condition for fan.

• CH 105

1. Is communication line between the main PCB and the fan PCB normal?
2. Is the communication LED on?

(3-way) Valve

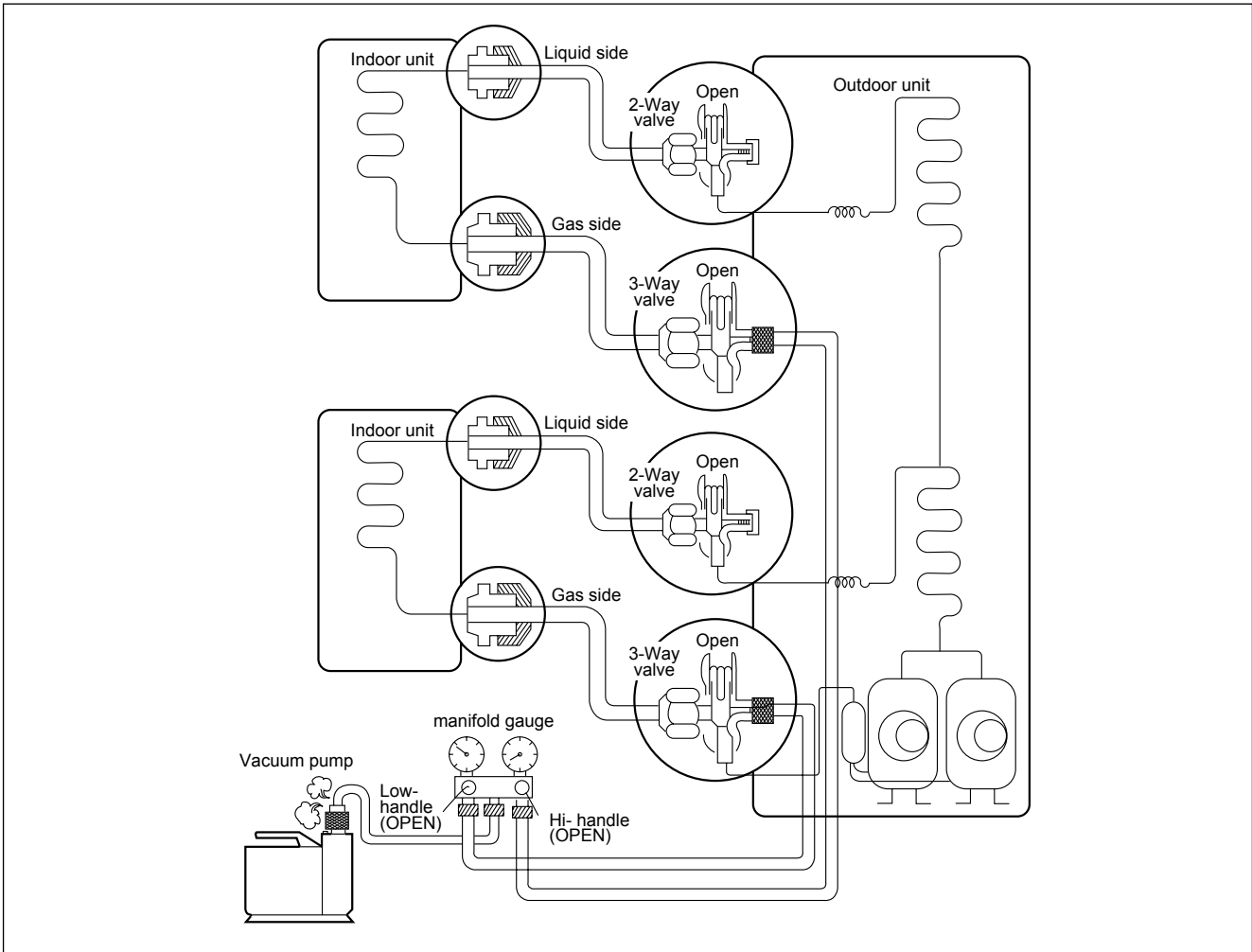
		3-way Valve (Liquid Side)		3-way Valve (Gas Side)	
Works		Shaft position	Service port	Shaft position	Service port
Shipping		Closed (with valve cap)	Closed (with cap)	Closed (with valve cap)	Closed (with cap)
1.	Air purging (Installation)	Open (counter-clockwise)	Open (push-pin or with vacuum pump)	Closed (clockwise)	Open (push-pin or with vacuum pump)
Operation		Open (with valve cap)	Closed (with cap)	Open (with valve cap)	Closed (with cap)
2.	Pumping down (Transferring)	Closed (clockwise)	Closed (with cap)	Open (counter-clockwise)	Open (connected manifold gauge)
3.	Evacuation (Servicing)	Open	Open (connected manifold gauge)	Open	Open (connected manifold gauge)
4.	Gas charging (Servicing)	Open	Closed (with cap)	Open	Open (with charging cylinder)
5.	Pressure check (Servicing)	Open	Open (connected manifold gauge)	Open	Open (connected manifold gauge)
6.	Gas releasing (Servicing)	Open	Open (connected manifold gauge)	Open	Open (connected manifold gauge)

(1) Pumping down**• Procedure**

- 1. Confirm that both the gas side and liquid side valves are set to the open position.**
 - Remove the valve stem caps and confirm that the valve stems are in the raised position.
 - Be sure to use a hexagonal wrench to operate the valve stems.
 - 2. Operate the unit for 10 to 15 minutes.**
 - 3. Stop operation and wait for 3 minutes, then connect the manifold gauge to the service port of the gas side valve.**
 - Connect the hose of the gauge with the push pin to the service port.
 - 4. Air purging of the charge hose.**
 - Open the Low-handle valve on the gauge slightly to air purge from the hose.
 - 5. Set the liquid side valve to the closed position.**
 - 6. Operate the air conditioner at the cooling cycle and stop it when the gauge indicates 1kg/cm²g.**
 - 7. Immediately set the gas side valve to the closed position.**
 - Do this quickly so that the gauge ends up indicating 1kg/cm²g.
 - 8. Disconnect the charge set, and mount the liquid side and gas side valve caps and the service port nut.**
 - Use torque wrench to tighten the service port nut to a torque of 1.8kg.m.(4.2kg.m/5.5kg.m)
 - Be sure to check for gas leakage.
- Be sure to short pressure S/W. otherwise Low pressure S/W detect low pressure skete and stops the compressor.

(2) Evacuation

(All amount of refrigerant leaked)

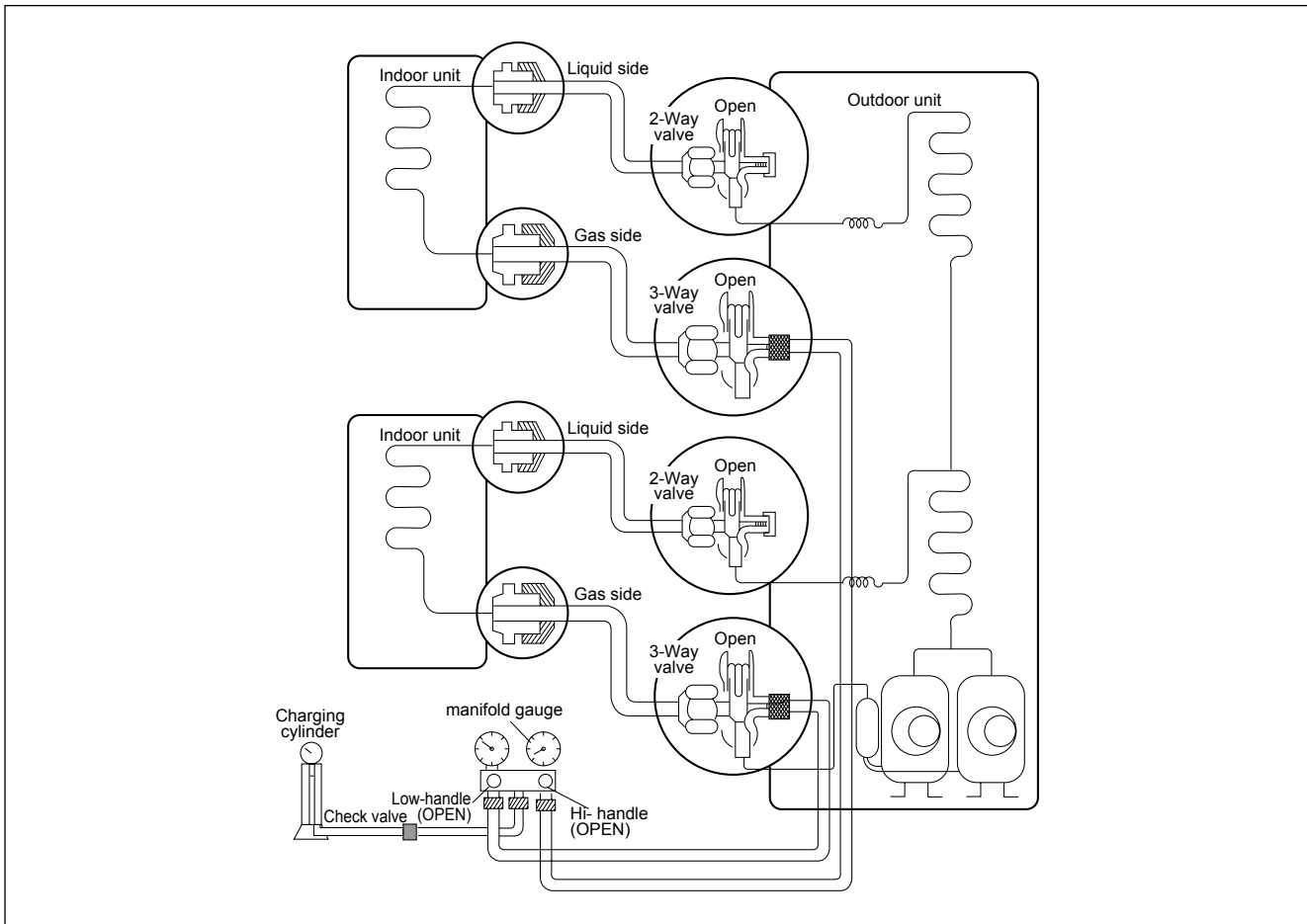


• Procedure

1. Confirm that both the liquid side valve and gas side valve are set to the opened position.
2. Connect the vacuum pump to the center hose of the manifold gauge.
3. Connect the service port of the gas side valve to the low side of the gauge.
4. Evacuation for approximately one hour.
 - Confirm that the gauge needle has moved toward -76 cmHg (vacuum of 4 mmHg or less).
5. Close the Low handle of the gauge, turn off the vacuum pump, and confirm that the gauge needle does not move (approximately 5 minutes after turning off the vacuum pump).
6. Disconnect the charge hose from the vacuum pump.
 - Vacuum pump oil.
If the vacuum pump oil becomes dirty or depleted, replenish as needed.
7. Mount the valve caps and the service port caps.

(3) Gas Charging

(After Evacuation)



• Procedure

1. Connect the gauge to the charging cylinder.

- Connect the charge hose which you disconnected from the vacuum pump to the valve at the bottom of the cylinder.
- If you are using a gas cylinder, also use a scale and reverse the cylinder so that the system can be charged with liquid.

2. Purge the air from the charge hose.

- Open the valve at the bottom of the cylinder and press the check valve on the charge set to purge the air. (Be careful of the liquid refrigerant). The procedure is the same if using a gas cylinder.

3. Open the low handle on the gauge and charge the system with liquid refrigerant.

- If the system can not be charged with the specified amount of refrigerant, it can be charged with a little at a time (approximately 150g each time) while operating the air conditioner in the cooling cycle; however, one time is not sufficient, wait approximately 1 minute and then repeat the procedure(pumping down-pin).

4. Immediately disconnect the charge hose from the gas side valve's service port.

This is different from previous procedures. Because you are charging with liquid refrigerant from the gas side, absolutely do not attempt to charge with larger amounts of liquid refrigerant while operating the air conditioner.

- Stopping partway will allow the gas to be discharged.
- If the system has been charged with liquid refrigerant while operating the air conditioner turn off the air conditioner before disconnecting the hose.

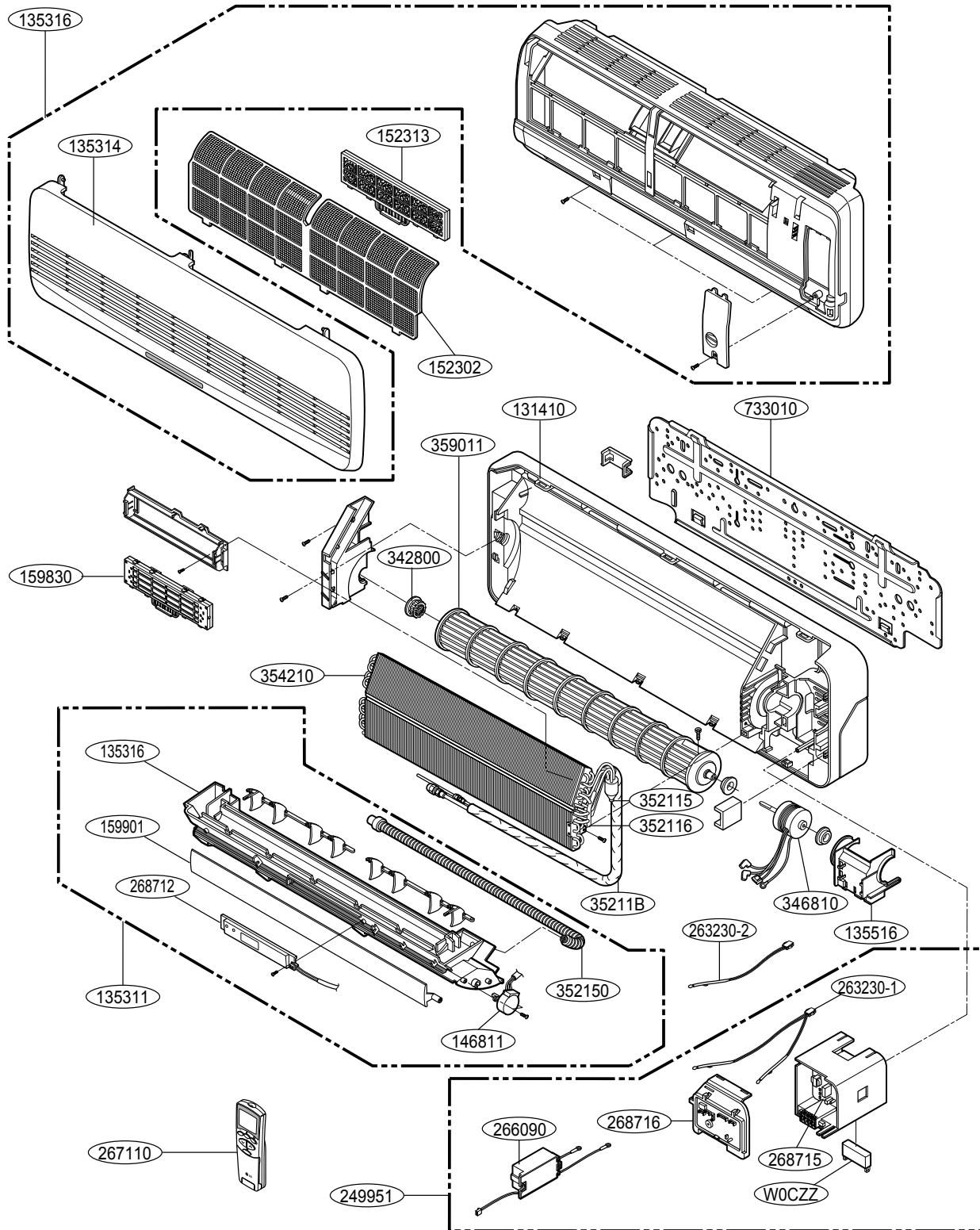
5. Mount the valve stem nuts and the service port nut.

- Use torque wrench to tighten the service port nut to a torque of 1.8 kg.m.(4.2kg.m/5.5kg.m.)
- Be sure to check for gas leakage.

Exploded View & Replacement Parts List

Indoor Unit

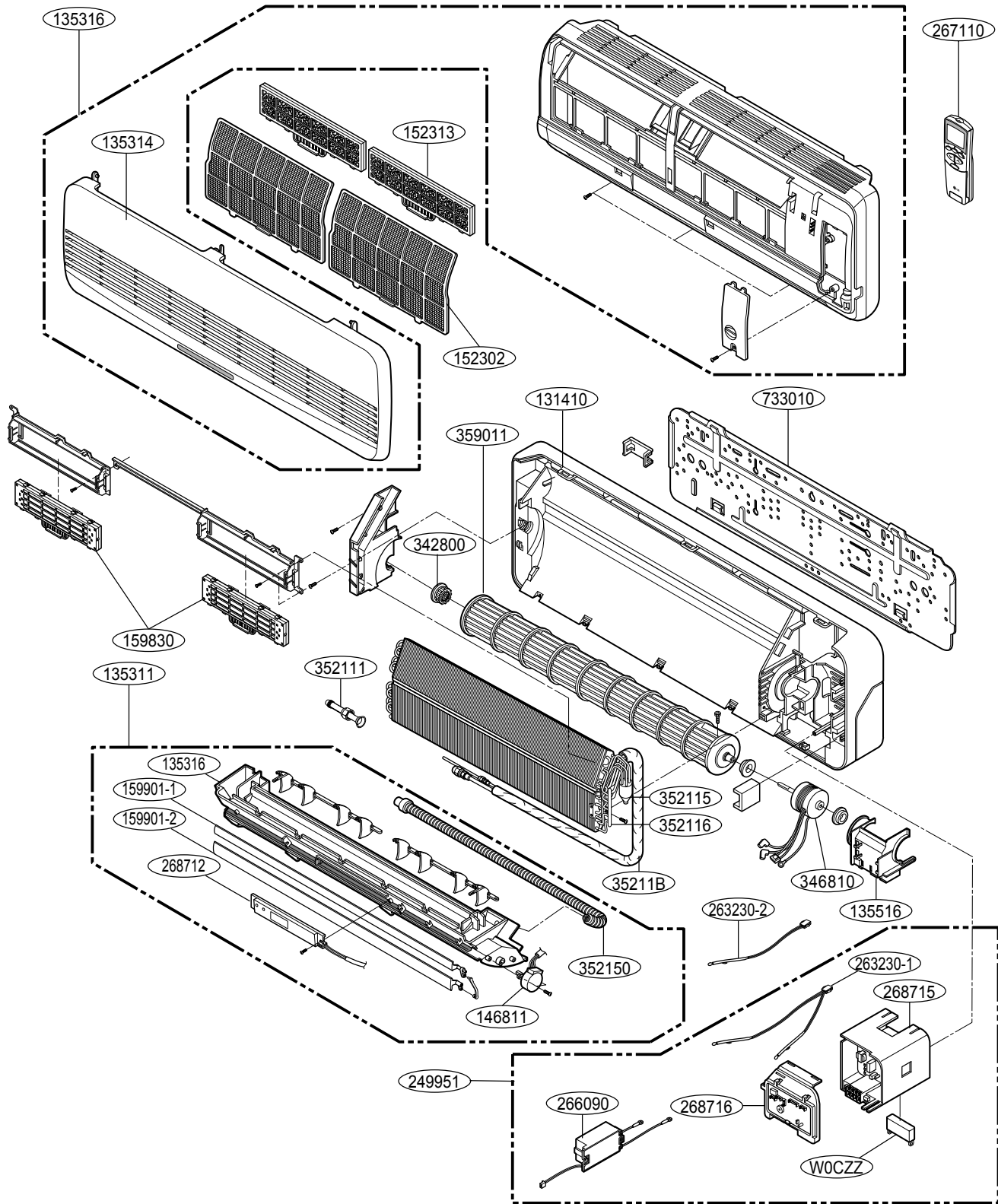
SQ/SR chassis



Parts List (SQ, SR chassis)

LOCATION No.	DESCRIPTION	PART No.				SVC CODE
		AMNH076LQL0	AMNH096LQL0	AMNH096LRL0	AMNH126LRL0	
131410	CHASSIS ASSEMBLY	3141A20006A	3141A20006A	3141A20005A	3141A20005A	R
135311	GRILLE ASSEMBLY,DISCHARGE(INDOOR)	3531A10127A	3531A10127A	3531A10230A	3531A10230A	R
135314	GRILLE ASSEMBLY,INLET SUB	3531A20100B	3531A20100B	3531A10117B	3531A10117B	R
135316	GRILLE ASSEMBLY,FRONT(INDOOR)	3531A20187M	3531A20187M	3531A10208N	3531A10208N	R
135516	COVER ASSEMBLY,MOTOR	3551A20050P	3551A20050P	3551A20099A	3551A20099A	R
146811	MOTOR ASSEMBLY,STEP	4681A20055A	4681A20055A	4681A20055A	4681A20055A	R
152302	FILTER(MECH),A/C	5230A10005A	5230A10005A	5230A20014C	5230A20014C	R
152313	FILTER ASSEMBLY,DEODORIZER	5231A20032C	5231A20032C	5231A20032C	5231A20032C	R
159830	AIR CLEANER ASSEMBLY	5983A10009V	5983A10009V	5983A10006V	5983A10006T	R
159901	VANE,HORIZONTAL	5990A10005A	5990A10005A	5990A20007A	5990A20007A	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A20361A	4995A20361B	4995A20361C	4995A20361D	R
263230-1	THERMISTOR ASSEMBLY	6323AQ3226T	6323AQ3226T	3623AQ3226T	3623AQ3226T	R
263230-2	THERMISTOR ASSEMBLY	6323A20004A	6323A20004A	6323A20004A	6323A20004A	R
266090	H.V ASSEMBLY	6609A10003J	6609A10003J	6609A10003H	6609A10003H	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A20067J	6711A20067J	6711A20067J	6711A20067J	R
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20194A	6871A20194A	6871A20390A	6871A20390A	R
268715	PWB(PCB) ASSEMBLY,MAIN(AC)	6871A20267B	6871A20267B	6871A20267B	6871A20267B	R
268716	PWB(PCB) ASSEMBLY,MAIN(DC)	6871A20440A	6871A20440B	6871A20440C	6871A20440D	R
342800	BEARING	4280A20004A	4280A20004A	4280A20004A	4280A20004A	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20062A	4681A20062A	4681A20048A	4681A20048A	R
35211B	TUBE ASSEMBLY,TUBING	5211A21399B	5211A21399B	5211A21400F	5211A21400F	R
352115	TUBE ASSEMBLY,EVAPORATOR IN	5211A20470J	5211A20470J	5211A20388H	5211A20388H	R
352116	TUBE ASSEMBLY,EVAPORATOR OUT	5211A20471D	5211A20471D	5211A20389F	5211A20389F	R
352150	HOSE ASSEMBLY,DRAIN	5251AR2575F	5251AR2575F	5251AR2575F	5251AR2575F	R
354210	EVAPORATOR ASSEMBLY, FIRST	5421A10024A	5421A10024A	5421A20086A	5421A20086A	R
359011	FAN ASSEMBLY,CROSS FLOW	5901A20007B	5901A20007B	5901A20007A	5901A20007A	R
733010	PLATE ASSEMBLY,INSTALL	3301A10003A	3301A10003A	1H00843A	1H00843A	R
W0CZZ	CAPACITOR,DRAWING	3H01487A	3H01487A	3H1487A	3H1487A	R

ST chassis

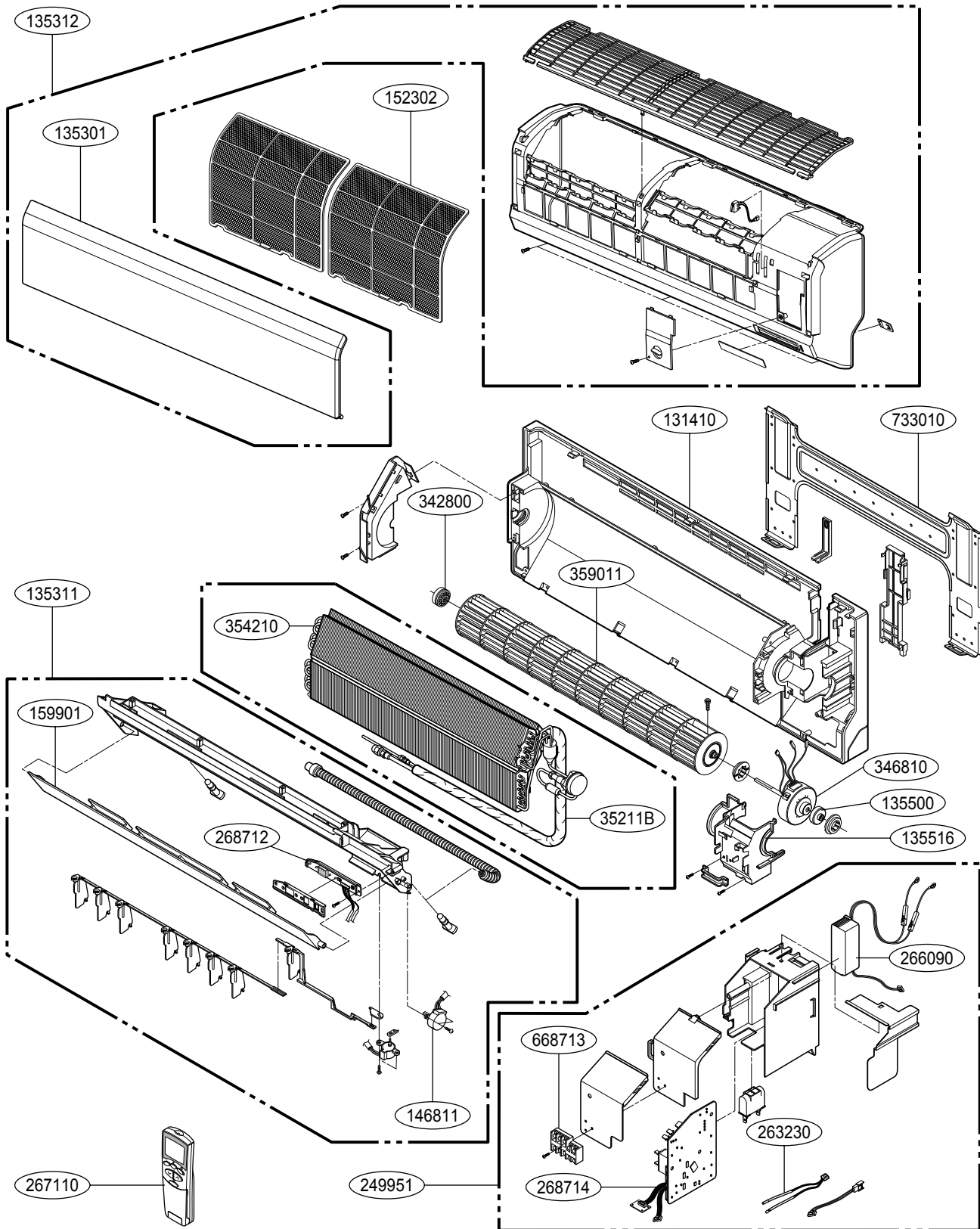


Parts List (ST chassis)

LOCATION No.	DESCRIPTION	PART No.		SVC CODE
		AMNH186LTLO	AMNH246LTLO	
131410	CHASSIS ASSEMBLY	3141A10002A	3141A10002A	R
135311	GRILLE ASSEMBLY,DISCHARGE(INDOOR)	3531A10116A	3531A10116A	R
135314	GRILLE ASSEMBLY,INLET SUB	3531A20107W	3531A20107W	R
135316	GRILLE ASSEMBLY,FRONT(INDOOR)	3531A20207E	3531A20207E	R
135516	COVER ASSEMBLY,MOTOR	3551A20099C	3551A20099C	R
146811	MOTOR ASSEMBLY,STEP	4681A20055A	4681A20055A	R
152302	FILTER(MECH),A/C	5230A20001A	5230A20001A	R
159830	AIR CLEANER ASSEMBLY	5983A10006T	5983A10006T	R
159901-1	VANE,HORIZONTAL	5990A20008A	5990A20008A	R
159901-2	VANE,HORIZONTAL	5990A20009A	5990A20009A	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A20361E	4995A20361F	R
263230-1	THERMISTOR ASSEMBLY	6323AQ3226T	6323AQ3226T	R
263230-2	THERMISTOR ASSEMBLY	6323A20004A	6323A20004A	R
266090	H.V ASSEMBLY	6609A10003L	6609A10003L	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A20067J	6711A20067J	R
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20194B	6871A20194B	R
268715	PWB(PCB) ASSEMBLY,MAIN(AC)	6871A20267B	6871A20267B	R
268716	PWB(PCB) ASSEMBLY,MAIN(DC)	6871A20440E	6871A20440F	R
342800	BEARING	4280A20004A	4280A20004A	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20003D	4681A20067A	R
352111*	TUBE ASSEMBLY,CONNECTOR	5211A20514G	5211A20514G	R
352115	TUBE ASSEMBLY,EVAPORATOR IN	5211A30058H	5211A30097J	R
352116	TUBE ASSEMBLY,EVAPORATOR OUT	5211A30057D	5211A30098G	R
352150	HOSE ASSEMBLY,DRAIN	5251AR2575F	5251AR2575F	R
359011	FAN ASSEMBLY,CROSS FLOW	5901A20008A	5901A20008A	R
733010	PLATE ASSEMBLY,INSTALL	3301A10002A	3301A10002A	R
35211B	TUBE ASSEMBLY,TUBING	5211A30439E	5211A30439J	R
W0CZZ	CAPACITOR,DRAWING	3H01487G	3H01487G	R

NOTE) 35211* is for pipe fitting to SVC valve.

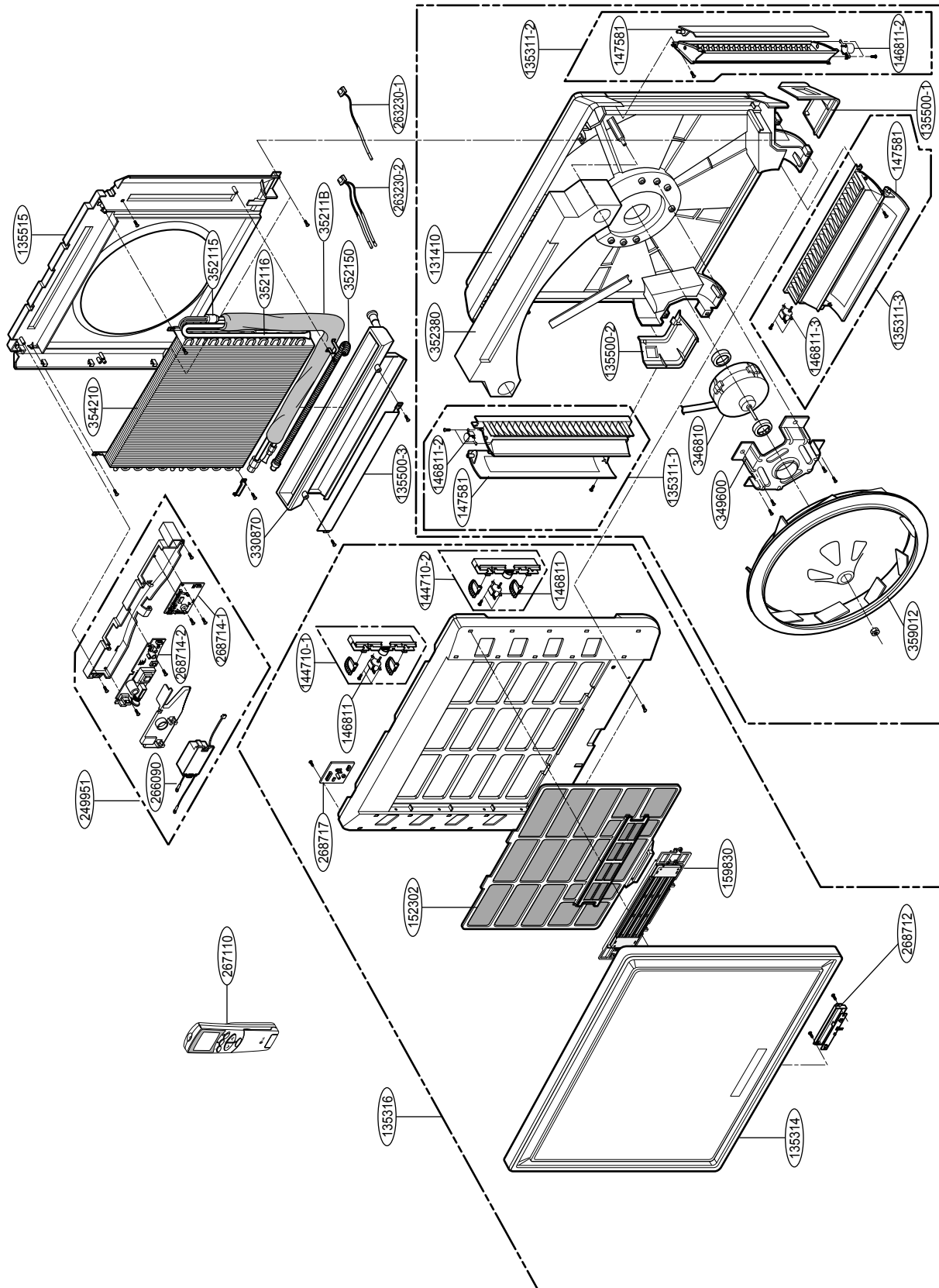
S4, S5 chassis



Parts List (S4, S5 chassis)

LOCATION No.	DESCRIPTION	PART No.					SVC CODE
		AMNH07GD4L0	AMNH09GD4L0	AMNH12GD4L0	AMNH18GD5L0	AMNH24GD5L0	
131410	CHASSIS ASSEMBLY	3141A20019C	3141A20019C	3141A20019C	3141A20020B	3141A20020B	R
135311	GRILLE ASSEMBLY,DISCHARGE(INDOOR)	3531A10307A	3531A10307A	3531A10307A	3531A20252T	3531A20252T	R
135314	GRILLE ASSEMBLY,INLET SUB	3531A10312A	3531A10312A	3531A10312A	3531A20254A	3531A20254A	R
135316	GRILLE ASSEMBLY,FRONT(INDOOR)	3531A14002Z	3531A14002Z	3531A14002Z	3531A20299D	3531A20299D	R
135516	COVER ASSEMBLY,MOTOR	3551A20156B	3551A20156B	3551A20156B	3551A20154B	3551A20154B	R
146811	MOTOR ASSEMBLY,STEP	4681A20055A	4681A20055A	4681A20055A	4681A20055A	4681A20055A	R
152302	FILTER(MECH),A/C	5230A20051B	5230A20051D	5230A20051B	5230A20052B	5230A20052B	R
152313	FILTER ASSEMBLY,DEODORIZER	5231A20040A	5231A20040A	5231A20040A	5231A20040B	5231A20040B	R
159830	AIR CLEANER ASSEMBLY	5983A20017A	5983A20017A	5983A20017A	5983A20018A	5983A20018A	R
159901	VANE,HORIZONTAL	5990A20069A	5990A20069A	5990A20069A	5990A20071A	5990A20071A	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A20632A	4995A20632B	4995A20632C	4995A20632D	4995A20632E	R
263230-1	THERMISTOR ASSEMBLY	6323AQ3226T	6323AQ3226T	6323AQ3226T	6323AQ3226T	6323AQ3226T	R
263230-2	THERMISTOR ASSEMBLY	6323A20004A	6323A20004A	6323A20004A	6323A20004A	6323A20004A	R
266090	H.V ASSEMBLY	6609A10003Z	6609A10003Z	6609A10003Z	6609A10008A	6609A10008A	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A20107C	6711A20107C	6711A20107C	6711A20107C	6711A20107C	R
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20574A	6871A20574A	6871A20574A	6871A20624A	6871A20624A	R
268714	PWB(PCB) ASSEMBLY,MAIN	6871A20156J	6871A20156K	6871A20156L	6871A20156M	6871A20156N	R
342800	BEARING	4280A20004B	4280A20004B	4280A20004B	4280A20004A	4280A20004A	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20091J	4681A20091J	4681A20091J	4681A20091J	4681A20091J	R
35211B	TUBE ASSEMBLY,TUBING	5211A21363E	5211A21363E	5211A21363E	5211A21378G	5211A21378G	R
352115	TUBE ASSEMBLY,EVAPORATOR IN	5211A29010A	5211A29010A	5211A29010A	5211A30756B	5211A30756B	R
352116	TUBE ASSEMBLY,EVAPORATOR OUT	5211A22110A	5211A22110A	5211A22110A	5211A39010A	5211A39010A	R
352150	HOSE ASSEMBLY,DRAIN	5251A20011B	5251A20011D	5251A20011D	5251A20011D	5251A20011D	R
354210	EVAPORATOR ASSEMBLY,FIRST	5421A20218A	5421A20218A	5421A20218A	5421A20220A	5421A20220A	R
359011	FAN ASSEMBLY,CROSS FLOW	5901A20071F	5901A20071F	5901A20071F	5901A92441E	5901A92441E	R
733010	PLATE ASSEMBLY,INSTALL	3301A20020C	3301A20020C	3301A20020C	3301A20020B	3301A20020B	R
135500	COVER	3550A21008A	3550A21008A	3550A21008A	3550A21008A	3550A21008A	R

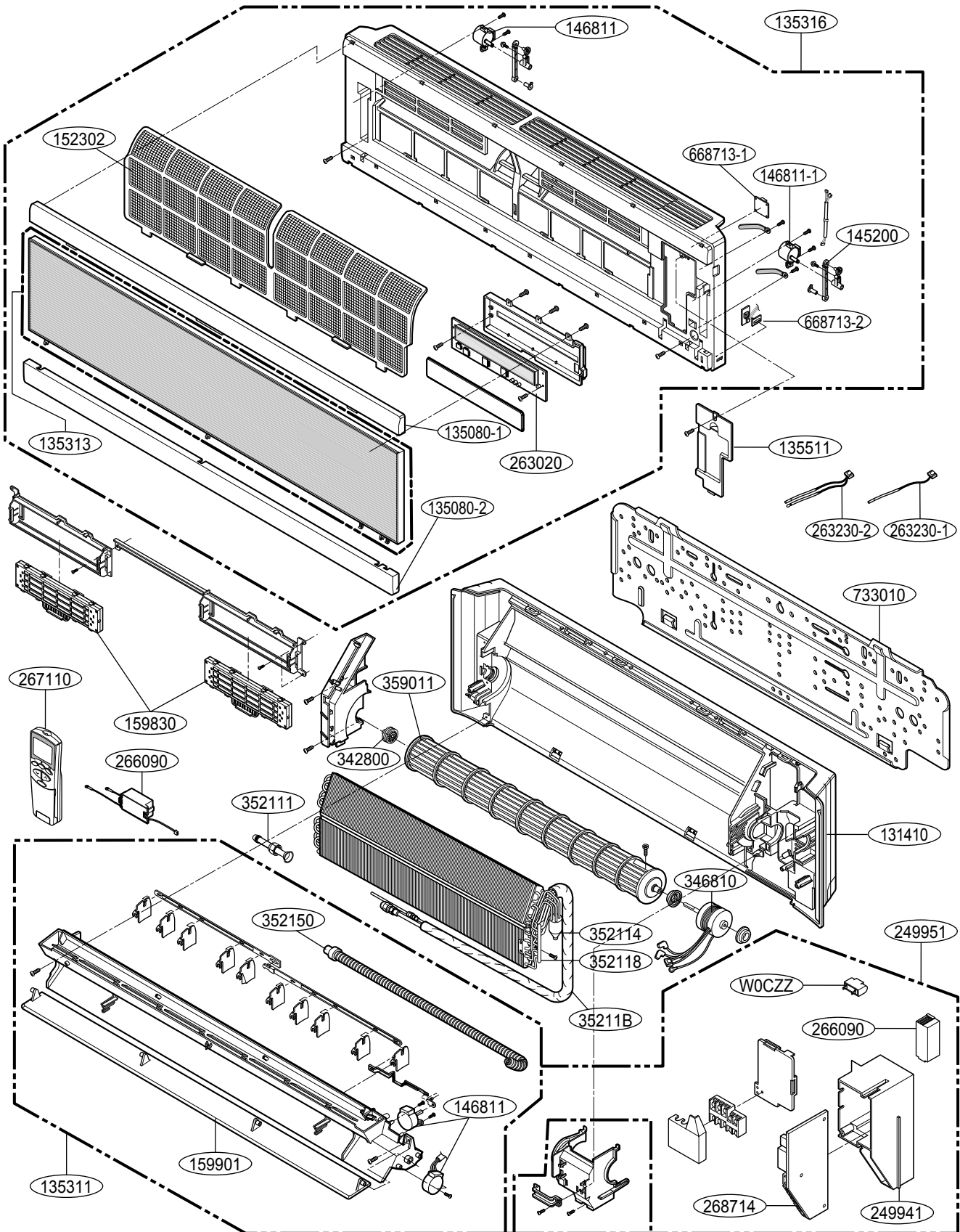
SP1 chassis(Art cool type)



Parts List (SP1 chassis)

LOCATION No.	DESCRIPTION	PART No.				SVC CODE	
		AMNH096AP*1	AMNC096AP*1	AMNH126AP*1	AMNC126AP*1		
131410	CHASSIS ASSEMBLY	3141A20004N	3141A20004N	3141A20004N	3141A20004N	R	
135500-1	COVER	3550A20123A	3550A20123A	3550A20123A	3550A20123A	R	
135500-2	COVER	3550A20124A	3550A20124A	3550A20124A	3550A20124A	R	
135500-3	COVER	3550A20060A	3550A20060A	3550A20060A	3550A20060A	R	
135311-1	GRILLE ASSEMBLY,DISCHARGE(INDOOR)	3531A20069G	3531A20069G	3531A20069G	3531A20069G	R	
135311-2	GRILLE ASSEMBLY,DISCHARGE(INDOOR)	3531A20069H	3531A20069H	3531A20069H	3531A20069H	R	
135311-3	GRILLE ASSEMBLY,DISCHARGE(INDOOR)	3531A20069J	3531A20069J	3531A20069J	3531A20069J	R	
135314	GRILLE ASSEMBLY, INLET	M: Matal	3531A20212K	3531A20212K	3531A20212K	3531A20212K	R
		B: Blue	3531A20212L	3531A20212L	3531A20212L	3531A20212L	R
		D: Wood	3531A20212M	3531A20212M	3531A20212M	3531A20212M	R
135515	COVER ASSEMBLY, TOP(INDOOR)	3551A20031B	3551A20031B	3551A20031B	3551A20031B	R	
135316	GRILLE ASSEMBLY, FRONT(INDOOR)	M: Matal	3531A20213N	3531A20213R	3531A20213N	3531A20213R	R
		B: Blue	3531A20213P	3531A20213S	3531A20213P	3531A20213S	R
		D: Wood	3531A20213Q	3531A20213T	3531A20213Q	3531A20213T	R
147581	LOUVER,HORIZONTAL	4758A20014B	4758A20014B	4758A20014B	4758A20014B	R	
146811-1	MOTOR ASSEMBLY,STEP	4681A20055C	4681A20055C	4681A20055C	4681A20055C	R	
146811-2	MOTOR ASSEMBLY,STEP	4681A20055A	4681A20055A	4681A20055A	4681A20055A	R	
152302	FILTER(MECH),A/C	5230A20032A	5230A20032A	5230A20032A	5230A20032A	R	
159830	AIR CLEANER ASSEMBLY	5983A20007F	5983A20007F	5983A20007F	5983A20007F	R	
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A20372H	4995A20372N	4995A20372J	4995A20372P	R	
249941	CONTROL BOX,INDOOR	4994A10046A	4994A10046A	4994A10046A	4994A10046A	R	
268715	PWB(PCB) ASSEMBLY,MAIN(AC)	6871A20380D	6871A20380D	6871A20380D	6871A20380D	R	
268716	PWB(PCB) ASSEMBLY,MAIN(DC)	6871A20381D	6871A20381G	6871A20381F	6871A20381G	R	
266090	H.V ASSEMBLY	6609A10003S	6609A10003S	6609A10003S	6609A10003S	R	
263230-1	THERMISTOR ASSEMBLY	6323AQ3226T	6323AQ3226T	6323AQ3226T	6323AQ3226T	R	
263230-2	THERMISTOR ASSEMBLY	6323A20004N	6323A20004N	6323A20004N	6323A20004N	R	
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20388A	6871A20363D	6871A20388A	6871A20363D	R	
267110	REMOTE CONTROLLER ASSEMBLY	6711A20073D	6711A20073E	6711A90031D	6711A20073E	R	
330870	DRAIN PAN ASSEMBLY	3087A30004A	3087A30004A	3087A30004A	3087A30004A	R	
346810	MOTOR ASSEMBLY,INDOOR	4681A20091A	4681A20091A	4681A20091A	4681A20091A	R	
349600	MOUNT,MOTOR	4960A20016A	4960A20016A	4960A20016A	4960A20016A	R	
352116	TUBE ASSEMBLY,EVAPORATOR OUT	5211A20301J	5211A20301J	5211A20301J	5211A20301J	R	
352115	TUBE ASSEMBLY,EVAPORATOR IN	5211A20302J	5211A20302J	5211A20302J	5211A20302J	R	
35211B	TUBE ASSY,TUBING	5211AR7066F	5211AR7066F	5211AR7066F	5211AR7066F	R	
352150	HOSE ASSEMBLY,DRAIN	5251AR1222R	5251AR1222R	5251AR1222R	5251AR1222R	R	
352380	AIR GUIDE	5238A20020A	5238A20020A	5238A20020A	5238A20020A	R	
354210	EVAPORATOR ASSEMBLY,FIRST	5421A20072A	5421A20072A	5421A20072A	5421A20072A	R	
359012	FAN,TURBO	5900A00003A	5900A00003A	5900A00003A	5900A00003A	R	

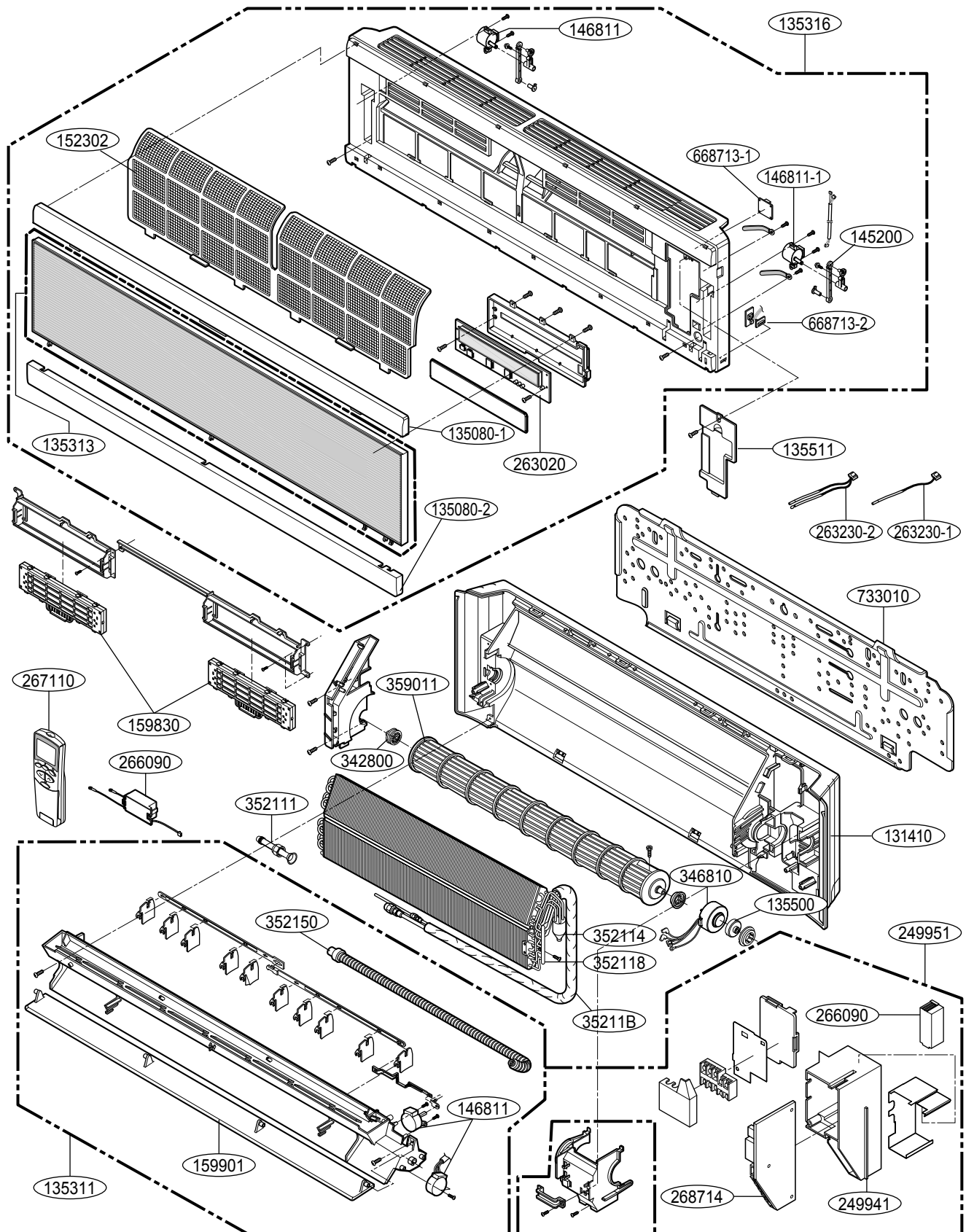
Art Cool Deluxe Type(SU,SZ, S3 chassis - A/C Motor)



Parts List(Art cool Deluxe Type A/C Motor)

LOCATION No.	DESCRIPTION	PART No.					SVC CODE	
		AMNH076DZ*0	AMNH096DU*0	AMNH126DU*0	AMNH186D3*0	AMNH246D3*0		
131410	CHASSIS ASSEMBLY	3141A20009B	3141A20007B	3141A20007B	3141A20012A	3141A20012A	R	
135080-1	DECORATION (TOP)	3508A20055B	3508A20034E	3508A20034E	-	-	R	
135080-2	DECORATION (BOTTOM)	3508A20056B	3508A20034F	3508A20034F	-	-	R	
135311	GRILLE ASSEMBLY, DISCHARGE	3531A20184C	3531A20137B	3531A20137B	3531A20231C	3531A20231C	R	
135313	GRILLE ASSEMBLY, INLET	W: White	3531A20196J	3531A20118Z	3531A20118Z	3531A20244E	3531A20244E	R
		M: Metal	3531A20196E	3531A20118Y	3531A20118Y	3531A20244A	3531A20244A	R
		R: Mirror	3531A20195B	3531A20118X	3531A20118X	3531A20232B	3531A20232B	R
		B: Blue	3531A20196F	3531A20118W	3531A20118W	3531A20244B	3531A20244B	R
		D: Wood	3531A20244C	3531A20244C	3531A20244C	3531A20244C	3531A20244C	R
		C: Cherry	3531A20244D	3531A20244D	3531A20244D	3531A20244D	3531A20244D	R
135316	GRILLE ASSEMBLY, FRONT	W: White	3531A10214K	3531A21026C	3531A21026C	3531A20263U	3531A20263U	R
		M: Metal	3531A10214H	3531A21026B	3531A21026B	3531A20263S	3531A20263S	R
		R: Mirror	3531A10214J	3531A21026A	3531A21026A	3531A20263R	3531A20263R	R
		B: Blue	3531A10214Q	3531A21026D	3531A21026D	3531A20263T	3531A20263T	R
		D: Wood	3531A20263W	3531A20263W	3531A20263W	3531A20263W	3531A20263W	R
		C: Cherry	3531A20263V	3531A20263V	3531A20263V	3531A20263V	3531A20263V	R
146811	MOTOR ASSEMBLY, STEP (Vane)	4681A20055A	4681A20055A	4681A20055A	4681A20055A	4681A20055A	R	
146811-1	MOTOR ASSEMBLY, STEP (Door)	4681A20055B	4681A20055B	4681A20055B	4681A20055D	4681A20055D	R	
159830	AIR CLEANER ASSEMBLY	5983A10009V	5981A25003H	5983A25003H	5983A10006T	5983A10006T	R	
152302	FILTER (MECH), A/C	5230A20033A	5230A20022A	5230A20022A	5230A20047A	5230A20047A	R	
159901	VANE, HORIZONTAL	5990A20022B	5990A20015B	5990A20015B	5990A20042B	5990A20042B	R	
249951	CONTROL BOX ASSEMBLY	4995A20323K	4995A20323L	4995A20323M	4995A20323X	4995A20323Y	R	
249941	CONTROL BOX, INDOOR	4994A20067A	4994A20067A	4994A20067A	4994A20067A	4994A20067A	R	
263020	DIGITRON	W: White	6302A90003A	6302A90003A	6302A90003A	6871A20656C	6871A20656C	R
		M: Metal	6302A90003A	6302A90003A	6302A90003A	6871A20656A	6871A20656A	R
		R: Mirror	6302A90003A	6302A90003A	6302A90003A	6871A20656A	6871A20656A	R
		B: Blue	6302A90003A	6302A90003A	6302A90003A	6871A20656C	6871A20656C	R
		D: Wood	6302A90003A	6302A90003A	6302A90003A	6871A20656C	6871A20656C	R
		C: Cherry	6302A90003A	6302A90003A	6302A90003A	6871A20656C	6871A20656C	R
263230-1	THERMISTOR ASSEMBLY (Out)	6323Q3226T	6323Q3226T	6323Q3226T	6323AQ3226T	6323AQ3226T	R	
263230-2	THERMISTOR ASSEMBLY (Room, in)	6323A20004A	6323A20004A	6323A20004A	6323A20004A	6323A20004A	R	
266090	HUB ASSEMBLY	6609A10005B	6609A10005D	6609A10005D	6609A10005D	6609A10005D	R	
267110	REMOE CONTROLLER ASSEMBLY	6711A20073P	6711A20073C	6711A20073C	6711A20107C	6711A20107C	R	
268714	PWB(PCB) ASSEMBLY, MAIN	6871A10111E	6871A10111F	6871A10111G	6871A20684A	6871A20684B	R	
342800	BEARING	4280A20004A	4280A20004A	4280A20004A	4280A20004A	4280A20004A	R	
346810	MOTOR ASSEMBLY, INDOOR	4681A20103C	4681A20048A	4681A20048A	4681A20067C	4681A20067C	R	
352114	TUBE ASSEMBLY, DISTRIBUTOR	5211A20569D	5211A20569D	5211A20569D	5211A14007A	5211A14007A	R	
352118	TUBE ASSEMBLY MANIFOLD	5211A20605B	5211A20605B	5211A20605B	5211A10474D	5211A10474D	R	
35211B	TUBE ASSEMBLY, TUBING	5211A30596A	5211AR7066L	5211AR7066L	5211A30038Z	5211A30038Z	R	
352150	HOSE ASEMBLY, DRAIN	5251AR1222R	5251AR1222R	5251AR1222R	5251AR1222R	5251AR1222R	R	
354212	EVAPORATOR ASSEMBLY, FINAL	5421A20149E	5421A20105H	5421A20105H	5421A21004T	5421A21004T	R	
359011	FAN ASSEMBLY, CROSS FLOW	5901A20016E	5910A20016J	5901A20016J	5901A20017C	5901A20017C	R	
668713	PWB ASSEMBLY, SUB	6871A20258B	6871A20258B	6871A20258B	6871A20258B	6871A20258B	R	
668713	PWB ASSEMBLY, SUB	6871A20259A	6871A20259A	6871A20259A	6871A20259A	6871A20259A	R	
733010	PLATE	3301A10005A	1H00843A	1H00843A	3301A10002A	3301A10002A	R	
W0CZZ	CAPACITOR, DRAWING	3H01487A	3H01487A	3H01487A	3H01487G	3H01487G	R	

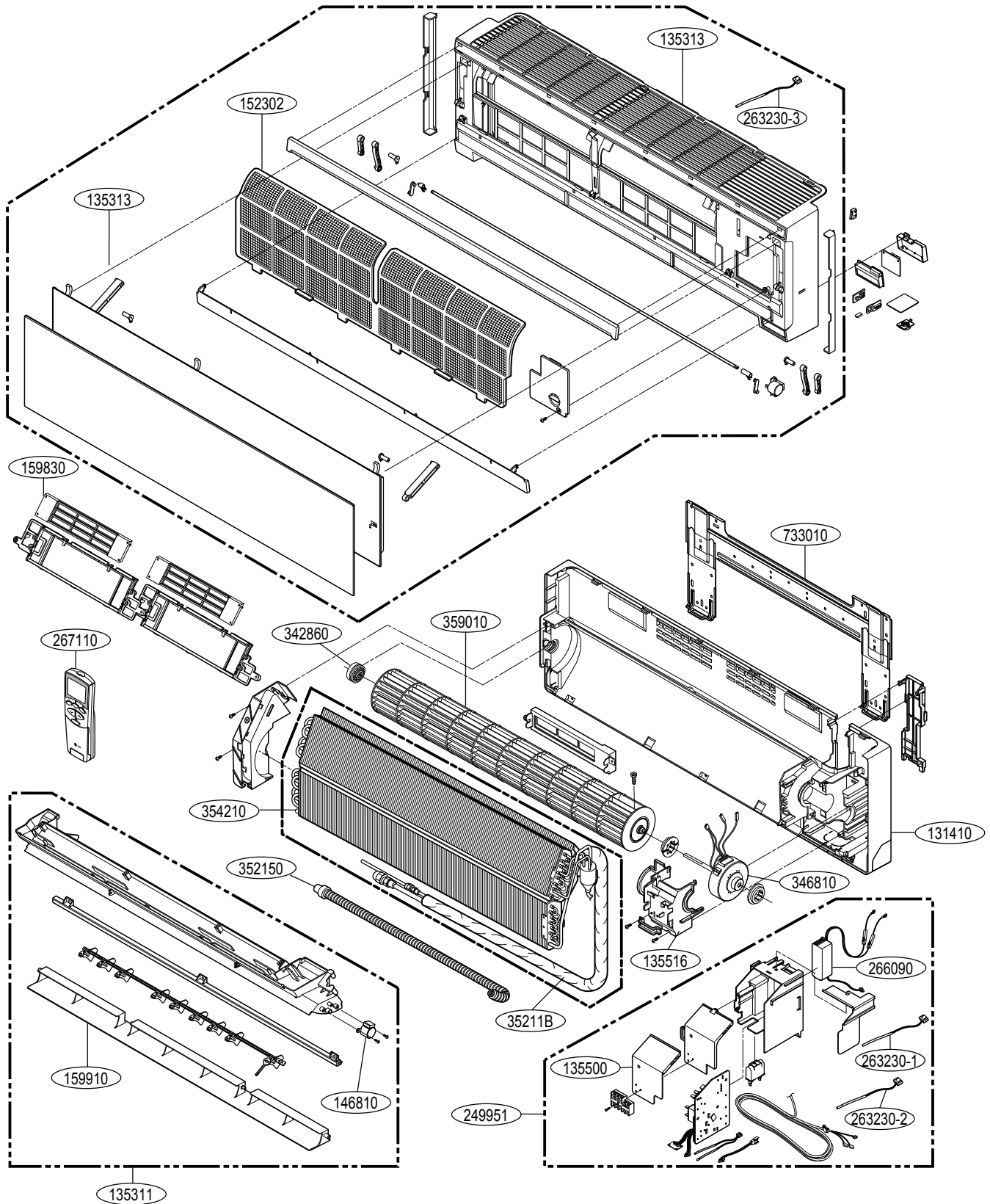
Art Cool Deluxe Type(SU,SZ, S3 chassis - BLDC)



Parts List(Art cool Deluxe Type BLDC)

LOCATION No.	DESCRIPTION	PART No.					SVC CODE	
		AMNH07GDZ*0	AMNH09GDU*0	AMNH12GDU*0	AMNH18GD3*0	AMNH24GD3*0		
131410	CHASSIS ASSEMBLY	3141A20009B	3141A20007B	3141A20007B	3141A20012A	3141A20012A	R	
135080-1	DECORATION (TOP)	3508A20055B	3508A20034E	3508A20034E	-	-	R	
135080-2	DECORATION (BOTTOM)	3508A20056B	3508A20034F	3508A20034F	-	-	R	
135311	GRILLE ASSEMBLY, DISCHARGE	3531A20184C	3531A20137B	3531A20137B	3531A20231C	3531A20231C	R	
135313	GRILLE ASSEMBLY, INLET	W: White	3531A20196J	3531A10331B	3531A10331B	-	-	R
		M: Metal	3531A20196E	3531A10331C	3531A10331C	3531A20244A	3531A20244A	R
		R: Mirror	3531A20195B	3531A10331A	3531A10331A	3531A20232B	3531A20232B	R
		B: Blue	3531A20196F	3531A10331D	3531A10331D	-	-	R
135316	GRILLE ASSEMBLY, FRONT	W: White	3531A10214W	3531A21026V	3531A21026V	-	-	R
		M: Metal	3531A10214U	3531A21026U	3531A21026U	3531A30032B	3531A30032B	R
		R: Mirror	3531A10214T	3531A21026T	3531A21026T	3531A30032A	3531A30032A	R
		B: Blue	3531A10214V	3531A21026W	3531A21026W	-	-	R
146811	MOTOR ASSEMBLY, STEP (Vane)	4681A20055A	4681A20055A	4681A20055A	4681A20055A	4681A20055A	R	
146811-1	MOTOR ASSEMBLY, STEP (Door)	4681A20055B	4681A20055B	4681A20055B	4681A20055D	4681A20055D	R	
159830	AIR CLEANER ASSEMBLY	5983A10009V	5983A25003H	5983A25003H	5983A10006T	5983A10006T	R	
152302	FILTER (MECH), A/C	5230A20033A	5230A20022A	5230A20022A	5230A20047A	5230A20047A	R	
159901	VANE, HORIZONTAL	5990A20022B	5990A20015B	5990A20015B	5990A20042B	5990A20042B	R	
249951	CONTROL BOX ASSEMBLY	4995A20637A	4995A20637B	4995A20637C	4995A20637D	4995A20637E	R	
249941	CONTROL BOX, INDOOR	4994A20067A	4994A20067A	4994A20067A	4994A20067A	4994A20067A	R	
263020	LCD	W: White	6306A90005A	6306A90005A	6306A90005A	6306A90005A	6306A90005A	R
		M: Metal	6306A90005A	6306A90005A	6306A90005A	6306A90005A	6306A90005A	R
		R: Mirror	6306A90005A	6306A90005A	6306A90005A	6306A90005A	6306A90005A	R
		B: Blue	6306A90005A	6306A90005A	6306A90005A	6306A90005A	6306A90005A	R
263230-1	THERMISTOR ASSEMBLY (Out)	6323A3226T	6323A3226T	6323A3226T	6323AQ3226T	6323AQ3226T	R	
263230-2	THERMISTOR ASSEMBLY (Room, in)	6323A20004A	6323A20004A	6323A20004A	6323A20004A	6323A20004A	R	
266090	HUB ASSEMBLY	6609A10005B	6609A10005D	6609A10005D	6609A10005D	6609A10005D	R	
267110	REMOE CONTROLLER ASSEMBLY	6711A20107D	6711A20107C	6711A20107C	6711A20107C	6711A20107C	R	
268714	PWB(PCB) ASSEMBLY, MAIN	6871A20799A	6871A20799B	6871A20799C	6871A20799D	6871A20799E	R	
342800	BEARING	4280A20004A	4280A20004A	4280A20004A	4280A20004A	4280A20004A	R	
346810	MOTOR ASSEMBLY, INDOOR	4681A20091J	4681A20091J	4681A20091J	4681A20091J	4681A20091J	R	
352114	TUBE ASSEMBLY, DISTRIBUTOR	5211A20569D	5211A20569D	5211A20569D	5211A14007A	5211A14007A	R	
352118	TUBE ASSEMBLY MANIFOLD	5211A20605B	5211A20605B	5211A20605B	5211A10474D	5211A10474D	R	
35211B	TUBE ASSEMBLY, TUBING	5211A30596A	5211AR7066L	5211AR7066L	5211A30038Z	5211A30038Z	R	
352150	HOSE ASEMBLY, DRAIN	5251AR1222R	5251AR1222R	5251AR1222R	5251AR1222R	5251AR1222R	R	
354212	EVAPORATOR ASSEMBLY, FINAL	5421A20149E	5421A20105H	5421A20105H	5421A21004T	5421A21004T	R	
359011	FAN ASSEMBLY, CROSS FLOW	5901A20016E	5901A20016J	5901A20016J	5901A20017C	5901A20017C	R	
668713	PWB ASSEMBLY, SUB	6871A20258B	6871A20258B	6871A20258B	6871A20258B	6871A20258B	R	
668713	PWB ASSEMBLY, SUB	6871A20259A	6871A20259A	6871A20259A	6871A20259A	6871A20259A	R	
733010	PLATE	3301A10005A	1H00843A	1H00843A	3301A10002A	3301A10002A	R	
135500	COVER	3550A21008C	3550A21008D	3550A21008D	3550A21008A	3550A21008A	R	

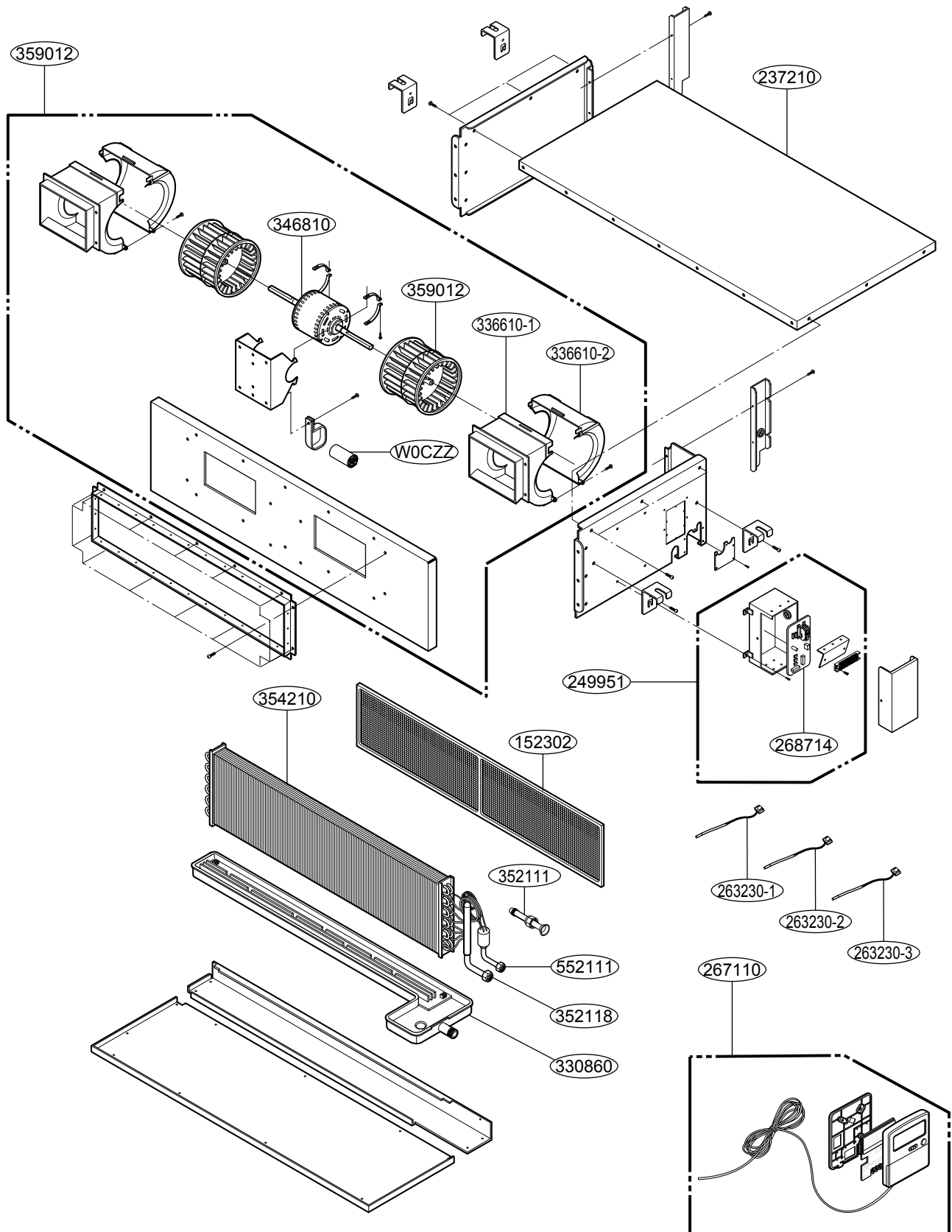
Art Cool Mirror Type(SE chassis - BLDC)



Parts List (SE chassis)

LOCATION No.	DESCRIPTION	PART No.			SVC CODE
		AMNH07GDER0	AMNH09GDER0	AMNH12GDER0	
131410	CHASSIS ASSEMBLY	3141A20034C	3141A20034C	3141A20034C	R
346910	MOTOR ASSEMBLY,INDOOR	4681A20091J	4681A20091J	4681A20091J	R
135516	COVER ASSEMBLY,MOTOR	3551A20050C	3551A20050C	3551A20050C	R
342900	BEARING	4280A20004A	4280A20004A	4280A20004A	R
135311	GRILLE ASSEMBLY,DISCHARGE(INDOOR)	3531A10137B	3531A10137B	3531A10137B	R
359011	FAN ASSEMBLY,CROSS FLOW	5901A20016J	5901A20016J	5901A20016J	R
354210	EVAPORATOR ASSEMBLY,FINAL	5421A20260C	5421A20260C	5421A20260C	R
159830	AIR CLEANER ASSEMBLY	5983A25003H	5983A25003H	5983A25003H	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A20495W	4995A20495X	4995A20495Y	R
135313	GRILLE ASSEMBLY,FRONT(INDOOR)	MIRROR	3531A10374H	-	R
		SILVER	3531A10374J	-	R
		BLUE	3531A10374K	-	R
733010	PLATE	1H00843A	1H00843A	1H00843A	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A90031C	6711A90031C	6711A90031C	R
135500	COVER	3550A21008D	3550A21008D	3550A21008D	R
263230-1	THERMISTER ASSEMBLY(IN)	6323A30002F	6323A30002F	6323A30002F	R
263230-2	THERMISTER ASSEMBLY(OUT)	6323AQ3226T	6323AQ3226T	6323AQ3226T	R
263230-3	THERMISTER ASSEMBLY(ROOM)	6323A20042A	6323A20042A	6323A20042A	R
35211B	TUBE ASSEMBLY TUBING	5211A25050C	5211A25050C	5211A25050C	R
352150	HOSE ASSEMBLY DRAIN	5251AR1222R	5251AR1222R	5251AR1222R	R

Duct Type - High Static



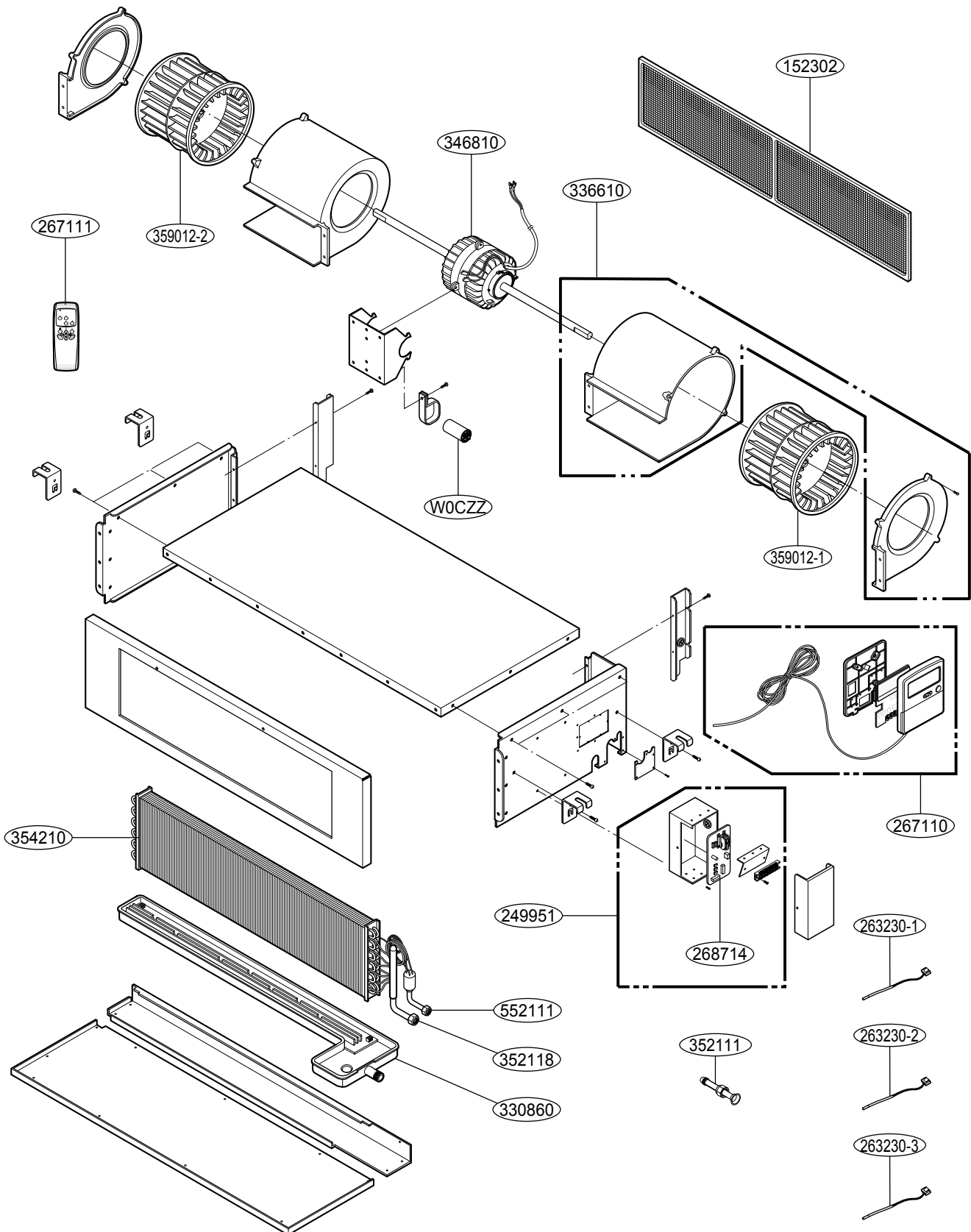
Parts List(Duct Type - High Static)

LOCATION No.	DESCRIPTION	PART No.					SVC CODE
		AMNH186BHA0	AMNH246BHA0	AMNH306BGA0	AMNC306BGA0	AMNH366BGA0	
152302	FILTER (MECH), A/C	5230A90002A	5230A90002A	5230A30001L	5230A30001L	5230A30001L	R
237210	PANEL ASSEMBLY, UPPER	3721A20177A	3721A20177A	3721A20180A	3721A20180C	3721A20180A	R
249951	CONTROL BOX ASSEMBLY(INDOOR)	4995A14002A	4995A14002B	4995A14002C	4995A14002C	4995A14002D	R
263230-1	THERMISTOR ASSEMBLY(IN)	6323AQ3226G	6323AQ3226G	6323AQ3226G	6323AQ3226G	6323AQ3226G	R
263230-2	THERMISTOR ASSEMBLY(ROOM)	6323AQ3214E	6323AQ3214E	6323AQ3214E	6323AQ3214E	6323AQ3214E	R
263230-3	THERMISTOR ASSEMBLY (OUT)	6323AQ3226V	6323AQ3226V	6323AQ3226V	6323AQ3226V	6323AQ3226V	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A10008X	6711A10008X	6711A10008X	6711A20043E	6711A10008X	R
268714	PWB(PCB) ASSEMBLY, MAIN	6871A10140E	6871A10140F	6871A10131H	6871A10131H	6871A10131J	R
330860	DRAIN PAN ASSEMBLY	3087A10008B	3087A10008B	3087A10008A	3087A10008A	3087A10008A	R
336610-1	HOUSING(MECH), WRAPPER	3660A20017A	3660A20017A	3660A20019A	3660A20019A	3660A20019A	R
336610-2	HOUSING(MECH), WRAPPER	3660A20018A	3660A20018A	3660A20020A	3660A20020A	3660A20020A	R
346810	MOTOR ASSEMBLY, INDOOR	4681A10013C	4681A10013C	4681A10013J	4681A10013J	4681A10013A	R
352111*	TUBE ASSEMBLY, CONNECTOR	5211A20514G	5211A20514G	5211A20514J	5211A20514J	5211A20514J	R
352118	TUBE ASSEMBLY, MENIFOLD(INDOOR)	5211A20465G	5211A20465G	5211A20416J	5211A20416J	5211A20416J	R
354210	EVAPORATOR ASSEMBLY, FIRST	5421A20100A	5421A20100B	5421A10027A	5421A10027A	5421A10027A	R
359012-1	FAN ASSEMBLY, BLOWER(Single)	5901A10026A	5901A10026A	5901A10026A	5901A10026A	5901A10026A	R
359012	FAN ASSEMBLY, BLOWER(Motor)	5901A10028B	5901A10028B	5901A10028J	5901A10028J	5901A10028A	R
552111	TUBE ASSEMBLY, CAPILLARY	5211A20466K	5211A20466L	5211A20693D	5211A20693D	5211A20693D	R
W0CZZ	CAPACITOR, DRAWING	2A00986D	2A00986D	2A00986D	2A00986D	2A00986D	R

LOCATION No.	DESCRIPTION	PART No.		SVC CODE
		AMNC246BHA0	AMNC366BGA0	
152302	FILTER(MECH),A/C	5230A30001M	5230A30001L	R
237210	PANEL ASSEMBLY,UPPER	3721A20177C	3721A20180C	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A14002B	4995A14002D	R
263230-1	THERMISTOR ASSEMBLY	6323AQ3226G	6323AQ3226G	R
263230-2	THERMISTOR ASSEMBLY	6323AQ3214E	6323AQ3214E	R
263230-3	THERMISTOR ASSEMBLY	6323AQ3226V	6323AQ3226V	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A20043E	6711A20043E	R
268714	PWB(PCB) ASSEMBLY,MAIN	6871A10140F	6871A10131J	R
330860	DRAIN PAN ASSEMBLY	3087A10008B	3087A10008A	R
336600-1	HOUSING (MECH),WRAPPER	3660A20017A	3660A20019A	R
336600-2	HOUSING (MECH),WRAPPER	3660A20018A	3660A20020A	R
346810	MOTOR ASSEMBLY,INDOOR	4681A10013C	4681A10013A	R
352111*	SOCKET (MECH),FLARE	5162A20011C	5211A20514J	R
352118	TUBE ASSEMBLY,MENIFOLD(INDOOR)	5211A20465G	5211A20416J	R
354210	EVAPORATOR ASSEMBLY,FIRST	5421A20100B	5421A10027A	R
359012-1	FAN,BLOWER	5901A10026A	5901A10026A	R
359012	FAN ASSEMBLY,BLOWER	5901A10028B	5901A10028A	R
552111	TUBE ASSEMBLY,CAPILLARY	5211A20466L	5211A20693D	R
W0CZZ	CAPACITOR,DRAWING	2A00986D	2A00986D	R

NOTE) *5211A20514G is for connecting service valve pipe fitting.

Duct Type - Low Static (BT, BT1 chassis)

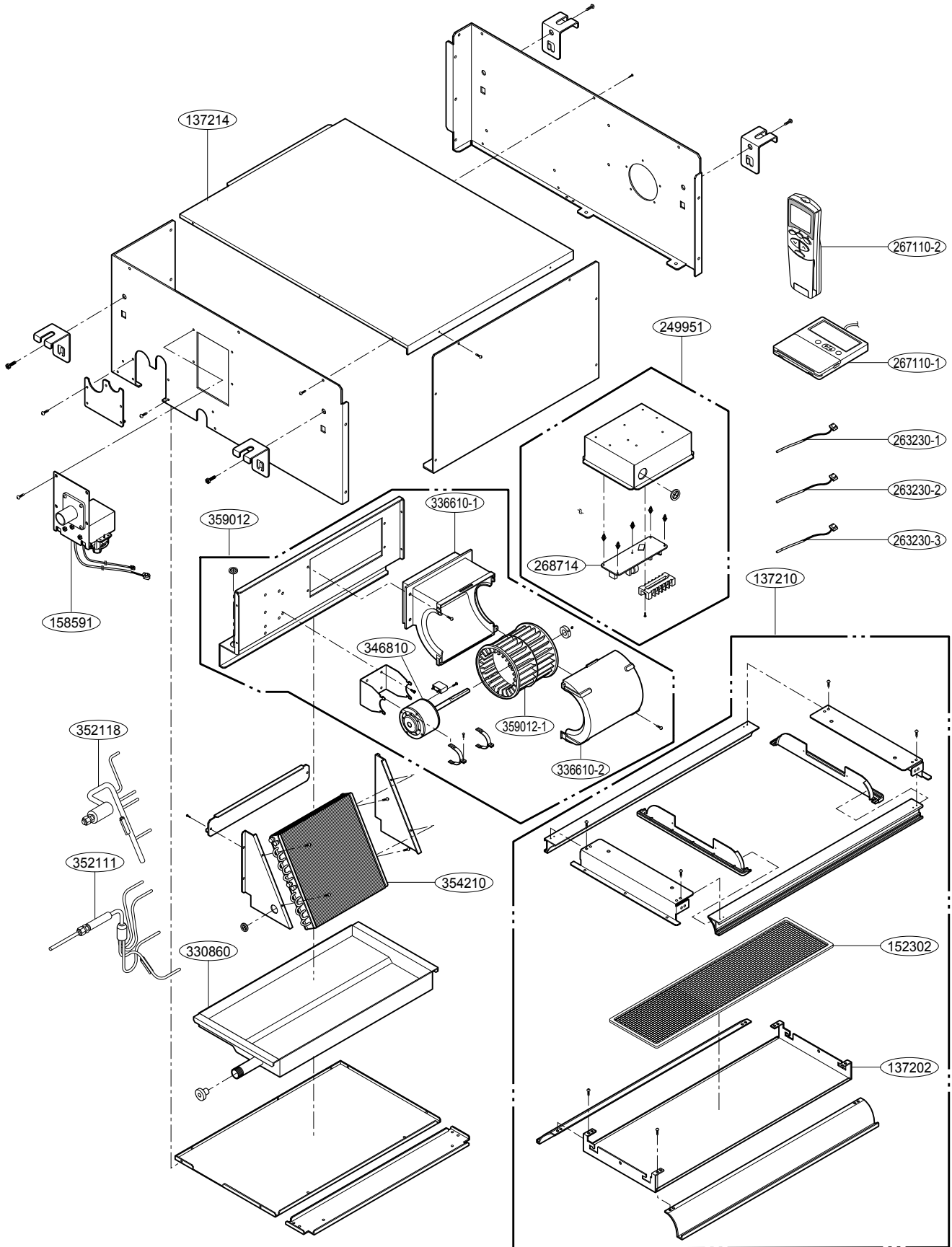


Parts List (Duct Type - Low Static)

LOCATION No.	DESCRIPTION	PART No.			SVC CODE
		AMNH096BTG0	AMNH126BTG0	AMNH186BTG0	
152302	FILTER(MECH), A/C	5230A30001Q	5230A30001Q	5230A30001P	R
237203	PANEL ASSEMBLY, UPPER	3721A20150B	3721A20150B	3721A20150A	R
249951	CONTROL BOX ASSEMBLY(INDOOR)	4995A20338F	4995A20338E	4995A20338J	R
263230-1	THERMISTOR ASSEMBLY (IN)	6323AQ3226G	6323AQ3226G	6323AQ3226G	R
263230-2	THERMISTOR ASSEMBLY (ROOM)	6323AQ3214E	6323AQ3214E	6323AQ3214E	R
263230-3	THERMISTOR ASSEMBLY (OUT)	6323A20025D	6323A20025D	6323A20025D	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A10008U	6711A10008U	6711A10008U	R
267111	*REMOTE CONTROLLER ASSEMBLY	6711A20041E	6711A20041E	6711A20041E	R
268714	PWB(PCB) ASSEMBLY, MAIN	6871A10131A	6871A10131B	6871A10131G	R
330860	DRAIN PAN ASSEMBLY	3087A10015C	3087A10015C	3087A10015B	R
336610	HOUSING(MECH), WRAPPER	3660A20033A	3660A20033A	3660A20033A	R
346810	MOTOR ASSEMBLY, INDOOR	4681A10022B	4681A10022B	4681A10022A	R
352118	TUBE ASSEMBLY, MENIFOLD(INDOOR)	5211A10418B	5211A25011B	5211A10418C	R
354210	EVAPORATOR ASSEMBLY, FIRST	5421A20153B	5421A21002A	5421A20153A	R
359012-1	FAN ASSEMBLY, BLOWER(Single)	5901A20030A	5901A20030A	5901A20030A	R
359012-2	FAN ASSEMBLY, BLOWER(Single)	-	-	5901A20030B	R
352111	TUBE ASSEMBLY, CONNECTOR	-	-	5211A20514G	R
552111	TUBE ASSEMBLY, EVAPORATOR IN	5211A10417B	5211A25010A	5211A10417B	R
WOCZZ	CAPACITOR, DRAWING	3A02157K	3A02157K	3A02157H	R

NOTE) "*" For Australia, Wireless Remote Controller is supplied.

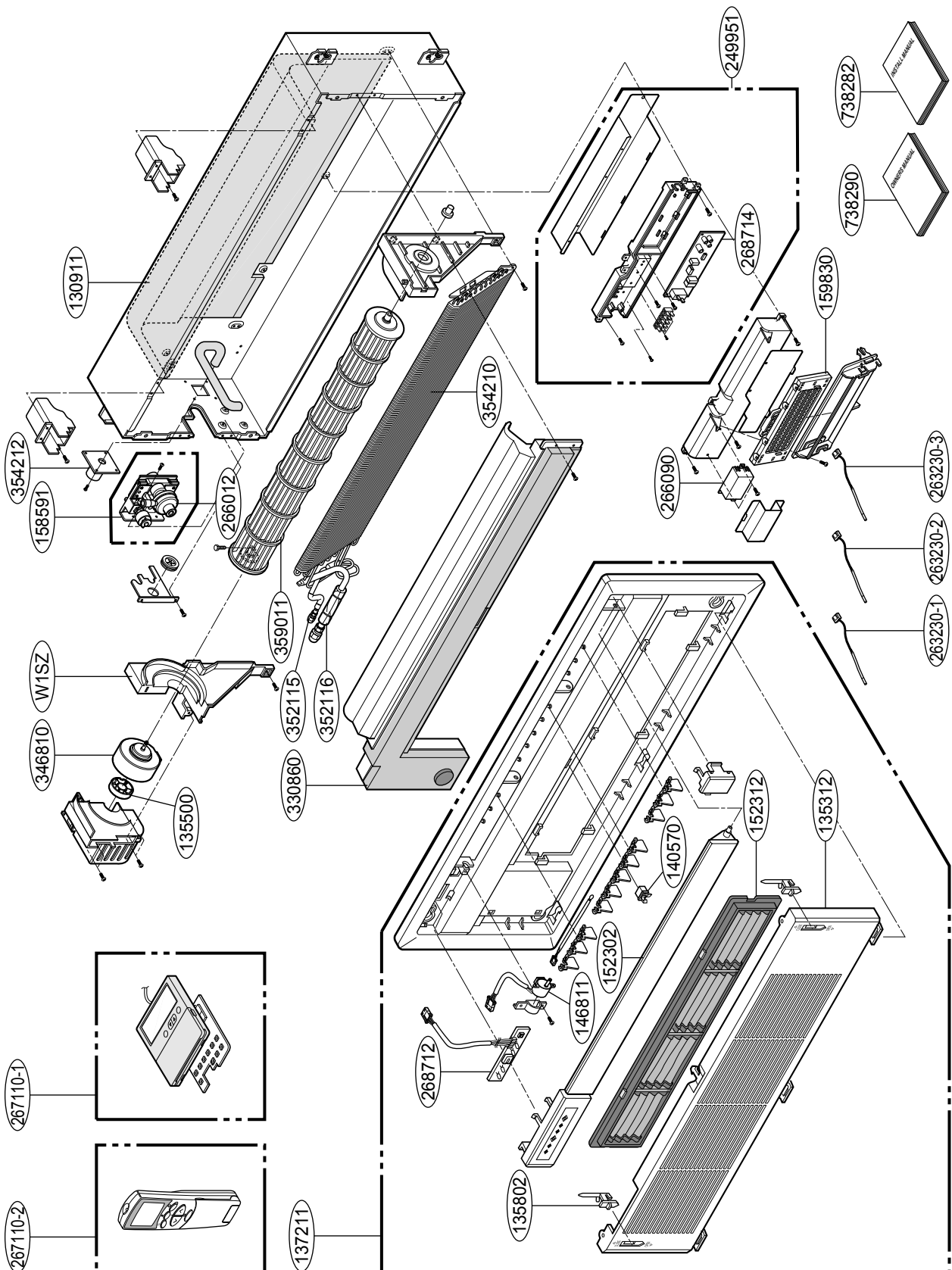
Built in Duct type (BP chassis)



Parts List(Built in Duct Type-BP chassis)

Location No.	Description	Part No.		SVC CODE
		AMNH096BPA0	AMNH126BPA0	
237202	PANLE, FRONT	3720A20260B	3720A20260B	R
137210	PANEL ASSEMBLY, FRONT (SINGLE)	3721A20168A	3721A20168A	R
137214	PANEL, UPPER	3721A20188A	3721A20188A	R
152302	FILTER (MECH), A/C	5230A30001R	5230A30001R	R
158591	PUMP ASSEMBLY, WATER	5859A20002A	5859A20002A	R
249951	CONTROL BOX ASSEMBLY(INDOOR)	4995A20355C	4995A20355B	R
263230-1	THERMISTOR ASSEMBLY	6323AQ3226Y	6323AQ3226Y	R
263230-2	THERMISTOR ASSEMBLY	6323AQ3214E	6323AQ3214E	R
263230-3	THERMISTOR ASSEMBLY	6323AQ3226E	6323AQ3226E	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A10008U	6711A10008U	R
268714	PWB(PCB) ASSEMBLY, MAIN	6871A10140G	6871A10140H	R
330860	DRAIN PAN ASSEMBLY	3086A10036A	3086A10036A	R
336610-1	HOUSING(MECH), WRAPPER	3660A20017A	3660A20017A	R
336610-2	HOUSING(MECH), WRAPPER	3660A20018A	3660A20018A	R
346811	MOTOR ASSEMBLY, INDOOR	4681A10031A	4681A10031A	R
352118-1	TUBE ASSEMBLY, MENIFOLD(OUT)	5211A21171A	5211A21171A	R
352118-2	TUBE ASSEMBLY, MANIFOLD (IN)	5211A21172A	5211A21172A	R
354210	EVAPORATOR ASSEMBLY, FIRST	5421A20178E	5421A20178E	R
359012	FAN ASSEMBLY, BLOWE	5901A10049A	5901A10049A	
359012-1	FAN ASSEMBLY, BLOWER(SINGLE)	5901A10026A	5901A10026A	R
WOCZZ	CAPACITOR, DRAWING	2A00986D	2A00986D	R

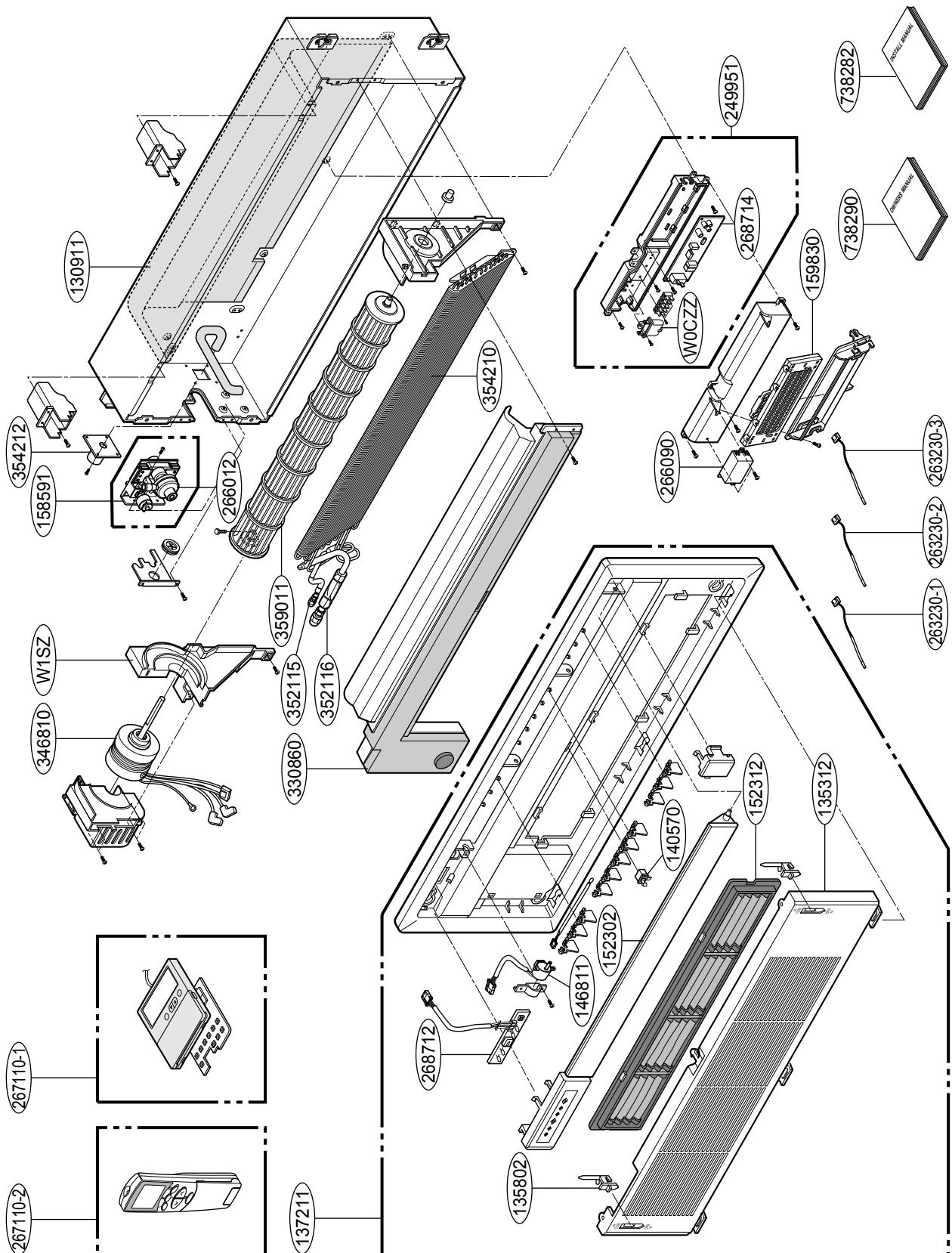
Cassette Type - 1 way (TC1 chassis)



Parts List(Cassette Type - 1 way)

LOCATION No.	DESCRIPTION	Part No.		REMARKS
		AMNH09GTCC0	AMNH12GTCC0	
135802	DOOR LOCK	3580A20010A	3580A20010A	R
268714	PWB(PCB) ASSEMBLY,MAIN	6871A10363C	6871A10363D	R
139011	CABINET ASSEMBLY,INDOOR	3091A10024A	3091A10024A	R
158580	PUMP ASSEMBLY,WATER	5859A10001A	5859A10001A	R
159830	AIR CLEANER ASSEMBLY	5983A10006A	5983A10006A	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A10114C	4995A10114D	R
263230-1	THERMISTOR ASSEMBLY (IN)	6323AQ3226E	6323AQ3226E	R
263230-2	THERMISTOR ASSEMBLY (OUT)	6323AQ3226V	6323AQ3226V	R
263230-3	THERMISTOR ASSEMBLY (ROOM)	6323AQ3213E	6323AQ3213E	R
266012	SWITCH ASSEMBLY,FLOAT	6601A20001E	6601A20001E	R
266090	HVB ASSEMBLY	6690A20009K	6690A20009K	R
267110-1	REMOTE CONTROLLER ASSEMBLY	6711A20127A	6711A20127A	R
267110-2	REMOTE CONTROLLER ASSEMBLY (WIRELESS)	6711A20096B	6711A20096B	Option
330870	DRAIN PAN ASSEMBLY	3087A10005A	3087A10005A	R
352115	TUBE ASSEMBLY,EVAPORATOR IN	5211A20229E	5211A20229E	R
352116	TUBE ASSEMBLY, EVAPORATOR OUT	5211A20230E	5211A20230E	R
354210	EVAPORATOR ASSEMBLY,FIRST	5421A10011A	5421A10011A	R
354212	DRAIN ASSEMBLY,TUBE	5251A20001A	5251A20001A	R
359011	FAN ASSEMBLY,CROSS FLOW	5901AR2441A	5901AR2441A	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20091K	4681A20091K	R
135500	COVER	3550A21008A	3550A21008A	R
W1SZ	AIR GUIDE ASSEMBLY	5239A10004A	5239A10004A	R

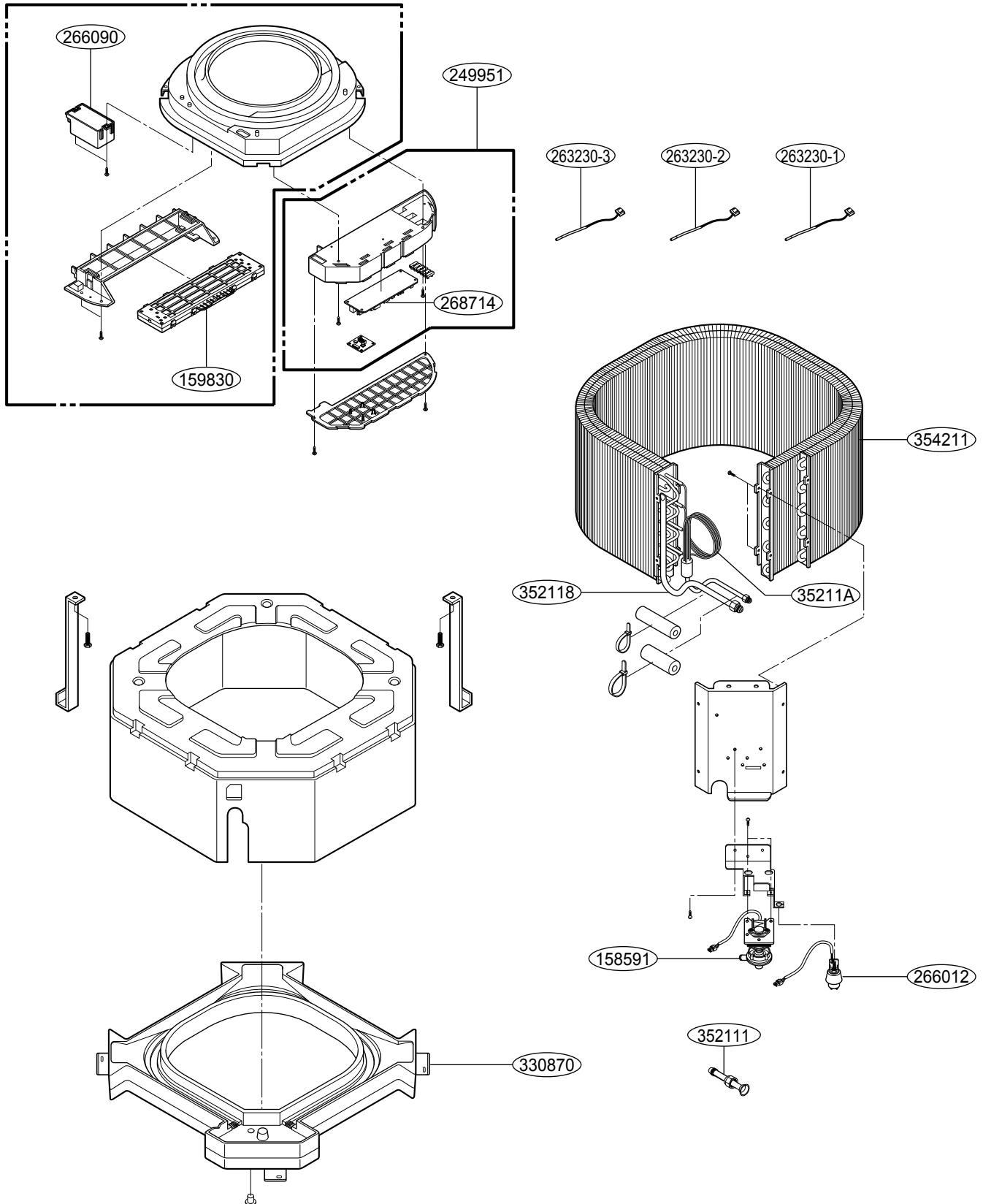
Cassette Type - 1 way (TC chassis)

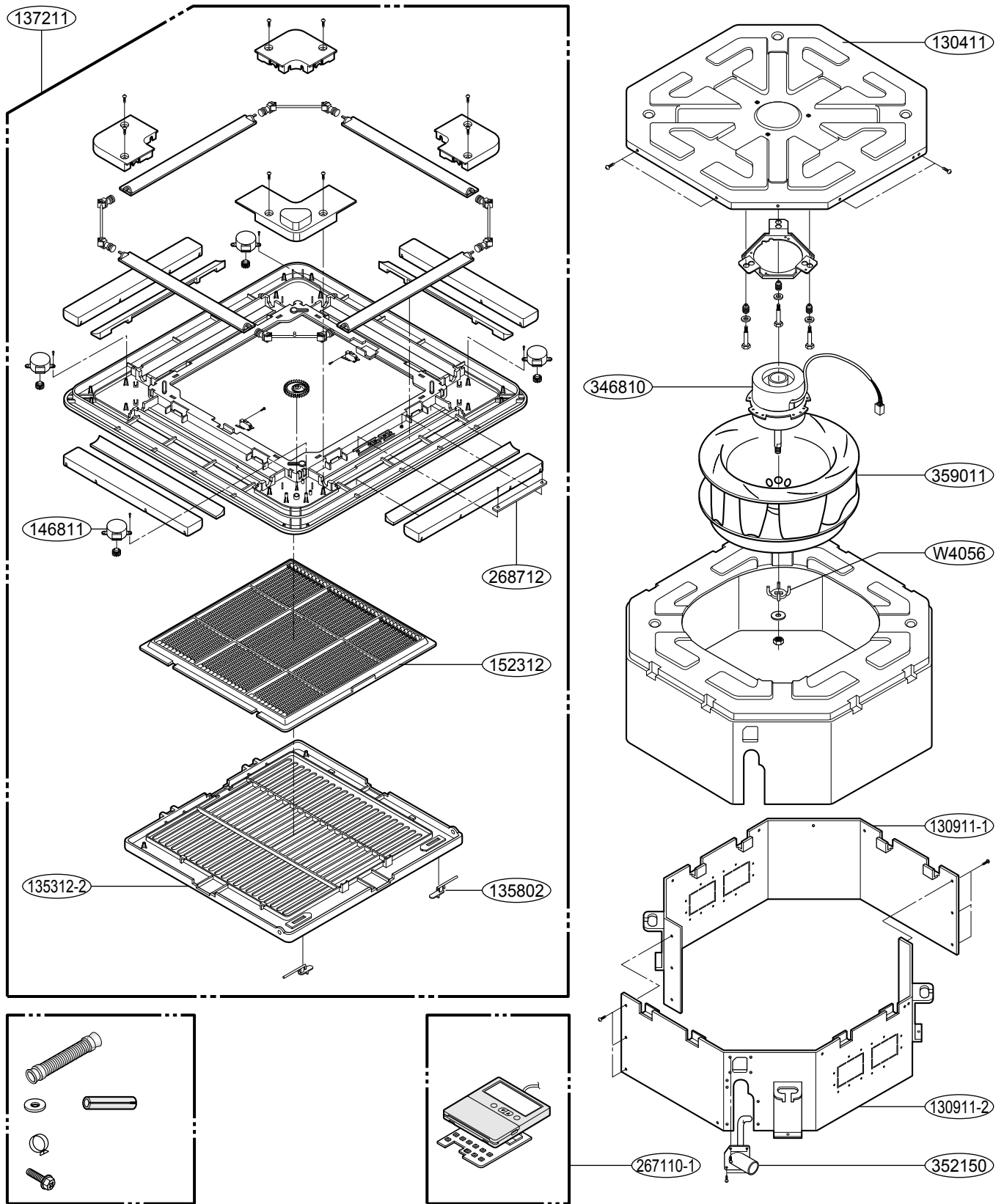


Parts List(Cassette Type - 1 way)

LOCATION No.	DESCRIPTION	Part No.				REMARKS
		AMNH096TCC0	AMNC096TCC0	AMNH126TCC0	AMNC126TCC0	
135802	DOOR LOCK	3580A20010A	-	3580A20010A	-	R
268714	PWB(PCB) ASSEMBLY,MAIN	6871A10140A	6871A10140A	6871A10140B	6871A10140B	R
139011	CABINET ASSEMBLY,INDOOR	3091A10024A	3091A10024A	3091A10024A	3091A10024A	R
158580	PUMP ASSEMBLY,WATER	5859A10001A	5859A10001A	5859A10001A	5859A10001A	R
159830	AIR CLEANER ASSEMBLY	5983A10006A	5983A10006A	5983A10006A	5983A10006A	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A10114B	4995A10114B	4995A10114A	4995A10114A	R
263230-1	THERMISTOR ASSEMBLY (IN)	6323AQ3226E	6323AQ3226E	6323AQ3226E	6323AQ3226E	R
263230-2	THERMISTOR ASSEMBLY (OUT)	6323AQ3226V	6323AQ3226V	6323AQ3226V	6323AQ3226V	R
263230-3	THERMISTOR ASSEMBLY (ROOM)	6323AQ3213E	-	6323AQ3213E	-	R
266012	SWITCH ASSEMBLY,FLOAT	6601A20001E	6601A20001E	6601A20001E	6601A20001E	R
266090	HVB ASSEMBLY	6690A20005C	6690A20005C	6690A20005C	6690A20005C	R
267110-1	REMOTE CONTROLLER ASSEMBLY	6711A10008V	6711A10002Q	6711A10008V	6711A10002Q	R
267110-2	REMOTE CONTROLLER ASSEMBLY (WIRELESS)	6711A20096B	-	6711A20096B	-	Option
330870	DRAIN PAN ASSEMBLY	3087A10005A	3087A10005A	3087A10005A	3087A10005A	R
352115	TUBE ASSEMBLY,EVAPORATOR IN	5211A20229E	5211A20229E	5211A20229E	5211A20229E	R
352116	TUBE ASSEMBLY, EVAPORATOR OUT	5211A20230E	5211A20230E	5211A20230E	5211A20230E	R
354210	EVAPORATOR ASSEMBLY,FIRST	5421A10011A	5421A10011A	5421A10011A	5421A10011A	R
354212	DRAIN ASSEMBLY,TUBE	5251A20001A	5251A20001A	5251A20001A	5251A20001A	R
359011	FAN ASSEMBLY,CROSS FLOW	5901AR2441A	5901AR2441A	5901AR2441A	5901AR2441A	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20003Y	4681A20003Y	4681A20003Y	4681A20003Y	R
W0CZZ	CAPACITOR, DRAWING	3H00671E	3H00671E	3H00671E	3H00671E	R
W1SZ	AIR GUIDE ASSEMBLY	5239A10004A	5239A10004A	5239A10004A	5239A10004A	R

Cassette Type - 4 way[TE(1) chassis]



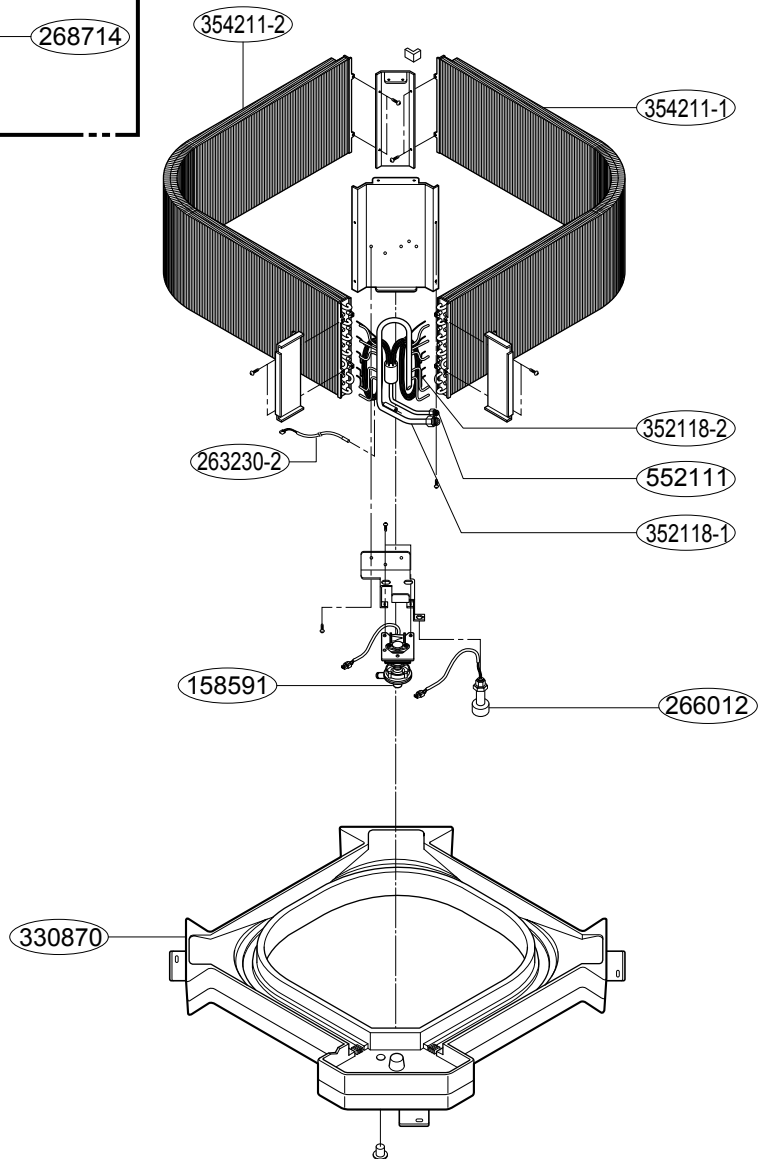
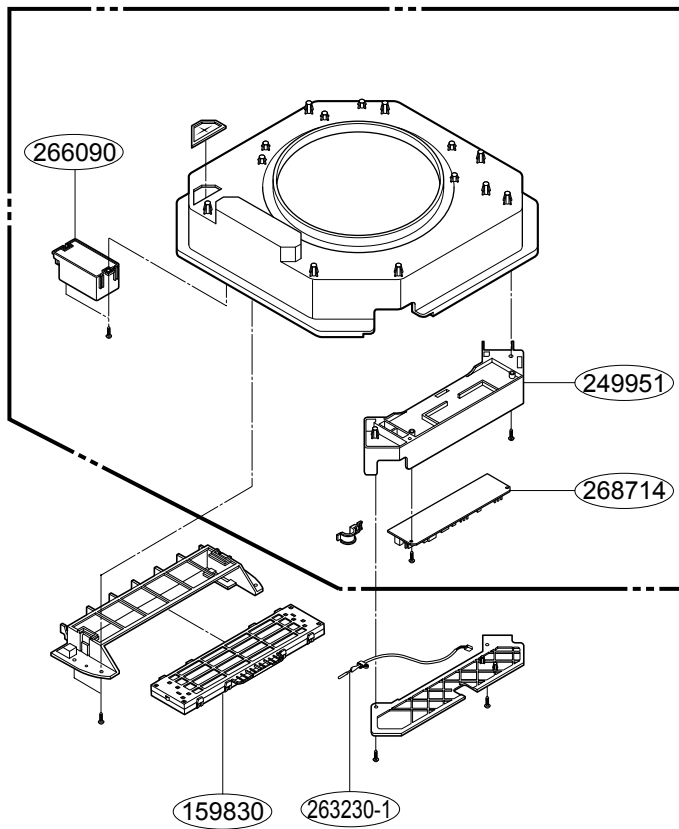


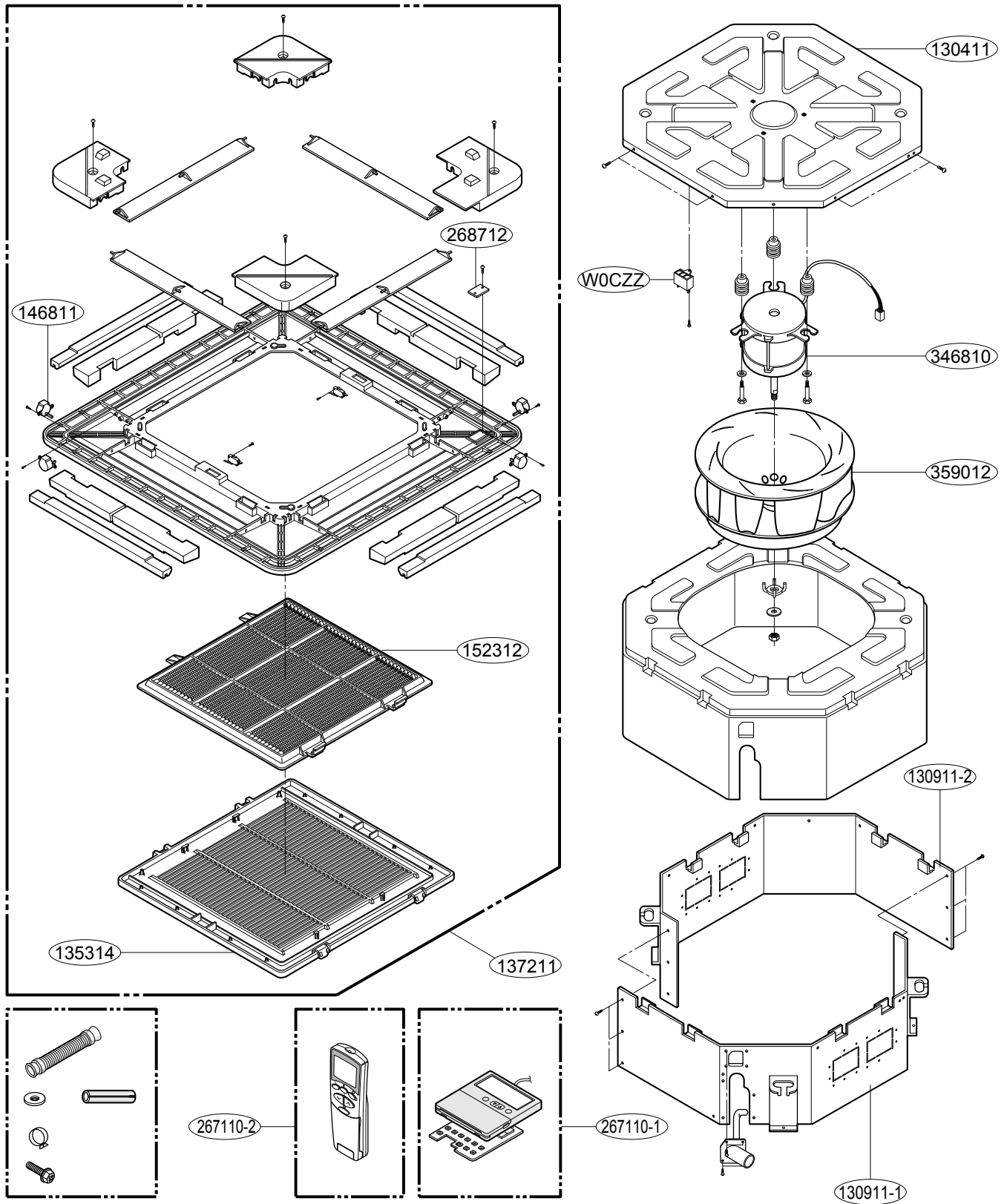
Parts List(Cassette Type - 4 way - TE(1) 9K, 12K, 18K)

LOCATION No.	DESCRIPTION	PART No.						SVC CODE
		AMNH096TEC0	AMNH126TEC0	AMNH186TEC0	AMNH09GTEF0	AMNH12GTEF0	AMNH18GTEF0	
130411	BASE ASSEMBLY,WELD[INDOOR]	3041A10013A	3041A10013A	3041A10013A	3041A10073A	3041A10073A	3041A10073A	R
130911-1	CABINET ASSEMBLY,INDOOR	3091A10023C	3091A10023C	3091A10023C	3091A10023E	3091A10023E	3091A10023E	R
130911-2	CABINET ASSEMBLY,INDOOR	3091A10023D	3091A10023D	3091A10023D	3091A10023F	3091A10023F	3091A10023F	R
137211	PANEL ASSEMBLY,FRONT(INDOOR)	3721A10105B	3721A10105B	3721A10105B	3721A10105N	3721A10105N	3721A10105N	R
135312	GRILLE ASSEMBLY,FRONT(INDOOR)	3531A10059A	3531A10059A	3531A10059A	3531A10059A	3531A10059A	3531A10059A	R
135802	DOOR ROCK	3580A20005A	3580A20005A	3580A20005A	3580A20005A	3580A20005A	3580A20005A	R
146811	MOTOR ASSEMBLY,STEP	4681A20055A	4681A20055A	4681A20055A	4681A20055A	4681A20055A	4681A20055A	R
152312	FILTER ASSEMBLY, AIR CLEANER	5231A10005A	5231A10005A	5231A10005A	5231A10005A	5231A10005A	5231A10005A	R
158591	PUMP ASSEMBLY,WATER	5859A20001M	5859A20001M	5859A20001M	5859A10007A	5859A10007A	5859A10007A	R
159830	AIR CLEANER ASSEMBLY	5983A10002A	5983A10002A	5983A10002A	5983A10002A	5983A10002A	5983A10002A	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A20168B	4995A14001D	4995A14001C	4995A10180B	4995A10180C	4995A10180D	R
263230-1	THERMISTOR ASSEMBLY (OUT)	6323AQ3226T	6323AQ3226T	6323AQ3226T	6323AQ3226T	6323AQ3226T	6323AQ3226T	R
263230-2	THERMISTOR ASSEMBLY (IN)	6323AQ3226F	6323AQ3226F	6323AQ3226F	6323AQ3226N	6323AQ3226F	6323AQ3226F	R
263230-3	THERMISTOR ASSEMBLY (ROOM)	6323A10002A	6323A10002A	6323A10002A	6323A10002A	6323A10002A	6323A10002A	R
266012	SWITCH ASSEMBLY,FLOAT	6601A20001G	6601A20001G	6601A20001G	6601A20001G	6601A20001G	6601A20001G	R
266090	H.V ASSEMBLY	6609A20005C	6609A20005C	6609A20005C	6609A20009J	6609A20009J	6609A20009J	R
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20096J	6871A20096J	6871A20096J	6871A20096J	6871A20096J	6871A20096J	R
268714	PWB(PCB) ASSEMBLY,MAIN	6871A10209Z	6871A10158D	6871A10158C	6871A10363E	6871A10363F	6871A10363Y	R
267110-1	REMOTE CONTROLLER ASSEMBLY	6711A20076N	6711A20076N	6711A20076N	6711A20127A	6711A20127A	6711A20127A	R
267110-2	REMOTE CONTROLLER ASSEMBLY (WIRELESS)	6711A20096B	6711A20096B	6711A20096B	-	-	-	R
330870	DRAIN PAN ASSEMBLY	3087A10002A	3087A10002A	3087A10002A	3087A10030D	3087A10030D	3087A10030D	R
346810	MOTOR ASSEMBLY,INDOOR	4681AC2026E	4681AC2026E	4681AC2026C	4681A20168B	4681A20168B	4681A20168B	R
352111*	TUBE ASSEMBLY, CONNECTOR	-	-	5211A20514G	-	5211A20514G	-	R
352118	TUBE ASSEMBLY,MENIFOLD(INDOOR)	5211A20241S	5211A20241S	5211A20241R	5211A21463D	5211A21463A	5211A21463A	R
35211A	TUBE ASSEMBLY, SUCTION (INDOOR)	5211A20243M	5211A20243M	5211A20243M	5211A12312A	5211A21486A	5211A21486A	R
352150	DRAIN ASSEMBLY, TUBE	5251A20002A	5251A20002A	5251A20002A	5251A20002A	5251A20002A	5251A20002A	R
354211	EVAPORATOR ASSEMBLY,BENDING	5421A10006A	5421A10006A	5421A10006A	5421A10060B	5421A10060A	5421A10060A	R
359011	FAN,TURBO	5900A10004A	5900A10004A	5900A10004A	5900A20054A	5900A20054A	5900A20054A	R
738282	MANUAL, INSTALLATION	3828A20403F	3828A20403F	3828A20403F	3828A20403F	3828A20403F	3828A20403F	R
738290	MANUAL, OWNERS	3828A20394D	3828A20394D	3828A20394D	3828A20394D	3828A20394D	3828A20394D	R
W0CZZ	CAPACITOR,DRAWING	3H00660N	3H00660N	3H00660N	-	-	-	R
W4056	LOCKER	4056A20001A	4056A20001A	4056A20001A	4A01405H	4A01405H	4A01405H	R

NOTE) 35211* is for pipe fitting the SVC valve.

Cassette Type - 4 way(TF chassis)



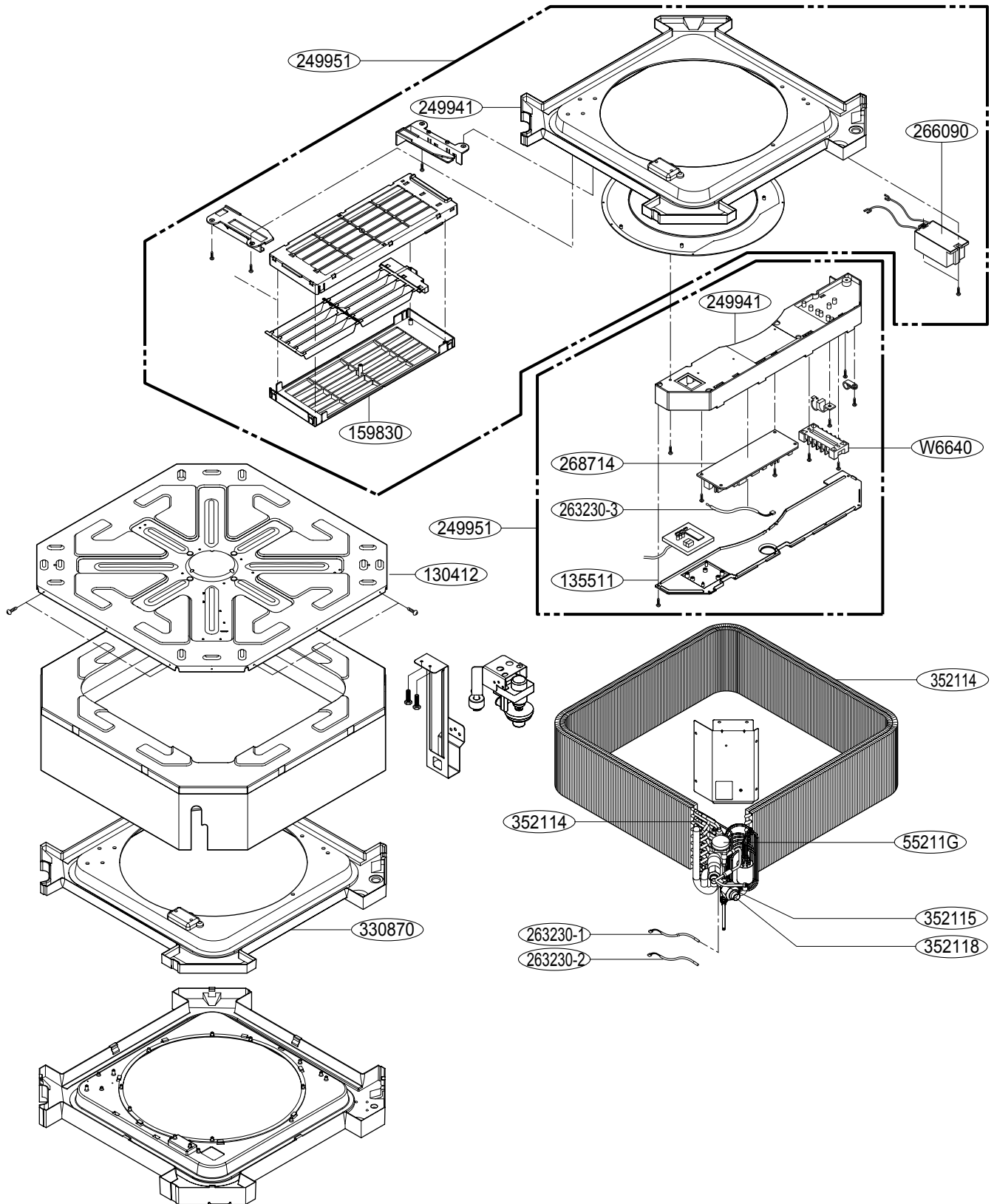


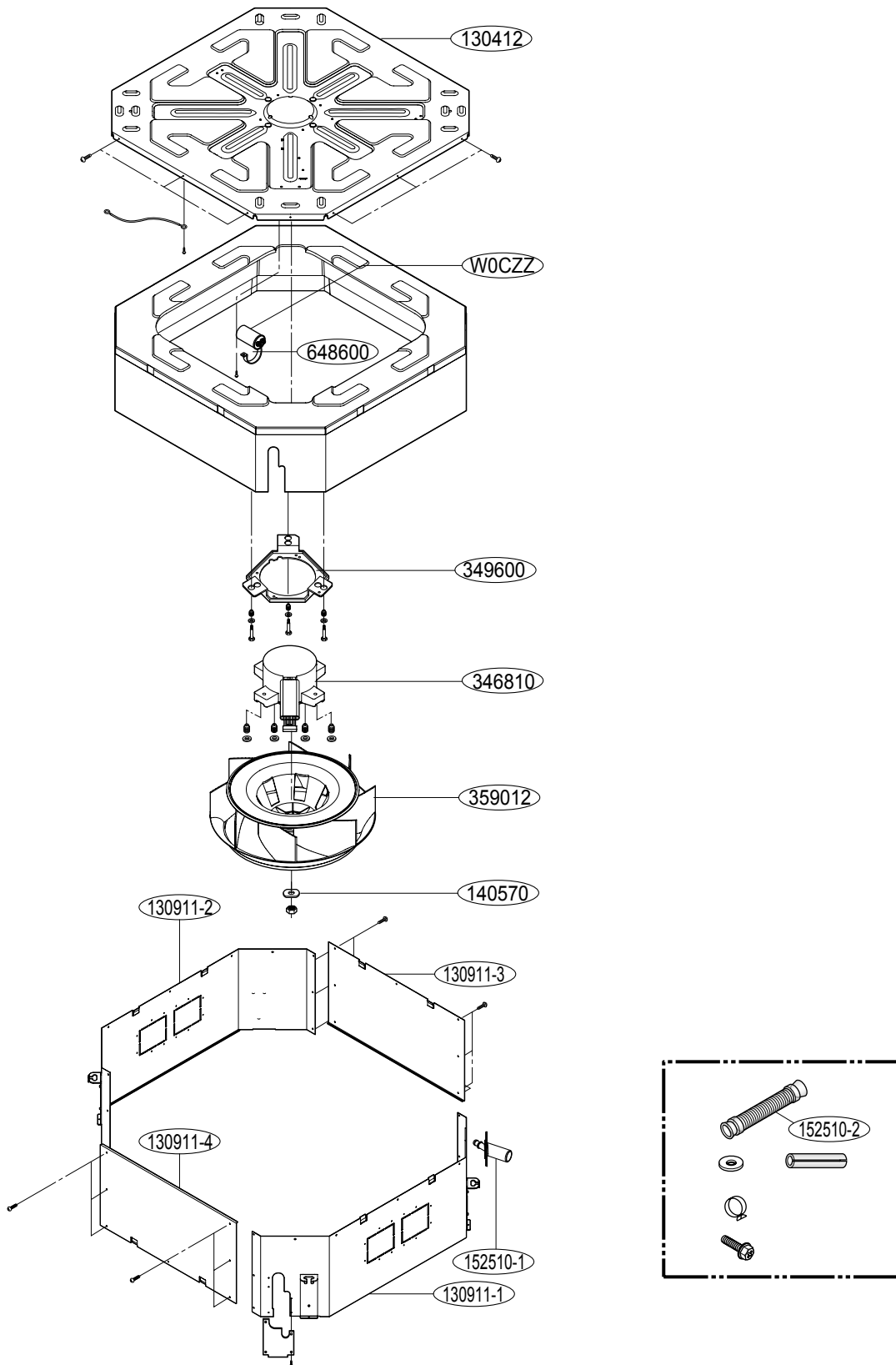
Parts List(Cassette Type - 4 way - TF 24K, 30K)

LOCATION No.	DESCRIPTION	Part No.				REMARKS
		AMNH246TFC0	AMNH306TFC0	AMNH306TFA0	AMNC306TFC0	
130411	BASE ASSEMBLY,WELD[INDOOR]	3041A10030B	3041A10030B	3041A10030B	3041A10030B	R
130911-1	CABINET ASSEMBLY,INDOOR	3091A10051A	3091A10051A	3091A10051A	3091A10051C	R
130911-2	CABINET ASSEMBLY,INDOOR	3091A10051B	3091A10051B	3091A10051B	3091A10051D	R
137211	PANEL ASSEMBLY,FRONT(INDOOR)	3721A10072E	3721A10072E	-	-	R
135314	GRILLE ASSEMBLY,FRONT(INDOOR)	3531A10211C	3531A10211C	-	-	R
146811	MOTOR ASSEMBLY,STEP	4681A20055A	4681A20055A			R
152312	FILTER ASSEMBLY, AIR CLEANER	5231A10012A	5231A10012A	-	-	R
158591	PUMP ASSEMBLY,WATER	5859A20001K	5859A20001K	5859A20001K	5859A20001K	R
159830	AIR CLEANER ASSEMBLY	5983A10002A	5983A10002A	5983A10002A	5983A10002A	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A10093K	4995A10093N	4995A10093N	4995A10131D	R
263230-1	THERMISTOR ASSEMBLY (OUT)	6323AQ3226Y	6323AQ3226Y	6323AQ3226Y	6323AQ3226Y	R
263230-2	THERMISTOR ASSEMBLY (IN)	6323AQ3226E	6323AQ3226E	6323AQ3226E	6323AQ3226E	R
263230-3	THERMISTOR ASSEMBLY (ROOM)	6323A10002A	6323A10002A	6323A10002A	6323A10002A	R
266012	SWITCH ASSEMBLY,FLOAT	6601A20001H	6601A20001H	6601A20001H	6601A20001H	R
266090	H.V ASSEMBLY	6609A20005E	6609A20005E	6609A20005E	6609A20005E	R
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20096J	6871A20096J	-	-	R
268714	PWB(PCB) ASSEMBLY,MAIN	6871A10158B	6871A10158R	6871A10158R	6871A10338W	R
267110-1	REMOTE CONTROLLER ASSEMBLY	6711A20076N	6711A20076N	6711A20076N	6711A20076K	R
267110-2	REMOTE CONTROLLER ASSEMBLY (WIRELESS)	6711A20096B	6711A20096B	6711A20096B	-	option
330870	DRAIN PAN ASSEMBLY	3087A10010B	3087A10010B	3087A10010B	3087A10010B	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20051Z	4681A20051W	4681A20051W	4681A20051W	R
352111*	TUBE ASSEMBLY, CONNECTOR	5211A20514G	5211A20514J	5211A20514J	5211A20514J	R
352118-1	TUBE ASSEMBLY,MENIFOLD(INDOOR)	5211A20251Q	5211A20251Q	5211A20251U	5211A20251U	R
352118-2	TUBE ASSEMBLY, MANIFOLD (INDOOR)	5211A20251K	5211A20251K	5211A20251K	5211A20251K	R
552111	TUBE ASSEMBLY, CAPILLARY (INDOOR)	5211A21137B	5211A21137B	5211A21137B	5211A21137B	R
352150	DRAIN ASSEMBLY, TUBE	5251A20002B	5251A20002B	5251AP2984A	5251A20002B	R
354211-1	EVAPORATOR ASSEMBLY,BENDING	5421A10016G	5421A10016G	5421A10016G	5421A10016G	R
354211-2	EVAPORATOR ASSEMBLY, BENDING	5421A10016H	5421A10016H	5421A10016H	5421A10016H	R
359012	FAN,TURBO	5901A10036A	5901A10036A	5901A10036A	5901A10036A	R
W0CZZ	CAPACITOR,DRAWING	3H00660M	3H00660M	3H00660M	3H00660M	R
W4056	LOCKER	4056A20001B	4056A20001B	4056A20001B	4056A20001B	R

NOTE) 35211* is for pipe fitting the SVC valve.

Cassette Type - 4 way (TH chassis)



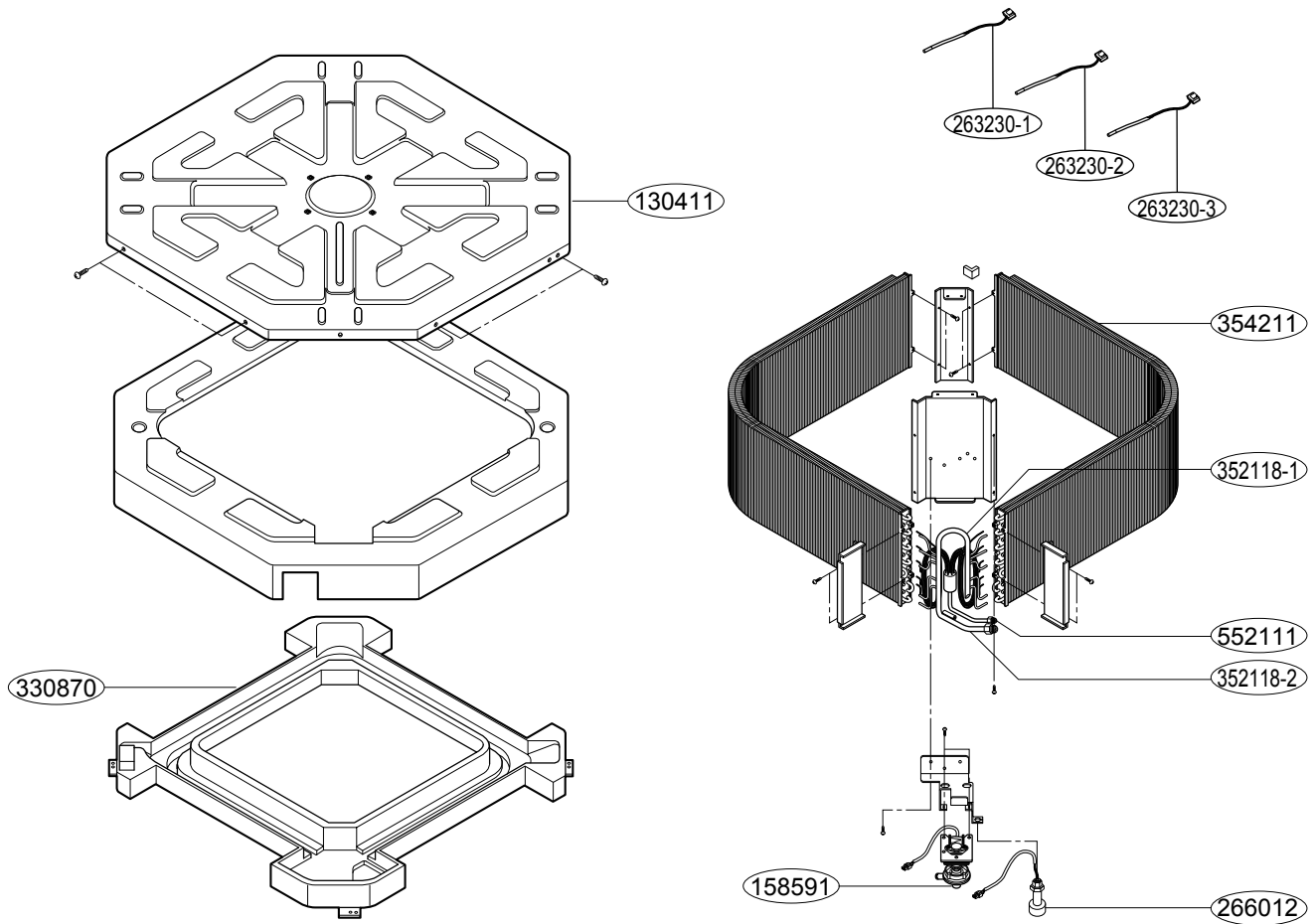
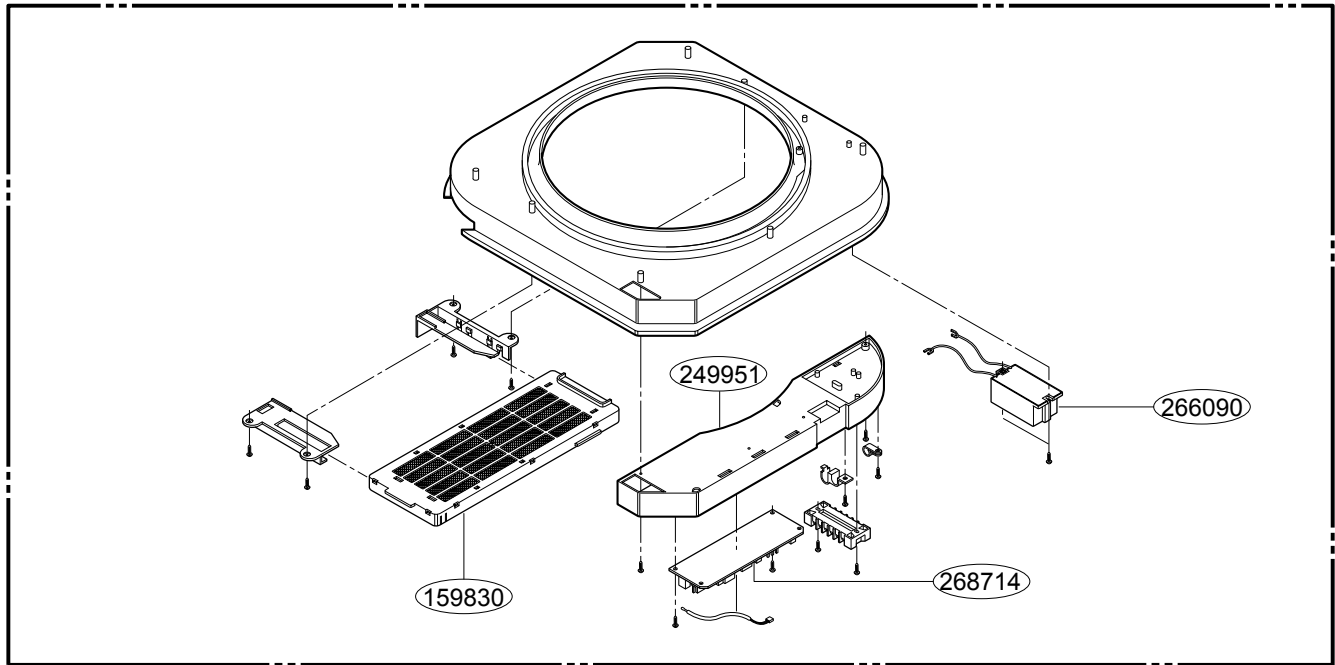


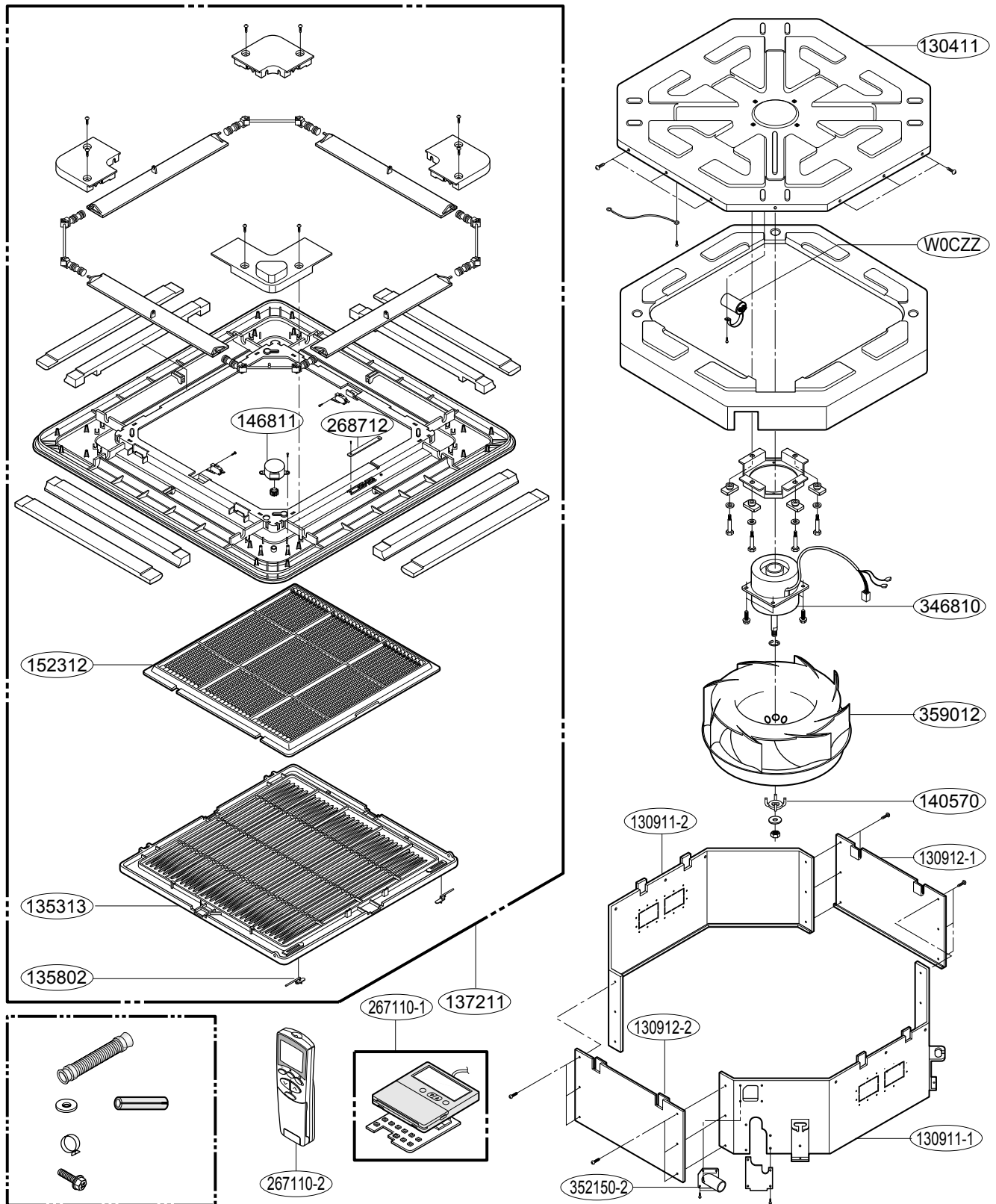
Parts List(Cassette Type - 4 way - TH)

LOCATION No.	DESCRIPTION	PART No.	SVC CODE
		AMNH24GTHF0	
130411	BASE ASSEMBLY,WELD[INDOOR]	3041A10069A	R
130911-1	CABINET ASSEMBLY, INDOOR	3091A10085A	R
130911-2	CABINET ASSEMBLY, INDOOR	3091A10075A	R
130911-3	CABINET ASSEMBLY, INDOOR	3091A10075B	R
130912-1	CABINET ASSEMBLY, INDOOR	-	R
130912-2	CABINET ASSEMBLY, INDOOR	-	R
137211	PANEL ASSEMBLY,FRONT(INDOOR)	3721A10106Z	R
135314	GRILLE ASSEMBLY,FRONT(INDOOR)	3531A10066A	R
135802	DOOR ROCK	3580A20005A	R
146811	MOTOR ASSEMBLY,STEP	4681A20055A	R
152312	FILTER ASSEMBLY, AIR CLEANER	5231A10004A	R
158591	PUMP ASSEMBLY,WATER	5859A10006C	R
159830	AIR CLEANER ASSEMBLY	5983A10003D	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A11007W	R
263230-1	THERMISTOR ASSEMBLY (OUT)	6323A30002A	R
263230-2	THERMISTOR ASSEMBLY (IN)	6323AQ3226W	R
263230-3	THERMISTOR ASSEMBLY (ROOM)	6323A10002B	R
266012	SWITCH ASSEMBLY,FLOAT	6601A20001K	R
266090	H.V ASSEMBLY	6609A20009L	R
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20096J	R
268714	PWB(PCB) ASSEMBLY,MAIN	6871A10363G	R
267110-1	REMOTE CONTROLLER ASSEMBLY	6711A20127A	R
267110-2	REMOTE CONTROLLER ASSEMBLY (WIRELESS)	-	R
330870	DRAIN PAN ASSEMBLY	3087A10035F	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20168A	R
352111*	TUBE ASSEMBLY, CONNECTOR	5211A20514J	R
352118-1	TUBE ASSEMBLY,MENIFOLD(INDOOR)	5211A10600A	R
352118-2	TUBE ASSEMBLY, MANIFOLD (INDOOR)	-	R
552111	TUBE ASSEMBLY, CAPILLARY (INDOOR)	5211A10550B	R
354211-1	EVAPORATOR ASSEMBLY,BENDING	5421A10061A	R
354211-2	EVAPORATOR ASSEMBLY, BENDING	-	R
359011	FAN,TURBO	5900A10016A	R
738282	MANUAL, INSTALLATION	3828A20403F	R
738290	MANUAL,OWNERS	3828A20394D	R
W0CZZ	CAPACITOR,DRAWING	-	R
W4056	LOCKER	4A01405C	R

NOTE) 35211* is for pipe fitting the SVC valve.

Cassette Type - 4 way(TD chassis)



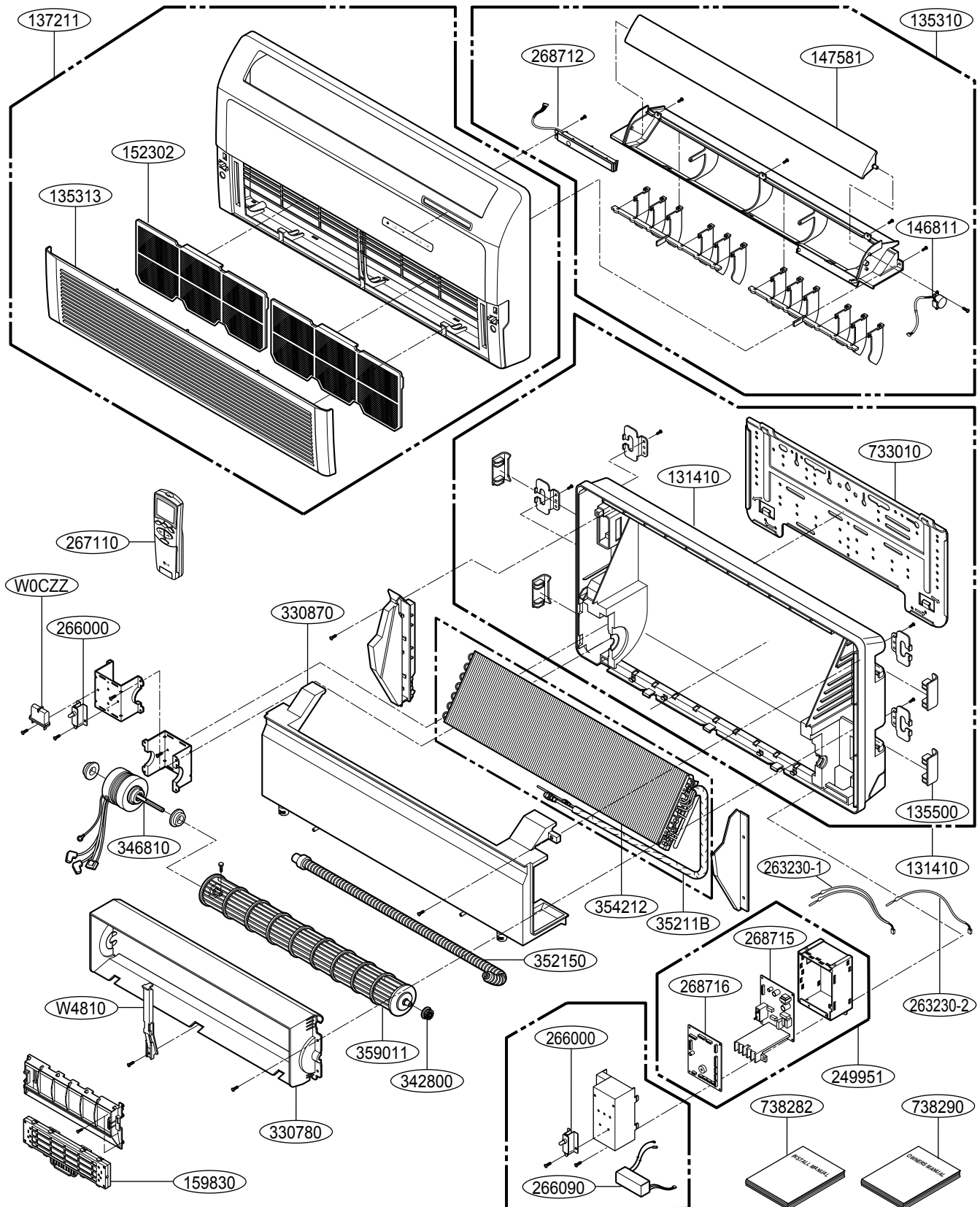


Parts List(Cassette Type - 4 way - TD 36K)

LOCATION No.	DESCRIPTION	PART No.		SVC CODE
		AMNH366TDC0	AMNC366TDC0	
130411	BASE ASSEMBLY,WELD[INDOOR]	3041A10016A	3041A10016A	R
130911-1	CABINET ASSEMBLY, INDOOR	3091A10030A	3091A20034A	R
130911-2	CABINET ASSEMBLY, INDOOR	3091A10030B	3091A20034B	R
130912-1	CABINET ASSEMBLY, INDOOR	3091A10031A	3091A20035A	R
130912-2	CABINET ASSEMBLY, INDOOR	3091A10031B	3091A20035B	R
137211	PANEL ASSEMBLY,FRONT(INDOOR)	3721A10106B	-	R
135314	GRILLE ASSEMBLY,FRONT(INDOOR)	3531A10066A	-	R
135802	DOOR ROCK	3580A20005A	-	R
146811	MOTOR ASSEMBLY,STEP	4681A20055A	-	R
152312	FILTER ASSEMBLY, AIR CLEANER	5231A10004A	-	R
158591	PUMP ASSEMBLY,WATER	5859A20001D	5859A20001D	R
159830	AIR CLEANER ASSEMBLY	5983A10003D	5983A10003D	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A22004L	4995A22004U	R
263230-1	THERMISTOR ASSEMBLY (OUT)	6323AQ3226V	6323AQ3226T	R
263230-2	THERMISTOR ASSEMBLY (IN)	6323AQ3226A	6323A30002A	R
263230-3	THERMISTOR ASSEMBLY (ROOM)	6323A10002B	6323A10002B	R
266012	SWITCH ASSEMBLY,FLOAT	6601A20001F	6601A20001F	R
266090	H.V ASSEMBLY	6609A20005D	6609A20005H	R
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20096J	-	R
268714	PWB(PCB) ASSEMBLY,MAIN	6871A10158S	6871A10338X	R
267110-1	REMOTE CONTROLLER ASSEMBLY	6711A20076N	6711A20076K	R
267110-2	REMOTE CONTROLLER ASSEMBLY (WIRELESS)	6711A20096B	-	R
330870	DRAIN PAN ASSEMBLY	3087A10006A	3087A10006A	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20006J	4681A20006J	R
352111*	TUBE ASSEMBLY, CONNECTOR	5211A20514J	5211A20514J	R
352118-1	TUBE ASSEMBLY,MENIFOLD(INDOOR)	5211A20251R	5211A20251R	R
352118-2	TUBE ASSEMBLY, MANIFOLD (INDOOR)	5211A20251B	5211A20251B	R
552111	TUBE ASSEMBLY, CAPILLARY (INDOOR)	5211A20316M	5211A20316M	R
354211-1	EVAPORATOR ASSEMBLY,BENDING	5421A10016A	5421A10016A	R
354211-2	EVAPORATOR ASSEMBLY, BENDING	5421A10016B	5421A10016B	R
359011	FAN,TURBO	5900A10003B	5900A10003B	R
738282	MANUAL, INSTALLATION	3828A20403F	-	
738290	MANUAL,OWNERS	3828A20394D	-	R
W0CZZ	CAPACITOR,DRAWING	3H00660M	3H00660M	R
W4056	LOCKER	4056A20001B	4056A20001B	R

NOTE) 35211* is for pipe fitting the SVC valve.

Convertible Type (VE chassis)



Parts List(Convertible Type-VE chassis)

LOCATION No.	DESCRIPTION	PART No.				SVC CORD
		AMNH096VEA0	AMNH096VELO	AMNH126VEA0	AMNH126VELO	
137211	PANEL ASSEMBLY,FRONT(INDOOR)	3721A10092A	3721A10092A	3721A10092A	3721A10092A	R
146811	MOTOR ASSEMBLY,STEP	4681A20055A	4681A20055A	4681A20055A	4681A20055A	R
147581	LOUVER,HORIZONTAL	4758A10006A	4758A10006A	4758A10006A	4758A10006A	R
152302	FILTER(MECH),A/C	5230A10009A	5230A10009A	5230A10009A	5230A10009A	R
159830	AIR CLEANER ASSEMBLY	-	5983A20007F	-	5983A20007F	R
249951	CONTROL BOX ASSEMBLY,INDOOR	4995A20356F	4995A20356	4995A20356E	4995A20356	R
263230-1	THERMISTOR ASSEMBLY (IN, ROOM)	6323A20004T	6323A20004T	6323A20004T	6323A20004T	R
263230-2	THERMISTOR ASSEMBLY (OUT)	6323AQ3226V	6323AQ3226V	6323AQ3226V	6323AQ3226V	R
266000	SWITCH,PUSH	6600AP2059B	6600AP2059B	6600AP2059B	6600AP2059B	R
266090	H.V ASSEMBLY	-	6609A10003S	-	6609A10003S	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A20096A	6711A20096A	6711A20096A	6711A20096A	R
268712	PWB(PCB) ASSEMBLY,DISPLAY	6871A20390D	6871A20390D	6871A20390D	6871A20390D	R
268715	PWB(PCB) ASSEMBLY,MAIN(AC)	6871A20359B	6871A20359B	6871A20359B	6871A20359B	R
268716	PWB(PCB) ASSEMBLY,MAIN(DC)	6871A20358E	6871A20358	6871A20358F	6871A20358	R
330780	CUT OFF	3078A20001A	3078A20001A	3078A20001A	3078A20001A	R
330870	DRAIN PAN ASSEMBLY	3087A10018A	3087A10018A	3087A10018A	3087A10018A	R
342800	BEARING	4280A20004A	4280A20004A	4280A20004A	4280A20004A	R
346810	MOTOR ASSEMBLY,INDOOR	4681A20131B	4681A20131B	4681A20131A	4681A20131A	R
35211B	TUBE ASSEMBLY,TUBING	5211A21217B	5211A21217B	5211A21217B	5211A21217B	R
352115	TUBE ASSEMBLY, EVAPORATOR IN	5211A25012B	5211A25012B	5211A25012B	5211A25012B	R
352116	TUBE ASSEMBLY EVAPORATOR OUT	5211A22007B	5211A22007B	5211A22007B	5211A22007B	R
352150	HOSE ASSEMBLY,DRAIN	5251AR2575Q	5251AR2575Q	5251AR2575Q	5251AR2575Q	R
354211	EVAPORATOR ASSEMBLY,FIRST	5421A30019B	5421A30019B	5421A30019B	5421A30019B	R
359011	FAN ASSEMBLY,CROSS FLOW	5901A20008E	5901A20008E	5901A20008E	5901A20008E	R
733010	PLATE ASSEMBLY,INSTALL	3301A10002A	3301A10002A	3301A10002A	3301A10002A	R
738282	MANUAL INSTALLATION	3828A20403K	3828A20403K	3828A20403K	3828A20403K	
738290	MANUAL OWNER'S	3828A20394H	3828A20394H	3828A20394H	3828A20394H	R
W0CZZ	CAPACITOR,DRAWING	3H00671A	3H00671A	3H00671A	3H00671A	R
W4810	BRACKET	4810A21019A	4810A21019A	4810A21019A	4810A21019A	R
131410	CHASSIS ASSEMBLY	3141A10009A	3141A10009A	3141A10009A	3141A10009A	R
135500	COVER	3550A30201A	3550A30201A	3550A30201A	3550A30201A	R
135310	GRILL ASSEMBLY, DIFFUSER(INDOOR)	3531A10248A	3531A10248A	3531A10248A	3531A10248A	R
135313	GRILL ASSEMBLY, INLET	3531A10247A	3531A10247A	3531A10247A	3531A10247A	R

NOTE) *Please ensure GCSC since these parts may be changed depending upon the buyer's request.
(GCSC WEBSITE <http://biz.LGservice.com>)

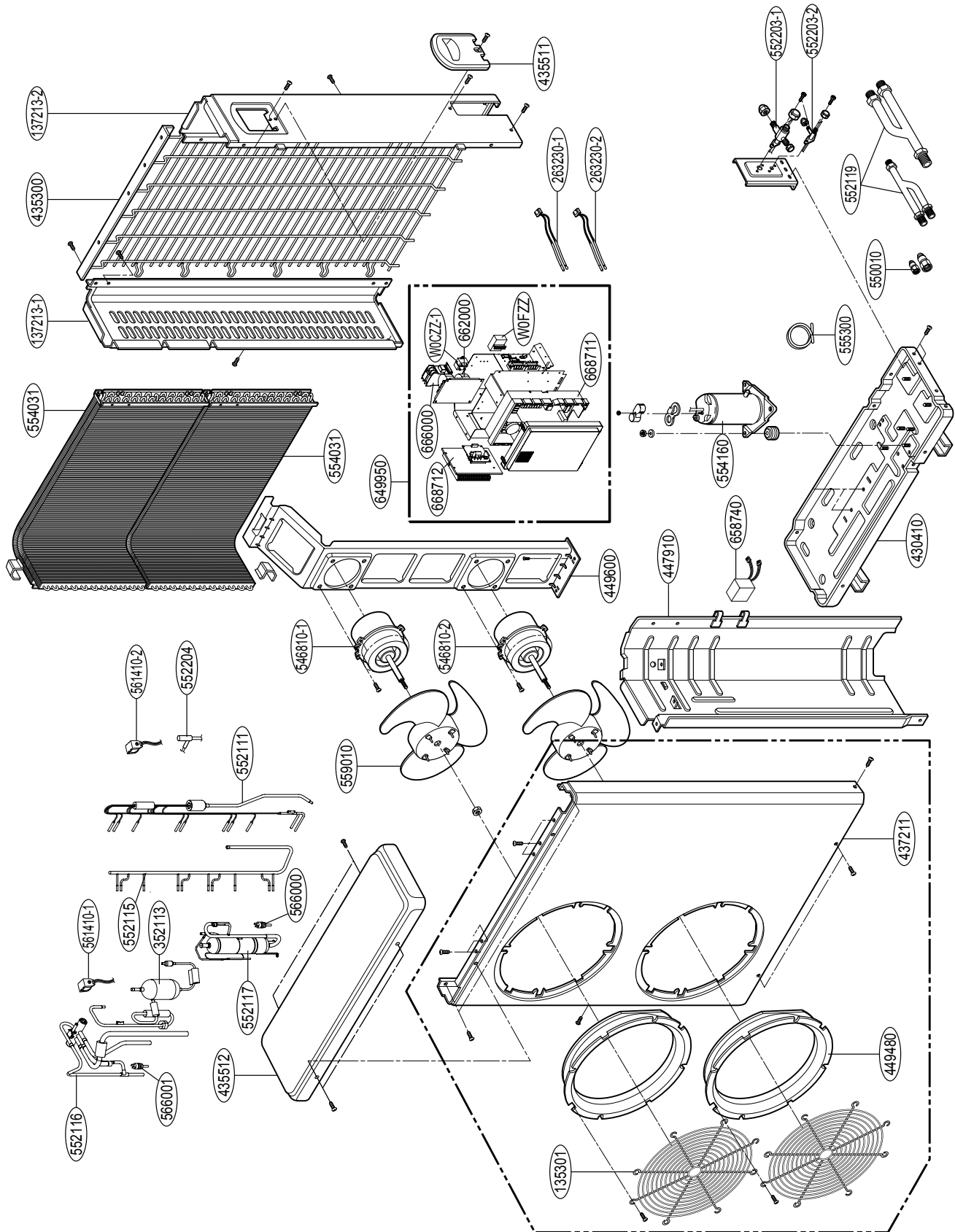
Parts List(Convertible Type-VB chassis)

Location No.	Description	Part No.		SVC CODE
		AMNH 186VBA0	AMNH 246VBA0	
130911	CABINET ASSEMBLY	3091AP2533A	3091AP2533A	R
135303	GRILLE, INLET	5230AP1236A	5230AP1236A	R
135310	GRILLE ASSEMBLY, DIFFUSER (INDOOR)	3531A10272E	3531A10272E	R
135314	GRILLE ASSEMBLY, INLET SUB	5237AP2817B	5237AP2817B	R
137211	PANEL ASSEMBLY, FRONT (INDOOR)	3720AP2767P	3720AP2767P	R
146811	MOTOR ASSEMBLY, STEP	4681A20055A	4681A20055A	R
152302	FILTER(MECH), A/C	5230AP7093A	5230AP7093A	R
159911	VANE ASSEMBLY, HORIZONTAL(UPPER)	5991AP2867B	5991AP2867B	R
159912	VANE ASSEMBLY, HORIZONTAL(LOWER)	5991AP7334C	5991AP7334C	R
166000	SWITCH, PUSH	6600AP2059B	6600AP2059B	R
235450	DISPLAY ASSEMBLY (MECH)	3545AP7224B	3545AP7224B	R
237900	WINDOW, DISPLAY	3790AP7080A	3790AP7080A	R
249951	CONTROL BOX ASSEMBLY, INDOOR	4995A10107B	4995A10107C	R
263230-1	THERMISTOR ASSEMBLY (ROOM, IN)	6323A20004Y	6323A20004Y	R
263230-2	THERMISTOR ASSEMBLY (OUT)	6323AQ3226Y	6323AQ3226Y	R
267110	REMOTE CONTROLLER ASSEMBLY	6711A20014S	6711A20014S	R
268711	PWB(PCB) ASSEMBLY, MAIN	3871A10159B	3871A10159A	R
268712	PWB(PCB) ASSEMBLY, DISPLAY	6871AQ3263A	6871AQ3263A	R
330870	DRAIN PAN ASSEMBLY	3087AP7233A	3087AP7233A	R
342800	BEARING	3H02821B	3H02821B	R
346810	MOTOR ASSEMBLY, INDOOR	4681AP2306M	4681AP2306N	R
35211A	TUBE ASSEMBLY, SUCTION INDOOR	5211AP2813G	5211AP2813H	R
352111*	TUBE ASSEMBLY, CONNECTOR	5211A20514G	5211A20514G	R
352115	TUBE ASSEMBLY, EVAPORATOR - IN	5211AP2810Q	5211AP2810R	R
352150	HOSE ASSEMBLY, DRAIN	5251AP2460B	5251AP2460B	R
354210	EVAPORATOR ASSEMBLY, FIRST	5421AP2812B	5421AP2812A	R
359010	FAN ASSEMBLY, CROSS FLOW	5901AR2351E	5901AR2351E	R
W0CZZ	CAPACITOR, DRAWING	3H00671A	3H00671A	R

NOTE) 35211* is for pipe fitting the SVC valve.

Outdoor Unit

A6UW368FA0



Parts List

Location No.	Description	Part No.	SVC CODE
		A6UW368FA0	
135301	GRILLE, DISCHARGE	3530A20006G	R
352113	TUBE ASSEMBLY, DISCHARGE (OUTDOOR)	5211A19013A	R
430410	BASE ASSEMBLY, WELD[OUTDOOR]	3041A20022T	R
435300	GRILLE, REAR	3530A10176F	R
435511	COVER ASSEMBLY, CONTROL(OUTDOOR)	3551A24001R	R
435512	COVER ASSEMBLY, TOP(OUTDOOR)	3551A30113C	R
437211	PANEL ASSEMBLY, FRONT(OUTDOOR)	3721A10109A	R
449480	ORIFICE	4948A20001A	R
449600	MOUNT,MOTOR	4960A10012B	R
447910	BARRIER ASSEMBLY, OUTDOOR	4791A10019D	R
550010	ACCESSORY ASSEMBLY, SINGLE(SOCKET)	5001A30059A	R
552111	TUBE ASSEMBLY, CAPILLARY	5211A11078B	R
552115	TUBE ASSEMBLY, CONDENSER IN	5211A13325A	R
552116	TUBE ASSEMBLY, REVERSING	5211A19012A	R
552117	TUBE ASSEMBLY, SUCTION(OUTDOOR)	5211A19014A	R
552119	TUBE ASSEMBLY,DISTRIBUTOR	5211A21210H	R
552204	VALVE, SOLENOID	5220A90002H	R
553000	HEATER, SUMP	2A00093R	R
554031	CONDENSER ASSEMBLY, BENT	5403A20168G	R
554160	COMPRESSOR	5416A90008G	R
559010	FAN ASSEMBLY, PROPELLER	5901A10033A	R
566000	SWITCH, PRESSURE(LOW)	3A02524F	R
566001	SWITCH, PRESSURE(HIGH)	3A02524L	R
649950	CONTROL BOX ASSEMBLY, OUTDOOR	4995A10196A	R
658740	REACTOR	5874A90001J	R
662000	FILTER(CIRC), EMC	6200J000129	R
666000	SWITCH, MAGNET	6600B000039	R
668711	PWB(PCB) ASSEMBLY, MAIN(OUTDOOR)	6871A10336C	R
668712	PWB(PCB) ASSEMBLY, SUB	6871A20133L	R
137213-1	PANEL ASSEMBLY, SIDE	3721A10110A	R
137213-2	PANEL ASSEMBLY, SIDE	3721A10111B	R
263230-1	THERMISTOR ASSEMBLY(AIR, COND OUT)	6323A20020H	R
263230-2	THERMISTOR ASSEMBLY(DISCHARGE, SUCTION)	6323A20020J	R
546810-1	MOTOR ASSEMBLY, OUTDOOR(UPPER)	4681AR1392Y	R
546810-2	MOTOR ASSEMBLY, OUTDOOR(LOWER)	4681AR1392Z	R
552203-1	VALVE, SERVICE(Ø15.88)	5220A20013A	R
552203-2	VALVE, SERVICE(Ø6.35)	2H02479D	R
561410-1	COIL ASSEMBLY, REVERSING VALVE	6141A20010K	R
561410-2	COIL ASSEMBLY, SOLENOID	6141A20031D	R
W0CZZ-1	CAPACITOR, DRAWING	3H00660P	R

Location No.	Description	Part No.			SVC CODE
		A7UW428FA0	A8UW488FA0	A9UW548FA0	
137212	PANEL, SIDE	3721A20229A	3721A20229A	3721A20229A	R
26230-1	THERMISTOR ASSEMBLY(AIR, COND OUT)	6323A20020H	6323A20020H	6323A20020H	R
26230-2	THERMISTOR ASSEMBLY(DISCHARGE, SUCTION)	6323A20020J	6323A20020J	6323A20020J	R
349600	MOUNT, MOTOR	4960AP1214F	4960AP1214F	4960AP1214F	R
430410	BASE ASSEMBLY, WELD[OUTDOOR]	3041A20047X	3041A20047X	3041A20047X	R
435301	GRILLE, DISCHARGE	3530AP1225D	3530AP1225D	3530AP1225D	R
435511	COVER ASSEMBLY, CONTROL(OUTDOOR)	3551A30014X	3551A30014X	3551A30014X	R
435512	COVER ASSEMBLY, TOP(OUTDOOR)	3550AP1213B	3550AP1213B	3550AP1213B	R
437210	PANEL ASSEMBLY, FRONT SUB	3720AP1212B	3720AP1212B	3720AP1212B	R
437212	PANEL ASSEMBLY, REAR(OUTDOOR)	3720AP1202C	3720AP1202C	3720AP1202C	R
447910	BARRIER ASSEMBLY, OUTDOOR	4791A20012J	4791A20012J	4791A20012J	R
546810	MOTOR ASSEMBLY	4681A20172B	4681A20172B	4681A20172B	R
548490	ACCUMULATOR ASSEMBLY(MECH)	4849A20070A	4849A20070A	4849A20070A	R
552112	TUBE ASSEMBLY, DISTRIBUTOR	5211A27004A	5211A27004A	5211A27004A	R
552113	TUBE ASSEMBLY, DISCHARGE (OUTDOOR)	5211A13332A	5211A13332A	5211A13332A	R
552115	TUBE ASSEMBLY, MENIFOLD(OUTDOOR)	5211A24116A	5211A24116A	5211A24116A	R
552116	TUBE ASSEMBLY, REVERSING	5211A23362A	5211A23362A	5211A23362A	R
55211G	TUBE ASSEMBLY, EXPANSION	5211A24126A	5211A24126A	5211A24126A	R
552117	TUBE ASSEMBLY, MENIFOLD(OUTDOOR), Ø19.05	5211A22018A	5211A22018A	5211A22018A	R
552118	TUBE ASSEMBLY, MENIFOLD(OUTDOOR), Ø9.52	5211A22018B	5211A22018B	5211A22018B	R
552203-1	VALVE, SERVICE(Ø19.05)	2A00499L	2A00499L	2A00499L	R
552203-2	VALVE, SERVICE(Ø9.52)	5220A20001E	5220A20001E	5220A20001E	R
552204	VALVE, SOLENOID(BODY)	5220A90002H	5220A90002H	5220A90002H	R
554031	CONDENSER ASSEMBLY, BENT	5403A20193A	5403A20193A	5403A20193A	R
554160	COMPRESSOR	5416A90008H	5416A90008H	5416A90008H	R
559010	FAN ASSEMBLY, PROPELLER	5901A10032A	5901A10032A	5901A10032A	R
561410	VALVE, EXPANSION BODY	6140A90001H	6140A90001H	6140A90001H	R
561411	COIL ASSEMBLY, EXPANSION	6141A30003M	6141A30003M	6141A30003M	R
561410-1	COIL ASSEMBLY, REVERSING VALVE	6141A20010K	6141A20010K	6141A20010K	R
561410-2	COIL ASSEMBLY, SOLENOID	6141A20031D	6141A20031D	6141A20031D	R
566000	SWITCH, PRESSURE(LOW)	3A02524F	3A02524F	3A02524F	R
566001	SWITCH, PRESSURE(HIGH)	3A02524L	3A02524L	3A02524L	R
649950	CONTROL BOX ASSEMBLY, OUTDOOR	4995A11010C	4995A11010B	4995A11010A	R
658740	REACTOR	5874A90001J	5874A90001J	5874A90001J	R
662000	FILTER(CIRC), EMC	6200J000133	6200J000133	6200J000133	R
666000	SWITCH, MAGNET	6600B000039	6600B000039	6600B000039	R
668510	CABLE ASSEMBLY	6851A20034B	6851A20034B	6851A20034B	R
668711	PWB(PCB) ASSEMBLY, MAIN(OUTDOOR)	6871A10336E	6871A10336B	6871A10336F	R
668712	PWB(PCB) ASSEMBLY, BLDC	6871A20892A	6871A20892A	6871A20892A	R
668713	PWB(PCB) ASSEMBLY, SUB	6871A20133N	6871A20133N	6871A20133N	R
W0FZZ	FUSE, DRAWING	0FZZA90001A	0FZZA90001A	0FZZA90001A	R



March, 2006
Printed in Korea

P/No.: MFL30233001