



Internal Use Only

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Multi V Air Conditioner

SVC MANUAL(Exploded View)

**MODEL : ARNU053TR*2
ARNU073TR*2
ARNU093TR*2
ARNU123TR*2
ARNU153TQ*2
ARNU183TQ*2**

CAUTION

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

1. Specification

* Model Name
A:Basic, C:Plasma

Type			4 Way Ceiling Cassette		
Model	Unit	ARNU053TR*2	ARNU073TR*2	ARNU093TR*2	
Cooling Capacity	kW	1.6	2.2	2.8	
	kcal/h	1,400	1,900	2,400	
	Btu/h	5,500	7,500	9,600	
Heating Capacity	kW	1.8	2.5	3.2	
	kcal/h	1,500	2,200	2,800	
	Btu/h	6,100	8,500	10,900	
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions (WxDxH)	Body	mm	570 x 570 x 214	570 x 570 x 214	570 x 570 x 214
		inch	22.4 x 22.4 x 8.4	22.4 x 22.4 x 8.4	22.4 x 22.4 x 8.4
	Front Panel	mm	700 x 700 x 30	700 x 700 x 30	700 x 700 x 30
		inch	27.5 x 27.5 x 1.2	27.5 x 27.5 x 1.2	27.5 x 27.5 x 1.2
Coil	Rows x Columns x FPI	1 x 8 x 18	1 x 8 x 18	2 x 8 x 18	
	Face Area	m ² (ft ²)	0.21(2.26)	0.21(2.26)	0.21(2.26)
Fan	Type	Turbo Fan	Turbo Fan	Turbo Fan	
	Motor Output x Number	W	43x1	43x1	43x1
	Running Current	A	0.2	0.2	0.2
	Air Flow Rate(H/M/L)	CMM	7.5/7.0/6.6	7.5/7.0/6.6	8.0/7.5/7.1
		cfm	265/247/212	265/247/212	283/265/251
	Drive	Motor type	Direct	Direct	Direct
Temperature Control			Microprocessor, Thermostat for cooling and heating	Microprocessor, Thermostat for cooling and heating	Microprocessor, Thermostat for cooling and heating
Sound Absorbing Thermal Insulation Material			Foamed polystyrene	Foamed polystyrene	Foamed polystyrene
Safety Device			Fuse	Fuse	Fuse
Pipe Connections	Liquid Side	mm(inch)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)
	Gas Side	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)
	Drain(ID)	mm	25	25	25
Net Weight	Body	kg(lbs)	13.1(28.9)	13.1(28.9)	14.2(31.3)
	Packaged	kg(lbs)	15.4(33.9)	15.4(33.9)	16.5(36.3)
Noise Level(Sound Press, 1.5m, H/M/L)		dB ± 3	36/35/33	36/35/33	36/35/34
Power Supply		Ø, V, Hz	1, 220 ~ 240, 50 1, 220, 60	1, 220 ~ 240, 50 1, 220, 60	1, 220 ~ 240, 50 1, 220, 60
Refrigerant Control			EEV	EEV	EEV
Power cable			CV1.5 x 3C	CV1.5 x 3C	CV1.5 x 3C
Transmission cable			CVV-SB 1.25 x 2C	CVV-SB 1.25 x 2C	CVV-SB 1.25 x 2C
Panel Color			Morning fog	Morning fog	Morning fog
Panel Name(Accessory)			PT-UQC		

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

Conversion Formula

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

- Capacities are net capacities
- Due to our policy of innovation some specifications may be changed without prior notification
- To be added for more available Models
- EEV : Electronic Expansion Valve

* Model Name
A:Basic, C:Plasma

Type			4 Way Ceiling Cassette			
Model		Unit	ARNU123TR*2	ARNU153TQ*2	ARNU183TQ*2	
Cooling Capacity		kW	3.6	4.5	5.6	
		kcal/h	3,100	3,900	4,800	
		Btu/h	12,300	15,400	19,100	
Heating Capacity		kW	4.0	5.0	6.3	
		kcal/h	3,400	4,300	5,400	
		Btu/h	13,600	17,100	21,500	
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions (WxDxH)	Body	mm	570 x 570 x 214	570 x 570 x 256	570 x 570 x 256	
		inch	22.4 x 22.4 x 8.4	22.4 x 22.4 x 10.1	22.4 x 22.4 x 10.1	
	Front Panel	mm	700 x 700 x 30	700 x 700 x 30	700 x 700 x 30	
		inch	27.5 x 27.5 x 1.2	27.5 x 27.5 x 1.2	27.5 x 27.5 x 1.2	
Coil	Rows x Columns x FPI		2 x 8 x 18	2 x 10 x 18	2 x 10 x 18	
	Face Area		m ² (ft ²)	0.21(2.26)	0.27(2.90)	0.27(2.90)
Fan	Type		Turbo Fan	Turbo Fan	Turbo Fan	
	Motor Output x Number		W	43x1	43x1	43x1
	Running Current		A	0.2	0.2	0.2
	Air Flow Rate(H/M/L)	CMM		8.7/8.0/7.0	11.0/10.0/9.3	11.2/11.0/10.0
		cfm		307/283/247	388/353/328	396/388/353
	Drive			Direct	Direct	Direct
Motor type			BLDC	BLDC	BLDC	
Temperature Control			Microprocessor, Thermostat for cooling and heating	Microprocessor, Thermostat for cooling and heating	Microprocessor, Thermostat for cooling and heating	
Sound Absorbing Thermal Insulation Material			Foamed polystyrene	Foamed polystyrene	Foamed polystyrene	
Safety Device			Fuse	Fuse	Fuse	
Pipe Connections	Liquid Side	mm(inch)	Ø6.35(1/4)	Ø6.35(1/4)	Ø6.35(1/4)	
	Gas Side	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)	Ø12.7(1/2)	
	Drain(ID)	mm	25	25	25	
Net Weight	Body	kg(lbs)	14.2(31.3)	15.5(34.2)	15.5(34.2)	
	Packaged	kg(lbs)	16.5(36.3)	18.2(39.7)	18.0(39.7)	
Noise Level(Sound Press, 1.5m, H/M/L)		dB ± 3	36/35/34	37/36/35	38/37/36	
Power Supply		Ø, V, Hz	1, 220 ~ 240, 50 1, 220, 60	1, 220 ~ 240, 50 1, 220, 60	1, 220 ~ 240, 50 1, 220, 60	
Refrigerant Control			EEV	EEV	EEV	
Power cable			CV1.5 x 3C	CV1.5 x 3C	CV1.5 x 3C	
Transmission cable			CVV-SB 1.25 x 2C	CVV-SB 1.25 x 2C	CVV-SB 1.25 x 2C	
Panel Color			Morning fog	Morning fog	Morning fog	
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 - 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

Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m ³ /min x 35.3
l/s = CMM x 1000/60

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2. List of Functions

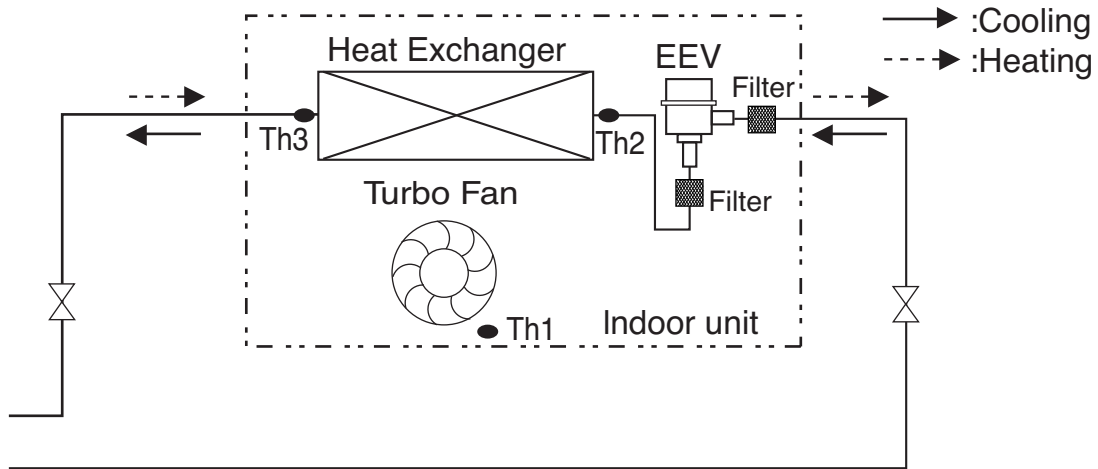
Category	Function	ARNU053TR*2 / ARNU073TR*2 / ARNU093TR*2 ARNU123TR*2 / ARNU153TQ*2 / ARNU183TQ*2
Air flow	Air supply outlet	4
	Airflow direction control(left & right)	-
	Airflow direction control(up & down)	auto
	Auto swing(left & right)	-
	Auto swing(up & down)	O
	Airflow steps(fan/cool/heat)	4/5/4
	Chaos swing	X
	Chaos wind(auto wind)	O
	Jet cool(Power wind)	O
	Swirl wind	O
Air purifying	Deodorizing filter	X
	Plasma air purifier	Option
	Prefilter(washable / anti-fungus)	O
Installation	Drain pump	O
	E.S.P. control	O
	Electric heater(operation)	X
	High ceiling operation	O
Reliability	Hot start	O
	Self diagnosis	O
	Soft dry operation	O
Convenience	Auto changeover	O(Heat recovery)
	Auto cleaning	X
	Auto operation(artificial intelligence)	O(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
Elevation Grill(Accessory)	X	
Individual control	Standard wired remote controller	Accessory
	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



Refrigerant pipe connection port diameter

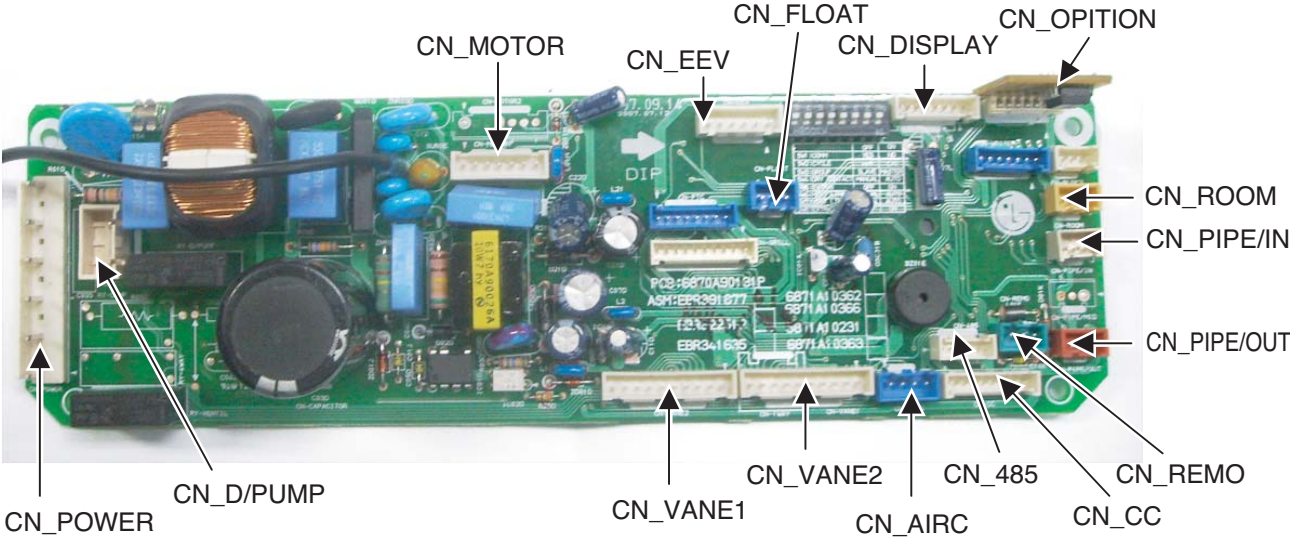
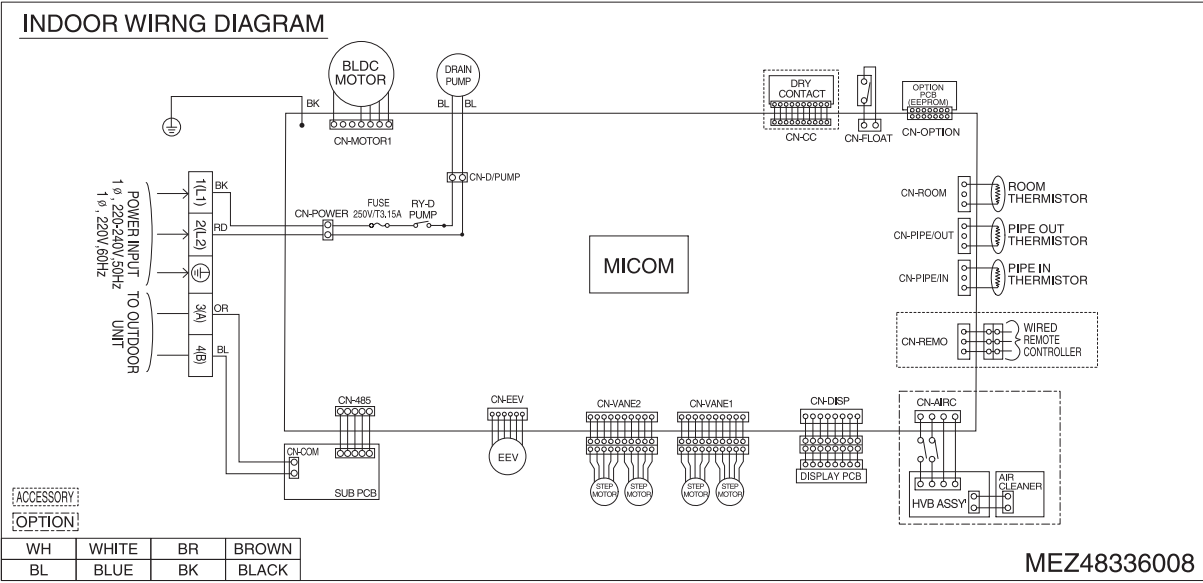
[unit: mm(inch)]

Model	Gas	Liquid
ARNU053TR*2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU073TR*2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU093TR*2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU123TR*2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU153TQ*2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU183TQ*2	Ø12.7(1/2)	Ø6.35(1/4)

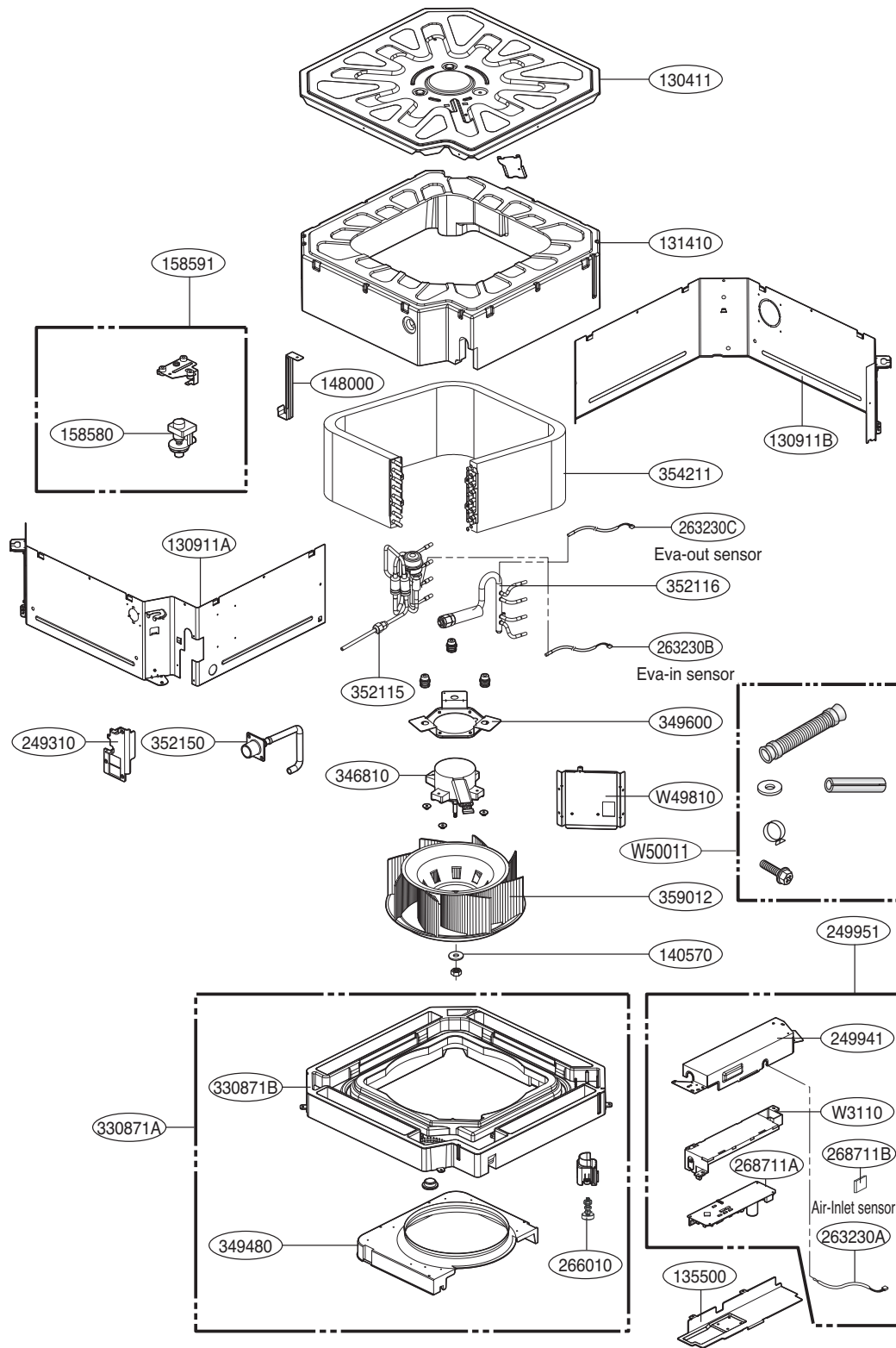
LOC.	Description
Th1	Room thermistor
Th2	Pipe in thermistor
Th3	Pipe out thermistor

4. Wiring Diagrams

TR/TQ Chassis

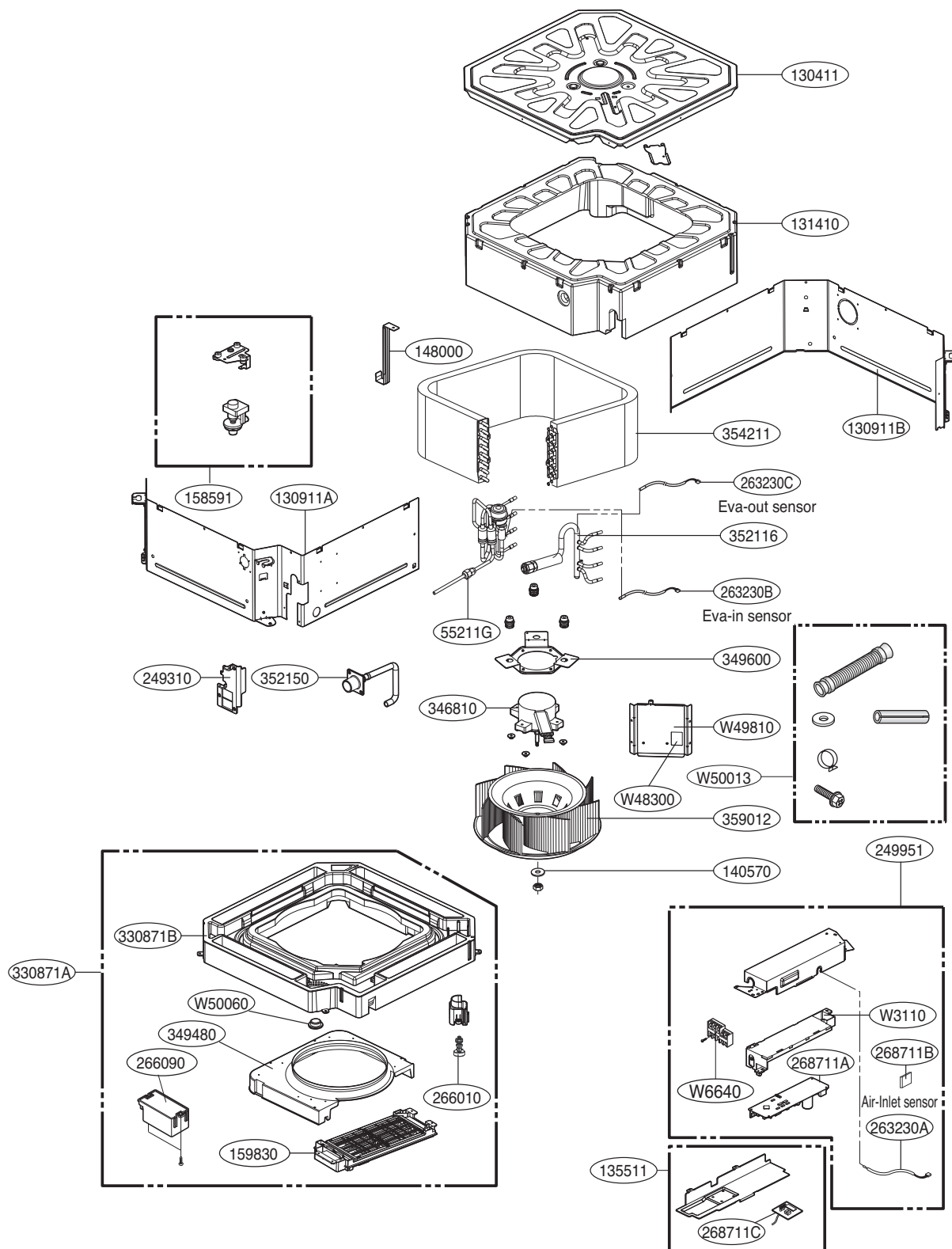


5. Exploded View TR/TQ(Standard model)



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

5. Exploded View TR/TQ(Plasma model)



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 : MFL42947623

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