



CONFIDENTIAL

Multi Air Conditioner

SVC MANUAL(Exploded View)

**MODEL : AMNQ09GTUA0 / AMNQ12GTUA0
AMNQ18GTTA0 / AMNQ24GTTA0
AMNC09GTUA0 / AMNC12GTUA0
AMNC24GTTA0
AMNW09GTUA0 / AMNW12GTUA0
AMNW18GTTA0**

CAUTION

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

1. Specification

Model			AMNQ09GTUA0 AMNC09GTUA0	AMNQ12GTUA0 AMNC12GTUA0
Power Supply	Φ , V, Hz		1, 220-240, 50	1, 220-240, 50
Cooling Capacity	kW		2.64	3.52
	Btu/h		9,000	12,000
Heating Capacity	kW		-	-
	Btu/h		-	-
Current	Max. Running Current	A	0.2	0.2
Fan	Motor Type		BLDC	BLDC
	Fan Type		Cross Flow Fan	Cross Flow Fan
	Motor Output(W) x No. of Unit		30 x 1	30 x 1
	Air Flow Rate (H / M / L)	CMM	7.5/7.3/6.8	8.1/7.4/7.0
		CFM	265/258/240	286/261/247
	Capacitor	μ F / Vac	-	-
Drive		Direct Drive	Direct Drive	
Coil	Row x Column x FPI		2R x 12C x 18	2R x 12C x 18
Dimensions (W x H x D)	Body	mm	860 x 132 x 450	860 x 132 x 450
		inch	33.8 x 5.2 x 17.7	33.8 x 5.2 x 17.7
	Front Panel	mm	1,160 x 34 x 500	1,160 x 34 x 500
		inch	45.7 x 1.3 x 19.7	45.7 x 1.3 x 19.7
Net Weight	Body	kg (lbs)	11.7(25.8)	11.7(25.8)
	Package	kg (lbs)	14.4(31.7)	14.4(31.7)
Sound Level (H / M / L)		dB(A) + 3	36/34/32	37/36/33
Piping Connections	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)
	Gas	mm(inch)	9.52(3/8)	9.52(3/8)
	Drain(OD/ID)	mm	Φ 32.0 / 25.0	Φ 32.0 / 25.0
Safety Devices			Fuse, Thermal Protector for Fan Motor	
Temperature Sensor			Thermistor	Thermistor
Refrigerant			R410A	R410A
Refrigerant Control			EEV(in Outdoor unit or BD)	EEV(in Outdoor unit or BD)
Connectable Outdoor Unit			Multi F / FDX series	Multi F / FDX series
Power and Transmission Interunit Cable		No. x mm ²	4 x 0.75(including earth)	4 x 0.75(including earth)

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
- 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

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

Model			AMNQ18GTTA0	AMNQ24GTTA0 AMNC24GTTA0
Power Supply		Φ, V, Hz	1, 220-240, 50	1, 220-240, 50
Cooling Capacity		kW	5.28	7.03
		Btu/h	18,000	24,000
Heating Capacity		kW	-	-
		Btu/h	-	-
Current	Max. Running Current	A	0.31	0.31
Fan	Motor Type		BLDC	BLDC
	Fan Type		Cross Flow Fan	Cross Flow Fan
	Motor Output(W) x No. of Unit		30 x 1	30 x 1
	Air Flow Rate (H / M / L)	CMM	13.3/11.8/10.8	14.0/13.3/11.8
		CFM	470/417/381	494/470/417
	Capacitor	μF / Vac	-	-
Drive		Direct Drive	Direct Drive	
Coil	Row x Column x FPI		2R x 12C x 18	2R x 12C x 18
Dimensions (W x H x D)	Body	mm	1,180 x 132 x 450	1,180 x 132 x 450
		inch	46.5 x 5.2 x 17.7	46.5 x 5.2 x 17.7
	Front Panel	mm	1,480 x 34 x 500	1,480 x 34 x 500
		inch	58.3 x 1.3 x 19.7	58.3x 1.3 x 19.7
Net Weight	Body	kg (lbs)	14.5(32.0)	14.5(32.0)
	Package	kg (lbs)	19.4(42.8)	19.4(42.8)
Sound Level (H / M / L)		dB(A) + 3	41 / 39 / 36	44 / 41 / 39
Piping Connections	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)
	Gas	mm(inch)	12.70(1/2)	12.70(1/2)
	Drain(OD/ID)	mm	Ø32.0 / 25.0	Ø32.0 / 25.0
Safety Devices			Fuse, Thermal Protector for Fan Motor	
Temperature Sensor			Thermistor	Thermistor
Refrigerant			R410A	R410A
Refrigerant Control			EEV(in Outdoor unit or BD)	EEV(in Outdoor unit or BD)
Connectable Outdoor Unit			Multi F / FDX series	Multi F / FDX series
Power and Transmission Interunit Cable		No. x mm ²	4 x 0.75(including earth)	4 x 0.75(including earth)

Notes:-

1. Capacities are based on the following conditions:

- Cooling
 - Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
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 - 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

Model			AMNW09GTUA0	AMNW12GTUA0
Power Supply		Φ , V , Hz	1, 220-240, 50	1, 220-240, 50
Cooling Capacity		kW	2.64	3.52
		Btu/h	9,000	12,000
Heating Capacity		kW	2.93	3.87
		Btu/h	10,000	13,200
Current	Max. Running Current	A	0.2	0.2
Fan	Motor Type		BLDC	BLDC
	Fan Type		Cross Flow Fan	Cross Flow Fan
	Motor Output(W) x No. of Unit		30 x 1	30 x 1
	Air Flow Rate (H / M / L)	CMM	7.5/7.3/6.8	8.1/7.4/7.0
		CFM	265/258/240	286/261/247
	Capacitor	μF / Vac	-	-
Drive		Direct Drive	Direct Drive	
Coil	Row x Column x FPI		2R x 12C x 18	2R x 12C x 18
Dimensions (W x H x D)	Body	mm	860 x 132 x 450	860 x 132 x 450
		inch	33.8 x 5.2 x 17.7	33.8 x 5.2 x 17.7
	Front Panel	mm	1,160 x 34 x 500	1,160 x 34 x 500
		inch	45.7 x 1.3 x 19.7	45.7 x 1.3 x 19.7
Net Weight	Body	kg (lbs)	11.7(25.8)	11.7(25.8)
	Package	kg (lbs)	14.4(31.7)	14.4(31.7)
Sound Level (H / M / L)		dB(A) + 3	36/34/32	37/36/33
Piping Connections	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)
	Gas	mm(inch)	9.52(3/8)	9.52(3/8)
	Drain(OD/ID)	mm	Ø32.0 / 25.0	Ø32.0 / 25.0
Safety Devices			Fuse, Thermal Protector for Fan Motor	
Temperature Sensor			Thermistor	Thermistor
Referigerant			R410A	R410A
Referigerant Control			EEV(in Outdoor unit or BD)	EEV(in Outdoor unit or BD)
Connectable Outdoor Unit			Multi F / FDX series	Multi F / FDX series
Power and Transmission Interunit Cable		No. x mm ²	4 x 0.75(including earth)	4 x 0.75(including earth)

Notes:-

1. Capacities are based on the following conditions:

- | | |
|---------|---|
| Cooling | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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

Model			AMNW18GTTA0
Power Supply		Φ , V , Hz	1, 220-240, 50
Cooling Capacity		kW	5.28
		Btu/h	18,000
Heating Capacity		kW	5.28
		Btu/h	18,000
Current	Max. Running Current	A	0.31
Fan	Motor Type		BLDC
	Fan Type		Cross Flow Fan
	Motor Output(W) x No. of Unit		30 x 1
	Air Flow Rate (H / M / L)	CMM	13.3/11.8/10.8
		CFM	470/417/381
	Capacitor	μF / Vac	-
Drive		Direct Drive	
Coil	Row x Column x FPI		2R x 12C x 18
Dimensions (W x H x D)	Body	mm	1,180 x 132 x 450
		inch	46.5 x 5.2 x 17.7
	Front Panel	mm	1,480 x 34 x 500
		inch	58.3 x 1.3 x 19.7
Net Weight	Body	kg (lbs)	14.5(32.0)
	Package	kg (lbs)	19.4(42.8)
Sound Level (H / M / L)		dB(A) + 3	45 / 42 / 39
Piping Connections	Liquid	mm(inch)	6.35(1/4)
	Gas	mm(inch)	12.70(1/2)
	Drain(OD/ID)	mm	Ø32.0 / 25.0
Safety Devices			Fuse, Thermal Protector for Fan Motor
Temperature Sensor			Thermistor
Referigerant			R410A
Referigerant Control			EEV(in Outdoor unit or BD)
Connectable Outdoor Unit			Multi F / FDX series
Power and Transmission Interunit Cable		No. x mm ²	4 x 0.75(including earth)

Notes:-

1. Capacities are based on the following conditions:

- Cooling
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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

◆ Basic functions of Indoor Unit

Category	Functions	AMNQ09GTUA0 / AMNQ12GTUA0 AMNQ18GTUA0 / AMNQ24GTUA0 AMNC09GTUA0 / AMNC12GTUA0 AMNC24GTUA0
Air flow	Air supply outlet	1
	Airflow direction control (left & right)	Auto
	Airflow direction control (up & down)	Auto
	Auto swing (left & right)	O
	Auto swing (up & down)	O
	Airflow steps (fan/cool/heat)	4 / 5 / -
	Chaos wind(auto wind)	O
	Jet cool/heat	O / X
Air purifying	Swirl wind	X
	Triple filter (Deodorizing)	X
	Air Purifier	O
	Allergy Safe filter	X
Installation	Long-life prefilter (washable)	O
	Drain pump	O
	E.S.P. control*	O
	Electric heater	X
Reliability	High ceiling operation*	O
	Hot start	X
Convenience	Self diagnosis	O
	Auto changeover	X
	Auto cleaning	O
	Auto operation(artificial intelligence)	O
	Auto Restart	O
	Child lock*	O
	Forced operation	O
	Group control*	O
	Sleep mode	O
	Timer(on/off)	O
	Timer(weekly)*	O
	Two thermistor control*	O
Special Functions	Auto Elevation Grille	X
	Wi-Fi	O (Accessory)
Comes with product	Humidity Control	X
	Wireless Remote Controller	O
Network Solution(LGAP)	Wired Remote Controller	X
		O

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.

◆ Basic functions of Indoor Unit

Category	Functions	AMNW09GTUA0 / AMNW12GTUA0 AMNW18GTTA0
Air flow	Air supply outlet	1
	Airflow direction control (left & right)	Auto
	Airflow direction control (up & down)	Auto
	Auto swing (left & right)	O
	Auto swing (up & down)	O
	Airflow steps (fan/cool/heat)	4 / 5 / 4
	Chaos wind(auto wind)	O
	Jet cool/heat	O / X
	Swirl wind	X
Air purifying	Triple filter (Deodorizing)	X
	Air Purifier	O
	Allergy Safe filter	X
	Long-life prefilter (washable)	O
Installation	Drain pump	O
	E.S.P. control*	O
	Electric heater	X
	High ceiling operation*	O
Reliability	Hot start	O
	Self diagnosis	O
Convenience	Auto changeover	X
	Auto cleaning	O
	Auto operation(artificial intelligence)	O
	Auto Restart	O
	Child lock*	O
	Forced operation	O
	Group control*	O
	Sleep mode	O
	Timer(on/off)	O
	Timer(weekly)*	O
	Two thermistor control*	O
Auto Elevation Grille	X	
Special Functions	Wi-Fi	O (Accessory)
	Humidity Control	X
Comes with product	Wireless Remote Controller	O
	Wired Remote Controller	X
Network Solution(LGAP)		O

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.

◆ Network solution Accessory List

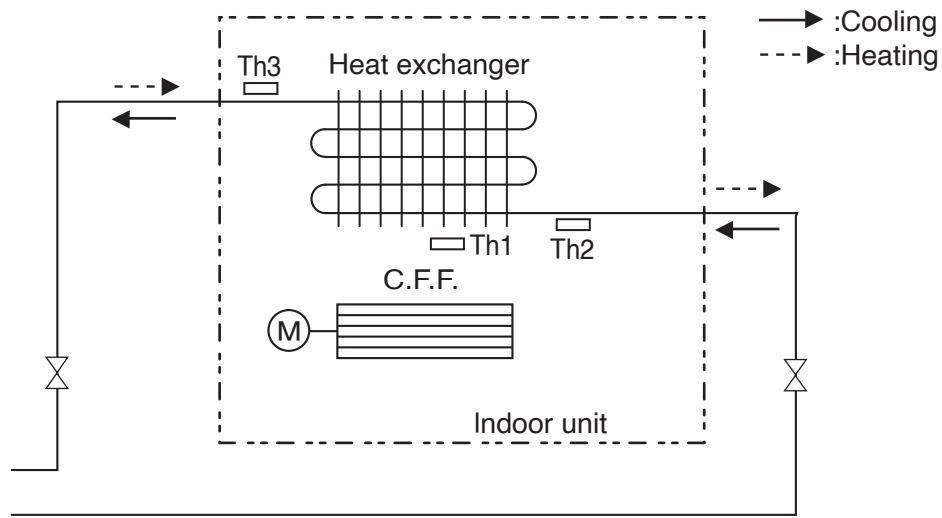
Category		Product	Remark	AMNQ09GTUA0 / AMNQ12GTUA0 AMNQ18GTUA0 / AMNQ24GTUA0 AMNC09GTUA0 / AMNC12GTUA0 AMNC18GTUA0 AMNW09GTUA0 / AMNW12GTUA0 AMNW18GTUA0
Wireless Remote Controller		PQWRCQ0FDB PQWRHQ0FDB	PQWRCQ0FDB (Cooling Only) PQWRHQ0FDB (Heat Pump)	○
Wired Remote Controller	Simple	PQRCVCL0Q(W)	Simple	○
		PQRCHCA0Q(W)	for Hotel	○
	Standard	PREMTB001	Standard (White)	○
		PREMTBB01	Standard (Black)	○
PREMTB100**		New Standard (White)	○	
Premium	PREMTA000(A/B)	Premium	○	
Dry contact	Simple Contact	PDRYCB000	Simple Dry Contact	○
		PDRYCB400	2 Points Dry Contact (For Setback)	○
	Communication type	PDRYCB300	-	○
		PDRYCB500	Dry Contact For Modbus	○
Gateway	IDU PI485	PHNFP14A0	Connected with the Indoor Units	X
		PSNFP14A0	Connected with the Indoor Units	X
ETC	Remote temperature sensor	PQRSTA0	-	○
	Zone controller	ABZCA	-	X
	Electronic thermostat	AQETC	-	X
	CTI (Communication transfer interface)	PKFC0	-	X
	CO ₂ Sensor	PES-C0RV0	For ERV, ERV DX Indoor units	X
	Group control wire	PZCWRCG3	0.25m	○
	2-Remo Control Wire	PZCWRC2	0.25m	○
	Extension Wire	PZCWRC1	10m	○
	Wi-Fi Controller*	PWFMDD200	-	○
Human detecting sensor	PTVSMA0	-	X	

○ : 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

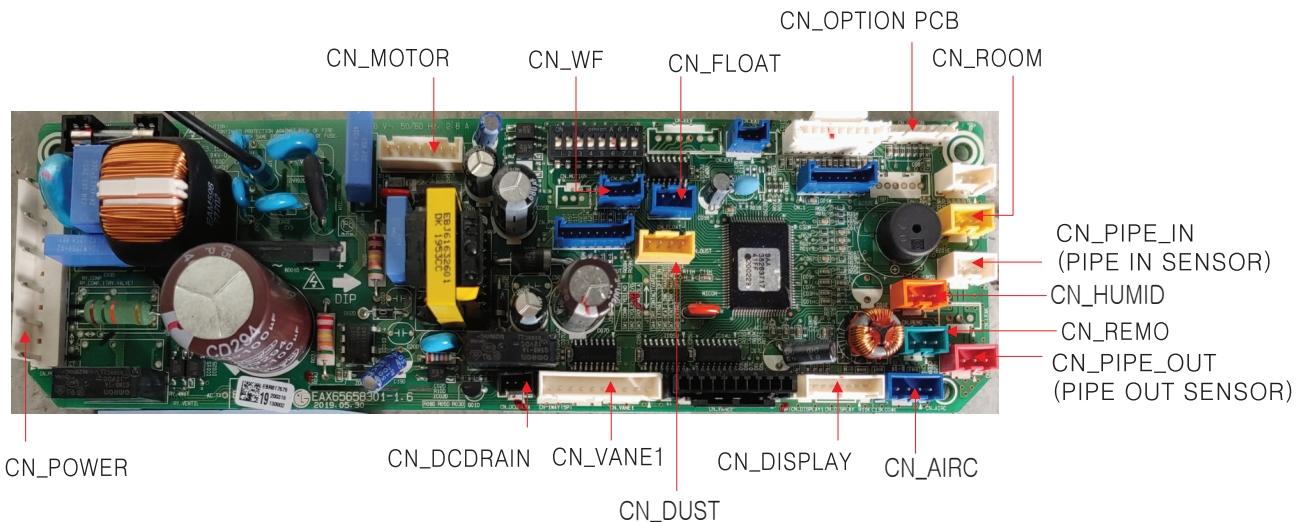
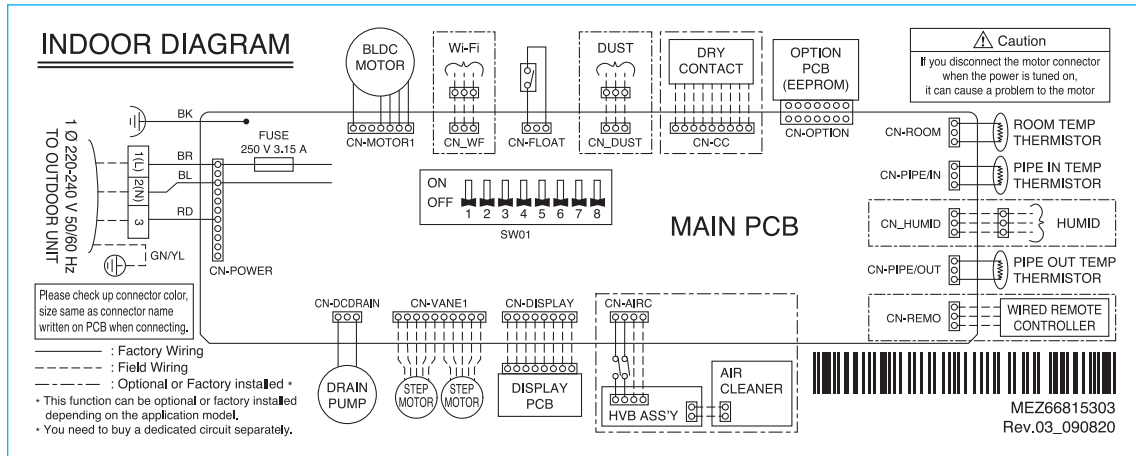
[Unit: mm(inch)]

Model	Gas	Liquid
AMNQ09GTUA0 / AMNC09GTUA0	Ø9.52(3/8)	Ø6.35(1/4)
AMNQ12GTUA0 / AMNC12GTUA0		
AMNQ18GTUA0	Ø12.70(1/2)	Ø6.35(1/4)
AMNQ24GTUA0 / AMNC24GTUA0		
AMNW09GTUA0	Ø9.52(3/8)	Ø6.35(1/4)
AMNW12GTUA0		
AMNW18GTUA0	Ø12.70(1/2)	Ø6.35(1/4)

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

4. Wiring Diagrams

Model : AMNQ**GT*A0 / AMNC**GT*A0 / AMNW**GT*A0



DIP switch setting		Off	On	Remarks
SW3	Group	Master	Slave	Group control setting using wired remote controller
SW4	Dry contact	Variable	Auto	Dry contact mode setting 1. Variable : Auto/manual mode can be chosen by wide wired remote controller or wireless remote controller (when shipped from factory → manual mode) 2. Auto : For dry contact, it is always auto mode.
SW5	Extra 1	Off	On	1. Duct model - Off : Default(not operate continuously) - On : Fan operate continuously 2. Cassette model : No function 3. Ceiling suspended model - Off : Ceiling(default) - On : Floor

CAUTION

For Multi model, DIP switch 1,6,7,8 must be set off.
Those DIP switches are used for other models.

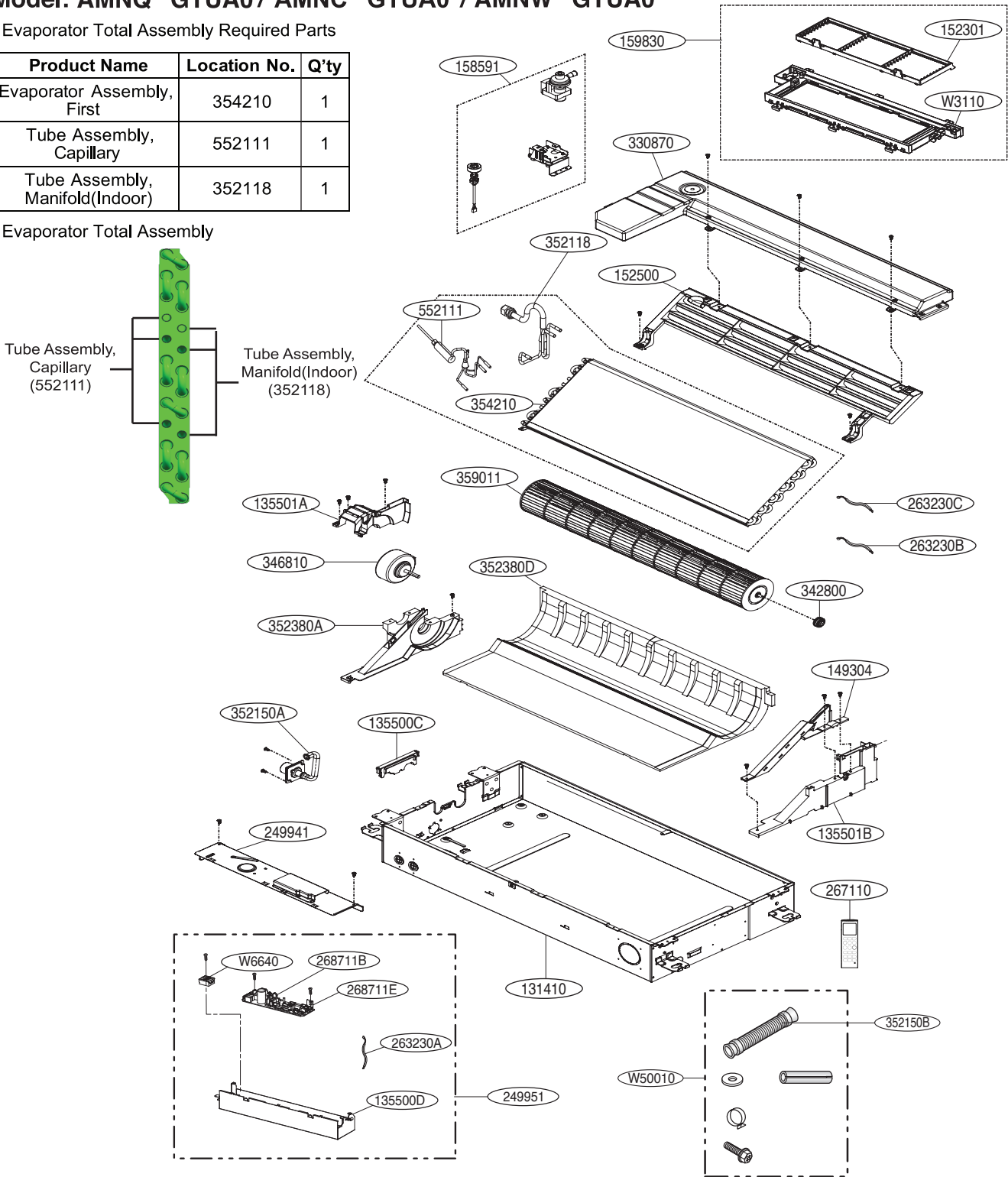
5. Exploded View

Model: AMNQ**GTUA0 / AMNC**GTUA0 / AMNW**GTUA0

• Evaporator Total Assembly Required Parts

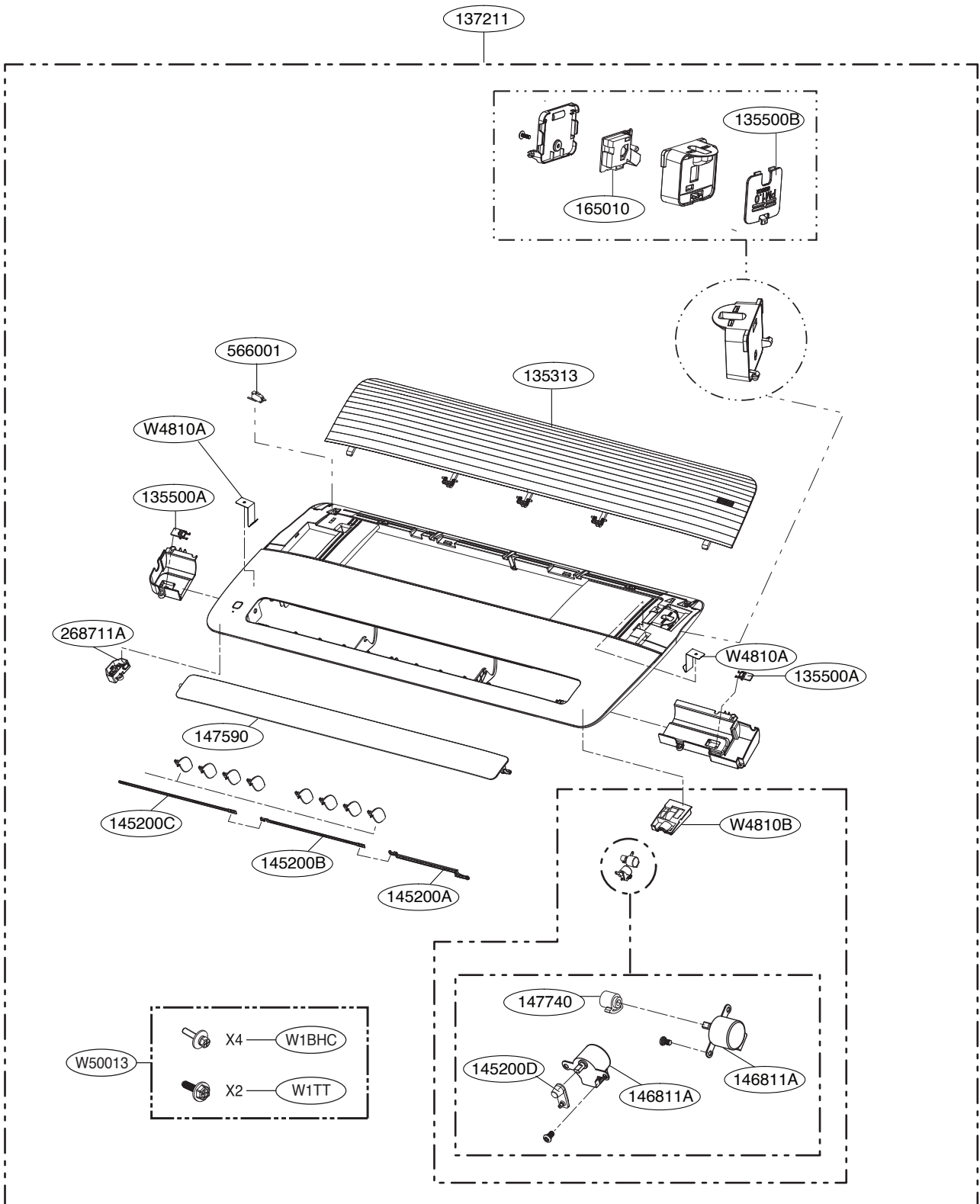
Product Name	Location No.	Q'ty
Evaporator Assembly, First	354210	1
Tube Assembly, Capillary	552111	1
Tube Assembly, Manifold(Indoor)	352118	1

• Evaporator Total Assembly



Location No.	Description	Sensor Information	Housing color
263230A	Thermistor 1	Air	Yellow
263230B	Thermistor 2	Pipe in	White
263230C	Thermistor 3	Pipe Out	Red

TU chassis : Front panel (grille type) : PT-UAHG0 / PT-UPHG0

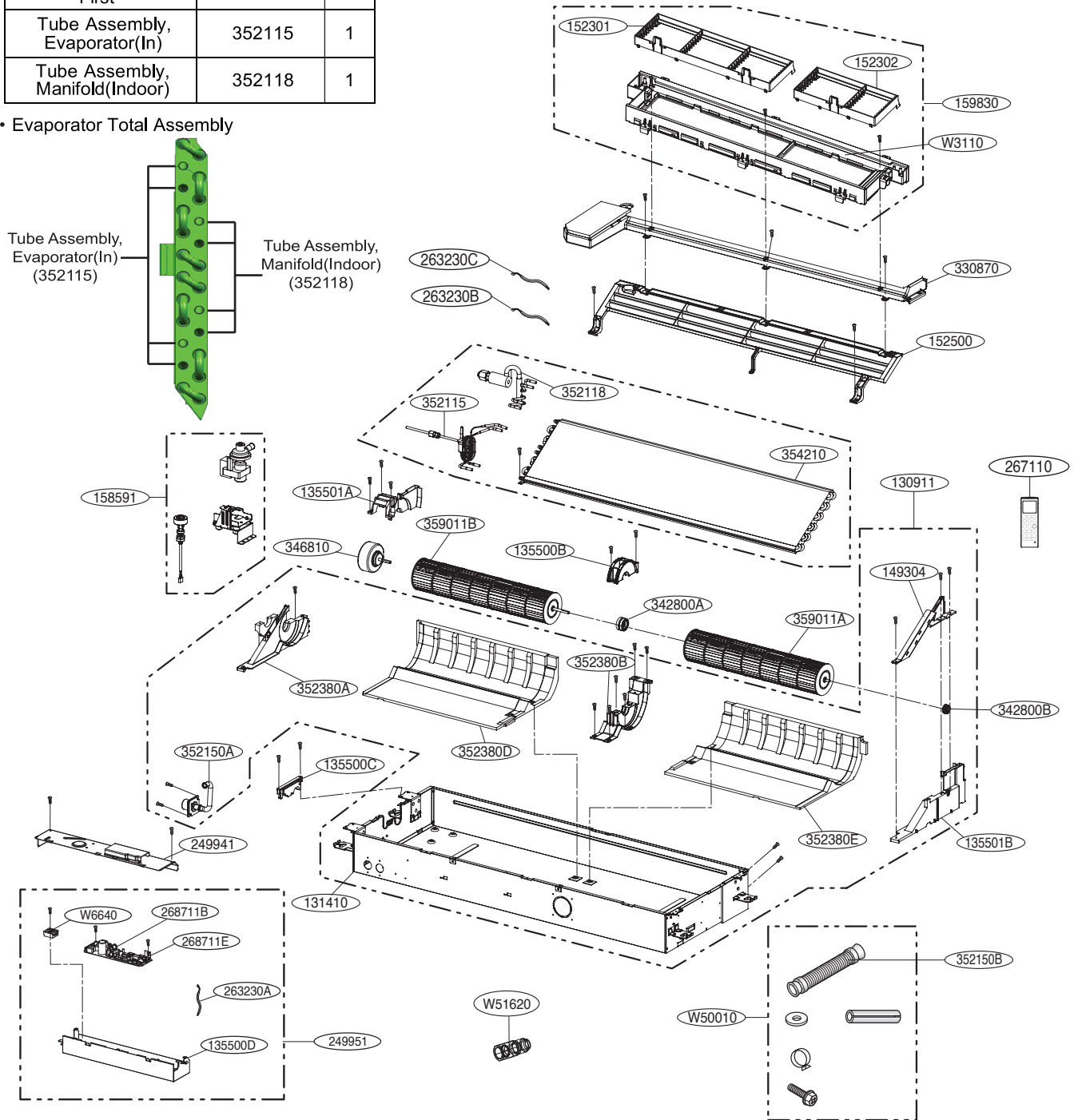


Model: AMNQ**GTTA0 / AMNC24GTTA0 / AMNW18GTTA0

• Evaporator Total Assembly Required Parts

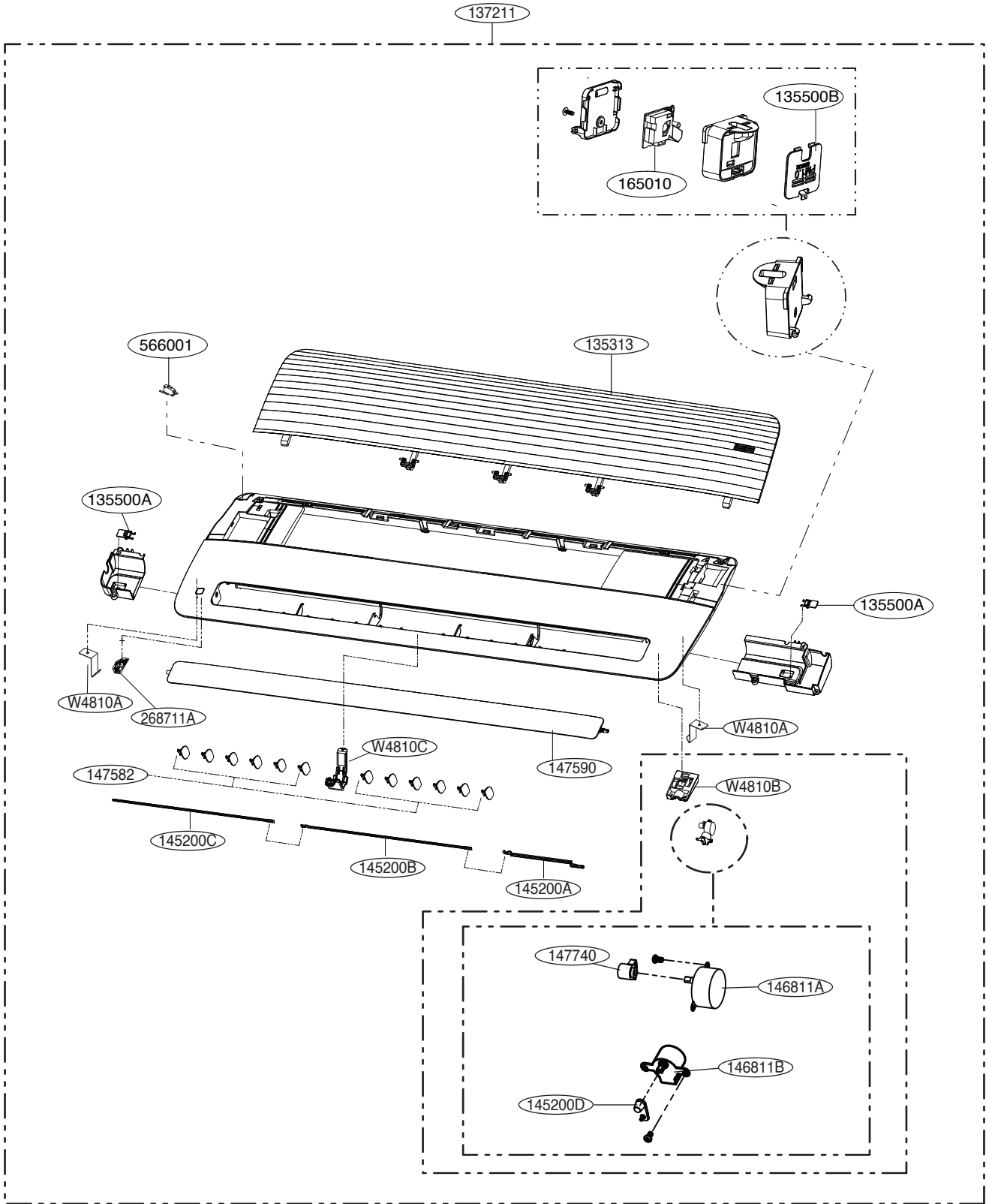
Product Name	Location No.	Q'ty
Evaporator Assembly, First	354210	1
Tube Assembly, Evaporator(In)	352115	1
Tube Assembly, Manifold(Indoor)	352118	1

• Evaporator Total Assembly



Location No.	Description	Sensor Information	Housing color
263230A	Thermistor 1	Air	Yellow
263230B	Thermistor 2	Pipe in	White
263230C	Thermistor 3	Pipe Out	Red

TT chassis Front panel (grille type) : PT-TAHG0 / PT-TPHG0





P/NO : MFL69149602