



Internal Use Only

<http://biz.lgservice.com>

Multi V Air Conditioner

SVC MANUAL(Exploded View)

MODEL : ARNU09GVEA2 ARNU12GVEA2
 ARNU18GVJA2 ARNU24GVJA2

CAUTION

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

1. Specification

Type			Ceiling & Floor	
Model		Unit	ARNU09GVEA2	ARNU12GVEA2
Cooling Capacity		kW	2.8	3.6
		kcal/h	2,400	3,100
		Btu/h	9,600	12,300
Heating Capacity		kW	3.2	4.0
		kcal/h	2,800	3,400
		Btu/h	10,900	13,600
Casing			-	-
Dimensions(WxDxH)	Body	mm	900x200x490	900x200x490
		inch	35.4x7.9x19.3	35.4x7.9x19.3
Coil	Rows x Columns x FPI		2x12x20	2x12x20
	Face Area	m ²	0.10	0.10
Fan	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output x Number	W	20	20
	Running Current	A	0.13	0.13
	Air Flow Rate(H/M/L)	CMM	7.6/6.9/6.2	9.2/7.6/6.9
		cfm	268/243/219	325/268/244
	Drive		Direct	Direct
Motor type		BLDC	BLDC	
Temperature Control			Microprocessor, Thermostat for cooling and heating	Microprocessor, Thermostat for cooling and heating
Sound Absorbing Thermal Insulation Material			Foamed polystyrene	Foamed polystyrene
Safety Device			Fuse	Fuse
Pipe Connections	Liquid Side	mm(inch)	Ø6.35(1/4)	Ø6.35(1/4)
	Gas Side	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)
	Drain Pipe(Internal Dia.)	mm	16	16
Net Weight		kg(lbs)	13.7(30.2)	13.7(30.2)
Noise Level(Sound Press, 1.5m, H/M/L)		dB(A)	36/32/28	38/36/30
Power Supply		Ø, V, Hz	1, 220 ~ 240, 50 1, 220, 60	1, 220 ~ 240, 50 1, 220, 60
Refrigerant Control			EEV	EEV
Power cable		mm ²	CV1.5 x 3C	CV1.5 x 3C
Transmission cable		mm ²	CVV-SB 1.25 x 2C	CVV-SB 1.25 x 2C
Color			Morning fog	Morning fog

Notes:-

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

2. Capacities are net capacities

3. Due to our policy of innovation some specifications may be changed without prior notification

4. To be added for more available Models

5. EEV : Electronic Expansion Valve

Conversion Formula

kcal/h= kW x 860
 Btu/h = kW x 3412
 cfm = m³/min x 35.3
 l/s = CMM x 1000/60

Type		Ceiling Suspended		
Model	Unit	ARNU18GVJA2	ARNU24GVJA2	
Cooling Capacity	kW	5.6	7.1	
	kcal/h	4,800	6,100	
	Btu/h	19,100	24,200	
Heating Capacity	kW	6.3	8.0	
	kcal/h	5,400	6,900	
	Btu/h	21,500	27,300	
Casing		Galvanized Steel Plate+Painting	Galvanized Steel Plate+Painting	
Dimensions(WxDxH)	Body	mm	950x220x650	
		inch	37.4x8.7x25.6	
Coil	Rows x Columns x FPI		3x14x19	
	Face Area	m ²	0.23	
Fan	Type		Sirocco Fan	
	Motor Output x Number	W	154	
	Running Current	A	0.40	
	Air Flow Rate(H/M/L)	CMM	16/ 14 /12	18/16/14
		cfm	565/495/424	636/566/495
	Drive		Direct	
Motor type		BLDC		
Temperature Control		Microprocessor, Thermostat for cooling and heating	Microprocessor, Thermostat for cooling and heating	
Sound Absorbing Thermal Insulation Material		Foamed polystrene	Foamed polystrene	
Safety Device		Fuse	Fuse	
Pipe Connections	Liquid Side	mm(inch)	Ø6.35(1/4)	
	Gas Side	mm(inch)	Ø12.7(1/2)	
	Drain Pipe(Internal Dia.)	mm	16	
Net Weight	kg(lbs)	24.6(54.2)	24.6(54.2)	
Noise Level(Sound Press, 1.5m, H/M/L)	dB(A)	42/40/37	43/41/39	
Power Supply	Ø, V, Hz	1, 220 ~ 240, 50	1, 220 ~ 240, 50	
		1, 220, 60	1, 220, 60	
Refrigerant Control		EEV	EEV	
Power cable	mm ²	CV1.5 x 3C	CV1.5 x 3C	
Transmission cable	mm ²	CVV-SB 1.25 x 2C	CVV-SB 1.25 x 2C	
Color		Morning fog	Morning fog	

Notes:-

1. Capacities are based on the following conditions:

- Cooling
 - Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
 - Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
 - Interconnecting Piping Length 7.5m
 - Level Difference of Zero
- Heating
 - Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
 - Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
 - Interconnecting Piping Length 7.5m
 - Level Difference of Zero

2. Capacities are net capacities

3. Due to our policy of innovation some specifications may be changed without prior notification

4. To be added for more available Models

5. EEV : Electronic Expansion Valve

Conversion Formula

kcal/h= kW x 860
 Btu/h = kW x 3412
 cfm = m³/min x 35.3
 l/s = CMM x 1000/60

2. List of Functions

Category	Function	ARNU09GVEA2, ARNU12GVEA2 ARNU18GVJA2, ARNU24GVJA2
Air flow	Air supply outlet	1
	Airflow direction control(left & right)	manual
	Airflow direction control(up & down)	auto
	Auto swing(left & right)	X
	Auto swing(up & down)	O
	Airflow steps(fan/cool/heat)	3/4/3
	Chaos swing	X
	Chaos wind(auto wind)	O
	Jet cool(Power wind)	O
	Swirl wind	-
Air purifying	Deodorizing filter	X
	Plasma air purifier	X
	Pre-filter(washable / anti-fungus)	O
Installation	Drain pump	X
	E.S.P. control	X
	Electric heater(operation)	X
	High ceiling operation	O
Reliability	Hot start	O
	Self diagnosis	O
	Soft dry operation	O
Convenience	Auto changeover	O(only heat recovery)
	Auto cleaning	X
	Auto operation(artificial intelligence)	O(only heat pump or cooling only)
	Auto restart operation	O
	Child lock	O
	Forced operation	O
	Group control	O
	Sleep mode	O
	Timer(on/off)	O
	Timer(weekly)	O
Two thermistor control	O	
Individual control	Standard wired remote controller	Accessory
	Wide Character wired remote controller	Accessory
	Picto wired remote controller	
	Deluxe wired remote controller	Accessory
	Simple wired remote controller	Accessory
	Wired remote controller(for hotel use)	Accessory
	Wireless remote controller(simple)	X
	Wireless LCD remote control	Accessory
Special function kit	Zone control	-
	CTIE	-
	Electro thermostat	-

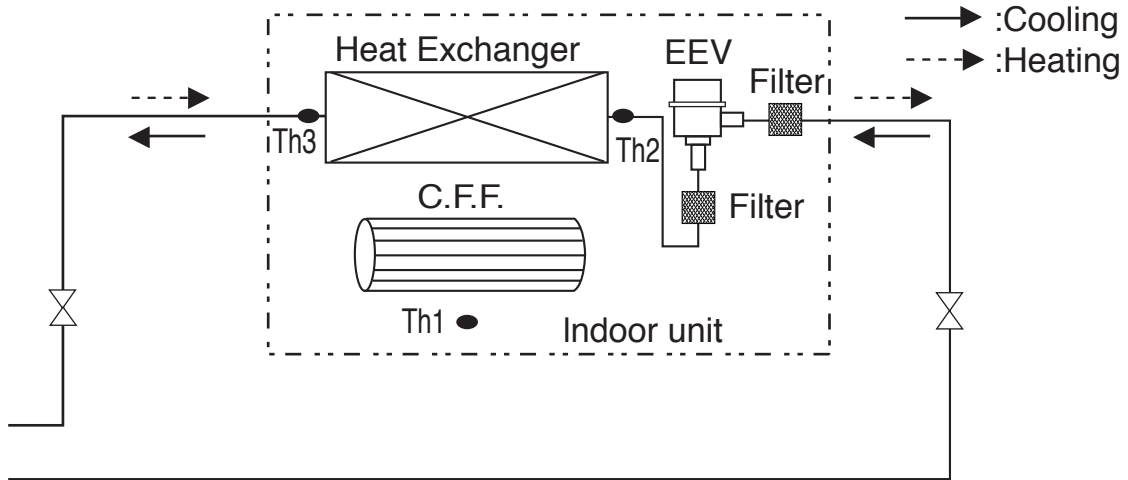
O : Applied X : Not applied - : No relation

Option : Model name & price are different according to options, and assembled in factory with main unit.

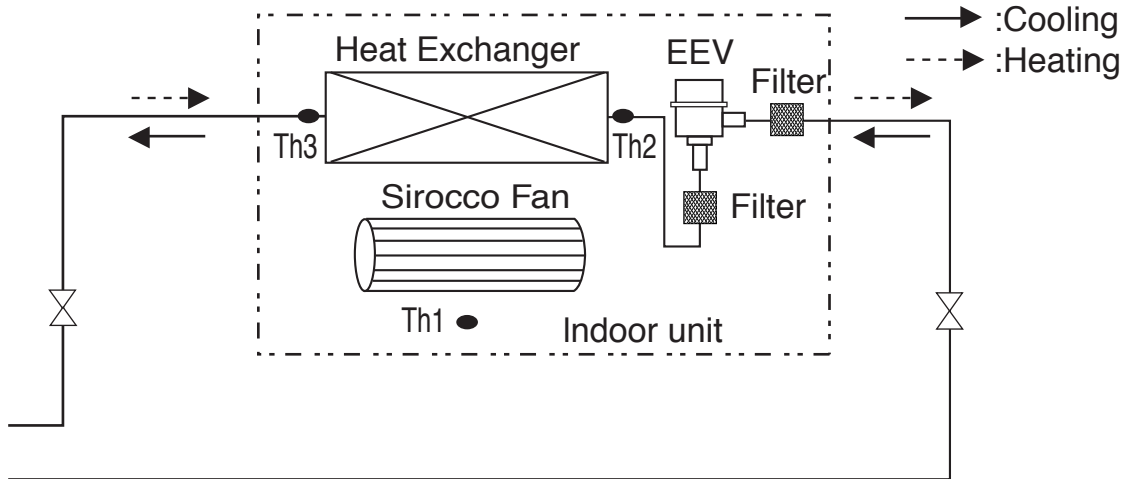
Accessory : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

3. Piping Diagrams

VE



VJ



Refrigerant pipe connection port diameter

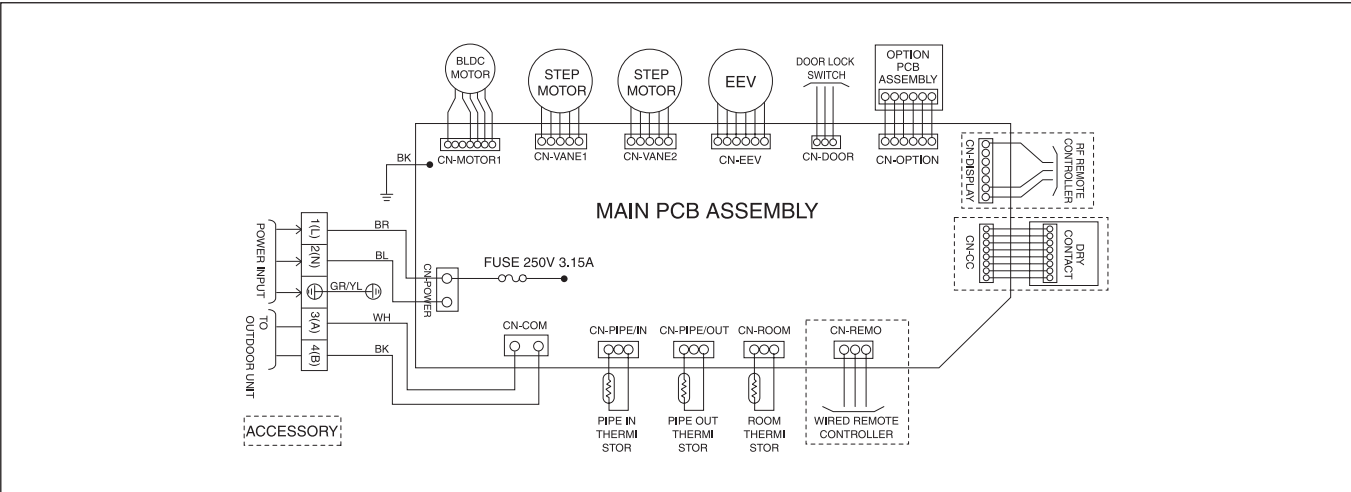
[unit: mm(inch)]

Model	Gas	Liquid
ARNU09GVEA2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU12GVEA2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU18GVJA2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU24GVJA2	Ø15.88(5/8)	Ø9.52(3/8)

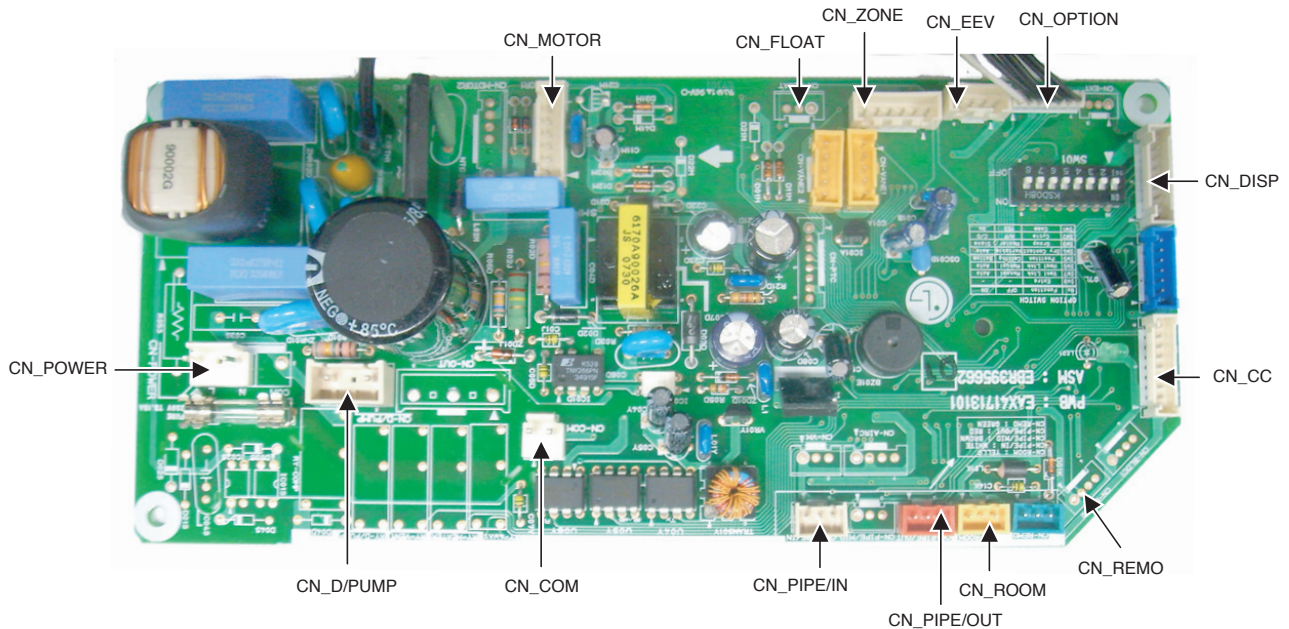
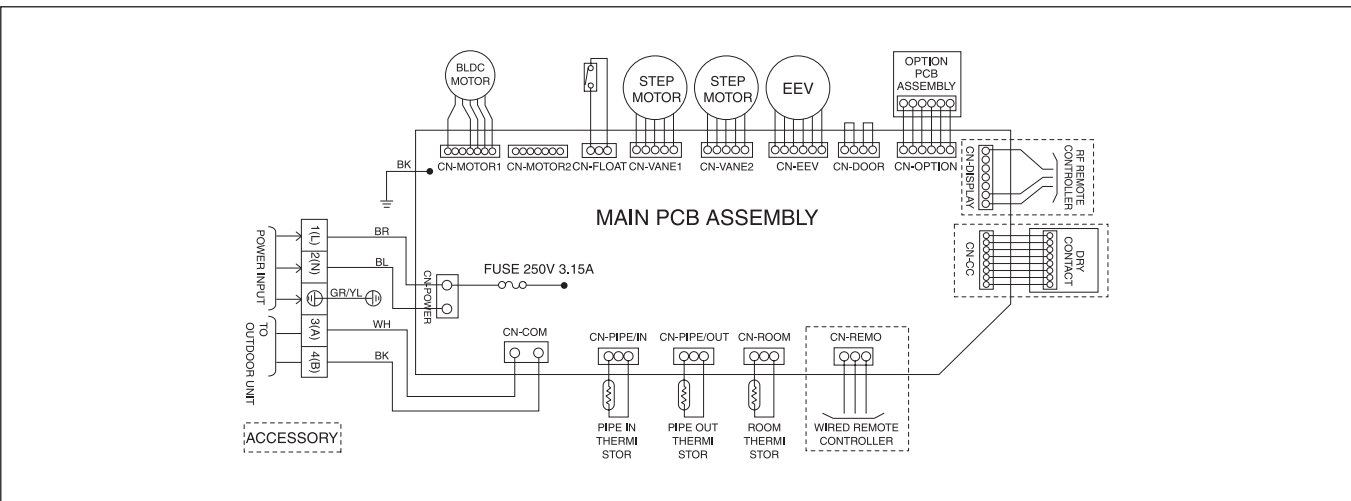
LOC.	Description
Th1	Room thermistor
Th2	Pipe in thermistor
Th3	Pipe out thermistor

4. Wiring Diagrams

VE Chassis

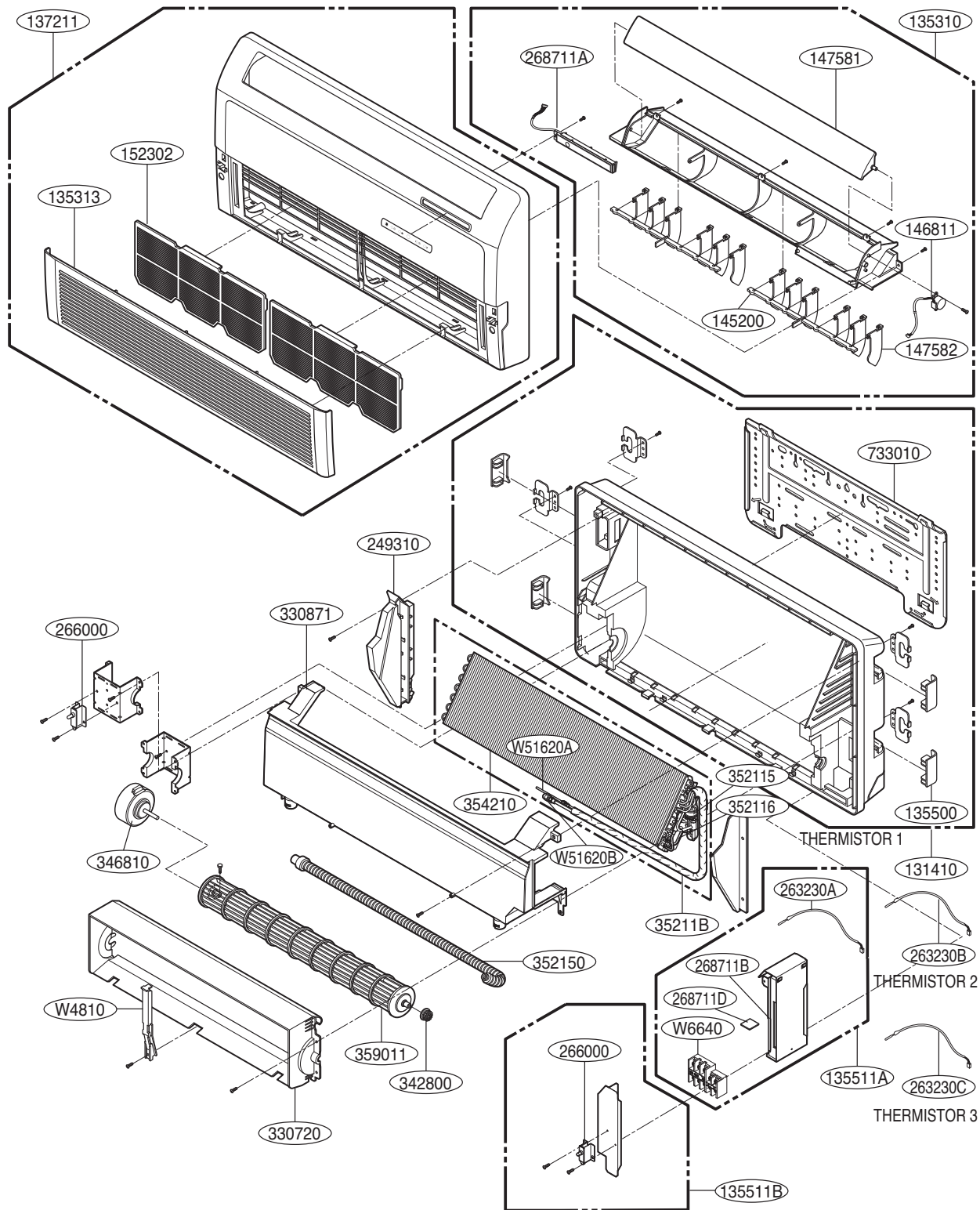


VJ Chassis



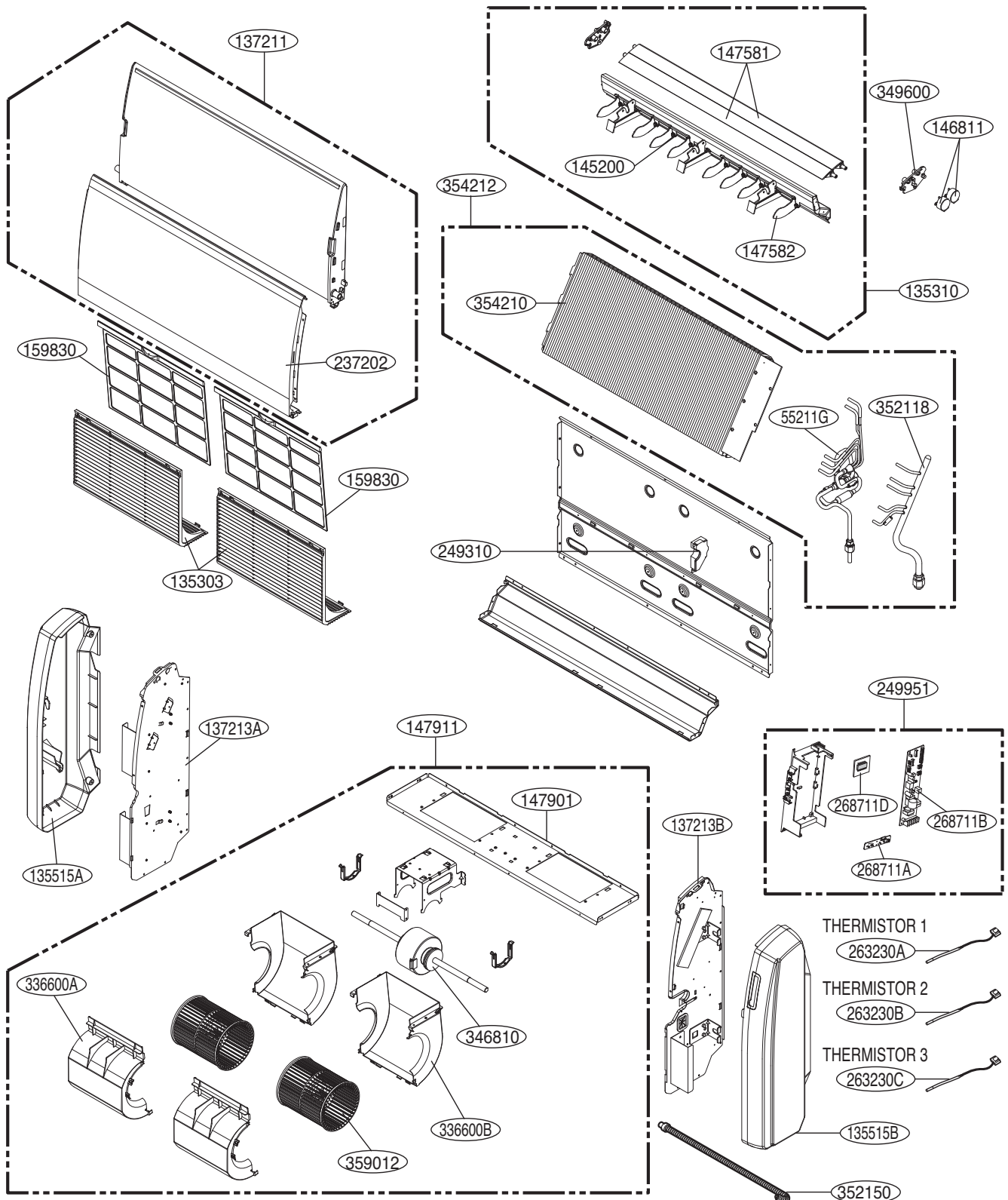
5. Exploded View

VE



Thermistor 1	263230A	Air	Housing color : yellow
Thermistor 2	263230B	Eva. in	Housing color : white
Thermistor 3	263230C	Eva. out	Housing color : red

VJ



Thermistor 1	263230A	Air	Housing color : yellow
Thermistor 2	263230B	Eva. in	Housing color : white
Thermistor 3	263230C	Eva. out	Housing color : red



P/NO : MFL42947608

NOVEMBER, 2009