

LG Air Conditioner

SVC MANUAL(EXPLODED VIEW)

**MODEL : LVN180HV4 LVN181HV4
LVN240HV4 LVN241HV4
LVN360HV4 LVN361HV4
LVN420HV LVN480HV**

CAUTION

Before Servicing the unit, read the safety precautions in General SVC manual.
Only for authorized service personnel.

1. Specifications

Indoor Units

Model Name				LVN180HV4	LVN181HV4	LVN240HV4	LVN241HV4
Power Supply			V , Ø , Hz	208 / 230, 1, 60	208 / 230, 1, 60	208 / 230, 1, 60	208 / 230, 1, 60
Dimensions	Body	W x H x D	mm	457 x 1236 x 540	457 x 1236 x 540	457 x 1236 x 540	457 x 1236 x 540
		W x H x D	inch	18 x 48-11/16 x 21-1/4	18 x 48-11/16 x 21-1/4	18 x 48-11/16 x 21-1/4	18 x 48-11/16 x 21-1/4
Net Weight	Body		kg (lbs)	55.5 (122.3)	53 (116.8)	55.5 (122.3)	53 (116.8)
Heat Exchan-ger	(Row x Column x FPDm)		-	(3x24x18) x 2	(2x24x18) x 2	(3x24x18) x 2	(2x24x18) x 2
	Face Area		m² (ft²)	0.22 (2.37) x 2	0.22 (2.37) x 2	0.22 (2.37) x 2	0.22 (2.37) x 2
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Air Flow Rate	H / M / L	m³/min	18 / 16.5 / 13.5	18 / 16.5 / 13.5	20 / 18 / 13.5	20 / 18 / 13.5
		H / M / L	ft³/min	640 / 580 / 480	640 / 580 / 480	710 / 640 / 480	710 / 640 / 480
Fan Motor	Type		-	BLDC	ECM	BLDC	ECM
	Output		W x No.	198	250	198	250
Dehumidification Rate			ℓ/h (pts/h)	2 (4.2)	2 (4.2)	2.5 (5.3)	2.5 (5.3)
Sound Pressure Level		H / M / L	dB(A)	42 / 42 / 41	35 / 33 / 30	43 / 42 / 41	36 / 34 / 30
Sound Power Level		Max.	dB(A)	-	-	-	-
Piping Connect-ions	Liquid		mm(inch)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
	Gas		mm(inch)	Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 15.88 (5/8)
	Drain_Secondary & Primary(ID.)		mm(inch)	19.05 (3/4 FPT)	19.05 (3/4 FPT)	19.05 (3/4 FPT)	19.05 (3/4 FPT)
Safety Devices			-	Fuse	Fuse	Fuse	Fuse
Power and Communication Cable (included Earth)			No. x mm² (AWG)	4C X 0.75 (18)	4C X 0.75 (18)	4C X 0.75 (18)	4C X 0.75 (18)

Note :

- All data are based on the following conditions :
 - Cooling temperature : Indoor 26.7 °C (80 °F) DB / 19.4 °C (67 °F) WB
Outdoor 35 °C (95 °F) DB / 23.9 °C (75 °F) WB
 - Piping length : Interconnected pipe length = 7.5m (24.6 ft)
 - Difference limit of elevation (outdoor unit ~ indoor unit) is zero.
- Wiring cable size must comply with the applicable local and national code.
- Due to our policy of innovation some specifications may be changed without notification.
- Sound level values are measured at anechoic chamber.
Therefore, these values can be increased owing to ambient conditions during operation.

Model Name				LVN360HV4	LVN361HV4	LVN420HV	LVN480HV
Power Supply			V , Ø , Hz	208 / 230, 1, 60	208 / 230, 1, 60	208 / 230, 1, 60	208 / 230, 1, 60
Dimensions	Body	W x H x D	mm	635 x 1401 x 540	457 x 1236 x 540	635 x 1401 x 540	635 x 1401 x 540
		W x H x D	inch	25 x 55-3/16 x 21-1/4	18 x 48-11/16 x 21-1/4	25 x 55-3/16 x 21-1/4	25 x 55-3/16 x 21-1/4
Net Weight	Body		kg (lbs)	75 (165)	55.5 (122.3)	75 (165)	75 (165)
Heat Exchan- ger	(Row x Column x FPDm)		-	(3 x 30 x 18) x 2	(3 x 24 x 18) x 2	(3 x 30 x 18) x 2	(3 x 30 x 18) x 2
	Face Area		m² (ft²)	0.22 (2.37) x 2	0.22 (2.37) x 2	0.22 (2.37) x 2	0.22 (2.37) x 2
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Air Flow Rate	H / M / L	m³/min	31 / 28 / 25	28 / 25 / 22.6	35 / 31 / 28	40 / 35 /28
		H / M / L	ft³/min	1100 / 1000 / 900	990 / 880 / 800	1260 / 1100 / 1000	1400 / 1260 / 1000
Fan Motor	Type		-	BLDC	ECM	BLDC	BLDC
	Output		W x No.	400 x 1	250	400 x 1	400 x 1
Dehumidification Rate			ℓ/h (pts/h)	3.4 (7.2)	2.5 (5.3)	4.3 (9.1)	5.2 (11)
Sound Pressure Level		H / M / L	dB(A)	45 / 44 / 43	44 / 41 / 39	48 / 45 / 44	49 / 48 / 44
Sound Power Level		Max.	dB(A)	-	-	-	-
Piping Connect- ions	Liquid		mm(inch)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
	Gas		mm(inch)	Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 15.88 (5/8)
	Drain_Secondary & Primary(ID.)		mm(inch)	19.05 (3/4 FPT)	19.05 (3/4 FPT)	19.05 (3/4 FPT)	19.05 (3/4 FPT)
Safety Devices			-	Fuse	Fuse	Fuse	Fuse
Power and Communication Cable (included Earth)			No. x mm² (AWG)	4C X 0.75 (18)	4C X 0.75 (18)	4C X 0.75 (18)	4C X 0.75 (18)

Note :

- All data are based on the following conditions :
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2. Function Table

■ Indoor Units

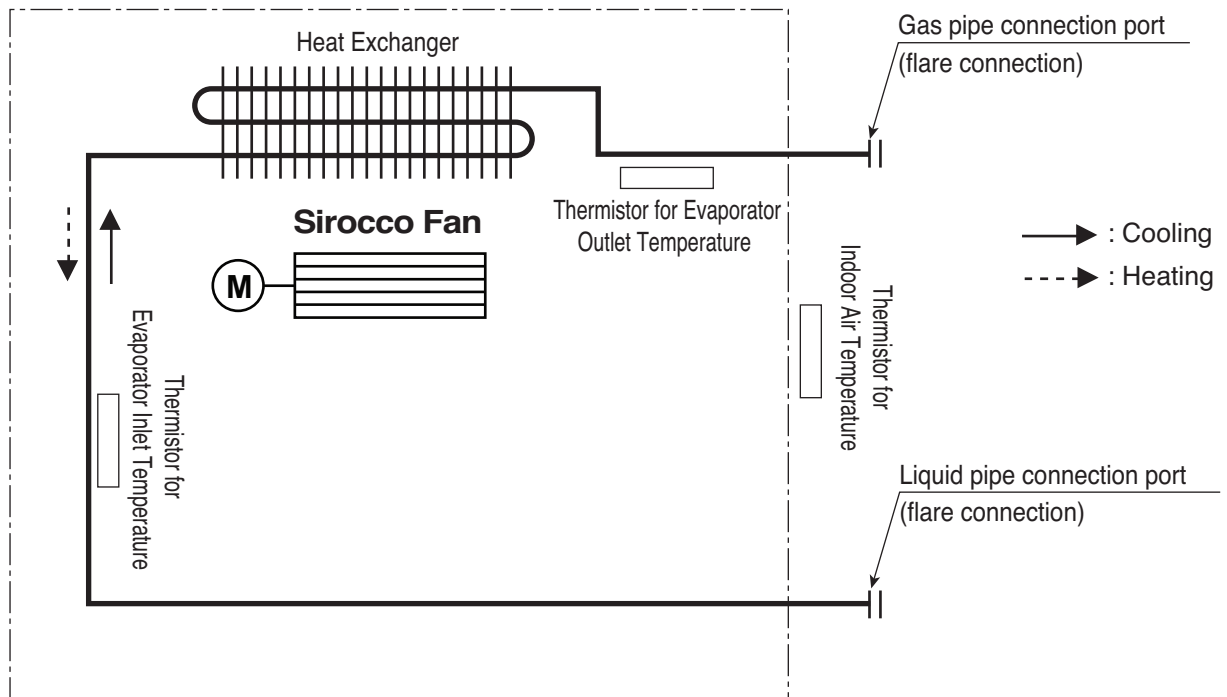
Category	Functions	LVN180HV4 / LVN240HV4 / LVN360HV4 / LVN420HV / LVN480HV4	LVN181HV4 / LVN241HV4 / LVN361HV4
Air flow	Air supply outlet	1	1
	Airflow direction control (left & right)	X	X
	Airflow direction control (up & down)	X	X
	Auto swing (left & right)	X	X
	Auto swing (up & down)	X	X
	Airflow steps (fan/cool/heat)	3 / 3 / 3	3 / 3 / 3
	Chaos wind(auto wind)	X	X
	Jet cool/heat	X	X
	Swirl wind	X	X
Air purifying	Triple filter (Deodorizing)	X	X
	Plasma air purifier	X	X
	Allergy Safe filter	X	X
	Long-life prefilter (washable)	X	X
Installation	Drain pump	X	X
	E.S.P. control	O	X
	Electric heater	ANEH***B*	ANEH***B*
	Aux heater Relay Kit	X	PRARH0
	High ceiling operation	X	X
	Auto Elevation Grille	X	X
Reliability	Hot start	O	O
	Self diagnosis	O	O
	Soft dry operation	O	O
Convenience	Auto changeover	O	O
	Auto cleaning	X	X
	Auto operation(artificial intelligence)	X	X
	Auto Restart	O	O
	Child lock	O	O
	Forced operation	X	X
	Group control	O	O
	Sleep mode	O	O
	Timer(on/off)	O	O
	Timer(weekly)	O	O
	Two thermistor control	O	O
Individual control	Standard Wired remote controller	PREMTB10U	PREMTB10U
	Deluxe wired remote controller	X	X
	Simple wired remote controller	PQRCH/V****	PQRCH/V****
	Simple Wired remote controller(for hotel use)	X	X
	Wireless remote controller*	PQWRHQ0FDB	PQWRHQ0FDB
Network function	General central controller (Non LGAP)	X	X
	Network Solution(LGAP) O	O	O
	Dry contact	O	O
	PI 485(for Indoor Unit)	X	X
Special function kit	Zone controller	X	X
	CTI(Communication transfer interface)	X	X
	Electronic thermostat	X	X
Others	Remote temperature sensor	PQRSTA0	PQRSTA0
	Group control wire	PZCWRCG3	PZCWRCG3
	Telecom shelter controller	X	X

Notes :

O : Applied, X : Not applied

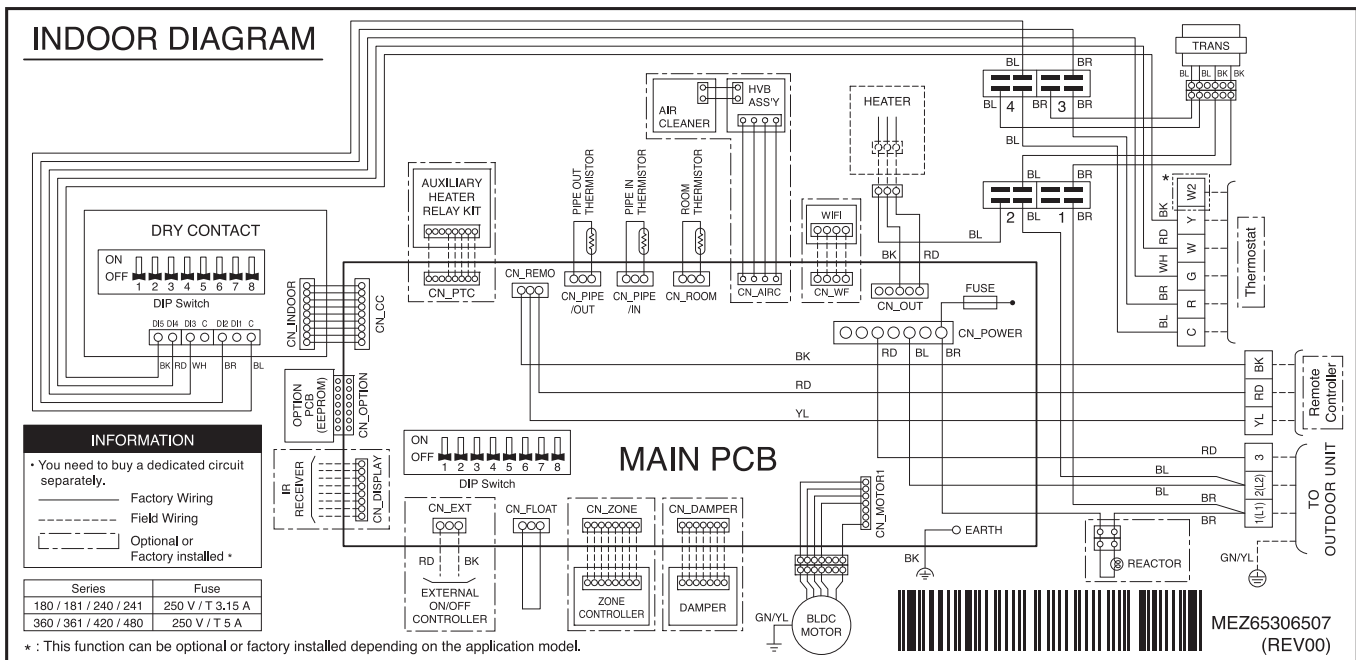
Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

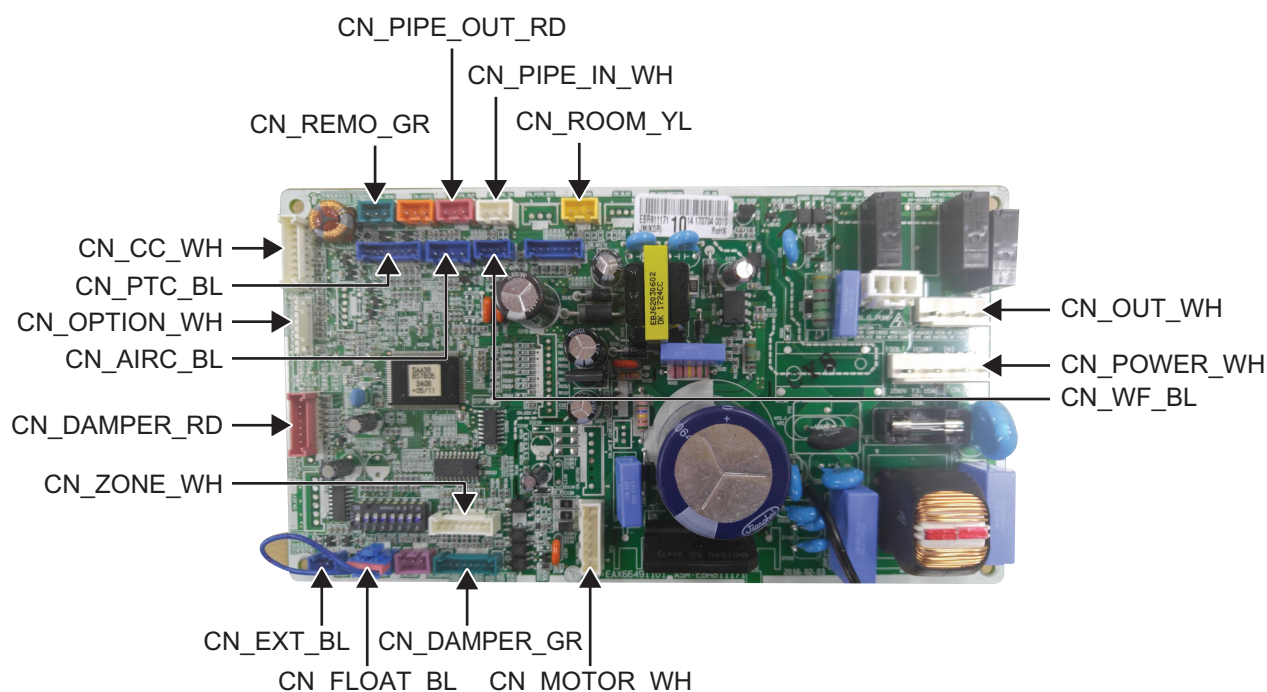
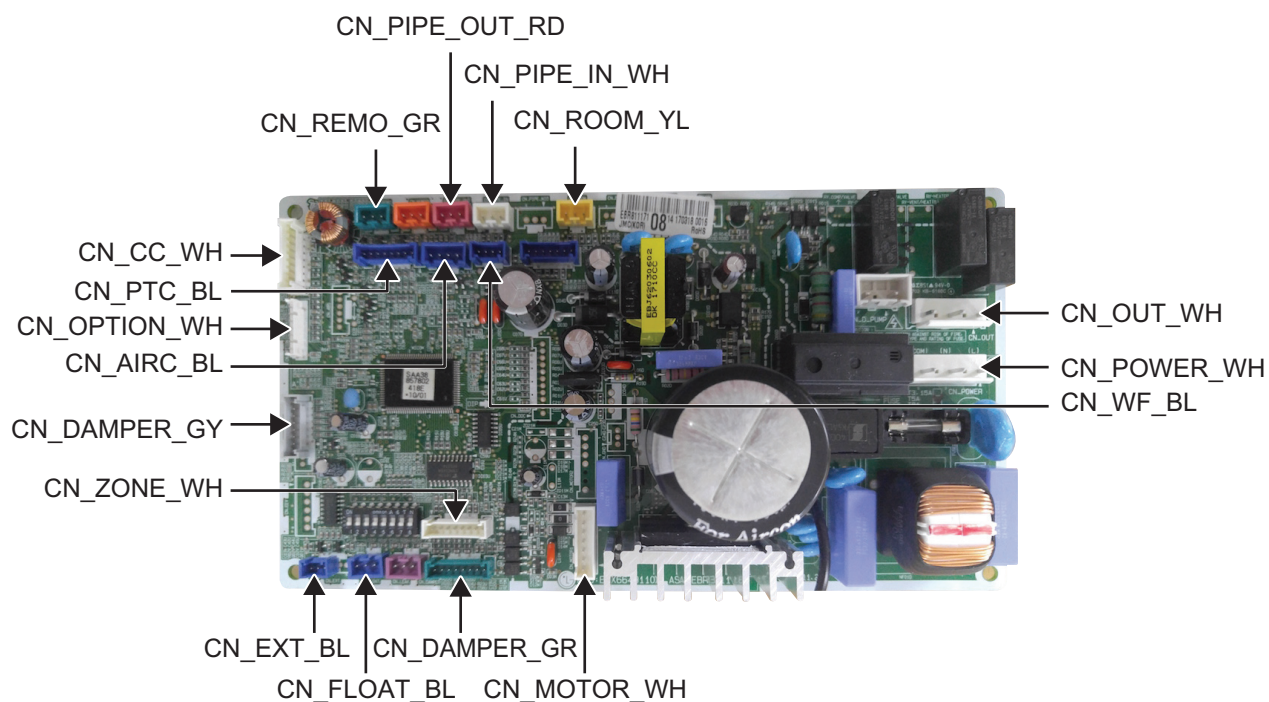
3. Piping Diagrams



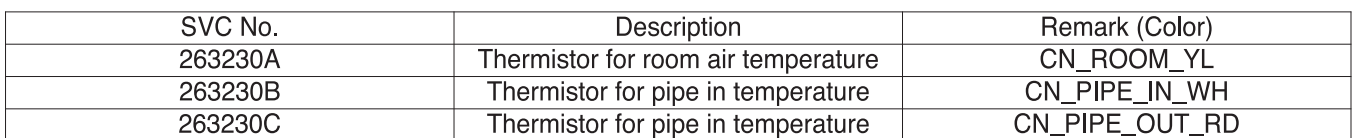
Description	PCB Connector
Thermistor for Indoor Air Temperature	CN_ROOM
Thermistor for Evaporator Inlet Temperature	CN_PIPE_IN
Thermistor for Evaporator Outlet Temperature	CN_PIPE_OUT

Notes : Description is expressed based on Cooling mode.



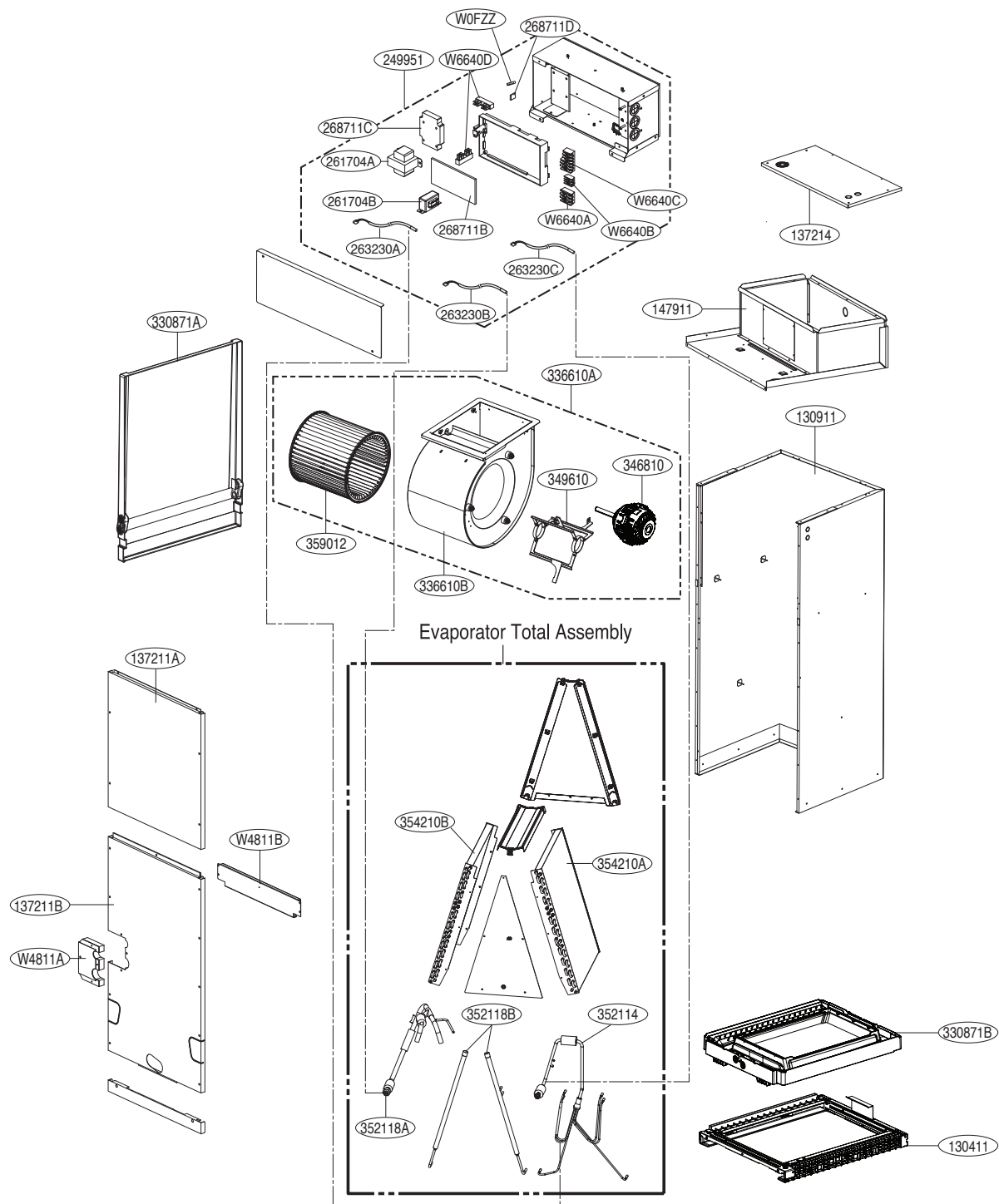
Main PCB**LVN180HV4 / LVN181HV4 / LVN240HV4 / LVN241HV4****LVN360HV4 / LVN361HV4 / LVN420HV / LVN480HV**

LVN180HV4 / LVN240HV4



Indoor Unit

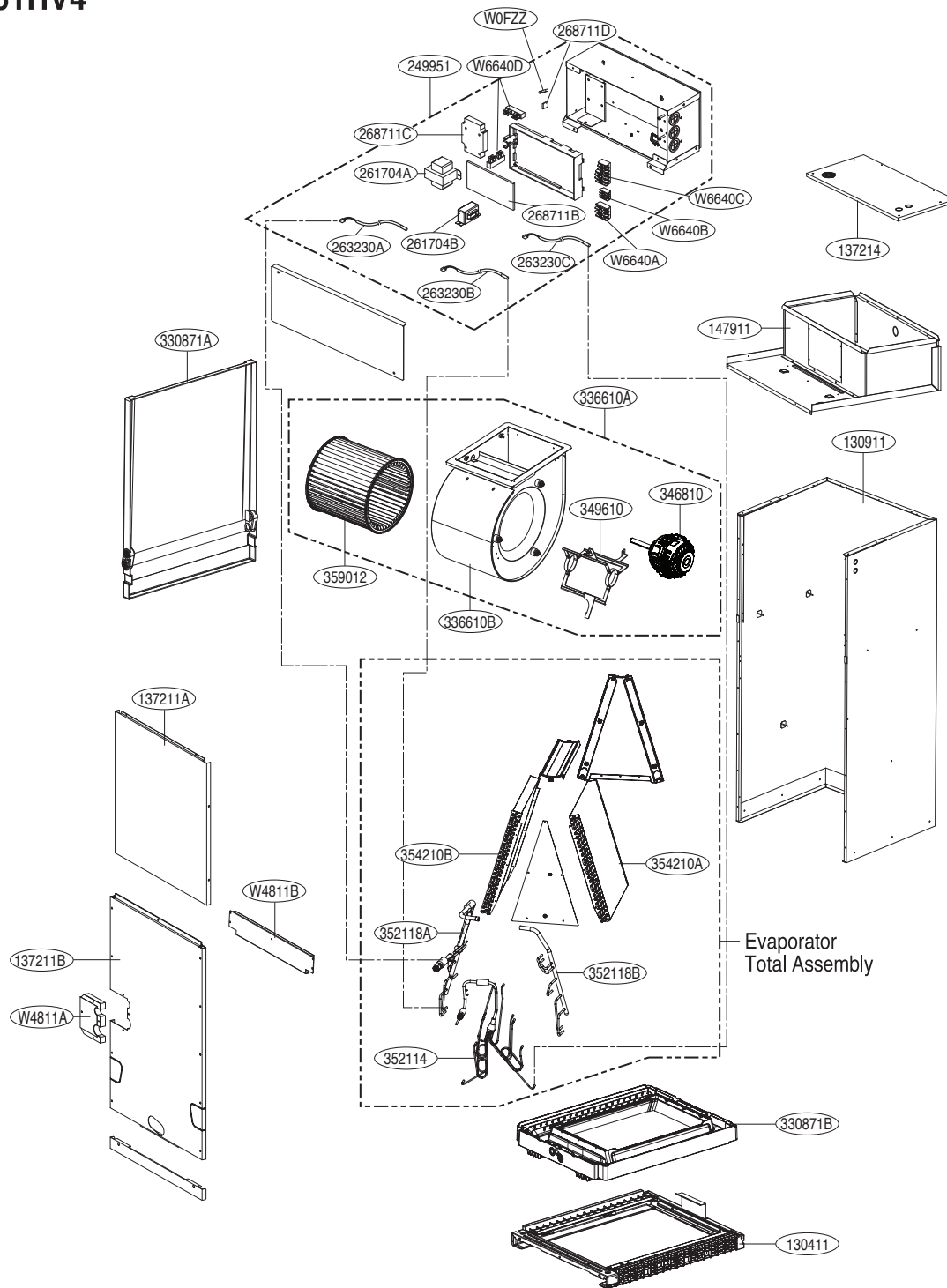
LVN181HV4 / LVN241HV4



SVC No.	Description	Remark (Color)
263230A	Thermistor for room air temperature	CN_ROOM_YL
263230B	Thermistor for pipe in temperature	CN_PIPE_IN_WH
263230C	Thermistor for pipe in temperature	CN_PIPE_OUT_RD

Indoor Unit

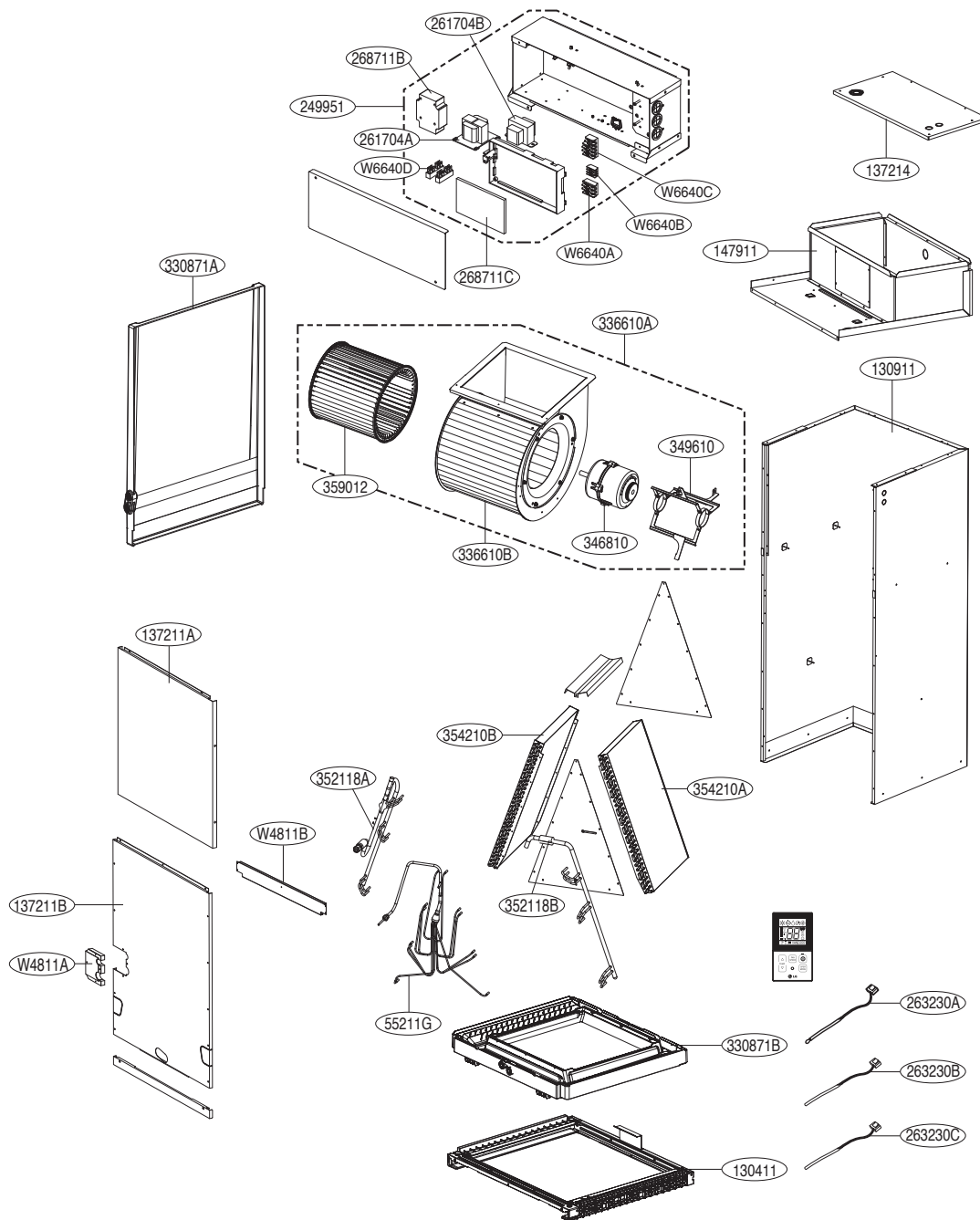
LVN361HV4



SVC No.	Description	Remark (Color)
263230A	Thermistor for room air temperature	CN_ROOM_YL
263230B	Thermistor for pipe in temperature	CN_PIPE_IN_WH
263230C	Thermistor for pipe in temperature	CN_PIPE_OUT_RD

Indoor Unit

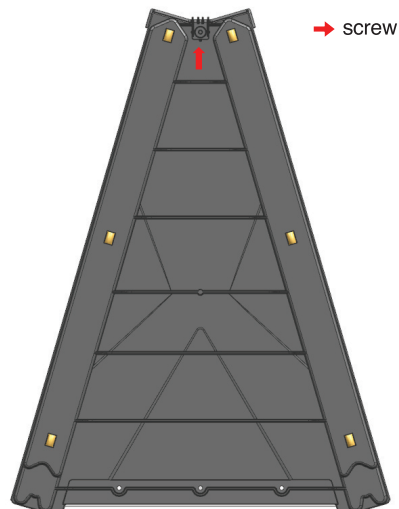
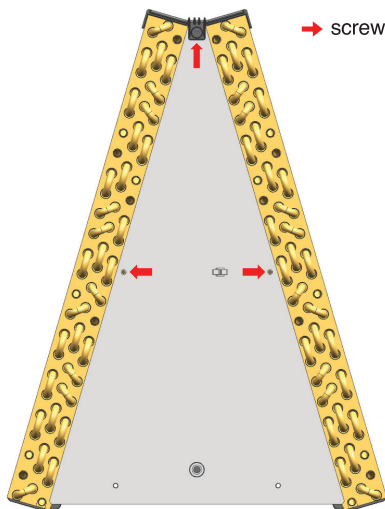
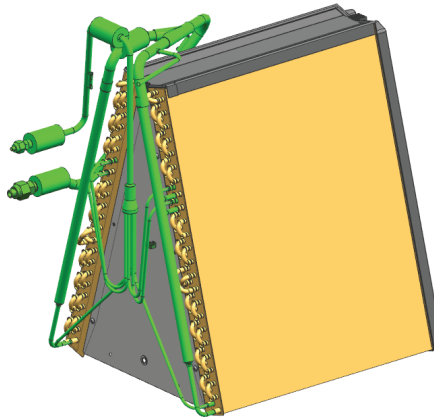
LVN360HV4 / LVN420HV / LVN480HV



SVC No.	Description	Remark (Color)
263230A	Thermistor for room air temperature	CN_ROOM_YL
263230B	Thermistor for pipe in temperature	CN_PIPE_IN_WH
263230C	Thermistor for pipe in temperature	CN_PIPE_OUT_RD

■ Evaporator Total Assembly Required parts

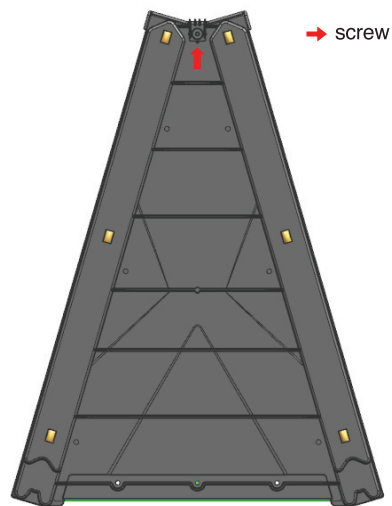
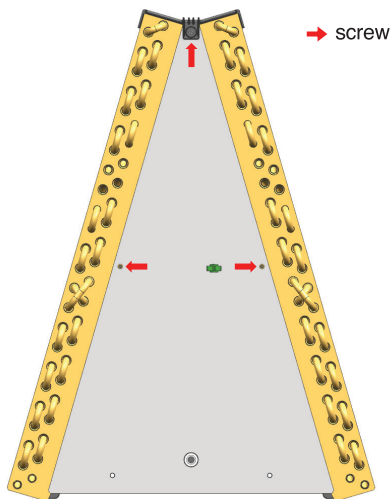
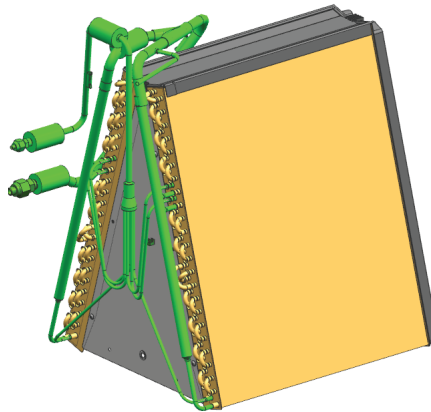
Model : LVN180HV4 / LVN240HV4 / LVN361HV4



Description	L/No.	Q'ty
Evaporator Assembly,First	354210A	1
Evaporator Assembly,First	354210B	1
Tube Assembly,Distributor	352114	1
Tube Assembly,Manifold(Indoor)	352118A	1
Tube Assembly,Manifold(Indoor)	352118B	1

■ Evaporator Total Assembly Required parts

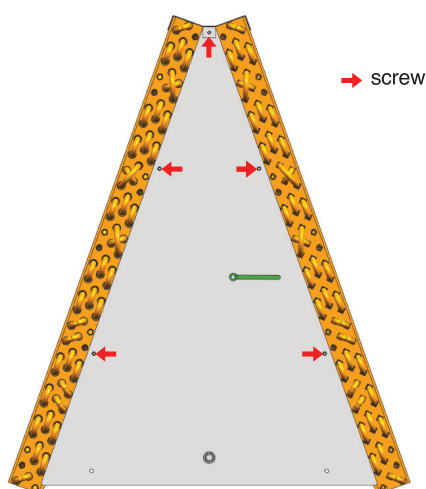
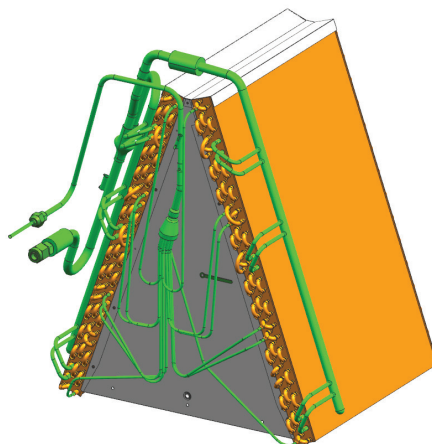
Model : LVN181HV4 / LVN241HV4



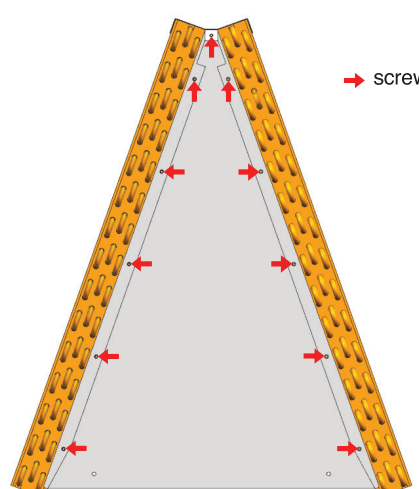
Description	L/No.	Q'ty
Evaporator Assembly,First	354210A	1
Evaporator Assembly,First	354210B	1
Tube Assembly,Distributor	352114	1
Tube Assembly,Manifold(Indoor)	352118A	1
Tube Assembly,Manifold(Indoor)	352118B	2

■ Evaporator Total Assembly Required parts

Model : LVN360HV4, LVN420HV, LVN480HV



→ screw



→ screw

Description	L/No.	Q'ty
Evaporator Assembly,First	354210A	1
Evaporator Assembly,First	354210B	1
Tube Assembly,Expansion	55211G	1
Tube Assembly,Manifold(Indoor)	352118A	1
Tube Assembly,Manifold(Indoor)	352118B	1



P/NO : MFL68082947